

Appendix B.6

E-UTRA Band 7

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 Communication Tester	Anristu	MT8821C	6201462742	2019/4/3	2020/4/3
Wideband Radio Communication Tester	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 Communication Tester	Anristu	MT8821C	6201462742	2019/3/2	2020/3/1
Wideband Radio Communication Tester	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]	$U = \pm 0.37$ dB
Bandwidth	Magnitude [%]	$U = \pm 0.2\%$
Band Edge Compliance	Disturbance Power [dBm]	$U = \pm 2.0$ dB
Spurious Emissions, Conducted	Disturbance Power [dBm]	$U = \pm 2.0$ dB
Frequency Stability	Frequency Accuracy [ppm]	$U = \pm 0.24$ ppm

3. Effective (Isotropic) Radiated Power

3.1. Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Conducted Power(dBm)	EIRP (dBm)	Limit (dBm)	Verdict
Band7	5MHz	QPSK	20775	1RB#0	22.91	21.41	33.00	PASS
Band7	5MHz	QPSK	20775	1RB#12	23.10	21.60	33.00	PASS
Band7	5MHz	QPSK	20775	1RB#24	22.97	21.47	33.00	PASS
Band7	5MHz	QPSK	20775	12RB#0	22.06	20.56	33.00	PASS
Band7	5MHz	QPSK	20775	12RB#6	22.12	20.62	33.00	PASS
Band7	5MHz	QPSK	20775	12RB#13	22.16	20.66	33.00	PASS
Band7	5MHz	QPSK	20775	25RB#0	22.06	20.56	33.00	PASS
Band7	5MHz	QPSK	21100	1RB#0	22.93	21.43	33.00	PASS
Band7	5MHz	QPSK	21100	1RB#12	23.07	21.57	33.00	PASS
Band7	5MHz	QPSK	21100	1RB#24	22.92	21.42	33.00	PASS
Band7	5MHz	QPSK	21100	12RB#0	22.05	20.55	33.00	PASS
Band7	5MHz	QPSK	21100	12RB#6	22.14	20.64	33.00	PASS
Band7	5MHz	QPSK	21100	12RB#13	22.06	20.56	33.00	PASS
Band7	5MHz	QPSK	21100	25RB#0	22.05	20.55	33.00	PASS
Band7	5MHz	QPSK	21425	1RB#0	22.92	21.42	33.00	PASS
Band7	5MHz	QPSK	21425	1RB#12	22.01	20.51	33.00	PASS
Band7	5MHz	QPSK	21425	1RB#24	22.01	20.51	33.00	PASS
Band7	5MHz	QPSK	21425	12RB#0	22.01	20.51	33.00	PASS
Band7	5MHz	QPSK	21425	12RB#6	22.01	20.51	33.00	PASS
Band7	5MHz	QPSK	21425	12RB#13	22.01	20.51	33.00	PASS
Band7	5MHz	QPSK	21425	25RB#0	22.01	20.51	33.00	PASS
Band7	5MHz	16QAM	20775	1RB#0	22.24	20.74	33.00	PASS
Band7	5MHz	16QAM	20775	1RB#12	22.36	20.86	33.00	PASS
Band7	5MHz	16QAM	20775	1RB#24	22.26	20.76	33.00	PASS
Band7	5MHz	16QAM	20775	12RB#0	21.11	19.61	33.00	PASS
Band7	5MHz	16QAM	20775	12RB#6	21.15	19.65	33.00	PASS
Band7	5MHz	16QAM	20775	12RB#13	21.15	19.65	33.00	PASS
Band7	5MHz	16QAM	20775	25RB#0	21.14	19.64	33.00	PASS
Band7	5MHz	16QAM	21100	1RB#0	22.20	20.70	33.00	PASS
Band7	5MHz	16QAM	21100	1RB#12	22.30	20.80	33.00	PASS
Band7	5MHz	16QAM	21100	1RB#24	22.21	20.71	33.00	PASS
Band7	5MHz	16QAM	21100	12RB#0	21.07	19.57	33.00	PASS
Band7	5MHz	16QAM	21100	12RB#6	21.16	19.66	33.00	PASS
Band7	5MHz	16QAM	21100	12RB#13	21.07	19.57	33.00	PASS
Band7	5MHz	16QAM	21100	25RB#0	21.13	19.63	33.00	PASS
Band7	5MHz	16QAM	21425	1RB#0	22.18	20.68	33.00	PASS
Band7	5MHz	16QAM	21425	1RB#12	22.33	20.83	33.00	PASS

Band7	5MHz	16QAM	21425	1RB#24	22.21	20.71	33.00	PASS
Band7	5MHz	16QAM	21425	12RB#0	21.11	19.61	33.00	PASS
Band7	5MHz	16QAM	21425	12RB#6	21.18	19.68	33.00	PASS
Band7	5MHz	16QAM	21425	12RB#13	21.13	19.63	33.00	PASS
Band7	5MHz	16QAM	21425	25RB#0	21.14	19.64	33.00	PASS
Band7	10MHz	QPSK	20800	1RB#0	22.94	21.44	33.00	PASS
Band7	10MHz	QPSK	20800	1RB#24	23.16	21.66	33.00	PASS
Band7	10MHz	QPSK	20800	1RB#49	23.04	21.54	33.00	PASS
Band7	10MHz	QPSK	20800	25RB#0	22.02	20.52	33.00	PASS
Band7	10MHz	QPSK	20800	25RB#12	22.16	20.66	33.00	PASS
Band7	10MHz	QPSK	20800	25RB#25	22.17	20.67	33.00	PASS
Band7	10MHz	QPSK	20800	50RB#0	22.11	20.61	33.00	PASS
Band7	10MHz	QPSK	21100	1RB#0	22.94	21.44	33.00	PASS
Band7	10MHz	QPSK	21100	1RB#24	23.12	21.62	33.00	PASS
Band7	10MHz	QPSK	21100	1RB#49	23.03	21.53	33.00	PASS
Band7	10MHz	QPSK	21100	25RB#0	22.11	20.61	33.00	PASS
Band7	10MHz	QPSK	21100	25RB#12	22.12	20.62	33.00	PASS
Band7	10MHz	QPSK	21100	25RB#25	22.15	20.65	33.00	PASS
Band7	10MHz	QPSK	21100	50RB#0	22.14	20.64	33.00	PASS
Band7	10MHz	QPSK	21400	1RB#0	22.97	21.47	33.00	PASS
Band7	10MHz	QPSK	21400	1RB#24	22.01	20.51	33.00	PASS
Band7	10MHz	QPSK	21400	1RB#49	22.01	20.51	33.00	PASS
Band7	10MHz	QPSK	21400	25RB#0	22.01	20.51	33.00	PASS
Band7	10MHz	QPSK	21400	25RB#12	22.01	20.51	33.00	PASS
Band7	10MHz	QPSK	21400	25RB#25	22.01	20.51	33.00	PASS
Band7	10MHz	QPSK	21400	50RB#0	22.01	20.51	33.00	PASS
Band7	10MHz	16QAM	20800	1RB#0	22.20	20.70	33.00	PASS
Band7	10MHz	16QAM	20800	1RB#24	22.43	20.93	33.00	PASS
Band7	10MHz	16QAM	20800	1RB#49	22.37	20.87	33.00	PASS
Band7	10MHz	16QAM	20800	25RB#0	21.14	19.64	33.00	PASS
Band7	10MHz	16QAM	20800	25RB#12	21.18	19.68	33.00	PASS
Band7	10MHz	16QAM	20800	25RB#25	21.24	19.74	33.00	PASS
Band7	10MHz	16QAM	20800	50RB#0	21.22	19.72	33.00	PASS
Band7	10MHz	16QAM	21100	1RB#0	22.22	20.72	33.00	PASS
Band7	10MHz	16QAM	21100	1RB#24	22.44	20.94	33.00	PASS
Band7	10MHz	16QAM	21100	1RB#49	22.30	20.80	33.00	PASS
Band7	10MHz	16QAM	21100	25RB#0	21.13	19.63	33.00	PASS
Band7	10MHz	16QAM	21100	25RB#12	21.13	19.63	33.00	PASS
Band7	10MHz	16QAM	21100	25RB#25	21.15	19.65	33.00	PASS
Band7	10MHz	16QAM	21100	50RB#0	21.16	19.66	33.00	PASS
Band7	10MHz	16QAM	21400	1RB#0	22.25	20.75	33.00	PASS
Band7	10MHz	16QAM	21400	1RB#24	22.39	20.89	33.00	PASS
Band7	10MHz	16QAM	21400	1RB#49	22.32	20.82	33.00	PASS
Band7	10MHz	16QAM	21400	25RB#0	21.11	19.61	33.00	PASS

Band7	10MHz	16QAM	21400	25RB#12	21.15	19.65	33.00	PASS
Band7	10MHz	16QAM	21400	25RB#25	21.22	19.72	33.00	PASS
Band7	10MHz	16QAM	21400	50RB#0	21.14	19.64	33.00	PASS
Band7	15MHz	QPSK	20825	1RB#0	22.96	21.46	33.00	PASS
Band7	15MHz	QPSK	20825	1RB#38	23.10	21.60	33.00	PASS
Band7	15MHz	QPSK	20825	1RB#74	23.02	21.52	33.00	PASS
Band7	15MHz	QPSK	20825	36RB#0	22.04	20.54	33.00	PASS
Band7	15MHz	QPSK	20825	36RB#18	22.17	20.67	33.00	PASS
Band7	15MHz	QPSK	20825	36RB#39	22.21	20.71	33.00	PASS
Band7	15MHz	QPSK	20825	75RB#0	22.14	20.64	33.00	PASS
Band7	15MHz	QPSK	21100	1RB#0	22.92	21.42	33.00	PASS
Band7	15MHz	QPSK	21100	1RB#38	23.06	21.56	33.00	PASS
Band7	15MHz	QPSK	21100	1RB#74	23.05	21.55	33.00	PASS
Band7	15MHz	QPSK	21100	36RB#0	22.10	20.60	33.00	PASS
Band7	15MHz	QPSK	21100	36RB#18	22.12	20.62	33.00	PASS
Band7	15MHz	QPSK	21100	36RB#39	22.20	20.70	33.00	PASS
Band7	15MHz	QPSK	21100	75RB#0	22.16	20.66	33.00	PASS
Band7	15MHz	QPSK	21375	1RB#0	22.98	21.48	33.00	PASS
Band7	15MHz	QPSK	21375	1RB#38	22.01	20.51	33.00	PASS
Band7	15MHz	QPSK	21375	1RB#74	22.01	20.51	33.00	PASS
Band7	15MHz	QPSK	21375	36RB#0	22.01	20.51	33.00	PASS
Band7	15MHz	QPSK	21375	36RB#18	22.01	20.51	33.00	PASS
Band7	15MHz	QPSK	21375	36RB#39	22.01	20.51	33.00	PASS
Band7	15MHz	QPSK	21375	75RB#0	22.01	20.51	33.00	PASS
Band7	15MHz	16QAM	20825	1RB#0	22.27	20.77	33.00	PASS
Band7	15MHz	16QAM	20825	1RB#38	22.38	20.88	33.00	PASS
Band7	15MHz	16QAM	20825	1RB#74	22.35	20.85	33.00	PASS
Band7	15MHz	16QAM	20825	36RB#0	21.10	19.60	33.00	PASS
Band7	15MHz	16QAM	20825	36RB#18	21.18	19.68	33.00	PASS
Band7	15MHz	16QAM	20825	36RB#39	21.20	19.70	33.00	PASS
Band7	15MHz	16QAM	20825	75RB#0	21.19	19.69	33.00	PASS
Band7	15MHz	16QAM	21100	1RB#0	22.18	20.68	33.00	PASS
Band7	15MHz	16QAM	21100	1RB#38	22.31	20.81	33.00	PASS
Band7	15MHz	16QAM	21100	1RB#74	22.34	20.84	33.00	PASS
Band7	15MHz	16QAM	21100	36RB#0	21.12	19.62	33.00	PASS
Band7	15MHz	16QAM	21100	36RB#18	21.12	19.62	33.00	PASS
Band7	15MHz	16QAM	21100	36RB#39	21.14	19.64	33.00	PASS
Band7	15MHz	16QAM	21100	75RB#0	21.17	19.67	33.00	PASS
Band7	15MHz	16QAM	21375	1RB#0	22.19	20.69	33.00	PASS
Band7	15MHz	16QAM	21375	1RB#38	22.30	20.80	33.00	PASS
Band7	15MHz	16QAM	21375	1RB#74	22.35	20.85	33.00	PASS
Band7	15MHz	16QAM	21375	36RB#0	21.09	19.59	33.00	PASS
Band7	15MHz	16QAM	21375	36RB#18	21.17	19.67	33.00	PASS
Band7	15MHz	16QAM	21375	36RB#39	21.18	19.68	33.00	PASS

Band7	15MHz	16QAM	21375	75RB#0	21.14	19.64	33.00	PASS
Band7	20MHz	QPSK	20850	1RB#0	22.87	21.37	33.00	PASS
Band7	20MHz	QPSK	20850	1RB#49	23.16	21.66	33.00	PASS
Band7	20MHz	QPSK	20850	1RB#99	22.94	21.44	33.00	PASS
Band7	20MHz	QPSK	20850	50RB#0	22.03	20.53	33.00	PASS
Band7	20MHz	QPSK	20850	50RB#25	22.14	20.64	33.00	PASS
Band7	20MHz	QPSK	20850	50RB#50	22.19	20.69	33.00	PASS
Band7	20MHz	QPSK	20850	100RB#0	22.09	20.59	33.00	PASS
Band7	20MHz	QPSK	21100	1RB#0	22.86	21.36	33.00	PASS
Band7	20MHz	QPSK	21100	1RB#49	23.12	21.62	33.00	PASS
Band7	20MHz	QPSK	21100	1RB#99	22.99	21.49	33.00	PASS
Band7	20MHz	QPSK	21100	50RB#0	22.16	20.66	33.00	PASS
Band7	20MHz	QPSK	21100	50RB#25	22.14	20.64	33.00	PASS
Band7	20MHz	QPSK	21100	50RB#50	22.13	20.63	33.00	PASS
Band7	20MHz	QPSK	21100	100RB#0	22.13	20.63	33.00	PASS
Band7	20MHz	QPSK	21350	1RB#0	22.91	21.41	33.00	PASS
Band7	20MHz	QPSK	21350	1RB#49	22.01	20.51	33.00	PASS
Band7	20MHz	QPSK	21350	1RB#99	22.01	20.51	33.00	PASS
Band7	20MHz	QPSK	21350	50RB#0	22.01	20.51	33.00	PASS
Band7	20MHz	QPSK	21350	50RB#25	22.01	20.51	33.00	PASS
Band7	20MHz	QPSK	21350	50RB#50	22.01	20.51	33.00	PASS
Band7	20MHz	QPSK	21350	100RB#0	22.01	20.51	33.00	PASS
Band7	20MHz	16QAM	20850	1RB#0	22.11	20.61	33.00	PASS
Band7	20MHz	16QAM	20850	1RB#49	22.46	20.96	33.00	PASS
Band7	20MHz	16QAM	20850	1RB#99	22.22	20.72	33.00	PASS
Band7	20MHz	16QAM	20850	50RB#0	21.08	19.58	33.00	PASS
Band7	20MHz	16QAM	20850	50RB#25	21.14	19.64	33.00	PASS
Band7	20MHz	16QAM	20850	50RB#50	21.23	19.73	33.00	PASS
Band7	20MHz	16QAM	20850	100RB#0	21.14	19.64	33.00	PASS
Band7	20MHz	16QAM	21100	1RB#0	22.15	20.65	33.00	PASS
Band7	20MHz	16QAM	21100	1RB#49	22.37	20.87	33.00	PASS
Band7	20MHz	16QAM	21100	1RB#99	22.30	20.80	33.00	PASS
Band7	20MHz	16QAM	21100	50RB#0	21.15	19.65	33.00	PASS
Band7	20MHz	16QAM	21100	50RB#25	21.18	19.68	33.00	PASS
Band7	20MHz	16QAM	21100	50RB#50	21.16	19.66	33.00	PASS
Band7	20MHz	16QAM	21100	100RB#0	21.14	19.64	33.00	PASS
Band7	20MHz	16QAM	21350	1RB#0	22.19	20.69	33.00	PASS
Band7	20MHz	16QAM	21350	1RB#49	22.37	20.87	33.00	PASS
Band7	20MHz	16QAM	21350	1RB#99	22.20	20.70	33.00	PASS
Band7	20MHz	16QAM	21350	50RB#0	21.07	19.57	33.00	PASS
Band7	20MHz	16QAM	21350	50RB#25	21.18	19.68	33.00	PASS
Band7	20MHz	16QAM	21350	50RB#50	21.18	19.68	33.00	PASS
Band7	20MHz	16QAM	21350	100RB#0	21.11	19.61	33.00	PASS

Remark:

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

$$\text{ERP [dBm]} = \text{Conducted Power [dBm]} + \text{Gain [dBd]}$$

$$\text{EIRP [dBm]} = \text{Conducted Power [dBm]} + \text{Gain [dBi]}$$

4. Peak-to-Average Ratio(CCDF)

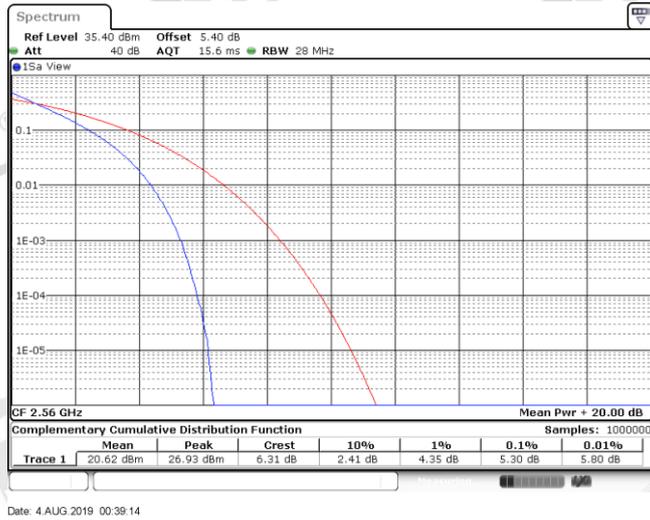
4.1. Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band7	20MHz	QPSK	20850	100RB#0	5.36	13	PASS
Band7	20MHz	QPSK	21100	100RB#0	5.45	13	PASS
Band7	20MHz	QPSK	21350	100RB#0	5.30	13	PASS
Band7	20MHz	16QAM	20850	100RB#0	6.17	13	PASS
Band7	20MHz	16QAM	21100	100RB#0	6.23	13	PASS
Band7	20MHz	16QAM	21350	100RB#0	6.12	13	PASS

4.2. Test Plots



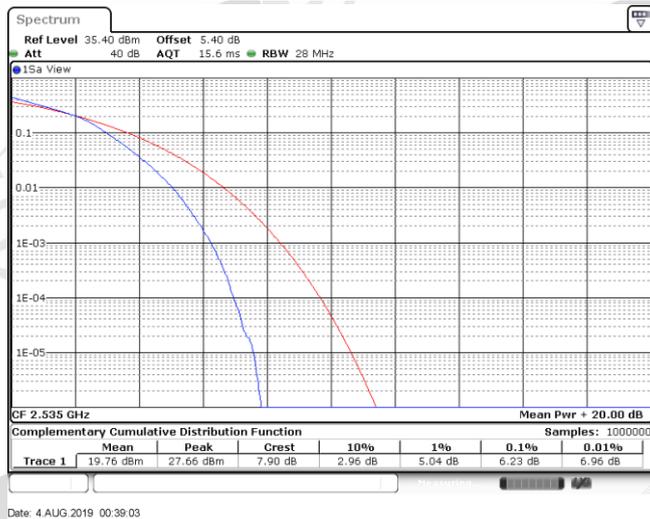
Band7_20MHz_QPSK_21350_100RB#0

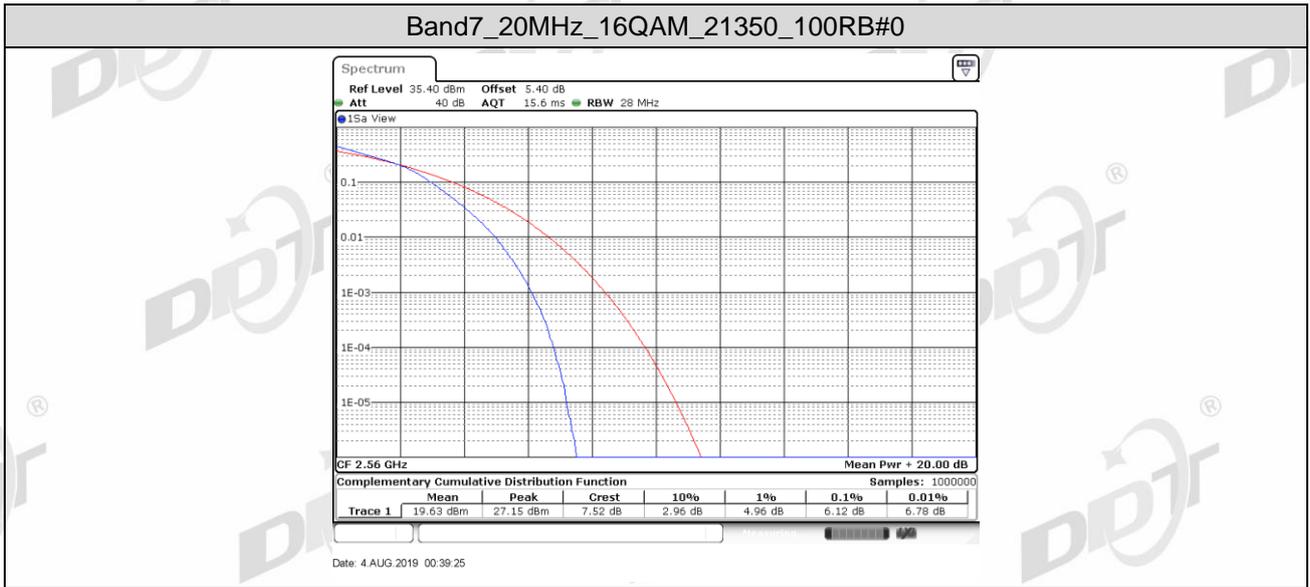


Band7_20MHz_16QAM_20850_100RB#0



Band7_20MHz_16QAM_21100_100RB#0



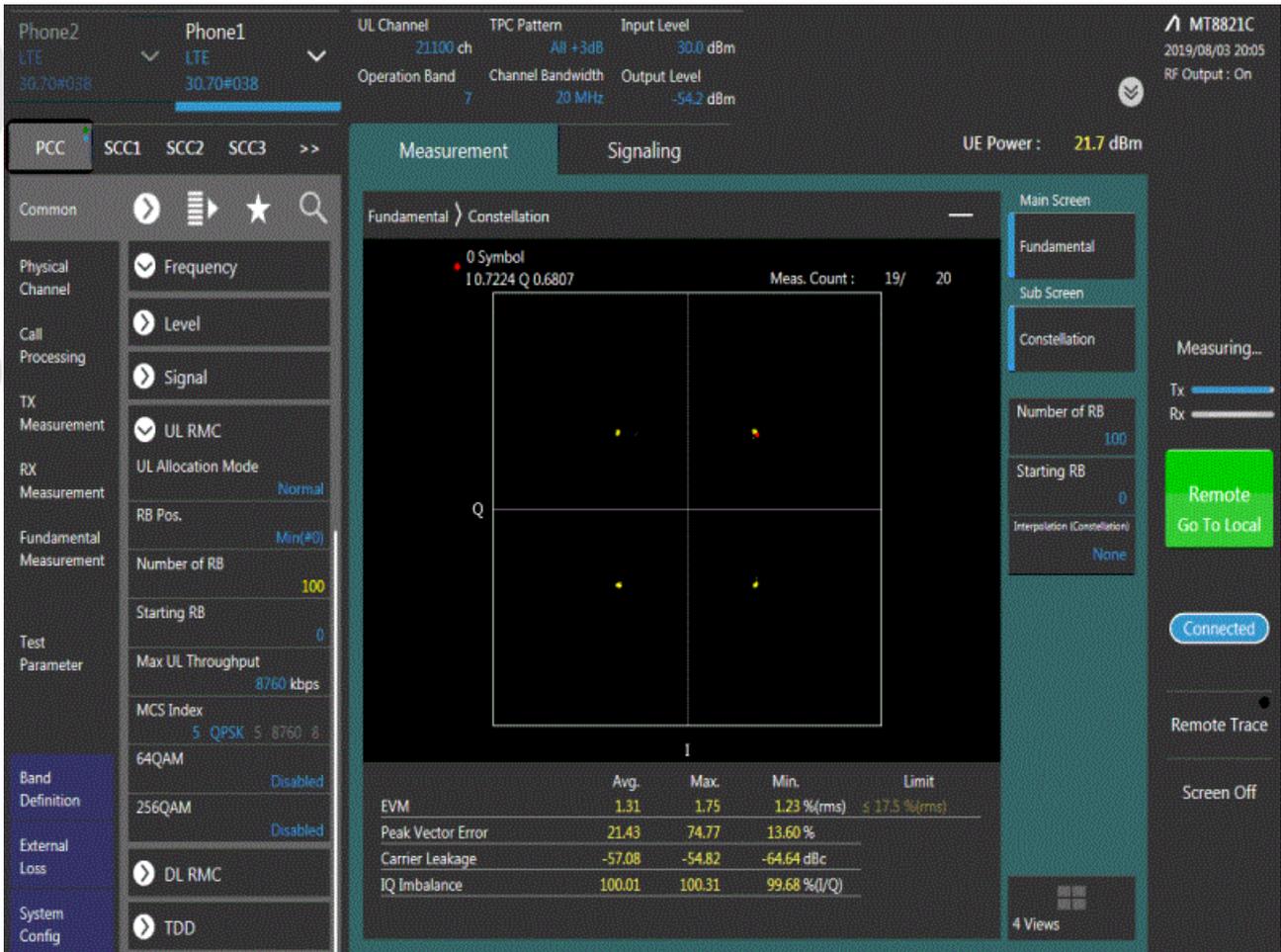


5. Modulation Characteristics

5.1. Test Band = LTE Band 7

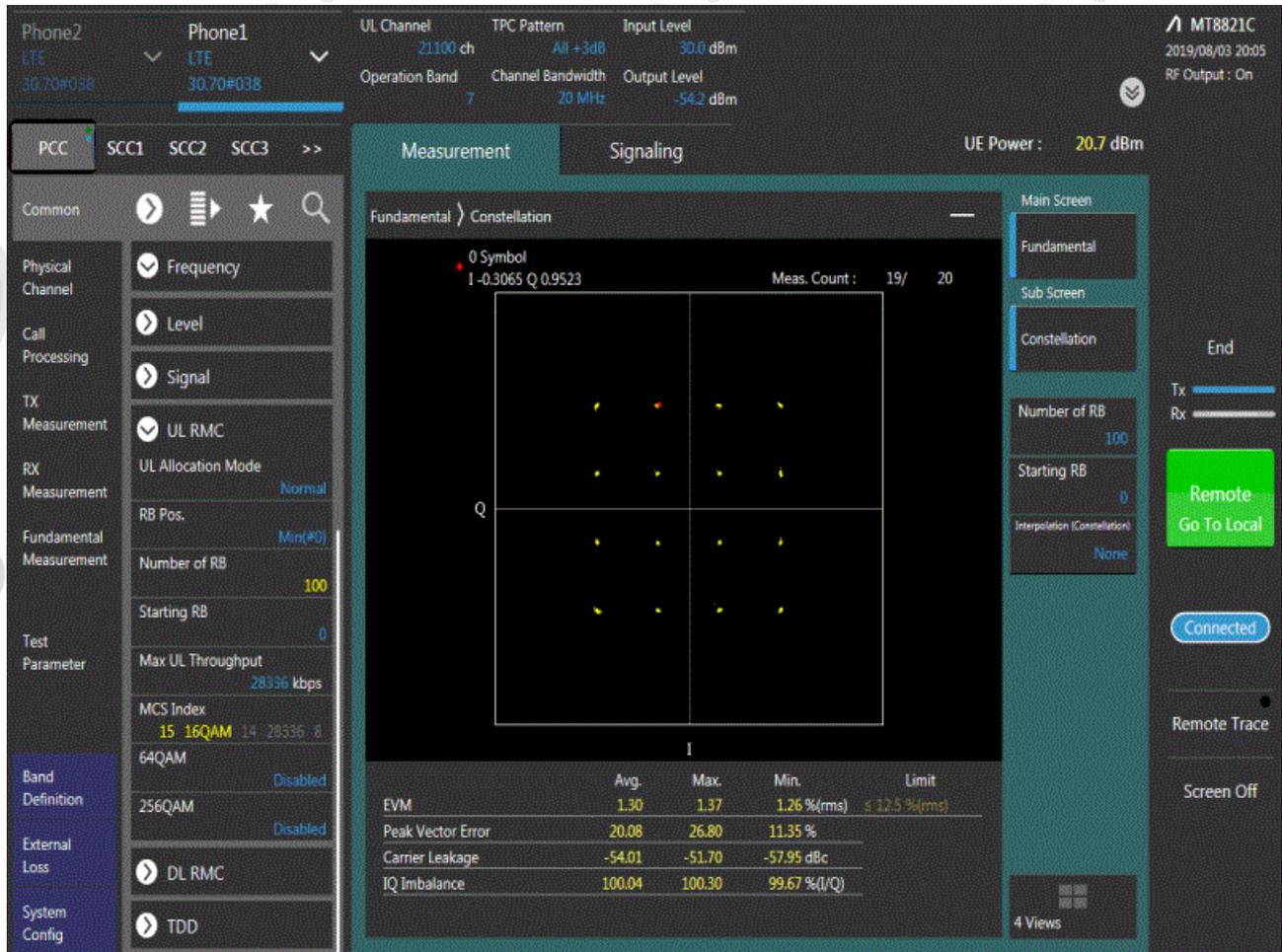
5.2. Test Mode = LTE /TM1 20MHz

5.2.1. Test Channel = MCH



5.3. Test Mode = LTE /TM2 20MHz

5.3.1. Test Channel = MCH

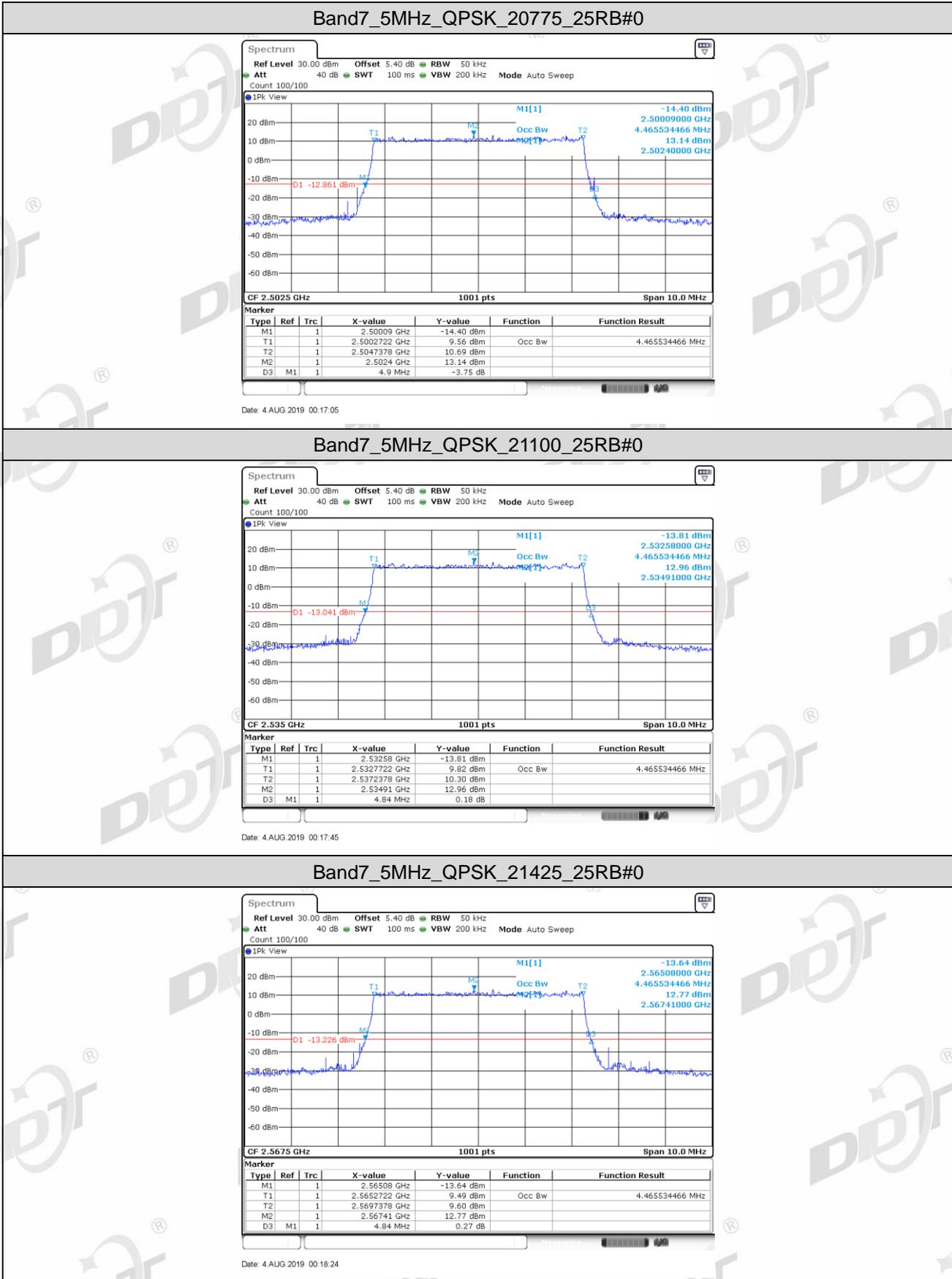


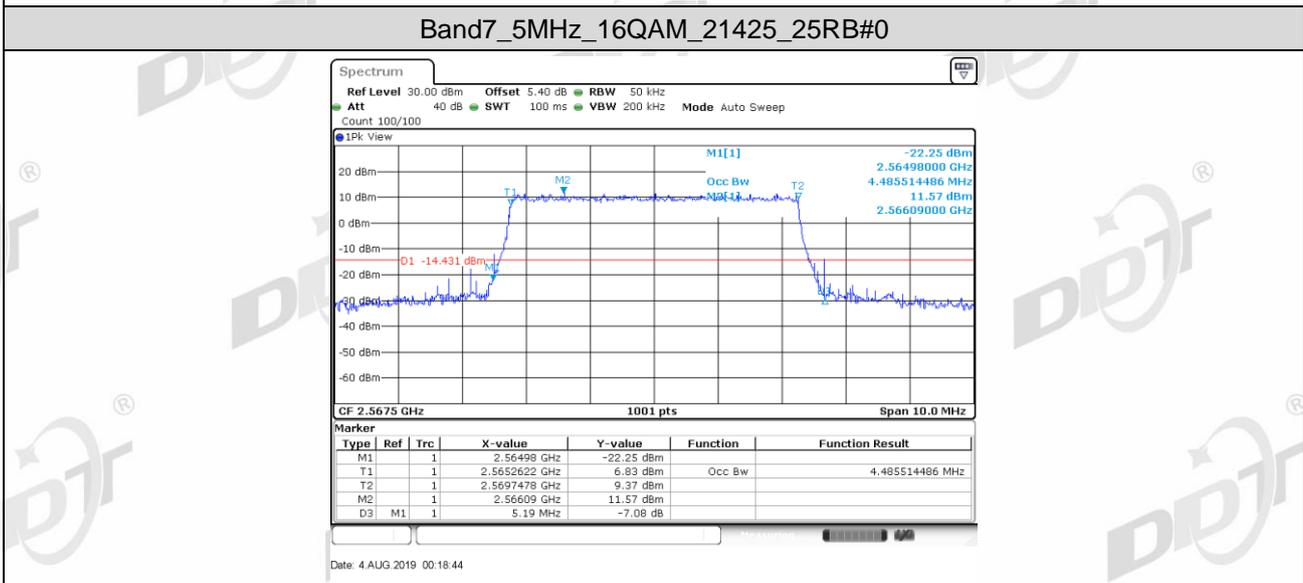
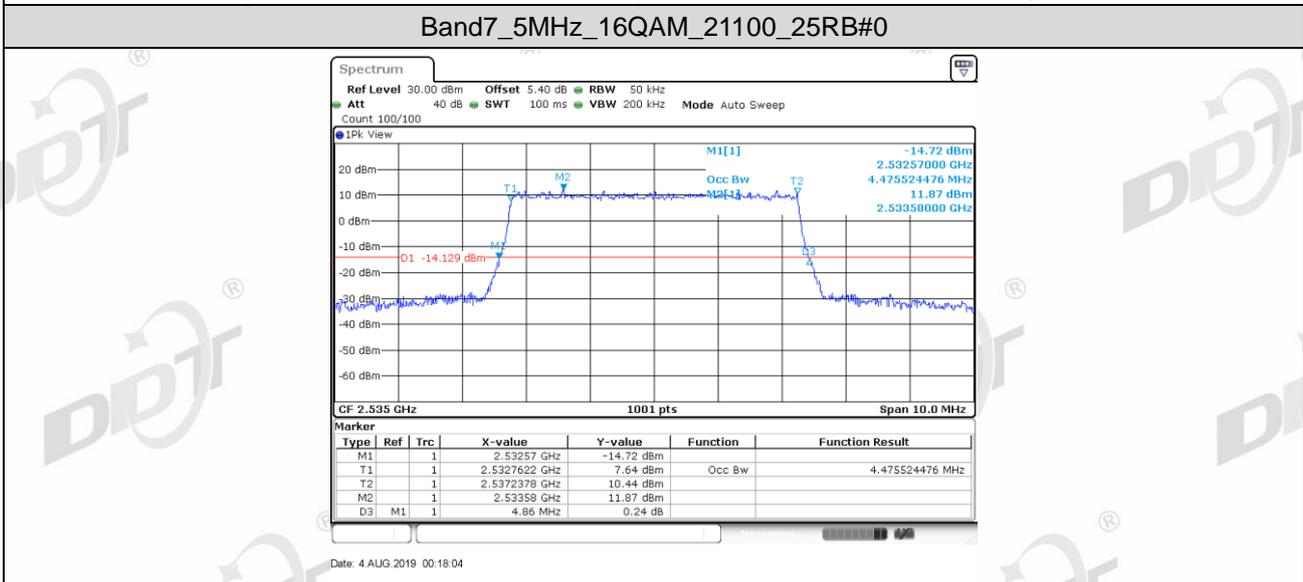
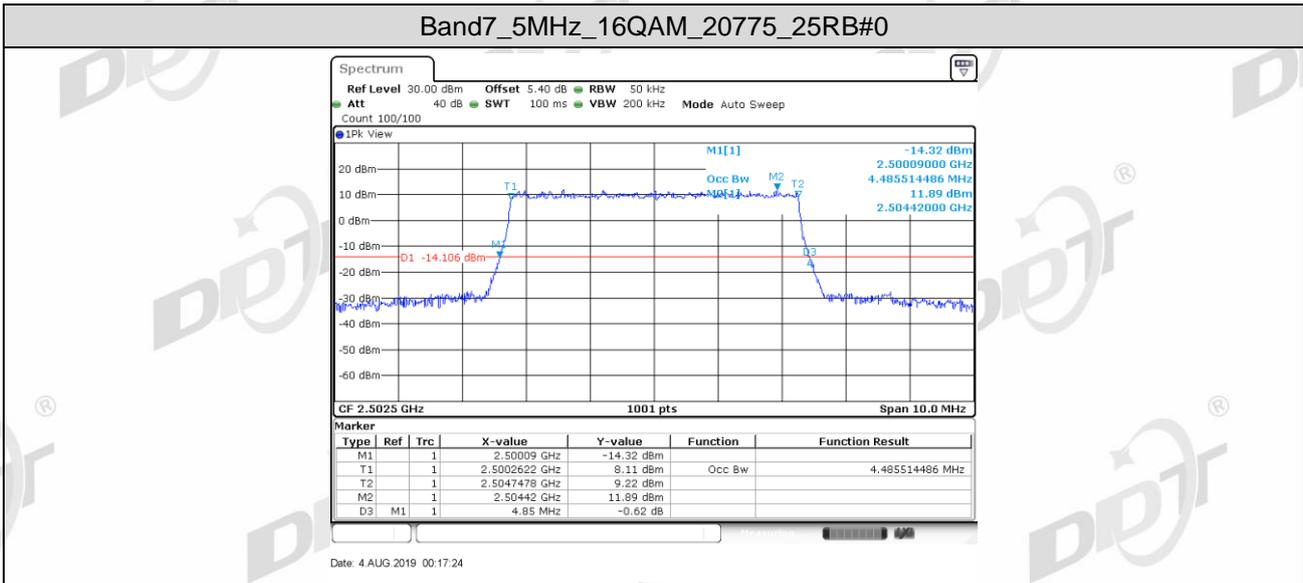
6. 26dB Bandwidth and Occupied Bandwidth

6.1. Test Result

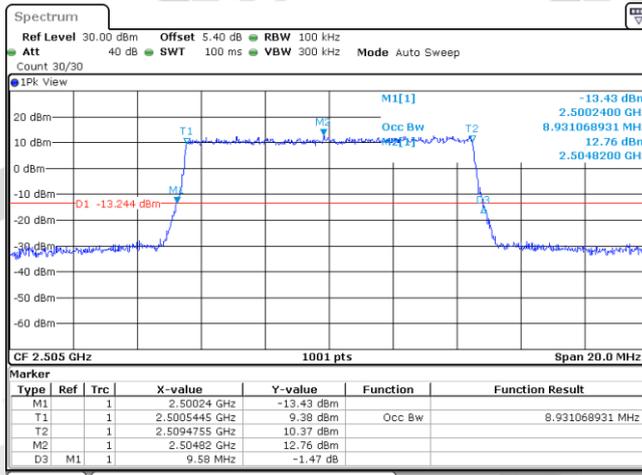
Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band7	5MHz	QPSK	20775	25RB#0	4.466	4.900	PASS
Band7	5MHz	QPSK	21100	25RB#0	4.466	4.840	PASS
Band7	5MHz	QPSK	21425	25RB#0	4.466	4.840	PASS
Band7	5MHz	16QAM	20775	25RB#0	4.486	4.850	PASS
Band7	5MHz	16QAM	21100	25RB#0	4.476	4.860	PASS
Band7	5MHz	16QAM	21425	25RB#0	4.486	5.190	PASS
Band7	10MHz	QPSK	20800	50RB#0	8.931	9.580	PASS
Band7	10MHz	QPSK	21100	50RB#0	8.911	9.680	PASS
Band7	10MHz	QPSK	21400	50RB#0	8.931	9.580	PASS
Band7	10MHz	16QAM	20800	50RB#0	8.931	9.640	PASS
Band7	10MHz	16QAM	21100	50RB#0	8.931	9.640	PASS
Band7	10MHz	16QAM	21400	50RB#0	8.911	9.640	PASS
Band7	15MHz	QPSK	20825	75RB#0	13.457	14.730	PASS
Band7	15MHz	QPSK	21100	75RB#0	13.457	14.670	PASS
Band7	15MHz	QPSK	21375	75RB#0	13.457	14.700	PASS
Band7	15MHz	16QAM	20825	75RB#0	13.457	14.700	PASS
Band7	15MHz	16QAM	21100	75RB#0	13.457	14.670	PASS
Band7	15MHz	16QAM	21375	75RB#0	13.427	14.700	PASS
Band7	20MHz	QPSK	20850	100RB#0	17.862	19.400	PASS
Band7	20MHz	QPSK	21100	100RB#0	17.902	19.320	PASS
Band7	20MHz	QPSK	21350	100RB#0	17.862	19.280	PASS
Band7	20MHz	16QAM	20850	100RB#0	17.862	19.200	PASS
Band7	20MHz	16QAM	21100	100RB#0	17.862	19.320	PASS
Band7	20MHz	16QAM	21350	100RB#0	17.902	19.320	PASS

6.2. Test Plots



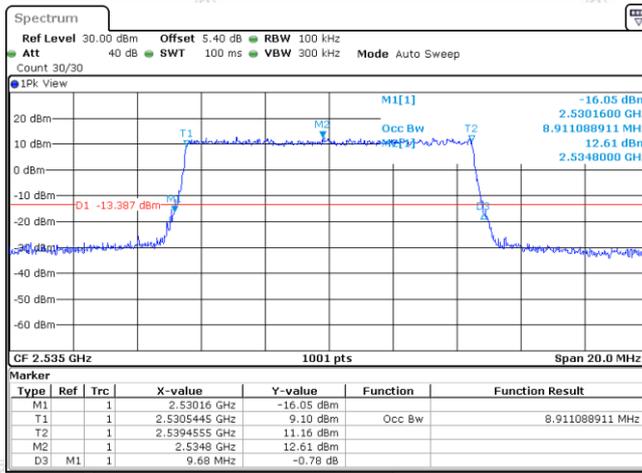


Band7_10MHz_QPSK_20800_50RB#0



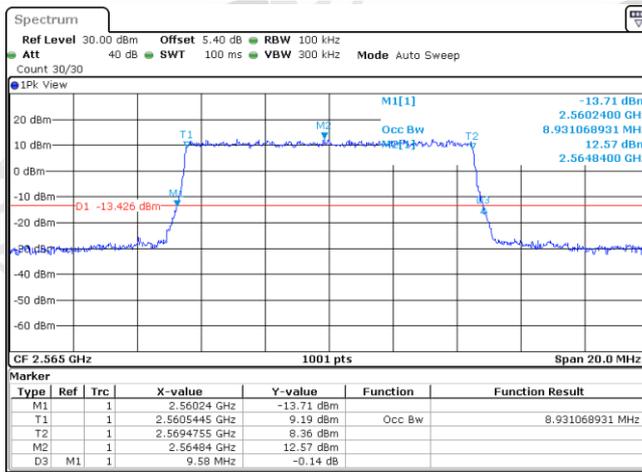
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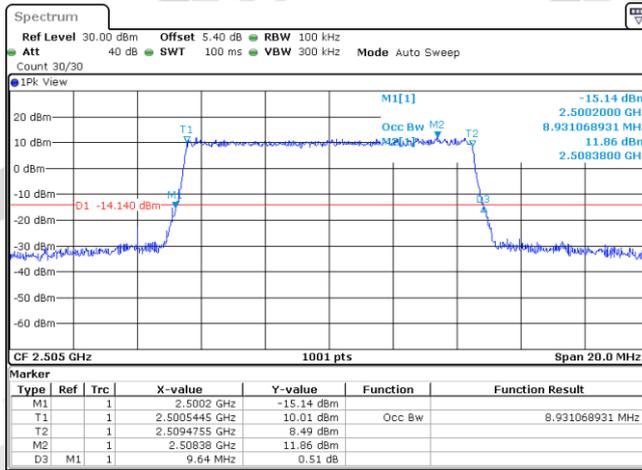
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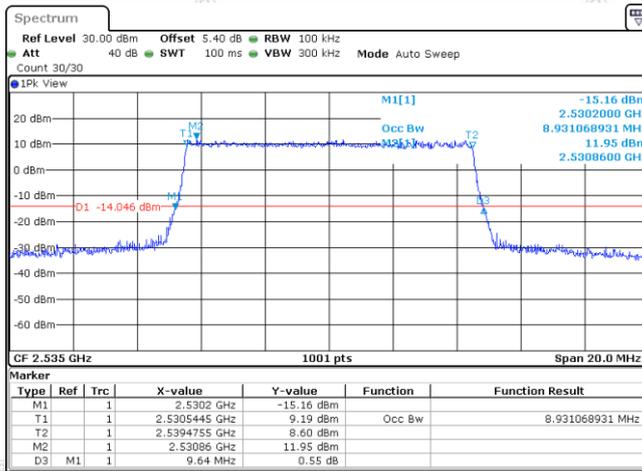
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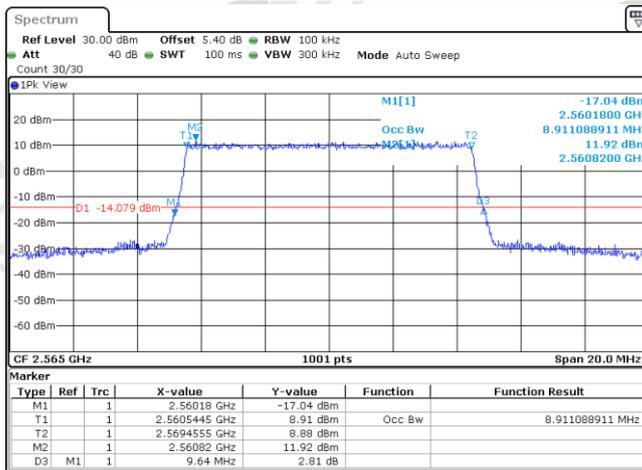
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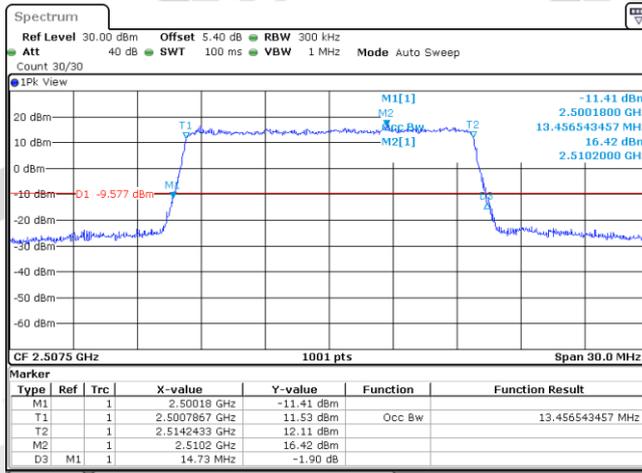
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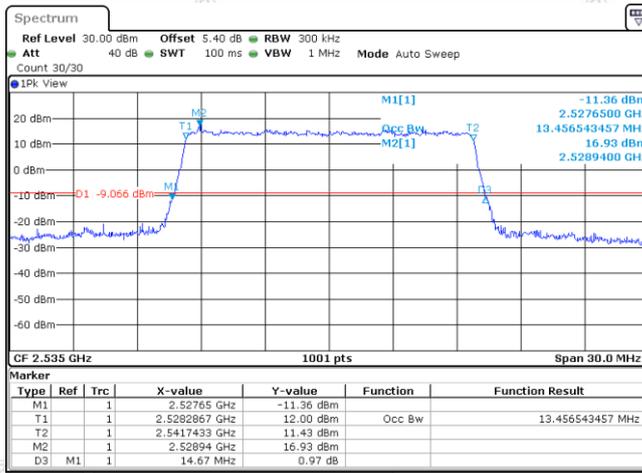
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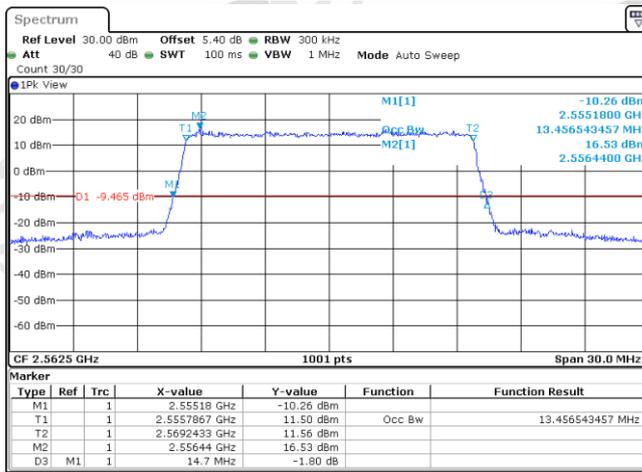
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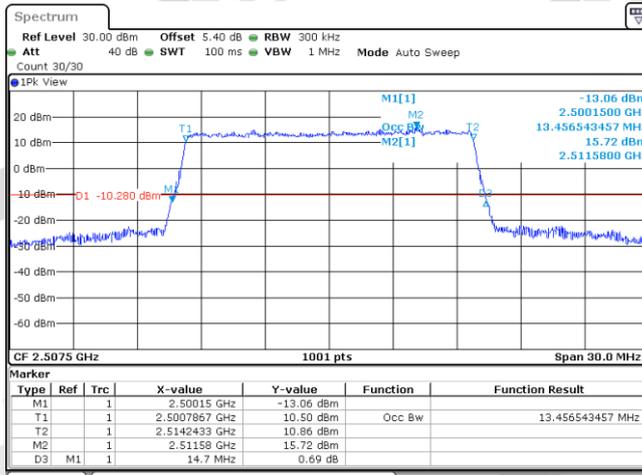
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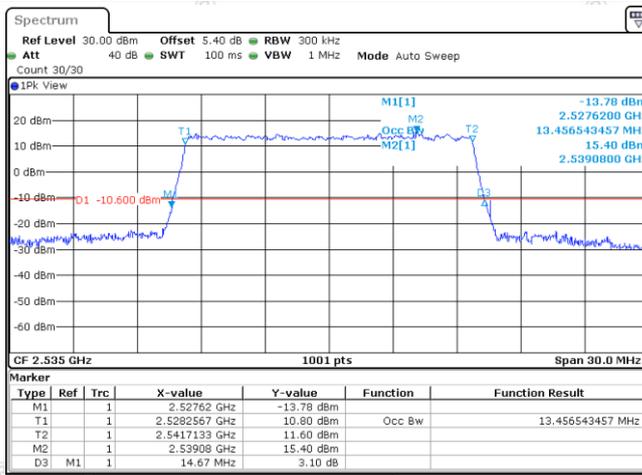
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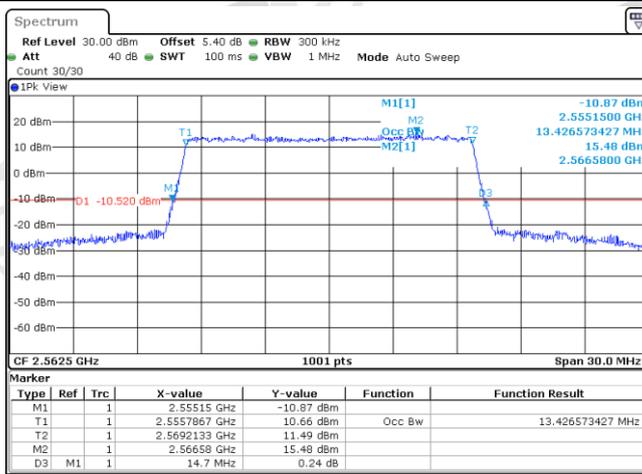
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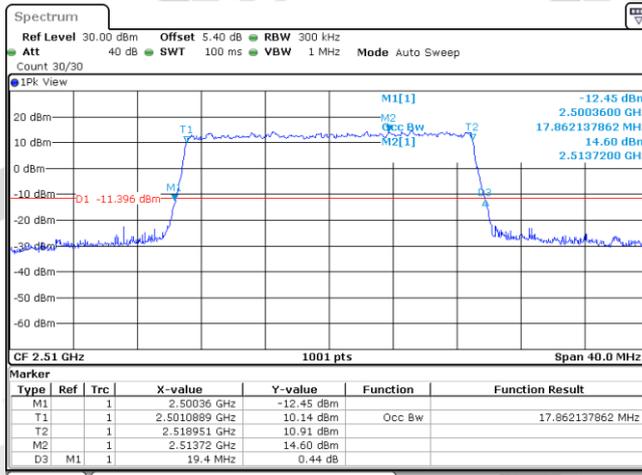
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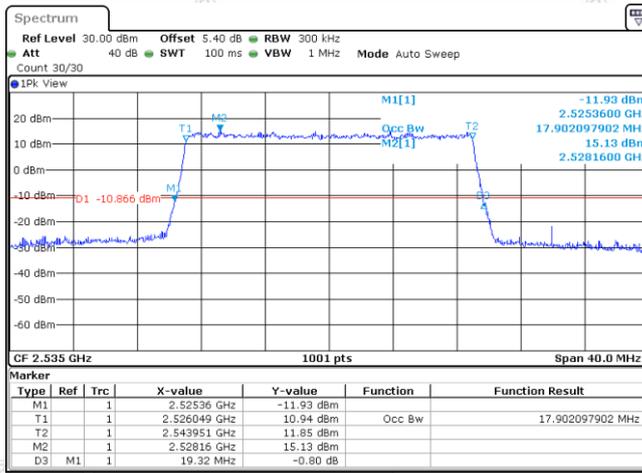
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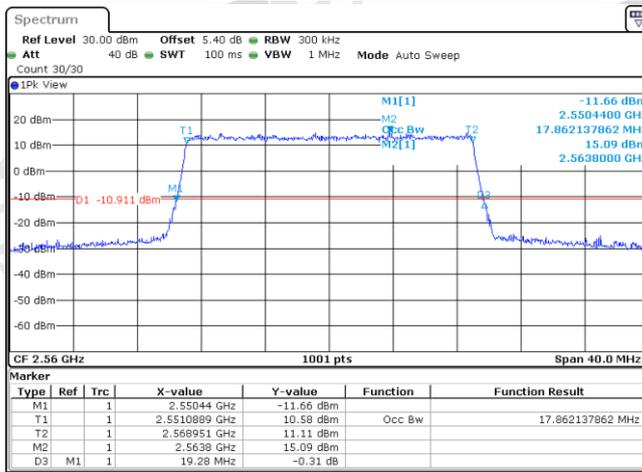
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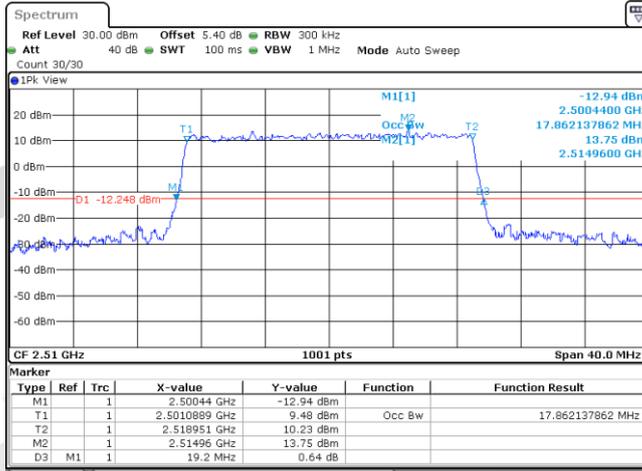
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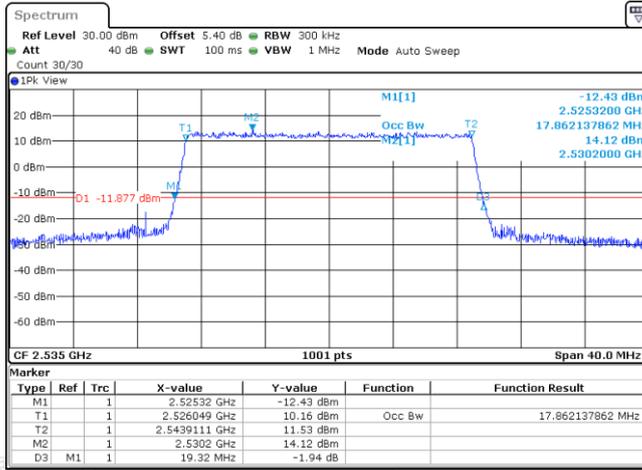


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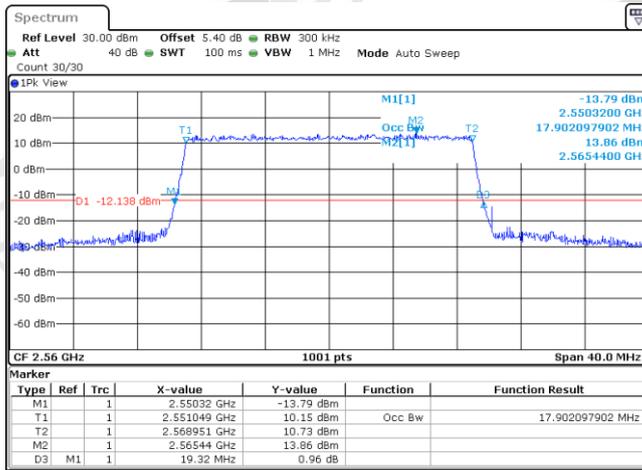
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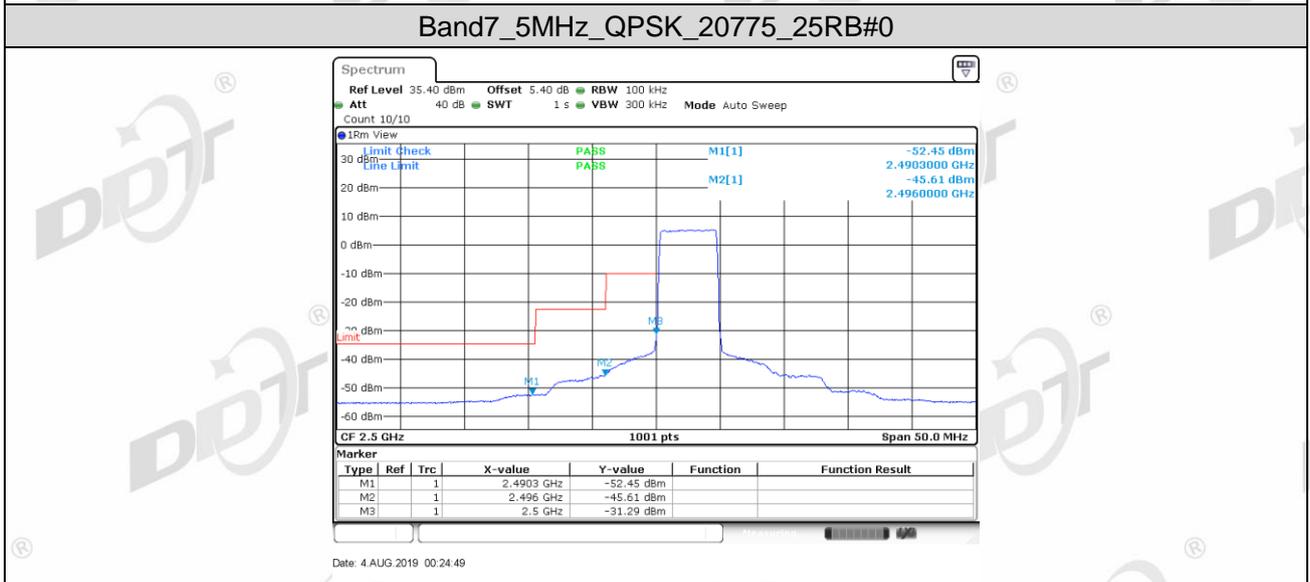
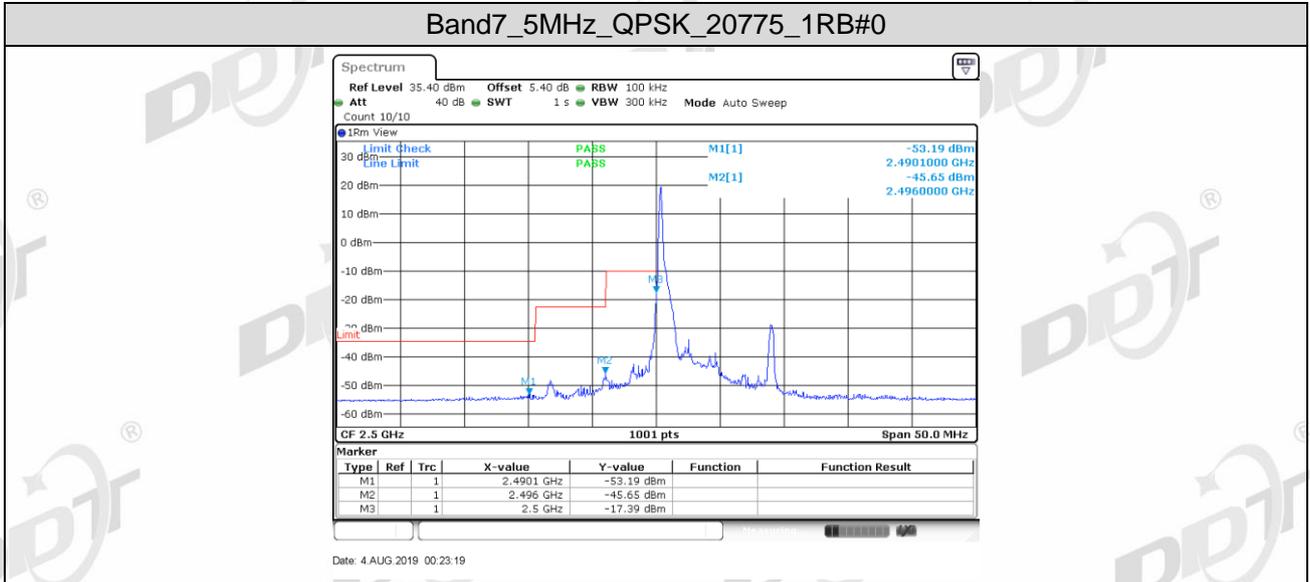


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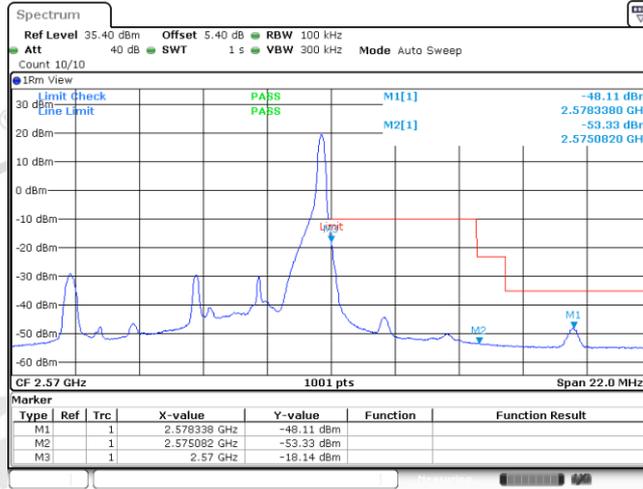


7. Band Edge Compliance

7.1. Test Plots

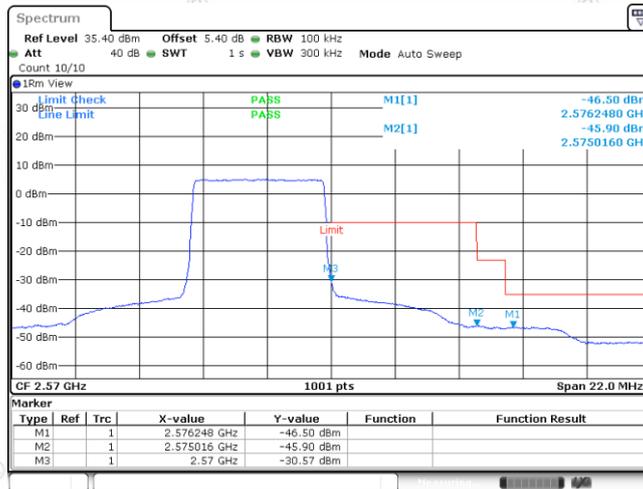


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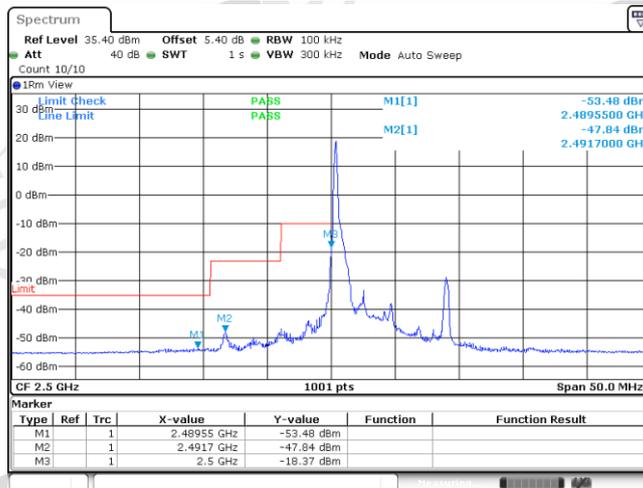
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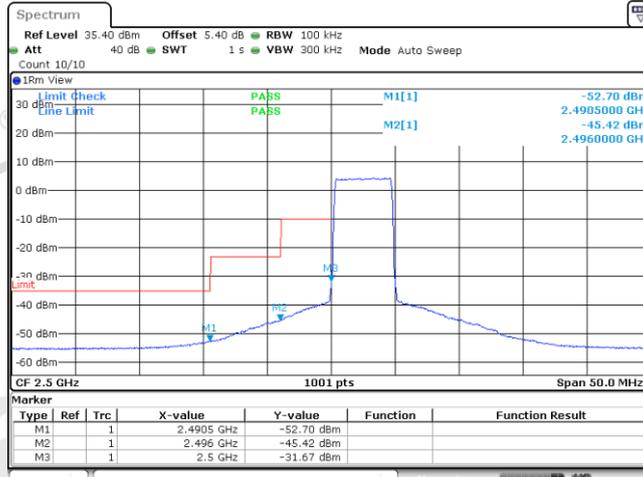
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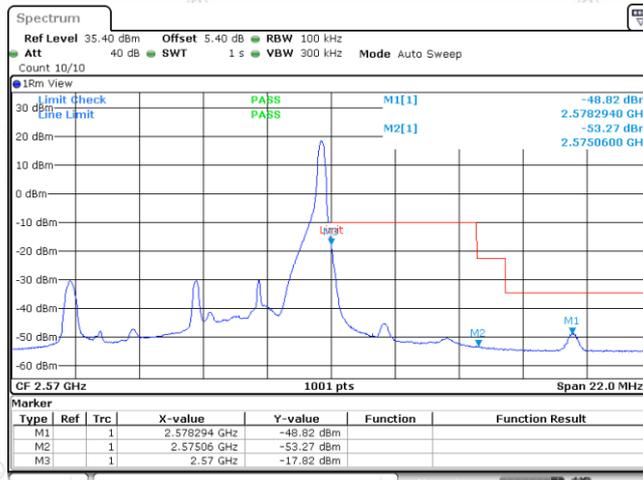
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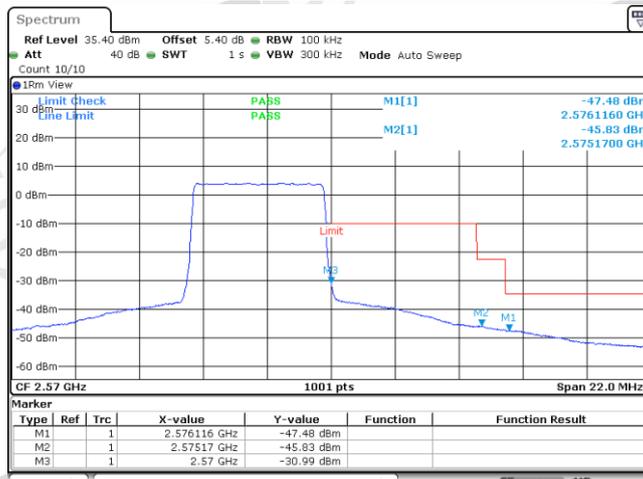
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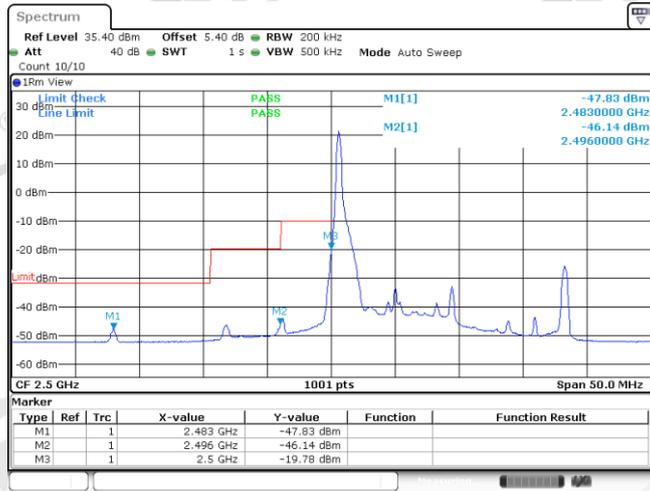
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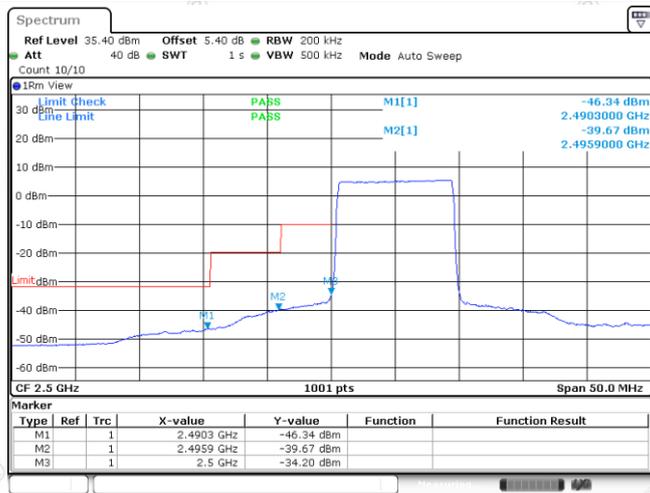
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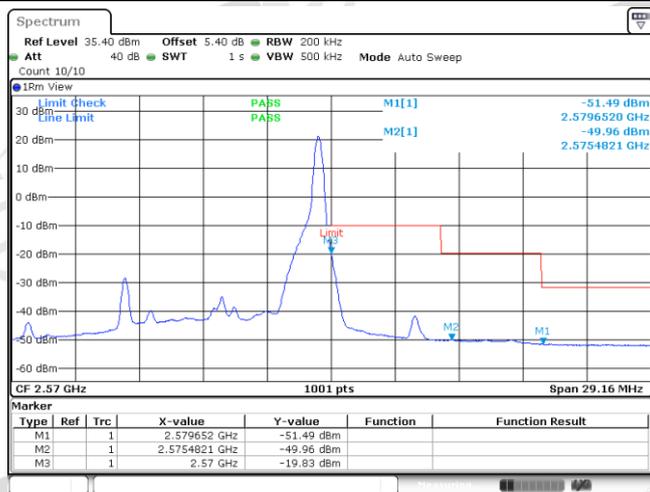
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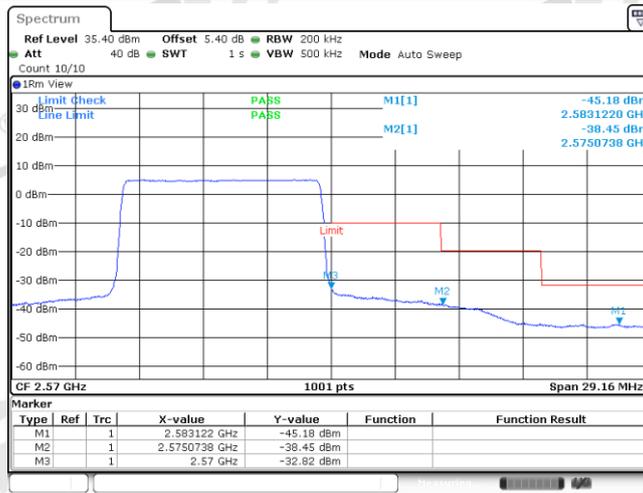
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Band7_10MHz_QPSK_21400_1RB#49



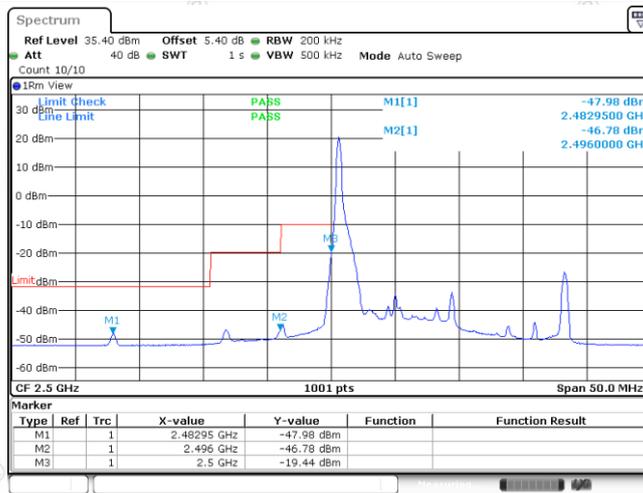
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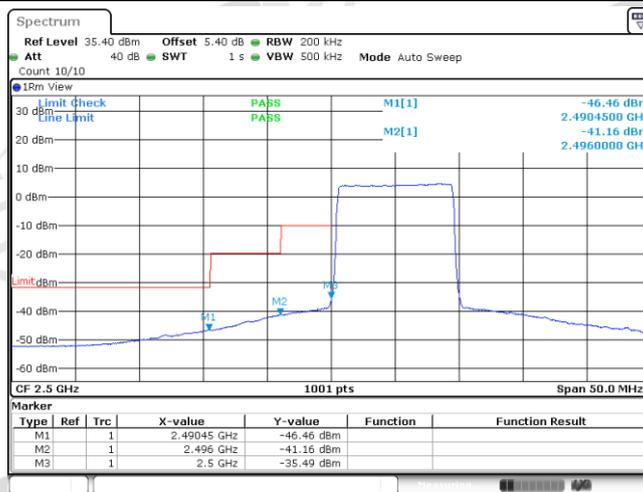
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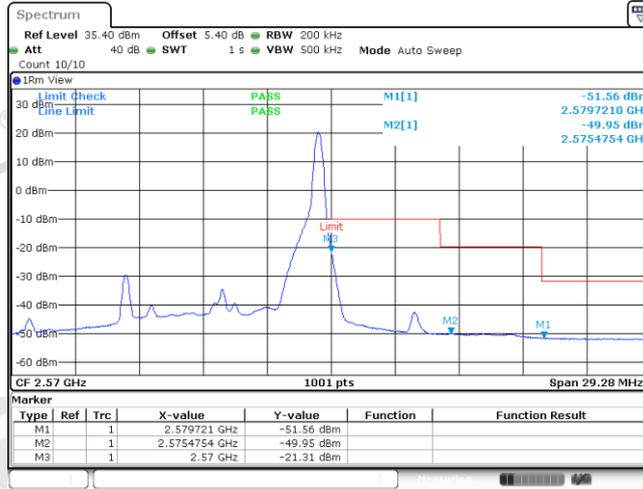
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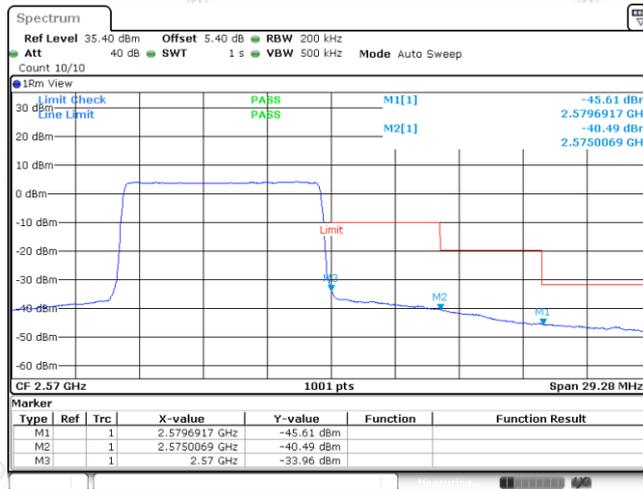


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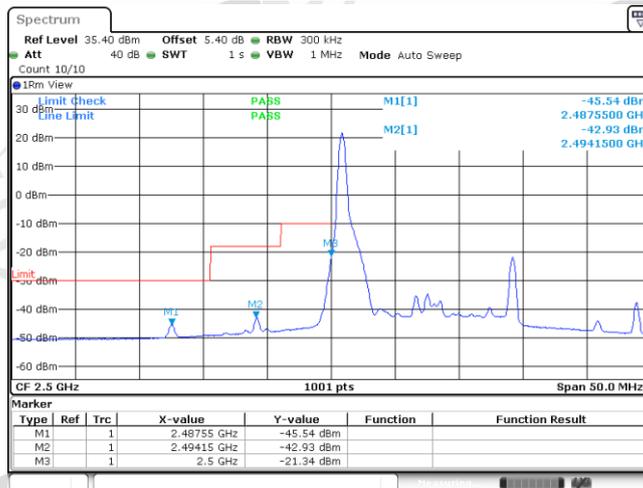
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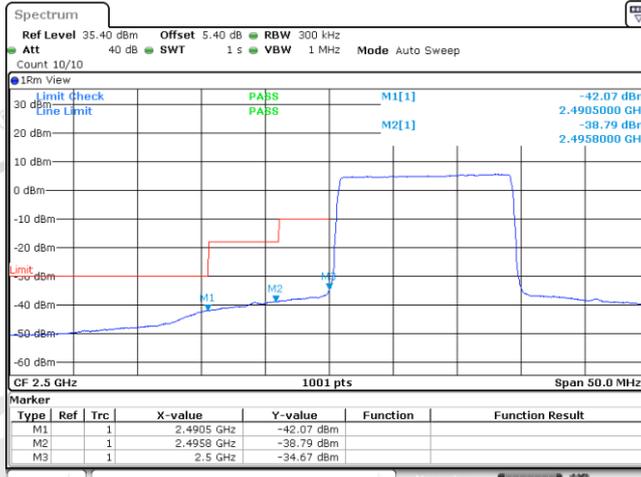
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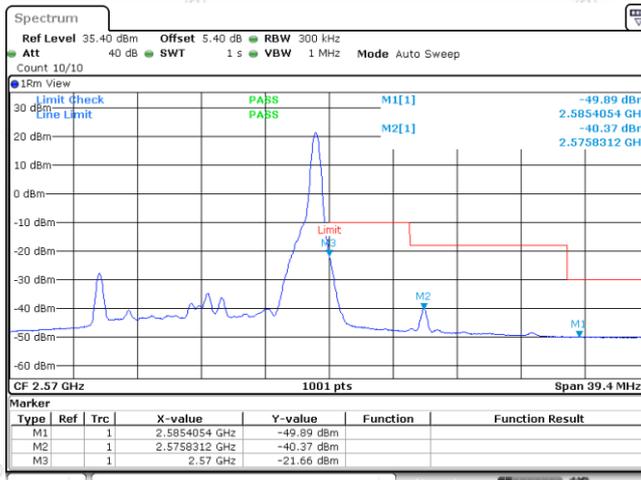


Band7_15MHz_QPSK_20825_75RB#0



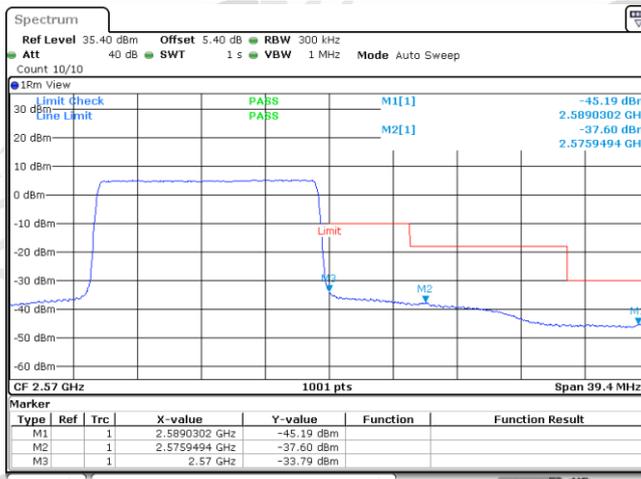
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Band7_15MHz_QPSK_21375_1RB#74



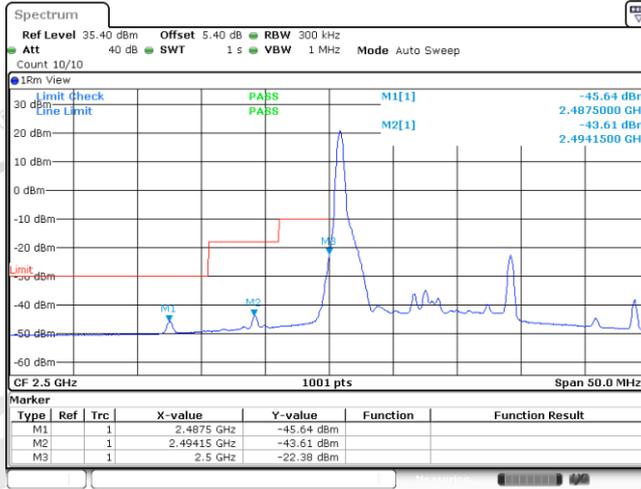
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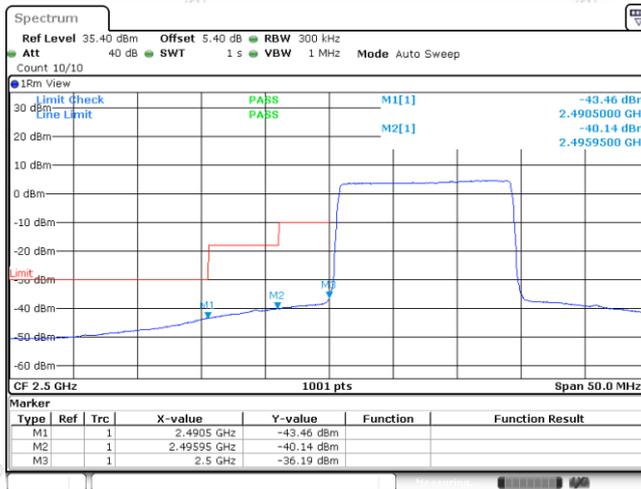
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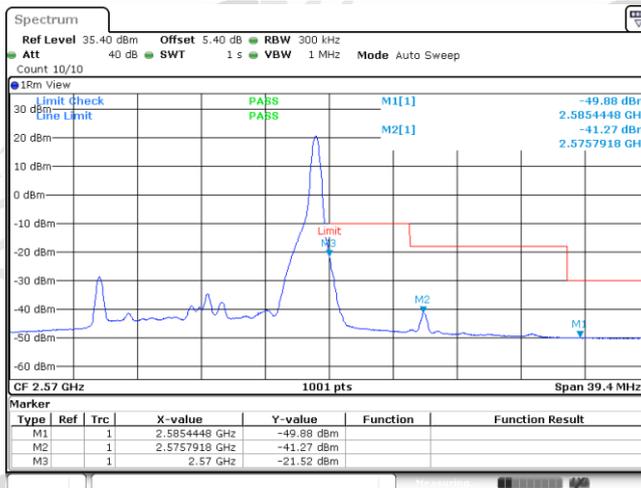
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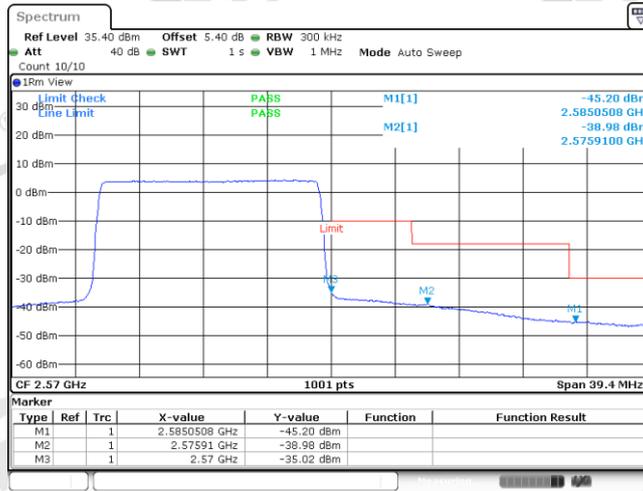
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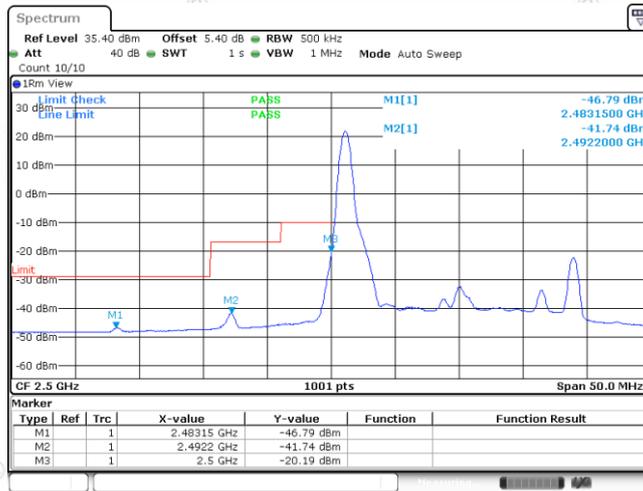
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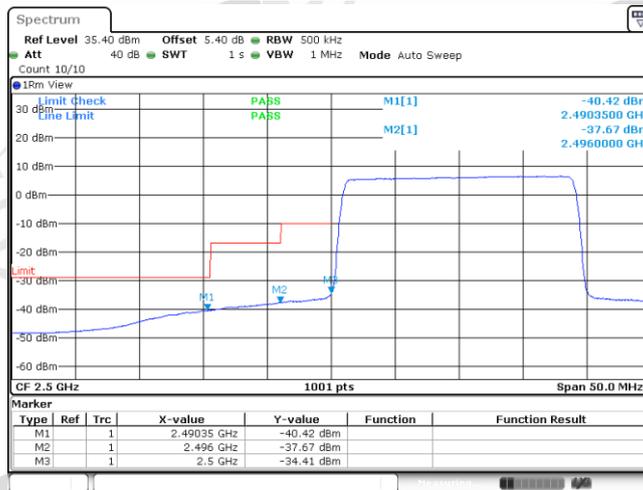
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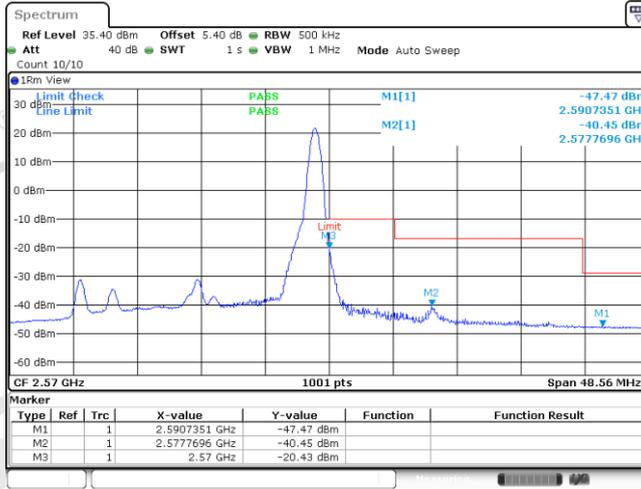
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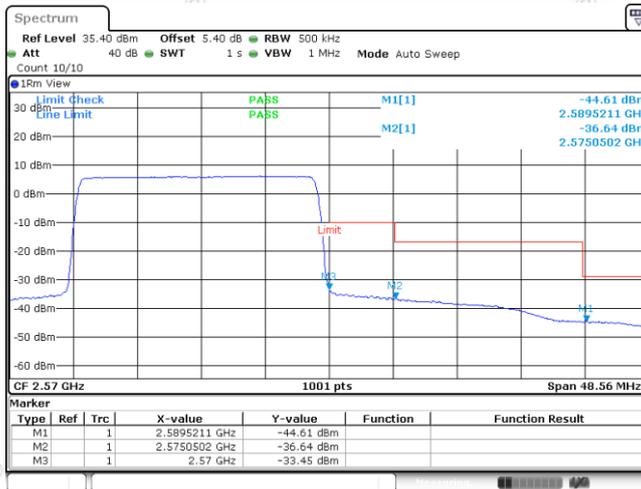
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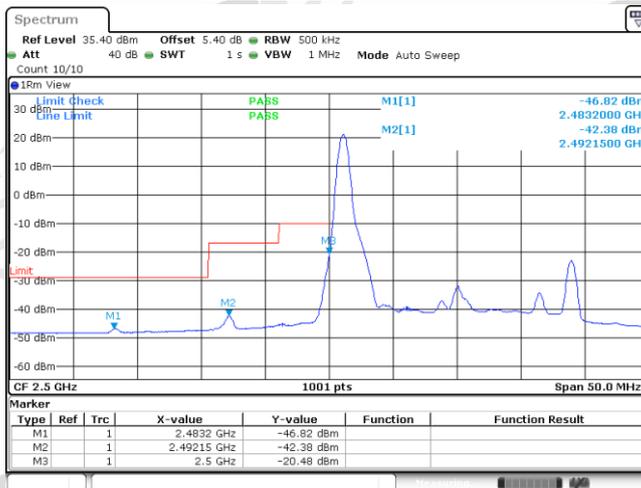
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Band7_20MHz_QPSK_21350_100RB#0



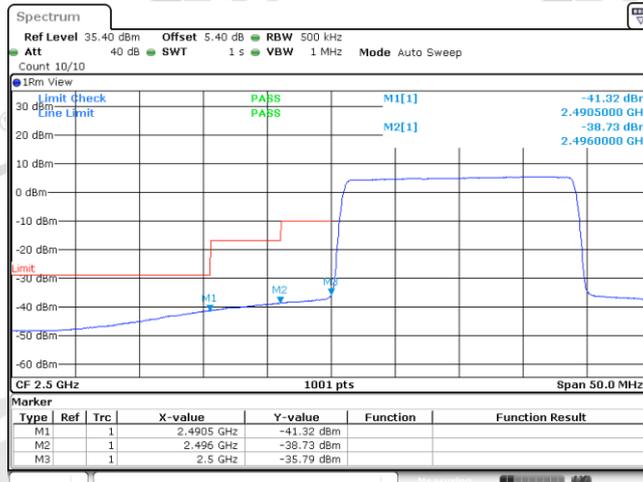
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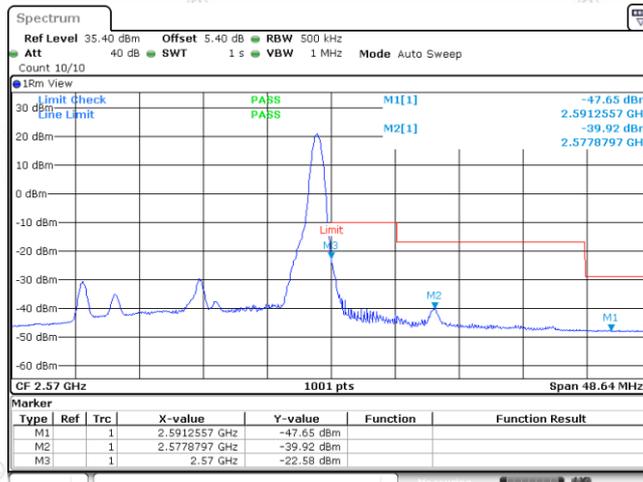
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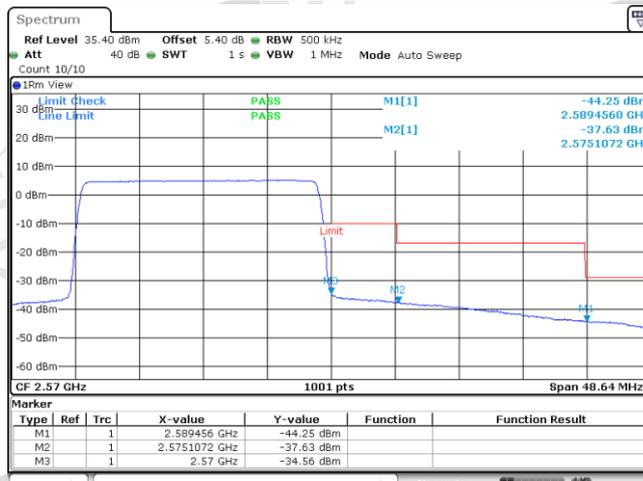
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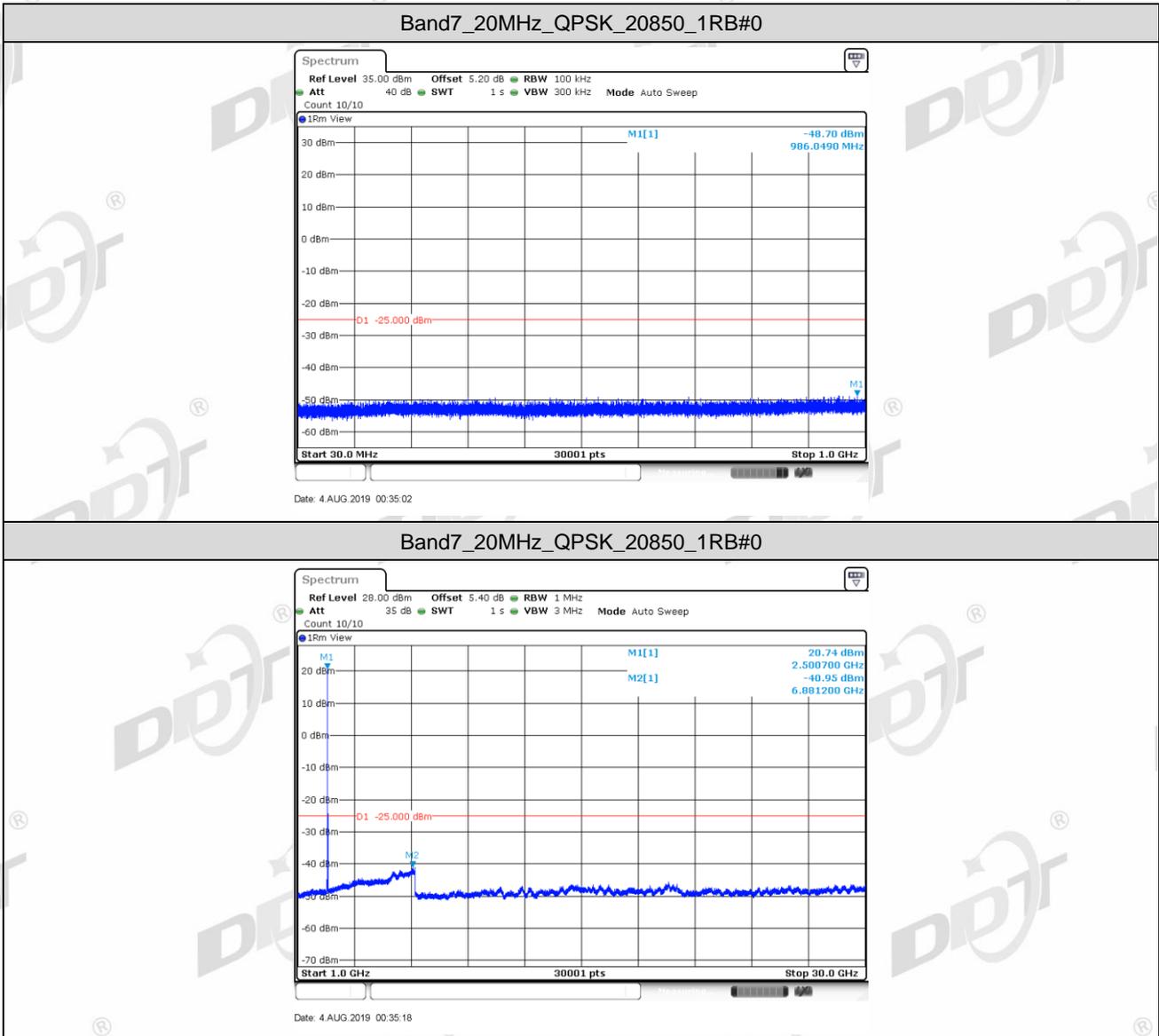
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8. Spurious Emission at Antenna Terminal

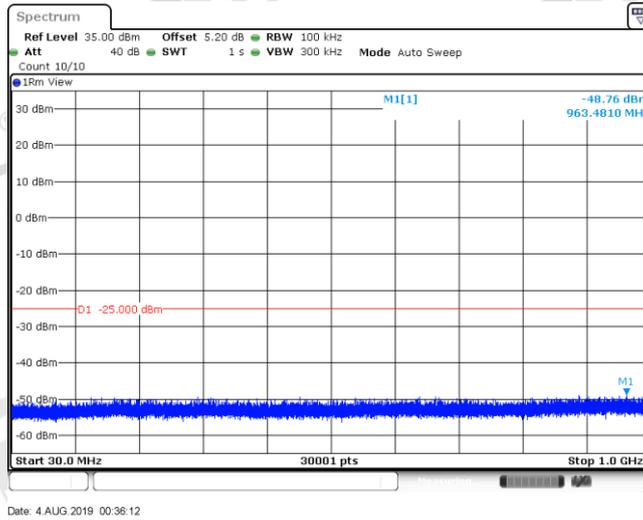
Remark1: For the averaged unwanted emissions measurements, the measurement points in each sweep is greater than twice the Span/RBW in order to ensure bin-to-bin spacing of $< RBW/2$ so that narrowband signals are not lost between frequency bins. As to the present test item, the "Measurement Points =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

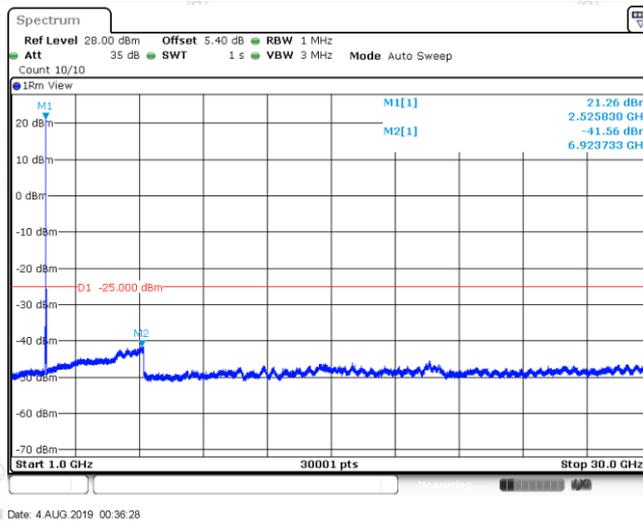
8.1. Test Plots



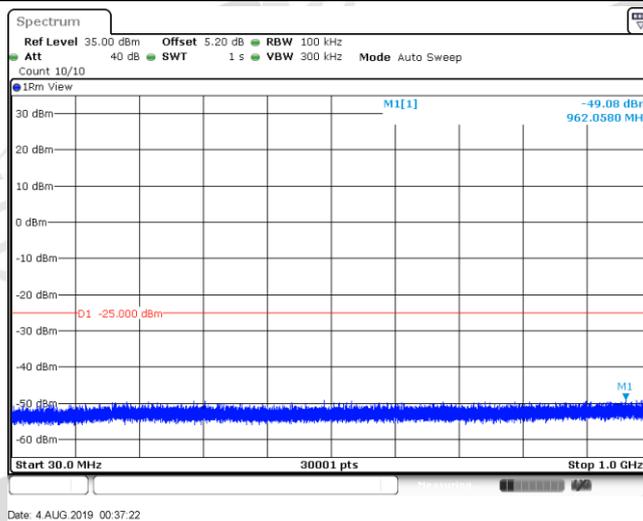
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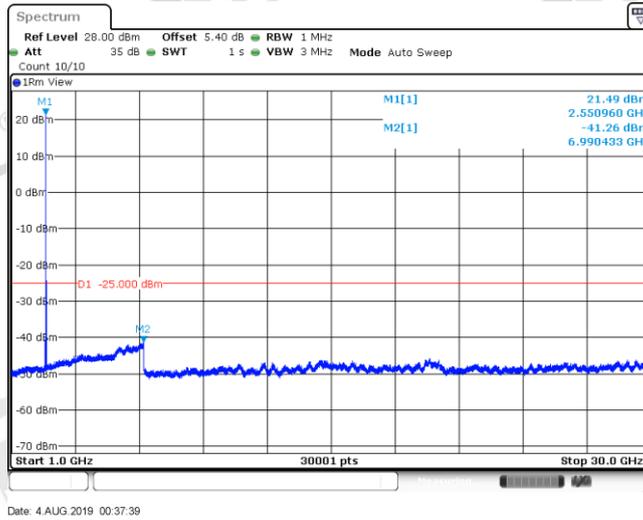
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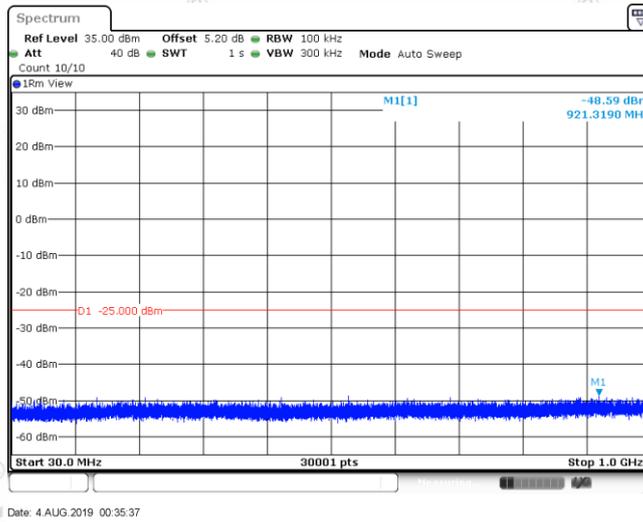
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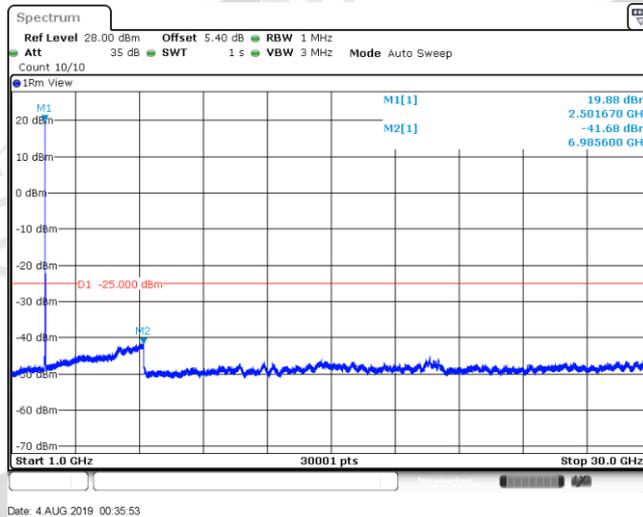
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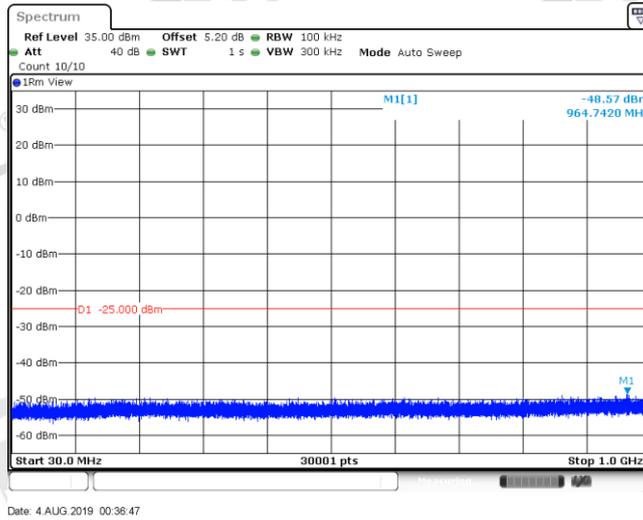
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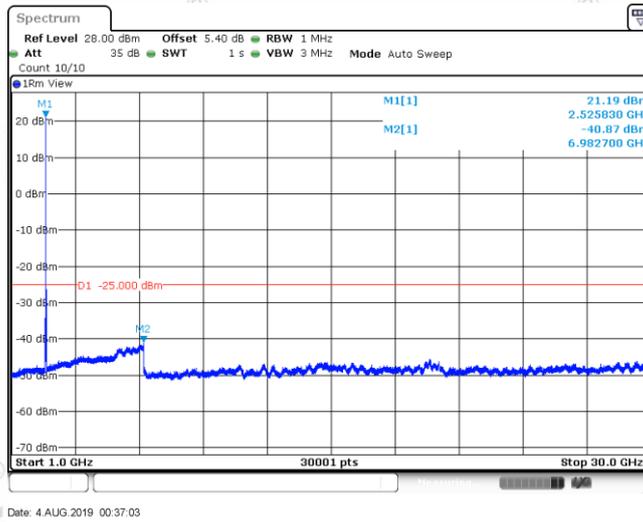
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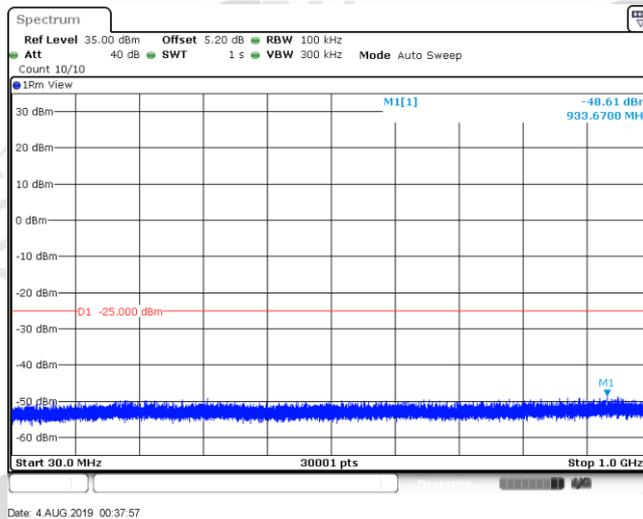
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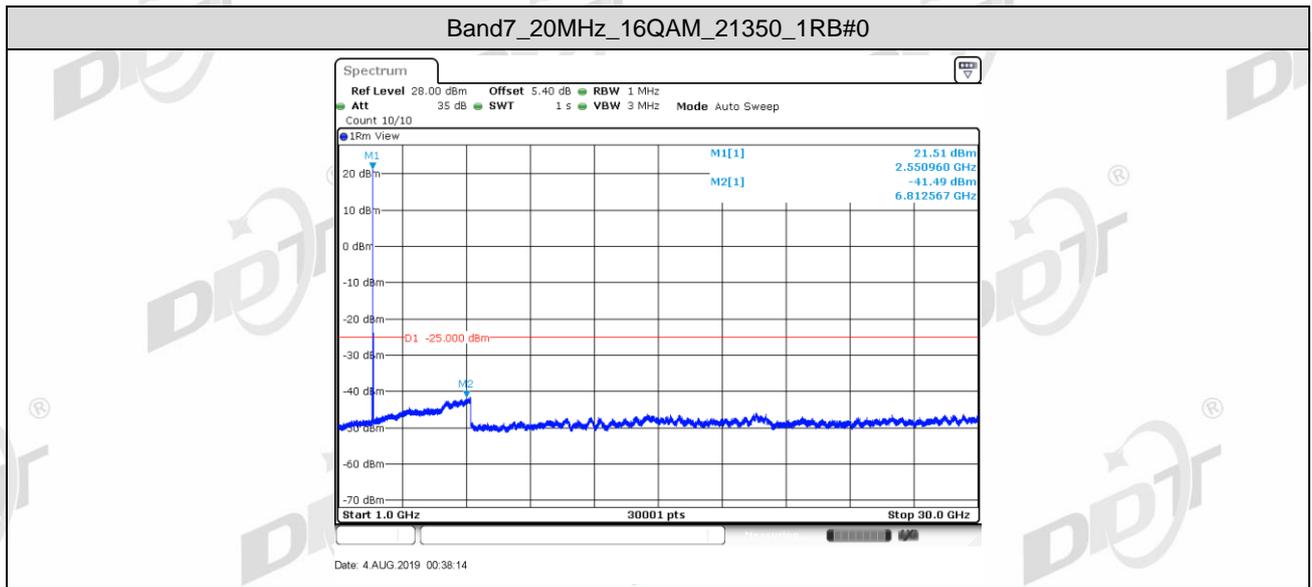


Band7_20MHz_16QAM_21100_1RB#0



Band7_20MHz_16QAM_21350_1RB#0





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	-2.70	-0.001076	±2.5	PASS
Band7	20MHz	QPSK	20850	100RB#0	VN	NT	-8.90	-0.003546	±2.5	PASS
Band7	20MHz	QPSK	20850	100RB#0	VH	NT	-7.20	-0.002869	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	VL	NT	-0.70	-0.000276	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	VN	NT	-5.30	-0.002091	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	VH	NT	-5.00	-0.001972	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	VL	NT	-0.70	-0.000273	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	VN	NT	-4.10	-0.001602	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	VH	NT	-3.10	-0.001211	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	VL	NT	-3.90	-0.001554	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	VN	NT	-0.90	-0.000359	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	VH	NT	-9.30	-0.003705	±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	-5.30	-0.002091	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	VH	NT	-2.20	-0.000868	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	VL	NT	-7.70	-0.003008	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	VN	NT	-6.30	-0.002461	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	VH	NT	-11.10	-0.004336	±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	-9.40	-0.003745	±2.5	PASS
Band7	20MHz	QPSK	20850	100RB#0	NV	-20	-2.30	-0.000916	±2.5	PASS
Band7	20MHz	QPSK	20850	100RB#0	NV	0	-4.60	-0.001833	±2.5	PASS
Band7	20MHz	QPSK	20850	100RB#0	NV	10	-4.00	-0.001594	±2.5	PASS
Band7	20MHz	QPSK	20850	100RB#0	NV	20	0.40	0.000159	±2.5	PASS
Band7	20MHz	QPSK	20850	100RB#0	NV	30	-6.90	-0.002749	±2.5	PASS
Band7	20MHz	QPSK	20850	100RB#0	NV	40	-4.90	-0.001952	±2.5	PASS
Band7	20MHz	QPSK	20850	100RB#0	NV	50	-1.10	-0.000438	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	-30	-4.20	-0.001657	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	-20	-7.20	-0.002840	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	0	-10.90	-0.004300	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	10	-8.80	-0.003471	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	20	-5.00	-0.001972	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	30	-6.40	-0.002525	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	40	-8.40	-0.003314	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	50	-8.50	-0.003353	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	NV	-30	-4.10	-0.001602	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	NV	-20	-4.60	-0.001797	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	NV	0	-4.20	-0.001641	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	NV	10	-3.20	-0.001250	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	NV	20	-4.60	-0.001797	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	NV	30	-5.60	-0.002188	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	NV	40	-3.10	-0.001211	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	NV	50	-3.90	-0.001523	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	NV	-30	-3.90	-0.001554	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	NV	-20	-4.70	-0.001873	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	NV	0	-10.00	-0.003984	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	NV	10	-6.30	-0.002510	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	NV	20	-2.50	-0.000996	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	NV	30	-1.90	-0.000757	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	NV	40	-5.10	-0.002032	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	NV	50	-6.50	-0.002590	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	NV	-30	-6.80	-0.002682	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	NV	-20	-9.50	-0.003748	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	NV	0	-4.60	-0.001815	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	NV	10	-4.30	-0.001696	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	NV	20	-7.30	-0.002880	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	NV	30	-9.00	-0.003550	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	NV	40	-2.40	-0.000947	±2.5	PASS

Band7	20MHz	16QAM	21100	100RB#0	NV	50	-4.90	-0.001933	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	NV	-30	-2.90	-0.001133	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	NV	-20	-2.20	-0.000859	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	NV	0	-6.50	-0.002539	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	NV	10	-12.30	-0.004805	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	NV	20	-5.90	-0.002305	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	NV	30	-10.90	-0.004258	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	NV	40	-1.50	-0.000586	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	NV	50	-5.40	-0.002109	±2.5	PASS

The End