



Appendix B

E-UTRA Band 7



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1 Effective (Isotropic) Radiated Power

1.1. Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Conducted Power(dBm)	EIRP (dBm)	Limit (dBm)	Verdict
Band7	5MHz	QPSK	20775	1RB#0	22.68	22.35	33.00	PASS
Band7	5MHz	QPSK	20775	1RB#12	22.92	22.59	33.00	PASS
Band7	5MHz	QPSK	20775	1RB#24	22.63	22.30	33.00	PASS
Band7	5MHz	QPSK	20775	12RB#0	21.73	21.40	33.00	PASS
Band7	5MHz	QPSK	20775	12RB#6	21.90	21.57	33.00	PASS
Band7	5MHz	QPSK	20775	12RB#13	21.85	21.52	33.00	PASS
Band7	5MHz	QPSK	20775	25RB#0	21.97	21.64	33.00	PASS
Band7	5MHz	QPSK	21100	1RB#0	22.85	22.52	33.00	PASS
Band7	5MHz	QPSK	21100	1RB#24	22.74	22.41	33.00	PASS
Band7	5MHz	QPSK	21100	1RB#12	22.92	22.59	33.00	PASS
Band7	5MHz	QPSK	21100	12RB#0	21.93	21.60	33.00	PASS
Band7	5MHz	QPSK	21100	12RB#6	21.80	21.47	33.00	PASS
Band7	5MHz	QPSK	21100	12RB#13	21.84	21.51	33.00	PASS
Band7	5MHz	QPSK	21100	25RB#0	21.63	21.30	33.00	PASS
Band7	5MHz	QPSK	21425	1RB#24	22.77	22.44	33.00	PASS
Band7	5MHz	QPSK	21425	1RB#0	22.51	22.18	33.00	PASS
Band7	5MHz	QPSK	21425	1RB#12	22.67	22.34	33.00	PASS
Band7	5MHz	QPSK	21425	12RB#0	21.97	21.64	33.00	PASS
Band7	5MHz	QPSK	21425	12RB#6	21.86	21.53	33.00	PASS
Band7	5MHz	QPSK	21425	12RB#13	21.64	21.31	33.00	PASS
Band7	5MHz	QPSK	21425	25RB#0	21.68	21.35	33.00	PASS
Band7	5MHz	16QAM	20775	1RB#0	21.87	21.54	33.00	PASS
Band7	5MHz	16QAM	20775	1RB#12	21.52	21.19	33.00	PASS
Band7	5MHz	16QAM	20775	1RB#24	21.95	21.62	33.00	PASS
Band7	5MHz	16QAM	20775	12RB#6	20.68	20.35	33.00	PASS
Band7	5MHz	16QAM	20775	12RB#0	20.67	20.34	33.00	PASS
Band7	5MHz	16QAM	20775	12RB#13	20.92	20.59	33.00	PASS
Band7	5MHz	16QAM	20775	25RB#0	20.58	20.25	33.00	PASS
Band7	5MHz	16QAM	21100	1RB#0	21.68	21.35	33.00	PASS
Band7	5MHz	16QAM	21100	1RB#12	21.97	21.64	33.00	PASS
Band7	5MHz	16QAM	21100	1RB#24	21.94	21.61	33.00	PASS
Band7	5MHz	16QAM	21100	12RB#13	20.71	20.38	33.00	PASS
Band7	5MHz	16QAM	21100	12RB#0	20.51	20.18	33.00	PASS
Band7	5MHz	16QAM	21100	12RB#6	20.84	20.51	33.00	PASS
Band7	5MHz	16QAM	21100	25RB#0	20.93	20.60	33.00	PASS
Band7	5MHz	16QAM	21425	1RB#12	21.64	21.31	33.00	PASS
Band7	5MHz	16QAM	21425	1RB#0	21.94	21.61	33.00	PASS
Band7	5MHz	16QAM	21425	1RB#24	21.77	21.44	33.00	PASS



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Band7	5MHz	16QAM	21425	12RB#0	20.55	20.22	33.00	PASS
Band7	5MHz	16QAM	21425	12RB#6	20.75	20.42	33.00	PASS
Band7	5MHz	16QAM	21425	12RB#13	20.62	20.29	33.00	PASS
Band7	5MHz	16QAM	21425	25RB#0	20.91	20.58	33.00	PASS
Band7	10MHz	QPSK	20800	1RB#24	22.90	22.57	33.00	PASS
Band7	10MHz	QPSK	20800	1RB#49	22.85	22.52	33.00	PASS
Band7	10MHz	QPSK	20800	1RB#0	22.76	22.43	33.00	PASS
Band7	10MHz	QPSK	20800	25RB#0	21.54	21.21	33.00	PASS
Band7	10MHz	QPSK	20800	25RB#12	21.55	21.22	33.00	PASS
Band7	10MHz	QPSK	20800	25RB#25	21.61	21.28	33.00	PASS
Band7	10MHz	QPSK	20800	50RB#0	21.88	21.55	33.00	PASS
Band7	10MHz	QPSK	21100	1RB#0	22.74	22.41	33.00	PASS
Band7	10MHz	QPSK	21100	1RB#49	22.53	22.20	33.00	PASS
Band7	10MHz	QPSK	21100	1RB#24	22.97	22.64	33.00	PASS
Band7	10MHz	QPSK	21100	25RB#25	21.89	21.56	33.00	PASS
Band7	10MHz	QPSK	21100	25RB#0	21.77	21.44	33.00	PASS
Band7	10MHz	QPSK	21100	25RB#12	21.93	21.60	33.00	PASS
Band7	10MHz	QPSK	21100	50RB#0	21.51	21.18	33.00	PASS
Band7	10MHz	QPSK	21400	1RB#24	22.61	22.28	33.00	PASS
Band7	10MHz	QPSK	21400	1RB#0	22.73	22.40	33.00	PASS
Band7	10MHz	QPSK	21400	1RB#49	22.52	22.19	33.00	PASS
Band7	10MHz	QPSK	21400	25RB#0	21.65	21.32	33.00	PASS
Band7	10MHz	QPSK	21400	25RB#25	21.81	21.48	33.00	PASS
Band7	10MHz	QPSK	21400	25RB#12	21.83	21.50	33.00	PASS
Band7	10MHz	QPSK	21400	50RB#0	21.99	21.66	33.00	PASS
Band7	10MHz	16QAM	20800	1RB#49	21.69	21.36	33.00	PASS
Band7	10MHz	16QAM	20800	1RB#0	21.59	21.26	33.00	PASS
Band7	10MHz	16QAM	20800	1RB#24	21.96	21.63	33.00	PASS
Band7	10MHz	16QAM	20800	25RB#25	20.82	20.49	33.00	PASS
Band7	10MHz	16QAM	20800	25RB#12	20.74	20.41	33.00	PASS
Band7	10MHz	16QAM	20800	25RB#0	20.56	20.23	33.00	PASS
Band7	10MHz	16QAM	20800	50RB#0	20.67	20.34	33.00	PASS
Band7	10MHz	16QAM	21100	1RB#49	21.89	21.56	33.00	PASS
Band7	10MHz	16QAM	21100	1RB#0	21.58	21.25	33.00	PASS
Band7	10MHz	16QAM	21100	1RB#24	21.76	21.43	33.00	PASS
Band7	10MHz	16QAM	21100	25RB#25	20.57	20.24	33.00	PASS
Band7	10MHz	16QAM	21100	25RB#0	20.68	20.35	33.00	PASS
Band7	10MHz	16QAM	21100	25RB#12	20.62	20.29	33.00	PASS
Band7	10MHz	16QAM	21100	50RB#0	20.51	20.18	33.00	PASS
Band7	10MHz	16QAM	21400	1RB#24	21.64	21.31	33.00	PASS
Band7	10MHz	16QAM	21400	1RB#0	21.91	21.58	33.00	PASS
Band7	10MHz	16QAM	21400	1RB#49	21.62	21.29	33.00	PASS
Band7	10MHz	16QAM	21400	25RB#0	20.66	20.33	33.00	PASS
Band7	10MHz	16QAM	21400	25RB#12	20.82	20.49	33.00	PASS
Band7	10MHz	16QAM	21400	25RB#25	20.54	20.21	33.00	PASS
Band7	10MHz	16QAM	21400	50RB#0	20.95	20.62	33.00	PASS
Band7	15MHz	QPSK	20825	1RB#0	22.64	22.31	33.00	PASS



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Band7	15MHz	QPSK	20825	1RB#38	22.93	22.60	33.00	PASS
Band7	15MHz	QPSK	20825	1RB#74	22.95	22.62	33.00	PASS
Band7	15MHz	QPSK	20825	36RB#0	21.63	21.30	33.00	PASS
Band7	15MHz	QPSK	20825	36RB#18	21.84	21.51	33.00	PASS
Band7	15MHz	QPSK	20825	36RB#39	21.92	21.59	33.00	PASS
Band7	15MHz	QPSK	20825	75RB#0	21.94	21.61	33.00	PASS
Band7	15MHz	QPSK	21100	1RB#0	22.57	22.24	33.00	PASS
Band7	15MHz	QPSK	21100	1RB#74	22.96	22.63	33.00	PASS
Band7	15MHz	QPSK	21100	1RB#38	22.55	22.22	33.00	PASS
Band7	15MHz	QPSK	21100	36RB#0	21.73	21.40	33.00	PASS
Band7	15MHz	QPSK	21100	36RB#18	21.55	21.22	33.00	PASS
Band7	15MHz	QPSK	21100	36RB#39	21.56	21.23	33.00	PASS
Band7	15MHz	QPSK	21100	75RB#0	21.62	21.29	33.00	PASS
Band7	15MHz	QPSK	21375	1RB#74	22.63	22.30	33.00	PASS
Band7	15MHz	QPSK	21375	1RB#0	22.60	22.27	33.00	PASS
Band7	15MHz	QPSK	21375	1RB#38	22.71	22.38	33.00	PASS
Band7	15MHz	QPSK	21375	36RB#0	21.97	21.64	33.00	PASS
Band7	15MHz	QPSK	21375	36RB#18	21.84	21.51	33.00	PASS
Band7	15MHz	QPSK	21375	36RB#39	21.50	21.17	33.00	PASS
Band7	15MHz	QPSK	21375	75RB#0	21.63	21.30	33.00	PASS
Band7	15MHz	16QAM	20825	1RB#0	21.55	21.22	33.00	PASS
Band7	15MHz	16QAM	20825	1RB#38	21.94	21.61	33.00	PASS
Band7	15MHz	16QAM	20825	1RB#74	21.83	21.50	33.00	PASS
Band7	15MHz	16QAM	20825	36RB#18	20.52	20.19	33.00	PASS
Band7	15MHz	16QAM	20825	36RB#0	20.79	20.46	33.00	PASS
Band7	15MHz	16QAM	20825	36RB#39	20.98	20.65	33.00	PASS
Band7	15MHz	16QAM	20825	75RB#0	20.90	20.57	33.00	PASS
Band7	15MHz	16QAM	21100	1RB#0	21.65	21.32	33.00	PASS
Band7	15MHz	16QAM	21100	1RB#38	21.79	21.46	33.00	PASS
Band7	15MHz	16QAM	21100	1RB#74	21.63	21.30	33.00	PASS
Band7	15MHz	16QAM	21100	36RB#39	20.91	20.58	33.00	PASS
Band7	15MHz	16QAM	21100	36RB#0	20.70	20.37	33.00	PASS
Band7	15MHz	16QAM	21100	36RB#18	20.72	20.39	33.00	PASS
Band7	15MHz	16QAM	21100	75RB#0	20.71	20.38	33.00	PASS
Band7	15MHz	16QAM	21375	1RB#38	21.71	21.38	33.00	PASS
Band7	15MHz	16QAM	21375	1RB#0	21.88	21.55	33.00	PASS
Band7	15MHz	16QAM	21375	1RB#74	21.93	21.60	33.00	PASS
Band7	15MHz	16QAM	21375	36RB#0	20.62	20.29	33.00	PASS
Band7	15MHz	16QAM	21375	36RB#18	20.63	20.30	33.00	PASS
Band7	15MHz	16QAM	21375	36RB#39	20.59	20.26	33.00	PASS
Band7	15MHz	16QAM	21375	75RB#0	20.58	20.25	33.00	PASS
Band7	20MHz	QPSK	20850	1RB#99	22.62	22.29	33.00	PASS
Band7	20MHz	QPSK	20850	1RB#49	22.61	22.28	33.00	PASS
Band7	20MHz	QPSK	20850	1RB#0	22.68	22.35	33.00	PASS
Band7	20MHz	QPSK	20850	50RB#0	21.73	21.40	33.00	PASS
Band7	20MHz	QPSK	20850	50RB#25	21.56	21.23	33.00	PASS
Band7	20MHz	QPSK	20850	50RB#50	21.50	21.17	33.00	PASS



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Band7	20MHz	QPSK	20850	100RB#0	21.96	21.63	33.00	PASS
Band7	20MHz	QPSK	21100	1RB#0	22.92	22.59	33.00	PASS
Band7	20MHz	QPSK	21100	1RB#99	22.91	22.58	33.00	PASS
Band7	20MHz	QPSK	21100	1RB#49	22.76	22.43	33.00	PASS
Band7	20MHz	QPSK	21100	50RB#50	21.88	21.55	33.00	PASS
Band7	20MHz	QPSK	21100	50RB#0	21.88	21.55	33.00	PASS
Band7	20MHz	QPSK	21100	50RB#25	21.97	21.64	33.00	PASS
Band7	20MHz	QPSK	21100	100RB#0	21.83	21.50	33.00	PASS
Band7	20MHz	QPSK	21350	1RB#49	22.85	22.52	33.00	PASS
Band7	20MHz	QPSK	21350	1RB#0	22.95	22.62	33.00	PASS
Band7	20MHz	QPSK	21350	1RB#99	22.75	22.42	33.00	PASS
Band7	20MHz	QPSK	21350	50RB#0	21.86	21.53	33.00	PASS
Band7	20MHz	QPSK	21350	50RB#50	21.85	21.52	33.00	PASS
Band7	20MHz	QPSK	21350	50RB#25	21.96	21.63	33.00	PASS
Band7	20MHz	QPSK	21350	100RB#0	21.68	21.35	33.00	PASS
Band7	20MHz	16QAM	20850	1RB#99	21.62	21.29	33.00	PASS
Band7	20MHz	16QAM	20850	1RB#0	21.61	21.28	33.00	PASS
Band7	20MHz	16QAM	20850	1RB#49	21.95	21.62	33.00	PASS
Band7	20MHz	16QAM	20850	50RB#50	20.52	20.19	33.00	PASS
Band7	20MHz	16QAM	20850	50RB#25	20.93	20.60	33.00	PASS
Band7	20MHz	16QAM	20850	50RB#0	20.62	20.29	33.00	PASS
Band7	20MHz	16QAM	20850	100RB#0	20.72	20.39	33.00	PASS
Band7	20MHz	16QAM	21100	1RB#99	21.52	21.19	33.00	PASS
Band7	20MHz	16QAM	21100	1RB#0	21.68	21.35	33.00	PASS
Band7	20MHz	16QAM	21100	1RB#49	21.79	21.46	33.00	PASS
Band7	20MHz	16QAM	21100	50RB#50	20.99	20.66	33.00	PASS
Band7	20MHz	16QAM	21100	50RB#0	20.60	20.27	33.00	PASS
Band7	20MHz	16QAM	21100	50RB#25	20.79	20.46	33.00	PASS
Band7	20MHz	16QAM	21100	100RB#0	20.71	20.38	33.00	PASS
Band7	20MHz	16QAM	21350	1RB#49	21.56	21.23	33.00	PASS
Band7	20MHz	16QAM	21350	1RB#0	21.78	21.45	33.00	PASS
Band7	20MHz	16QAM	21350	1RB#99	21.85	21.52	33.00	PASS
Band7	20MHz	16QAM	21350	50RB#0	20.91	20.58	33.00	PASS
Band7	20MHz	16QAM	21350	50RB#25	20.89	20.56	33.00	PASS
Band7	20MHz	16QAM	21350	50RB#50	20.79	20.46	33.00	PASS
Band7	20MHz	16QAM	21350	100RB#0	20.98	20.65	33.00	PASS

Remark:

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

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

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



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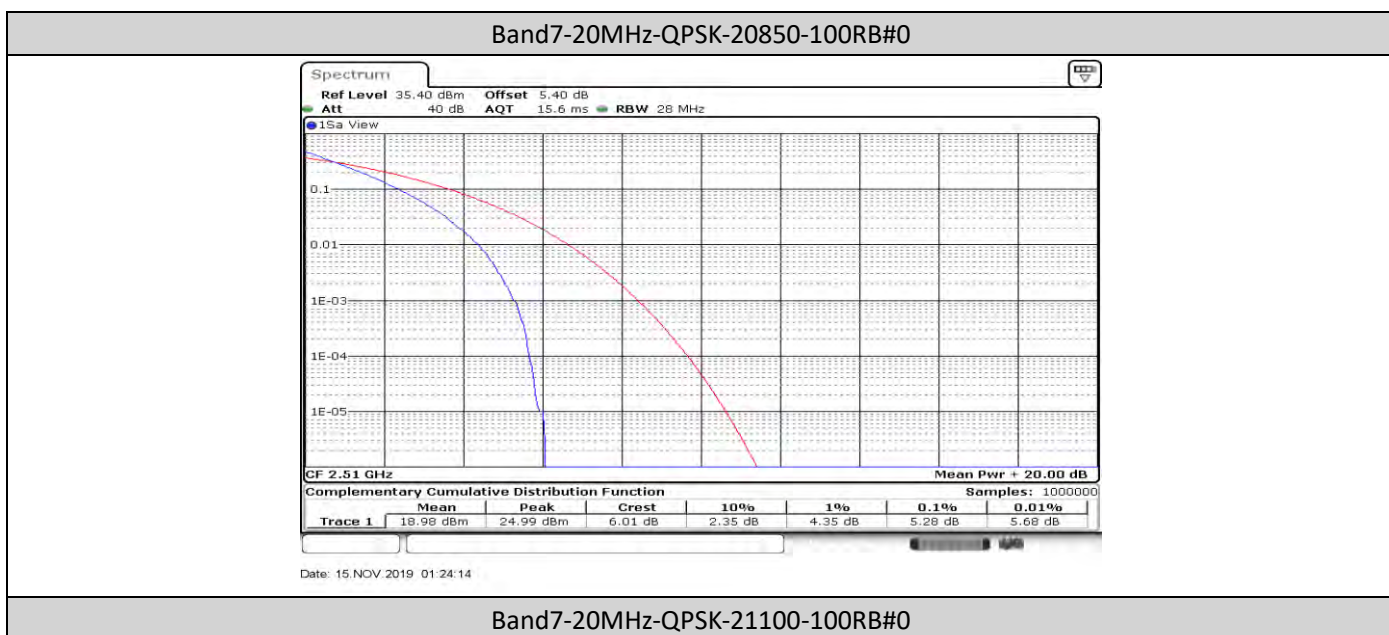


2. Peak-to-Average Ratio (CCDF)

2.1. Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band7	20MHz	QPSK	20850	100RB#0	5.28	13	PASS
Band7	20MHz	QPSK	21100	100RB#0	6.32	13	PASS
Band7	20MHz	QPSK	21350	100RB#0	5.19	13	PASS
Band7	20MHz	16QAM	20850	100RB#0	6.14	13	PASS
Band7	20MHz	16QAM	21100	100RB#0	6.35	13	PASS
Band7	20MHz	16QAM	21350	100RB#0	6.09	13	PASS

2.2. Test Plots



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Date: 15.NOV.2019 01:24:33

Band7-20MHz-QPSK-21350-100RB#0



Date: 15.NOV.2019 01:24:52

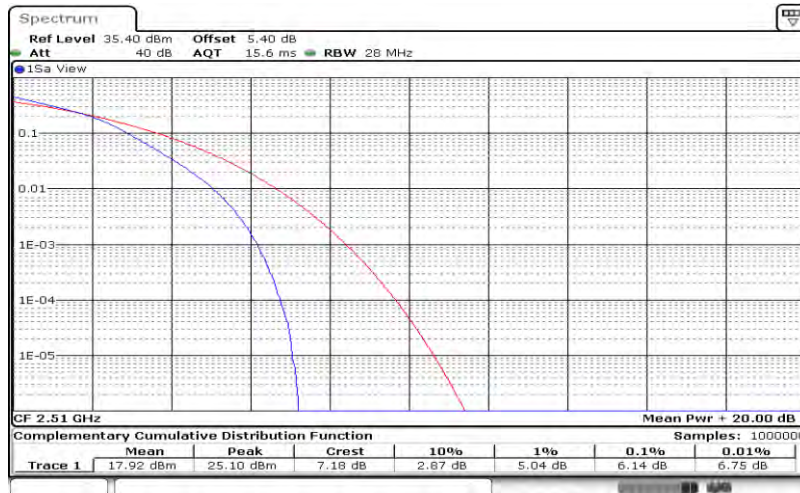
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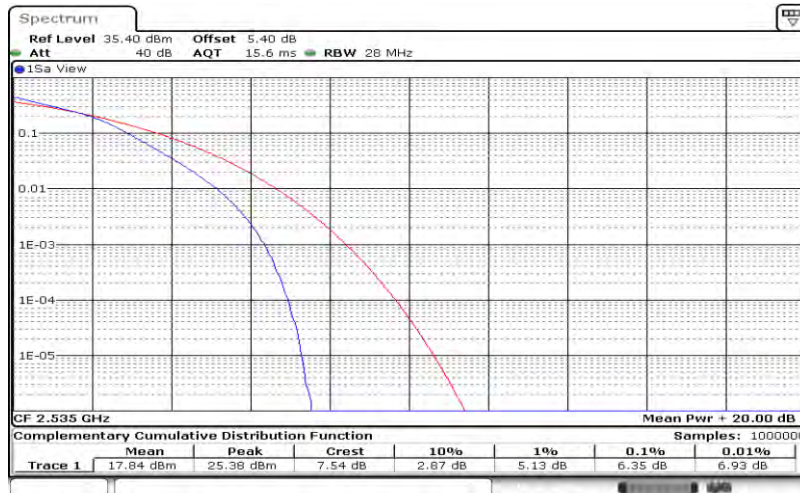
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Date: 15.NOV.2019 01:24:22

Band7-20MHz-16QAM-21100-100RB#0



Date: 15.NOV.2019 01:24:41

Band7-20MHz-16QAM-21350-100RB#0



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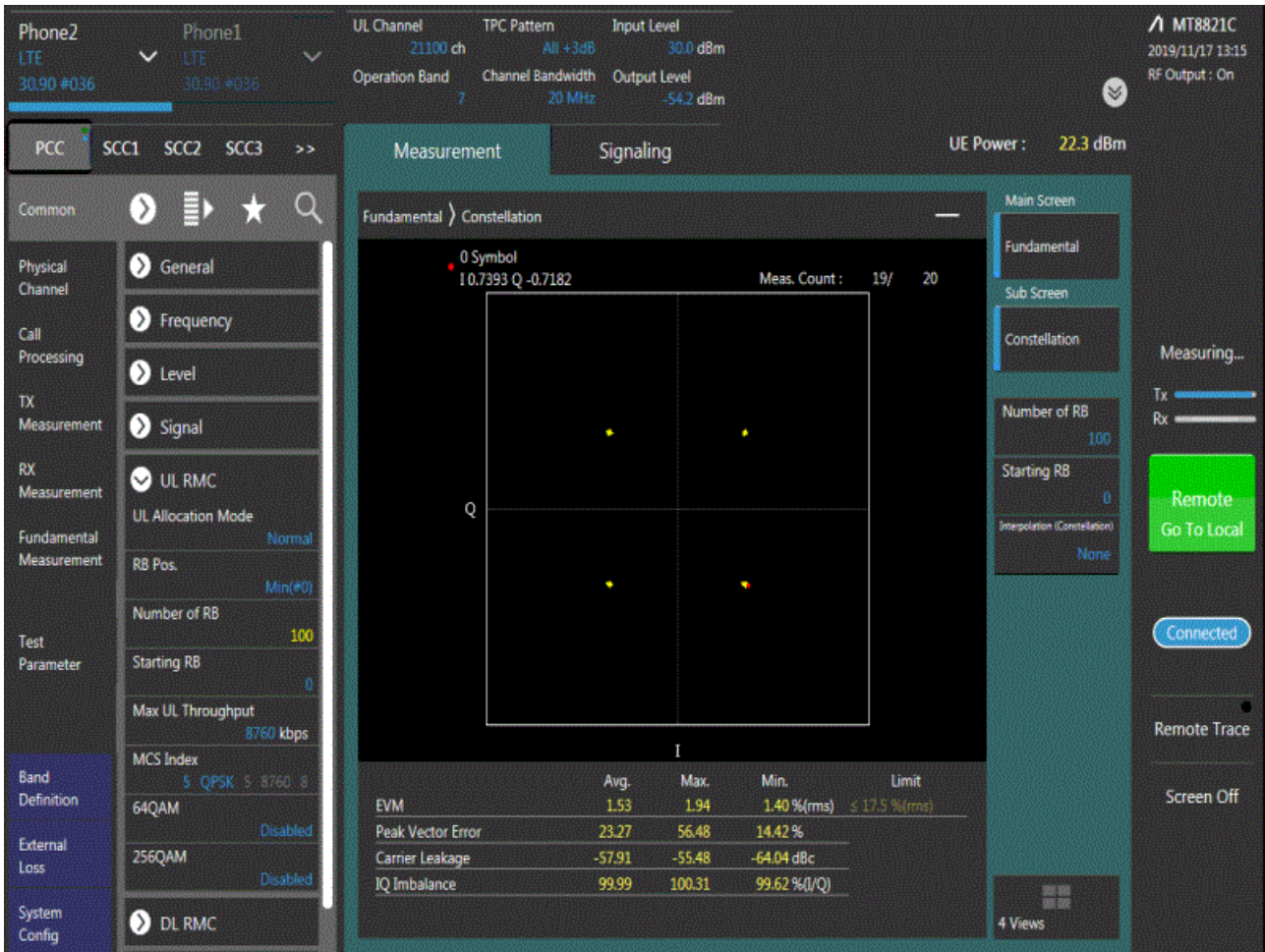
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3. Modulation Characteristics

3.1. Test Band = LTE Band 7

3.1.1. Test Mode = LTE /TM1 20MHz

3.1.1.1. Test Channel = MCH



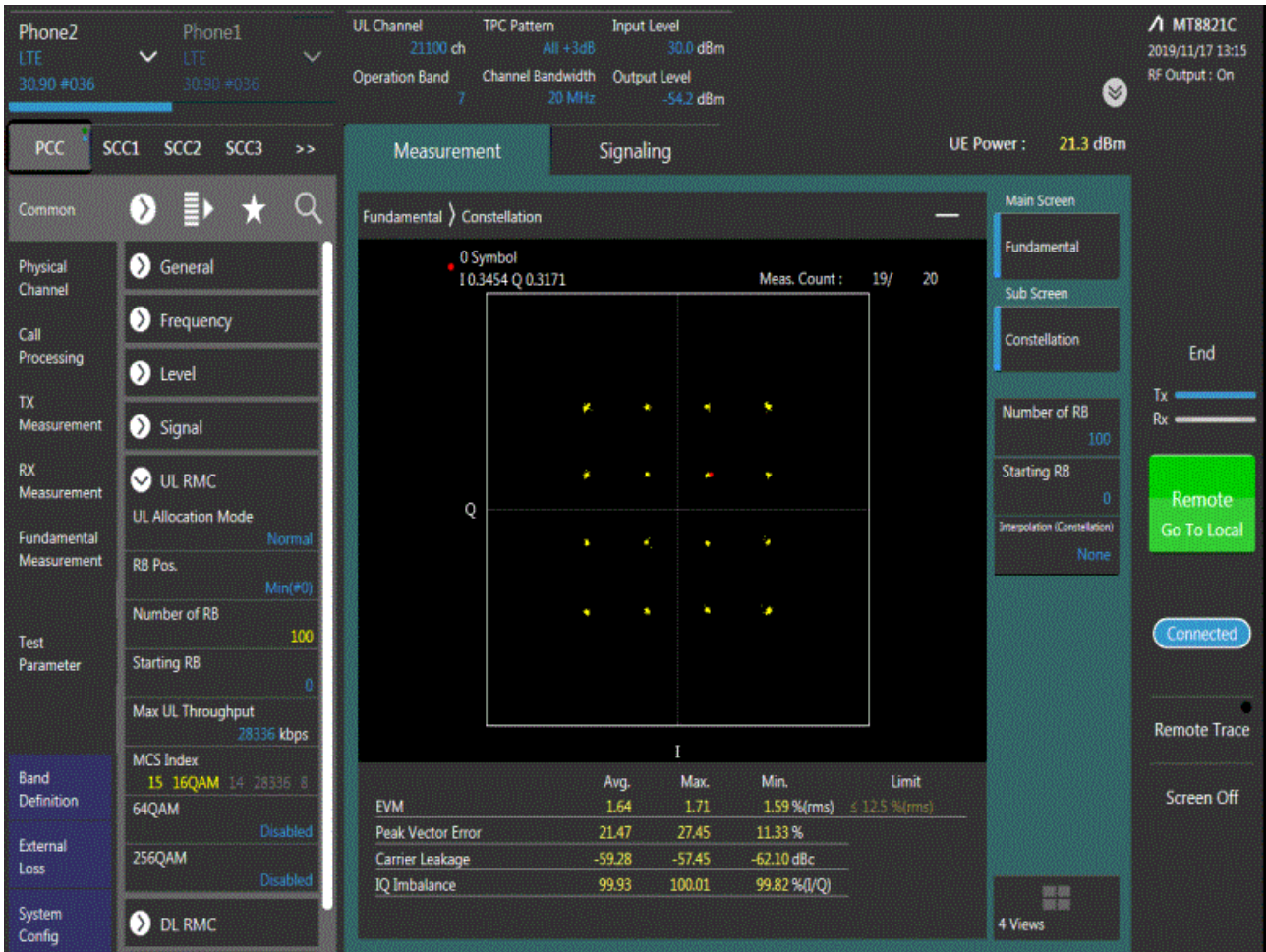
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3.1.2. Test Mode = LTE /TM2 20MHz

3.1.2.1. Test Channel = MCH



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4. 26dB Bandwidth and Occupied Bandwidth

4.1. Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band7	5MHz	QPSK	20775	25RB#0	4.466	4.840	PASS
Band7	5MHz	QPSK	21100	25RB#0	4.476	4.910	PASS
Band7	5MHz	QPSK	21425	25RB#0	4.486	4.870	PASS
Band7	5MHz	16QAM	20775	25RB#0	4.466	4.990	PASS
Band7	5MHz	16QAM	21100	25RB#0	4.476	4.860	PASS
Band7	5MHz	16QAM	21425	25RB#0	4.466	4.800	PASS
Band7	10MHz	QPSK	20800	50RB#0	8.951	9.620	PASS
Band7	10MHz	QPSK	21100	50RB#0	8.931	9.520	PASS
Band7	10MHz	QPSK	21400	50RB#0	8.951	9.600	PASS
Band7	10MHz	16QAM	20800	50RB#0	8.931	9.640	PASS
Band7	10MHz	16QAM	21100	50RB#0	8.951	9.600	PASS
Band7	10MHz	16QAM	21400	50RB#0	8.931	9.600	PASS
Band7	15MHz	QPSK	20825	75RB#0	13.457	14.820	PASS
Band7	15MHz	QPSK	21100	75RB#0	13.457	14.670	PASS
Band7	15MHz	QPSK	21375	75RB#0	13.457	17.490	PASS
Band7	15MHz	16QAM	20825	75RB#0	13.487	14.730	PASS
Band7	15MHz	16QAM	21100	75RB#0	13.457	14.700	PASS
Band7	15MHz	16QAM	21375	75RB#0	13.457	14.640	PASS
Band7	20MHz	QPSK	20850	100RB#0	17.942	19.360	PASS
Band7	20MHz	QPSK	21100	100RB#0	17.902	19.240	PASS
Band7	20MHz	QPSK	21350	100RB#0	17.862	20.160	PASS
Band7	20MHz	16QAM	20850	100RB#0	17.942	19.240	PASS
Band7	20MHz	16QAM	21100	100RB#0	17.902	19.320	PASS
Band7	20MHz	16QAM	21350	100RB#0	17.902	19.280	PASS

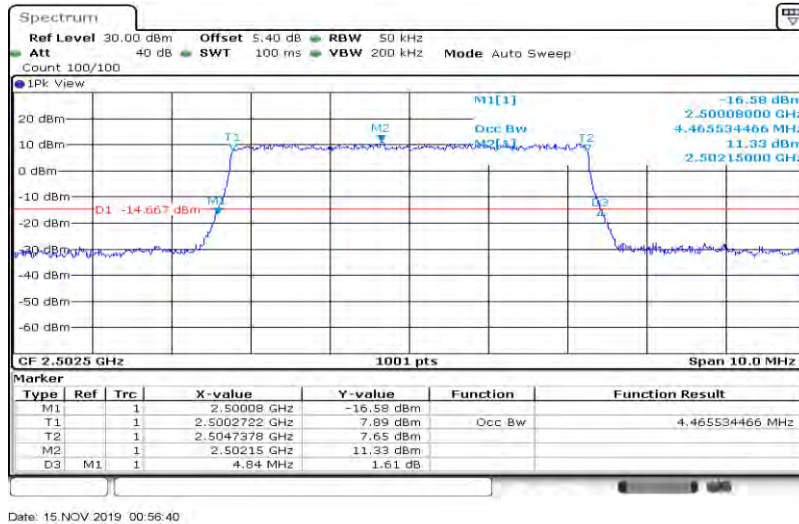


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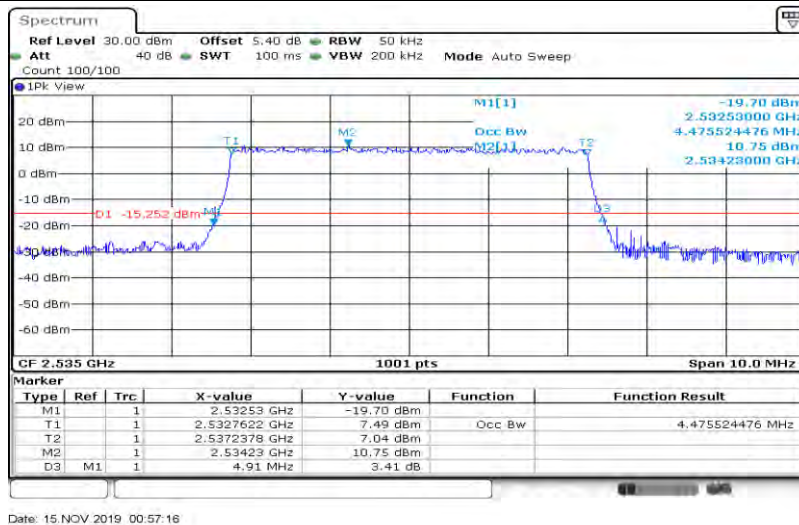
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4.2. Test Plots

Band7-5MHz-QPSK-20775-25RB#0-4.466



Band7-5MHz-QPSK-21100-25RB#0-4.476



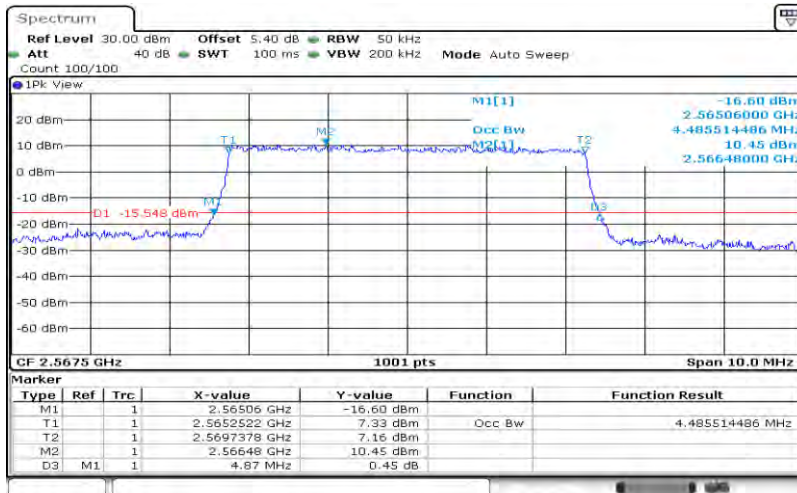
Band7-5MHz-QPSK-21425-25RB#0-4.486



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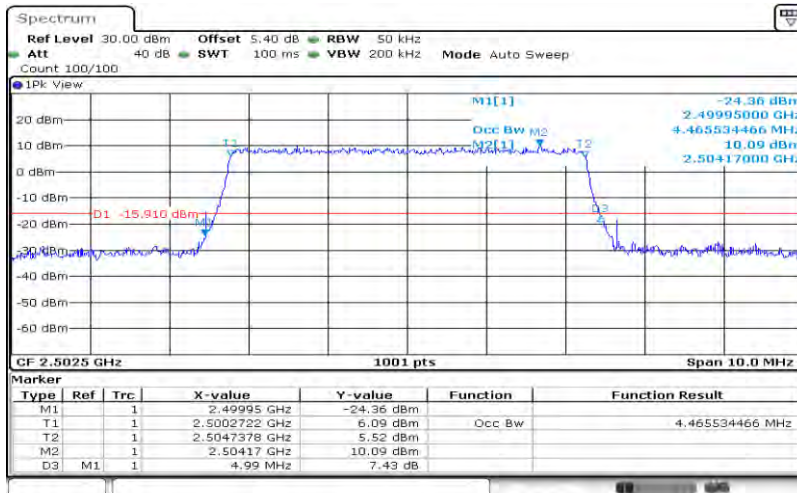
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Date: 15.NOV.2019 00:57:52

Band7-5MHz-16QAM-20775-25RB#0-4.466

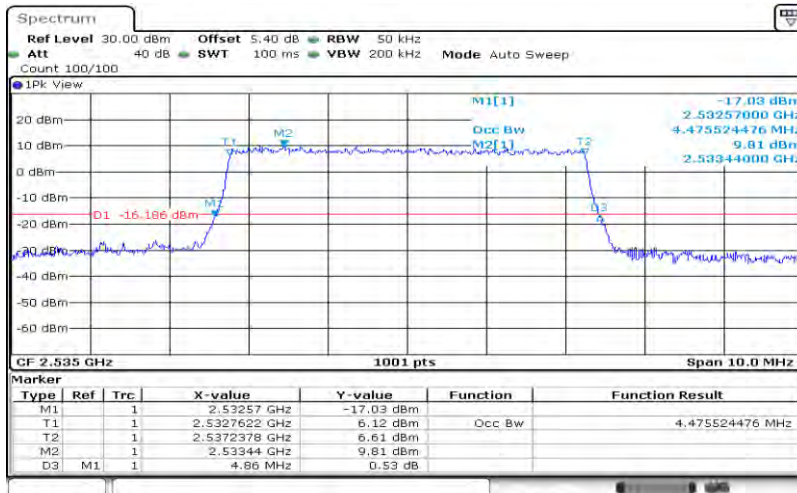


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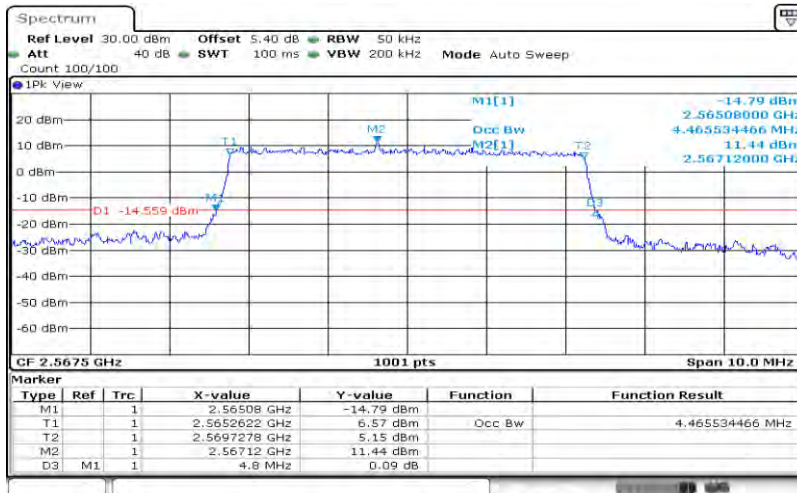


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Band7-5MHz-16QAM-21425-25RB#0-4.466

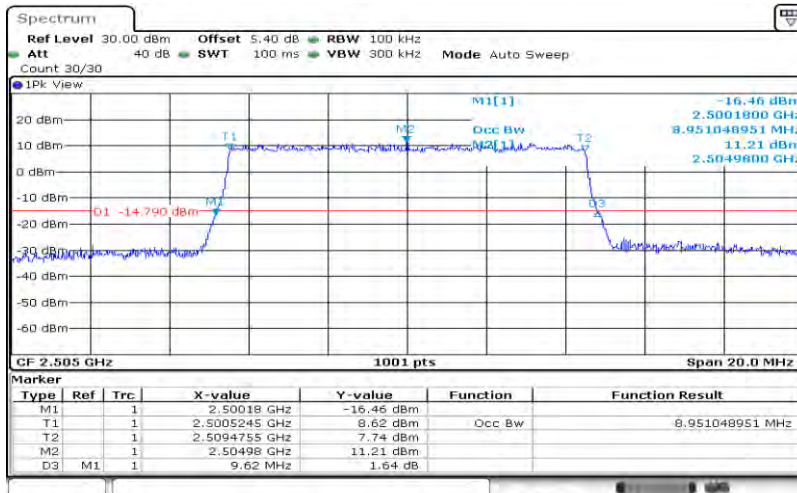


Date: 15.NOV.2019 00:58:09

Band7-10MHz-QPSK-20800-50RB#0-8.951

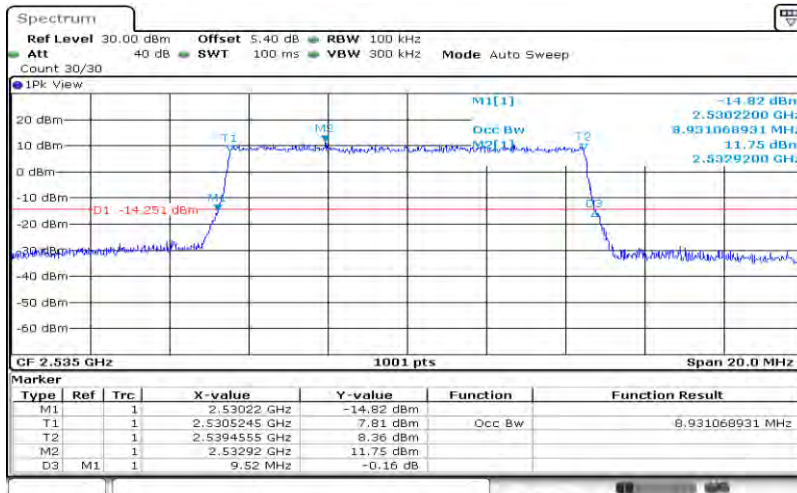


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Date: 15.NOV.2019 00:58:43

Band7-10MHz-QPSK-21100-50RB#0-8.931

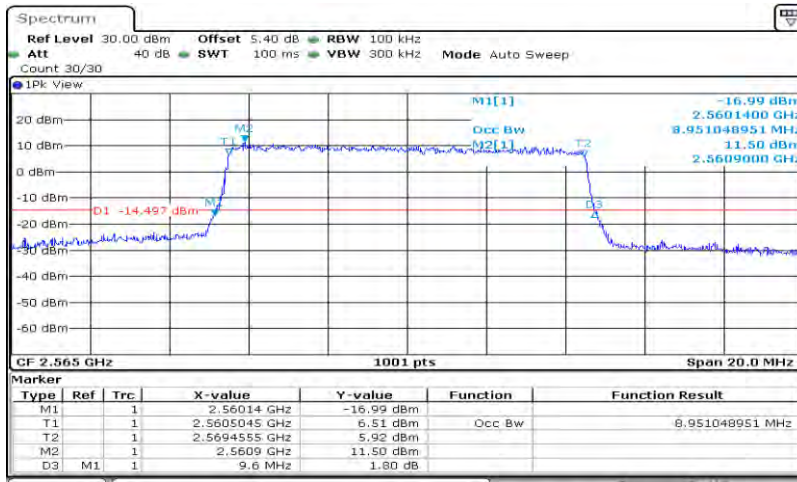


Date: 15.NOV.2019 01:00:06

Band7-10MHz-QPSK-21400-50RB#0-8.951

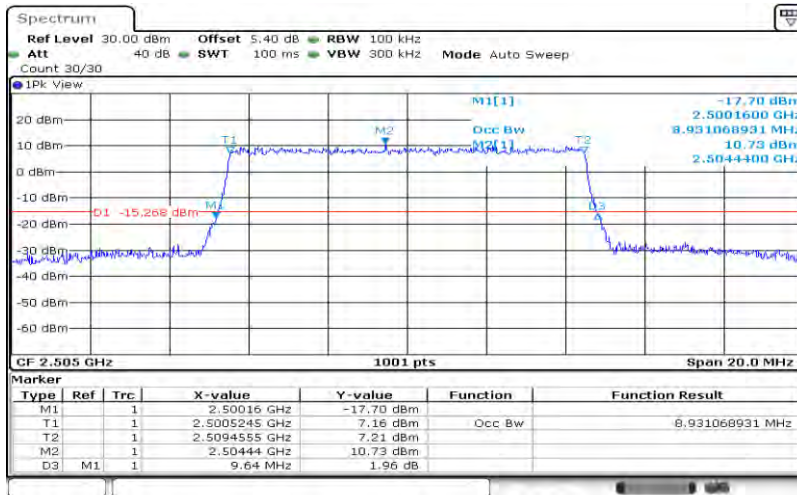


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Band7-10MHz-16QAM-20800-50RB#0-8.931

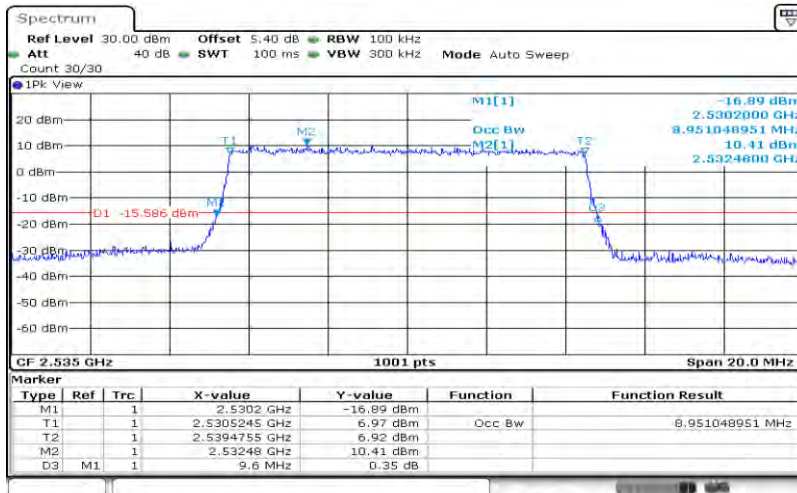


Date: 15.NOV.2019 00:59:53

Band7-10MHz-16QAM-21100-50RB#0-8.951

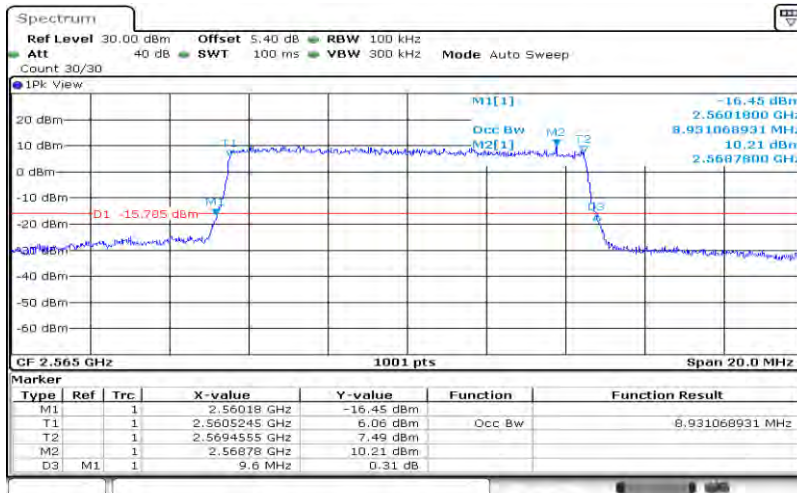


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Date: 15.NOV.2019 01:00:16

Band7-10MHz-16QAM-21400-50RB#0-8.931

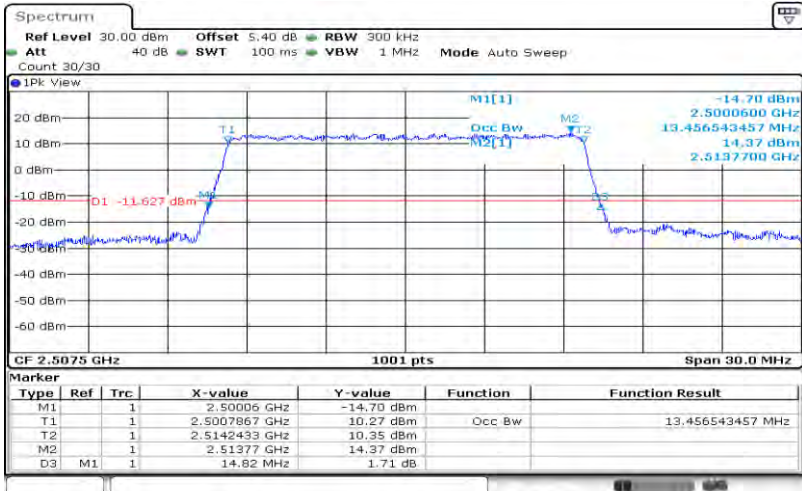


Date: 15.NOV.2019 01:00:38

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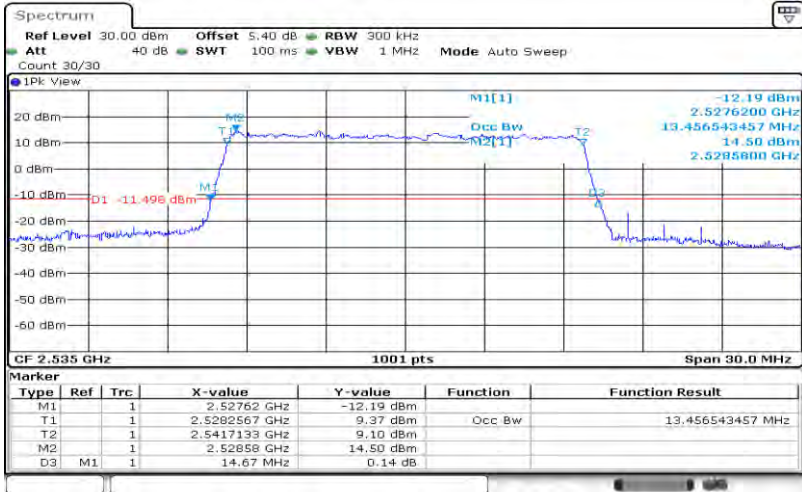


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Date: 15.NOV.2019 01:02:13

Band7-15MHz-QPSK-21100-75RB#0-13.457

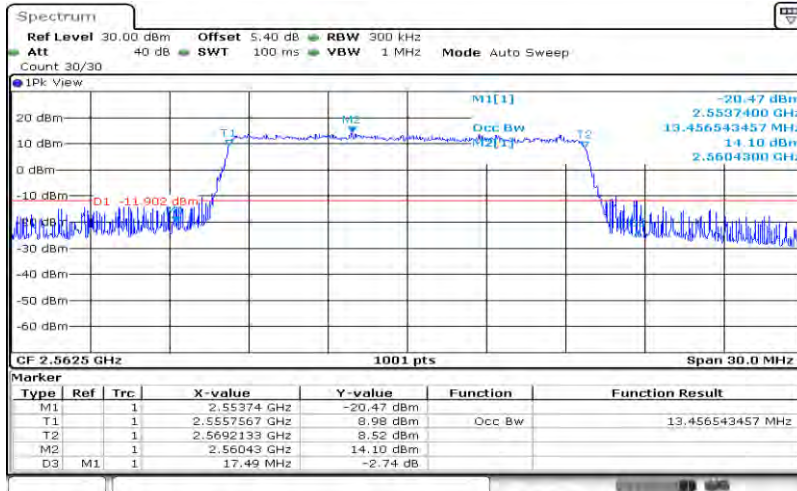


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Band7-15MHz-QPSK-21375-75RB#0-13.457

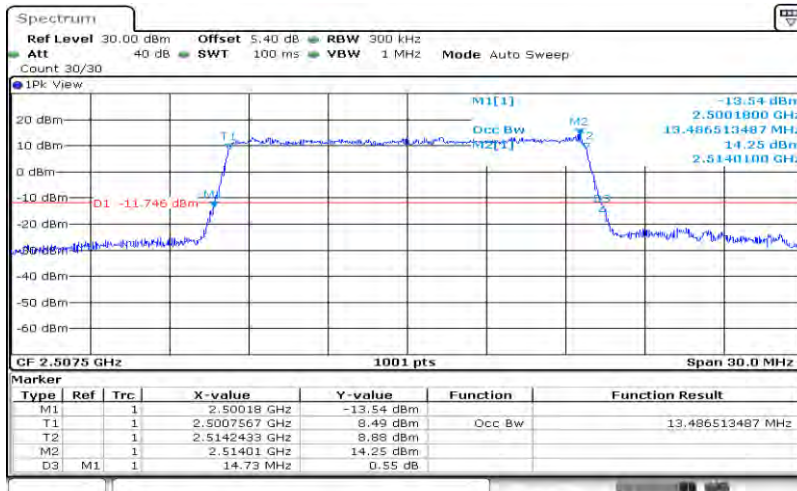


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Date: 15.NOV.2019 01:02:57

Band7-15MHz-16QAM-20825-75RB#0-13.487



Date: 15.NOV.2019 01:02:23

Band7-15MHz-16QAM-21100-75RB#0-13.457

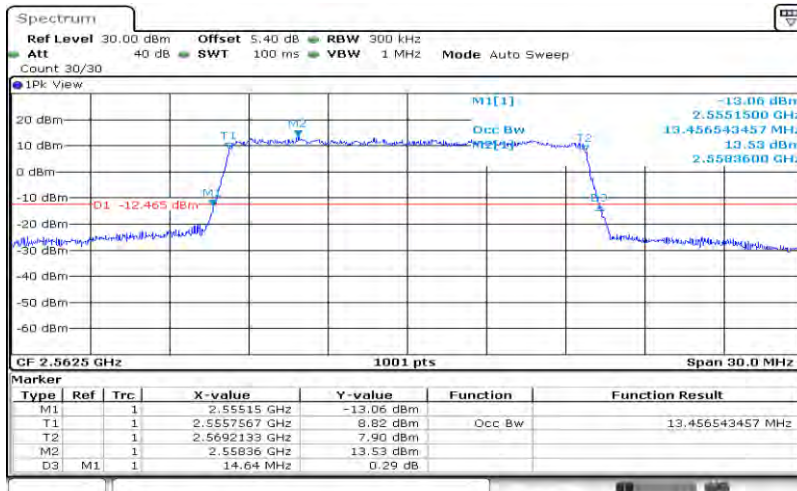


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Date: 15.NOV.2019 01:02:45

Band7-15MHz-16QAM-21375-75RB#0-13.457

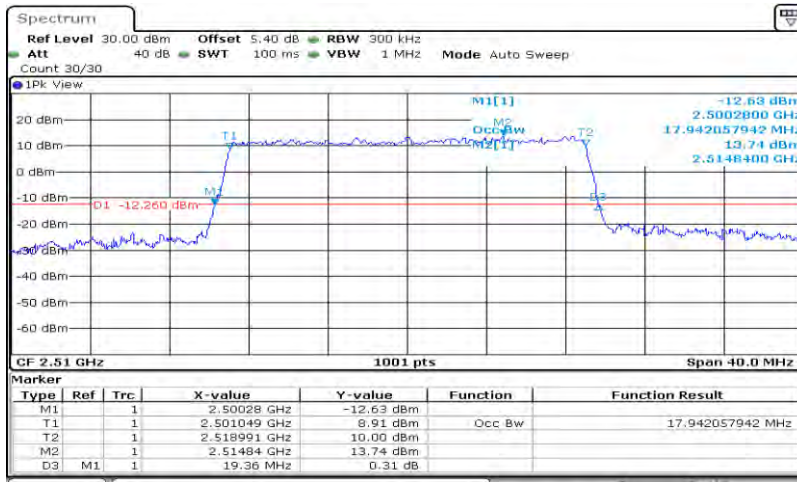


Date: 15.NOV.2019 01:03:07

Band7-20MHz-QPSK-20850-100RB#0-17.942

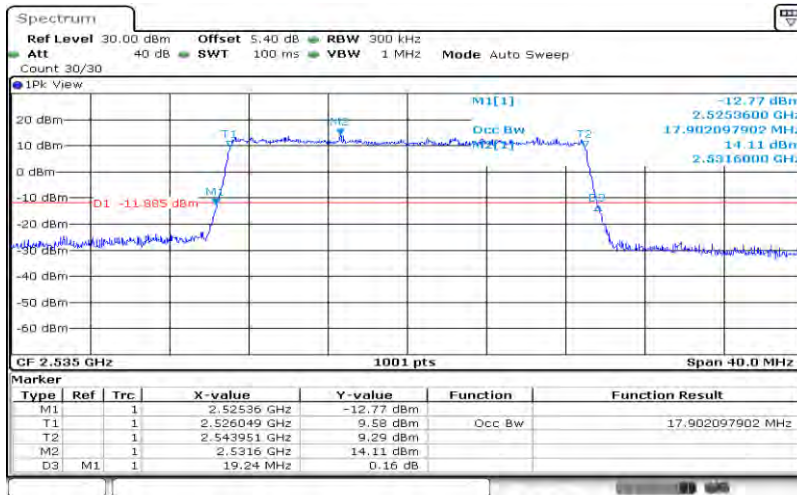


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Date: 15.NOV.2019 01:04:42

Band7-20MHz-QPSK-21100-100RB#0-17.902

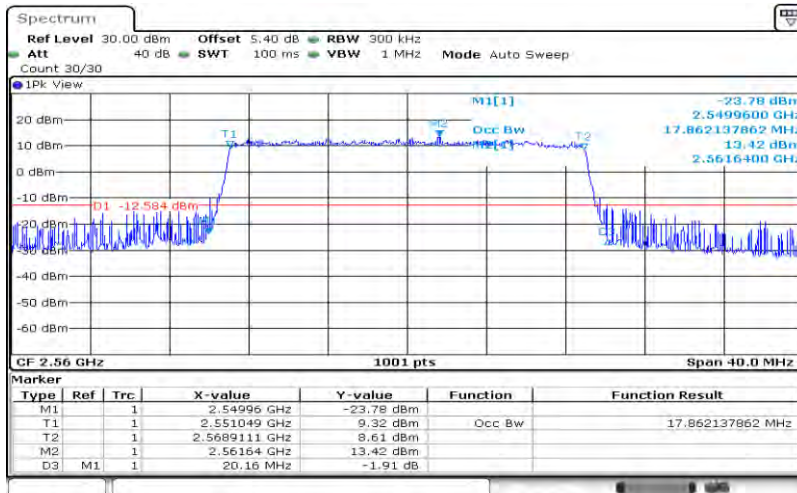


Date: 15.NOV.2019 01:05:04

Band7-20MHz-QPSK-21350-100RB#0-17.862

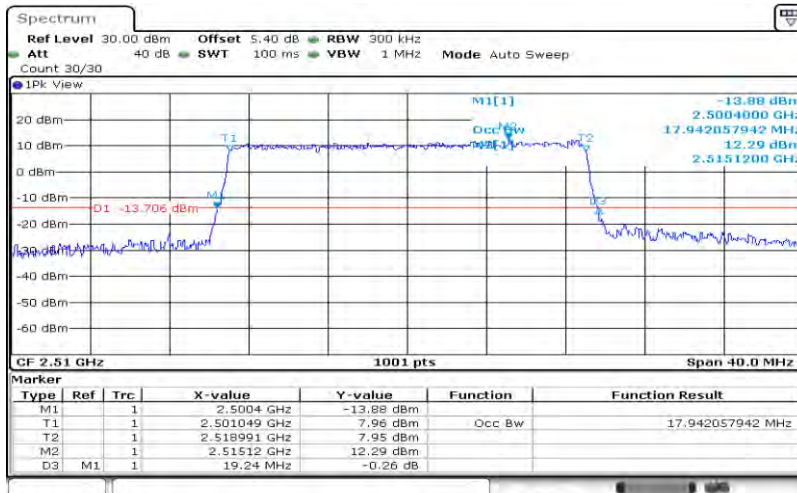


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Date: 15.NOV.2019 01:05:26

Band7-20MHz-16QAM-20850-100RB#0-17.942

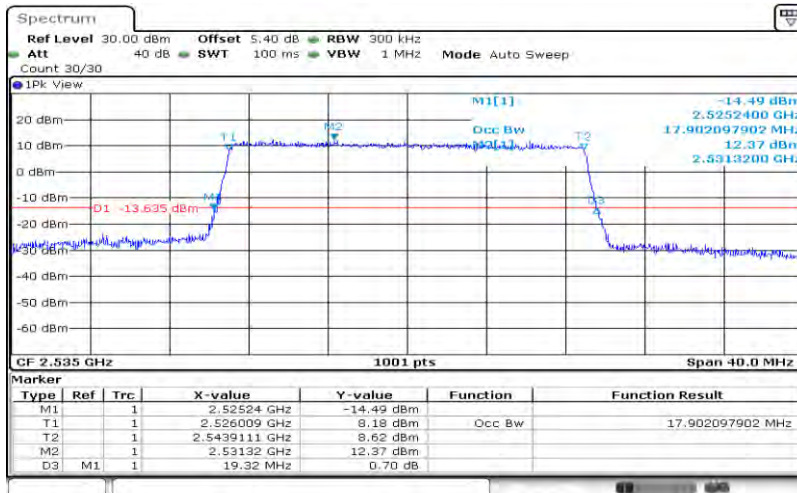


Date: 15.NOV.2019 01:04:51

Band7-20MHz-16QAM-21100-100RB#0-17.902

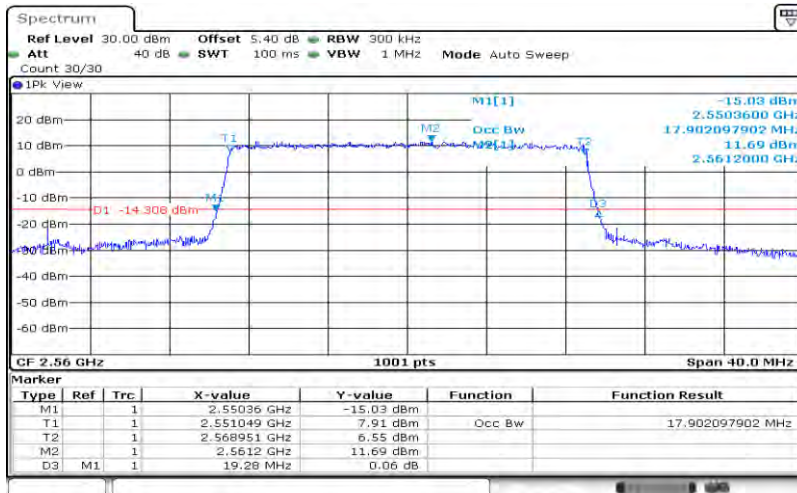


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Date: 15.NOV.2019 01:05:14

Band7-20MHz-16QAM-21350-100RB#0-17.902



Date: 15.NOV.2019 01:05:36

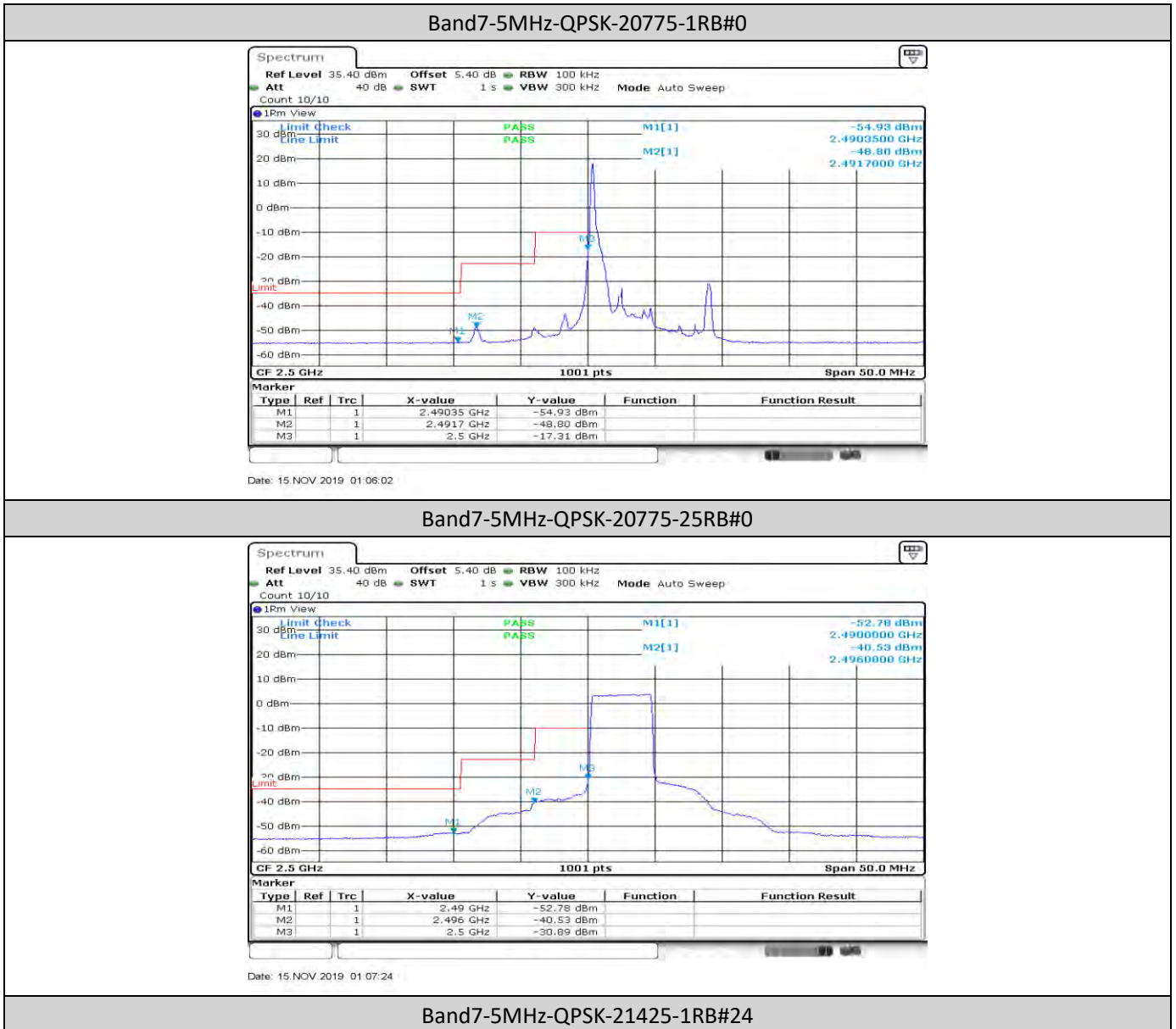


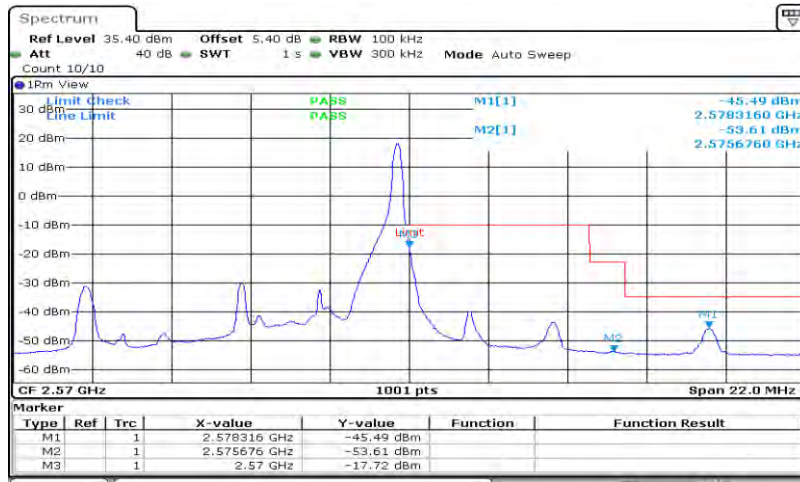
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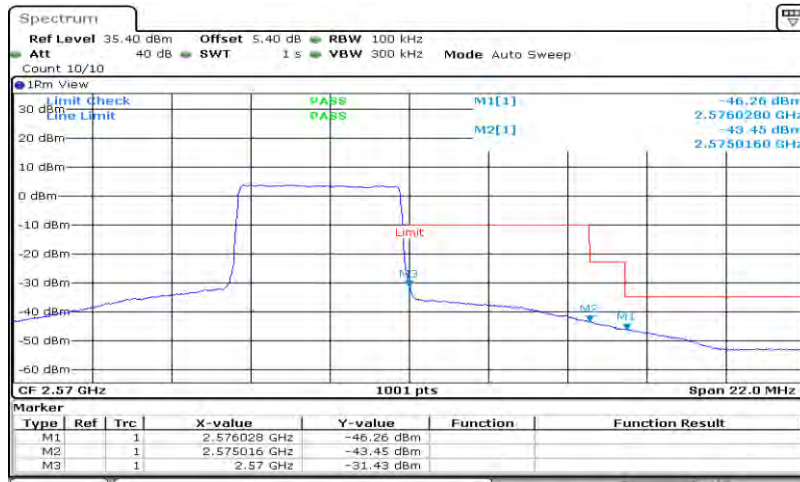
5. Band Edge Compliance

5.1. Test Plots





Band7-5MHz-QPSK-21425-25RB#0

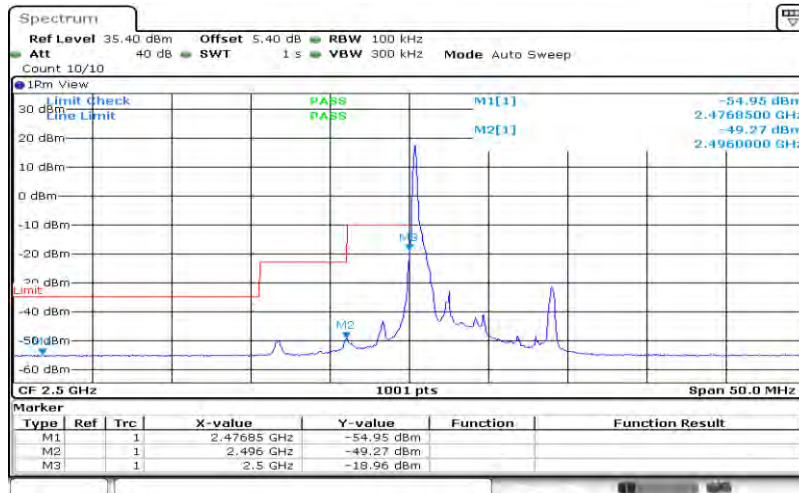


Band7-5MHz-16QAM-20775-1RB#0

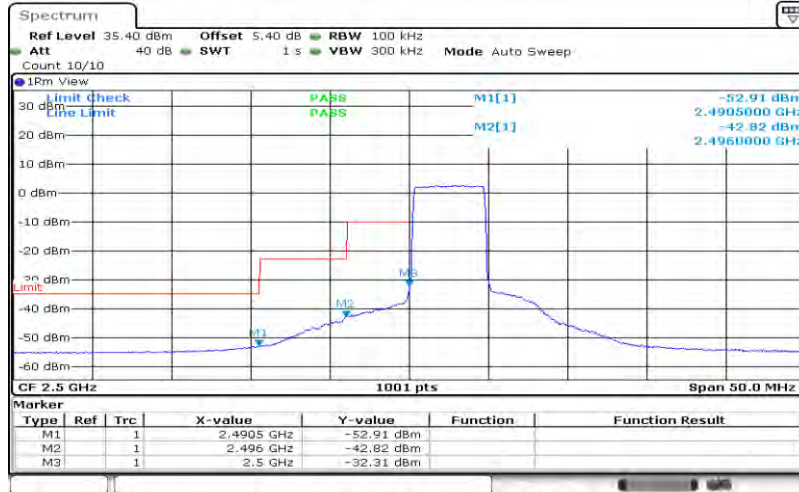


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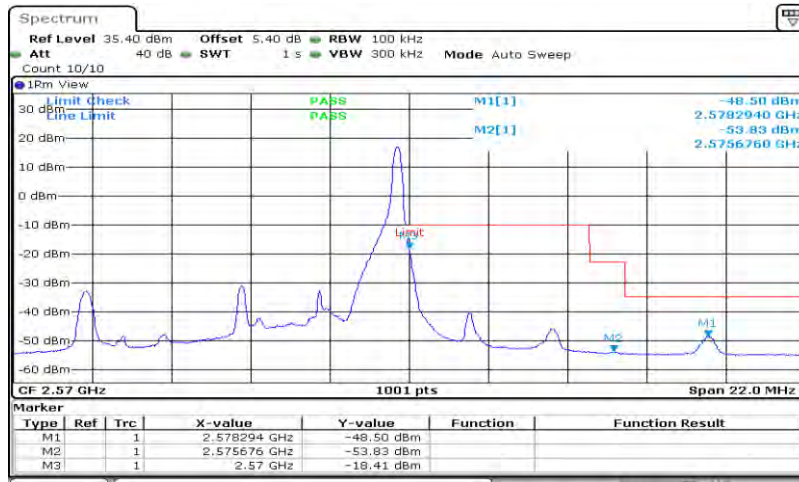
Band7-5MHz-16QAM-20775-25RB#0



Band7-5MHz-16QAM-21425-1RB#24

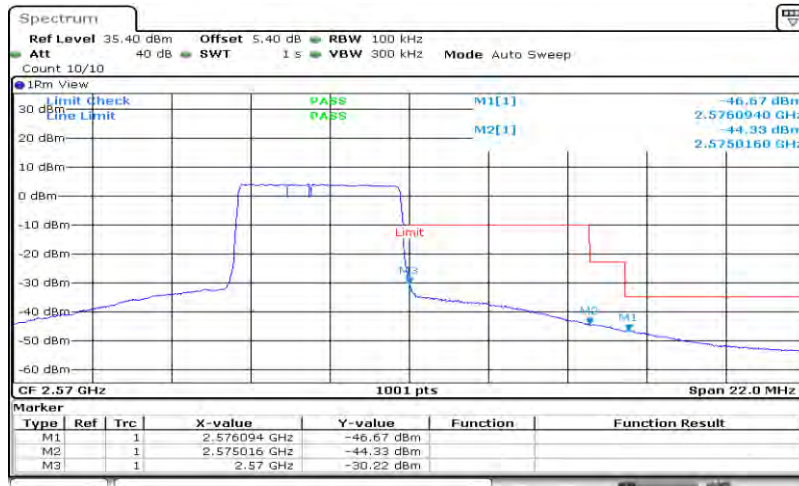


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Date: 15.NOV.2019 01:07:01

Band7-5MHz-16QAM-21425-25RB#0

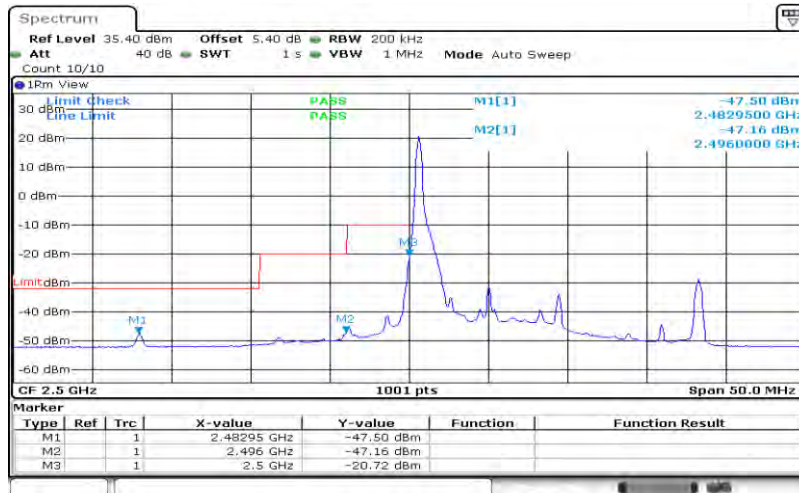


Date: 15.NOV.2019 01:08:19

Band7-10MHz-QPSK-20800-1RB#0

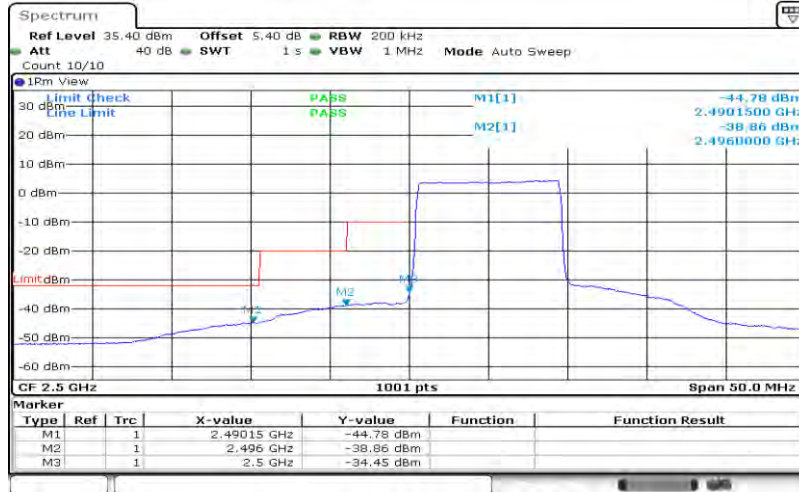


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Date: 15.NOV.2019 01:10:04

Band7-10MHz-QPSK-20800-50RB#0

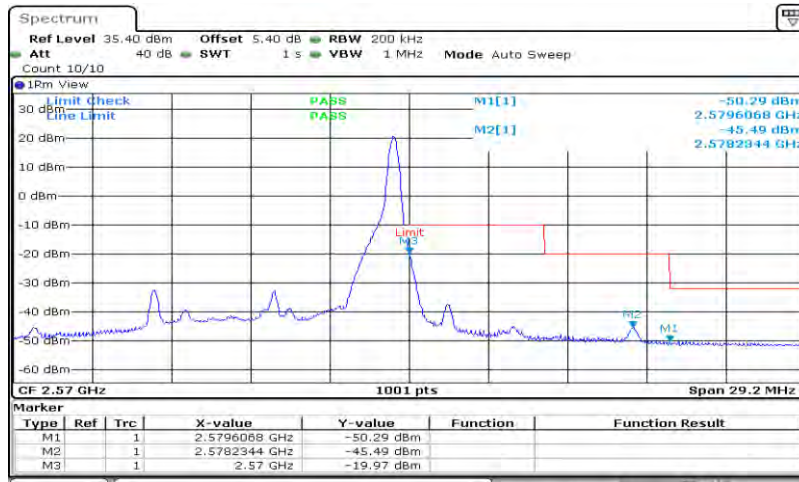


Date: 15.NOV.2019 01:11:27

Band7-10MHz-QPSK-21400-1RB#49

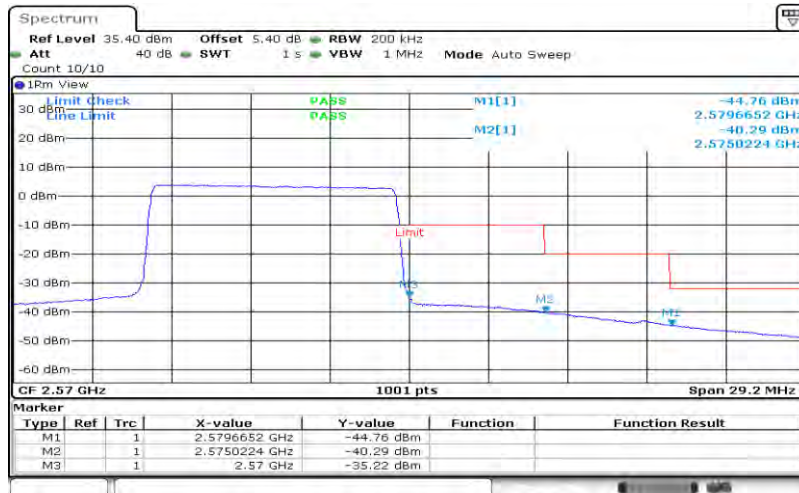


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Date: 15.NOV.2019 01:10:46

Band7-10MHz-QPSK-21400-50RB#0

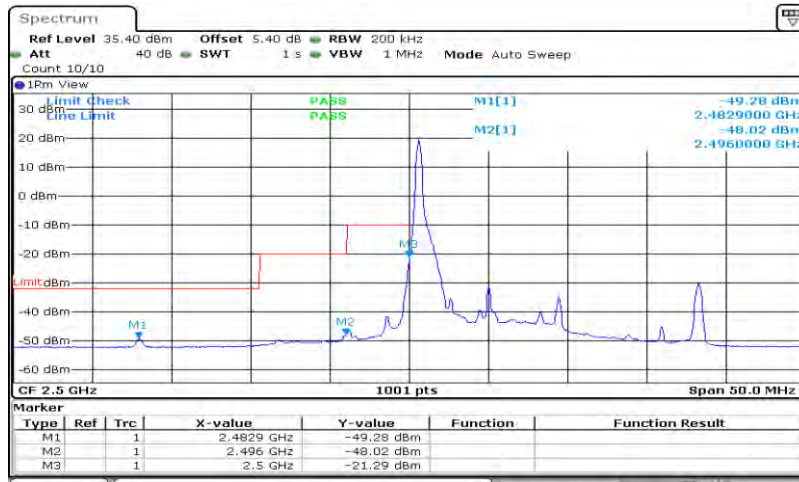


Date: 15.NOV.2019 01:12:06

Band7-10MHz-16QAM-20800-1RB#0

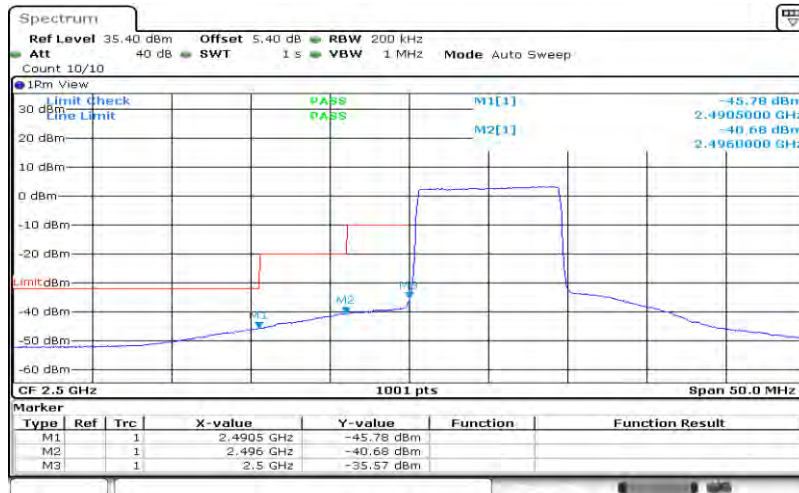


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Date: 15.NOV.2019 01:10:22

Band7-10MHz-16QAM-20800-50RB#0

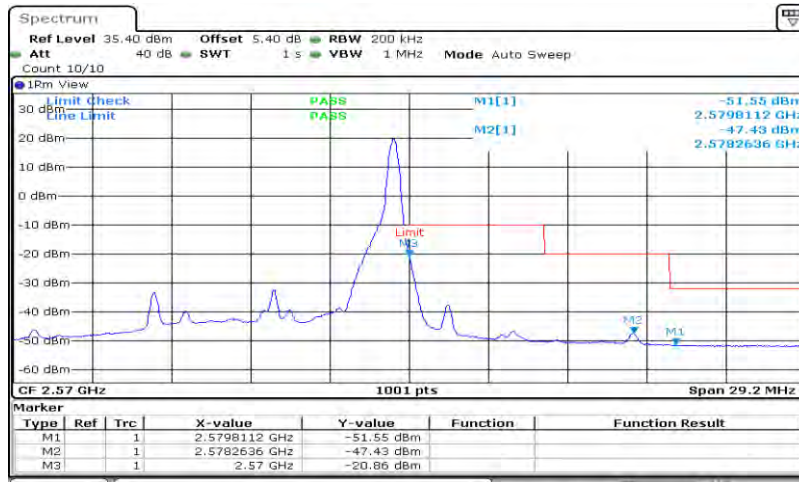


Date: 15.NOV.2019 01:11:45

Band7-10MHz-16QAM-21400-1RB#49

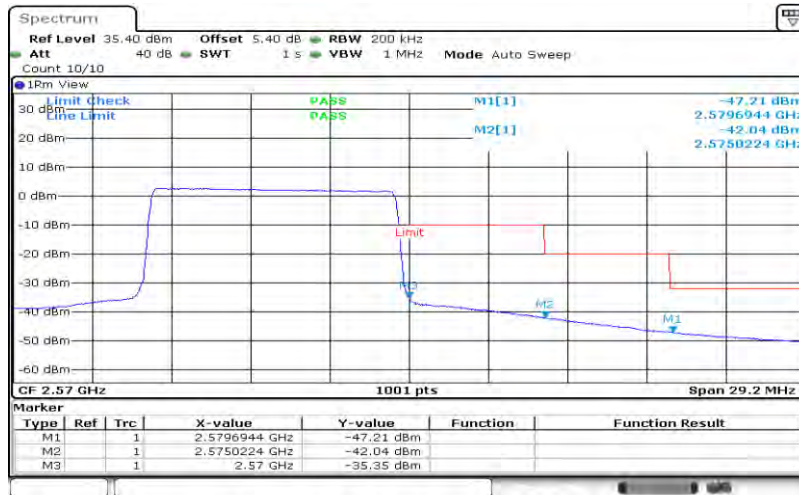


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Date: 15.NOV.2019 01:11:04

Band7-10MHz-16QAM-21400-50RB#0

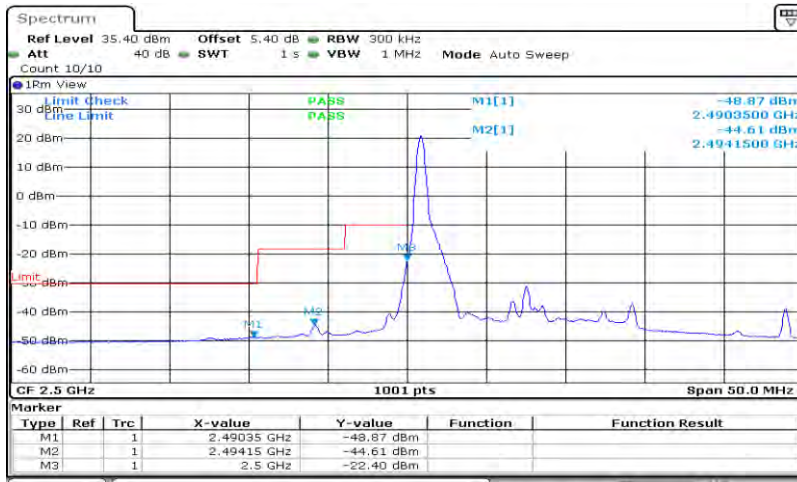


Date: 15.NOV.2019 01:12:24

Band7-15MHz-QPSK-20825-1RB#0



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Date: 15.NOV.2019 01:14:09

Band7-15MHz-QPSK-20825-75RB#0

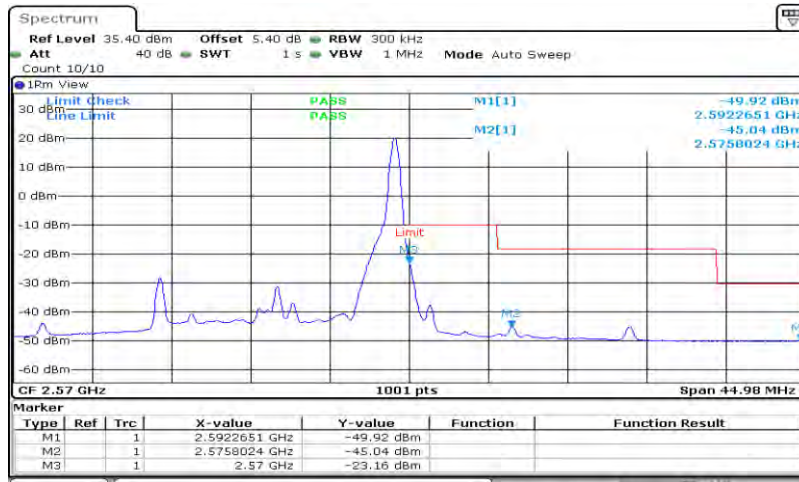


Date: 15.NOV.2019 01:15:33

Band7-15MHz-QPSK-21375-1RB#74

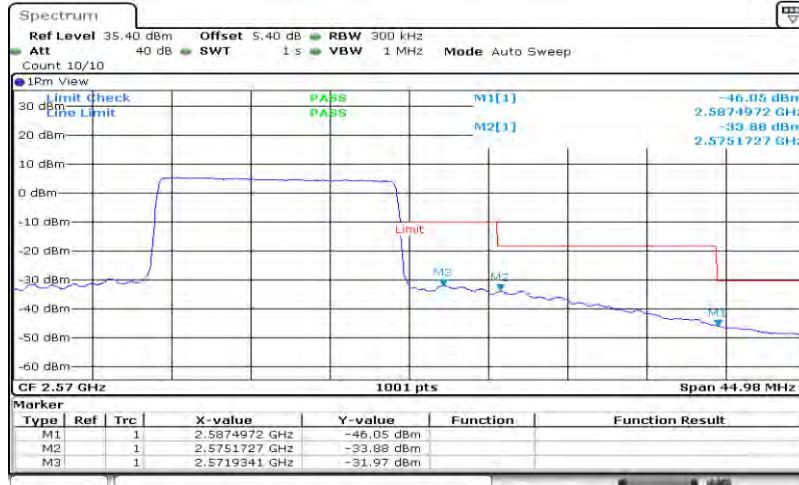


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Date: 15.NOV.2019 01:14:51

Band7-15MHz-QPSK-21375-75RB#0

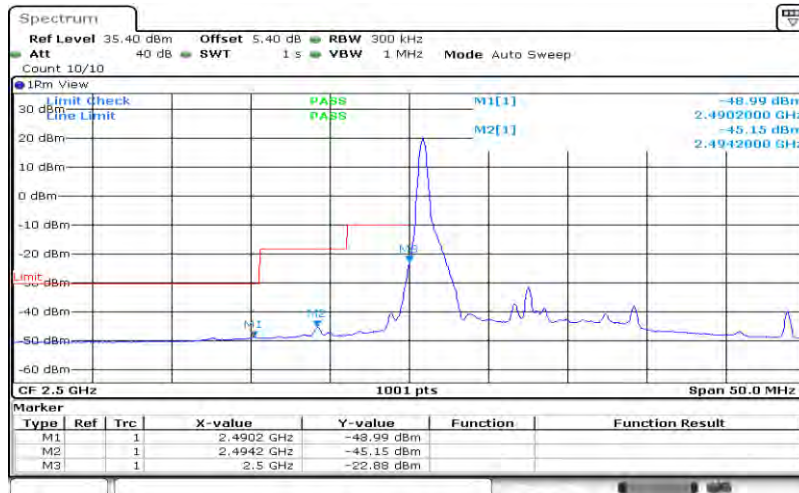


Date: 15.NOV.2019 01:16:12

Band7-15MHz-16QAM-20825-1RB#0



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Date: 15.NOV.2019 01:14:27

Band7-15MHz-16QAM-20825-75RB#0

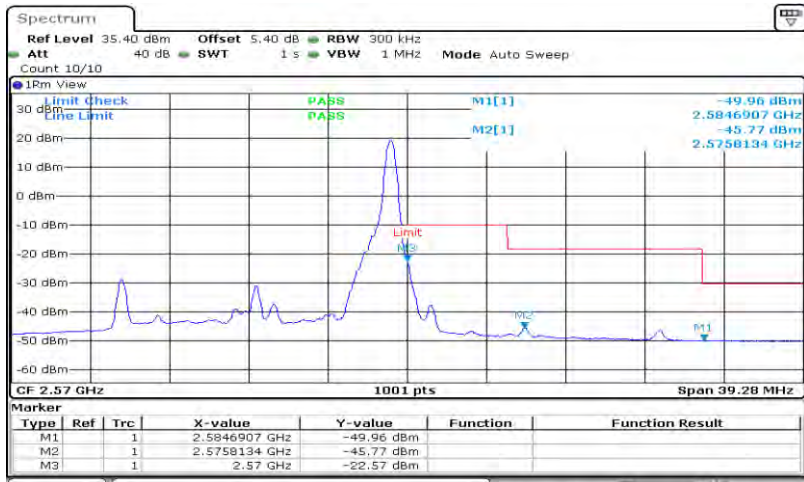


Date: 15.NOV.2019 01:15:51

Band7-15MHz-16QAM-21375-1RB#74

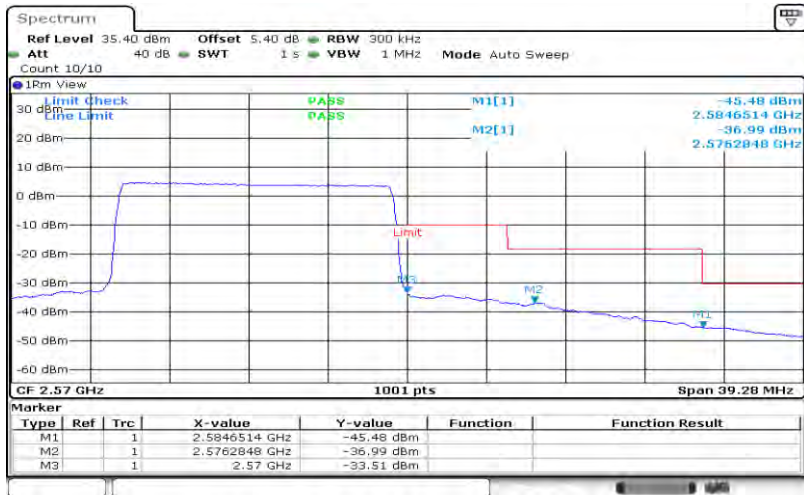


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Date: 15.NOV.2019 01:15:09

Band7-15MHz-16QAM-21375-75RB#0

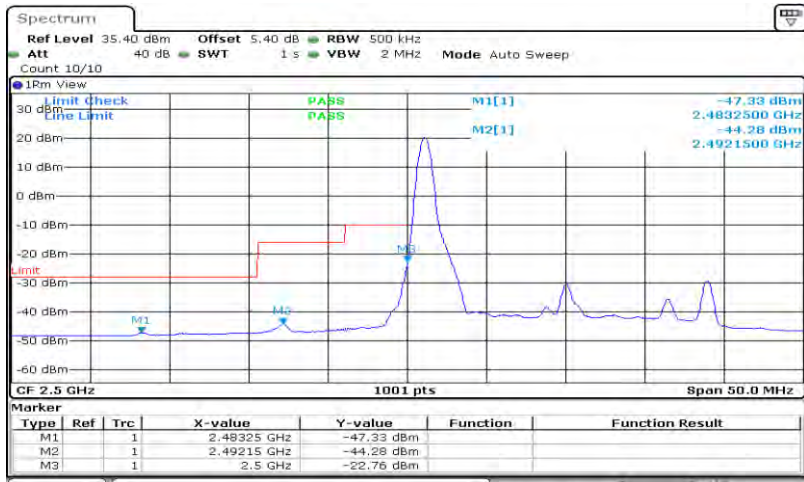


Date: 15.NOV.2019 01:16:31

Band7-20MHz-QPSK-20850-1RB#0

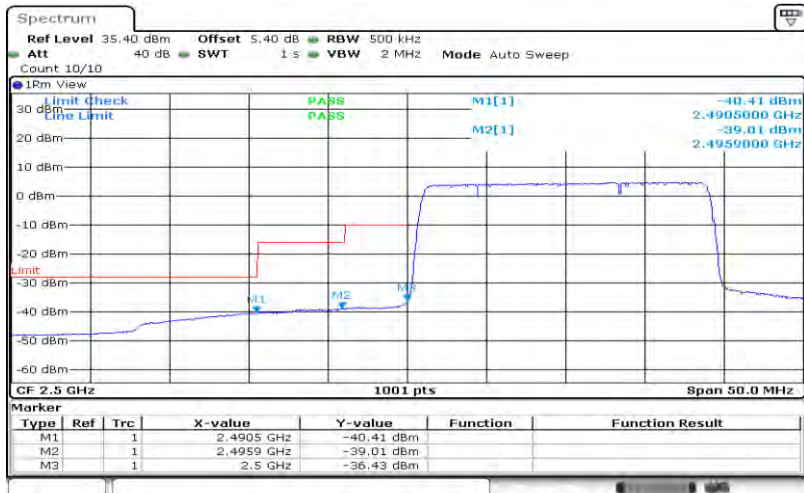


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Date: 15.NOV.2019 01:18:17

Band7-20MHz-QPSK-20850-100RB#0

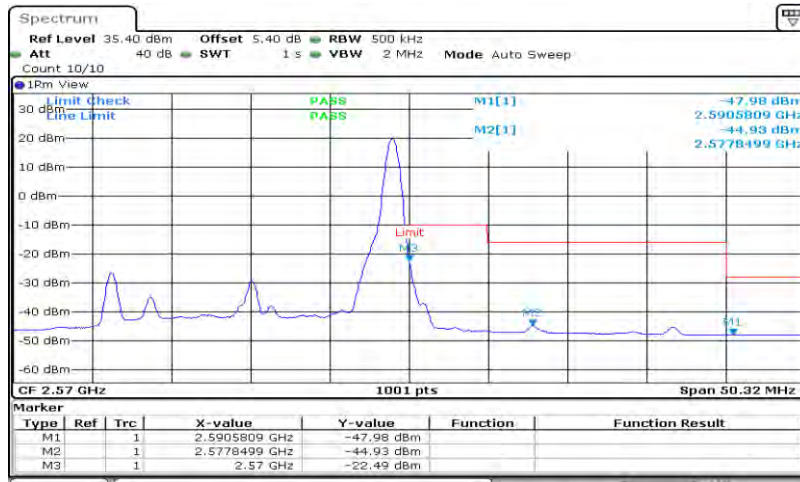


Date: 15.NOV.2019 01:19:42

Band7-20MHz-QPSK-21350-1RB#99

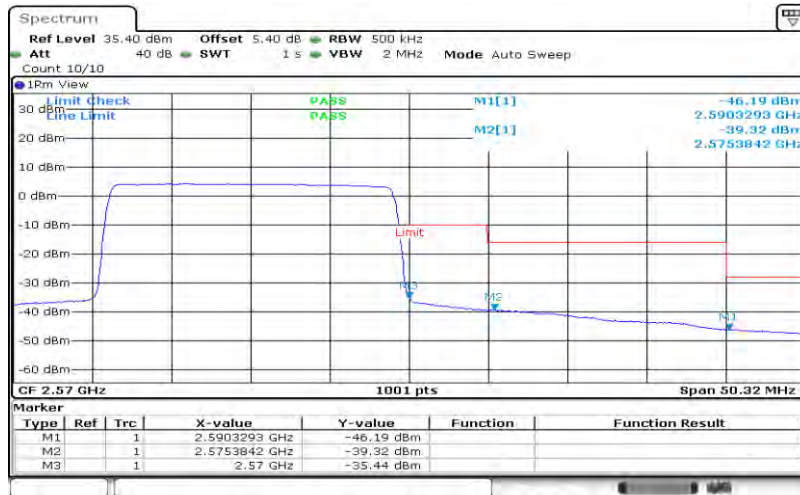


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Date: 15.NOV.2019 01:19:00

Band7-20MHz-QPSK-21350-100RB#0

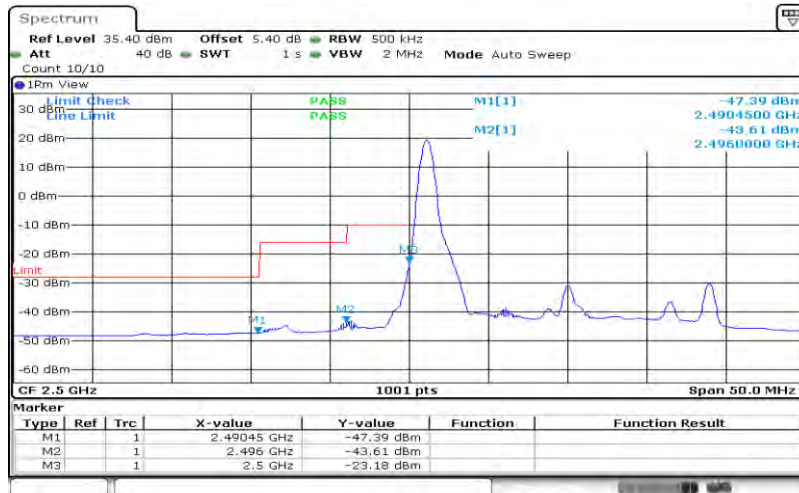


Date: 15.NOV.2019 01:20:23

Band7-20MHz-16QAM-20850-1RB#0

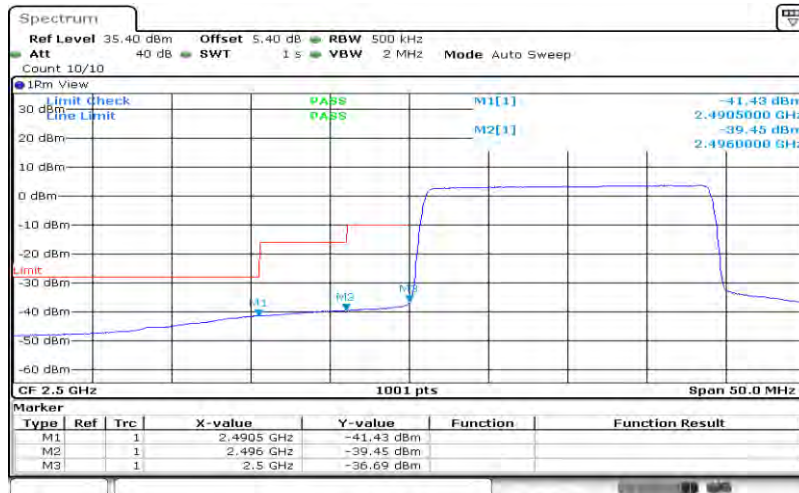


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Date: 15.NOV.2019 01:18:35

Band7-20MHz-16QAM-20850-100RB#0

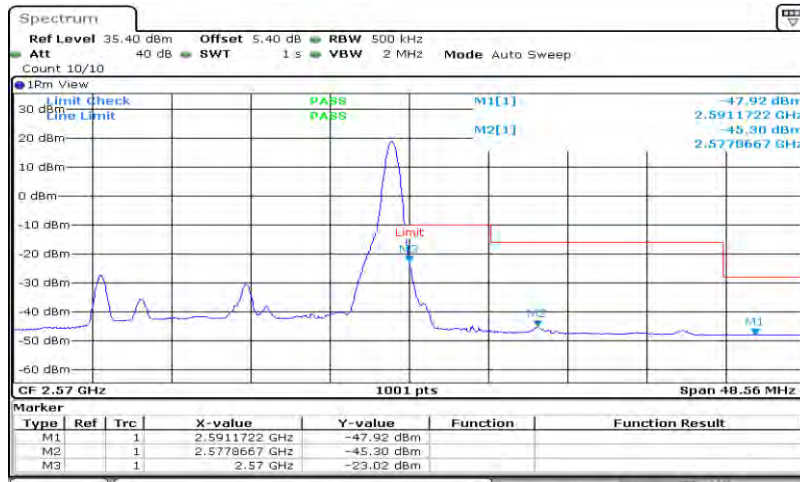


Date: 15.NOV.2019 01:20:01

Band7-20MHz-16QAM-21350-1RB#99

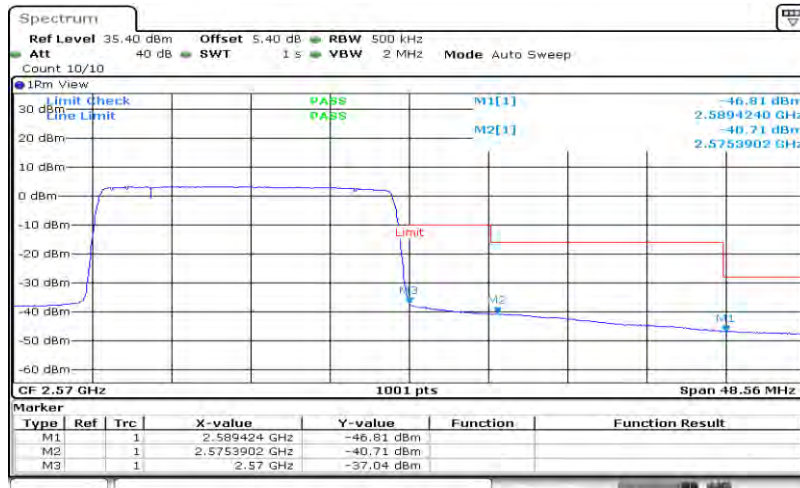


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Date: 15.NOV.2019 01:19:19

Band7-20MHz-16QAM-21350-100RB#0



Date: 15.NOV.2019 01:20:42



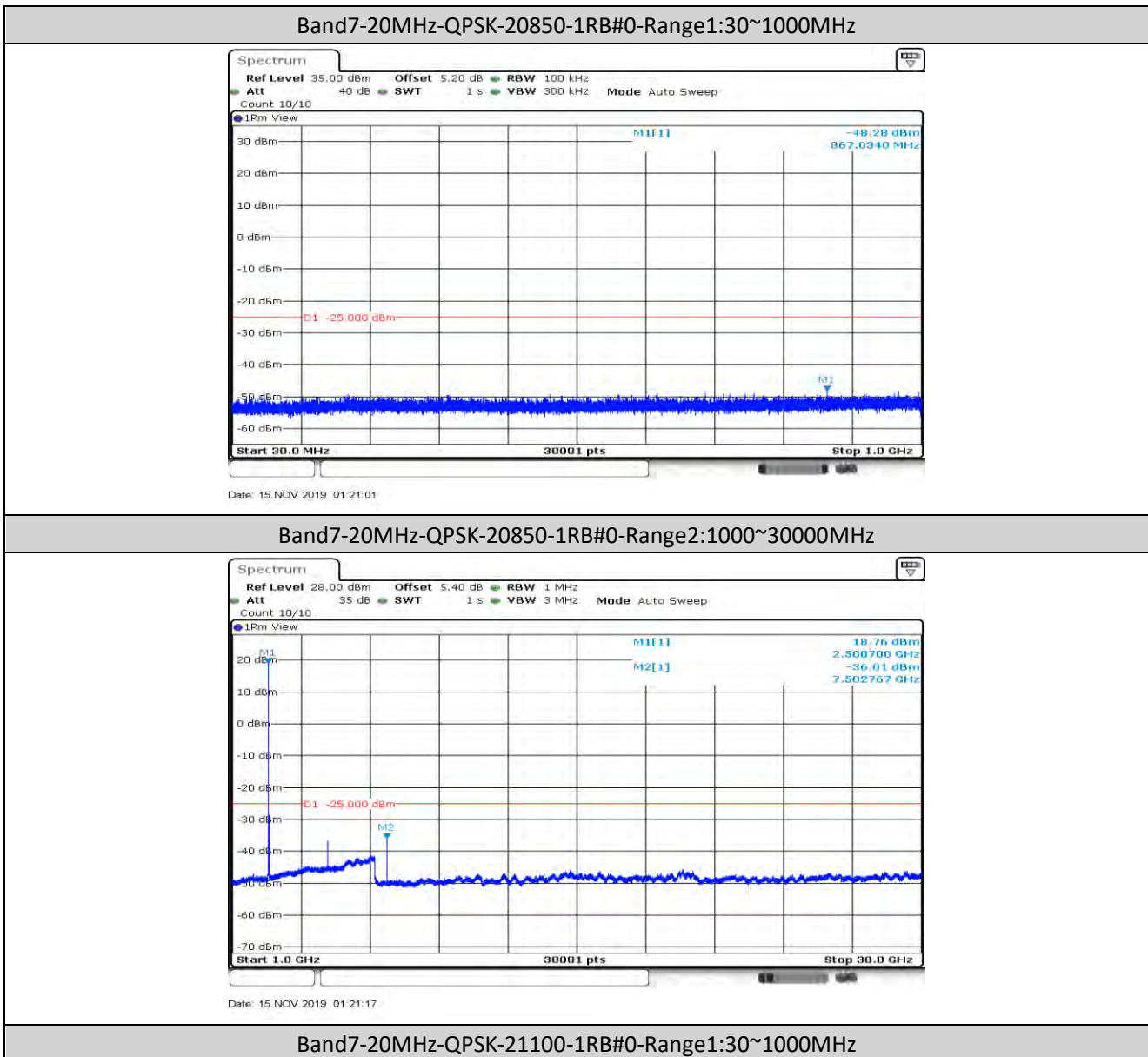
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6. Spurious Emission at Antenna Terminal

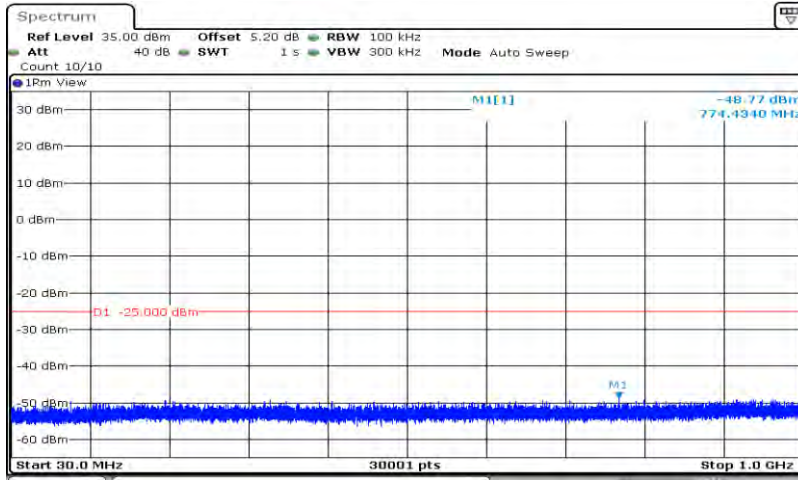
Remark1: For the averaged unwanted emissions measurements, the measurement points in each sweep is greater than twice the Span/RBW in order to ensure bin-to-bin spacing of $< RBW/2$ so that narrowband signals are not lost between frequency bins. As to the present test item, the "Measurement Points =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

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

6.1. Test Plots

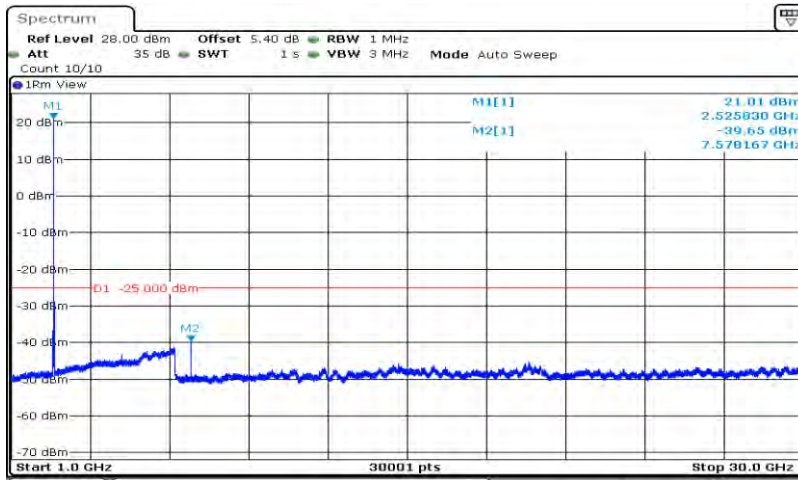


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Date: 15.NOV.2019 01:22:07

Band7-20MHz-QPSK-21100-1RB#0-Range2:1000~30000MHz

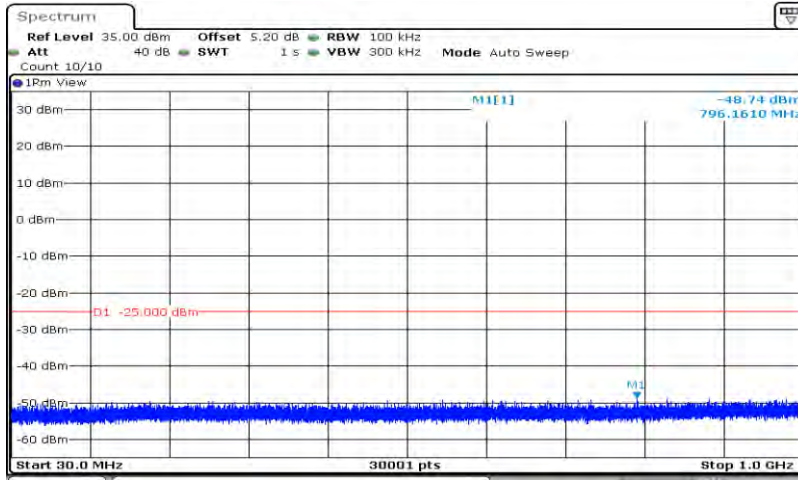


Date: 15.NOV.2019 01:22:23

Band7-20MHz-QPSK-21350-1RB#0-Range1:30~1000MHz

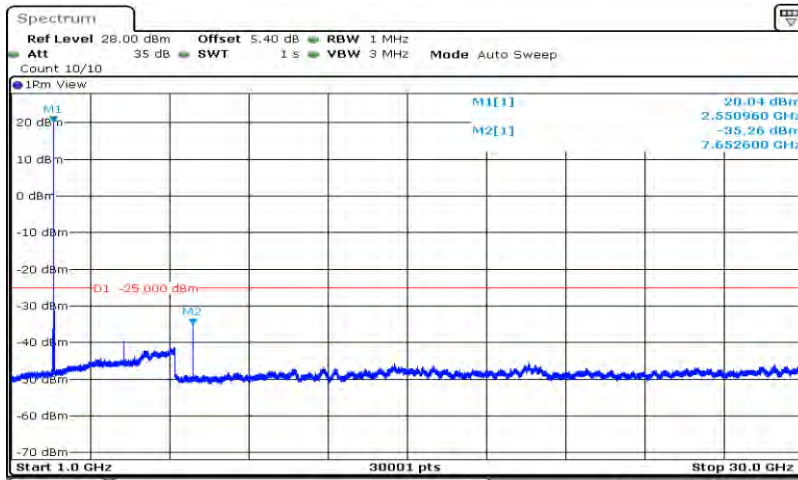


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Date: 15.NOV.2019 01:23:14

Band7-20MHz-QPSK-21350-1RB#0-Range2:1000~30000MHz

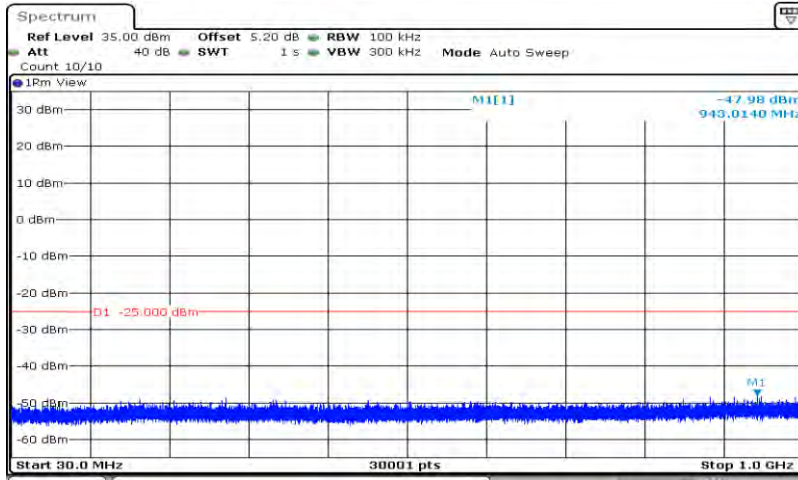


Date: 15.NOV.2019 01:23:30

Band7-20MHz-16QAM-20850-1RB#0-Range1:30~1000MHz

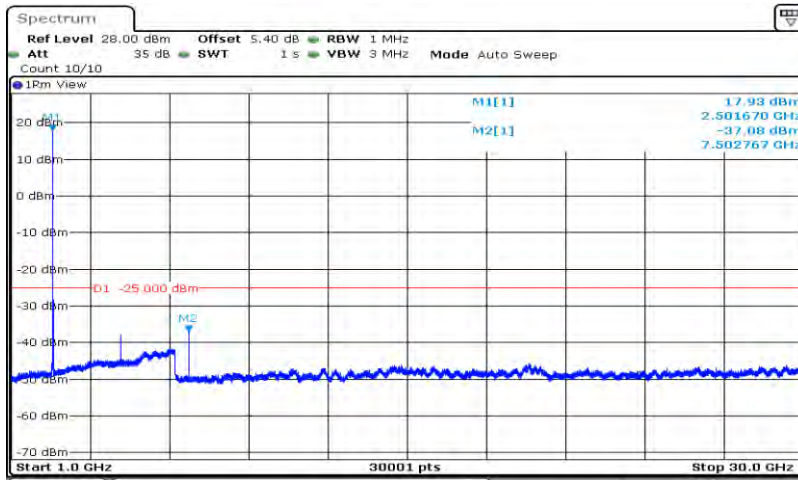


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Date: 15.NOV.2019 01:21:33

Band7-20MHz-16QAM-20850-1RB#0-Range2:1000~30000MHz

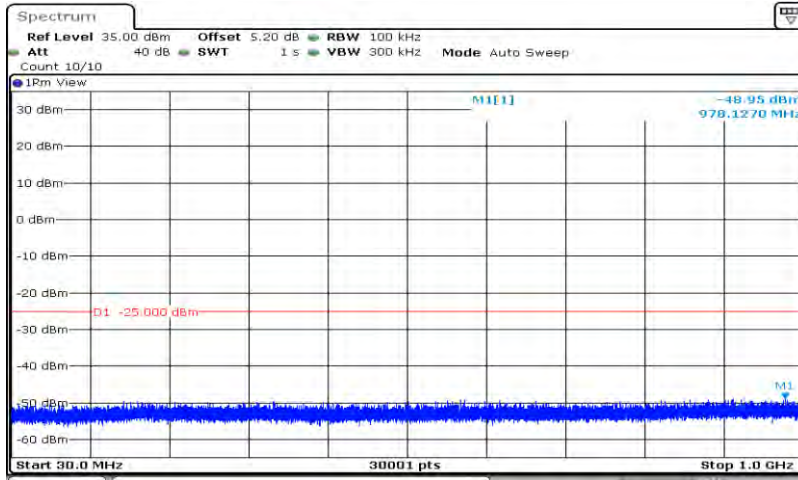


Date: 15.NOV.2019 01:21:49

Band7-20MHz-16QAM-21100-1RB#0-Range1:30~1000MHz

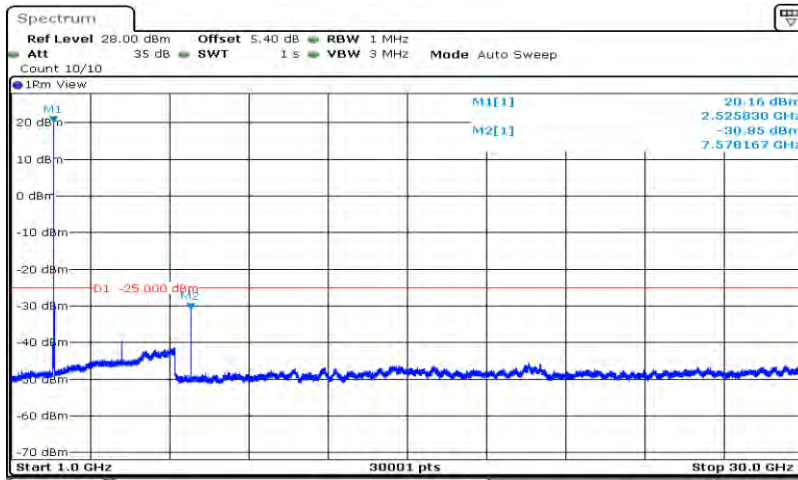


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Date: 15.NOV.2019 01:22:40

Band7-20MHz-16QAM-21100-1RB#0-Range2:1000~30000MHz

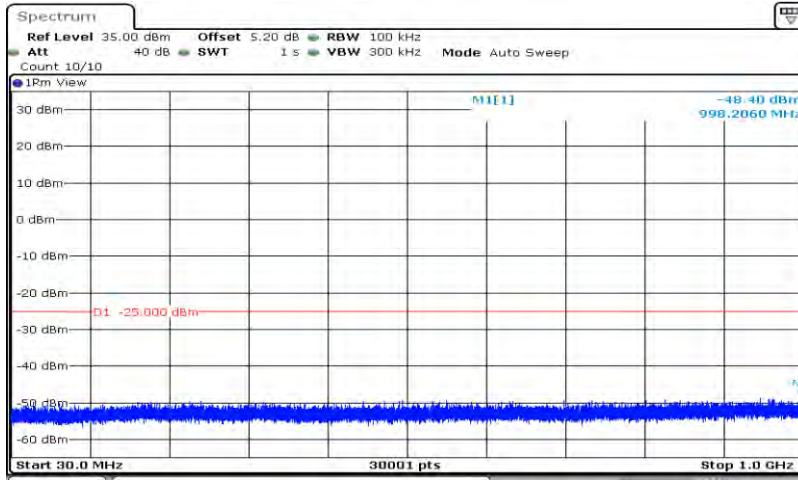


Date: 15.NOV.2019 01:22:56

Band7-20MHz-16QAM-21350-1RB#0-Range1:30~1000MHz

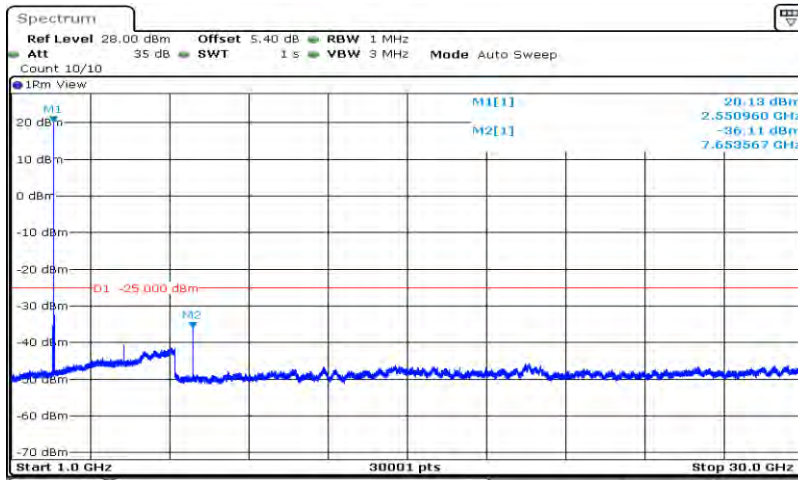


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Date: 15.NOV.2019 01:23:47

Band7-20MHz-16QAM-21350-1RB#0-Range2:1000~30000MHz



Date: 15.NOV.2019 01:24:03



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7. Field Strength of Spurious Radiation

7.1. Test Band = LTE Band 7

7.1.1. Test Mode = LTE/TM1

7.1.1.1. Test Channel = LCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
110.3200	-66.17	-25.00	41.17	Vertical
5002.2801	-35.69	-25.00	10.69	Vertical
7503.1801	-38.99	-25.00	13.99	Vertical
10004.0802	-33.26	-25.00	8.26	Vertical
12505.5802	-44.56	-25.00	19.56	Vertical
17996.9999	-35.66	-25.00	10.66	Vertical
43.5322	-64.75	-25.00	39.75	Horizontal
832.6666	-62.82	-25.00	37.82	Horizontal
5002.2801	-40.29	-25.00	15.29	Horizontal
7503.1801	-46.33	-25.00	21.33	Horizontal
10004.0802	-43.26	-25.00	18.26	Horizontal
16388.3355	-39.44	-25.00	14.44	Horizontal

7.1.1.2. Test Channel = MCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
110.7565	-66.12	-25.00	41.12	Vertical
5052.0821	-41.84	-25.00	16.84	Vertical
7578.1831	-45.37	-25.00	20.37	Vertical
10104.2842	-36.30	-25.00	11.30	Vertical
12630.3852	-45.58	-25.00	20.58	Vertical
17995.1998	-35.70	-25.00	10.70	Vertical
45.8118	-65.90	-25.00	40.90	Horizontal
227.3564	-69.37	-25.00	44.37	Horizontal
5052.0821	-43.61	-25.00	18.61	Horizontal
7578.1831	-52.05	-25.00	27.05	Horizontal
10104.2842	-43.64	-25.00	18.64	Horizontal
16381.1352	-40.15	-25.00	15.15	Horizontal



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7.1.1.3. Test Channel = HCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
111.1446	-66.07	-25.00	41.07	Vertical
5101.8841	-45.77	-25.00	20.77	Vertical
7653.1861	-42.28	-25.00	17.28	Vertical
10204.4882	-43.10	-25.00	18.10	Vertical
12755.7902	-44.08	-25.00	19.08	Vertical
17996.9999	-35.56	-25.00	10.56	Vertical
44.7932	-65.59	-25.00	40.59	Horizontal
816.1273	-63.11	-25.00	38.11	Horizontal
5102.4841	-48.20	-25.00	23.20	Horizontal
7653.1861	-48.39	-25.00	23.39	Horizontal
10203.8882	-46.91	-25.00	21.91	Horizontal
16389.5356	-40.05	-25.00	15.05	Horizontal

Remark:

- 1 According to 971168 D01 Power Meas License Digital Systems, The amplitudes of unwanted emissions that are attenuated more than 20 dB below the applicable limit are not required to be reported.
- 2 The disturbance below 30MHz was very low, and the above harmonics were the highest point could be found when testing, so only the worst case data displayed in this report.
- 3 all modulation and all Bandwidth had been tested, but only the worst case data displayed in this report.



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8. Frequency Stability

8.1. Frequency Vs Voltage

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	-13.20	-0.005259	±2.5	PASS
Band7	20MHz	QPSK	20850	100RB#0	VN	NT	-11.50	-0.004582	±2.5	PASS
Band7	20MHz	QPSK	20850	100RB#0	VH	NT	2.70	0.001076	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	VL	NT	3.50	0.001381	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	VN	NT	-3.60	-0.001420	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	VH	NT	-9.10	-0.003590	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	VL	NT	-1.50	-0.000586	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	VN	NT	-7.10	-0.002773	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	VH	NT	0.50	0.000195	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	VL	NT	-3.50	-0.001394	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	VN	NT	-7.00	-0.002789	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	VH	NT	-12.00	-0.004781	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	VL	NT	-9.20	-0.003629	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	VN	NT	-2.90	-0.001144	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	VH	NT	-12.10	-0.004773	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	VL	NT	-11.70	-0.004570	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	VN	NT	-14.70	-0.005742	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	VH	NT	-7.30	-0.002852	±2.5	PASS

8.2. Frequency Vs 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	-3.10	-0.001235	±2.5	PASS
Band7	20MHz	QPSK	20850	100RB#0	NV	-20	-16.00	-0.006375	±2.5	PASS
Band7	20MHz	QPSK	20850	100RB#0	NV	0	-10.10	-0.004024	±2.5	PASS
Band7	20MHz	QPSK	20850	100RB#0	NV	10	-0.50	-0.000199	±2.5	PASS
Band7	20MHz	QPSK	20850	100RB#0	NV	20	-11.60	-0.004622	±2.5	PASS
Band7	20MHz	QPSK	20850	100RB#0	NV	30	-10.10	-0.004024	±2.5	PASS
Band7	20MHz	QPSK	20850	100RB#0	NV	40	0.20	0.000080	±2.5	PASS
Band7	20MHz	QPSK	20850	100RB#0	NV	50	-11.90	-0.004741	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	-30	-6.60	-0.002604	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	-20	-2.40	-0.000947	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	0	-5.10	-0.002012	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	10	-11.40	-0.004497	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	20	-7.60	-0.002998	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	30	5.80	0.002288	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	40	-15.40	-0.006075	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	50	5.90	0.002327	±2.5	PASS



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Band7	20MHz	QPSK	21350	100RB#0	NV	-30	1.50	0.000586	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	NV	-20	-5.20	-0.002031	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	NV	0	-4.50	-0.001758	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	NV	10	-7.80	-0.003047	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	NV	20	-19.10	-0.007461	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	NV	30	-13.10	-0.005117	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	NV	40	-4.60	-0.001797	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	NV	50	4.40	0.001719	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	NV	-30	0.90	0.000359	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	NV	-20	-11.60	-0.004622	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	NV	0	-9.10	-0.003625	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	NV	10	1.40	0.000558	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	NV	20	5.30	0.002112	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	NV	30	-9.20	-0.003665	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	NV	40	-12.50	-0.004980	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	NV	50	-13.10	-0.005219	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	NV	-30	4.20	0.001657	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	NV	-20	8.80	0.003471	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	NV	0	-2.80	-0.001105	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	NV	10	-9.90	-0.003905	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	NV	20	-2.90	-0.001144	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	NV	30	1.00	0.000394	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	NV	40	-9.50	-0.003748	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	NV	50	-12.20	-0.004813	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	NV	-30	-1.10	-0.000430	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	NV	-20	-14.30	-0.005586	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	NV	0	-10.60	-0.004141	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	NV	10	-0.60	-0.000234	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	NV	20	-8.80	-0.003438	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	NV	30	1.90	0.000742	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	NV	40	2.80	0.001094	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	NV	50	-1.70	-0.000664	±2.5	PASS



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