

## **Annex A.2 Peak to Average Ratio**

# 1. WCDMA\_Band2

## 1.1. WCDMA Peak to Average Ratio\_Part22-24-27(NTNV)(Channel:9262)

Center Frequency(MHz)	PAR Percent (%)	PAR (dB)	Upper Limit (dB)	Verdict
1852.4	0.1	2.86	13	Pass

**General Purpose RF Measurement - V3.5.110 - Base V 3.5.137**  
**Power** | Spectrum | FFT Spectrum | IQ Recorder | IQ vs. Slot | EPS  
 Frequency: 1852.40000 Ref. Level: 30.00 Connector:RF2COM

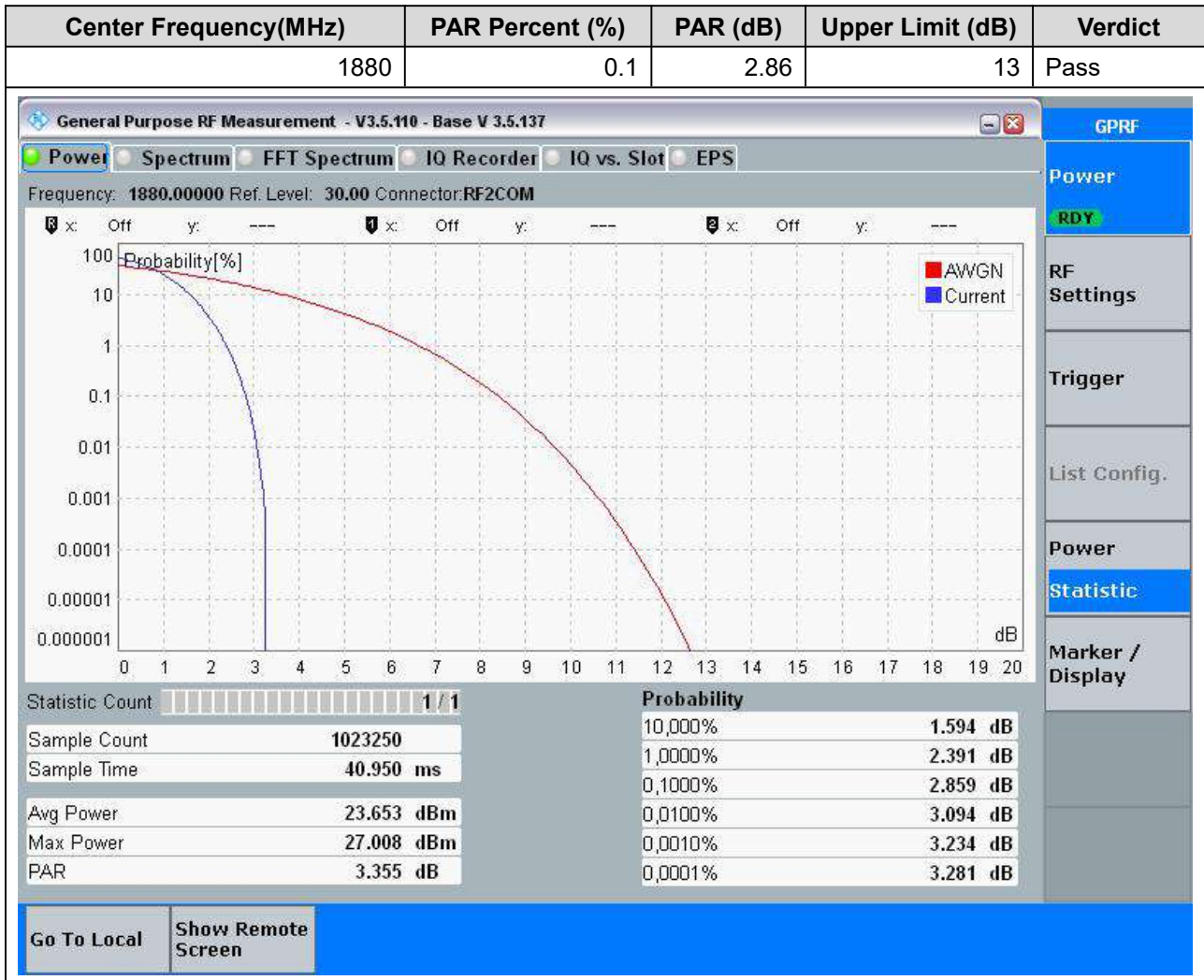
GPRF  
 Power  
RDY  
 RF Settings  
 Trigger  
 List Config.  
 Power  
Statistic  
 Marker / Display

Statistic Count	
Sample Count	999512
Sample Time	40.000 ms
Avg Power	23.551 dBm
Max Power	26.869 dBm
PAR	3.318 dB

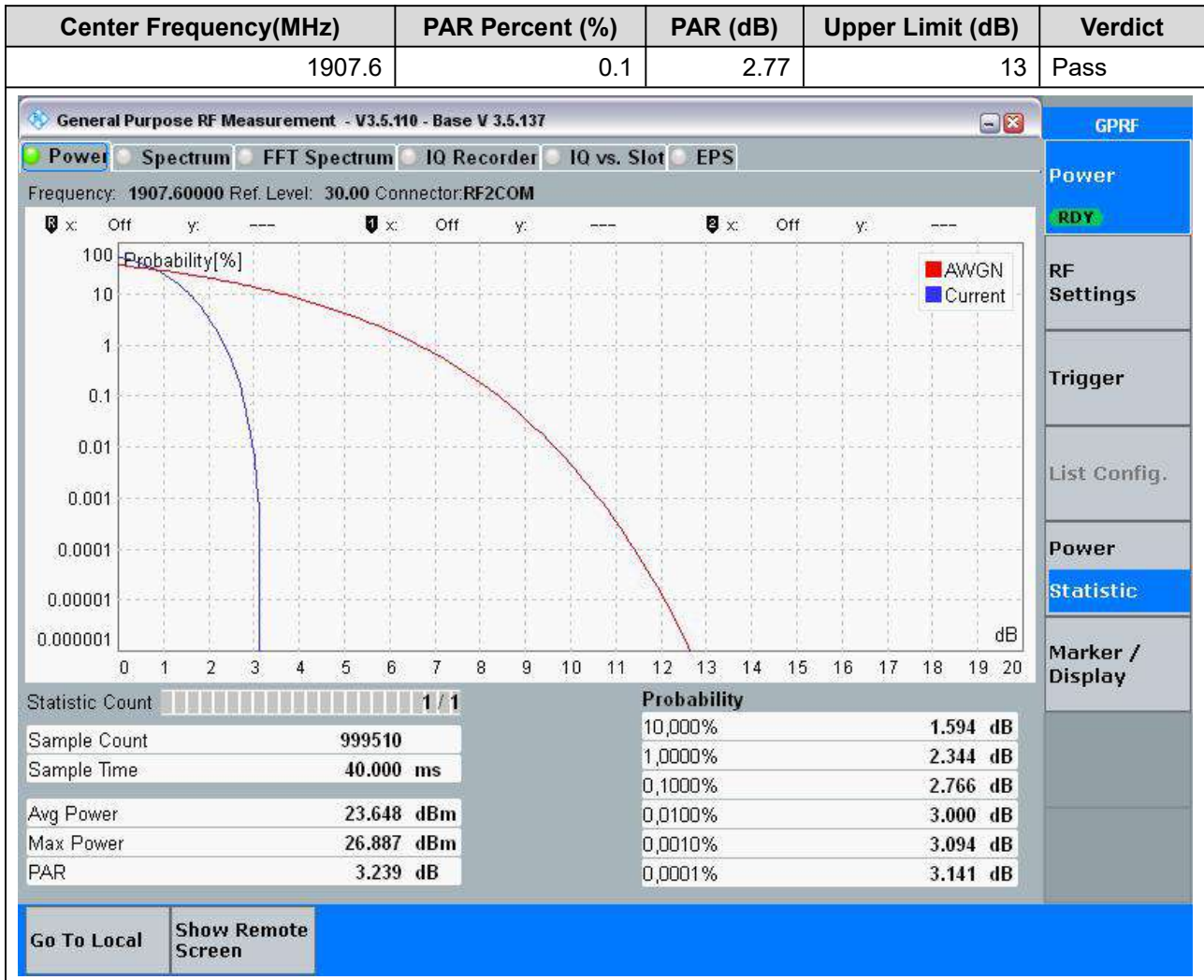
Probability	
10,000%	1.594 dB
1,0000%	2.391 dB
0,1000%	2.859 dB
0,0100%	3.094 dB
0,0010%	3.234 dB
0,0001%	3.281 dB

Go To Local
Show Remote Screen

## 1.2. WCDMA Peak to Average Ratio\_Part22-24-27(NTNV)(Channel:9400)

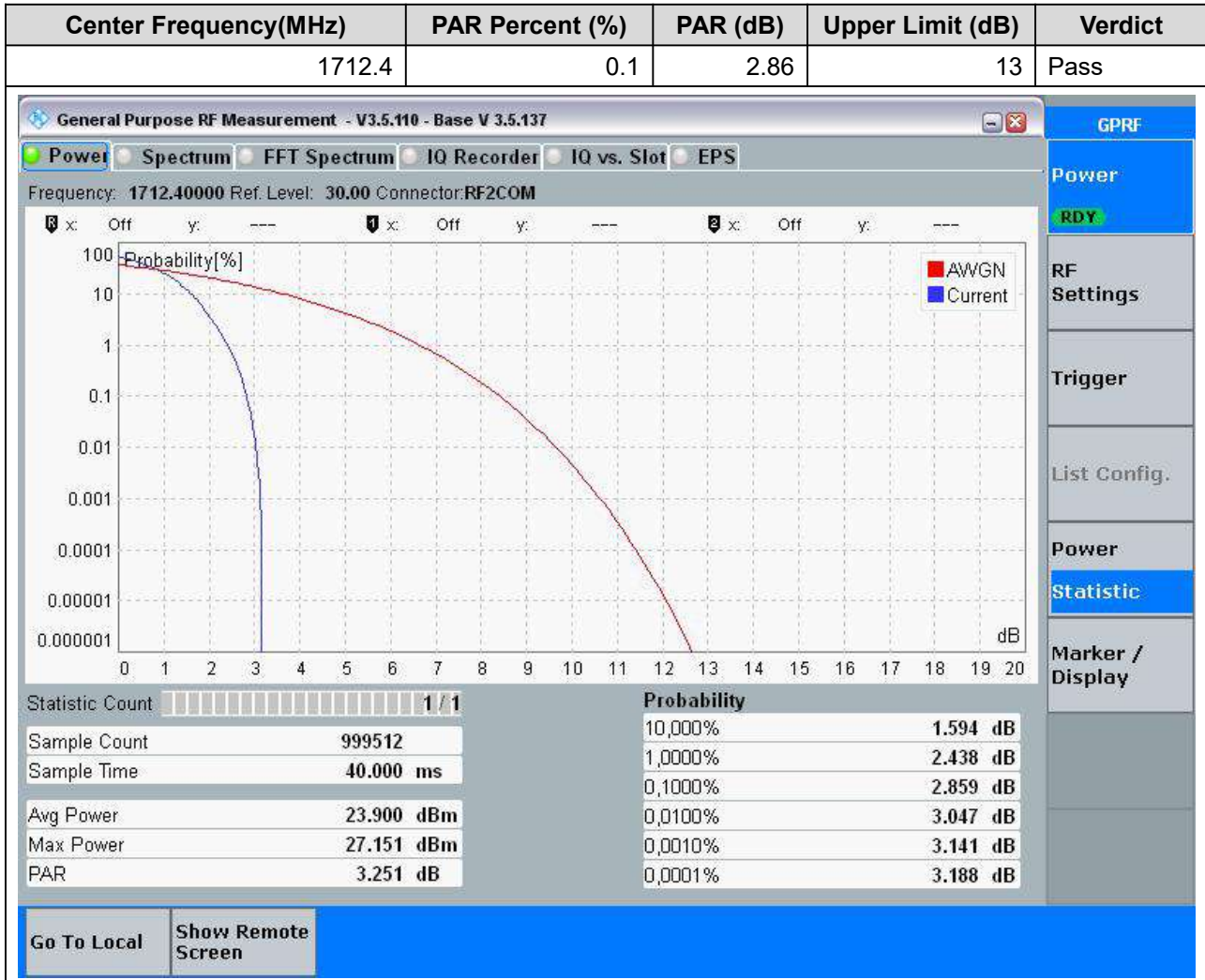


### 1.3. WCDMA Peak to Average Ratio\_Part22-24-27(NTNV)(Channel:9538)

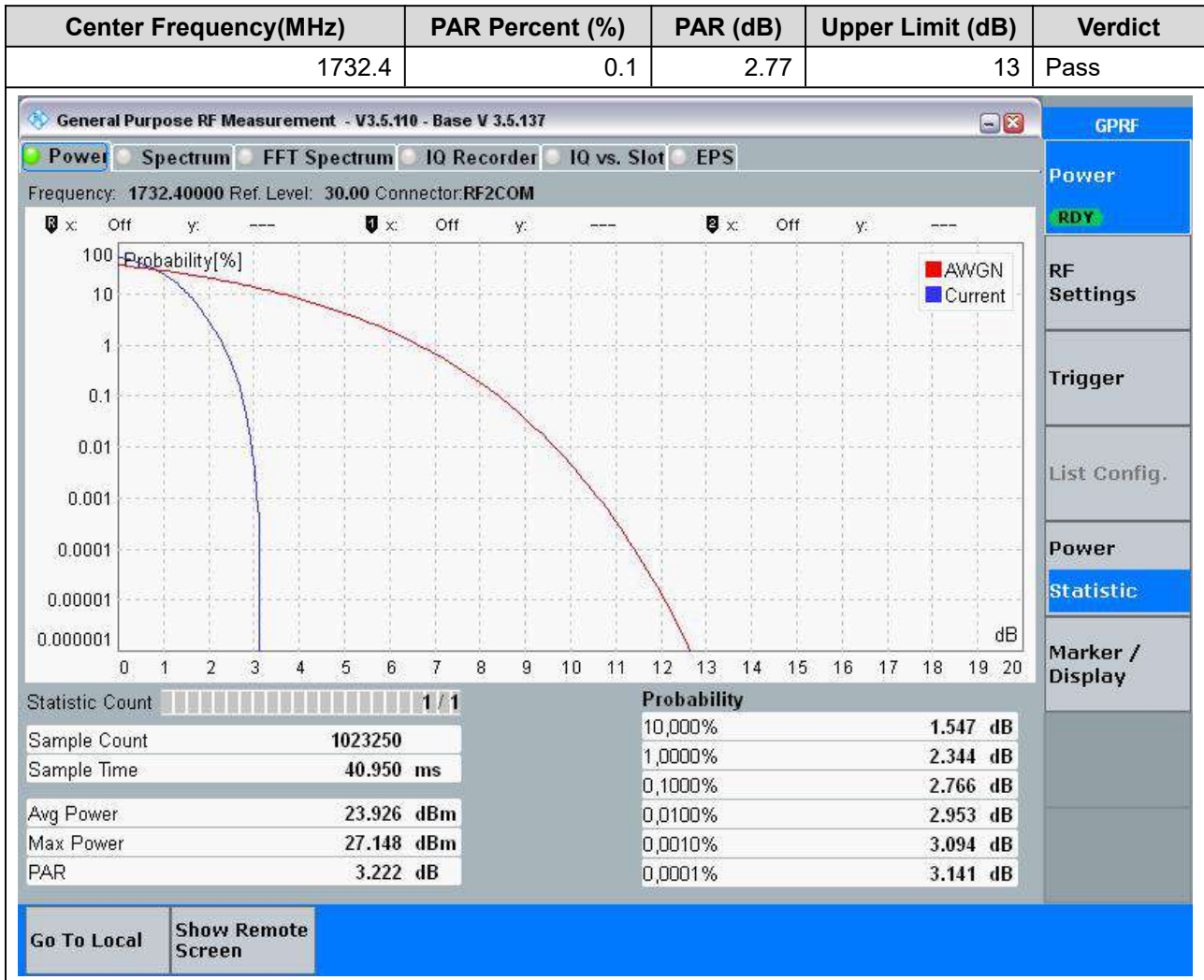


## 2. WCDMA\_Band4

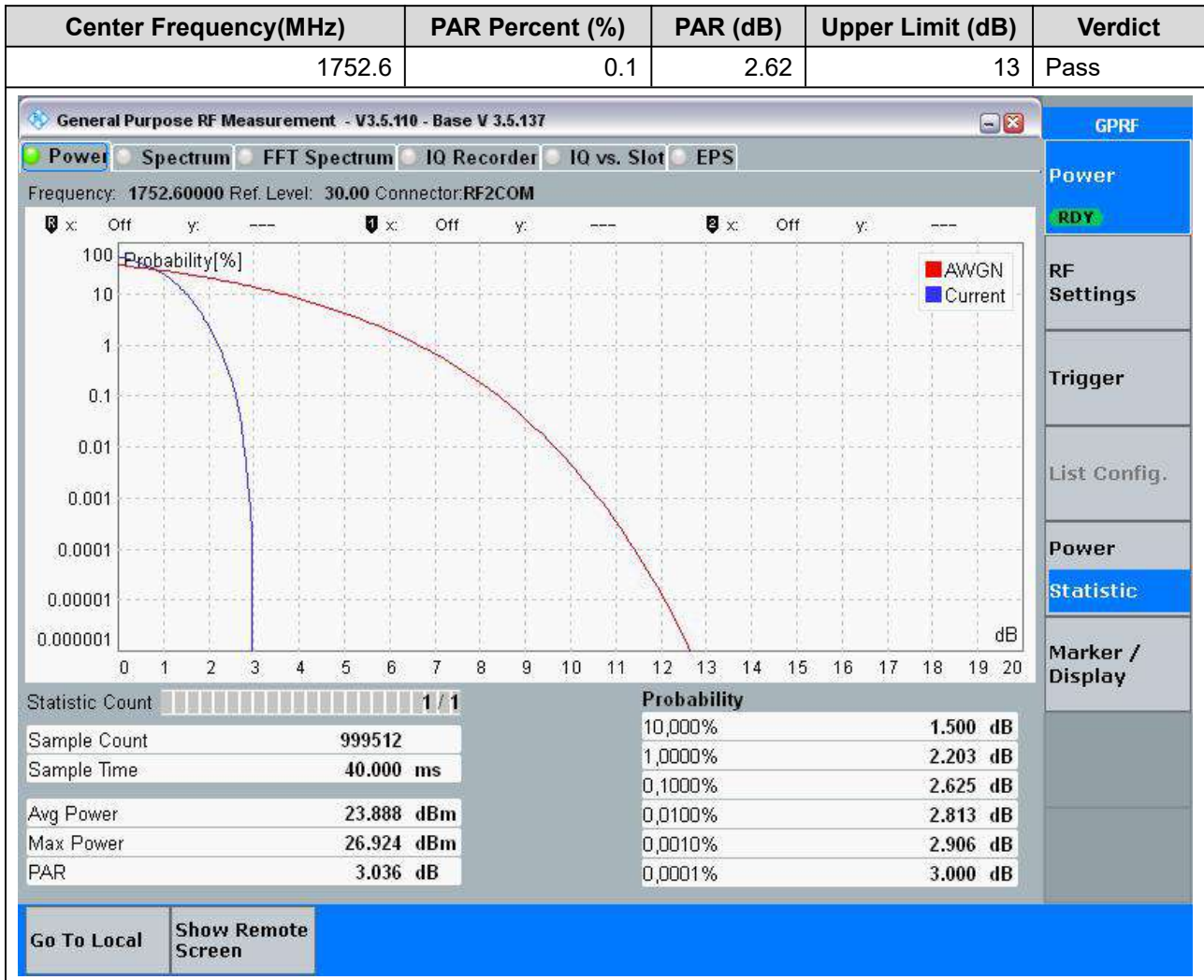
### 2.1. WCDMA Peak to Average Ratio\_Part22-24-27(NTNV)(Channel:1312)



## 2.2. WCDMA Peak to Average Ratio\_Part22-24-27(NTNV)(Channel:1412)

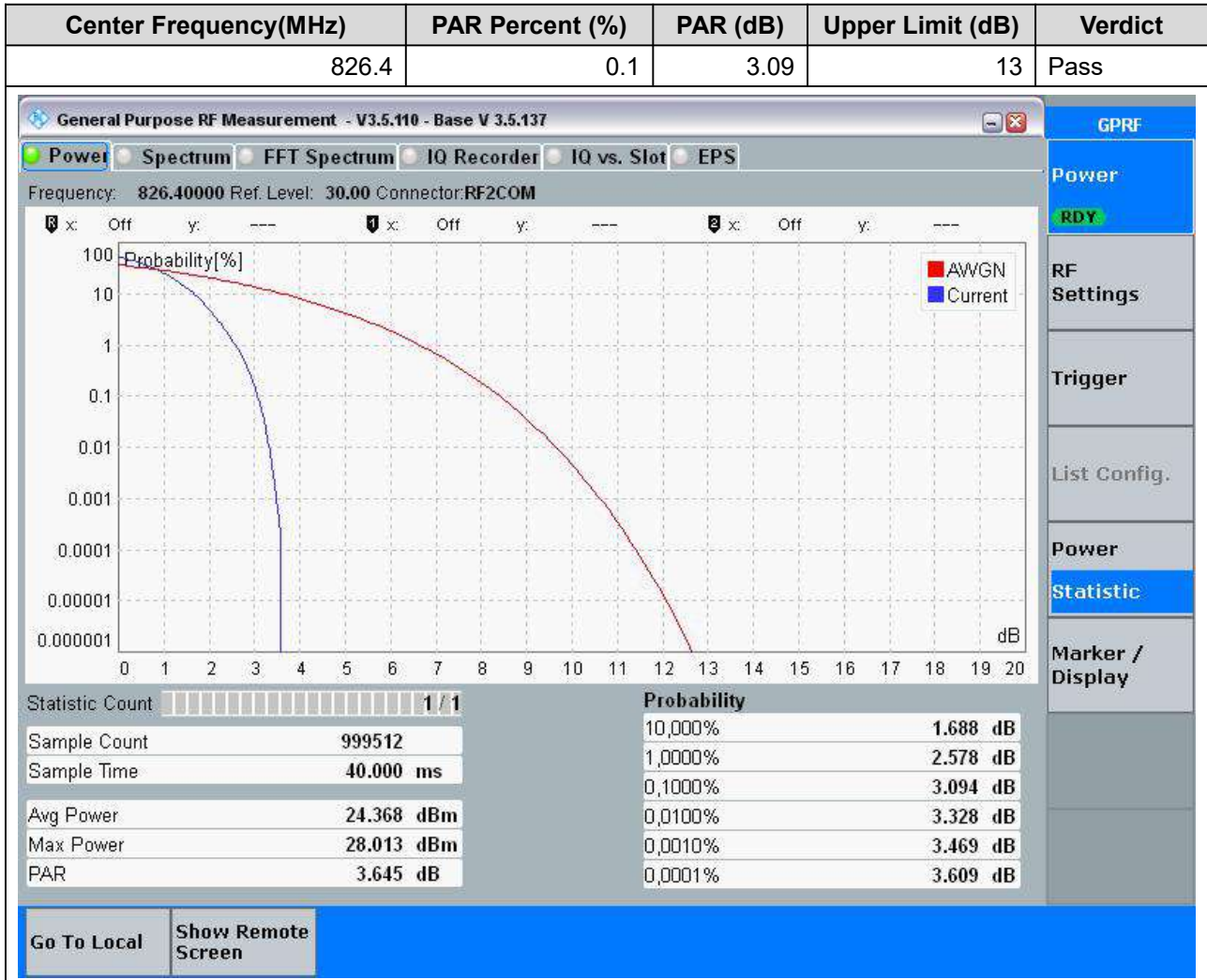


### 2.3. WCDMA Peak to Average Ratio\_Part22-24-27(NTNV)(Channel:1513)



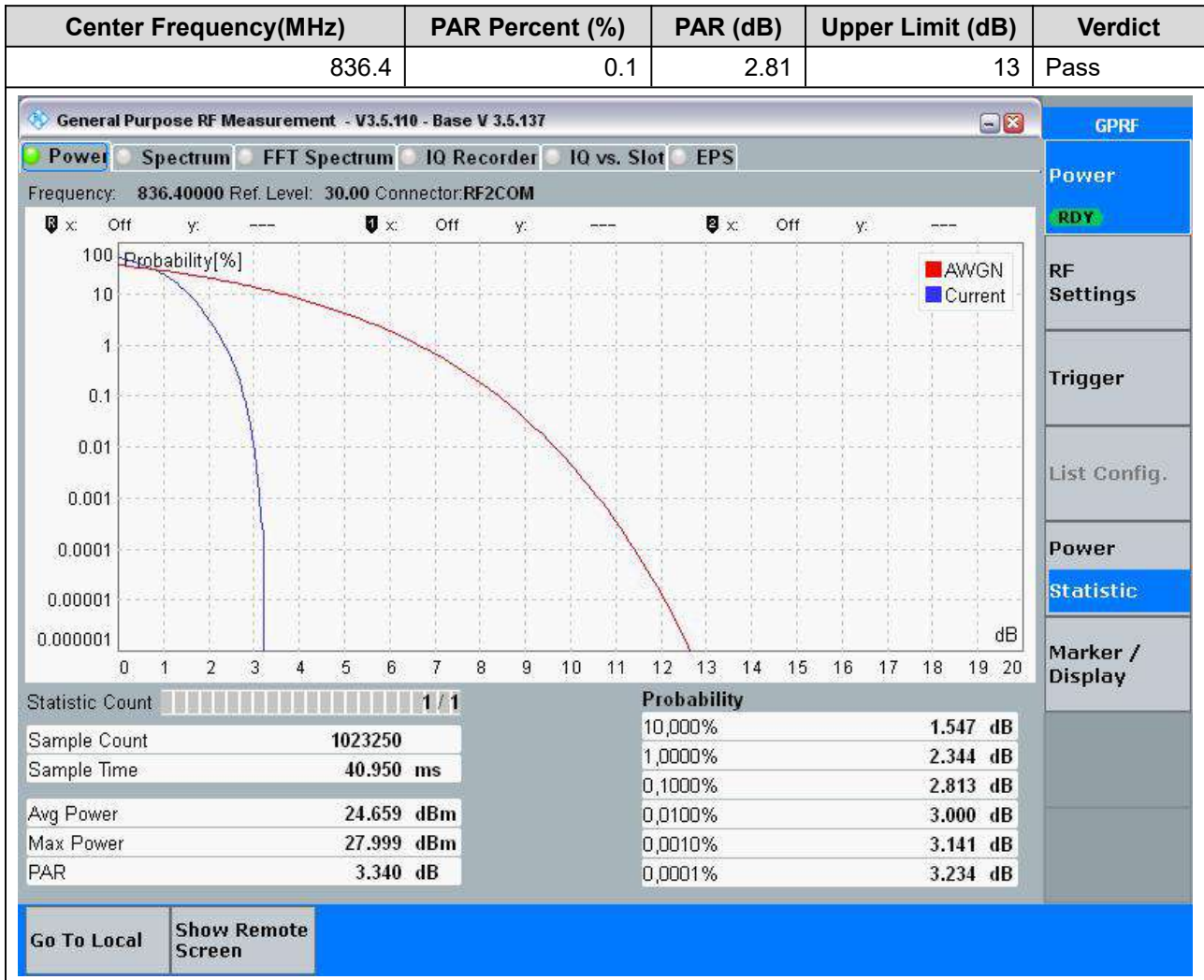
### 3. WCDMA\_Band5

#### 3.1. WCDMA Peak to Average Ratio\_Part22-24-27(NTNV)(Channel:4132)

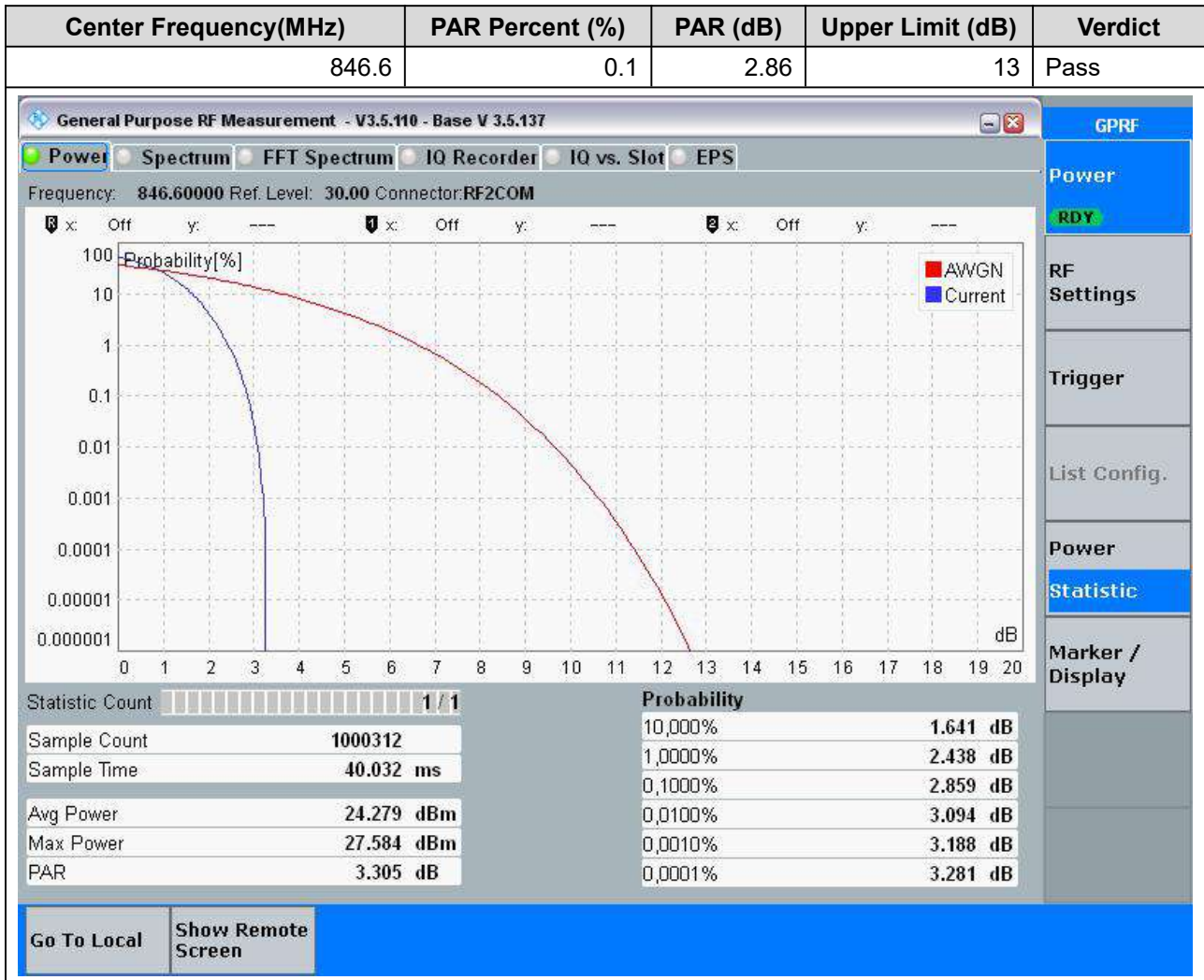




### 3.2. WCDMA Peak to Average Ratio\_Part22-24-27(NTNV)(Channel:4182)

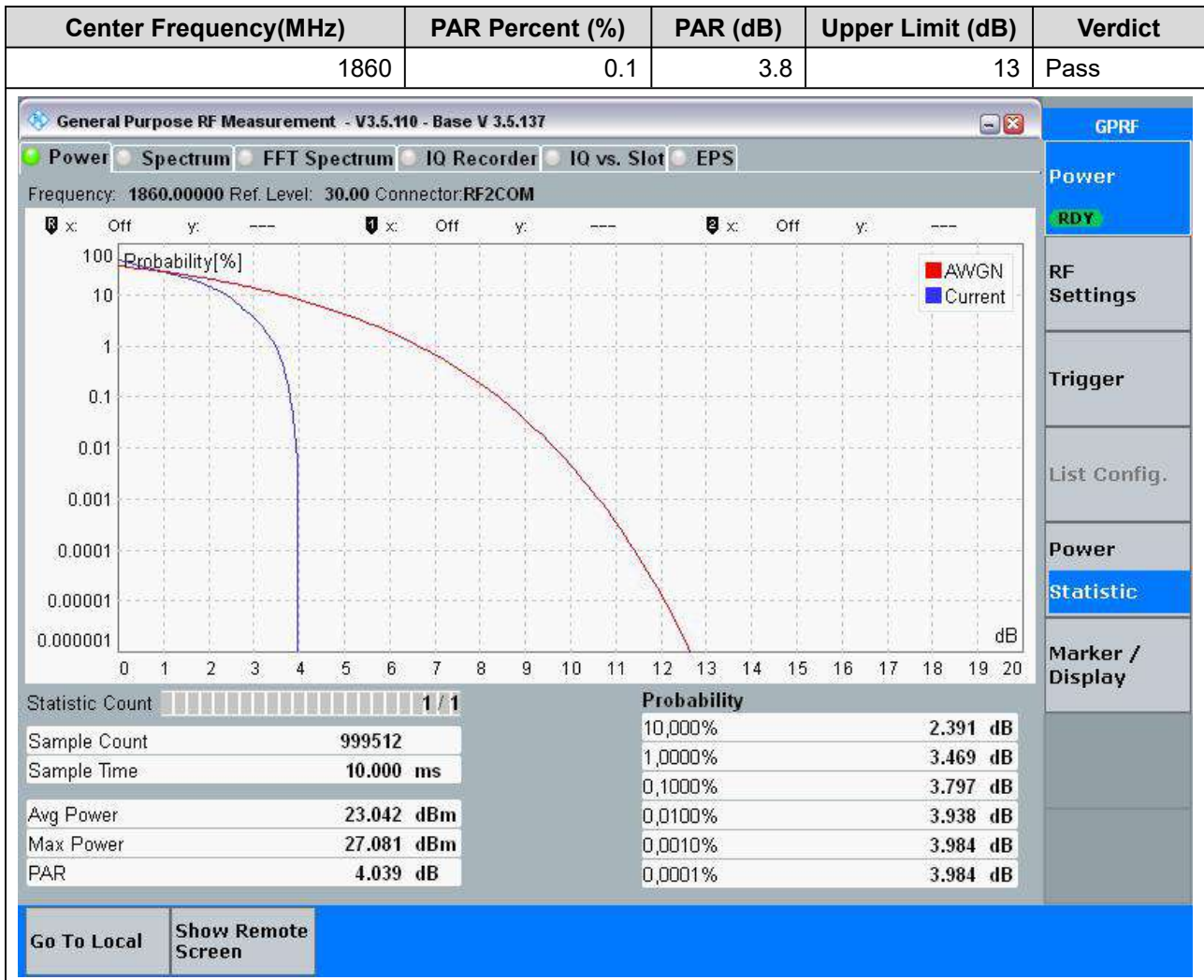


### 3.3. WCDMA Peak to Average Ratio\_Part22-24-27(NTNV)(Channel:4233)



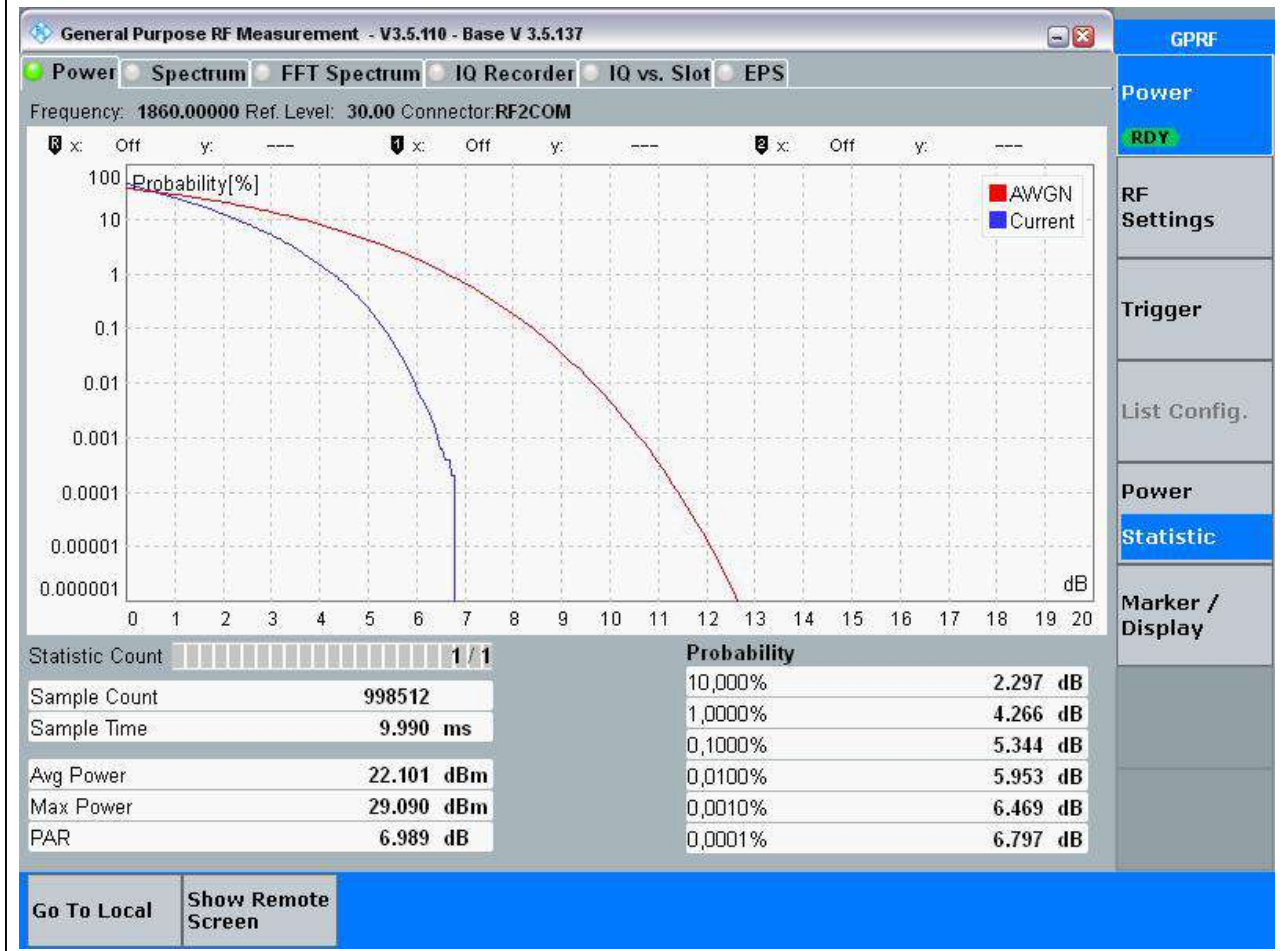
## 4. LTE\_Band2

### 4.1. LTE Peak to Average Ratio\_Part22-24-27(NTNV)(Subtest:1, Channel:18700, Bandwidth:20, Modulation:QPSK, RB Number: 1, RB Position:LOW)

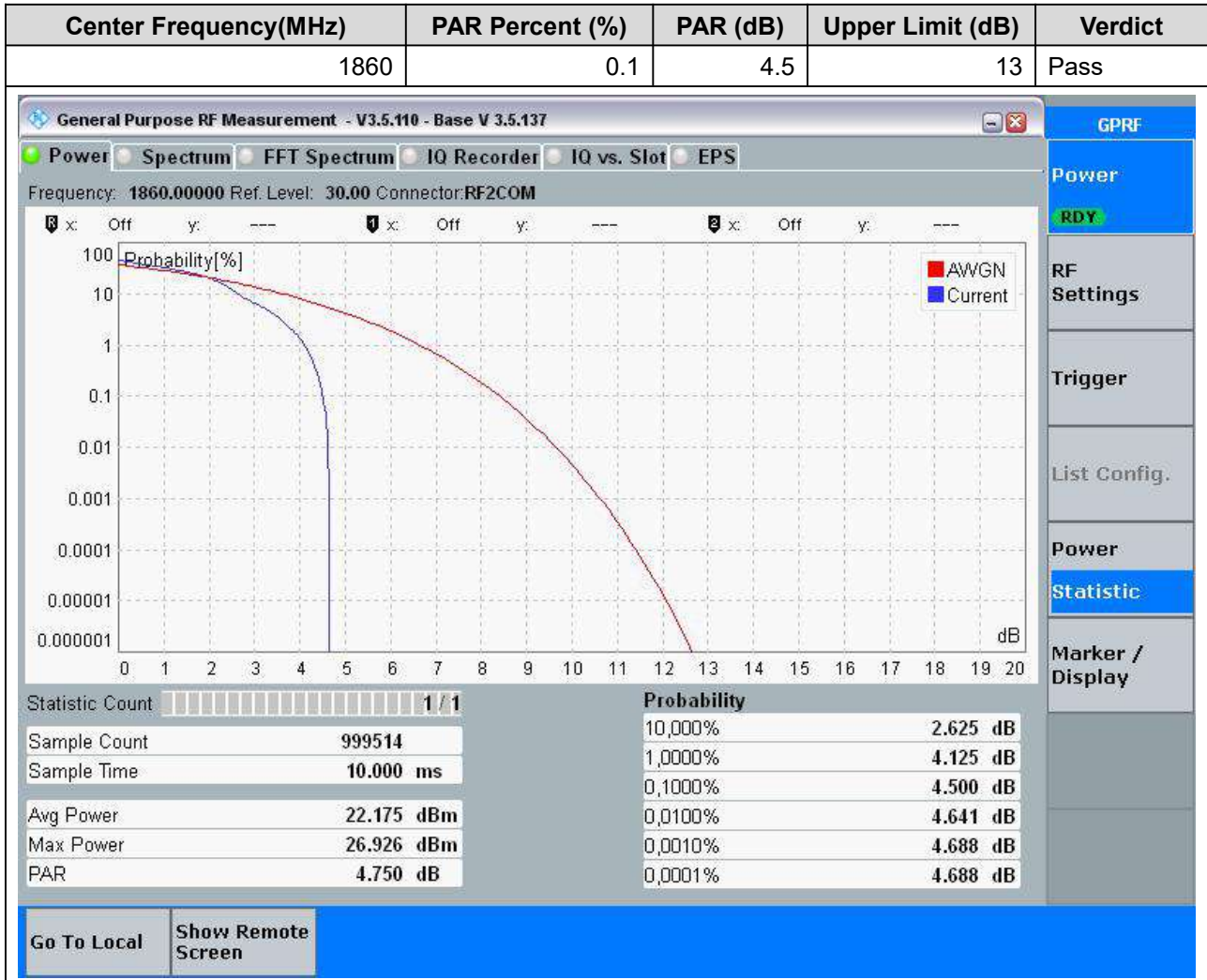


**4.2. LTE Peak to Average Ratio\_Part22-24-27(NTNV)(Subtest:2, Channel:18700, Bandwidth:20, Modulation:QPSK, RB Number: 100, RB Position:LOW)**

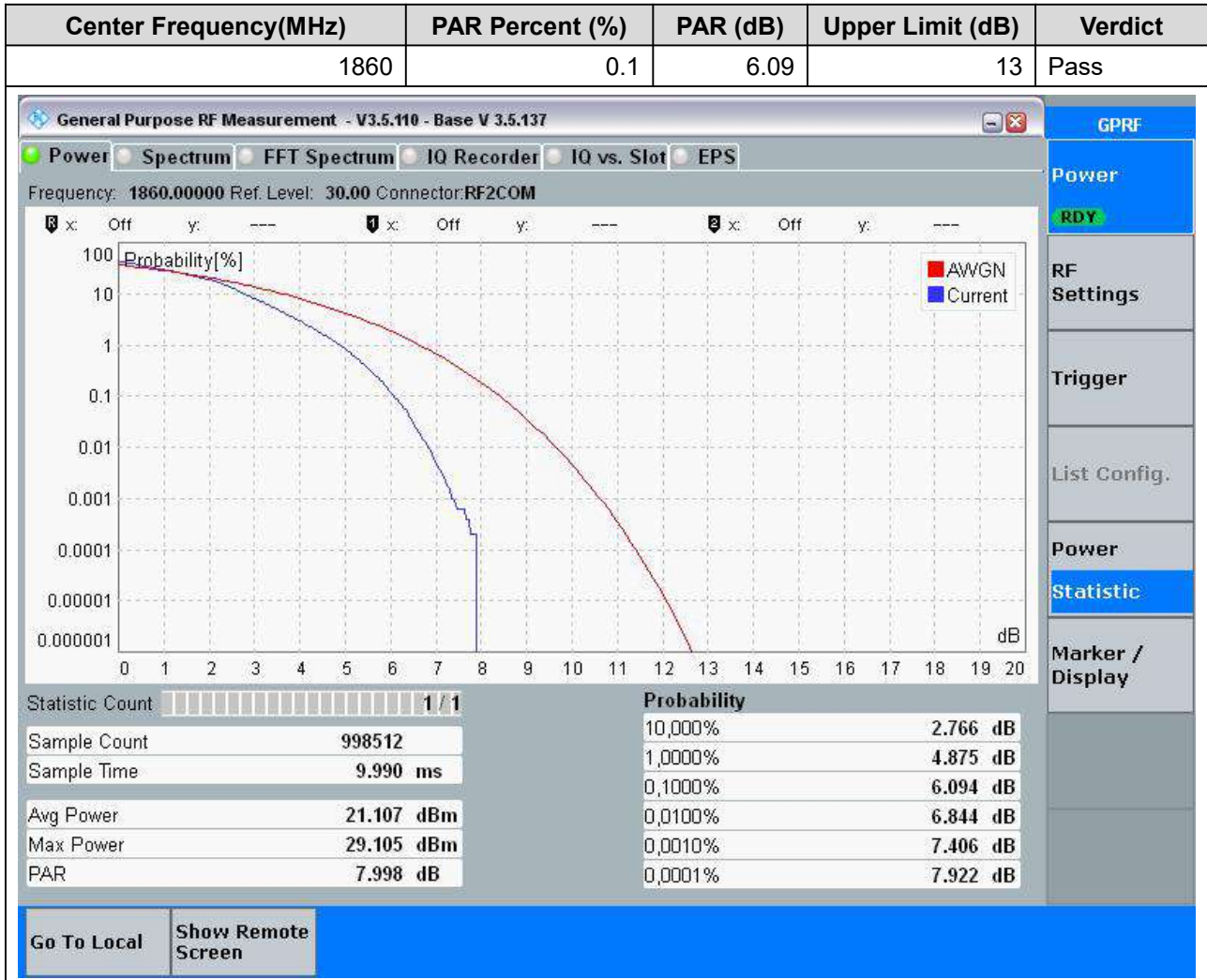
Center Frequency(MHz)	PAR Percent (%)	PAR (dB)	Upper Limit (dB)	Verdict
1860	0.1	5.34	13	Pass



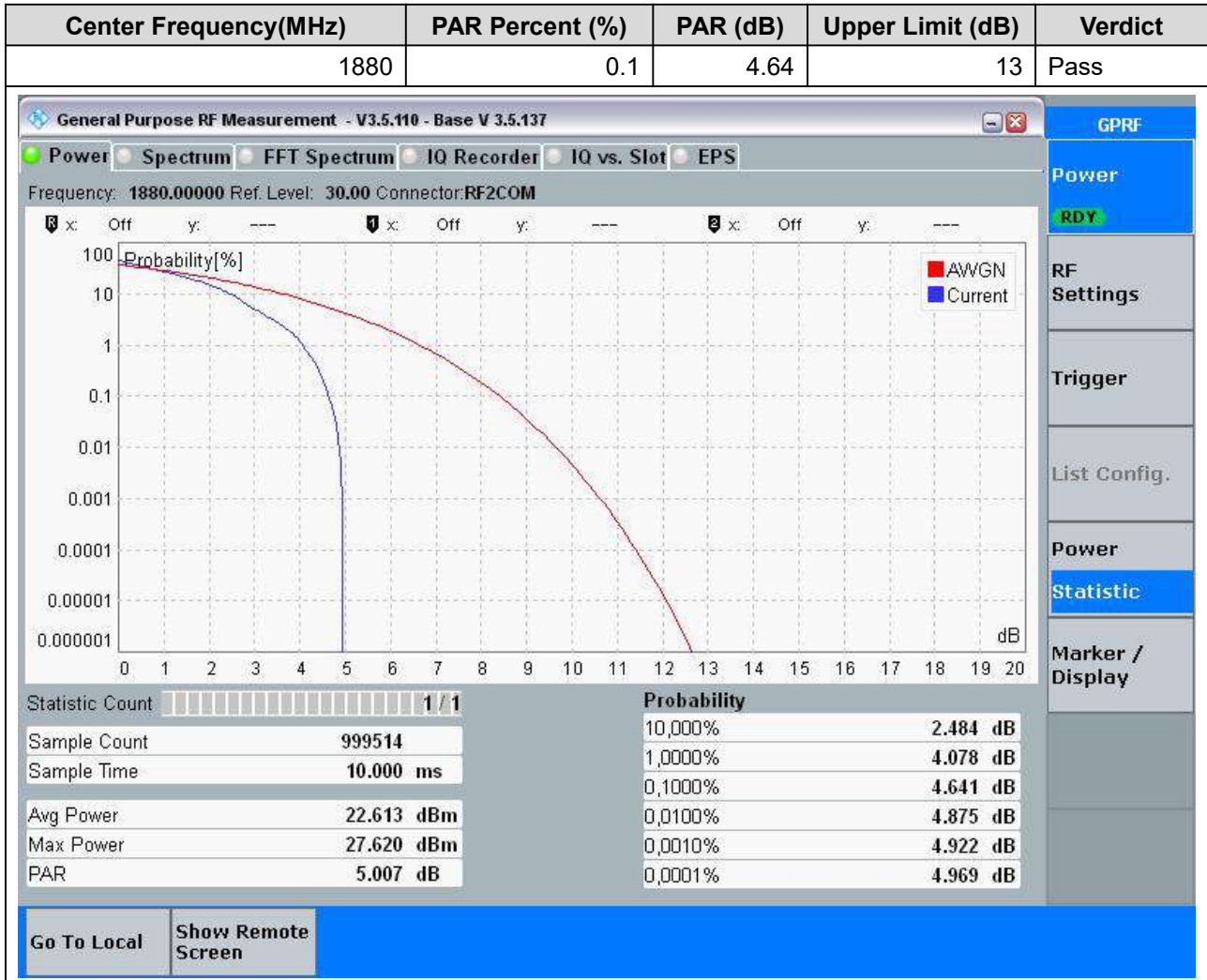
### 4.3. LTE Peak to Average Ratio\_Part22-24-27(NTNV)(Subtest:3, Channel:18700, Bandwidth:20, Modulation:Q16, RB Number: 1, RB Position:LOW)



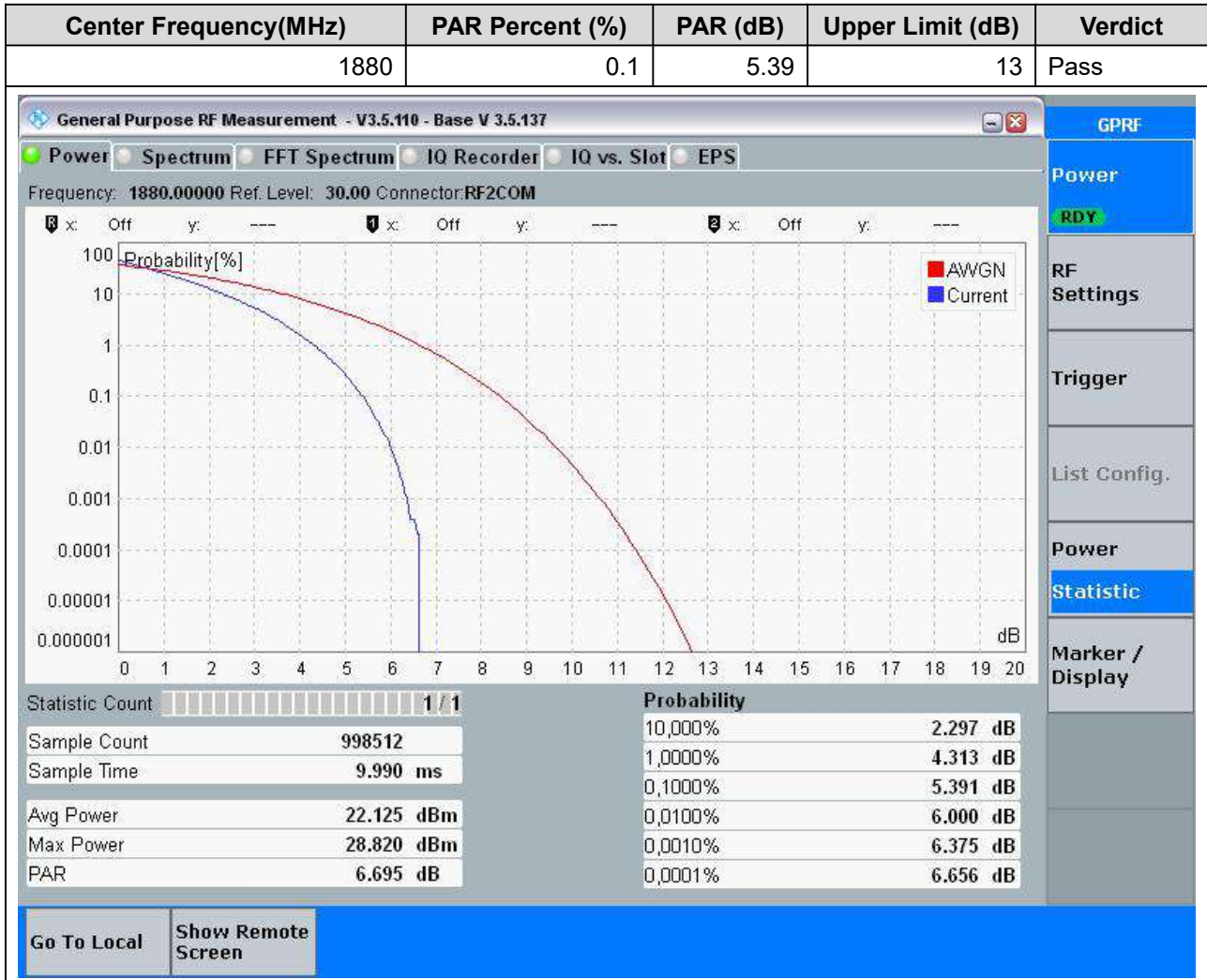
#### 4.4. LTE Peak to Average Ratio\_Part22-24-27(NTNV)(Subtest:4, Channel:18700, Bandwidth:20, Modulation:Q16, RB Number: 100, RB Position:LOW)



**4.5. LTE Peak to Average Ratio\_Part22-24-27(NTNV)(Subtest:5, Channel:18900, Bandwidth:20, Modulation:QPSK, RB Number: 1, RB Position:LOW)**

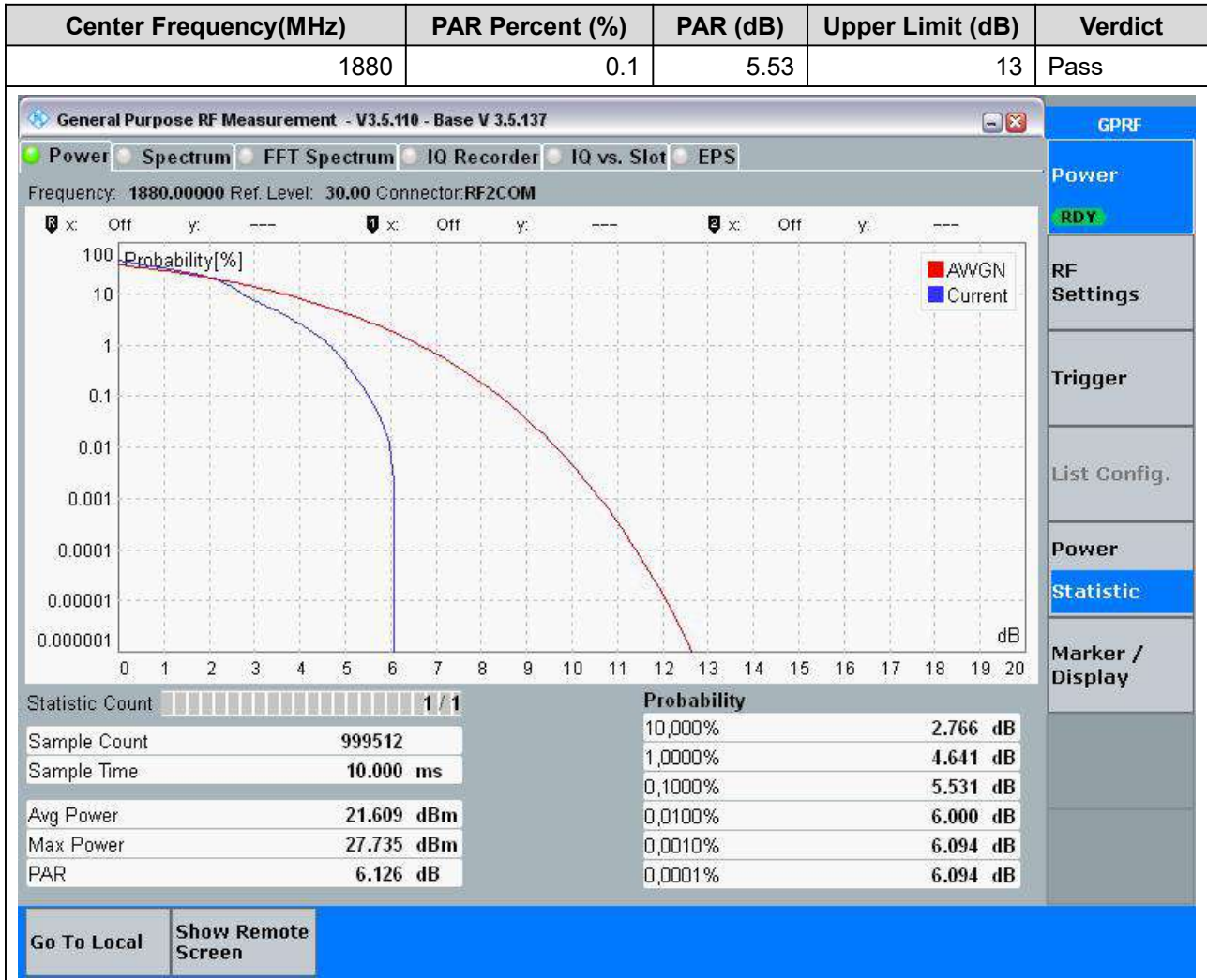


**4.6. LTE Peak to Average Ratio\_Part22-24-27(NTNV)(Subtest:6, Channel:18900, Bandwidth:20, Modulation:QPSK, RB Number: 100, RB Position:LOW)**

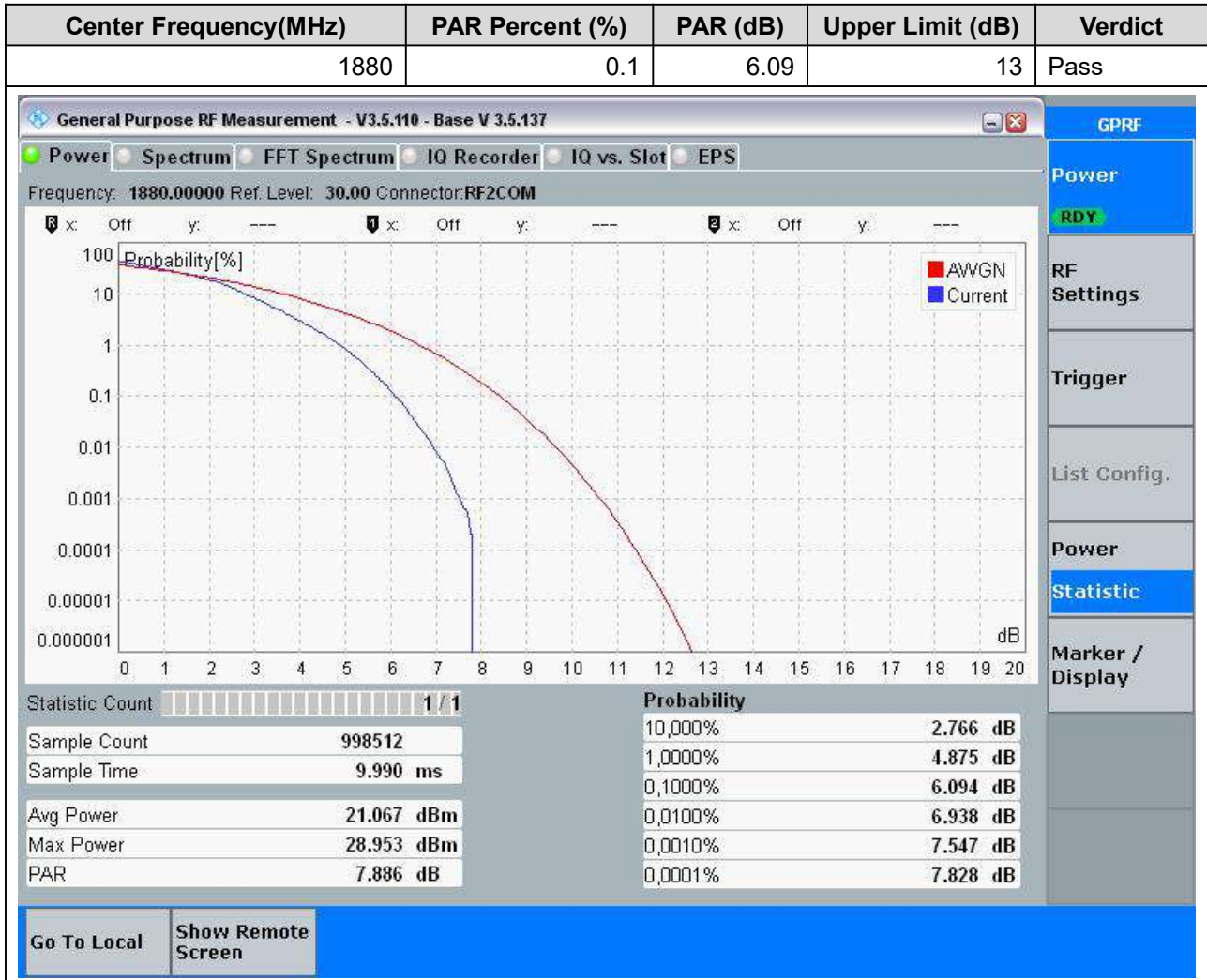




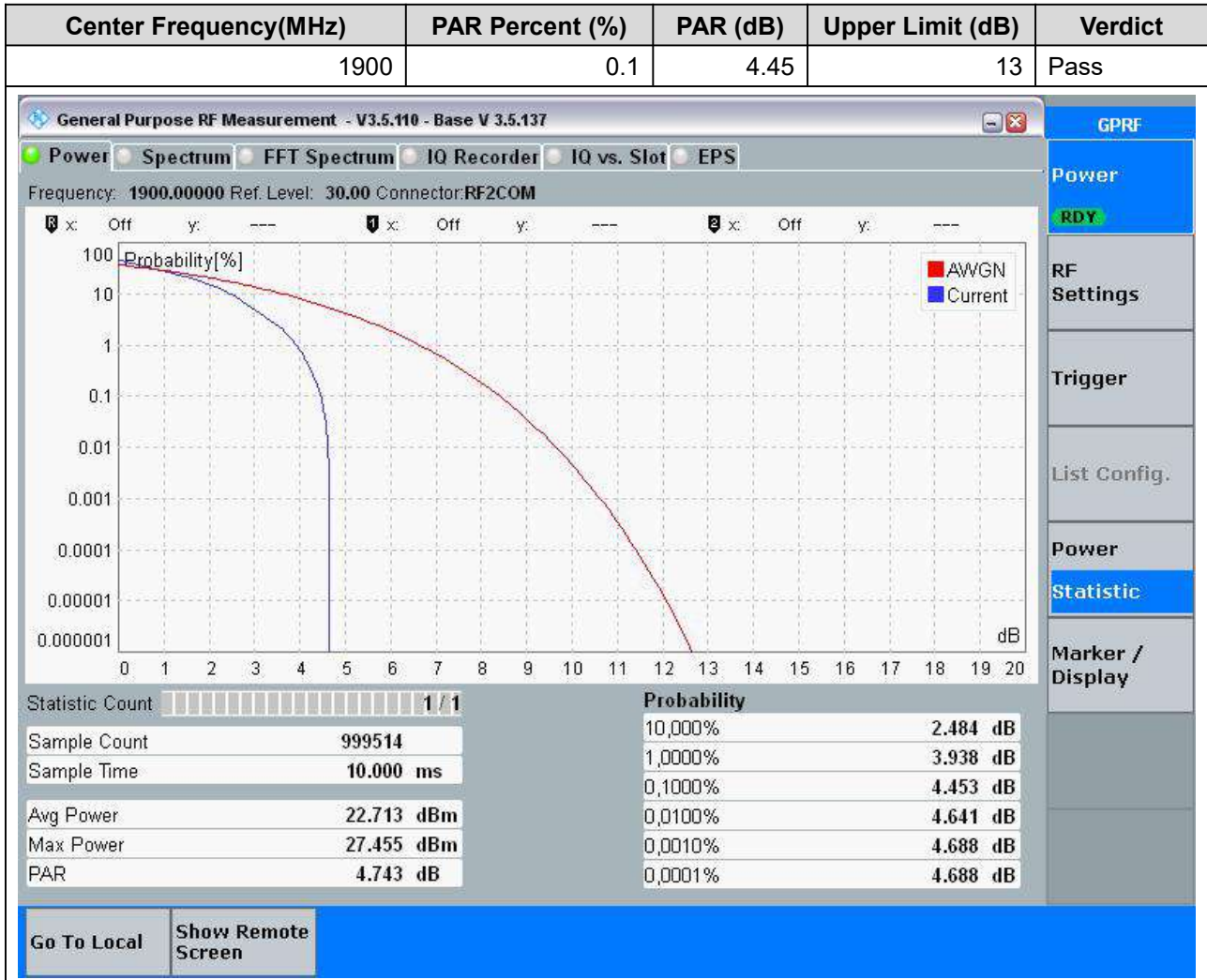
**4.7. LTE Peak to Average Ratio\_Part22-24-27(NTNV)(Subtest:7, Channel:18900, Bandwidth:20, Modulation:Q16, RB Number: 1, RB Position:LOW)**



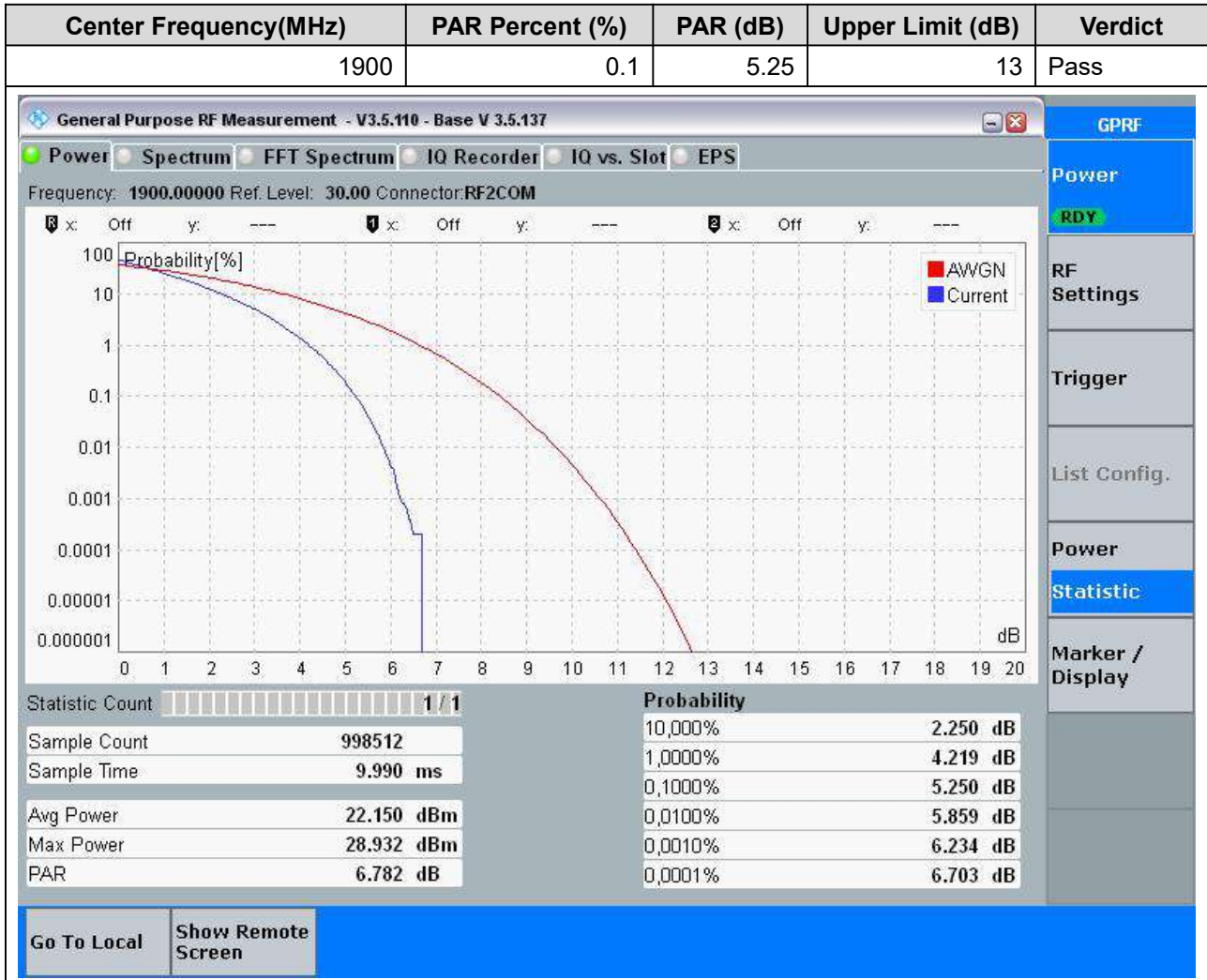
**4.8. LTE Peak to Average Ratio\_Part22-24-27(NTNV)(Subtest:8, Channel:18900, Bandwidth:20, Modulation:Q16, RB Number: 100, RB Position:LOW)**



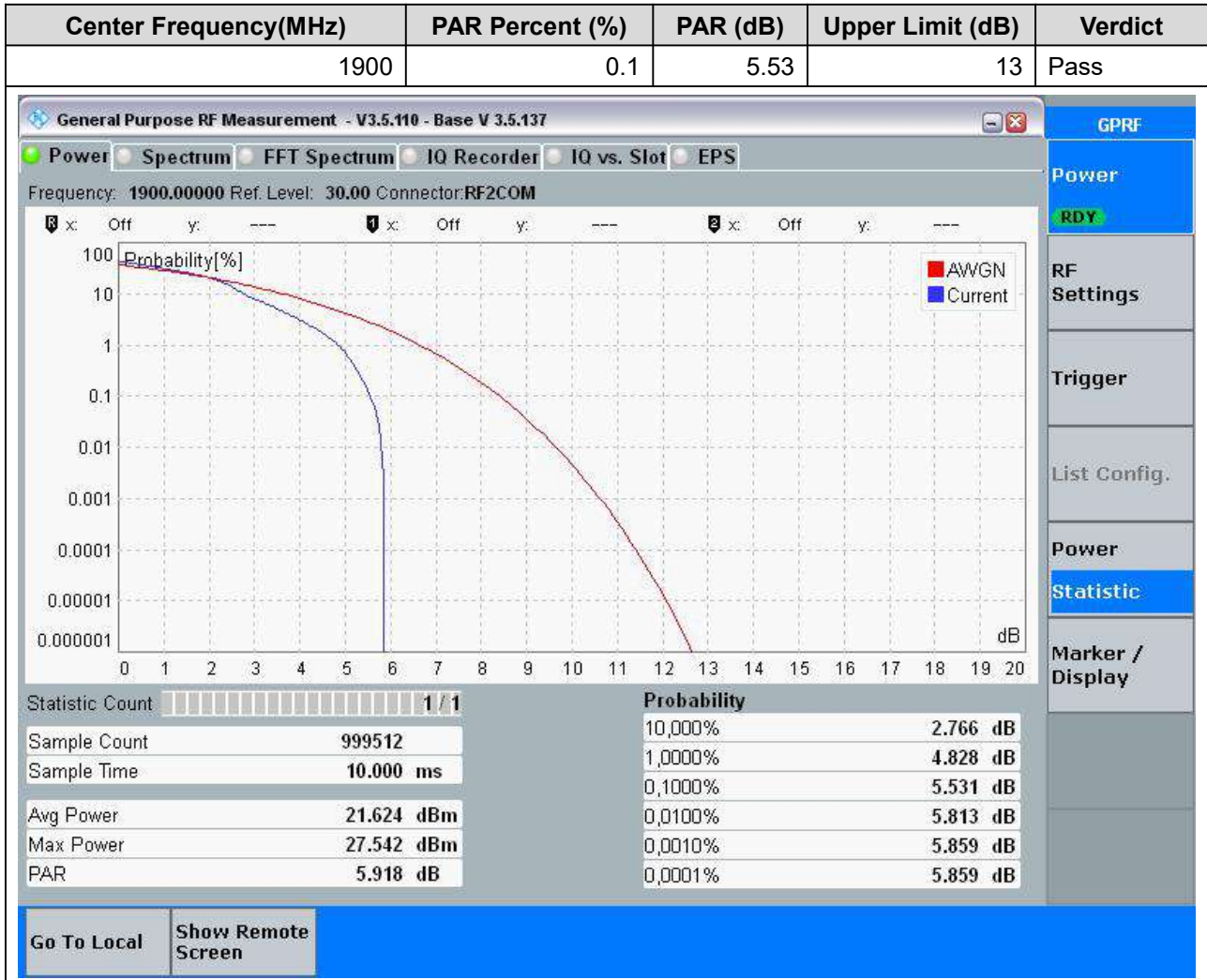
**4.9. LTE Peak to Average Ratio\_Part22-24-27(NTNV)(Subtest:9, Channel:19100, Bandwidth:20, Modulation:QPSK, RB Number: 1, RB Position:LOW)**



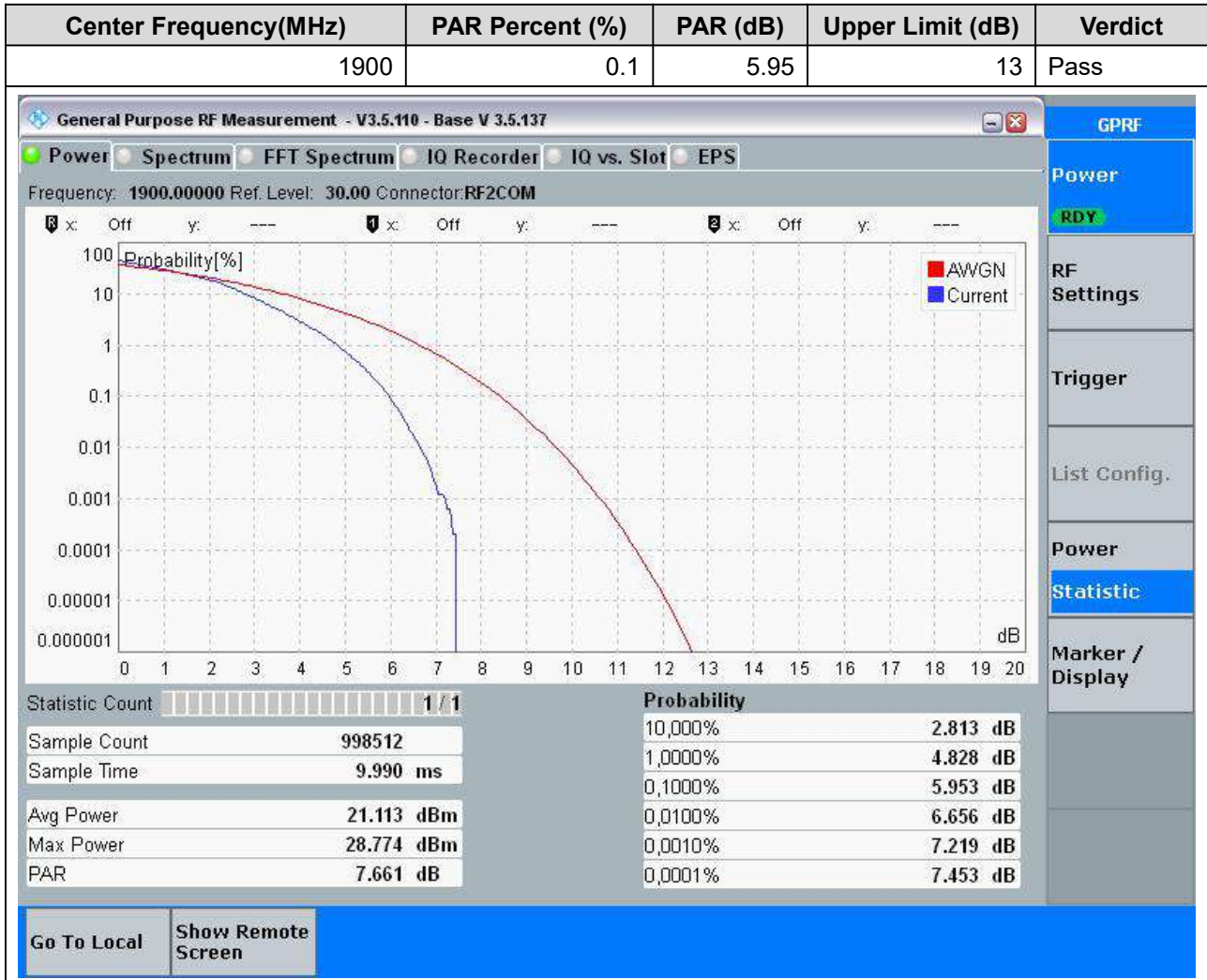
**4.10. LTE Peak to Average Ratio\_Part22-24-27(NTNV)(Subtest:10, Channel:19100, Bandwidth:20, Modulation:QPSK, RB Number: 100, RB Position:LOW)**



**4.11. LTE Peak to Average Ratio\_Part22-24-27(NTNV)(Subtest:11, Channel:19100, Bandwidth:20, Modulation:Q16, RB Number: 1, RB Position:LOW)**



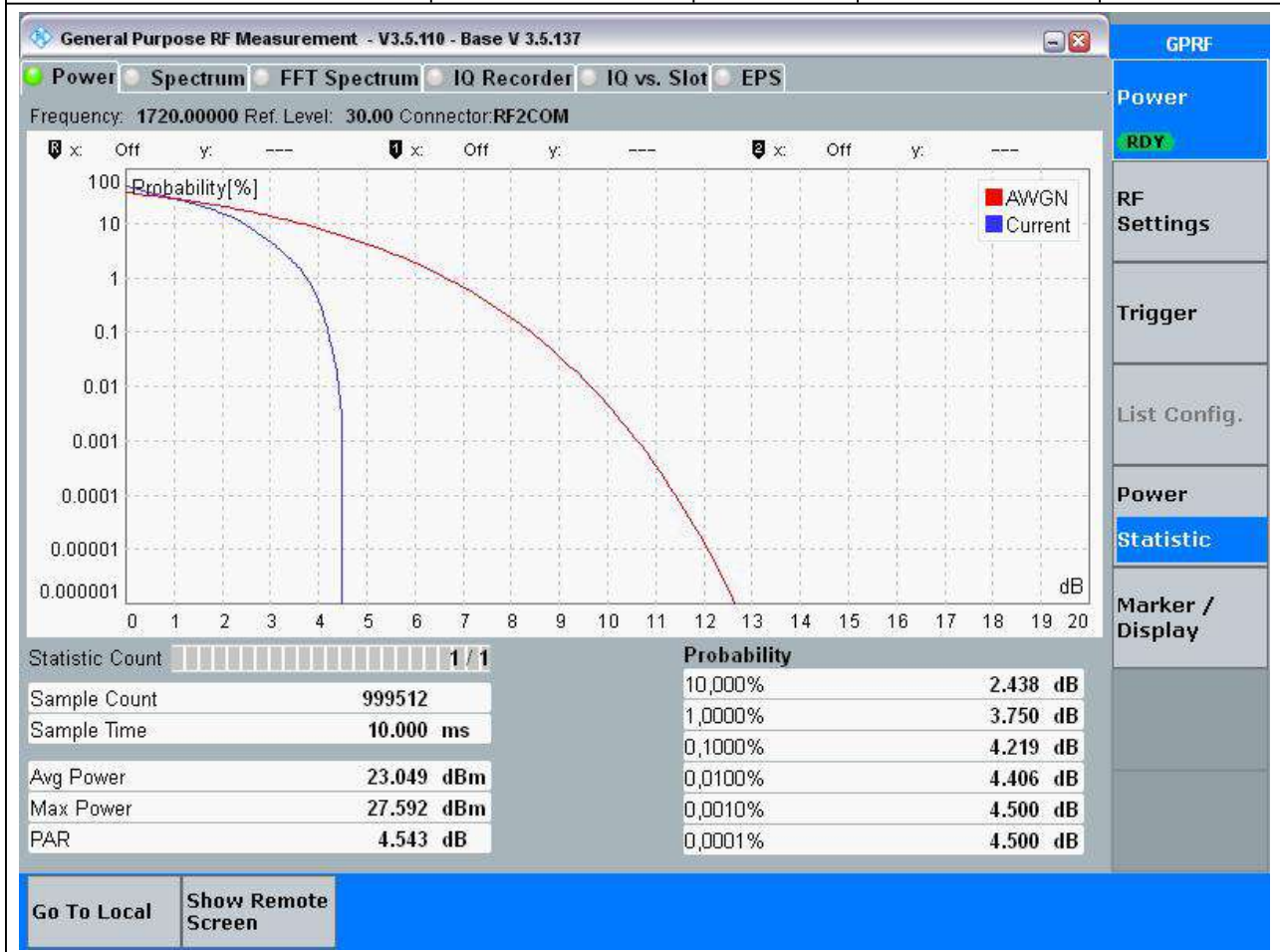
**4.12. LTE Peak to Average Ratio\_Part22-24-27(NTNV)(Subtest:12, Channel:19100, Bandwidth:20, Modulation:Q16, RB Number: 100, RB Position:LOW)**



## 5. LTE\_Band4

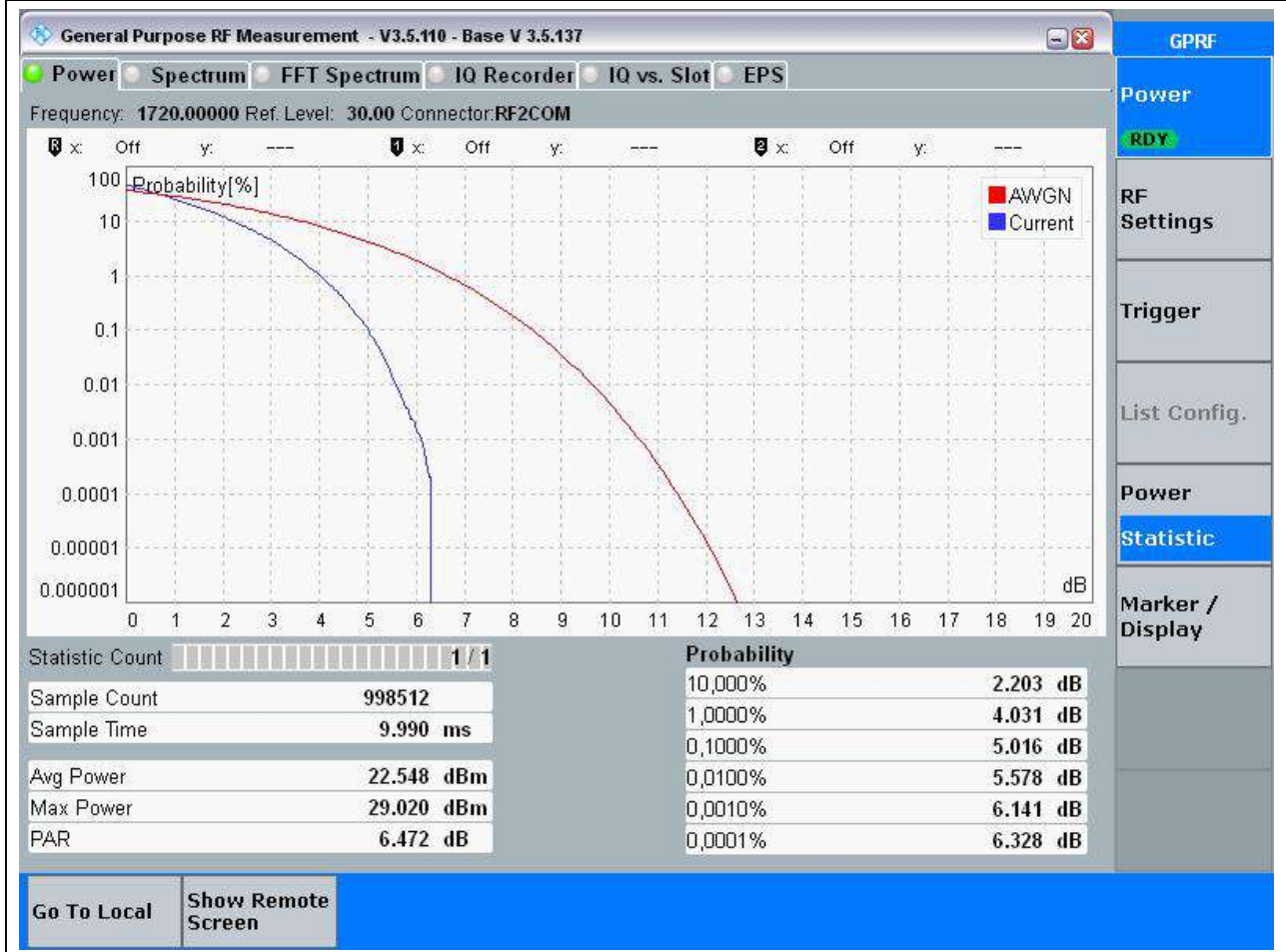
### 5.1. LTE Peak to Average Ratio\_Part22-24-27(NTNV)(Subtest:1, Channel:20050, Bandwidth:20, Modulation:QPSK, RB Number: 1, RB Position:LOW)

Center Frequency(MHz)	PAR Percent (%)	PAR (dB)	Upper Limit (dB)	Verdict
1720	0.1	4.22	13	Pass



**5.2. LTE Peak to Average Ratio\_Part22-24-27(NTNV)(Subtest:2, Channel:20050, Bandwidth:20, Modulation:QPSK, RB Number: 100, RB Position:LOW)**

Center Frequency(MHz)	PAR Percent (%)	PAR (dB)	Upper Limit (dB)	Verdict
1720	0.1	5.02	13	Pass





**5.3. LTE Peak to Average Ratio\_Part22-24-27(NTNV)(Subtest:3, Channel:20050, Bandwidth:20, Modulation:Q16, RB Number: 1, RB Position:LOW)**

Center Frequency(MHz)	PAR Percent (%)	PAR (dB)	Upper Limit (dB)	Verdict
1720	0.1	4.87	13	Pass

General Purpose RF Measurement - V3.5.110 - Base V 3.5.137

Power Spectrum FFT Spectrum IQ Recorder IQ vs. Slot EPS

Frequency: 1720.00000 Ref. Level: 30.00 Connector:RF2COM

GPRF

Power

RDY

RF Settings

Trigger

List Config.

Power

Statistic

Marker / Display

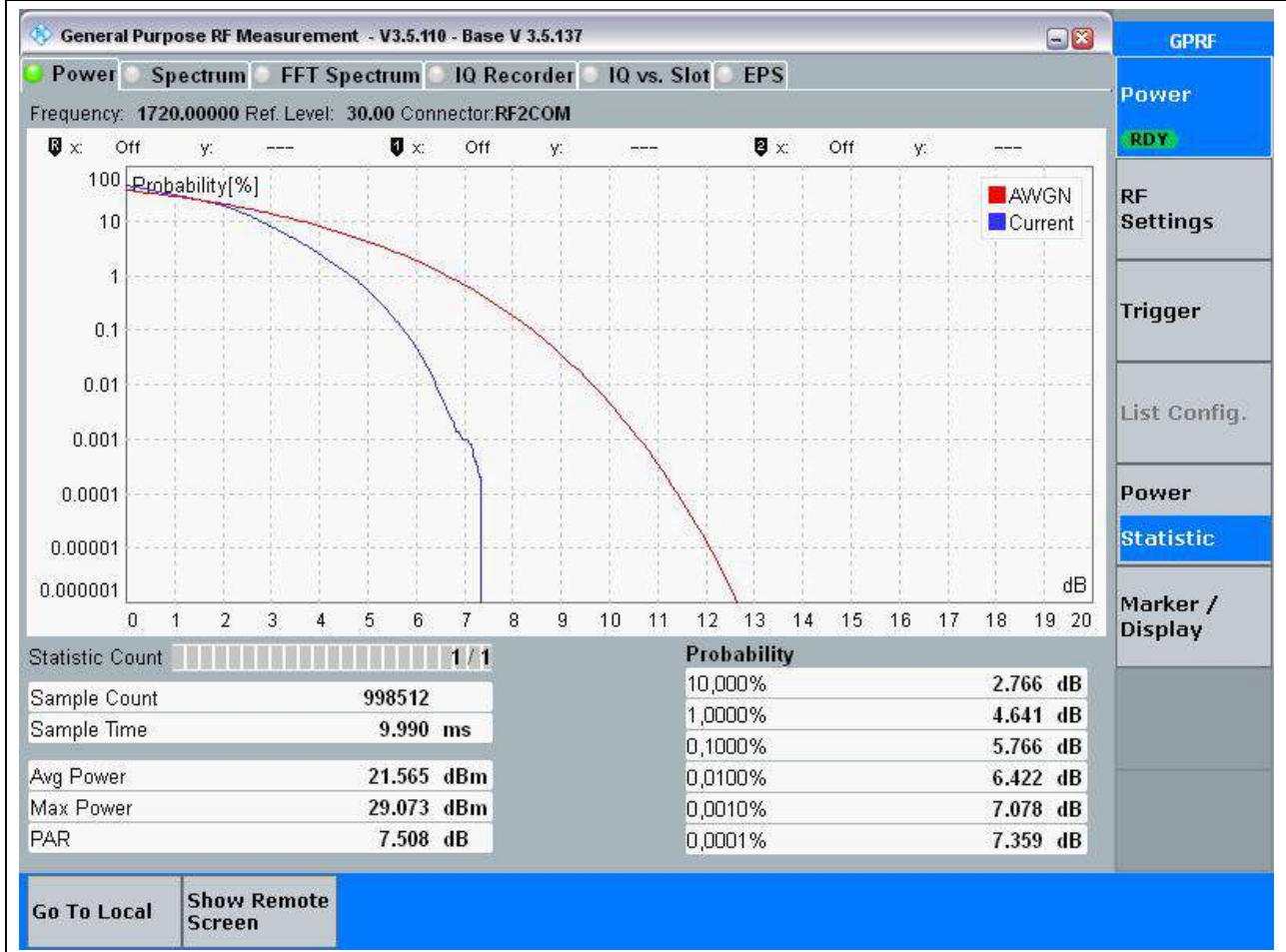
Statistic Count	
Sample Count	999512
Sample Time	10.000 ms
Avg Power	22.203 dBm
Max Power	27.358 dBm
PAR	5.154 dB

Probability	
10,000%	2.719 dB
1,0000%	4.313 dB
0,1000%	4.875 dB
0,0100%	5.016 dB
0,0010%	5.109 dB
0,0001%	5.109 dB

Go To Local
Show Remote Screen

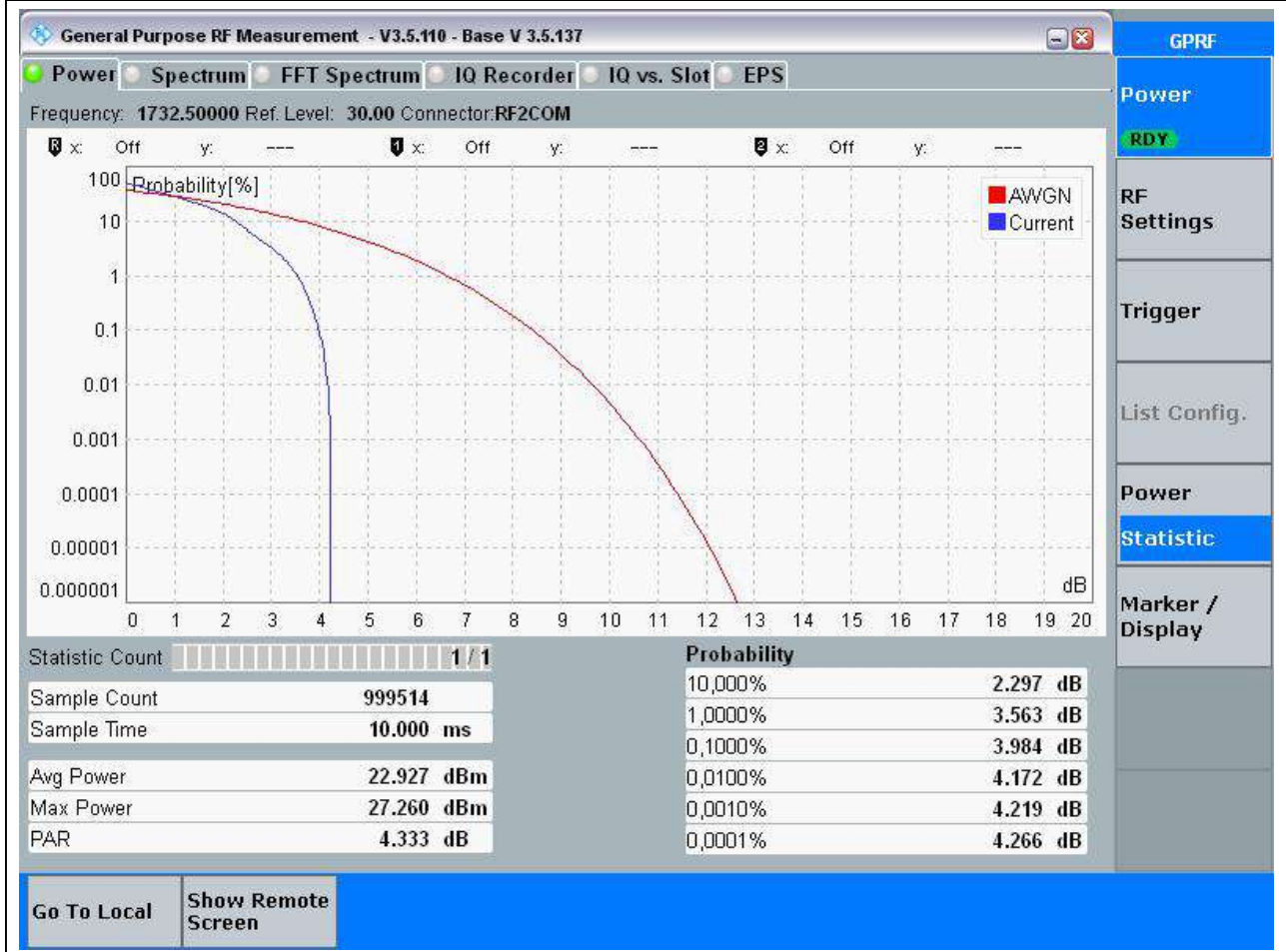
**5.4. LTE Peak to Average Ratio\_Part22-24-27(NTNV)(Subtest:4, Channel:20050, Bandwidth:20, Modulation:Q16, RB Number: 100, RB Position:LOW)**

Center Frequency(MHz)	PAR Percent (%)	PAR (dB)	Upper Limit (dB)	Verdict
1720	0.1	5.77	13	Pass



**5.5. LTE Peak to Average Ratio\_Part22-24-27(NTNV)(Subtest:5, Channel:20175, Bandwidth:20, Modulation:QPSK, RB Number: 1, RB Position:LOW)**

Center Frequency(MHz)	PAR Percent (%)	PAR (dB)	Upper Limit (dB)	Verdict
1732.5	0.1	3.98	13	Pass



**5.6. LTE Peak to Average Ratio\_Part22-24-27(NTNV)(Subtest:6, Channel:20175, Bandwidth:20, Modulation:QPSK, RB Number: 100, RB Position:LOW)**

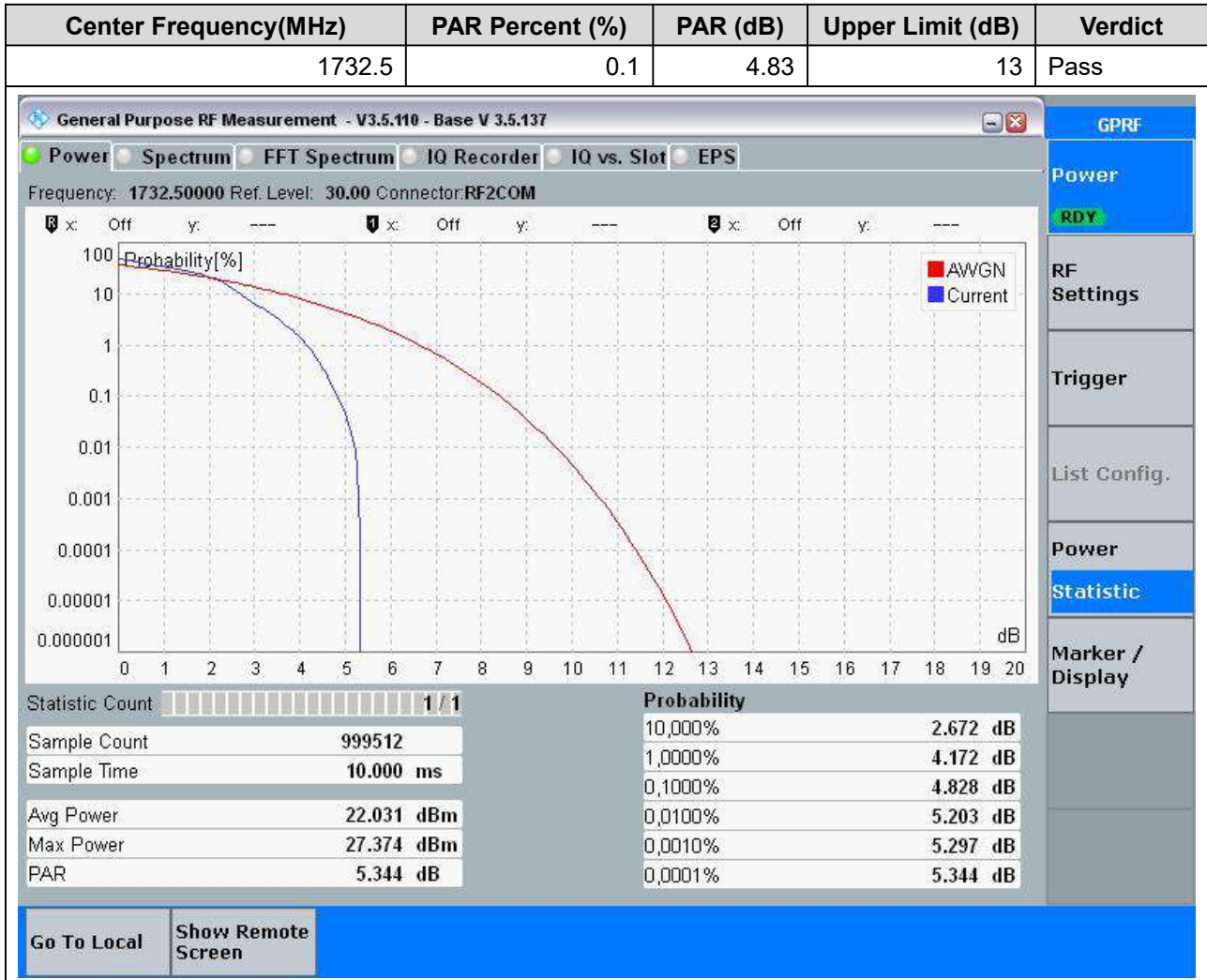
Center Frequency(MHz)	PAR Percent (%)	PAR (dB)	Upper Limit (dB)	Verdict
1732.5	0.1	5.06	13	Pass

The screenshot displays the 'General Purpose RF Measurement' interface. The main plot is a Cumulative Distribution Function (CDF) graph with 'Probability[%]' on the y-axis (log scale from 0.000001 to 100) and 'dB' on the x-axis (linear scale from 0 to 20). Two curves are shown: a red line for 'AWGN' and a blue line for 'Current'. The 'Current' curve shows a steeper decline, indicating a higher PAR. Below the plot, a statistics table provides the following data:

Statistic	Value	Probability	Value
Sample Count	998512	10,000%	2.250 dB
Sample Time	9.990 ms	1,0000%	4.078 dB
Avg Power	22.576 dBm	0,1000%	5.063 dB
Max Power	28.902 dBm	0,0100%	5.625 dB
PAR	6.326 dB	0,0010%	6.000 dB
		0,0001%	6.188 dB

Additional interface elements include a top menu bar with 'Power', 'Spectrum', 'FFT Spectrum', 'IQ Recorder', 'IQ vs. Slot', and 'EPS'. A right-hand sidebar contains buttons for 'GPRF', 'Power RDY', 'RF Settings', 'Trigger', 'List Config.', 'Power Statistic', and 'Marker / Display'. At the bottom, there are 'Go To Local' and 'Show Remote Screen' buttons.

**5.7. LTE Peak to Average Ratio\_Part22-24-27(NTNV)(Subtest:7, Channel:20175, Bandwidth:20, Modulation:Q16, RB Number: 1, RB Position:LOW)**



**5.8. LTE Peak to Average Ratio\_Part22-24-27(NTNV)(Subtest:8, Channel:20175, Bandwidth:20, Modulation:Q16, RB Number: 100, RB Position:LOW)**

Center Frequency(MHz)	PAR Percent (%)	PAR (dB)	Upper Limit (dB)	Verdict
1732.5	0.1	5.86	13	Pass

**General Purpose RF Measurement - V3.5.110 - Base V 3.5.137**

Power Spectrum FFT Spectrum IQ Recorder IQ vs. Slot EPS

Frequency: 1732.50000 Ref. Level: 30.00 Connector:RF2COM

Statistic Count		Probability	
Sample Count	998512	10,000%	2.813 dB
Sample Time	9.990 ms	1,0000%	4.734 dB
Avg Power	21.552 dBm	0,1000%	5.859 dB
Max Power	29.078 dBm	0,0100%	6.609 dB
PAR	7.525 dB	0,0010%	7.125 dB
		0,0001%	7.453 dB

GPRF

Power

RDY

RF Settings

Trigger

List Config.

Power

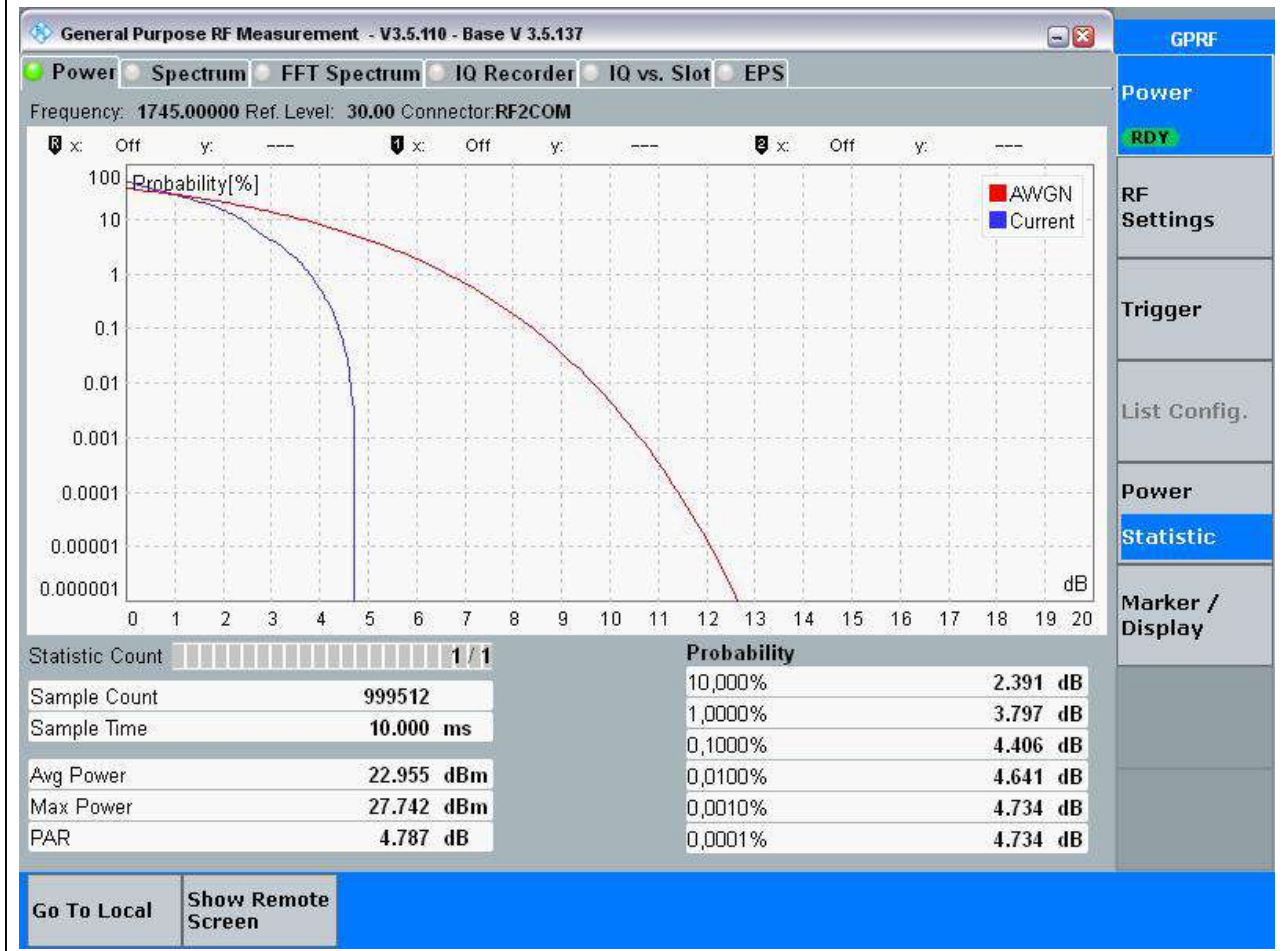
Statistic

Marker / Display

Go To Local
Show Remote Screen

**5.9. LTE Peak to Average Ratio\_Part22-24-27(NTNV)(Subtest:9, Channel:20300, Bandwidth:20, Modulation:QPSK, RB Number: 1, RB Position:LOW)**

Center Frequency(MHz)	PAR Percent (%)	PAR (dB)	Upper Limit (dB)	Verdict
1745	0.1	4.41	13	Pass



**5.10. LTE Peak to Average Ratio\_Part22-24-27(NTNV)(Subtest:10, Channel:20300, Bandwidth:20, Modulation:QPSK, RB Number: 100, RB Position:LOW)**

Center Frequency(MHz)	PAR Percent (%)	PAR (dB)	Upper Limit (dB)	Verdict
1745	0.1	5.02	13	Pass

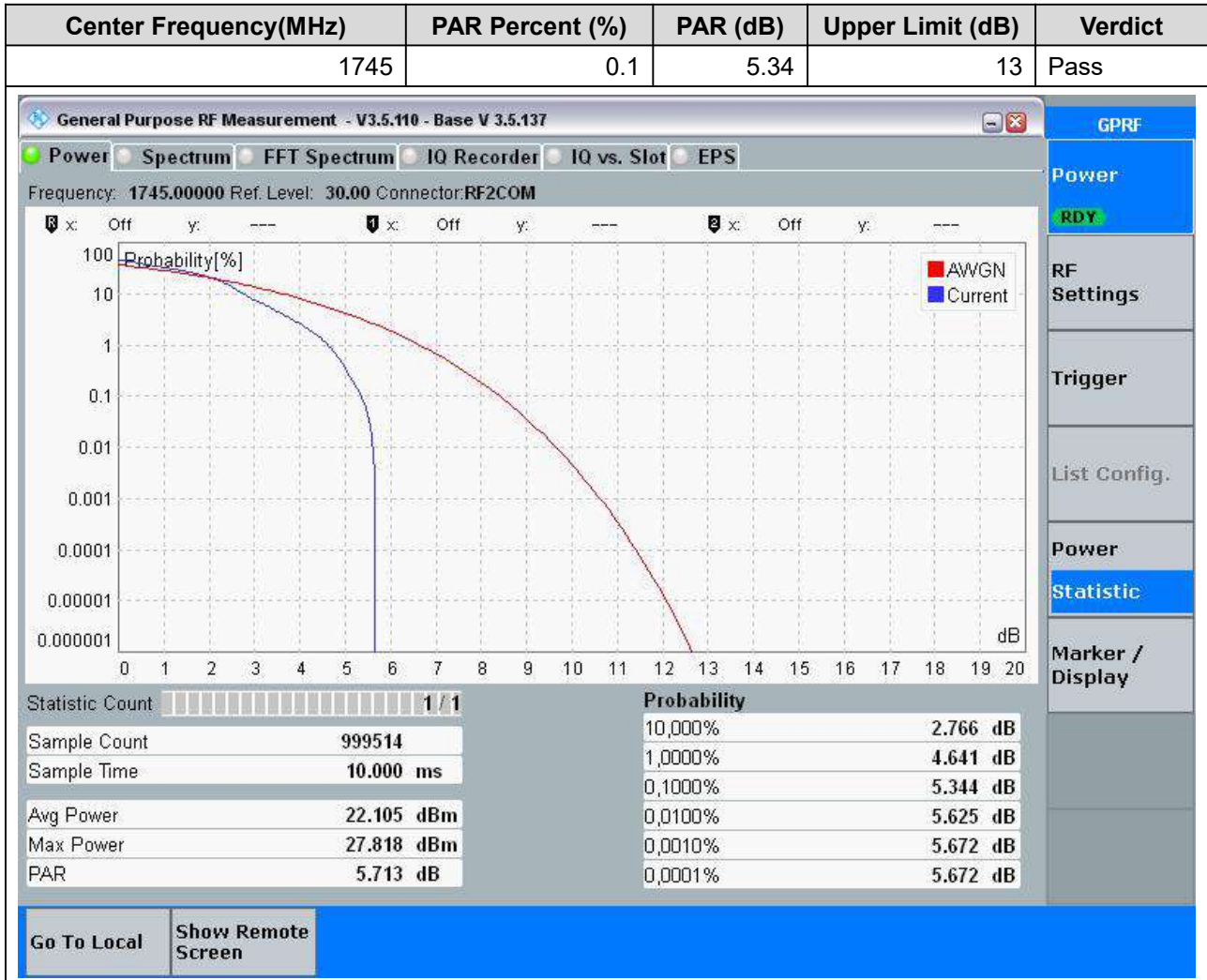
The screenshot displays the 'General Purpose RF Measurement' software interface. The main window shows a PDF plot with 'Probability[%]' on the y-axis (log scale from 0.000001 to 100) and 'dB' on the x-axis (linear scale from 0 to 20). Two curves are shown: a red line for 'AWGN' and a blue line for 'Current'. The 'Current' curve shows a sharp drop-off around 6.7 dB, while the 'AWGN' curve is much broader. Below the plot is a statistics table.

Statistic Count		Probability	
Sample Count	998512	10,000%	2.203 dB
Sample Time	9.990 ms	1,0000%	4.031 dB
Avg Power	22.510 dBm	0,1000%	5.016 dB
Max Power	29.207 dBm	0,0100%	5.625 dB
PAR	6.697 dB	0,0010%	6.047 dB
		0,0001%	6.609 dB

At the bottom of the interface, there are buttons for 'Go To Local' and 'Show Remote Screen'.

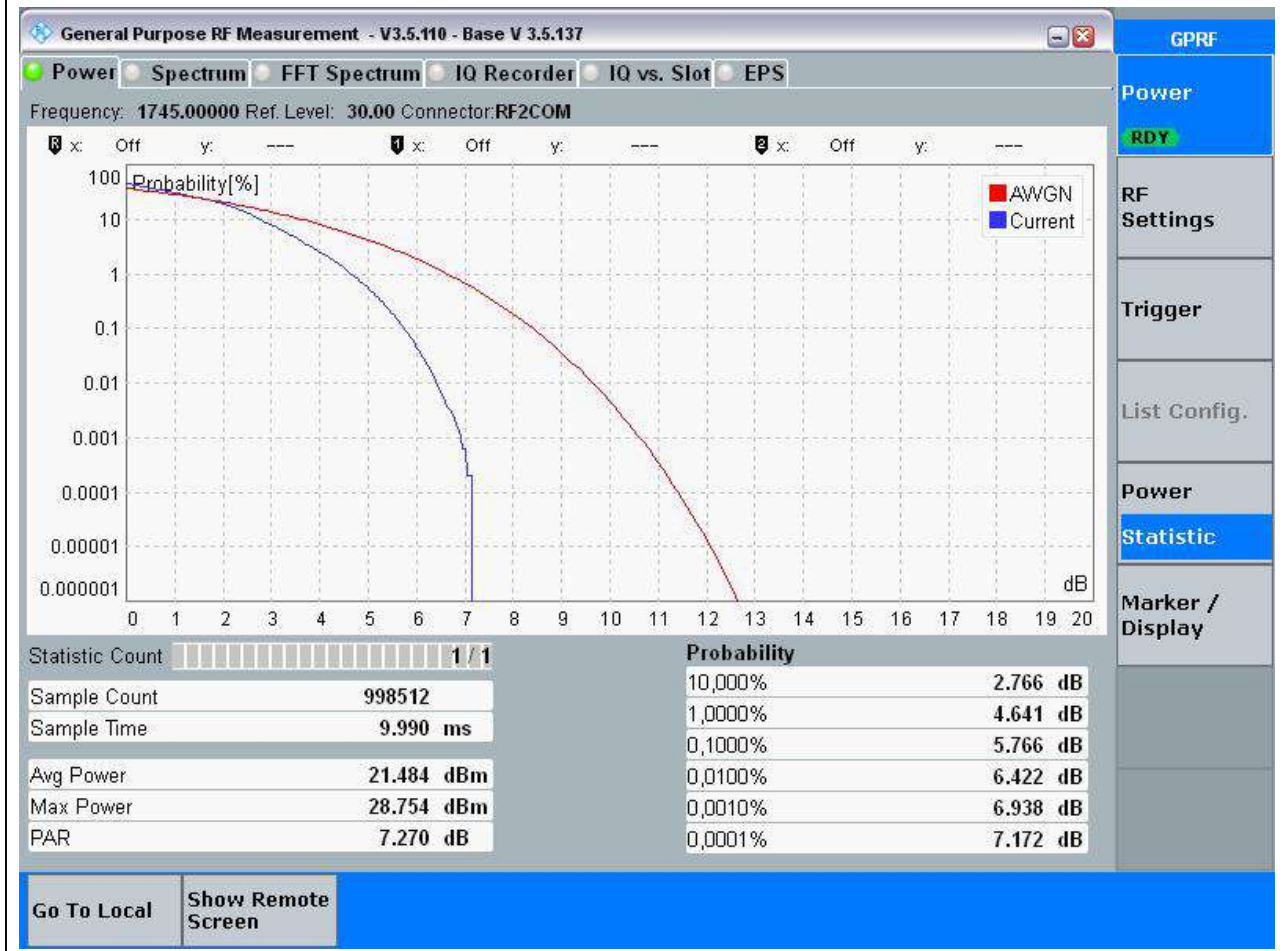


**5.11. LTE Peak to Average Ratio\_Part22-24-27(NTNV)(Subtest:11, Channel:20300, Bandwidth:20, Modulation:Q16, RB Number: 1, RB Position:LOW)**



**5.12. LTE Peak to Average Ratio\_Part22-24-27(NTNV)(Subtest:12, Channel:20300, Bandwidth:20, Modulation:Q16, RB Number: 100, RB Position:LOW)**

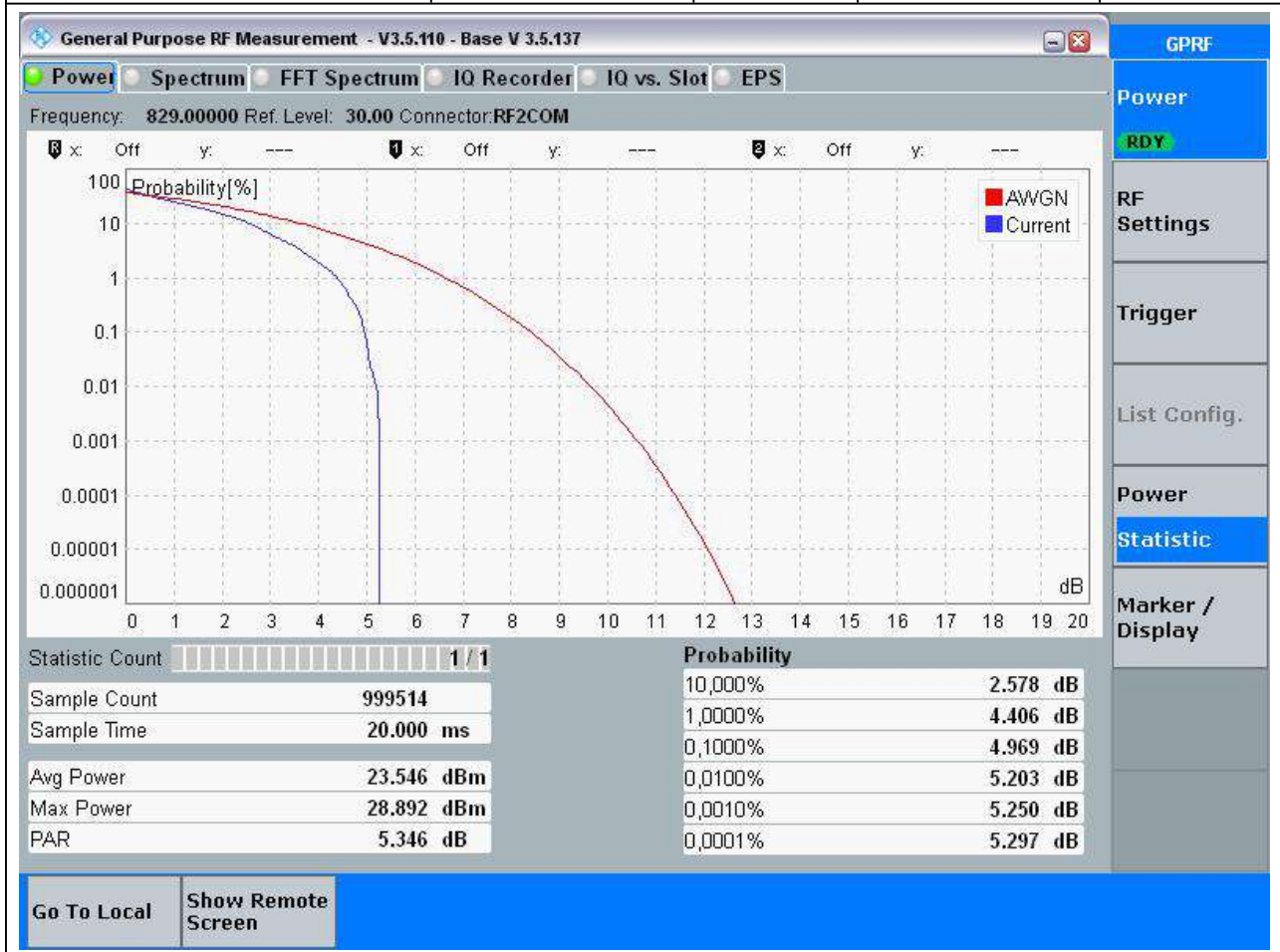
Center Frequency(MHz)	PAR Percent (%)	PAR (dB)	Upper Limit (dB)	Verdict
1745	0.1	5.77	13	Pass



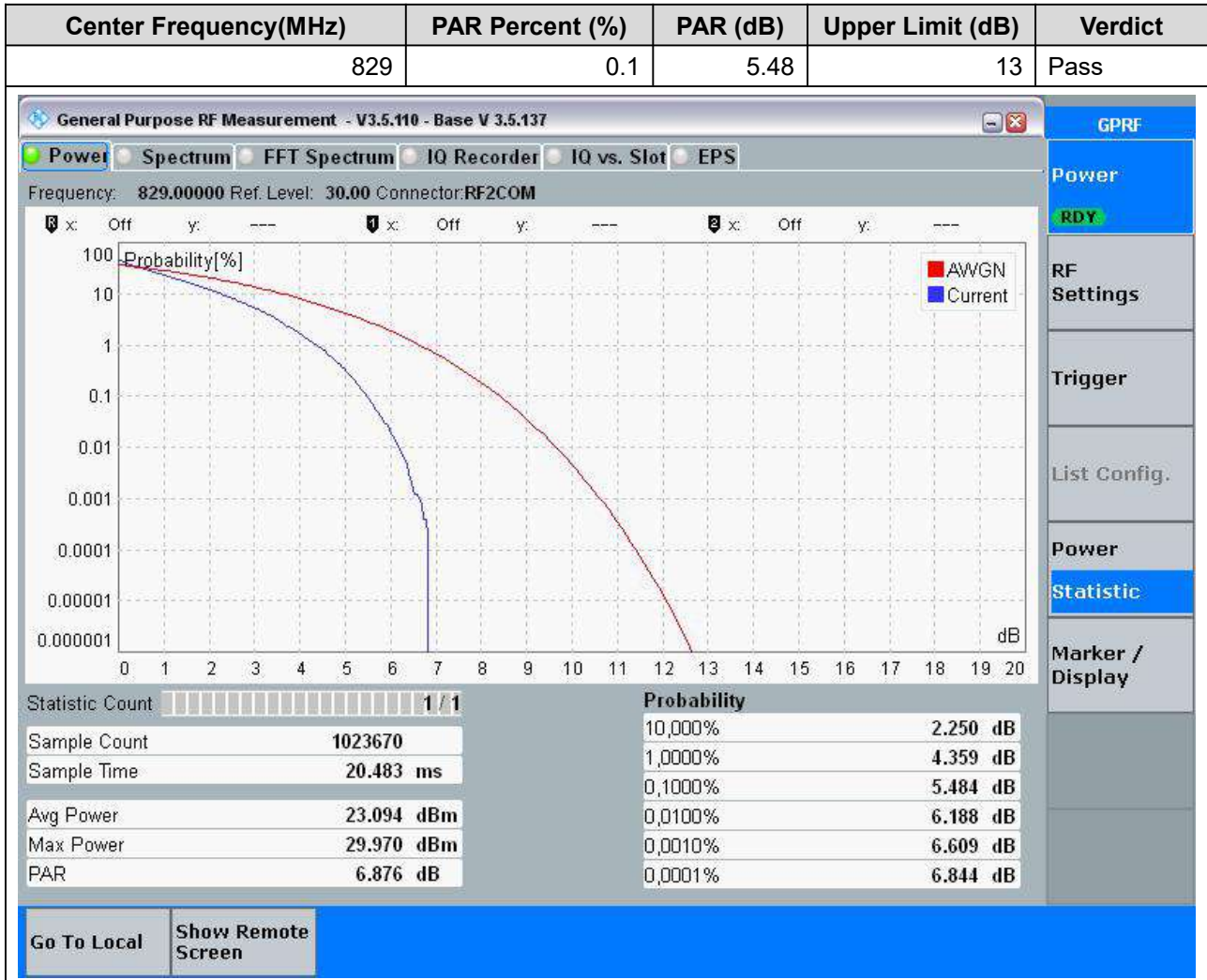
## 6. LTE\_Band5

### 6.1. LTE Peak to Average Ratio\_Part22-24-27(NTNV)(Subtest:1, Channel:20450, Bandwidth:10, Modulation:QPSK, RB Number: 1, RB Position:LOW)

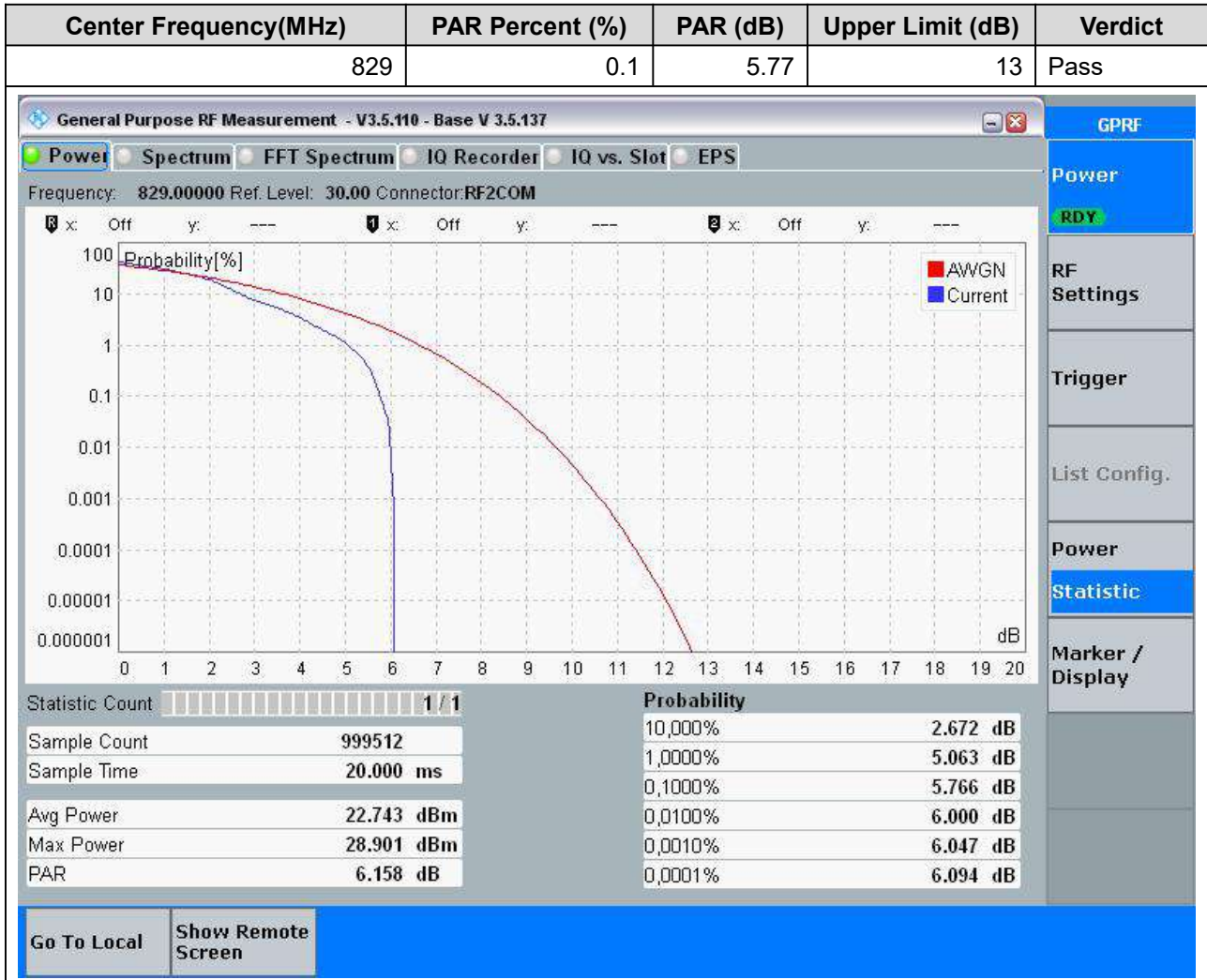
Center Frequency(MHz)	PAR Percent (%)	PAR (dB)	Upper Limit (dB)	Verdict
829	0.1	4.97	13	Pass



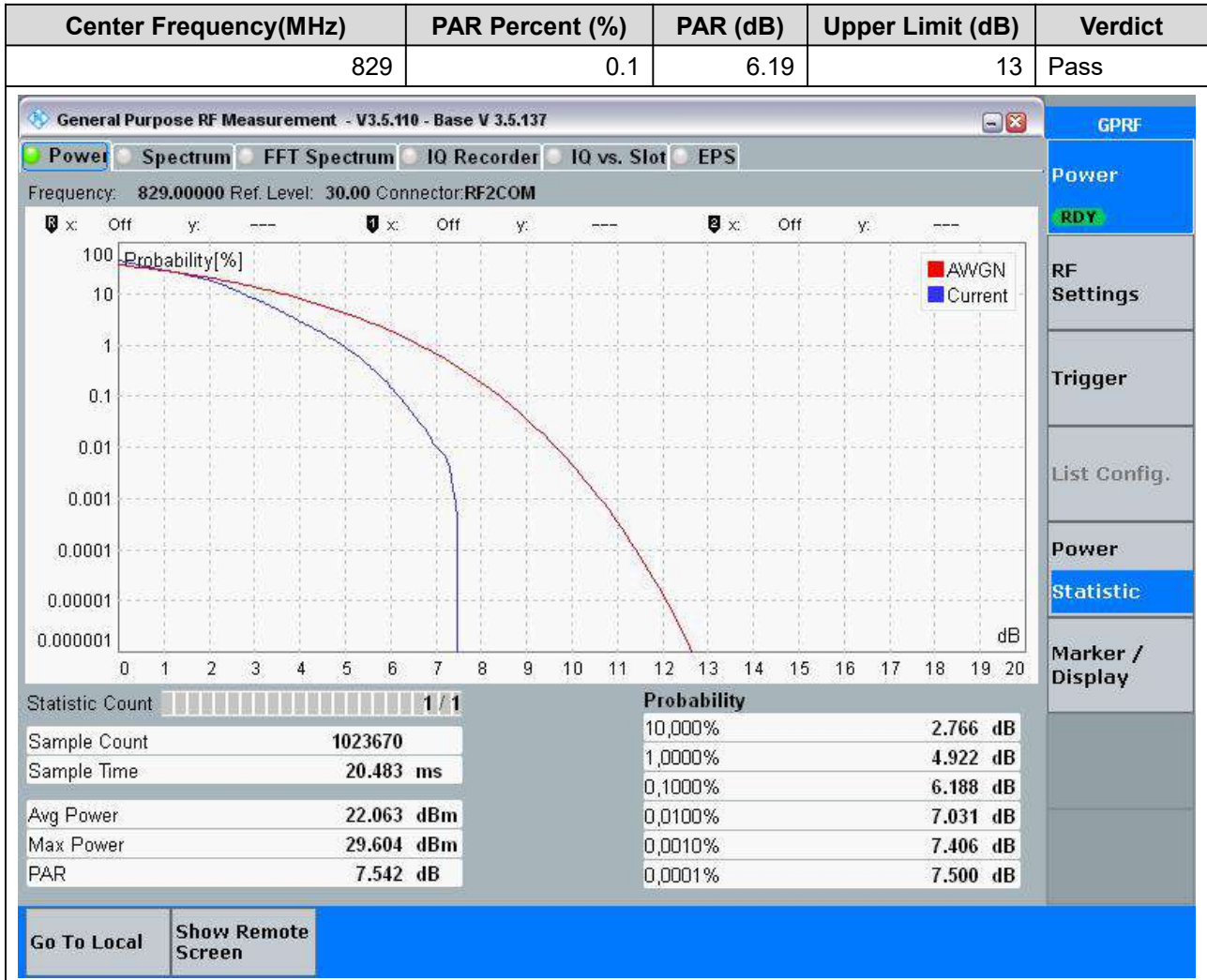
**6.2. LTE Peak to Average Ratio\_Part22-24-27(NTNV)(Subtest:2, Channel:20450, Bandwidth:10, Modulation:QPSK, RB Number: 50, RB Position:LOW)**



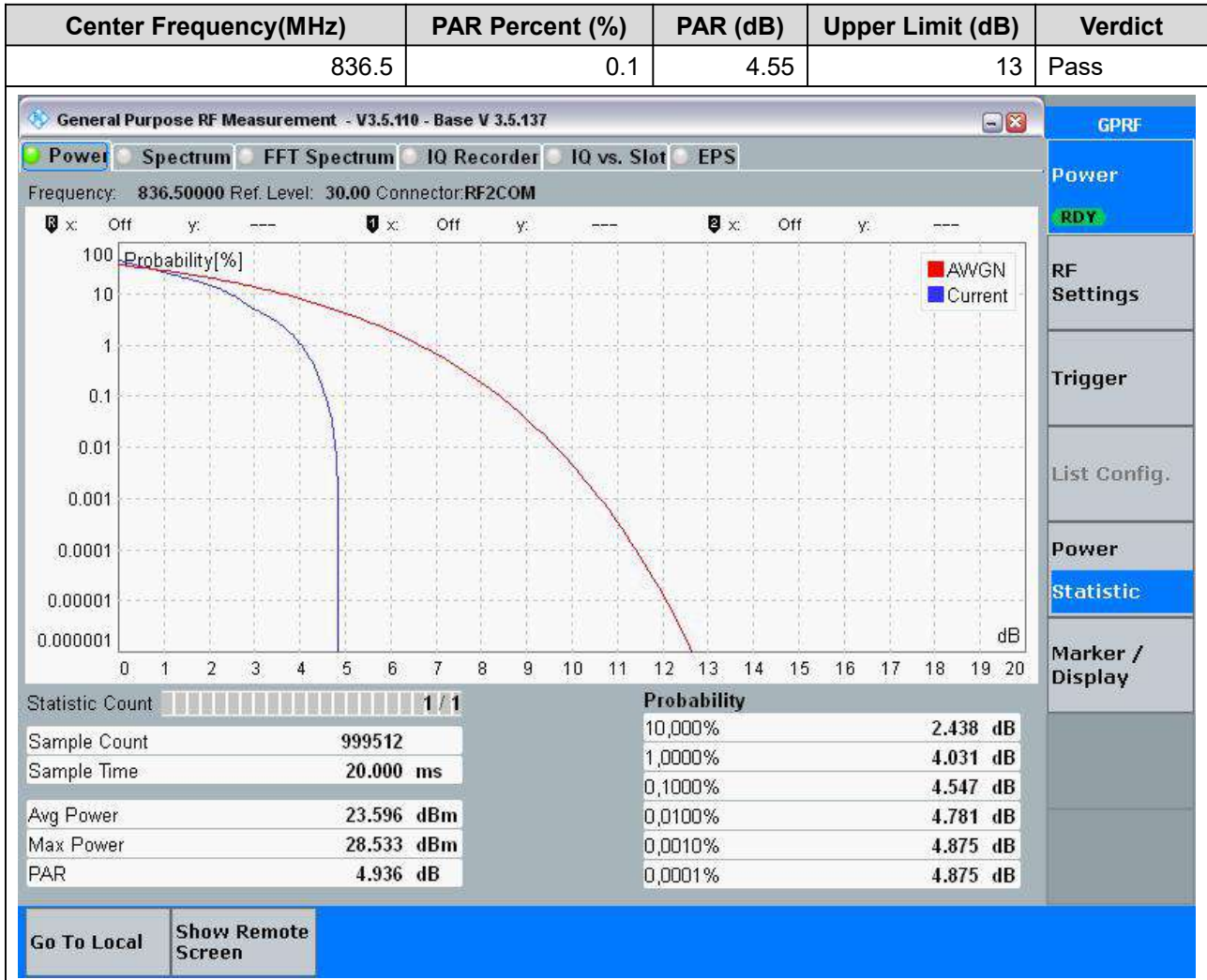
**6.3. LTE Peak to Average Ratio\_Part22-24-27(NTNV)(Subtest:3, Channel:20450, Bandwidth:10, Modulation:Q16, RB Number: 1, RB Position:LOW)**



**6.4. LTE Peak to Average Ratio\_Part22-24-27(NTNV)(Subtest:4, Channel:20450, Bandwidth:10, Modulation:Q16, RB Number: 50, RB Position:LOW)**

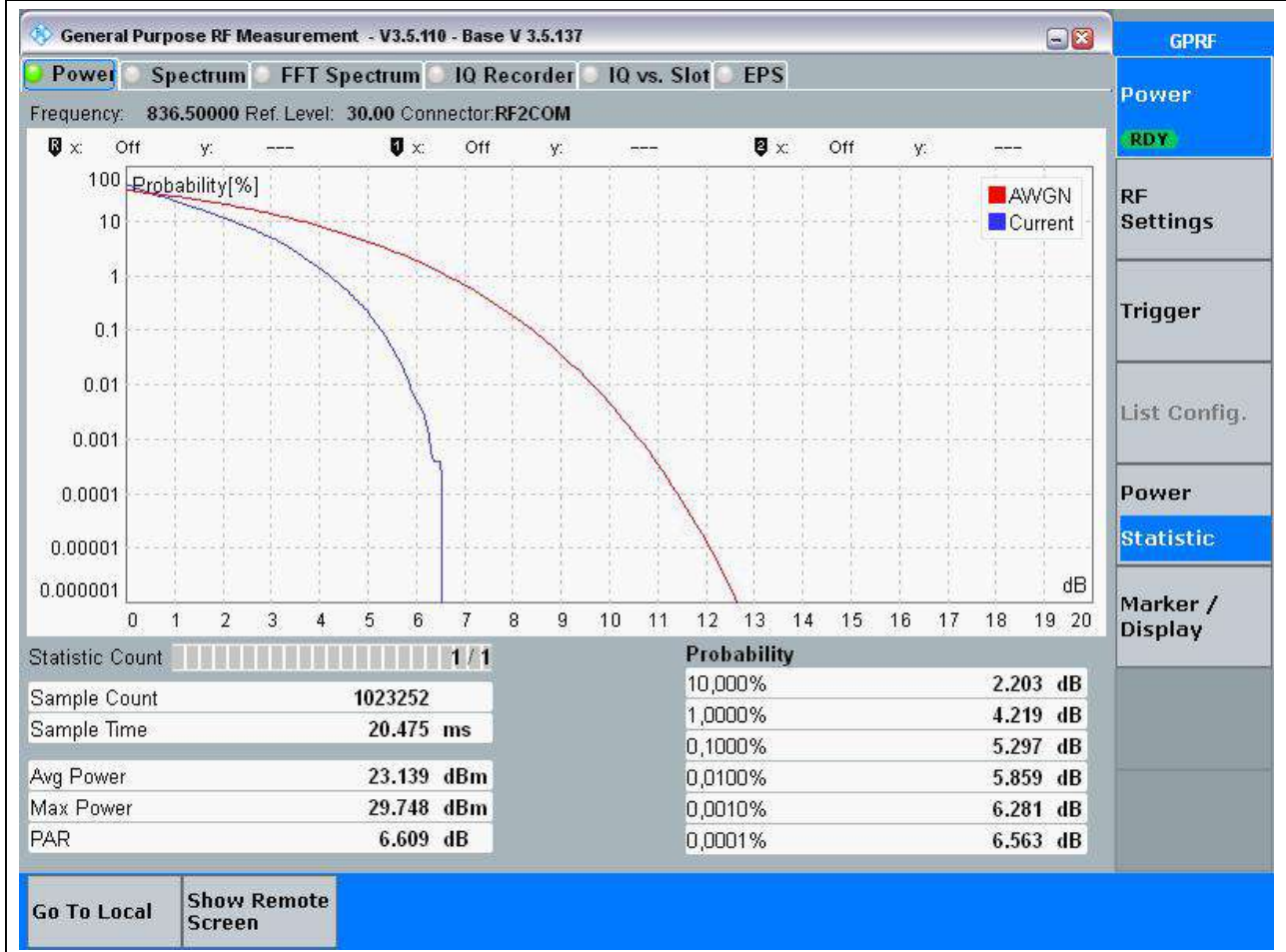


**6.5. LTE Peak to Average Ratio\_Part22-24-27(NTNV)(Subtest:5, Channel:20525, Bandwidth:10, Modulation:QPSK, RB Number: 1, RB Position:LOW)**



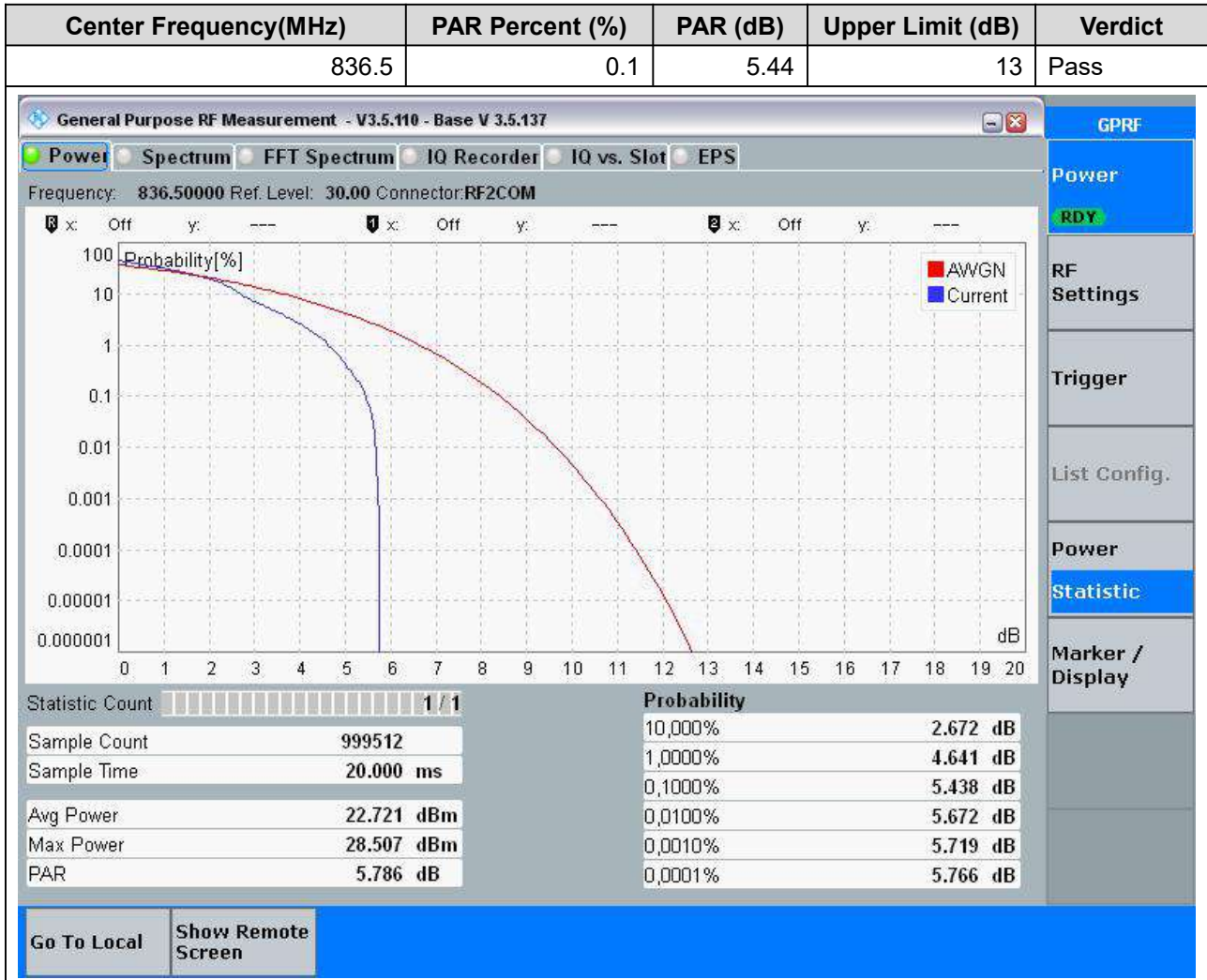
**6.6. LTE Peak to Average Ratio\_Part22-24-27(NTNV)(Subtest:6, Channel:20525, Bandwidth:10, Modulation:QPSK, RB Number: 50, RB Position:LOW)**

Center Frequency(MHz)	PAR Percent (%)	PAR (dB)	Upper Limit (dB)	Verdict
836.5	0.1	5.3	13	Pass

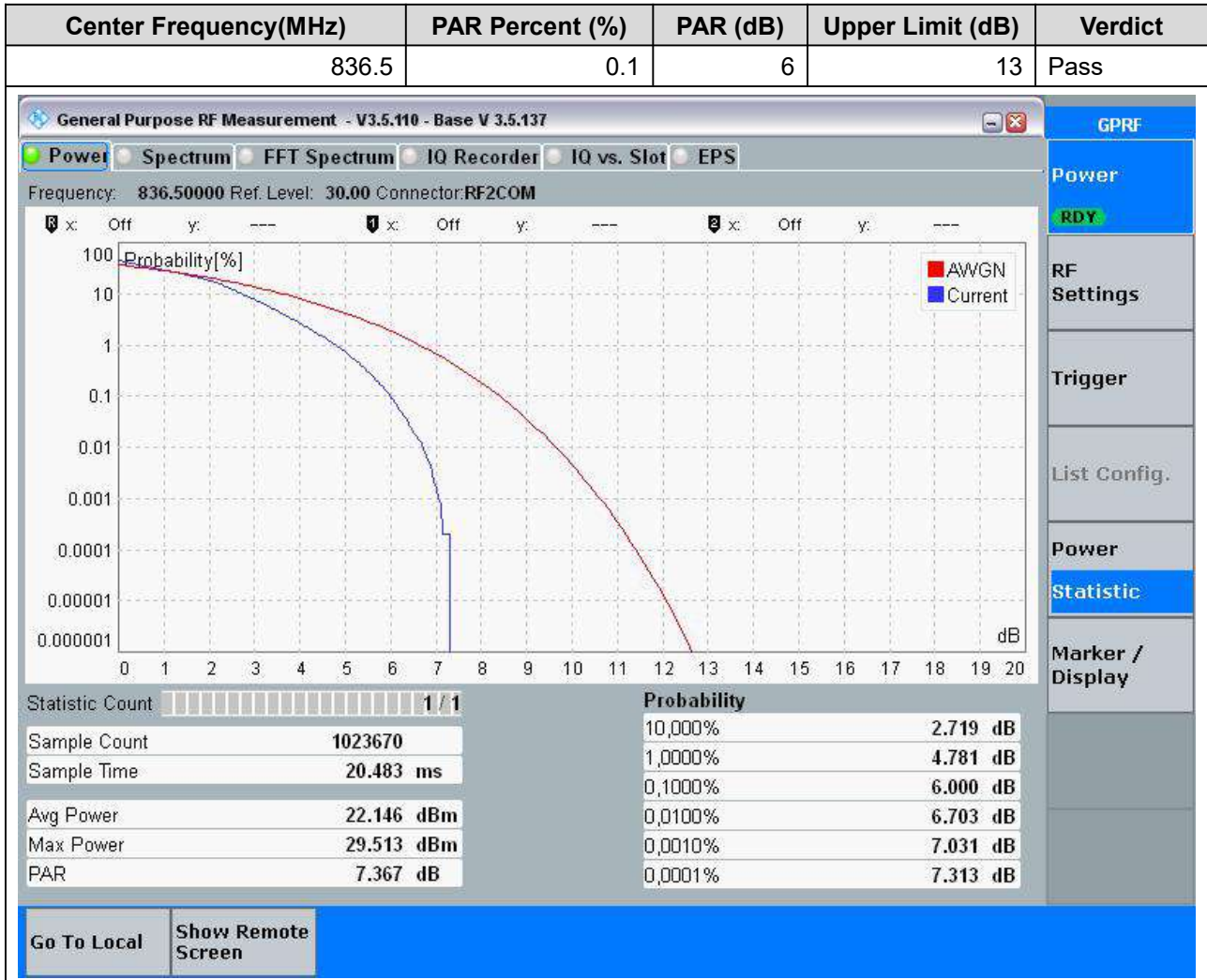




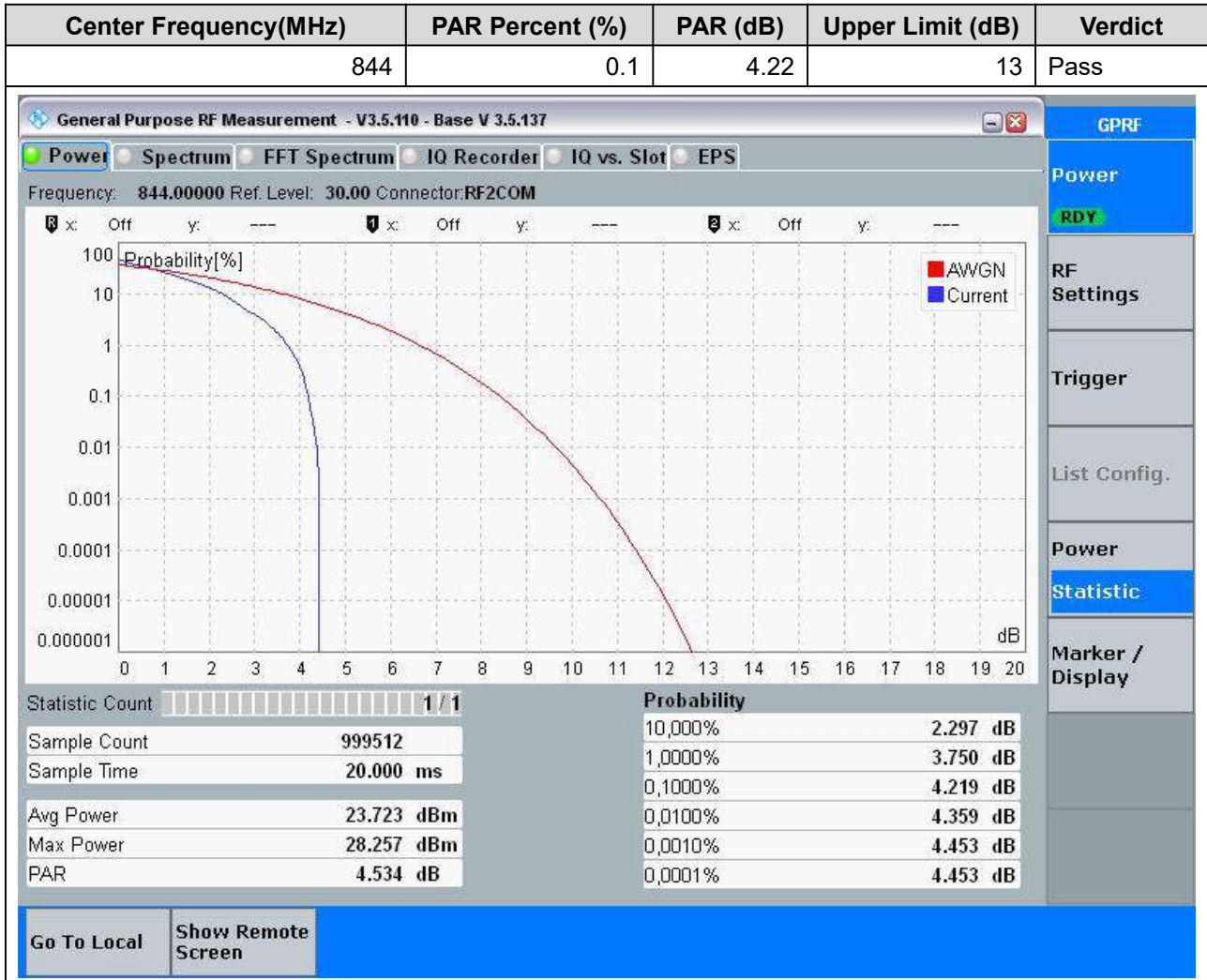
**6.7. LTE Peak to Average Ratio\_Part22-24-27(NTNV)(Subtest:7, Channel:20525, Bandwidth:10, Modulation:Q16, RB Number: 1, RB Position:LOW)**



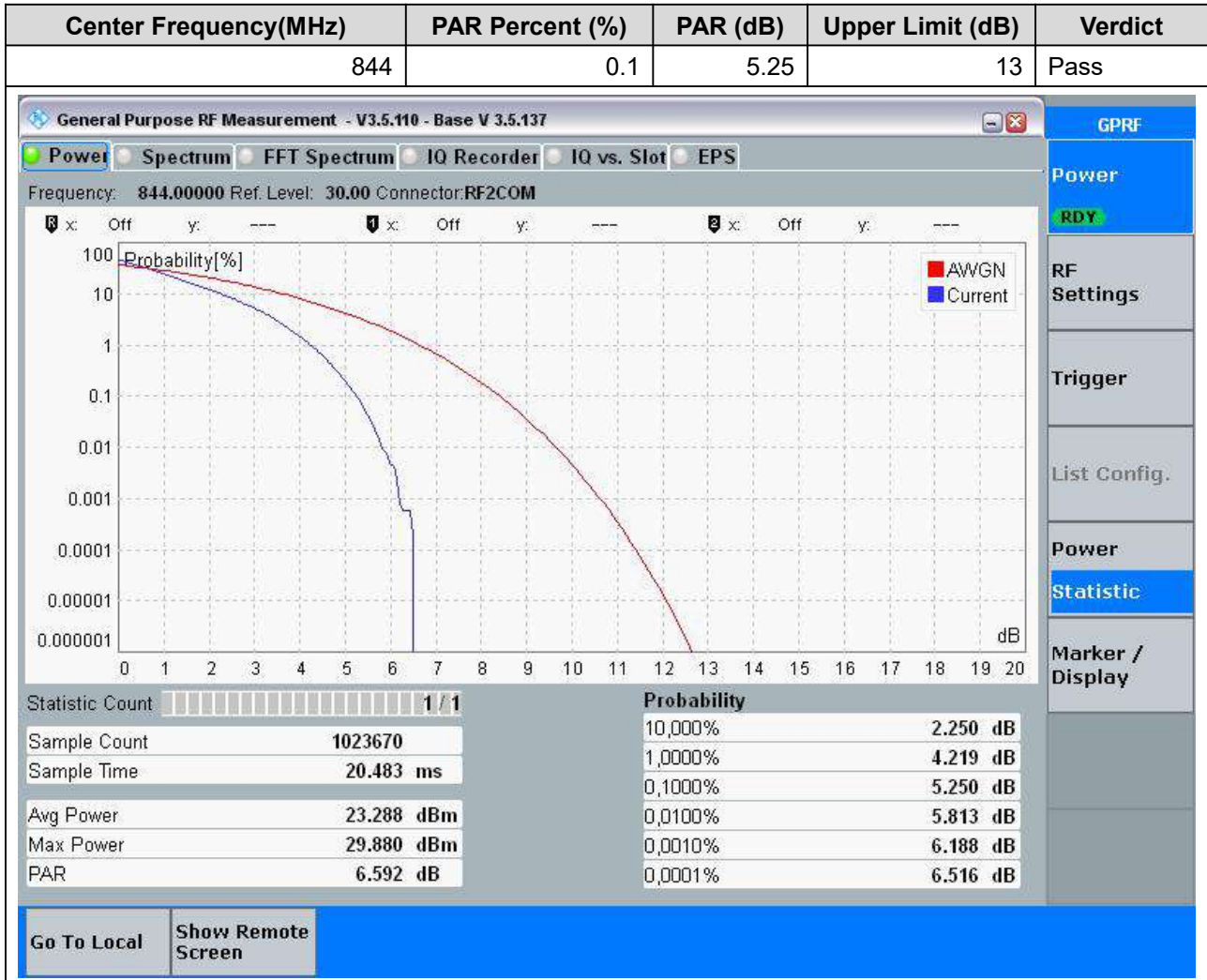
**6.8. LTE Peak to Average Ratio\_Part22-24-27(NTNV)(Subtest:8, Channel:20525, Bandwidth:10, Modulation:Q16, RB Number: 50, RB Position:LOW)**



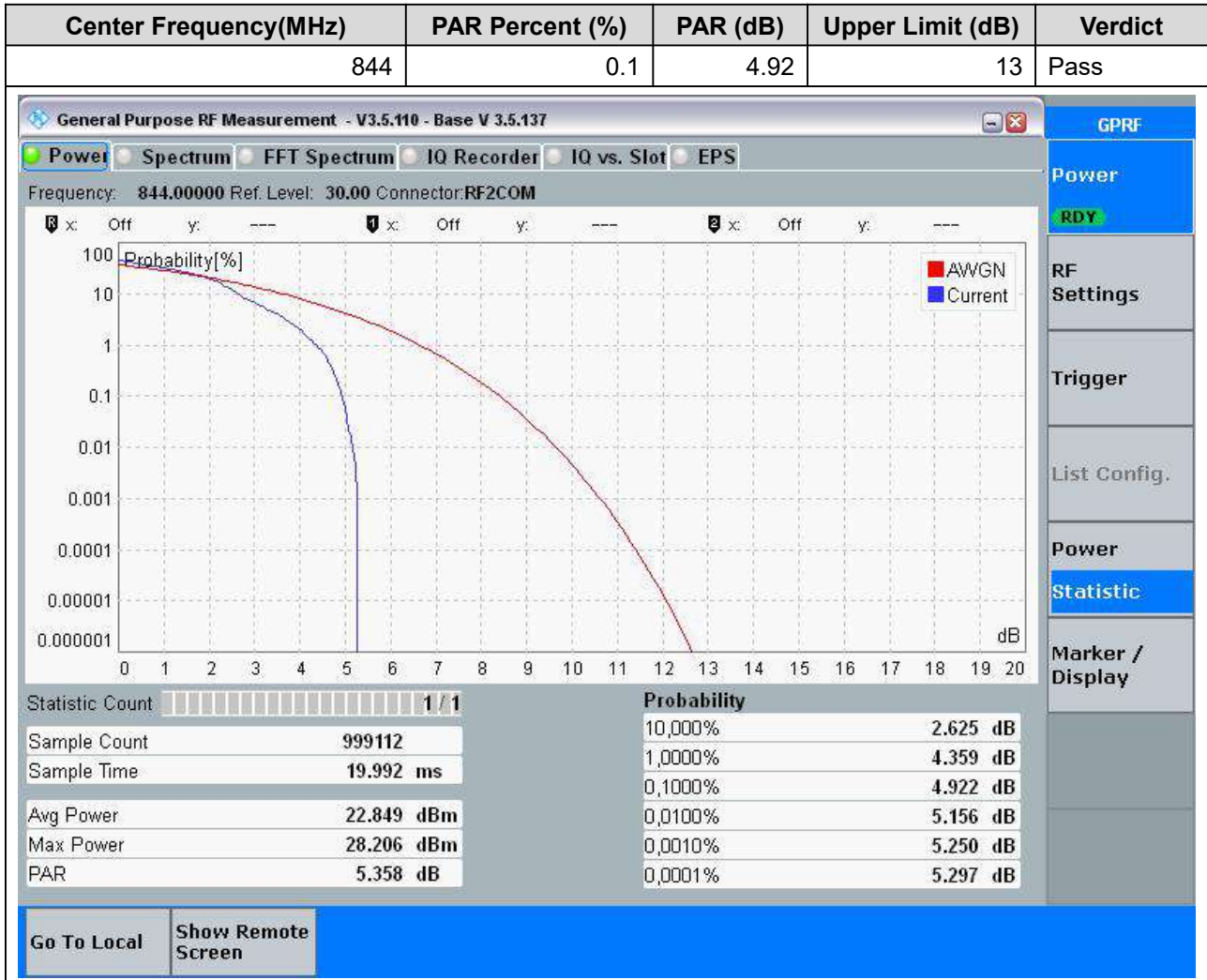
**6.9. LTE Peak to Average Ratio\_Part22-24-27(NTNV)(Subtest:9, Channel:20600, Bandwidth:10, Modulation:QPSK, RB Number: 1, RB Position:LOW)**



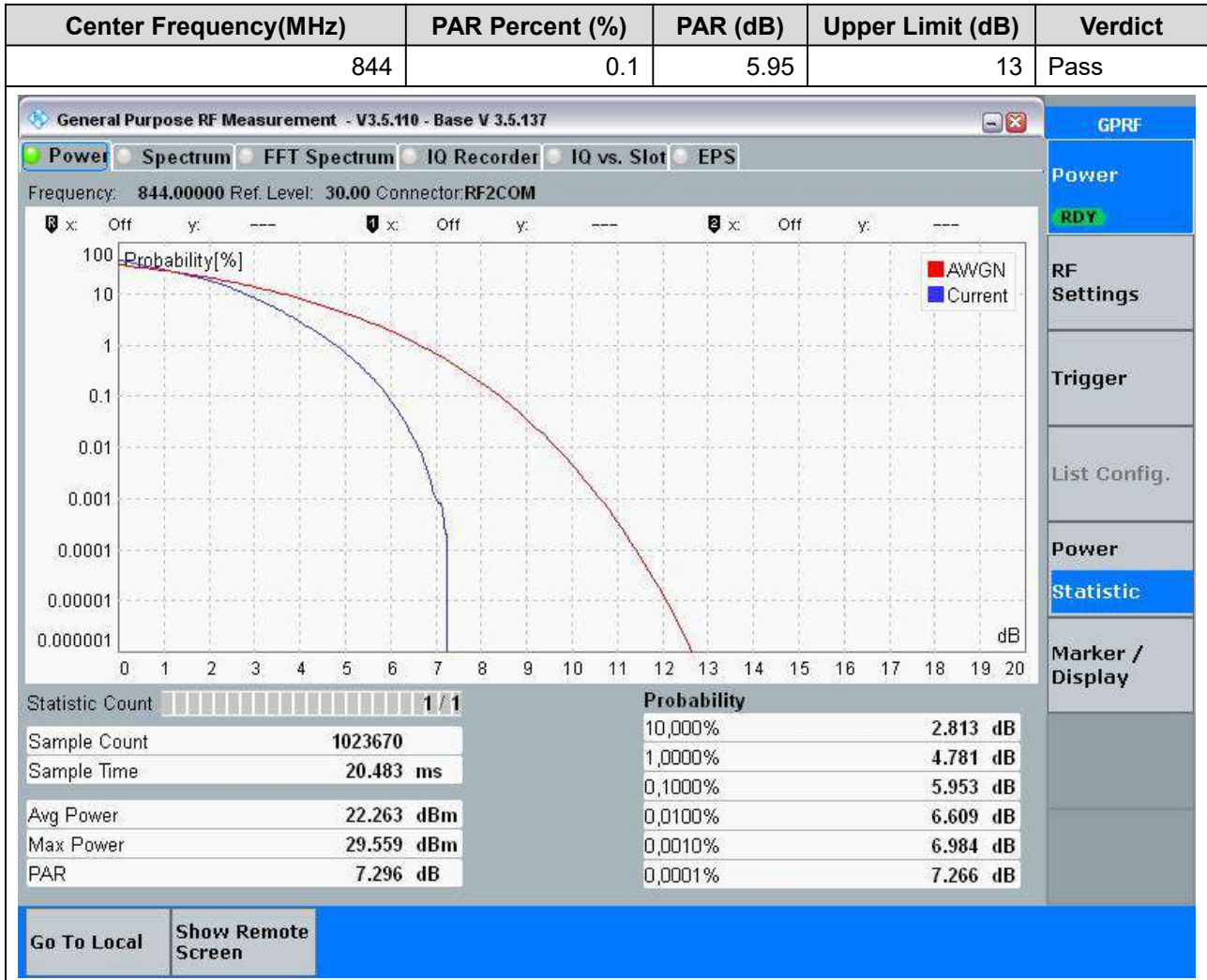
**6.10. LTE Peak to Average Ratio\_Part22-24-27(NTNV)(Subtest:10, Channel:20600, Bandwidth:10, Modulation:QPSK, RB Number: 50, RB Position:LOW)**



**6.11. LTE Peak to Average Ratio\_Part22-24-27(NTNV)(Subtest:11, Channel:20600, Bandwidth:10, Modulation:Q16, RB Number: 1, RB Position:LOW)**

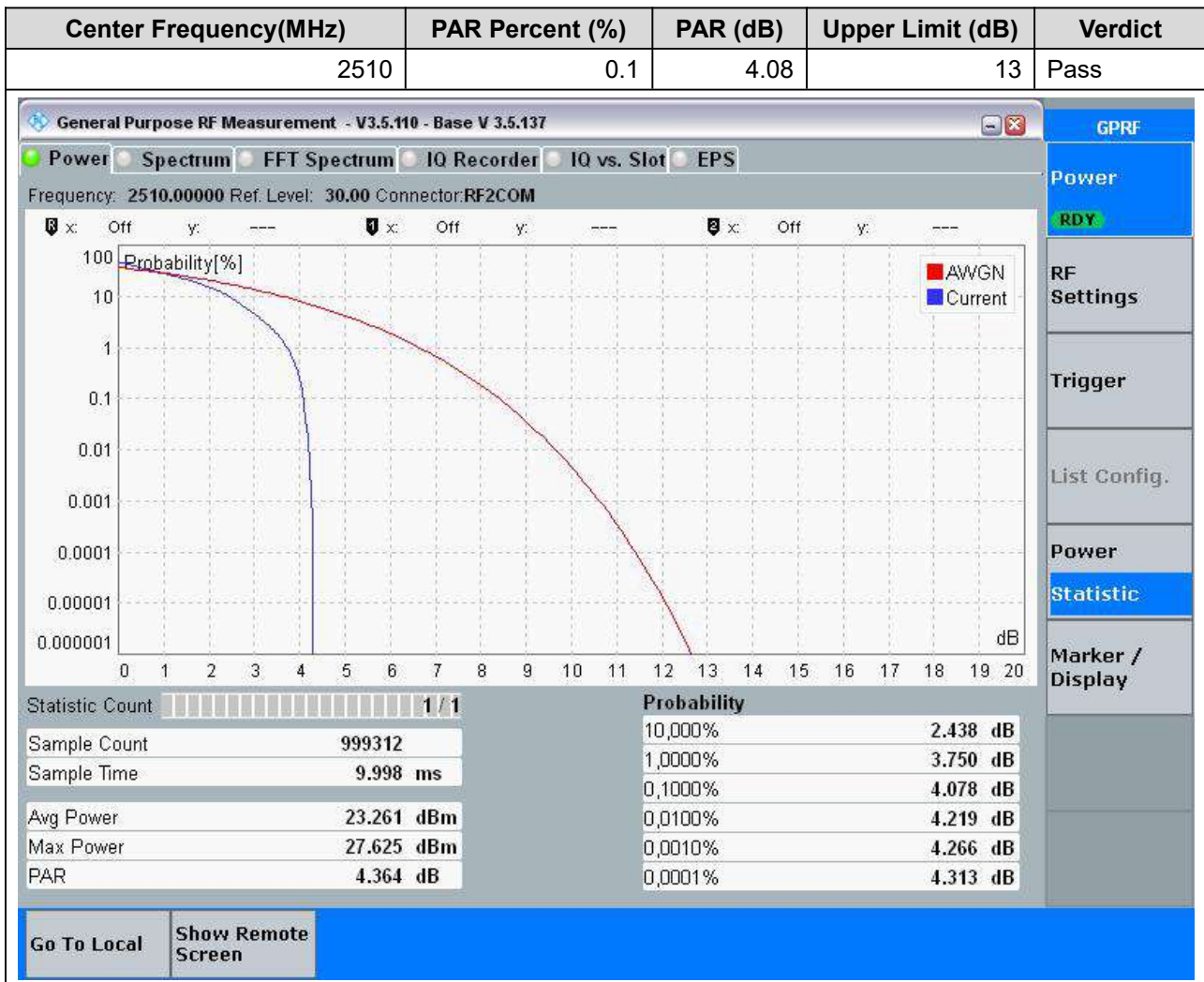


**6.12. LTE Peak to Average Ratio\_Part22-24-27(NTNV)(Subtest:12, Channel:20600, Bandwidth:10, Modulation:Q16, RB Number: 50, RB Position:LOW)**



## 7. LTE\_Band7

### 7.1. LTE Peak to Average Ratio\_Part22-24-27(NTNV)(Subtest:1, Channel:20850, Bandwidth:20, Modulation:QPSK, RB Number: 1, RB Position:LOW)



**7.2. LTE Peak to Average Ratio\_Part22-24-27(NTNV)(Subtest:2, Channel:20850, Bandwidth:20, Modulation:QPSK, RB Number: 100, RB Position:LOW)**

Center Frequency(MHz)	PAR Percent (%)	PAR (dB)	Upper Limit (dB)	Verdict
2510	0.1	5.06	13	Pass

The screenshot displays the 'General Purpose RF Measurement' software interface. The main window shows a Probability Density Function (PDF) plot with 'Probability[%]' on the y-axis (log scale from 0.000001 to 100) and 'dB' on the x-axis (linear scale from 0 to 20). Two curves are shown: a red line for 'AWGN' and a blue line for 'Current'. The 'Current' curve shows a sharp drop-off around 6.5 dB, while the 'AWGN' curve is broader and extends to approximately 12.5 dB.

Below the plot is a statistics table:

Statistic Count		Probability	
Sample Count	998912	10,000%	2.250 dB
Sample Time	9.994 ms	1,0000%	4.078 dB
Avg Power	22.822 dBm	0,1000%	5.063 dB
Max Power	29.402 dBm	0,0100%	5.672 dB
PAR	6.580 dB	0,0010%	6.000 dB
		0,0001%	6.516 dB

At the bottom of the interface, there are buttons for 'Go To Local' and 'Show Remote Screen'.



### 7.3. LTE Peak to Average Ratio\_Part22-24-27(NTNV)(Subtest:3, Channel:20850, Bandwidth:20, Modulation:Q16, RB Number: 1, RB Position:LOW)

Center Frequency(MHz)	PAR Percent (%)	PAR (dB)	Upper Limit (dB)	Verdict
2510	0.1	4.78	13	Pass

General Purpose RF Measurement - V3.5.110 - Base V 3.5.137

Power Spectrum FFT Spectrum IQ Recorder IQ vs. Slot EPS

Frequency: 2510.00000 Ref. Level: 30.00 Connector: RF2COM

GPRF

Probability[%]

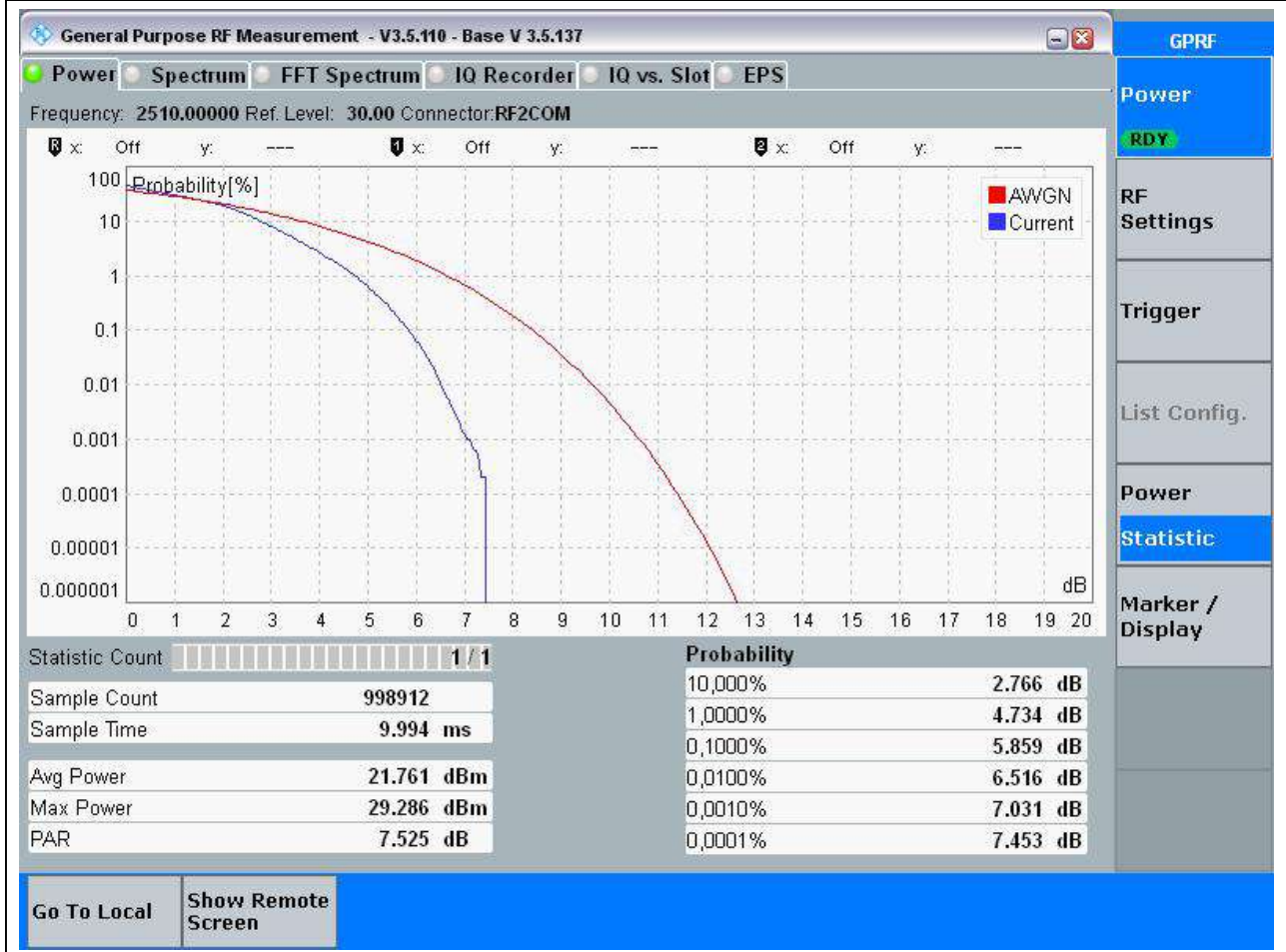
Statistic Count	Value
Sample Count	999114
Sample Time	9.996 ms
Avg Power	22.456 dBm
Max Power	27.518 dBm
PAR	5.062 dB

Probability	Value
10,000%	2.672 dB
1,0000%	4.359 dB
0,1000%	4.781 dB
0,0100%	4.922 dB
0,0010%	4.969 dB
0,0001%	5.016 dB

Go To Local
Show Remote Screen

**7.4. LTE Peak to Average Ratio\_Part22-24-27(NTNV)(Subtest:4, Channel:20850, Bandwidth:20, Modulation:Q16, RB Number: 100, RB Position:LOW)**

Center Frequency(MHz)	PAR Percent (%)	PAR (dB)	Upper Limit (dB)	Verdict
2510	0.1	5.86	13	Pass



**7.5. LTE Peak to Average Ratio\_Part22-24-27(NTNV)(Subtest:5, Channel:21100, Bandwidth:20, Modulation:QPSK, RB Number: 1, RB Position:LOW)**

Center Frequency(MHz)	PAR Percent (%)	PAR (dB)	Upper Limit (dB)	Verdict
2535	0.1	3.98	13	Pass

General Purpose RF Measurement - V3.5.110 - Base V 3.5.137

Power Spectrum FFT Spectrum IQ Recorder IQ vs. Slot EPS

Frequency: 2535.00000 Ref. Level: 30.00 Connector: RF2COM

GPRF

Probability[%]

Statistic Count	
Sample Count	999112
Sample Time	9.996 ms
Avg Power	23.043 dBm
Max Power	27.266 dBm
PAR	4.224 dB

Probability	
10,000%	2.344 dB
1,0000%	3.656 dB
0,1000%	3.984 dB
0,0100%	4.125 dB
0,0010%	4.172 dB
0,0001%	4.172 dB

Go To Local
Show Remote Screen

Power

RDY

RF Settings

Trigger

List Config.

Power

Statistic

Marker / Display

**7.6. LTE Peak to Average Ratio\_Part22-24-27(NTNV)(Subtest:6, Channel:21100, Bandwidth:20, Modulation:QPSK, RB Number: 100, RB Position:LOW)**

Center Frequency(MHz)	PAR Percent (%)	PAR (dB)	Upper Limit (dB)	Verdict
2535	0.1	5.16	13	Pass

General Purpose RF Measurement - V3.5.110 - Base V 3.5.137

Power Spectrum FFT Spectrum IQ Recorder IQ vs. Slot EPS

Frequency: 2535.00000 Ref. Level: 30.00 Connector:RF2COM

GPRF

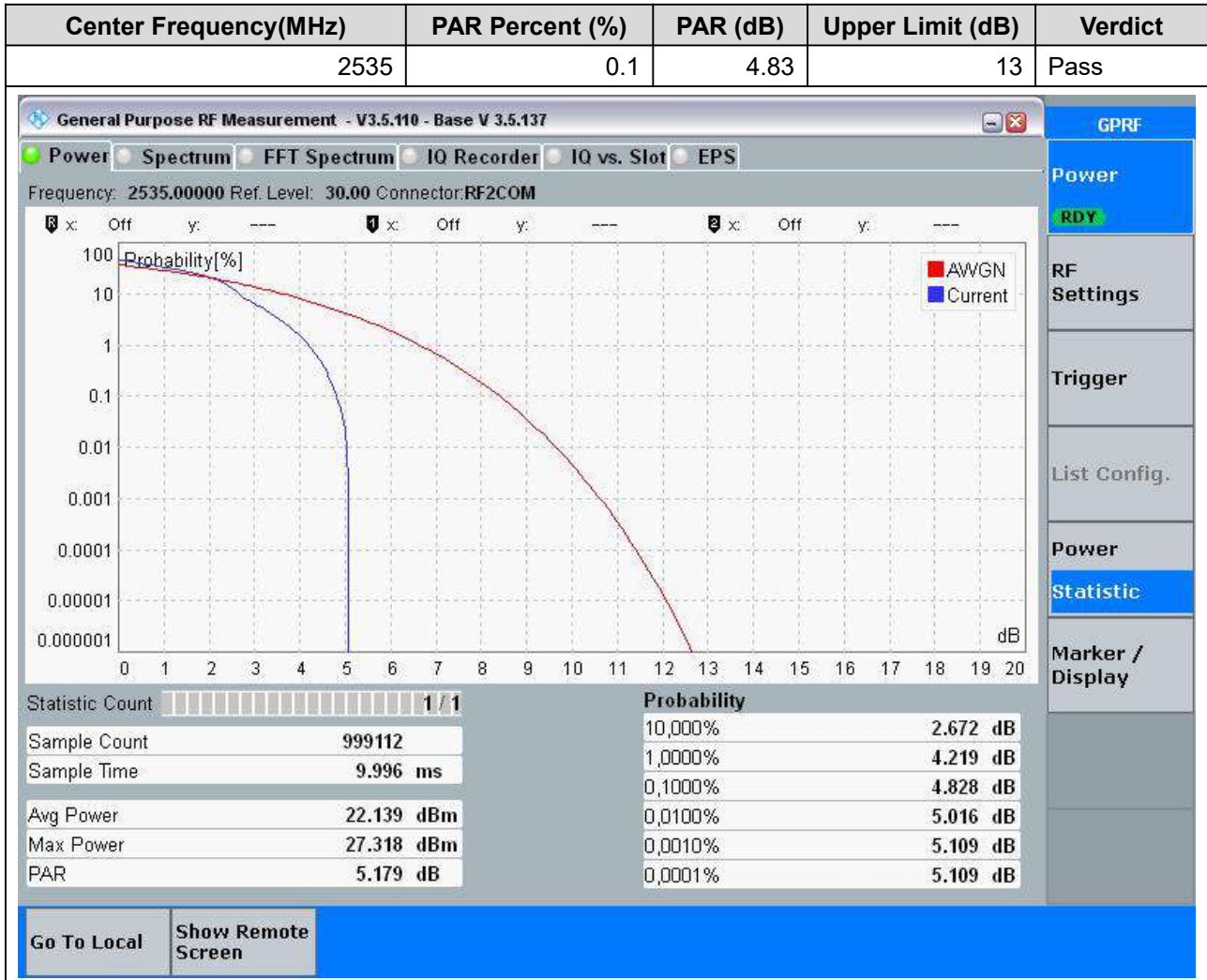
Probability[%]

Statistic Count		Probability	
Sample Count	998912	10,000%	2.250 dB
Sample Time	9.994 ms	1,0000%	4.172 dB
Avg Power	22.760 dBm	0,1000%	5.156 dB
Max Power	29.022 dBm	0,0010%	6.047 dB
PAR	6.262 dB	0,0001%	6.094 dB

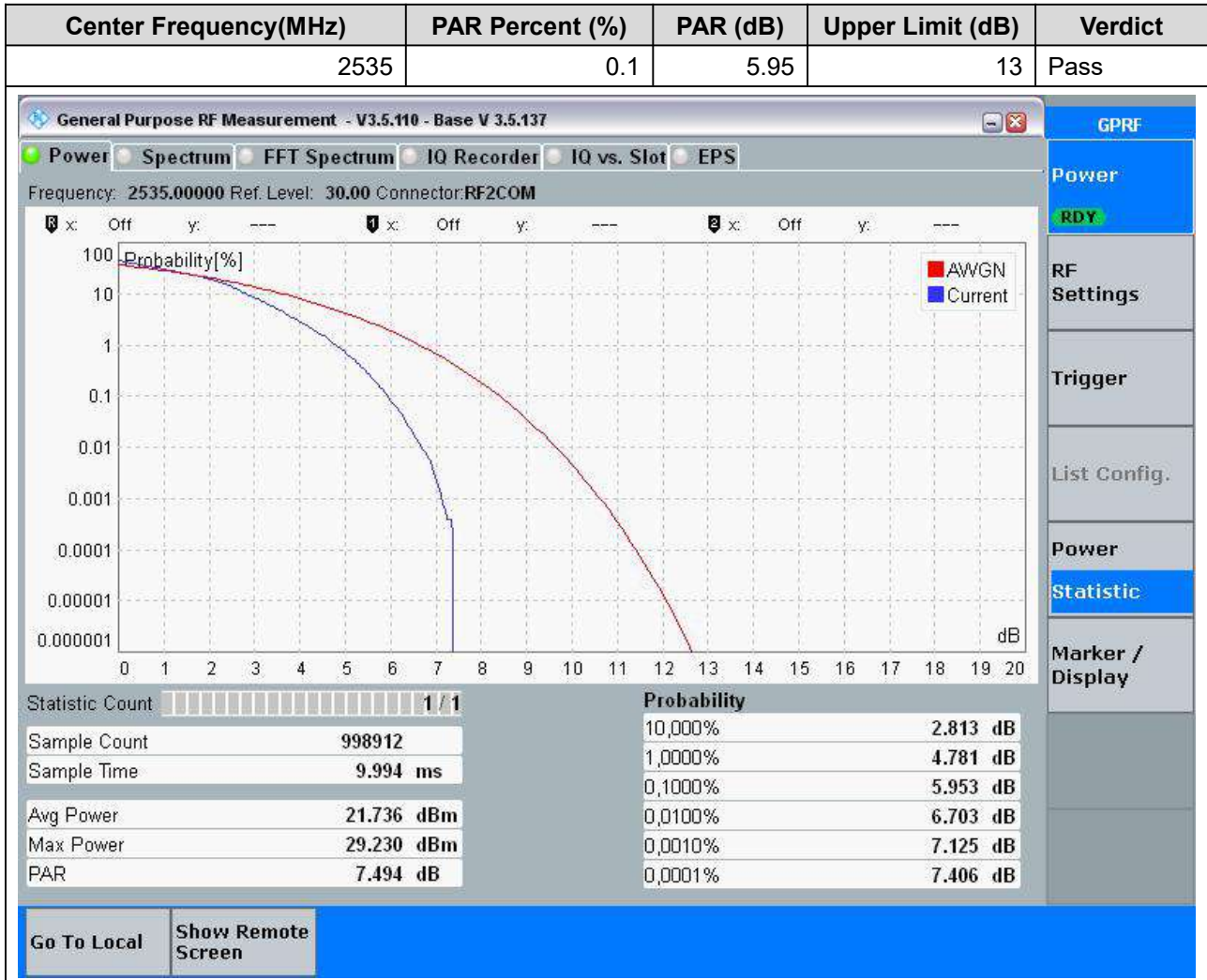
1 / 1

Go To Local Show Remote Screen

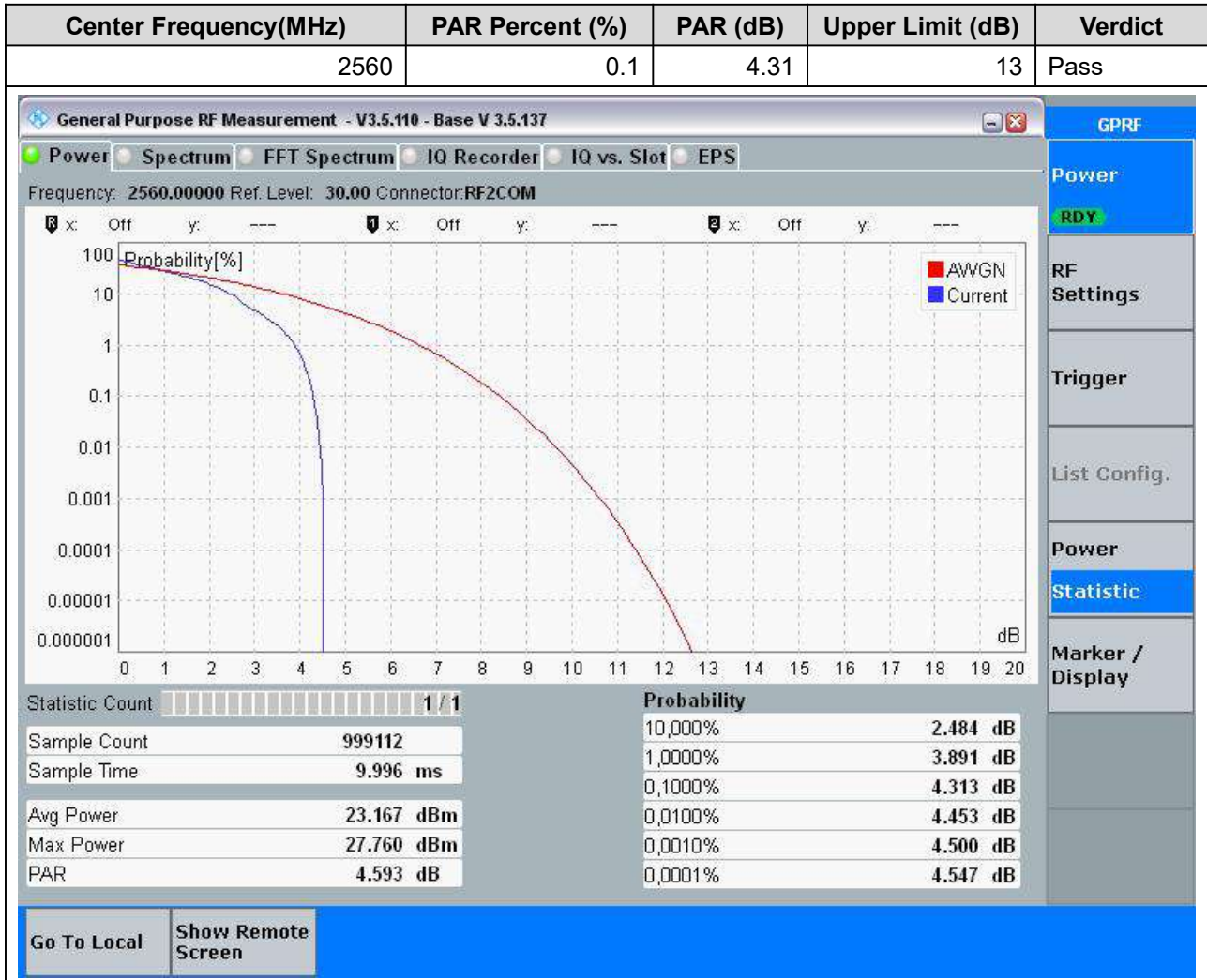
**7.7. LTE Peak to Average Ratio\_Part22-24-27(NTNV)(Subtest:7, Channel:21100, Bandwidth:20, Modulation:Q16, RB Number: 1, RB Position:LOW)**



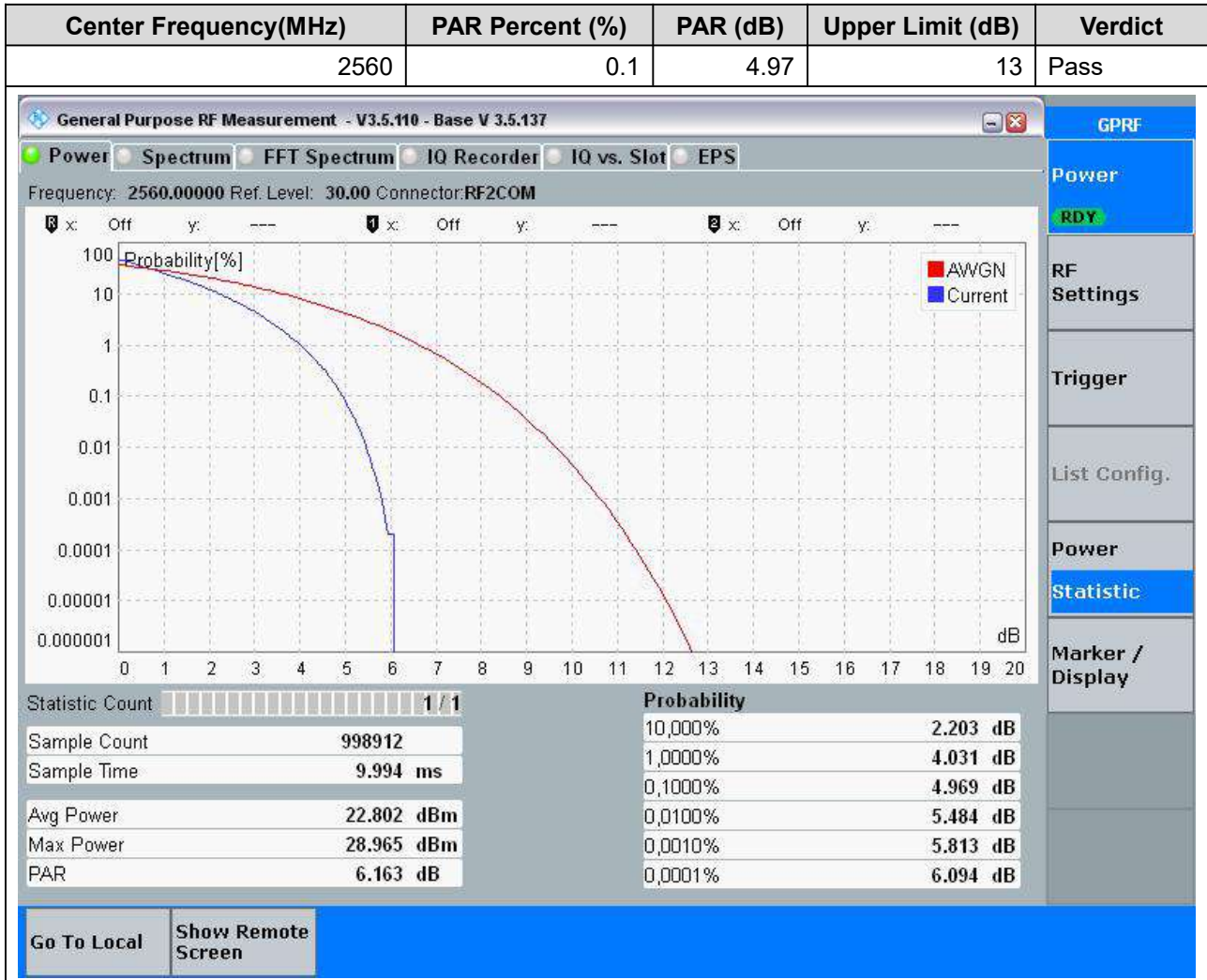
**7.8. LTE Peak to Average Ratio\_Part22-24-27(NTNV)(Subtest:8, Channel:21100, Bandwidth:20, Modulation:Q16, RB Number: 100, RB Position:LOW)**



**7.9. LTE Peak to Average Ratio\_Part22-24-27(NTNV)(Subtest:9, Channel:21350, Bandwidth:20, Modulation:QPSK, RB Number: 1, RB Position:LOW)**

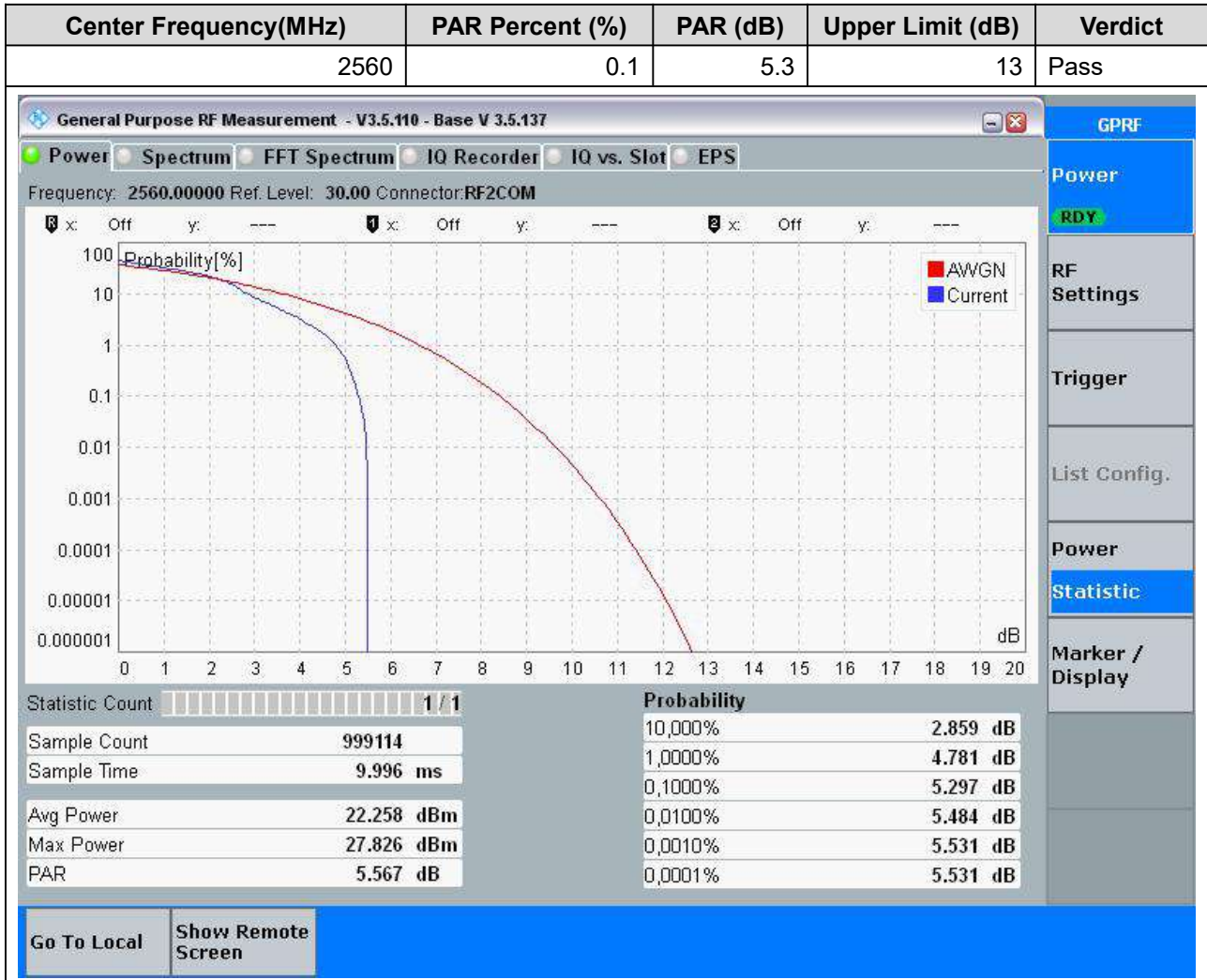


**7.10. LTE Peak to Average Ratio\_Part22-24-27(NTNV)(Subtest:10, Channel:21350, Bandwidth:20, Modulation:QPSK, RB Number: 100, RB Position:LOW)**

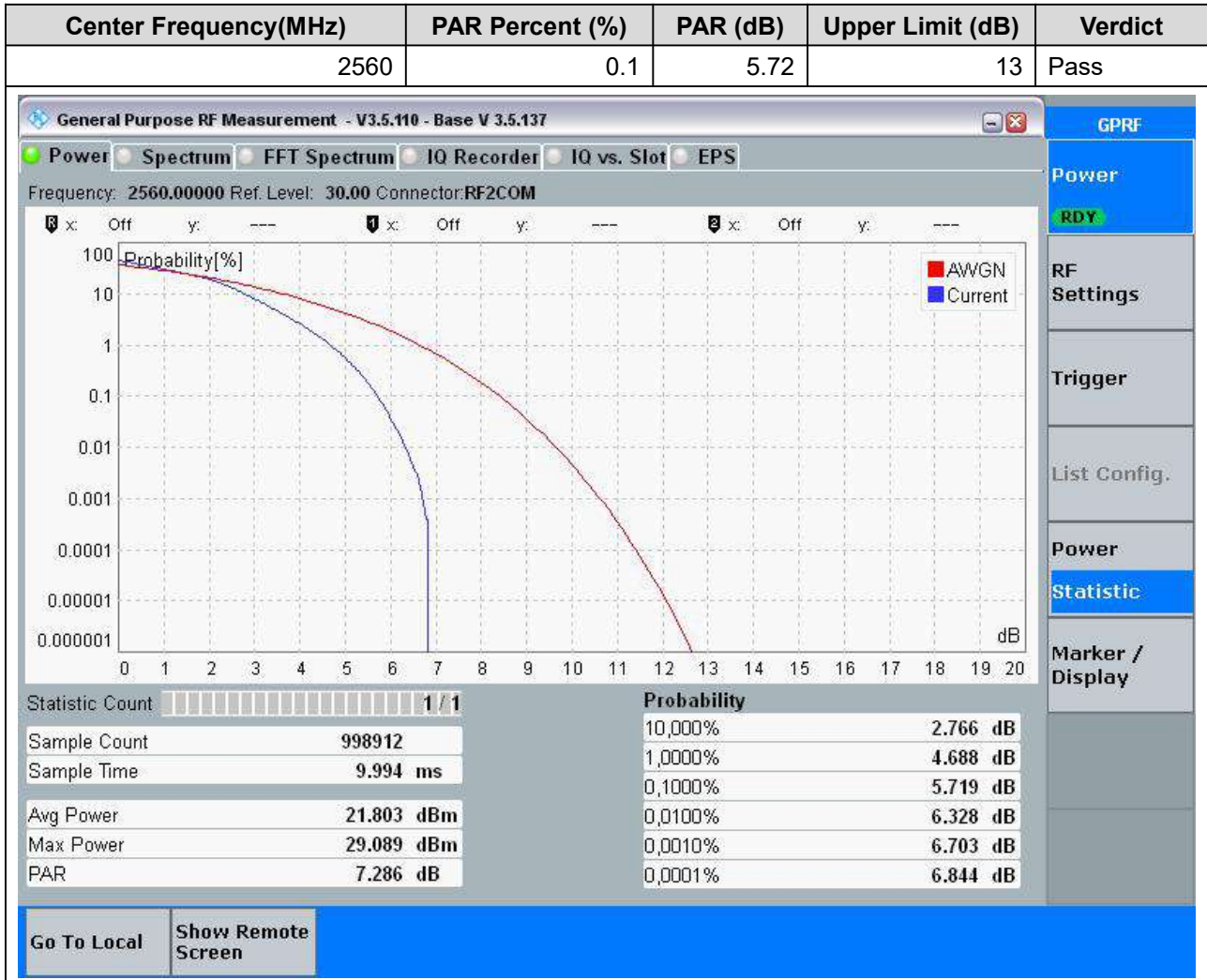




**7.11. LTE Peak to Average Ratio\_Part22-24-27(NTNV)(Subtest:11, Channel:21350, Bandwidth:20, Modulation:Q16, RB Number: 1, RB Position:LOW)**



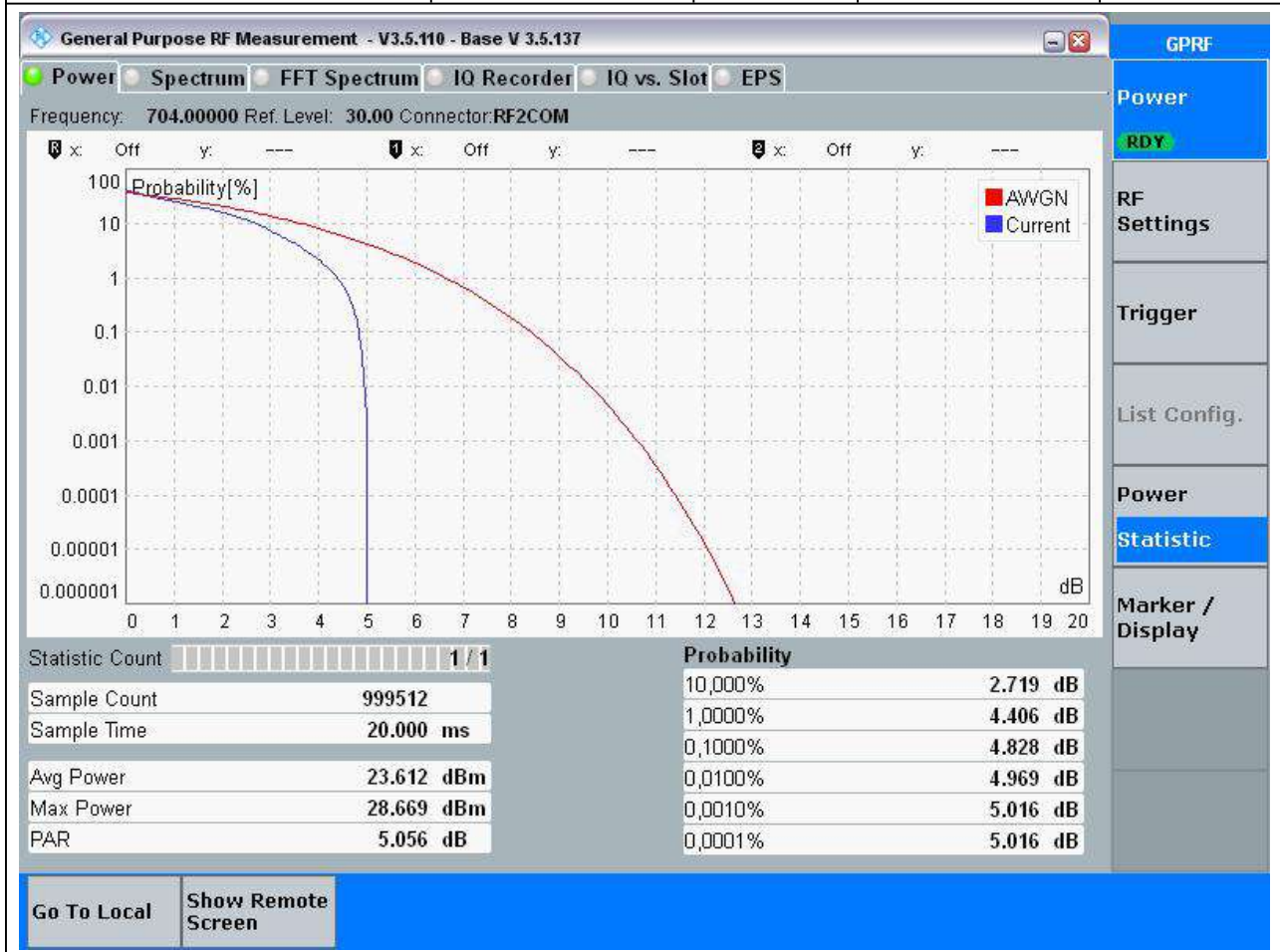
**7.12. LTE Peak to Average Ratio\_Part22-24-27(NTNV)(Subtest:12, Channel:21350, Bandwidth:20, Modulation:Q16, RB Number: 100, RB Position:LOW)**



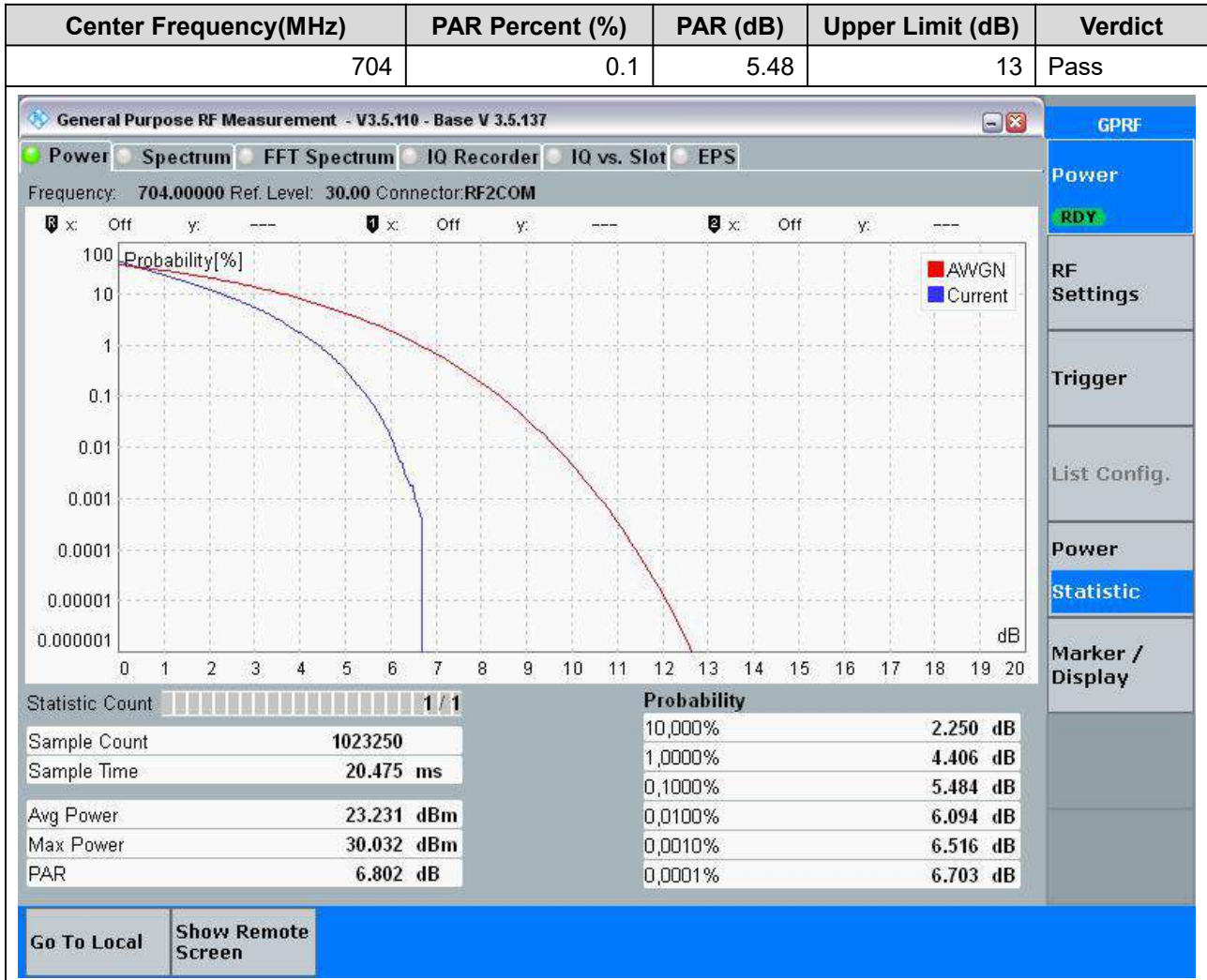
## 8. LTE\_Band12

### 8.1. LTE Peak to Average Ratio\_Part22-24-27(NTNV)(Subtest:1, Channel:23060, Bandwidth:10, Modulation:QPSK, RB Number: 1, RB Position:LOW)

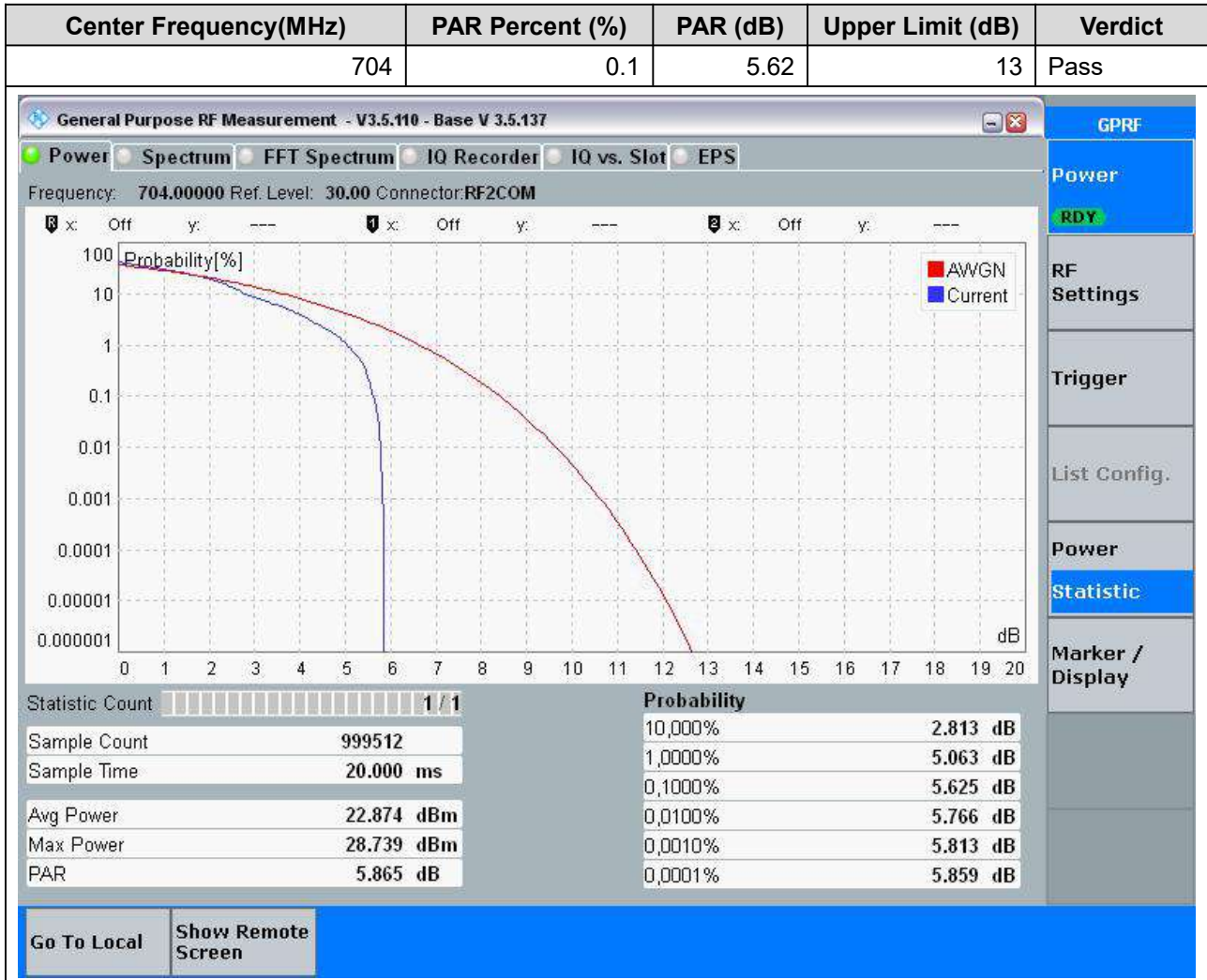
Center Frequency(MHz)	PAR Percent (%)	PAR (dB)	Upper Limit (dB)	Verdict
704	0.1	4.83	13	Pass



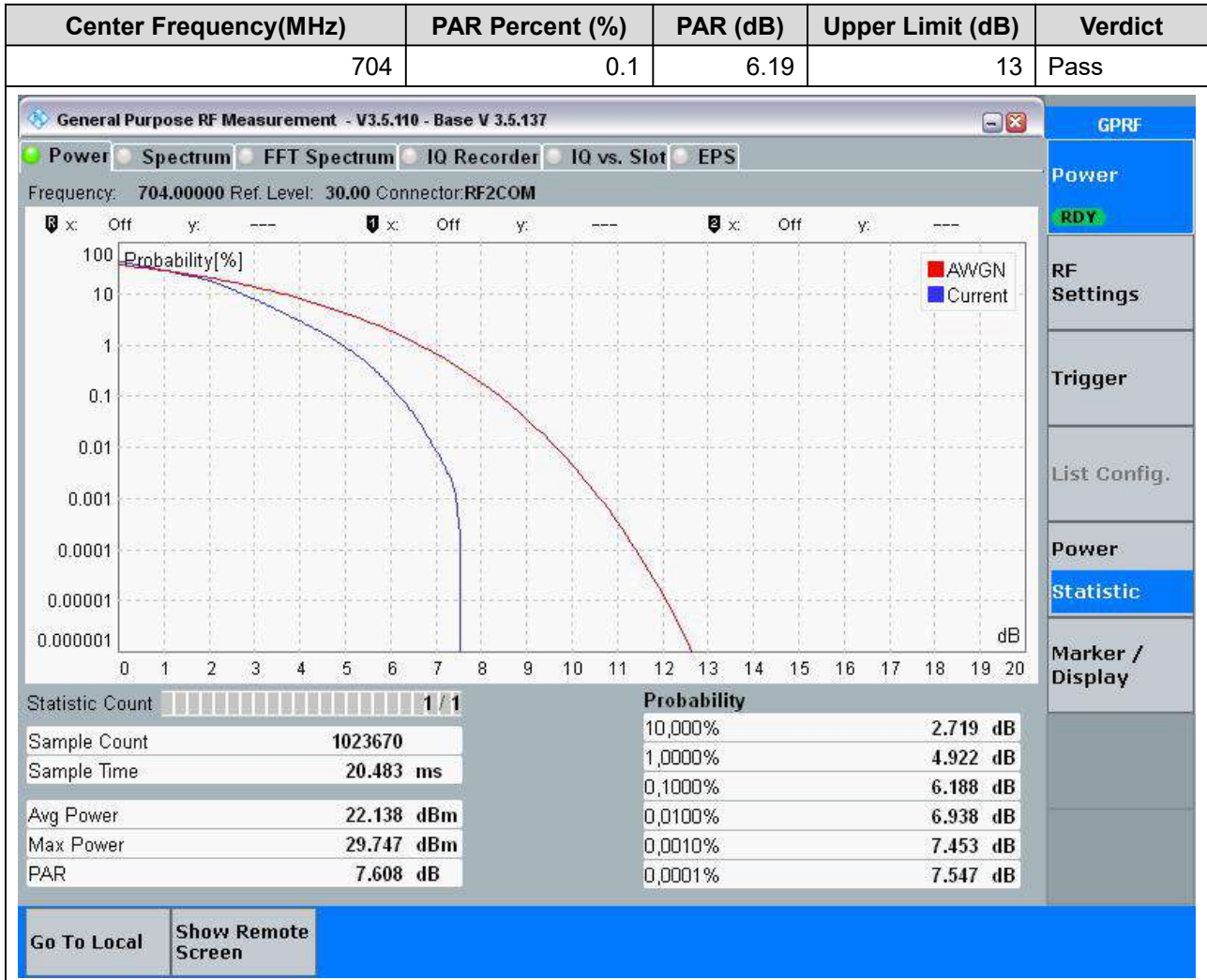
**8.2. LTE Peak to Average Ratio\_Part22-24-27(NTNV)(Subtest:2, Channel:23060, Bandwidth:10, Modulation:QPSK, RB Number: 50, RB Position:LOW)**



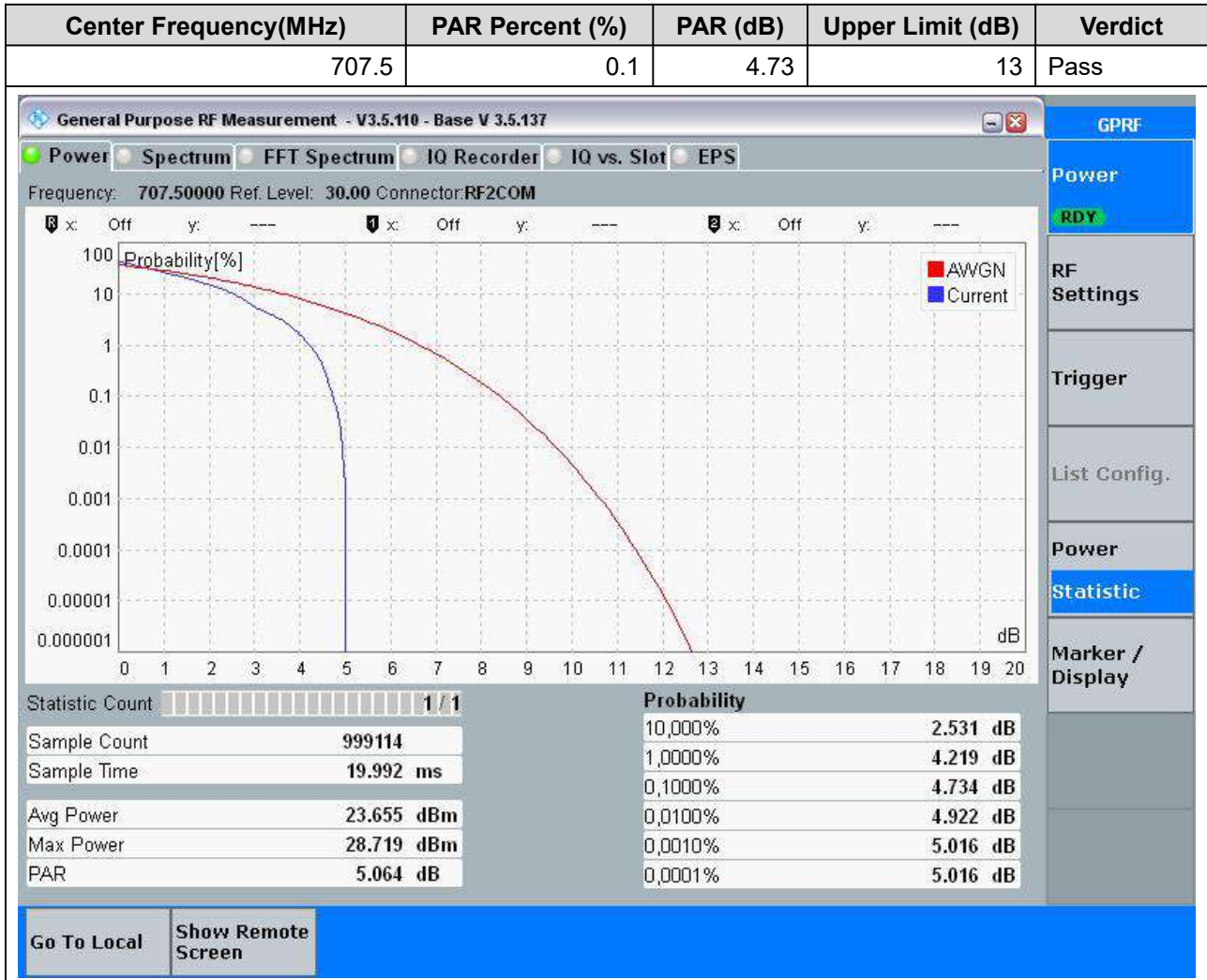
### 8.3. LTE Peak to Average Ratio\_Part22-24-27(NTNV)(Subtest:3, Channel:23060, Bandwidth:10, Modulation:Q16, RB Number: 1, RB Position:LOW)



**8.4. LTE Peak to Average Ratio\_Part22-24-27(NTNV)(Subtest:4, Channel:23060, Bandwidth:10, Modulation:Q16, RB Number: 50, RB Position:LOW)**

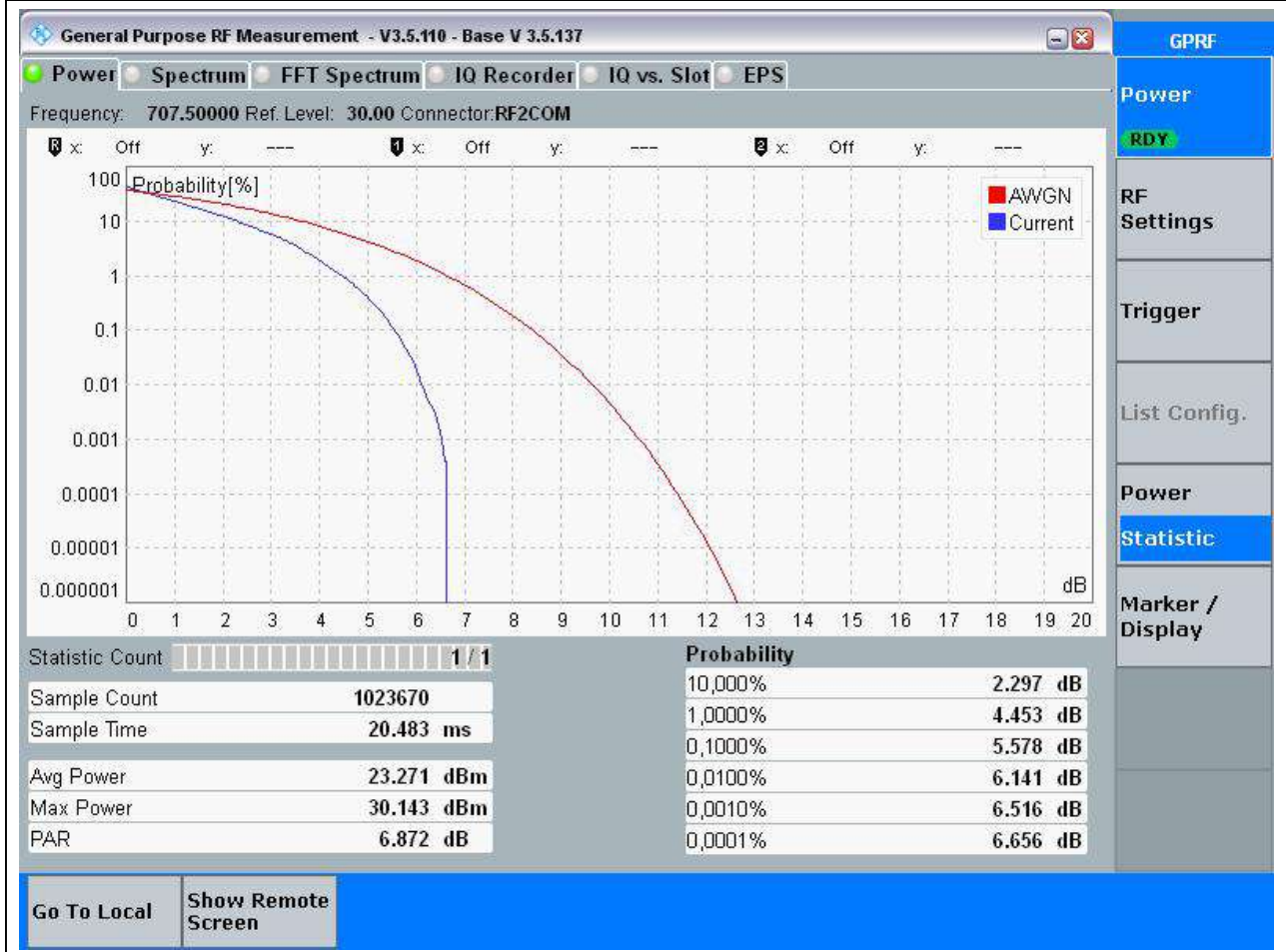


**8.5. LTE Peak to Average Ratio\_Part22-24-27(NTNV)(Subtest:5, Channel:23095, Bandwidth:10, Modulation:QPSK, RB Number: 1, RB Position:LOW)**



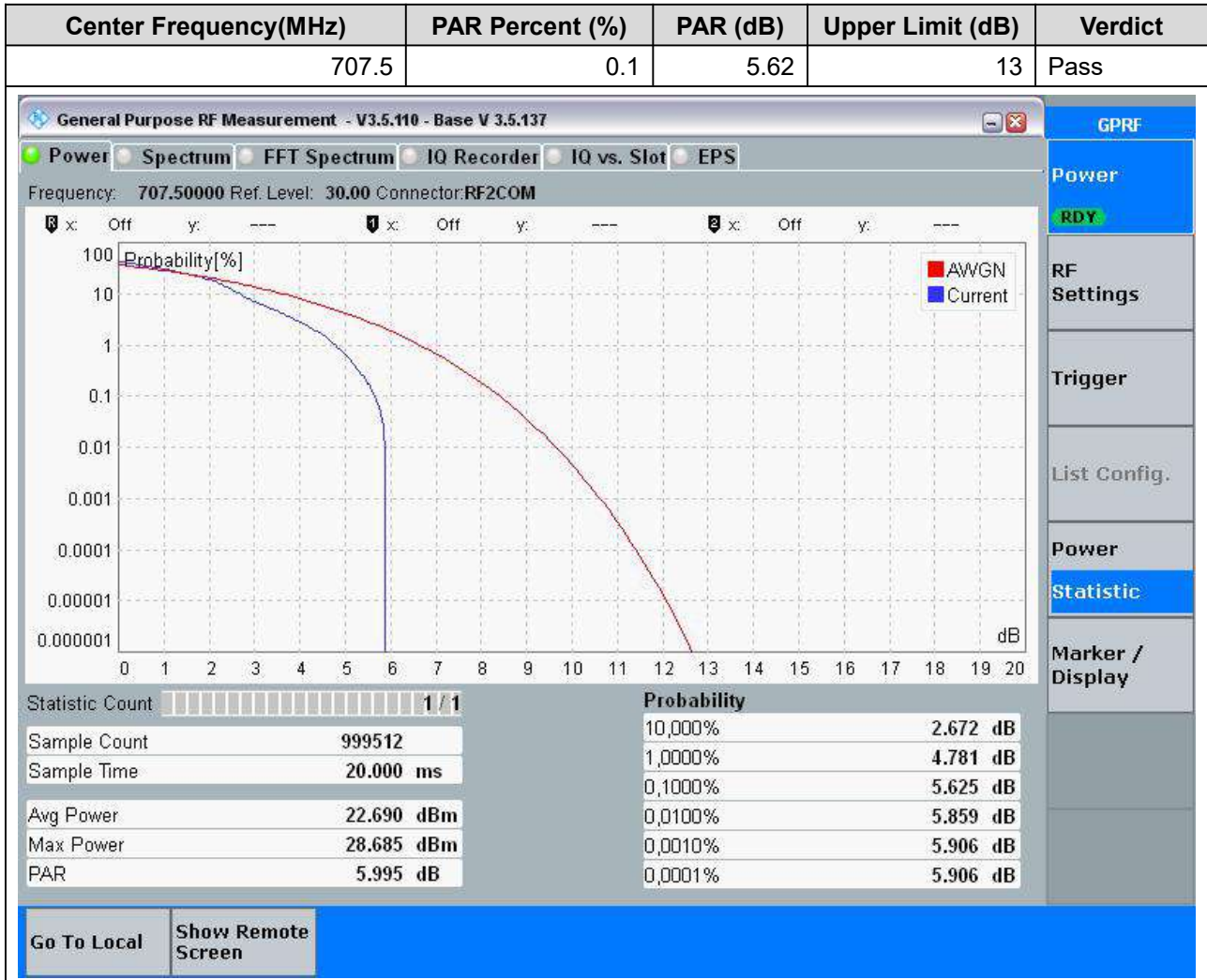
**8.6. LTE Peak to Average Ratio\_Part22-24-27(NTNV)(Subtest:6, Channel:23095, Bandwidth:10, Modulation:QPSK, RB Number: 50, RB Position:LOW)**

Center Frequency(MHz)	PAR Percent (%)	PAR (dB)	Upper Limit (dB)	Verdict
707.5	0.1	5.58	13	Pass





**8.7. LTE Peak to Average Ratio\_Part22-24-27(NTNV)(Subtest:7, Channel:23095, Bandwidth:10, Modulation:Q16, RB Number: 1, RB Position:LOW)**



**8.8. LTE Peak to Average Ratio\_Part22-24-27(NTNV)(Subtest:8, Channel:23095, Bandwidth:10, Modulation:Q16, RB Number: 50, RB Position:LOW)**

Center Frequency(MHz)	PAR Percent (%)	PAR (dB)	Upper Limit (dB)	Verdict
707.5	0.1	6.33	13	Pass

General Purpose RF Measurement - V3.5.110 - Base V 3.5.137

Power Spectrum FFT Spectrum IQ Recorder IQ vs. Slot EPS

Frequency: 707.50000 Ref. Level: 30.00 Connector:RF2COM

GPRF

Power

RDY

RF Settings

Trigger

List Config.

Power

Statistic

Marker / Display

Probability[%]

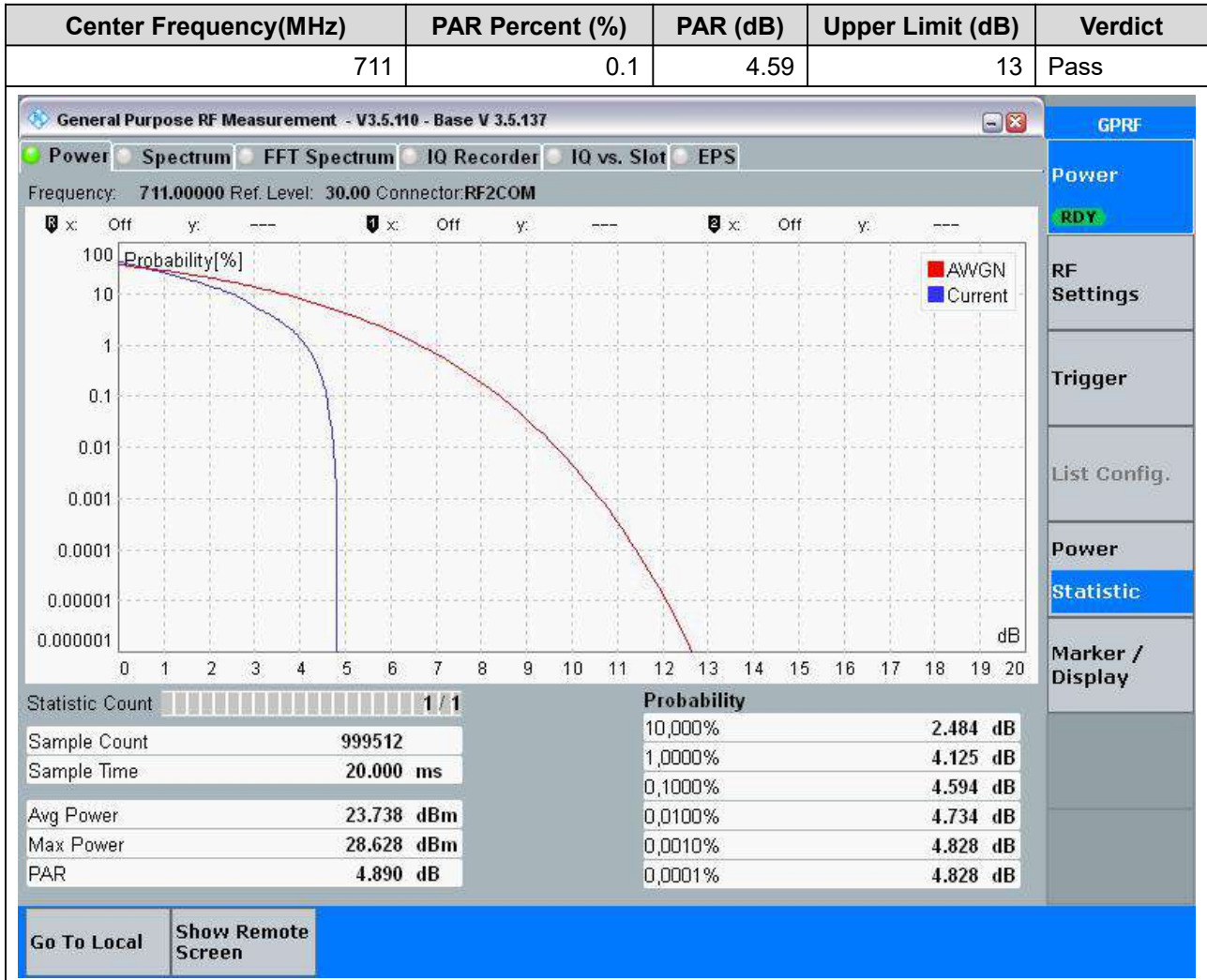
dB

Statistic Count	
Sample Count	1023670
Sample Time	20.483 ms
Avg Power	22.242 dBm
Max Power	29.837 dBm
PAR	7.595 dB

Probability	
10,000%	2.766 dB
1,0000%	5.016 dB
0,1000%	6.328 dB
0,0100%	7.031 dB
0,0010%	7.359 dB
0,0001%	7.547 dB

Go To Local
Show Remote Screen

**8.9. LTE Peak to Average Ratio\_Part22-24-27(NTNV)(Subtest:9, Channel:23130, Bandwidth:10, Modulation:QPSK, RB Number: 1, RB Position:LOW)**



**8.10. LTE Peak to Average Ratio\_Part22-24-27(NTNV)(Subtest:10, Channel:23130, Bandwidth:10, Modulation:QPSK, RB Number: 50, RB Position:LOW)**

Center Frequency(MHz)	PAR Percent (%)	PAR (dB)	Upper Limit (dB)	Verdict
711	0.1	5.62	13	Pass

General Purpose RF Measurement - V3.5.110 - Base V 3.5.137

Power Spectrum FFT Spectrum IQ Recorder IQ vs. Slot EPS

Frequency: 711.00000 Ref. Level: 30.00 Connector:RF2COM

GPRF

Probability[%]

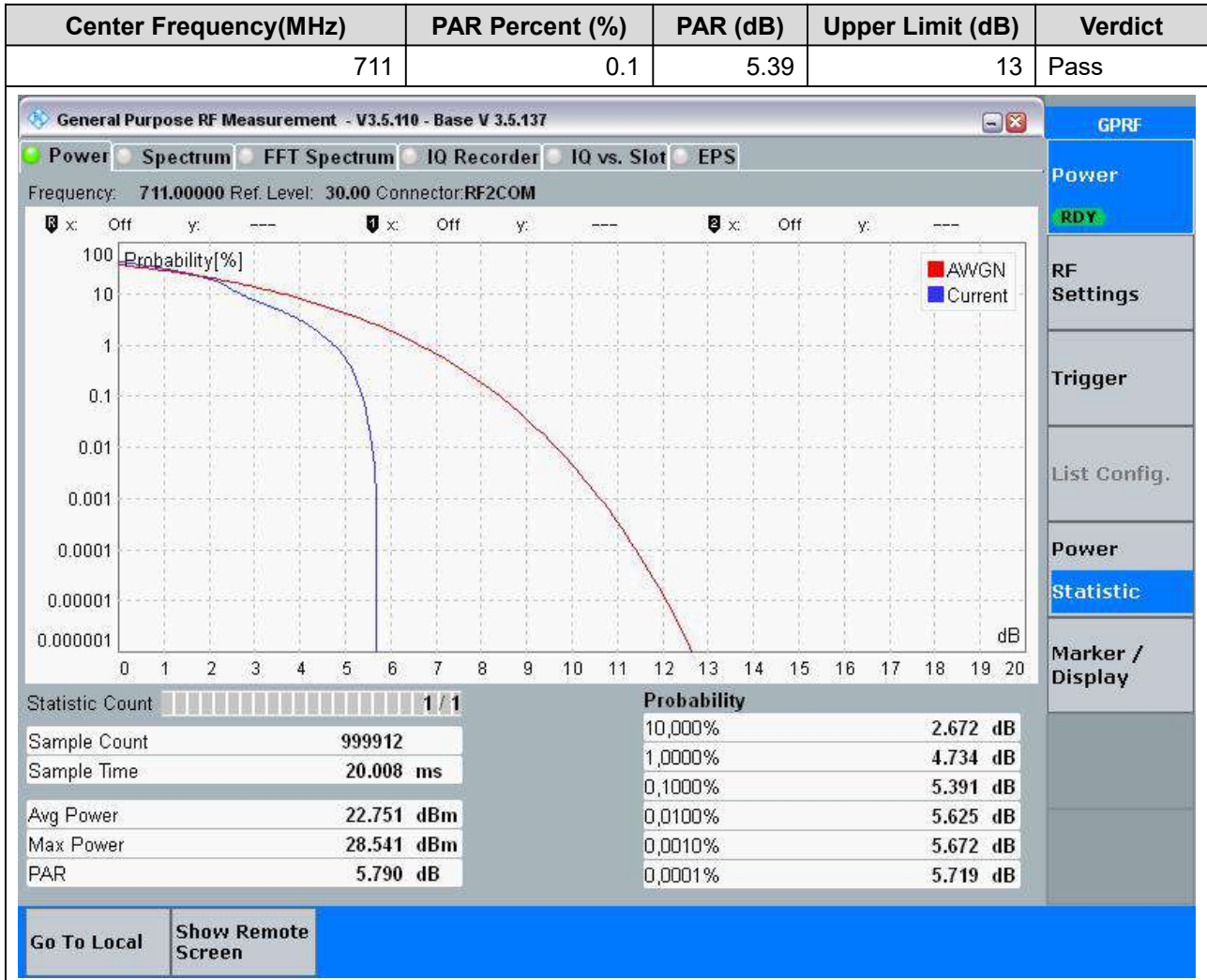
Statistic Count		Probability	
Sample Count	1023252	10,000%	2.297 dB
Sample Time	20.475 ms	1,0000%	4.547 dB
Avg Power	23.218 dBm	0,1000%	5.625 dB
Max Power	30.267 dBm	0,0100%	6.188 dB
PAR	7.049 dB	0,0010%	6.656 dB
		0,0001%	6.703 dB

1 / 1

Go To Local Show Remote Screen

Power
RDY
RF Settings
Trigger
List Config.
Power
Statistic
Marker / Display

**8.11. LTE Peak to Average Ratio\_Part22-24-27(NTNV)(Subtest:11, Channel:23130, Bandwidth:10, Modulation:Q16, RB Number: 1, RB Position:LOW)**



**8.12. LTE Peak to Average Ratio\_Part22-24-27(NTNV)(Subtest:12, Channel:23130, Bandwidth:10, Modulation:Q16, RB Number: 50, RB Position:LOW)**

Center Frequency(MHz)	PAR Percent (%)	PAR (dB)	Upper Limit (dB)	Verdict
711	0.1	6.42	13	Pass

General Purpose RF Measurement - V3.5.110 - Base V 3.5.137

Power Spectrum FFT Spectrum IQ Recorder IQ vs. Slot EPS

Frequency: 711.00000 Ref. Level: 30.00 Connector:RF2COM

GPRF

Probability[%]

Statistic Count	
Sample Count	1023252
Sample Time	20.475 ms
Avg Power	22.182 dBm
Max Power	30.086 dBm
PAR	7.904 dB

Probability	
10,000%	2.766 dB
1,0000%	5.109 dB
0,1000%	6.422 dB
0,0100%	7.078 dB
0,0010%	7.547 dB
0,0001%	7.734 dB

Go To Local
Show Remote Screen

Power

RDY

RF Settings

Trigger

List Config.

Power

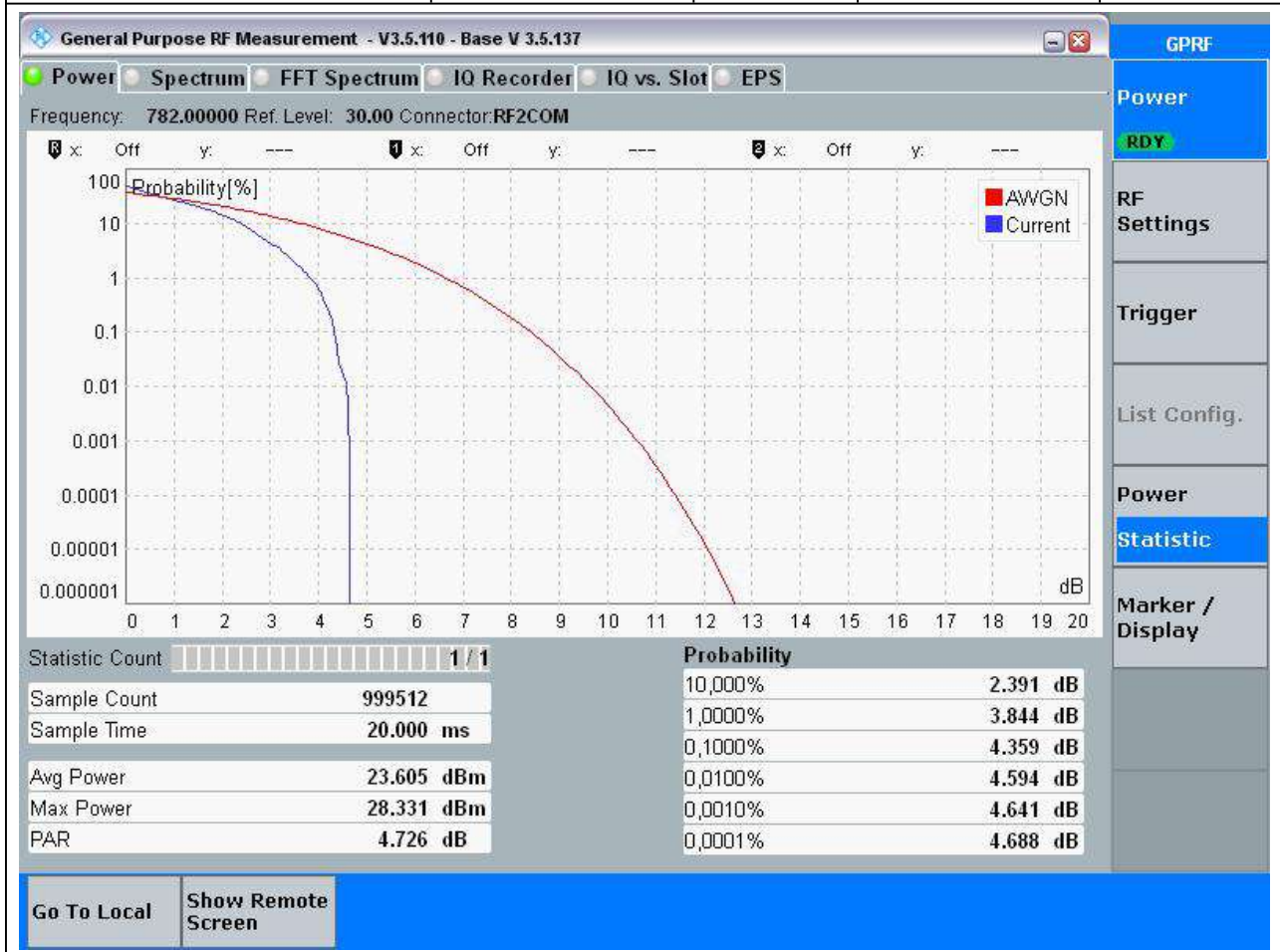
Statistic

Marker / Display

## 9. LTE\_Band13

### 9.1. LTE Peak to Average Ratio\_Part22-24-27(NTNV)(Subtest:1, Channel:23230, Bandwidth:10, Modulation:QPSK, RB Number: 1, RB Position:LOW)

Center Frequency(MHz)	PAR Percent (%)	PAR (dB)	Upper Limit (dB)	Verdict
782	0.1	4.36	13	Pass



**9.2. LTE Peak to Average Ratio\_Part22-24-27(NTNV)(Subtest:2, Channel:23230, Bandwidth:10, Modulation:QPSK, RB Number: 50, RB Position:LOW)**

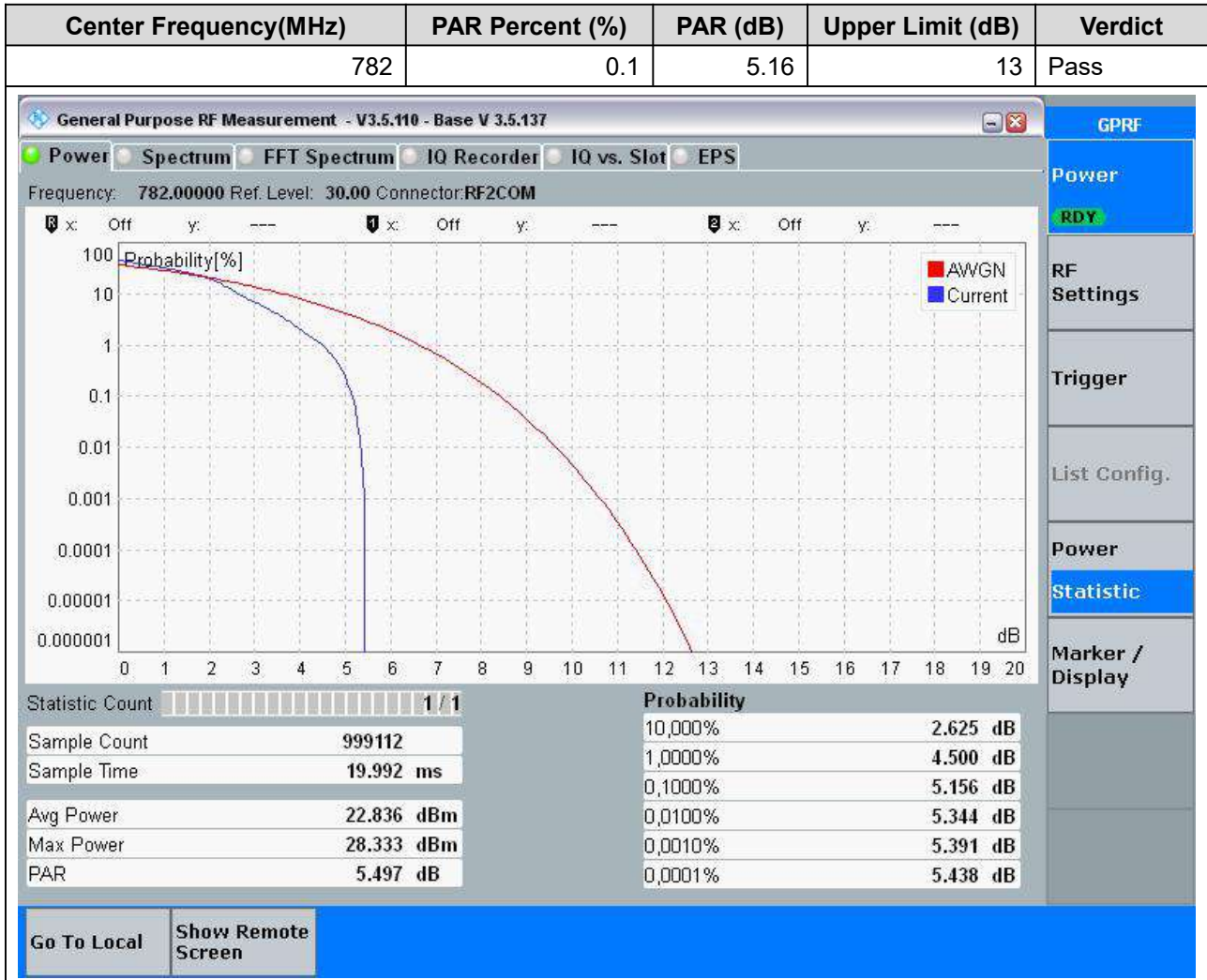
Center Frequency(MHz)	PAR Percent (%)	PAR (dB)	Upper Limit (dB)	Verdict
782	0.1	5.39	13	Pass

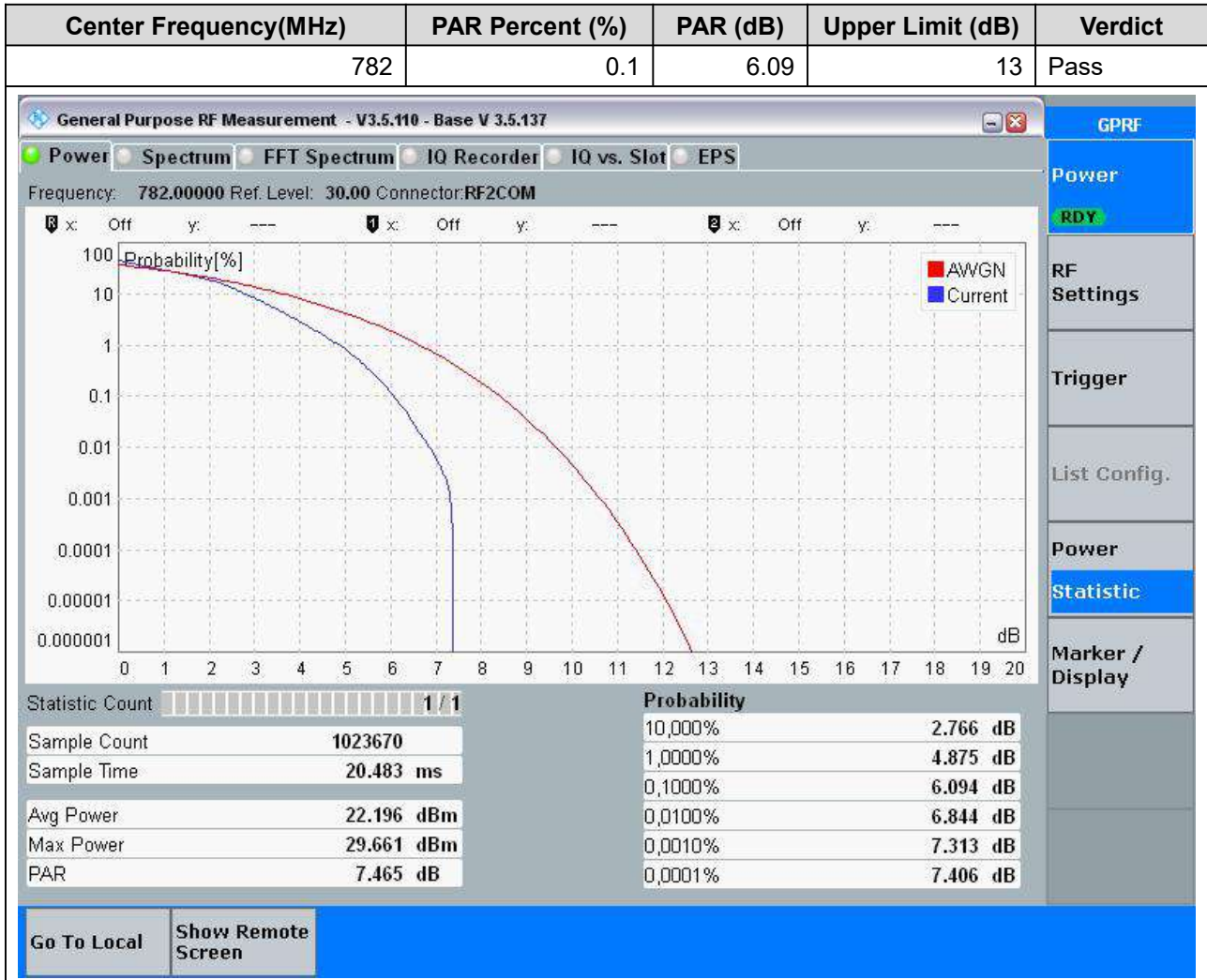
Statistic Count		Probability	
Sample Count	1023670	10,000%	2.250 dB
Sample Time	20.483 ms	1,0000%	4.266 dB
Avg Power	23.175 dBm	0,1000%	5.391 dB
Max Power	29.914 dBm	0,0100%	6.000 dB
PAR	6.738 dB	0,0010%	6.469 dB
		0,0001%	6.656 dB



### 9.3. LTE Peak to Average Ratio\_Part22-24-27(NTNV)(Subtest:3, Channel:23230, Bandwidth:10, Modulation:Q16, RB Number: 1, RB Position:LOW)



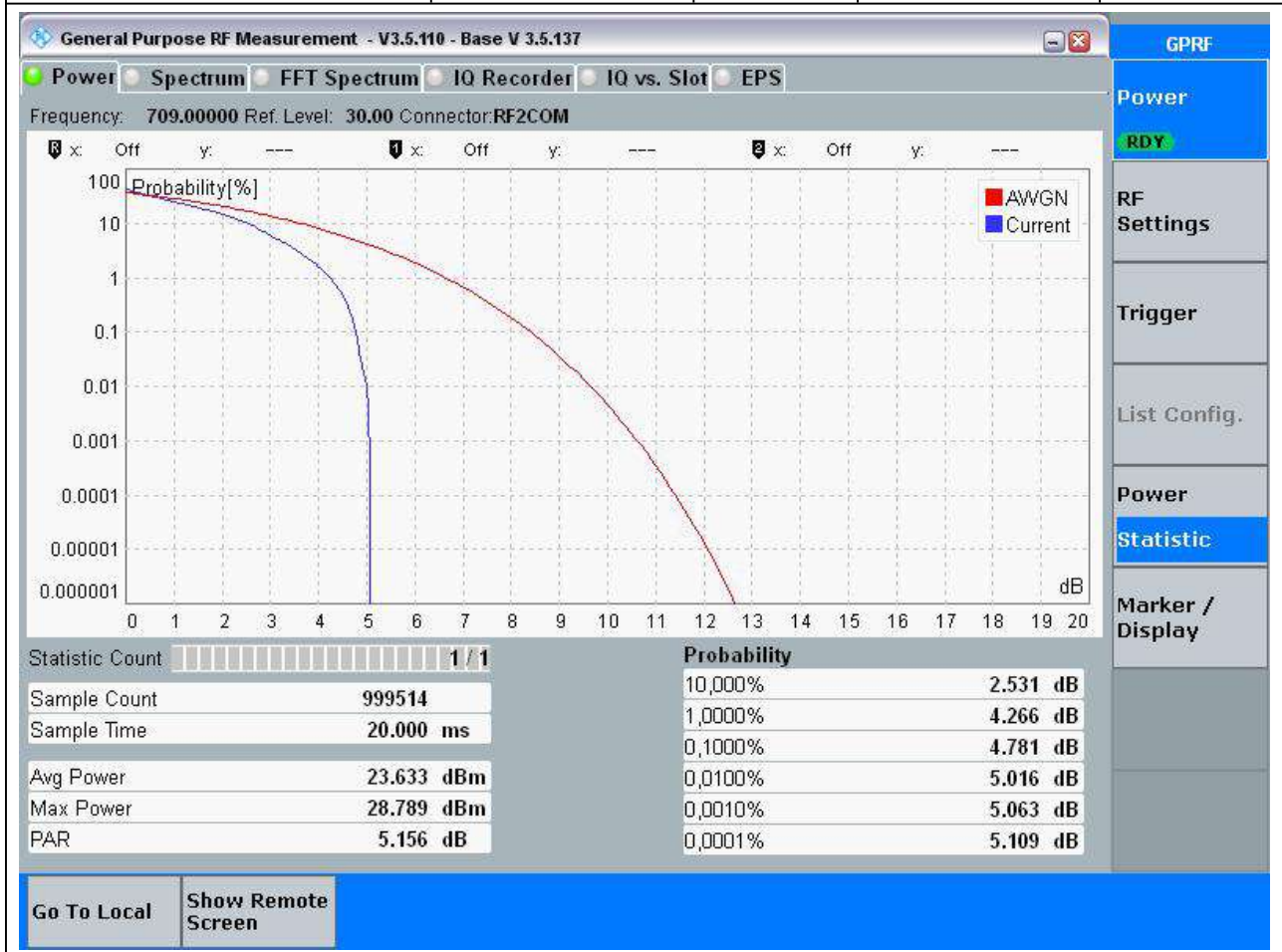
**9.4. LTE Peak to Average Ratio\_Part22-24-27(NTNV)(Subtest:4, Channel:23230, Bandwidth:10, Modulation:Q16, RB Number: 50, RB Position:LOW)**



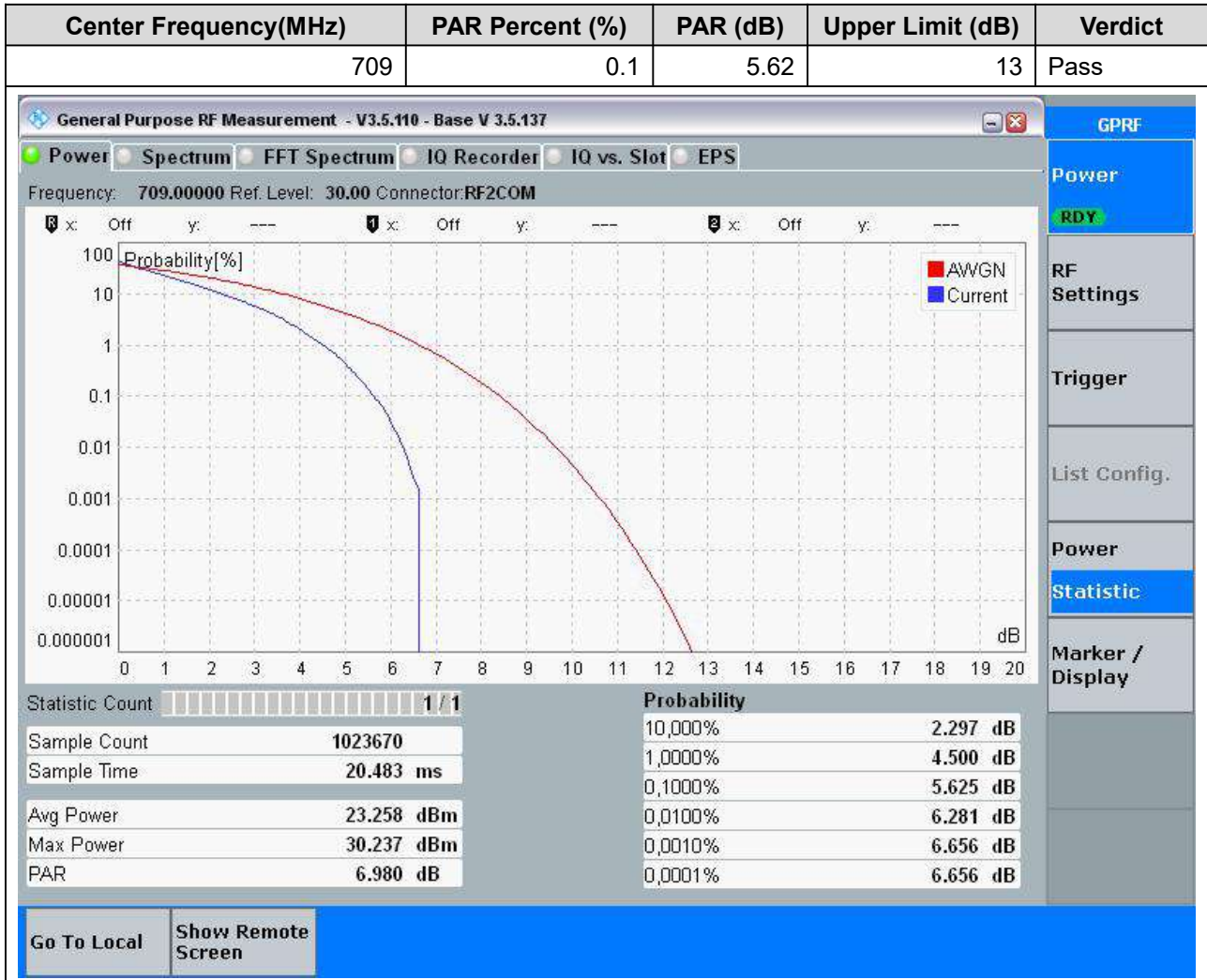
## 10. LTE\_Band17

### 10.1. LTE Peak to Average Ratio\_Part22-24-27(NTNV)(Subtest:1, Channel:23780, Bandwidth:10, Modulation:QPSK, RB Number: 1, RB Position:LOW)

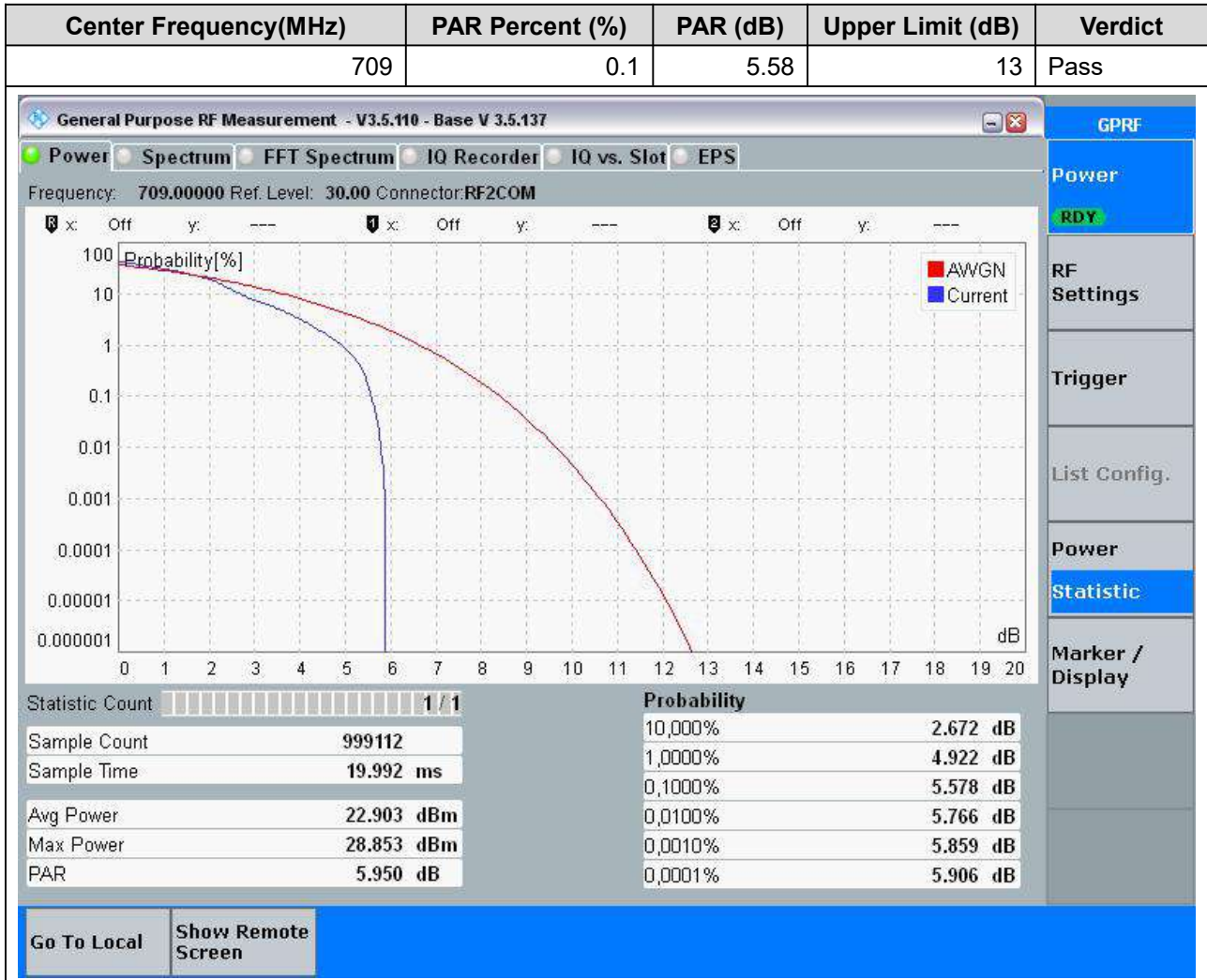
Center Frequency(MHz)	PAR Percent (%)	PAR (dB)	Upper Limit (dB)	Verdict
709	0.1	4.78	13	Pass



**10.2. LTE Peak to Average Ratio\_Part22-24-27(NTNV)(Subtest:2, Channel:23780, Bandwidth:10, Modulation:QPSK, RB Number: 50, RB Position:LOW)**



**10.3. LTE Peak to Average Ratio\_Part22-24-27(NTNV)(Subtest:3, Channel:23780, Bandwidth:10, Modulation:Q16, RB Number: 1, RB Position:LOW)**



**10.4. LTE Peak to Average Ratio\_Part22-24-27(NTNV)(Subtest:4, Channel:23780, Bandwidth:10, Modulation:Q16, RB Number: 50, RB Position:LOW)**

Center Frequency(MHz)	PAR Percent (%)	PAR (dB)	Upper Limit (dB)	Verdict
709	0.1	6.37	13	Pass

General Purpose RF Measurement - V3.5.110 - Base V 3.5.137

Power Spectrum FFT Spectrum IQ Recorder IQ vs. Slot EPS

Frequency: 709.00000 Ref. Level: 30.00 Connector:RF2COM

GPRF

Probability[%]

Statistic Count	
Sample Count	1023670
Sample Time	20.483 ms
Avg Power	22.181 dBm
Max Power	30.003 dBm
PAR	7.821 dB

Probability	
10,000%	2.766 dB
1,0000%	5.063 dB
0,1000%	6.375 dB
0,0100%	7.172 dB
0,0010%	7.594 dB
0,0001%	7.734 dB

Go To Local
Show Remote Screen

Power

RDY

RF Settings

Trigger

List Config.

Power

Statistic

Marker / Display

**10.5. LTE Peak to Average Ratio\_Part22-24-27(NTNV)(Subtest:5, Channel:23790, Bandwidth:10, Modulation:QPSK, RB Number: 1, RB Position:LOW)**

Center Frequency(MHz)	PAR Percent (%)	PAR (dB)	Upper Limit (dB)	Verdict
710	0.1	4.69	13	Pass

General Purpose RF Measurement - V3.5.110 - Base V 3.5.137

Power Spectrum FFT Spectrum IQ Recorder IQ vs. Slot EPS

Frequency: 710.00000 Ref. Level: 30.00 Connector:RF2COM

GPRF

Probability[%]

Statistic Count	Value
Sample Count	999112
Sample Time	19.992 ms
Avg Power	23.774 dBm
Max Power	28.785 dBm
PAR	5.011 dB

Probability	Value
10,000%	2.531 dB
1,0000%	4.172 dB
0,1000%	4.688 dB
0,0100%	4.875 dB
0,0010%	4.922 dB
0,0001%	4.969 dB

Go To Local
Show Remote Screen

Power

RDY

RF Settings

Trigger

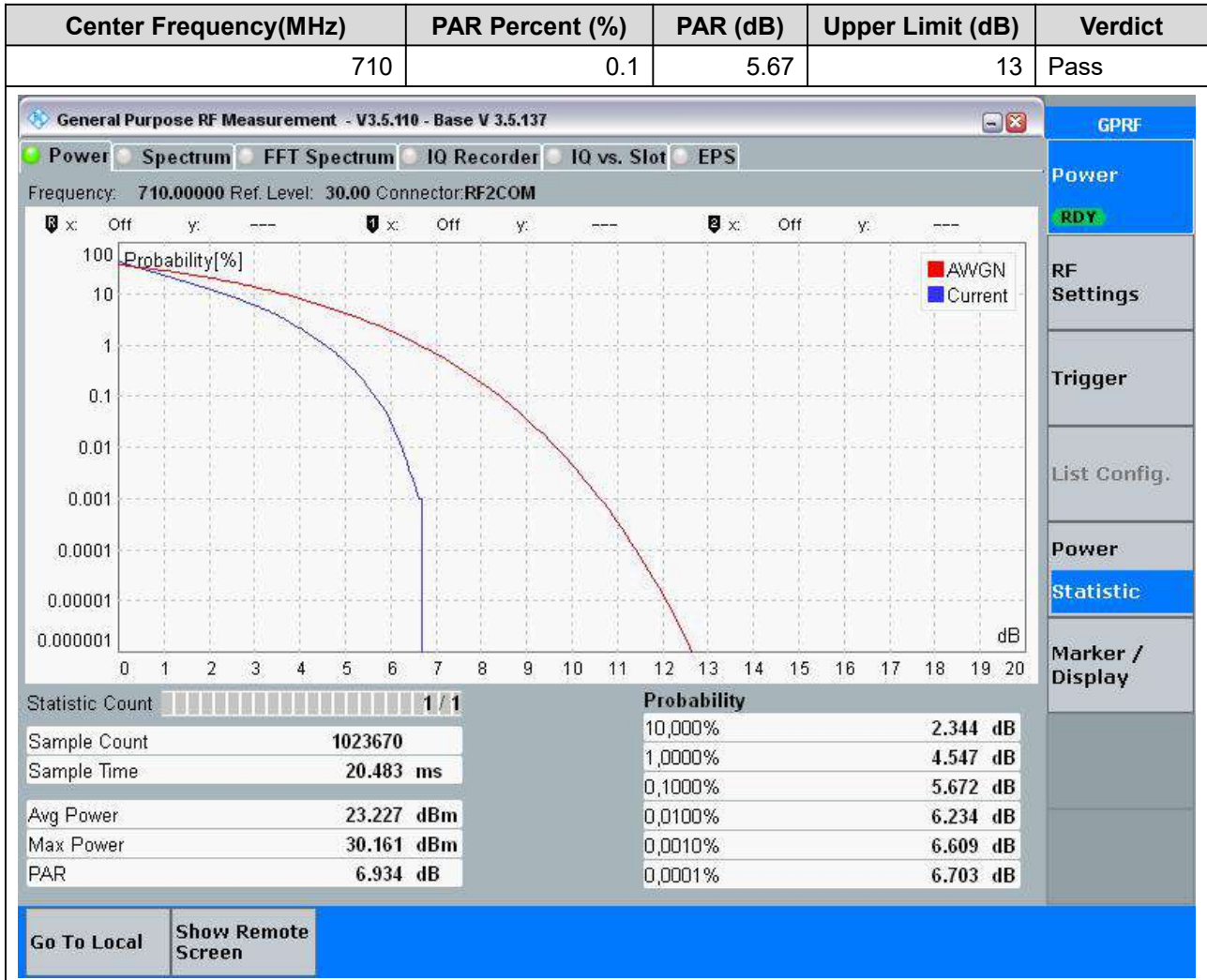
List Config.

Power

Statistic

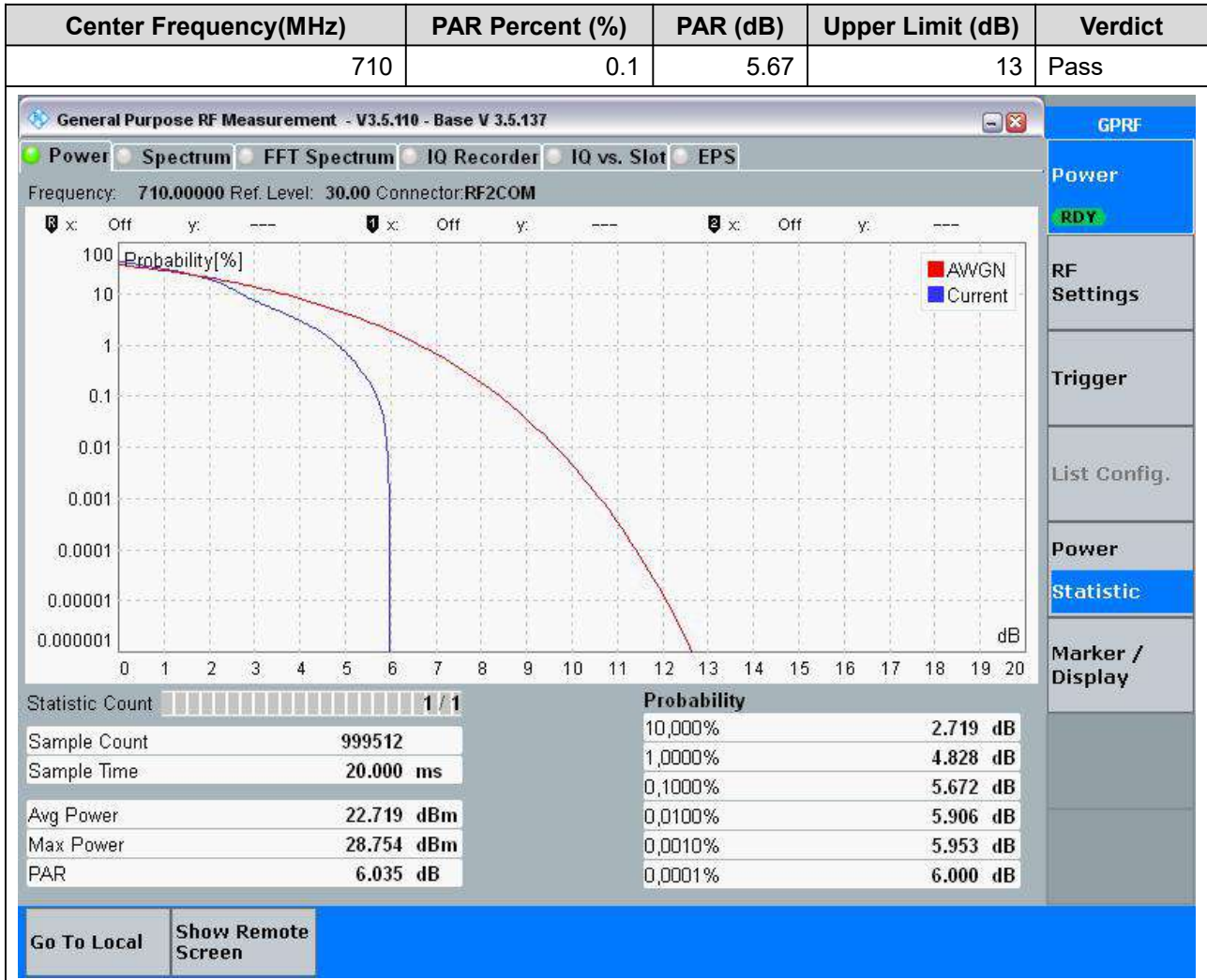
Marker / Display

**10.6. LTE Peak to Average Ratio\_Part22-24-27(NTNV)(Subtest:6, Channel:23790, Bandwidth:10, Modulation:QPSK, RB Number: 50, RB Position:LOW)**

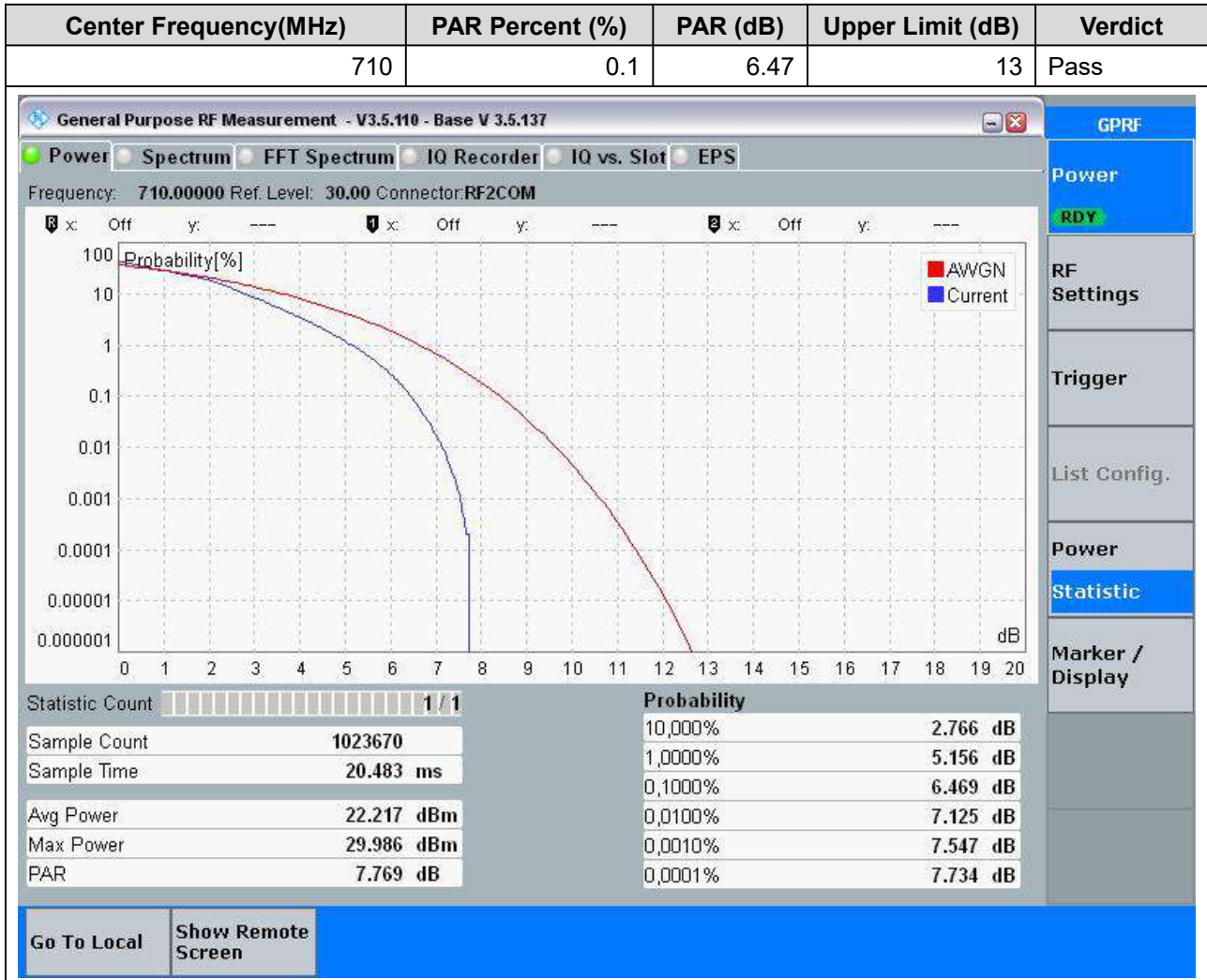




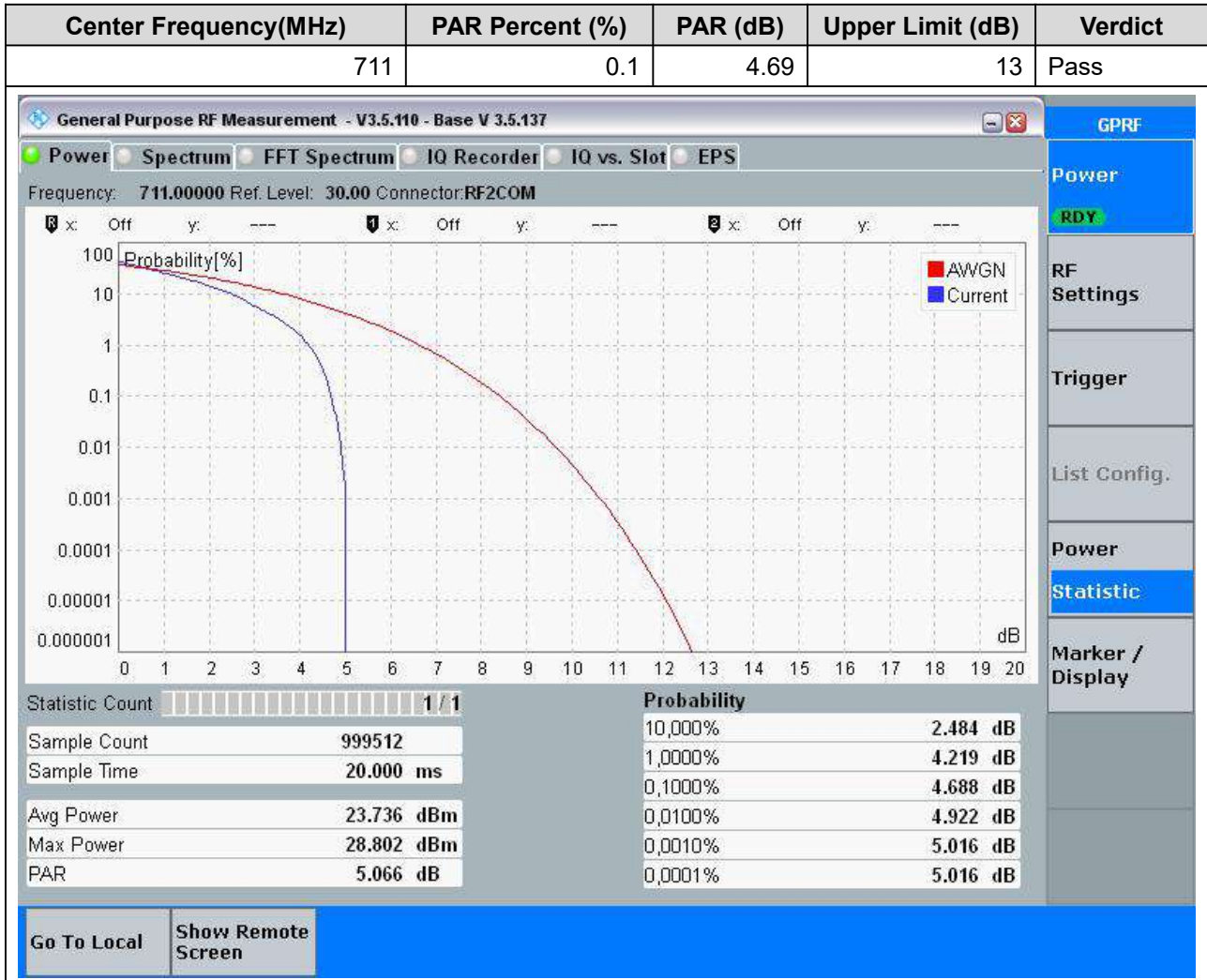
**10.7. LTE Peak to Average Ratio\_Part22-24-27(NTNV)(Subtest:7, Channel:23790, Bandwidth:10, Modulation:Q16, RB Number: 1, RB Position:LOW)**



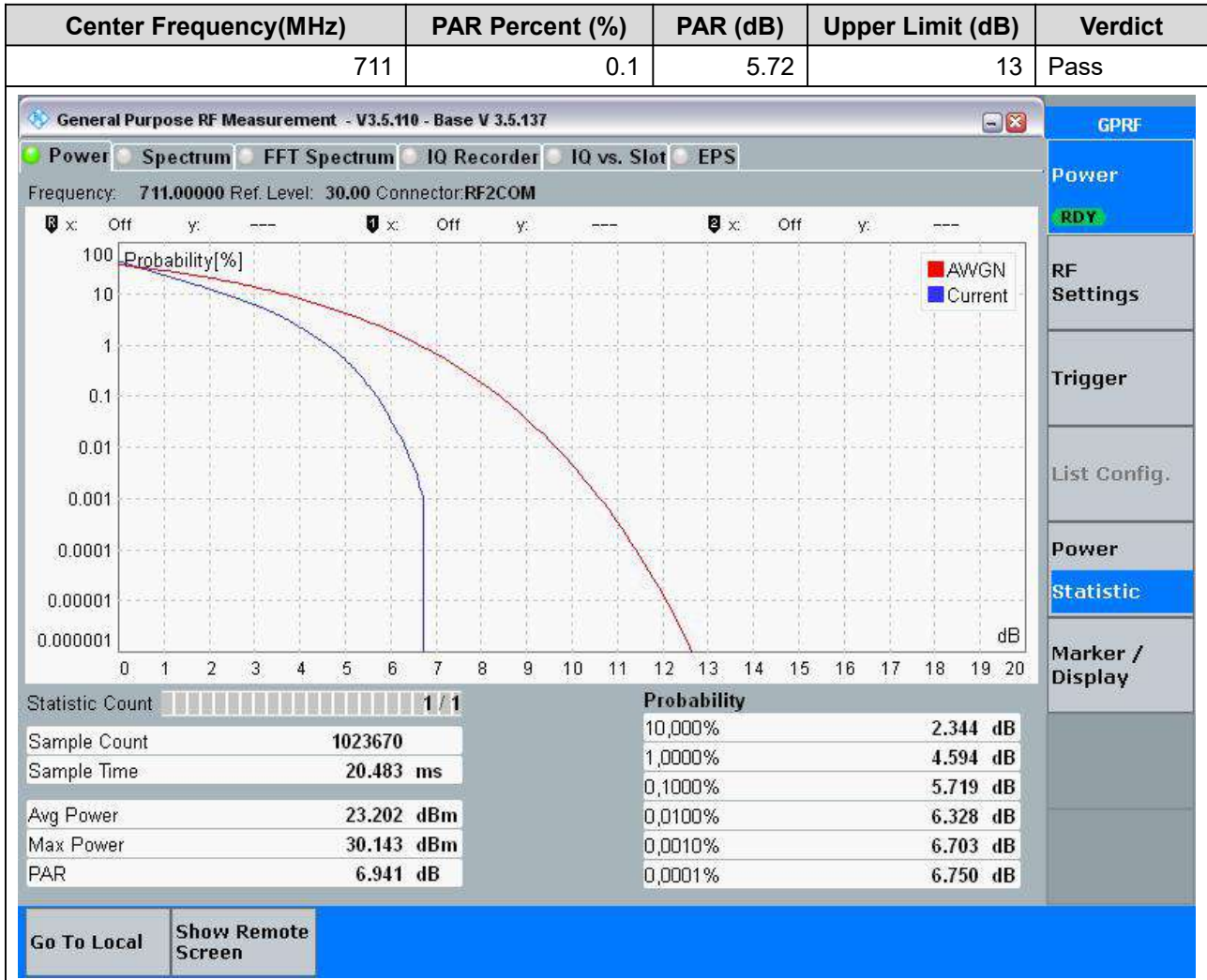
**10.8. LTE Peak to Average Ratio\_Part22-24-27(NTNV)(Subtest:8, Channel:23790, Bandwidth:10, Modulation:Q16, RB Number: 50, RB Position:LOW)**



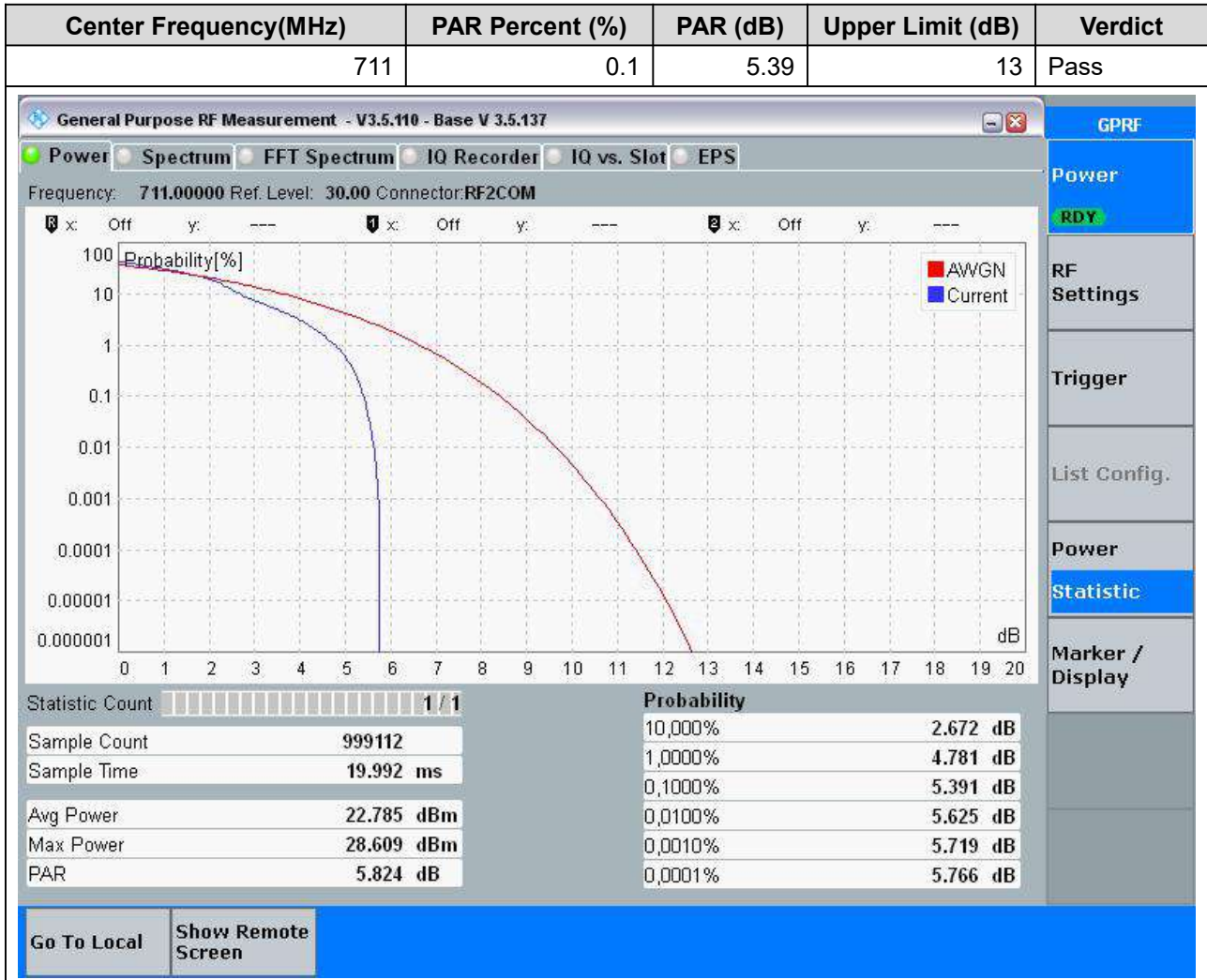
**10.9. LTE Peak to Average Ratio\_Part22-24-27(NTNV)(Subtest:9, Channel:23800, Bandwidth:10, Modulation:QPSK, RB Number: 1, RB Position:LOW)**



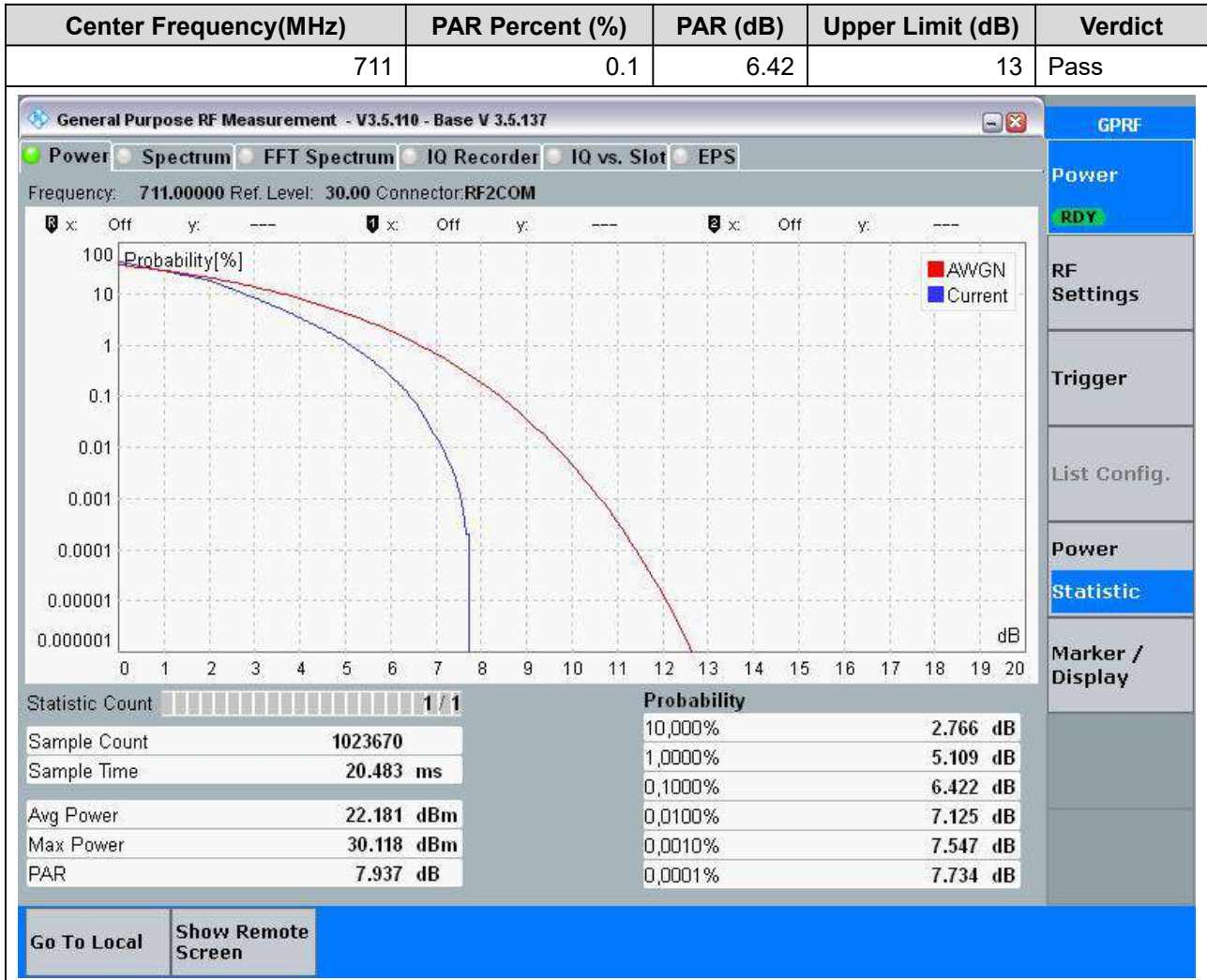
**10.10. LTE Peak to Average Ratio\_Part22-24-27(NTNV)(Subtest:10, Channel:23800, Bandwidth:10, Modulation:QPSK, RB Number: 50, RB Position:LOW)**



**10.11. LTE Peak to Average Ratio\_Part22-24-27(NTNV)(Subtest:11, Channel:23800, Bandwidth:10, Modulation:Q16, RB Number: 1, RB Position:LOW)**

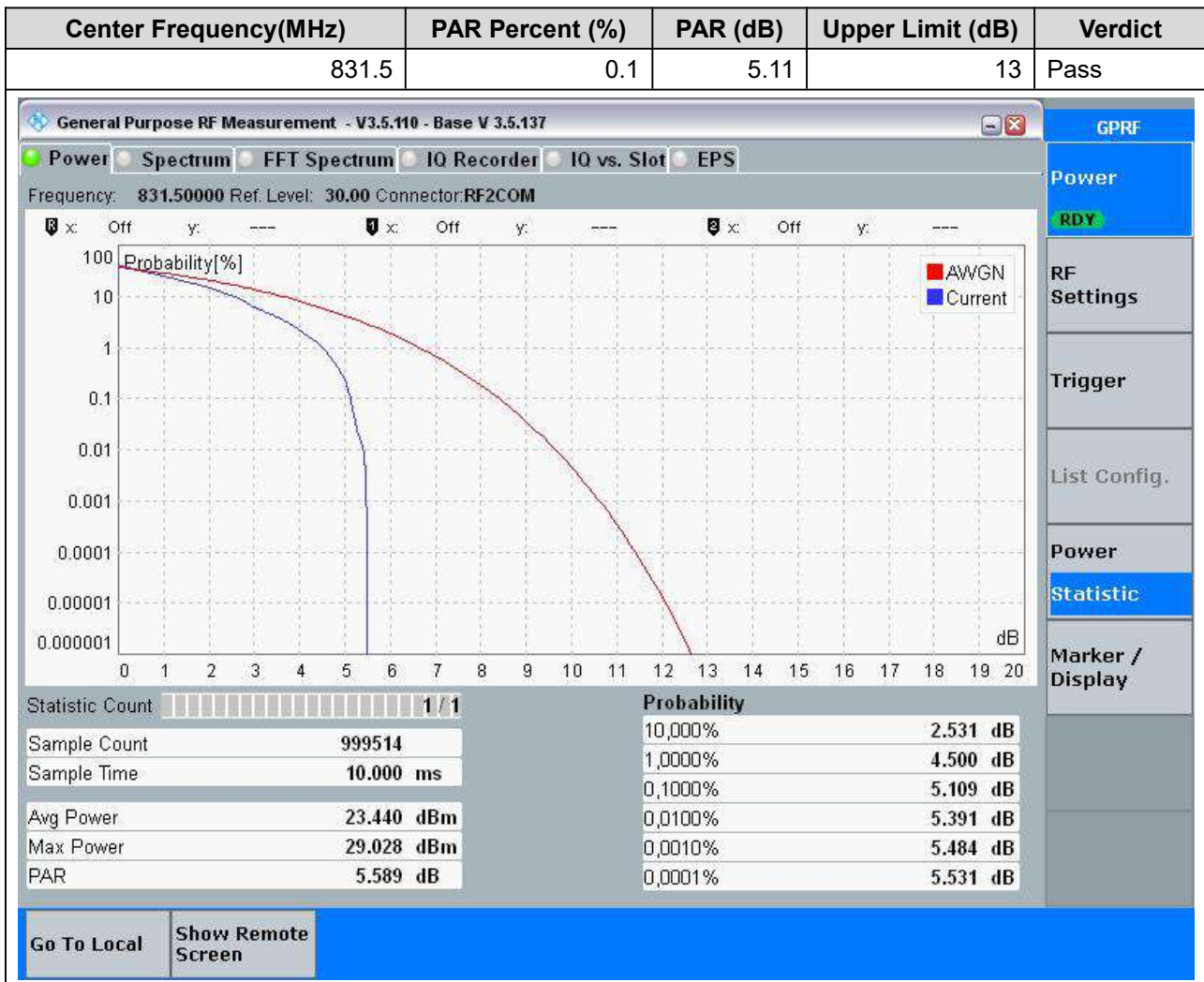


**10.12. LTE Peak to Average Ratio\_Part22-24-27(NTNV)(Subtest:12, Channel:23800, Bandwidth:10, Modulation:Q16, RB Number: 50, RB Position:LOW)**

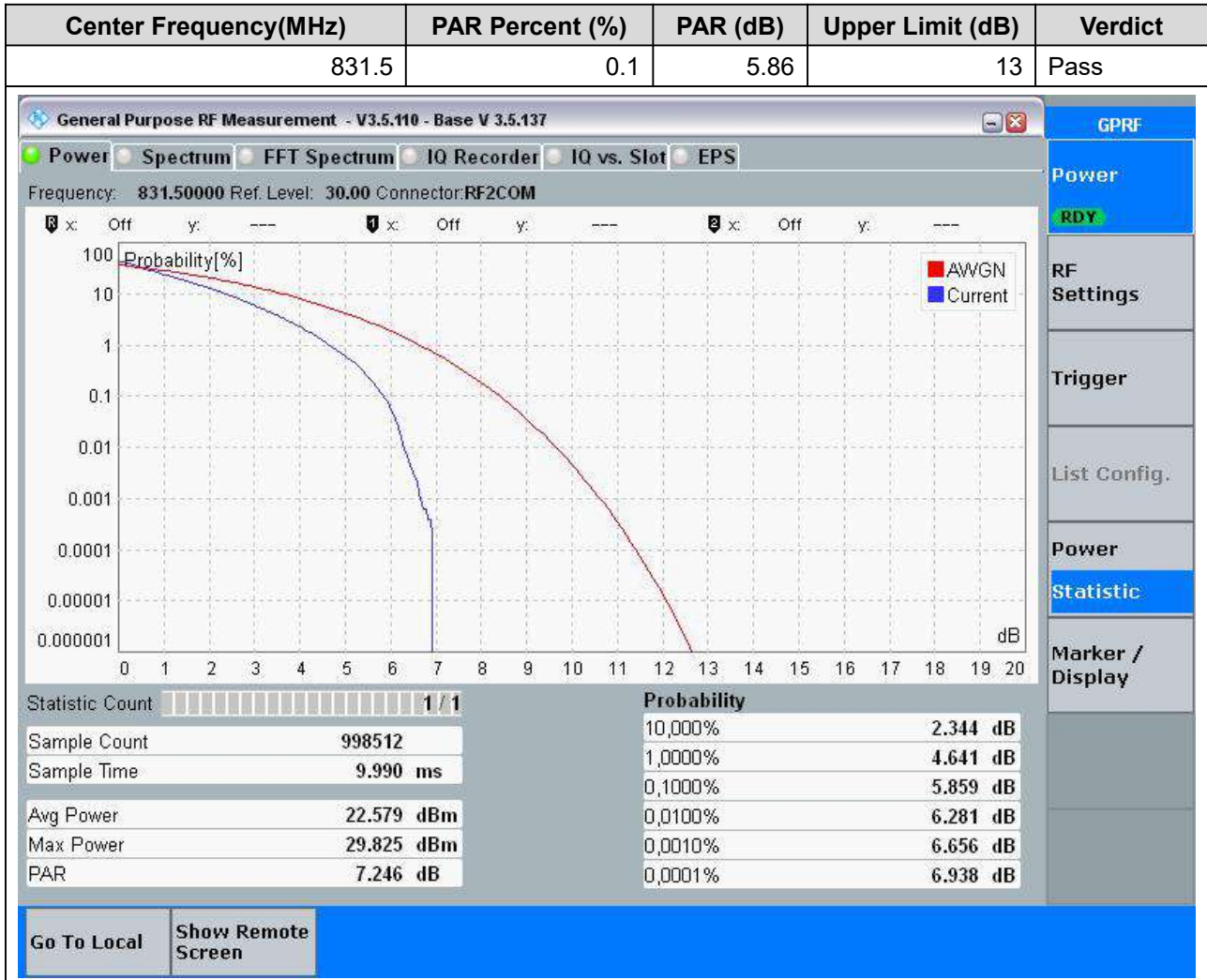


## 11. LTE\_Band26(part22)

### 11.1. LTE Peak to Average Ratio\_Part22-24-27(NTNV)(Subtest:1, Channel:26865, Bandwidth:15, Modulation:QPSK, RB Number: 1, RB Position:LOW)



**11.2. LTE Peak to Average Ratio\_Part22-24-27(NTNV)(Subtest:2, Channel:26865, Bandwidth:15, Modulation:QPSK, RB Number: 75, RB Position:LOW)**





**11.3. LTE Peak to Average Ratio\_Part22-24-27(NTNV)(Subtest:3, Channel:26865, Bandwidth:15, Modulation:Q16, RB Number: 1, RB Position:LOW)**

Center Frequency(MHz)	PAR Percent (%)	PAR (dB)	Upper Limit (dB)	Verdict
831.5	0.1	5.95	13	Pass

General Purpose RF Measurement - V3.5.110 - Base V 3.5.137

Power Spectrum FFT Spectrum IQ Recorder IQ vs. Slot EPS

Frequency: 831.50000 Ref. Level: 30.00 Connector:RF2COM

GPRF

Probability[%]

Statistic Count	Value
Sample Count	999512
Sample Time	10.000 ms
Avg Power	22.703 dBm
Max Power	29.057 dBm
PAR	6.354 dB

Probability	Value
10,000%	2.672 dB
1,0000%	5.156 dB
0,1000%	5.953 dB
0,0100%	6.188 dB
0,0010%	6.281 dB
0,0001%	6.281 dB

Go To Local
Show Remote Screen

Power

RDY

RF Settings

Trigger

List Config.

Power

Statistic

Marker / Display

**11.4. LTE Peak to Average Ratio\_Part22-24-27(NTNV)(Subtest:4, Channel:26865, Bandwidth:15, Modulation:Q16, RB Number: 75, RB Position:LOW)**

Center Frequency(MHz)	PAR Percent (%)	PAR (dB)	Upper Limit (dB)	Verdict
831.5	0.1	6.33	13	Pass

General Purpose RF Measurement - V3.5.110 - Base V 3.5.137

Power Spectrum FFT Spectrum IQ Recorder IQ vs. Slot EPS

Frequency: 831.50000 Ref. Level: 30.00 Connector:RF2COM

GPRF

Probability[%]

Statistic Count	
Sample Count	998512
Sample Time	9.990 ms
Avg Power	21.591 dBm
Max Power	29.393 dBm
PAR	7.801 dB

Probability	
10,000%	2.813 dB
1,0000%	5.109 dB
0,1000%	6.328 dB
0,0100%	7.031 dB
0,0010%	7.500 dB
0,0001%	7.734 dB

Go To Local
Show Remote Screen

Power

RDY

RF Settings

Trigger

List Config.

Power

Statistic

Marker / Display

**11.5. LTE Peak to Average Ratio\_Part22-24-27(NTNV)(Subtest:5, Channel:26915, Bandwidth:15, Modulation:QPSK, RB Number: 1, RB Position:LOW)**

Center Frequency(MHz)	PAR Percent (%)	PAR (dB)	Upper Limit (dB)	Verdict
836.5	0.1	4.83	13	Pass

The screenshot displays the 'General Purpose RF Measurement' interface. The main window shows a CDF plot of Power (dB) versus Probability (%). The plot compares the 'Current' measurement (blue line) against an 'AWGN' reference (red line). The current measurement shows a steeper decline, indicating a higher PAR. Below the plot, a table provides statistical data for the current measurement.

Statistic	Value	Probability	Value (dB)
Sample Count	999514	10,000%	2.484
Sample Time	10.000 ms	1,0000%	4.266
Avg Power	23.499 dBm	0,1000%	4.828
Max Power	28.743 dBm	0,0100%	5.063
PAR	5.243 dB	0,0010%	5.156
		0,0001%	5.203

Buttons at the bottom include 'Go To Local' and 'Show Remote Screen'.

**11.6. LTE Peak to Average Ratio\_Part22-24-27(NTNV)(Subtest:6, Channel:26915, Bandwidth:15, Modulation:QPSK, RB Number: 75, RB Position:LOW)**

Center Frequency(MHz)	PAR Percent (%)	PAR (dB)	Upper Limit (dB)	Verdict
836.5	0.1	5.72	13	Pass

