



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)	EIRP (dBm)	Limit (dBm)	Verdict
Band12	1.4MHz	QPSK	23017	1RB#0	24.06	17.99	34.77	PASS
Band12	1.4MHz	QPSK	23017	1RB#2	24.34	18.27	34.77	PASS
Band12	1.4MHz	QPSK	23017	1RB#5	24.21	18.14	34.77	PASS
Band12	1.4MHz	QPSK	23017	3RB#0	24.34	18.27	34.77	PASS
Band12	1.4MHz	QPSK	23017	3RB#1	24.40	18.33	34.77	PASS
Band12	1.4MHz	QPSK	23017	3RB#3	24.31	18.24	34.77	PASS
Band12	1.4MHz	QPSK	23017	6RB#0	23.34	17.27	34.77	PASS
Band12	1.4MHz	QPSK	23095	1RB#0	24.05	17.98	34.77	PASS
Band12	1.4MHz	QPSK	23095	1RB#2	24.22	18.15	34.77	PASS
Band12	1.4MHz	QPSK	23095	1RB#5	24.05	17.98	34.77	PASS
Band12	1.4MHz	QPSK	23095	3RB#0	24.19	18.12	34.77	PASS
Band12	1.4MHz	QPSK	23095	3RB#1	24.22	18.15	34.77	PASS
Band12	1.4MHz	QPSK	23095	3RB#3	24.14	18.07	34.77	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	23.19	17.12	34.77	PASS
Band12	1.4MHz	QPSK	23173	1RB#0	23.93	17.86	34.77	PASS
Band12	1.4MHz	QPSK	23173	1RB#2	24.06	17.99	34.77	PASS
Band12	1.4MHz	QPSK	23173	1RB#5	23.92	17.85	34.77	PASS
Band12	1.4MHz	QPSK	23173	3RB#0	24.03	17.96	34.77	PASS
Band12	1.4MHz	QPSK	23173	3RB#1	24.09	18.02	34.77	PASS
Band12	1.4MHz	QPSK	23173	3RB#3	24.05	17.98	34.77	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	23.10	17.03	34.77	PASS
Band12	1.4MHz	16QAM	23017	1RB#0	23.10	17.03	34.77	PASS
Band12	1.4MHz	16QAM	23017	1RB#2	23.28	17.21	34.77	PASS
Band12	1.4MHz	16QAM	23017	1RB#5	23.23	17.16	34.77	PASS
Band12	1.4MHz	16QAM	23017	3RB#0	23.18	17.11	34.77	PASS
Band12	1.4MHz	16QAM	23017	3RB#1	23.23	17.16	34.77	PASS
Band12	1.4MHz	16QAM	23017	3RB#3	23.19	17.12	34.77	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	22.29	16.22	34.77	PASS
Band12	1.4MHz	16QAM	23095	1RB#0	23.24	17.17	34.77	PASS
Band12	1.4MHz	16QAM	23095	1RB#2	23.32	17.25	34.77	PASS
Band12	1.4MHz	16QAM	23095	1RB#5	23.17	17.10	34.77	PASS
Band12	1.4MHz	16QAM	23095	3RB#0	23.21	17.14	34.77	PASS

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Band12	1.4MHz	16QAM	23095	3RB#1	23.19	17.12	34.77	PASS
Band12	1.4MHz	16QAM	23095	3RB#3	23.13	17.06	34.77	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	22.21	16.14	34.77	PASS
Band12	1.4MHz	16QAM	23173	1RB#0	22.95	16.88	34.77	PASS
Band12	1.4MHz	16QAM	23173	1RB#2	23.08	17.01	34.77	PASS
Band12	1.4MHz	16QAM	23173	1RB#5	22.93	16.86	34.77	PASS
Band12	1.4MHz	16QAM	23173	3RB#0	22.97	16.90	34.77	PASS
Band12	1.4MHz	16QAM	23173	3RB#1	23.06	16.99	34.77	PASS
Band12	1.4MHz	16QAM	23173	3RB#3	22.93	16.86	34.77	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	22.05	15.98	34.77	PASS
Band12	3MHz	QPSK	23025	1RB#0	24.26	18.19	34.77	PASS
Band12	3MHz	QPSK	23025	1RB#8	24.24	18.17	34.77	PASS
Band12	3MHz	QPSK	23025	1RB#14	24.15	18.08	34.77	PASS
Band12	3MHz	QPSK	23025	8RB#0	23.25	17.18	34.77	PASS
Band12	3MHz	QPSK	23025	8RB#4	23.24	17.17	34.77	PASS
Band12	3MHz	QPSK	23025	8RB#7	23.19	17.12	34.77	PASS
Band12	3MHz	QPSK	23025	15RB#0	23.24	17.17	34.77	PASS
Band12	3MHz	QPSK	23095	1RB#0	24.13	18.06	34.77	PASS
Band12	3MHz	QPSK	23095	1RB#8	24.11	18.04	34.77	PASS
Band12	3MHz	QPSK	23095	1RB#14	24.05	17.98	34.77	PASS
Band12	3MHz	QPSK	23095	8RB#0	23.12	17.05	34.77	PASS
Band12	3MHz	QPSK	23095	8RB#4	23.17	17.10	34.77	PASS
Band12	3MHz	QPSK	23095	8RB#7	23.14	17.07	34.77	PASS
Band12	3MHz	QPSK	23095	15RB#0	23.16	17.09	34.77	PASS
Band12	3MHz	QPSK	23165	1RB#0	23.95	17.88	34.77	PASS
Band12	3MHz	QPSK	23165	1RB#8	24.01	17.94	34.77	PASS
Band12	3MHz	QPSK	23165	1RB#14	23.93	17.86	34.77	PASS
Band12	3MHz	QPSK	23165	8RB#0	23.06	16.99	34.77	PASS
Band12	3MHz	QPSK	23165	8RB#4	23.06	16.99	34.77	PASS
Band12	3MHz	QPSK	23165	8RB#7	23.02	16.95	34.77	PASS
Band12	3MHz	QPSK	23165	15RB#0	23.08	17.01	34.77	PASS
Band12	3MHz	16QAM	23025	1RB#0	23.18	17.11	34.77	PASS
Band12	3MHz	16QAM	23025	1RB#8	23.23	17.16	34.77	PASS
Band12	3MHz	16QAM	23025	1RB#14	23.10	17.03	34.77	PASS
Band12	3MHz	16QAM	23025	8RB#0	22.14	16.07	34.77	PASS
Band12	3MHz	16QAM	23025	8RB#4	22.15	16.08	34.77	PASS
Band12	3MHz	16QAM	23025	8RB#7	22.09	16.02	34.77	PASS
Band12	3MHz	16QAM	23025	15RB#0	22.11	16.04	34.77	PASS

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Band12	3MHz	16QAM	23095	1RB#0	23.26	17.19	34.77	PASS
Band12	3MHz	16QAM	23095	1RB#8	23.15	17.08	34.77	PASS
Band12	3MHz	16QAM	23095	1RB#14	23.20	17.13	34.77	PASS
Band12	3MHz	16QAM	23095	8RB#0	22.10	16.03	34.77	PASS
Band12	3MHz	16QAM	23095	8RB#4	22.14	16.07	34.77	PASS
Band12	3MHz	16QAM	23095	8RB#7	22.12	16.05	34.77	PASS
Band12	3MHz	16QAM	23095	15RB#0	22.06	15.99	34.77	PASS
Band12	3MHz	16QAM	23165	1RB#0	23.06	16.99	34.77	PASS
Band12	3MHz	16QAM	23165	1RB#8	22.95	16.88	34.77	PASS
Band12	3MHz	16QAM	23165	1RB#14	22.92	16.85	34.77	PASS
Band12	3MHz	16QAM	23165	8RB#0	21.99	15.92	34.77	PASS
Band12	3MHz	16QAM	23165	8RB#4	22.01	15.94	34.77	PASS
Band12	3MHz	16QAM	23165	8RB#7	21.97	15.90	34.77	PASS
Band12	3MHz	16QAM	23165	15RB#0	21.95	15.88	34.77	PASS
Band12	5MHz	QPSK	23035	1RB#0	24.14	18.07	34.77	PASS
Band12	5MHz	QPSK	23035	1RB#12	24.31	18.24	34.77	PASS
Band12	5MHz	QPSK	23035	1RB#24	24.03	17.96	34.77	PASS
Band12	5MHz	QPSK	23035	12RB#0	23.24	17.17	34.77	PASS
Band12	5MHz	QPSK	23035	12RB#6	23.23	17.16	34.77	PASS
Band12	5MHz	QPSK	23035	12RB#13	23.12	17.05	34.77	PASS
Band12	5MHz	QPSK	23035	25RB#0	23.22	17.15	34.77	PASS
Band12	5MHz	QPSK	23095	1RB#0	24.02	17.95	34.77	PASS
Band12	5MHz	QPSK	23095	1RB#12	24.28	18.21	34.77	PASS
Band12	5MHz	QPSK	23095	1RB#24	23.92	17.85	34.77	PASS
Band12	5MHz	QPSK	23095	12RB#0	23.07	17.00	34.77	PASS
Band12	5MHz	QPSK	23095	12RB#6	23.17	17.10	34.77	PASS
Band12	5MHz	QPSK	23095	12RB#13	23.15	17.08	34.77	PASS
Band12	5MHz	QPSK	23095	25RB#0	23.17	17.10	34.77	PASS
Band12	5MHz	QPSK	23155	1RB#0	23.92	17.85	34.77	PASS
Band12	5MHz	QPSK	23155	1RB#12	24.18	18.11	34.77	PASS
Band12	5MHz	QPSK	23155	1RB#24	23.77	17.70	34.77	PASS
Band12	5MHz	QPSK	23155	12RB#0	23.12	17.05	34.77	PASS
Band12	5MHz	QPSK	23155	12RB#6	23.09	17.02	34.77	PASS
Band12	5MHz	QPSK	23155	12RB#13	22.98	16.91	34.77	PASS
Band12	5MHz	QPSK	23155	25RB#0	23.13	17.06	34.77	PASS
Band12	5MHz	16QAM	23035	1RB#0	23.12	17.05	34.77	PASS
Band12	5MHz	16QAM	23035	1RB#12	23.41	17.34	34.77	PASS
Band12	5MHz	16QAM	23035	1RB#24	23.05	16.98	34.77	PASS

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Band12	5MHz	16QAM	23035	12RB#0	22.16	16.09	34.77	PASS
Band12	5MHz	16QAM	23035	12RB#6	22.19	16.12	34.77	PASS
Band12	5MHz	16QAM	23035	12RB#13	22.14	16.07	34.77	PASS
Band12	5MHz	16QAM	23035	25RB#0	22.12	16.05	34.77	PASS
Band12	5MHz	16QAM	23095	1RB#0	23.20	17.13	34.77	PASS
Band12	5MHz	16QAM	23095	1RB#12	23.26	17.19	34.77	PASS
Band12	5MHz	16QAM	23095	1RB#24	22.96	16.89	34.77	PASS
Band12	5MHz	16QAM	23095	12RB#0	22.07	16.00	34.77	PASS
Band12	5MHz	16QAM	23095	12RB#6	22.12	16.05	34.77	PASS
Band12	5MHz	16QAM	23095	12RB#13	22.11	16.04	34.77	PASS
Band12	5MHz	16QAM	23095	25RB#0	22.10	16.03	34.77	PASS
Band12	5MHz	16QAM	23155	1RB#0	23.06	16.99	34.77	PASS
Band12	5MHz	16QAM	23155	1RB#12	23.21	17.14	34.77	PASS
Band12	5MHz	16QAM	23155	1RB#24	22.76	16.69	34.77	PASS
Band12	5MHz	16QAM	23155	12RB#0	22.11	16.04	34.77	PASS
Band12	5MHz	16QAM	23155	12RB#6	22.05	15.98	34.77	PASS
Band12	5MHz	16QAM	23155	12RB#13	21.96	15.89	34.77	PASS
Band12	5MHz	16QAM	23155	25RB#0	22.04	15.97	34.77	PASS
Band12	10MHz	QPSK	23060	1RB#0	24.27	18.20	34.77	PASS
Band12	10MHz	QPSK	23060	1RB#24	24.26	18.19	34.77	PASS
Band12	10MHz	QPSK	23060	1RB#49	24.03	17.96	34.77	PASS
Band12	10MHz	QPSK	23060	25RB#0	23.45	17.38	34.77	PASS
Band12	10MHz	QPSK	23060	25RB#12	23.28	17.21	34.77	PASS
Band12	10MHz	QPSK	23060	25RB#25	23.35	17.28	34.77	PASS
Band12	10MHz	QPSK	23060	50RB#0	23.44	17.37	34.77	PASS
Band12	10MHz	QPSK	23095	1RB#0	24.15	18.08	34.77	PASS
Band12	10MHz	QPSK	23095	1RB#24	24.17	18.10	34.77	PASS
Band12	10MHz	QPSK	23095	1RB#49	23.96	17.89	34.77	PASS
Band12	10MHz	QPSK	23095	25RB#0	23.24	17.17	34.77	PASS
Band12	10MHz	QPSK	23095	25RB#12	23.22	17.15	34.77	PASS
Band12	10MHz	QPSK	23095	25RB#25	23.27	17.20	34.77	PASS
Band12	10MHz	QPSK	23095	50RB#0	23.26	17.19	34.77	PASS
Band12	10MHz	QPSK	23130	1RB#0	24.11	18.04	34.77	PASS
Band12	10MHz	QPSK	23130	1RB#24	24.12	18.05	34.77	PASS
Band12	10MHz	QPSK	23130	1RB#49	23.87	17.80	34.77	PASS
Band12	10MHz	QPSK	23130	25RB#0	23.10	17.03	34.77	PASS
Band12	10MHz	QPSK	23130	25RB#12	23.15	17.08	34.77	PASS
Band12	10MHz	QPSK	23130	25RB#25	23.00	16.93	34.77	PASS

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Band12	10MHz	QPSK	23130	50RB#0	23.05	16.98	34.77	PASS
Band12	10MHz	16QAM	23060	1RB#0	23.16	17.09	34.77	PASS
Band12	10MHz	16QAM	23060	1RB#24	23.25	17.18	34.77	PASS
Band12	10MHz	16QAM	23060	1RB#49	23.11	17.04	34.77	PASS
Band12	10MHz	16QAM	23060	25RB#0	22.32	16.25	34.77	PASS
Band12	10MHz	16QAM	23060	25RB#12	22.18	16.11	34.77	PASS
Band12	10MHz	16QAM	23060	25RB#25	22.26	16.19	34.77	PASS
Band12	10MHz	16QAM	23060	50RB#0	22.33	16.26	34.77	PASS
Band12	10MHz	16QAM	23095	1RB#0	23.28	17.21	34.77	PASS
Band12	10MHz	16QAM	23095	1RB#24	23.25	17.18	34.77	PASS
Band12	10MHz	16QAM	23095	1RB#49	22.99	16.92	34.77	PASS
Band12	10MHz	16QAM	23095	25RB#0	22.15	16.08	34.77	PASS
Band12	10MHz	16QAM	23095	25RB#12	22.10	16.03	34.77	PASS
Band12	10MHz	16QAM	23095	25RB#25	22.15	16.08	34.77	PASS
Band12	10MHz	16QAM	23095	50RB#0	22.17	16.10	34.77	PASS
Band12	10MHz	16QAM	23130	1RB#0	23.23	17.16	34.77	PASS
Band12	10MHz	16QAM	23130	1RB#24	23.20	17.13	34.77	PASS
Band12	10MHz	16QAM	23130	1RB#49	22.96	16.89	34.77	PASS
Band12	10MHz	16QAM	23130	25RB#0	21.99	15.92	34.77	PASS
Band12	10MHz	16QAM	23130	25RB#12	22.03	15.96	34.77	PASS
Band12	10MHz	16QAM	23130	25RB#25	21.89	15.82	34.77	PASS
Band12	10MHz	16QAM	23130	50RB#0	21.92	15.85	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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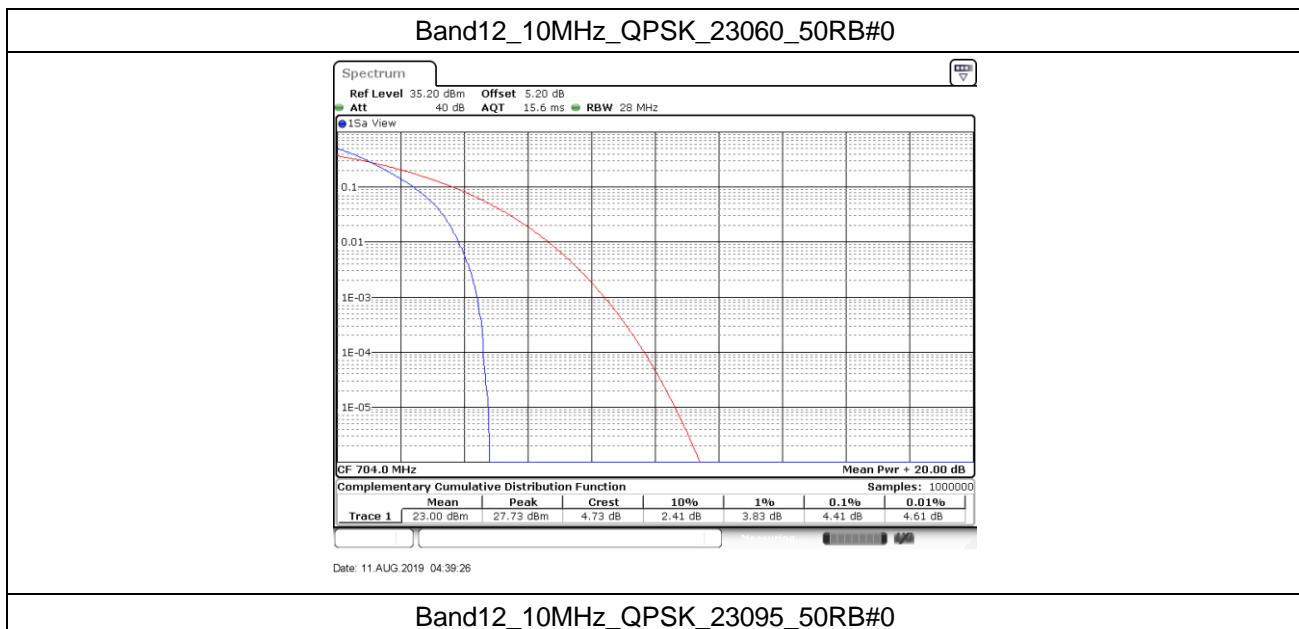
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2. Peak-to-Average Ratio (CCDF)

2.1. Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band12	10MHz	QPSK	23060	50RB#0	4.41	13	PASS
Band12	10MHz	QPSK	23095	50RB#0	4.14	13	PASS
Band12	10MHz	QPSK	23130	50RB#0	4.26	13	PASS
Band12	10MHz	16QAM	23060	50RB#0	5.22	13	PASS
Band12	10MHz	16QAM	23095	50RB#0	5.07	13	PASS
Band12	10MHz	16QAM	23130	50RB#0	5.16	13	PASS

2.2. Test Plots

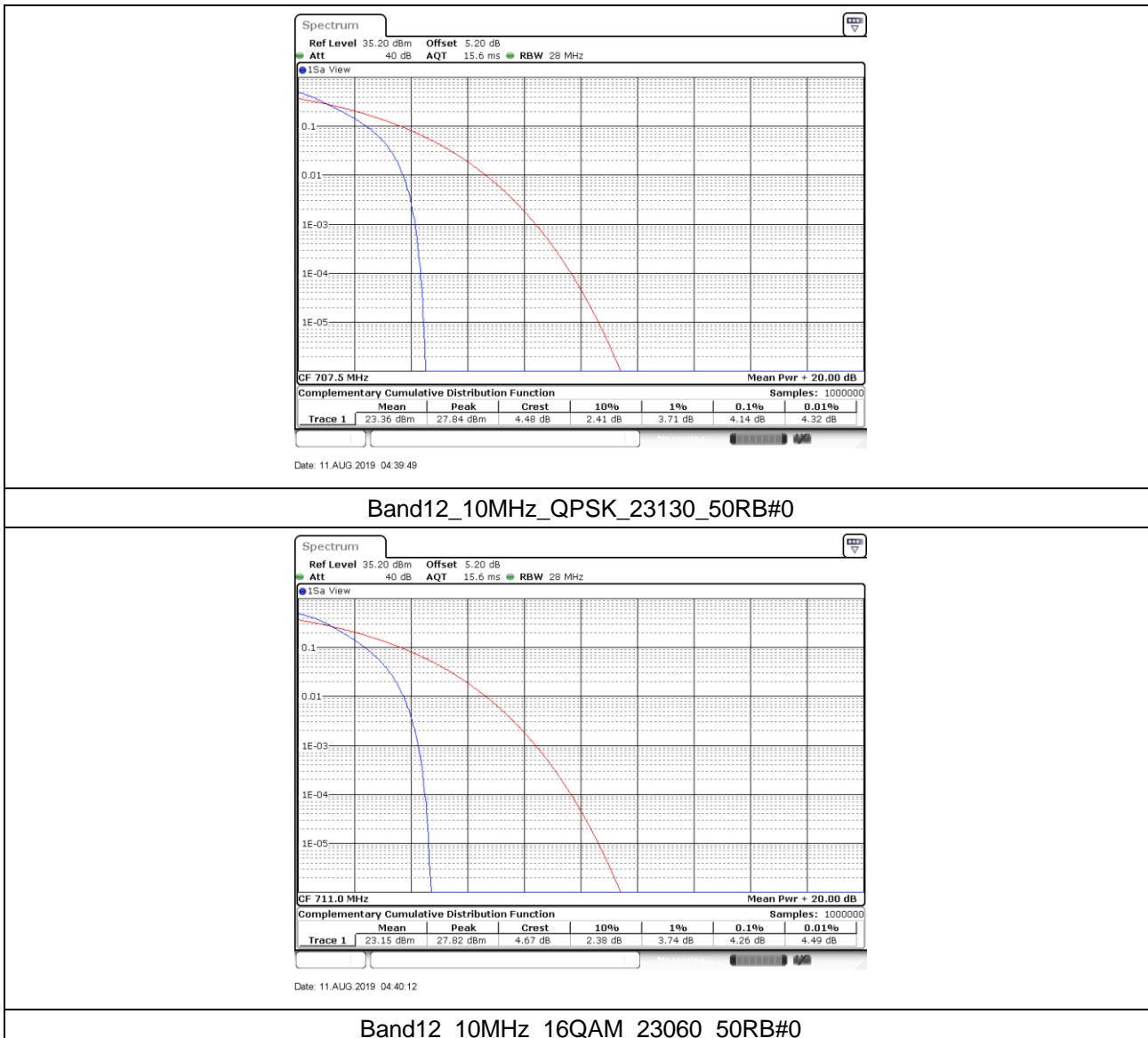


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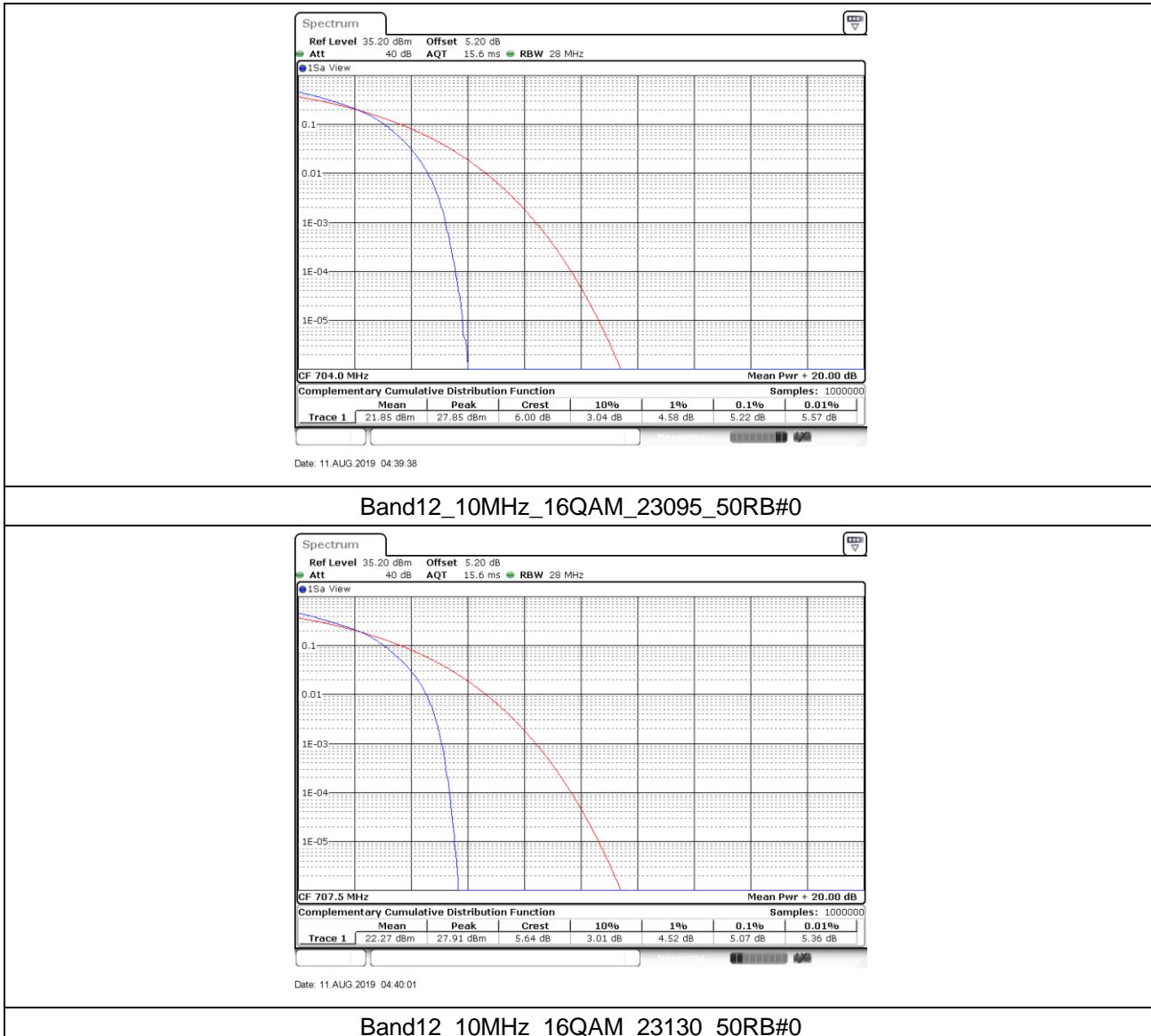
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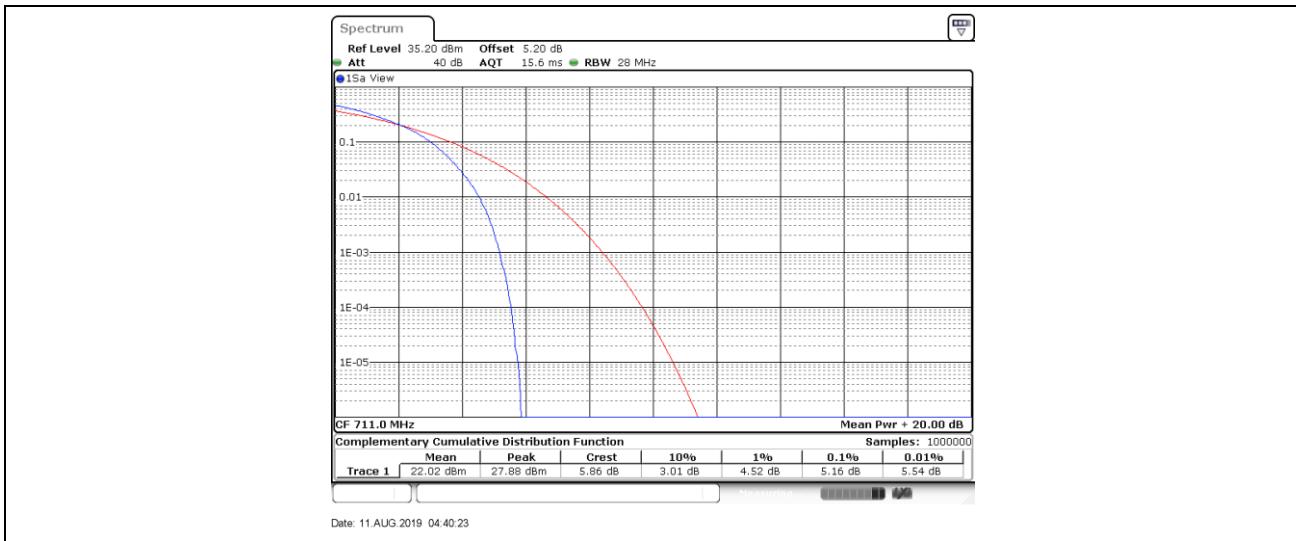
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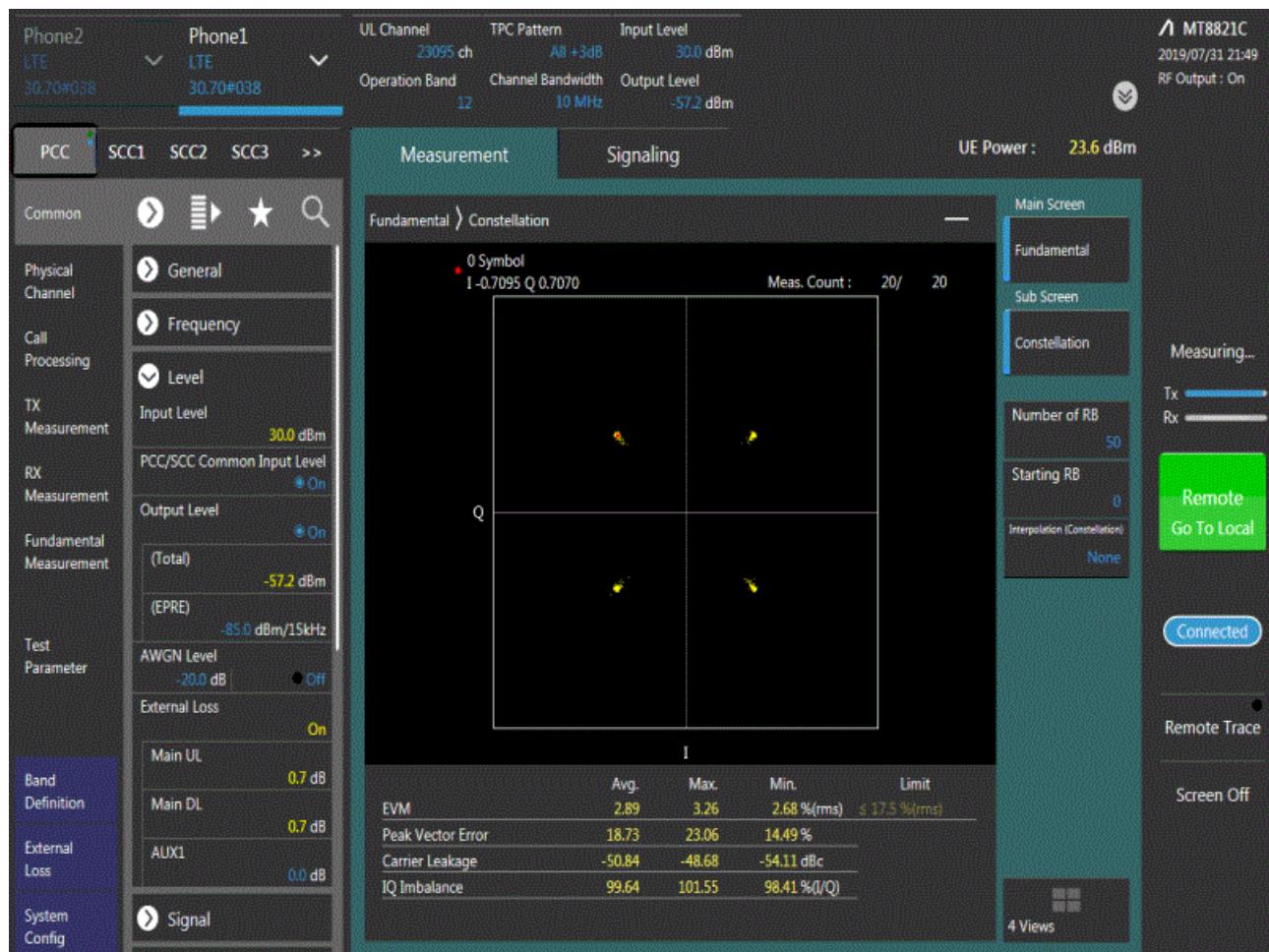
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3. Modulation Characteristics

3.1. Test Band = LTE Band 12

3.2. Test Mode = LTE /TM1 10MHz

3.2.1. Test Channel = MCH



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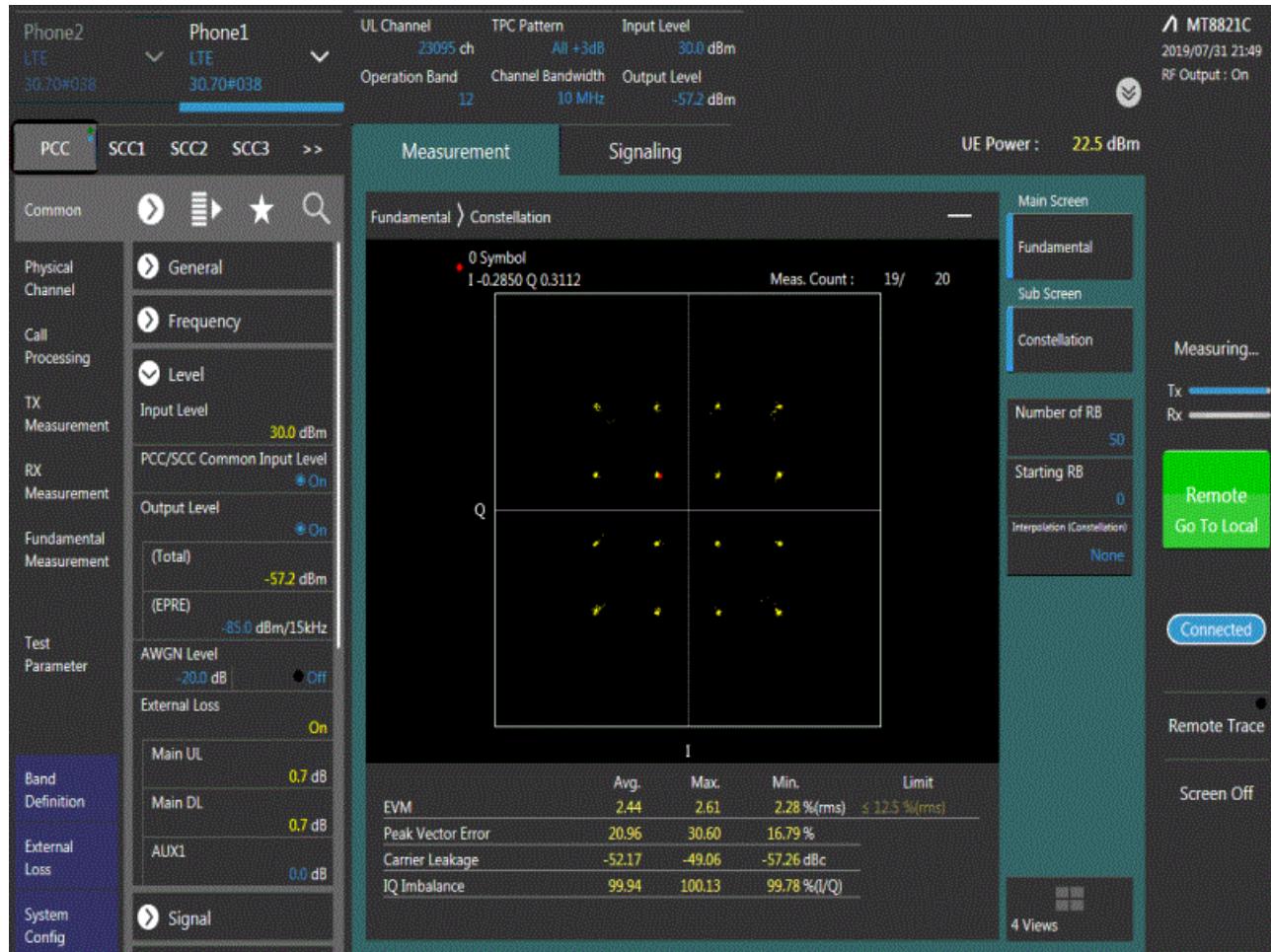


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3.3. Test Mode = LTE /TM2 10MHz

3.3.1. Test Channel = MCH



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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	1.097	1.293	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	1.094	1.323	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	1.097	1.311	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	1.091	1.284	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	1.091	1.278	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	1.097	1.293	PASS
Band12	3MHz	QPSK	23025	15RB#0	2.685	2.928	PASS
Band12	3MHz	QPSK	23095	15RB#0	2.691	2.916	PASS
Band12	3MHz	QPSK	23165	15RB#0	2.697	3.312	PASS
Band12	3MHz	16QAM	23025	15RB#0	2.673	2.898	PASS
Band12	3MHz	16QAM	23095	15RB#0	2.679	2.904	PASS
Band12	3MHz	16QAM	23165	15RB#0	2.679	2.922	PASS
Band12	5MHz	QPSK	23035	25RB#0	4.466	5.030	PASS
Band12	5MHz	QPSK	23095	25RB#0	4.486	5.110	PASS
Band12	5MHz	QPSK	23155	25RB#0	4.476	5.070	PASS
Band12	5MHz	16QAM	23035	25RB#0	4.496	5.070	PASS
Band12	5MHz	16QAM	23095	25RB#0	4.496	5.120	PASS
Band12	5MHz	16QAM	23155	25RB#0	4.496	5.050	PASS
Band12	10MHz	QPSK	23060	50RB#0	8.951	9.820	PASS
Band12	10MHz	QPSK	23095	50RB#0	8.991	10.100	PASS
Band12	10MHz	QPSK	23130	50RB#0	8.931	9.900	PASS
Band12	10MHz	16QAM	23060	50RB#0	8.931	9.900	PASS
Band12	10MHz	16QAM	23095	50RB#0	8.991	10.000	PASS
Band12	10MHz	16QAM	23130	50RB#0	8.931	9.820	PASS

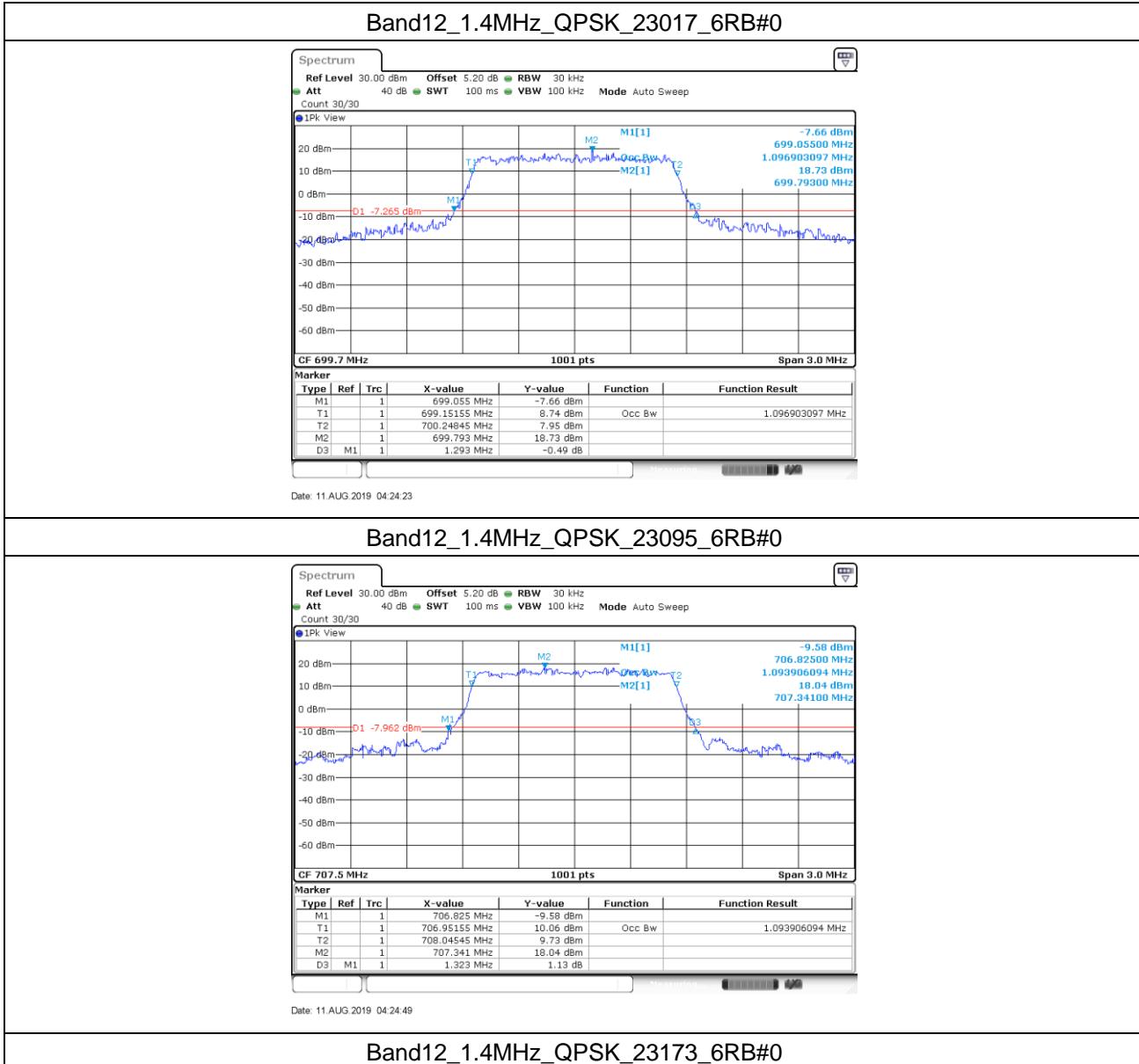
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4.2. Test Plots

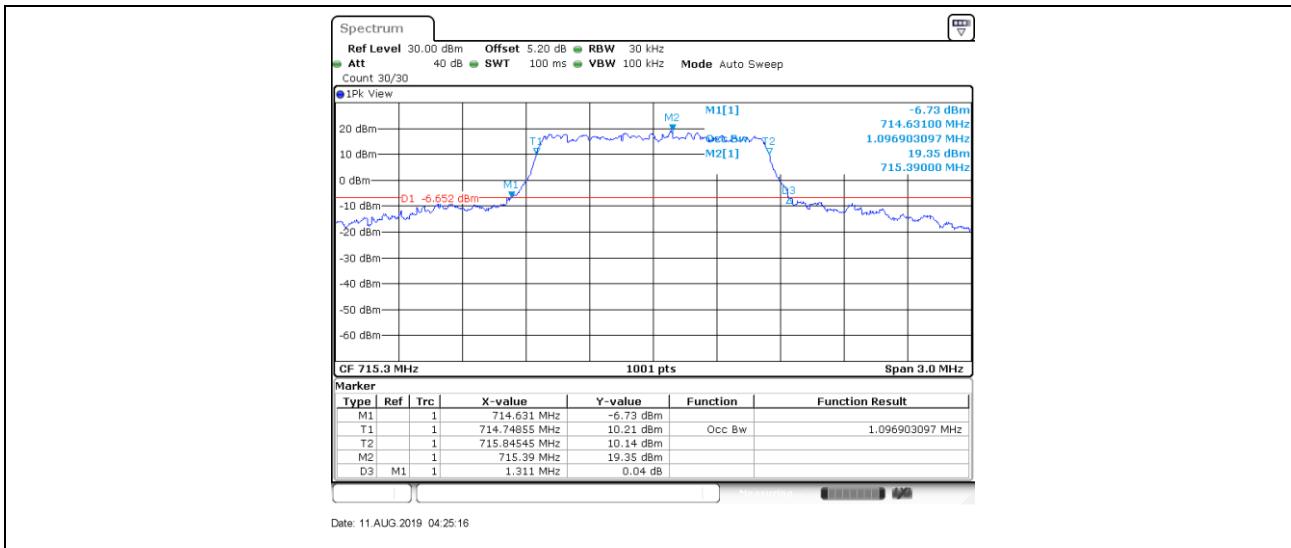


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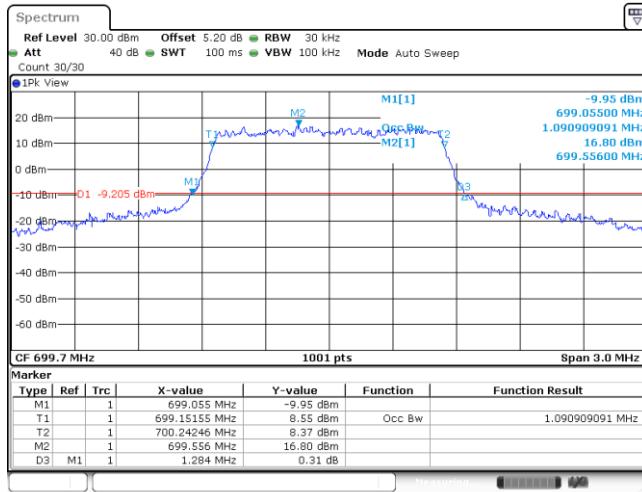
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Band12_1.4MHz_16QAM_23017_6RB#0



Date: 11 AUG 2019 04:24:36

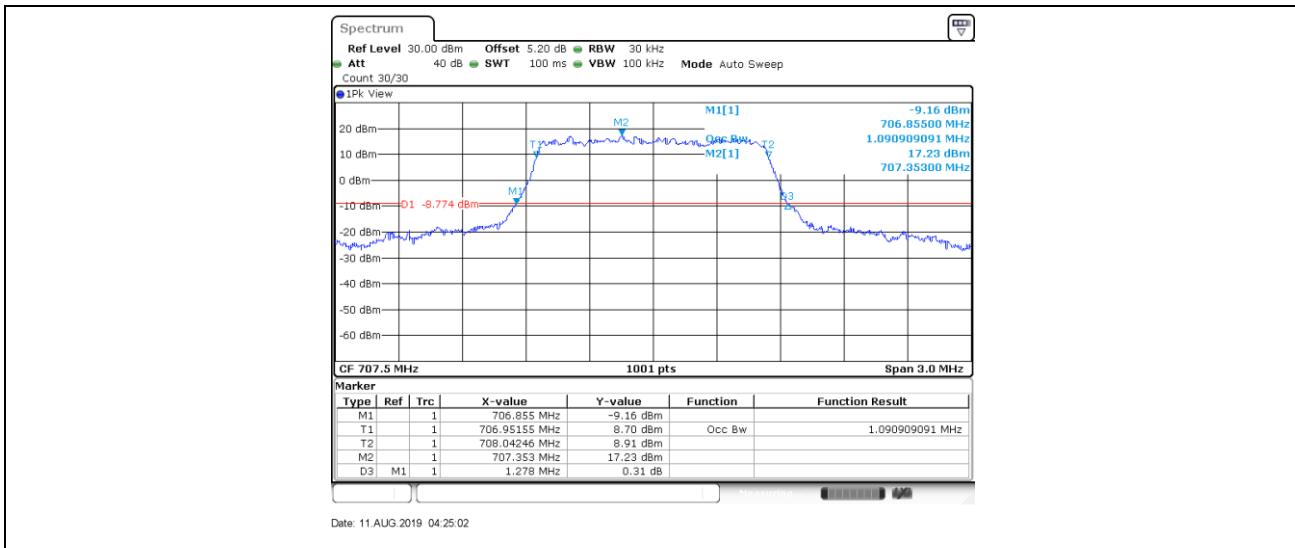
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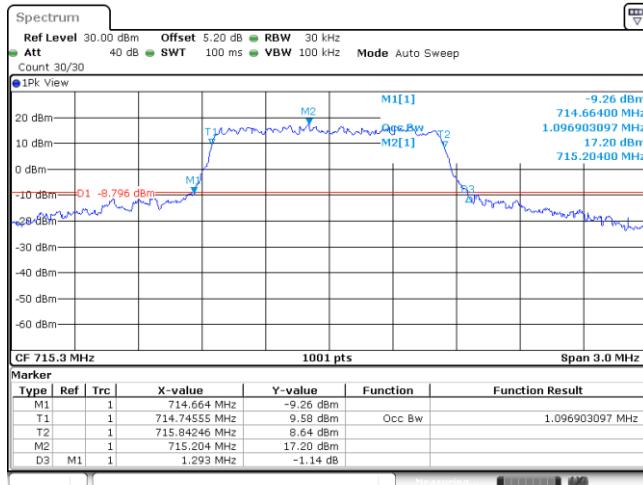
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Band12_1.4MHz_16QAM_23173_6RB#0



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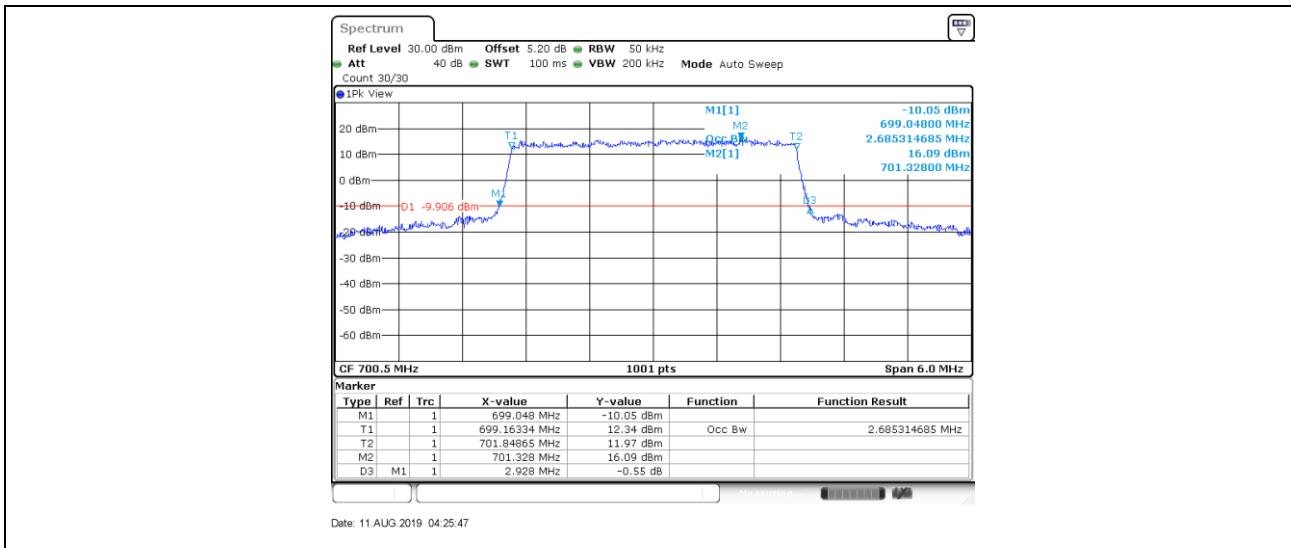
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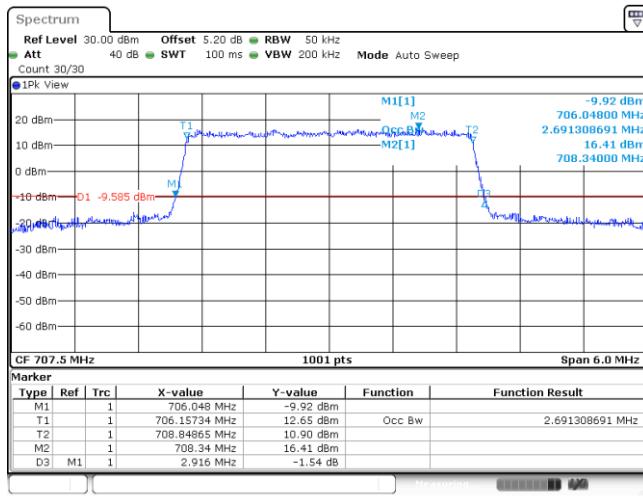
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Band12_3MHz_QPSK_23095_15RB#0



Band12_3MHz_QPSK_23165_15RB#0

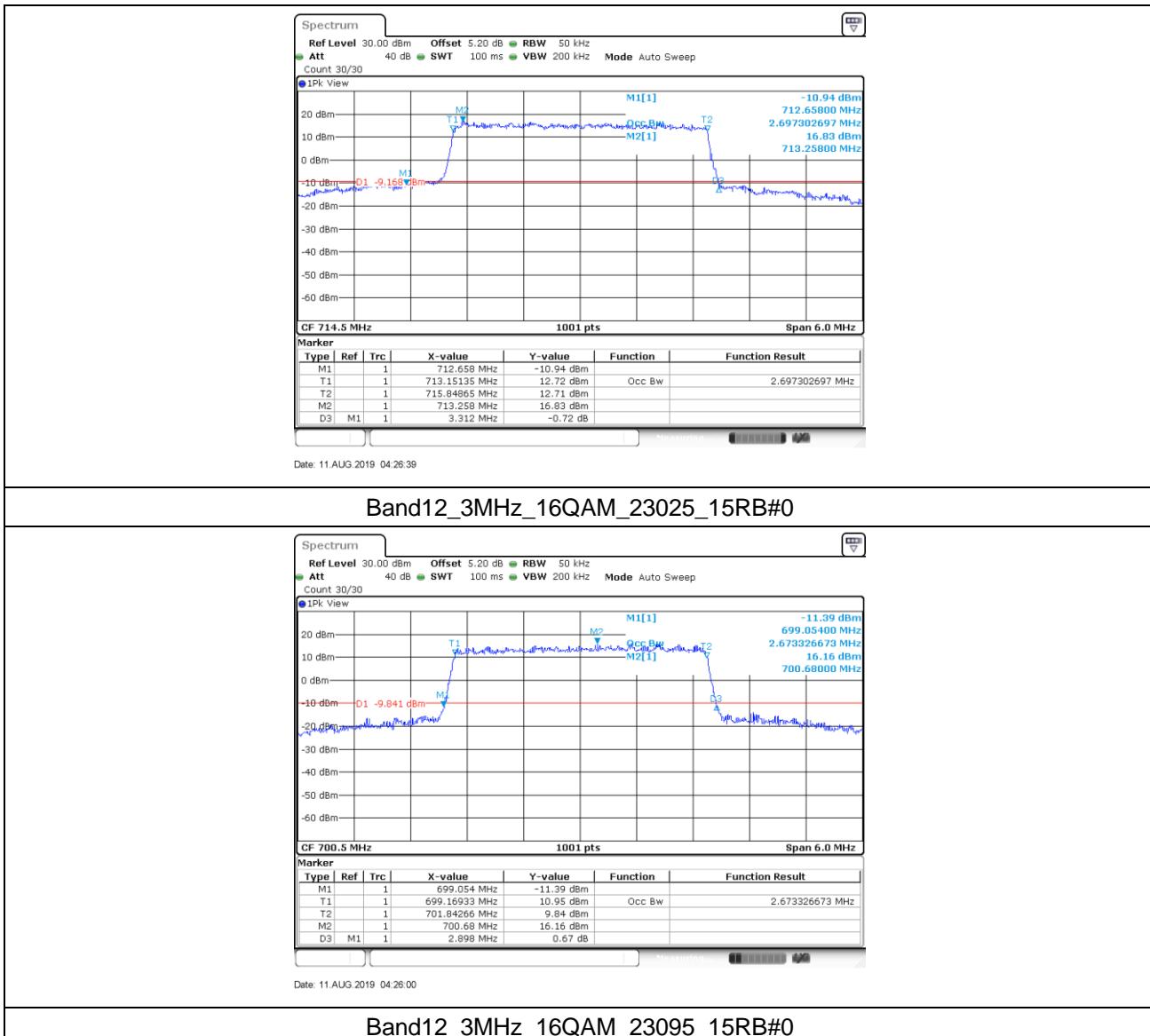
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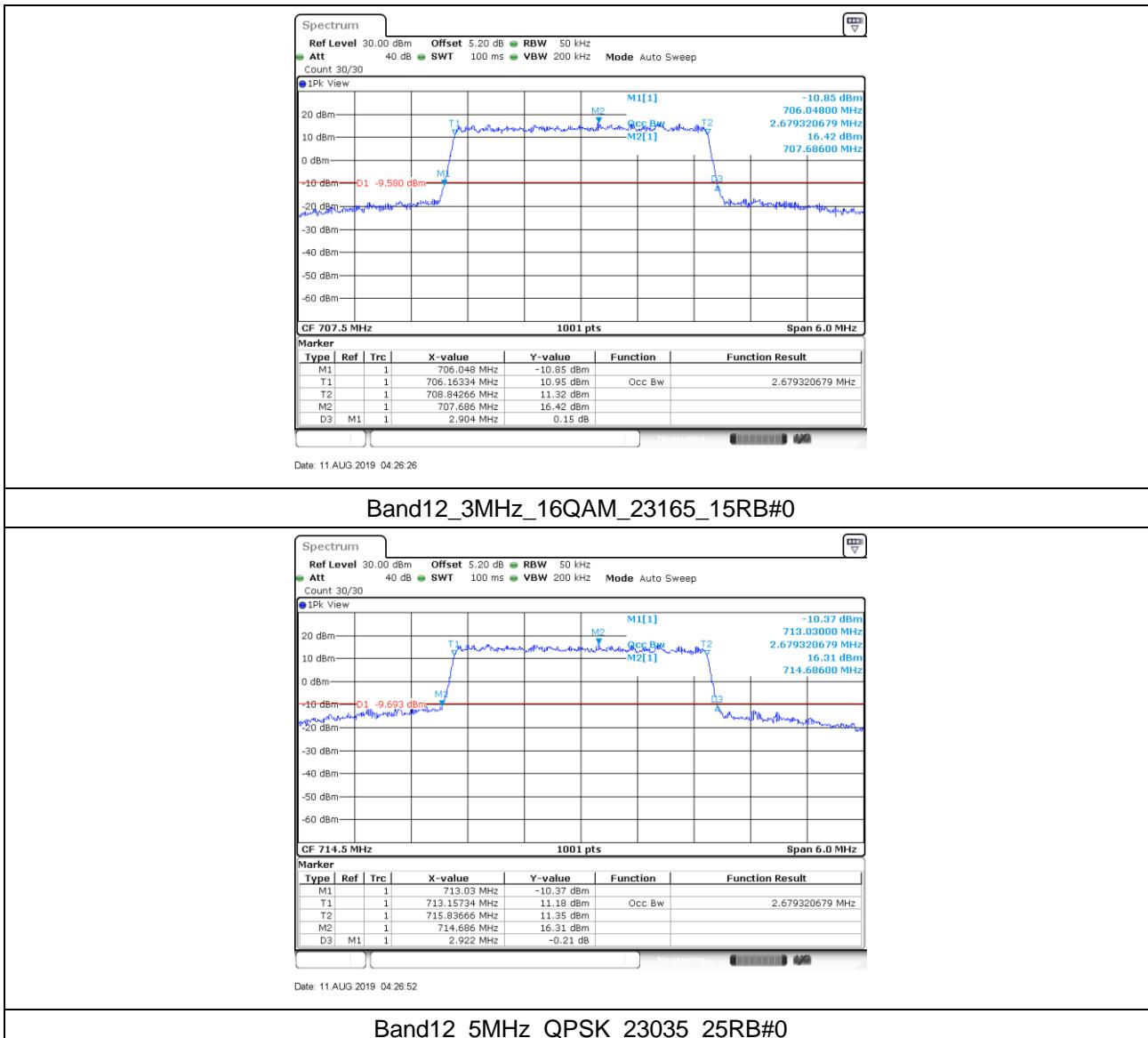
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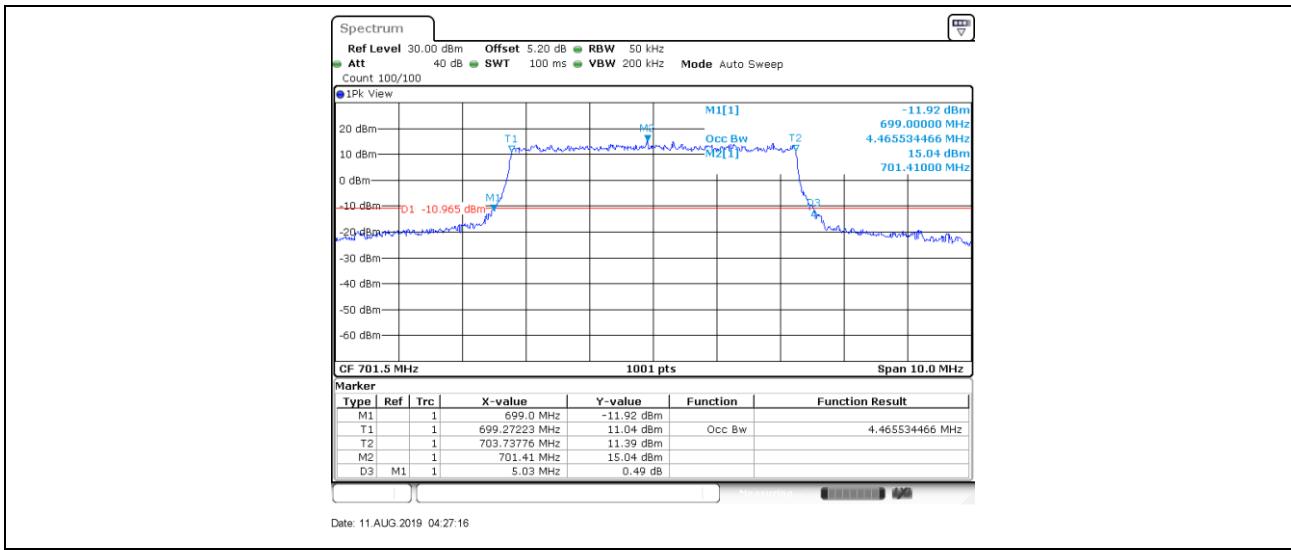




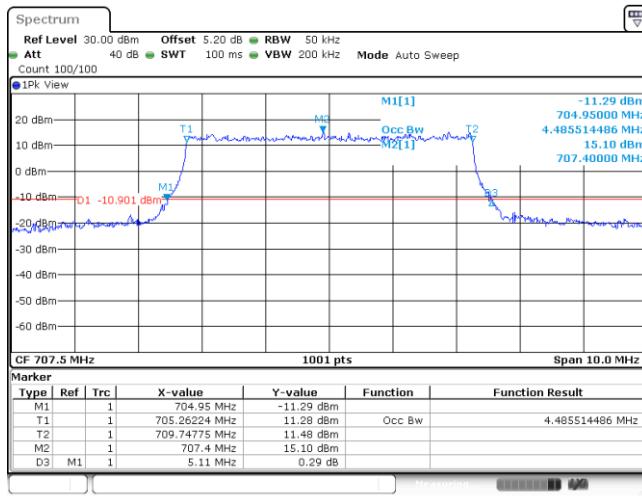
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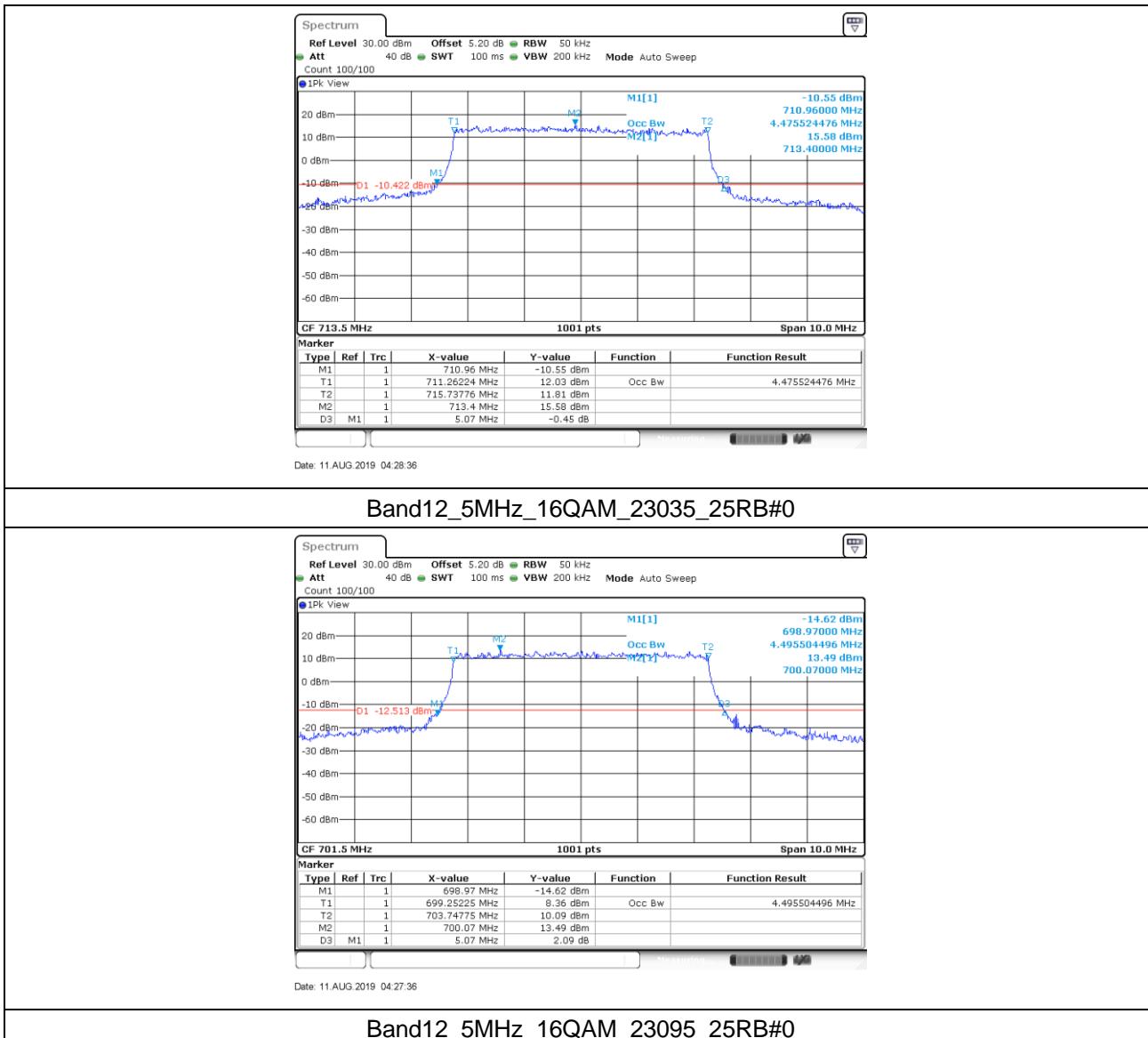


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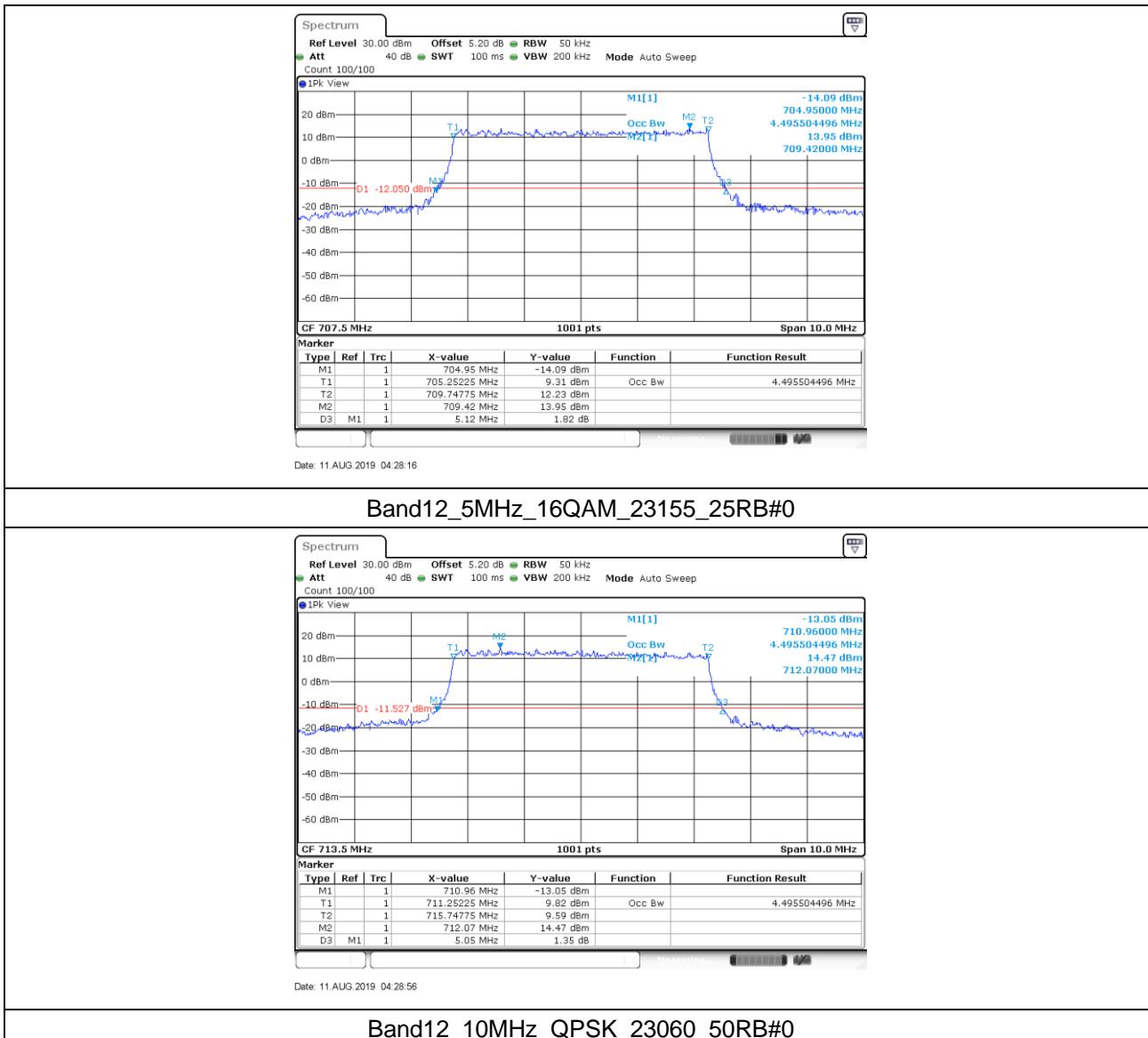




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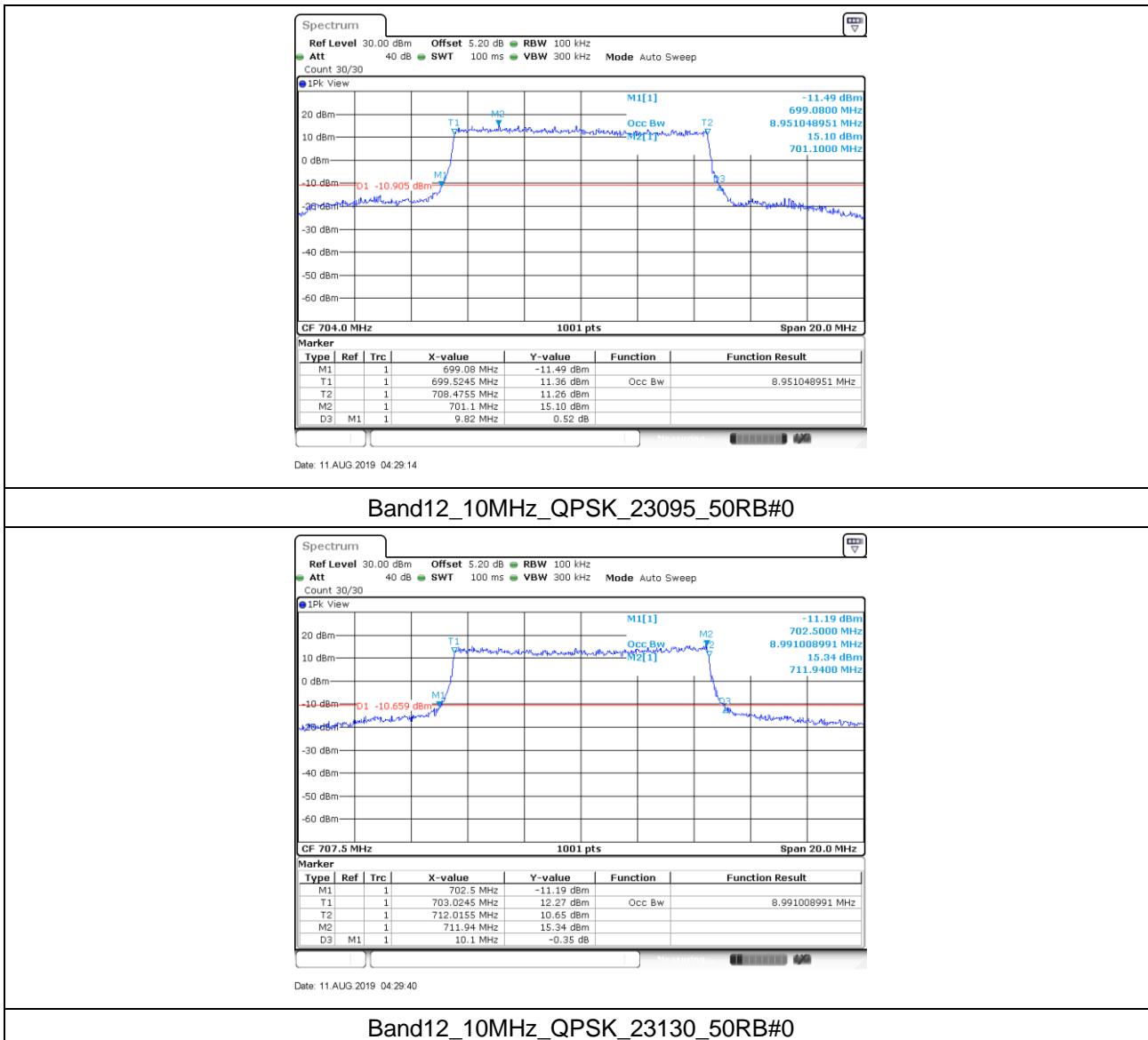


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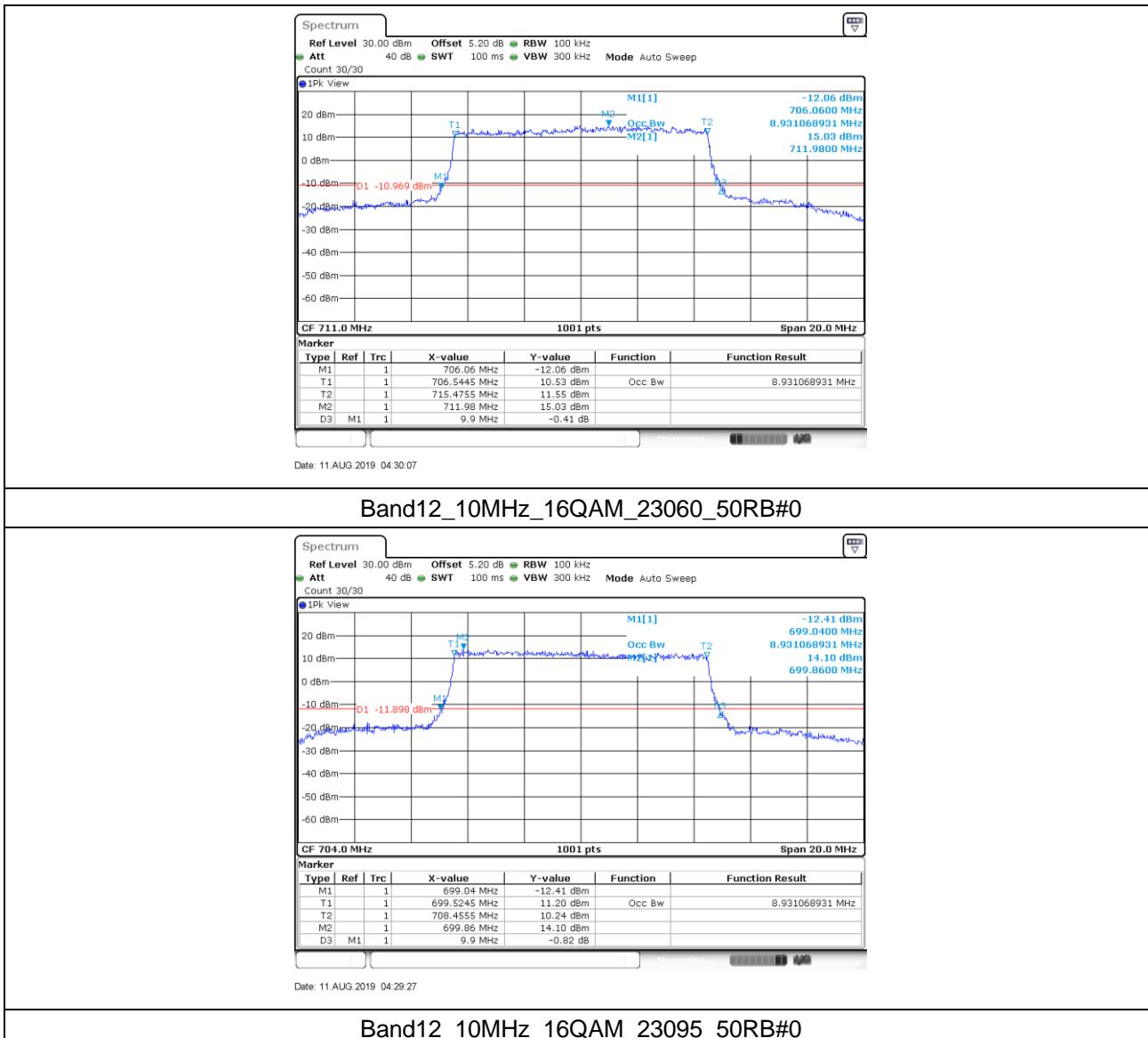
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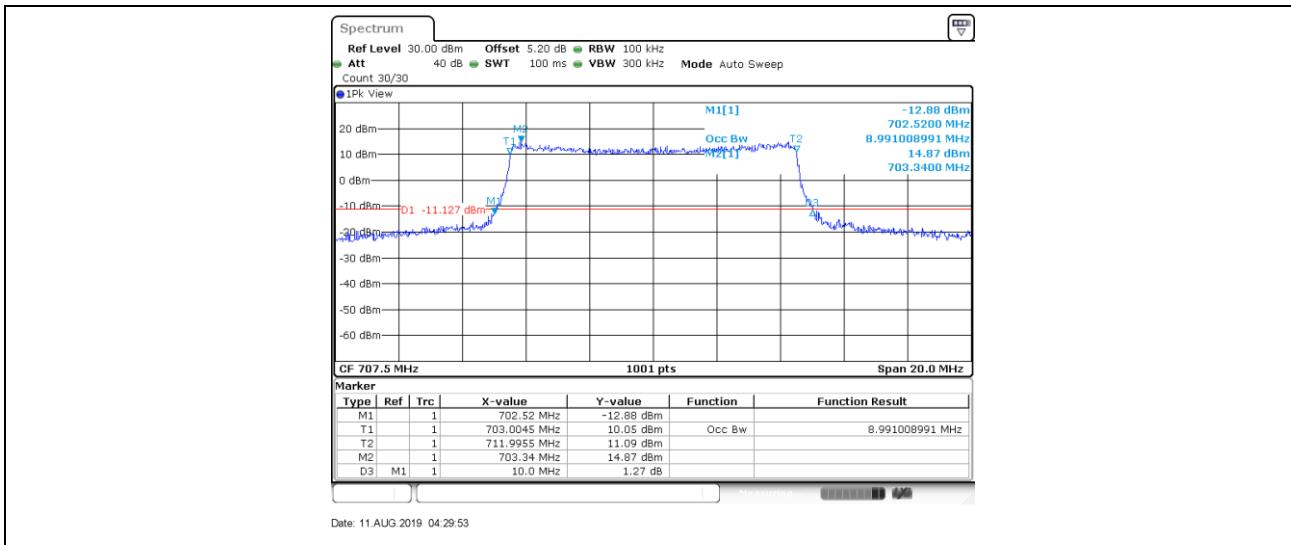


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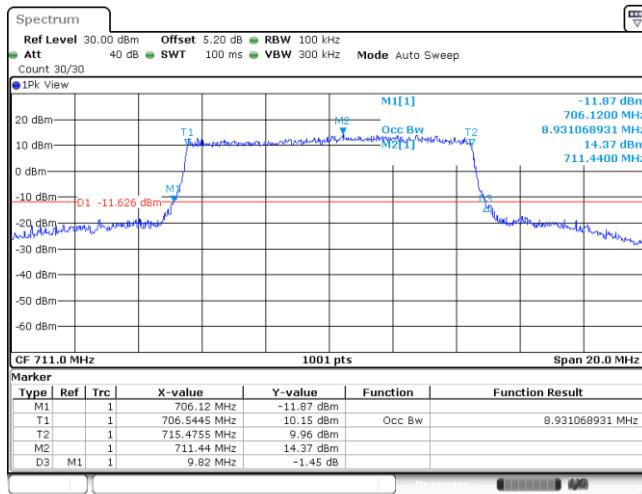
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Band12_10MHz_16QAM_23130_50RB#0



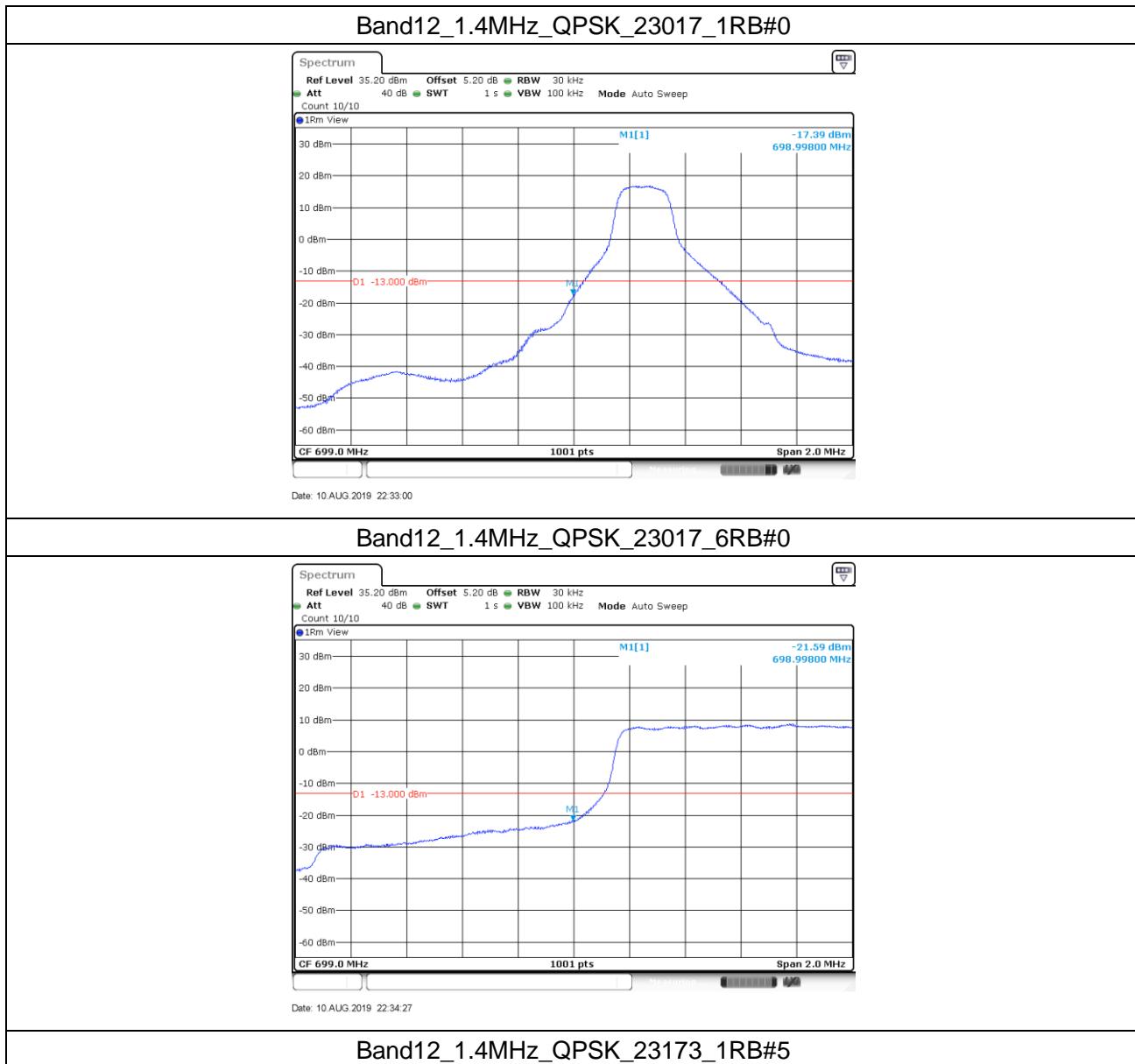
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5. Band Edge Compliance

5.1. Test Plots

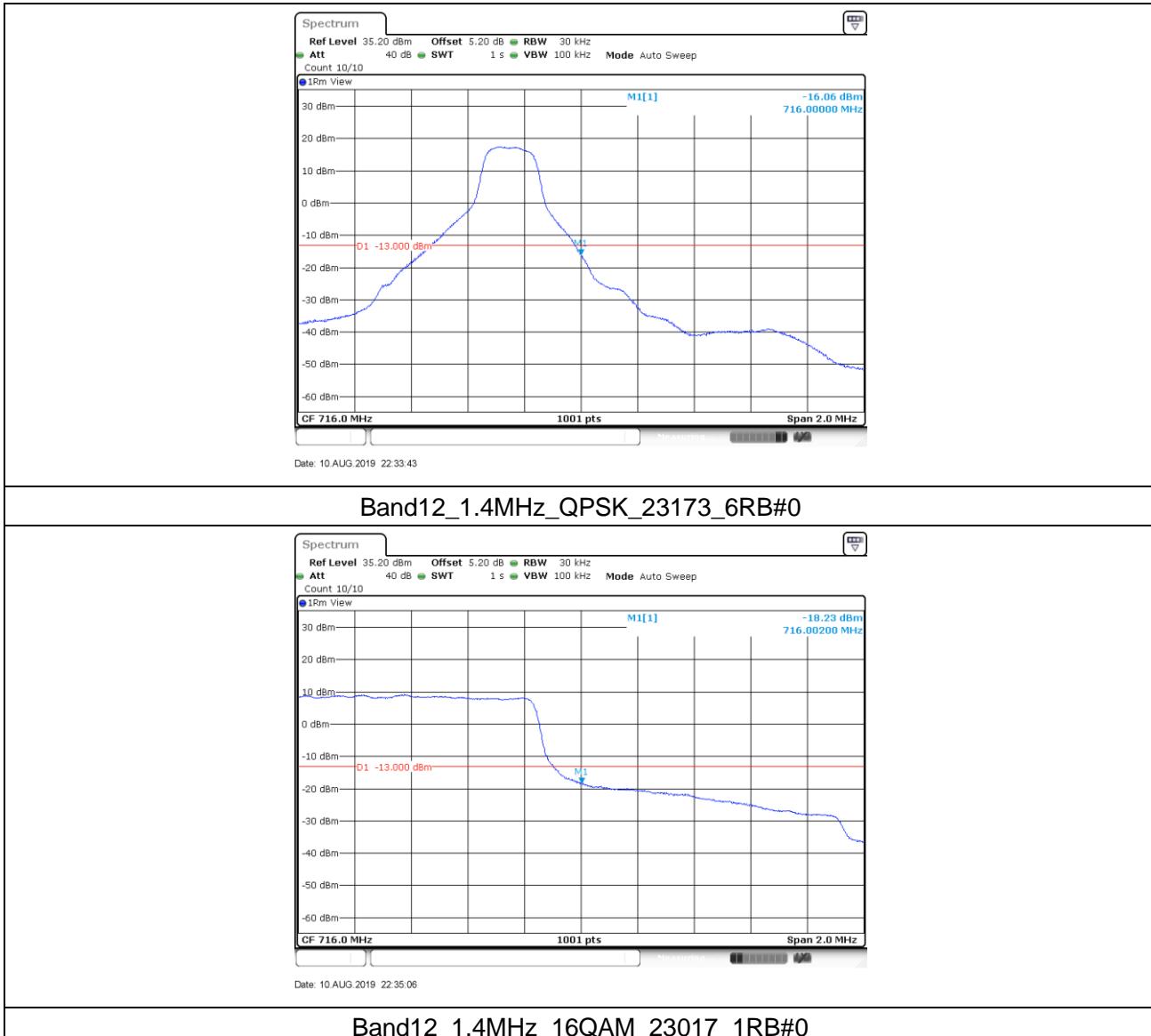


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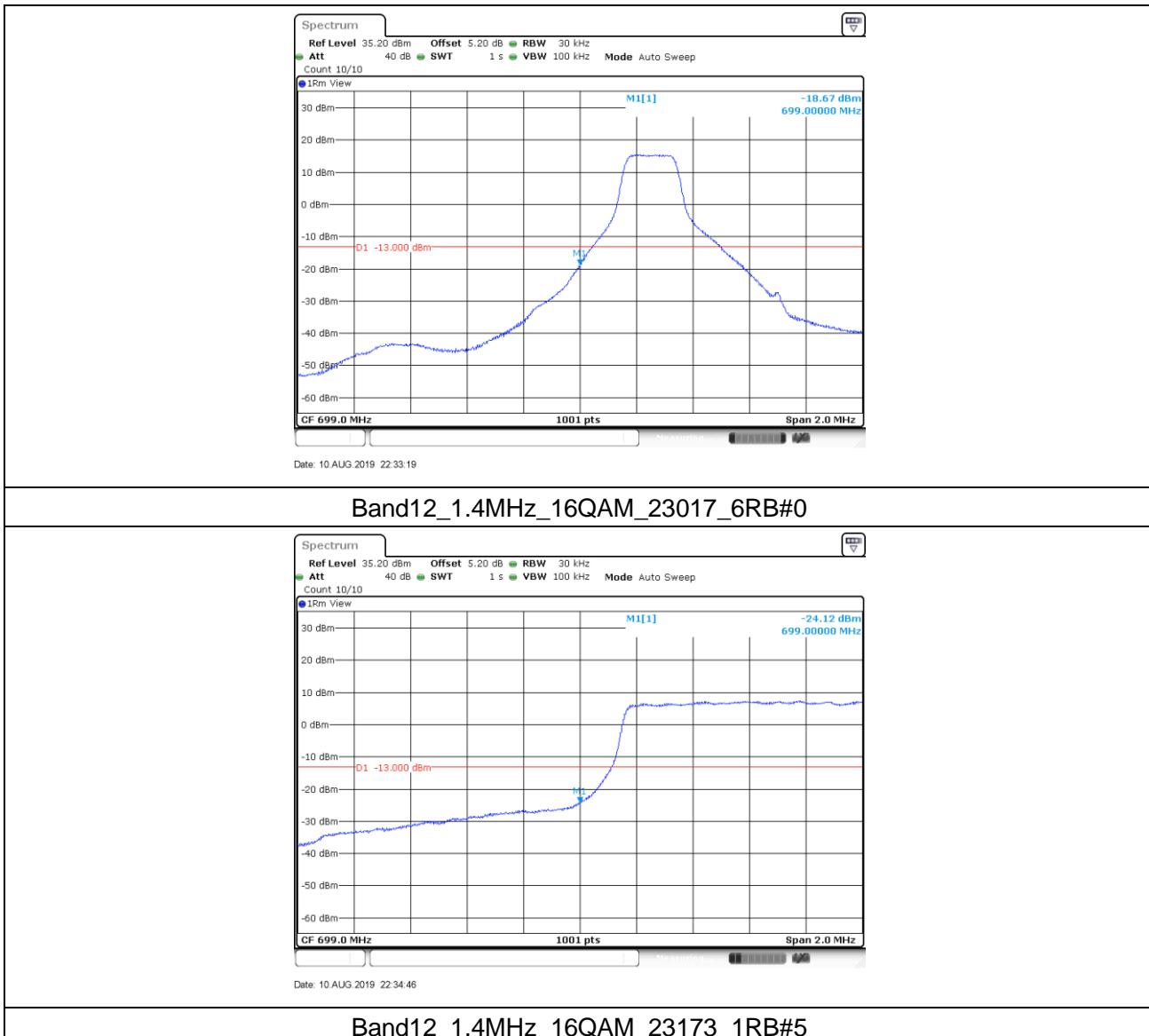


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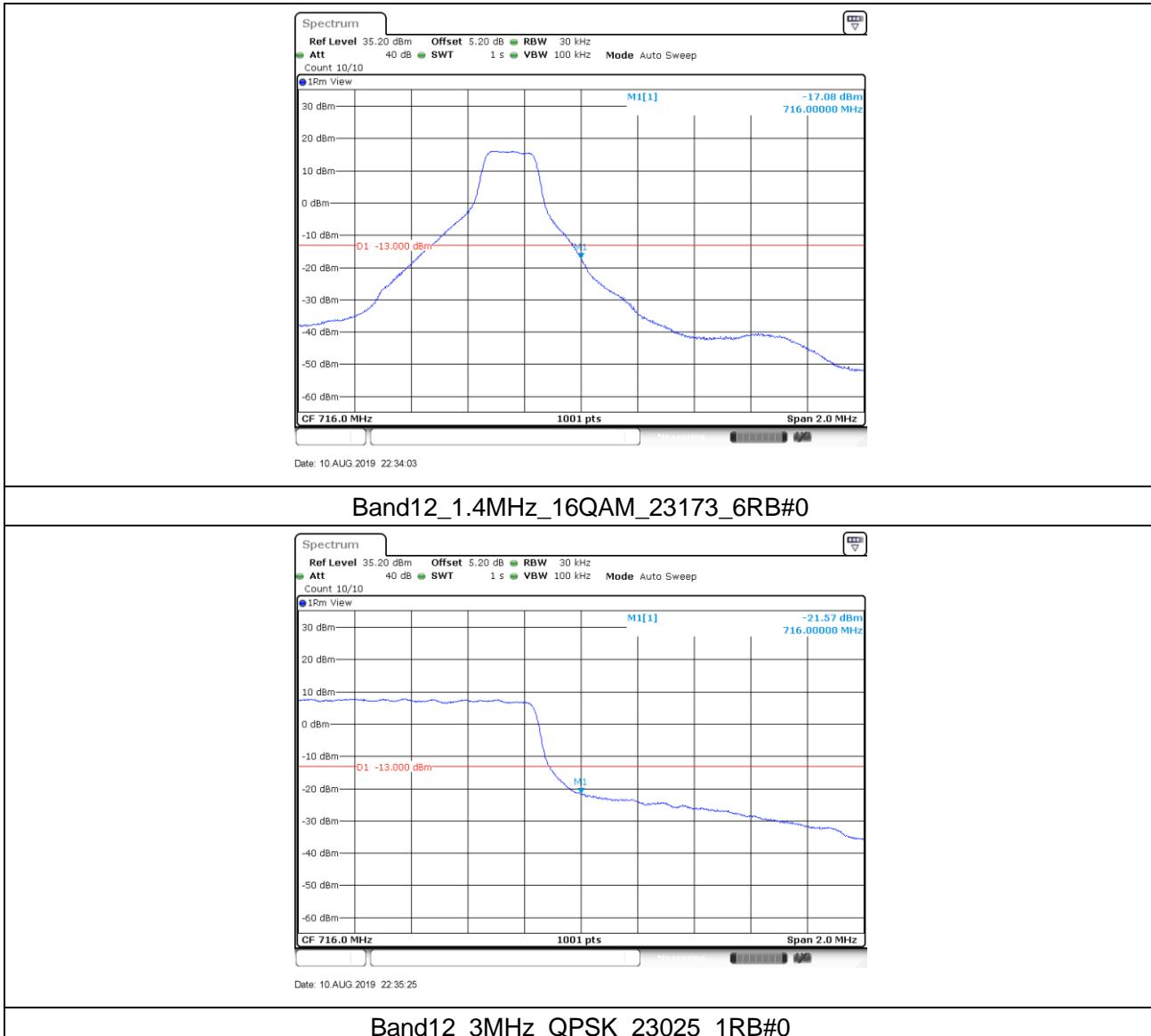
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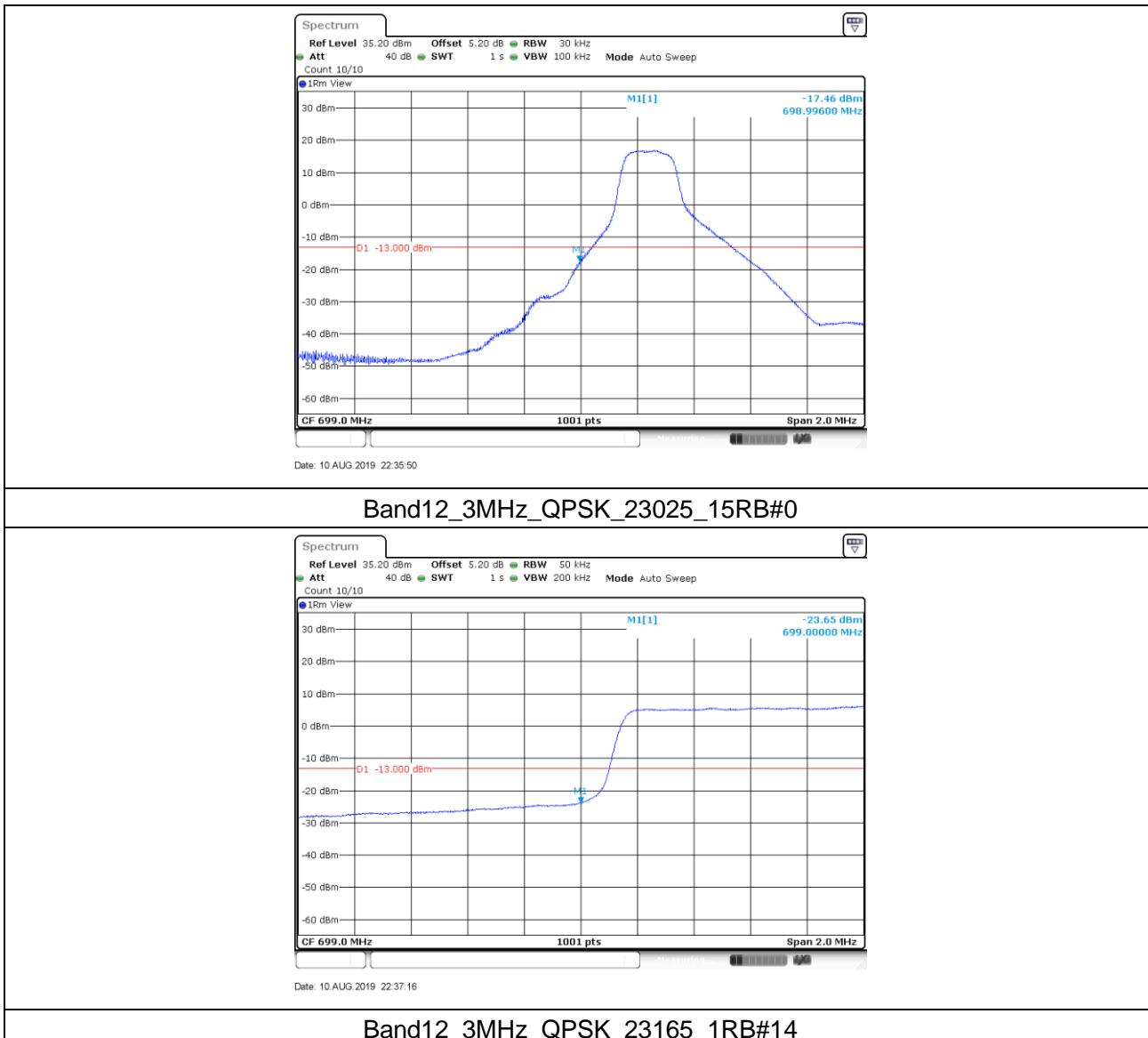
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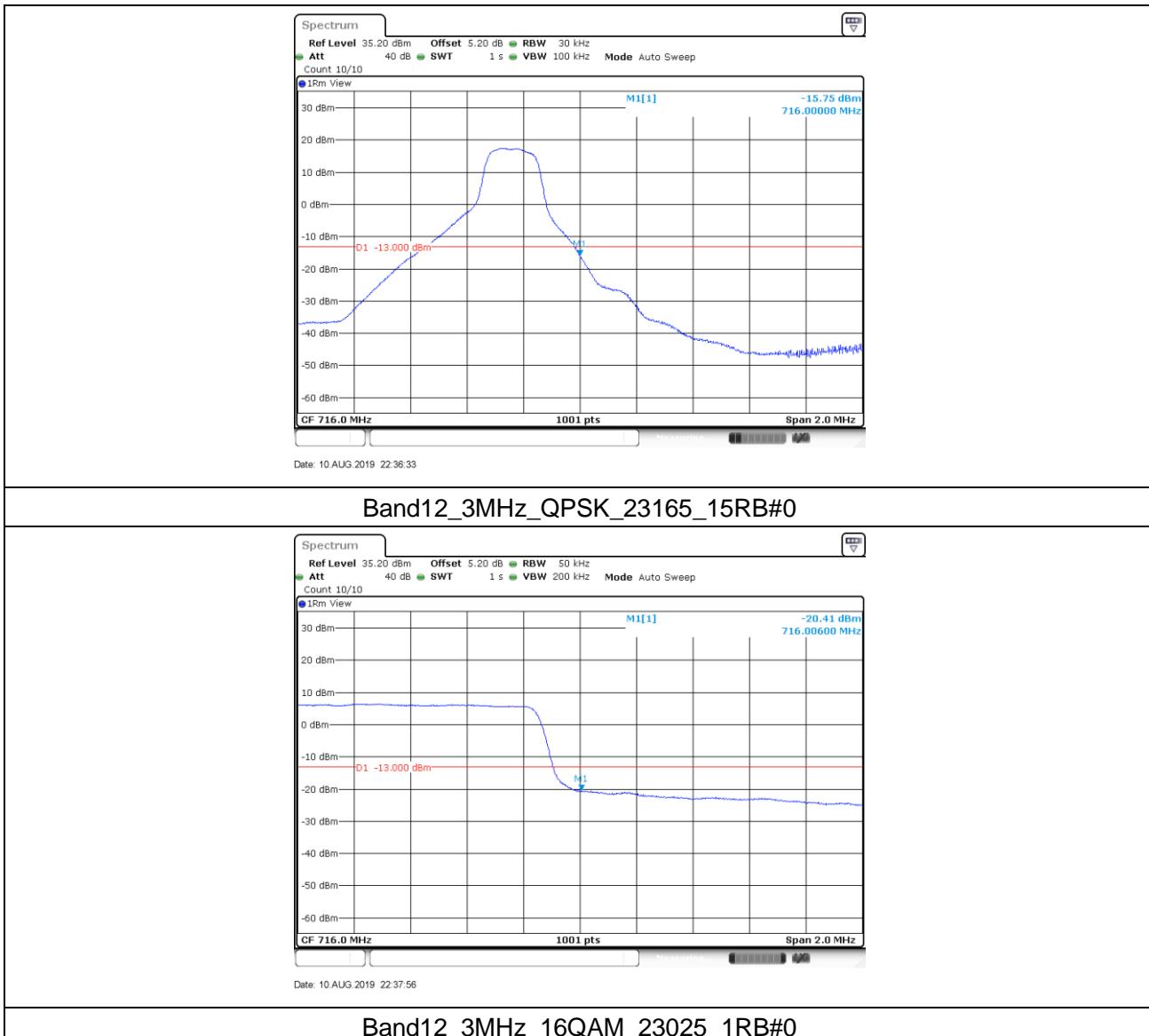
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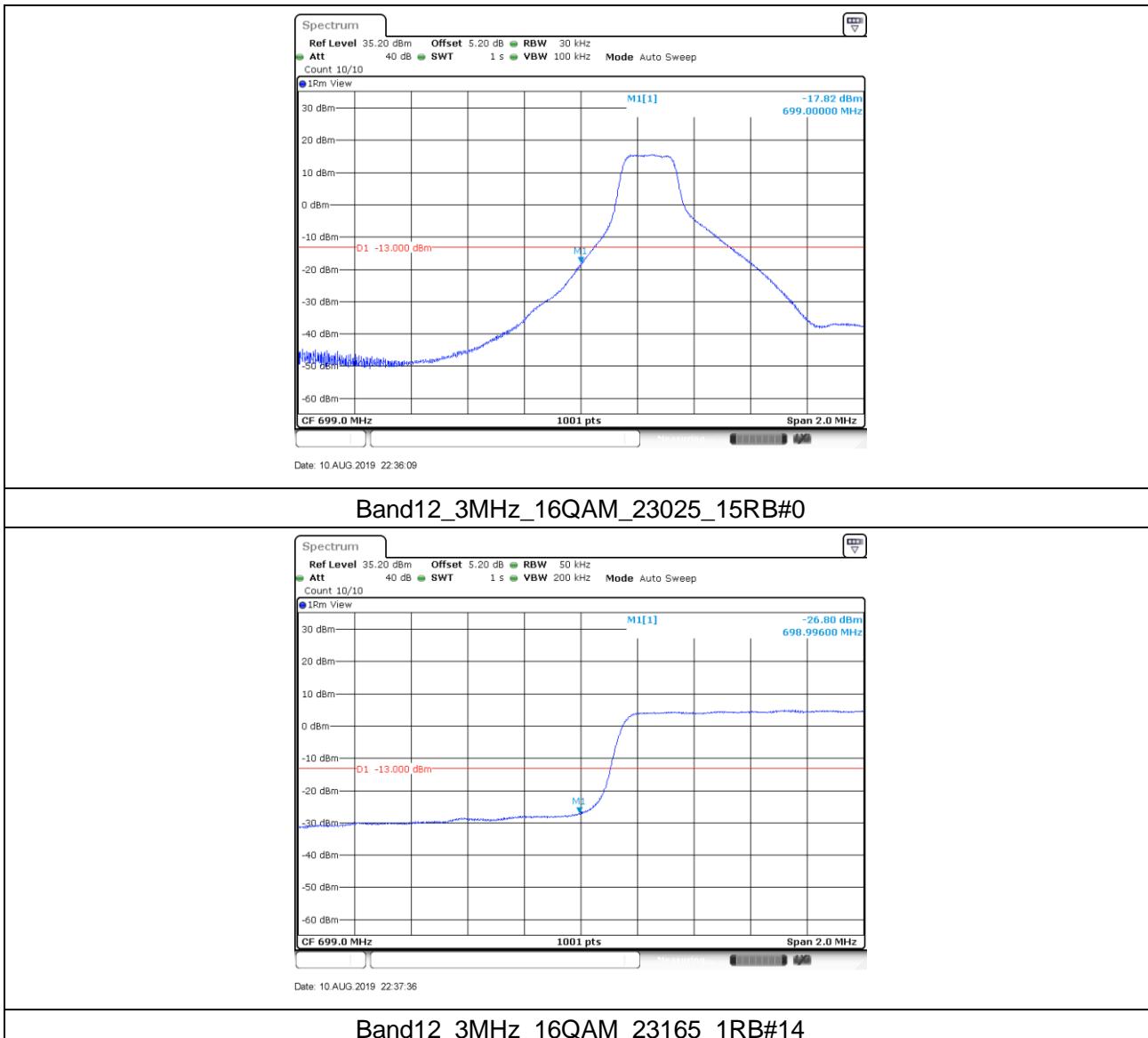


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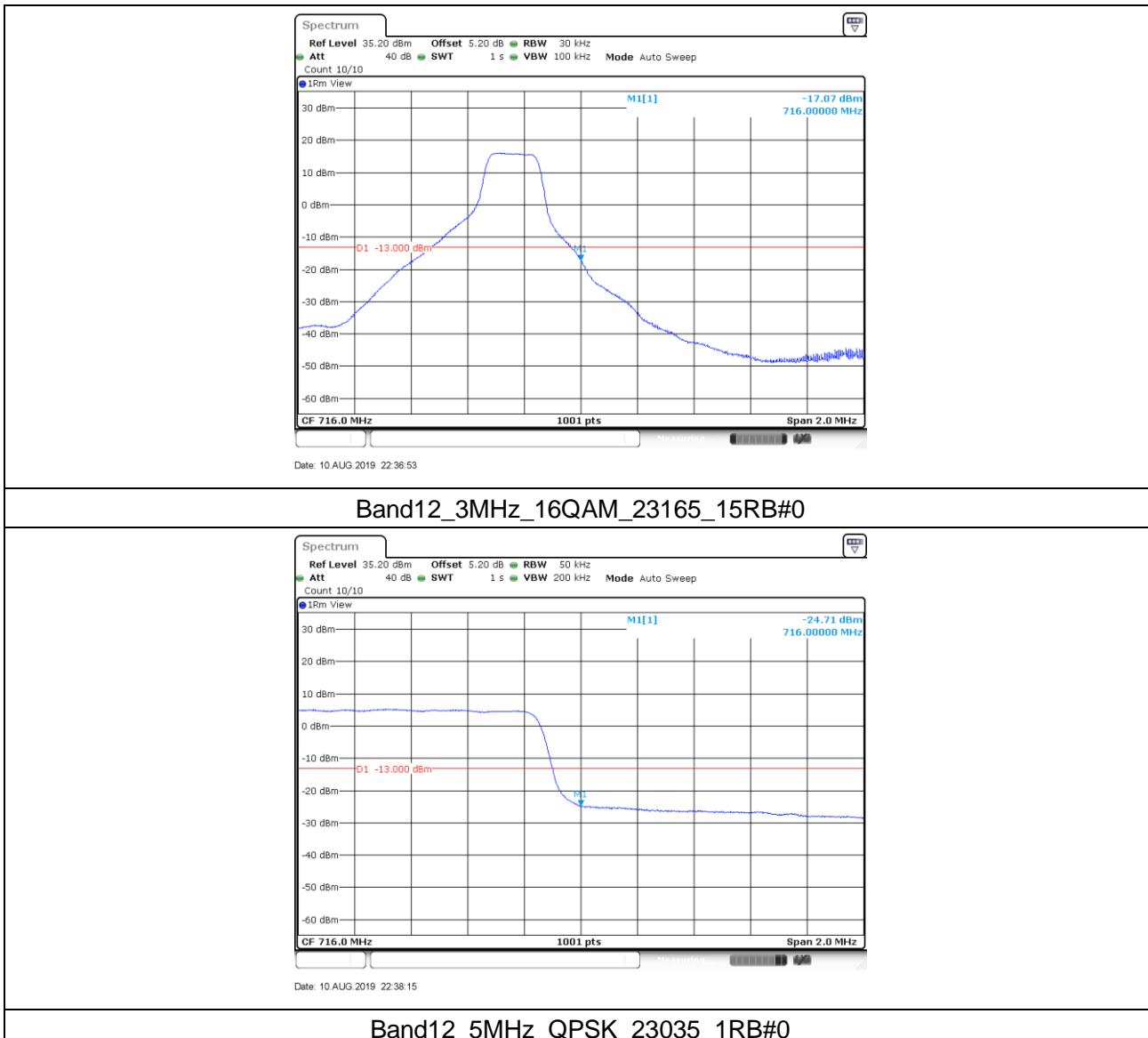
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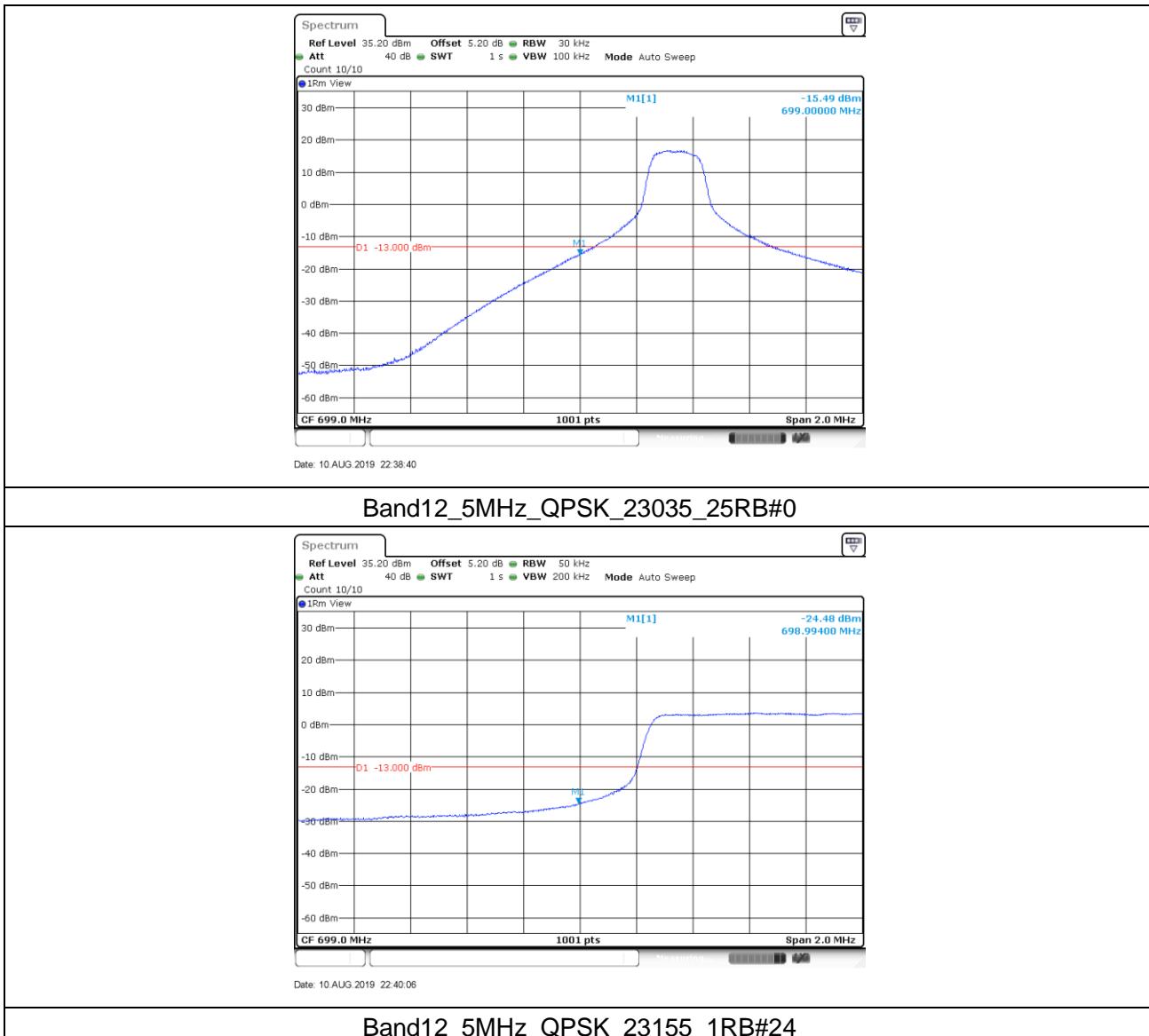


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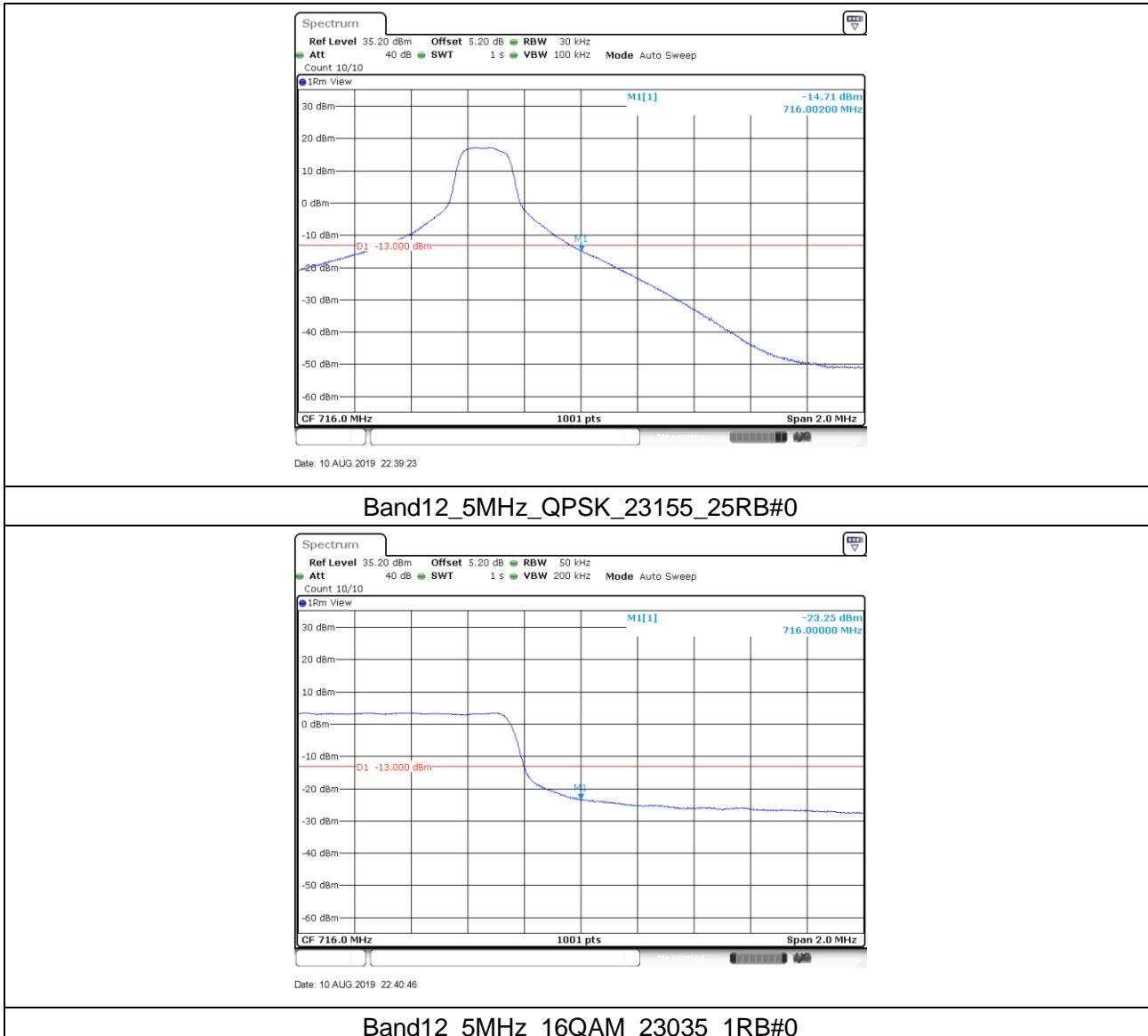


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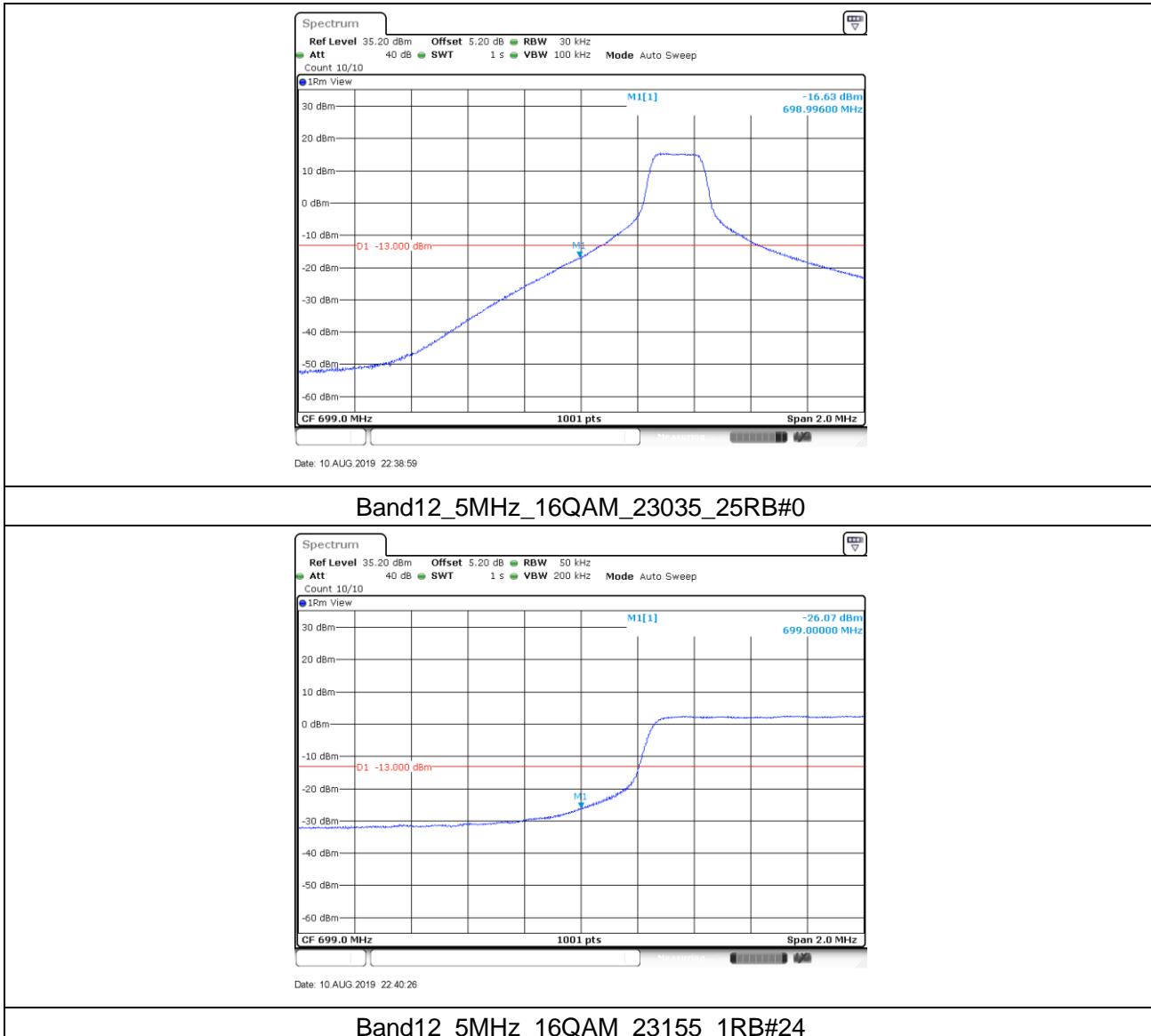
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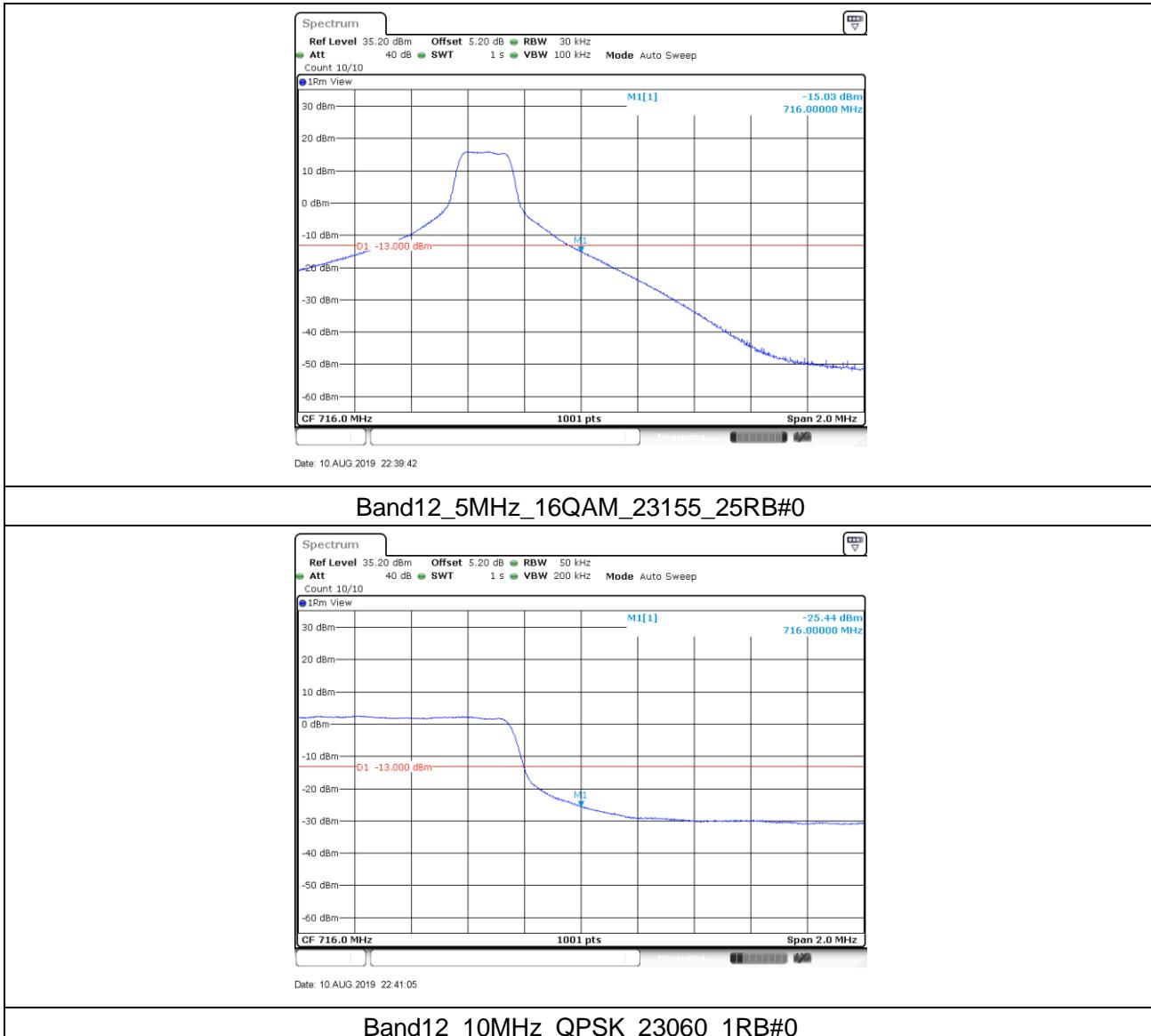


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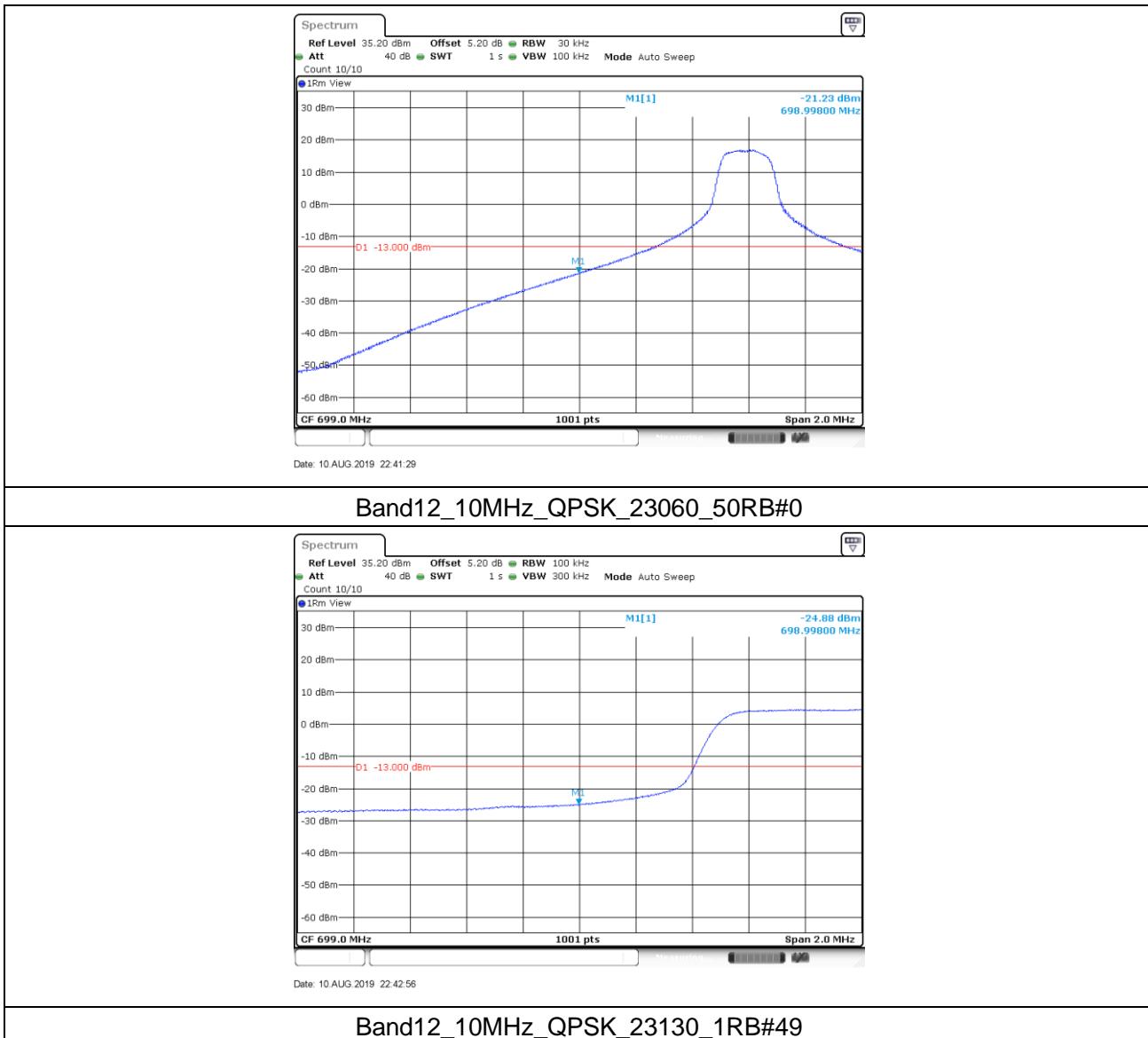


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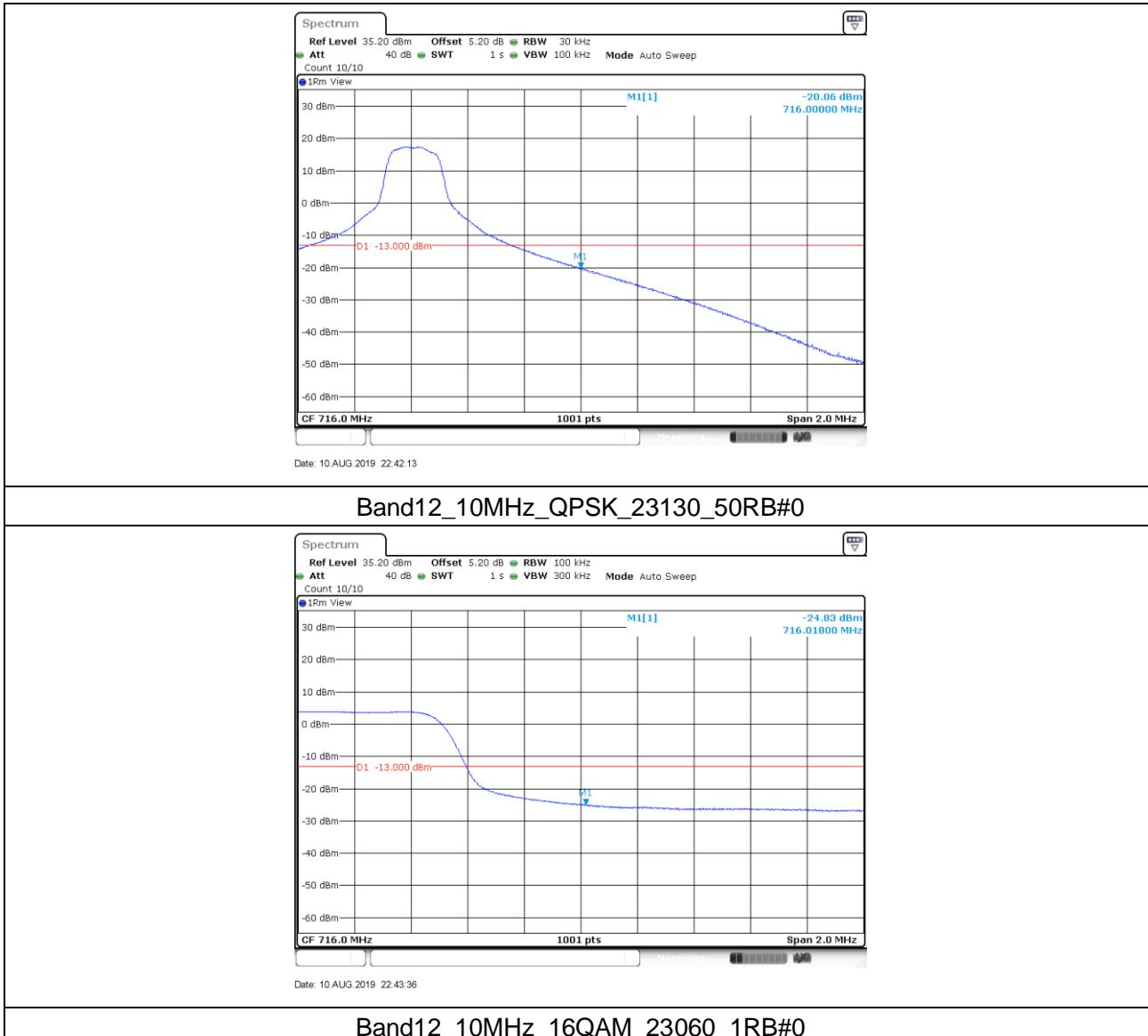
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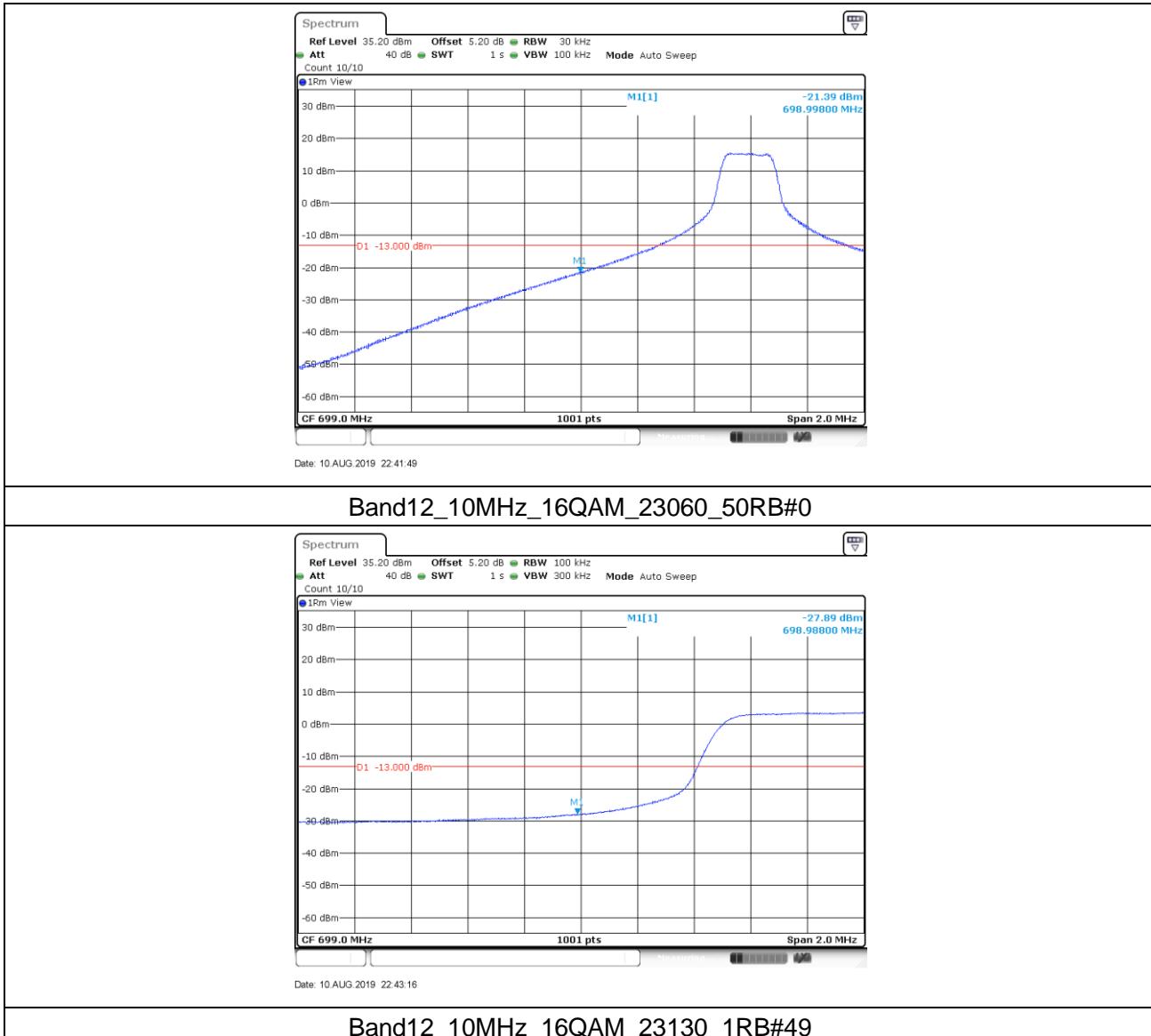


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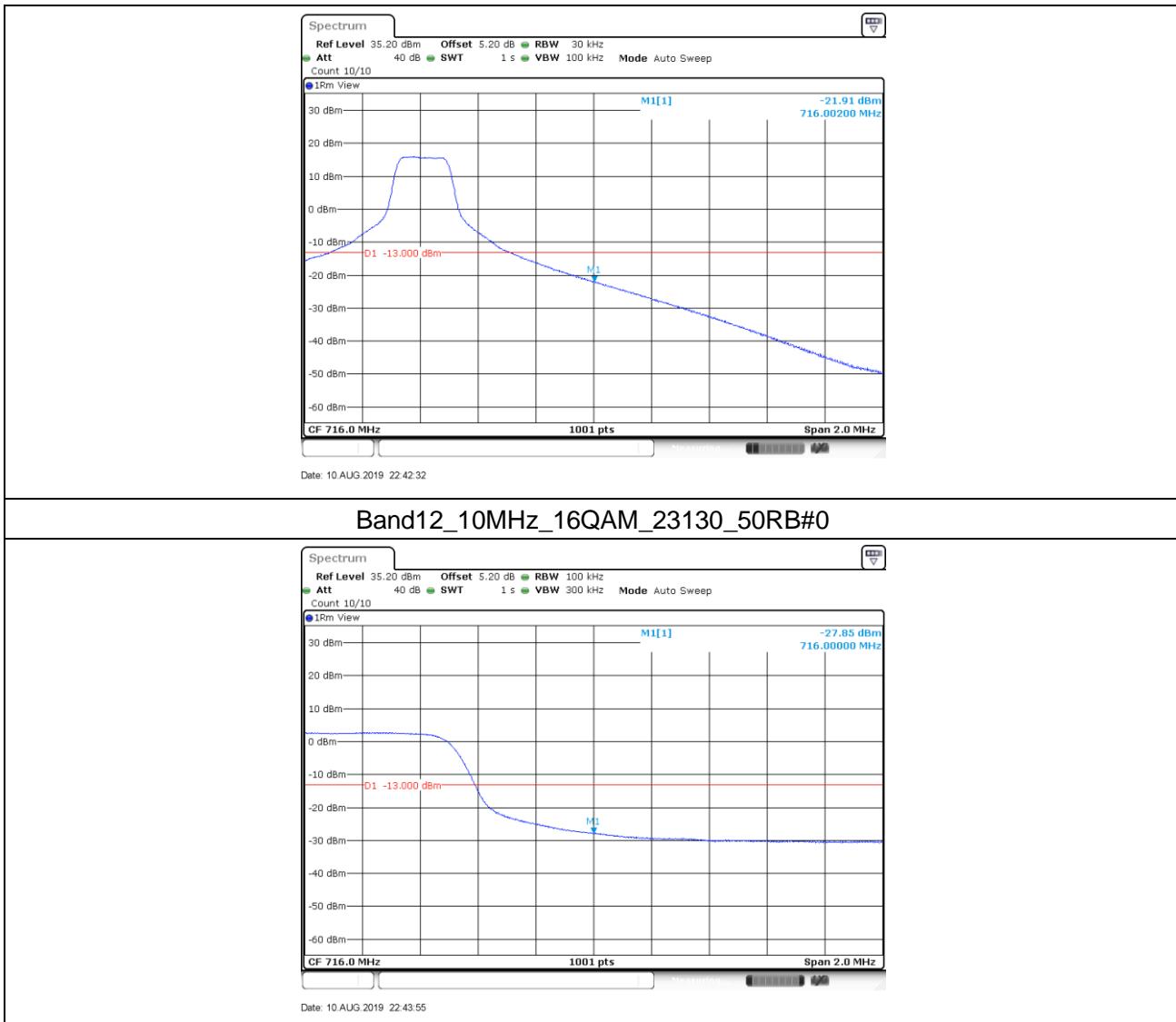


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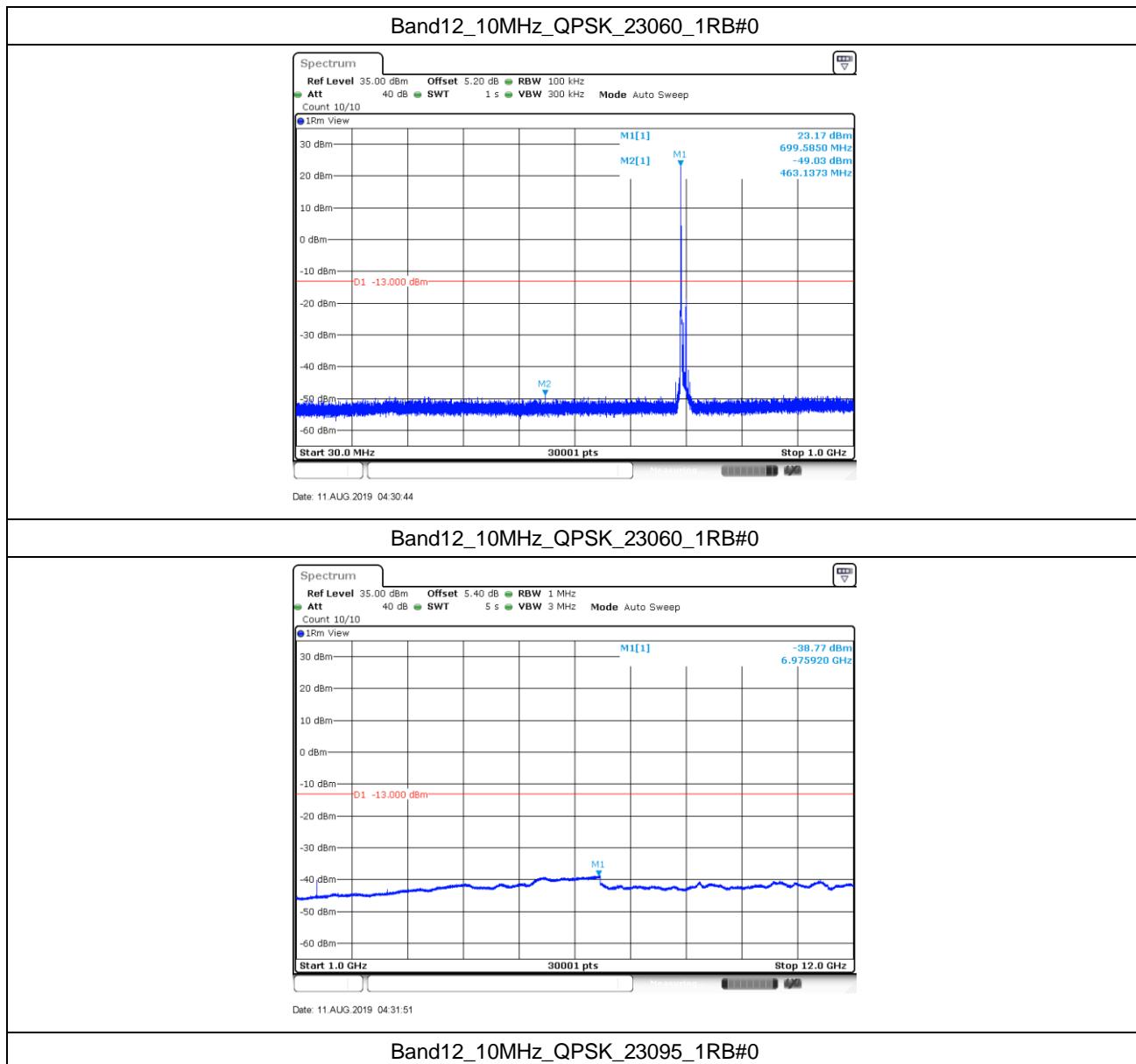
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6. Spurious Emission at Antenna Terminal

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 $< \text{RBW}/2$ so that narrowband signals are not lost between frequency bins. As to the present test item, the "Measurement Points = k * (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

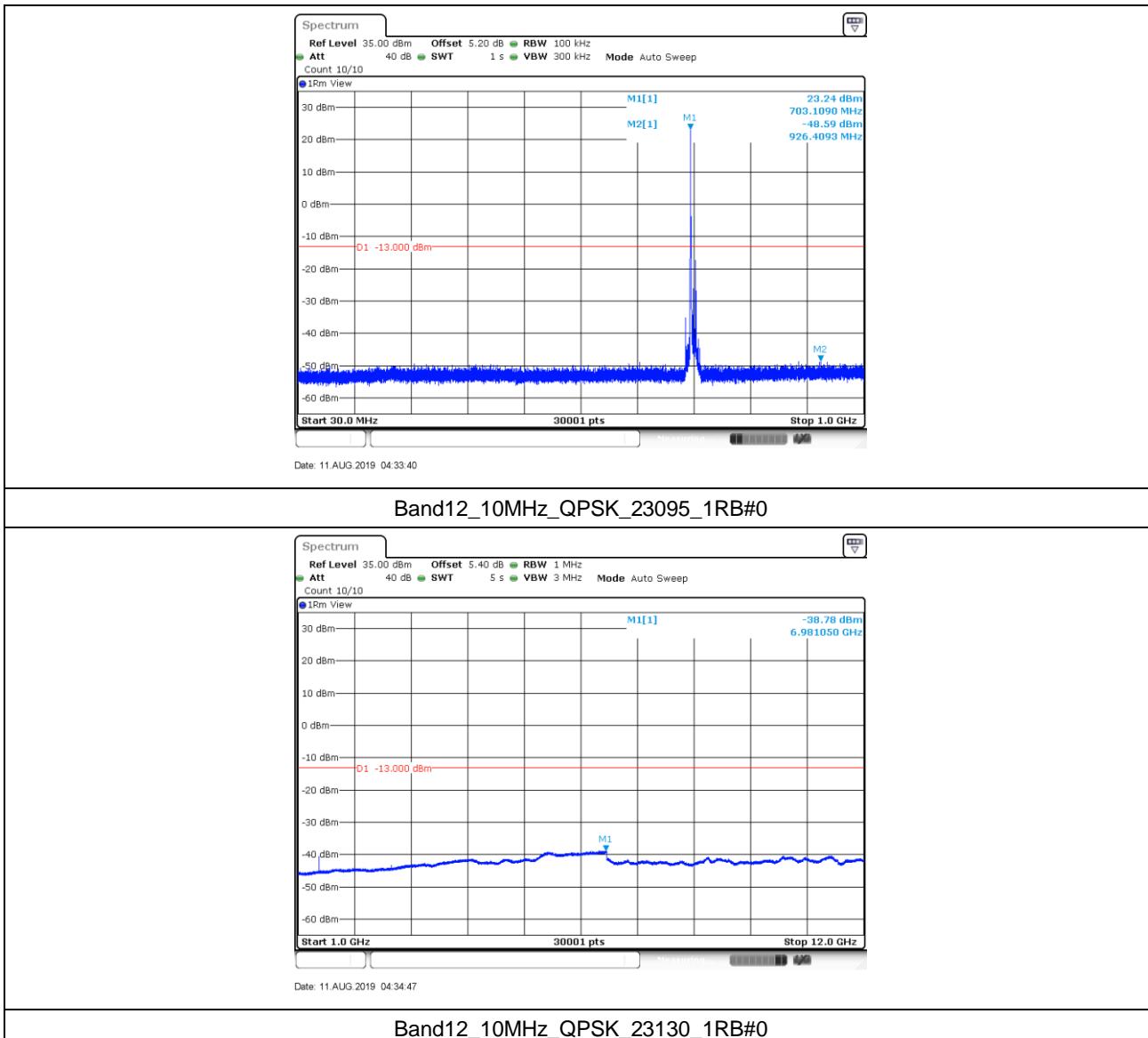


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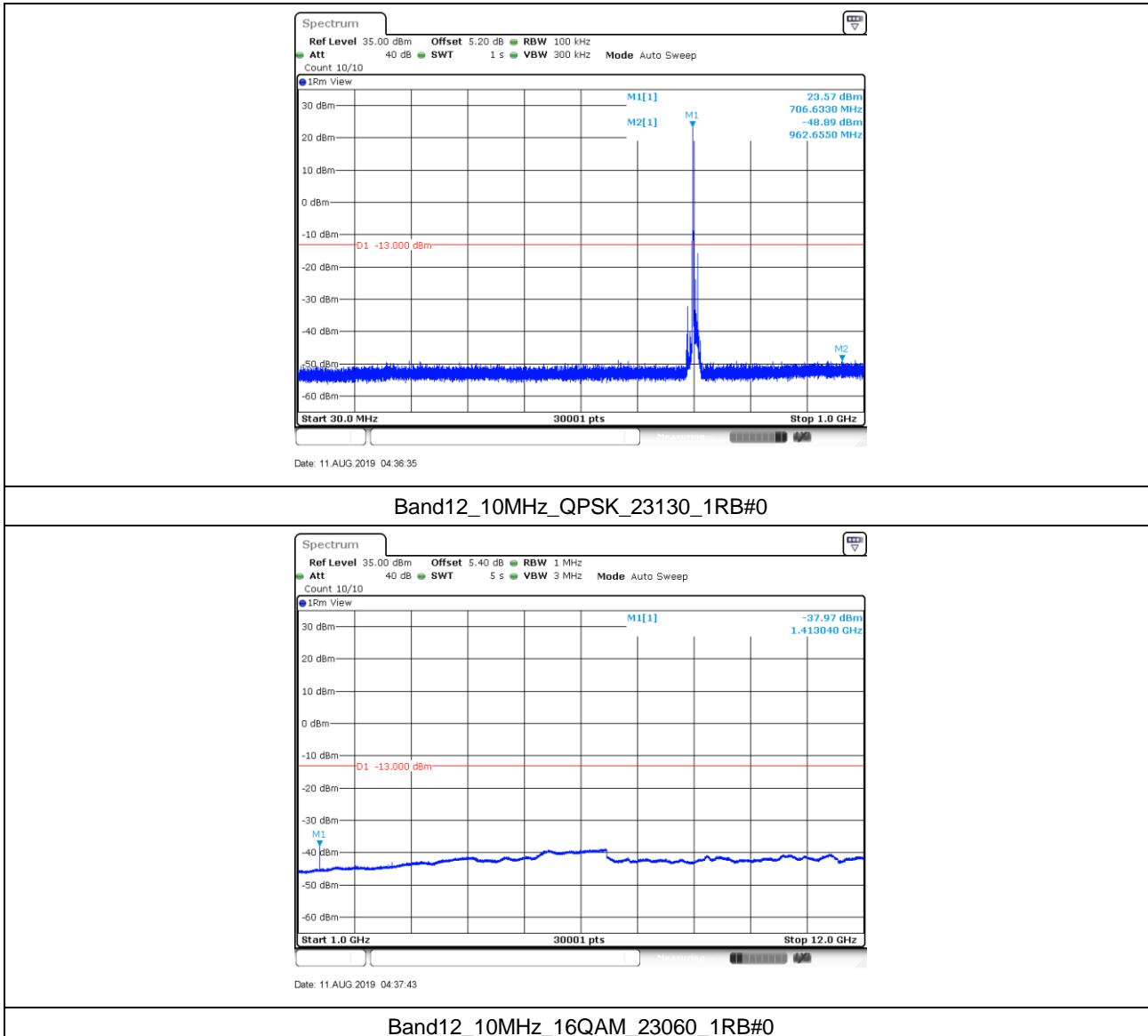
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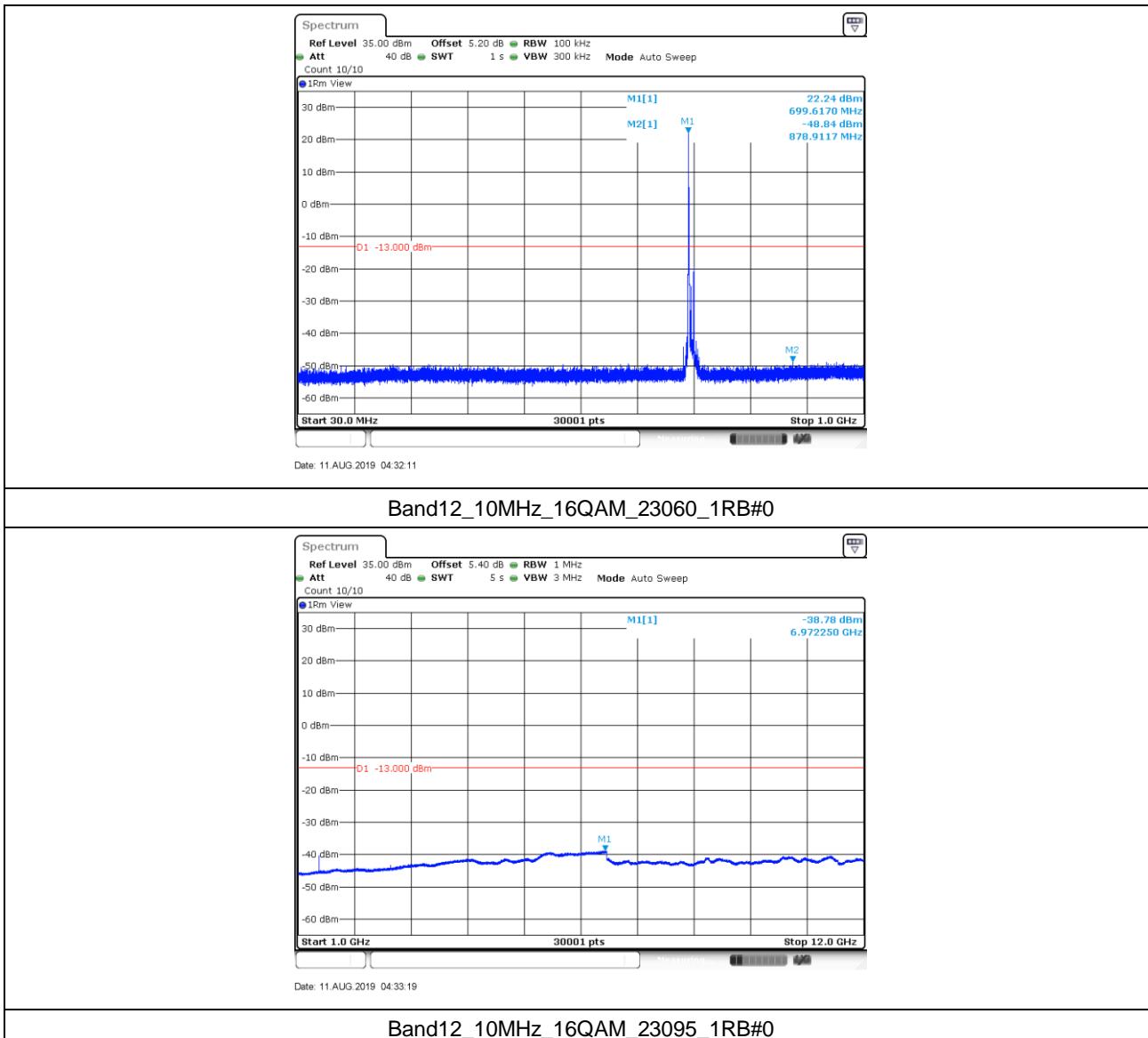
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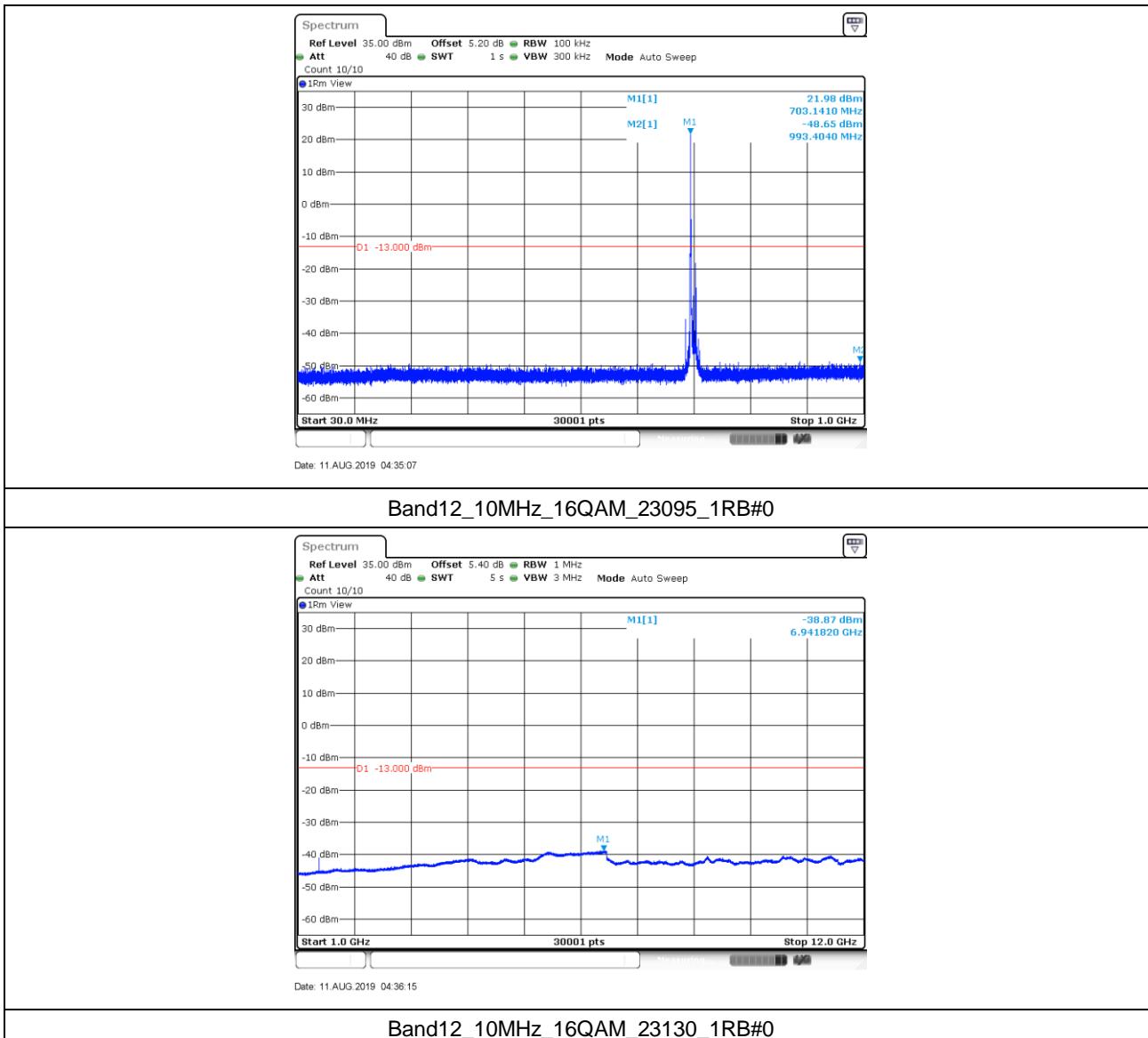
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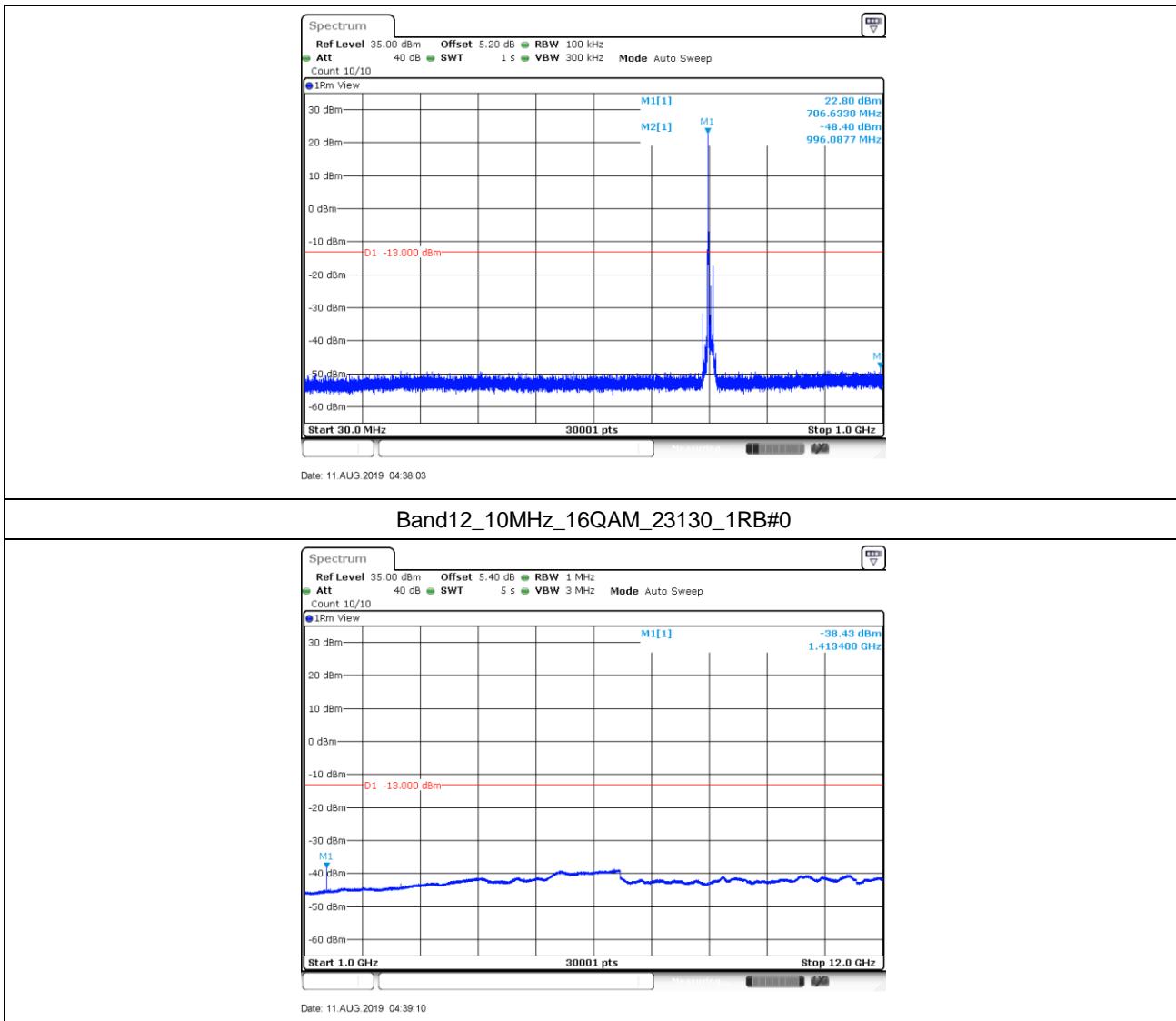


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7. Field Strength of Spurious Radiation

7.1. Test Band = LTE Band 12

7.1.1. Test Mode =LTE/TM1 10MHz

7.1.1.1. Test Channel = LCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
110.9991	-65.40	-13.00	52.40	Vertical
1398.8798	-55.95	-13.00	42.95	Vertical
2099.0198	-59.16	-13.00	46.16	Vertical
2798.7598	-54.04	-13.00	41.04	Vertical
14416.0566	-44.03	-13.00	31.03	Vertical
17903.3961	-34.66	-13.00	21.66	Vertical
43.8717	-63.51	-13.00	50.51	Horizontal
1398.8798	-49.40	-13.00	36.40	Horizontal
2099.0198	-52.74	-13.00	39.74	Horizontal
2798.3597	-45.77	-13.00	32.77	Horizontal
3498.0199	-52.45	-13.00	39.45	Horizontal
17998.1999	-37.37	-13.00	24.37	Horizontal

7.1.1.2. Test Channel = MCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
106.7793	-65.34	-13.00	52.34	Vertical
582.7821	-64.75	-13.00	51.75	Vertical
1406.0812	-52.94	-13.00	39.94	Vertical
2812.3625	-54.36	-13.00	41.36	Vertical
14520.4608	-43.17	-13.00	30.17	Vertical
17990.9996	-32.37	-13.00	19.37	Vertical
41.6406	-64.48	-13.00	51.48	Horizontal
232.6916	-68.52	-13.00	55.52	Horizontal
1406.0812	-45.87	-13.00	32.87	Horizontal
2109.4219	-55.95	-13.00	42.95	Horizontal
2812.3625	-48.01	-13.00	35.01	Horizontal
16403.9362	-38.27	-13.00	25.27	Horizontal
17985.5994	-36.58	-13.00	23.58	Horizontal

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7.1.1.3. Test Channel = HCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
110.1260	-64.90	-13.00	51.90	Vertical
1412.8826	-54.89	-13.00	41.89	Vertical
2119.8240	-49.98	-13.00	36.98	Vertical
2826.3653	-54.20	-13.00	41.20	Vertical
14279.8512	-44.06	-13.00	31.06	Vertical
17986.7995	-32.67	-13.00	19.67	Vertical
40.8160	-64.49	-13.00	51.49	Horizontal
1412.8826	-47.74	-13.00	34.74	Horizontal
2119.8240	-37.75	-13.00	24.75	Horizontal
2826.7654	-48.26	-13.00	35.26	Horizontal
3532.8213	-55.32	-13.00	42.32	Horizontal
17992.1997	-37.20	-13.00	24.20	Horizontal

Remark:

- 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.
- 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 had been displayed.
- all modulation and all Bandwidth had been tested, but only the worst case data displayed in this report.



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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	-4.10	-0.005824	±2.5	PASS	
Band12	10MHz	QPSK	23060	50RB#0	VN	NT	-8.40	-0.011932	±2.5	PASS	
Band12	10MHz	QPSK	23060	50RB#0	VH	NT	-5.70	-0.008097	±2.5	PASS	
Band12	10MHz	QPSK	23095	50RB#0	VL	NT	-8.10	-0.011449	±2.5	PASS	
Band12	10MHz	QPSK	23095	50RB#0	VN	NT	-4.90	-0.006926	±2.5	PASS	
Band12	10MHz	QPSK	23095	50RB#0	VH	NT	-5.40	-0.007633	±2.5	PASS	
Band12	10MHz	QPSK	23130	50RB#0	VL	NT	-8.40	-0.011814	±2.5	PASS	
Band12	10MHz	QPSK	23130	50RB#0	VN	NT	-10.10	-0.014205	±2.5	PASS	
Band12	10MHz	QPSK	23130	50RB#0	VH	NT	-4.80	-0.006751	±2.5	PASS	
Band12	10MHz	16QAM	23060	50RB#0	VL	NT	-1.80	-0.002557	±2.5	PASS	
Band12	10MHz	16QAM	23060	50RB#0	VN	NT	-1.90	-0.002699	±2.5	PASS	
Band12	10MHz	16QAM	23060	50RB#0	VH	NT	-7.60	-0.010795	±2.5	PASS	
Band12	10MHz	16QAM	23095	50RB#0	VL	NT	-3.80	-0.005371	±2.5	PASS	
Band12	10MHz	16QAM	23095	50RB#0	VN	NT	-6.60	-0.009329	±2.5	PASS	
Band12	10MHz	16QAM	23095	50RB#0	VH	NT	-4.60	-0.006502	±2.5	PASS	
Band12	10MHz	16QAM	23130	50RB#0	VL	NT	-2.80	-0.003938	±2.5	PASS	
Band12	10MHz	16QAM	23130	50RB#0	VN	NT	-5.90	-0.008298	±2.5	PASS	
Band12	10MHz	16QAM	23130	50RB#0	VH	NT	-6.20	-0.008720	±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	-6.20	-0.008807	±2.5	PASS	
Band12	10MHz	QPSK	23060	50RB#0	NV	-20	-2.00	-0.002841	±2.5	PASS	
Band12	10MHz	QPSK	23060	50RB#0	NV	0	-8.40	-0.011932	±2.5	PASS	
Band12	10MHz	QPSK	23060	50RB#0	NV	10	-7.00	-0.009943	±2.5	PASS	
Band12	10MHz	QPSK	23060	50RB#0	NV	20	-2.50	-0.003551	±2.5	PASS	
Band12	10MHz	QPSK	23060	50RB#0	NV	30	-8.30	-0.011790	±2.5	PASS	
Band12	10MHz	QPSK	23060	50RB#0	NV	40	-8.00	-0.011364	±2.5	PASS	
Band12	10MHz	QPSK	23060	50RB#0	NV	50	-8.40	-0.011932	±2.5	PASS	

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Band12	10MHz	QPSK	23095	50RB#0	NV	-30	-3.90	-0.005512	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	NV	-20	-1.40	-0.001979	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	NV	0	-0.90	-0.001272	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	NV	10	-7.80	-0.011025	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	NV	20	-8.30	-0.011731	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	NV	30	-4.70	-0.006643	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	NV	40	-7.90	-0.011166	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	NV	50	-10.30	-0.014558	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	NV	-30	-4.80	-0.006751	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	NV	-20	-8.20	-0.011533	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	NV	0	-9.90	-0.013924	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	NV	10	-4.90	-0.006892	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	NV	20	-9.00	-0.012658	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	NV	30	-9.60	-0.013502	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	NV	40	-8.30	-0.011674	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	NV	50	-10.40	-0.014627	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	NV	-30	-5.50	-0.007813	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	NV	-20	-9.20	-0.013068	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	NV	0	-2.10	-0.002983	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	NV	10	-1.70	-0.002415	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	NV	20	-1.30	-0.001847	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	NV	30	-3.70	-0.005256	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	NV	40	-6.50	-0.009233	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	NV	50	-0.60	-0.000852	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	NV	-30	-1.10	-0.001555	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	NV	-20	-0.50	-0.000707	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	NV	0	-4.90	-0.006926	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	NV	10	-1.10	-0.001555	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	NV	20	-7.90	-0.011166	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	NV	30	-8.30	-0.011731	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	NV	40	-4.30	-0.006078	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	NV	50	-7.30	-0.010318	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	NV	-30	-10.70	-0.015049	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	NV	-20	-4.40	-0.006188	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	NV	0	-7.70	-0.010830	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	NV	10	-3.70	-0.005204	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	NV	20	-6.80	-0.009564	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	NV	30	-3.90	-0.005485	±2.5	PASS

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Band12	10MHz	16QAM	23130	50RB#0	NV	40	-2.80	-0.003938	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	NV	50	-7.90	-0.011111	±2.5	PASS

The End

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