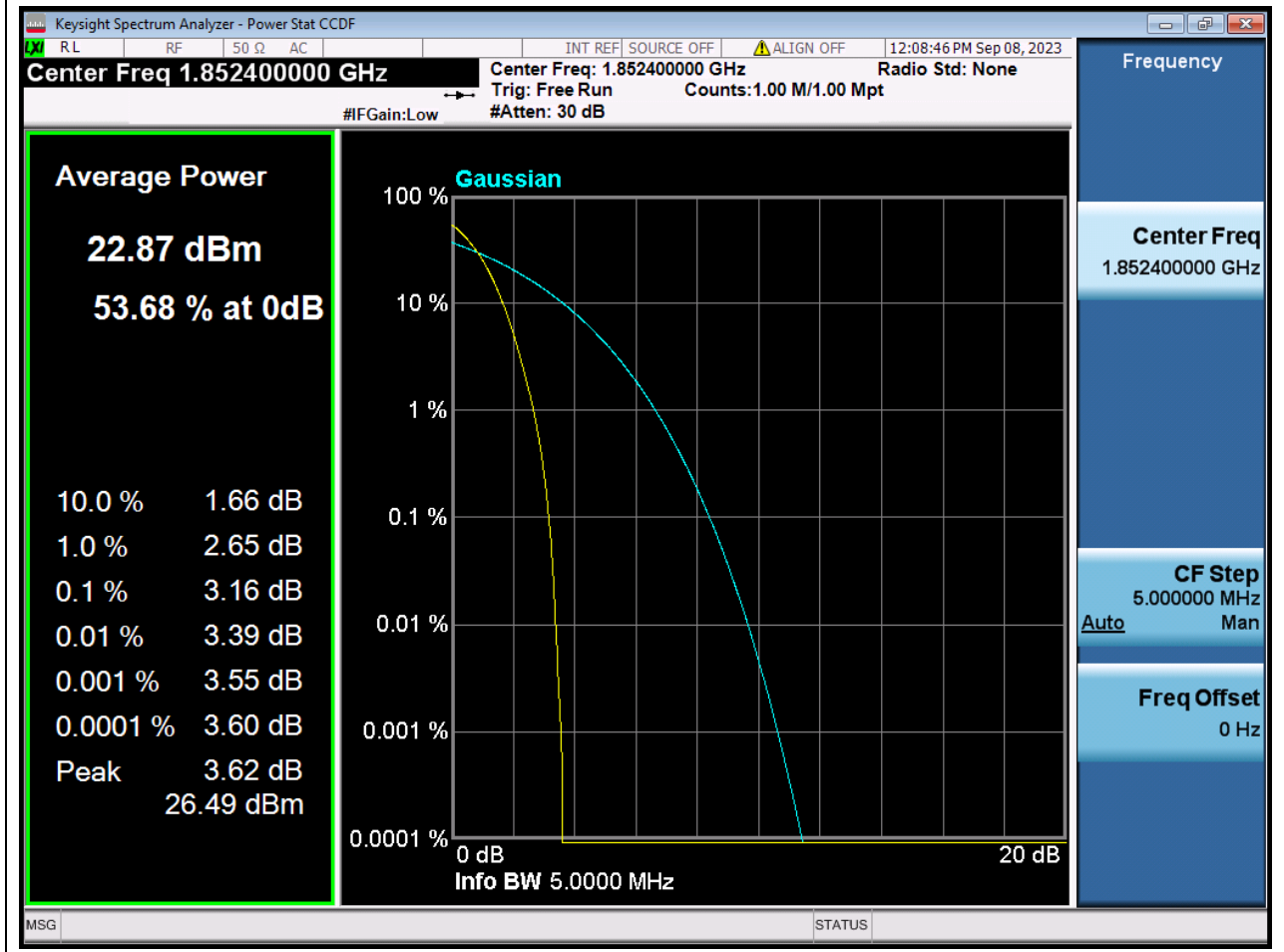


# EXHIBIT A. Peak to Average Ratio

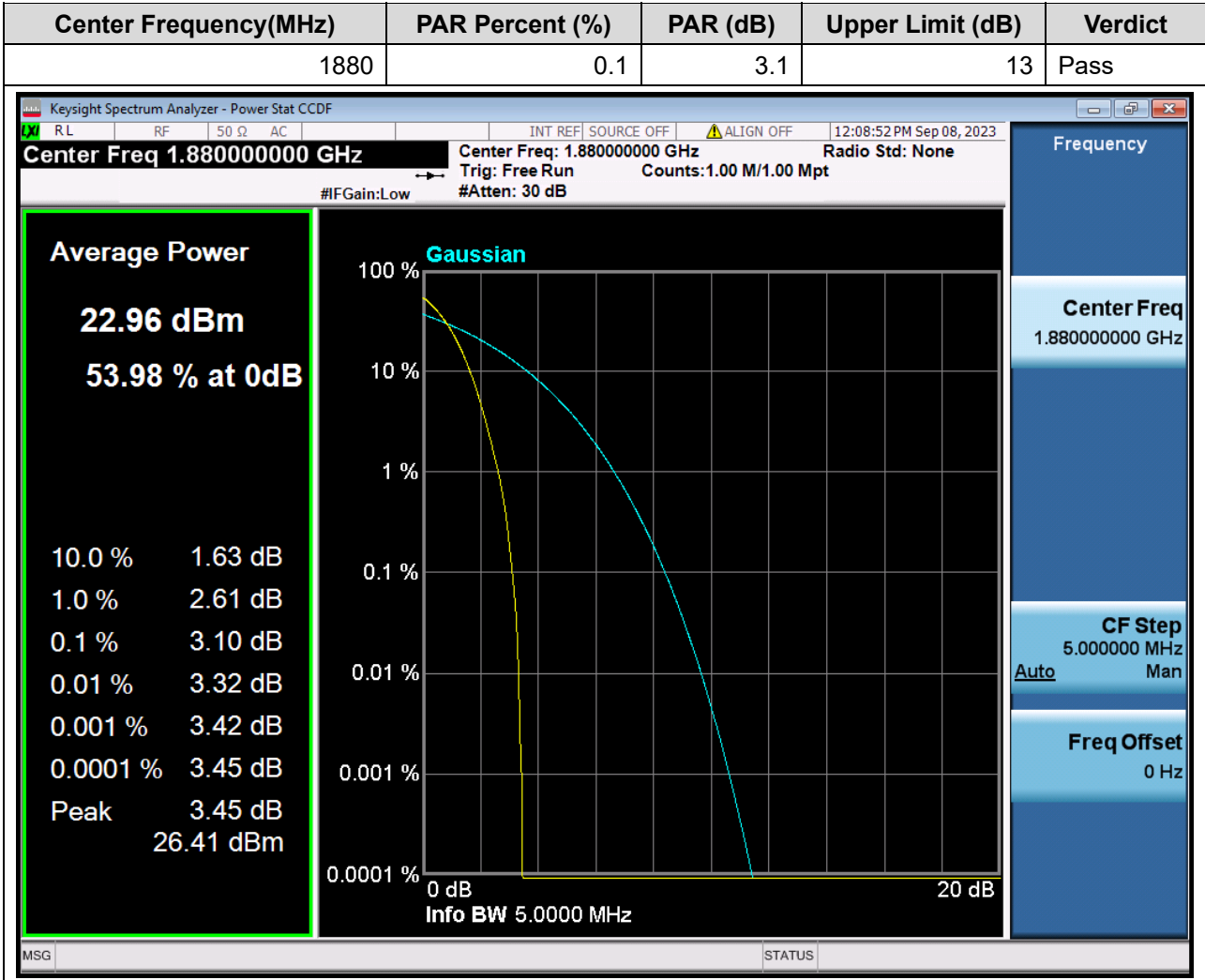
## 1. WCDMA\_Band2

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

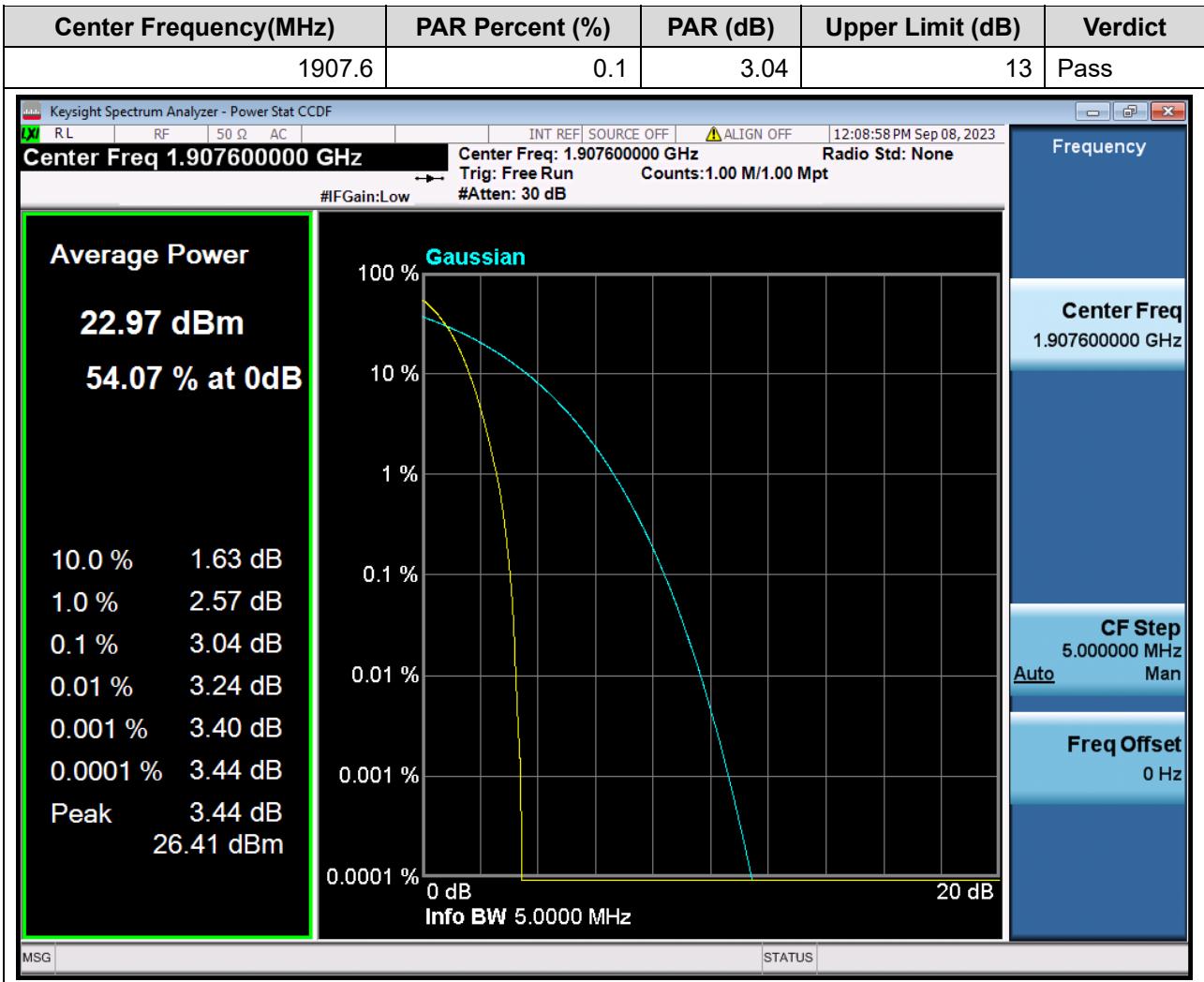
Center Frequency(MHz)	PAR Percent (%)	PAR (dB)	Upper Limit (dB)	Verdict
1852.4	0.1	3.16	13	Pass



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

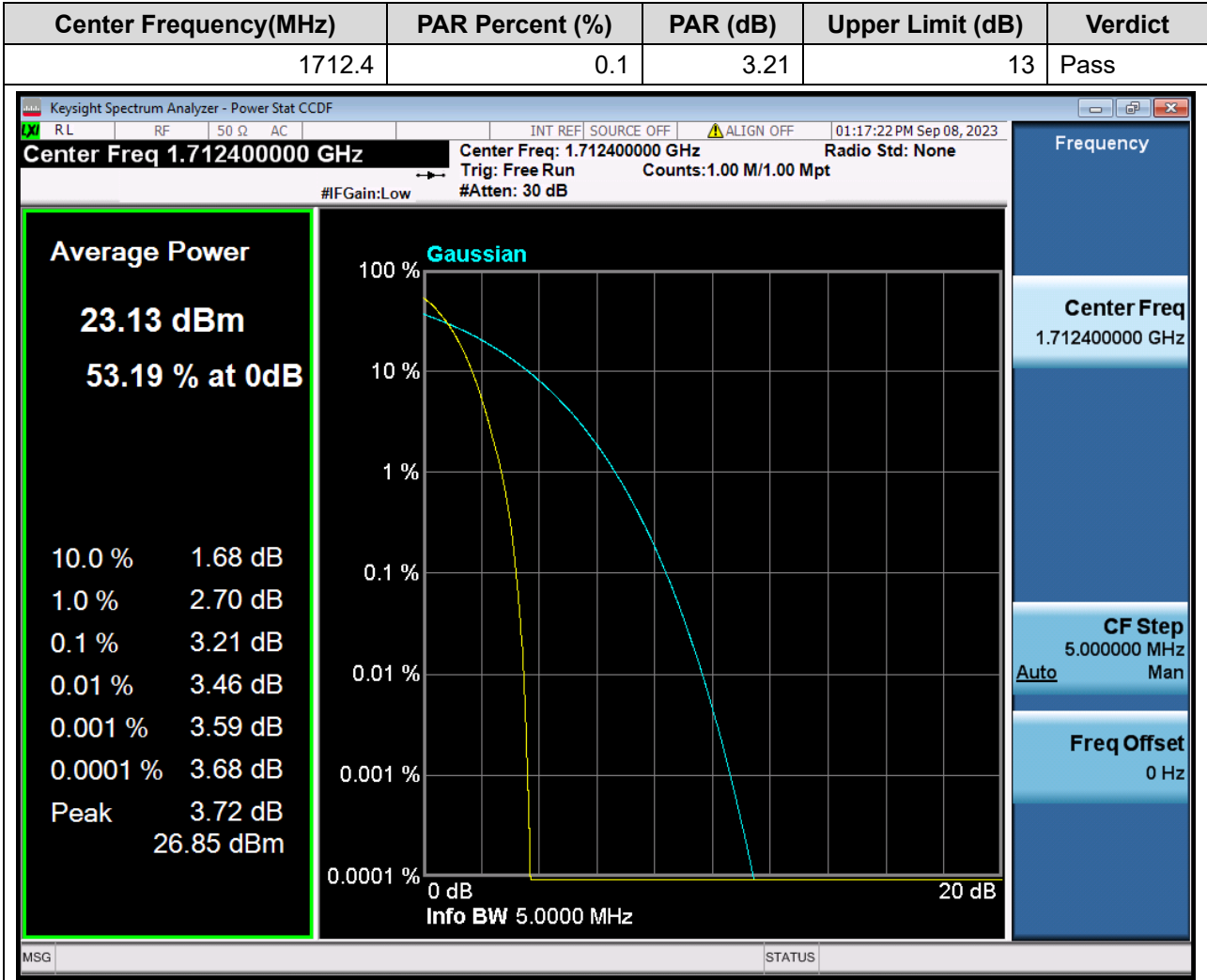


## 1.3. WCDMA Peak to Average Ratio(NTNV)(Channel:9538)

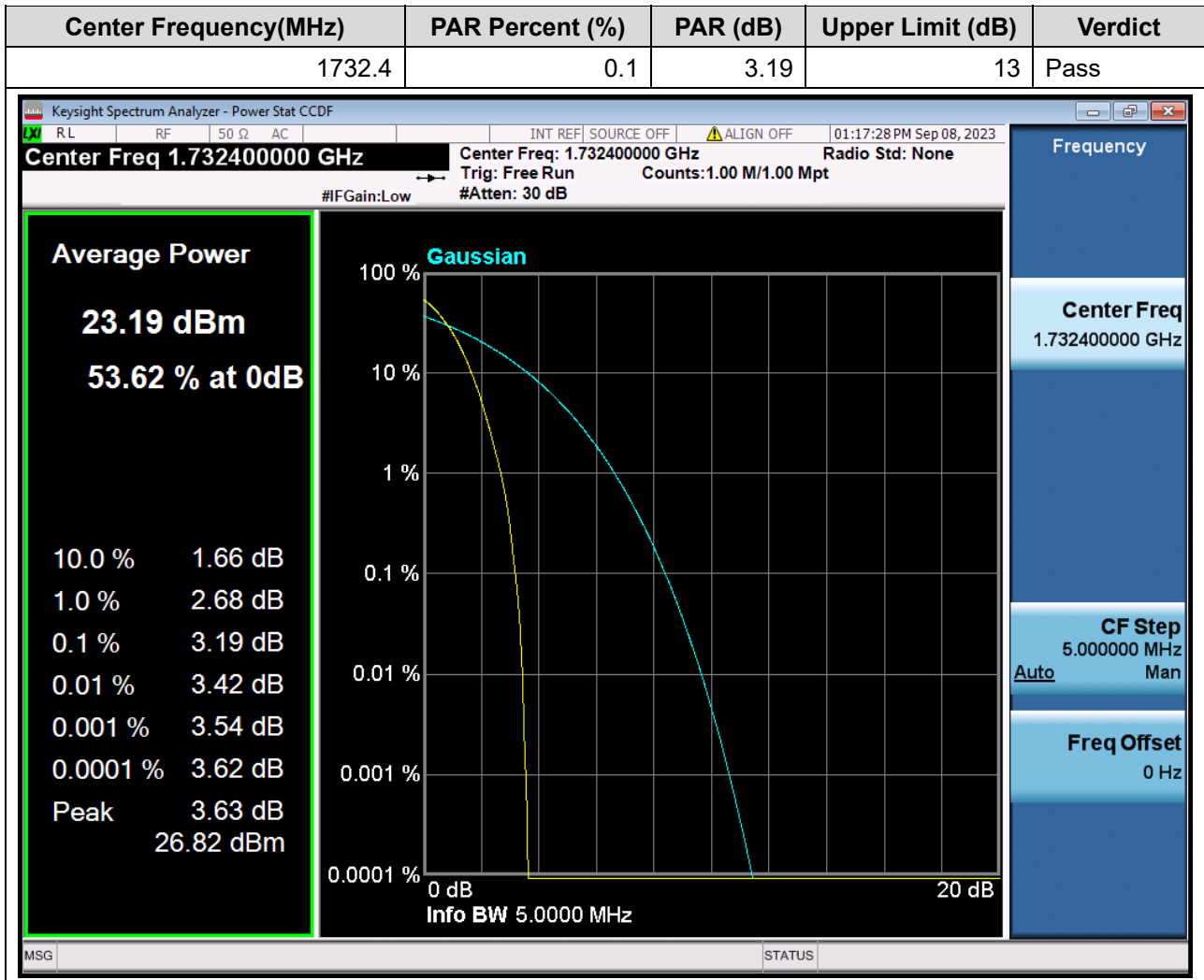


## 2. WCDMA\_Band4

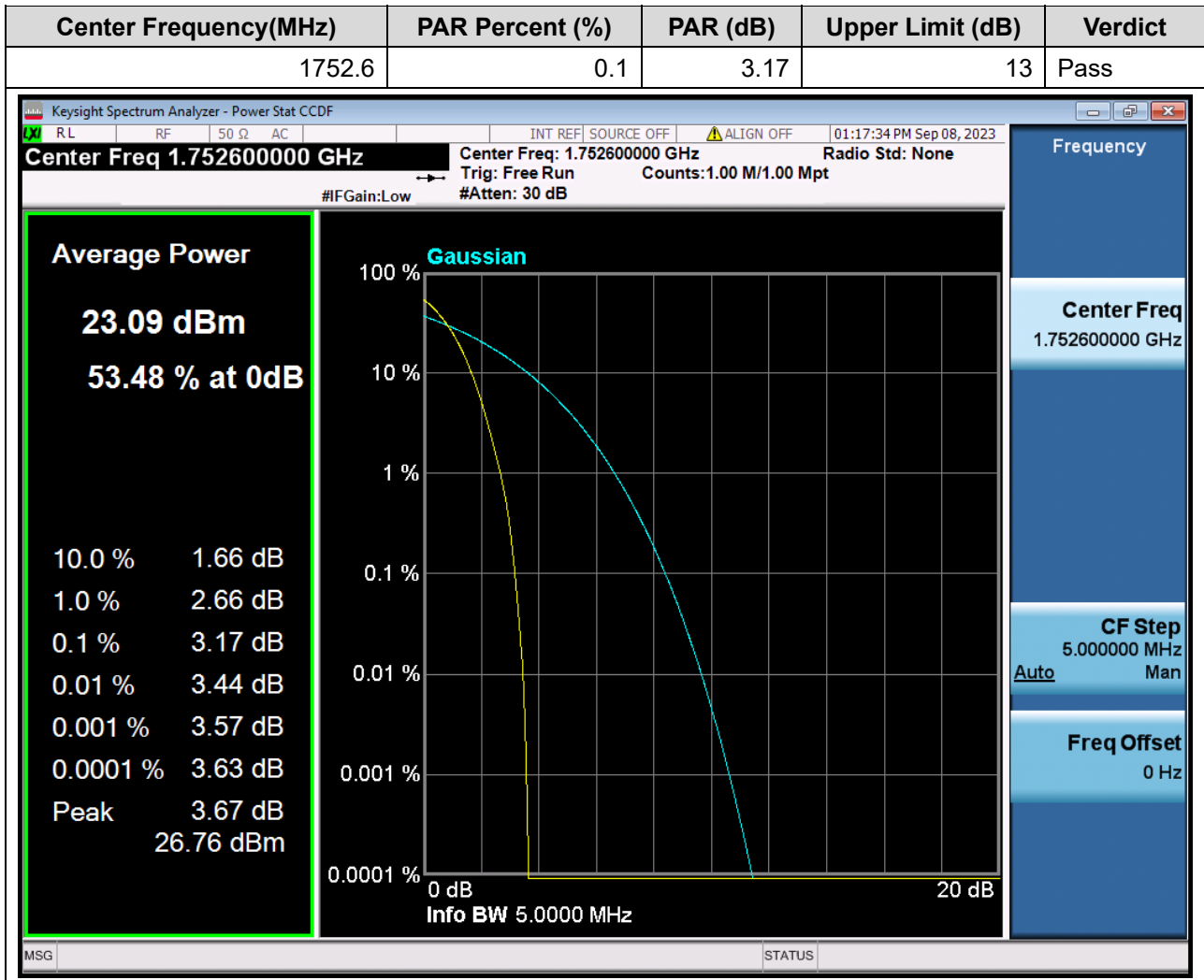
### 2.1. WCDMA Peak to Average Ratio(NTNV)(Channel:1312)



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

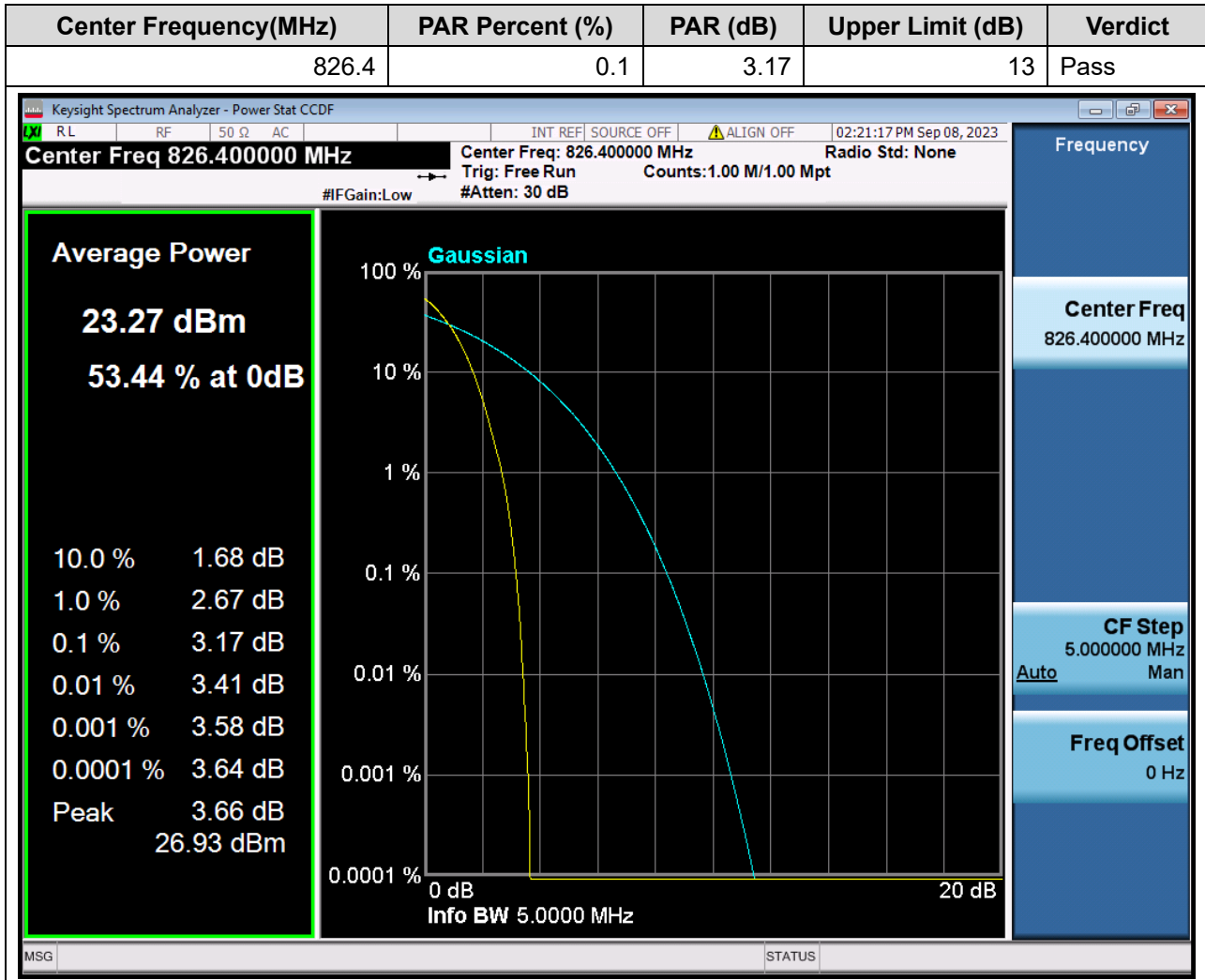


## 2.3. WCDMA Peak to Average Ratio(NTNV)(Channel:1513)

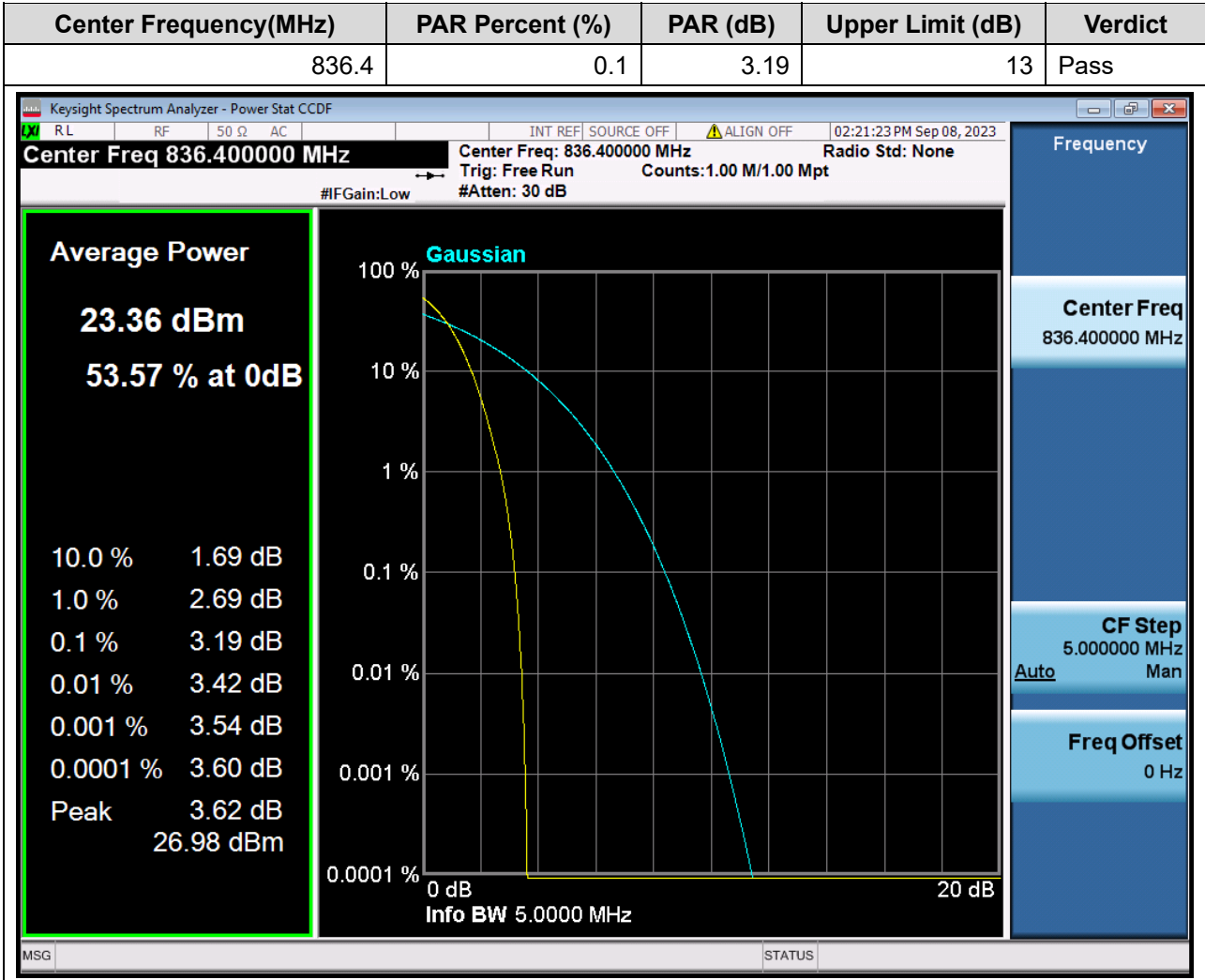


## 3. WCDMA\_Band5

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

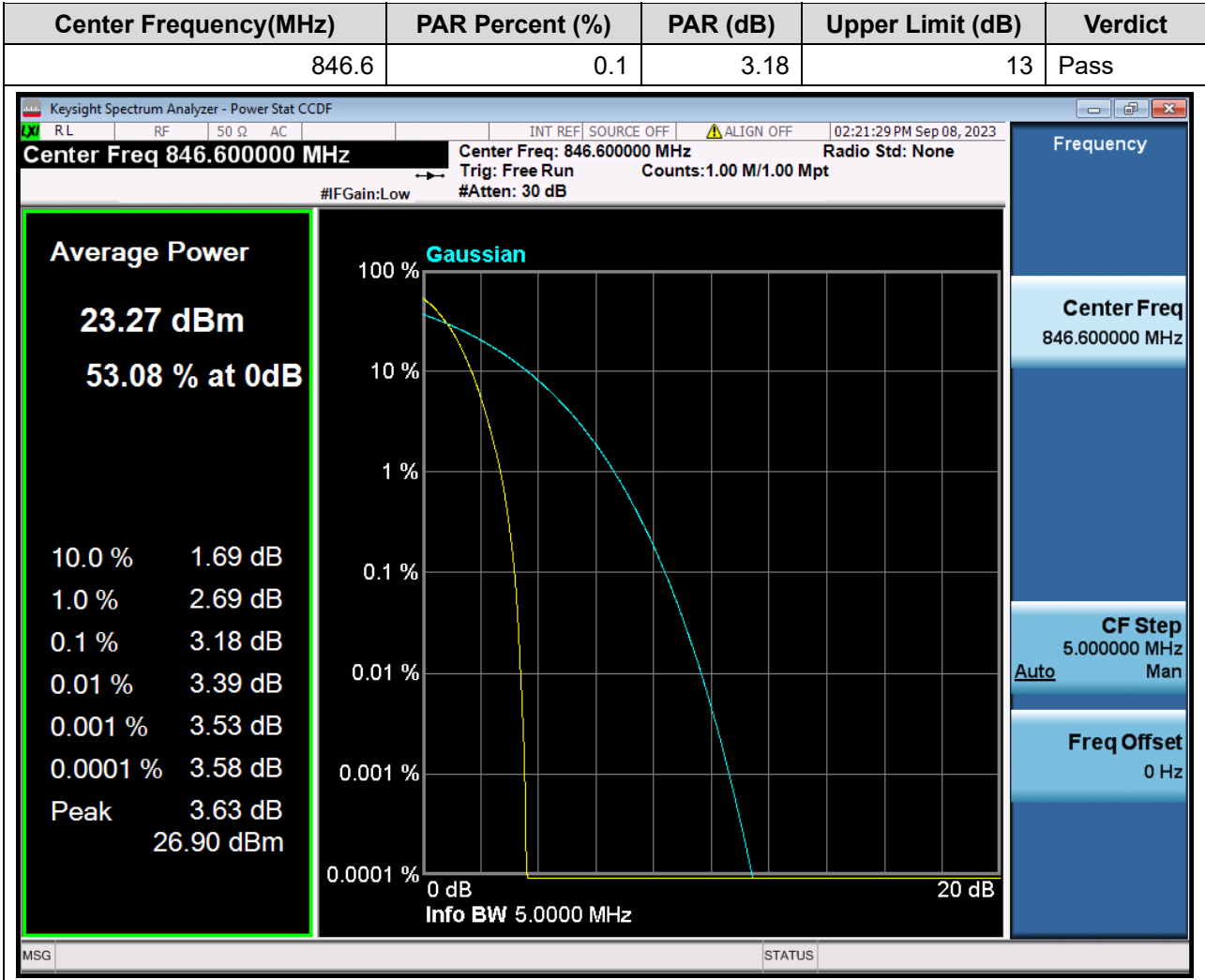


## 3.2. WCDMA Peak to Average Ratio(NTNV)(Channel:4182)





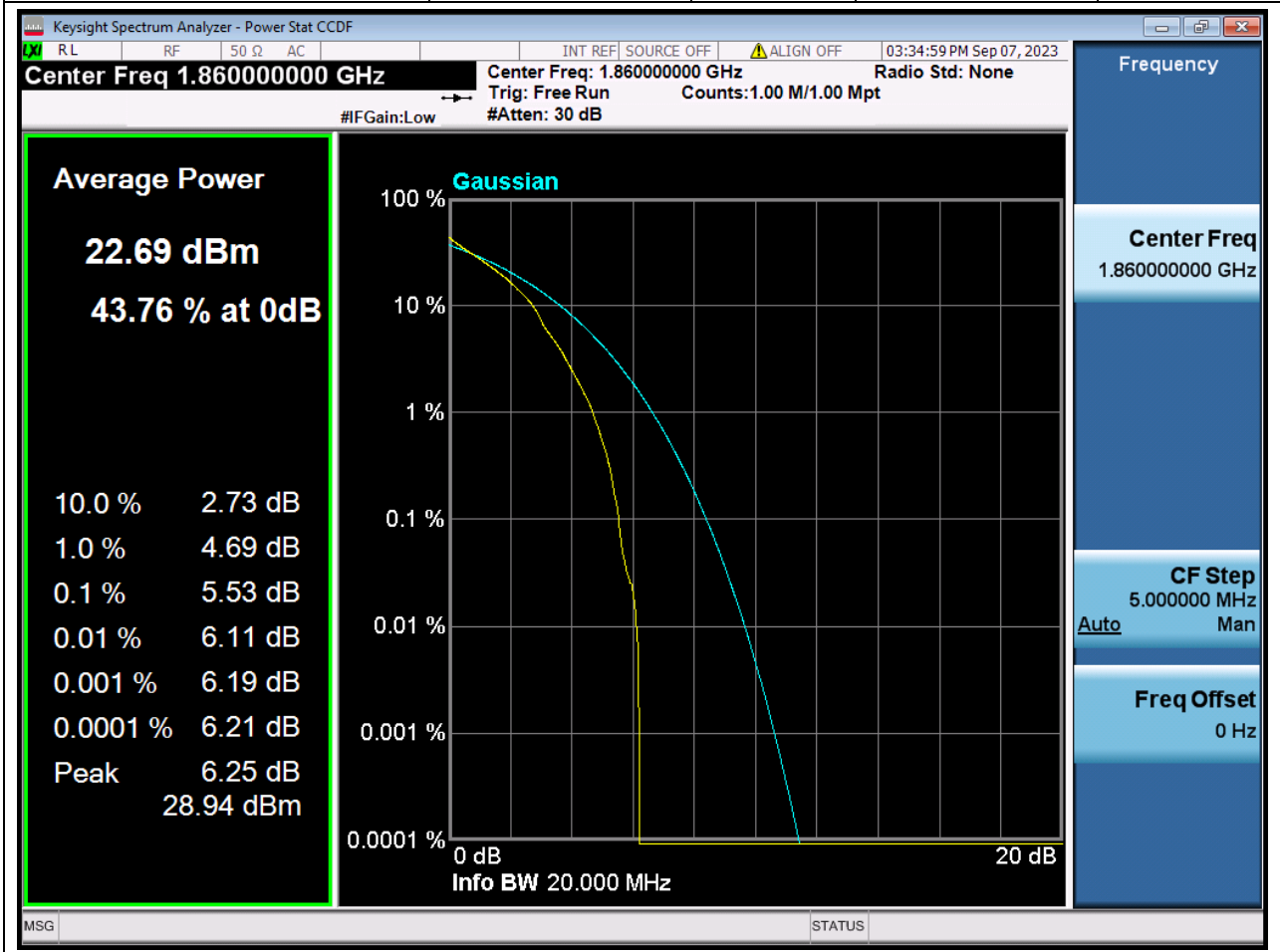
### 3.3. WCDMA Peak to Average Ratio(NTNV)(Channel:4233)



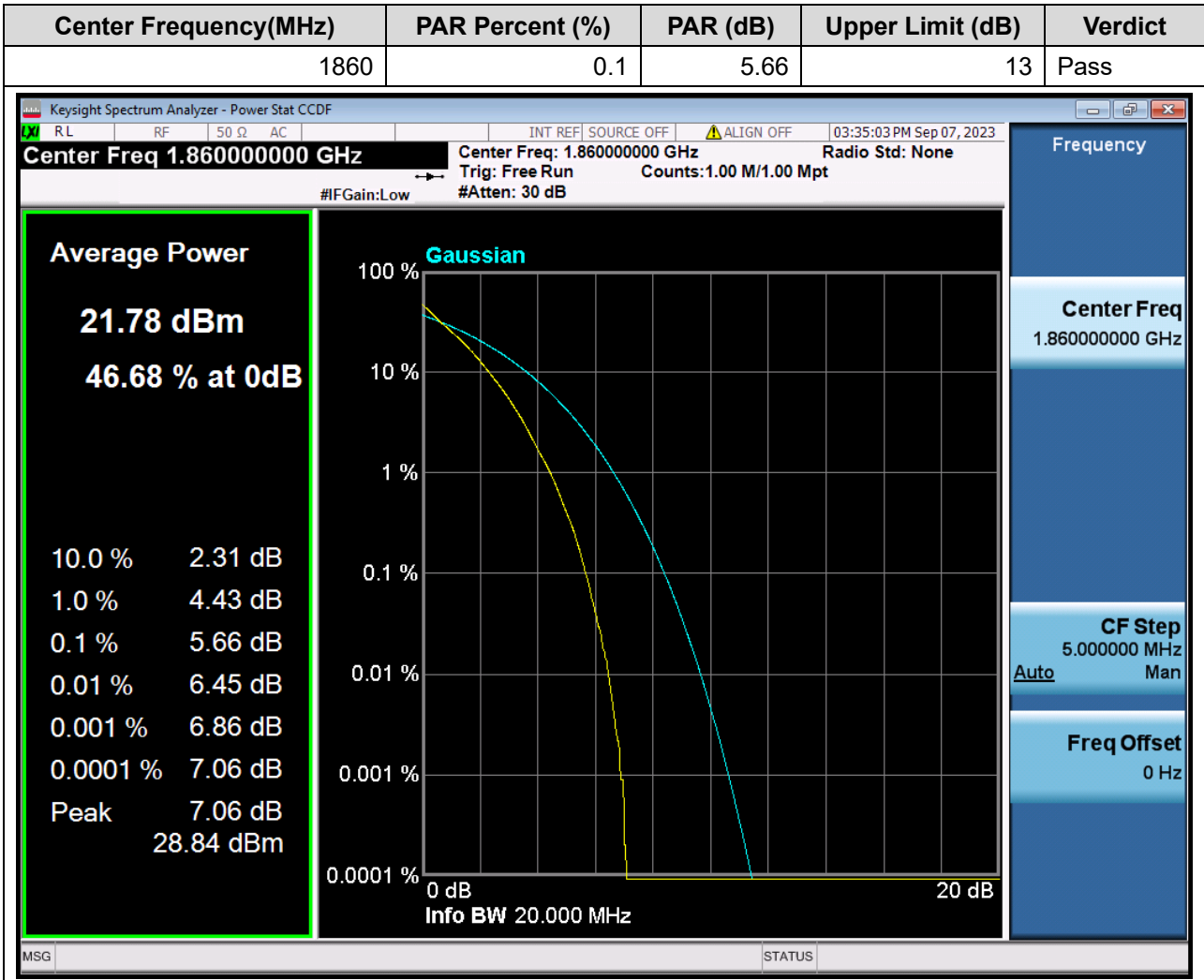
## 4. LTE\_Band2

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

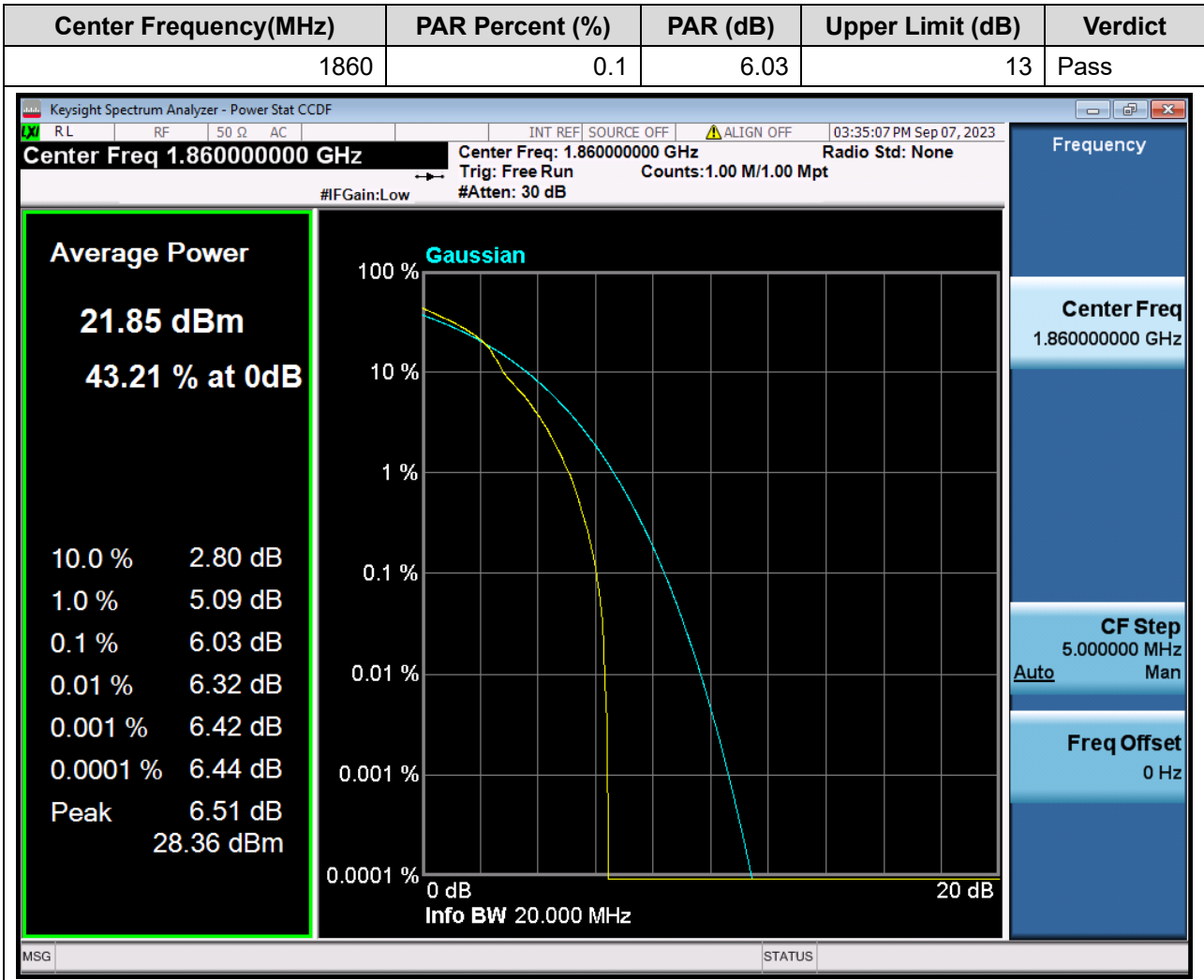
Center Frequency(MHz)	PAR Percent (%)	PAR (dB)	Upper Limit (dB)	Verdict
1860	0.1	5.53	13	Pass



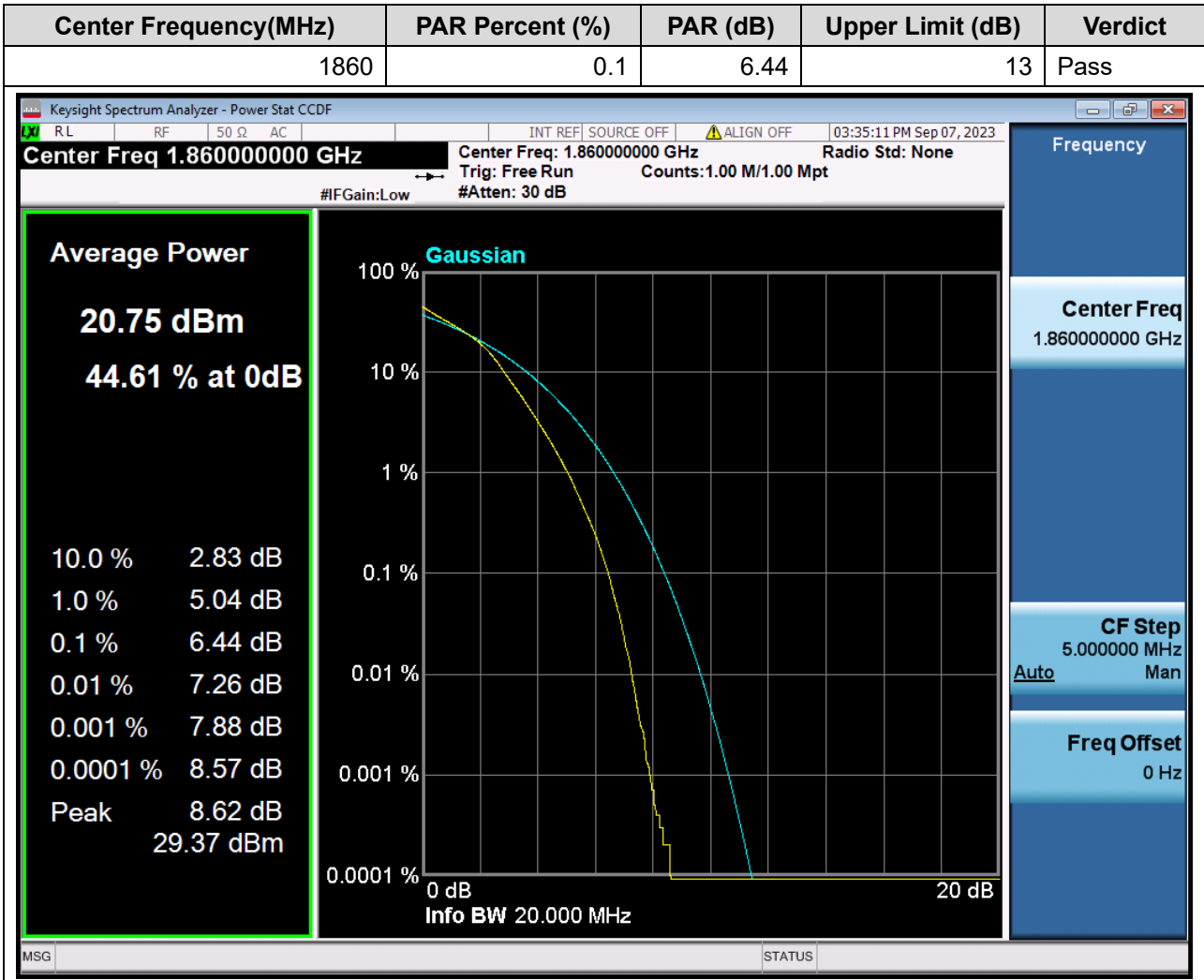
## 4.2. LTE Peak to Average Ratio(NTNV)(Subtest:2, Channel:18700, Bandwidth:20, Modulation:QPSK, RB Number: 100, RB Position:LOW)



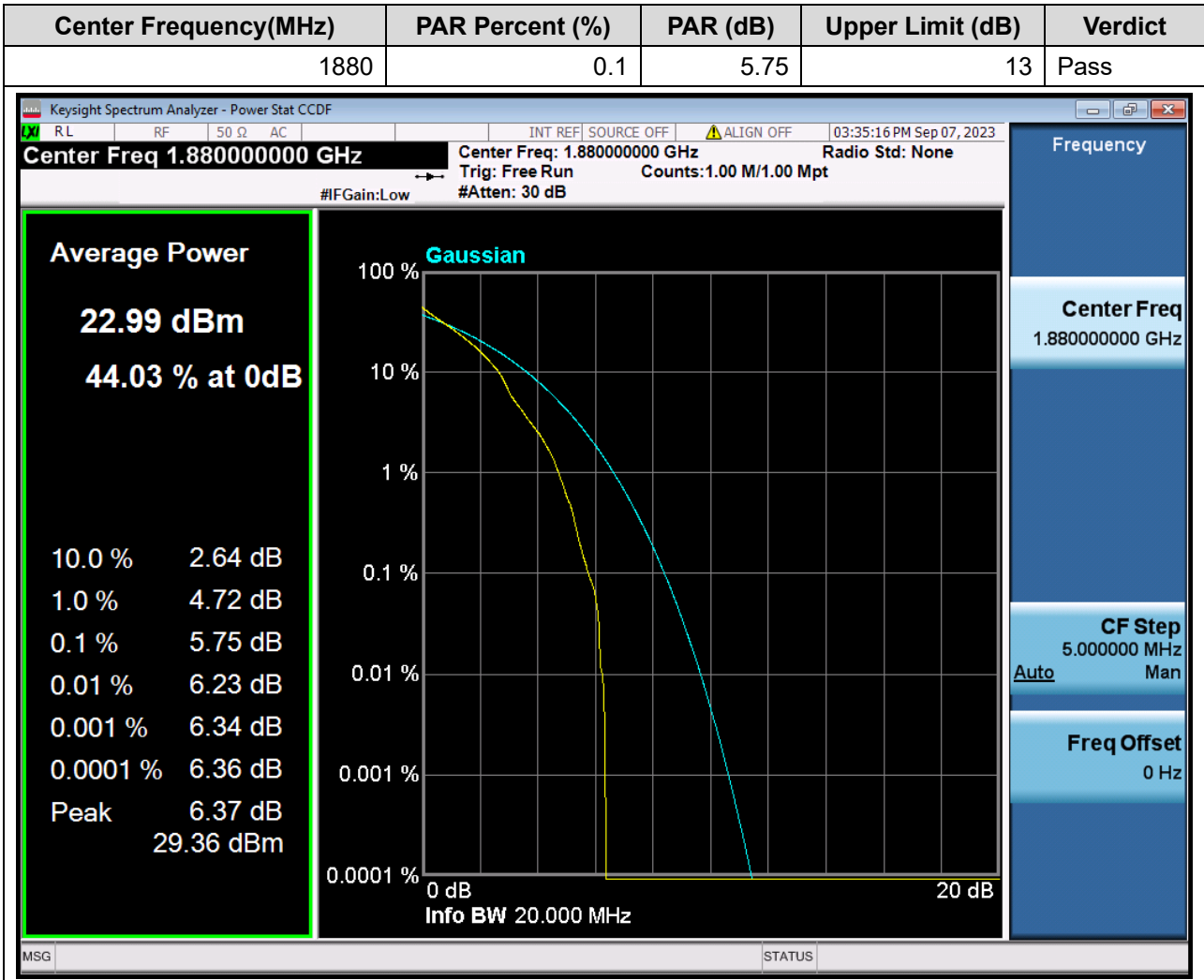
### 4.3. LTE Peak to Average Ratio(NTNV)(Subtest:3, Channel:18700, Bandwidth:20, Modulation:Q16, RB Number: 1, RB Position:LOW)



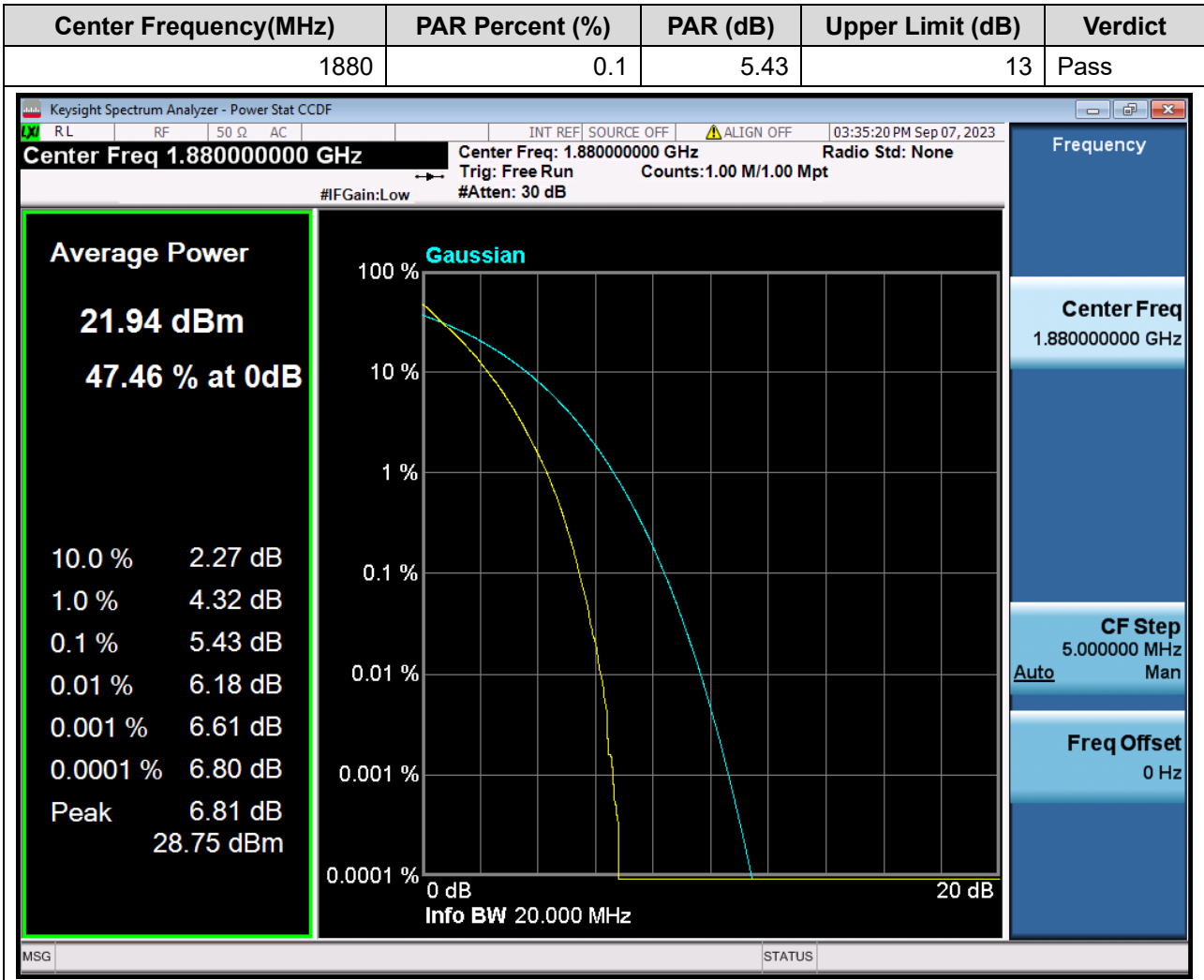
## 4.4. LTE Peak to Average Ratio(NTNV)(Subtest:4, Channel:18700, Bandwidth:20, Modulation:Q16, RB Number: 100, RB Position:LOW)



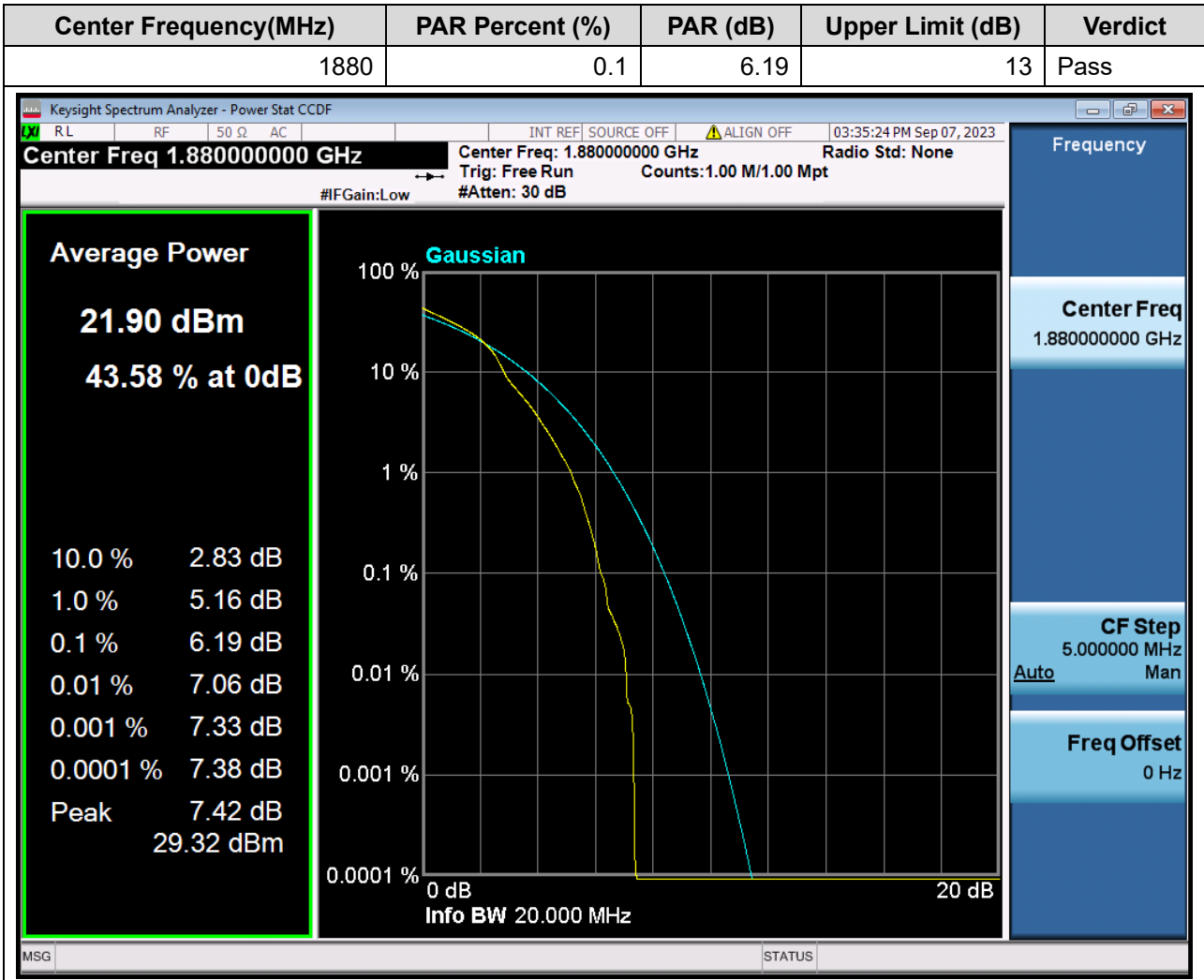
## 4.5. LTE Peak to Average Ratio(NTNV)(Subtest:5, Channel:18900, Bandwidth:20, Modulation:QPSK, RB Number: 1, RB Position:LOW)



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

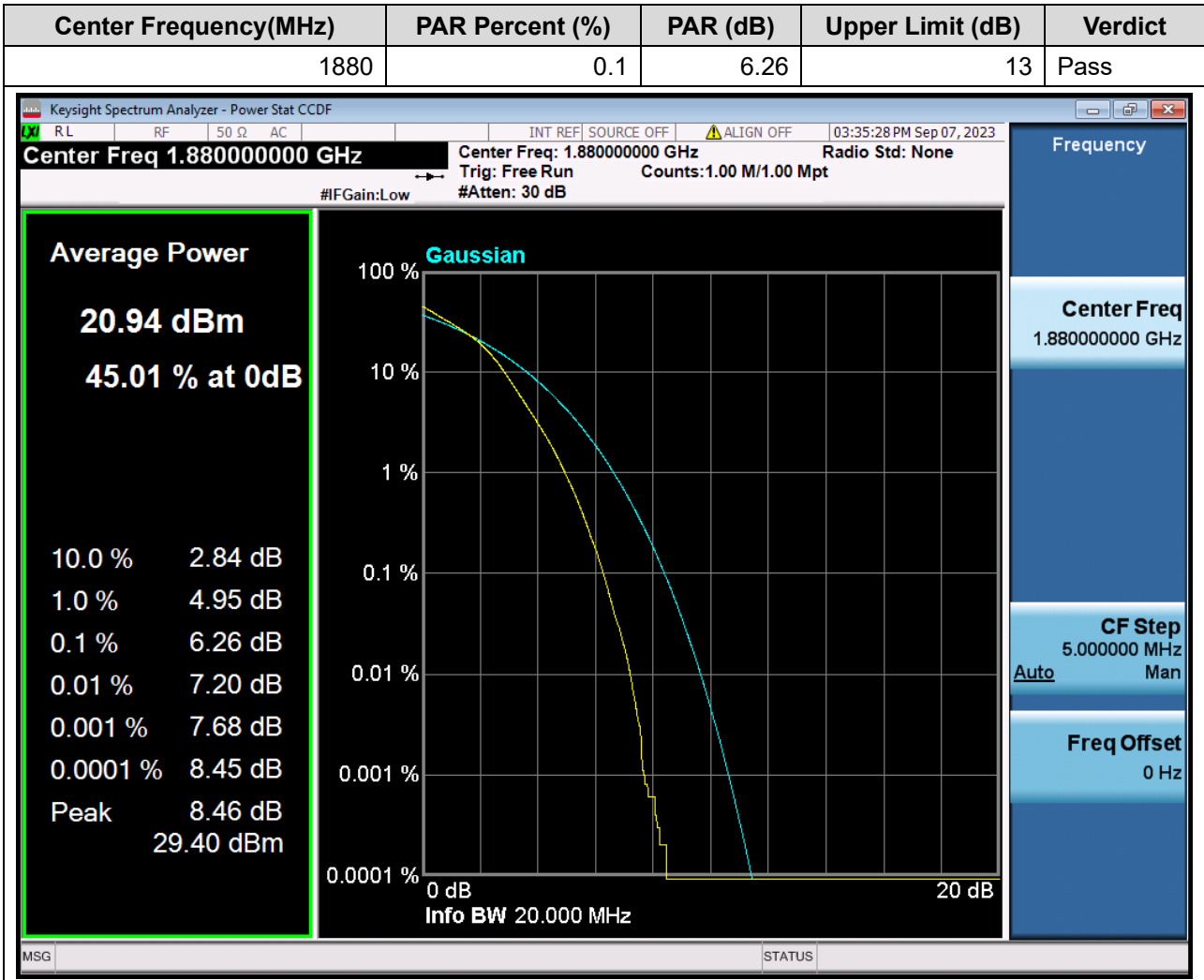


## 4.7. LTE Peak to Average Ratio(NTNV)(Subtest:7, Channel:18900, Bandwidth:20, Modulation:Q16, RB Number: 1, RB Position:LOW)

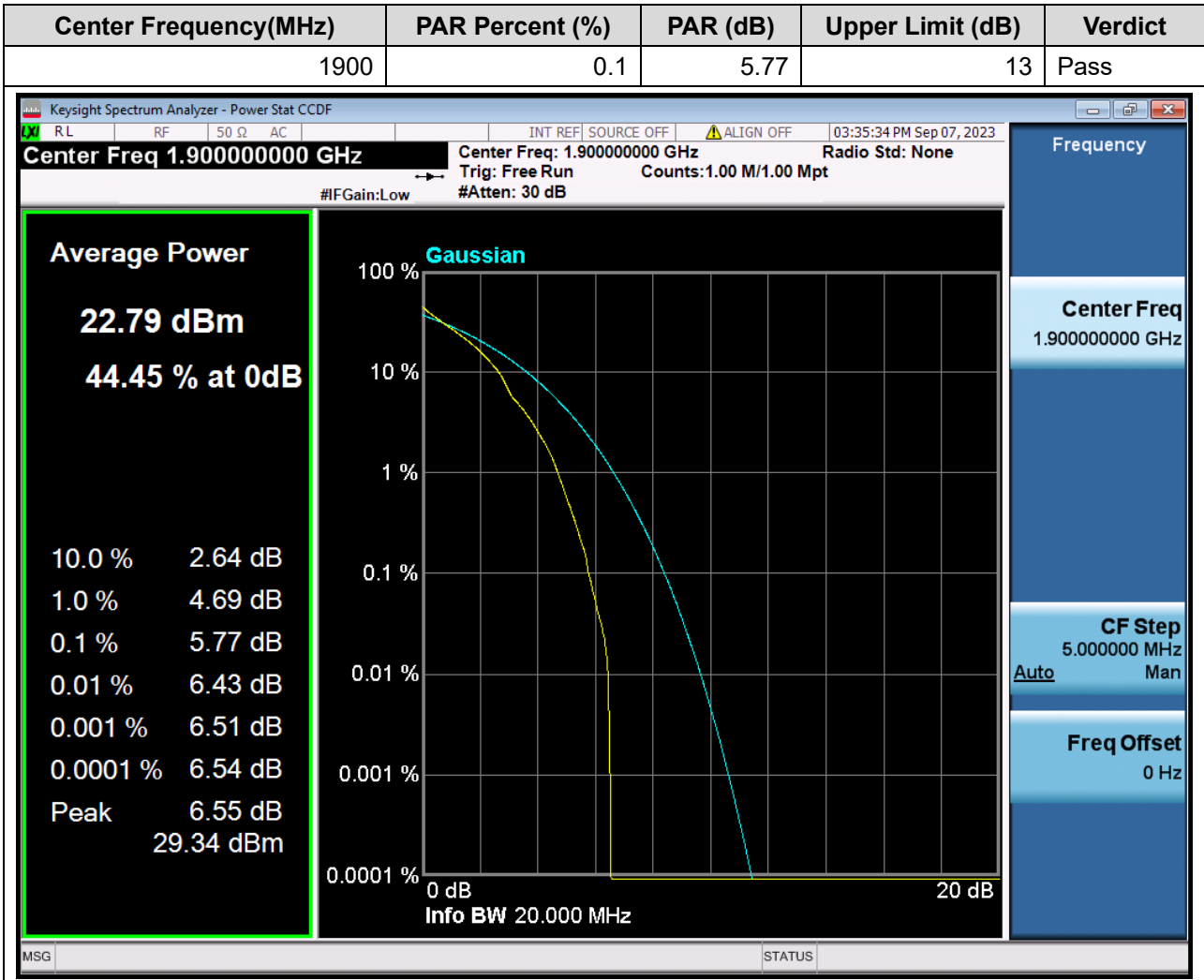




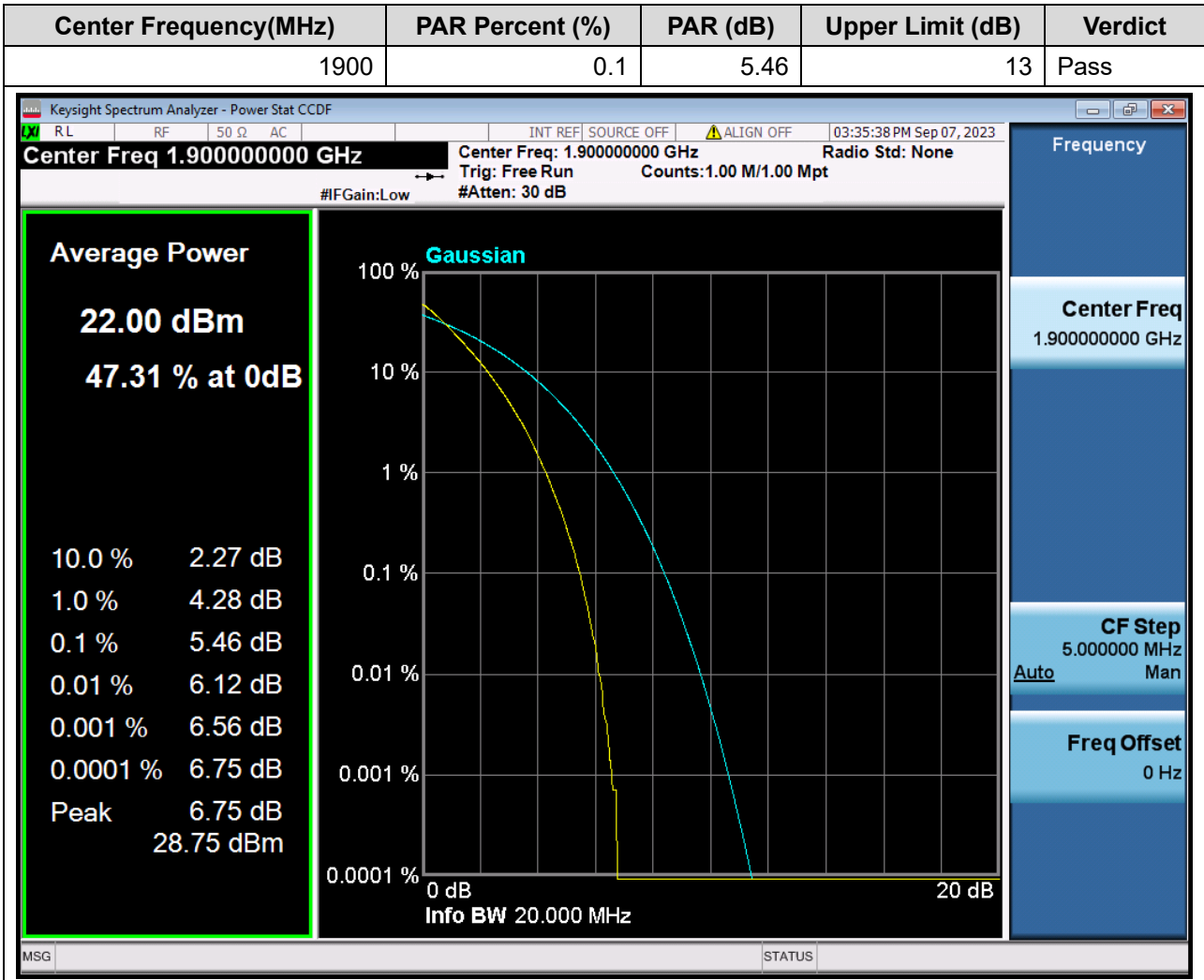
## 4.8. LTE Peak to Average Ratio(NTNV)(Subtest:8, Channel:18900, Bandwidth:20, Modulation:Q16, RB Number: 100, RB Position:LOW)



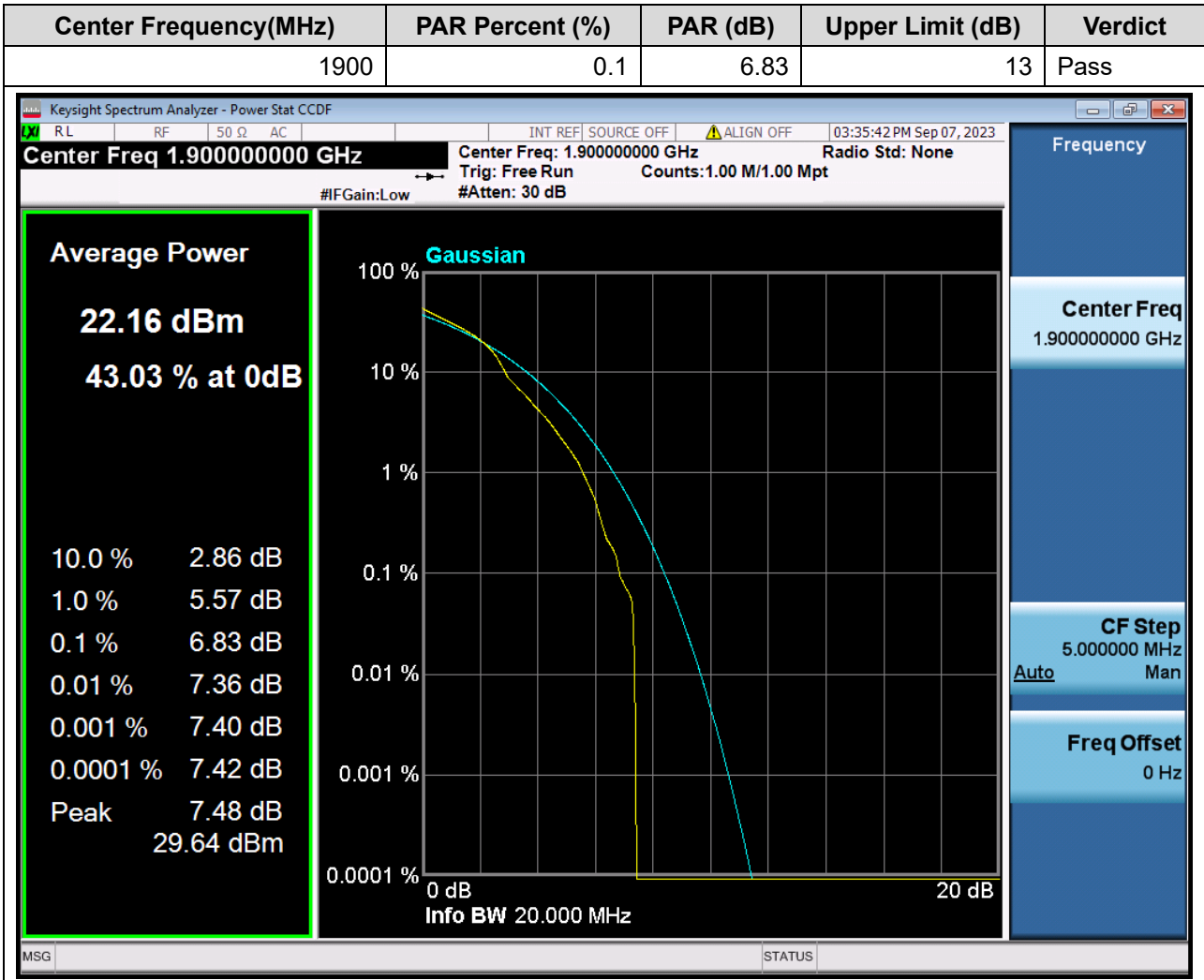
## 4.9. LTE Peak to Average Ratio(NTNV)(Subtest:9, Channel:19100, Bandwidth:20, Modulation:QPSK, RB Number: 1, RB Position:LOW)



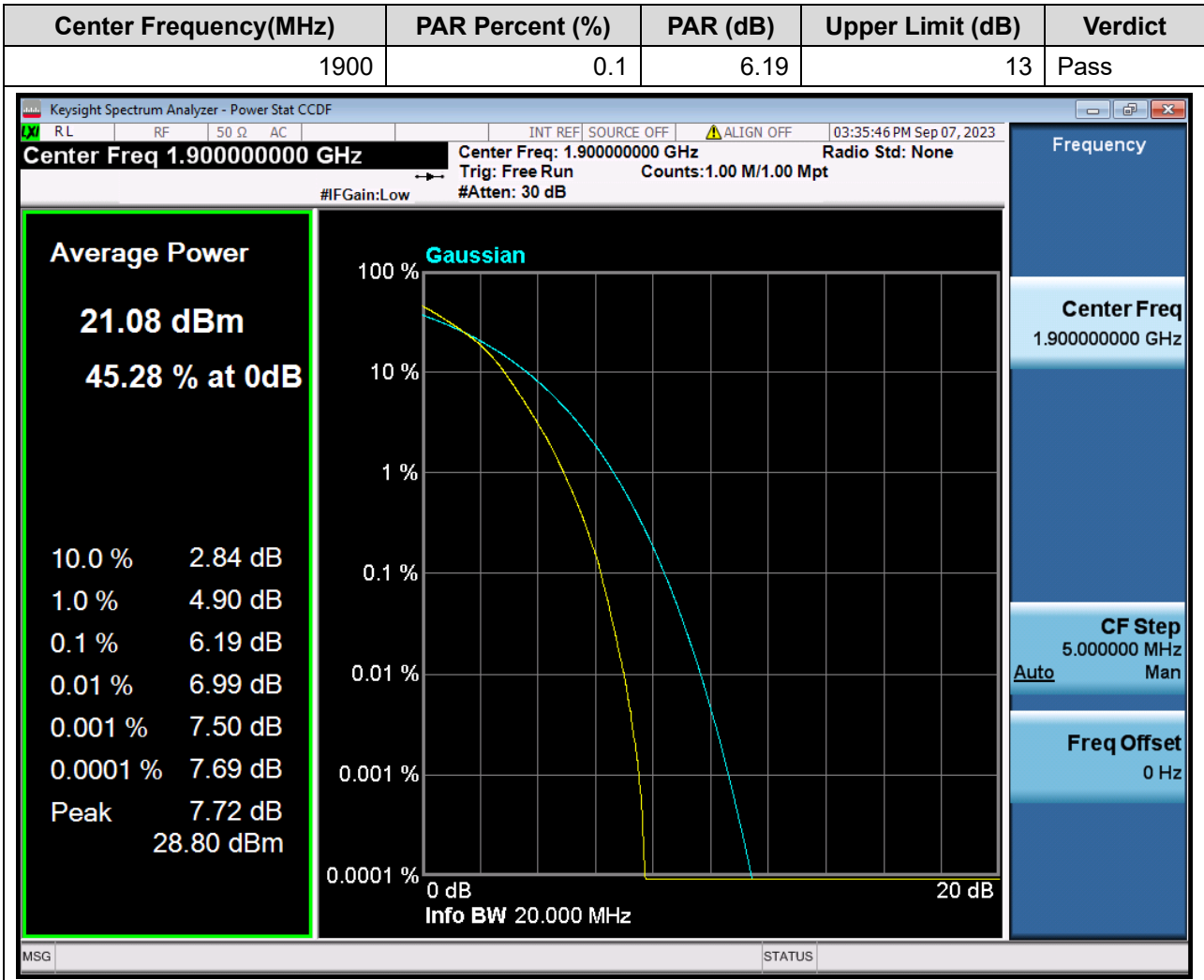
## 4.10. LTE Peak to Average Ratio(NTNV)(Subtest:10, Channel:19100, Bandwidth:20, Modulation:QPSK, RB Number: 100, RB Position:LOW)



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



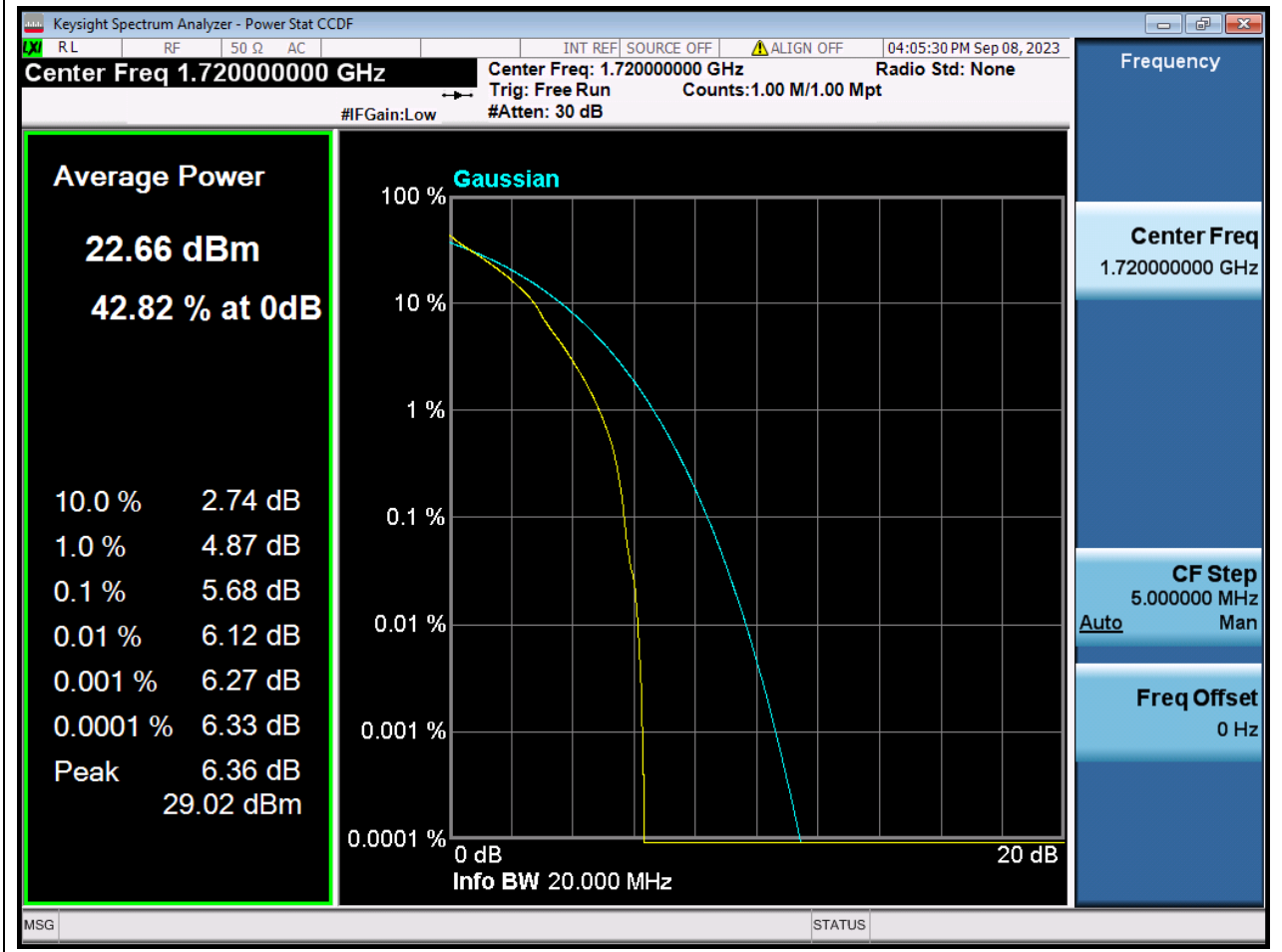
## 4.12. LTE Peak to Average Ratio(NTNV)(Subtest:12, Channel:19100, Bandwidth:20, Modulation:Q16, RB Number: 100, RB Position:LOW)



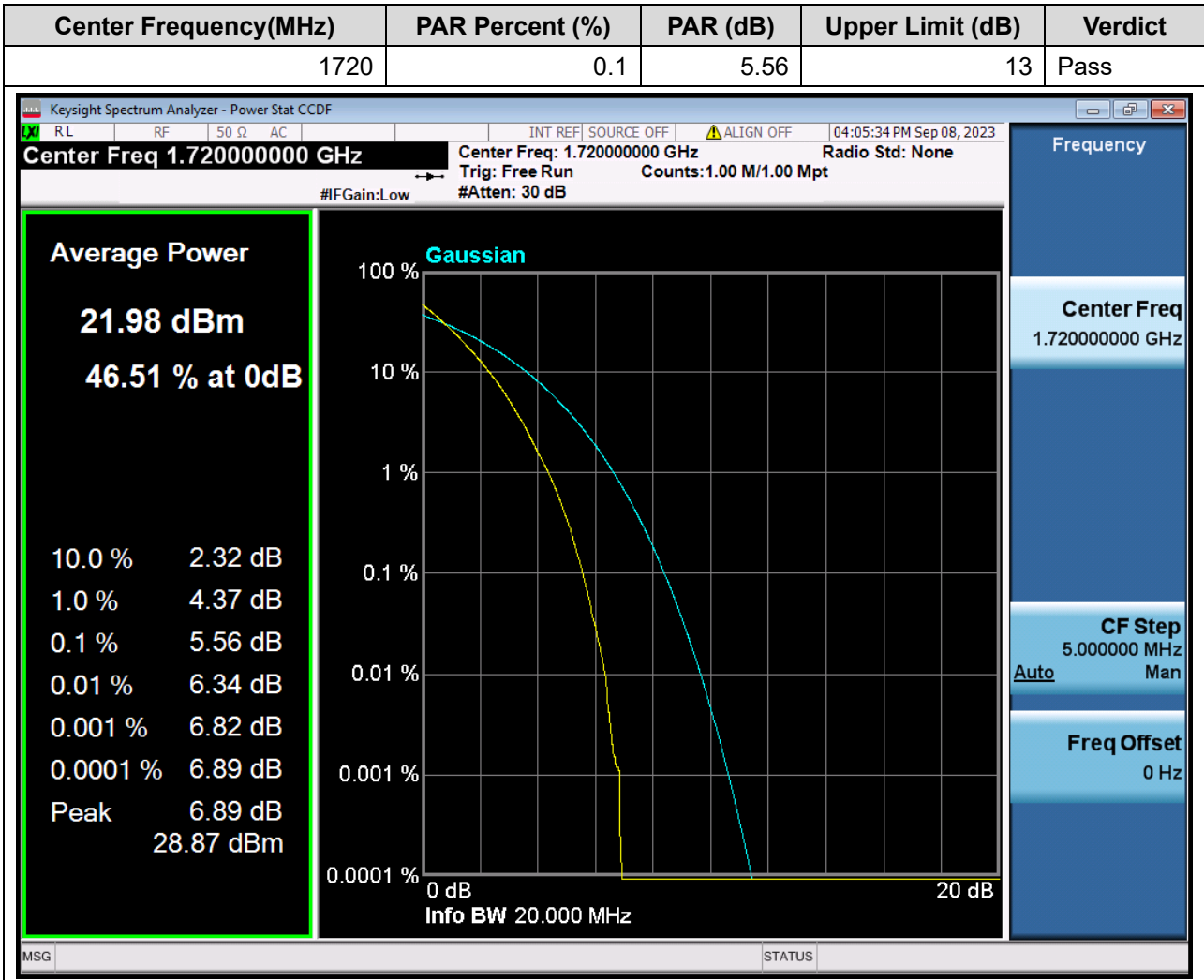
## 5. LTE\_Band4

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

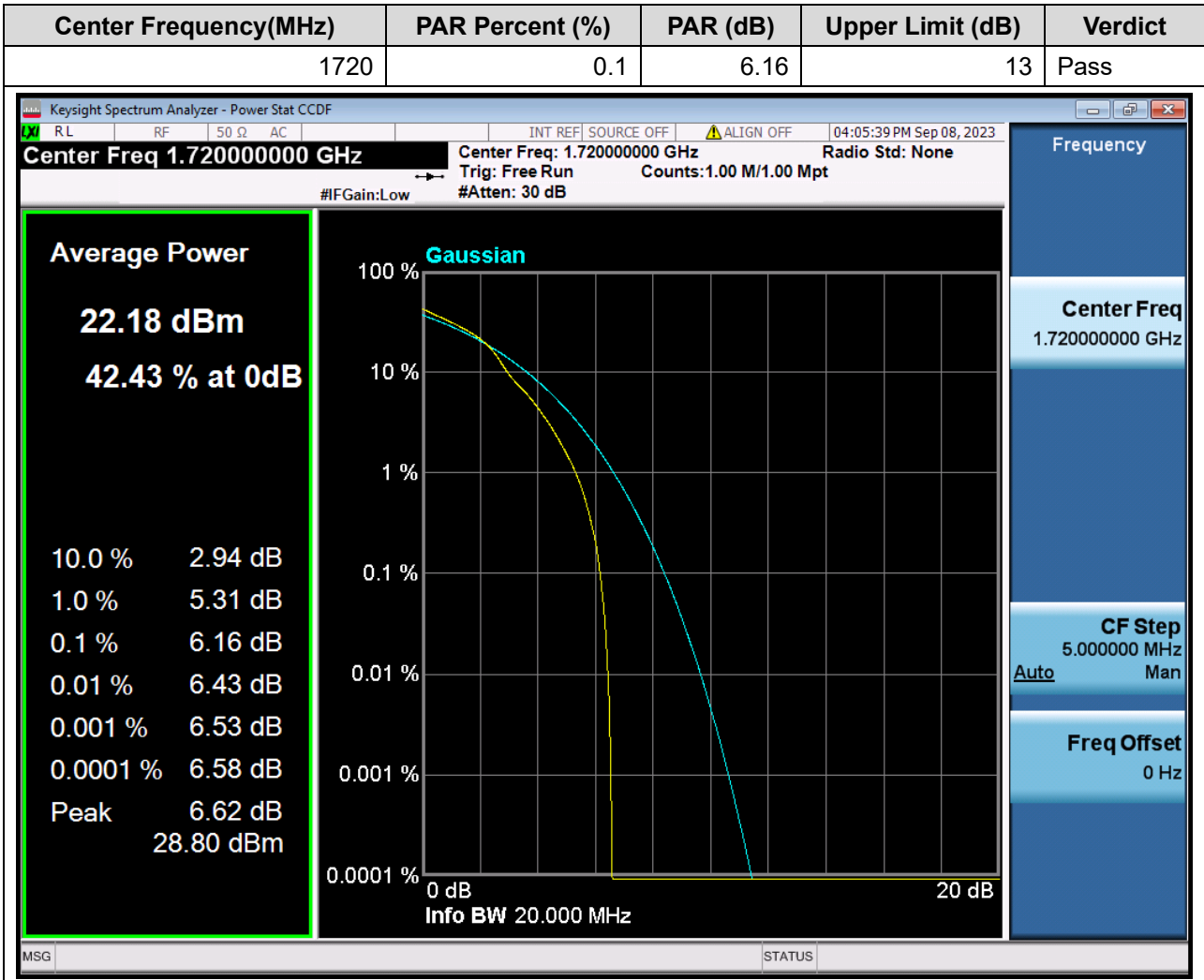
Center Frequency(MHz)	PAR Percent (%)	PAR (dB)	Upper Limit (dB)	Verdict
1720	0.1	5.68	13	Pass



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

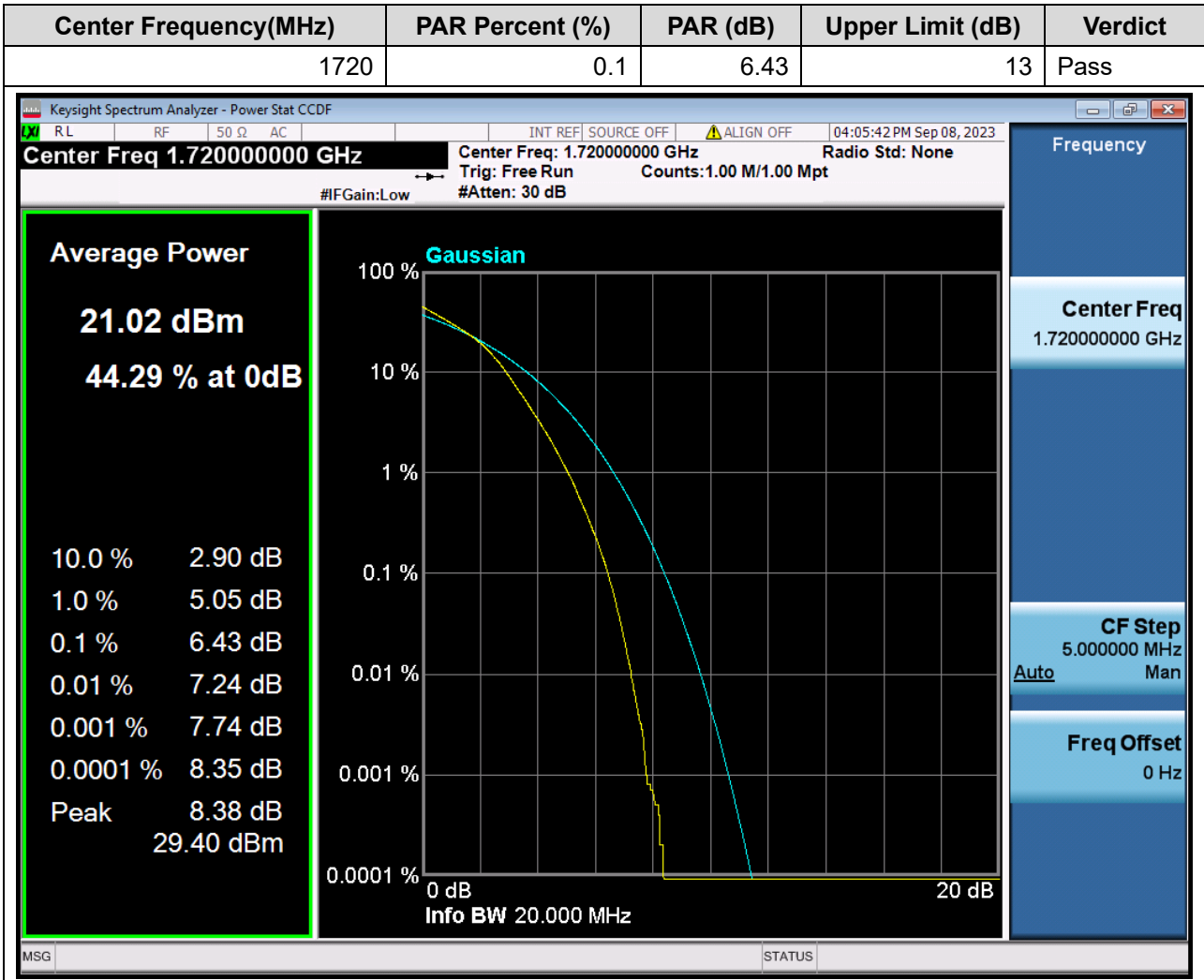


### 5.3. LTE Peak to Average Ratio(NTNV)(Subtest:3, Channel:20050, Bandwidth:20, Modulation:Q16, RB Number: 1, RB Position:LOW)

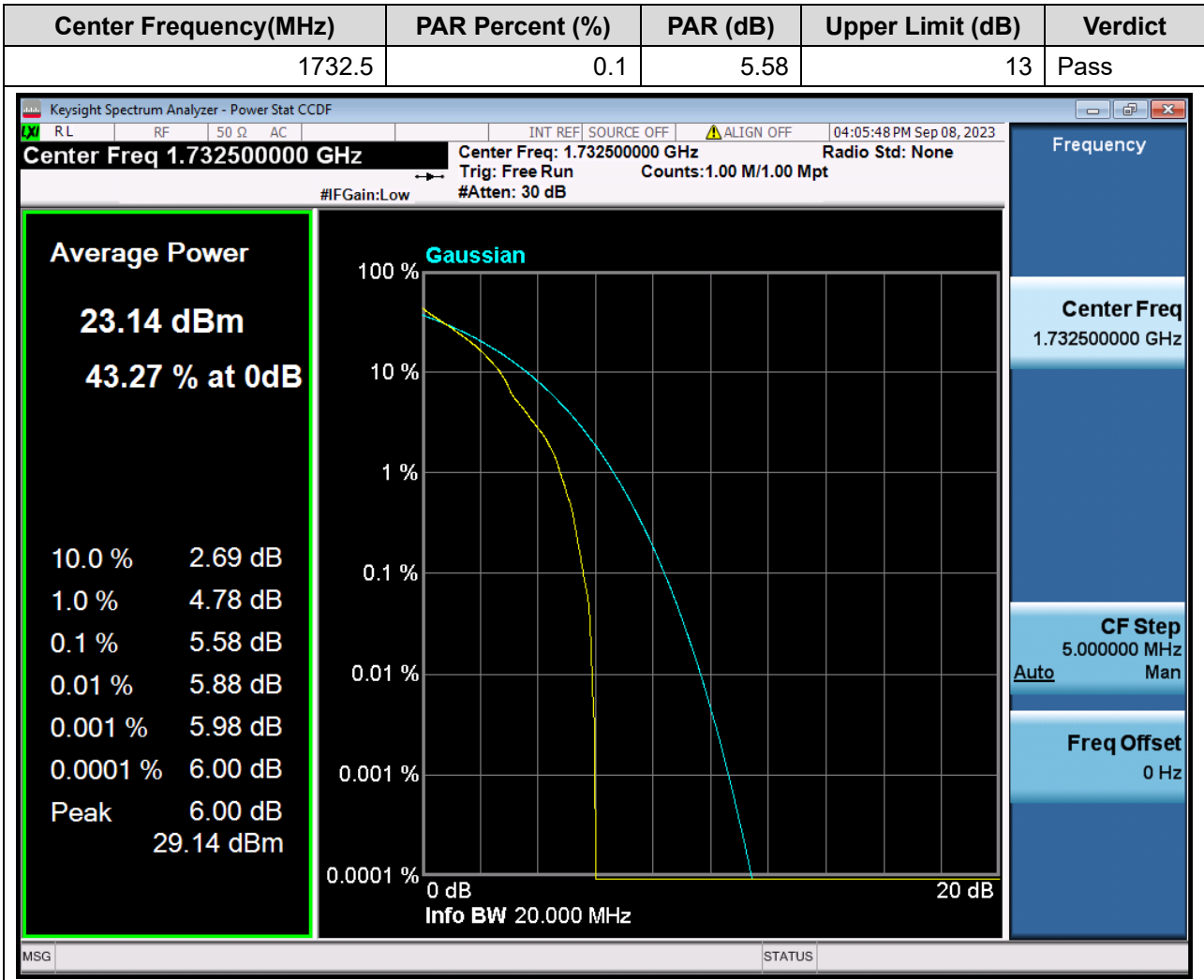




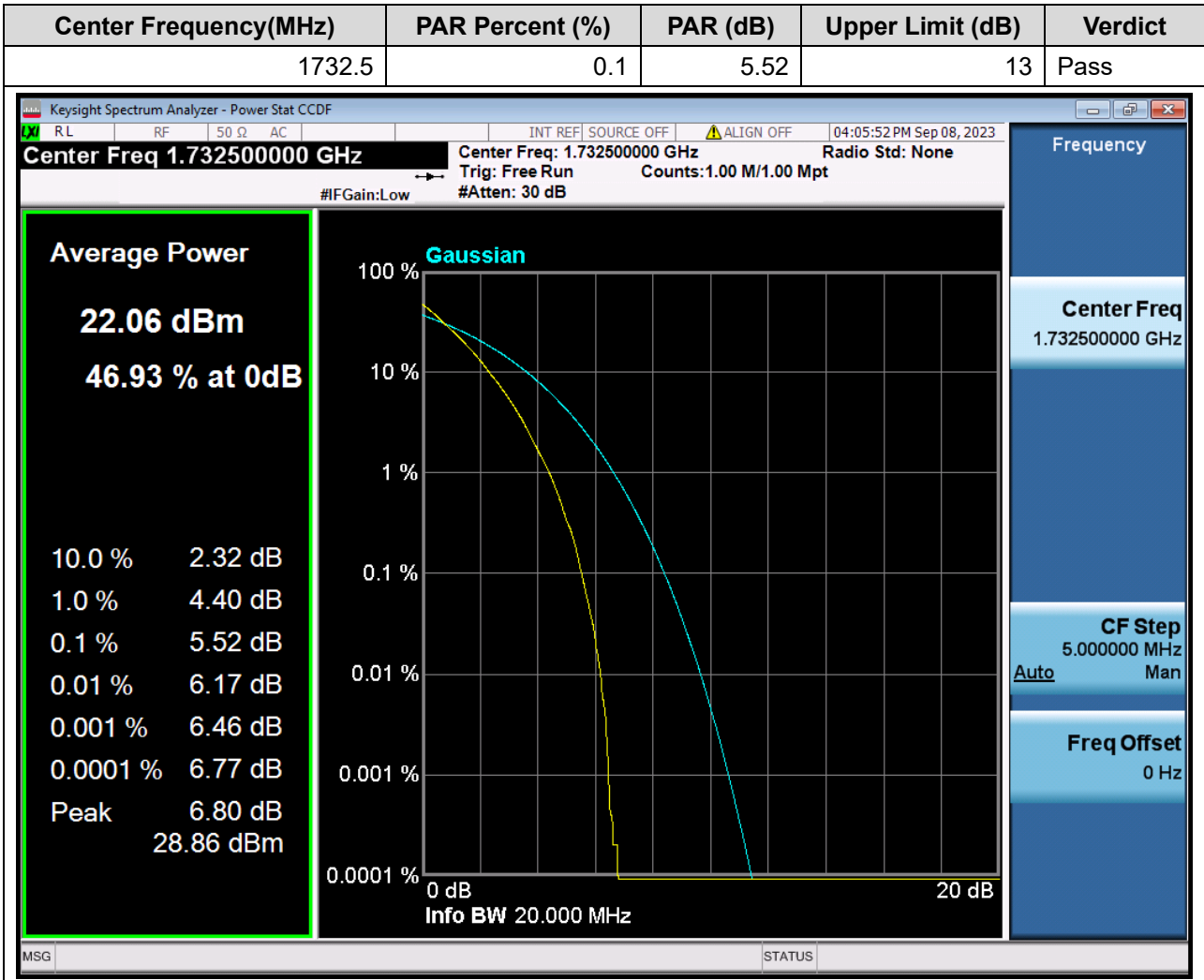
## 5.4. LTE Peak to Average Ratio(NTNV)(Subtest:4, Channel:20050, Bandwidth:20, Modulation:Q16, RB Number: 100, RB Position:LOW)



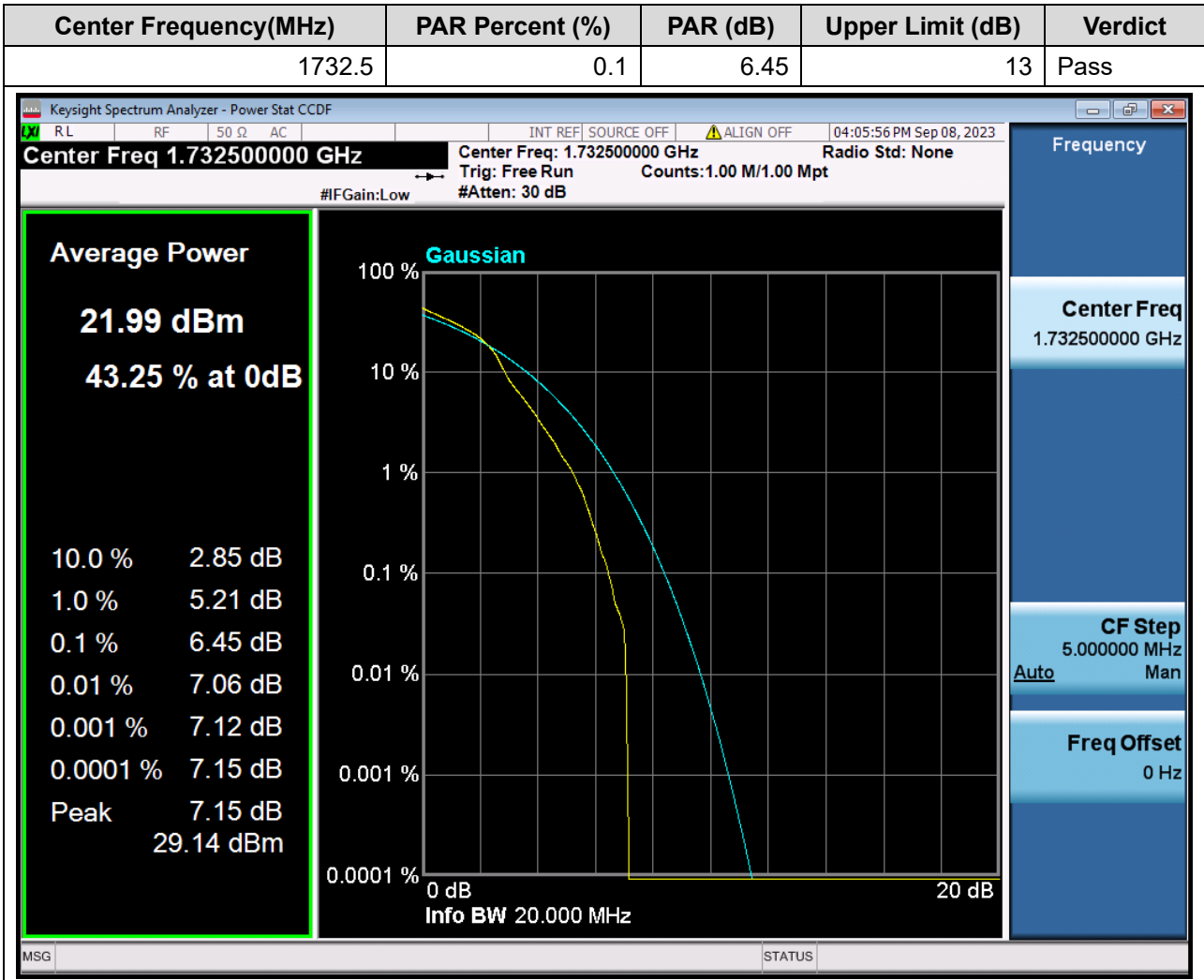
**5.5. LTE Peak to Average Ratio(NTNV)(Subtest:5, Channel:20175, Bandwidth:20, Modulation:QPSK, RB Number: 1, RB Position:LOW)**



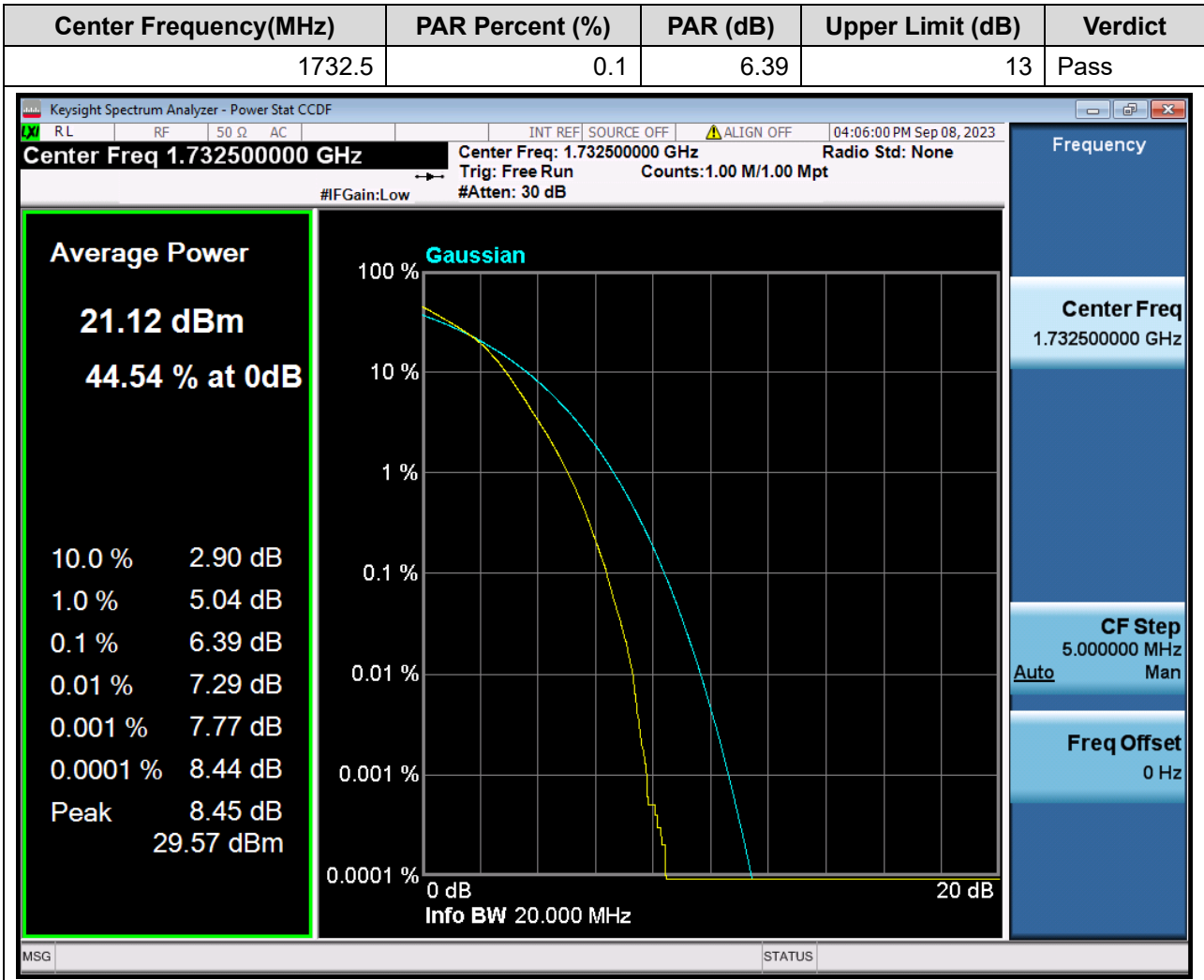
## 5.6. LTE Peak to Average Ratio(NTNV)(Subtest:6, Channel:20175, Bandwidth:20, Modulation:QPSK, RB Number: 100, RB Position:LOW)



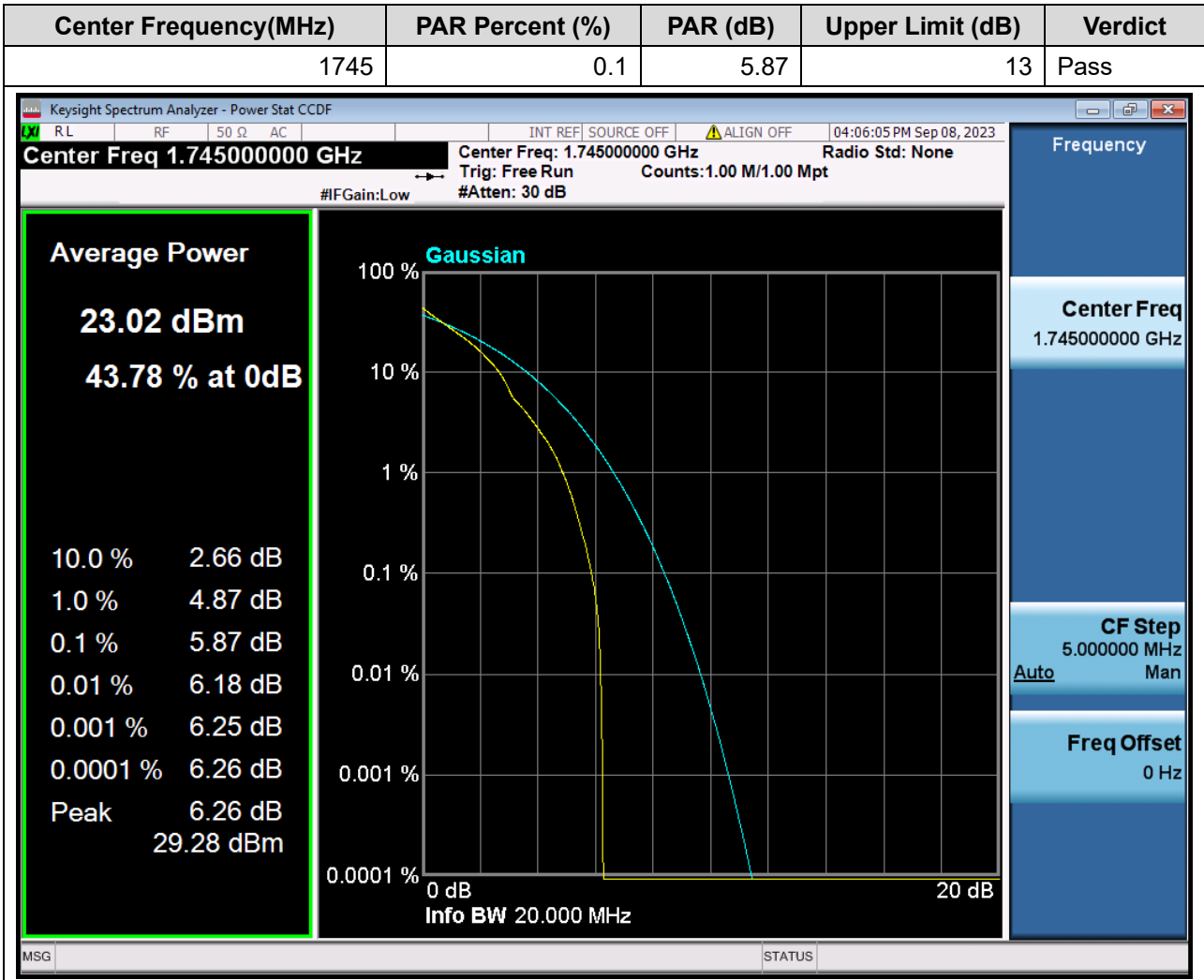
**5.7. LTE Peak to Average Ratio(NTNV)(Subtest:7, Channel:20175, Bandwidth:20, Modulation:Q16, RB Number: 1, RB Position:LOW)**



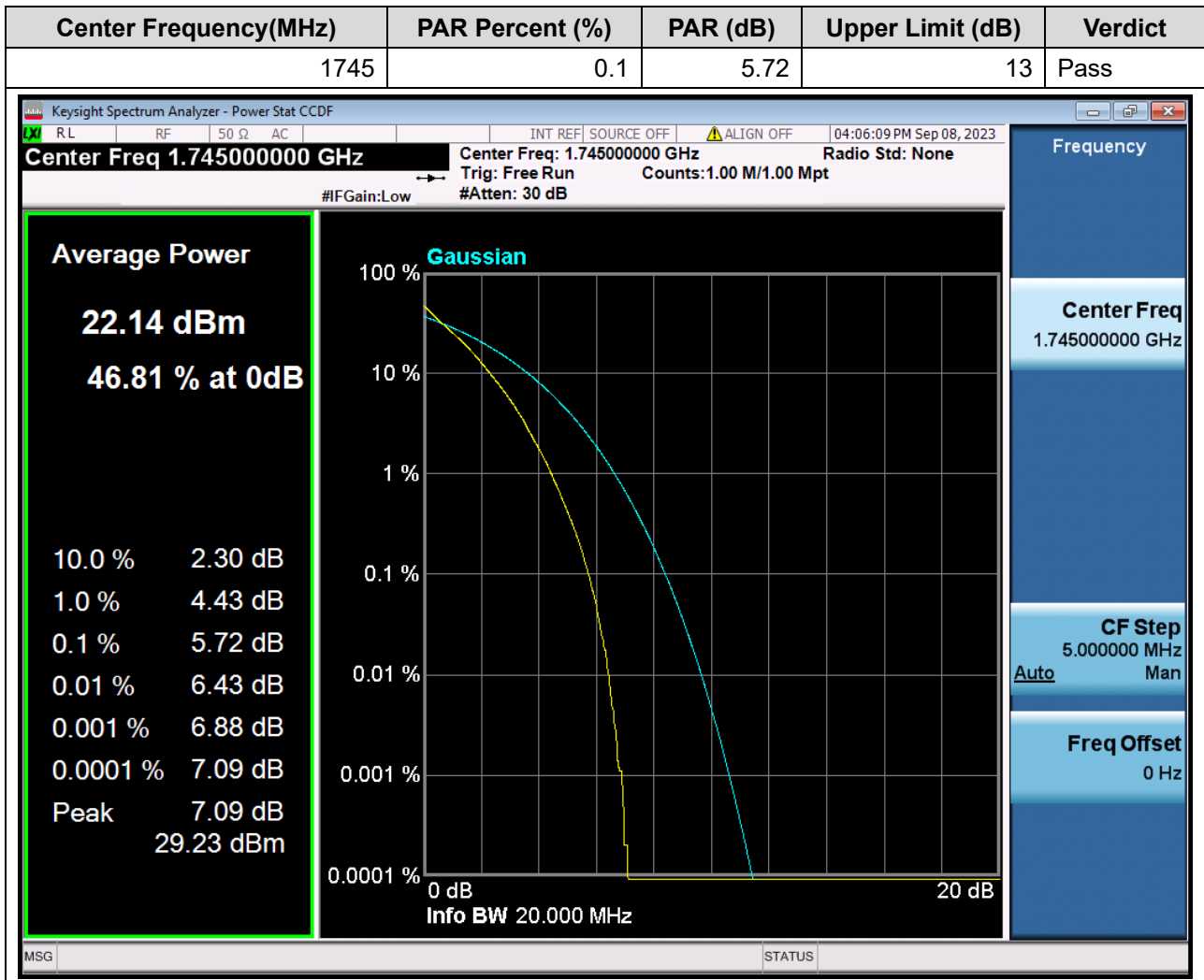
**5.8. LTE Peak to Average Ratio(NTNV)(Subtest:8, Channel:20175, Bandwidth:20, Modulation:Q16, RB Number: 100, RB Position:LOW)**



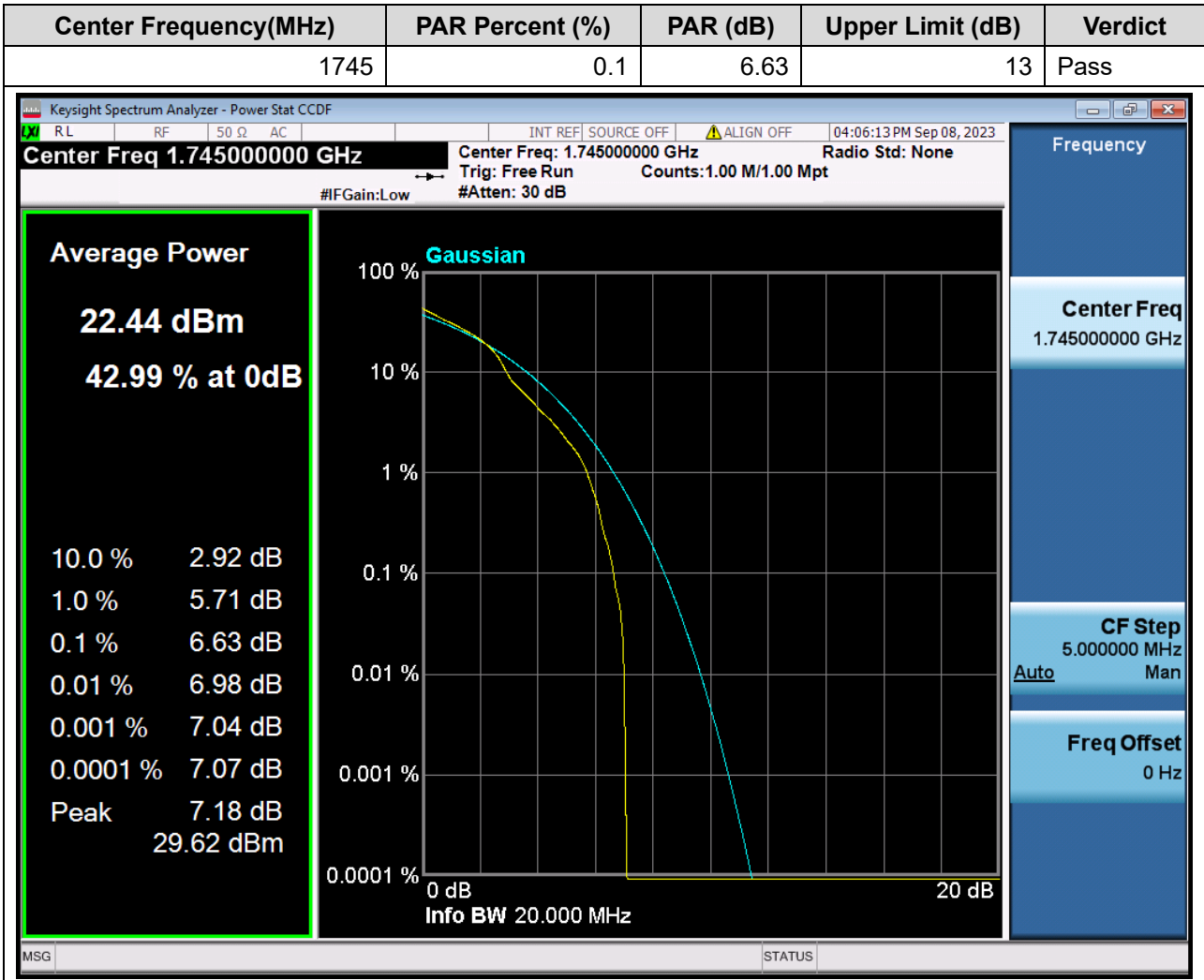
**5.9. LTE Peak to Average Ratio(NTNV)(Subtest:9, Channel:20300, Bandwidth:20, Modulation:QPSK, RB Number: 1, RB Position:LOW)**



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

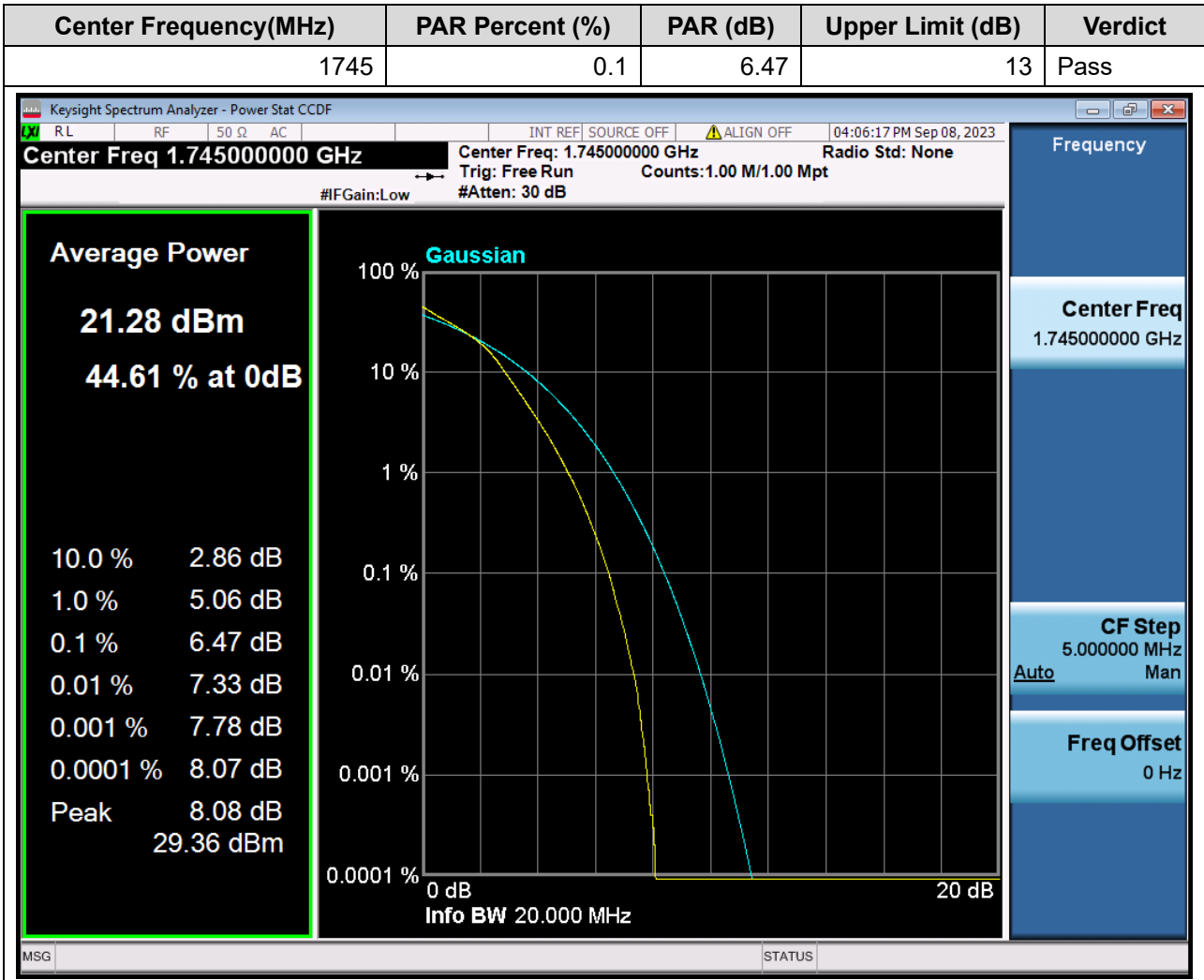


**5.11. LTE Peak to Average Ratio(NTNV)(Subtest:11, Channel:20300, Bandwidth:20, Modulation:Q16, RB Number: 1, RB Position:LOW)**



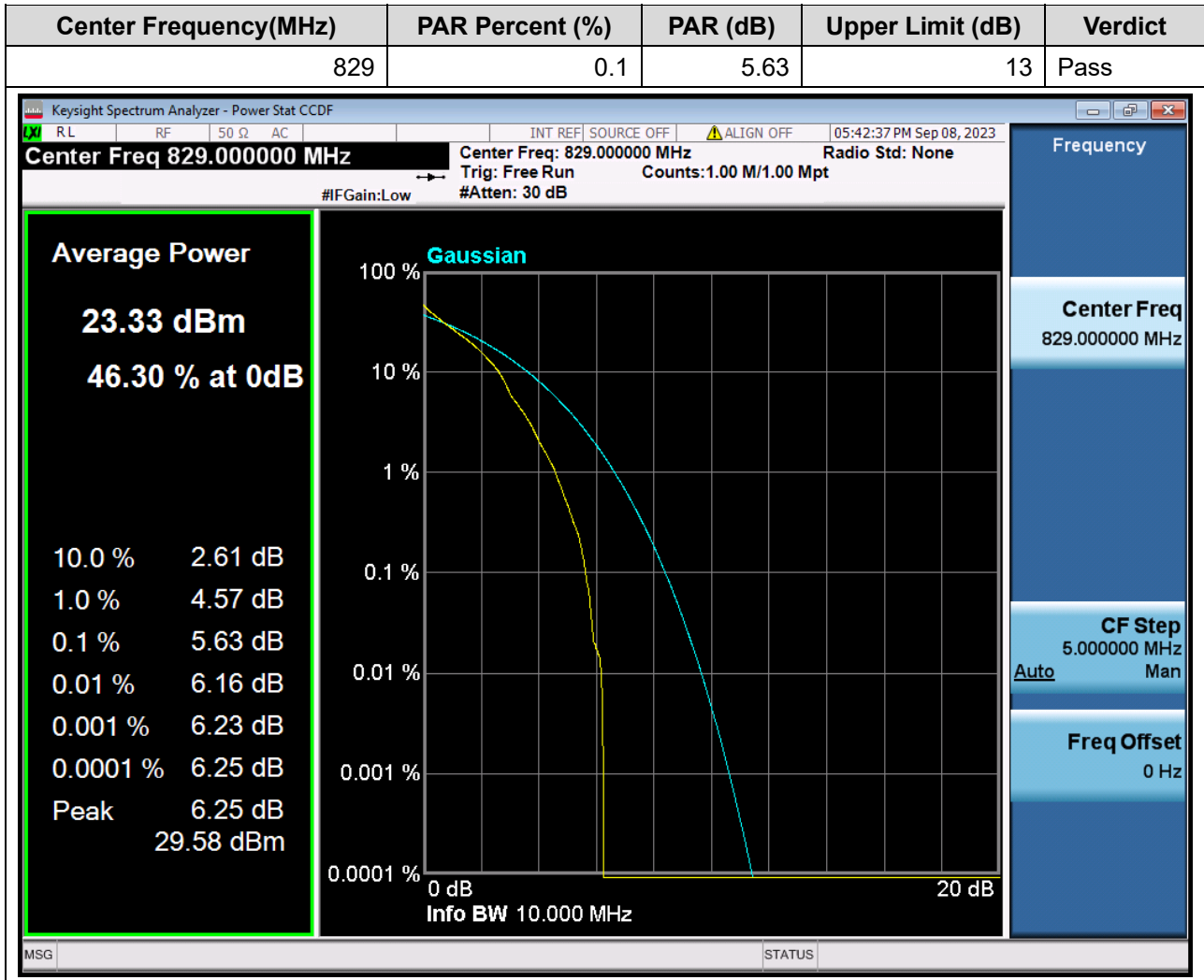


## 5.12. LTE Peak to Average Ratio(NTNV)(Subtest:12, Channel:20300, Bandwidth:20, Modulation:Q16, RB Number: 100, RB Position:LOW)

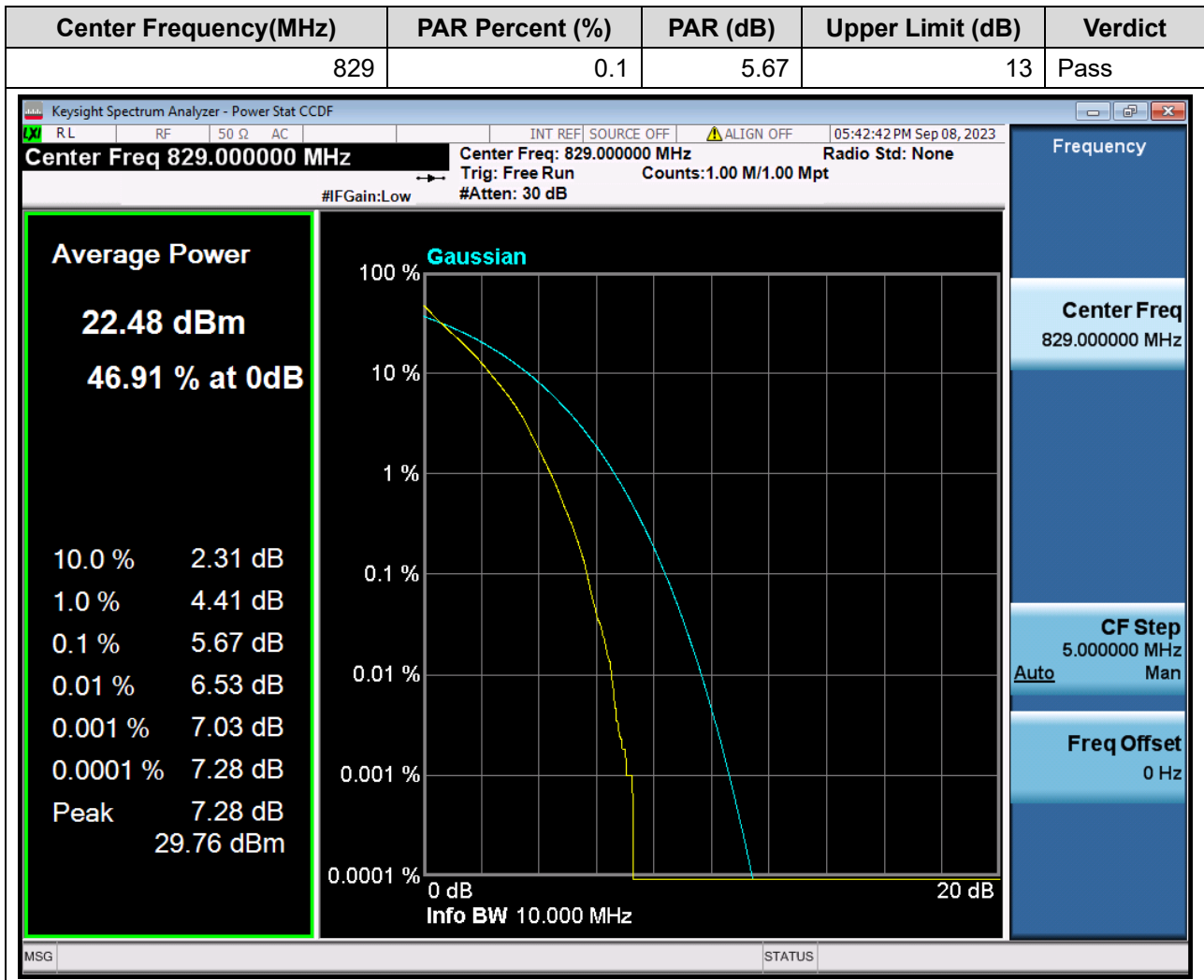


## 6. LTE\_Band5

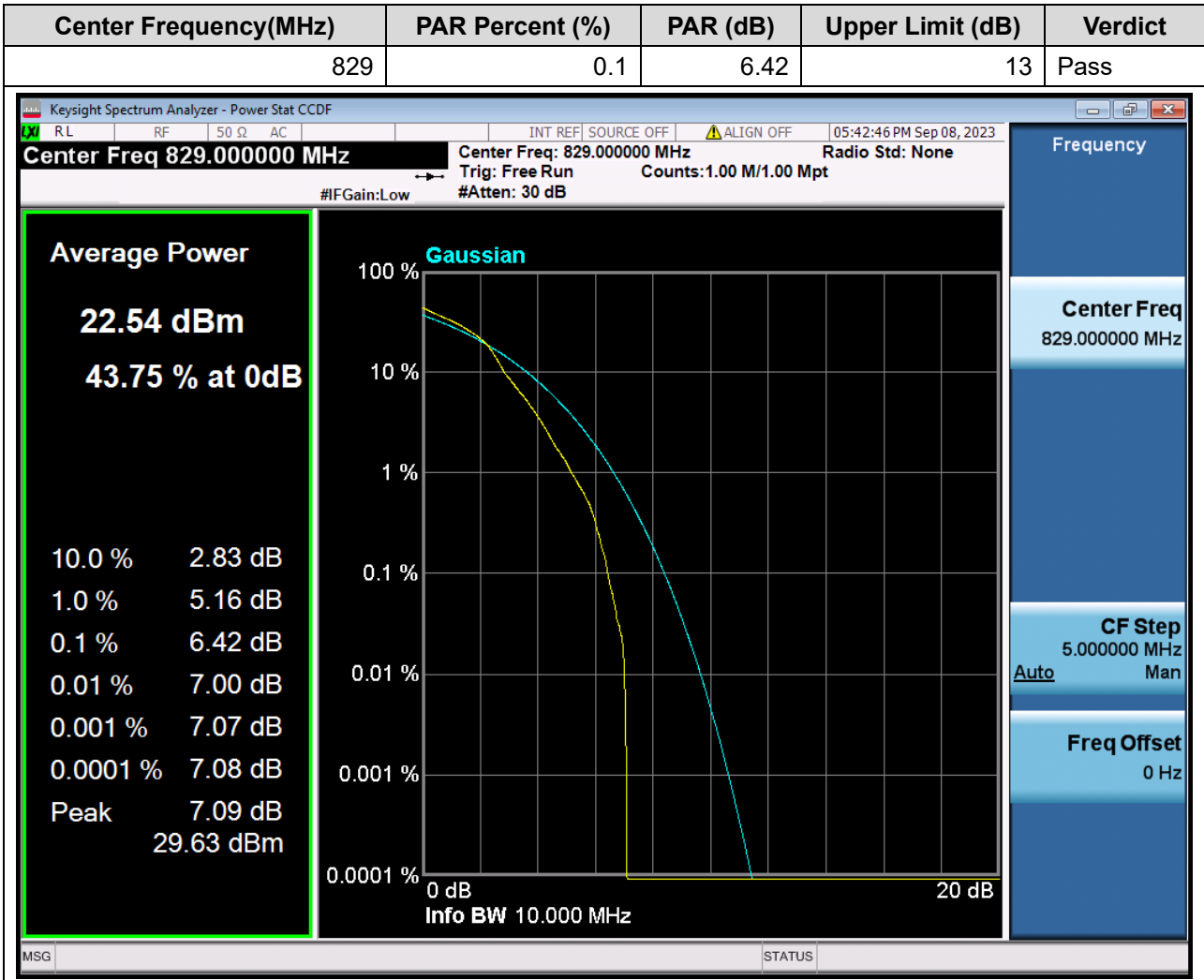
### 6.1. LTE Peak to Average Ratio(NTNV)(Subtest:1, Channel:20450, Bandwidth:10, Modulation:QPSK, RB Number: 1, RB Position:LOW)



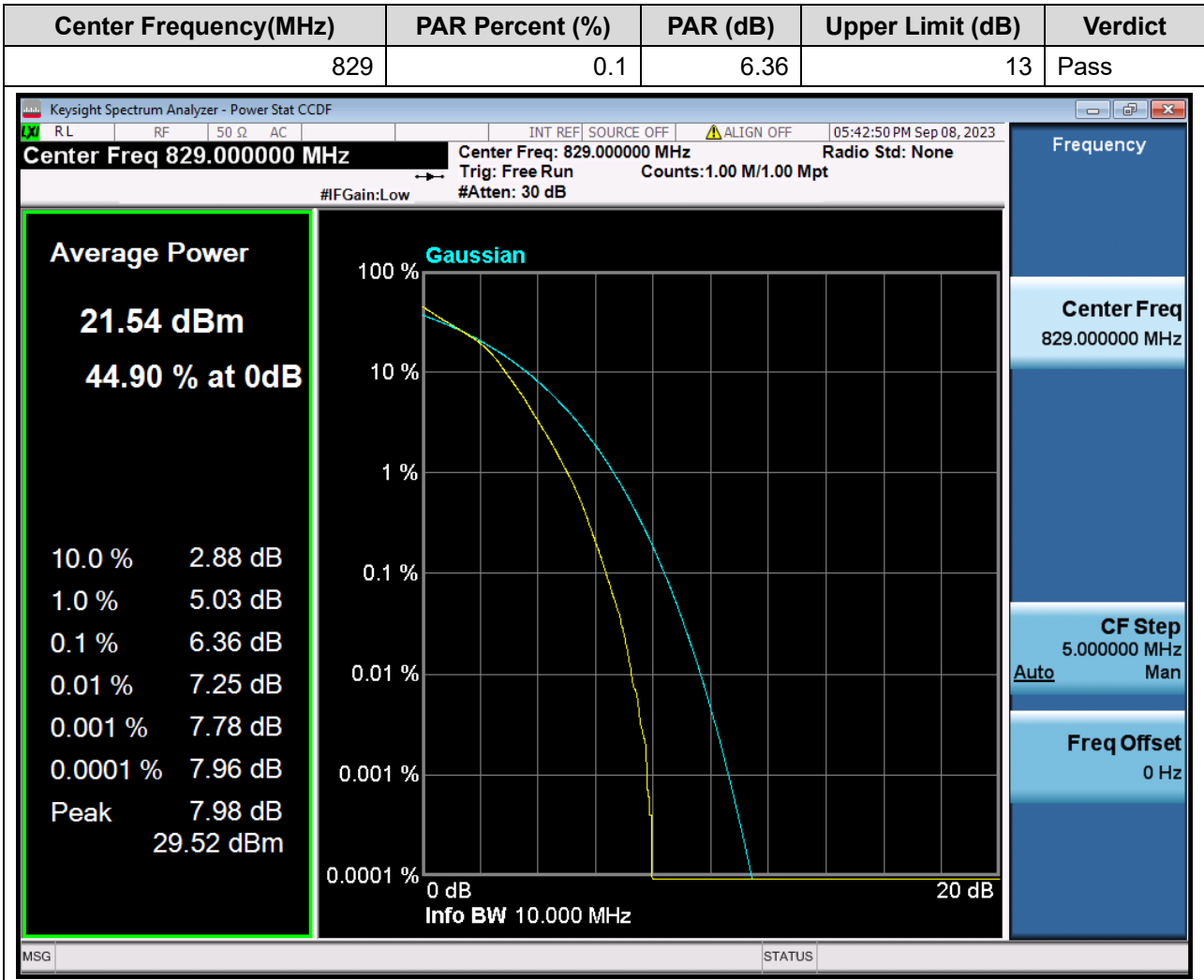
## 6.2. LTE Peak to Average Ratio(NTNV)(Subtest:2, Channel:20450, Bandwidth:10, Modulation:QPSK, RB Number: 50, RB Position:LOW)



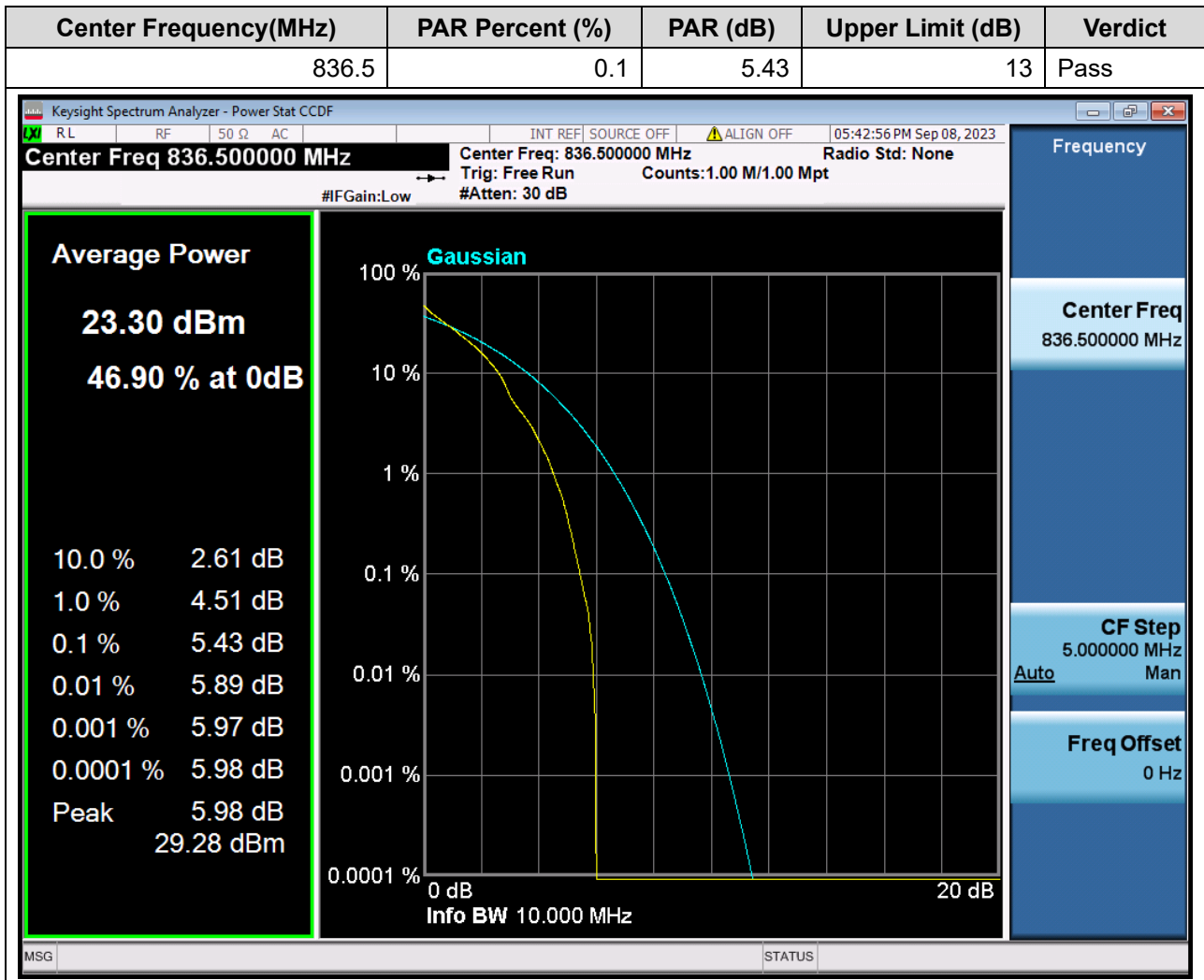
### 6.3. LTE Peak to Average Ratio(NTNV)(Subtest:3, Channel:20450, Bandwidth:10, Modulation:Q16, RB Number: 1, RB Position:LOW)



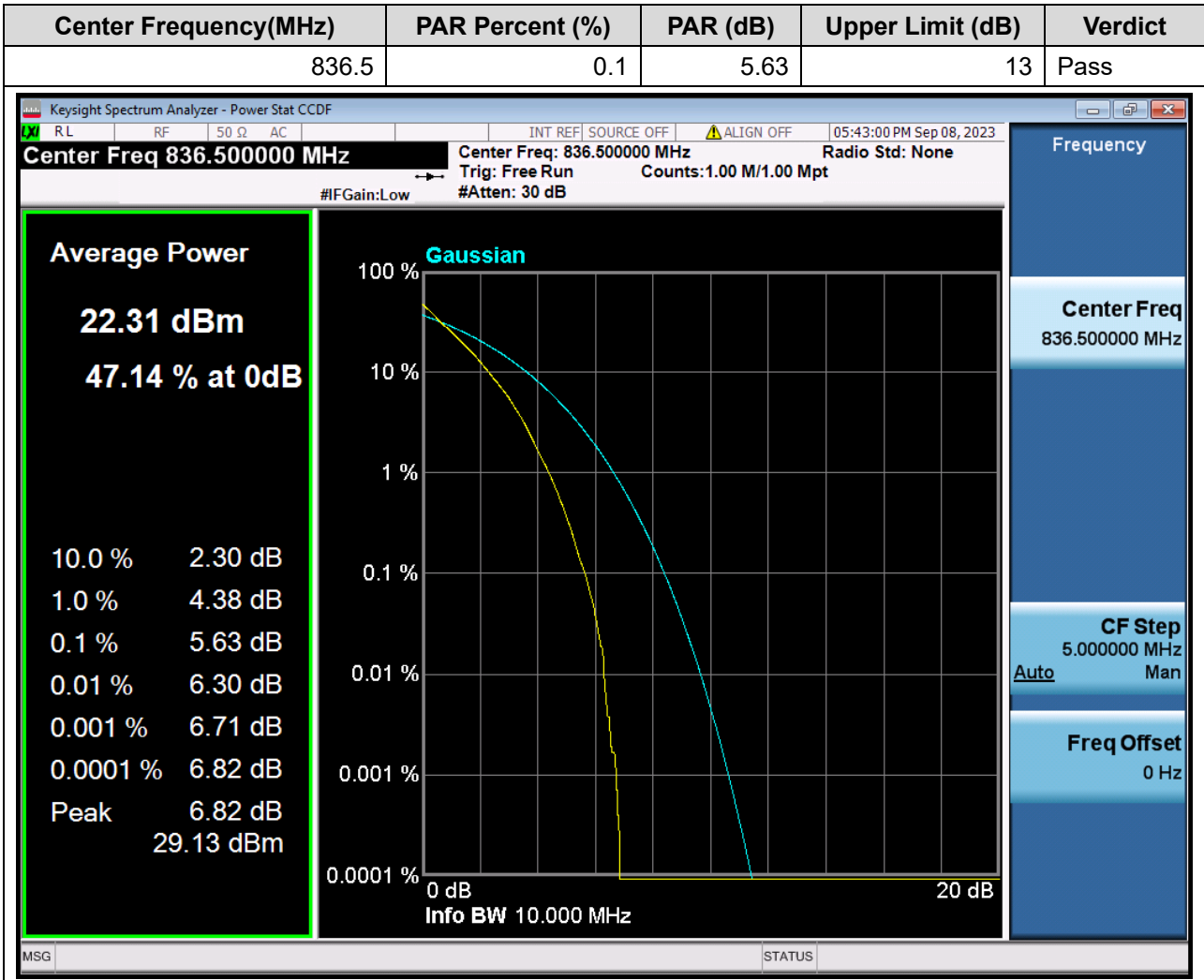
## 6.4. LTE Peak to Average Ratio(NTNV)(Subtest:4, Channel:20450, Bandwidth:10, Modulation:Q16, RB Number: 50, RB Position:LOW)



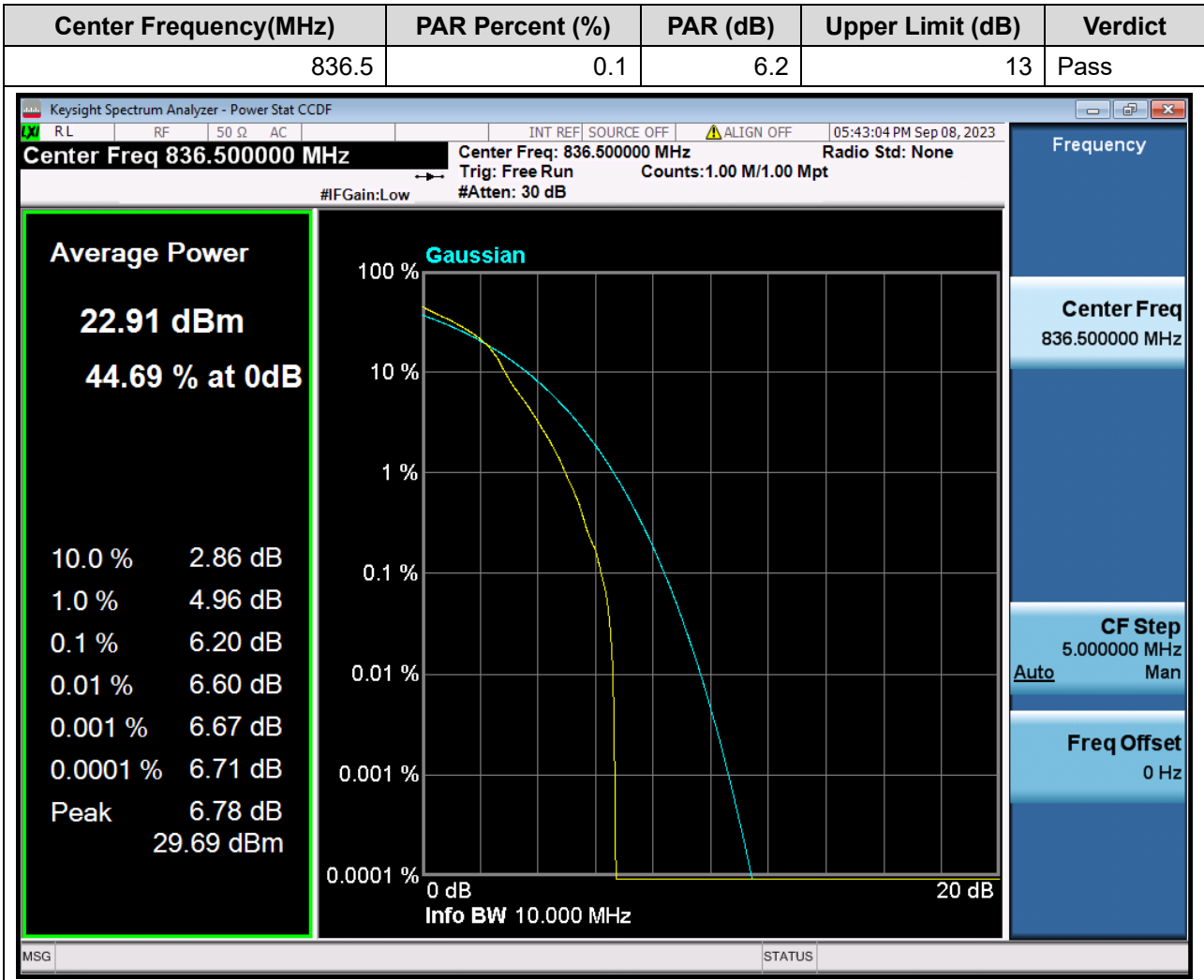
## 6.5. LTE Peak to Average Ratio(NTNV)(Subtest:5, Channel:20525, Bandwidth:10, Modulation:QPSK, RB Number: 1, RB Position:LOW)



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

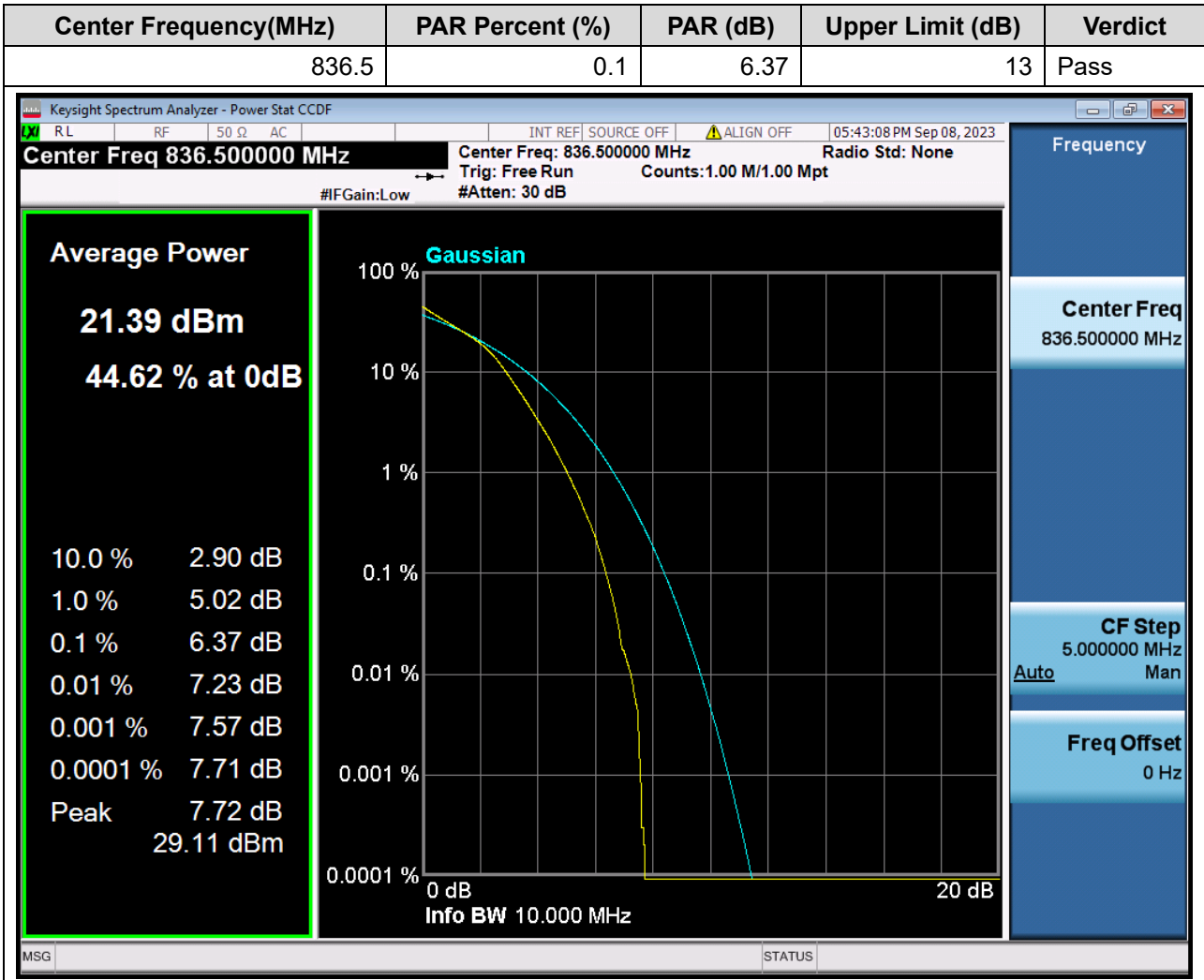


**6.7. LTE Peak to Average Ratio(NTNV)(Subtest:7, Channel:20525, Bandwidth:10, Modulation:Q16, RB Number: 1, RB Position:LOW)**

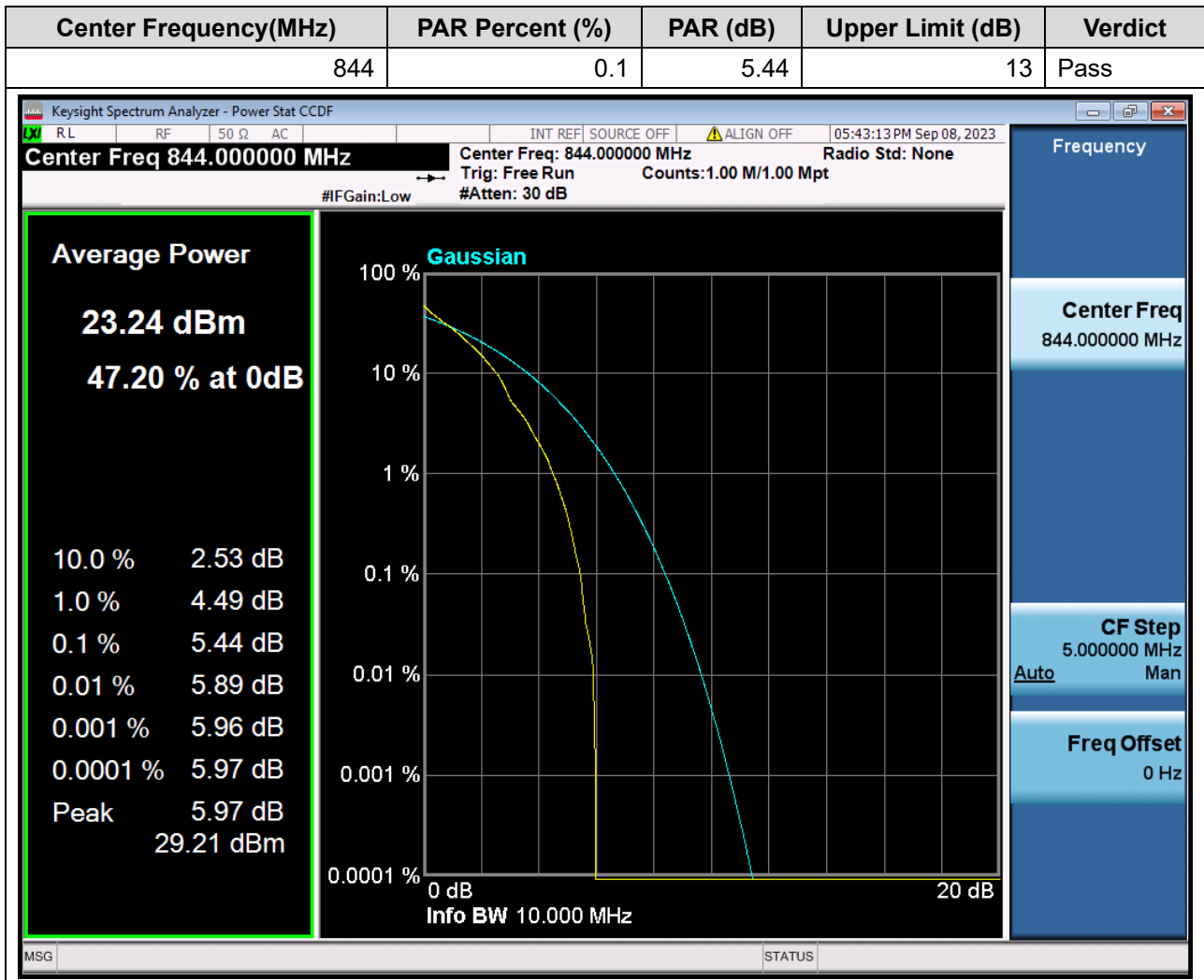




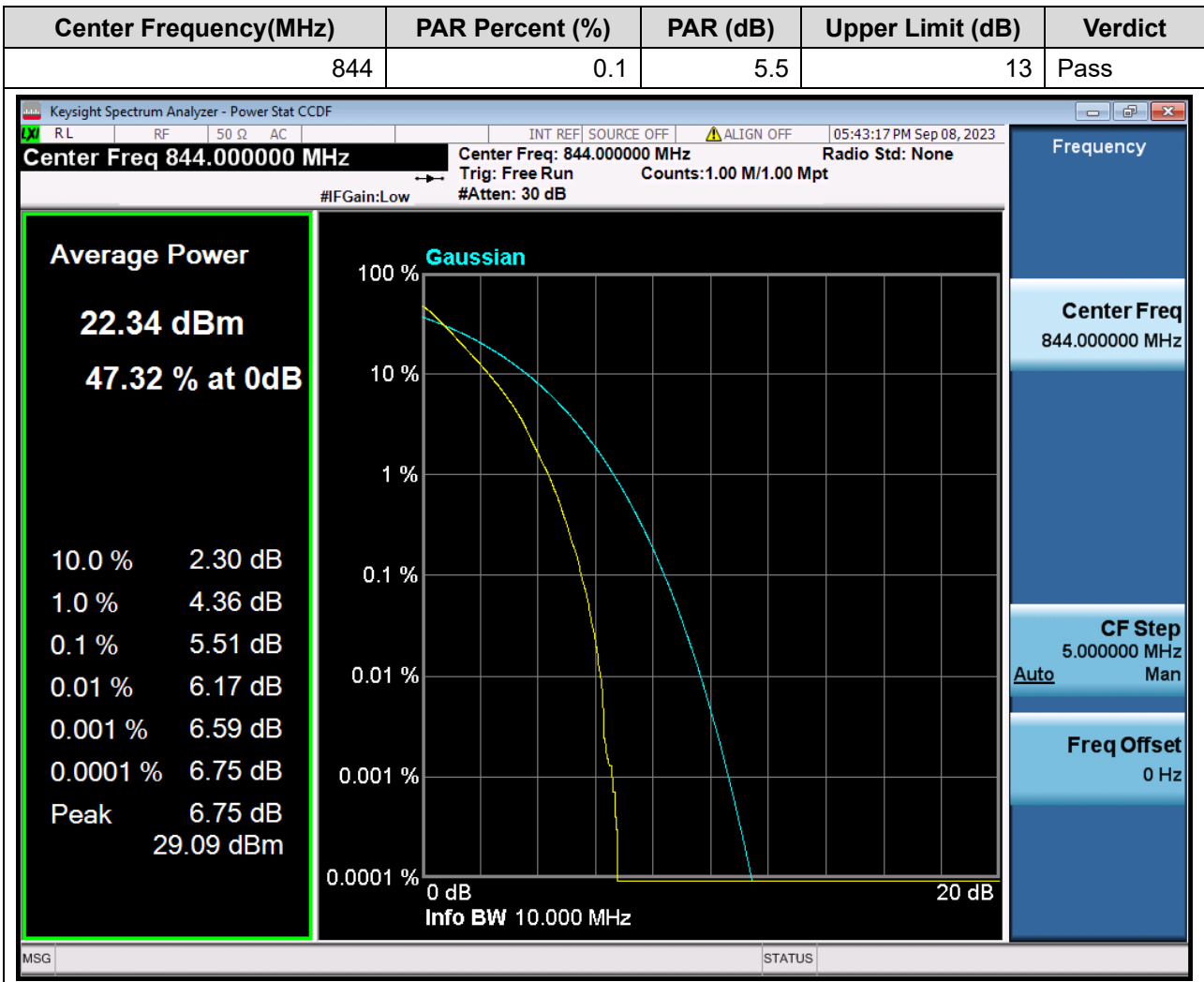
**6.8. LTE Peak to Average Ratio(NTNV)(Subtest:8, Channel:20525, Bandwidth:10, Modulation:Q16, RB Number: 50, RB Position:LOW)**



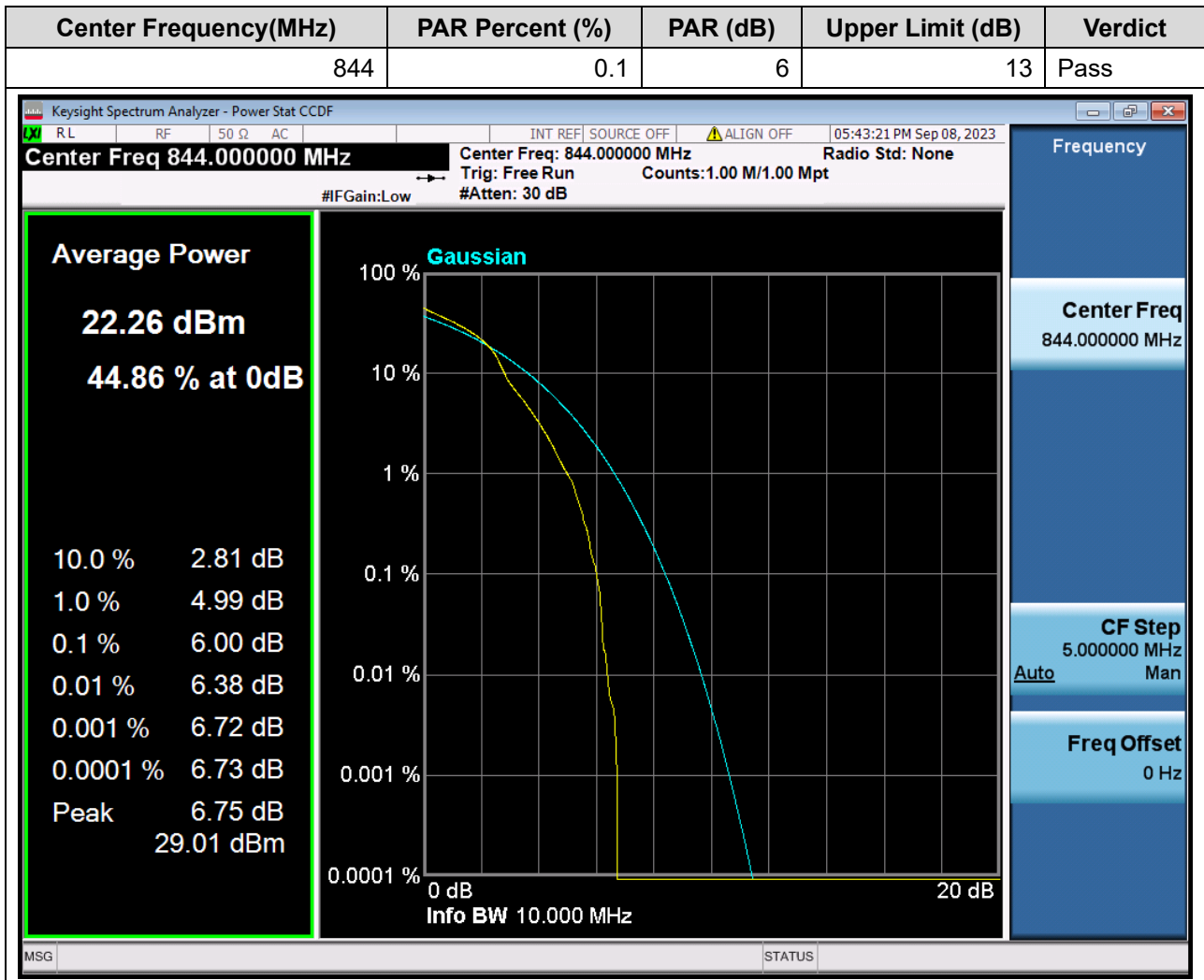
## 6.9. LTE Peak to Average Ratio(NTNV)(Subtest:9, Channel:20600, Bandwidth:10, Modulation:QPSK, RB Number: 1, RB Position:LOW)



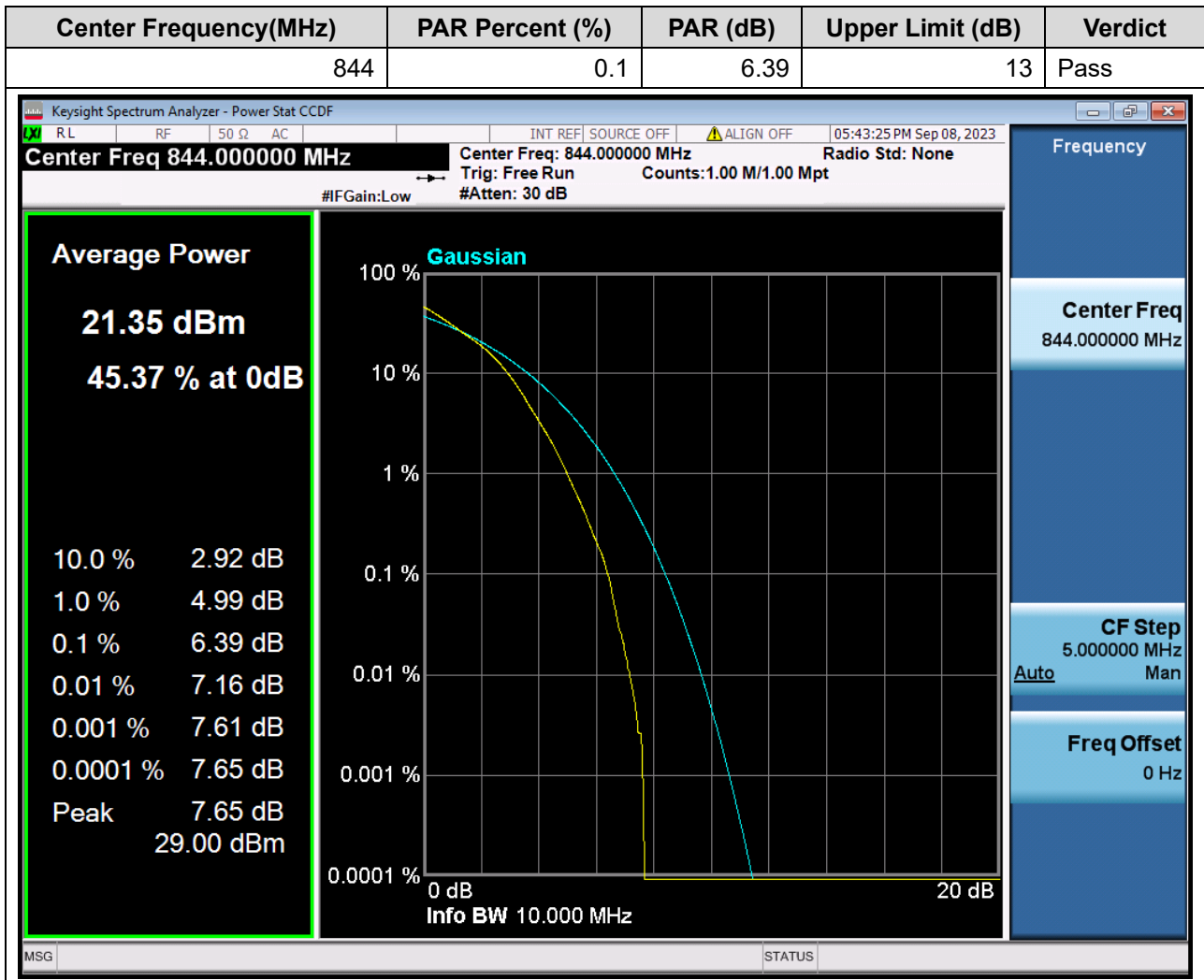
## 6.10. LTE Peak to Average Ratio(NTNV)(Subtest:10, Channel:20600, Bandwidth:10, Modulation:QPSK, RB Number: 50, RB Position:LOW)



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

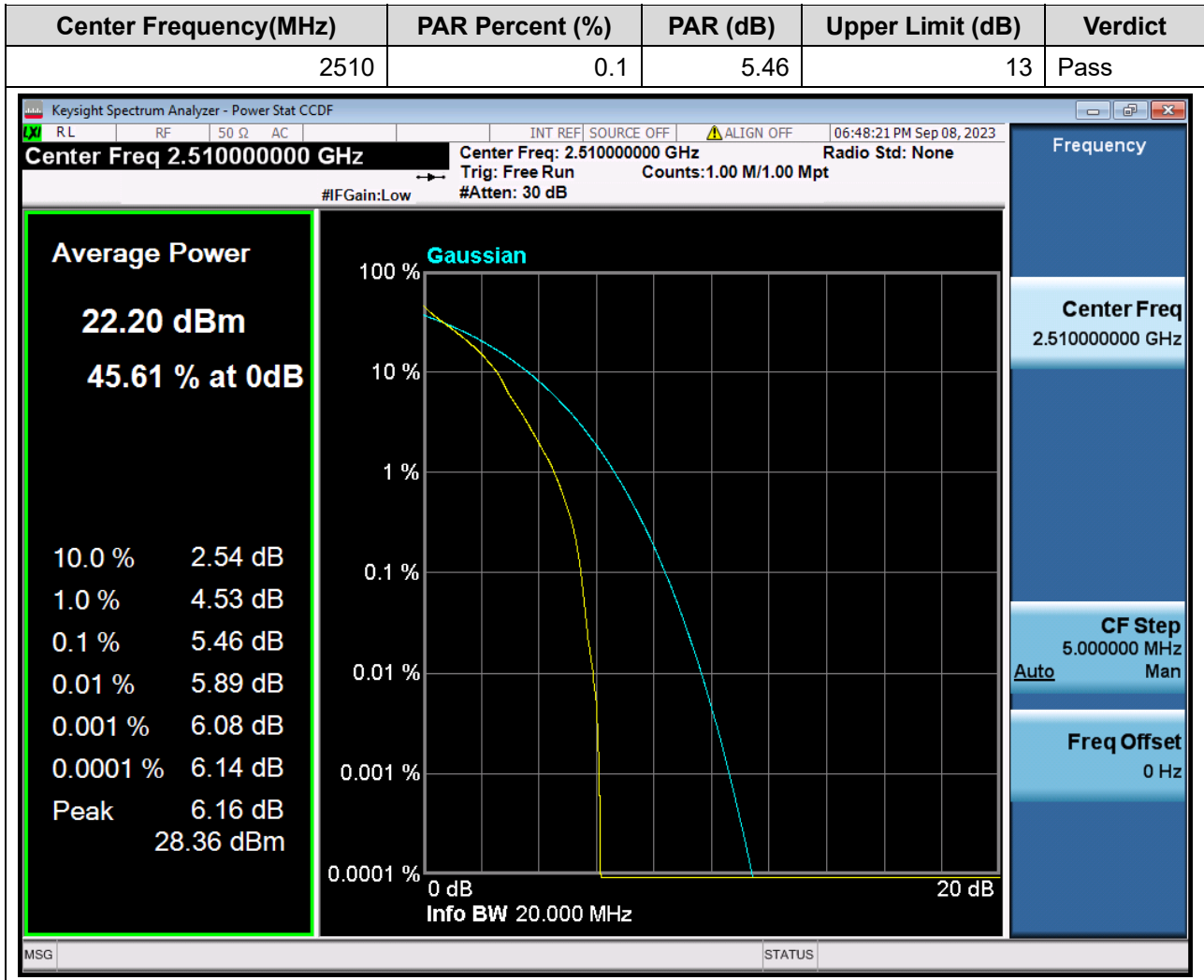


## 6.12. LTE Peak to Average Ratio(NTNV)(Subtest:12, Channel:20600, Bandwidth:10, Modulation:Q16, RB Number: 50, RB Position:LOW)

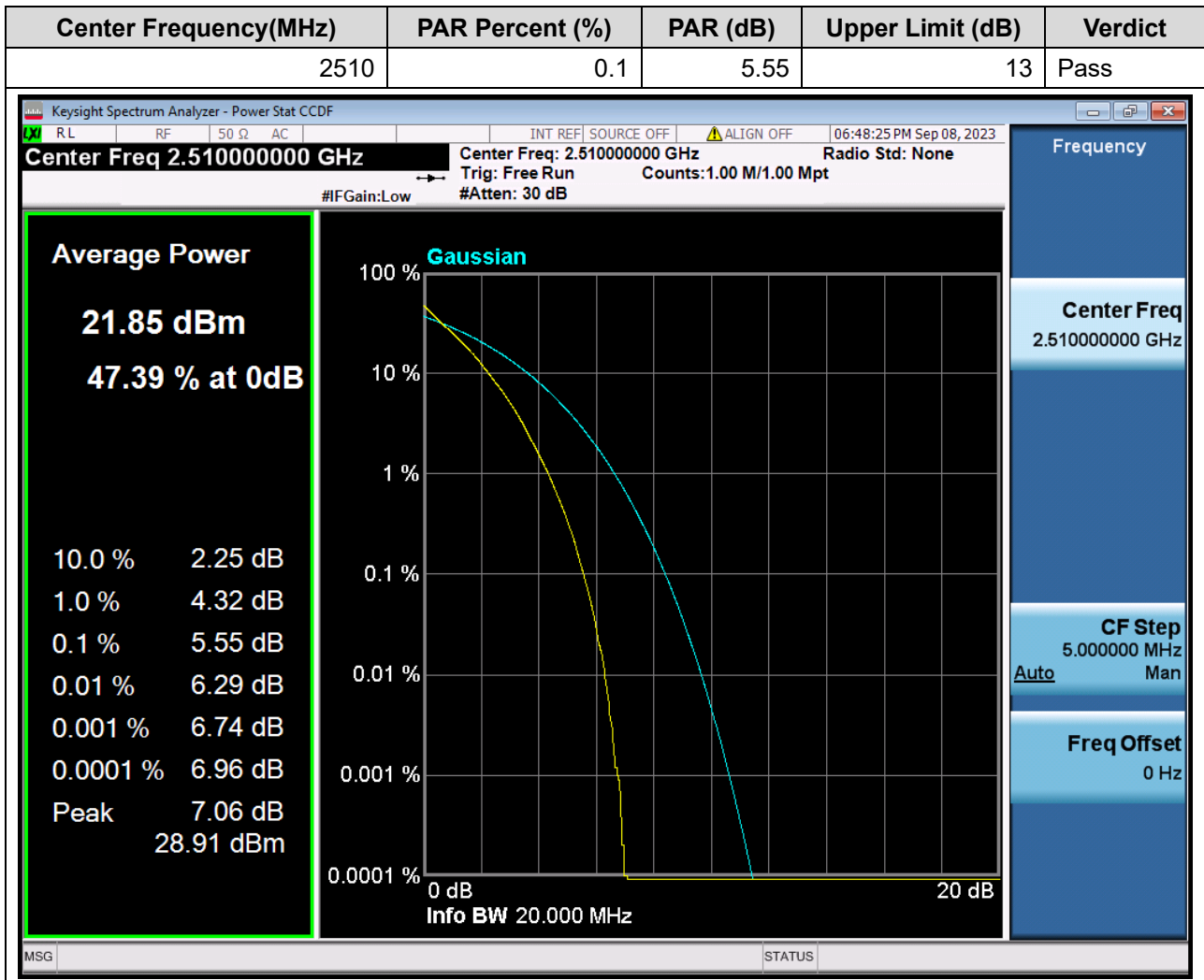


## 7. LTE\_Band7

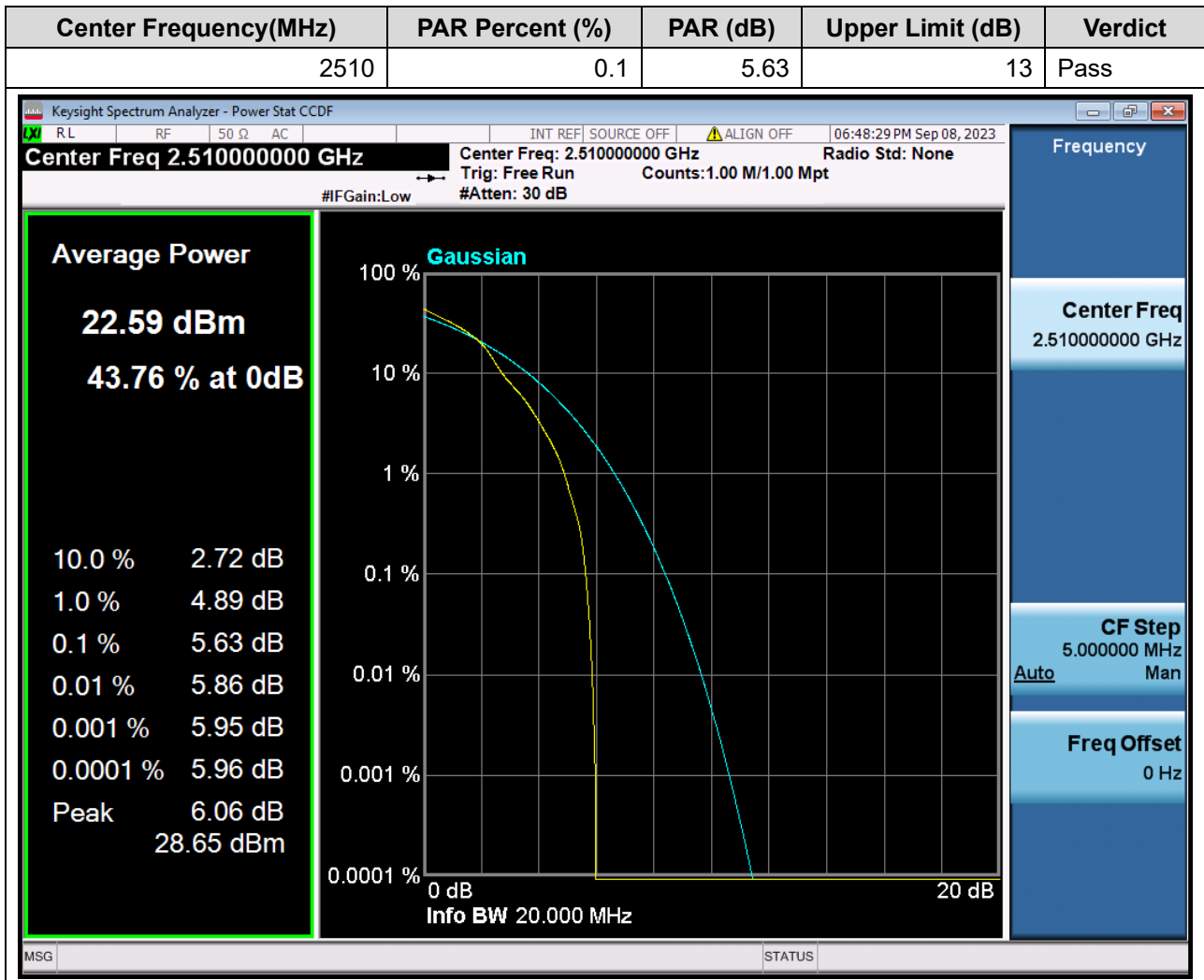
### 7.1. LTE Peak to Average Ratio(NTNV)(Subtest:1, Channel:20850, Bandwidth:20, Modulation:QPSK, RB Number: 1, RB Position:LOW)



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

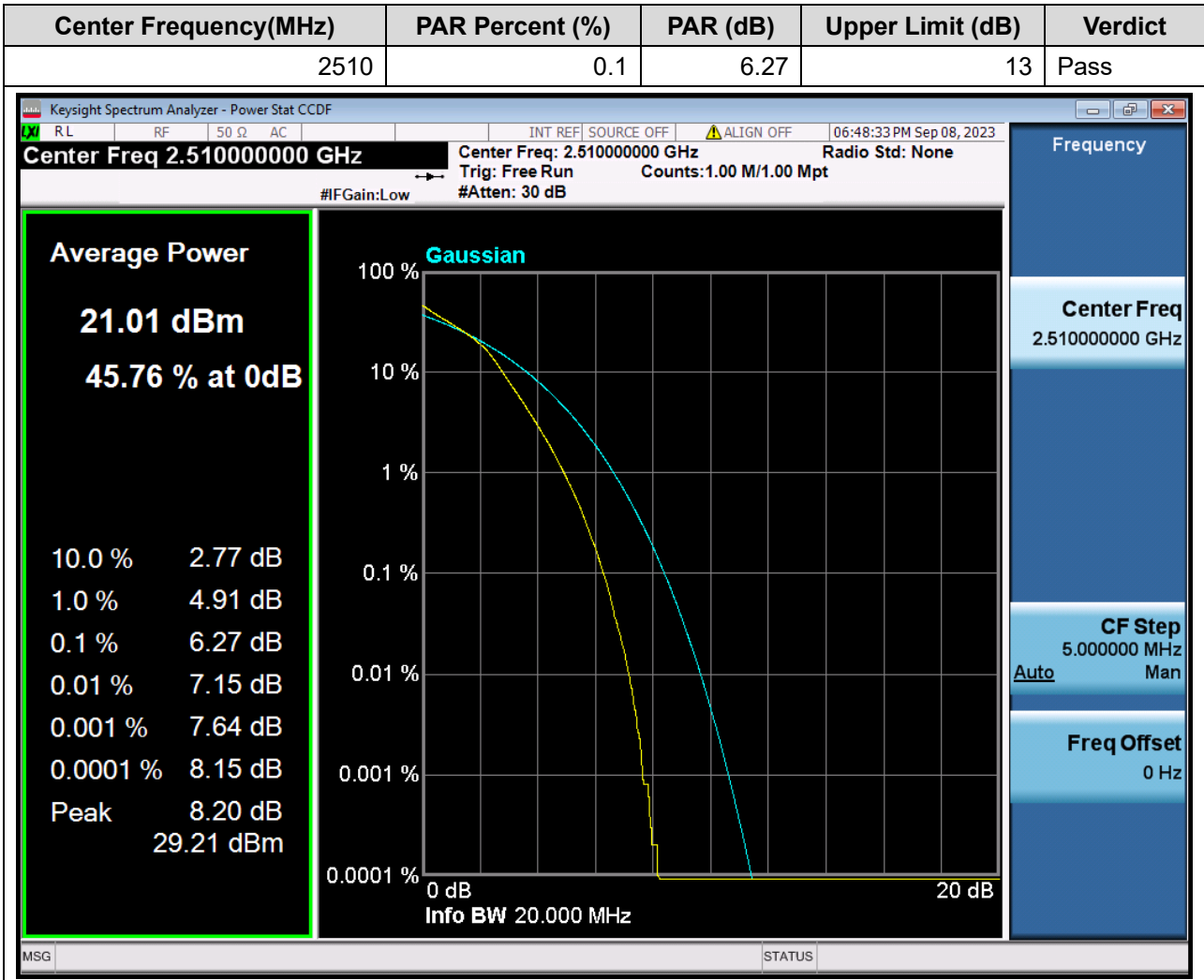


## 7.6. LTE Peak to Average Ratio(NTNV)(Subtest:3, Channel:20850, Bandwidth:20, Modulation:Q16, RB Number: 1, RB Position:LOW)

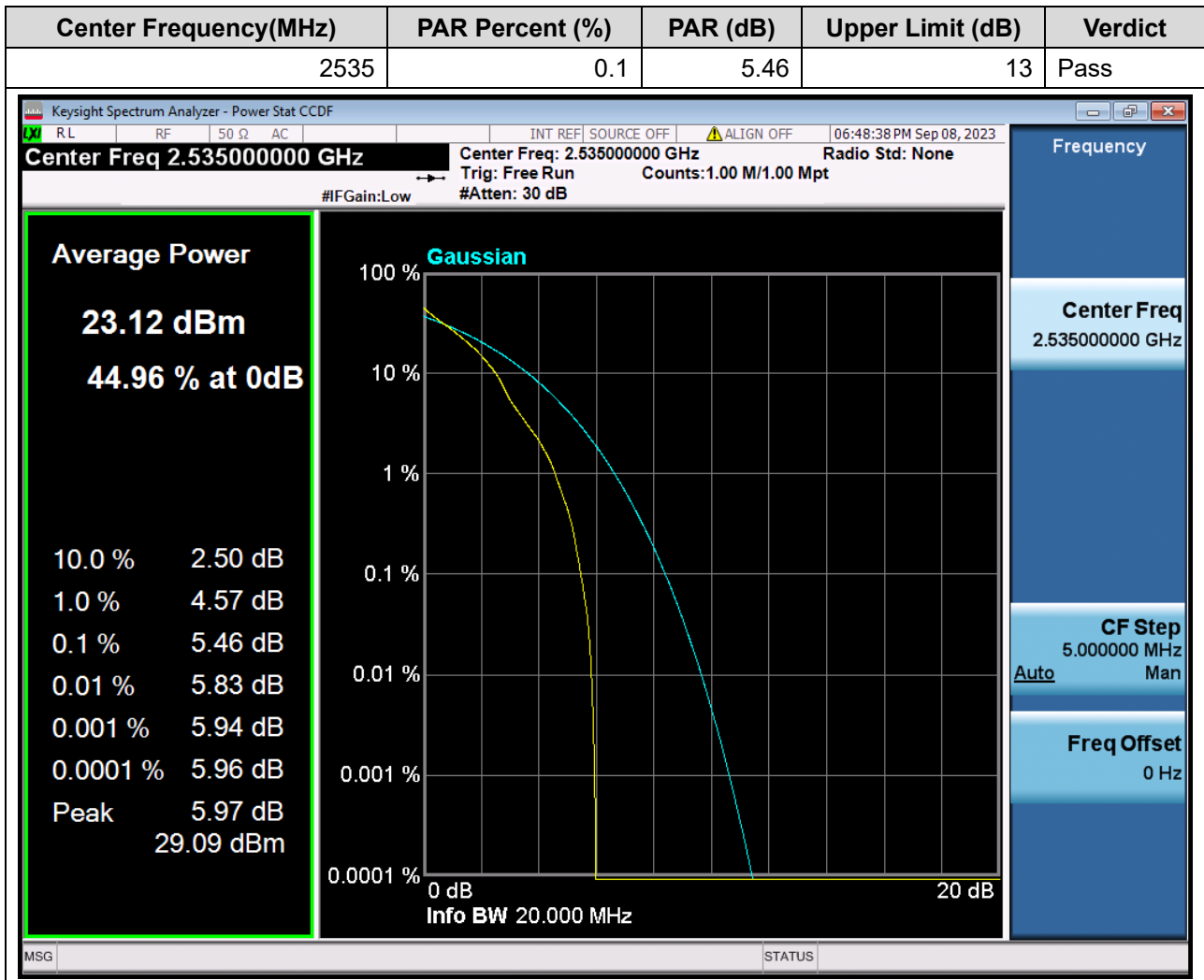




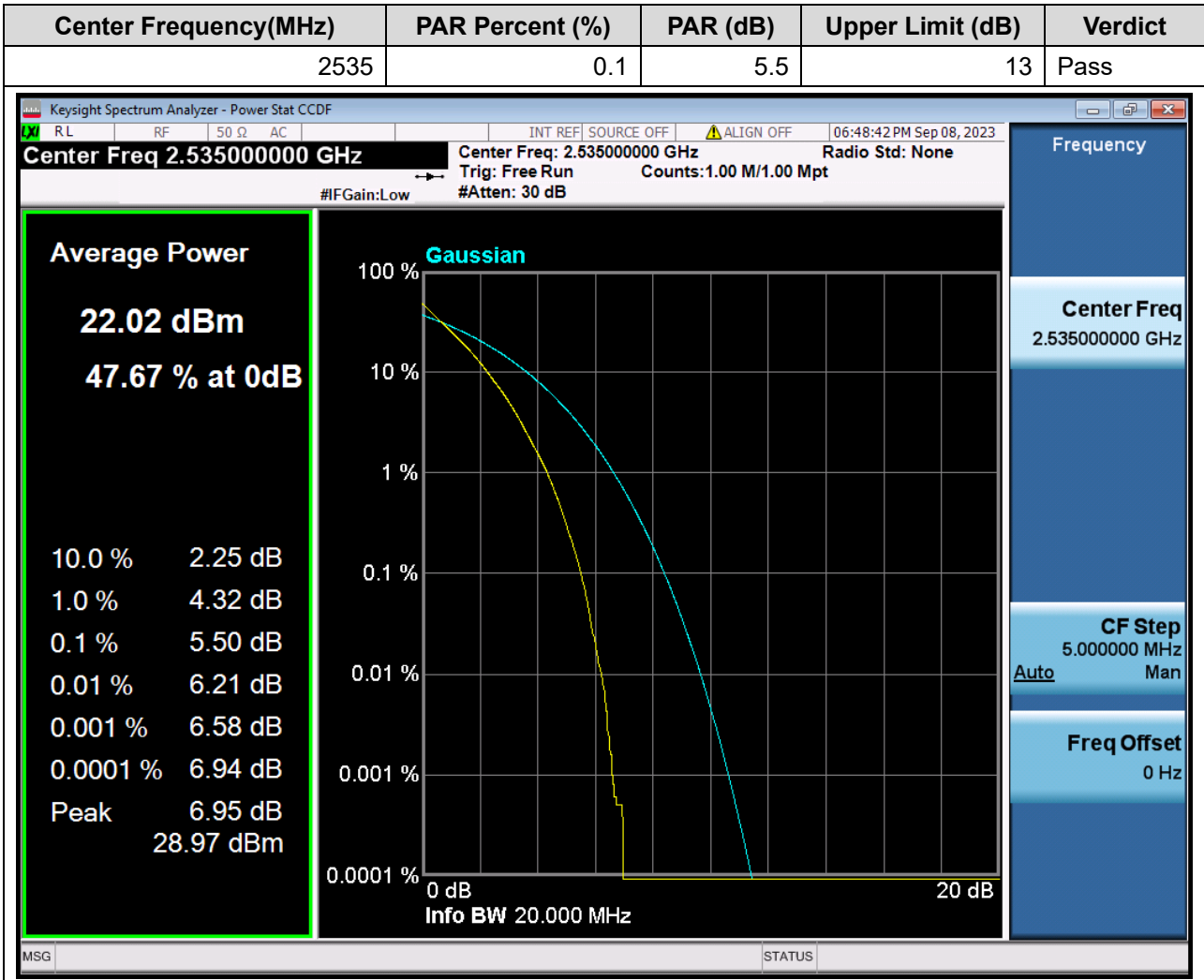
## 7.4. LTE Peak to Average Ratio(NTNV)(Subtest:4, Channel:20850, Bandwidth:20, Modulation:Q16, RB Number: 100, RB Position:LOW)



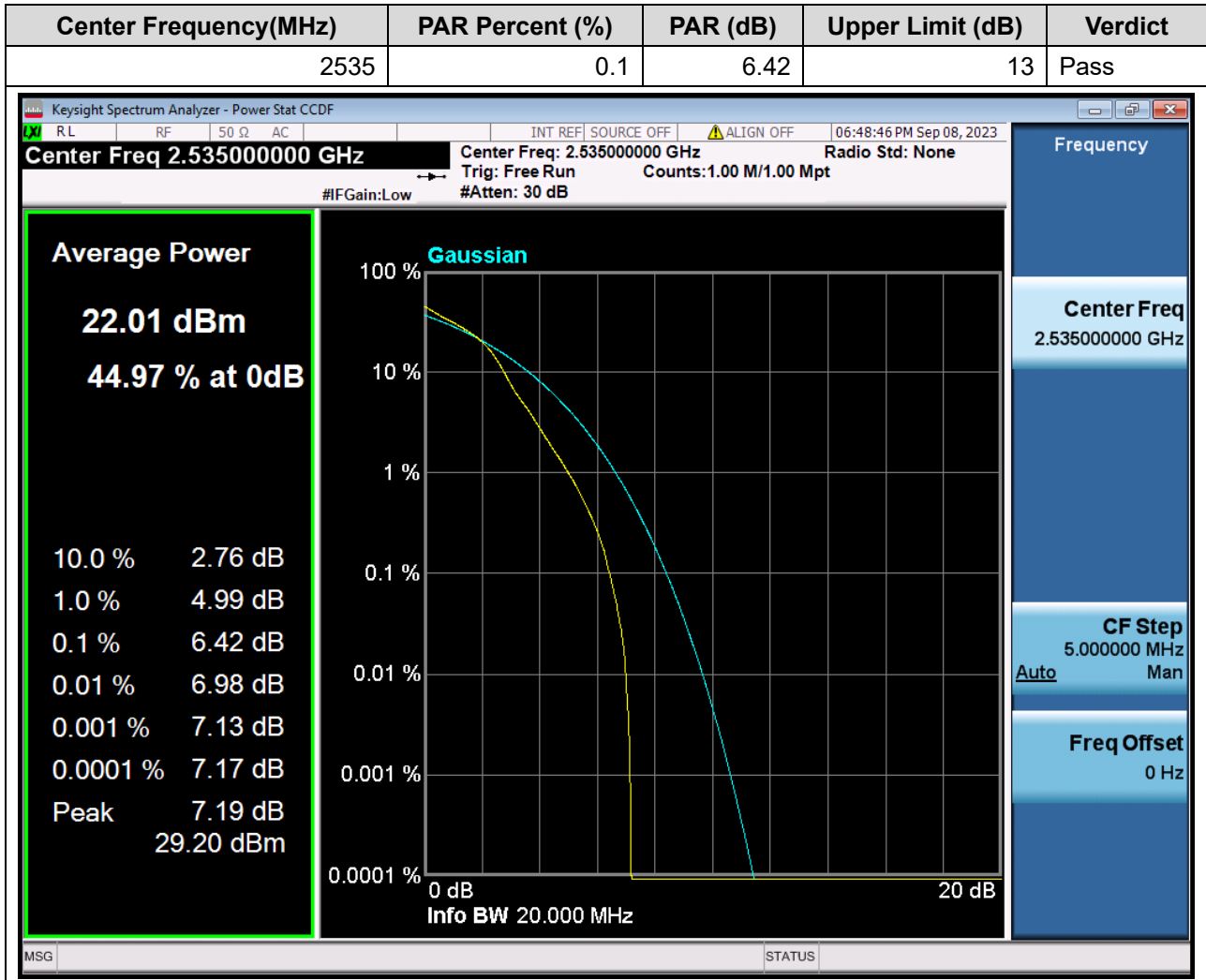
## 7.5. LTE Peak to Average Ratio(NTNV)(Subtest:5, Channel:21100, Bandwidth:20, Modulation:QPSK, RB Number: 1, RB Position:LOW)



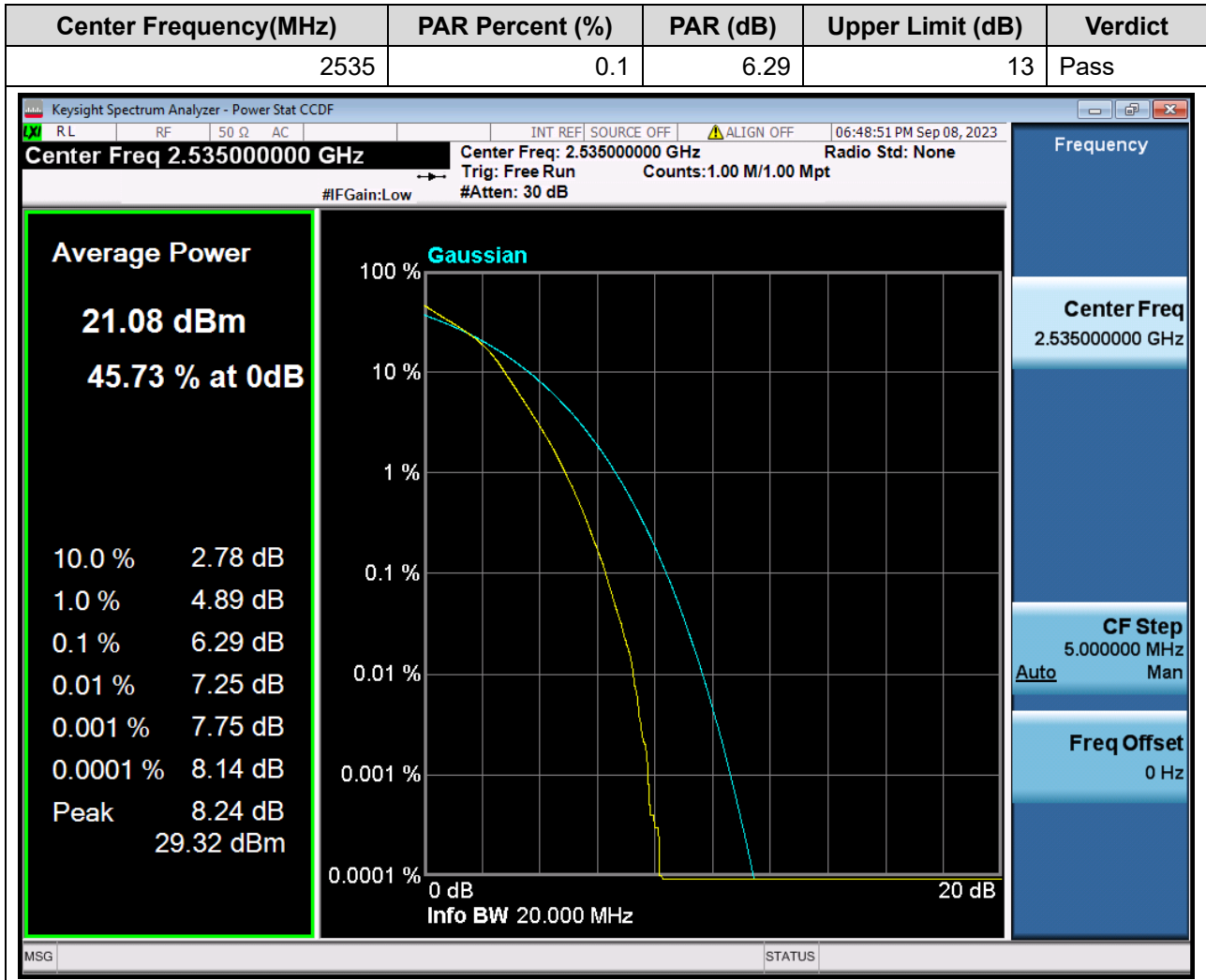
## 7.6. LTE Peak to Average Ratio(NTNV)(Subtest:6, Channel:21100, Bandwidth:20, Modulation:QPSK, RB Number: 100, RB Position:LOW)



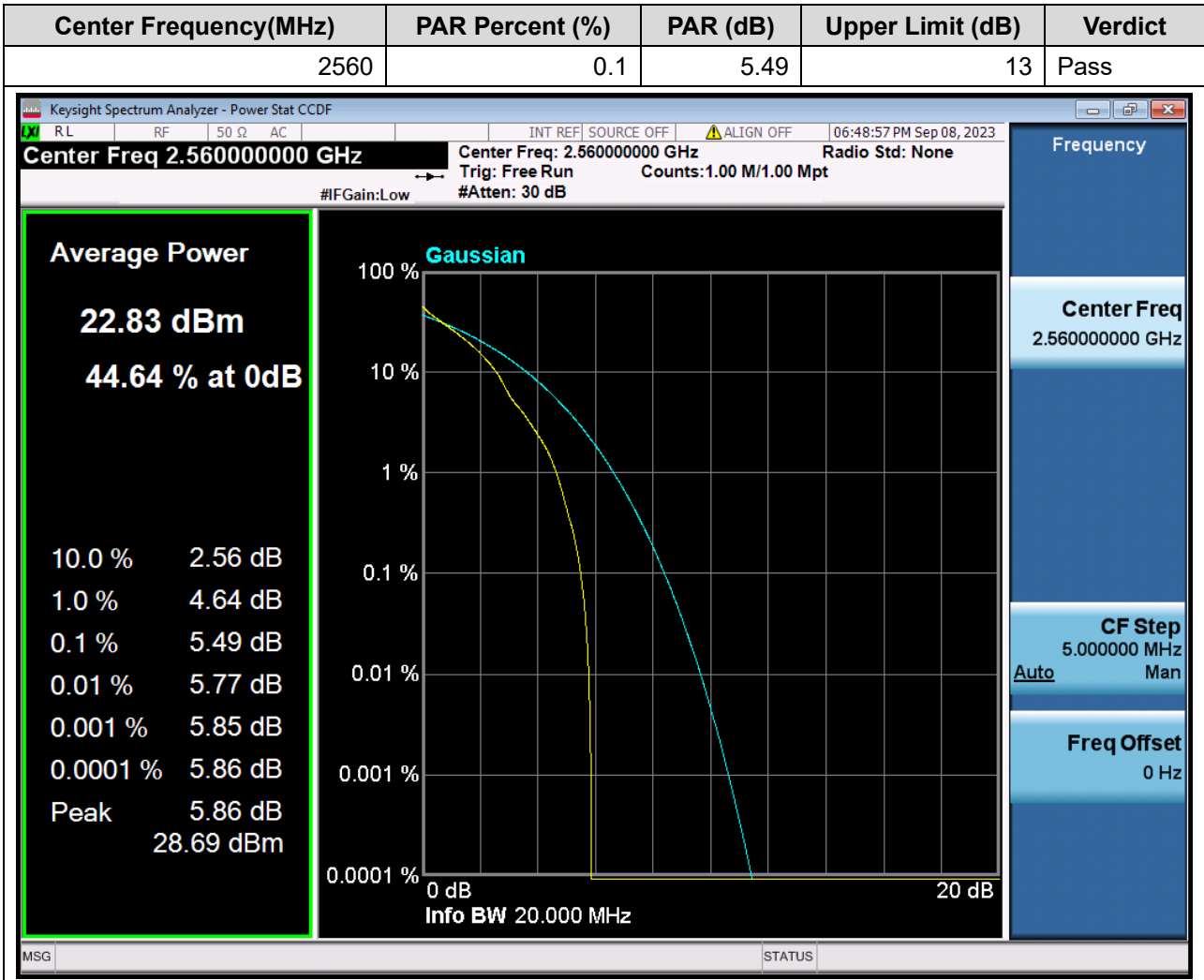
## 7.7. LTE Peak to Average Ratio(NTNV)(Subtest:7, Channel:21100, Bandwidth:20, Modulation:Q16, RB Number: 1, RB Position:LOW)



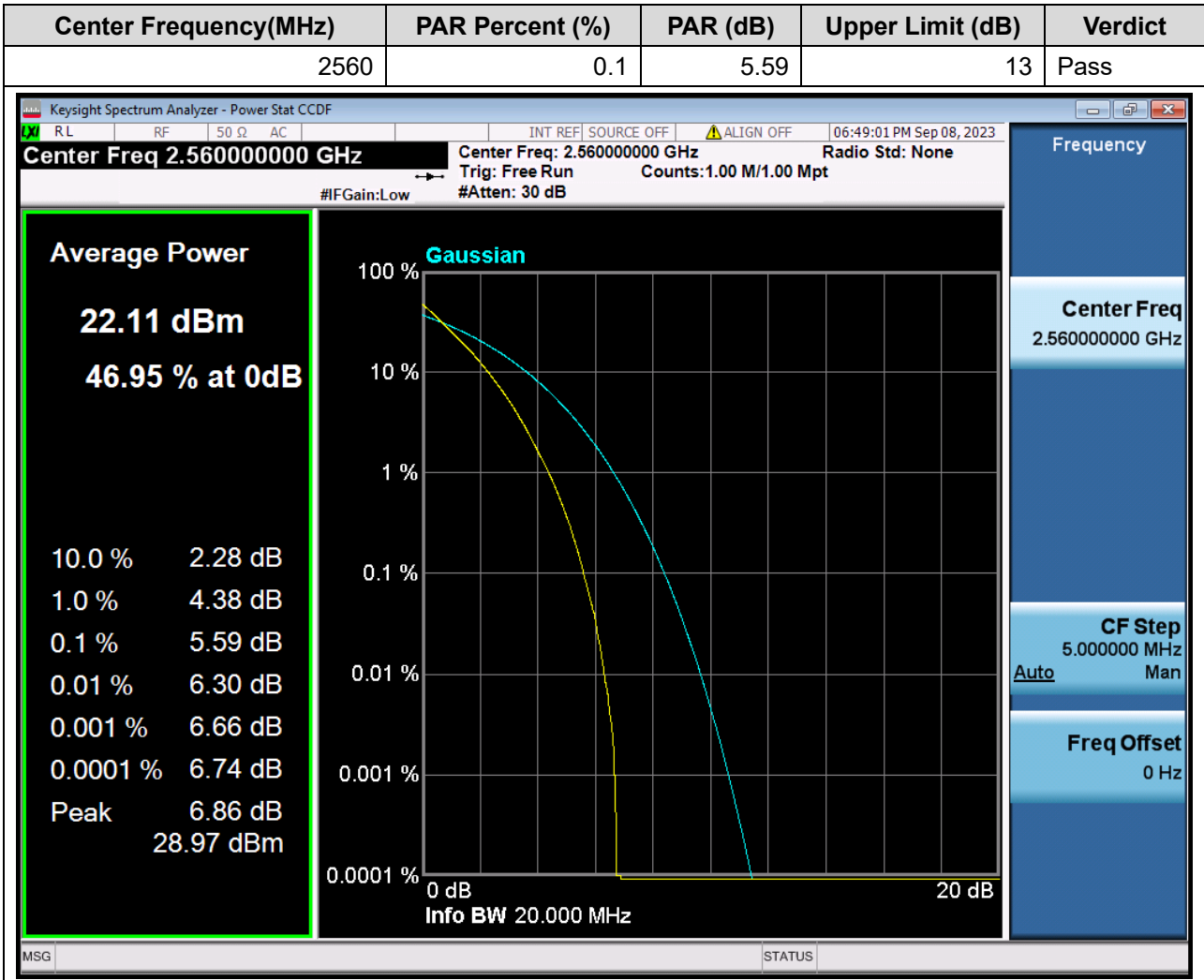
## 7.8. LTE Peak to Average Ratio(NTNV)(Subtest:8, Channel:21100, Bandwidth:20, Modulation:Q16, RB Number: 100, RB Position:LOW)



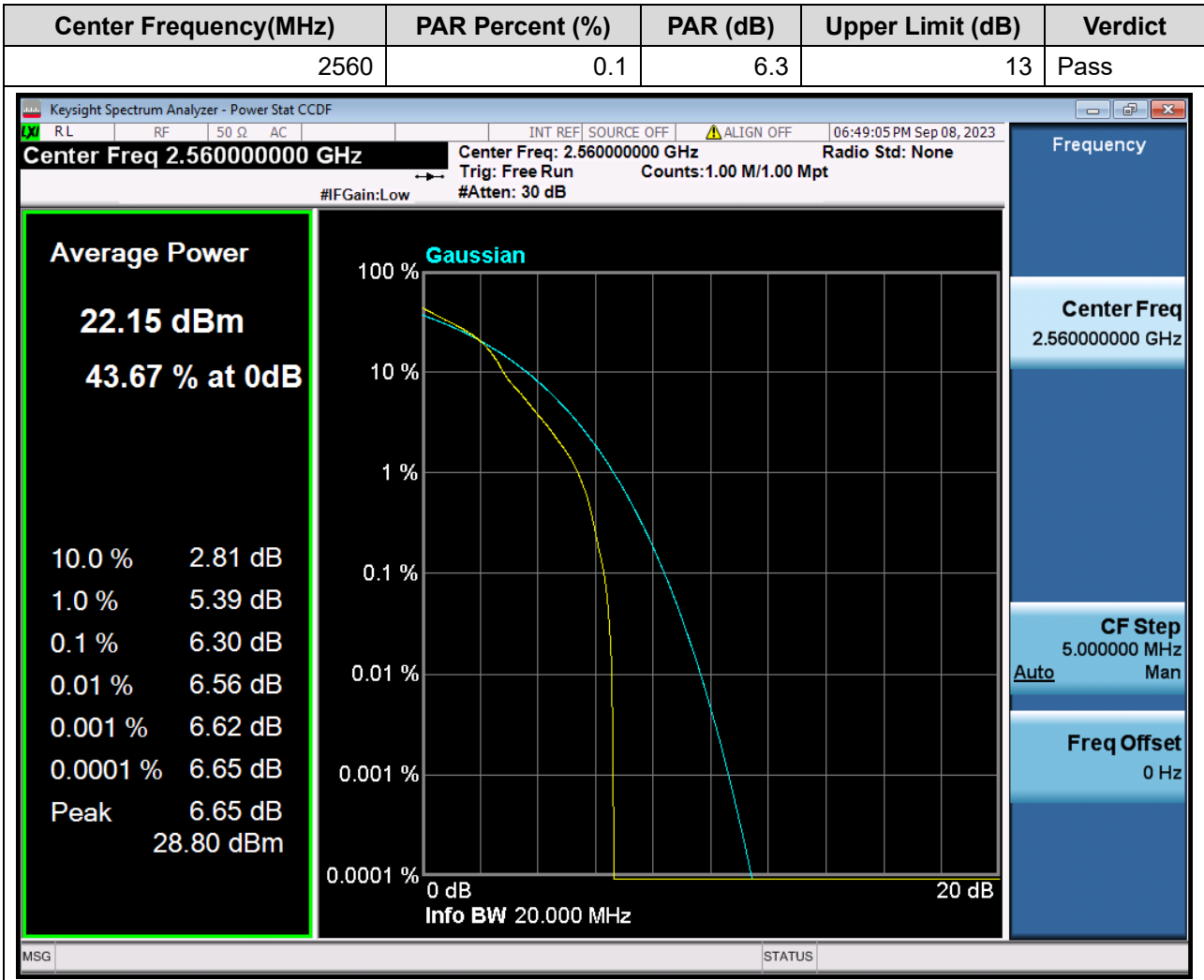
## 7.9. LTE Peak to Average Ratio(NTNV)(Subtest:9, Channel:21350, Bandwidth:20, Modulation:QPSK, RB Number: 1, RB Position:LOW)



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

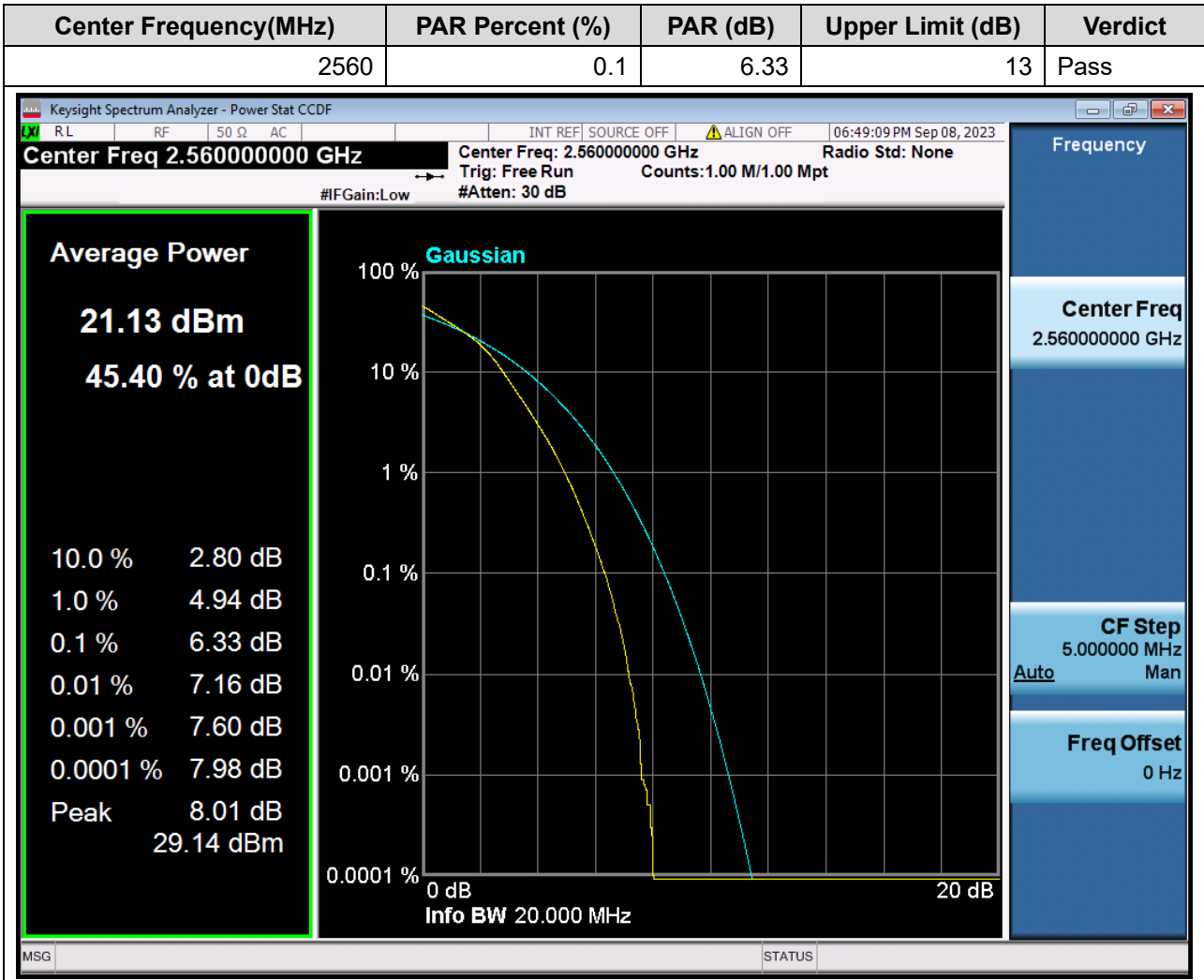


**7.11. LTE Peak to Average Ratio(NTNV)(Subtest:11, Channel:21350, Bandwidth:20, Modulation:Q16, RB Number: 1, RB Position:LOW)**



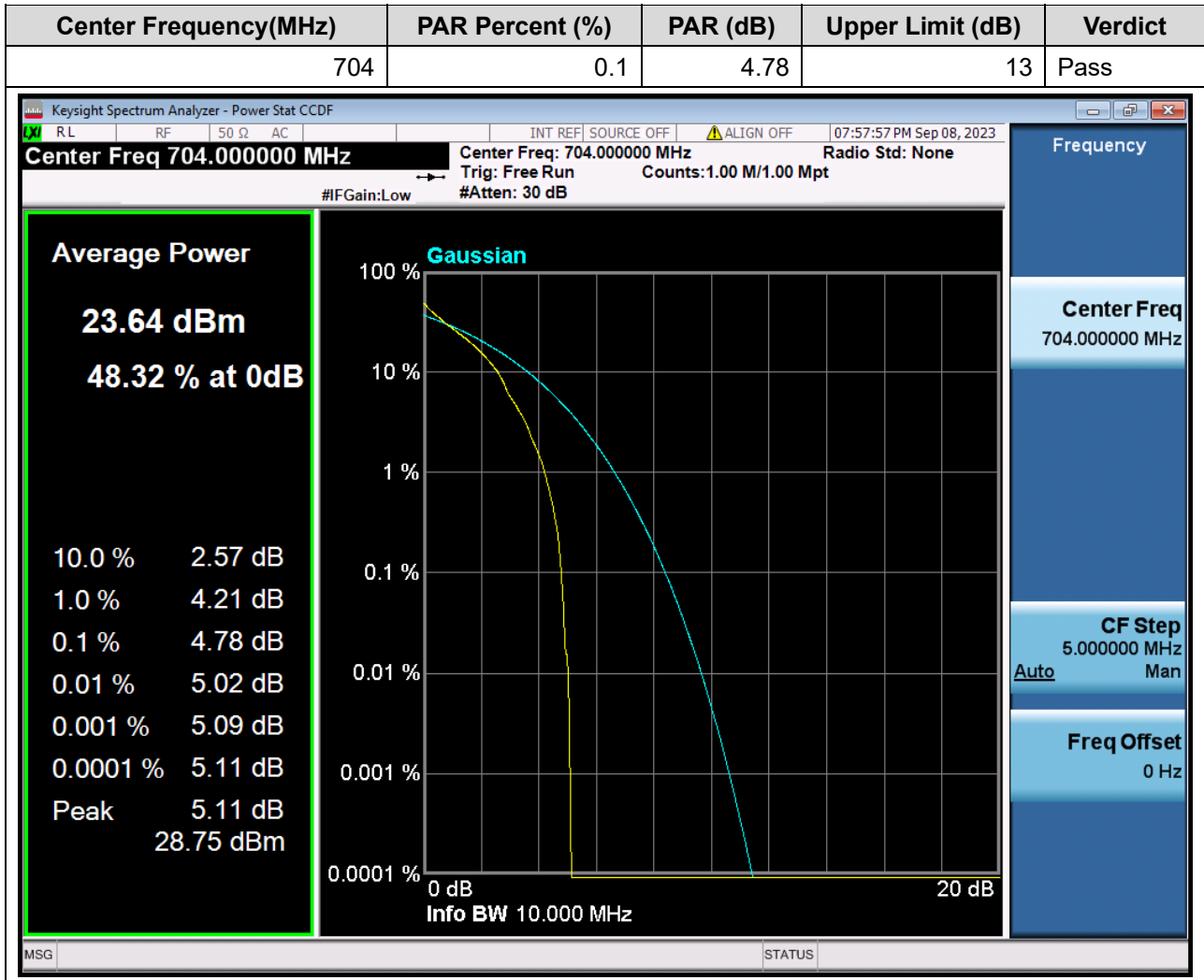


## 7.12. LTE Peak to Average Ratio(NTNV)(Subtest:12, Channel:21350, Bandwidth:20, Modulation:Q16, RB Number: 100, RB Position:LOW)

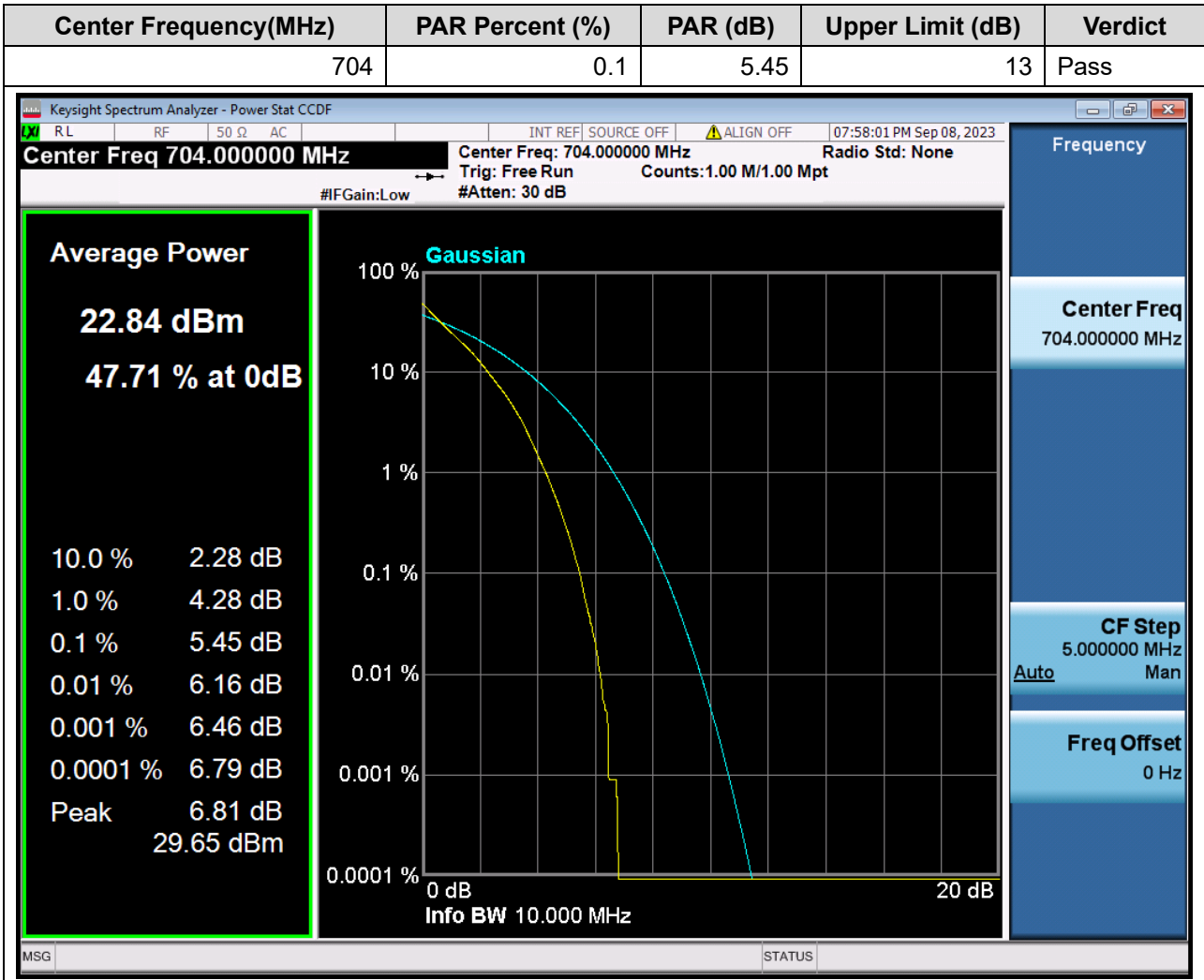


## 8. LTE\_Band12

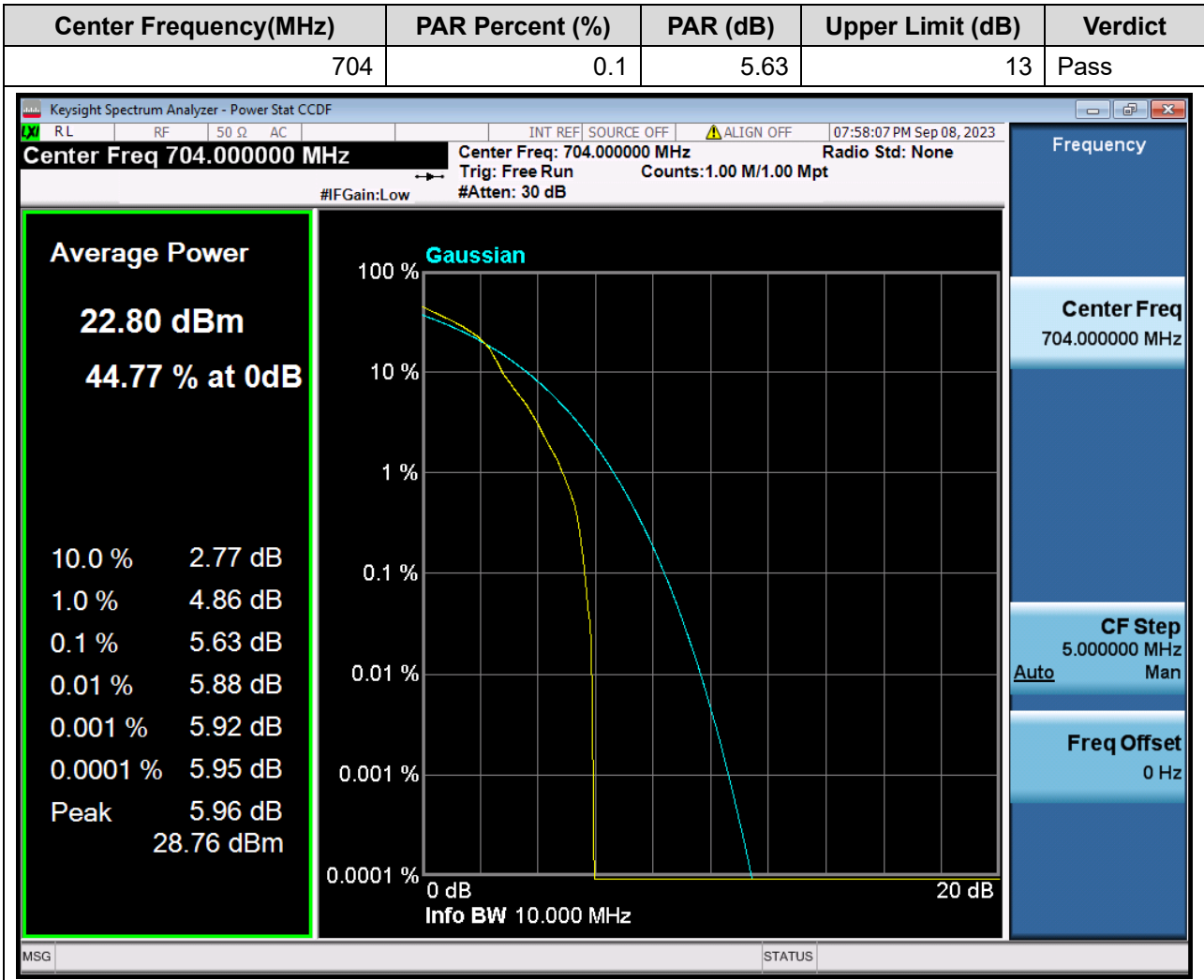
### 8.1. LTE Peak to Average Ratio(NTNV)(Subtest:1, Channel:23060, Bandwidth:10, Modulation:QPSK, RB Number: 1, RB Position:LOW)



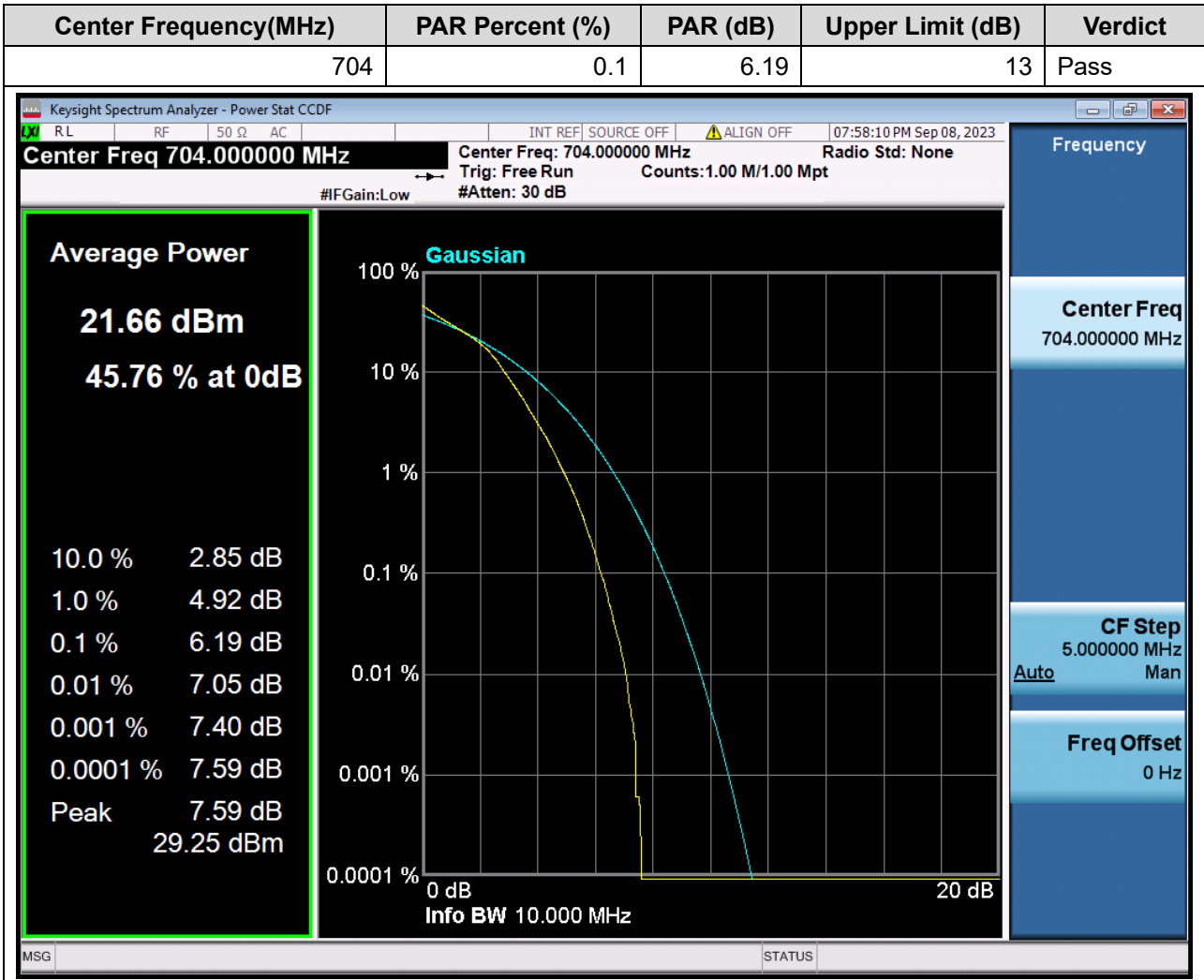
## 8.2. LTE Peak to Average Ratio(NTNV)(Subtest:2, Channel:23060, Bandwidth:10, Modulation:QPSK, RB Number: 50, RB Position:LOW)



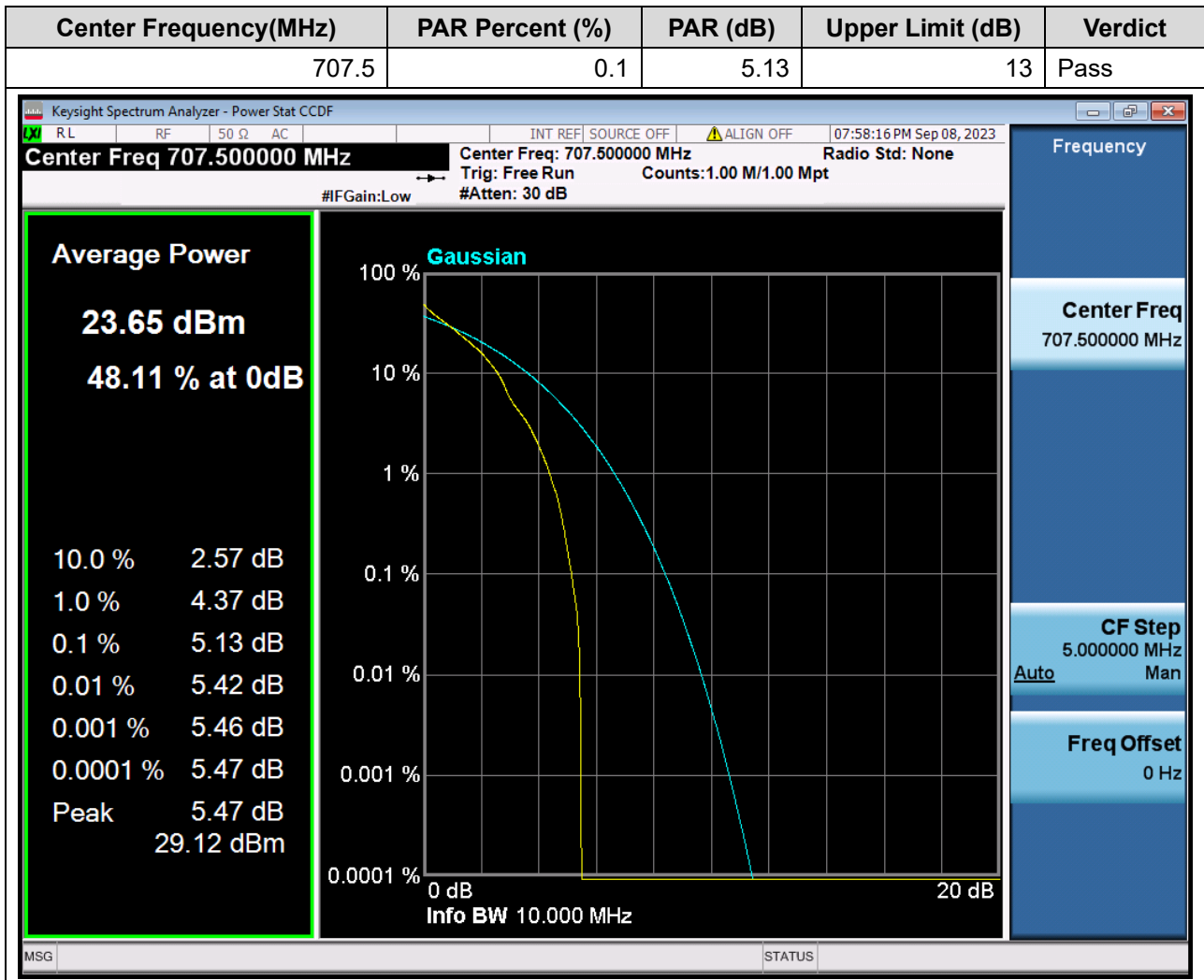
### 8.3. LTE Peak to Average Ratio(NTNV)(Subtest:3, Channel:23060, Bandwidth:10, Modulation:Q16, RB Number: 1, RB Position:LOW)



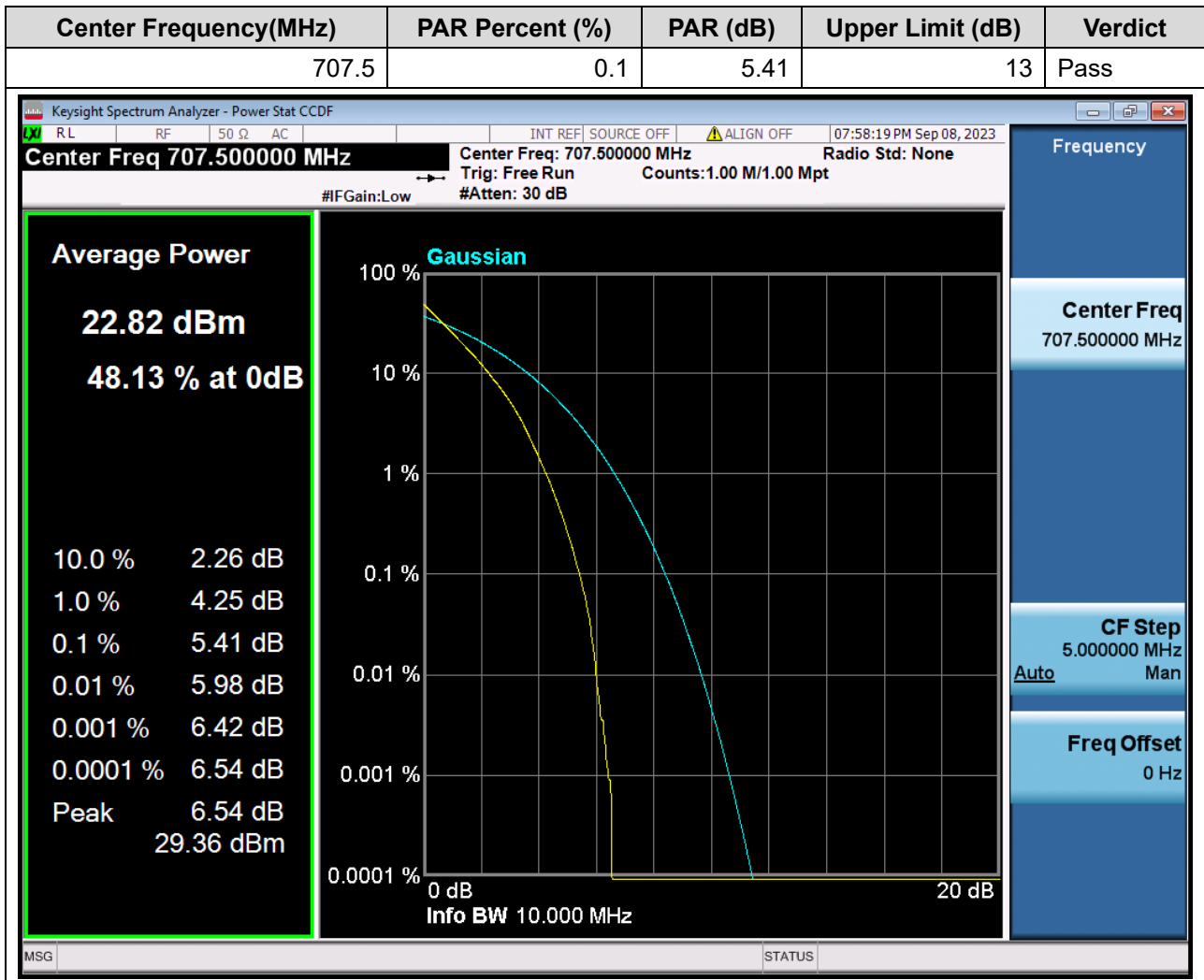
## 8.4. LTE Peak to Average Ratio(NTNV)(Subtest:4, Channel:23060, Bandwidth:10, Modulation:Q16, RB Number: 50, RB Position:LOW)



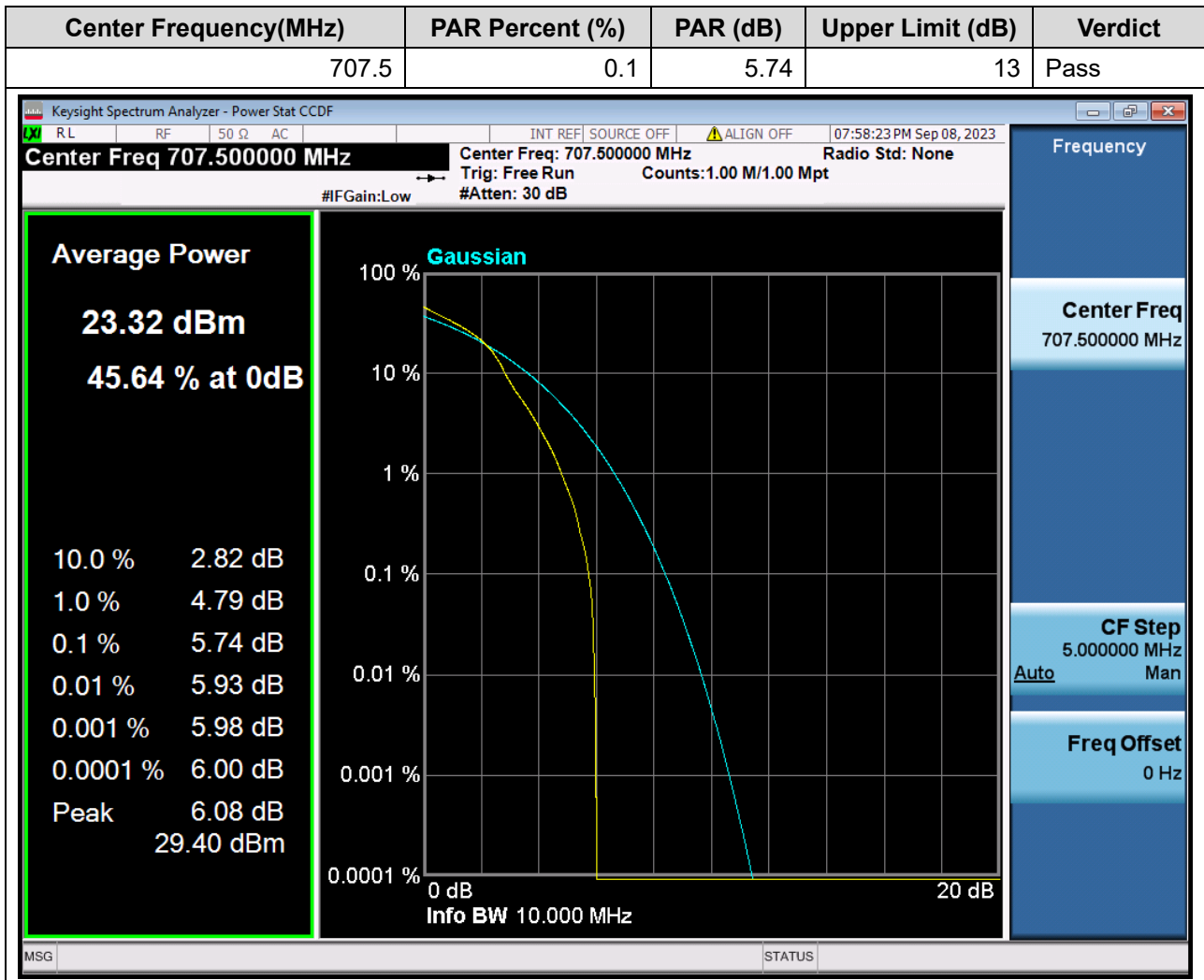
## 8.5. LTE Peak to Average Ratio(NTNV)(Subtest:5, Channel:23095, Bandwidth:10, Modulation:QPSK, RB Number: 1, RB Position:LOW)



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

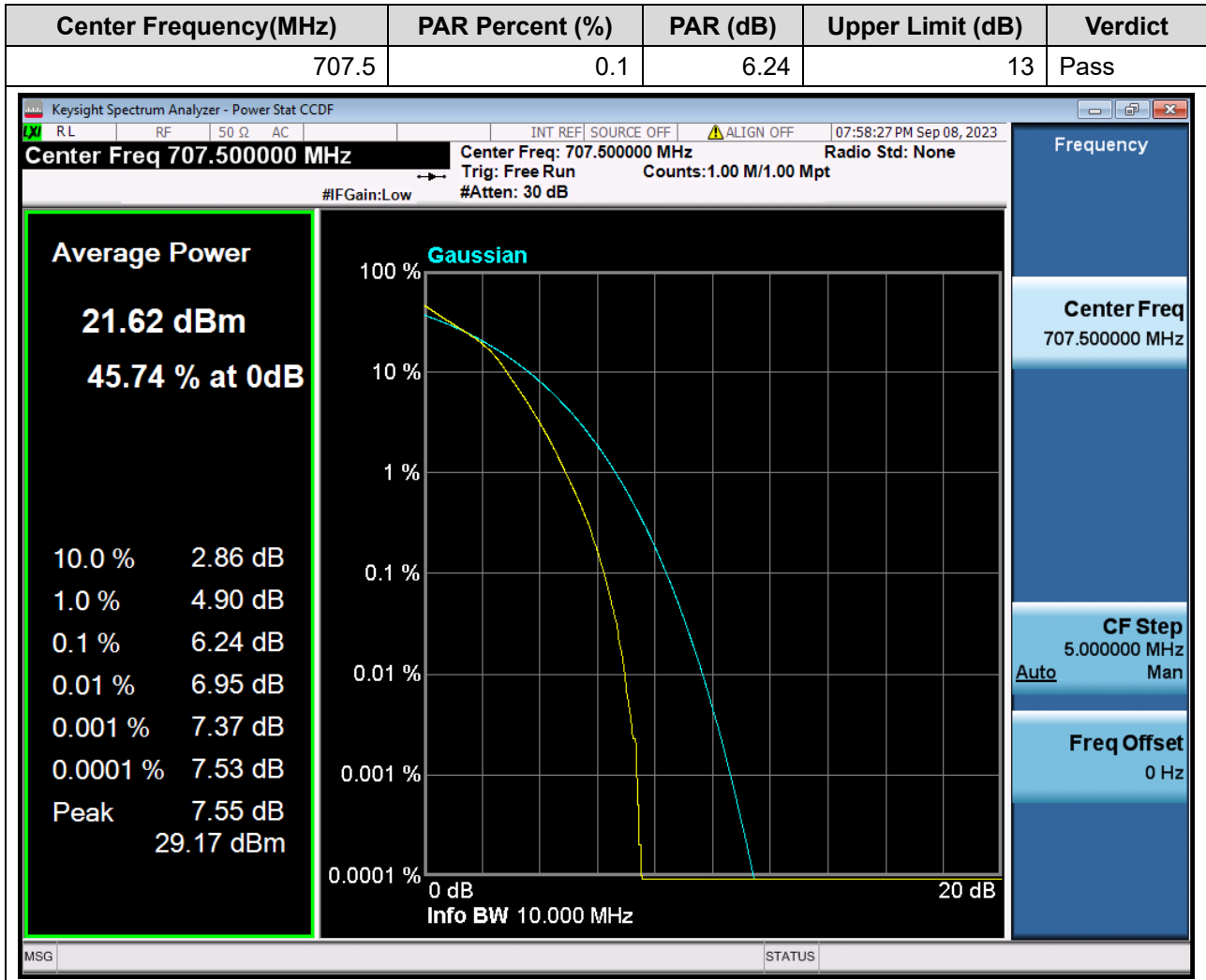


## 8.7. LTE Peak to Average Ratio(NTNV)(Subtest:7, Channel:23095, Bandwidth:10, Modulation:Q16, RB Number: 1, RB Position:LOW)





## 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)

