Appendix B

E-UTRA BAND 12

CONTENT

1. Effective (Isotropic) Radiated Power

1.1. Test Result

BAND	Bandwidth	Modulation	Channel	RB Configuration	Result (dBm)	ERP (dBm)	Limit (dBm)	Verdict
Band12	1.4MHz	QPSK	23017	1RB#0	23.04	19.59	34.77	PASS
Band12	1.4MHz	QPSK	23017	1RB#2	23.19	19.74	34.77	PASS
Band12	1.4MHz	QPSK	23017	1RB#5	23.20	19.75	34.77	PASS
Band12	1.4MHz	QPSK	23017	3RB#0	23.29	19.84	34.77	PASS
Band12	1.4MHz	QPSK	23017	3RB#1	23.38	19.93	34.77	PASS
Band12	1.4MHz	QPSK	23017	3RB#3	23.35	19.90	34.77	PASS
Band12	1.4MHz	QPSK	23017	6RB#0	22.14	18.69	34.77	PASS
Band12	1.4MHz	QPSK	23095	1RB#0	23.31	19.86	34.77	PASS
Band12	1.4MHz	QPSK	23095	1RB#2	23.37	19.92	34.77	PASS
Band12	1.4MHz	QPSK	23095	1RB#5	22.96	19.51	34.77	PASS
Band12	1.4MHz	QPSK	23095	3RB#0	23.33	19.88	34.77	PASS
Band12	1.4MHz	QPSK	23095	3RB#1	23.53	20.08	34.77	PASS
Band12	1.4MHz	QPSK	23095	3RB#3	23.28	19.83	34.77	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	22.36	18.91	34.77	PASS
Band12	1.4MHz	QPSK	23173	1RB#0	23.15	19.70	34.77	PASS
Band12	1.4MHz	QPSK	23173	1RB#2	23.23	19.78	34.77	PASS
Band12	1.4MHz	QPSK	23173	1RB#5	23.08	19.63	34.77	PASS
Band12	1.4MHz	QPSK	23173	3RB#0	23.19	19.74	34.77	PASS
Band12	1.4MHz	QPSK	23173	3RB#1	23.44	19.99	34.77	PASS
Band12	1.4MHz	QPSK	23173	3RB#3	23.29	19.84	34.77	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	22.27	18.82	34.77	PASS
Band12	1.4MHz	16QAM	23017	1RB#0	21.61	18.16	34.77	PASS
Band12	1.4MHz	16QAM	23017	1RB#2	21.86	18.41	34.77	PASS
Band12	1.4MHz	16QAM	23017	1RB#5	21.64	18.19	34.77	PASS
Band12	1.4MHz	16QAM	23017	3RB#0	22.37	18.92	34.77	PASS
Band12	1.4MHz	16QAM	23017	3RB#1	22.43	18.98	34.77	PASS
Band12	1.4MHz	16QAM	23017	3RB#3	22.17	18.72	34.77	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	21.33	17.88	34.77	PASS
Band12	1.4MHz	16QAM	23095	1RB#0	22.33	18.88	34.77	PASS
Band12	1.4MHz	16QAM	23095	1RB#2	22.04	18.59	34.77	PASS
Band12	1.4MHz	16QAM	23095	1RB#5	21.81	18.36	34.77	PASS
Band12	1.4MHz	16QAM	23095	3RB#0	22.63	19.18	34.77	PASS
Band12	1.4MHz	16QAM	23095	3RB#1	22.48	19.03	34.77	PASS
Band12	1.4MHz	16QAM	23095	3RB#3	22.52	19.07	34.77	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	21.37	17.92	34.77	PASS
Band12	1.4MHz	16QAM	23173	1RB#0	21.84	18.39	34.77	PASS

Band12	1.4MHz	16QAM	23173	1RB#2	21.95	18.50	34.77	PASS
Band12	1.4MHz	16QAM	23173	1RB#5	21.76	18.31	34.77	PASS
Band12	1.4MHz	16QAM	23173	3RB#0	22.16	18.71	34.77	PASS
Band12	1.4MHz	16QAM	23173	3RB#1	22.28	18.83	34.77	PASS
Band12	1.4MHz	16QAM	23173	3RB#3	22.46	19.01	34.77	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	21.28	17.83	34.77	PASS
Band12	3MHz	QPSK	23025	1RB#0	23.50	20.05	34.77	PASS
Band12	3MHz	QPSK	23025	1RB#8	23.55	20.10	34.77	PASS
Band12	3MHz	QPSK	23025	1RB#14	23.69	20.24	34.77	PASS
Band12	3MHz	QPSK	23025	8RB#0	22.12	18.67	34.77	PASS
Band12	3MHz	QPSK	23025	8RB#4	22.60	19.15	34.77	PASS
Band12	3MHz	QPSK	23025	8RB#7	22.48	19.03	34.77	PASS
Band12	3MHz	QPSK	23025	15RB#0	22.35	18.90	34.77	PASS
Band12	3MHz	QPSK	23095	1RB#0	23.61	20.16	34.77	PASS
Band12	3MHz	QPSK	23095	1RB#8	23.01	19.56	34.77	PASS
Band12	3MHz	QPSK	23095	1RB#14	23.09	19.64	34.77	PASS
Band12	3MHz	QPSK	23095	8RB#0	22.54	19.09	34.77	PASS
Band12	3MHz	QPSK	23095	8RB#4	22.20	18.75	34.77	PASS
Band12	3MHz	QPSK	23095	8RB#7	22.23	18.78	34.77	PASS
Band12	3MHz	QPSK	23095	15RB#0	22.51	19.06	34.77	PASS
Band12	3MHz	QPSK	23165	1RB#0	23.55	20.10	34.77	PASS
Band12	3MHz	QPSK	23165	1RB#8	23.07	19.62	34.77	PASS
Band12	3MHz	QPSK	23165	1RB#14	23.17	19.72	34.77	PASS
Band12	3MHz	QPSK	23165	8RB#0	22.51	19.06	34.77	PASS
Band12	3MHz	QPSK	23165	8RB#4	22.21	18.76	34.77	PASS
Band12	3MHz	QPSK	23165	8RB#7	22.19	18.74	34.77	PASS
Band12	3MHz	QPSK	23165	15RB#0	22.35	18.90	34.77	PASS
Band12	3MHz	16QAM	23025	1RB#0	21.83	18.38	34.77	PASS
Band12	3MHz	16QAM	23025	1RB#8	22.26	18.81	34.77	PASS
Band12	3MHz	16QAM	23025	1RB#14	22.06	18.61	34.77	PASS
Band12	3MHz	16QAM	23025	8RB#0	21.21	17.76	34.77	PASS
Band12	3MHz	16QAM	23025	8RB#4	21.20	17.75	34.77	PASS
Band12	3MHz	16QAM	23025	8RB#7	21.14	17.69	34.77	PASS
Band12	3MHz	16QAM	23025	15RB#0	21.53	18.08	34.77	PASS
Band12	3MHz	16QAM	23095	1RB#0	21.88	18.43	34.77	PASS
Band12	3MHz	16QAM	23095	1RB#8	21.97	18.52	34.77	PASS
Band12	3MHz	16QAM	23095	1RB#14	21.97	18.52	34.77	PASS
Band12	3MHz	16QAM	23095	8RB#0	21.34	17.89	34.77	PASS
Band12	3MHz	16QAM	23095	8RB#4	21.26	17.81	34.77	PASS
Band12	3MHz	16QAM	23095	8RB#7	21.60	18.15	34.77	PASS
Band12	3MHz	16QAM	23095	15RB#0	21.30	17.85	34.77	PASS
Band12	3MHz	16QAM	23165	1RB#0	21.95	18.50	34.77	PASS

Band12	3MHz	16QAM	23165	1RB#8	22.18	18.73	34.77	PASS
Band12	3MHz	16QAM	23165	1RB#14	21.90	18.45	34.77	PASS
Band12	3MHz	16QAM	23165	8RB#0	21.08	17.63	34.77	PASS
Band12	3MHz	16QAM	23165	8RB#4	21.24	17.79	34.77	PASS
Band12	3MHz	16QAM	23165	8RB#7	21.15	17.70	34.77	PASS
Band12	3MHz	16QAM	23165	15RB#0	21.30	17.85	34.77	PASS
Band12	5MHz	QPSK	23035	1RB#0	23.33	19.88	34.77	PASS
Band12	5MHz	QPSK	23035	1RB#12	23.79	20.34	34.77	PASS
Band12	5MHz	QPSK	23035	1RB#24	23.58	20.13	34.77	PASS
Band12	5MHz	QPSK	23035	12RB#0	22.18	18.73	34.77	PASS
Band12	5MHz	QPSK	23035	12RB#6	22.61	19.16	34.77	PASS
Band12	5MHz	QPSK	23035	12RB#13	22.54	19.09	34.77	PASS
Band12	5MHz	QPSK	23035	25RB#0	22.47	19.02	34.77	PASS
Band12	5MHz	QPSK	23095	1RB#0	23.74	20.29	34.77	PASS
Band12	5MHz	QPSK	23095	1RB#12	22.85	19.40	34.77	PASS
Band12	5MHz	QPSK	23095	1RB#24	23.19	19.74	34.77	PASS
Band12	5MHz	QPSK	23095	12RB#0	22.58	19.13	34.77	PASS
Band12	5MHz	QPSK	23095	12RB#6	22.20	18.75	34.77	PASS
Band12	5MHz	QPSK	23095	12RB#13	22.23	18.78	34.77	PASS
Band12	5MHz	QPSK	23095	25RB#0	22.51	19.06	34.77	PASS
Band12	5MHz	QPSK	23155	1RB#0	23.28	19.83	34.77	PASS
Band12	5MHz	QPSK	23155	1RB#12	23.40	19.95	34.77	PASS
Band12	5MHz	QPSK	23155	1RB#24	22.77	19.32	34.77	PASS
Band12	5MHz	QPSK	23155	12RB#0	22.49	19.04	34.77	PASS
Band12	5MHz	QPSK	23155	12RB#6	22.58	19.13	34.77	PASS
Band12	5MHz	QPSK	23155	12RB#13	22.24	18.79	34.77	PASS
Band12	5MHz	QPSK	23155	25RB#0	22.42	18.97	34.77	PASS
Band12	5MHz	16QAM	23035	1RB#0	22.23	18.78	34.77	PASS
Band12	5MHz	16QAM	23035	1RB#12	22.15	18.70	34.77	PASS
Band12	5MHz	16QAM	23035	1RB#24	21.85	18.40	34.77	PASS
Band12	5MHz	16QAM	23035	12RB#0	21.41	17.96	34.77	PASS
Band12	5MHz	16QAM	23035	12RB#6	21.46	18.01	34.77	PASS
Band12	5MHz	16QAM	23035	12RB#13	21.40	17.95	34.77	PASS
Band12	5MHz	16QAM	23035	25RB#0	21.59	18.14	34.77	PASS
Band12	5MHz	16QAM	23095	1RB#0	21.63	18.18	34.77	PASS
Band12	5MHz	16QAM	23095	1RB#12	22.45	19.00	34.77	PASS
Band12	5MHz	16QAM	23095	1RB#24	21.70	18.25	34.77	PASS
Band12	5MHz	16QAM	23095	12RB#0	21.49	18.04	34.77	PASS
Band12	5MHz	16QAM	23095	12RB#6	21.28	17.83	34.77	PASS
Band12	5MHz	16QAM	23095	12RB#13	21.14	17.69	34.77	PASS
Band12	5MHz	16QAM	23095	25RB#0	21.35	17.90	34.77	PASS
Band12	5MHz	16QAM	23155	1RB#0	22.37	18.92	34.77	PASS

Band12	5MHz	16QAM	23155	1RB#12	22.29	18.84	34.77	PASS
Band12	5MHz	16QAM	23155	1RB#24	22.23	18.78	34.77	PASS
Band12	5MHz	16QAM	23155	12RB#0	21.29	17.84	34.77	PASS
Band12	5MHz	16QAM	23155	12RB#6	21.41	17.96	34.77	PASS
Band12	5MHz	16QAM	23155	12RB#13	21.34	17.89	34.77	PASS
Band12	5MHz	16QAM	23155	25RB#0	21.46	18.01	34.77	PASS
Band12	10MHz	QPSK	23060	1RB#0	23.32	19.87	34.77	PASS
Band12	10MHz	QPSK	23060	1RB#24	23.84	20.39	34.77	PASS
Band12	10MHz	QPSK	23060	1RB#49	22.18	18.73	34.77	PASS
Band12	10MHz	QPSK	23060	25RB#0	23.01	19.56	34.77	PASS
Band12	10MHz	QPSK	23060	25RB#12	22.39	18.94	34.77	PASS
Band12	10MHz	QPSK	23060	25RB#25	22.06	18.61	34.77	PASS
Band12	10MHz	QPSK	23060	50RB#0	22.58	19.13	34.77	PASS
Band12	10MHz	QPSK	23095	1RB#0	23.77	20.32	34.77	PASS
Band12	10MHz	QPSK	23095	1RB#24	22.54	19.09	34.77	PASS
Band12	10MHz	QPSK	23095	1RB#49	23.26	19.81	34.77	PASS
Band12	10MHz	QPSK	23095	25RB#0	22.63	19.18	34.77	PASS
Band12	10MHz	QPSK	23095	25RB#12	22.06	18.61	34.77	PASS
Band12	10MHz	QPSK	23095	25RB#25	22.21	18.76	34.77	PASS
Band12	10MHz	QPSK	23095	50RB#0	22.50	19.05	34.77	PASS
Band12	10MHz	QPSK	23130	1RB#0	23.53	20.08	34.77	PASS
Band12	10MHz	QPSK	23130	1RB#24	23.26	19.81	34.77	PASS
Band12	10MHz	QPSK	23130	1RB#49	23.16	19.71	34.77	PASS
Band12	10MHz	QPSK	23130	25RB#0	22.49	19.04	34.77	PASS
Band12	10MHz	QPSK	23130	25RB#12	22.43	18.98	34.77	PASS
Band12	10MHz	QPSK	23130	25RB#25	22.52	19.07	34.77	PASS
Band12	10MHz	QPSK	23130	50RB#0	22.27	18.82	34.77	PASS
Band12	10MHz	16QAM	23060	1RB#0	21.69	18.24	34.77	PASS
Band12	10MHz	16QAM	23060	1RB#24	22.38	18.93	34.77	PASS
Band12	10MHz	16QAM	23060	1RB#49	21.90	18.45	34.77	PASS
Band12	10MHz	16QAM	23060	25RB#0	21.54	18.09	34.77	PASS
Band12	10MHz	16QAM	23060	25RB#12	21.44	17.99	34.77	PASS
Band12	10MHz	16QAM	23060	25RB#25	21.50	18.05	34.77	PASS
Band12	10MHz	16QAM	23060	50RB#0	21.61	18.16	34.77	PASS
Band12	10MHz	16QAM	23095	1RB#0	22.35	18.90	34.77	PASS
Band12	10MHz	16QAM	23095	1RB#24	22.35	18.90	34.77	PASS
Band12	10MHz	16QAM	23095	1RB#49	22.34	18.89	34.77	PASS
Band12	10MHz	16QAM	23095	25RB#0	21.54	18.09	34.77	PASS
Band12	10MHz	16QAM	23095	25RB#12	21.32	17.87	34.77	PASS
Band12	10MHz	16QAM	23095	25RB#25	21.31	17.86	34.77	PASS
Band12	10MHz	16QAM	23095	50RB#0	21.41	17.96	34.77	PASS
Band12	10MHz	16QAM	23130	1RB#0	21.93	18.48	34.77	PASS

Band12	10MHz	16QAM	23130	1RB#24	22.01	18.56	34.77	PASS
Band12	10MHz	16QAM	23130	1RB#49	21.70	18.25	34.77	PASS
Band12	10MHz	16QAM	23130	25RB#0	21.46	18.01	34.77	PASS
Band12	10MHz	16QAM	23130	25RB#12	21.46	18.01	34.77	PASS
Band12	10MHz	16QAM	23130	25RB#25	21.12	17.67	34.77	PASS
Band12	10MHz	16QAM	23130	50RB#0	21.42	17.97	34.77	PASS

Remark:

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

ERP [dBm] = SGP [dBm] - Cable Loss [dB] + Gain [dBd]

EIRP [dBm] = SGP [dBm] – Cable Loss [dB] + Gain [dBi]

b: SGP=Signal Generator Level

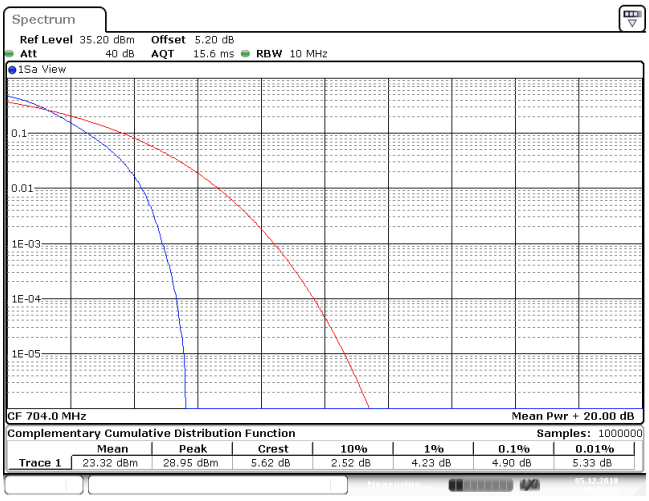
2. Peak-to-Average Ratio(CCDF)

2.1. Test Result

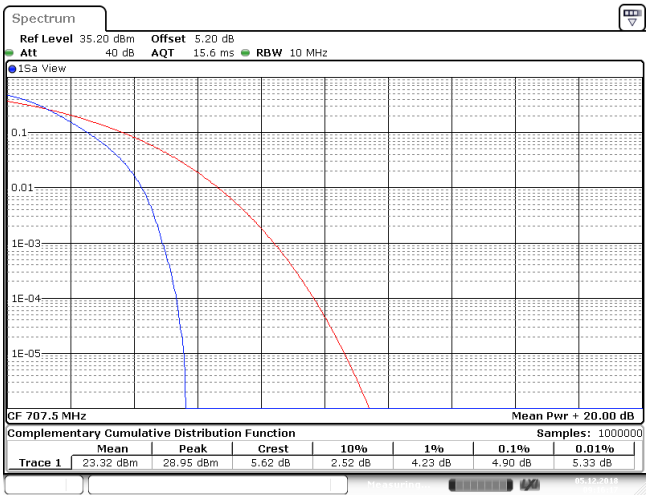
BAND	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band12	10MHz	QPSK	23060	50RB#0	4.90	13	PASS
Band12	10MHz	QPSK	23095	50RB#0	4.90	13	PASS
Band12	10MHz	QPSK	23130	50RB#0	4.90	13	PASS
Band12	10MHz	16QAM	23060	50RB#0	4.90	13	PASS
Band12	10MHz	16QAM	23095	50RB#0	4.90	13	PASS
Band12	10MHz	16QAM	23130	50RB#0	4.90	13	PASS

2.2. Test Plots

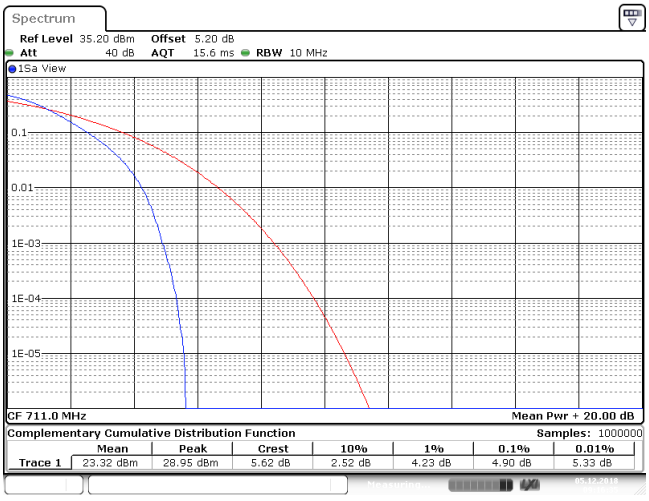
Band12_10MHz_QPSK_23060_50RB#0



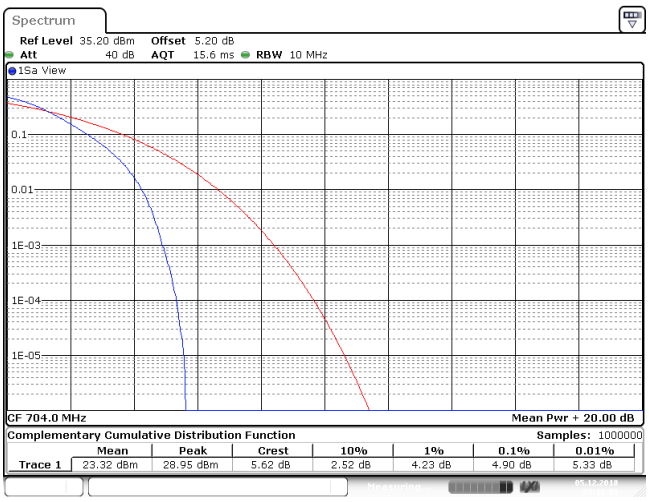
Band12_10MHz_QPSK_23095_50RB#0



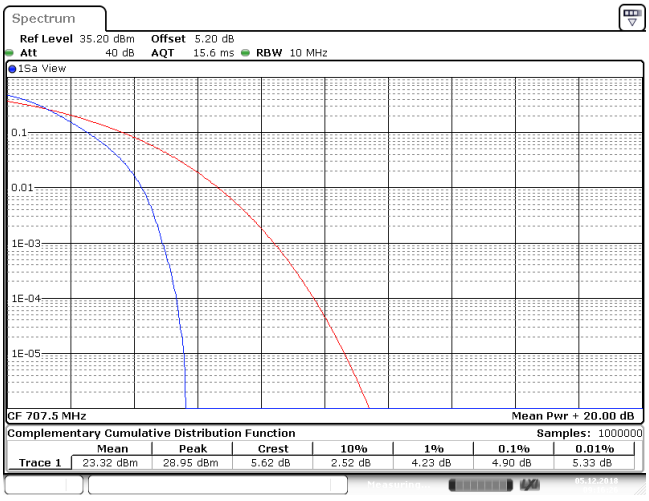
Band12_10MHz_QPSK_23130_50RB#0



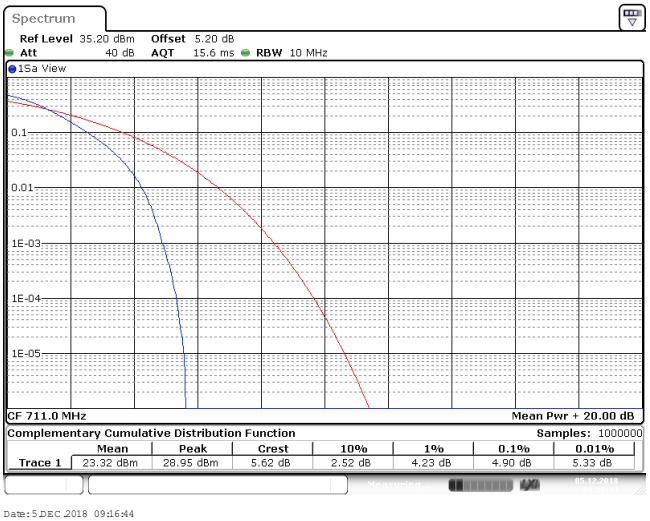
Band12_10MHz_16QAM_23060_50RB#0



Band12_10MHz_16QAM_23095_50RB#0



Band12_10MHz_16QAM_23130_50RB#0

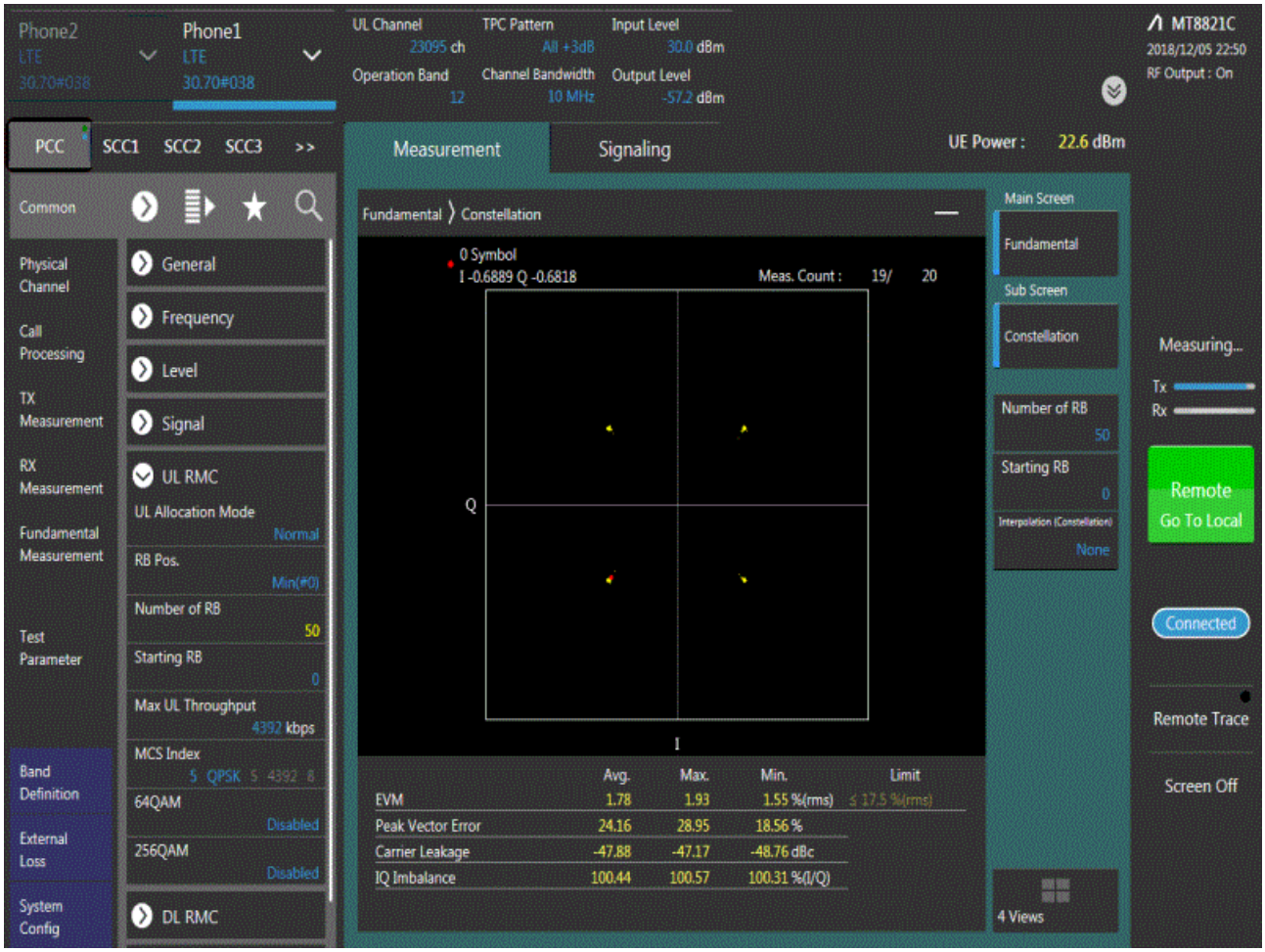


3. Modulation Characteristics

3.1. Test BAND = LTE BAND12

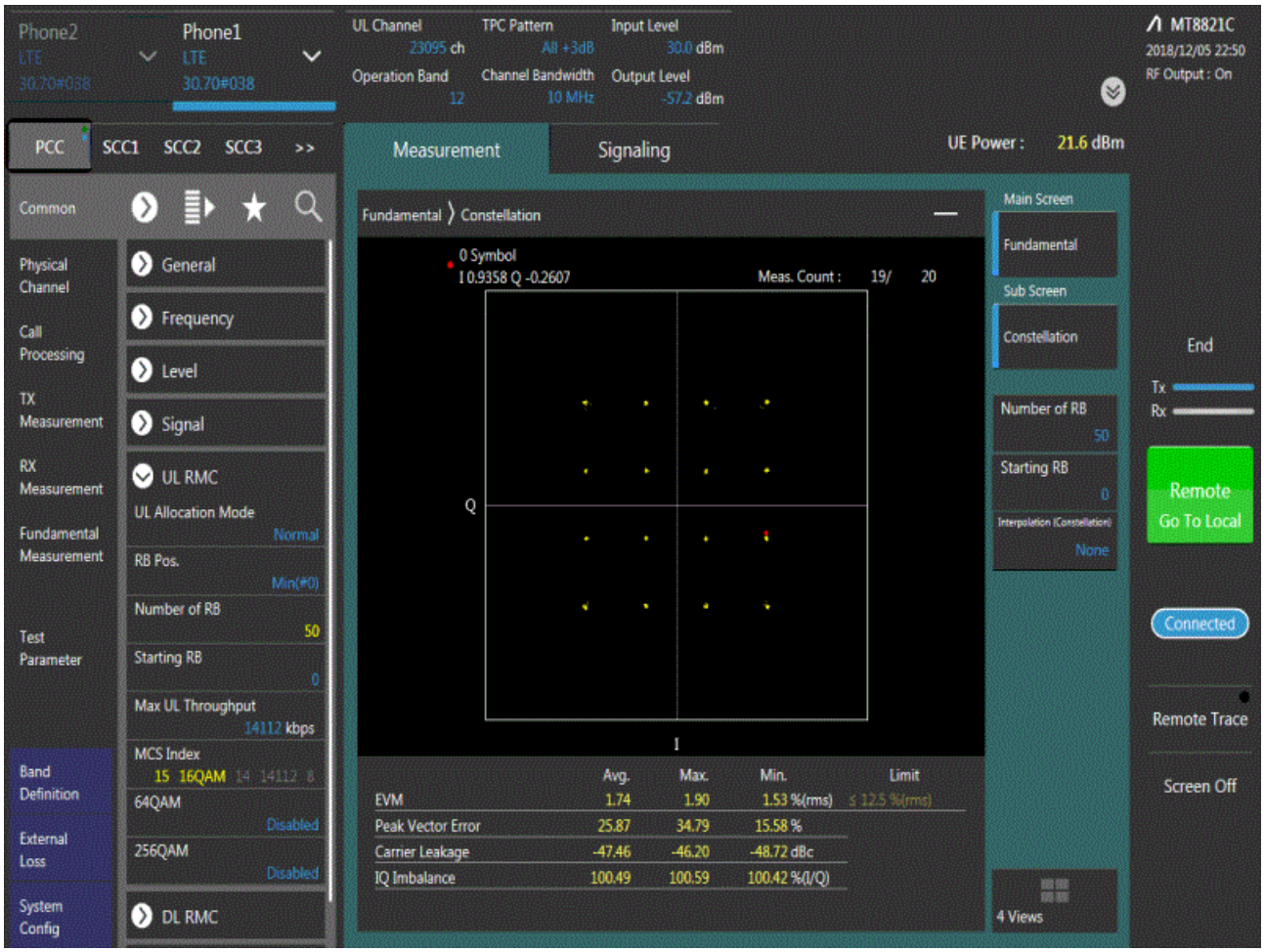
3.1.1. Test Mode = LTE /TM1 10MHz

3.1.1.1. Test Channel = MCH



3.1.2. Test Mode = LTE /TM2 10MHz

3.1.2.1. Test Channel = MCH



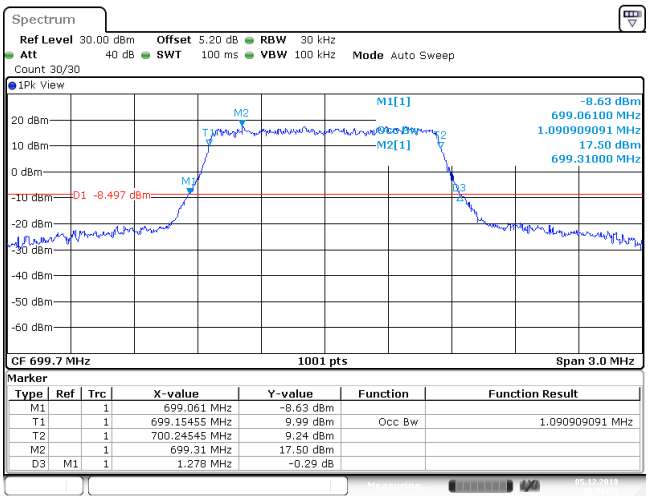
4. 26dB Bandwidth and Occupied Bandwidth

4.1. Test Result

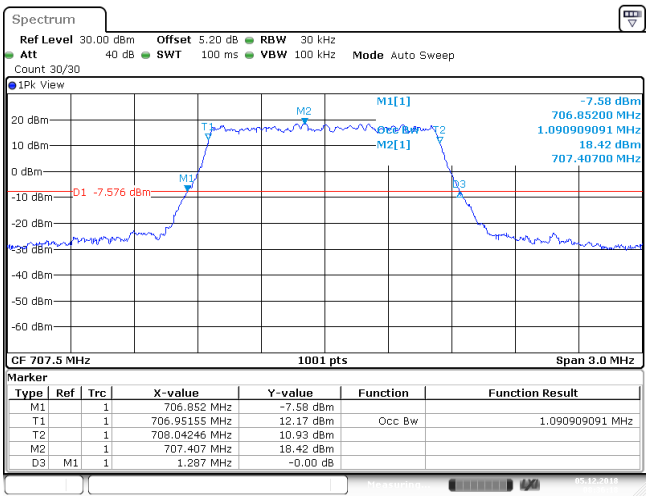
BAND	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band12	1.4MHz	QPSK	23017	6RB#0	1.091	1.278	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	1.091	1.287	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	1.094	1.290	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	1.091	1.278	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	1.094	1.284	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	1.091	1.275	PASS
Band12	3MHz	QPSK	23025	15RB#0	2.691	2.976	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	2.679	2.958	PASS
Band12	3MHz	16QAM	23095	15RB#0	2.685	2.982	PASS
Band12	3MHz	16QAM	23165	15RB#0	2.685	2.976	PASS
Band12	5MHz	QPSK	23035	25RB#0	4.466	4.900	PASS
Band12	5MHz	QPSK	23095	25RB#0	4.476	4.950	PASS
Band12	5MHz	QPSK	23155	25RB#0	4.466	4.900	PASS
Band12	5MHz	16QAM	23035	25RB#0	4.476	4.910	PASS
Band12	5MHz	16QAM	23095	25RB#0	4.486	4.970	PASS
Band12	5MHz	16QAM	23155	25RB#0	4.476	4.910	PASS
Band12	10MHz	QPSK	23060	50RB#0	8.891	9.640	PASS
Band12	10MHz	QPSK	23095	50RB#0	8.931	9.780	PASS
Band12	10MHz	QPSK	23130	50RB#0	8.891	9.600	PASS
Band12	10MHz	16QAM	23060	50RB#0	8.911	9.700	PASS
Band12	10MHz	16QAM	23095	50RB#0	8.951	9.840	PASS
Band12	10MHz	16QAM	23130	50RB#0	8.911	9.580	PASS

4.2. Test Plots

Band12_1.4MHz_QPSK_23017_6RB#0



Band12_1.4MHz_QPSK_23095_6RB#0



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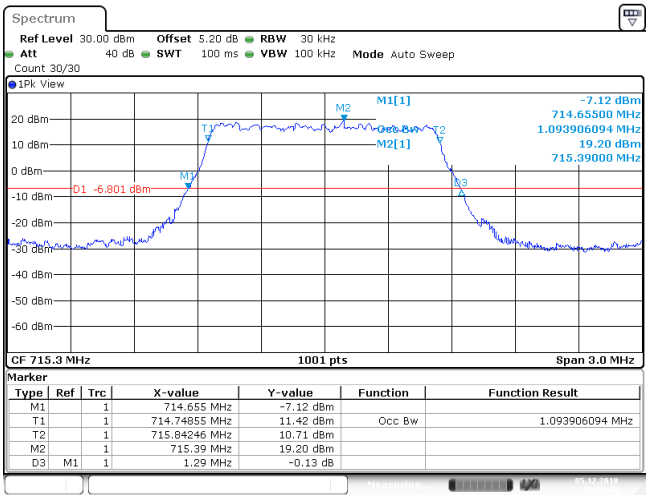

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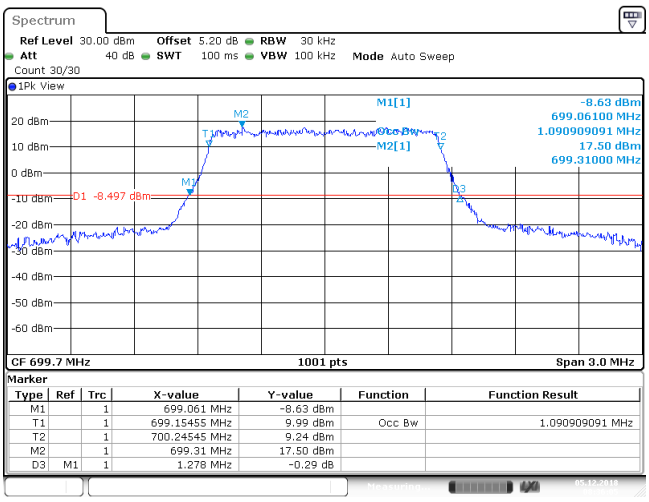

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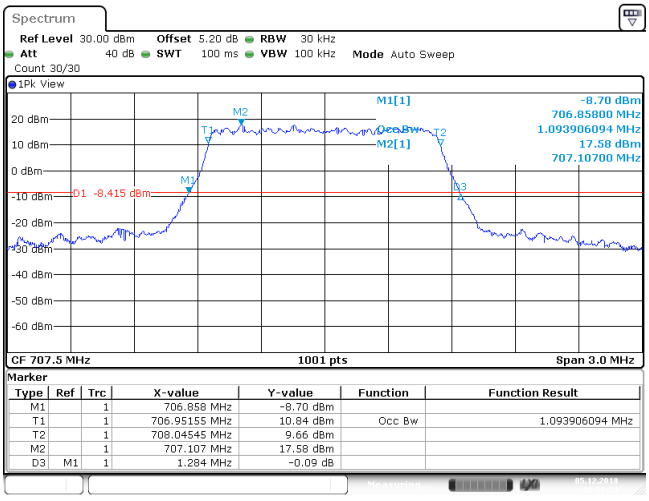

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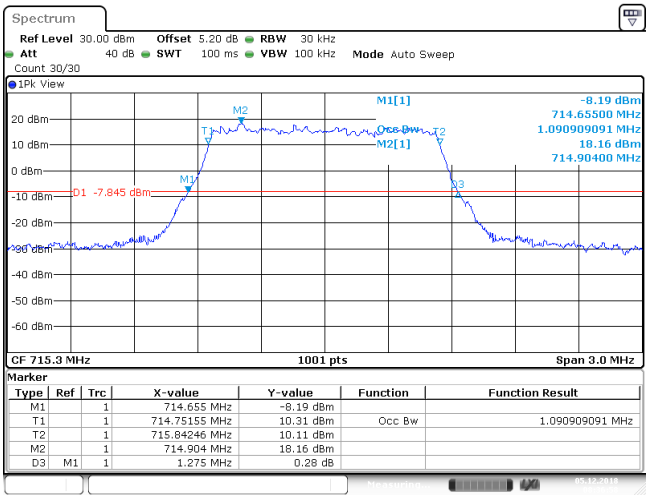

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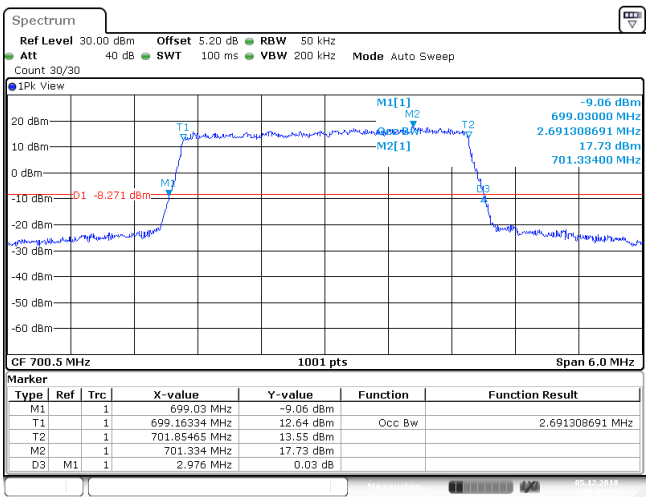

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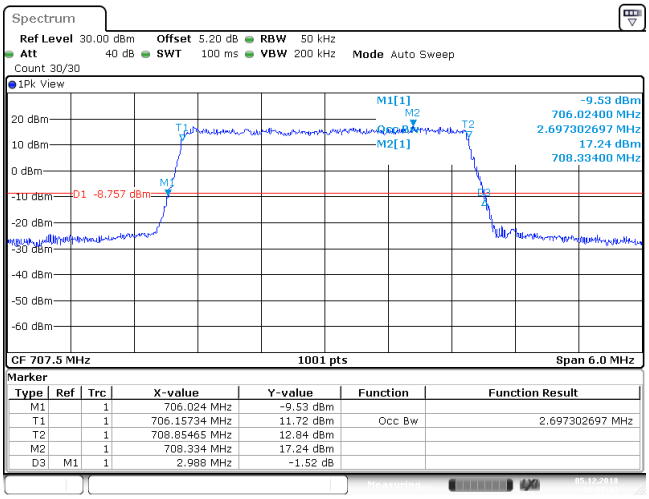
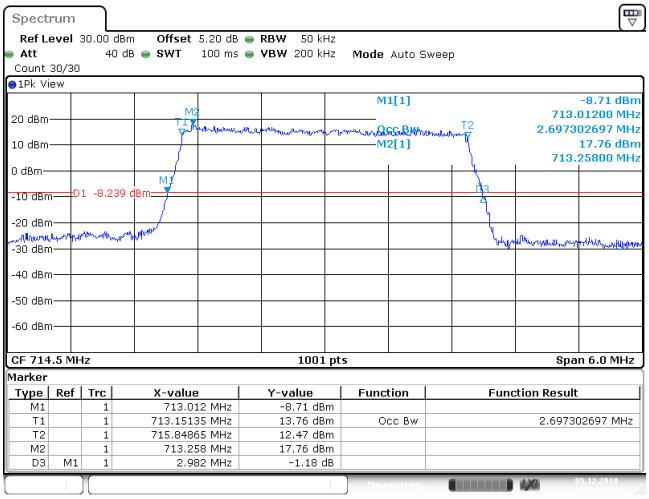


Band12_3MHz_QPSK_23165_15RB#0



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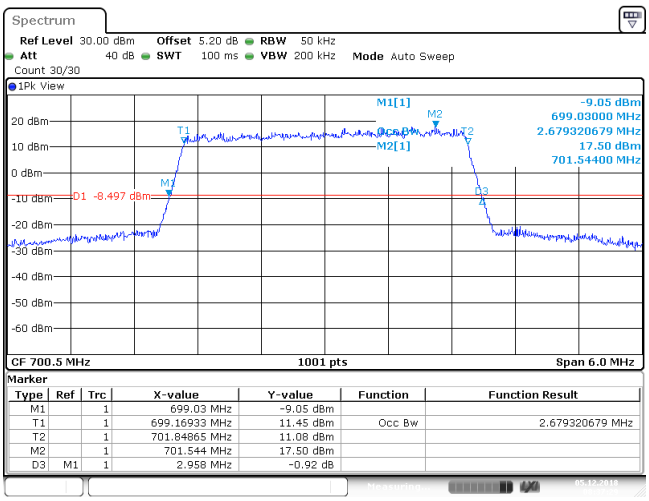

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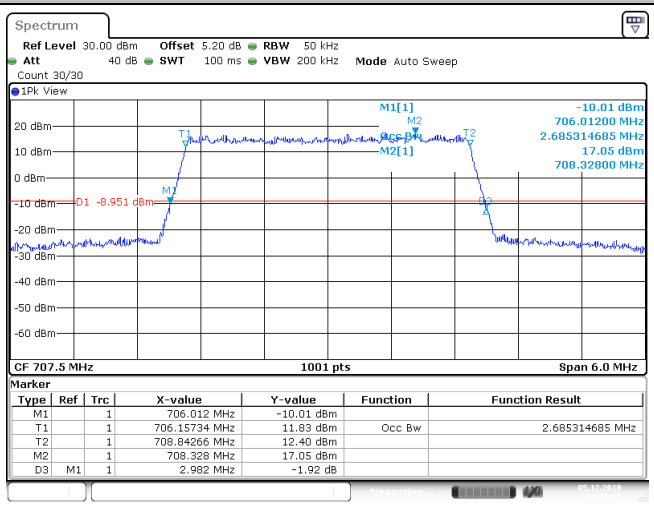

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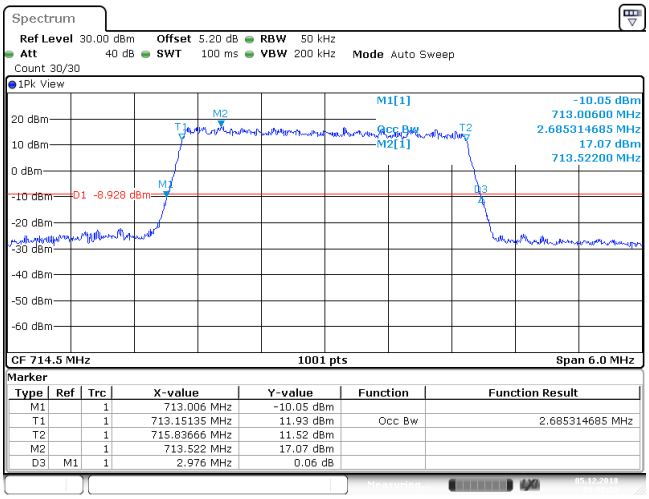
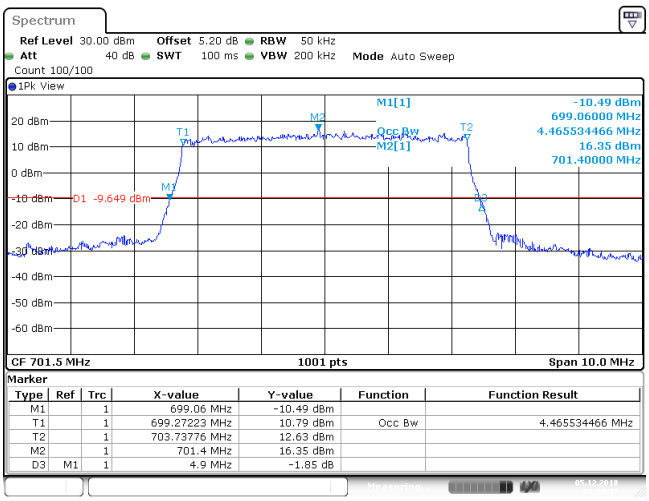


Band12_5MHz_QPSK_23035_25RB#0



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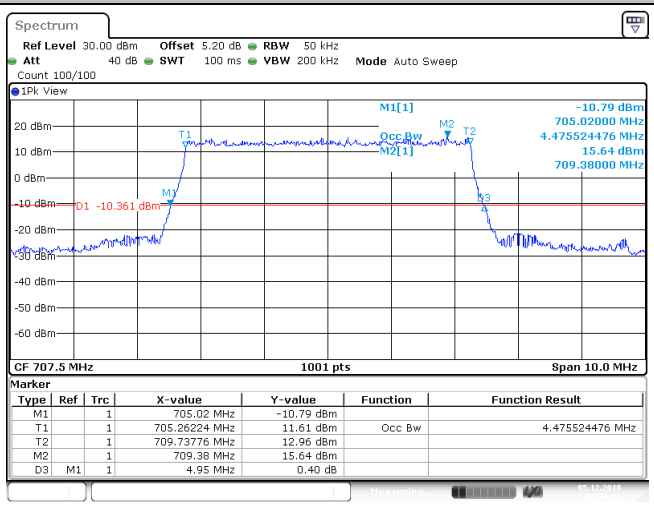
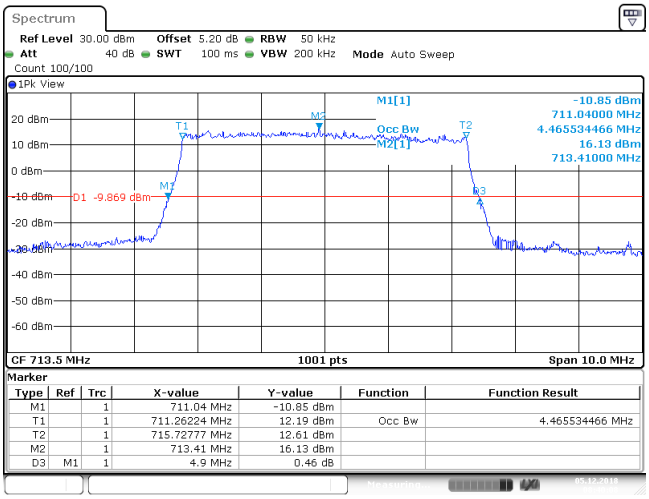


Band12_5MHz_QPSK_23155_25RB#0



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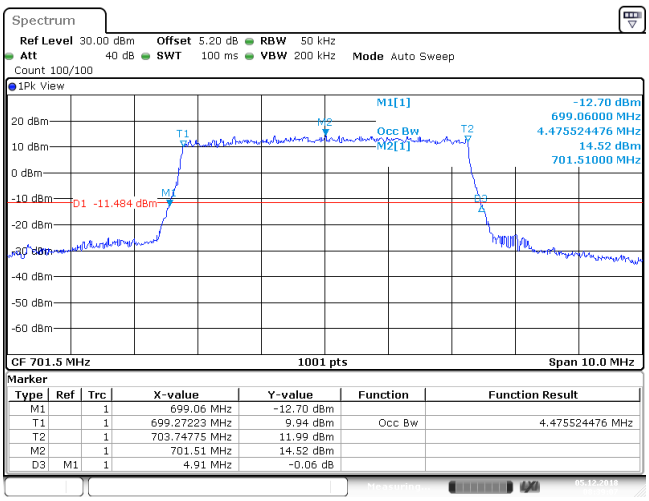

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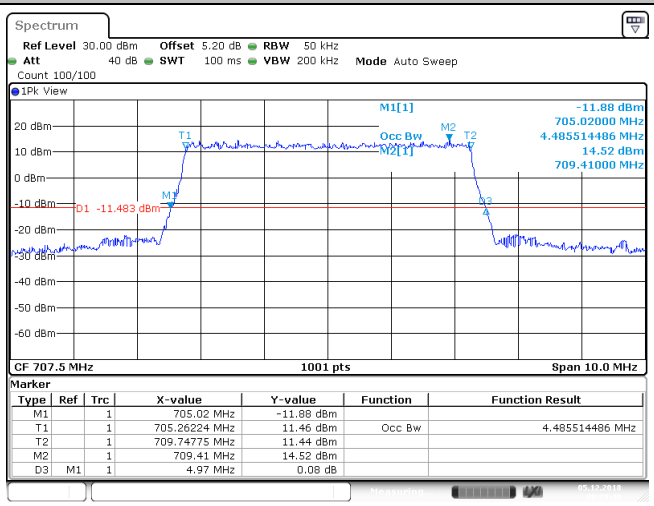

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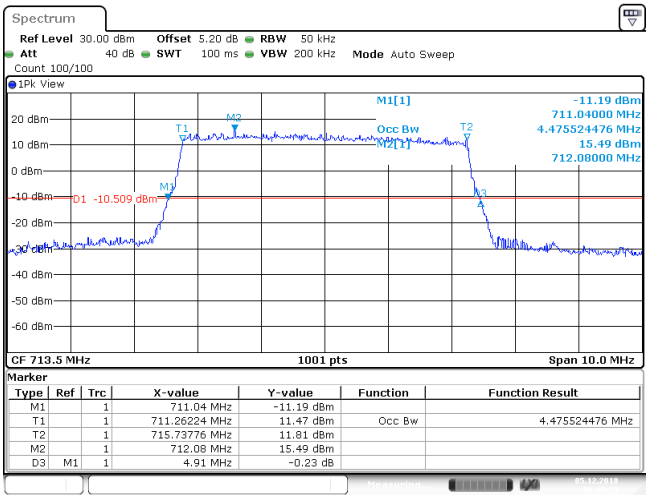
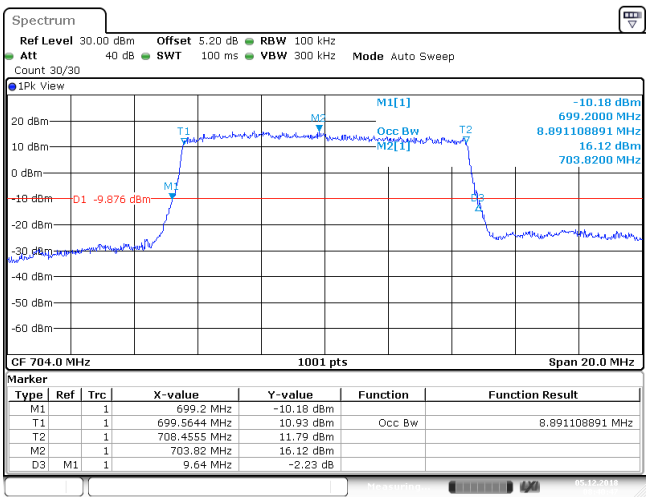


Band12_10MHz_QPSK_23060_50RB#0



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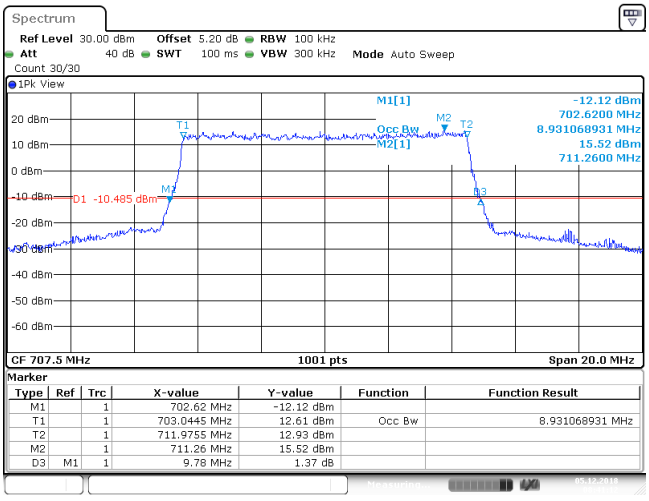

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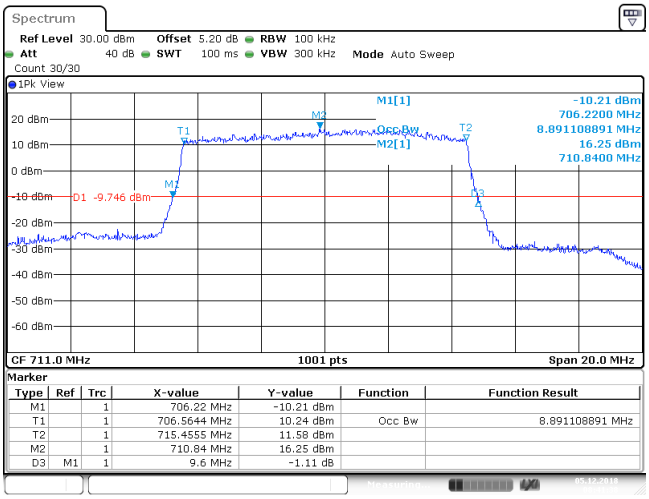

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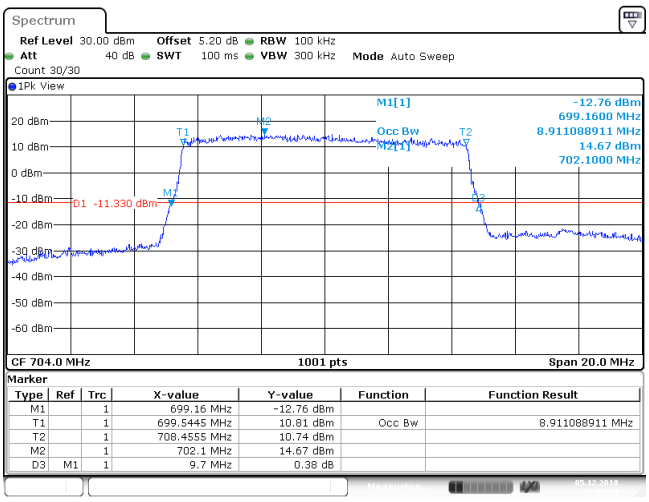

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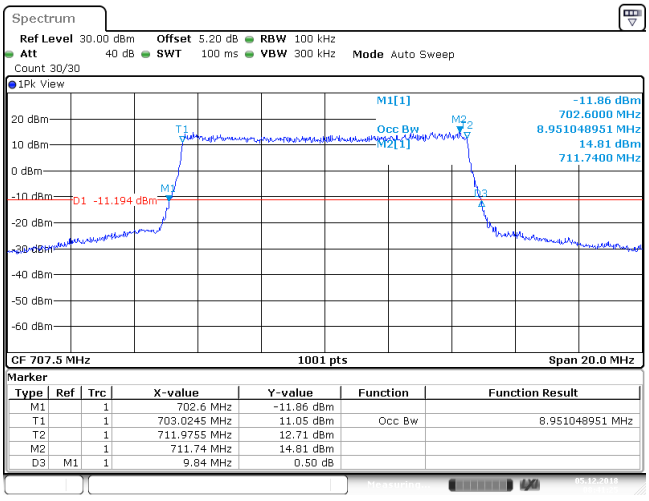

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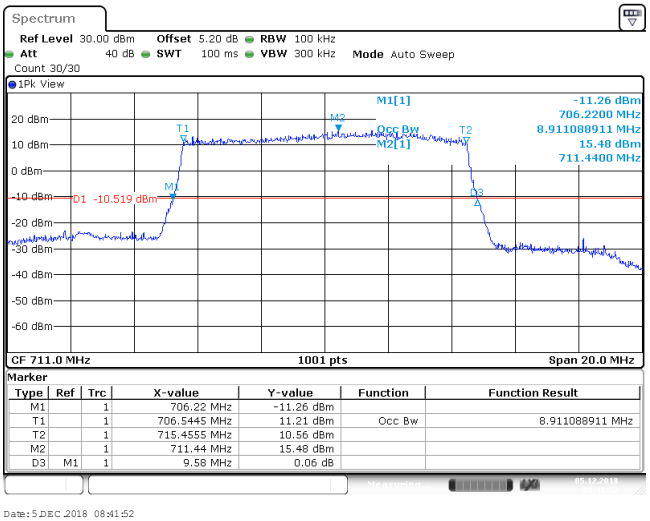
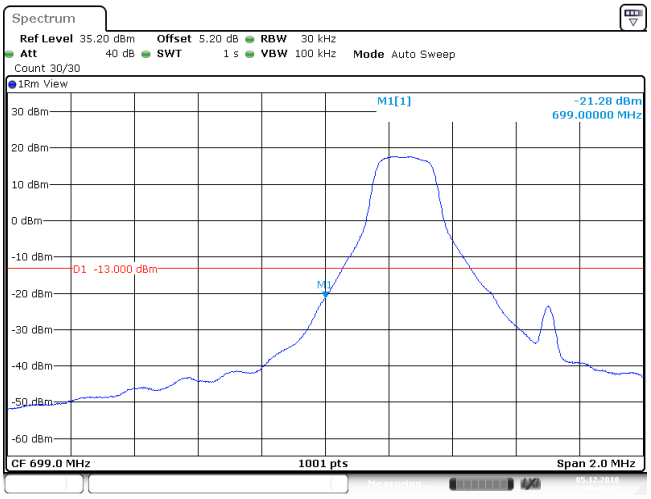


5. Band Edge Compliance

5.1. Test Plots

Band12_1.4MHz_QPSK_23017_1RB#0



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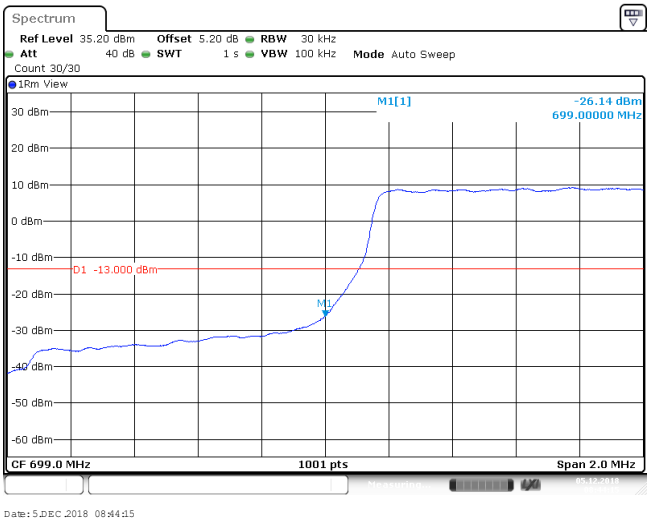
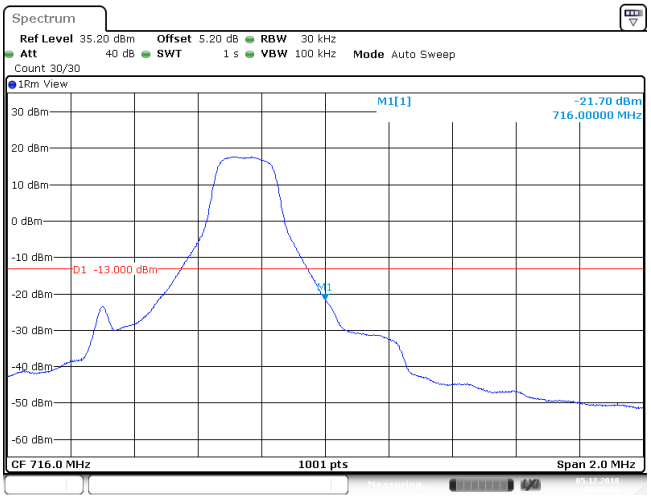
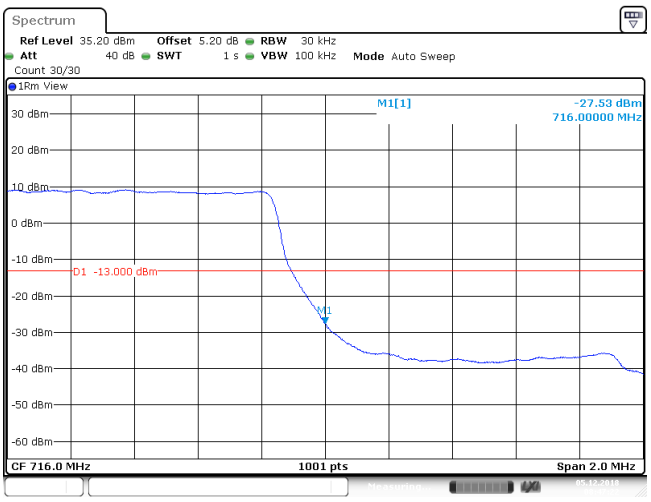


Band12_1.4MHz_QPSK_23173_1RB#5



Band12_1.4MHz_QPSK_23173_6RB#0



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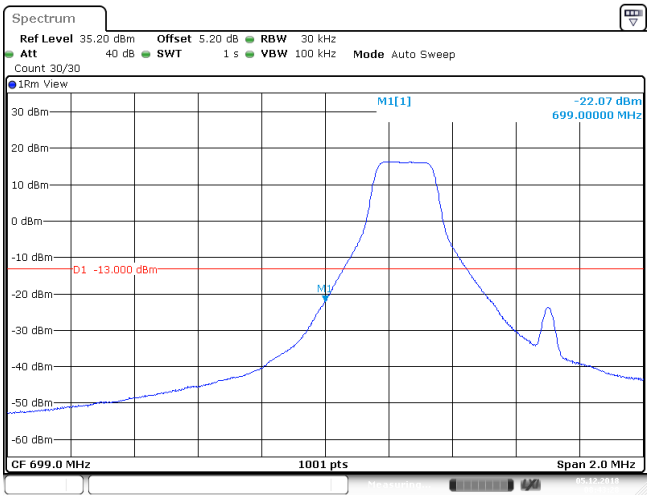

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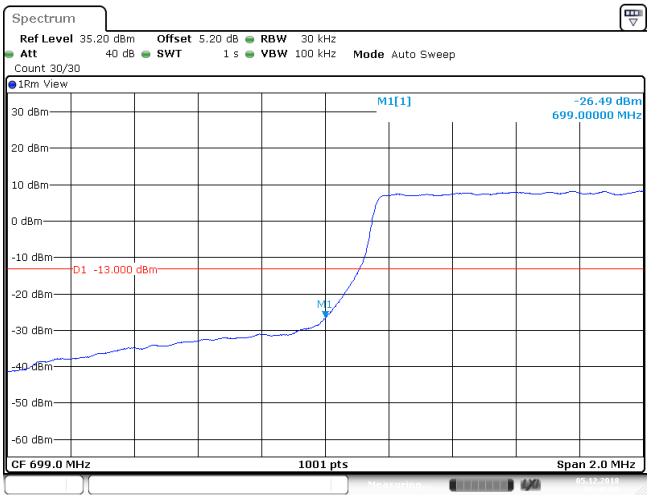

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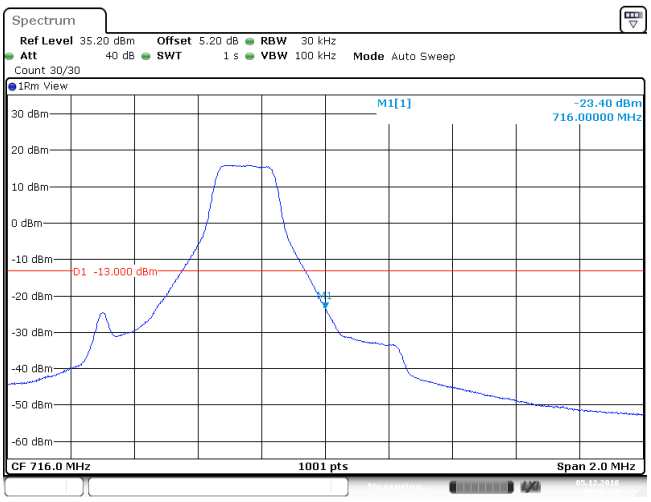
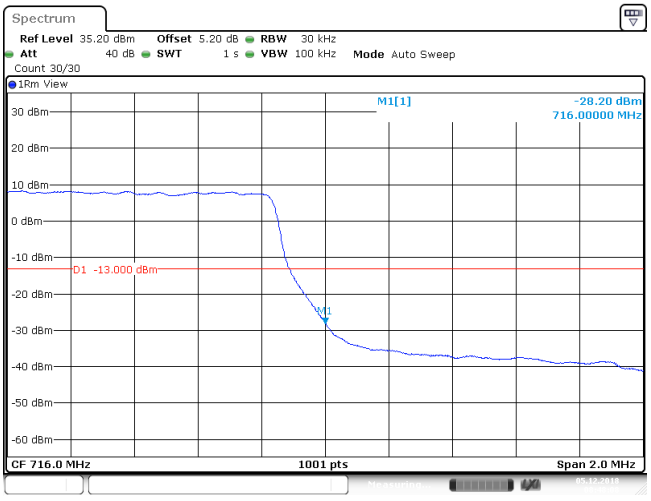
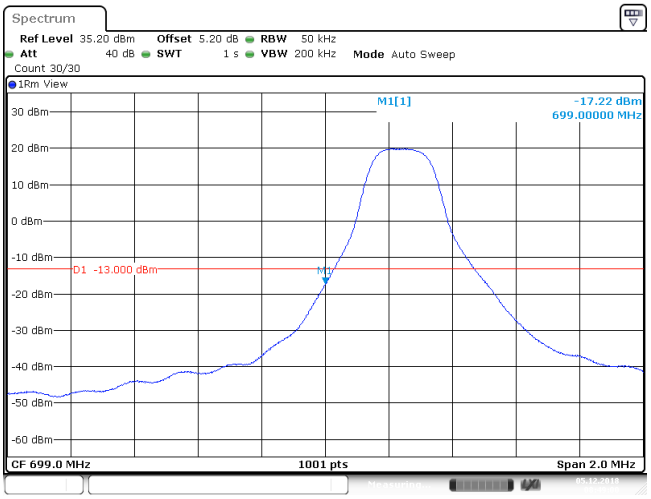


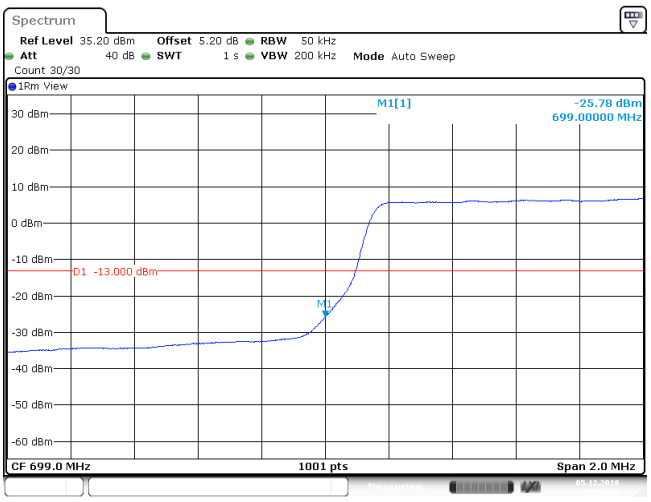
Band12_1.4MHz_16QAM_23173_6RB#0



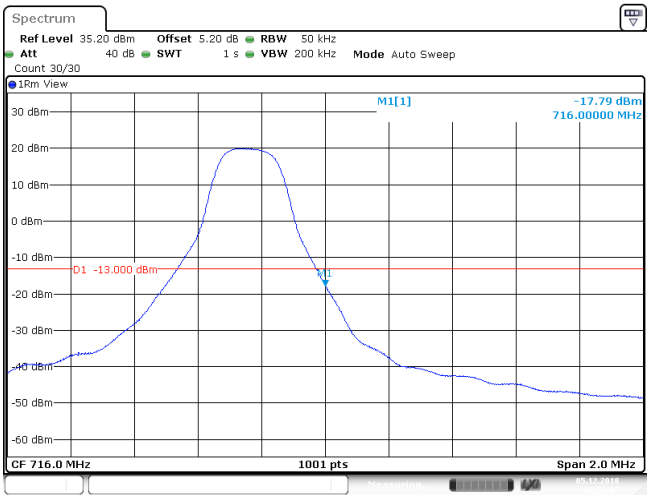
Band12_3MHz_QPSK_23025_1RB#0



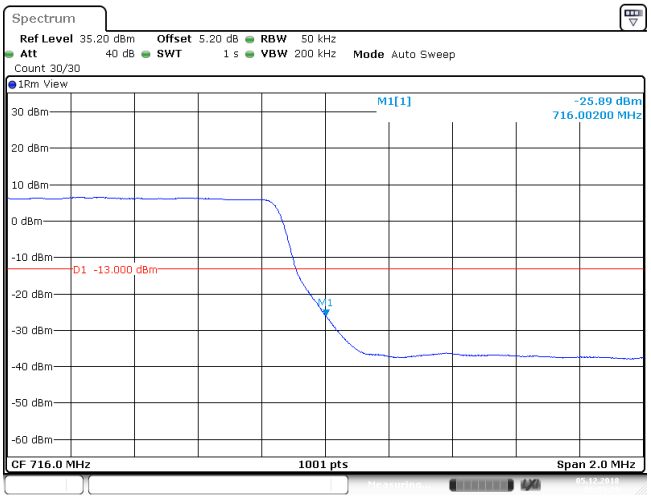
Band12_3MHz_QPSK_23025_15RB#0



Band12_3MHz_QPSK_23165_1RB#14



Band12_3MHz_QPSK_23165_15RB#0



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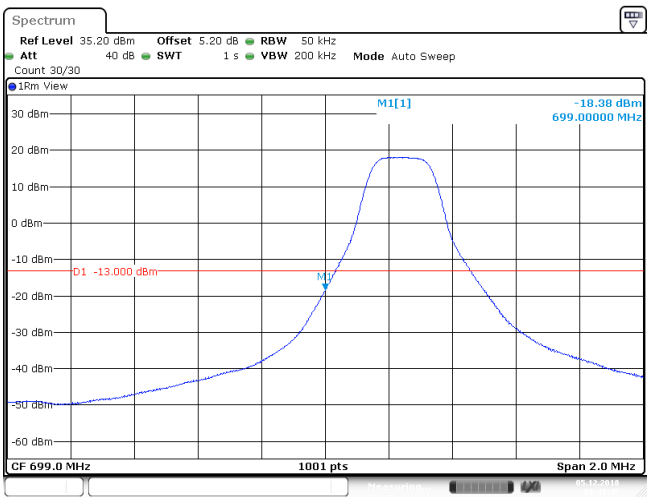

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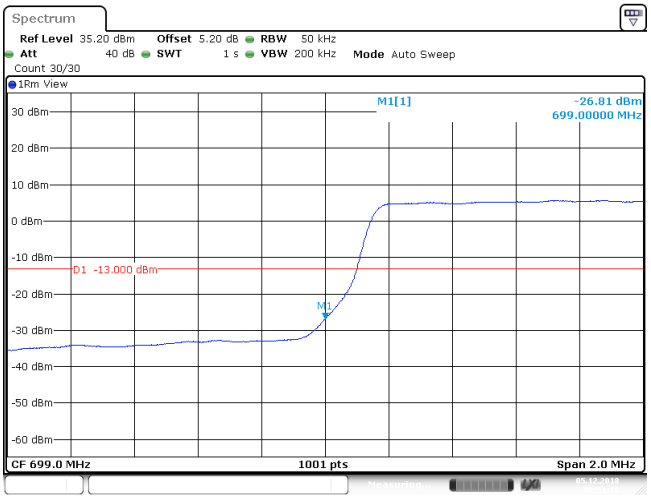
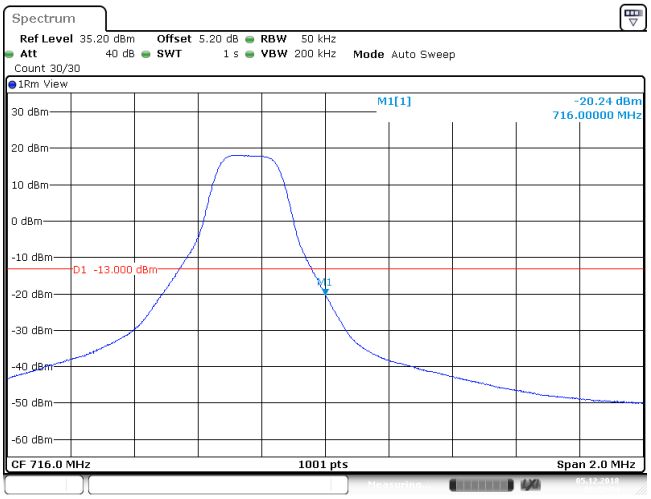
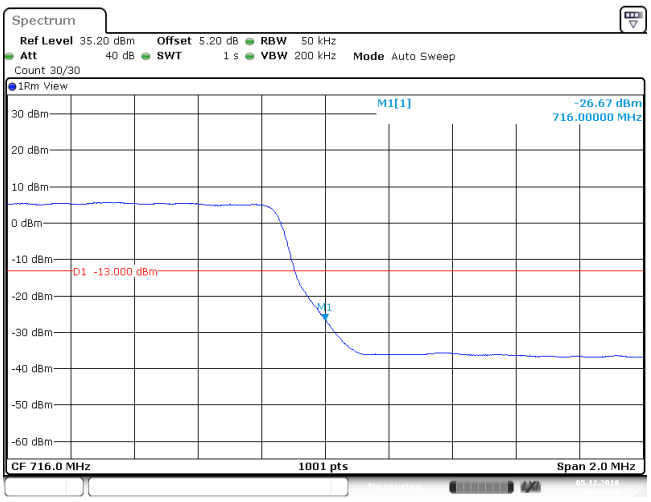


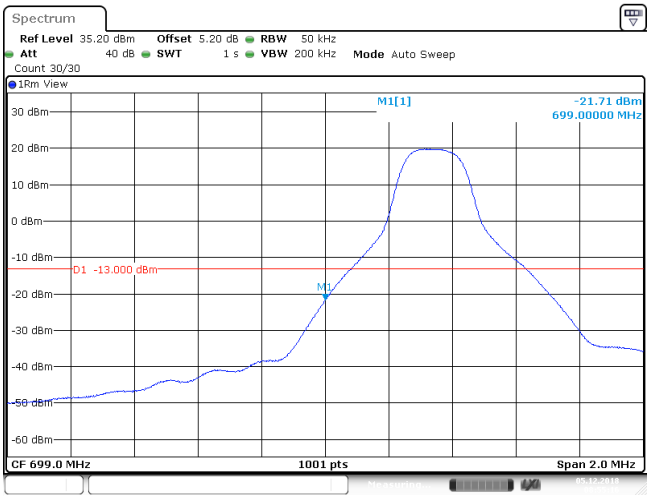
Band12_3MHz_16QAM_23165_1RB#14



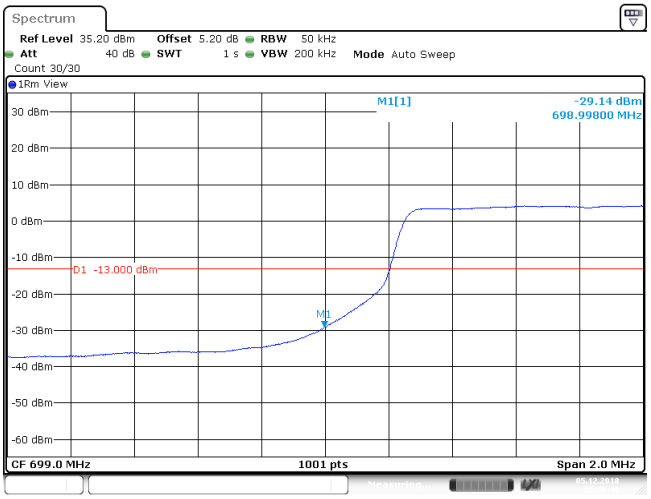
Band12_3MHz_16QAM_23165_15RB#0



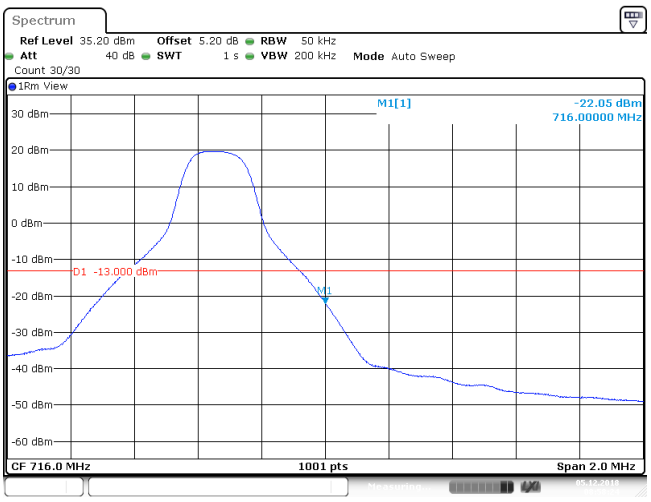
Band12_5MHz_QPSK_23035_1RB#0



Band12_5MHz_QPSK_23035_25RB#0



Band12_5MHz_QPSK_23155_1RB#24



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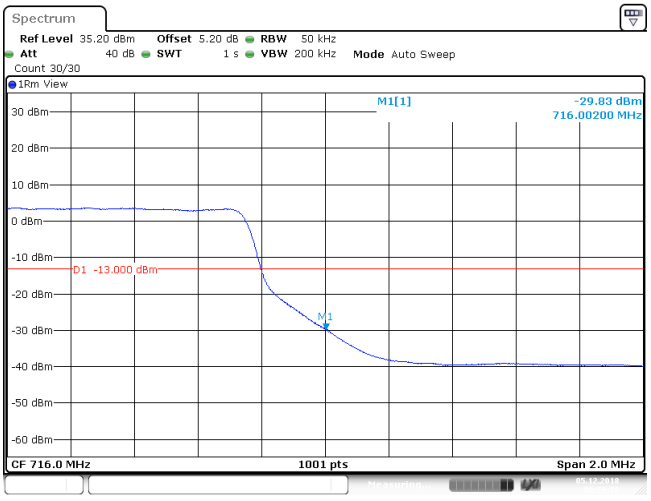

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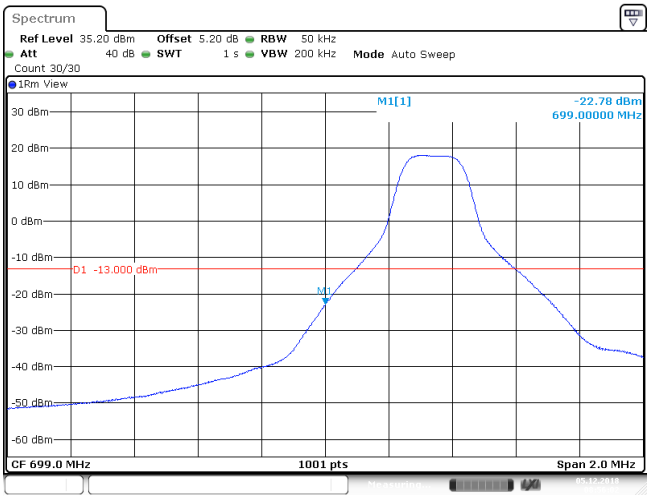
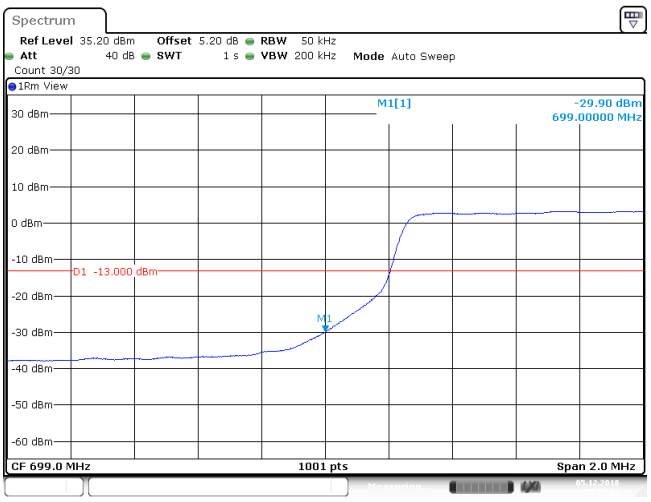
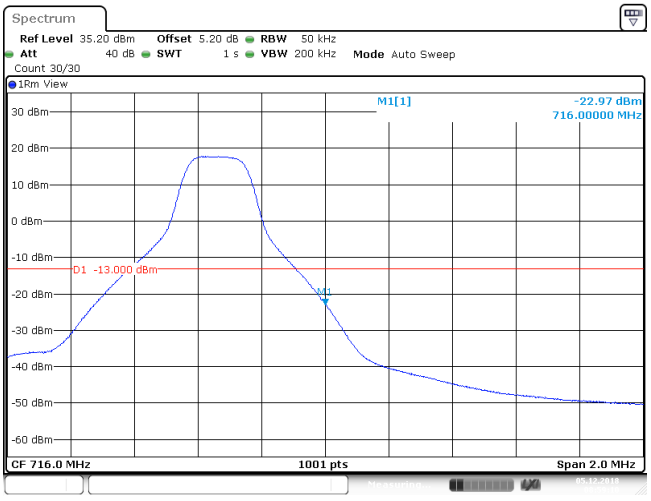


Band12_5MHz_16QAM_23035_25RB#0



Band12_5MHz_16QAM_23155_1RB#24



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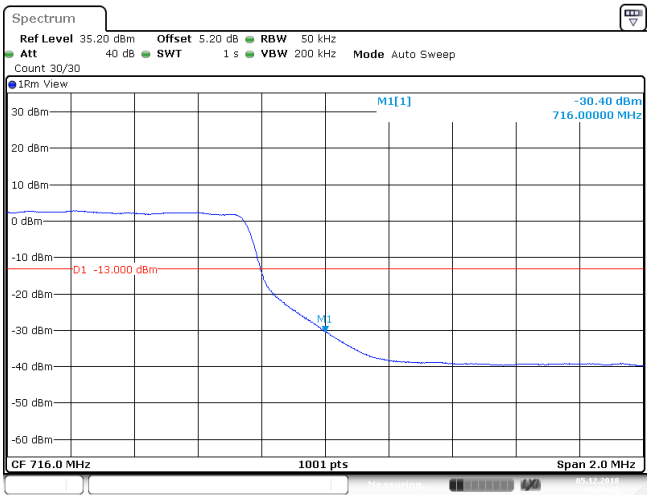
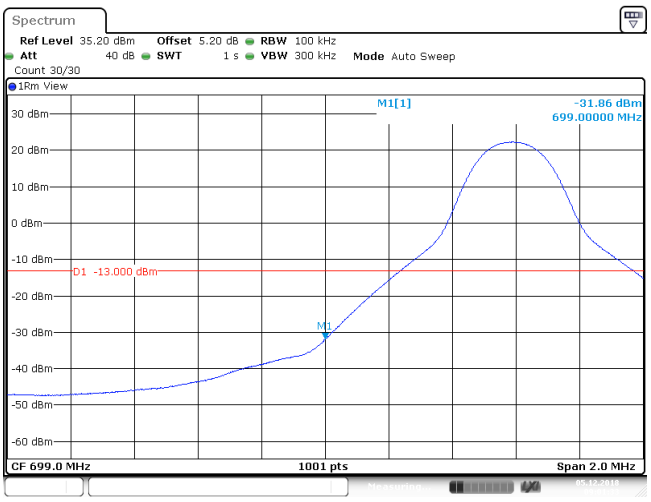
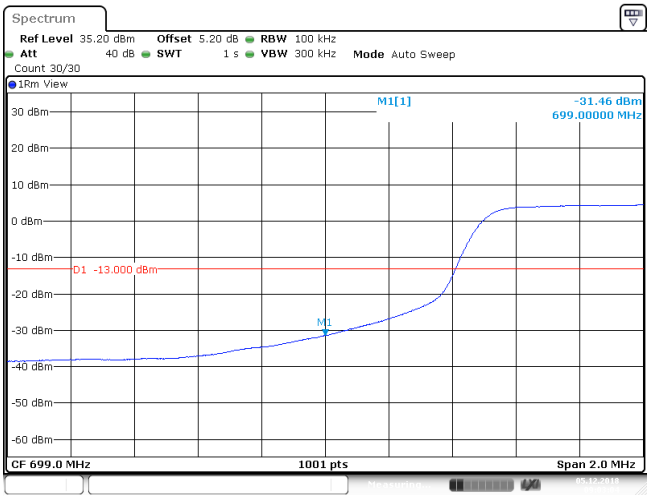


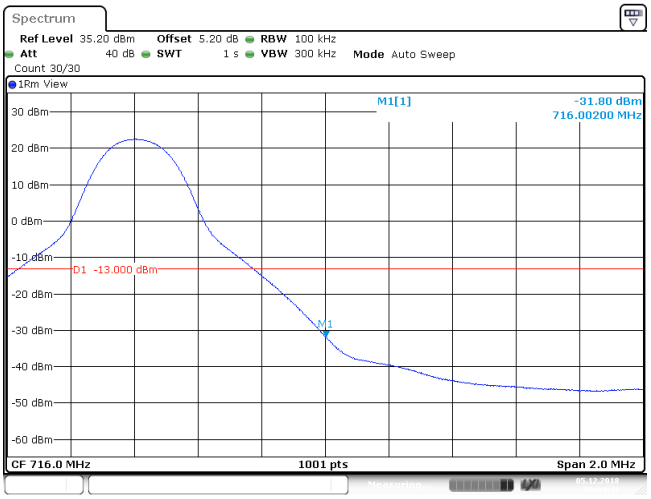
Band12_10MHz_QPSK_23060_1RB#0



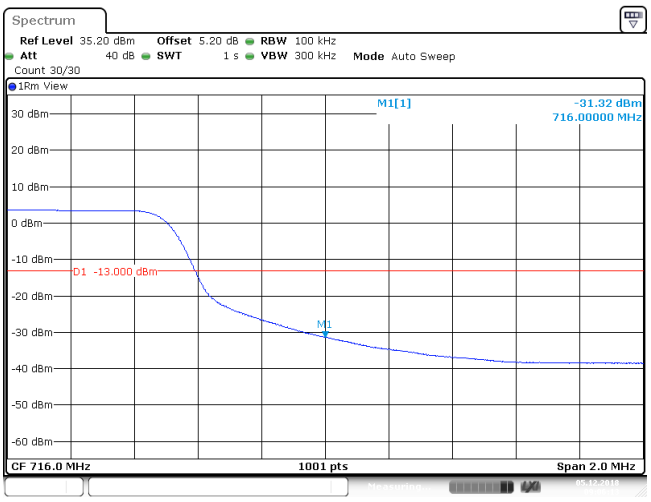
Band12_10MHz_QPSK_23060_50RB#0



Band12_10MHz_QPSK_23130_1RB#49



Band12_10MHz_QPSK_23130_50RB#0



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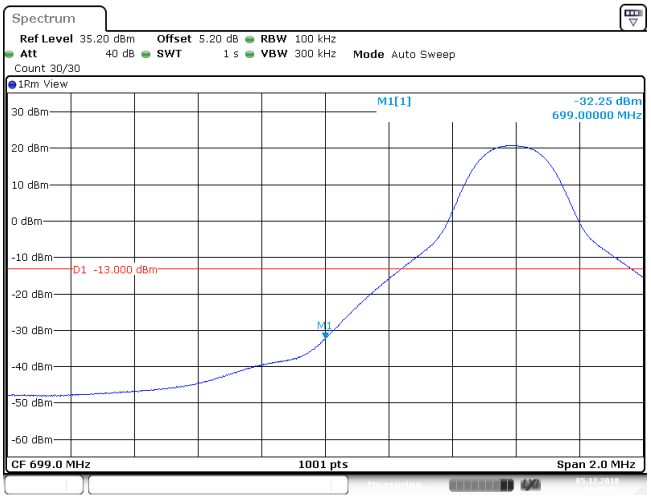

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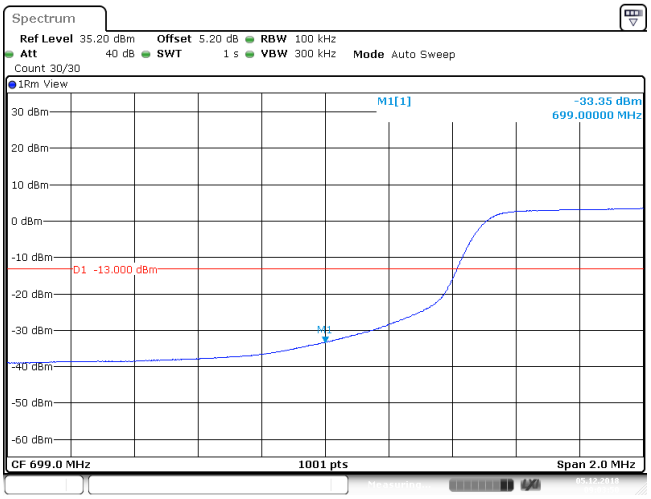
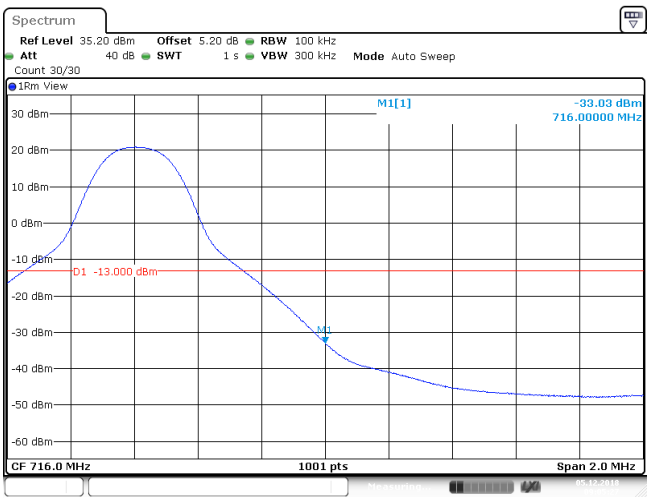
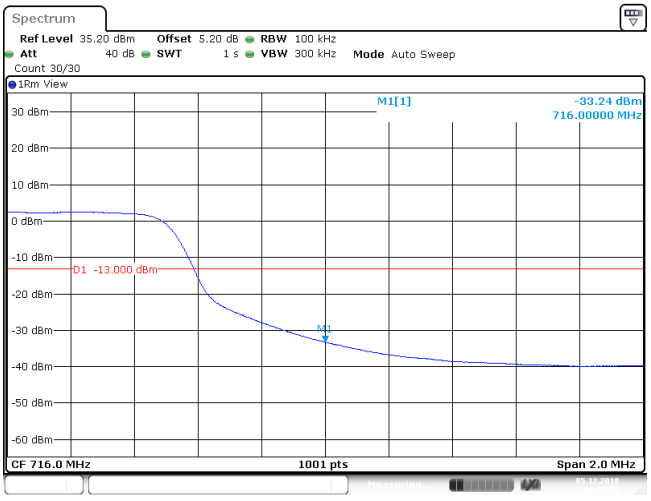


Band12_10MHz_16QAM_23130_1RB#49



Band12_10MHz_16QAM_23130_50RB#0



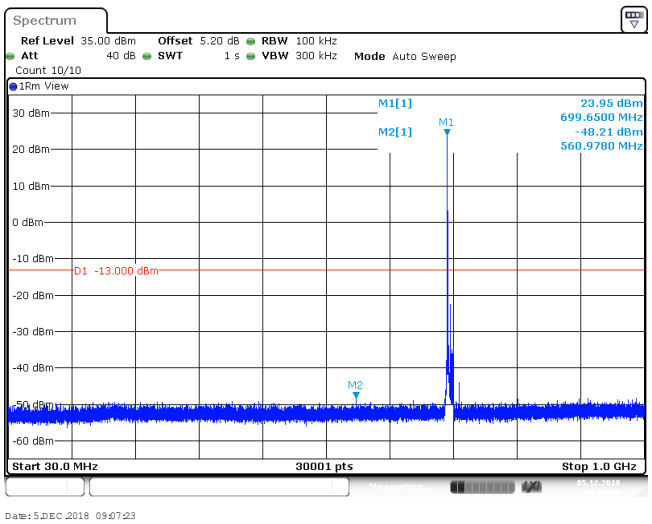
6. Spurious Emission at Antenna Terminal

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 * (Span / RBW)" with k between 4 and 5, which results in an acceptable level error of less than 0.5 dB.

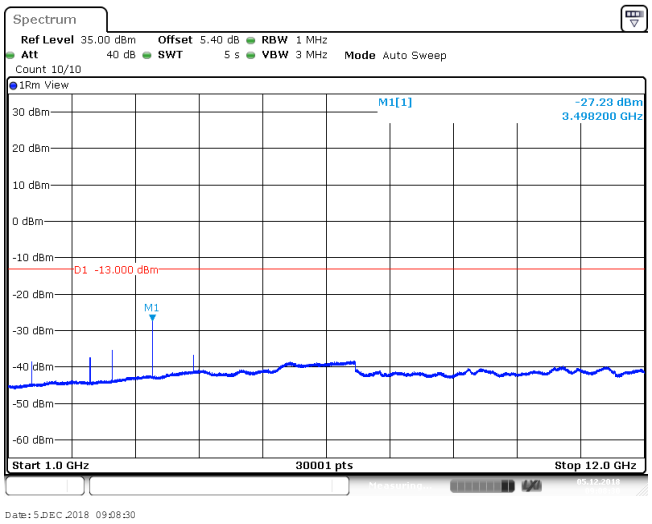
Remark2: only the worst case data displayed in this report.

6.1. Test Plots

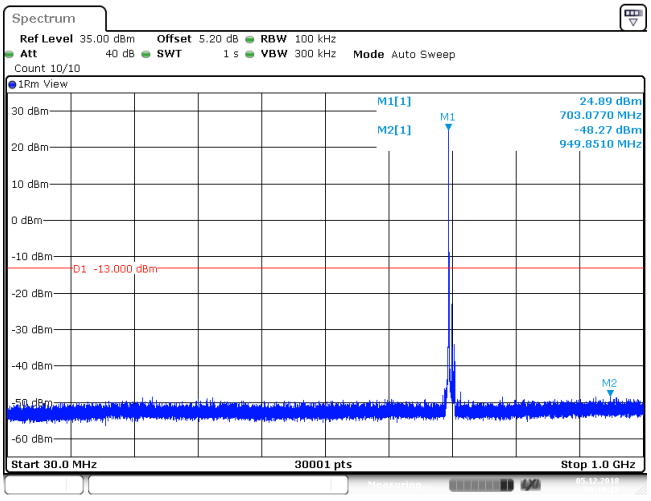
Band12_10MHz_QPSK_23060_1RB#0



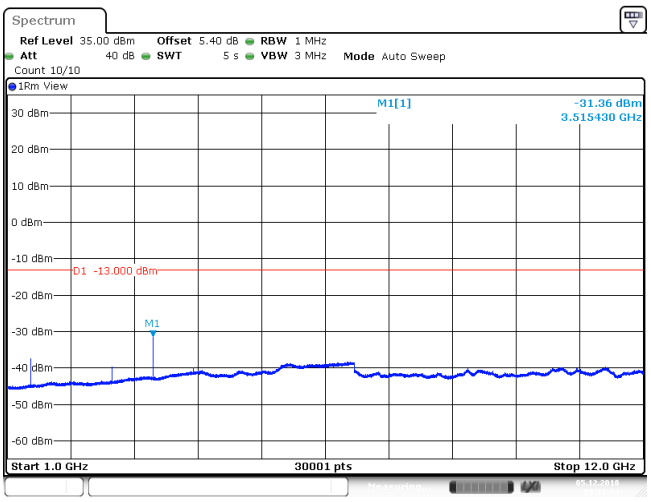
Band12_10MHz_QPSK_23060_1RB#0



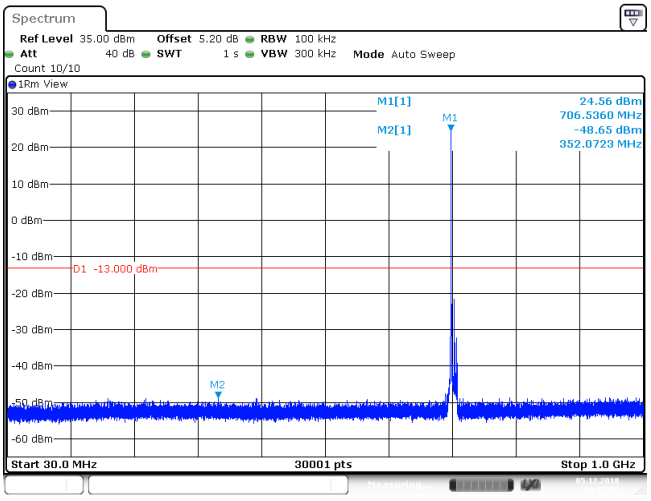
Band12_10MHz_QPSK_23095_1RB#0



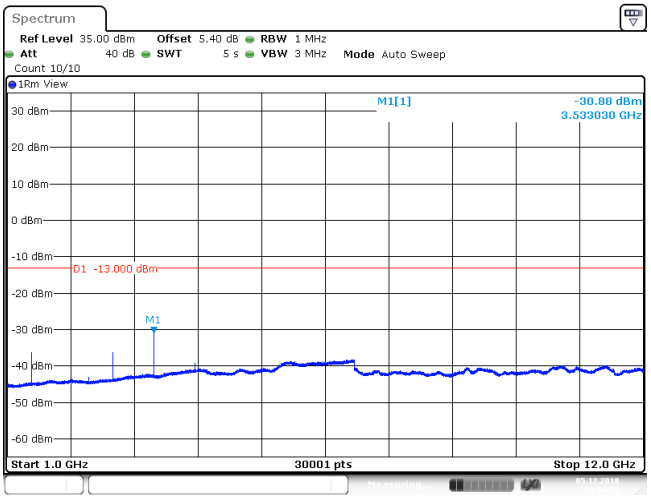
Band12_10MHz_QPSK_23095_1RB#0



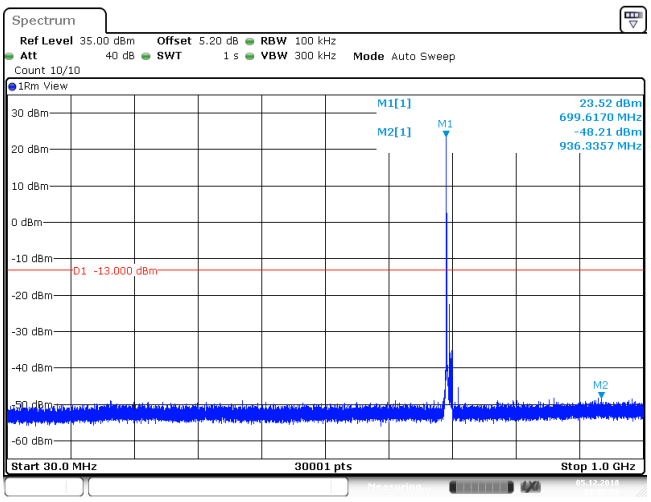
Band12_10MHz_QPSK_23130_1RB#0



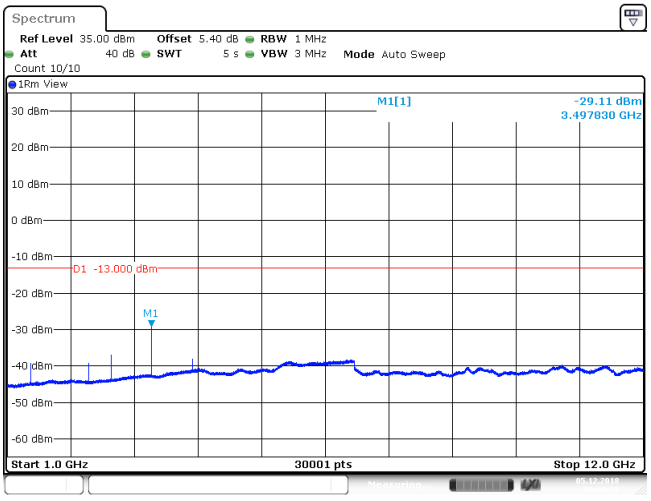
Band12_10MHz_QPSK_23130_1RB#0



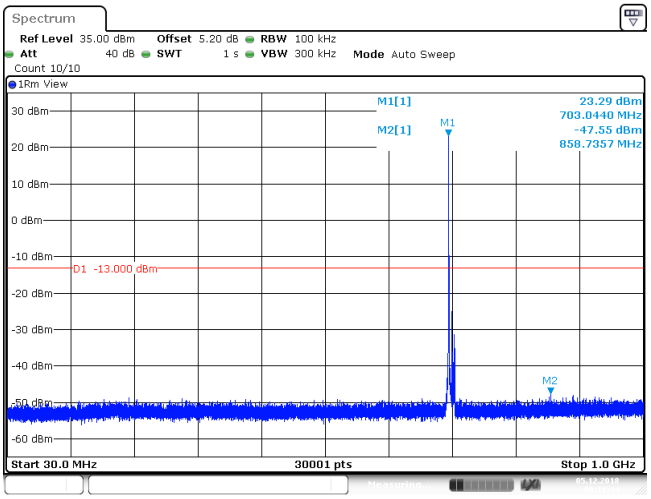
Band12_10MHz_16QAM_23060_1RB#0



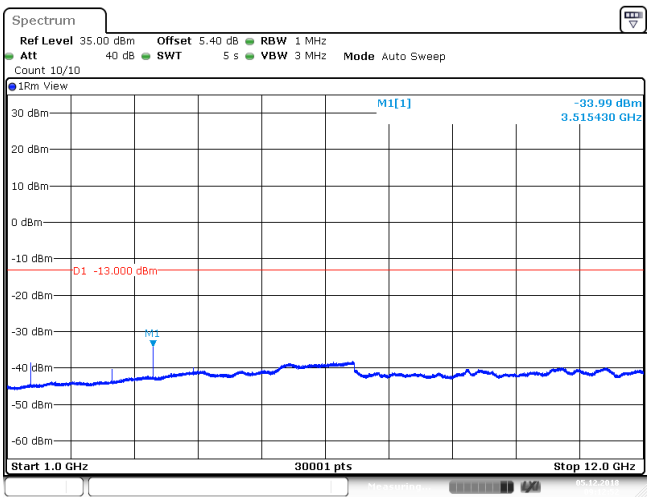
Band12_10MHz_16QAM_23060_1RB#0



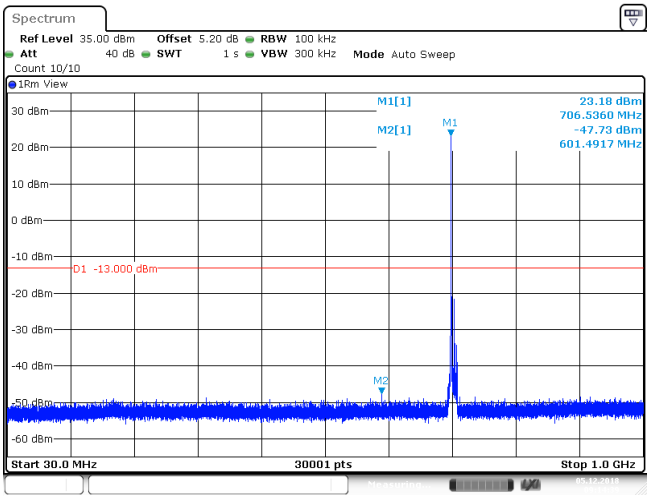
Band12_10MHz_16QAM_23095_1RB#0



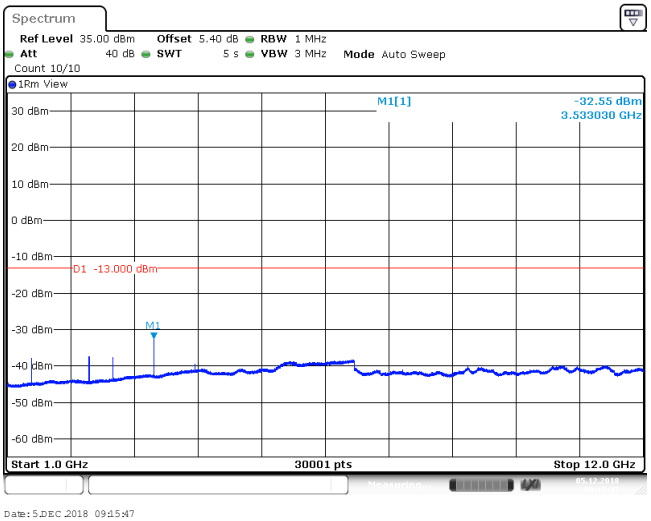
Band12_10MHz_16QAM_23095_1RB#0



Band12_10MHz_16QAM_23130_1RB#0



Band12_10MHz_16QAM_23130_1RB#0



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
1399.000000	-56.11	-13.00	43.11	Vertical
2099.000000	-58.15	-13.00	45.15	Vertical
2798.500000	-50.93	-13.00	37.93	Vertical
3497.737500	-53.79	-13.00	40.79	Vertical
4197.300000	-56.04	-13.00	43.04	Vertical
4896.862500	-62.63	-13.00	49.63	Vertical
1399.000000	-61.37	-13.00	48.37	Horizontal
2099.000000	-58.70	-13.00	45.70	Horizontal
2798.500000	-50.37	-13.00	37.37	Horizontal
3497.737500	-49.97	-13.00	36.97	Horizontal
4197.300000	-54.69	-13.00	41.69	Horizontal
4896.862500	-64.01	-13.00	51.01	Horizontal

7.1.1.2. Test Channel = MCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
1406.000000	-46.81	-13.00	33.81	Vertical
2109.500000	-57.65	-13.00	44.65	Vertical
2812.500000	-49.63	-13.00	36.63	Vertical
3515.287500	-57.49	-13.00	44.49	Vertical
4218.262500	-59.71	-13.00	46.71	Vertical
4921.237500	-61.41	-13.00	48.41	Vertical
1406.000000	-50.70	-13.00	37.70	Horizontal
2109.500000	-58.64	-13.00	45.64	Horizontal
2812.500000	-50.14	-13.00	37.14	Horizontal
3515.287500	-53.67	-13.00	40.67	Horizontal
4218.262500	-59.10	-13.00	46.10	Horizontal
4921.237500	-63.48	-13.00	50.48	Horizontal

7.1.1.3. Test Channel = HCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
1413.000000	-45.13	-13.00	32.13	Vertical
2120.000000	-53.93	-13.00	40.93	Vertical
2826.500000	-46.88	-13.00	33.88	Vertical
3532.837500	-53.04	-13.00	40.04	Vertical
4239.225000	-56.04	-13.00	43.04	Vertical
4946.100000	-60.63	-13.00	47.63	Vertical
1413.000000	-50.46	-13.00	37.46	Horizontal
2120.000000	-56.59	-13.00	43.59	Horizontal
2826.500000	-46.53	-13.00	33.53	Horizontal
3532.837500	-50.17	-13.00	37.17	Horizontal
4239.225000	-55.22	-13.00	42.22	Horizontal
4946.100000	-62.75	-13.00	49.75	Horizontal

Remark:

1) 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.
2) We have tested all modulation and all Bandwidth , but only the worst case data presented in this report.

8. Frequency Stability

8.1. Frequency Vs Voltage

Voltage										
BAND	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band12	10MHz	QPSK	23060	50RB#0	VL	NT	0.40	0.000568	±2.5	PASS
Band12	10MHz	QPSK	23060	50RB#0	VN	NT	1.80	0.002557	±2.5	PASS
Band12	10MHz	QPSK	23060	50RB#0	VH	NT	1.10	0.001563	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	VL	NT	0.60	0.000848	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	VN	NT	0.80	0.001131	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	VH	NT	0.60	0.000848	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	VL	NT	0.50	0.000703	±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	-0.70	-0.000985	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	VL	NT	1.10	0.001563	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	VN	NT	-0.20	-0.000284	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	VH	NT	0.50	0.000710	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	VL	NT	0.30	0.000424	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	VN	NT	-0.20	-0.000283	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	VH	NT	0.00	0.000000	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	VL	NT	0.00	0.000000	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	VN	NT	-1.50	-0.002110	±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 (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band12	10MHz	QPSK	23060	50RB#0	NV	-30	0.90	0.001278	±2.5	PASS
Band12	10MHz	QPSK	23060	50RB#0	NV	-20	0.40	0.000568	±2.5	PASS
Band12	10MHz	QPSK	23060	50RB#0	NV	0	2.00	0.002841	±2.5	PASS
Band12	10MHz	QPSK	23060	50RB#0	NV	10	1.20	0.001705	±2.5	PASS
Band12	10MHz	QPSK	23060	50RB#0	NV	20	0.60	0.000852	±2.5	PASS
Band12	10MHz	QPSK	23060	50RB#0	NV	30	0.60	0.000852	±2.5	PASS
Band12	10MHz	QPSK	23060	50RB#0	NV	40	1.70	0.002415	±2.5	PASS
Band12	10MHz	QPSK	23060	50RB#0	NV	50	2.30	0.003267	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	NV	-30	0.70	0.000989	±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	0	0.90	0.001272	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	NV	10	-0.20	-0.000283	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	NV	20	0.70	0.000989	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	NV	30	1.20	0.001696	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	NV	40	1.80	0.002544	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	NV	50	1.00	0.001413	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	NV	-30	-0.10	-0.000141	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	NV	-20	1.00	0.001406	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	NV	0	0.20	0.000281	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	NV	10	0.00	0.000000	±2.5	PASS

Band12	10MHz	QPSK	23130	50RB#0	NV	20	0.50	0.000703	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	NV	30	-1.50	-0.002110	±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	-0.40	-0.000563	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	NV	-30	1.00	0.001420	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	NV	-20	0.10	0.000142	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	NV	0	1.30	0.001847	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	NV	10	0.00	0.000000	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	NV	20	1.10	0.001563	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	NV	30	-0.40	-0.000568	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	NV	40	0.10	0.000142	±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	1.70	0.002403	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	NV	-20	-0.10	-0.000141	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	NV	0	-0.60	-0.000848	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	NV	10	0.80	0.001131	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	NV	20	-0.30	-0.000424	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	NV	30	-0.30	-0.000424	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	NV	40	0.60	0.000848	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	NV	50	1.20	0.001696	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	NV	-30	-2.30	-0.003235	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	NV	-20	-0.20	-0.000281	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	NV	0	-0.60	-0.000844	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	NV	10	-0.30	-0.000422	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	NV	20	-1.20	-0.001688	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	NV	30	-1.60	-0.002250	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	NV	40	-0.90	-0.001266	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	NV	50	-0.10	-0.000141	±2.5	PASS

The End