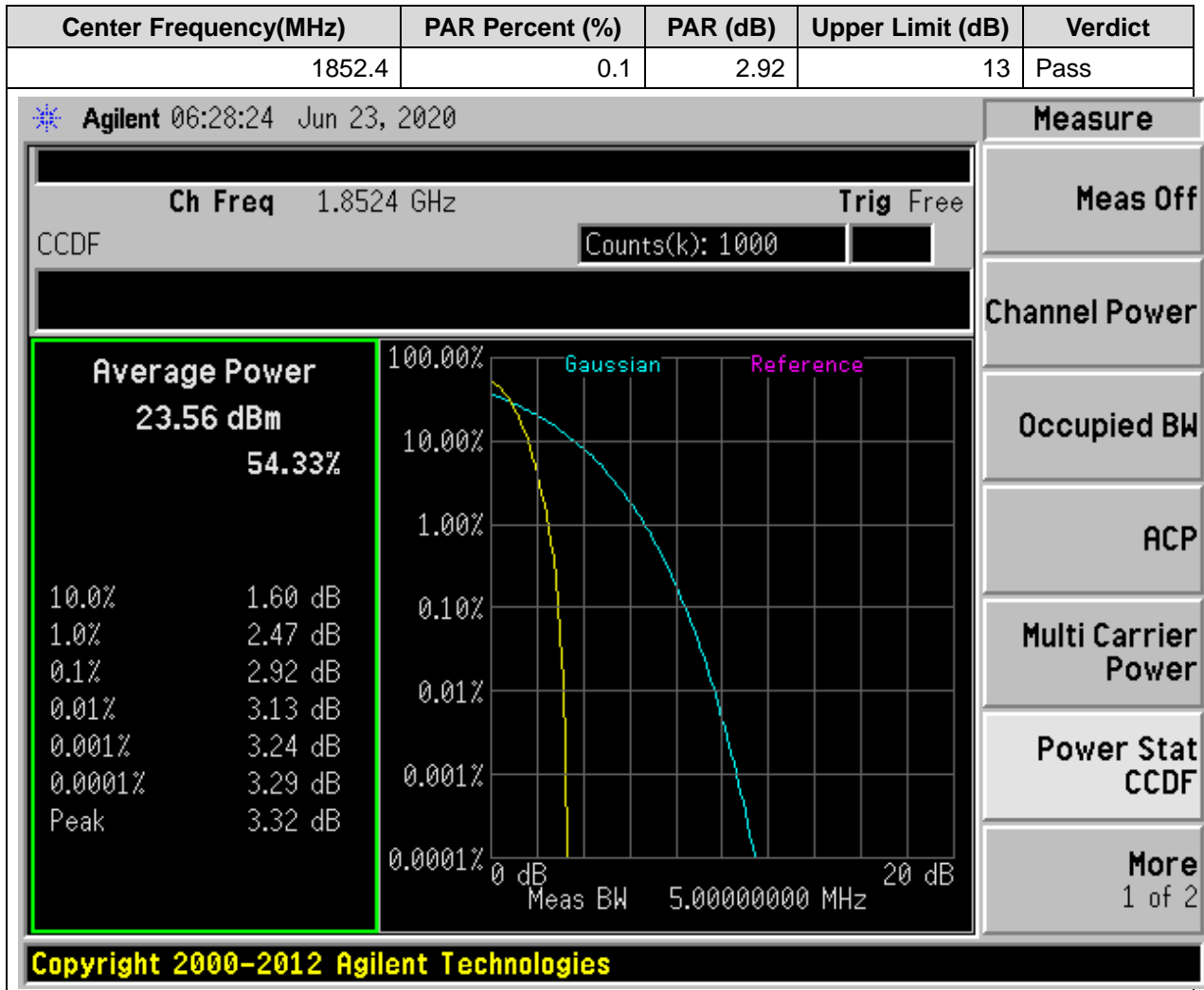


## Annex A.2 Peak to Average Ratio

# WCDMA

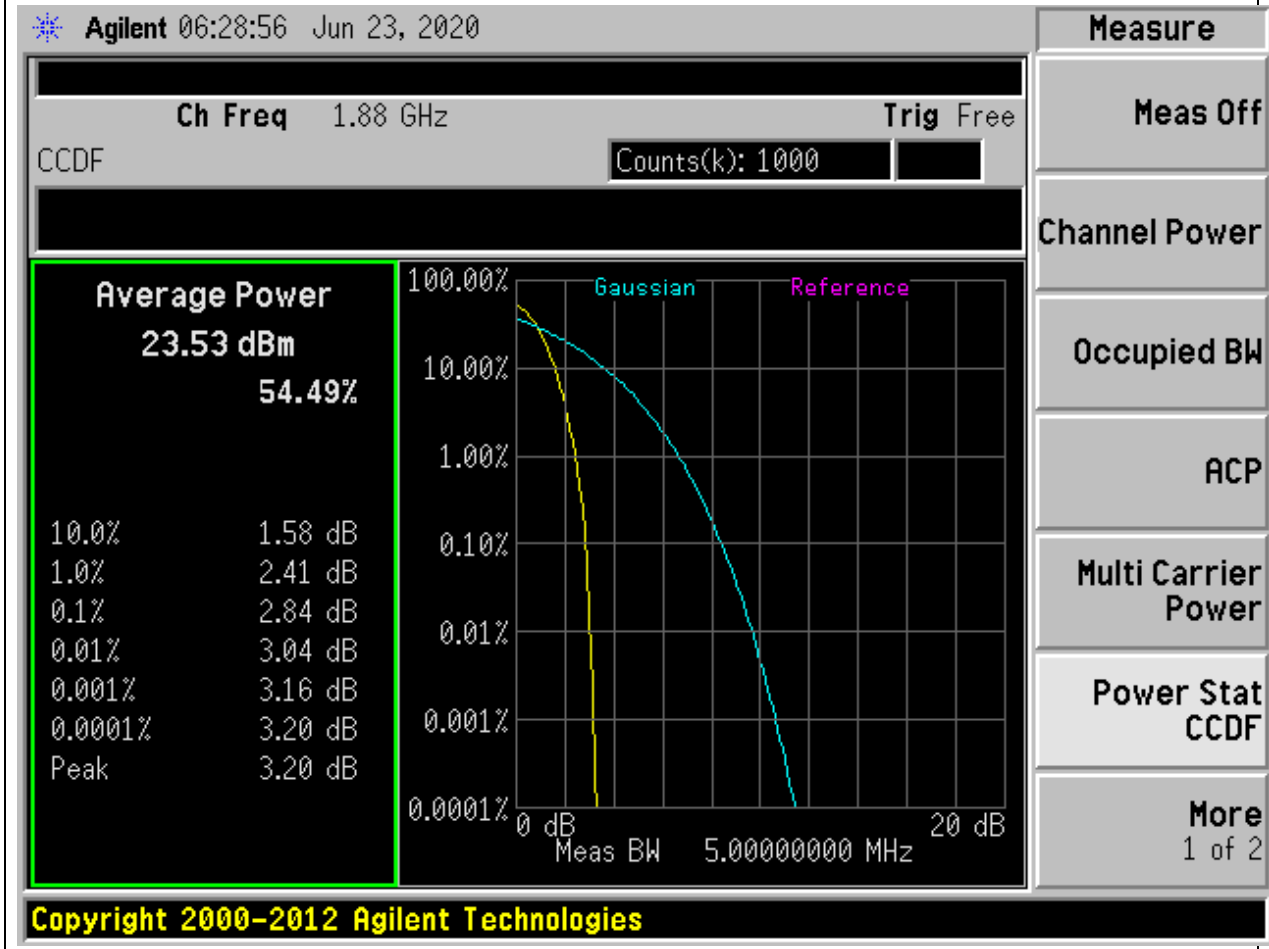
## 1. WCDMA\_Band2

### 1.1. WCDMA Peak to Average Ratio(NTNV)(Channel:9262)



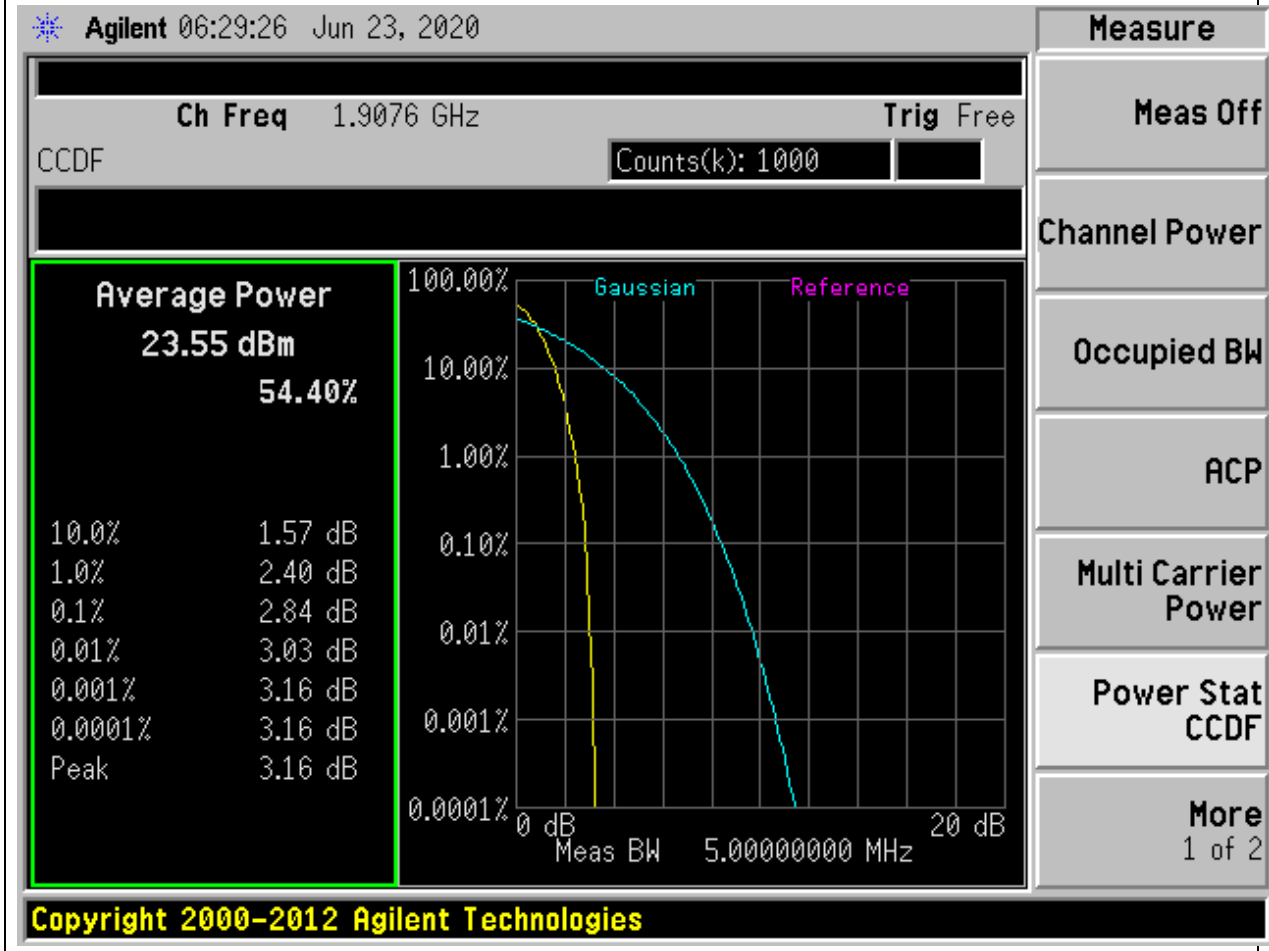
## 1.2. WCDMA Peak to Average Ratio(NTNV)(Channel:9400)

Center Frequency(MHz)	PAR Percent (%)	PAR (dB)	Upper Limit (dB)	Verdict
1880	0.1	2.84	13	Pass



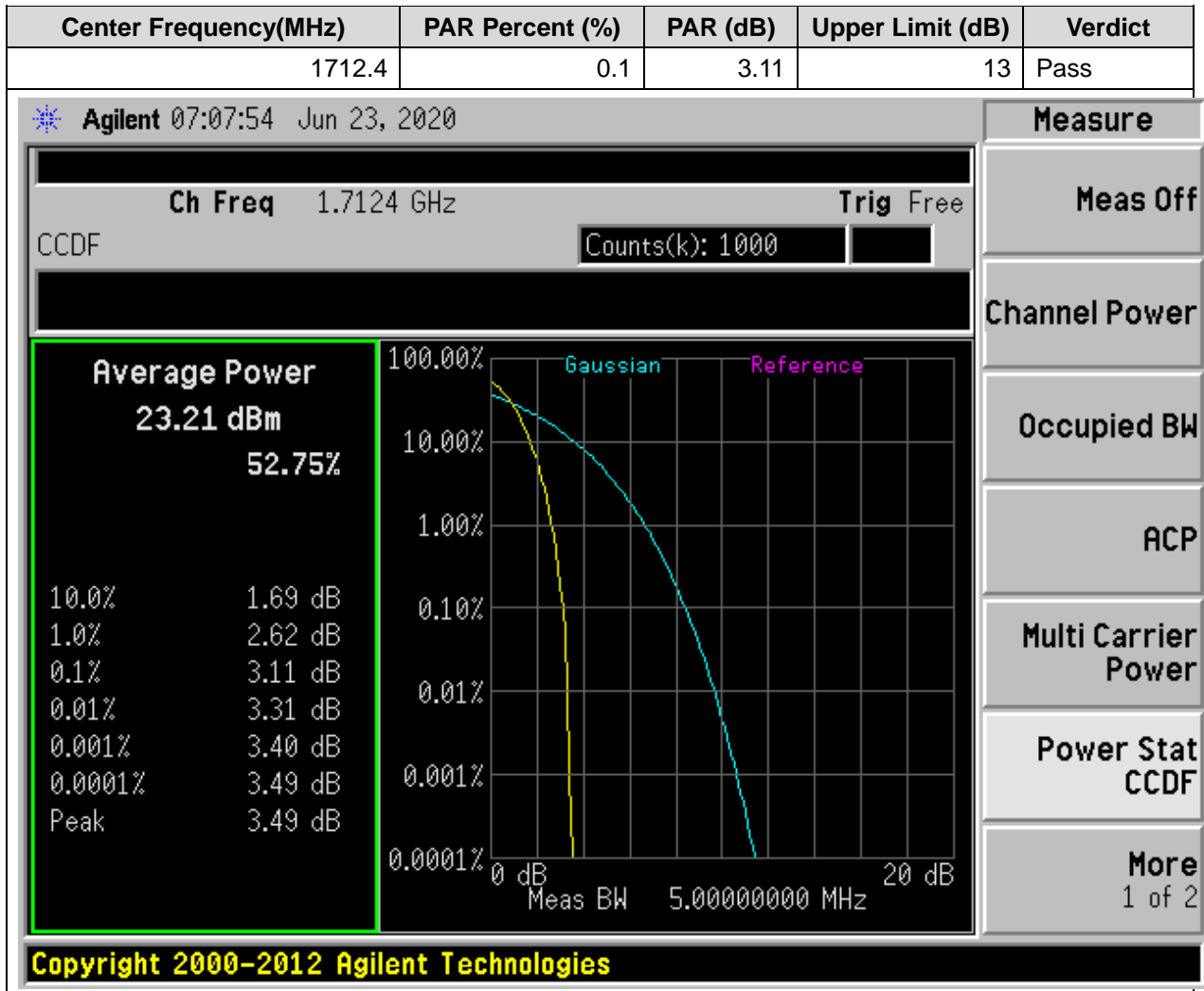
### 1.3. WCDMA Peak to Average Ratio(NTNV)(Channel:9538)

Center Frequency(MHz)	PAR Percent (%)	PAR (dB)	Upper Limit (dB)	Verdict
1907.6	0.1	2.84	13	Pass



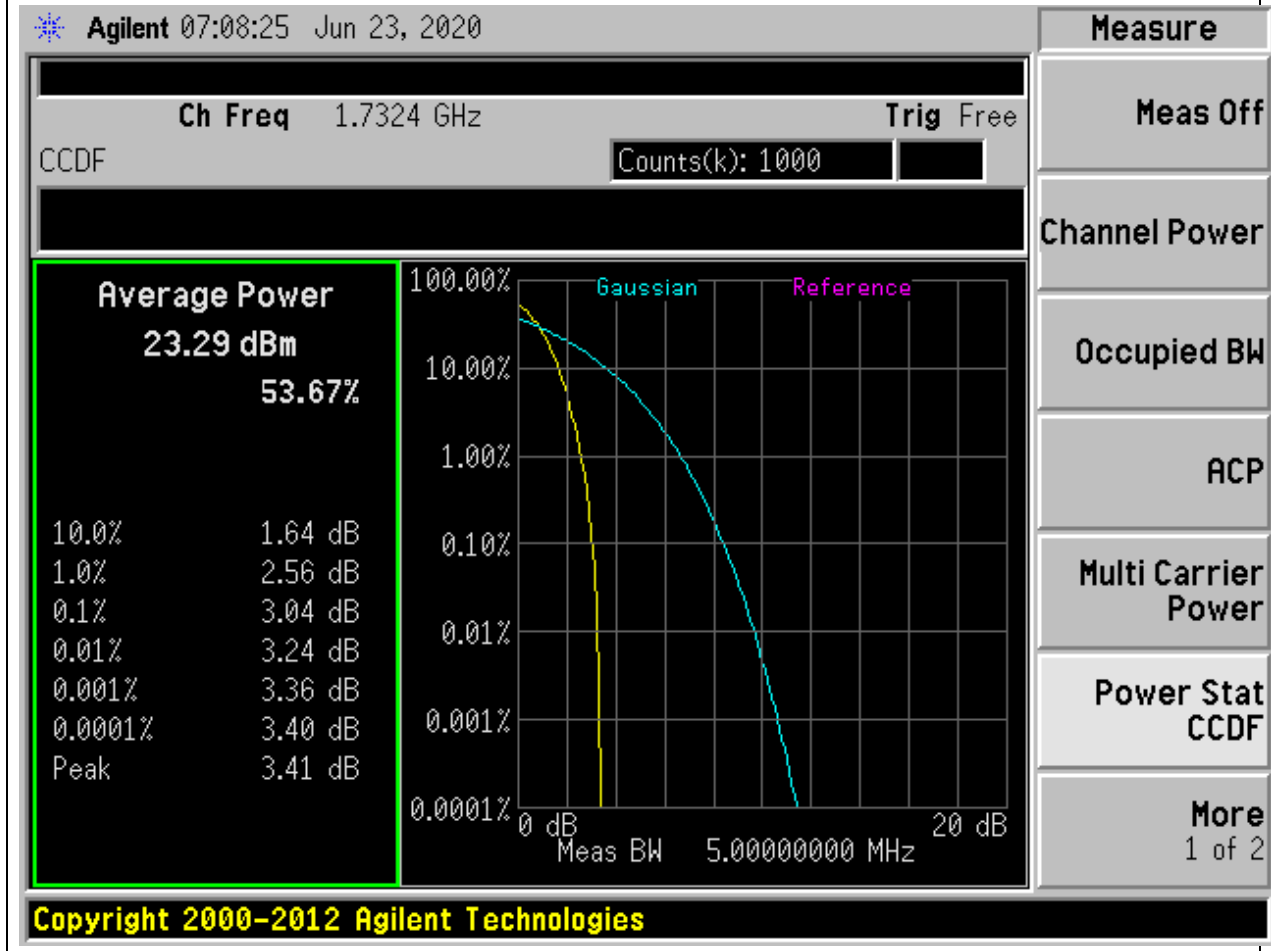
## 2. WCDMA\_Band4

### 2.1. WCDMA Peak to Average Ratio(NTNV)(Channel:1312)



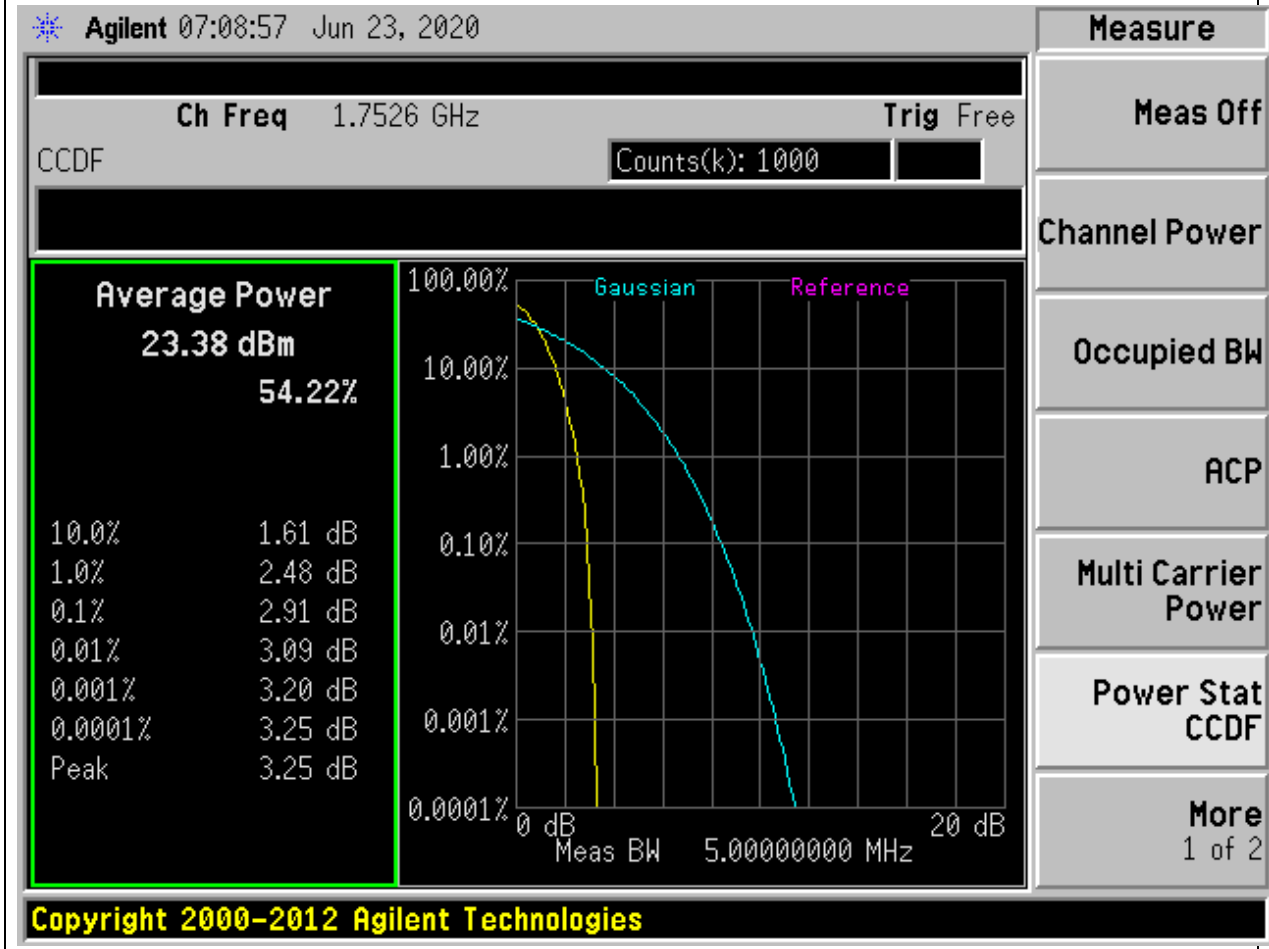
## 2.2. WCDMA Peak to Average Ratio(NTNV)(Channel:1412)

Center Frequency(MHz)	PAR Percent (%)	PAR (dB)	Upper Limit (dB)	Verdict
1732.4	0.1	3.04	13	Pass



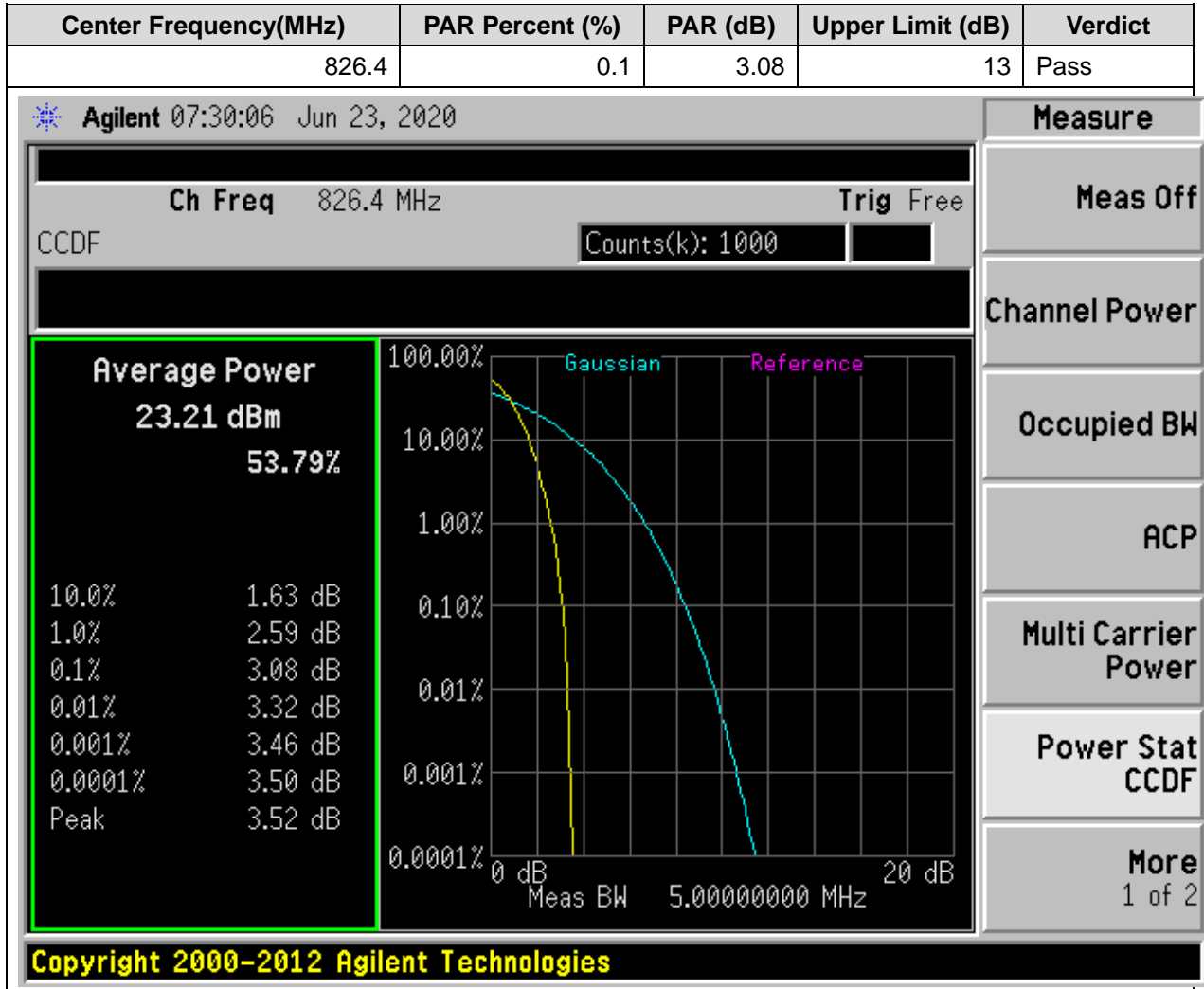
### 2.3. WCDMA Peak to Average Ratio(NTNV)(Channel:1513)

Center Frequency(MHz)	PAR Percent (%)	PAR (dB)	Upper Limit (dB)	Verdict
1752.6	0.1	2.91	13	Pass



### 3. WCDMA\_Band5

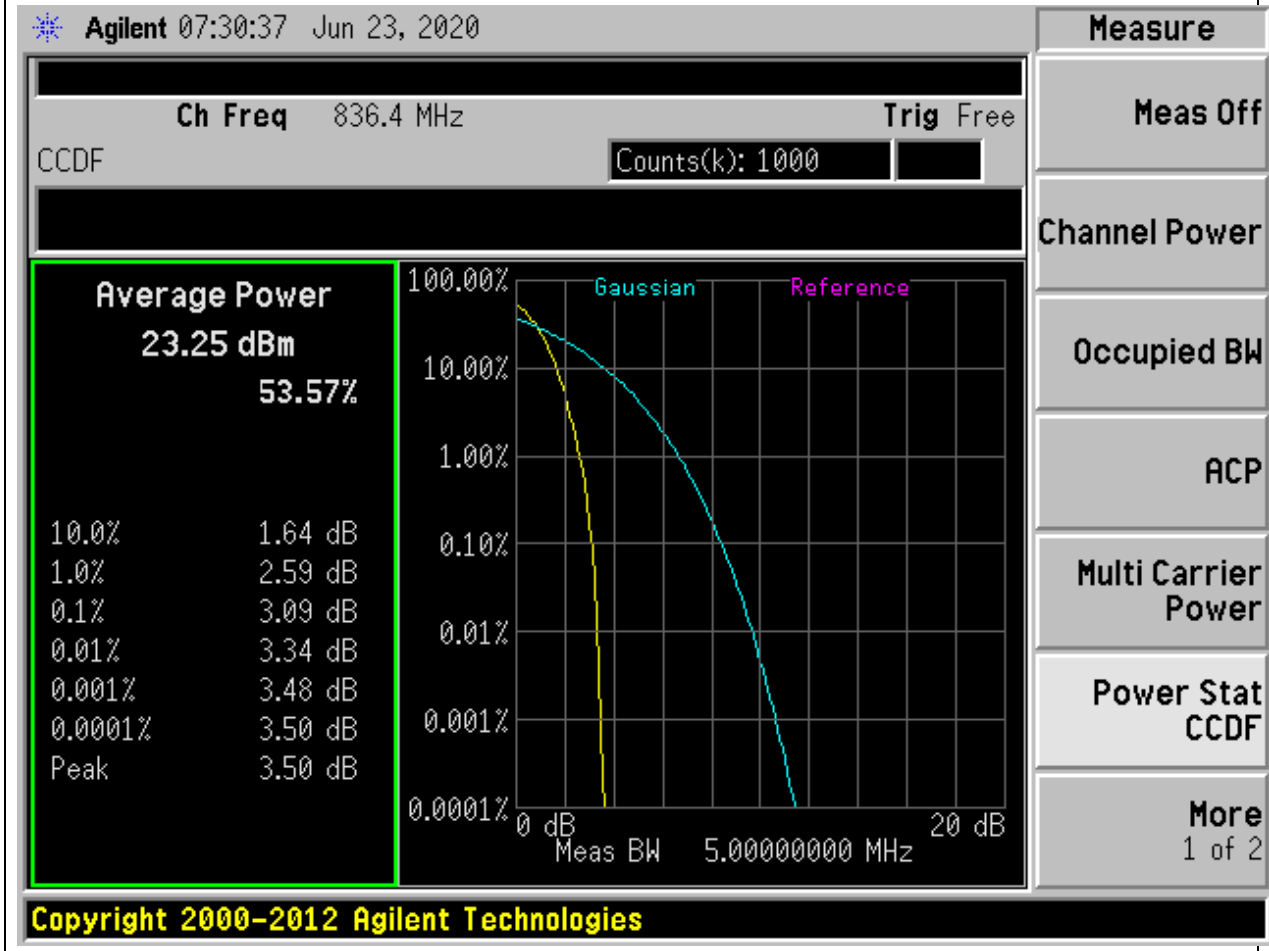
#### 3.1. WCDMA Peak to Average Ratio(NTNV)(Channel:4132)





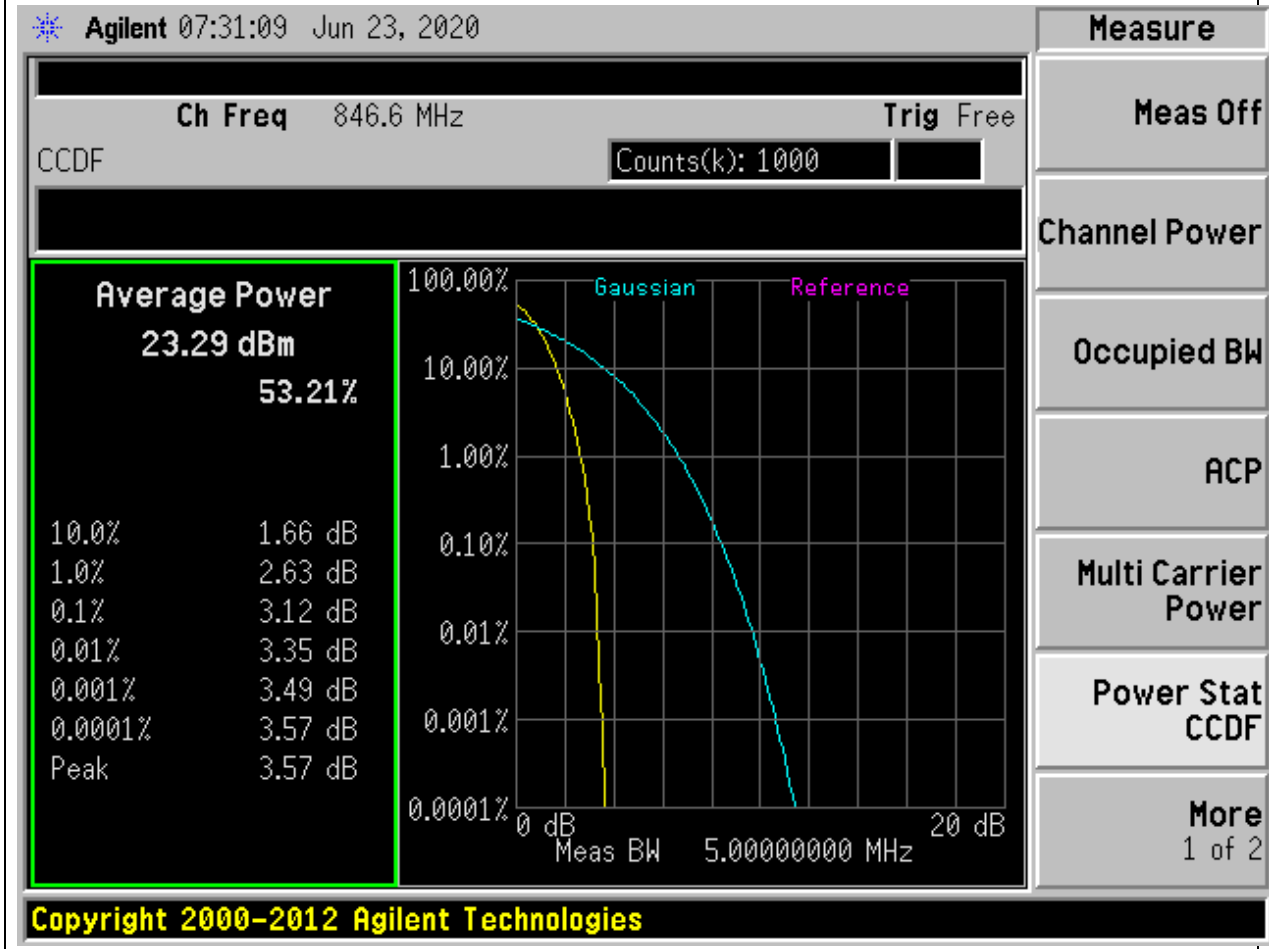
### 3.2. WCDMA Peak to Average Ratio(NTNV)(Channel:4182)

Center Frequency(MHz)	PAR Percent (%)	PAR (dB)	Upper Limit (dB)	Verdict
836.4	0.1	3.09	13	Pass



### 3.3. WCDMA Peak to Average Ratio(NTNV)(Channel:4233)

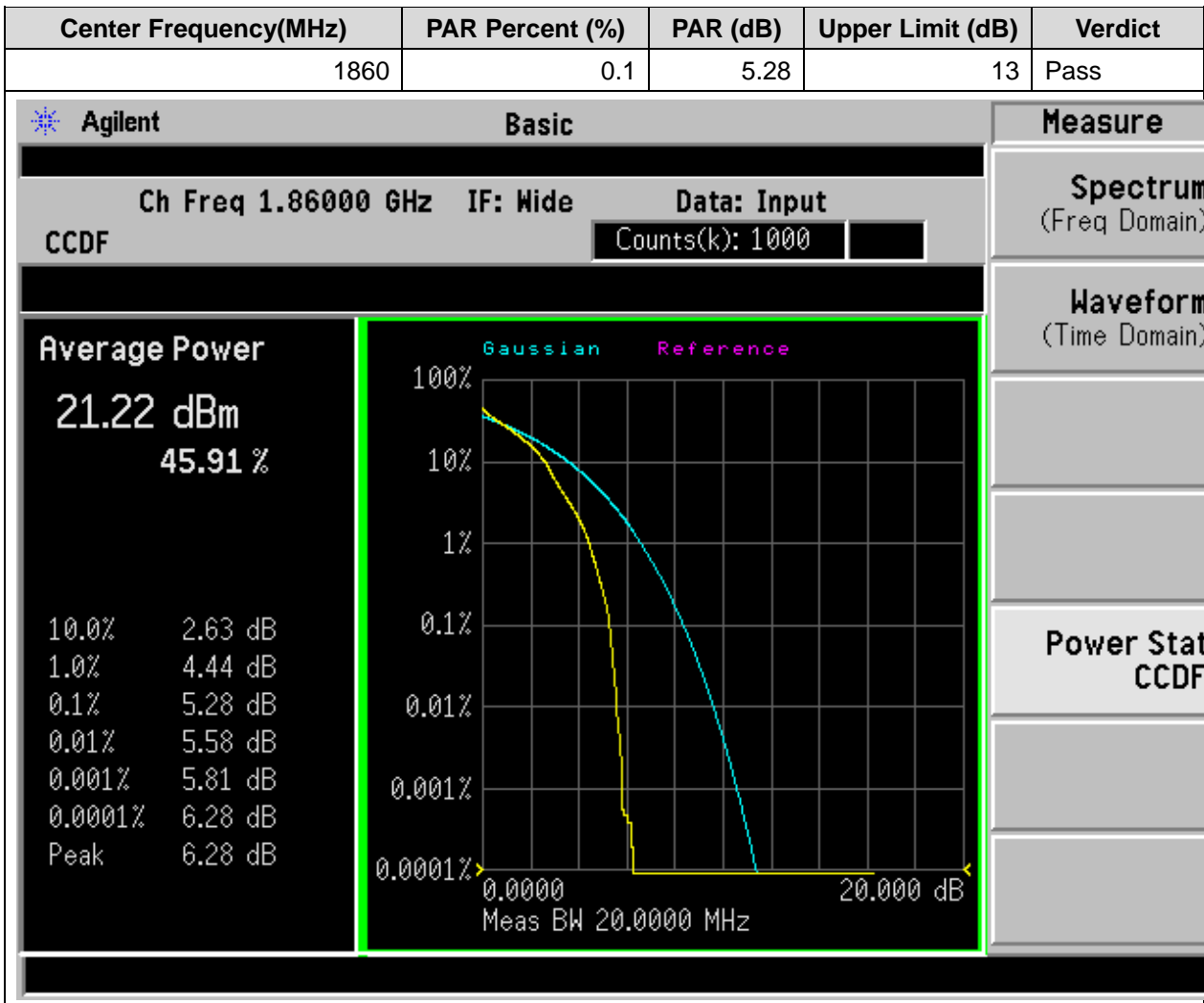
Center Frequency(MHz)	PAR Percent (%)	PAR (dB)	Upper Limit (dB)	Verdict
846.6	0.1	3.12	13	Pass



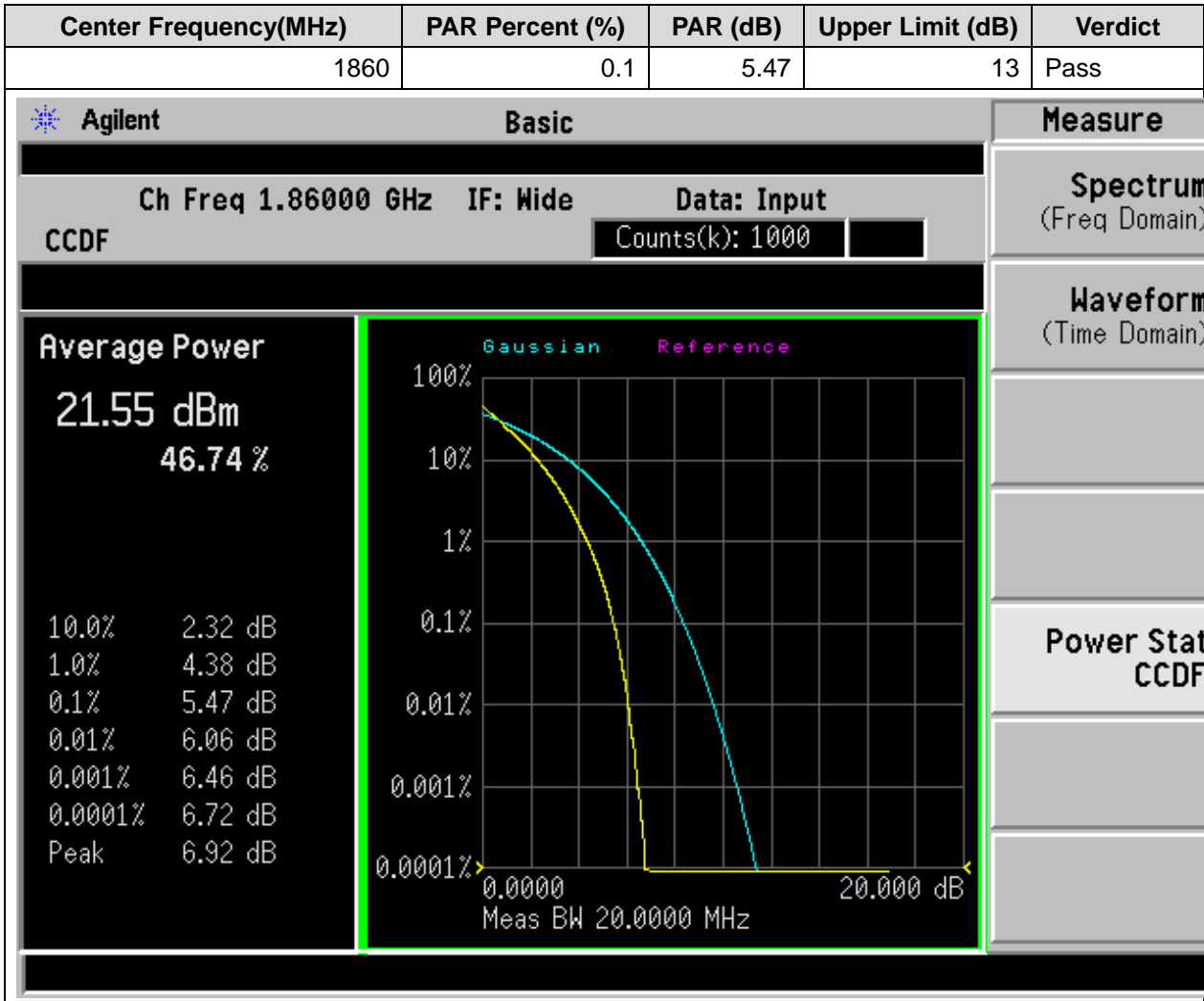
# LTE

## 4. LTE\_Band2

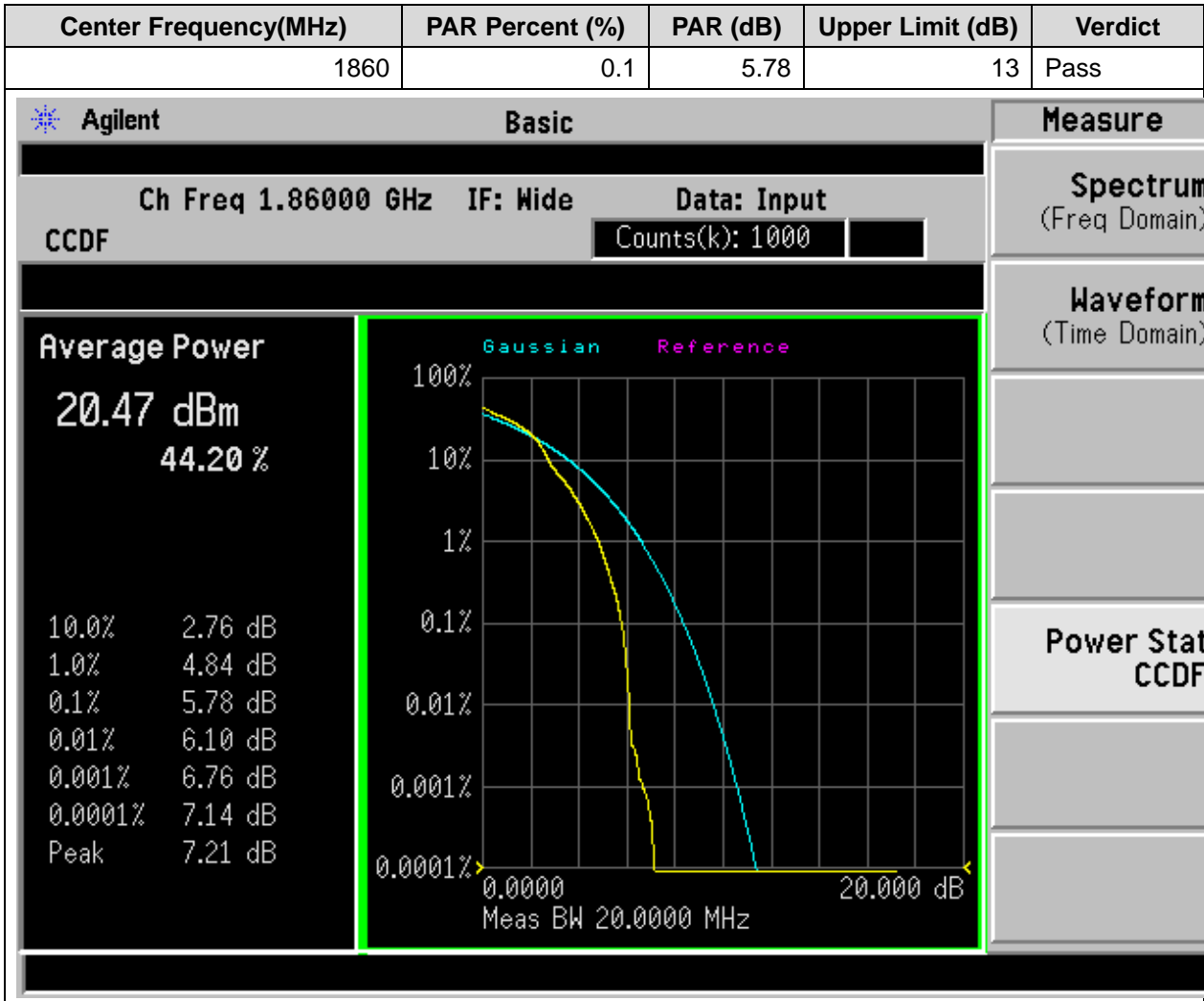
### 4.1. LTE Peak to Average Ratio(NTNV)(Subtest:1, Channel:18700, Bandwidth:20, Modulation:QPSK, RB Number: 1, RB Position:LOW)



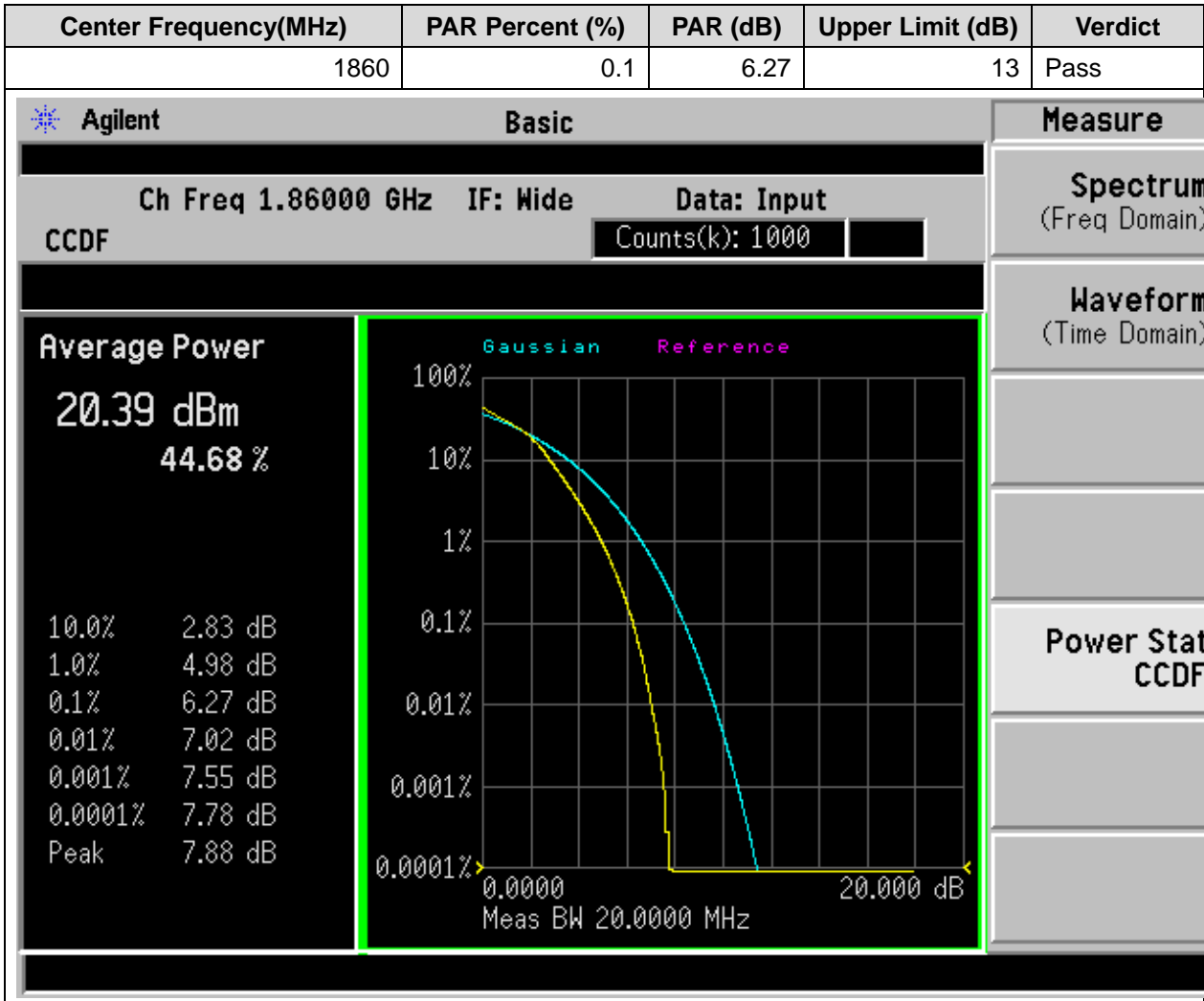
**4.2. LTE Peak to Average Ratio(NTNV)(Subtest:2, Channel:18700, Bandwidth:20, Modulation:QPSK, RB Number: 100, RB Position:LOW)**



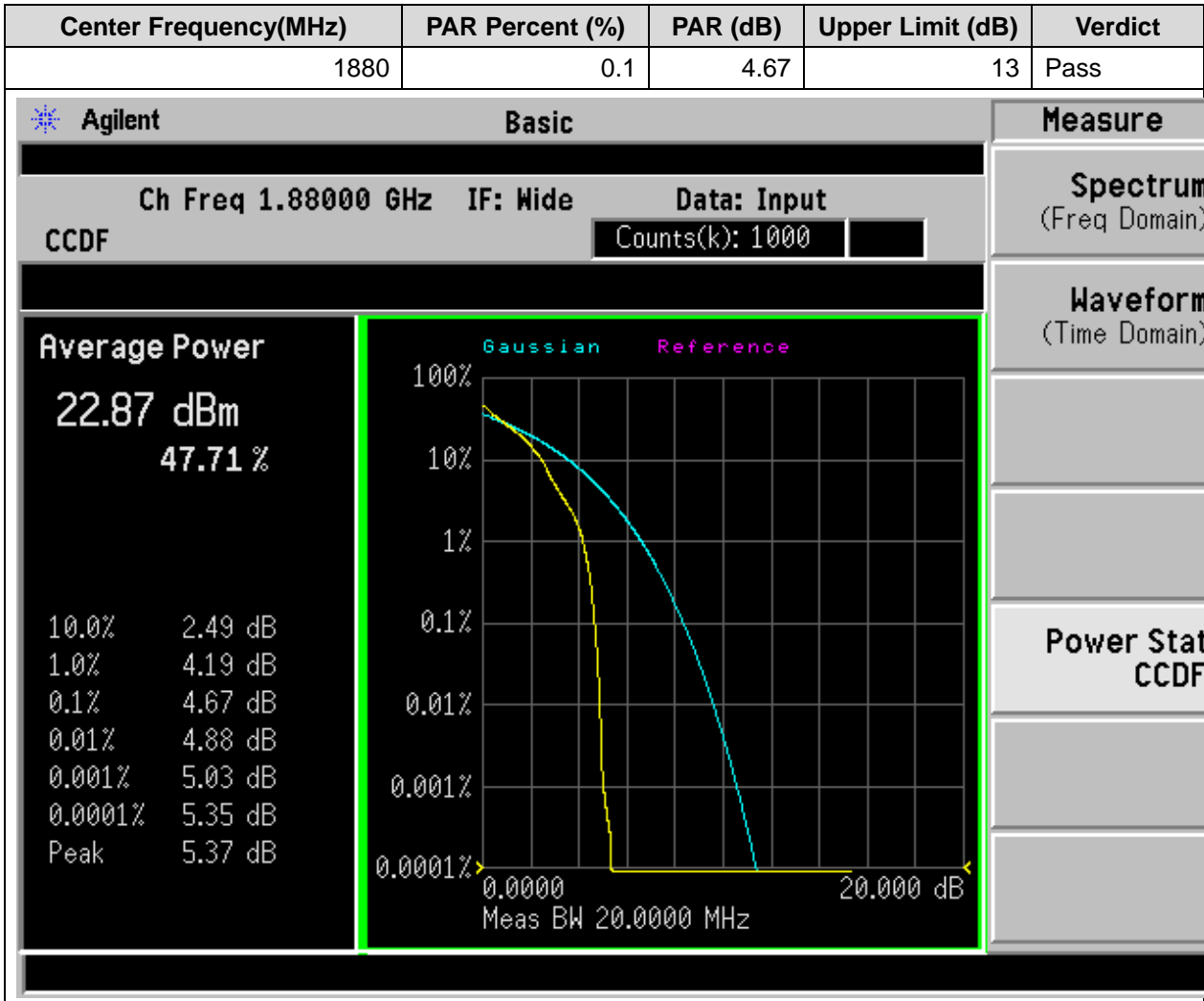
**4.3. LTE Peak to Average Ratio(NTNV)(Subtest:3, Channel:18700, Bandwidth:20, Modulation:Q16, RB Number: 1, RB Position:LOW)**



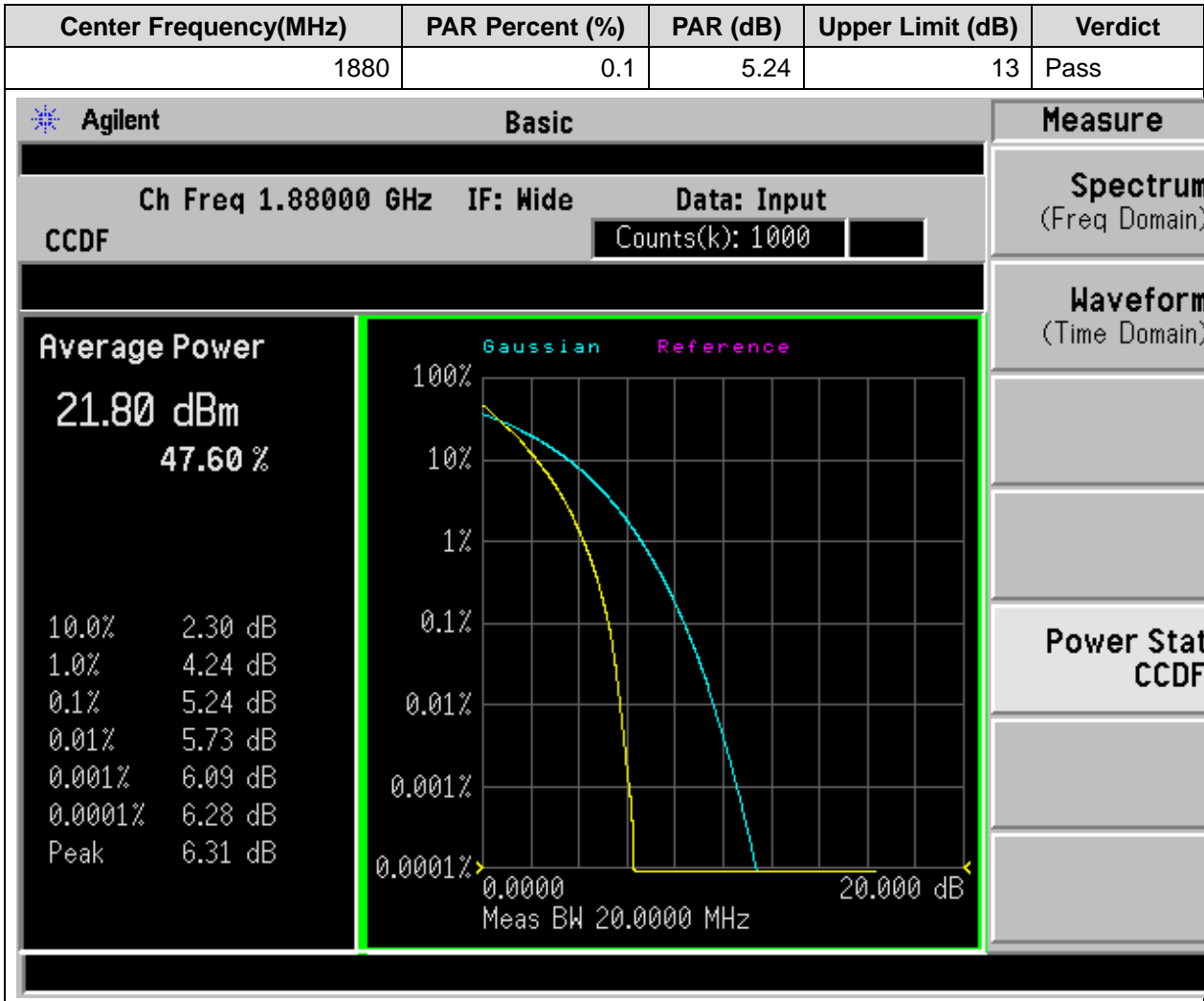
**4.4. LTE Peak to Average Ratio(NTNV)(Subtest:4, Channel:18700, Bandwidth:20, Modulation:Q16, RB Number: 100, RB Position:LOW)**



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

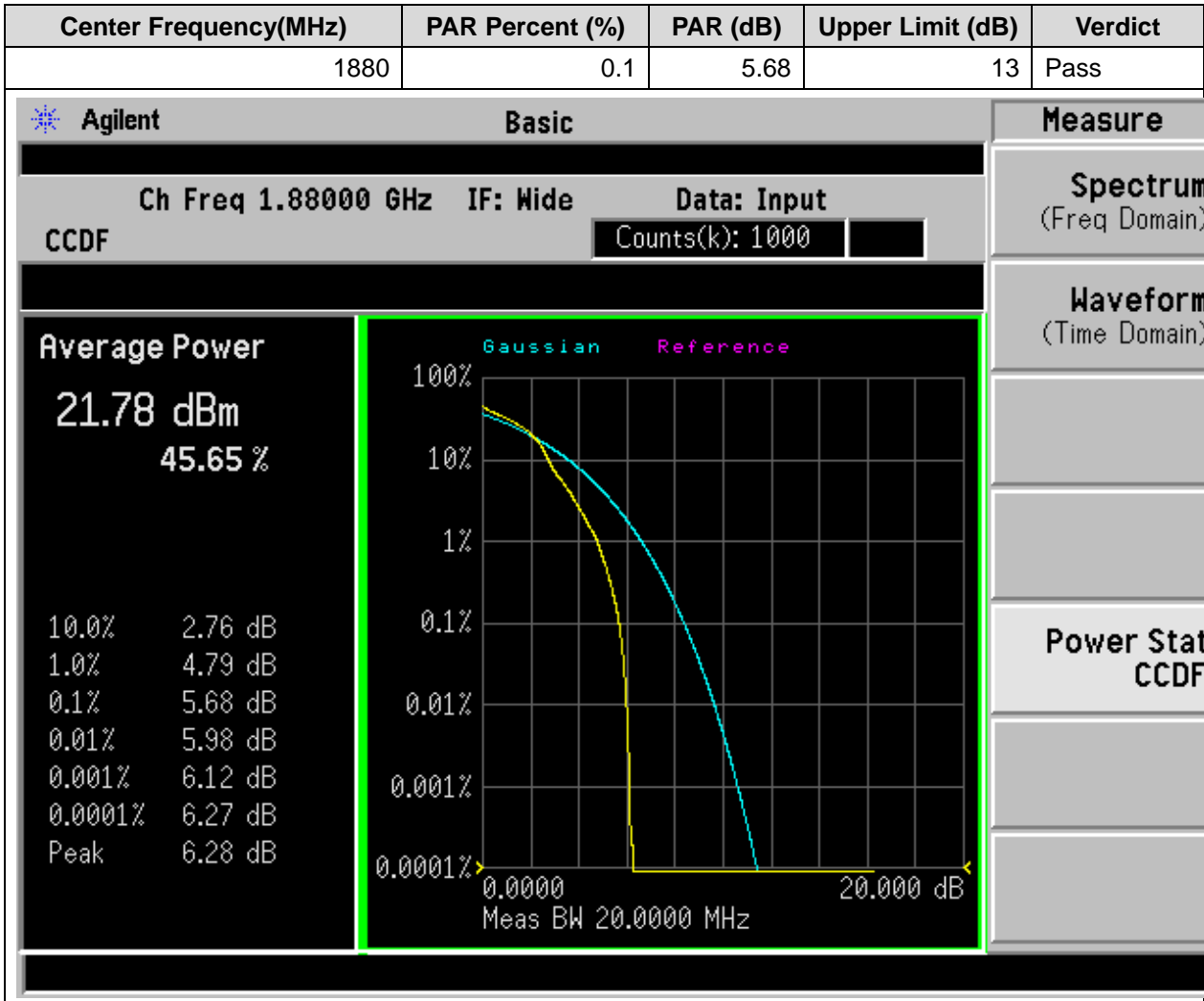


**4.6. LTE Peak to Average Ratio(NTNV)(Subtest:6, Channel:18900, Bandwidth:20, Modulation:QPSK, RB Number: 100, RB Position:LOW)**

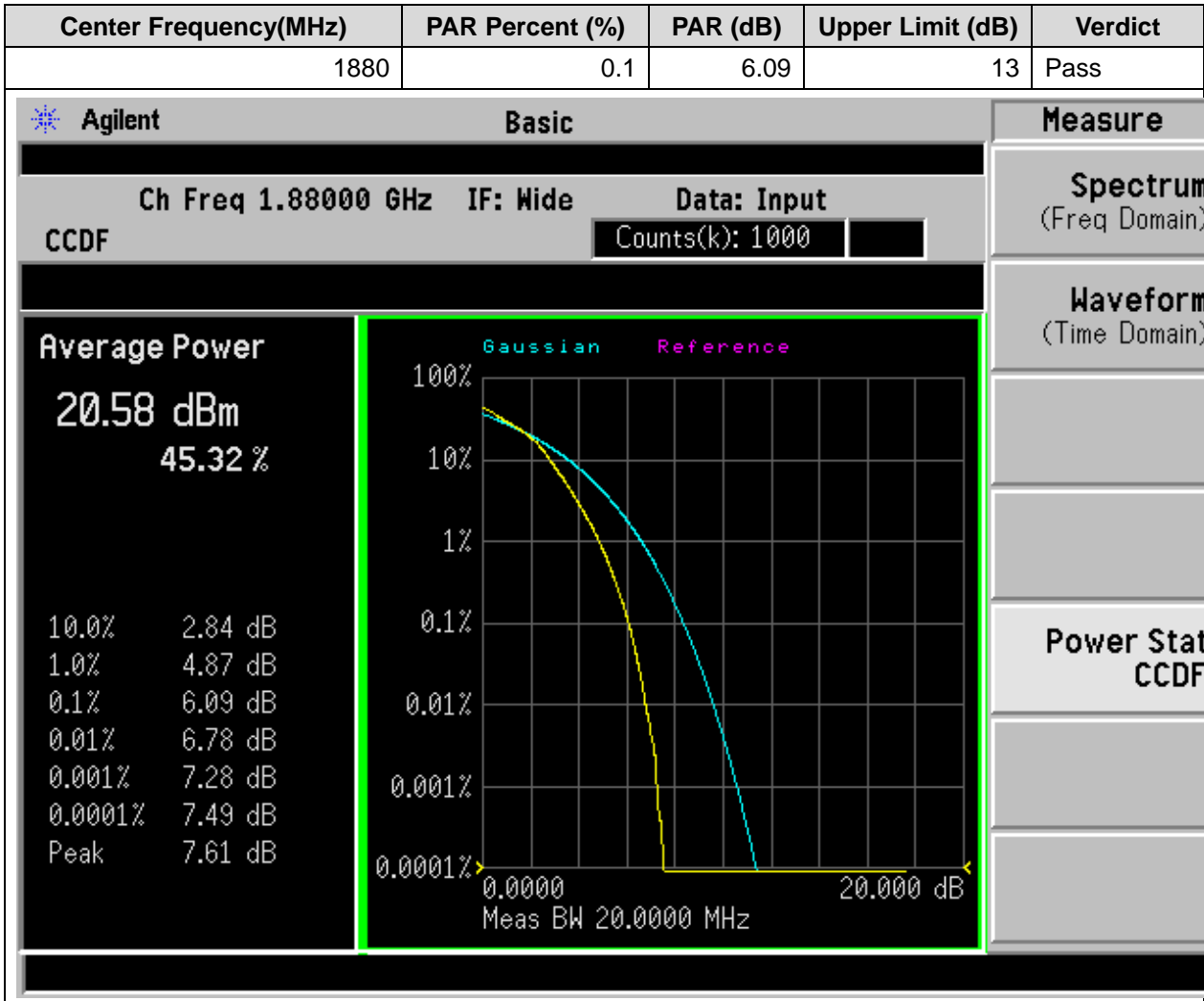




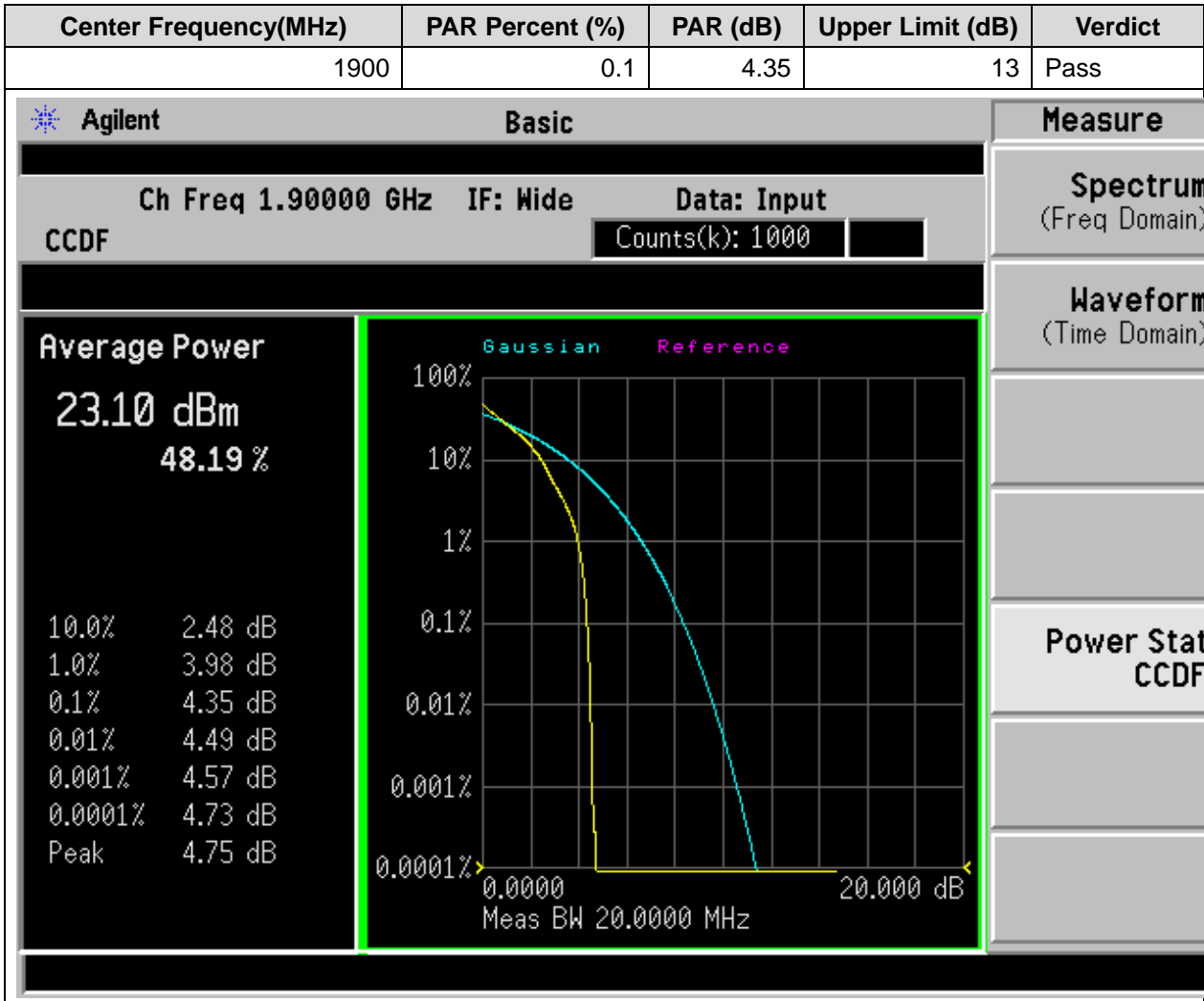
**4.7. LTE Peak to Average Ratio(NTNV)(Subtest:7, Channel:18900, Bandwidth:20, Modulation:Q16, RB Number: 1, RB Position:LOW)**



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



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

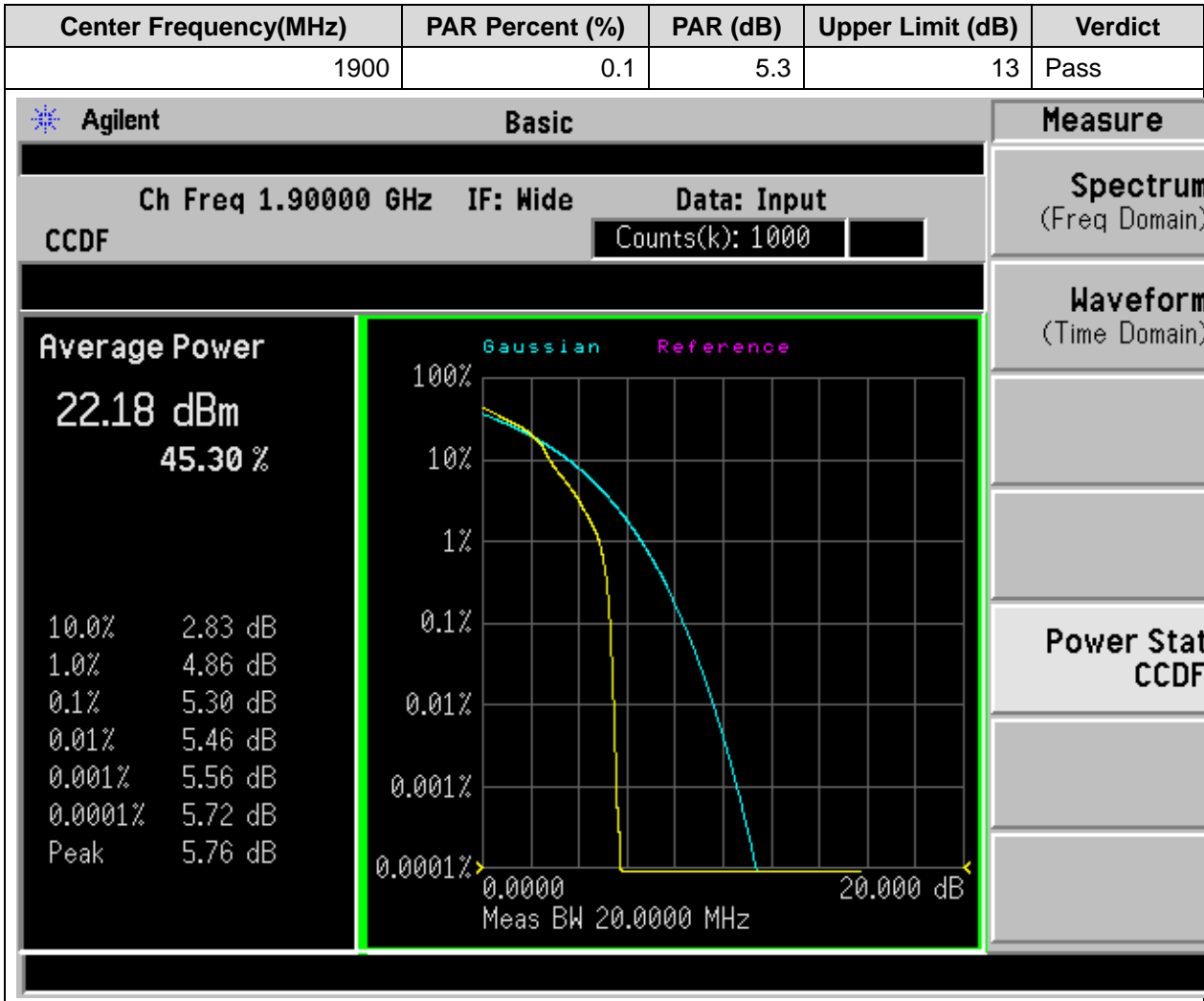


**4.10. LTE Peak to Average Ratio(NTNV)(Subtest:10, Channel:19100, Bandwidth:20, Modulation:QPSK, RB Number: 100, RB Position:LOW)**

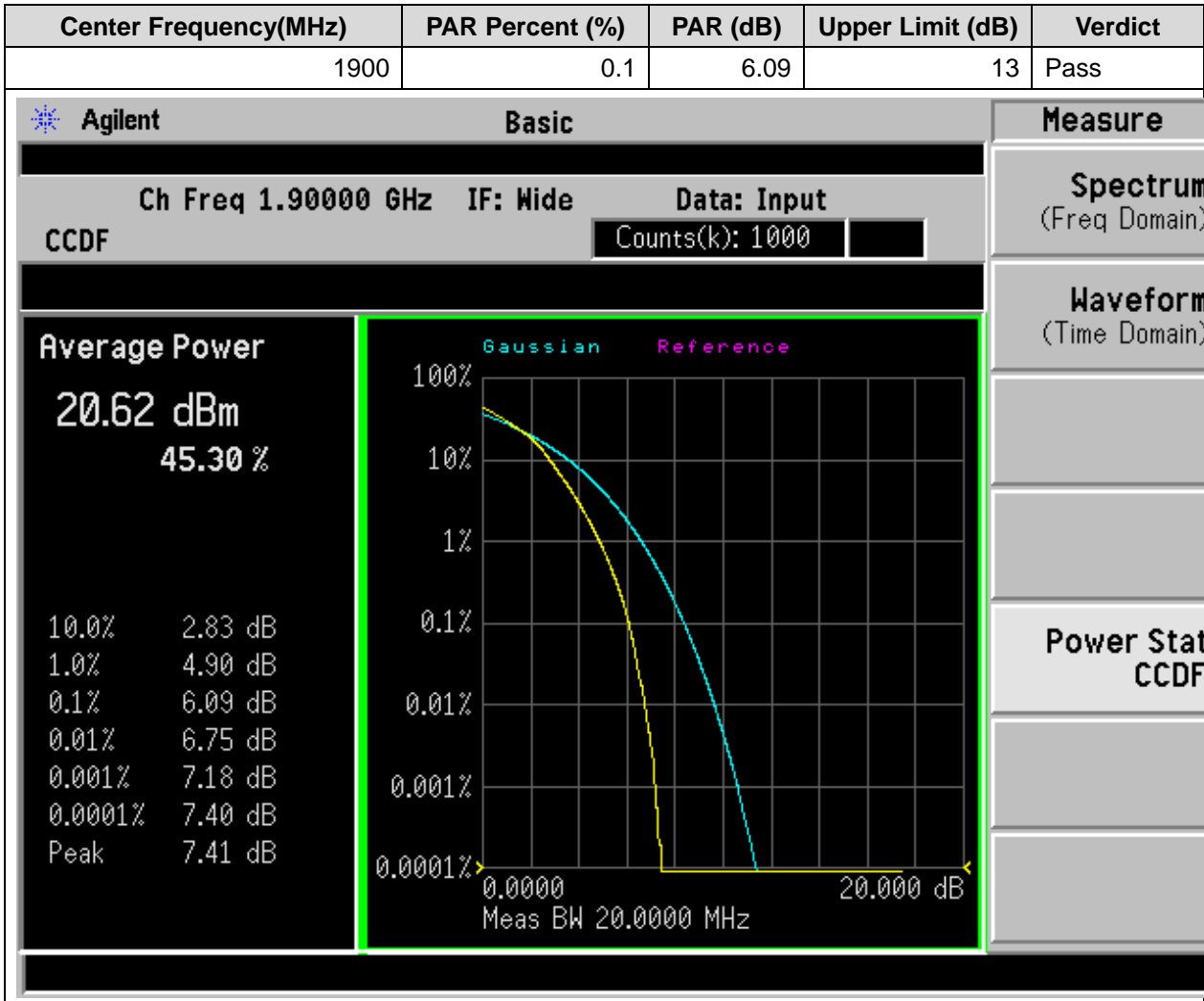
Center Frequency(MHz)	PAR Percent (%)	PAR (dB)	Upper Limit (dB)	Verdict
1900	0.1	5.35	13	Pass



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

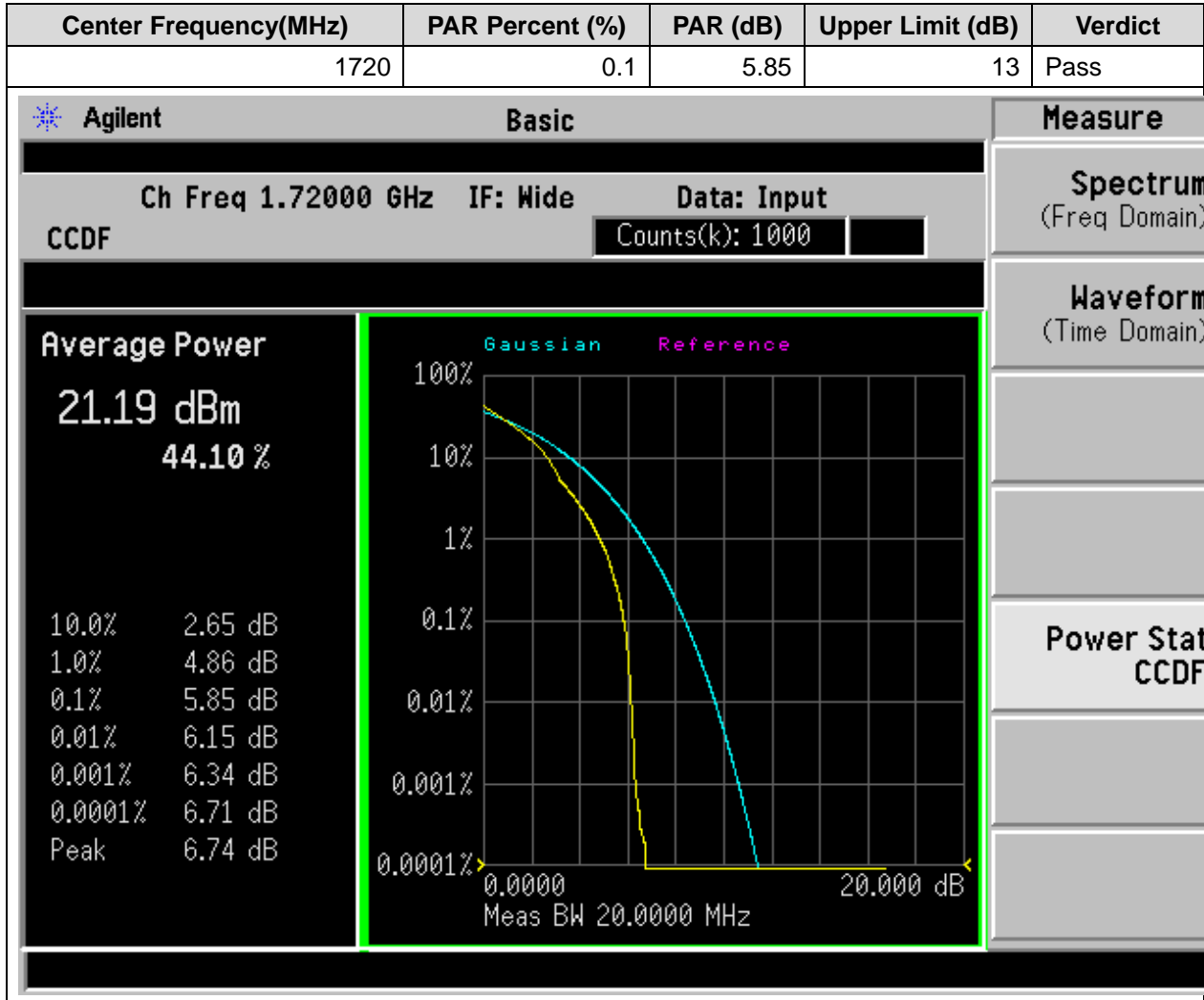


**4.12. LTE Peak to Average Ratio(NTNV)(Subtest:12, Channel:19100, Bandwidth:20, Modulation:Q16, RB Number: 100, RB Position:LOW)**

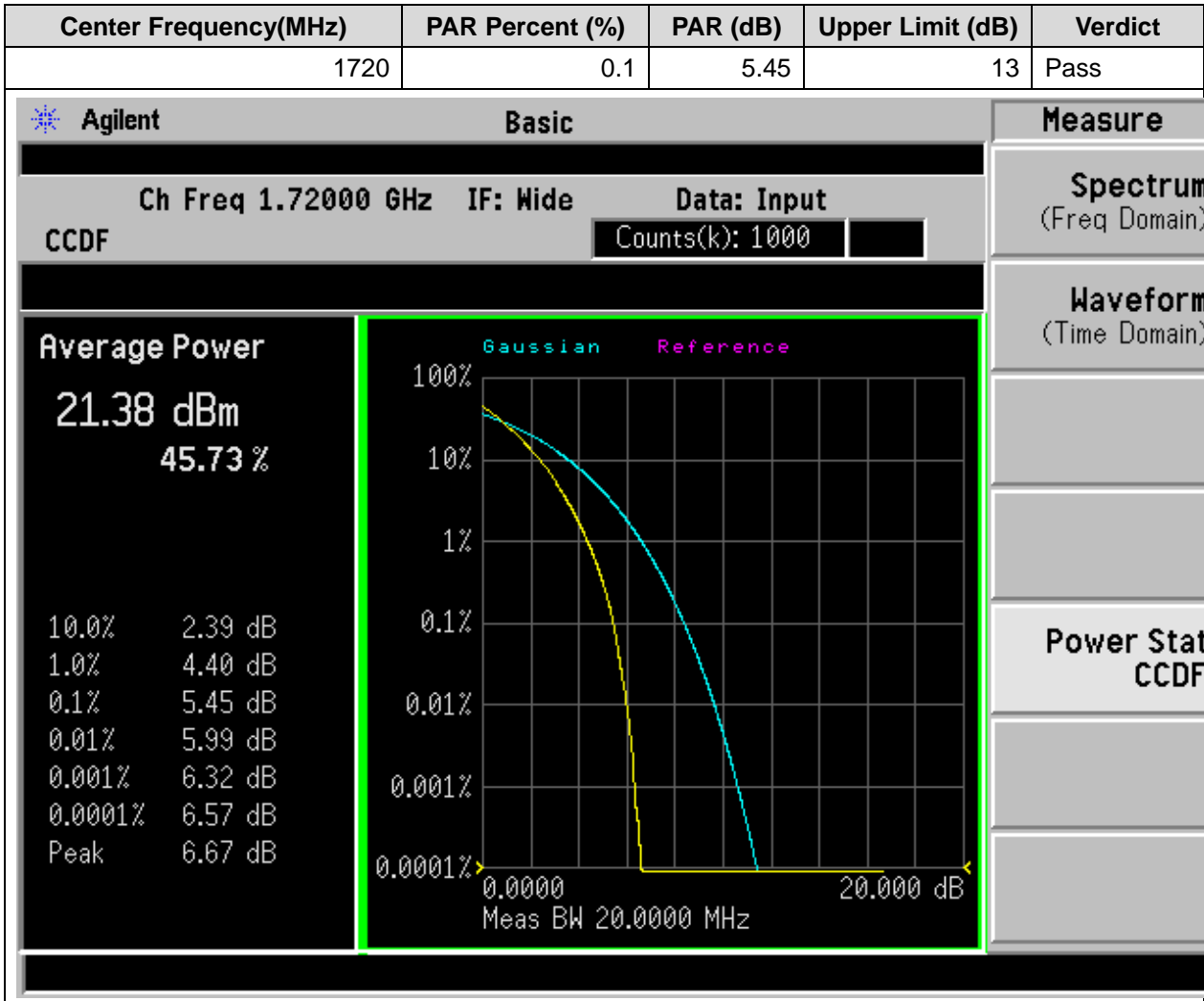


## 5. LTE\_Band4

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

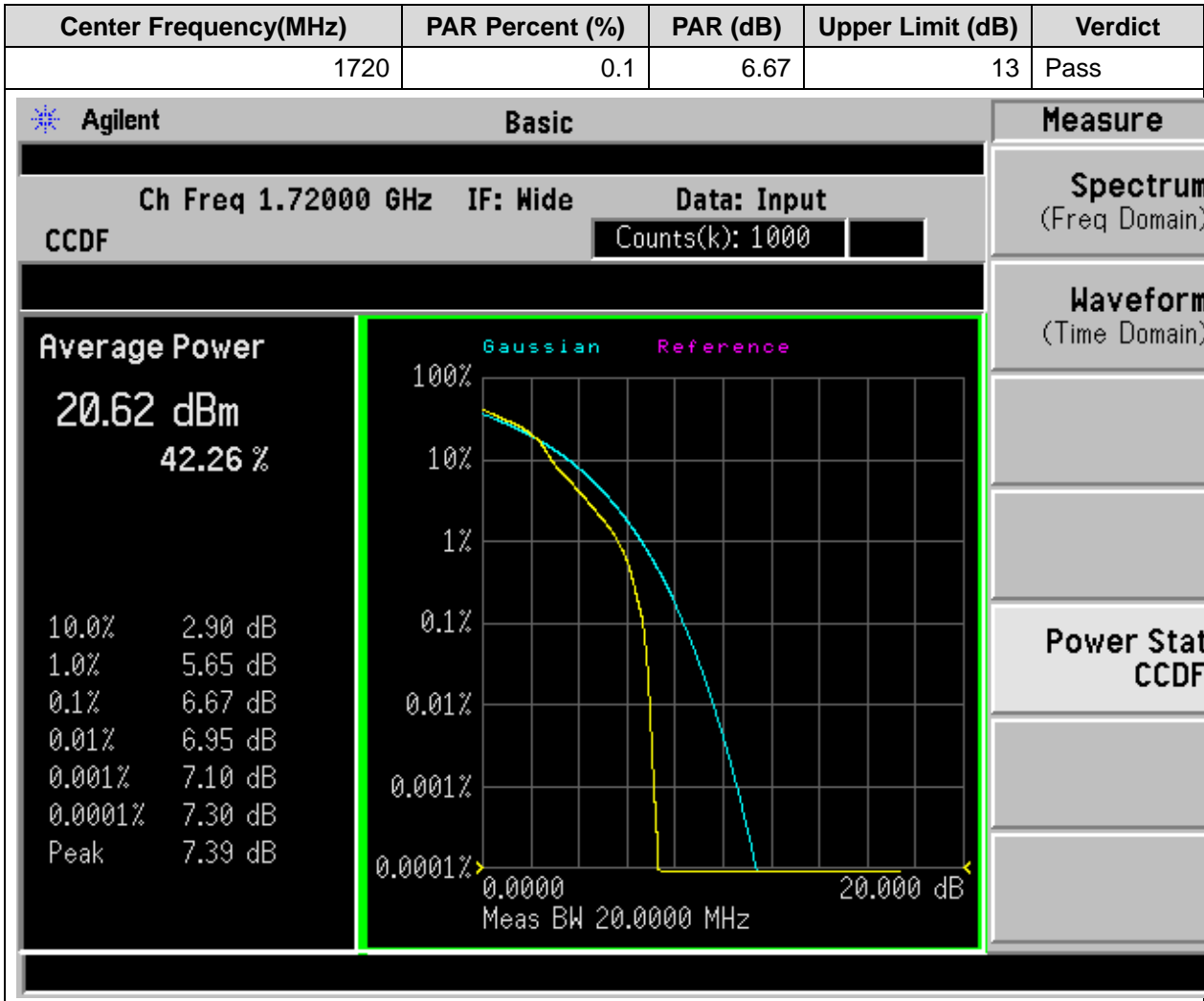


**5.2. LTE Peak to Average Ratio(NTNV)(Subtest:2, Channel:20050, Bandwidth:20, Modulation:QPSK, RB Number: 100, RB Position:LOW)**

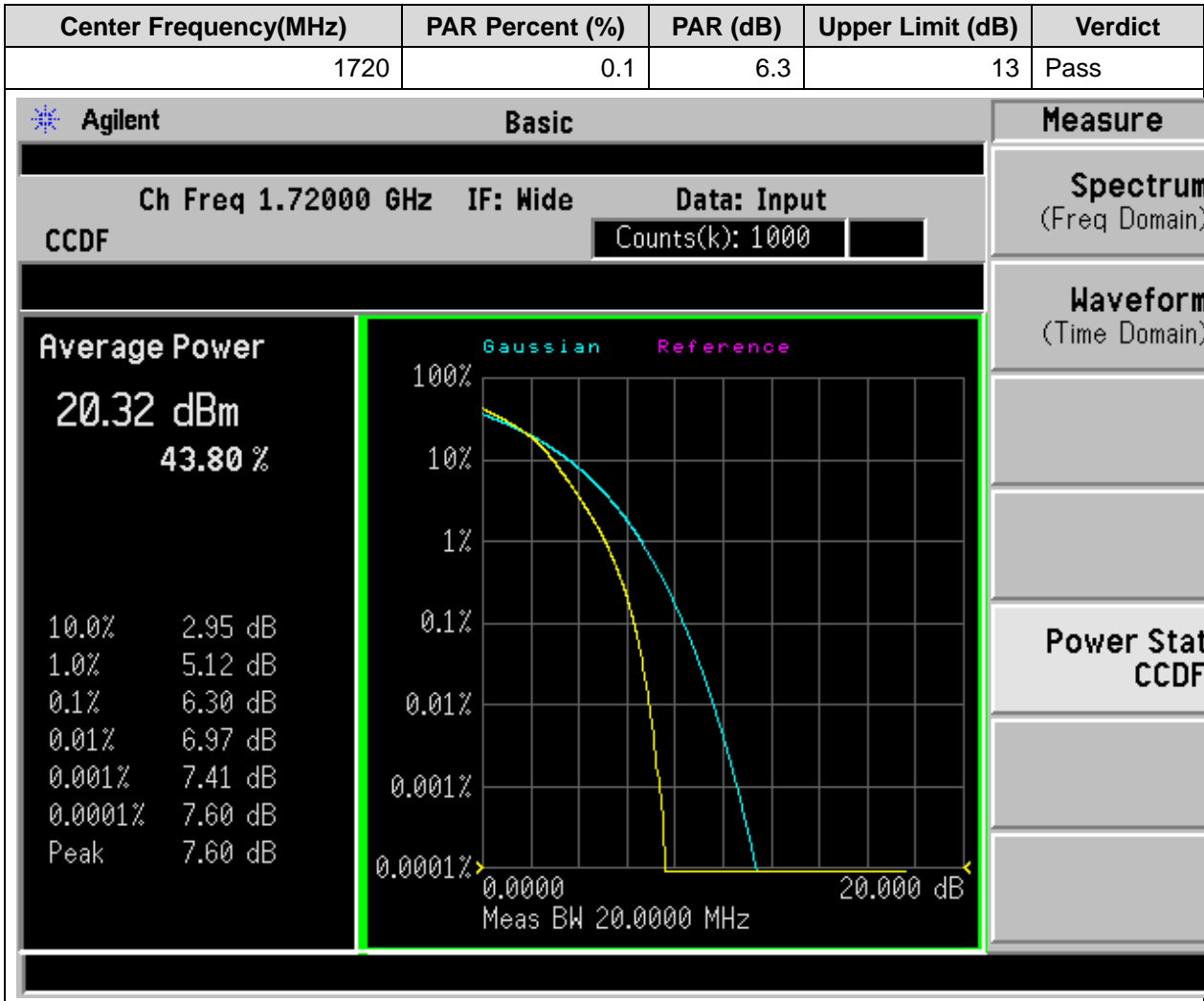




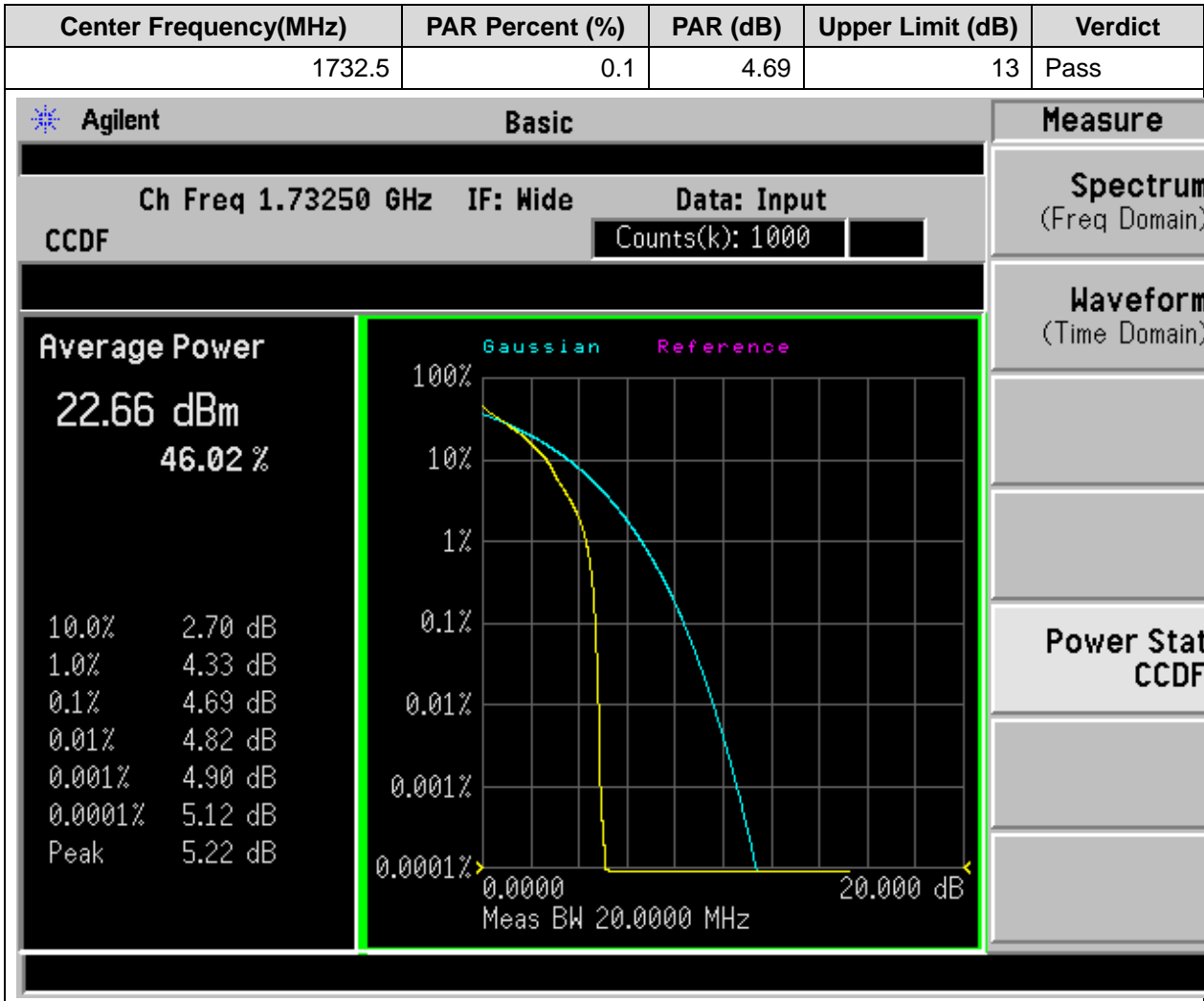
**5.3. LTE Peak to Average Ratio(NTNV)(Subtest:3, Channel:20050, Bandwidth:20, Modulation:Q16, RB Number: 1, RB Position:LOW)**



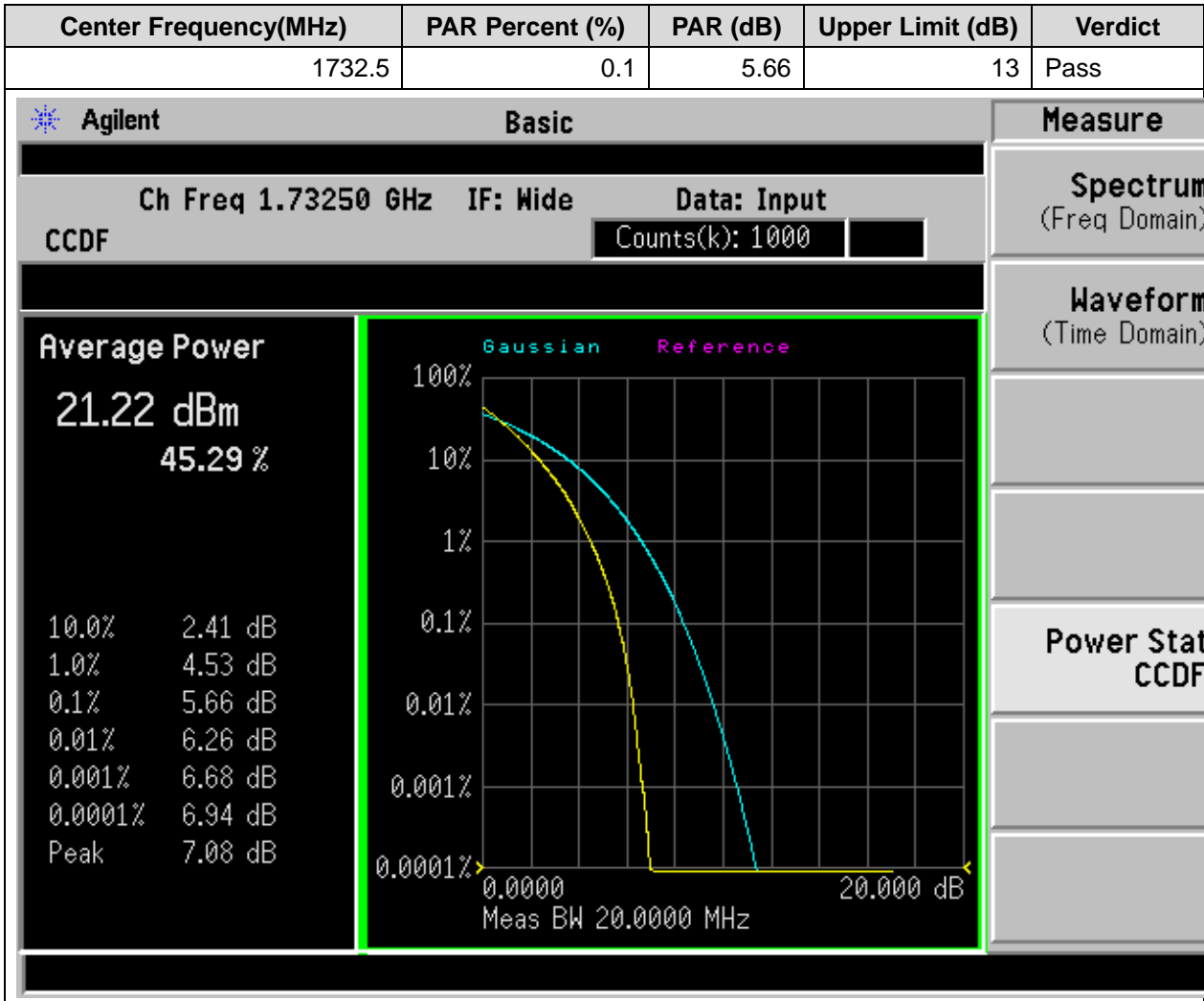
**5.4. LTE Peak to Average Ratio(NTNV)(Subtest:4, Channel:20050, Bandwidth:20, Modulation:Q16, RB Number: 100, RB Position:LOW)**



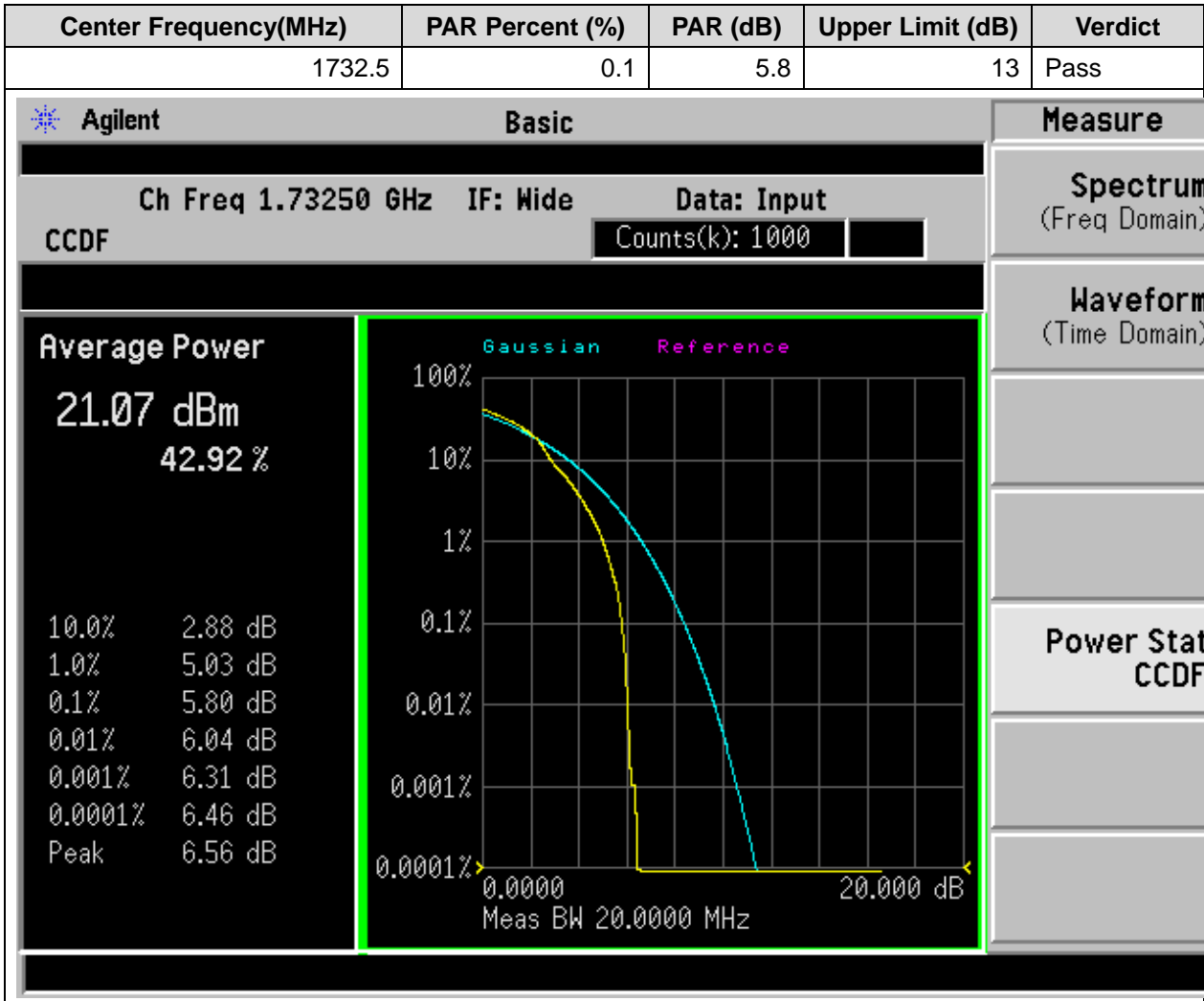
**5.5. LTE Peak to Average Ratio(NTNV)(Subtest:5, Channel:20175, Bandwidth:20, Modulation:QPSK, RB Number: 1, RB Position:LOW)**



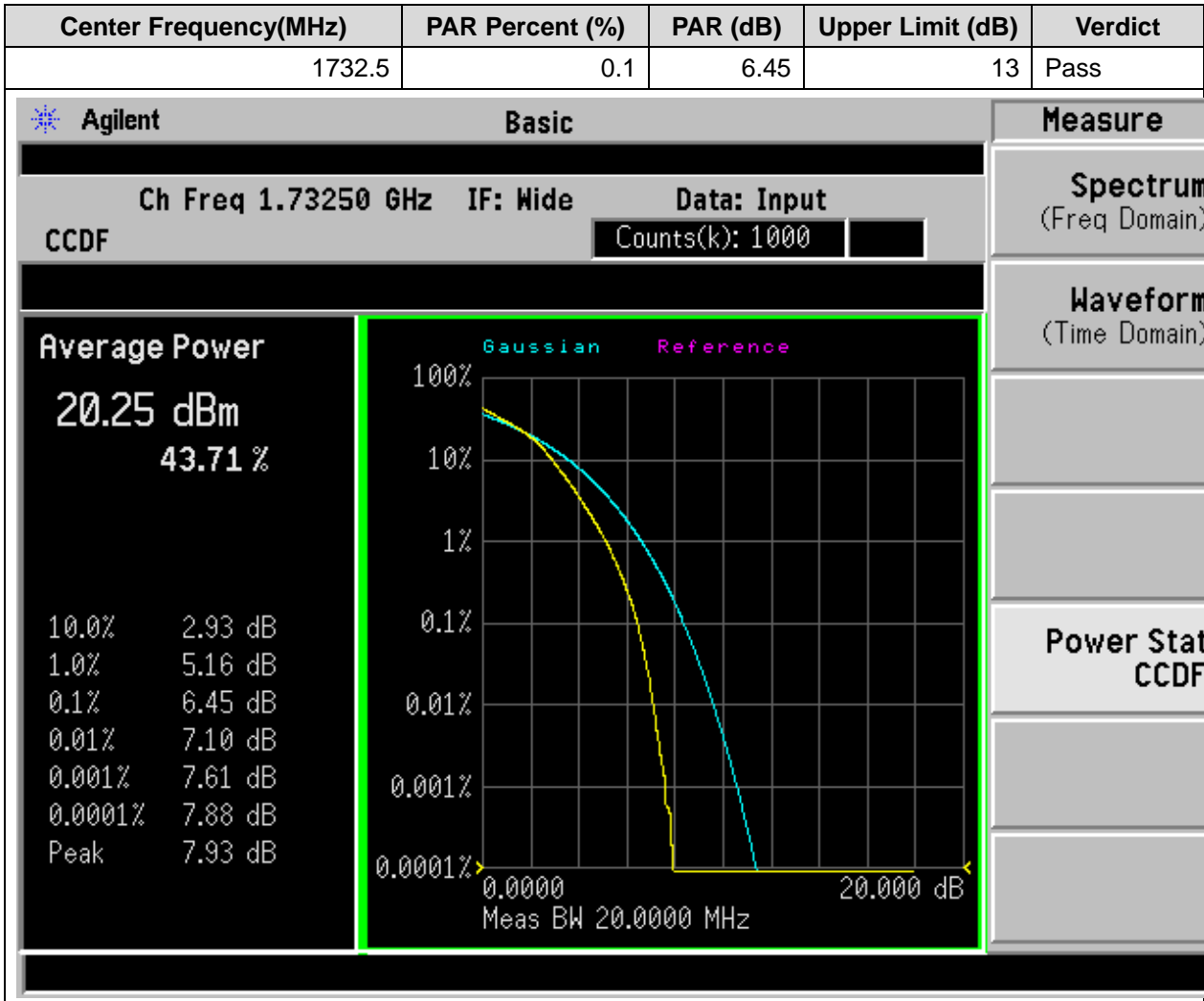
**5.6. LTE Peak to Average Ratio(NTNV)(Subtest:6, Channel:20175, Bandwidth:20, Modulation:QPSK, RB Number: 100, RB Position:LOW)**



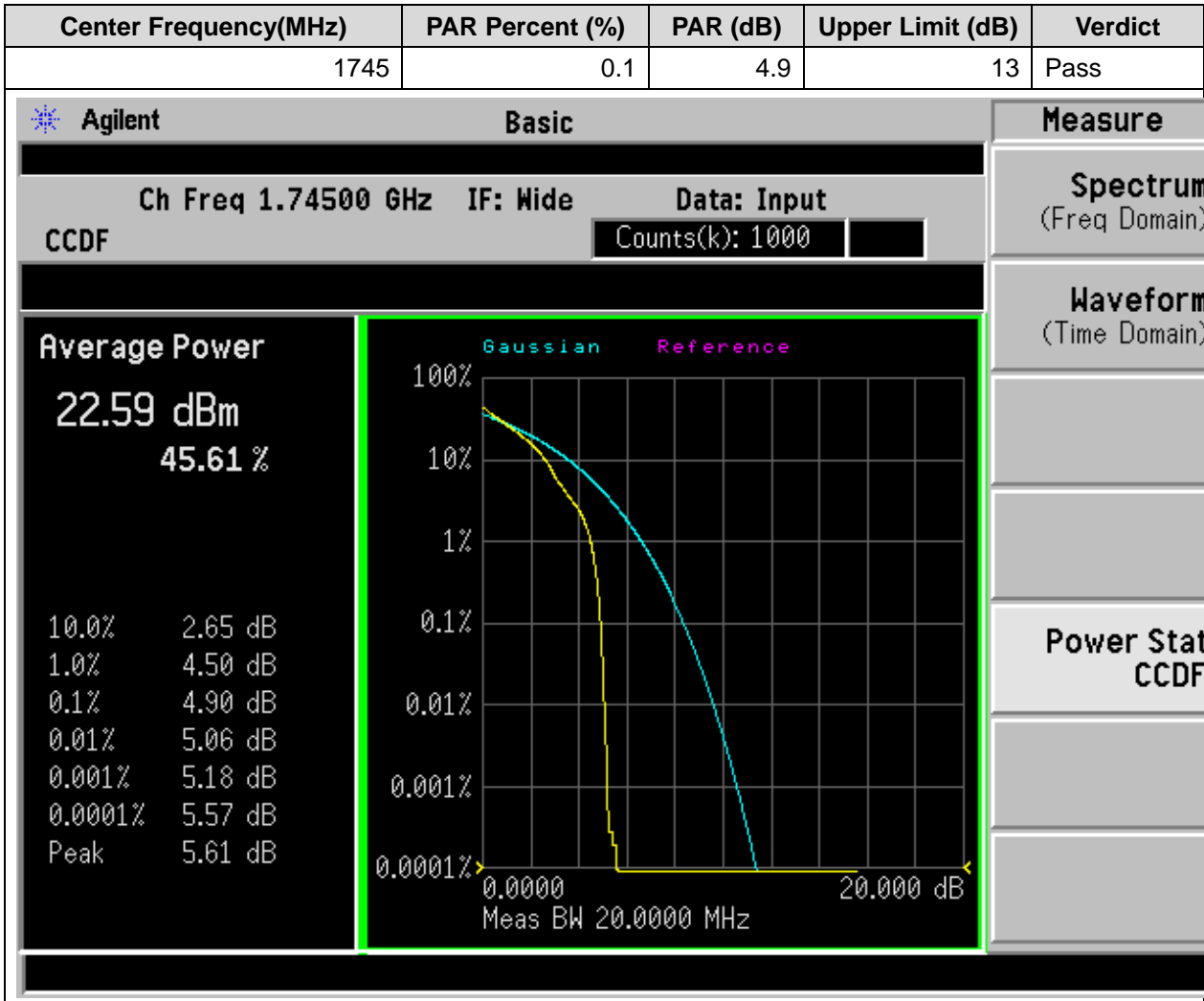
**5.7. LTE Peak to Average Ratio(NTNV)(Subtest:7, Channel:20175, Bandwidth:20, Modulation:Q16, RB Number: 1, RB Position:LOW)**



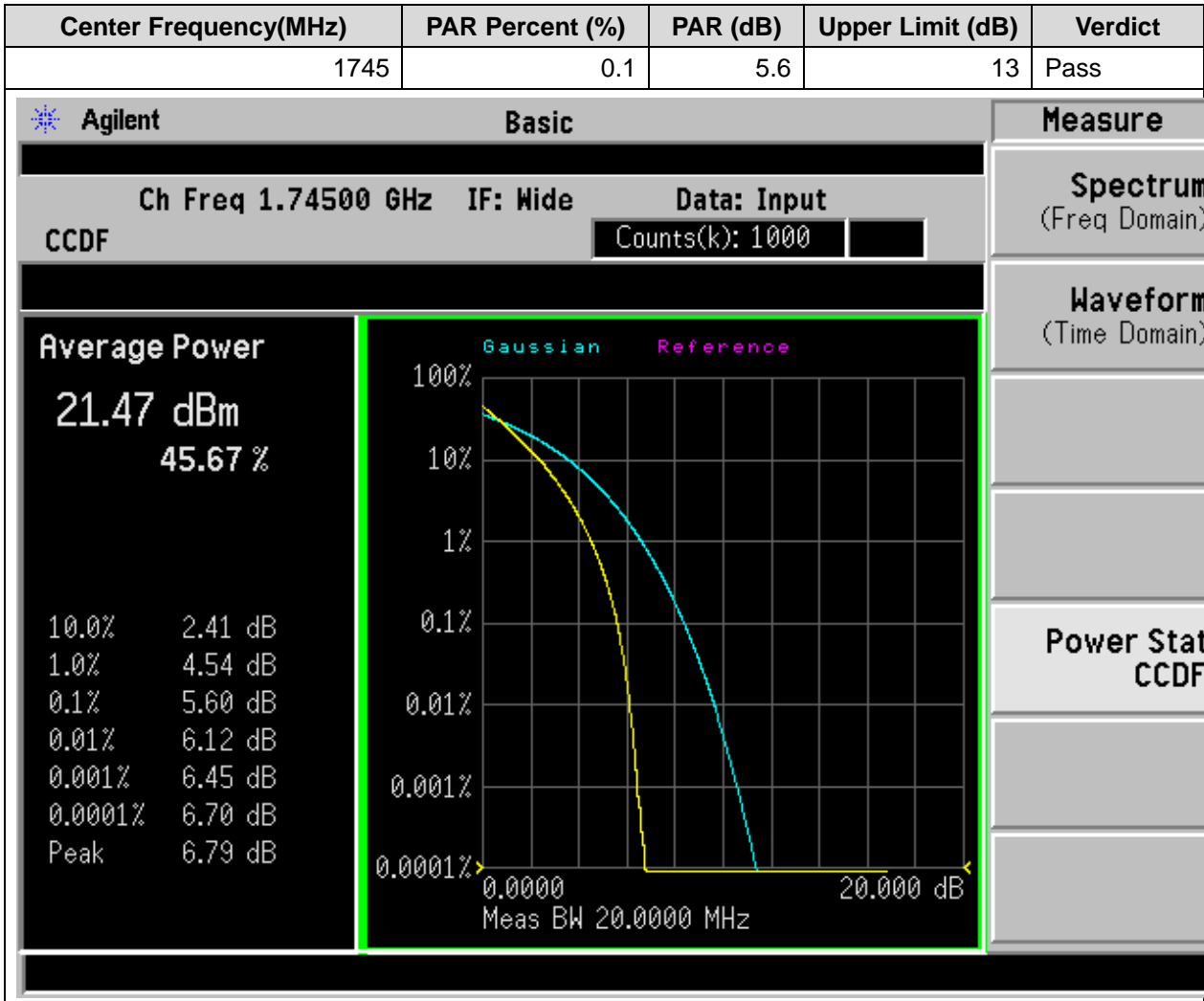
**5.8. LTE Peak to Average Ratio(NTNV)(Subtest:8, Channel:20175, Bandwidth:20, Modulation:Q16, RB Number: 100, RB Position:LOW)**



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

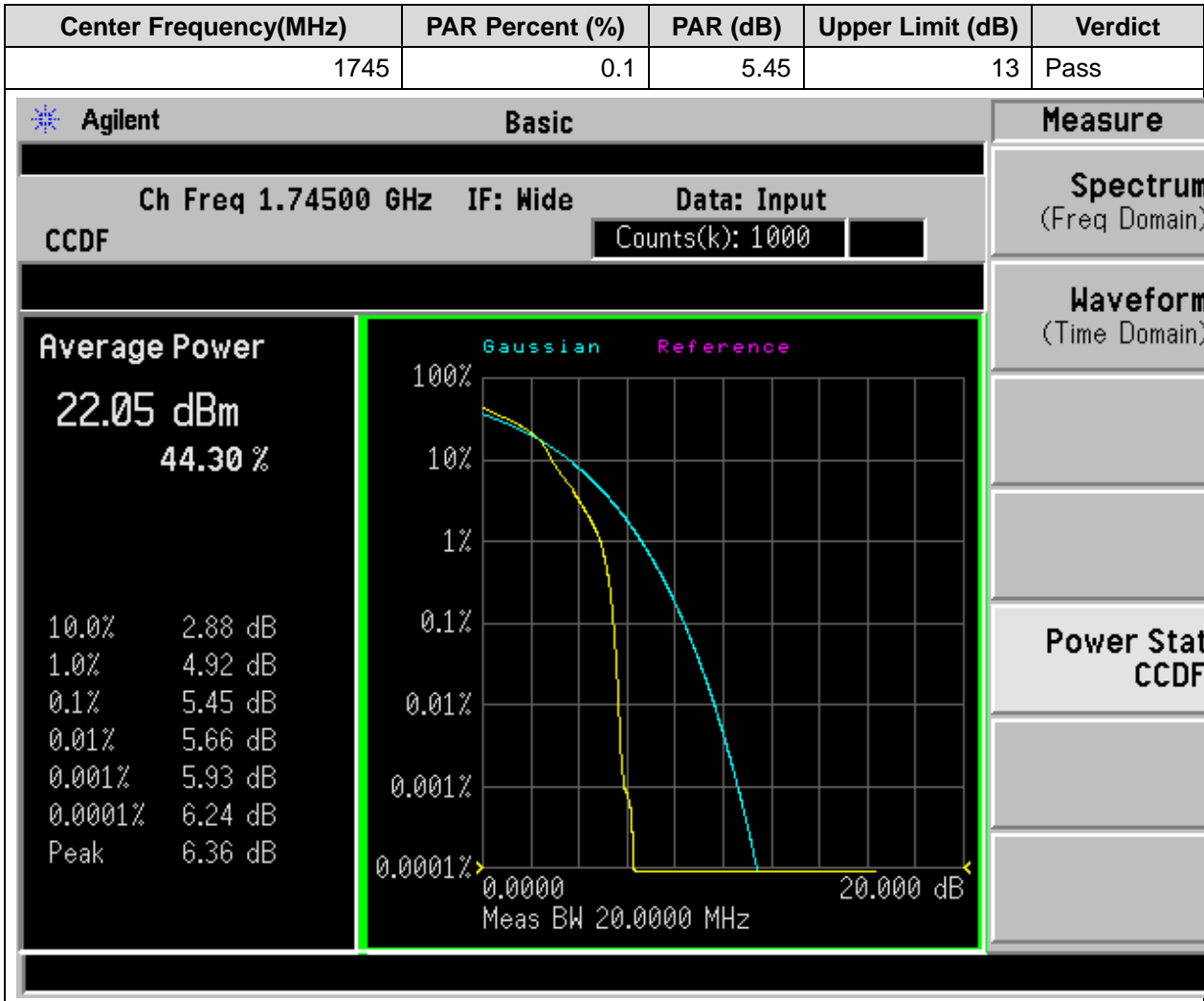


**5.10. LTE Peak to Average Ratio(NTNV)(Subtest:10, Channel:20300, Bandwidth:20, Modulation:QPSK, RB Number: 100, RB Position:LOW)**

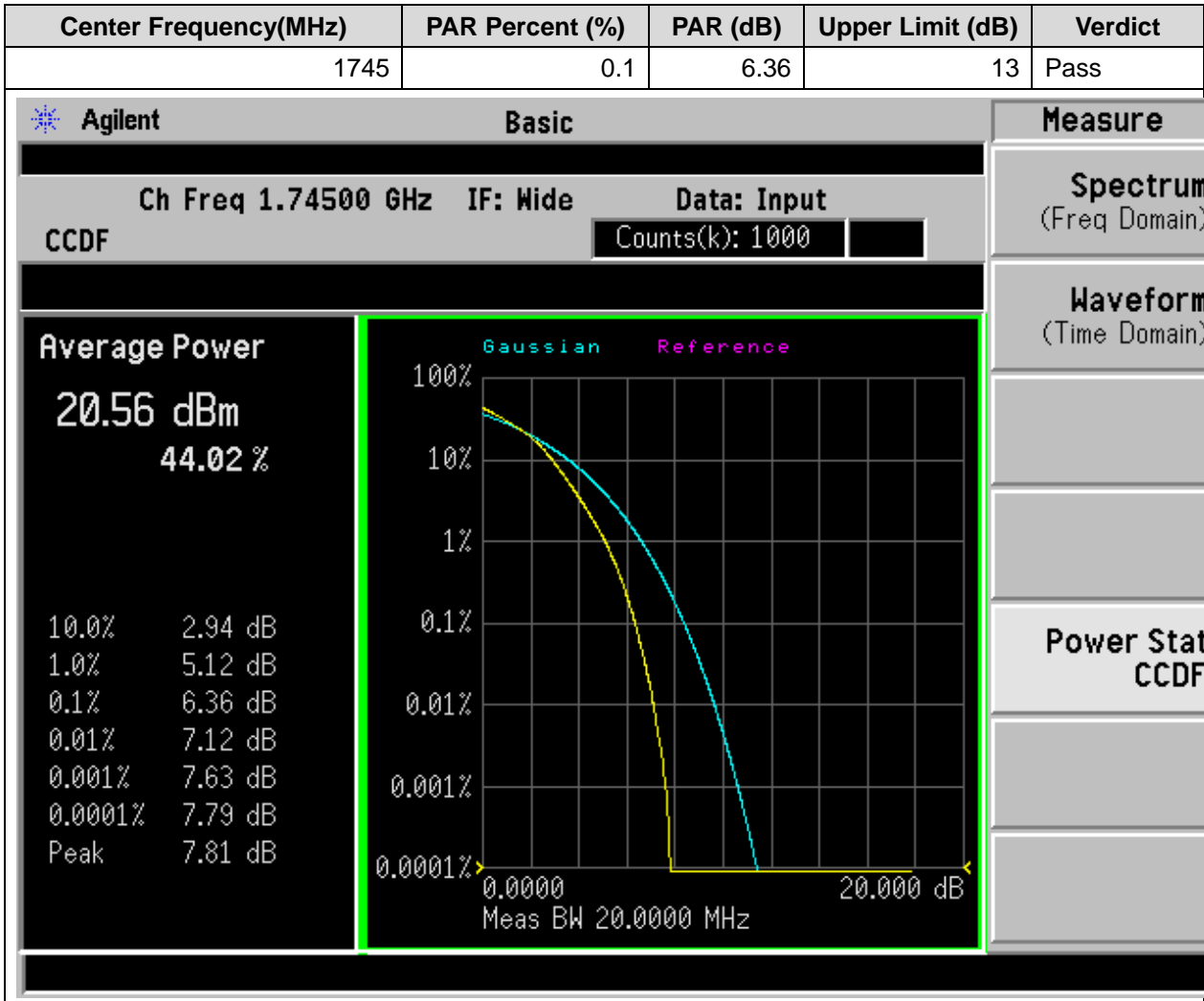




5.11. LTE Peak to Average Ratio(NTNV)(Subtest:11, Channel:20300, Bandwidth:20, Modulation:Q16, RB Number: 1, RB Position:LOW)

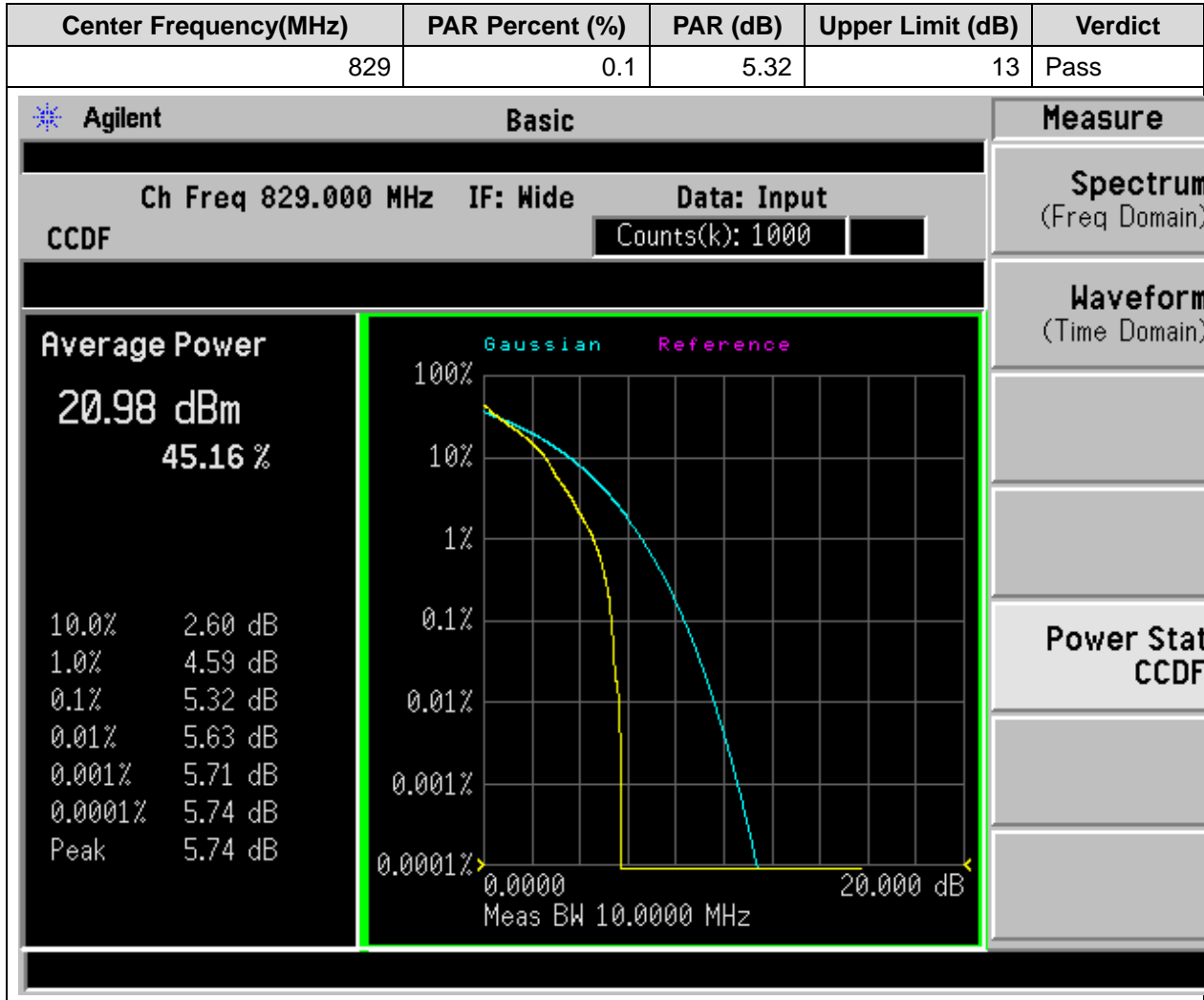


**5.12. LTE Peak to Average Ratio(NTNV)(Subtest:12, Channel:20300, Bandwidth:20, Modulation:Q16, RB Number: 100, RB Position:LOW)**

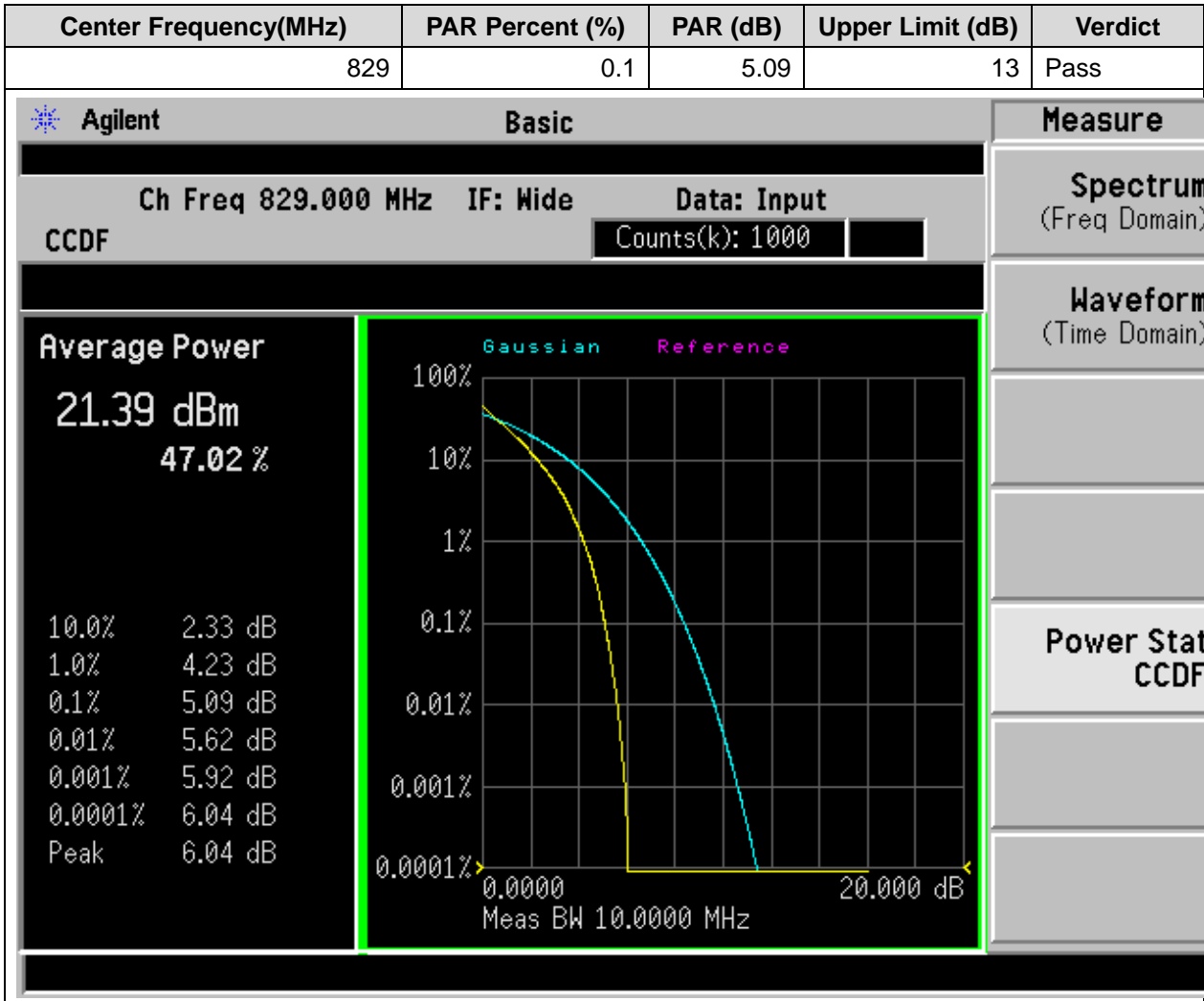


## 6. LTE\_Band5

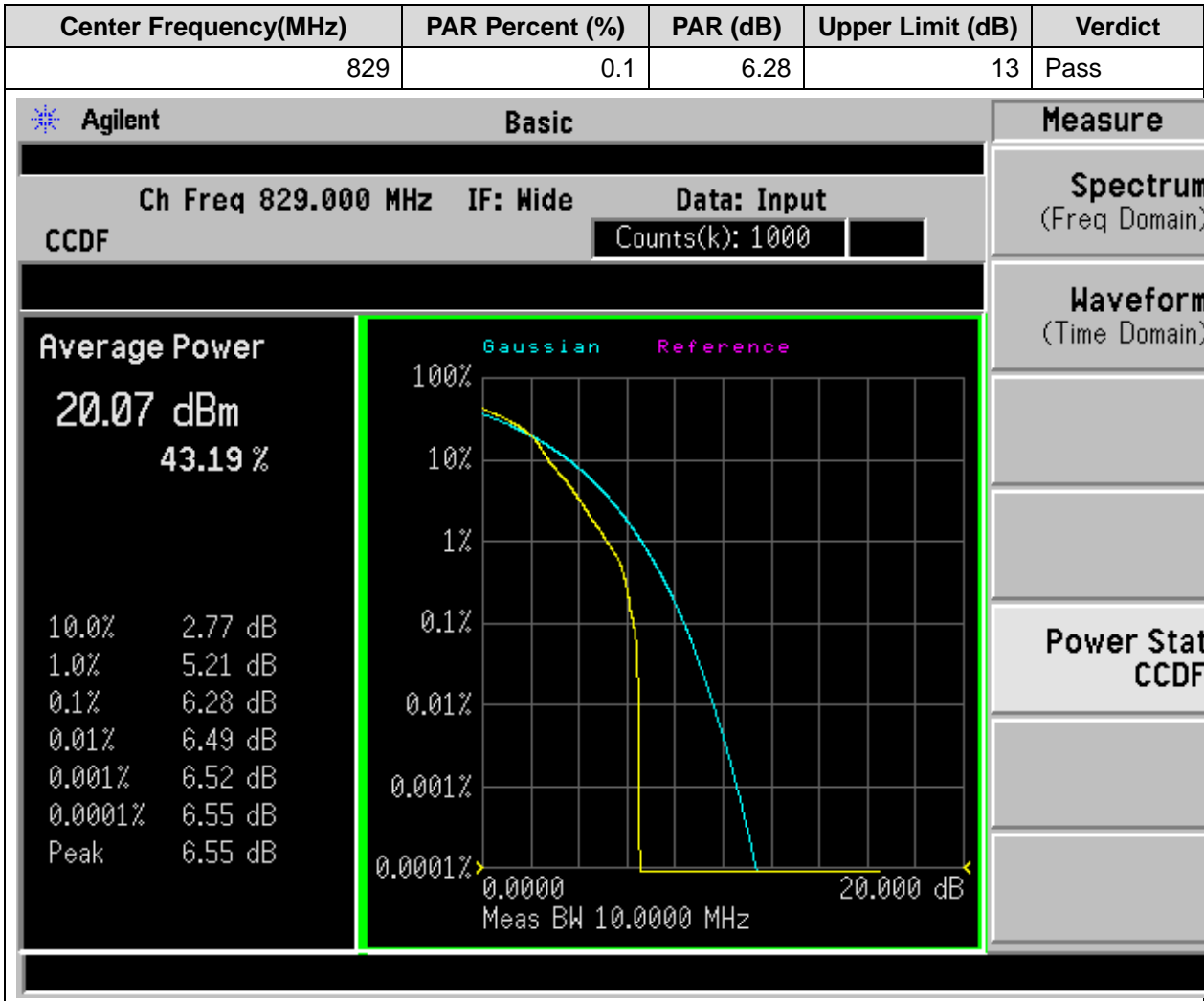
### 6.1. LTE Peak to Average Ratio(NTNV)(Subtest:1, Channel:20450, Bandwidth:10, Modulation:QPSK, RB Number: 1, RB Position:LOW)



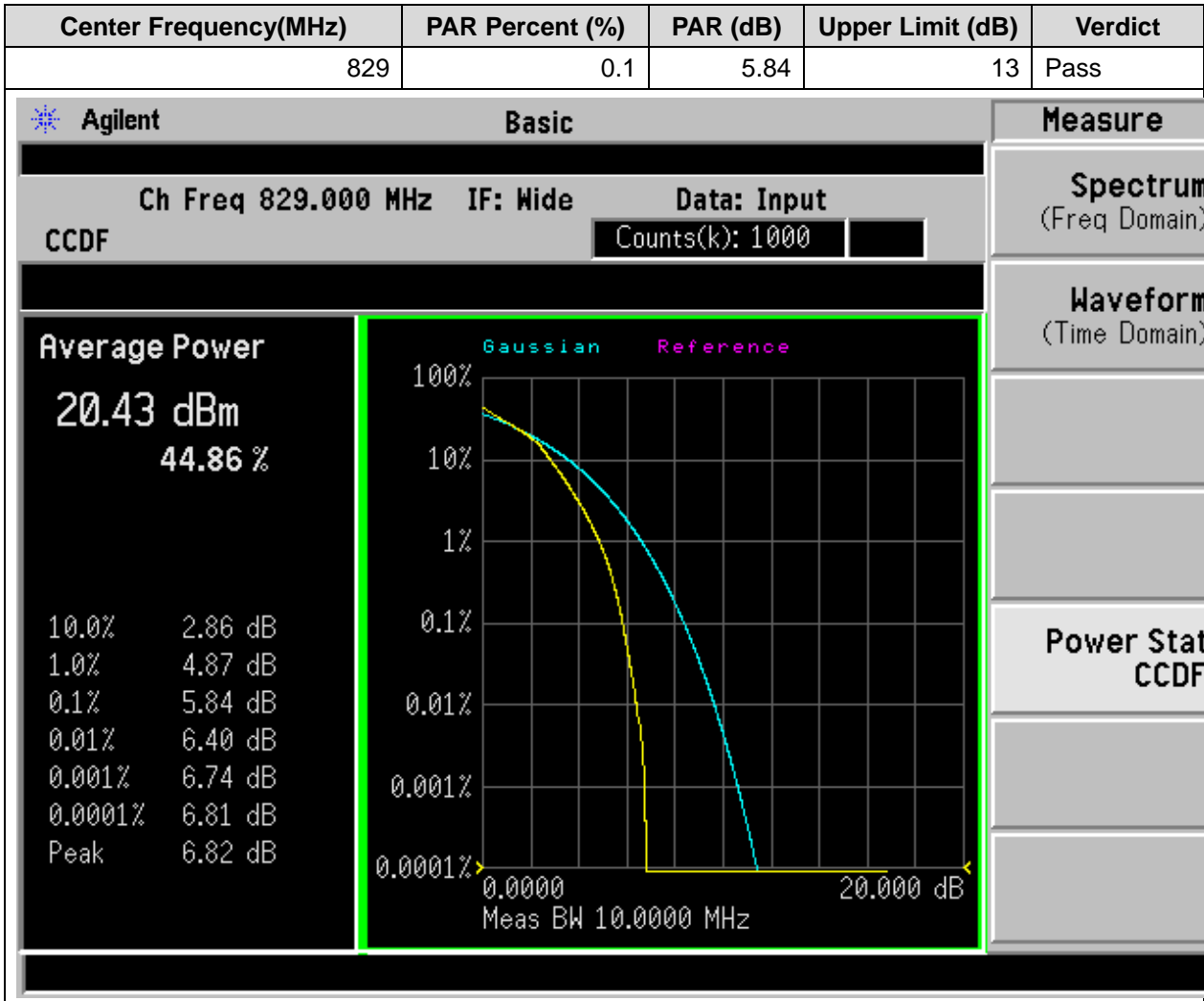
**6.2. LTE Peak to Average Ratio(NTNV)(Subtest:2, Channel:20450, Bandwidth:10, Modulation:QPSK, RB Number: 50, RB Position:LOW)**



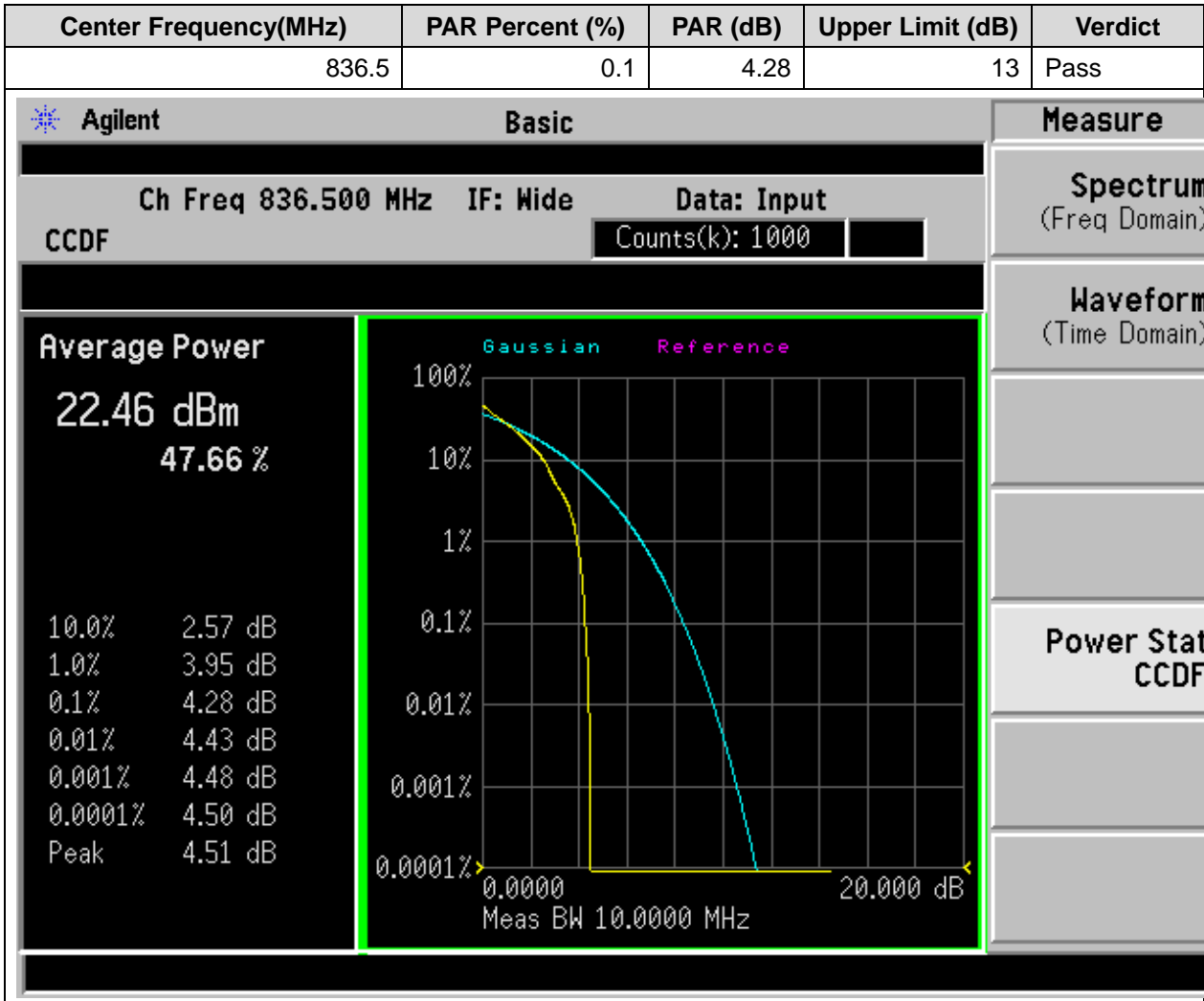
**6.3. LTE Peak to Average Ratio(NTNV)(Subtest:3, Channel:20450, Bandwidth:10, Modulation:Q16, RB Number: 1, RB Position:LOW)**



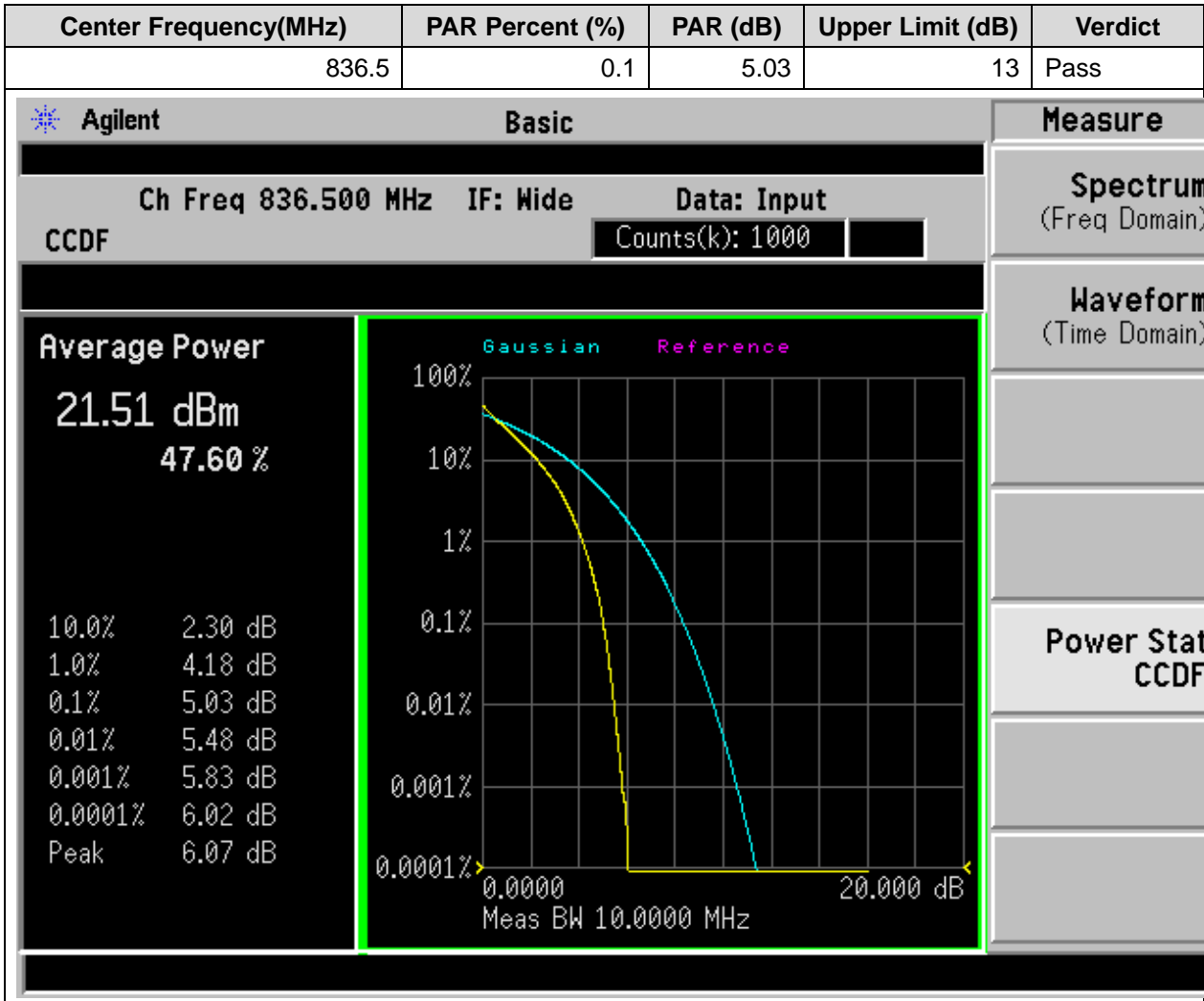
6.4. LTE Peak to Average Ratio(NTNV)(Subtest:4, Channel:20450, Bandwidth:10, Modulation:Q16, RB Number: 50, RB Position:LOW)



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

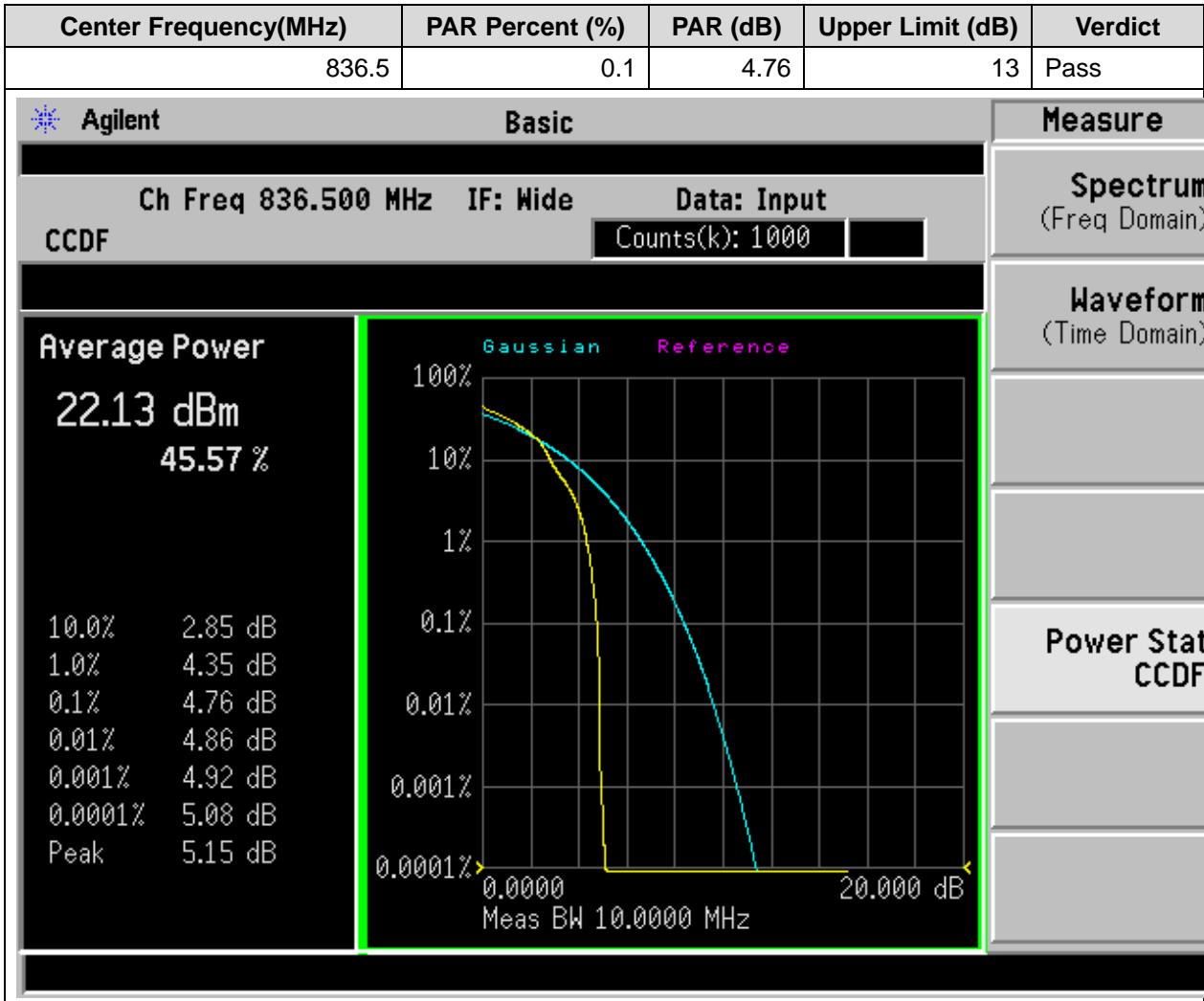


**6.6. LTE Peak to Average Ratio(NTNV)(Subtest:6, Channel:20525, Bandwidth:10, Modulation:QPSK, RB Number: 50, RB Position:LOW)**

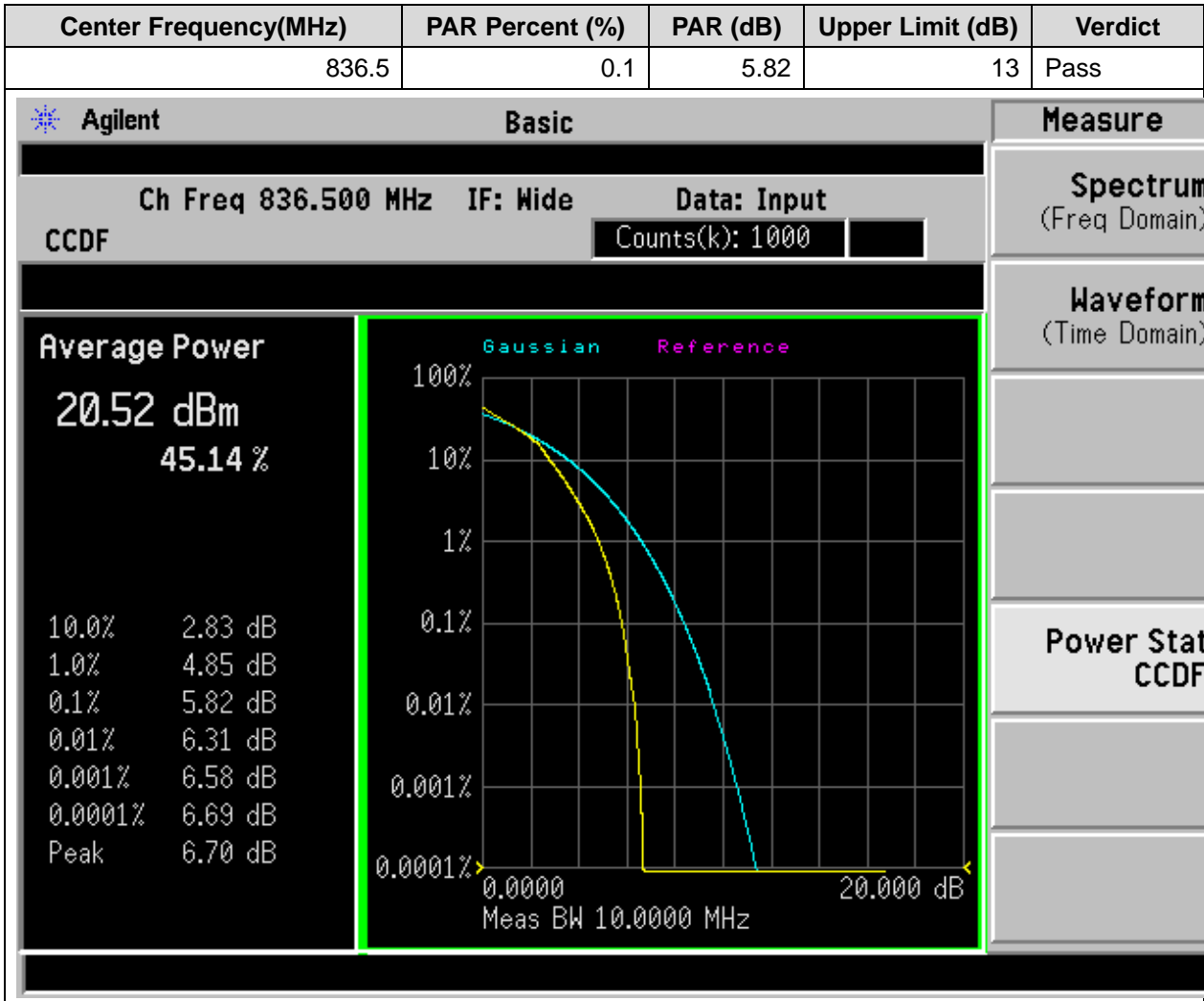




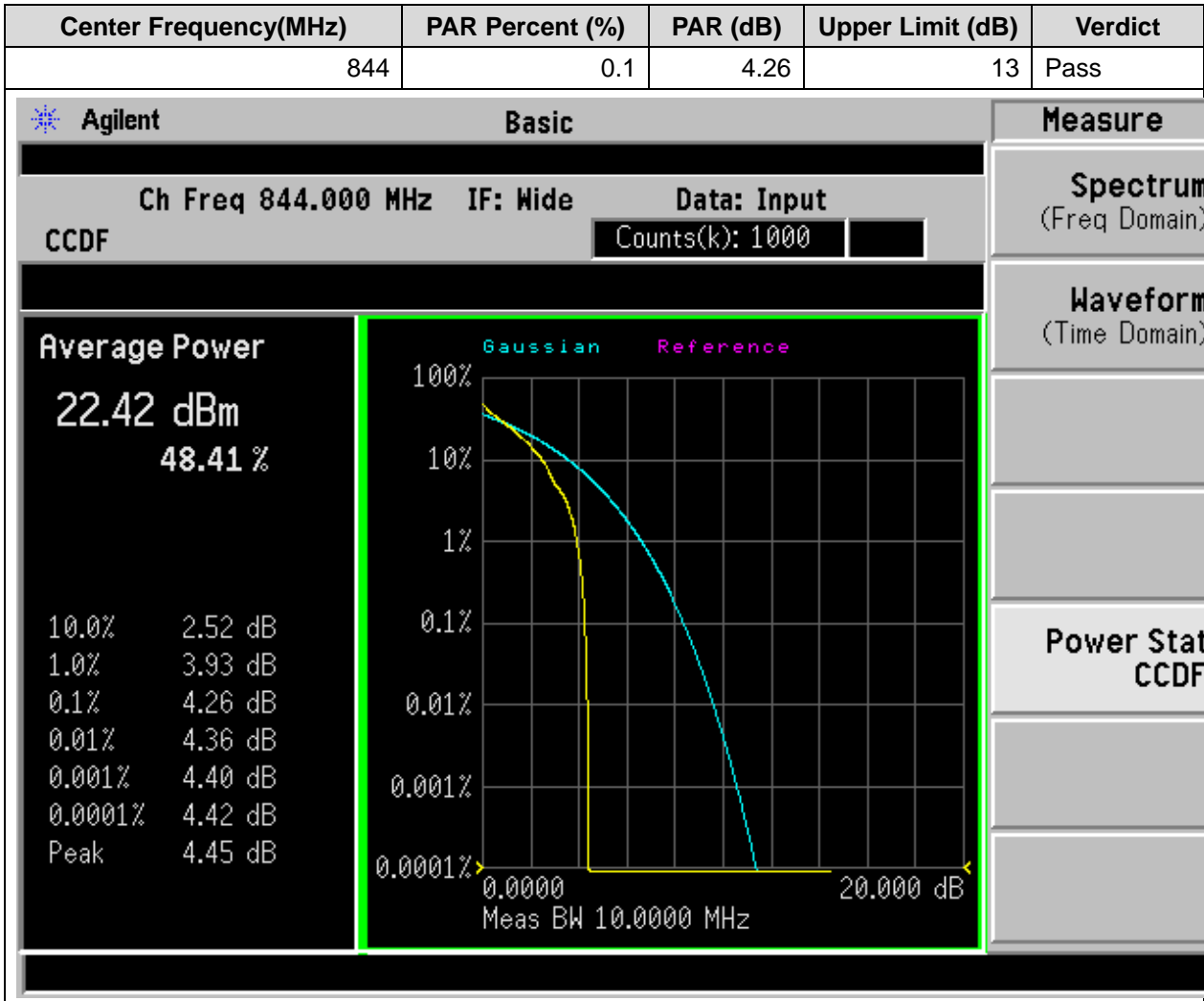
**6.7. LTE Peak to Average Ratio(NTNV)(Subtest:7, Channel:20525, Bandwidth:10, Modulation:Q16, RB Number: 1, RB Position:LOW)**



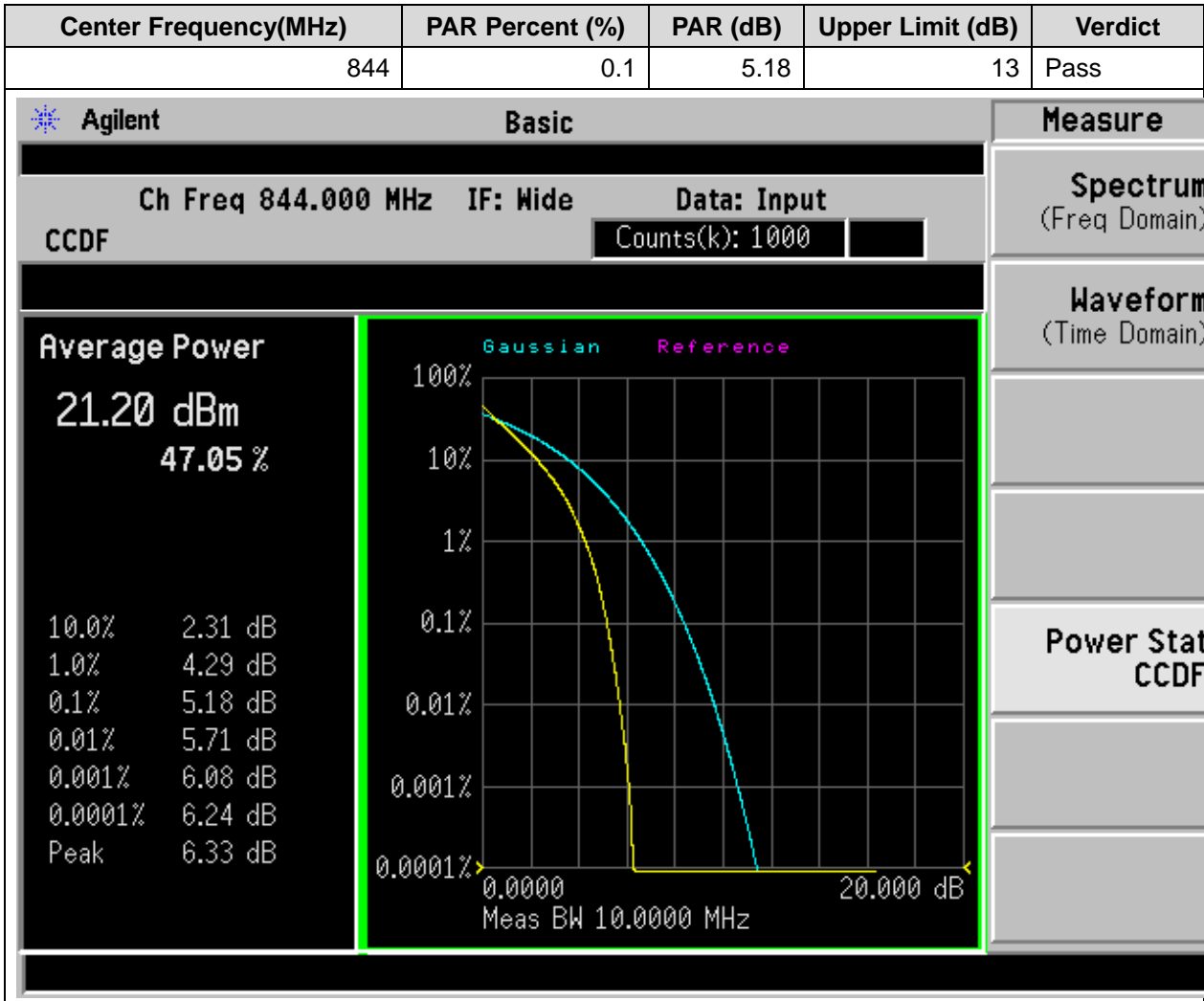
**6.8. LTE Peak to Average Ratio(NTNV)(Subtest:8, Channel:20525, Bandwidth:10, Modulation:Q16, RB Number: 50, RB Position:LOW)**



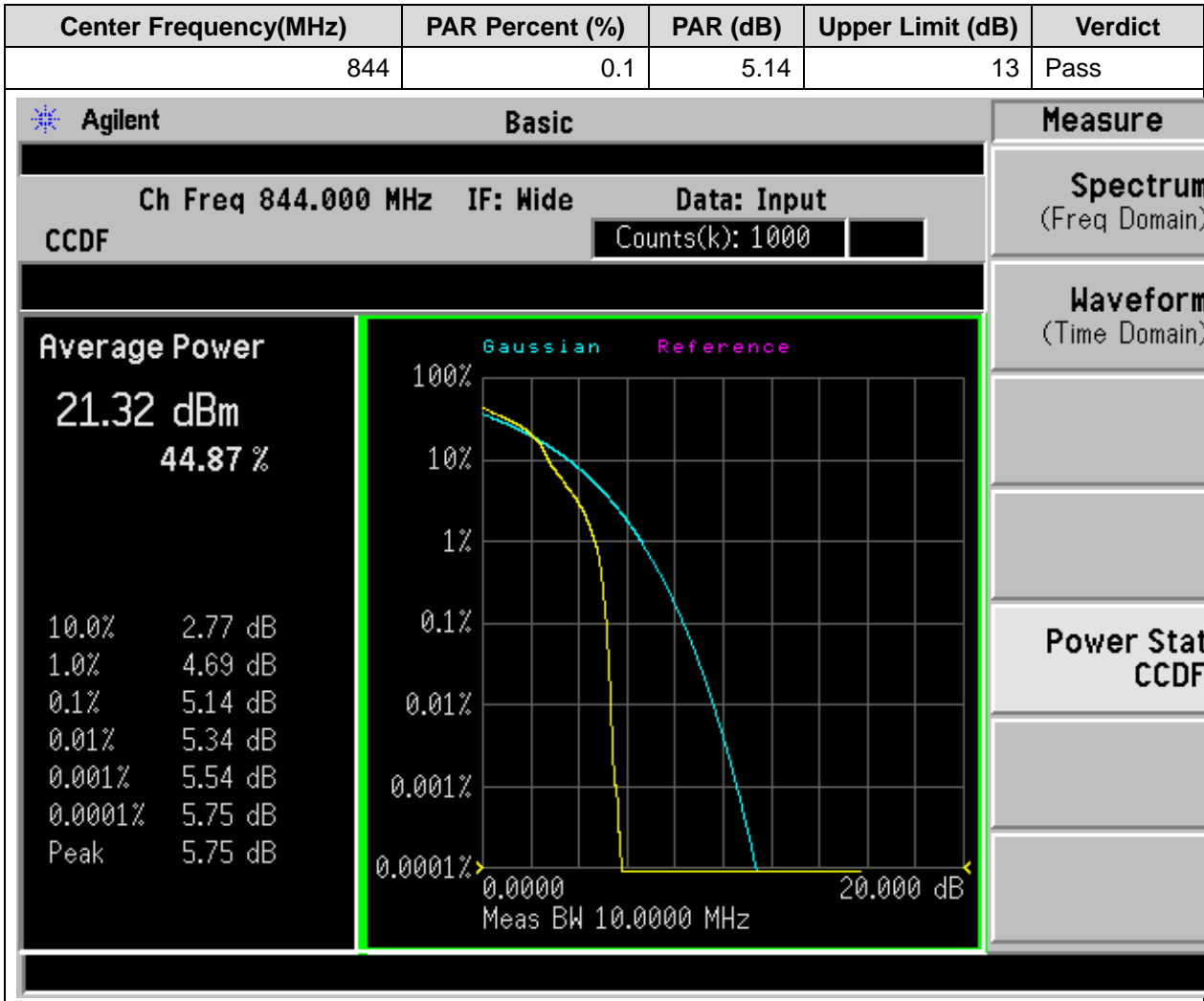
**6.9. LTE Peak to Average Ratio(NTNV)(Subtest:9, Channel:20600, Bandwidth:10, Modulation:QPSK, RB Number: 1, RB Position:LOW)**



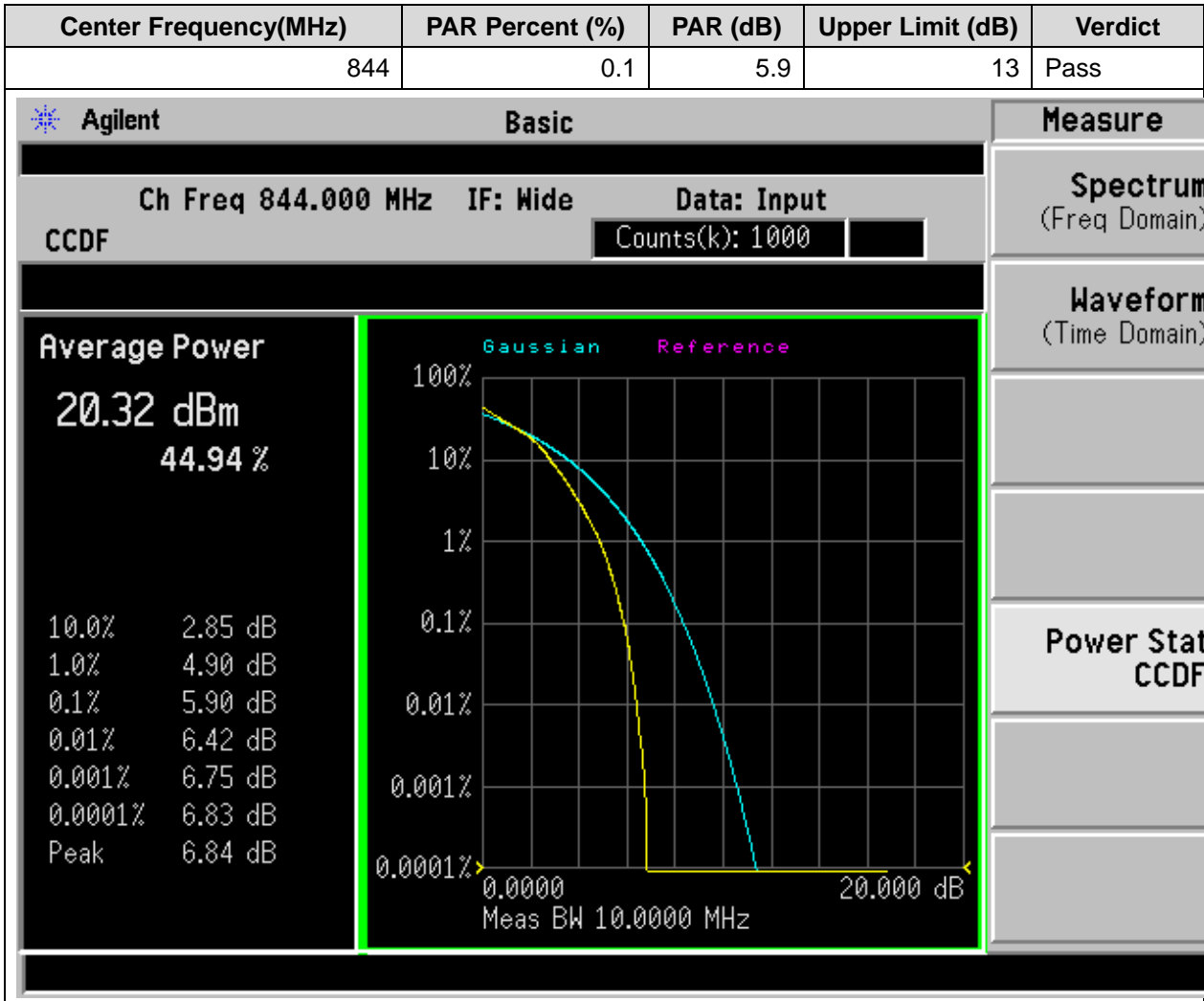
**6.10. LTE Peak to Average Ratio(NTNV)(Subtest:10, Channel:20600, Bandwidth:10, Modulation:QPSK, RB Number: 50, RB Position:LOW)**



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

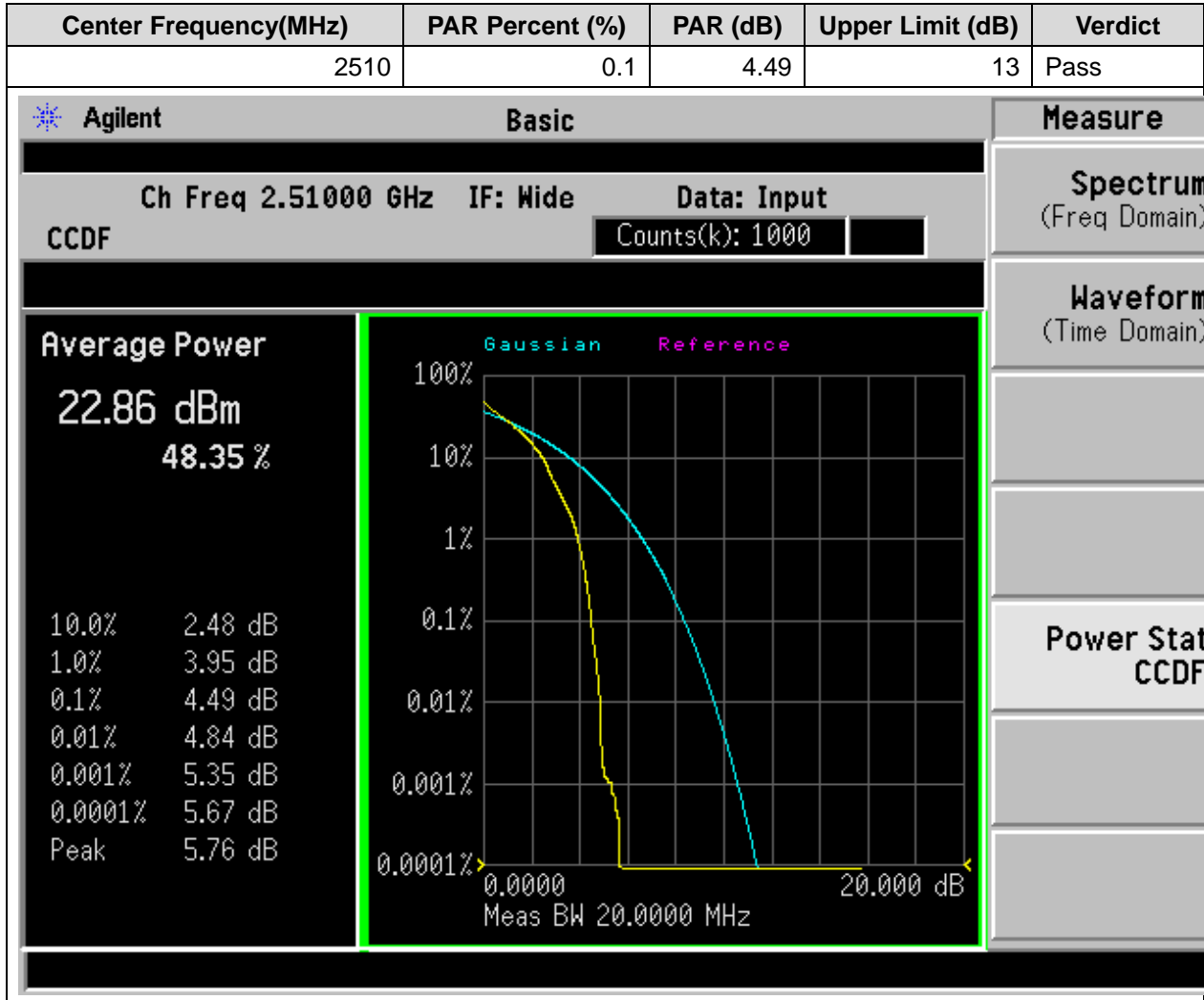


6.12. LTE Peak to Average Ratio(NTNV)(Subtest:12, Channel:20600, Bandwidth:10, Modulation:Q16, RB Number: 50, RB Position:LOW)

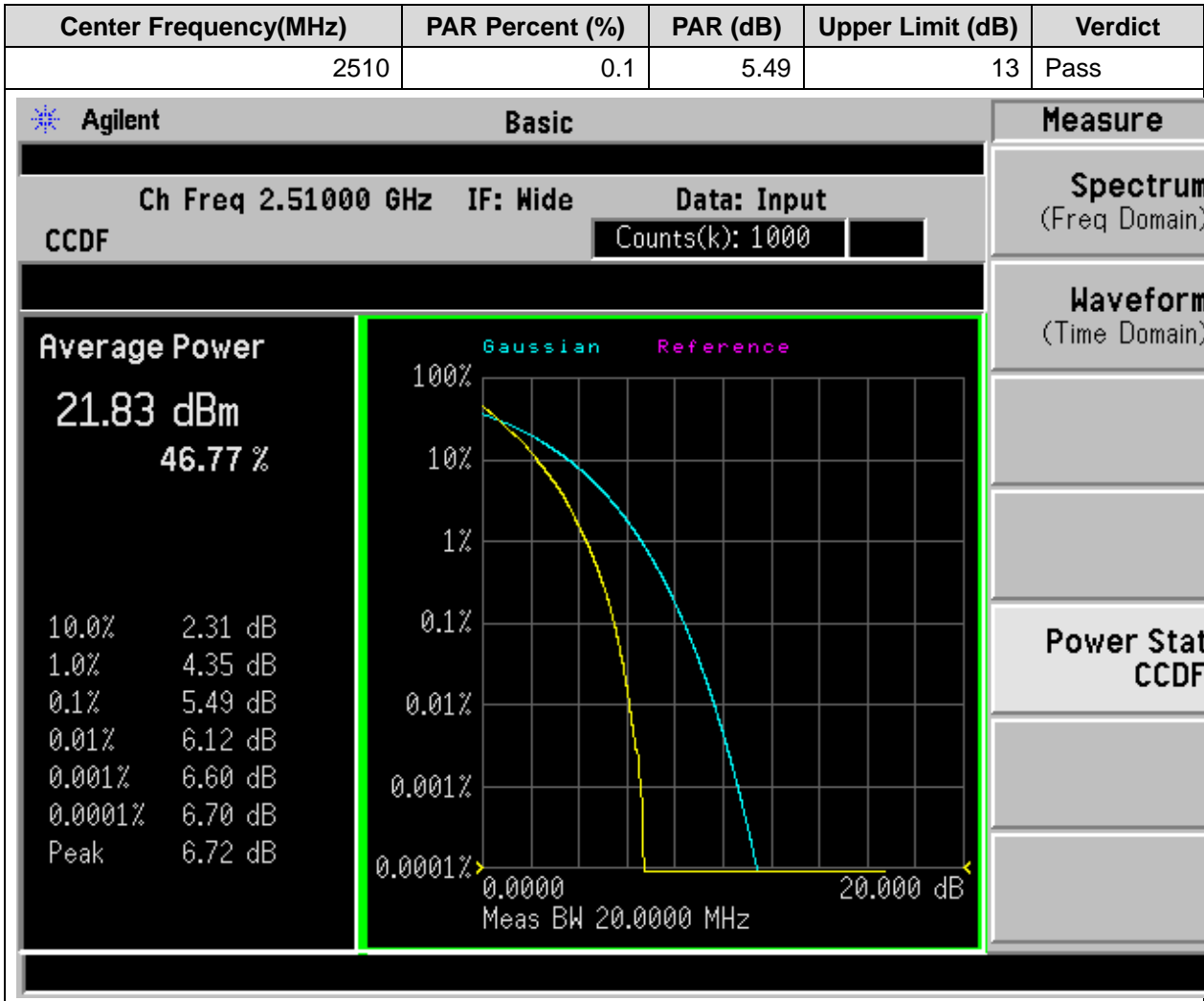


## 7. LTE\_Band7

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

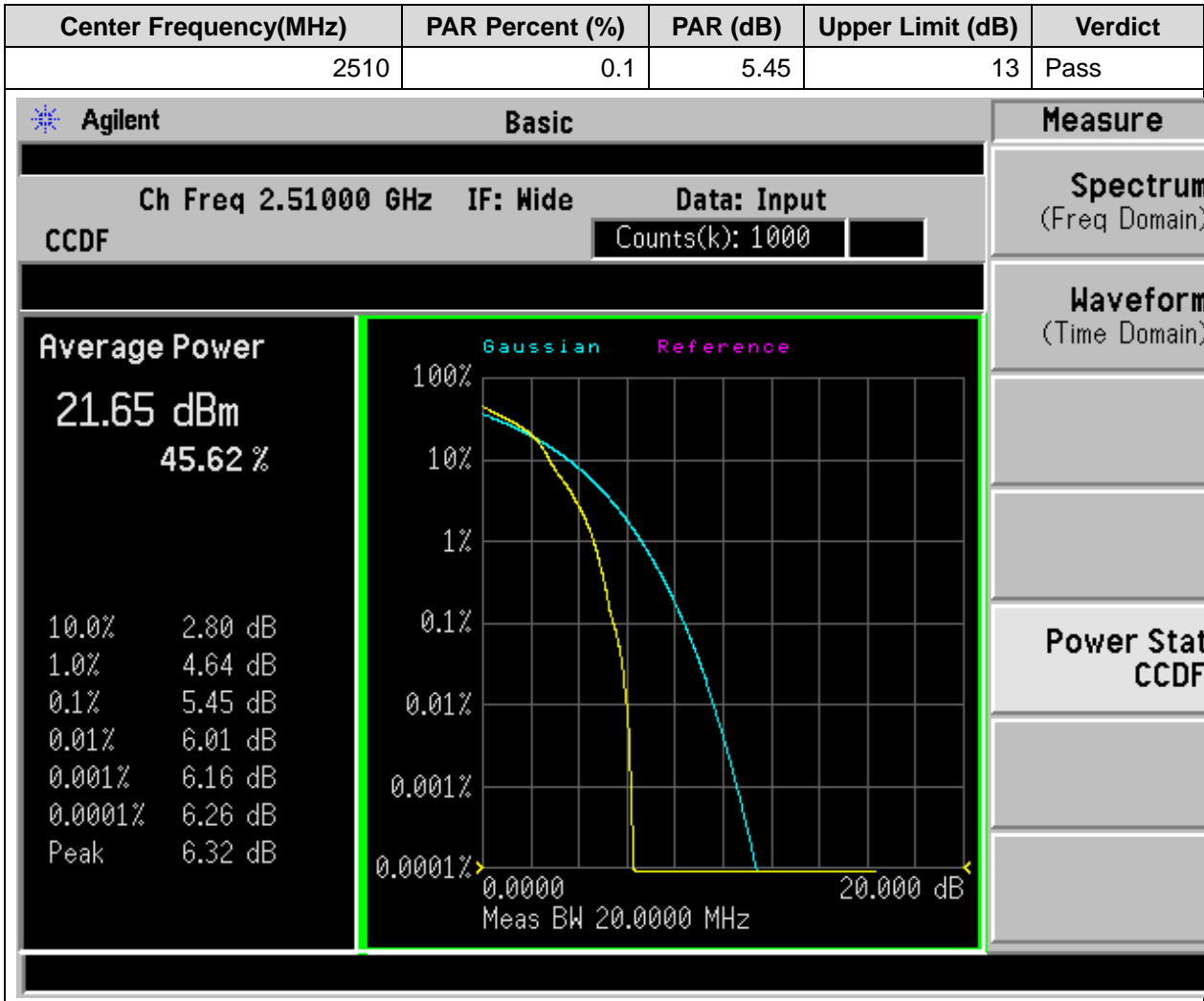


**7.2. LTE Peak to Average Ratio(NTNV)(Subtest:2, Channel:20850, Bandwidth:20, Modulation:QPSK, RB Number: 100, RB Position:LOW)**

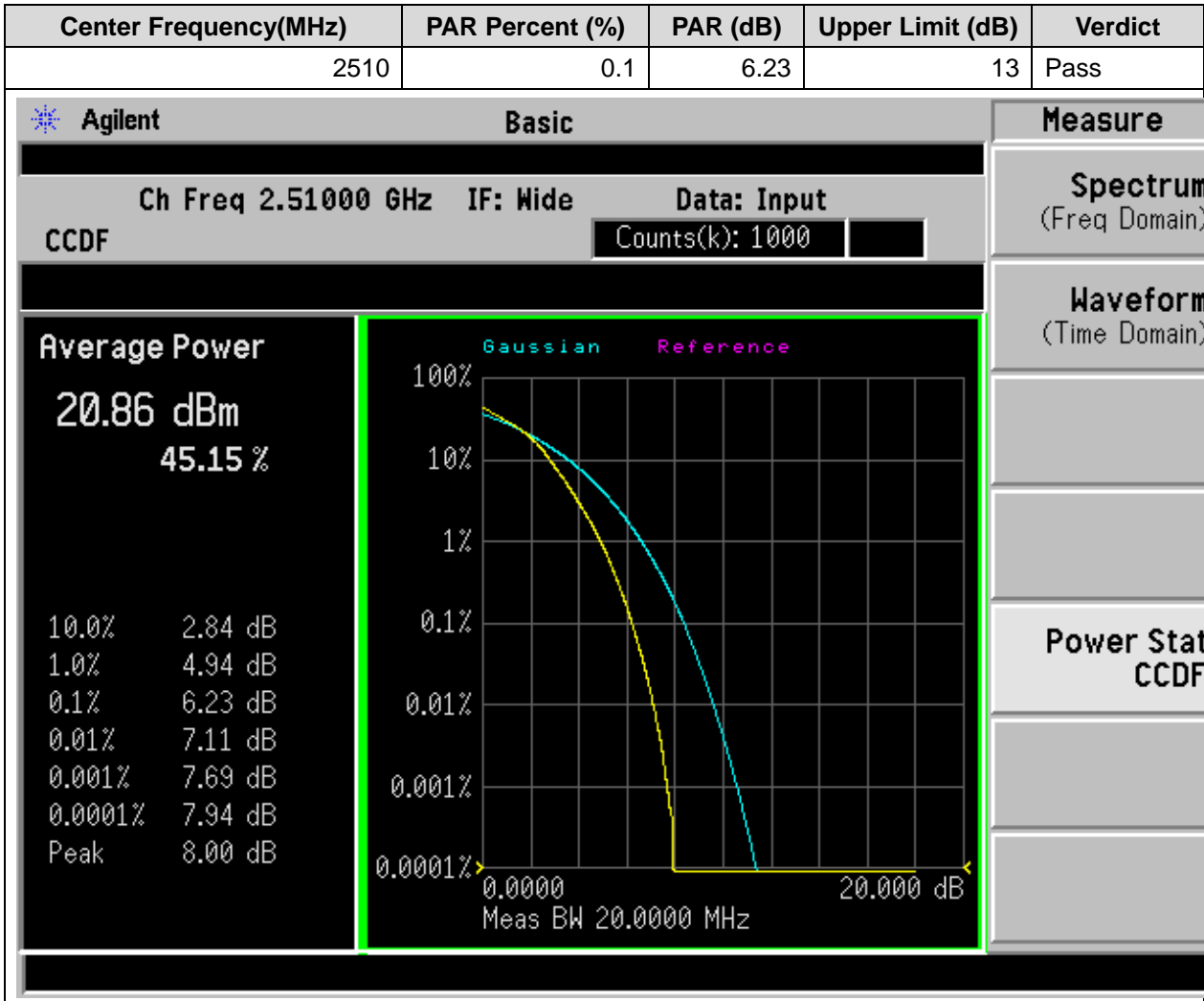




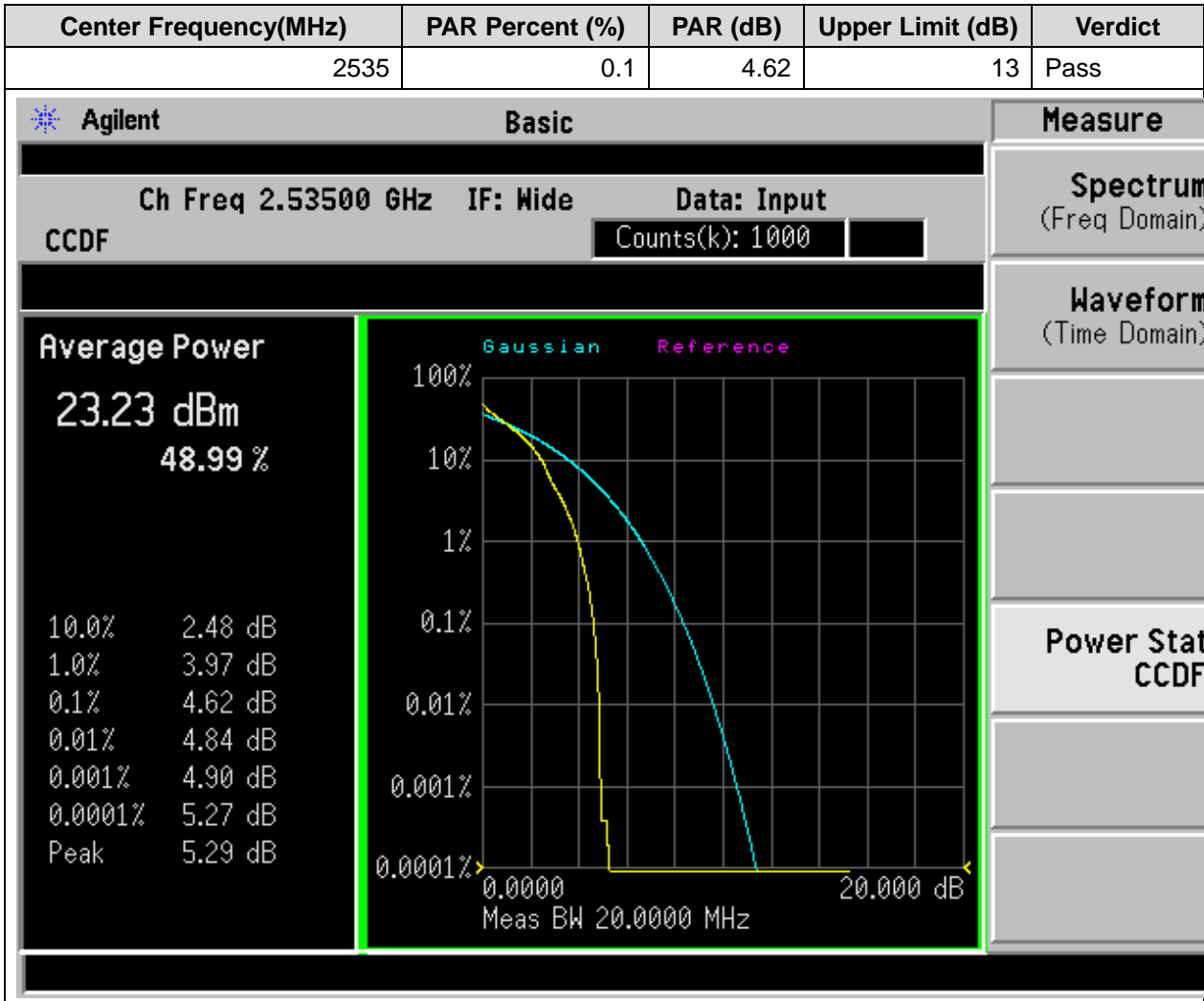
**7.3. LTE Peak to Average Ratio(NTNV)(Subtest:3, Channel:20850, Bandwidth:20, Modulation:Q16, RB Number: 1, RB Position:LOW)**



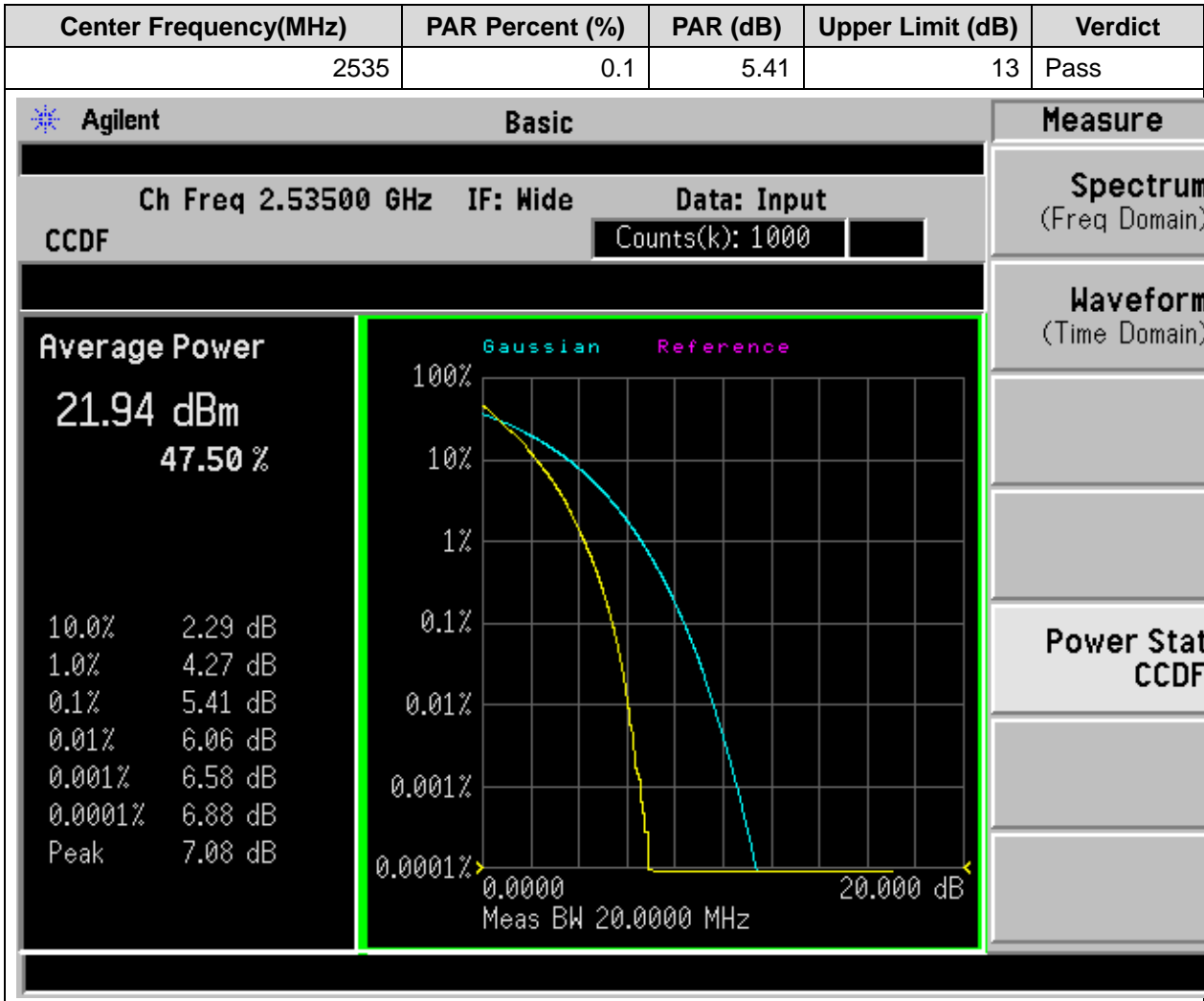
**7.4. LTE Peak to Average Ratio(NTNV)(Subtest:4, Channel:20850, Bandwidth:20, Modulation:Q16, RB Number: 100, RB Position:LOW)**



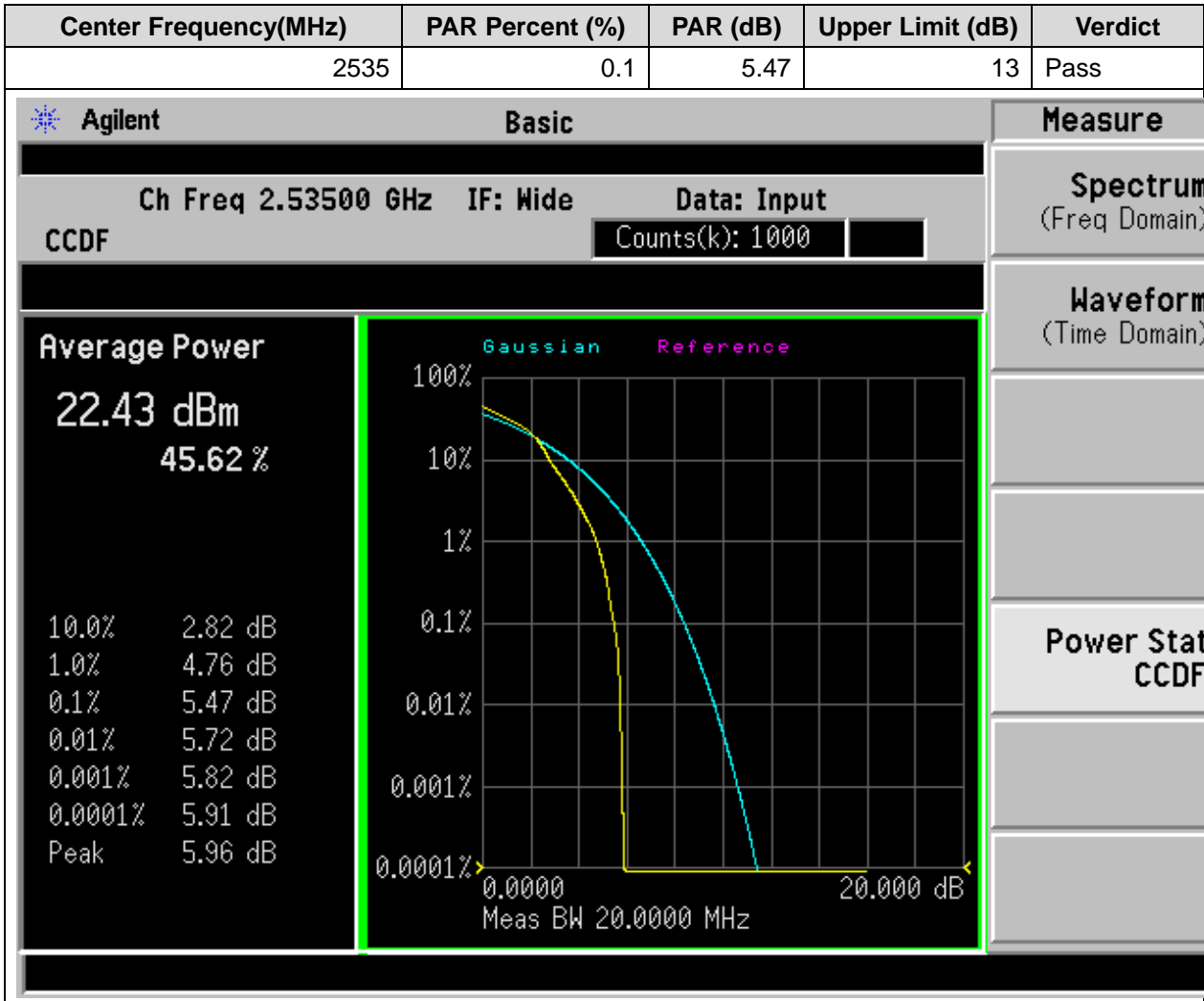
**7.5. LTE Peak to Average Ratio(NTNV)(Subtest:5, Channel:21100, Bandwidth:20, Modulation:QPSK, RB Number: 1, RB Position:LOW)**



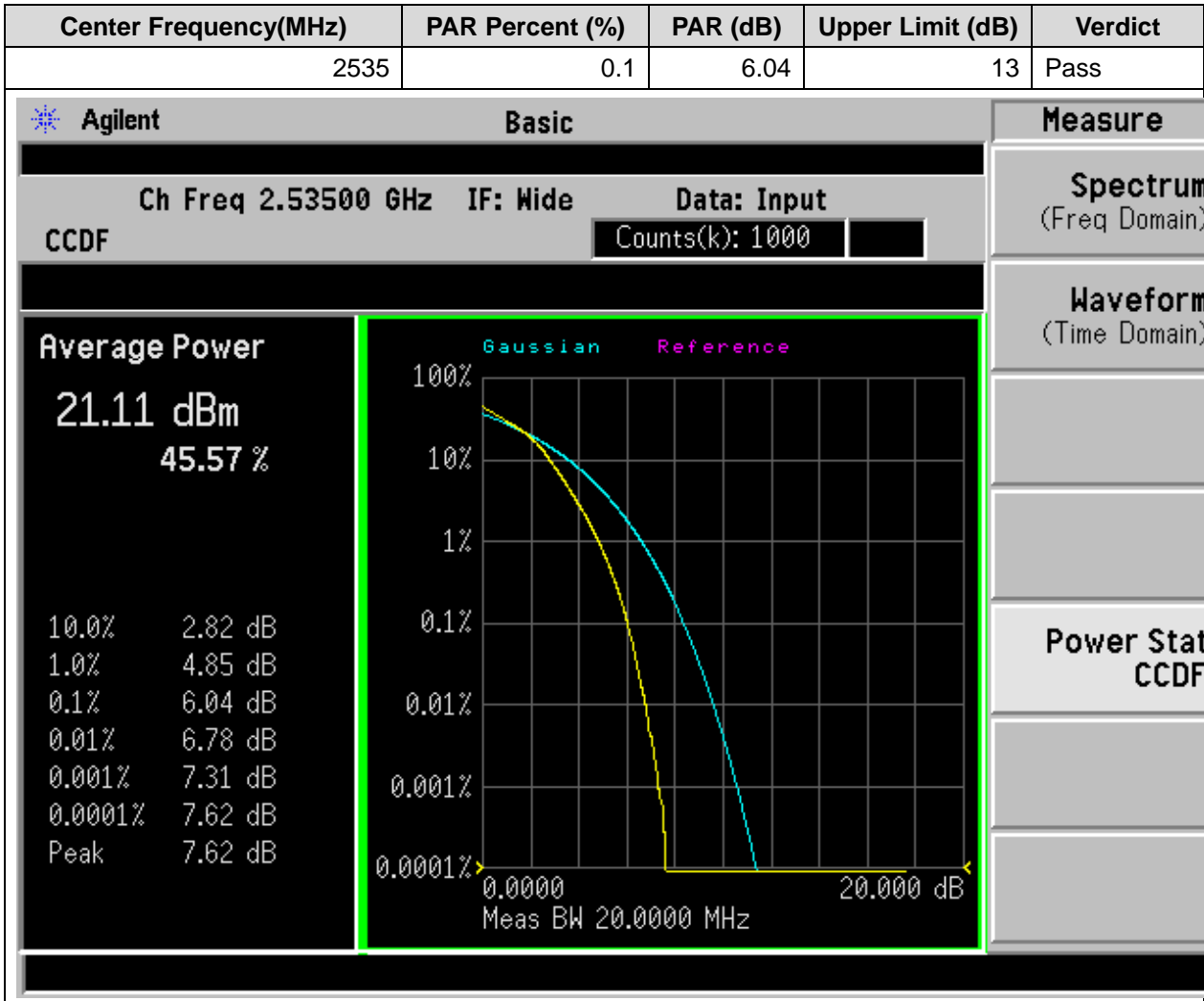
**7.6. LTE Peak to Average Ratio(NTNV)(Subtest:6, Channel:21100, Bandwidth:20, Modulation:QPSK, RB Number: 100, RB Position:LOW)**



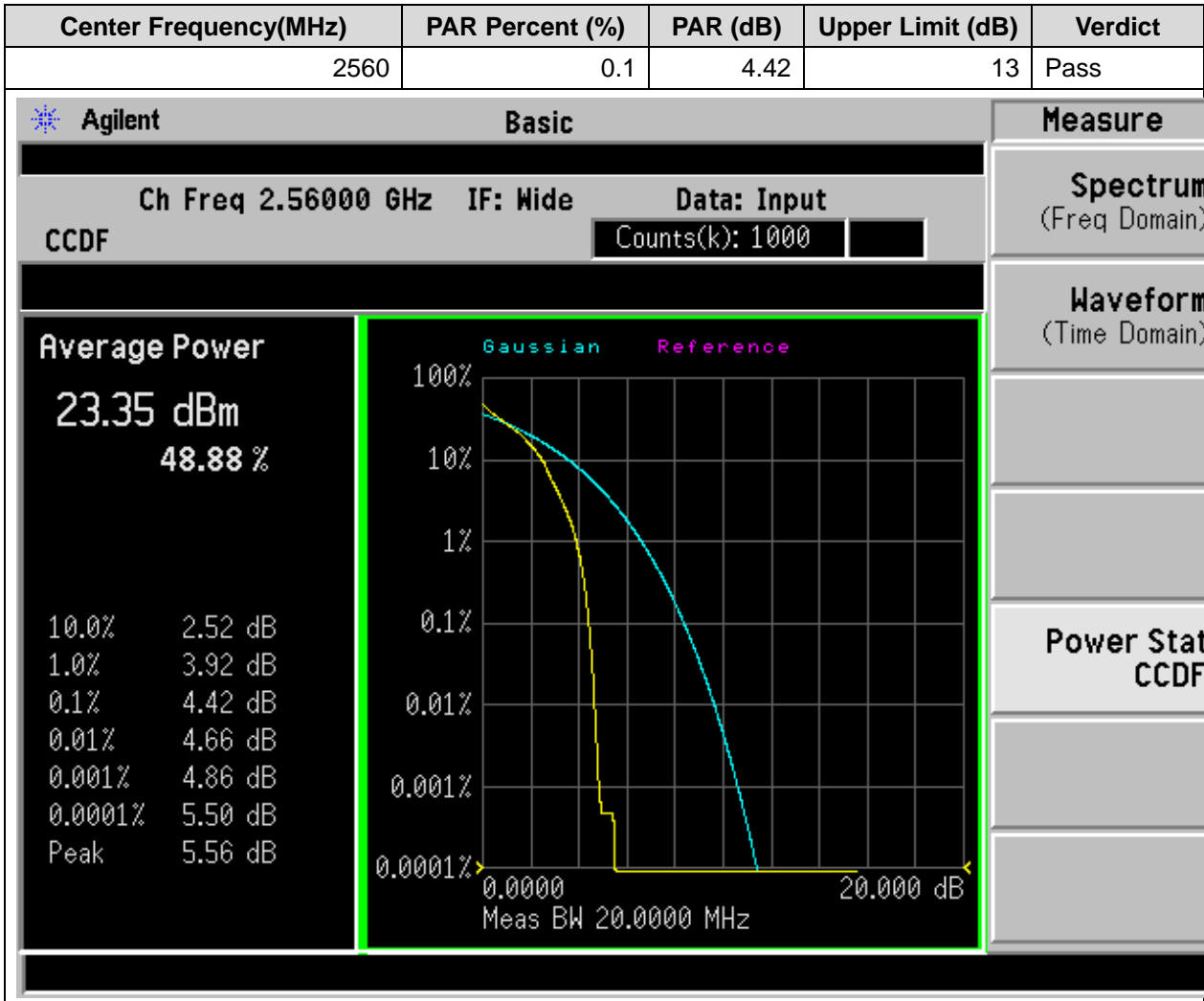
**7.7. LTE Peak to Average Ratio(NTNV)(Subtest:7, Channel:21100, Bandwidth:20, Modulation:Q16, RB Number: 1, RB Position:LOW)**



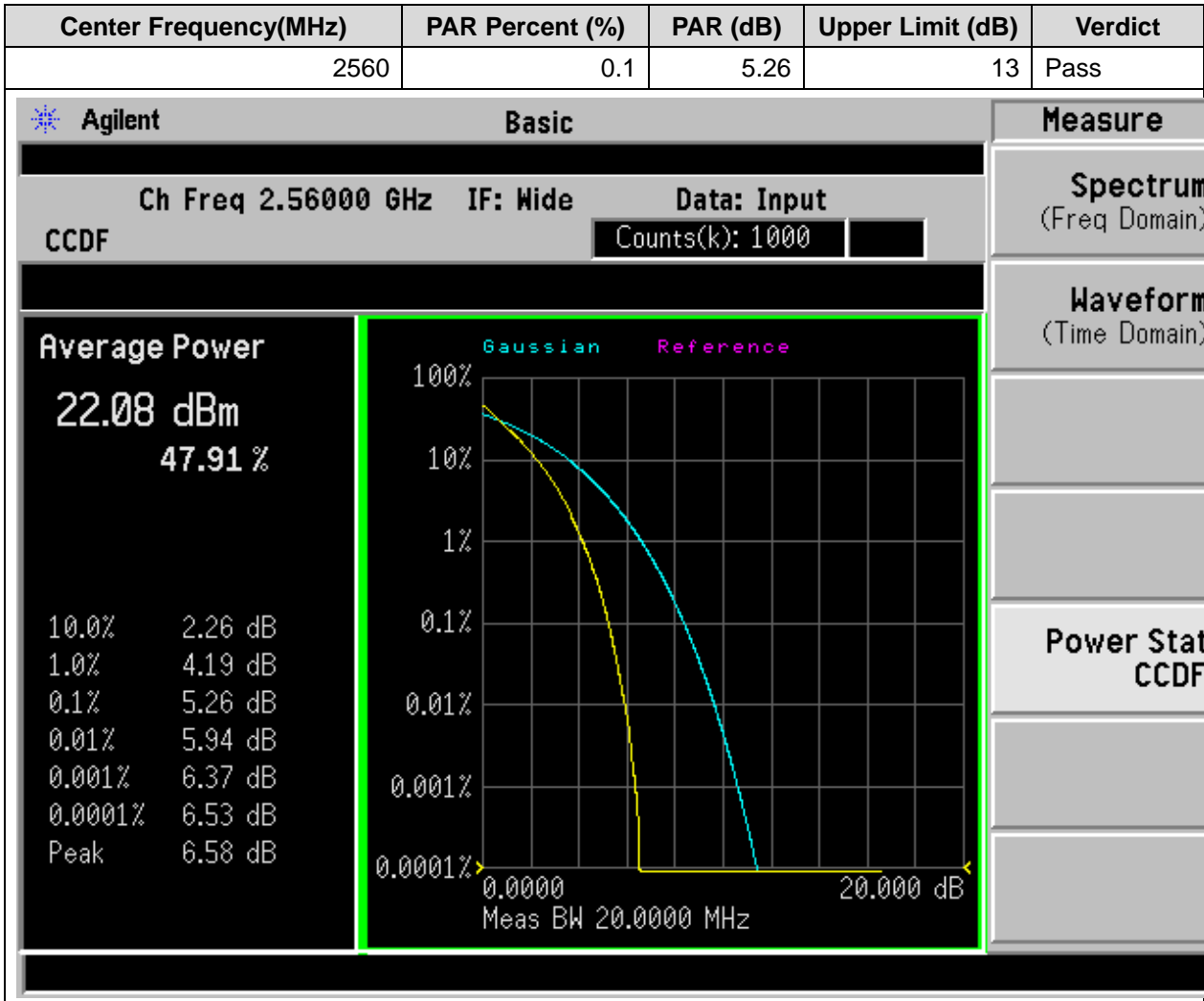
**7.8. LTE Peak to Average Ratio(NTNV)(Subtest:8, Channel:21100, Bandwidth:20, Modulation:Q16, RB Number: 100, RB Position:LOW)**



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

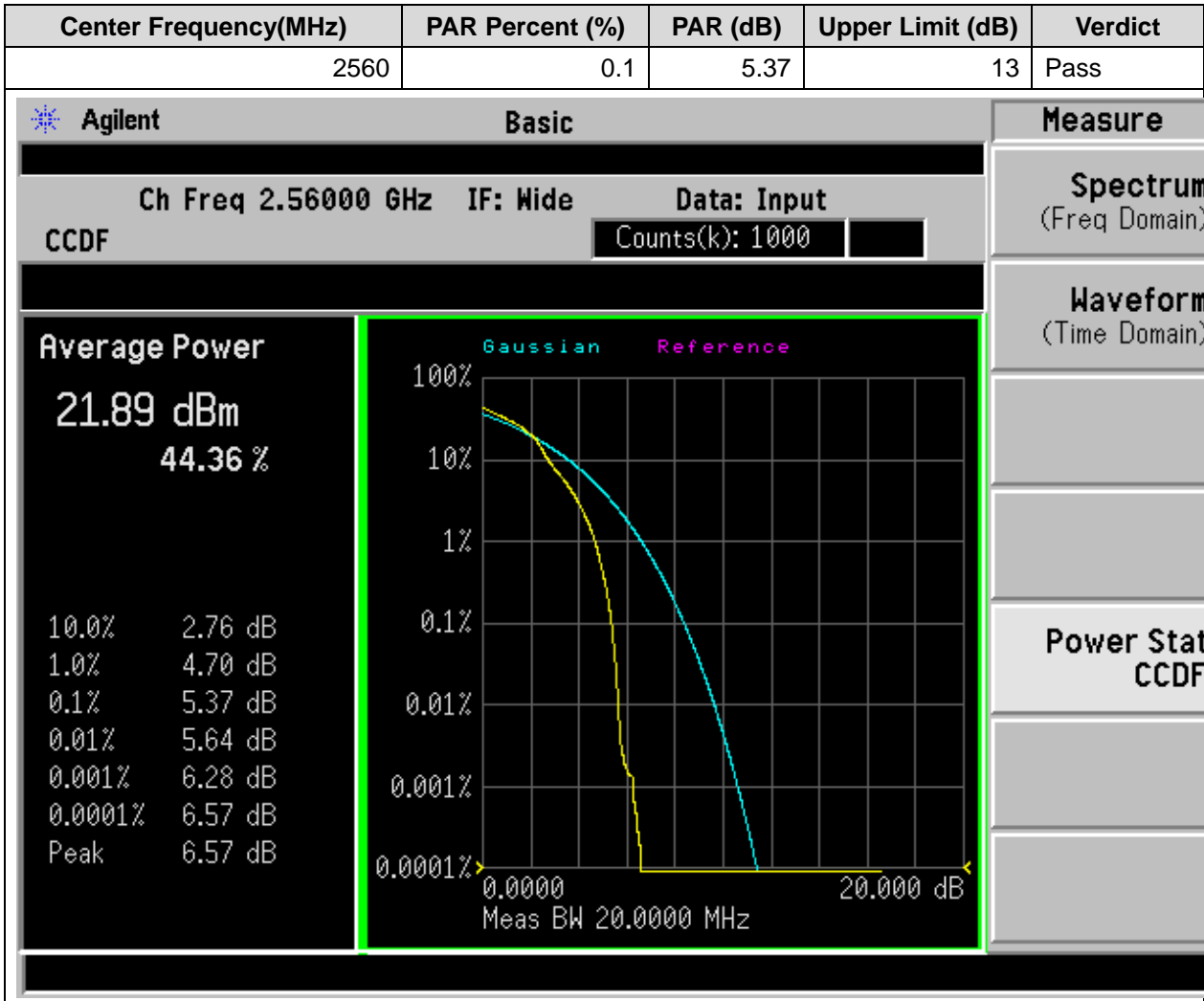


**7.10. LTE Peak to Average Ratio(NTNV)(Subtest:10, Channel:21350, Bandwidth:20, Modulation:QPSK, RB Number: 100, RB Position:LOW)**

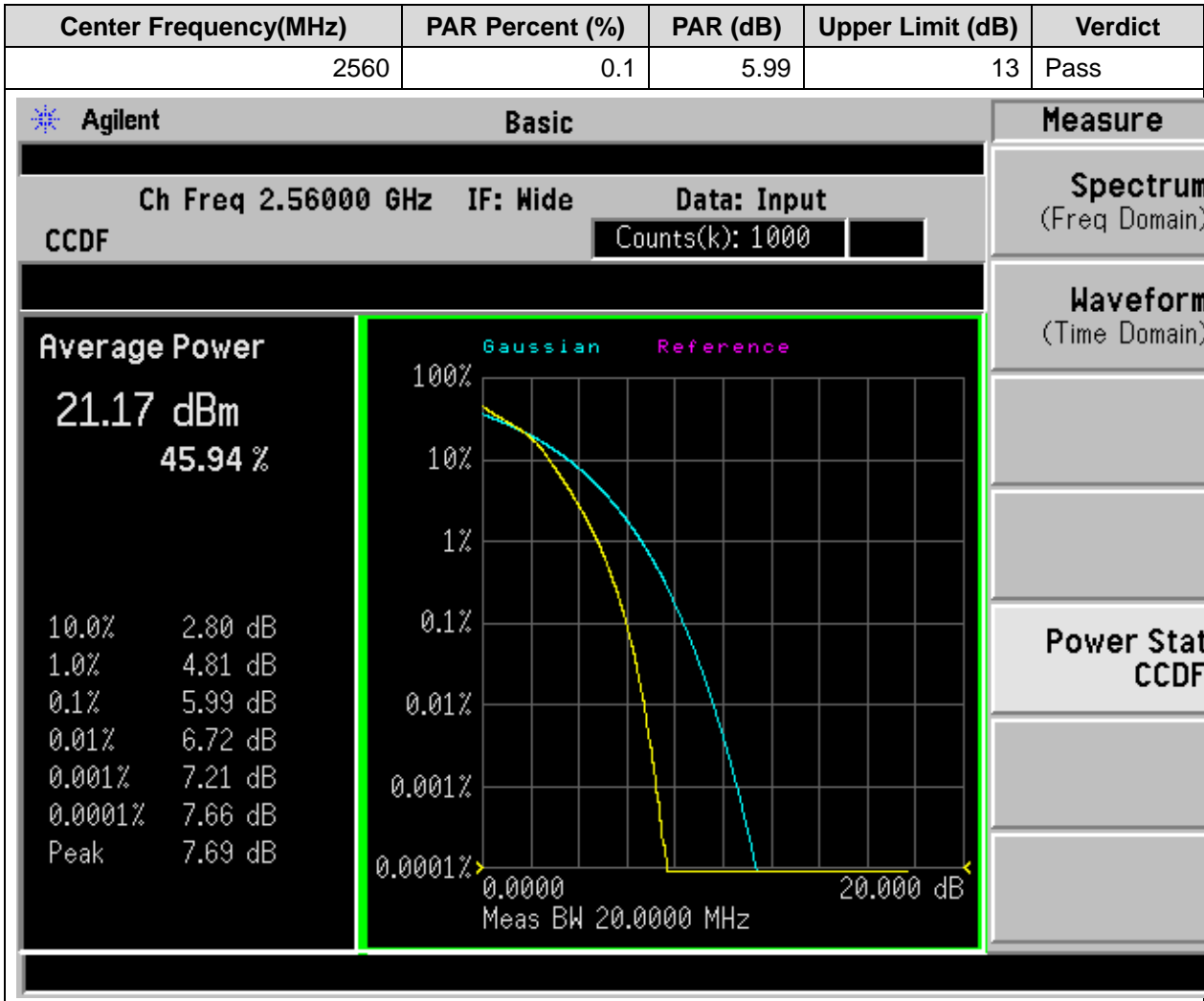




7.11. LTE Peak to Average Ratio(NTNV)(Subtest:11, Channel:21350, Bandwidth:20, Modulation:Q16, RB Number: 1, RB Position:LOW)

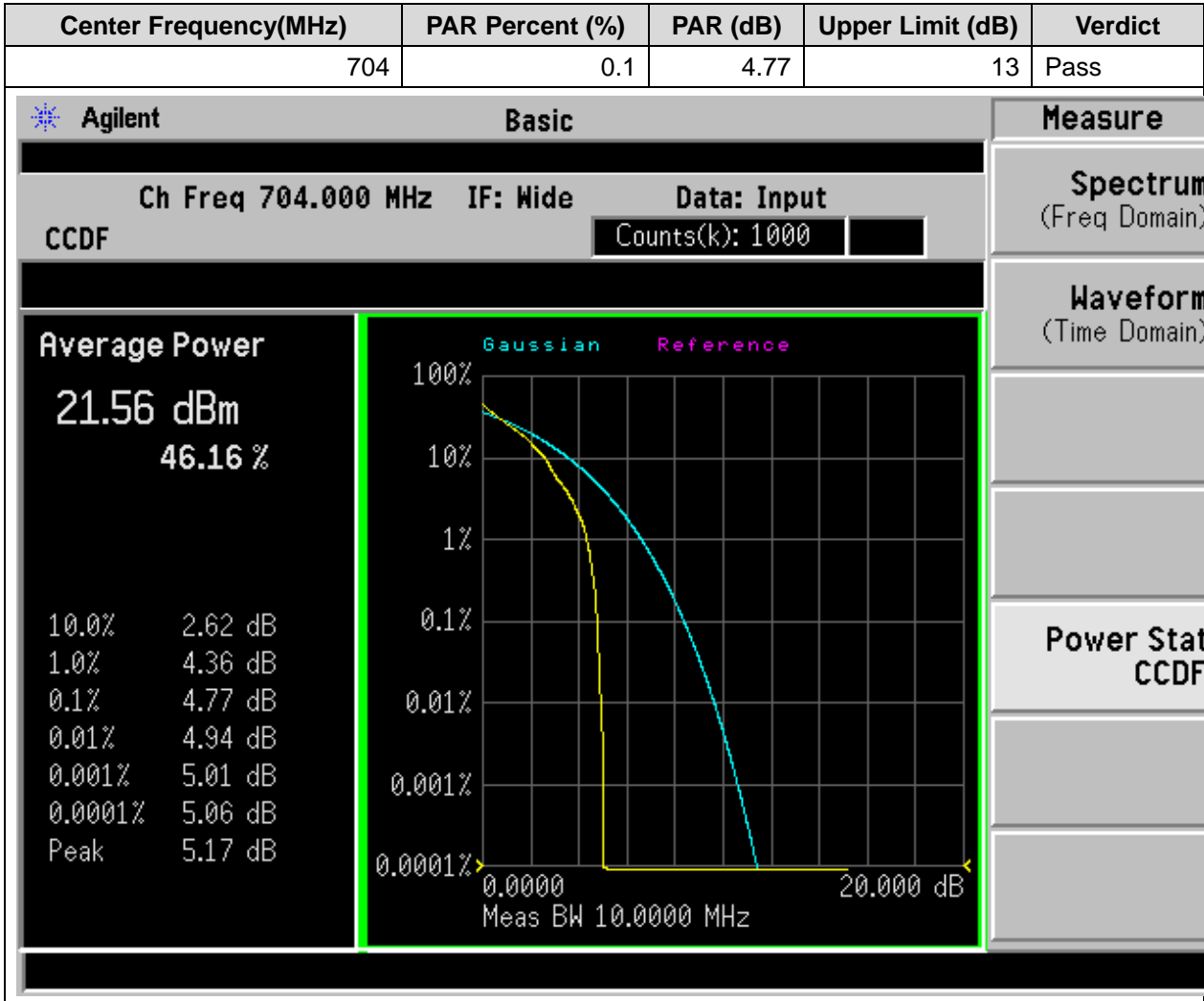


**7.12. LTE Peak to Average Ratio(NTNV)(Subtest:12, Channel:21350, Bandwidth:20, Modulation:Q16, RB Number: 100, RB Position:LOW)**

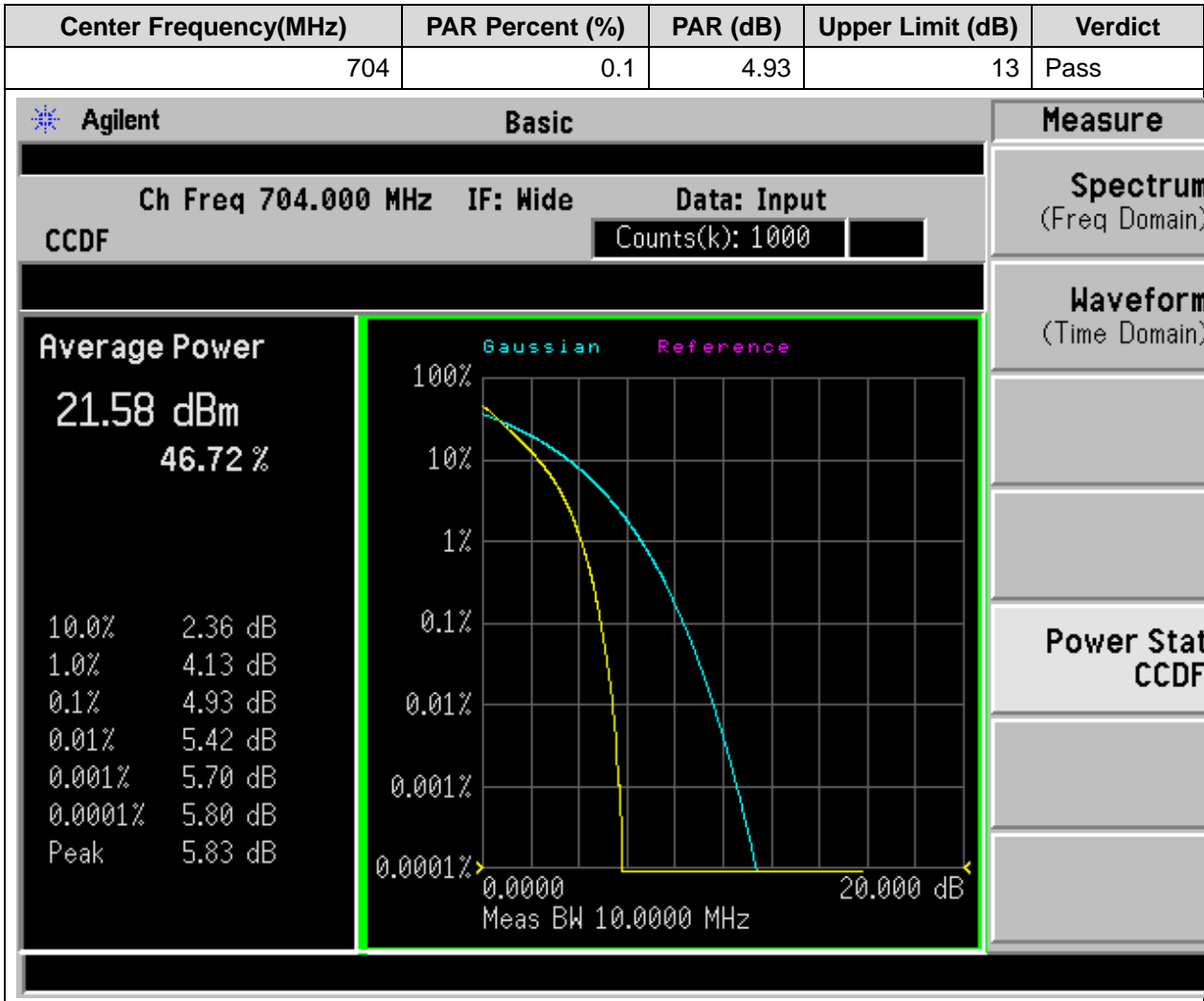


## 8. LTE\_Band12

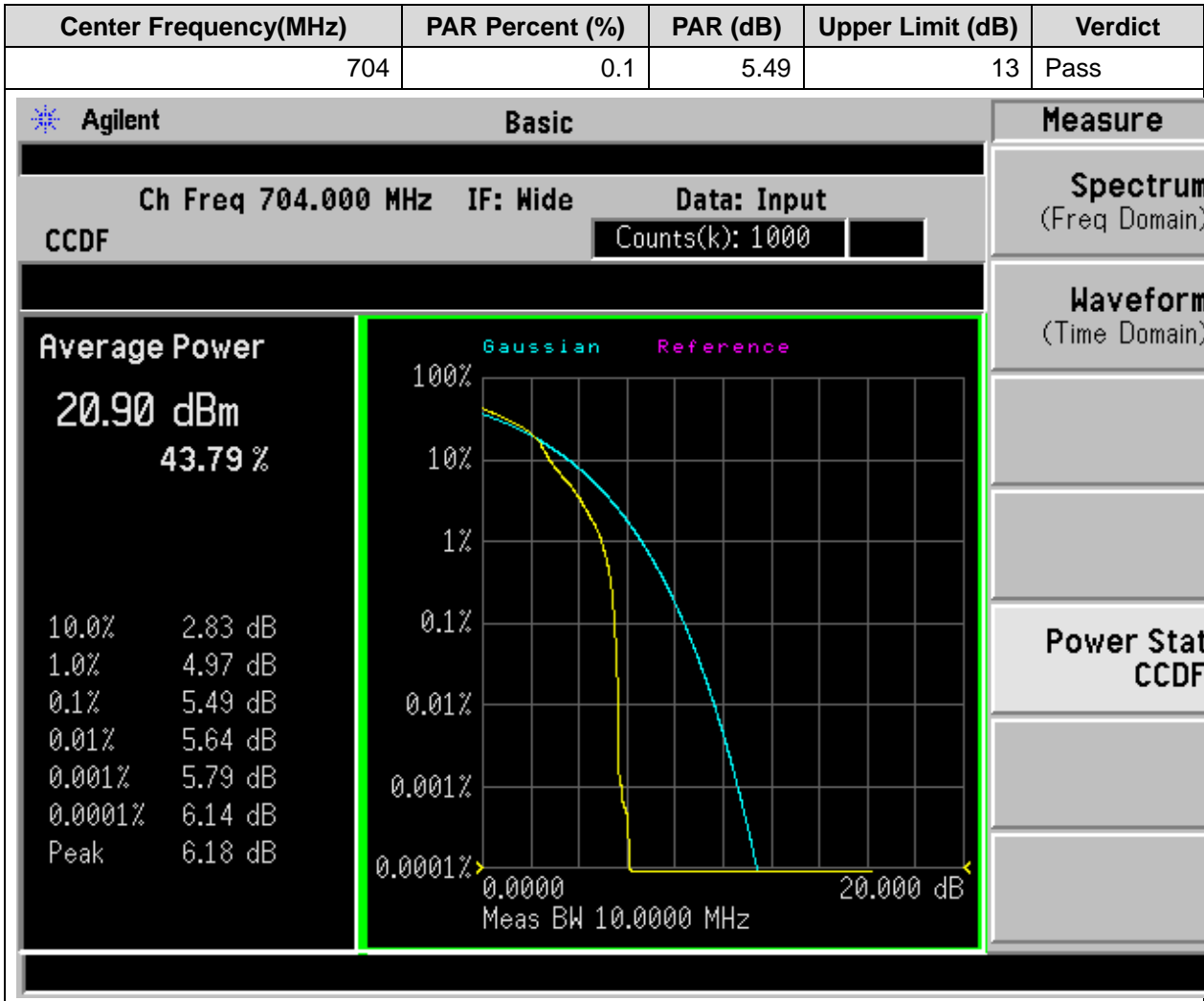
### 8.1. LTE Peak to Average Ratio(NTNV)(Subtest:1, Channel:23060, Bandwidth:10, Modulation:QPSK, RB Number: 1, RB Position:LOW)



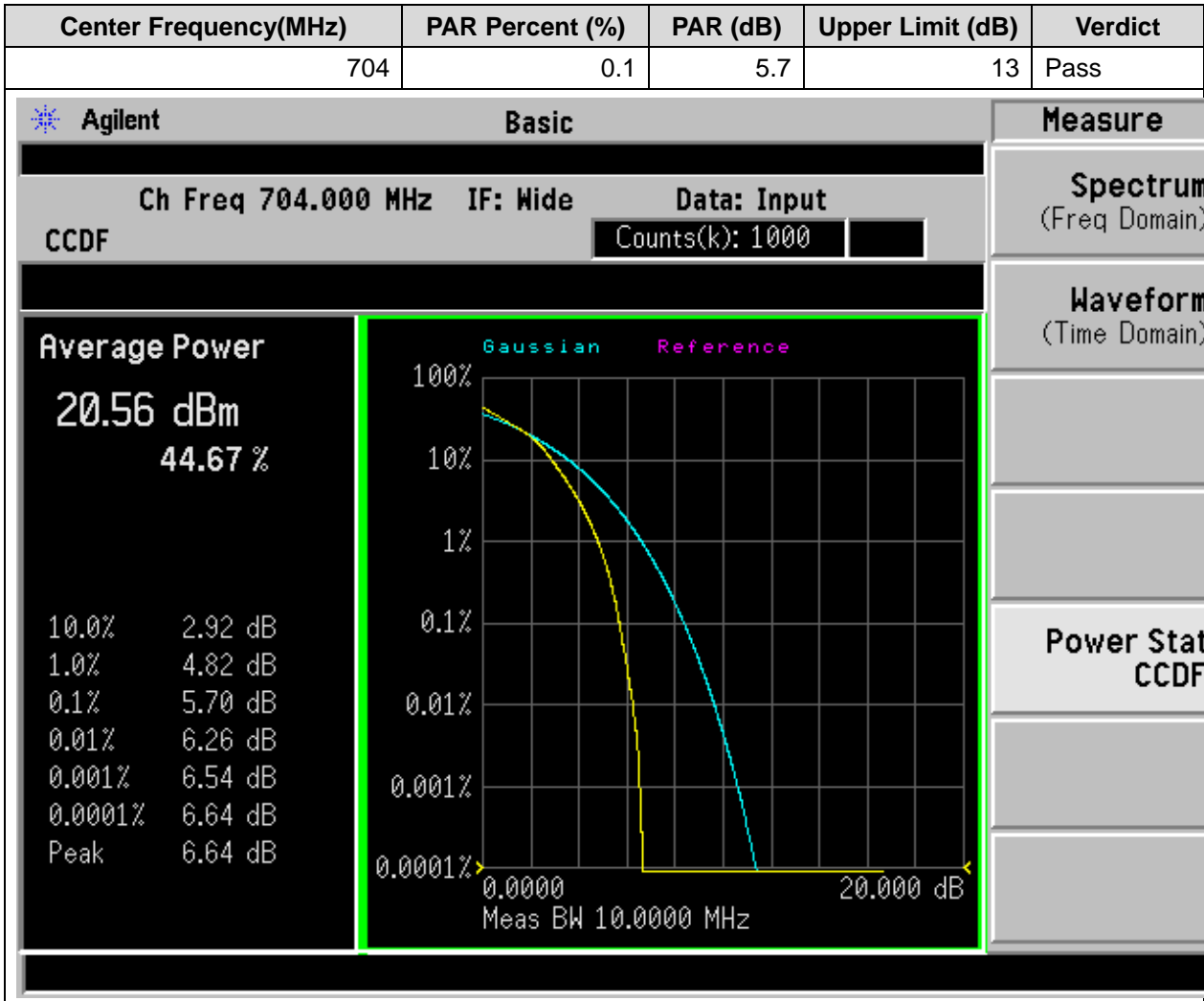
**8.2. LTE Peak to Average Ratio(NTNV)(Subtest:2, Channel:23060, Bandwidth:10, Modulation:QPSK, RB Number: 50, RB Position:LOW)**



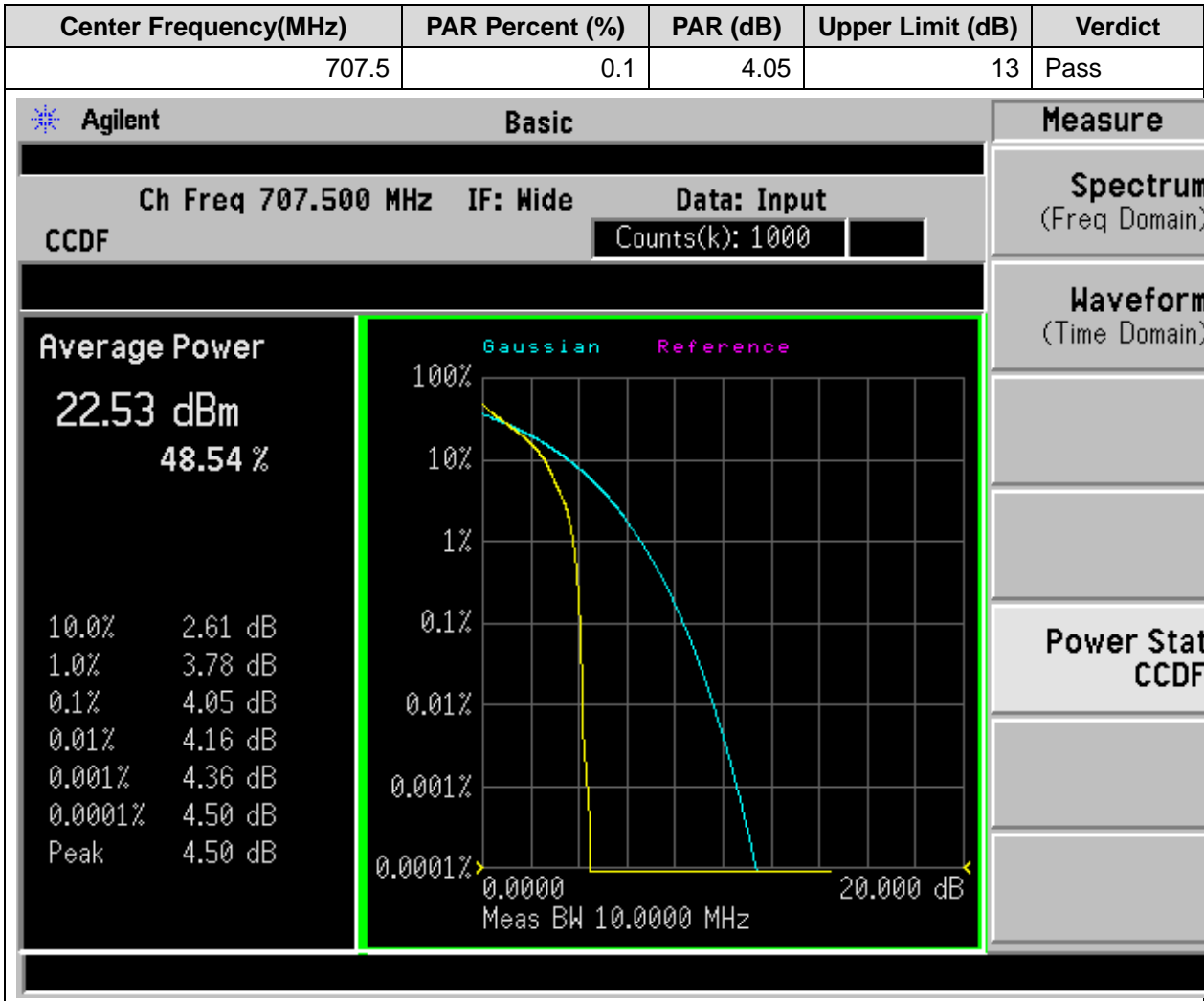
**8.3. LTE Peak to Average Ratio(NTNV)(Subtest:3, Channel:23060, Bandwidth:10, Modulation:Q16, RB Number: 1, RB Position:LOW)**



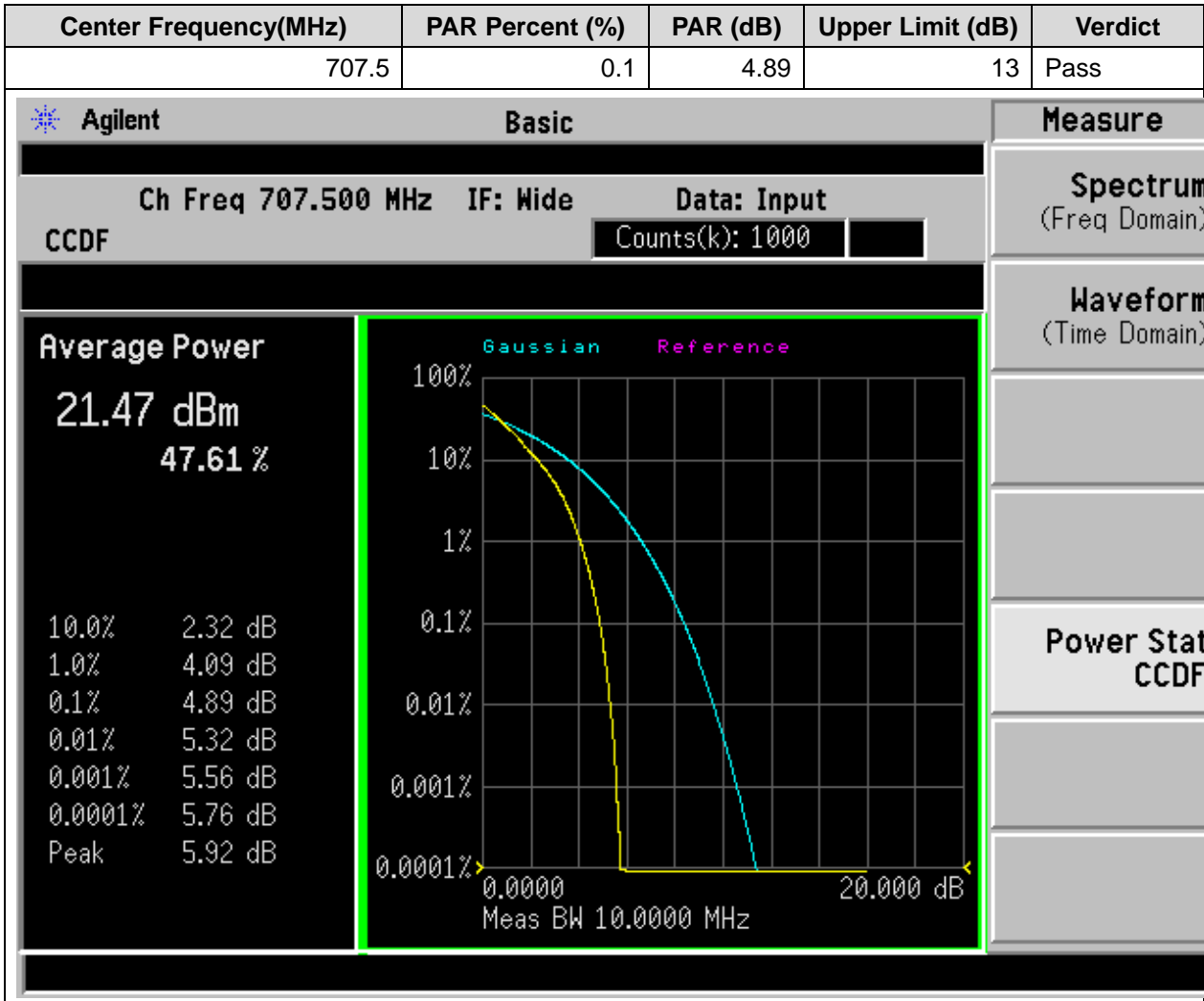
**8.4. LTE Peak to Average Ratio(NTNV)(Subtest:4, Channel:23060, Bandwidth:10, Modulation:Q16, RB Number: 50, RB Position:LOW)**



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

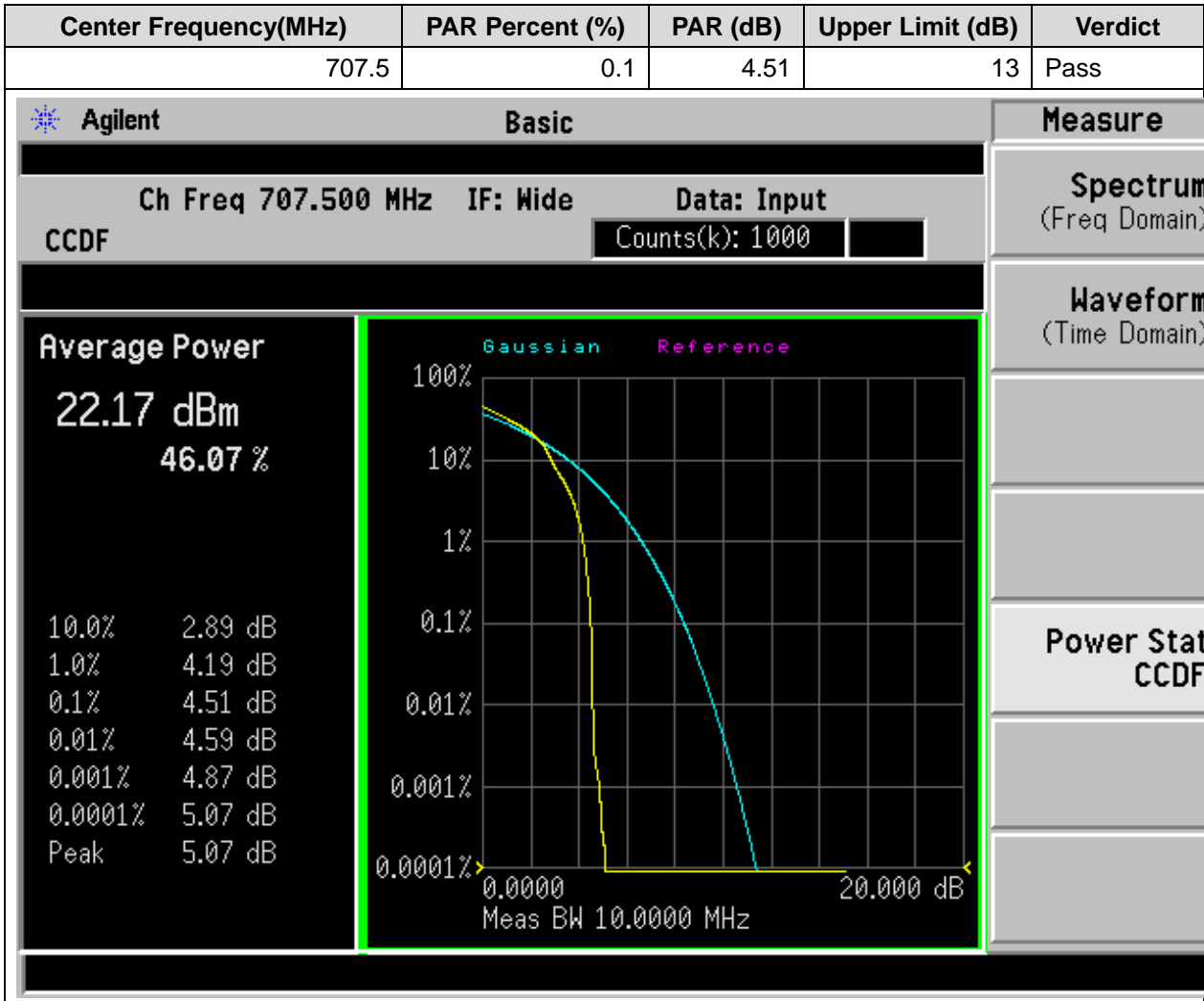


**8.6. LTE Peak to Average Ratio(NTNV)(Subtest:6, Channel:23095, Bandwidth:10, Modulation:QPSK, RB Number: 50, RB Position:LOW)**

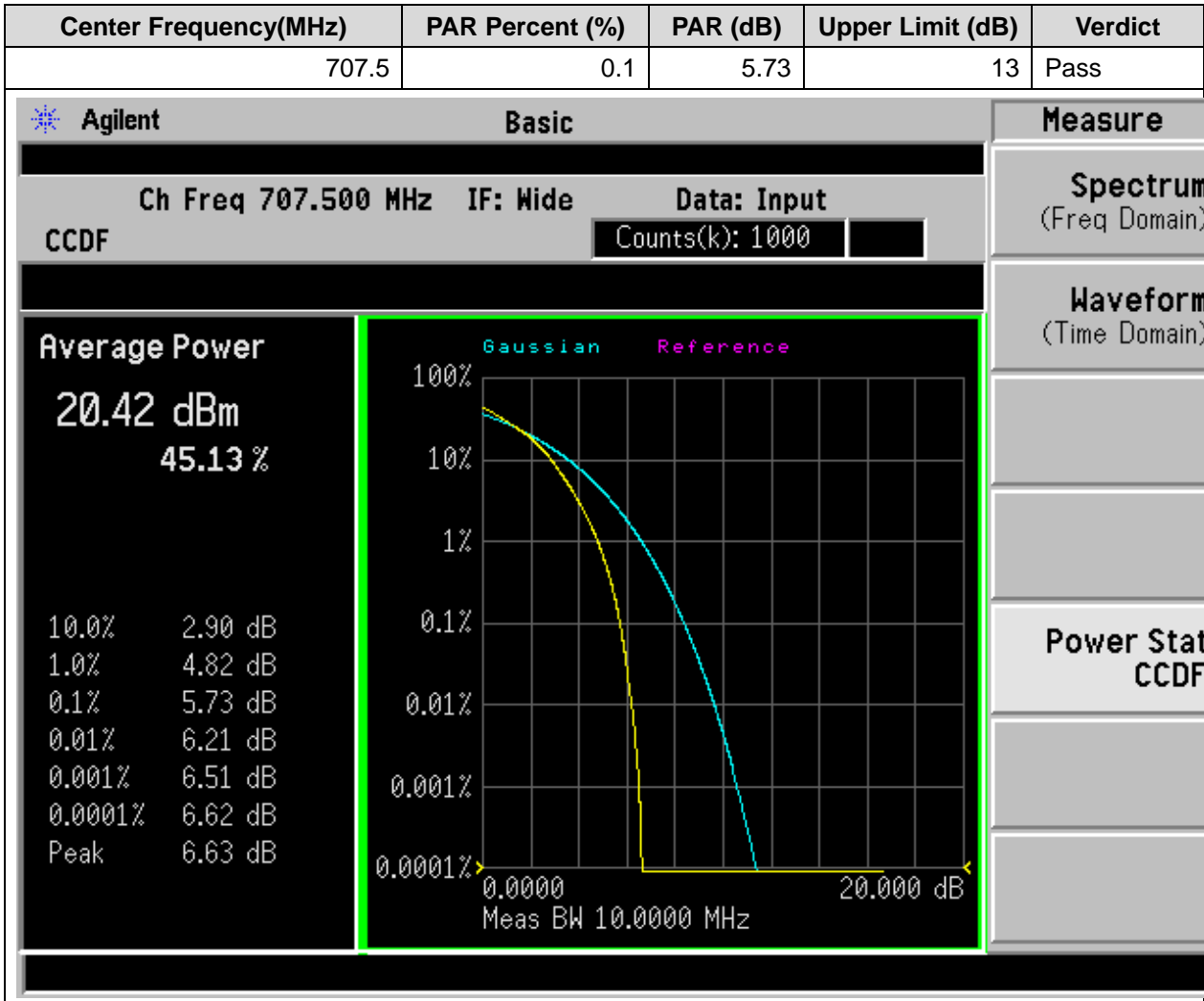




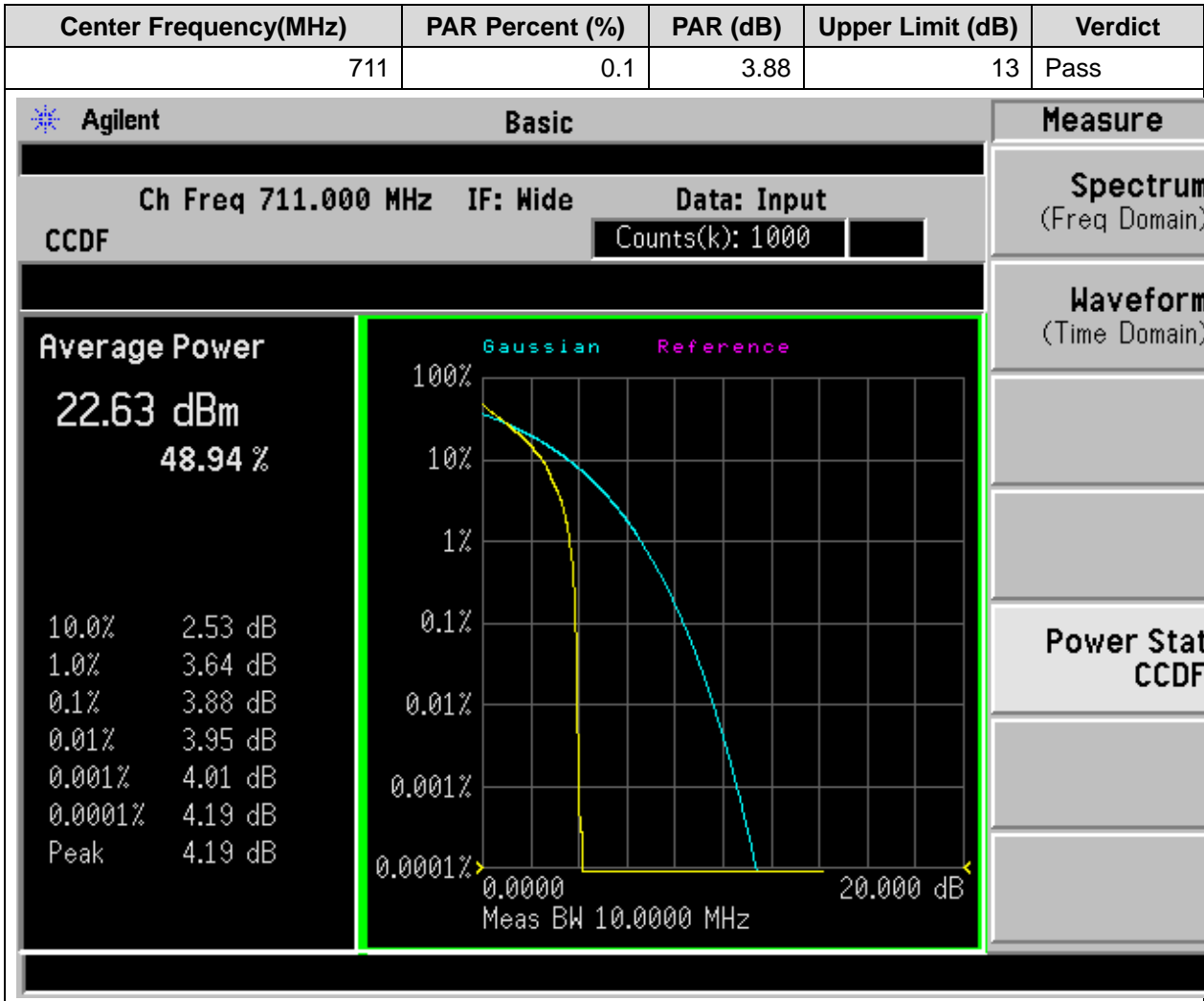
**8.7. LTE Peak to Average Ratio(NTNV)(Subtest:7, Channel:23095, Bandwidth:10, Modulation:Q16, RB Number: 1, RB Position:LOW)**



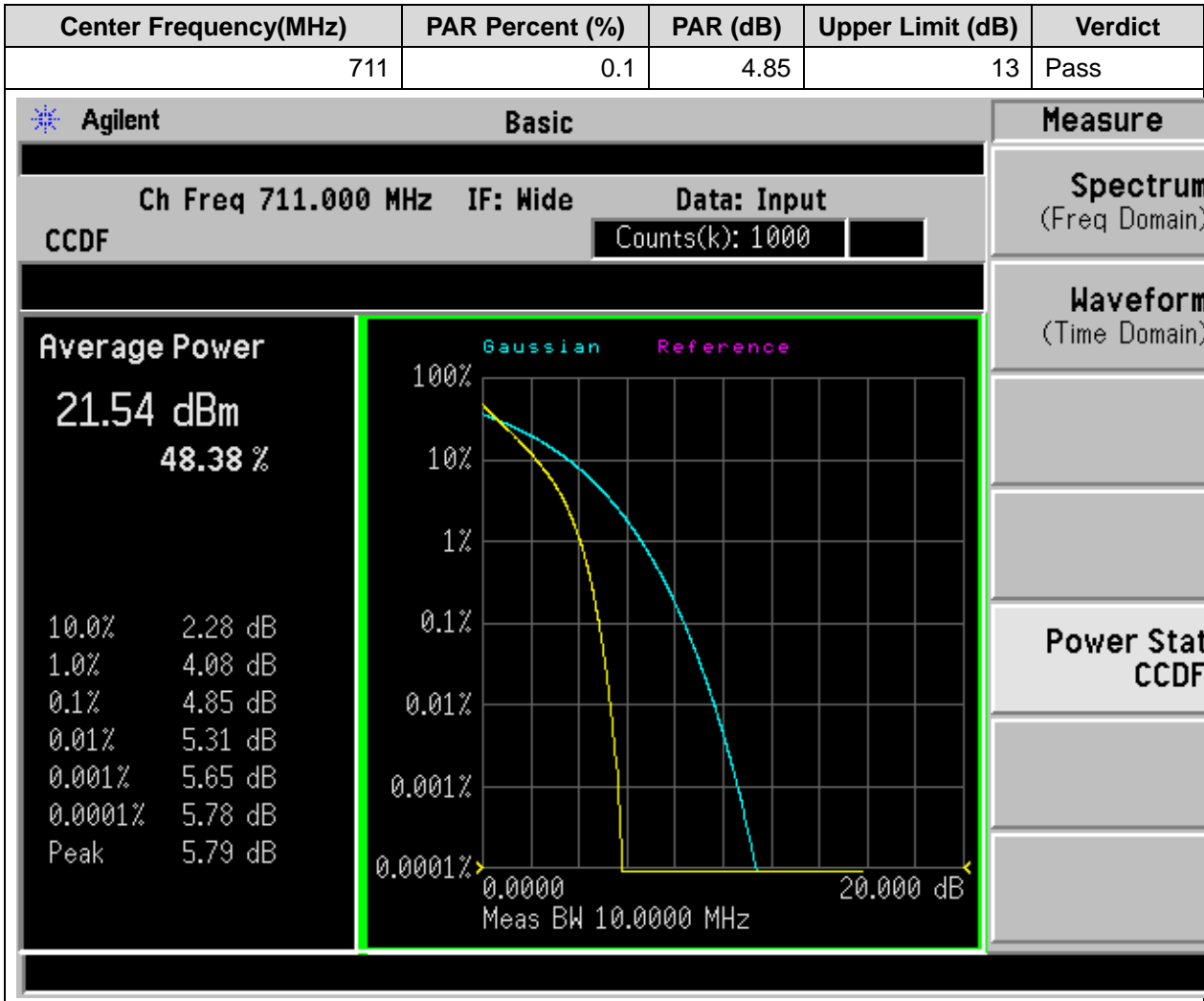
**8.8. LTE Peak to Average Ratio(NTNV)(Subtest:8, Channel:23095, Bandwidth:10, Modulation:Q16, RB Number: 50, RB Position:LOW)**



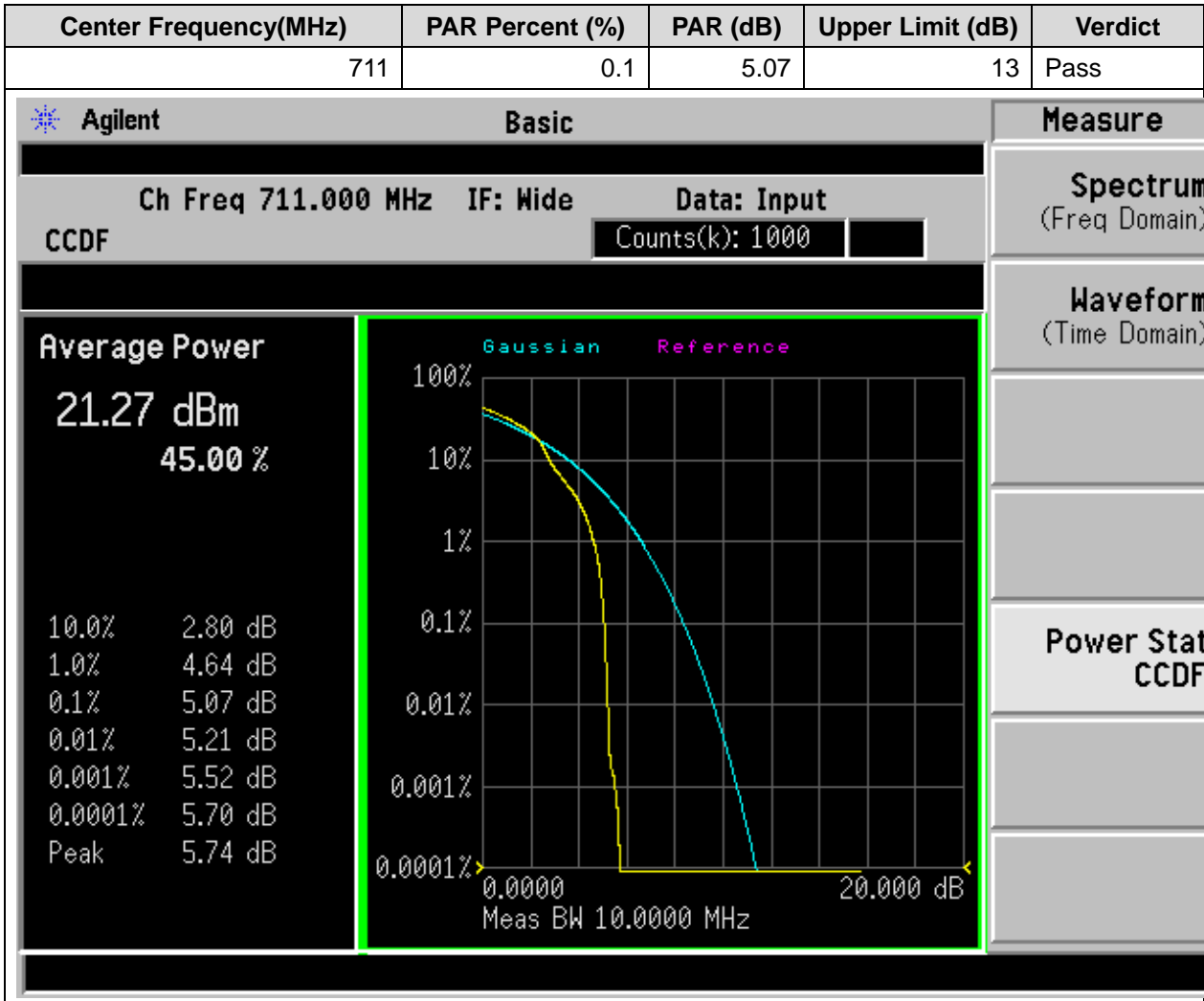
**8.9. LTE Peak to Average Ratio(NTNV)(Subtest:9, Channel:23130, Bandwidth:10, Modulation:QPSK, RB Number: 1, RB Position:LOW)**



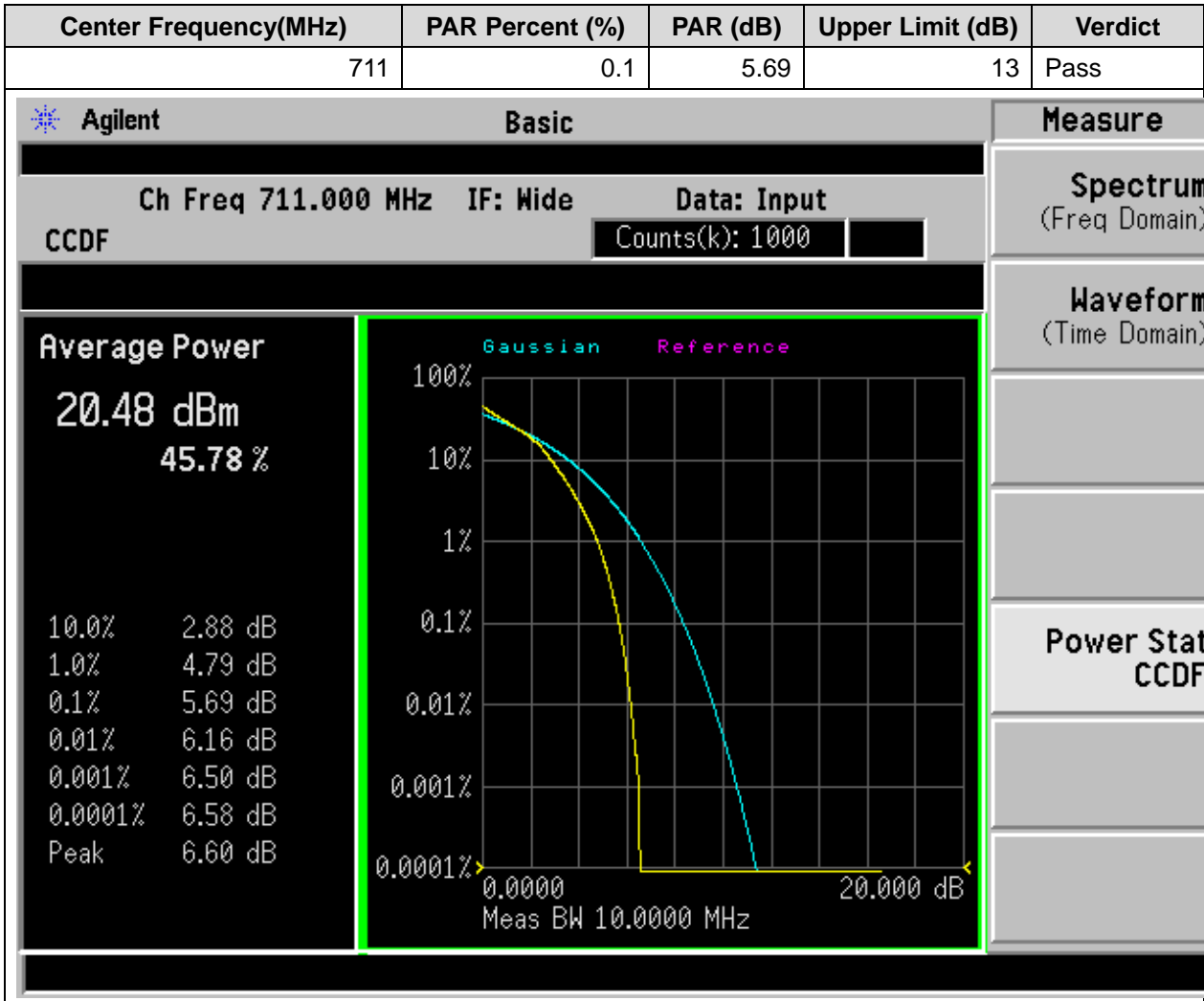
**8.10. LTE Peak to Average Ratio(NTNV)(Subtest:10, Channel:23130, Bandwidth:10, Modulation:QPSK, RB Number: 50, RB Position:LOW)**



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

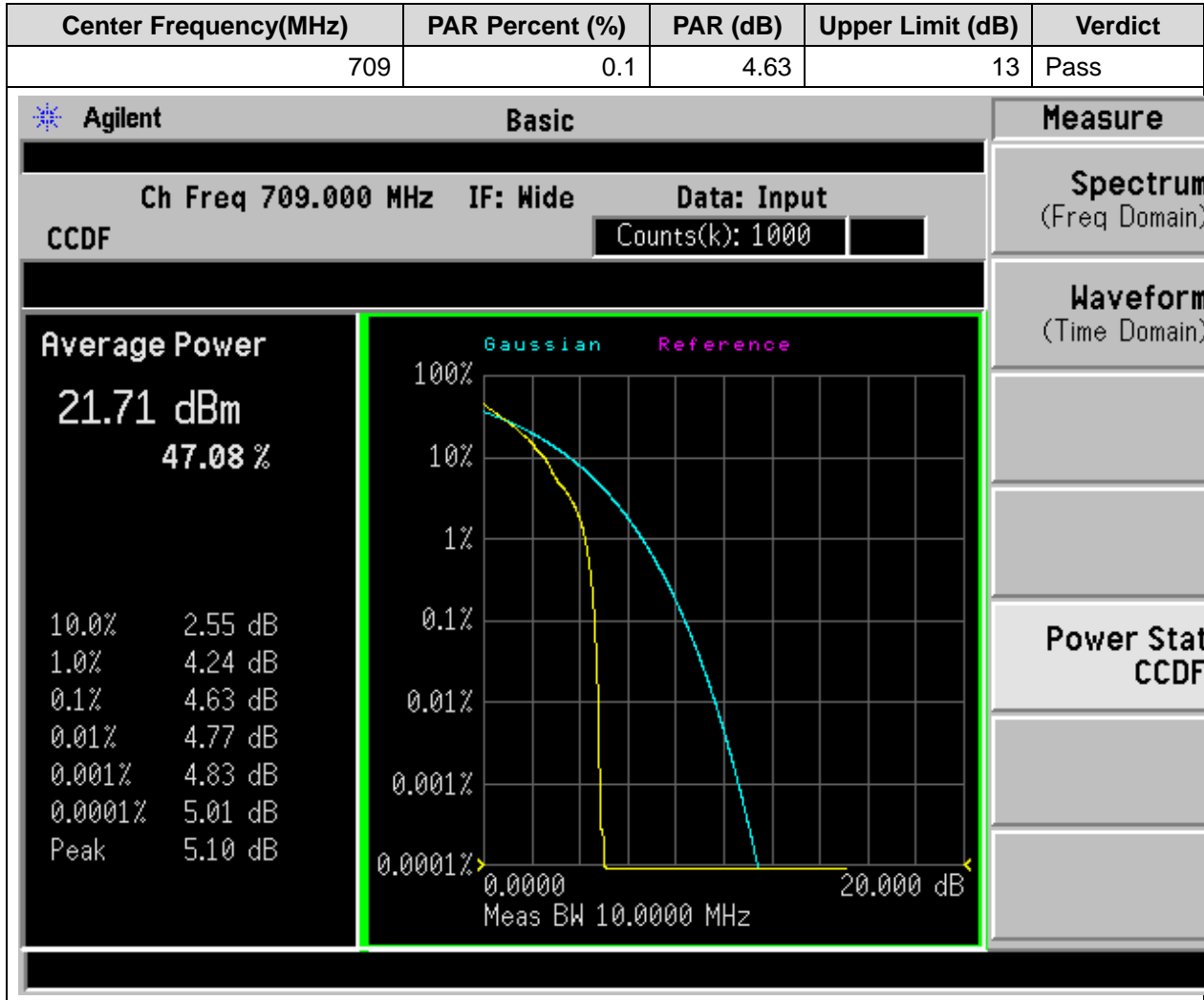


8.12. LTE Peak to Average Ratio(NTNV)(Subtest:12, Channel:23130, Bandwidth:10, Modulation:Q16, RB Number: 50, RB Position:LOW)

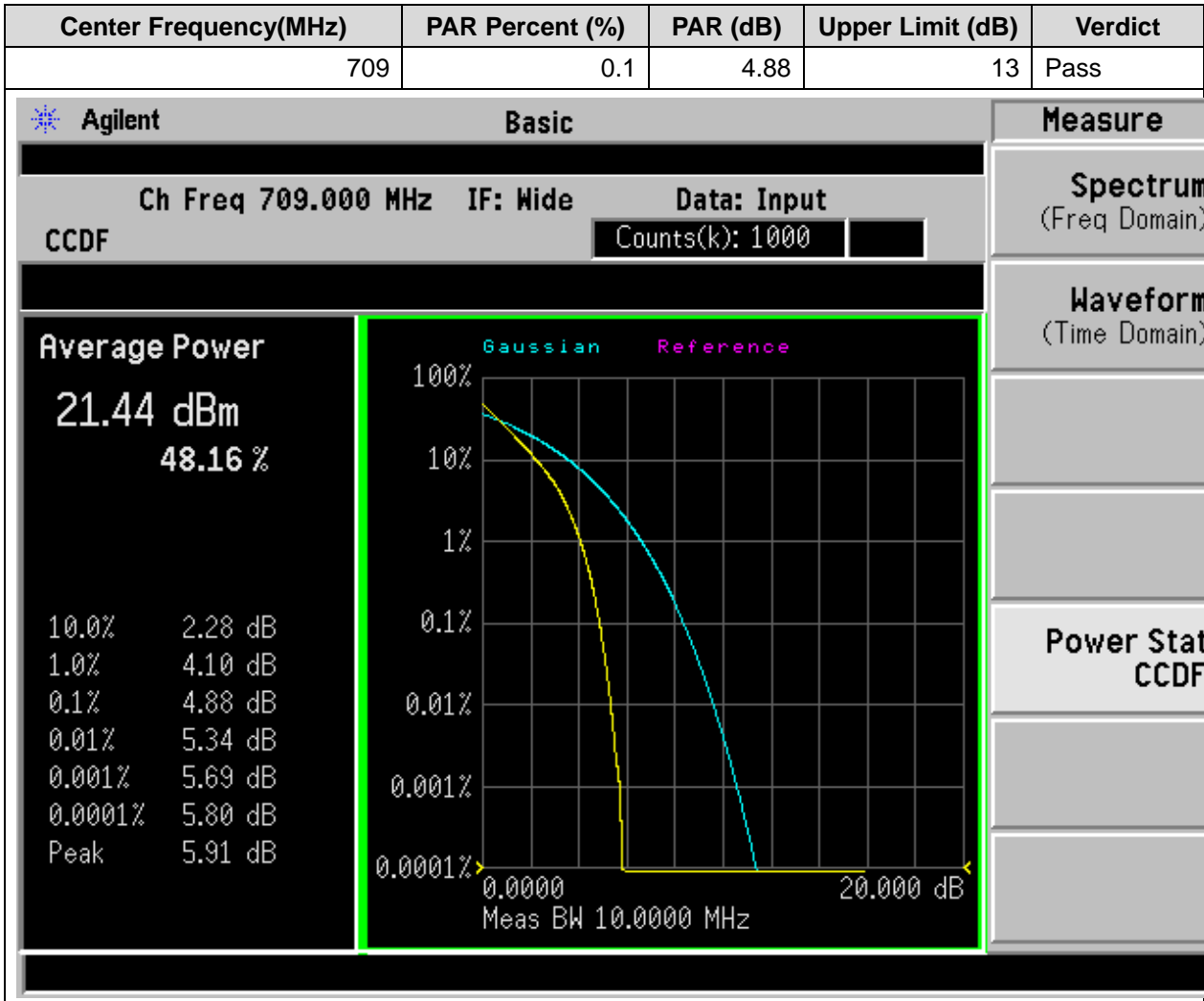


## 9. LTE\_Band17

### 9.1. LTE Peak to Average Ratio(NTNV)(Subtest:1, Channel:23780, Bandwidth:10, Modulation:QPSK, RB Number: 1, RB Position:LOW)

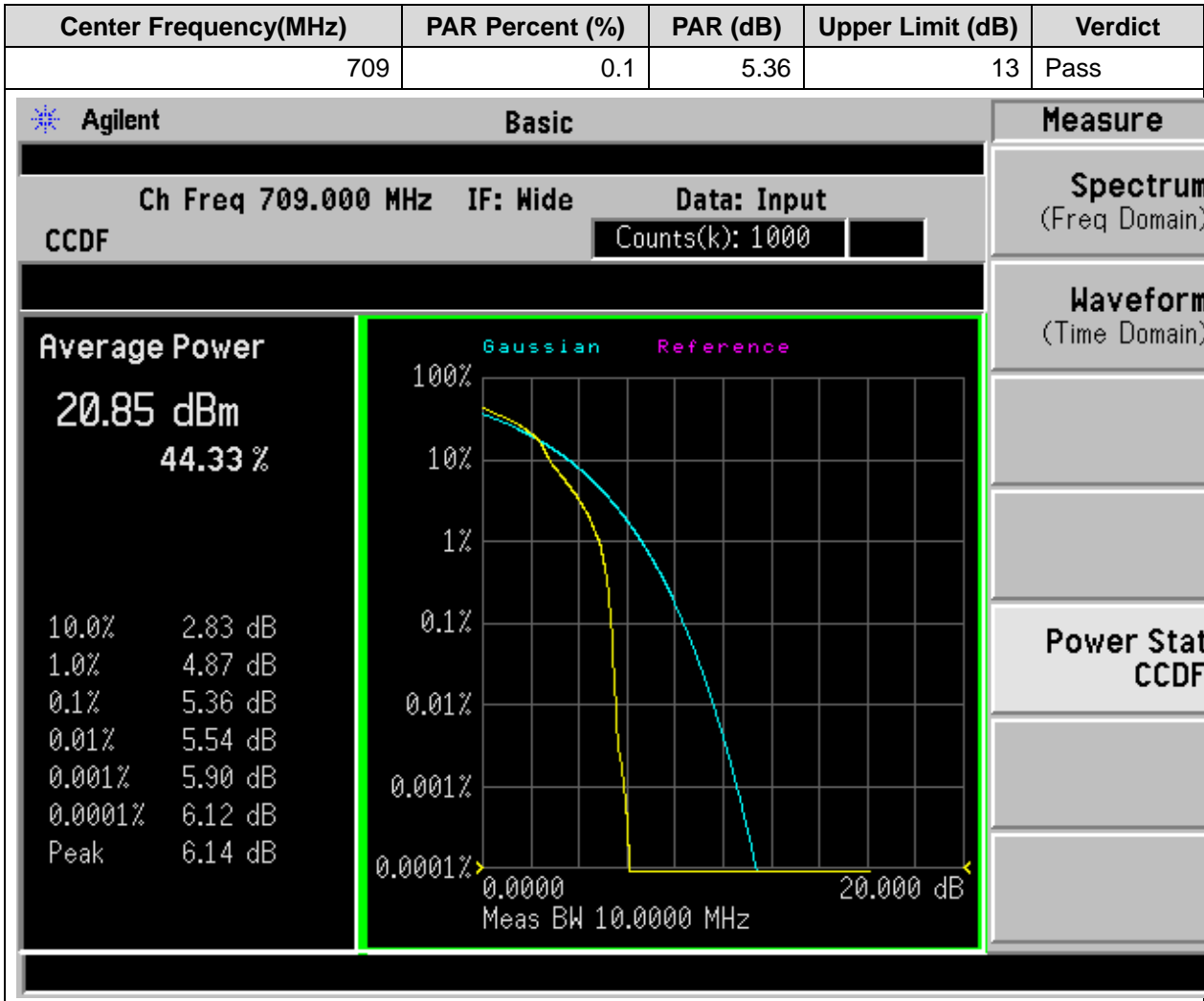


9.2. LTE Peak to Average Ratio(NTNV)(Subtest:2, Channel:23780, Bandwidth:10, Modulation:QPSK, RB Number: 50, RB Position:LOW)

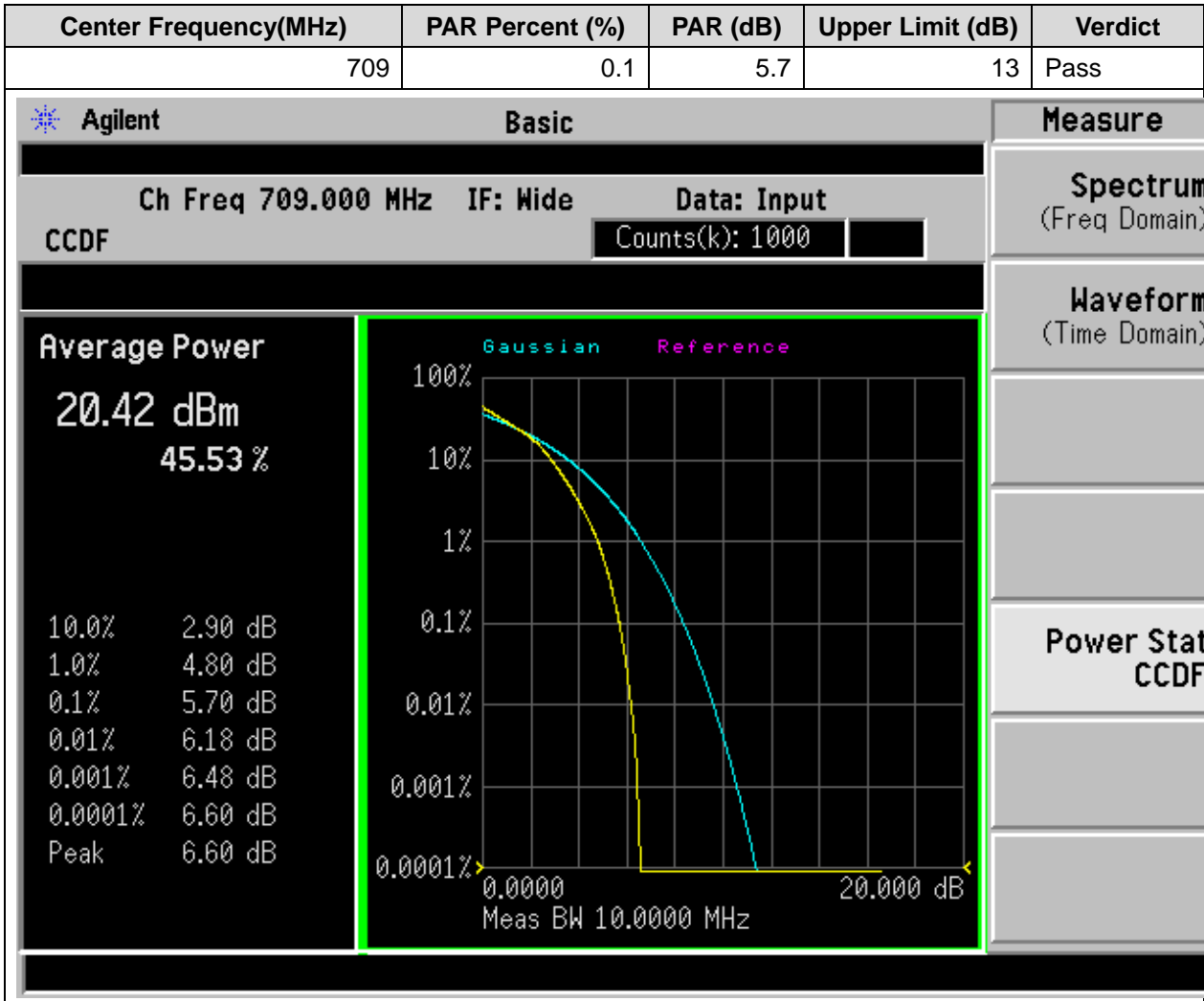




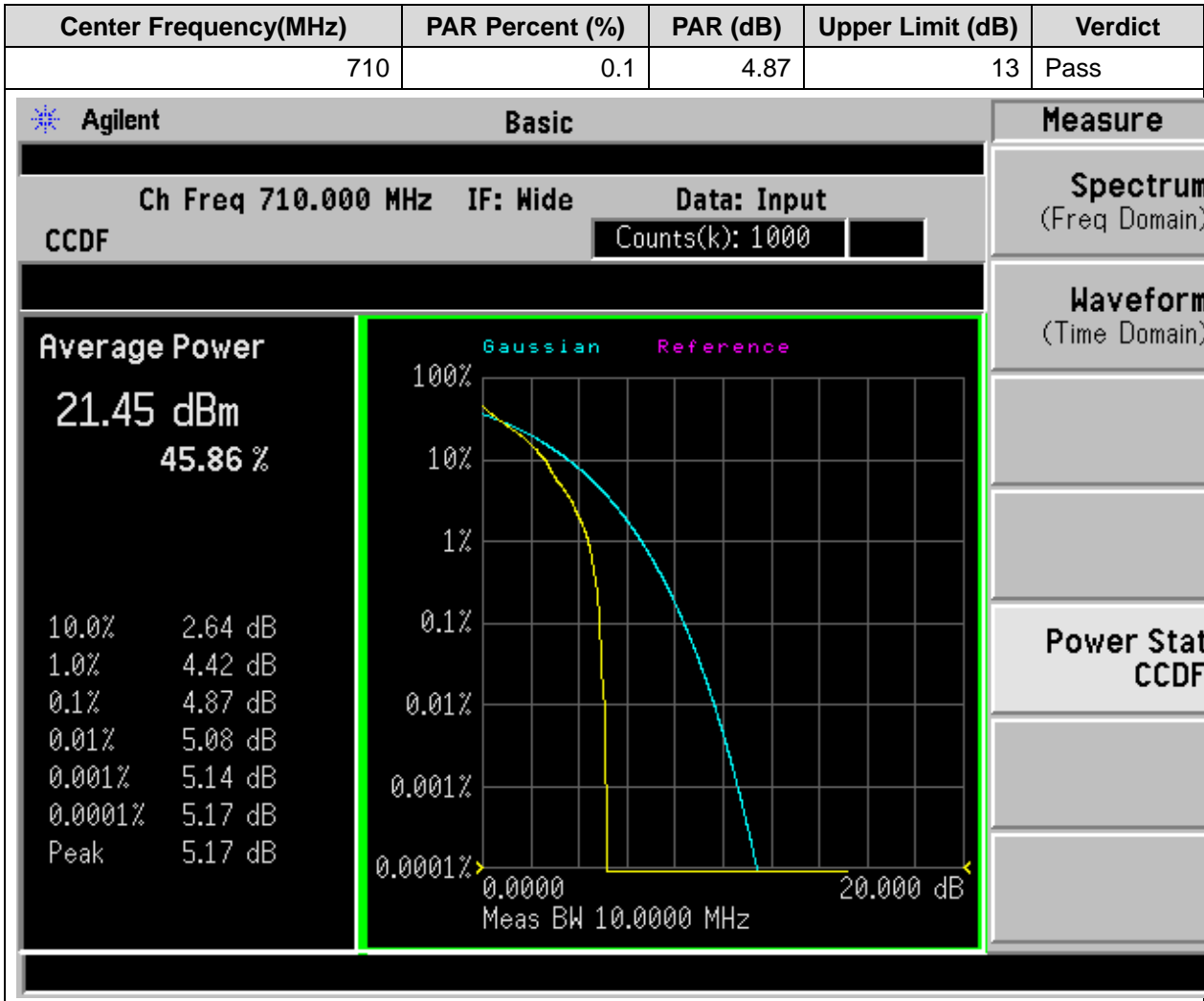
**9.3. LTE Peak to Average Ratio(NTNV)(Subtest:3, Channel:23780, Bandwidth:10, Modulation:Q16, RB Number: 1, RB Position:LOW)**



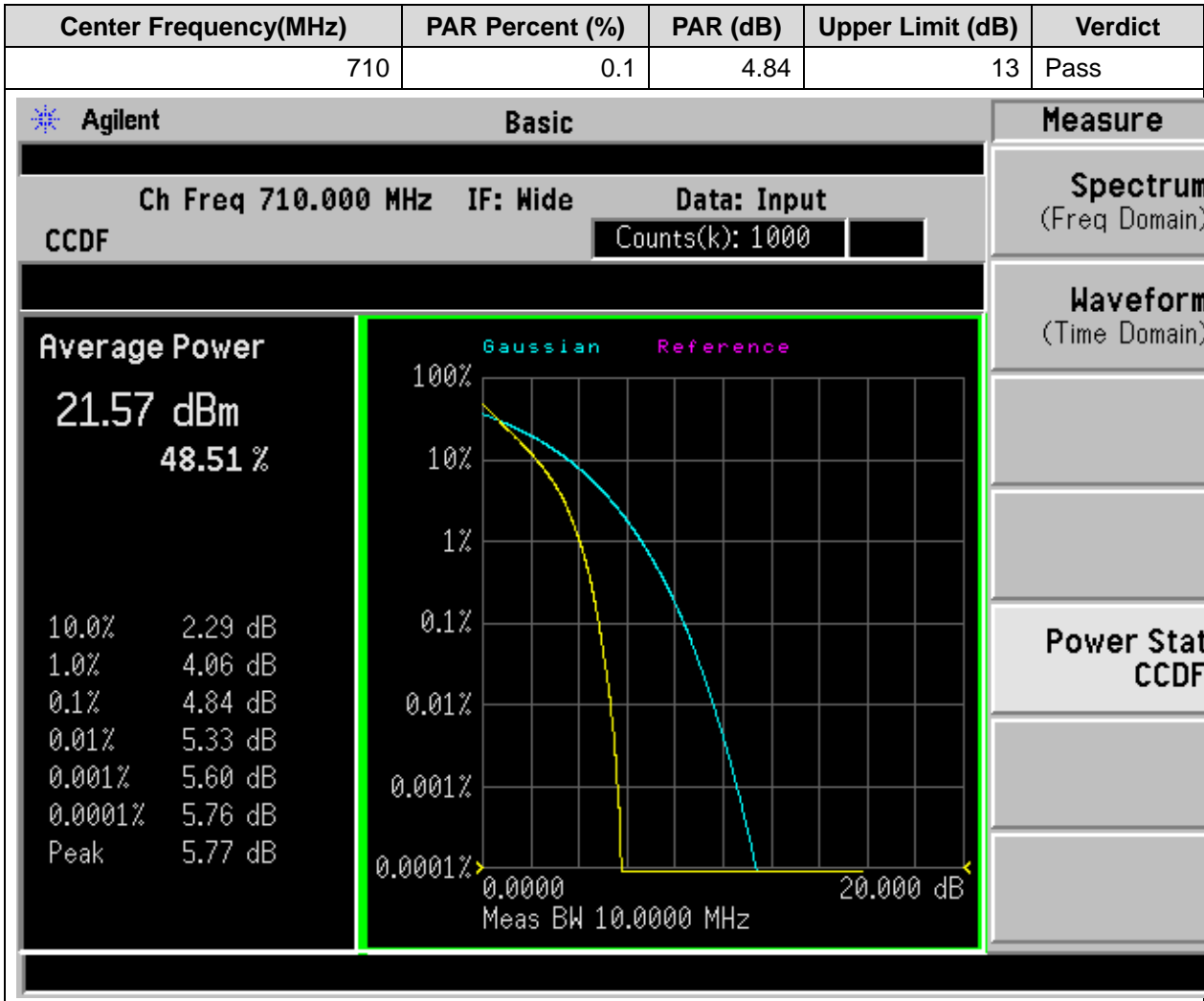
**9.4. LTE Peak to Average Ratio(NTNV)(Subtest:4, Channel:23780, Bandwidth:10, Modulation:Q16, RB Number: 50, RB Position:LOW)**



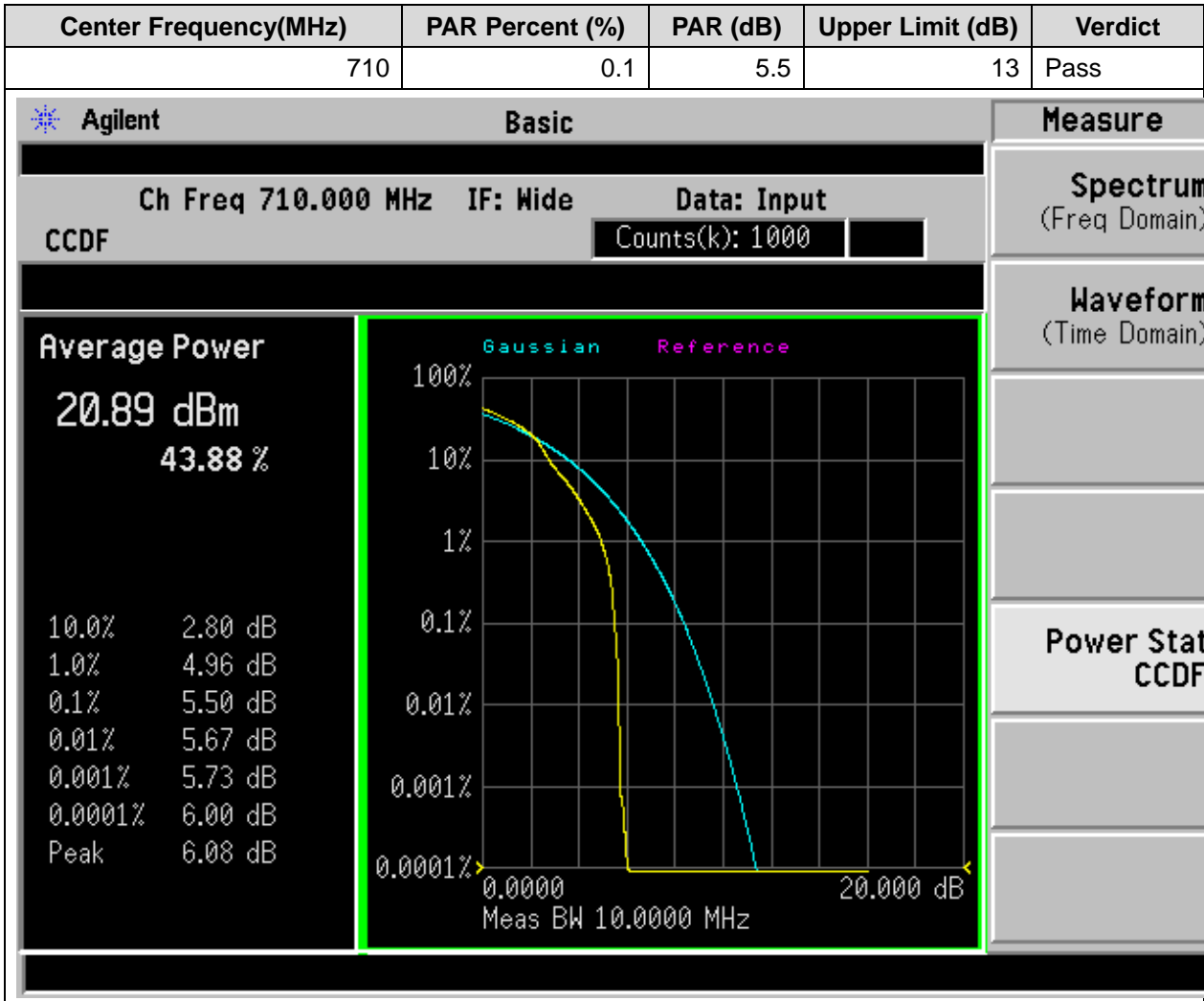
**9.5. LTE Peak to Average Ratio(NTNV)(Subtest:5, Channel:23790, Bandwidth:10, Modulation:QPSK, RB Number: 1, RB Position:LOW)**



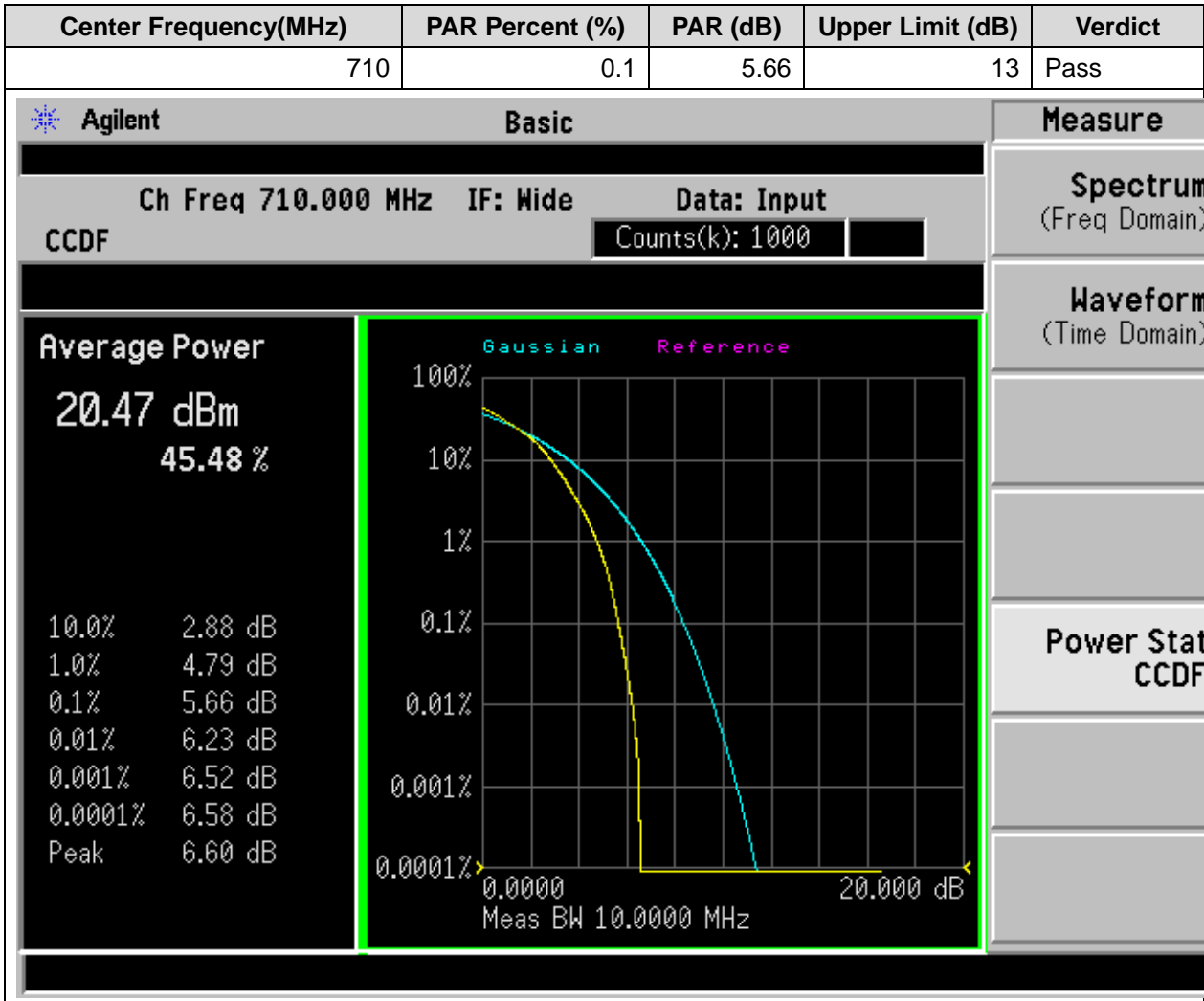
9.6. LTE Peak to Average Ratio(NTNV)(Subtest:6, Channel:23790, Bandwidth:10, Modulation:QPSK, RB Number: 50, RB Position:LOW)



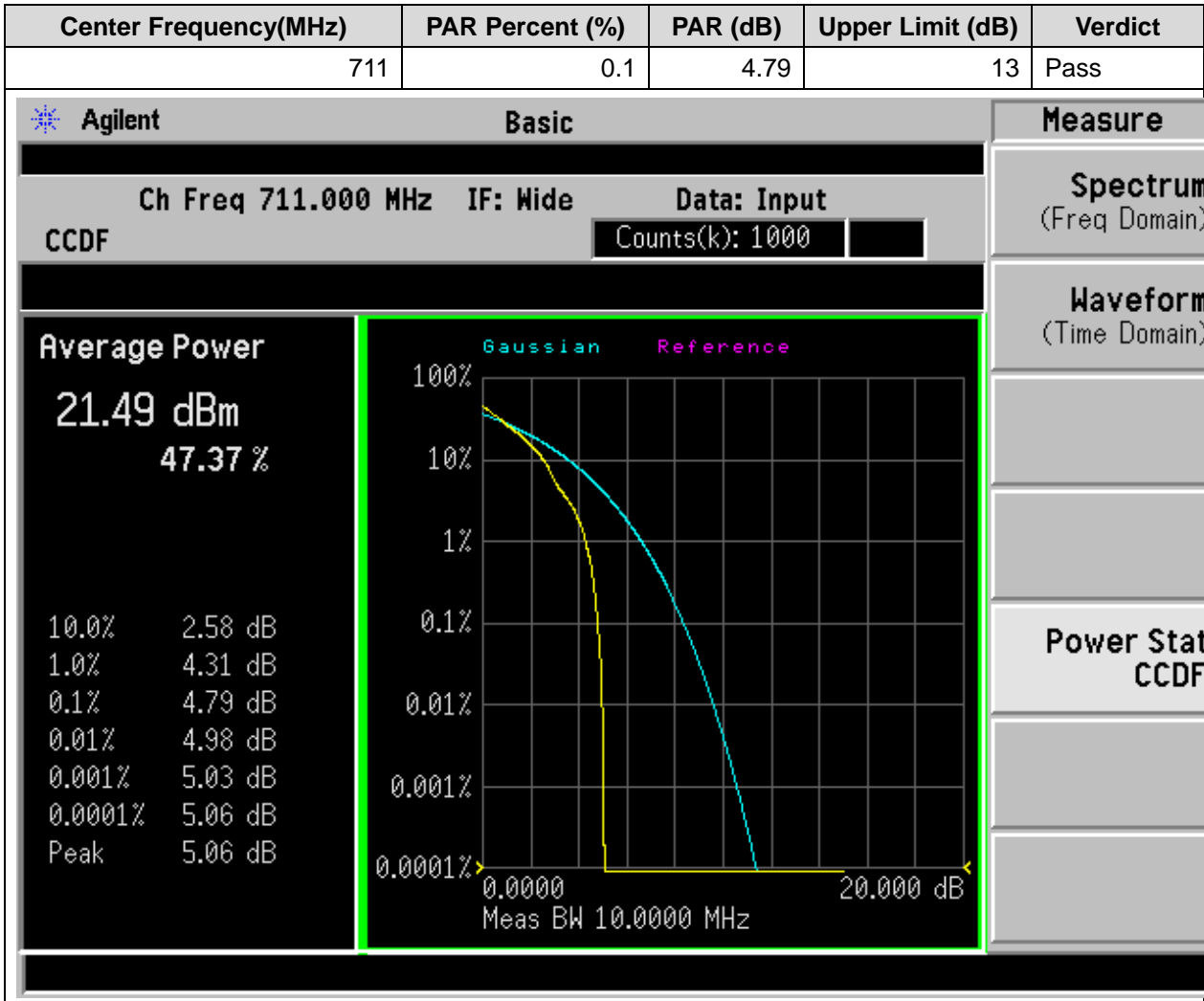
**9.7. LTE Peak to Average Ratio(NTNV)(Subtest:7, Channel:23790, Bandwidth:10, Modulation:Q16, RB Number: 1, RB Position:LOW)**



**9.8. LTE Peak to Average Ratio(NTNV)(Subtest:8, Channel:23790, Bandwidth:10, Modulation:Q16, RB Number: 50, RB Position:LOW)**



**9.9. LTE Peak to Average Ratio(NTNV)(Subtest:9, Channel:23800, Bandwidth:10, Modulation:QPSK, RB Number: 1, RB Position:LOW)**



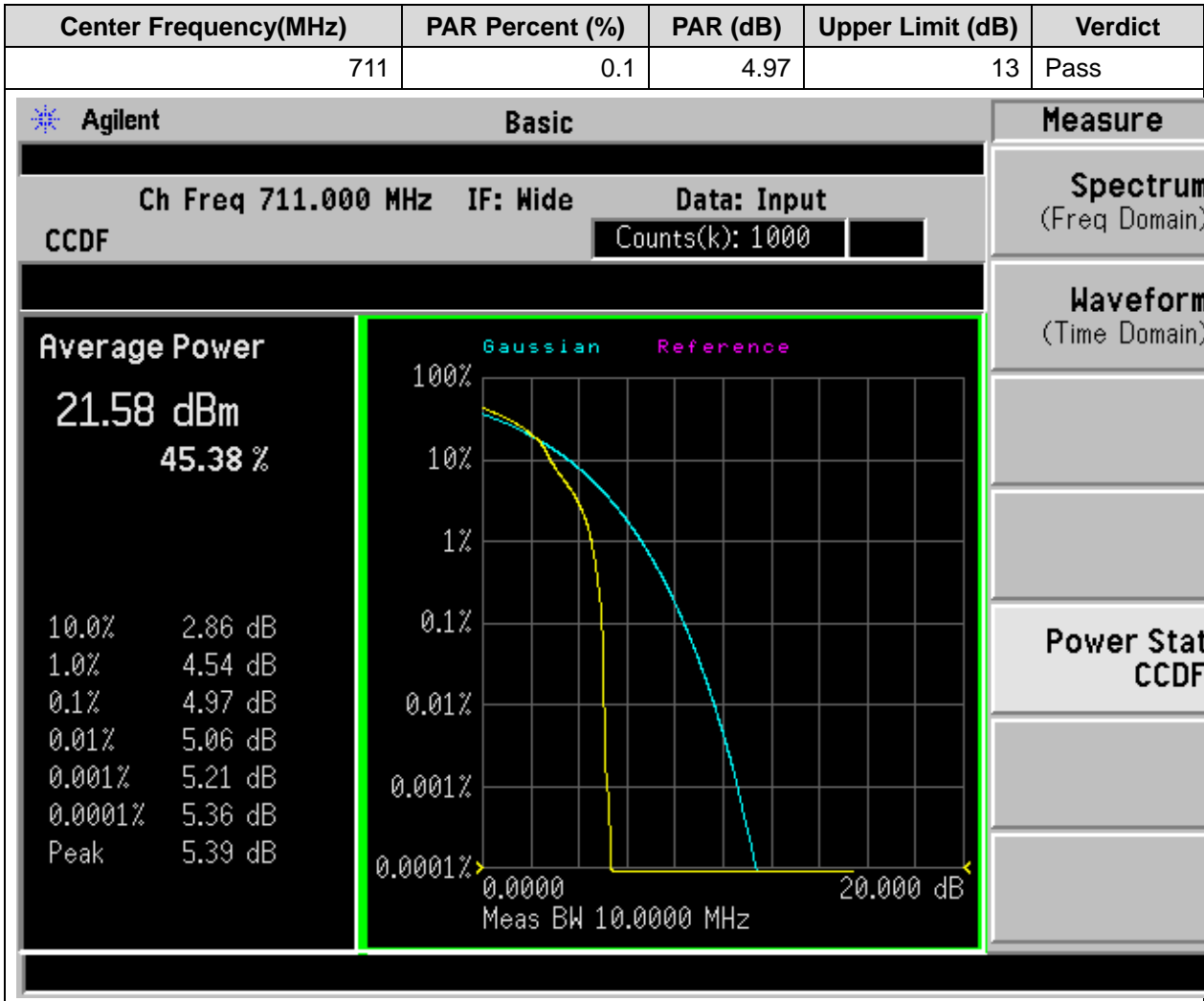
**9.10. LTE Peak to Average Ratio(NTNV)(Subtest:10, Channel:23800, Bandwidth:10, Modulation:QPSK, RB Number: 50, RB Position:LOW)**

Center Frequency(MHz)	PAR Percent (%)	PAR (dB)	Upper Limit (dB)	Verdict
711	0.1	4.88	13	Pass

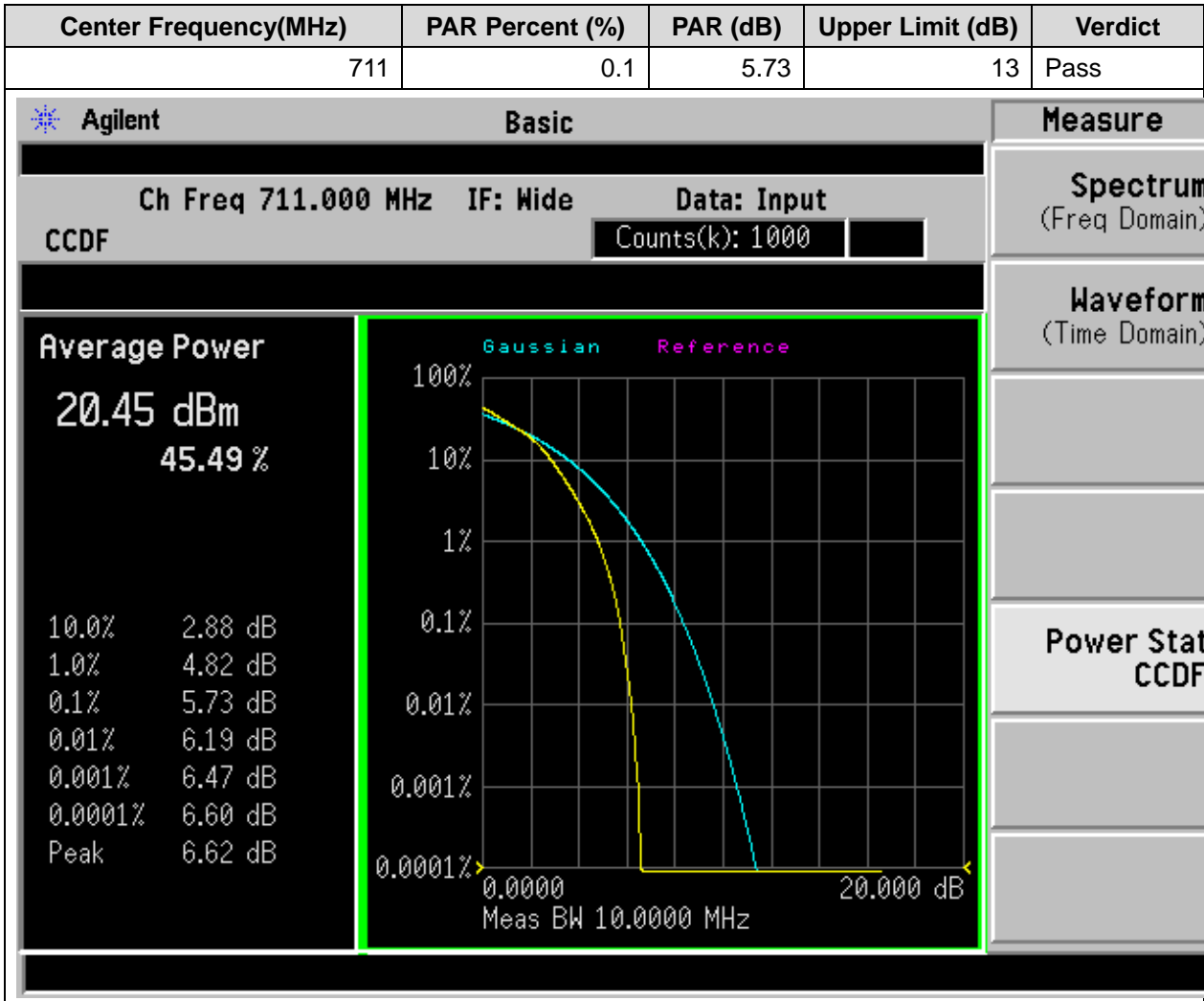




9.11. LTE Peak to Average Ratio(NTNV)(Subtest:11, Channel:23800, Bandwidth:10, Modulation:Q16, RB Number: 1, RB Position:LOW)

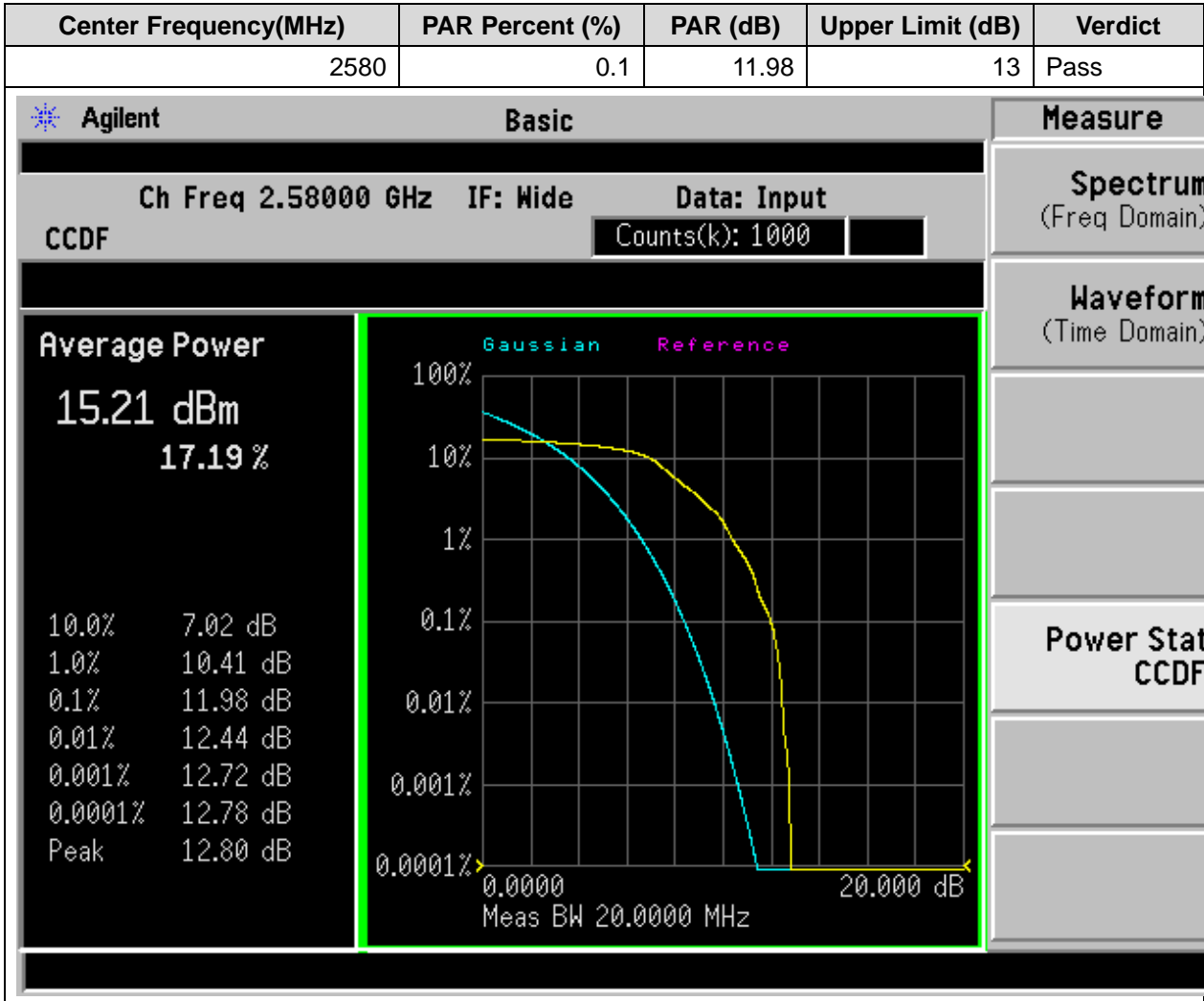


9.12. LTE Peak to Average Ratio(NTNV)(Subtest:12, Channel:23800, Bandwidth:10, Modulation:Q16, RB Number: 50, RB Position:LOW)

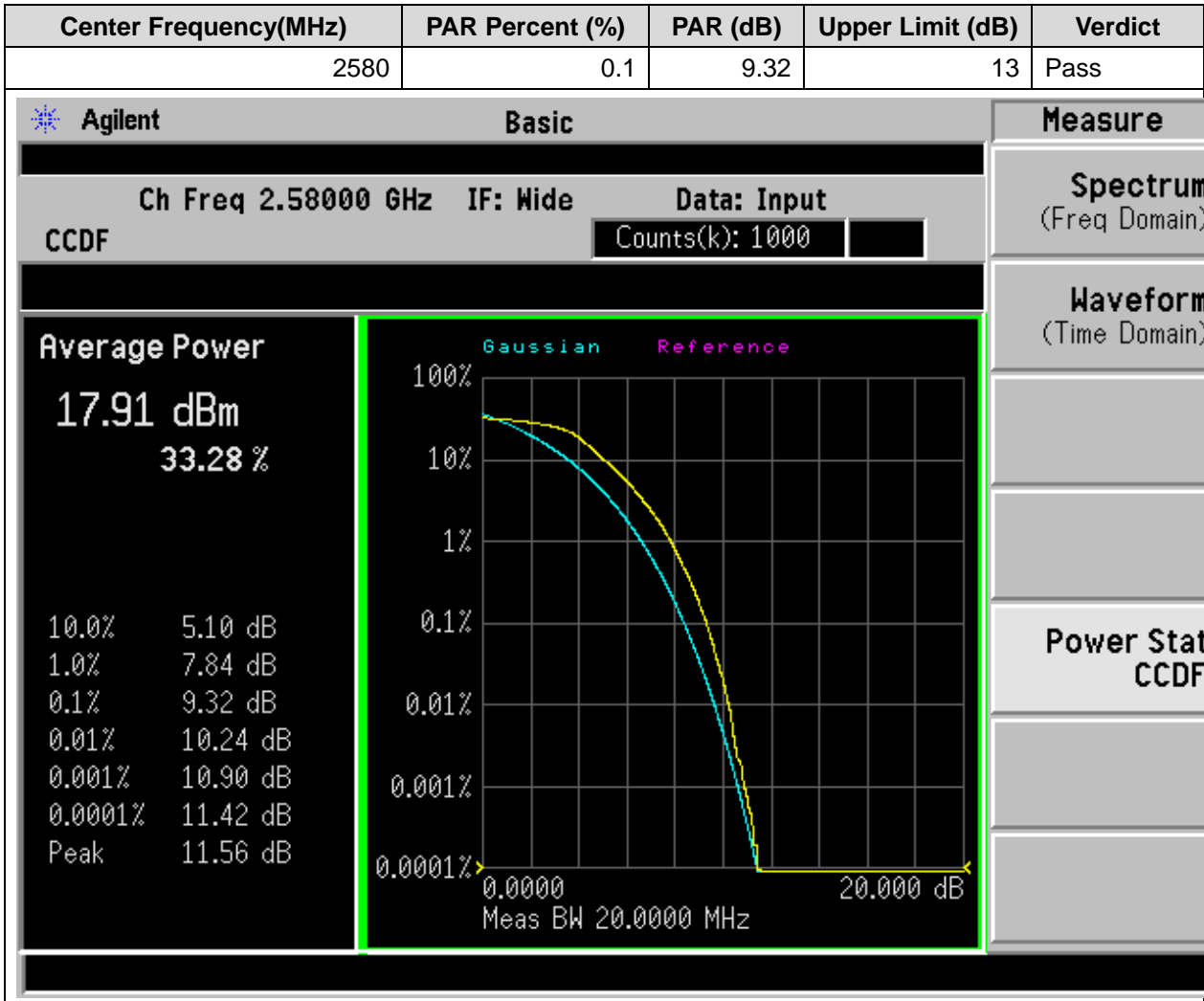


## 10. LTE\_Band38

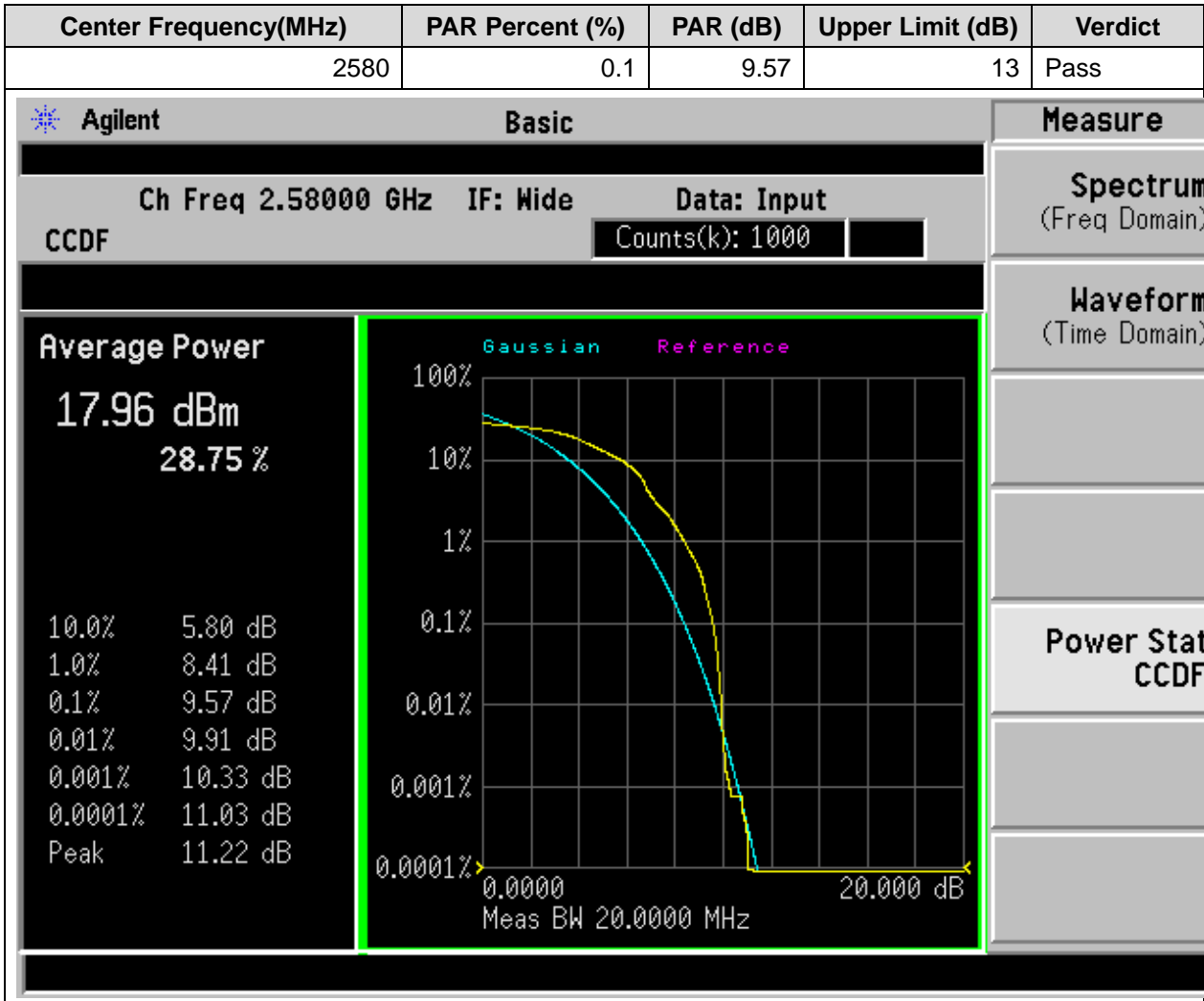
### 10.1. LTE Peak to Average Ratio(NTNV)(Subtest:1, Channel:37850, Bandwidth:20, Modulation:QPSK, RB Number: 1, RB Position:LOW)



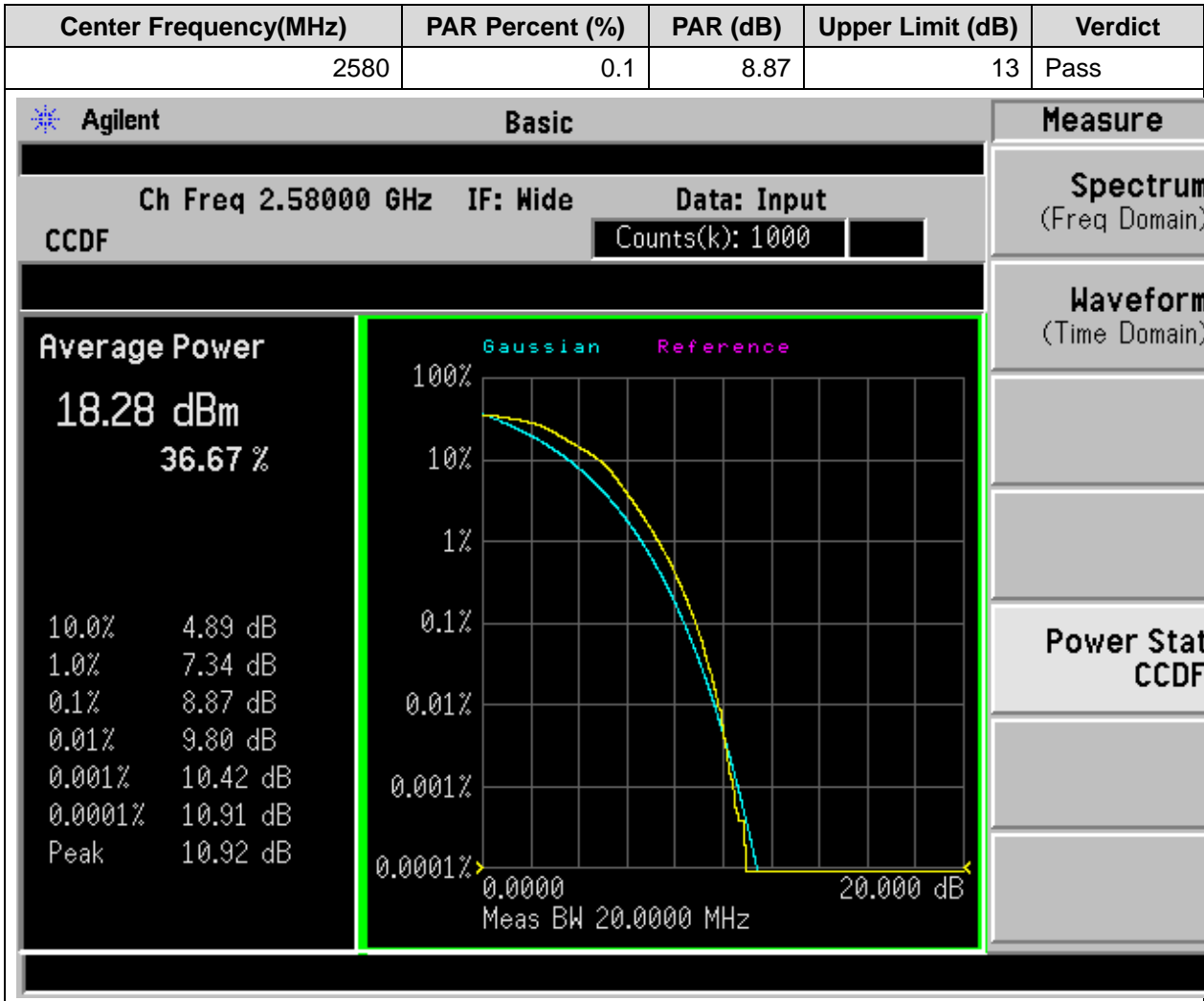
**10.2. LTE Peak to Average Ratio(NTNV)(Subtest:2, Channel:37850, Bandwidth:20, Modulation:QPSK, RB Number: 100, RB Position:LOW)**



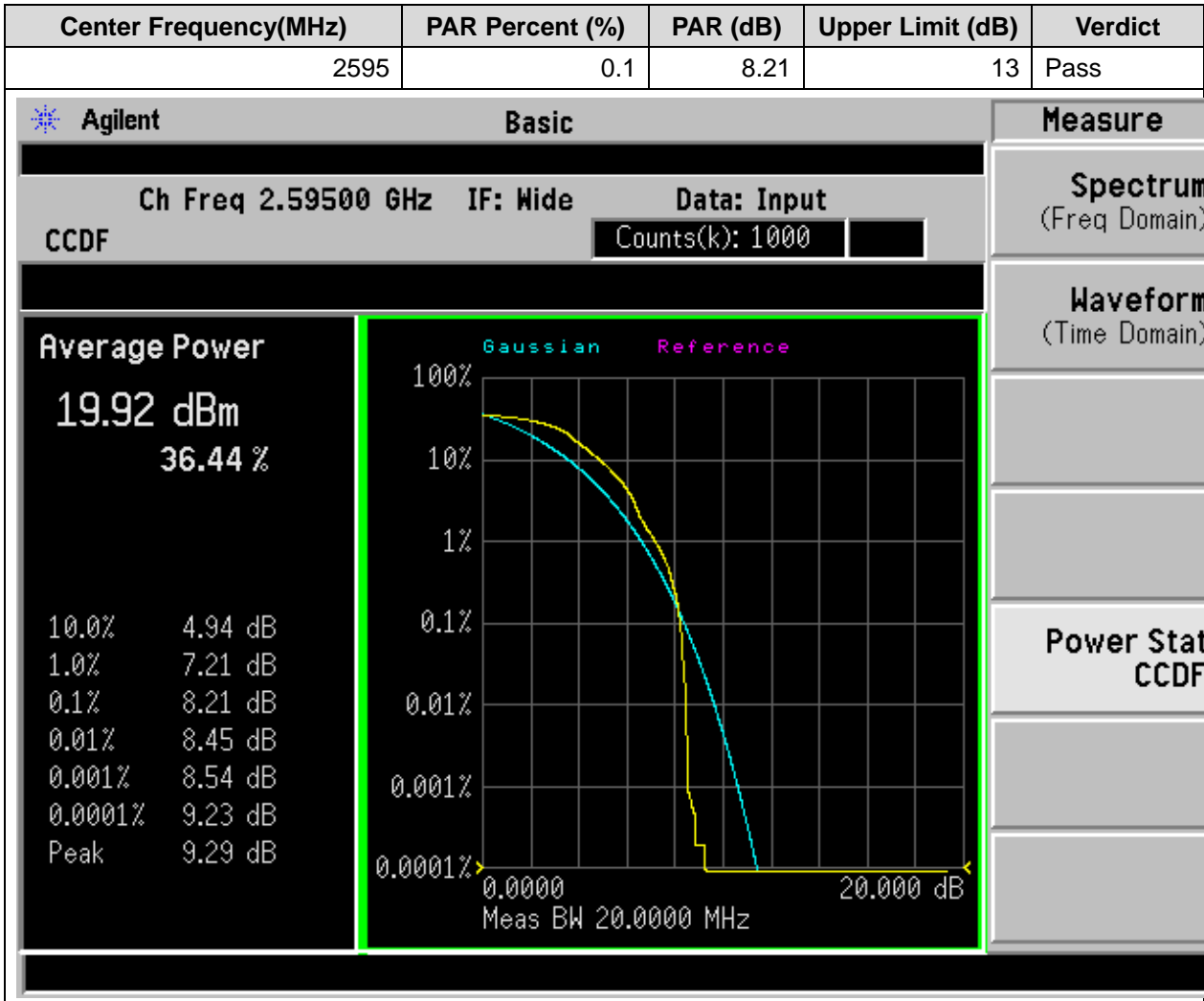
**10.3. LTE Peak to Average Ratio(NTNV)(Subtest:3, Channel:37850, Bandwidth:20, Modulation:Q16, RB Number: 1, RB Position:LOW)**



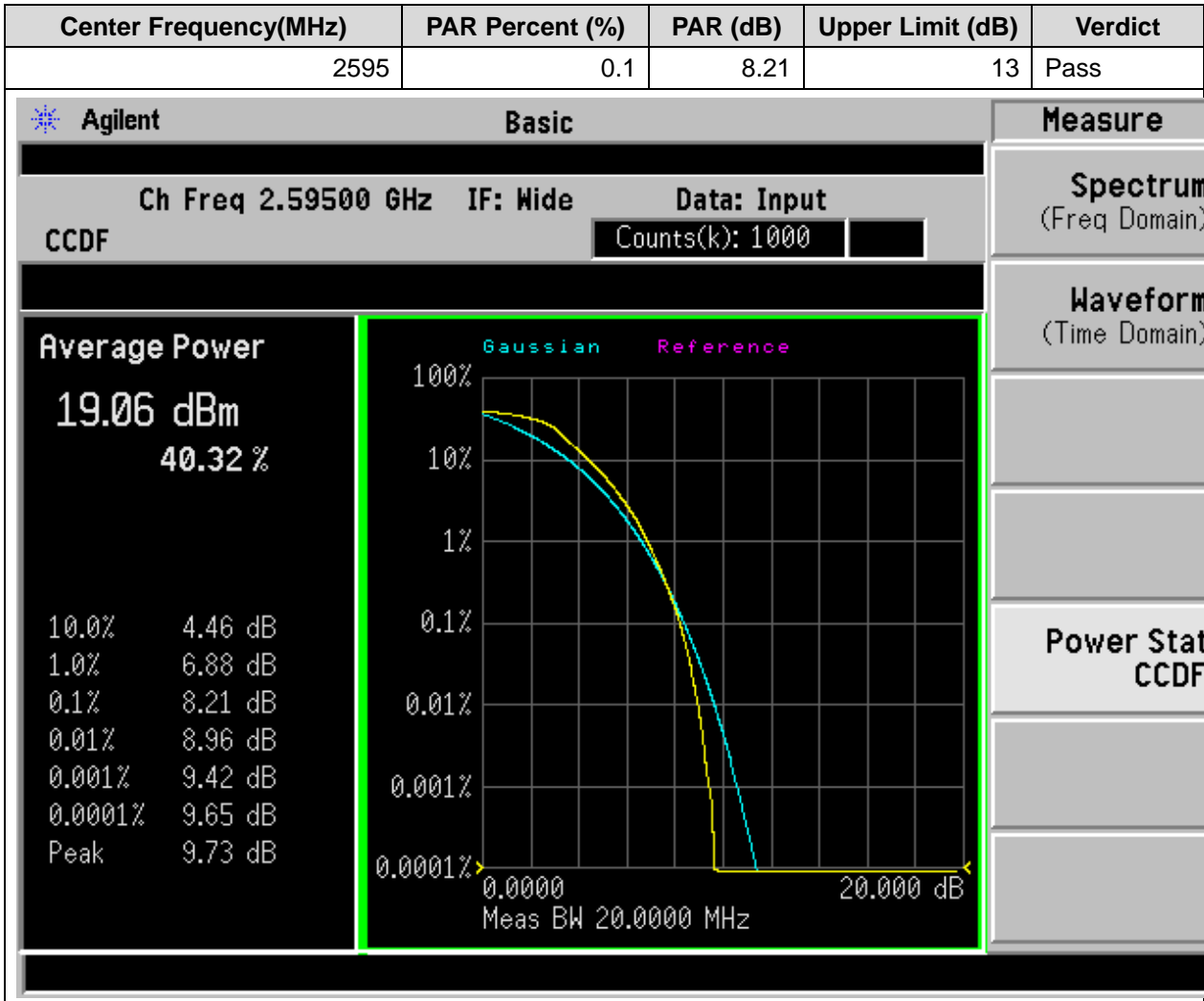
**10.4. LTE Peak to Average Ratio(NTNV)(Subtest:4, Channel:37850, Bandwidth:20, Modulation:Q16, RB Number: 100, RB Position:LOW)**



**10.5. LTE Peak to Average Ratio(NTNV)(Subtest:5, Channel:38000, Bandwidth:20, Modulation:QPSK, RB Number: 1, RB Position:LOW)**

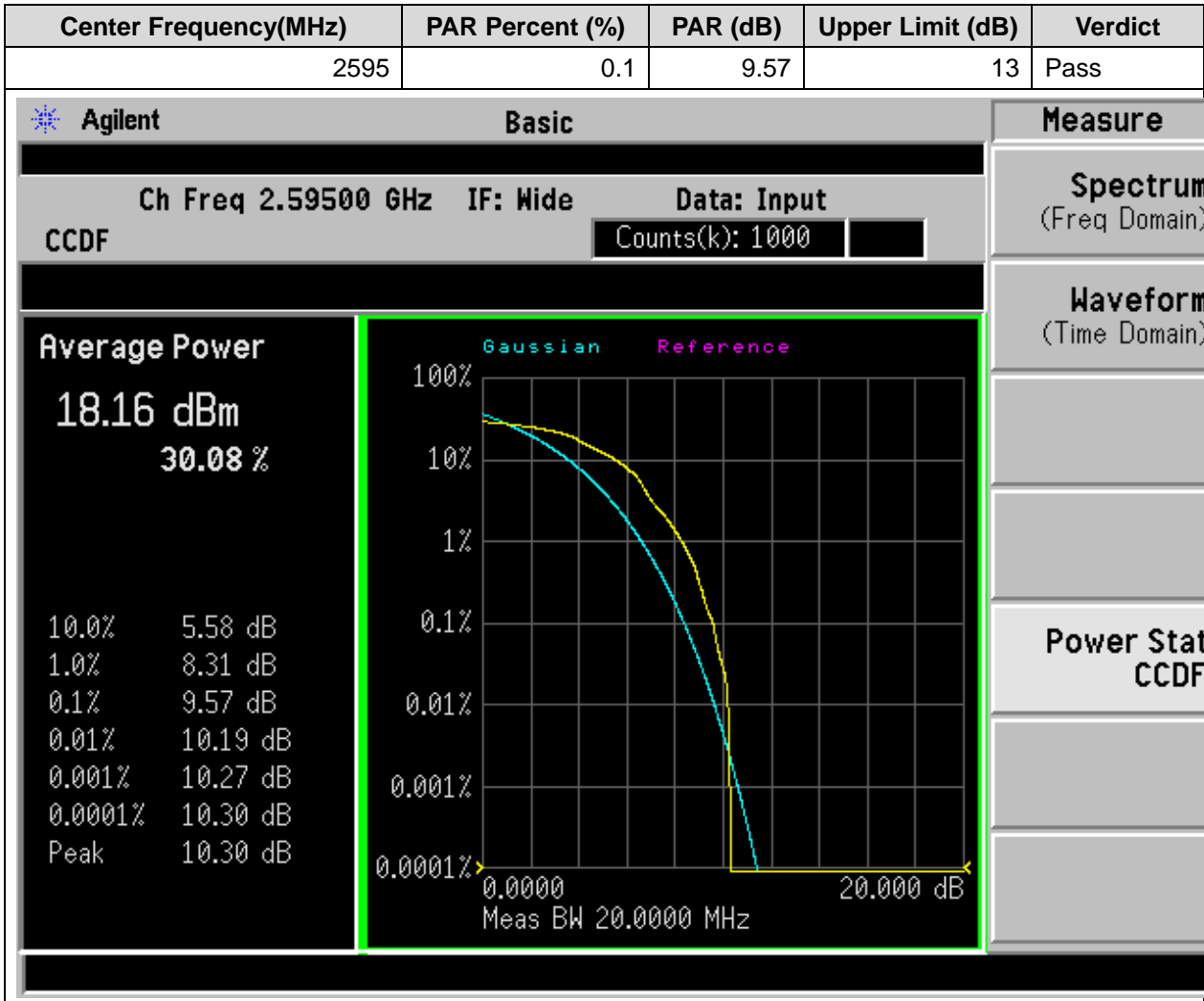


**10.6. LTE Peak to Average Ratio(NTNV)(Subtest:6, Channel:38000, Bandwidth:20, Modulation:QPSK, RB Number: 100, RB Position:LOW)**

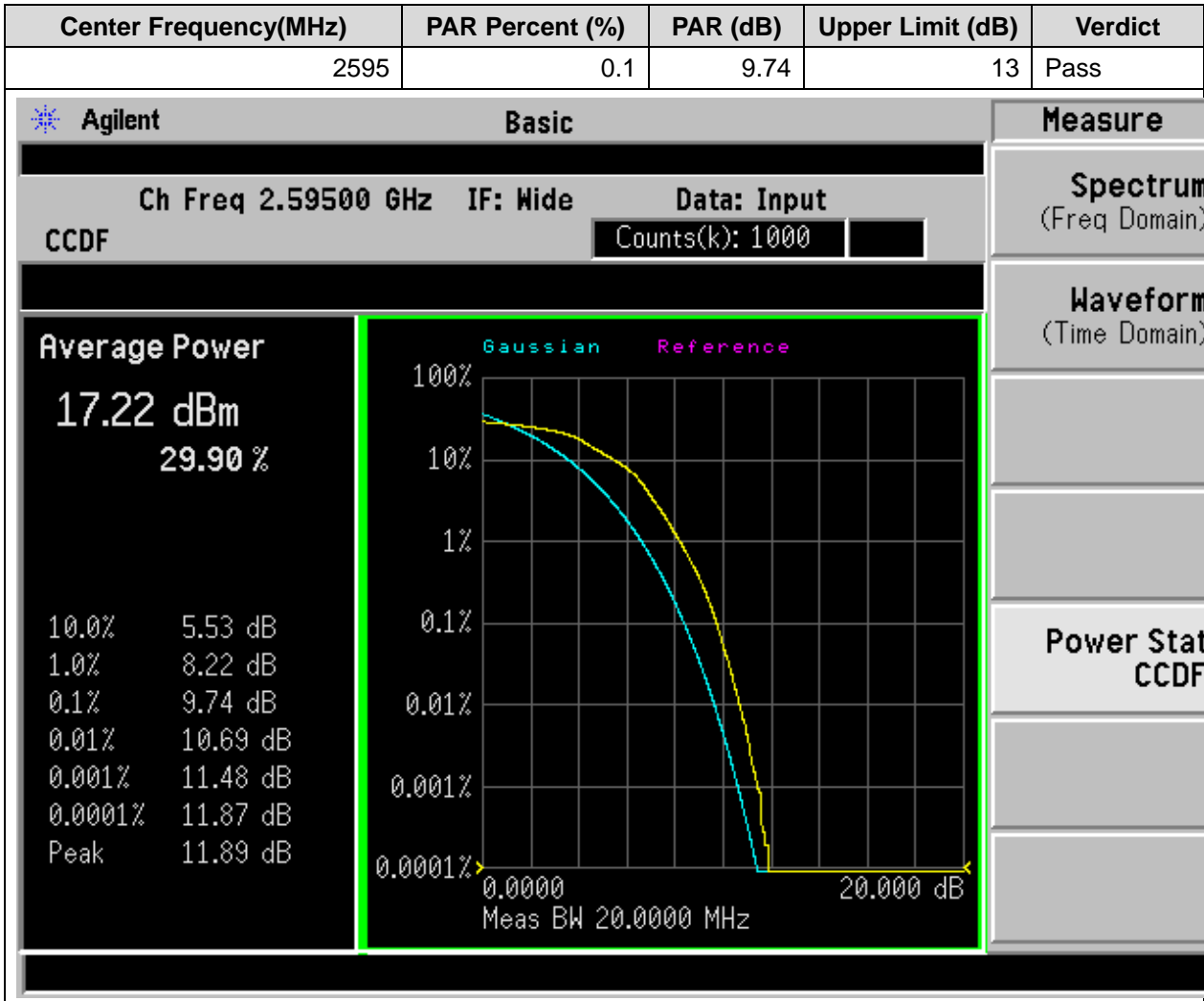




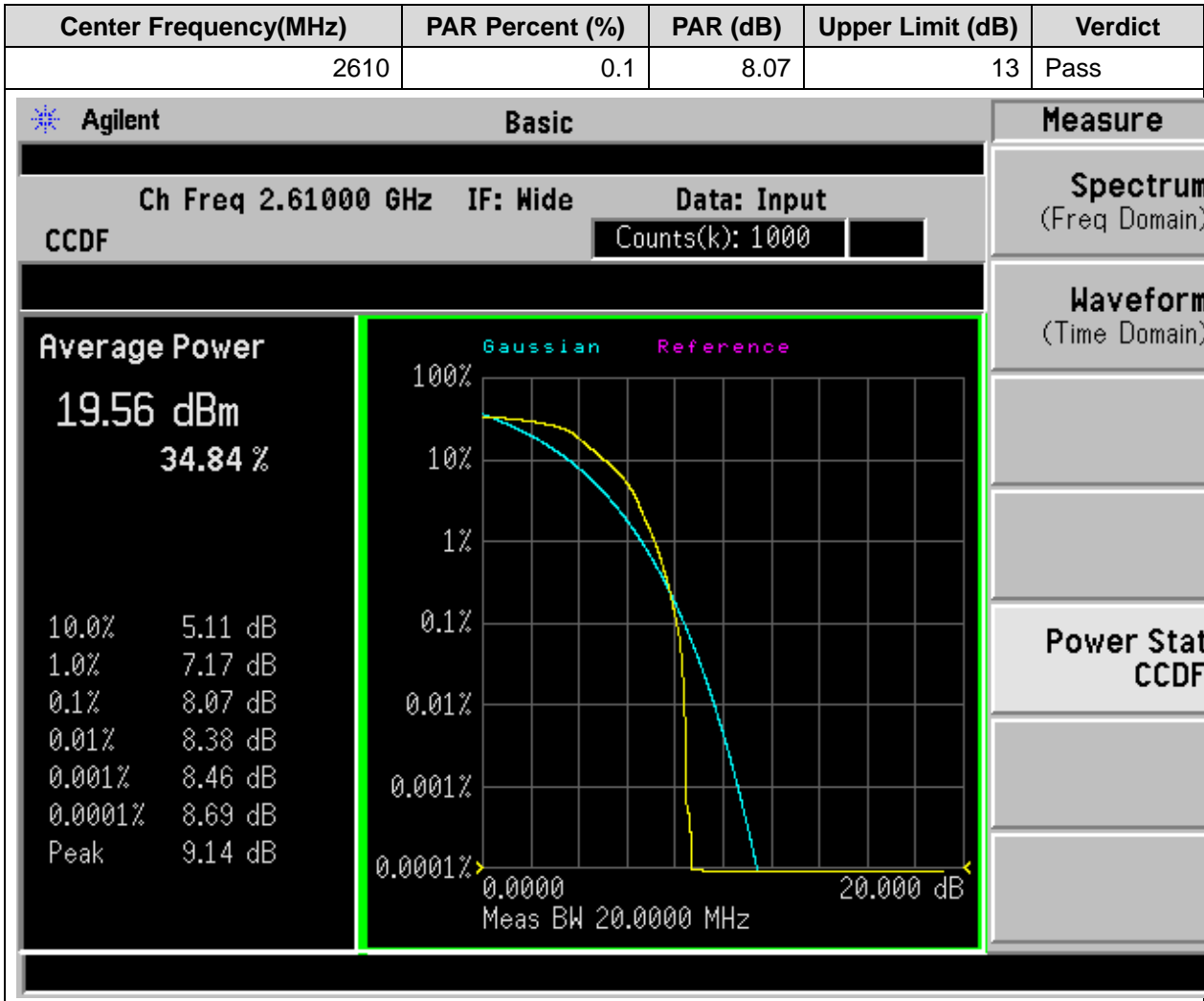
**10.7. LTE Peak to Average Ratio(NTNV)(Subtest:7, Channel:38000, Bandwidth:20, Modulation:Q16, RB Number: 1, RB Position:LOW)**



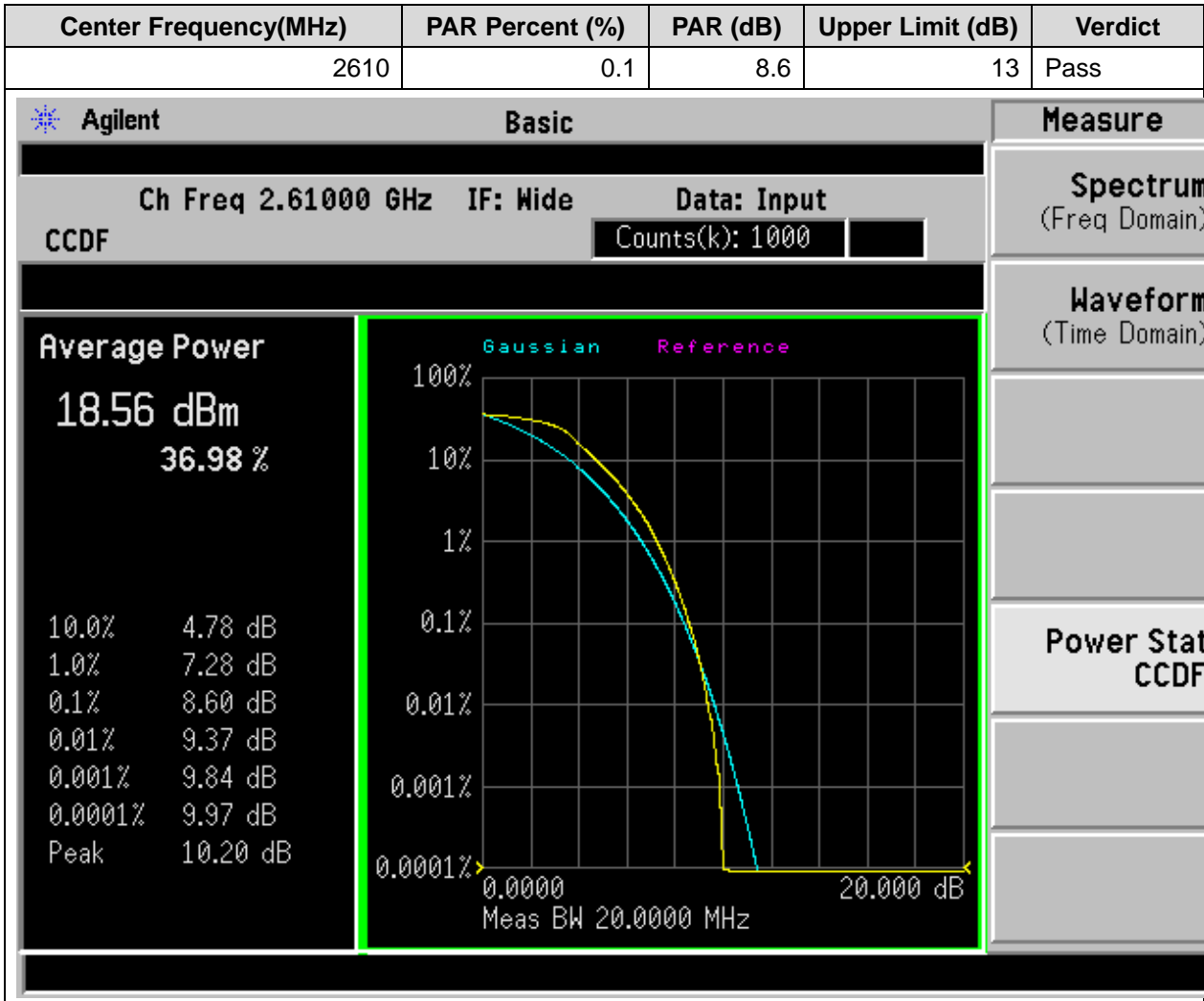
**10.8. LTE Peak to Average Ratio(NTNV)(Subtest:8, Channel:38000, Bandwidth:20, Modulation:Q16, RB Number: 100, RB Position:LOW)**



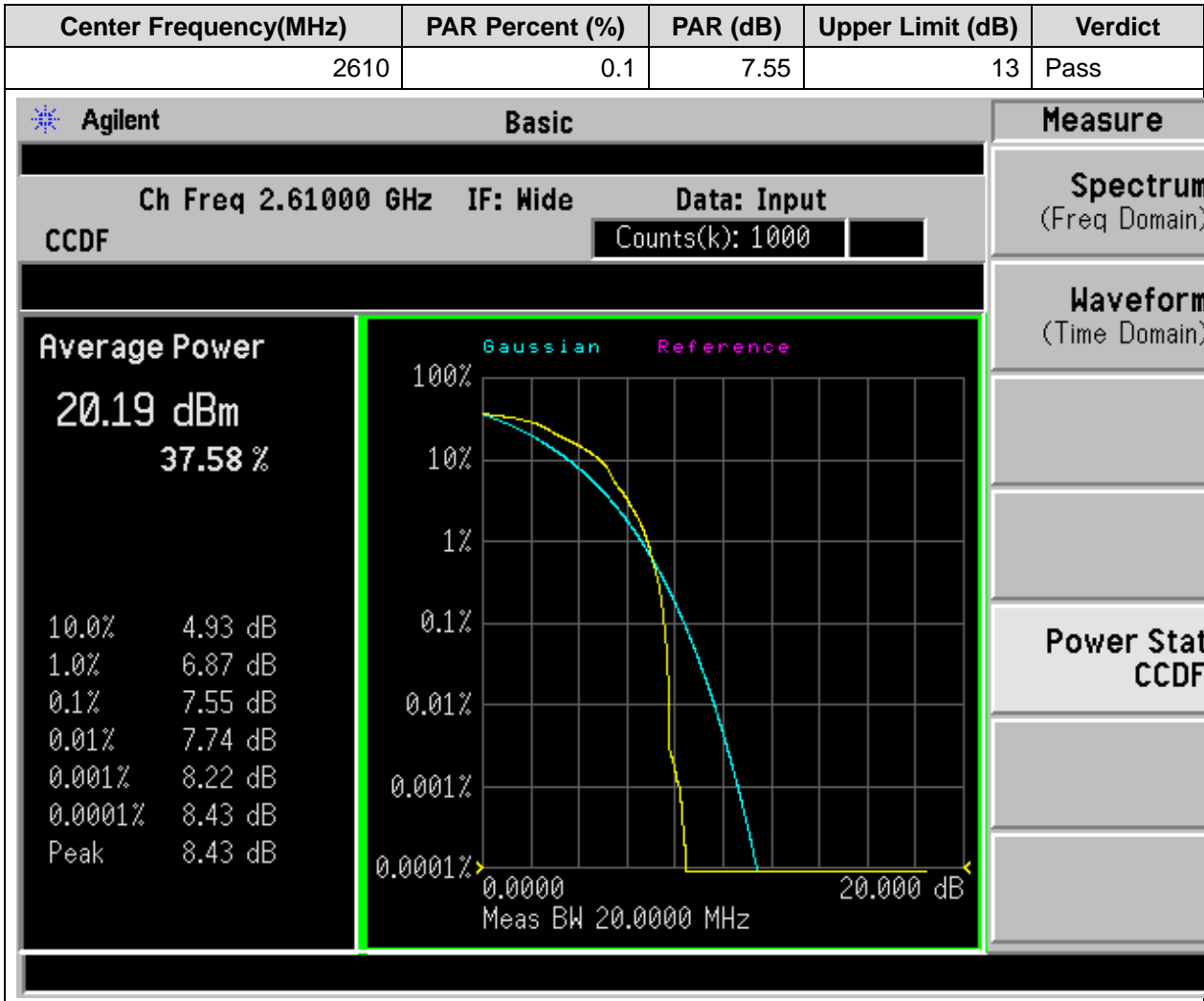
**10.9. LTE Peak to Average Ratio(NTNV)(Subtest:9, Channel:38150, Bandwidth:20, Modulation:QPSK, RB Number: 1, RB Position:LOW)**



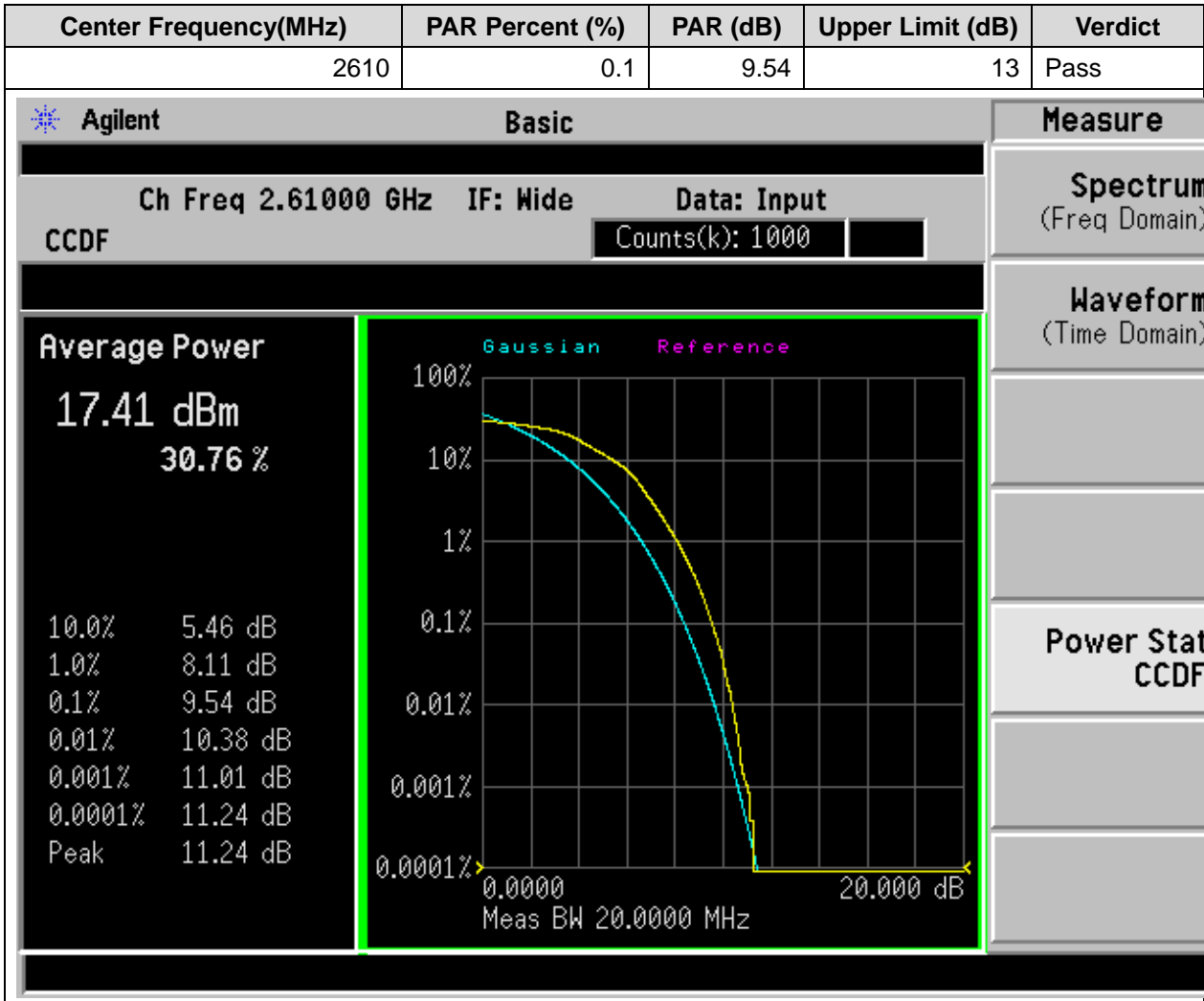
**10.10. LTE Peak to Average Ratio(NTNV)(Subtest:10, Channel:38150, Bandwidth:20, Modulation:QPSK, RB Number: 100, RB Position:LOW)**



10.11. LTE Peak to Average Ratio(NTNV)(Subtest:11, Channel:38150, Bandwidth:20, Modulation:Q16, RB Number: 1, RB Position:LOW)

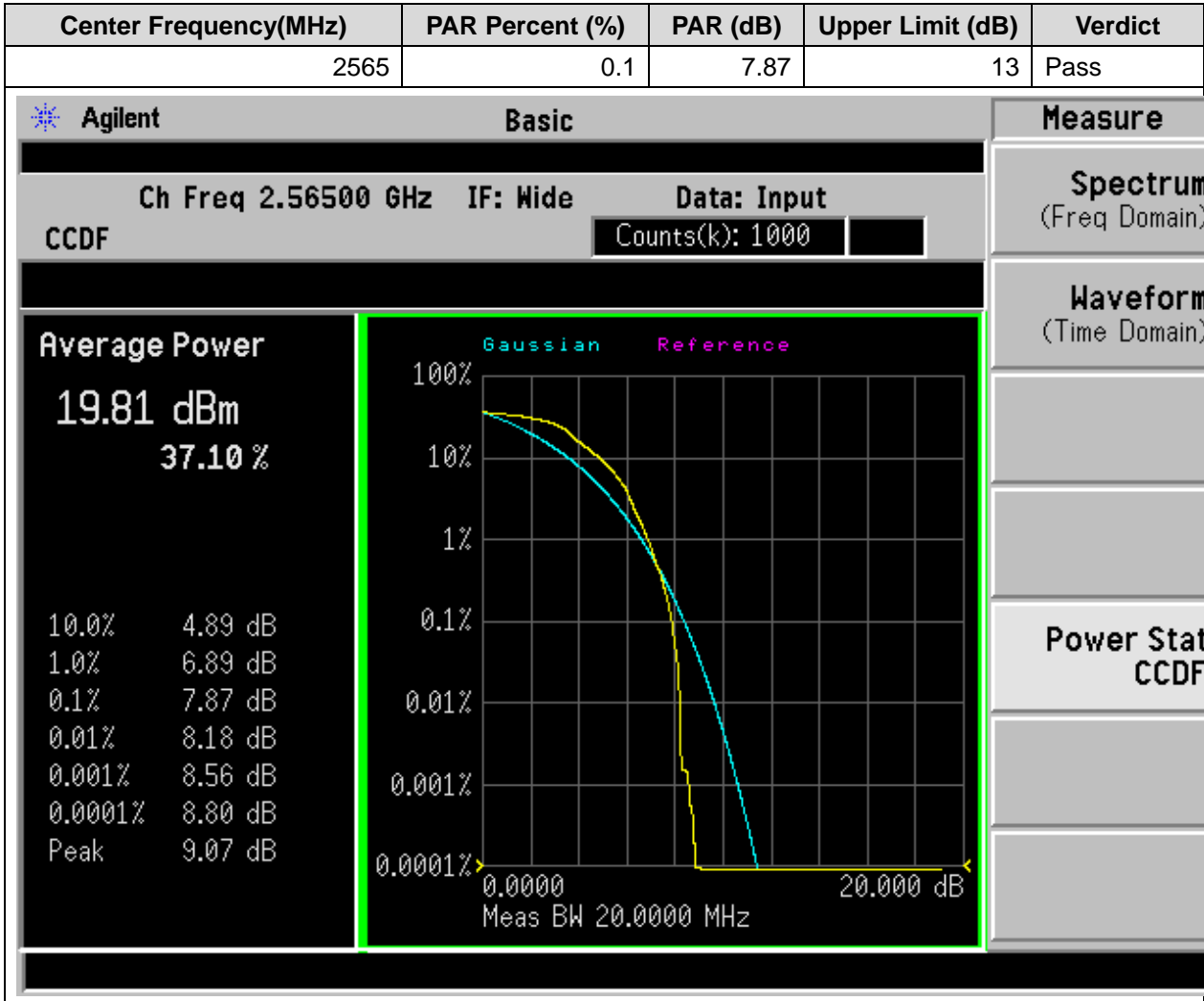


10.12. LTE Peak to Average Ratio(NTNV)(Subtest:12, Channel:38150, Bandwidth:20, Modulation:Q16, RB Number: 100, RB Position:LOW)

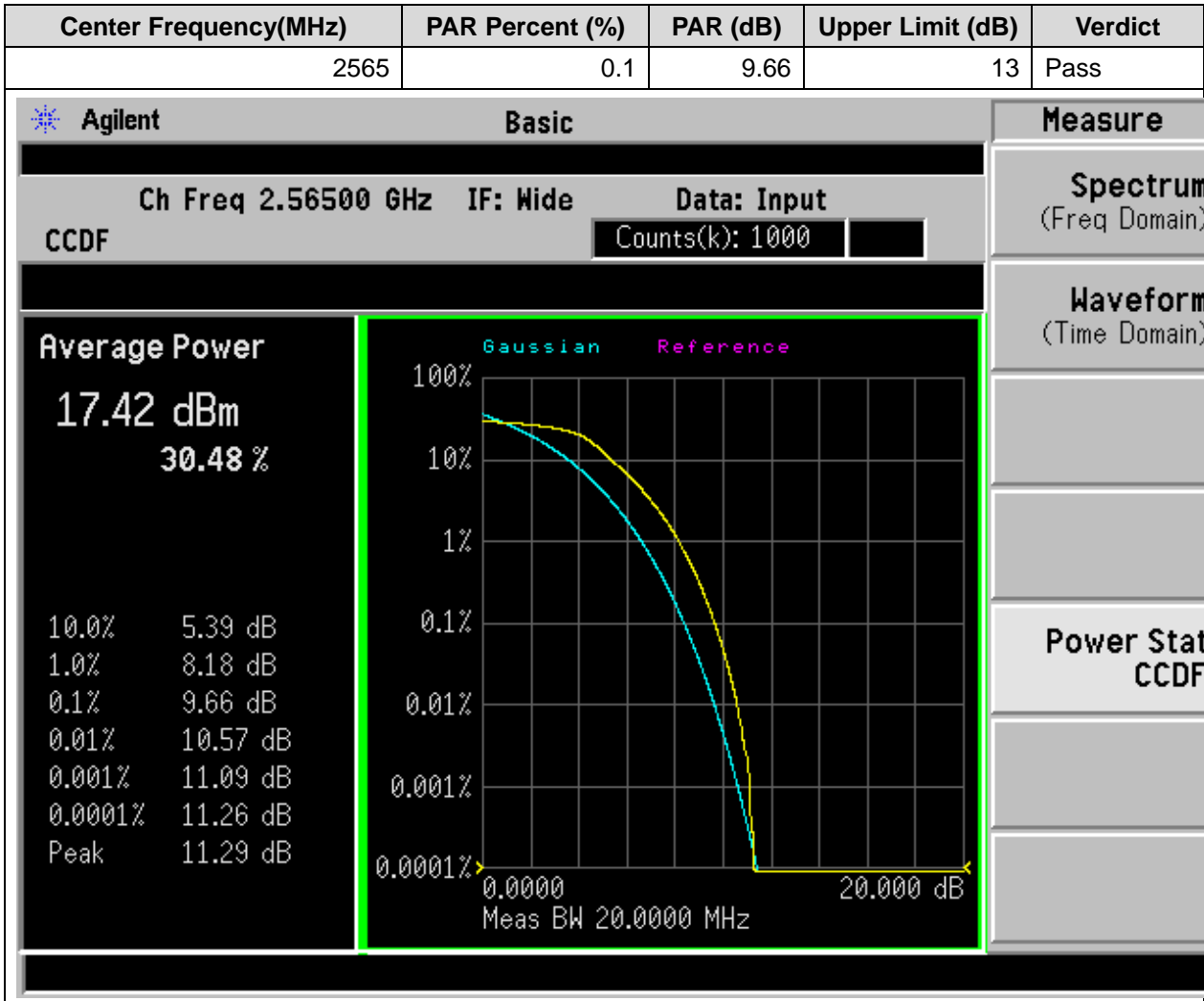


## 11. LTE\_Band41 100M

11.1. LTE Peak to Average Ratio(NTNV)(Subtest:1, Channel:40340, Bandwidth:20, Modulation:QPSK, RB Number: 1, RB Position:LOW)

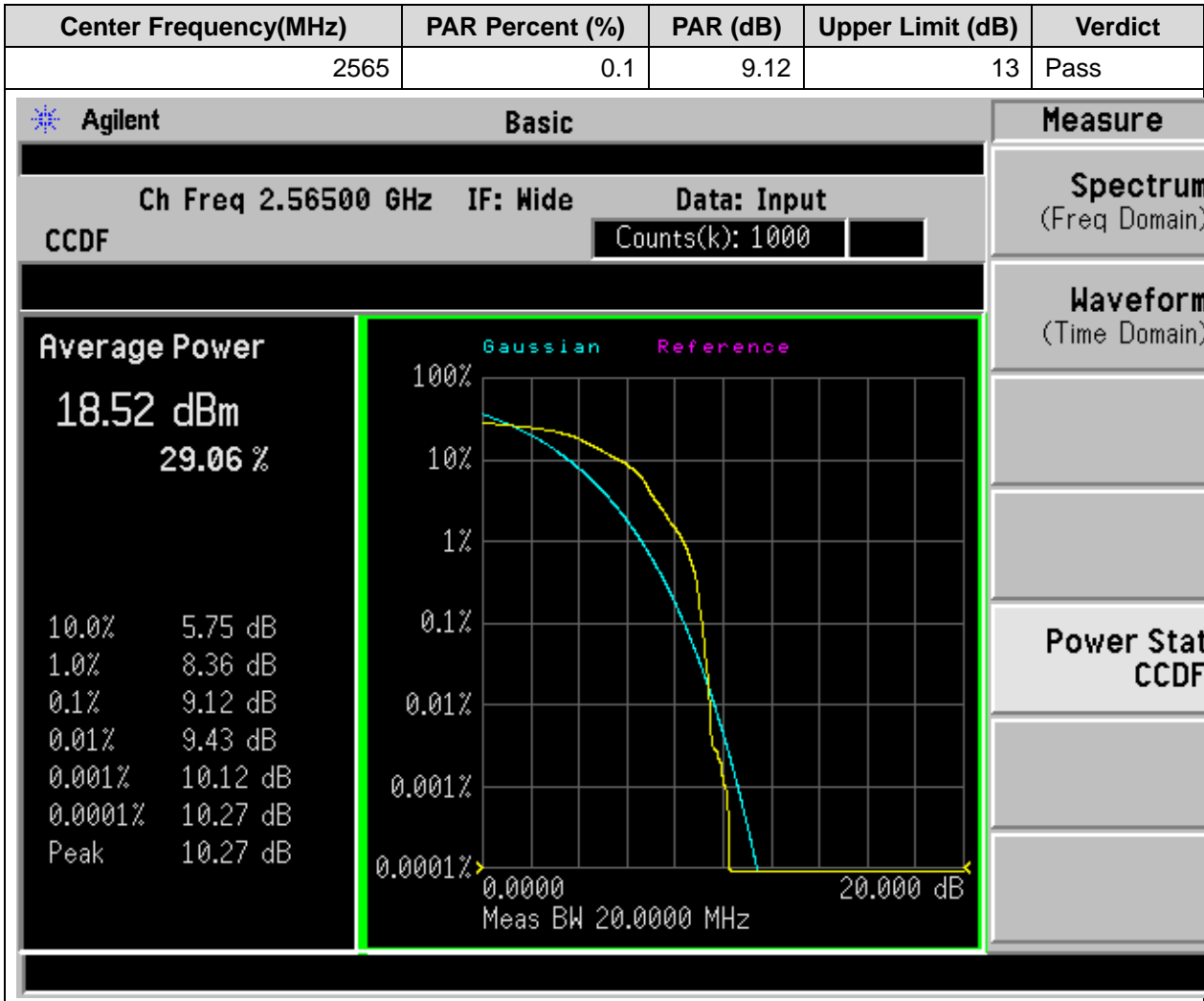


**11.2. LTE Peak to Average Ratio(NTNV)(Subtest:2, Channel:40340, Bandwidth:20, Modulation:QPSK, RB Number: 100, RB Position:LOW)**

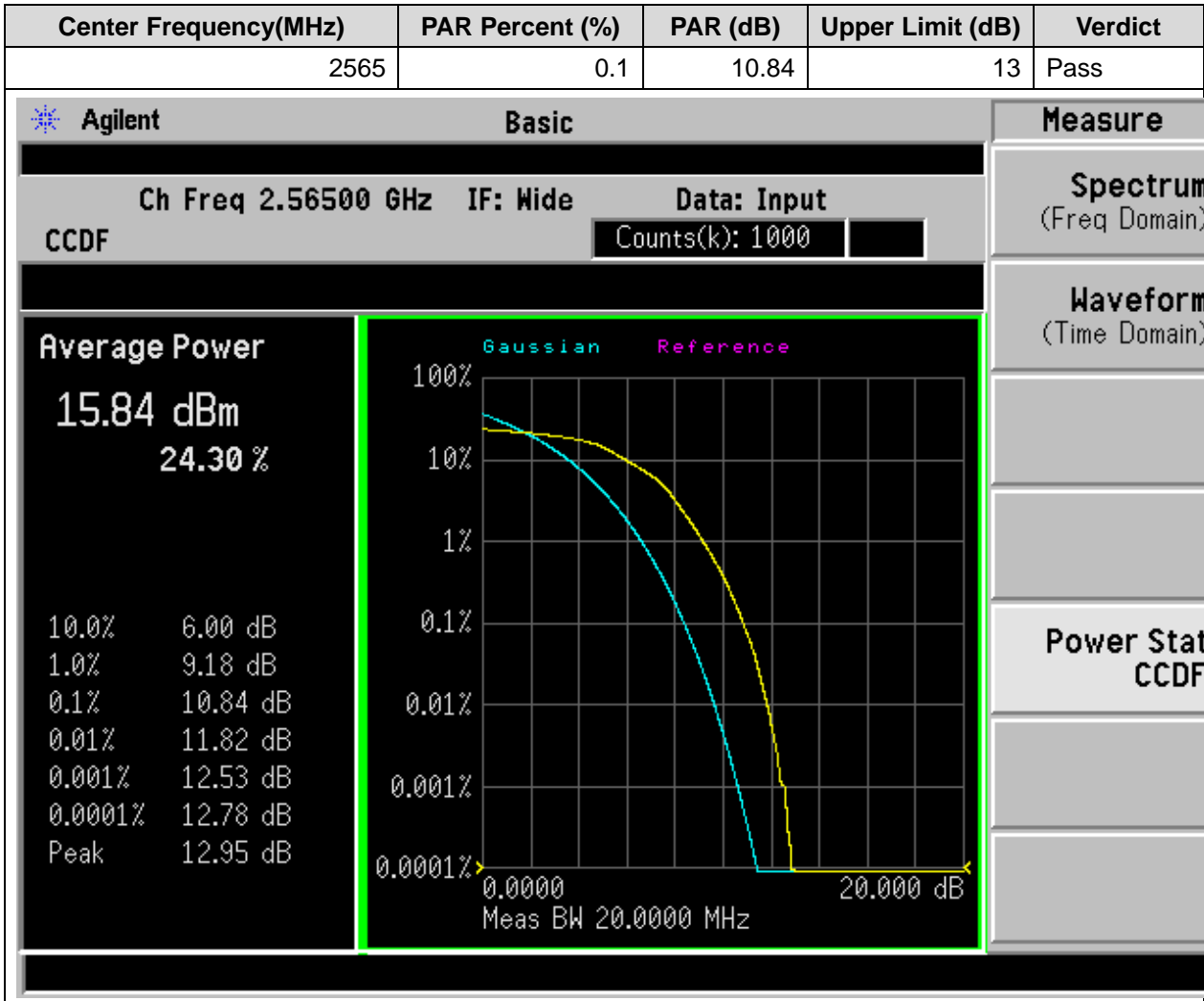




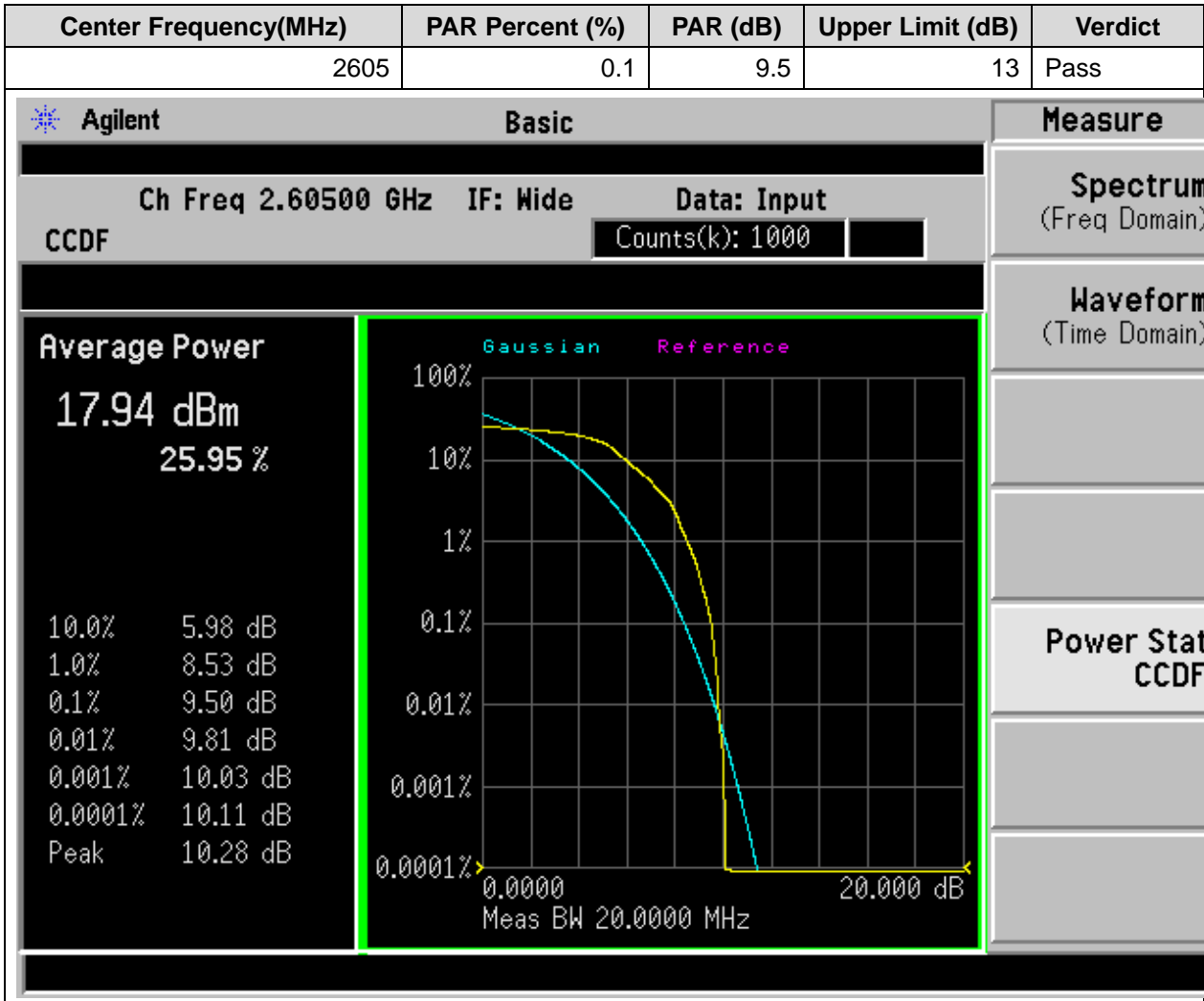
**11.3. LTE Peak to Average Ratio(NTNV)(Subtest:3, Channel:40340, Bandwidth:20, Modulation:Q16, RB Number: 1, RB Position:LOW)**



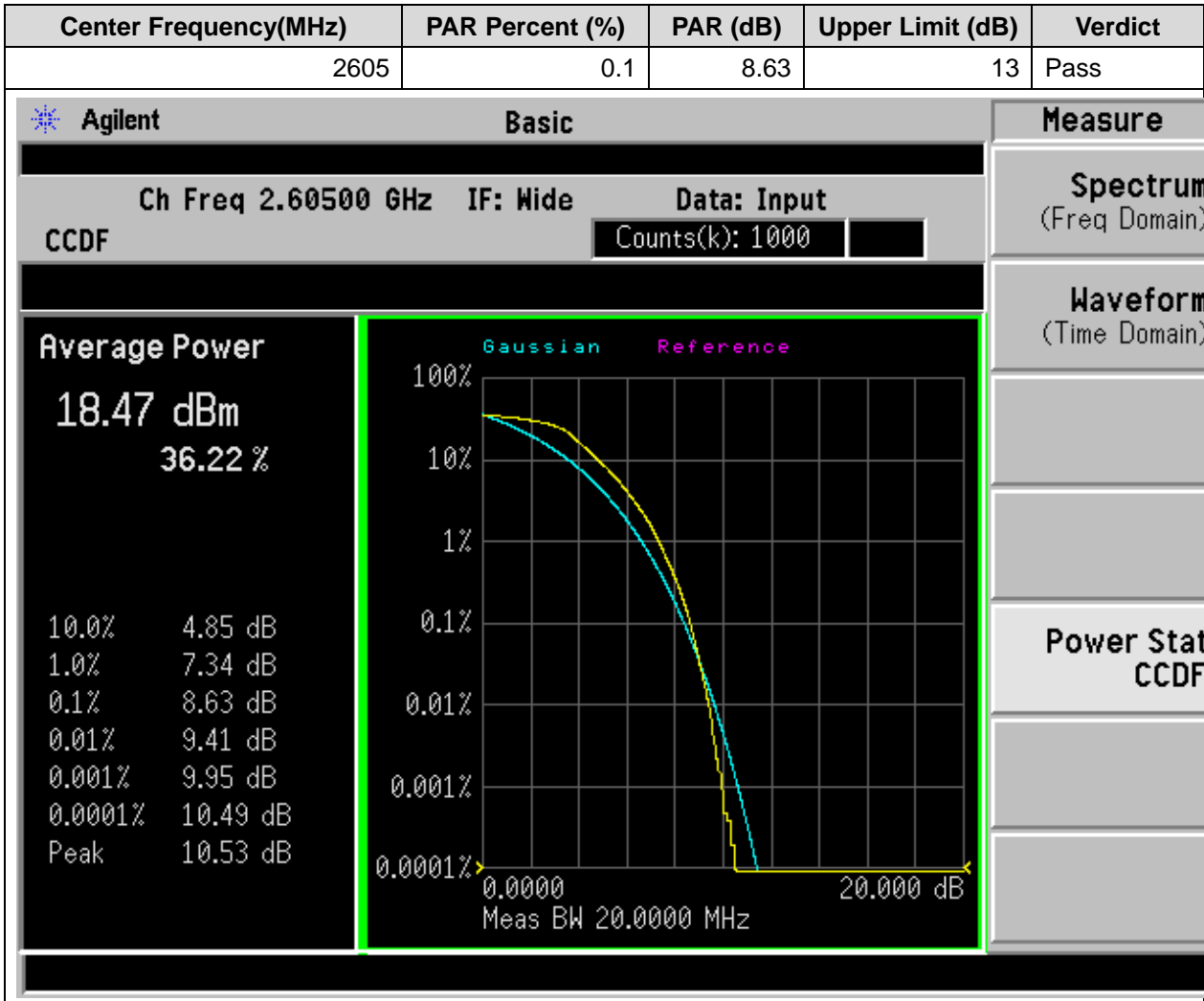
**11.4. LTE Peak to Average Ratio(NTNV)(Subtest:4, Channel:40340, Bandwidth:20, Modulation:Q16, RB Number: 100, RB Position:LOW)**



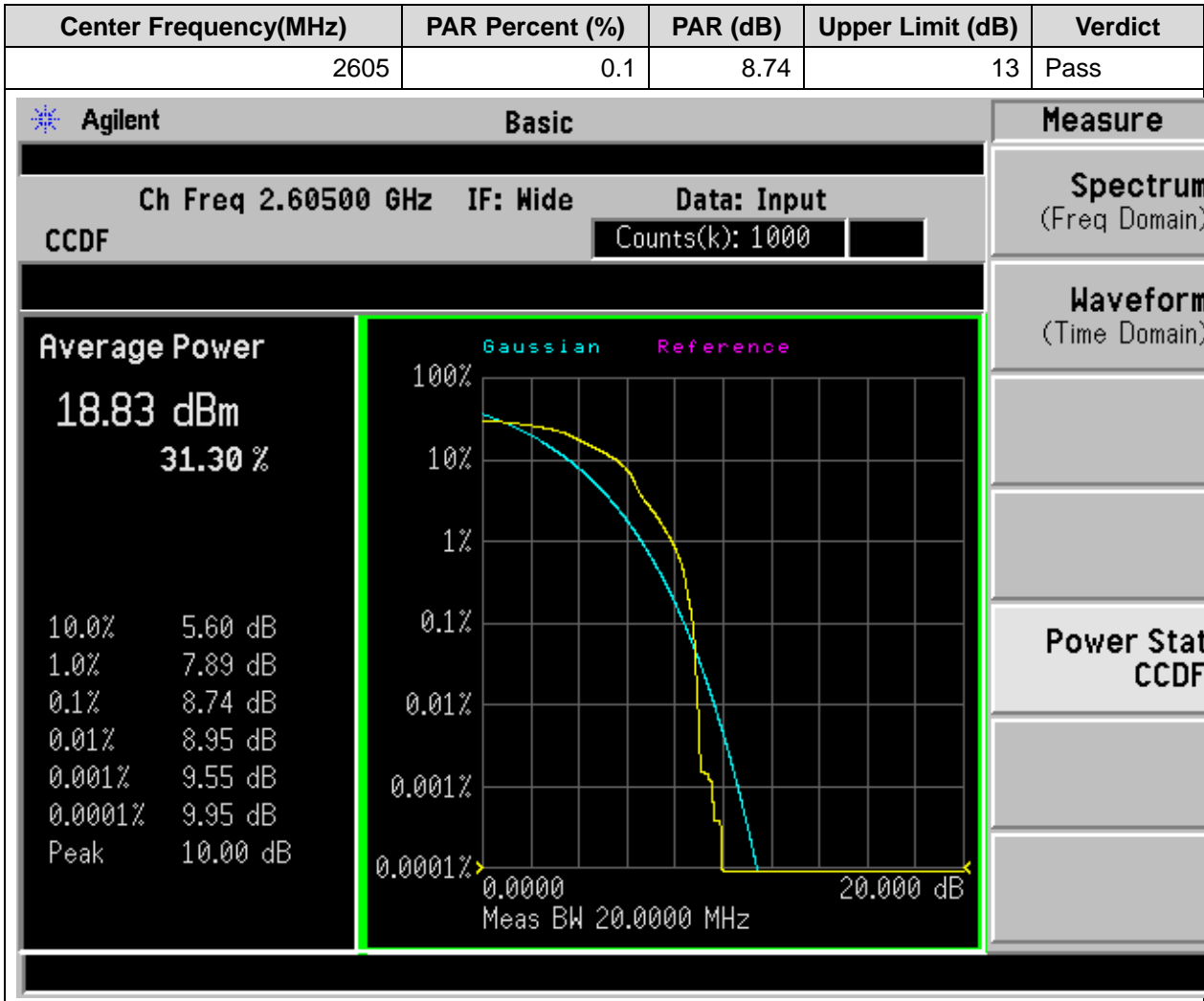
**11.5. LTE Peak to Average Ratio(NTNV)(Subtest:5, Channel:40740, Bandwidth:20, Modulation:QPSK, RB Number: 1, RB Position:LOW)**



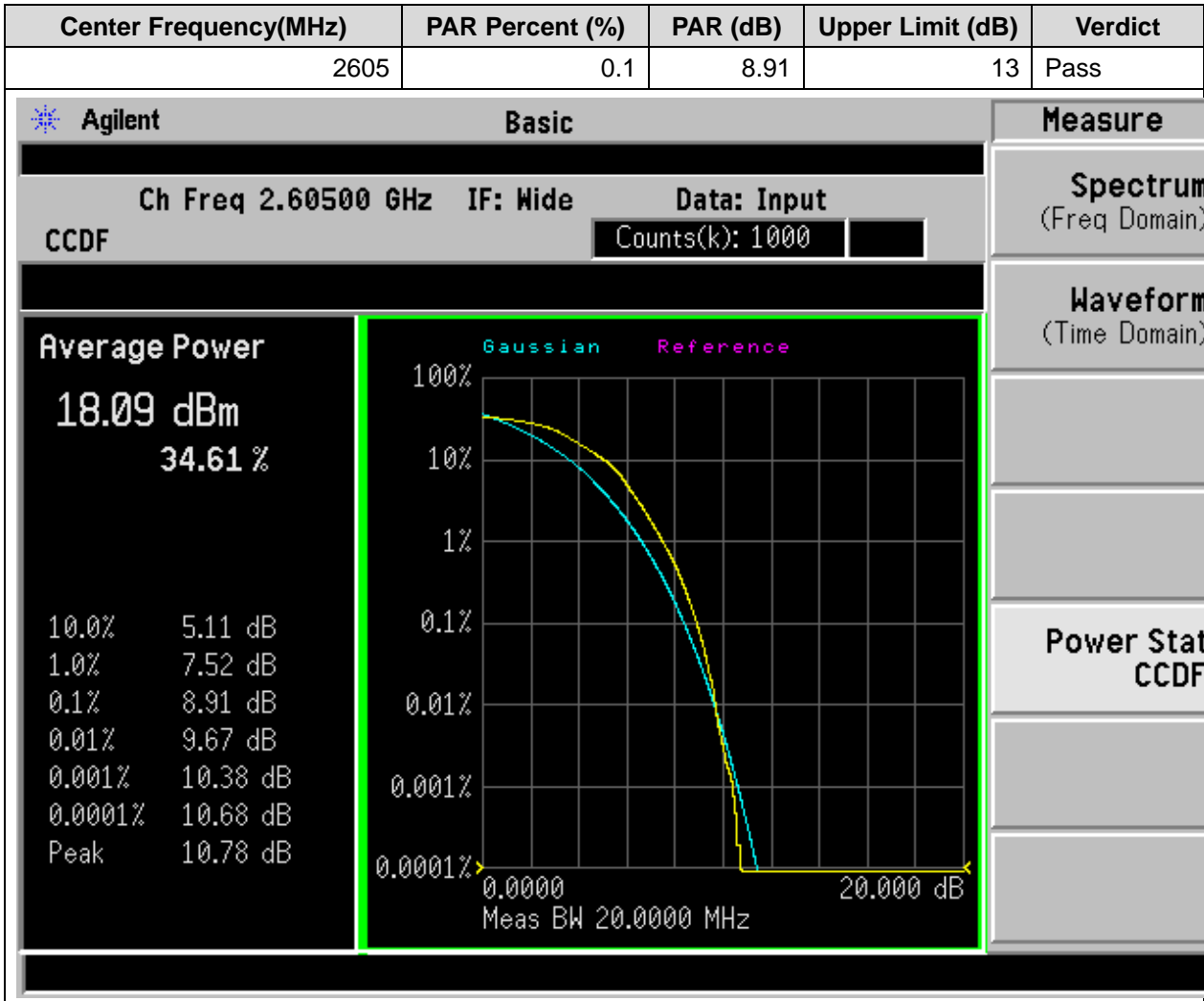
**11.6. LTE Peak to Average Ratio(NTNV)(Subtest:6, Channel:40740, Bandwidth:20, Modulation:QPSK, RB Number: 100, RB Position:LOW)**



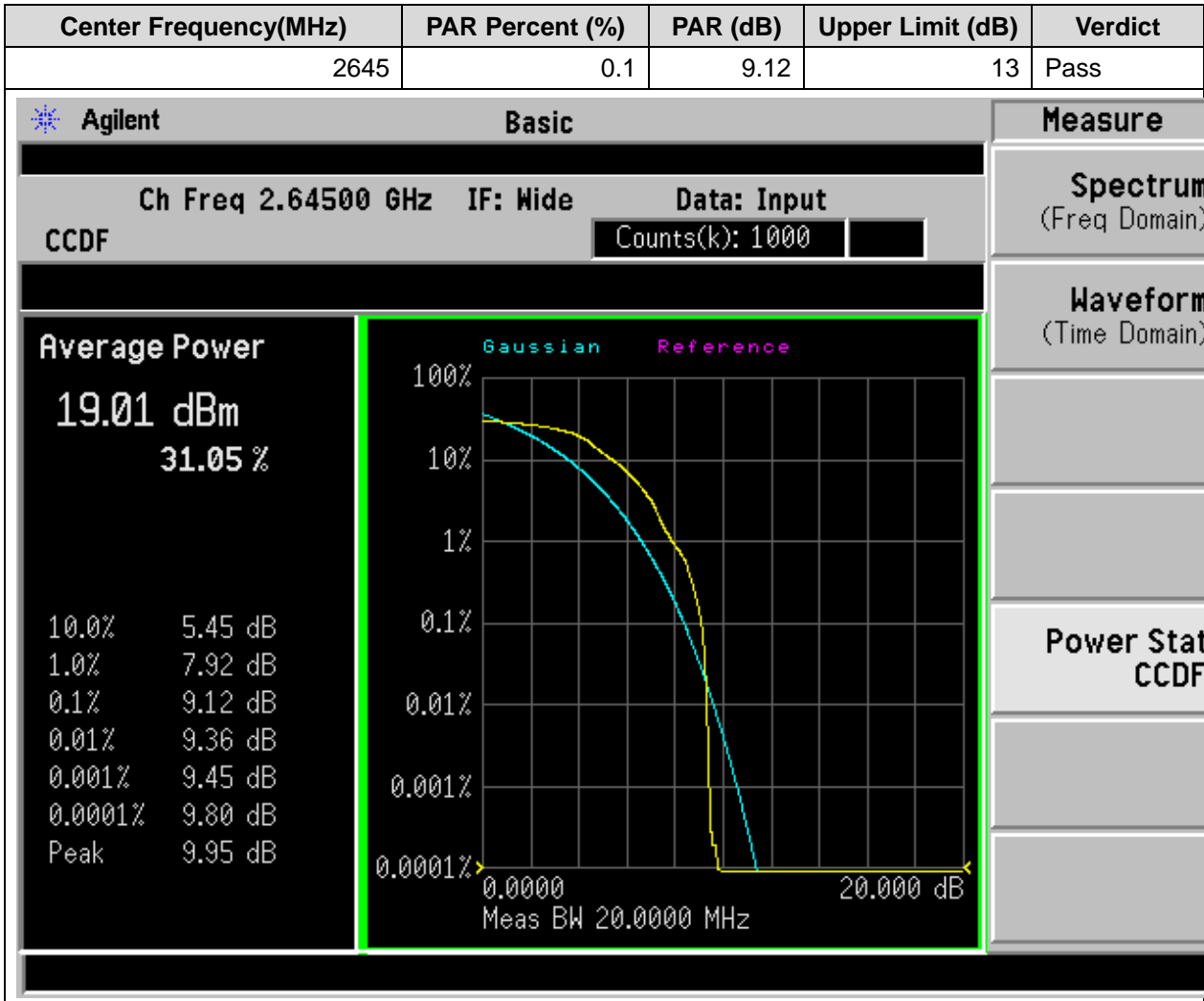
11.7. LTE Peak to Average Ratio(NTNV)(Subtest:7, Channel:40740, Bandwidth:20, Modulation:Q16, RB Number: 1, RB Position:LOW)



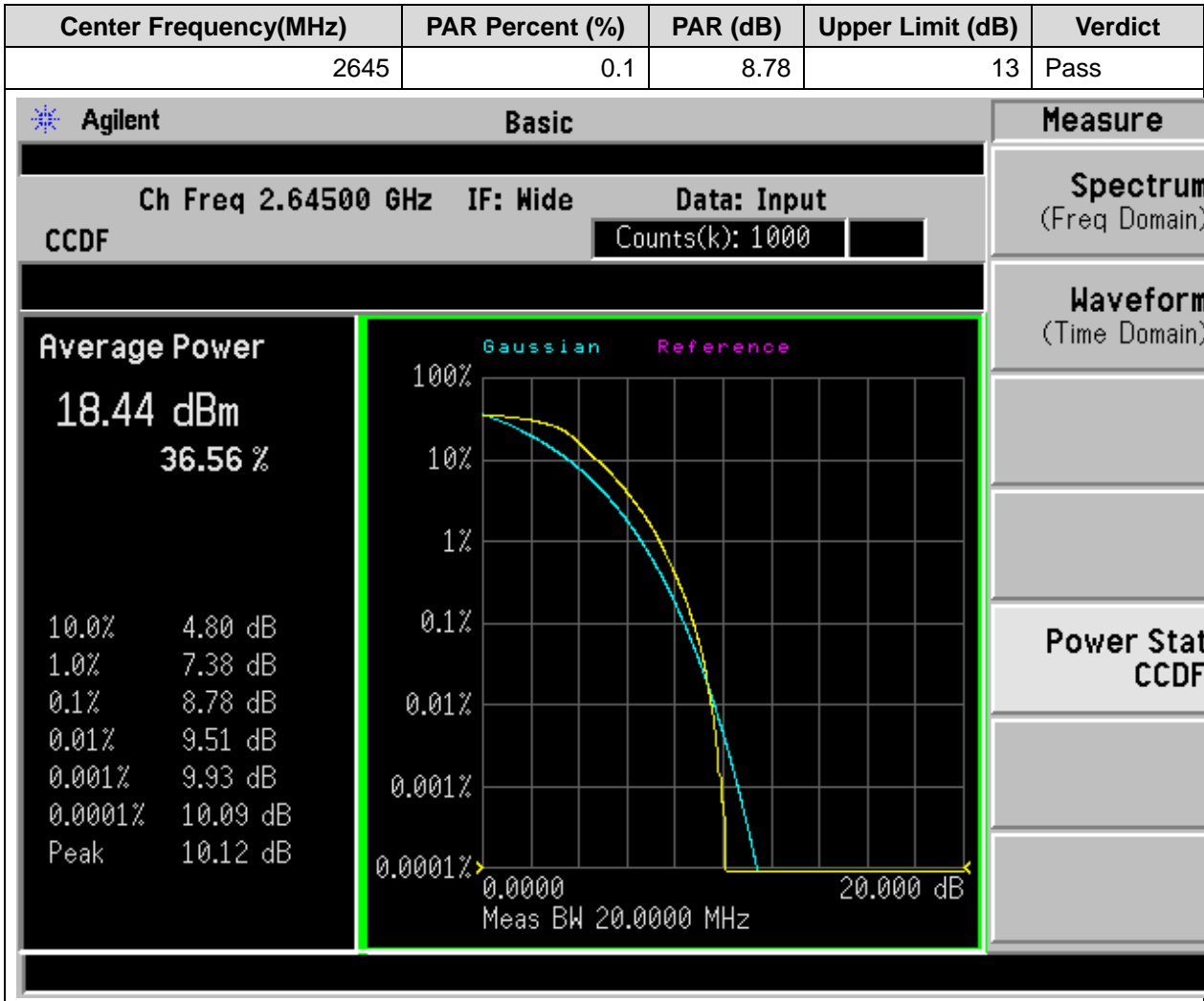
**11.8. LTE Peak to Average Ratio(NTNV)(Subtest:8, Channel:40740, Bandwidth:20, Modulation:Q16, RB Number: 100, RB Position:LOW)**



**11.9. LTE Peak to Average Ratio(NTNV)(Subtest:9, Channel:41140, Bandwidth:20, Modulation:QPSK, RB Number: 1, RB Position:LOW)**

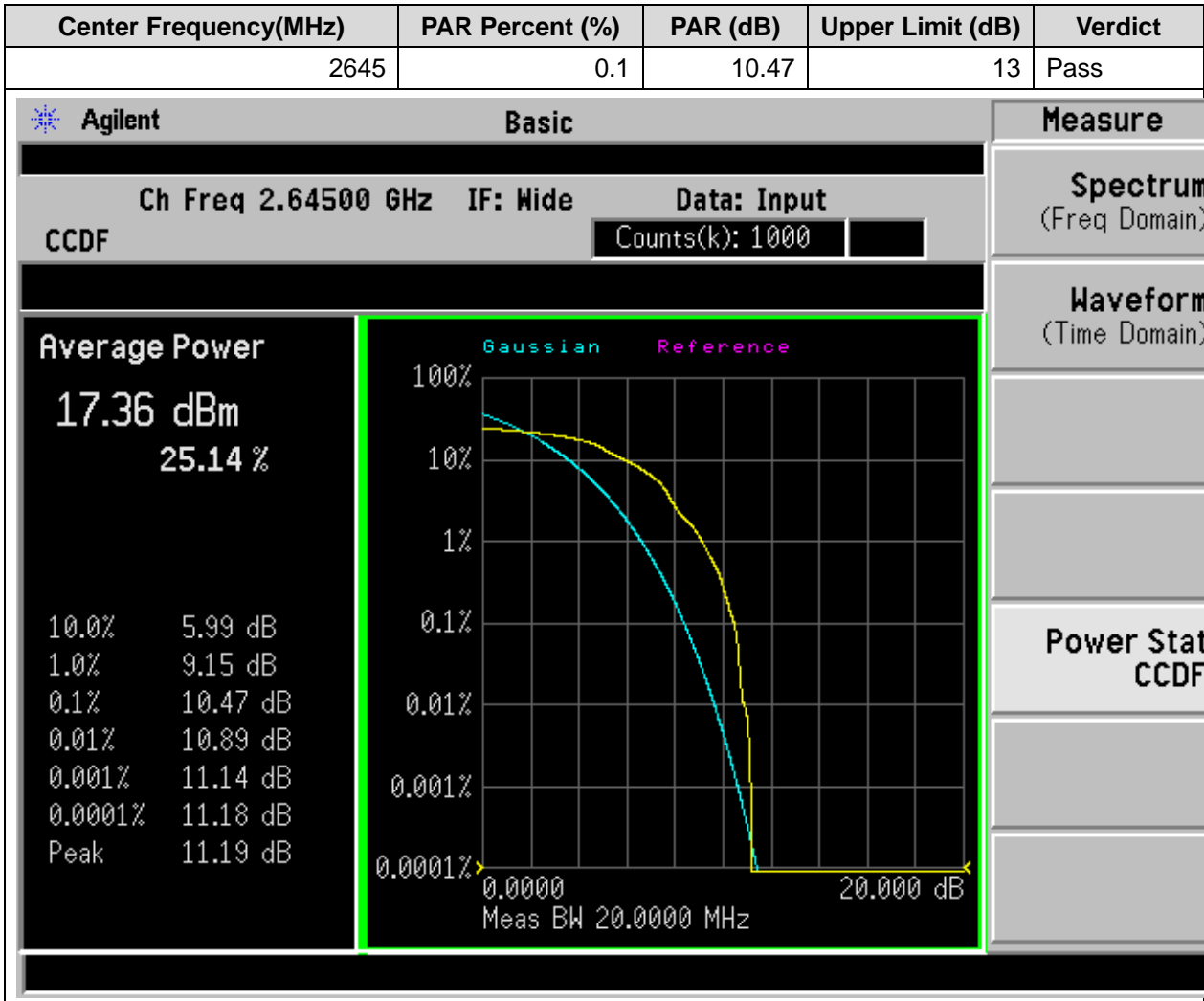


**11.10. LTE Peak to Average Ratio(NTNV)(Subtest:10, Channel:41140, Bandwidth:20, Modulation:QPSK, RB Number: 100, RB Position:LOW)**

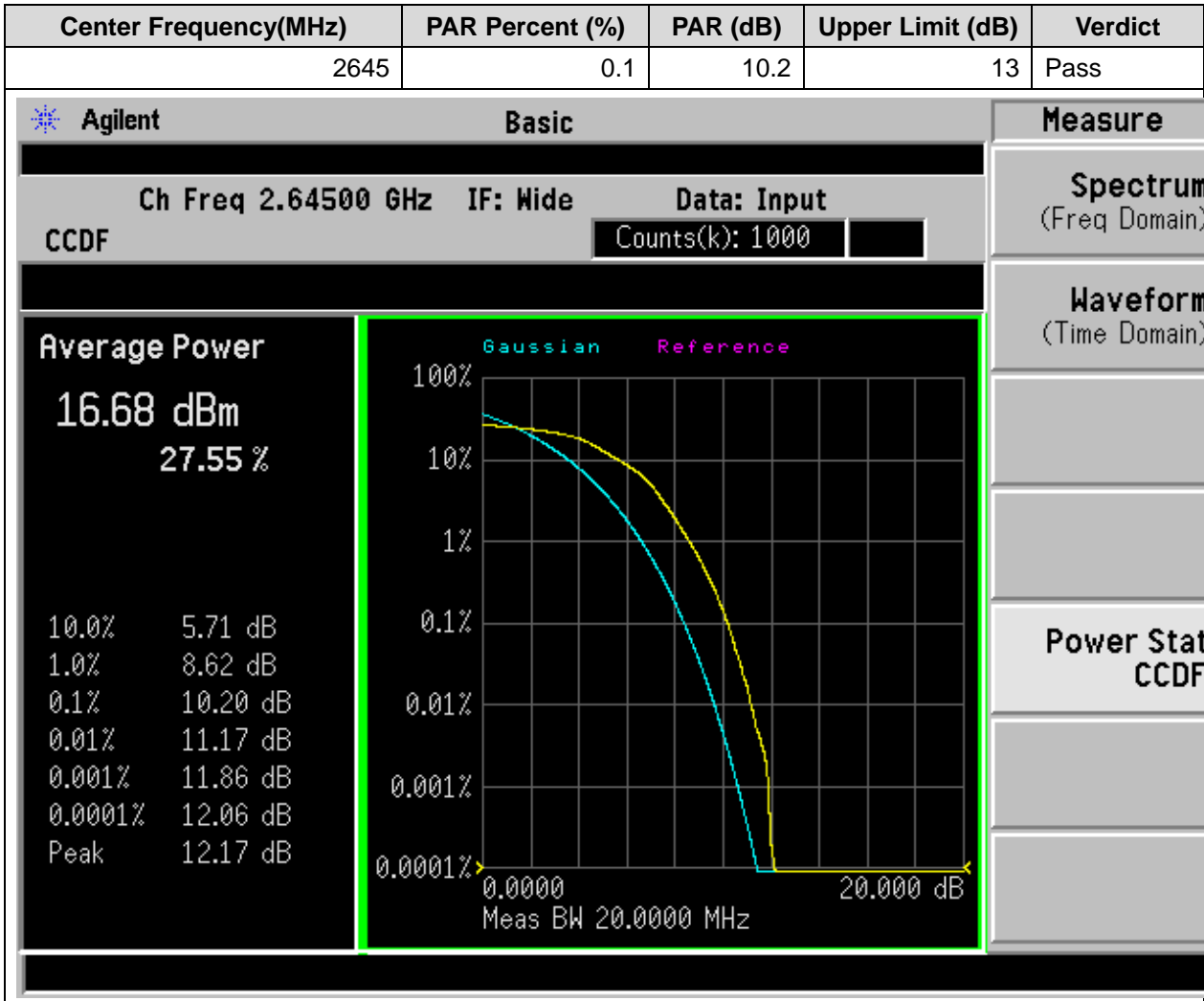




11.11. LTE Peak to Average Ratio(NTNV)(Subtest:11, Channel:41140, Bandwidth:20, Modulation:Q16, RB Number: 1, RB Position:LOW)



11.12. LTE Peak to Average Ratio(NTNV)(Subtest:12, Channel:41140, Bandwidth:20, Modulation:Q16, RB Number: 100, RB Position:LOW)



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END