



Appendix A2: 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 described 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]	Total Channel Power [W]	Antenna Gain [dBi]	EIRP [W]	ERP [W]	Verdict
5M_B	19.66	0.185	3	---	---	Pass
5M_M	20.25	0.212	3	---	---	Pass
5M_T	19.56	0.181	3	---	---	Pass
10M_B	19.75	0.189	3	---	---	Pass
10M_M	20.21	0.210	3	---	---	Pass
10M_T	19.47	0.177	3	---	---	Pass
15M_B	19.92	0.196	3	---	---	Pass
15M_M	20.33	0.216	3	---	---	Pass
15M_T	19.59	0.182	3	---	---	Pass
20M_B	19.72	0.188	3	---	---	Pass
20M_M	20.08	0.204	3	---	---	Pass
20M_T	19.4	0.174	3	---	---	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 described below, and if exceed, the combination of the practical output power and the practical antenna gain should NOT exceed the required EIRP limit.

EUT Conf.	Channel Power Spectral Density [dBm/MHz]	Total Channel PSD [dBm/MHz]	Antenna Gain [dBi]	EIRP [W/MHz]	Verdict
5M_B	13.65	16.65	3	0.092	Pass
5M_M	14.15	17.15	3	0.104	Pass
5M_T	13.5	16.5	3	0.089	Pass
20M_B	7.61	10.61	3	0.023	Pass
20M_M	7.99	10.99	3	0.025	Pass
20M_T	7.79	10.79	3	0.024	Pass



1.3 Peak-to-Average Ratio

EUT Conf.	Peak-to-Average Ratio [dB]	Verdict
5M_B	7.36	Pass
5M_M	7.36	Pass
5M_T	7.33	Pass
20M_B	7.22	Pass
20M_M	7.11	Pass
20M_T	7.15	Pass

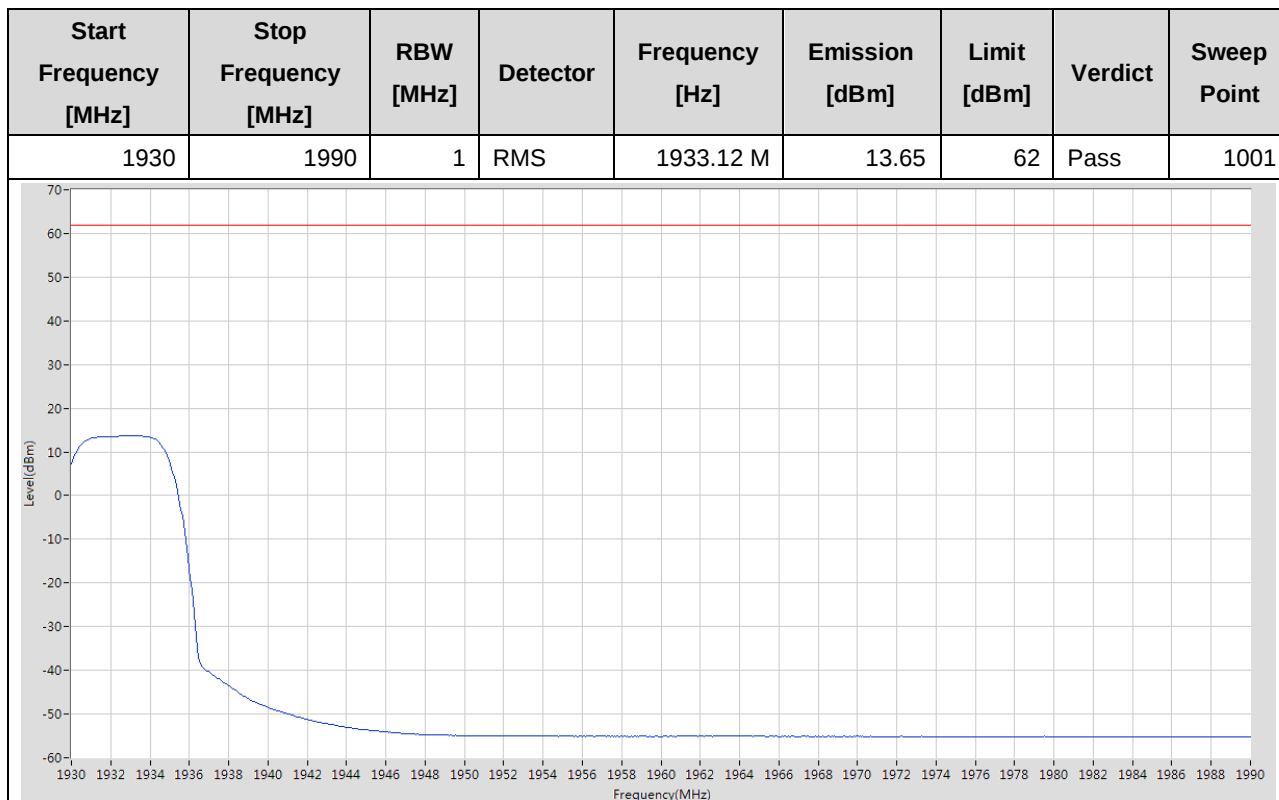


2 Test Plot

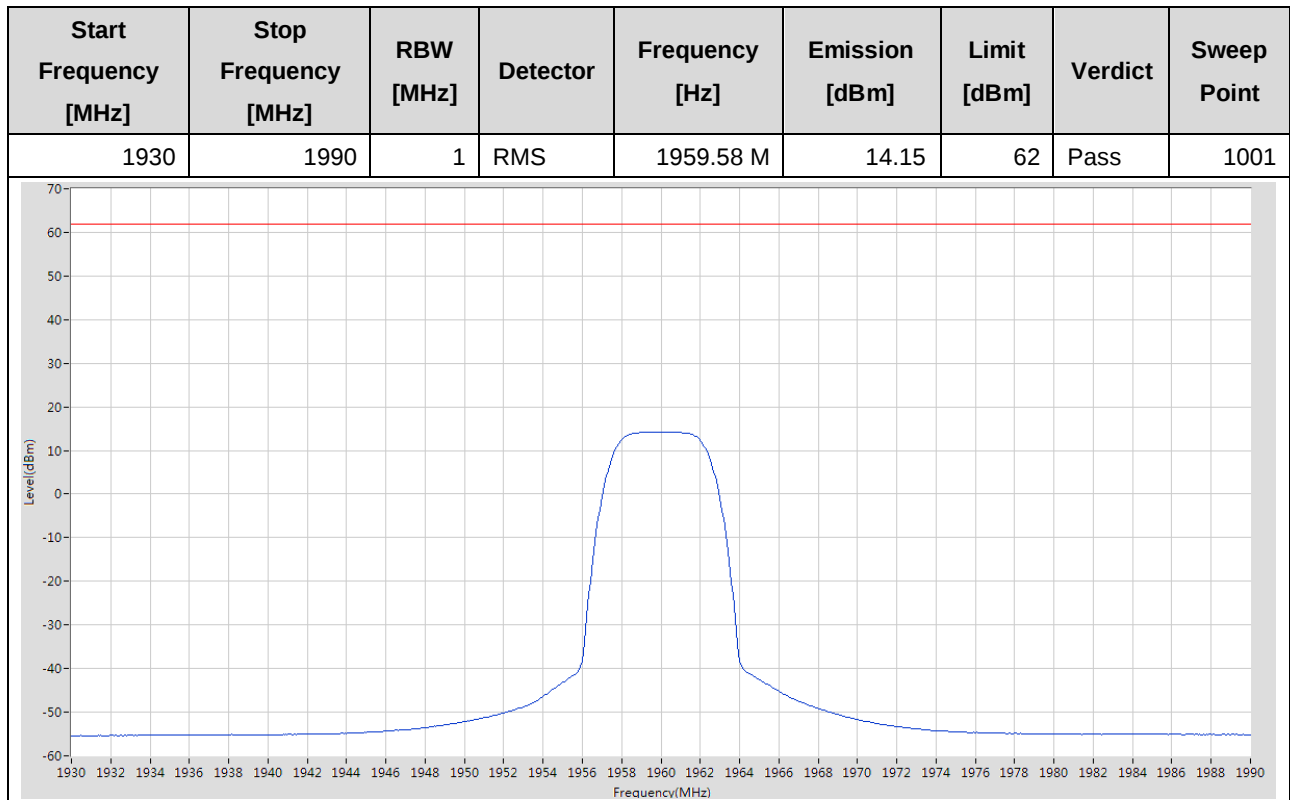
NOTE: Only the test plots for the measurements of Spectral Density and Peak-to-Average Ratio are supplied.

2.1 Power Spectral Density

2.1.1 5M_B

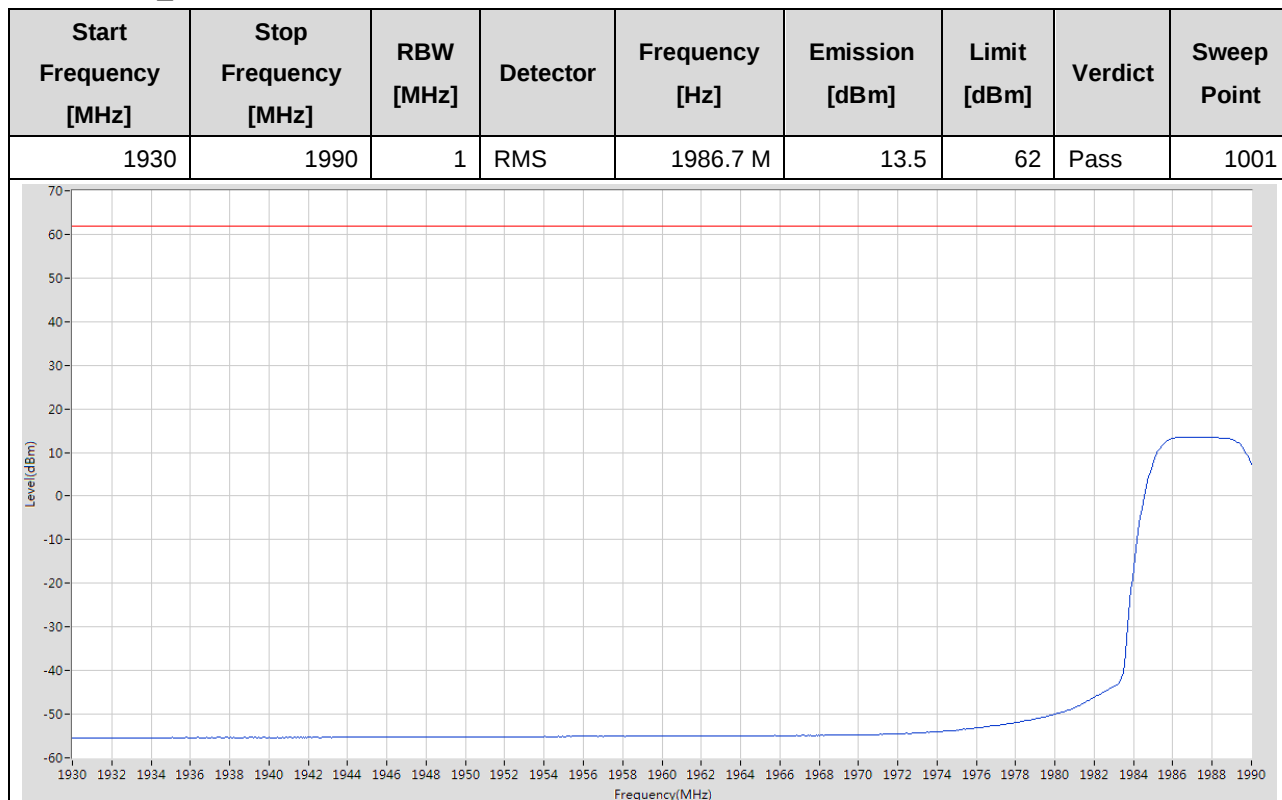


2.1.2 5M_M

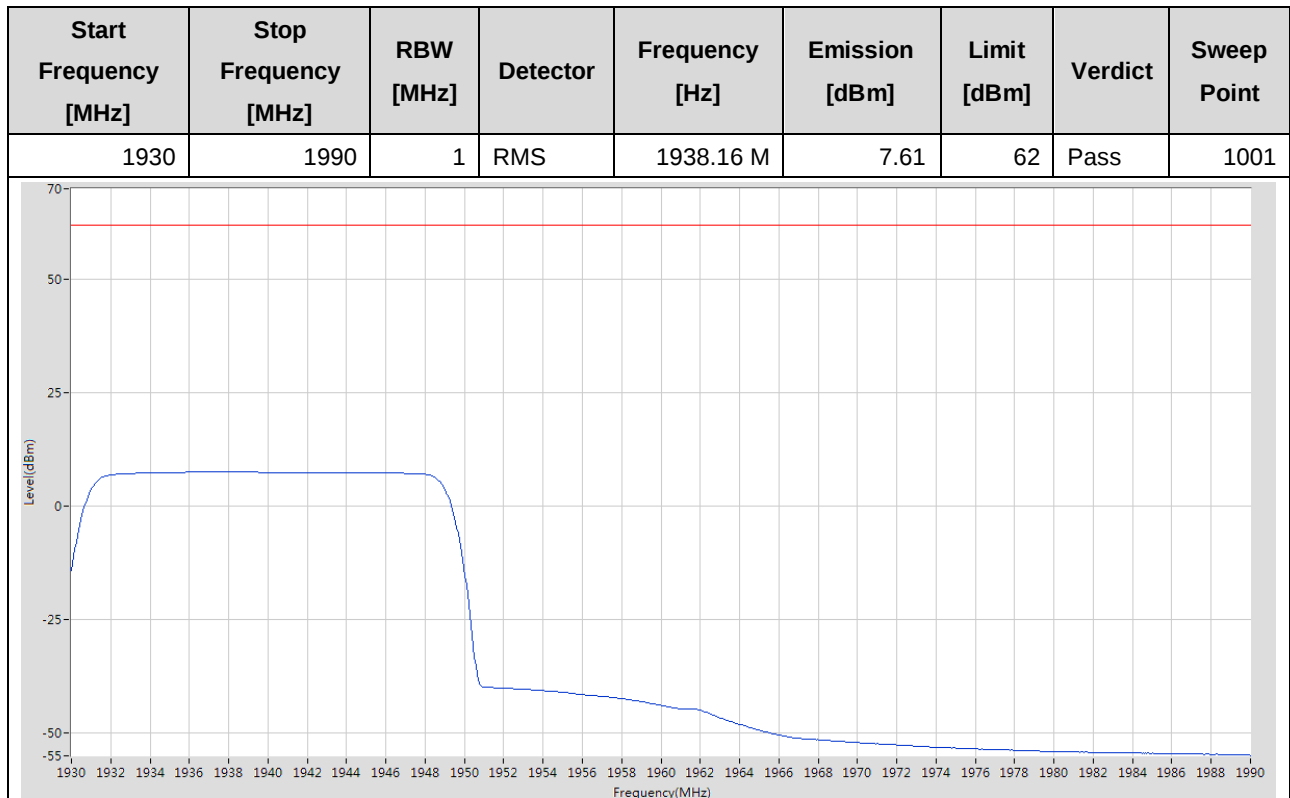




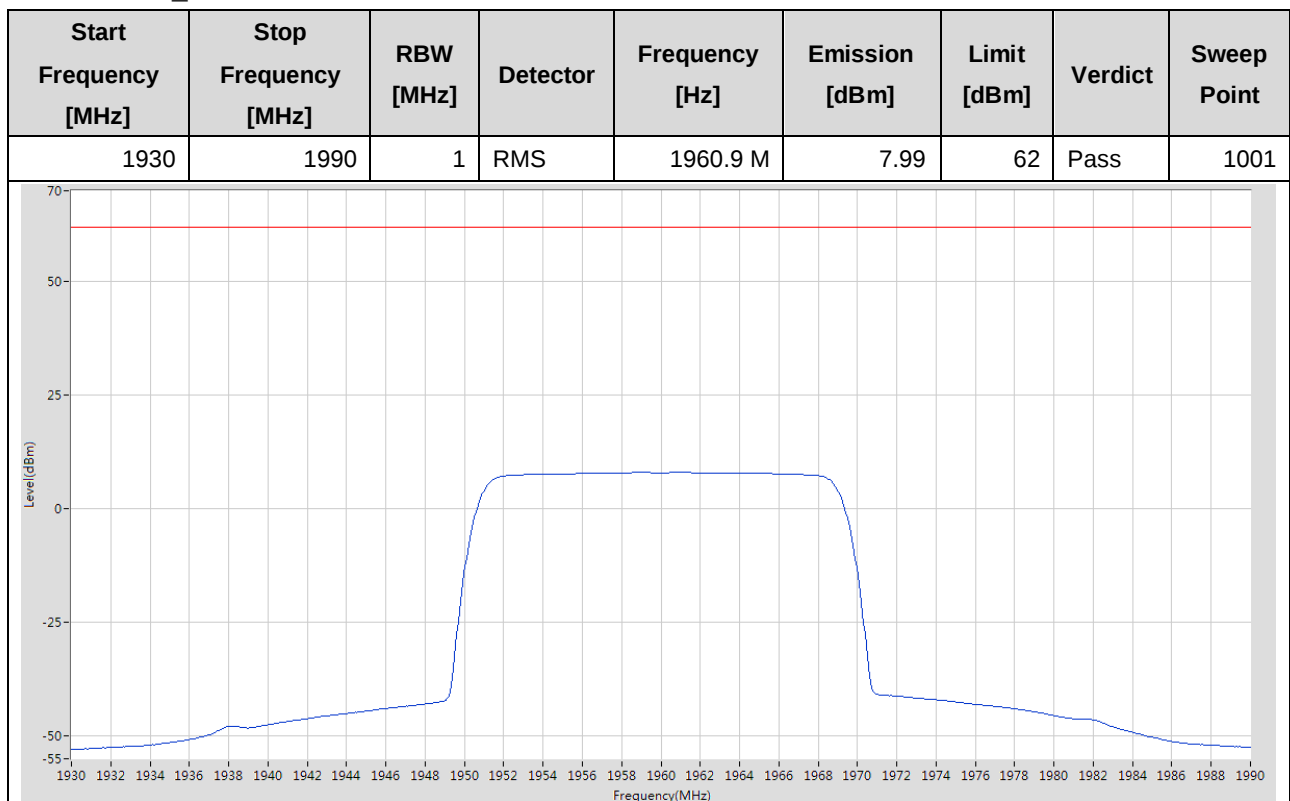
2.1.3 5M_T



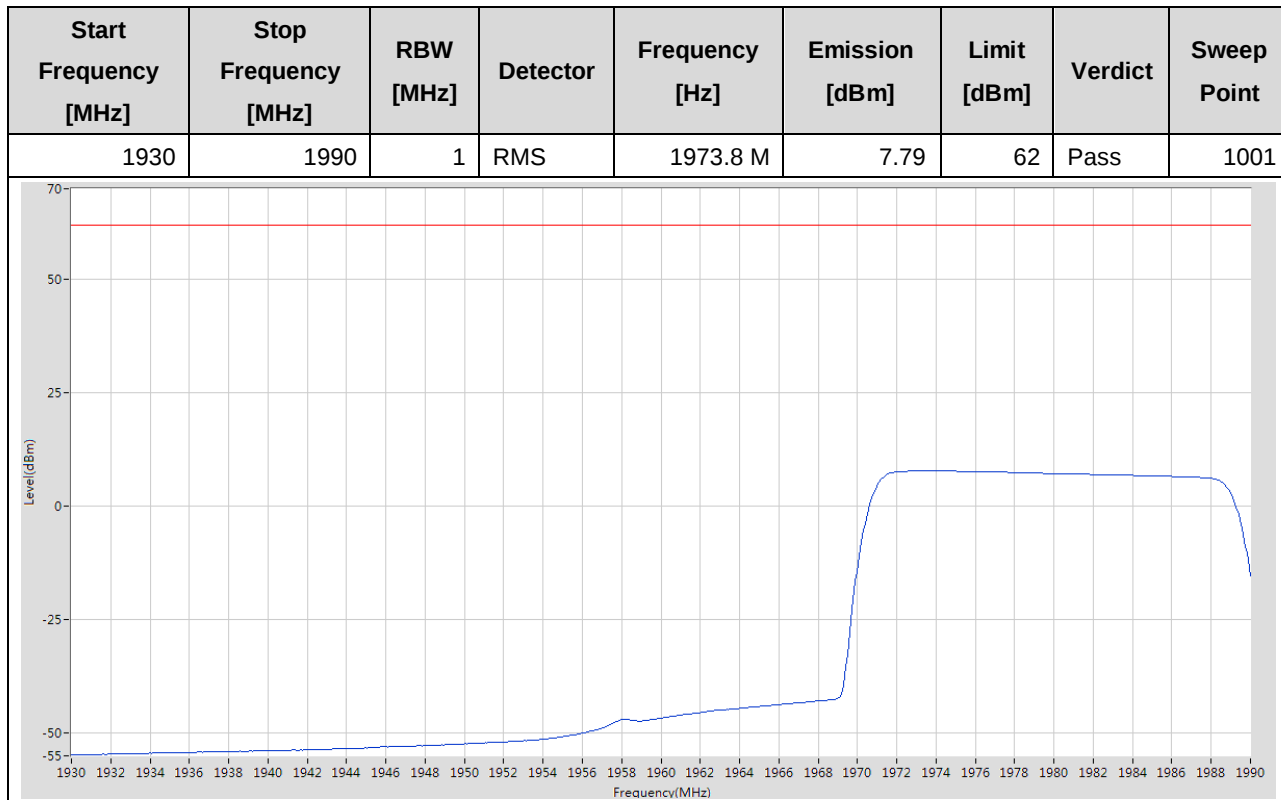
2.1.4 20M_B



2.1.5 20M_M

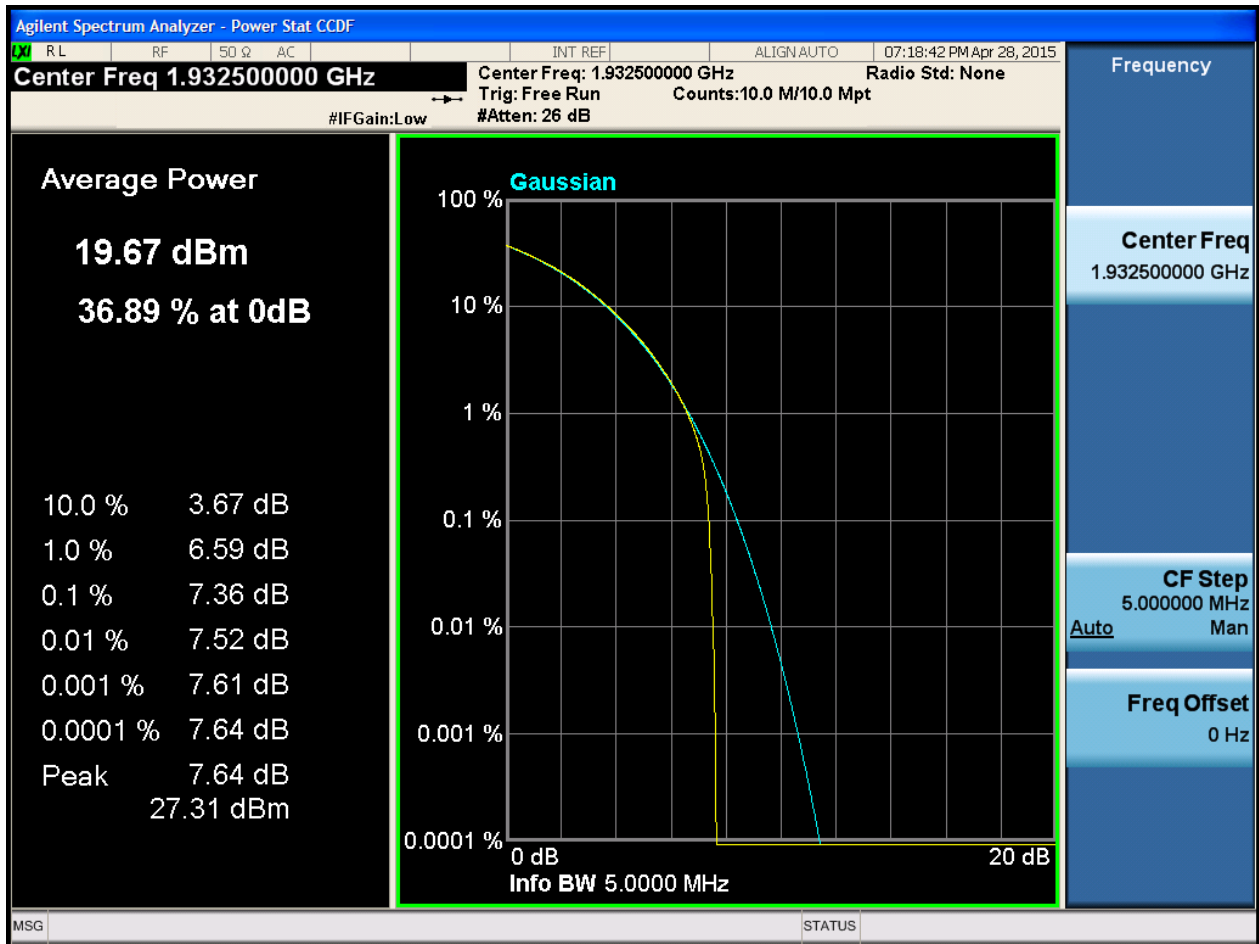


2.1.6 20M_T



2.2 Peak-to-Average Ratio

2.2.1 5M_B



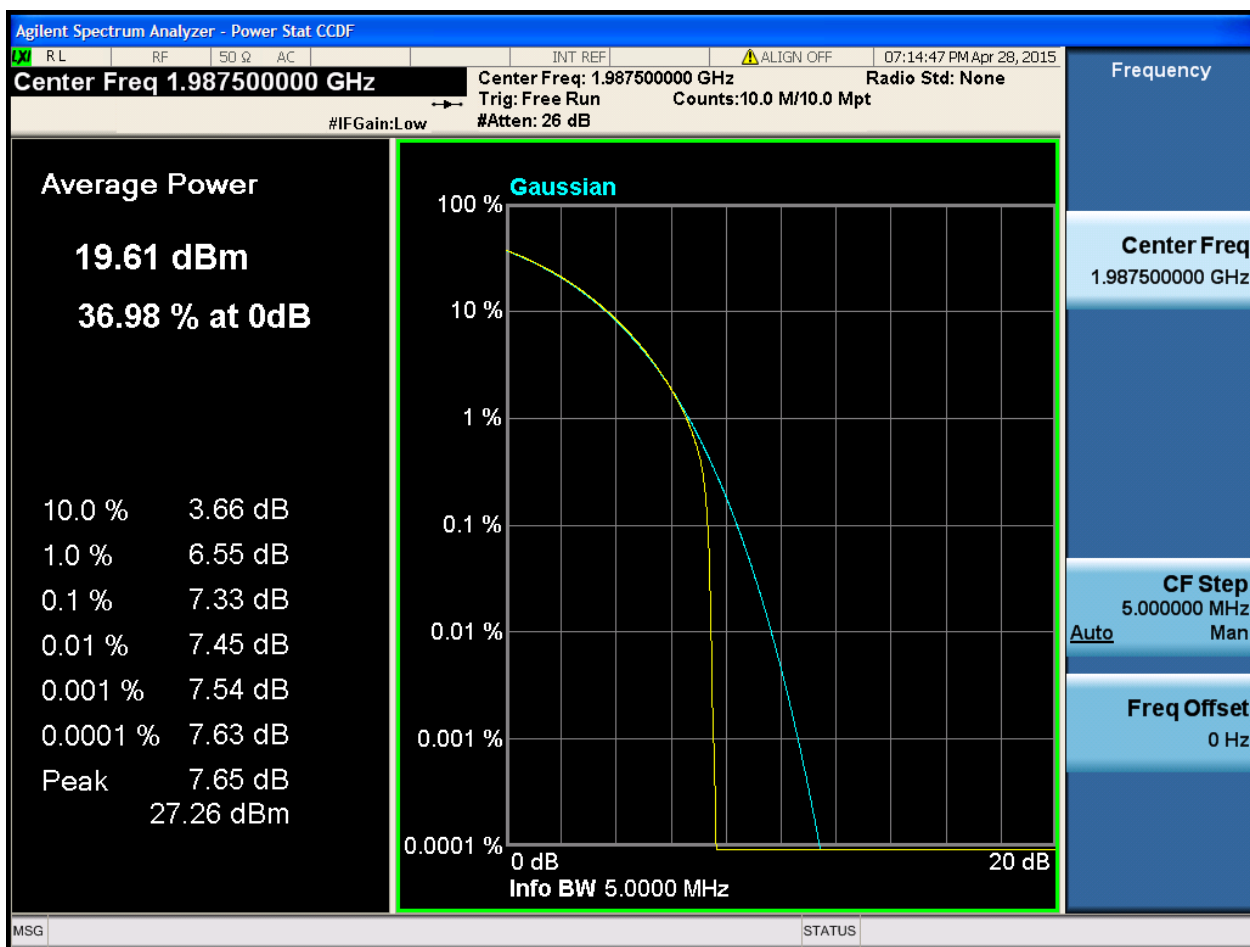


2.2.2 5M_M



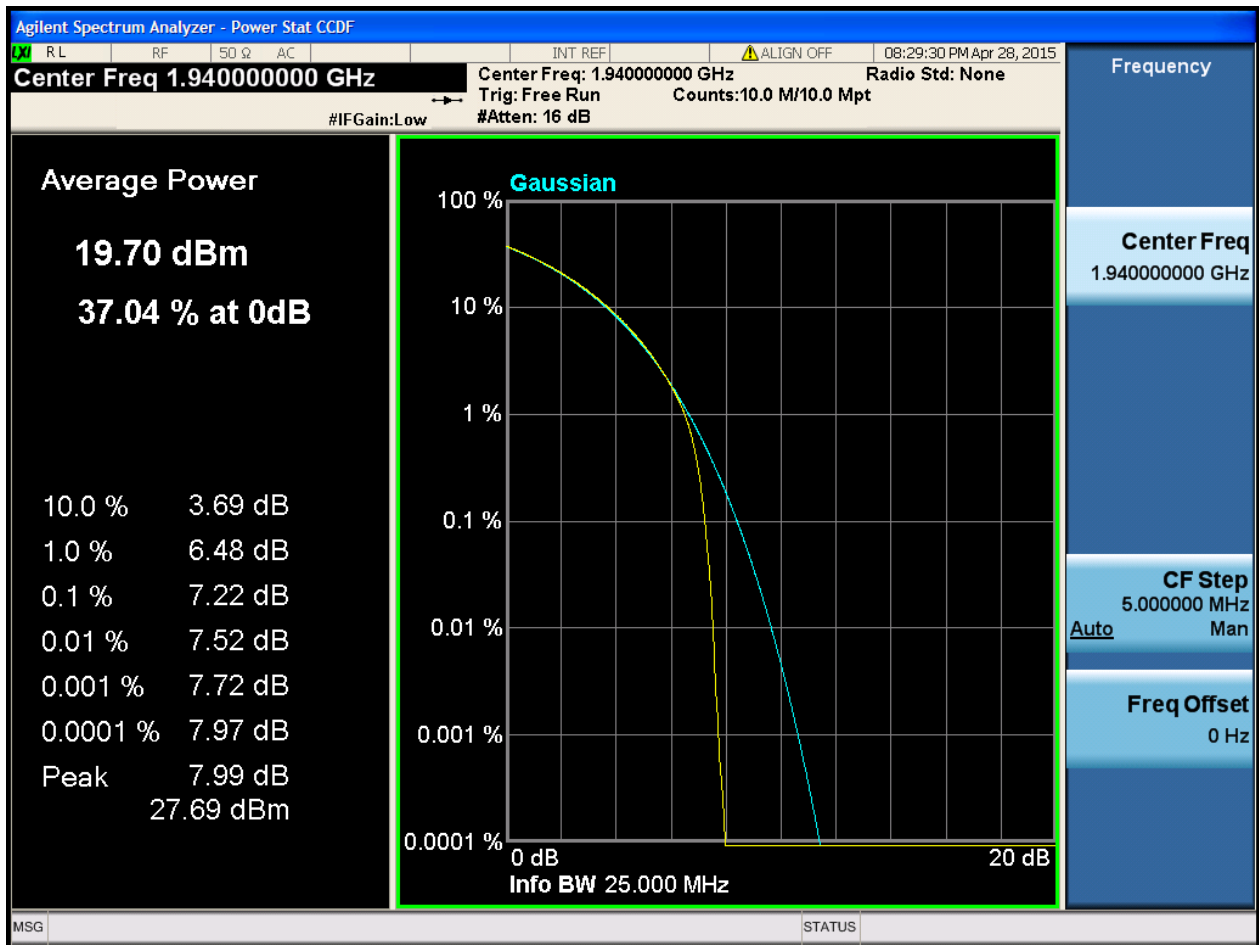


2.2.3 5M_T





2.2.4 20M_B



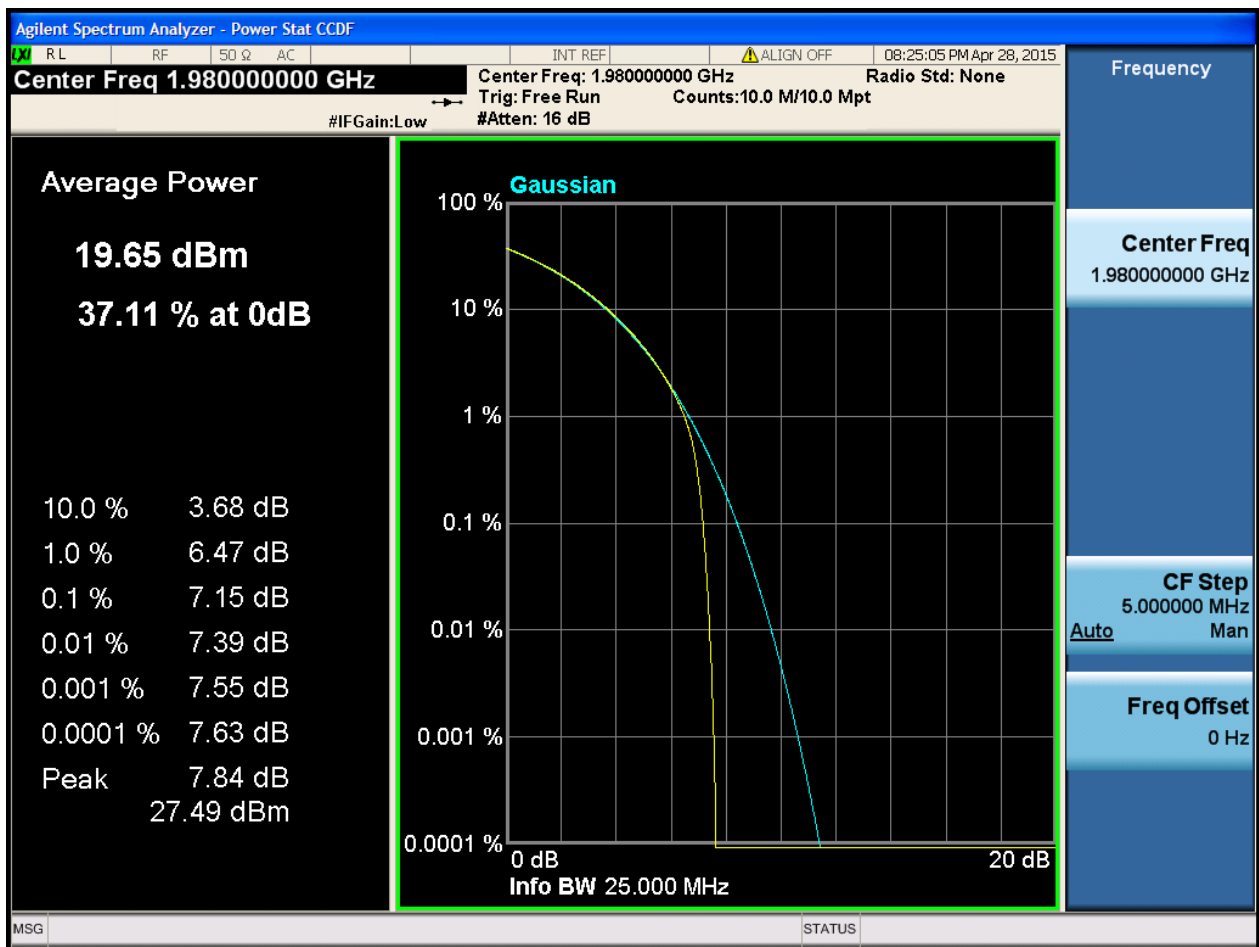


2.2.5 20M_M





2.2.6 20M_T





Appendix B2: Bandwidth



1 Result Table

1.1 Occupied Bandwidth

EUT Conf.	Occupied Bandwidth [MHz]	Verdict
5M_B	4.49351	---
5M_M	4.494276	---
5M_T	4.494164	---
10M_B	8.965866	---
10M_M	8.970047	---
10M_T	8.971851	---
15M_B	13.454836	---
15M_M	13.458541	---
15M_T	13.468678	---
20M_B	17.915639	---
20M_M	17.911744	---
20M_T	17.922258	---

1.2 Emission Bandwidth

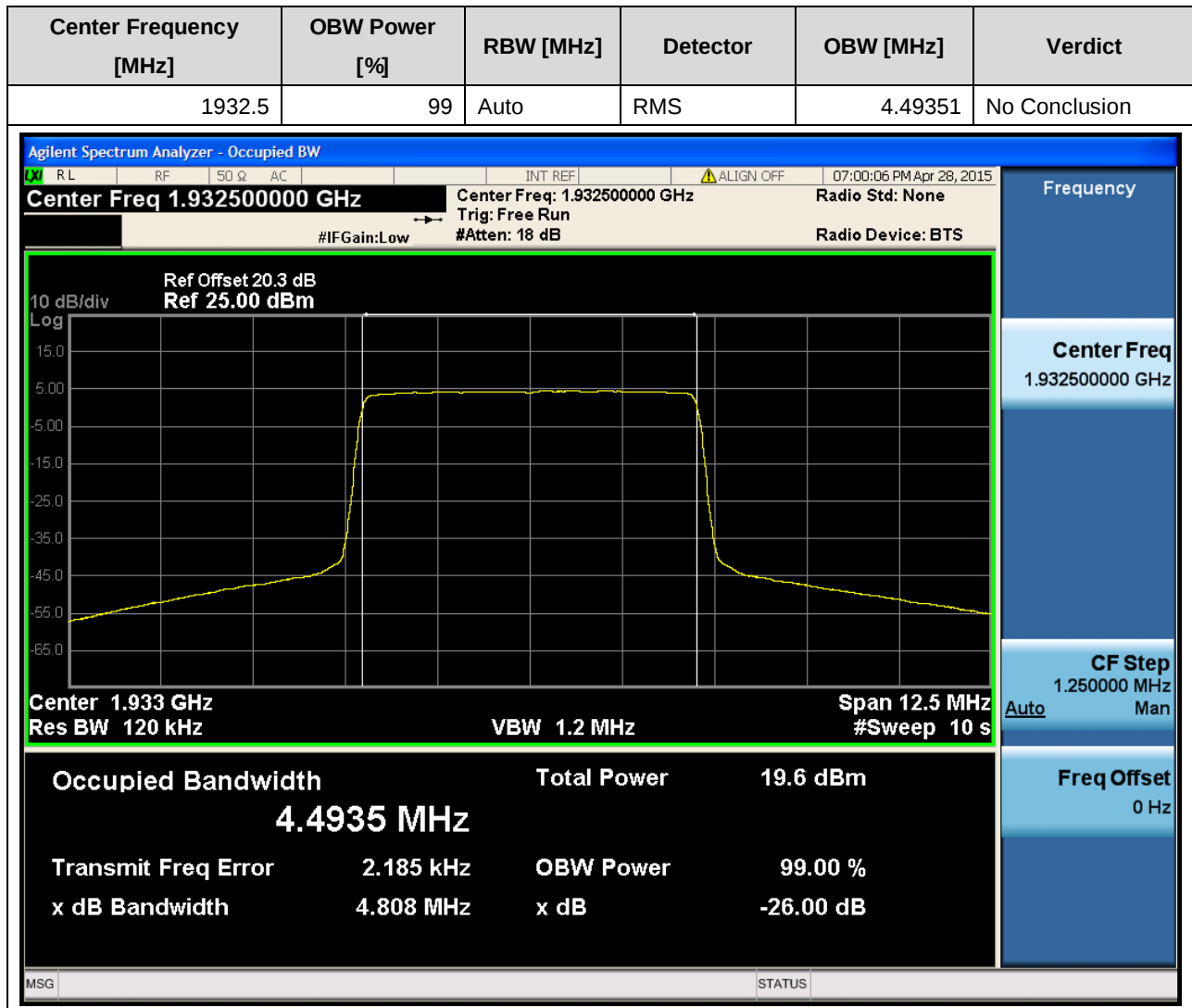
EUT Conf.	Emission Bandwidth, -26 dBc [MHz]	Emission Bandwidth, -20 dBc [MHz]	Verdict
5M_B	4.77376	4.723712	---
5M_M	4.793856	4.723712	---
5M_T	4.783744	4.72384	---
10M_B	9.393792	9.233792	---
10M_M	9.383808	9.233664	---
10M_T	9.383808	9.25376	---
15M_B	13.97376	13.733632	---
15M_M	14.003712	13.743616	---
15M_T	13.993728	13.743616	---
20M_B	18.58368	18.303616	---
20M_M	18.593664	18.2336	---
20M_T	18.603648	18.243584	---



2 Test Plot

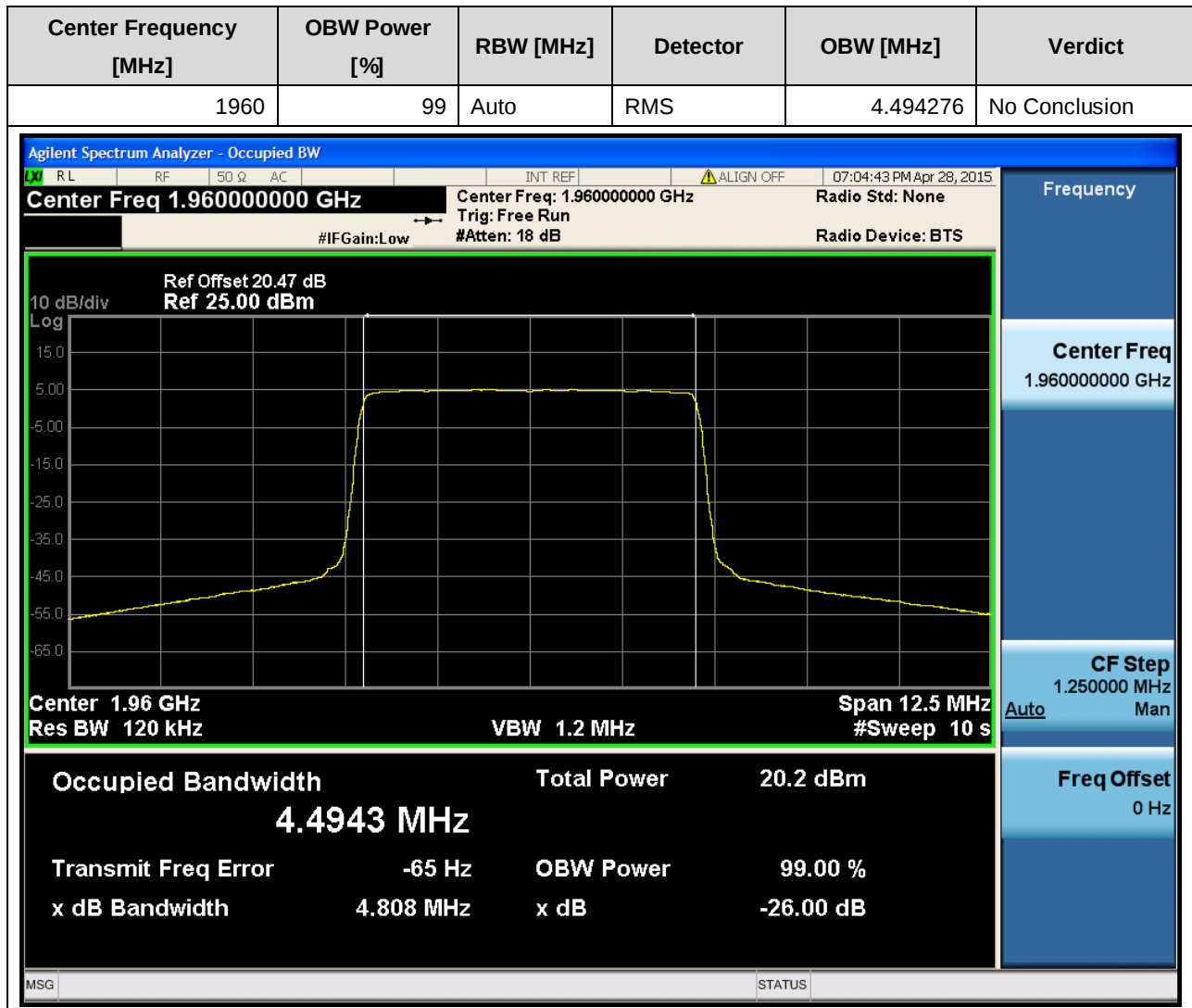
2.1 Occupied Bandwidth

2.1.1 5M_B



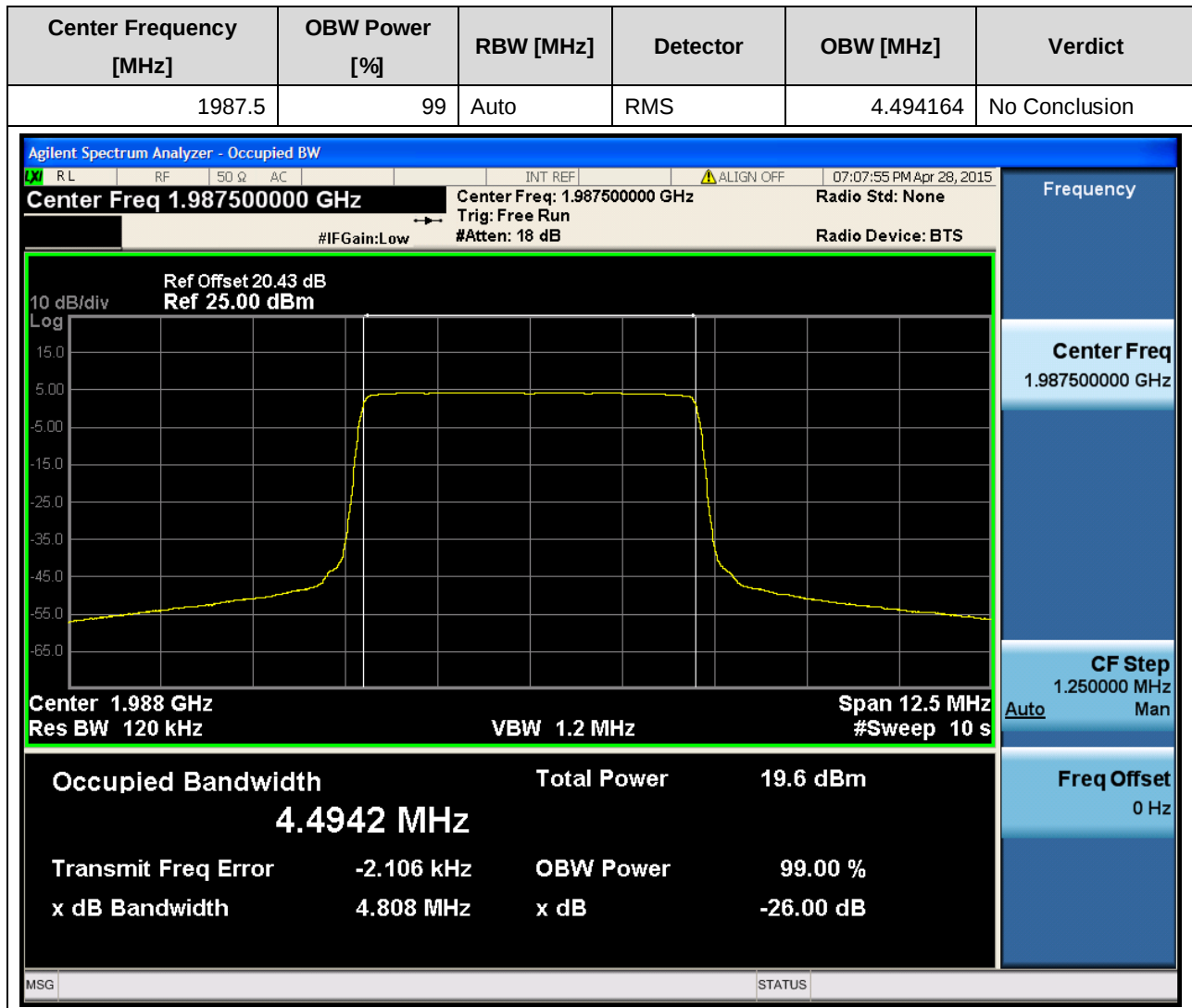


2.1.2 5M_M



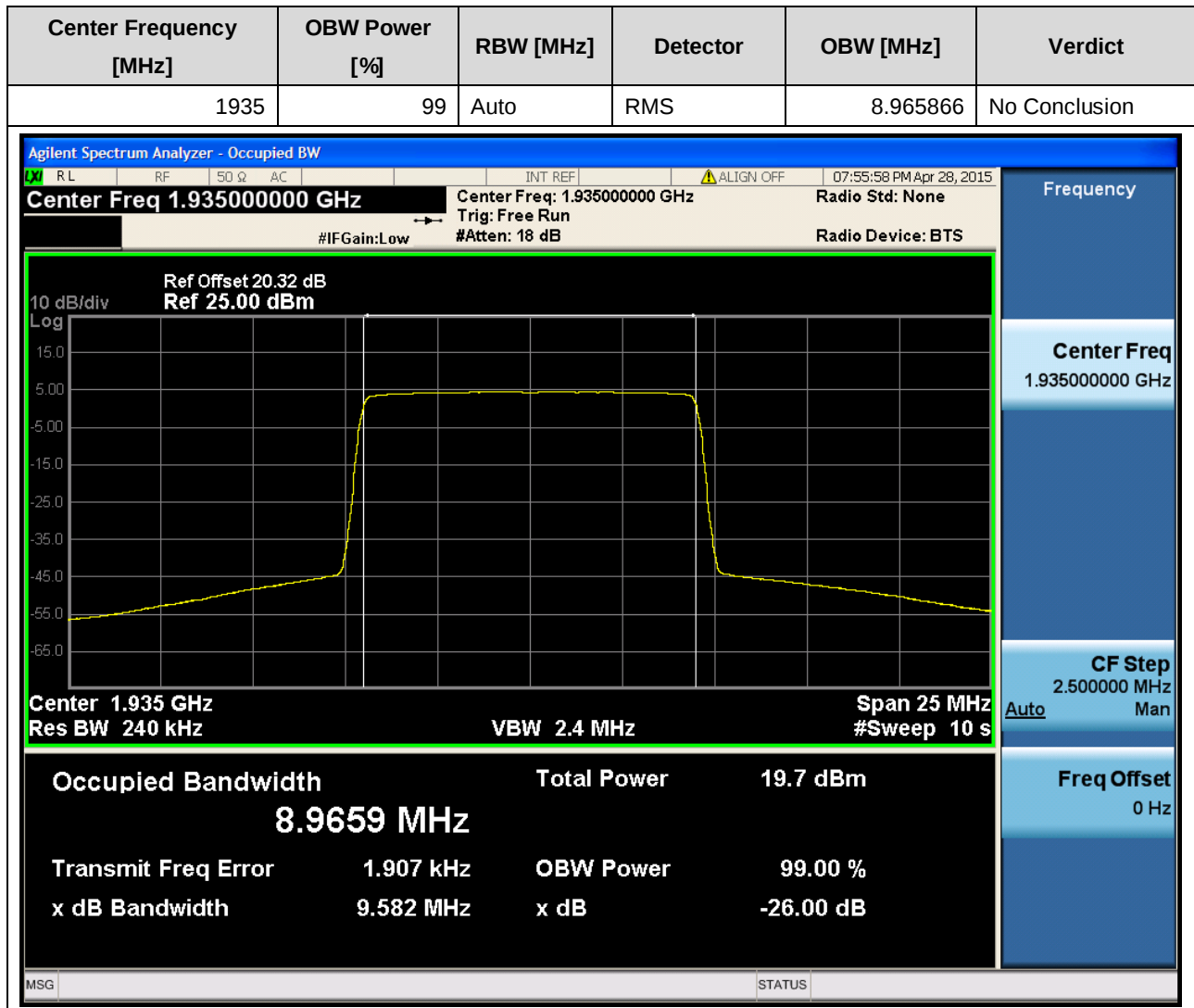


2.1.3 5M_T

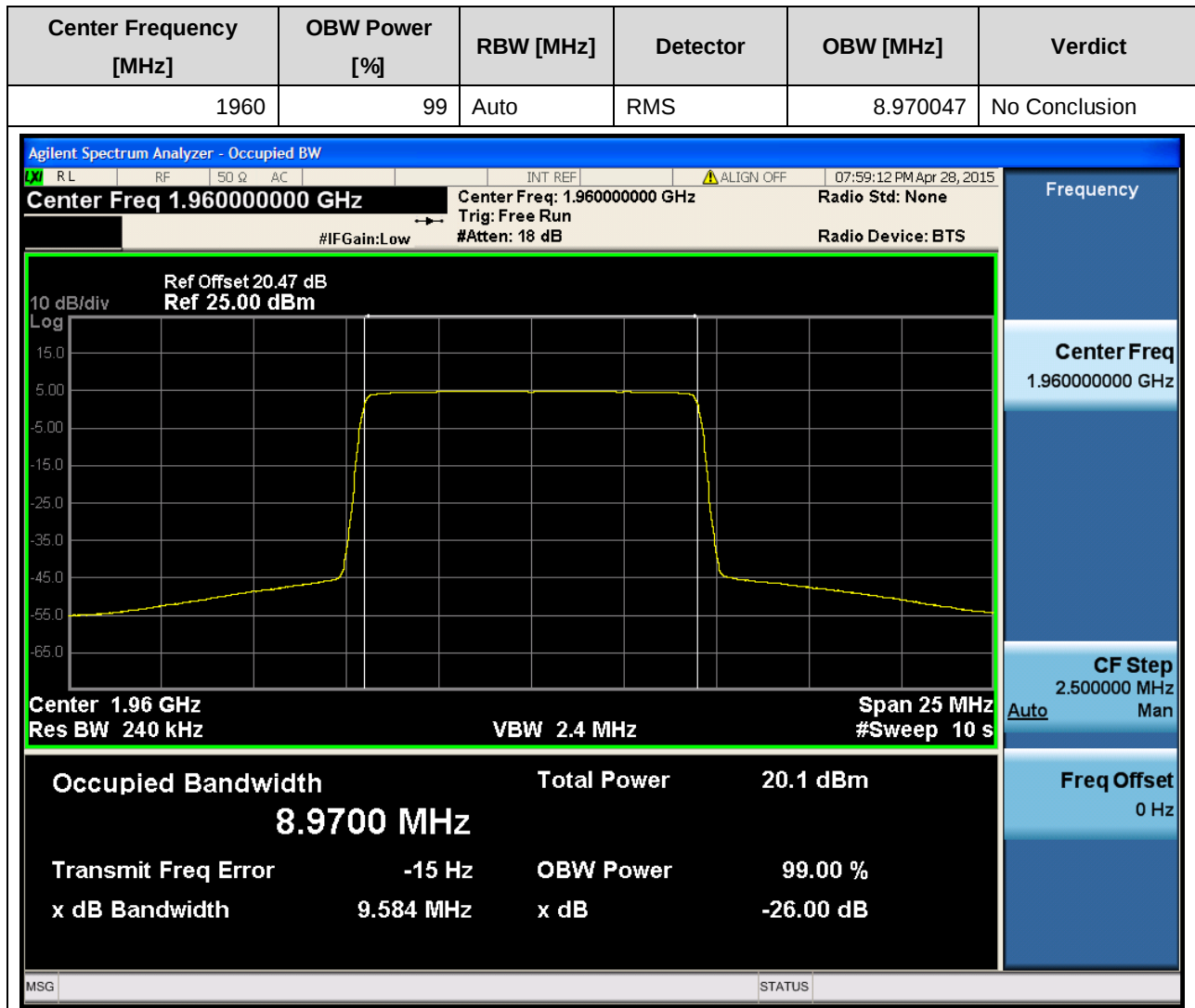




2.1.4 10M_B

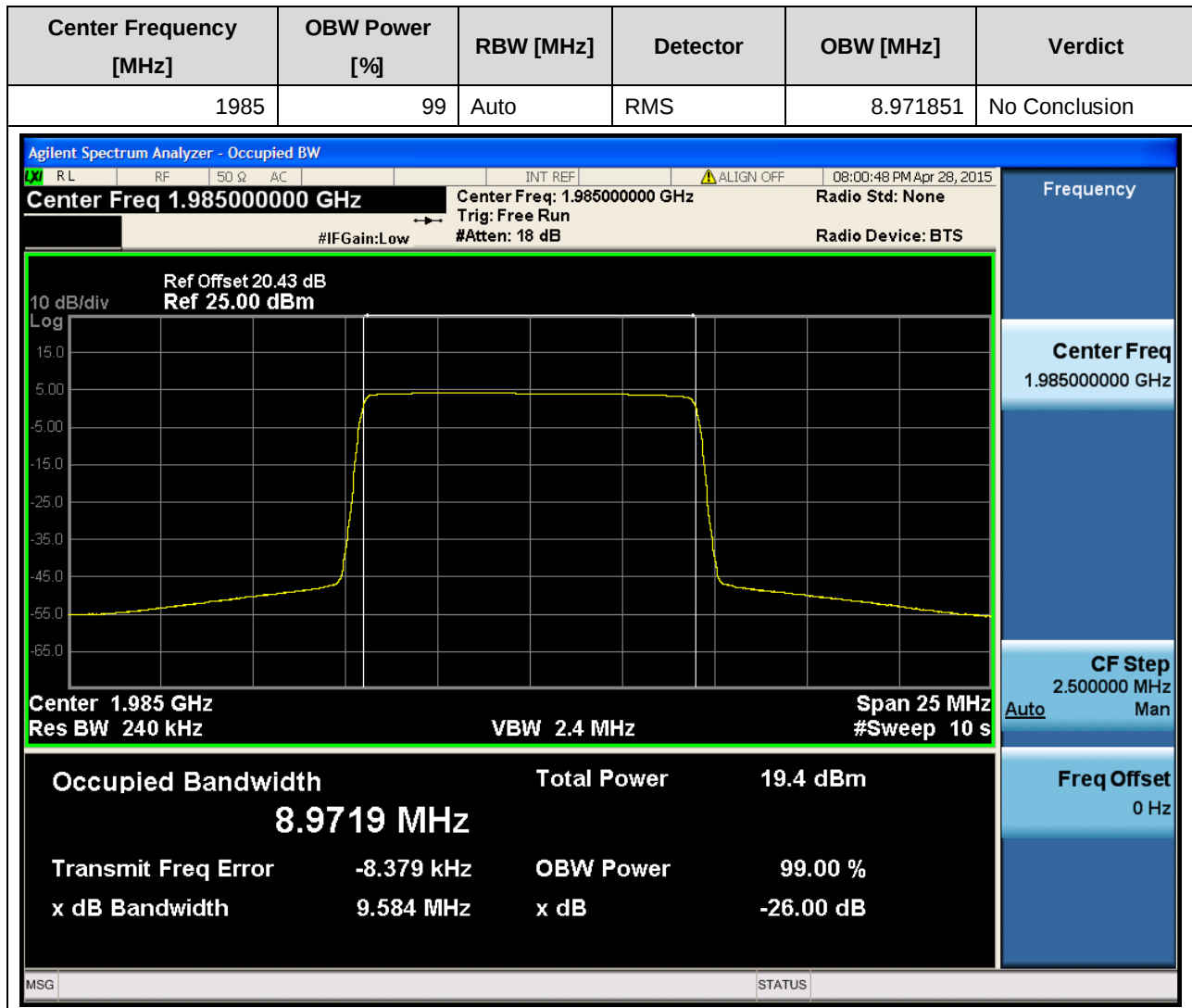


2.1.5 10M_M

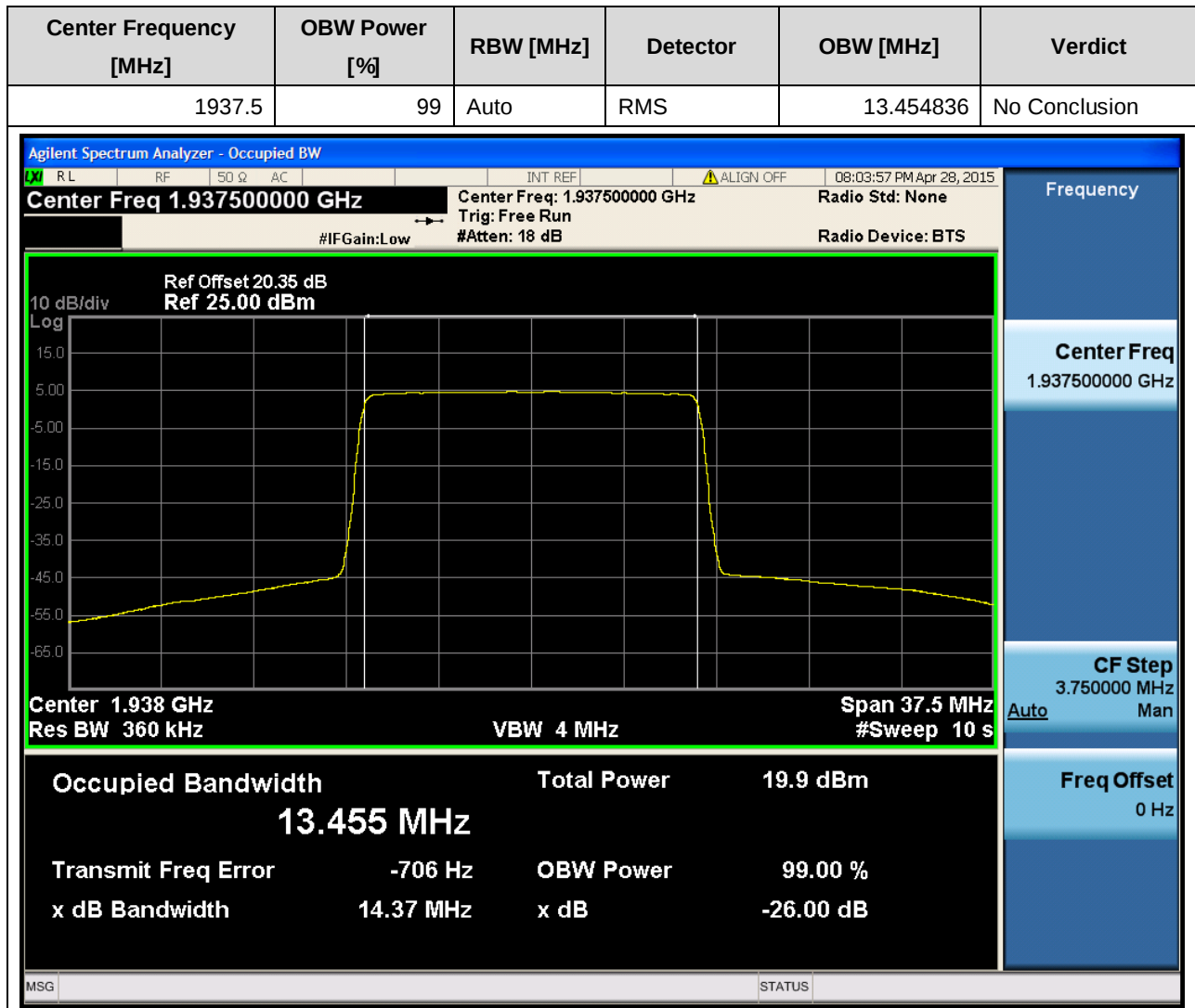




2.1.6 10M_T

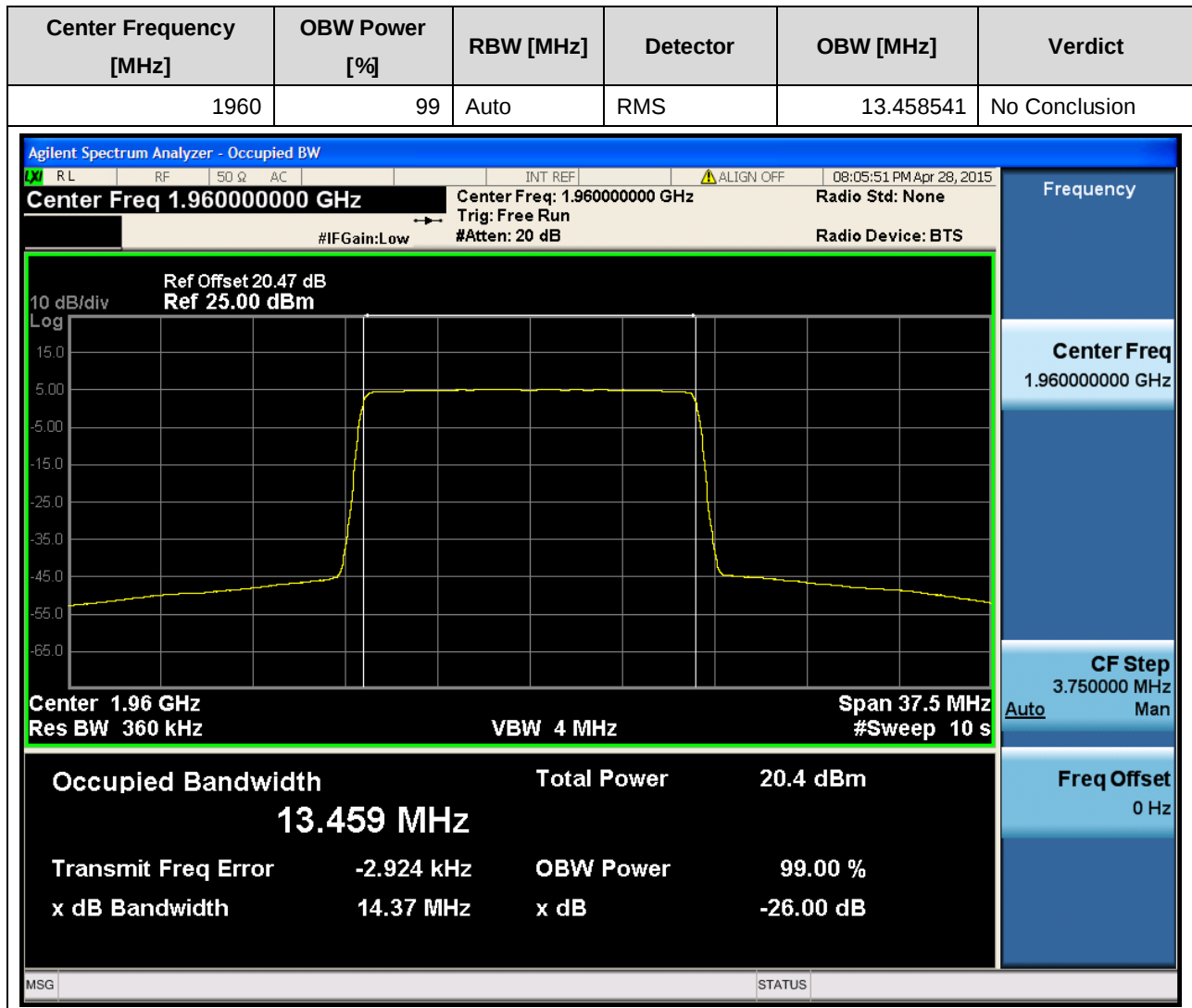


2.1.7 15M_B

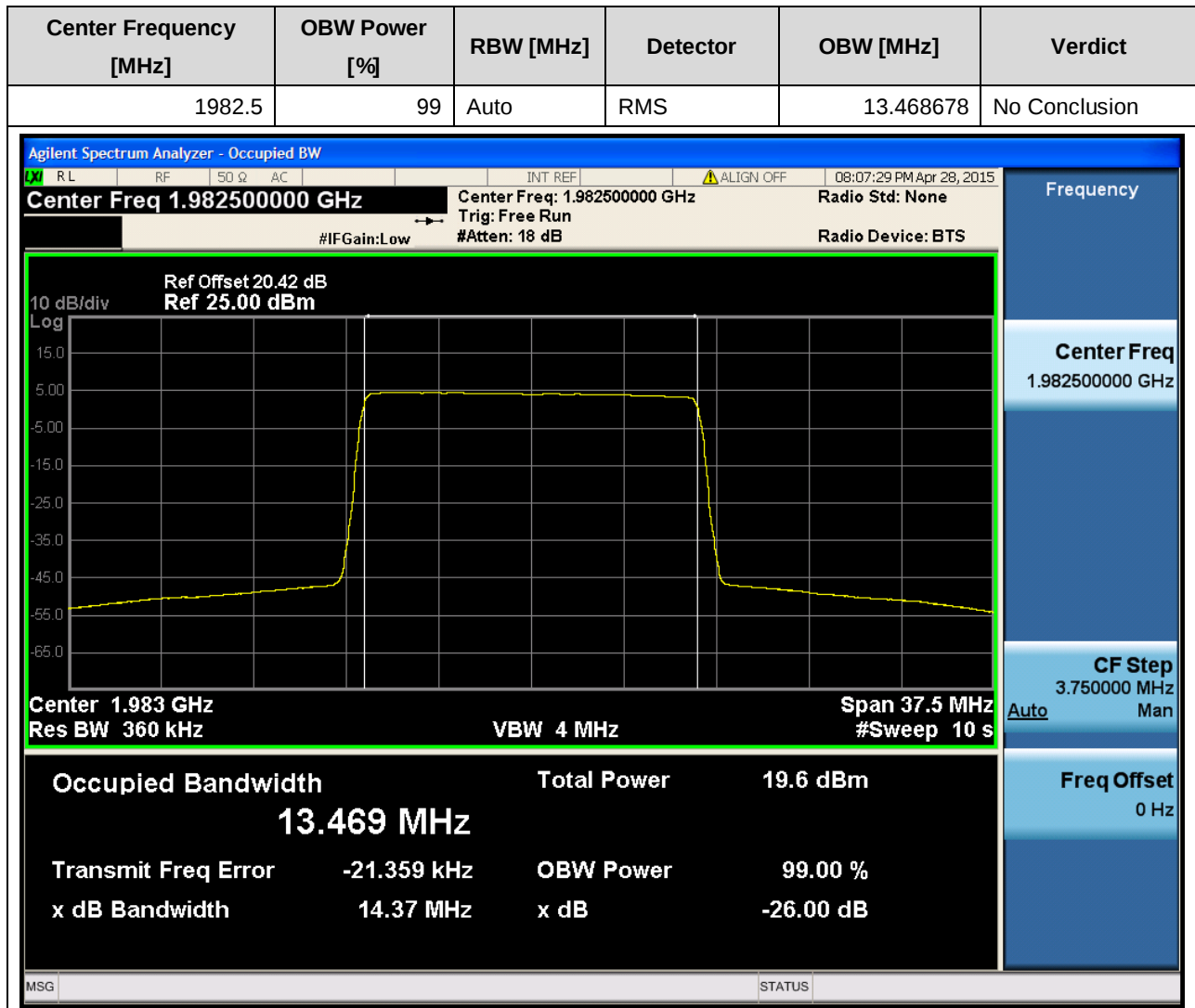




2.1.8 15M_M

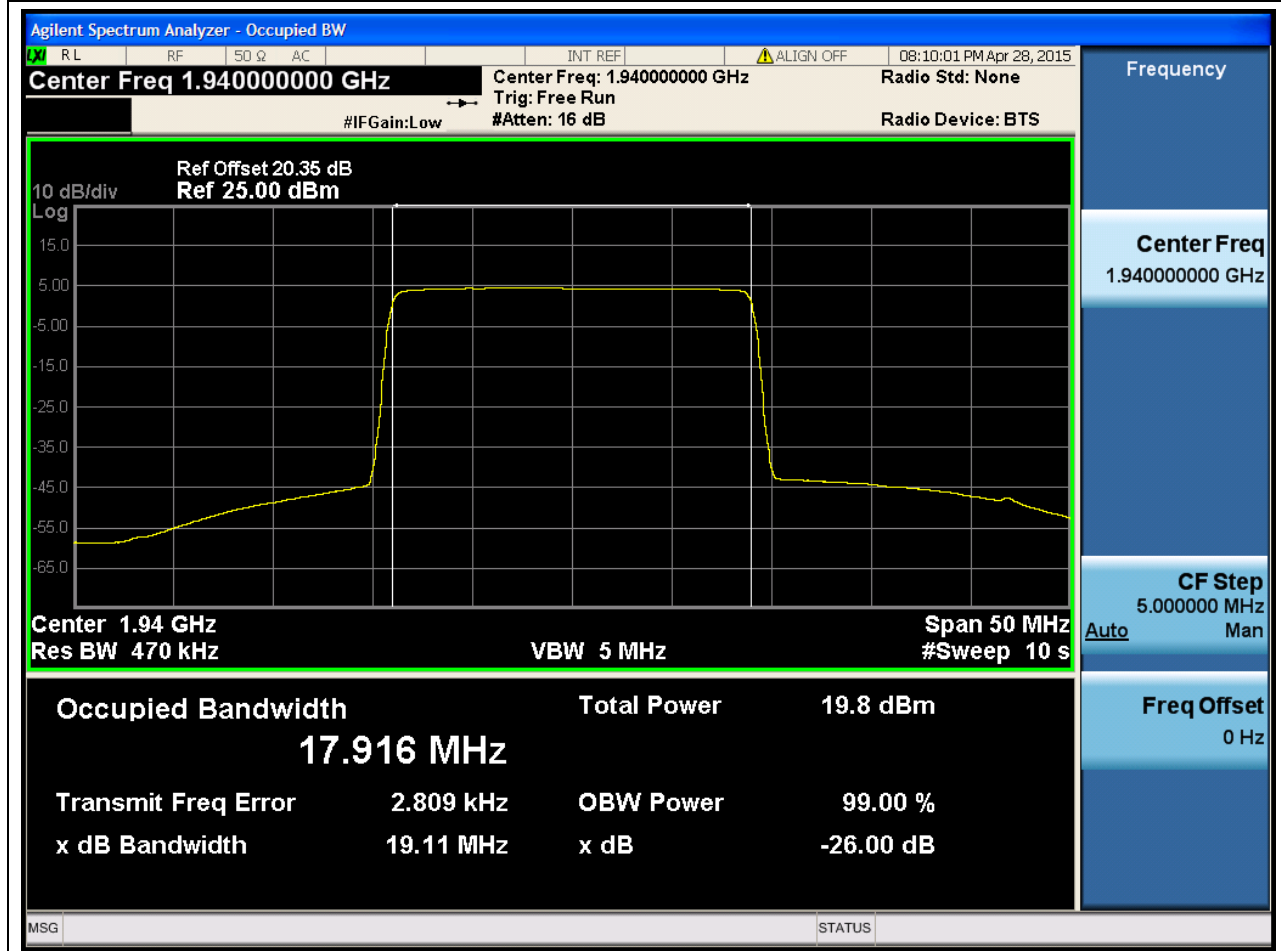


2.1.9 15M_T



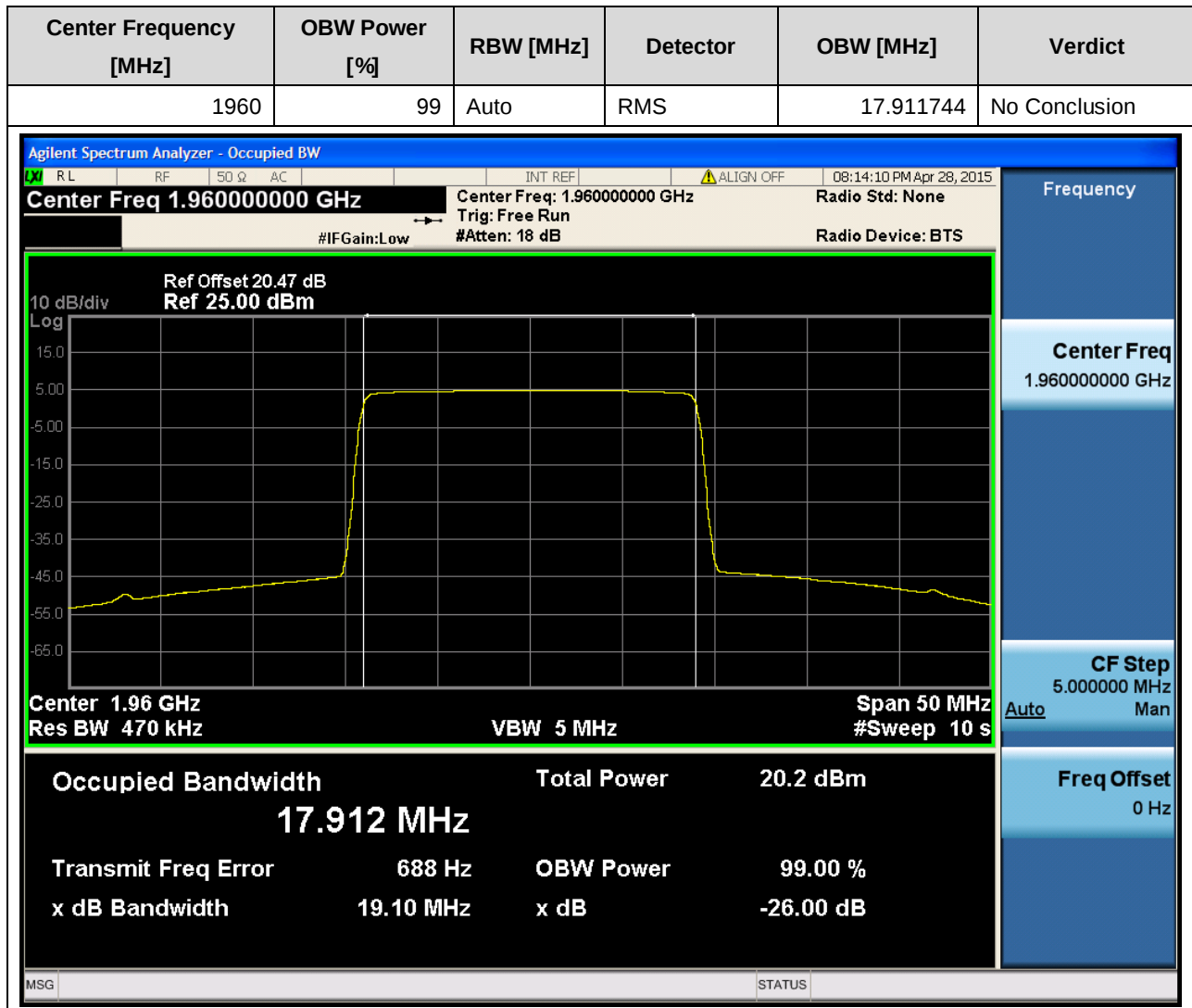
2.1.10 20M_B

Center Frequency [MHz]	OBW Power [%]	RBW [MHz]	Detector	OBW [MHz]	Verdict
1940	99	Auto	RMS	17.915639	No Conclusion



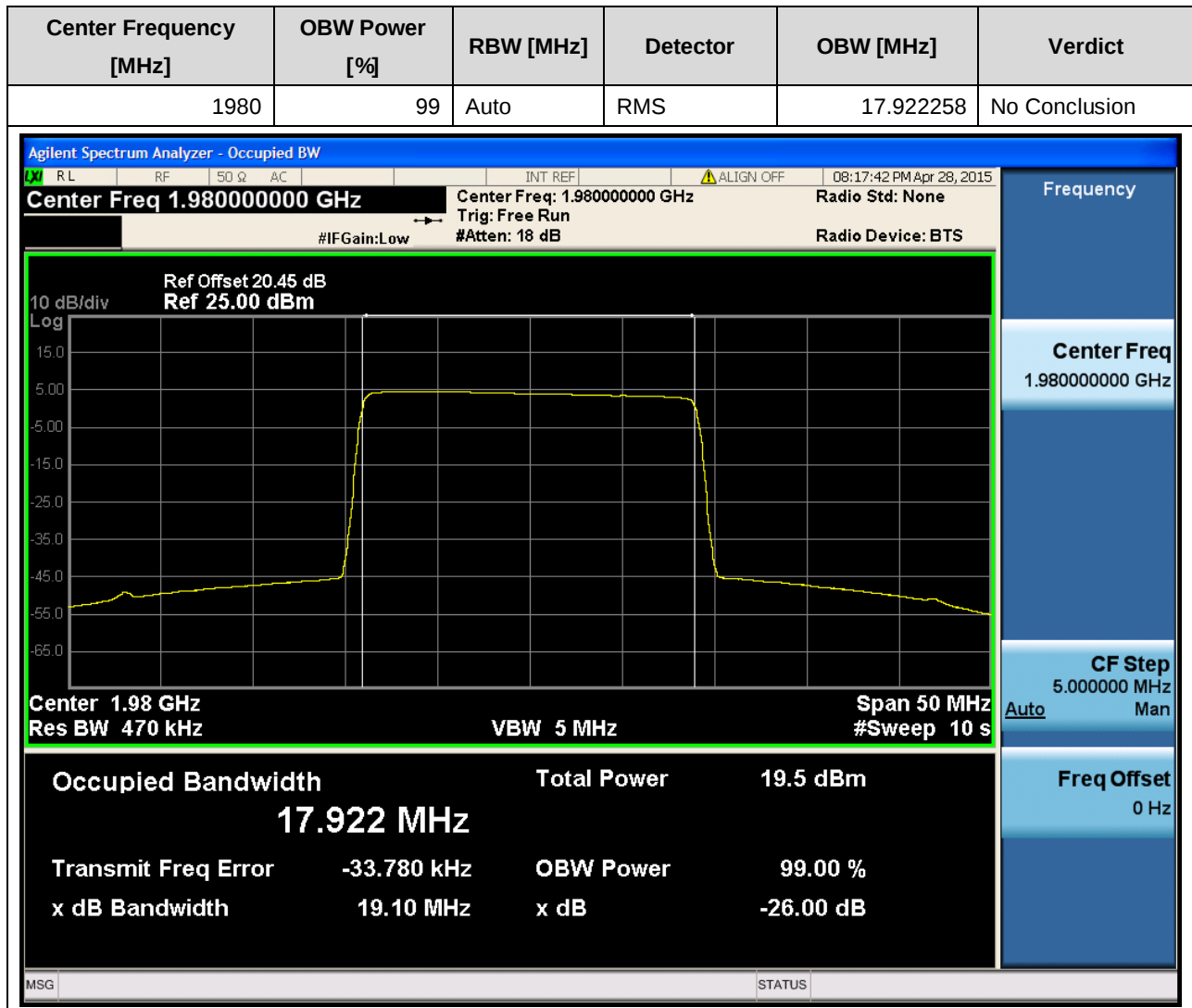


2.1.11 20M_M





2.1.12 20M_T

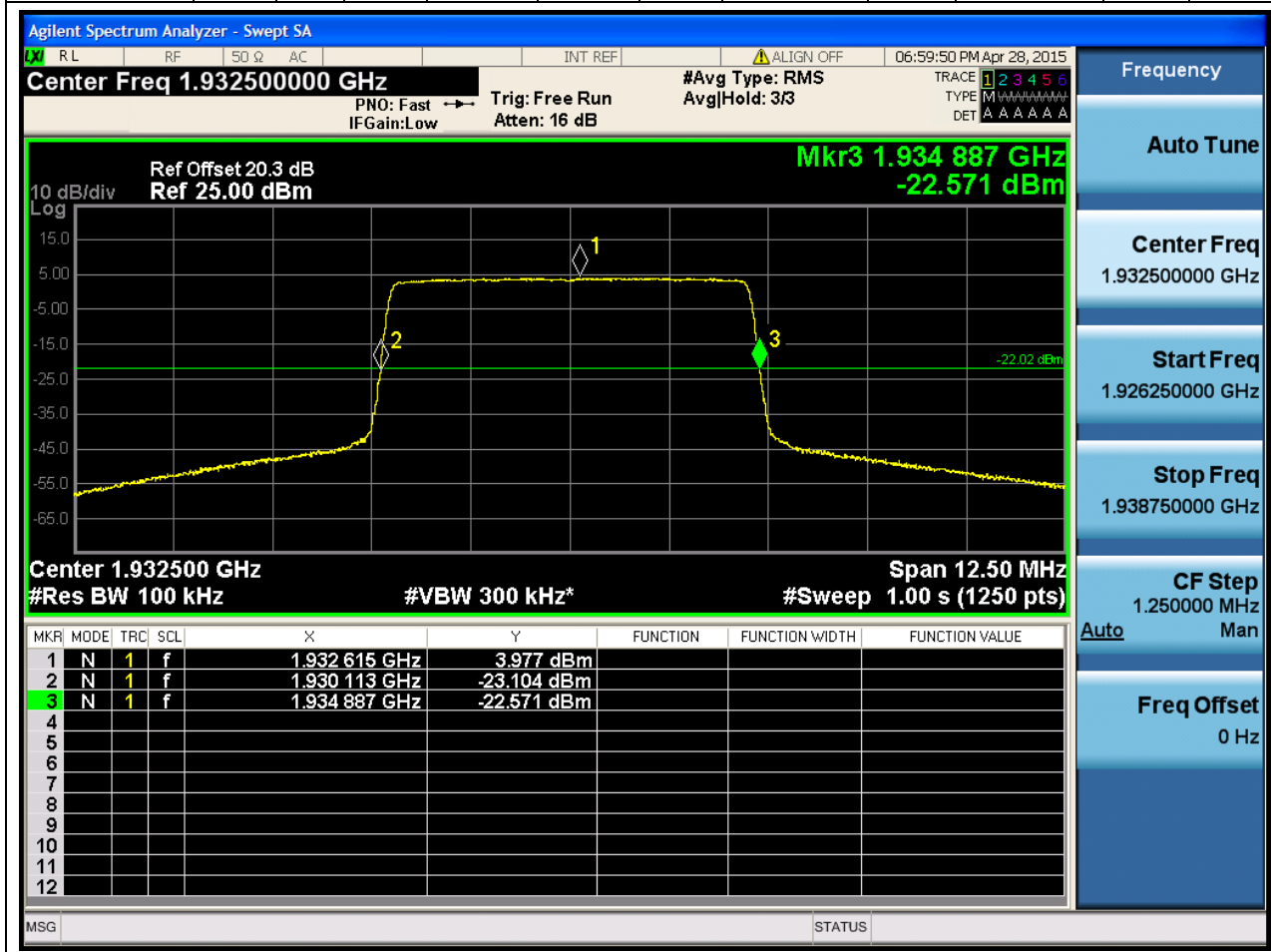




2.2 Emission Bandwidth(-26dBc)

2.2.1 5M_B

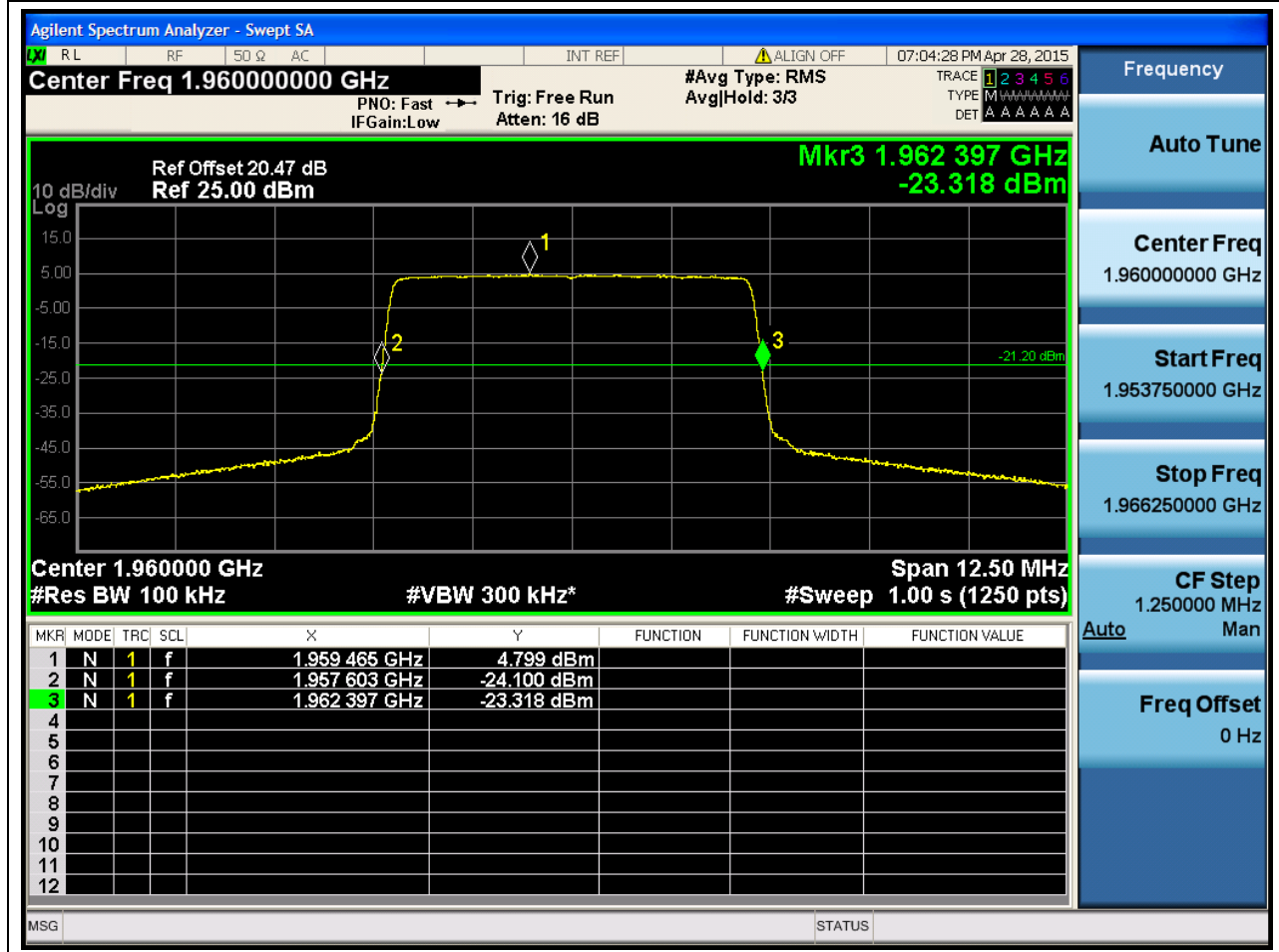
Center Frequency[MHz]	Span [MHz]	nd B [dB]	RB W [MHz]	Detect or	ndB BW [MHz]	BW Limit [MHz]	Lower Freq [MHz]	Low er Limit [MHz]	Upper Freq [MHz]	Upp er Limit [MHz]	Verdict
1932.5	12.5	26	0.1	RMS	4.77376	5	1930.113152	1930	1934.886912	1990	Pass





2.2.2 5M_M

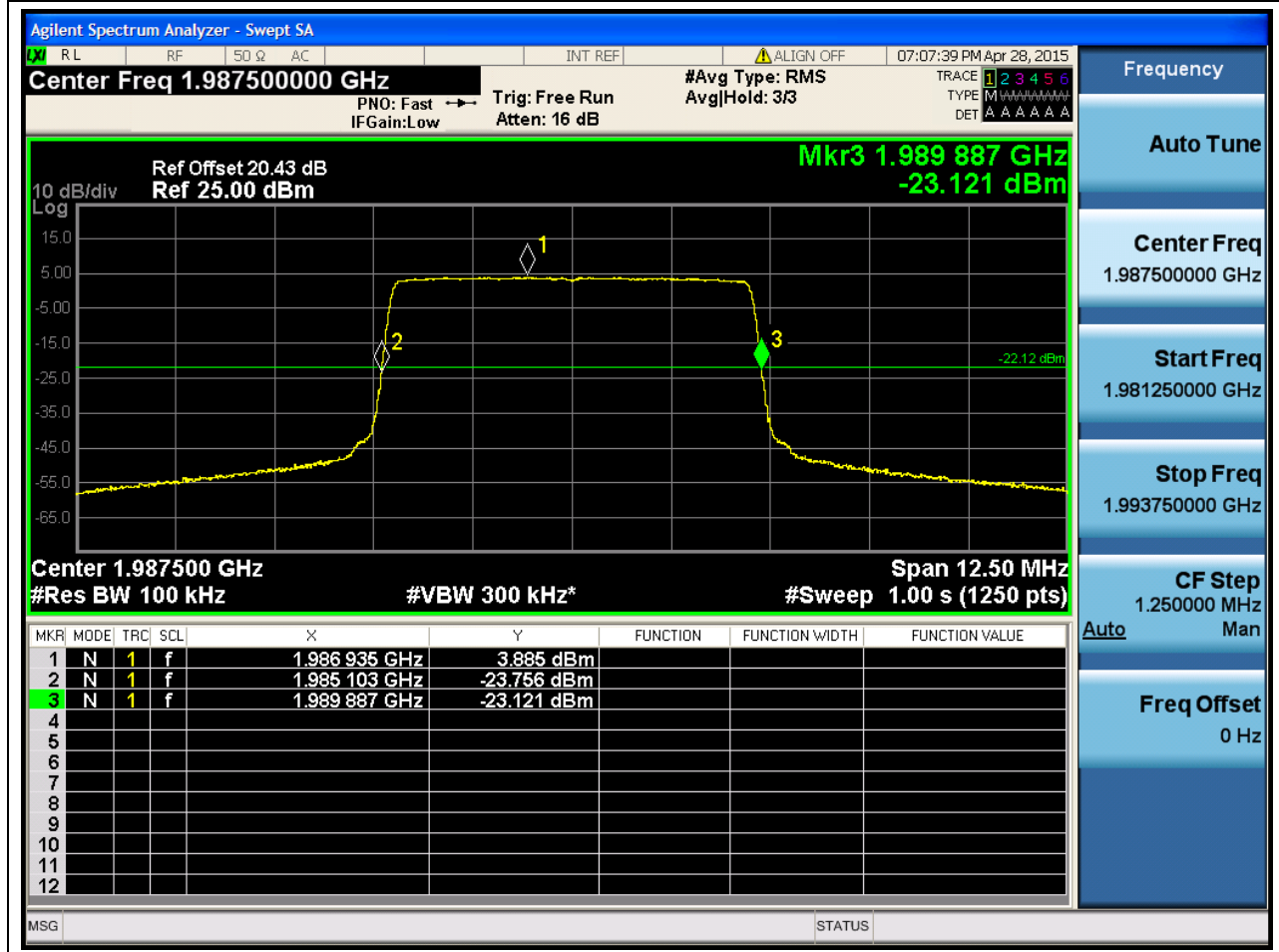
Center Frequency[MHz]	Span [MHz]	ndB [dB]	RBW [MHz]	Detect or	ndB BW [MHz]	BW Limit [MHz]	Lower Freq [MHz]	Lower Limit [MHz]	Upper Freq [MHz]	Upper Limit [MHz]	Verdict
1960	12.5	26	0.1	RMS	4.793856	5	1957.603072	1930	1962.396928	1990	Pass





2.2.3 5M_T

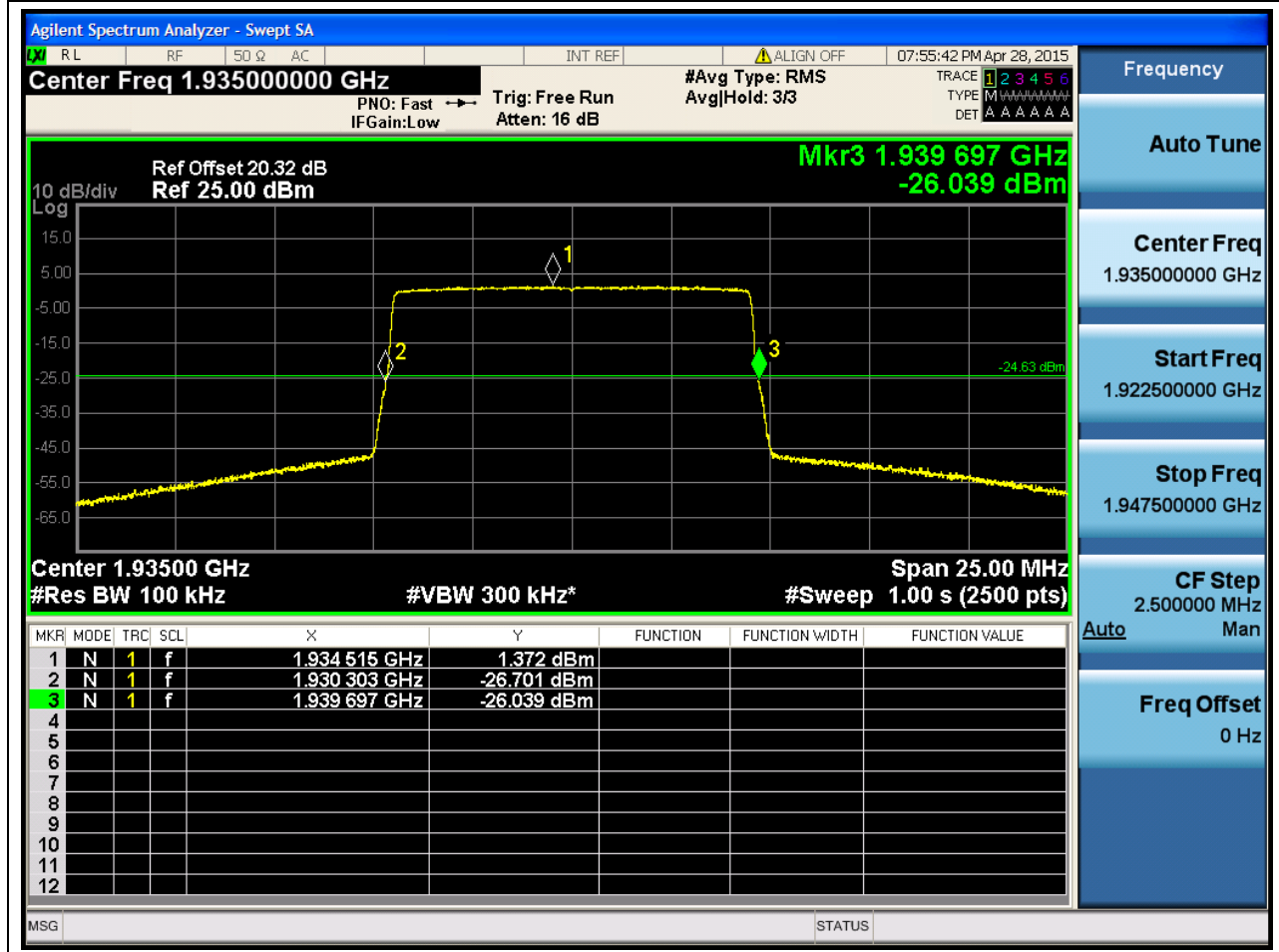
Center Frequency[MHz]	Span [MHz]	ndB [dB]	RBW [MHz]	Detect or	ndB BW [MHz]	BW Limit [MHz]	Lower Freq [MHz]	Lower Limit [MHz]	Upper Freq [MHz]	Upper Limit [MHz]	Verdict
1987.5	12.5	26	0.1	RMS	4.783744	5	1985.103104	1930	1989.886848	1990	Pass





2.2.4 10M_B

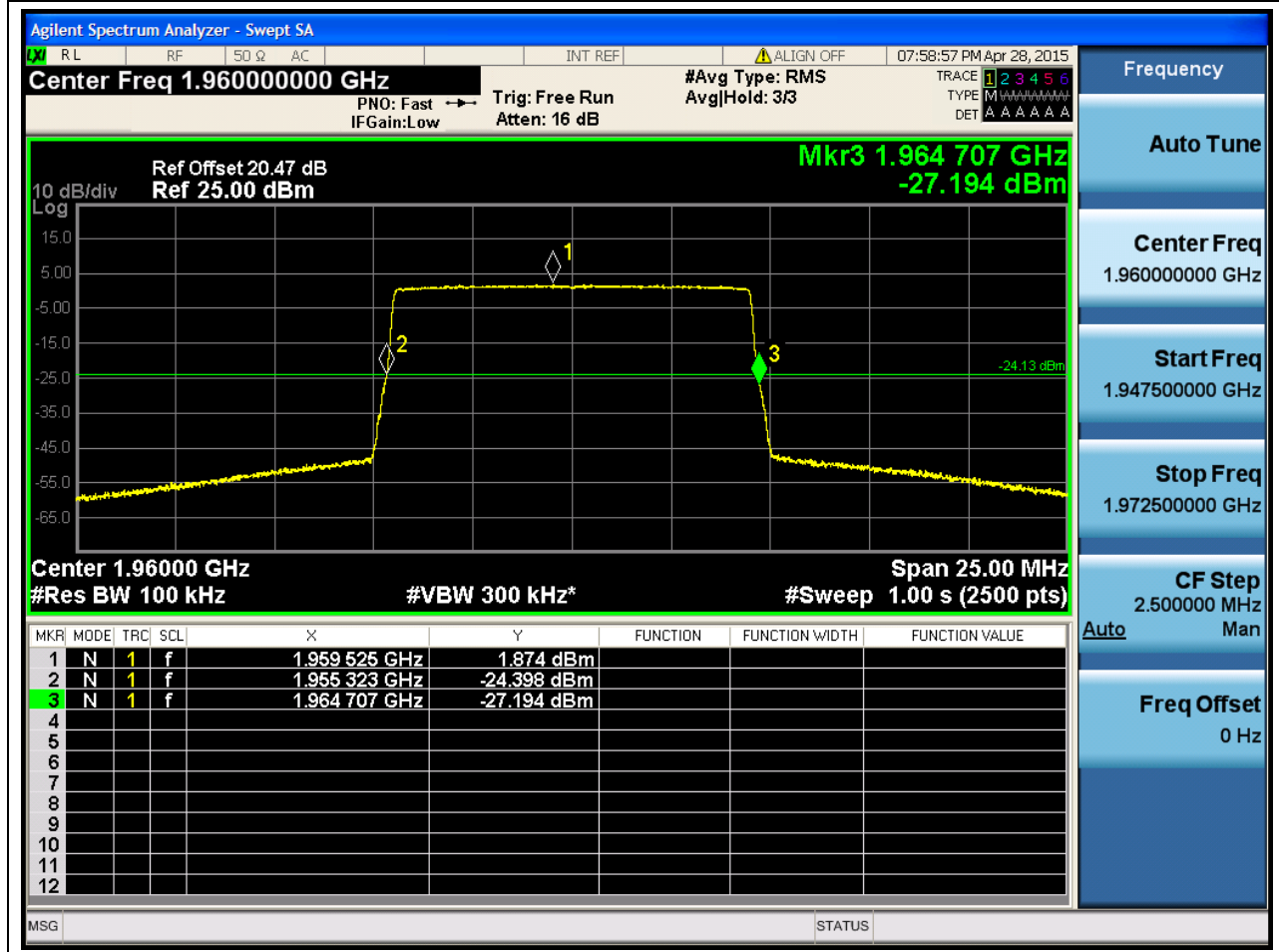
Center Frequency[MHz]	Span [MHz]	nd B [dB]	RB W [MHz]	Detect or	ndB BW [MHz]	BW Limit [MHz]	Lower Freq [MHz]	Low er Limit [MHz]	Upper Freq [MHz]	Upp er Limit [MHz]	Verdict
1935	25	26	0.1	RMS	9.393792	10	1930.303104	1930	1939.696896	1990	Pass





2.2.5 10M_M

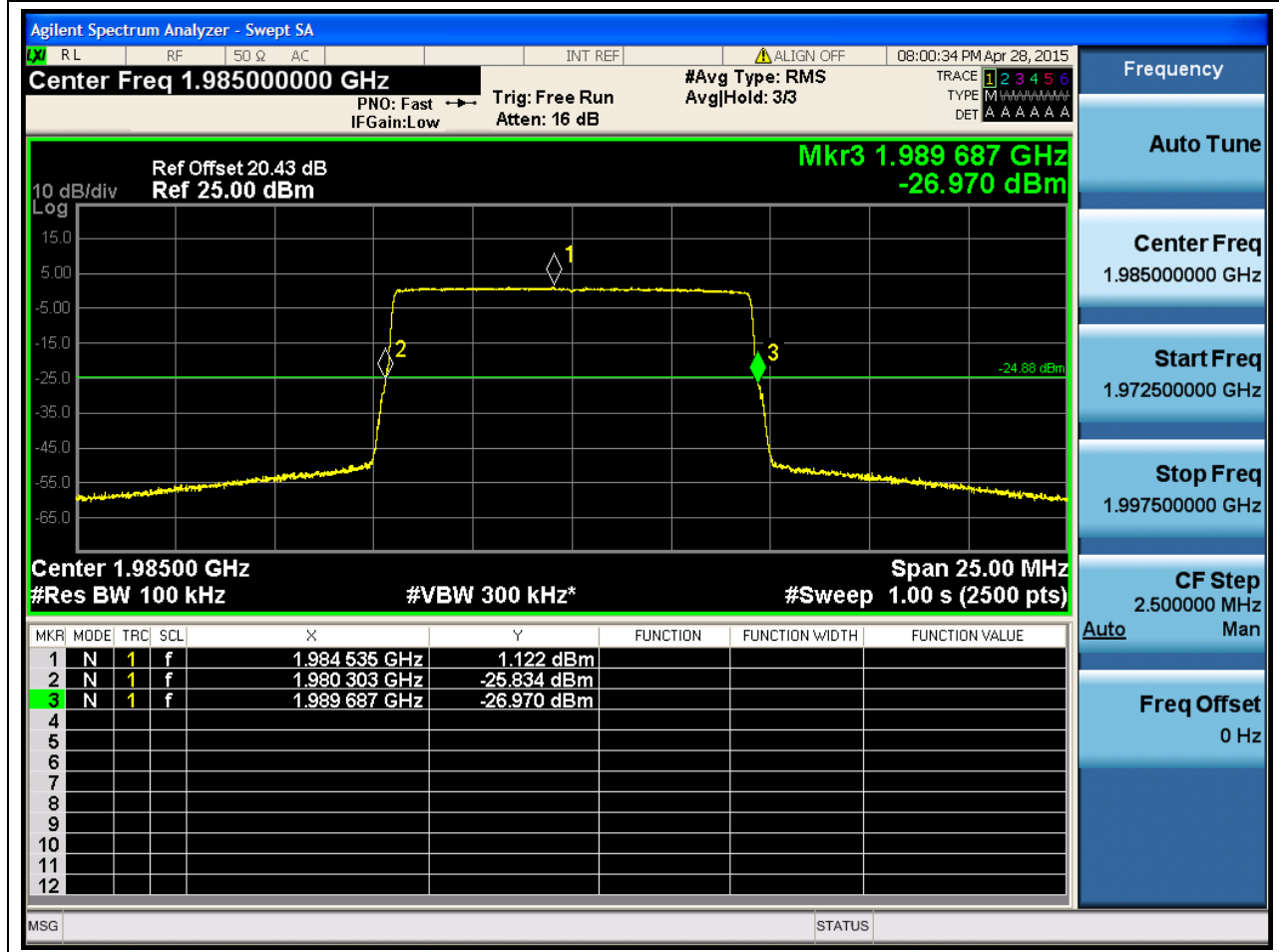
Center Frequency[MHz]	Span [MHz]	nd B [dB]	RB W [MHz]	Detect or	ndB BW [MHz]	BW Limit [MHz]	Lower Freq [MHz]	Lower Limit [MHz]	Upper Freq [MHz]	Upper Limit [MHz]	Verdict
1960	25	26	0.1	RMS	9.383808	10	1955.323136	1930	1964.706944	1990	Pass





2.2.6 10M_T

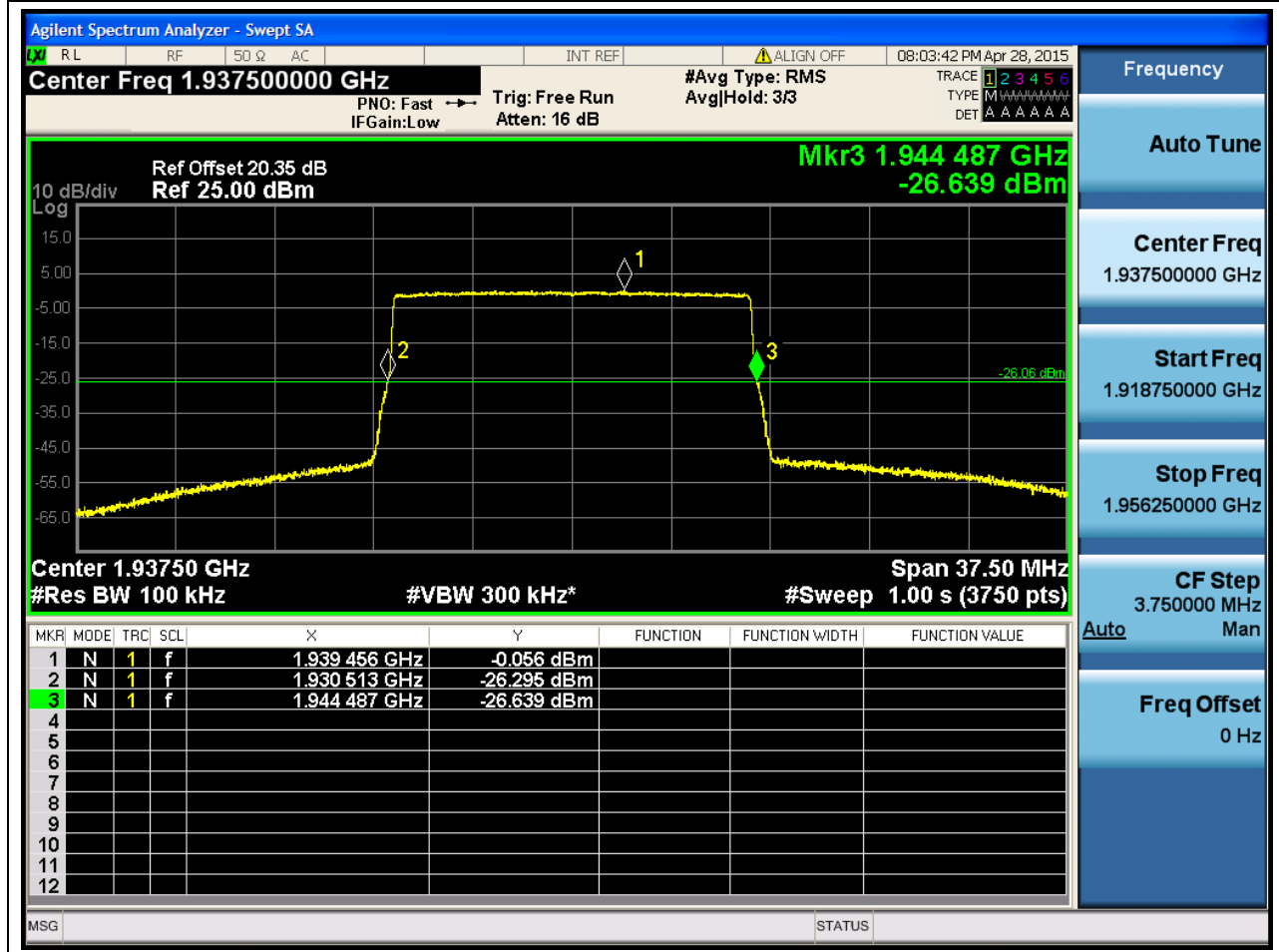
Center Frequency[MHz]	Span [MHz]	nd B [dB]	RB W [MHz]	Detect or	ndB BW [MHz]	BW Limit [MHz]	Lower Freq [MHz]	Low er Limit [MHz]	Upper Freq [MHz]	Upp er Limit [MHz]	Verdict
1985	25	26	0.1	RMS	9.383808	10	1980.303104	1930	1989.686912	1990	Pass





2.2.7 15M_B

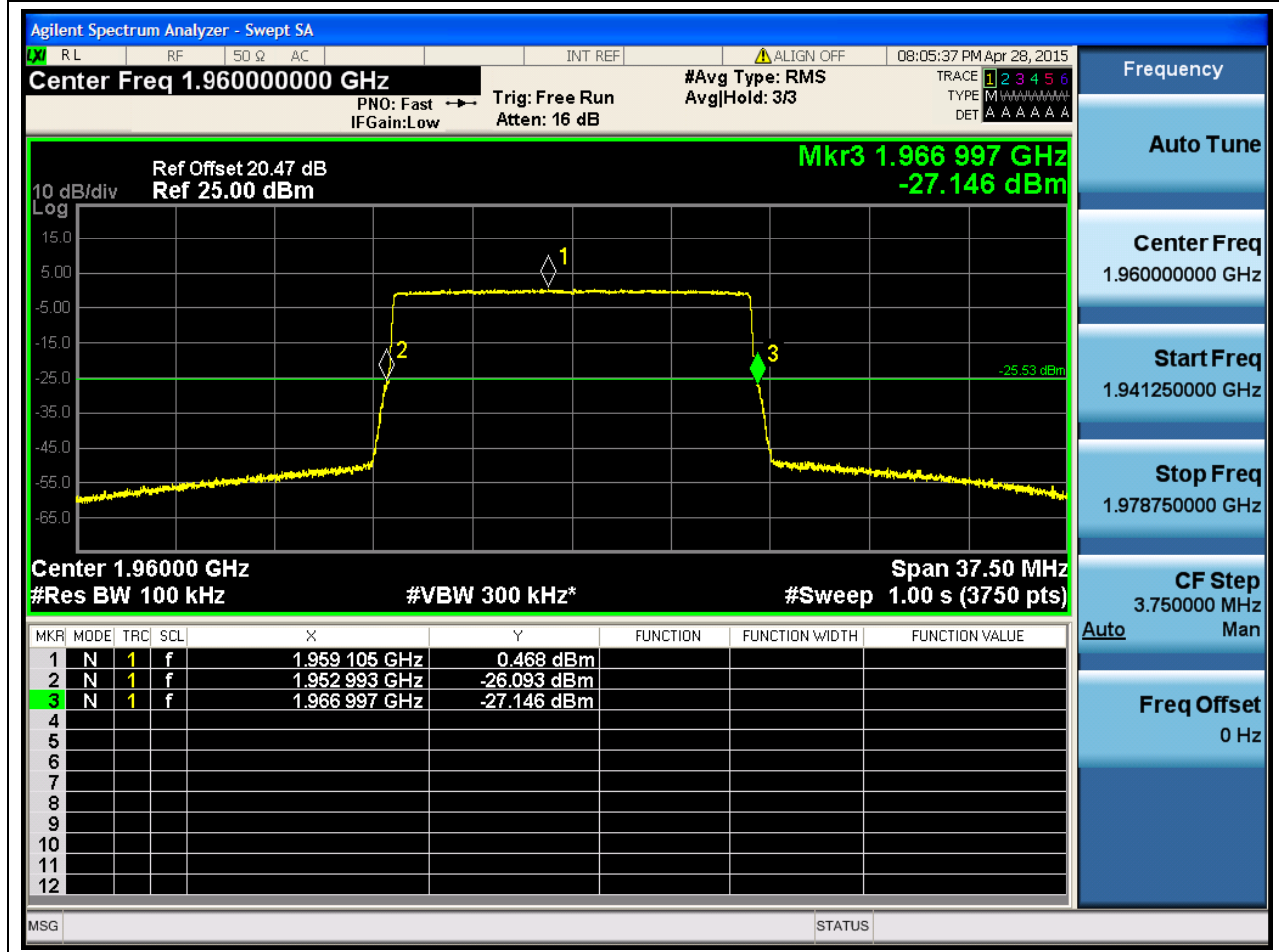
Center Frequency[MHz]	Span [MHz]	nd B [dB]	RB W [MHz]	Detect or	ndB BW [MHz]	BW Limit [MHz]	Lower Freq [MHz]	Lower Limit [MHz]	Upper Freq [MHz]	Upper Limit [MHz]	Verdict
1937.5	37.5	26	0.1	RMS	13.97376	15	1930.513152	1930	1944.486912	1990	Pass





2.2.8 15M_M

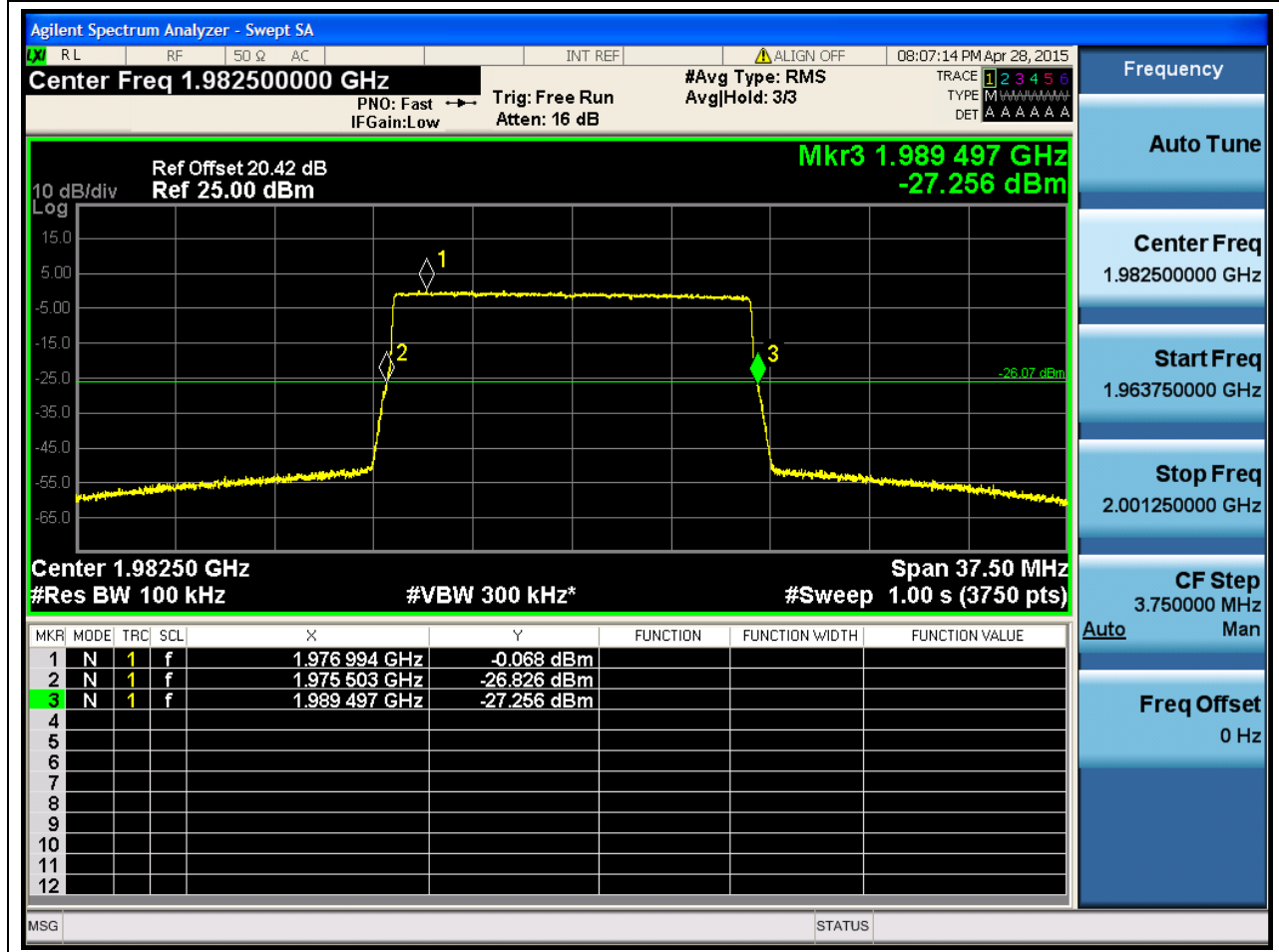
Center Frequency[MHz]	Span [MHz]	ndB [dB]	RBW [MHz]	Detect or	ndB BW [MHz]	BW Limit [MHz]	Lower Freq [MHz]	Lower Limit [MHz]	Upper Freq [MHz]	Upper Limit [MHz]	Verdict
1960	37.5	26	0.1	RMS	14.003712	15	1952.993152	1930	1966.996864	1990	Pass





2.2.9 15M_T

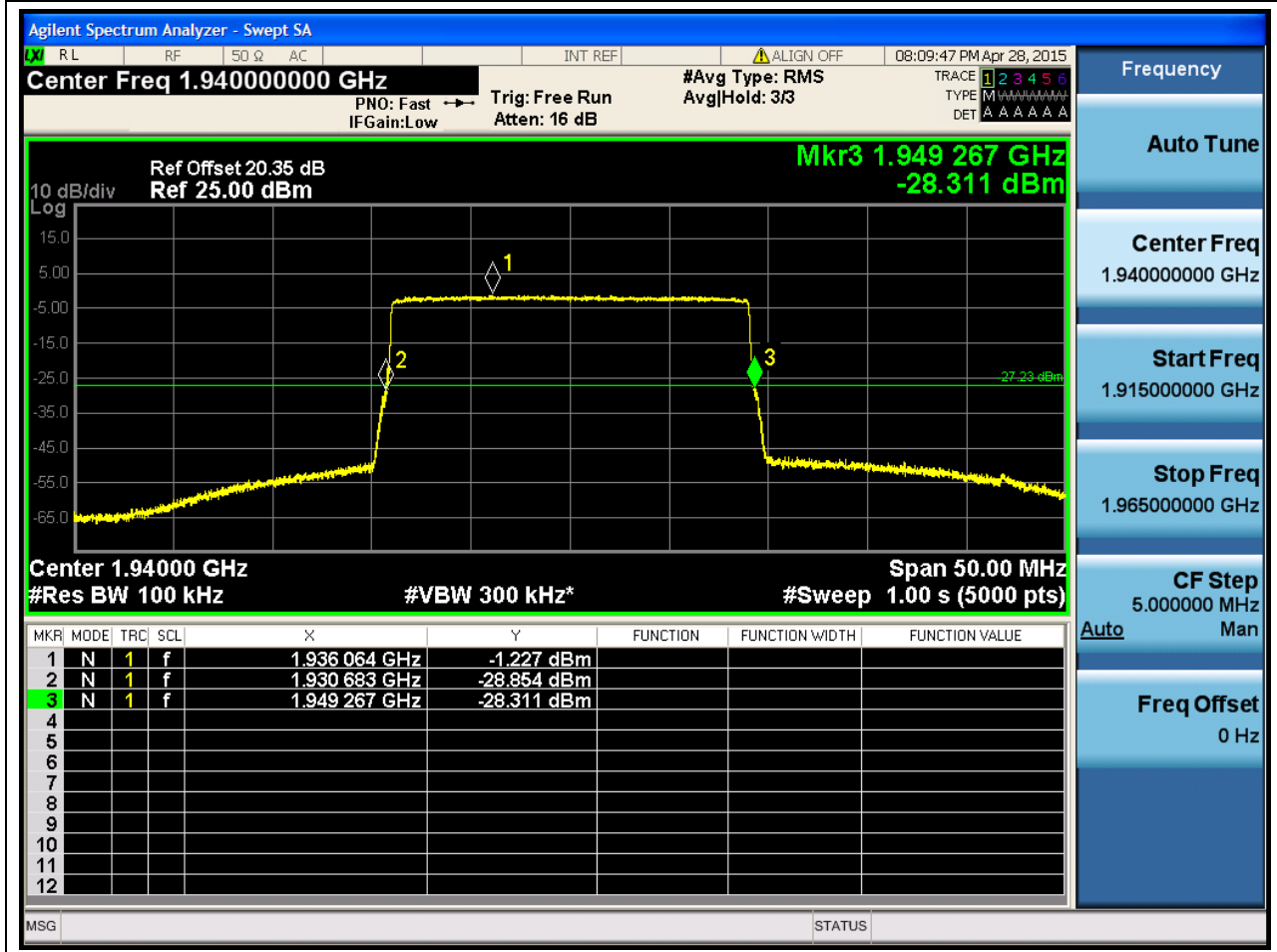
Center Frequency[MHz]	Span [MHz]	ndB [dB]	RBW [MHz]	Detect or	ndB BW [MHz]	BW Limit [MHz]	Lower Freq [MHz]	Lower Limit [MHz]	Upper Freq [MHz]	Upper Limit [MHz]	Verdict
1982.5	37.5	26	0.1	RMS	13.993728	15	1975.503104	1930	1989.496832	1990	Pass





2.2.10 20M_B

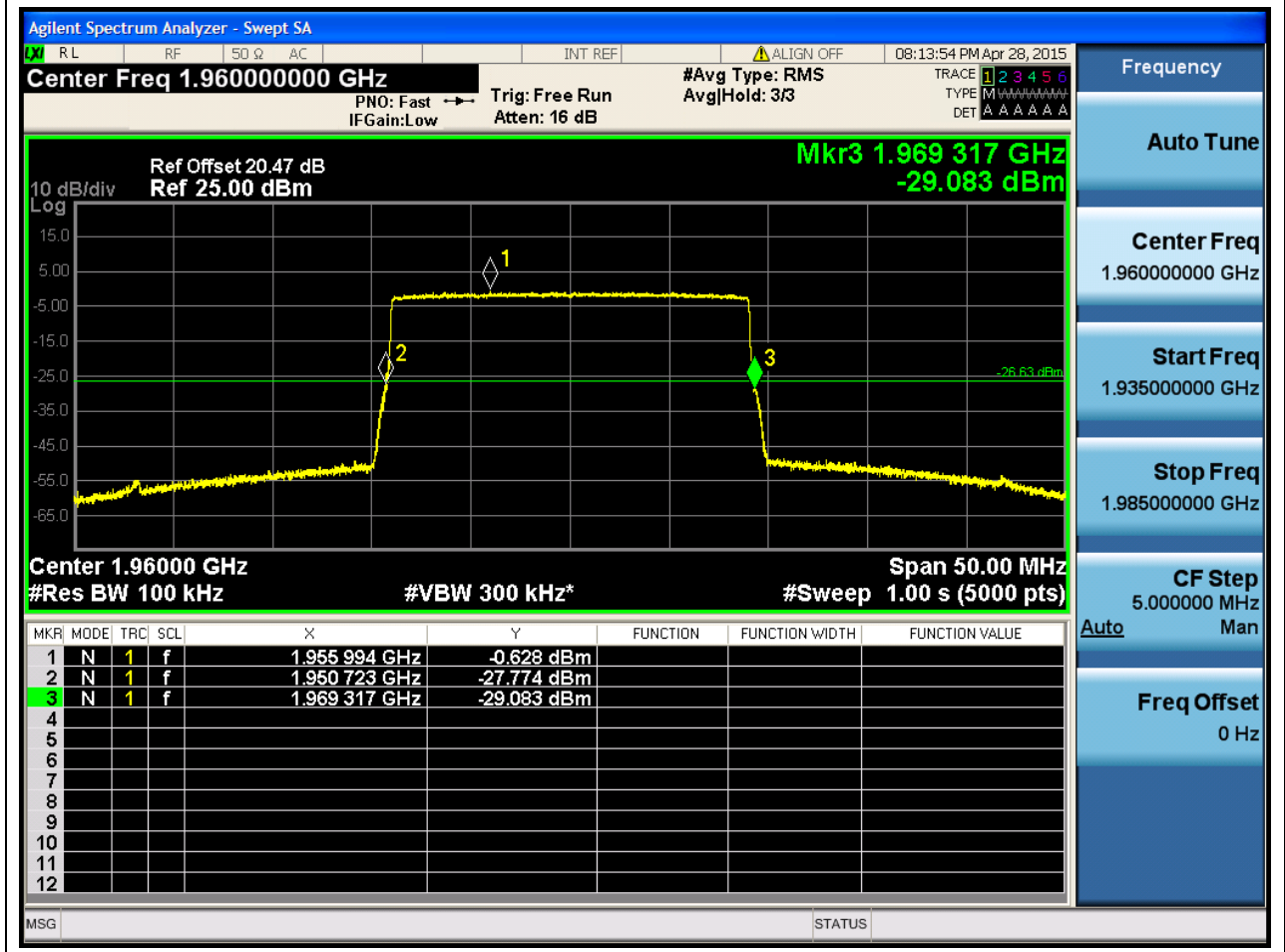
Center Frequency[MHz]	Span [MHz]	nd B [dB]	RB W [MHz]	Detect or	ndB BW [MHz]	BW Limit [MHz]	Lower Freq [MHz]	Lower Limit [MHz]	Upper Freq [MHz]	Upper Limit [MHz]	Verdict
1940	50	26	0.1	RMS	18.58368	20	1930.683136	1930	1949.266816	1990	Pass





2.2.11 20M_M

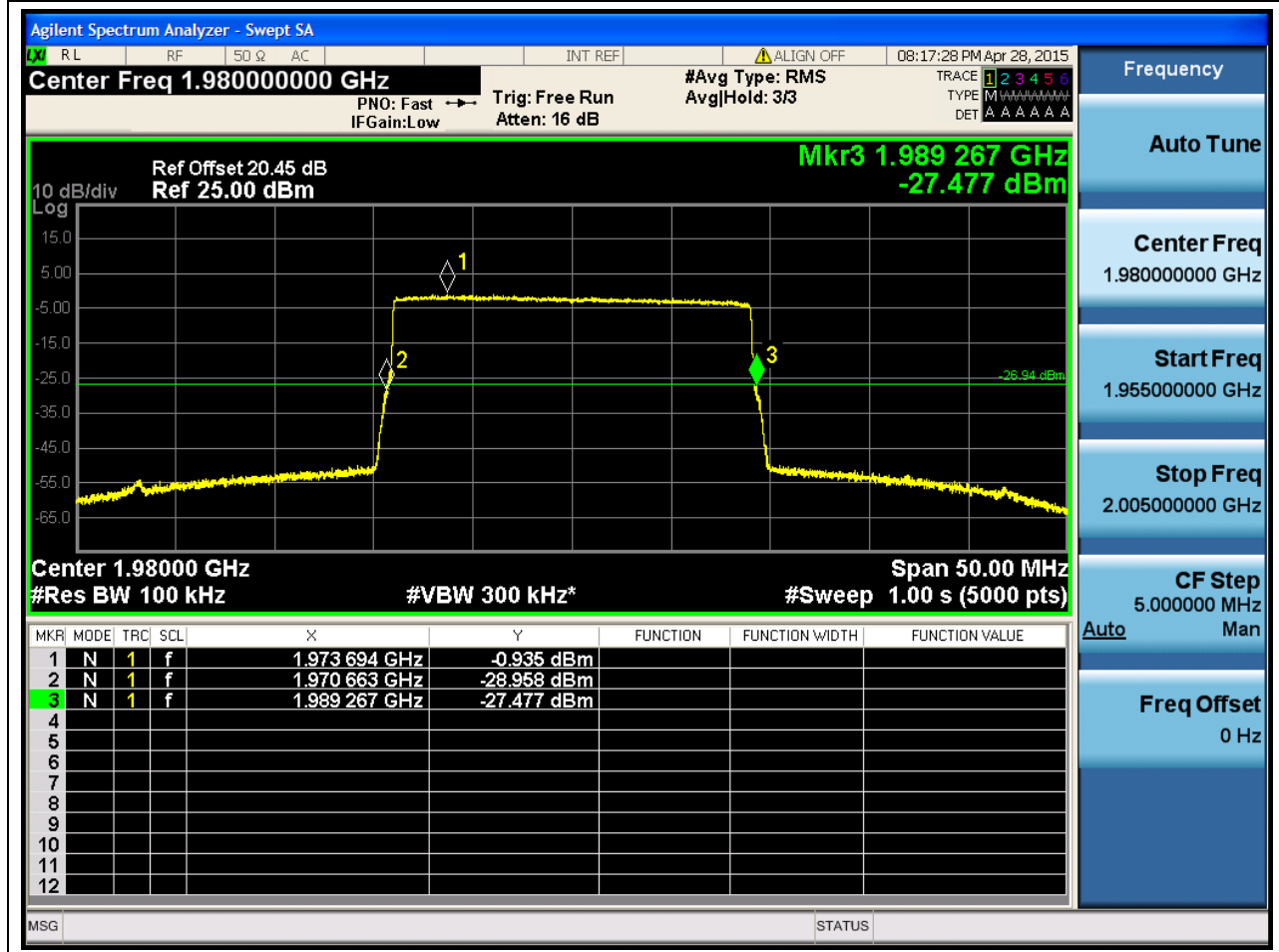
Center Frequency[MHz]	Span [MHz]	ndB [dB]	RBW [MHz]	Detect or	ndB BW [MHz]	BW Limit [MHz]	Lower Freq [MHz]	Lower Limit [MHz]	Upper Freq [MHz]	Upper Limit [MHz]	Verdict
1960	50	26	0.1	RMS	18.593664	20	1950.7232	1930	1969.316864	1990	Pass





2.2.12 20M_T

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
1980	50	26	0.1	RMS	18.603648	20	1970.663168	1930	1989.266816	1990	Pass

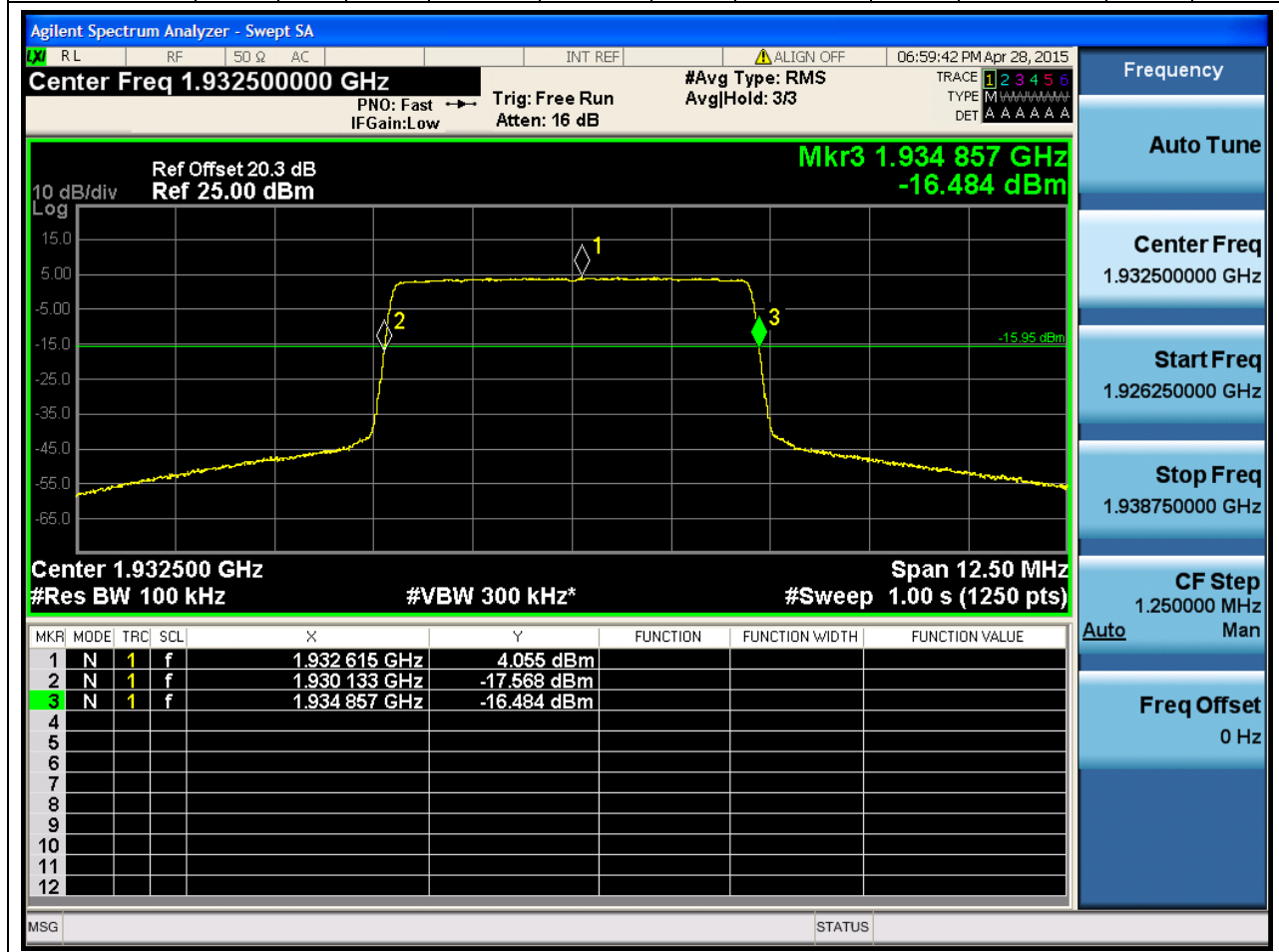




2.3 Emission Bandwidth(-20dBc)

2.3.1 5M_B

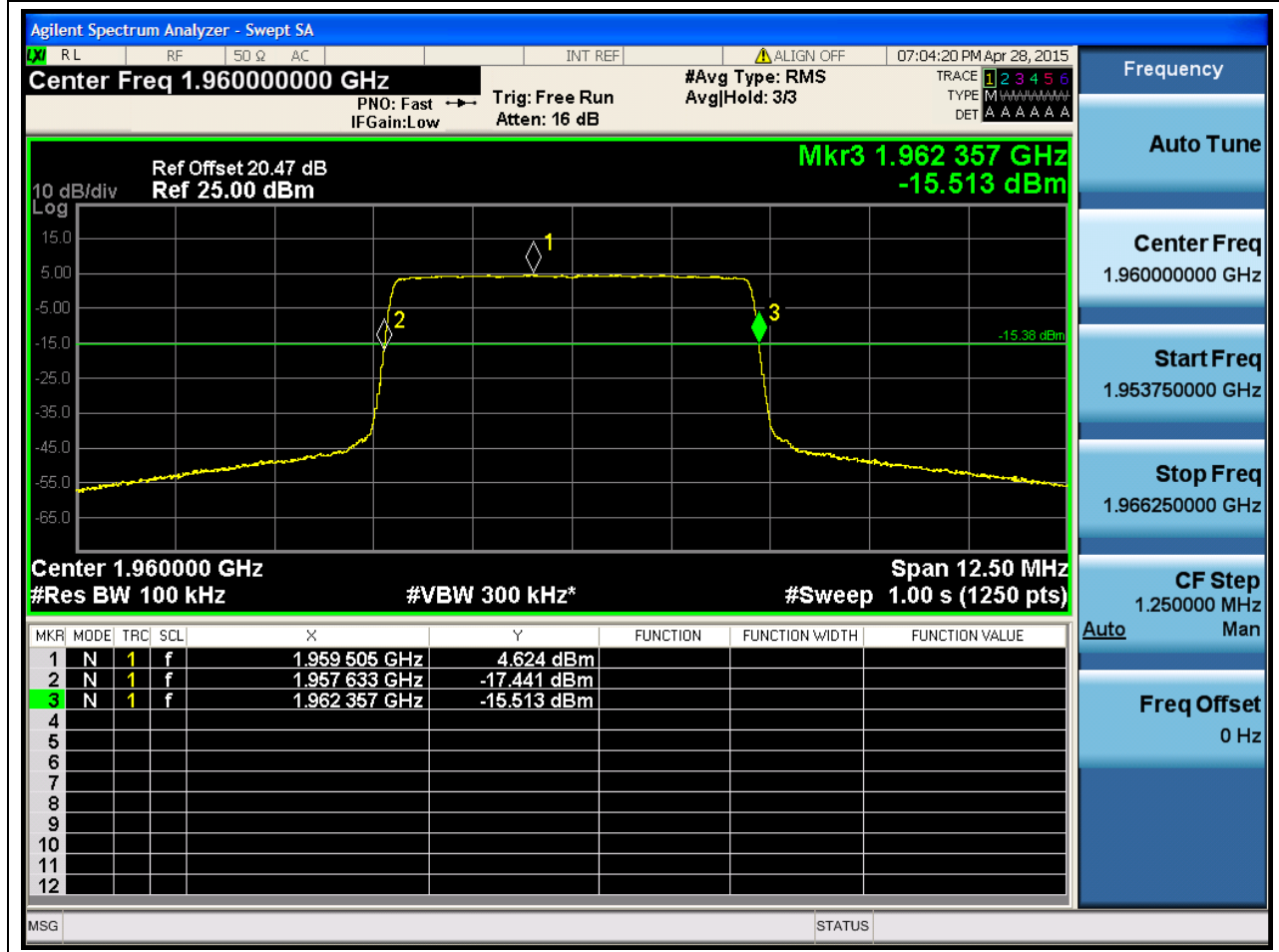
Center Frequency[MHz]	Span [MHz]	nd B [dB]	RB W [MHz]	Detect or	ndB BW [MHz]	BW Limit [MHz]	Lower Freq [MHz]	Lower Limit [MHz]	Upper Freq [MHz]	Upper Limit [MHz]	Verdict
1932.5	12.5	20	0.1	RMS	4.7237 12	5	1930.133 12	1930	1934.8568 32	1990	Pass





2.3.2 5M_M

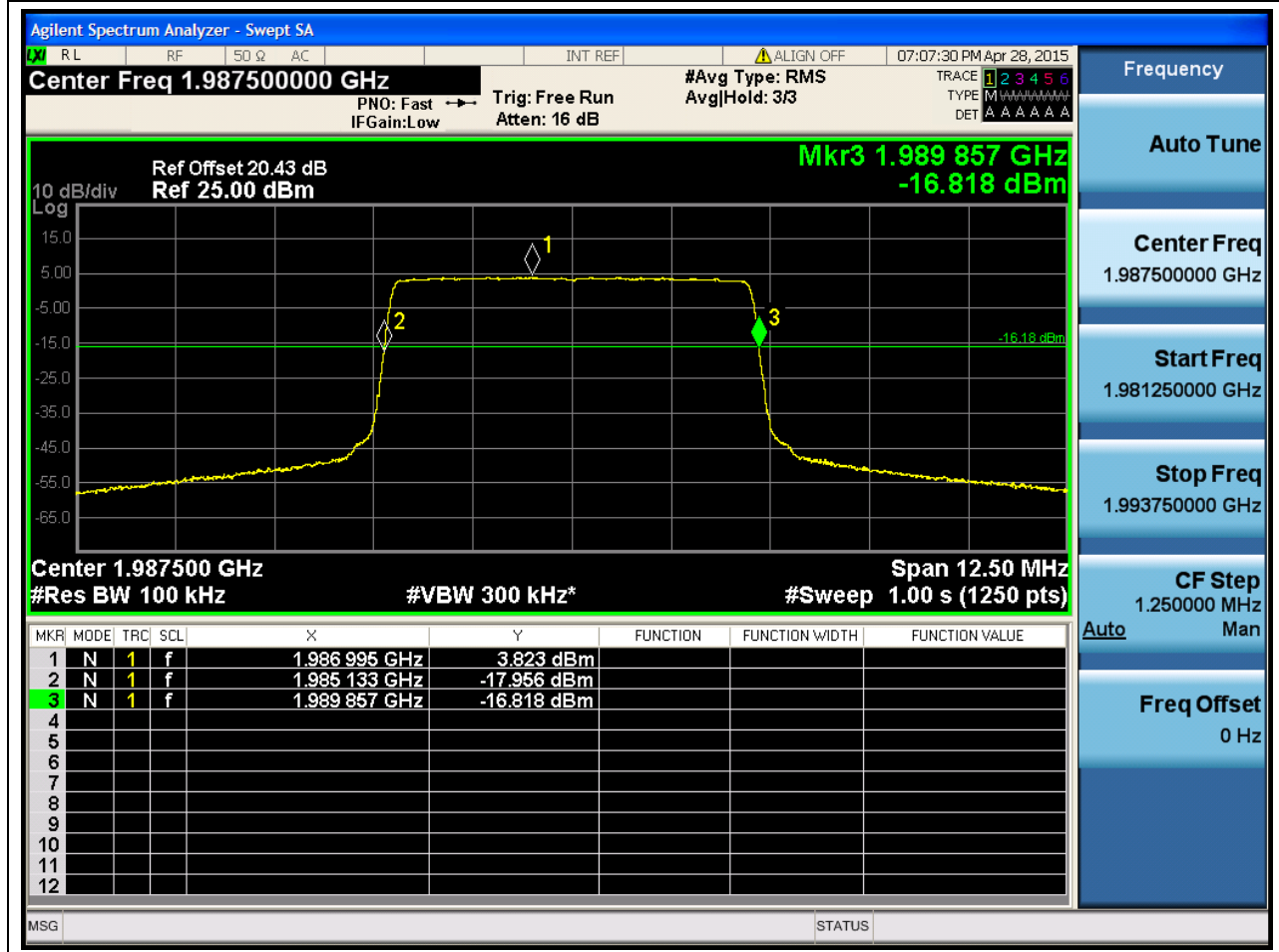
Center Frequency[MHz]	Span [MHz]	nd B [dB]	RB W [MHz]	Detect or	ndB BW [MHz]	BW Limit [MHz]	Lower Freq [MHz]	Lower Limit [MHz]	Upper Freq [MHz]	Upper Limit [MHz]	Verdict
1960	12.5	20	0.1	RMS	4.7237 12	5	1957.6331 52	1930	1962.3568 64	1990	Pass





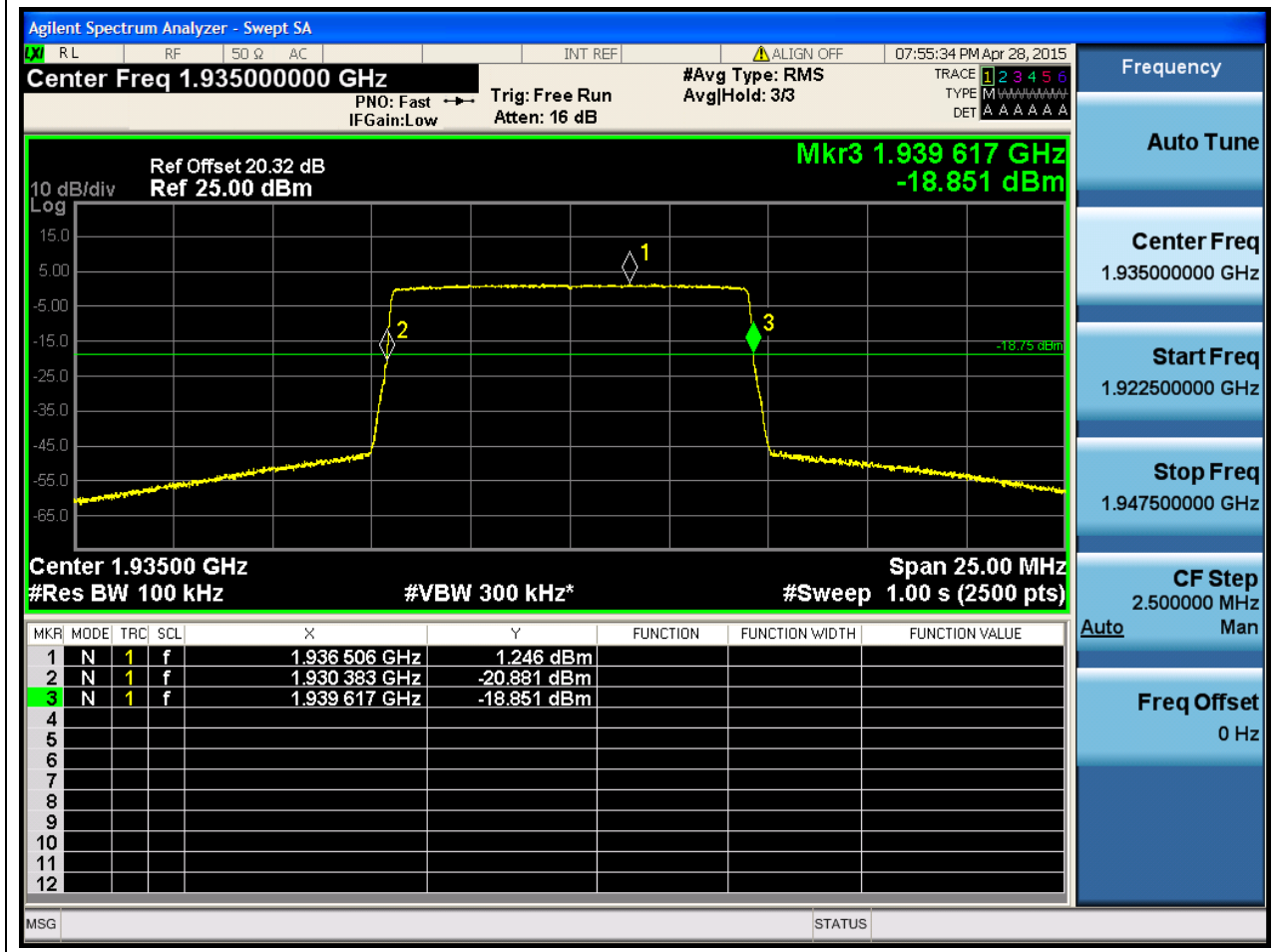
2.3.3 5M_T

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
1987.5	12.5	20	0.1	RMS	4.7238	5	1985.1330	1930	1989.8568	1990	Pass
					4		56		96		



2.3.4 10M_B

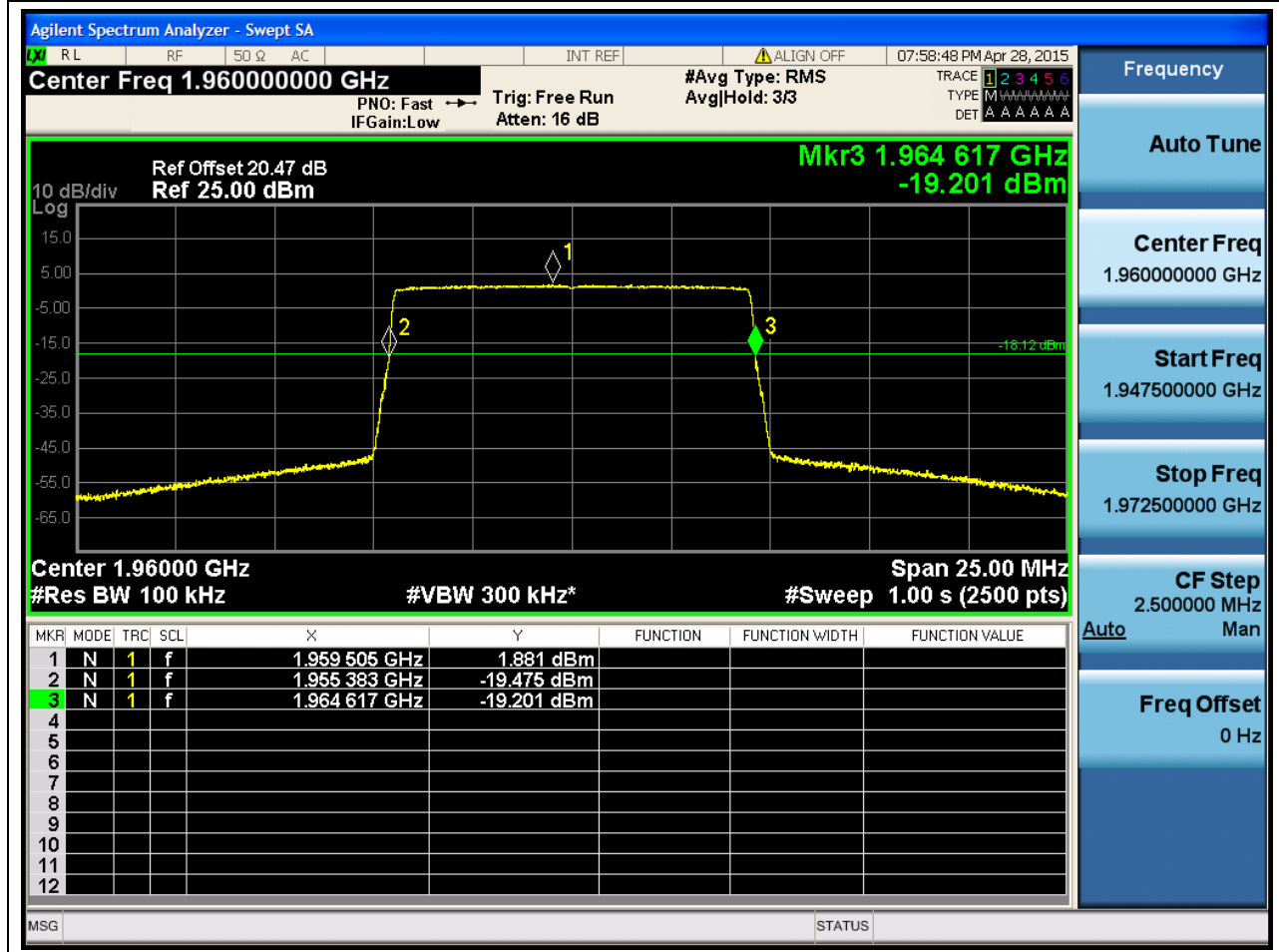
Center Frequency[MHz]	Span [MHz]	Bandwidth [dB]	RBW [MHz]	Detection	Bandwidth [MHz]	Limit [MHz]	Lower Freq [MHz]	Lower Limit [MHz]	Upper Freq [MHz]	Upper Limit [MHz]	Verdict
1935	25	20	0.1	RMS	9.233792	10	1930.383104	1930	1939.616896	1990	Pass





2.3.5 10M_M

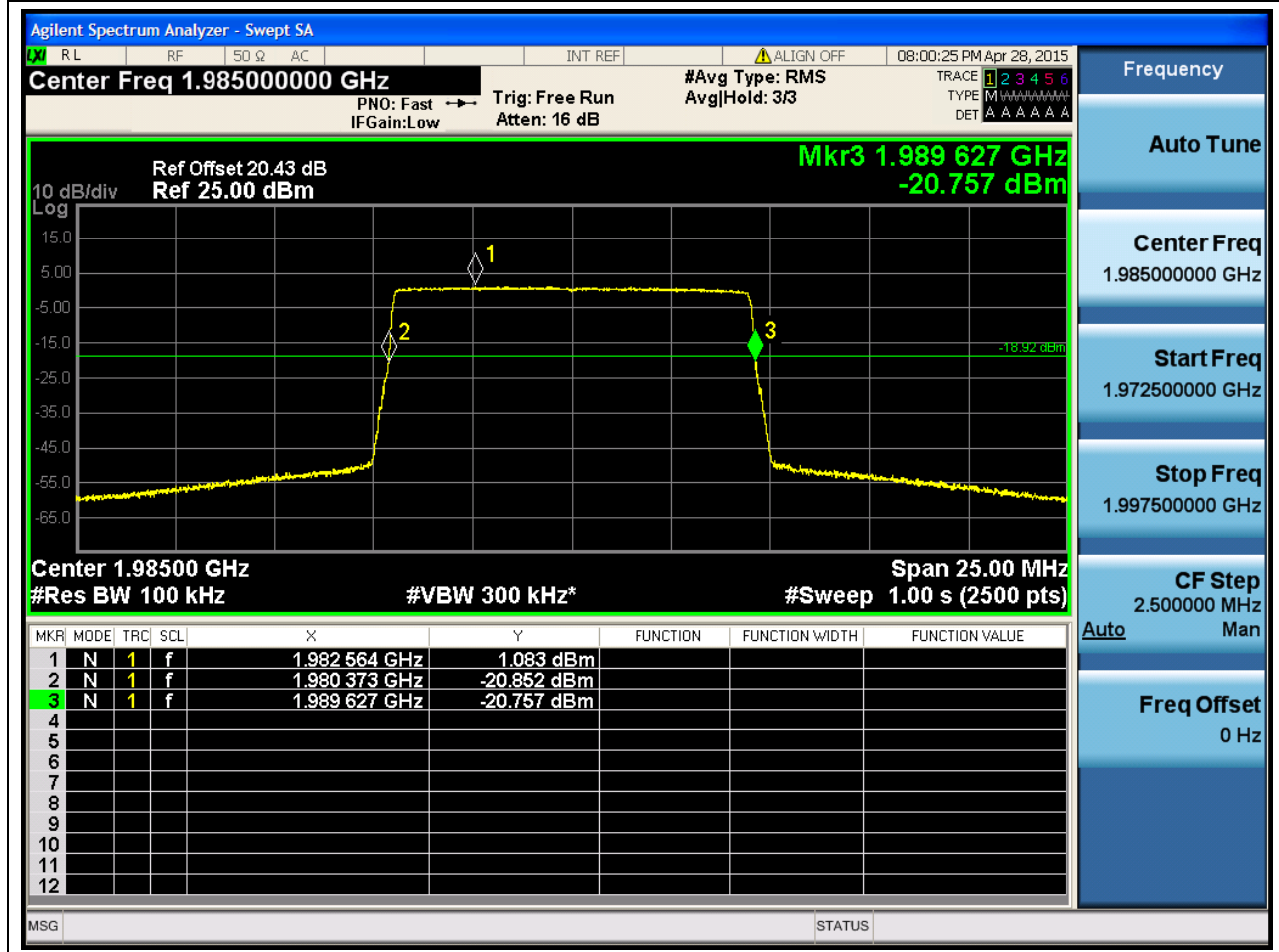
Center Frequency[MHz]	Span [MHz]	nd B [dB]	RB W [MHz]	Detect or	ndB BW [MHz]	BW Limit [MHz]	Lower Freq [MHz]	Lower Limit [MHz]	Upper Freq [MHz]	Upper Limit [MHz]	Verdict
1960	25	20	0.1	RMS	9.233664	10	1955.383168	1930	1964.616832	1990	Pass





2.3.6 10M_T

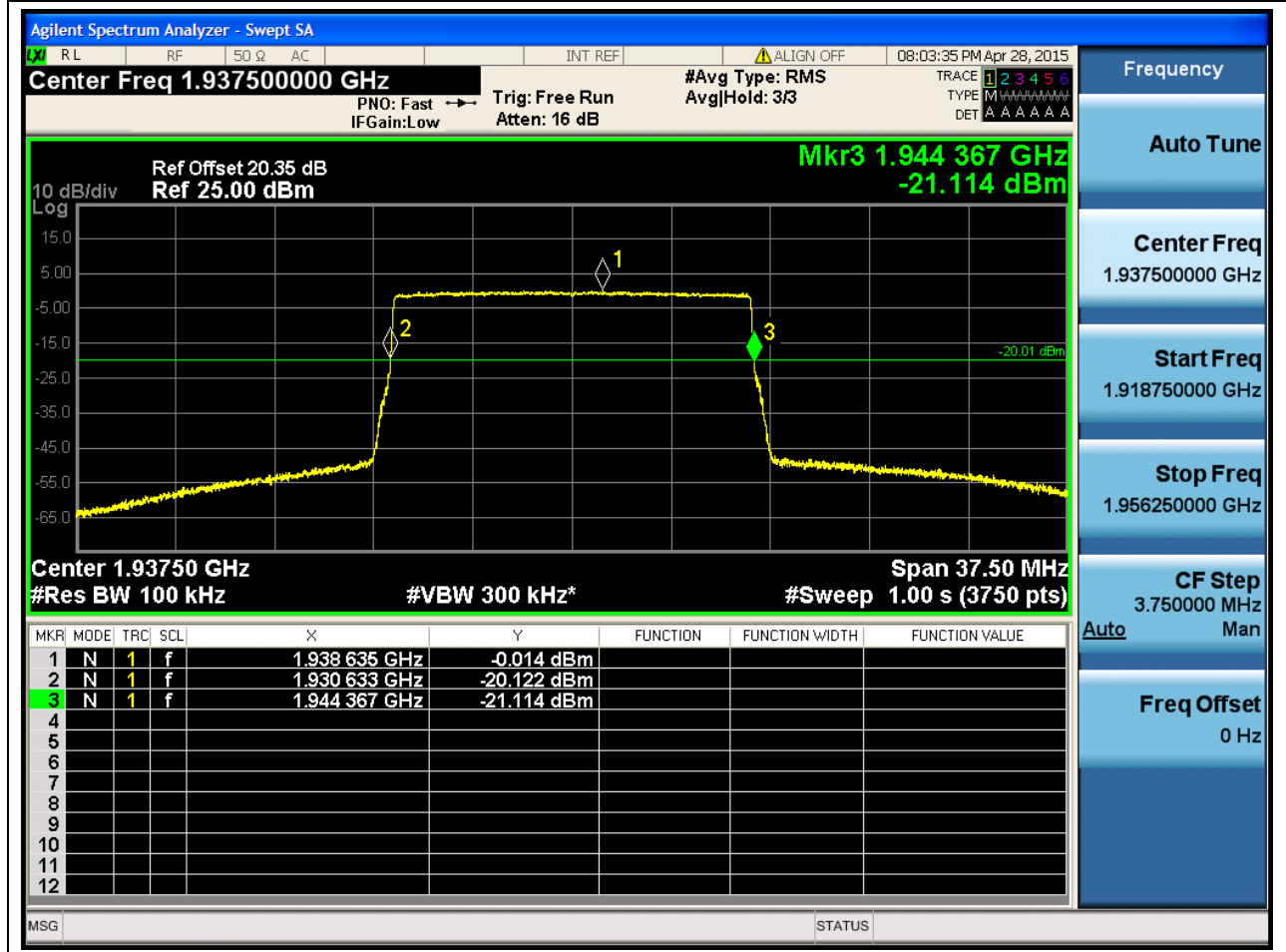
Center Frequency[MHz]	Span [MHz]	nd B [dB]	RBW [MHz]	Detect or	ndB BW [MHz]	BW Limit [MHz]	Lower Freq [MHz]	Lower Limit [MHz]	Upper Freq [MHz]	Upper Limit [MHz]	Verdict
1985	25	20	0.1	RMS	9.25376	10	1980.37312	1930	1989.62688	1990	Pass





2.3.7 15M_B

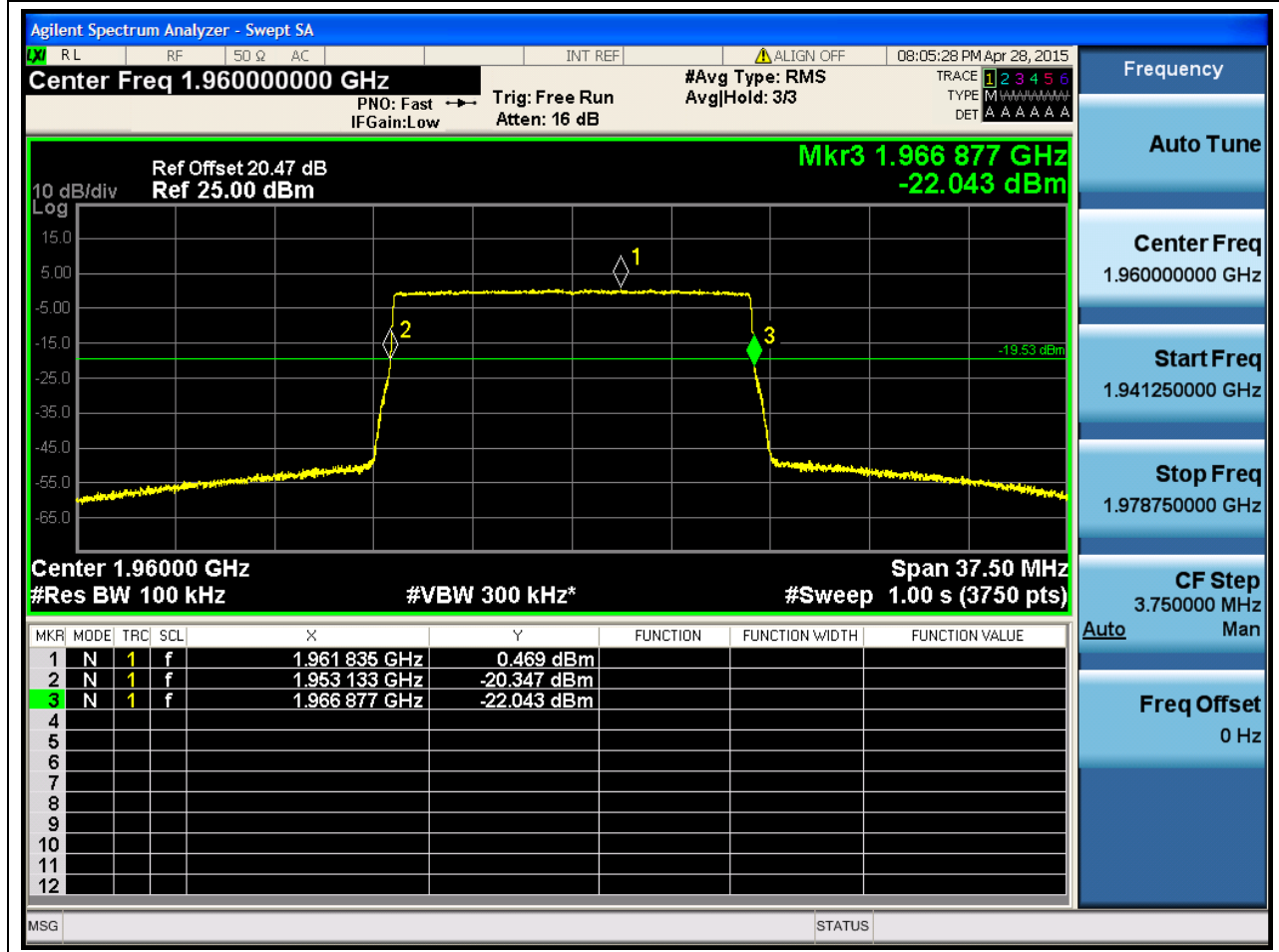
Center Frequency[MHz]	Span [MHz]	nd B [dB]	RB W [MHz]	Detect or	ndB BW [MHz]	BW Limit [MHz]	Lower Freq [MHz]	Low er Limit [MHz]	Upper Freq [MHz]	Upp er Limit [MHz]	Verdict
1937.5	37.5	20	0.1	RMS	13.7336 32	15	1930.6332 16	1930	1944.3668 48	1990	Pass





2.3.8 15M_M

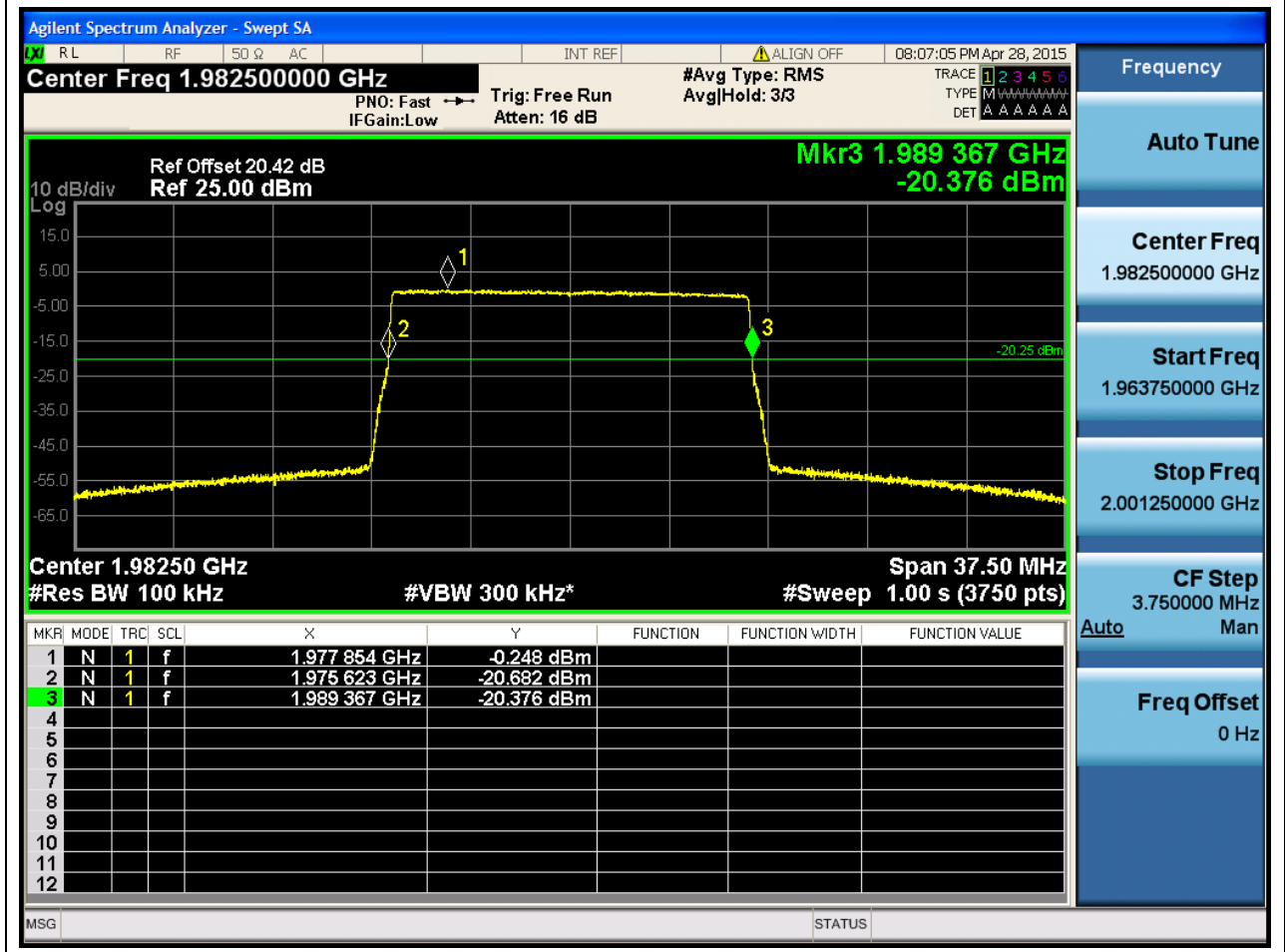
Center Frequency[MHz]	Span [MHz]	ndB [dB]	RBW [MHz]	Detect or	ndB BW [MHz]	BW Limit [MHz]	Lower Freq [MHz]	Lower Limit [MHz]	Upper Freq [MHz]	Upper Limit [MHz]	Verdict
1960	37.5	20	0.1	RMS	13.743616	15	1953.133184	1930	1966.8768	1990	Pass





2.3.9 15M_T

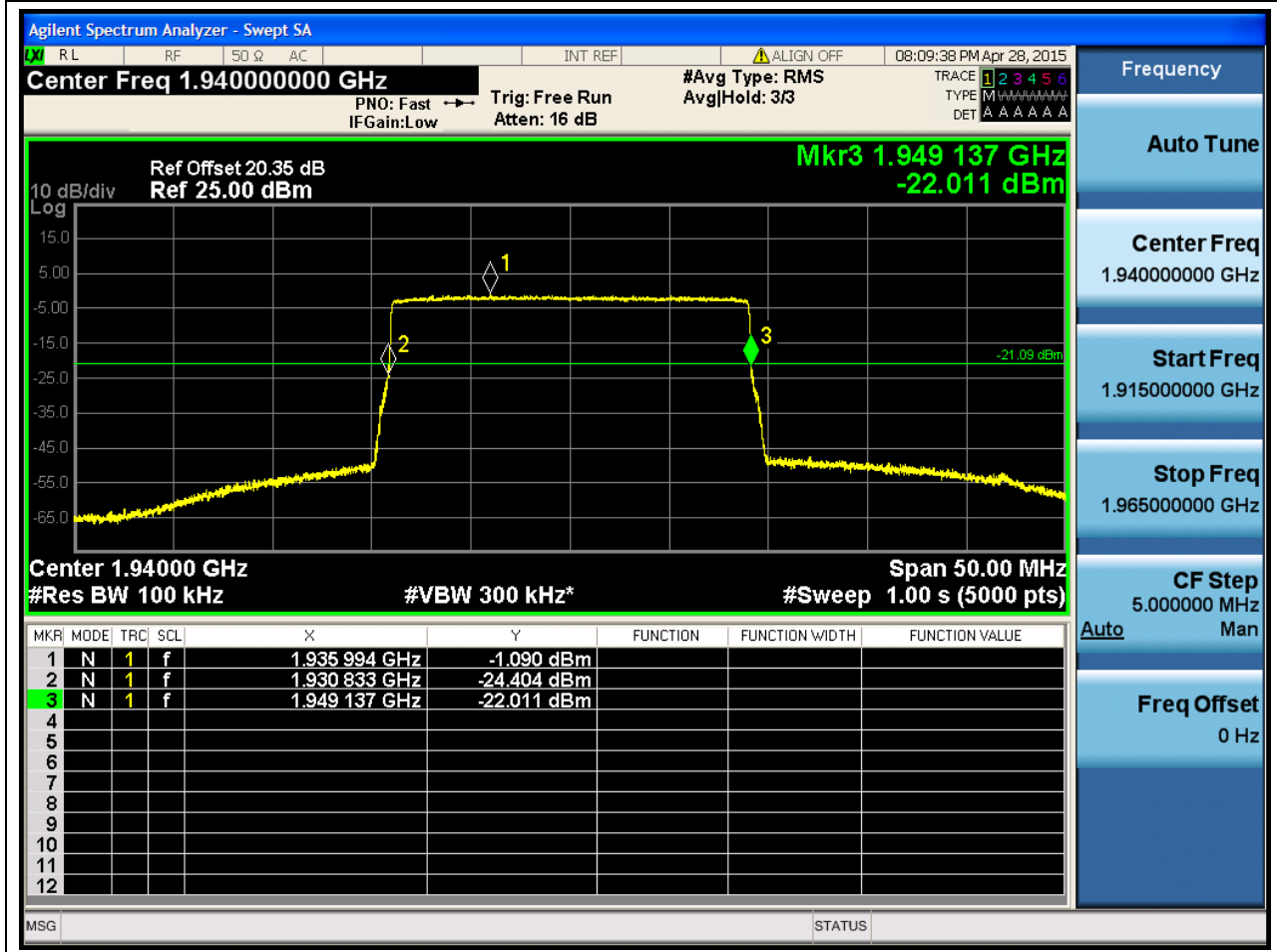
Center Frequency[MHz]	Span [MHz]	ndB [dB]	RBW [MHz]	Detect or	ndB BW [MHz]	BW Limit [MHz]	Lower Freq [MHz]	Lower Limit [MHz]	Upper Freq [MHz]	Upper Limit [MHz]	Verdict
1982.5	37.5	20	0.1	RMS	13.743616	15	1975.623168	1930	1989.366784	1990	Pass





2.3.10 20M_B

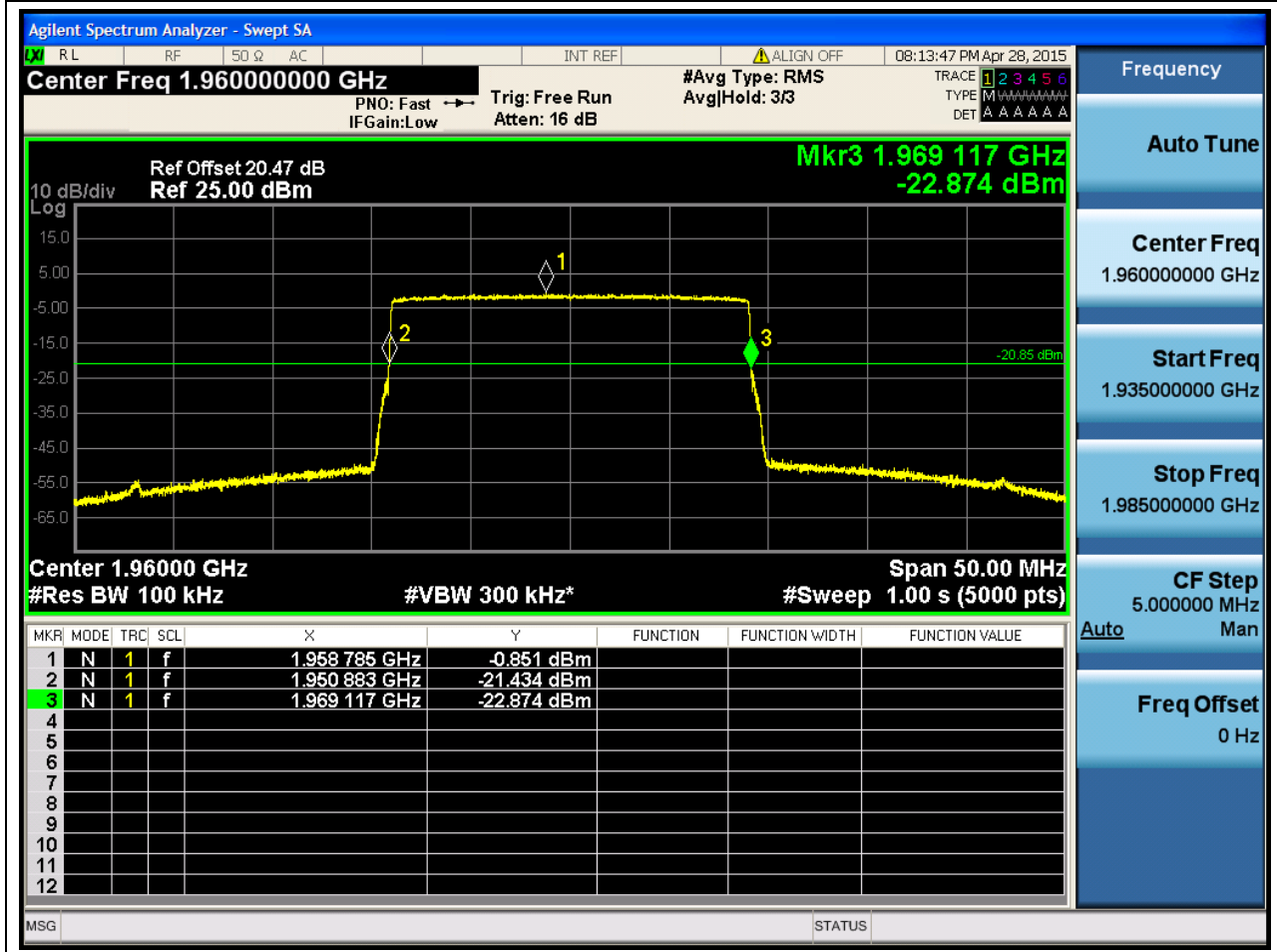
Center Frequency[MHz]	Span [MHz]	ndB [dB]	RBW [MHz]	Detect or	ndB BW [MHz]	BW Limit [MHz]	Lower Freq [MHz]	Lower Limit [MHz]	Upper Freq [MHz]	Upper Limit [MHz]	Verdict
1940	50	20	0.1	RMS	18.303616	20	1930.833152	1930	1949.136768	1990	Pass





2.3.11 20M_M

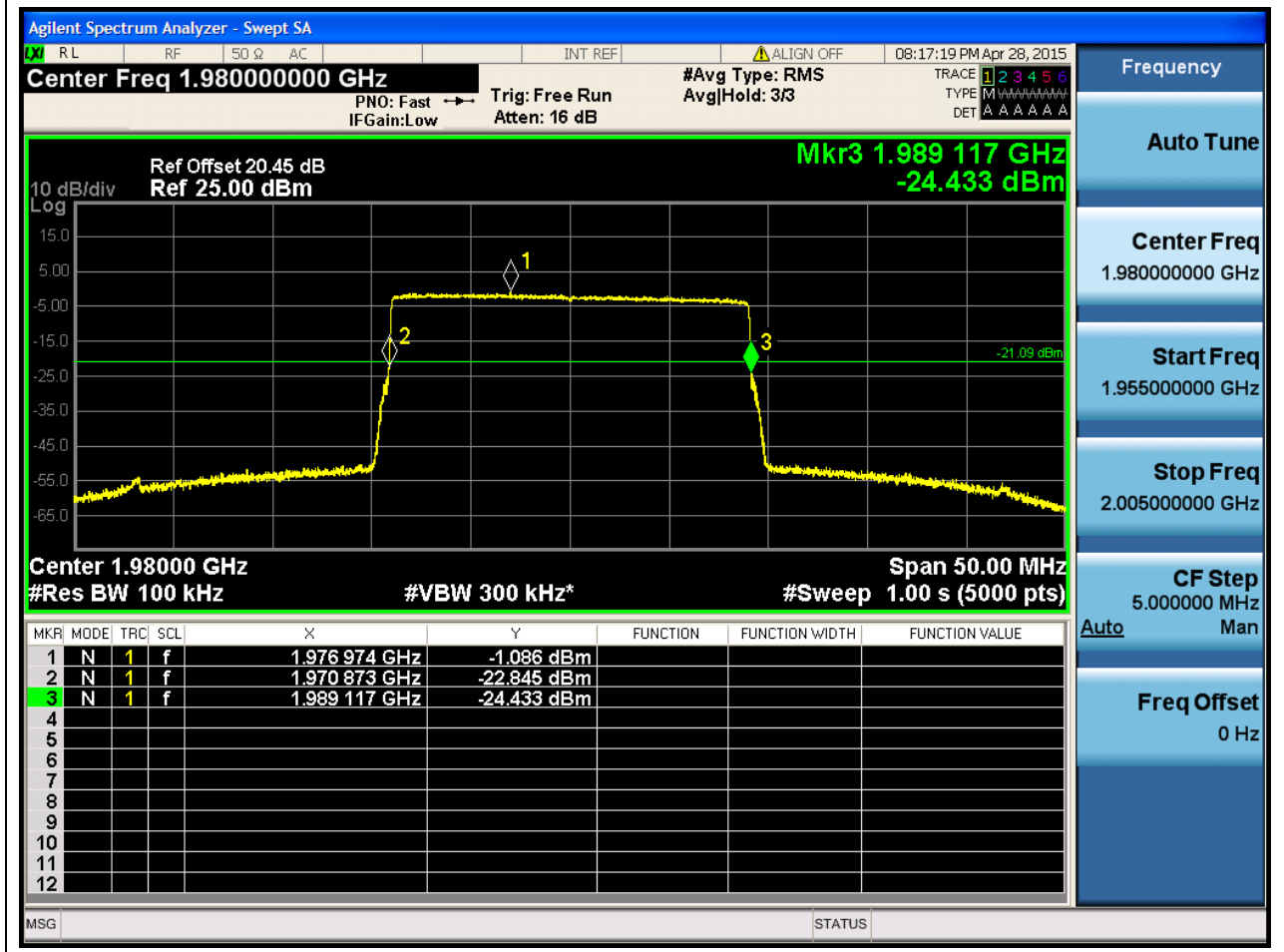
Center Frequency[MHz]	Span [MHz]	nd B [dB]	RBW [MHz]	Detector	ndB BW [MHz]	BW Limit [MHz]	Lower Freq [MHz]	Lower Limit [MHz]	Upper Freq [MHz]	Upper Limit [MHz]	Verdict
1960	50	20	0.1	RMS	18.2336	20	1950.8832	1930	1969.1168	1990	Pass





2.3.12 20M_T

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
1980	50	20	0.1	RMS	18.243584	20	1970.873216	1930	1989.1168	1990	Pass





Appendix C2: Band Edges Compliance



1 Result Table

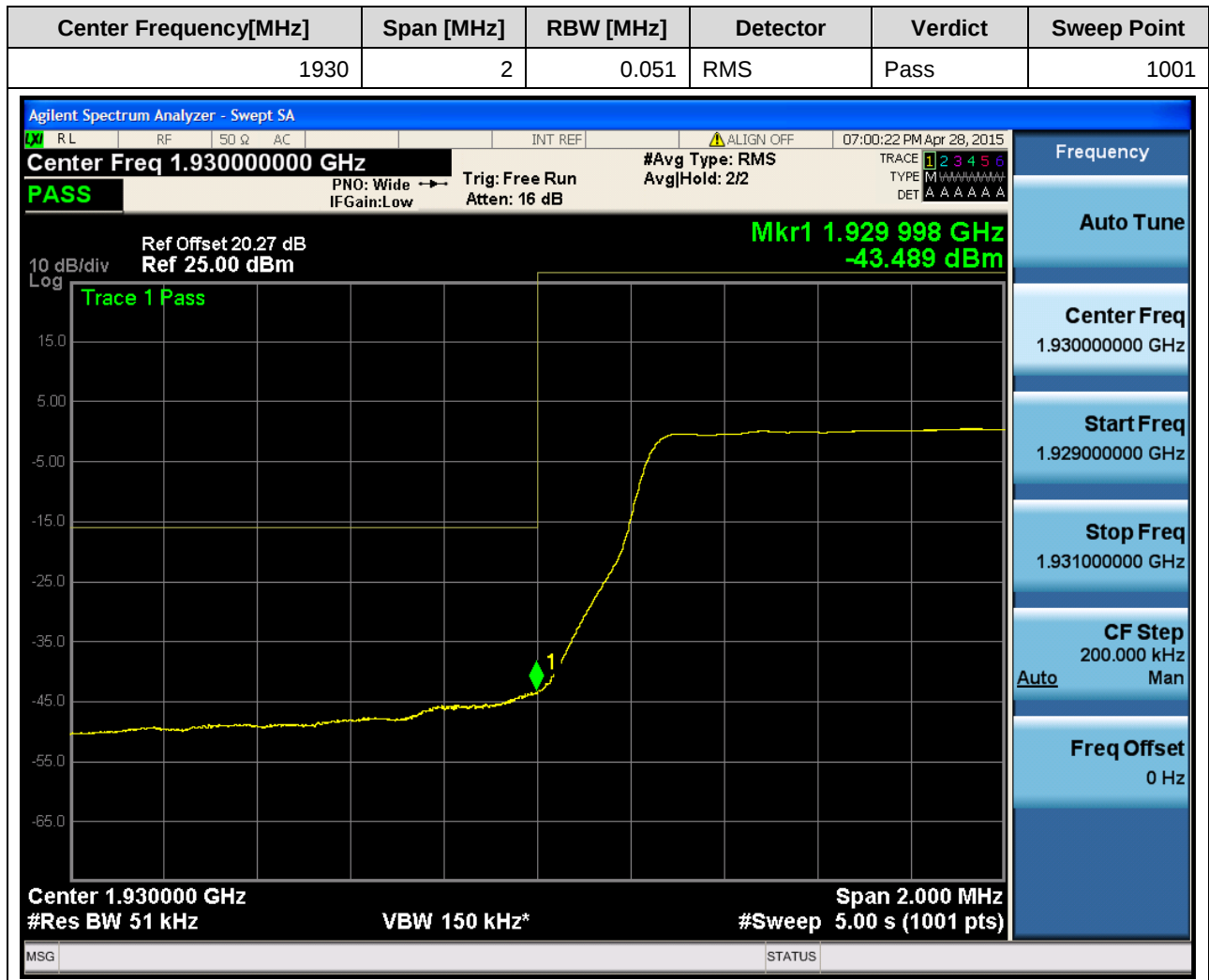
NOTE: The offset of measurement filter -3dB point may be considered when identifying the maximum emission for e.g. the CDMA, WCDMA, WiMAX, LTE systems.

EUT Conf.	Maximum Emission [dBm]	Verdict
5M_B	<-13	Pass
5M_T	<-13	Pass
20M_B	<-13	Pass
20M_T	<-13	Pass



2 Test Plot

2.1 5M_B



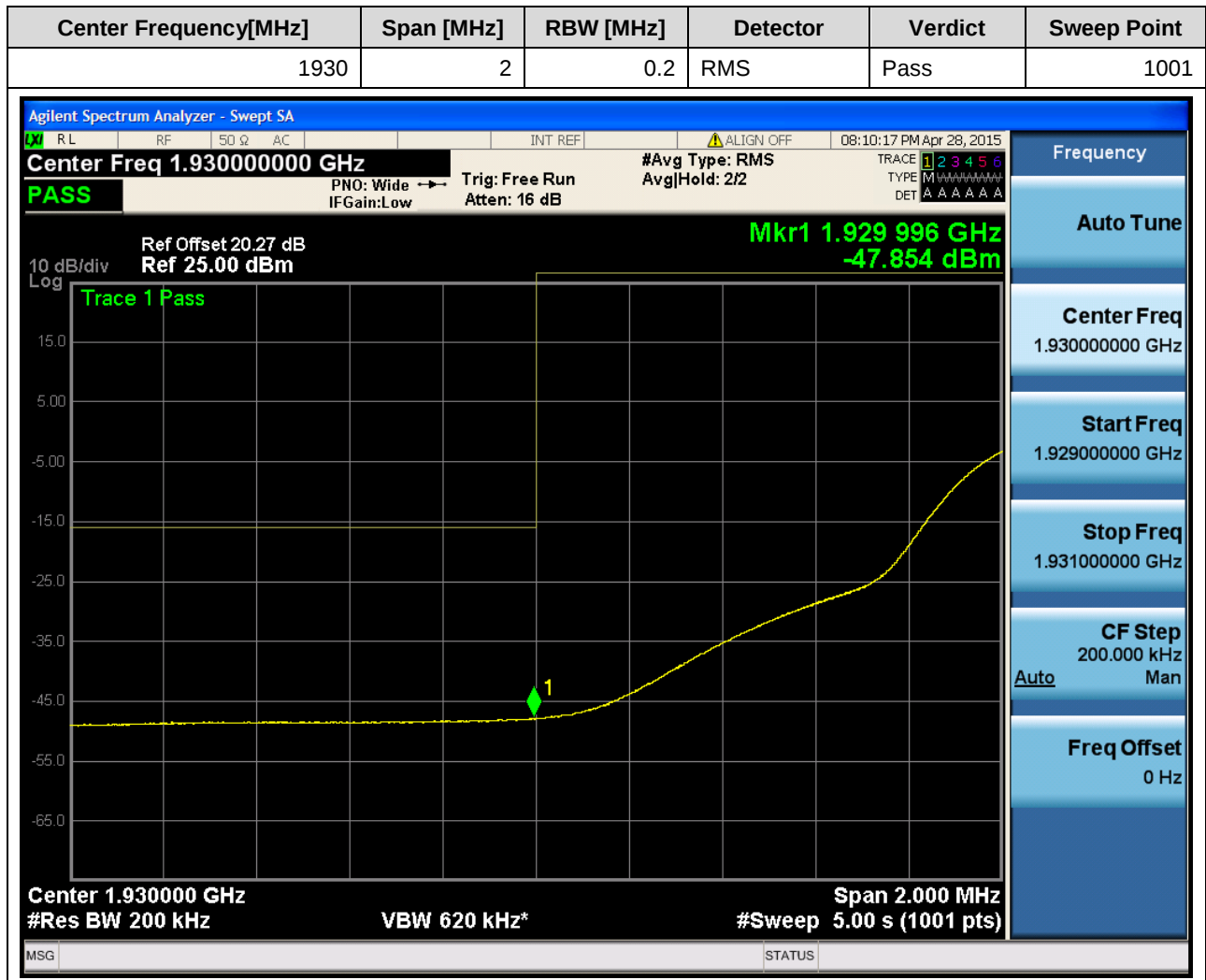


2.2 5M_T



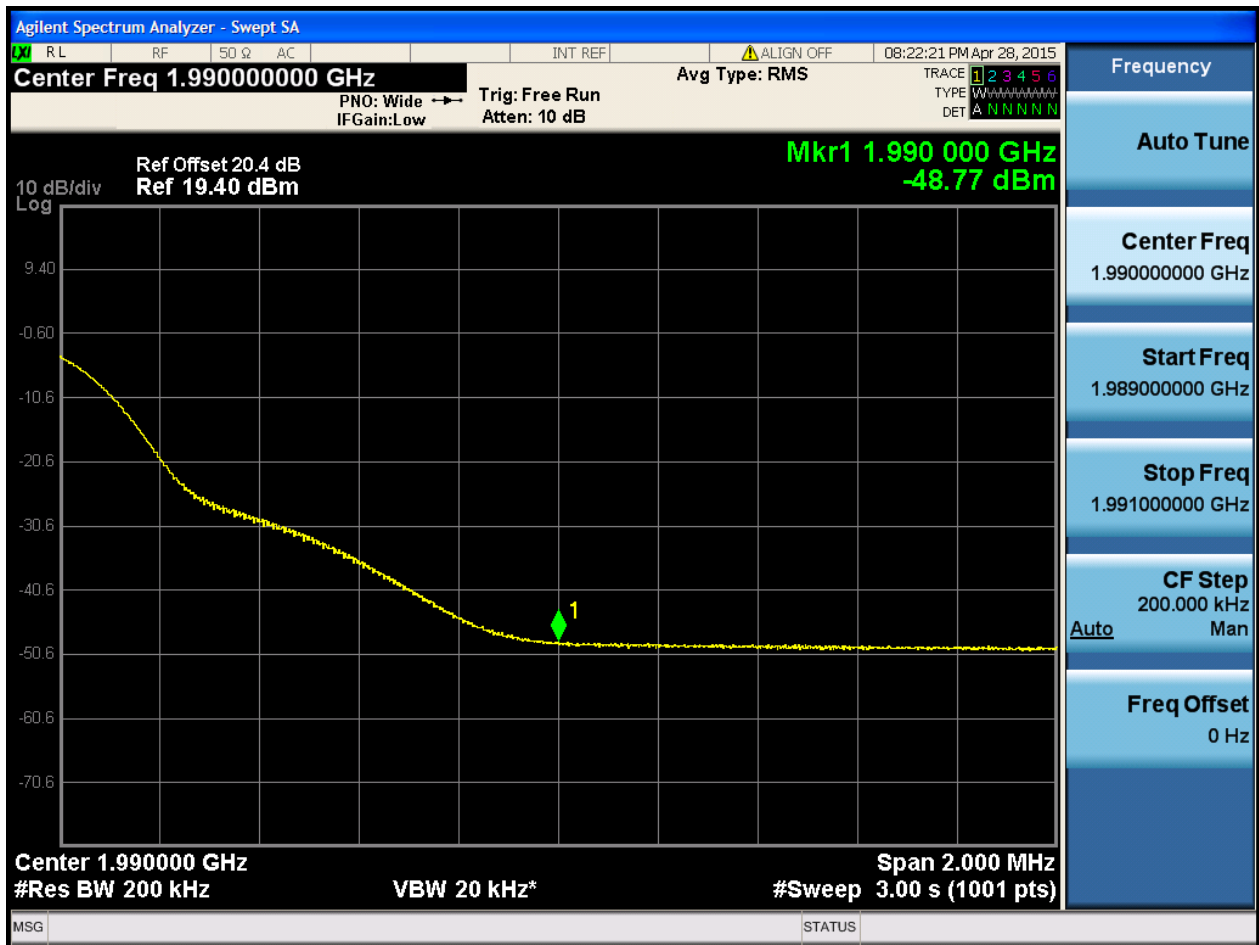


2.3 20M_B





2.4 20M_T





Appendix D2: Spurious Emission at Antenna Terminals



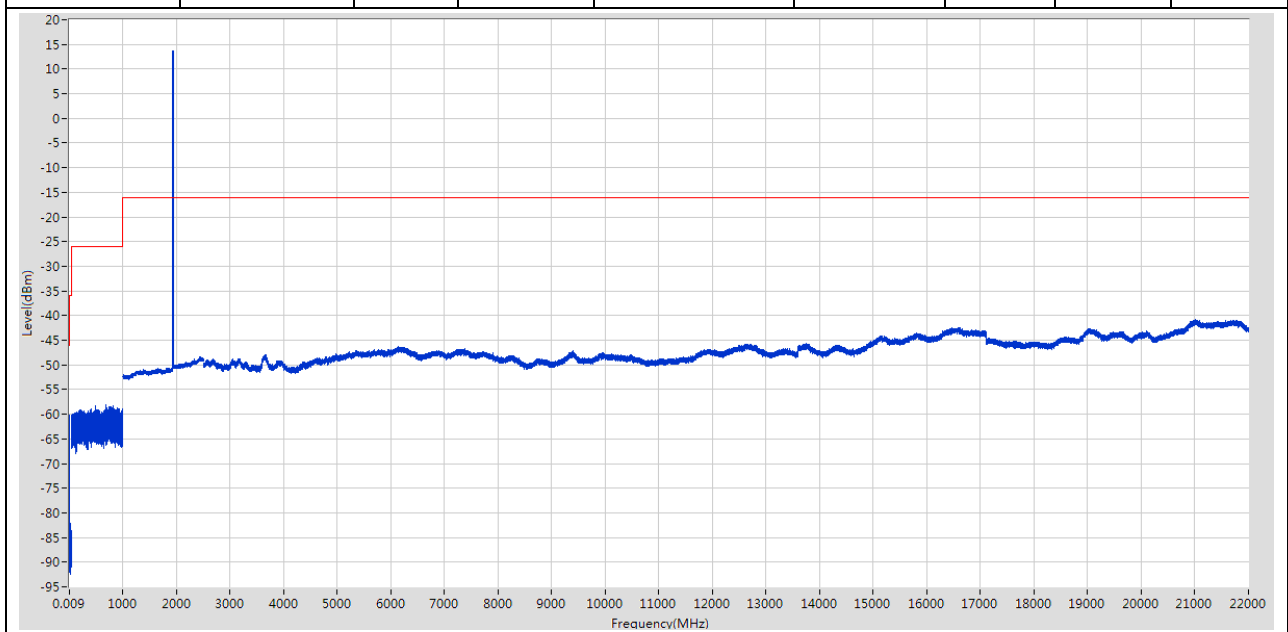
1 Result Table

EUT Conf.	Maximum Emission [dBm]	Verdict
5M_B	<-13	Pass
5M_M	<-13	Pass
5M_T	<-13	Pass
20M_B	<-13	Pass
20M_M	<-13	Pass
20M_T	<-13	Pass

2 Test Plot

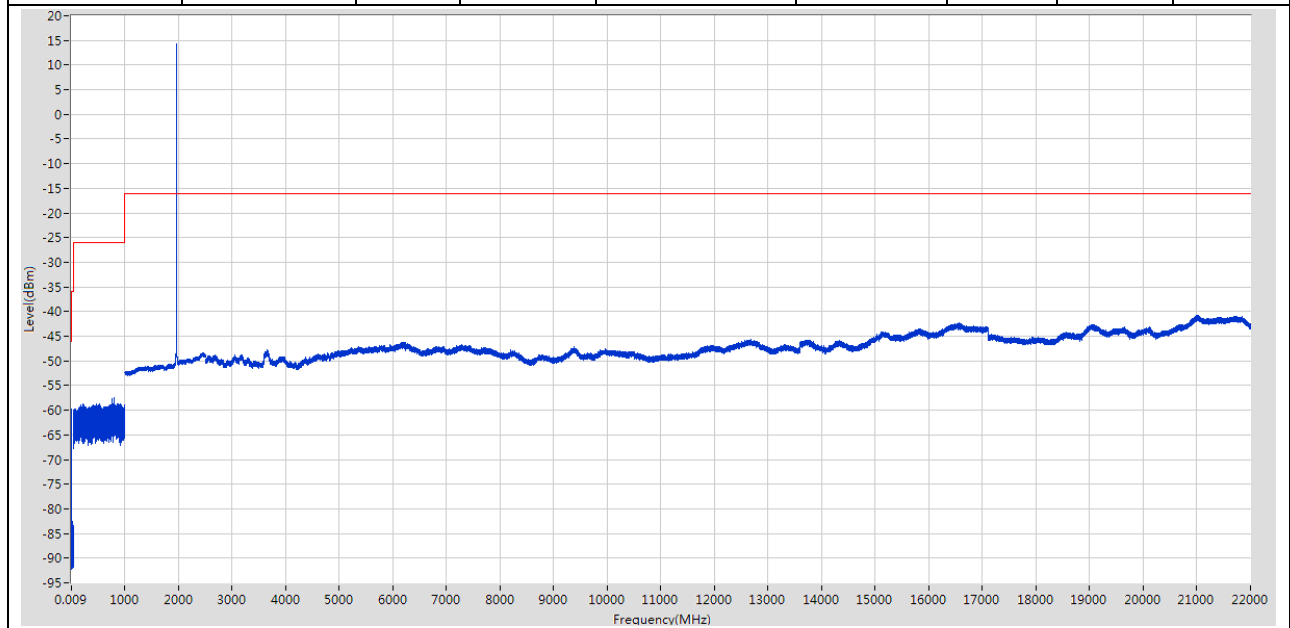
2.1 5M_B

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 k	-60.27	-46	Pass	1001
0.15	30	0.01	RMS	158.001 k	-64.14	-36	Pass	14925
30	1000	0.1	RMS	682.556313 M	-58.1	-26	Pass	48500
1000	2500	1	RMS	1932.724363 M	13.73	-16	---	7500
2500	22000	1	RMS	21014.543682 M	-40.82	-16	Pass	97500



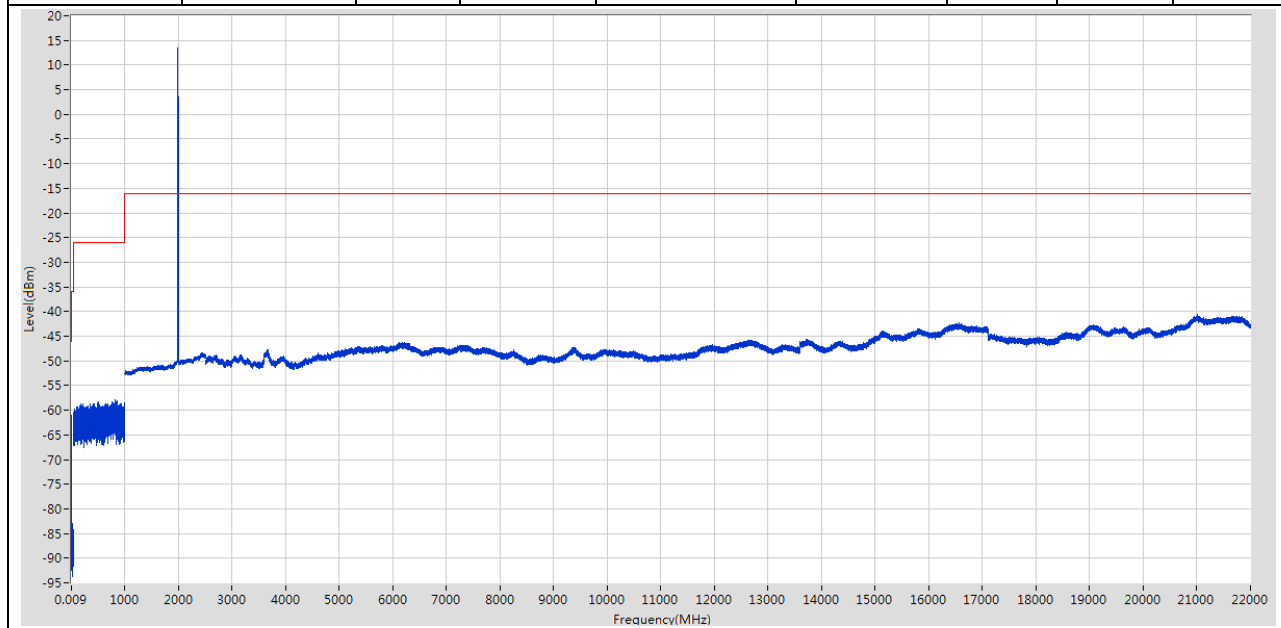
2.2 5M_M

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	9 k	-59.77	-46	Pass	1001
0.15	30	0.01	RMS	156 k	-63.59	-36	Pass	14925
30	1000	0.1	RMS	794.979124 M	-57.43	-26	Pass	48500
1000	2500	1	RMS	1959.527937 M	14.24	-16	---	7500
2500	22000	1	RMS	21019.743979 M	-40.79	-16	Pass	97500



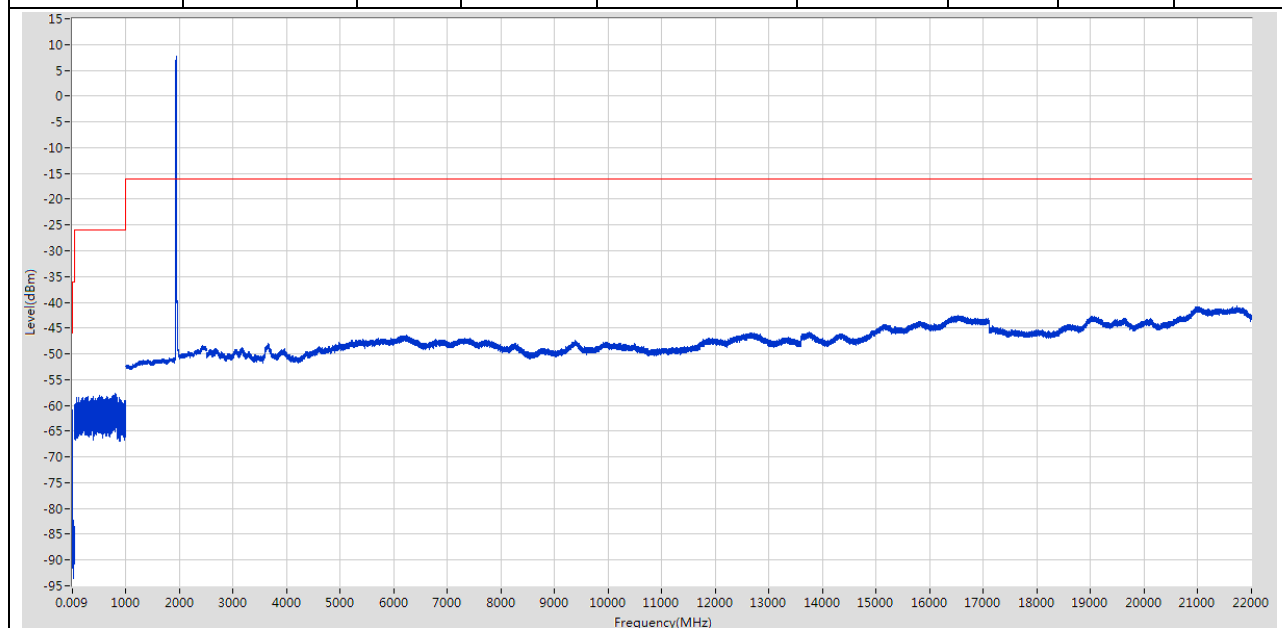
2.3 5M_T

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	-61.03	-46	Pass	1001
0.15	30	0.01	RMS	150 k	-64.96	-36	Pass	14925
30	1000	0.1	RMS	805.899397 M	-57.92	-26	Pass	48500
1000	2500	1	RMS	1987.331644 M	13.55	-16	---	7500
2500	22000	1	RMS	21016.543796 M	-40.63	-16	Pass	97500



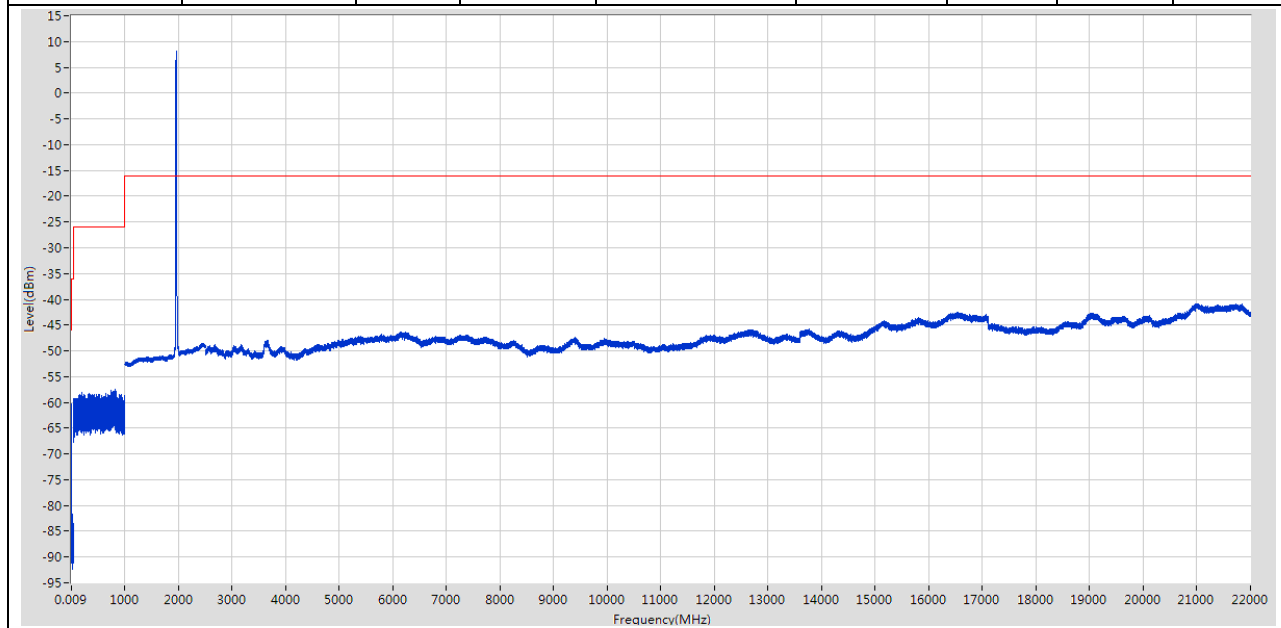
2.4 20M_B

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	9.282 k	-60.99	-46	Pass	1001
0.15	30	0.01	RMS	150 k	-64.42	-36	Pass	14925
30	1000	0.1	RMS	804.979374 M	-57.65	-26	Pass	48500
1000	2500	1	RMS	1936.52487 M	7.74	-16	---	7500
2500	22000	1	RMS	21725.584317 M	-40.7	-16	Pass	97500



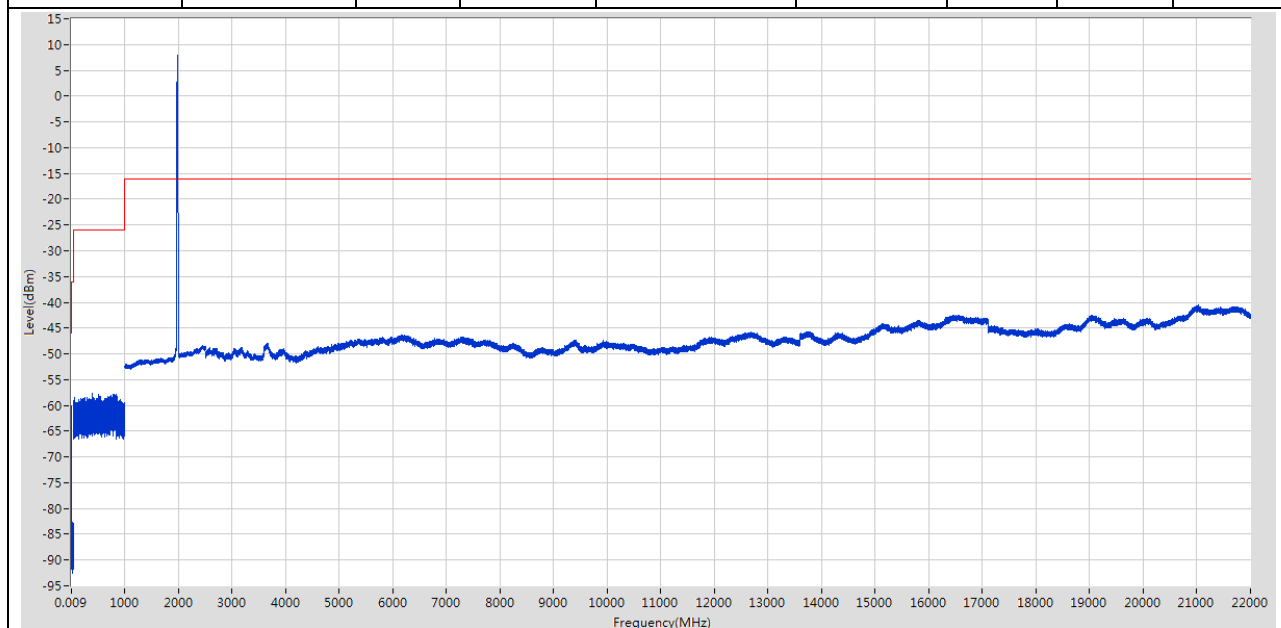
2.5 20M_M

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 k	-60.24	-46	Pass	1001
0.15	30	0.01	RMS	152 k	-63.44	-36	Pass	14925
30	1000	0.1	RMS	816.879672 M	-57.53	-26	Pass	48500
1000	2500	1	RMS	1960.928124 M	8.07	-16	---	7500
2500	22000	1	RMS	21014.743693 M	-40.81	-16	Pass	97500



2.6 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	-60.16	-46	Pass	1001
0.15	30	0.01	RMS	152 k	-64.72	-36	Pass	14925
30	1000	0.1	RMS	395.349133 M	-57.71	-26	Pass	48500
1000	2500	1	RMS	1973.729831 M	7.93	-16	---	7500
2500	22000	1	RMS	21029.544539 M	-40.5	-16	Pass	97500





Appendix E2: Radiated (Spurious) Emissions

1 Result Table

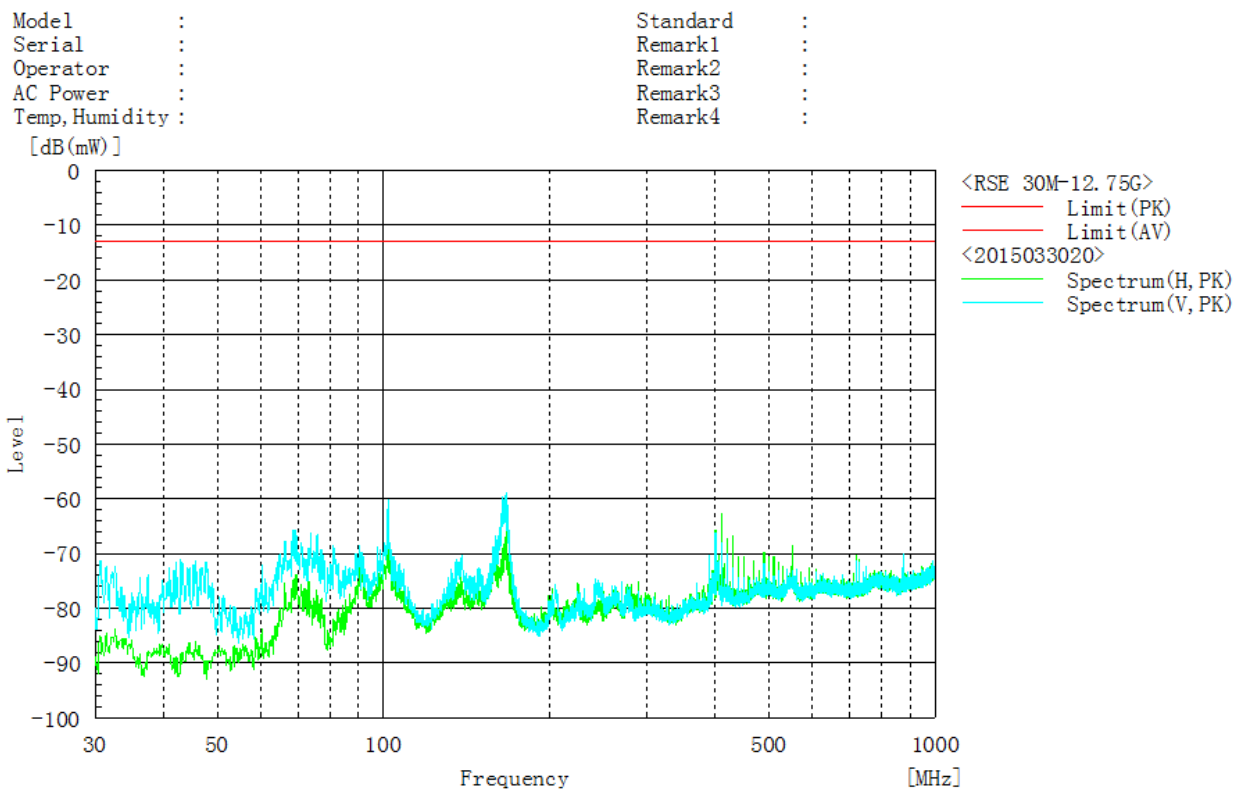
EUT Conf.	Measured Curve Conformed to the Emission Limit?	Verdict
5M_M (Worst case)	Yes	Pass

Note: The setting of analyzer is below

Frequency range	RBW	Detector
30MHz to 1GHz	1MHz	Average
1GHz to 18GHz	1MHz	Average
18GHz to 26.5GHz	1MHz	Average

2 Test Plot

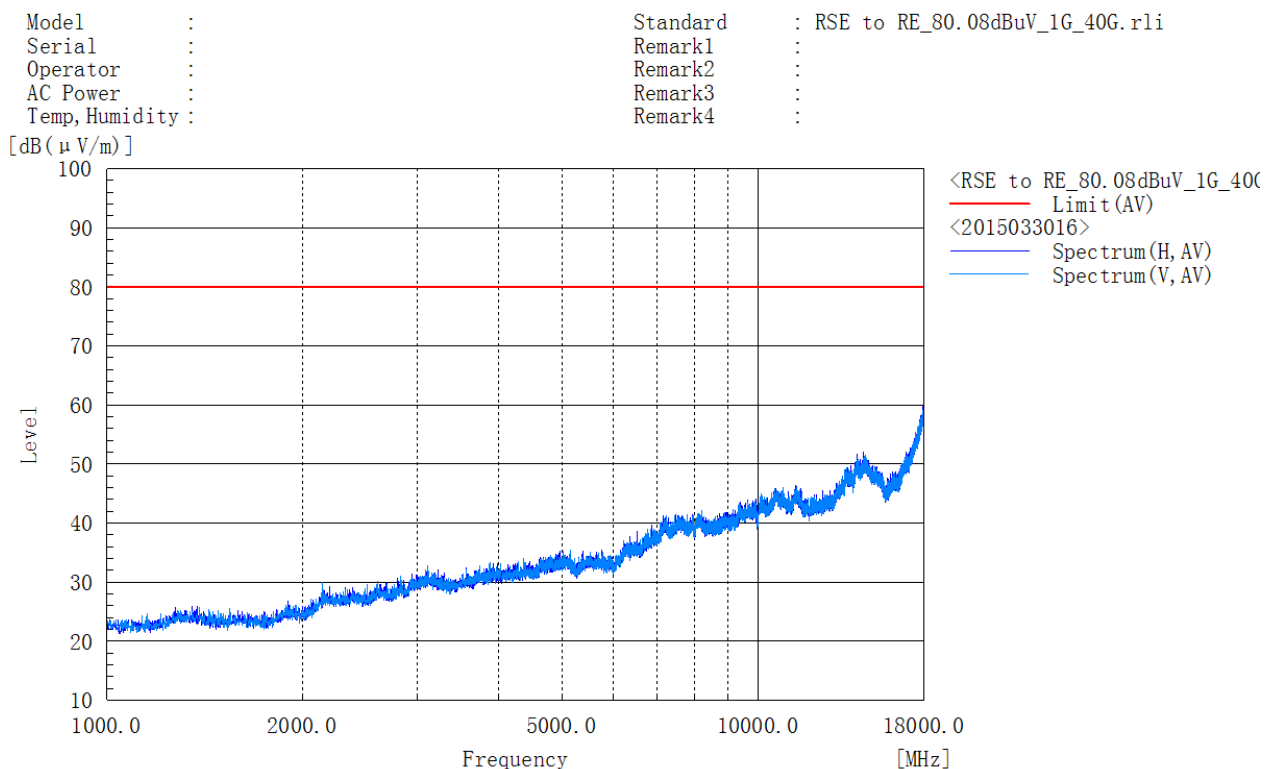
2.1 30MHz-1GHz





2.2 1GHz-18GHz

Note: the signal exceeding the limit line is the wanted signal.

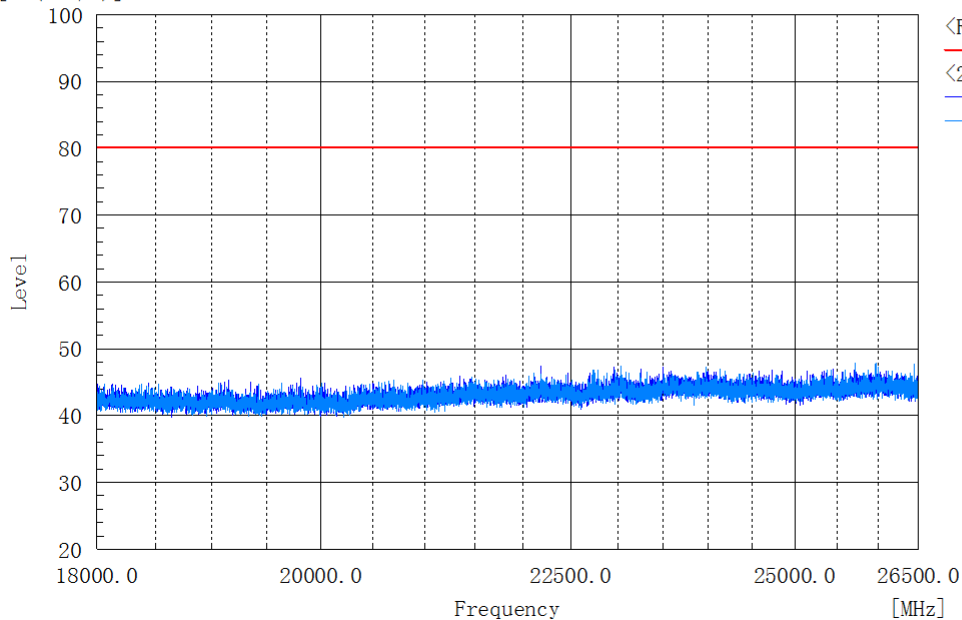




2.3 18GHz-26.5GHz

Model	:	Standard	:	RSE to RE_80.08dBuV_1G_40G.rli
Serial	:	Remark1	:	
Operator	:	Remark2	:	
AC Power	:	Remark3	:	
Temp, Humidity	:	Remark4	:	

[dB (μV/m)]



<RSE to RE_80.08dBuV_1G_40G.rli>
Limit (AV)
<2015033018>
Spectrum (H, AV)
Spectrum (V, AV)



Appendix F2: Frequency Stability

1 Result Table

1.1 Frequency Error

(1) Frequency Error vs. Temperature:

EUT Conf.	Voltage	Temperature	Freq. Error [Hz]	Freq. vs. rated [ppm]	Freq. vs. 20 °C [ppm]	Verdict
5M_M	100%	-30 °C	0.70382	0.00036	-0.00008	Pass
		-20 °C	1.2555	0.00064	0.00020	Pass
		-10 °C	1.0242	0.00052	0.00008	Pass
		0 °C	2.3924	0.00122	0.00078	Pass
		+10 °C	0.97991	0.00050	0.00006	Pass
		+20 °C	0.85948	0.00044	0	Pass
		+30 °C	1.1379	0.00058	0.00014	Pass
		+40 °C	1.159	0.00059	0.00015	Pass
		+50 °C	1.4807	0.00076	0.00032	Pass

(2) Frequency Error vs. Voltage:

EUT Conf.	Temperature	Voltage	Freq. Error [Hz]	Freq. vs. rated [ppm]	Freq. vs. 20 °C [ppm]	Verdict
5M_M	+20 °C	85 %	1.7688	0.00090	0.00046	Pass
		100 %	0.85948	0.00044	0	Pass
		115 %	1.5481	0.00079	0.00035	Pass

1.2 Frequency Range

(Not applicable)



2 Test Plot

NOTE: Only the test plots for the measurements of Frequency Range are supplied.

(Not applicable)



Appendix G2: Receiver Spurious Emissions



1 Result Table

(Not applicable)

2 Test Plot

(Not applicable)

END