

Appendix B

E-UTRA Band 12



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1 Effective (Isotropic) Radiated Power

1.1. Test Result

Band	Bandwidth	Modulation	Channel	RB Config.	Result (dBm)	ERP (dBm)	Limit (dBm)	Verdict
Band12	1.4MHz	QPSK	23017	1RB#0	23.58	14.43	34.77	PASS
Band12	1.4MHz	QPSK	23017	1RB#2	23.69	14.54	34.77	PASS
Band12	1.4MHz	QPSK	23017	1RB#5	23.73	14.58	34.77	PASS
Band12	1.4MHz	QPSK	23017	3RB#0	23.77	14.62	34.77	PASS
Band12	1.4MHz	QPSK	23017	3RB#1	23.87	14.72	34.77	PASS
Band12	1.4MHz	QPSK	23017	3RB#3	23.96	14.81	34.77	PASS
Band12	1.4MHz	QPSK	23017	6RB#0	22.83	13.68	34.77	PASS
Band12	1.4MHz	QPSK	23095	1RB#0	23.72	14.57	34.77	PASS
Band12	1.4MHz	QPSK	23095	1RB#2	23.64	14.49	34.77	PASS
Band12	1.4MHz	QPSK	23095	1RB#5	23.57	14.42	34.77	PASS
Band12	1.4MHz	QPSK	23095	3RB#0	23.70	14.55	34.77	PASS
Band12	1.4MHz	QPSK	23095	3RB#1	23.84	14.69	34.77	PASS
Band12	1.4MHz	QPSK	23095	3RB#3	23.72	14.57	34.77	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	22.76	13.61	34.77	PASS
Band12	1.4MHz	QPSK	23173	1RB#0	23.36	14.21	34.77	PASS
Band12	1.4MHz	QPSK	23173	1RB#2	23.49	14.34	34.77	PASS
Band12	1.4MHz	QPSK	23173	1RB#5	23.76	14.61	34.77	PASS
Band12	1.4MHz	QPSK	23173	3RB#0	23.48	14.33	34.77	PASS
Band12	1.4MHz	QPSK	23173	3RB#1	23.85	14.7	34.77	PASS
Band12	1.4MHz	QPSK	23173	3RB#3	23.84	14.69	34.77	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	22.62	13.47	34.77	PASS
Band12	1.4MHz	16QAM	23017	1RB#0	22.15	13	34.77	PASS
Band12	1.4MHz	16QAM	23017	1RB#2	22.51	13.36	34.77	PASS
Band12	1.4MHz	16QAM	23017	1RB#5	22.41	13.26	34.77	PASS
Band12	1.4MHz	16QAM	23017	3RB#0	22.88	13.73	34.77	PASS
Band12	1.4MHz	16QAM	23017	3RB#1	22.99	13.84	34.77	PASS
Band12	1.4MHz	16QAM	23017	3RB#3	22.97	13.82	34.77	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	21.82	12.67	34.77	PASS
Band12	1.4MHz	16QAM	23095	1RB#0	22.29	13.14	34.77	PASS
Band12	1.4MHz	16QAM	23095	1RB#2	22.47	13.32	34.77	PASS
Band12	1.4MHz	16QAM	23095	1RB#5	22.30	13.15	34.77	PASS
Band12	1.4MHz	16QAM	23095	3RB#0	22.89	13.74	34.77	PASS



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Band12	1.4MHz	16QAM	23095	3RB#1	22.86	13.71	34.77	PASS
Band12	1.4MHz	16QAM	23095	3RB#3	23.10	13.95	34.77	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	21.72	12.57	34.77	PASS
Band12	1.4MHz	16QAM	23173	1RB#0	22.21	13.06	34.77	PASS
Band12	1.4MHz	16QAM	23173	1RB#2	22.29	13.14	34.77	PASS
Band12	1.4MHz	16QAM	23173	1RB#5	22.14	12.99	34.77	PASS
Band12	1.4MHz	16QAM	23173	3RB#0	22.89	13.74	34.77	PASS
Band12	1.4MHz	16QAM	23173	3RB#1	22.90	13.75	34.77	PASS
Band12	1.4MHz	16QAM	23173	3RB#3	22.80	13.65	34.77	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	21.84	12.69	34.77	PASS
Band12	3MHz	QPSK	23025	1RB#0	23.68	14.53	34.77	PASS
Band12	3MHz	QPSK	23025	1RB#8	23.80	14.65	34.77	PASS
Band12	3MHz	QPSK	23025	1RB#14	23.47	14.32	34.77	PASS
Band12	3MHz	QPSK	23025	8RB#0	22.77	13.62	34.77	PASS
Band12	3MHz	QPSK	23025	8RB#4	22.76	13.61	34.77	PASS
Band12	3MHz	QPSK	23025	8RB#7	22.72	13.57	34.77	PASS
Band12	3MHz	QPSK	23025	15RB#0	22.69	13.54	34.77	PASS
Band12	3MHz	QPSK	23095	1RB#0	23.51	14.36	34.77	PASS
Band12	3MHz	QPSK	23095	1RB#8	23.44	14.29	34.77	PASS
Band12	3MHz	QPSK	23095	1RB#14	23.22	14.07	34.77	PASS
Band12	3MHz	QPSK	23095	8RB#0	22.91	13.76	34.77	PASS
Band12	3MHz	QPSK	23095	8RB#4	22.67	13.52	34.77	PASS
Band12	3MHz	QPSK	23095	8RB#7	22.60	13.45	34.77	PASS
Band12	3MHz	QPSK	23095	15RB#0	22.74	13.59	34.77	PASS
Band12	3MHz	QPSK	23165	1RB#0	23.42	14.27	34.77	PASS
Band12	3MHz	QPSK	23165	1RB#8	23.93	14.78	34.77	PASS
Band12	3MHz	QPSK	23165	1RB#14	23.73	14.58	34.77	PASS
Band12	3MHz	QPSK	23165	8RB#0	22.58	13.43	34.77	PASS
Band12	3MHz	QPSK	23165	8RB#4	22.84	13.69	34.77	PASS
Band12	3MHz	QPSK	23165	8RB#7	22.70	13.55	34.77	PASS
Band12	3MHz	QPSK	23165	15RB#0	22.66	13.51	34.77	PASS
Band12	3MHz	16QAM	23025	1RB#0	22.37	13.22	34.77	PASS
Band12	3MHz	16QAM	23025	1RB#8	22.45	13.3	34.77	PASS
Band12	3MHz	16QAM	23025	1RB#14	22.24	13.09	34.77	PASS
Band12	3MHz	16QAM	23025	8RB#0	21.59	12.44	34.77	PASS
Band12	3MHz	16QAM	23025	8RB#4	21.66	12.51	34.77	PASS
Band12	3MHz	16QAM	23025	8RB#7	21.50	12.35	34.77	PASS
Band12	3MHz	16QAM	23025	15RB#0	21.77	12.62	34.77	PASS



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Band12	3MHz	16QAM	23095	1RB#0	22.17	13.02	34.77	PASS
Band12	3MHz	16QAM	23095	1RB#8	22.39	13.24	34.77	PASS
Band12	3MHz	16QAM	23095	1RB#14	22.34	13.19	34.77	PASS
Band12	3MHz	16QAM	23095	8RB#0	21.49	12.34	34.77	PASS
Band12	3MHz	16QAM	23095	8RB#4	21.48	12.33	34.77	PASS
Band12	3MHz	16QAM	23095	8RB#7	21.52	12.37	34.77	PASS
Band12	3MHz	16QAM	23095	15RB#0	21.66	12.51	34.77	PASS
Band12	3MHz	16QAM	23165	1RB#0	22.33	13.18	34.77	PASS
Band12	3MHz	16QAM	23165	1RB#8	22.00	12.85	34.77	PASS
Band12	3MHz	16QAM	23165	1RB#14	22.00	12.85	34.77	PASS
Band12	3MHz	16QAM	23165	8RB#0	21.53	12.38	34.77	PASS
Band12	3MHz	16QAM	23165	8RB#4	21.82	12.67	34.77	PASS
Band12	3MHz	16QAM	23165	8RB#7	21.70	12.55	34.77	PASS
Band12	3MHz	16QAM	23165	15RB#0	21.75	12.6	34.77	PASS
Band12	5MHz	QPSK	23035	1RB#0	23.47	14.32	34.77	PASS
Band12	5MHz	QPSK	23035	1RB#12	23.99	14.84	34.77	PASS
Band12	5MHz	QPSK	23035	1RB#24	23.47	14.32	34.77	PASS
Band12	5MHz	QPSK	23035	12RB#0	22.68	13.53	34.77	PASS
Band12	5MHz	QPSK	23035	12RB#6	22.84	13.69	34.77	PASS
Band12	5MHz	QPSK	23035	12RB#13	22.62	13.47	34.77	PASS
Band12	5MHz	QPSK	23035	25RB#0	22.64	13.49	34.77	PASS
Band12	5MHz	QPSK	23095	1RB#0	23.37	14.22	34.77	PASS
Band12	5MHz	QPSK	23095	1RB#12	24.01	14.86	34.77	PASS
Band12	5MHz	QPSK	23095	1RB#24	22.78	13.63	34.77	PASS
Band12	5MHz	QPSK	23095	12RB#0	22.90	13.75	34.77	PASS
Band12	5MHz	QPSK	23095	12RB#6	22.81	13.66	34.77	PASS
Band12	5MHz	QPSK	23095	12RB#13	22.46	13.31	34.77	PASS
Band12	5MHz	QPSK	23095	25RB#0	22.76	13.61	34.77	PASS
Band12	5MHz	QPSK	23155	1RB#0	23.33	14.18	34.77	PASS
Band12	5MHz	QPSK	23155	1RB#12	24.00	14.85	34.77	PASS
Band12	5MHz	QPSK	23155	1RB#24	23.58	14.43	34.77	PASS
Band12	5MHz	QPSK	23155	12RB#0	22.57	13.42	34.77	PASS
Band12	5MHz	QPSK	23155	12RB#6	22.84	13.69	34.77	PASS
Band12	5MHz	QPSK	23155	12RB#13	22.69	13.54	34.77	PASS
Band12	5MHz	QPSK	23155	25RB#0	22.58	13.43	34.77	PASS
Band12	5MHz	16QAM	23035	1RB#0	22.41	13.26	34.77	PASS
Band12	5MHz	16QAM	23035	1RB#12	22.69	13.54	34.77	PASS
Band12	5MHz	16QAM	23035	1RB#24	22.30	13.15	34.77	PASS



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Band12	5MHz	16QAM	23035	12RB#0	21.68	12.53	34.77	PASS
Band12	5MHz	16QAM	23035	12RB#6	21.69	12.54	34.77	PASS
Band12	5MHz	16QAM	23035	12RB#13	21.68	12.53	34.77	PASS
Band12	5MHz	16QAM	23035	25RB#0	21.68	12.53	34.77	PASS
Band12	5MHz	16QAM	23095	1RB#0	22.17	13.02	34.77	PASS
Band12	5MHz	16QAM	23095	1RB#12	22.52	13.37	34.77	PASS
Band12	5MHz	16QAM	23095	1RB#24	22.26	13.11	34.77	PASS
Band12	5MHz	16QAM	23095	12RB#0	21.80	12.65	34.77	PASS
Band12	5MHz	16QAM	23095	12RB#6	21.73	12.58	34.77	PASS
Band12	5MHz	16QAM	23095	12RB#13	21.49	12.34	34.77	PASS
Band12	5MHz	16QAM	23095	25RB#0	21.56	12.41	34.77	PASS
Band12	5MHz	16QAM	23155	1RB#0	22.30	13.15	34.77	PASS
Band12	5MHz	16QAM	23155	1RB#12	22.53	13.38	34.77	PASS
Band12	5MHz	16QAM	23155	1RB#24	22.00	12.85	34.77	PASS
Band12	5MHz	16QAM	23155	12RB#0	21.58	12.43	34.77	PASS
Band12	5MHz	16QAM	23155	12RB#6	21.47	12.32	34.77	PASS
Band12	5MHz	16QAM	23155	12RB#13	21.46	12.31	34.77	PASS
Band12	5MHz	16QAM	23155	25RB#0	21.74	12.59	34.77	PASS
Band12	10MHz	QPSK	23060	1RB#0	23.47	14.32	34.77	PASS
Band12	10MHz	QPSK	23060	1RB#24	24.64	15.49	34.77	PASS
Band12	10MHz	QPSK	23060	1RB#49	23.18	14.03	34.77	PASS
Band12	10MHz	QPSK	23060	25RB#0	22.64	13.49	34.77	PASS
Band12	10MHz	QPSK	23060	25RB#12	22.83	13.68	34.77	PASS
Band12	10MHz	QPSK	23060	25RB#25	22.73	13.58	34.77	PASS
Band12	10MHz	QPSK	23060	50RB#0	22.58	13.43	34.77	PASS
Band12	10MHz	QPSK	23095	1RB#0	23.35	14.2	34.77	PASS
Band12	10MHz	QPSK	23095	1RB#24	24.37	15.22	34.77	PASS
Band12	10MHz	QPSK	23095	1RB#49	22.80	13.65	34.77	PASS
Band12	10MHz	QPSK	23095	25RB#0	22.95	13.8	34.77	PASS
Band12	10MHz	QPSK	23095	25RB#12	22.80	13.65	34.77	PASS
Band12	10MHz	QPSK	23095	25RB#25	22.29	13.14	34.77	PASS
Band12	10MHz	QPSK	23095	50RB#0	22.78	13.63	34.77	PASS
Band12	10MHz	QPSK	23130	1RB#0	23.69	14.54	34.77	PASS
Band12	10MHz	QPSK	23130	1RB#24	23.36	14.21	34.77	PASS
Band12	10MHz	QPSK	23130	1RB#49	23.59	14.44	34.77	PASS
Band12	10MHz	QPSK	23130	25RB#0	22.75	13.6	34.77	PASS
Band12	10MHz	QPSK	23130	25RB#12	22.60	13.45	34.77	PASS
Band12	10MHz	QPSK	23130	25RB#25	22.63	13.48	34.77	PASS



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Band12	10MHz	QPSK	23130	50RB#0	22.78	13.63	34.77	PASS
Band12	10MHz	16QAM	23060	1RB#0	22.53	13.38	34.77	PASS
Band12	10MHz	16QAM	23060	1RB#24	22.38	13.23	34.77	PASS
Band12	10MHz	16QAM	23060	1RB#49	22.33	13.18	34.77	PASS
Band12	10MHz	16QAM	23060	25RB#0	21.62	12.47	34.77	PASS
Band12	10MHz	16QAM	23060	25RB#12	21.60	12.45	34.77	PASS
Band12	10MHz	16QAM	23060	25RB#25	21.61	12.46	34.77	PASS
Band12	10MHz	16QAM	23060	50RB#0	21.62	12.47	34.77	PASS
Band12	10MHz	16QAM	23095	1RB#0	22.23	13.08	34.77	PASS
Band12	10MHz	16QAM	23095	1RB#24	22.45	13.3	34.77	PASS
Band12	10MHz	16QAM	23095	1RB#49	22.37	13.22	34.77	PASS
Band12	10MHz	16QAM	23095	25RB#0	21.66	12.51	34.77	PASS
Band12	10MHz	16QAM	23095	25RB#12	21.63	12.48	34.77	PASS
Band12	10MHz	16QAM	23095	25RB#25	21.71	12.56	34.77	PASS
Band12	10MHz	16QAM	23095	50RB#0	21.64	12.49	34.77	PASS
Band12	10MHz	16QAM	23130	1RB#0	22.45	13.3	34.77	PASS
Band12	10MHz	16QAM	23130	1RB#24	22.34	13.19	34.77	PASS
Band12	10MHz	16QAM	23130	1RB#49	22.17	13.02	34.77	PASS
Band12	10MHz	16QAM	23130	25RB#0	21.64	12.49	34.77	PASS
Band12	10MHz	16QAM	23130	25RB#12	21.62	12.47	34.77	PASS
Band12	10MHz	16QAM	23130	25RB#25	21.58	12.43	34.77	PASS
Band12	10MHz	16QAM	23130	50RB#0	21.76	12.61	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 [dBi]

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



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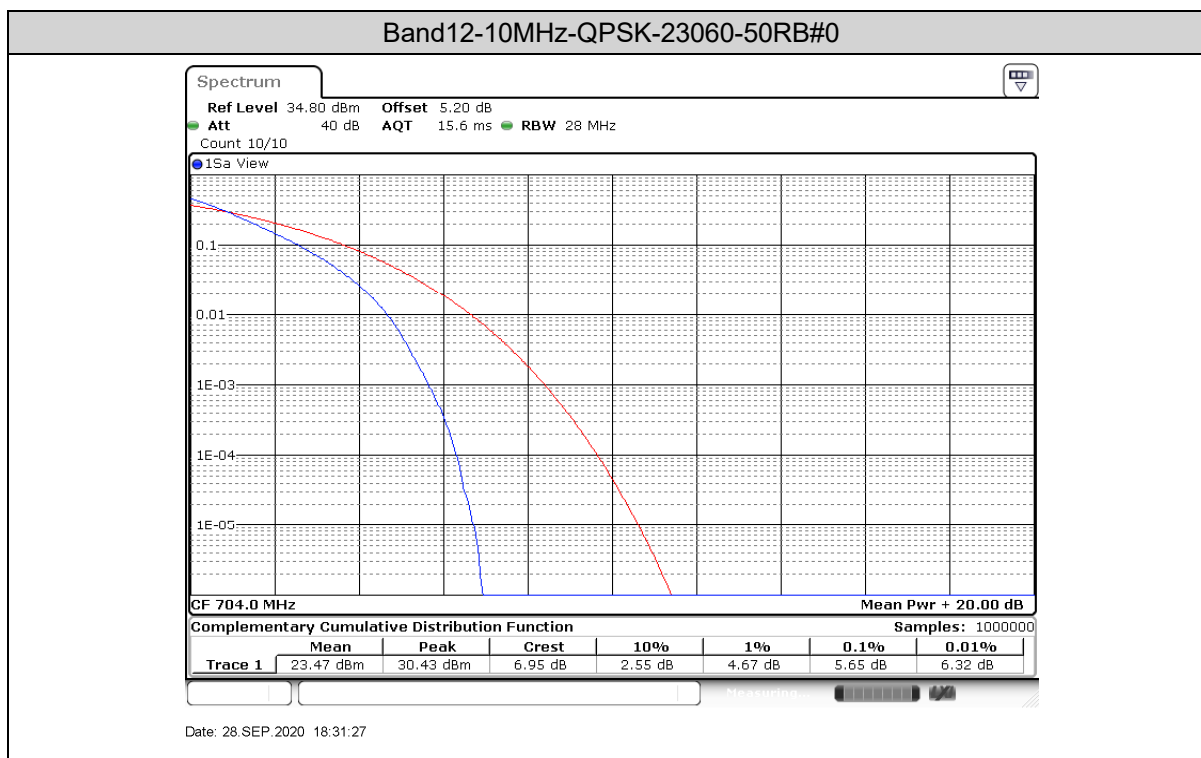
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2. Peak-to-Average Ratio (CCDF)

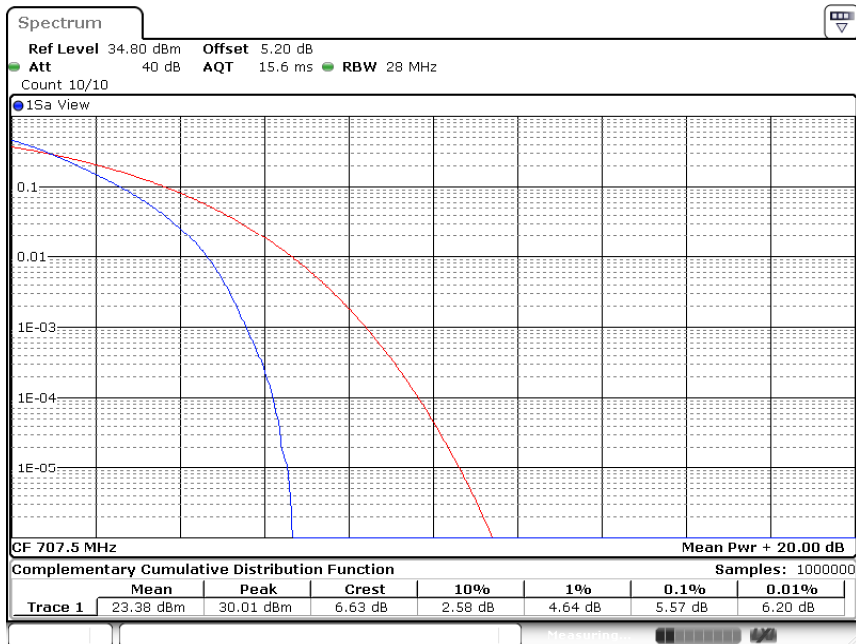
2.1. Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band12	10MHz	QPSK	23060	50RB#0	5.65	13	PASS
Band12	10MHz	QPSK	23095	50RB#0	5.57	13	PASS
Band12	10MHz	QPSK	23130	50RB#0	4.99	13	PASS
Band12	10MHz	16QAM	23060	50RB#0	6.29	13	PASS
Band12	10MHz	16QAM	23095	50RB#0	6.32	13	PASS
Band12	10MHz	16QAM	23130	50RB#0	5.91	13	PASS

2.2. Test Plots

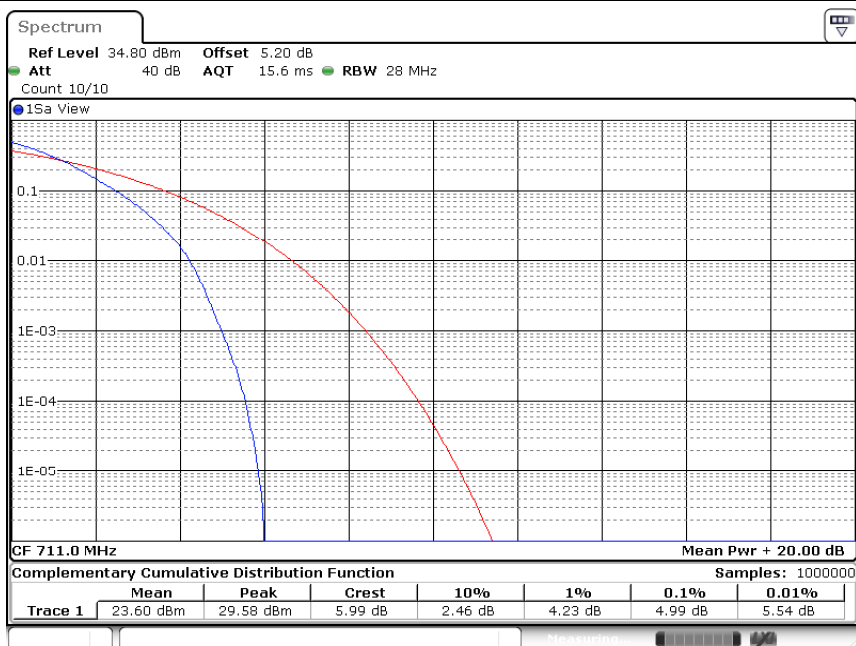


Band12-10MHz-QPSK-23095-50RB#0



Date: 28.SEP.2020 18:31:55

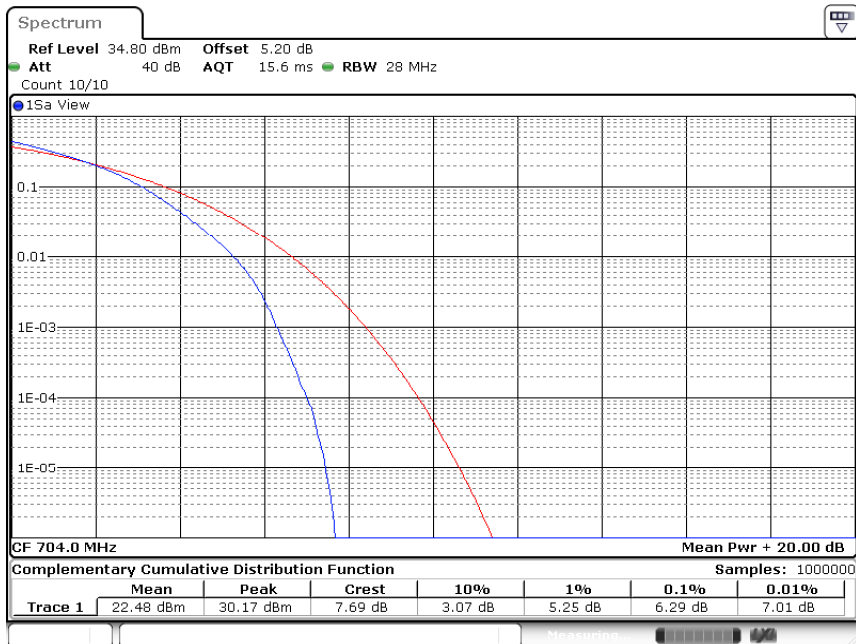
Band12-10MHz-QPSK-23130-50RB#0



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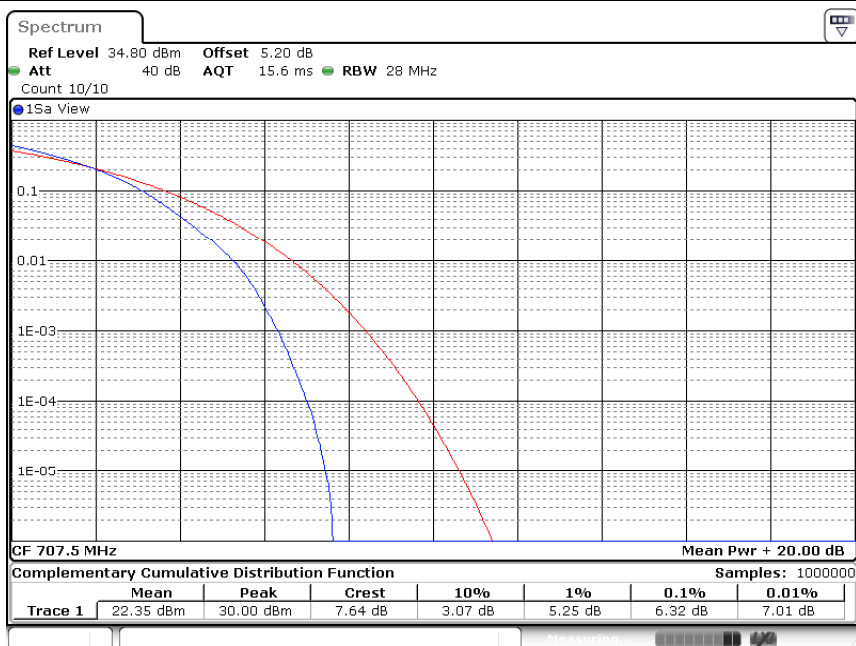


Band12-10MHz-16QAM-23060-50RB#0



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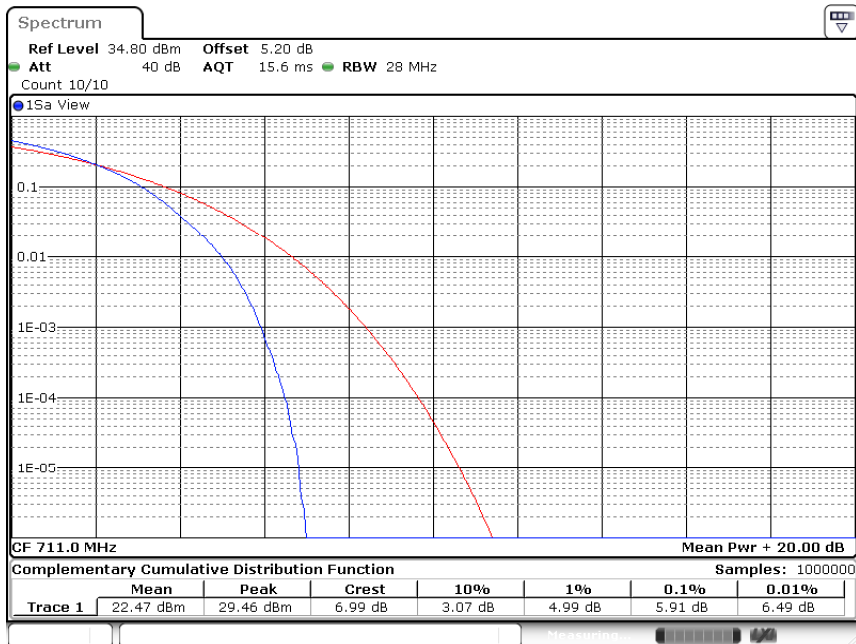
Band12-10MHz-16QAM-23095-50RB#0



Date: 28.SEP.2020 18:32:09



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



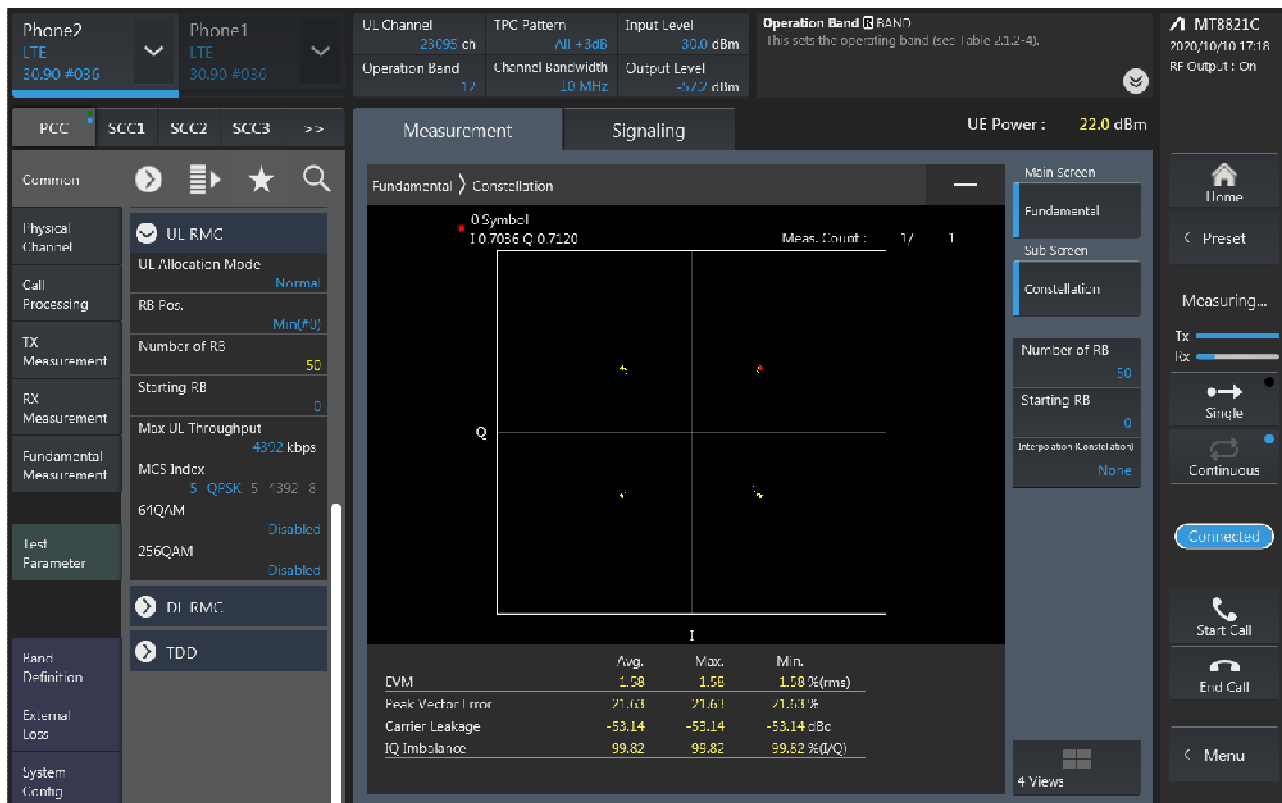
Date: 28. SEP. 2020 18:32:37



3. Modulation Characteristics

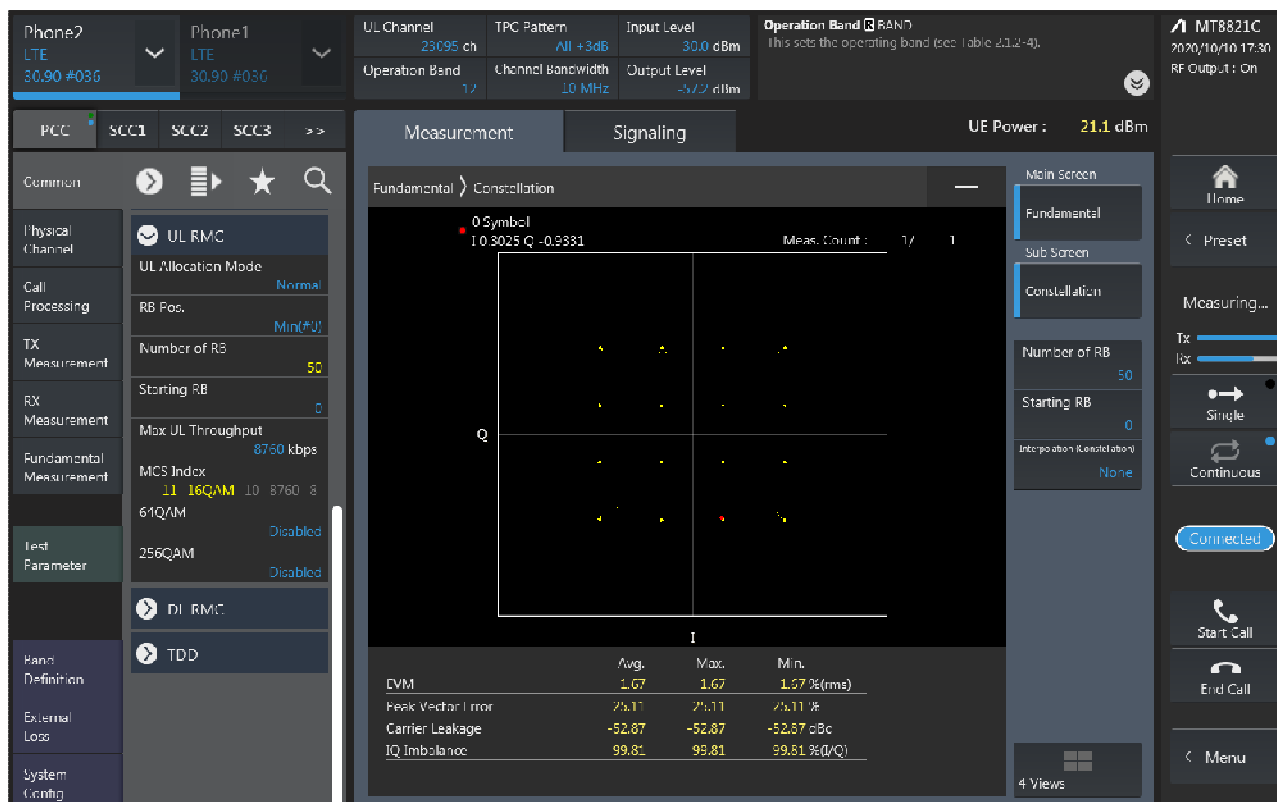
3.1. Test Mode = LTE /TM1 10MHz

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	1.091	1.290	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	1.091	1.275	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	1.094	1.284	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	1.091	1.275	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	1.088	1.287	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	1.094	1.293	PASS
Band12	3MHz	QPSK	23025	15RB#0	2.691	2.988	PASS
Band12	3MHz	QPSK	23095	15RB#0	2.697	2.988	PASS
Band12	3MHz	QPSK	23165	15RB#0	2.697	2.982	PASS
Band12	3MHz	16QAM	23025	15RB#0	2.685	2.964	PASS
Band12	3MHz	16QAM	23095	15RB#0	2.685	2.964	PASS
Band12	3MHz	16QAM	23165	15RB#0	2.691	2.976	PASS
Band12	5MHz	QPSK	23035	25RB#0	4.466	4.870	PASS
Band12	5MHz	QPSK	23095	25RB#0	4.476	4.920	PASS
Band12	5MHz	QPSK	23155	25RB#0	4.466	4.900	PASS
Band12	5MHz	16QAM	23035	25RB#0	4.476	4.900	PASS
Band12	5MHz	16QAM	23095	25RB#0	4.476	4.950	PASS
Band12	5MHz	16QAM	23155	25RB#0	4.486	4.900	PASS
Band12	10MHz	QPSK	23060	50RB#0	8.951	9.720	PASS
Band12	10MHz	QPSK	23095	50RB#0	8.931	9.720	PASS
Band12	10MHz	QPSK	23130	50RB#0	8.871	9.600	PASS
Band12	10MHz	16QAM	23060	50RB#0	8.931	9.740	PASS
Band12	10MHz	16QAM	23095	50RB#0	8.931	9.740	PASS
Band12	10MHz	16QAM	23130	50RB#0	8.871	9.620	PASS



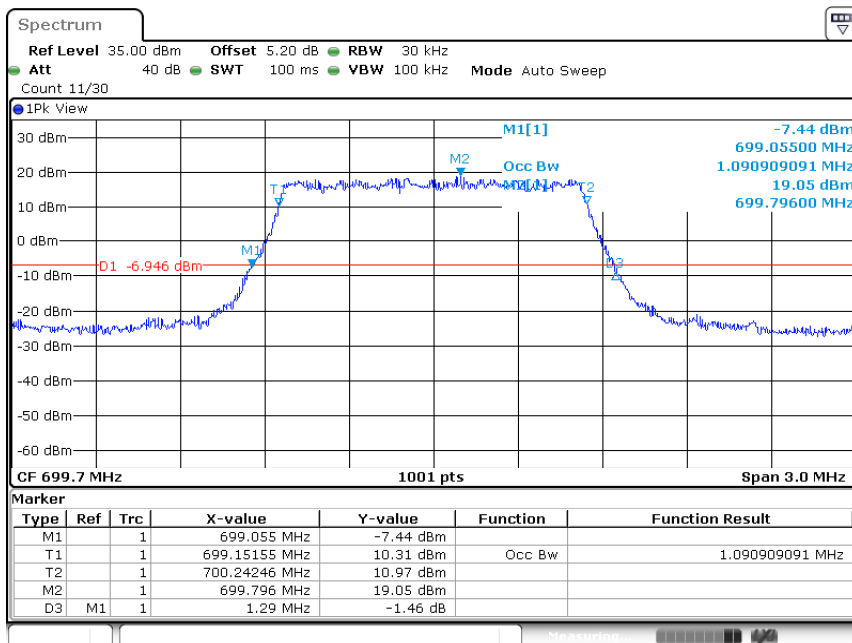
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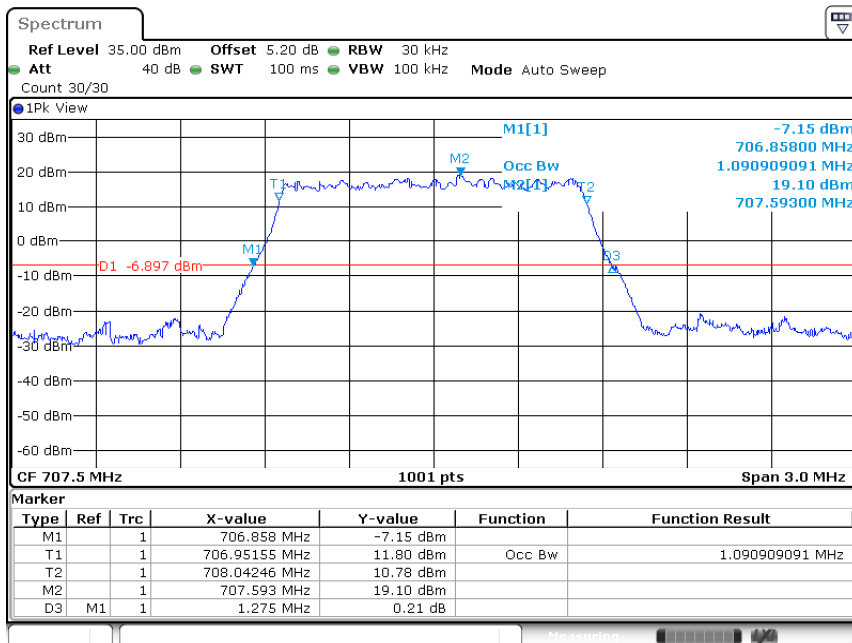
4.2. Test Plots

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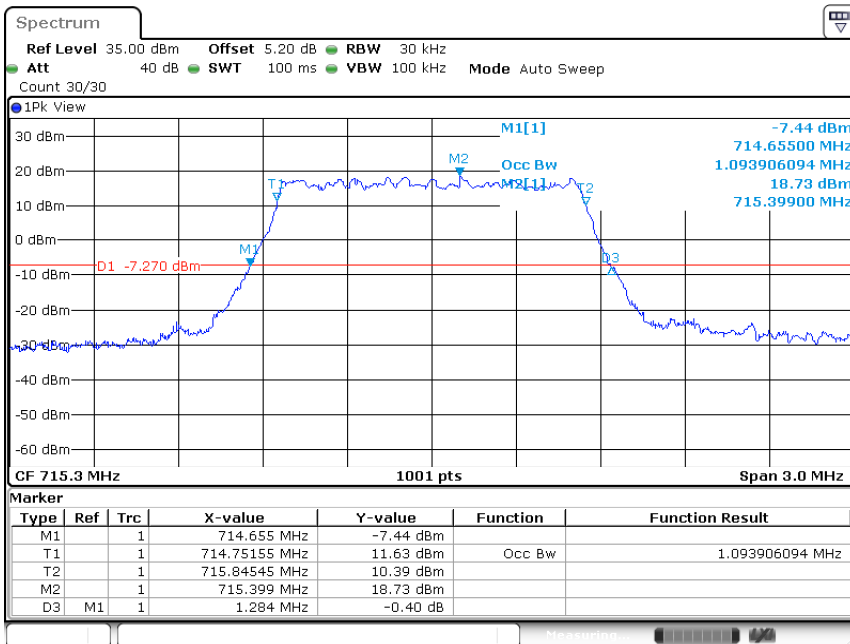
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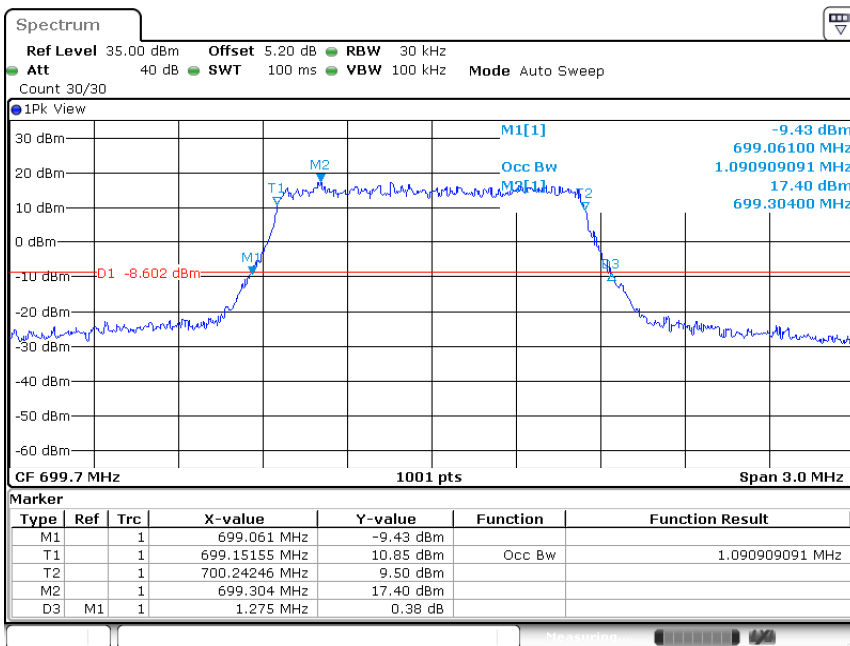


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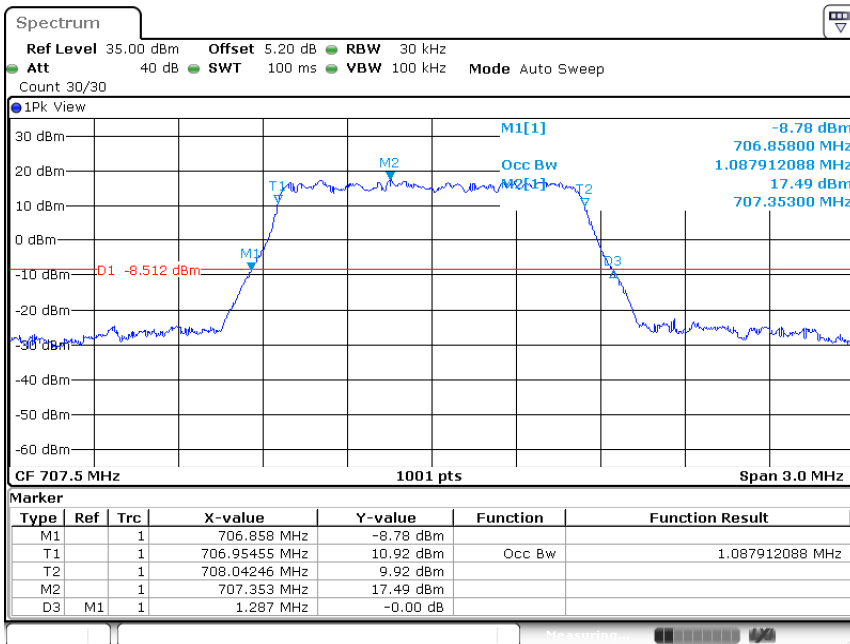
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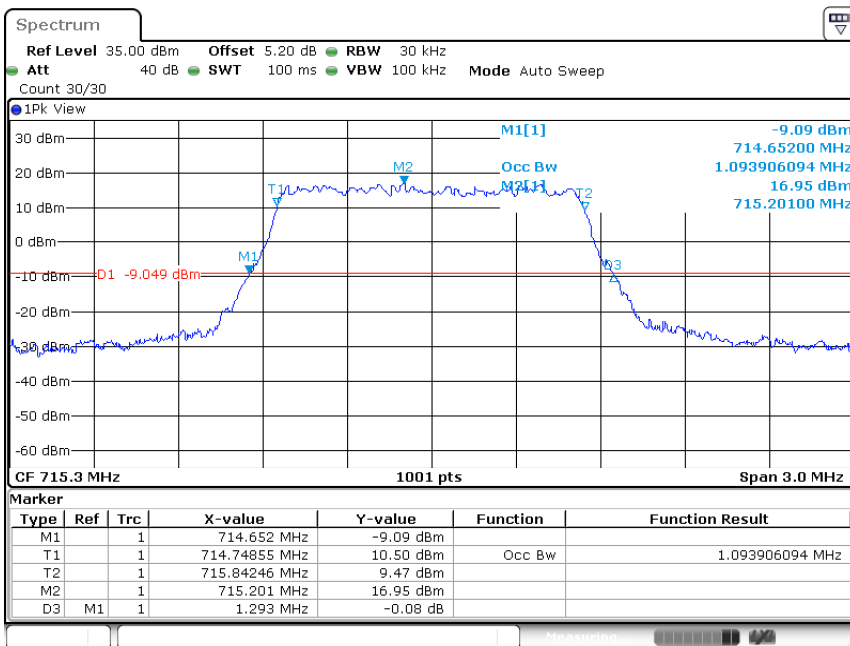


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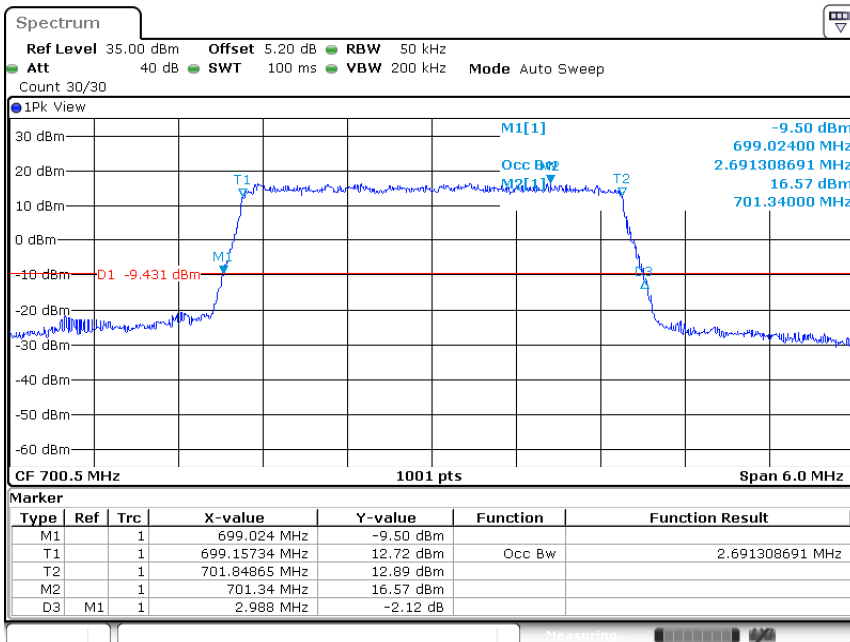
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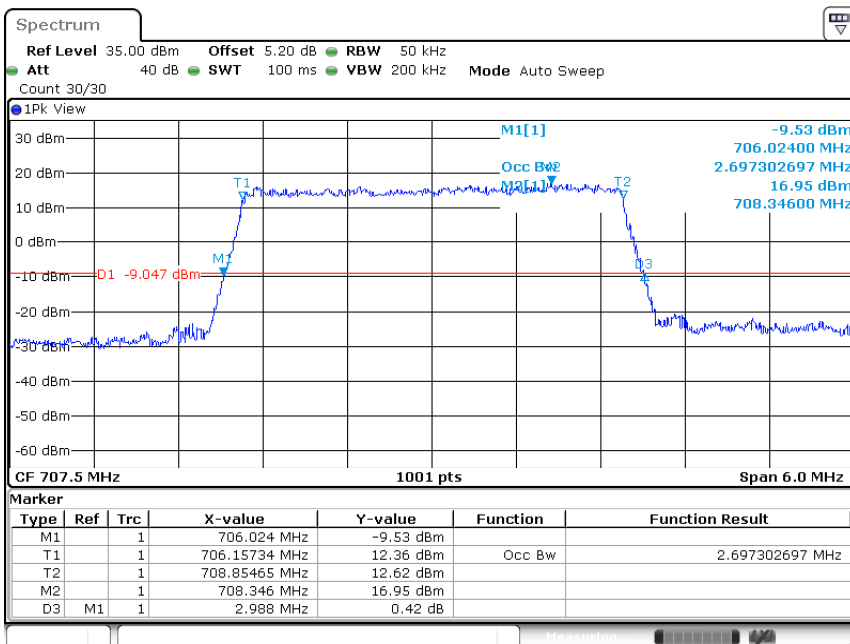


Band12-3MHz-QPSK-23025-15RB#0-2.691



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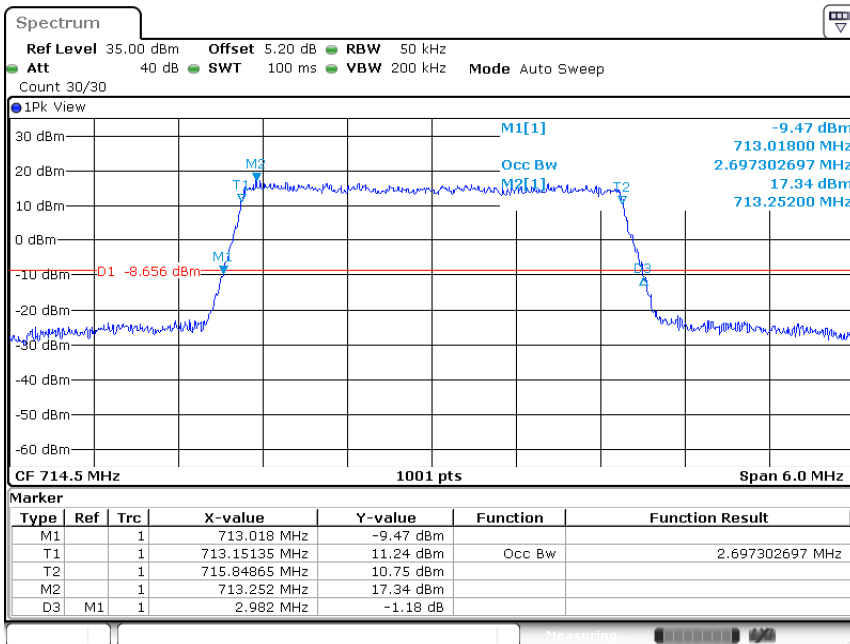
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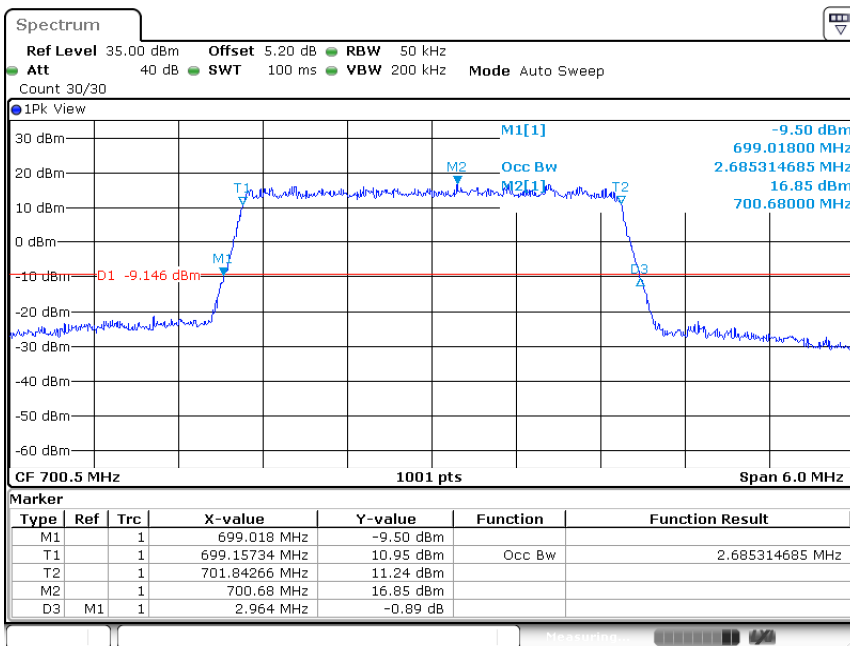


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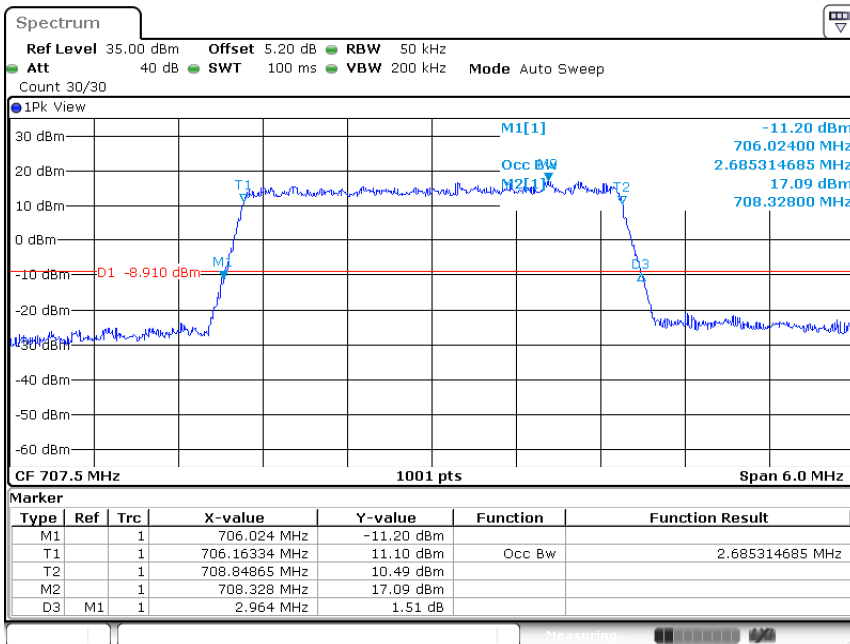
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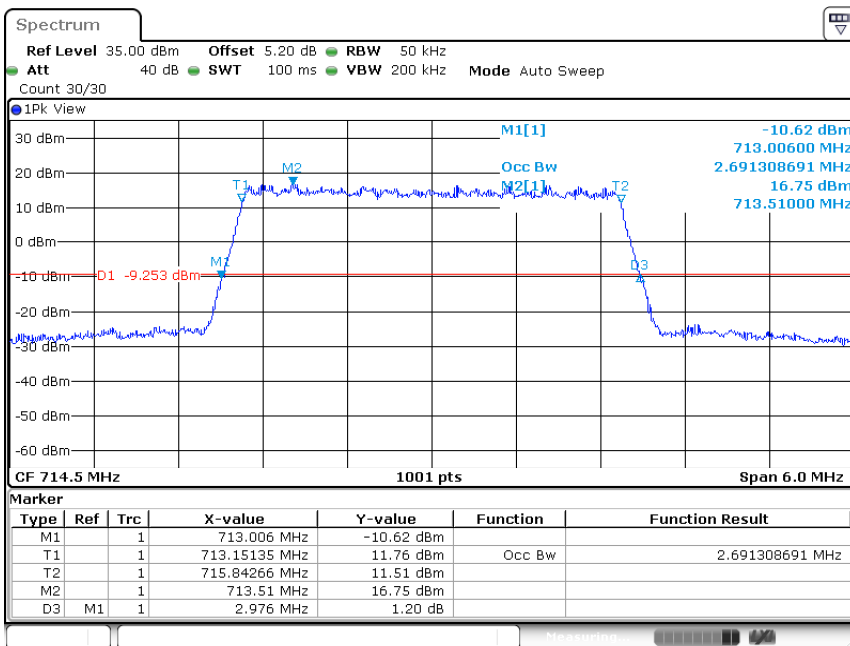


Band12-3MHz-16QAM-23095-15RB#0-2.685



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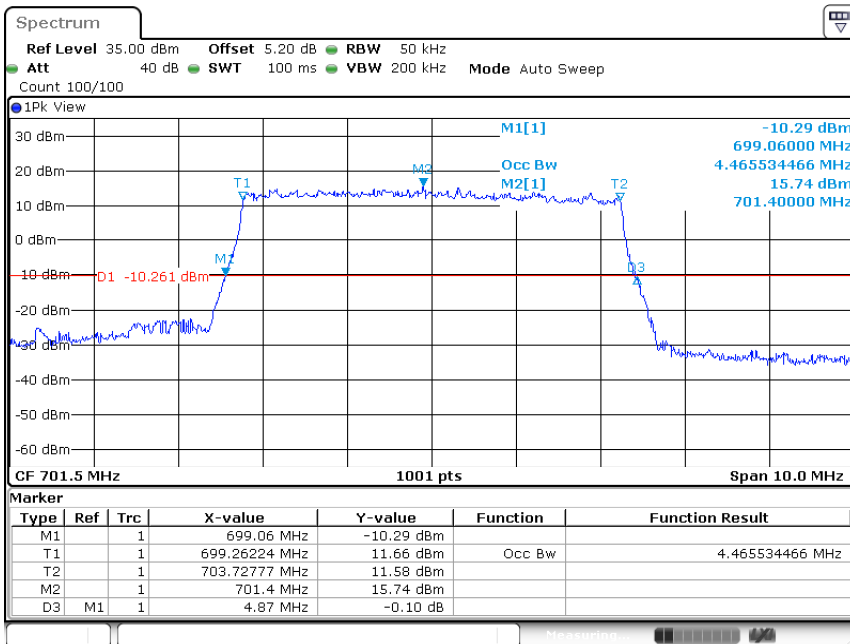
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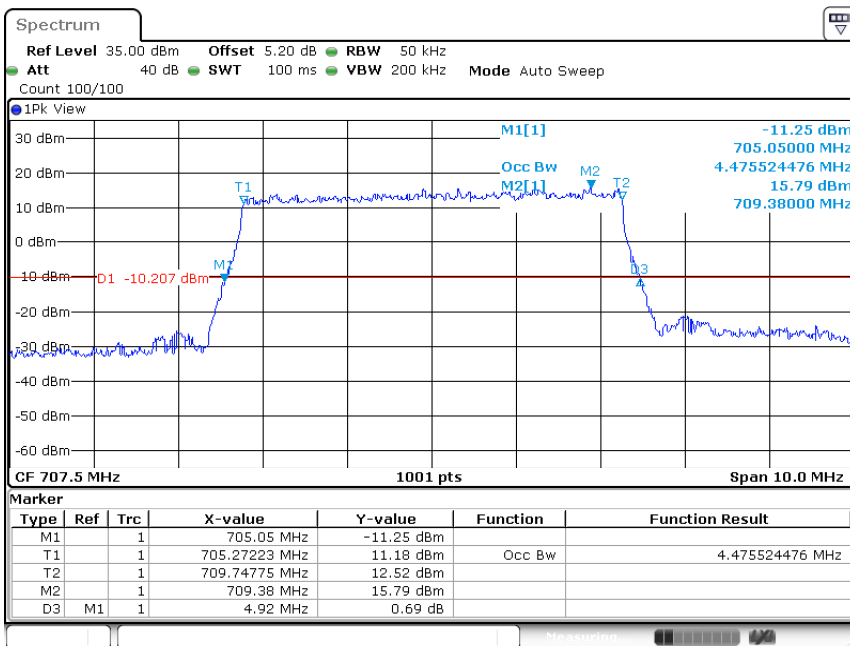


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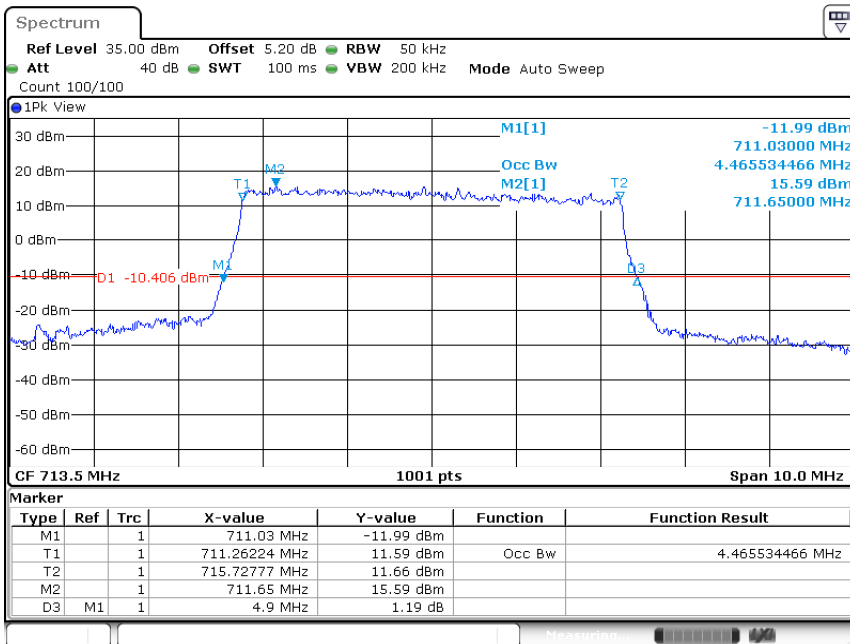
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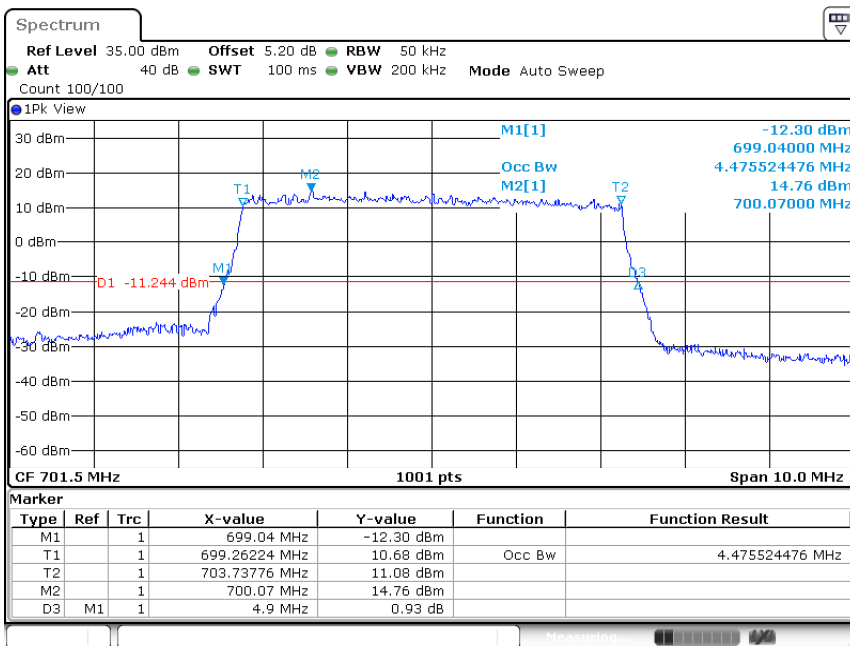


Band12-5MHz-QPSK-23155-25RB#0-4.466



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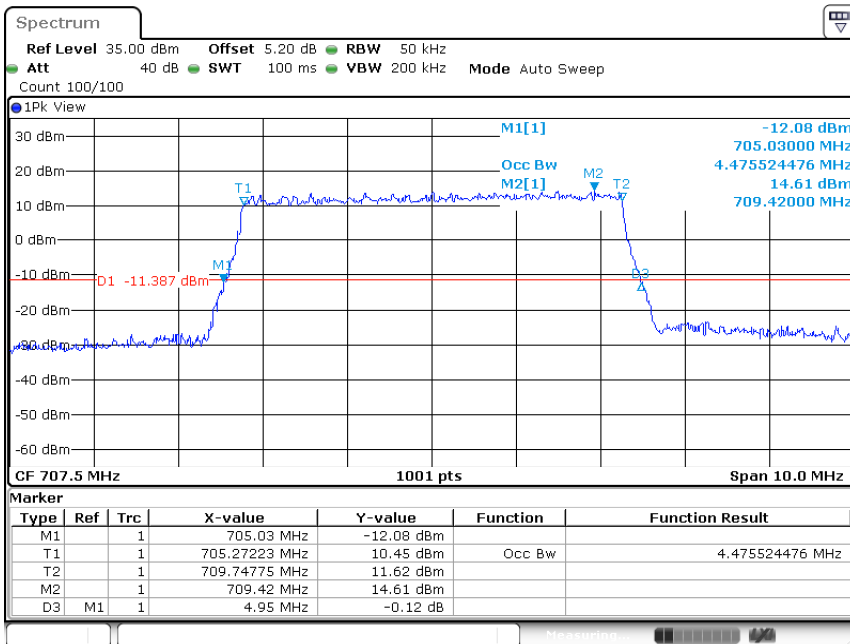
Band12-5MHz-16QAM-23035-25RB#0-4.476



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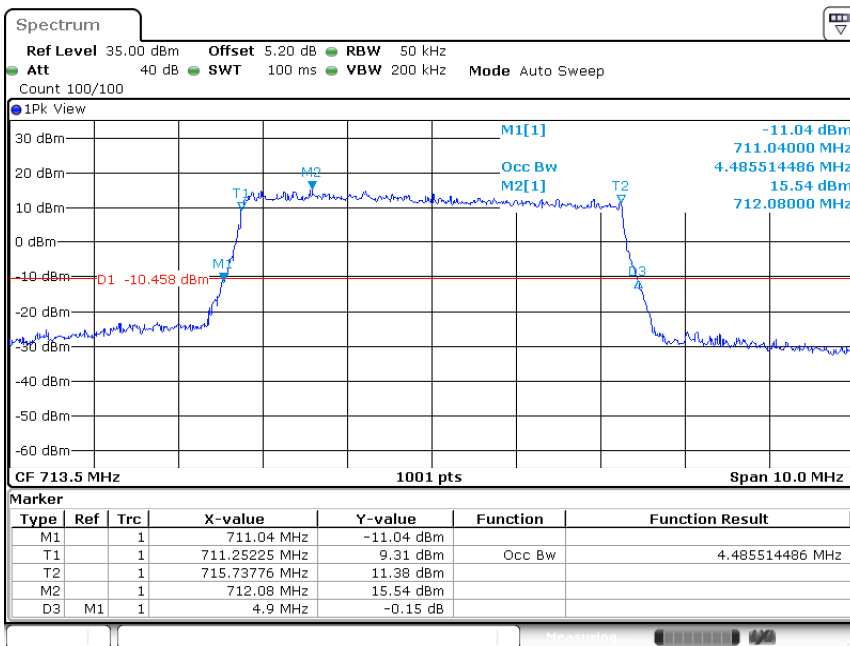


Band12-5MHz-16QAM-23095-25RB#0-4.476



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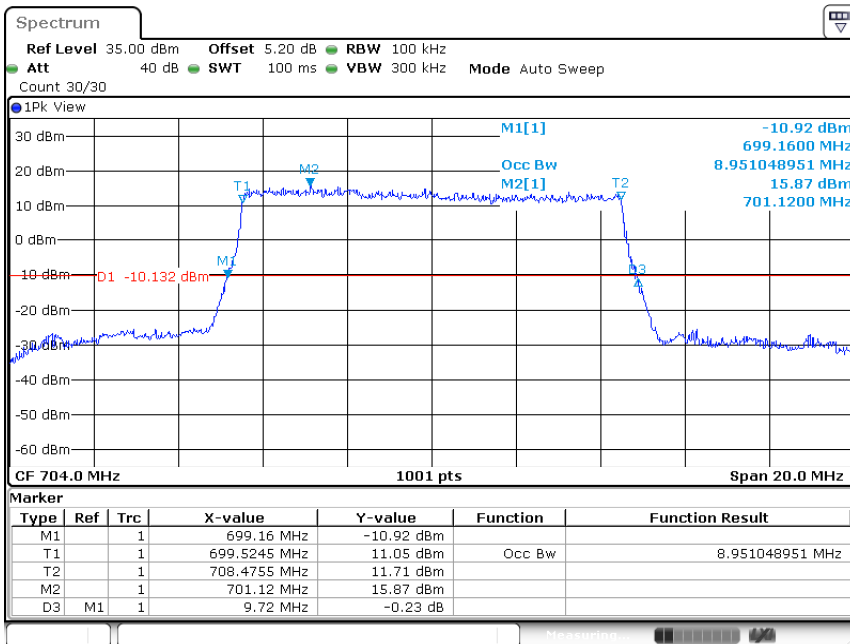
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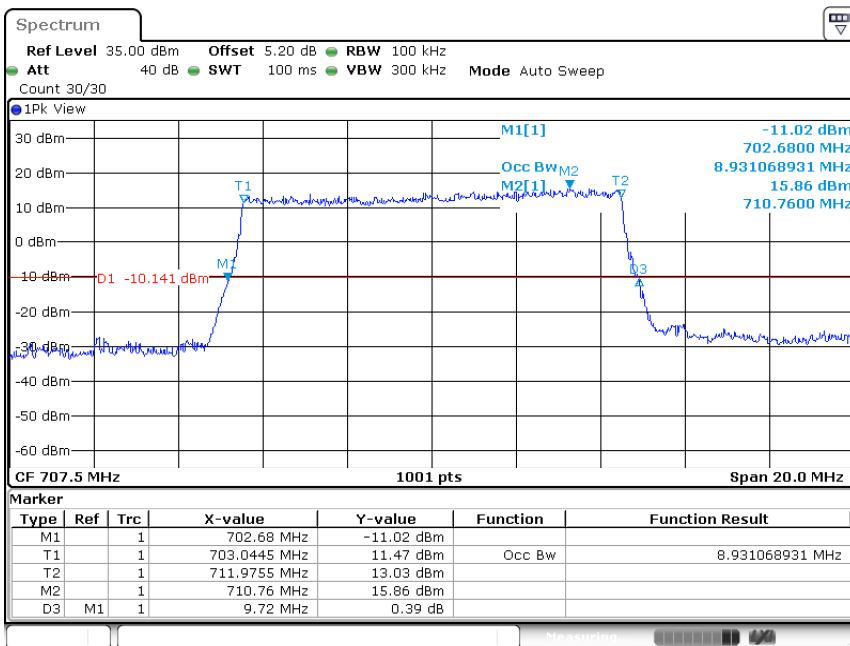


Band12-10MHz-QPSK-23060-50RB#0-8.951



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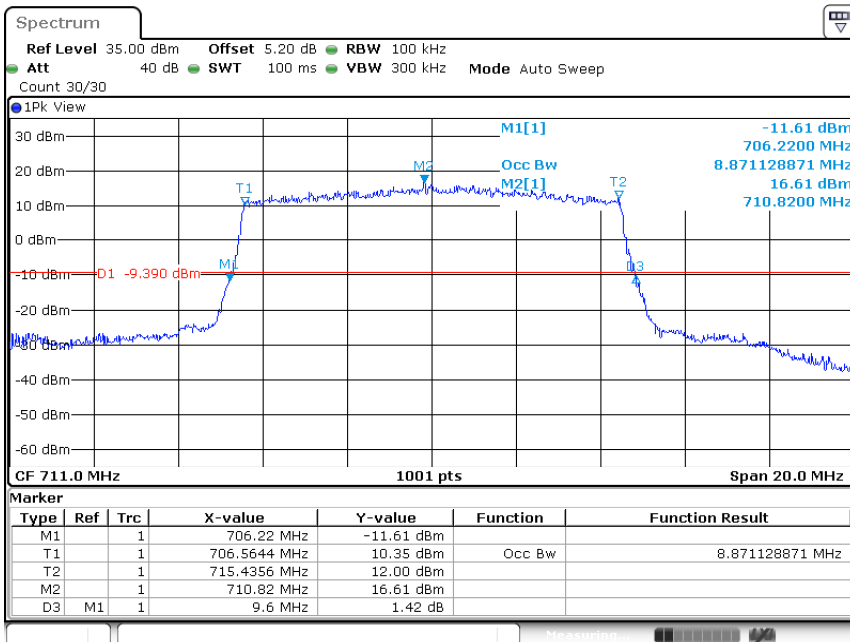
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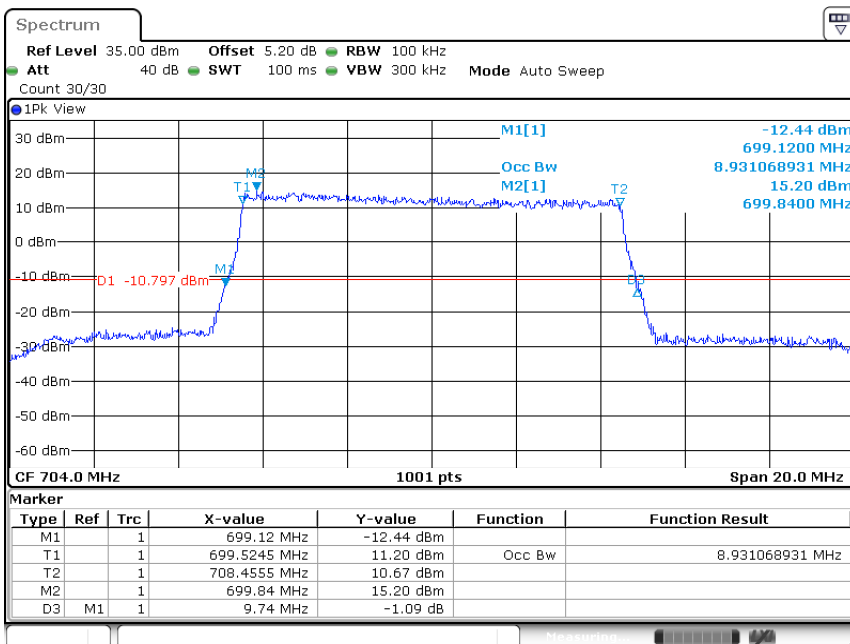


Band12-10MHz-QPSK-23130-50RB#0-8.871



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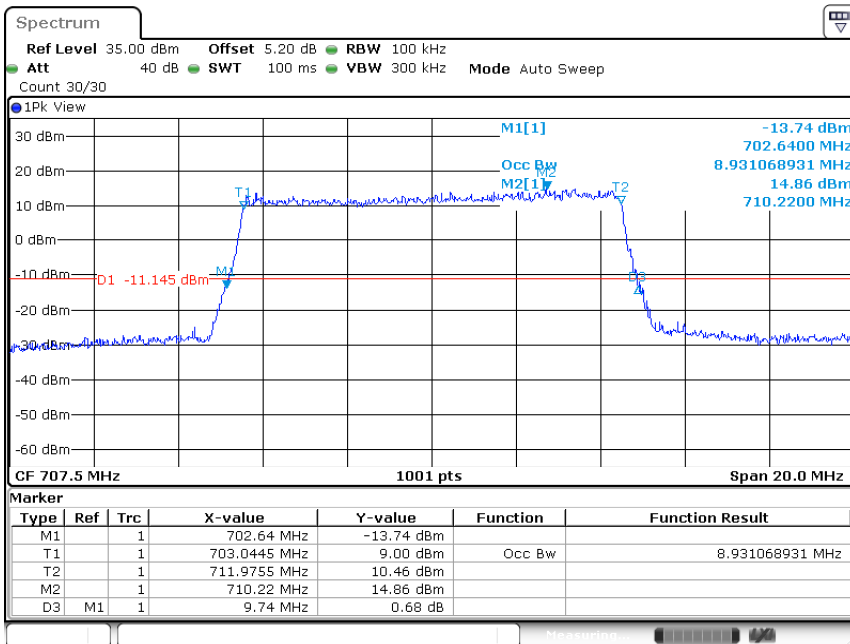
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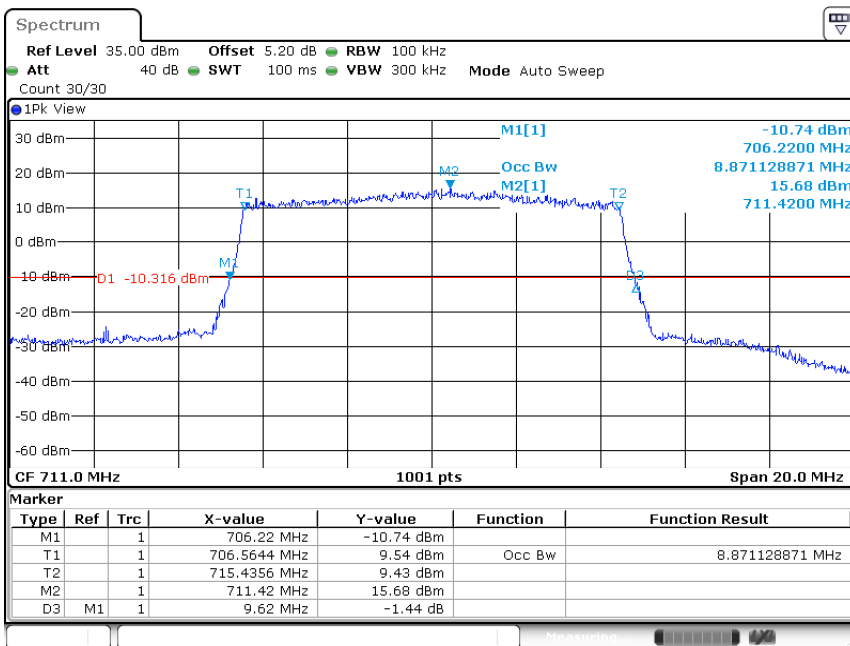


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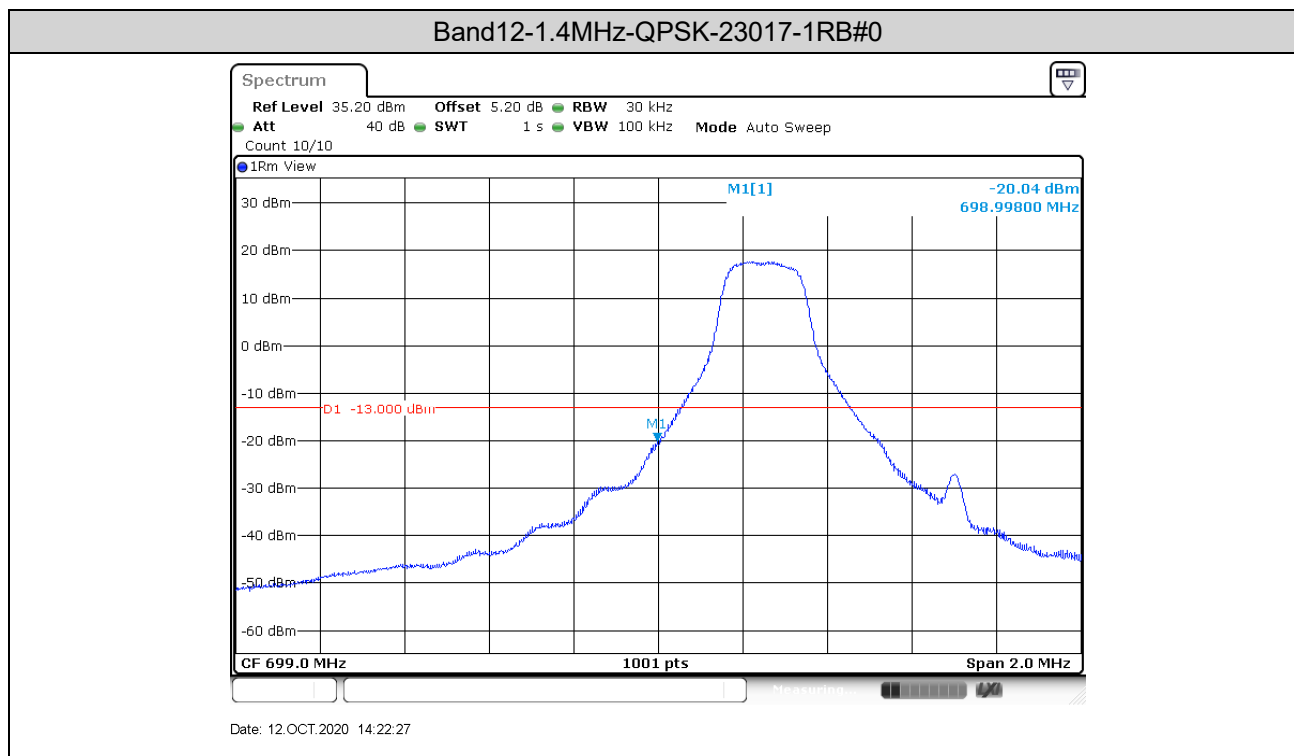


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5. Band Edge Compliance

5.1. Test Plots



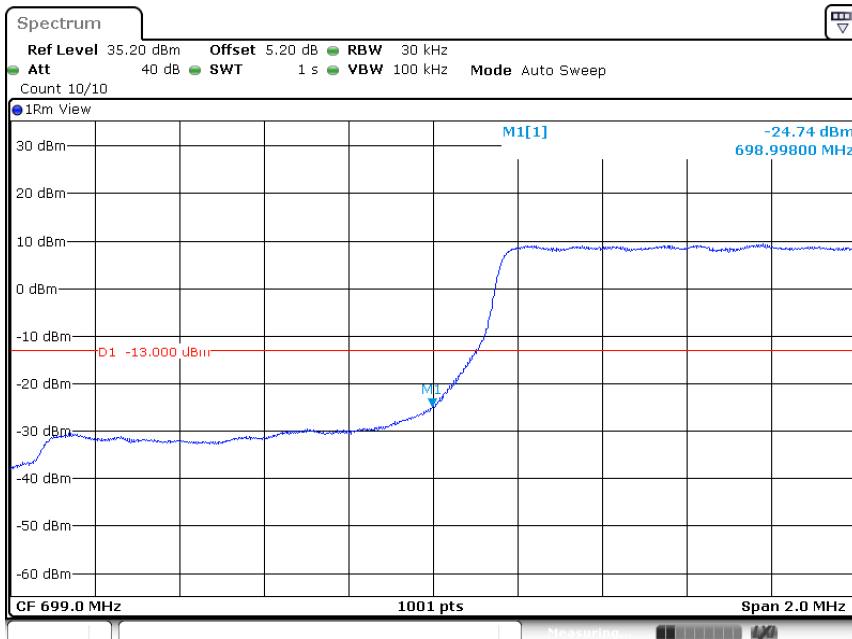
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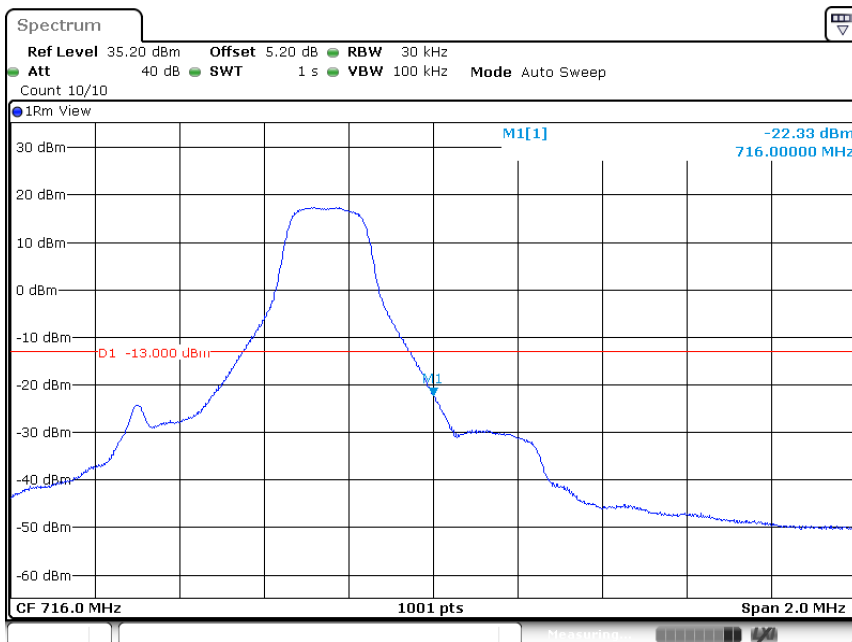
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Band12-1.4MHz-QPSK-23017-6RB#0



Date: 12.OCT.2020 14:23:08

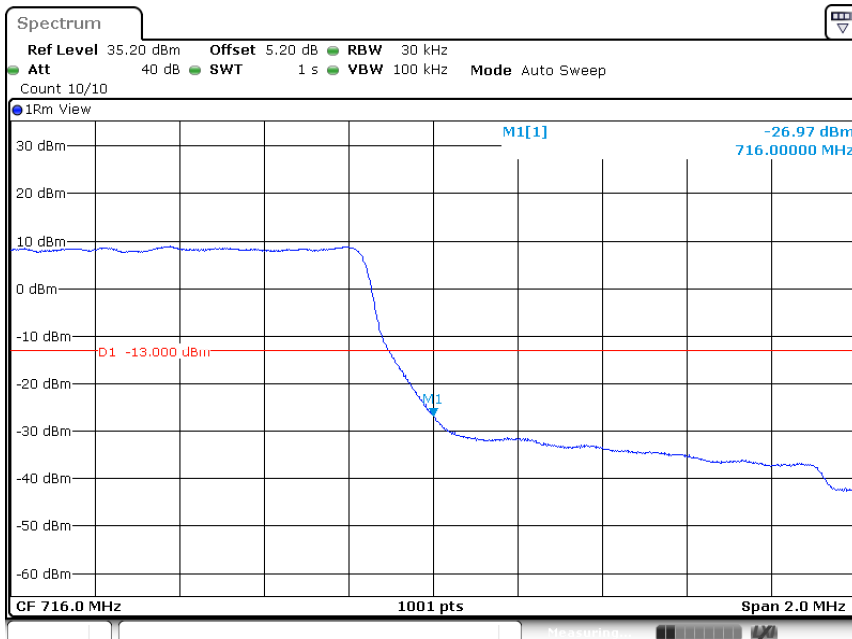
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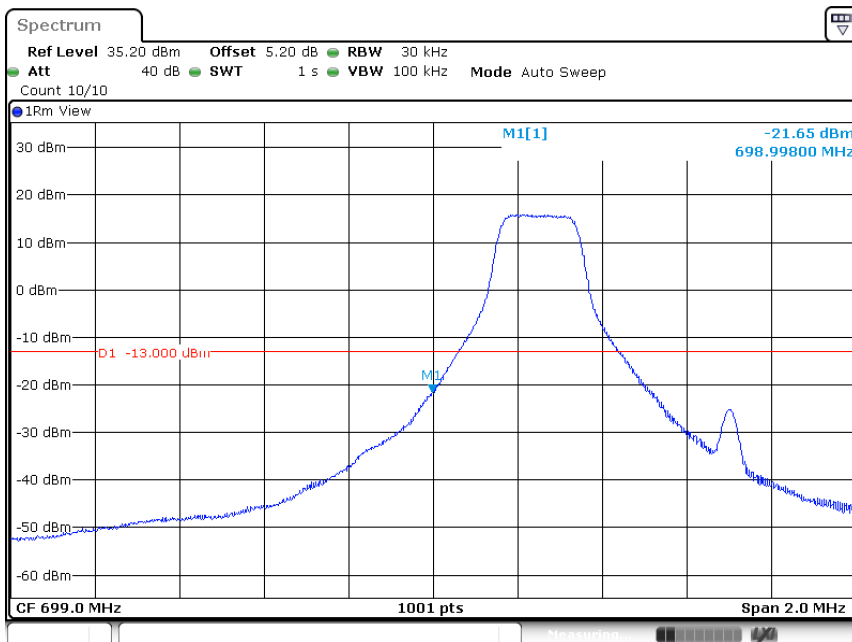


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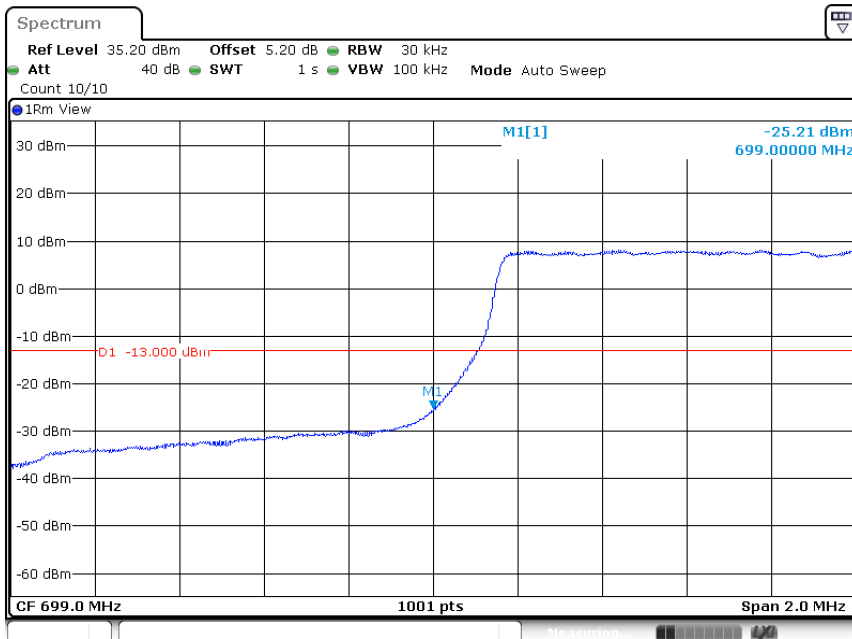
Band12-1.4MHz-16QAM-23017-1RB#0



Date: 12.OCT.2020 14:22:47



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



Date: 12.OCT.2020 14:23:28

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



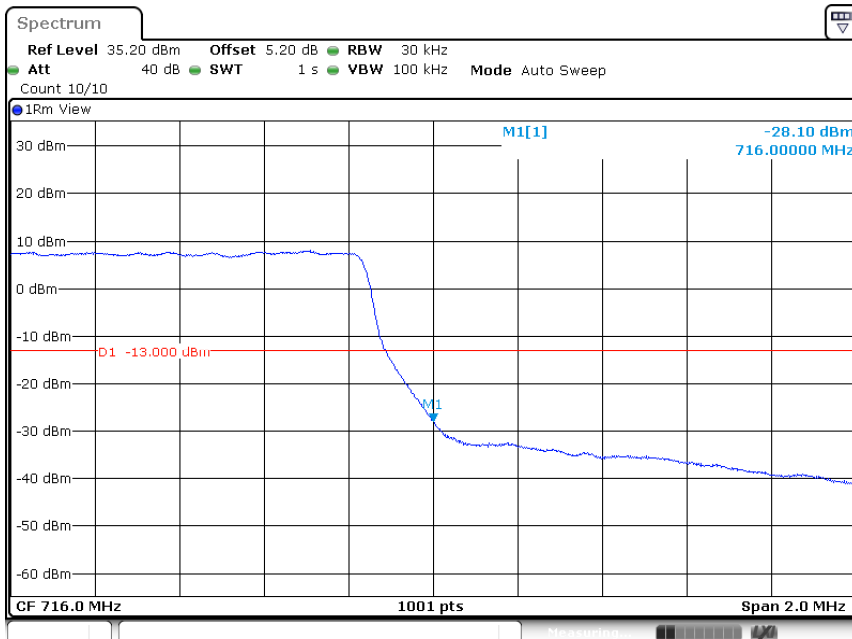
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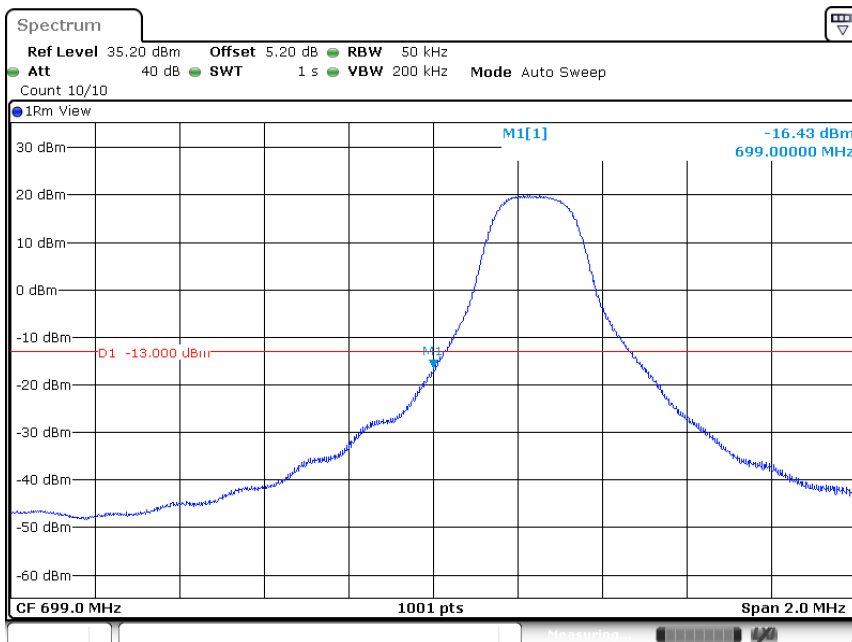
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Band12-1.4MHz-16QAM-23173-6RB#0



Date: 12.OCT.2020 14:24:55

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



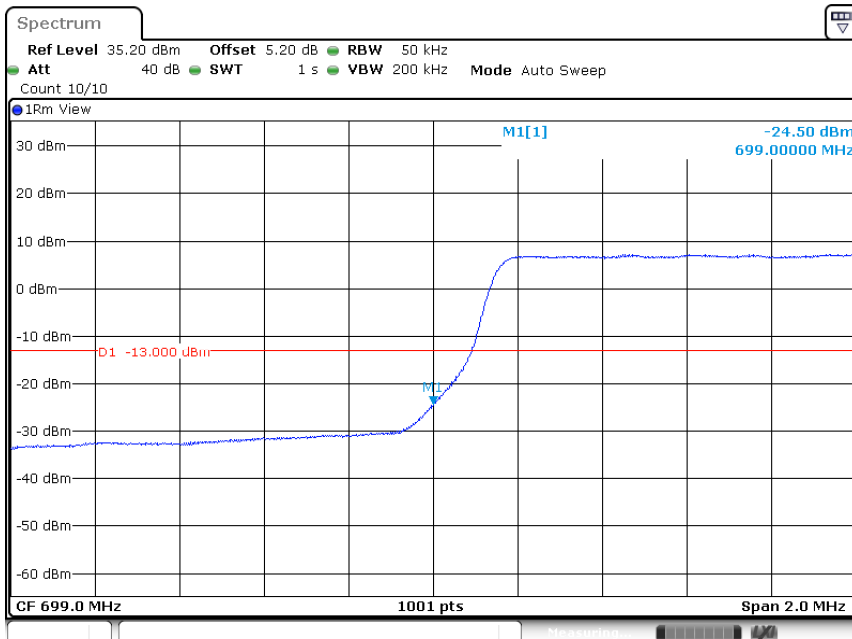
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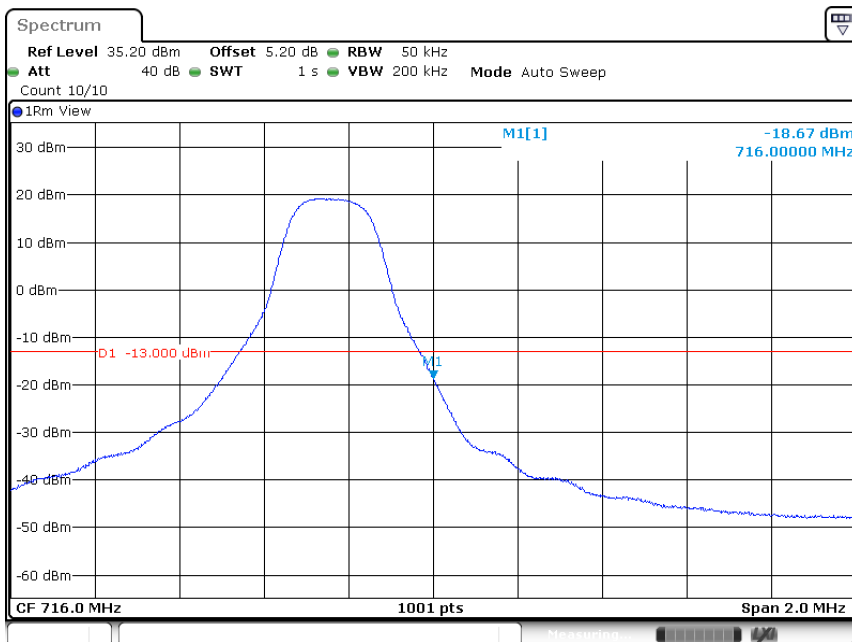
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Band12-3MHz-QPSK-23025-15RB#0



Date: 12.OCT.2020 14:26:01

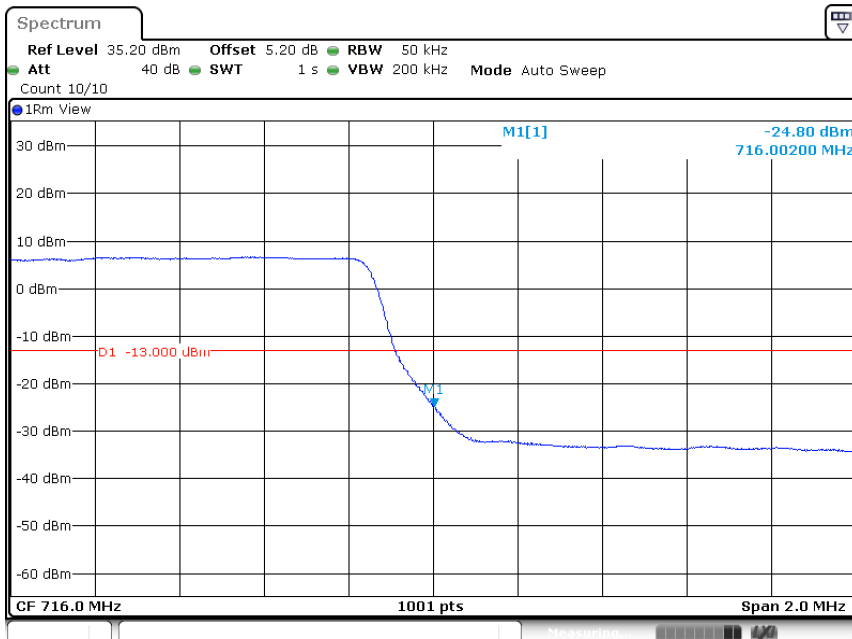
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Date: 12.OCT.2020 14:26:46

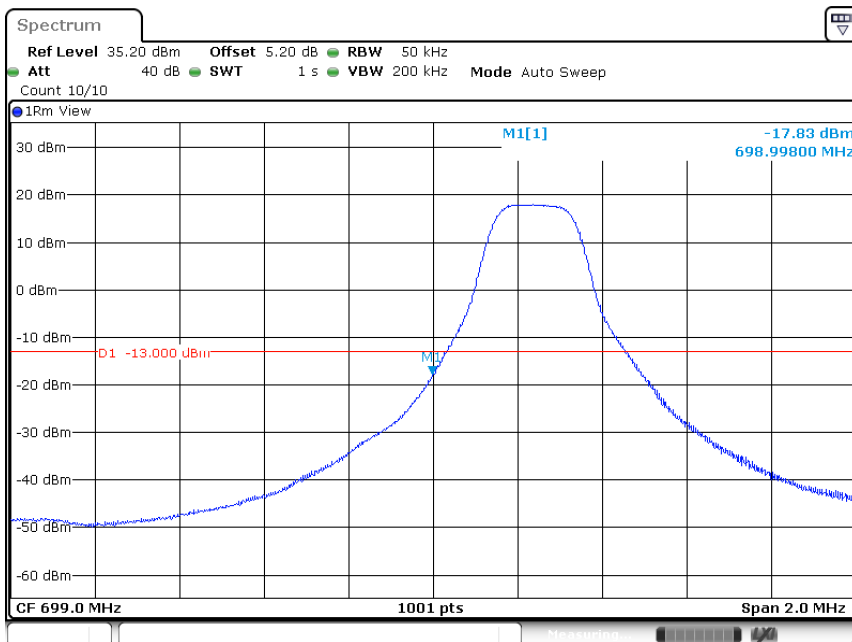


Band12-3MHz-QPSK-23165-15RB#0



Date: 12.OCT.2020 14:27:27

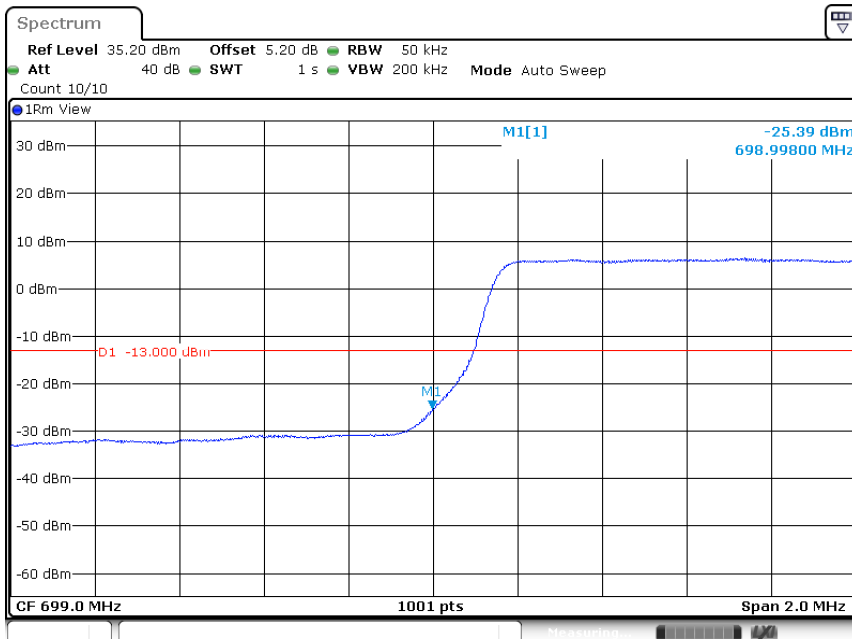
Band12-3MHz-16QAM-23025-1RB#0



Date: 12.OCT.2020 14:25:41

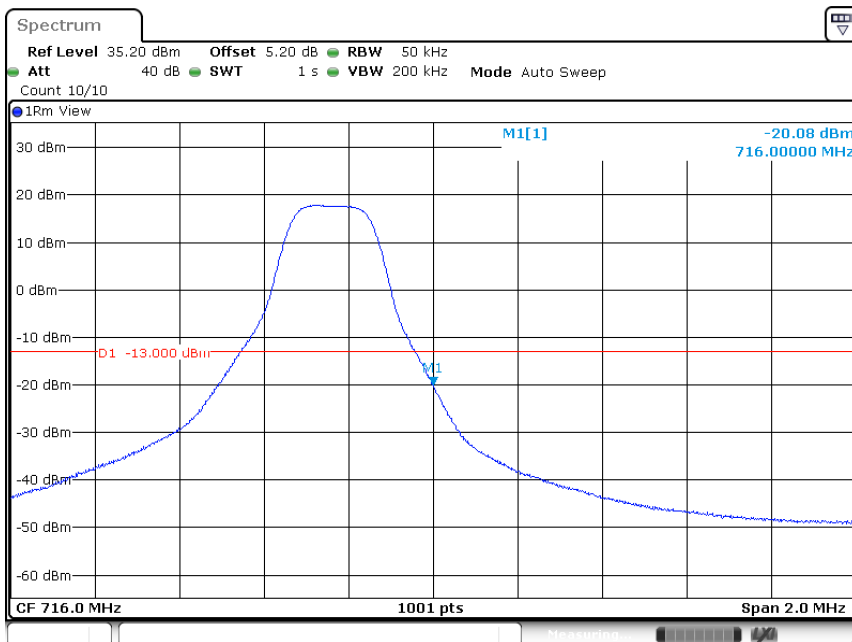


Band12-3MHz-16QAM-23025-15RB#0



Date: 12.OCT.2020 14:26:21

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



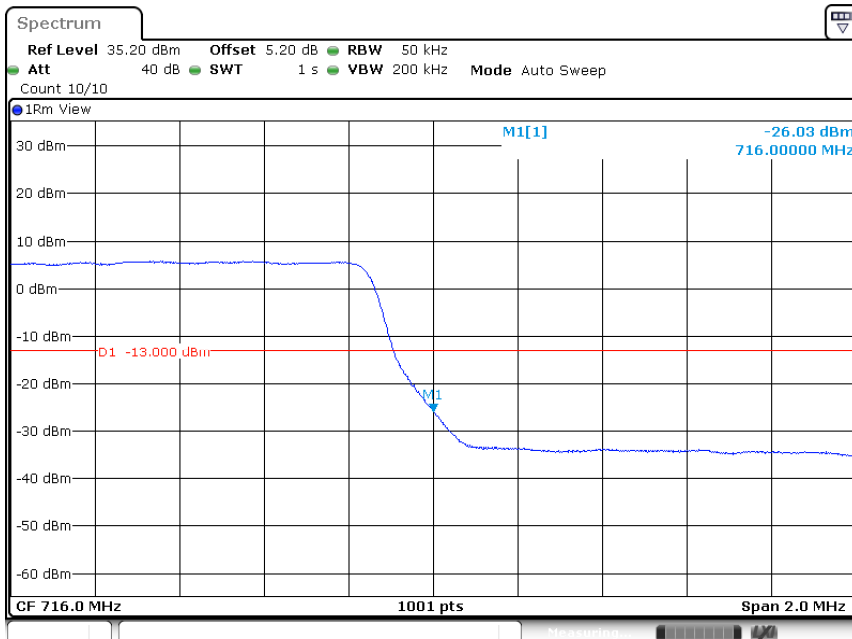
Date: 12.OCT.2020 14:27:07



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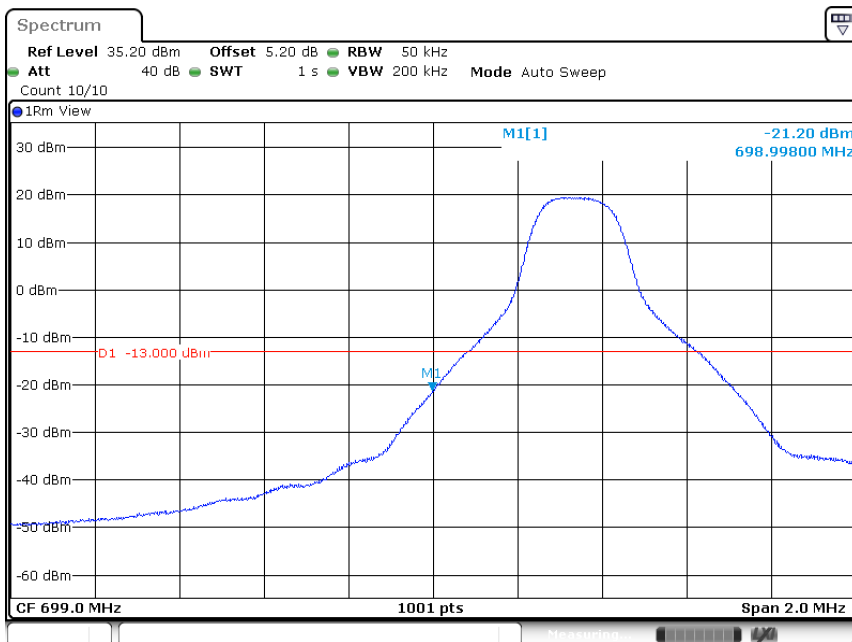
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Band12-3MHz-16QAM-23165-15RB#0



Date: 12.OCT.2020 14:27:48

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



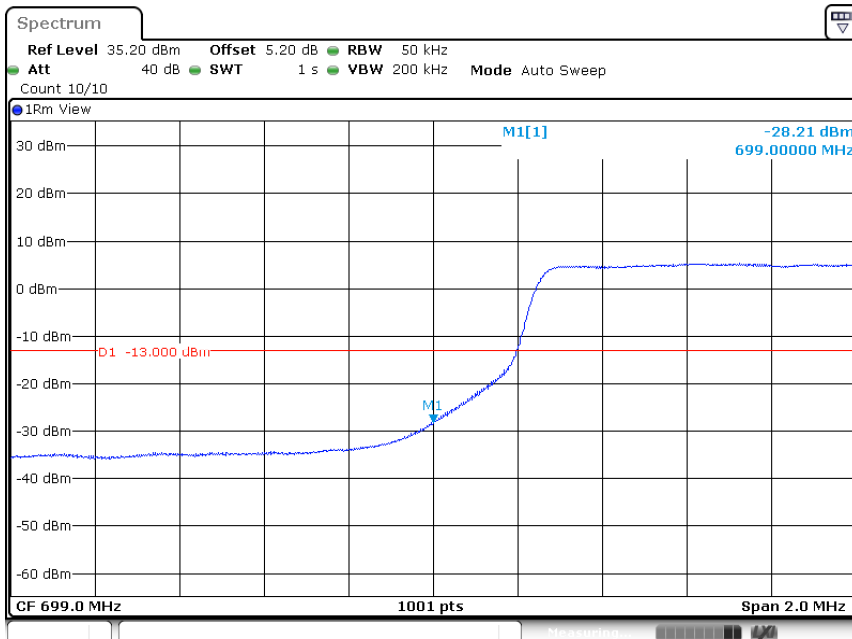
Date: 12.OCT.2020 14:28:13



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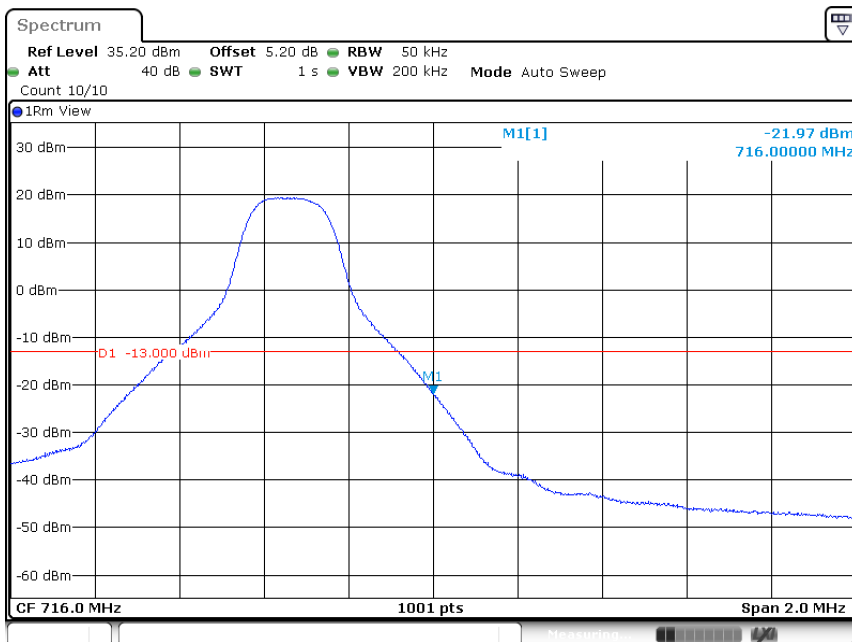
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Band12-5MHz-QPSK-23035-25RB#0



Date: 12.OCT.2020 14:28:54

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



Date: 12.OCT.2020 14:29:40

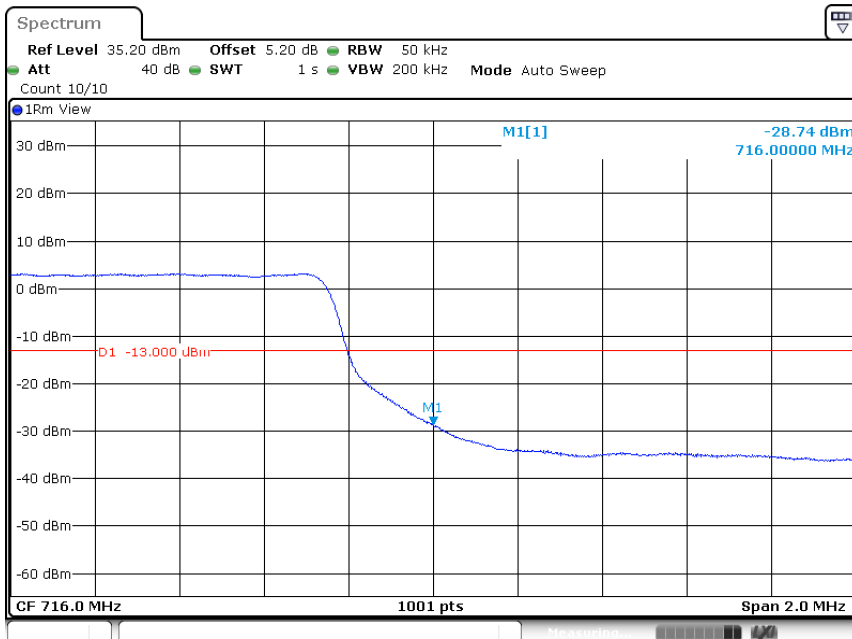


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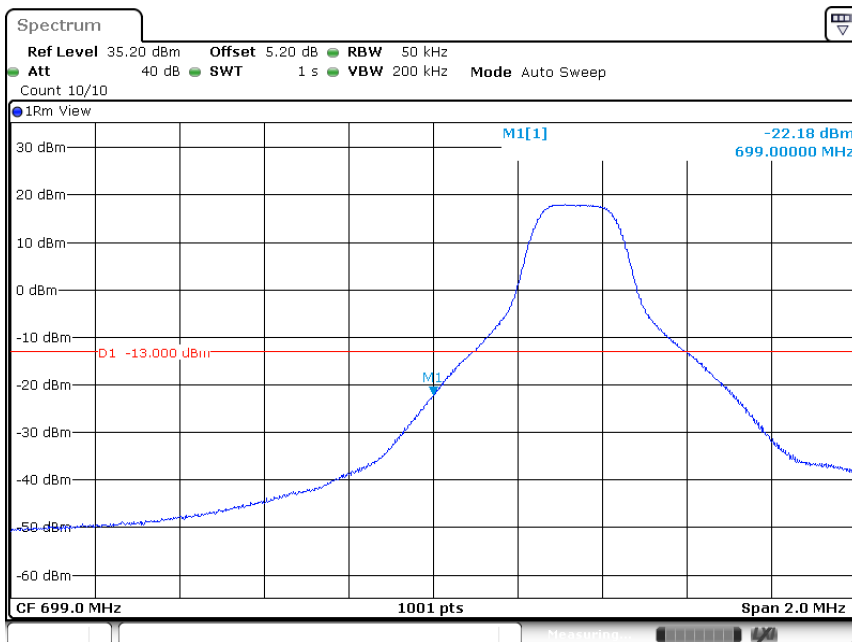
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Band12-5MHz-QPSK-23155-25RB#0



Date: 12.OCT.2020 14:30:22

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



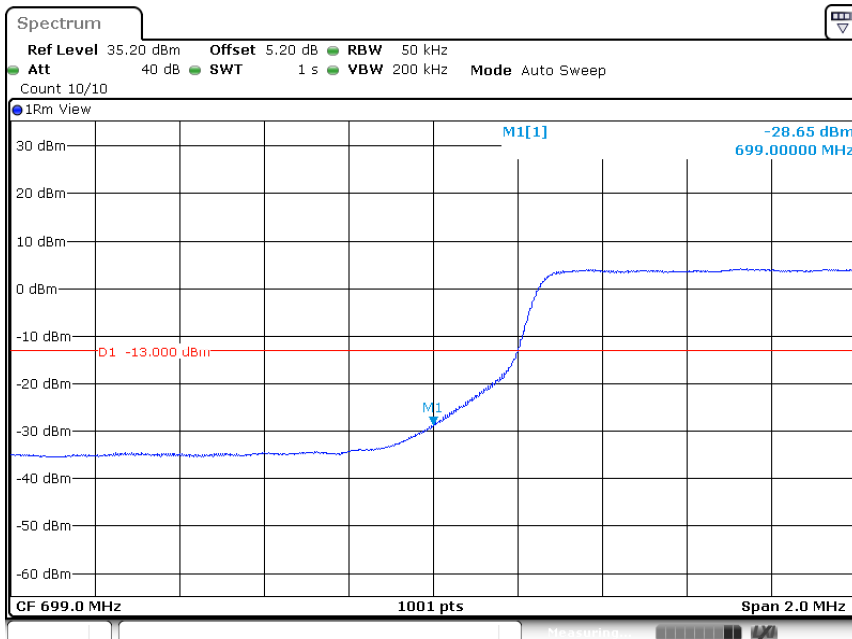
Date: 12.OCT.2020 14:28:34



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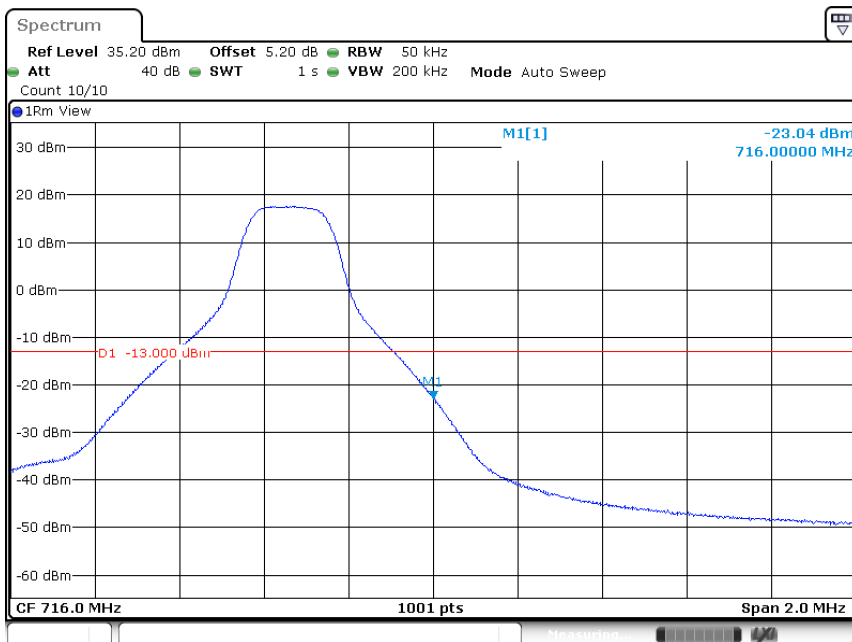
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Band12-5MHz-16QAM-23035-25RB#0



Date: 12.OCT.2020 14:29:15

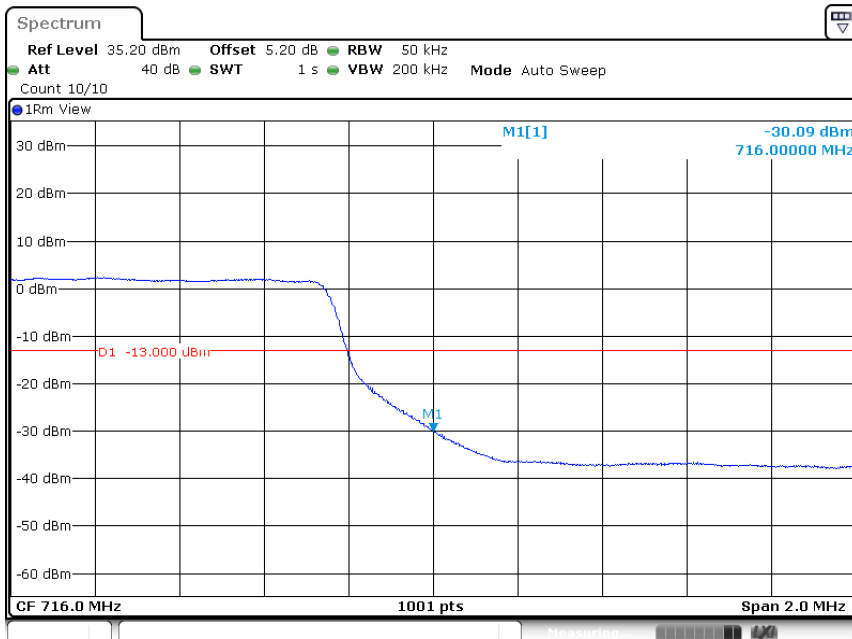
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Date: 12.OCT.2020 14:30:01

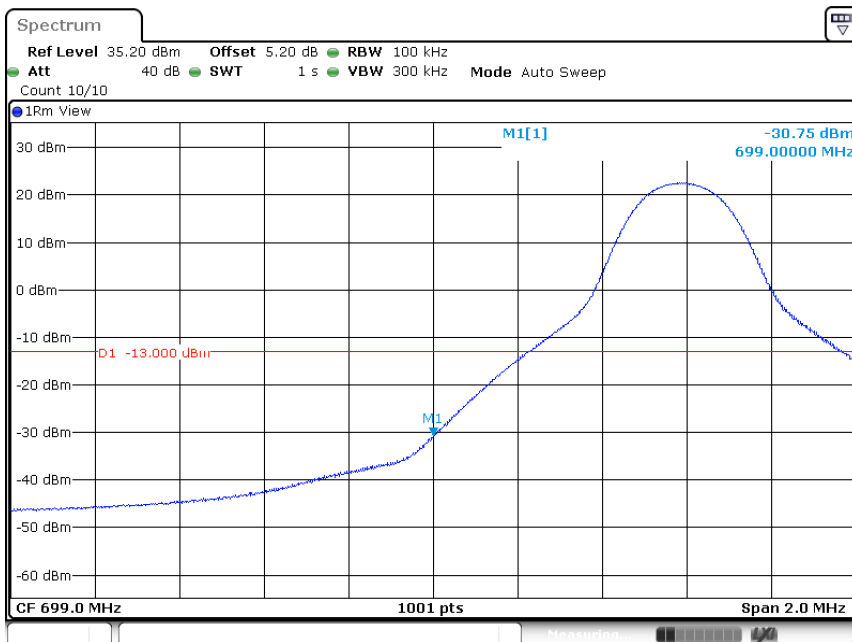


Band12-5MHz-16QAM-23155-25RB#0



Date: 12.OCT.2020 14:30:42

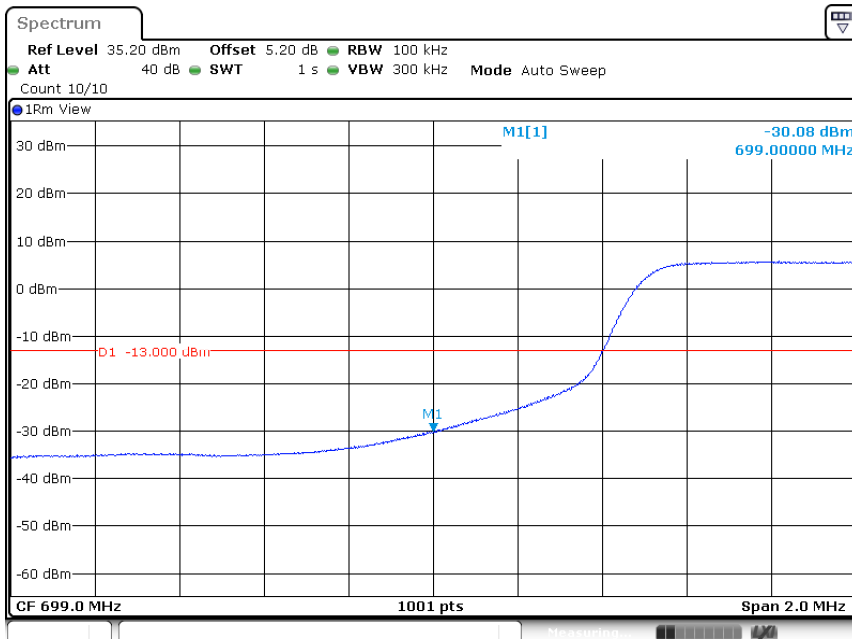
Band12-10MHz-QPSK-23060-1RB#0



Date: 12.OCT.2020 14:31:07

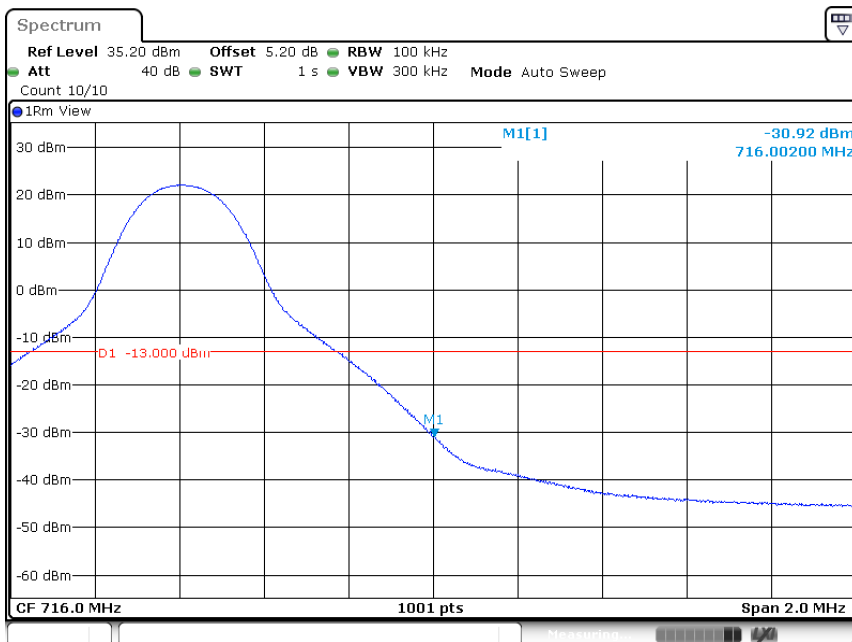


Band12-10MHz-QPSK-23060-50RB#0



Date: 12.OCT.2020 14:31:48

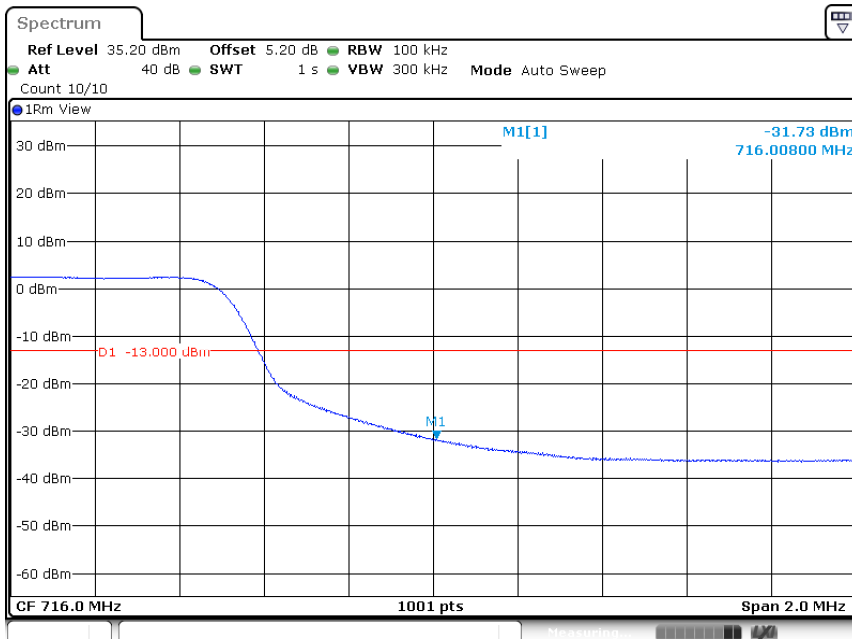
Band12-10MHz-QPSK-23130-1RB#49



Date: 12.OCT.2020 14:32:34

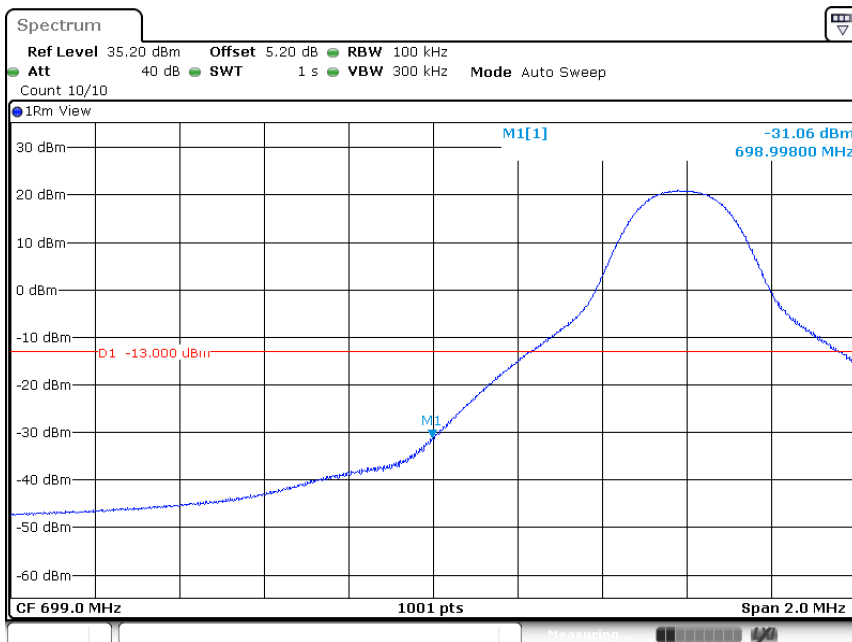


Band12-10MHz-QPSK-23130-50RB#0



Date: 12.OCT.2020 14:33:15

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



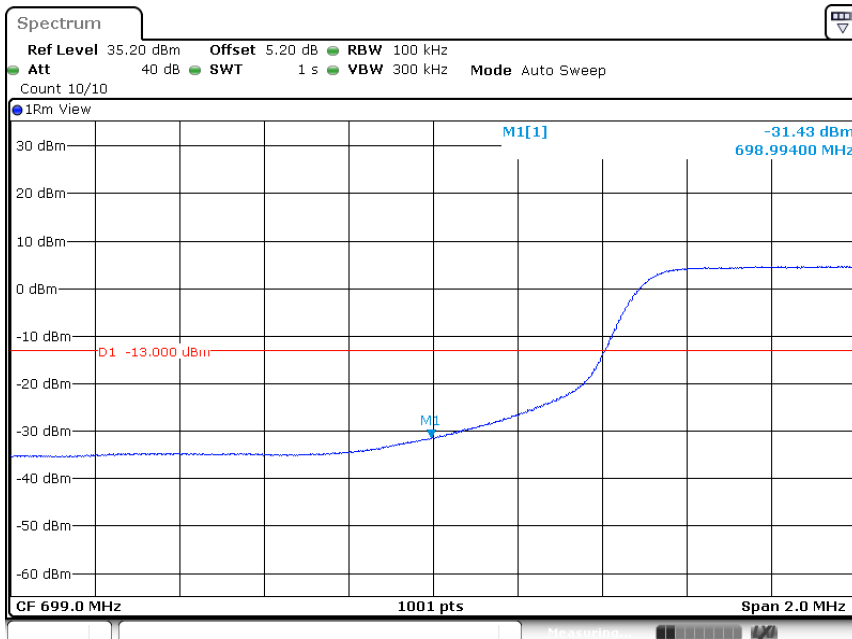
Date: 12.OCT.2020 14:31:28



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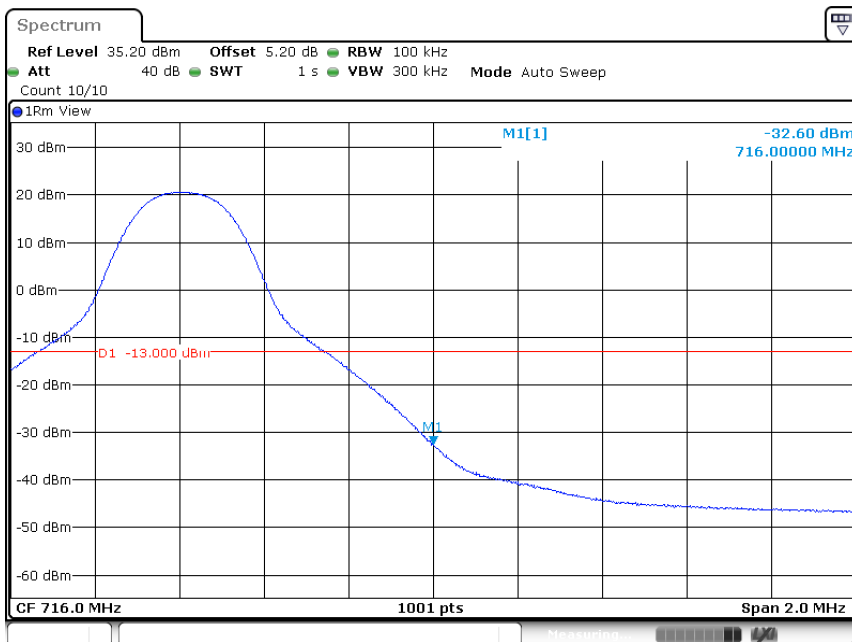
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Band12-10MHz-16QAM-23060-50RB#0



Date: 12.OCT.2020 14:32:09

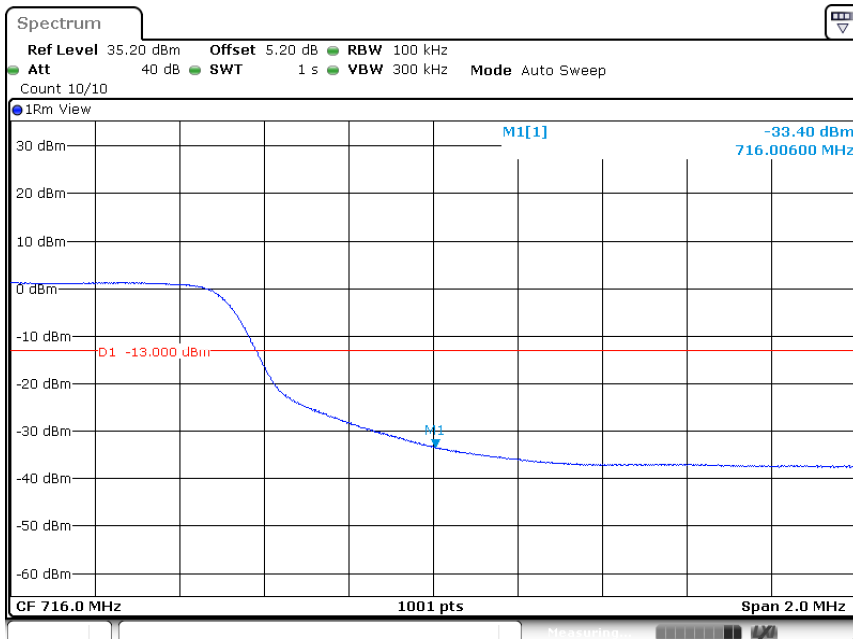
Band12-10MHz-16QAM-23130-1RB#49



Date: 12.OCT.2020 14:32:54



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



Date: 12.OCT.2020 14:33:35



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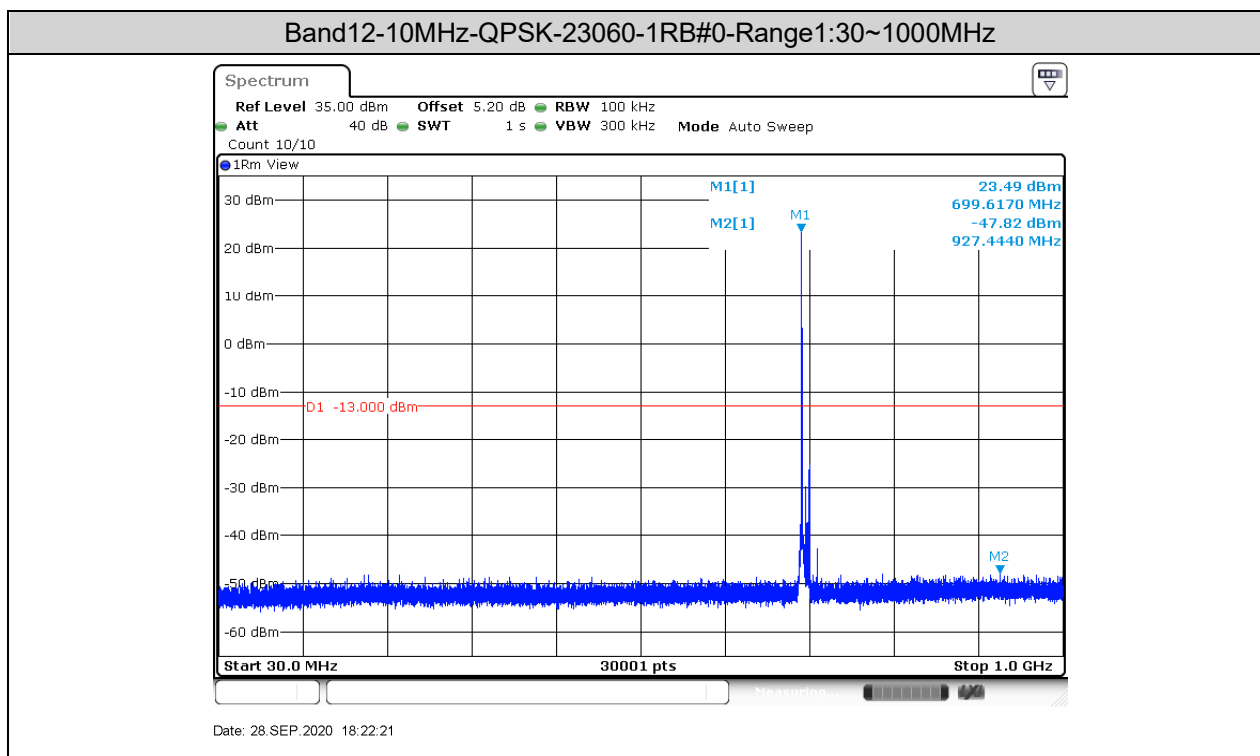
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6. Spurious Emission at Antenna Terminal

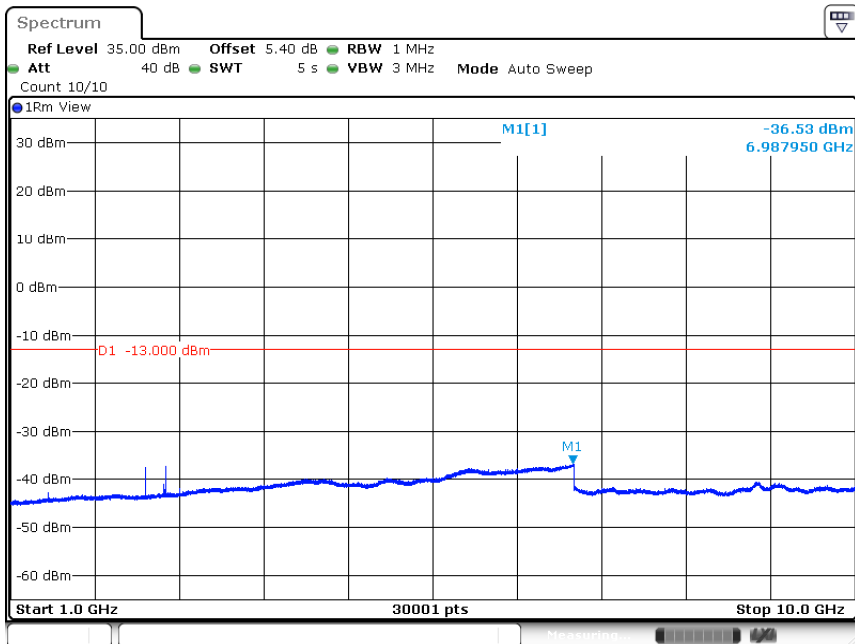
Remark1: For the averaged unwanted emissions measurements, the measurement points in each sweep is greater than twice the Span/RBW in order to ensure bin-to-bin spacing of $< RBW/2$ so that narrowband signals are not lost between frequency bins. As to the present test item, the "Measurement Points =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

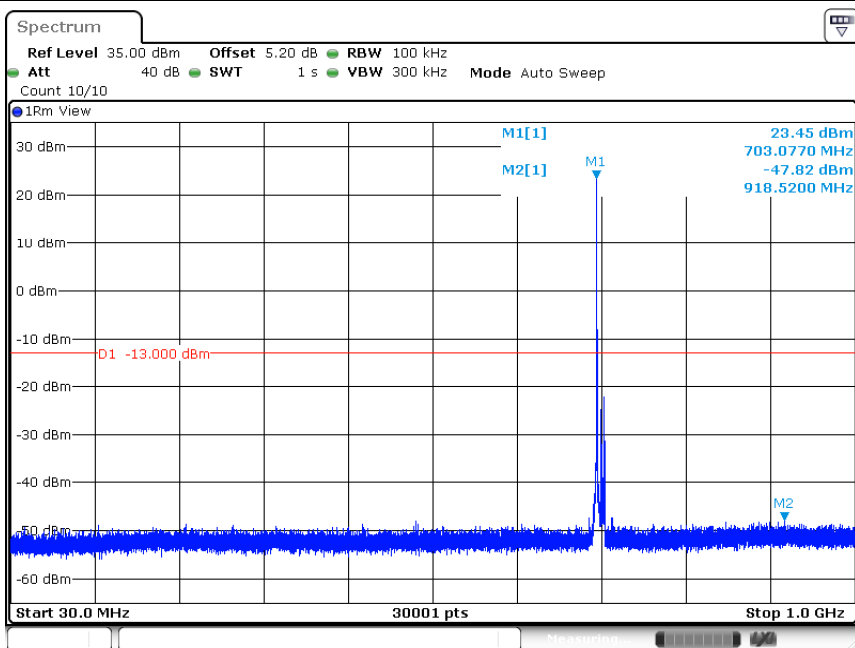


Band12-10MHz-QPSK-23060-1RB#0-Range2:1000~10000MHz



Date: 28.SEP.2020 18:23:30

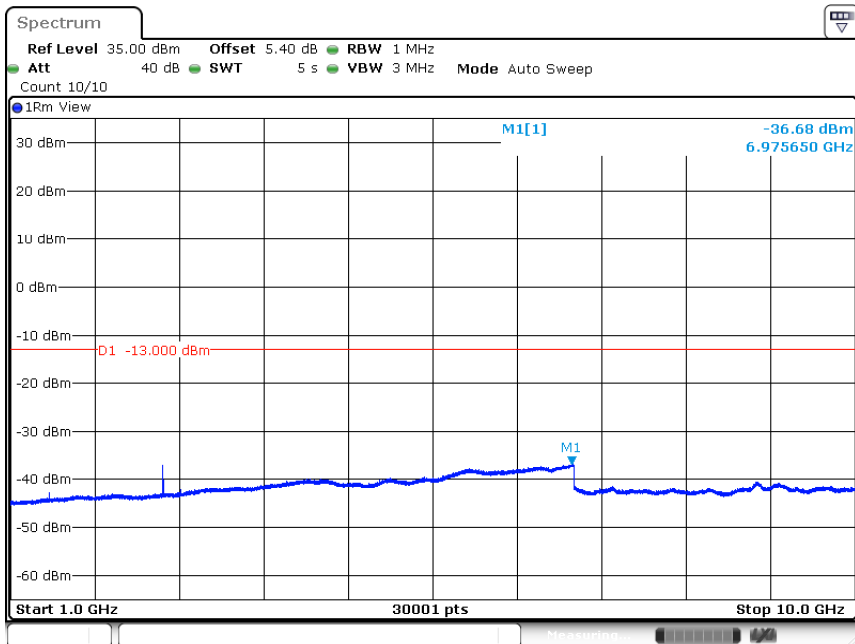
Band12-10MHz-QPSK-23095-1RB#0-Range1:30~1000MHz



Date: 28.SEP.2020 18:25:27

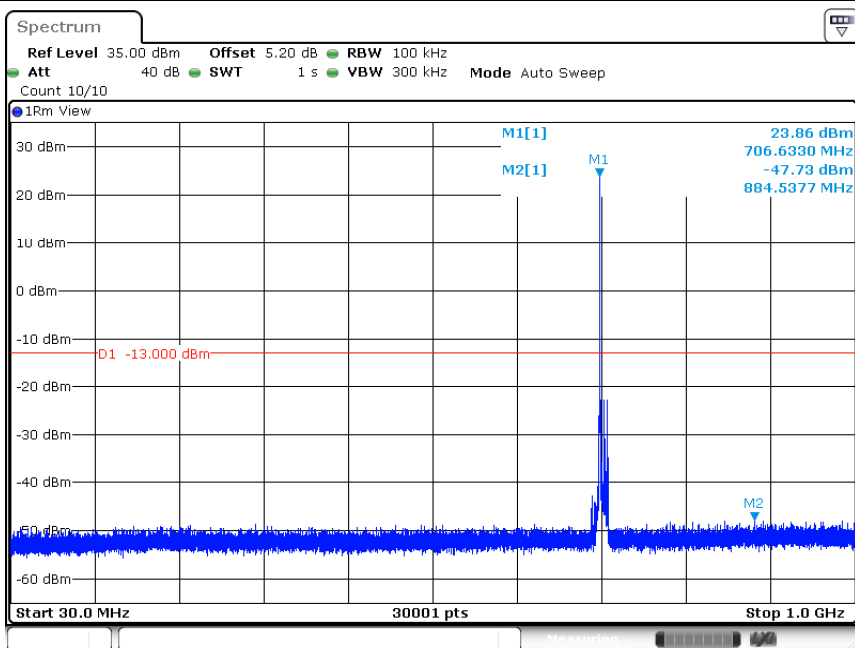


Band12-10MHz-QPSK-23095-1RB#0-Range2:1000~10000MHz



Date: 28.SEP.2020 18:26:35

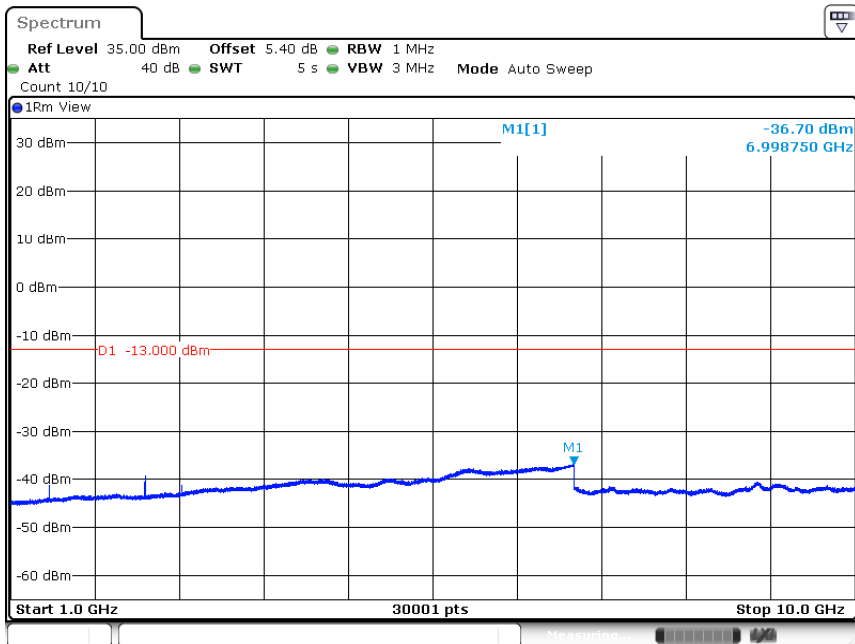
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Date: 28.SEP.2020 18:28:29

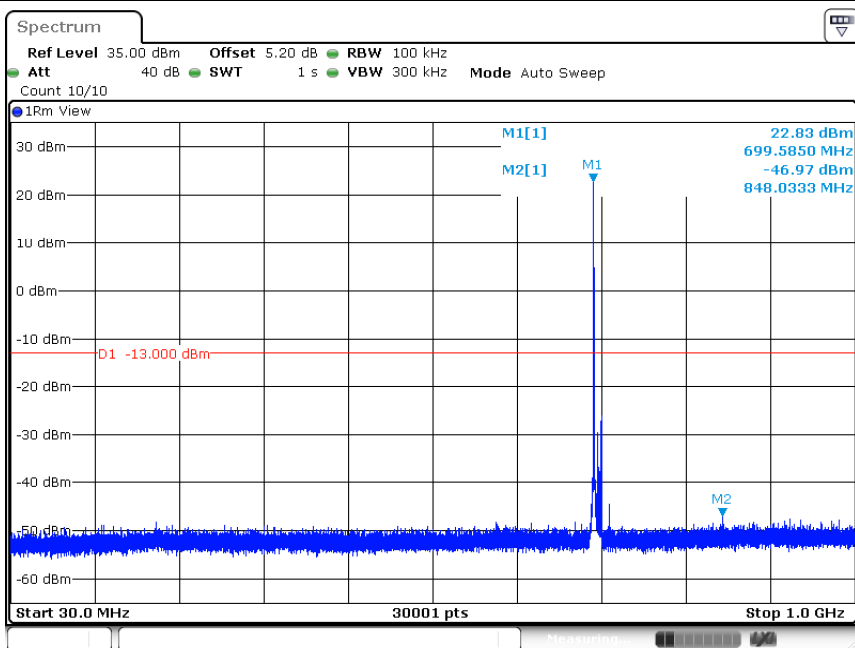


Band12-10MHz-QPSK-23130-1RB#0-Range2:1000~10000MHz



Date: 28.SEP.2020 18:29:37

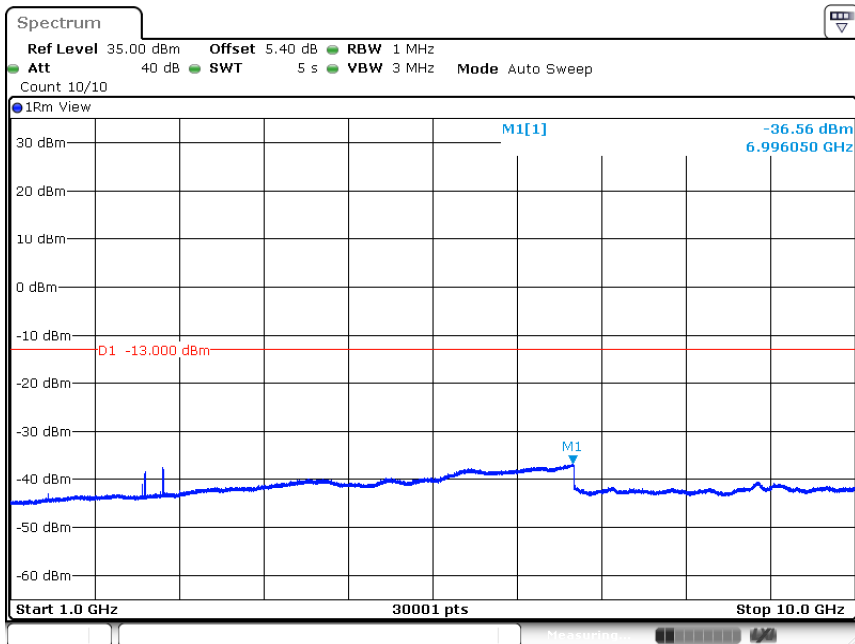
Band12-10MHz-16QAM-23060-1RB#0-Range1:30~1000MHz



Date: 28.SEP.2020 18:23:55

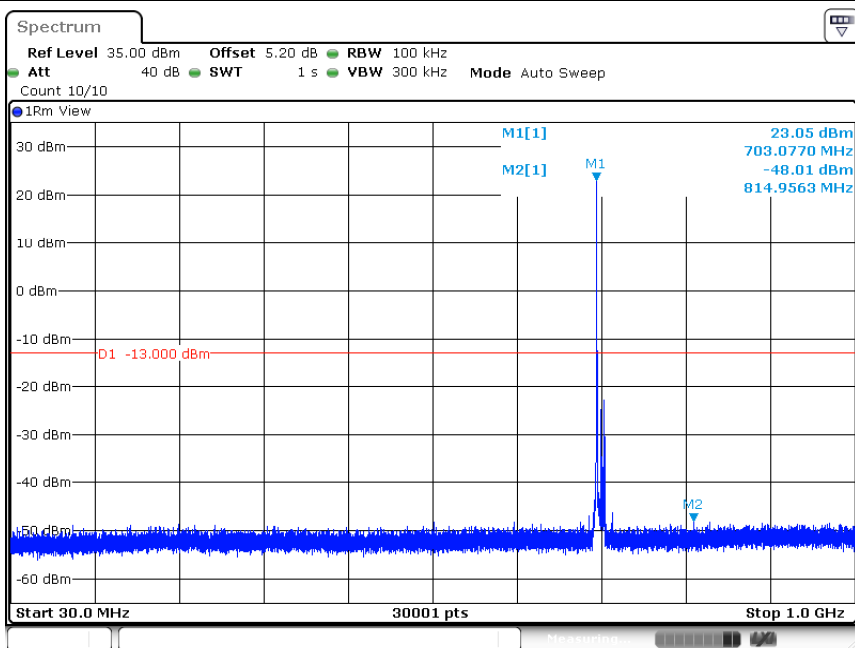


Band12-10MHz-16QAM-23060-1RB#0-Range2:1000~10000MHz



Date: 28.SEP.2020 18:25:04

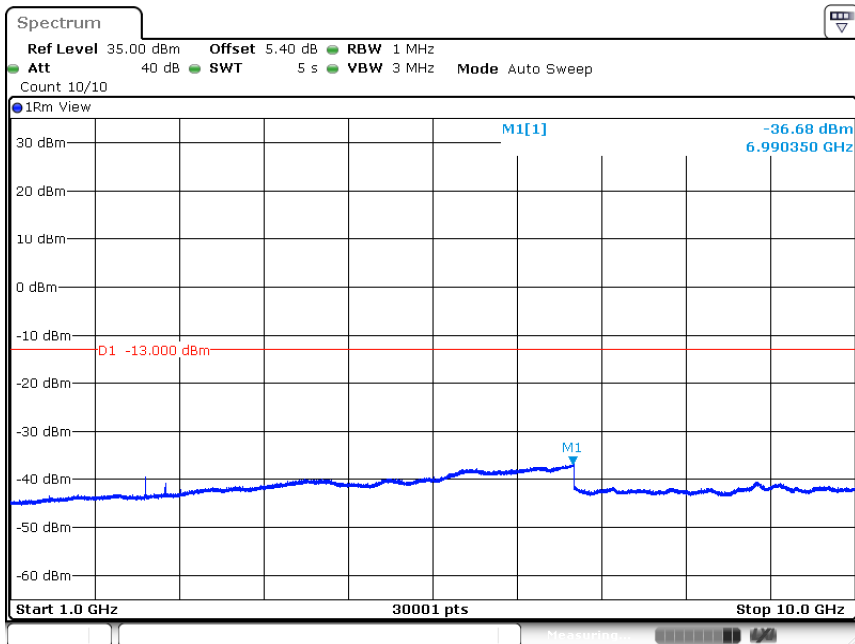
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Date: 28.SEP.2020 18:26:58

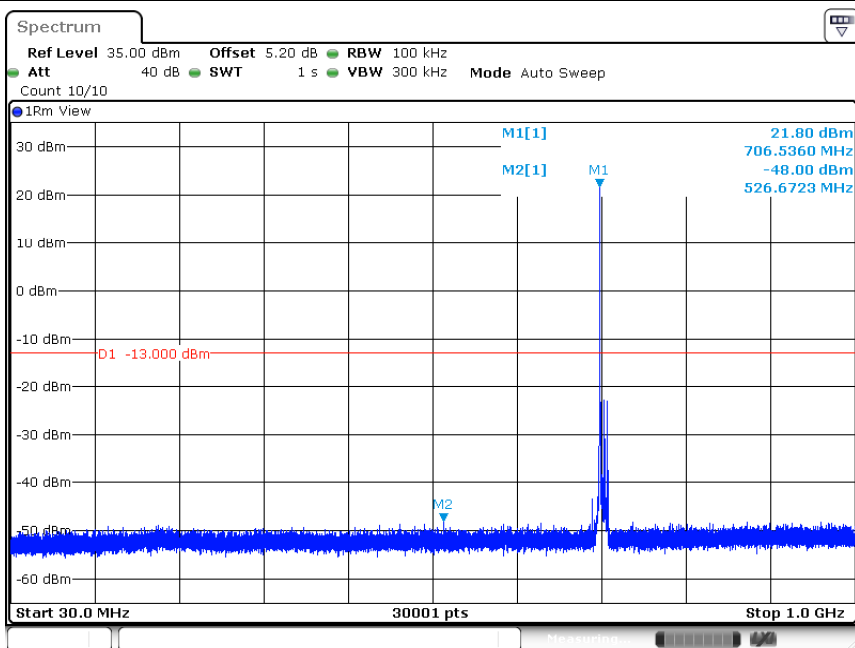


Band12-10MHz-16QAM-23095-1RB#0-Range2:1000~10000MHz



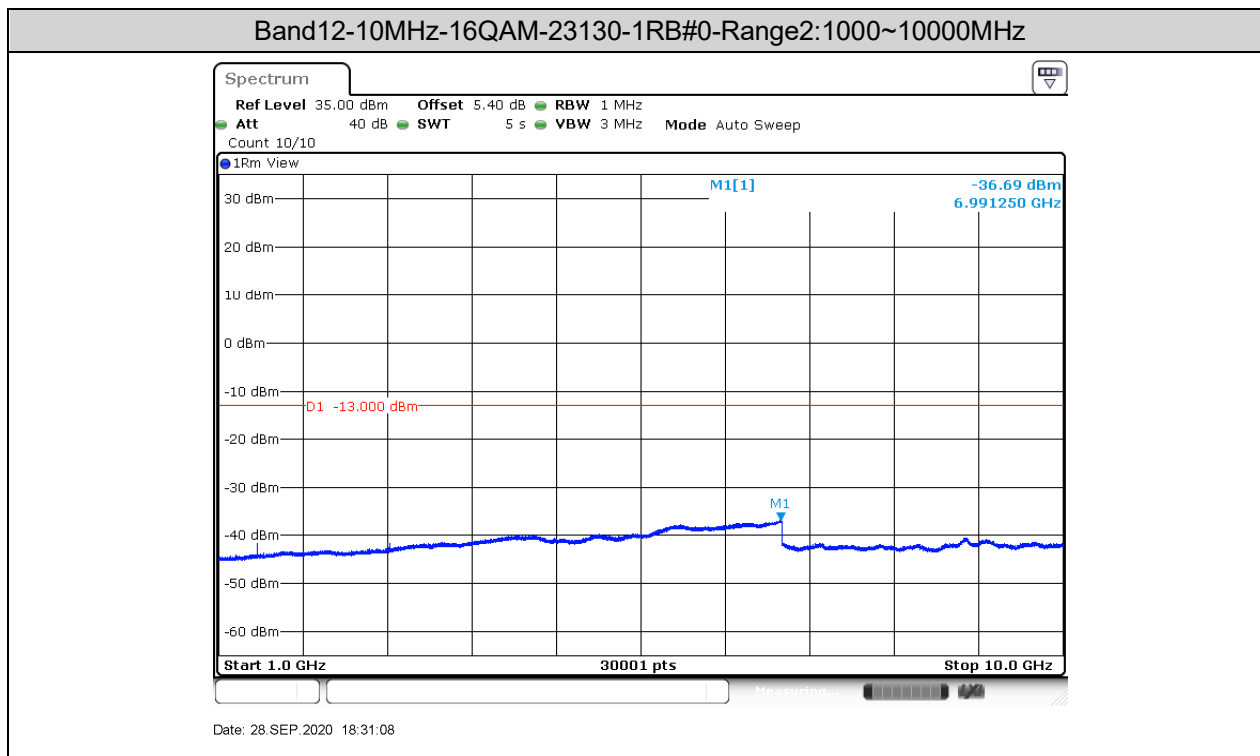
Date: 28.SEP.2020 18:28:06

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



Date: 28.SEP.2020 18:30:00





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7. Field Strength of Spurious Radiation

7.1. Test Mode =LTE/TM1 10MHz

7.1.1. Test Channel = LCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
31.6976	-74.67	-13.00	61.67	Vertical
107.8464	-65.18	-13.00	52.18	Vertical
338.0389	-68.61	-13.00	55.61	Vertical
1398.8798	-52.46	-13.00	39.46	Vertical
2798.3597	-49.69	-13.00	36.69	Vertical
3497.8599	-57.66	-13.00	44.66	Vertical
41.2526	-64.17	-13.00	51.17	Horizontal
83.4012	-75.32	-13.00	62.32	Horizontal
240.5005	-68.23	-13.00	55.23	Horizontal
1398.8798	-49.11	-13.00	36.11	Horizontal
2798.3597	-47.10	-13.00	34.10	Horizontal
3497.8599	-55.61	-13.00	42.61	Horizontal

7.1.2. Test Channel = MCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
31.8916	-75.12	-13.00	62.12	Vertical
113.3272	-64.58	-13.00	51.58	Vertical
322.7121	-67.84	-13.00	54.84	Vertical
1406.0812	-53.73	-13.00	40.73	Vertical
2812.3625	-52.07	-13.00	39.07	Vertical
3515.5006	-60.33	-13.00	47.33	Vertical
42.0771	-63.90	-13.00	50.90	Horizontal
100.4255	-75.42	-13.00	62.42	Horizontal
249.3280	-67.69	-13.00	54.69	Horizontal
1406.0812	-46.97	-13.00	33.97	Horizontal
2812.3625	-51.33	-13.00	38.33	Horizontal
3515.7806	-58.46	-13.00	45.46	Horizontal



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SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch (Testing Center) EEC Laboratory

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com



7.1.3. Test Channel = HCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
30.8245	-74.73	-13.00	61.73	Vertical
110.9505	-64.48	-13.00	51.48	Vertical
318.1529	-68.80	-13.00	55.80	Vertical
1413.2827	-54.81	-13.00	41.81	Vertical
2826.3653	-49.24	-13.00	36.24	Vertical
3532.8613	-59.59	-13.00	46.59	Vertical
39.8460	-63.60	-13.00	50.60	Horizontal
81.1216	-74.95	-13.00	61.95	Horizontal
231.3336	-67.60	-13.00	54.60	Horizontal
1412.8826	-49.28	-13.00	36.28	Horizontal
2826.7654	-47.84	-13.00	34.84	Horizontal
3532.8613	-57.96	-13.00	44.96	Horizontal

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

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	0.60	0.000852	±2.5	PASS
Band12	10MHz	QPSK	23060	50RB#0	VN	NT	0.30	0.000426	±2.5	PASS
Band12	10MHz	QPSK	23060	50RB#0	VH	NT	1.80	0.002557	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	VL	NT	1.60	0.002261	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	VN	NT	0.20	0.000283	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	VH	NT	-2.00	-0.002827	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	VL	NT	0.00	0.000000	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	VN	NT	-0.20	-0.000281	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	VH	NT	-0.80	-0.001125	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	VL	NT	-1.30	-0.001847	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	VN	NT	3.10	0.004403	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	VH	NT	-1.10	-0.001563	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	VL	NT	1.10	0.001555	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	VN	NT	-0.30	-0.000424	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	VH	NT	0.70	0.000989	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	VL	NT	0.10	0.000141	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	VN	NT	-2.80	-0.003938	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	VH	NT	-0.60	-0.000844	±2.5	PASS

8.2. Frequency Vs Temperature

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	-1.10	-0.001563	±2.5	PASS
Band12	10MHz	QPSK	23060	50RB#0	NV	-20	0.20	0.000284	±2.5	PASS
Band12	10MHz	QPSK	23060	50RB#0	NV	-10	-0.50	-0.000710	±2.5	PASS
Band12	10MHz	QPSK	23060	50RB#0	NV	0	-1.20	-0.001705	±2.5	PASS
Band12	10MHz	QPSK	23060	50RB#0	NV	10	0.40	0.000568	±2.5	PASS
Band12	10MHz	QPSK	23060	50RB#0	NV	20	1.50	0.002131	±2.5	PASS
Band12	10MHz	QPSK	23060	50RB#0	NV	30	2.80	0.003977	±2.5	PASS



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Band12	10MHz	QPSK	23060	50RB#0	NV	40	2.00	0.002841	±2.5	PASS
Band12	10MHz	QPSK	23060	50RB#0	NV	50	1.20	0.001705	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	NV	-30	2.40	0.003392	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	NV	-20	-2.20	-0.003110	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	NV	-10	-2.00	-0.002827	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	NV	0	1.20	0.001696	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	NV	10	0.30	0.000424	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	NV	20	0.00	0.000000	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	NV	30	1.10	0.001555	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	NV	40	0.70	0.000989	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	NV	50	-0.50	-0.000707	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	NV	-30	-2.00	-0.002813	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	NV	-20	-1.20	-0.001688	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	NV	-10	-0.10	-0.000141	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	NV	0	-1.10	-0.001547	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	NV	10	1.70	0.002391	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	NV	20	0.70	0.000985	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	NV	30	-0.40	-0.000563	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	NV	40	-1.80	-0.002532	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	NV	50	-0.50	-0.000703	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	NV	-30	2.40	0.003409	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	NV	-20	0.30	0.000426	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	NV	-10	0.70	0.000994	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	NV	0	2.60	0.003693	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	NV	10	2.10	0.002983	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	NV	20	3.60	0.005114	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	NV	30	1.10	0.001563	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	NV	40	0.30	0.000426	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	NV	50	1.40	0.001989	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	NV	-30	2.00	0.002827	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	NV	-20	1.50	0.002120	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	NV	-10	2.40	0.003392	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	NV	0	1.00	0.001413	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	NV	10	0.10	0.000141	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	NV	20	1.20	0.001696	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	NV	30	0.20	0.000283	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	NV	40	-0.70	-0.000989	±2.5	PASS



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Band12	10MHz	16QAM	23095	50RB#0	NV	50	-0.50	-0.000707	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	NV	-30	1.10	0.001547	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	NV	-20	-0.90	-0.001266	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	NV	-10	1.80	0.002532	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	NV	0	-1.20	-0.001688	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	NV	10	1.30	0.001828	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	NV	20	-0.80	-0.001125	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	NV	30	1.00	0.001406	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	NV	40	-2.50	-0.003516	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	NV	50	1.50	0.002110	±2.5	PASS

The End

