

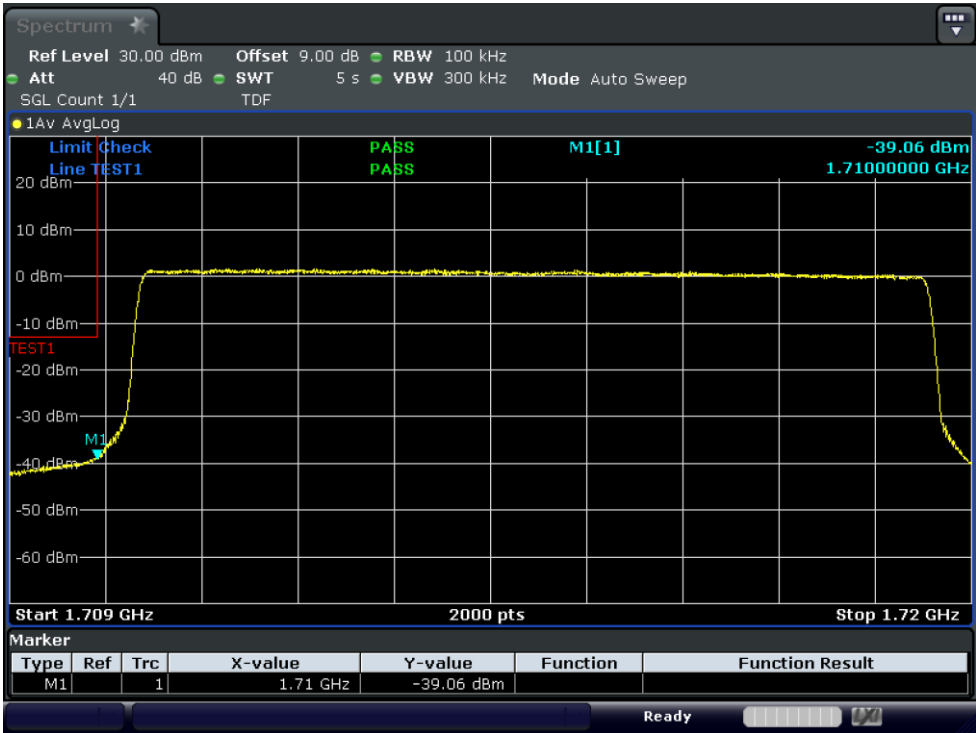


Test_Graph_band4_1715MHz_10M_16QAM_1RB#LOW_Band edge



Test_Graph_band4_1715MHz_10M_QPSK_1RB#LOW_Band edge





Test_Graph_band4_1715MHz_10M_QPSK_50RB#LOW_Band edge

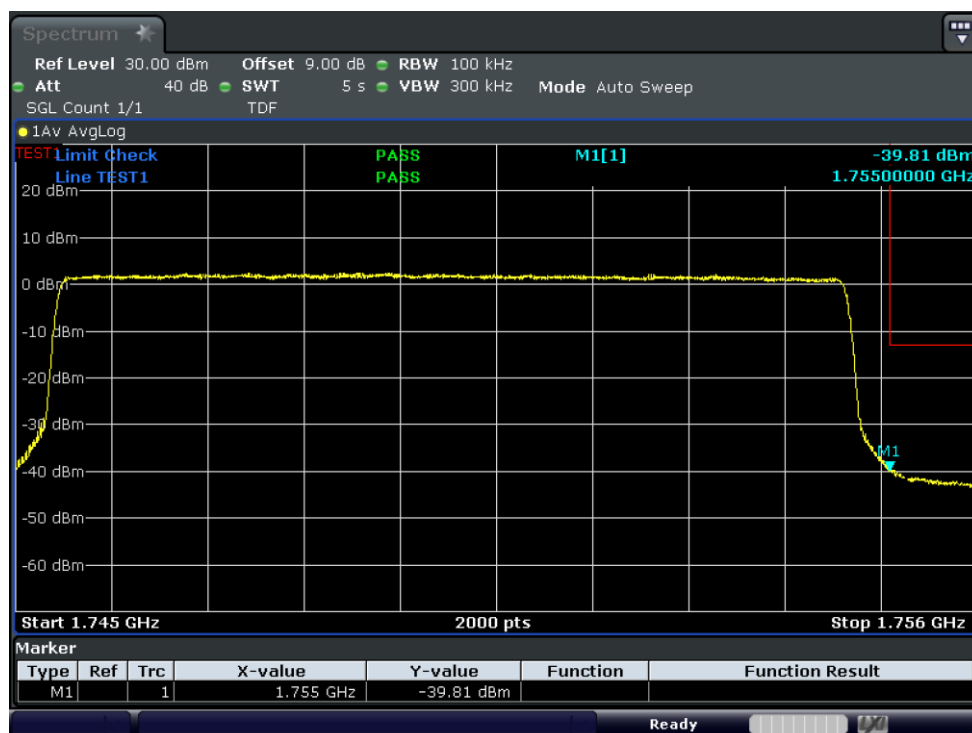


Test_Graph_band4_1750MHz_10M_16QAM_1RB#HIGH_Band edge





Test_Graph_band4_1750MHz_10M_QPSK_1RB#HIGH_Band edge



Test_Graph_band4_1750MHz_10M_QPSK_50RB#LOW_Band edge





Test_Graph_band4_1717.5MHz_15M_16QAM_1RB#LOW_Band edge

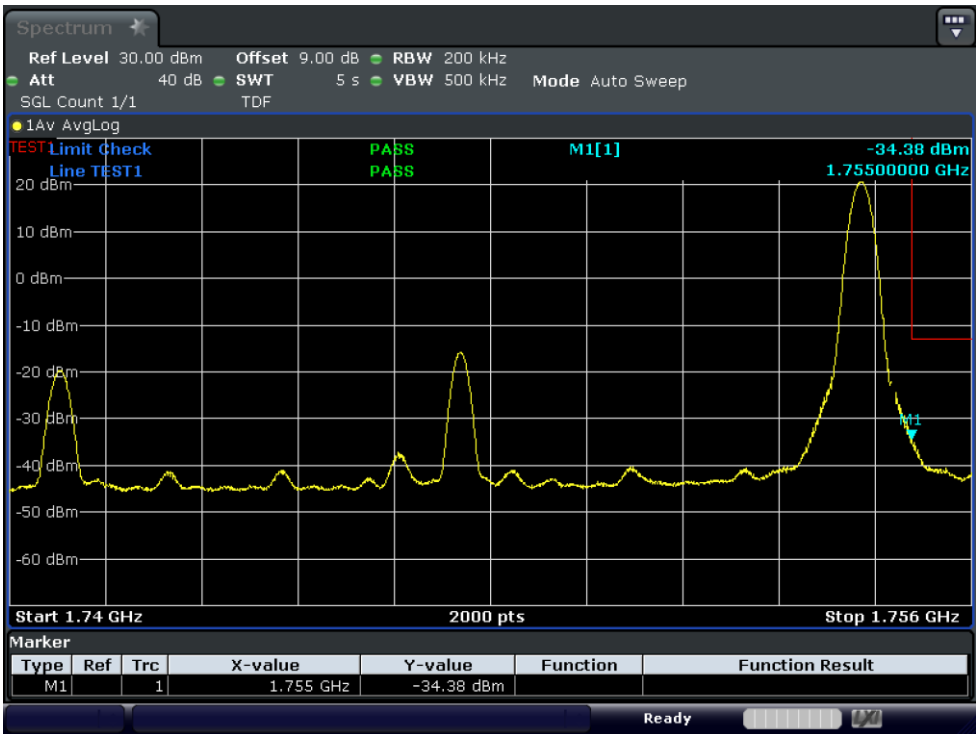


Test_Graph_band4_1717.5MHz_15M_QPSK_1RB#LOW_Band edge





Test_Graph_band4_1717.5MHz_15M_QPSK_75RB#LOW_Band edge

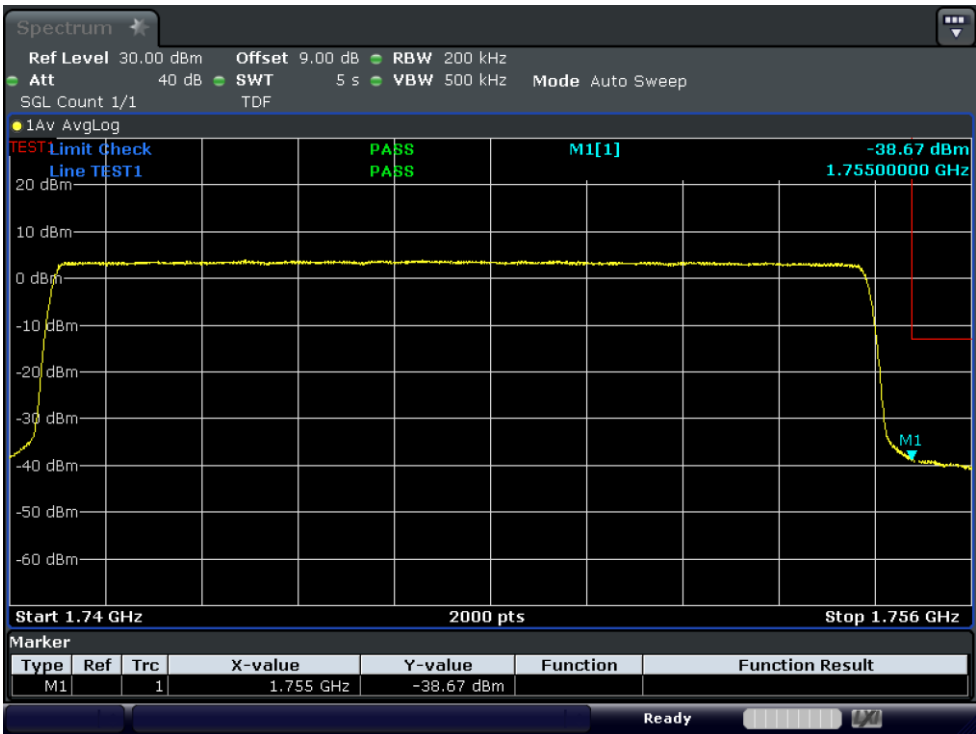


Test_Graph_band4_1747.5MHz_15M_16QAM_1RB#HIGH_Band edge



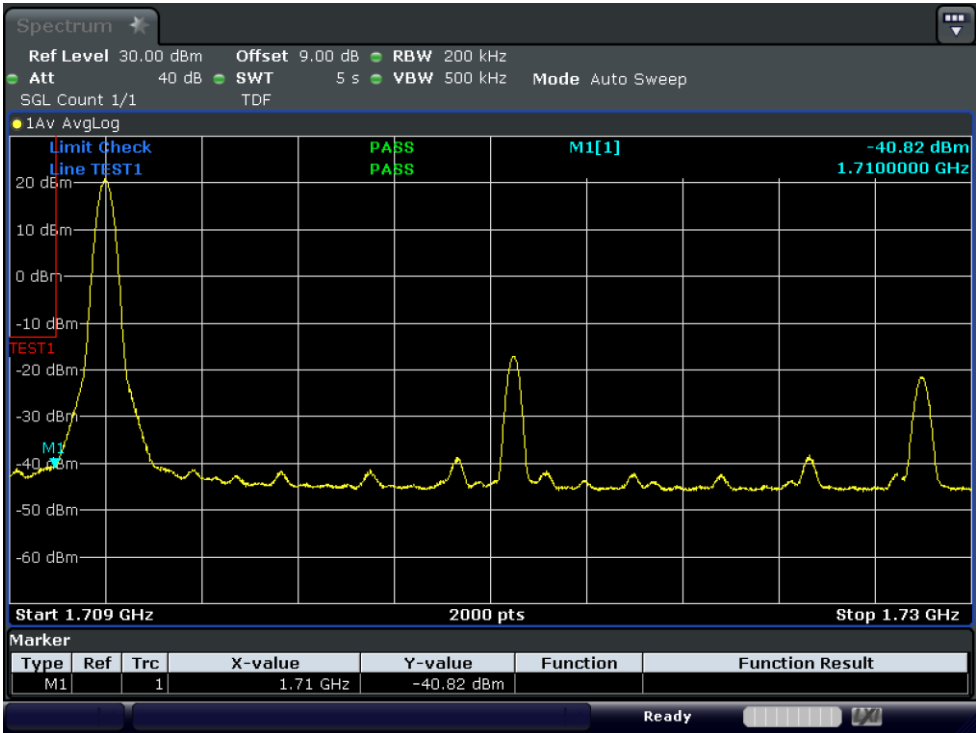


Test_Graph_band4_1747.5MHz_15M_QPSK_1RB#HIGH_Band edge

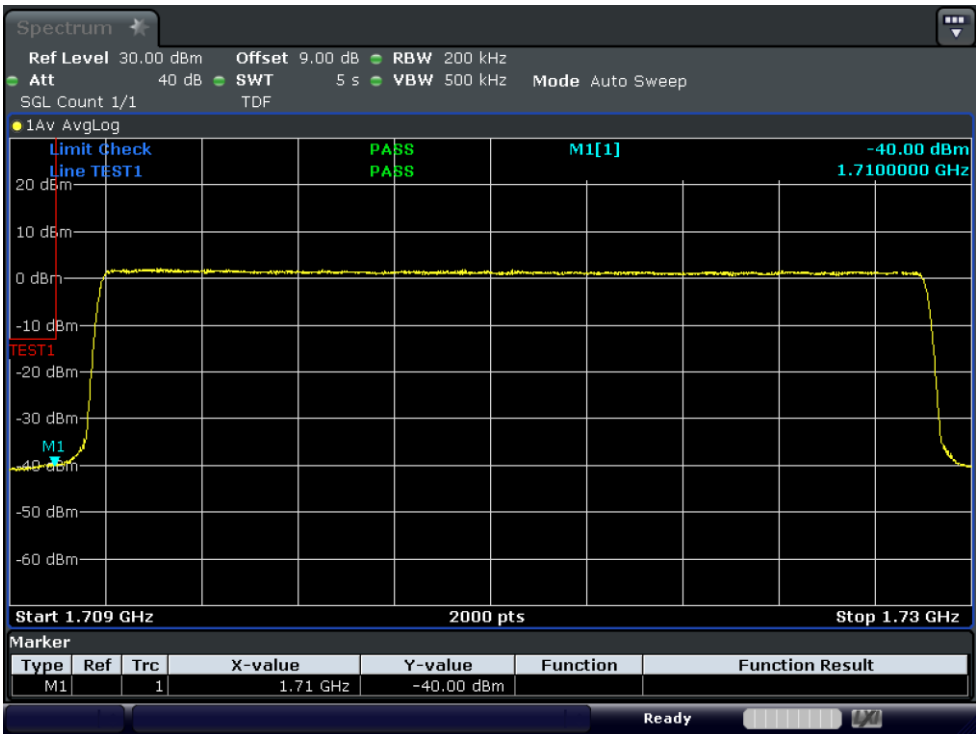


Test_Graph_band4_1747.5MHz_15M_QPSK_75RB#LOW_Band edge

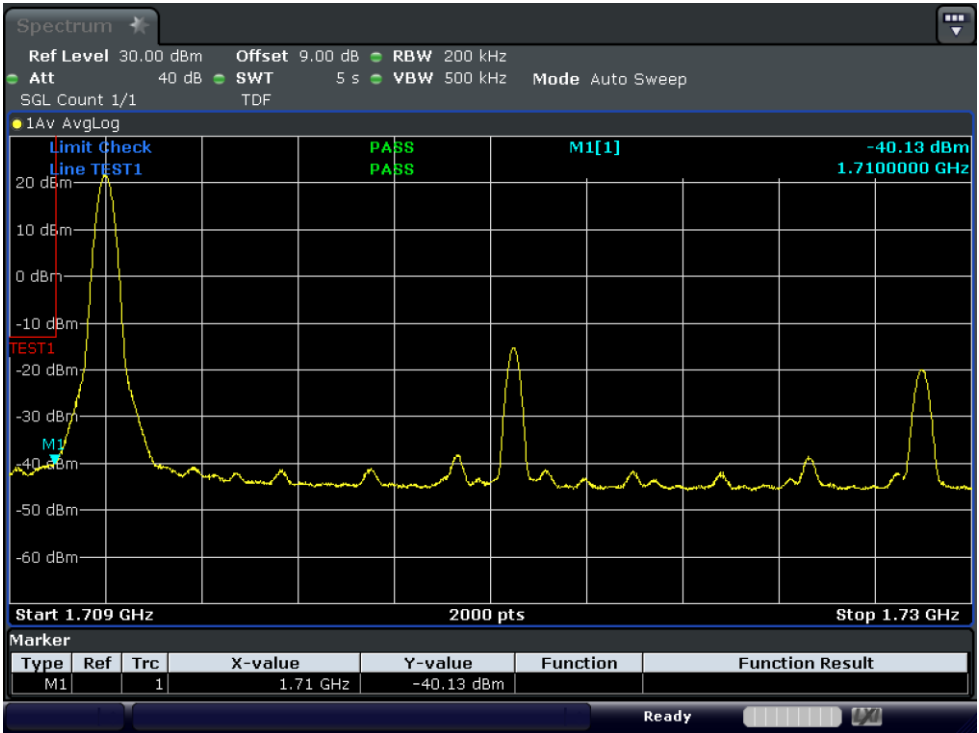




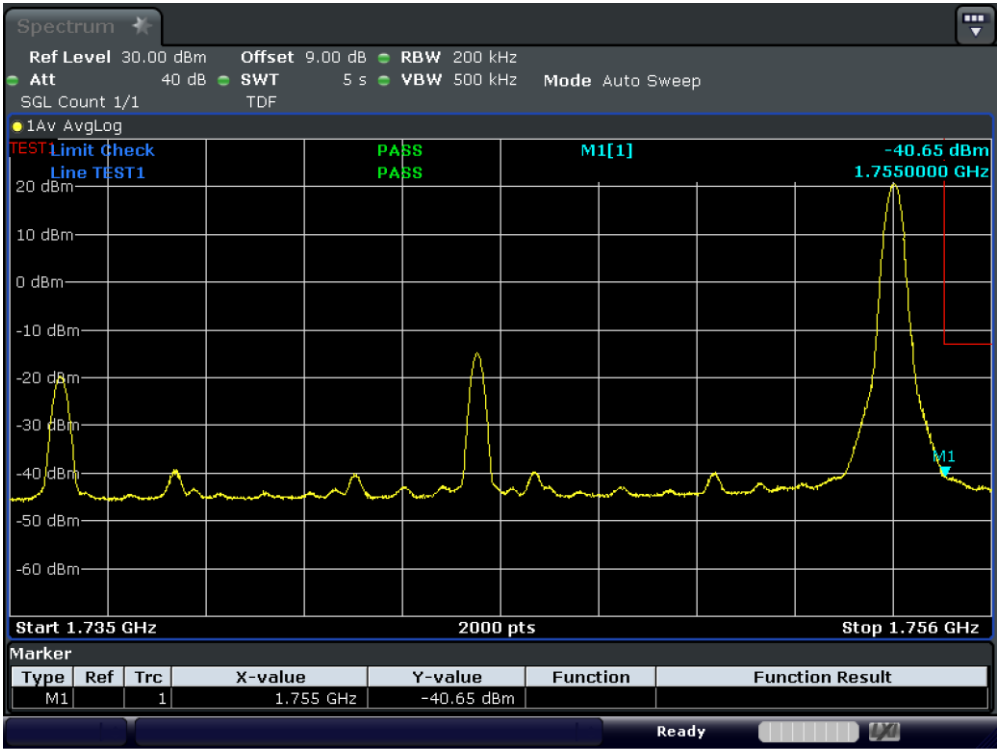
Test_Graph_band4_1720MHz_20M_16QAM_1RB#LOW_Band edge



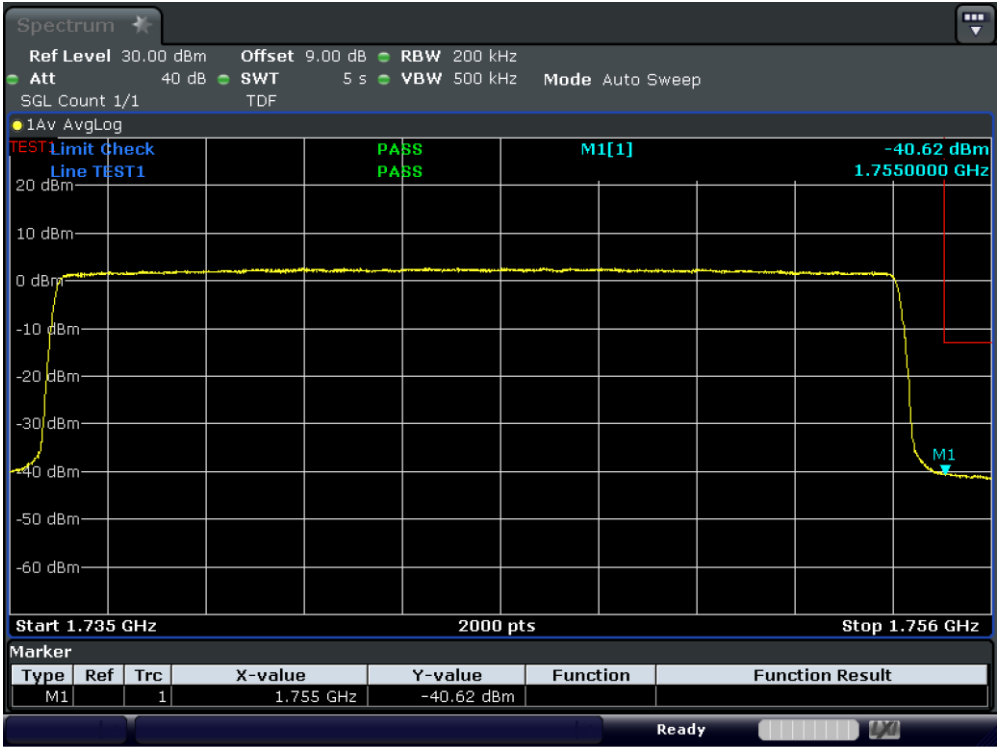
Test_Graph_band4_1720MHz_20M_QPSK_100RB#LOW_Band edge



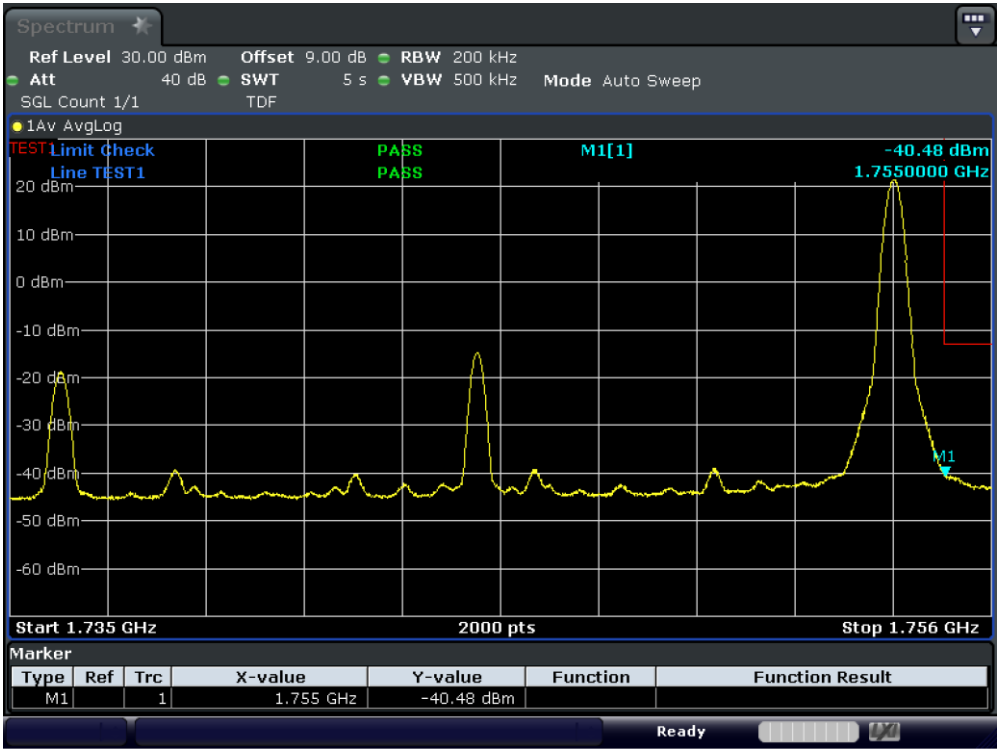
Test_Graph_band4_1720MHz_20M_QPSK_1RB#LOW_Band edge



Test_Graph_band4_1745MHz_20M_16QAM_1RB#HIGH_Band edge



Test_Graph_band4_1745MHz_20M_QPSK_100RB#LOW_Band edge



Test_Graph_band4_1745MHz_20M_QPSK_1RB#HIGH_Band edge



Appendix D: Unwanted spurious emissions at antenna terminals

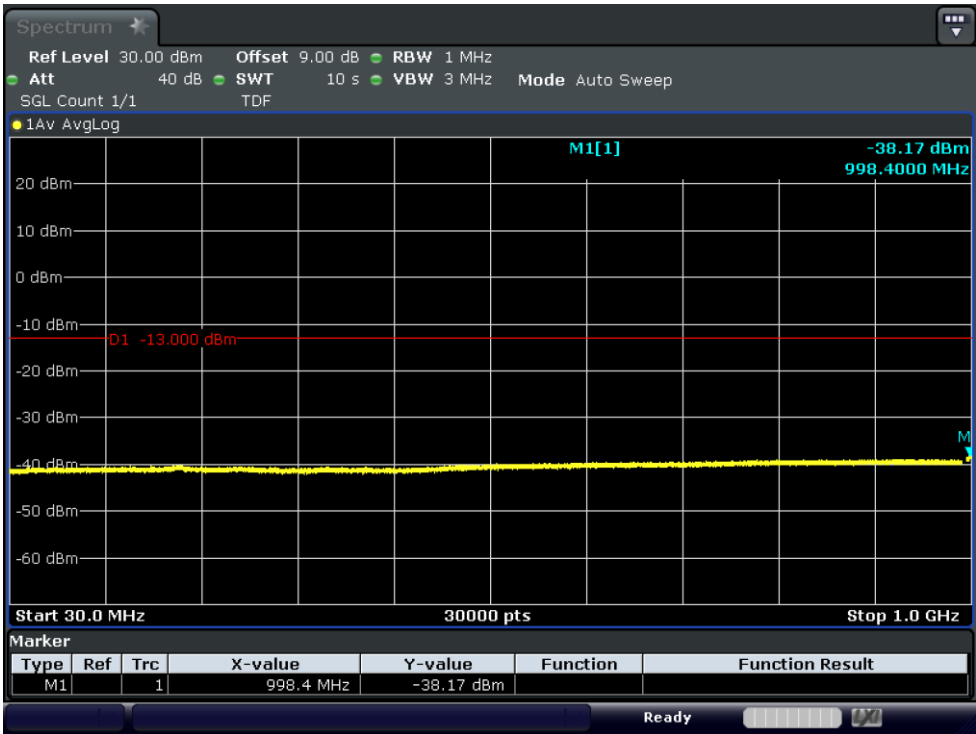
Test Result

Band	Bandwidth (MHz)	UL Frequency (MHz)	Modulation	RB Size	RB Offset	Conclusion
4	1.4	1710.7	QPSK	6	LOW	Pass
4	1.4	1732.5	QPSK	6	LOW	Pass
4	1.4	1754.3	QPSK	6	LOW	Pass
4	3	1711.5	QPSK	15	LOW	Pass
4	3	1732.5	QPSK	15	LOW	Pass
4	3	1753.5	QPSK	15	LOW	Pass
4	5	1712.5	QPSK	25	LOW	Pass
4	5	1752.5	QPSK	25	LOW	Pass
4	5	1752.5	QPSK	25	LOW	Pass
4	10	1715	QPSK	50	LOW	Pass
4	10	1732.5	QPSK	50	LOW	Pass
4	10	1750	QPSK	50	LOW	Pass
4	15	1717.5	QPSK	75	LOW	Pass
4	15	1732.5	QPSK	75	LOW	Pass
4	15	1747.5	QPSK	75	LOW	Pass
4	20	1720	QPSK	100	LOW	Pass
4	20	1732.5	QPSK	100	LOW	Pass
4	20	1745	QPSK	100	LOW	Pass

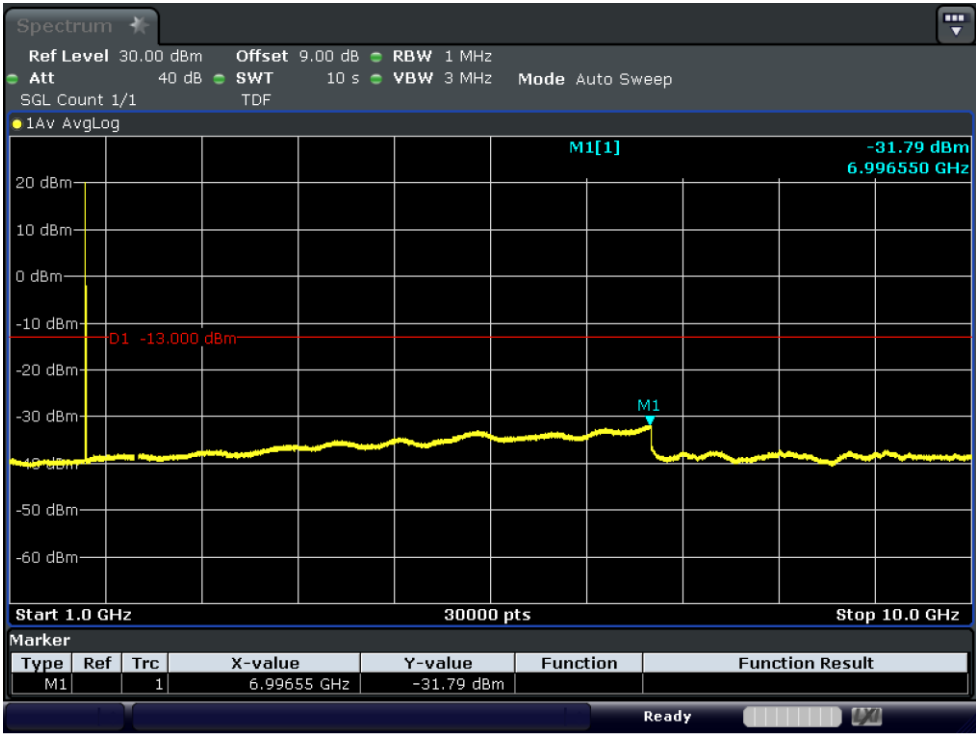
Note: Both QPSK and 16QAM modulation modes were tested. Since the QPSK mode produced the worst-case results, only the corresponding QPSK test results are included in this report.



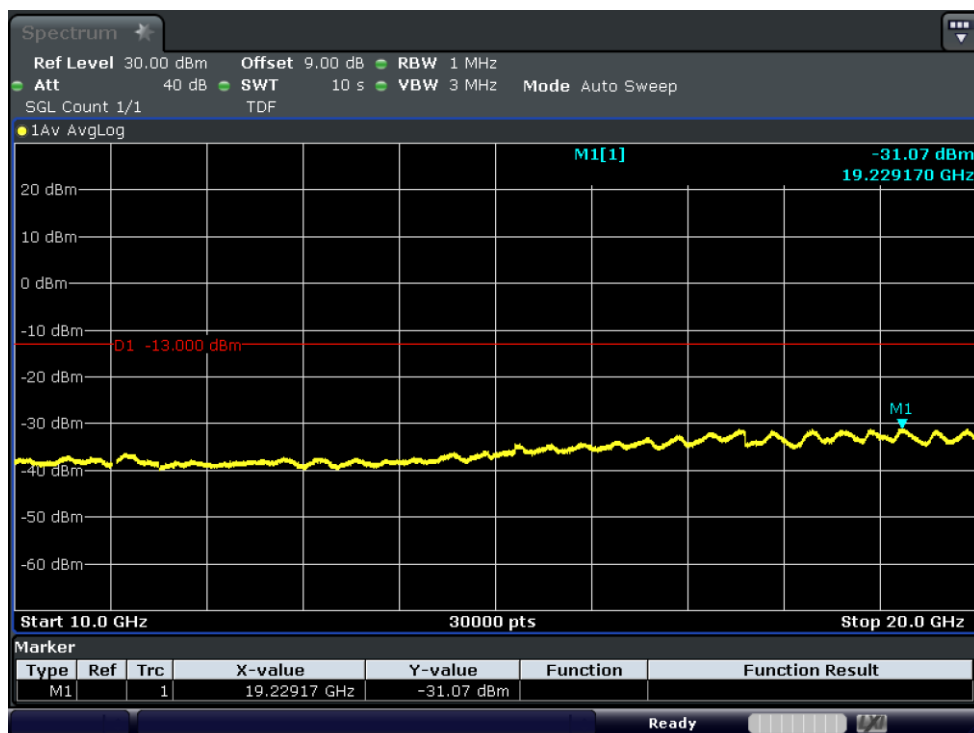
Test Graphs



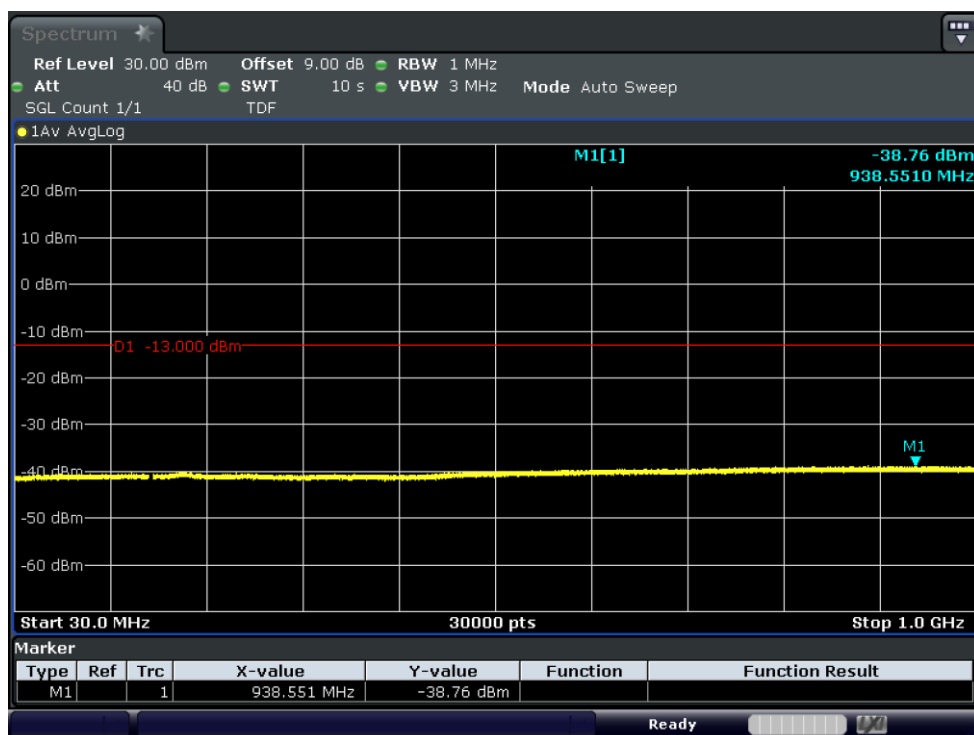
Test_Graph_band4_1710.7MHz_1.4M_QPSK_6RB#LOW_30M_1G_TX



Test_Graph_band4_1710.7MHz_1.4M_QPSK_6RB#LOW_1G_10G_TX

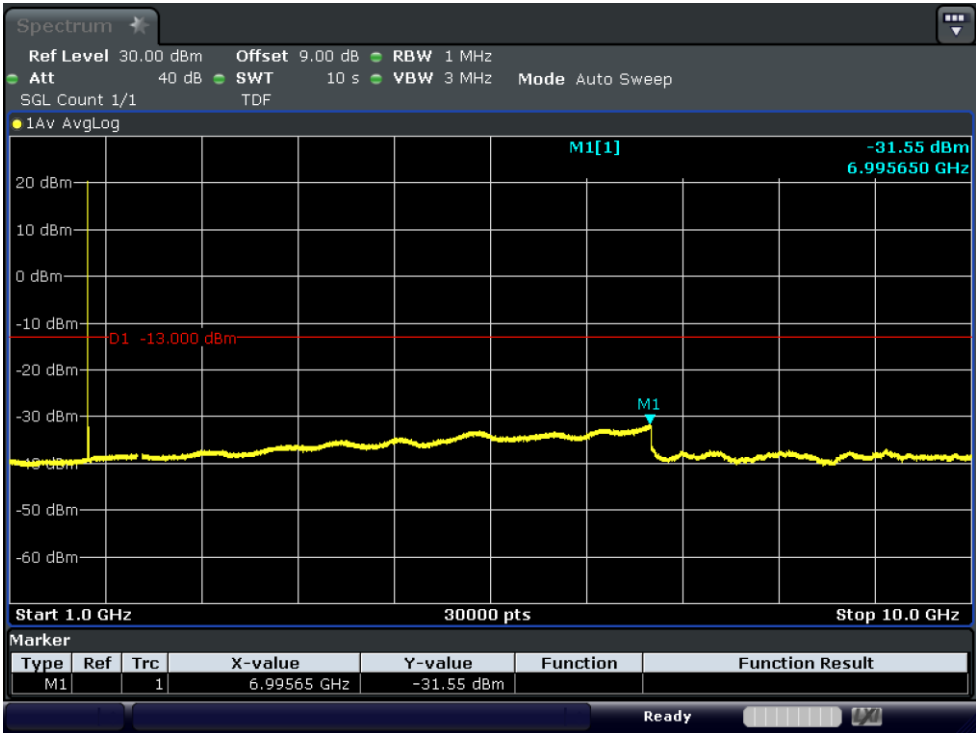


Test_Graph_band4_1710.7MHz_1.4M_QPSK_6RB#LOW_10G_20.0G_TX

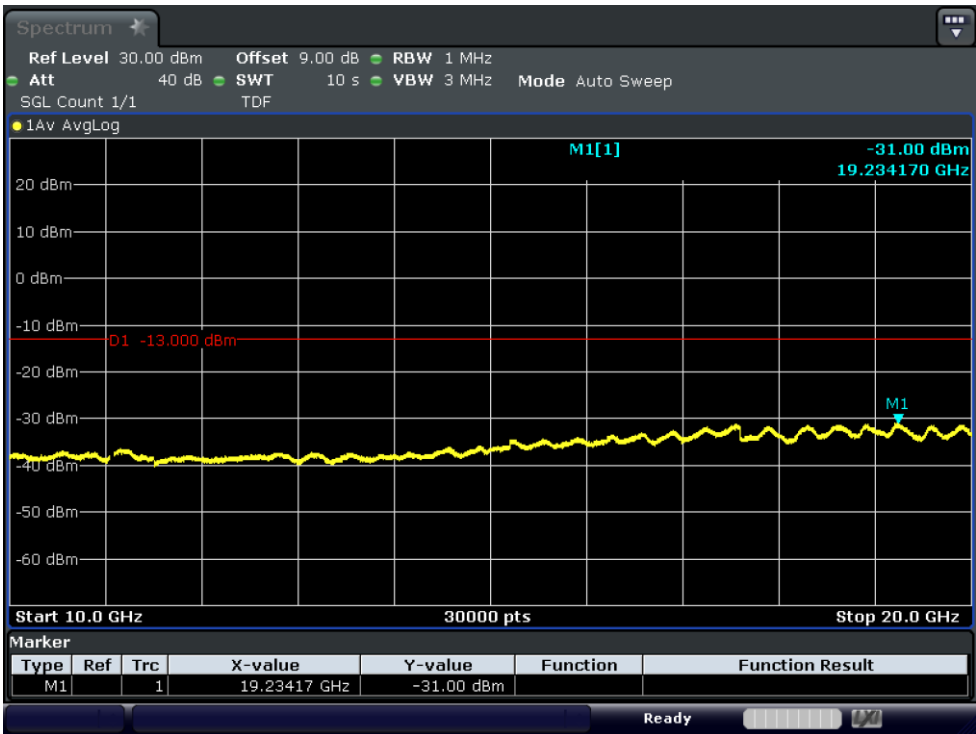


Test_Graph_band4_1732.5MHz_1.4M_QPSK_6RB#LOW_30M_1G_TX

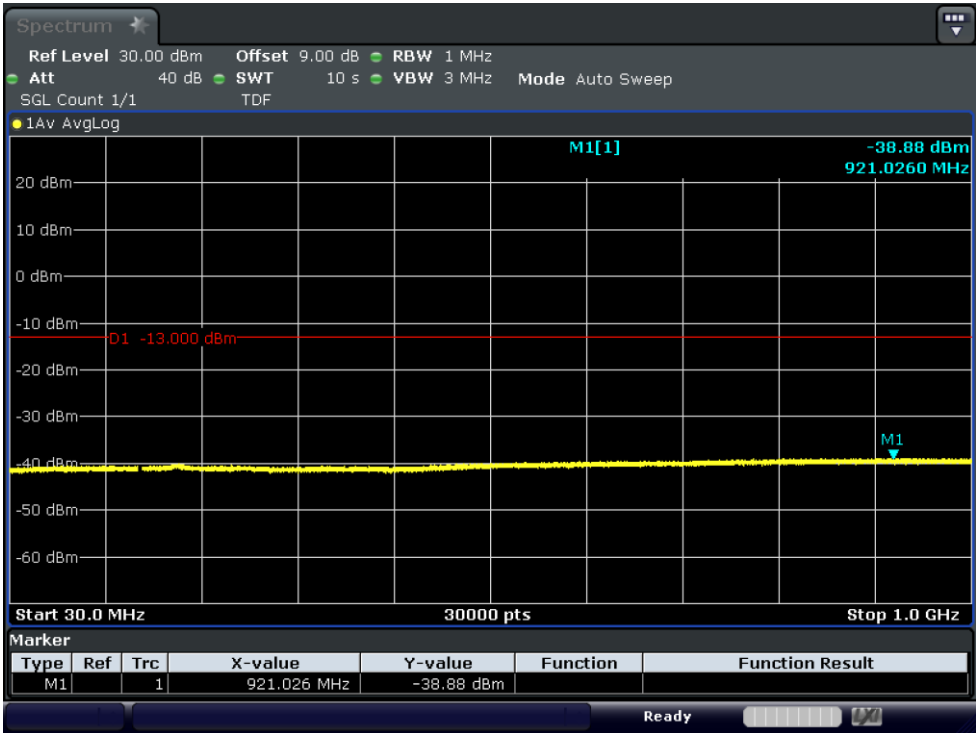




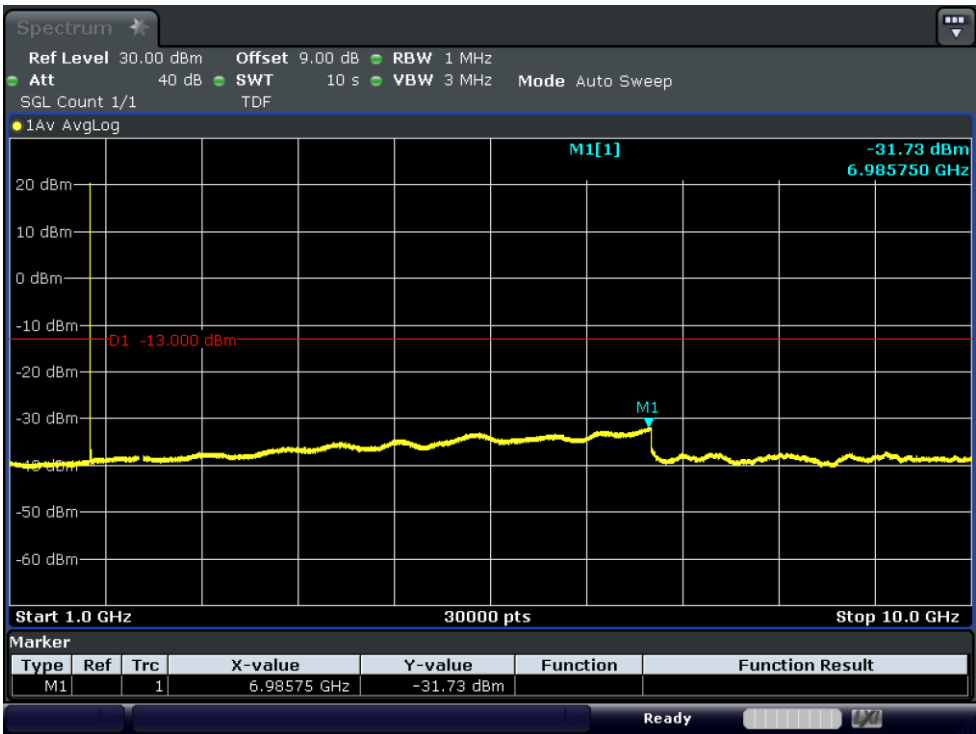
Test_Graph_band4_1732.5MHz_1.4M_QPSK_6RB#LOW_1G_10G_TX



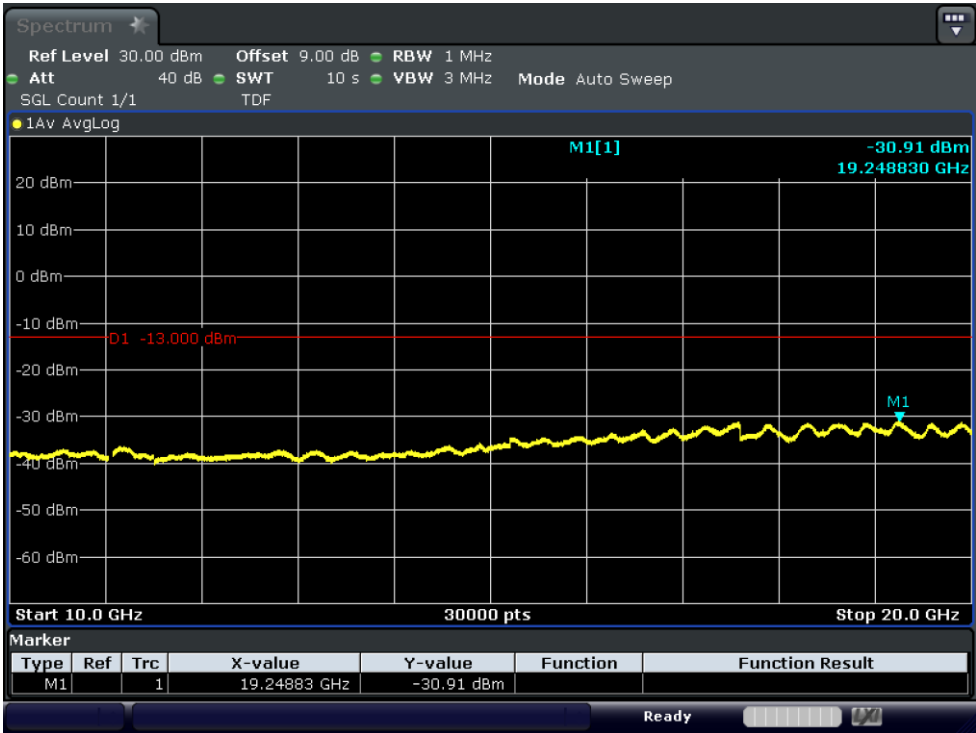
Test_Graph_band4_1732.5MHz_1.4M_QPSK_6RB#LOW_10G_20.0G_TX



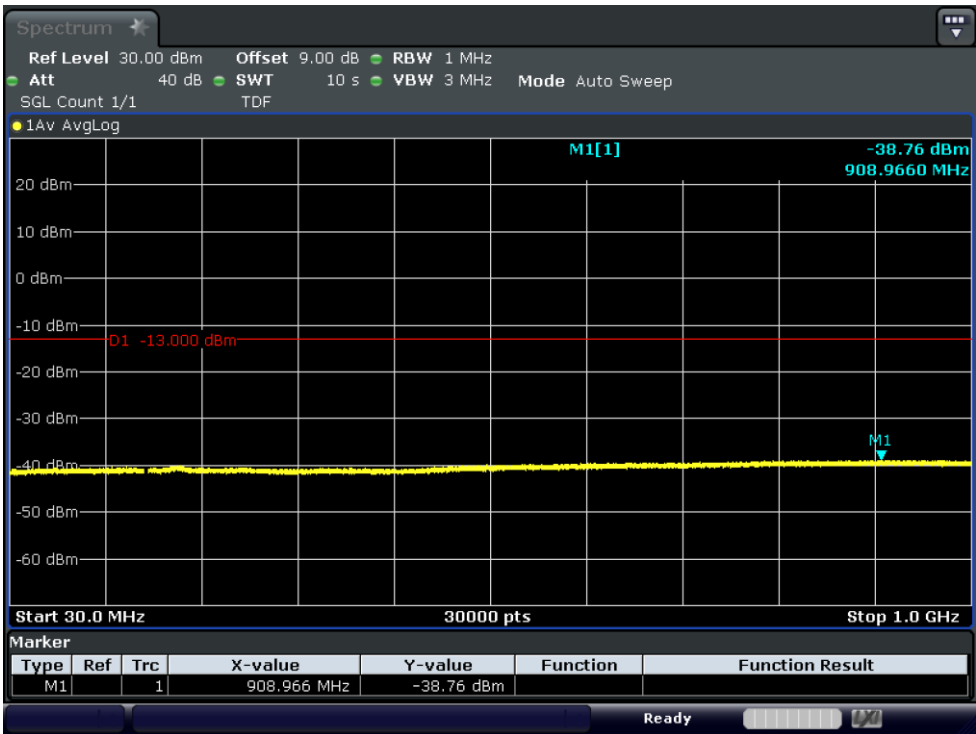
Test_Graph_band4_1754.3MHz_1.4M_QPSK_6RB#LOW_30M_1G_TX



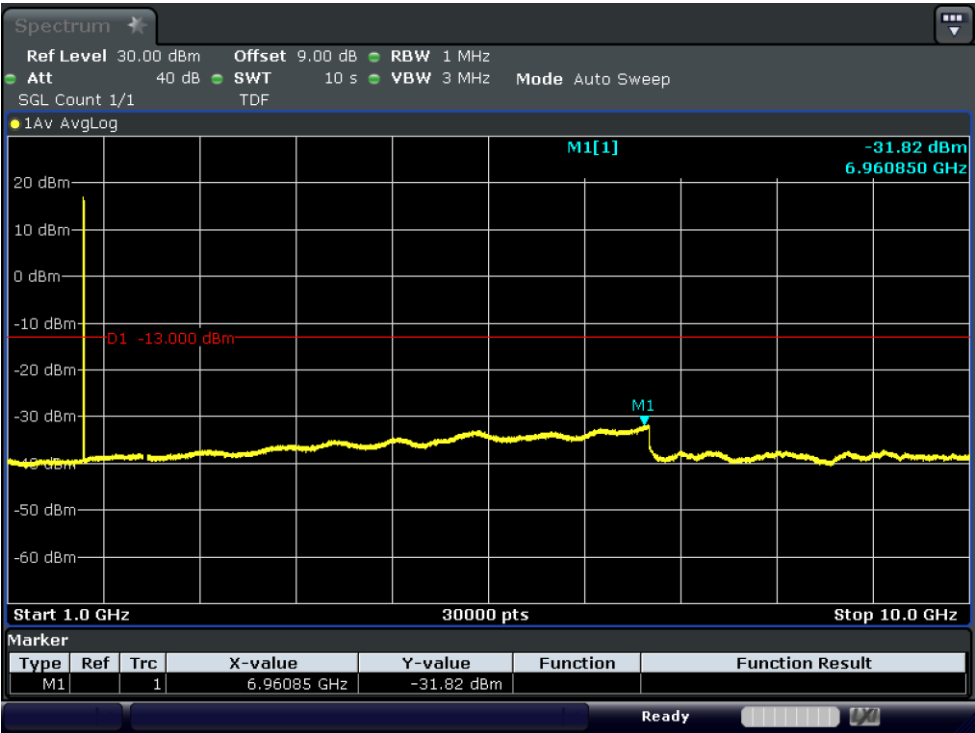
Test_Graph_band4_1754.3MHz_1.4M_QPSK_6RB#LOW_1G_10G_TX



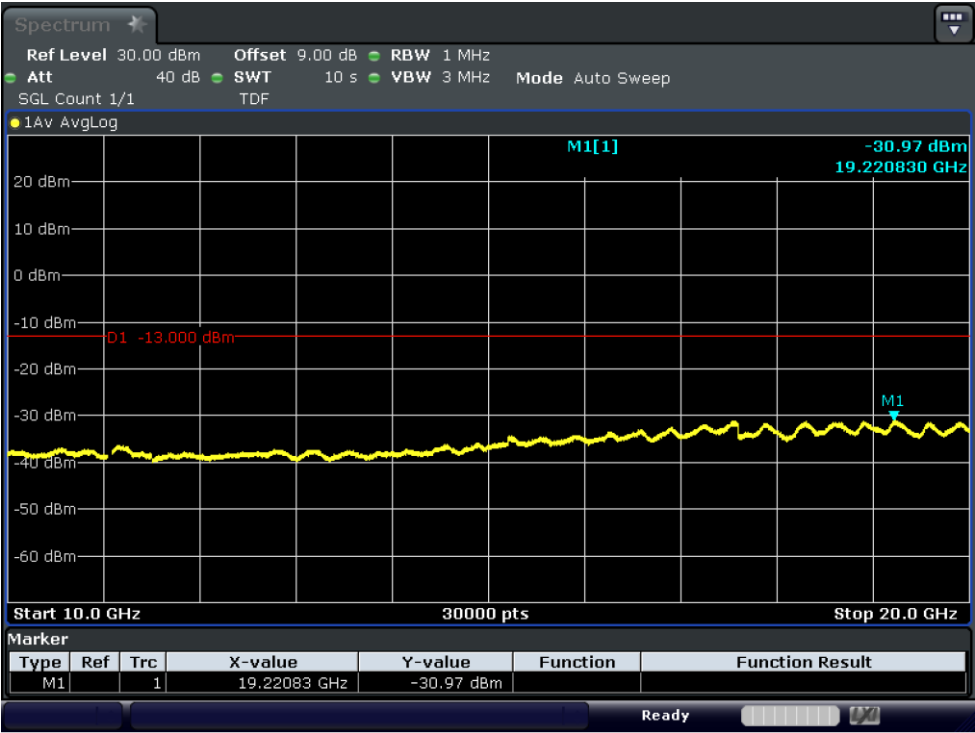
Test_Graph_band4_1754.3MHz_1.4M_QPSK_6RB#LOW_10G_20.0G_TX



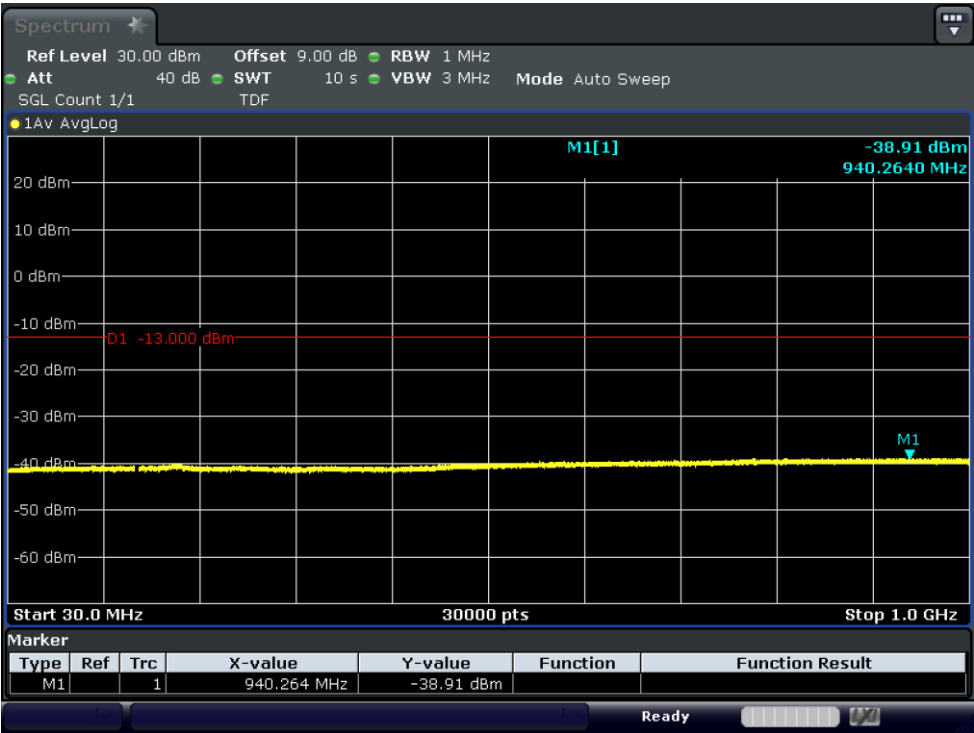
Test_Graph_band4_1711.5MHz_3M_QPSK_15RB#LOW_30M_1G_TX



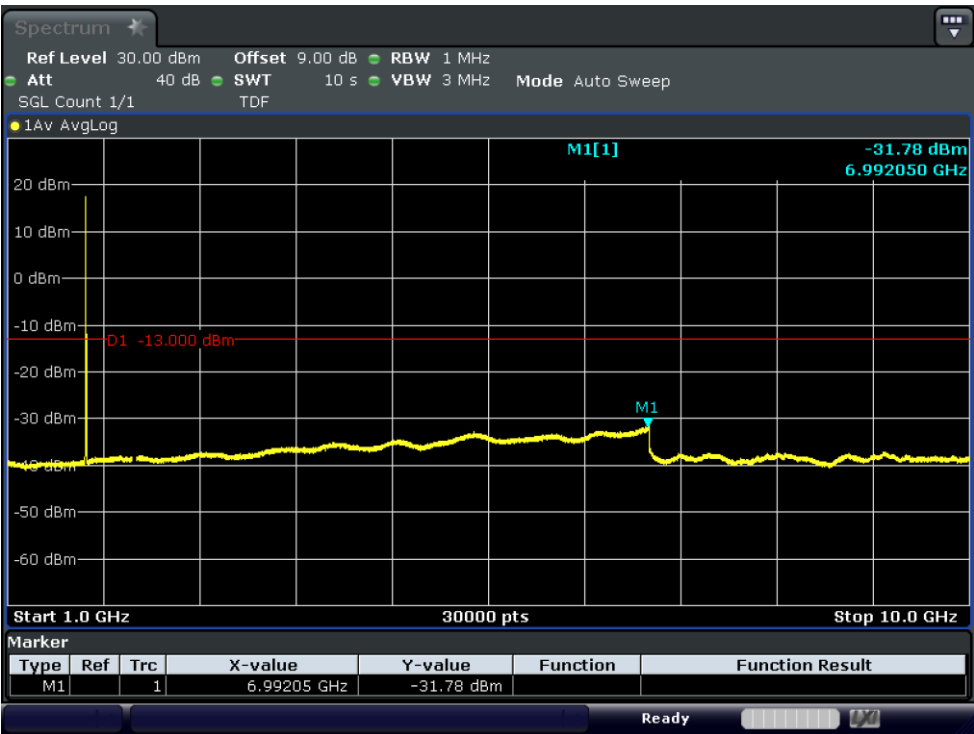
Test_Graph_band4_1711.5MHz_3M_QPSK_15RB#LOW_1G_10G_TX



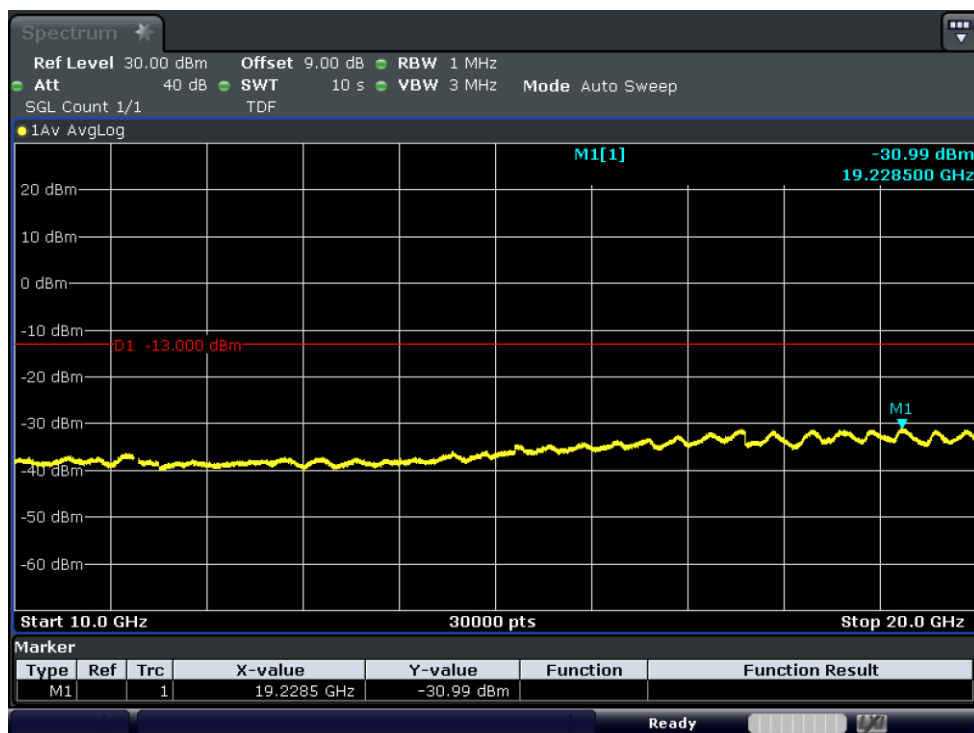
Test_Graph_band4_1711.5MHz_3M_QPSK_15RB#LOW_10G_20.0G_TX



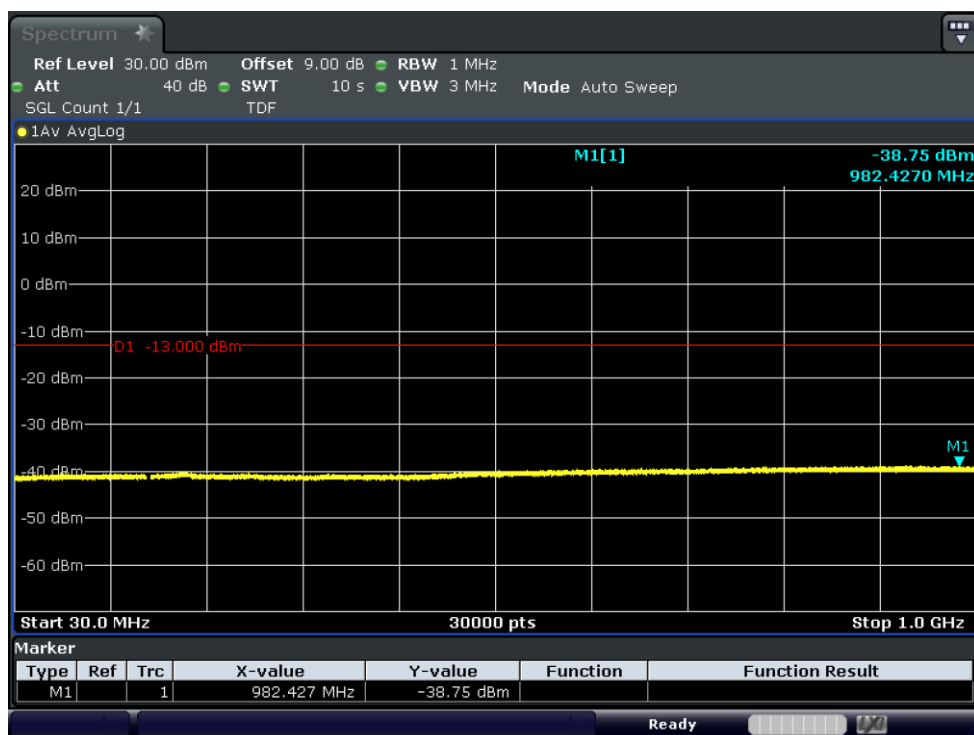
Test_Graph_band4_1732.5MHz_3M_QPSK_15RB#LOW_30M_1G_TX



Test_Graph_band4_1732.5MHz_3M_QPSK_15RB#LOW_1G_10G_TX

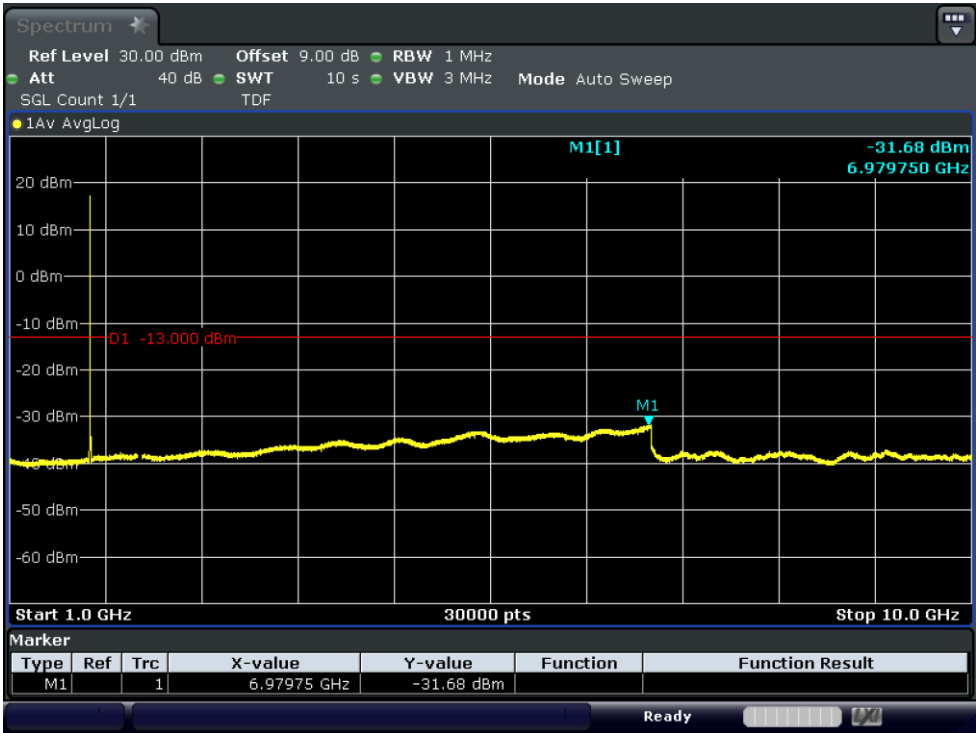


Test_Graph_band4_1732.5MHz_3M_QPSK_15RB#LOW_10G_20.0G_TX

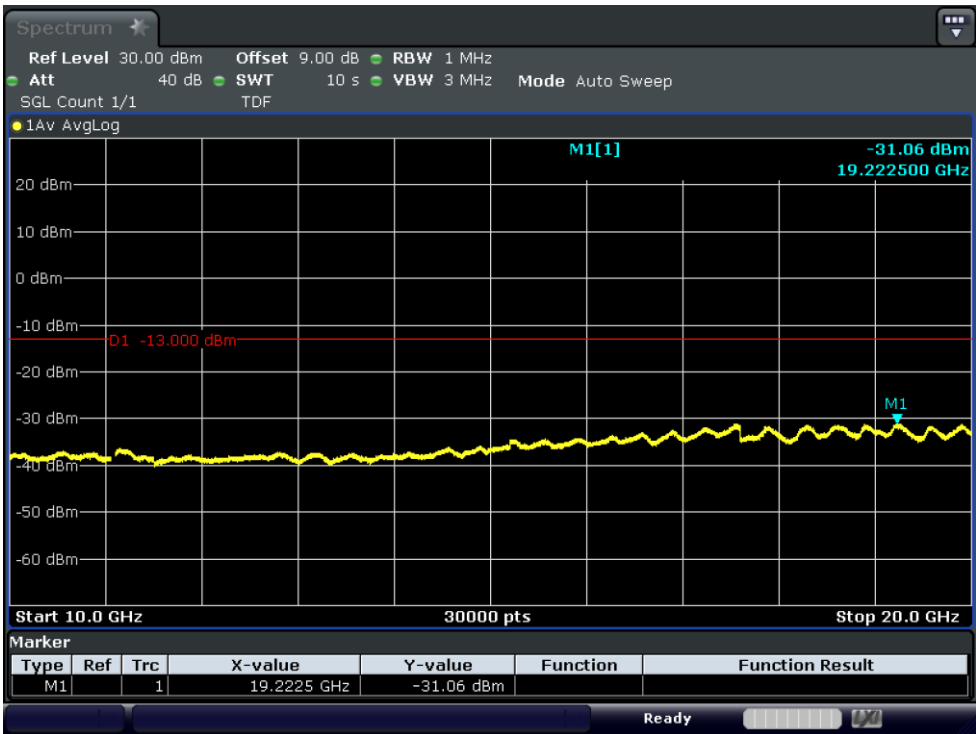


Test_Graph_band4_1753.5MHz_3M_QPSK_15RB#LOW_30M_1G_TX

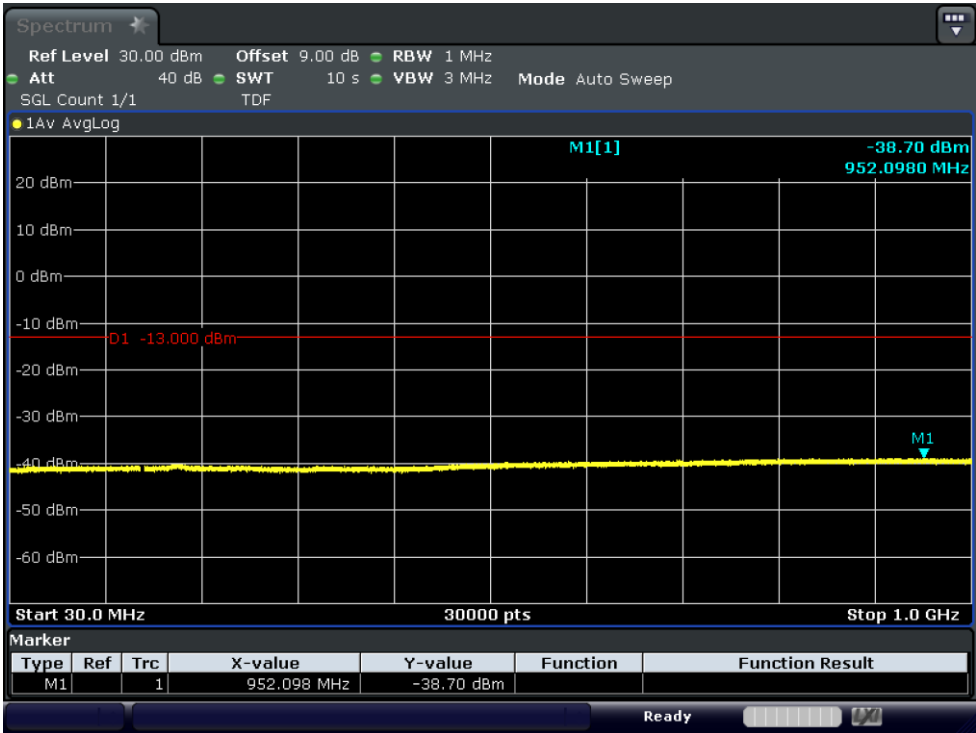




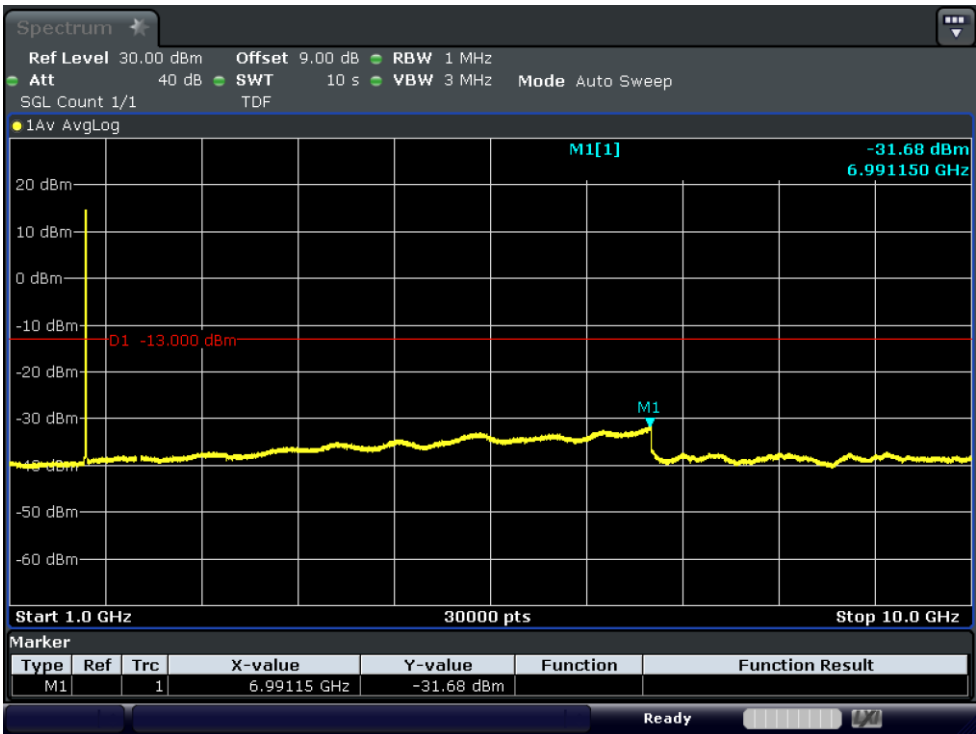
Test_Graph_band4_1753.5MHz_3M_QPSK_15RB#LOW_1G_10G_TX



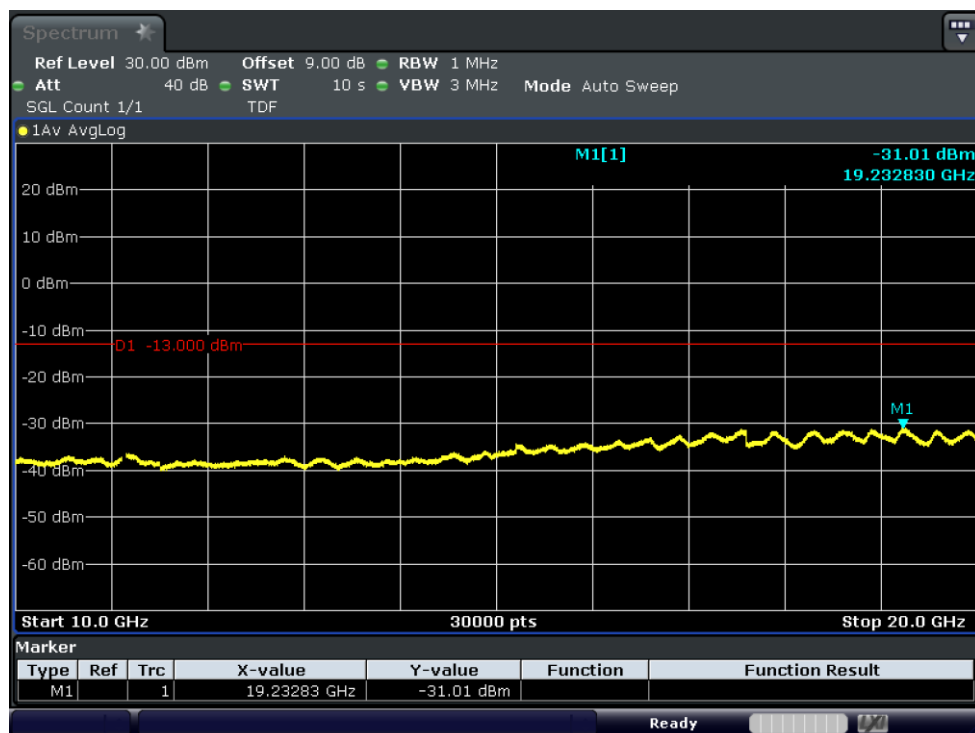
Test_Graph_band4_1753.5MHz_3M_QPSK_15RB#LOW_10G_20.0G_TX



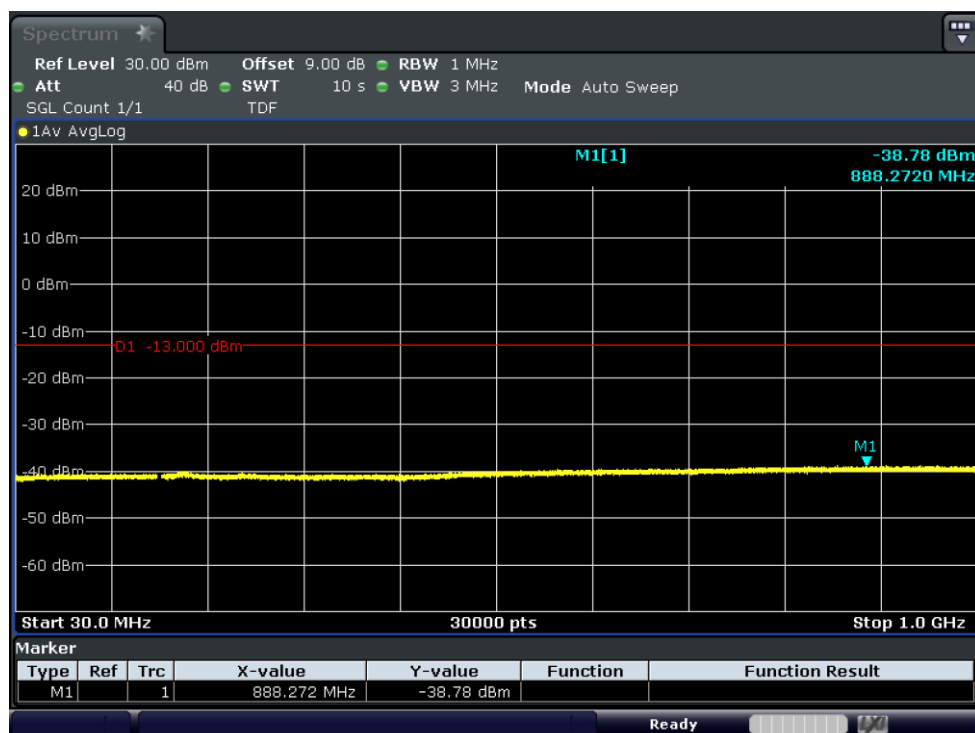
Test_Graph_band4_1712.5MHz_5M_QPSK_25RB#LOW_30M_1G_TX



Test_Graph_band4_1712.5MHz_5M_QPSK_25RB#LOW_1G_10G_TX

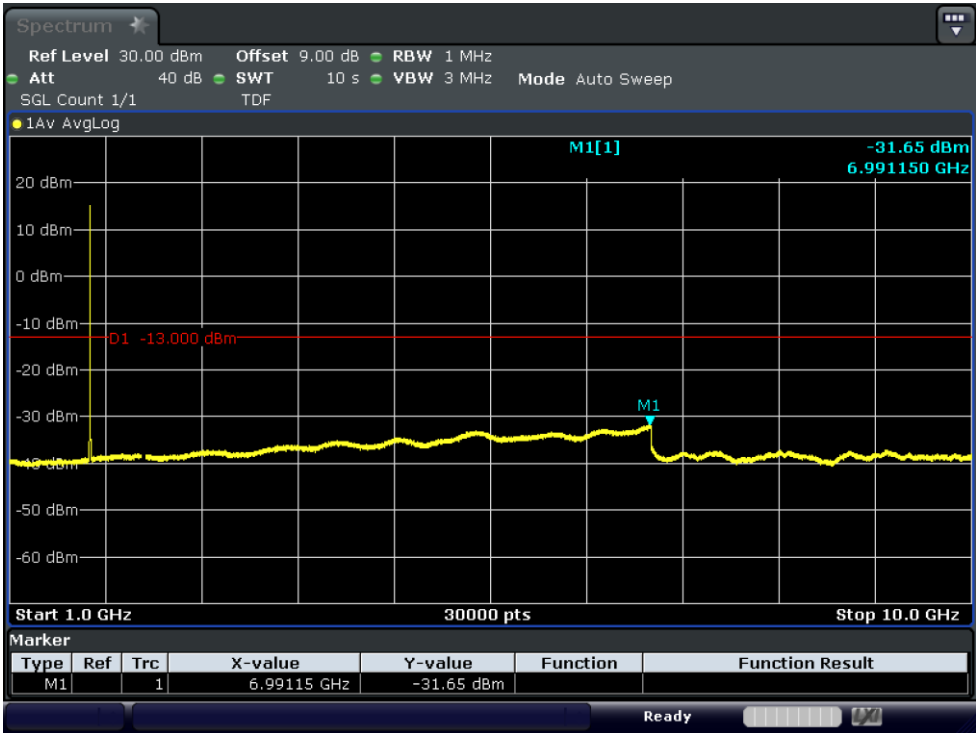


Test_Graph_band4_1712.5MHz_5M_QPSK_25RB#LOW_10G_20.0G_TX

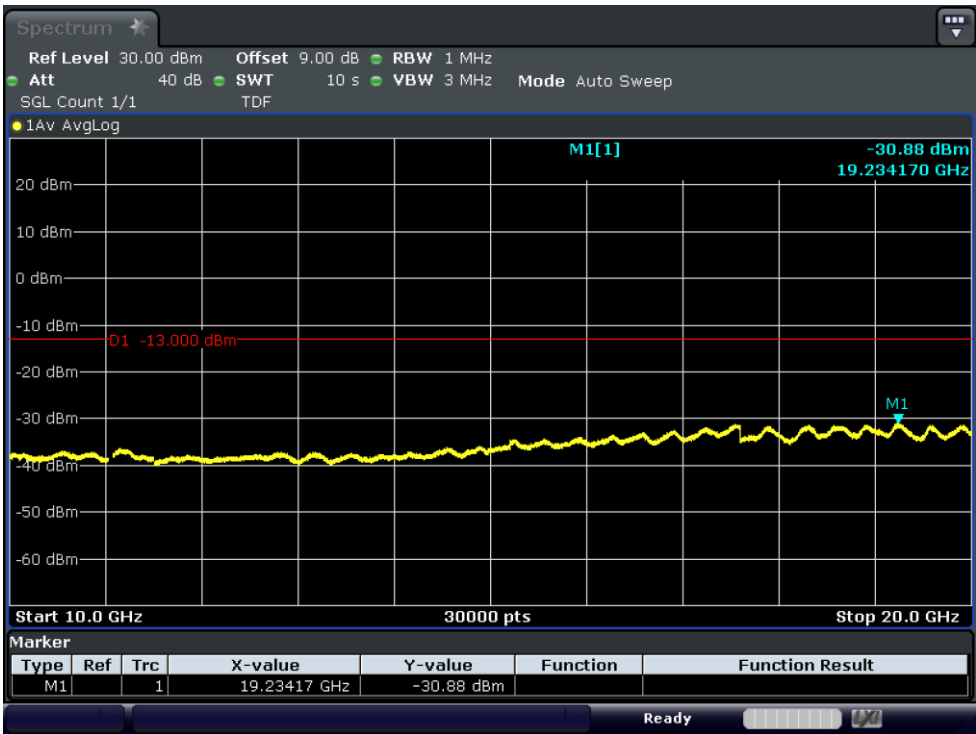


Test_Graph_band4_1752.5MHz_5M_QPSK_25RB#LOW_30M_1G_TX



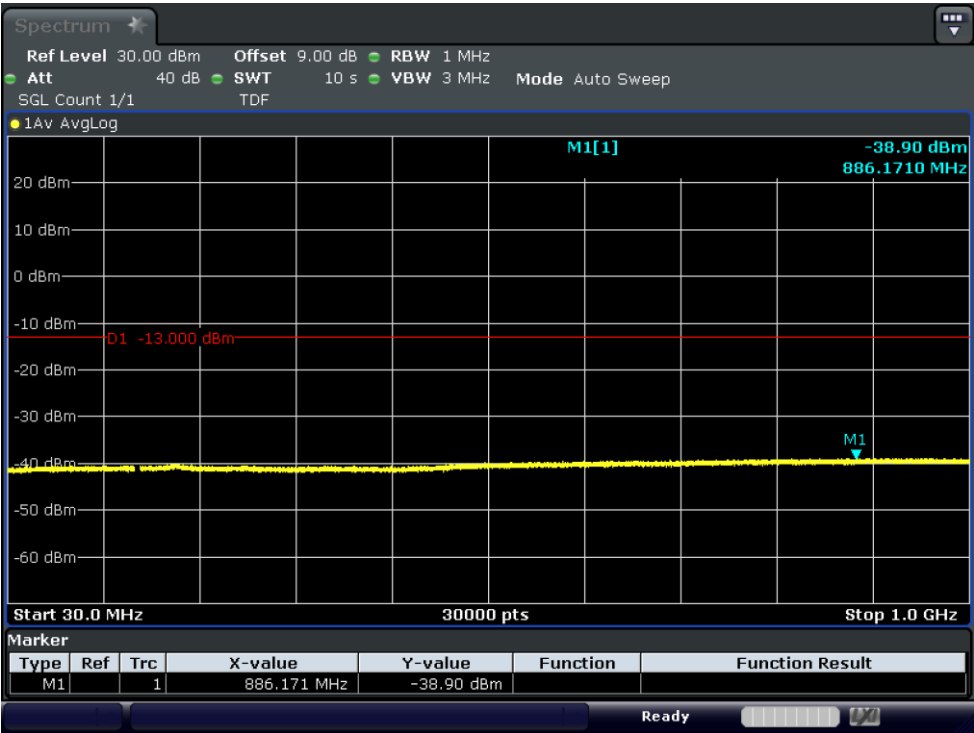


Test_Graph_band4_1752.5MHz_5M_QPSK_25RB#LOW_1G_10G_TX

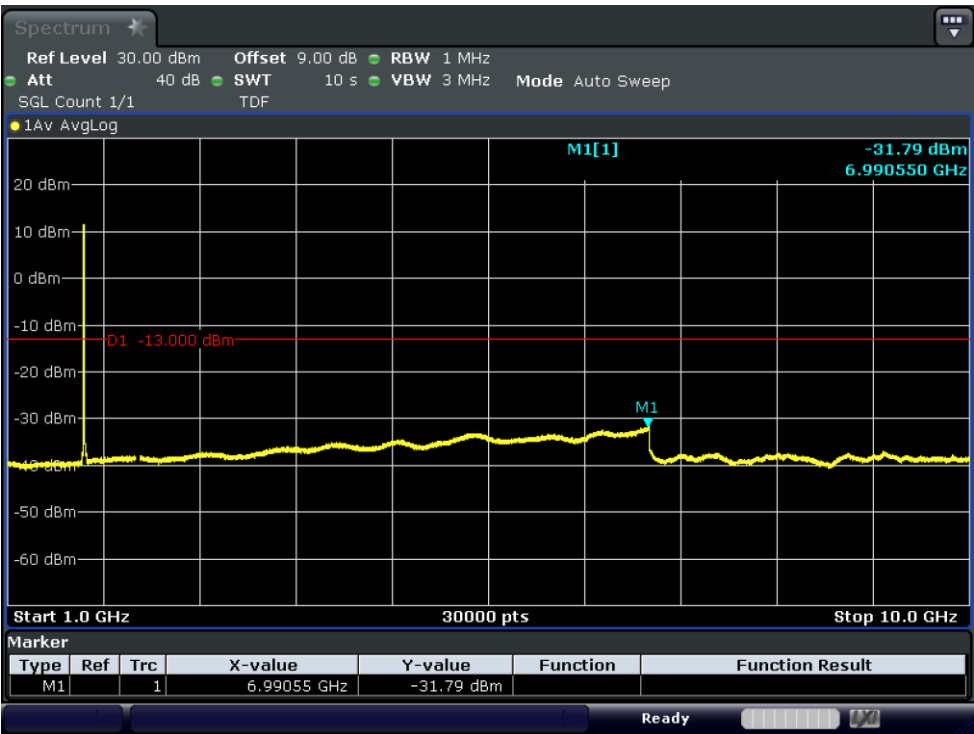


Test_Graph_band4_1752.5MHz_5M_QPSK_25RB#LOW_10G_20.0G_TX

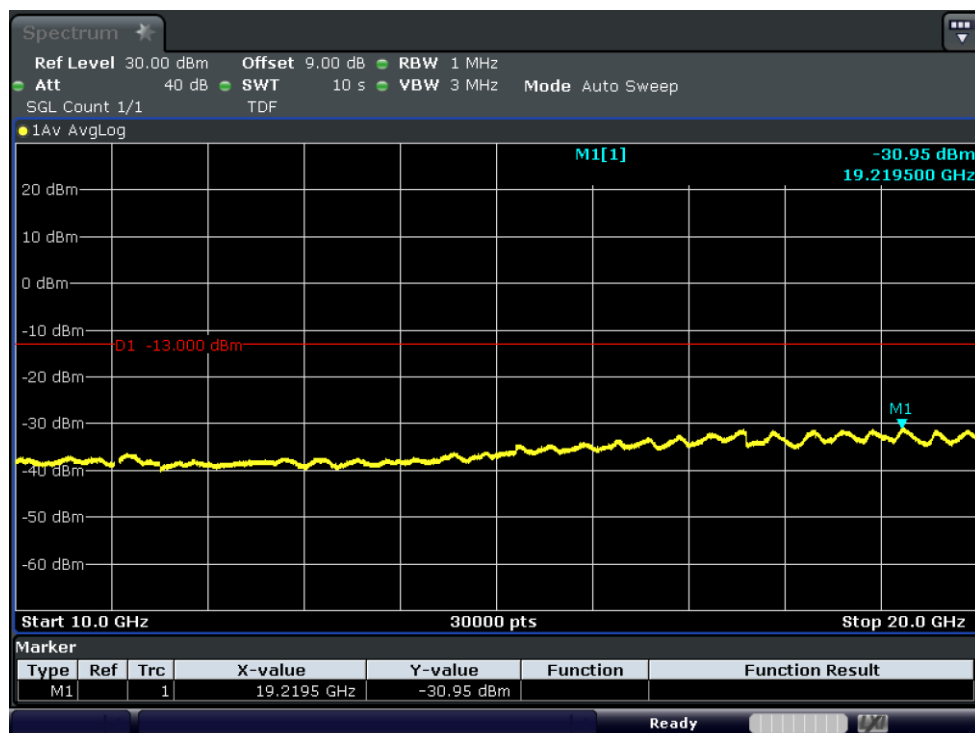




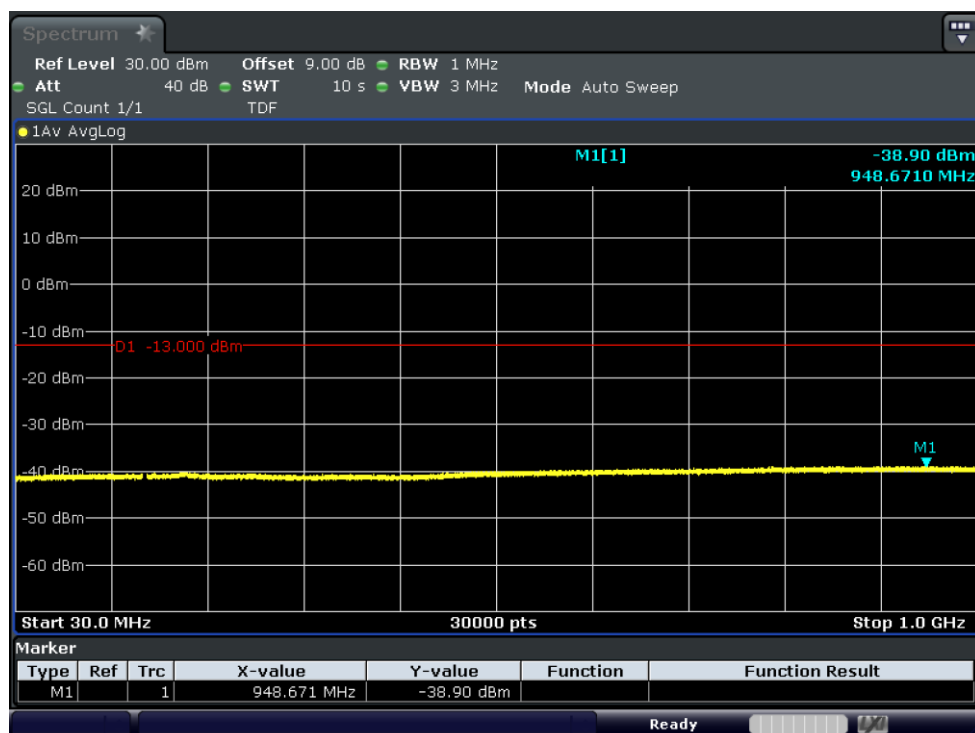
Test_Graph_band4_1715MHz_10M_QPSK_50RB#LOW_30M_1G_TX



Test_Graph_band4_1715MHz_10M_QPSK_50RB#LOW_1G_10G_TX

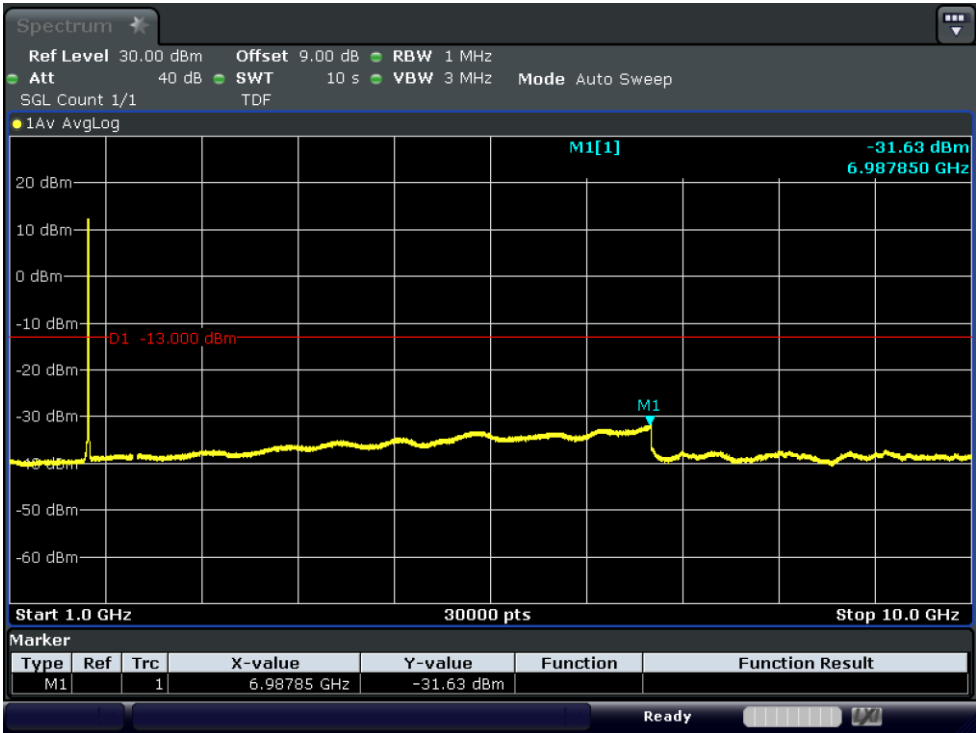


Test_Graph_band4_1715MHz_10M_QPSK_50RB#LOW_10G_20.0G_TX

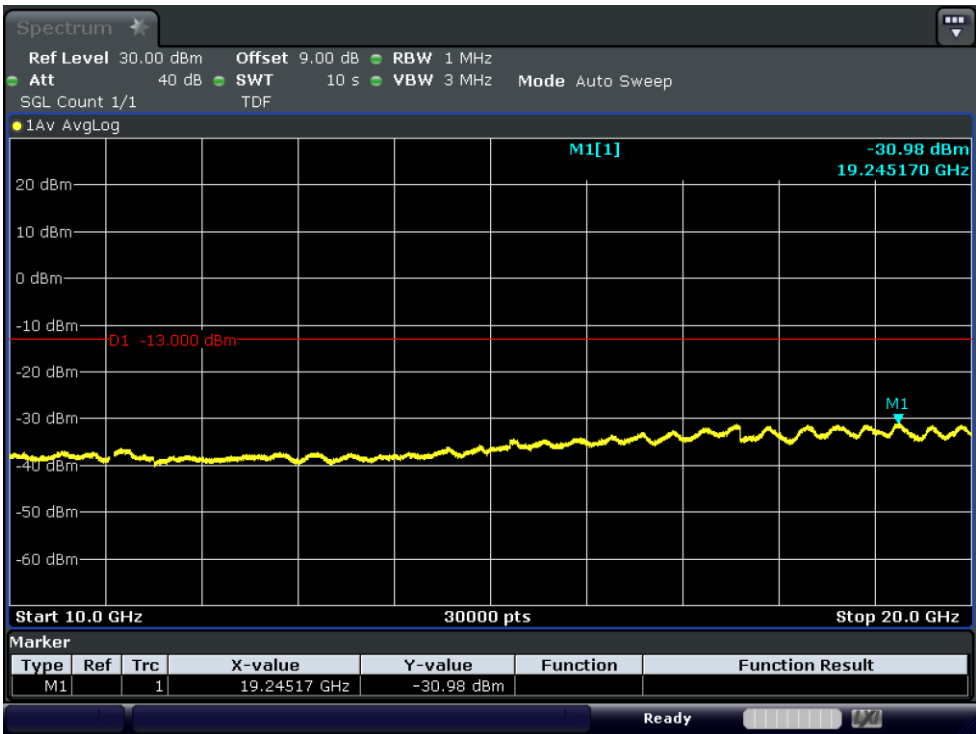


Test_Graph_band4_1732.5MHz_10M_QPSK_50RB#LOW_30M_1G_TX

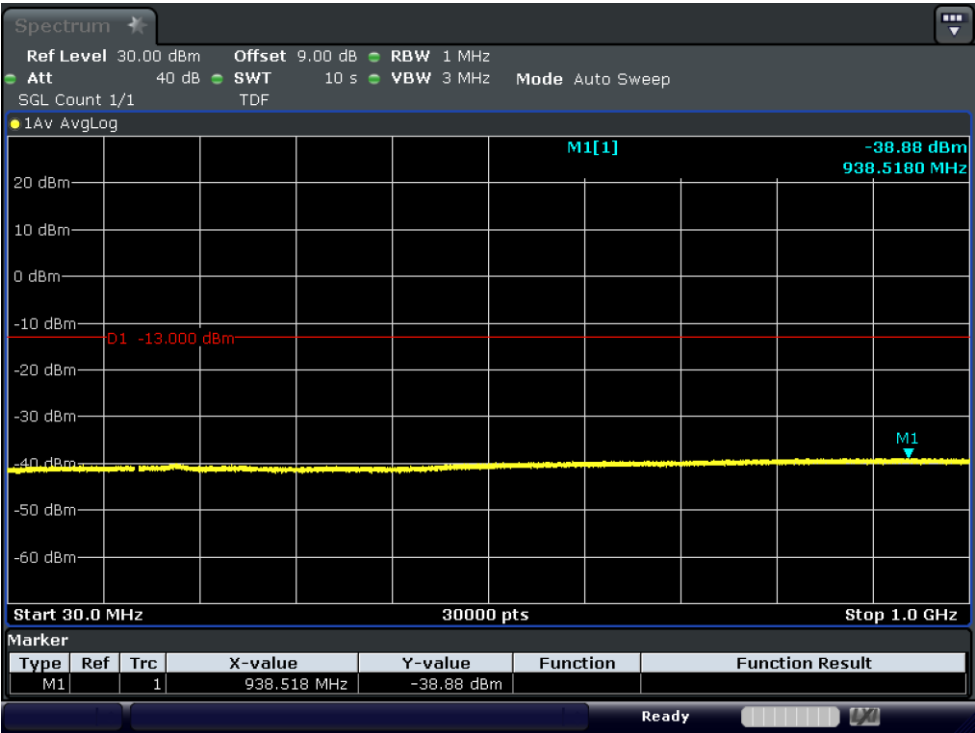




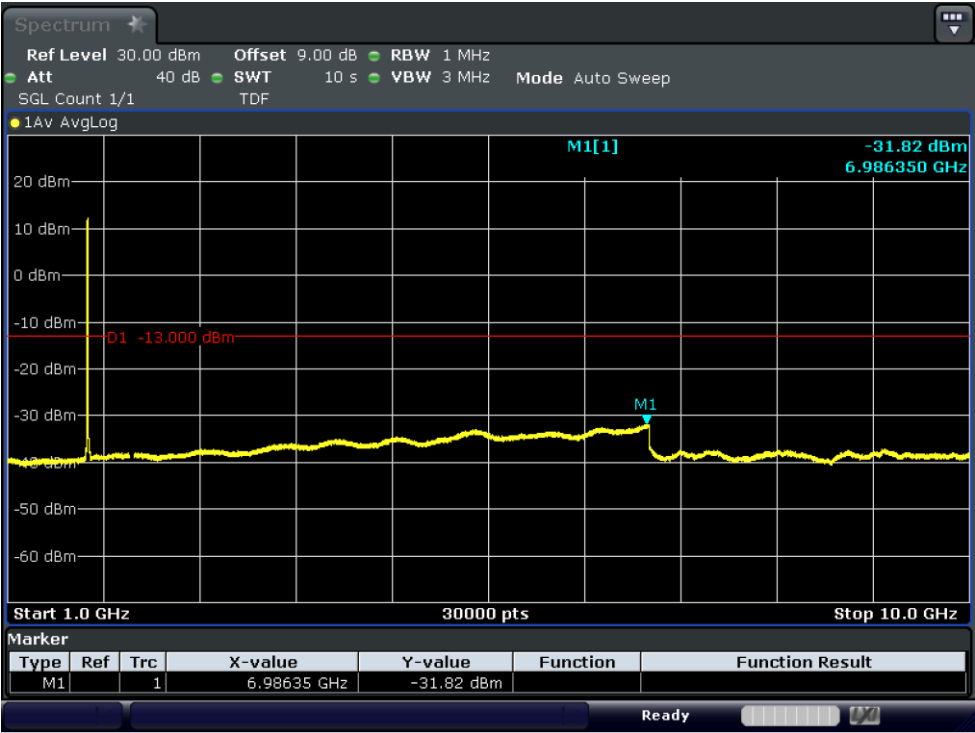
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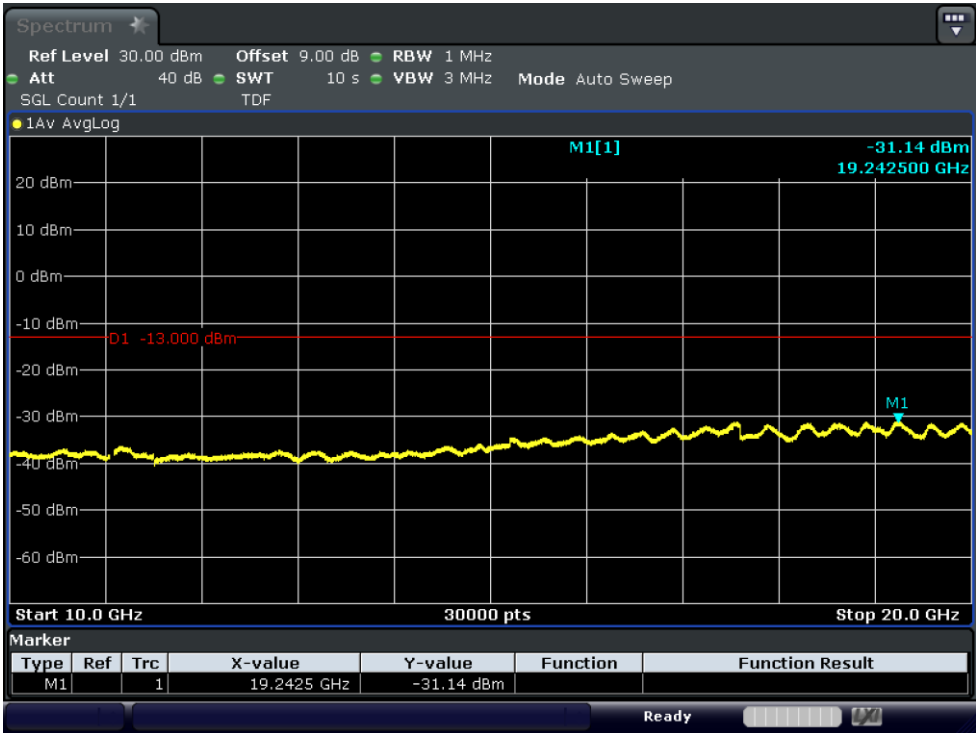
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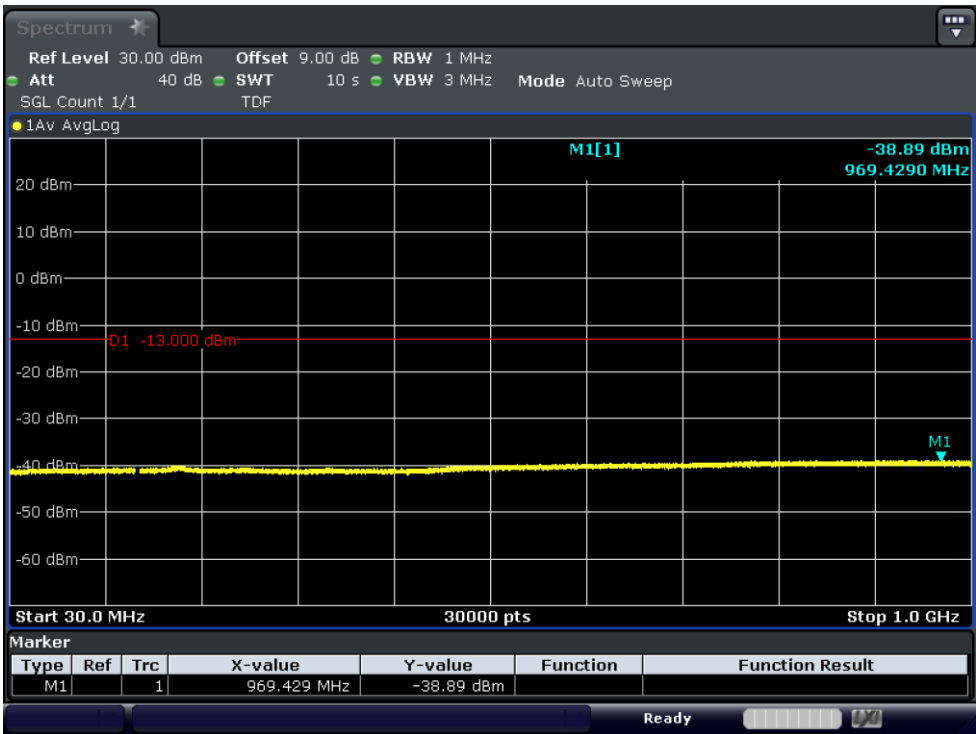
Test_Graph_band4_1750MHz_10M_QPSK_50RB#LOW_30M_1G_TX



Test_Graph_band4_1750MHz_10M_QPSK_50RB#LOW_1G_10G_TX

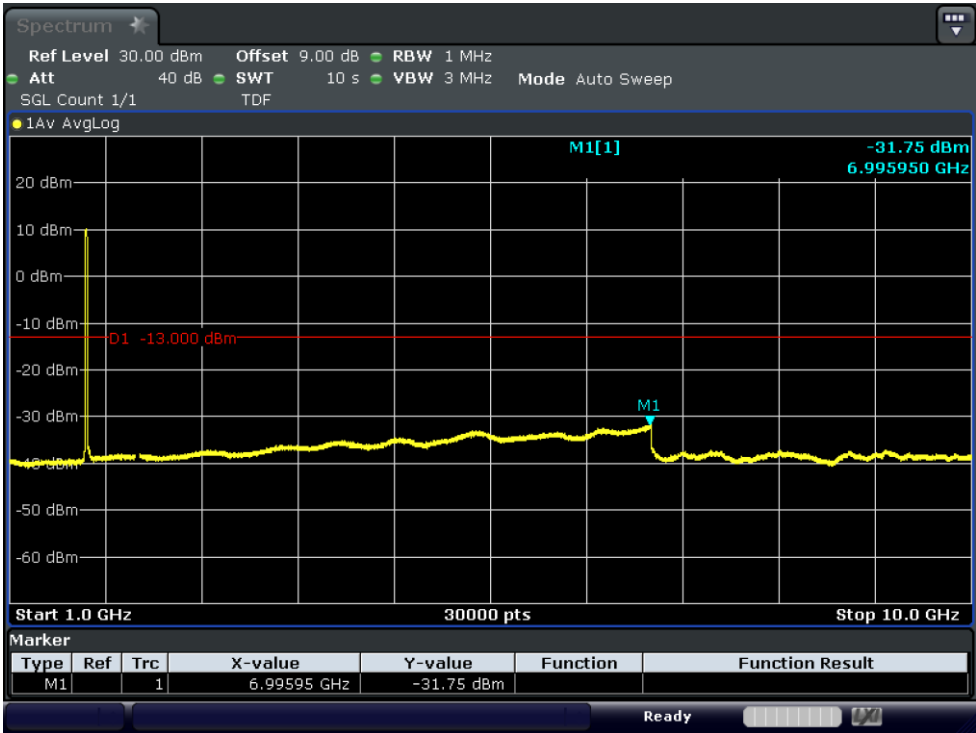


Test_Graph_band4_1750MHz_10M_QPSK_50RB#LOW_10G_20.0G_TX

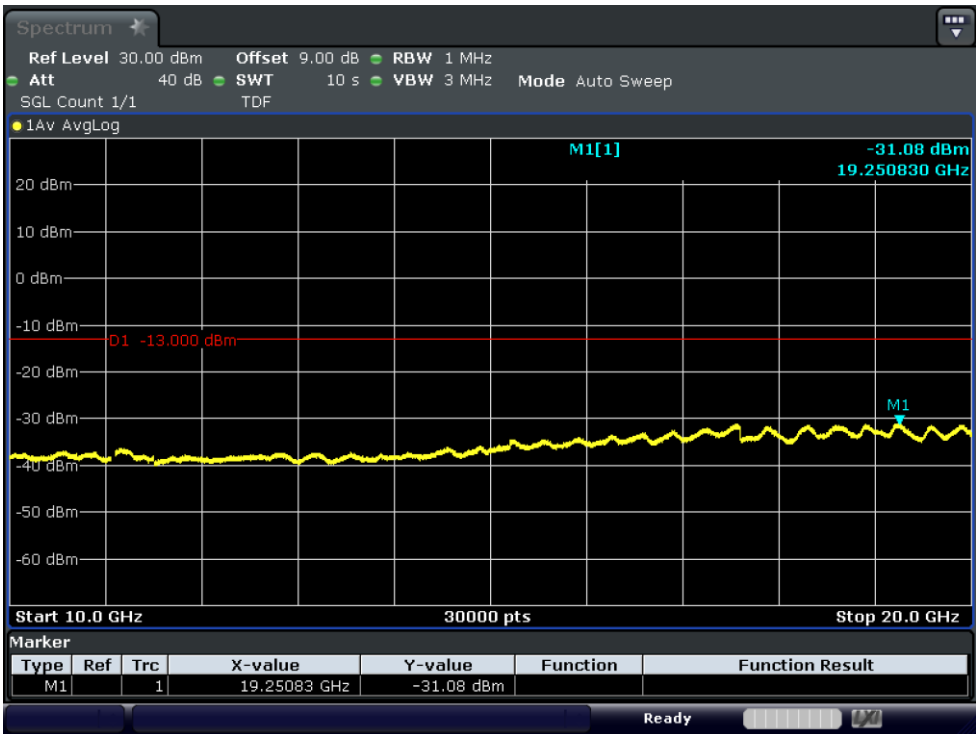


Test_Graph_band4_1717.5MHz_15M_QPSK_75RB#LOW_30M_1G_TX

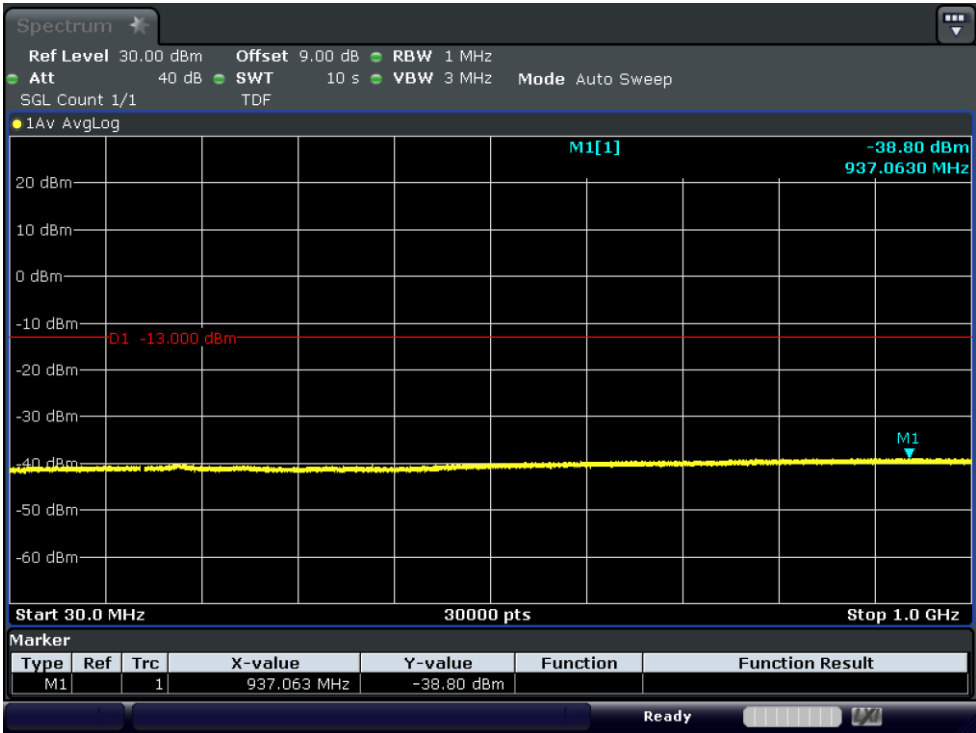




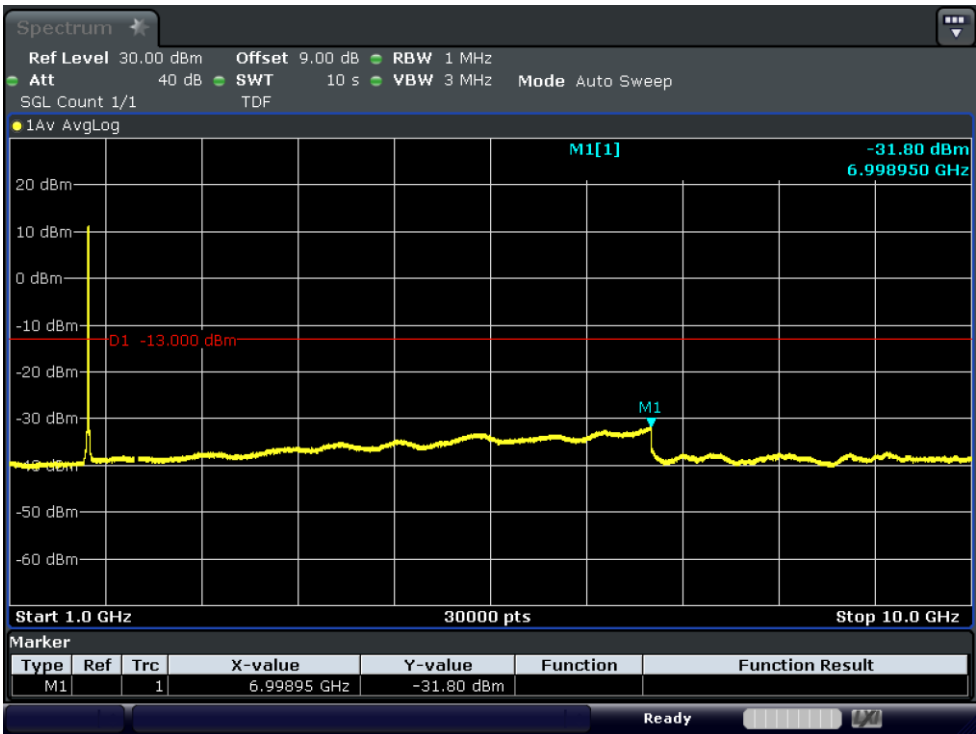
Test_Graph_band4_1717.5MHz_15M_QPSK_75RB#LOW_1G_10G_TX



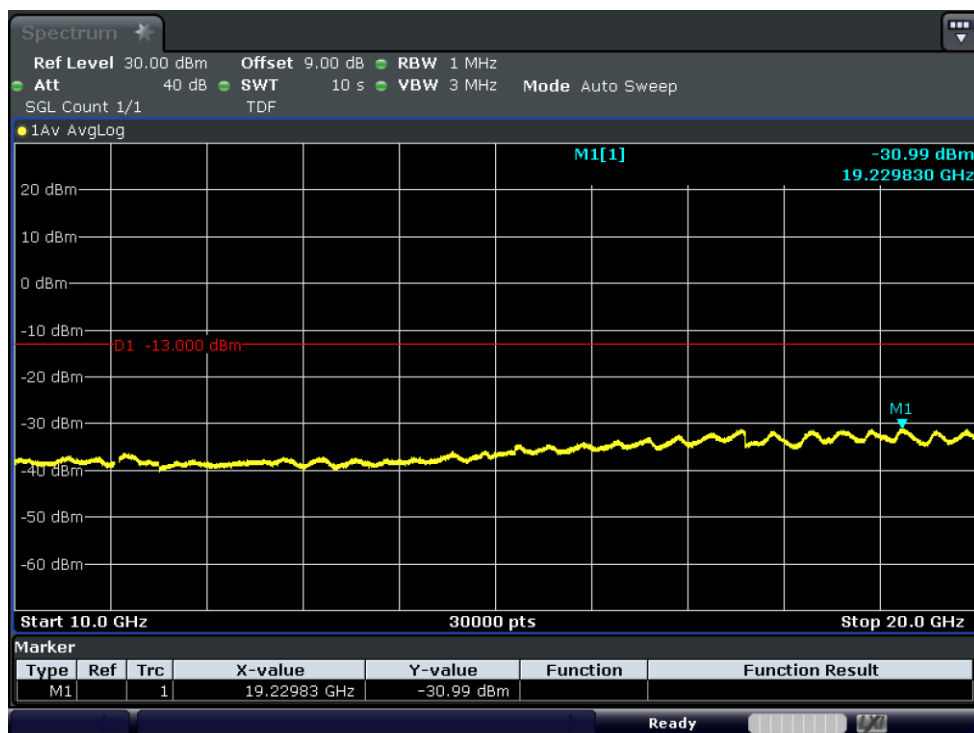
Test_Graph_band4_1717.5MHz_15M_QPSK_75RB#LOW_10G_20.0G_TX



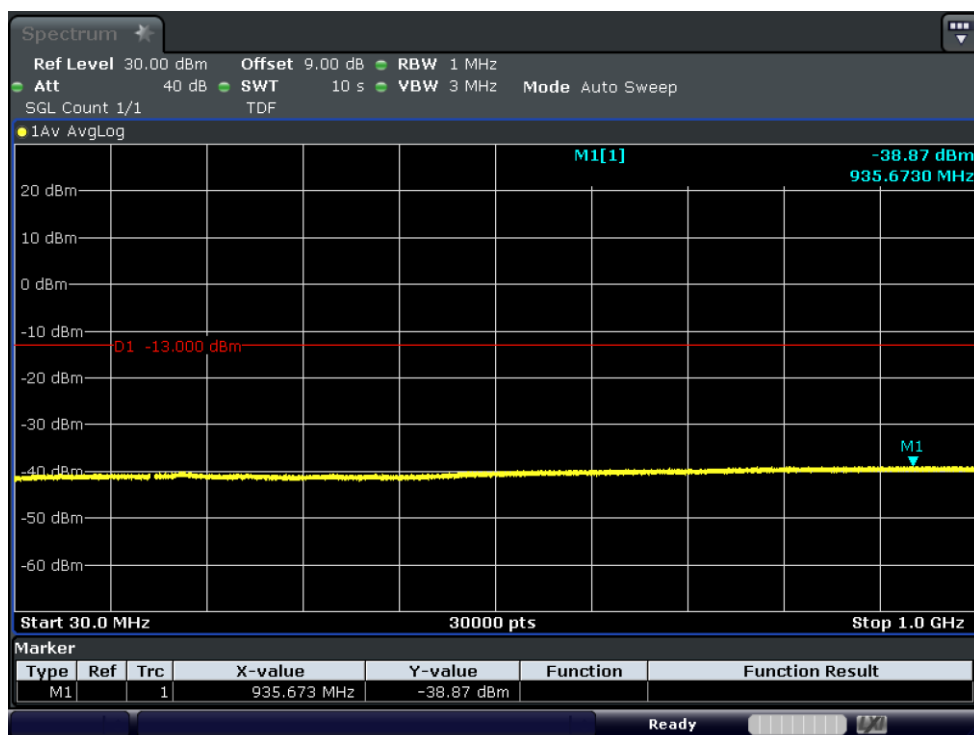
Test_Graph_band4_1732.5MHz_15M_QPSK_75RB#LOW_30M_1G_TX



Test_Graph_band4_1732.5MHz_15M_QPSK_75RB#LOW_1G_10G_TX

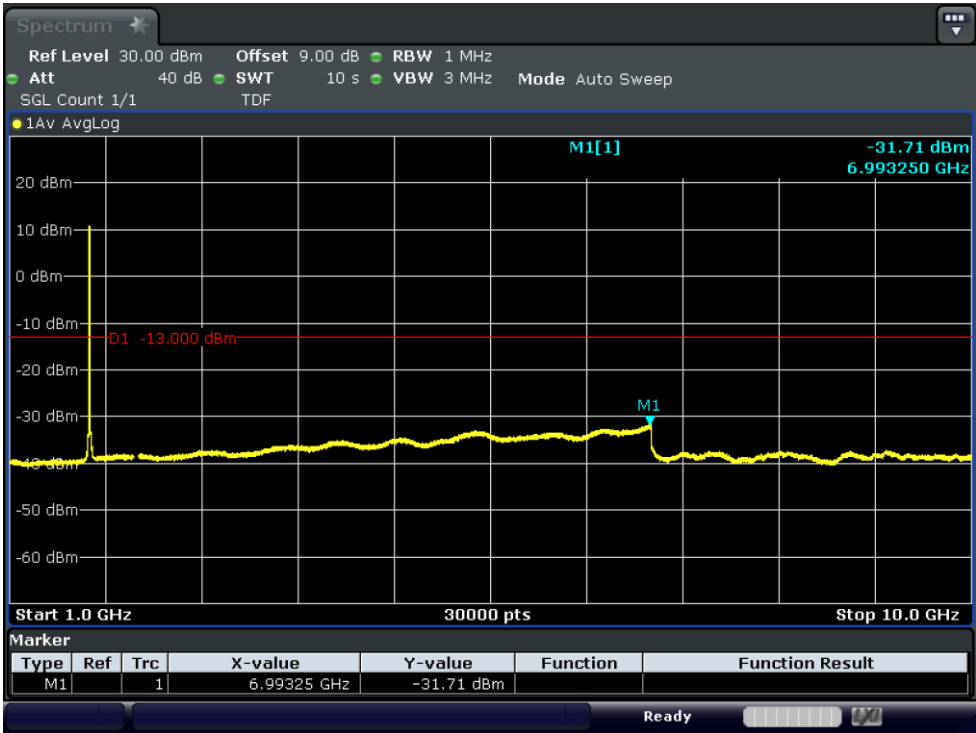


Test_Graph_band4_1732.5MHz_15M_QPSK_75RB#LOW_10G_20.0G_TX

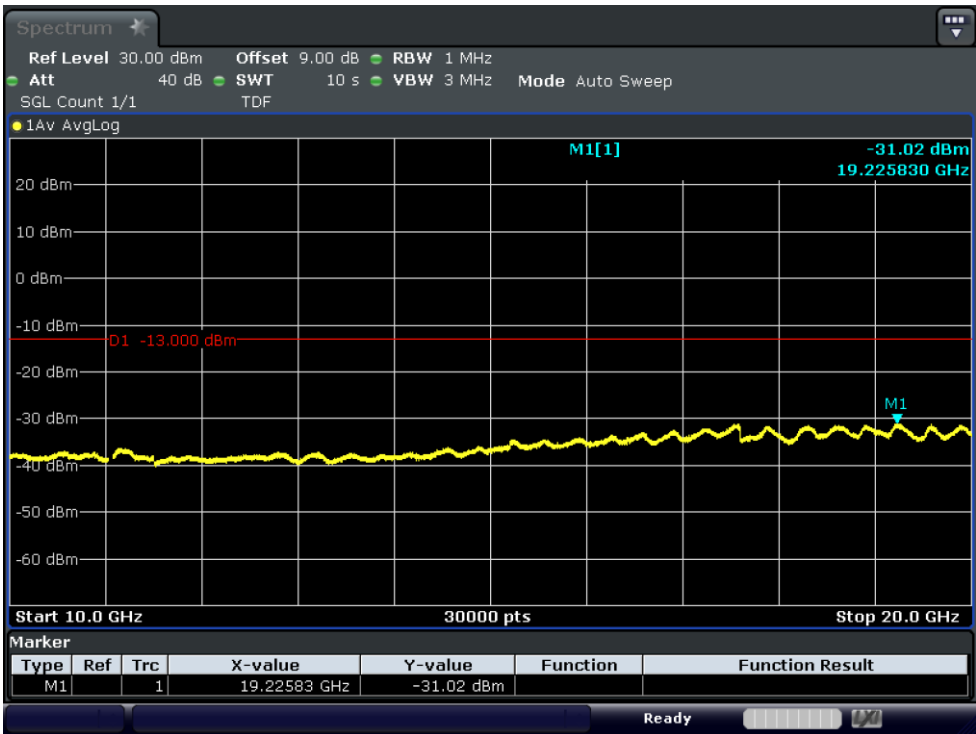


Test_Graph_band4_1747.5MHz_15M_QPSK_75RB#LOW_30M_1G_TX



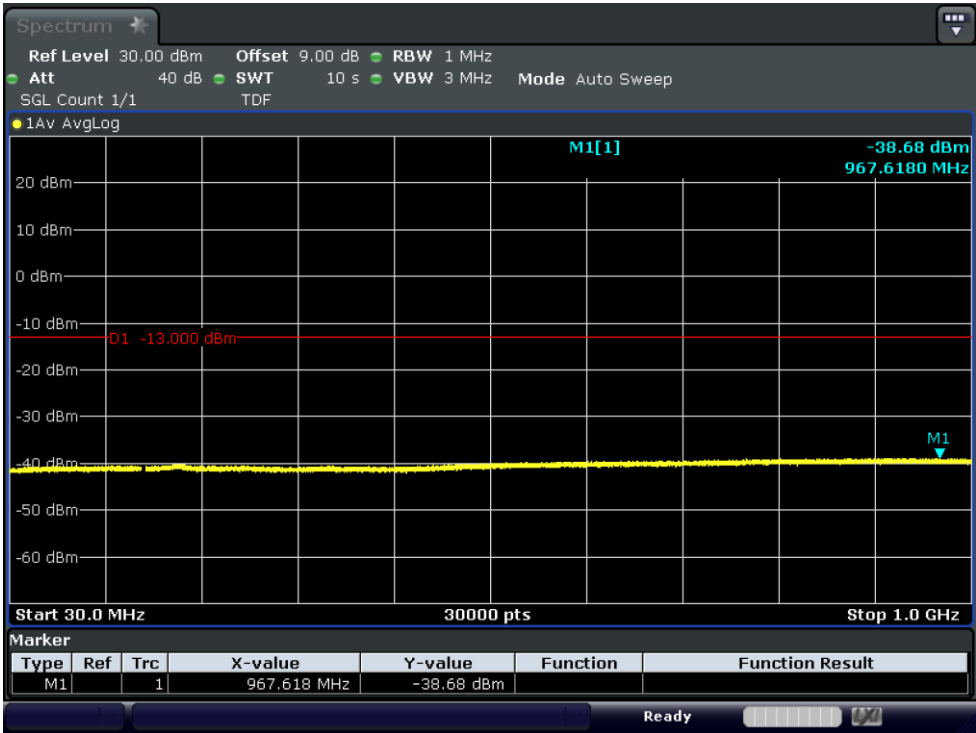


Test_Graph_band4_1747.5MHz_15M_QPSK_75RB#LOW_1G_10G_TX

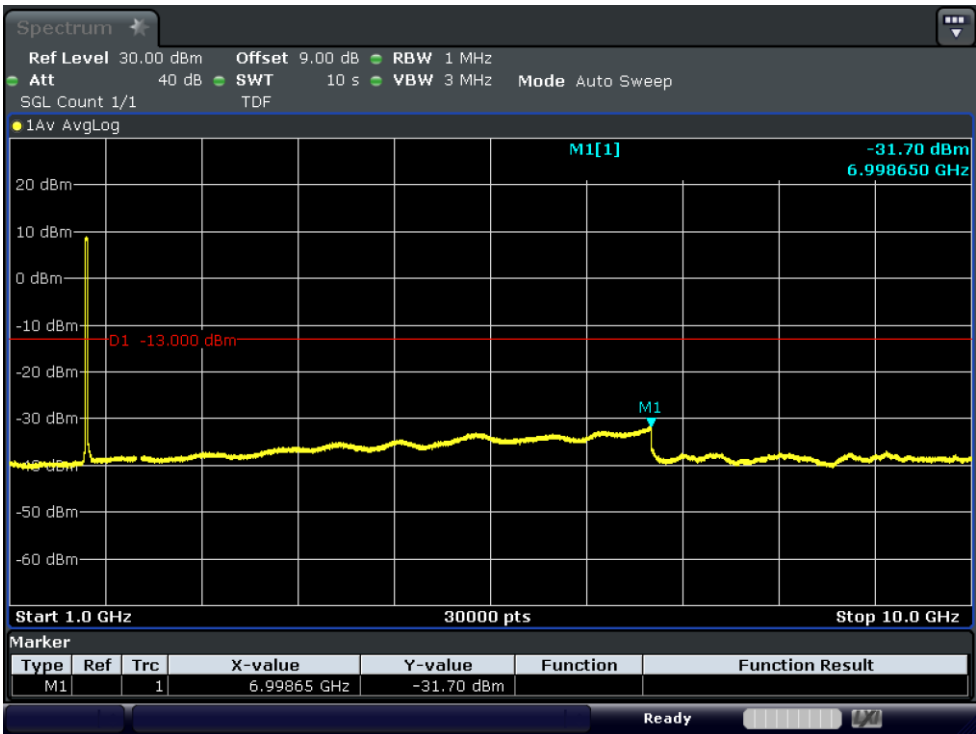


Test_Graph_band4_1747.5MHz_15M_QPSK_75RB#LOW_10G_20.0G_TX

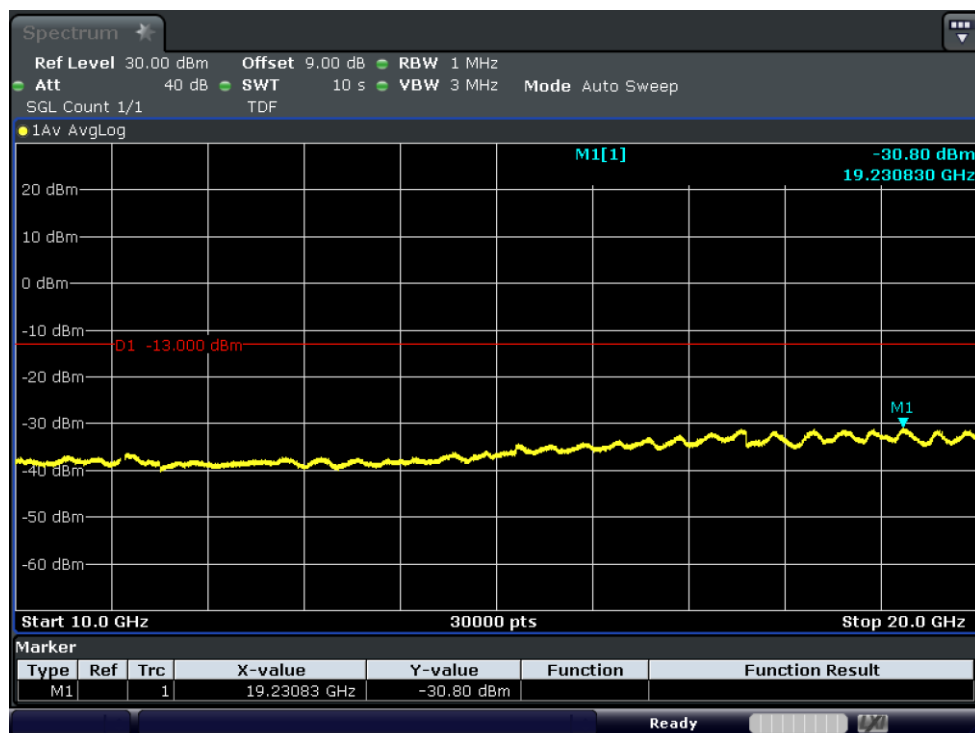




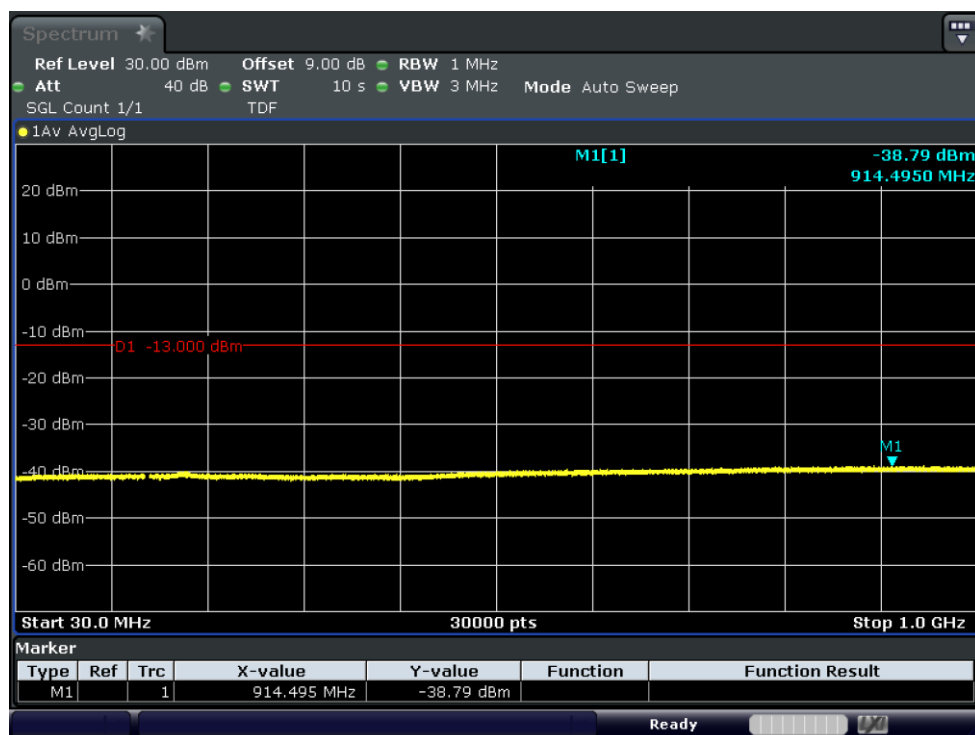
Test_Graph_band4_1720MHz_20M_QPSK_100RB#LOW_30M_1G_TX



Test_Graph_band4_1720MHz_20M_QPSK_100RB#LOW_1G_10G_TX

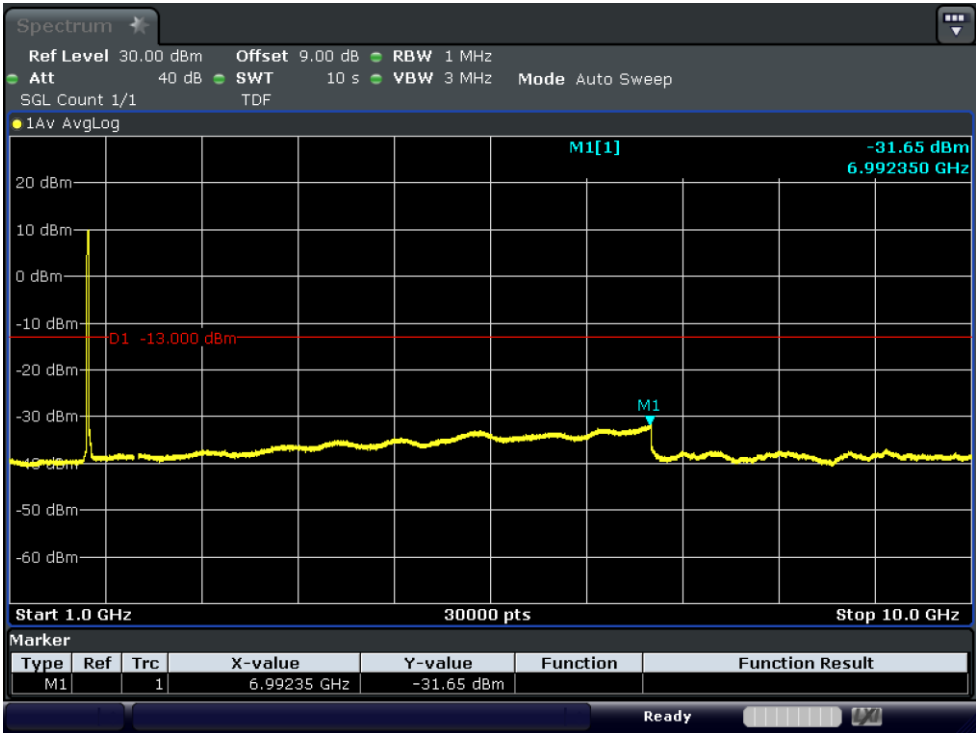


Test_Graph_band4_1720MHz_20M_QPSK_100RB#LOW_10G_20.0G_TX

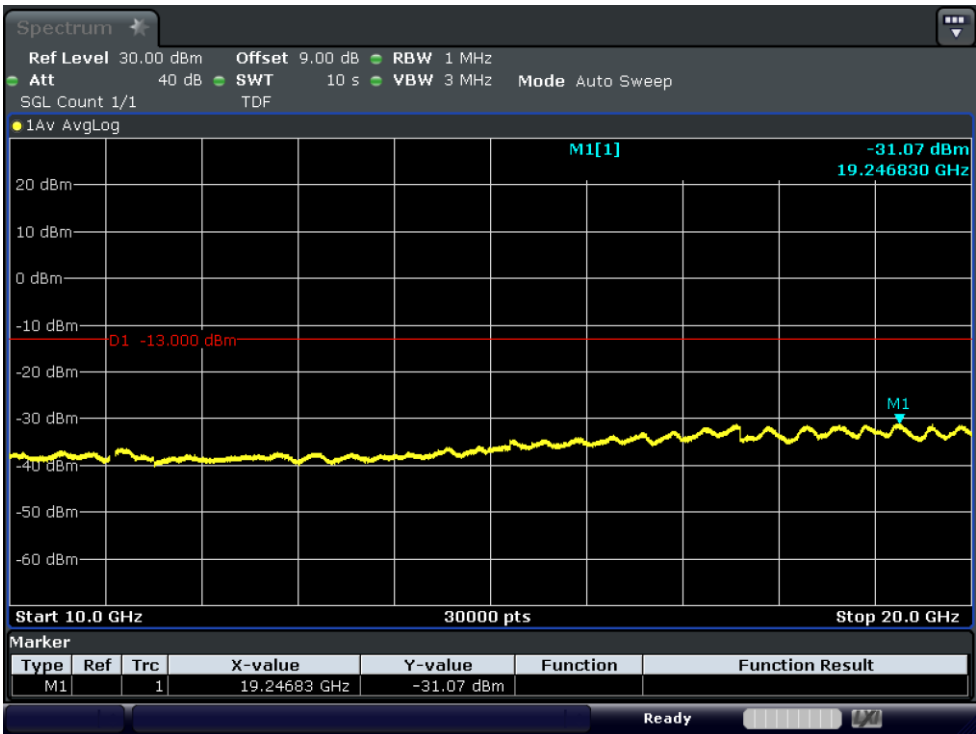


Test_Graph_band4_1732.5MHz_20M_QPSK_100RB#LOW_30M_1G_TX

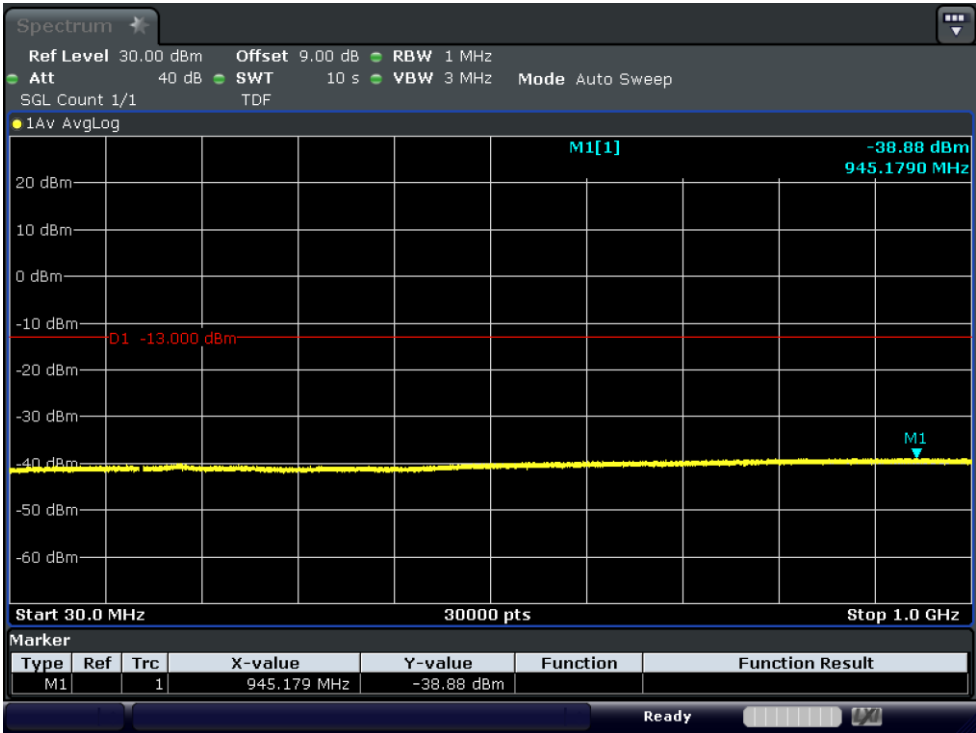




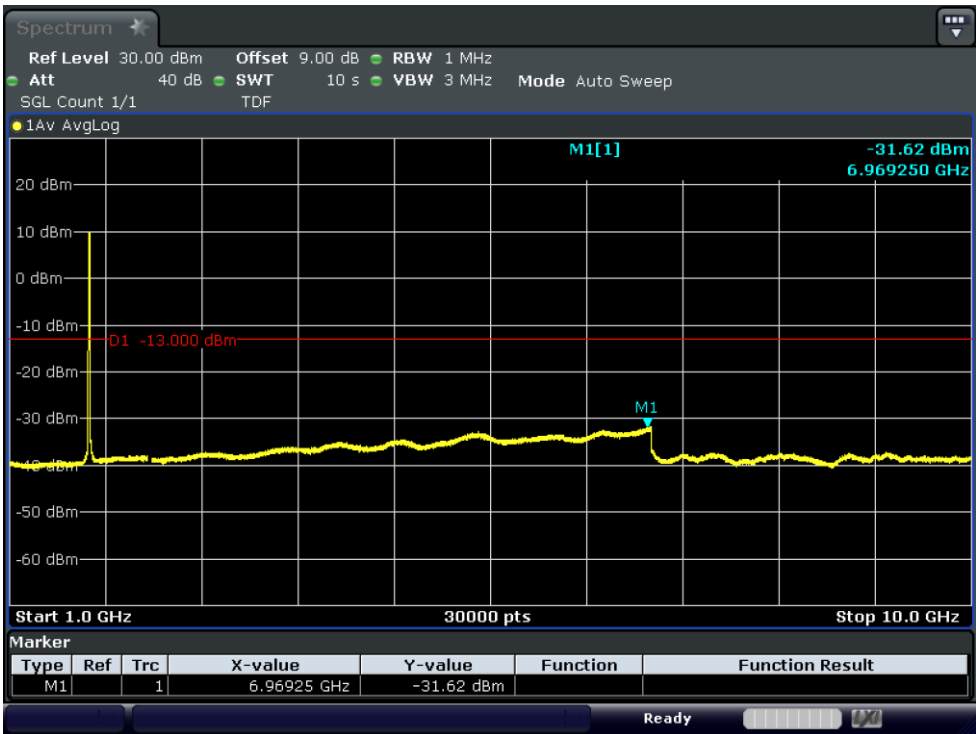
Test_Graph_band4_1732.5MHz_20M_QPSK_100RB#LOW_1G_10G_TX



Test_Graph_band4_1732.5MHz_20M_QPSK_100RB#LOW_1G_20.0G_TX

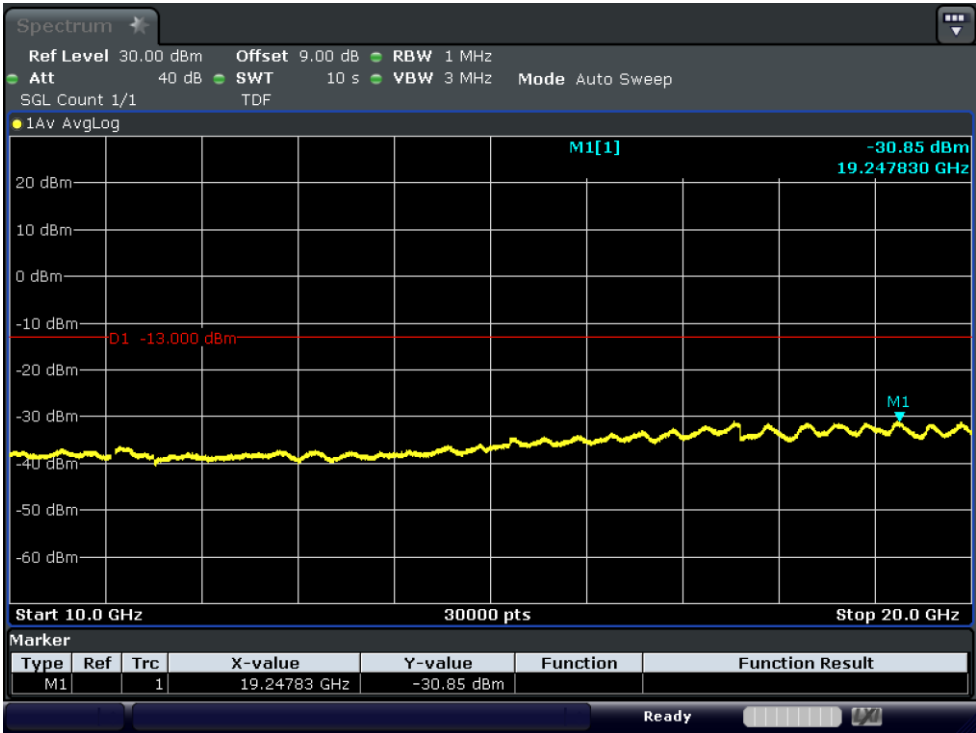


Test_Graph_band4_1745MHz_20M_QPSK_100RB#LOW_30M_1G_TX



Test_Graph_band4_1745MHz_20M_QPSK_100RB#LOW_1G_10G_TX





Test_Graph_band4_1745MHz_20M_QPSK_100RB#LOW_10G_20.0G_TX



Appendix E: Frequency stability

Test Result

Test Conditions (LTE Band 4(QPSK) /BW 20MHz)		Frequency Range		Frequency Error	Verdict
Temperature (°C)	Voltage (Volt)	>1710 Freq Reading @ Low End (MHz)	<1755 Freq Reading @ High End (MHz)	Middle Channel	
				≤2.5ppm	
50	Normal Voltage	1711.0654	1753.9961	0.0064	PASS
40	Normal Voltage	1711.0656	1753.9961	0.0061	
30	Normal Voltage	1711.0655	1753.9962	0.0064	
20(Ref.)	Normal Voltage	1711.0655	1753.9963	0.0066	
10	Normal Voltage	1711.0655	1753.9962	0.0068	
0	Normal Voltage	1711.0654	1753.9963	0.0062	
-10	Normal Voltage	1711.0655	1753.9962	0.0064	
-20	Normal Voltage	1711.0656	1753.9961	0.0066	
-30	Normal Voltage	1711.0655	1753.9962	0.0067	
20	+15%	1711.0654	1753.9963	0.0069	
20	-15%	1711.0655	1753.9962	0.0067	
20	Battery End Point	1711.0655	1753.9963	0.0065	

