Appendix A: Transmitter Output Power

1 Result Table

1.1 Channel Power, Total

NOTE: If applicable, the EIPR [W] = 10 ^ ((Channel Power [dBm] + Antenna Gain [dBi] + 10 log10 (N)) / 10 - 3), and the ERP [W] = EIRP [W] / 1.64. N is the number of transmitter output port.

EUT Conf.	Ch. BW [MHz]	Channel Power [dBm]	Total Conduct Power	Offset from Rated [dB]	Antenna Gain [dBi]	EIRP [dBm]	EIRP [W]	EIRP Limit [W]	Verdict
EUT Conf. 1	20M _B	43.37	43.37	+0.37	17	60.37	1088.93	2000.804	Pass
EUT Conf. 2	20M _M	43.00	43.00	0.00	17	60.00	1000.00	2000.804	Pass
EUT Conf. 3	20M _T	43.36	43.36	+0.36	17	60.36	1086.43	2000.804	Pass
EUT Conf. 4	20M+20M+20M _B	38.45/38.20 /38.15	43.04	+0.04	17	60.04	1009.25	2000.804	Pass
EUT Conf. 5	20M+20M+20M _M	38.18/37.87 /38.09	42.82	-.18	17	59.82	959.40	2000.804	Pass
EUT Conf. 6	20M+20M+20M _T	38.19/38.11 /38.05	42.89	-0.11	17	59.89	974.99	2000.804	Pass

Appendix B: Occupied Bandwidth

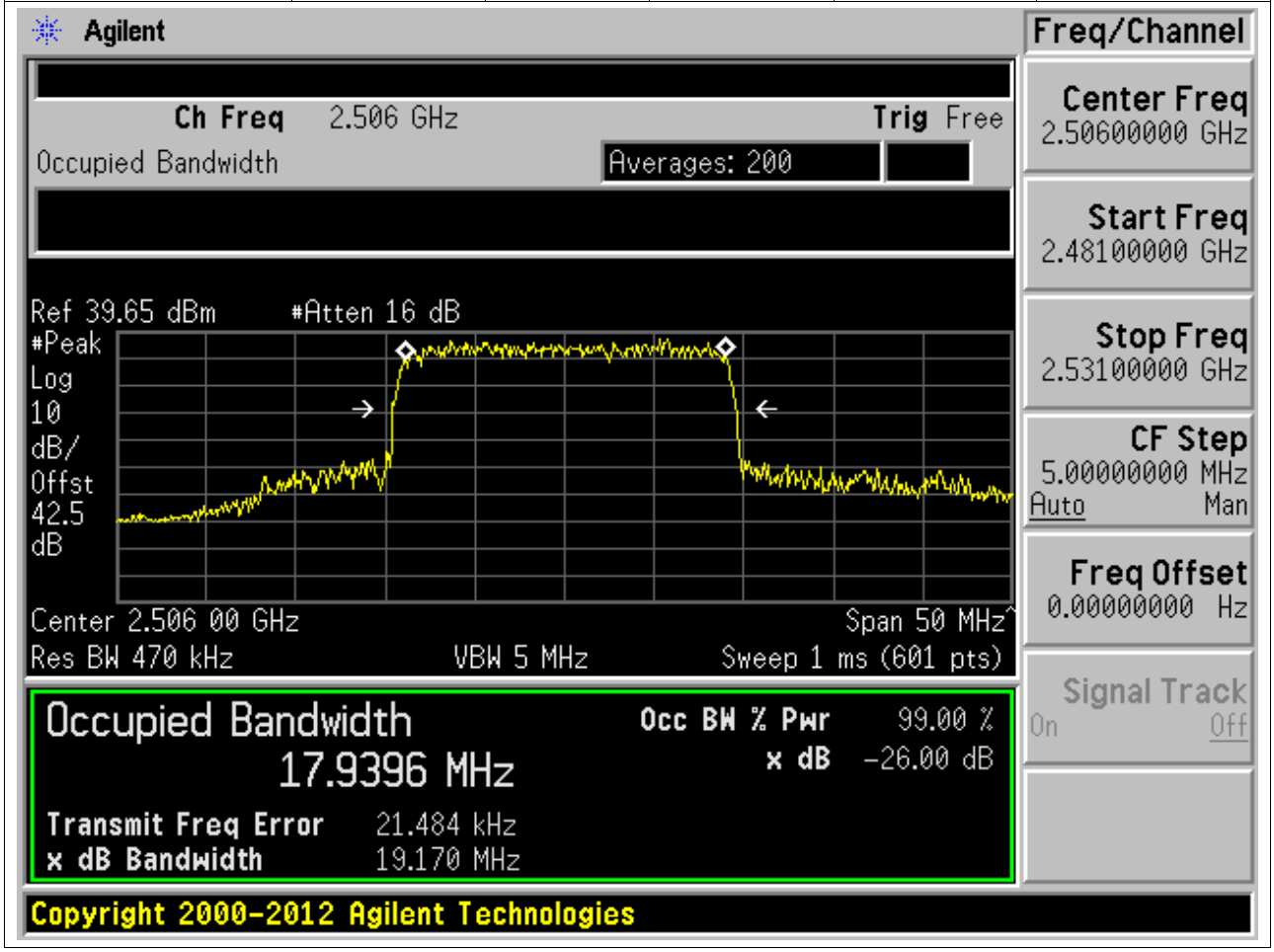
1 Result Table

EUT Conf.	Occupied Bandwidth [MHz]	Verdict
20M _B	17.93961	Pass
20M _M	17.76926	Pass
20M _T	17.88441	Pass

2 Test Plot

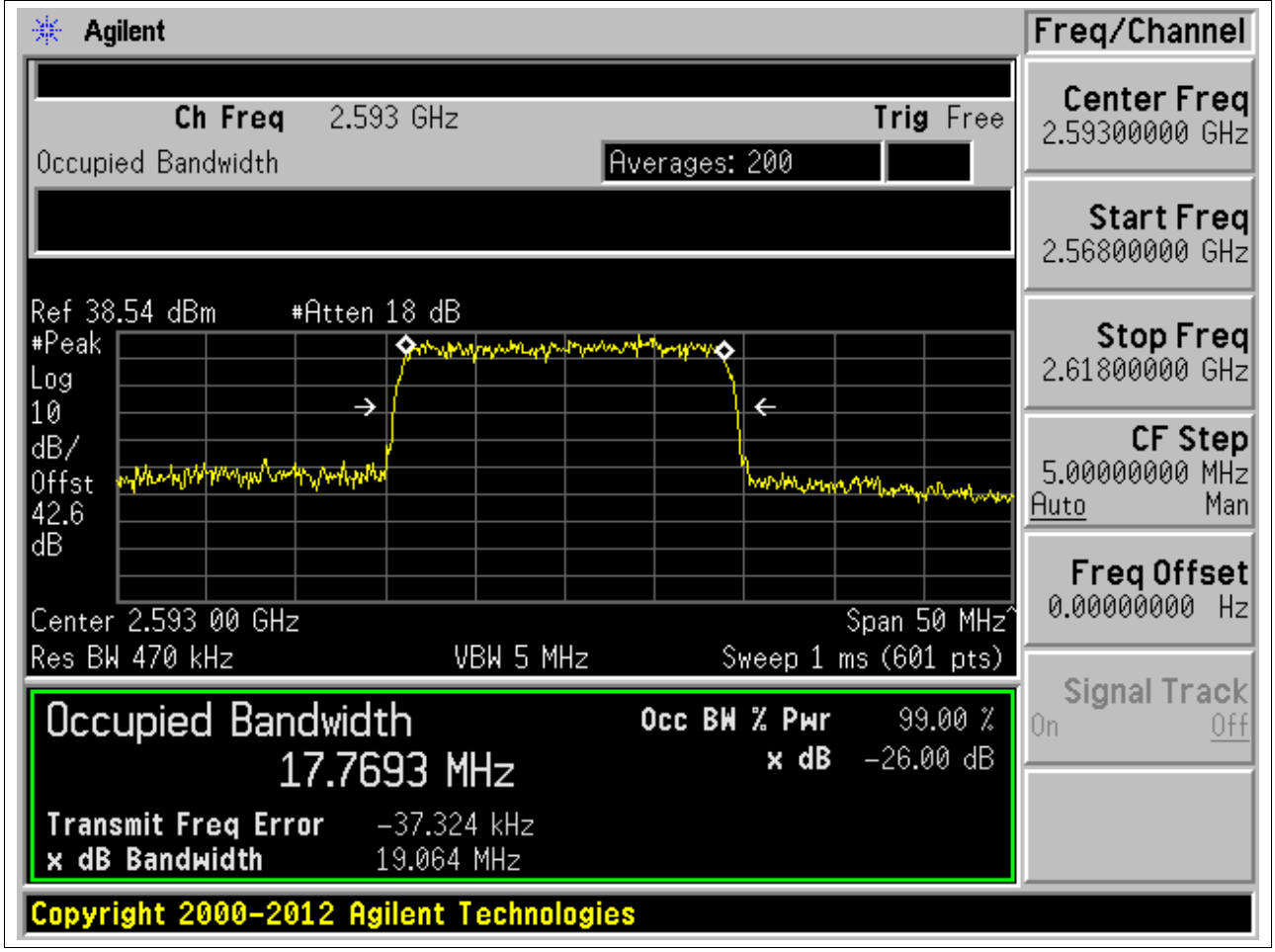
2.1 20M _B

Center Frequency [MHz]	OBW Power [%]	RBW [MHz]	Detector	OBW [MHz]	Verdict
2506	99	Auto	Peak	17.93961	No Conclusion



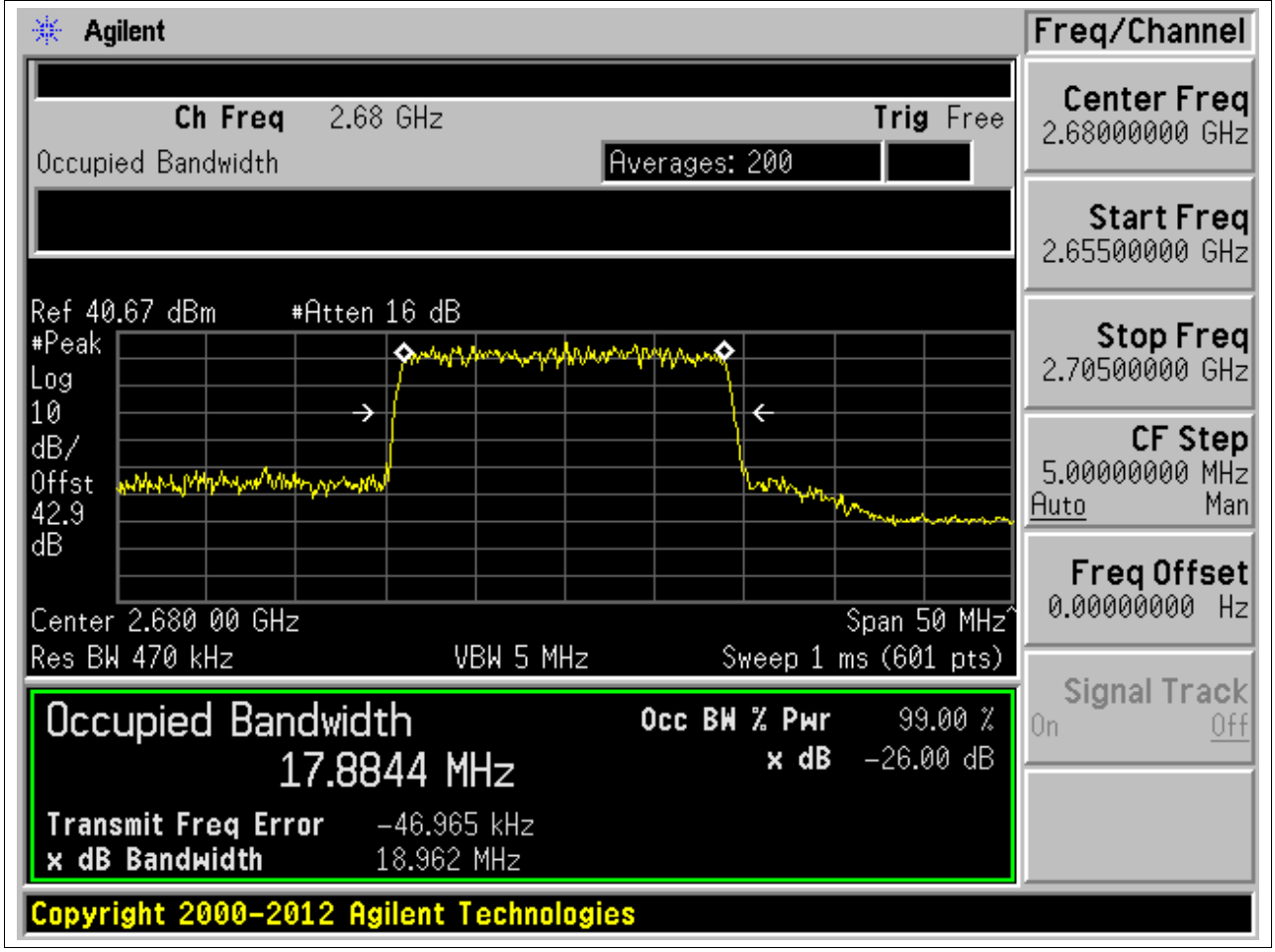
2.2 20M _M

Center Frequency [MHz]	OBW Power [%]	RBW [MHz]	Detector	OBW [MHz]	Verdict
2593	99	Auto	Peak	17.76926	No Conclusion



2.3 20M _T

Center Frequency [MHz]	OBW Power [%]	RBW [MHz]	Detector	OBW [MHz]	Verdict
2680	99	Auto	Peak	17.88441	No Conclusion



Appendix C: Band Edges Compliance

1 Result Table

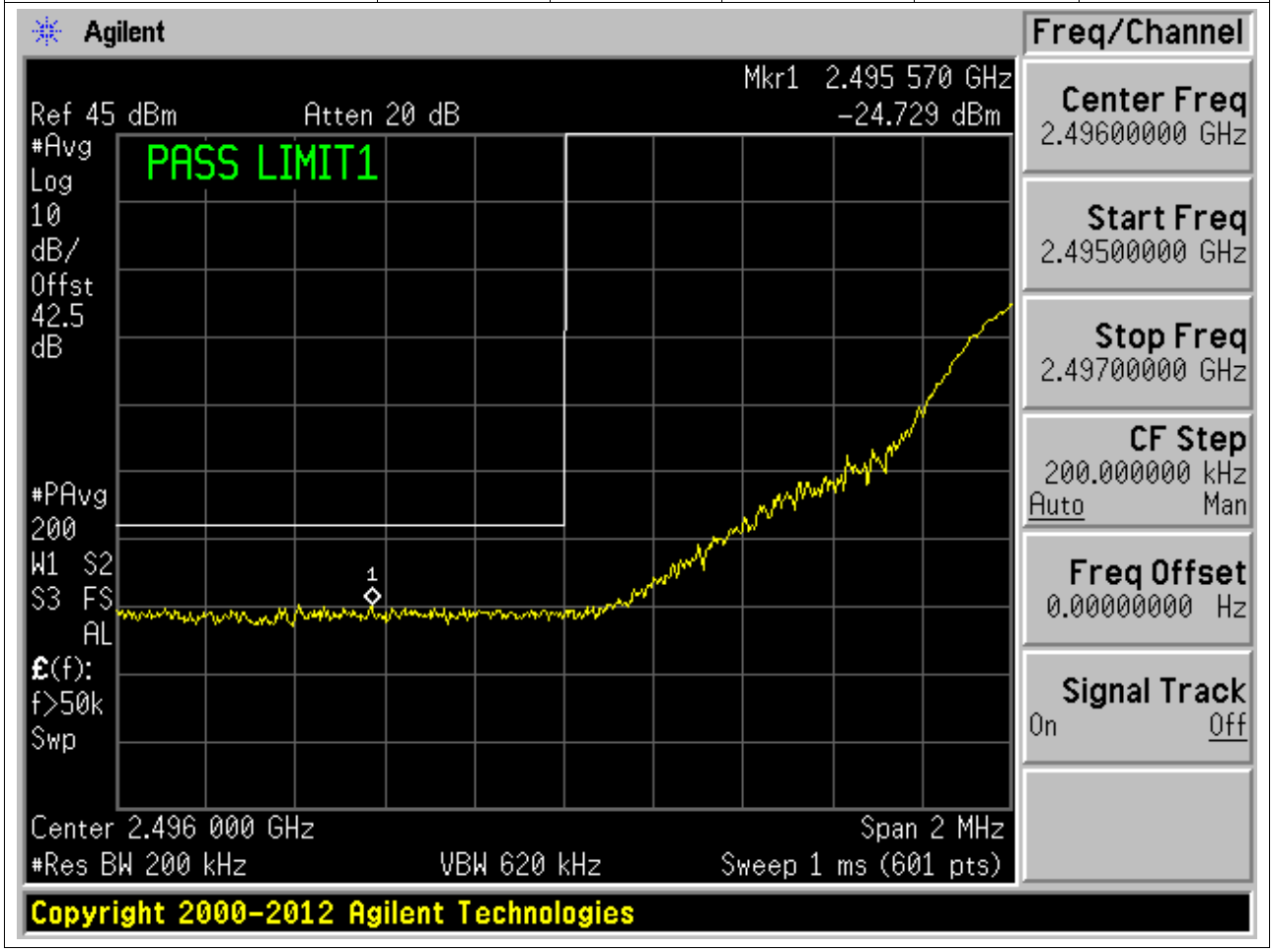
NOTE: The offset of measurement filter -3dB point may be considered when identifying the maximum emission for e.g. the CDMA, WCDMA, WiMAX, LTE systems.

EUT Conf.	Maximum Emission [dBm]	Limit(dBm)	Verdict
20M _B	-24.729	-13	Pass
20M _T	-24.643	-13	Pass
20M+20M+20M _B	-29.043	-13	Pass
20M+20M+20M _T	-30.383	-13	Pass

2 Test Plot

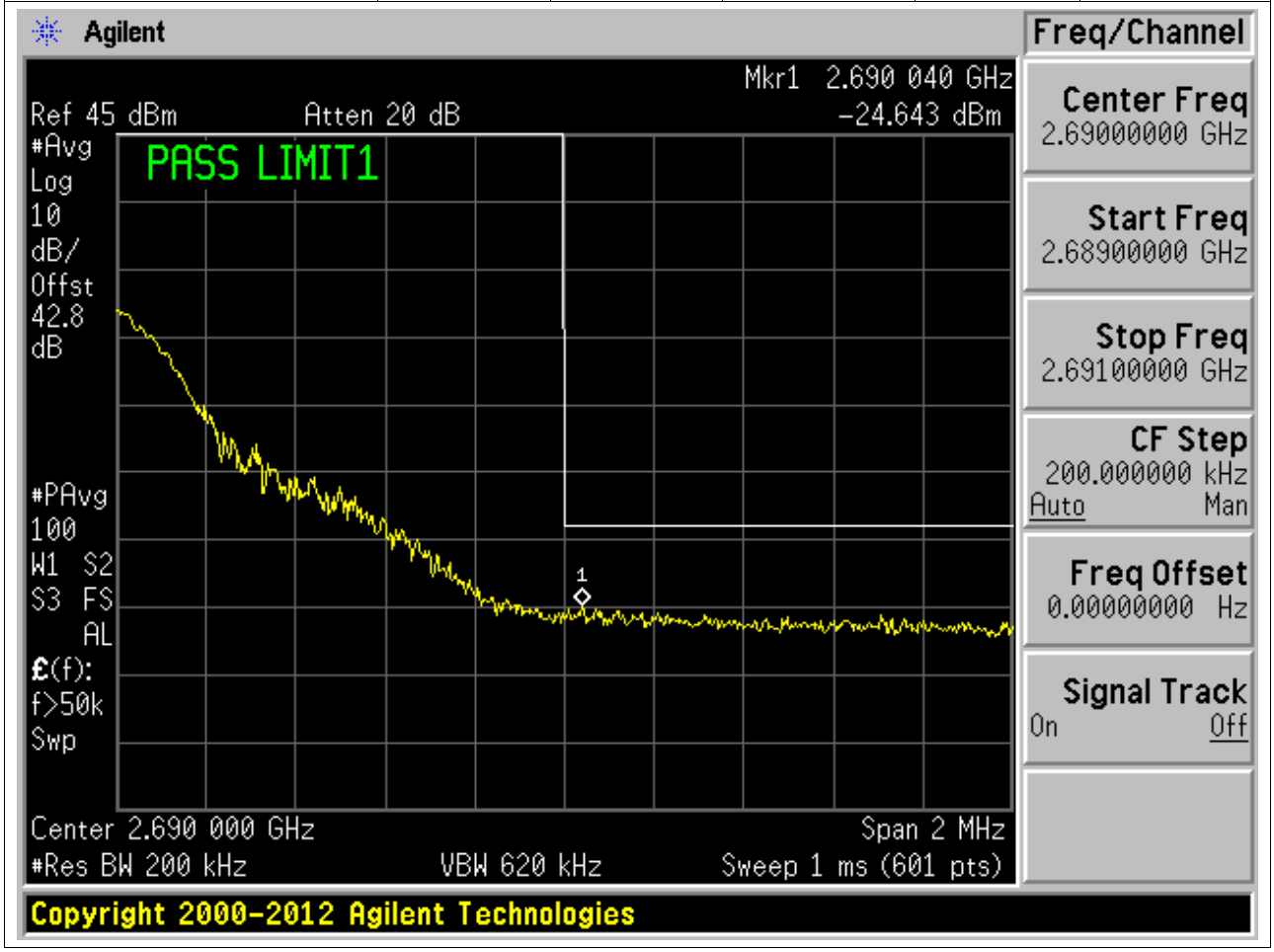
2.1 20M _B

Center Frequency[MHz]	Span [MHz]	RBW [MHz]	Detector	Verdict	Sweep Point
2496	2	0.2	RMS	Pass	601



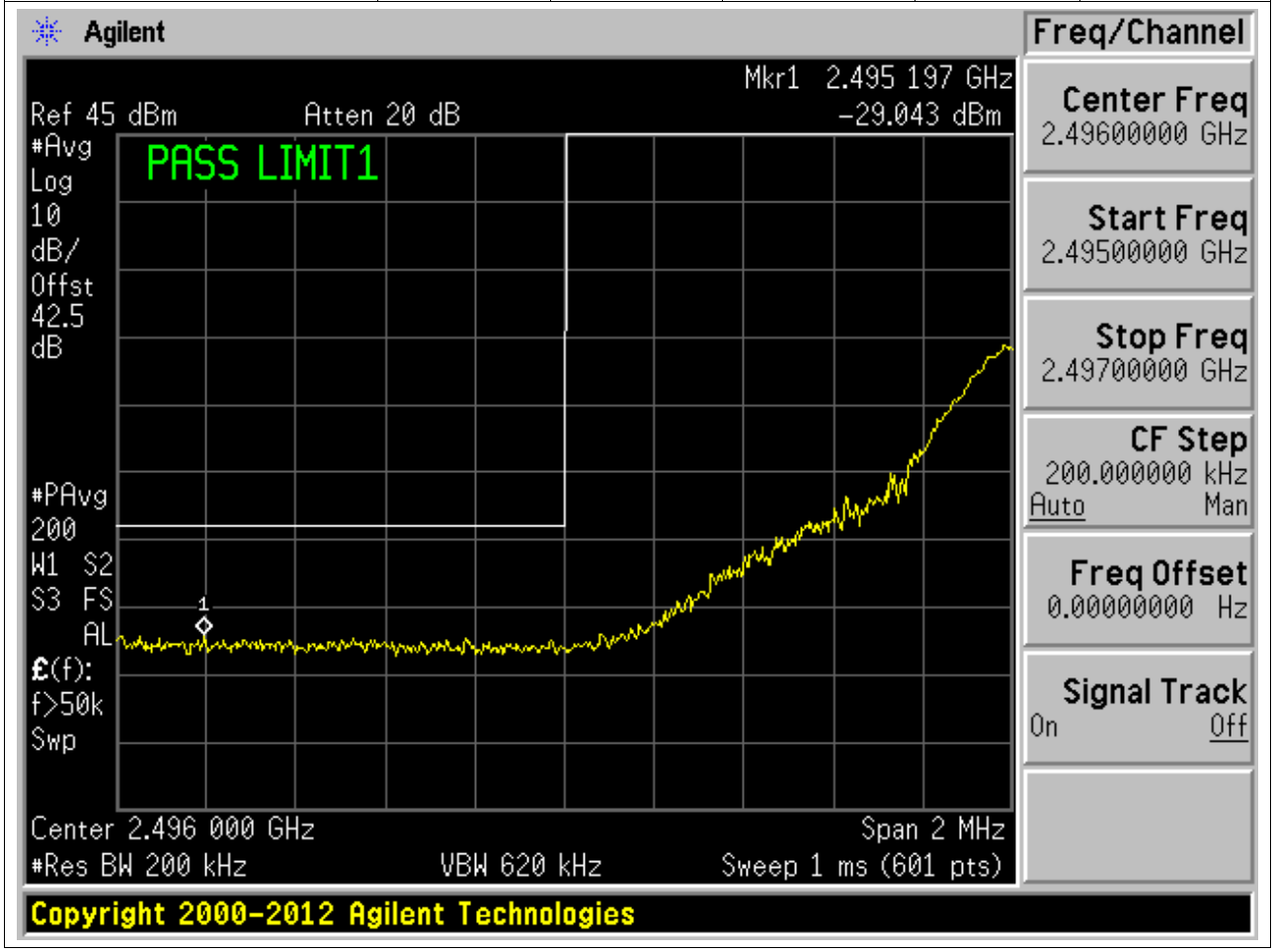
2.2 20M _T

Center Frequency[MHz]	Span [MHz]	RBW [MHz]	Detector	Verdict	Sweep Point
2690	2	0.2	RMS	Pass	601



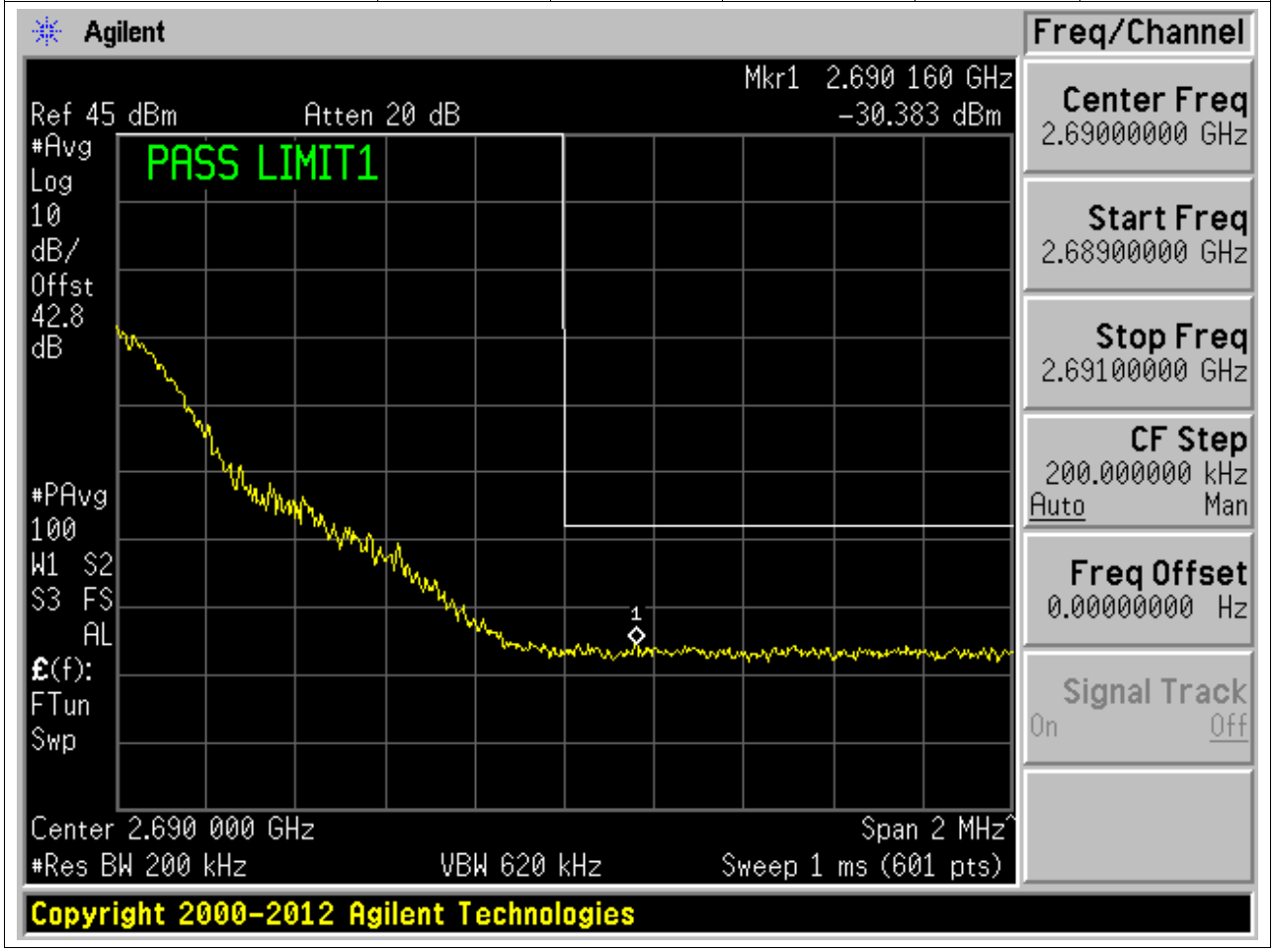
2.3 20M+20M+20M _B

Center Frequency[MHz]	Span [MHz]	RBW [MHz]	Detector	Verdict	Sweep Point
2496	2	0.2	RMS	Pass	601



2.4 20M+20M+20M _T

Center Frequency[MHz]	Span [MHz]	RBW [MHz]	Detector	Verdict	Sweep Point
2690	2	0.2	RMS	Pass	601



Appendix D: Spurious Emission at Antenna Terminals

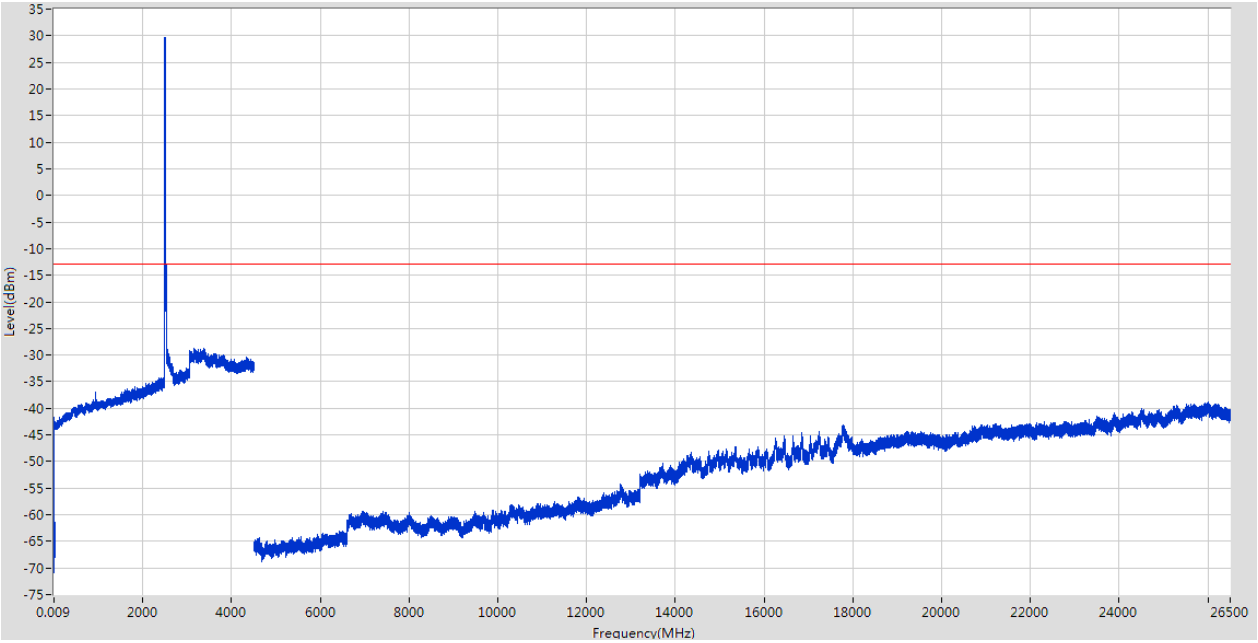
1 Result Table

EUT Conf.	Verdict
20M _B	Pass
20M _M	Pass
20M _T	Pass
20M+20M+20M _B	Pass
20M+20M+20M _M	Pass
20M+20M+20M _T	Pass

2 Test Plot

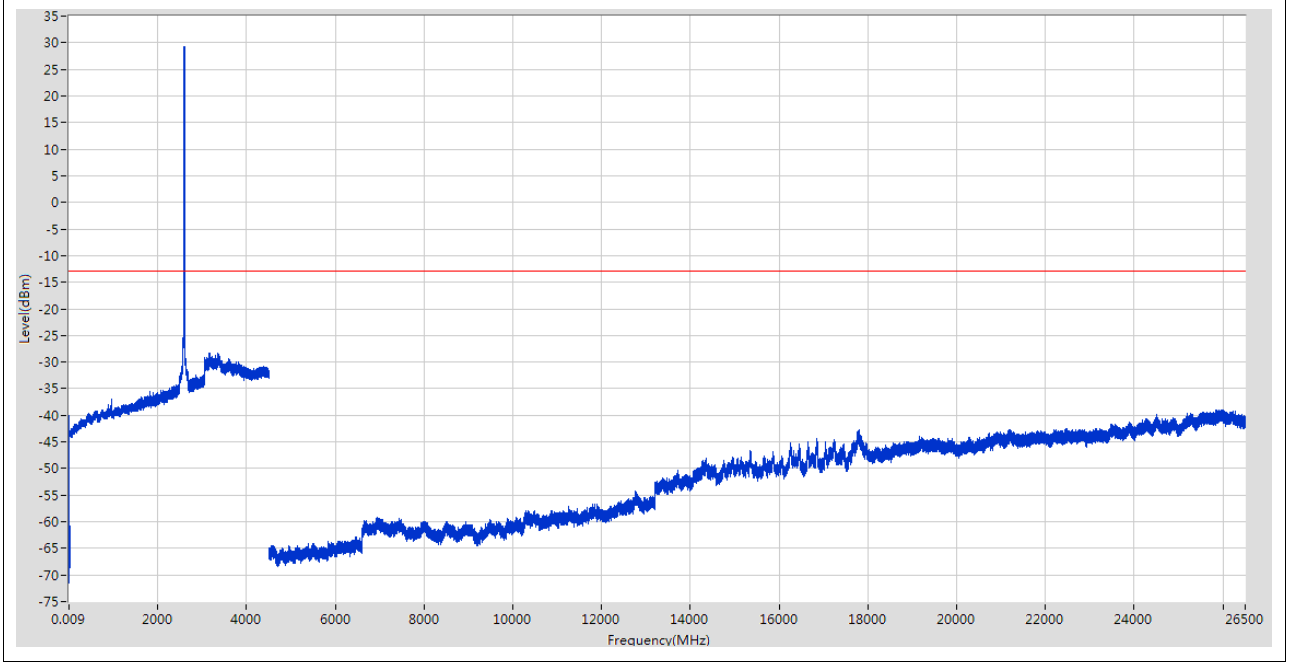
2.1 20M _B

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	13.807 k	-51.83	-13	Pass	705
0.15	30	0.01	RMS	158.001 k	-41.63	-13	Pass	14925
30	1500	1	RMS	944.724452 M	-36.91	-13	Pass	7350
1500	4500	1	RMS	2513.723746 M	29.69	-13	centre frequency	15000
4500	26500	1	RMS	26004.858693 M	-38.75	-13	Pass	110000



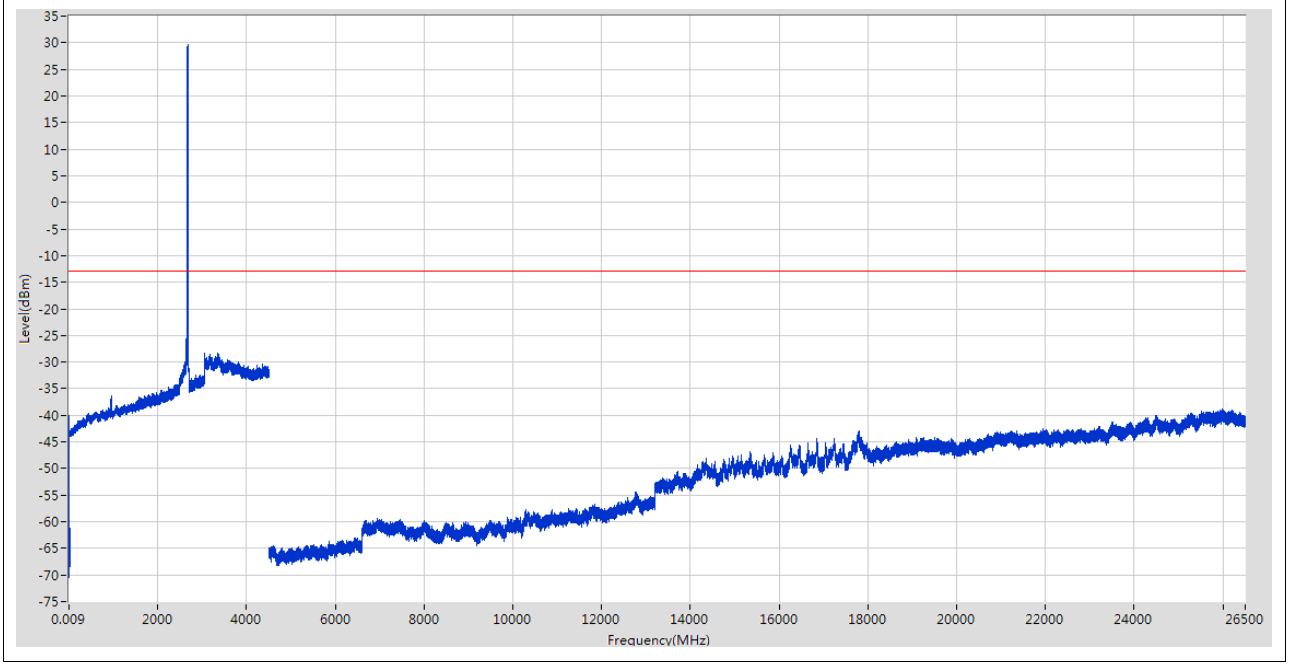
2.2 20M _M

Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict	Swee p Point
0.009	0.15	0.001	RMS	13.807 k	-52.05	-13	Pass	705
0.15	30	0.01	RMS	160.001 k	-40.04	-13	Pass	14925
30	1500	1	RMS	950.525242 M	-37	-13	Pass	7350
1500	4500	1	RMS	2590.333097 M	29.28	-13	centre frequency	15000
4500	26500	1	RMS	25986.853554 M	-38.95	-13	Pass	11000 0



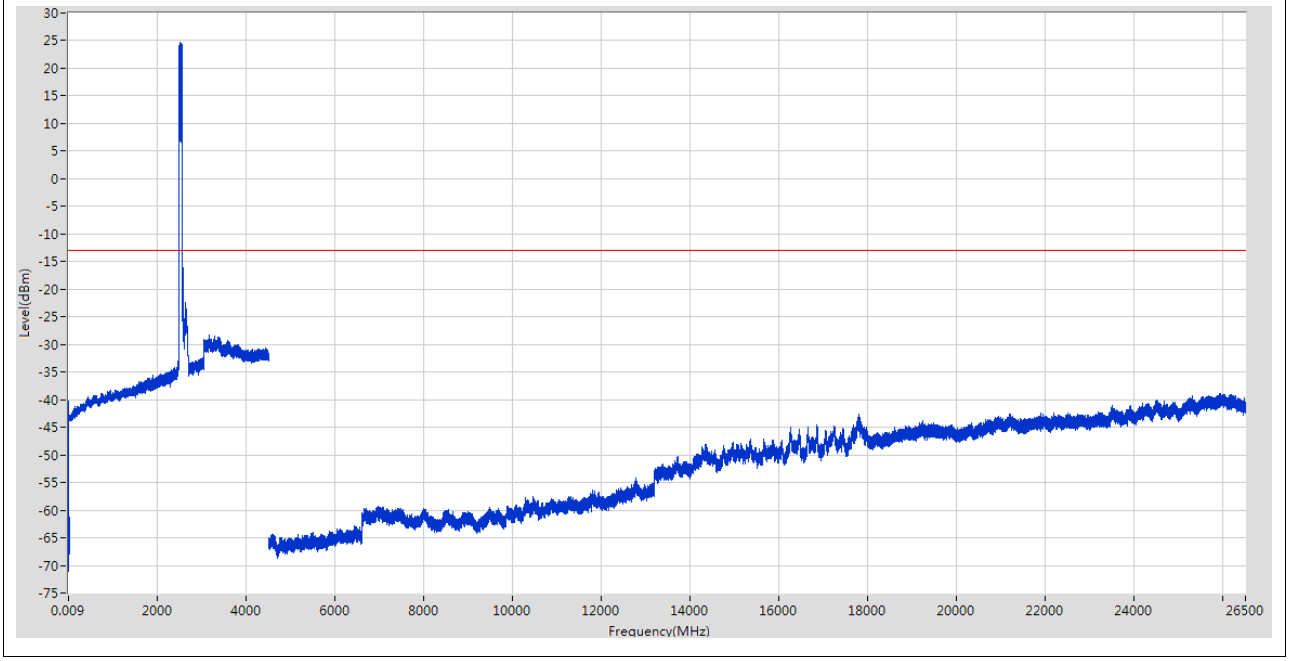
2.3 20M _T

Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict	Swee p Point
0.009	0.15	0.001	RMS	14.207 k	-52.73	-13	Pass	705
0.15	30	0.01	RMS	158.001 k	-40.07	-13	Pass	14925
30	1500	1	RMS	948.324942 M	-36.43	-13	Pass	7350
1500	4500	1	RMS	2672.943182 M	29.71	-13	centre frequency	15000
4500	26500	1	RMS	25978.451156 M	-38.83	-13	Pass	110000



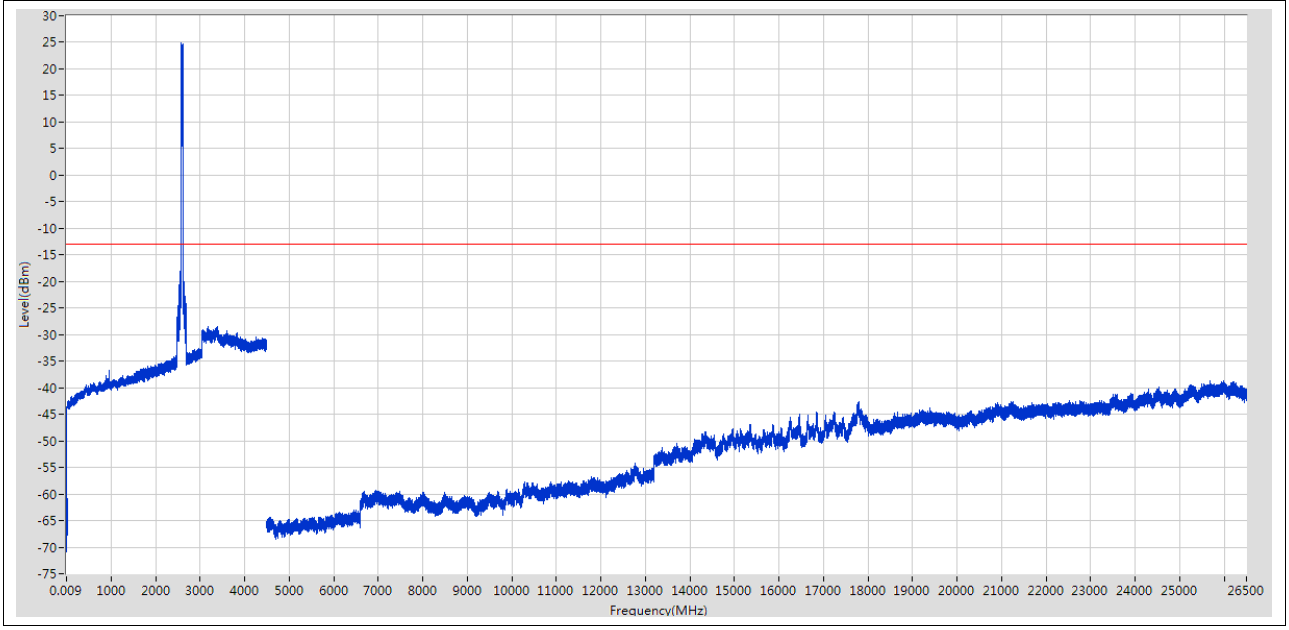
2.4 20M+20M+20M _B

Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict	Swee p Point
0.009	0.15	0.001	RMS	13.807 k	-51.71	-13	Pass	705
0.15	30	0.01	RMS	160.001 k	-40.25	-13	Pass	14925
30	1500	1	RMS	1462.194856 M	-37.49	-13	Pass	7350
1500	4500	1	RMS	2513.723746 M	24.8	-13	centre frequency	15000
4500	26500	1	RMS	25942.040765 M	-38.87	-13	Pass	110000



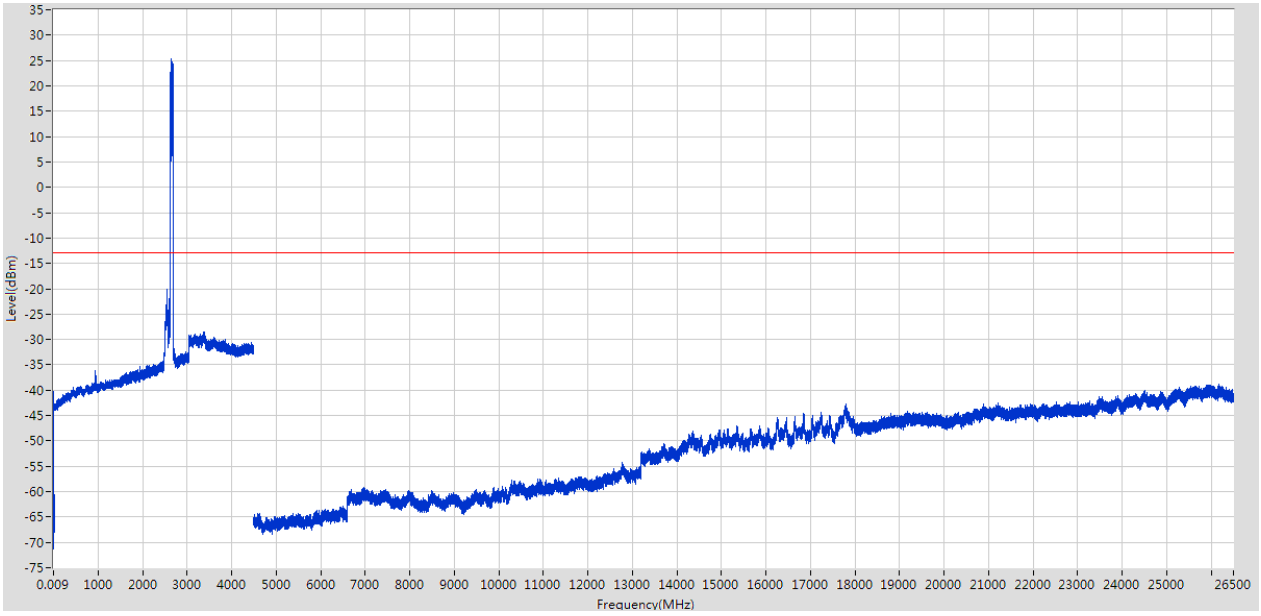
2.5 20M+20M+20M _M

Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict	Swee p Point
0.009	0.15	0.001	RMS	13.807 k	-52.03	-13	Pass	705
0.15	30	0.01	RMS	158.001 k	-43.63	-13	Pass	14925
30	1500	1	RMS	953.125595 M	-36.82	-13	Pass	7350
1500	4500	1	RMS	2572.530924 M	24.85	-13	centre frequency	15000
4500	26500	1	RMS	25991.454867 M	-38.68	-13	Pass	110000



2.6 20M+20M+20M _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	14.207 k	-51.09	-13	Pass	705
0.15	30	0.01	RMS	158.001 k	-40.23	-13	Pass	14925
30	1500	1	RMS	944.92448 M	-36.16	-13	Pass	7350
1500	4500	1	RMS	2645.539836 M	25.29	-13	centre frequency	15000
4500	26500	1	RMS	26168.105281 M	-38.81	-13	Pass	110000



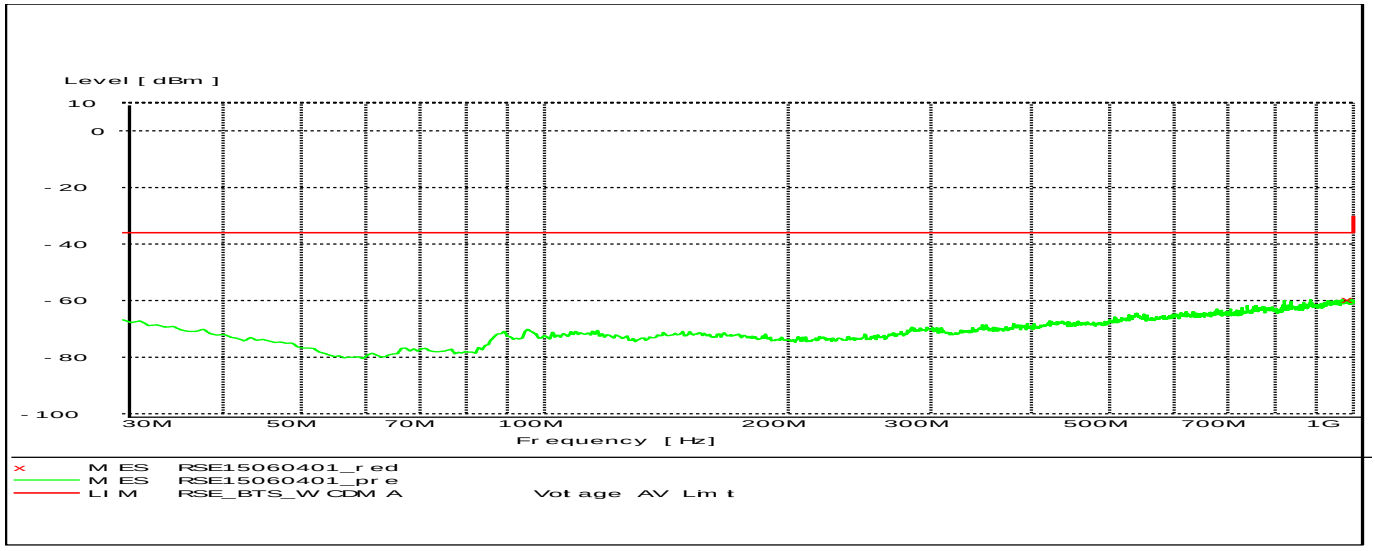
Appendix E: Field Strength of Spurious Radiation

1 Result Table

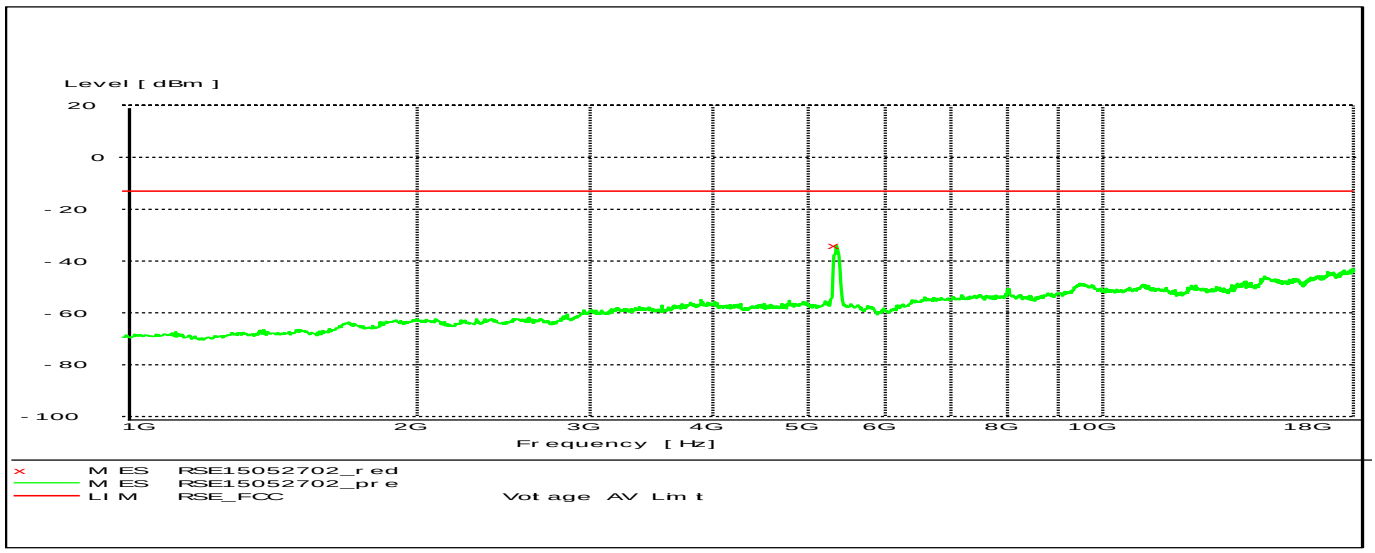
EUT Conf.	Maximum Emission [dBm]	Verdict
20M+20M+20M _T	< -13	Pass

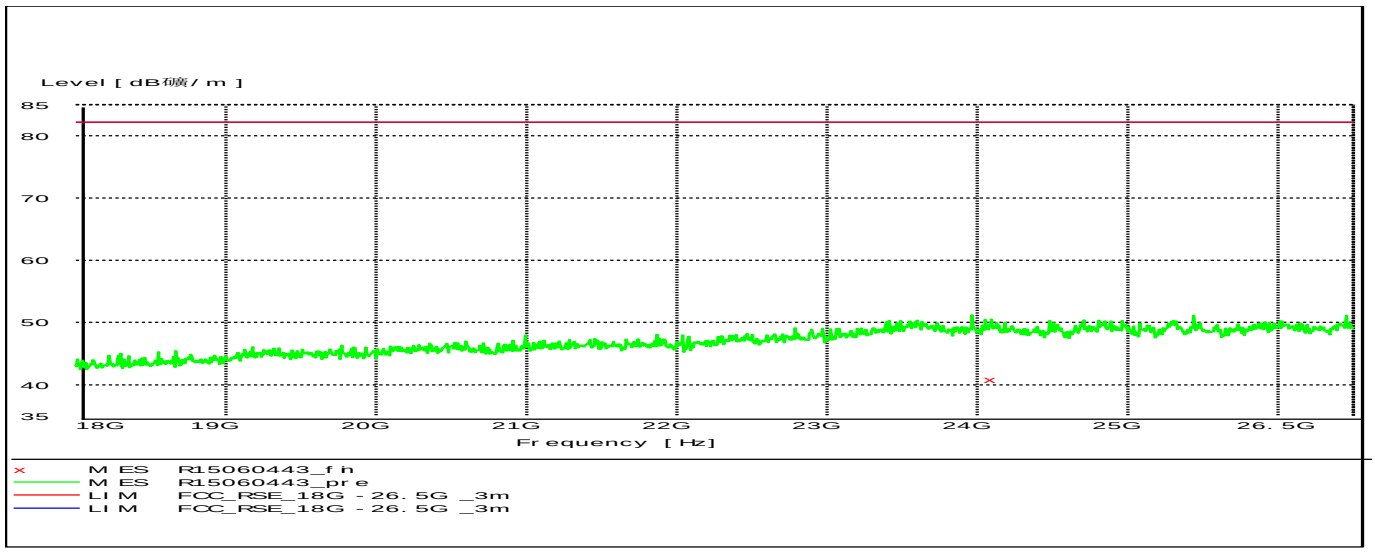
2 Test Plot

2.1.1 Below 1GHz



2.1.2 Above 1GHz





Appendix F: Frequency Stability

1 Result Table

1.1 Frequency Error

Note: A representative EUT configuration was selected since the un-modulation carrier configuration was required by the standards/rules.

(1) Frequency Error vs. Temperature:

EUT Conf.	Voltage	Temperature	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
20M _B	100%	-30 °C	1.8521	0.000739066	Pass
		-20 °C	1.5086	0.000601995	Pass
		-10 °C	1.3383	0.000534038	Pass
		0 °C	1.8304	0.000730407	Pass
		+10 °C	1.4503	0.000578731	Pass
		+20 °C	-3.1604	-0.001261133	Pass
		+30 °C	2.0946	0.000835833	Pass
		+40 °C	0.96467	0.000384944	Pass
		+50 °C	0.42702	0.000170399	Pass
20M _T	100%	-30 °C	1.1128	0.000415223	Pass
		-20 °C	-1.9654	-0.00073283	Pass
		-10 °C	2.1002	0.000783656	Pass
		0 °C	2.2878	0.000853656	Pass
		+10 °C	-1.3614	-0.000507985	Pass
		+20 °C	1.7417	0.000649888	Pass
		+30 °C	-1.0911	-0.000407126	Pass
		+40 °C	1.4070	0.000525000	Pass
		+50 °C	1.9547	0.000356231	Pass

(2) Frequency Error vs. Voltage:

EUT Conf.	Temperature	Voltage	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
20M _B	+20 °C	85 %	-2.0404	-0.000814205	Pass
		100 %	-0.77265	-0.000308320	Pass
		115 %	1.4274	0.000569592	Pass
20M _T	+20 °C	85 %	-1.1384	-0.000424776	Pass
		100 %	1.3258	0.000495671	Pass
		115 %	3.5582	0.001327686	Pass

Appendix G: Receiver Spurious Emissions

Not applicable.

END