

Appendix B

E-UTRA Band 7

TABLE OF CONTENTS

1.	MAIN TEST INSTRUMENTS	3
2.	MEASUREMENT UNCERTAINTY	3
3.	EFFECTIVE (ISOTROPIC) RADIATED POWER	4
3.1.	TEST RESULT	4
4.	PEAK-TO-AVERAGE RATIO(CCDF)	9
4.1.	TEST RESULT	9
4.2.	TEST PLOTS	9
5.	MODULATION CHARACTERISTICS	12
5.1.	TEST BAND = LTE BAND 7	12
5.2.	TEST MODE = LTE /TM1 20MHZ	12
5.2.1.	TEST CHANNEL = MCH	12
5.3.	TEST MODE = LTE /TM2 20MHZ	13
5.3.1.	TEST CHANNEL = MCH	13
6.	26DB BANDWIDTH AND OCCUPIED BANDWIDTH	14
6.1.	TEST RESULT	14
6.2.	TEST PLOTS	15
7.	BAND EDGE COMPLIANCE	23
7.1.	TEST PLOTS	23
8.	SPURIOUS EMISSION AT ANTENNA TERMINAL	34
8.1.	TEST PLOTS	34
9.	FREQUENCY STABILITY	39
9.1.	FREQUENCY VS VOLTAGE	39
9.2.	FREQUENCY VS TEMPERATURE	40

1. Main Test Instruments

RE in Chamber					
Test Equipment	Manufacturer	Model No.	Inventory No.	Cal. date	Cal.Due date
				(yyyy-mm-dd)	(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	2018/4/13	2021/4/12
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	Cal.Due date
				(yyyy-mm-dd)	(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]	$U = \pm 0.37 \text{ dB}$
Bandwidth	Magnitude [%]	$U = \pm 0.2\%$
Band Edge Compliance	Disturbance Power [dBm]	$U = \pm 2.0 \text{ dB}$
Spurious Emissions, Conducted	Disturbance Power [dBm]	$U = \pm 2.0 \text{ dB}$
Frequency Stability	Frequency Accuracy [ppm]	$U = \pm 0.24 \text{ ppm}$

3. Effective (Isotropic) Radiated Power

3.1. Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Conducted Power(dBm)	EIRP (dBm)	Limit (dBm)	Verdict
Band7	5MHz	QPSK	20775	1RB#0	23.43	22.78	33.00	PASS
Band7	5MHz	QPSK	20775	1RB#12	23.76	23.11	33.00	PASS
Band7	5MHz	QPSK	20775	1RB#24	23.46	22.81	33.00	PASS
Band7	5MHz	QPSK	20775	12RB#0	22.54	21.89	33.00	PASS
Band7	5MHz	QPSK	20775	12RB#6	22.60	21.95	33.00	PASS
Band7	5MHz	QPSK	20775	12RB#13	22.59	21.94	33.00	PASS
Band7	5MHz	QPSK	20775	25RB#0	22.62	21.97	33.00	PASS
Band7	5MHz	QPSK	21100	1RB#0	23.59	22.94	33.00	PASS
Band7	5MHz	QPSK	21100	1RB#12	23.83	23.18	33.00	PASS
Band7	5MHz	QPSK	21100	1RB#24	23.55	22.90	33.00	PASS
Band7	5MHz	QPSK	21100	12RB#0	22.69	22.04	33.00	PASS
Band7	5MHz	QPSK	21100	12RB#6	22.70	22.05	33.00	PASS
Band7	5MHz	QPSK	21100	12RB#13	22.66	22.01	33.00	PASS
Band7	5MHz	QPSK	21100	25RB#0	22.73	22.08	33.00	PASS
Band7	5MHz	QPSK	21425	1RB#0	23.46	22.81	33.00	PASS
Band7	5MHz	QPSK	21425	1RB#12	23.69	23.04	33.00	PASS
Band7	5MHz	QPSK	21425	1RB#24	23.40	22.75	33.00	PASS
Band7	5MHz	QPSK	21425	12RB#0	22.62	21.97	33.00	PASS
Band7	5MHz	QPSK	21425	12RB#6	22.63	21.98	33.00	PASS
Band7	5MHz	QPSK	21425	12RB#13	22.54	21.89	33.00	PASS
Band7	5MHz	QPSK	21425	25RB#0	22.65	22.00	33.00	PASS
Band7	5MHz	16QAM	20775	1RB#0	22.54	21.89	33.00	PASS
Band7	5MHz	16QAM	20775	1RB#12	22.88	22.23	33.00	PASS
Band7	5MHz	16QAM	20775	1RB#24	22.70	22.05	33.00	PASS
Band7	5MHz	16QAM	20775	12RB#0	21.55	20.90	33.00	PASS
Band7	5MHz	16QAM	20775	12RB#6	21.61	20.96	33.00	PASS
Band7	5MHz	16QAM	20775	12RB#13	21.60	20.95	33.00	PASS
Band7	5MHz	16QAM	20775	25RB#0	21.57	20.92	33.00	PASS
Band7	5MHz	16QAM	21100	1RB#0	22.79	22.14	33.00	PASS
Band7	5MHz	16QAM	21100	1RB#12	22.98	22.33	33.00	PASS
Band7	5MHz	16QAM	21100	1RB#24	22.72	22.07	33.00	PASS
Band7	5MHz	16QAM	21100	12RB#0	21.70	21.05	33.00	PASS
Band7	5MHz	16QAM	21100	12RB#6	21.71	21.06	33.00	PASS
Band7	5MHz	16QAM	21100	12RB#13	21.66	21.01	33.00	PASS
Band7	5MHz	16QAM	21100	25RB#0	21.66	21.01	33.00	PASS
Band7	5MHz	16QAM	21425	1RB#0	22.53	21.88	33.00	PASS
Band7	5MHz	16QAM	21425	1RB#12	22.83	22.18	33.00	PASS

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Report No: JYTSZ-R12-2200350

Band7	5MHz	16QAM	21425	1RB#24	22.64	21.99	33.00	PASS
Band7	5MHz	16QAM	21425	12RB#0	21.64	20.99	33.00	PASS
Band7	5MHz	16QAM	21425	12RB#6	21.65	21.00	33.00	PASS
Band7	5MHz	16QAM	21425	12RB#13	21.57	20.92	33.00	PASS
Band7	5MHz	16QAM	21425	25RB#0	21.57	20.92	33.00	PASS
Band7	10MHz	QPSK	20800	1RB#0	23.55	22.90	33.00	PASS
Band7	10MHz	QPSK	20800	1RB#24	23.72	23.07	33.00	PASS
Band7	10MHz	QPSK	20800	1RB#49	23.64	22.99	33.00	PASS
Band7	10MHz	QPSK	20800	25RB#0	22.67	22.02	33.00	PASS
Band7	10MHz	QPSK	20800	25RB#12	22.71	22.06	33.00	PASS
Band7	10MHz	QPSK	20800	25RB#25	22.71	22.06	33.00	PASS
Band7	10MHz	QPSK	20800	50RB#0	22.69	22.04	33.00	PASS
Band7	10MHz	QPSK	21100	1RB#0	23.72	23.07	33.00	PASS
Band7	10MHz	QPSK	21100	1RB#24	23.79	23.14	33.00	PASS
Band7	10MHz	QPSK	21100	1RB#49	23.62	22.97	33.00	PASS
Band7	10MHz	QPSK	21100	25RB#0	22.82	22.17	33.00	PASS
Band7	10MHz	QPSK	21100	25RB#12	22.78	22.13	33.00	PASS
Band7	10MHz	QPSK	21100	25RB#25	22.77	22.12	33.00	PASS
Band7	10MHz	QPSK	21100	50RB#0	22.81	22.16	33.00	PASS
Band7	10MHz	QPSK	21400	1RB#0	23.59	22.94	33.00	PASS
Band7	10MHz	QPSK	21400	1RB#24	23.68	23.03	33.00	PASS
Band7	10MHz	QPSK	21400	1RB#49	23.49	22.84	33.00	PASS
Band7	10MHz	QPSK	21400	25RB#0	22.72	22.07	33.00	PASS
Band7	10MHz	QPSK	21400	25RB#12	22.67	22.02	33.00	PASS
Band7	10MHz	QPSK	21400	25RB#25	22.65	22.00	33.00	PASS
Band7	10MHz	QPSK	21400	50RB#0	22.67	22.02	33.00	PASS
Band7	10MHz	16QAM	20800	1RB#0	22.69	22.04	33.00	PASS
Band7	10MHz	16QAM	20800	1RB#24	22.87	22.22	33.00	PASS
Band7	10MHz	16QAM	20800	1RB#49	22.82	22.17	33.00	PASS
Band7	10MHz	16QAM	20800	25RB#0	21.62	20.97	33.00	PASS
Band7	10MHz	16QAM	20800	25RB#12	21.65	21.00	33.00	PASS
Band7	10MHz	16QAM	20800	25RB#25	21.66	21.01	33.00	PASS
Band7	10MHz	16QAM	20800	50RB#0	21.65	21.00	33.00	PASS
Band7	10MHz	16QAM	21100	1RB#0	22.80	22.15	33.00	PASS
Band7	10MHz	16QAM	21100	1RB#24	22.89	22.24	33.00	PASS
Band7	10MHz	16QAM	21100	1RB#49	22.78	22.13	33.00	PASS
Band7	10MHz	16QAM	21100	25RB#0	21.73	21.08	33.00	PASS
Band7	10MHz	16QAM	21100	25RB#12	21.70	21.05	33.00	PASS
Band7	10MHz	16QAM	21100	25RB#25	21.70	21.05	33.00	PASS
Band7	10MHz	16QAM	21100	50RB#0	21.73	21.08	33.00	PASS
Band7	10MHz	16QAM	21400	1RB#0	22.70	22.05	33.00	PASS
Band7	10MHz	16QAM	21400	1RB#24	22.75	22.10	33.00	PASS
Band7	10MHz	16QAM	21400	1RB#49	22.59	21.94	33.00	PASS
Band7	10MHz	16QAM	21400	25RB#0	21.61	20.96	33.00	PASS

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Report No: JYTSZ-R12-2200350

Band7	10MHz	16QAM	21400	25RB#12	21.63	20.98	33.00	PASS
Band7	10MHz	16QAM	21400	25RB#25	21.60	20.95	33.00	PASS
Band7	10MHz	16QAM	21400	50RB#0	21.61	20.96	33.00	PASS
Band7	15MHz	QPSK	20825	1RB#0	23.50	22.85	33.00	PASS
Band7	15MHz	QPSK	20825	1RB#38	23.68	23.03	33.00	PASS
Band7	15MHz	QPSK	20825	1RB#74	23.60	22.95	33.00	PASS
Band7	15MHz	QPSK	20825	36RB#0	22.64	21.99	33.00	PASS
Band7	15MHz	QPSK	20825	36RB#18	22.68	22.03	33.00	PASS
Band7	15MHz	QPSK	20825	36RB#39	22.72	22.07	33.00	PASS
Band7	15MHz	QPSK	20825	75RB#0	22.69	22.04	33.00	PASS
Band7	15MHz	QPSK	21100	1RB#0	23.68	23.03	33.00	PASS
Band7	15MHz	QPSK	21100	1RB#38	23.69	23.04	33.00	PASS
Band7	15MHz	QPSK	21100	1RB#74	23.56	22.91	33.00	PASS
Band7	15MHz	QPSK	21100	36RB#0	22.76	22.11	33.00	PASS
Band7	15MHz	QPSK	21100	36RB#18	22.74	22.09	33.00	PASS
Band7	15MHz	QPSK	21100	36RB#39	22.71	22.06	33.00	PASS
Band7	15MHz	QPSK	21100	75RB#0	22.76	22.11	33.00	PASS
Band7	15MHz	QPSK	21375	1RB#0	23.60	22.95	33.00	PASS
Band7	15MHz	QPSK	21375	1RB#38	23.59	22.94	33.00	PASS
Band7	15MHz	QPSK	21375	1RB#74	23.42	22.77	33.00	PASS
Band7	15MHz	QPSK	21375	36RB#0	22.68	22.03	33.00	PASS
Band7	15MHz	QPSK	21375	36RB#18	22.65	22.00	33.00	PASS
Band7	15MHz	QPSK	21375	36RB#39	22.61	21.96	33.00	PASS
Band7	15MHz	QPSK	21375	75RB#0	22.64	21.99	33.00	PASS
Band7	15MHz	16QAM	20825	1RB#0	22.69	22.04	33.00	PASS
Band7	15MHz	16QAM	20825	1RB#38	22.77	22.12	33.00	PASS
Band7	15MHz	16QAM	20825	1RB#74	22.69	22.04	33.00	PASS
Band7	15MHz	16QAM	20825	36RB#0	21.63	20.98	33.00	PASS
Band7	15MHz	16QAM	20825	36RB#18	21.68	21.03	33.00	PASS
Band7	15MHz	16QAM	20825	36RB#39	21.70	21.05	33.00	PASS
Band7	15MHz	16QAM	20825	75RB#0	21.67	21.02	33.00	PASS
Band7	15MHz	16QAM	21100	1RB#0	22.72	22.07	33.00	PASS
Band7	15MHz	16QAM	21100	1RB#38	22.75	22.10	33.00	PASS
Band7	15MHz	16QAM	21100	1RB#74	22.70	22.05	33.00	PASS
Band7	15MHz	16QAM	21100	36RB#0	21.72	21.07	33.00	PASS
Band7	15MHz	16QAM	21100	36RB#18	21.69	21.04	33.00	PASS
Band7	15MHz	16QAM	21100	36RB#39	21.66	21.01	33.00	PASS
Band7	15MHz	16QAM	21100	75RB#0	21.67	21.02	33.00	PASS
Band7	15MHz	16QAM	21375	1RB#0	22.75	22.10	33.00	PASS
Band7	15MHz	16QAM	21375	1RB#38	22.80	22.15	33.00	PASS
Band7	15MHz	16QAM	21375	1RB#74	22.53	21.88	33.00	PASS
Band7	15MHz	16QAM	21375	36RB#0	21.65	21.00	33.00	PASS
Band7	15MHz	16QAM	21375	36RB#18	21.61	20.96	33.00	PASS
Band7	15MHz	16QAM	21375	36RB#39	21.61	20.96	33.00	PASS

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Report No: JYTSZ-R12-2200350

Band7	15MHz	16QAM	21375	75RB#0	21.59	20.94	33.00	PASS
Band7	20MHz	QPSK	20850	1RB#0	23.45	22.80	33.00	PASS
Band7	20MHz	QPSK	20850	1RB#49	23.75	23.10	33.00	PASS
Band7	20MHz	QPSK	20850	1RB#99	23.56	22.91	33.00	PASS
Band7	20MHz	QPSK	20850	50RB#0	22.71	22.06	33.00	PASS
Band7	20MHz	QPSK	20850	50RB#25	22.73	22.08	33.00	PASS
Band7	20MHz	QPSK	20850	50RB#50	22.75	22.10	33.00	PASS
Band7	20MHz	QPSK	20850	100RB#0	22.70	22.05	33.00	PASS
Band7	20MHz	QPSK	21100	1RB#0	23.61	22.96	33.00	PASS
Band7	20MHz	QPSK	21100	1RB#49	23.75	23.10	33.00	PASS
Band7	20MHz	QPSK	21100	1RB#99	23.46	22.81	33.00	PASS
Band7	20MHz	QPSK	21100	50RB#0	22.78	22.13	33.00	PASS
Band7	20MHz	QPSK	21100	50RB#25	22.77	22.12	33.00	PASS
Band7	20MHz	QPSK	21100	50RB#50	22.70	22.05	33.00	PASS
Band7	20MHz	QPSK	21100	100RB#0	22.70	22.05	33.00	PASS
Band7	20MHz	QPSK	21350	1RB#0	23.57	22.92	33.00	PASS
Band7	20MHz	QPSK	21350	1RB#49	23.67	23.02	33.00	PASS
Band7	20MHz	QPSK	21350	1RB#99	23.36	22.71	33.00	PASS
Band7	20MHz	QPSK	21350	50RB#0	22.73	22.08	33.00	PASS
Band7	20MHz	QPSK	21350	50RB#25	22.70	22.05	33.00	PASS
Band7	20MHz	QPSK	21350	50RB#50	22.62	21.97	33.00	PASS
Band7	20MHz	QPSK	21350	100RB#0	22.65	22.00	33.00	PASS
Band7	20MHz	16QAM	20850	1RB#0	22.65	22.00	33.00	PASS
Band7	20MHz	16QAM	20850	1RB#49	22.95	22.30	33.00	PASS
Band7	20MHz	16QAM	20850	1RB#99	22.70	22.05	33.00	PASS
Band7	20MHz	16QAM	20850	50RB#0	21.67	21.02	33.00	PASS
Band7	20MHz	16QAM	20850	50RB#25	21.66	21.01	33.00	PASS
Band7	20MHz	16QAM	20850	50RB#50	21.69	21.04	33.00	PASS
Band7	20MHz	16QAM	20850	100RB#0	21.65	21.00	33.00	PASS
Band7	20MHz	16QAM	21100	1RB#0	22.68	22.03	33.00	PASS
Band7	20MHz	16QAM	21100	1RB#49	22.85	22.20	33.00	PASS
Band7	20MHz	16QAM	21100	1RB#99	22.67	22.02	33.00	PASS
Band7	20MHz	16QAM	21100	50RB#0	21.70	21.05	33.00	PASS
Band7	20MHz	16QAM	21100	50RB#25	21.72	21.07	33.00	PASS
Band7	20MHz	16QAM	21100	50RB#50	21.63	20.98	33.00	PASS
Band7	20MHz	16QAM	21100	100RB#0	21.65	21.00	33.00	PASS
Band7	20MHz	16QAM	21350	1RB#0	22.82	22.17	33.00	PASS
Band7	20MHz	16QAM	21350	1RB#49	22.85	22.20	33.00	PASS
Band7	20MHz	16QAM	21350	1RB#99	22.61	21.96	33.00	PASS
Band7	20MHz	16QAM	21350	50RB#0	21.67	21.02	33.00	PASS
Band7	20MHz	16QAM	21350	50RB#25	21.64	20.99	33.00	PASS
Band7	20MHz	16QAM	21350	50RB#50	21.55	20.90	33.00	PASS
Band7	20MHz	16QAM	21350	100RB#0	21.59	20.94	33.00	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]

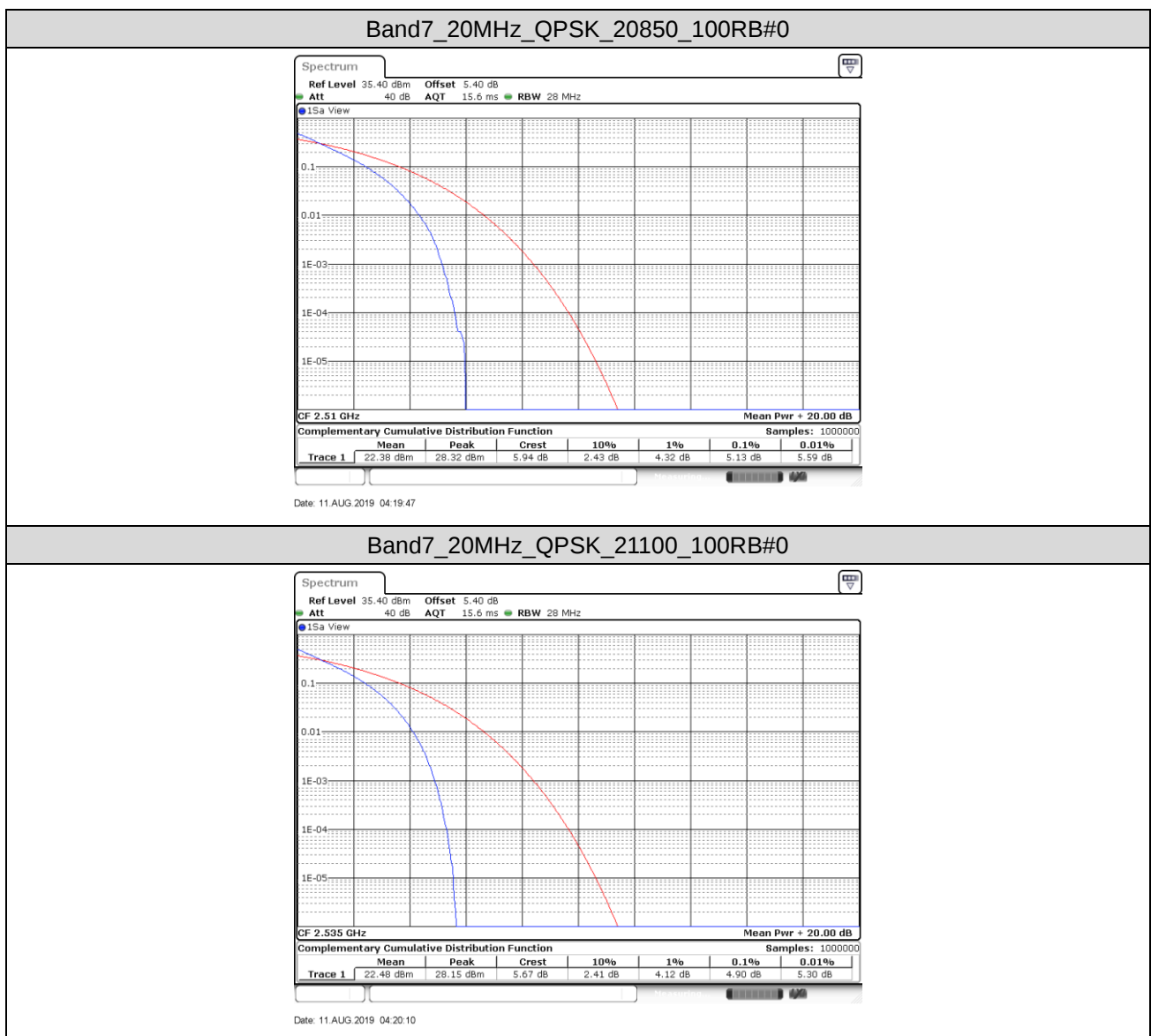
EIRP [dBm] = Conducted Power [dBm] + Gain [dBi]

4. Peak-to-Average Ratio(CCDF)

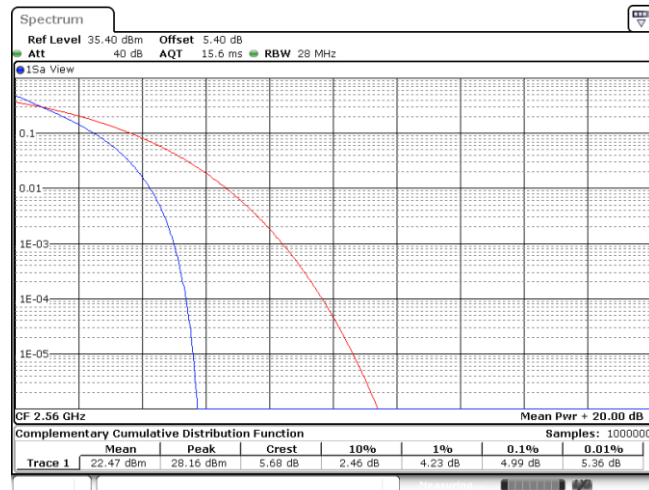
4.1. Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band7	20MHz	QPSK	20850	100RB#0	5.13	13	PASS
Band7	20MHz	QPSK	21100	100RB#0	4.90	13	PASS
Band7	20MHz	QPSK	21350	100RB#0	4.99	13	PASS
Band7	20MHz	16QAM	20850	100RB#0	6.09	13	PASS
Band7	20MHz	16QAM	21100	100RB#0	5.77	13	PASS
Band7	20MHz	16QAM	21350	100RB#0	5.88	13	PASS

4.2. Test Plots

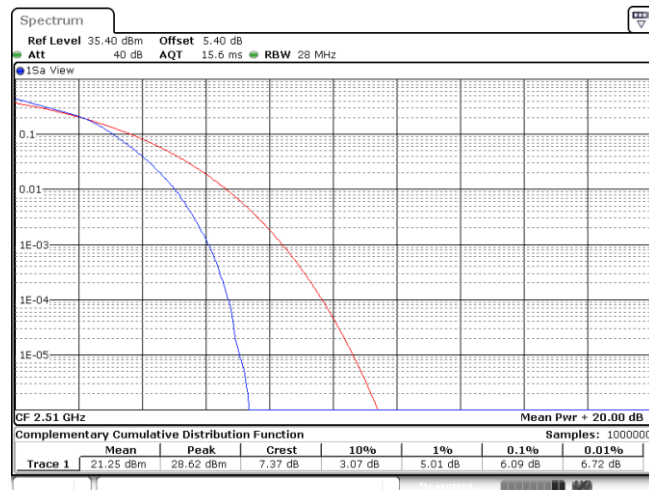


Band7_20MHz_QPSK_21350_100RB#0



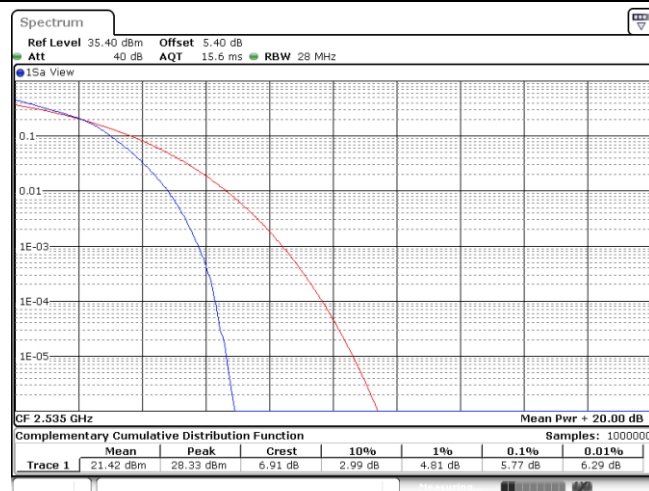
Date: 11 AUG.2019 04:20:33

Band7_20MHz_16QAM_20850_100RB#0



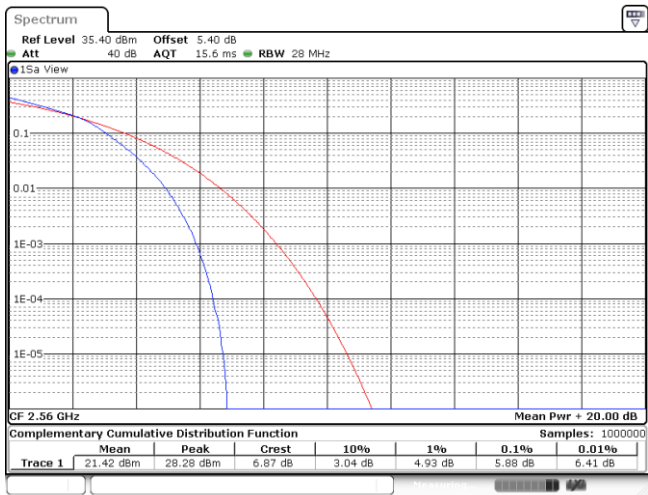
Date: 11 AUG.2019 04:19:58

Band7_20MHz_16QAM_21100_100RB#0



Date: 11 AUG.2019 04:20:21

Band7_20MHz_16QAM_21350_100RB#0



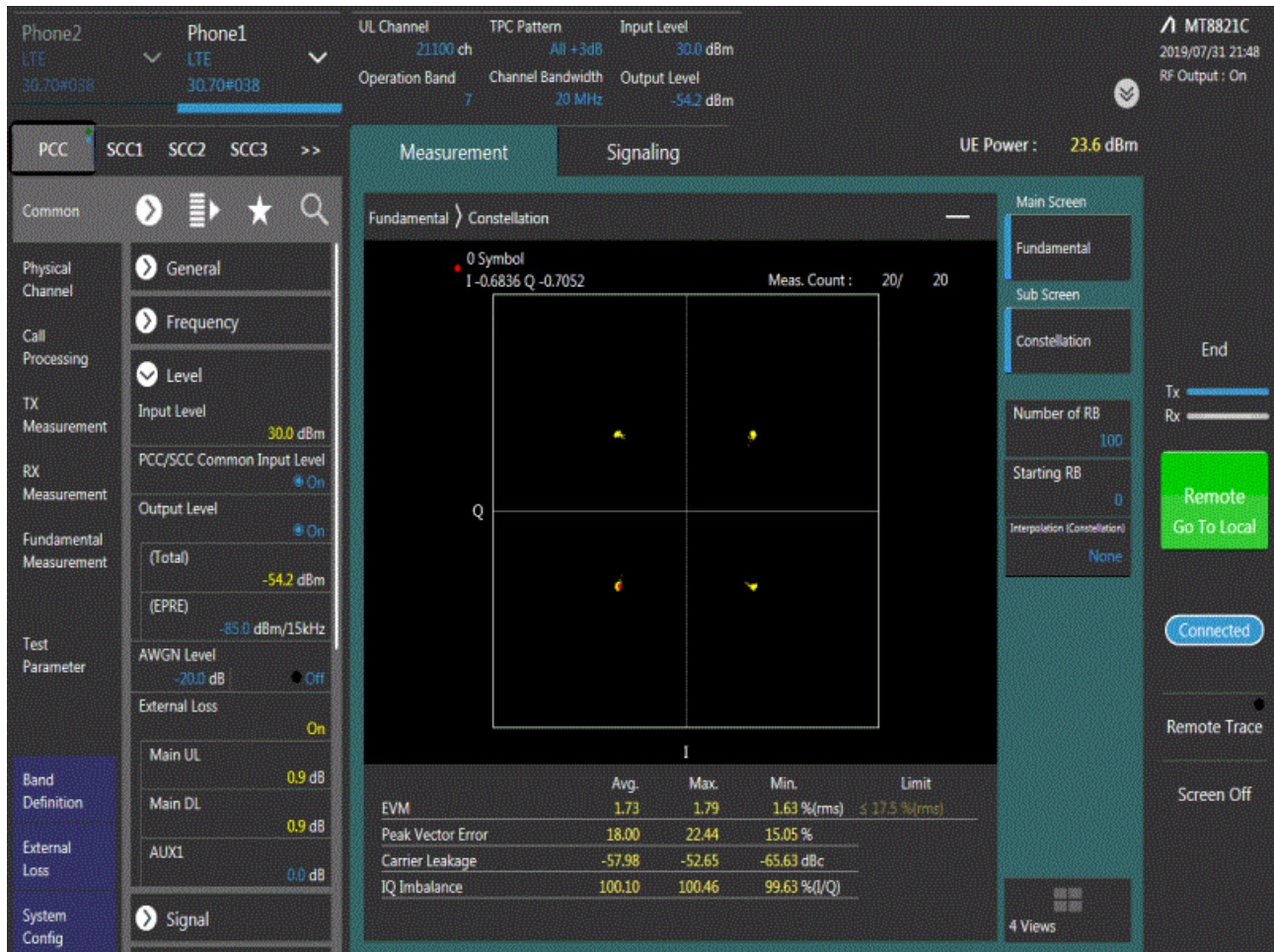
Date: 11.AUG.2019 04:20:44

5. Modulation Characteristics

5.1. Test Band = LTE Band 7

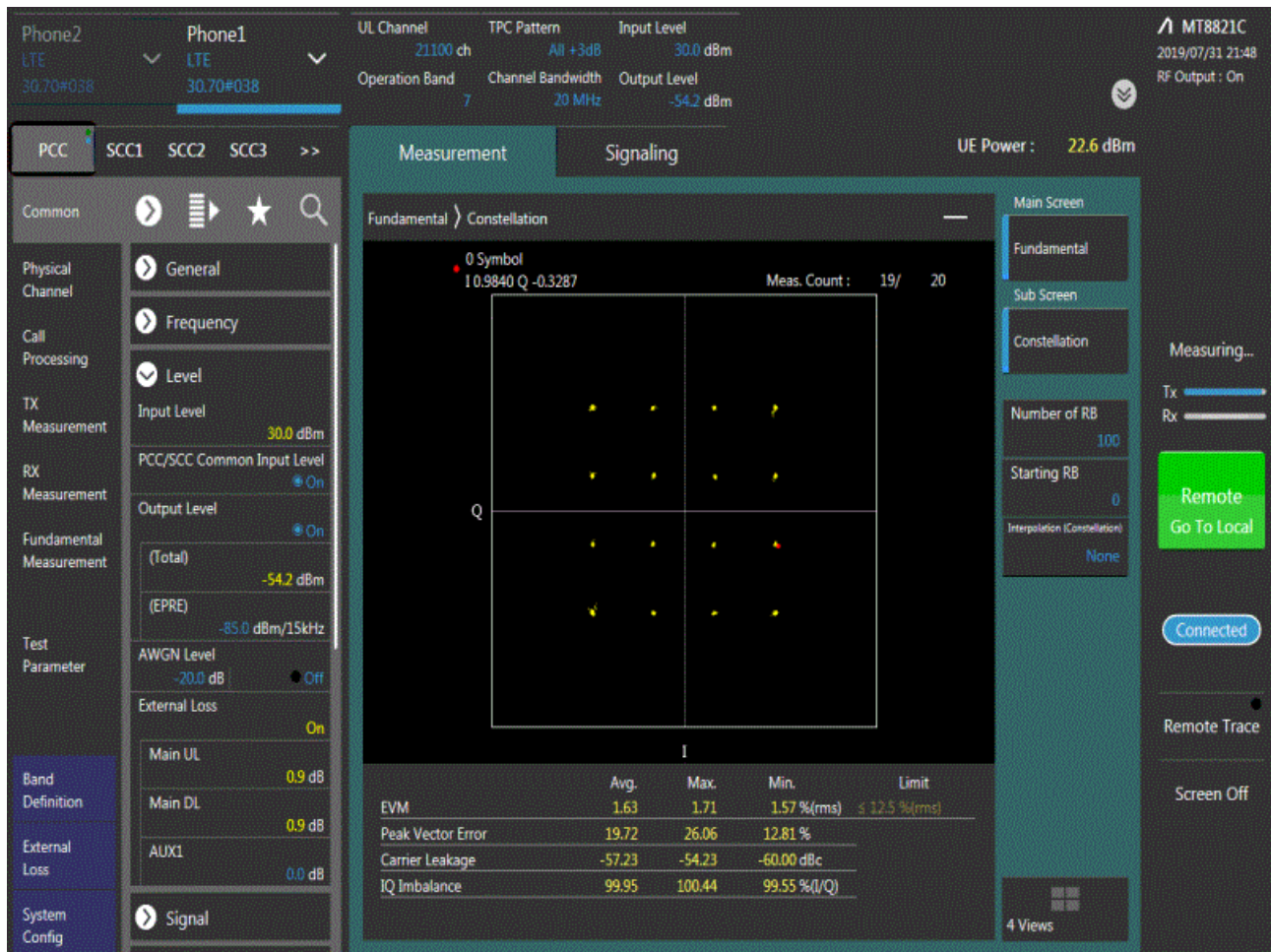
5.2. Test Mode = LTE /TM1 20MHz

5.2.1. Test Channel = MCH



5.3. Test Mode = LTE /TM2 20MHz

5.3.1. Test Channel = MCH



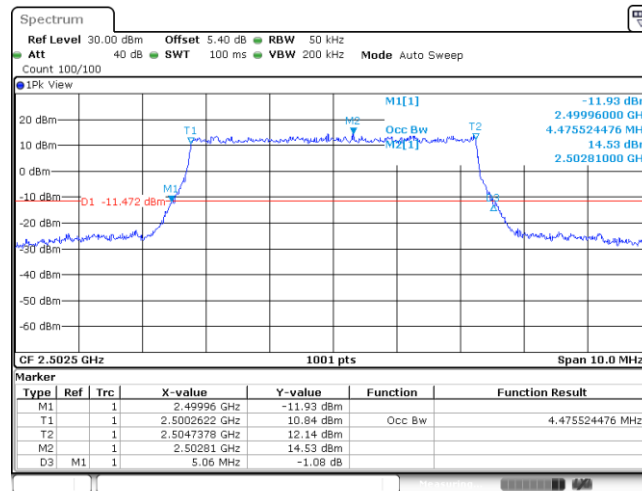
6. 26dB Bandwidth and Occupied Bandwidth

6.1. Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band7	5MHz	QPSK	20775	25RB#0	4.476	5.060	PASS
Band7	5MHz	QPSK	21100	25RB#0	4.476	5.090	PASS
Band7	5MHz	QPSK	21425	25RB#0	4.476	5.080	PASS
Band7	5MHz	16QAM	20775	25RB#0	4.486	5.090	PASS
Band7	5MHz	16QAM	21100	25RB#0	4.496	5.090	PASS
Band7	5MHz	16QAM	21425	25RB#0	4.496	5.100	PASS
Band7	10MHz	QPSK	20800	50RB#0	8.931	9.920	PASS
Band7	10MHz	QPSK	21100	50RB#0	8.931	9.860	PASS
Band7	10MHz	QPSK	21400	50RB#0	8.931	9.900	PASS
Band7	10MHz	16QAM	20800	50RB#0	8.951	9.900	PASS
Band7	10MHz	16QAM	21100	50RB#0	8.931	9.920	PASS
Band7	10MHz	16QAM	21400	50RB#0	8.951	9.940	PASS
Band7	15MHz	QPSK	20825	75RB#0	13.487	15.090	PASS
Band7	15MHz	QPSK	21100	75RB#0	13.487	15.180	PASS
Band7	15MHz	QPSK	21375	75RB#0	13.457	15.060	PASS
Band7	15MHz	16QAM	20825	75RB#0	13.487	15.150	PASS
Band7	15MHz	16QAM	21100	75RB#0	13.487	15.150	PASS
Band7	15MHz	16QAM	21375	75RB#0	13.487	15.090	PASS
Band7	20MHz	QPSK	20850	100RB#0	17.942	19.680	PASS
Band7	20MHz	QPSK	21100	100RB#0	17.902	19.760	PASS
Band7	20MHz	QPSK	21350	100RB#0	17.902	19.760	PASS
Band7	20MHz	16QAM	20850	100RB#0	17.902	19.600	PASS
Band7	20MHz	16QAM	21100	100RB#0	17.902	19.680	PASS
Band7	20MHz	16QAM	21350	100RB#0	17.902	19.760	PASS

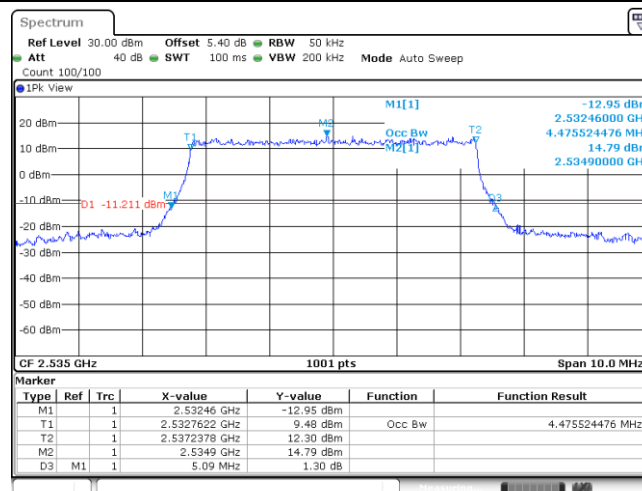
6.2. Test Plots

Band7_5MHz_QPSK_20775_25RB#0



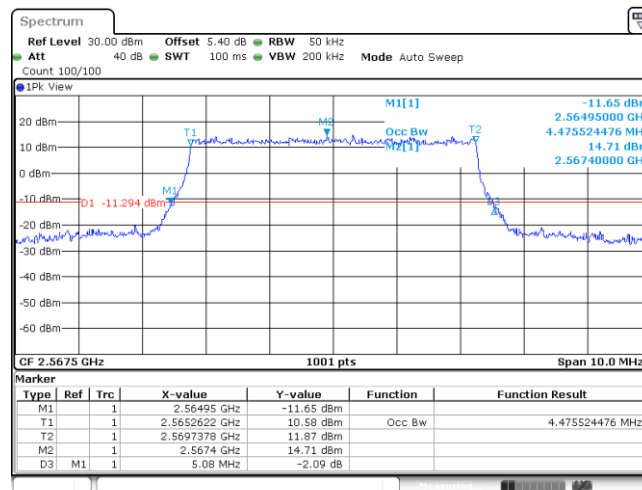
Date: 11 AUG 2019 04:10:03

Band7_5MHz_QPSK_21100_25RB#0



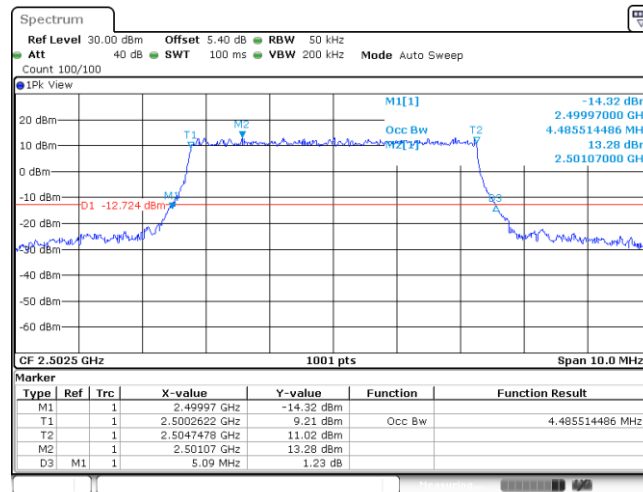
Date: 11 AUG 2019 04:10:44

Band7_5MHz_QPSK_21425_25RB#0



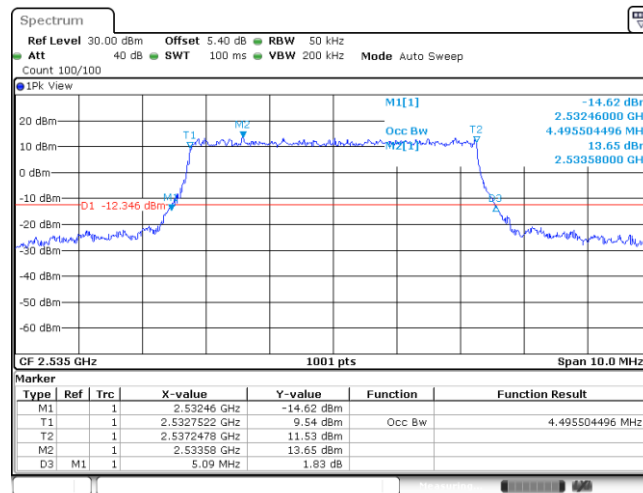
Date: 11 AUG 2019 04:11:24

Band7_5MHz_16QAM_20775_25RB#0



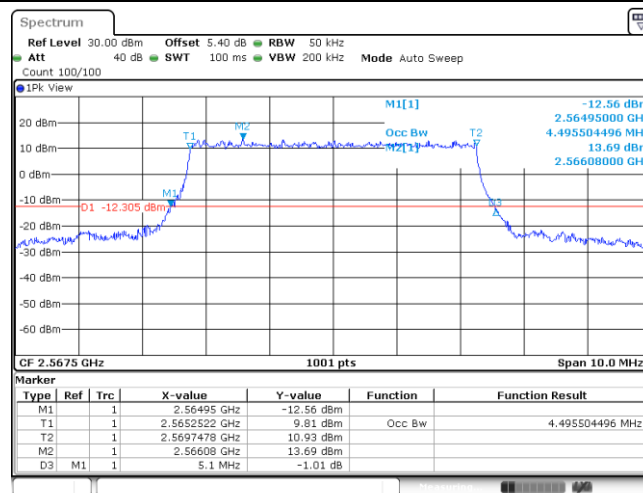
Date: 11 AUG 2019 04:10:23

Band7_5MHz_16QAM_21100_25RB#0



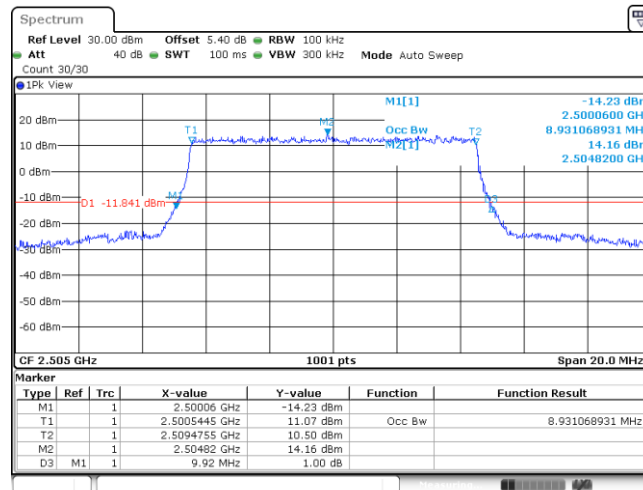
Date: 11 AUG 2019 04:11:03

Band7_5MHz_16QAM_21425_25RB#0



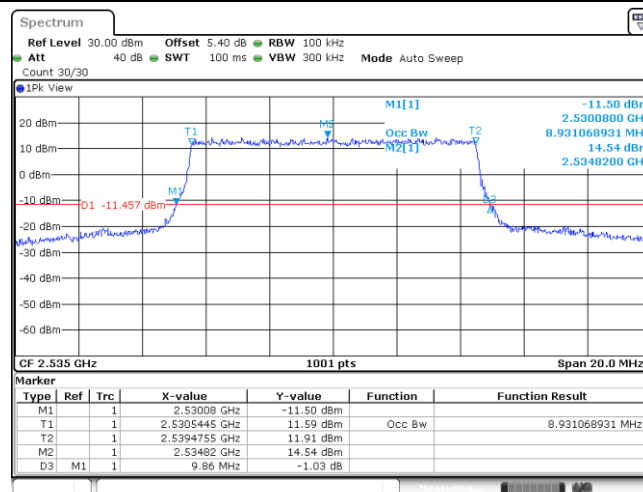
Date: 11 AUG 2019 04:11:44

Band7_10MHz_QPSK_20800_50RB#0



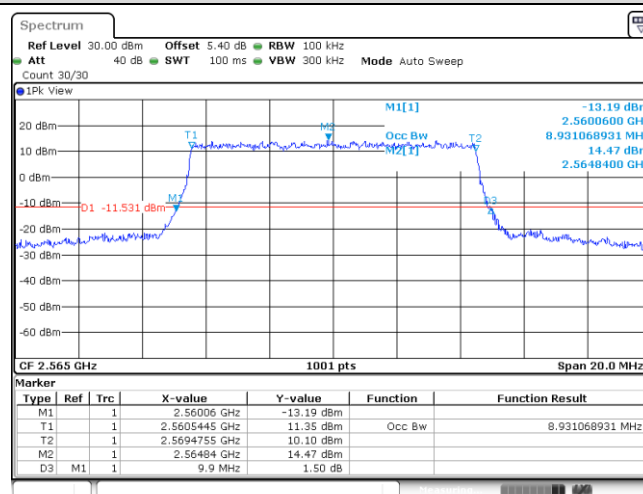
Date: 11 AUG 2019 04:12:02

Band7_10MHz_QPSK_21100_50RB#0



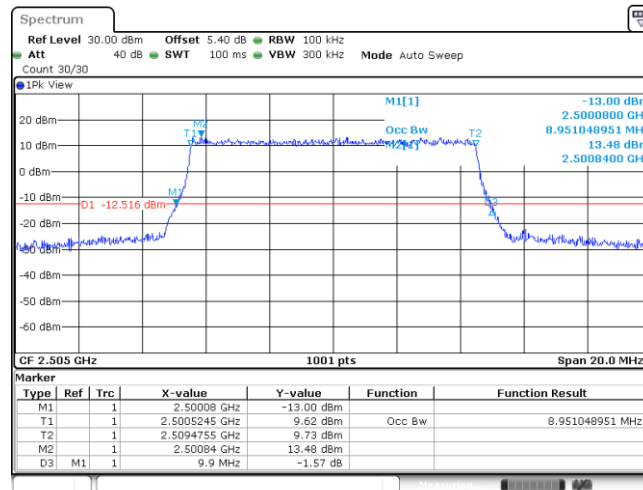
Date: 11 AUG 2019 04:12:28

Band7_10MHz_QPSK_21400_50RB#0



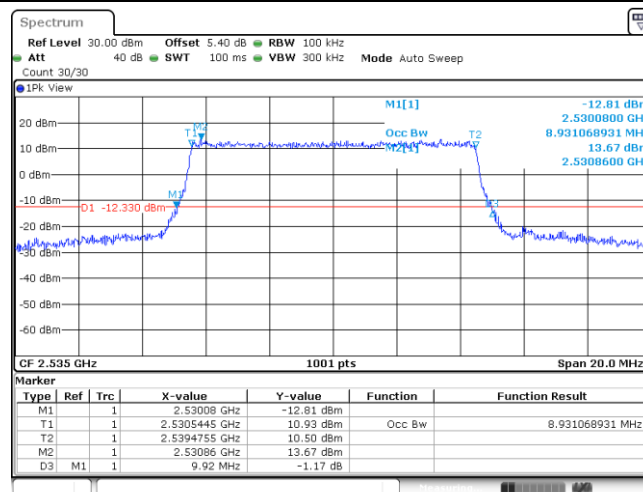
Date: 11 AUG 2019 04:12:54

Band7_10MHz_16QAM_20800_50RB#0



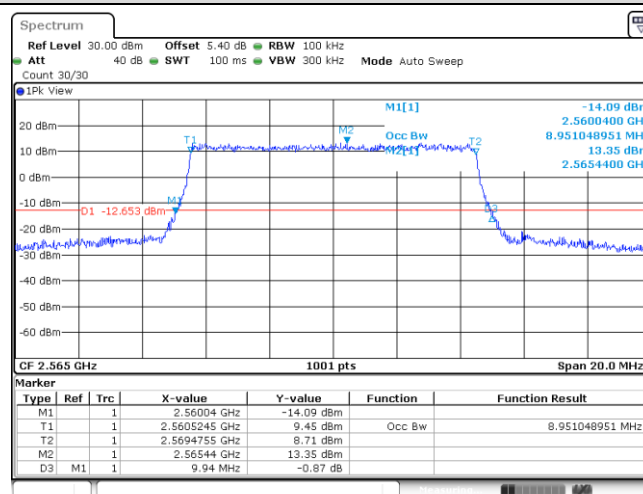
Date: 11 AUG 2019 04:12:14

Band7_10MHz_16QAM_21100_50RB#0



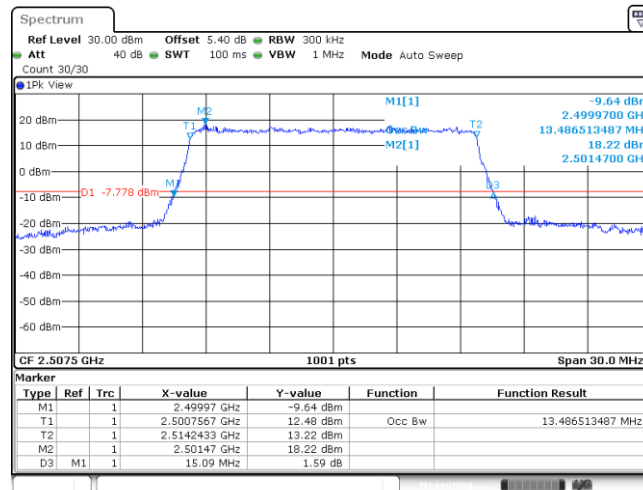
Date: 11 AUG 2019 04:12:40

Band7_10MHz_16QAM_21400_50RB#0



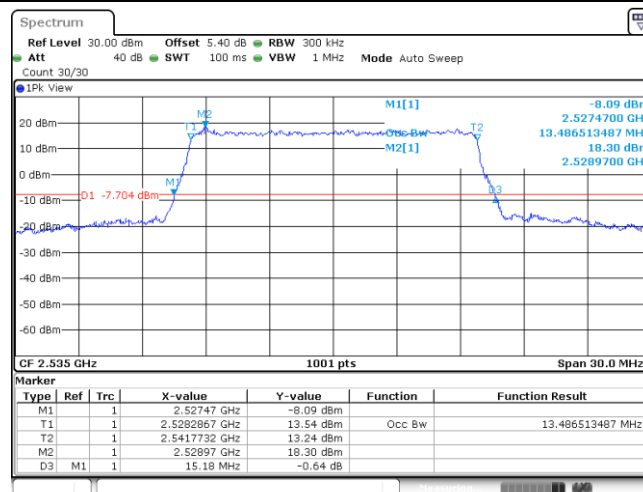
Date: 11 AUG 2019 04:13:07

Band7_15MHz_QPSK_20825_75RB#0



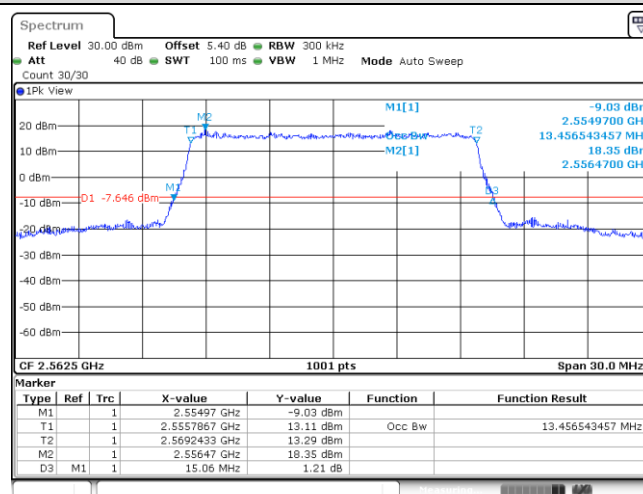
Date: 11 AUG 2019 04:13:24

Band7_15MHz_QPSK_21100_75RB#0



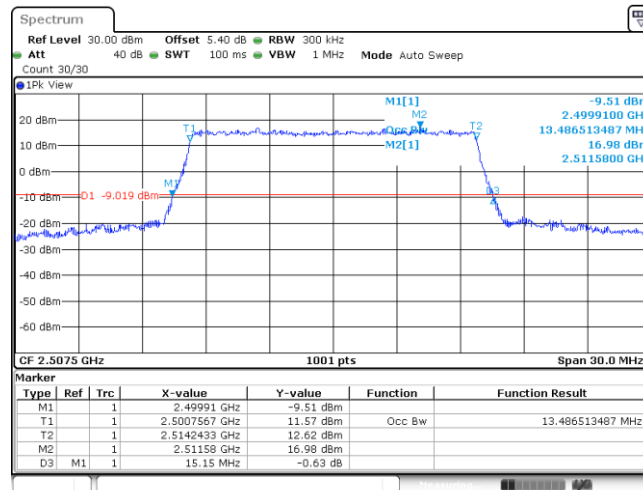
Date: 11 AUG 2019 04:13:50

Band7_15MHz_QPSK_21375_75RB#0



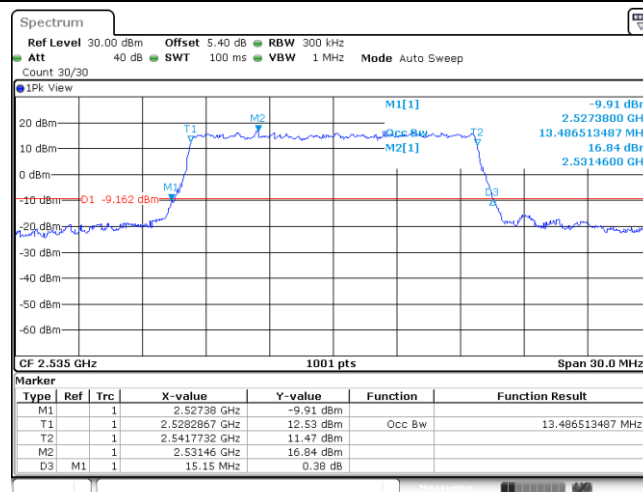
Date: 11 AUG 2019 04:14:16

Band7_15MHz_16QAM_20825_75RB#0



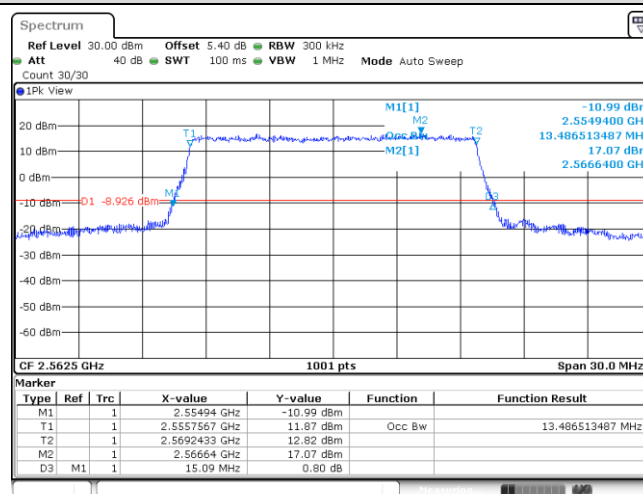
Date: 11 AUG 2019 04:13:37

Band7_15MHz_16QAM_21100_75RB#0



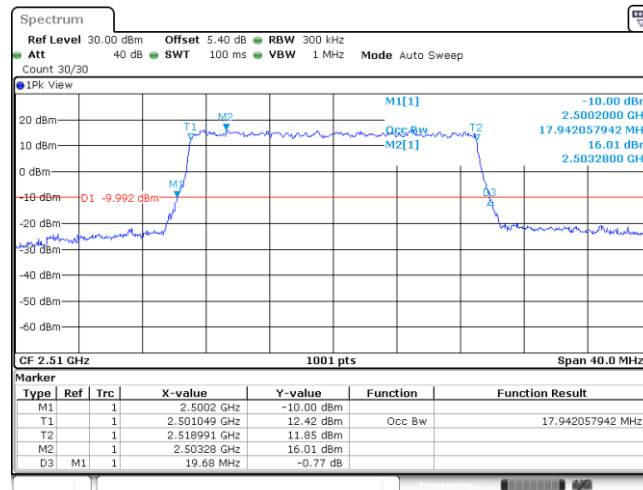
Date: 11 AUG 2019 04:14:03

Band7_15MHz_16QAM_21375_75RB#0



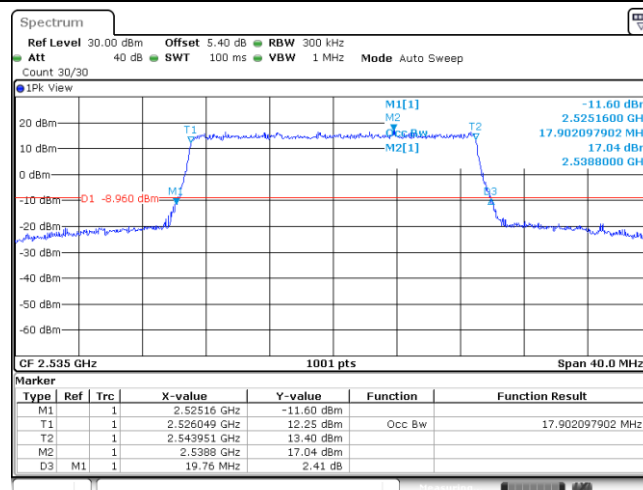
Date: 11 AUG 2019 04:14:29

Band7_20MHz_QPSK_20850_100RB#0



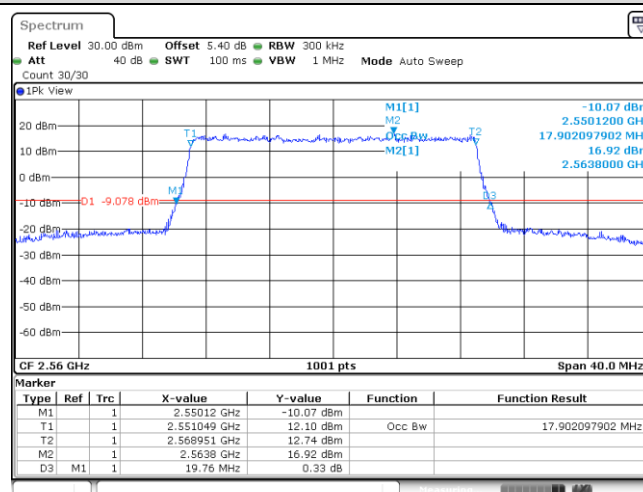
Date: 11 AUG 2019 04:14:47

Band7_20MHz_QPSK_21100_100RB#0



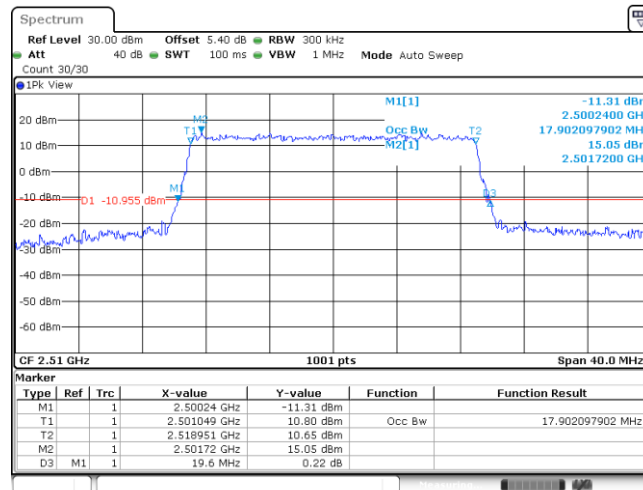
Date: 11 AUG 2019 04:15:14

Band7_20MHz_QPSK_21350_100RB#0



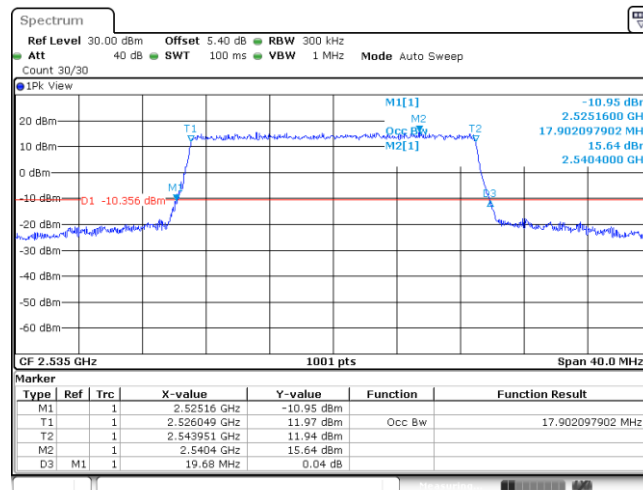
Date: 11 AUG 2019 04:15:40

Band7_20MHz_16QAM_20850_100RB#0



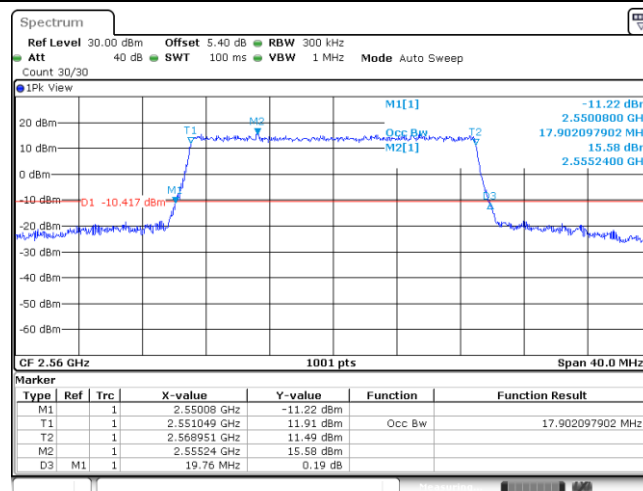
Date: 11 AUG 2019 04:15:00

Band7_20MHz_16QAM_21100_100RB#0



Date: 11 AUG 2019 04:15:27

Band7_20MHz_16QAM_21350_100RB#0

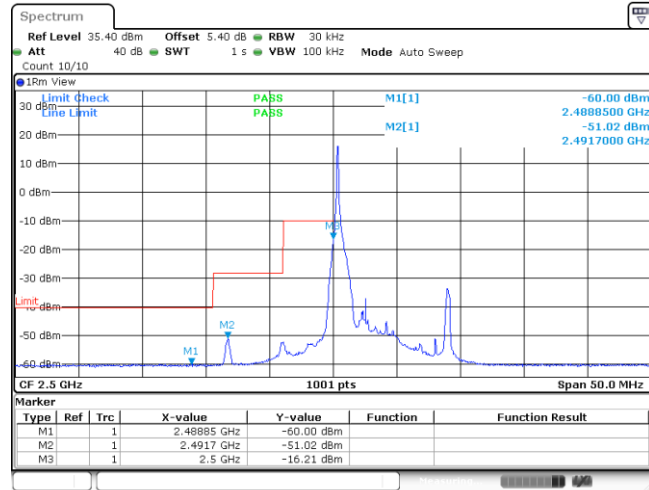


Date: 11 AUG 2019 04:15:52

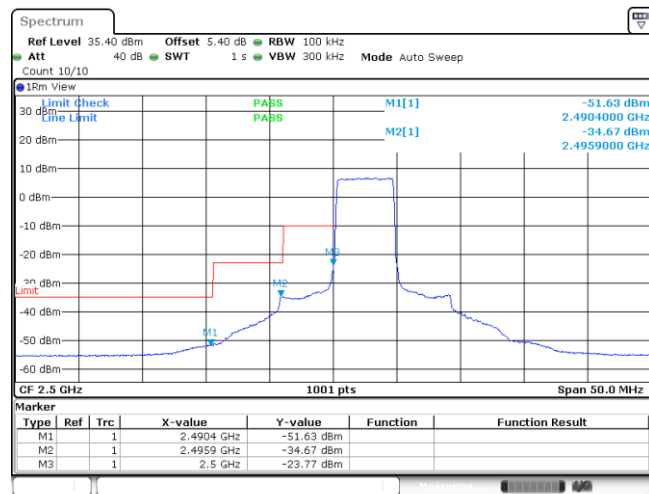
7. Band Edge Compliance

7.1. Test Plots

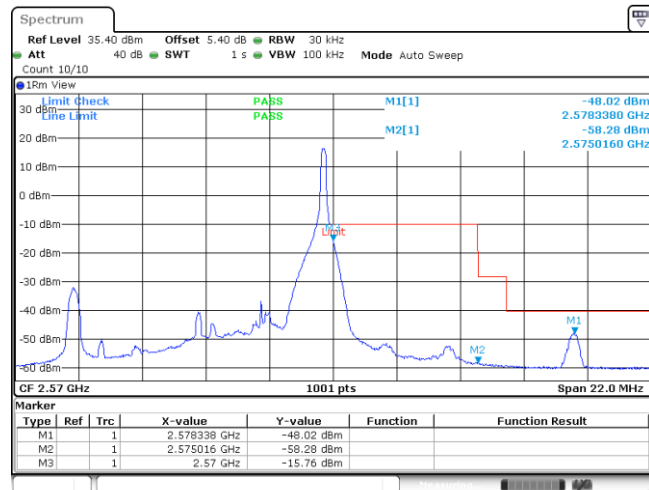
Band7_5MHz_QPSK_20775_1RB#0



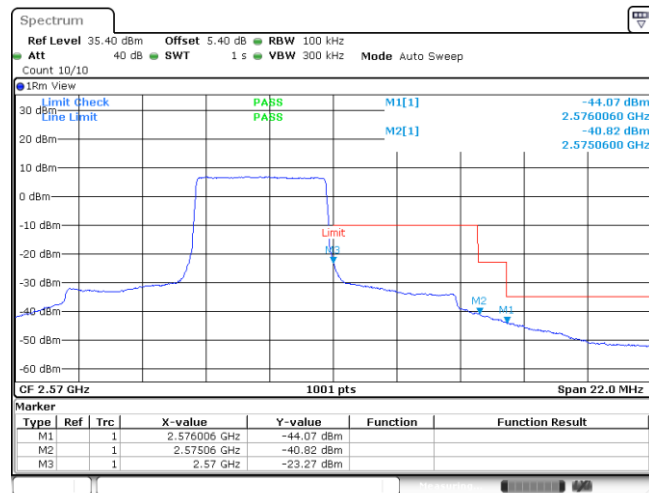
Band7_5MHz_QPSK_20775_25RB#0



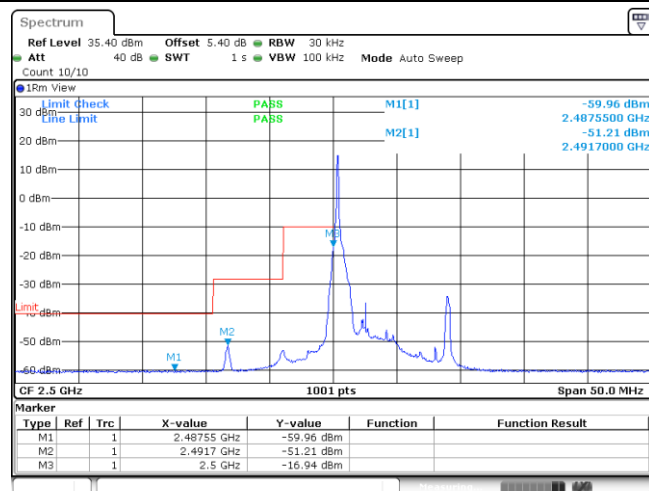
Band7_5MHz_QPSK_21425_1RB#24



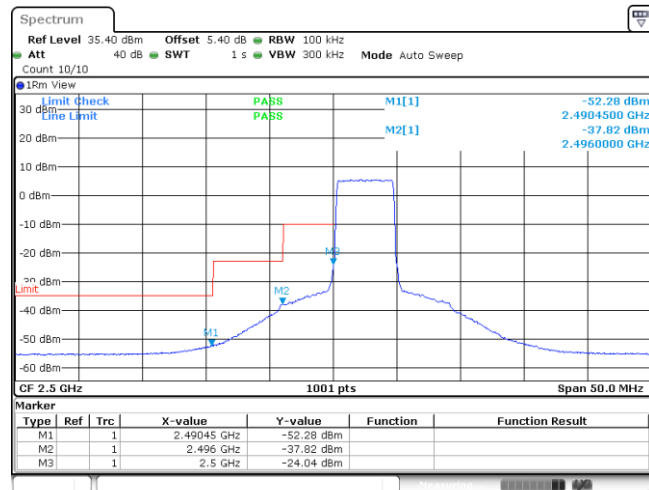
Band7_5MHz_QPSK_21425_25RB#0



Band7_5MHz_16QAM_20775_1RB#0

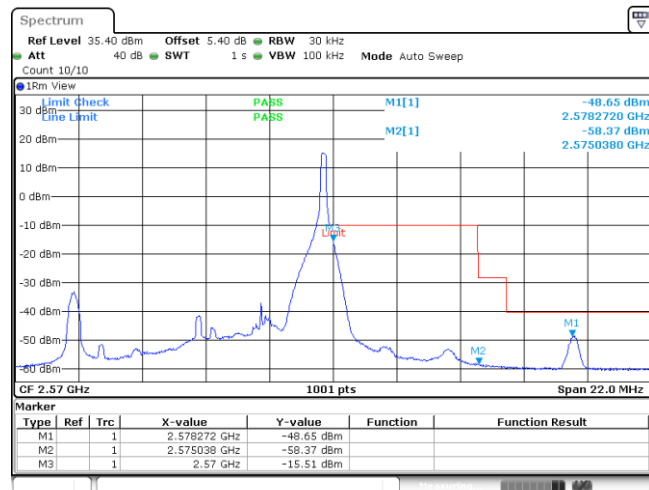


Band7_5MHz_16QAM_20775_25RB#0



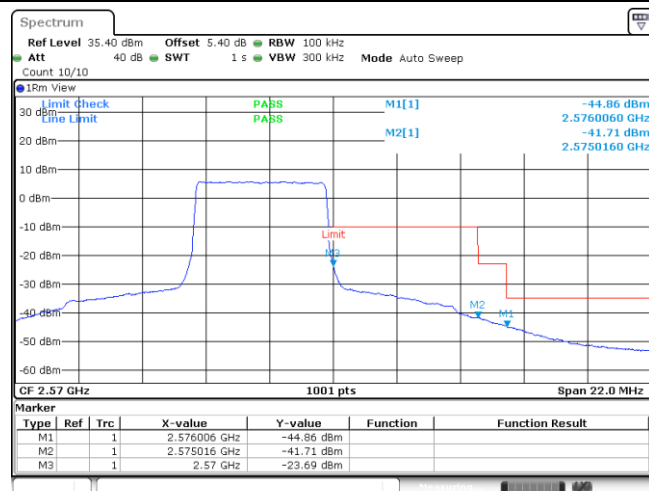
Date: 10 AUG.2019 22:18:17

Band7_5MHz_16QAM_21425_1RB#24



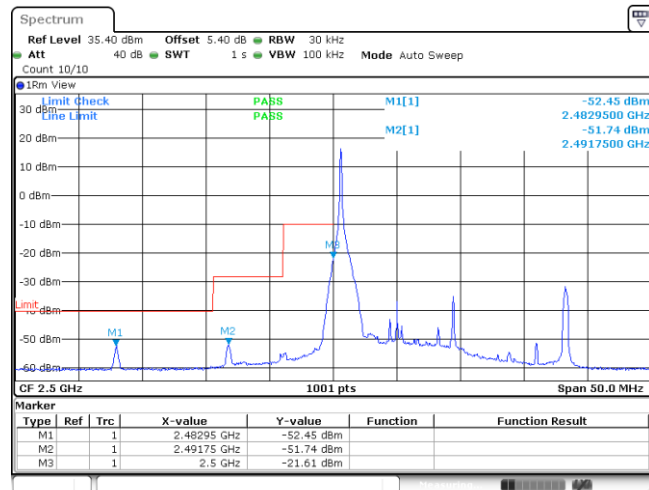
Date: 10 AUG.2019 22:17:33

Band7_5MHz_16QAM_21425_25RB#0

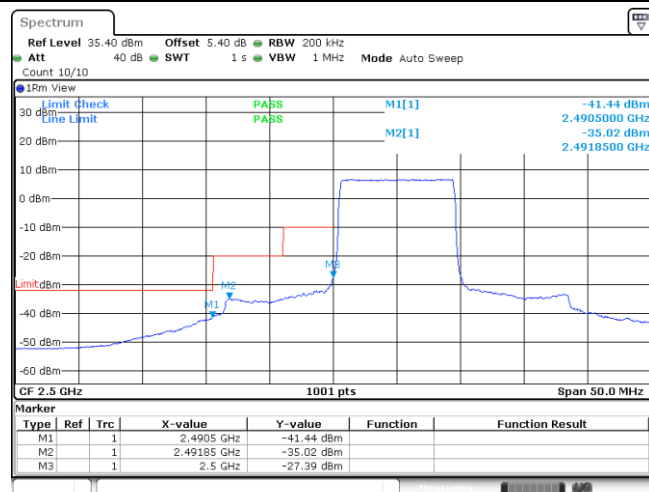


Date: 10 AUG.2019 22:18:58

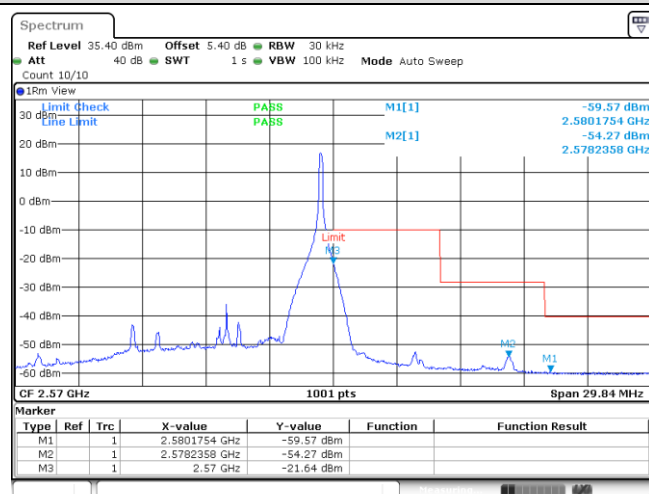
Band7_10MHz_QPSK_20800_1RB#0



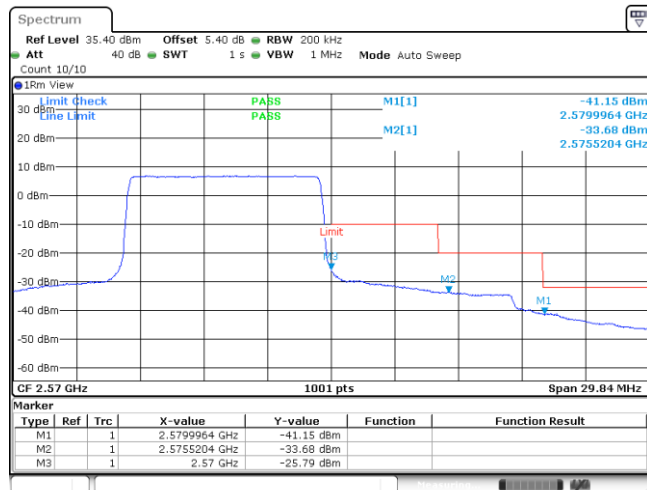
Band7_10MHz_QPSK_20800_50RB#0



Band7_10MHz_QPSK_21400_1RB#49

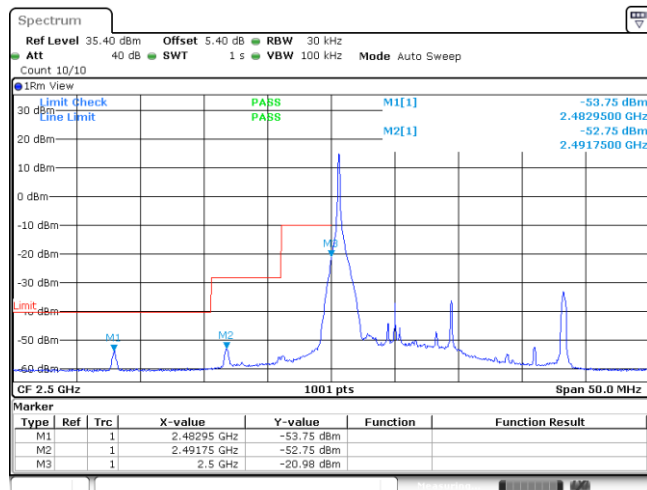


Band7_10MHz_QPSK_21400_50RB#0



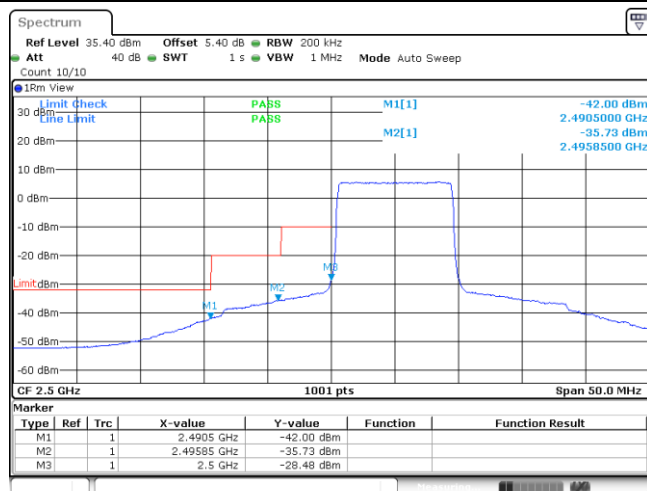
Date: 10 AUG.2019 22:21:34

Band7_10MHz_16QAM_20800_1RB#0



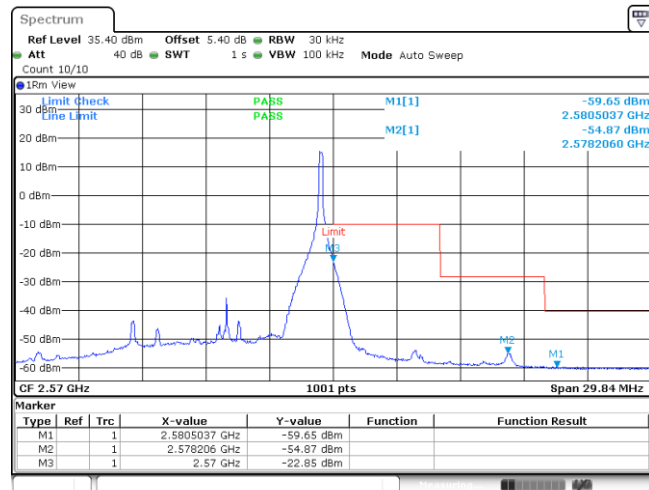
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Band7_10MHz_16QAM_20800_50RB#0

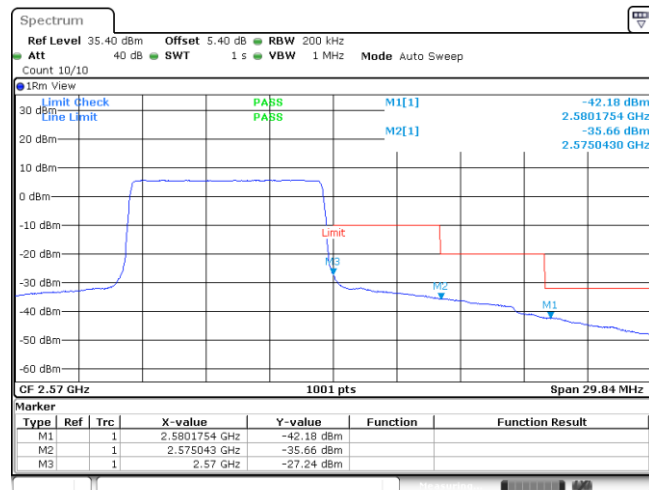


Date: 10 AUG.2019 22:21:13

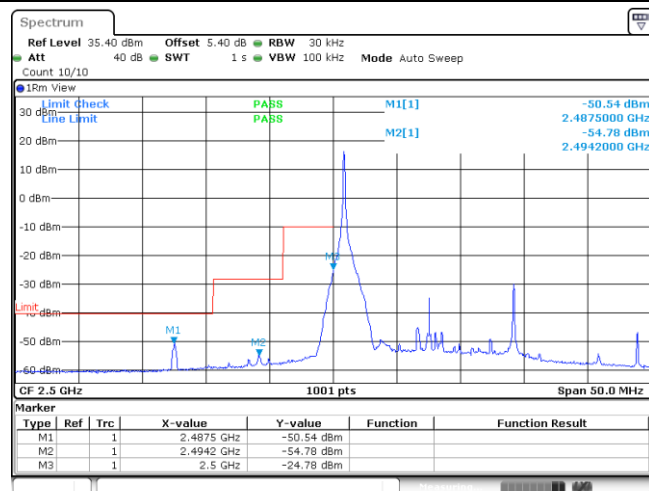
Band7_10MHz_16QAM_21400_1RB#49



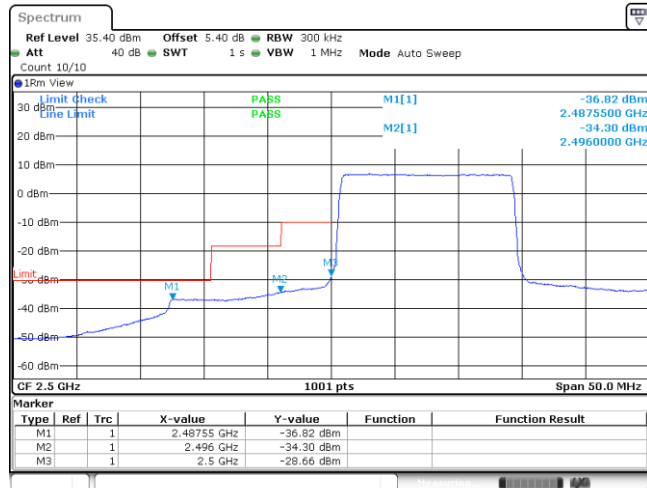
Band7_10MHz_16QAM_21400_50RB#0



Band7_15MHz_QPSK_20825_1RB#0

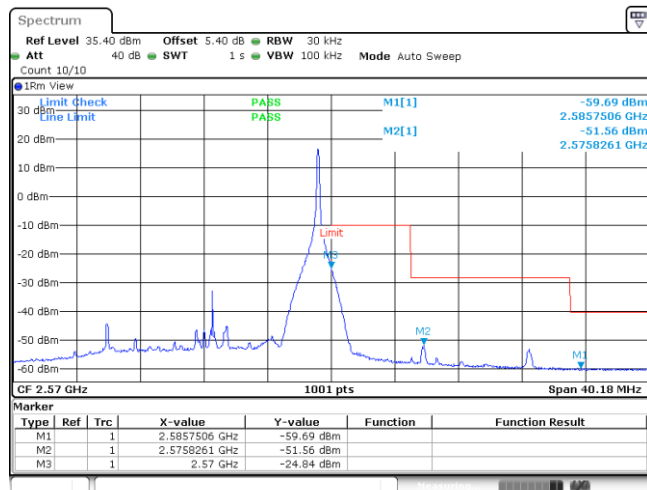


Band7_15MHz_QPSK_20825_75RB#0



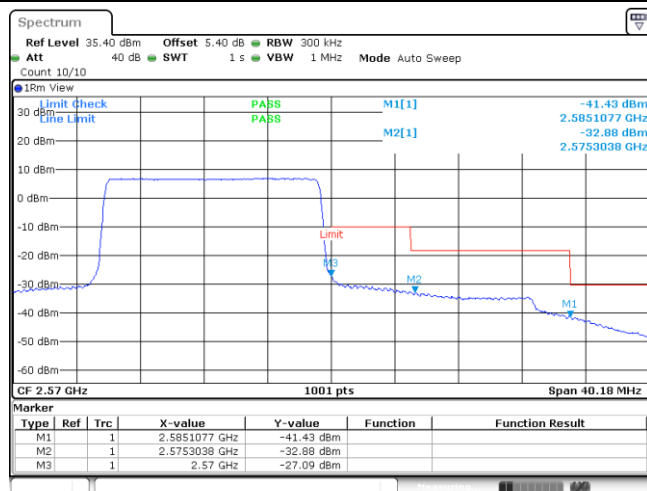
Date: 10 AUG.2019 22:23:48

Band7_15MHz_QPSK_21375_1RB#74



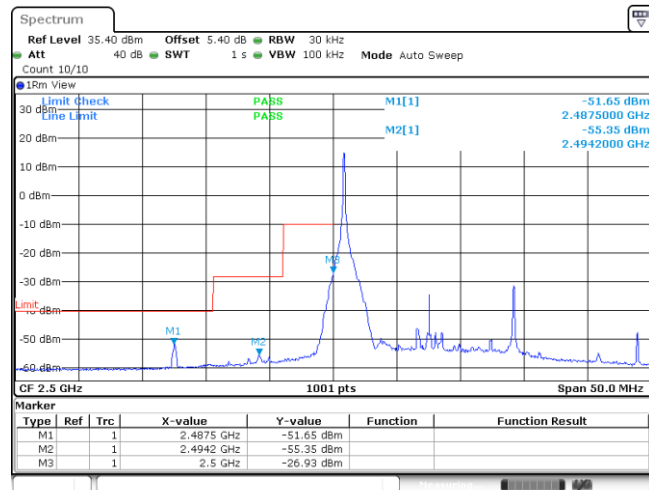
Date: 10 AUG.2019 22:23:03

Band7_15MHz_QPSK_21375_75RB#0



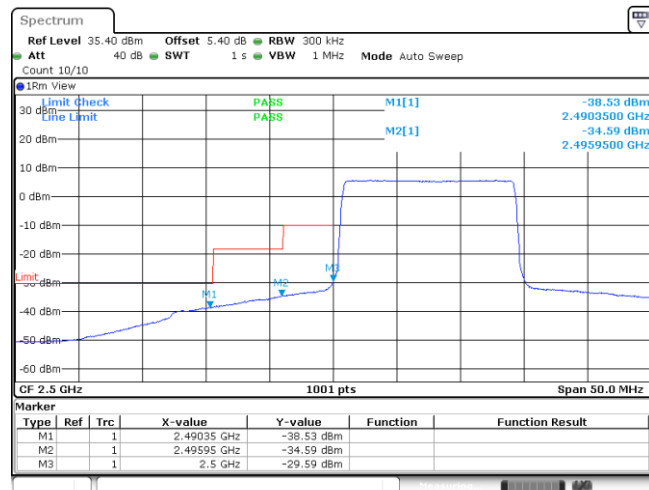
Date: 10 AUG.2019 22:24:29

Band7_15MHz_16QAM_20825_1RB#0



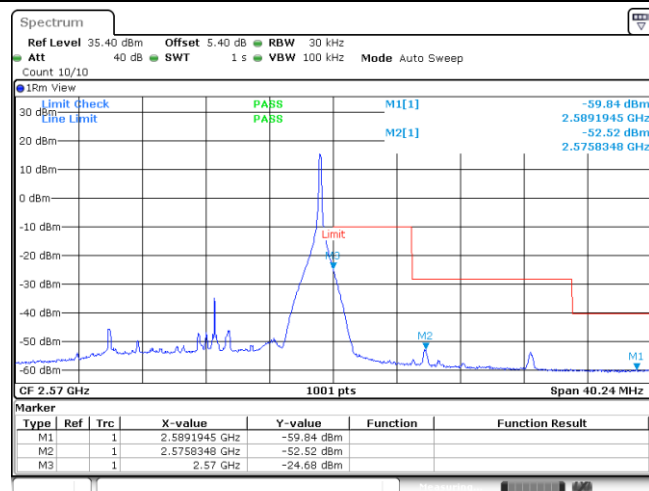
Date: 10 AUG.2019 22:22:39

Band7_15MHz_16QAM_20825_75RB#0



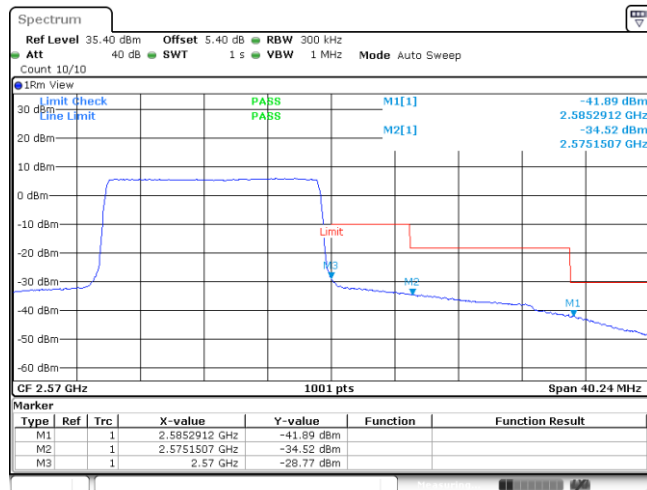
Date: 10 AUG.2019 22:24:09

Band7_15MHz_16QAM_21375_1RB#74



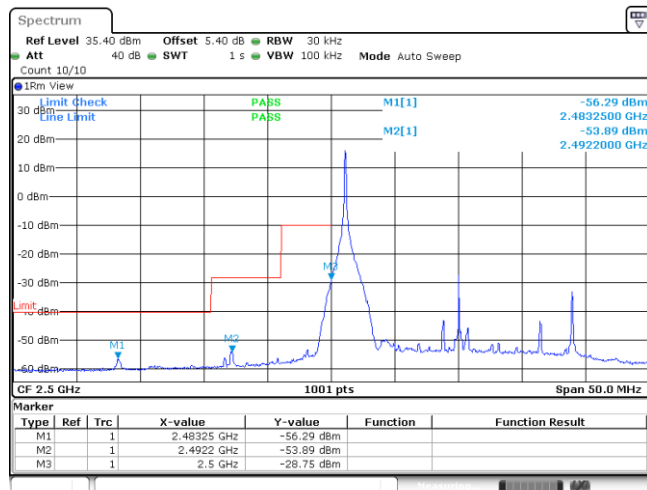
Date: 10 AUG.2019 22:23:24

Band7_15MHz_16QAM_21375_75RB#0



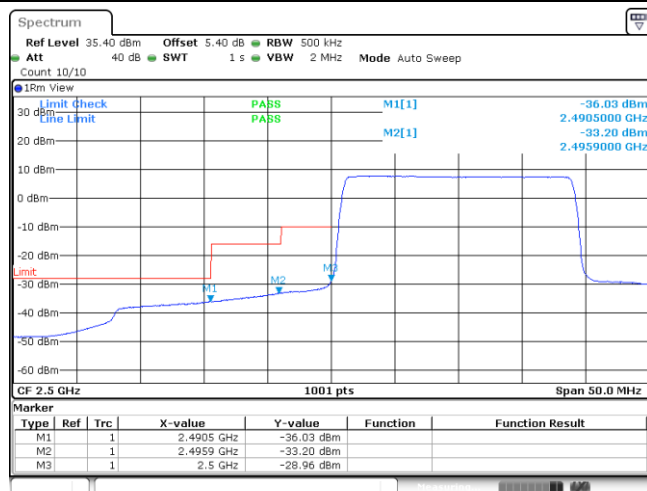
Date: 10 AUG.2019 22:24:49

Band7_20MHz_QPSK_20850_1RB#0



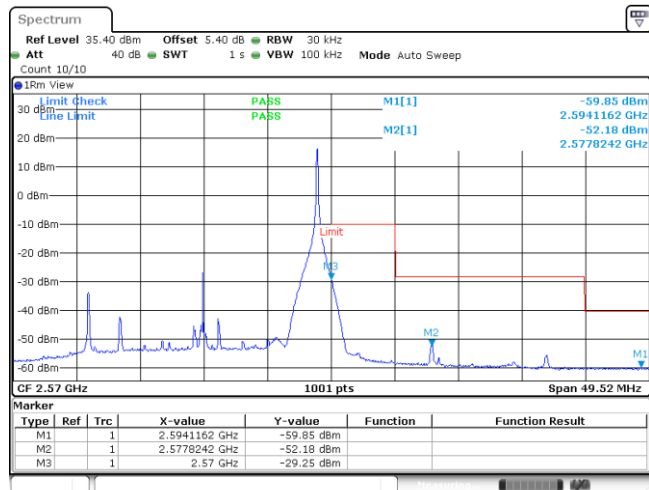
Date: 10 AUG.2019 22:25:14

Band7_20MHz_QPSK_20850_100RB#0

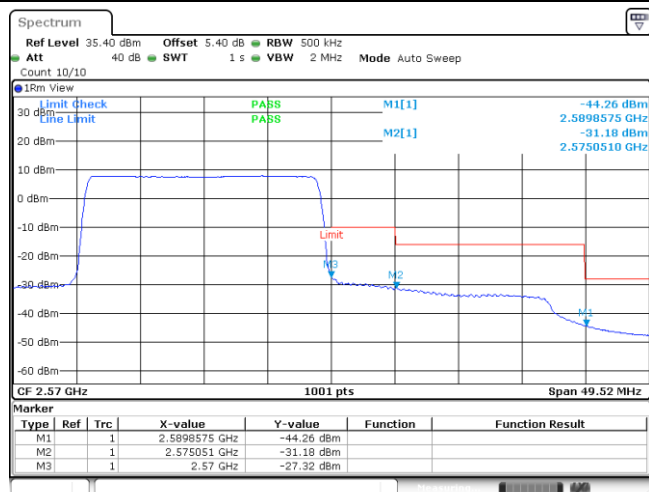


Date: 10 AUG.2019 22:26:44

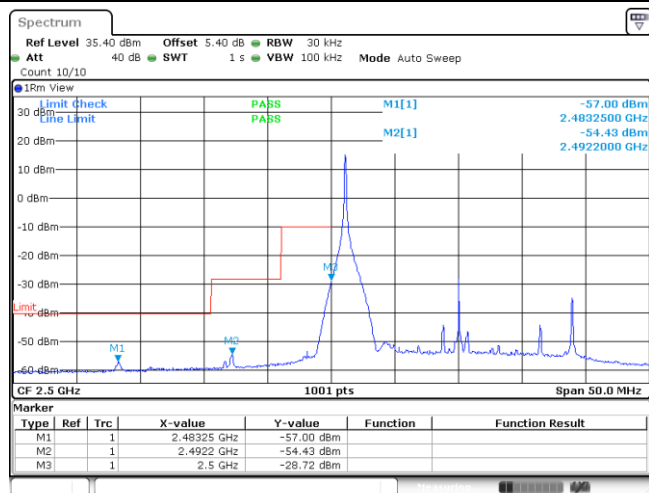
Band7_20MHz_QPSK_21350_1RB#99



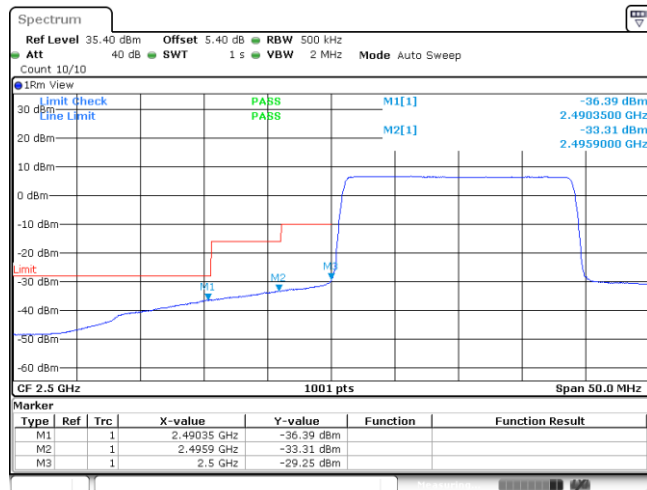
Band7_20MHz_QPSK_21350_100RB#0



Band7_20MHz_16QAM_20850_1RB#0

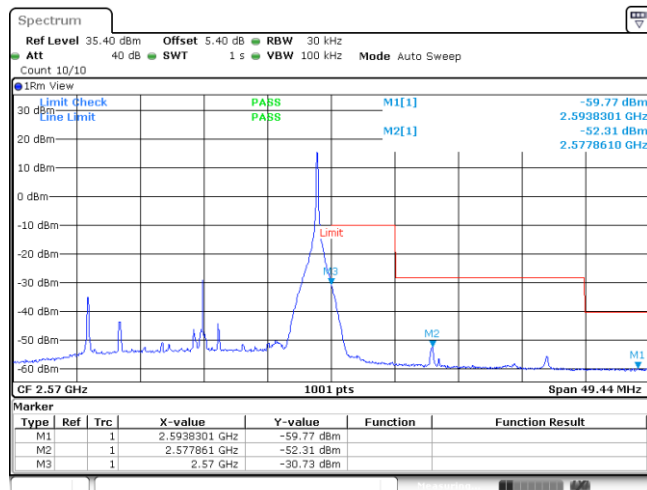


Band7_20MHz_16QAM_20850_100RB#0



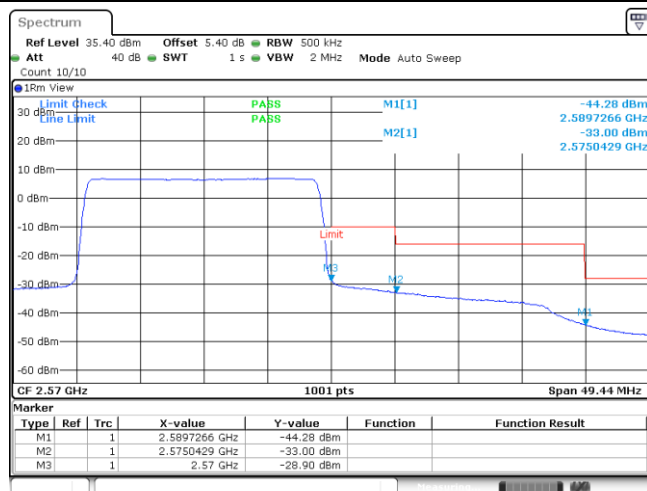
Date: 10 AUG.2019 22:27:04

Band7_20MHz_16QAM_21350_1RB#99



Date: 10 AUG.2019 22:28:19

Band7_20MHz_16QAM_21350_100RB#0



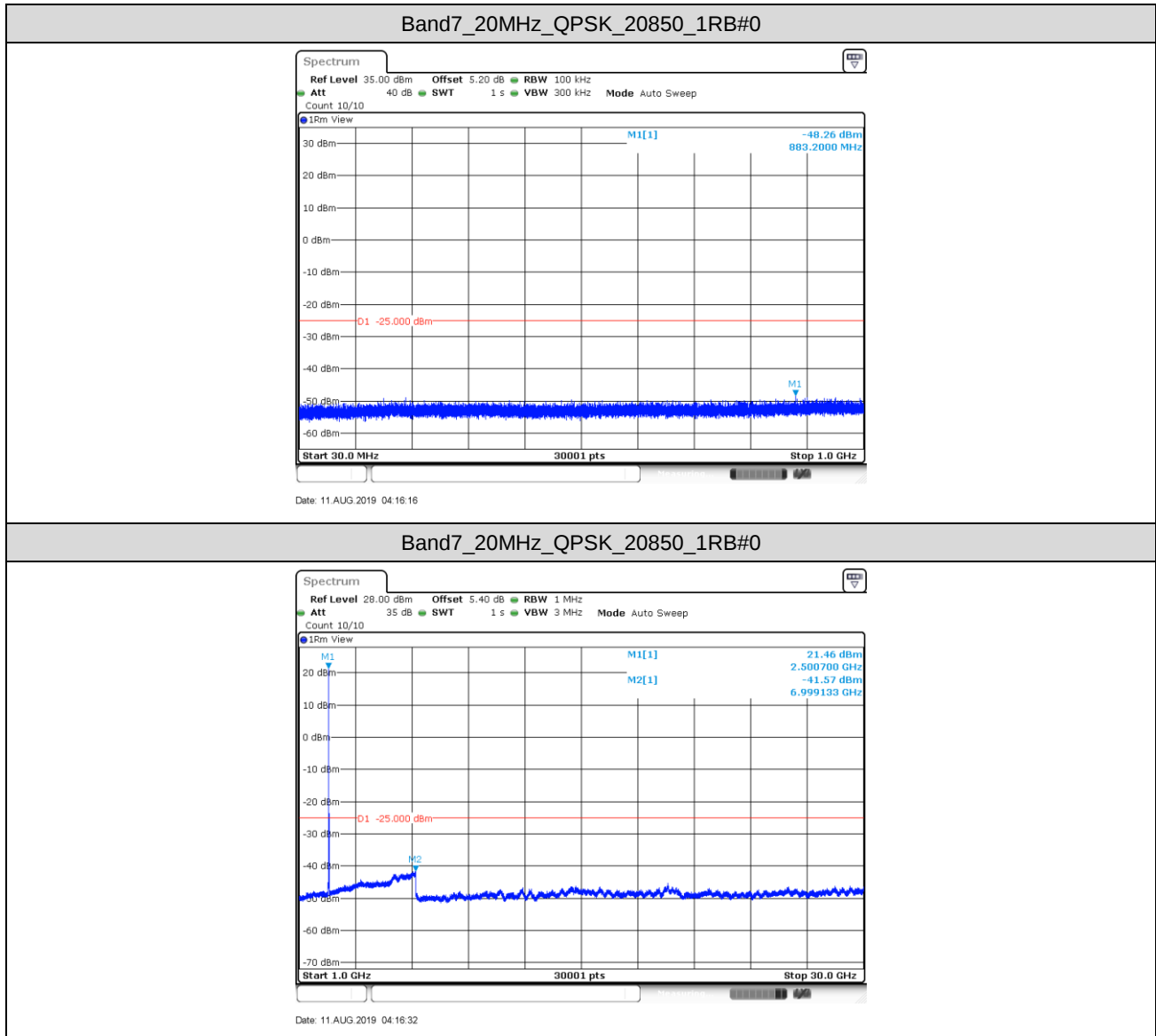
Date: 10 AUG.2019 22:27:45

8. Spurious Emission at Antenna Terminal

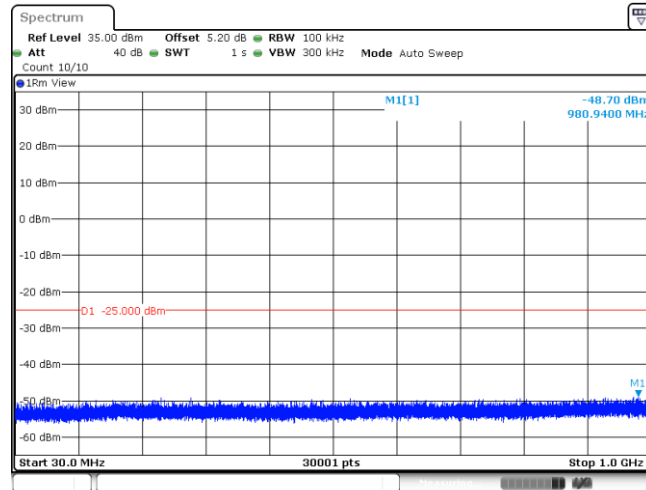
Remark1: For the averaged unwanted emissions measurements, the measurement points in each sweep is greater than twice the Span/RBW in order to ensure bin-to-bin spacing of $< RBW/2$ so that narrowband signals are not lost between frequency bins. As to the present test item, the "Measurement Points =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

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

8.1. Test Plots

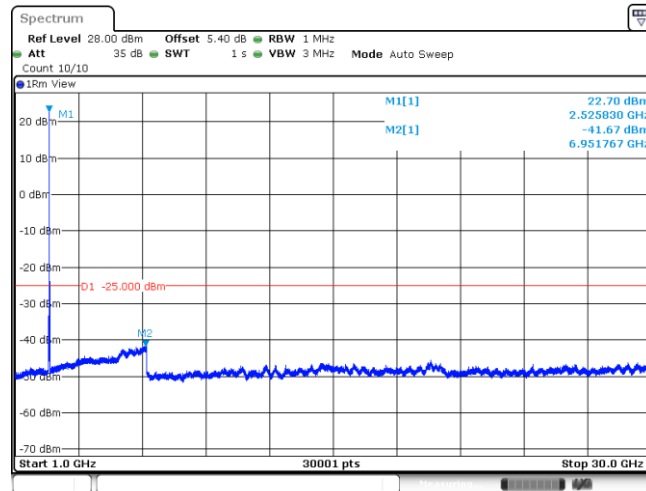


Band7_20MHz_QPSK_21100_1RB#0



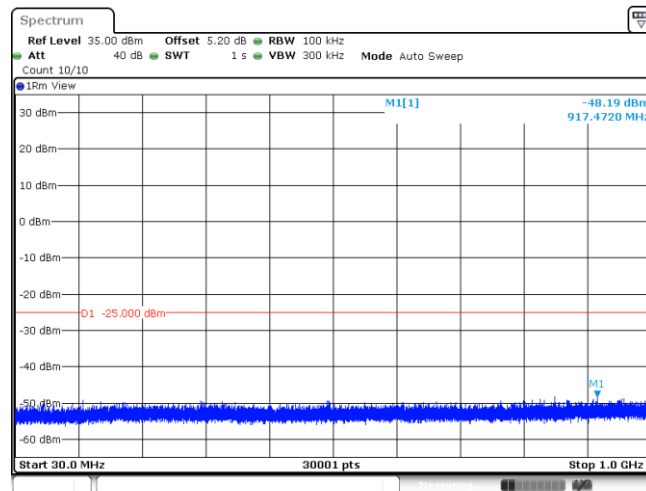
Date: 11.AUG.2019 04:17:27

Band7_20MHz_QPSK_21100_1RB#0



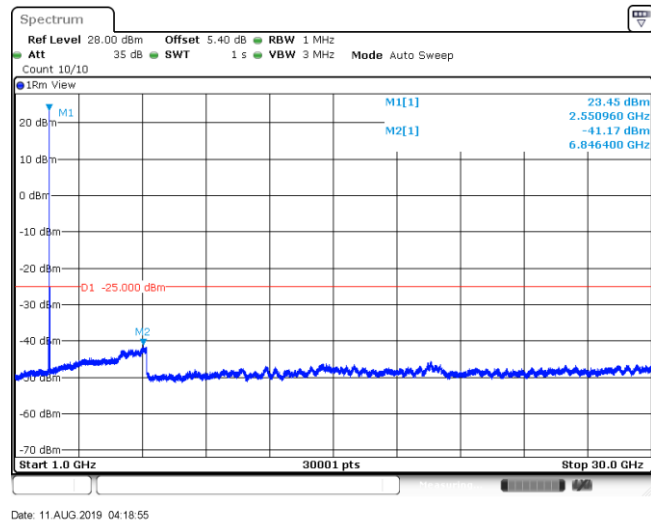
Date: 11.AUG.2019 04:17:44

Band7_20MHz_QPSK_21350_1RB#0

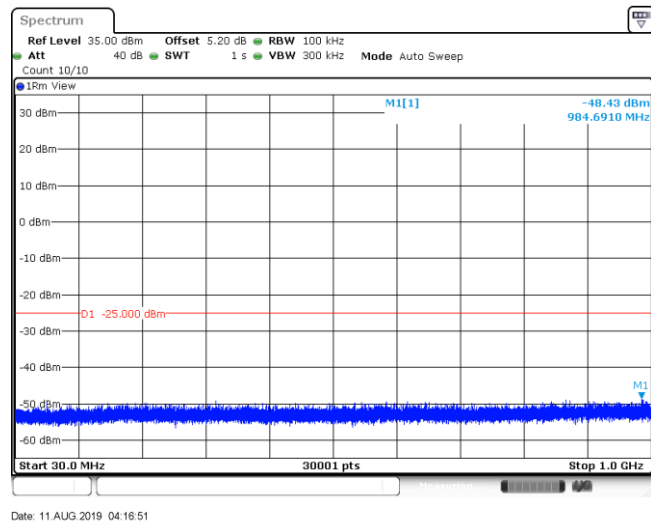


Date: 11.AUG.2019 04:18:38

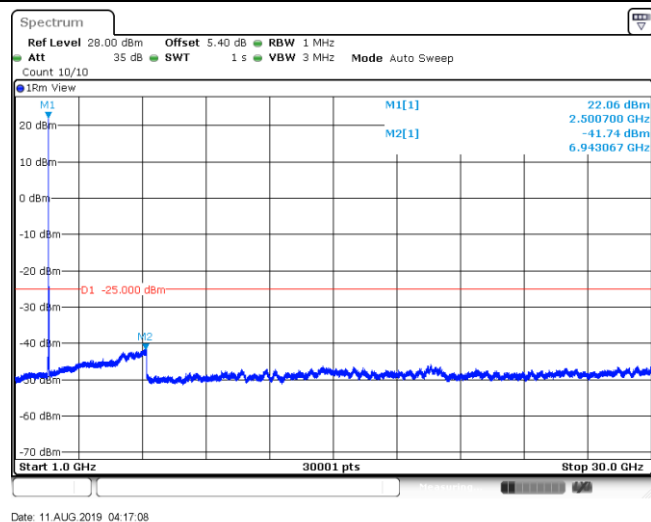
Band7_20MHz_QPSK_21350_1RB#0



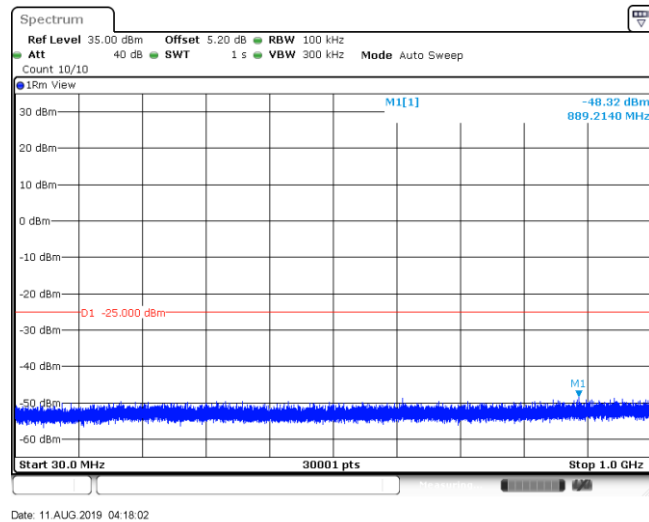
Band7_20MHz_16QAM_20850_1RB#0



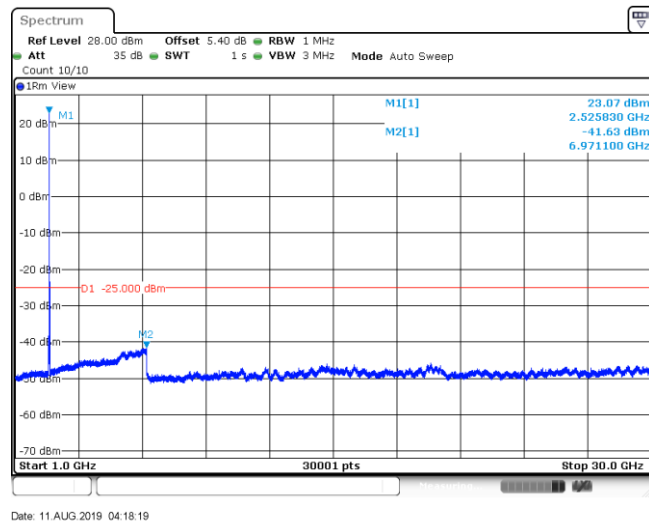
Band7_20MHz_16QAM_20850_1RB#0



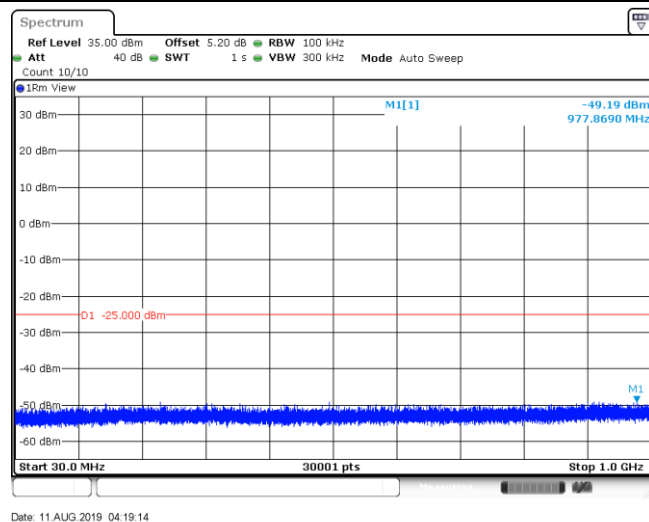
Band7_20MHz_16QAM_21100_1RB#0



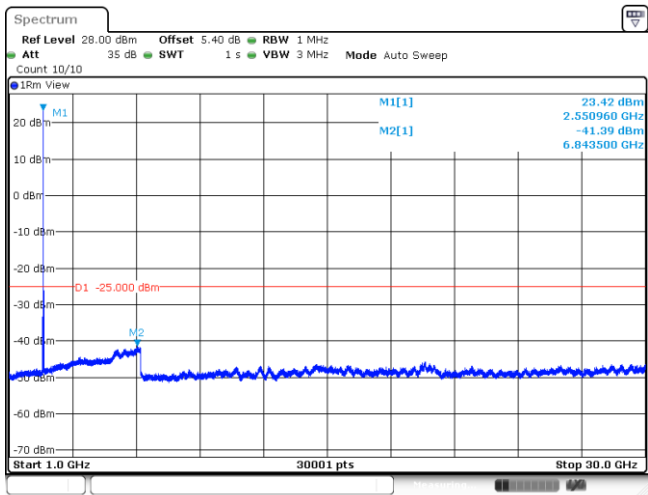
Band7_20MHz_16QAM_21100_1RB#0



Band7_20MHz_16QAM_21350_1RB#0



Band7_20MHz_16QAM_21350_1RB#0



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9. Frequency Stability

9.1. Frequency Vs Voltage

Voltage										
Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band7	20MHz	QPSK	20850	100RB#0	VL	NT	6.60	0.002629	±2.5	PASS
Band7	20MHz	QPSK	20850	100RB#0	VN	NT	1.00	0.000398	±2.5	PASS
Band7	20MHz	QPSK	20850	100RB#0	VH	NT	2.30	0.000916	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	VL	NT	3.90	0.001538	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	VN	NT	-5.10	-0.002012	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	VH	NT	-8.50	-0.003353	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	VL	NT	-16.10	-0.006289	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	VN	NT	-13.50	-0.005273	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	VH	NT	-6.10	-0.002383	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	VL	NT	-2.90	-0.001155	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	VN	NT	-3.70	-0.001474	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	VH	NT	-12.80	-0.005100	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	VL	NT	-12.10	-0.004773	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	VN	NT	-1.00	-0.000394	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	VH	NT	2.50	0.000986	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	VL	NT	-13.70	-0.005352	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	VN	NT	-4.80	-0.001875	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	VH	NT	-6.40	-0.002500	±2.5	PASS

9.2. Frequency Vs Temperature

Temperature										
Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band7	20MHz	QPSK	20850	100RB#0	NV	-30	-4.80	-0.001912	±2.5	PASS
Band7	20MHz	QPSK	20850	100RB#0	NV	-20	-11.40	-0.004542	±2.5	PASS
Band7	20MHz	QPSK	20850	100RB#0	NV	0	5.00	0.001992	±2.5	PASS
Band7	20MHz	QPSK	20850	100RB#0	NV	10	4.70	0.001873	±2.5	PASS
Band7	20MHz	QPSK	20850	100RB#0	NV	20	-12.20	-0.004861	±2.5	PASS
Band7	20MHz	QPSK	20850	100RB#0	NV	30	-10.90	-0.004343	±2.5	PASS
Band7	20MHz	QPSK	20850	100RB#0	NV	40	-12.00	-0.004781	±2.5	PASS
Band7	20MHz	QPSK	20850	100RB#0	NV	50	-2.90	-0.001155	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	-30	3.90	0.001538	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	-20	-5.20	-0.002051	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	0	-12.10	-0.004773	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	10	-5.30	-0.002091	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	20	4.50	0.001775	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	30	-1.90	-0.000750	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	40	2.40	0.000947	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	50	-1.50	-0.000592	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	NV	-30	-15.10	-0.005898	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	NV	-20	-5.00	-0.001953	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	NV	0	-15.10	-0.005898	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	NV	10	-14.40	-0.005625	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	NV	20	-8.20	-0.003203	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	NV	30	-4.70	-0.001836	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	NV	40	-13.00	-0.005078	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	NV	50	-12.80	-0.005000	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	NV	-30	-6.90	-0.002749	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	NV	-20	-2.60	-0.001036	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	NV	0	-14.30	-0.005697	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	NV	10	-2.80	-0.001116	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	NV	20	-5.90	-0.002351	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	NV	30	6.40	0.002550	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	NV	40	-1.50	-0.000598	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	NV	50	5.40	0.002151	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	NV	-30	-9.60	-0.003787	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	NV	-20	-0.40	-0.000158	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	NV	0	-3.80	-0.001499	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	NV	10	-0.70	-0.000276	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	NV	20	-6.70	-0.002643	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	NV	30	-7.30	-0.002880	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	NV	40	-4.70	-0.001854	±2.5	PASS

JianYan Testing Group Shenzhen Co., Ltd.

Report No: JYTSZ-R12-2200350

Band7	20MHz	16QAM	21100	100RB#0	NV	50	-4.40	-0.001736	± 2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	NV	-30	-6.10	-0.002383	± 2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	NV	-20	-13.70	-0.005352	± 2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	NV	0	-16.50	-0.006445	± 2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	NV	10	-4.90	-0.001914	± 2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	NV	20	-5.30	-0.002070	± 2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	NV	30	-5.00	-0.001953	± 2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	NV	40	-9.80	-0.003828	± 2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	NV	50	-16.40	-0.006406	± 2.5	PASS

The End