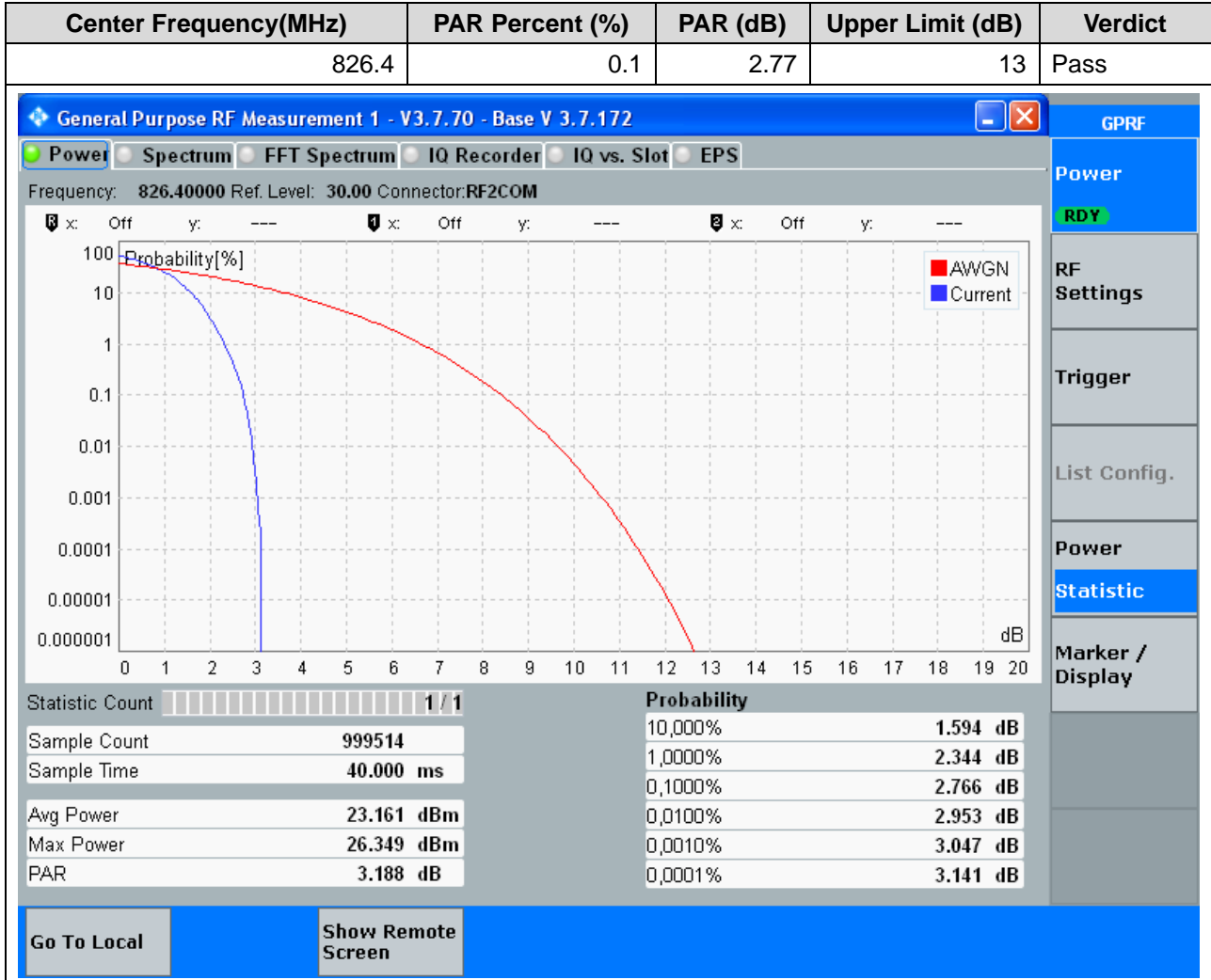


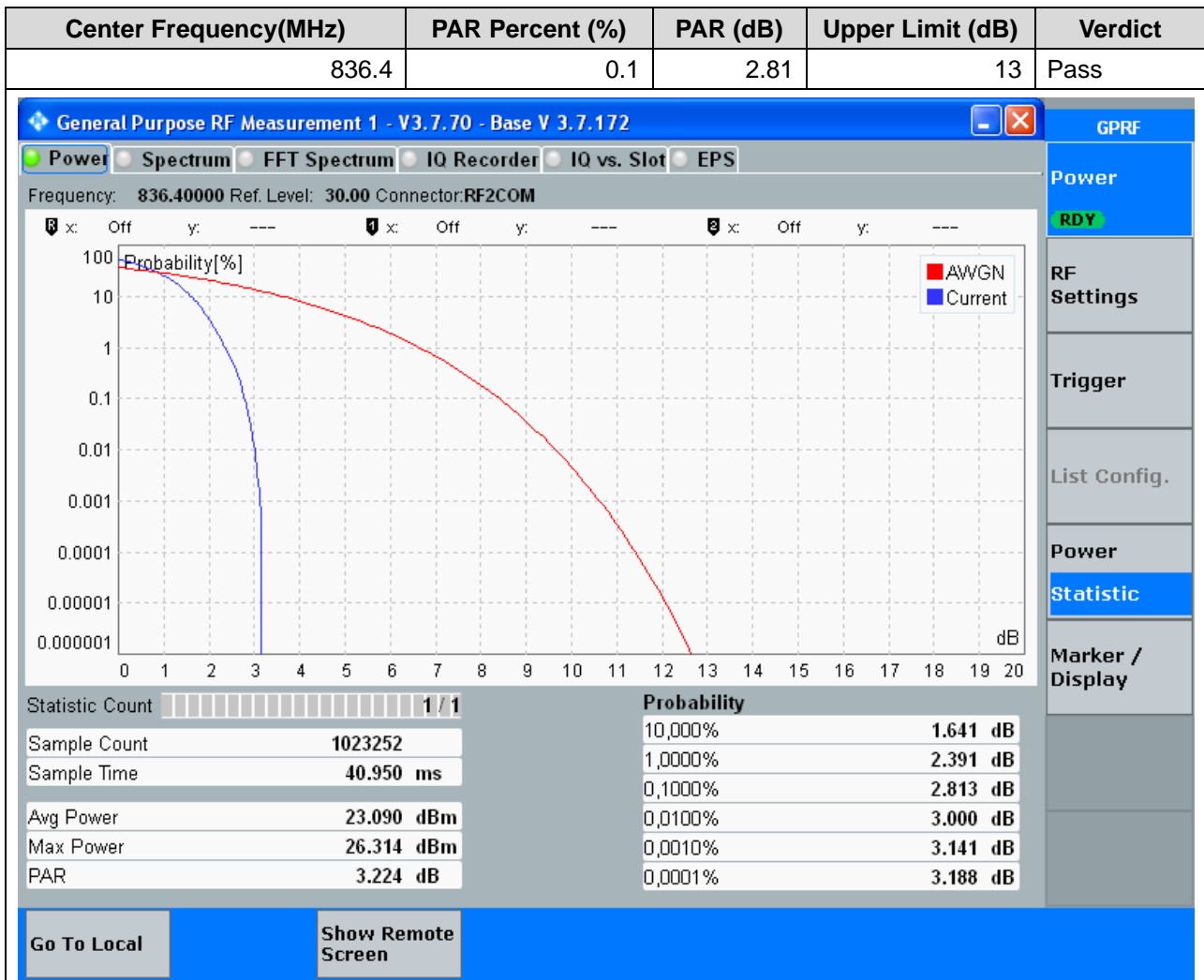
Annex A.2 Peak to Average Ratio

1. WCDMA_Band5

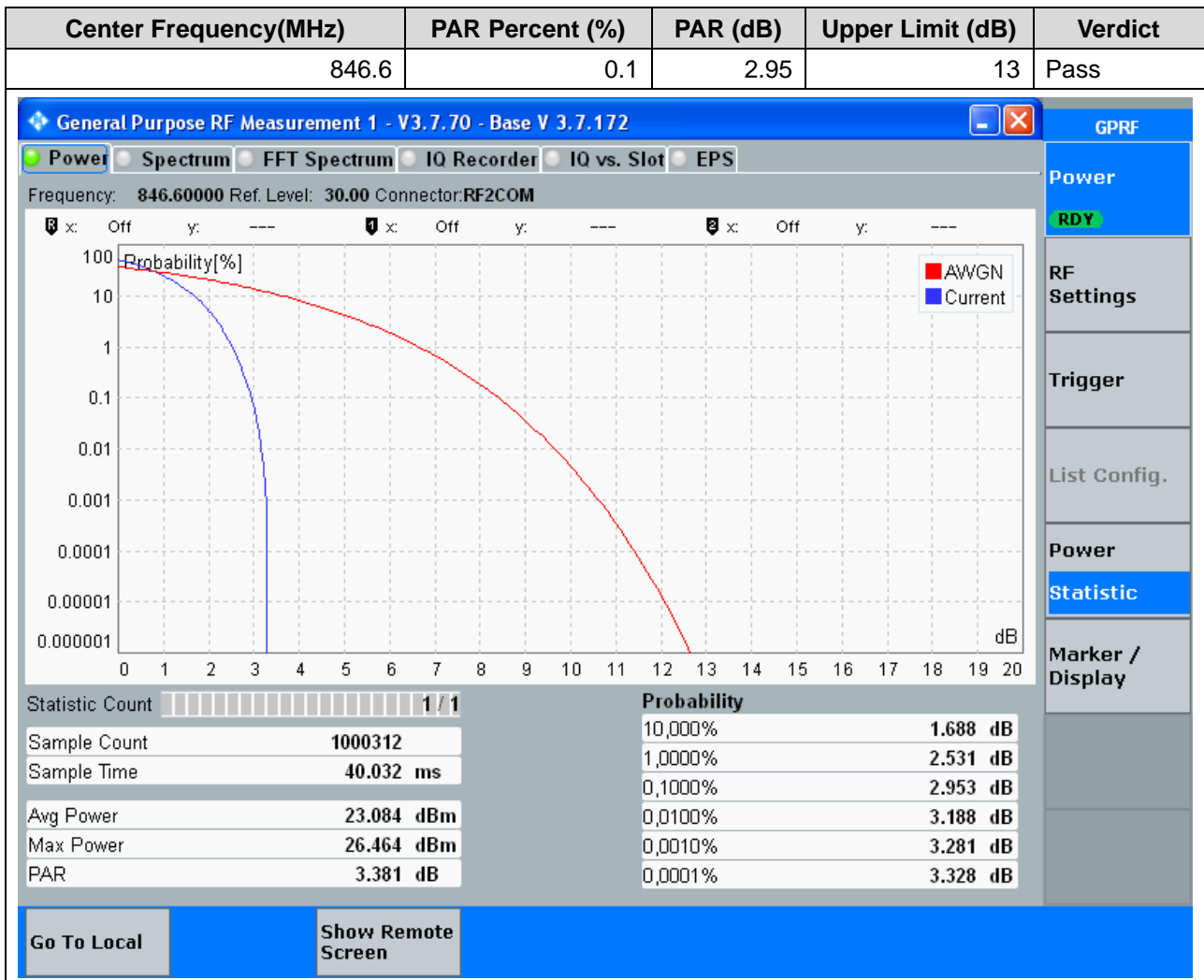
1.1. WCDMA Peak to Average Ratio_Part22-24-27(NTNV)(Channel:4132)



1.2. WCDMA Peak to Average Ratio_Part22-24-27(NTNV)(Channel:4182)

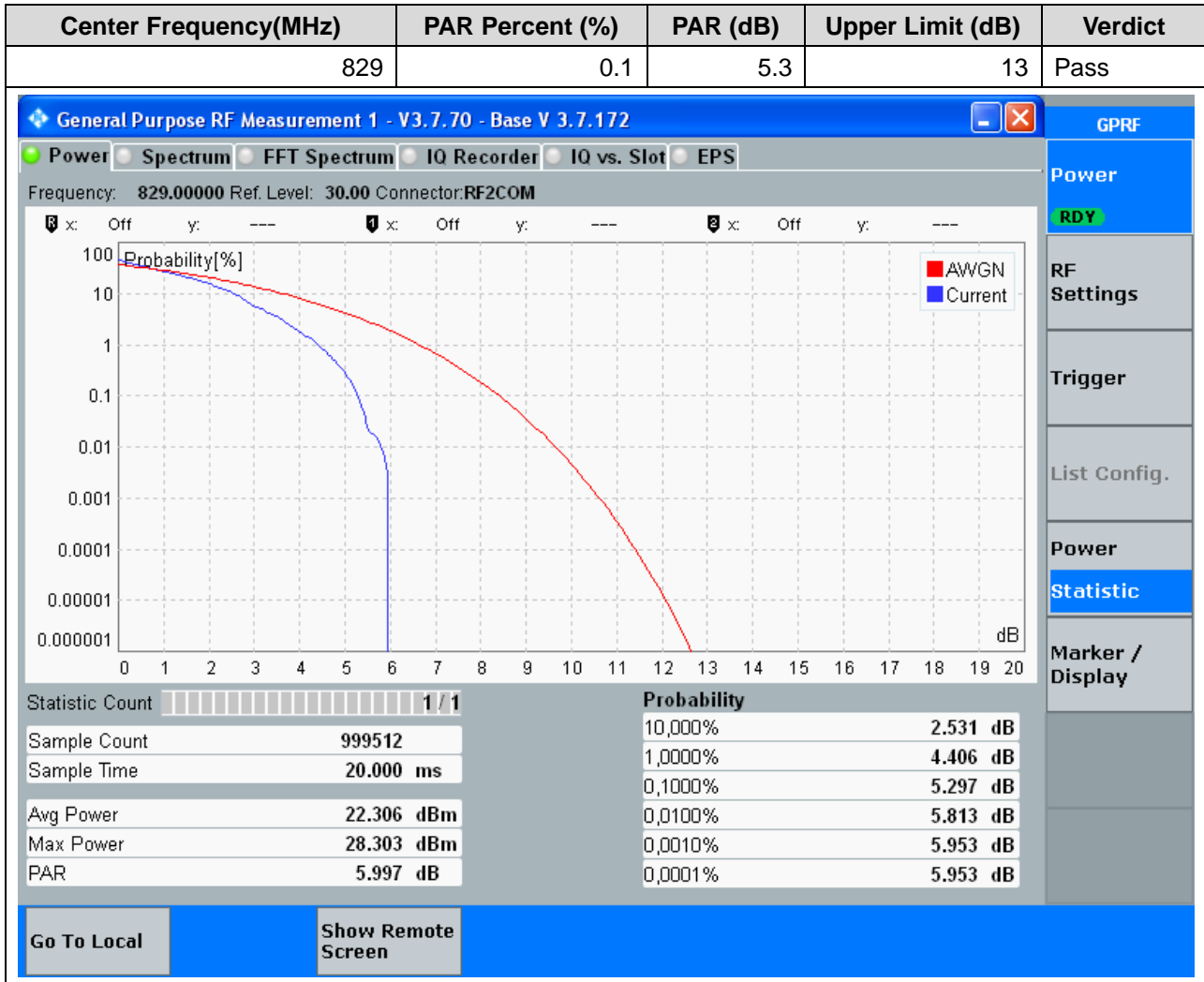


1.3. WCDMA Peak to Average Ratio_Part22-24-27(NTNV)(Channel:4233)

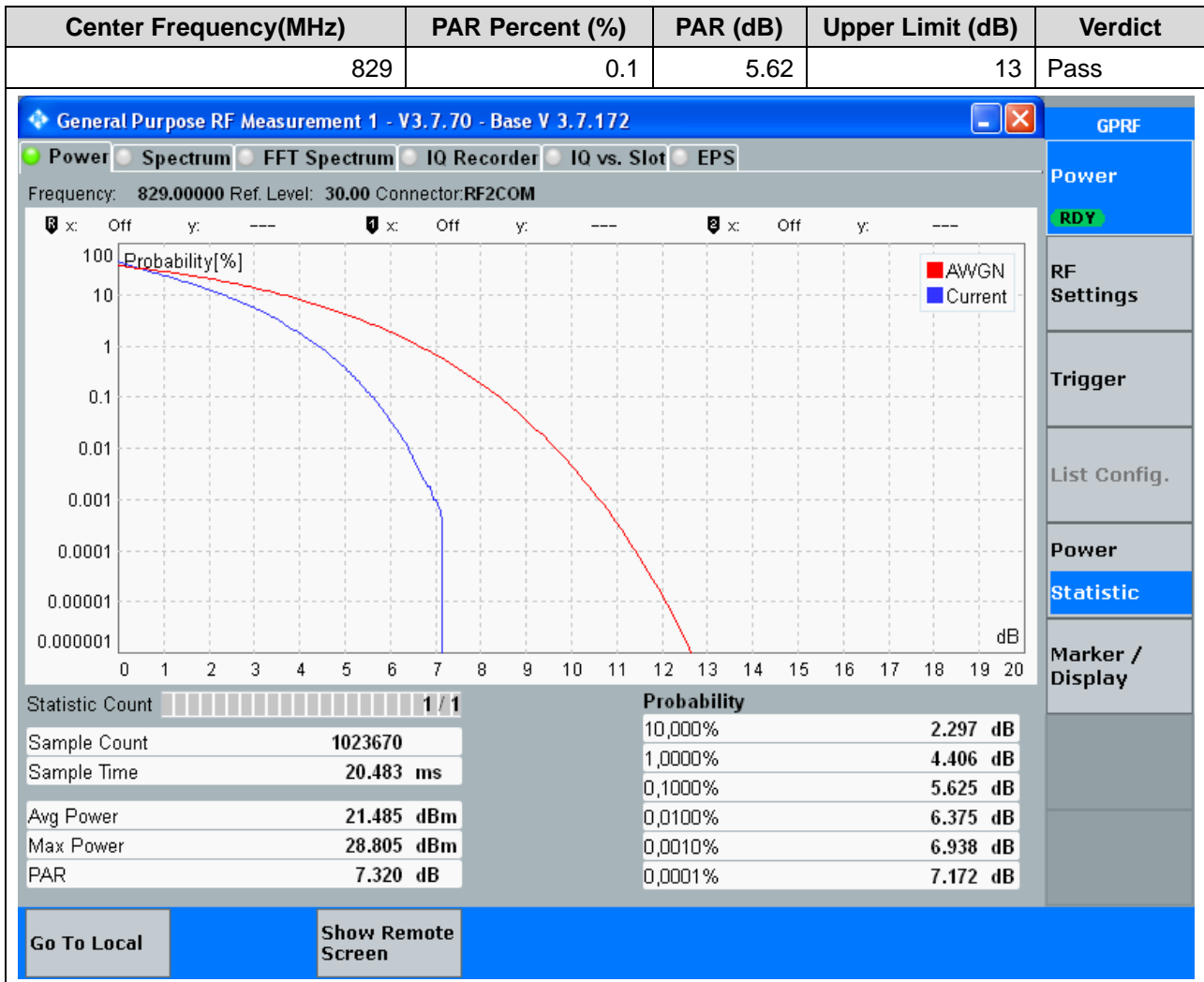


2. LTE_Band5

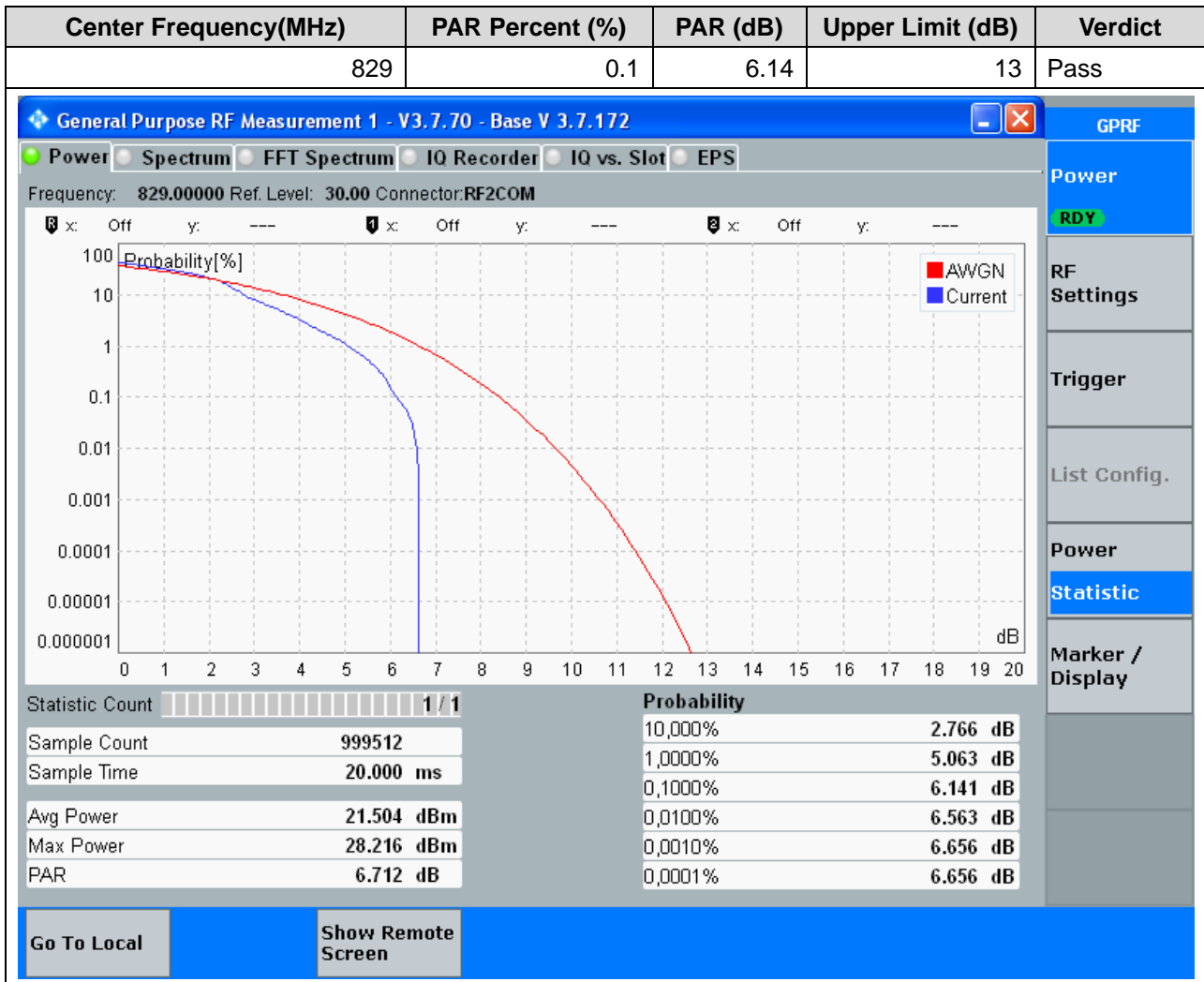
2.1. LTE Peak to Average Ratio_Part22-24-27(NTNV)(Subtest:1, Channel:20450, Bandwidth:10, Modulation:QPSK, RB Number: 1, RB Position:LOW)



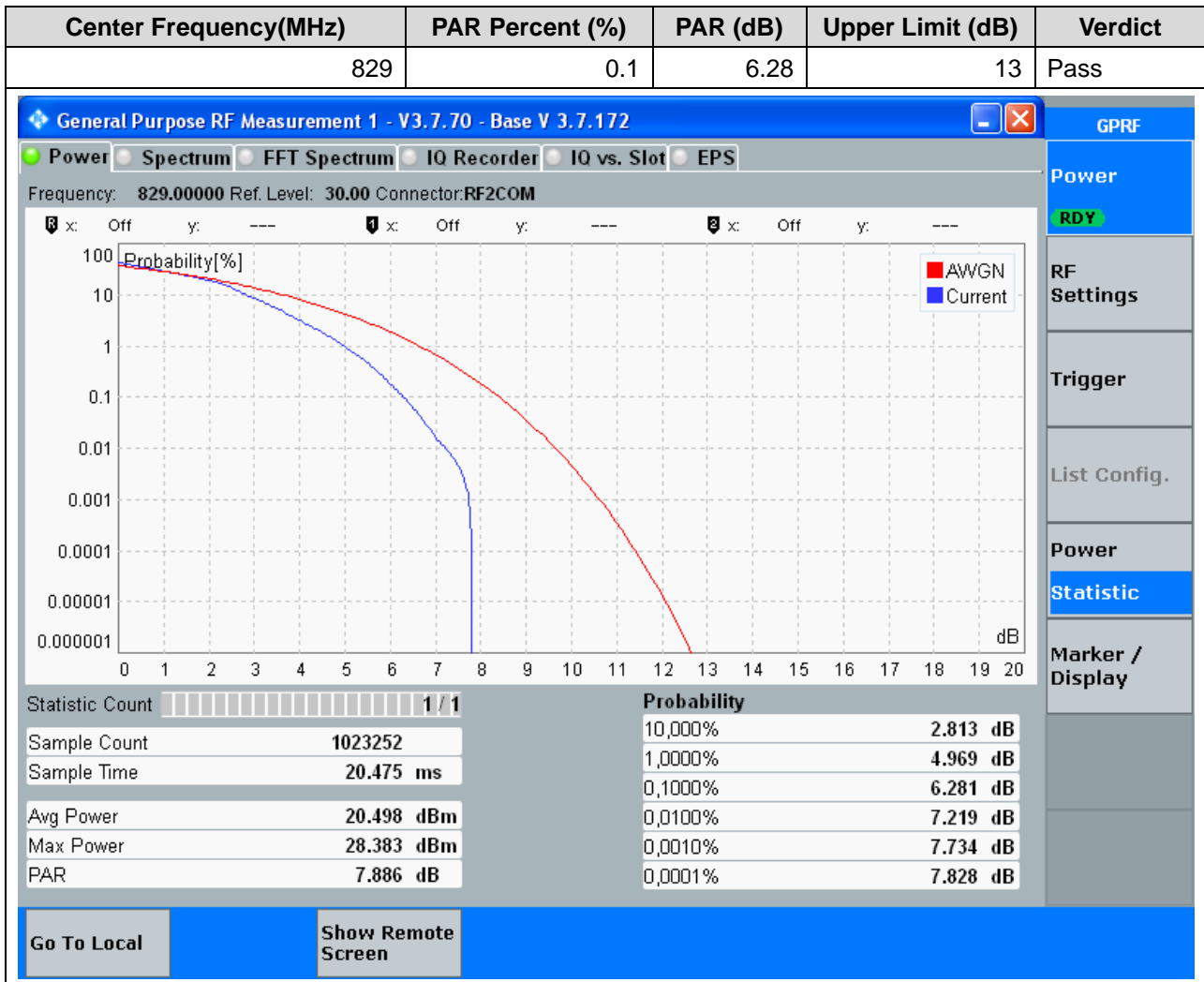
2.2. LTE Peak to Average Ratio_Part22-24-27(NTNV)(Subtest:2, Channel:20450, Bandwidth:10, Modulation:QPSK, RB Number: 50, RB Position:LOW)



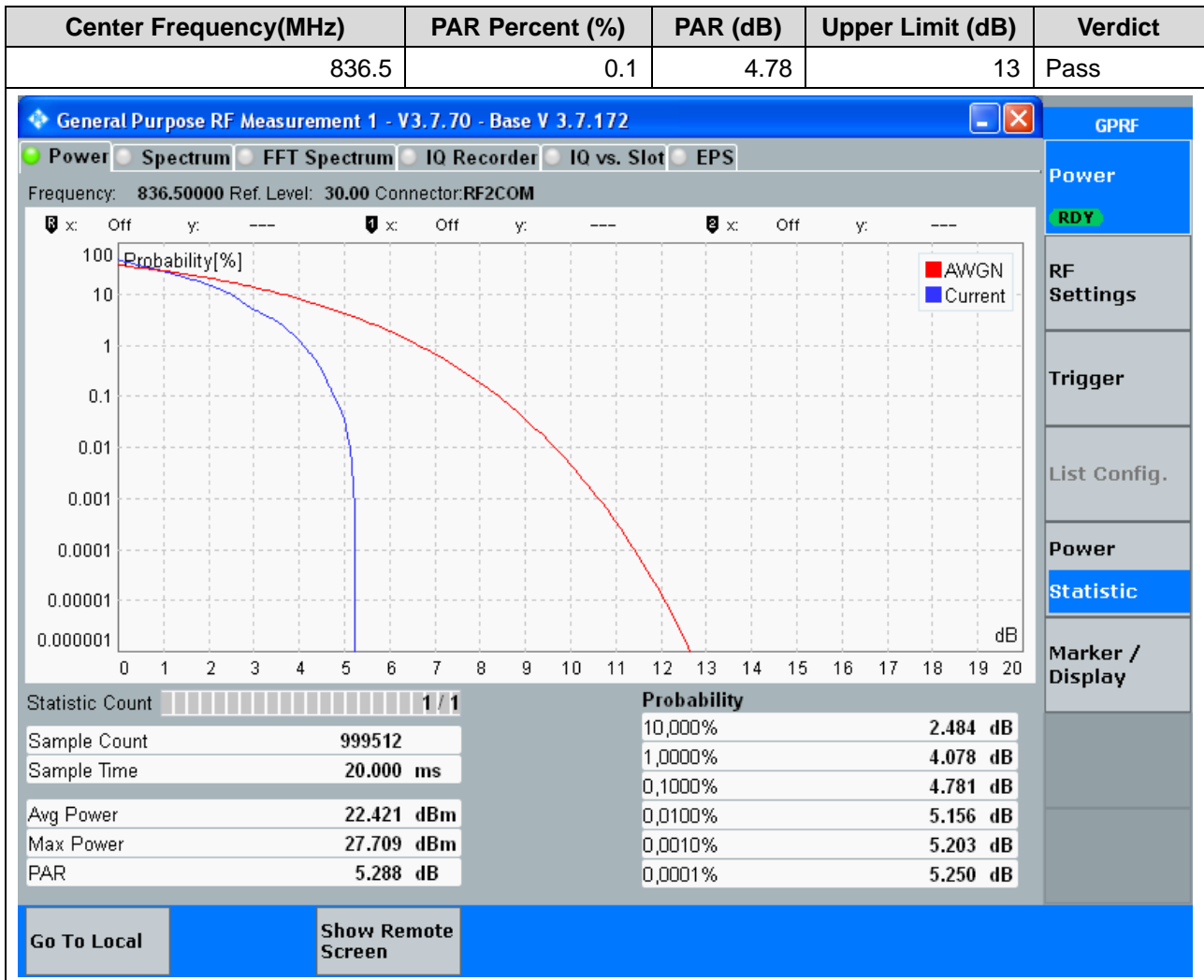
2.3. LTE Peak to Average Ratio_Part22-24-27(NTNV)(Subtest:3, Channel:20450, Bandwidth:10, Modulation:Q16, RB Number: 1, RB Position:LOW)



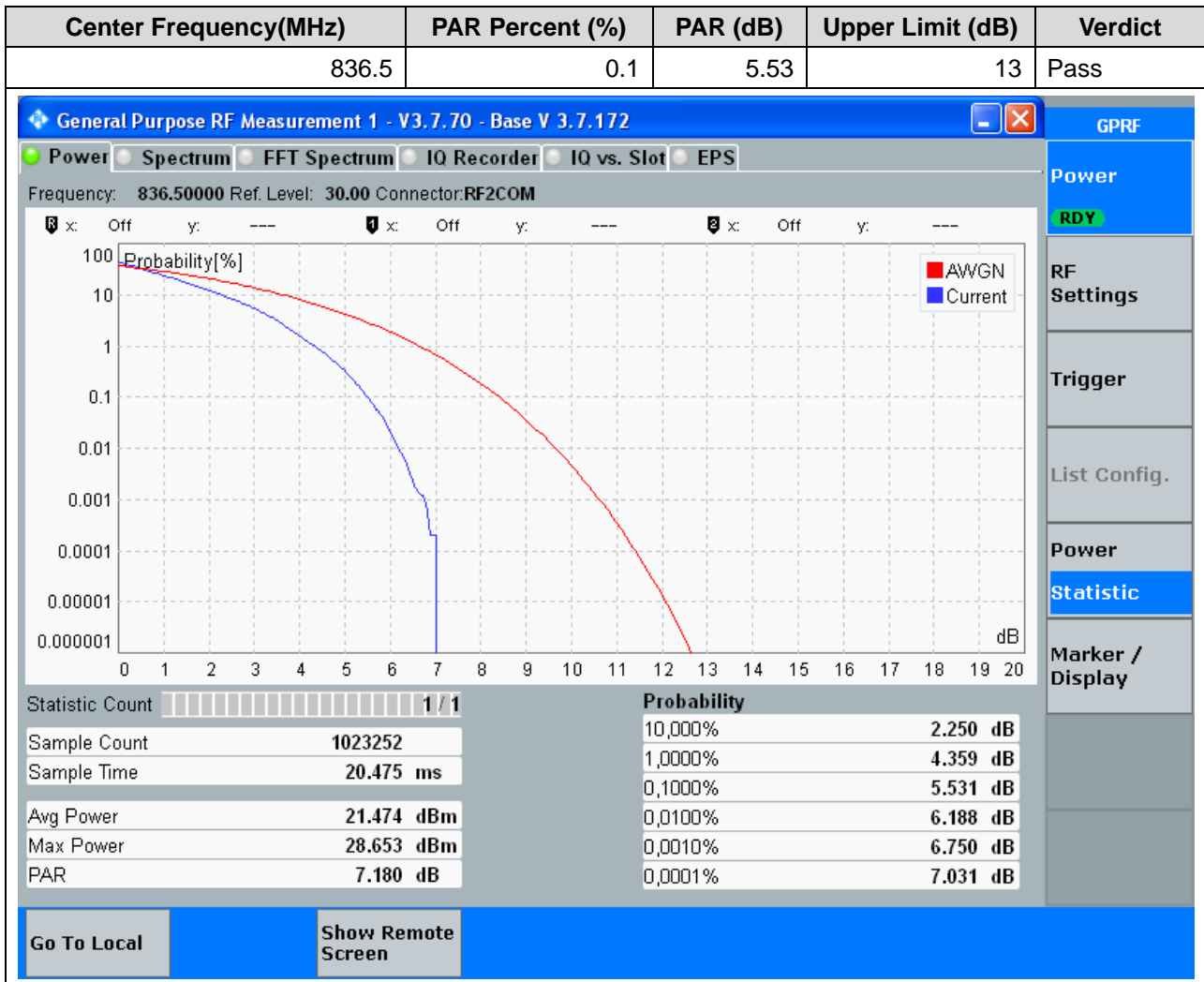
2.4. LTE Peak to Average Ratio_Part22-24-27(NTNV)(Subtest:4, Channel:20450, Bandwidth:10, Modulation:Q16, RB Number: 50, RB Position:LOW)



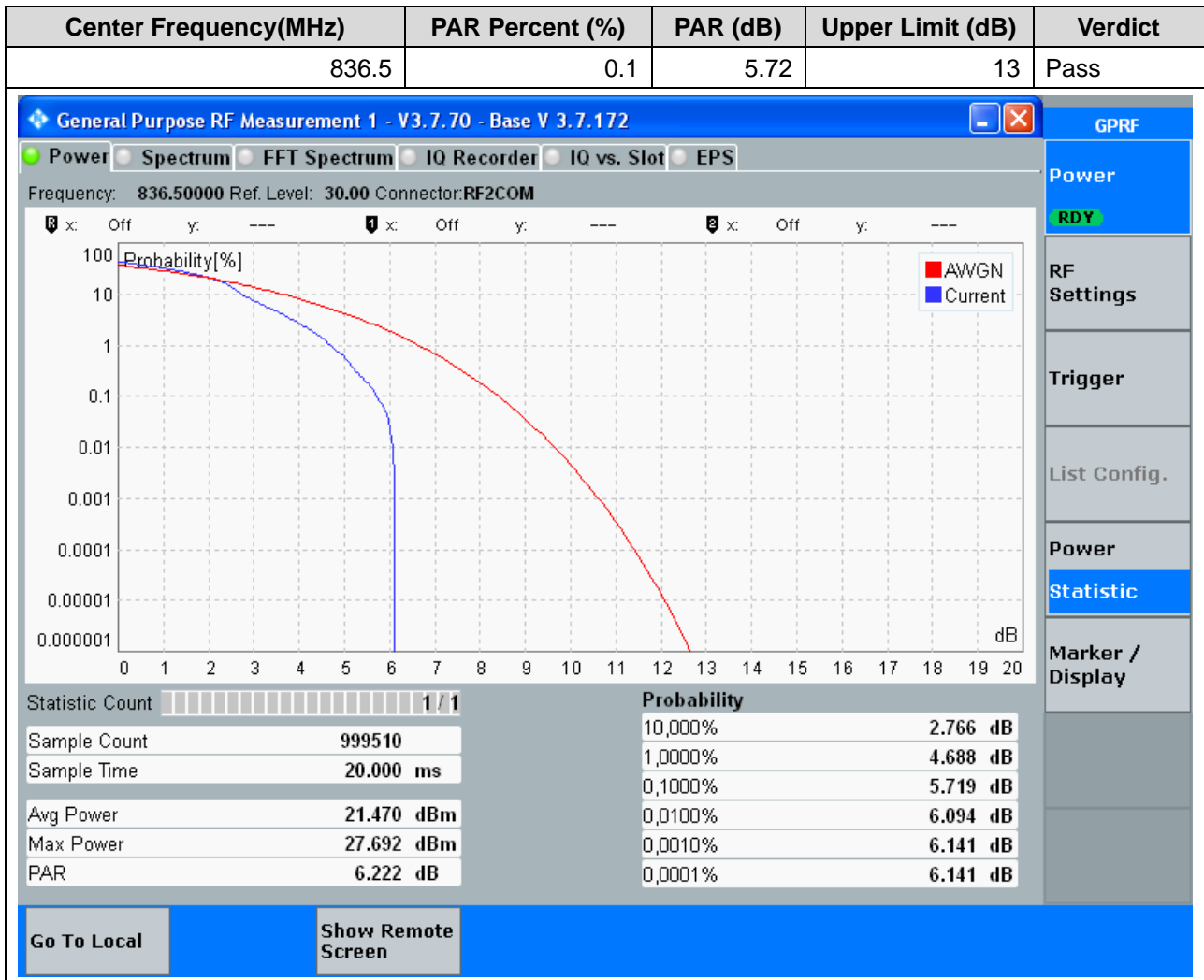
2.5. LTE Peak to Average Ratio_Part22-24-27(NTNV)(Subtest:5, Channel:20525, Bandwidth:10, Modulation:QPSK, RB Number: 1, RB Position:LOW)



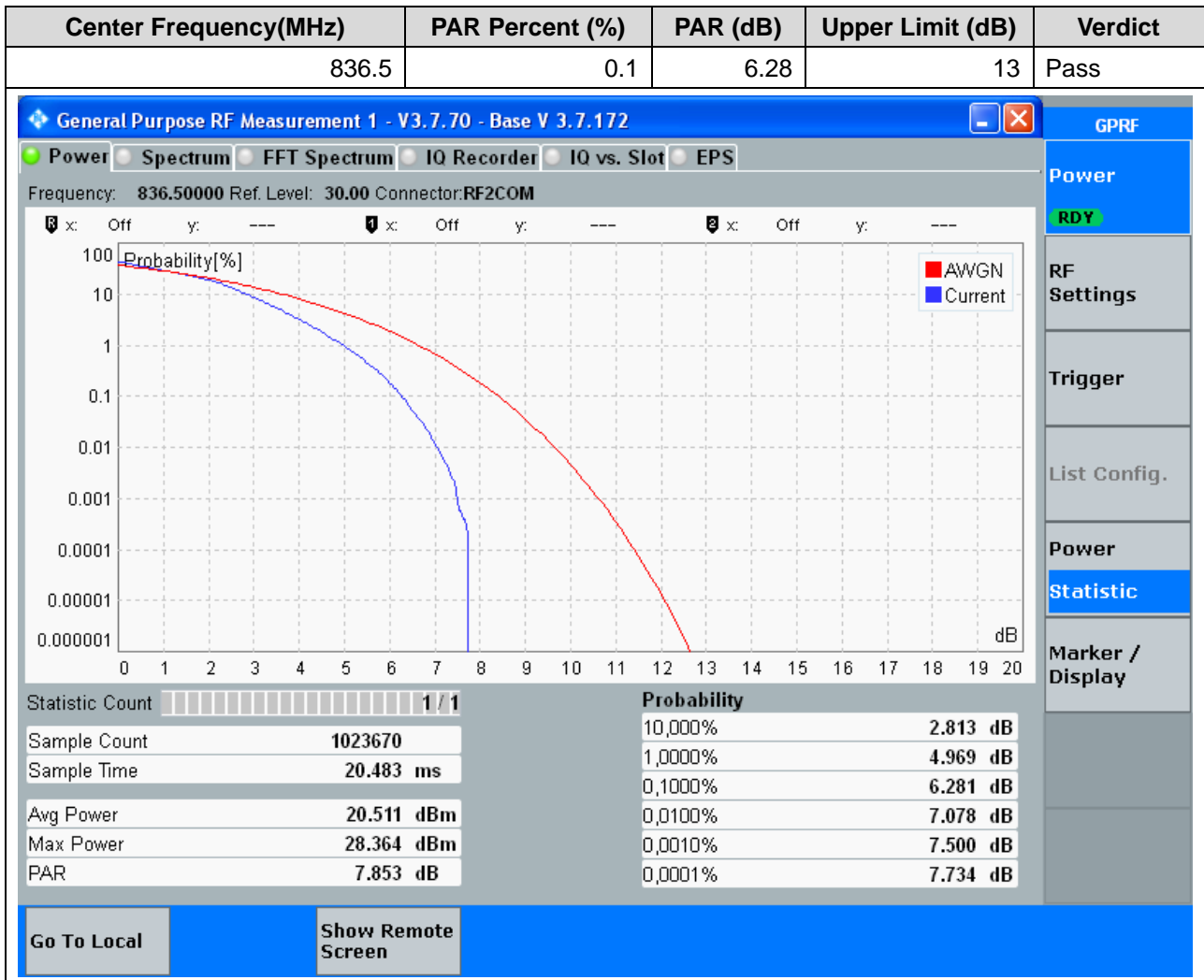
2.6. LTE Peak to Average Ratio_Part22-24-27(NTNV)(Subtest:6, Channel:20525, Bandwidth:10, Modulation:QPSK, RB Number: 50, RB Position:LOW)



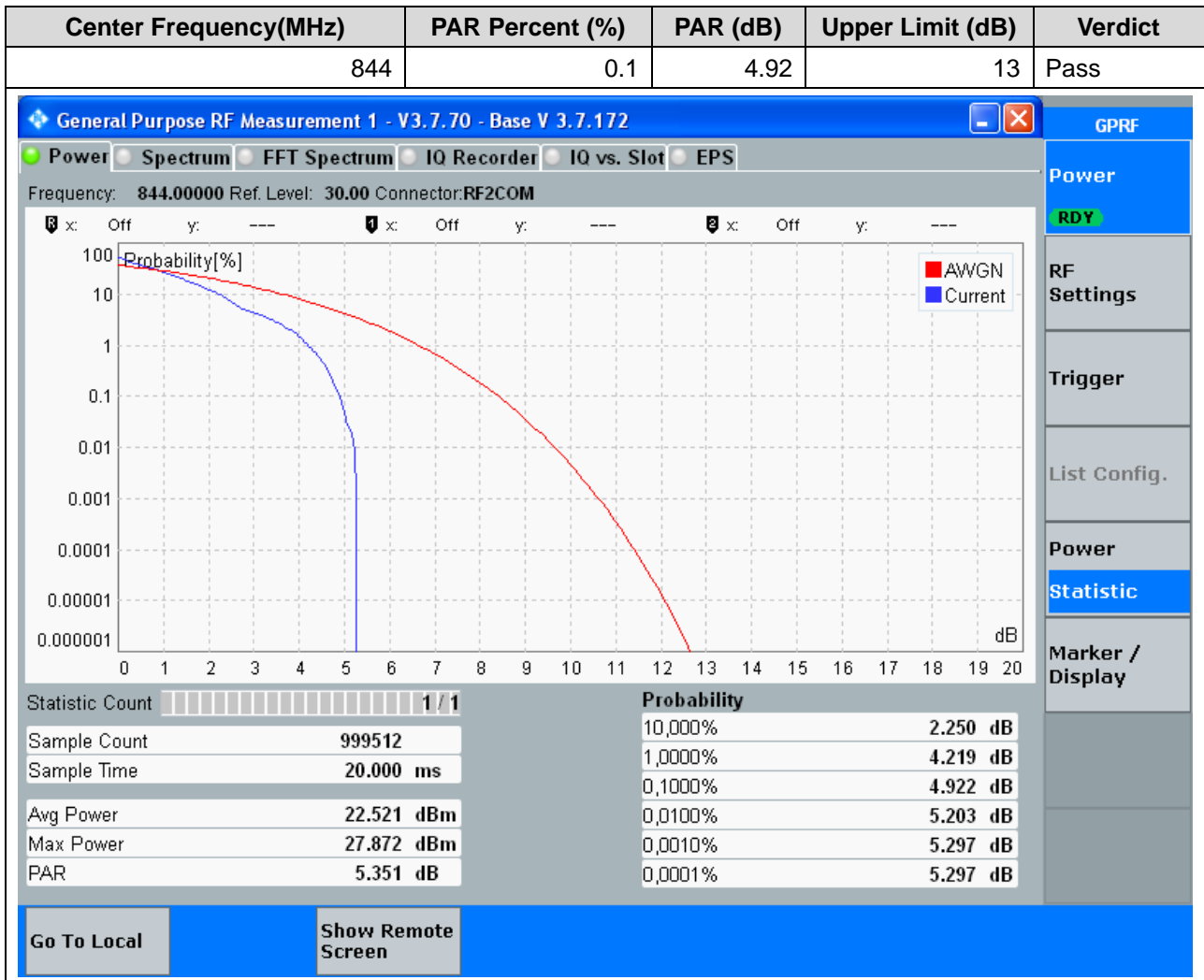
2.7. LTE Peak to Average Ratio_Part22-24-27(NTNV)(Subtest:7, Channel:20525, Bandwidth:10, Modulation:Q16, RB Number: 1, RB Position:LOW)



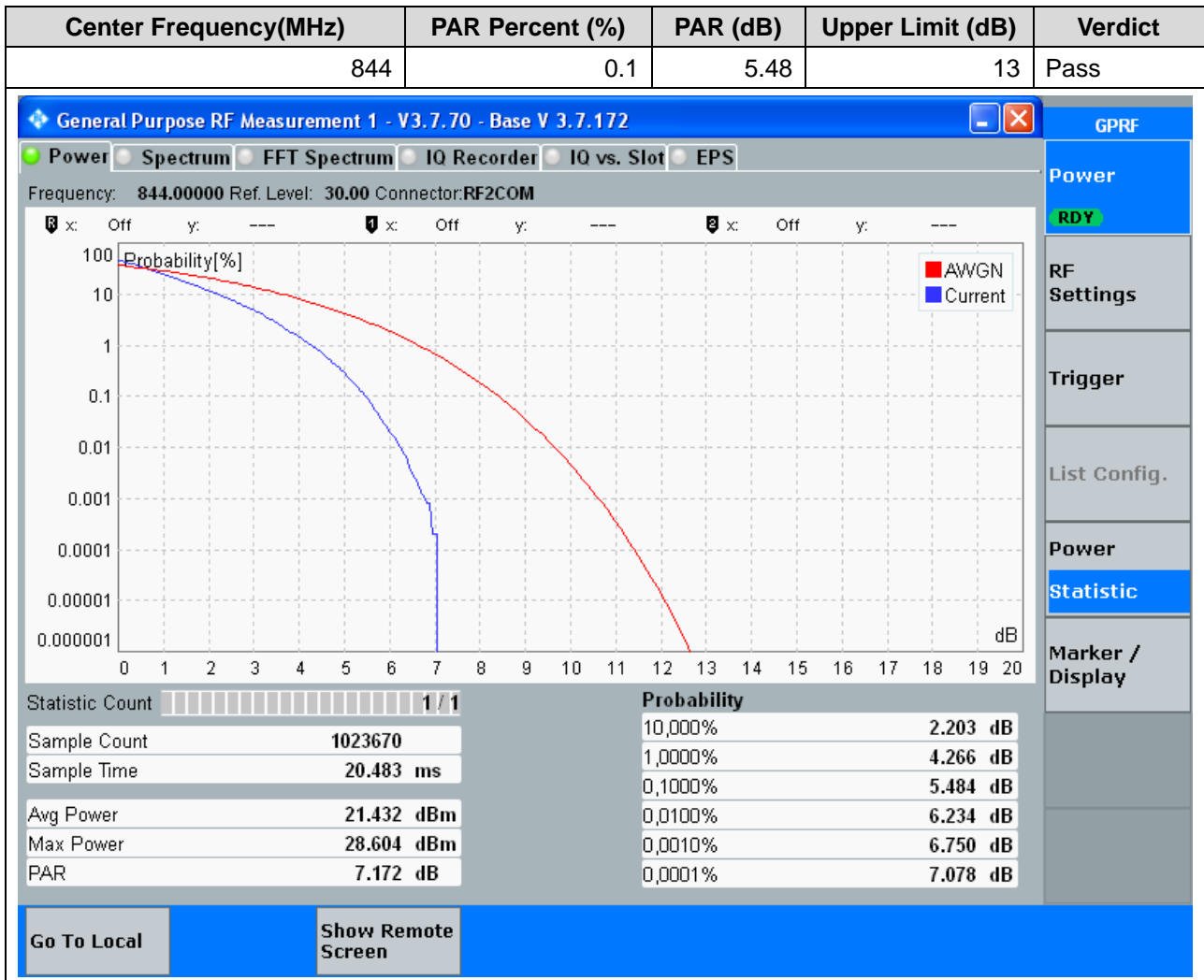
2.8. LTE Peak to Average Ratio_Part22-24-27(NTNV)(Subtest:8, Channel:20525, Bandwidth:10, Modulation:Q16, RB Number: 50, RB Position:LOW)



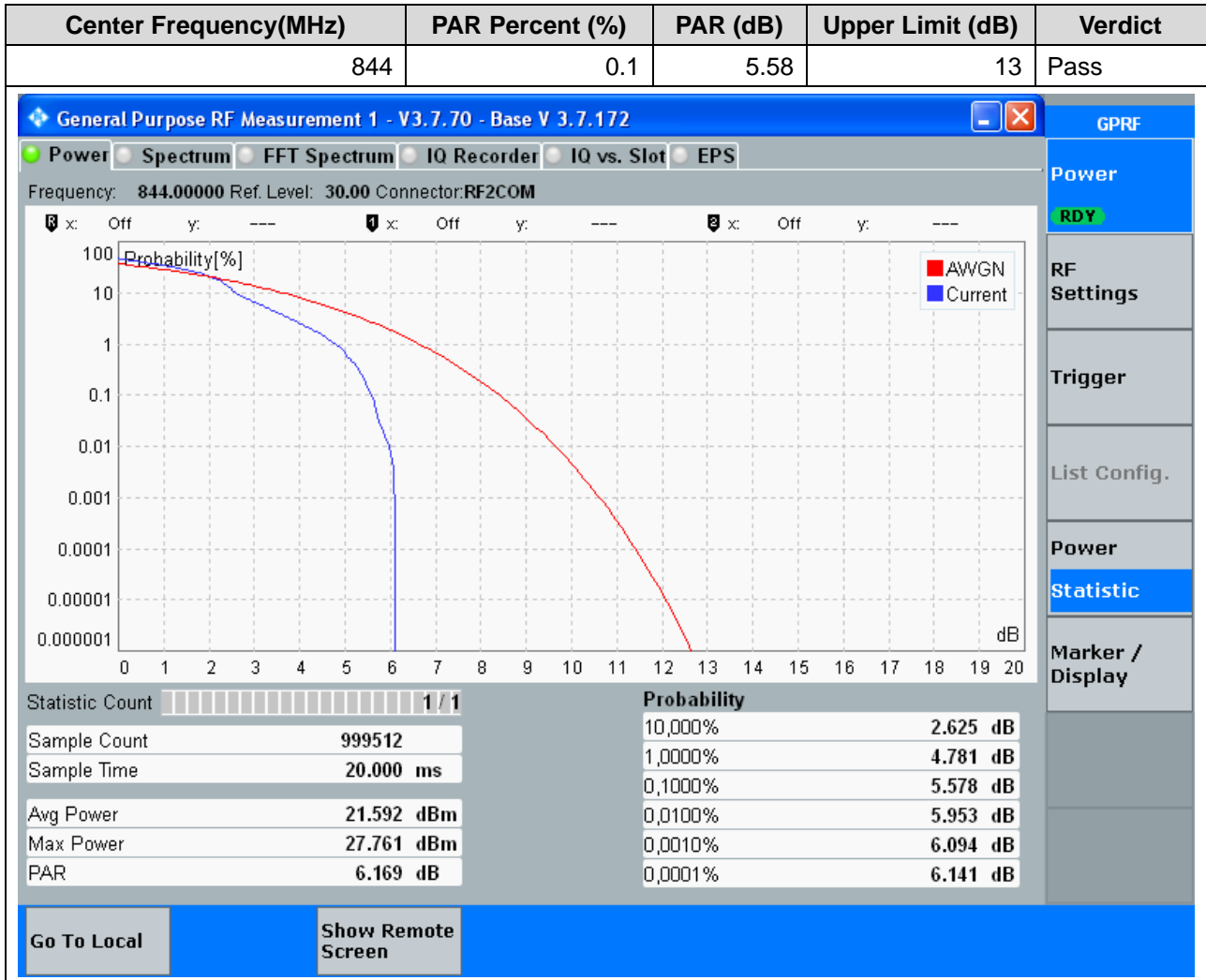
2.9. LTE Peak to Average Ratio_Part22-24-27(NTNV)(Subtest:9, Channel:20600, Bandwidth:10, Modulation:QPSK, RB Number: 1, RB Position:LOW)



2.10. LTE Peak to Average Ratio_Part22-24-27(NTNV)(Subtest:10, Channel:20600, Bandwidth:10, Modulation:QPSK, RB Number: 50, RB Position:LOW)



2.11. LTE Peak to Average Ratio_Part22-24-27(NTNV)(Subtest:11, Channel:20600, Bandwidth:10, Modulation:Q16, RB Number: 1, RB Position:LOW)



2.12. LTE Peak to Average Ratio_Part22-24-27(NTNV)(Subtest:12, Channel:20600, Bandwidth:10, Modulation:Q16, RB Number: 50, RB Position:LOW)

Center Frequency(MHz)	PAR Percent (%)	PAR (dB)	Upper Limit (dB)	Verdict
844	0.1	6.28	13	Pass

General Purpose RF Measurement 1 - V3.7.70 - Base V 3.7.172
GPRF

Power Spectrum FFT Spectrum IQ Recorder IQ vs. Slot EPS
Power

Frequency: 844.00000 Ref. Level: 30.00 Connector:RF2COM
RDY

x: Off y: ---
x: Off y: ---
x: Off y: ---

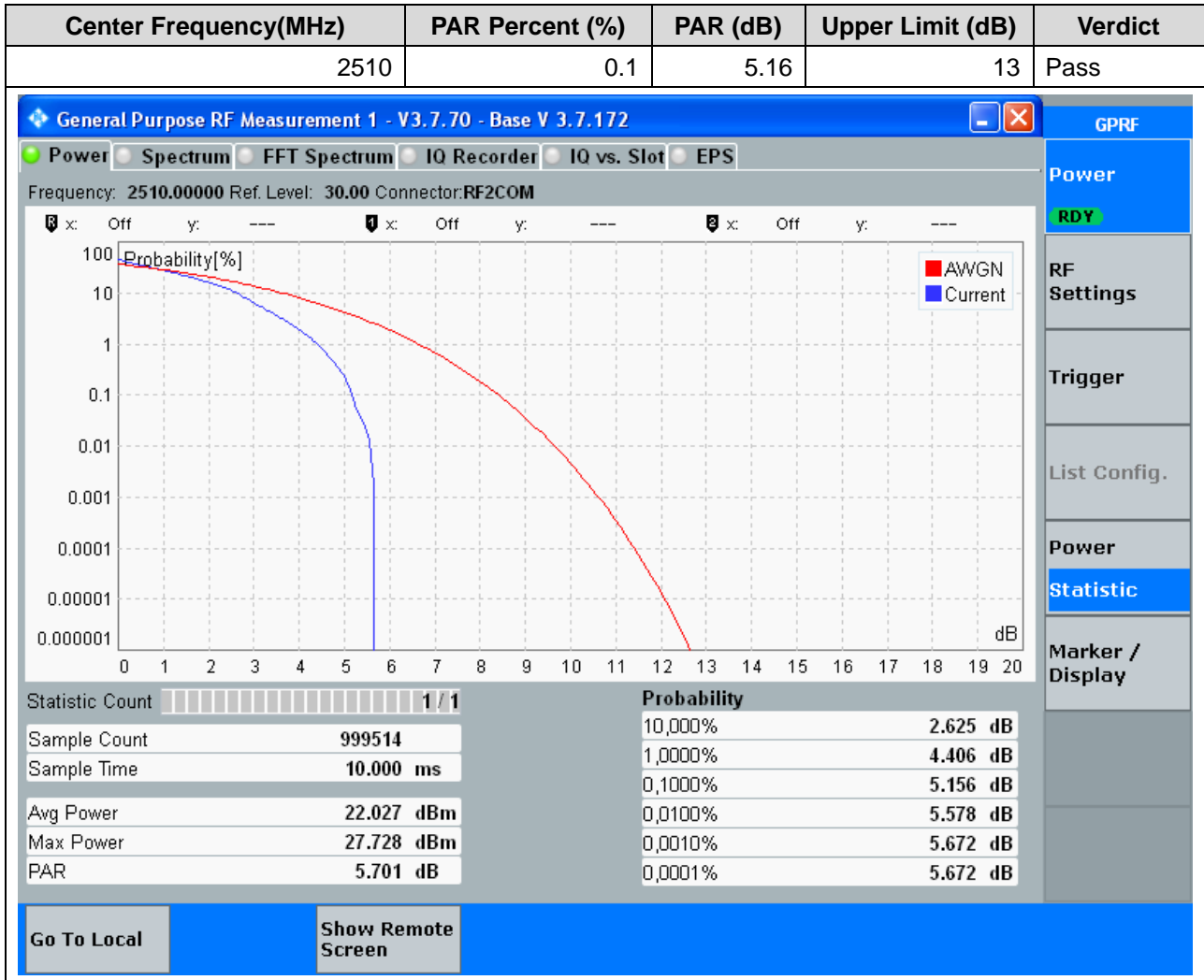
Statistic Count	Value
Sample Count	1023670
Sample Time	20.483 ms
Avg Power	20.396 dBm
Max Power	28.362 dBm
PAR	7.966 dB

Probability	Value
10,000%	2.813 dB
1,0000%	4.875 dB
0,1000%	6.281 dB
0,0100%	7.031 dB
0,0010%	7.594 dB
0,0001%	7.875 dB

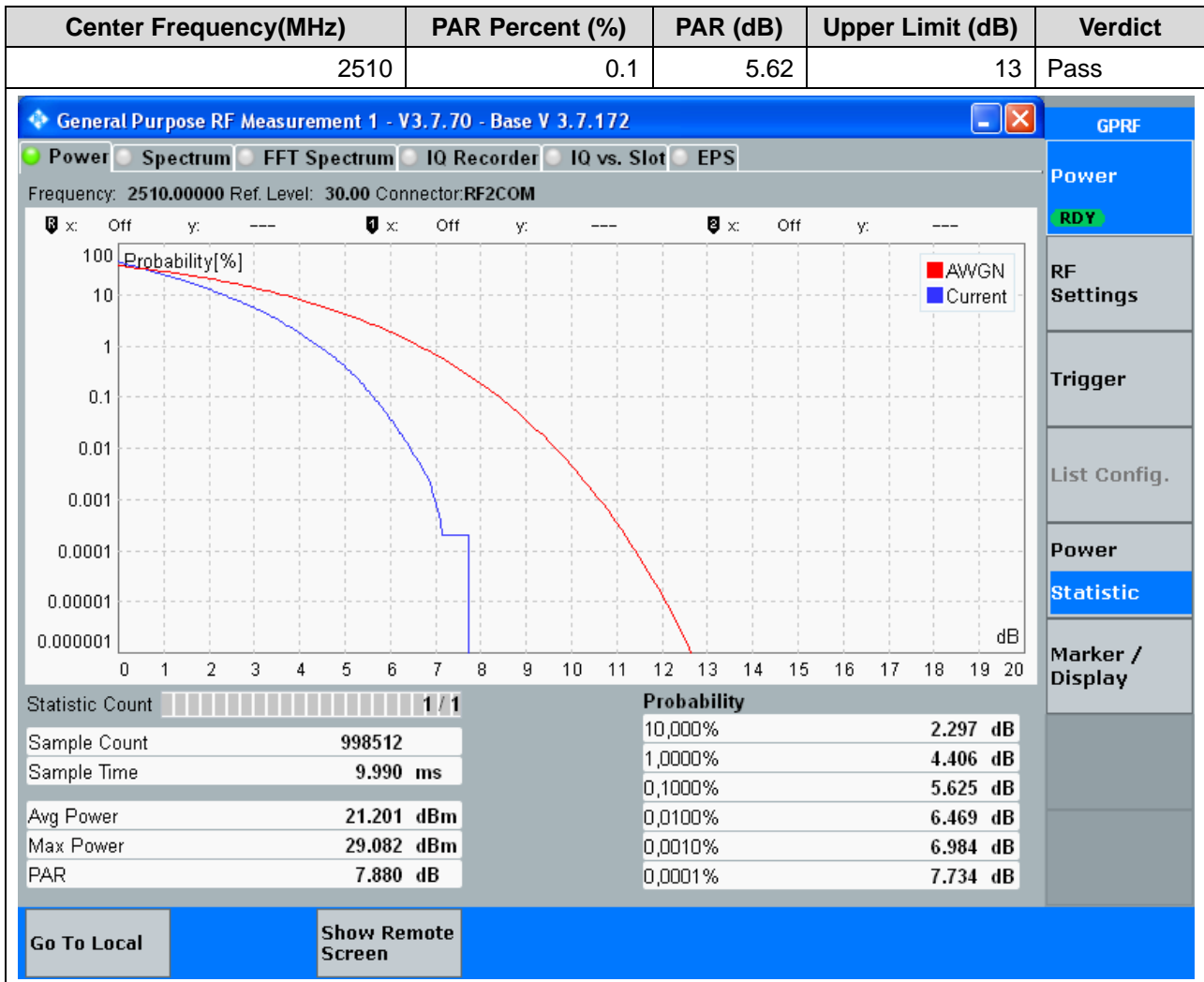
Go To Local
Show Remote Screen

3. LTE_Band7

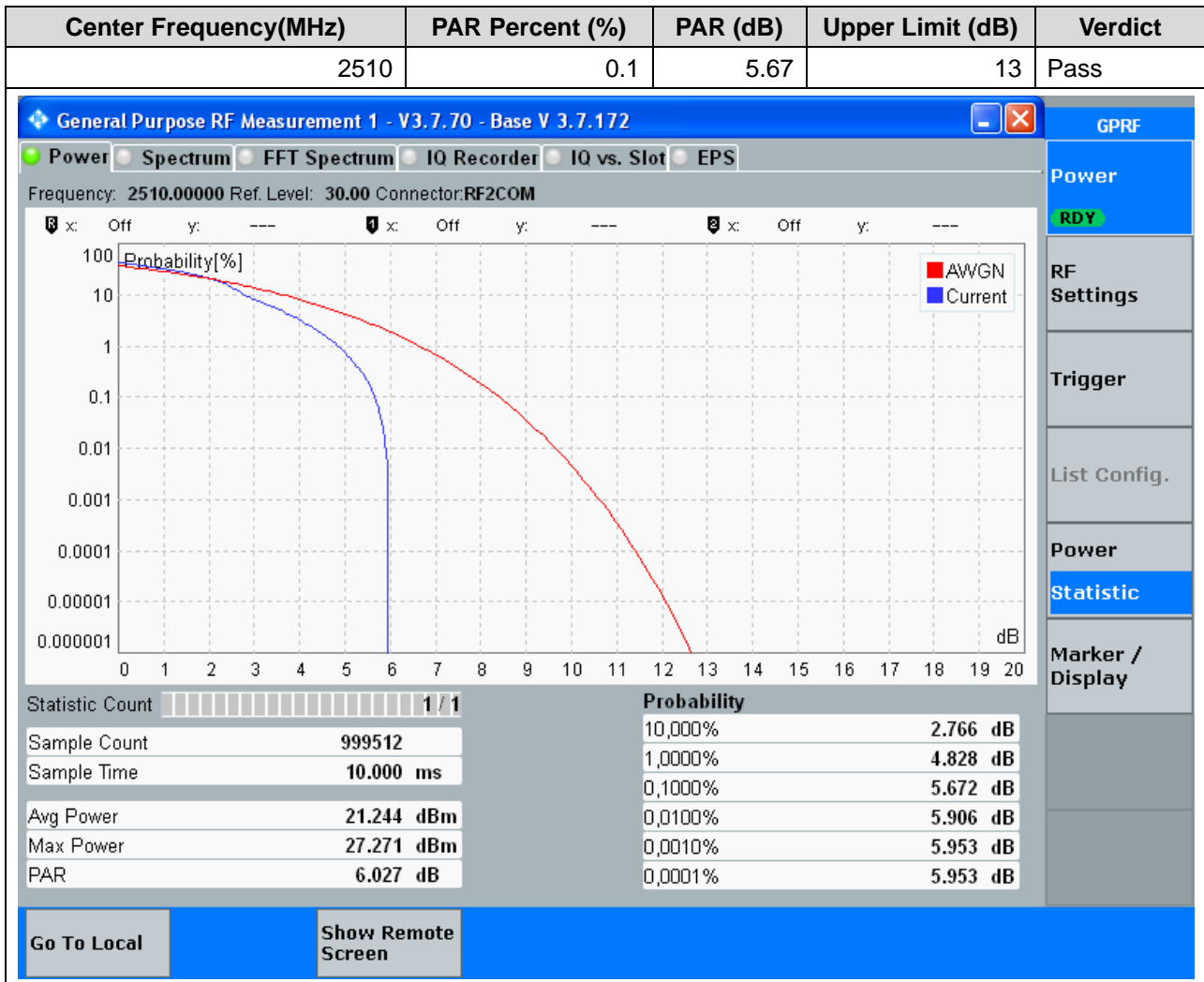
3.1. LTE Peak to Average Ratio_Part22-24-27(NTNV)(Subtest:1, Channel:20850, Bandwidth:20, Modulation:QPSK, RB Number: 1, RB Position:LOW)



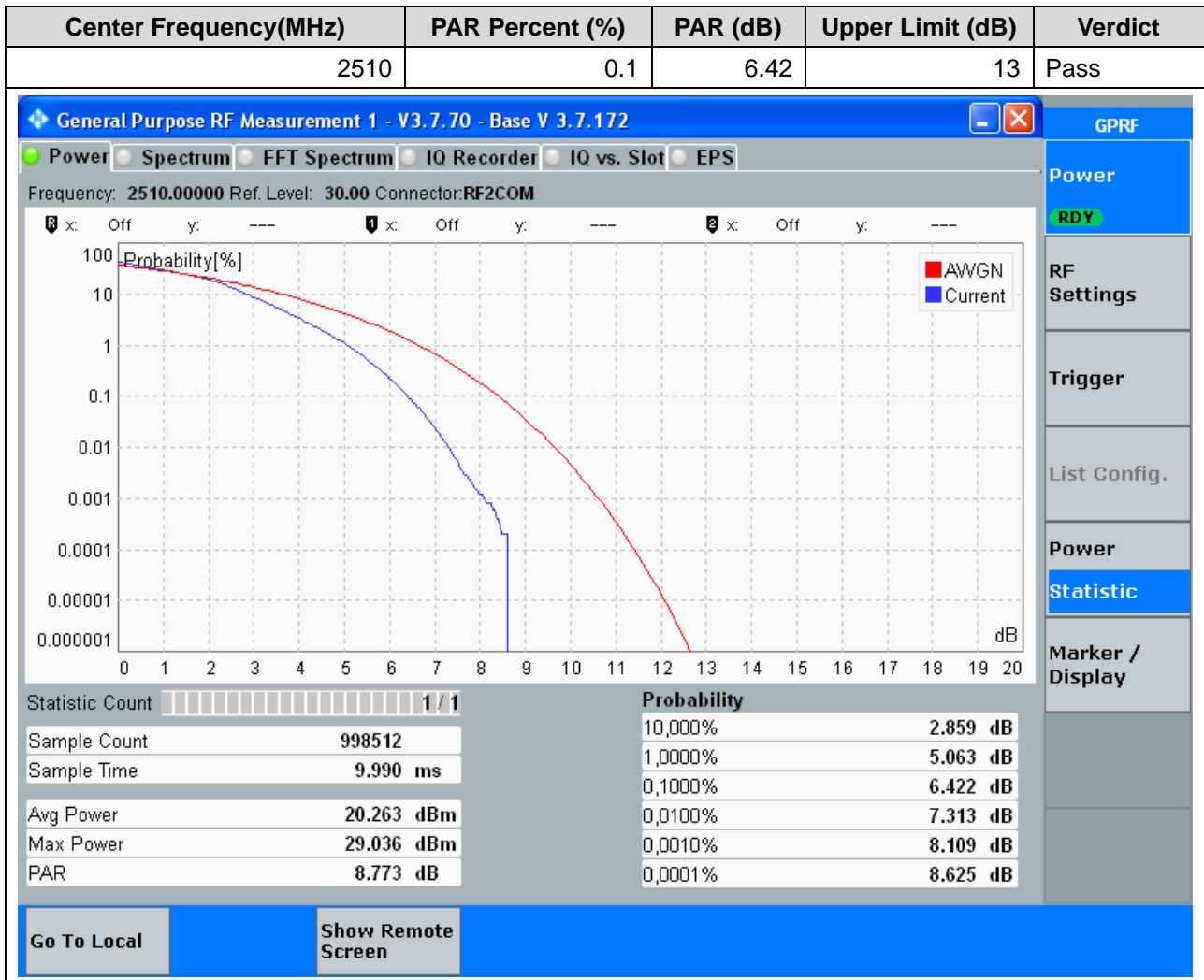
3.2. LTE Peak to Average Ratio_Part22-24-27(NTNV)(Subtest:2, Channel:20850, Bandwidth:20, Modulation:QPSK, RB Number: 100, RB Position:LOW)



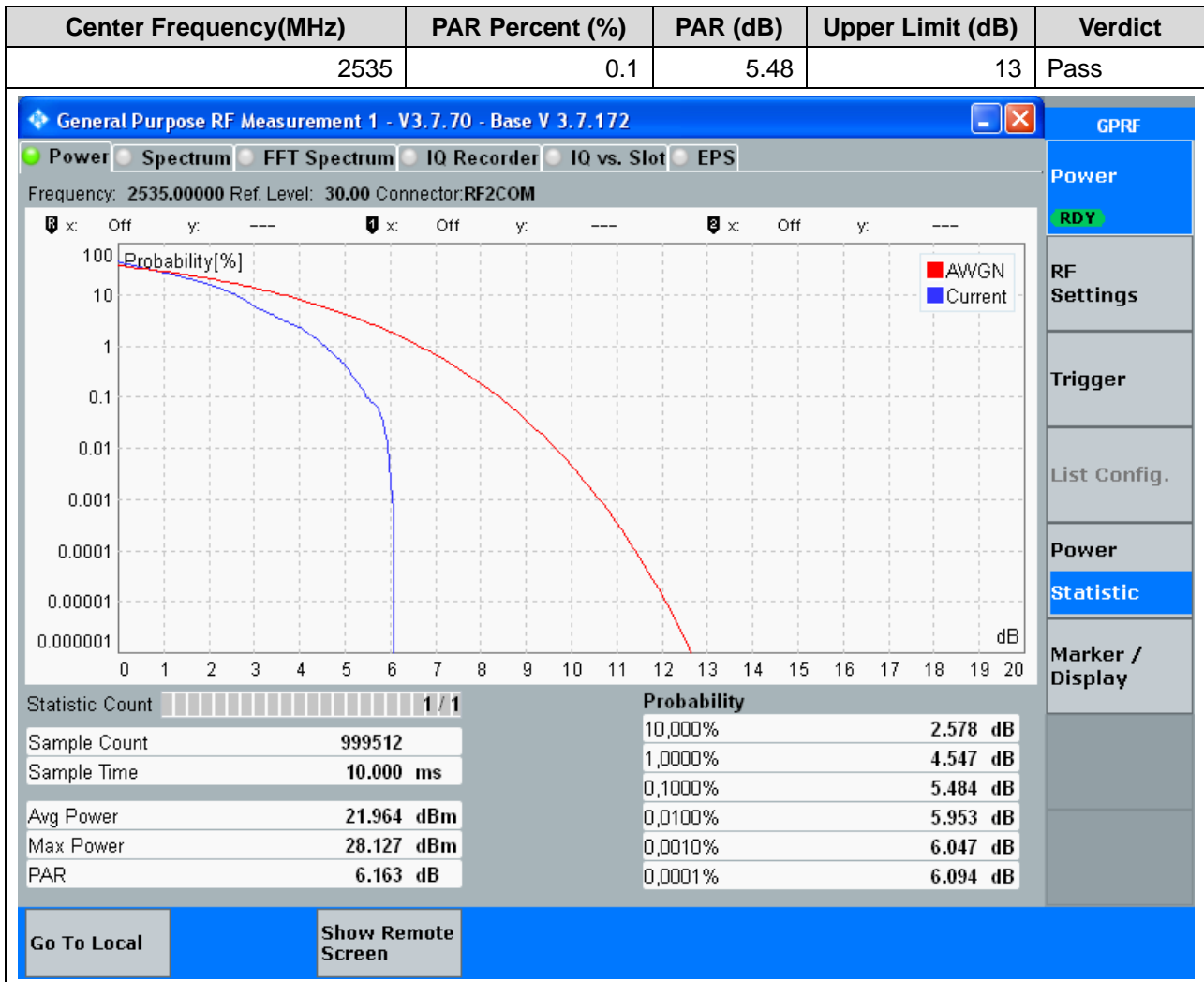
3.3. LTE Peak to Average Ratio_Part22-24-27(NTNV)(Subtest:3, Channel:20850, Bandwidth:20, Modulation:Q16, RB Number: 1, RB Position:LOW)



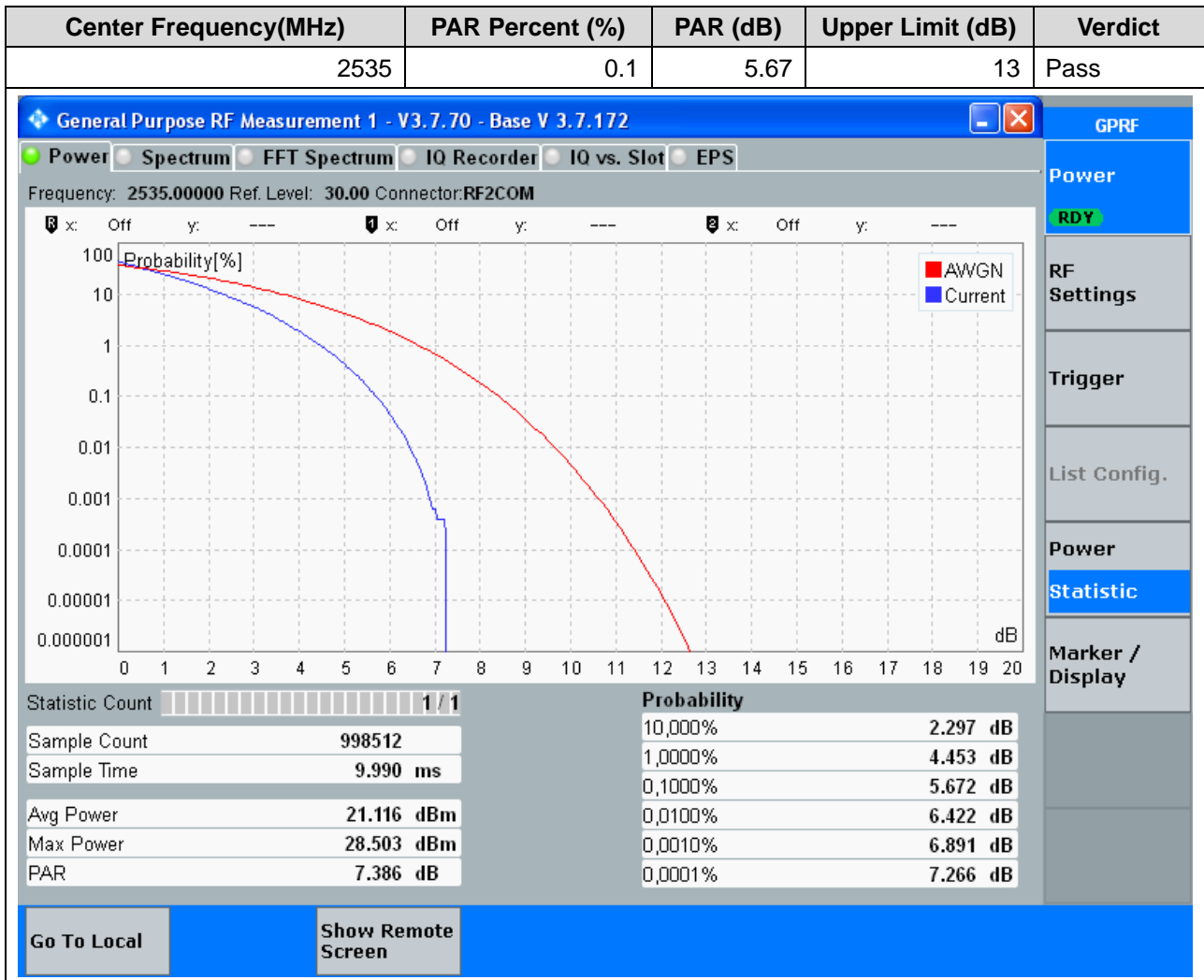
3.4. LTE Peak to Average Ratio_Part22-24-27(NTNV)(Subtest:4, Channel:20850, Bandwidth:20, Modulation:Q16, RB Number: 100, RB Position:LOW)



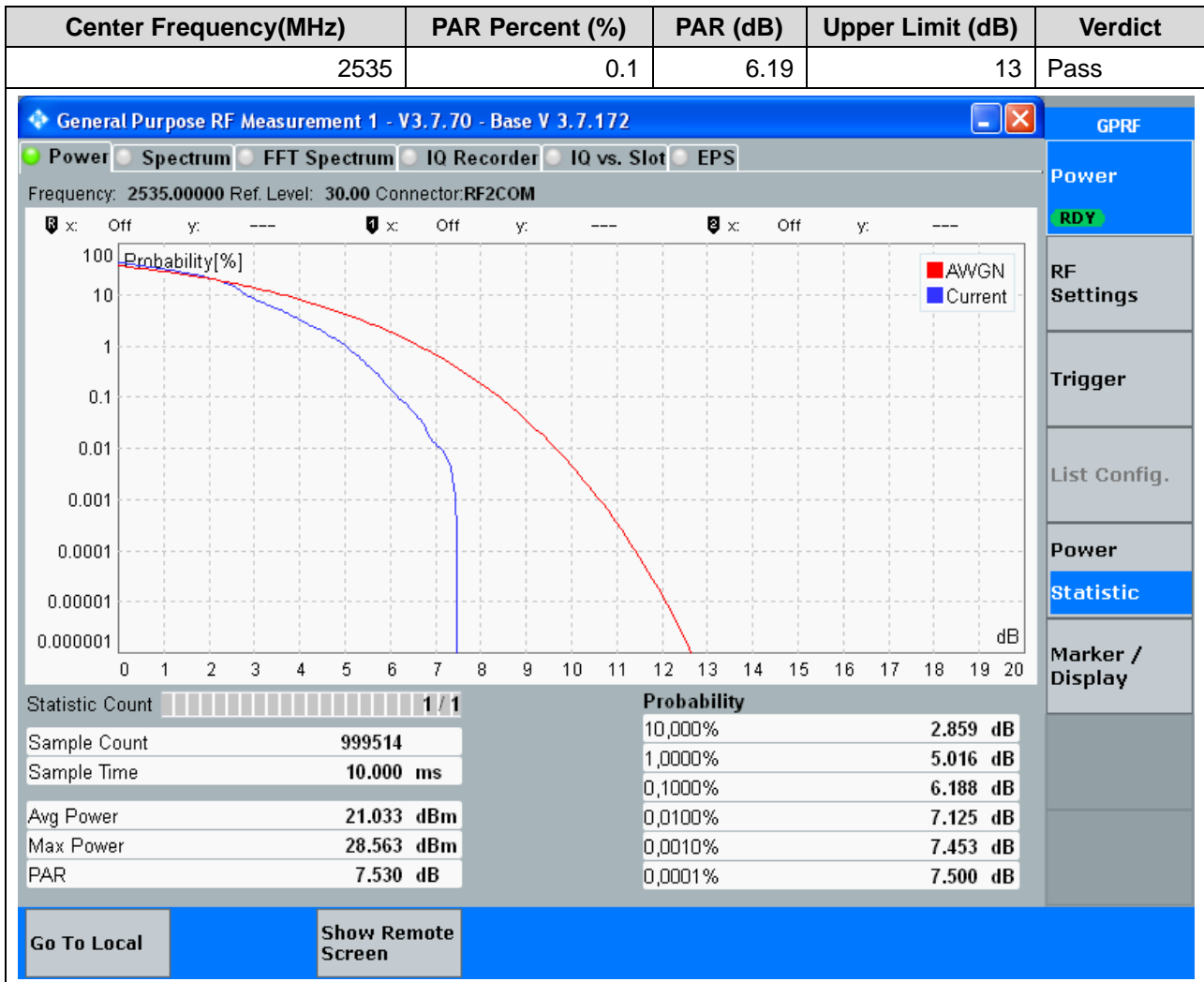
3.5. LTE Peak to Average Ratio_Part22-24-27(NTNV)(Subtest:5, Channel:21100, Bandwidth:20, Modulation:QPSK, RB Number: 1, RB Position:LOW)



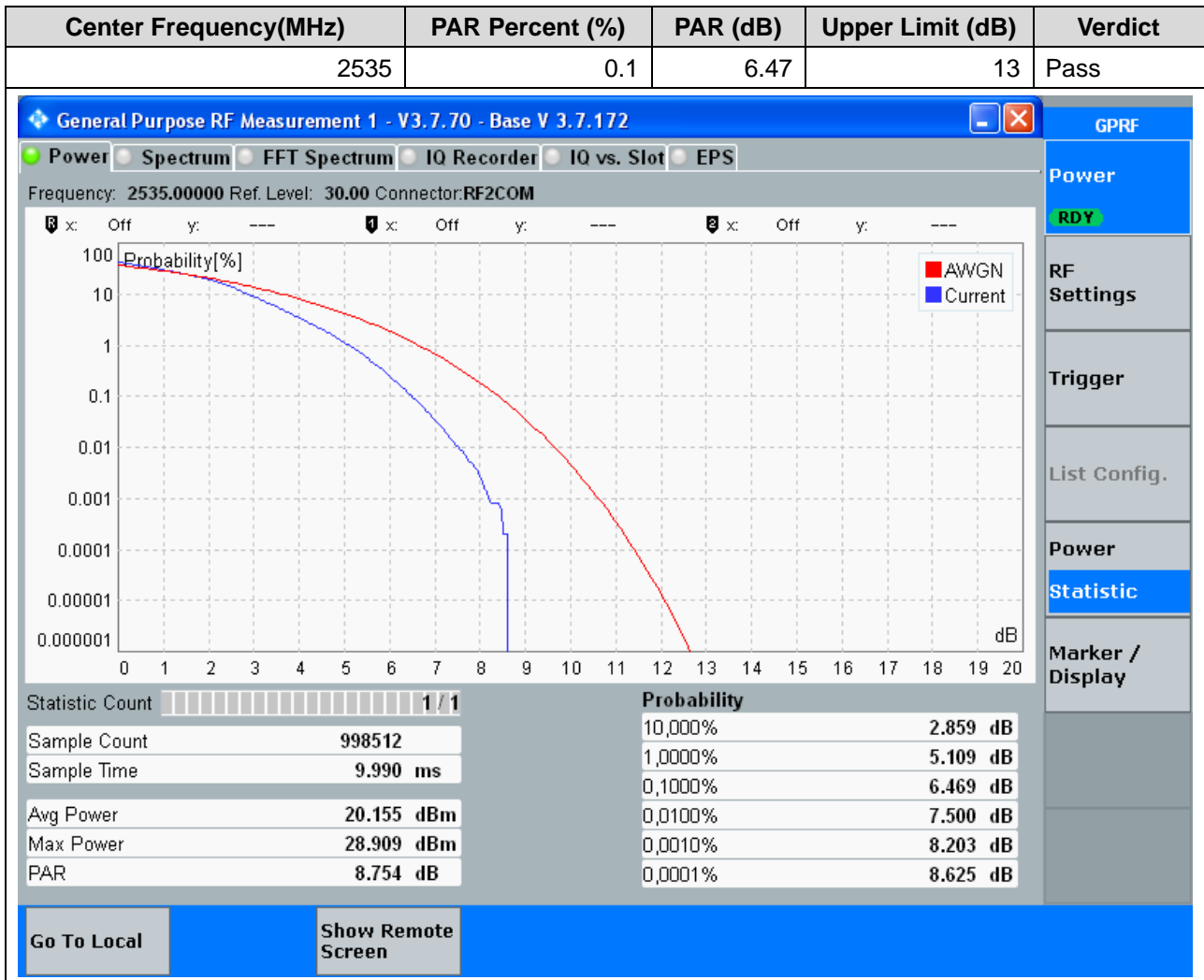
3.6. LTE Peak to Average Ratio_Part22-24-27(NTNV)(Subtest:6, Channel:21100, Bandwidth:20, Modulation:QPSK, RB Number: 100, RB Position:LOW)



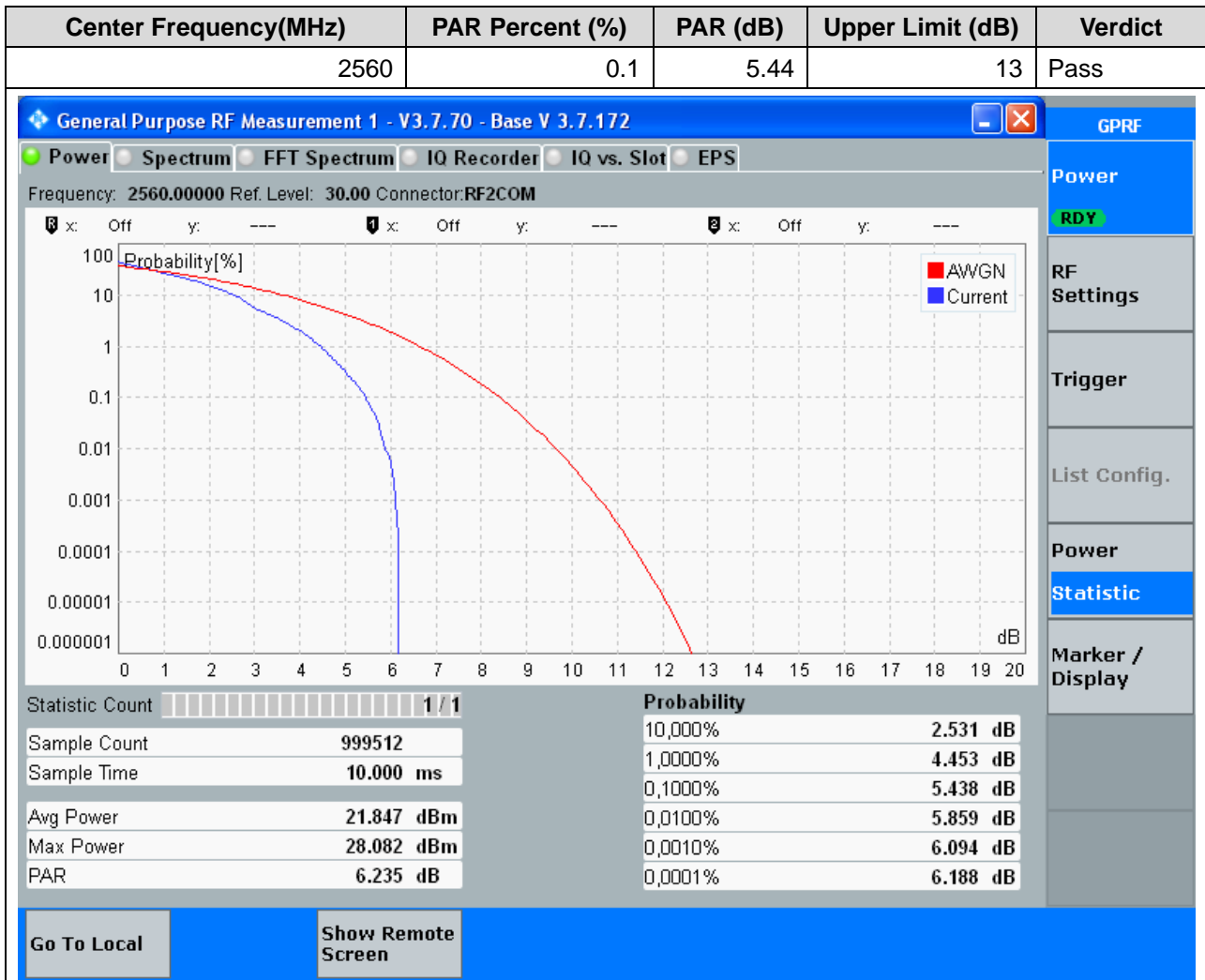
3.7. LTE Peak to Average Ratio_Part22-24-27(NTNV)(Subtest:7, Channel:21100, Bandwidth:20, Modulation:Q16, RB Number: 1, RB Position:LOW)



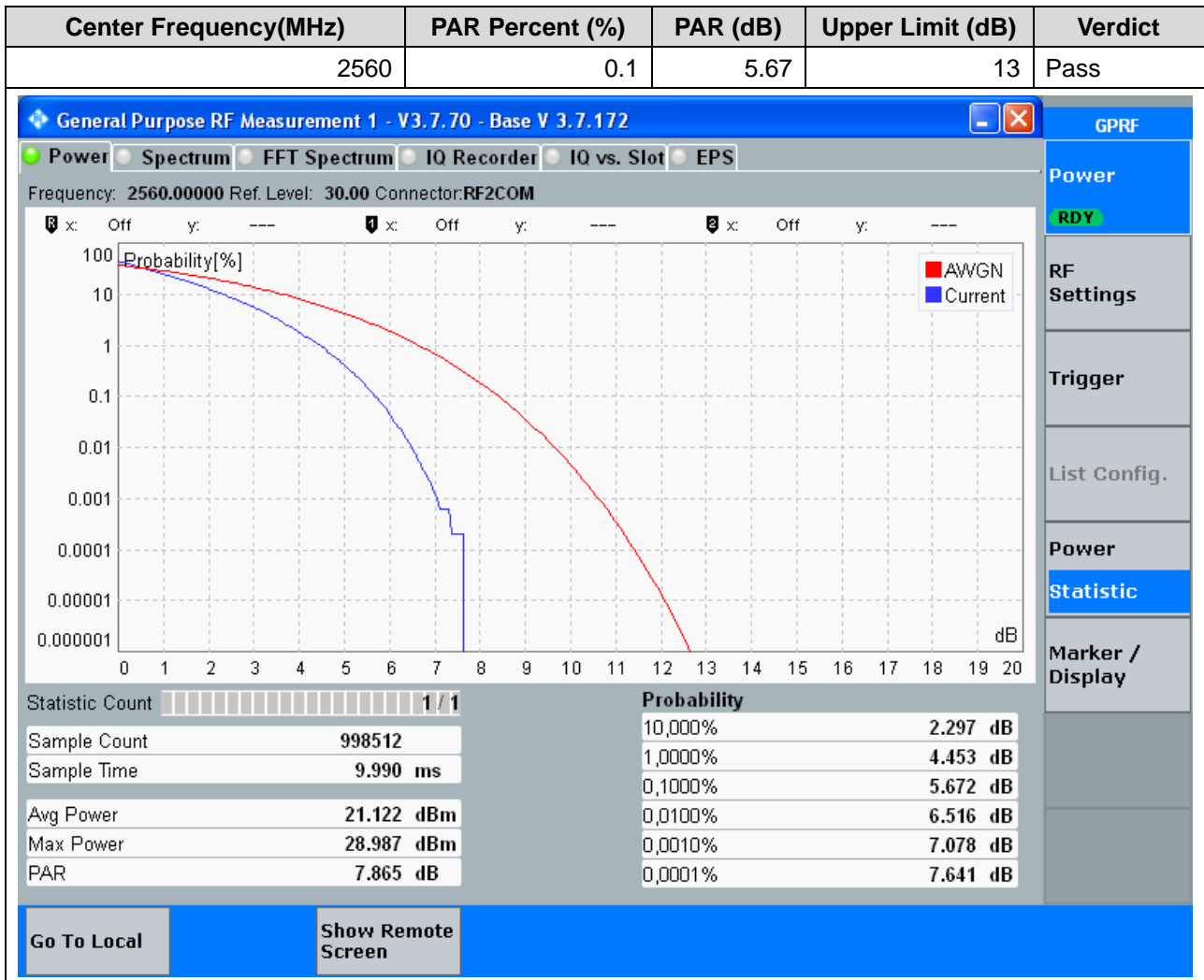
3.8. LTE Peak to Average Ratio_Part22-24-27(NTNV)(Subtest:8, Channel:21100, Bandwidth:20, Modulation:Q16, RB Number: 100, RB Position:LOW)



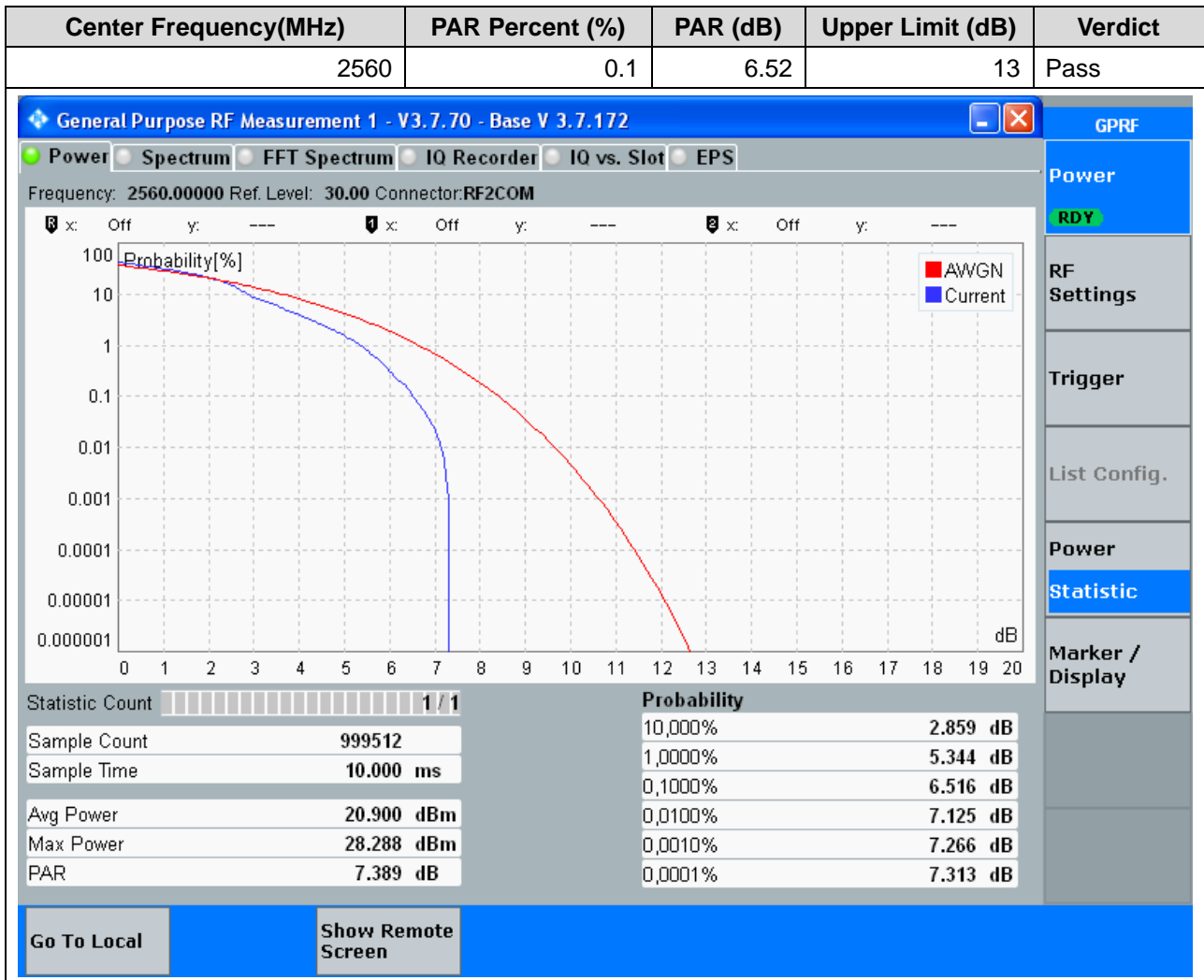
3.9. LTE Peak to Average Ratio_Part22-24-27(NTNV)(Subtest:9, Channel:21350, Bandwidth:20, Modulation:QPSK, RB Number: 1, RB Position:LOW)



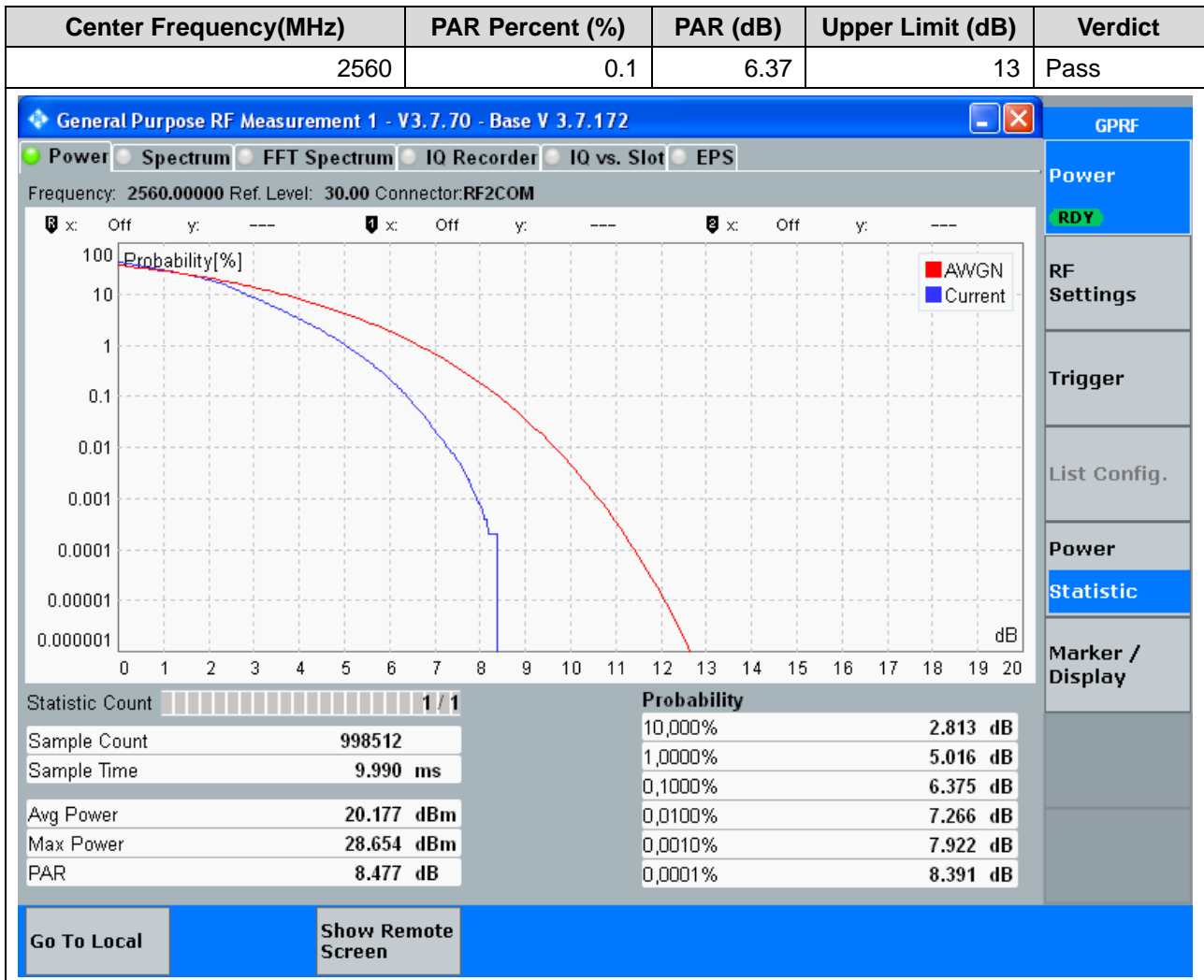
3.10. LTE Peak to Average Ratio_Part22-24-27(NTNV)(Subtest:10, Channel:21350, Bandwidth:20, Modulation:QPSK, RB Number: 100, RB Position:LOW)



3.11. LTE Peak to Average Ratio_Part22-24-27(NTNV)(Subtest:11, Channel:21350, Bandwidth:20, Modulation:Q16, RB Number: 1, RB Position:LOW)

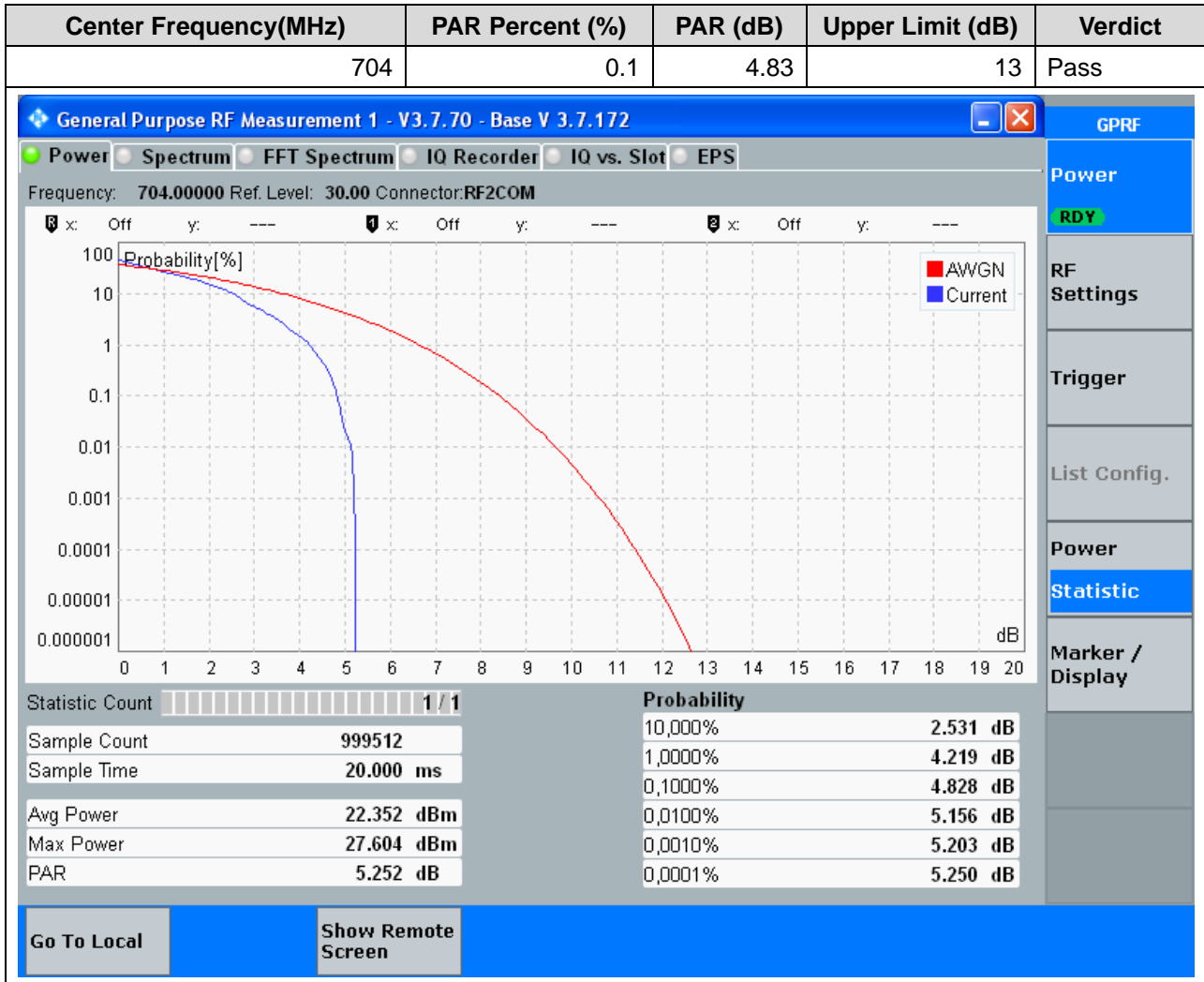


3.12. LTE Peak to Average Ratio_Part22-24-27(NTNV)(Subtest:12, Channel:21350, Bandwidth:20, Modulation:Q16, RB Number: 100, RB Position:LOW)

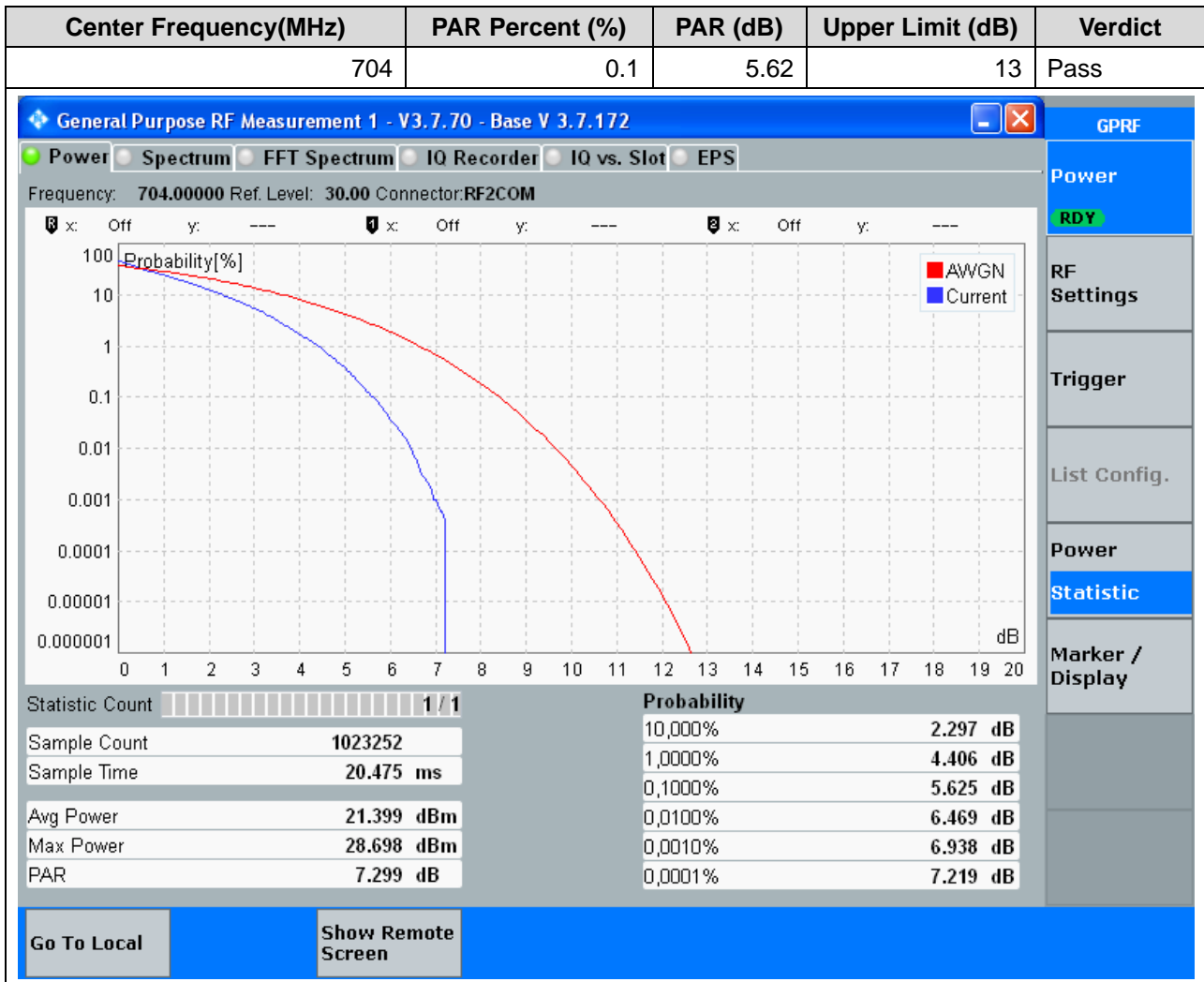


4. LTE_Band12

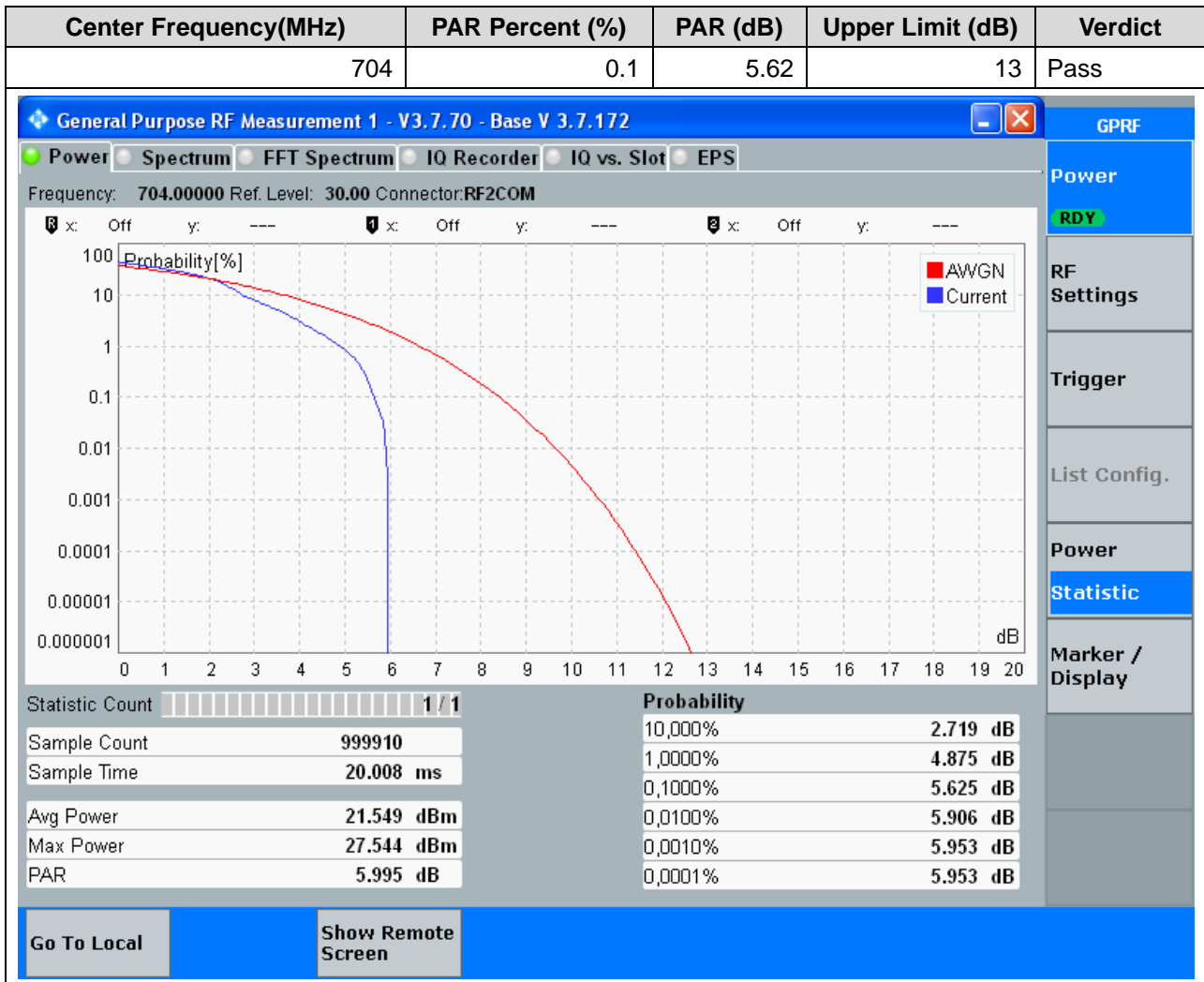
4.1. LTE Peak to Average Ratio_Part22-24-27(NTNV)(Subtest:1, Channel:23060, Bandwidth:10, Modulation:QPSK, RB Number: 1, RB Position:LOW)



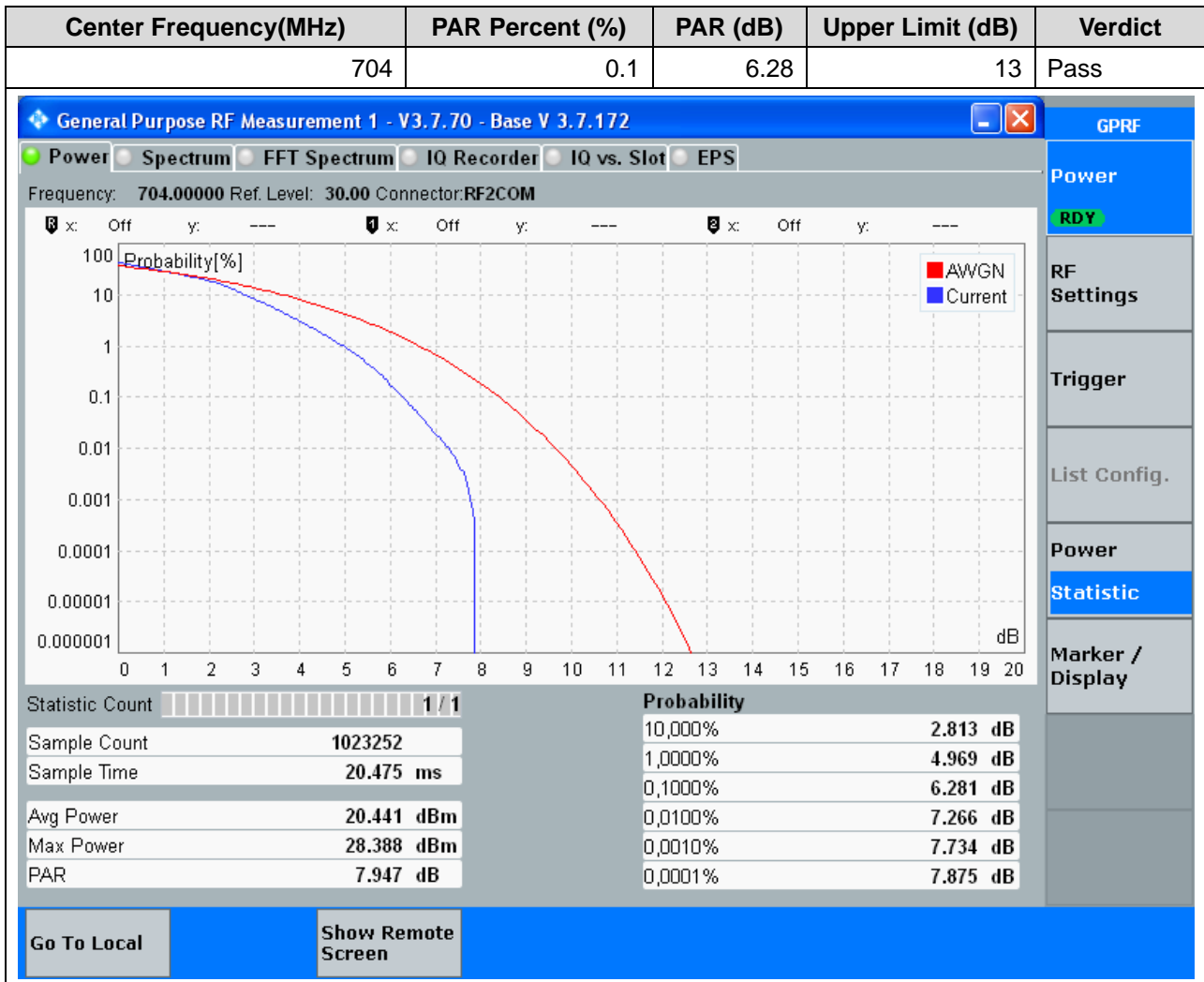
4.2. LTE Peak to Average Ratio_Part22-24-27(NTNV)(Subtest:2, Channel:23060, Bandwidth:10, Modulation:QPSK, RB Number: 50, RB Position:LOW)



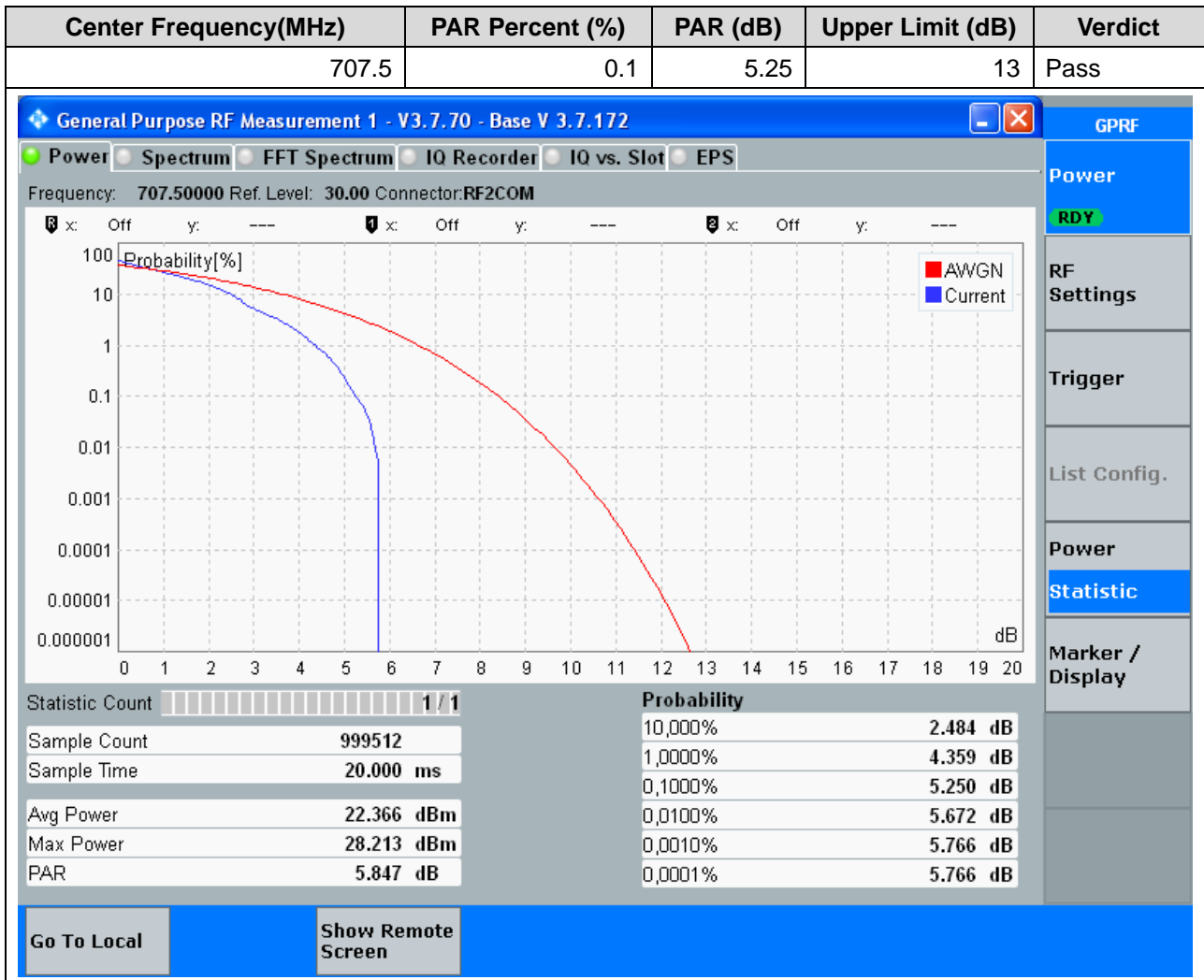
4.3. LTE Peak to Average Ratio_Part22-24-27(NTNV)(Subtest:3, Channel:23060, Bandwidth:10, Modulation:Q16, RB Number: 1, RB Position:LOW)



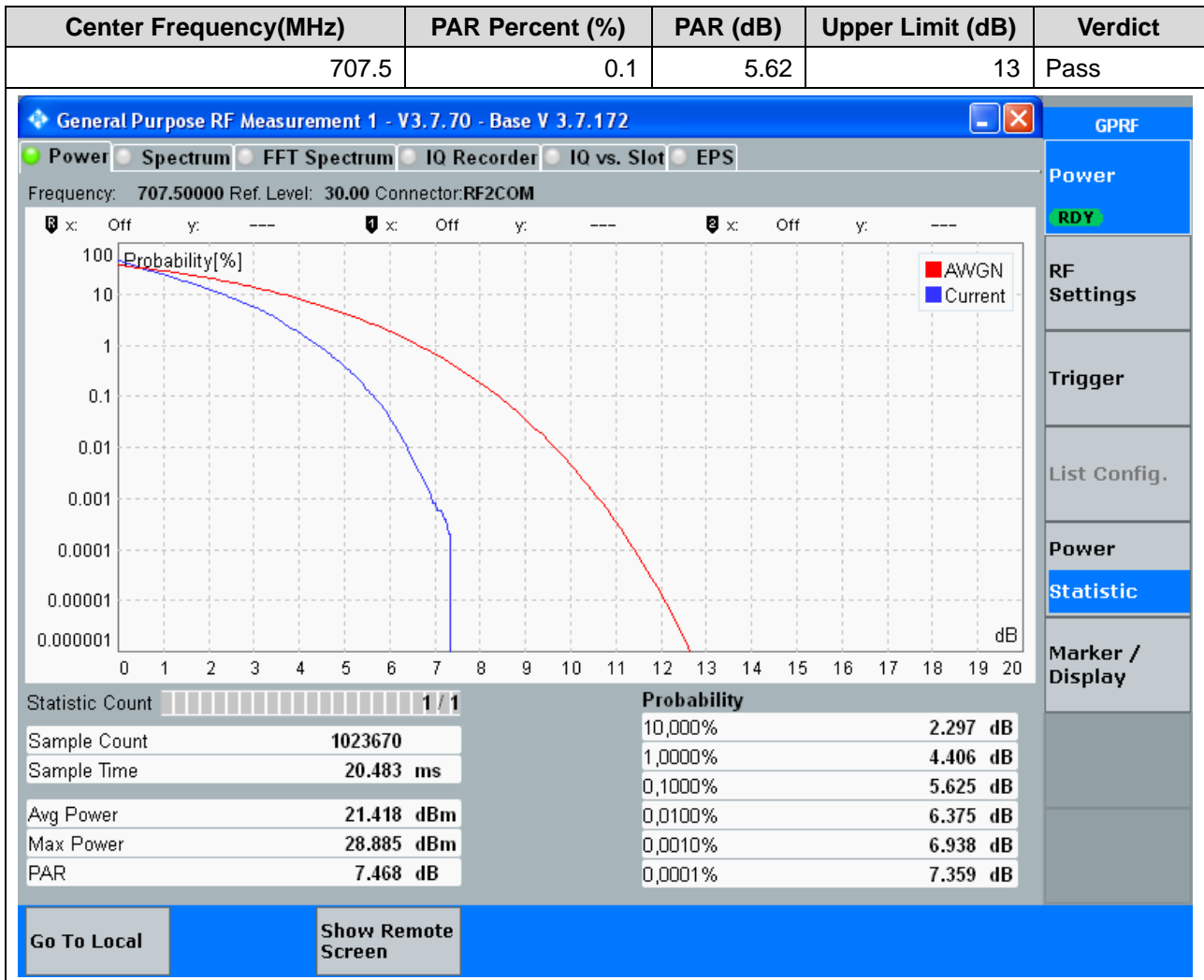
4.4. LTE Peak to Average Ratio_Part22-24-27(NTNV)(Subtest:4, Channel:23060, Bandwidth:10, Modulation:Q16, RB Number: 50, RB Position:LOW)



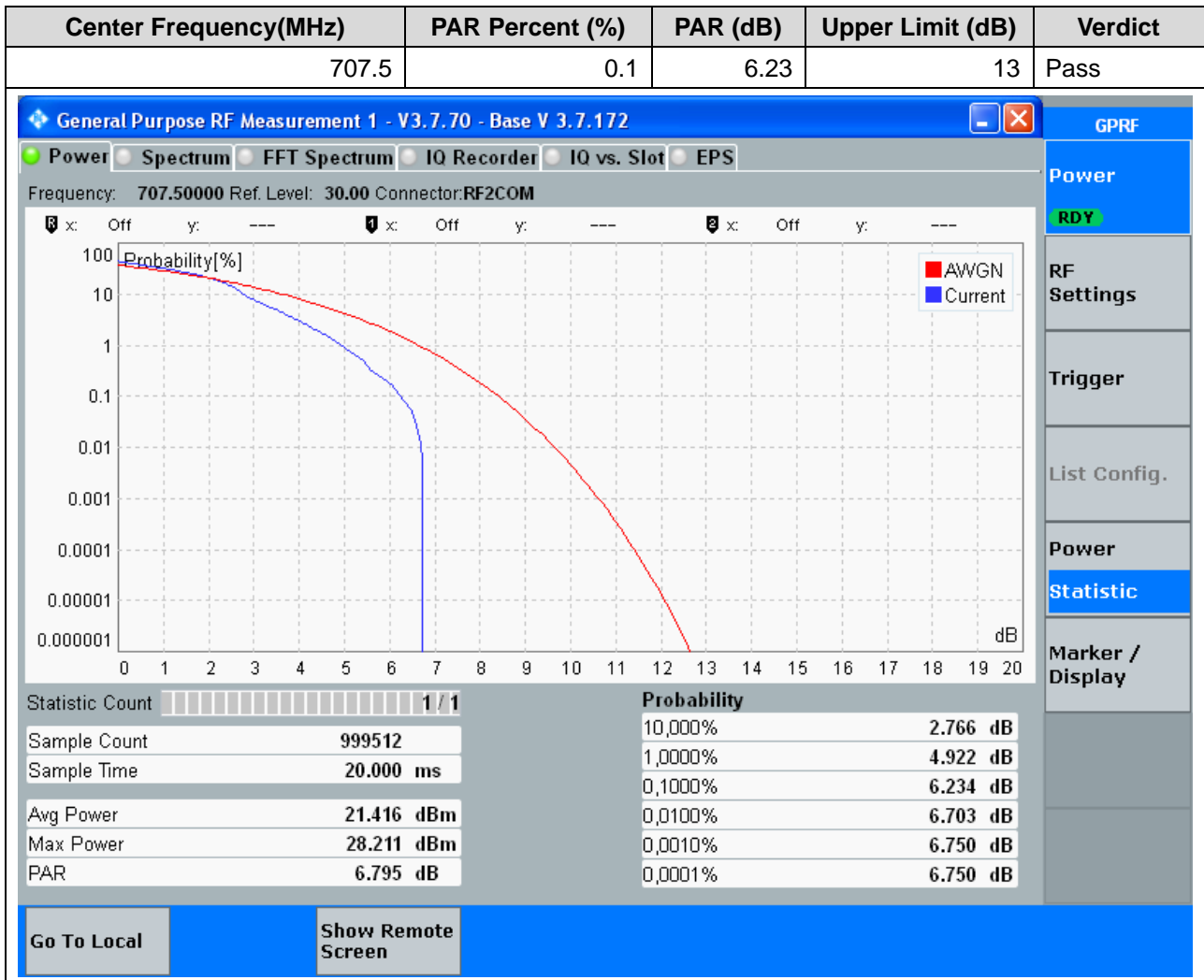
4.5. LTE Peak to Average Ratio_Part22-24-27(NTNV)(Subtest:5, Channel:23095, Bandwidth:10, Modulation:QPSK, RB Number: 1, RB Position:LOW)



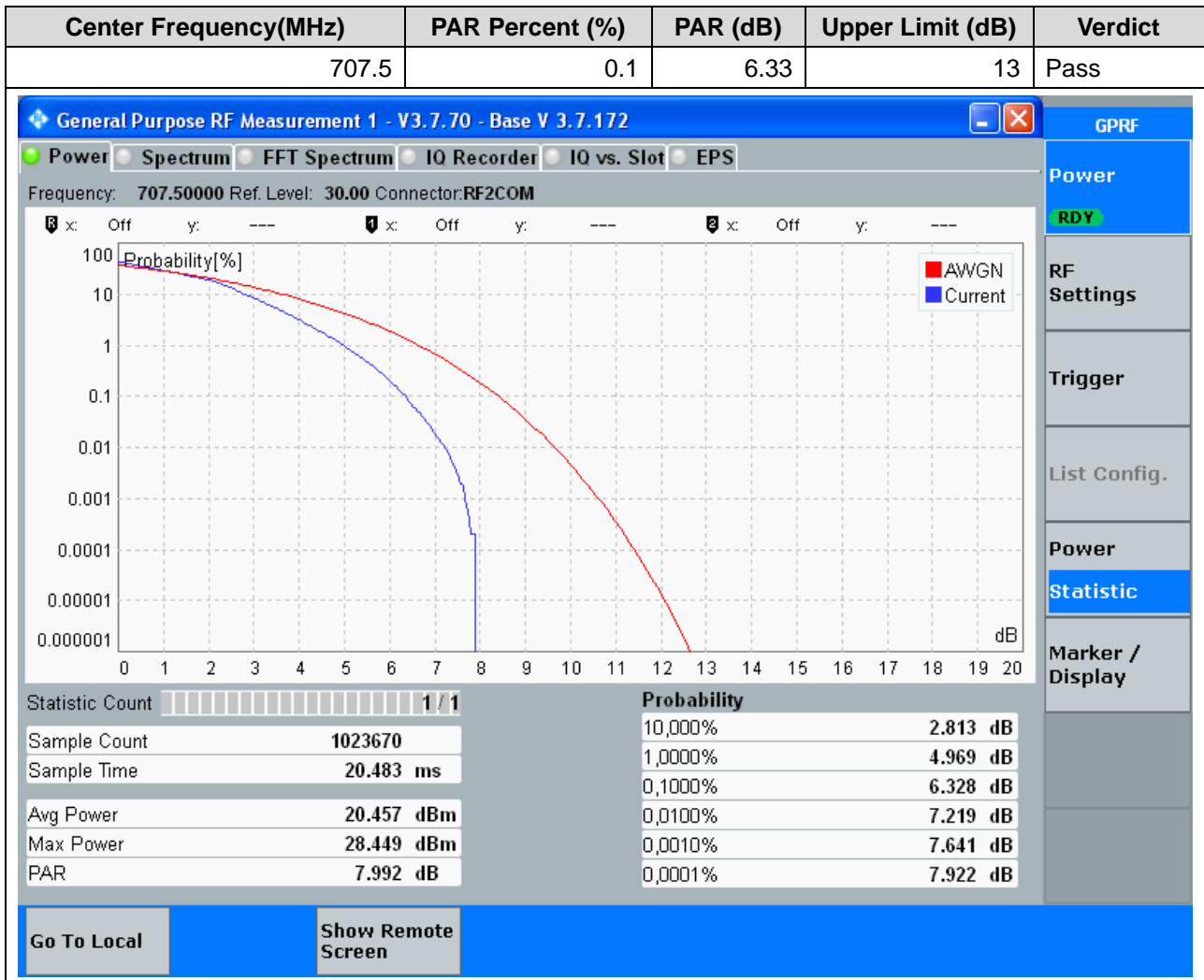
4.6. LTE Peak to Average Ratio_Part22-24-27(NTNV)(Subtest:6, Channel:23095, Bandwidth:10, Modulation:QPSK, RB Number: 50, RB Position:LOW)



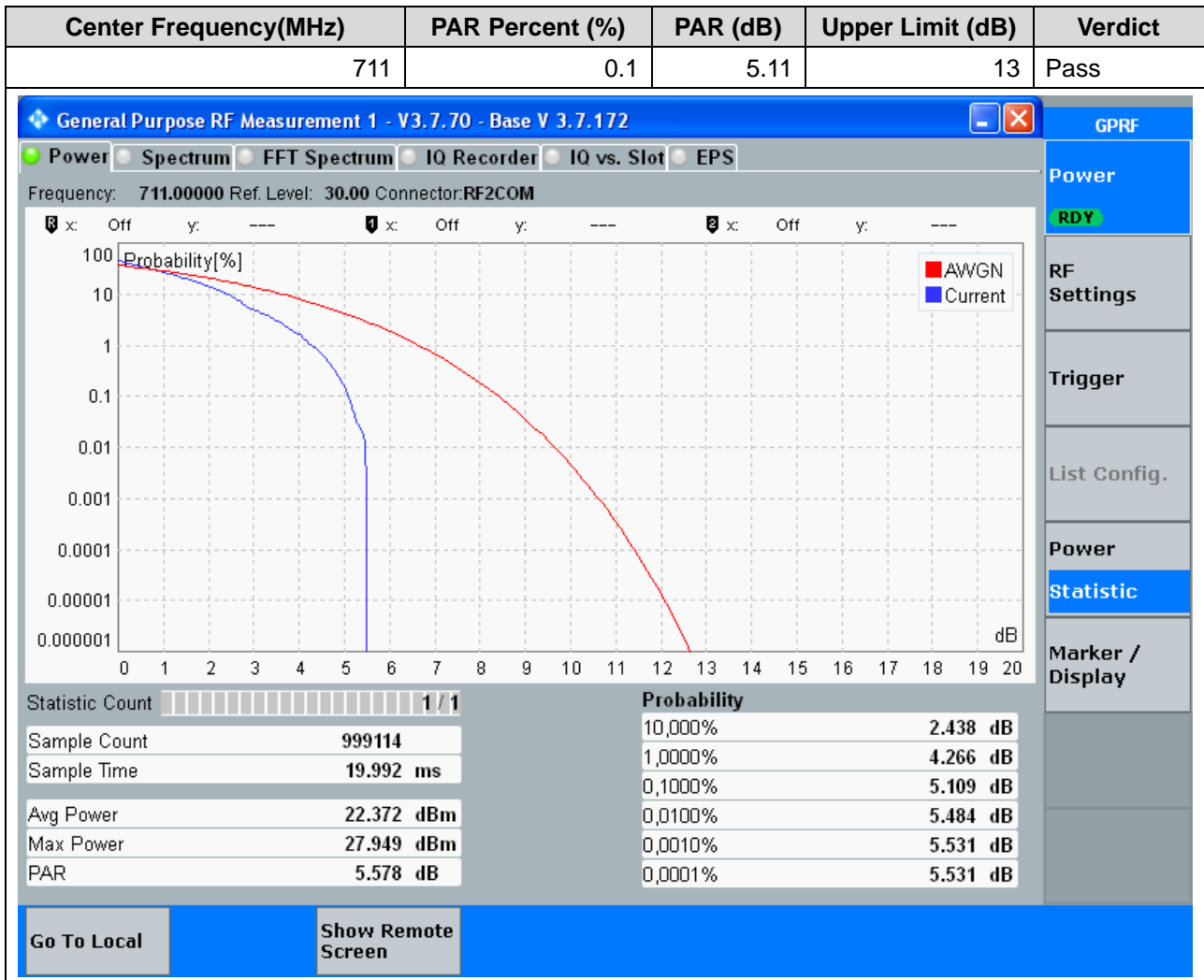
4.7. LTE Peak to Average Ratio_Part22-24-27(NTNV)(Subtest:7, Channel:23095, Bandwidth:10, Modulation:Q16, RB Number: 1, RB Position:LOW)



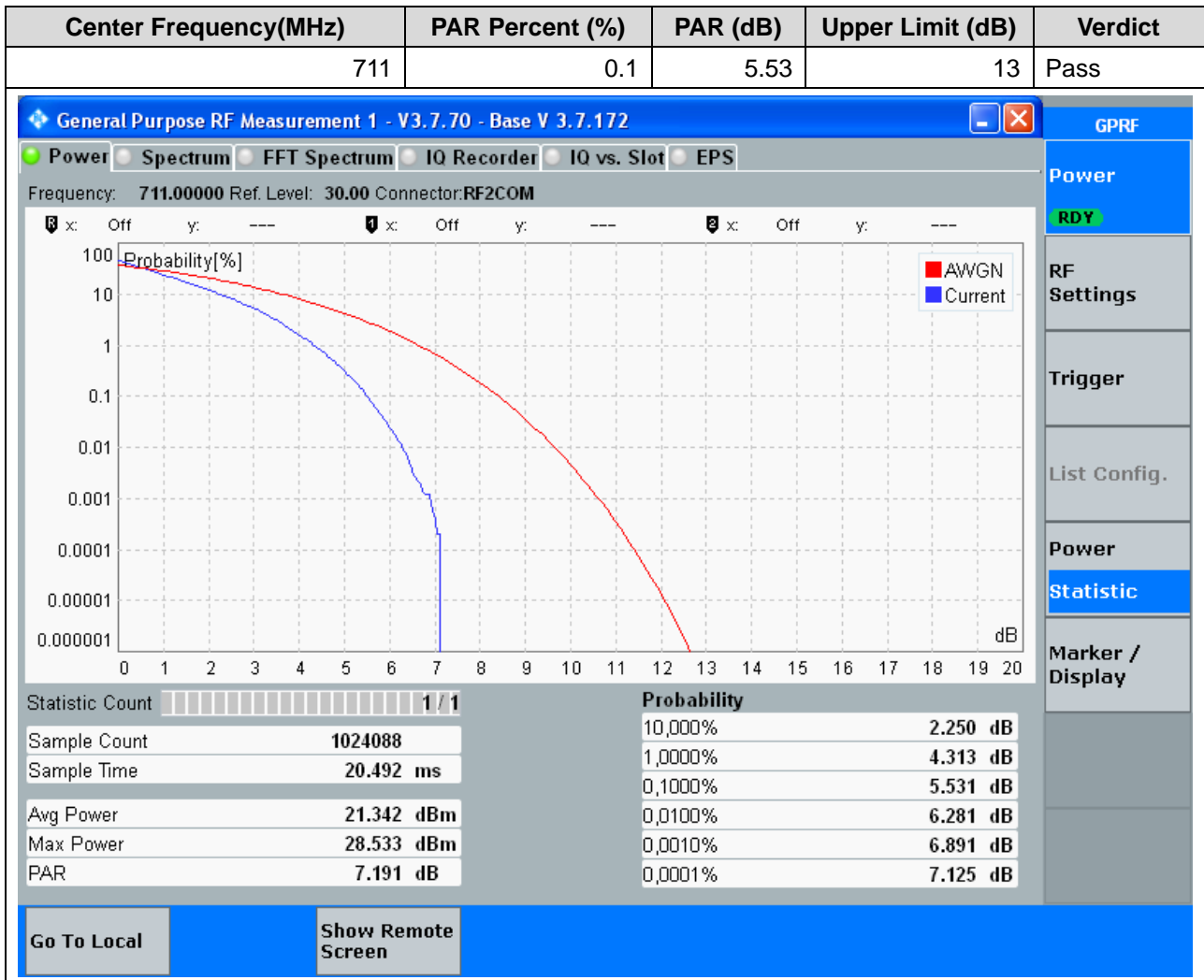
4.8. LTE Peak to Average Ratio_Part22-24-27(NTNV)(Subtest:8, Channel:23095, Bandwidth:10, Modulation:Q16, RB Number: 50, RB Position:LOW)



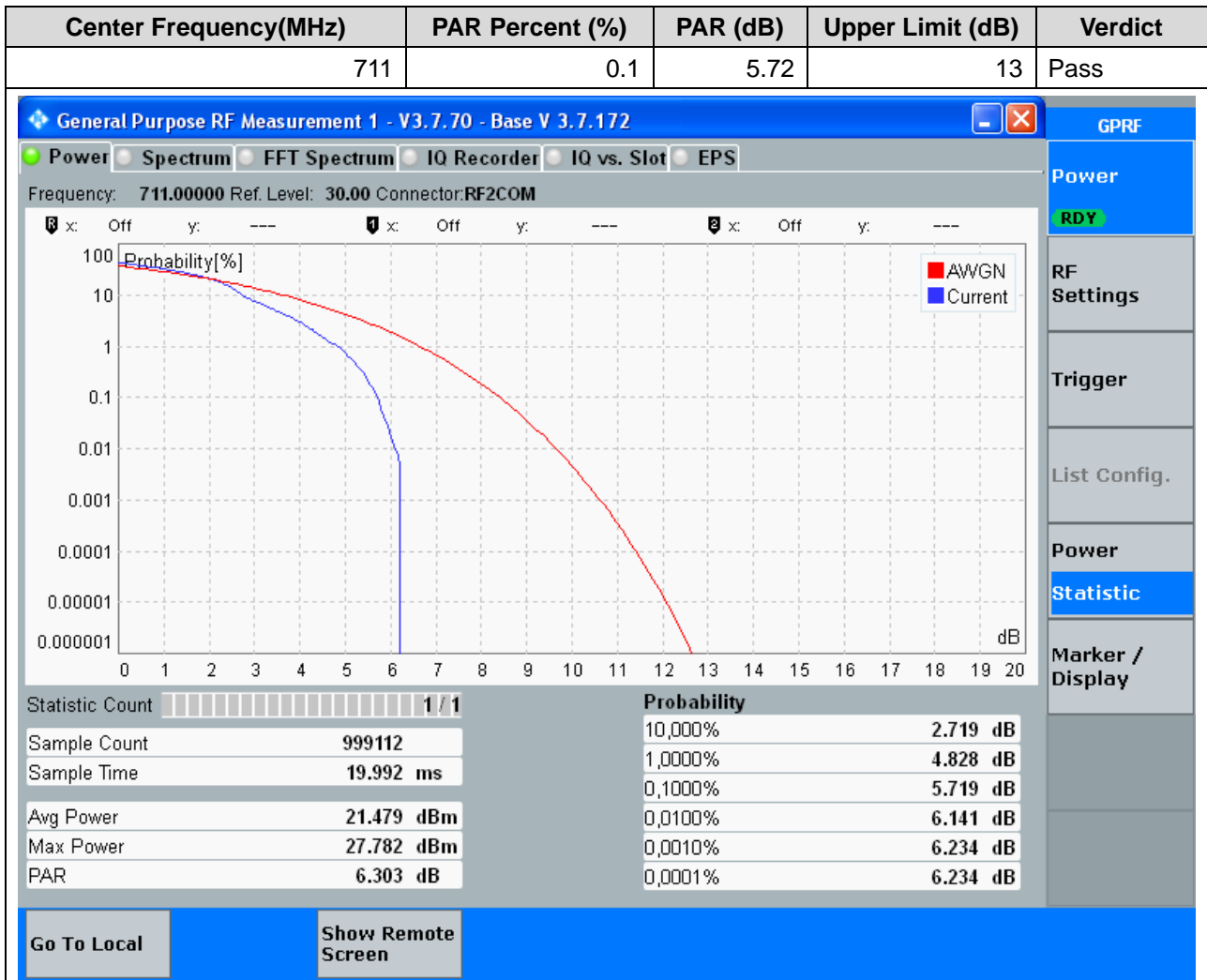
4.9. LTE Peak to Average Ratio_Part22-24-27(NTNV)(Subtest:9, Channel:23130, Bandwidth:10, Modulation:QPSK, RB Number: 1, RB Position:LOW)



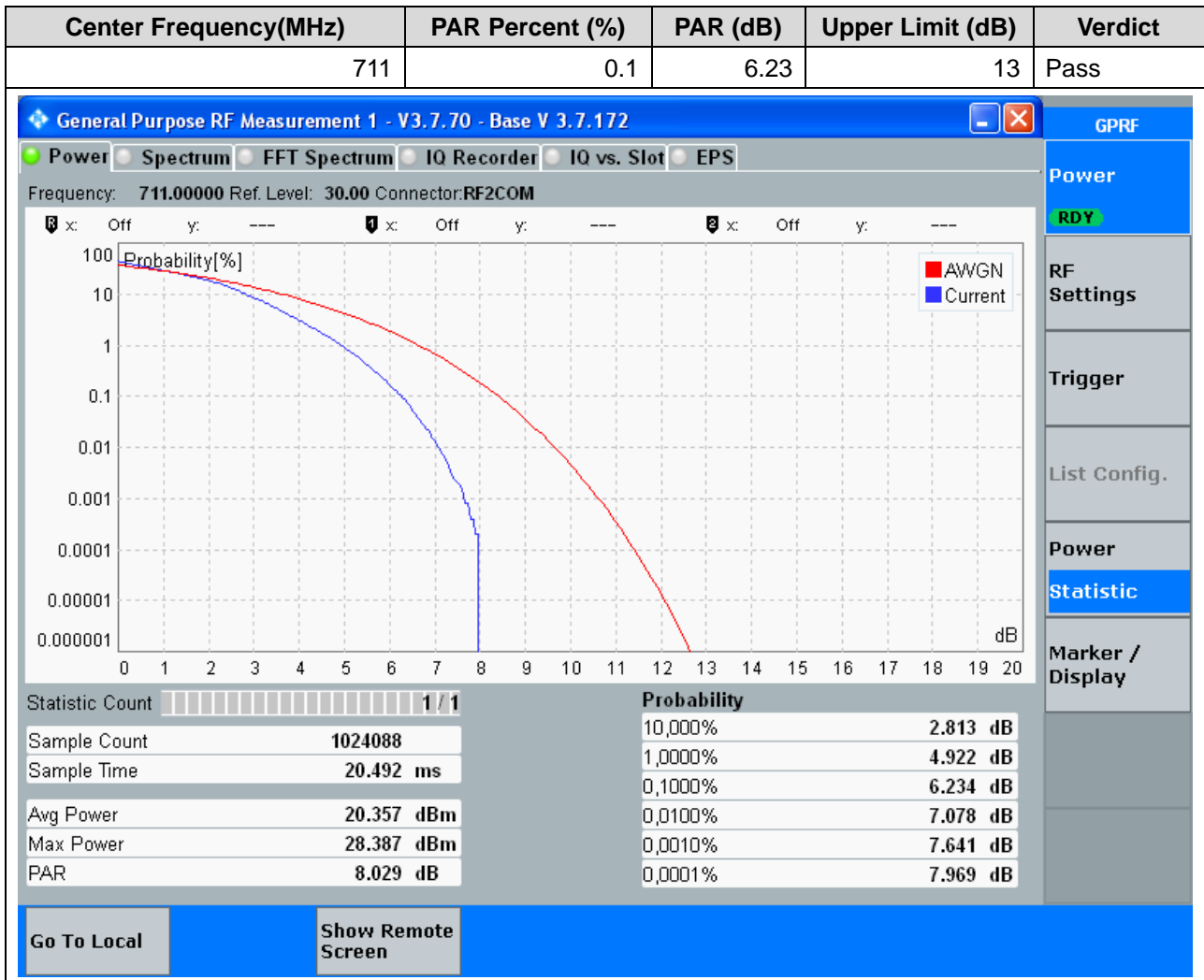
4.10. LTE Peak to Average Ratio_Part22-24-27(NTNV)(Subtest:10, Channel:23130, Bandwidth:10, Modulation:QPSK, RB Number: 50, RB Position:LOW)



4.11. LTE Peak to Average Ratio_Part22-24-27(NTNV)(Subtest:11, Channel:23130, Bandwidth:10, Modulation:Q16, RB Number: 1, RB Position:LOW)

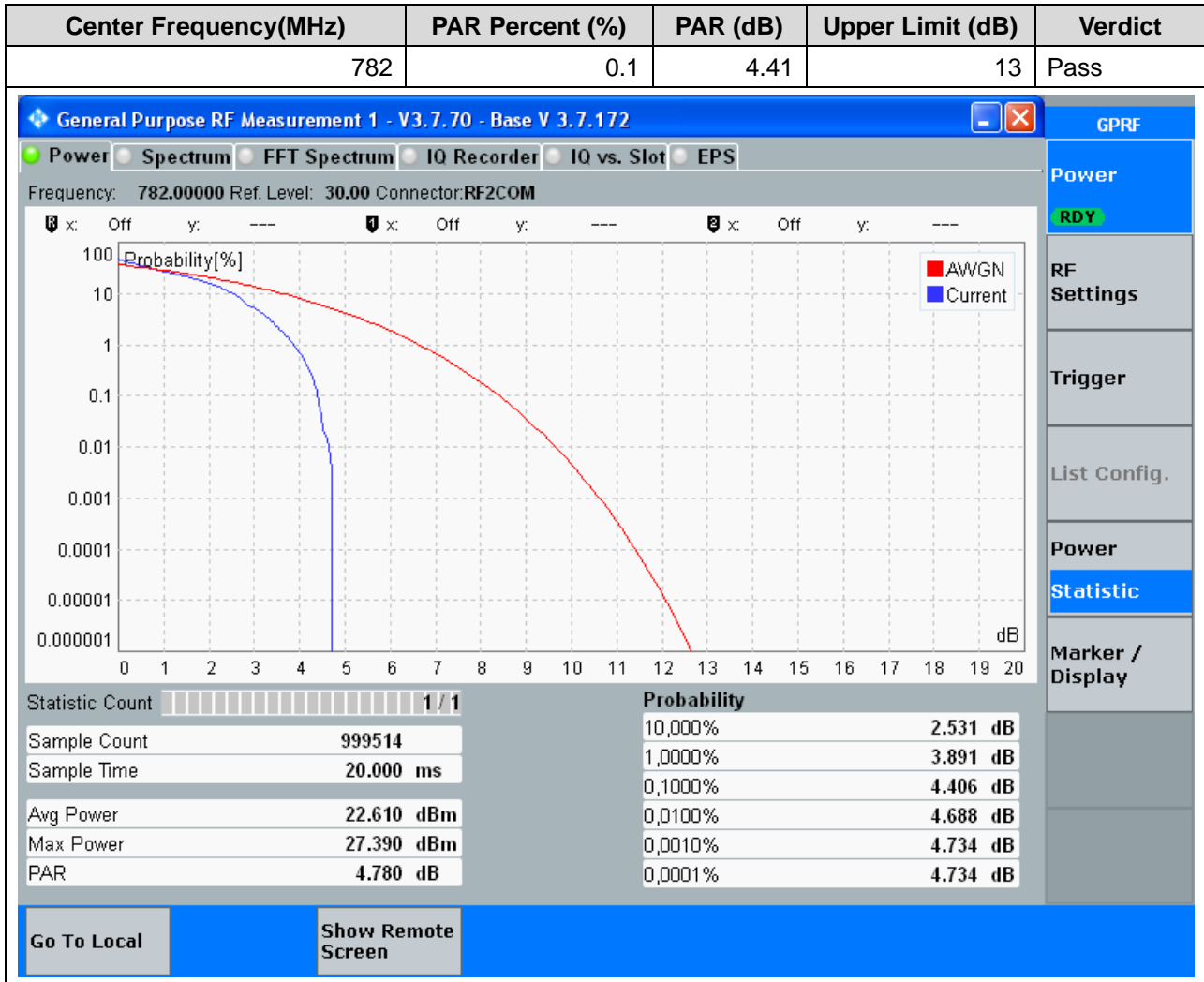


4.12. LTE Peak to Average Ratio_Part22-24-27(NTNV)(Subtest:12, Channel:23130, Bandwidth:10, Modulation:Q16, RB Number: 50, RB Position:LOW)

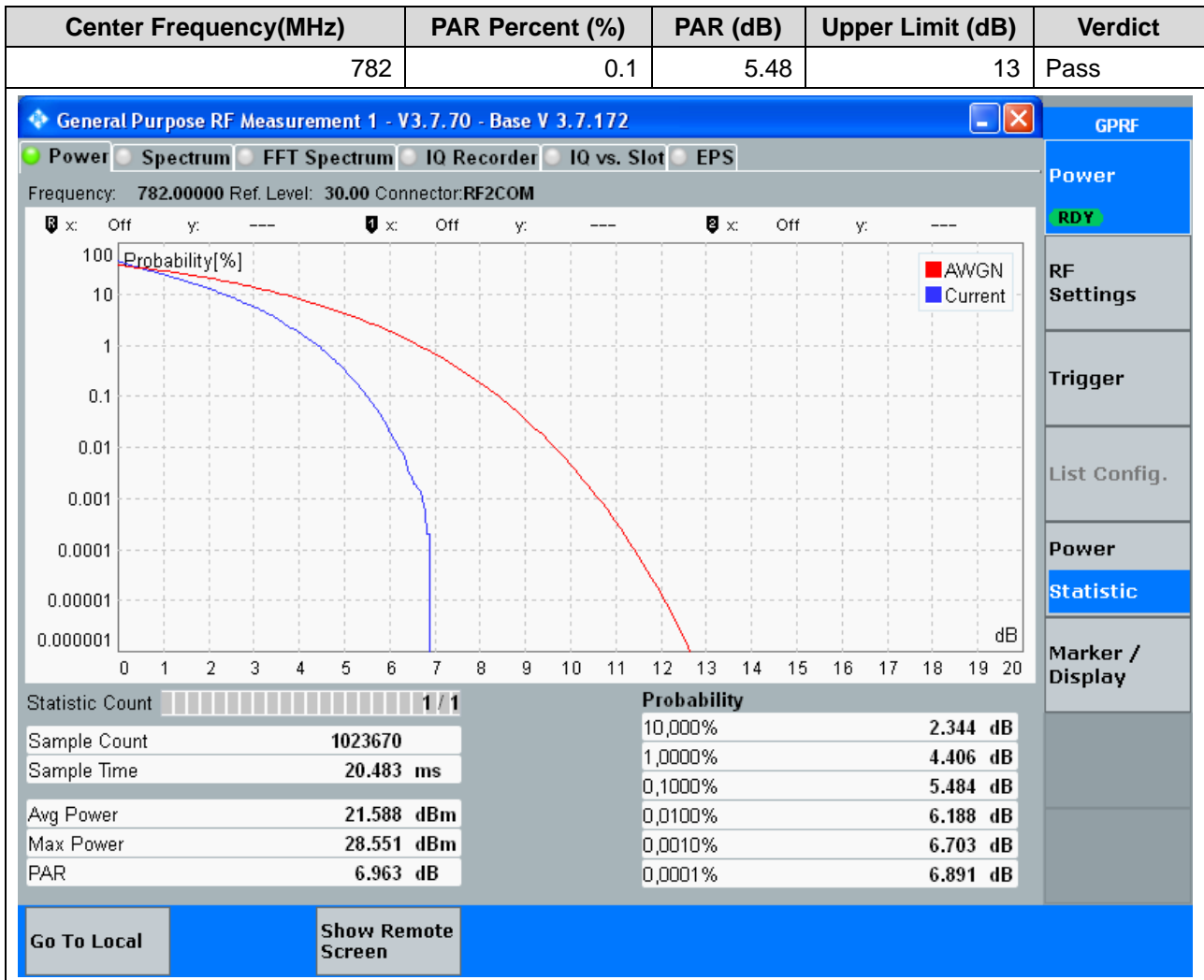


5. LTE_Band13

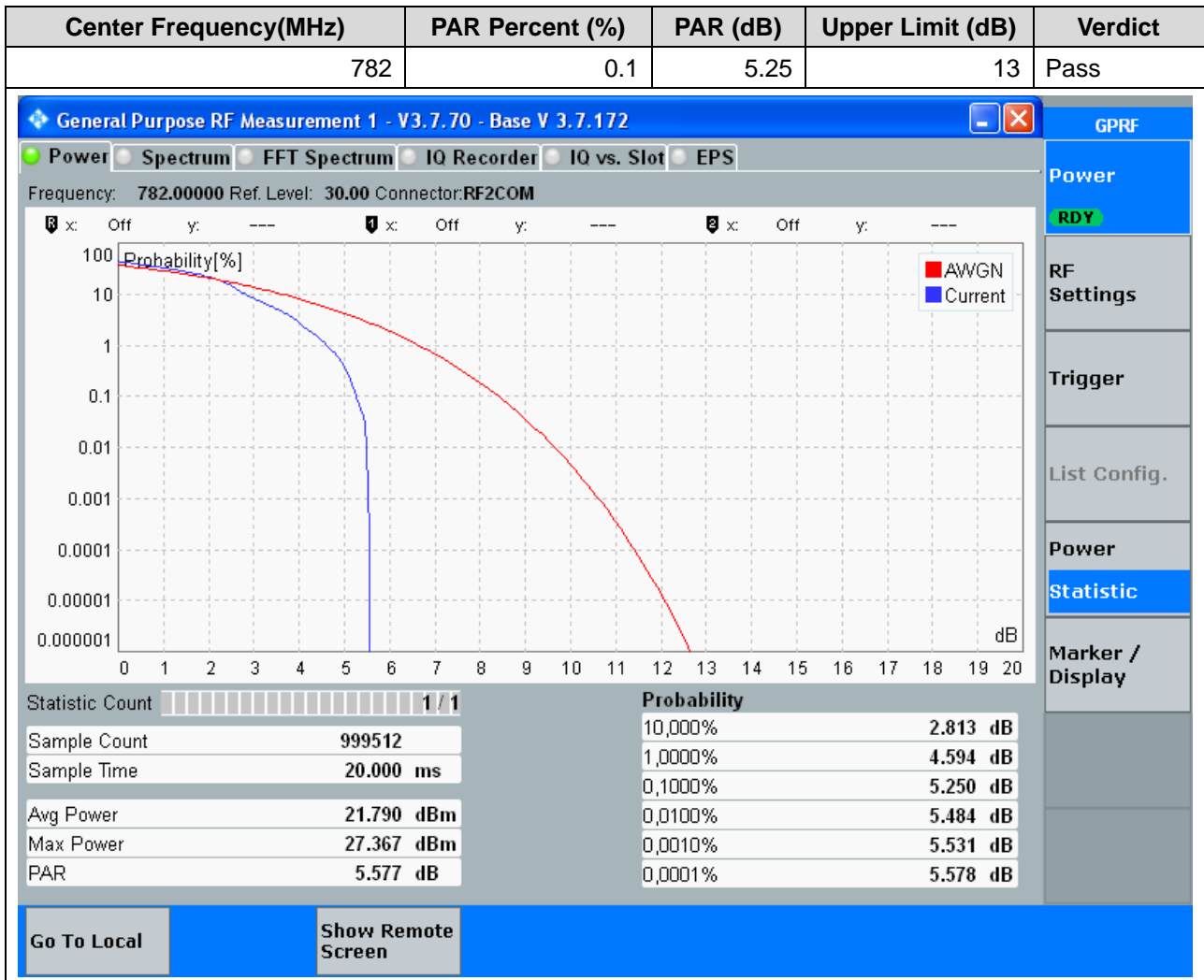
5.1. LTE Peak to Average Ratio_Part22-24-27(NTNV)(Subtest:1, Channel:23230, Bandwidth:10, Modulation:QPSK, RB Number: 1, RB Position:LOW)



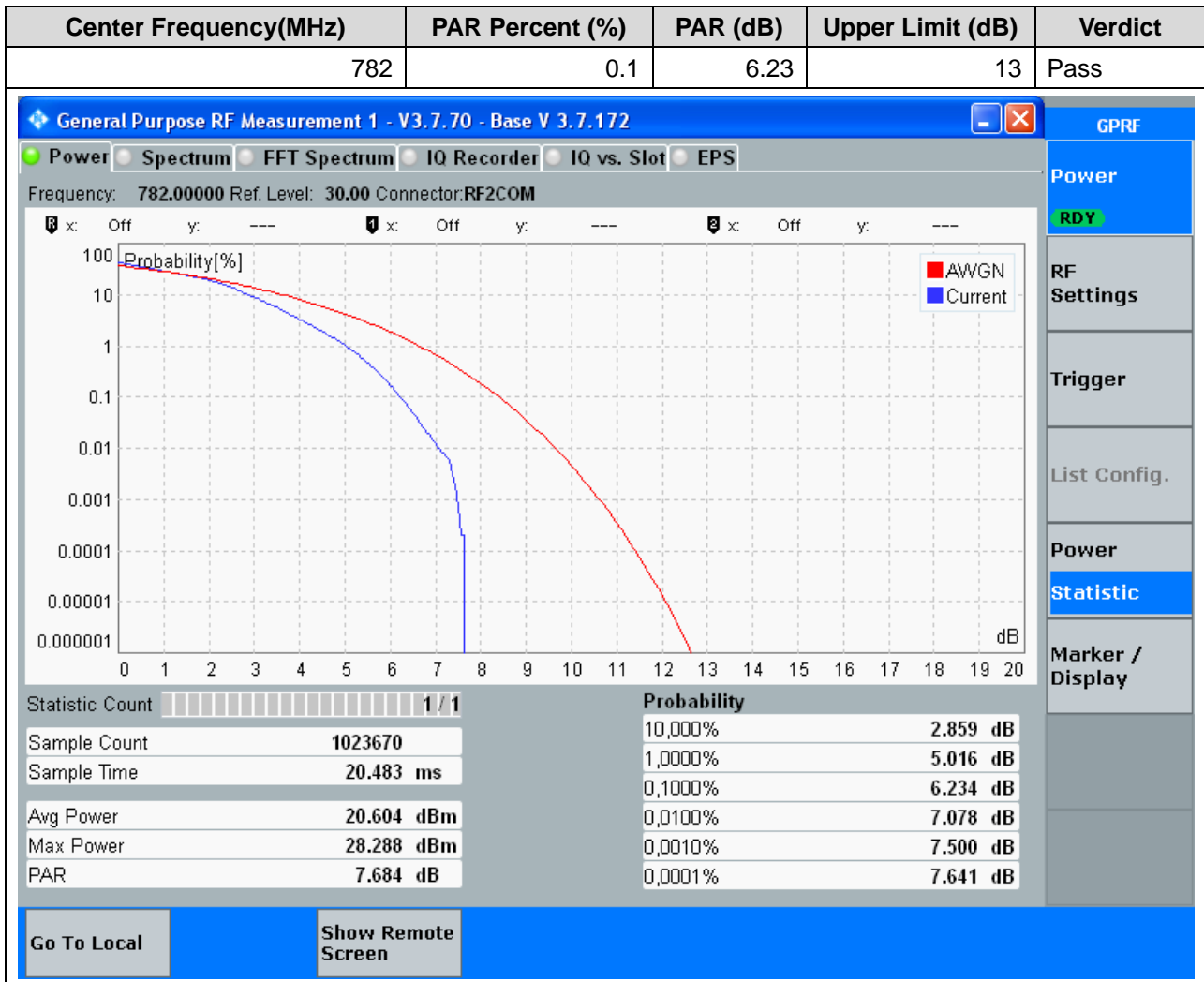
5.2. LTE Peak to Average Ratio_Part22-24-27(NTNV)(Subtest:2, Channel:23230, Bandwidth:10, Modulation:QPSK, RB Number: 50, RB Position:LOW)



5.3. LTE Peak to Average Ratio_Part22-24-27(NTNV)(Subtest:3, Channel:23230, Bandwidth:10, Modulation:Q16, RB Number: 1, RB Position:LOW)

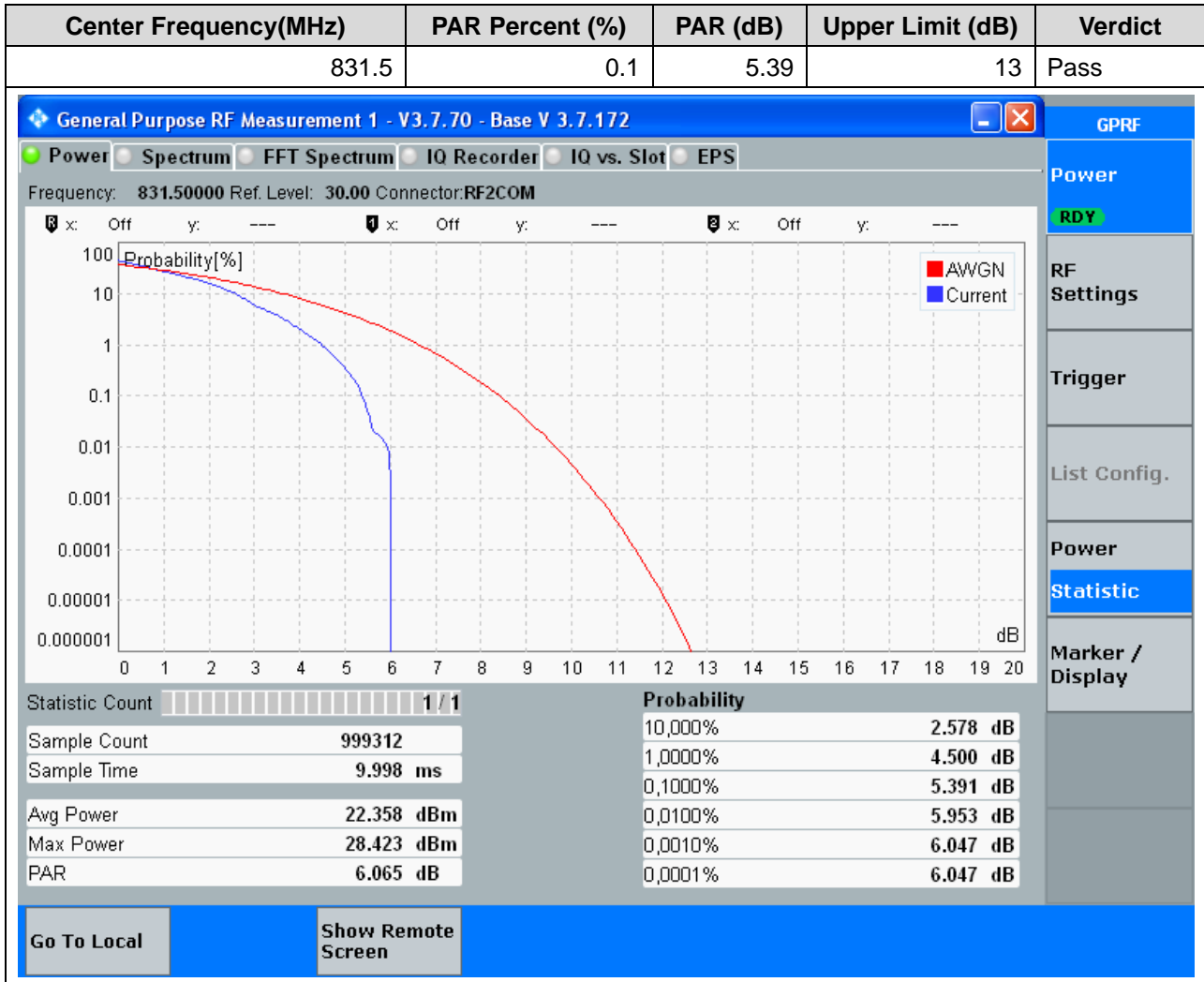


5.4. LTE Peak to Average Ratio_Part22-24-27(NTNV)(Subtest:4, Channel:23230, Bandwidth:10, Modulation:Q16, RB Number: 50, RB Position:LOW)

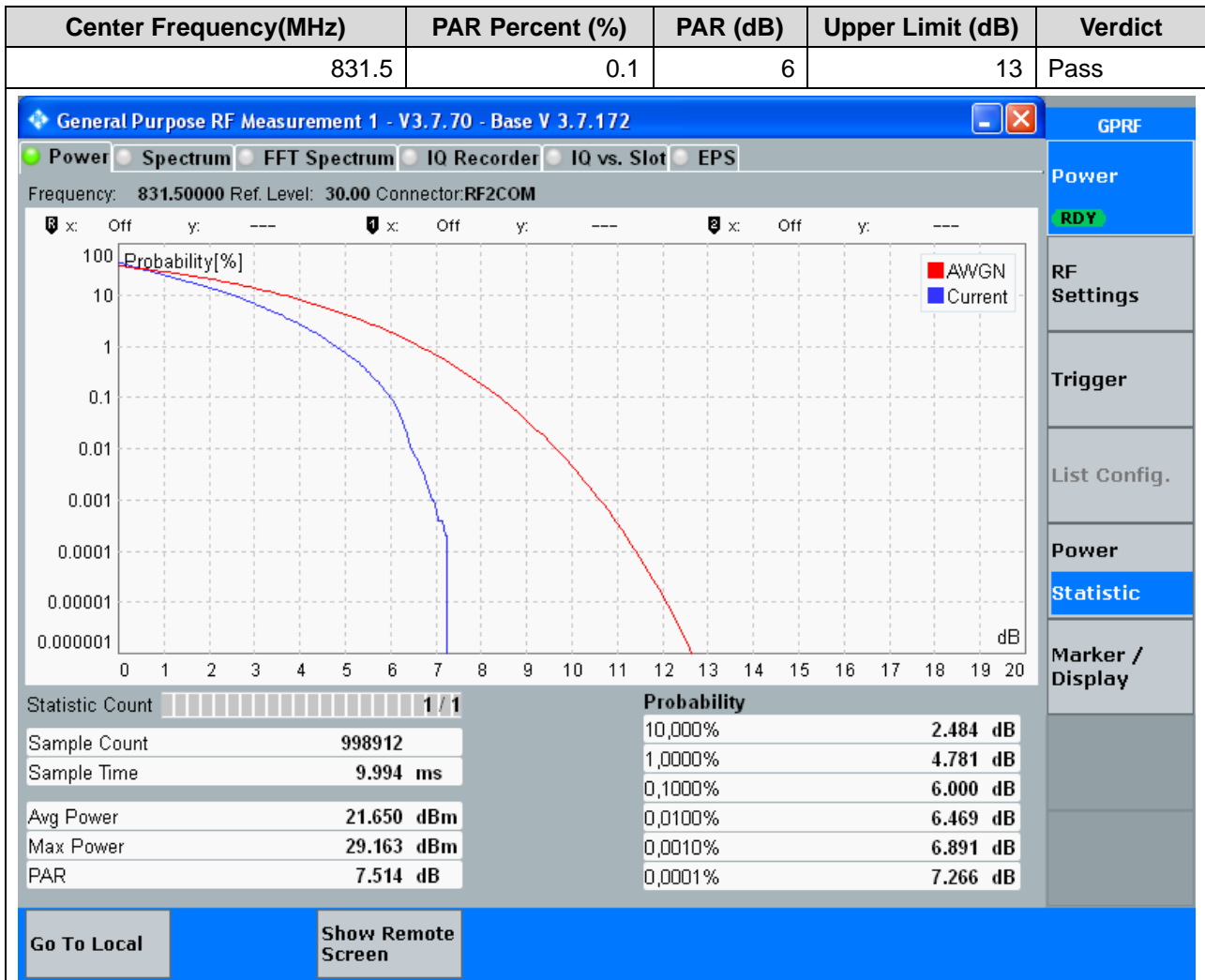


6. LTE_Band26(part22)

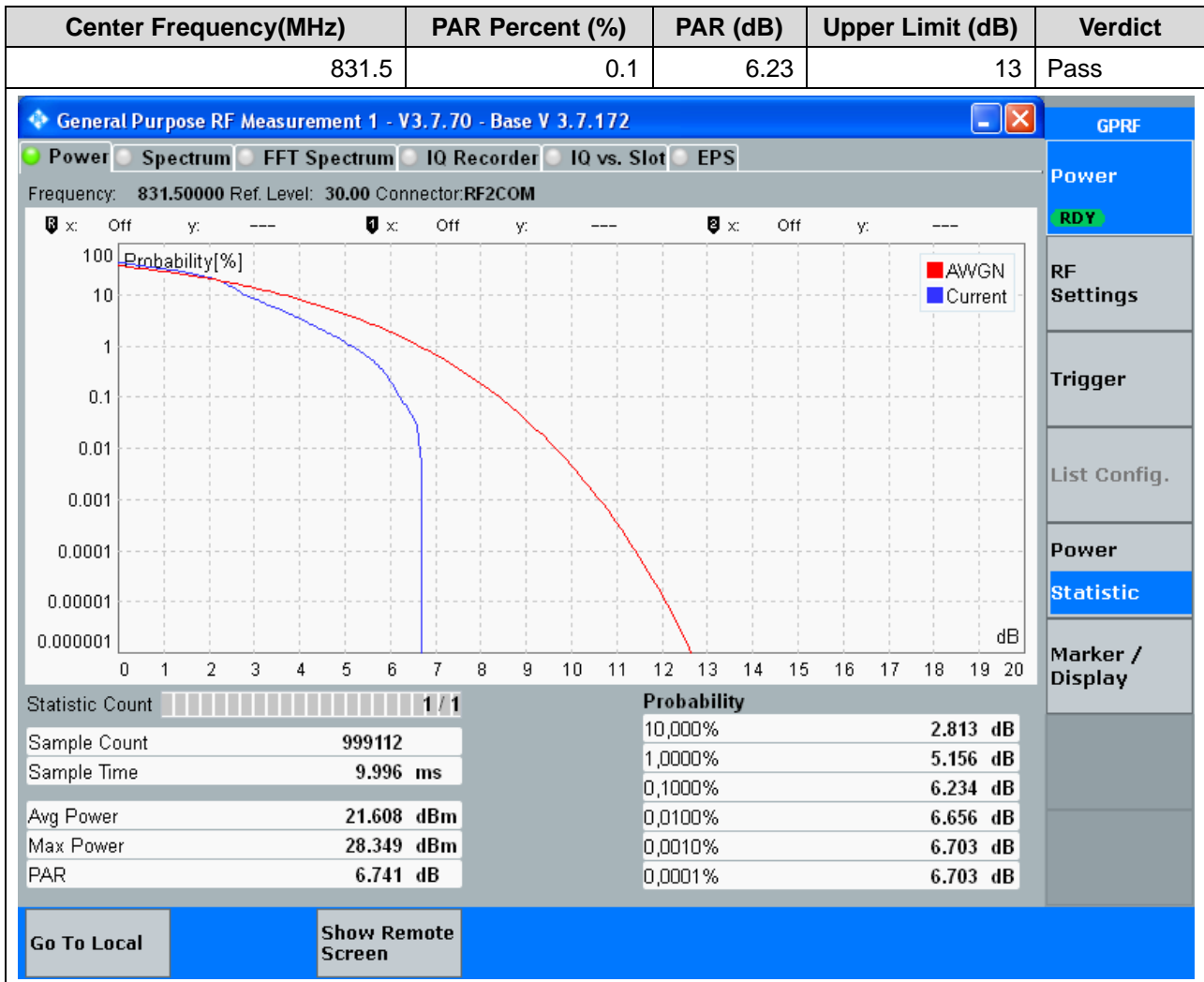
6.1. LTE Peak to Average Ratio_Part22-24-27(NTNV)(Subtest:1, Channel:26865, Bandwidth:15, Modulation:QPSK, RB Number: 1, RB Position:LOW)



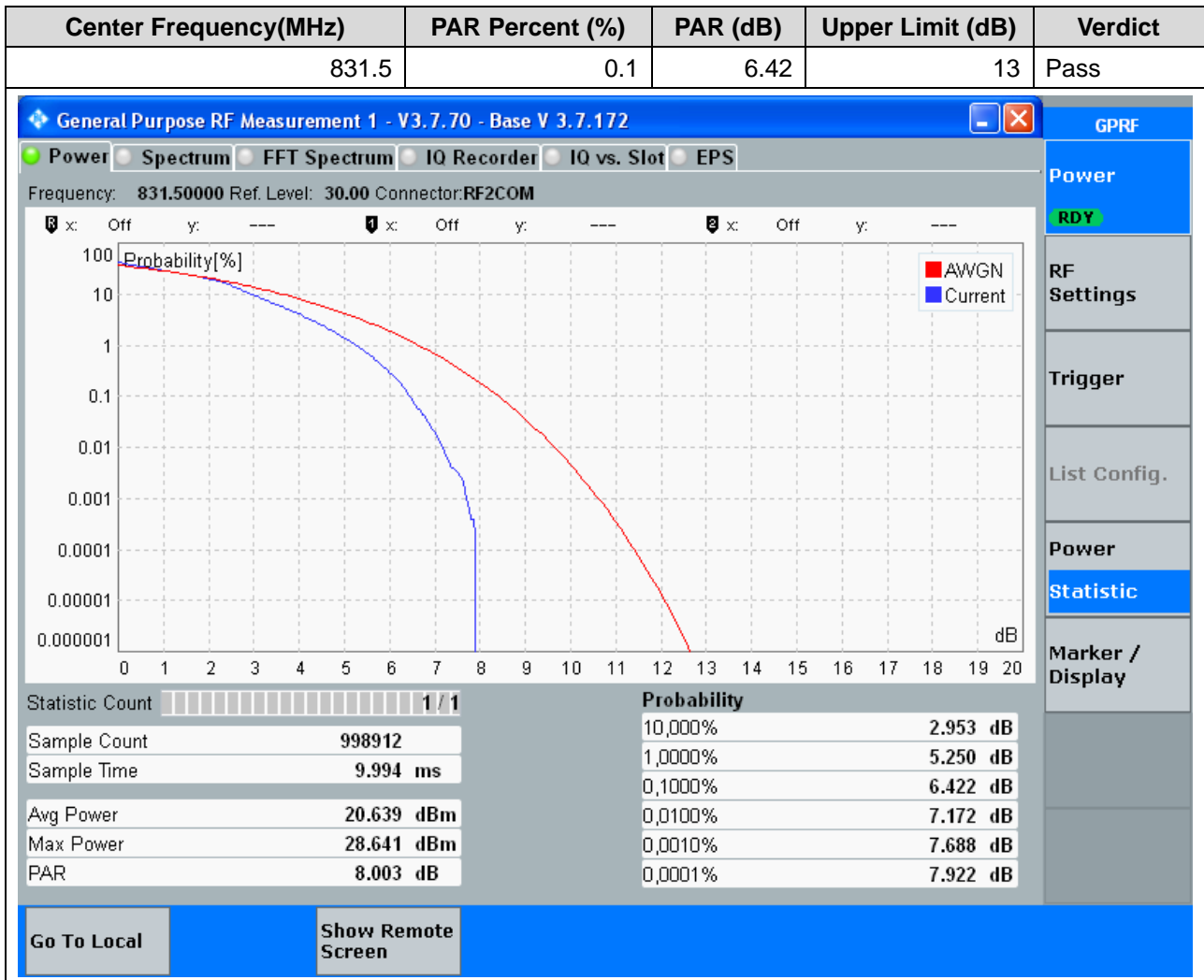
6.2. LTE Peak to Average Ratio_Part22-24-27(NTNV)(Subtest:2, Channel:26865, Bandwidth:15, Modulation:QPSK, RB Number: 75, RB Position:LOW)



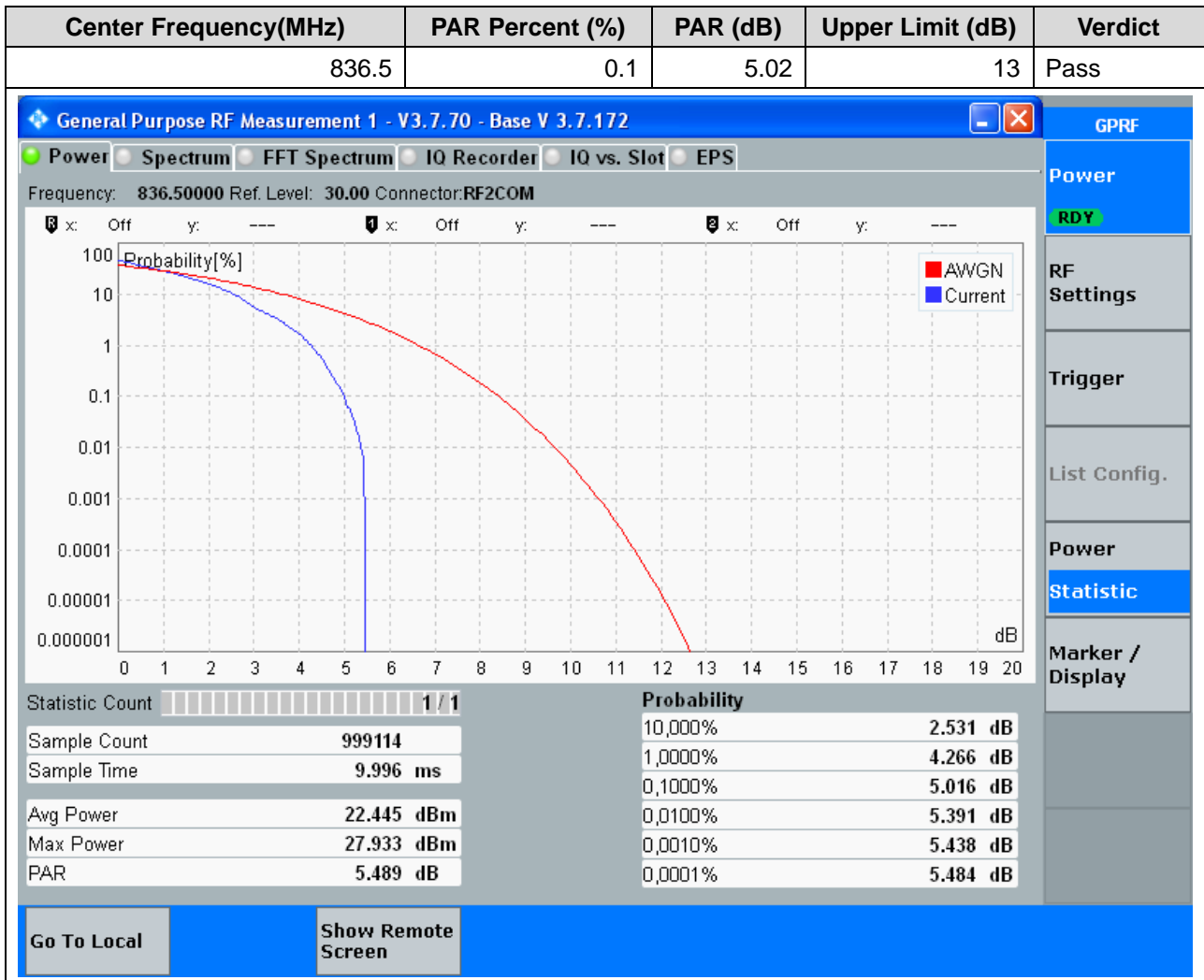
6.3. LTE Peak to Average Ratio_Part22-24-27(NTNV)(Subtest:3, Channel:26865, Bandwidth:15, Modulation:Q16, RB Number: 1, RB Position:LOW)



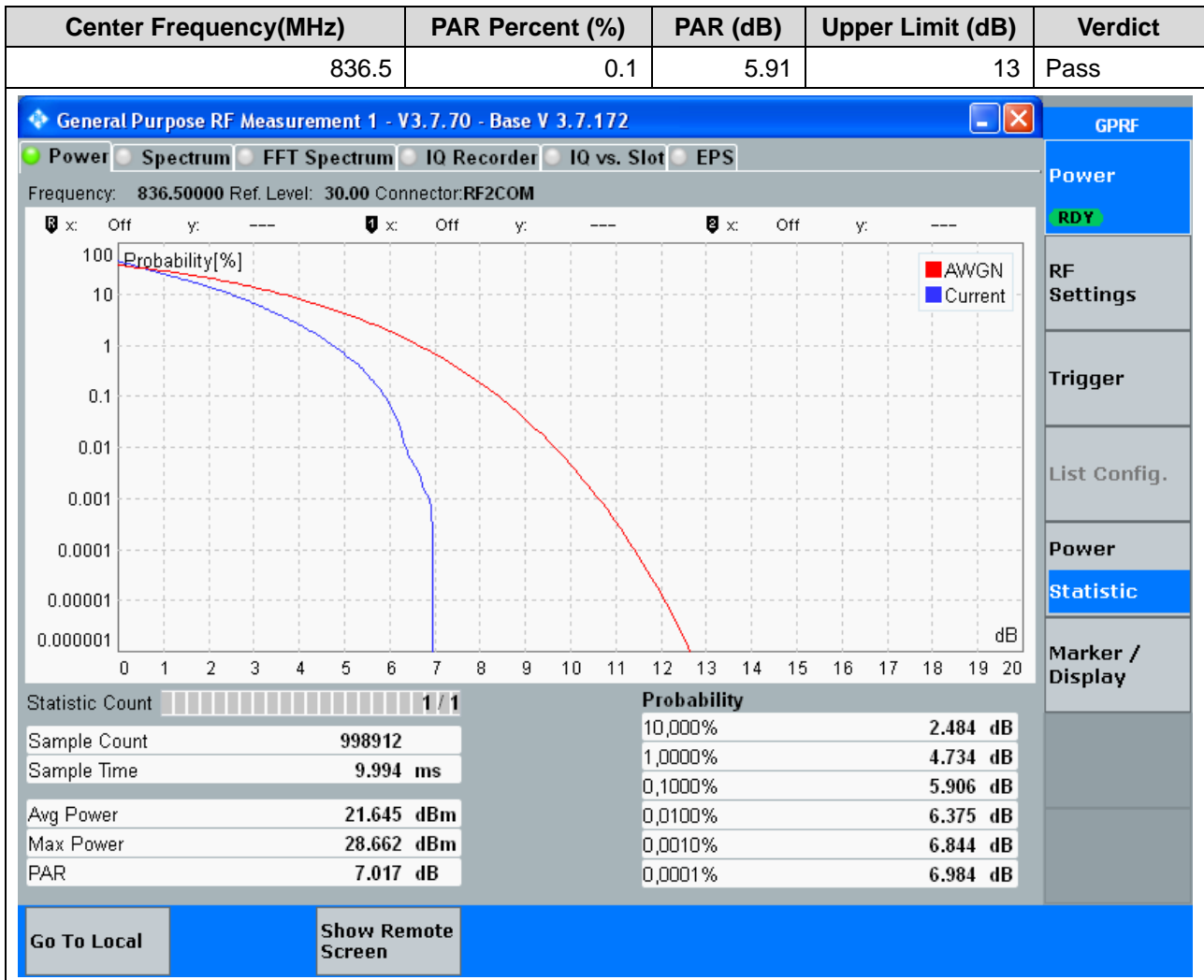
6.4. LTE Peak to Average Ratio_Part22-24-27(NTNV)(Subtest:4, Channel:26865, Bandwidth:15, Modulation:Q16, RB Number: 75, RB Position:LOW)



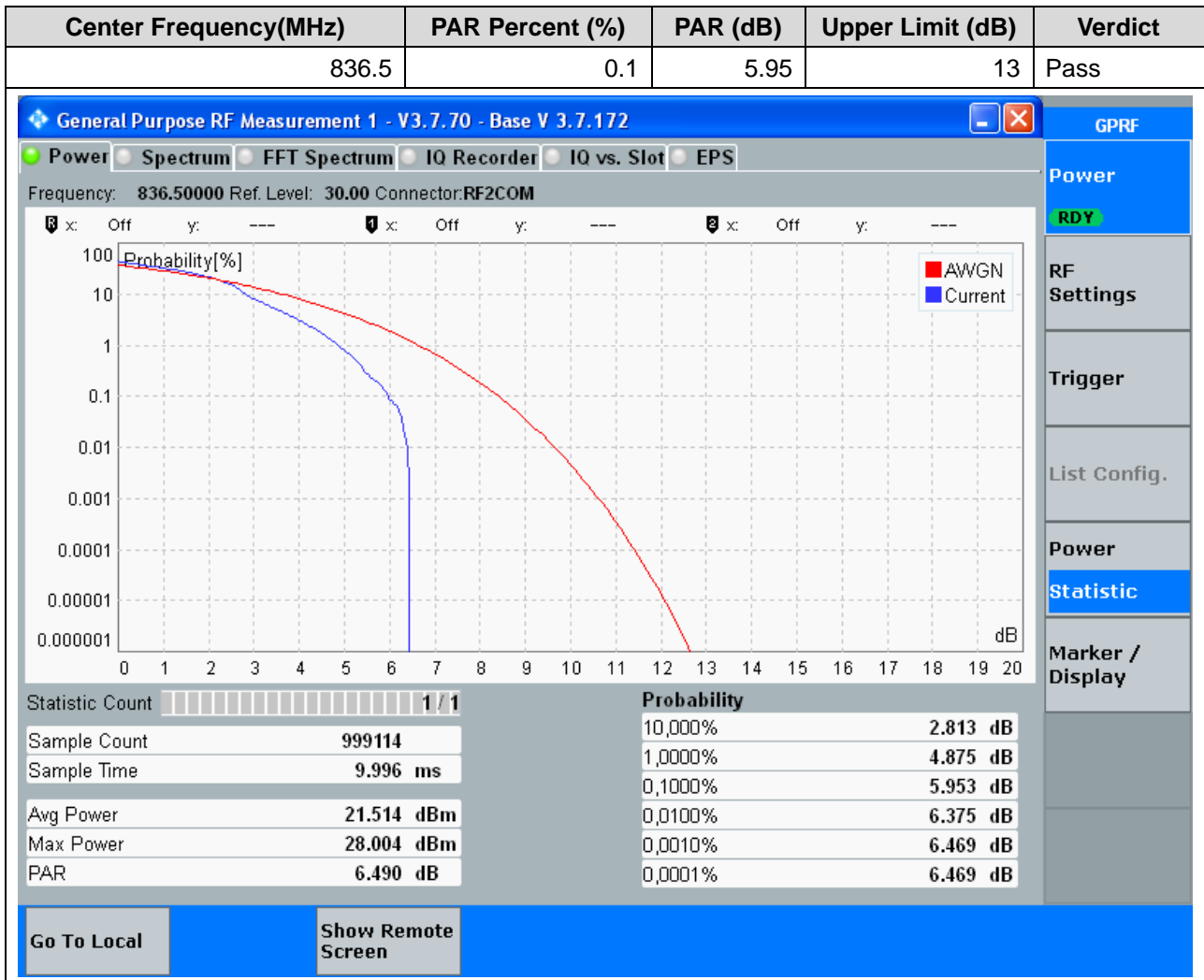
6.5. LTE Peak to Average Ratio_Part22-24-27(NTNV)(Subtest:5, Channel:26915, Bandwidth:15, Modulation:QPSK, RB Number: 1, RB Position:LOW)



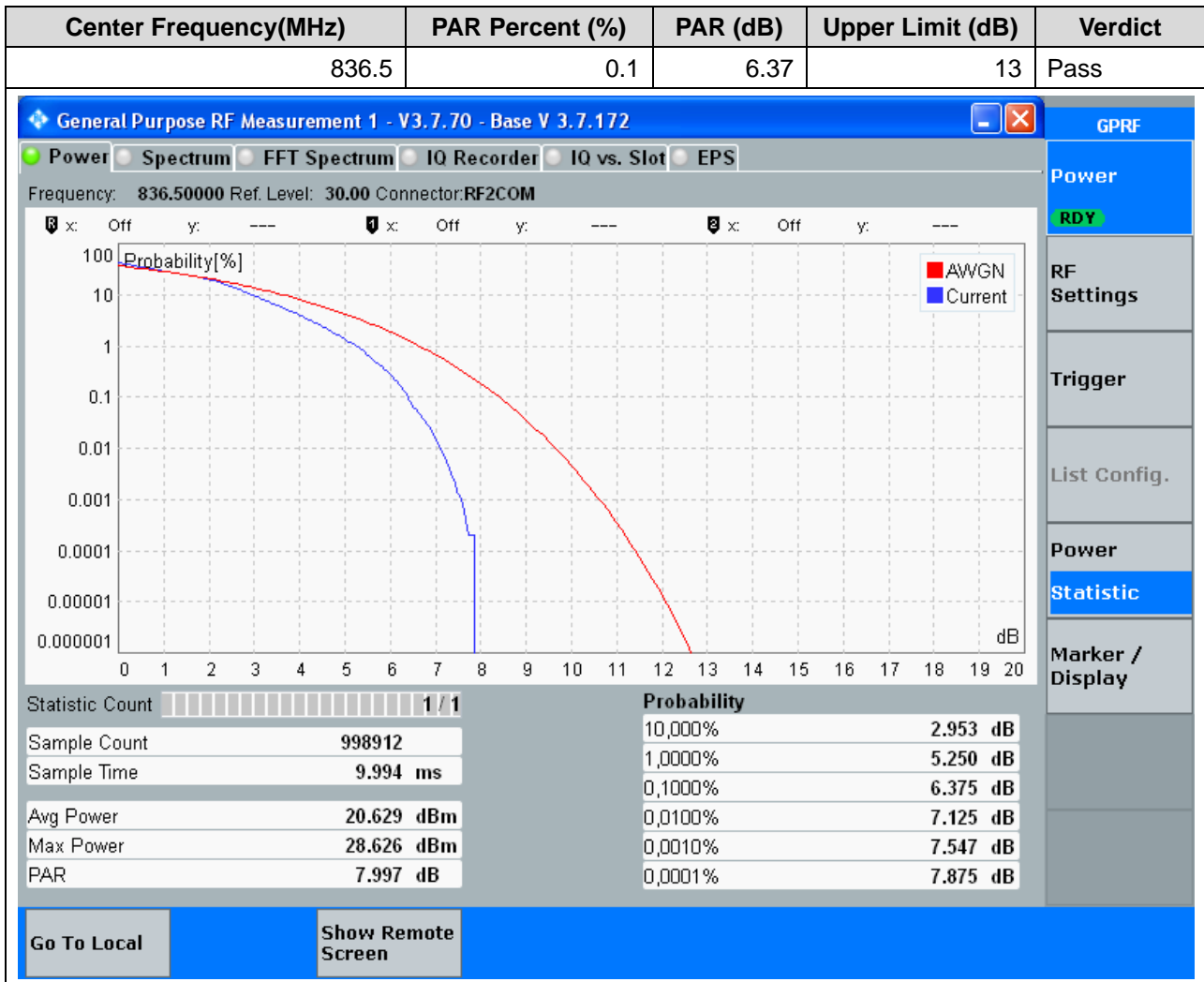
6.6. LTE Peak to Average Ratio_Part22-24-27(NTNV)(Subtest:6, Channel:26915, Bandwidth:15, Modulation:QPSK, RB Number: 75, RB Position:LOW)



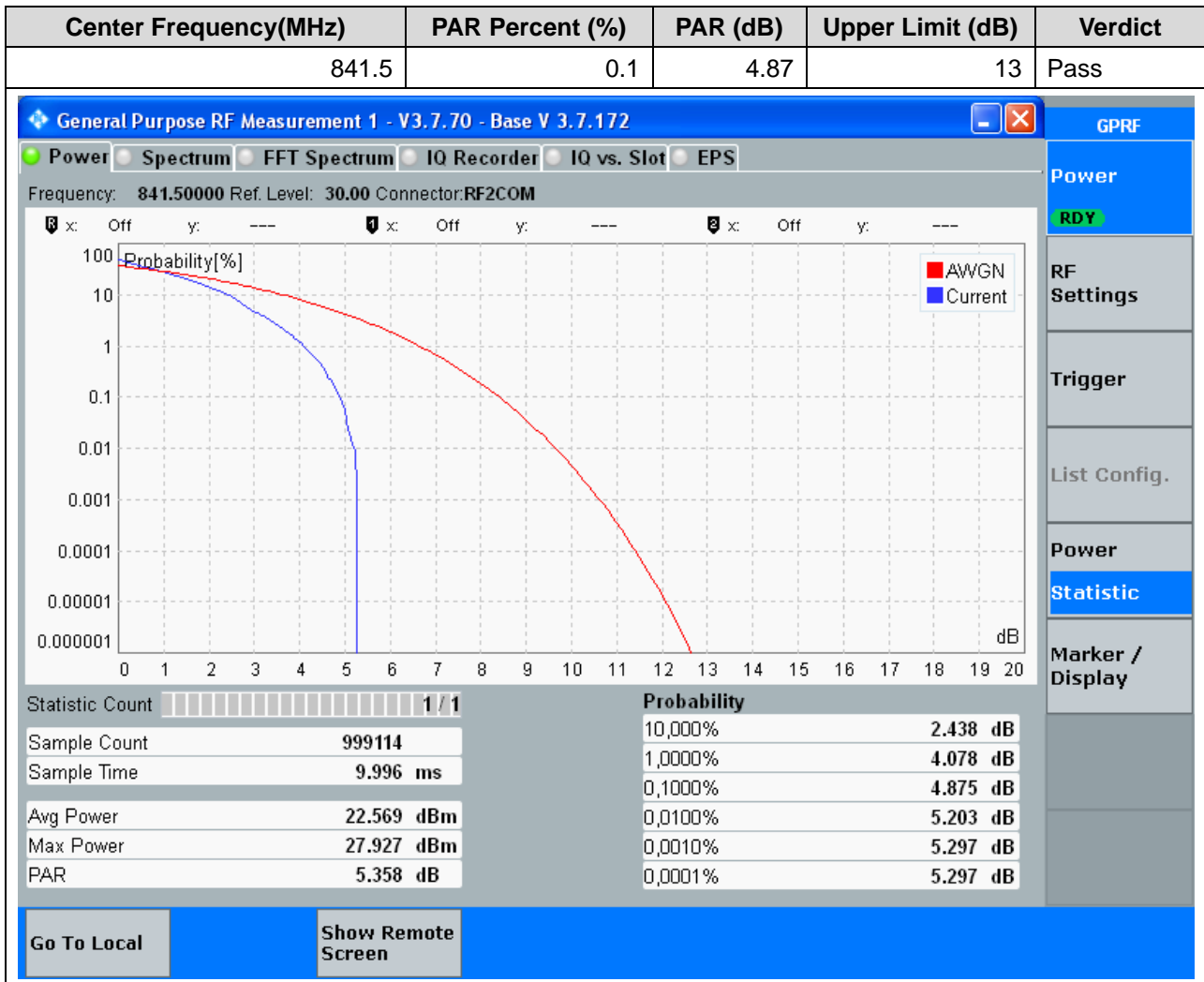
6.7. LTE Peak to Average Ratio_Part22-24-27(NTNV)(Subtest:7, Channel:26915, Bandwidth:15, Modulation:Q16, RB Number: 1, RB Position:LOW)



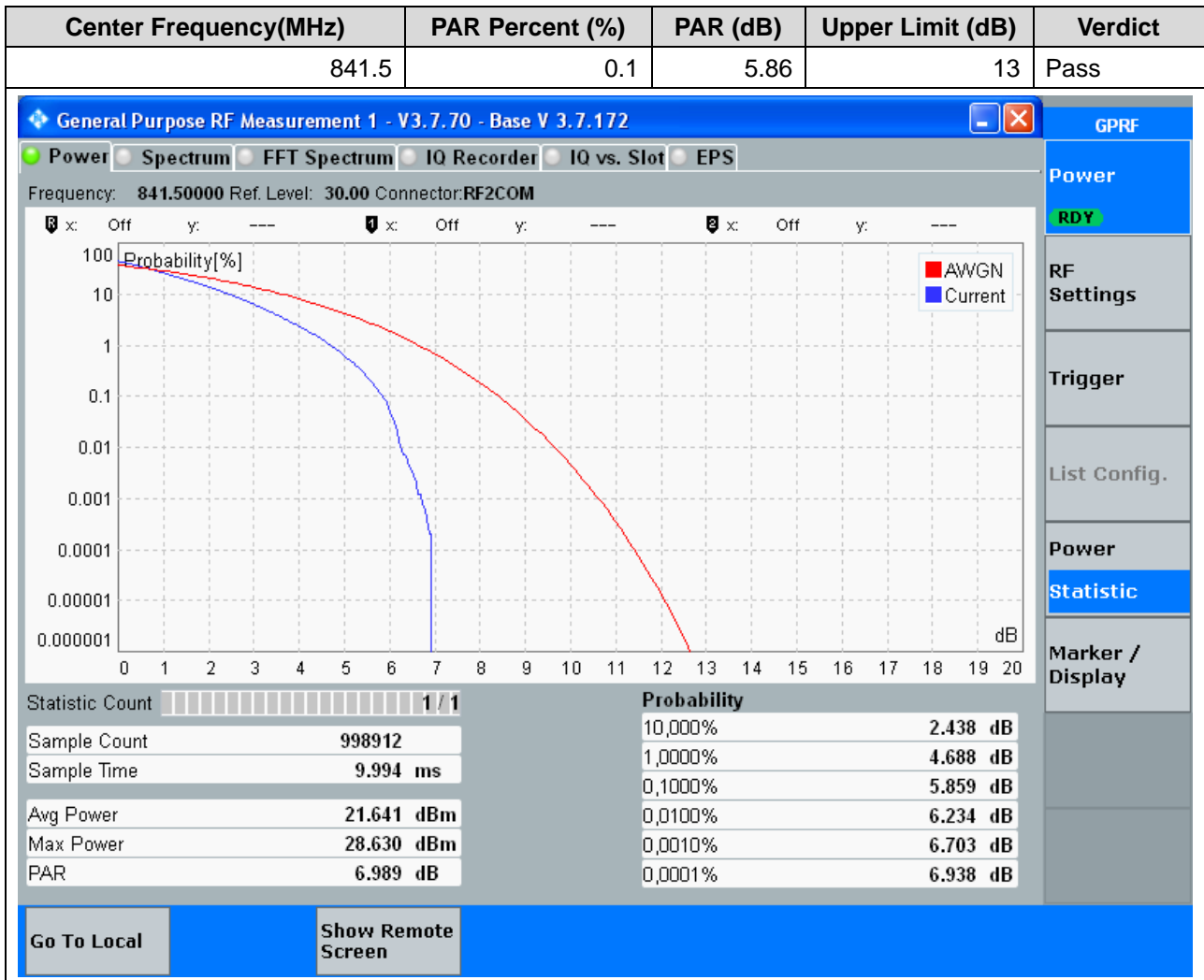
6.8. LTE Peak to Average Ratio_Part22-24-27(NTNV)(Subtest:8, Channel:26915, Bandwidth:15, Modulation:Q16, RB Number: 75, RB Position:LOW)



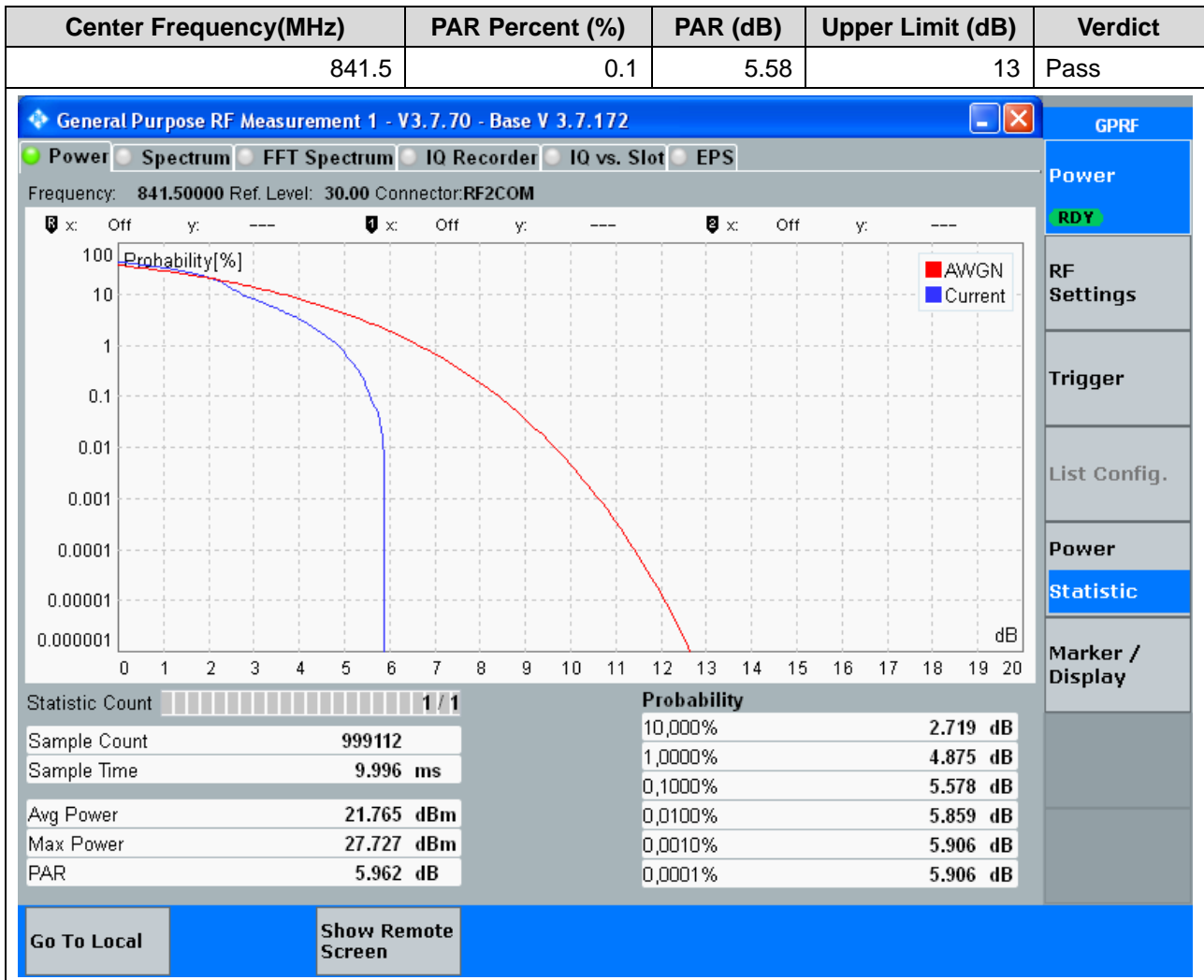
6.9. LTE Peak to Average Ratio_Part22-24-27(NTNV)(Subtest:9, Channel:26965, Bandwidth:15, Modulation:QPSK, RB Number: 1, RB Position:LOW)



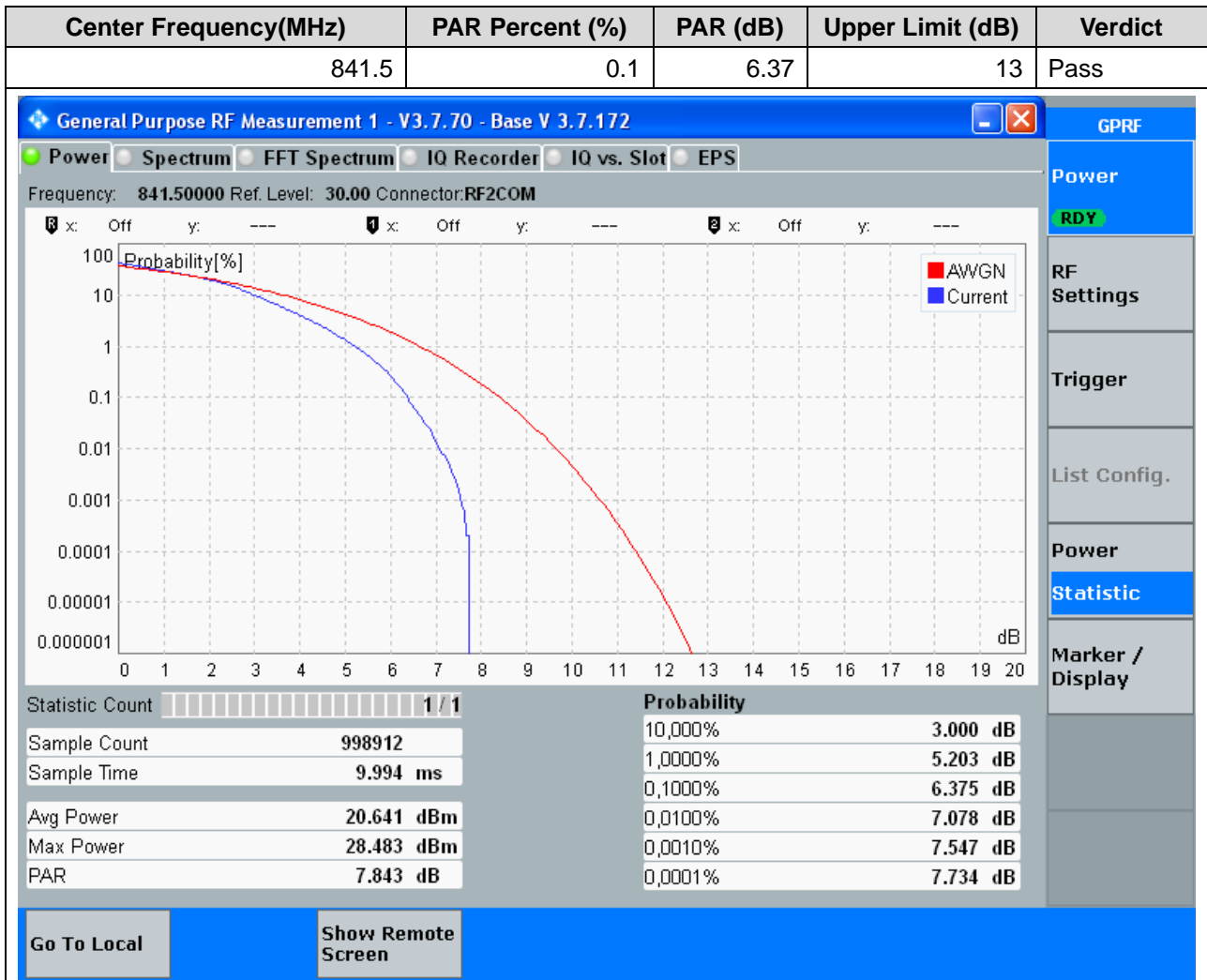
6.10. LTE Peak to Average Ratio_Part22-24-27(NTNV)(Subtest:10, Channel:26965, Bandwidth:15, Modulation:QPSK, RB Number: 75, RB Position:LOW)



6.11. LTE Peak to Average Ratio_Part22-24-27(NTNV)(Subtest:11, Channel:26965, Bandwidth:15, Modulation:Q16, RB Number: 1, RB Position:LOW)

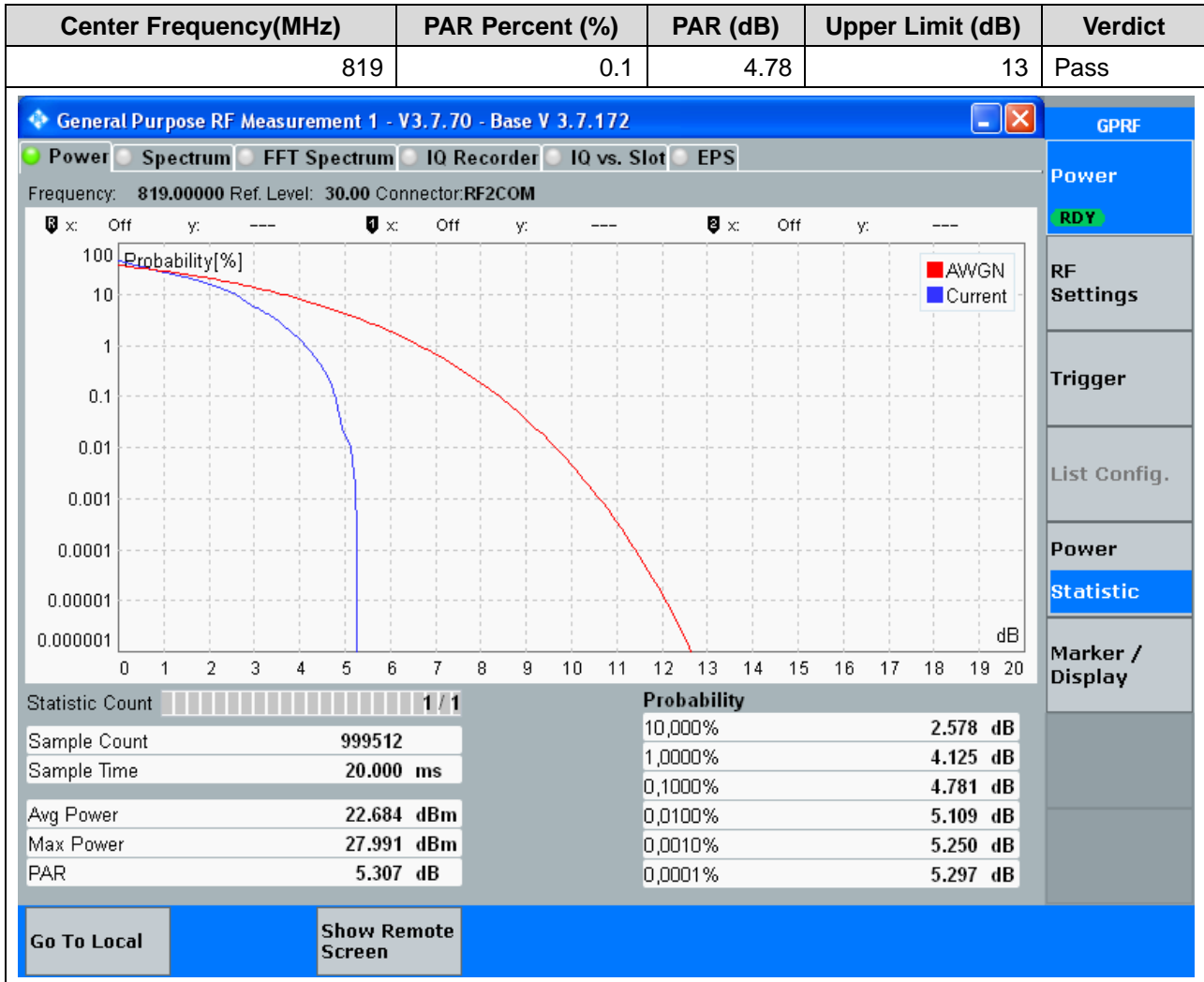


6.12. LTE Peak to Average Ratio_Part22-24-27(NTNV)(Subtest:12, Channel:26965, Bandwidth:15, Modulation:Q16, RB Number: 75, RB Position:LOW)

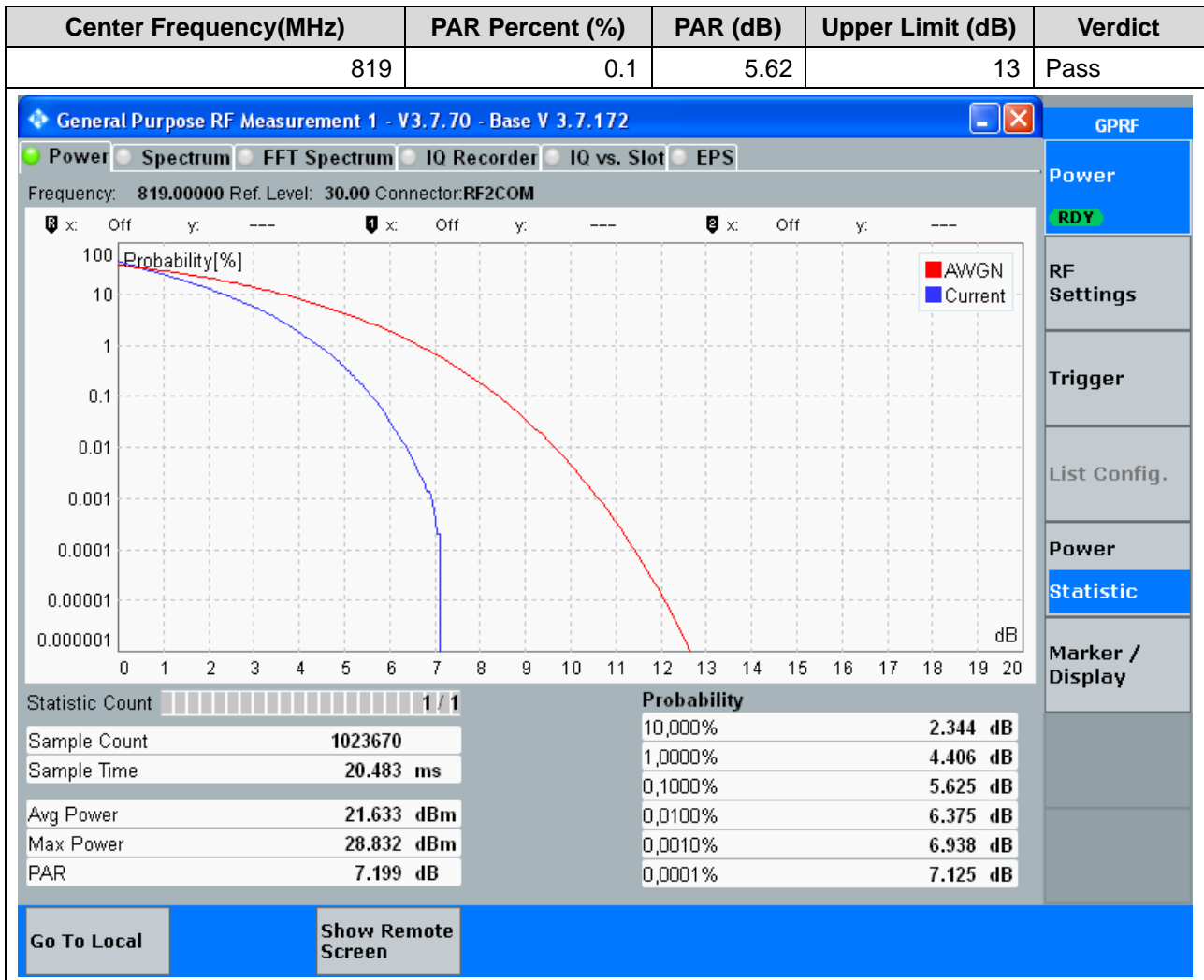


7. LTE_Band26(part90)

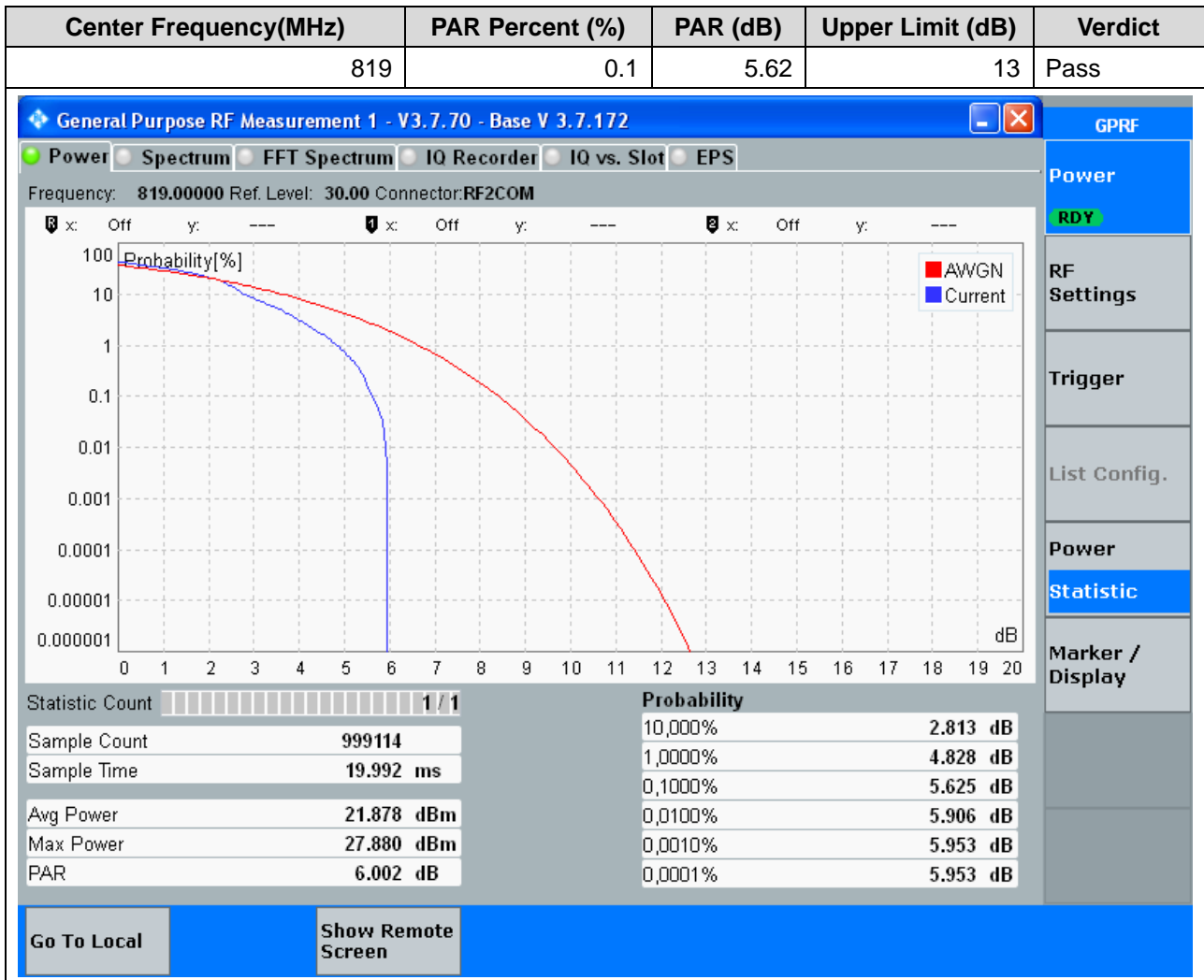
7.1. LTE Peak to Average Ratio_Part90(NTNV)(Subtest:1, Channel:26740, Bandwidth:10, Modulation:QPSK, RB Number: 1, RB Position:LOW)



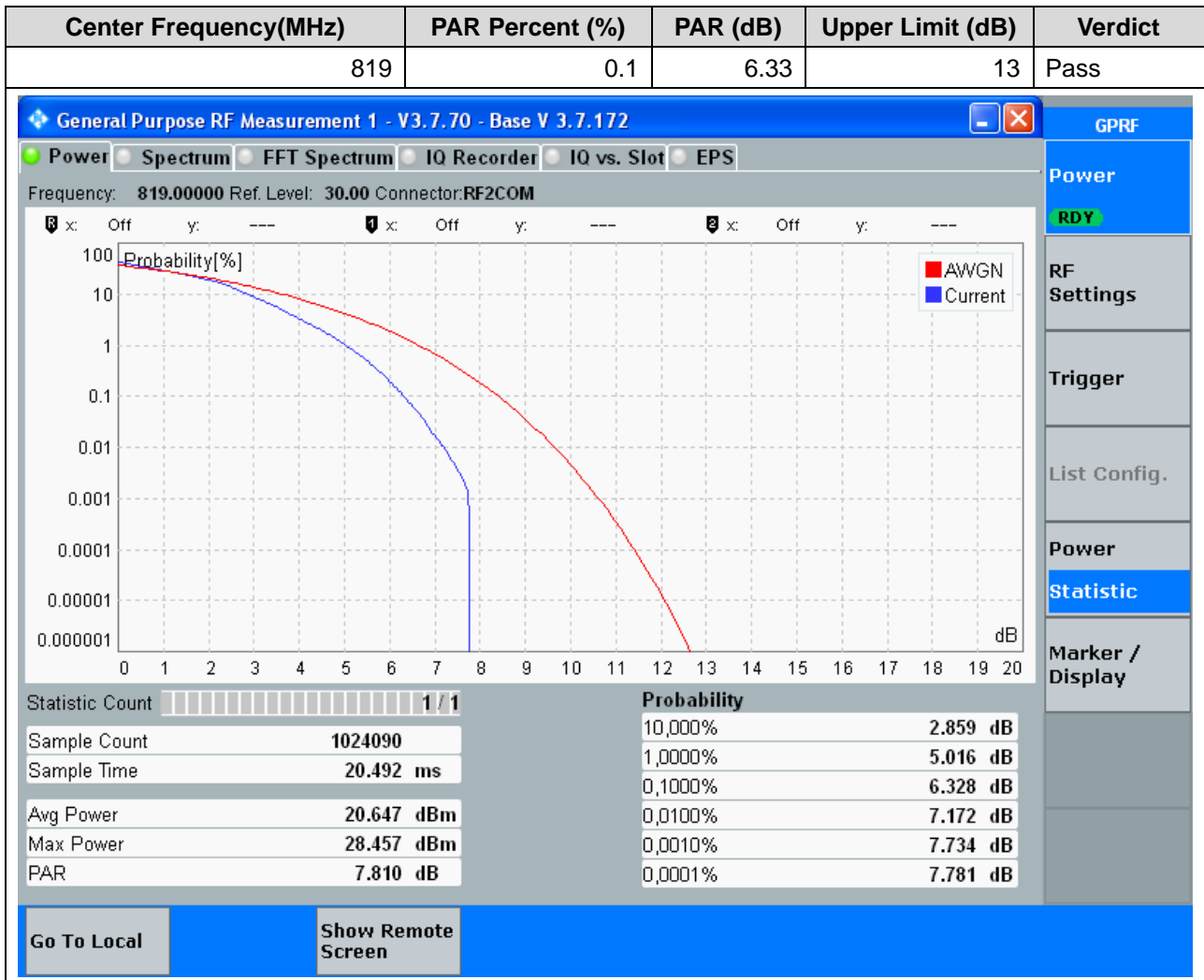
7.2. LTE Peak to Average Ratio_Part90(NTNV)(Subtest:2, Channel:26740, Bandwidth:10, Modulation:QPSK, RB Number: 50, RB Position:LOW)



7.3. LTE Peak to Average Ratio_Part90(NTNV)(Subtest:3, Channel:26740, Bandwidth:10, Modulation:Q16, RB Number: 1, RB Position:LOW)

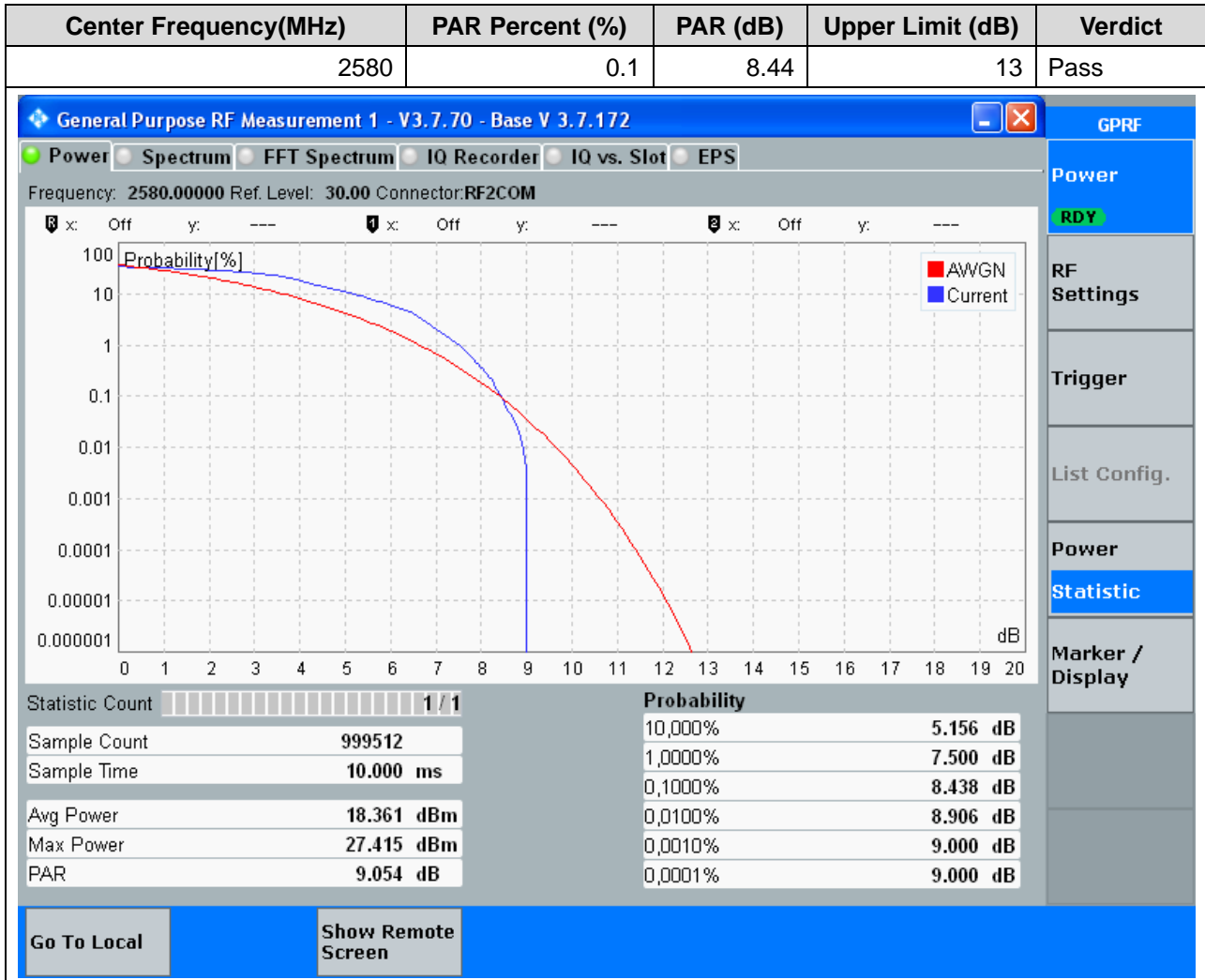


7.4. LTE Peak to Average Ratio_Part90(NTNV)(Subtest:4, Channel:26740, Bandwidth:10, Modulation:Q16, RB Number: 50, RB Position:LOW)

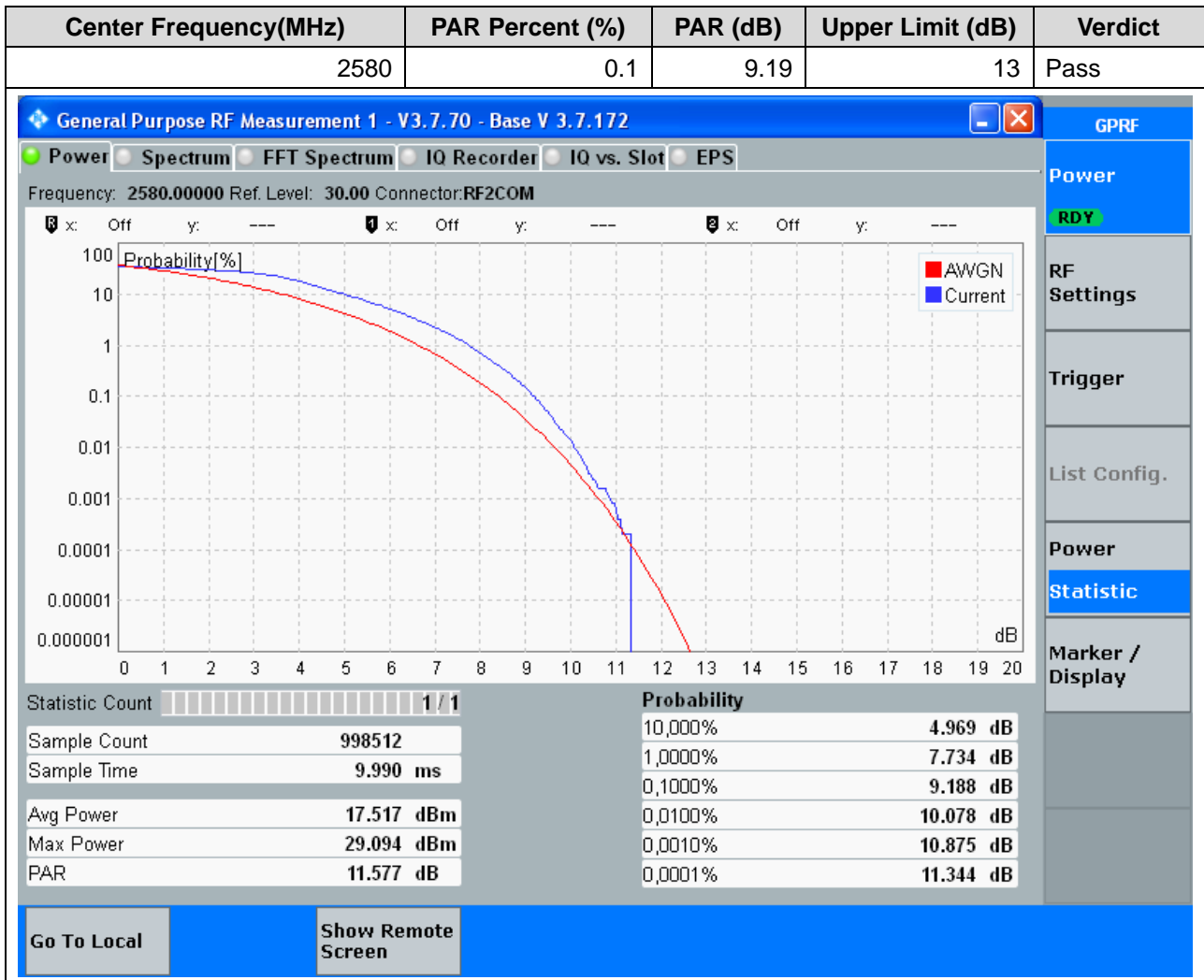


8. LTE_Band38

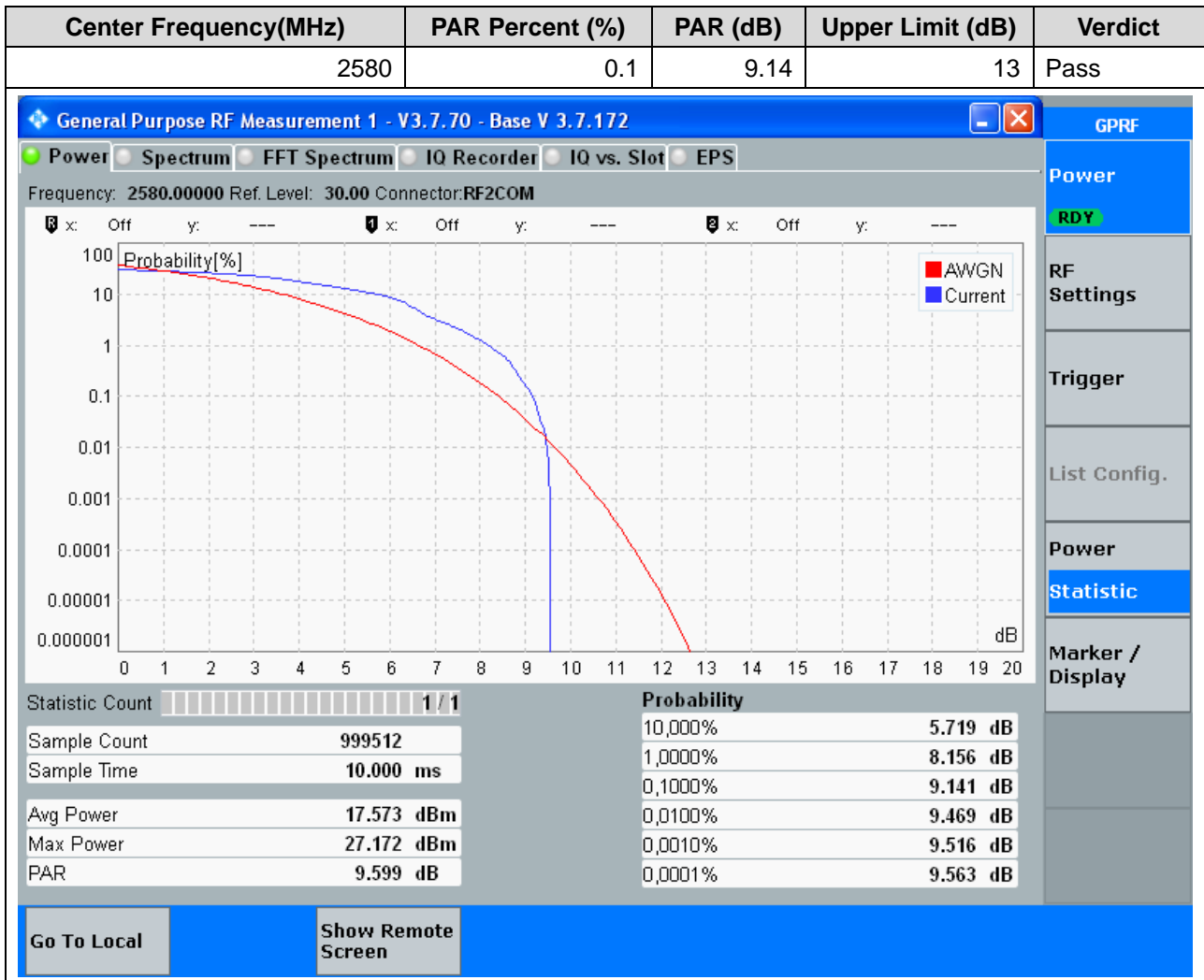
8.1. LTE Peak to Average Ratio_Part22-24-27(NTNV)(Subtest:1, Channel:37850, Bandwidth:20, Modulation:QPSK, RB Number: 1, RB Position:LOW)



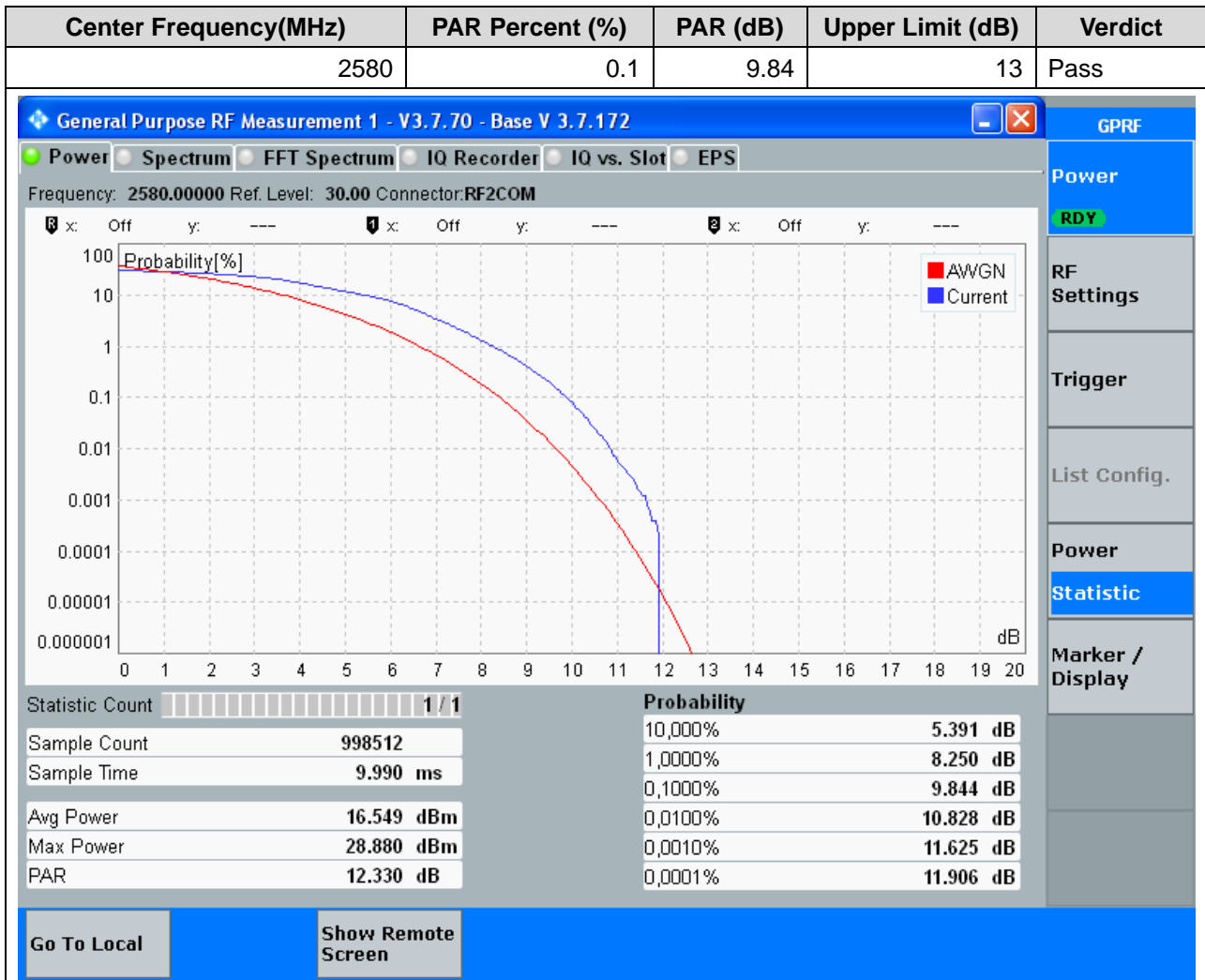
8.2. LTE Peak to Average Ratio_Part22-24-27(NTNV)(Subtest:2, Channel:37850, Bandwidth:20, Modulation:QPSK, RB Number: 100, RB Position:LOW)



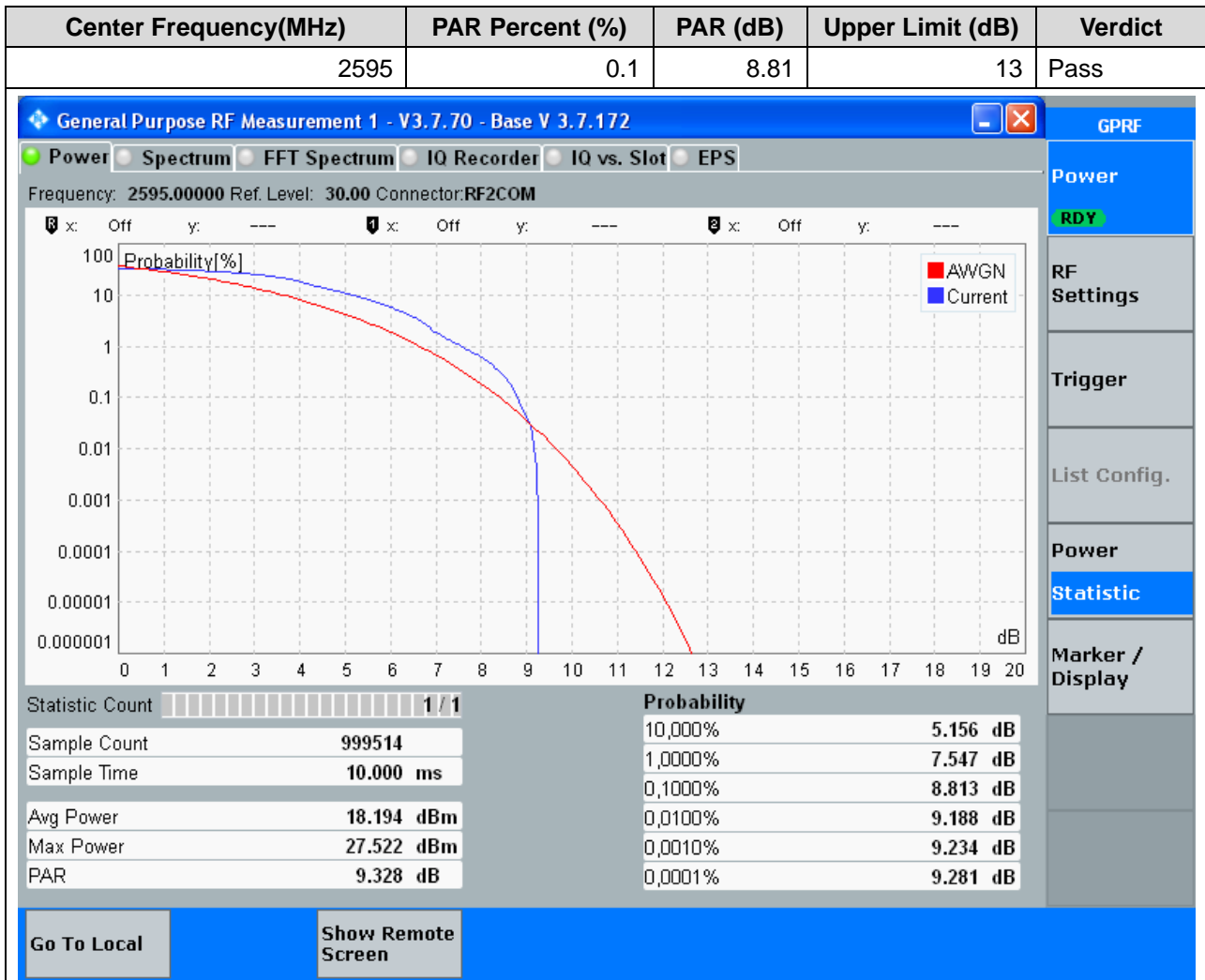
8.3. LTE Peak to Average Ratio_Part22-24-27(NTNV)(Subtest:3, Channel:37850, Bandwidth:20, Modulation:Q16, RB Number: 1, RB Position:LOW)



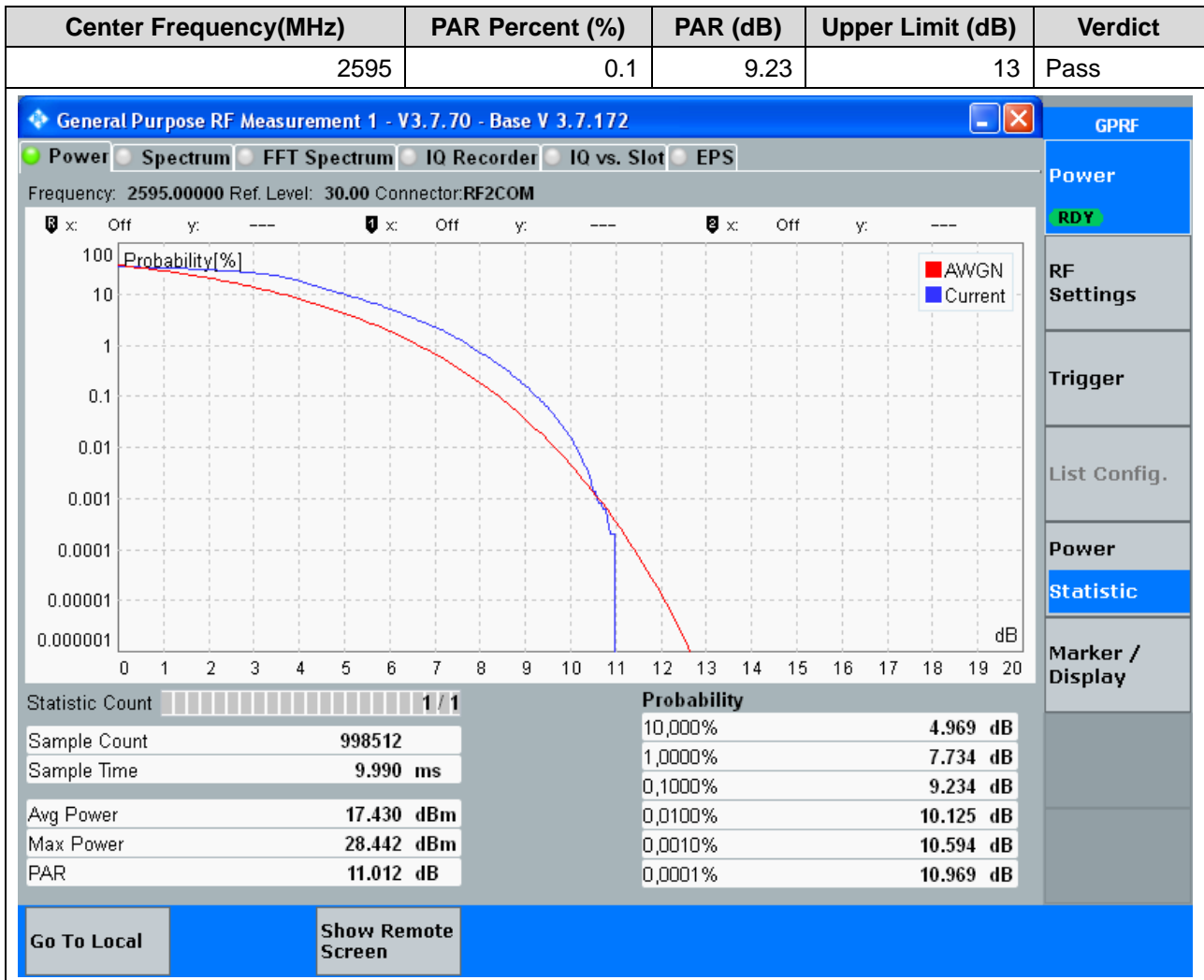
8.4. LTE Peak to Average Ratio_Part22-24-27(NTNV)(Subtest:4, Channel:37850, Bandwidth:20, Modulation:Q16, RB Number: 100, RB Position:LOW)



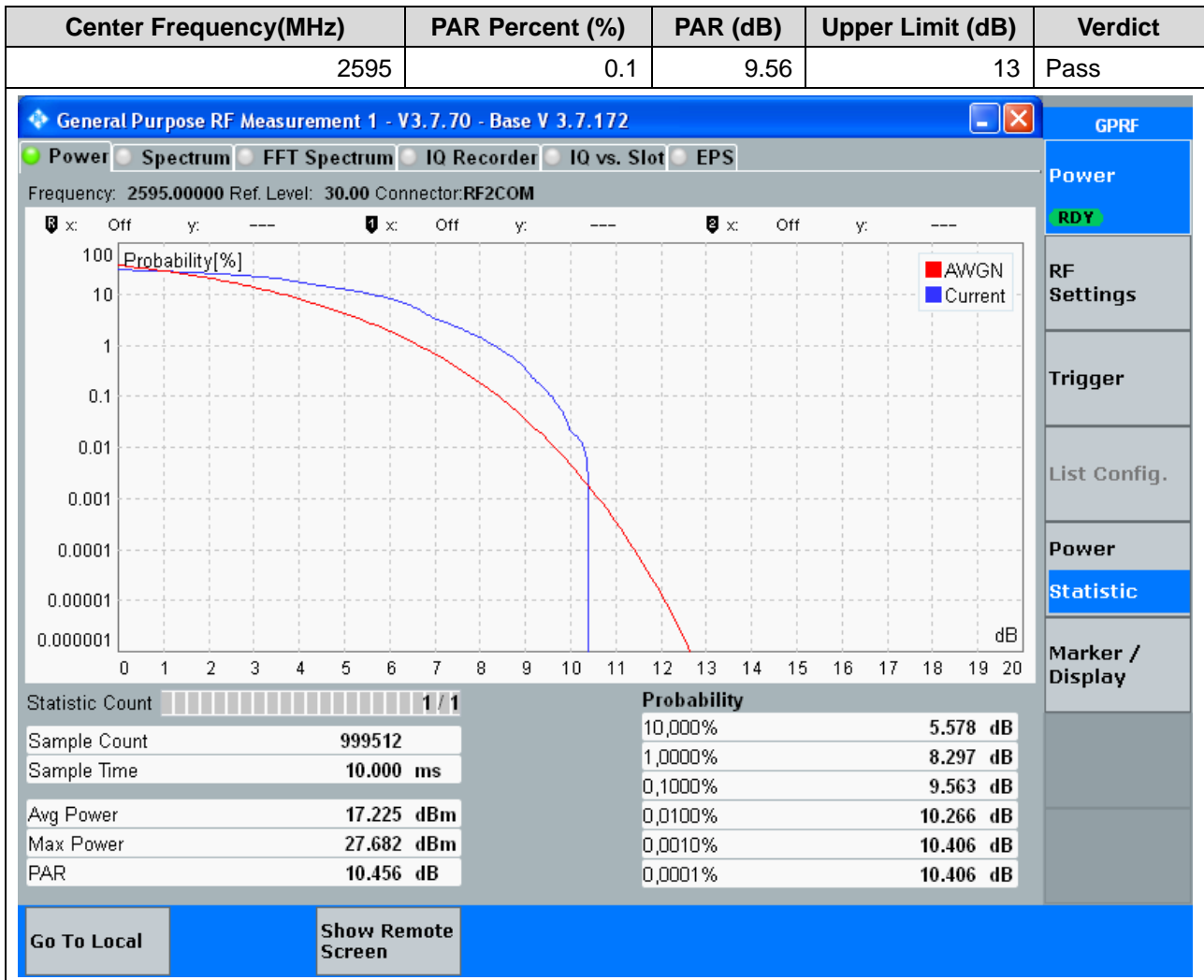
8.5. LTE Peak to Average Ratio_Part22-24-27(NTNV)(Subtest:5, Channel:38000, Bandwidth:20, Modulation:QPSK, RB Number: 1, RB Position:LOW)



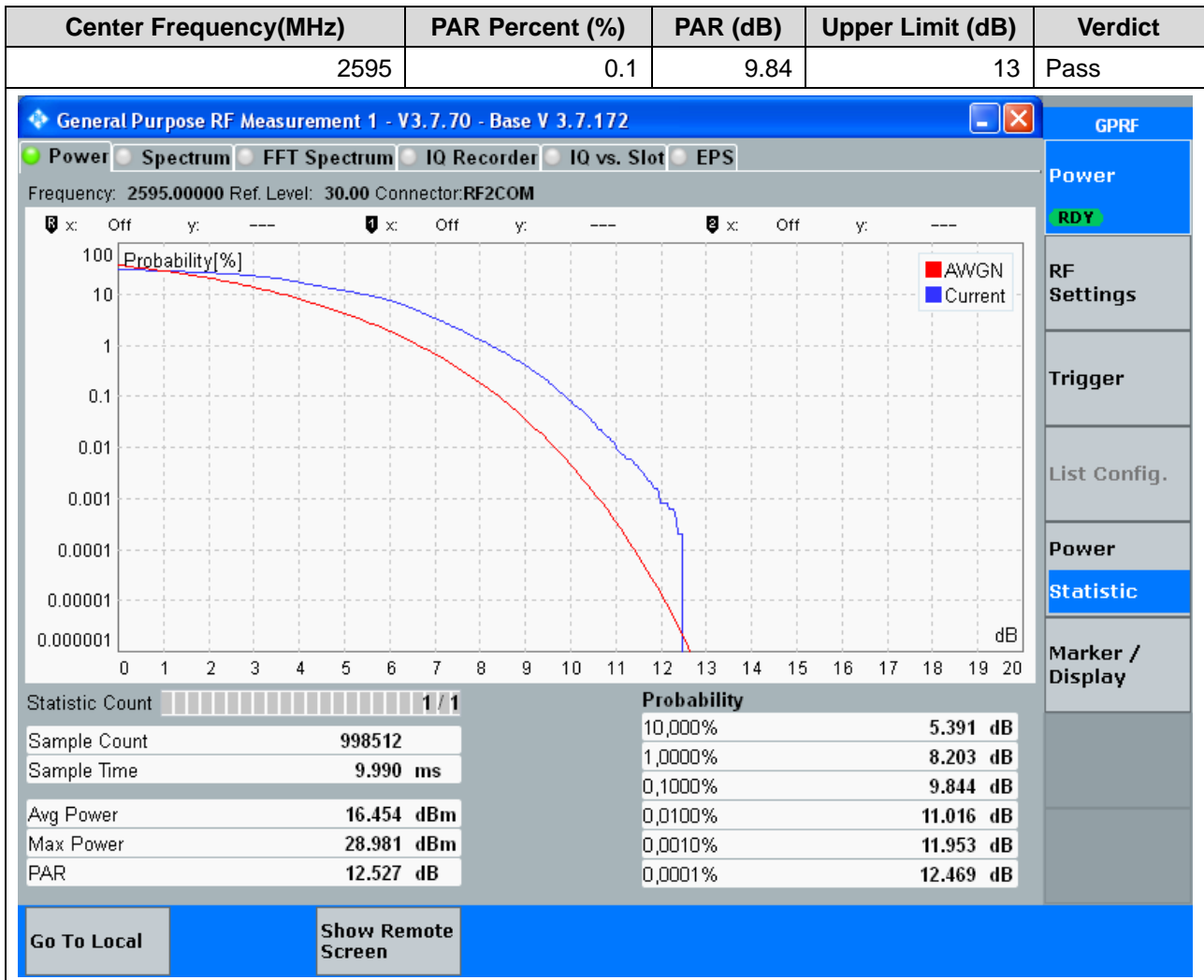
8.6. LTE Peak to Average Ratio_Part22-24-27(NTNV)(Subtest:6, Channel:38000, Bandwidth:20, Modulation:QPSK, RB Number: 100, RB Position:LOW)



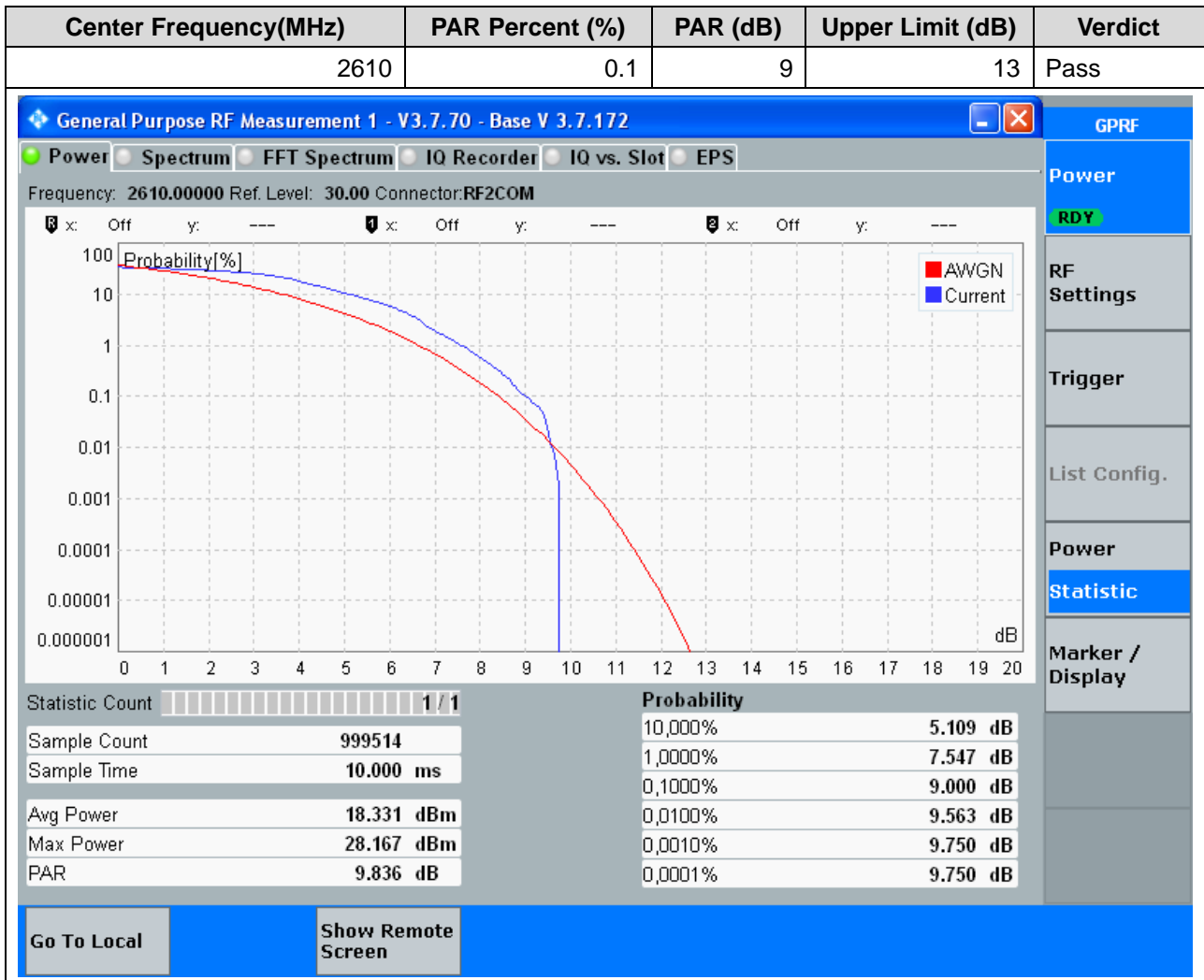
8.7. LTE Peak to Average Ratio_Part22-24-27(NTNV)(Subtest:7, Channel:38000, Bandwidth:20, Modulation:Q16, RB Number: 1, RB Position:LOW)



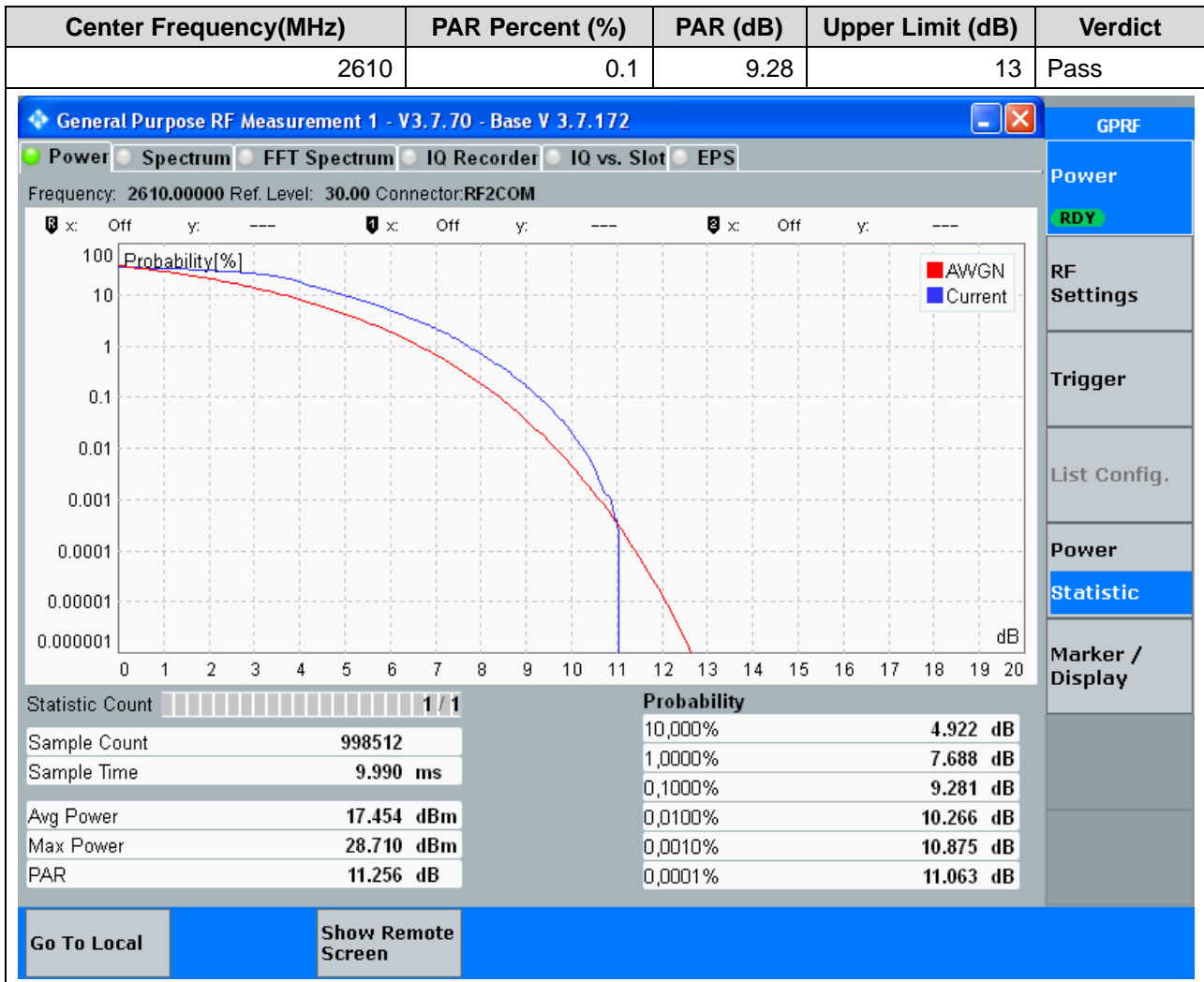
8.8. LTE Peak to Average Ratio_Part22-24-27(NTNV)(Subtest:8, Channel:38000, Bandwidth:20, Modulation:Q16, RB Number: 100, RB Position:LOW)



8.9. LTE Peak to Average Ratio_Part22-24-27(NTNV)(Subtest:9, Channel:38150, Bandwidth:20, Modulation:QPSK, RB Number: 1, RB Position:LOW)



8.10. LTE Peak to Average Ratio_Part22-24-27(NTNV)(Subtest:10, Channel:38150, Bandwidth:20, Modulation:QPSK, RB Number: 100, RB Position:LOW)



8.11. LTE Peak to Average Ratio_Part22-24-27(NTNV)(Subtest:11, Channel:38150, Bandwidth:20, Modulation:Q16, RB Number: 1, RB Position:LOW)

Center Frequency(MHz)	PAR Percent (%)	PAR (dB)	Upper Limit (dB)	Verdict
2610	0.1	9.7	13	Pass

General Purpose RF Measurement 1 - V3.7.70 - Base V 3.7.172
GPRF

Power Spectrum FFT Spectrum IQ Recorder IQ vs. Slot EPS
Power

Frequency: 2610.00000 Ref. Level: 30.00 Connector:RF2COM

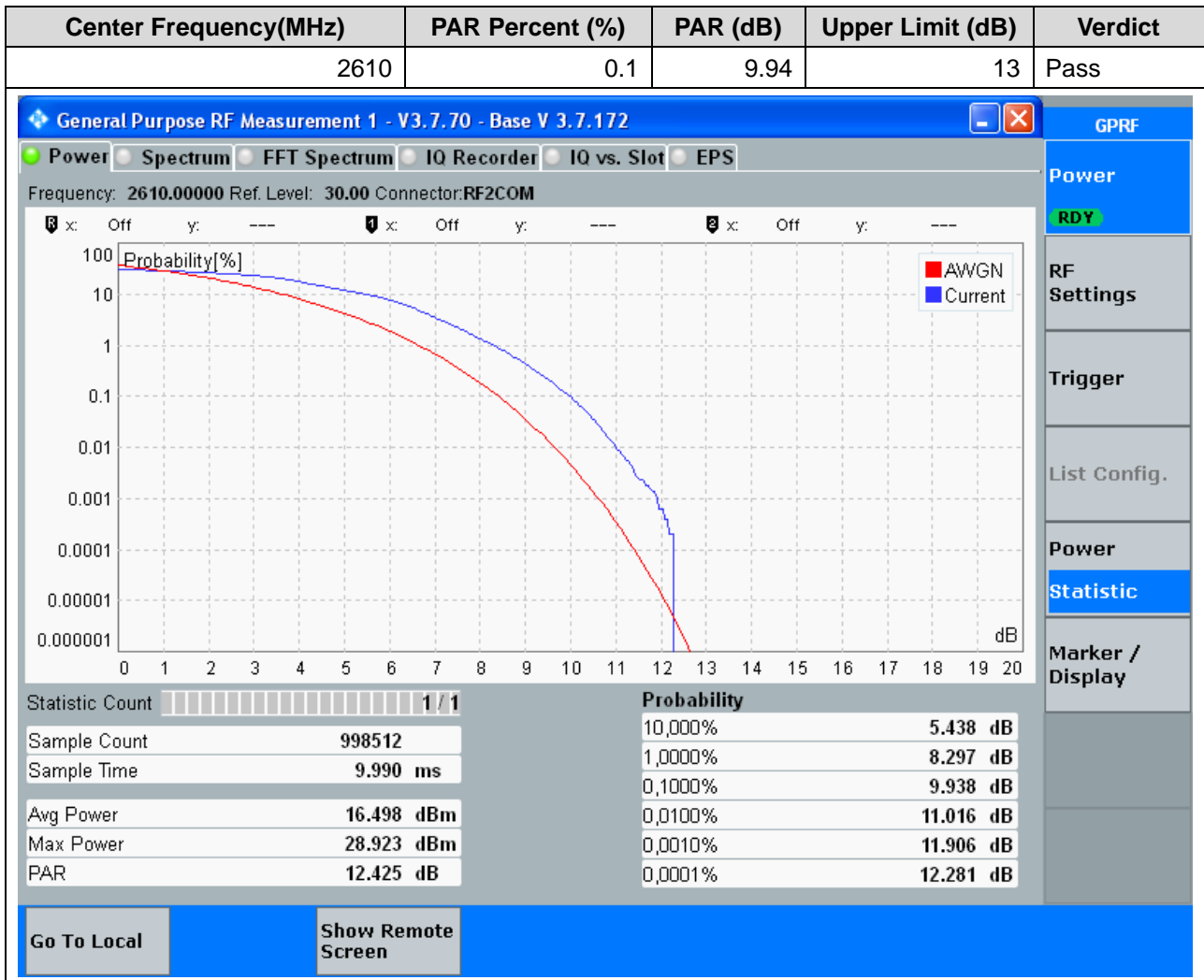
Probability[%]

Statistic Count	Value
Sample Count	999512
Sample Time	10.000 ms
Avg Power	17.382 dBm
Max Power	27.791 dBm
PAR	10.409 dB

Probability	Value
10,000%	5.578 dB
1,0000%	8.484 dB
0,1000%	9.703 dB
0,0100%	10.219 dB
0,0010%	10.359 dB
0,0001%	10.359 dB

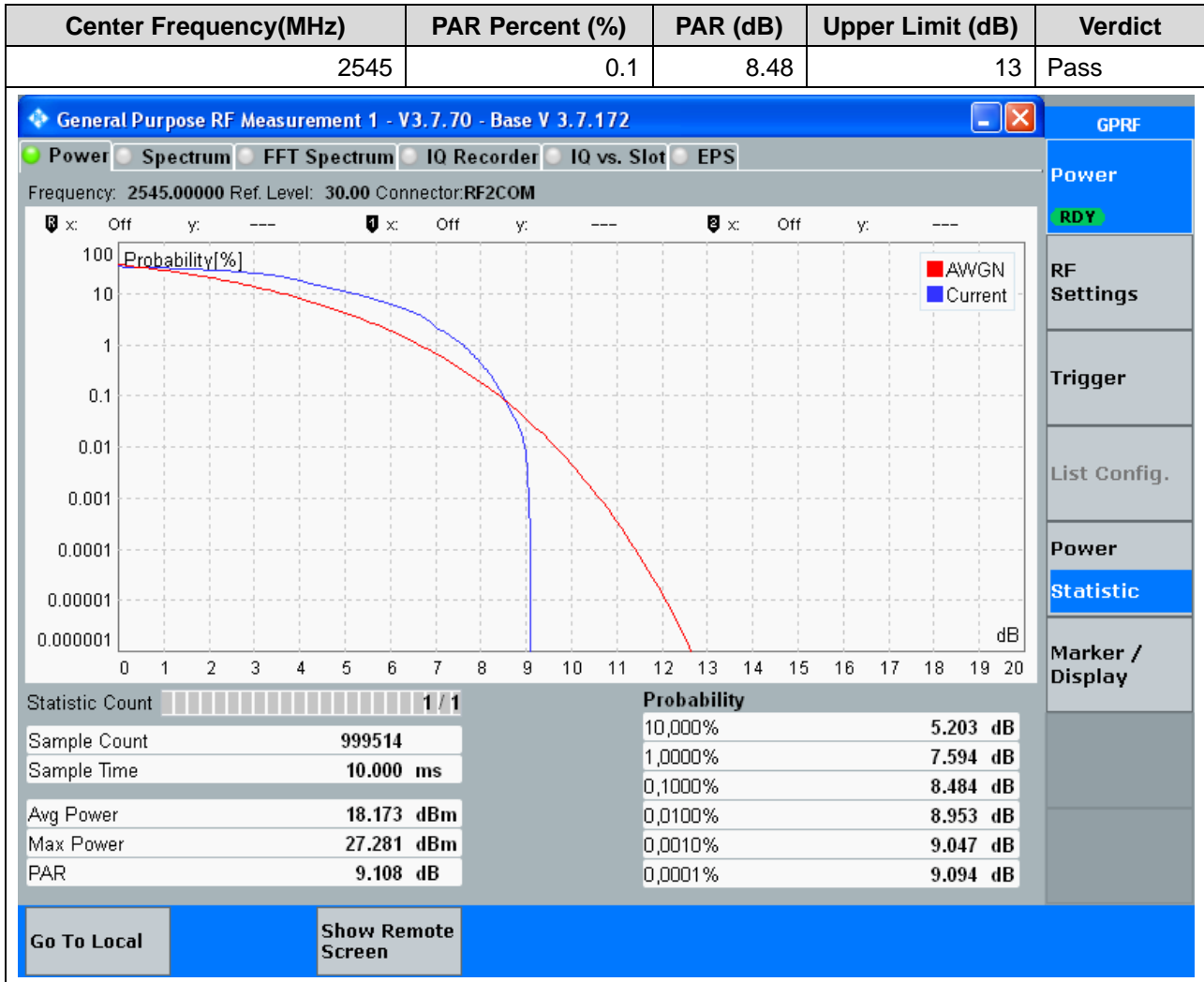
Go To Local
Show Remote Screen

8.12. LTE Peak to Average Ratio_Part22-24-27(NTNV)(Subtest:12, Channel:38150, Bandwidth:20, Modulation:Q16, RB Number: 100, RB Position:LOW)

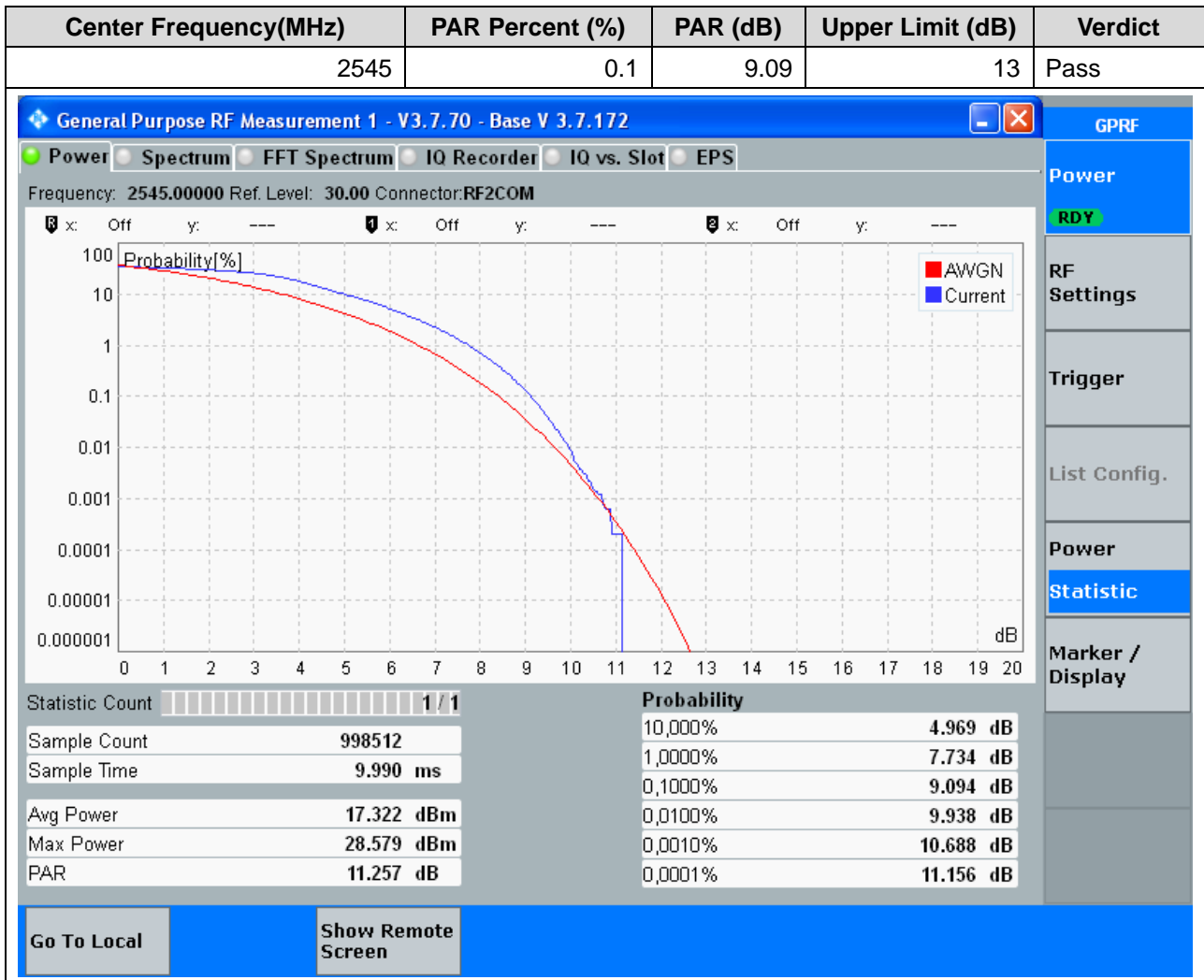


9. LTE_Band41 120M

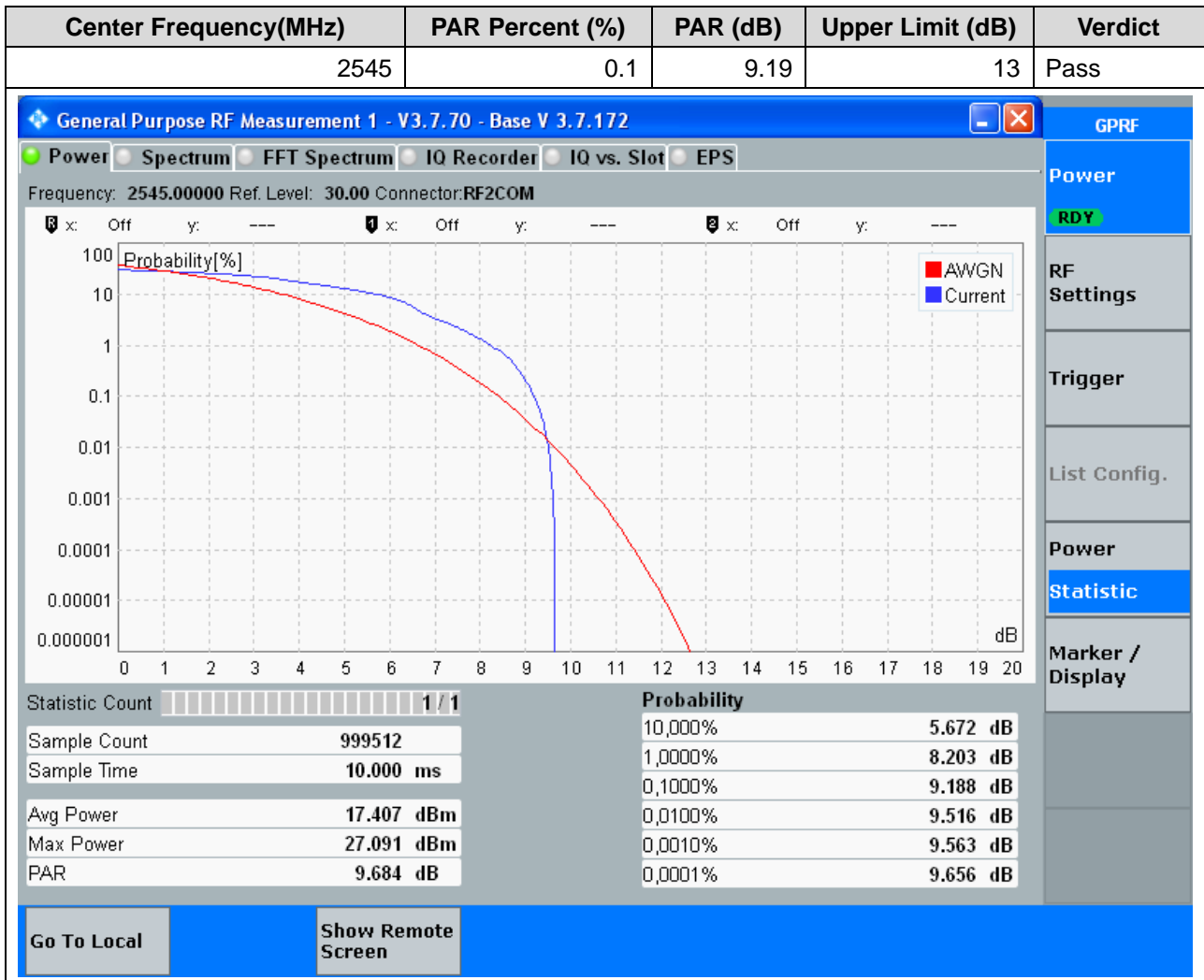
9.1. LTE Peak to Average Ratio_Part22-24-27(NTNV)(Subtest:1, Channel:40140, Bandwidth:20, Modulation:QPSK, RB Number: 1, RB Position:LOW)



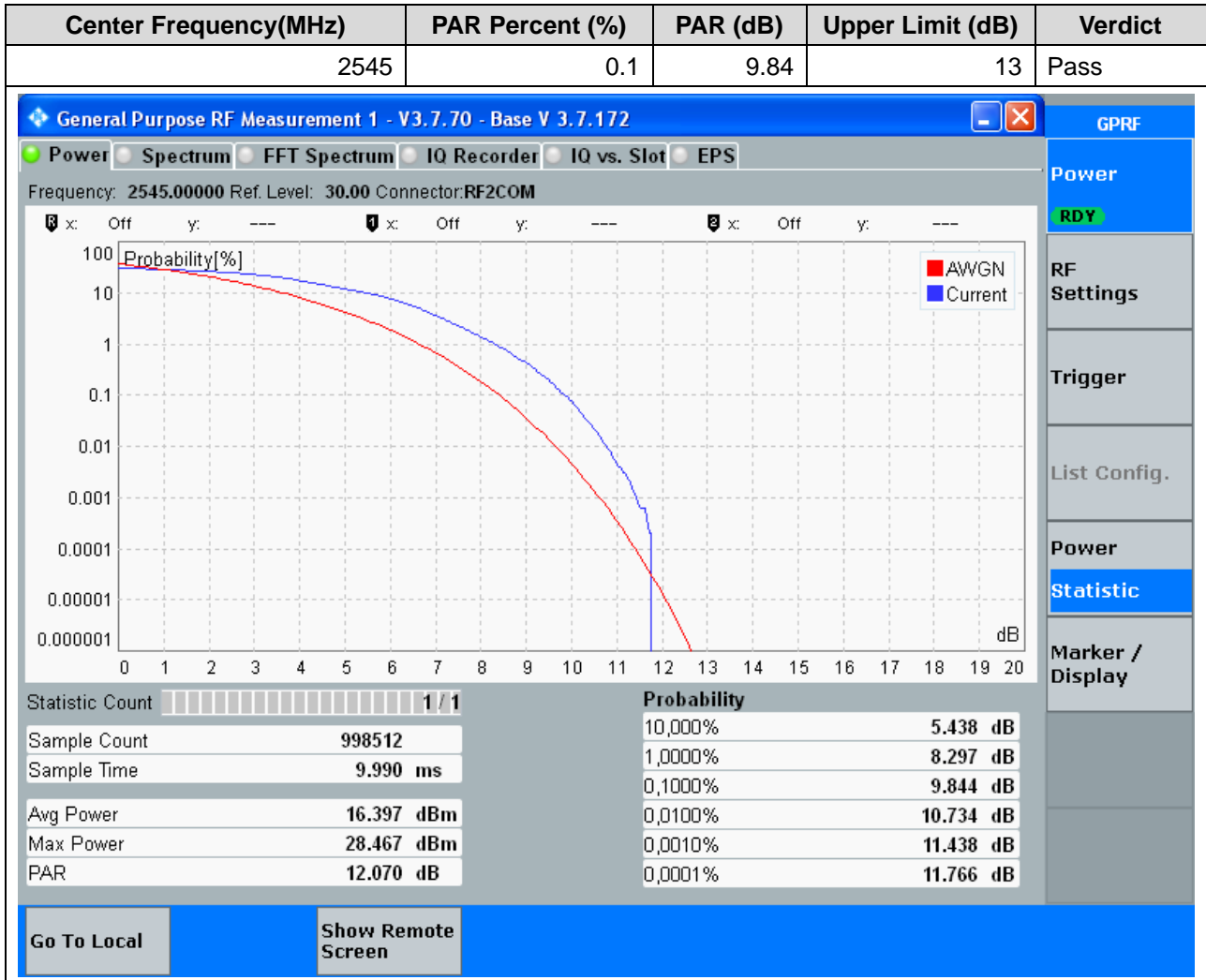
9.2. LTE Peak to Average Ratio_Part22-24-27(NTNV)(Subtest:2, Channel:40140, Bandwidth:20, Modulation:QPSK, RB Number: 100, RB Position:LOW)



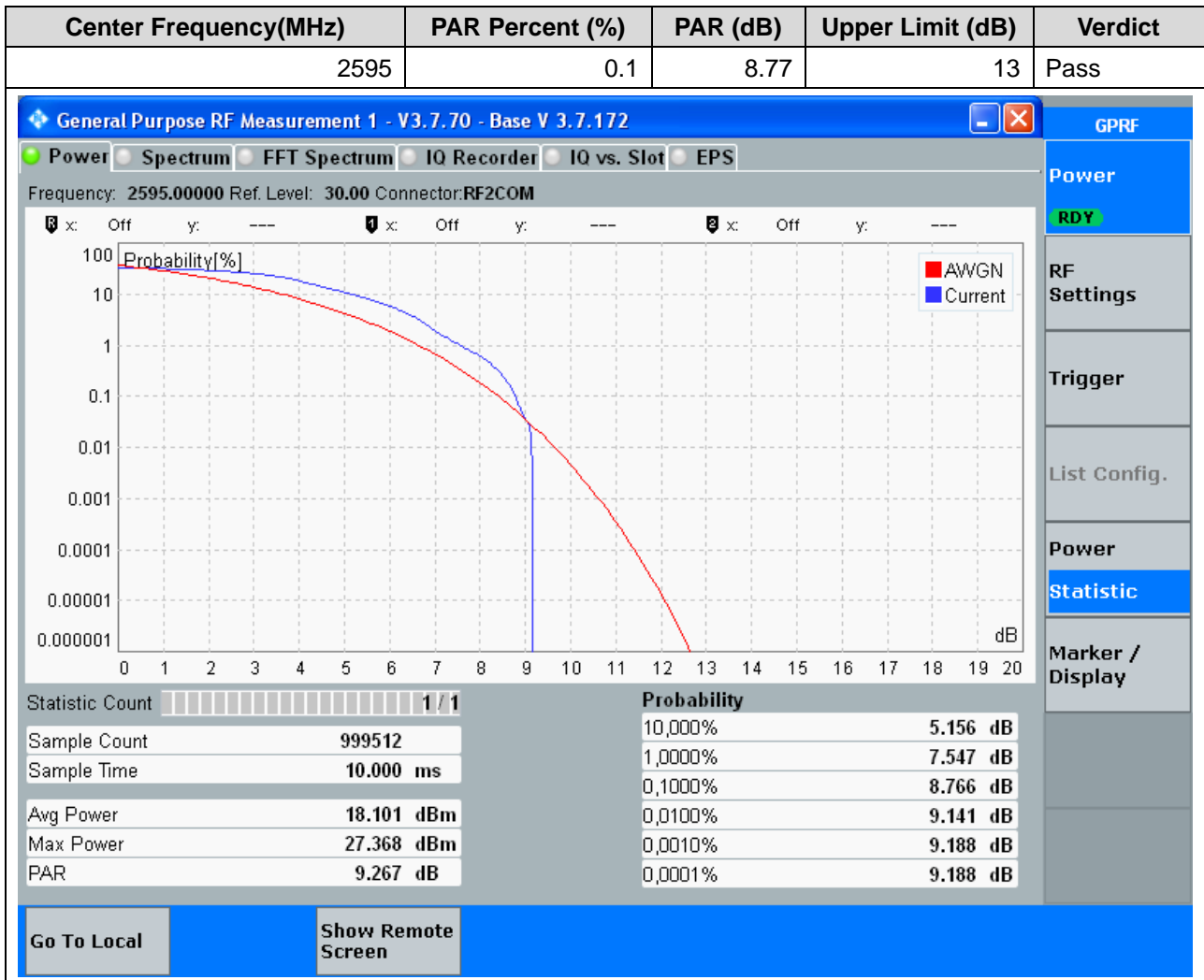
9.3. LTE Peak to Average Ratio_Part22-24-27(NTNV)(Subtest:3, Channel:40140, Bandwidth:20, Modulation:Q16, RB Number: 1, RB Position:LOW)



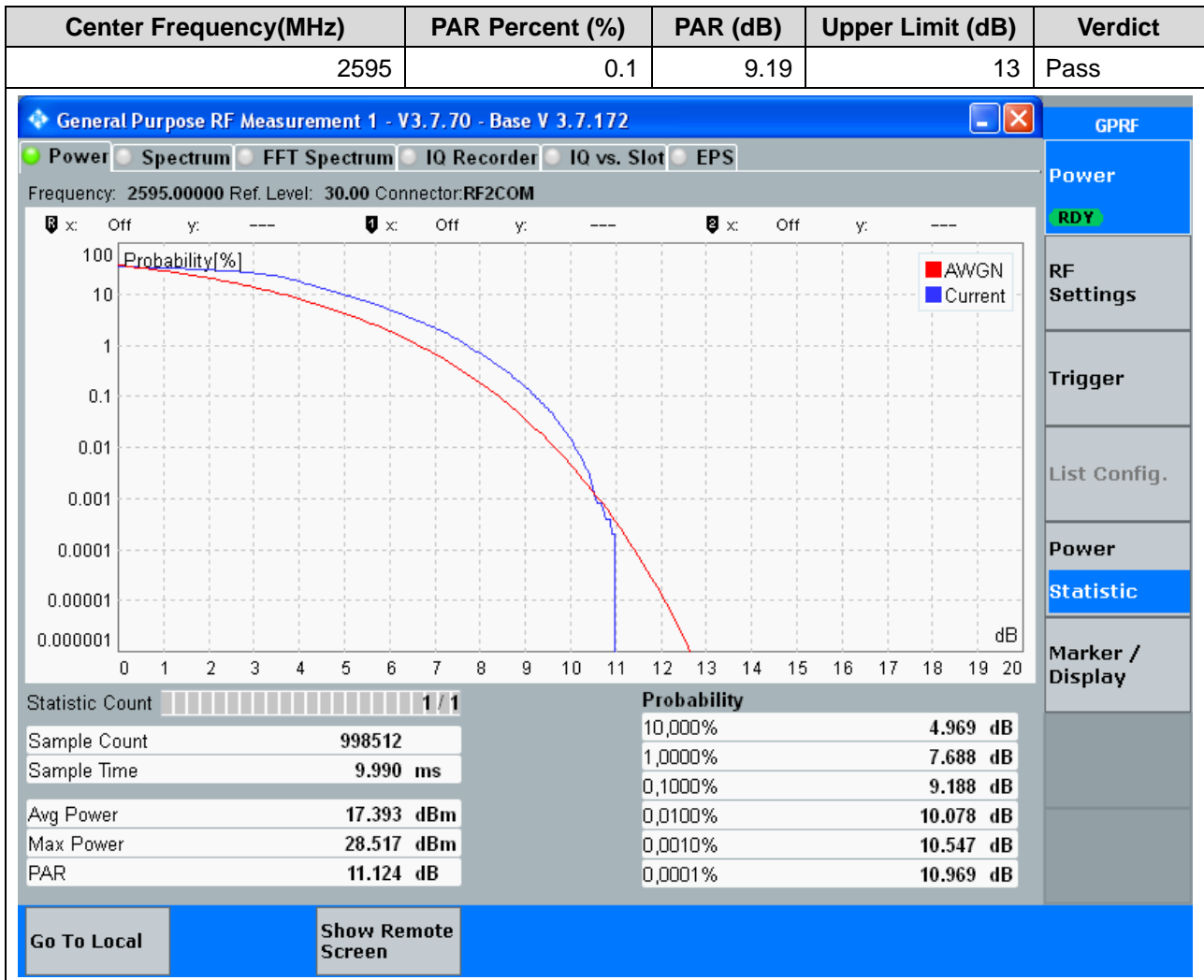
9.4. LTE Peak to Average Ratio_Part22-24-27(NTNV)(Subtest:4, Channel:40140, Bandwidth:20, Modulation:Q16, RB Number: 100, RB Position:LOW)



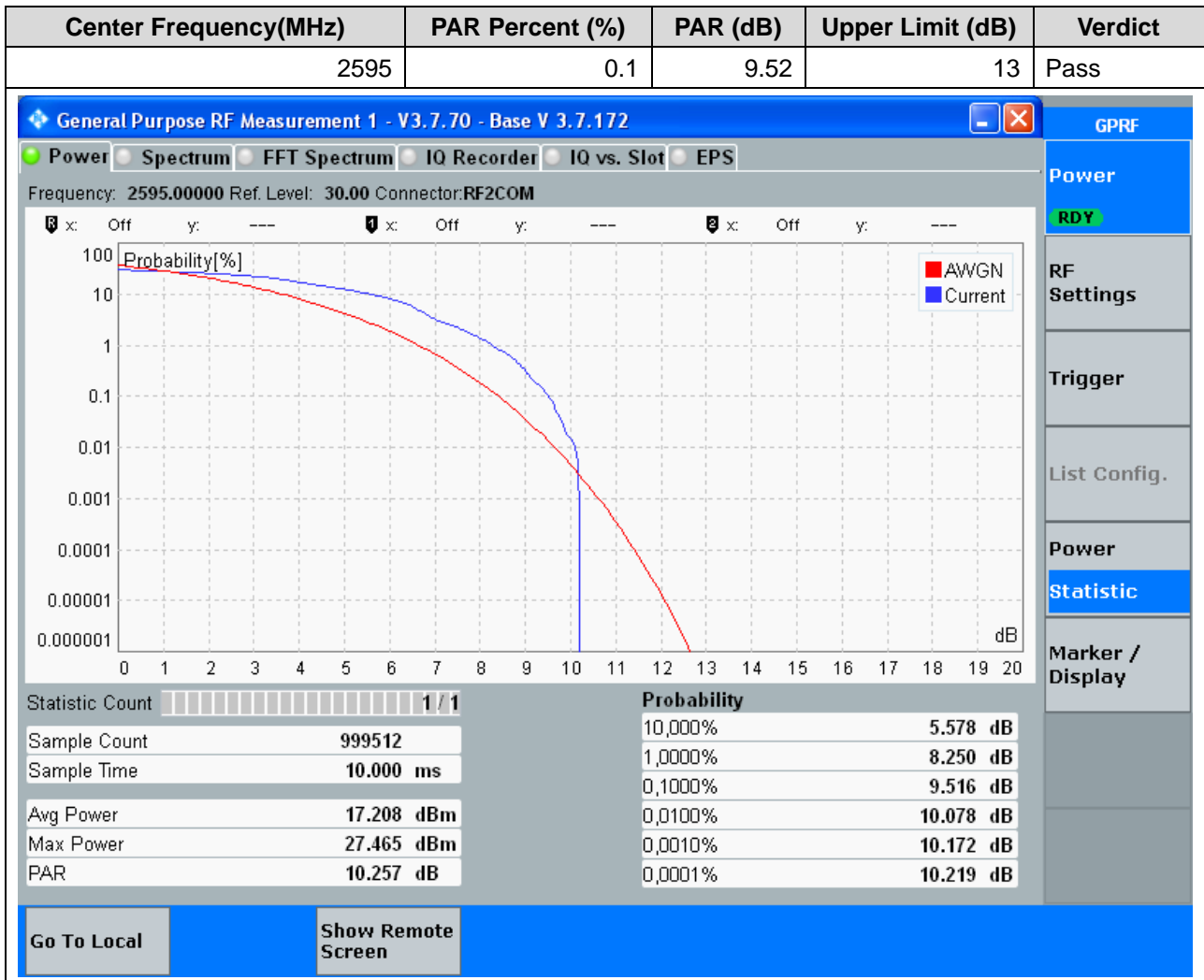
9.5. LTE Peak to Average Ratio_Part22-24-27(NTNV)(Subtest:5, Channel:40640, Bandwidth:20, Modulation:QPSK, RB Number: 1, RB Position:LOW)



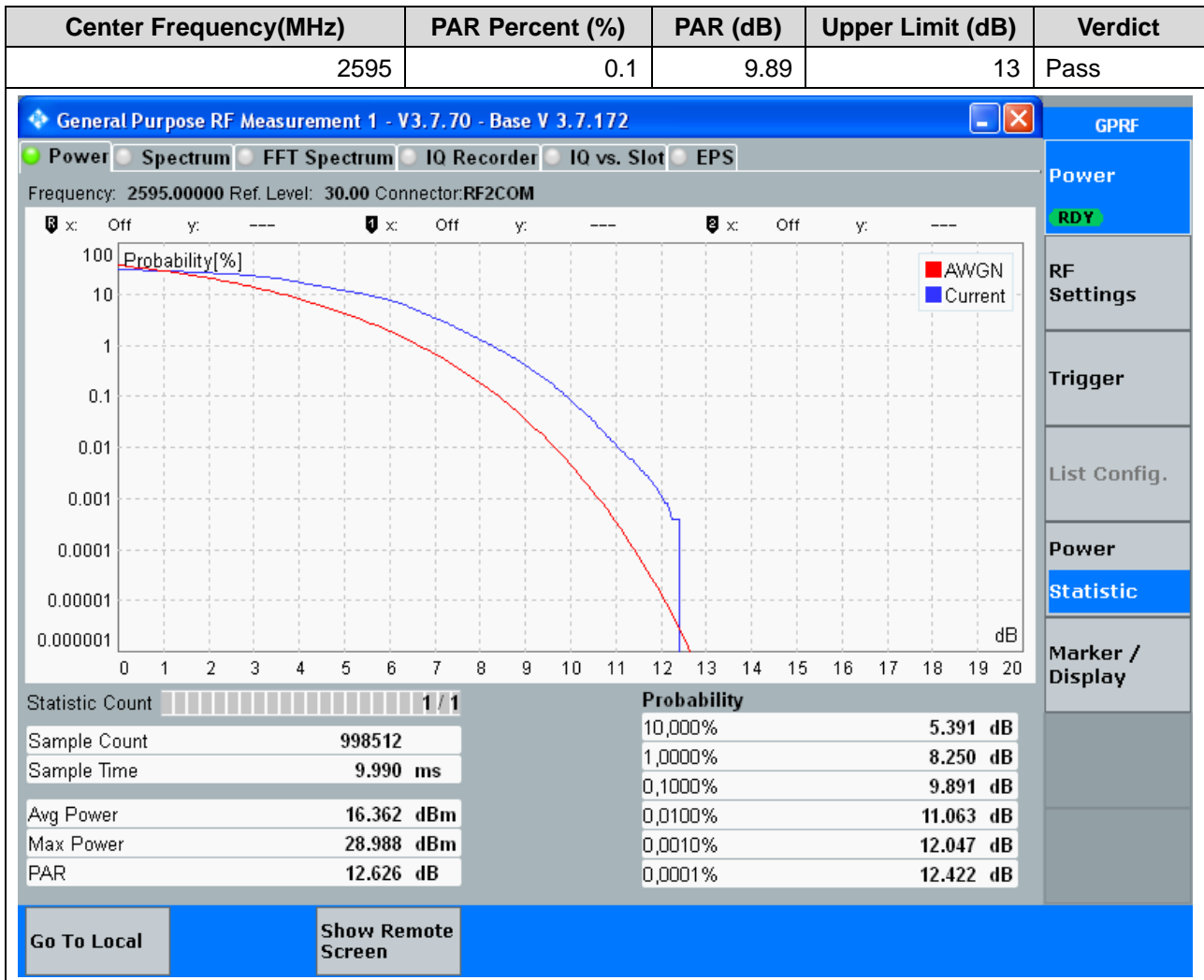
9.6. LTE Peak to Average Ratio_Part22-24-27(NTNV)(Subtest:6, Channel:40640, Bandwidth:20, Modulation:QPSK, RB Number: 100, RB Position:LOW)



9.7. LTE Peak to Average Ratio_Part22-24-27(NTNV)(Subtest:7, Channel:40640, Bandwidth:20, Modulation:Q16, RB Number: 1, RB Position:LOW)



9.8. LTE Peak to Average Ratio_Part22-24-27(NTNV)(Subtest:8, Channel:40640, Bandwidth:20, Modulation:Q16, RB Number: 100, RB Position:LOW)



9.9. LTE Peak to Average Ratio_Part22-24-27(NTNV)(Subtest:9, Channel:41140, Bandwidth:20, Modulation:QPSK, RB Number: 1, RB Position:LOW)

Center Frequency(MHz)	PAR Percent (%)	PAR (dB)	Upper Limit (dB)	Verdict
2645	0.1	9.19	13	Pass

General Purpose RF Measurement 1 - V3.7.70 - Base V 3.7.172 GPRF

Power
 Spectrum
 FFT Spectrum
 IQ Recorder
 IQ vs. Slot
 EPS

Frequency: 2645.00000 Ref. Level: 30.00 Connector:RF2COM

x: Off y: ---

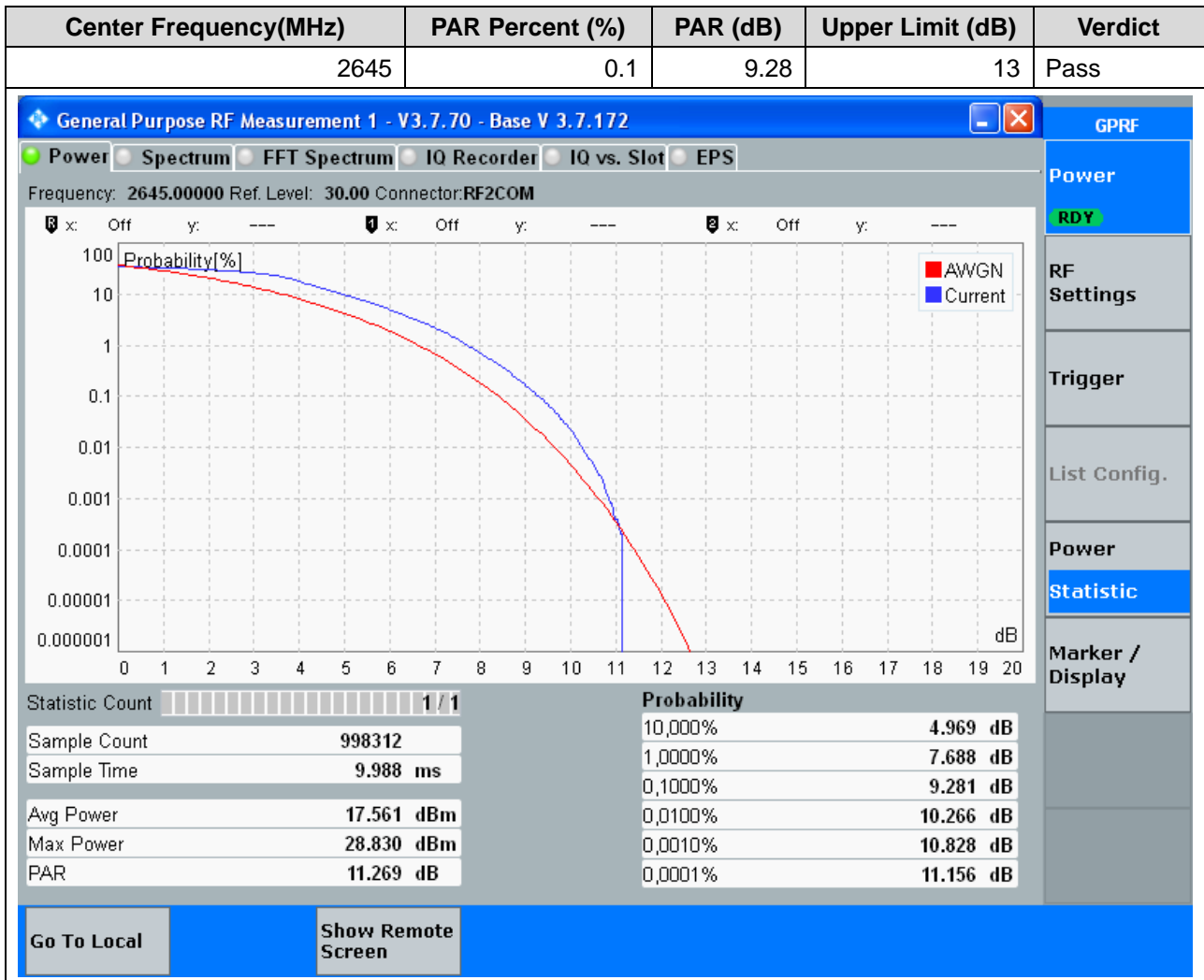
x: Off y: ---

x: Off y: ---

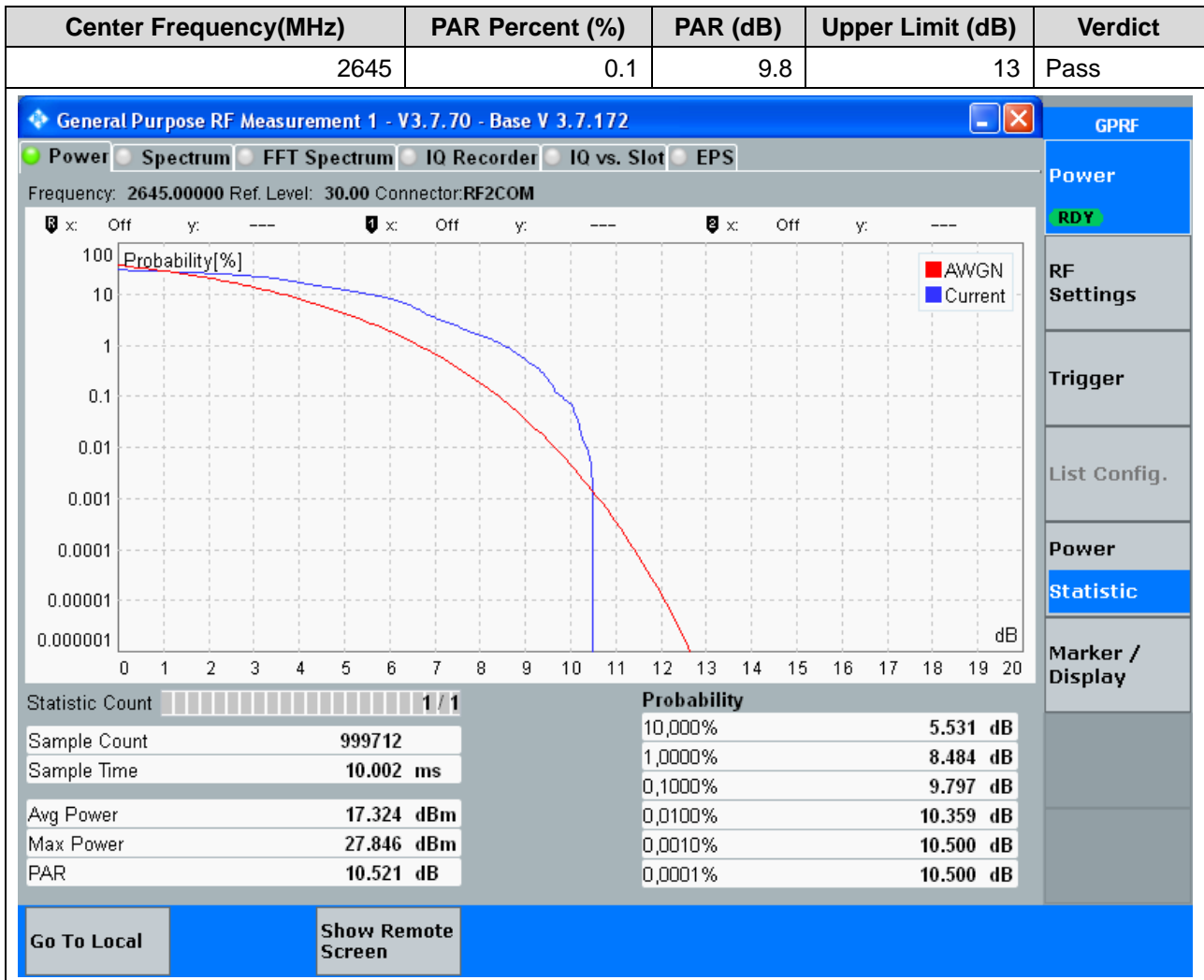
Probability[%]

Statistic Count		Probability	
Sample Count	999712	10,000%	5.109 dB
Sample Time	10.002 ms	1,0000%	7.594 dB
Avg Power	18.269 dBm	0,1000%	9.188 dB
Max Power	28.382 dBm	0,0010%	10.031 dB
PAR	10.113 dB	0,0001%	10.078 dB

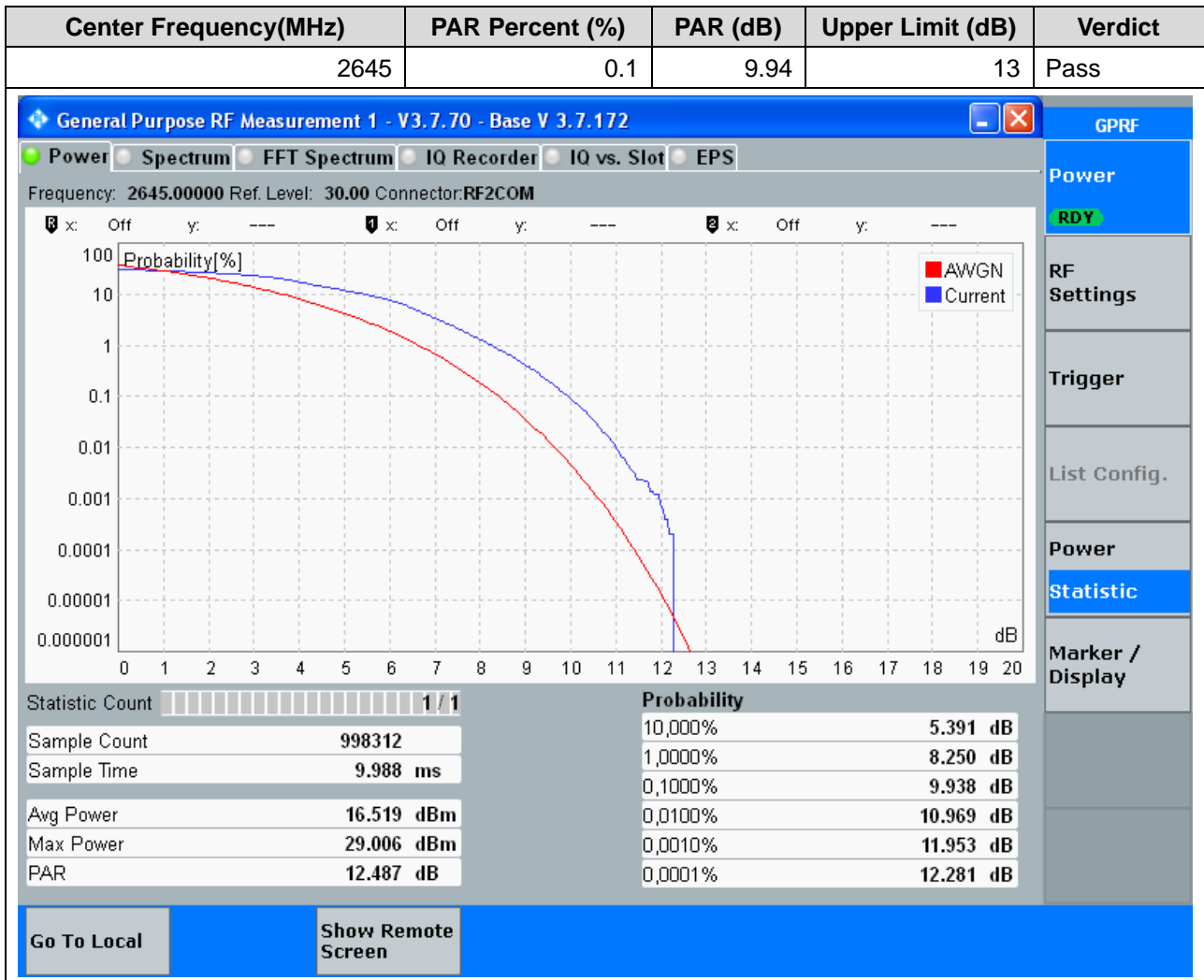
9.10. LTE Peak to Average Ratio_Part22-24-27(NTNV)(Subtest:10, Channel:41140, Bandwidth:20, Modulation:QPSK, RB Number: 100, RB Position:LOW)



9.11. LTE Peak to Average Ratio_Part22-24-27(NTNV)(Subtest:11, Channel:41140, Bandwidth:20, Modulation:Q16, RB Number: 1, RB Position:LOW)



9.12. LTE Peak to Average Ratio_Part22-24-27(NTNV)(Subtest:12, Channel:41140, Bandwidth:20, Modulation:Q16, RB Number: 100, RB Position:LOW)



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