



Appendix A: Transmitter Output Power



1 Result Table

1.1 Channel Power, Total

NOTE 1: If applicable, the EIRP [W] = $10^{((\text{Channel Power [dBm]} + \text{Antenna Gain [dBi]}) / 10 - 3)}$, and the ERP [W] = EIRP [W] / 1.64.

NOTE 2: When the EUT is put into service, the practical maximum antenna gain may exceed the value as below, and if exceed, the combination of the practical output power and the practical antenna gain should NOT exceed the required ERP/EIRP limit.

EUT Conf.	Channel Power[W]	Verdict
1G_TM1_B	19.32	Pass
1G_TM1_T	20.70	Pass
1G_TM2_B	20.28	Pass
1G_TM2_T	19.86	Pass
1U_TM1_B	39.99	Pass
1U_TM1_M	41.50	Pass
1U_TM1_T	39.45	Pass
2U_TM1_B	42.76	Pass
2U_TM1_T	45.60	Pass
1L_5M_TM1_B	36.73	Pass
1L_5M_TM1_M	36.39	Pass
1L_5M_TM1_T	38.11	Pass
1L_10M_TM1_B	37.50	Pass
1L_10M_TM1_M	37.50	Pass
1L_10M_TM1_T	38.46	Pass
1L_15M_TM1_B	37.50	Pass
1L_15M_TM1_M	37.33	Pass
1L_15M_TM1_T	39.99	Pass
1L_20M_TM1_B	41.88	Pass
1L_20M_TM1_M	38.73	Pass
1L_20M_TM1_T	38.99	Pass
2L_5M_TM1_B	34.28	Pass
2L_5M_TM1_T	37.24	Pass
2G2U_TM1_B	40.74	Pass
2G2U_TM1_T	43.35	Pass
2G2L_TM1_B	40.74	Pass
2G2L_TM1_T	39.08	Pass
1U2L_TM1_B	43.35	Pass
1U2L_TM1_T	40.46	Pass



1.2 Power Spectral Density

NOTE 1: If applicable, the EIRP [W/MHz] = $10^{((\text{Power Spectral Density [dBm/MHz]} + \text{Antenna Gain [dBi]}) / 10 - 3)}$, and the ERP [W/MHz] = EIRP [W/MHz] / 1.64.

NOTE 2: When the EUT is put into service, the practical maximum antenna gain may exceed the value as below, and if exceed, the combination of the practical output power and the practical antenna gain should NOT exceed the required ERP/EIRP limit.

EUT Conf.	Power Spectral Density [dBm/MHz]	Verdict
1U_TM1_B	40.55	Pass
1U_TM1_M	40.84	Pass
1U_TM1_T	40.54	Pass
1L_5M_TM1_B	39.46	Pass
1L_5M_TM1_M	39.36	Pass
1L_5M_TM1_T	38.99	Pass
1L_10M_TM1_B	36.56	Pass
1L_10M_TM1_M	36.58	Pass
1L_10M_TM1_T	36.78	Pass
1L_15M_TM1_B	34.87	Pass
1L_15M_TM1_M	34.84	Pass
1L_15M_TM1_T	35.19	Pass
1L_20M_TM1_B	33.87	Pass
1L_20M_TM1_M	33.80	Pass
1L_20M_TM1_T	34.16	Pass



1.3 Peak-to-Average Ratio

EUT Conf.	Peak-to-Average Ratio@0.1% [dB]	Verdict
1G_TM1_B	0.19	Pass
1G_TM1_T	0.19	Pass
1G_TM2_B	3.42	Pass
1G_TM2_T	3.43	Pass
1U_TM1_B	6.87	Pass
1U_TM1_M	6.90	Pass
1U_TM1_T	6.98	Pass
1L_5M_TM1_B	7.53	Pass
1L_5M_TM1_M	7.51	Pass
1L_5M_TM1_T	7.51	Pass
1L_10M_TM1_B	7.82	Pass
1L_10M_TM1_M	7.76	Pass
1L_10M_TM1_T	7.81	Pass
1L_15M_TM1_B	7.92	Pass
1L_15M_TM1_M	7.84	Pass
1L_15M_TM1_T	7.91	Pass
1L_20M_TM1_B	7.94	Pass
1L_20M_TM1_M	7.77	Pass
1L_20M_TM1_T	7.86	Pass

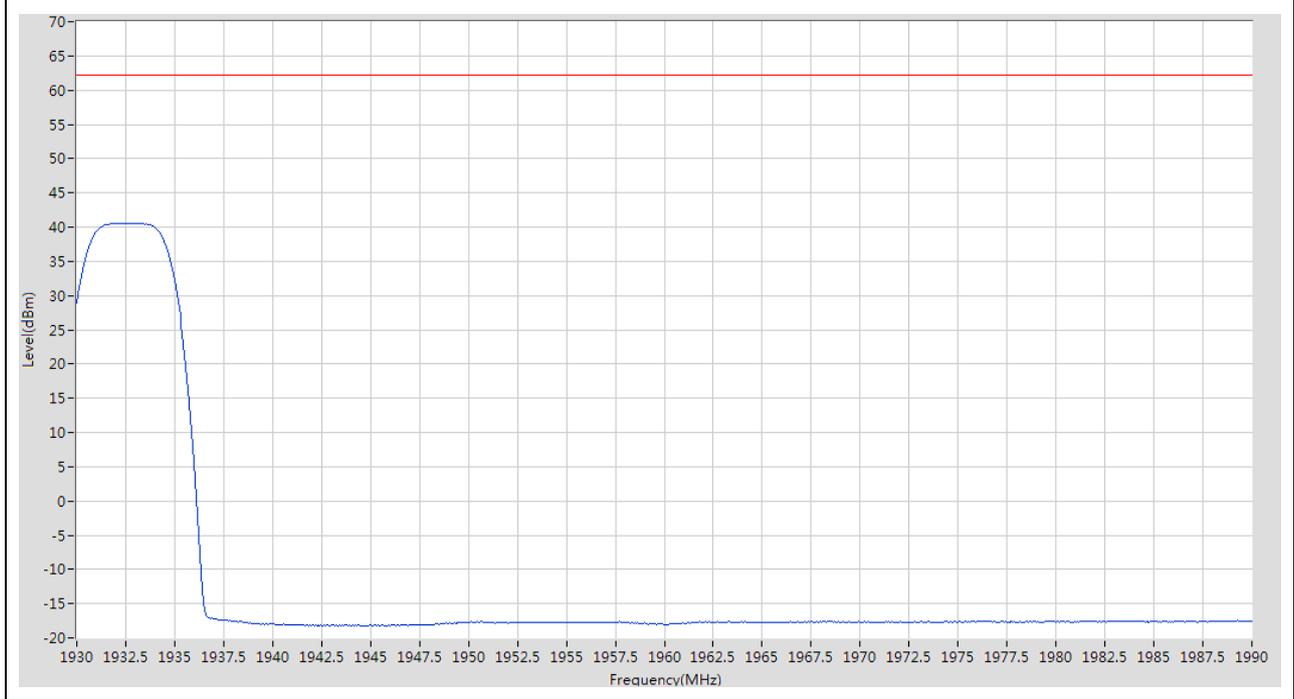
2 Test Plot

NOTE: Only the test plots for the measurements of Spectral Density and Peak-to-Average Ratio are supplied.

2.1 Power Spectral Density

2.1.1 1U_TM1_B

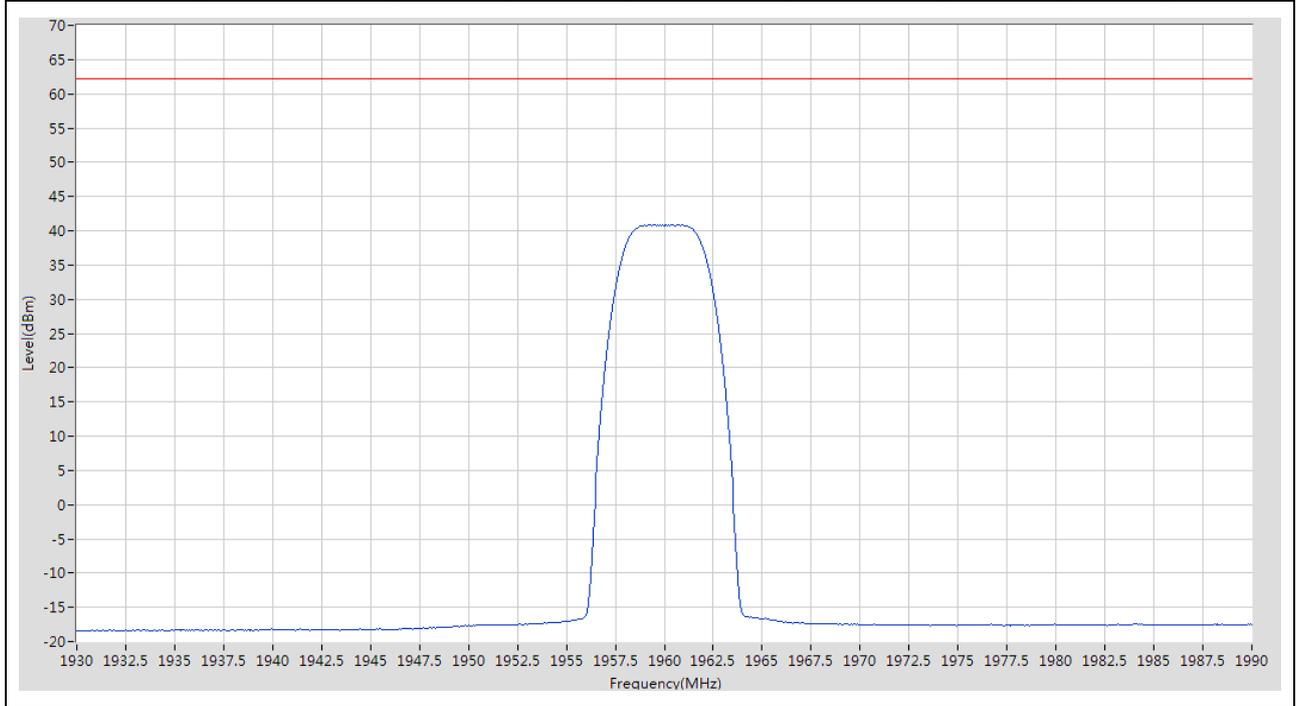
Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detect or	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict	Sweep Point
1930	1990	1	RMS	1932.28 M	40.55	62.15	Pass	1001





2.1.2 1U_TM1_M

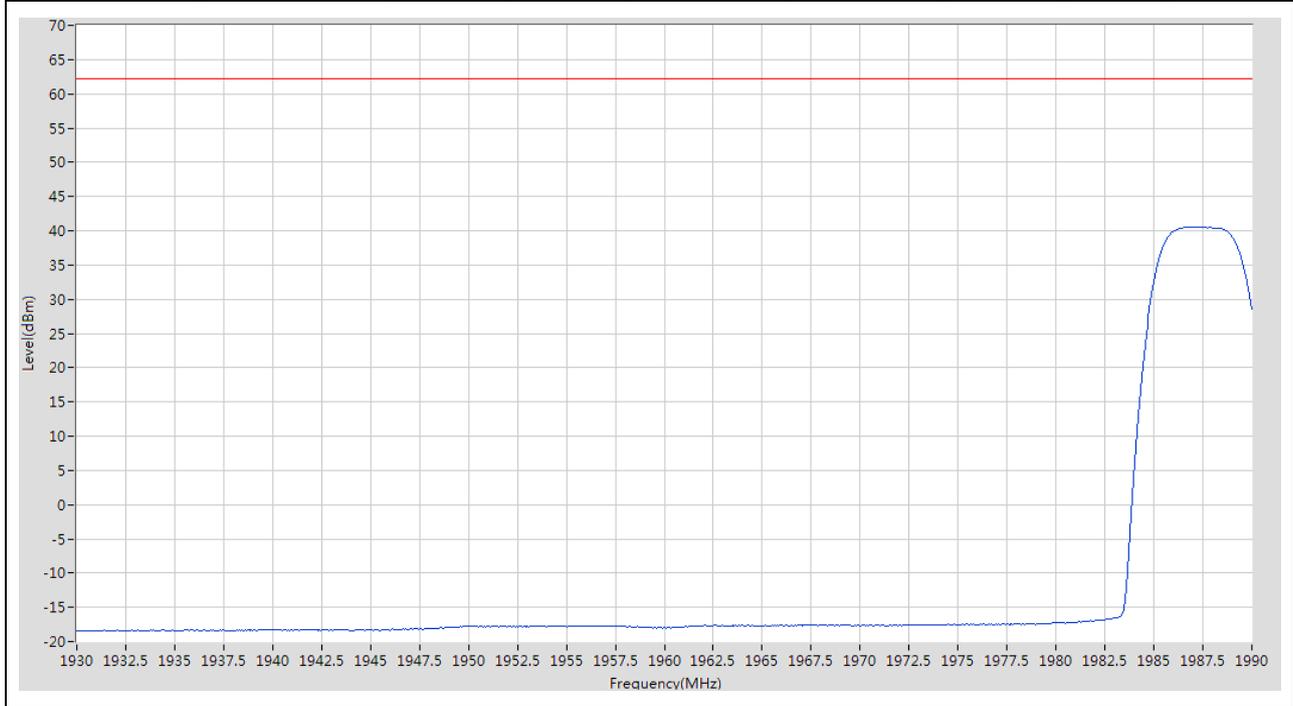
Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict	Sweep Point
1930	1990	1	RMS	1960.72 M	40.84	62.15	Pass	1001





2.1.3 1U_TM1_T

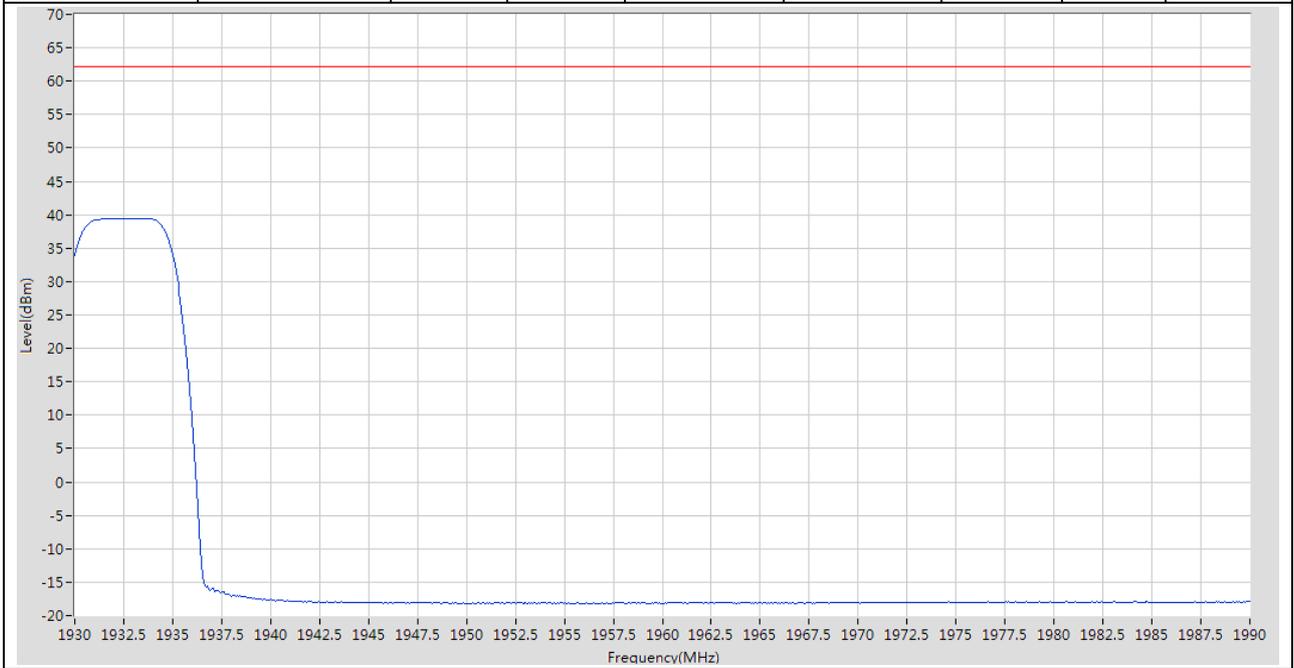
Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict	Sweep Point
1930	1990	1	RMS	1987.18 M	40.54	62.15	Pass	1001





2.1.4 1L_5M_B

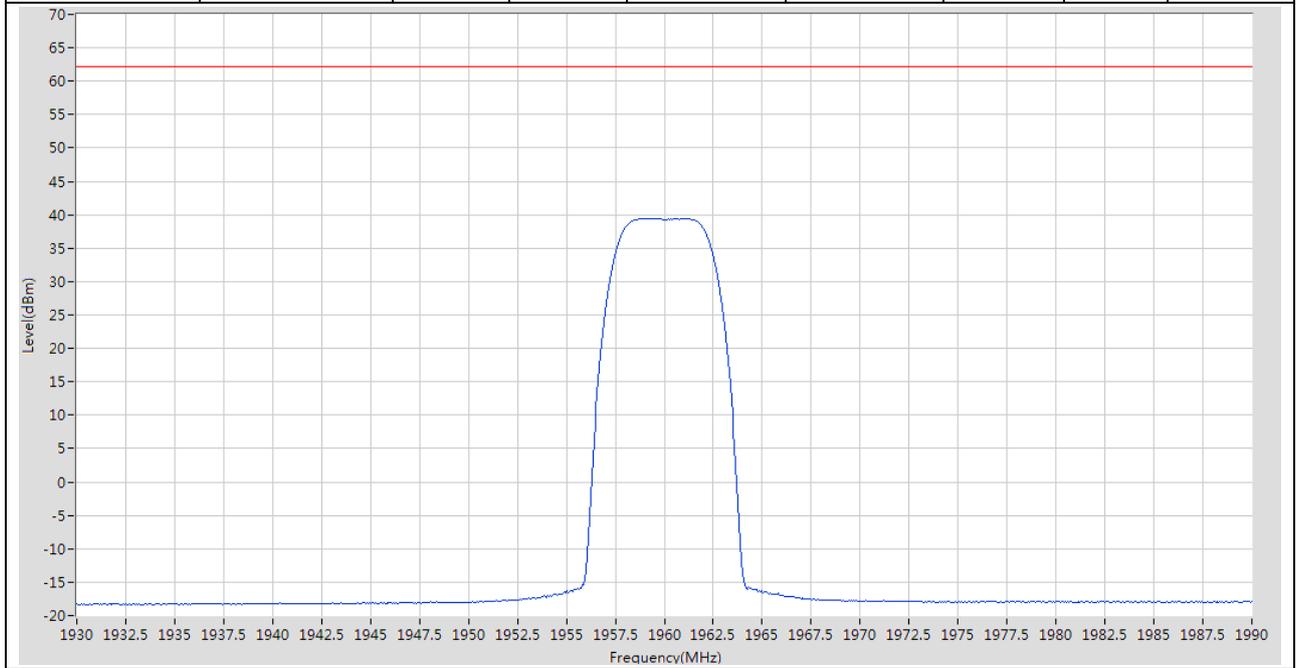
Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detect or	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict	Sweep Point
1930	1990	1	RMS	1933.48 M	39.46	62.15	Pass	1001





2.1.5 1L_5M_M

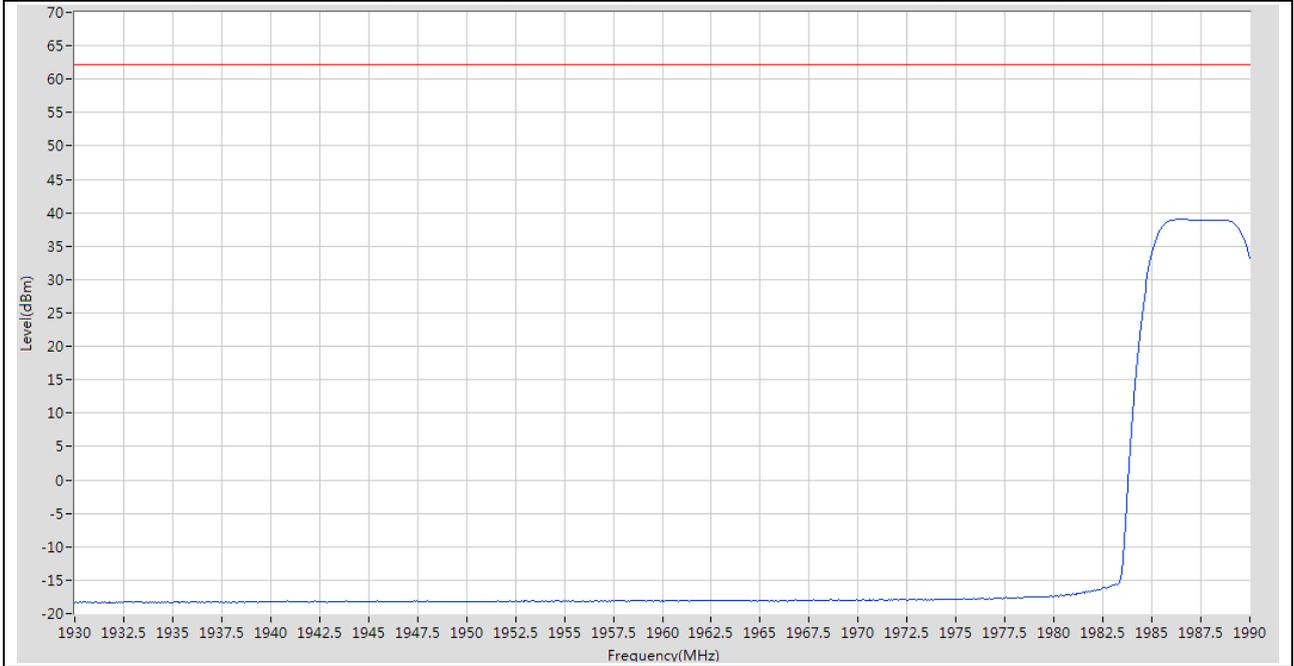
Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detect or	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict	Sweep Point
1930	1990	1	RMS	1961.08 M	39.36	62.15	Pass	1001





2.1.6 1L_5M_T

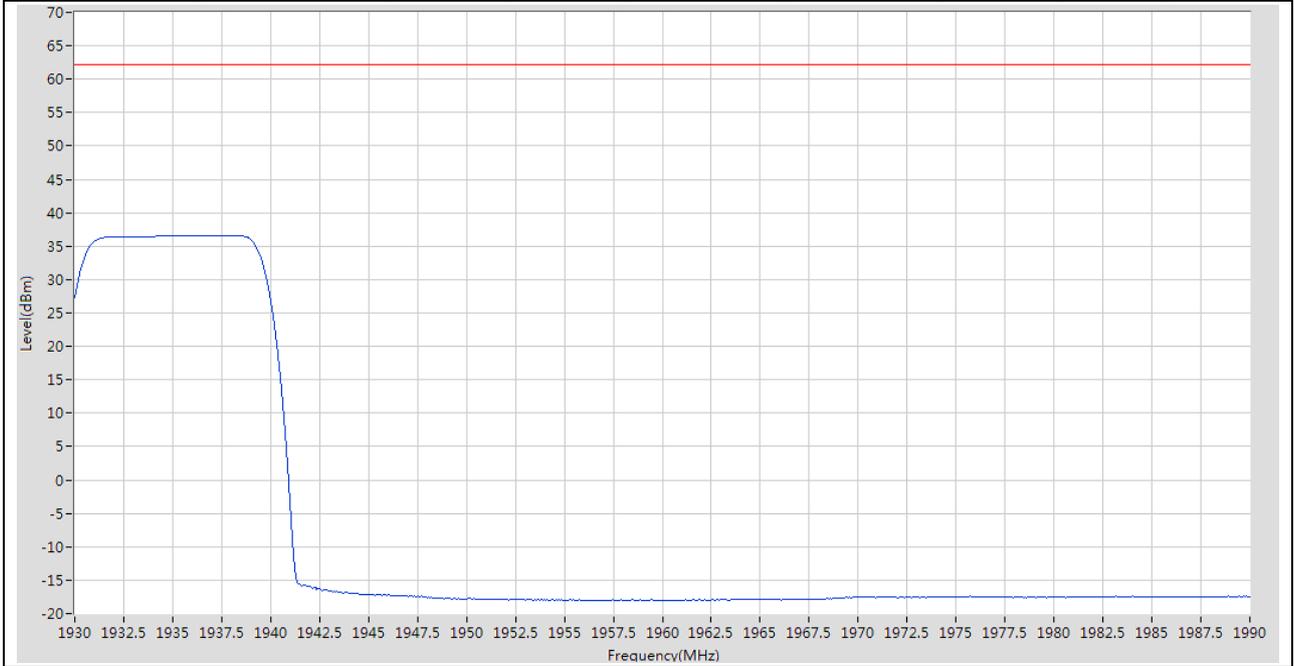
Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detect or	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict	Sweep Point
1930	1990	1	RMS	1986.46 M	38.99	62.15	Pass	1001





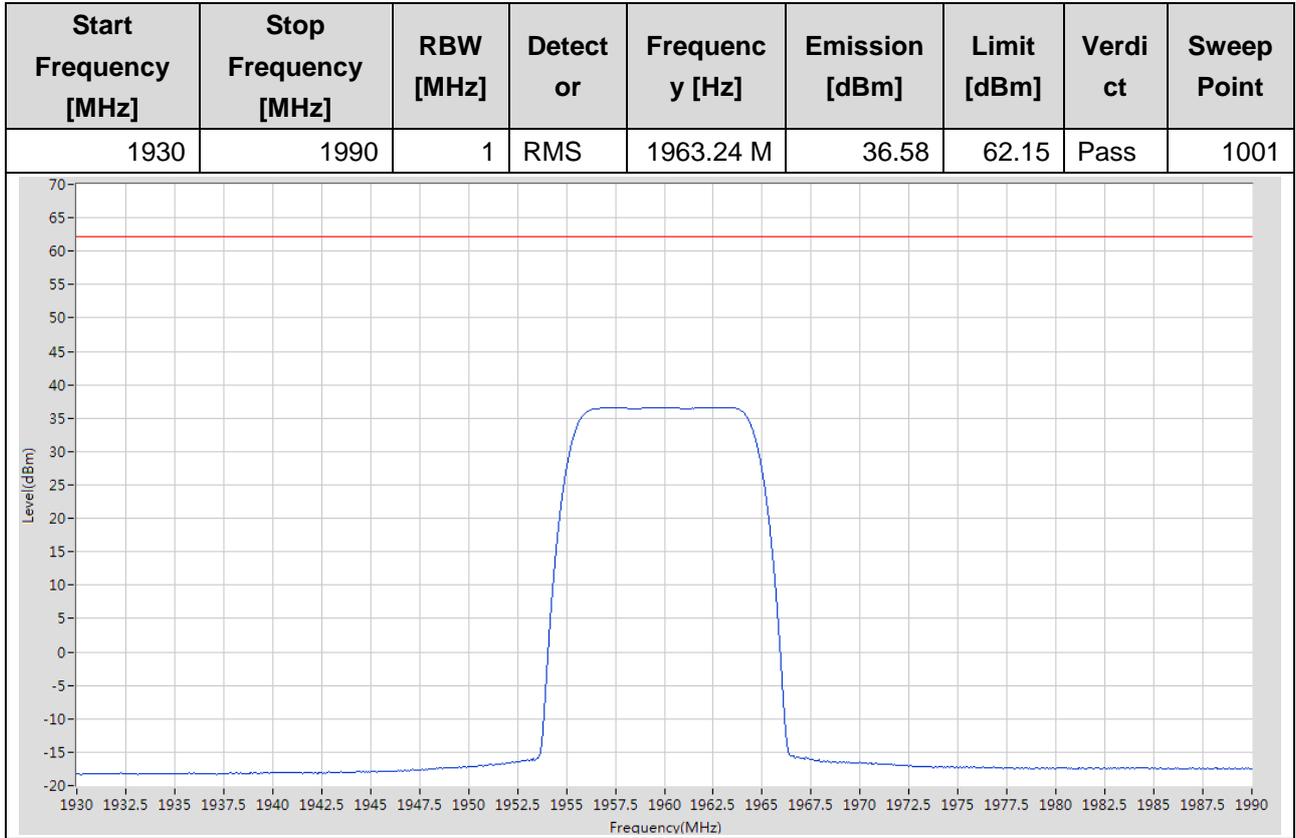
2.1.7 1L_10M_B

Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict	Sweep Point
1930	1990	1	RMS	1938.16 M	36.56	62.15	Pass	1001





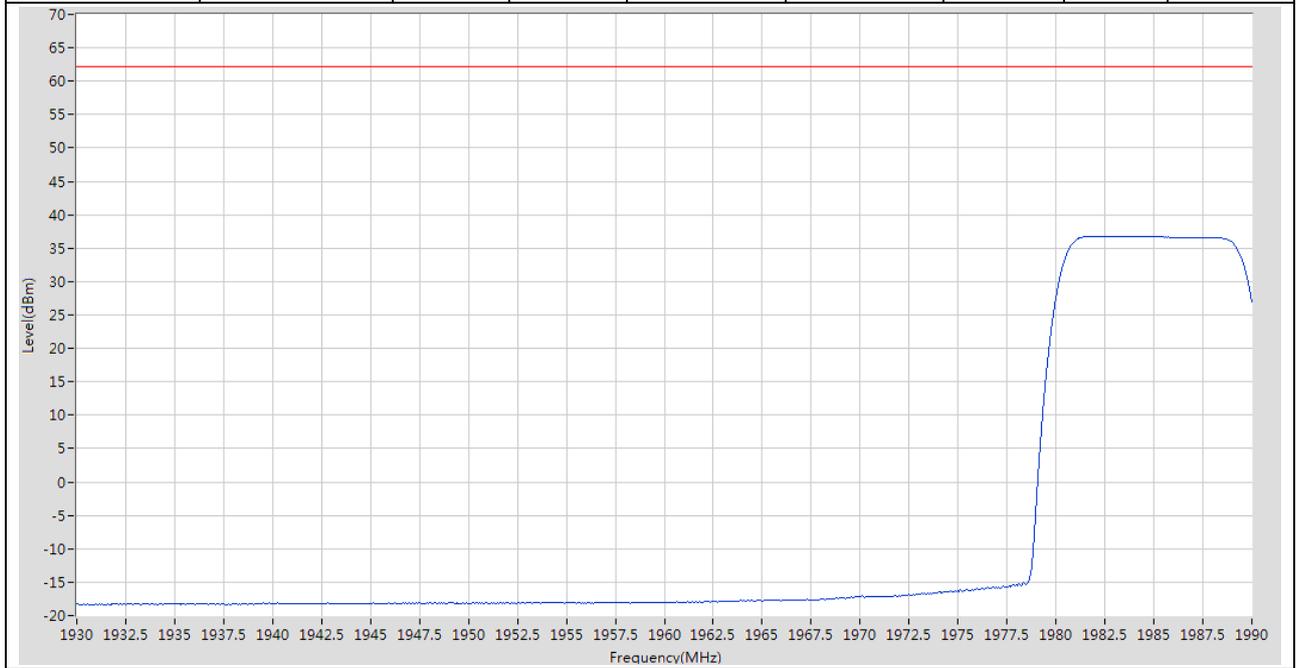
2.1.8 1L_10M_M





2.1.9 1L_10M_T

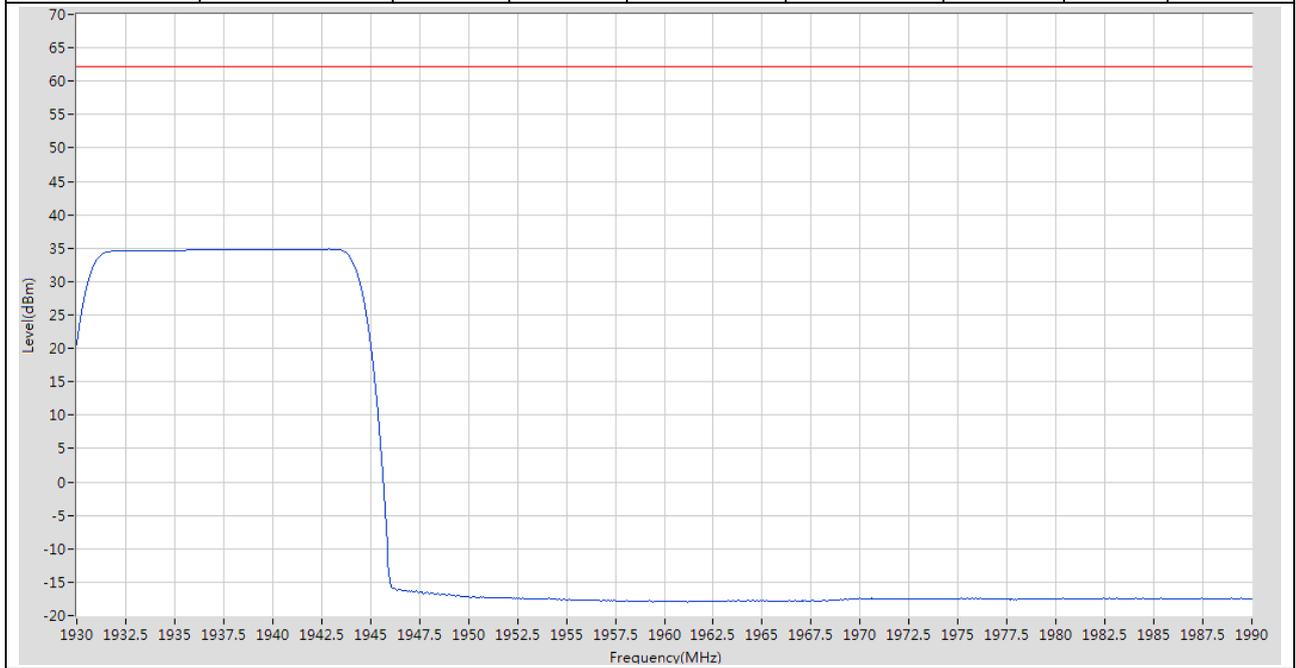
Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detect or	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict	Sweep Point
1930	1990	1	RMS	1982.02 M	36.78	62.15	Pass	1001





2.1.10 1L_15M_B

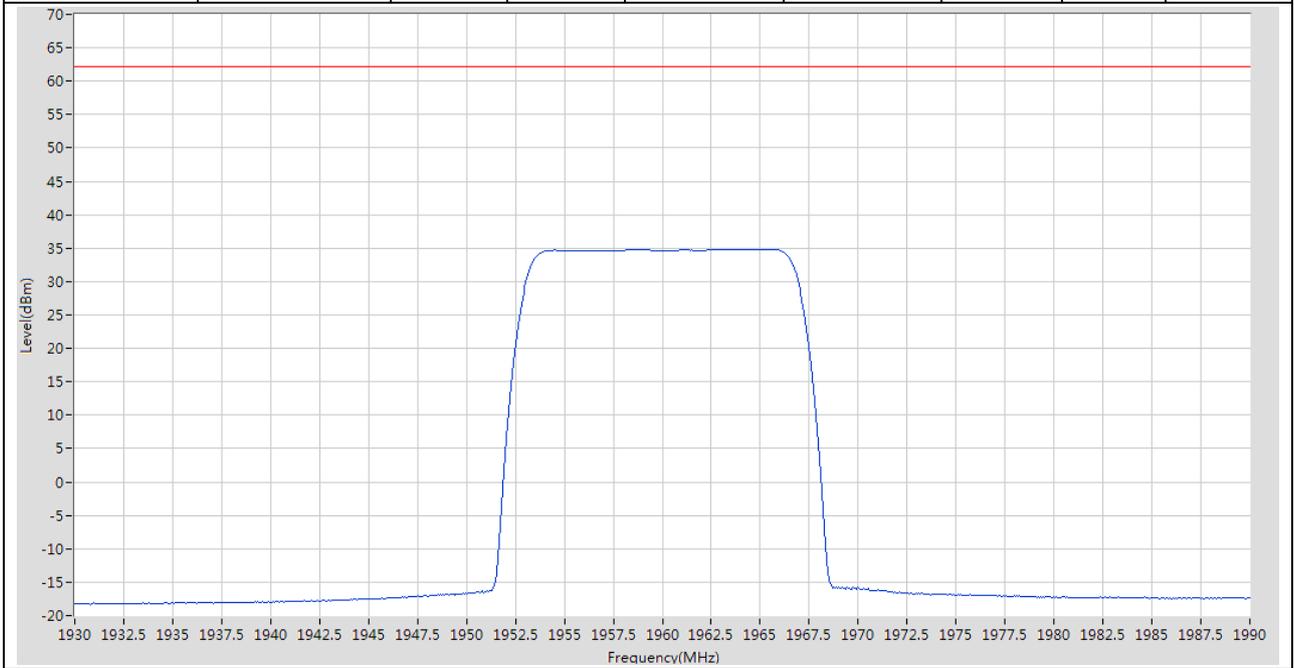
Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict	Sweep Point
1930	1990	1	RMS	1942.9 M	34.87	62.15	Pass	1001





2.1.11 1L_15M_M

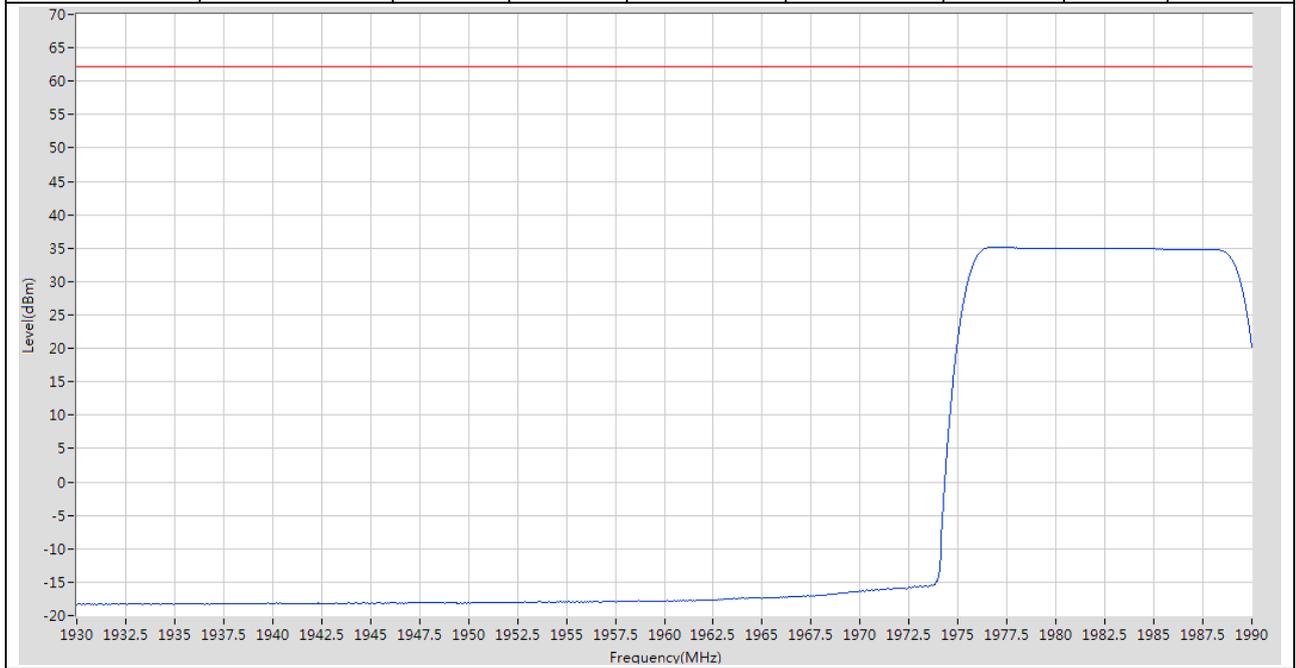
Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detect or	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict	Sweep Point
1930	1990	1	RMS	1965.34 M	34.84	62.15	Pass	1001





2.1.12 1L_15M_T

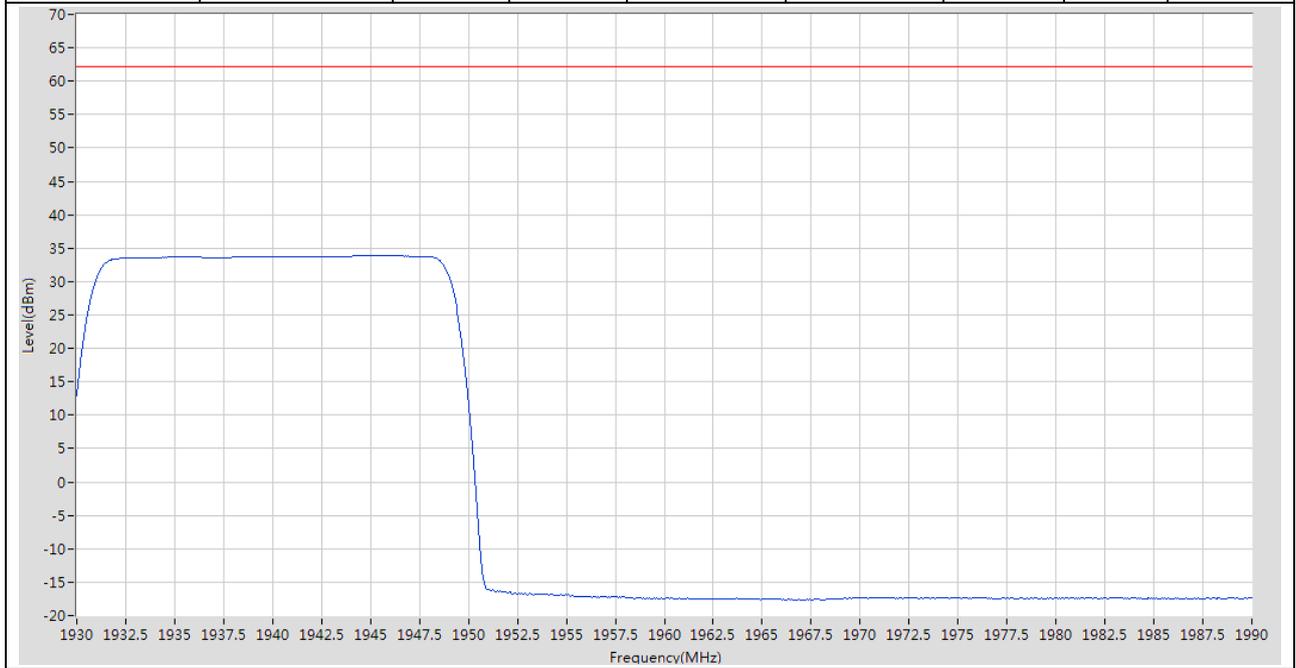
Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict	Sweep Point
1930	1990	1	RMS	1976.92 M	35.19	62.15	Pass	1001





2.1.13 1L_20M_B

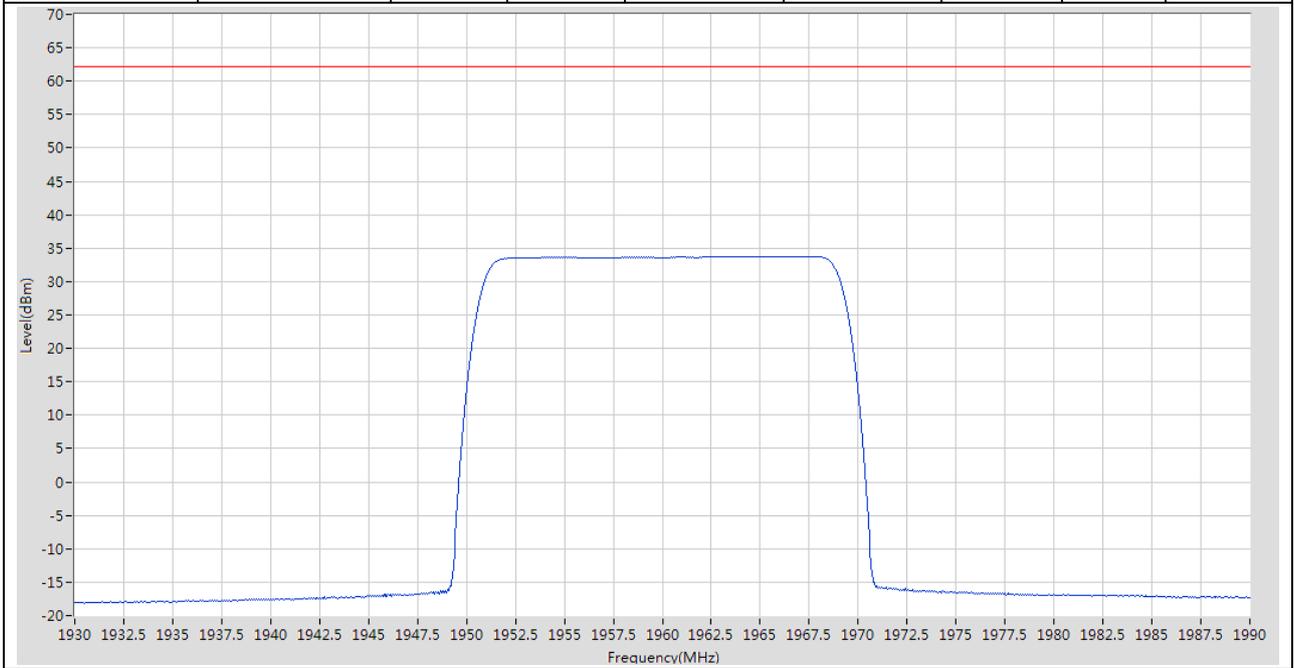
Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detect or	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict	Sweep Point
1930	1990	1	RMS	1944.76 M	33.87	62.15	Pass	1001





2.1.14 1L_20M_M

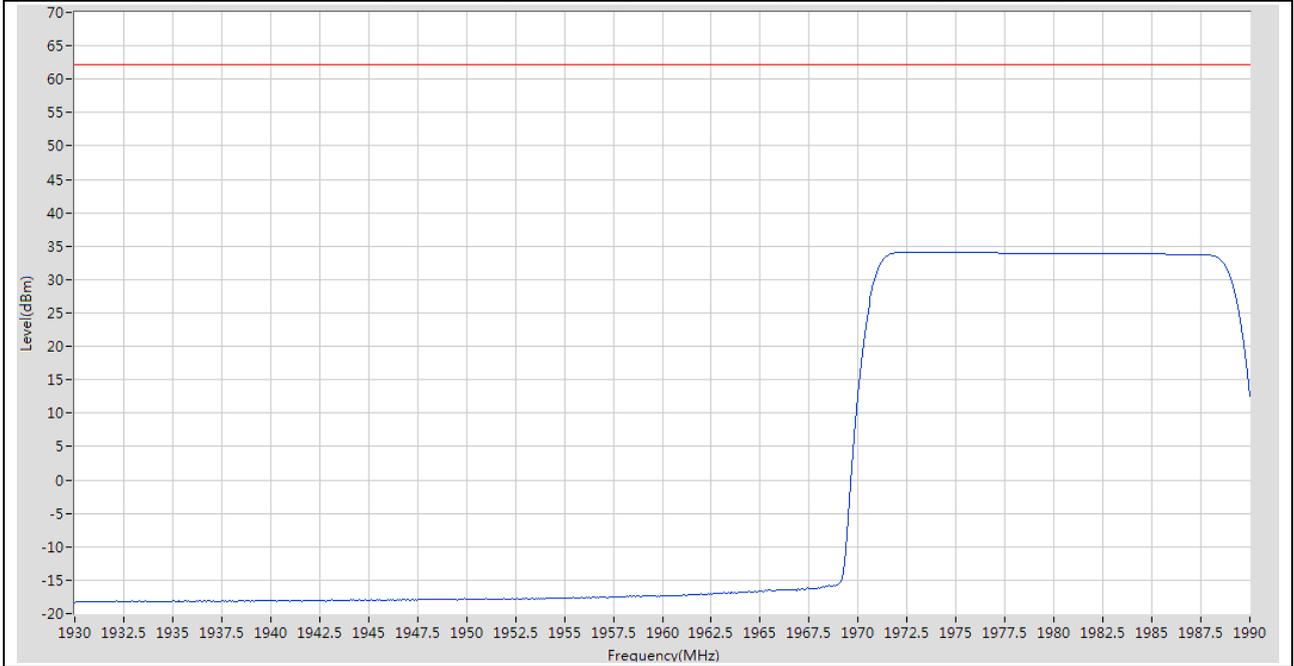
Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict	Sweep Point
1930	1990	1	RMS	1964.8 M	33.8	62.15	Pass	1001





2.1.15 1L_20M_T

Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detect or	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict	Sweep Point
1930	1990	1	RMS	1974.94 M	34.16	62.15	Pass	1001



2.2 Peak-to-Average Ratio

2.2.1 1G_TM1_B



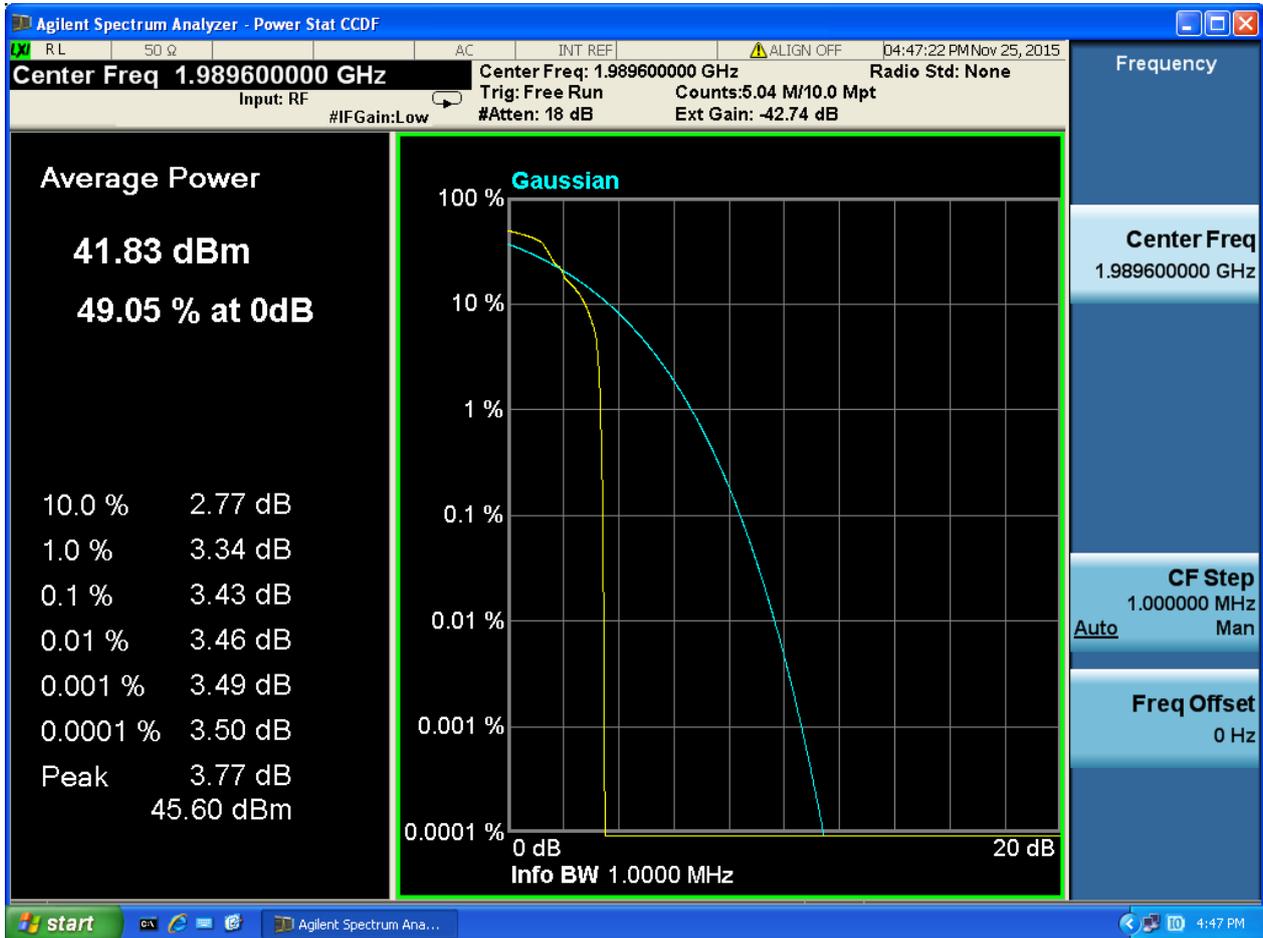
2.2.2 1G_TM1_T



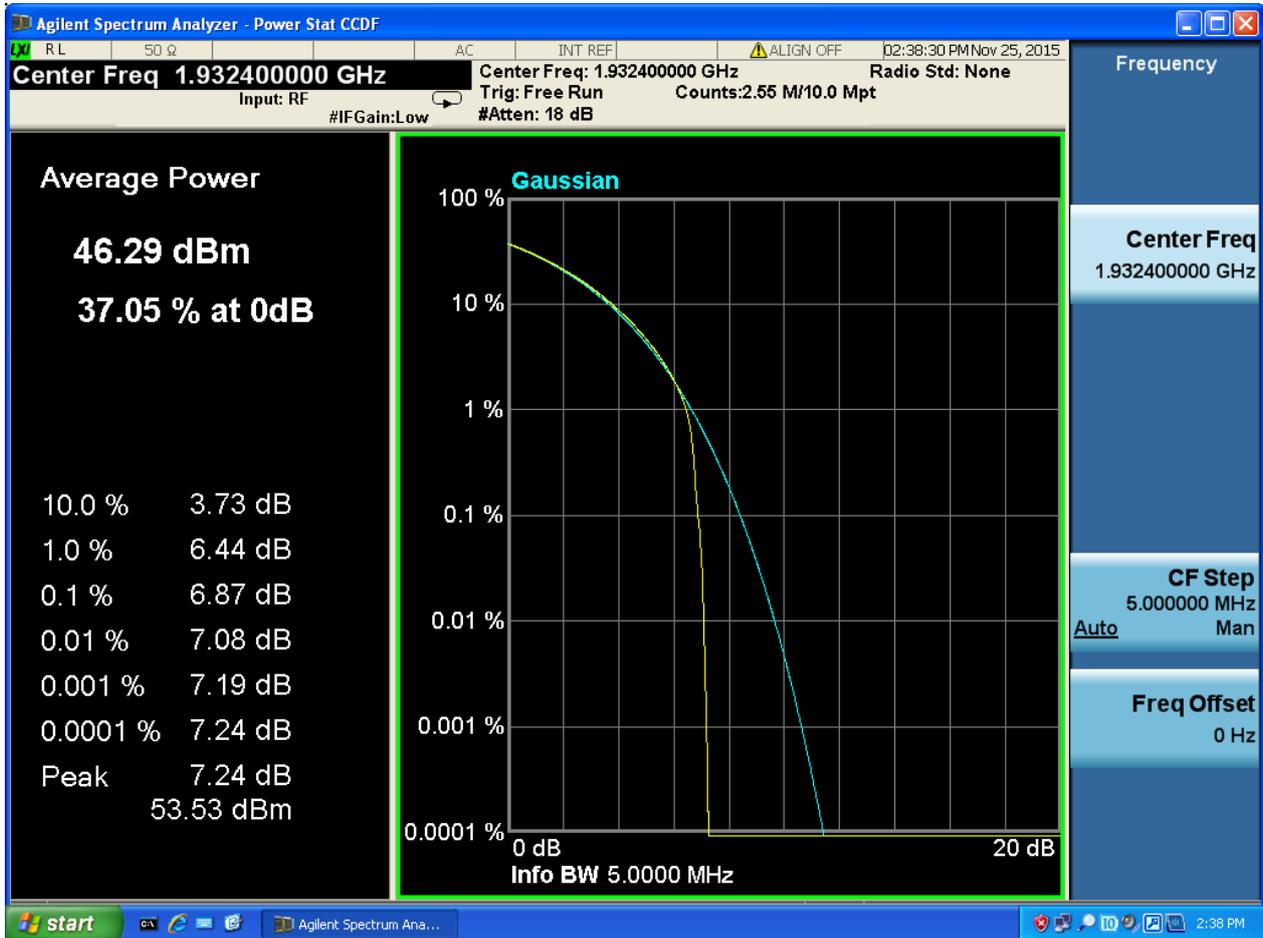
2.2.3 1G_TM2_B



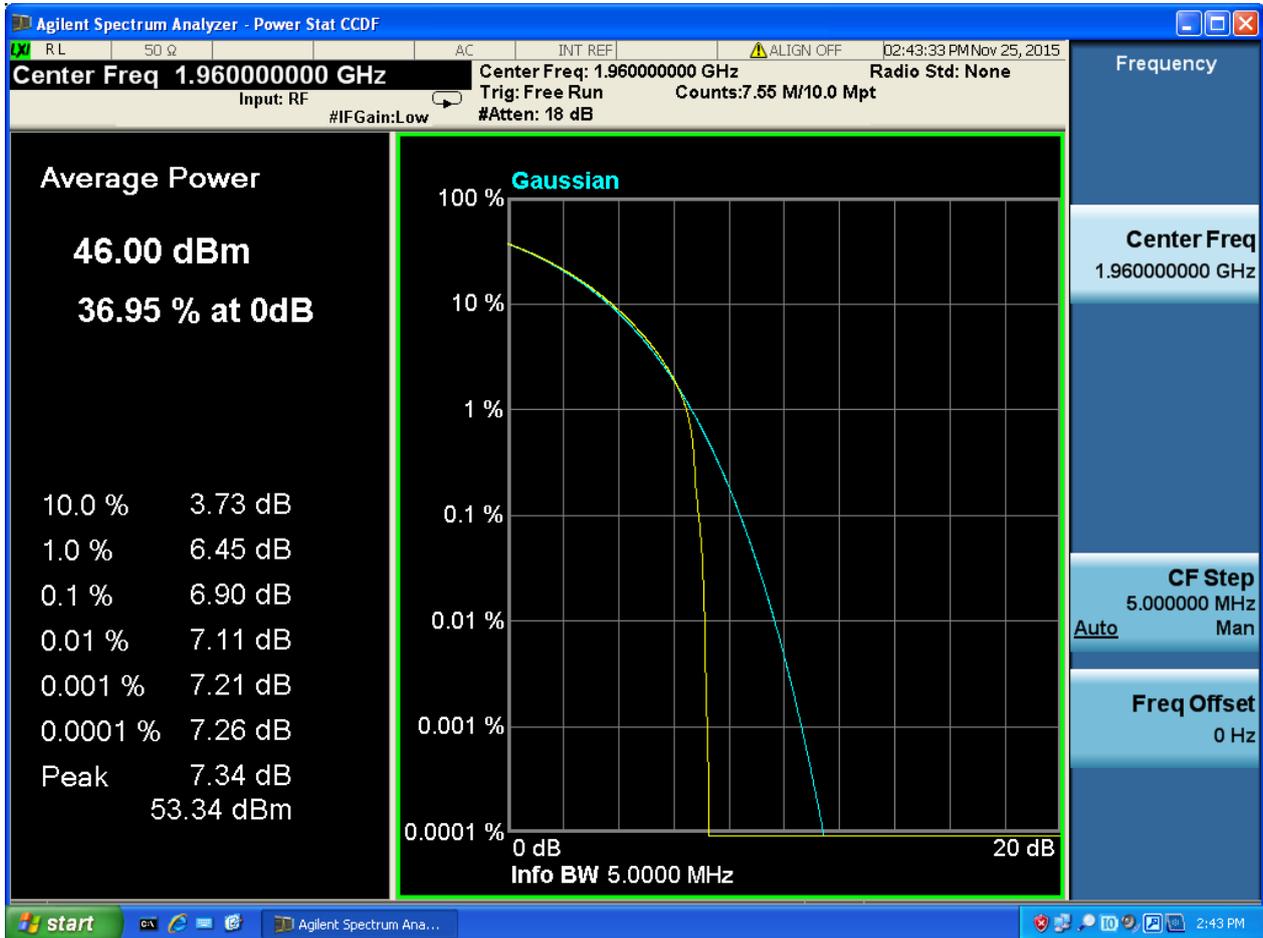
2.2.4 1G_TM2_T



2.2.5 1U_TM1_B



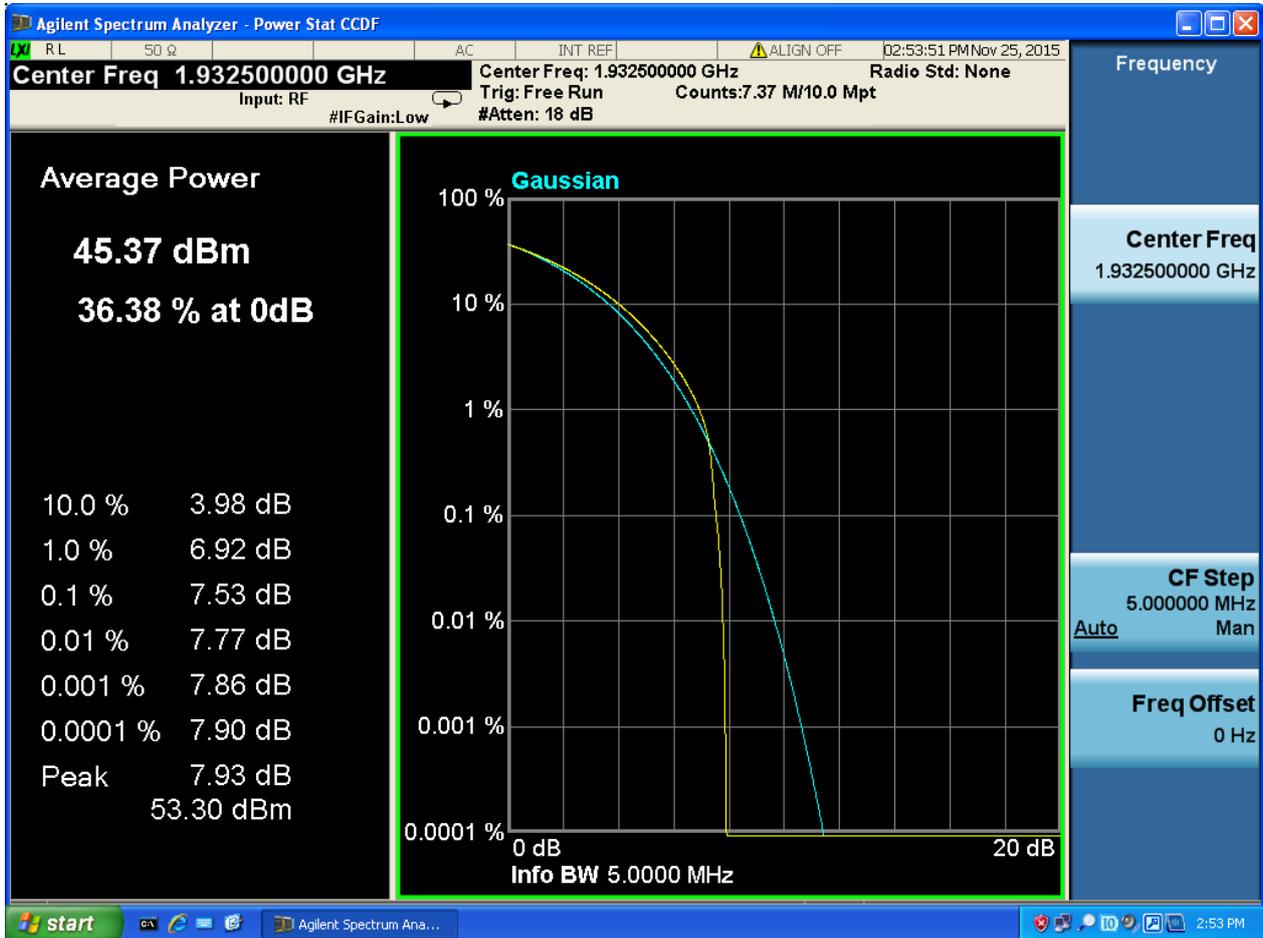
2.2.6 1U_TM1_M



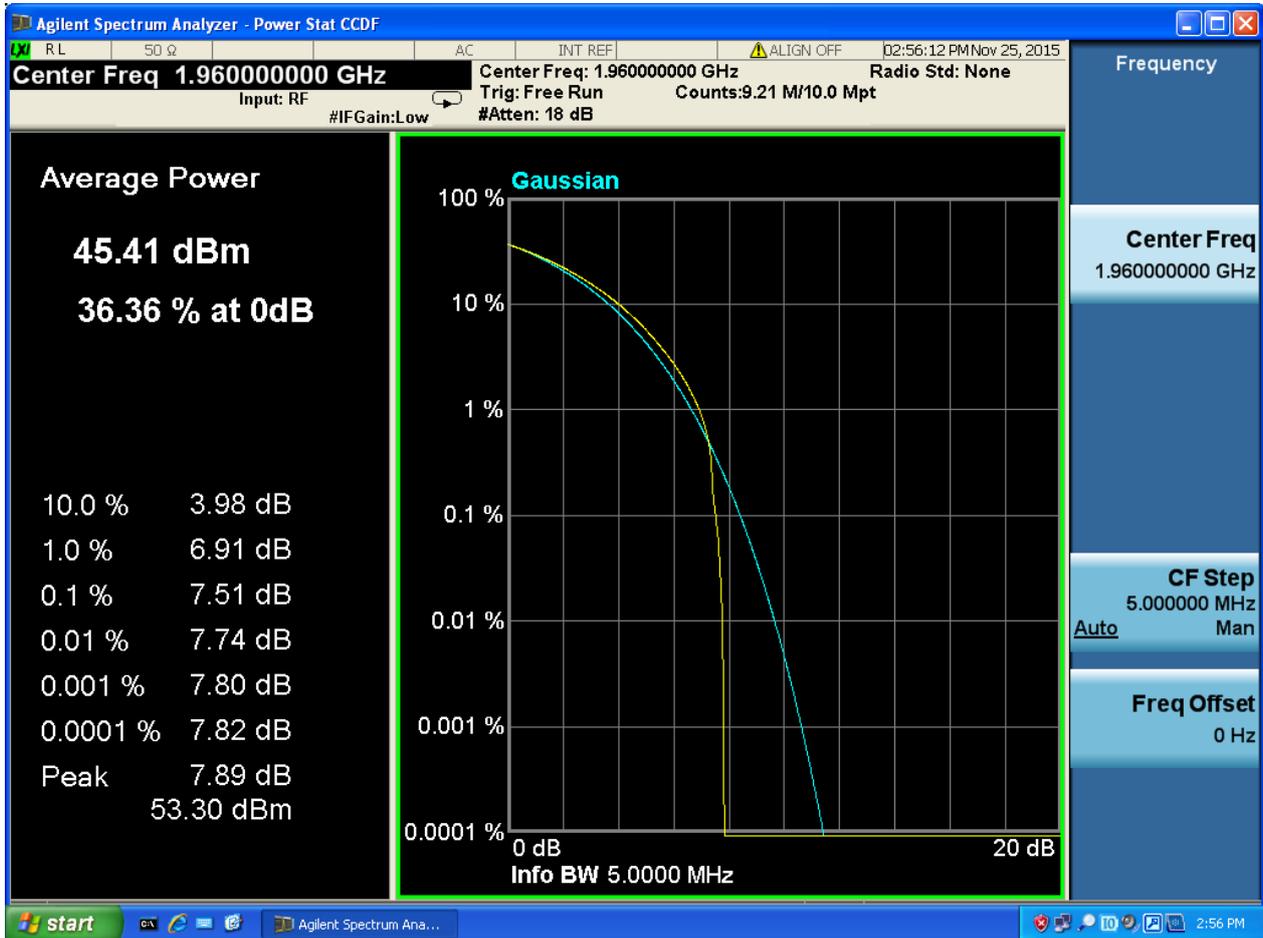
2.2.7 1U_TM1_T



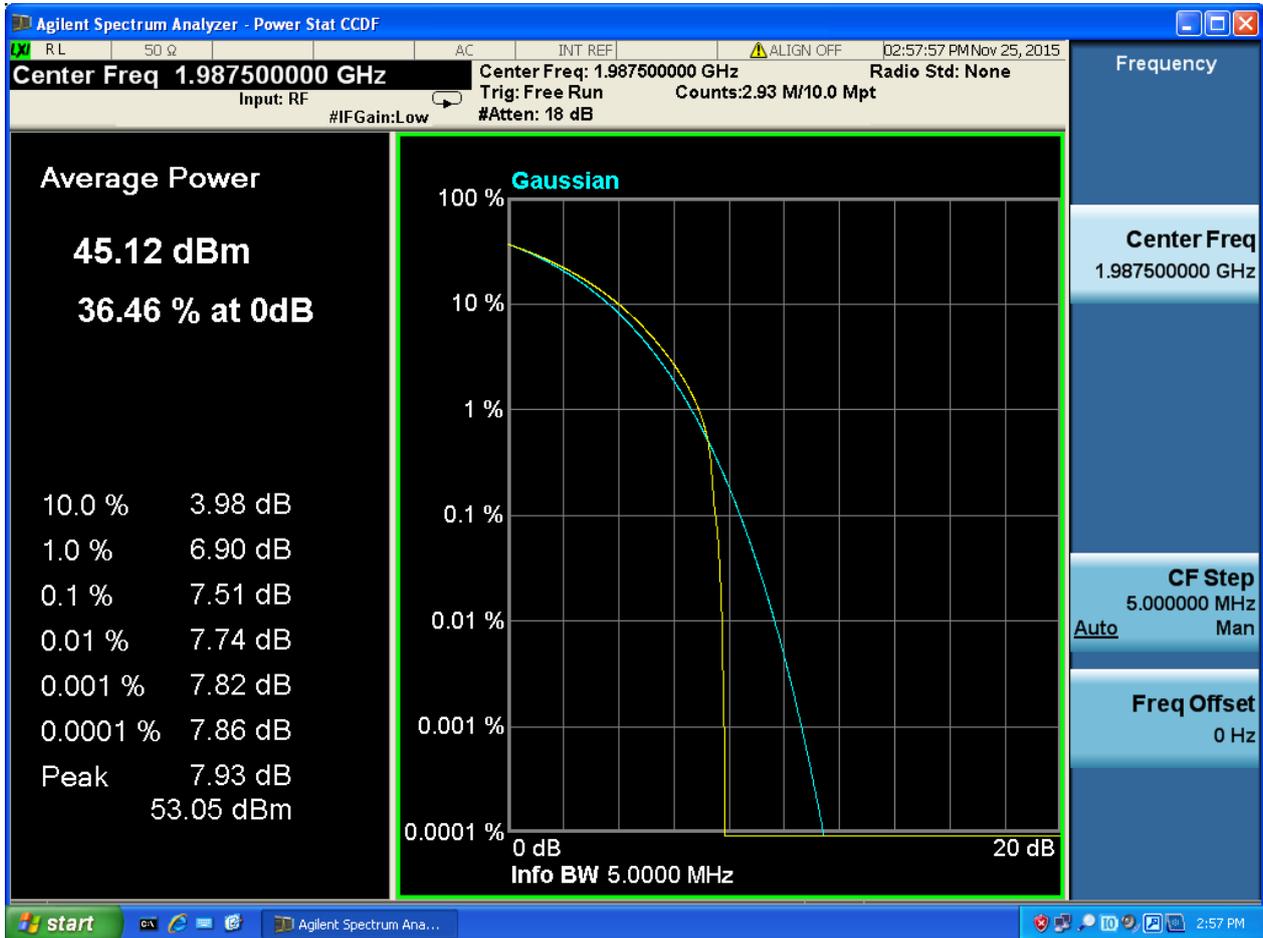
2.2.8 1L_5M_B



2.2.9 1L_5M_M



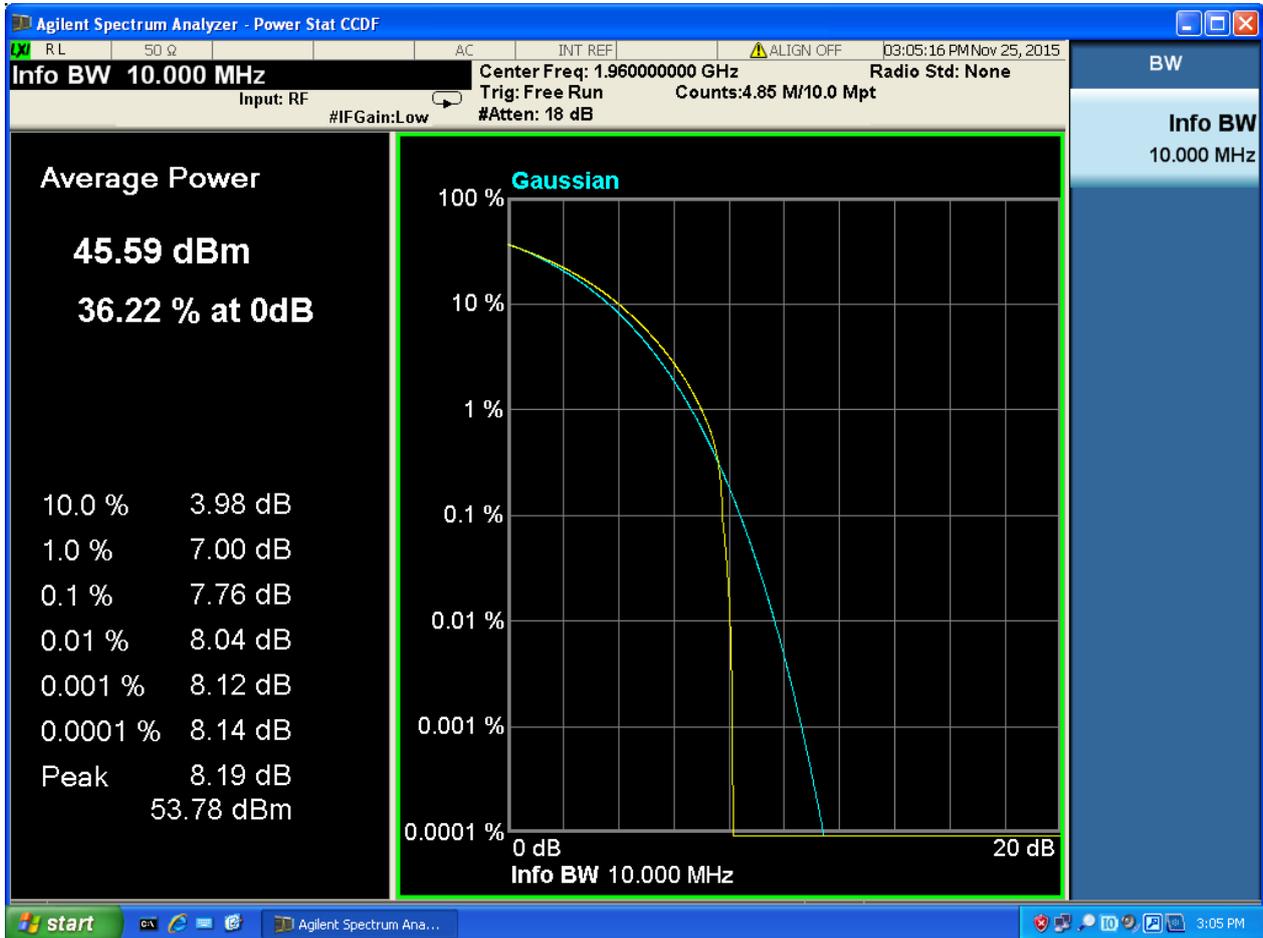
2.2.10 1L_5M_T



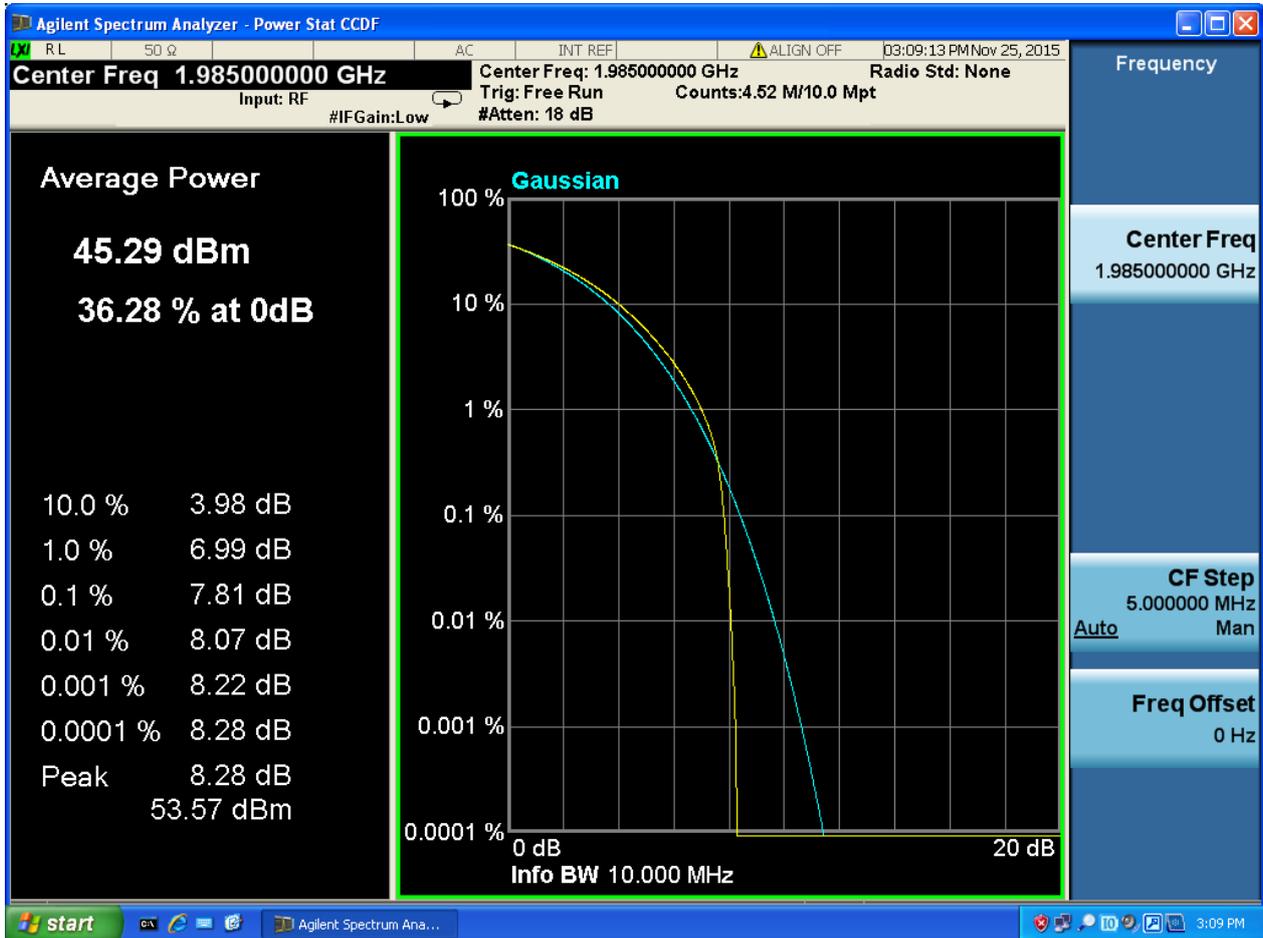
2.2.11 1L_10M_B



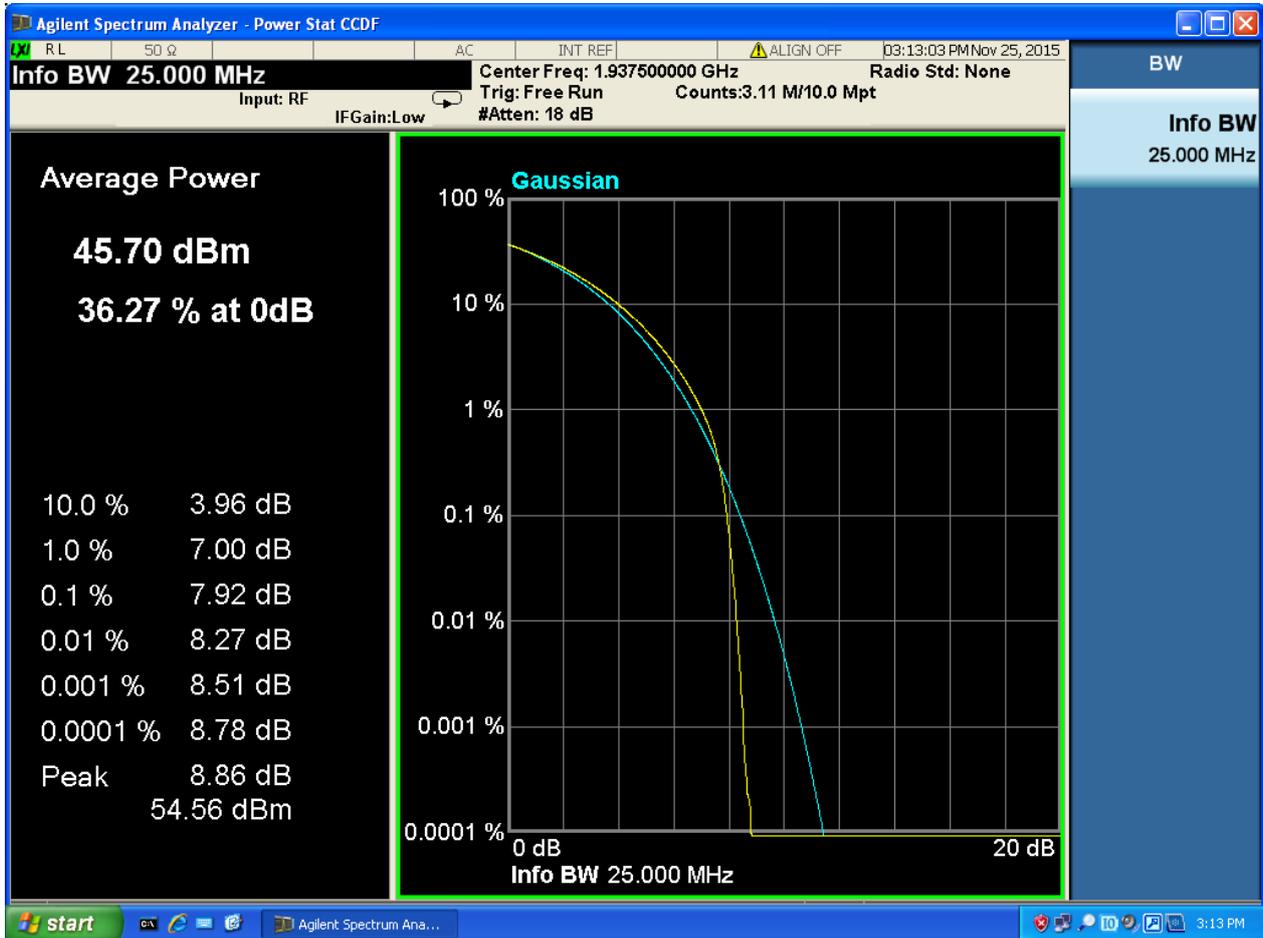
2.2.12 1L_10M_M



2.2.13 1L_10M_T



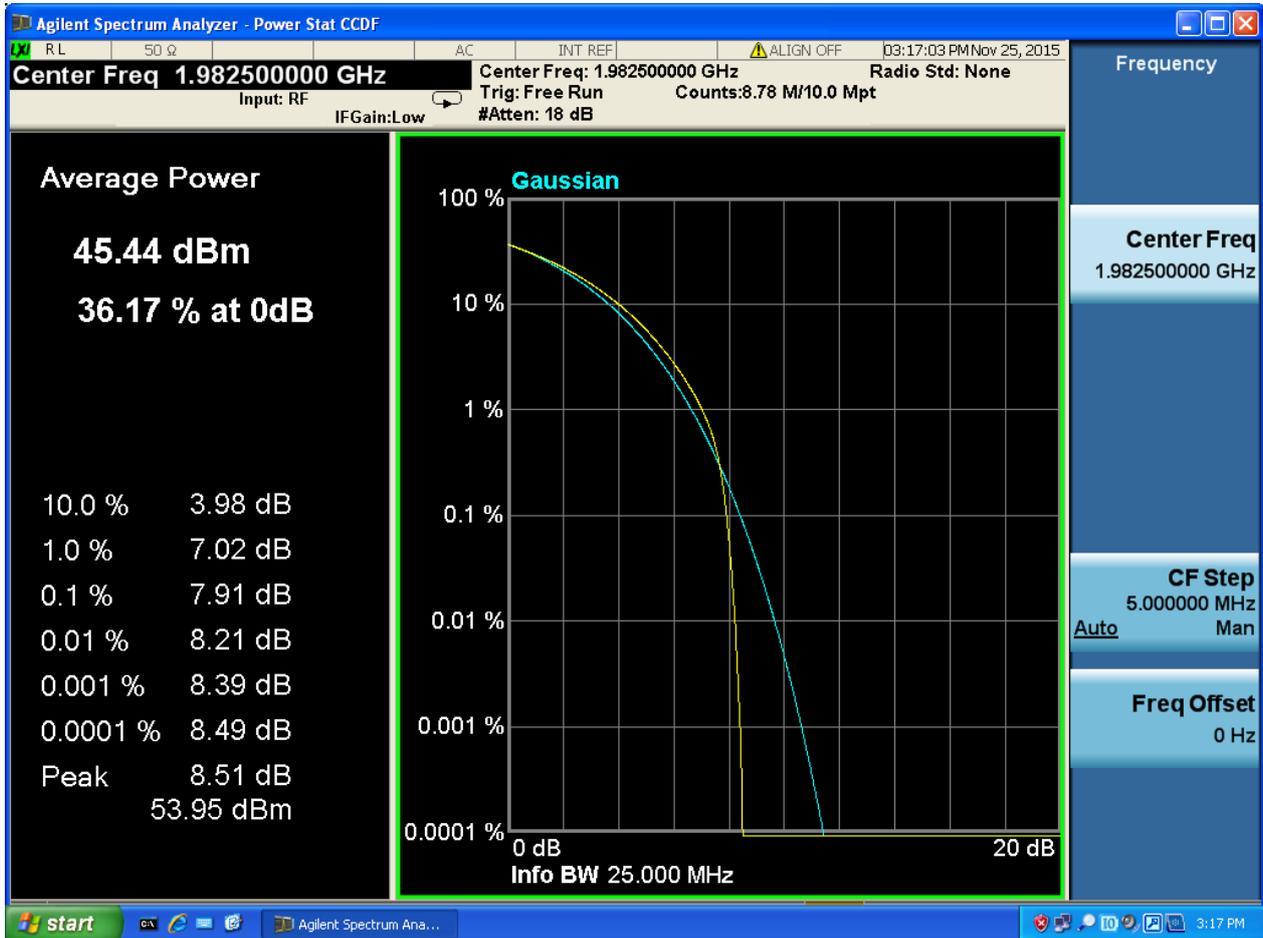
2.2.14 1L_15M_B



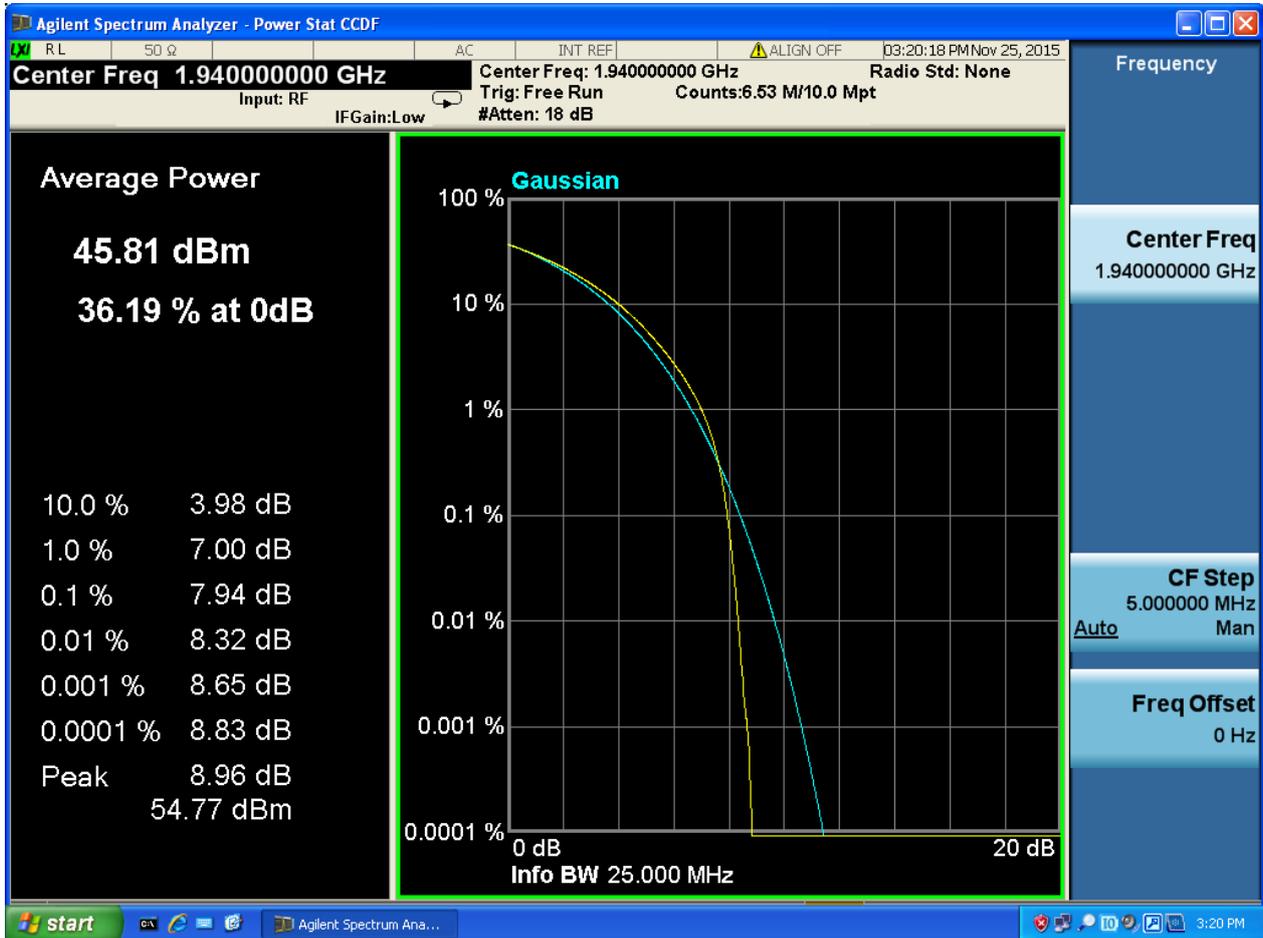
2.2.15 1L_15M_M



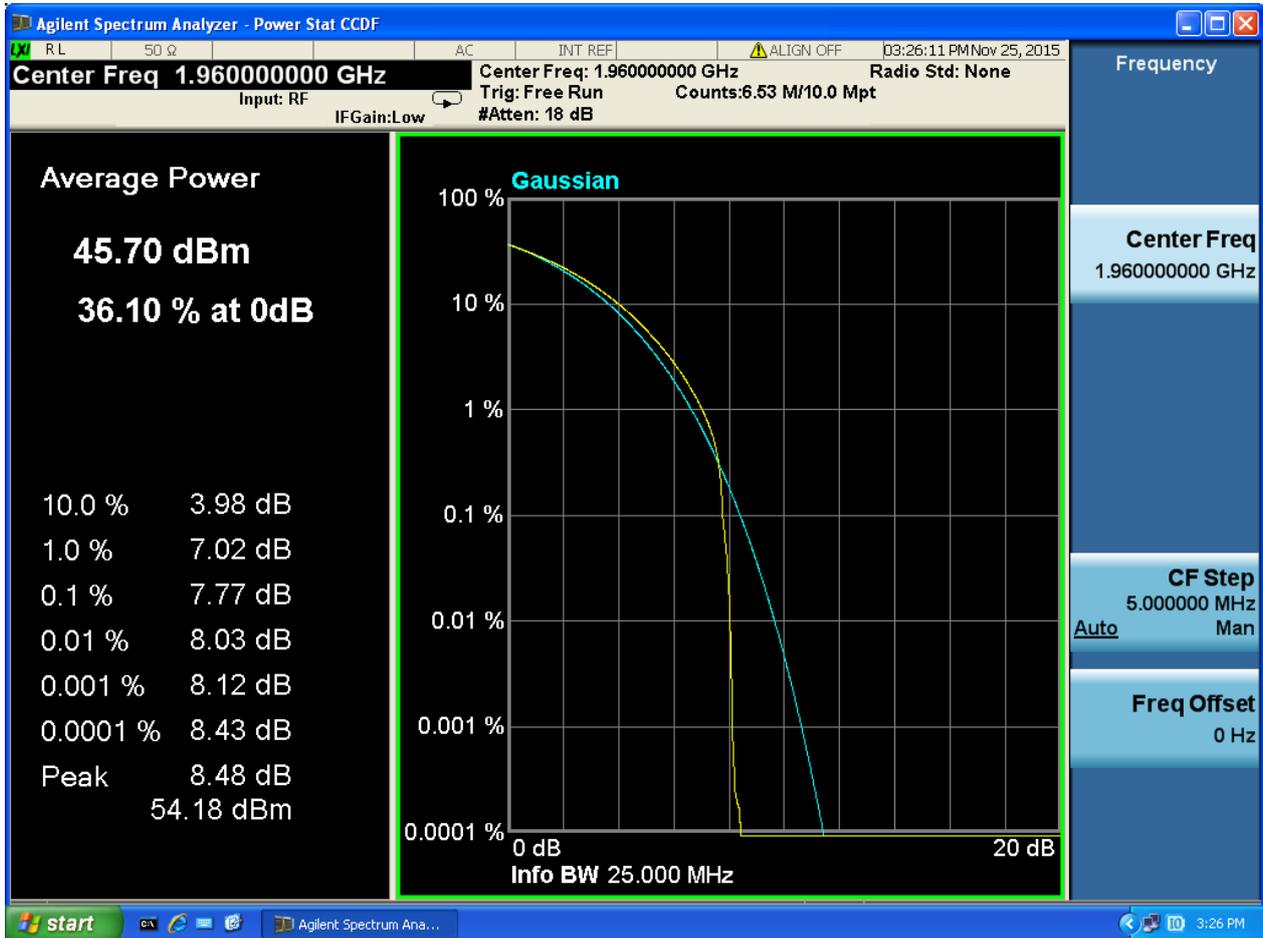
2.2.16 1L_15M_T



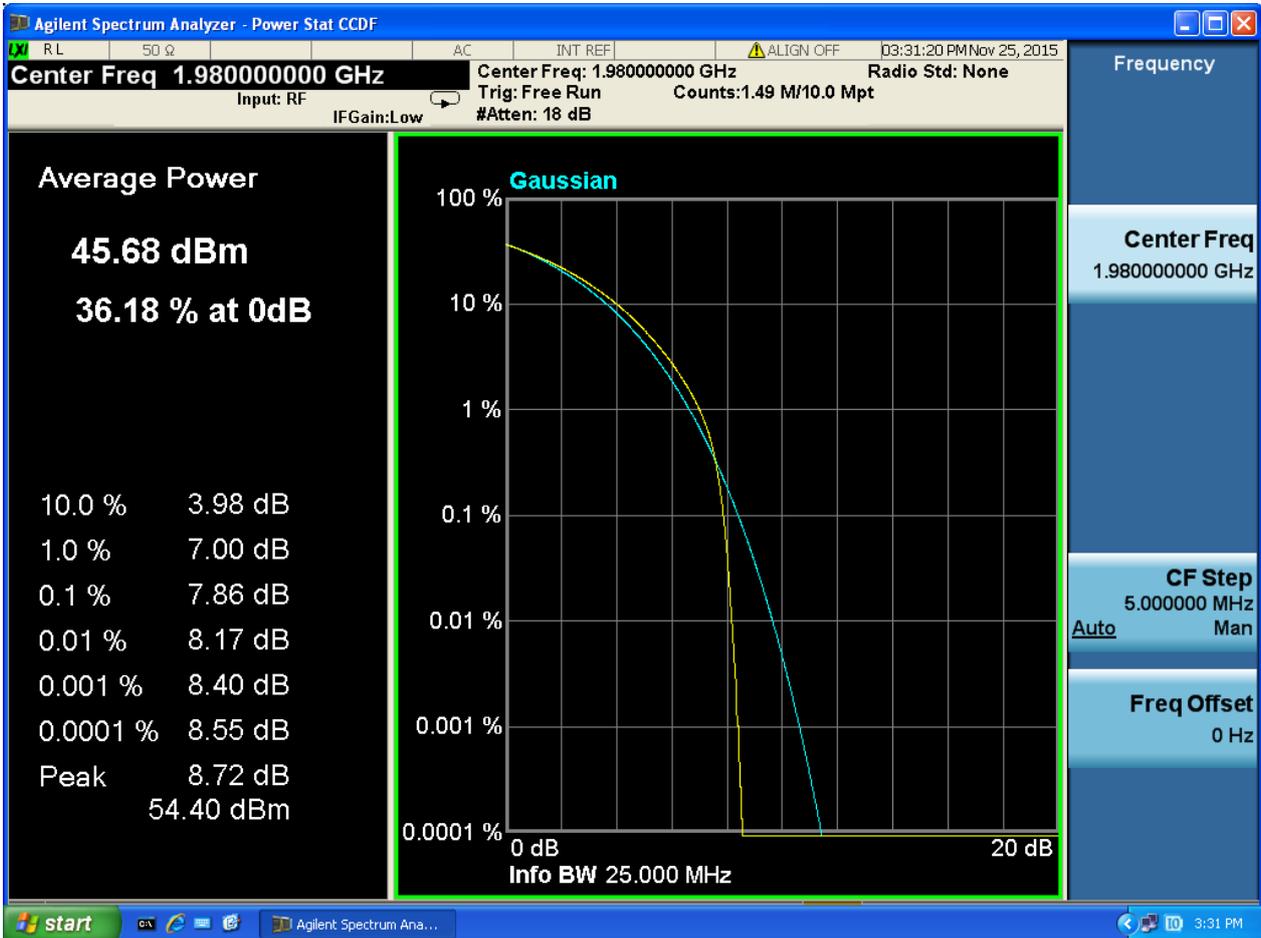
2.2.17 1L_20M_B



2.2.18 1L_20M_M



2.2.19 1L_20M_T





Appendix B: Bandwidth



1 Result Table

1.1 Occupied Bandwidth

EUT Conf.	Occupied Bandwidth [MHz]	Verdict
1G_TM1_B	0.246	Pass
1G_TM1_T	0.242	Pass
1G_TM2_B	0.245	Pass
1G_TM2_T	0.245	Pass
1U_TM1_B	4.141	Pass
1U_TM1_M	4.148	Pass
1U_TM1_T	4.151	Pass
1L_5M_TM1_B	4.506	Pass
1L_5M_TM1_M	4.504	Pass
1L_5M_TM1_T	4.509	Pass
1L_10M_TM1_B	8.987	Pass
1L_10M_TM1_M	8.987	Pass
1L_10M_TM1_T	8.987	Pass
1L_15M_TM1_B	13.473	Pass
1L_15M_TM1_M	13.492	Pass
1L_15M_TM1_T	13.482	Pass
1L_20M_TM1_B	17.966	Pass
1L_20M_TM1_M	17.983	Pass
1L_20M_TM1_T	17.977	Pass



1.2 Emission Bandwidth

EUT Conf.	Emission Bandwidth, -26 dBc [MHz]	Verdict
1G_TM1_B	0.358	Pass
1G_TM1_T	0.358	Pass
1G_TM2_B	0.353	Pass
1G_TM2_T	0.355	Pass
1U_TM1_B	4.628	Pass
1U_TM1_M	4.622	Pass
1U_TM1_T	4.622	Pass
1L_5M_TM1_B	4.760	Pass
1L_5M_TM1_M	4.745	Pass
1L_5M_TM1_T	4.765	Pass
1L_10M_TM1_B	9.457	Pass
1L_10M_TM1_M	9.498	Pass
1L_10M_TM1_T	9.468	Pass
1L_15M_TM1_B	14.114	Pass
1L_15M_TM1_M	14.114	Pass
1L_15M_TM1_T	14.108	Pass
1L_20M_TM1_B	18.826	Pass
1L_20M_TM1_M	18.913	Pass
1L_20M_TM1_T	18.913	Pass

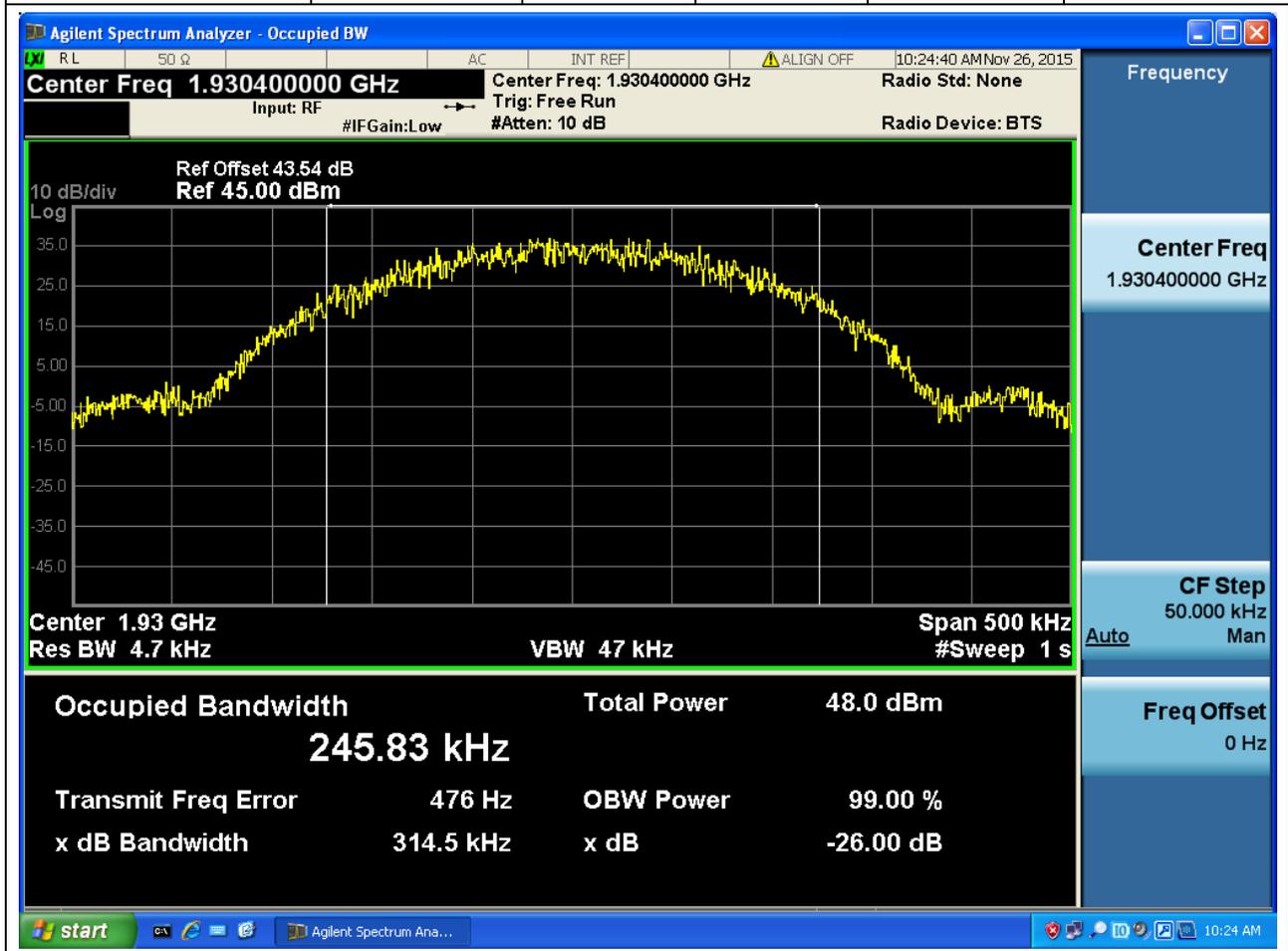


2 Test Plot

2.1 Occupied Bandwidth

2.1.1 1G_TM1_B

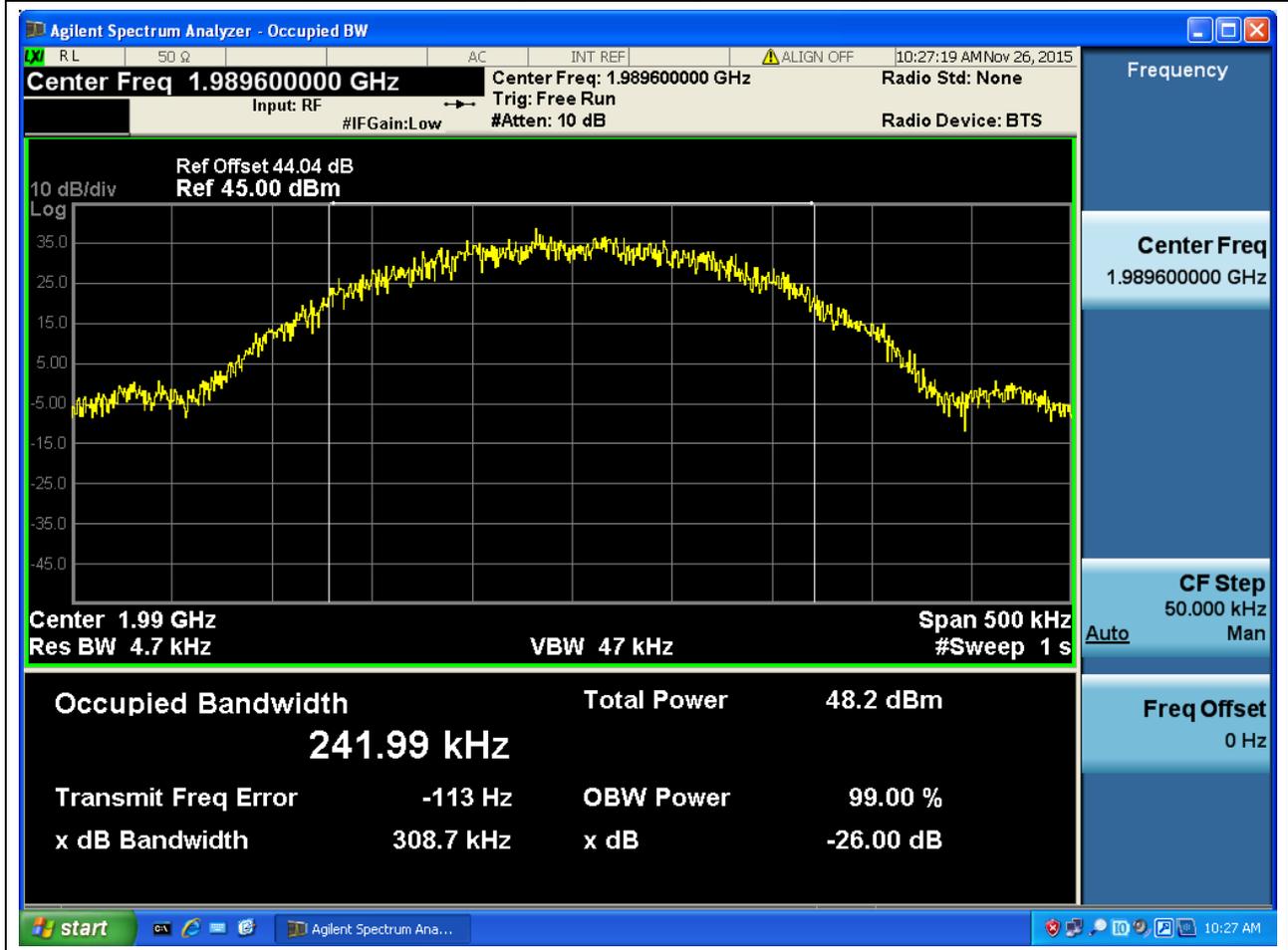
Center Frequency [MHz]	OBW Power [%]	RBW [MHz]	Detector	OBW [MHz]	Verdict
1930.4	99	Auto	Peak	0.245825	Fail





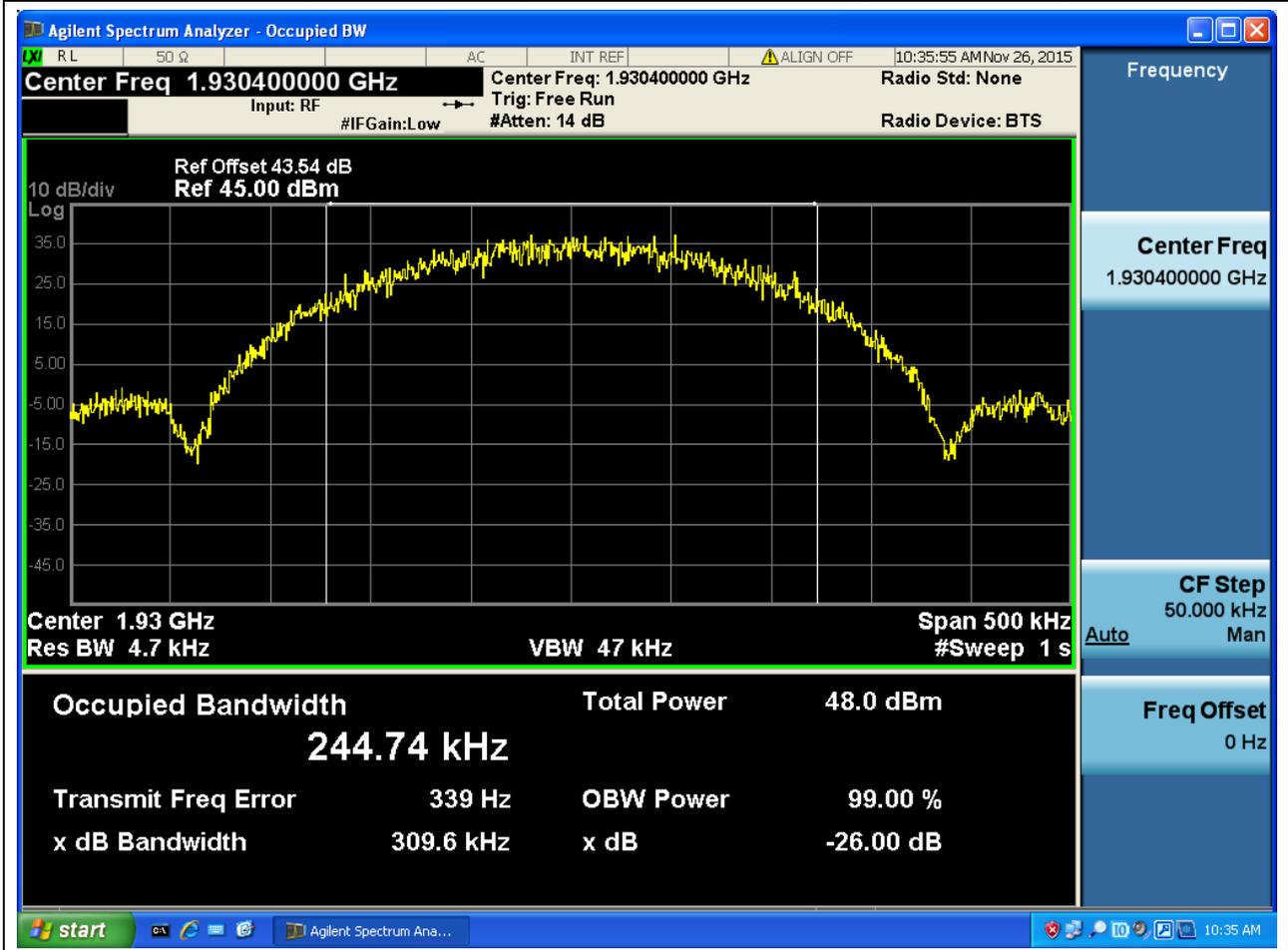
2.1.2 1G_TM1_T

Center Frequency [MHz]	OBW Power [%]	RBW [MHz]	Detector	OBW [MHz]	Verdict
1989.6	99	Auto	Peak	0.241993	Fail



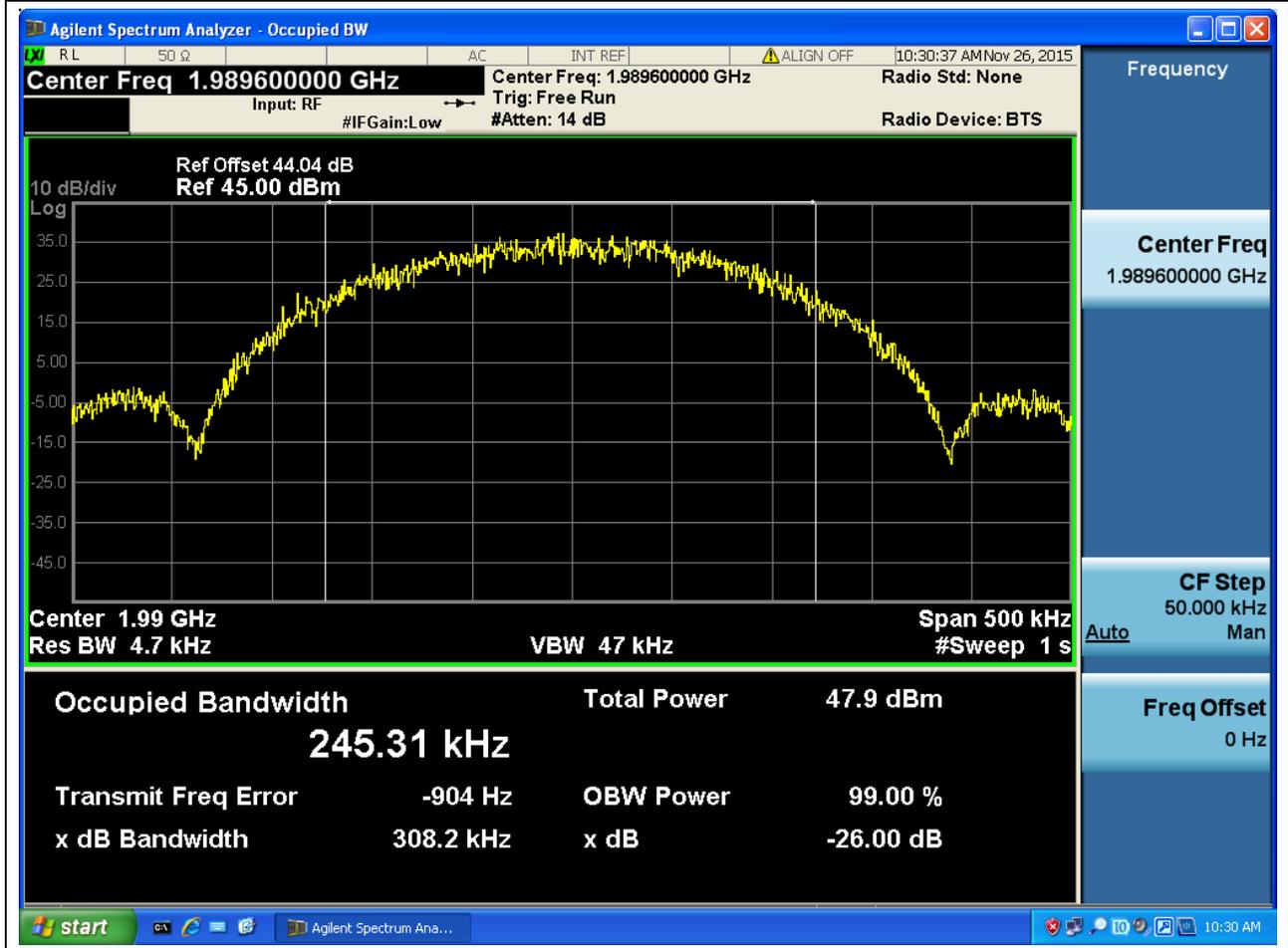
2.1.3 1G_TM1_B

Center Frequency [MHz]	OBW Power [%]	RBW [MHz]	Detector	OBW [MHz]	Verdict
1930.4	99	Auto	Peak	0.244741	Fail



2.1.4 1G_TM1_T

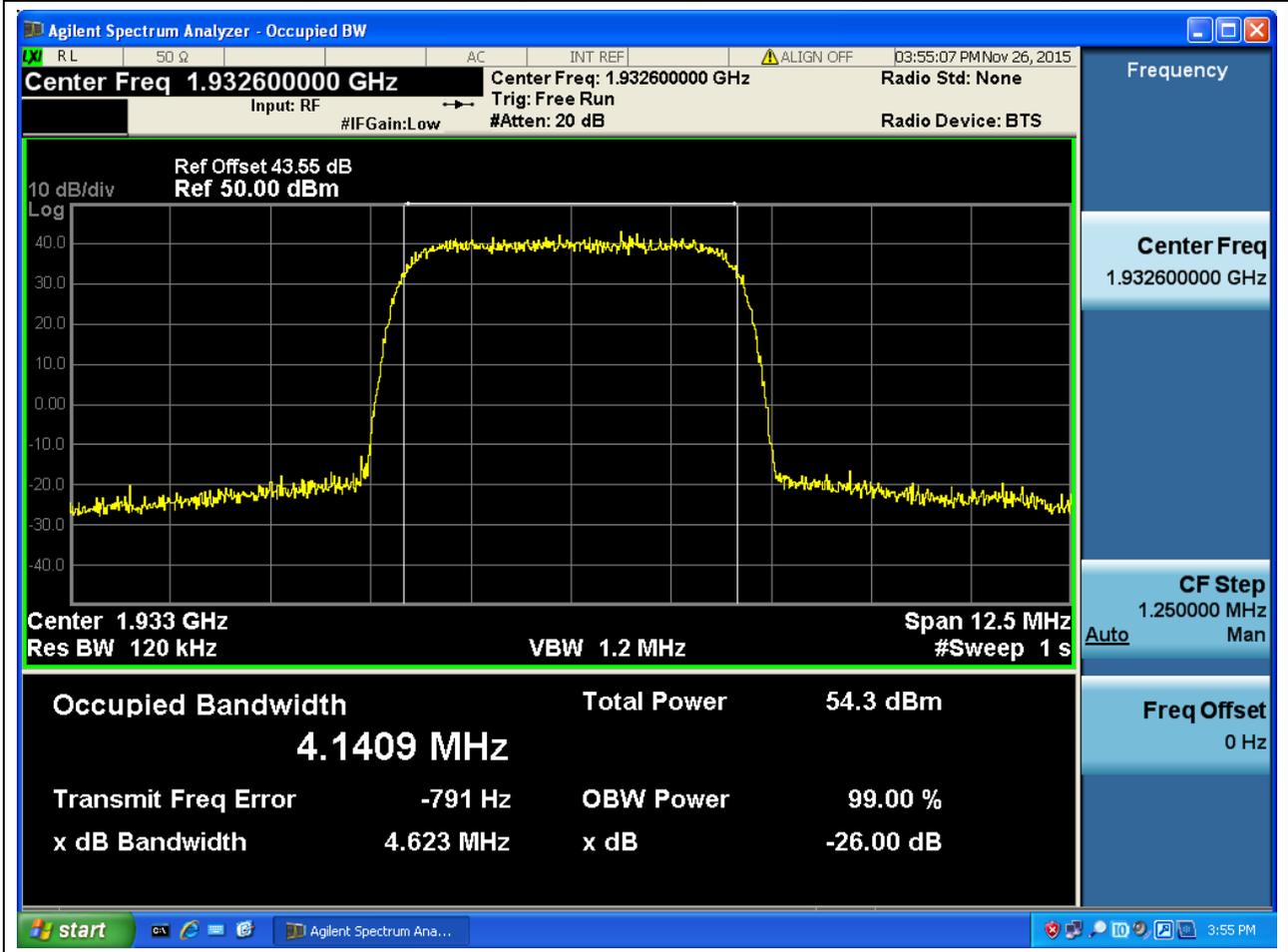
Center Frequency [MHz]	OBW Power [%]	RBW [MHz]	Detector	OBW [MHz]	Verdict
1989.6	99	Auto	Peak	0.245313	Fail





2.1.5 1U_TM1_B

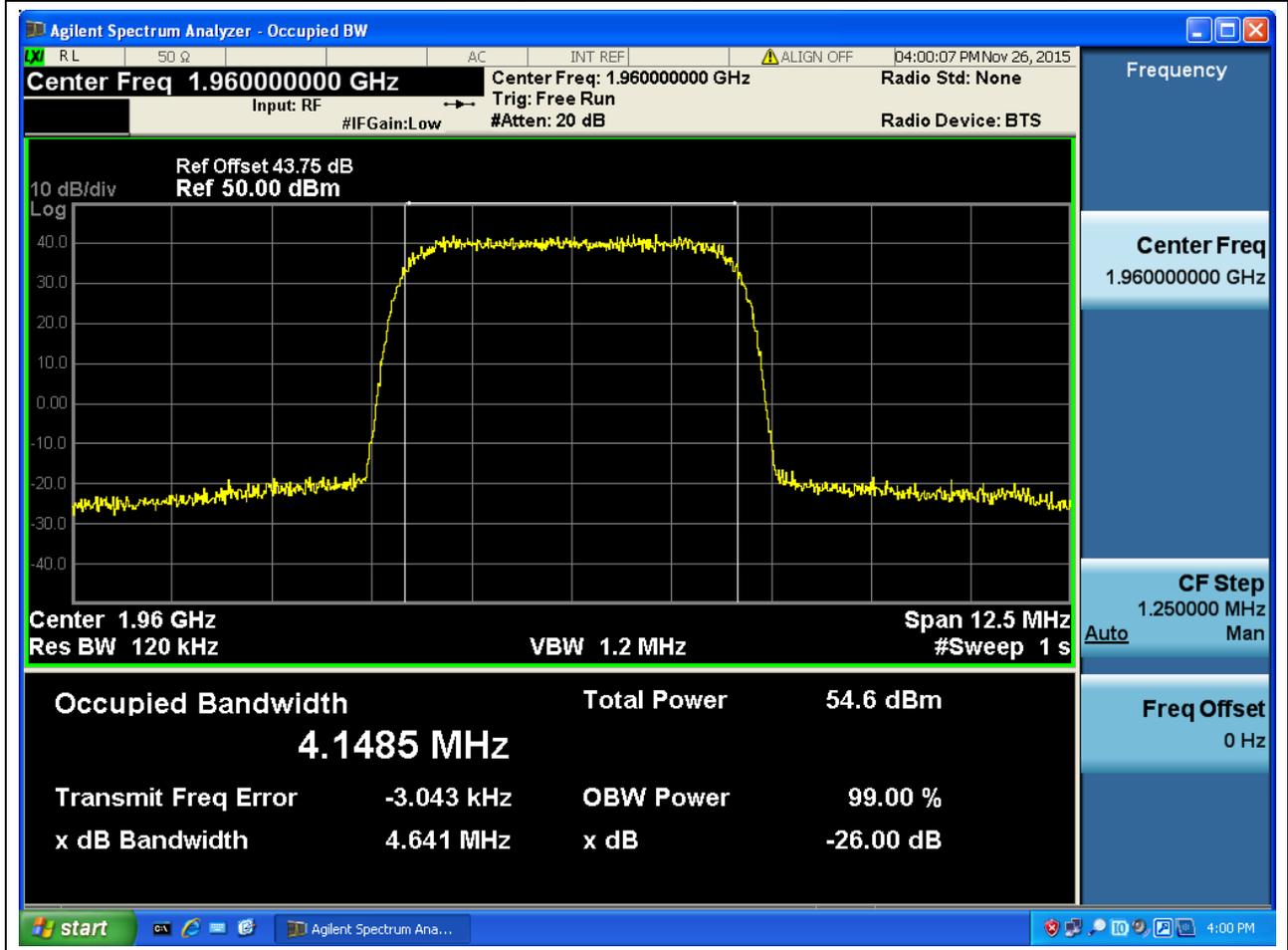
Center Frequency [MHz]	OBW Power [%]	RBW [MHz]	Detector	OBW [MHz]	Verdict
1932.6	99	Auto	Peak	4.140892	Fail





2.1.6 1U_TM1_M

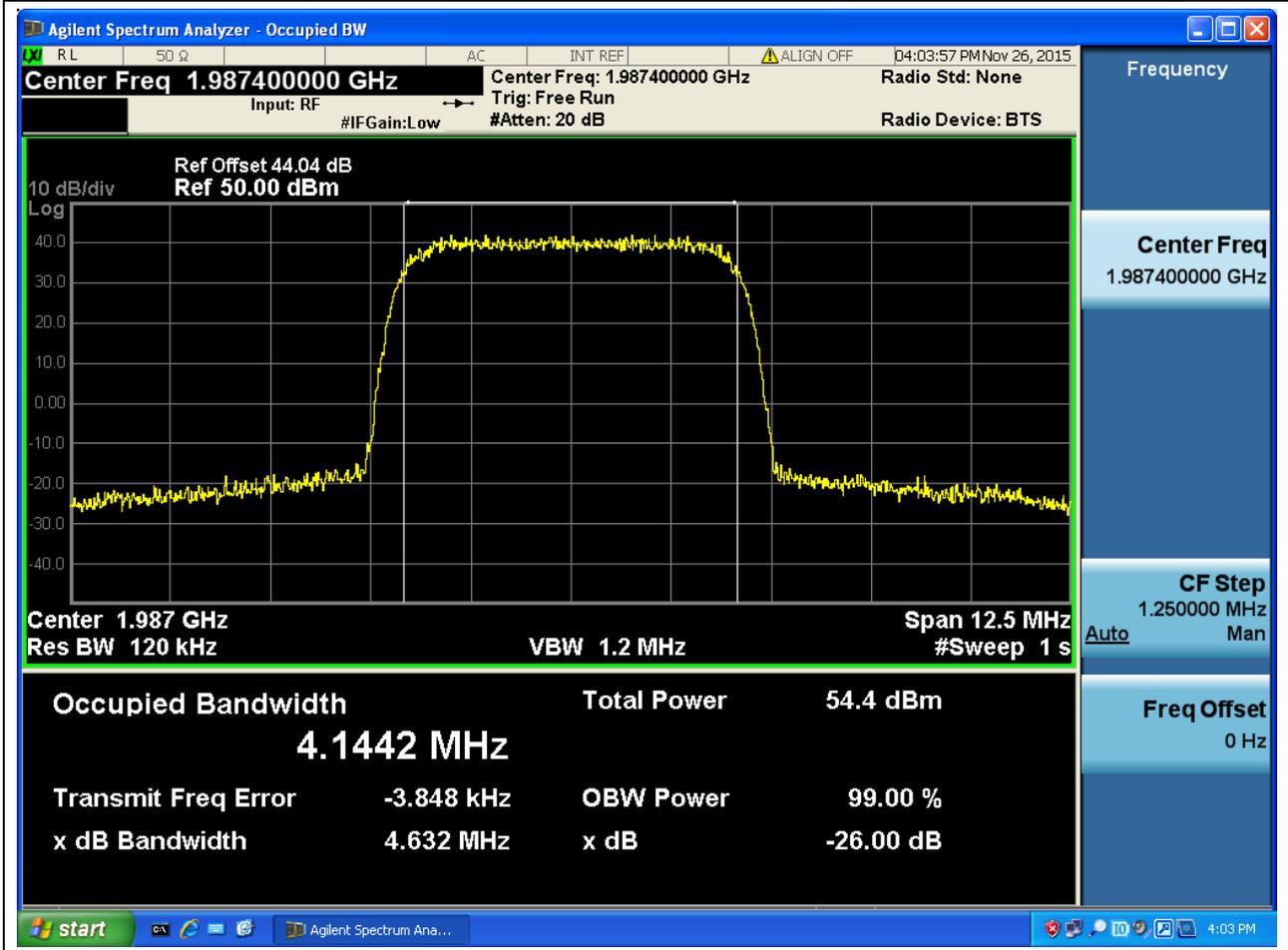
Center Frequency [MHz]	OBW Power [%]	RBW [MHz]	Detector	OBW [MHz]	Verdict
1960	99	Auto	Peak	4.148491	Fail





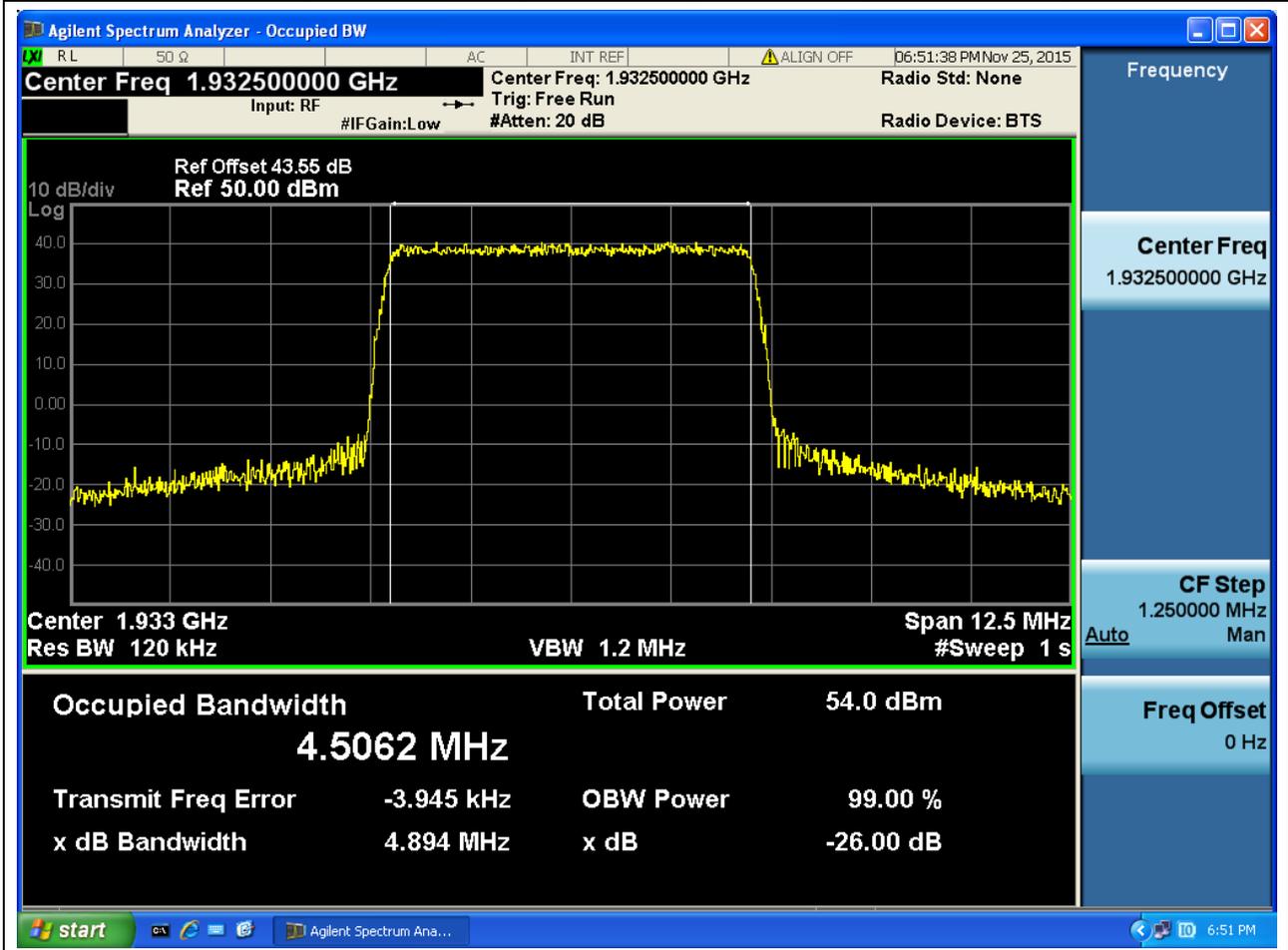
2.1.7 1U_TM1_T

Center Frequency [MHz]	OBW Power [%]	RBW [MHz]	Detector	OBW [MHz]	Verdict
1987.4	99	Auto	Peak	4.144226	Fail



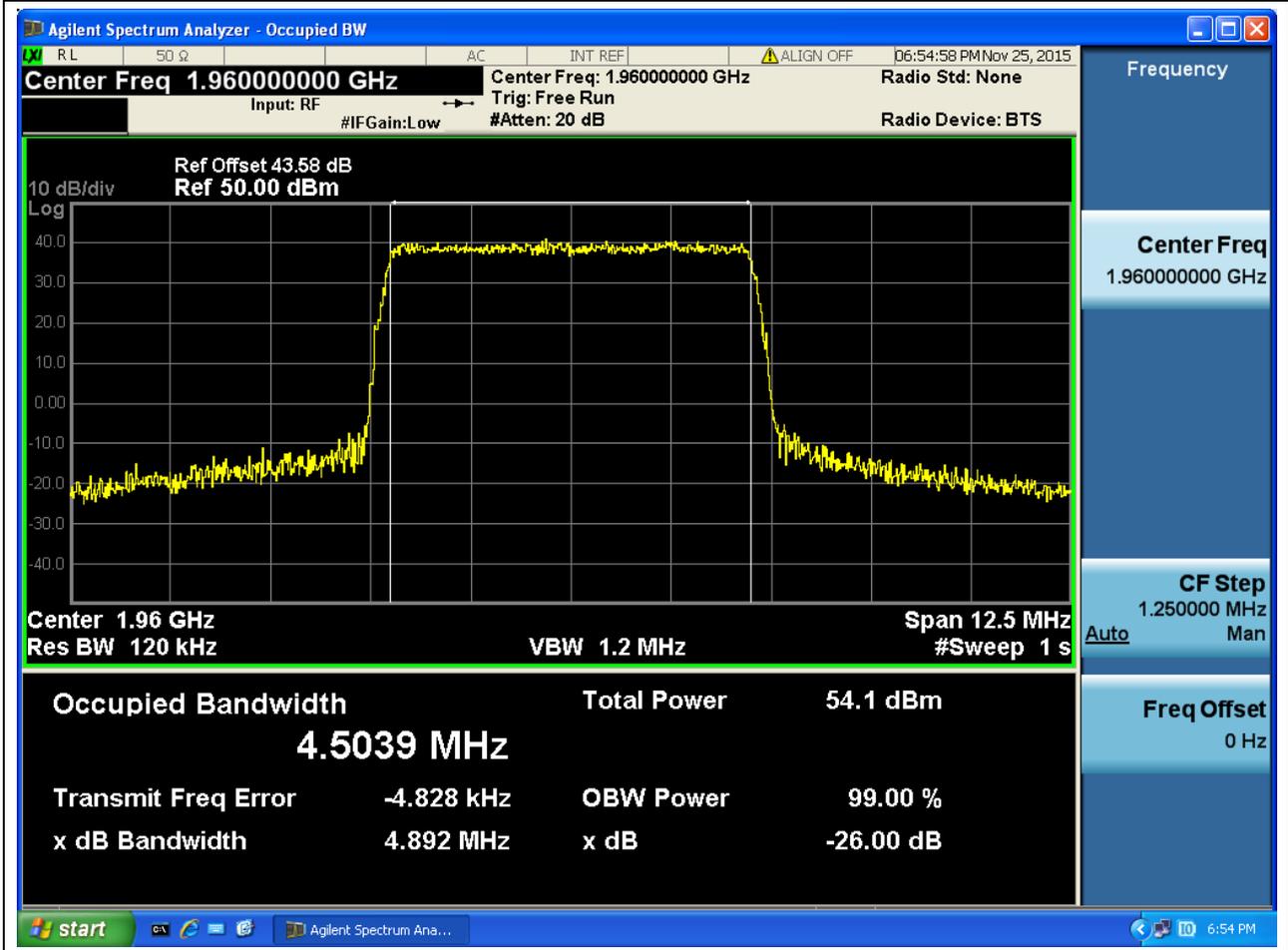
2.1.8 1L_5M_B

Center Frequency [MHz]	OBW Power [%]	RBW [MHz]	Detector	OBW [MHz]	Verdict
1932.5	99	Auto	Peak	4.506192	Fail



2.1.9 1L_5M_M

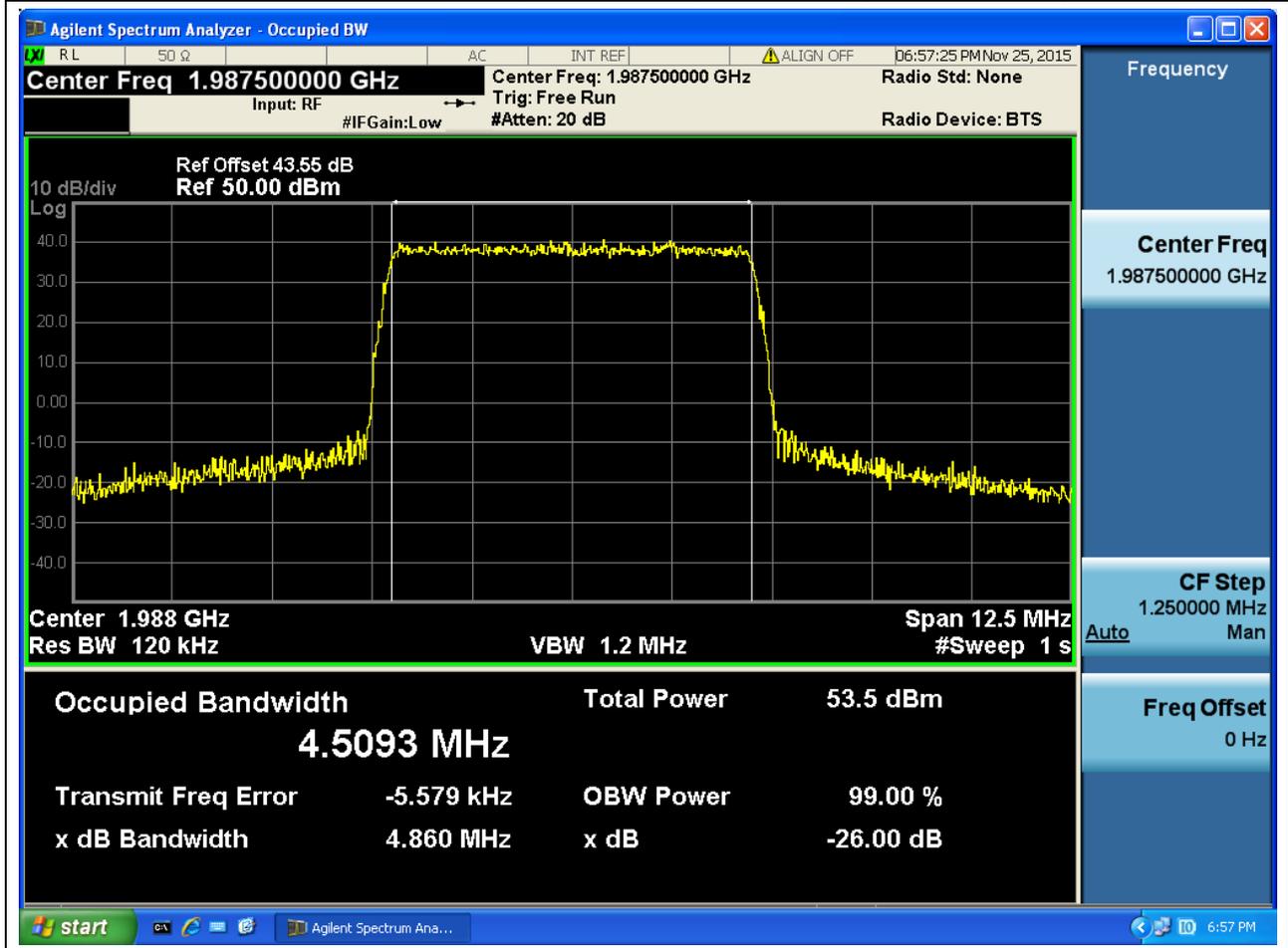
Center Frequency [MHz]	OBW Power [%]	RBW [MHz]	Detector	OBW [MHz]	Verdict
1960	99	Auto	Peak	4.503911	Fail





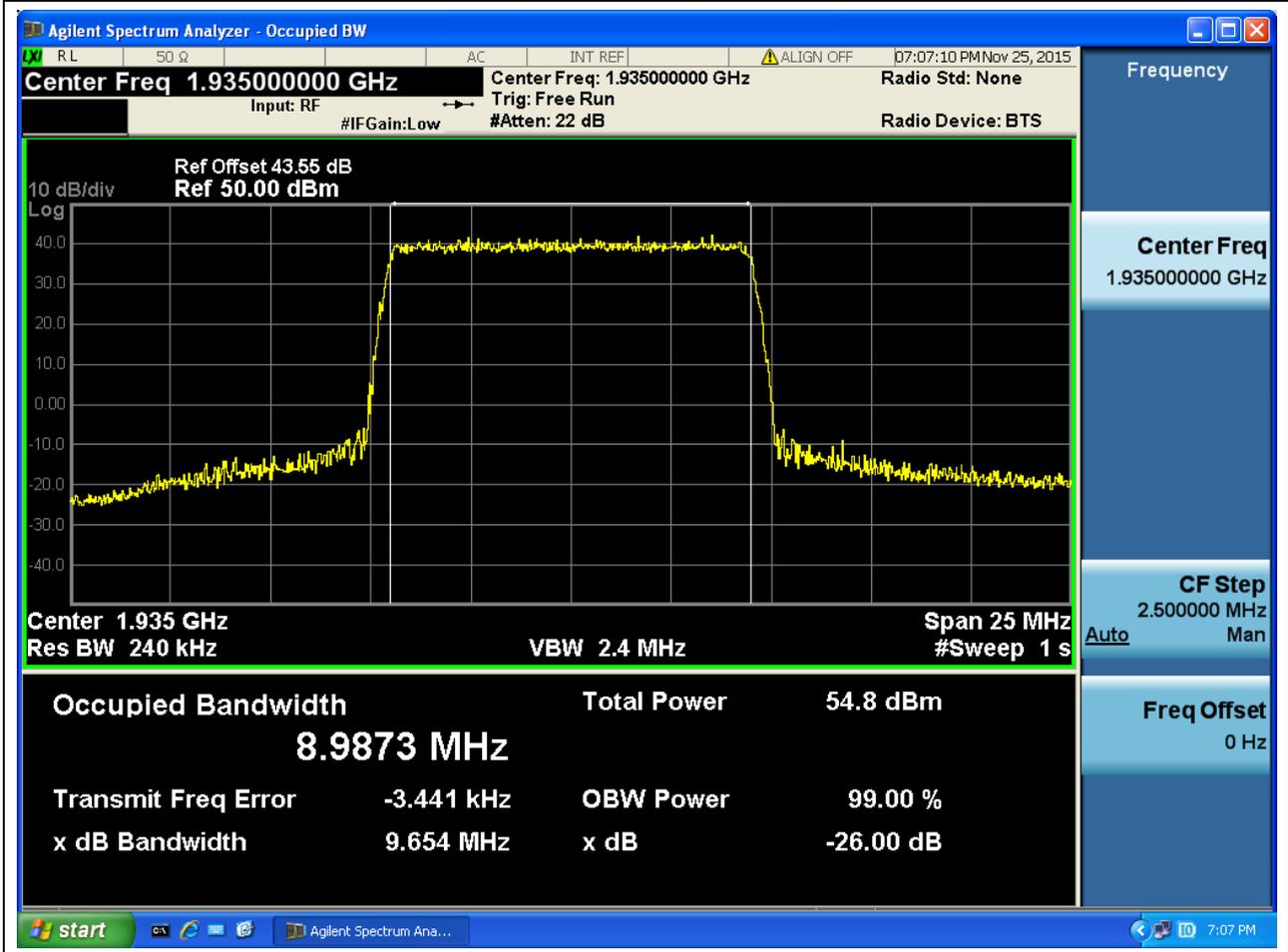
2.1.10 1L_5M_T

Center Frequency [MHz]	OBW Power [%]	RBW [MHz]	Detector	OBW [MHz]	Verdict
1987.5	99	Auto	Peak	4.509346	Fail



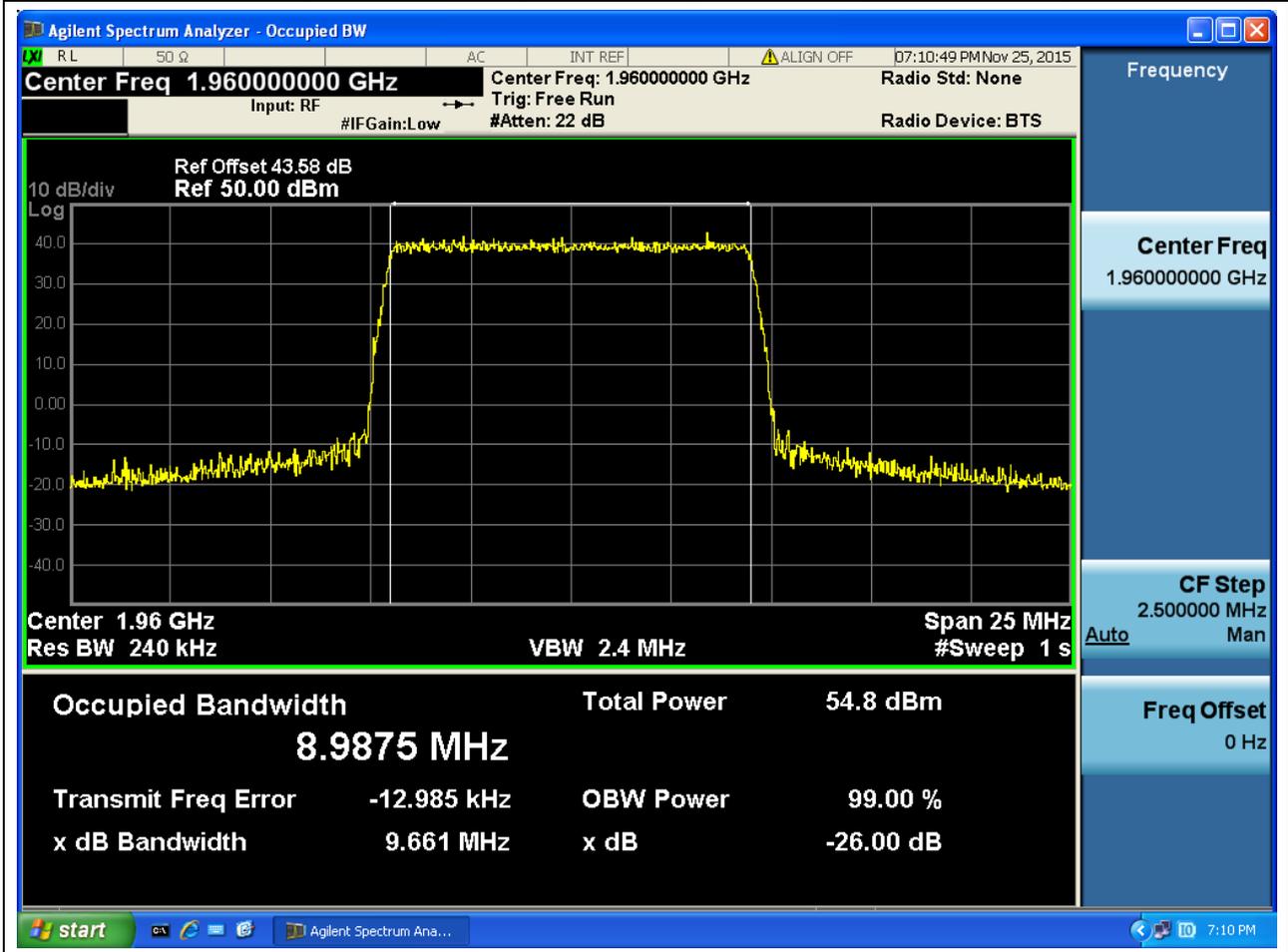
2.1.11 1L_10M_B

Center Frequency [MHz]	OBW Power [%]	RBW [MHz]	Detector	OBW [MHz]	Verdict
1935	99	Auto	Peak	8.987307	Fail



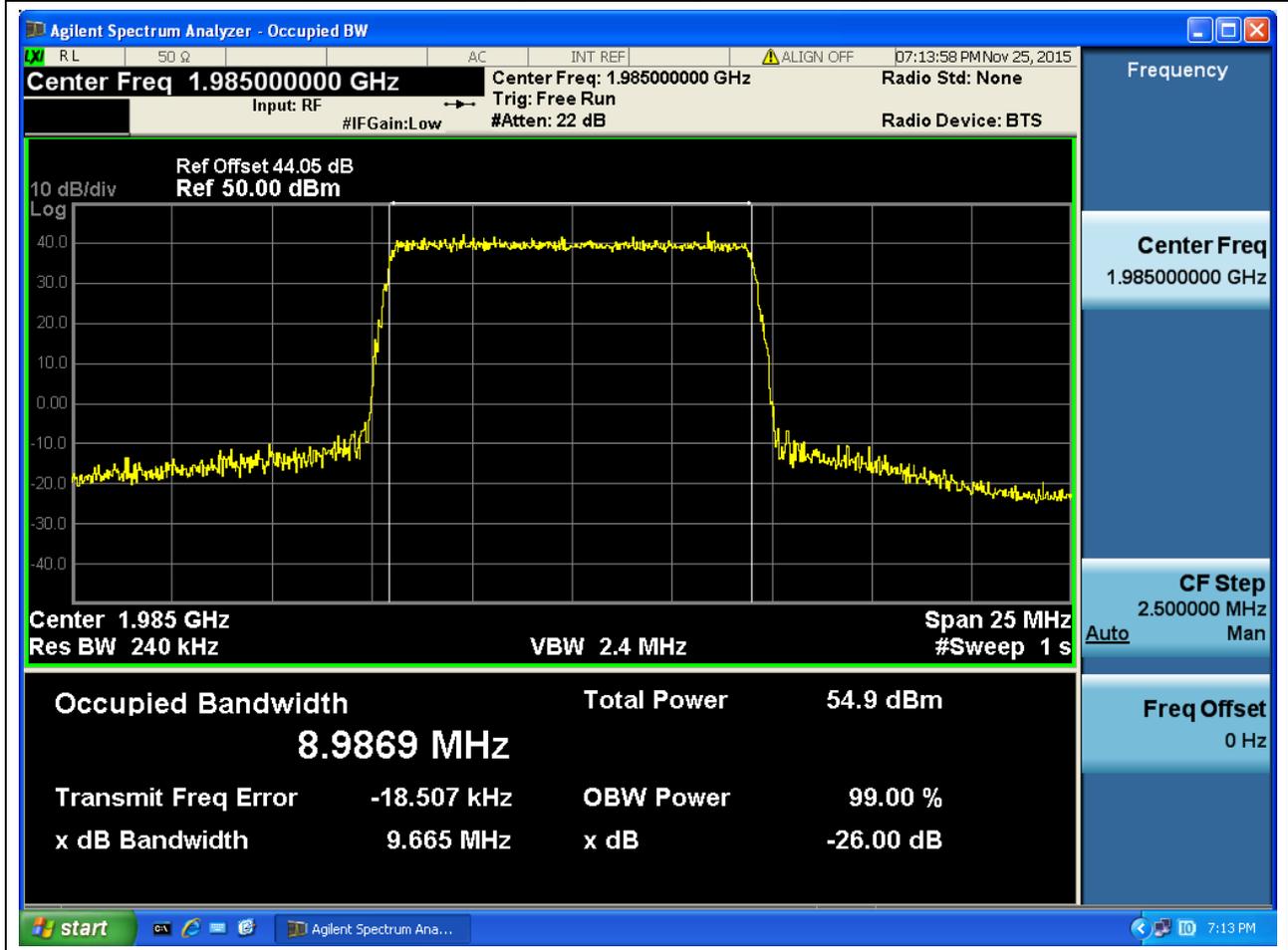
2.1.12 1L_10M_M

Center Frequency [MHz]	OBW Power [%]	RBW [MHz]	Detector	OBW [MHz]	Verdict
1960	99	Auto	Peak	8.987469	Fail



2.1.13 1L_10M_T

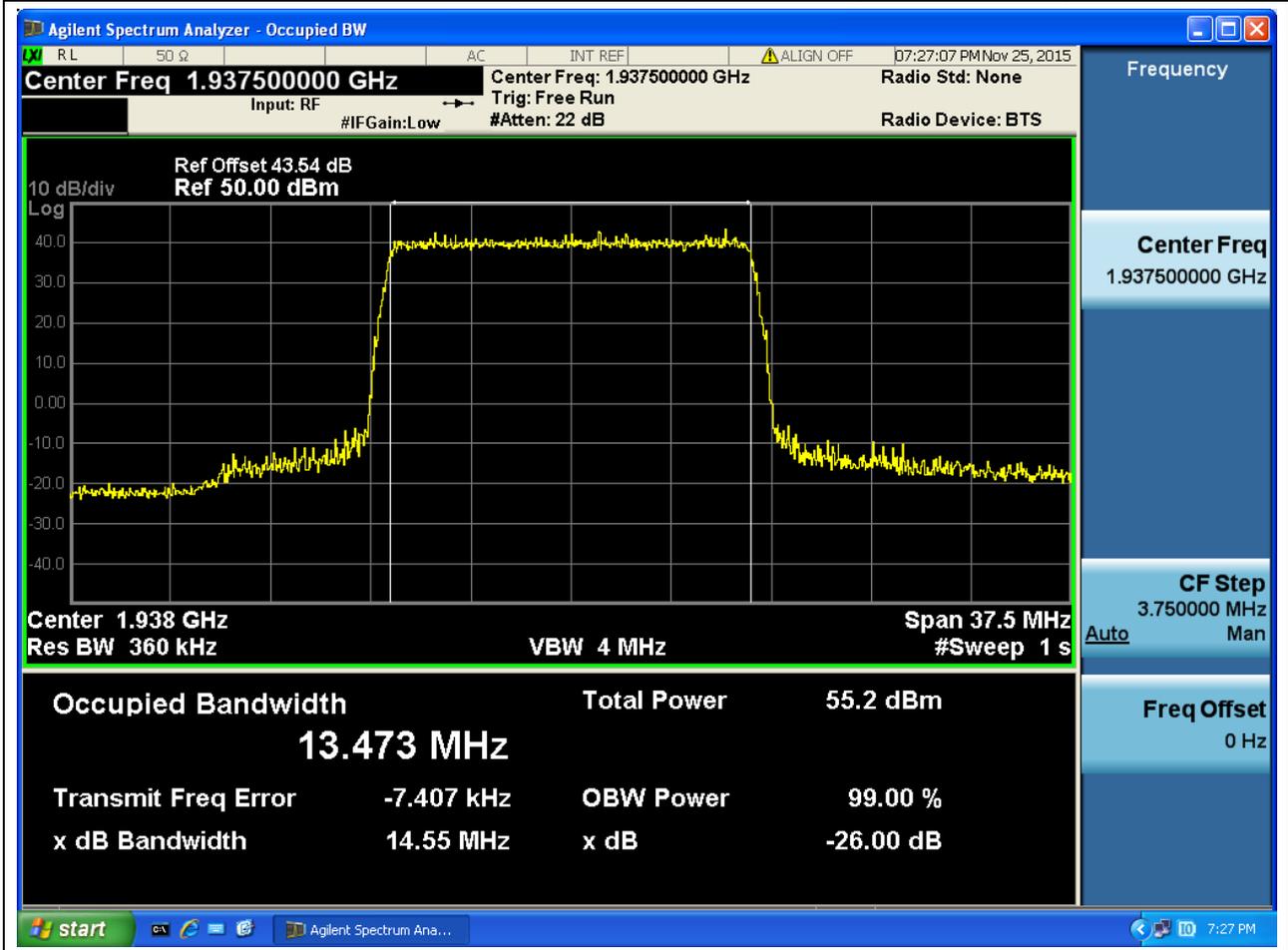
Center Frequency [MHz]	OBW Power [%]	RBW [MHz]	Detector	OBW [MHz]	Verdict
1985	99	Auto	Peak	8.986893	Fail





2.1.14 1L_15M_B

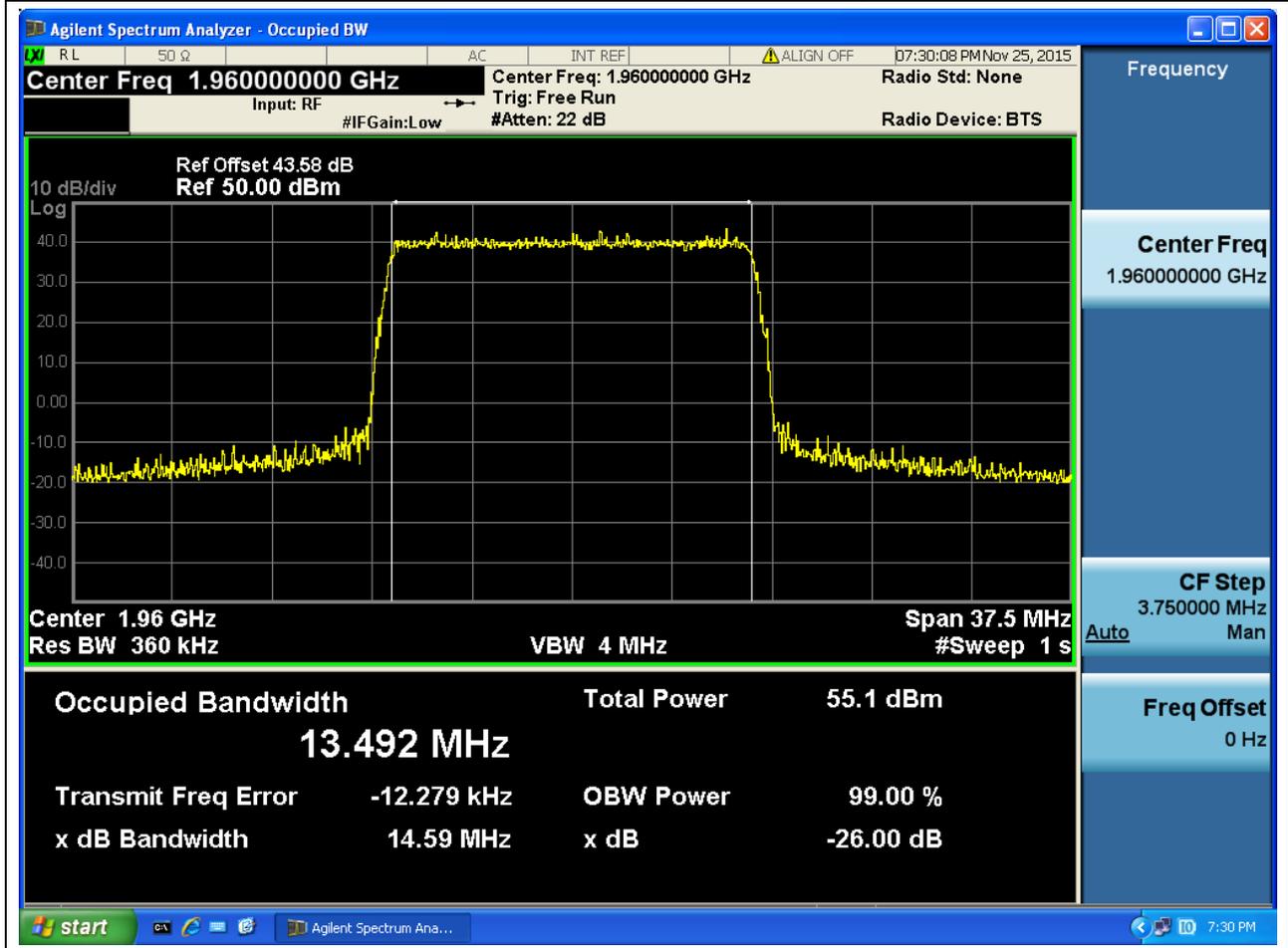
Center Frequency [MHz]	OBW Power [%]	RBW [MHz]	Detector	OBW [MHz]	Verdict
1937.5	99	Auto	Peak	13.473075	Fail





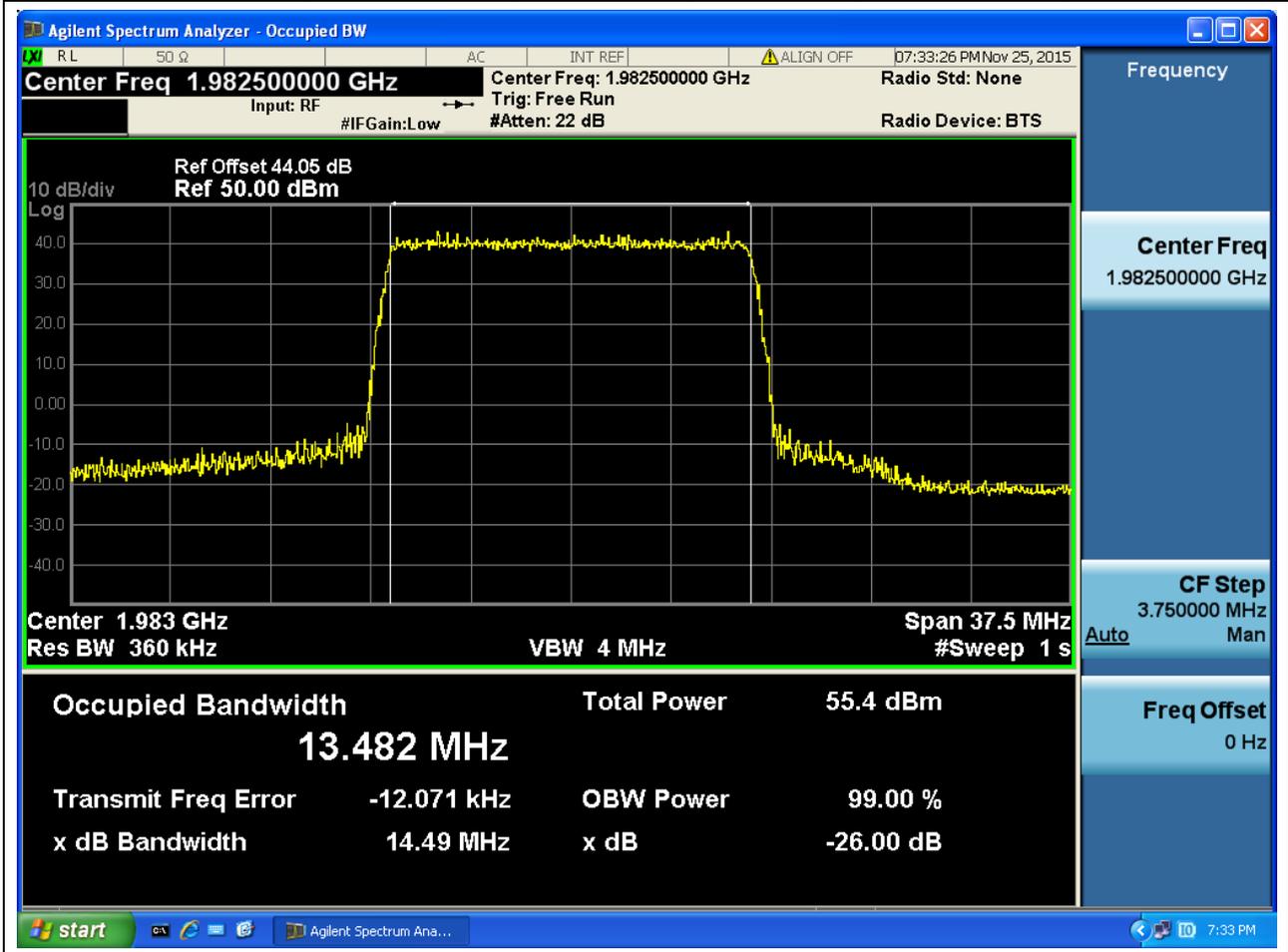
2.1.15 1L_15M_M

Center Frequency [MHz]	OBW Power [%]	RBW [MHz]	Detector	OBW [MHz]	Verdict
1960	99	Auto	Peak	13.491951	Fail



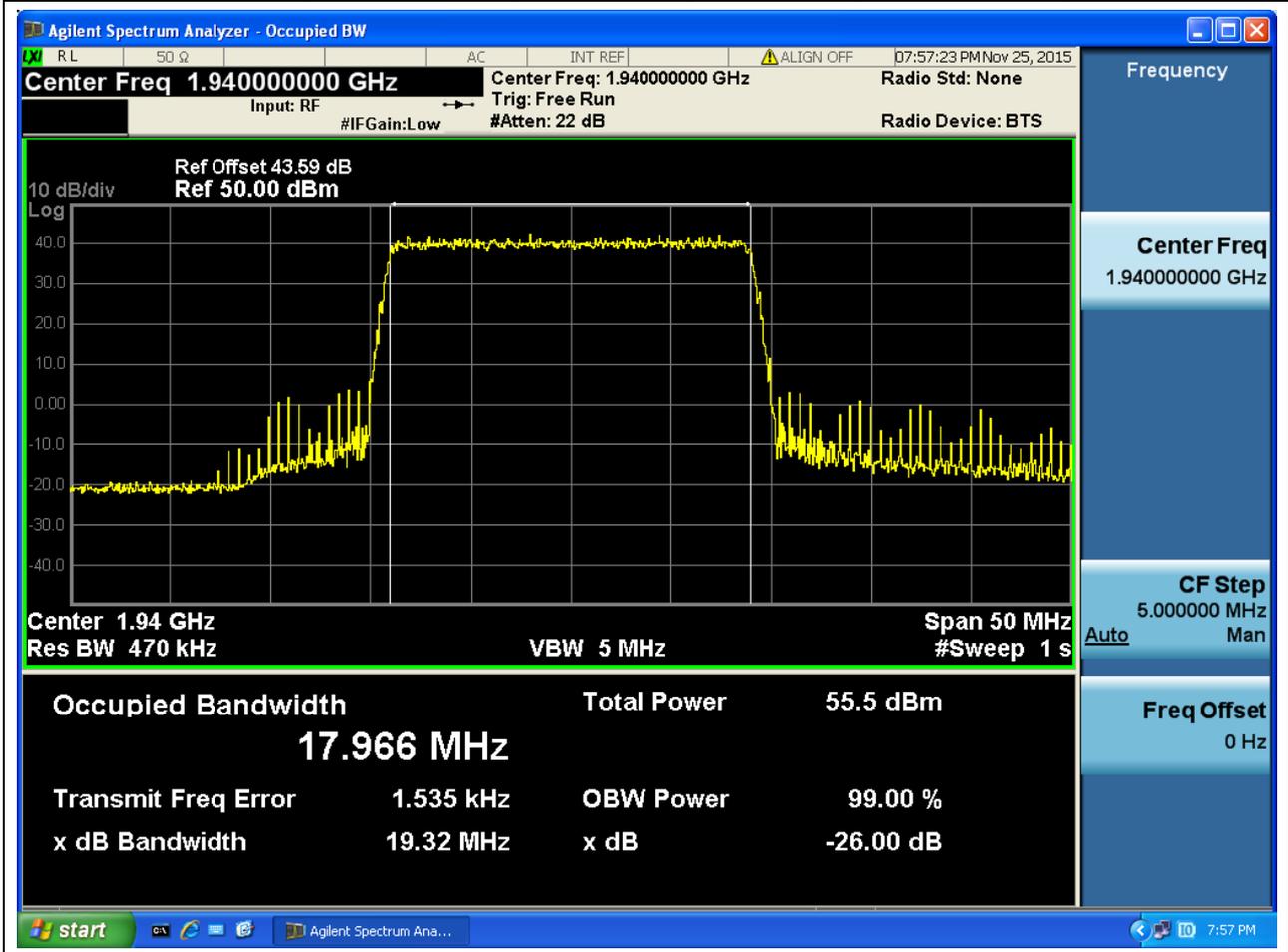
2.1.16 1L_15M_T

Center Frequency [MHz]	OBW Power [%]	RBW [MHz]	Detector	OBW [MHz]	Verdict
1982.5	99	Auto	Peak	13.482391	Fail



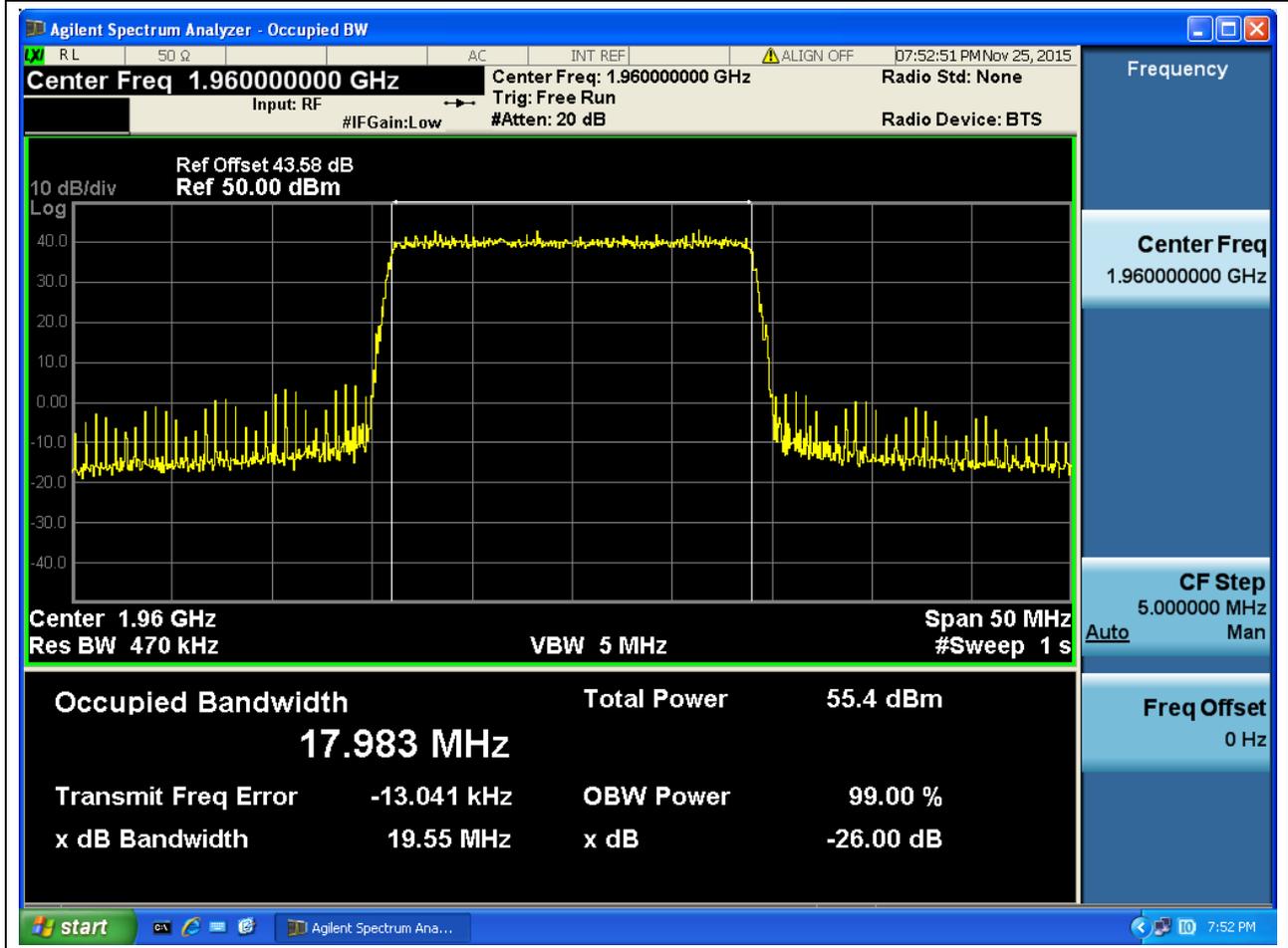
2.1.17 1L_20M_B

Center Frequency [MHz]	OBW Power [%]	RBW [MHz]	Detector	OBW [MHz]	Verdict
1940	99	Auto	Peak	17.965987	Fail



2.1.18 1L_20M_M

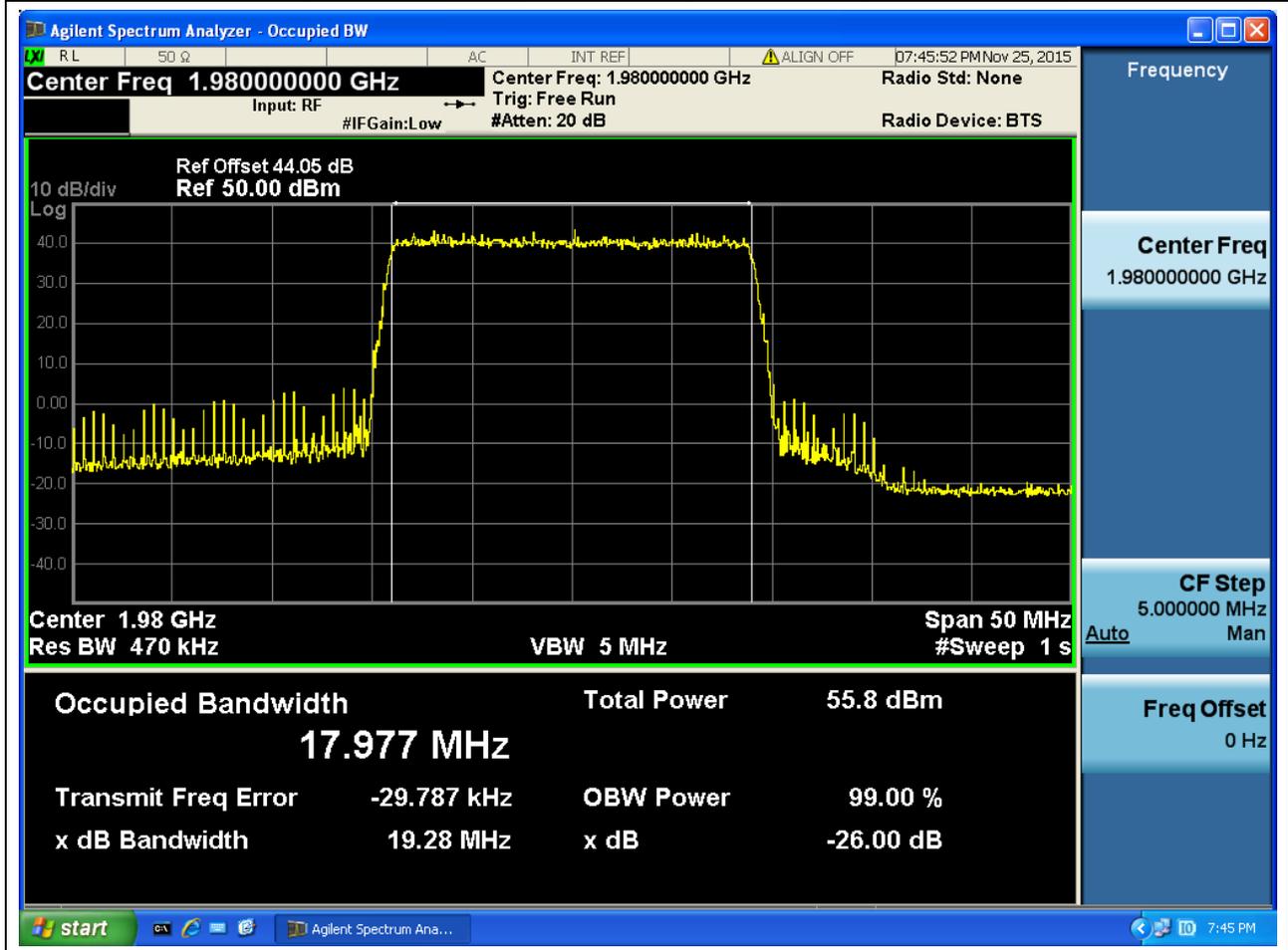
Center Frequency [MHz]	OBW Power [%]	RBW [MHz]	Detector	OBW [MHz]	Verdict
1960	99	Auto	Peak	17.983105	Fail





2.1.19 1L_20M_T

Center Frequency [MHz]	OBW Power [%]	RBW [MHz]	Detector	OBW [MHz]	Verdict
1980	99	Auto	Peak	17.977365	Fail





2.2 Emission Bandwidth

2.2.1 1G_TM1_B

Center Frequency[MHz]	Span [MHz]	ndB [dB]	RBW [MHz]	Detector	ndB BW [MHz]	BW Limit [MHz]	Lower Freq [MHz]	Lower Limit [MHz]	Upper Freq [MHz]	Upper Limit [MHz]	Verdict
1930.4	0.5	26	0.051	RMS	0.357504	0.2	1930.221056	1930	1930.57856	1990	NA





2.2.2 1G_TM1_T

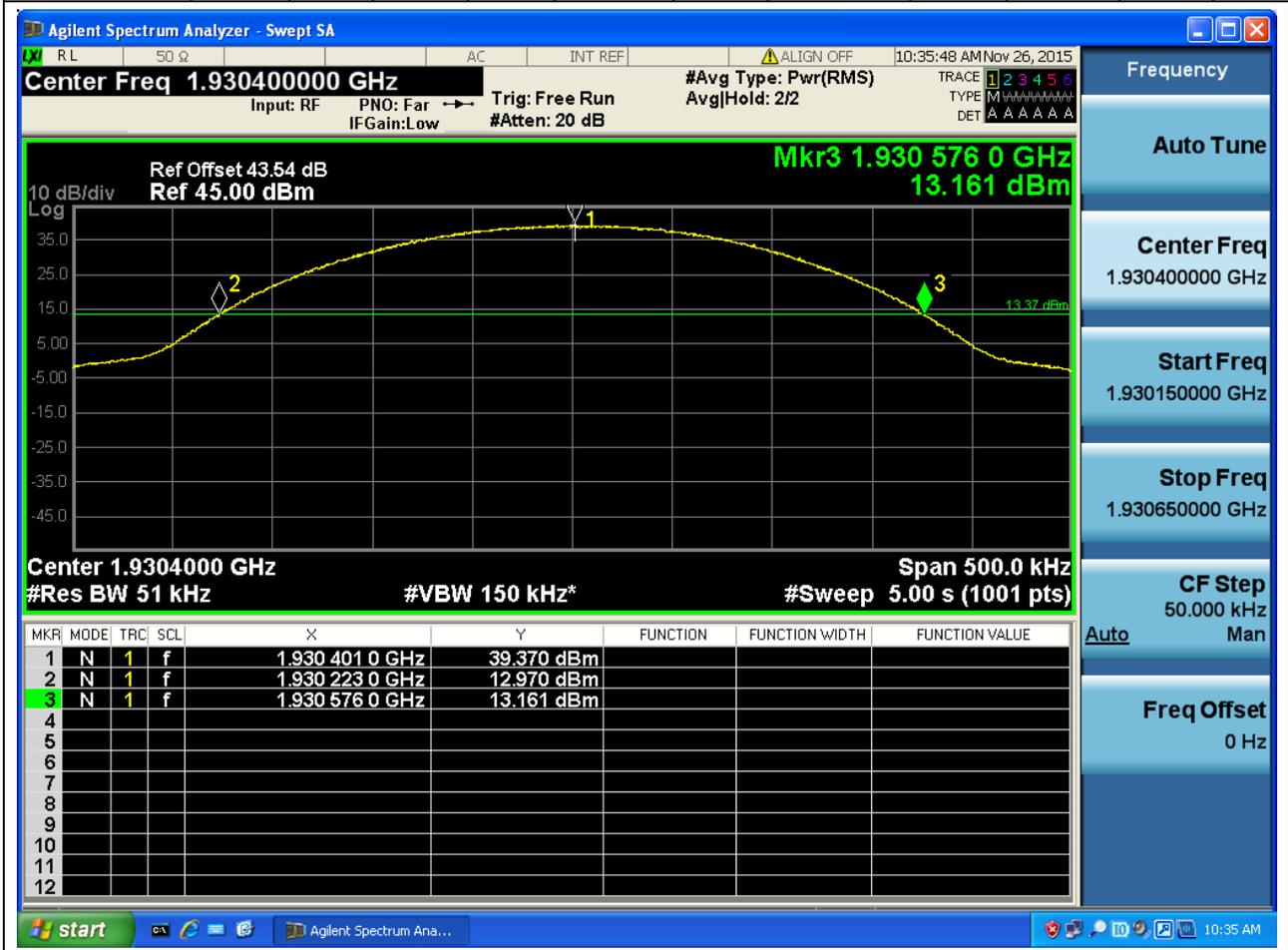
Center Frequency [MHz]	Span [MHz]	ndB [dB]	RBW [MHz]	Detector	ndB BW [MHz]	BW Limit [MHz]	Lower Freq [MHz]	Lower Limit [MHz]	Upper Freq [MHz]	Upper Limit [MHz]	Verdict
1989.6	0.5	26	0.051	RMS	0.3584	0.2	1989.421056	1930	1989.779456	1990	NA





2.2.3 1G_TM2_B

Center Frequency [MHz]	Span [MHz]	ndB [dB]	RBW [MHz]	Detector	ndB BW [MHz]	BW Limit [MHz]	Lower Freq [MHz]	Lower Limit [MHz]	Upper Freq [MHz]	Upper Limit [MHz]	Verdict
1930.4	0.5	26	0.051	RMS	0.353024	0.2	1930.222976	1930	1930.576	1990	NA





2.2.4 1G_TM2_T

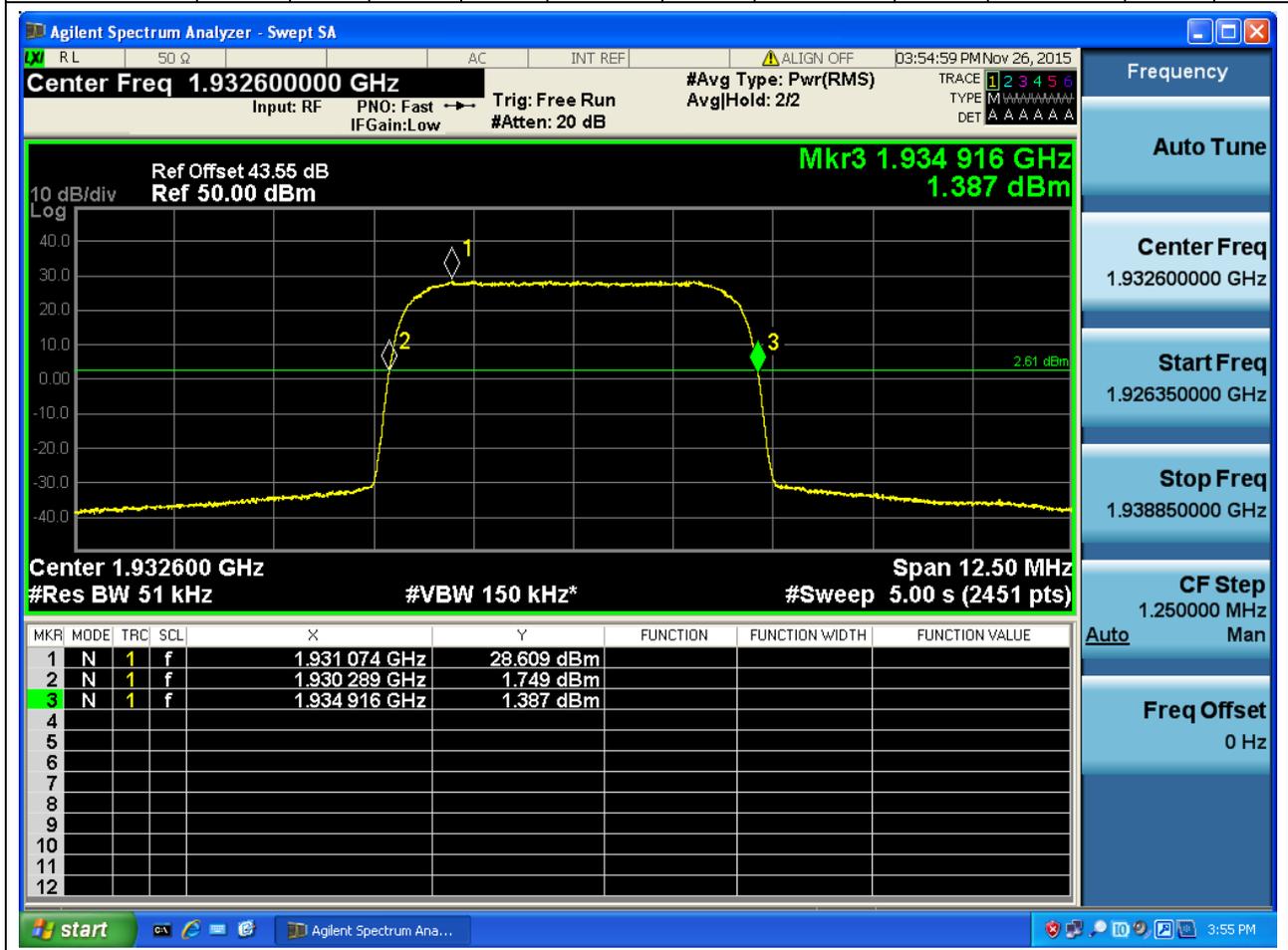
Center Frequency [MHz]	Span [MHz]	ndB [dB]	RBW [MHz]	Detector	ndB BW [MHz]	BW Limit [MHz]	Lower Freq [MHz]	Lower Limit [MHz]	Upper Freq [MHz]	Upper Limit [MHz]	Verdict
1989.6	0.5	26	0.051	RMS	0.35456	0.2	1989.421952	1930	1989.776512	1990	NA





2.2.5 1U_TM1_B

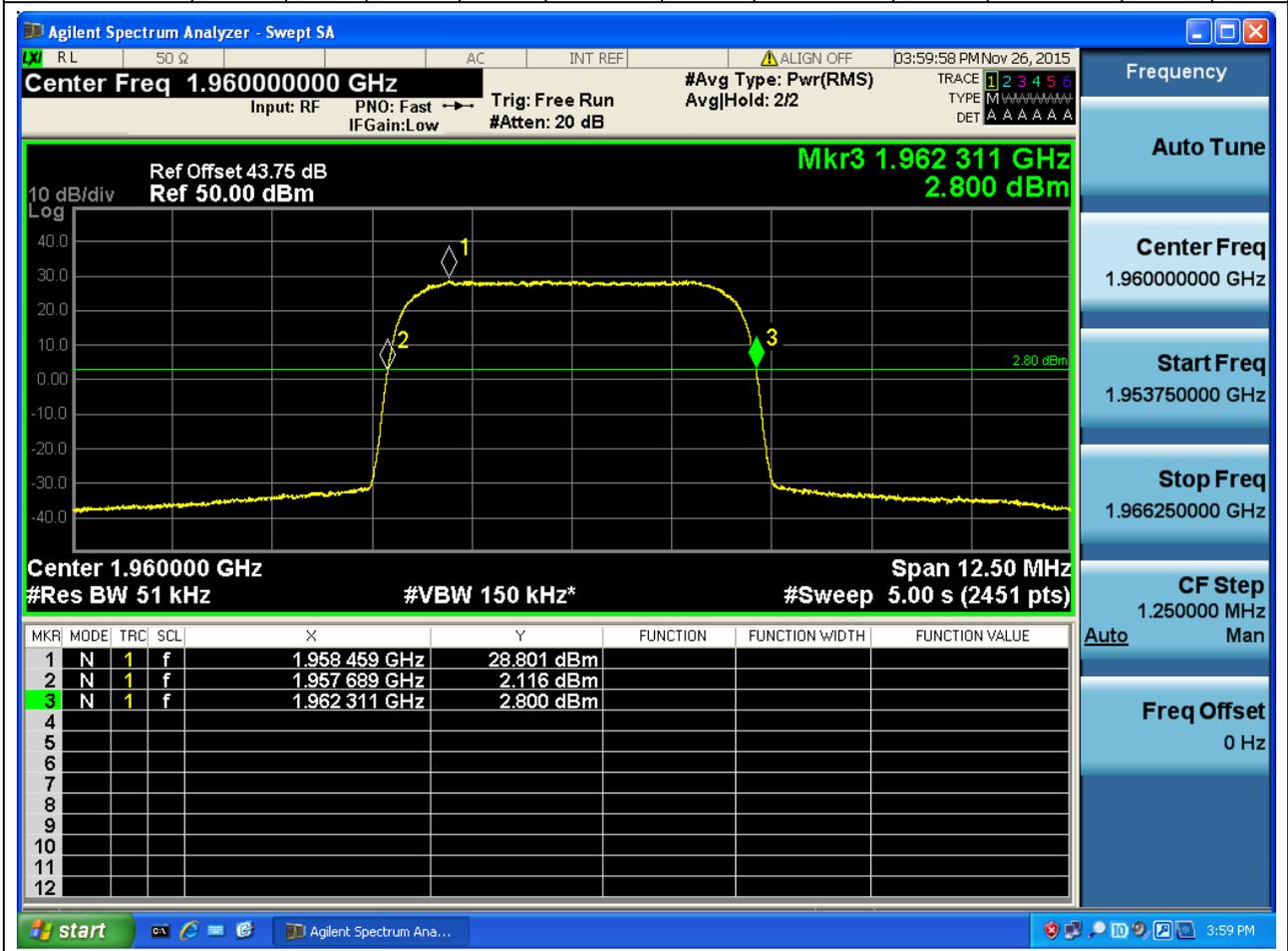
Center Frequency [MHz]	Span [MHz]	ndB [dB]	RBW [MHz]	Detector	ndB BW [MHz]	BW Limit [MHz]	Lower Freq [MHz]	Lower Limit [MHz]	Upper Freq [MHz]	Upper Limit [MHz]	Verdict
1932.6	12.5	26	0.051	RM S	4.627584	5	1930.288768	1930	1934.916352	1990	Pass





2.2.6 1U_TM1_M

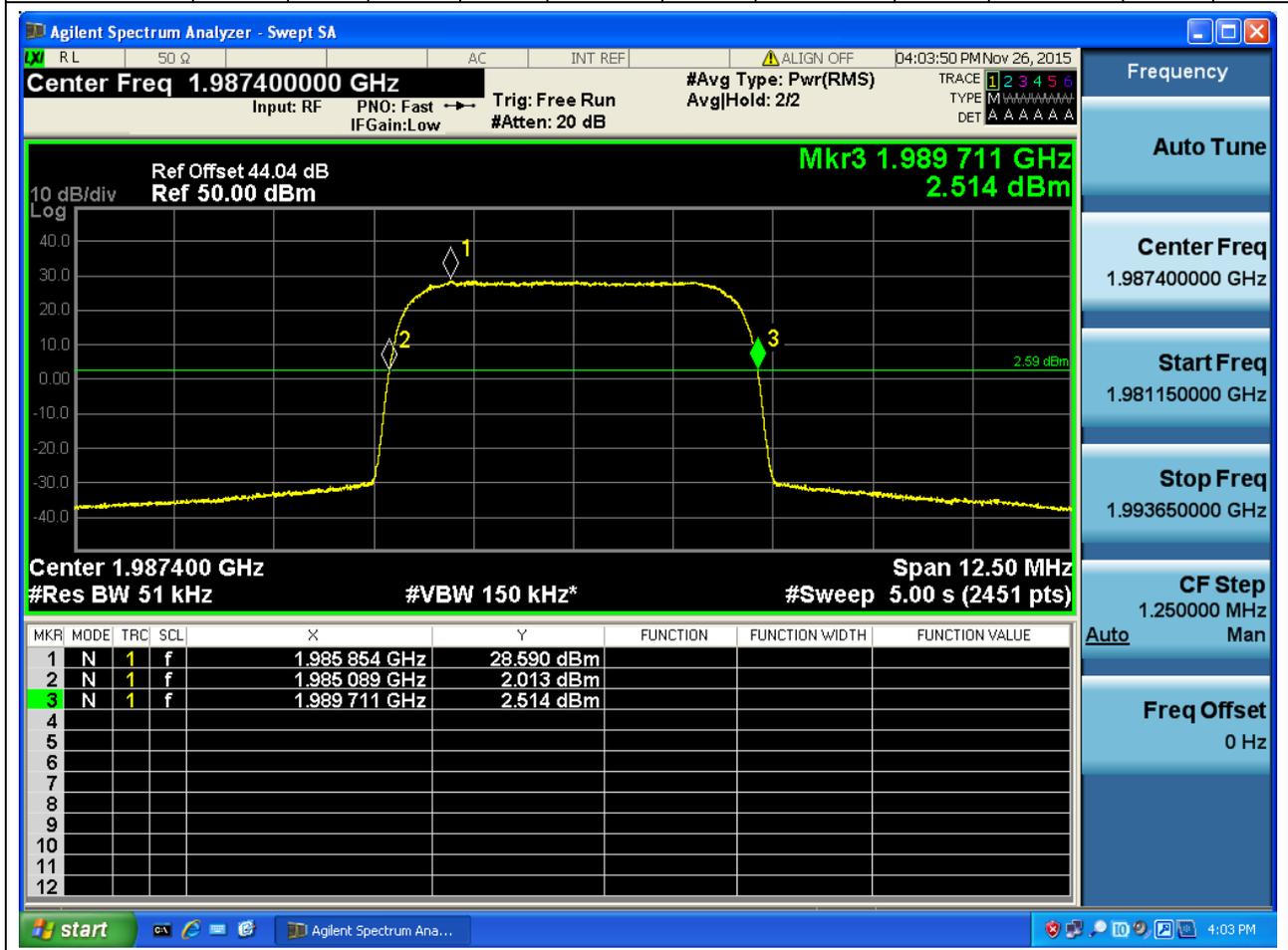
Center Frequency [MHz]	Span [MHz]	ndB [dB]	RBW [MHz]	Detector	ndB BW [MHz]	BW Limit [MHz]	Lower Freq [MHz]	Lower Limit [MHz]	Upper Freq [MHz]	Upper Limit [MHz]	Verdict
1960	12.5	26	0.051	RMS	4.622336	5	1957.688832	1930	1962.311168	1990	Pass





2.2.7 1U_TM1_T

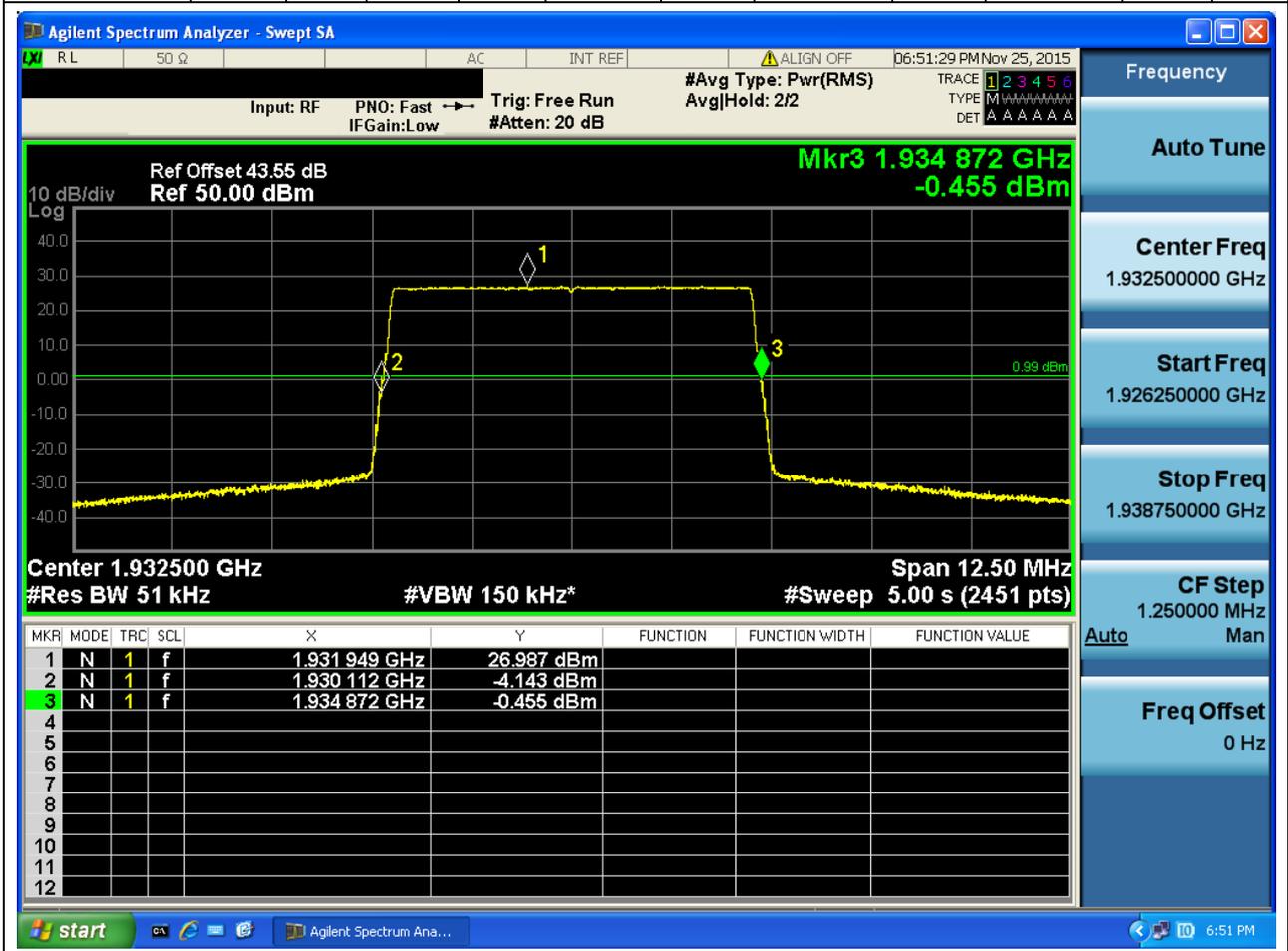
Center Frequency [MHz]	Span [MHz]	ndB [dB]	RBW [MHz]	Detector	ndB BW [MHz]	BW Limit [MHz]	Lower Freq [MHz]	Lower Limit [MHz]	Upper Freq [MHz]	Upper Limit [MHz]	Verdict
1987.4	12.5	26	0.051	RMS	4.622464	5	1985.088768	1930	1989.711232	1990	Pass





2.2.8 1L_5M_B

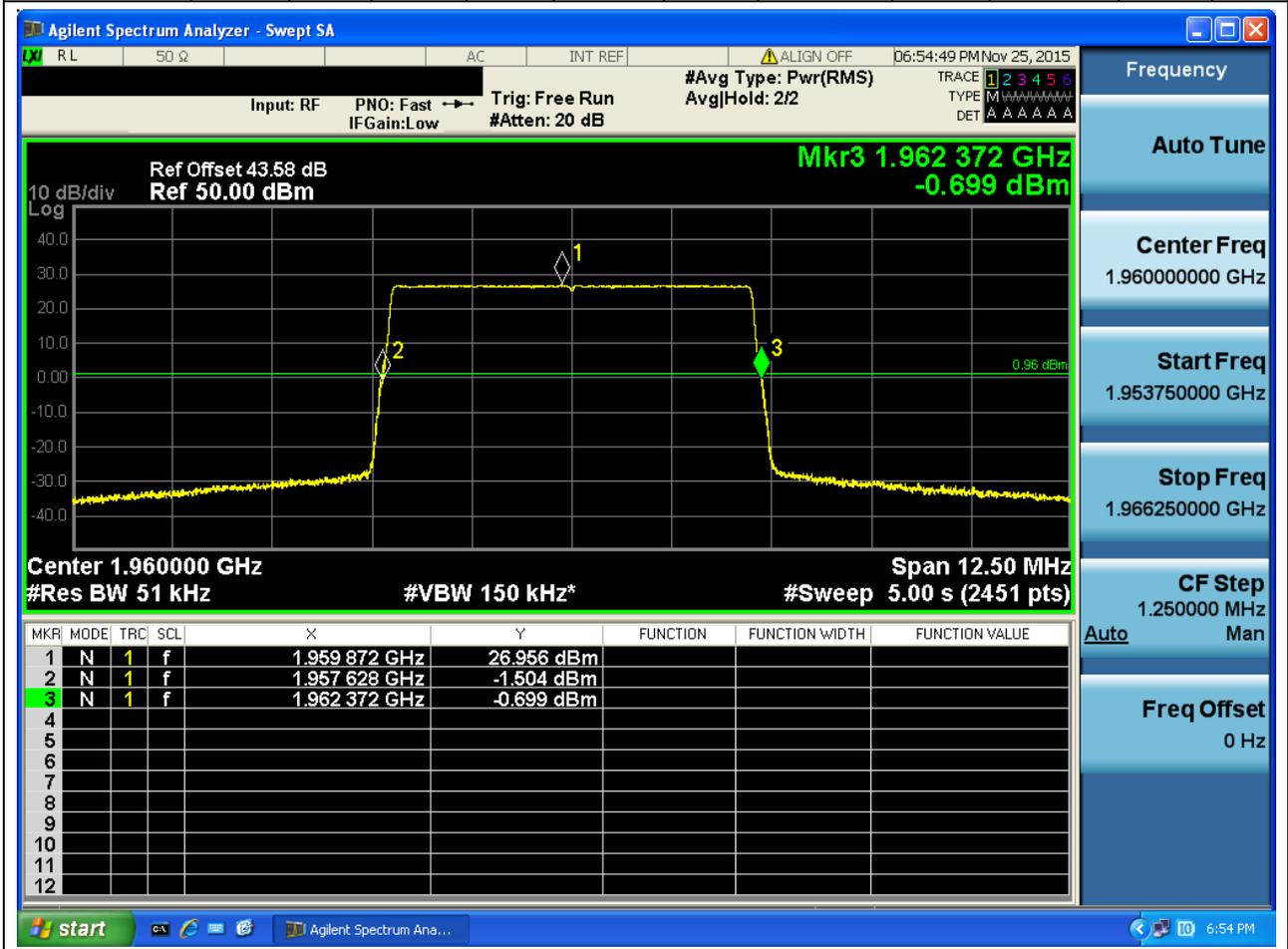
Center Frequency [MHz]	Span [MHz]	ndB [dB]	RBW [MHz]	Detector	ndB BW [MHz]	BW Limit [MHz]	Lower Freq [MHz]	Lower Limit [MHz]	Upper Freq [MHz]	Upper Limit [MHz]	Verdict
1932.5	12.5	26	0.051	RMS	4.760192	5	1930.112256	1930	1934.872448	1990	Pass





2.2.9 1L_5M_M

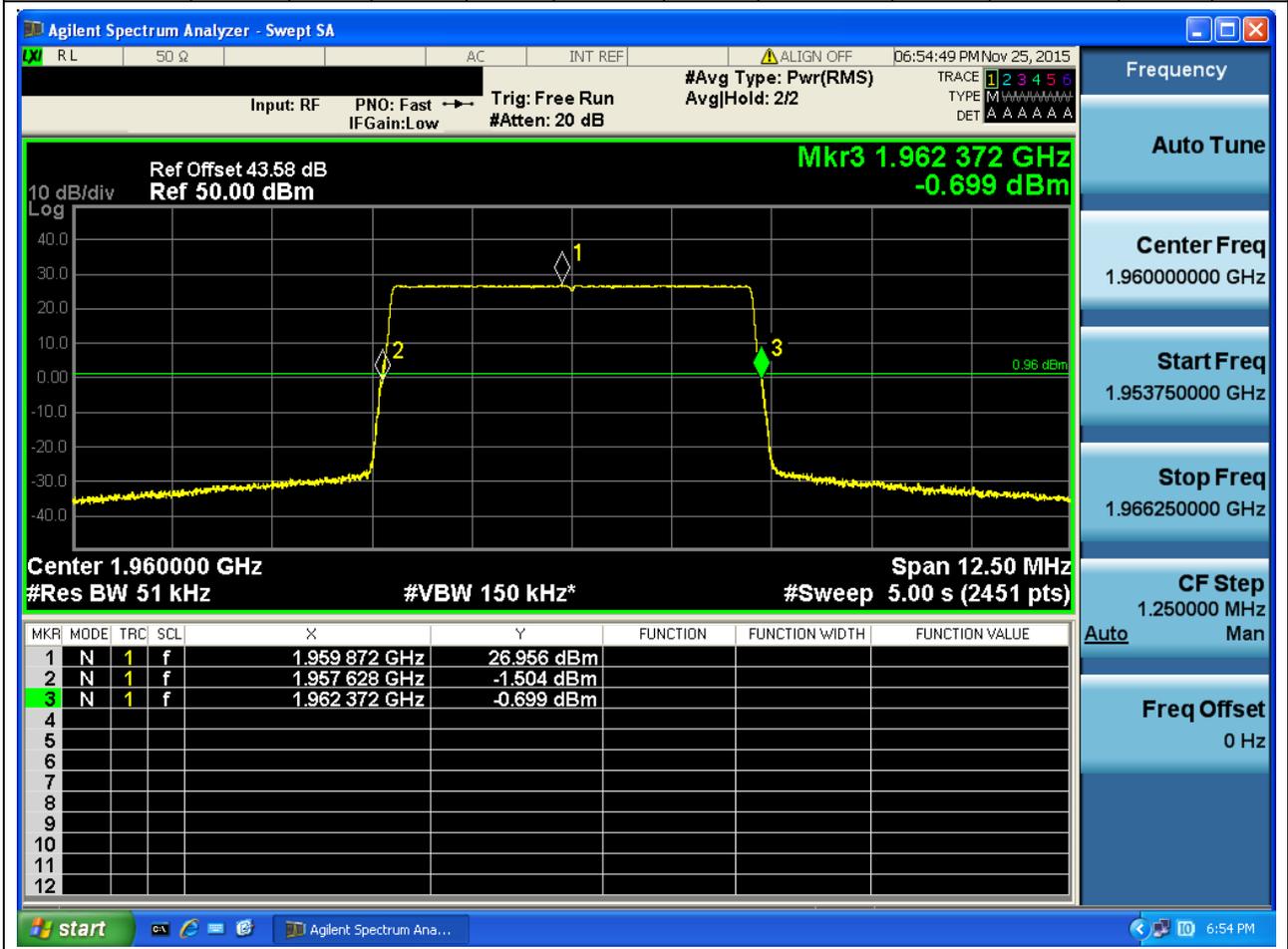
Center Frequency [MHz]	Span [MHz]	ndB [dB]	RBW [MHz]	Detector	ndB BW [MHz]	BW Limit [MHz]	Lower Freq [MHz]	Lower Limit [MHz]	Upper Freq [MHz]	Upper Limit [MHz]	Verdict
1960	12.5	26	0.051	RMS	4.74496	5	1957.62752	1930	1962.37248	1990	Pass





2.2.10 1L_5M_T

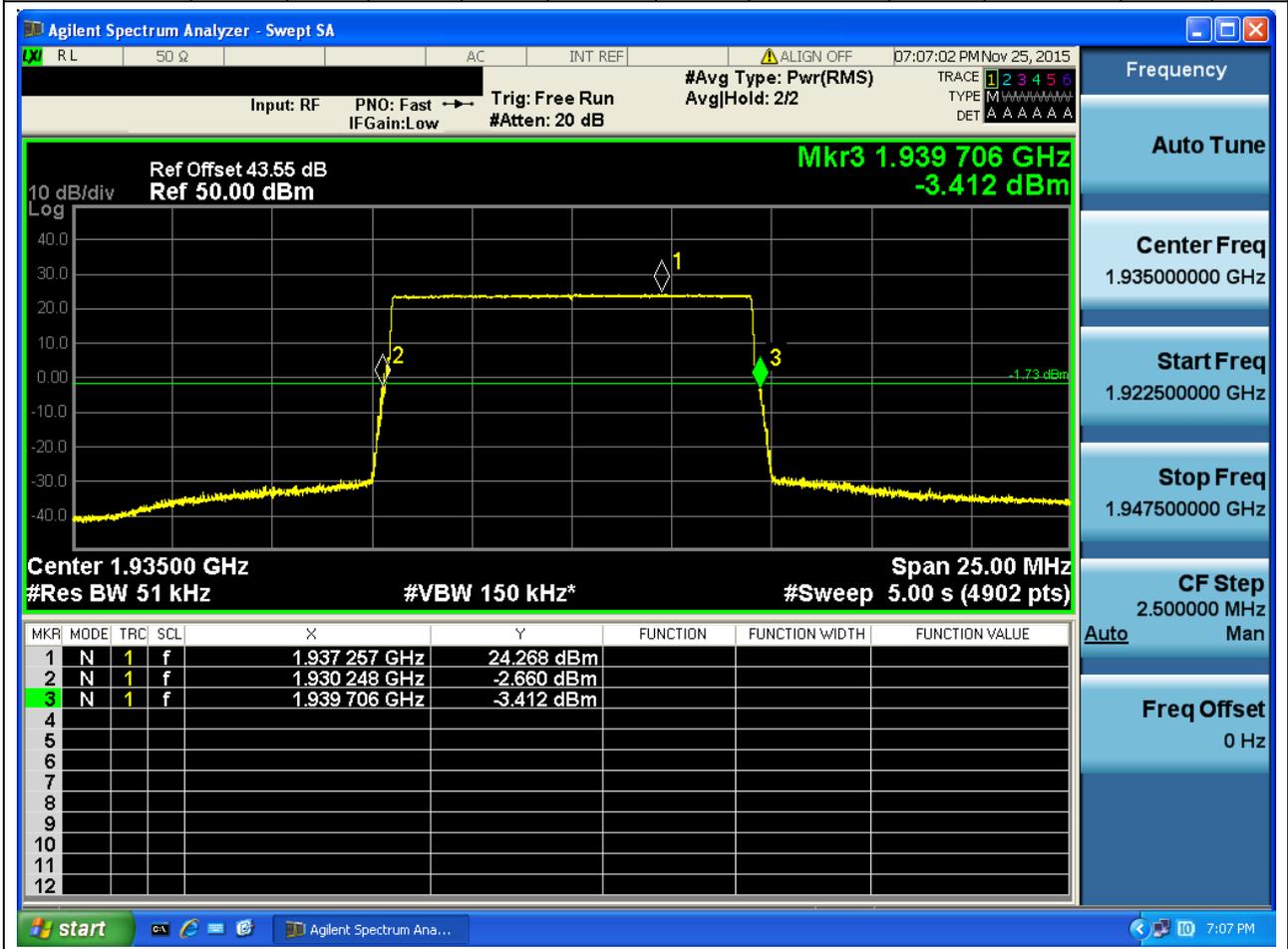
Center Frequency [MHz]	Span [MHz]	ndB [dB]	RBW [MHz]	Detector	ndB BW [MHz]	BW Limit [MHz]	Lower Freq [MHz]	Lower Limit [MHz]	Upper Freq [MHz]	Upper Limit [MHz]	Verdict
1960	12.5	26	0.051	RMS	4.74496	5	1957.62752	1930	1962.37248	1990	Pass





2.2.11 1L_10M_B

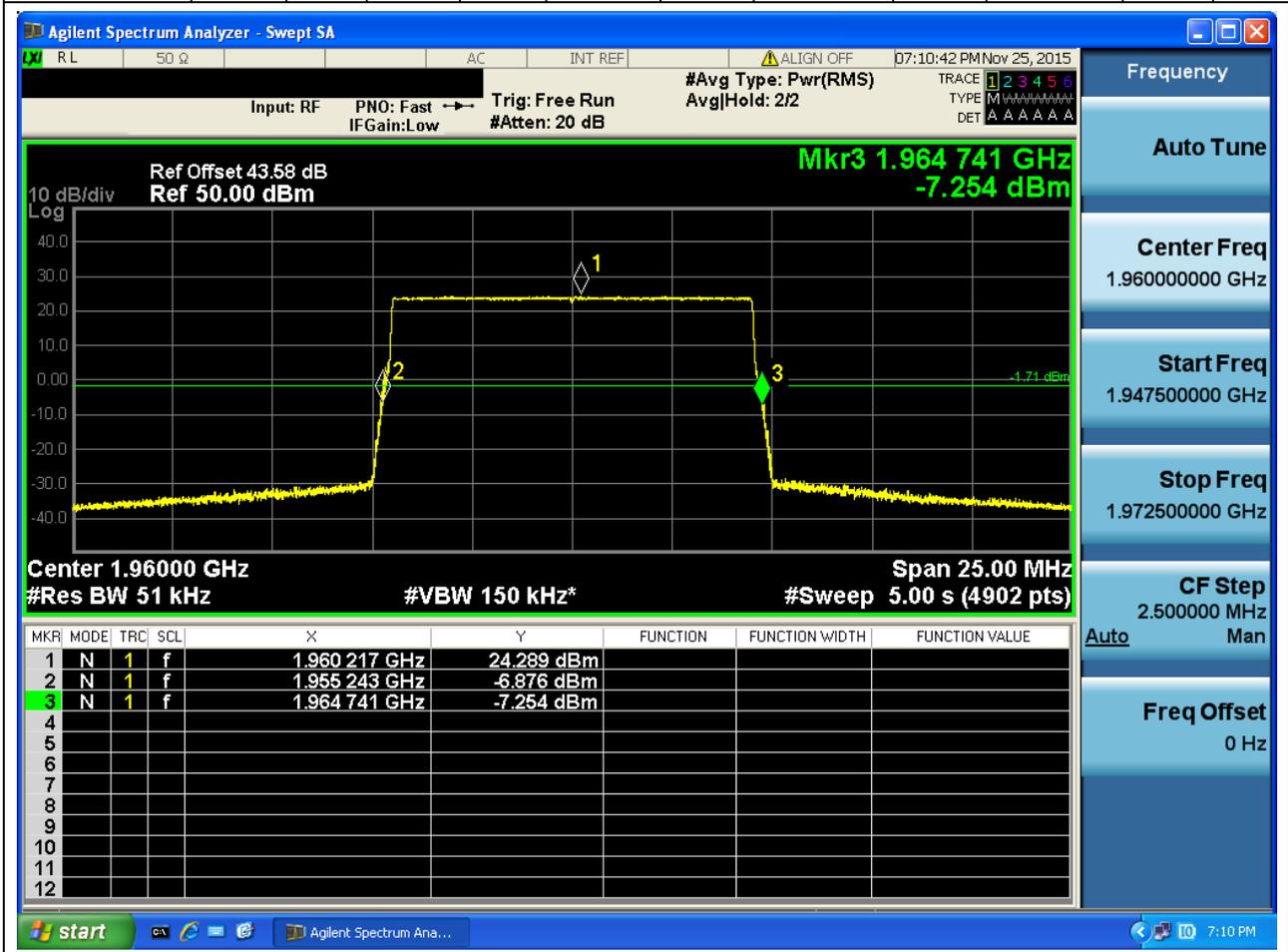
Center Frequency [MHz]	Span [MHz]	ndB [dB]	RBW [MHz]	Detector	ndB BW [MHz]	BW Limit [MHz]	Lower Freq [MHz]	Lower Limit [MHz]	Upper Freq [MHz]	Upper Limit [MHz]	Verdict
1935	25	26	0.051	RMS	9.45728	10	1930.248448	1930	1939.705728	1990	Pass





2.2.12 1L_10M_M

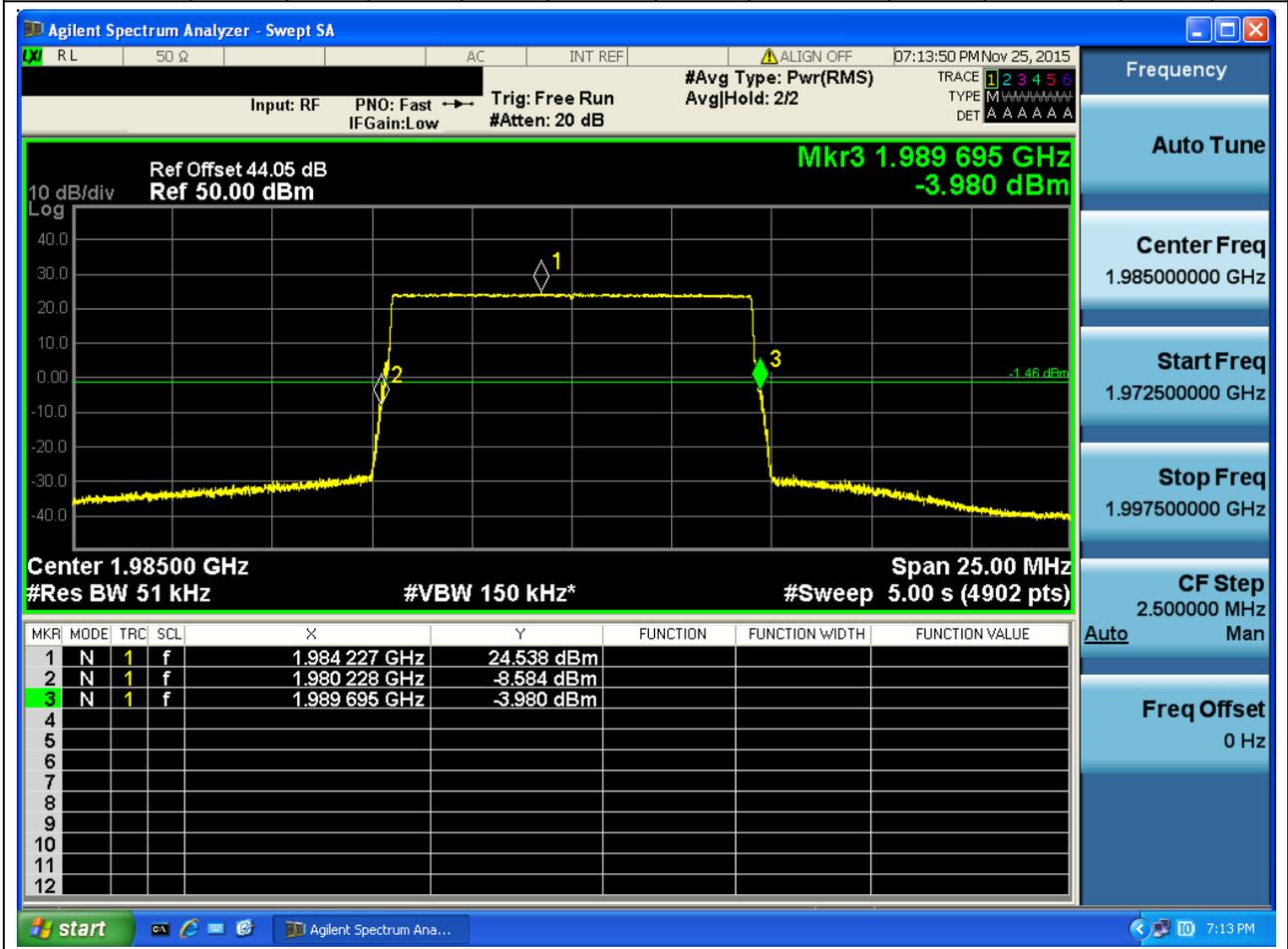
Center Frequency [MHz]	Span [MHz]	ndB [dB]	RBW [MHz]	Detector	ndB BW [MHz]	BW Limit [MHz]	Lower Freq [MHz]	Lower Limit [MHz]	Upper Freq [MHz]	Upper Limit [MHz]	Verdict
1960	25	26	0.051	RMS	9.498112	10	1955.243264	1930	1964.741376	1990	Pass





2.2.13 1L_10M_T

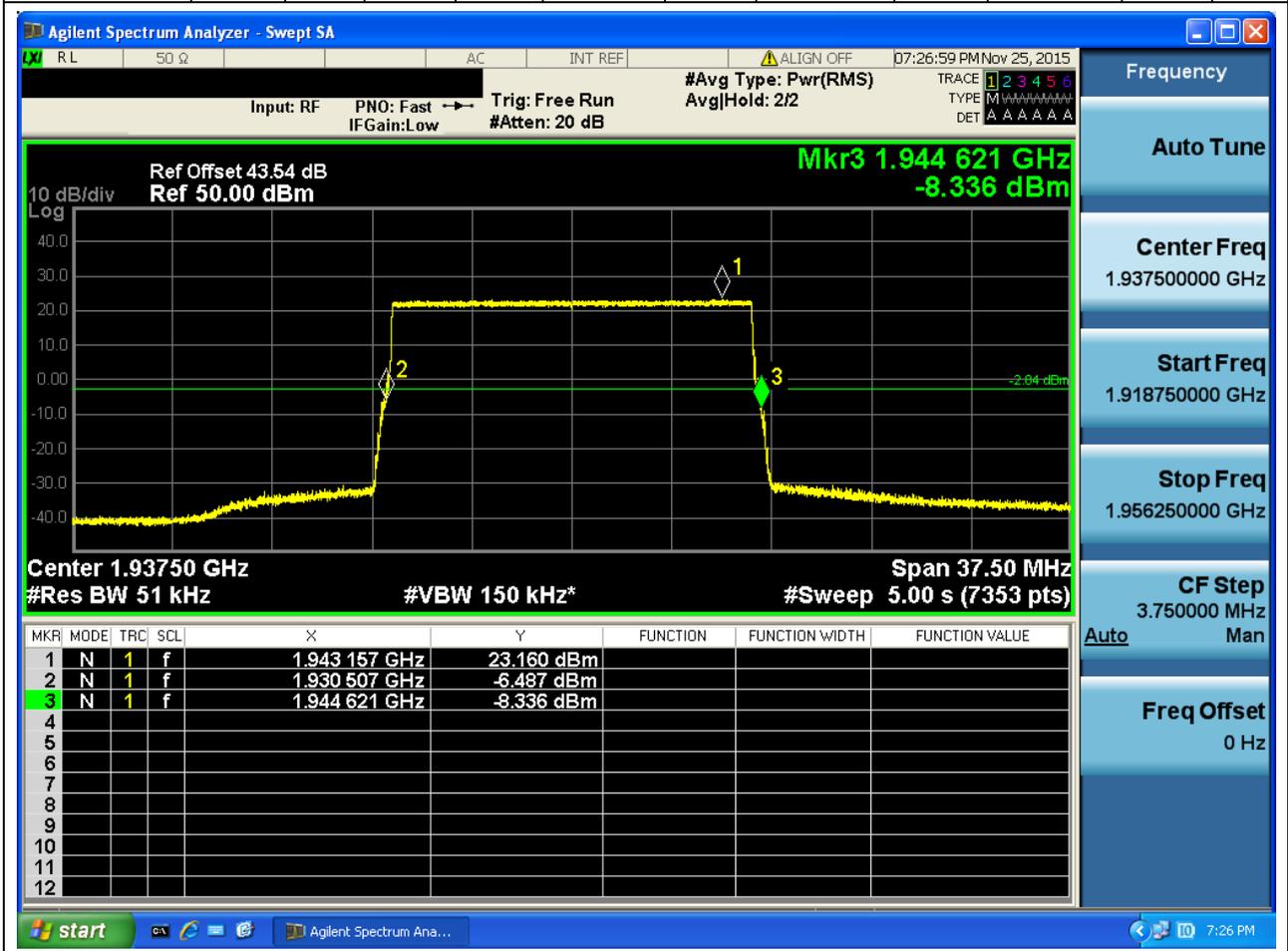
Center Frequency [MHz]	Span [MHz]	ndB [dB]	RBW [MHz]	Detector	ndB BW [MHz]	BW Limit [MHz]	Lower Freq [MHz]	Lower Limit [MHz]	Upper Freq [MHz]	Upper Limit [MHz]	Verdict
1985	25	26	0.051	RMS	9.46752	10	1980.227968	1930	1989.695488	1990	Pass





2.2.14 1L_15M_B

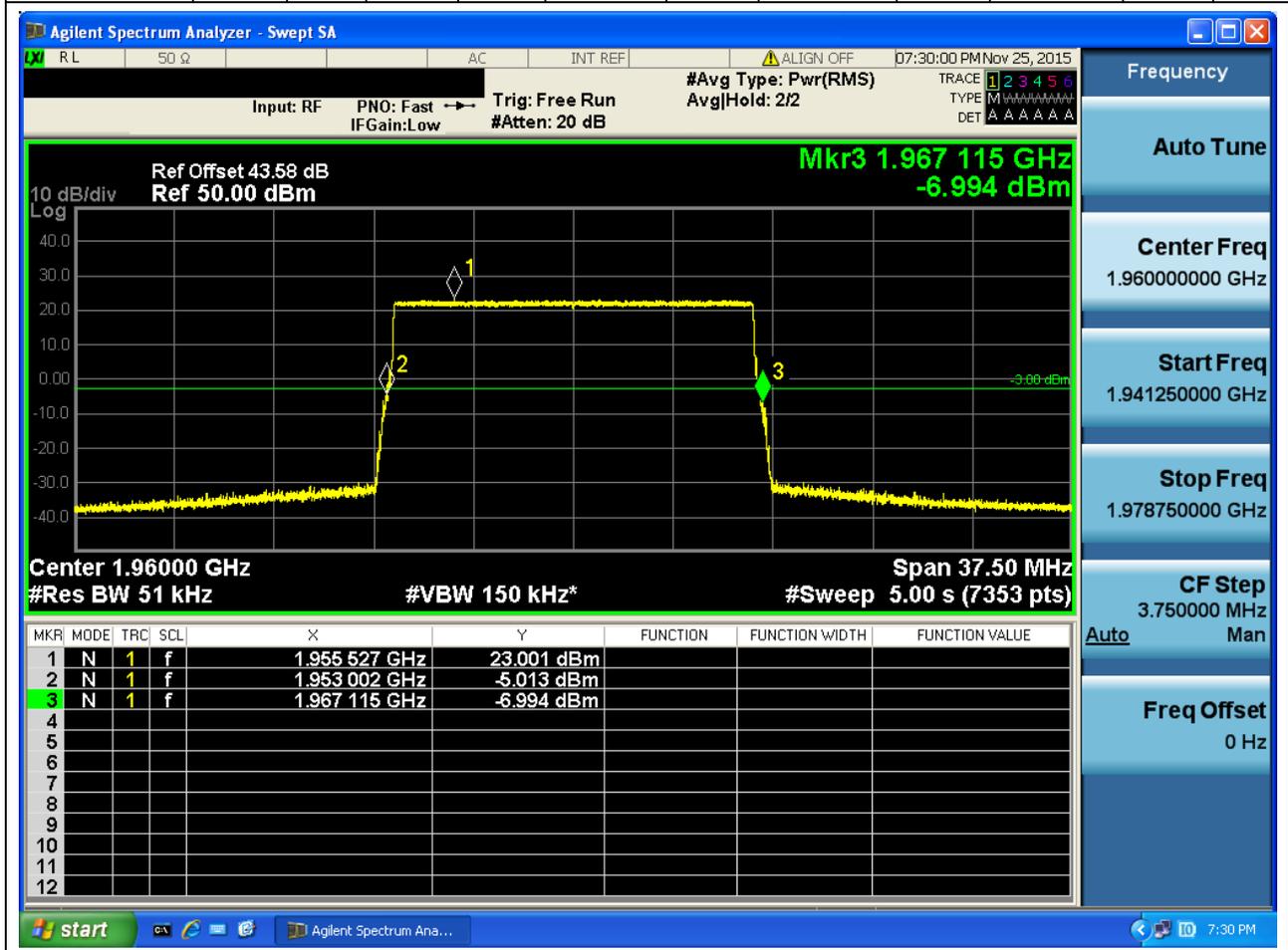
Center Frequency [MHz]	Span [MHz]	ndB [dB]	RBW [MHz]	Detector	ndB BW [MHz]	BW Limit [MHz]	Lower Freq [MHz]	Lower Limit [MHz]	Upper Freq [MHz]	Upper Limit [MHz]	Verdict
1937.5	37.5	26	0.051	RMS	14.113536	15	1930.507008	1930	1944.620544	1990	Pass





2.2.15 1L_15M_M

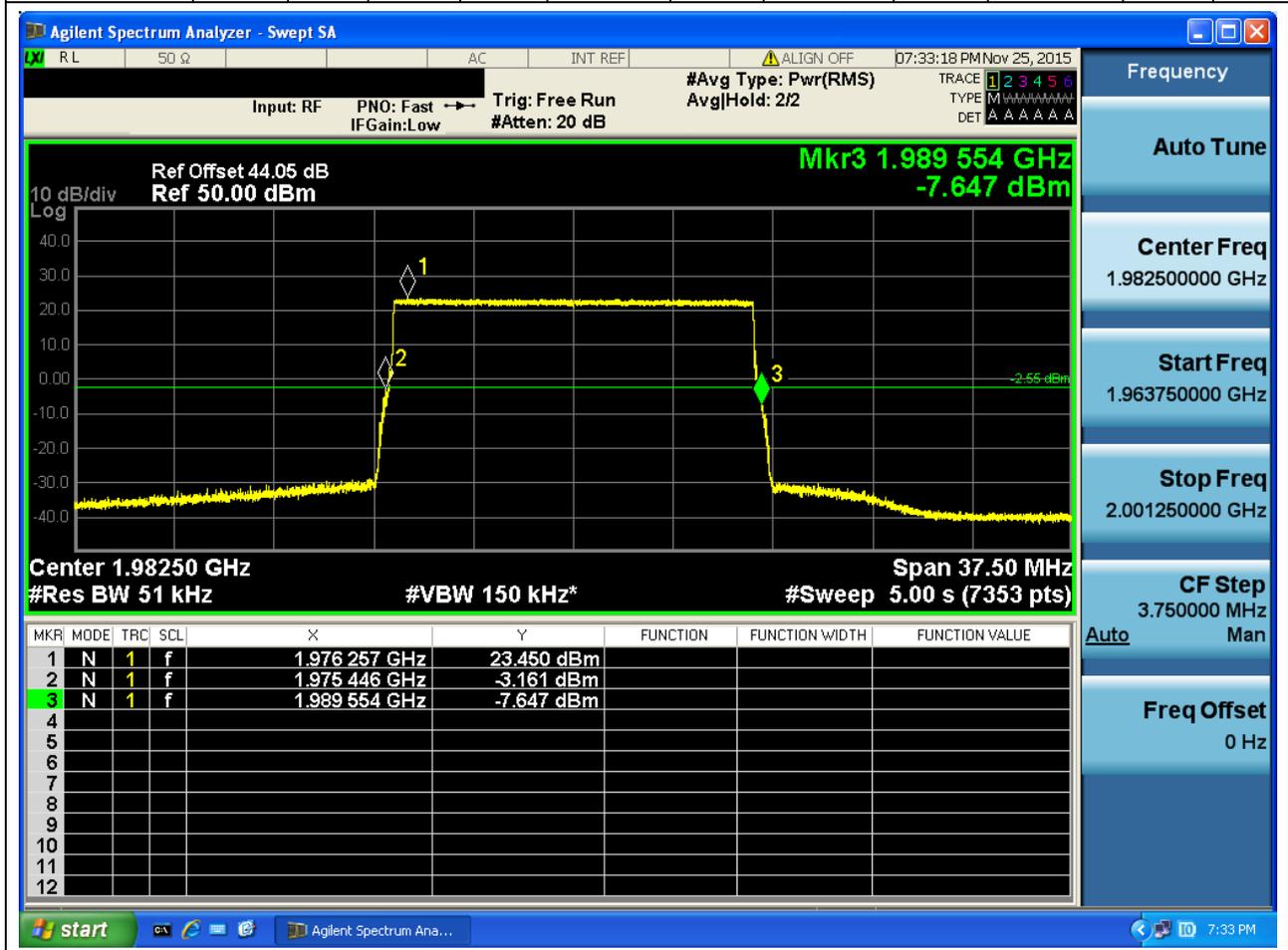
Center Frequency [MHz]	Span [MHz]	ndB [dB]	RBW [MHz]	Detector	ndB BW [MHz]	BW Limit [MHz]	Lower Freq [MHz]	Lower Limit [MHz]	Upper Freq [MHz]	Upper Limit [MHz]	Verdict
1960	37.5	26	0.051	RMS	14.113536	15	1953.001856	1930	1967.115392	1990	Pass





2.2.16 1L_15M_T

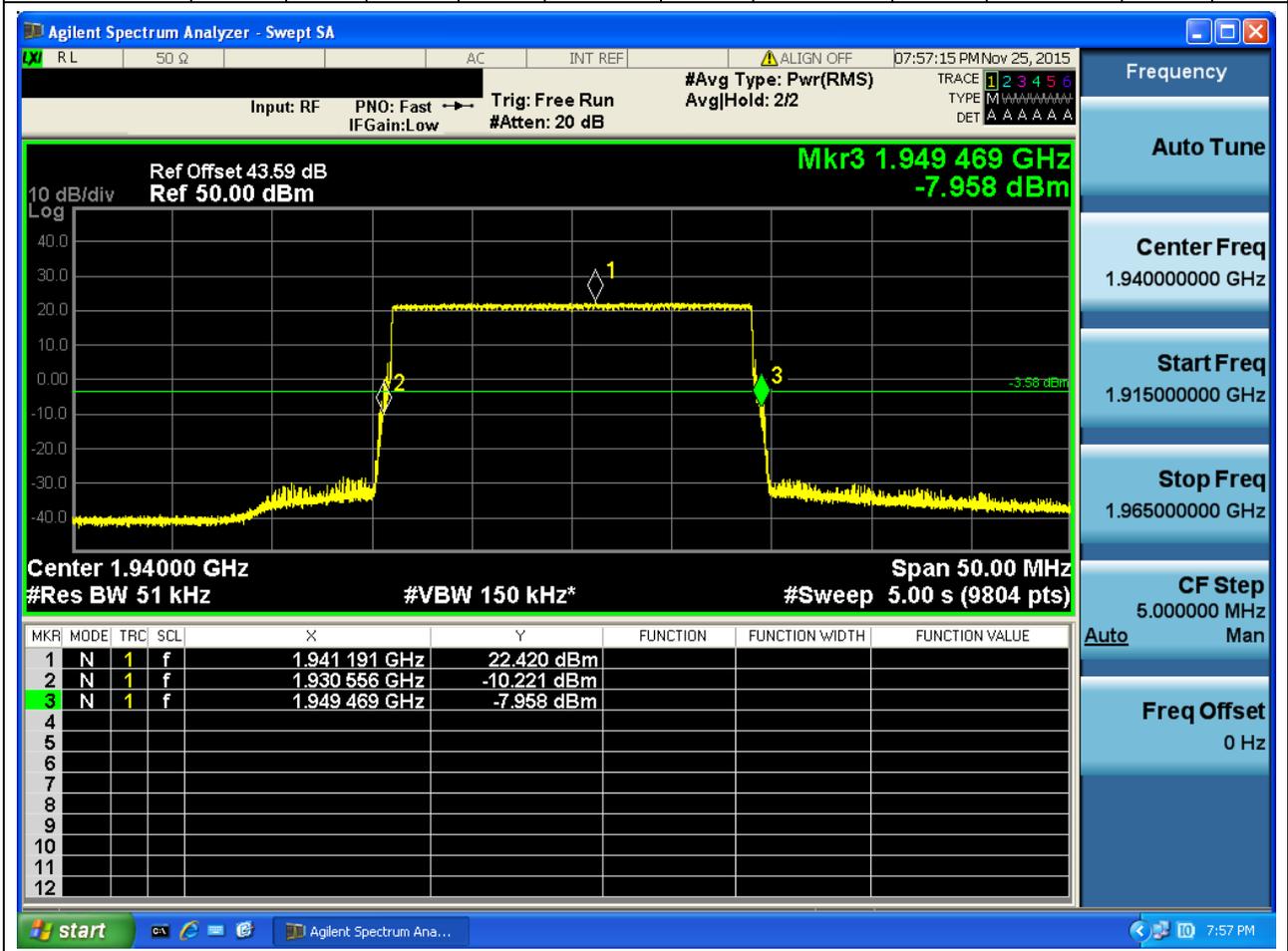
Center Frequency [MHz]	Span [MHz]	ndB [dB]	RBW [MHz]	Detector	ndB BW [MHz]	BW Limit [MHz]	Lower Freq [MHz]	Lower Limit [MHz]	Upper Freq [MHz]	Upper Limit [MHz]	Verdict
1982.5	37.5	26	0.051	RMS	14.108416	15	1975.44576	1930	1989.554176	1990	Pass





2.2.17 1L_20M_B

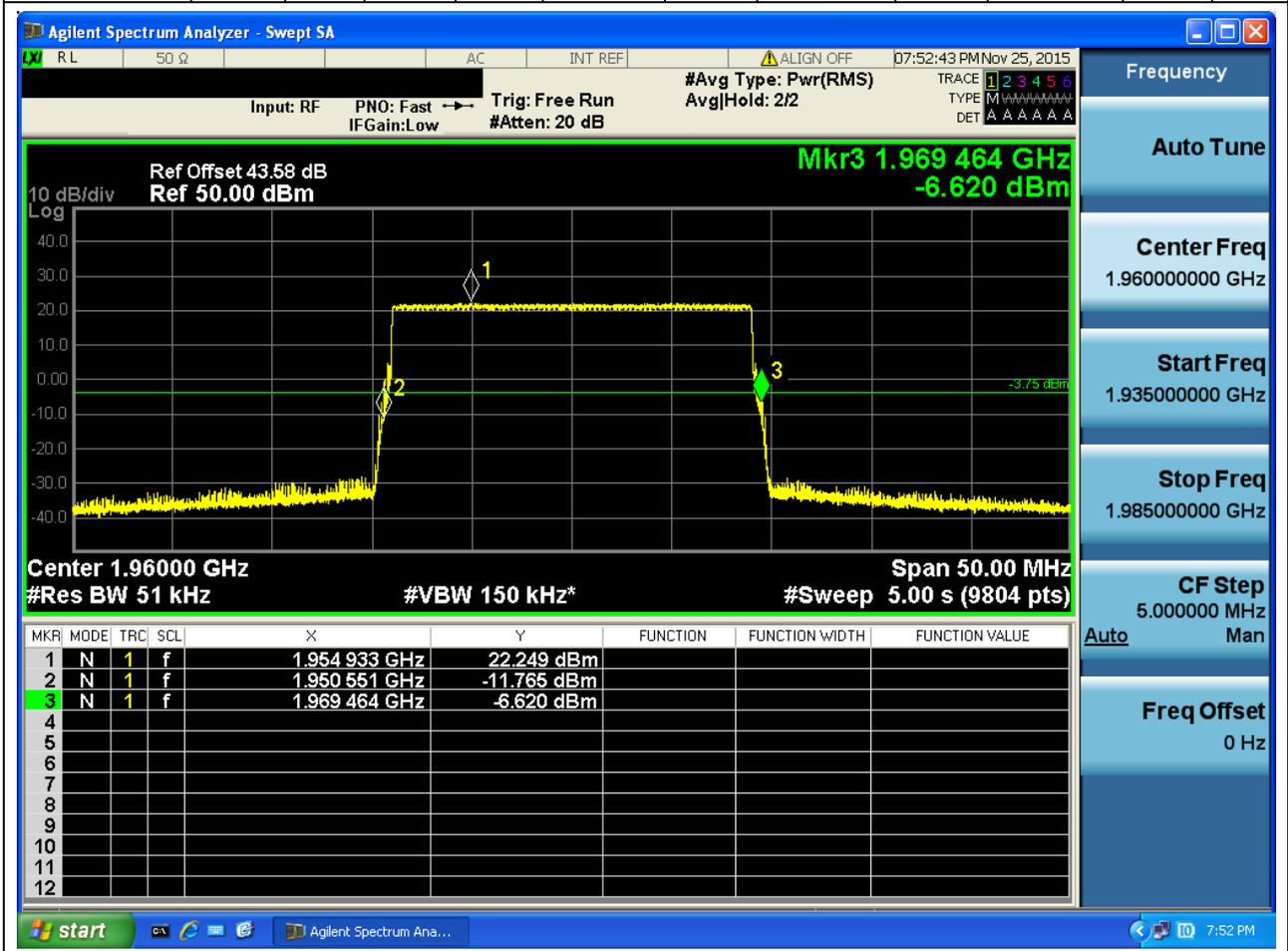
Center Frequency [MHz]	Span [MHz]	ndB [dB]	RBW [MHz]	Detector	ndB BW [MHz]	BW Limit [MHz]	Lower Freq [MHz]	Lower Limit [MHz]	Upper Freq [MHz]	Upper Limit [MHz]	Verdict
1940	50	26	0.051	RMS	18.91264	20	1930.556416	1930	1949.469056	1990	Pass





2.2.18 1L_20M_M

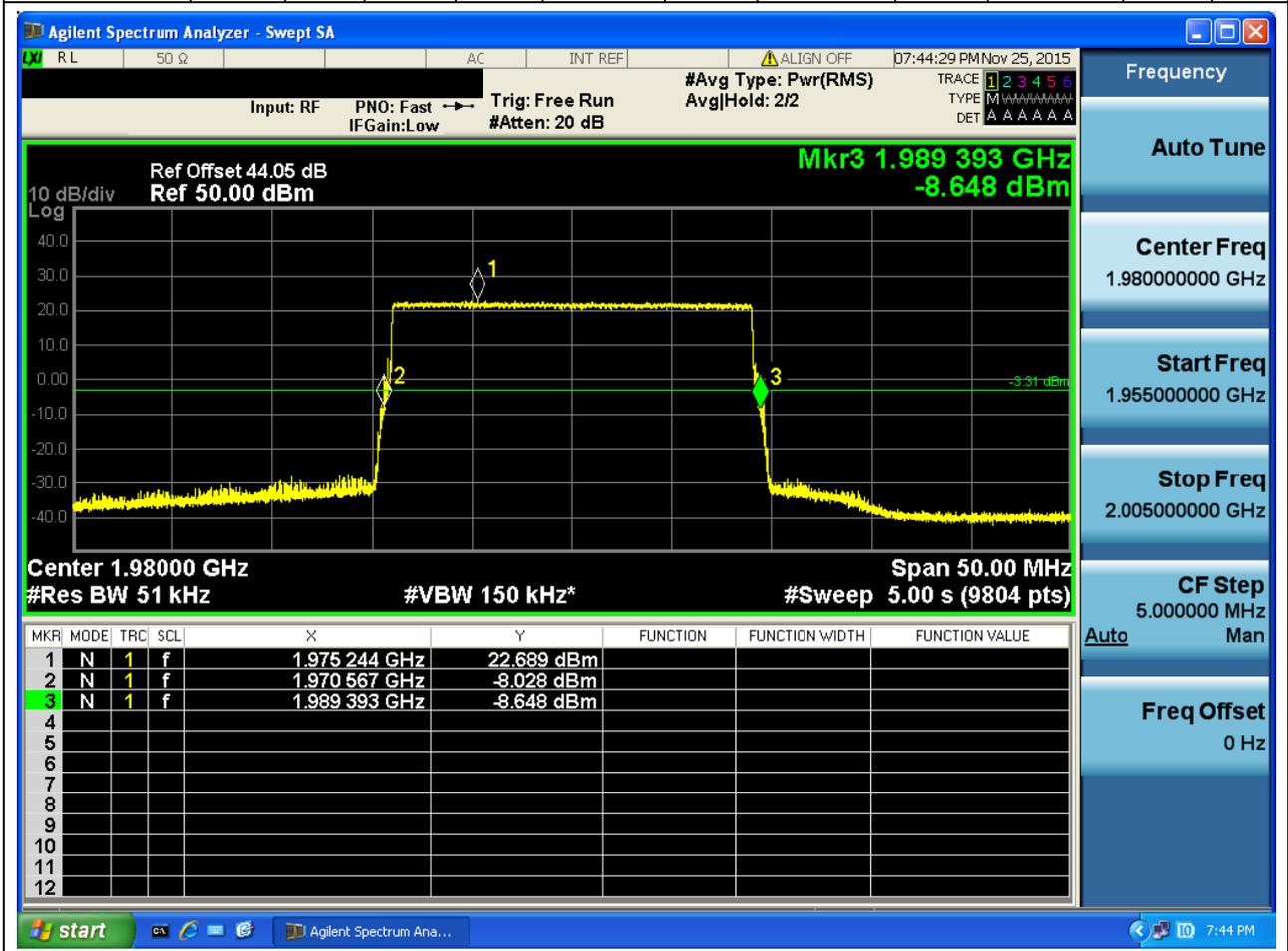
Center Frequency [MHz]	Span [MHz]	ndB [dB]	RBW [MHz]	Detector	ndB BW [MHz]	BW Limit [MHz]	Lower Freq [MHz]	Lower Limit [MHz]	Upper Freq [MHz]	Upper Limit [MHz]	Verdict
1960	50	26	0.051	RMS	18.912512	20	1950.551424	1930	1969.463936	1990	Pass





2.2.19 1L_20M_T

Center Frequency [MHz]	Span [MHz]	ndB [dB]	RBW [MHz]	Detector	ndB BW [MHz]	BW Limit [MHz]	Lower Freq [MHz]	Lower Limit [MHz]	Upper Freq [MHz]	Upper Limit [MHz]	Verdict
1980	50	26	0.051	RMS	18.825856	20	1970.566656	1930	1989.392512	1990	Pass





Appendix C: Band Edges Compliance / Emission Mask



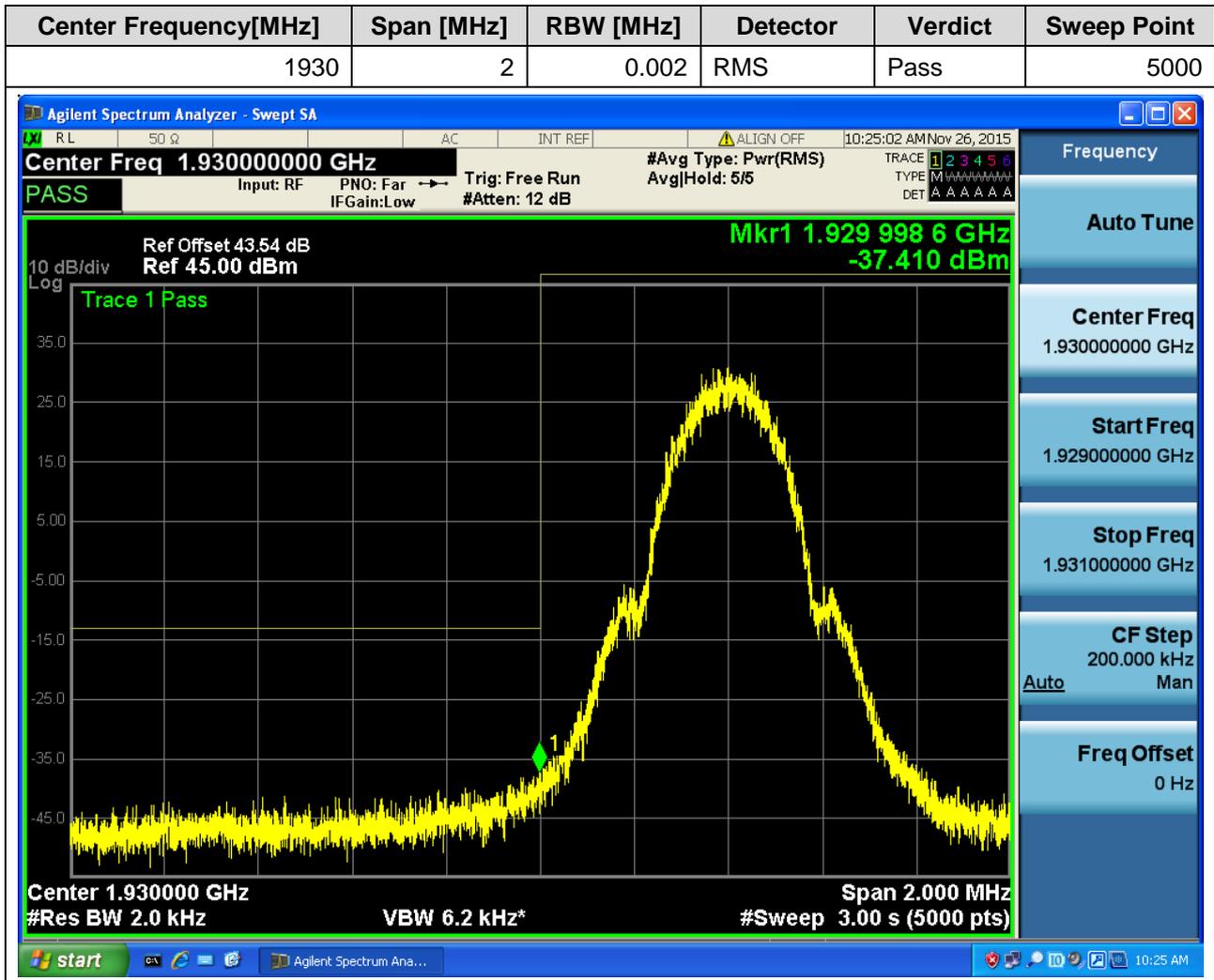
1 Result Table

NOTE: If applicable, the offset of measurement filter -3dB point may be considered when identifying the maximum emission for e.g. the CDMA, WCDMA, WiMAX, LTE systems.

EUT Conf.	Maximum Emission [dBm]	Verdict
1U_TM1_B	<-13	Pass
1U_TM1_T	<-13	Pass
2U_TM1_B	<-13	Pass
2U_TM1_T	<-13	Pass
1L_5M_TM1_B	<-13	Pass
1L_5M_TM1_T	<-13	Pass
1L_10M_TM1_B	<-13	Pass
1L_10M_TM1_T	<-13	Pass
1L_15M_TM1_B	<-13	Pass
1L_15M_TM1_T	<-13	Pass
1L_20M_TM1_B	<-13	Pass
1L_20M_TM1_T	<-13	Pass
2L_5M_TM1_B	<-13	Pass
2L_5M_TM1_T	<-13	Pass
2G2U_TM1_B	<-13	Pass
2G2U_TM1_T	<-13	Pass
2G2L_TM1_B	<-13	Pass
2G2L_TM1_T	<-13	Pass
1G_TM1_B	<-13	Pass
1G_TM1_T	<-13	Pass
1G_TM2_B	<-13	Pass
1G_TM2_T	<-13	Pass
1U2L_TM1_B	<-13	Pass
1U2L_TM1_T	<-13	Pass

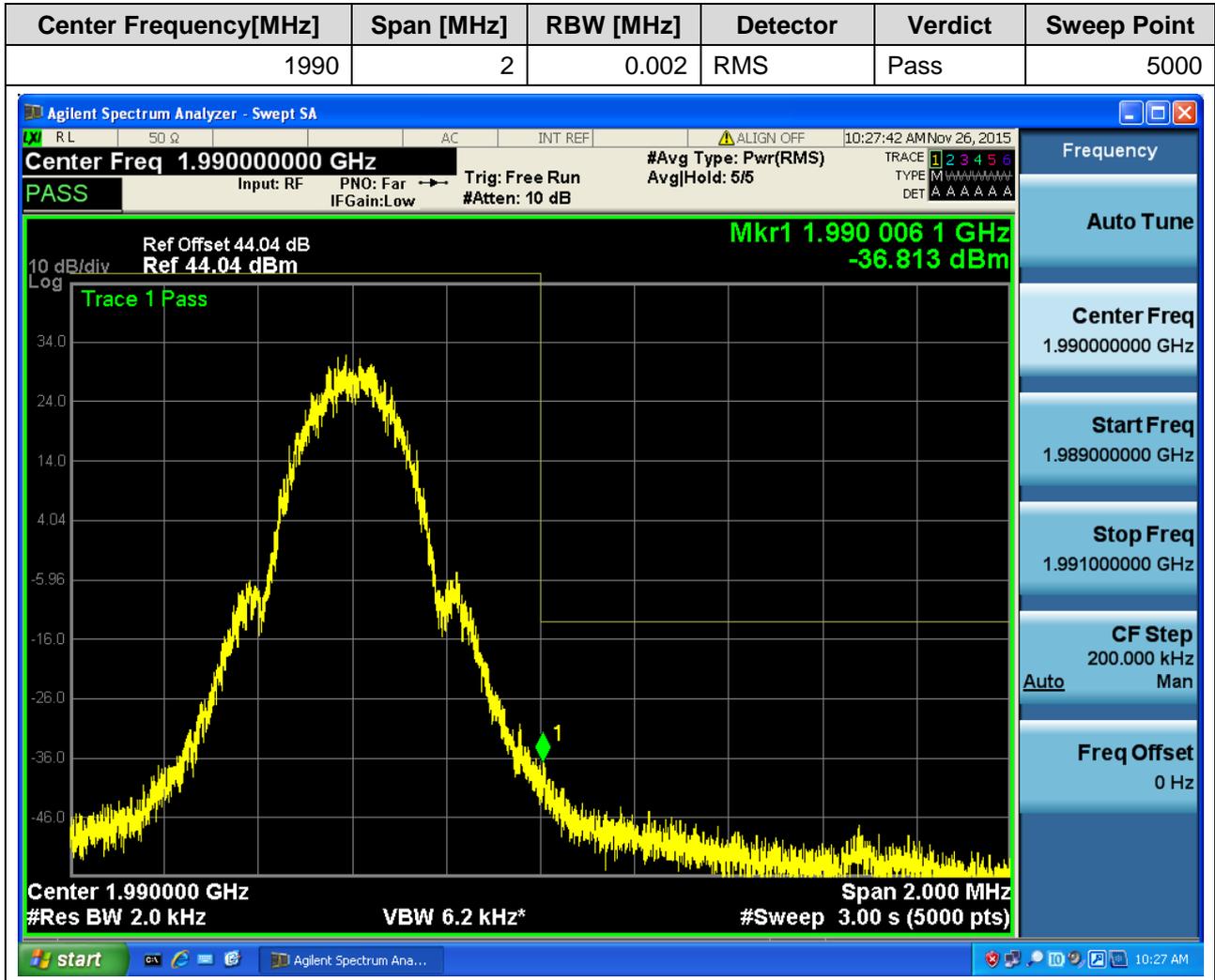
2 Test Plot

2.1 1G_TM1_B





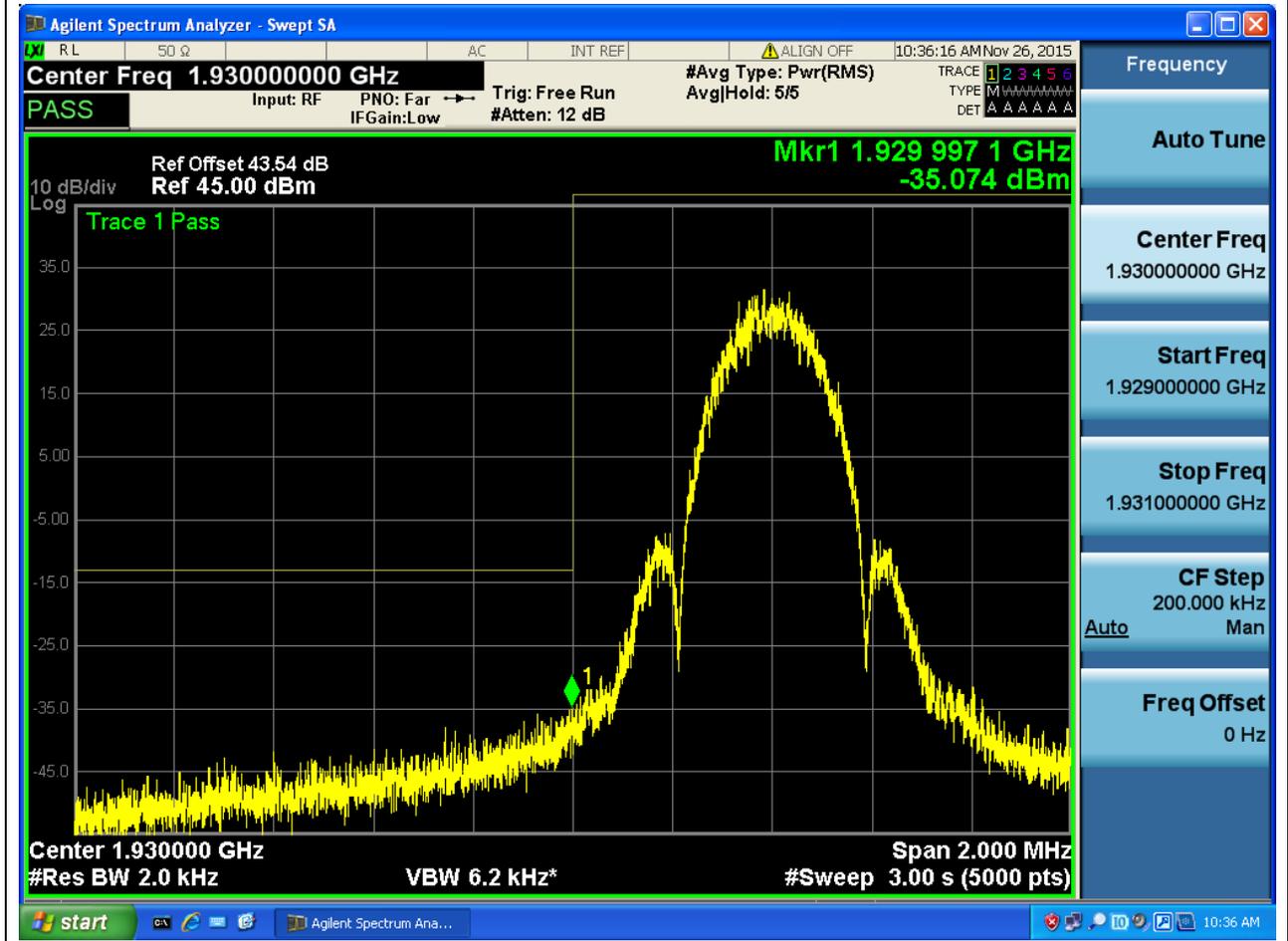
2.2 1G_TM1_T





2.3 1G_TM2_B

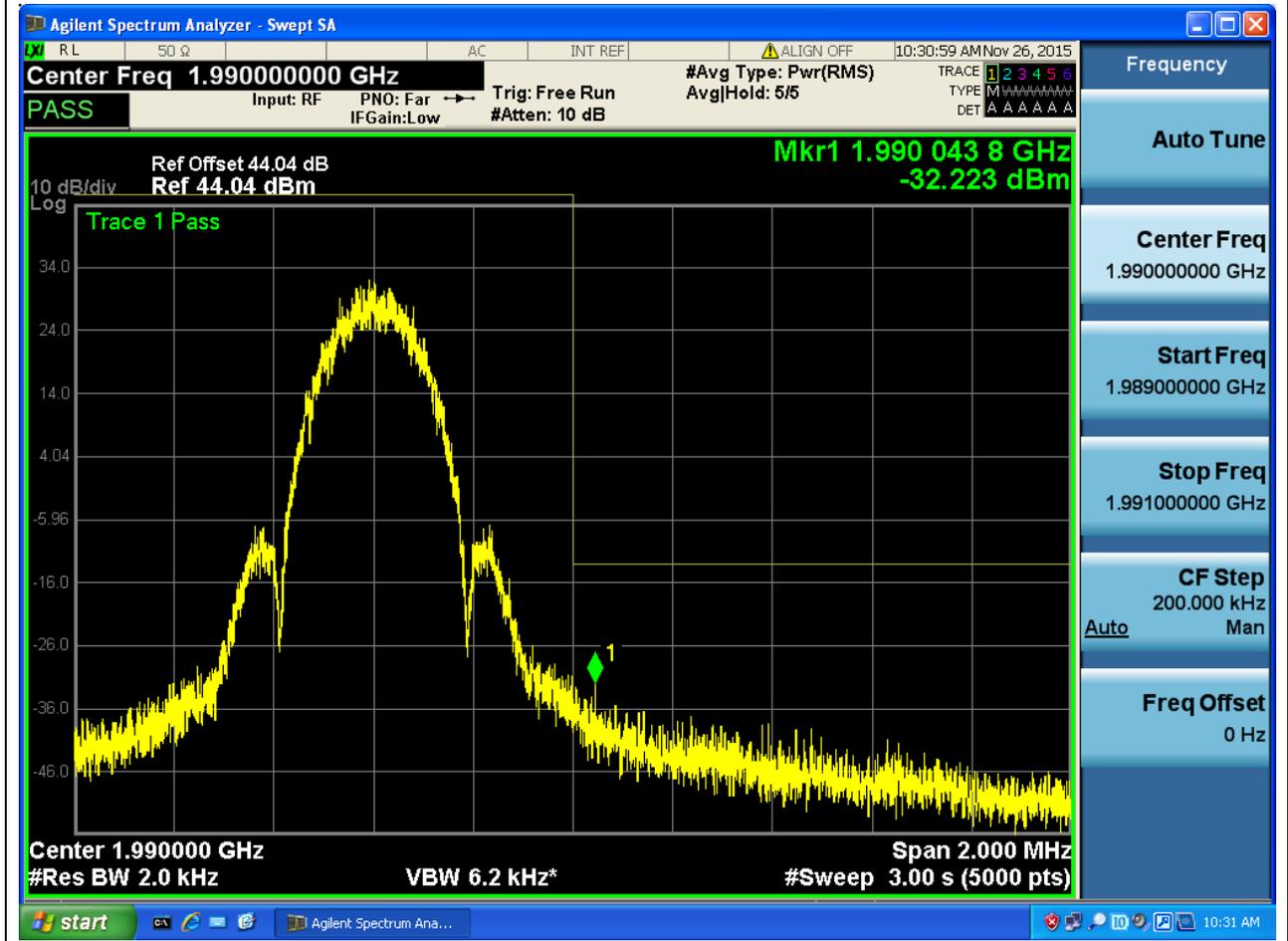
Center Frequency[MHz]	Span [MHz]	RBW [MHz]	Detector	Verdict	Sweep Point
1930	2	0.002	RMS	Pass	5000





2.4 1G_TM2_T

Center Frequency[MHz]	Span [MHz]	RBW [MHz]	Detector	Verdict	Sweep Point
1990	2	0.002	RMS	Pass	5000





2.5 1U_TM1_B

Center Frequency[MHz]	Span [MHz]	RBW [MHz]	Detector	Verdict	Sweep Point
1930	2	0.051	RMS	Pass	1001





2.6 1U_TM1_T

Center Frequency[MHz]	Span [MHz]	RBW [MHz]	Detector	Verdict	Sweep Point
1990	2	0.051	RMS	Pass	1001





2.7 2U_TM1_B

Center Frequency[MHz]	Span [MHz]	RBW [MHz]	Detector	Verdict	Sweep Point
1930	2	0.051	RMS	Pass	1001





2.8 2U_TM1_T

Center Frequency[MHz]	Span [MHz]	RBW [MHz]	Detector	Verdict	Sweep Point
1990	2	0.051	RMS	Pass	1001





2.9 1L_5M_TM1_B





2.10 1L_5M_TM1_T

Center Frequency[MHz]	Span [MHz]	RBW [MHz]	Detector	Verdict	Sweep Point
1990	2	0.051	RMS	Pass	1001





2.11 1L_10M_TM1_B

Center Frequency[MHz]	Span [MHz]	RBW [MHz]	Detector	Verdict	Sweep Point
1930	2	0.1	RMS	Pass	1001





2.12 1L_10M_TM1_T





2.13 1L_15M_TM1_B





2.14 1L_15M_TM1_T

Center Frequency[MHz]	Span [MHz]	RBW [MHz]	Detector	Verdict	Sweep Point
1990	2	0.15	RMS	Pass	1001





2.15 1L_20M_TM1_B

Center Frequency[MHz]	Span [MHz]	RBW [MHz]	Detector	Verdict	Sweep Point
1930	2	0.2	RMS	Pass	1001





2.16 1L_20M_TM1_T





2.17 2L_5M_TM1_B

Center Frequency[MHz]	Span [MHz]	RBW [MHz]	Detector	Verdict	Sweep Point
1930	2	0.051	RMS	Pass	1001





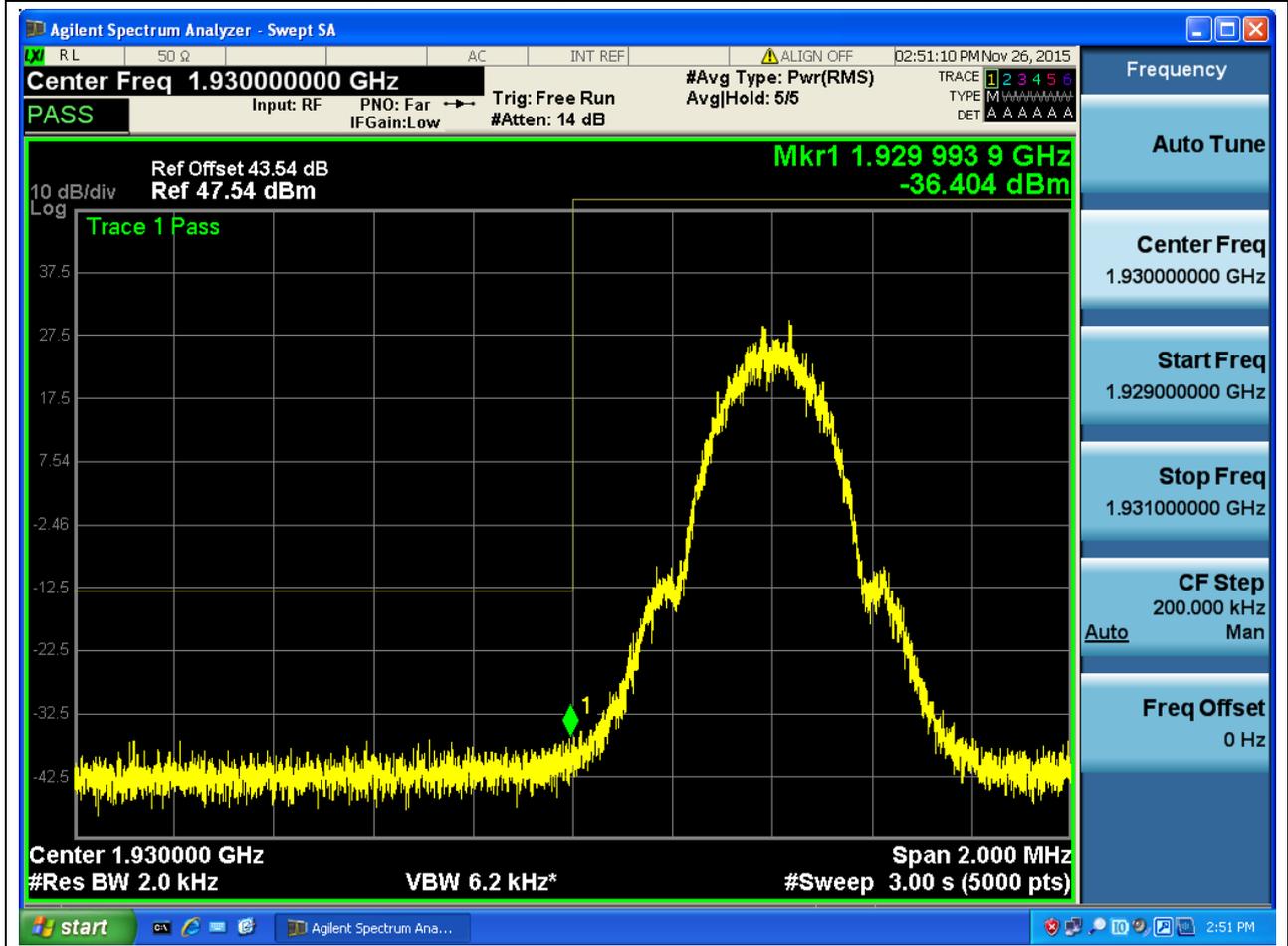
2.18 2L_5M_TM1_T





2.19 2G2U_TM1_B

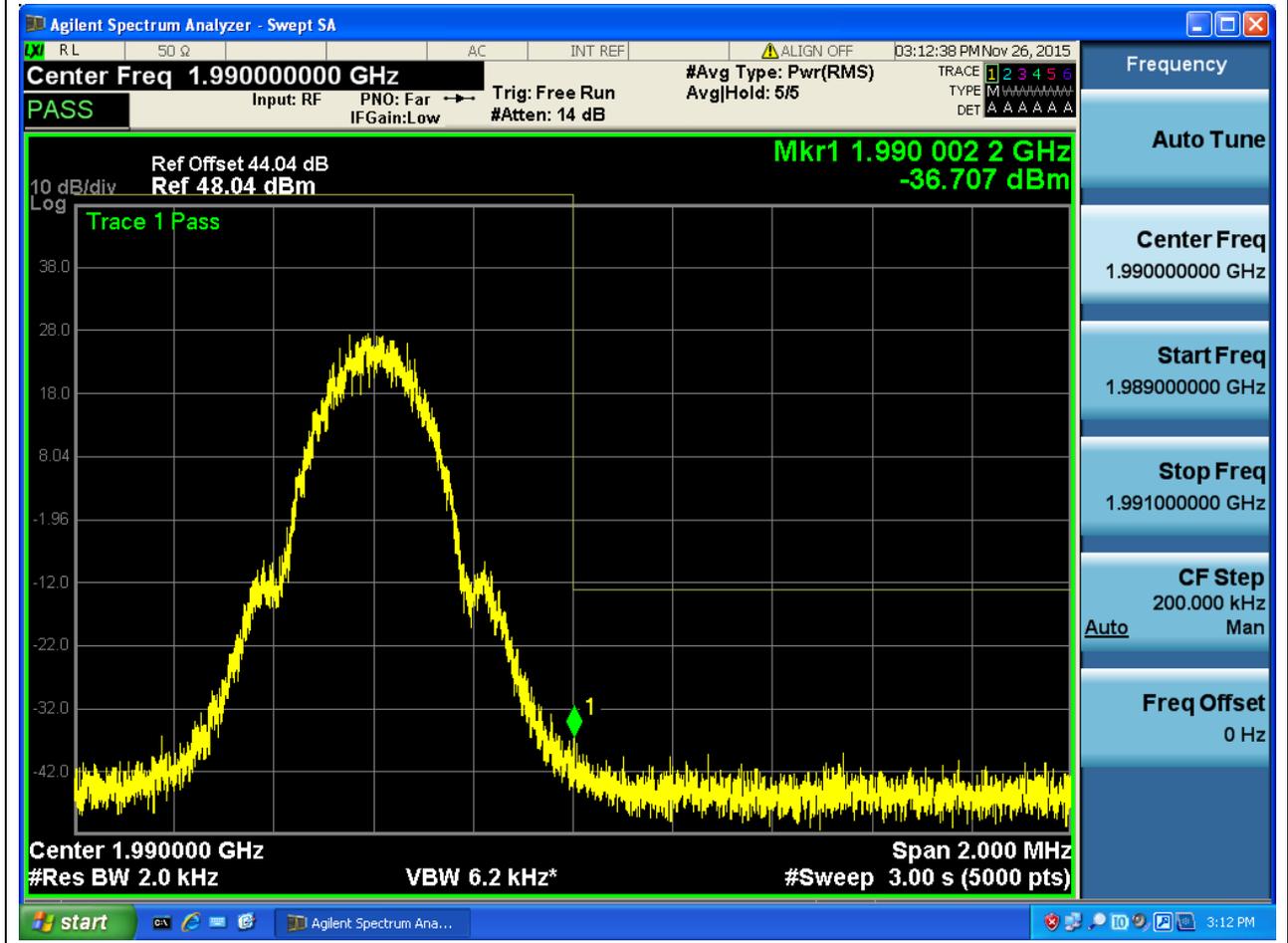
Center Frequency[MHz]	Span [MHz]	RBW [MHz]	Detector	Verdict	Sweep Point
1930	2	0.002	RMS	Pass	5000





2.20 2G2U_TM1_T

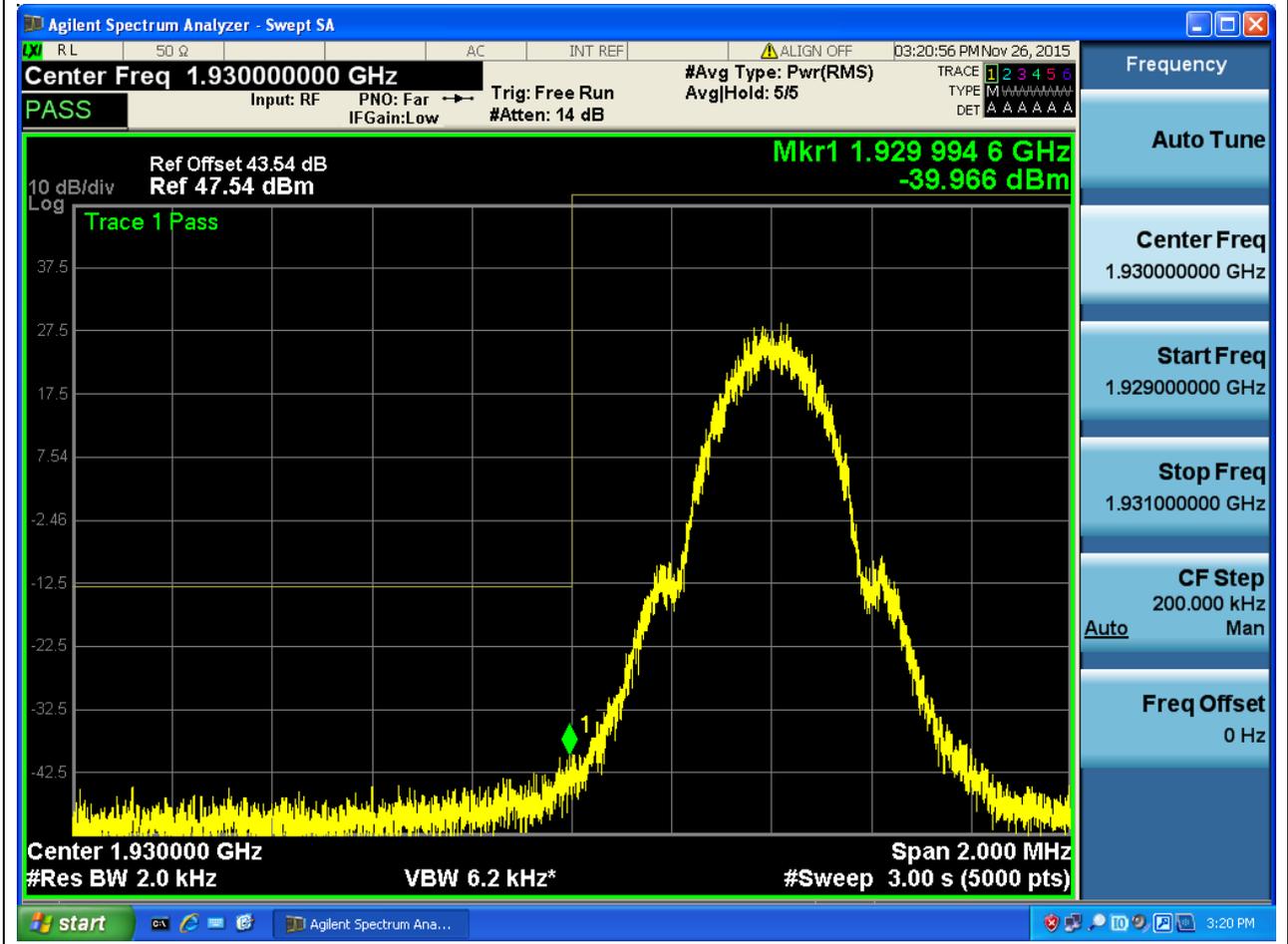
Center Frequency[MHz]	Span [MHz]	RBW [MHz]	Detector	Verdict	Sweep Point
1990	2	0.002	RMS	Pass	5000





2.21 2G2L_TM1_B

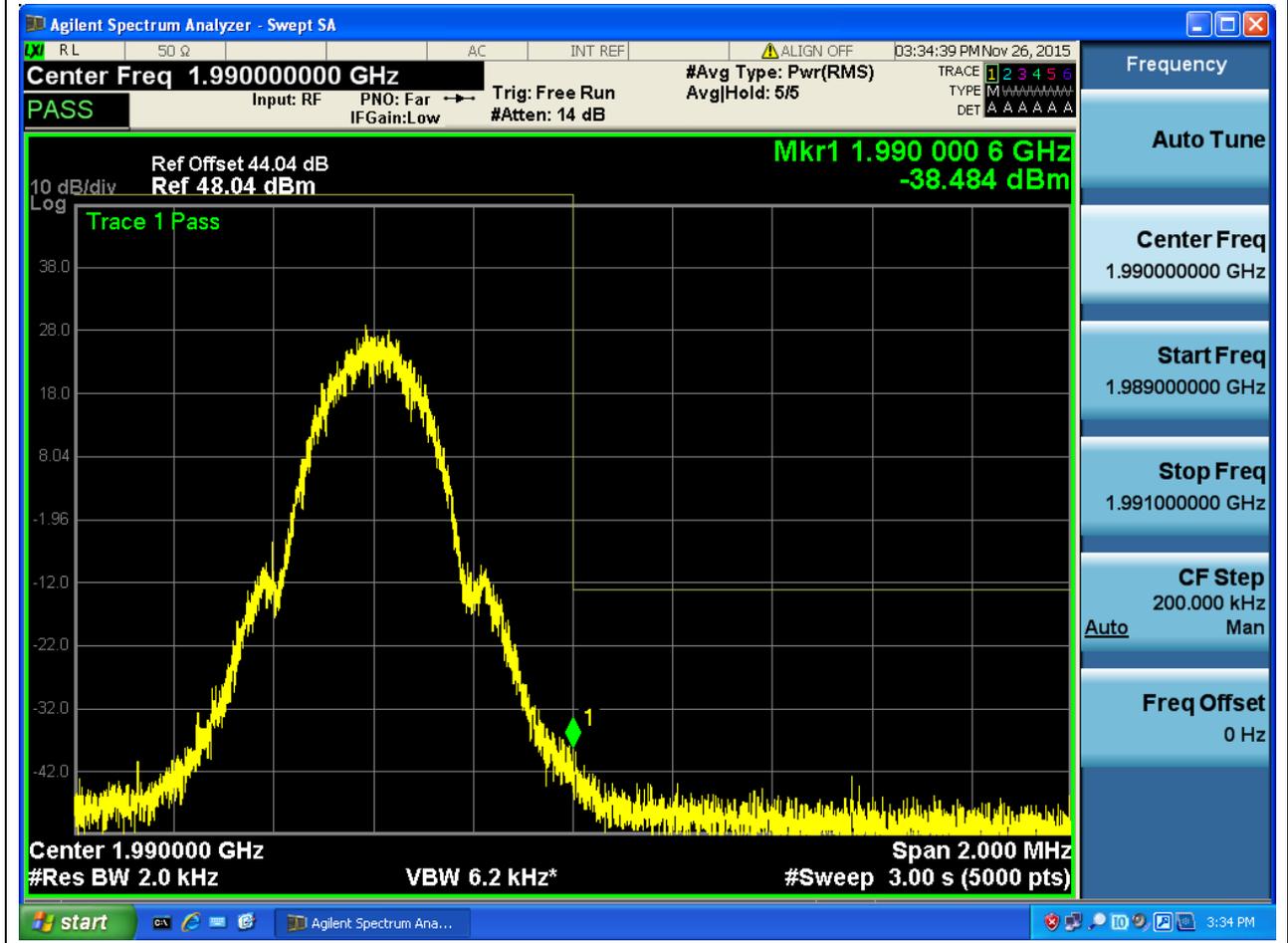
Center Frequency[MHz]	Span [MHz]	RBW [MHz]	Detector	Verdict	Sweep Point
1930	2	0.002	RMS	Pass	5000





2.22 2G2L_TM1_T

Center Frequency[MHz]	Span [MHz]	RBW [MHz]	Detector	Verdict	Sweep Point
1990	2	0.002	RMS	Pass	5000





2.23 1U2L_TM1_B

Center Frequency[MHz]	Span [MHz]	RBW [MHz]	Detector	Verdict	Sweep Point
1930	2	0.051	RMS	Pass	1001





2.24 1U2L_TM1_T

Center Frequency[MHz]	Span [MHz]	RBW [MHz]	Detector	Verdict	Sweep Point
1990	2	0.051	RMS	Pass	1001





Appendix D: Spurious Emission at Antenna Terminals



1 Result Table

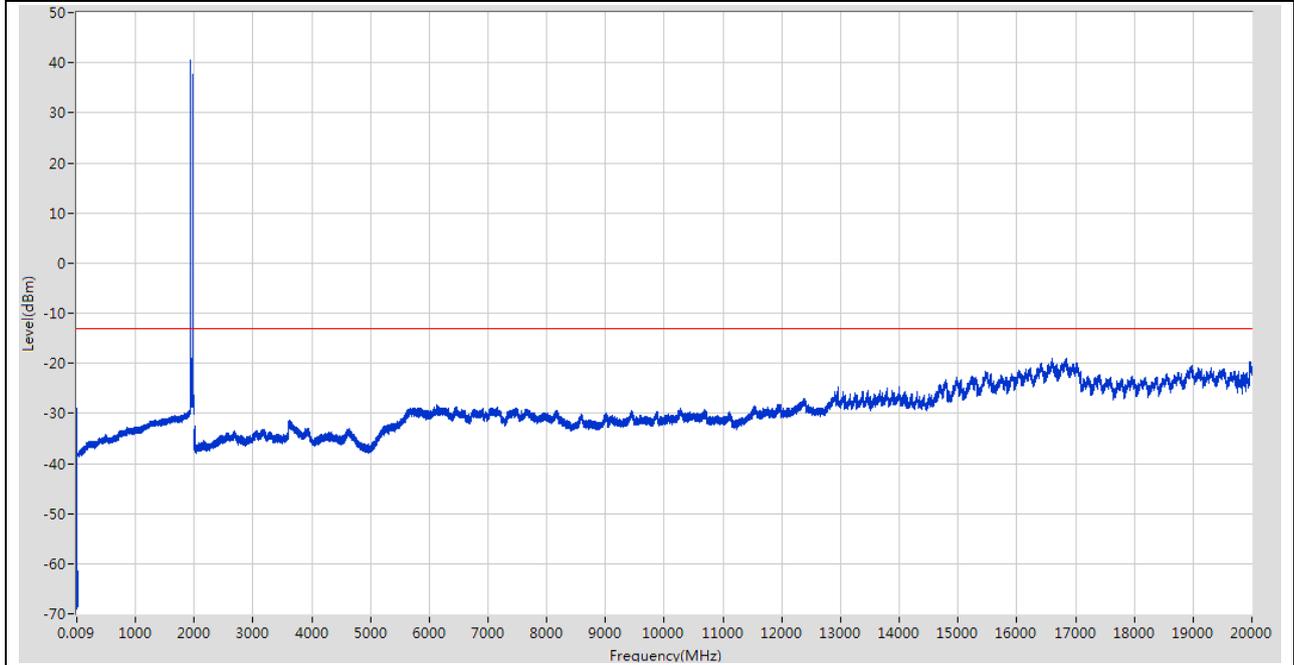
EUT Conf.	Maximum Emission [dBm]	Verdict
1U_TM1_B	<-13	Pass
1U_TM1_T	<-13	Pass
2U_TM1_B	<-13	Pass
2U_TM1_T	<-13	Pass
1L_5M_TM1_B	<-13	Pass
1L_5M_TM1_T	<-13	Pass
1L_10M_TM1_B	<-13	Pass
1L_10M_TM1_T	<-13	Pass
1L_15M_TM1_B	<-13	Pass
1L_15M_TM1_T	<-13	Pass
1L_20M_TM1_B	<-13	Pass
1L_20M_TM1_T	<-13	Pass
2L_5M_TM1_B	<-13	Pass
2L_5M_TM1_T	<-13	Pass
2G2U_TM1_B	<-13	Pass
2G2U_TM1_T	<-13	Pass
2G2L_TM1_B	<-13	Pass
2G2L_TM1_T	<-13	Pass
1G_TM1_B	<-13	Pass
1G_TM1_T	<-13	Pass
1U2L_TM1_B	<-13	Pass
1U2L_TM1_T	<-13	Pass



2 Test Plot

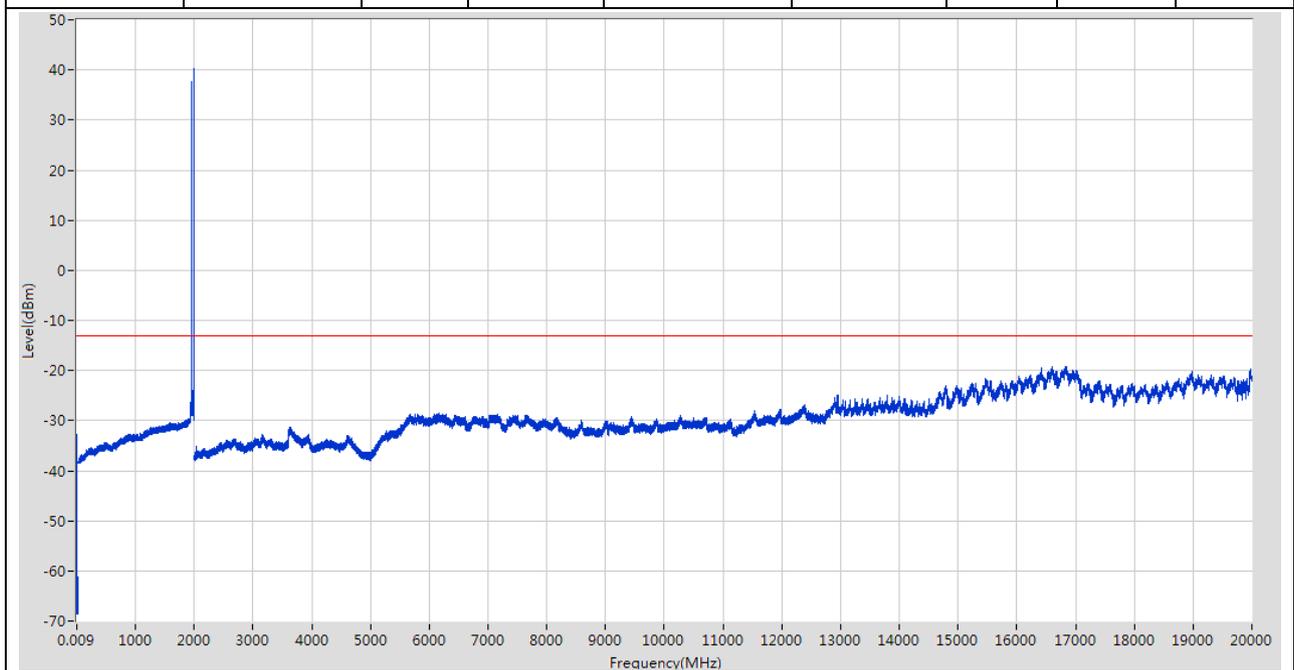
2.1 1G_TM1_B

Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict	Sweep Point
0.009	0.15	0.001	RMS	9.705 k	-38.8	-13	Pass	1001
0.15	30	0.01	RMS	156 k	-29.07	-13	Pass	14925
30	2000	1	RMS	1930.392933 M	40.5	-13	Fail	9850
2000	20000	1	RMS	16839.17097 M	-18.92	-13	Pass	90000



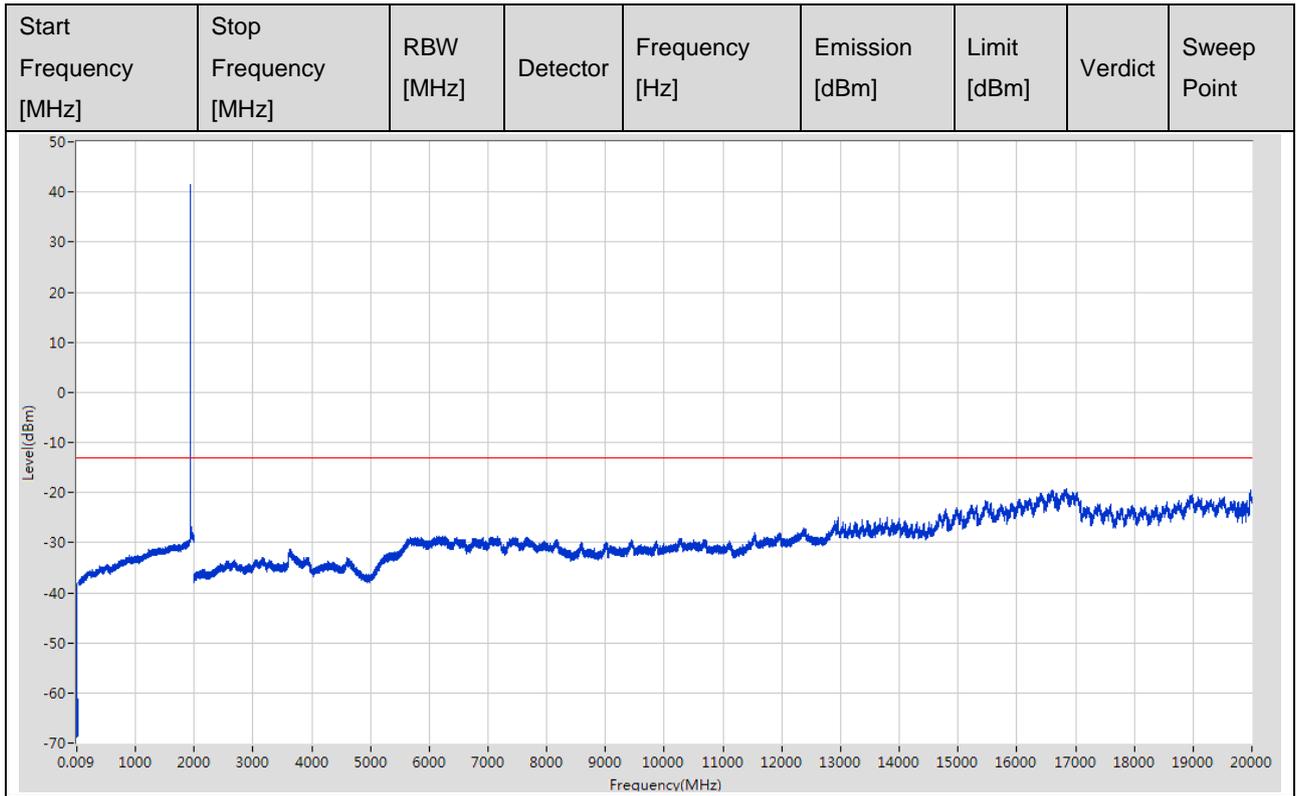
2.2 1G_TM1_T

Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict	Sweep Point
0.009	0.15	0.001	RMS	9.141 k	-38.56	-13	Pass	1001
0.15	30	0.01	RMS	158.001 k	-32.65	-13	Pass	14925
30	2000	1	RMS	1989.598944 M	40.33	-13	Fail	9850
2000	20000	1	RMS	16824.3706 M	-19.24	-13	Pass	90000



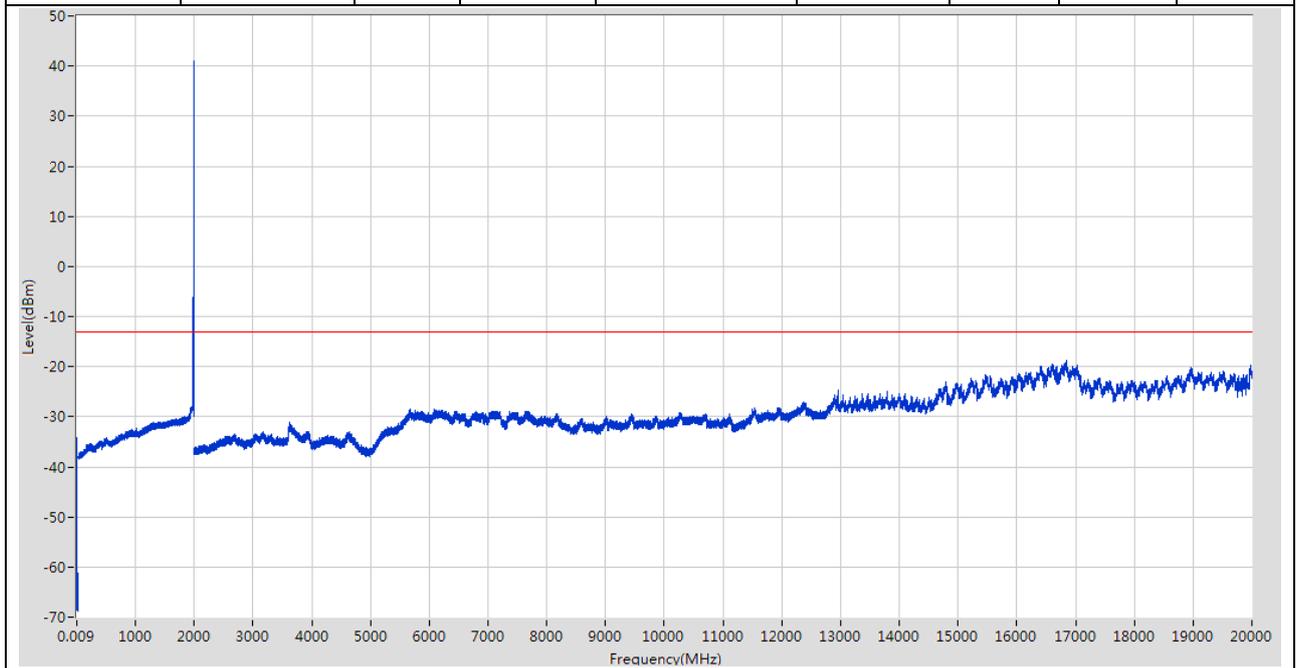
2.3 1U_TM1_B

Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict	Sweep Point
0.009	0.15	0.001	RMS	9.141 k	-38.11	-13	Pass	1001
0.15	30	0.01	RMS	154 k	-40.74	-13	Pass	14925
30	2000	1	RMS	1932.193116 M	41.54	-13	Fail	9850
2000	20000	1	RMS	16841.97104 M	-19.21	-13	Pass	90000



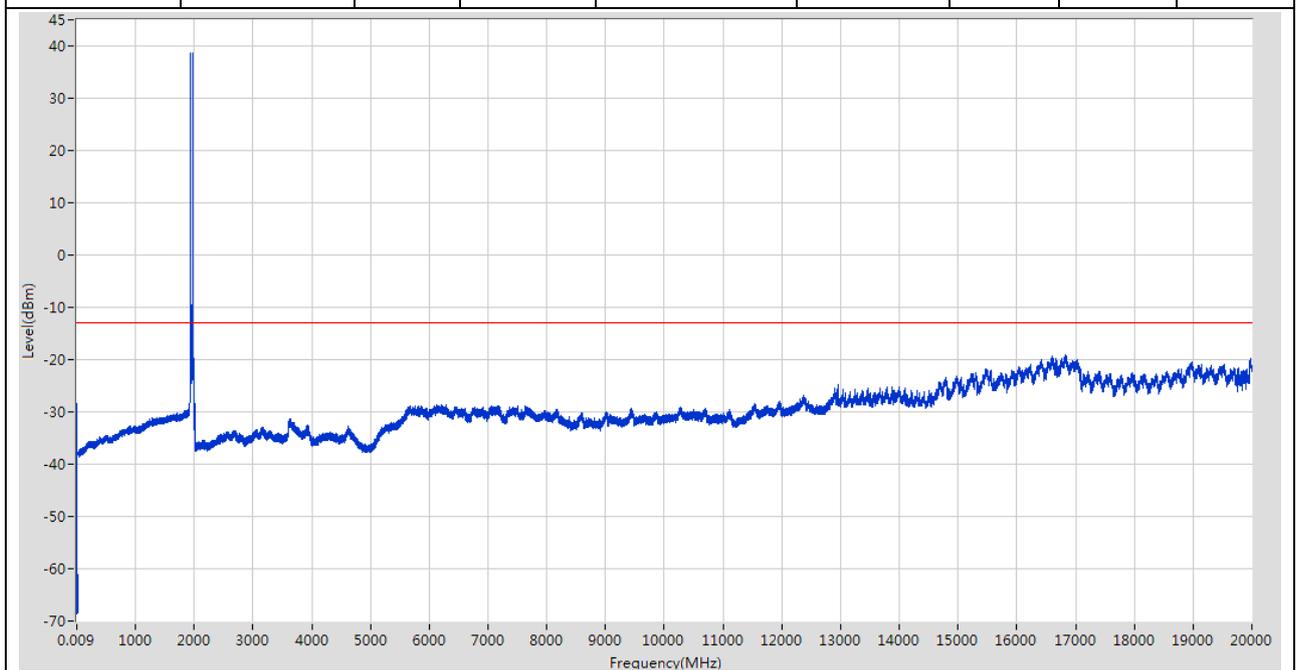
2.4 1U_TM1_T

Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict	Sweep Point
0.009	0.15	0.001	RMS	9.564 k	-37.87	-13	Pass	1001
0.15	30	0.01	RMS	156 k	-34.2	-13	Pass	14925
30	2000	1	RMS	1986.99868 M	41.08	-13	Fail	9850
2000	20000	1	RMS	16839.770985 M	-18.87	-13	Pass	90000



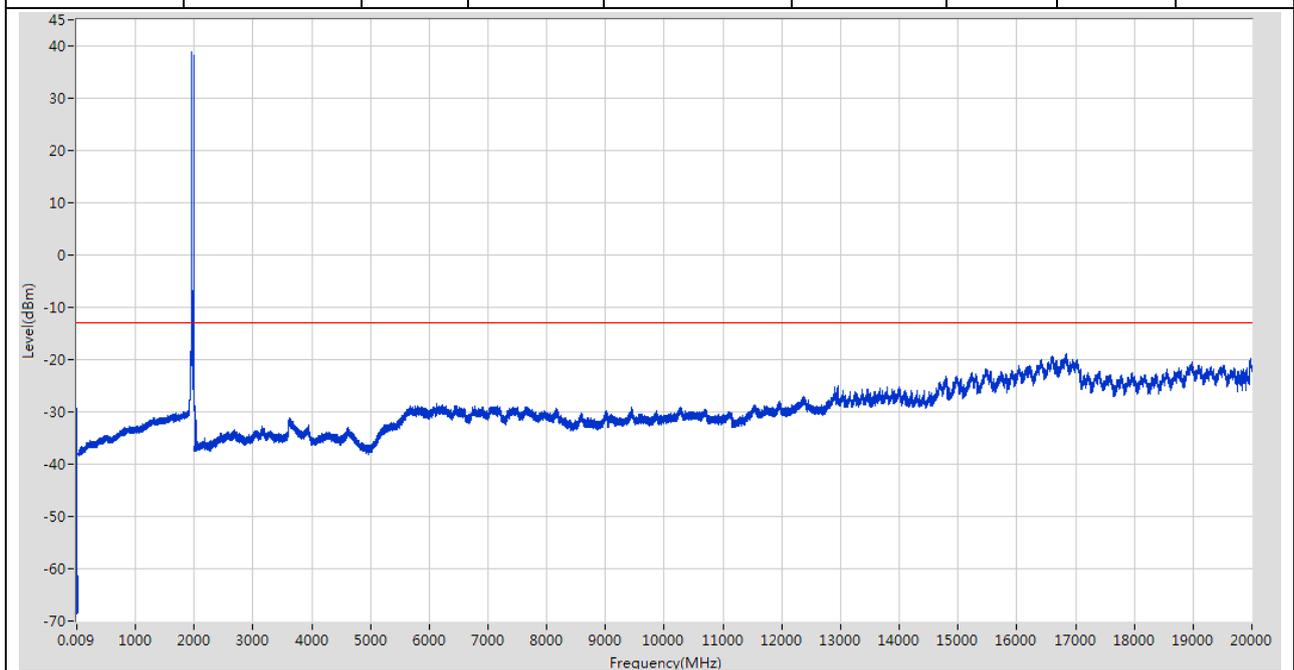
2.5 2U_TM1_B

Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict	Sweep Point
0.009	0.15	0.001	RMS	9 k	-37.02	-13	Pass	1001
0.15	30	0.01	RMS	156 k	-28.52	-13	Pass	14925
30	2000	1	RMS	1932.793177 M	38.61	-13	Fail	9850
2000	20000	1	RMS	16824.170595 M	-19.1	-13	Pass	90000



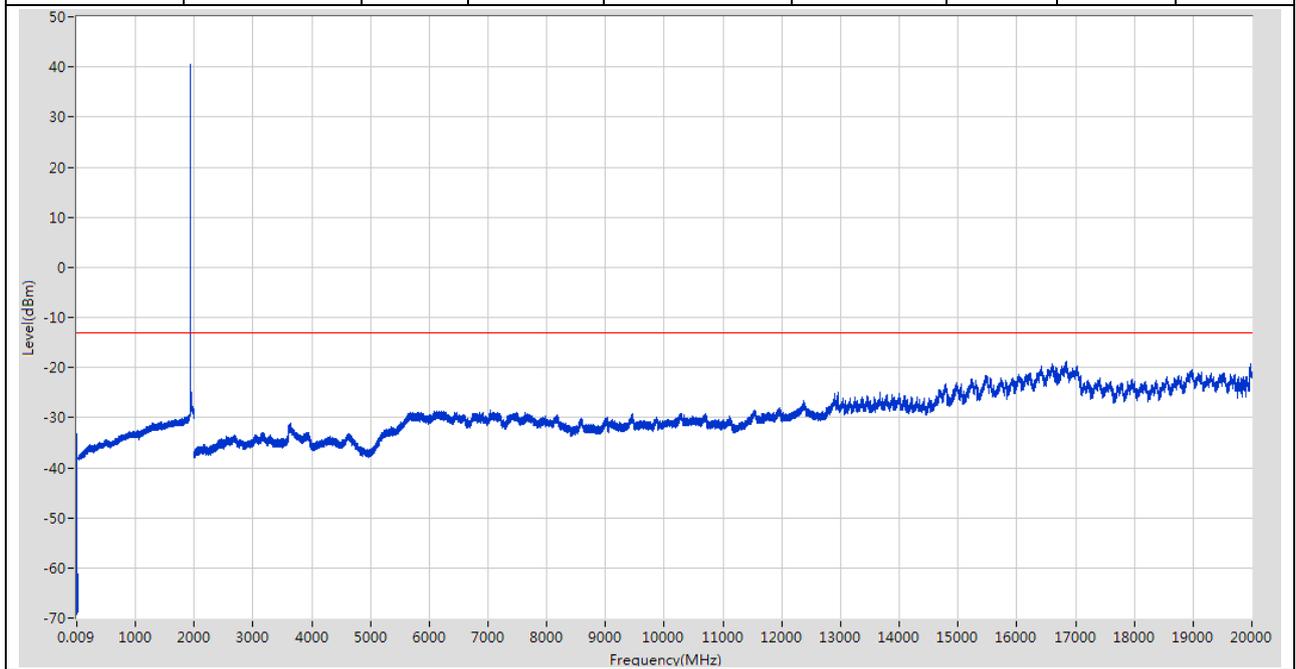
2.6 2U_TM1_T

Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict	Sweep Point
0.009	0.15	0.001	RMS	9.987 k	-38.96	-13	Pass	1001
0.15	30	0.01	RMS	154 k	-29.24	-13	Pass	14925
30	2000	1	RMS	1951.995126 M	38.86	-13	Fail	9850
2000	20000	1	RMS	16839.57098 M	-18.87	-13	Pass	90000



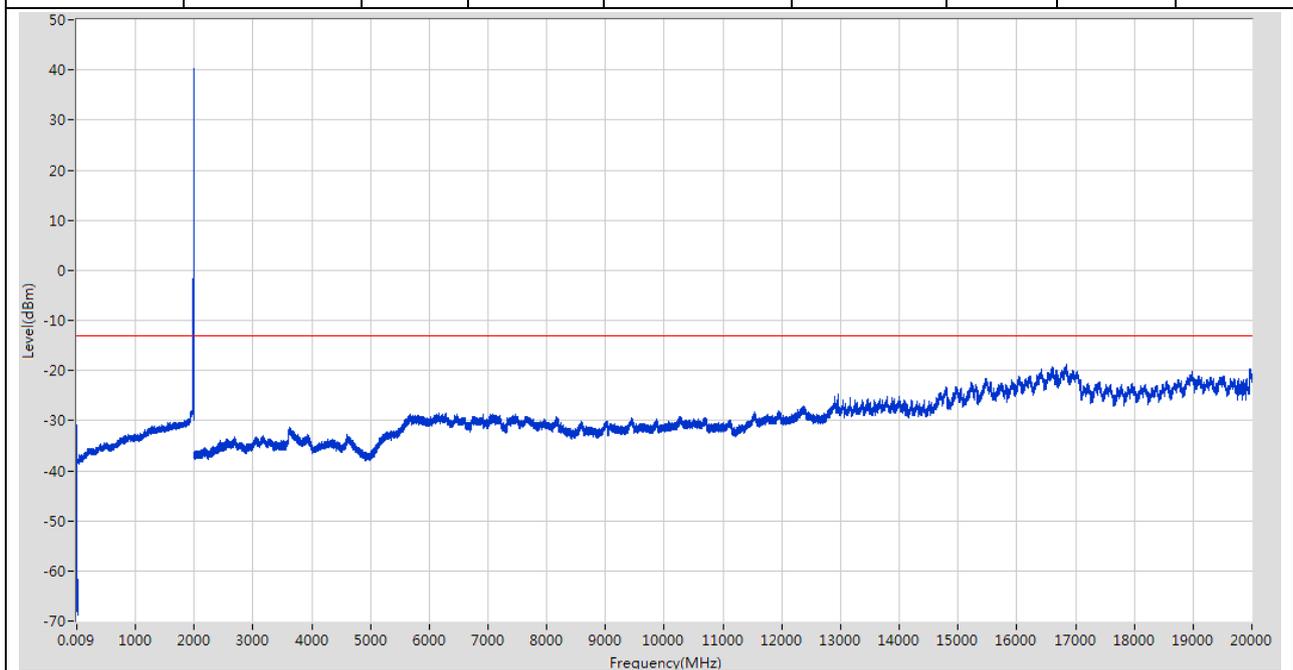
2.7 1L_5M_TM1_B

Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict	Sweep Point
0.009	0.15	0.001	RMS	9.705 k	-39.31	-13	Pass	1001
0.15	30	0.01	RMS	154 k	-33.34	-13	Pass	14925
30	2000	1	RMS	1933.993299 M	40.63	-13	Fail	9850
2000	20000	1	RMS	16841.17102 M	-18.86	-13	Pass	90000



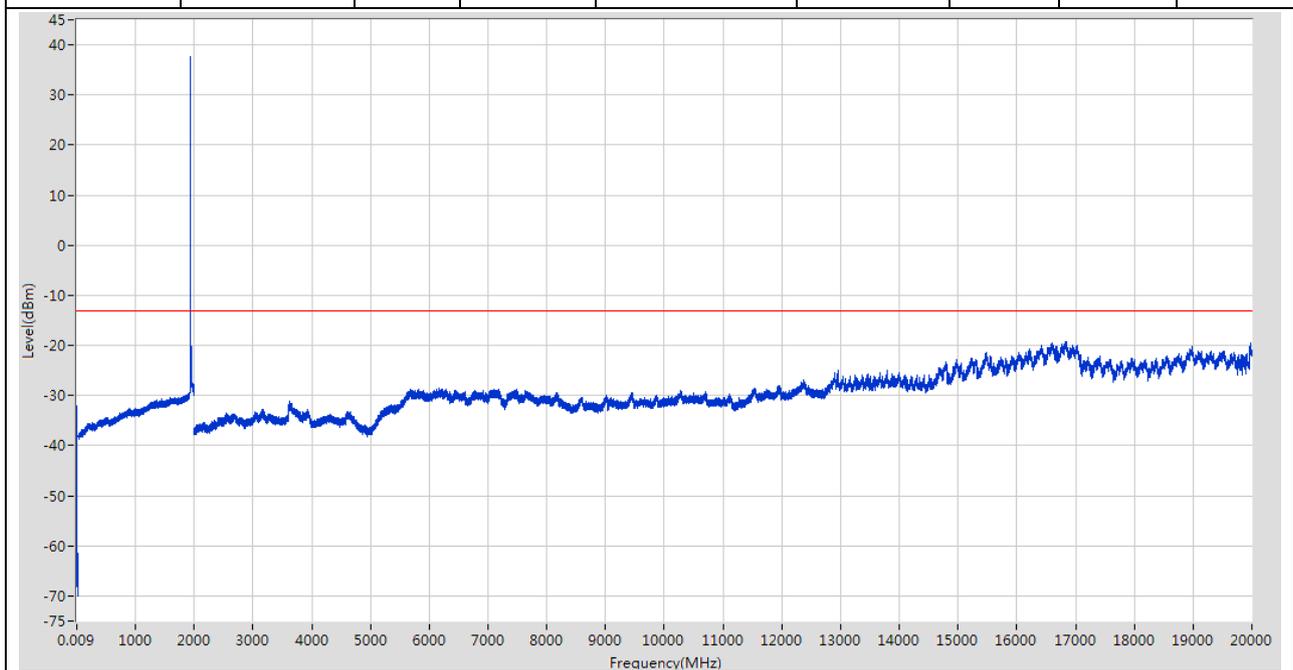
2.8 1L_5M_TM1_T

Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict	Sweep Point
0.009	0.15	0.001	RMS	9 k	-38.39	-13	Pass	1001
0.15	30	0.01	RMS	154 k	-30.81	-13	Pass	14925
30	2000	1	RMS	1986.79866 M	40.24	-13	Fail	9850
2000	20000	1	RMS	16840.77101 M	-18.76	-13	Pass	90000



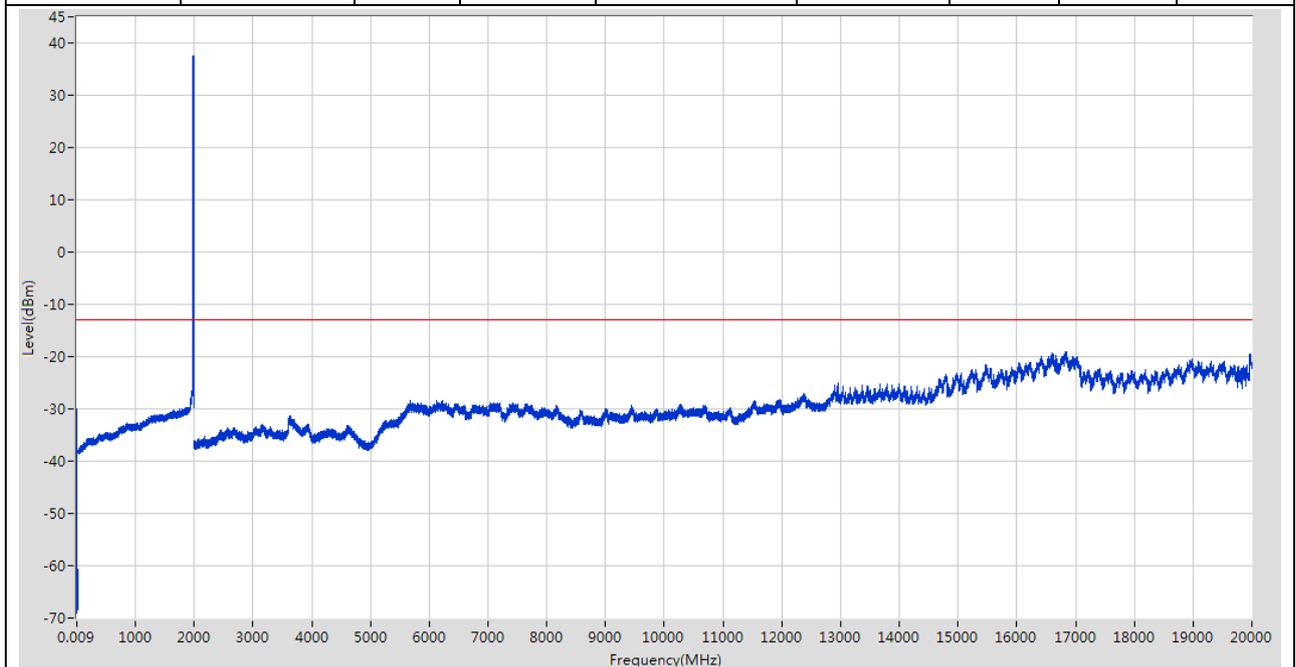
2.9 1L_10M_TM1_B

Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict	Sweep Point
0.009	0.15	0.001	RMS	9.141 k	-38.5	-13	Pass	1001
0.15	30	0.01	RMS	158.001 k	-31.97	-13	Pass	14925
30	2000	1	RMS	1938.393746 M	37.64	-13	Fail	9850
2000	20000	1	RMS	16836.970915 M	-19.31	-13	Pass	90000



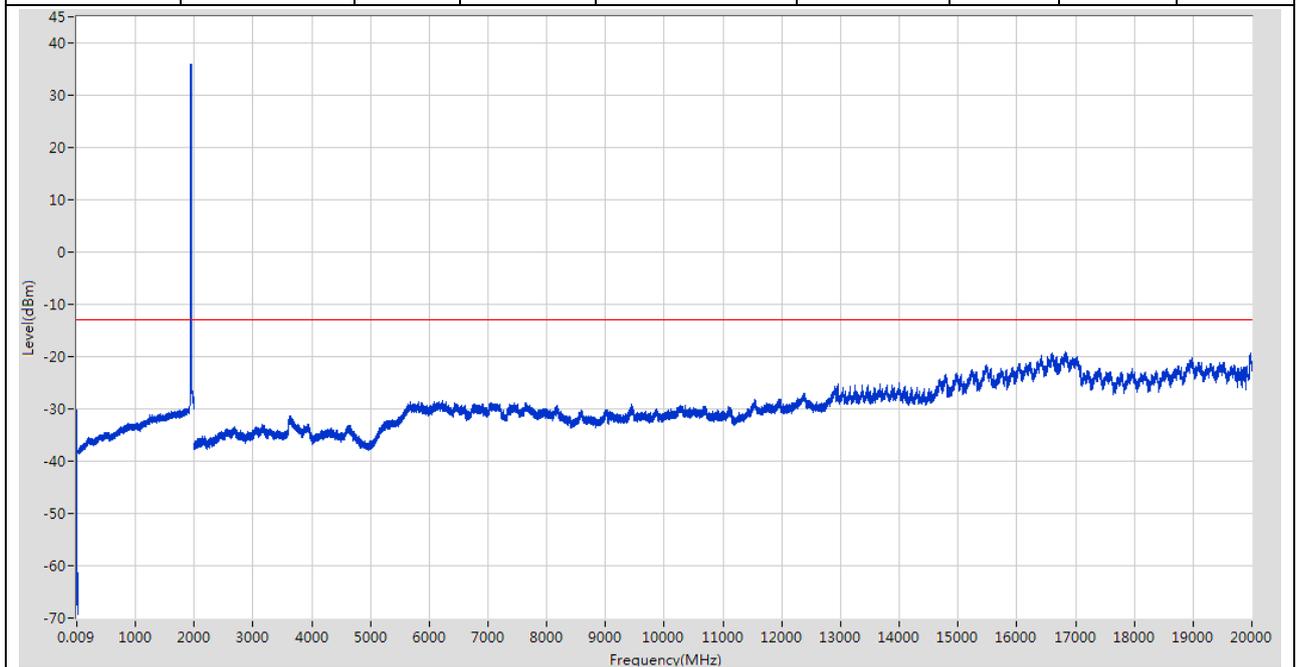
2.10 1L_10M_TM1_T

Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict	Sweep Point
0.009	0.15	0.001	RMS	9.423 k	-39.63	-13	Pass	1001
0.15	30	0.01	RMS	156 k	-30.08	-13	Pass	14925
30	2000	1	RMS	1984.398416 M	37.53	-13	Fail	9850
2000	20000	1	RMS	16841.771035 M	-19.14	-13	Pass	90000



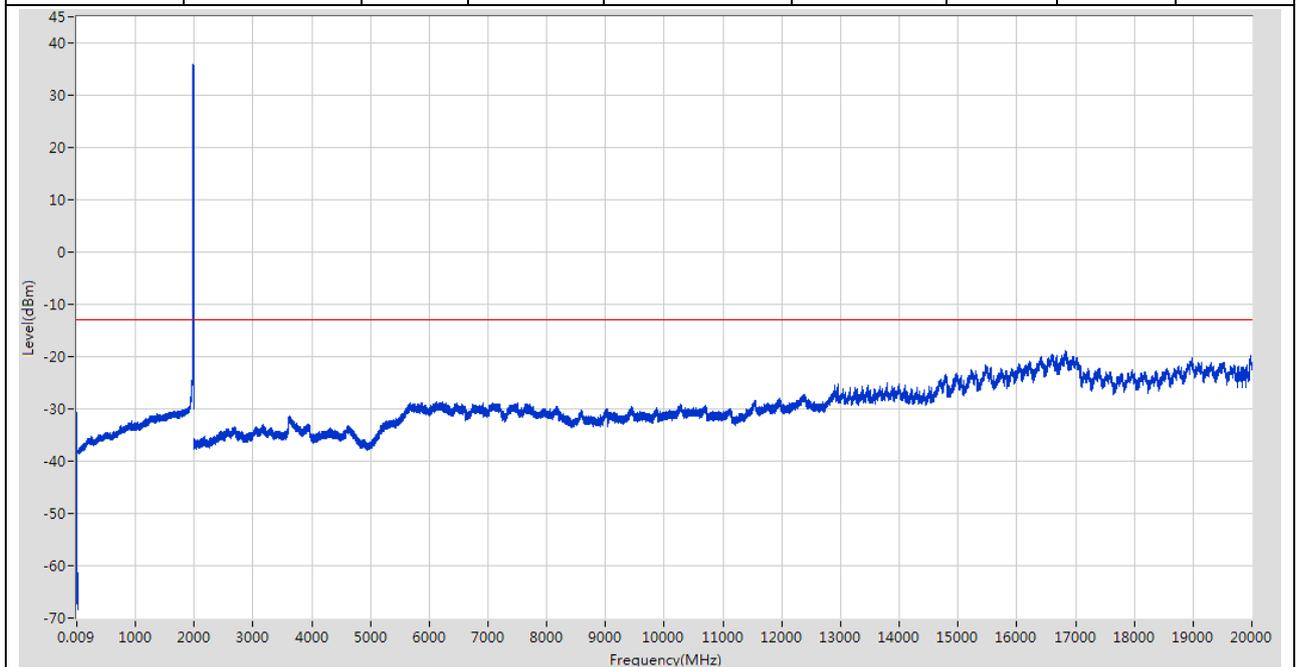
2.11 1L_15M_TM1_B

Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict	Sweep Point
0.009	0.15	0.001	RMS	9.987 k	-37	-13	Pass	1001
0.15	30	0.01	RMS	156 k	-30.18	-13	Pass	14925
30	2000	1	RMS	1943.194233 M	35.93	-13	Fail	9850
2000	20000	1	RMS	16833.770835 M	-19.19	-13	Pass	90000



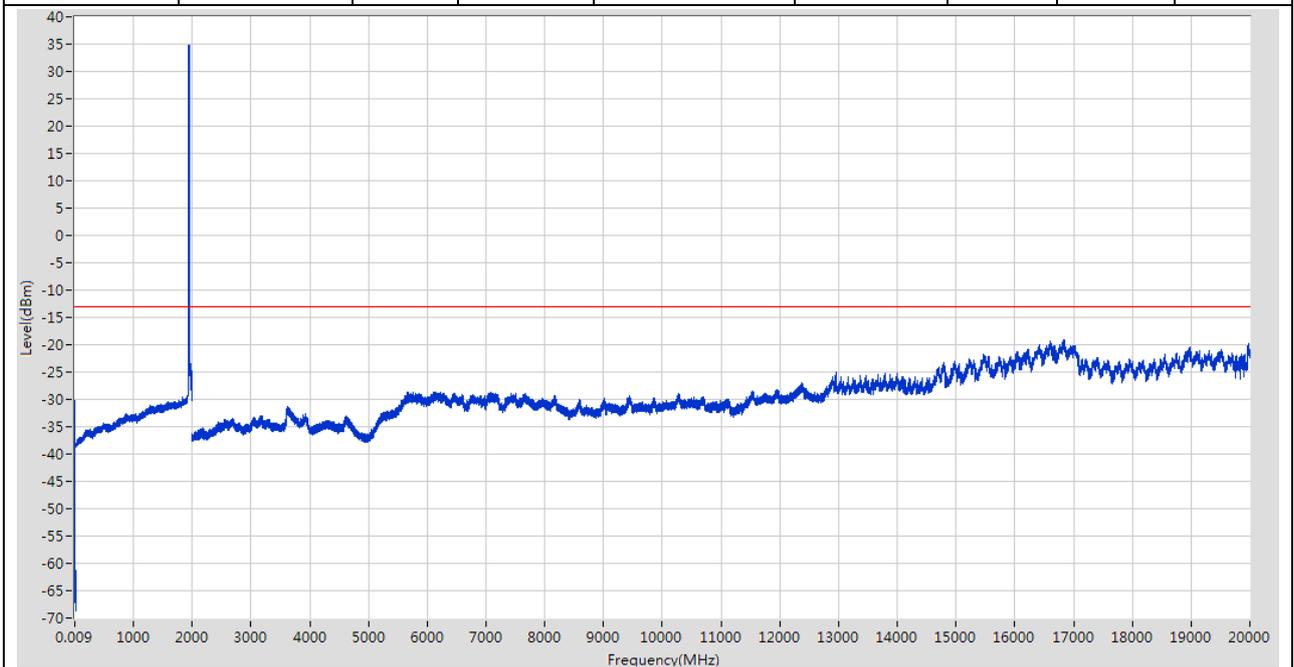
2.12 1L_15M_TM1_T

Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict	Sweep Point
0.009	0.15	0.001	RMS	9.141 k	-37.4	-13	Pass	1001
0.15	30	0.01	RMS	158.001 k	-30.66	-13	Pass	14925
30	2000	1	RMS	1976.997665 M	35.81	-13	Fail	9850
2000	20000	1	RMS	16835.57088 M	-18.96	-13	Pass	90000



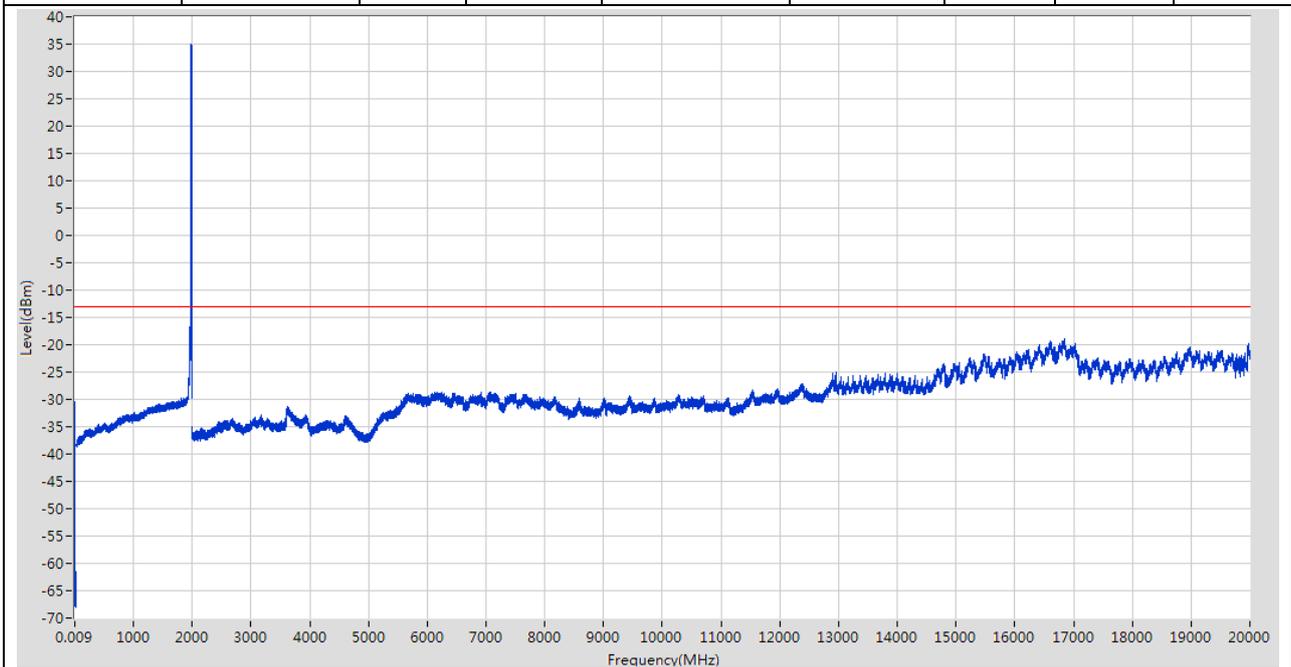
2.13 1L_20M_TM1_B

Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict	Sweep Point
0.009	0.15	0.001	RMS	9 k	-38.03	-13	Pass	1001
0.15	30	0.01	RMS	158.001 k	-30.19	-13	Pass	14925
30	2000	1	RMS	1947.394659 M	34.83	-13	Fail	9850
2000	20000	1	RMS	16822.970565 M	-19.12	-13	Pass	90000



2.14 1L_20M_TM1_T

Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict	Sweep Point
0.009	0.15	0.001	RMS	10.551 k	-38.67	-13	Pass	1001
0.15	30	0.01	RMS	156 k	-30.36	-13	Pass	14925
30	2000	1	RMS	1976.197584 M	34.9	-13	Fail	9850
2000	20000	1	RMS	16839.57098 M	-18.9	-13	Pass	90000



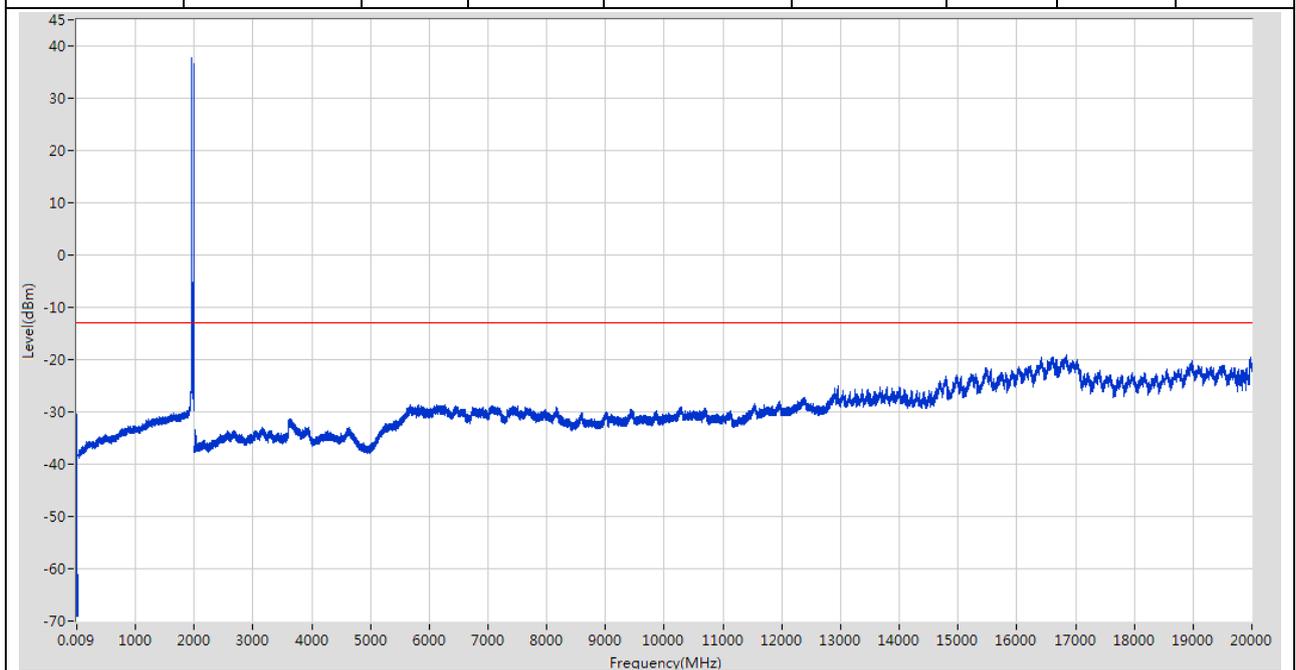
2.15 2L_5M_TM1_B

Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict	Sweep Point
0.009	0.15	0.001	RMS	9 k	-37.64	-13	Pass	1001
0.15	30	0.01	RMS	156 k	-36.34	-13	Pass	14925
30	2000	1	RMS	1933.393238 M	37.68	-13	Fail	9850
2000	20000	1	RMS	16838.570955 M	-19.23	-13	Pass	90000



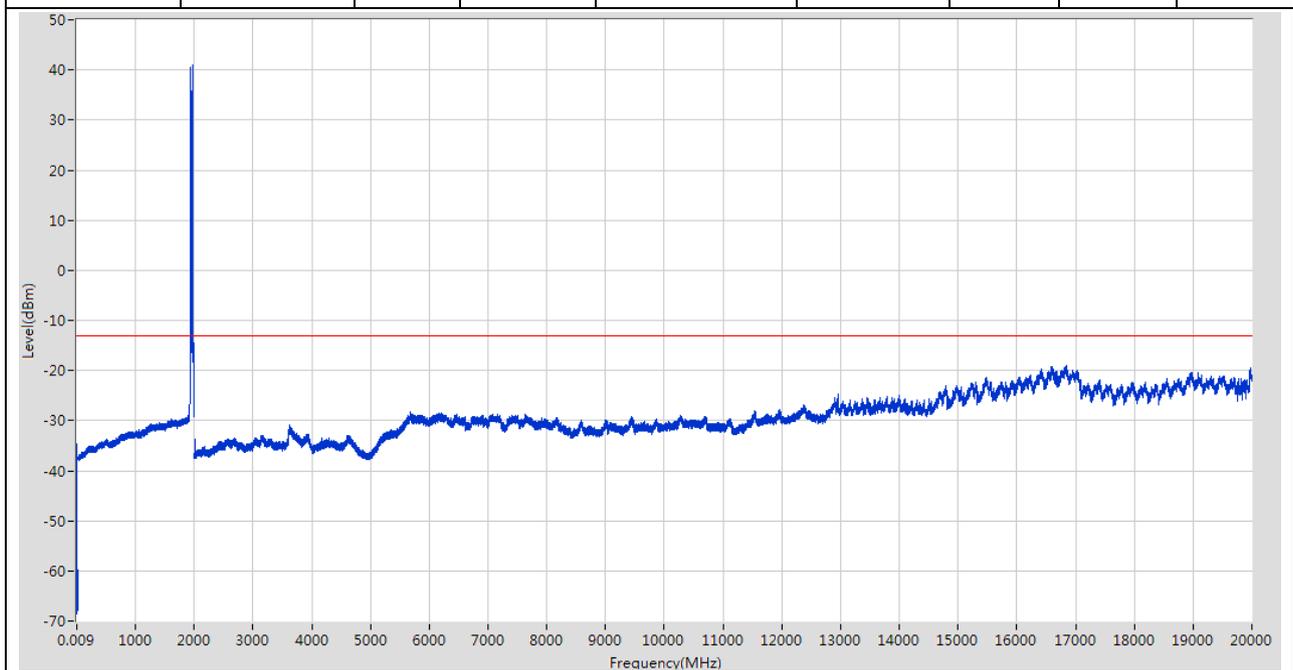
2.16 2L_5M_TM1_T

Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict	Sweep Point
0.009	0.15	0.001	RMS	9.846 k	-37.88	-13	Pass	1001
0.15	30	0.01	RMS	156 k	-30.36	-13	Pass	14925
30	2000	1	RMS	1953.995329 M	37.62	-13	Fail	9850
2000	20000	1	RMS	16837.17092 M	-19.12	-13	Pass	90000



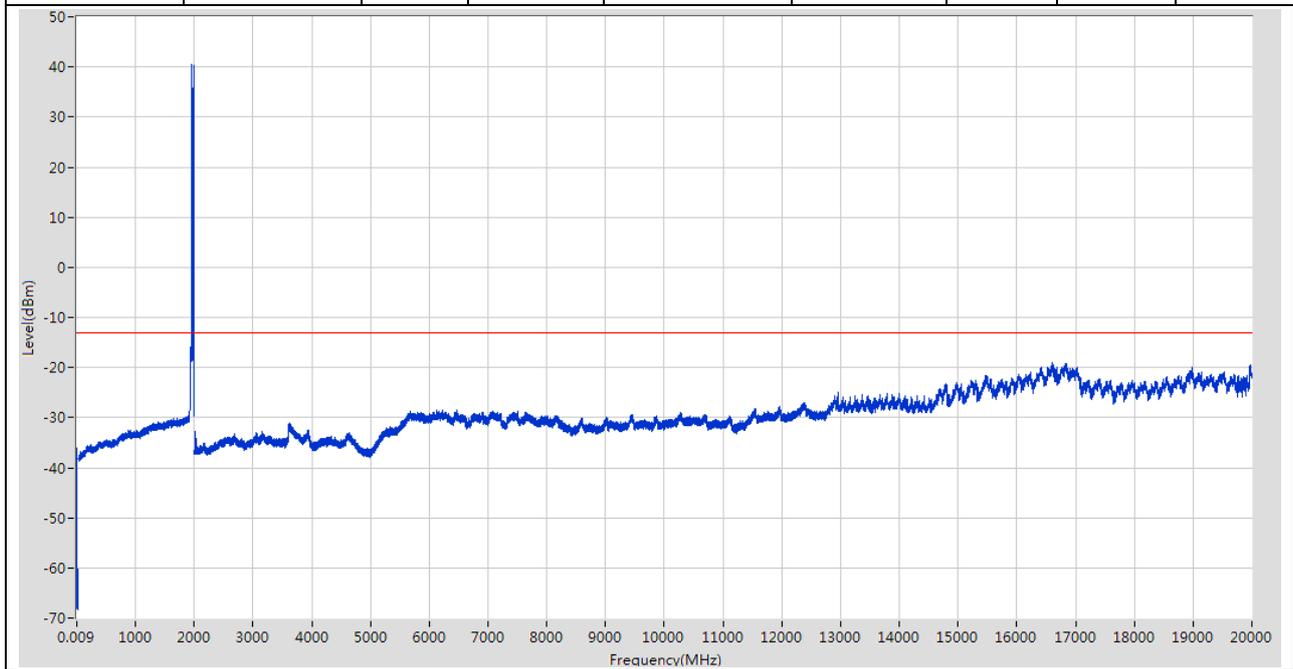
2.17 2G2U_TM1_B

Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict	Sweep Point
0.009	0.15	0.001	RMS	9.705 k	-38.39	-13	Pass	1001
0.15	30	0.01	RMS	156 k	-34.75	-13	Pass	14925
30	2000	1	RMS	1969.996954 M	40.92	-13	Fail	9850
2000	20000	1	RMS	16838.170945 M	-19.04	-13	Pass	90000



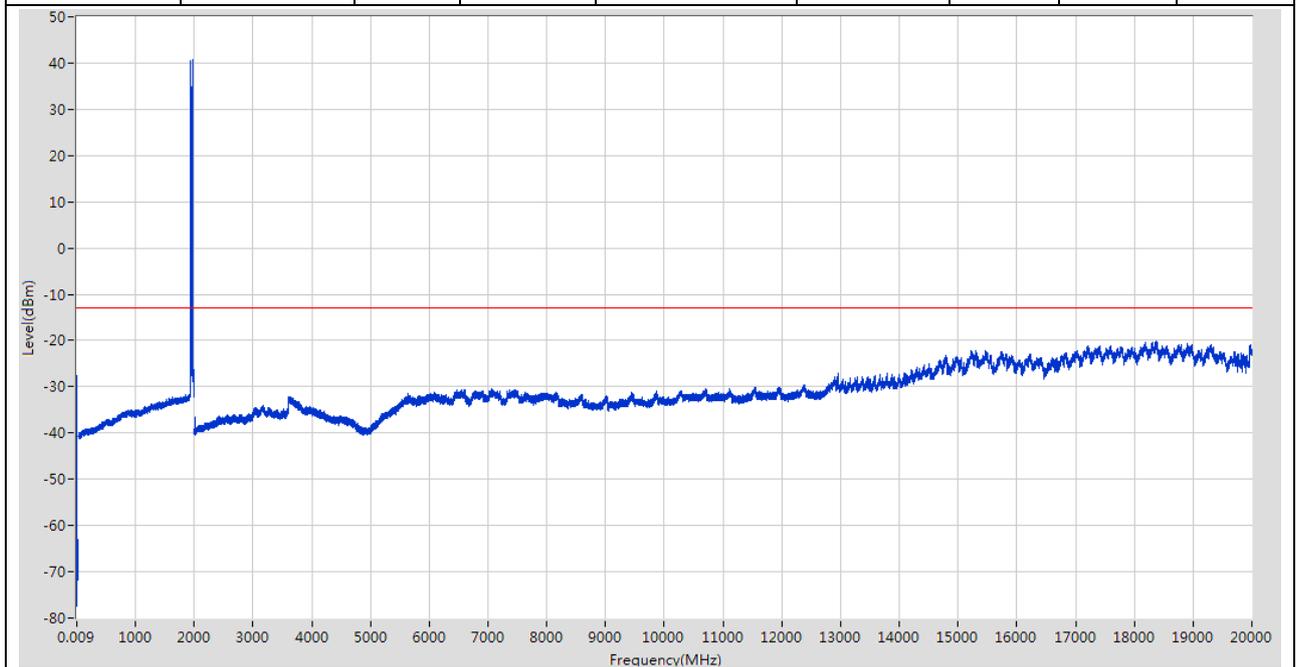
2.18 2G2U_TM1_T

Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict	Sweep Point
0.009	0.15	0.001	RMS	9 k	-38.63	-13	Pass	1001
0.15	30	0.01	RMS	156 k	-36.14	-13	Pass	14925
30	2000	1	RMS	1949.994923 M	40.61	-13	Fail	9850
2000	20000	1	RMS	16607.16517 M	-19.06	-13	Pass	90000



2.19 2G2L_TM1_B

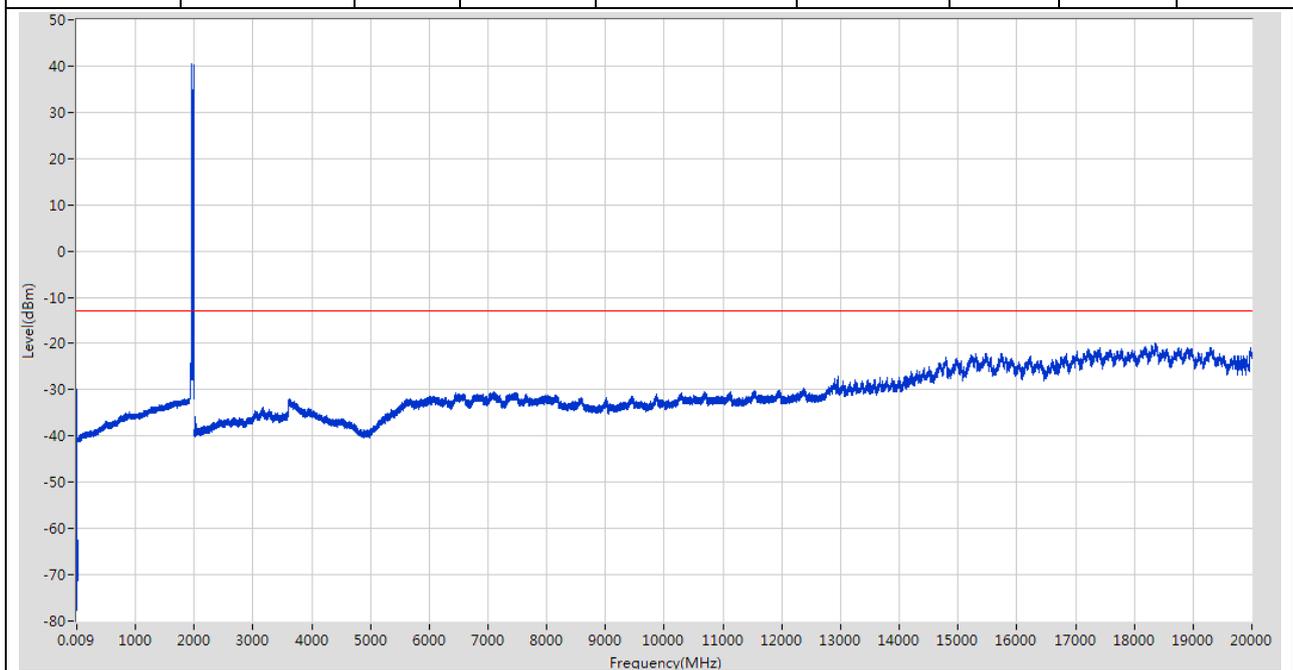
Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict	Sweep Point
0.009	0.15	0.001	RMS	78.09 k	-51.24	-13	Pass	1001
0.15	30	0.01	RMS	156 k	-27.49	-13	Pass	14925
30	2000	1	RMS	1969.996954 M	40.81	-13	Fail	9850
2000	20000	1	RMS	18376.637631 M	-20.03	-13	Pass	90000





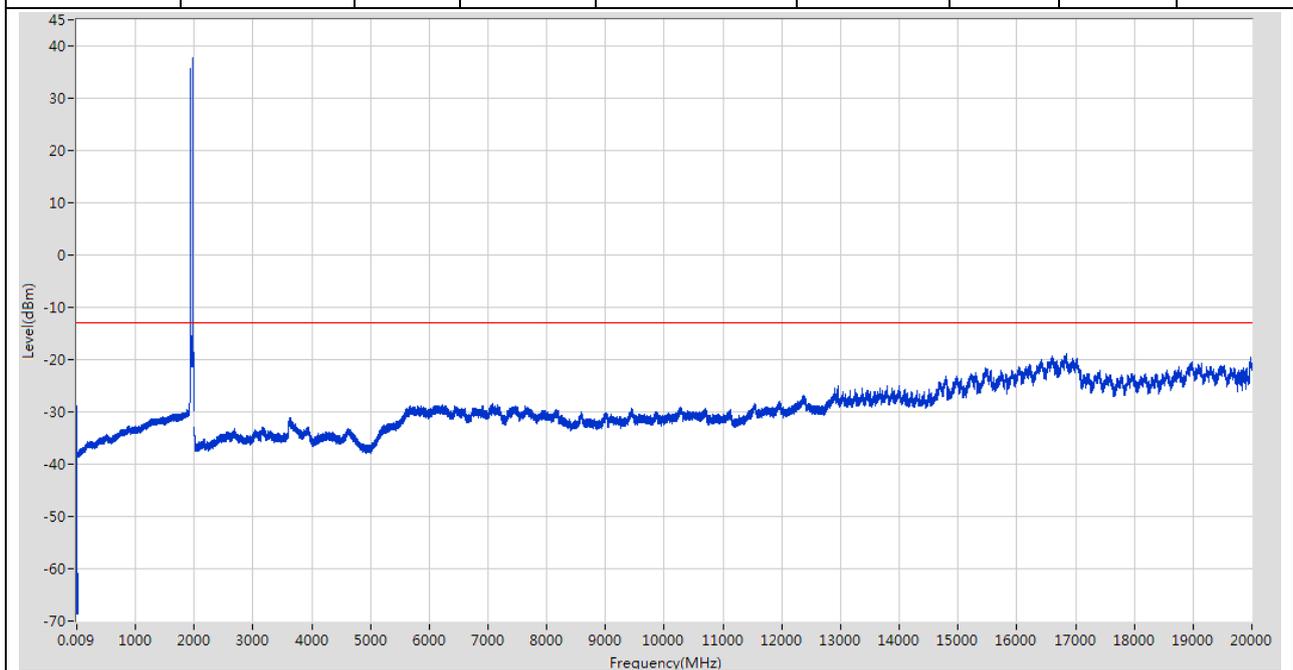
2.20 2G2L_TM1_T

Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict	Sweep Point
0.009	0.15	0.001	RMS	78.09 k	-51.08	-13	Pass	1001
0.15	30	0.01	RMS	156 k	-29.89	-13	Pass	14925
30	2000	1	RMS	1949.994923 M	40.56	-13	Fail	9850
2000	20000	1	RMS	18360.035971 M	-19.89	-13	Pass	90000



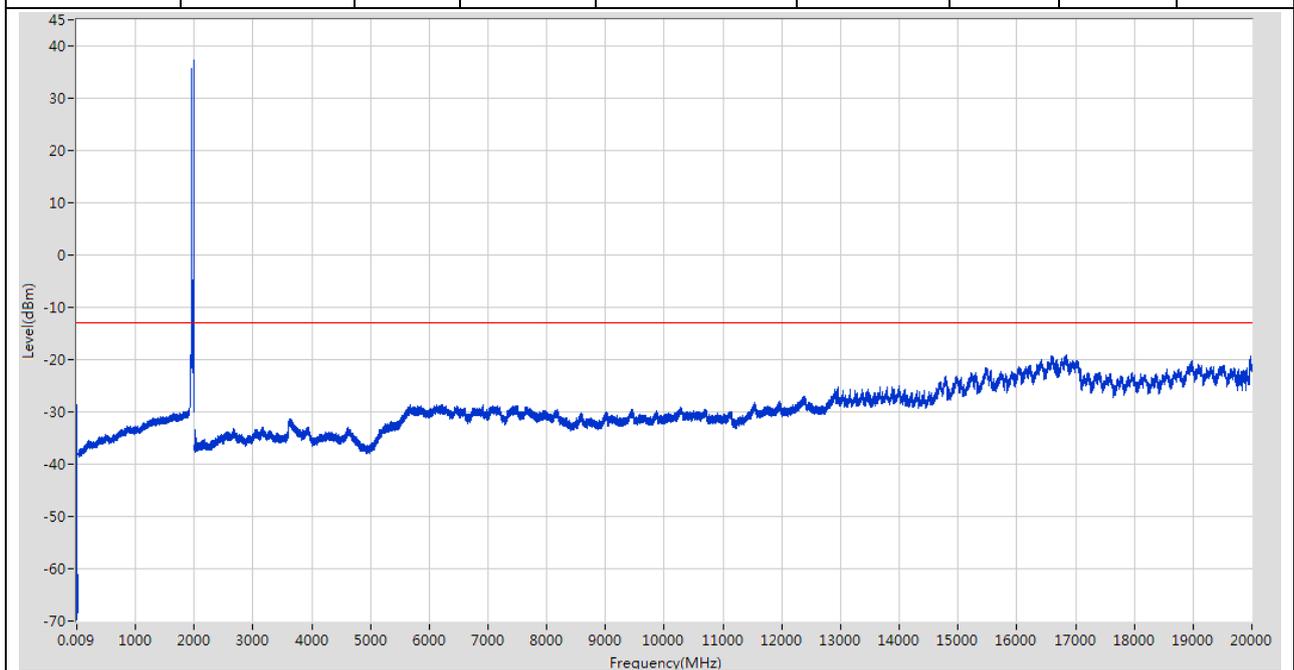
2.21 1U2L_TM1_B

Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict	Sweep Point
0.009	0.15	0.001	RMS	9 k	-38.02	-13	Pass	1001
0.15	30	0.01	RMS	156 k	-28.79	-13	Pass	14925
30	2000	1	RMS	1967.996751 M	37.63	-13	Fail	9850
2000	20000	1	RMS	16840.971015 M	-18.89	-13	Pass	90000



2.22 1U2L_TM1_T

Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict	Sweep Point
0.009	0.15	0.001	RMS	11.961 k	-39.01	-13	Pass	1001
0.15	30	0.01	RMS	156 k	-28.54	-13	Pass	14925
30	2000	1	RMS	1986.398619 M	37.33	-13	Fail	9850
2000	20000	1	RMS	16840.170995 M	-19.14	-13	Pass	90000





Appendix E: Field Strength of Spurious Radiation / Radiated Spurious Emissions



1 Result Table

NOTE: If applicable, according to FCC KDB 971168 §5.8.3, for the requirement of a fixed limit (e.g. -13 dBm), the power limit can be mathematically converted to an equivalent field strength limit. The relationship is:

(1) $E \text{ [dB}\mu\text{V/m]} = \text{EIRP [dBm]} - 20 \cdot \lg(D) + 104.8$; where D is the measurement distance in meters.

(2) $\text{EIRP [dBm]} = \text{ERP [dBm]} + 2.15$.

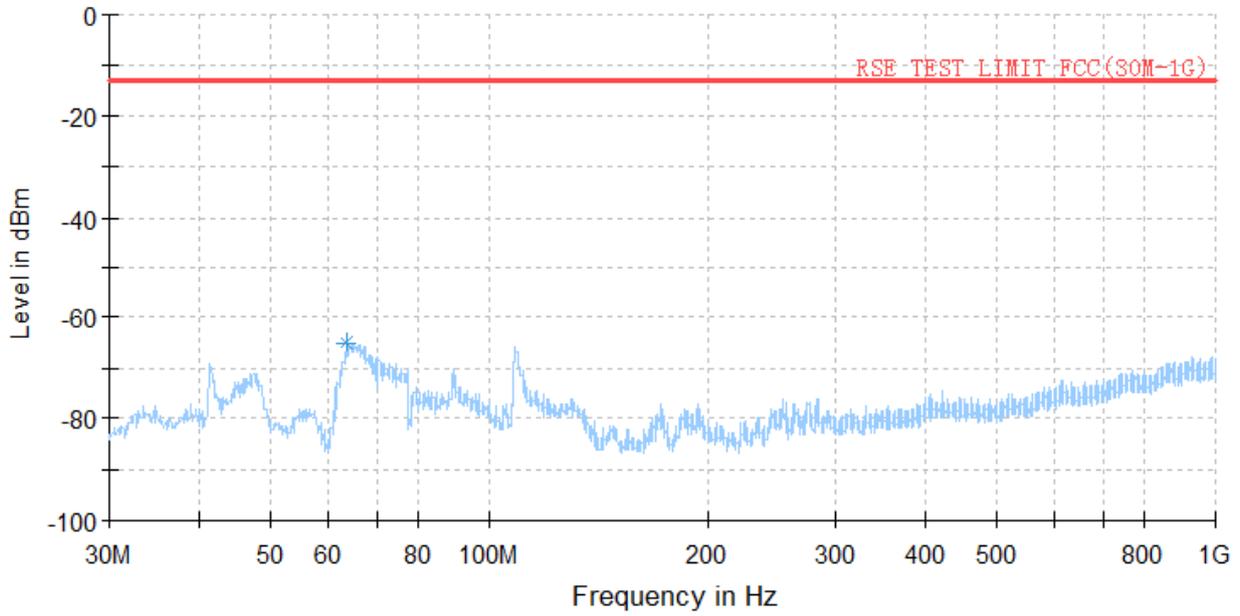
Also according to FCC §2.1053(a), emissions are assumed radiated from halfwave dipole antennas, so the power limit refer to the ERP.

(For example, the fixed power limit -13 dBm can be converted to the field strength limit 84.4 dB μ V/m at 3 m measurement distance, and to 93.95 dB μ V/m at 1 m measurement distance assuming in the far-field region of both the transmit and receive antennas.)

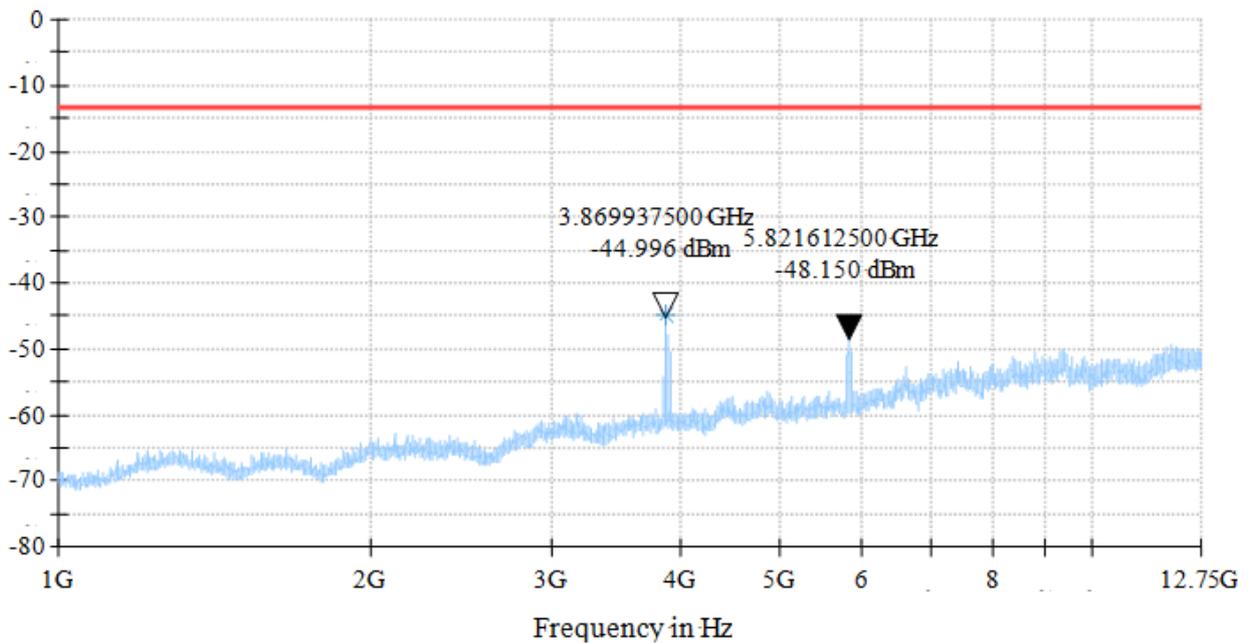
Test Range	EUT Conf.	Maximum Emission	Verdict
30 MHz to 1 GHz	2G2U_TM1_B (Worst Case)	-13 dBm	Pass
1 GHz to 18 GHz	2G2U_TM1_B (Worst Case)	-13 dBm	Pass
	2G2U_TM1_B (Worst Case)	-13 dBm	Pass
18 GHz to 26.5 GHz	2G2U_TM1_B (Worst Case)	-13 dBm	Pass

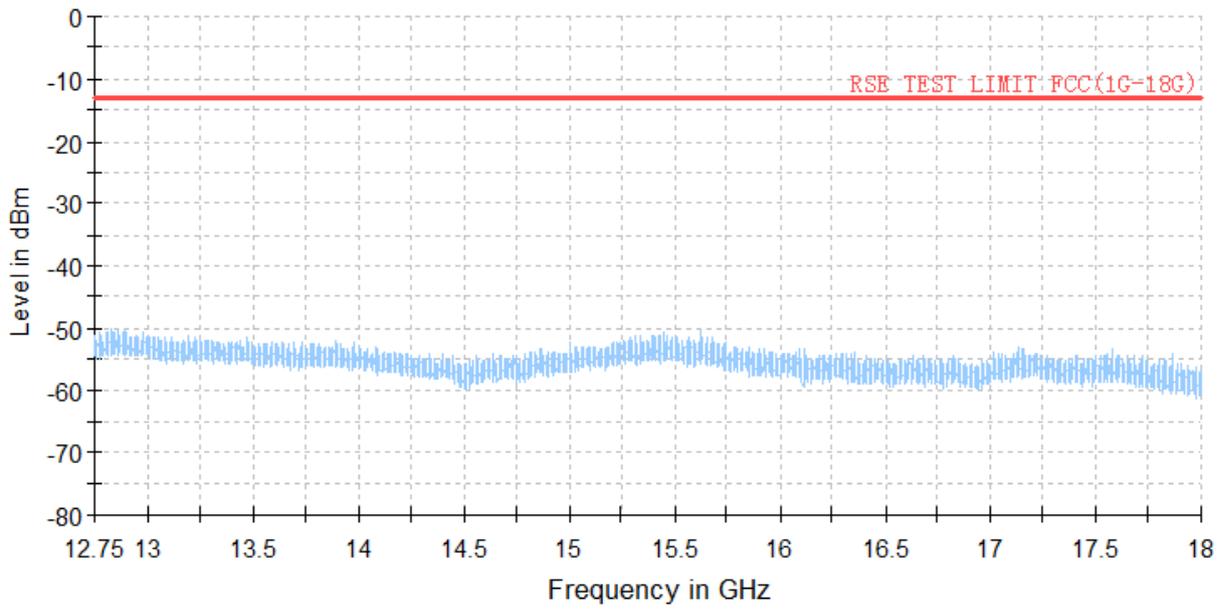
2 Test Plot

2.1 Test range of “30 MHz to 1 GHz”

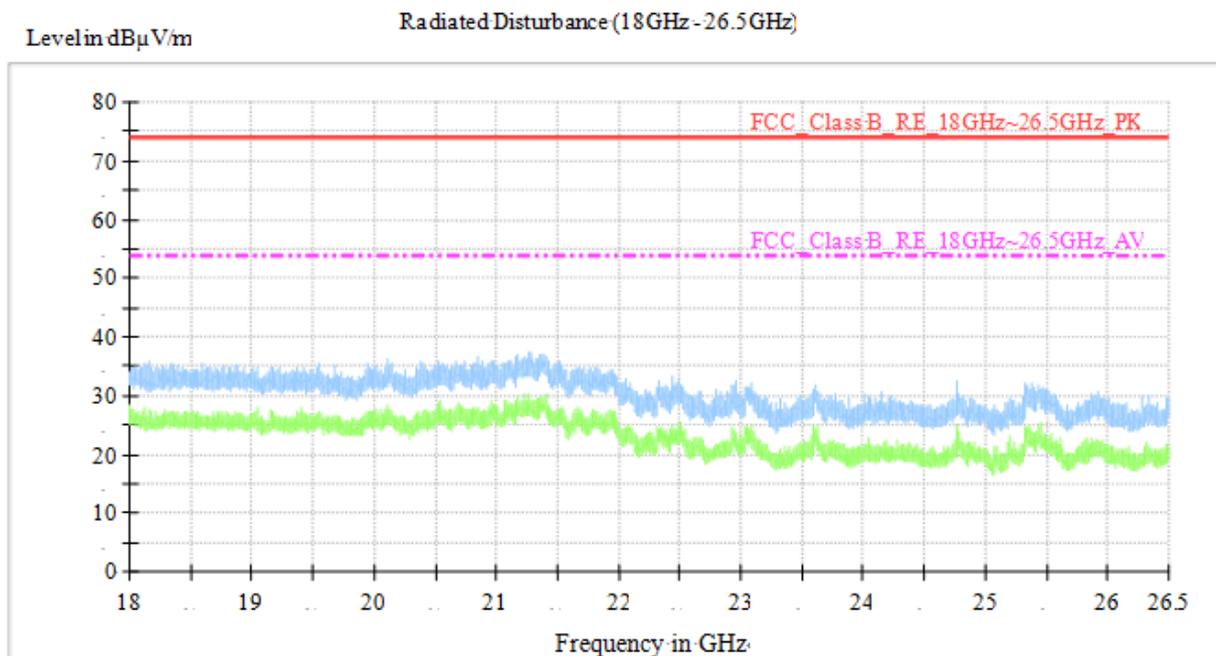


2.2 Test range of “1 GHz to 18 GHz”





2.3 Test range of “18 GHz to 26.5 GHz”





Appendix F: Frequency Stability



1 Result Table

1.1 Frequency Error

EUT Conf.	Temperature	Voltage	Freq. Error, f(offset) [Hz]	Freq. vs. rated [ppm]	Freq. vs. 20 °C [ppm]	Verdict
1L_5M_TM1_M	-30 °C	100%	3.61	0.00184	-0.00027	Pass
	-20 °C	100%	2.92	0.00149	-0.00062	Pass
	-10 °C	100%	1.68	0.00086	-0.00125	Pass
	0 °C	100%	2.41	0.00123	-0.00088	Pass
	+10 °C	100%	0.66	0.00033	-0.00178	Pass
	+20 °C	85 %	2.08	0.00106	-0.00105	Pass
	+20 °C	100 %	4.14	0.00211	---	Pass
	+20 °C	115 %	1.54	0.00079	-0.00133	Pass
	+30 °C	100%	2.61	0.00133	-0.00078	Pass
	+40 °C	100%	0.76	0.00039	-0.00172	Pass
	+50 °C	100%	-0.03	-0.00002	-0.00213	Pass



Appendix G: Receiver Spurious Emissions



(Not applicable)

END