Appendix B

E-UTRA Band 12

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1. Main Test Instruments

RE in Chamber					
Test Equipment	Manufacturer	Model No.	Inventory No.	Cal. date (yyyy-mm-dd)	Cal.Due date (yyyy-mm-dd)
3m Semi-Anechoic Chamber	AUDIX	N/A	SEM001-02	2018/3/13	2021/3/12
Spectrum Analyzer (20Hz-43GHz)	Rohde & Schwarz	FSU43	SEM004-08	2019/3/2	2020/3/1
BiConiLog Antenna (26-3000MHz)	ETS-Lindgren	3142C	SEM003-01	2017/6/27	2020/6/26
Horn Antenna (800MHz-18GHz)	Rohde & Schwarz	HF907	SEM003-07	2018/413	2021/412
Horn Antenna (15-40GHz)	Schwarzbeck	BBHA 9170	SEM003-15	2017/10/17	2020/10/16
Amplifier (0.1-1300MHz)	HP	8447D	SEM005-02	2018/9/2	2019/9/2
Low Noise Amplifier (100MHz-18GHz)	Black Diamond Series	BDLNA-0118-352810	SEM005-05	2018/9/2	2019/9/2
Pre-Amplifier (0.1-26.5GHz)	Compliance Directions Systems Inc.	PAP-0126	EMC2063	2018/10/20	2019/10/19
Pre-amplifier (26-40GHz)	Compliance Directions Systems Inc.	PAP-2640-50	SEM005-08	2019/3/2	2020/3/1
Band filter	N/A	N/A	N/A	N/A	N/A
Measurement Software	AUDIX	e3 V8.2014-6-27	N/A	N/A	N/A
Coaxial Cable	SGS	N/A	SEM026-01	2019/6/12	2020/6/11
Wideband Radio CommunicationTeste	Anristu	MT8821C	6201462742	2019/4/3	2020/4/3
Wideband Radio CommunicationTester	Rohde & Schwarz	CMW500	W005-02	2019/1/13	2020/1/12

RF conducted test					
Test Equipment	Manufacturer	Model No.	Inventory No.	Cal. date (yyyy-mm-dd)	Cal.Due date (yyyy-mm-dd)
Dual Output Mobile Communication DC Source	Agilent Technologies Inc	66311B	W009-09	2018/11/2	2019/11/1
Signal Analyzer	Rohde & Schwarz	FSV	W005-02	2019/3/2	2020/3/1
Coaxial Cable	SGS	N/A	SEM031-01	2019/6/12	2020/6/11
Attenuator	Weinschel Associates	WA41	SEM021-09	N/A	N/A
Signal Generator	KEYSIGHT	N5173B	SEM006-05	2018/11/2	2019/11/1
Humidity/ Temperature Indicator	Shanghai Meteorological Industry Factory	HTC-1	W006-17	2018/11/2	2019/11/1
Temperature Chamber	GIANT FORCE	ICT-150-40-CP-AR	W027-03	2018/11/2	2019/11/1
Wideband Radio CommunicationTeste	Anristu	MT8821C	6201462742	2019/3/2	2020/3/1
Wideband Radio CommunicationTester	Rohde & Schwarz	CMW500	W005-02	2018/11/2	2019/11/1

2. Measurement Uncertainty

For a 95% confidence level (k = 2), the measurement expanded uncertainties for defined systems, in accordance with the recommendations of ISO 17025 as following:

Test Item	Extended Uncertainty	Data
Transmit Output Power Data	Power [dBm]	U =±0.37 dB
Bandwidth	Magnitude [%]	U =± 0.2%
Band Edge Compliance	Disturbance Power [dBm]	U = ±2.0 dB
Spurious Emissions, Conducted	Disturbance Power [dBm]	U = ±2.0 dB
Frequency Stability	Frequency Accuracy [ppm]	U = ±0.24 ppm

3. Effective (Isotropic) Radiated Power

3.1. 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
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
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
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
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]

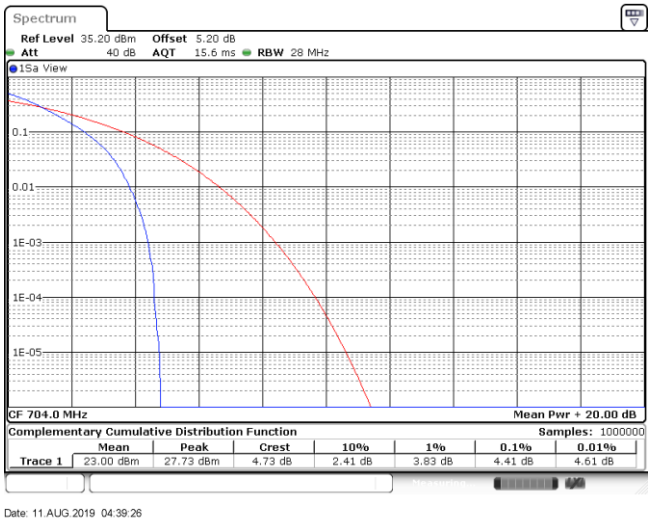
4. Peak-to-Average Ratio (CCDF)

4.1. Test Result

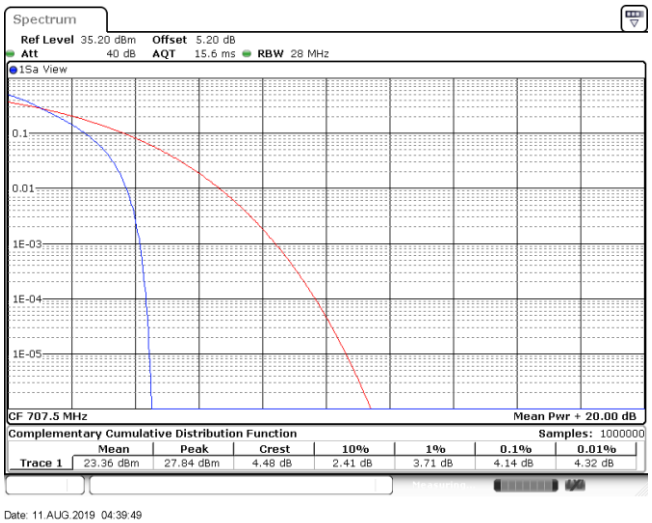
Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band12	10MHz	QPSK	23060	50RB#0	4.41	13	PASS
Band12	10MHz	QPSK	23095	50RB#0	4.14	13	PASS
Band12	10MHz	QPSK	23130	50RB#0	4.26	13	PASS
Band12	10MHz	16QAM	23060	50RB#0	5.22	13	PASS
Band12	10MHz	16QAM	23095	50RB#0	5.07	13	PASS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

4.2. Test Plots

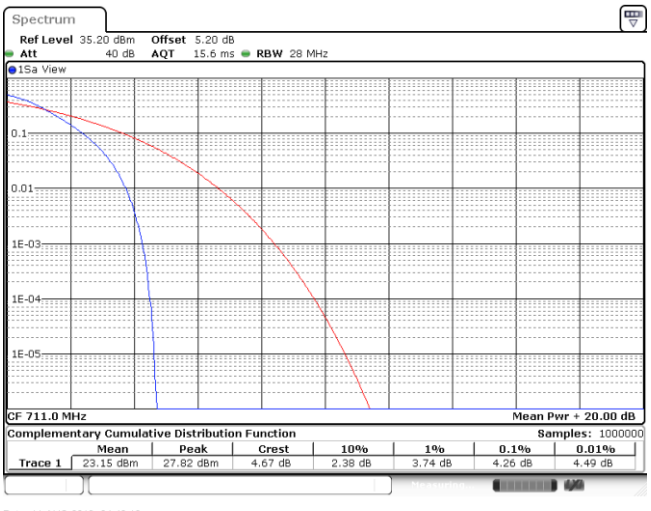
Band12_10MHz_QPSK_23060_50RB#0



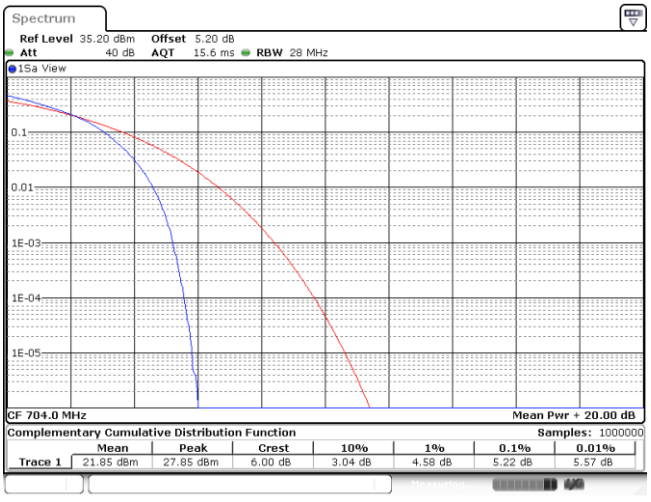
Band12_10MHz_QPSK_23095_50RB#0



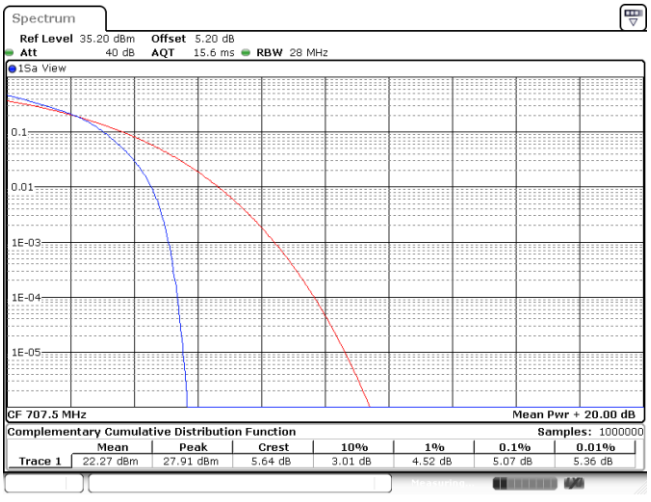
Band12_10MHz_QPSK_23130_50RB#0



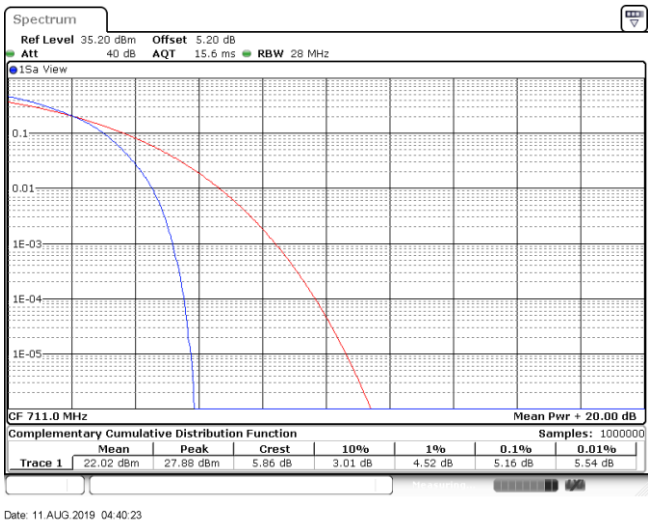
Band12_10MHz_16QAM_23060_50RB#0



Band12_10MHz_16QAM_23095_50RB#0



Band12_10MHz_16QAM_23130_50RB#0

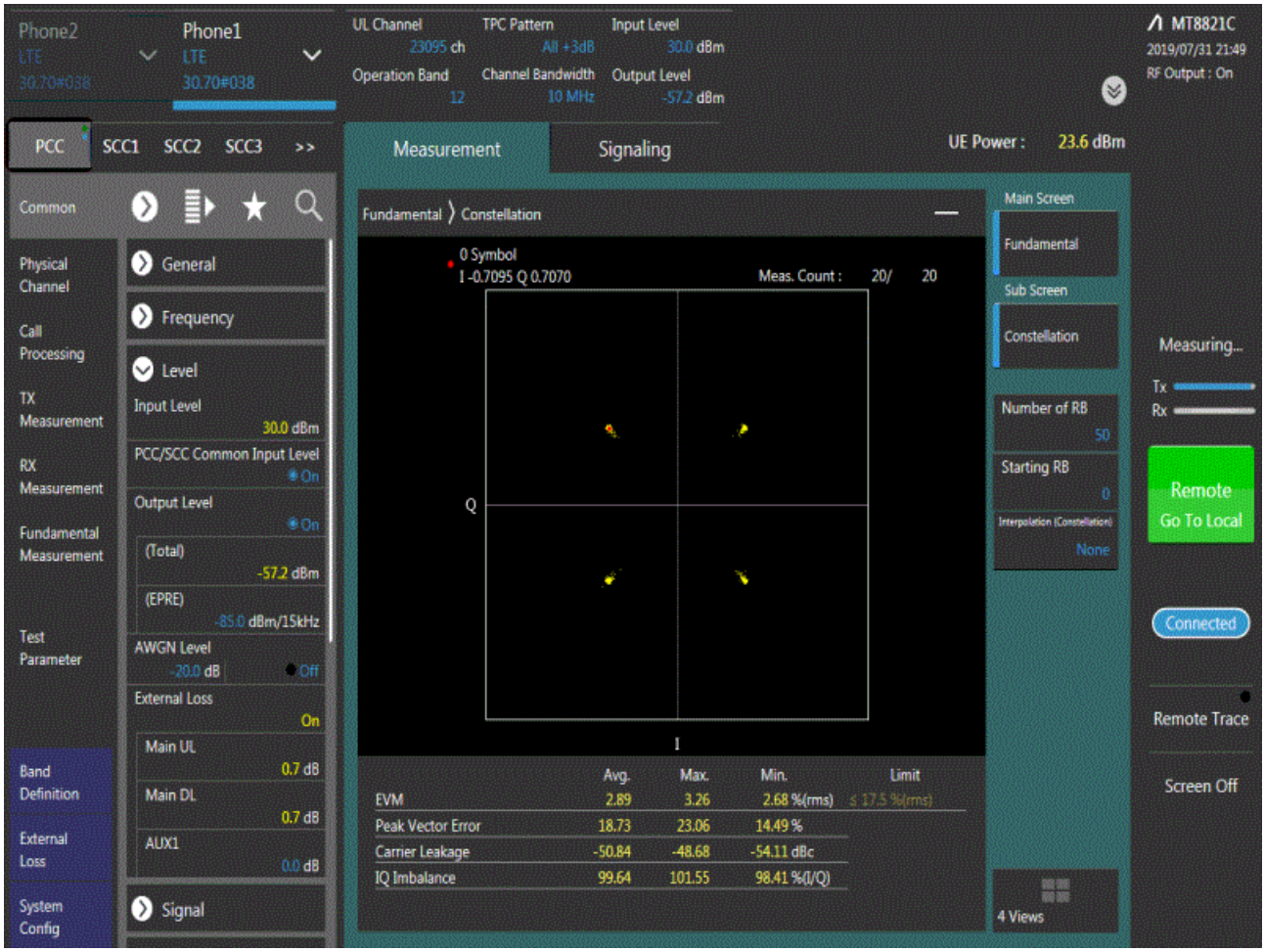


5. Modulation Characteristics

5.1. Test Band = LTE Band 12

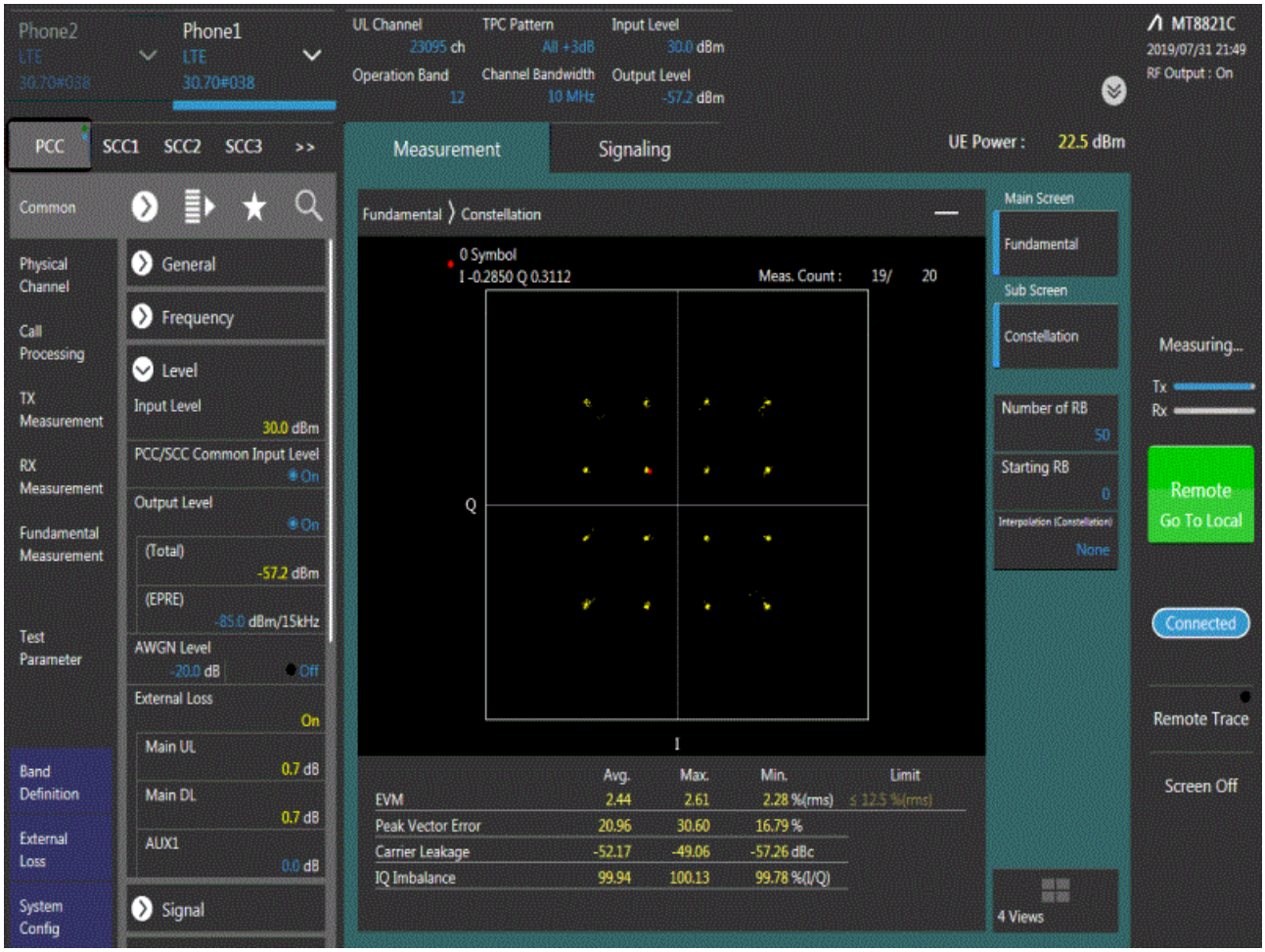
5.2. Test Mode = LTE /TM1 10MHz

5.2.1.Test Channel = MCH



5.3. Test Mode = LTE /TM2 10MHz

5.3.1.Test Channel = MCH



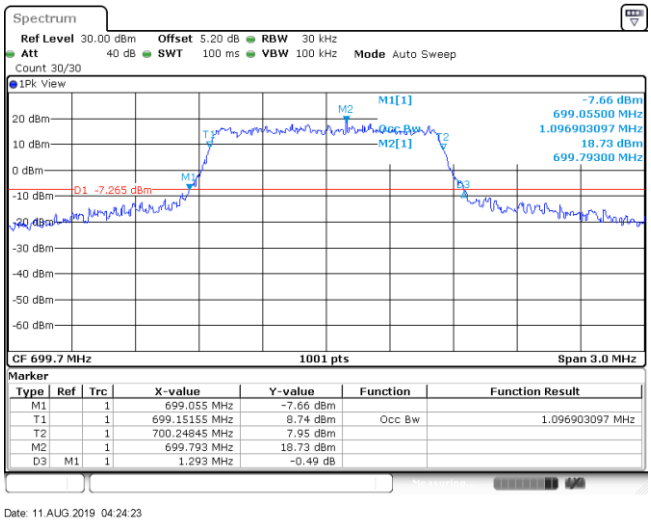
6. 26dB Bandwidth and Occupied Bandwidth

6.1. 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

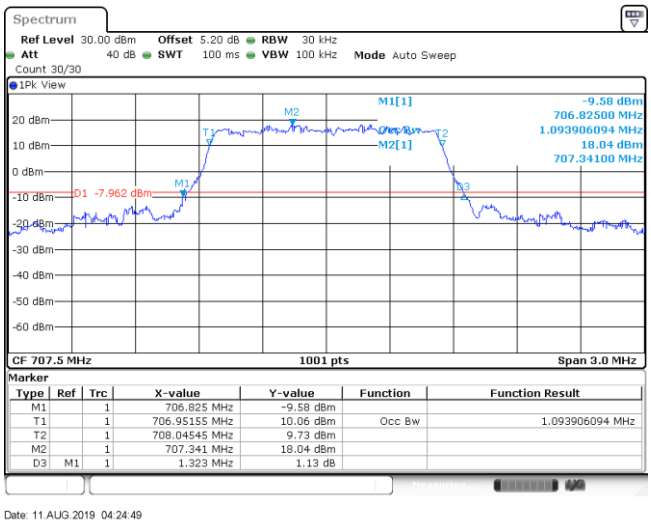
6.2. Test Plots

Band12_1.4MHz_QPSK_23017_6RB#0



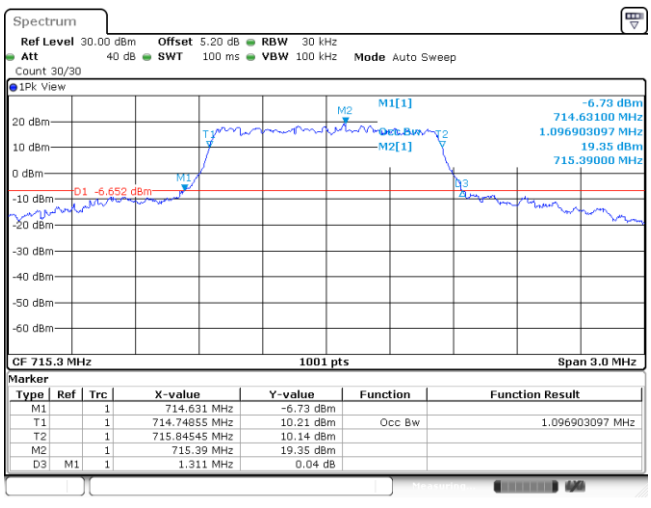
Date: 11.AUG.2019 04:24:23

Band12_1.4MHz_QPSK_23095_6RB#0



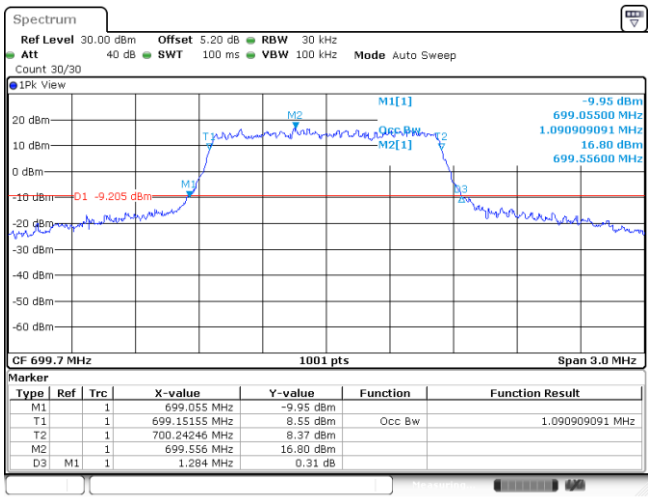
Date: 11.AUG.2019 04:24:49

Band12_1.4MHz_QPSK_23173_6RB#0



Date: 11.AUG.2019 04:25:16

Band12_1.4MHz_16QAM_23017_6RB#0



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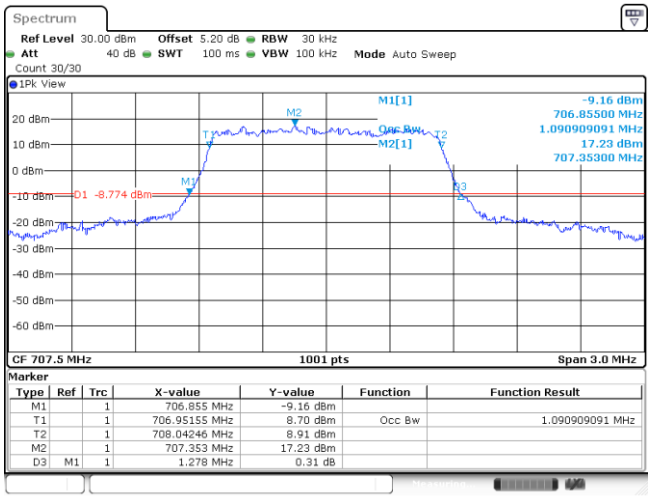

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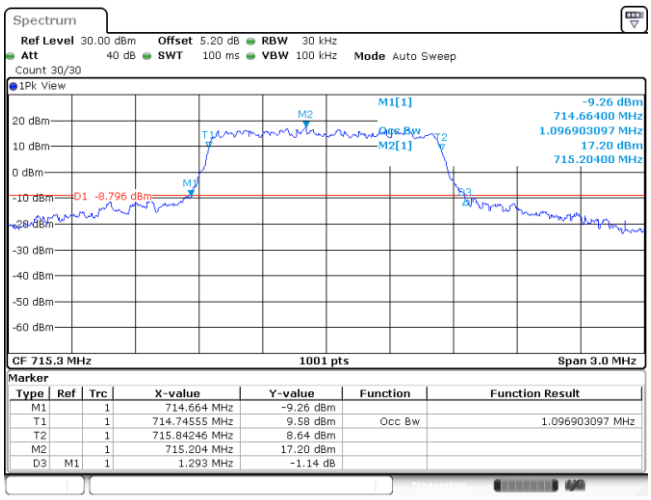
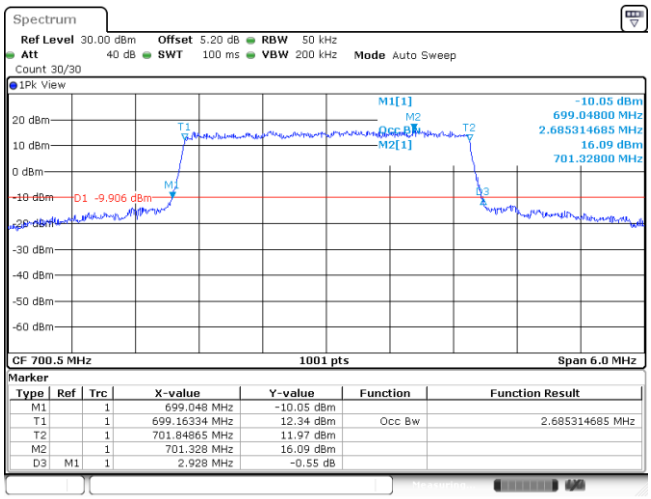
Band12_1.4MHz_16QAM_23173_6RB#0



Date: 11.AUG.2019 04:25:29

Band12_3MHz_QPSK_23025_15RB#0



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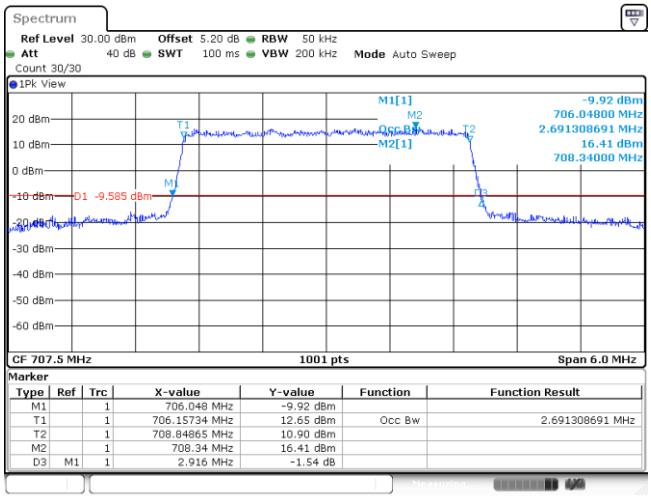
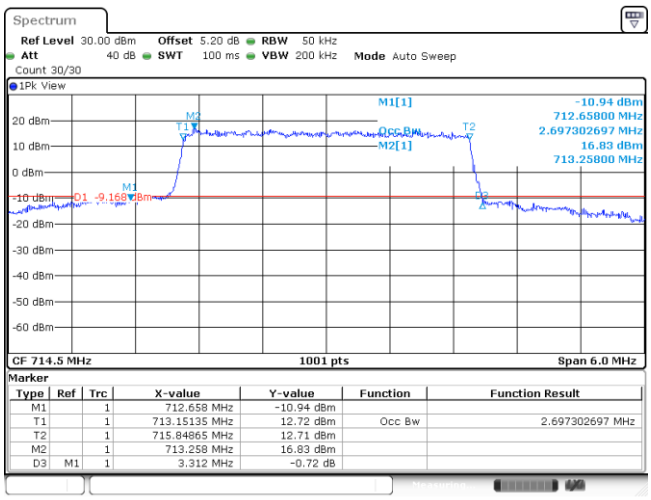
Band12_3MHz_QPSK_23095_15RB#0



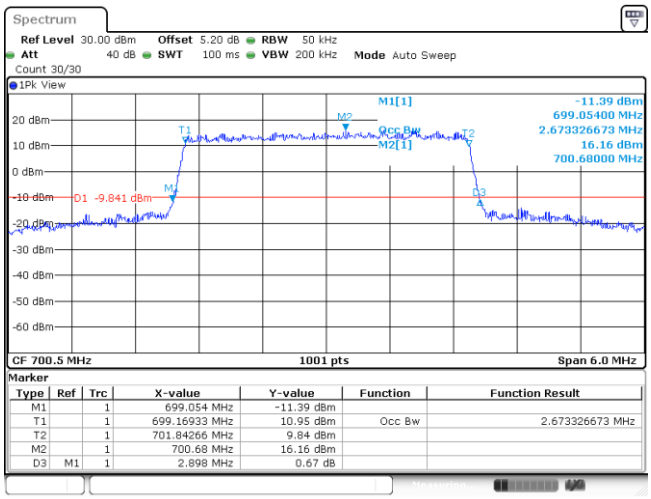
Date: 11.AUG.2019 04:26:13

Band12_3MHz_QPSK_23165_15RB#0



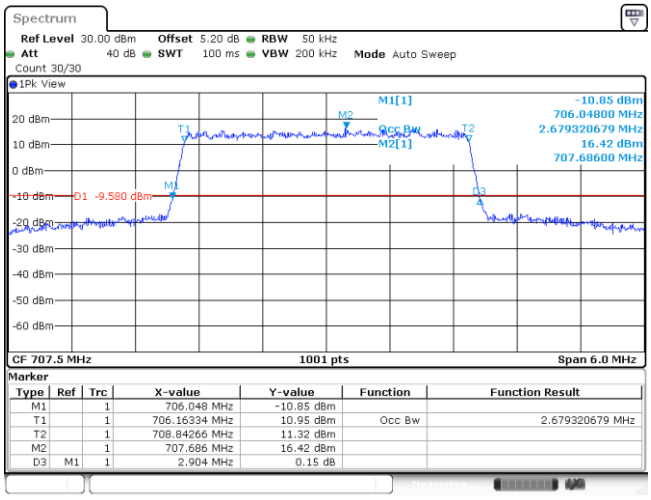
Date: 11.AUG.2019 04:26:39

Band12_3MHz_16QAM_23025_15RB#0



Date: 11.AUG.2019 04:26:00

Band12_3MHz_16QAM_23095_15RB#0



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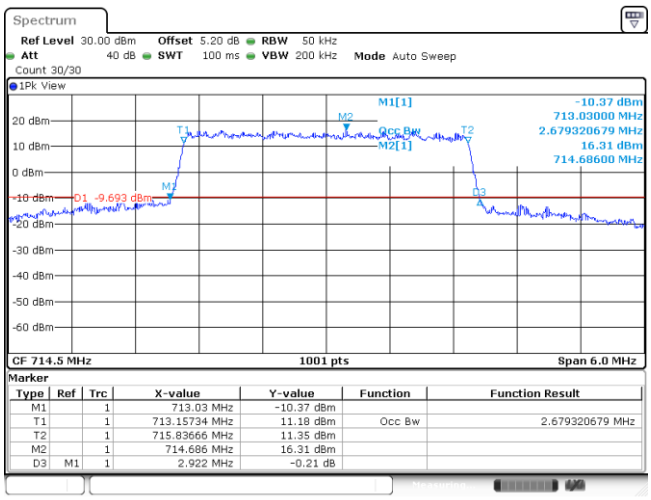
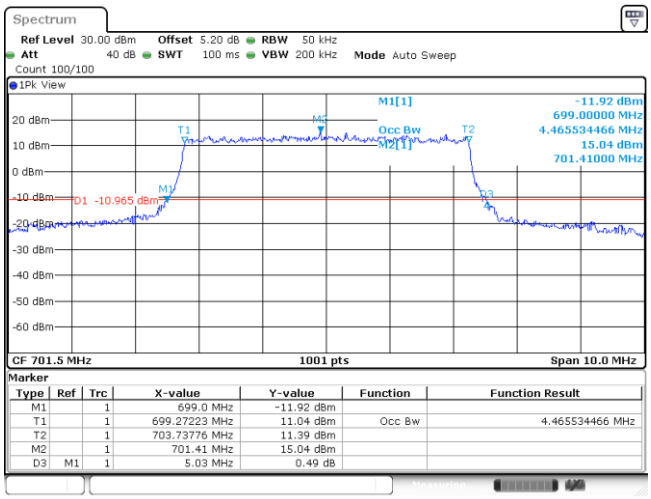
Band12_3MHz_16QAM_23165_15RB#0



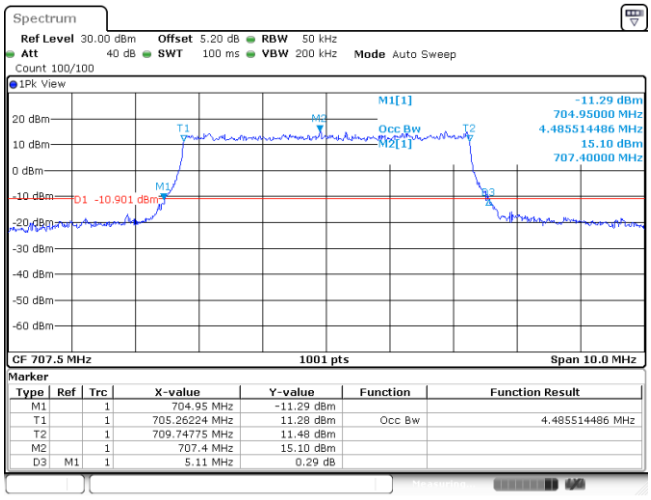
Date: 11.AUG.2019 04:26:52

Band12_5MHz_QPSK_23035_25RB#0



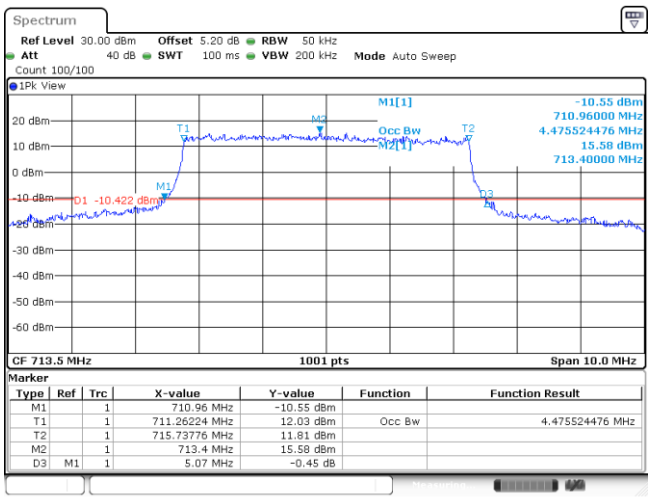
Date: 11.AUG.2019 04:27:16

Band12_5MHz_QPSK_23095_25RB#0



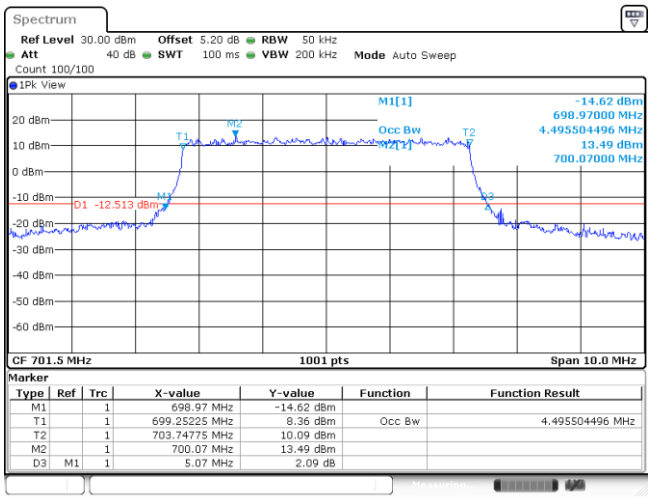
Date: 11.AUG.2019 04:27:56

Band12_5MHz_QPSK_23155_25RB#0



Date: 11.AUG.2019 04:28:36

Band12_5MHz_16QAM_23035_25RB#0



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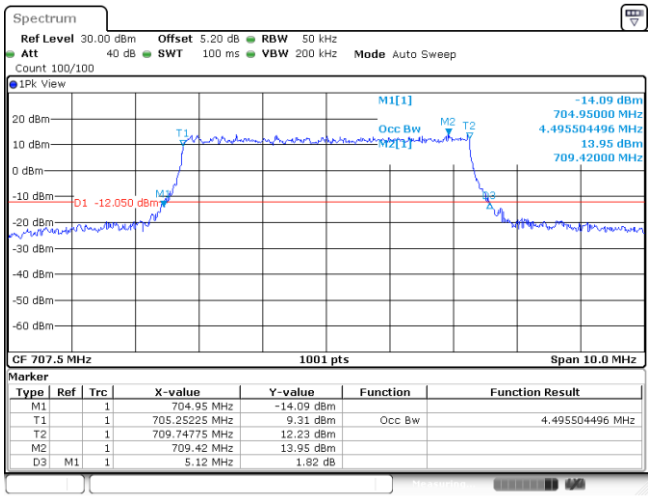
Band12_5MHz_16QAM_23095_25RB#0



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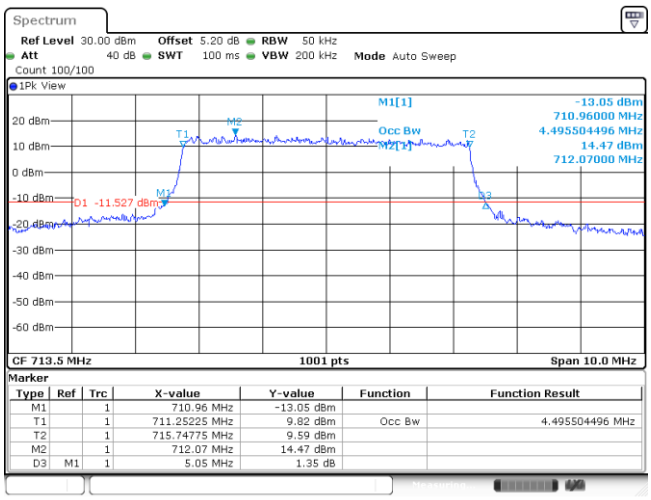
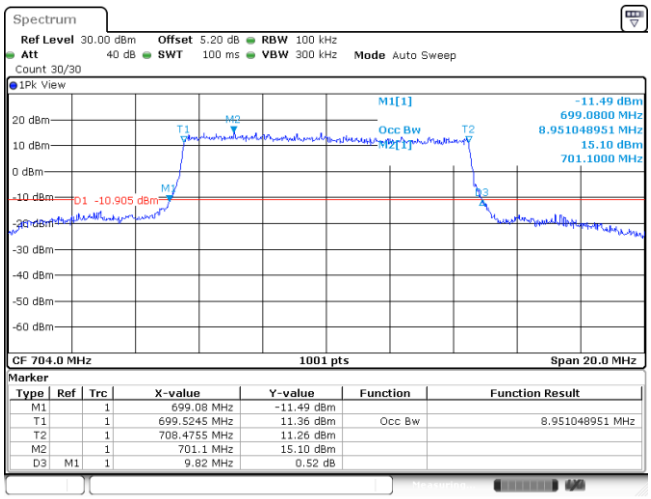
Band12_5MHz_16QAM_23155_25RB#0



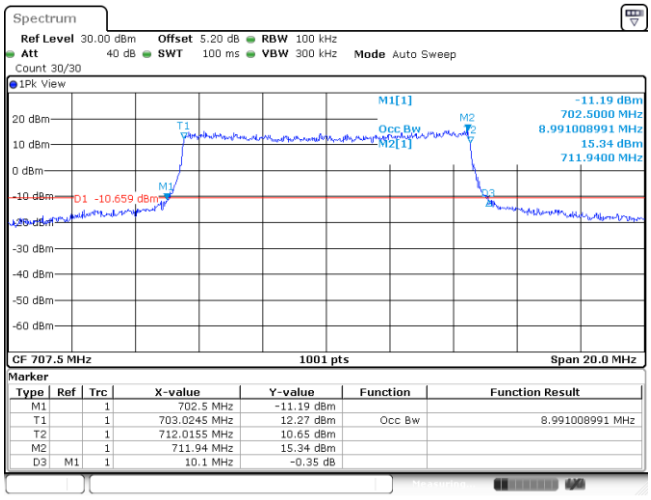
Date: 11.AUG.2019 04:28:56

Band12_10MHz_QPSK_23060_50RB#0



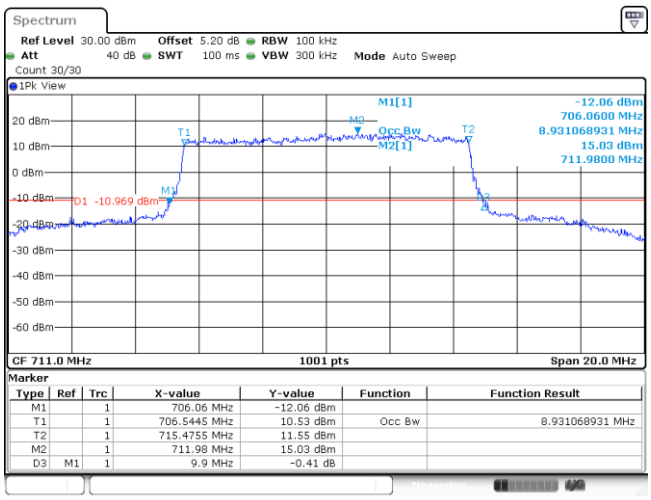
Date: 11.AUG.2019 04:29:14

Band12_10MHz_QPSK_23095_50RB#0



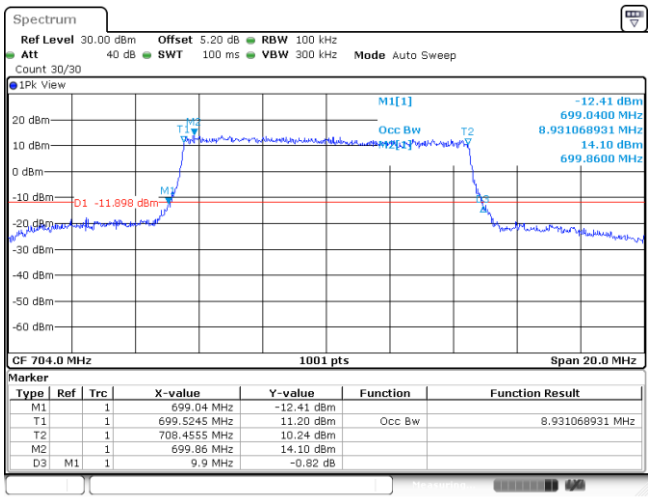
Date: 11.AUG.2019 04:29:40

Band12_10MHz_QPSK_23130_50RB#0



Date: 11.AUG.2019 04:30:07

Band12_10MHz_16QAM_23060_50RB#0



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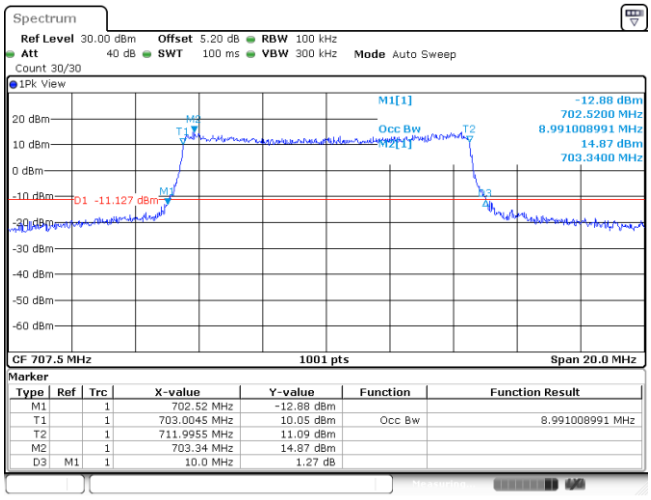
Band12_10MHz_16QAM_23095_50RB#0



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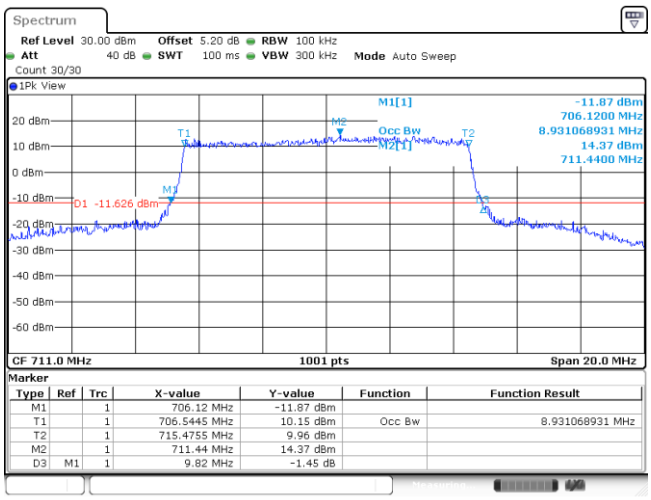
Band12_10MHz_16QAM_23130_50RB#0



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7. Band Edge Compliance

7.1. Test Plots

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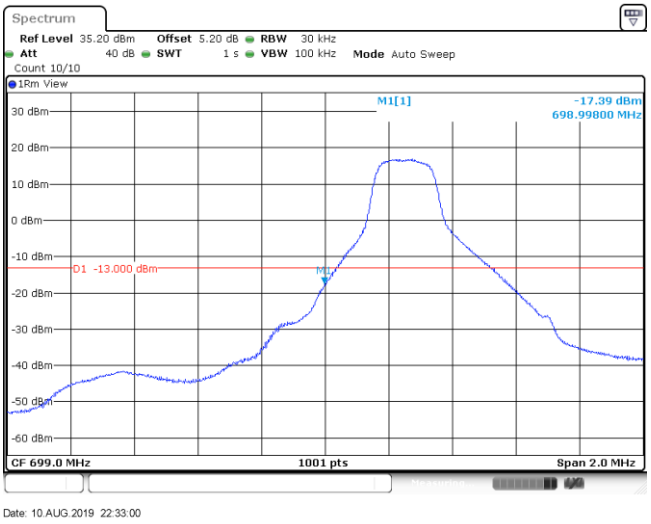
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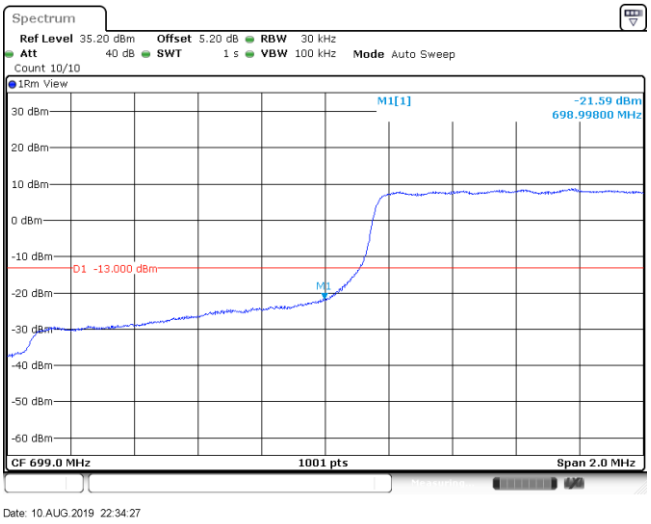
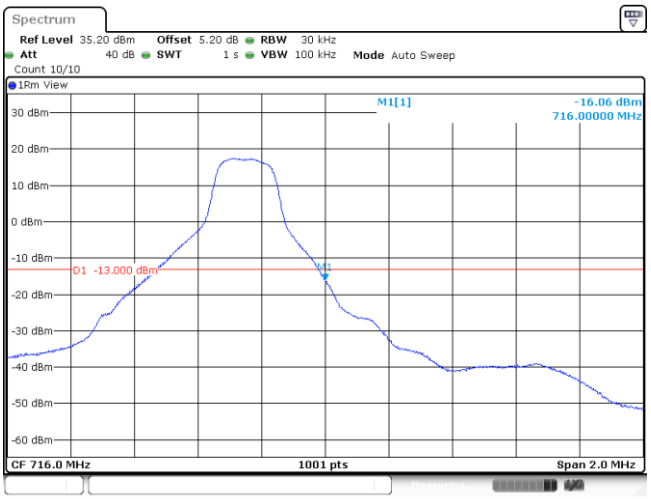
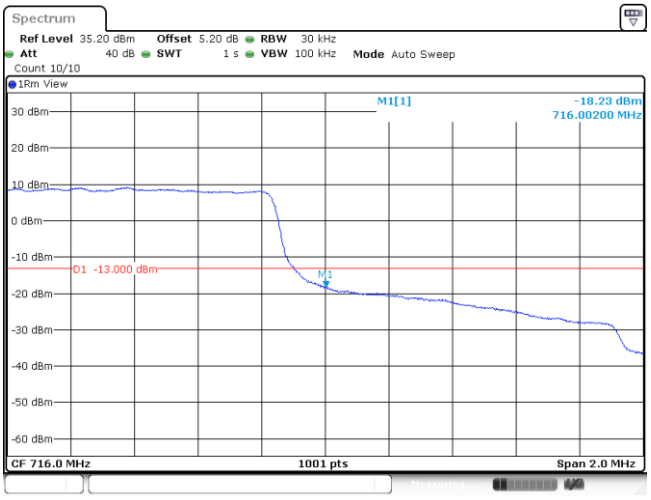


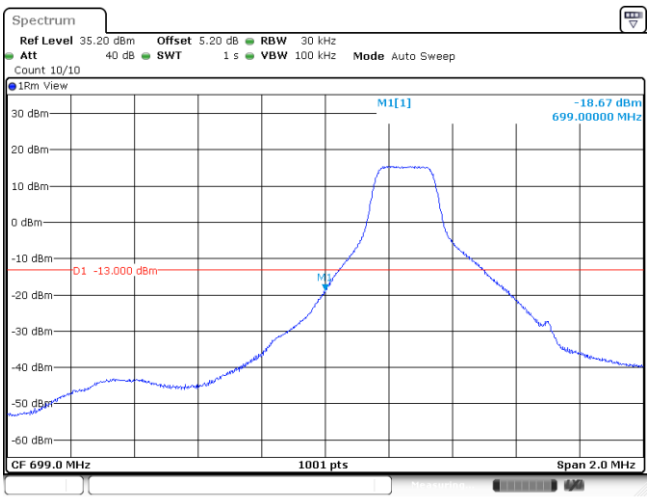
Band12_1.4MHz_QPSK_23173_1RB#5



Band12_1.4MHz_QPSK_23173_6RB#0



Band12_1.4MHz_16QAM_23017_1RB#0



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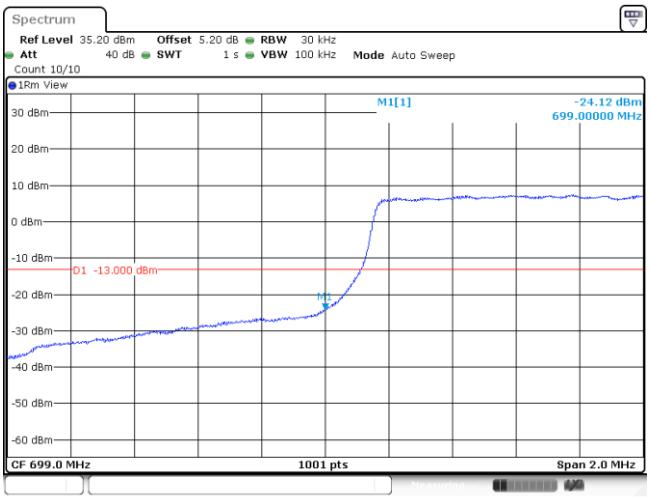
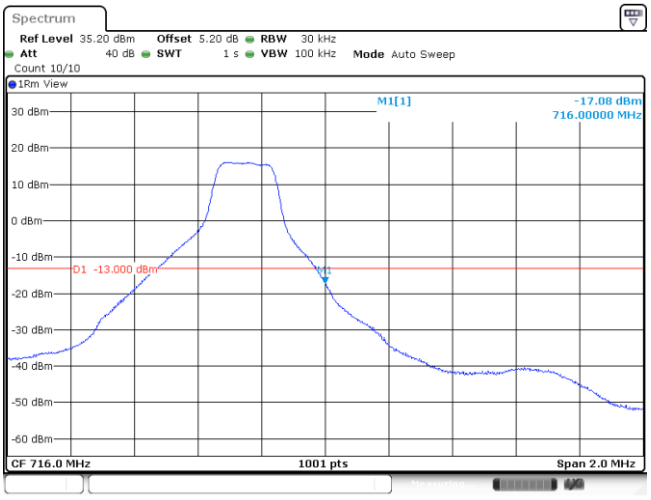
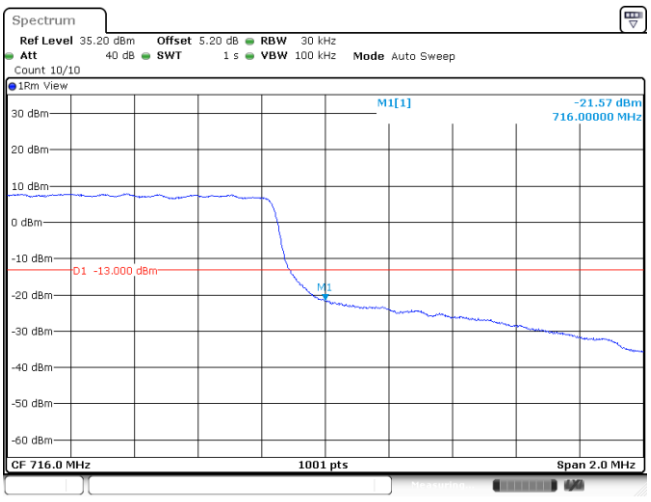
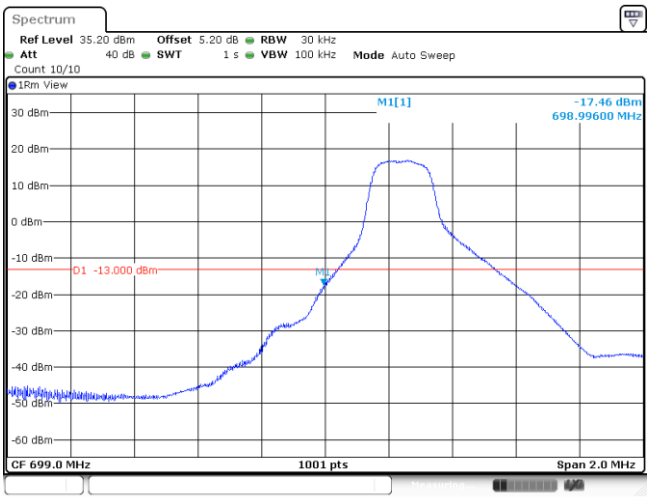
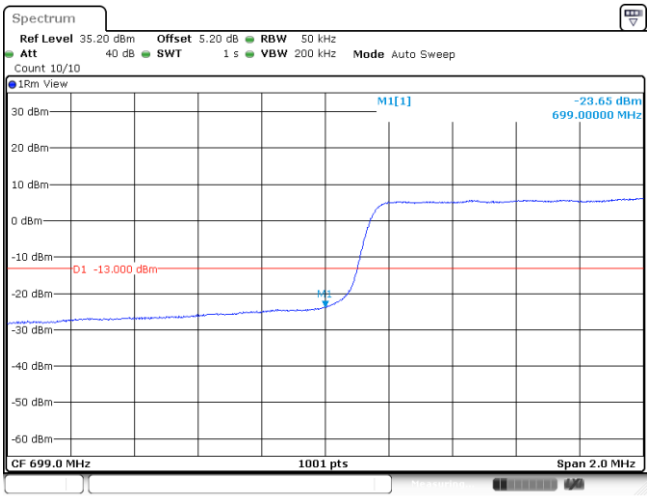
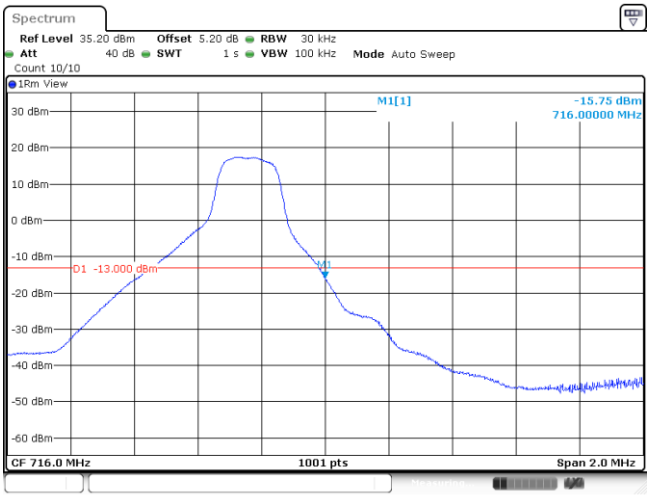


Band12_1.4MHz_16QAM_23173_1RB#5

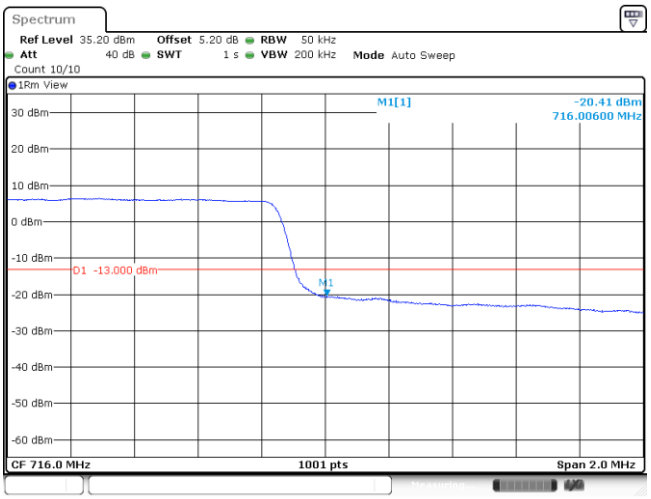


Band12_1.4MHz_16QAM_23173_6RB#0

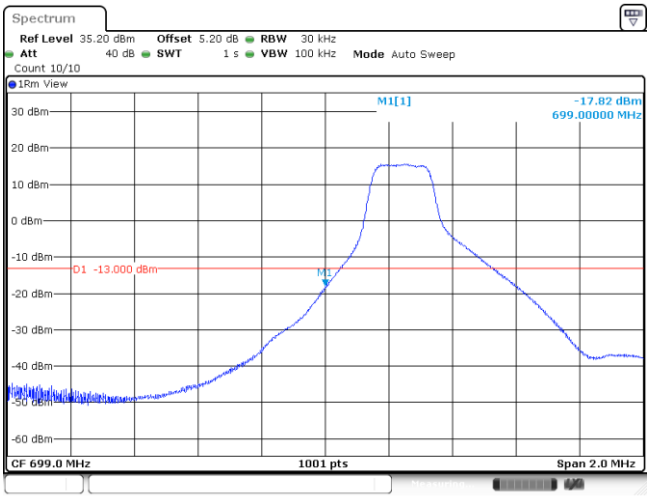


Band12_3MHz_QPSK_23025_1RB#0

Band12_3MHz_QPSK_23025_15RB#0

Band12_3MHz_QPSK_23165_1RB#14


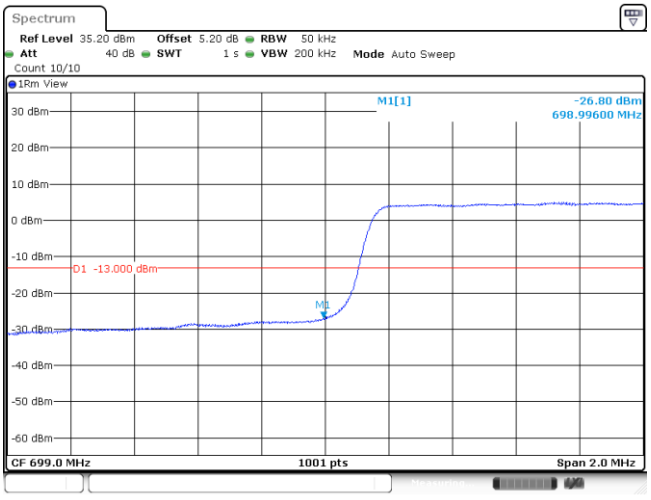
Band12_3MHz_QPSK_23165_15RB#0



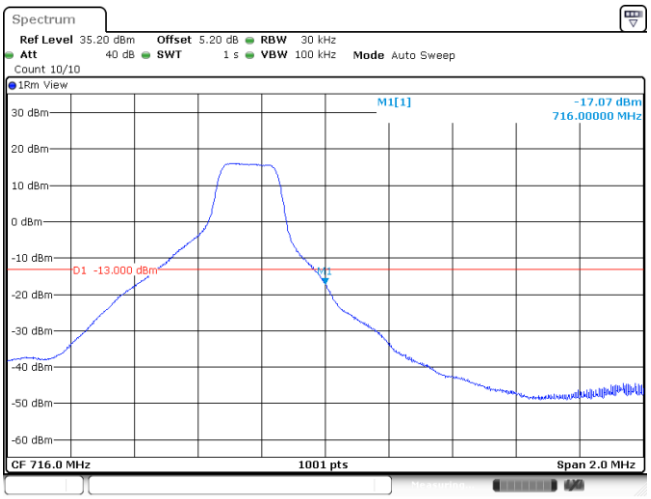
Band12_3MHz_16QAM_23025_1RB#0



Band12_3MHz_16QAM_23025_15RB#0

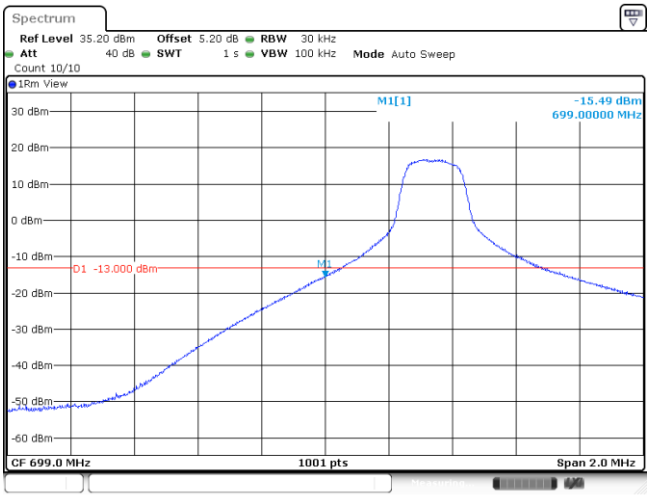


Band12_3MHz_16QAM_23165_1RB#14

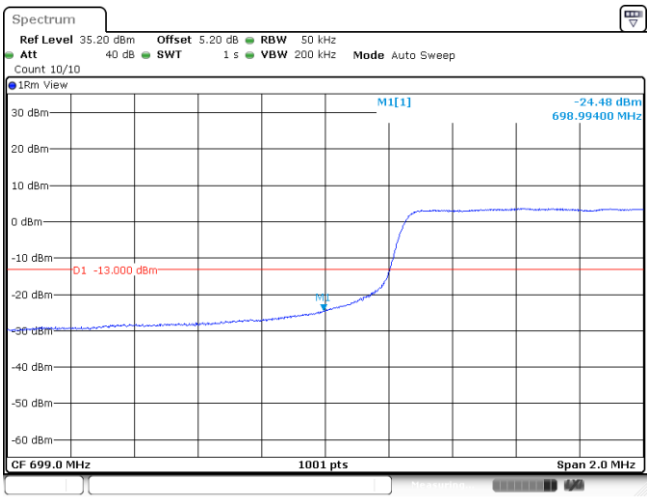


Band12_3MHz_16QAM_23165_15RB#0

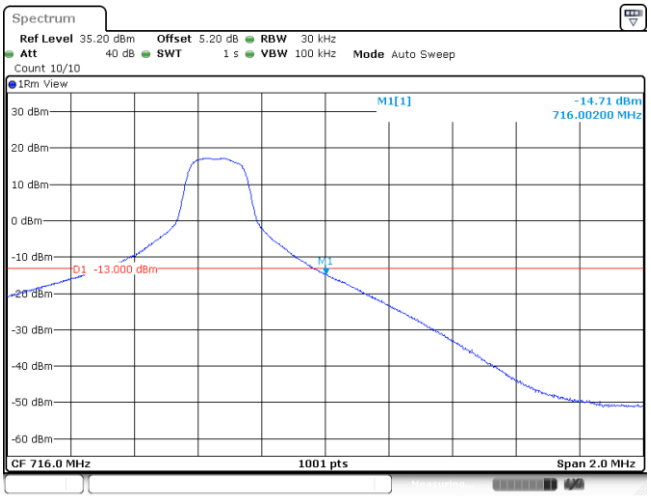
Band12_5MHz_QPSK_23035_1RB#0



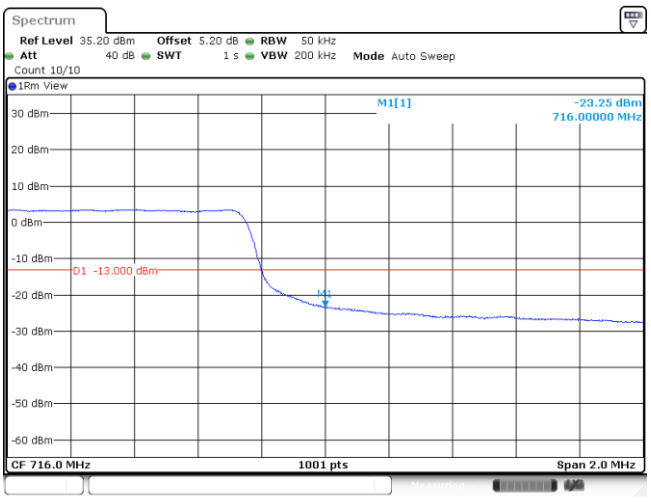
Band12_5MHz_QPSK_23035_25RB#0



Band12_5MHz_QPSK_23155_1RB#24



Band12_5MHz_QPSK_23155_25RB#0



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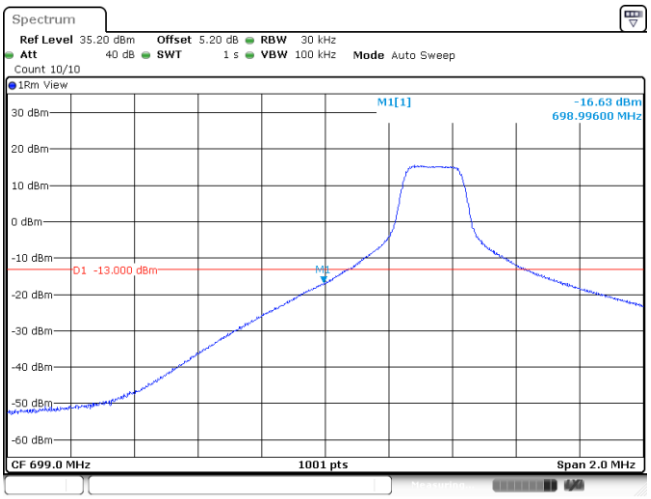

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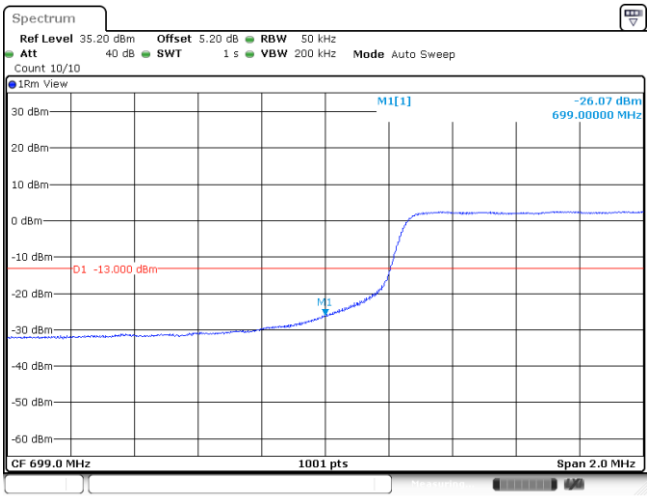

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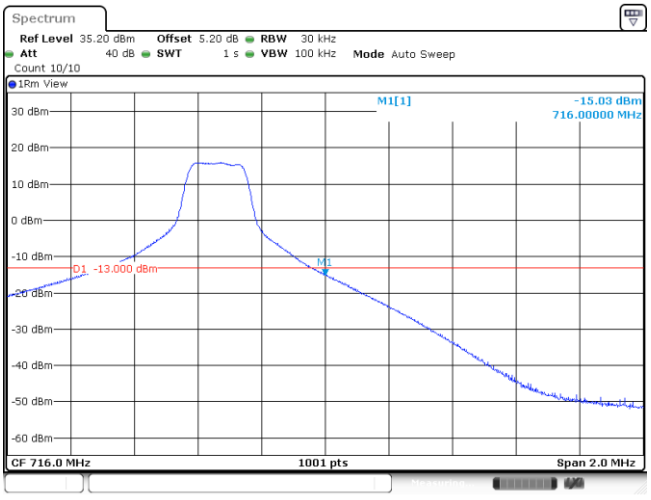
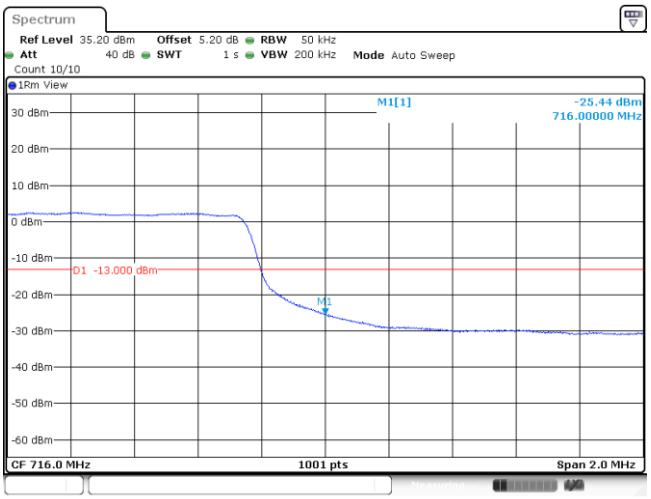
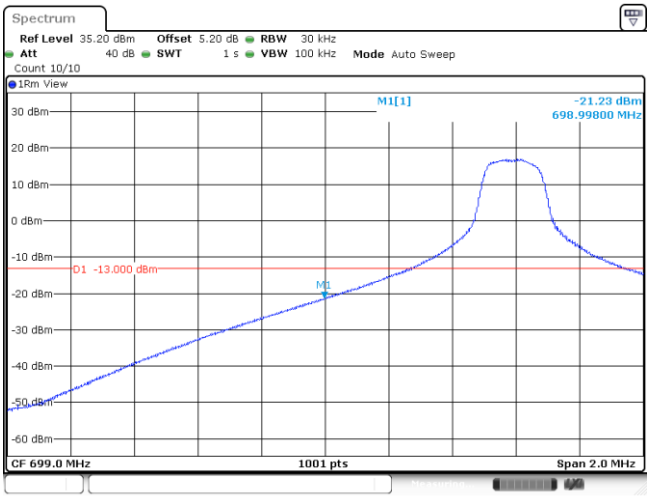
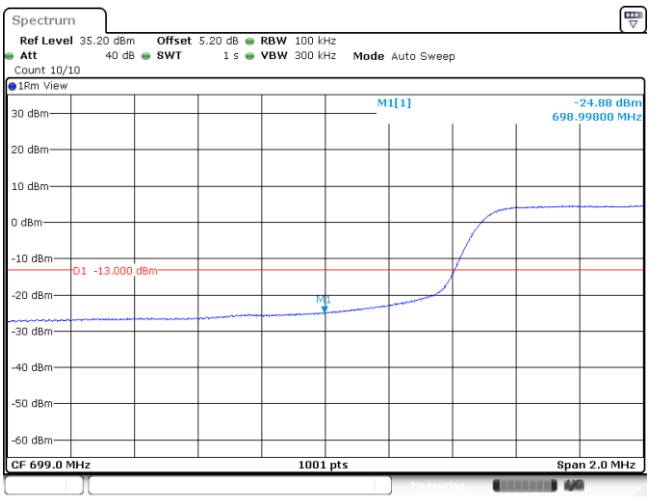
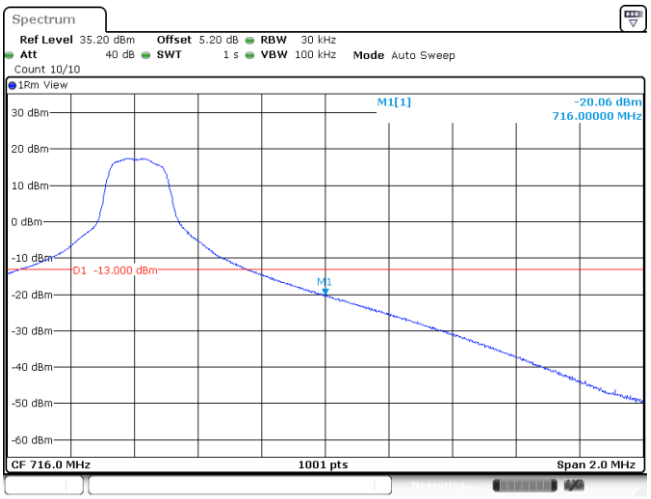
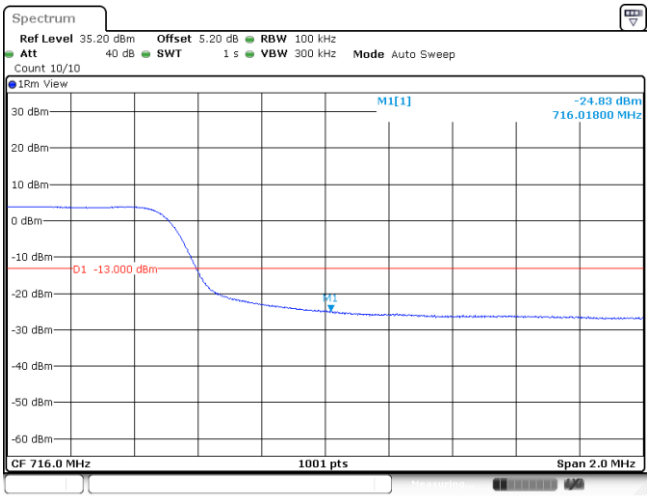


Band12_5MHz_16QAM_23155_25RB#0

Band12_10MHz_QPSK_23060_1RB#0

Band12_10MHz_QPSK_23060_50RB#0


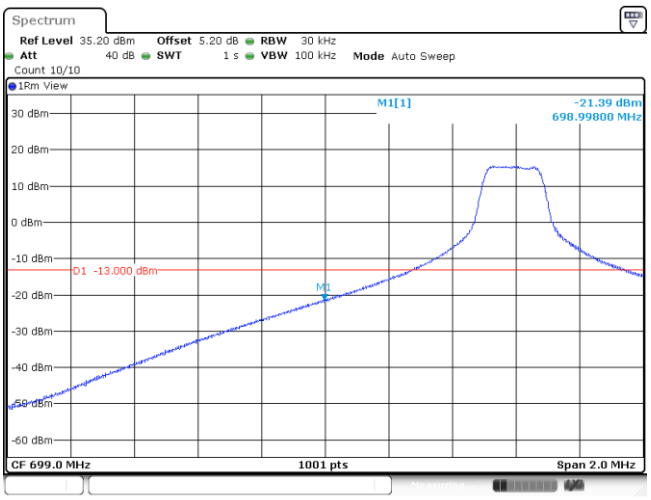
Band12_10MHz_QPSK_23130_1RB#49

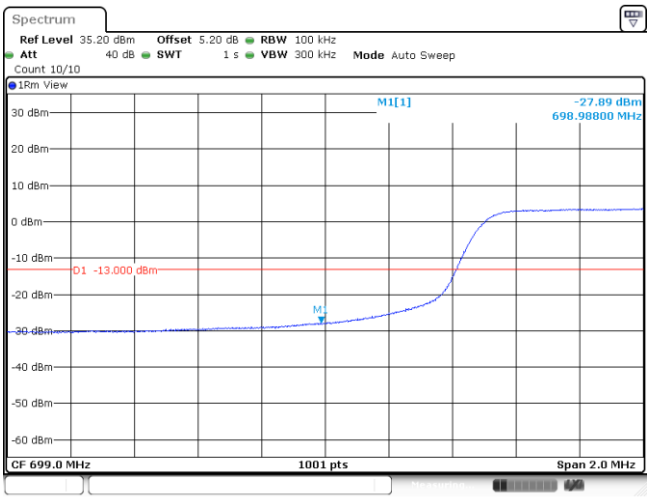
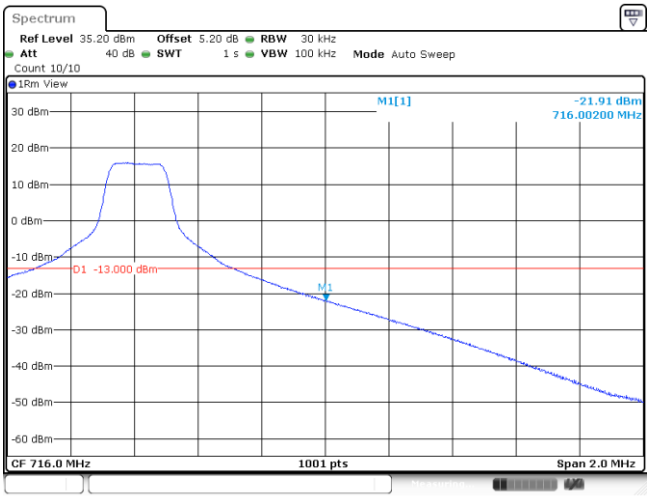
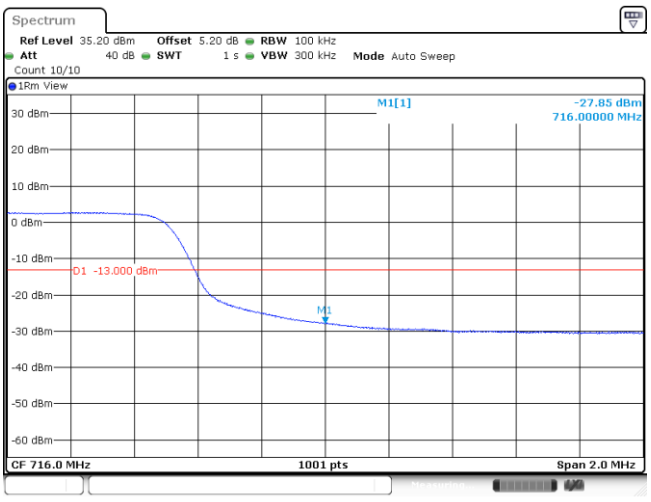


Band12_10MHz_QPSK_23130_50RB#0



Band12_10MHz_16QAM_23060_1RB#0



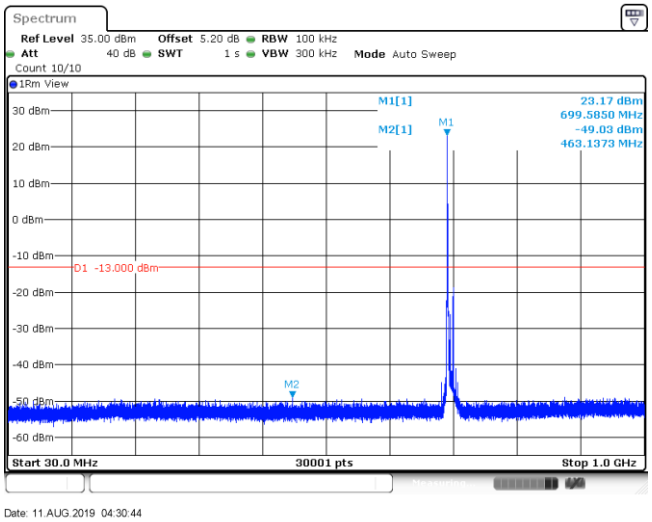
Band12_10MHz_16QAM_23060_50RB#0

Band12_10MHz_16QAM_23130_1RB#49

Band12_10MHz_16QAM_23130_50RB#0


8. Spurious Emission at Antenna Terminal

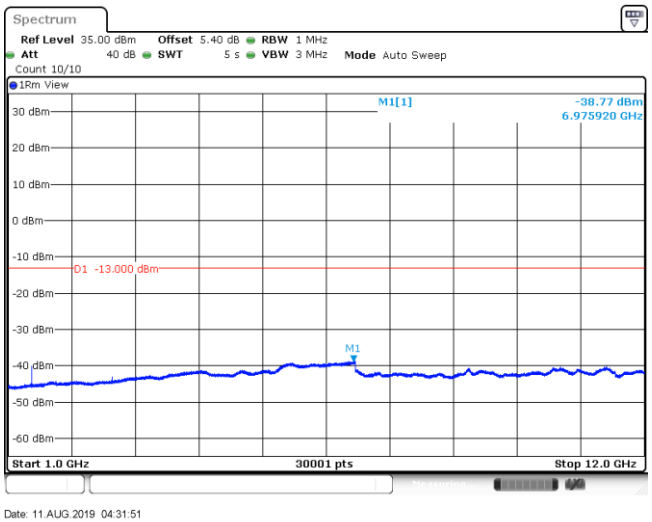
Remark1: For the averaged unwanted emissions measurements, the measurement points in each sweep is greater than twice the Span/RBW in order to ensure bin-to-bin spacing of < RBW/2 so that narrowband signals are not lost between frequency bins. As to the present test item, the "Measurement Points = k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

8.1. Test Plots

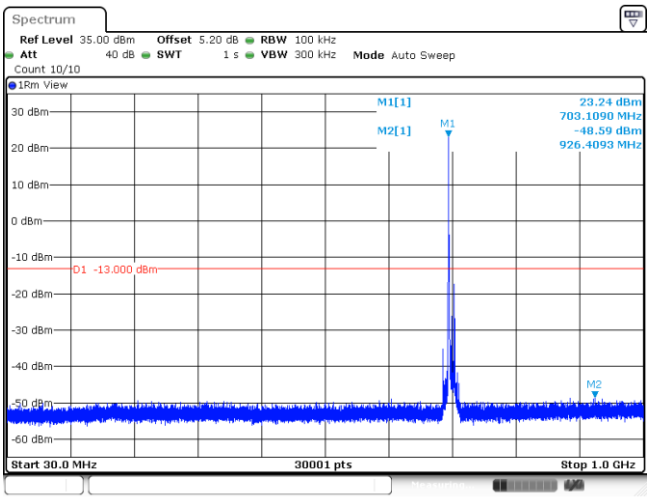
Band12_10MHz_QPSK_23060_1RB#0



Band12_10MHz_QPSK_23060_1RB#0

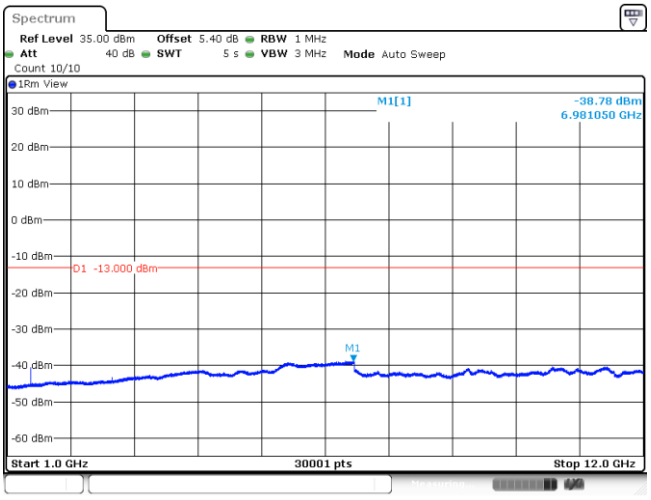


Band12_10MHz_QPSK_23095_1RB#0



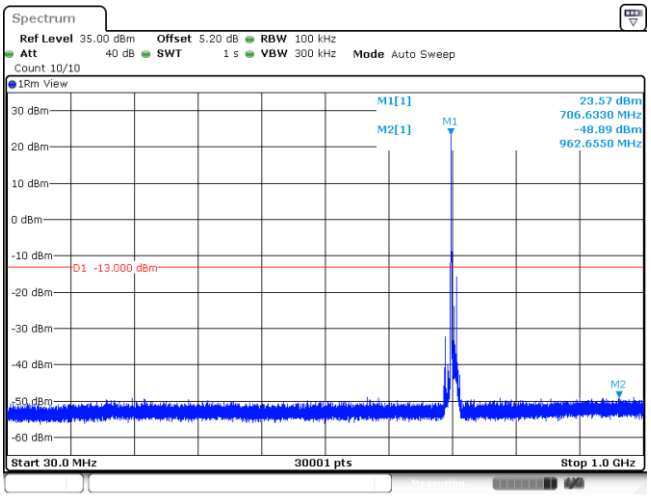
Date: 11.AUG.2019 04:33:40

Band12_10MHz_QPSK_23095_1RB#0



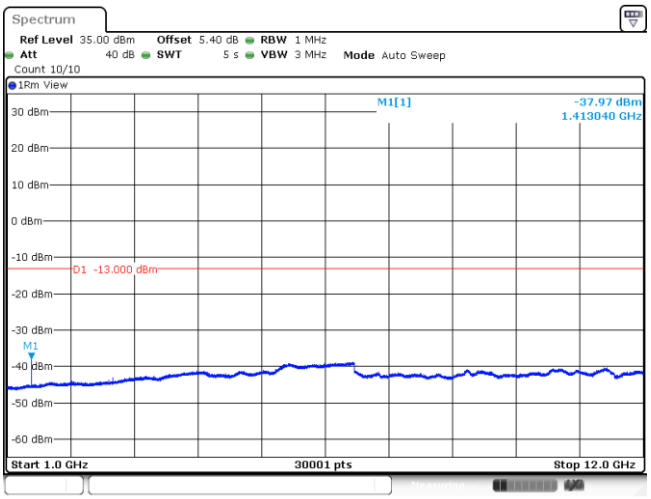
Date: 11.AUG.2019 04:34:47

Band12_10MHz_QPSK_23130_1RB#0

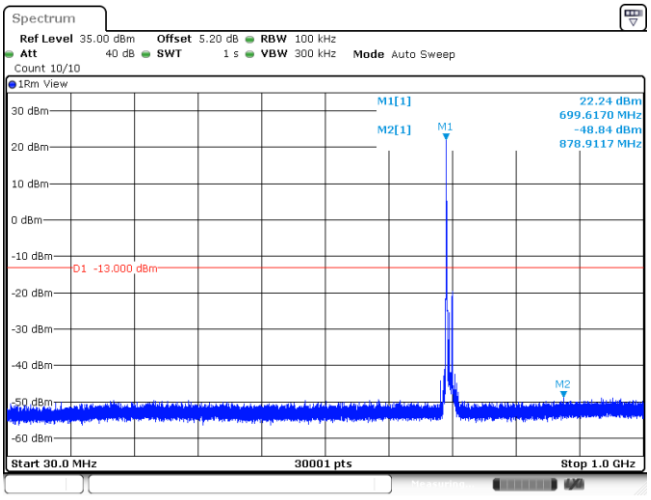


Date: 11.AUG.2019 04:36:35

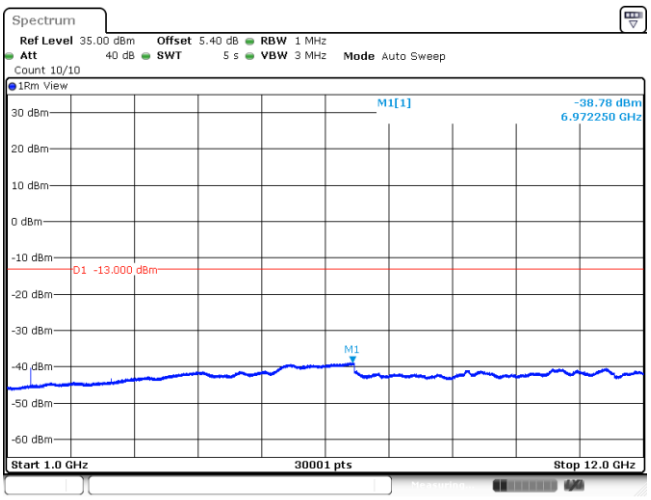
Band12_10MHz_QPSK_23130_1RB#0



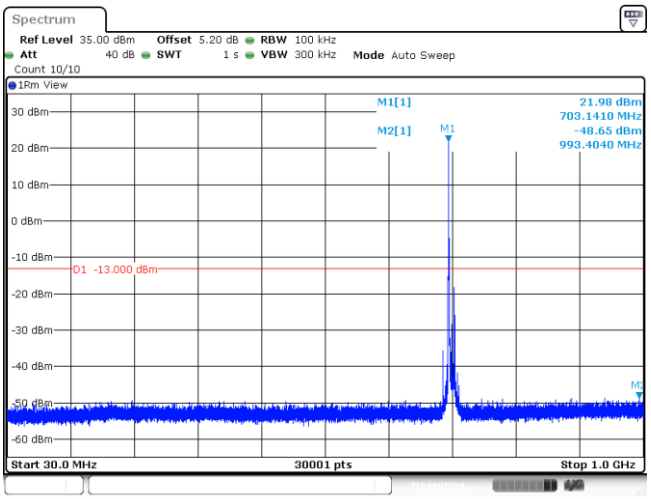
Band12_10MHz_16QAM_23060_1RB#0



Band12_10MHz_16QAM_23060_1RB#0

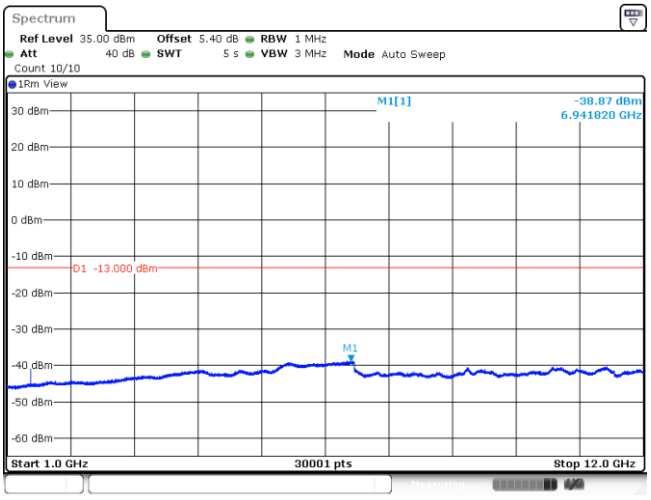


Band12_10MHz_16QAM_23095_1RB#0



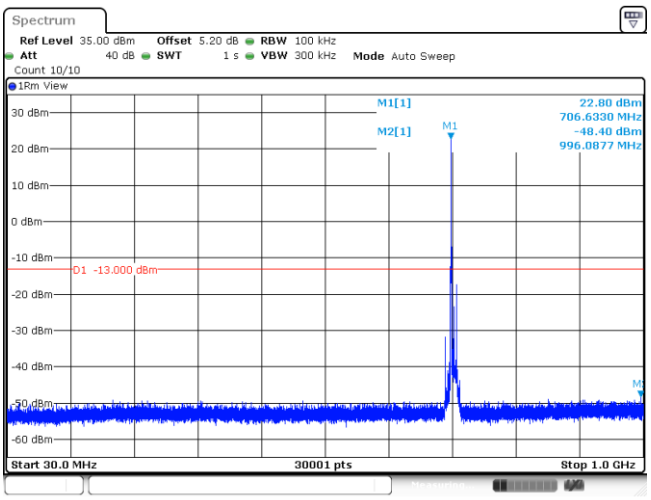
Date: 11.AUG.2019 04:35:07

Band12_10MHz_16QAM_23095_1RB#0

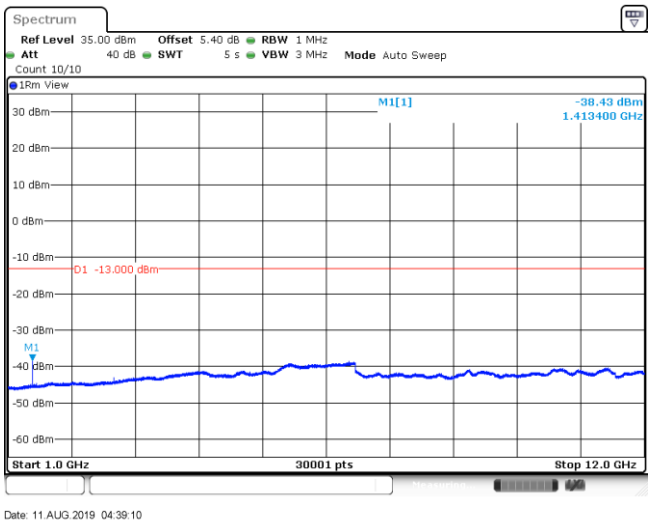


Date: 11.AUG.2019 04:36:15

Band12_10MHz_16QAM_23130_1RB#0



Date: 11.AUG.2019 04:38:03

Band12_10MHz_16QAM_23130_1RB#0


9. Frequency Stability

9.1. 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	-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

9.2. 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	-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
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
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