



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[dBm]				Verdict
	Port A		Port B		
	Channel Power per Port [dBm]	Channel Power per Port [W]	Channel Power per Port [dBm]	Channel Power per Port [W]	
1L_5M_B	46.52	44.87	46.79	47.75	Pass
1L_5M_M	46.29	42.56	46.5	44.67	Pass
1L_5M_T	46.29	42.56	46.54	45.08	Pass
1L_10M_B	46.51	44.77	46.74	47.21	Pass
1L_10M_M	46.3	42.66	46.65	46.24	Pass
1L_10M_T	46.48	44.46	46.71	46.88	Pass
1L_15M_B	46.63	46.03	46.73	47.10	Pass
1L_15M_M	46.47	44.36	46.75	47.32	Pass
1L_15M_T	46.59	45.60	46.76	47.42	Pass
1L_20M_B	46.62	45.92	46.61	45.81	Pass
1L_20M_M	46.34	43.05	46.6	45.71	Pass
1L_20M_T	46.53	44.98	46.8	47.86	Pass
2L_5M_B	46.58	45.50	46.68	46.56	Pass
2L_5M_T	46.22	41.88	46.31	42.76	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.

NOTE 3: Worst cases are listed. For the same power, the minimum and maximum bandwidth own respectively maximum and minimum emission level.

	Power Spectral Density [dBm/100kHz]	Verdict
1L_5M_B	30.75	Pass
1L_5M_M	30.39	Pass
1L_5M_T	30.34	Pass
1L_20M_B	24.74	Pass



	Power Spectral Density [dBm/100kHz]	Verdict
1L_20M_M	24.41	Pass
1L_20M_T	24.69	Pass

1.3 Peak-to-Average Ratio

NOTE 1: Worst cases are listed. PAPR for different bandwidth is similar.

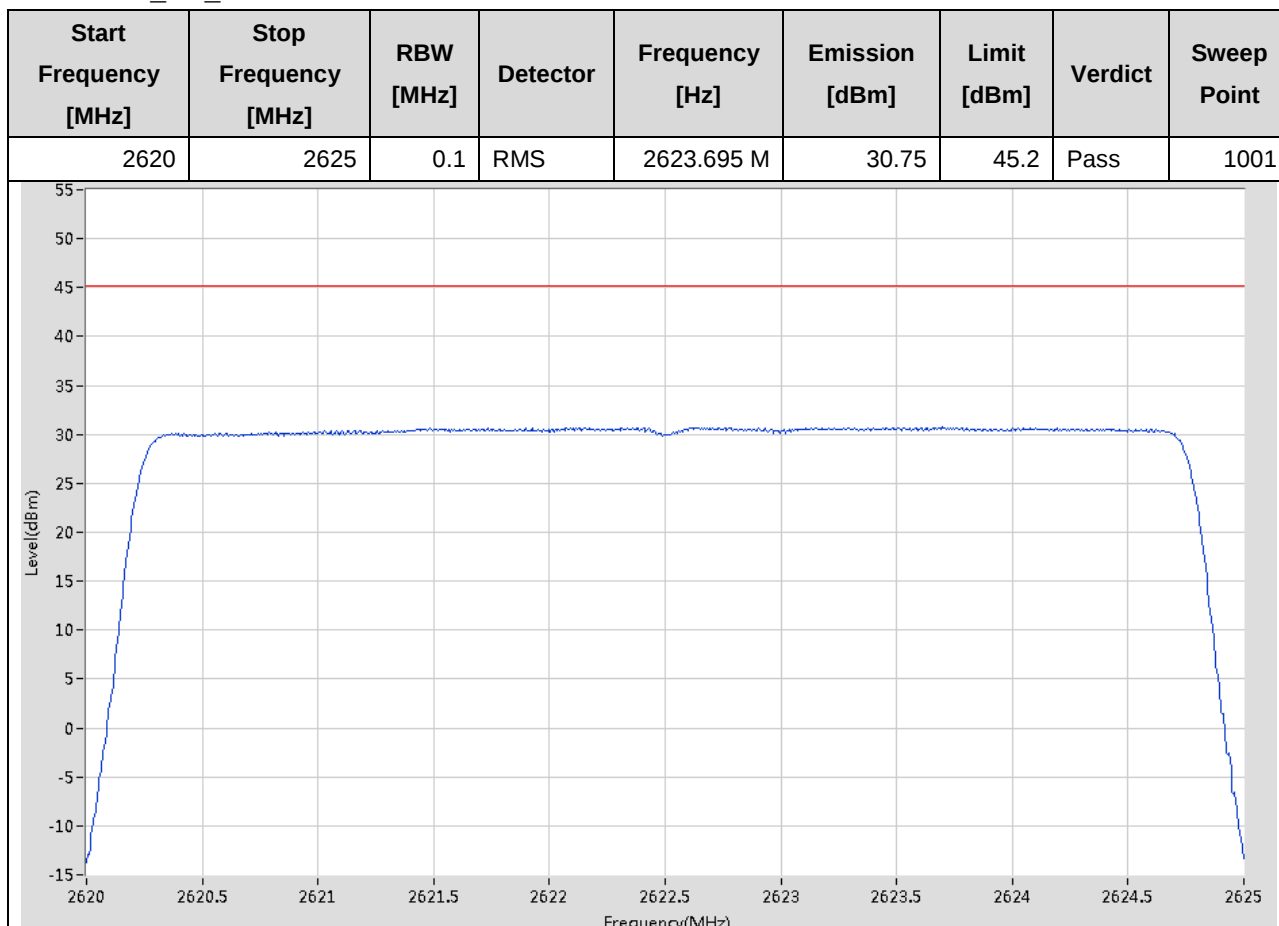
EUT Conf.	Peak-to-Average Ratio@0.1% [dB]	Verdict
1L_5M_B	7.05	Pass
1L_5M_M	6.99	Pass
1L_5M_T	7.01	Pass
1L_20M_B	7.39	Pass
1L_20M_M	7.05	Pass
1L_20M_T	7.13	Pass

2 Test Plot

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

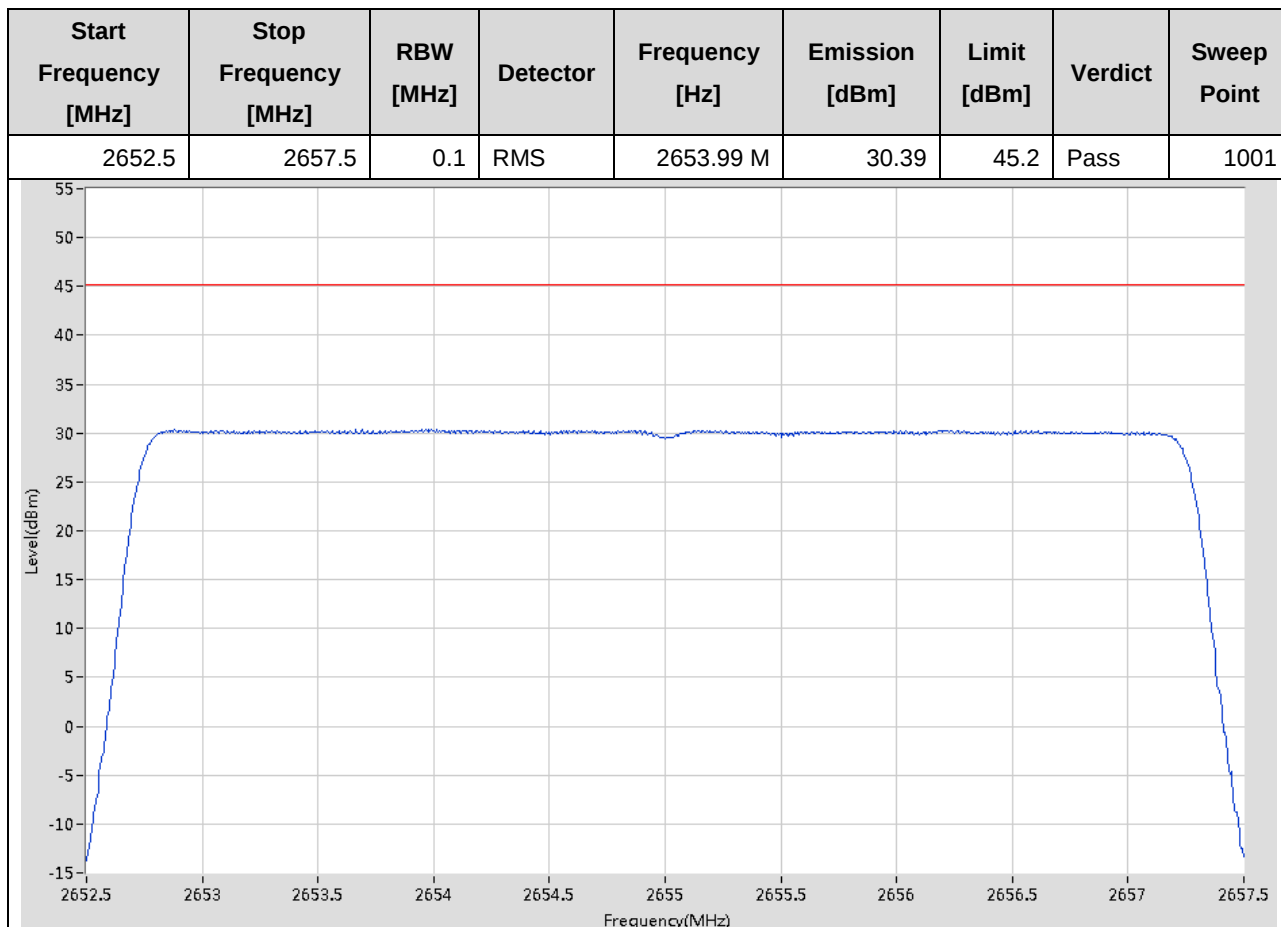
2.1 Power Spectral Density

2.1.1 1L_5M_B





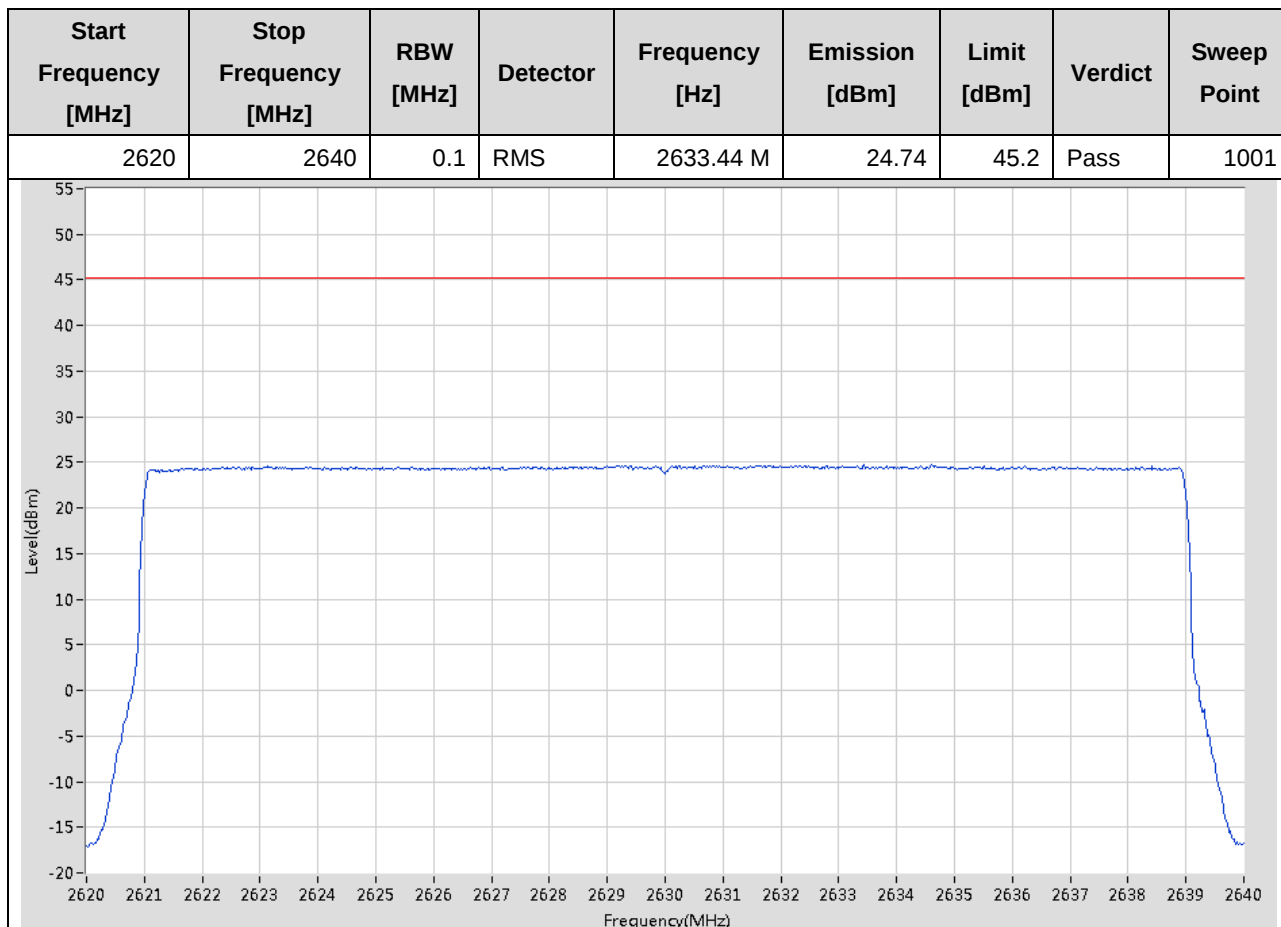
2.1.2 1L_5M_M



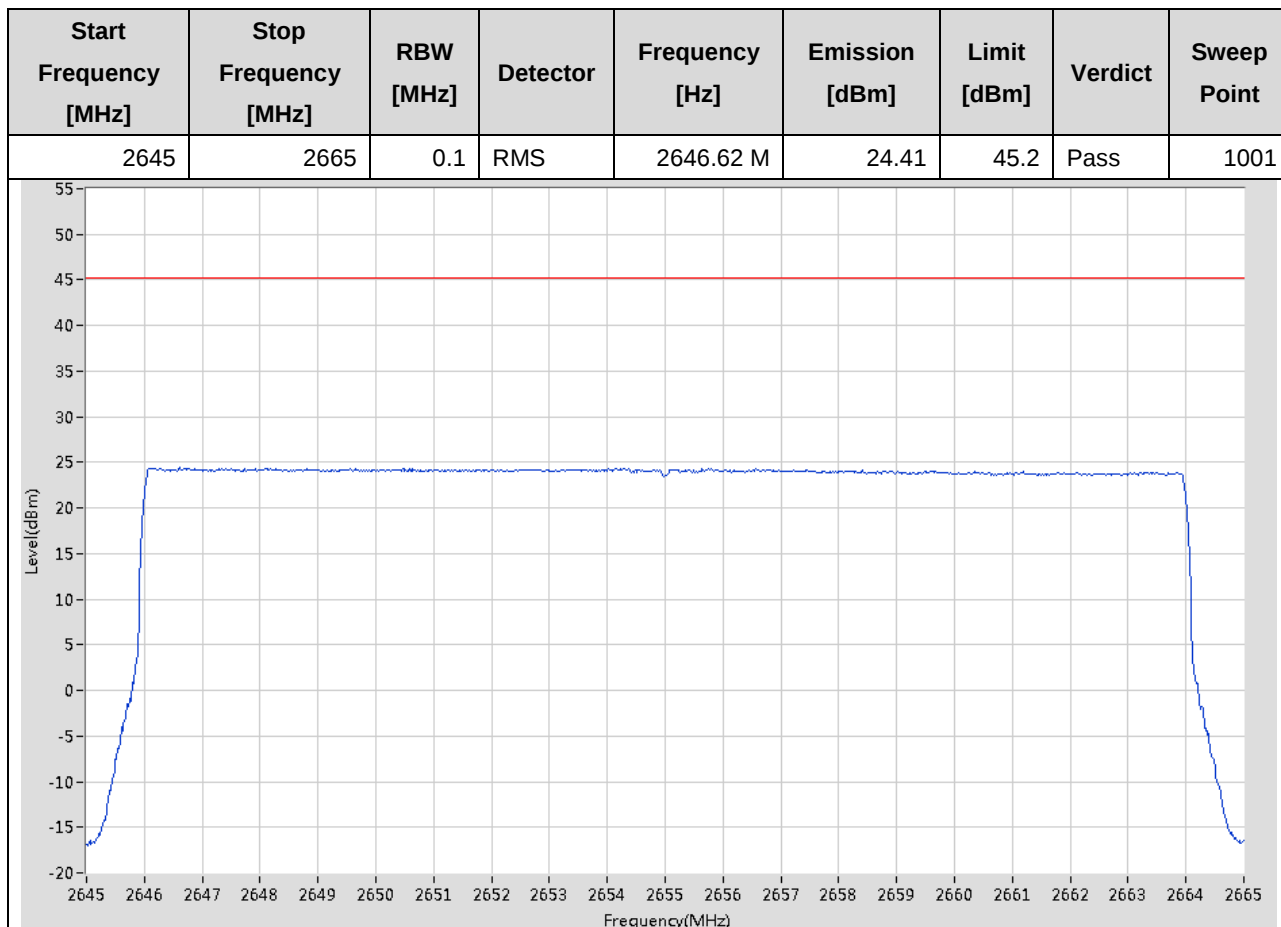
2.1.3 1L_5M_T



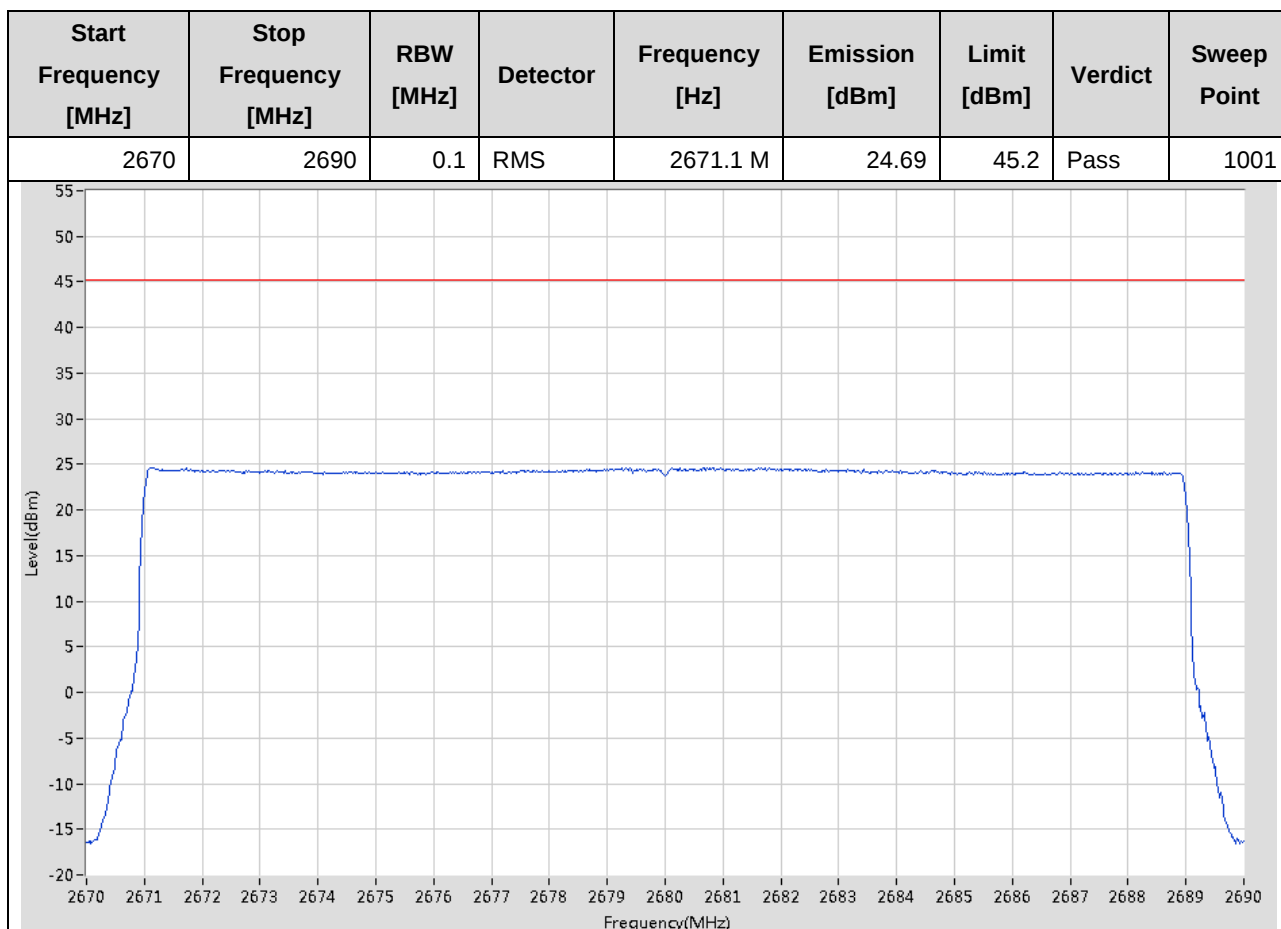
2.1.4 1L_20M_B



2.1.5 1L_20M_M



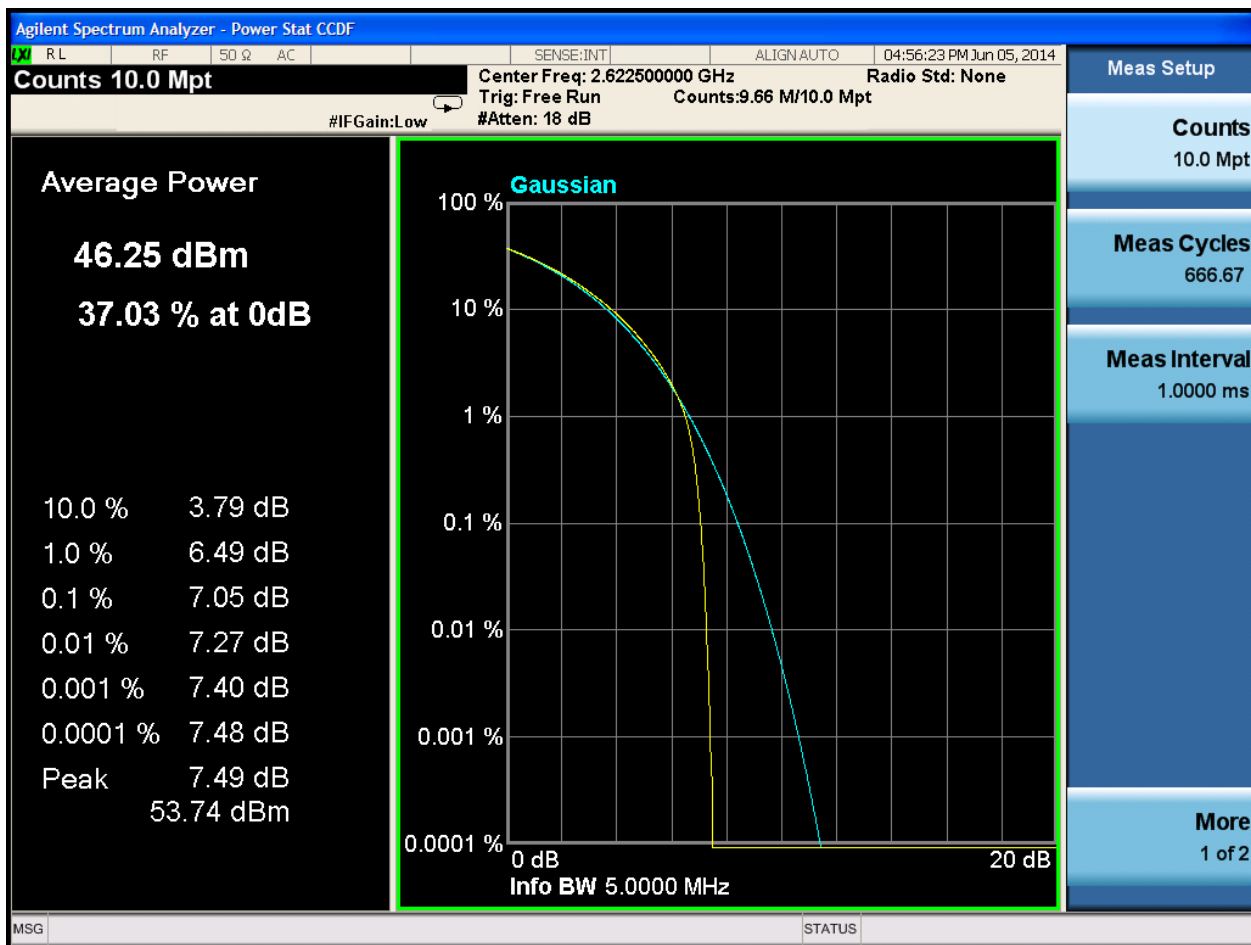
2.1.6 1L_20M_T



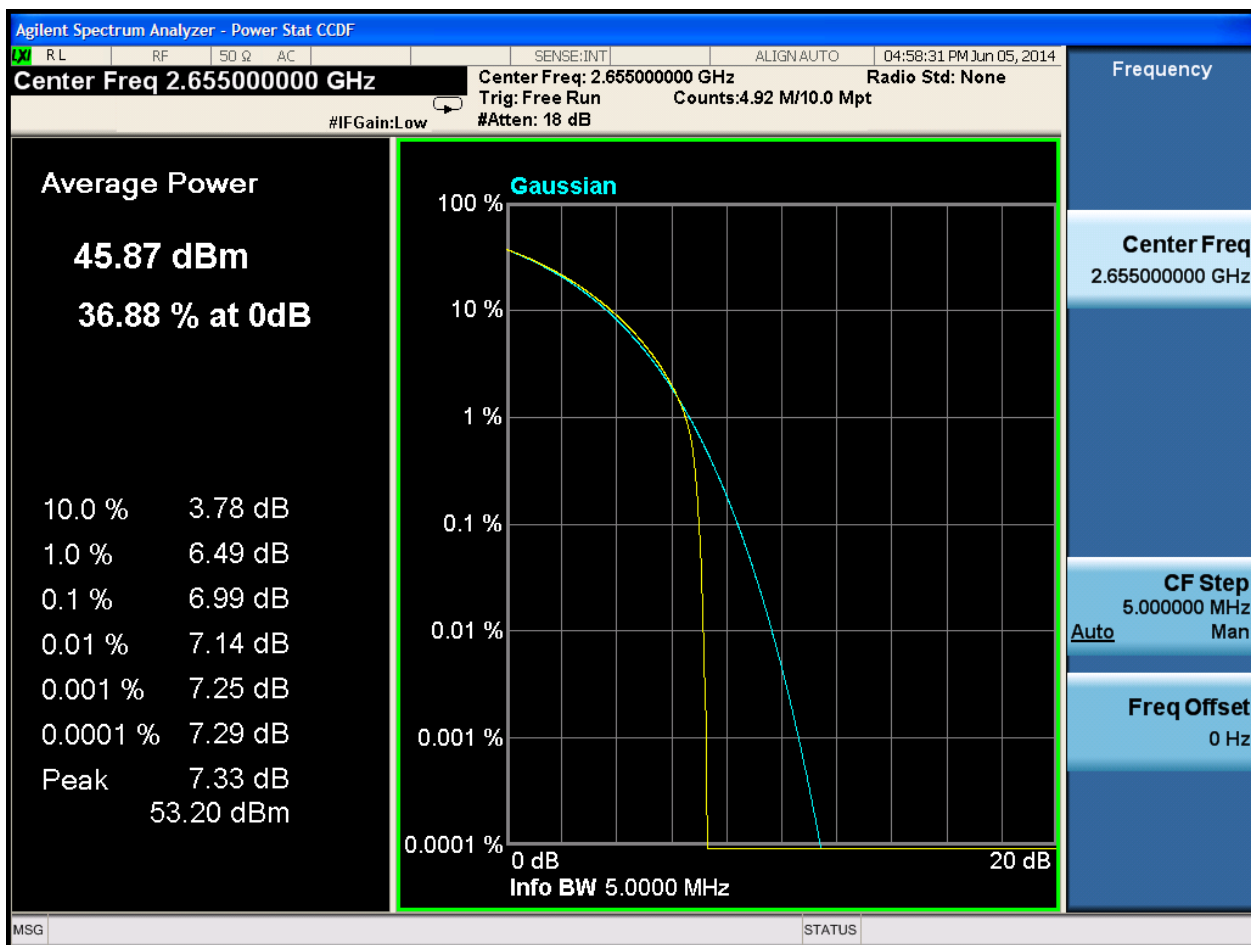


2.2 Peak-to-Average Ratio

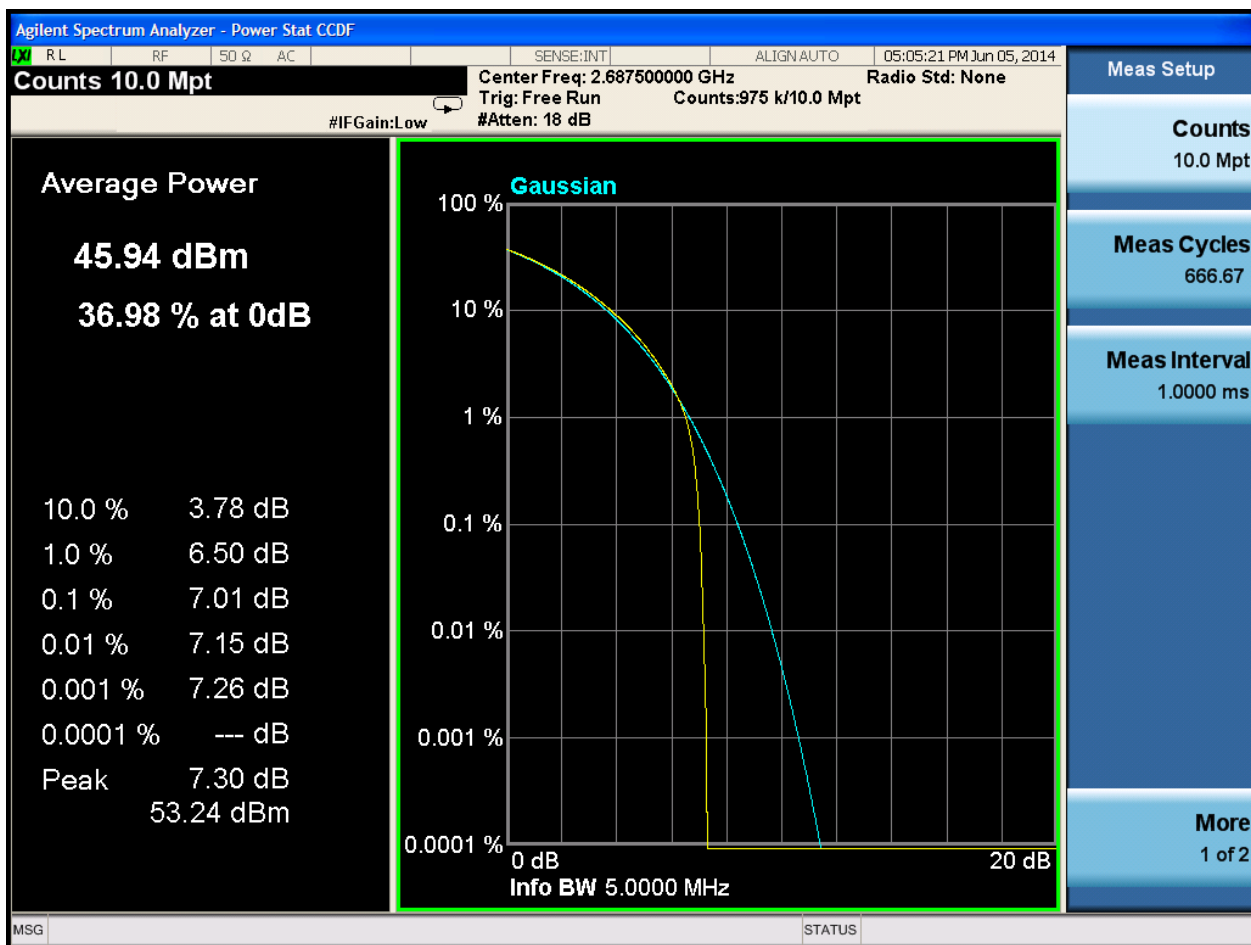
2.2.1 1L_5M_B



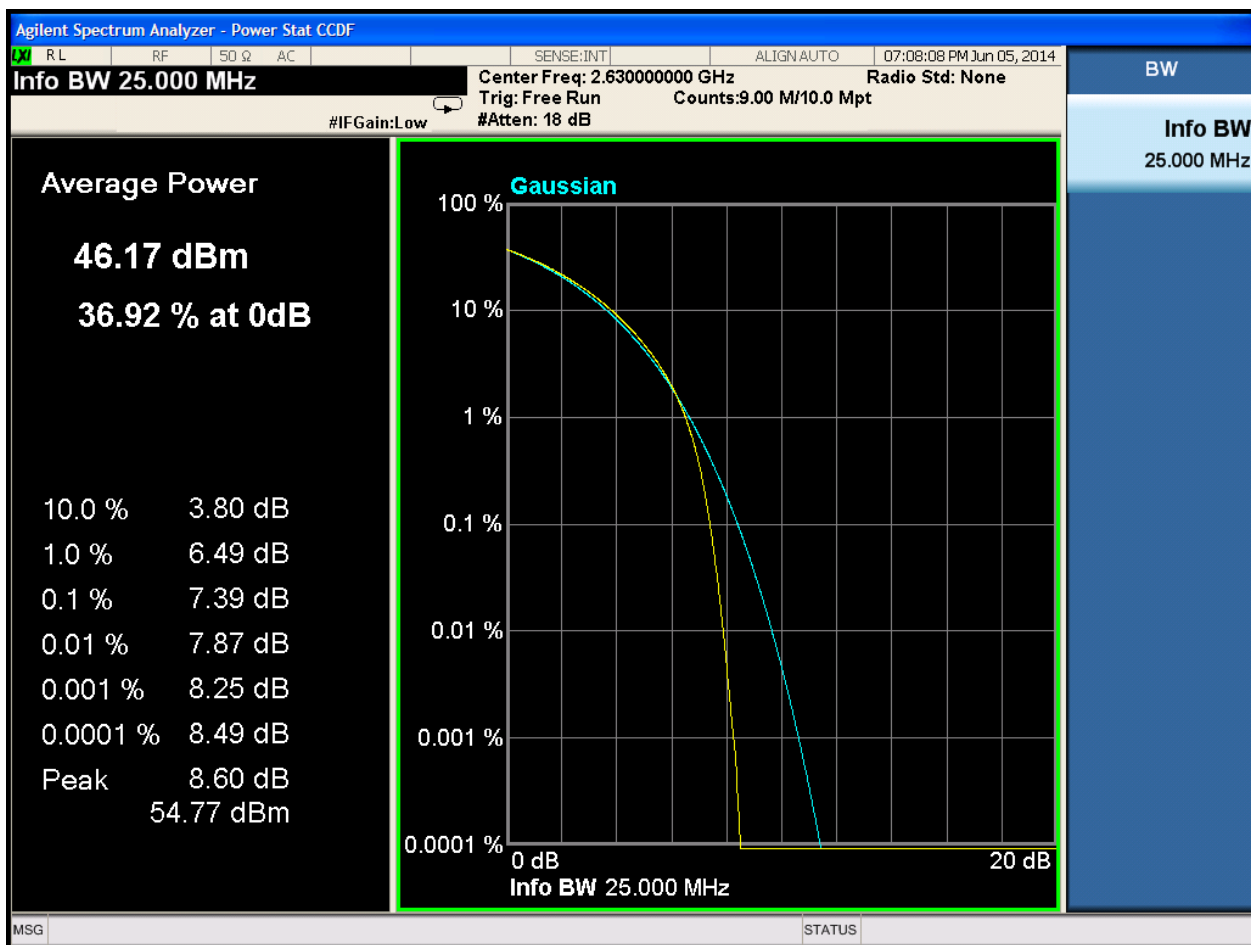
2.2.2 1L_5M_M



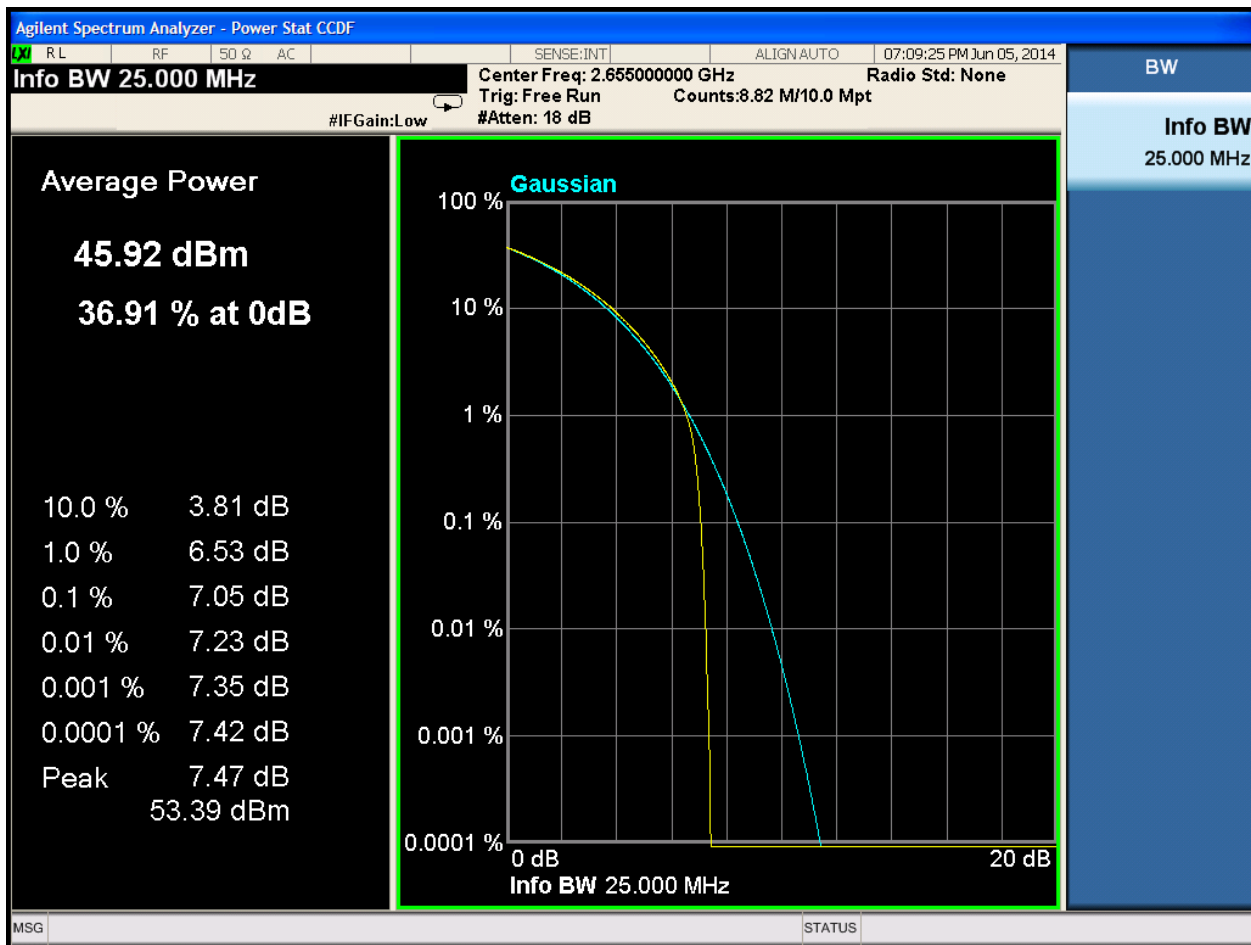
2.2.3 1L_5M_T



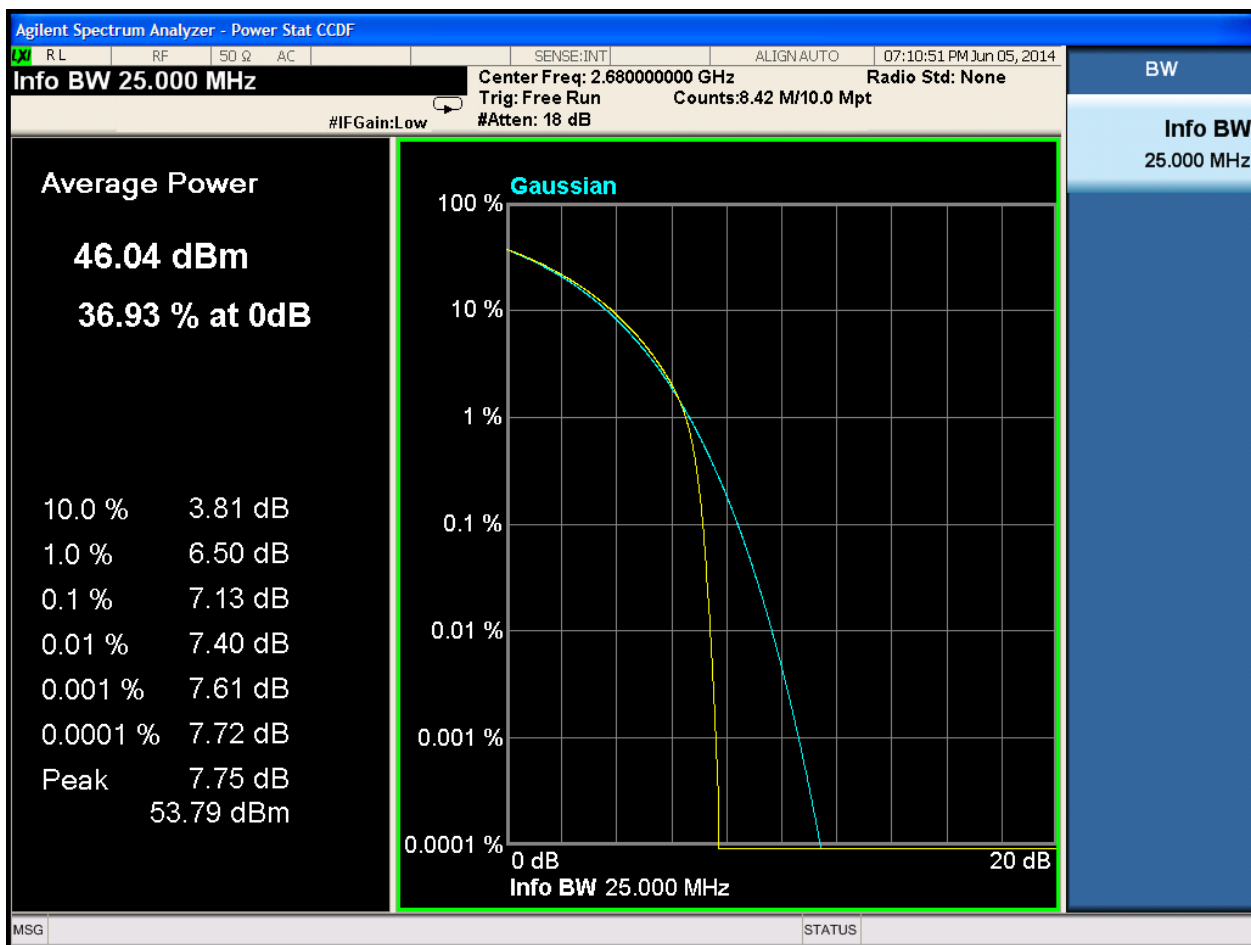
2.2.4 1L_20M_B



2.2.5 1L_20M_M



2.2.6 1L_20M_T





Appendix B: Bandwidth

1 Result Table

1.1 Occupied Bandwidth

EUT Conf.	Occupied Bandwidth [MHz]	Verdict
1L_5M_B	4.504876	Pass
1L_5M_M	4.514301	Pass
1L_5M_T	4.50796	Pass
1L_10M_B	9.001925	Pass
1L_10M_M	8.97621	Pass
1L_10M_T	8.998161	Pass
1L_15M_B	13.48013	Pass
1L_15M_M	13.52562	Pass
1L_15M_T	13.48046	Pass
1L_20M_B	17.92633	Pass
1L_20M_M	18.00522	Pass
1L_20M_T	18.01112	Pass

1.2 26dB Emission Bandwidth

EUT Conf.	Emission Bandwidth, -26 dBc [MHz]	Verdict
1L_5M_B	4.7808	Pass
1L_5M_M	4.785664	Pass
1L_5M_T	4.775424	Pass
1L_10M_B	9.452032	Pass
1L_10M_M	9.482752	Pass
1L_10M_T	9.431808	Pass
1L_15M_B	14.19008	Pass
1L_15M_M	14.15936	Pass
1L_15M_T	14.19008	Pass
1L_20M_B	18.88768	Pass
1L_20M_M	18.90765	Pass
1L_20M_T	19.04742	Pass

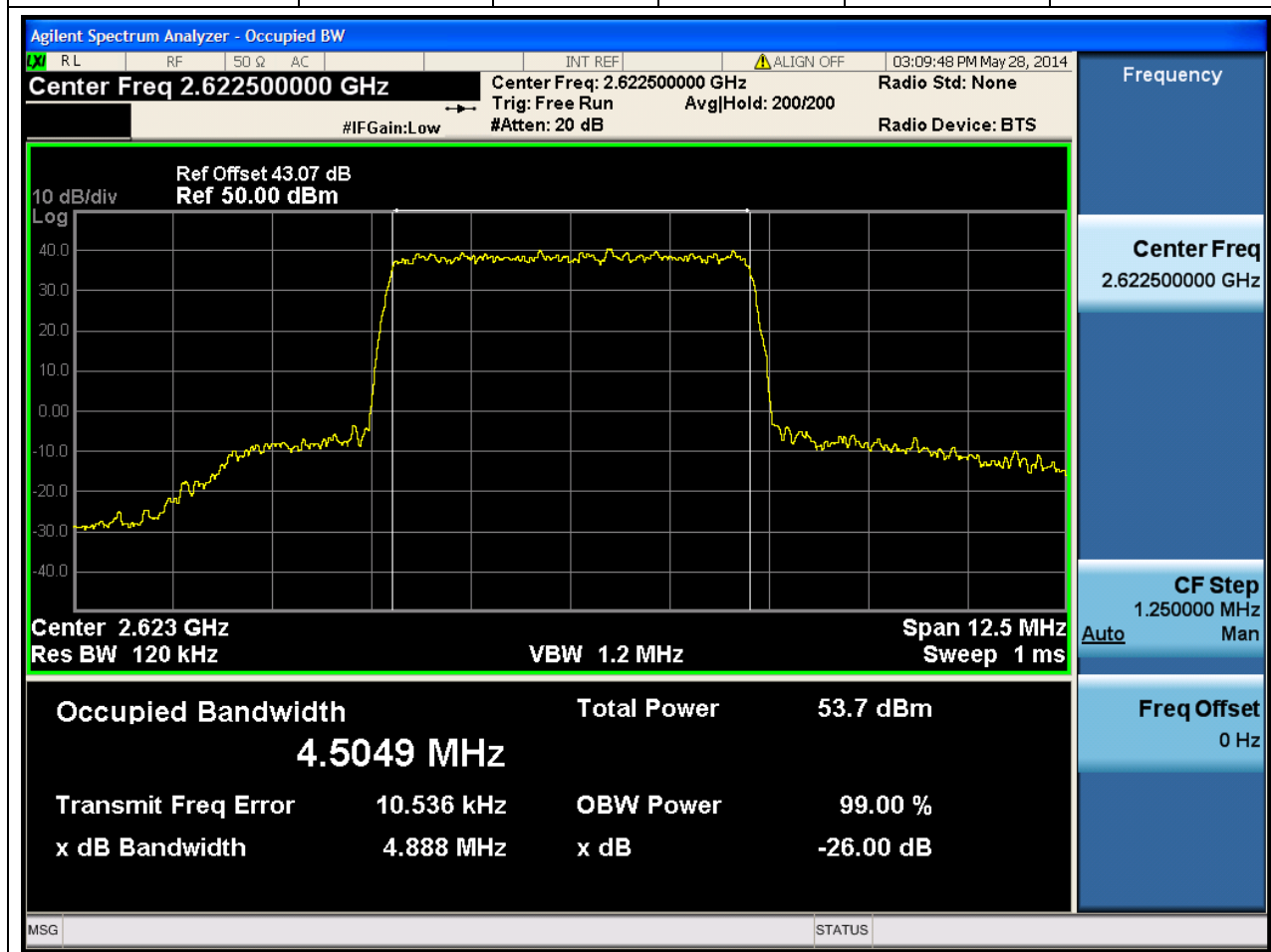


2 Test Plot

2.1 Occupied Bandwidth

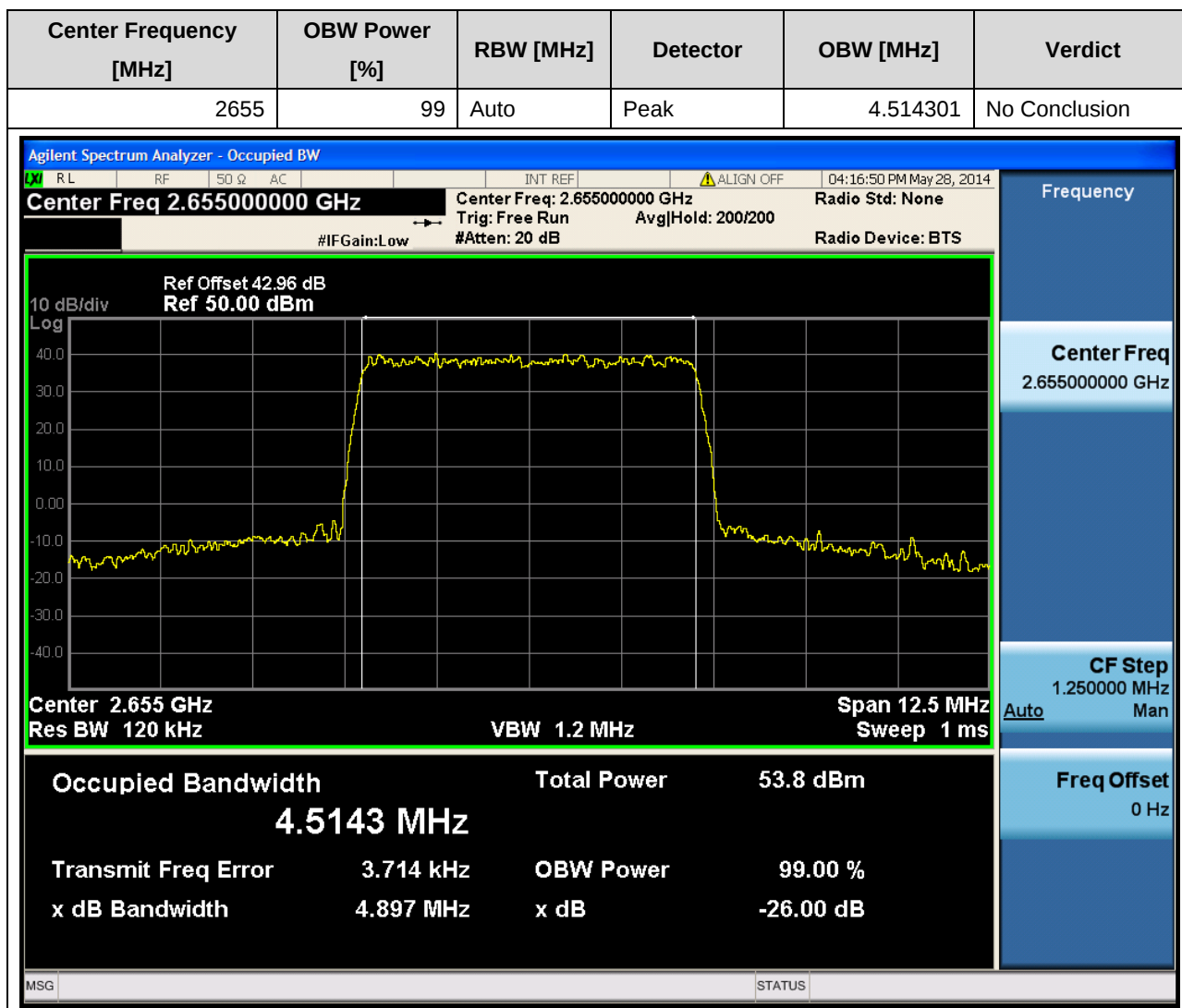
2.1.1 1L_5M_B

Center Frequency [MHz]	OBW Power [%]	RBW [MHz]	Detector	OBW [MHz]	Verdict
2622.5	99	Auto	Peak	4.504876	No Conclusion



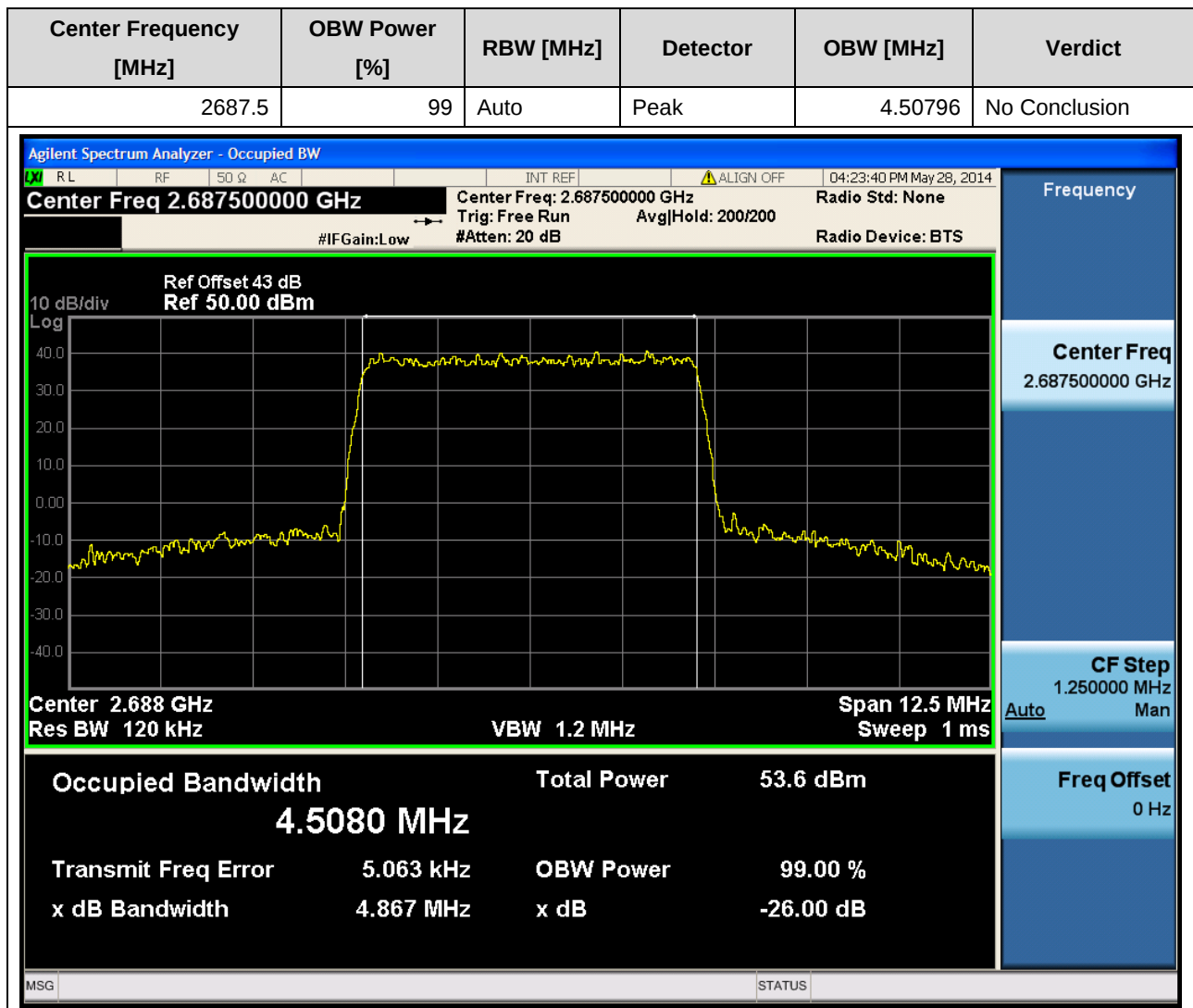


2.1.2 1L_5M_M



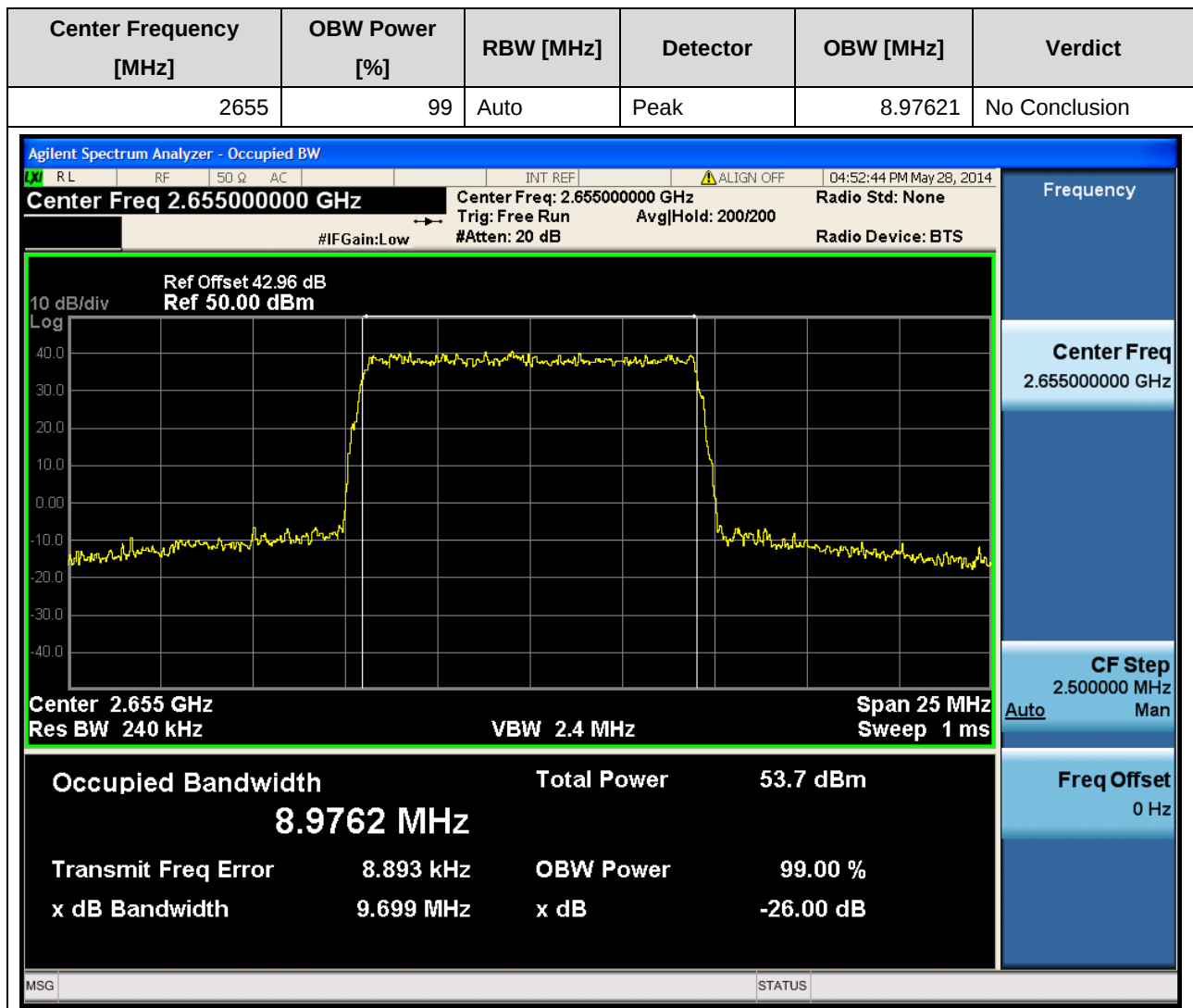


2.1.3 1L_5M_T



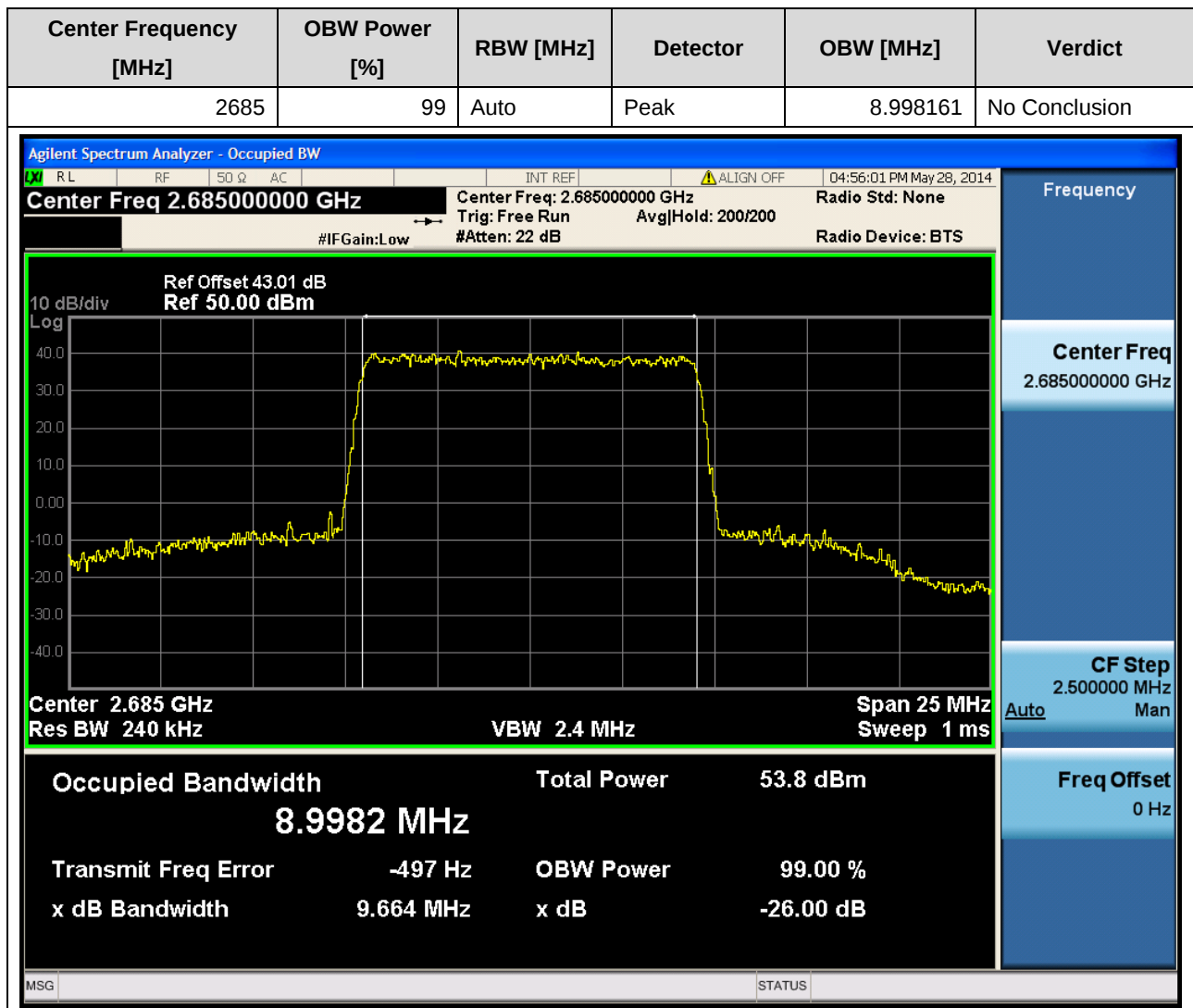


2.1.5 1L_10M_M



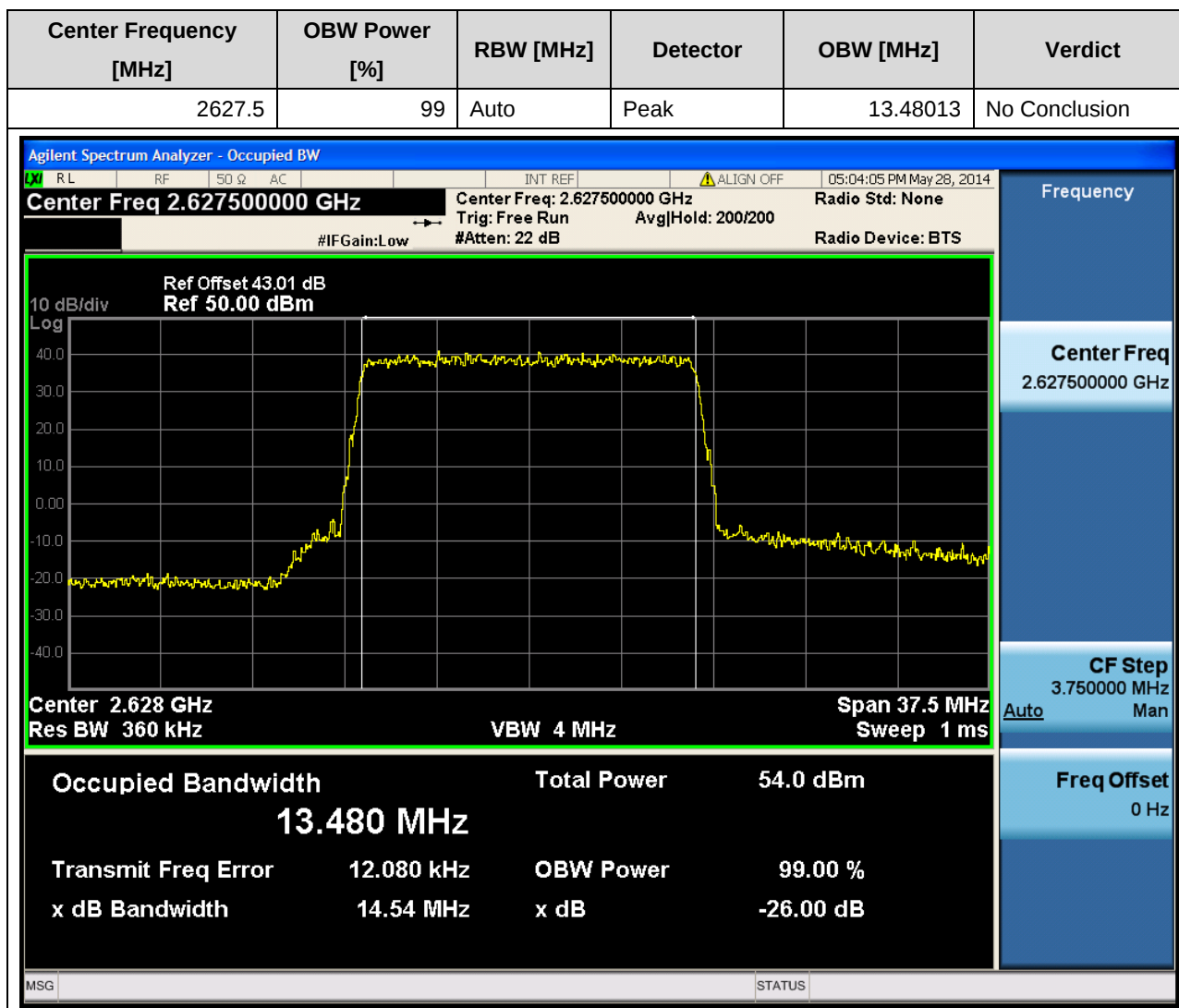


2.1.6 1L_10M_T

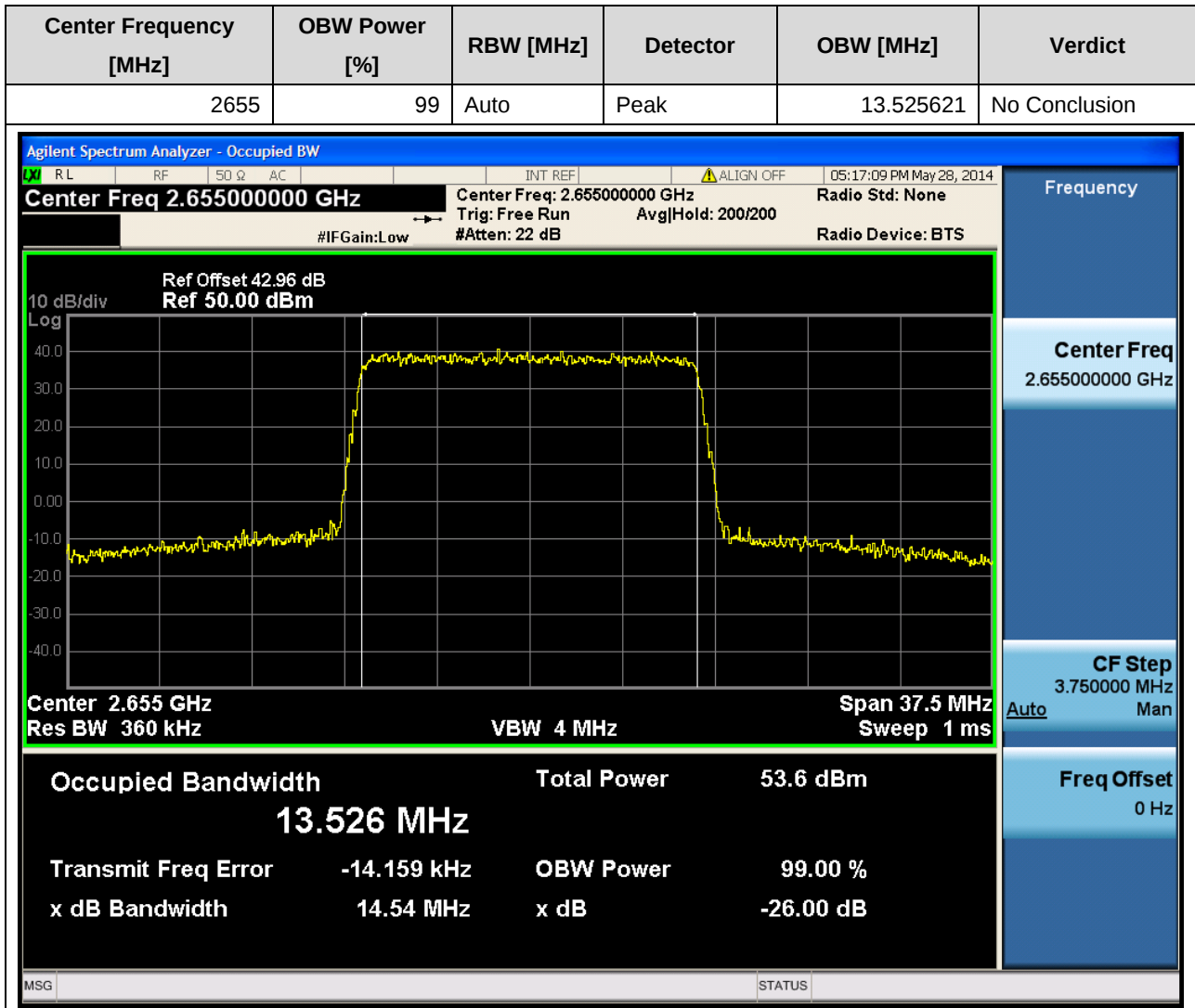




2.1.7 1L_15M_B

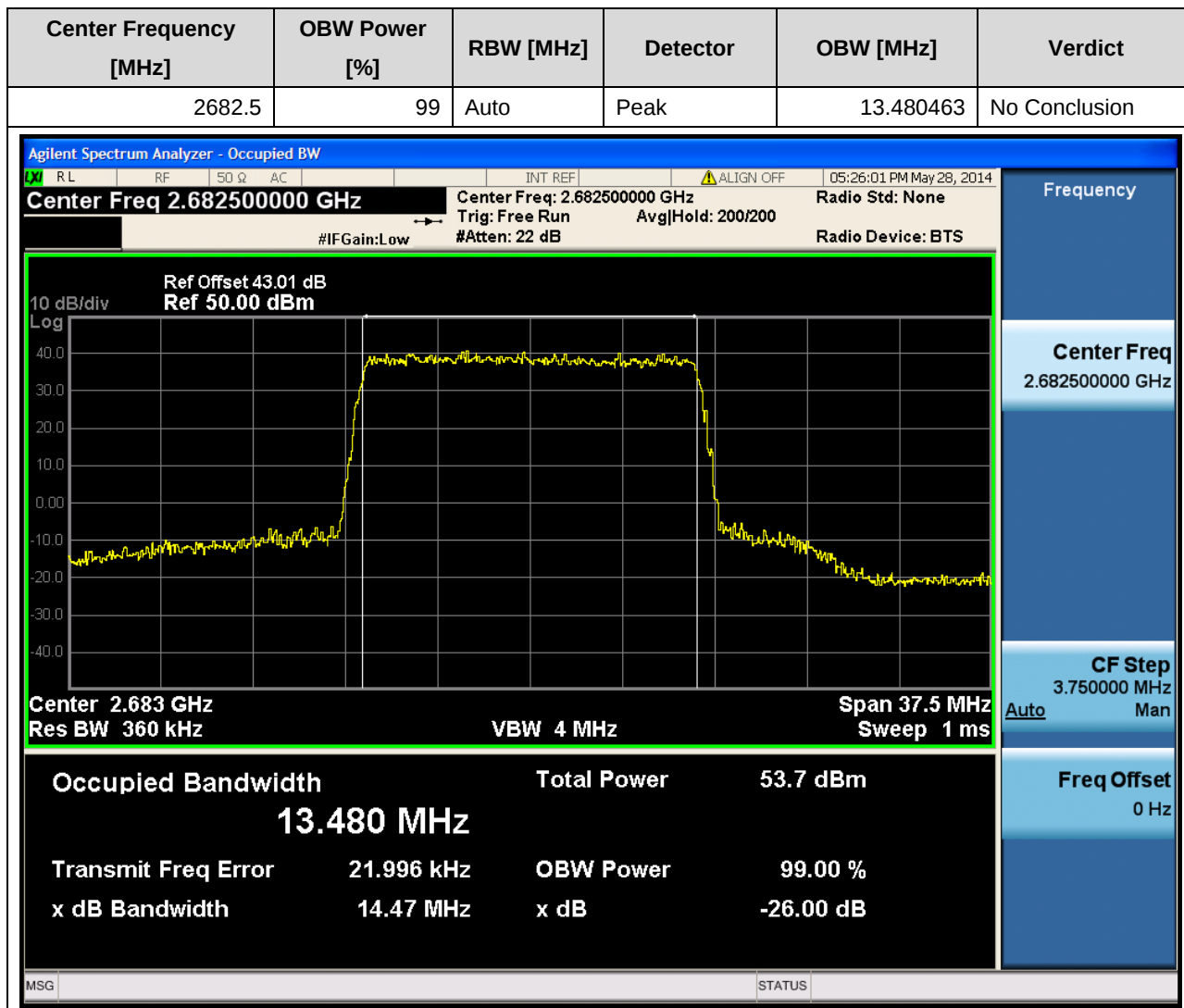


2.1.8 1L_15M_M



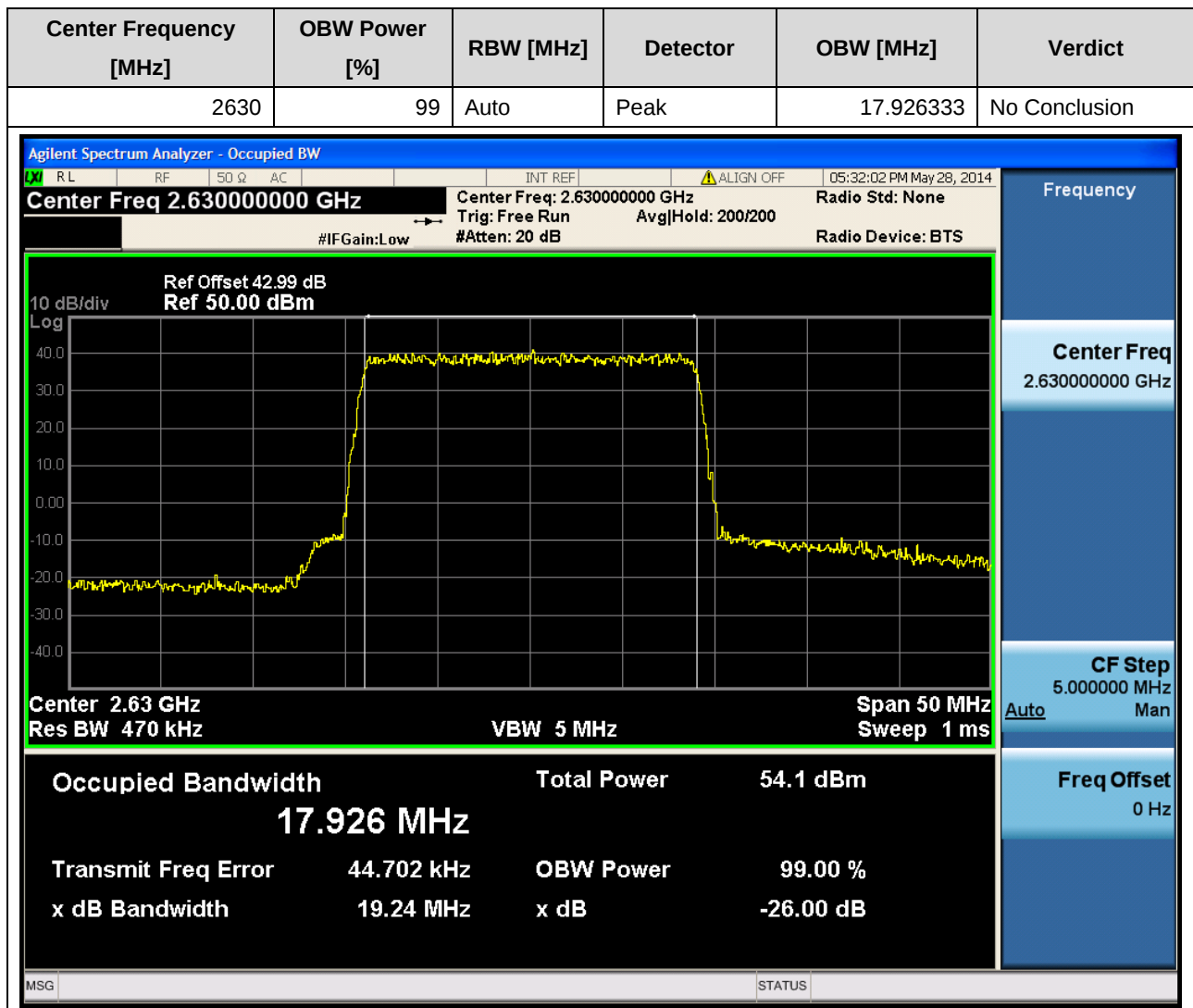


2.1.9 1L_15M_T



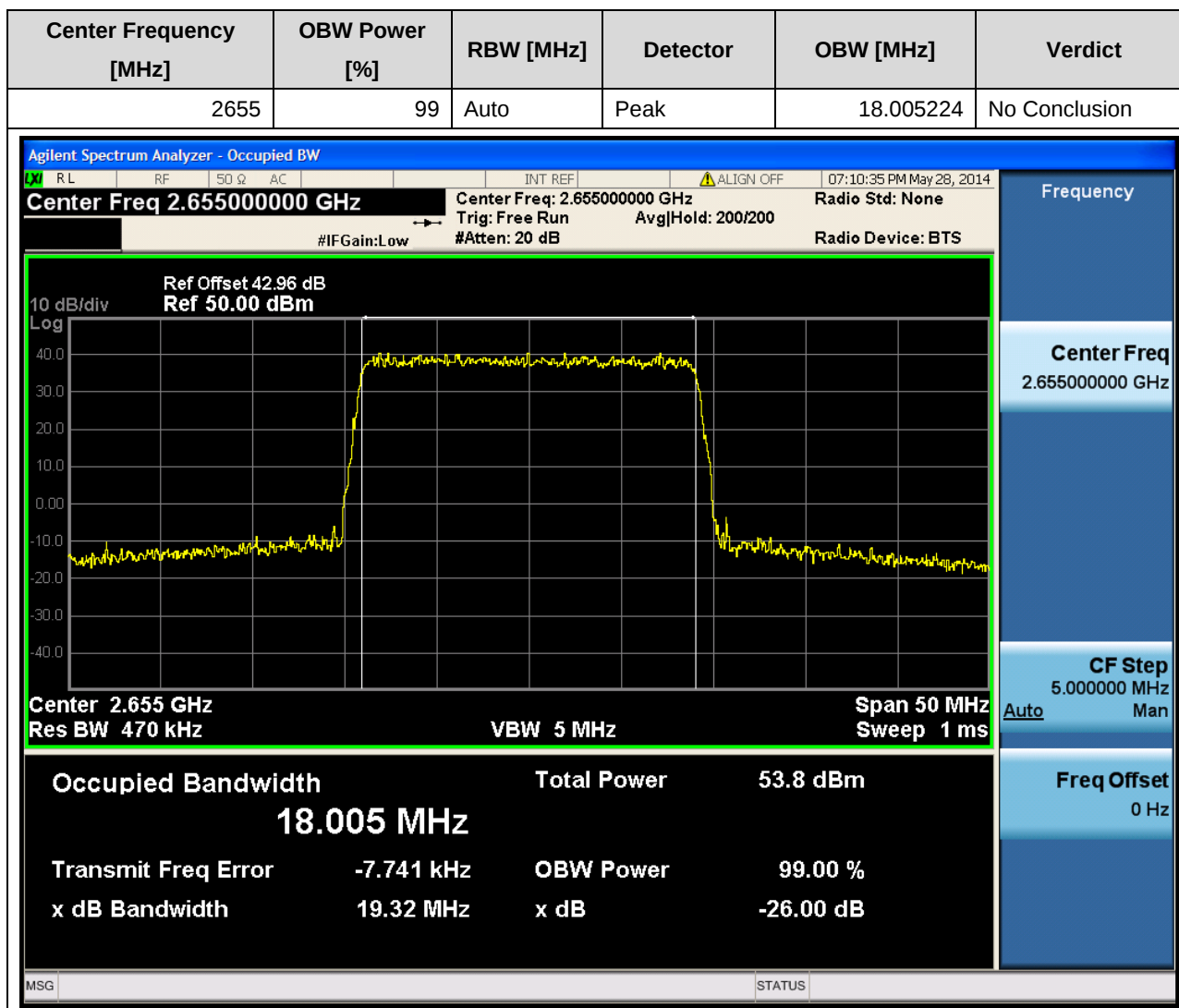


2.1.10 1L_20M_B



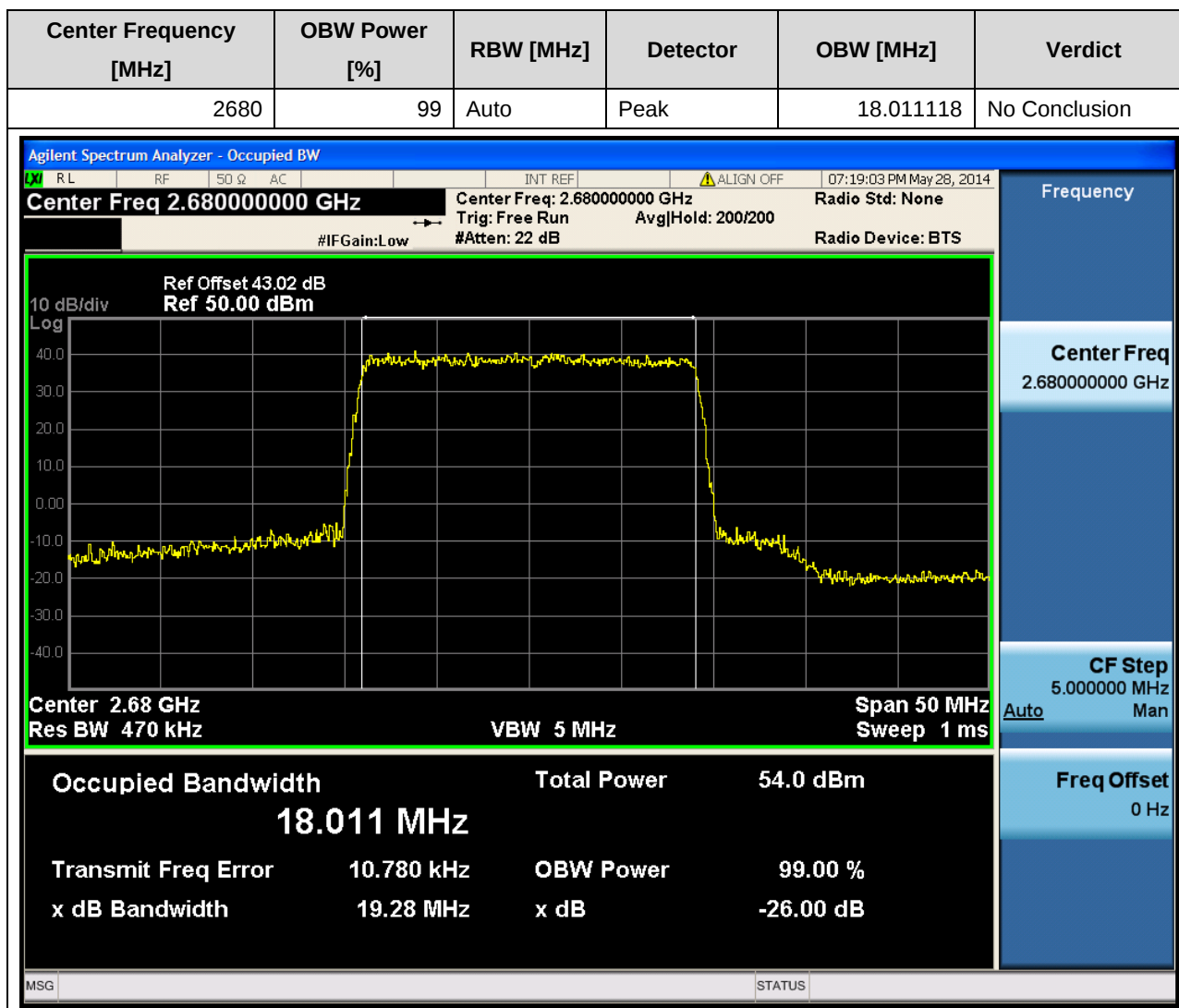


2.1.11 1L_20M_M





2.1.12 1L_20M_T

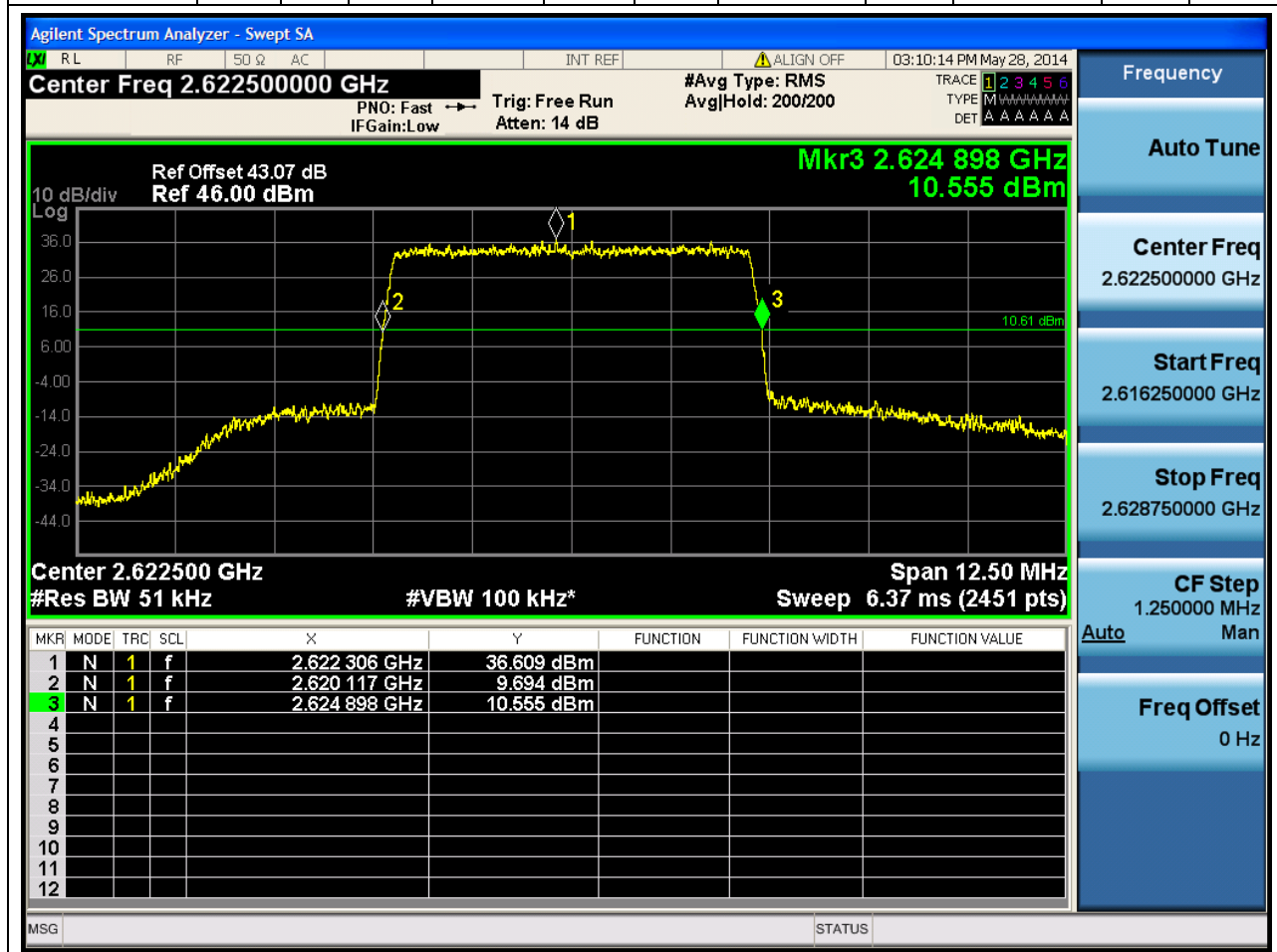




2.1 26dB Emission Bandwidth

2.1.1 1L_5M_B

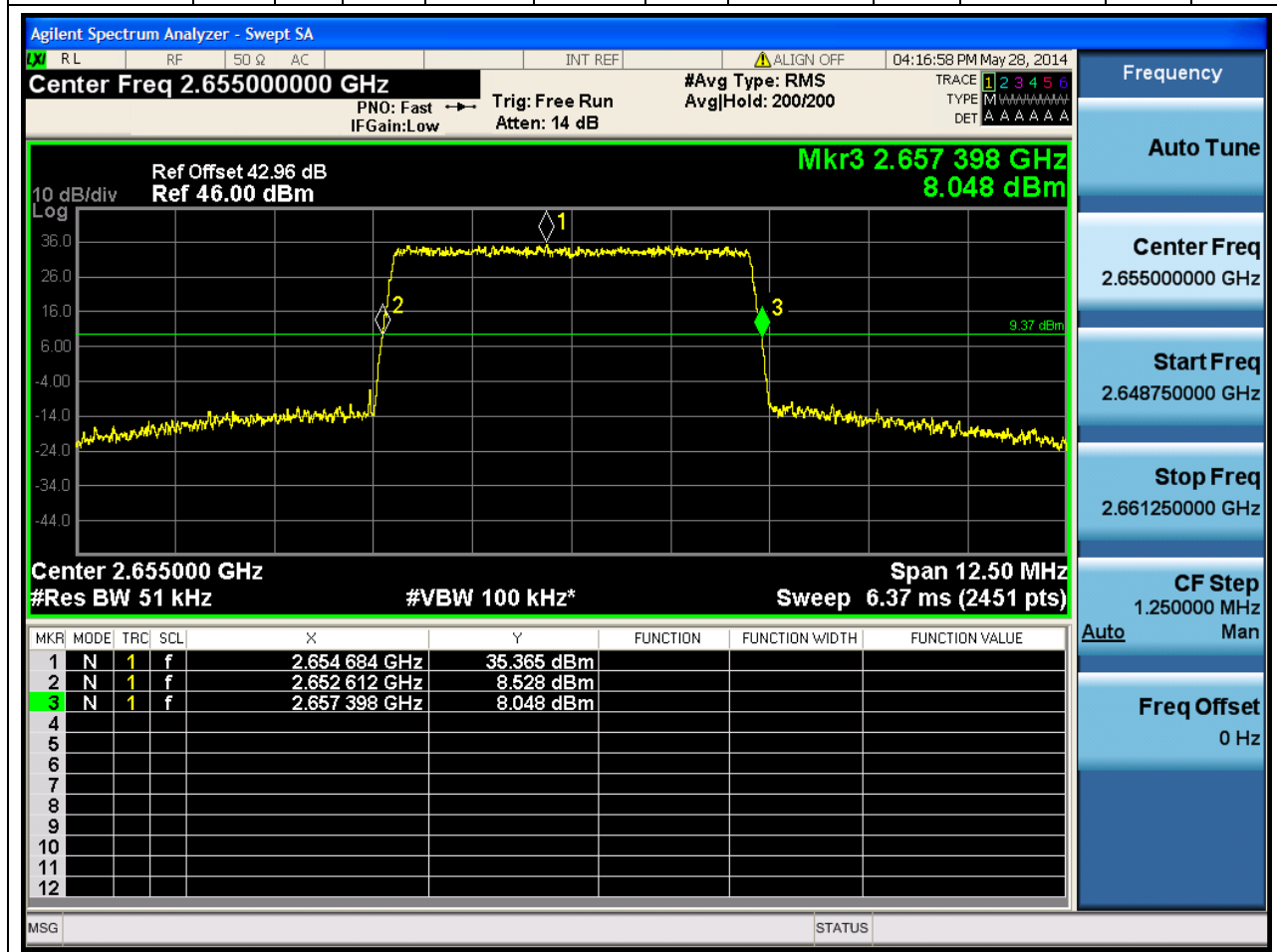
Center Frequency[MHz]	Span [MHz]	ndB [dB]	RBW [MHz]	Detect or	ndB BW [MHz]	BW Limit [MHz]	Lower Freq [MHz]	Lower Limit [MHz]	Upper Freq [MHz]	Upper Limit [MHz]	Verdict
2622.5	12.5	26	0.051	RMS	4.7808	5	2620.117248	2620	2624.898048	2690	Pass





2.1.2 1L_5M_M

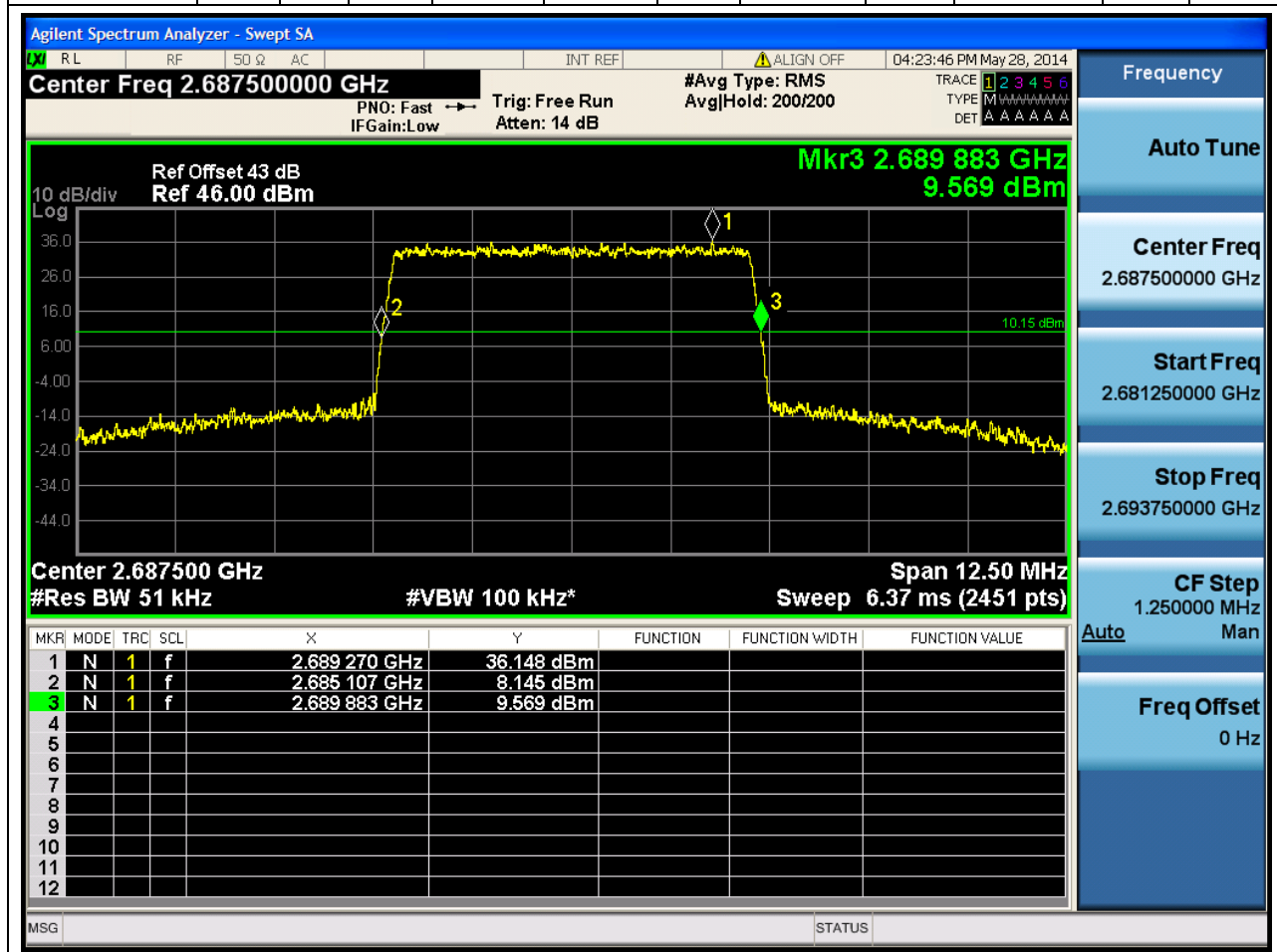
Center Frequency[MHz]	Span [MHz]	nd B [dB]	RB W [MHz]	Detect or	ndB BW [MHz]	BW Limit [MHz]	Lower Freq [MHz]	Low er Limit [MHz]	Upper Freq [MHz]	Upp er Limit [MHz]	Verdict
2655	12.5	26	0.051	RMS	4.785664	5	2652.612352	2620	2657.398016	2690	Pass





2.1.3 1L_5M_T

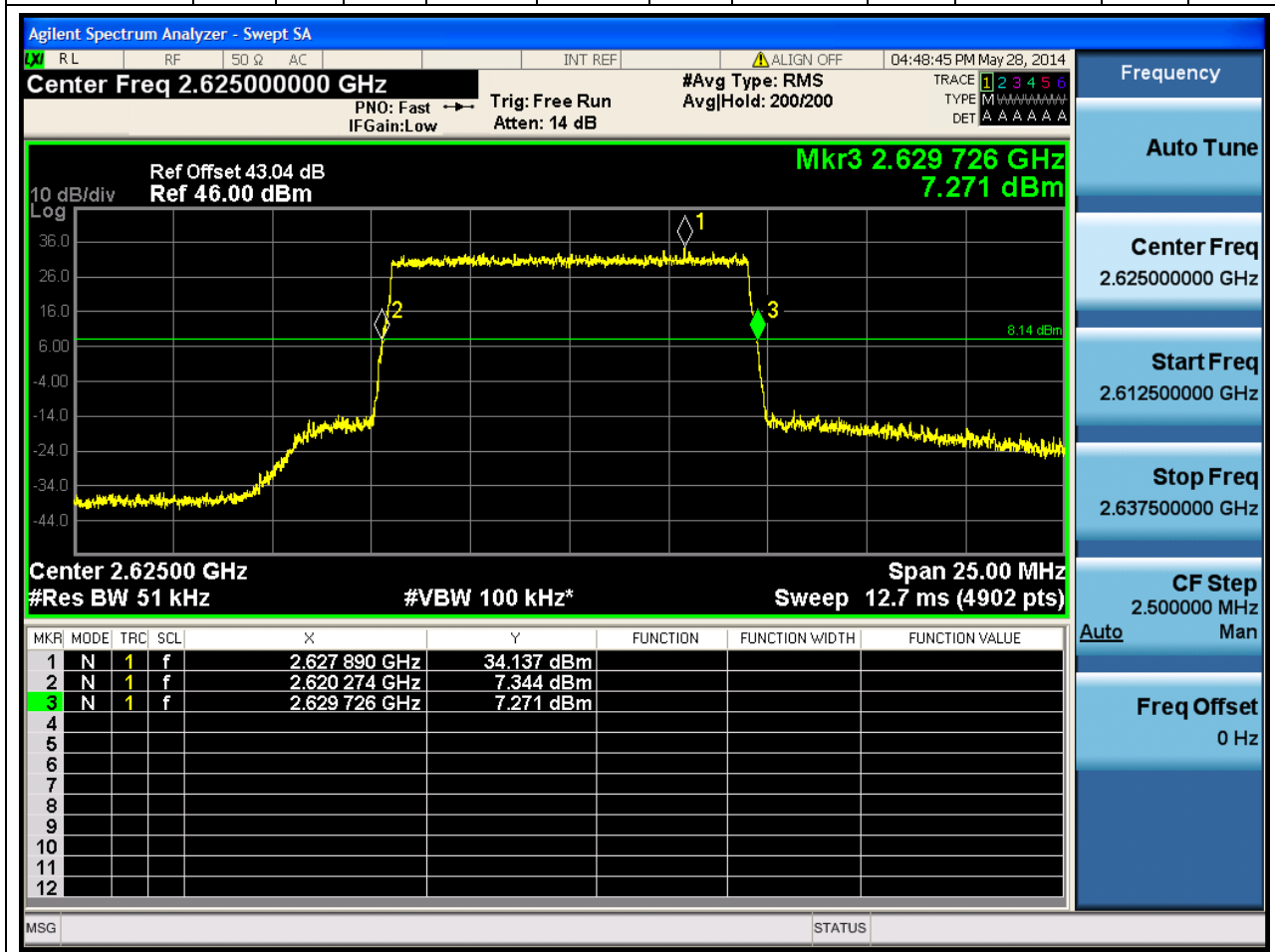
Center Frequency[MHz]	Span [MHz]	nd B [dB]	RB W [MHz]	Detect or	ndB BW [MHz]	BW Limit [MHz]	Lower Freq [MHz]	Lower Limit [MHz]	Upper Freq [MHz]	Upper Limit [MHz]	Verdict
2687.5	12.5	26	0.051	RMS	4.775424	5	2685.1072	2620	2689.882624	2690	Pass





2.1.4 1L_10M_B

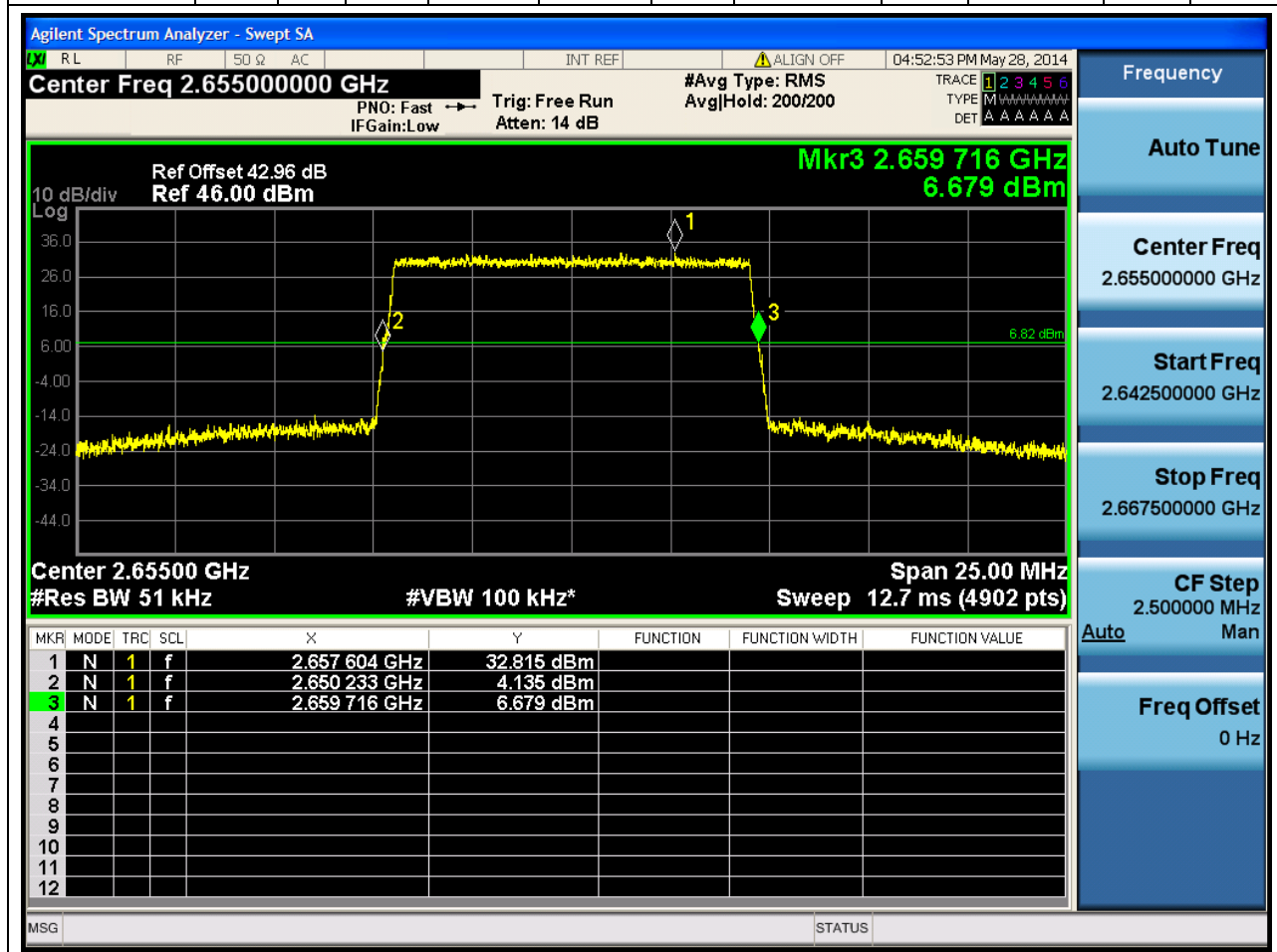
Center Frequency[MHz]	Span [MHz]	nd B [dB]	RB W [MHz]	Detect or	ndB BW [MHz]	BW Limit [MHz]	Lower Freq [MHz]	Low er Limit [MHz]	Upper Freq [MHz]	Upp er Limit [MHz]	Verdict
2625	25	26	0.051	RMS	9.452032	10	2620.27392	2620	2629.725952	2690	Pass





2.1.5 1L_10M_M

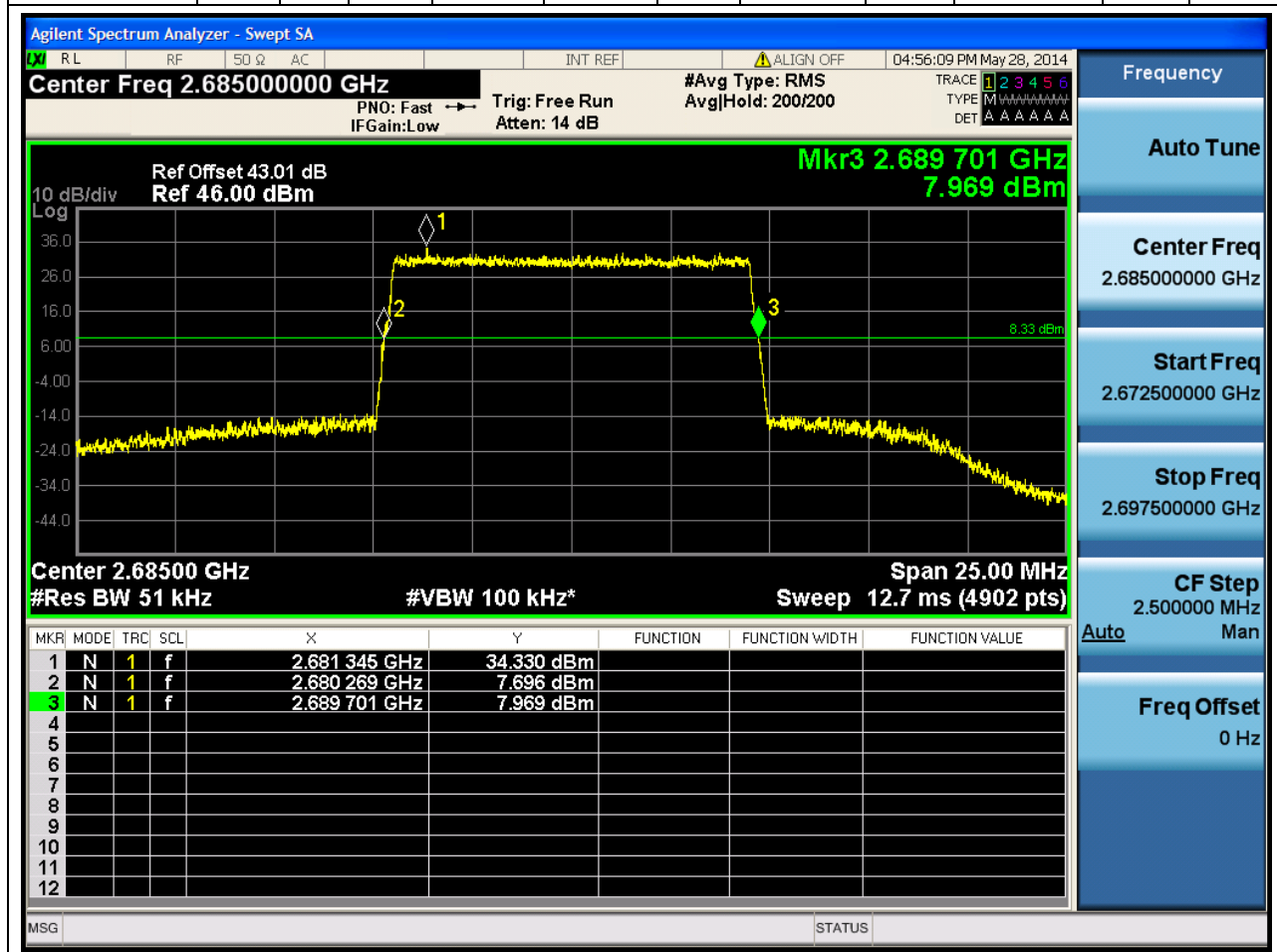
Center Frequency[MHz]	Span [MHz]	nd B [dB]	RB W [MHz]	Detect or	ndB BW [MHz]	BW Limit [MHz]	Lower Freq [MHz]	Lower Limit [MHz]	Upper Freq [MHz]	Upper Limit [MHz]	Verdict
2655	25	26	0.051	RMS	9.482752	10	2650.233088	2620	2659.71584	2690	Pass





2.1.6 1L_10M_T

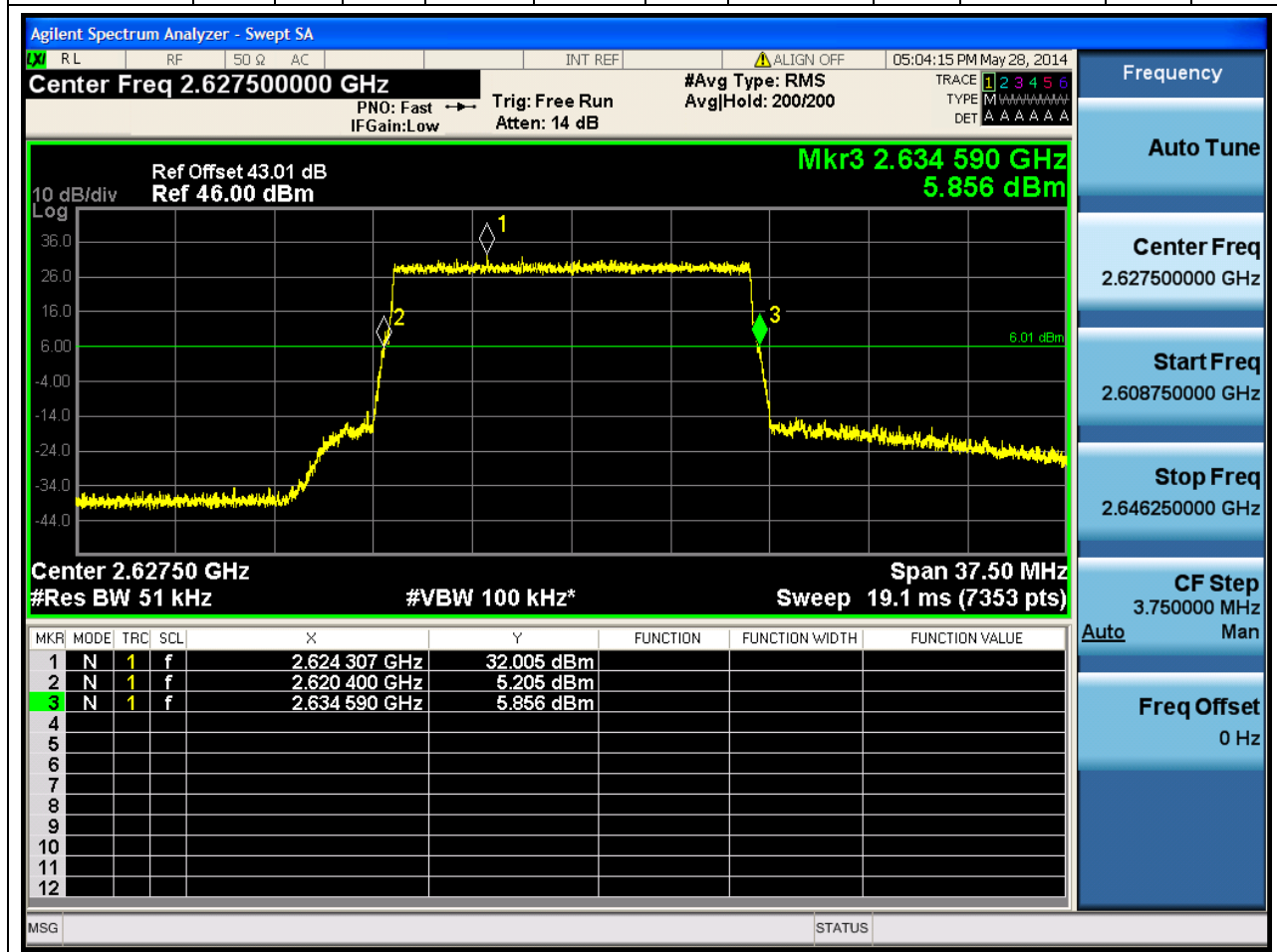
Center Frequency[MHz]	Span [MHz]	nd B [dB]	RB W [MHz]	Detect or	ndB BW [MHz]	BW Limit [MHz]	Lower Freq [MHz]	Lower Limit [MHz]	Upper Freq [MHz]	Upper Limit [MHz]	Verdict
2685	25	26	0.051	RMS	9.431808	10	2680.2688	2620	2689.700608	2690	Pass





2.1.7 1L_15M_B

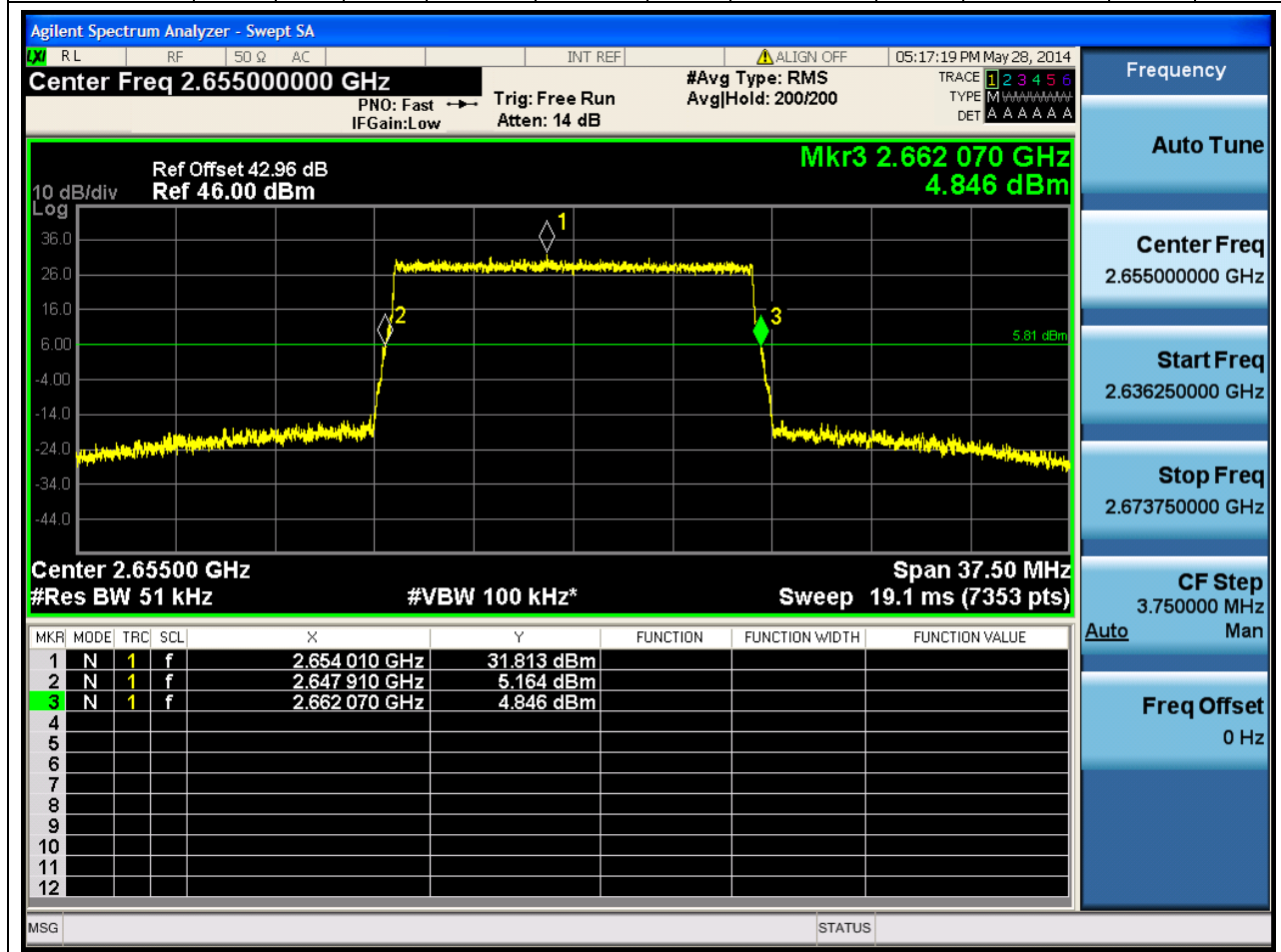
Center Frequency[MHz]	Span [MHz]	nd B [dB]	RB W [MHz]	Detect or	ndB BW [MHz]	BW Limit [MHz]	Lower Freq [MHz]	Low er Limit [MHz]	Upper Freq [MHz]	Upp er Limit [MHz]	Verdi ct
2627.5	37.5	26	0.051	RMS	14.19008	15	2620.399872	2620	2634.589952	2690	Pass





2.1.8 1L_15M_M

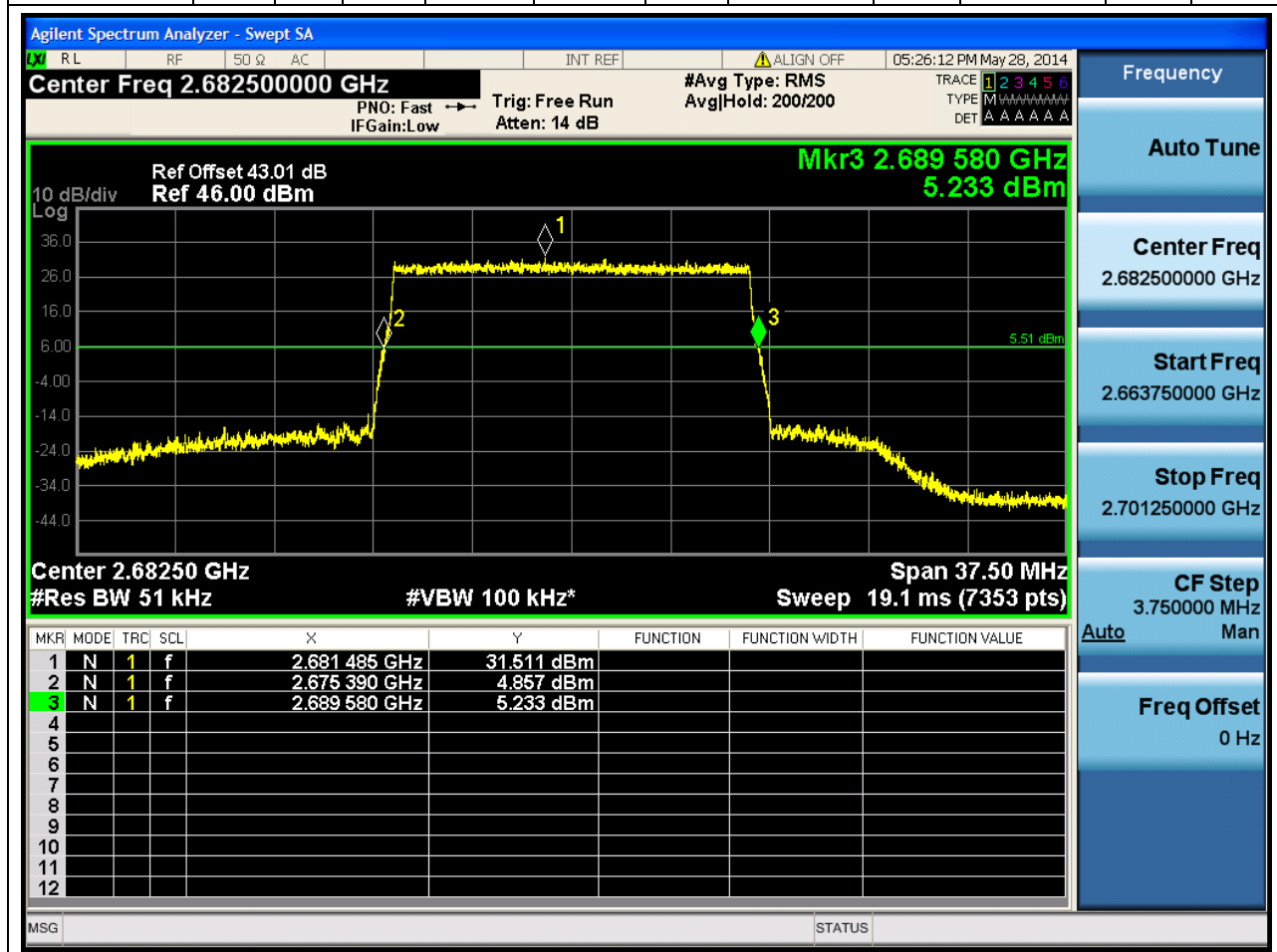
Center Frequency[MHz]	Span [MHz]	nd B [dB]	RB W [MHz]	Detect or	ndB BW [MHz]	BW Limit [MHz]	Lower Freq [MHz]	Lower Limit [MHz]	Upper Freq [MHz]	Upper Limit [MHz]	Verdict
2655	37.5	26	0.051	RMS	14.15936	15	2647.910144	2620	2662.069504	2690	Pass





2.1.9 1L_15M_T

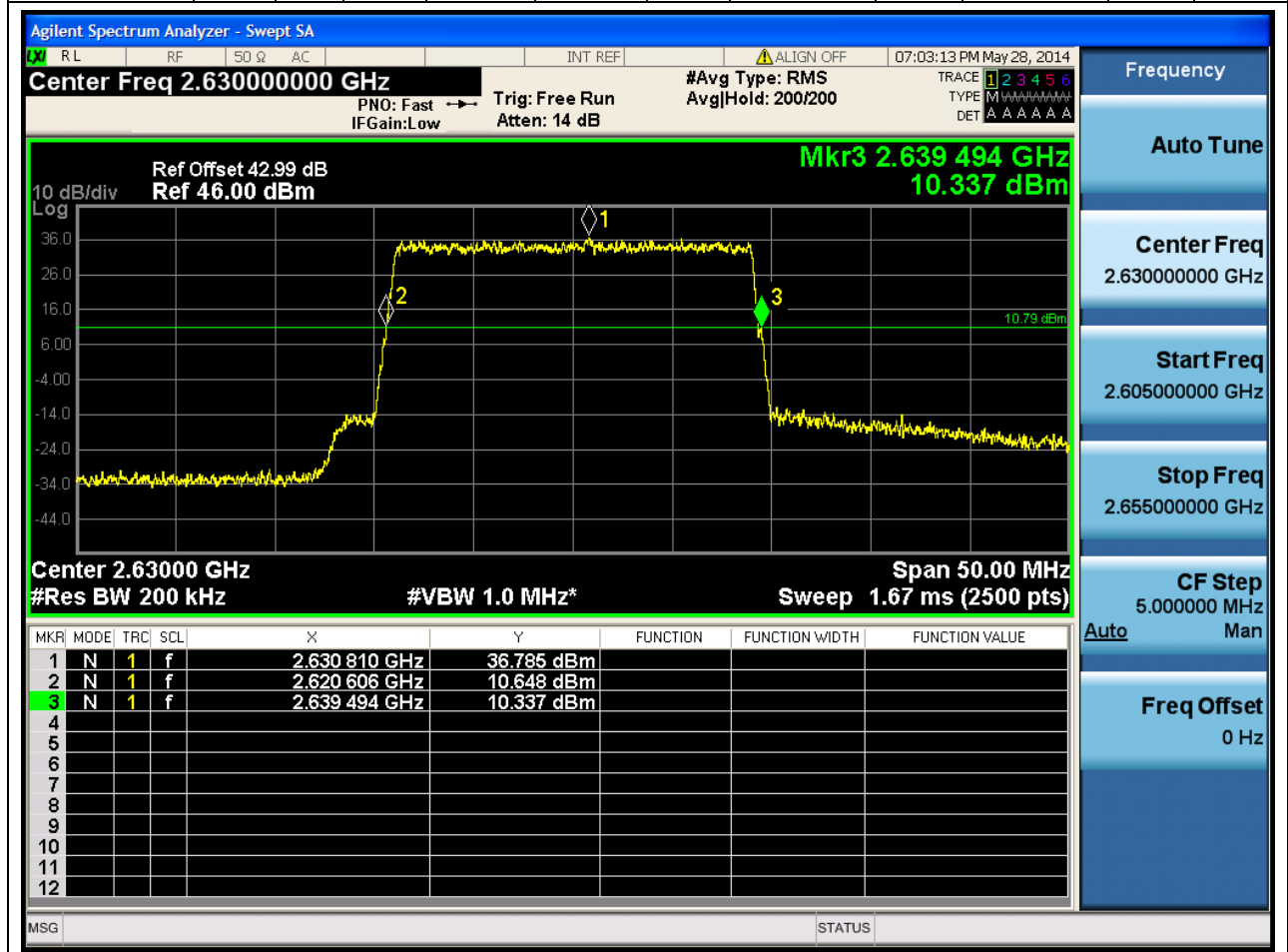
Center Frequency[MHz]	Span [MHz]	nd B [dB]	RB W [MHz]	Detect or	ndB BW [MHz]	BW Limit [MHz]	Lower Freq [MHz]	Lower Limit [MHz]	Upper Freq [MHz]	Upper Limit [MHz]	Verdict
2682.5	37.5	26	0.051	RMS	14.19008	15	2675.389696	2620	2689.579776	2690	Pass





2.1.10 1L_20M_B

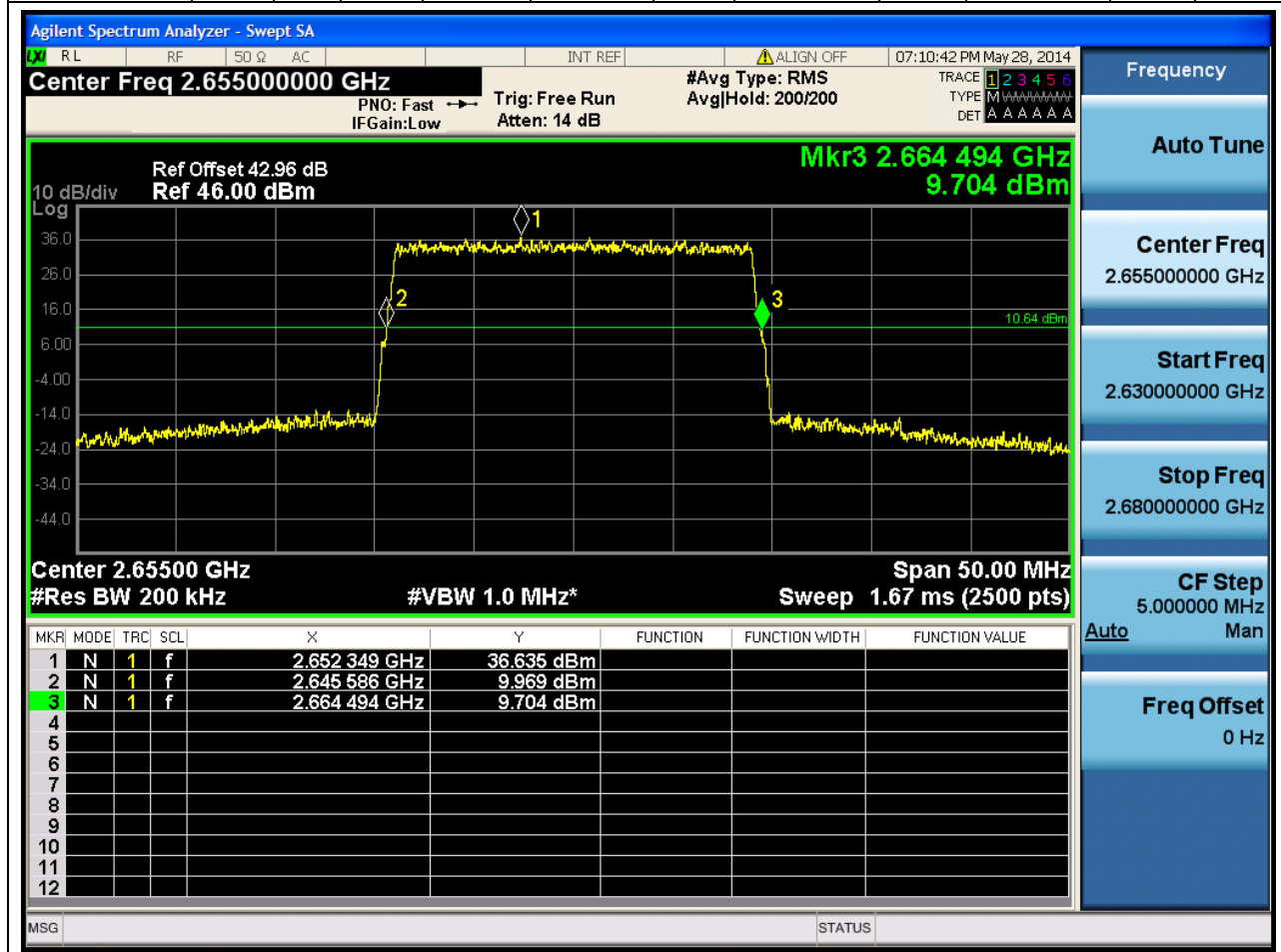
Center Frequency[MHz]	Span [MHz]	nd B [dB]	RB W [MHz]	Detect or	ndB BW [MHz]	BW Limit [MHz]	Lower Freq [MHz]	Low er Limit [MHz]	Upper Freq [MHz]	Upp er Limit [MHz]	Verdict
2630	50	26	0.2	RMS	18.88768	20	2620.606208	2620	2639.493888	2690	Pass





2.1.11 1L_20M_M

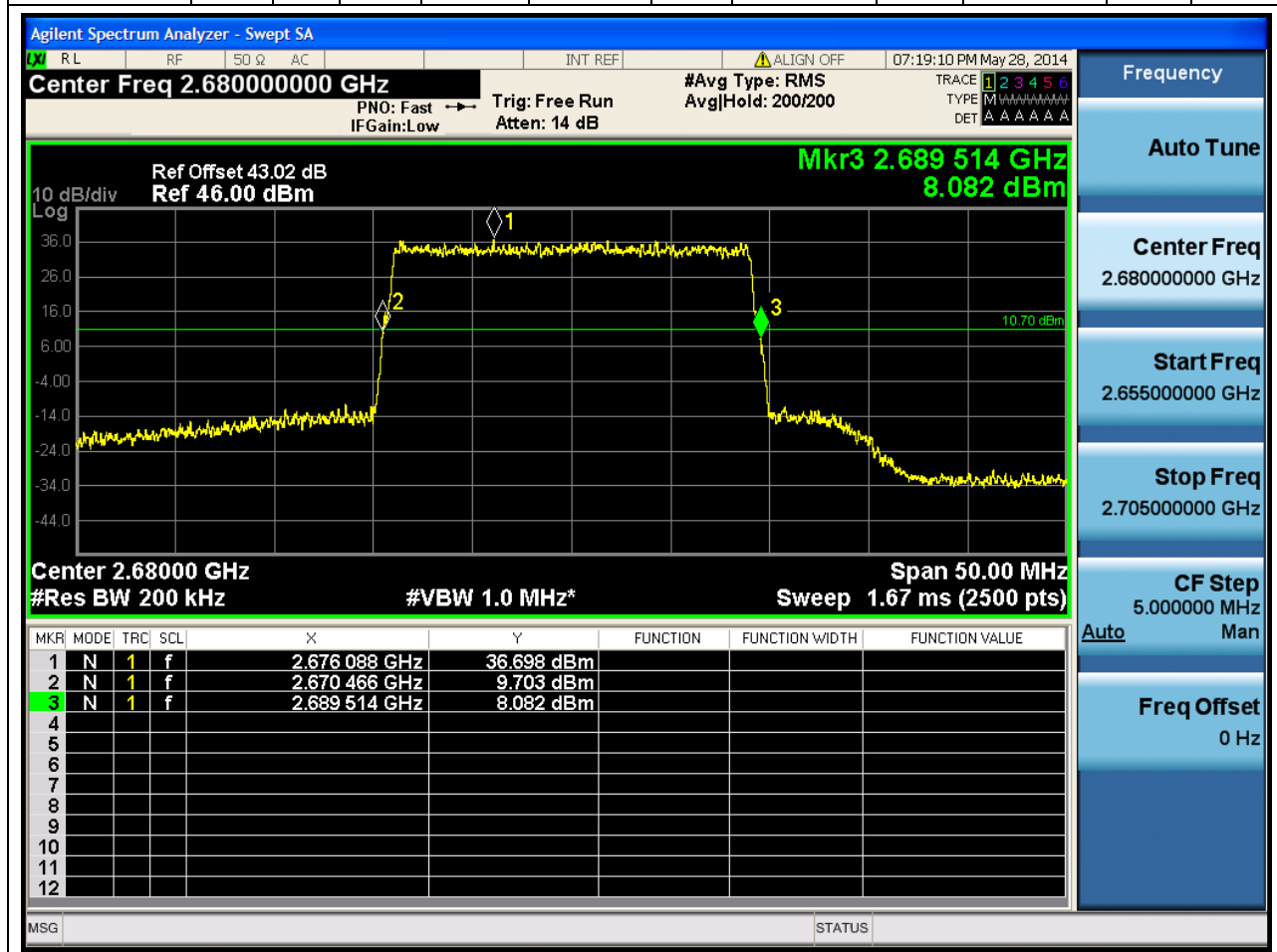
Center Frequency[MHz]	Span [MHz]	nd B [dB]	RB W [MHz]	Detect or	ndB BW [MHz]	BW Limit [MHz]	Lower Freq [MHz]	Lower Limit [MHz]	Upper Freq [MHz]	Upper Limit [MHz]	Verdict
2655	50	26	0.2	RMS	18.907648	20	2645.586176	2620	2664.493824	2690	Pass





2.1.12 1L_20M_T

Center Frequency[MHz]	Span [MHz]	nd B [dB]	RB W [MHz]	Detect or	ndB BW [MHz]	BW Limit [MHz]	Lower Freq [MHz]	Lower Limit [MHz]	Upper Freq [MHz]	Upper Limit [MHz]	Verdict
2680	50	26	0.2	RMS	19.047424	20	2670.466304	2620	2689.513728	2690	Pass





Appendix C: Band Edges Compliance



1 Result Table

NOTE 1: The offset of measurement filter -3dB point may be considered when identifying the maximum emission for e.g. the CDMA, WCDMA, WiMAX, LTE systems.

NOTE 2: Worst cases are listed. Maximum and minimum bandwidth represents the ultimate results.

EUT Conf.	Maximum Emission [dBm]	Verdict
1L_5M_B	<-16	Pass
1L_5M_T	<-16	Pass
1L_20M_B	<-16	Pass
1L_20M_T	<-16	Pass
2L_5M_B	<-16	Pass
2L_5M_T	<-16	Pass



2 Test Plot

2.1 1L_5M_B





2.2 1L_5M_T



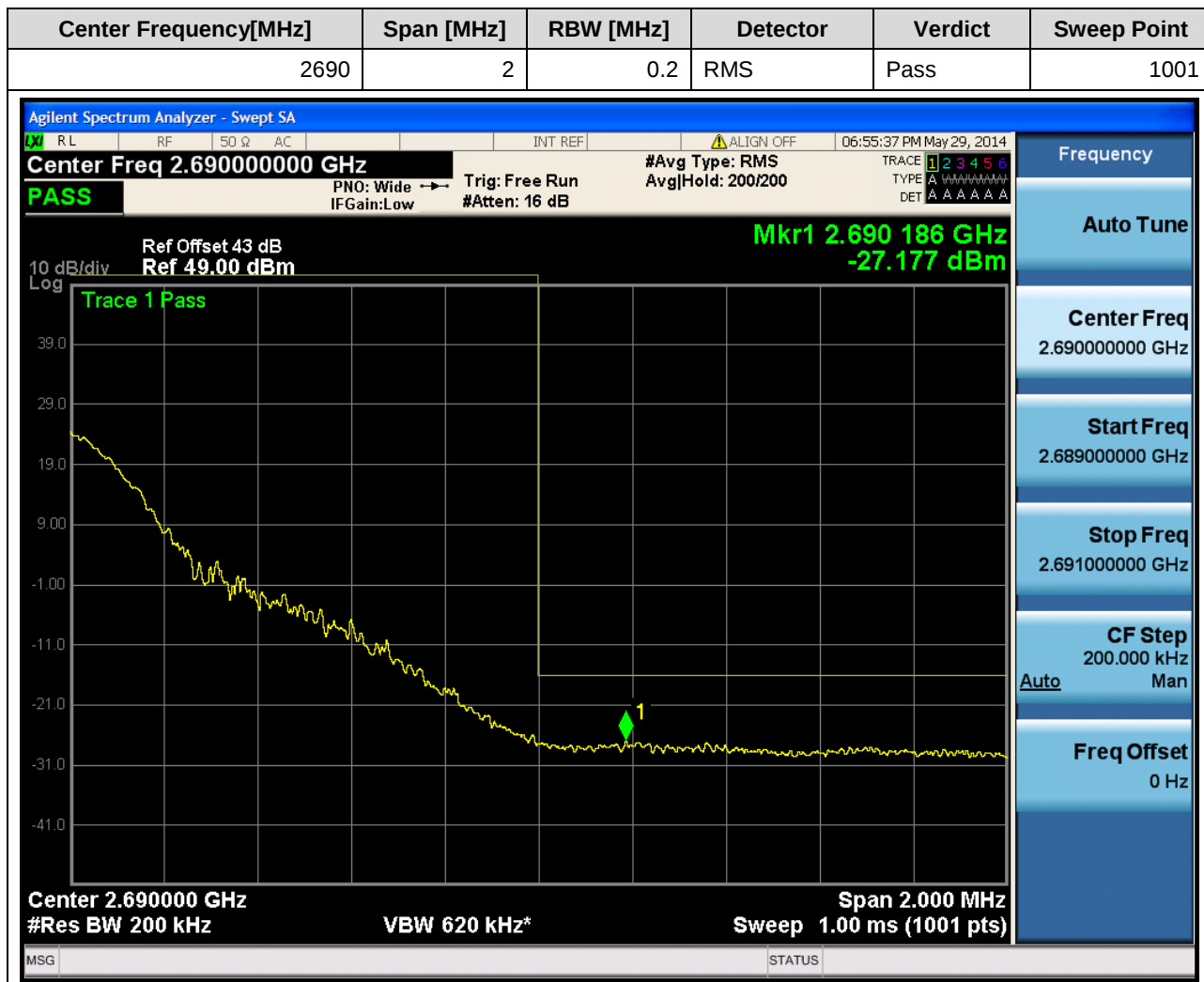


2.3 1L_20M_B





2.4 1L_20M_T





2.5 2L_5M_B





2.6 2L_5M_T





Appendix D: Spurious Emission at Antenna Terminals



1 Result Table

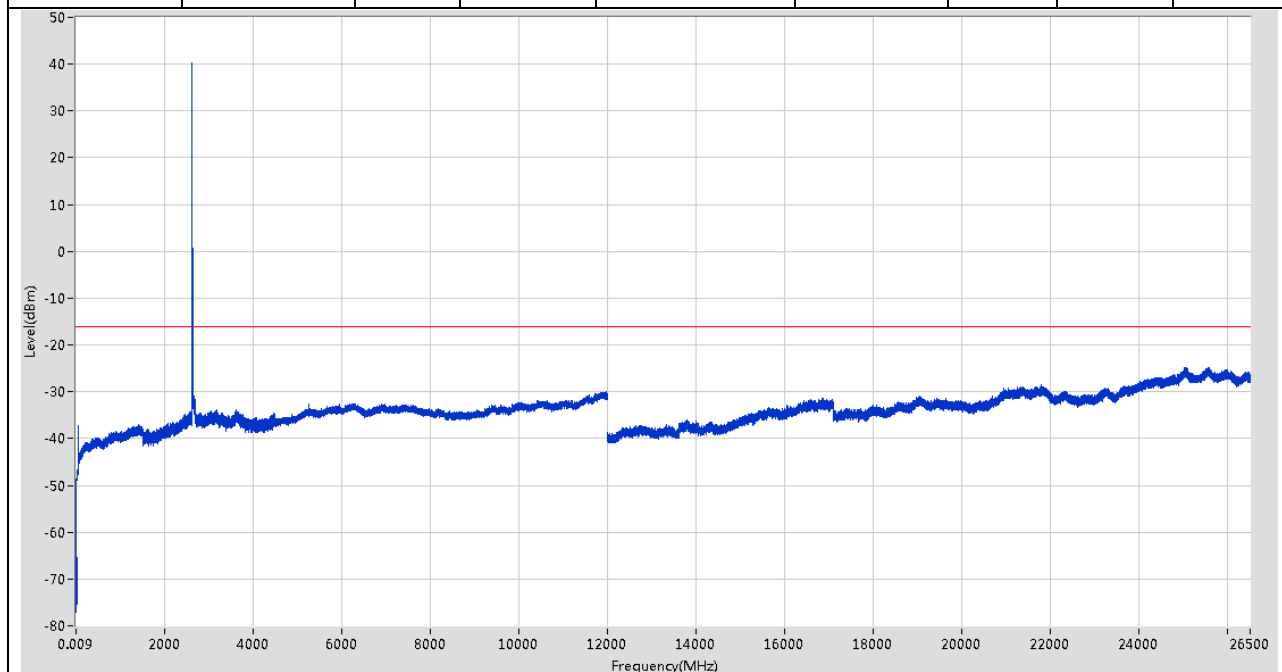
NOTE: Worst cases are listed. Maximum and minimum bandwidth represents the ultimate results.

EUT Conf.	Maximum Emission [dBm]	Verdict
1L_5M_B	<-16	Pass
1L_5M_M	<-16	Pass
1L_5M_T	<-16	Pass
1L_20M_B	<-16	Pass
1L_20M_M	<-16	Pass
1L_20M_T	<-16	Pass
2L_5M_B	<-16	Pass
2L_5M_T	<-16	Pass

2 Test Plot

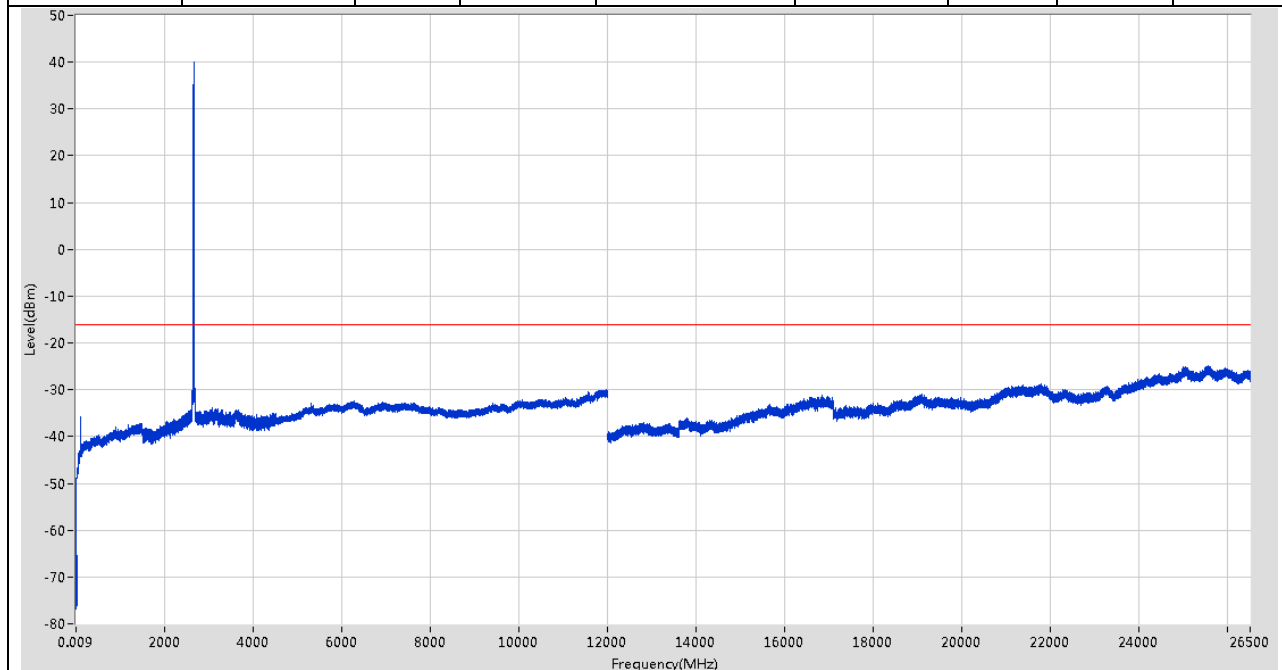
2.1 1L_5M_B

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	-48.76	-16	Pass	1001
0.15	30	0.01	RMS	158.001 k	-48.6	-16	Pass	14925
30	1500	1	RMS	1415.98857 M	-37.04	-16	Pass	7350
1500	4500	1	RMS	2623.874925 M	40.25	-16	Fail	15000
4500	12000	1	RMS	11969.799195 M	-29.99	-16	Pass	37500
12000	26500	1	RMS	25541.370503 M	-24.76	-16	Pass	72500



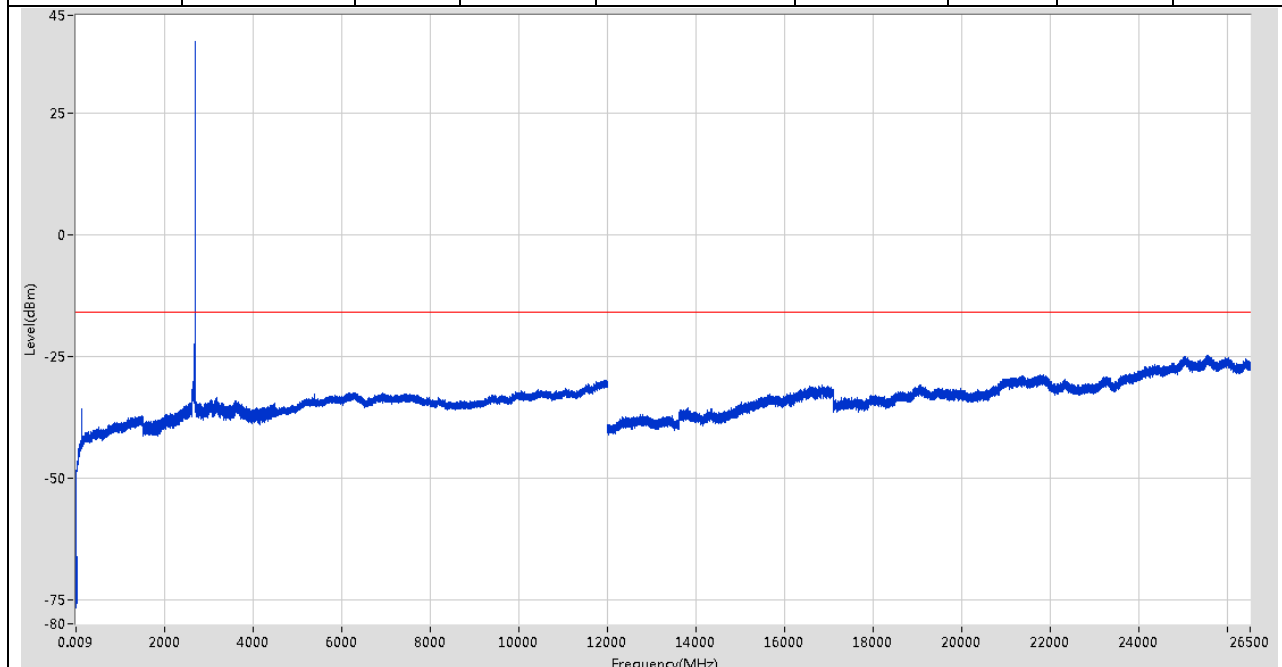
2.2 1L_5M_M

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	-48.79	-16	Pass	1001
0.15	30	0.01	RMS	158.001 k	-49.3	-16	Pass	14925
30	1500	1	RMS	94.008709 M	-35.73	-16	Pass	7350
1500	4500	1	RMS	2654.876992 M	40.06	-16	Fail	15000
4500	12000	1	RMS	11962.999013 M	-30.04	-16	Pass	37500
12000	26500	1	RMS	25554.170897 M	-24.84	-16	Pass	72500



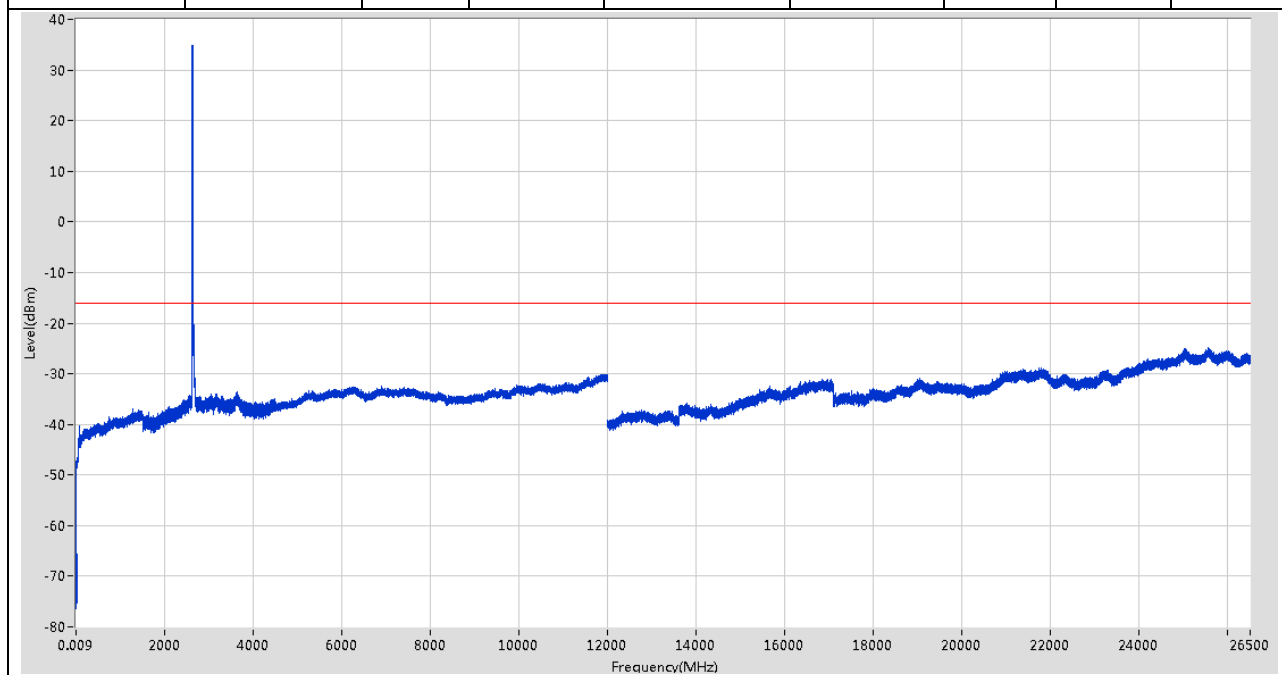
2.3 1L_5M_T

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	-48.55	-16	Pass	1001
0.15	30	0.01	RMS	160.001 k	-48.68	-16	Pass	14925
30	1500	1	RMS	126.613145 M	-35.9	-16	Pass	7350
1500	4500	1	RMS	2685.879059 M	39.74	-16	Fail	15000
4500	12000	1	RMS	11945.798555 M	-30	-16	Pass	37500
12000	26500	1	RMS	25544.570601 M	-24.84	-16	Pass	72500



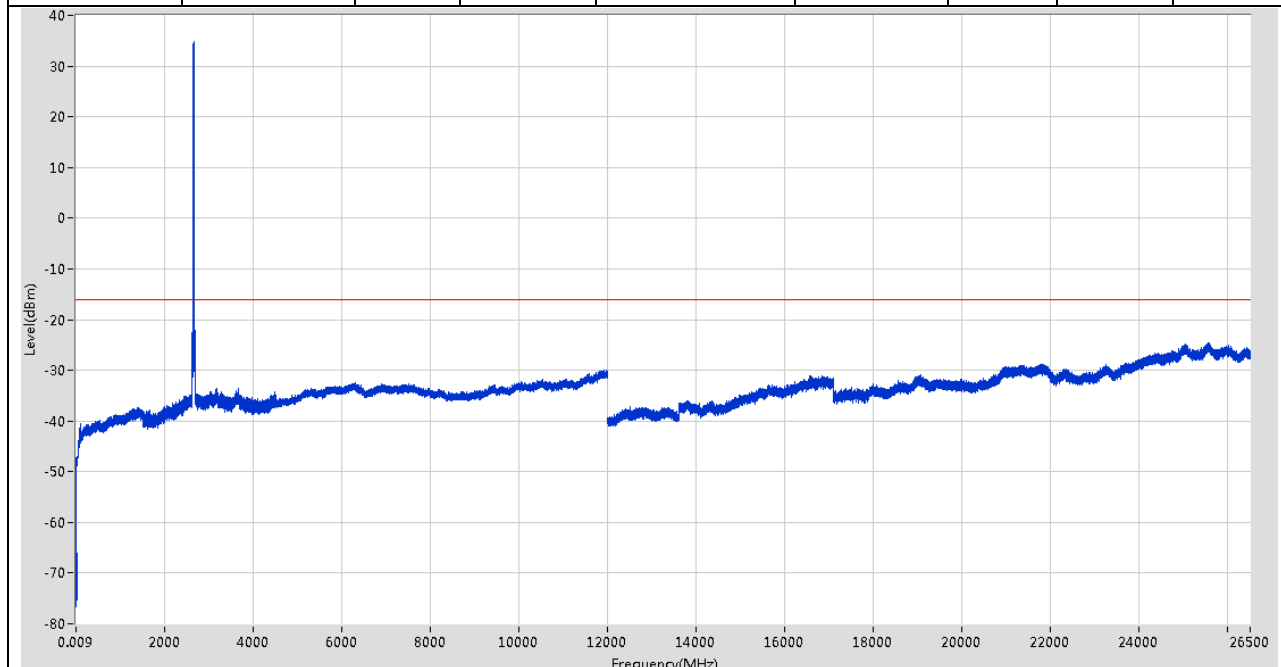
2.4 1L_20M_B

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	9.141 k	-48.87	-16	Pass	1001
0.15	30	0.01	RMS	158.001 k	-47.35	-16	Pass	14925
30	1500	1	RMS	1291.77167 M	-37.02	-16	Pass	7350
1500	4500	1	RMS	2622.674845 M	34.88	-16	Fail	15000
4500	12000	1	RMS	11903.99744 M	-30.13	-16	Pass	37500
12000	26500	1	RMS	25555.57094 M	-24.89	-16	Pass	72500



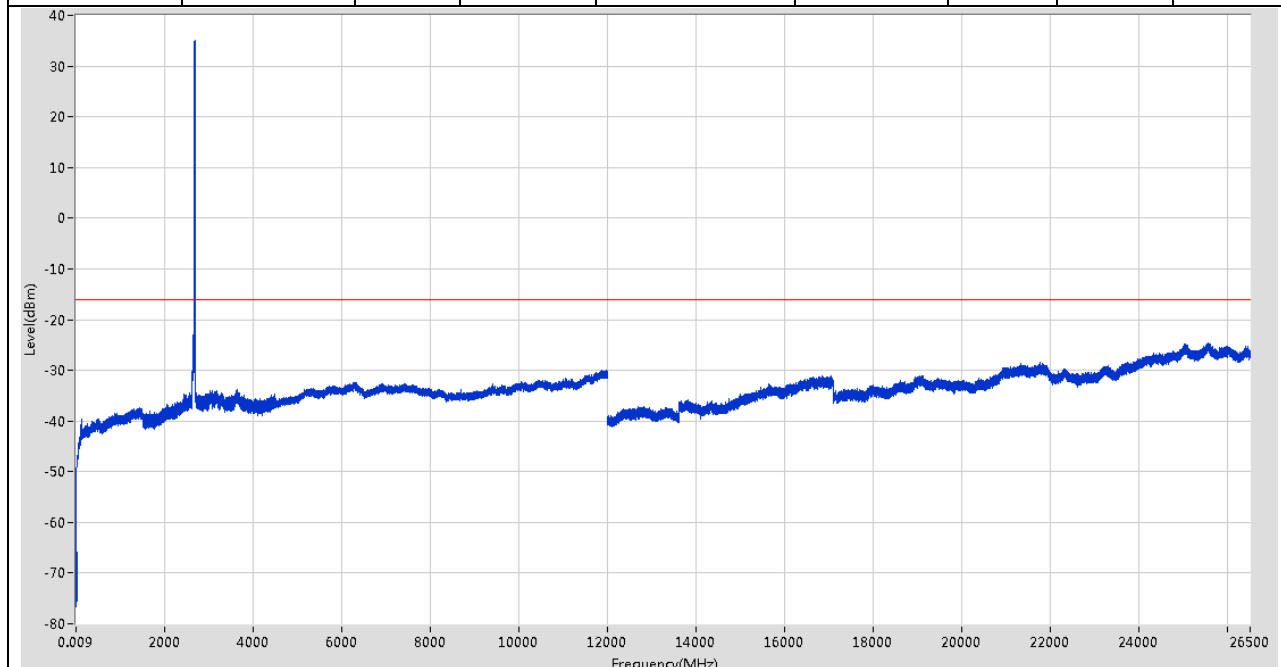
2.5 1L_20M_M

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	-47.21	-16	Pass	1001
0.15	30	0.01	RMS	156 k	-51.65	-16	Pass	14925
30	1500	1	RMS	1419.989114 M	-37.39	-16	Pass	7350
1500	4500	1	RMS	2656.277085 M	34.8	-16	Fail	15000
4500	12000	1	RMS	11974.999333 M	-29.94	-16	Pass	37500
12000	26500	1	RMS	25549.370749 M	-24.62	-16	Pass	72500



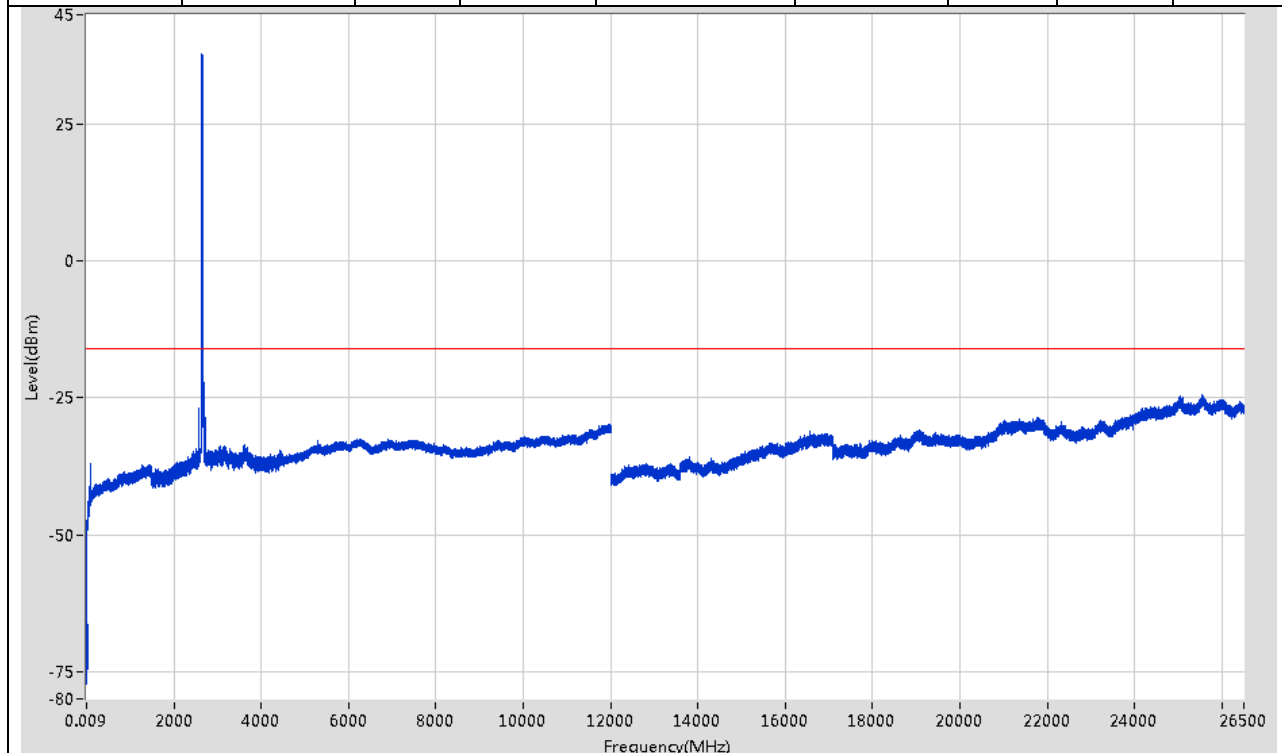
2.6 1L_20M_T

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	9 k	-49.35	-16	Pass	1001
0.15	30	0.01	RMS	150 k	-51.46	-16	Pass	14925
30	1500	1	RMS	1431.390665 M	-37.37	-16	Pass	7350
1500	4500	1	RMS	2682.878859 M	34.99	-16	Fail	15000
4500	12000	1	RMS	11961.798981 M	-29.93	-16	Pass	37500
12000	26500	1	RMS	25549.770761 M	-24.5	-16	Pass	72500



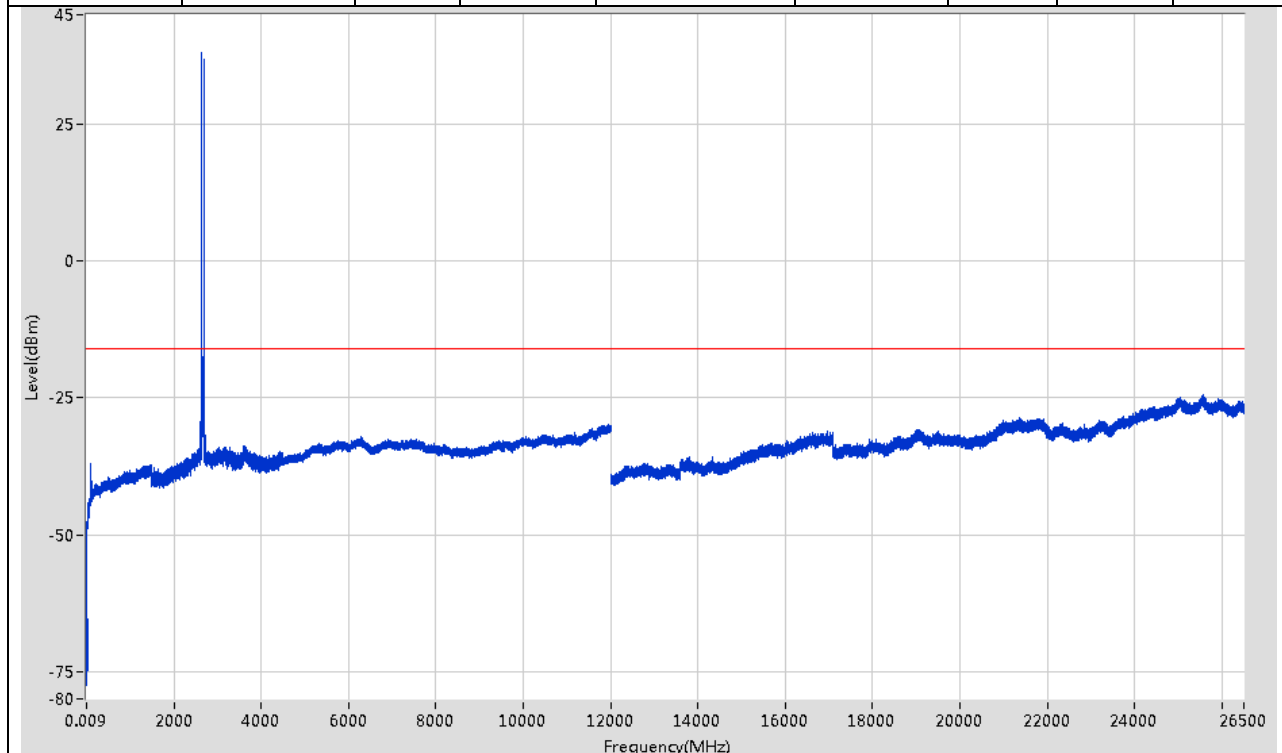
2.7 2L_5M_B

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	-47.32	-16	Pass	1001
0.15	30	0.01	RMS	156 k	-51.33	-16	Pass	14925
30	1500	1	RMS	83.407266 M	-37	-16	Pass	7350
1500	4500	1	RMS	2623.474898 M	37.73	-16	Fail	15000
4500	12000	1	RMS	11970.399211 M	-29.87	-16	Pass	37500
12000	26500	1	RMS	25553.570878 M	-24.37	-16	Pass	72500



2.8 2L_5M_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	-47.52	-16	Pass	1001
0.15	30	0.01	RMS	160.001 k	-50.81	-16	Pass	14925
30	1500	1	RMS	103.610015 M	-37.14	-16	Pass	7350
1500	4500	1	RMS	2641.476098 M	38.13	-16	Fail	15000
4500	12000	1	RMS	11957.398864 M	-29.8	-16	Pass	37500
12000	26500	1	RMS	25569.971383 M	-24.38	-16	Pass	72500





Appendix E: Field Strength of Spurious Radiation

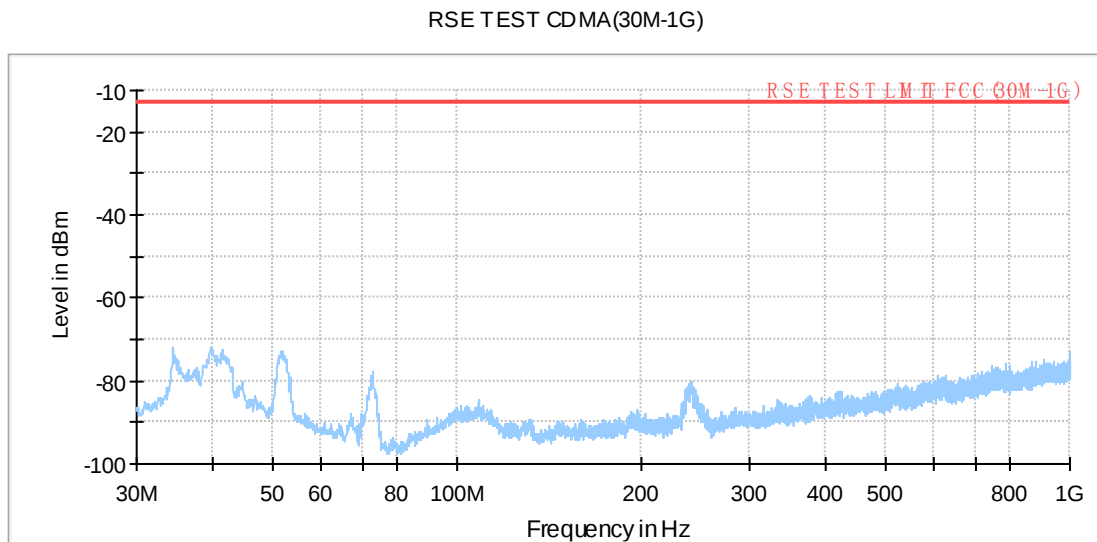


1 Result Table

EUT Conf.	Maximum Emission [dBm]	Verdict
1L_5M_M	< -13	Pass

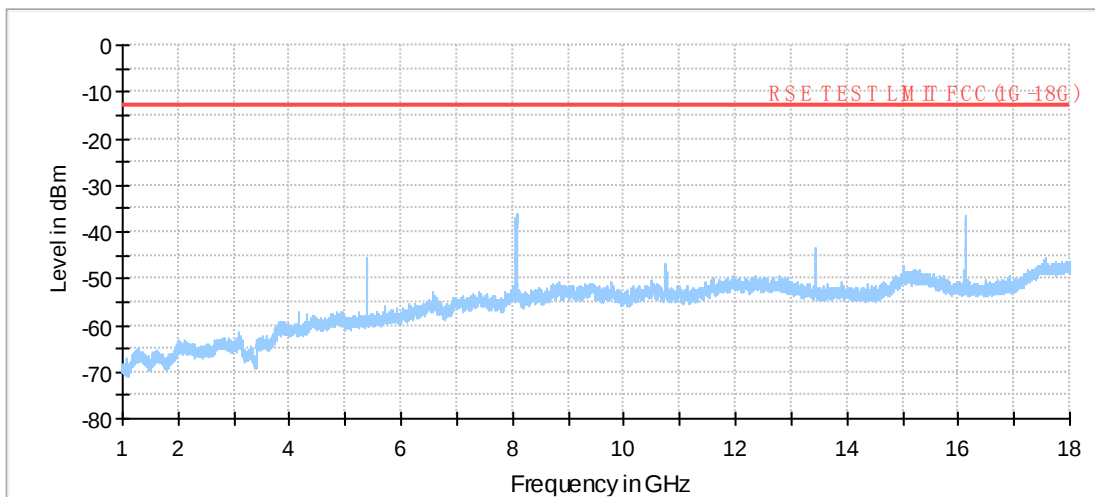
2 Test Plot

2.1 Below 1GHz



2.2 1G-18GHz

RSE TEST CDMA(1G-12.75G)



2.3 Above 18GHz

The magnitude of spurious emissions which are attenuated more than 20 dB below the permissible value need not be specified.



Appendix F: Frequency Stability

1 Result Table

NOTE: Worst cases are listed. For the item different bandwidth get similar test results.

1.1 Frequency Error

(1) Frequency Error vs. Temperature:

EUT Conf.	Voltage	Temperature	Freq. Error, f(offset) [Hz]	Freq. vs. rated [ppm]	Freq. vs. 20 °C [ppm]	Verdict
1L_5M_M	100%	-30 °C	-6.08	-0.0022900	-0.0022900	Pass
		-20 °C	-6.19	-0.0023315	-0.0023315	Pass
		-10 °C	1.32	0.0004972	0.0004972	Pass
		0 °C	1.12	0.0004218	0.0004218	Pass
		+10 °C	0.31	0.0001168	0.0001168	Pass
		+20 °C	1.25	0.0004708	0.0004708	Pass
		+30 °C	2.09	0.0007872	0.0007872	Pass
		+40 °C	1.31	0.0004934	0.0004934	Pass
		+50 °C	2.12	0.0007985	0.0007985	Pass

(2) Frequency Error vs. Voltage:

EUT Conf.	Temperature	Voltage	Freq. Error, f(offset) [Hz]	Freq. vs. rated [ppm]	Freq. vs. 20 °C [ppm]	Verdict
1L_5M_M	+20 °C	85 %	-2.36	-0.0008889	-0.0008889	Pass
		100 %	-3.13	-0.0011789	--	Pass
		115 %	-3.31	-0.0012467	-0.0012467	Pass



Appendix G: Receiver Spurious Emissions



(Not applicable)

END