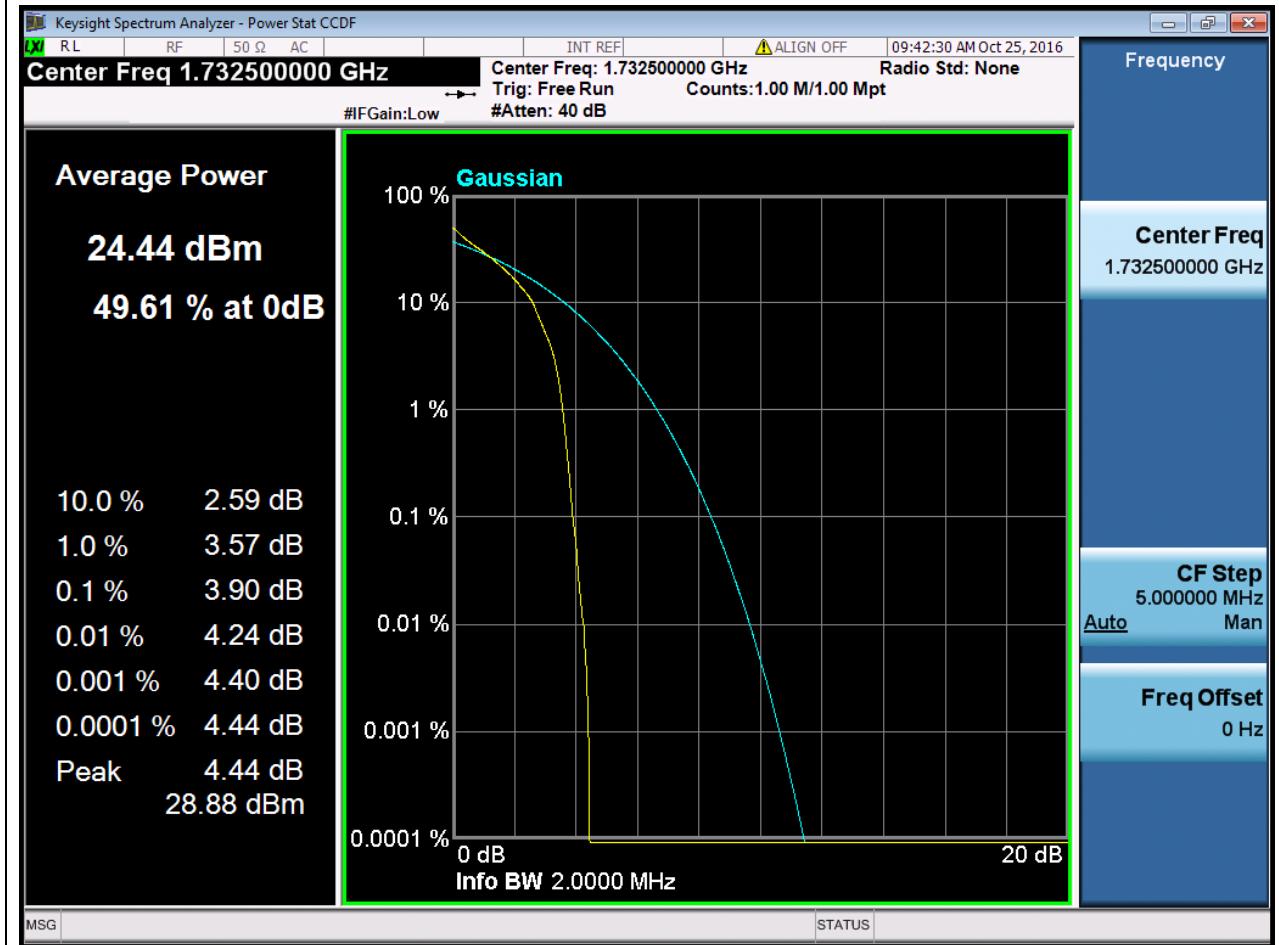


Annex B. LTE Peak to Average Ratio

1. LTE_Band4

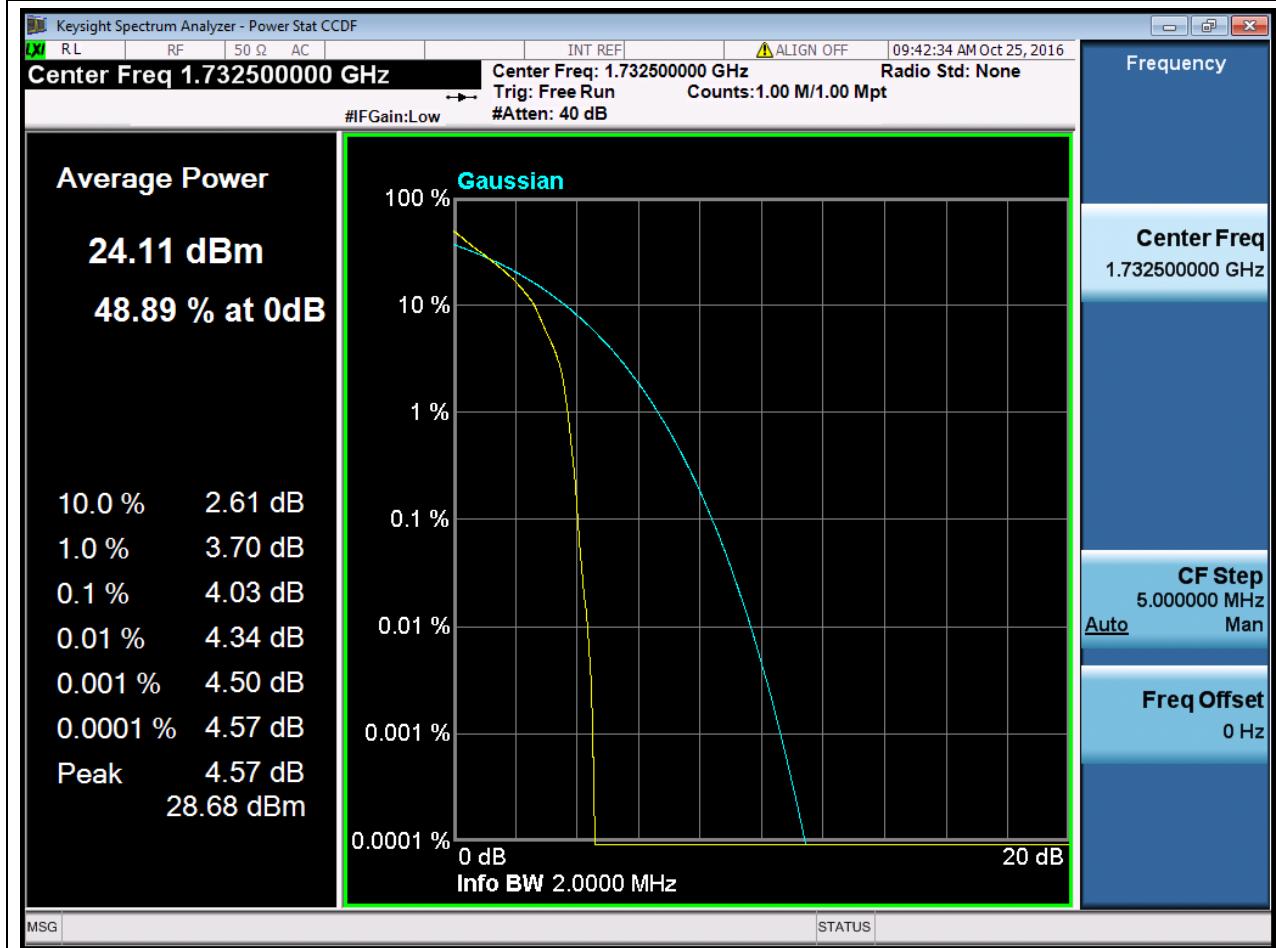
1.1. LTE Peak to Average Ratio(NTNV)(Subtest:1, Channel:20175, Bandwidth:1.4, Modulation:QPSK, RB Number: 1, RB Position:LOW)

| Center Frequency(MHz) | PAR Percent (%) | PAR (dB) | Upper Limit (dB) | Verdict |
|-----------------------|-----------------|----------|------------------|---------|
| 1732.5 | 0.1 | 3.9 | 13 | Pass |



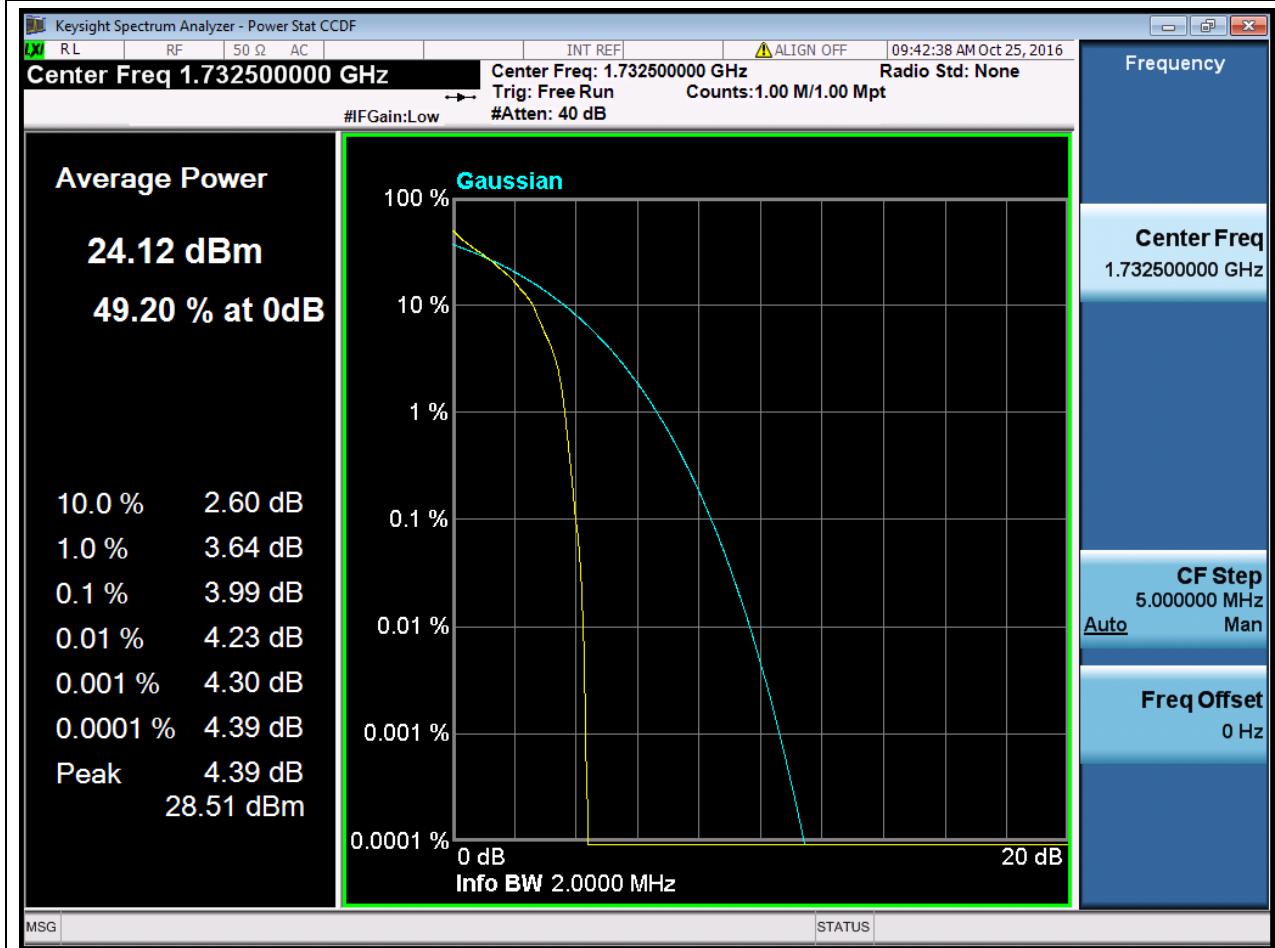
1.2. LTE Peak to Average Ratio(NTVV)(Subtest:2, Channel:20175, Bandwidth:1.4, Modulation:QPSK, RB Number: 1, RB Position:MID)

| Center Frequency(MHz) | PAR Percent (%) | PAR (dB) | Upper Limit (dB) | Verdict |
|-----------------------|-----------------|----------|------------------|---------|
| 1732.5 | 0.1 | 4.03 | 13 | Pass |



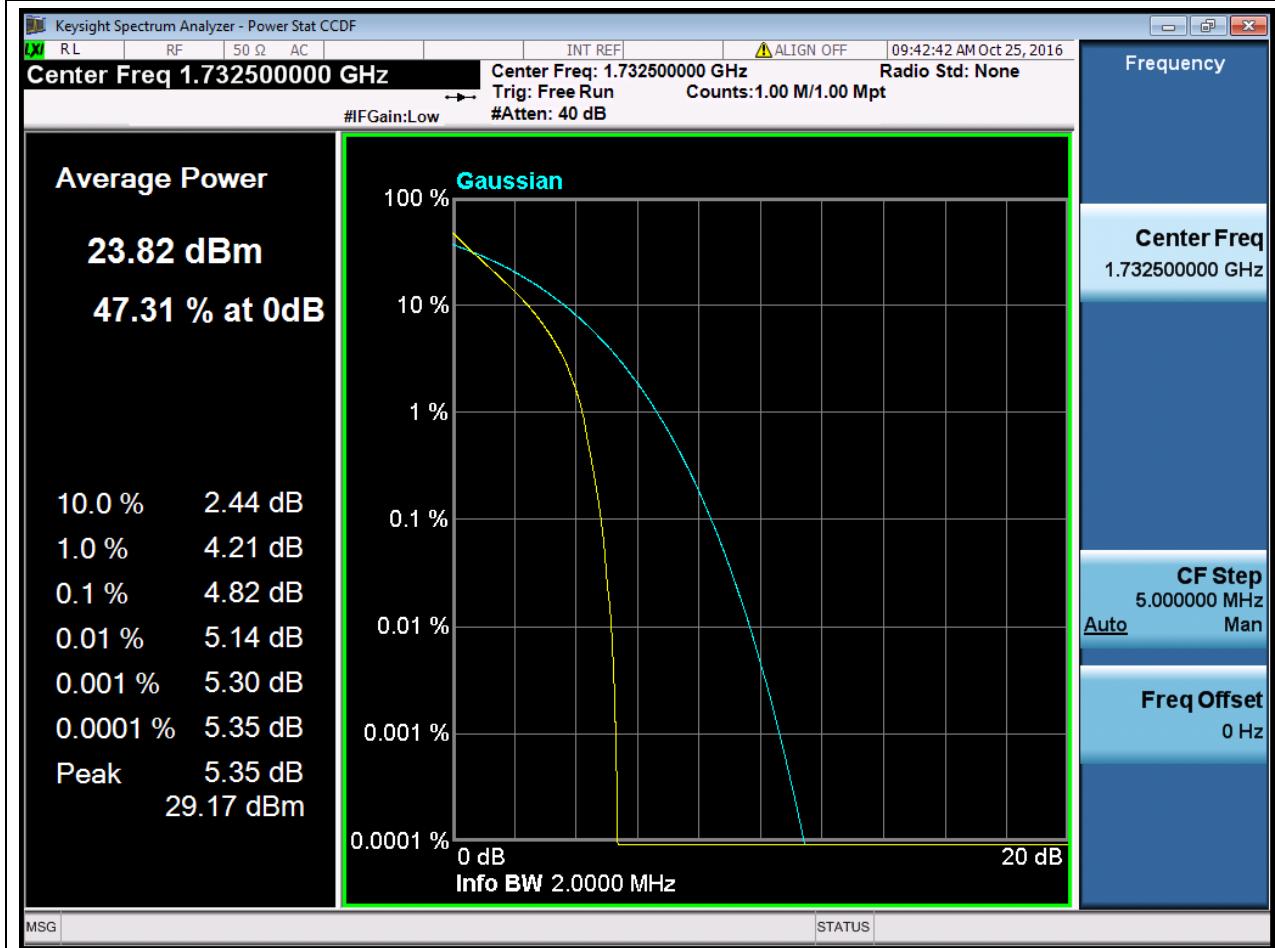
1.3. LTE Peak to Average Ratio(NTVV)(Subtest:3, Channel:20175, Bandwidth:1.4, Modulation:QPSK, RB Number: 1, RB Position:HIGH)

| Center Frequency(MHz) | PAR Percent (%) | PAR (dB) | Upper Limit (dB) | Verdict |
|-----------------------|-----------------|----------|------------------|---------|
| 1732.5 | 0.1 | 3.99 | 13 | Pass |

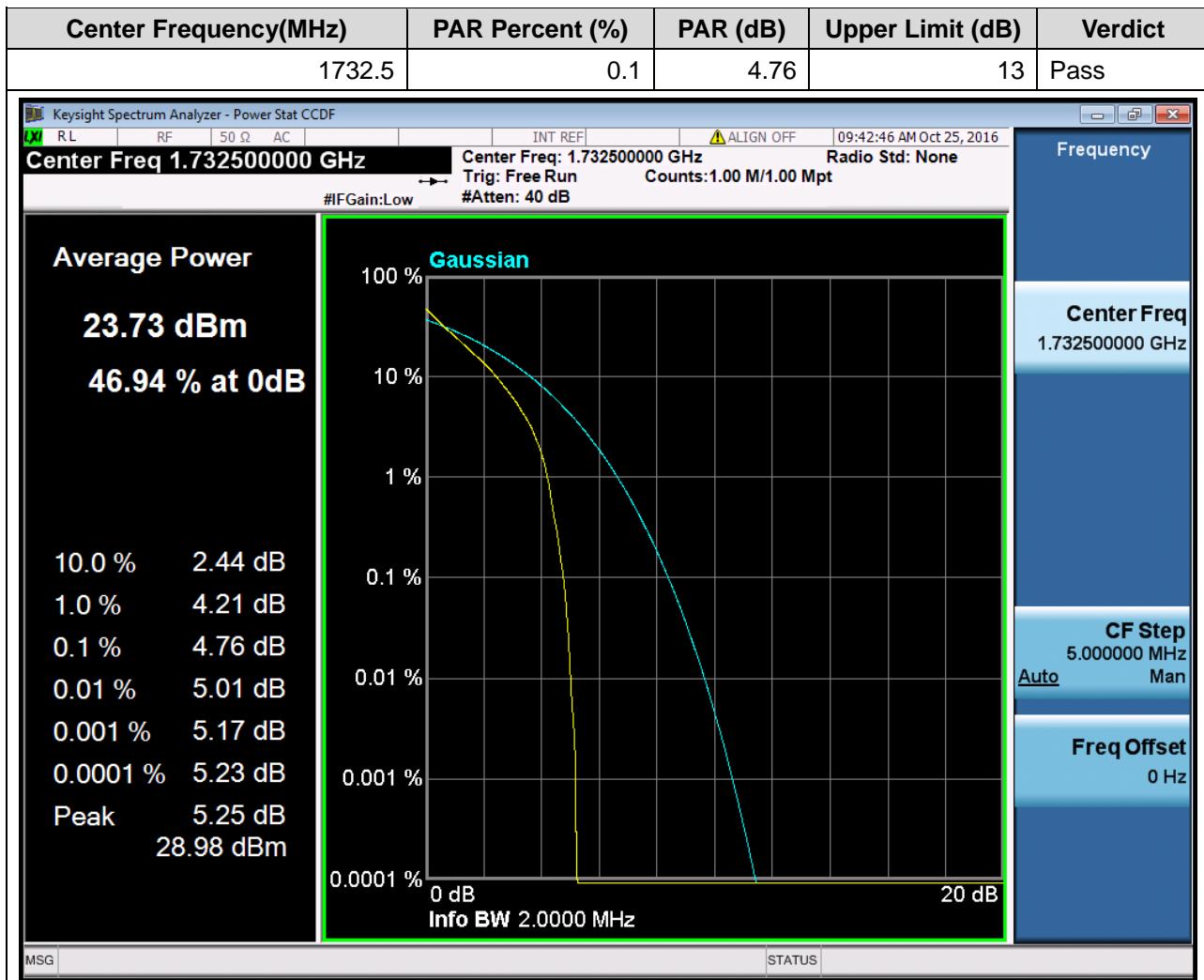


1.4. LTE Peak to Average Ratio(NTVV)(Subtest:4, Channel:20175, Bandwidth:1.4, Modulation:QPSK, RB Number: 3, RB Position:LOW)

| Center Frequency(MHz) | PAR Percent (%) | PAR (dB) | Upper Limit (dB) | Verdict |
|-----------------------|-----------------|----------|------------------|---------|
| 1732.5 | 0.1 | 4.82 | 13 | Pass |

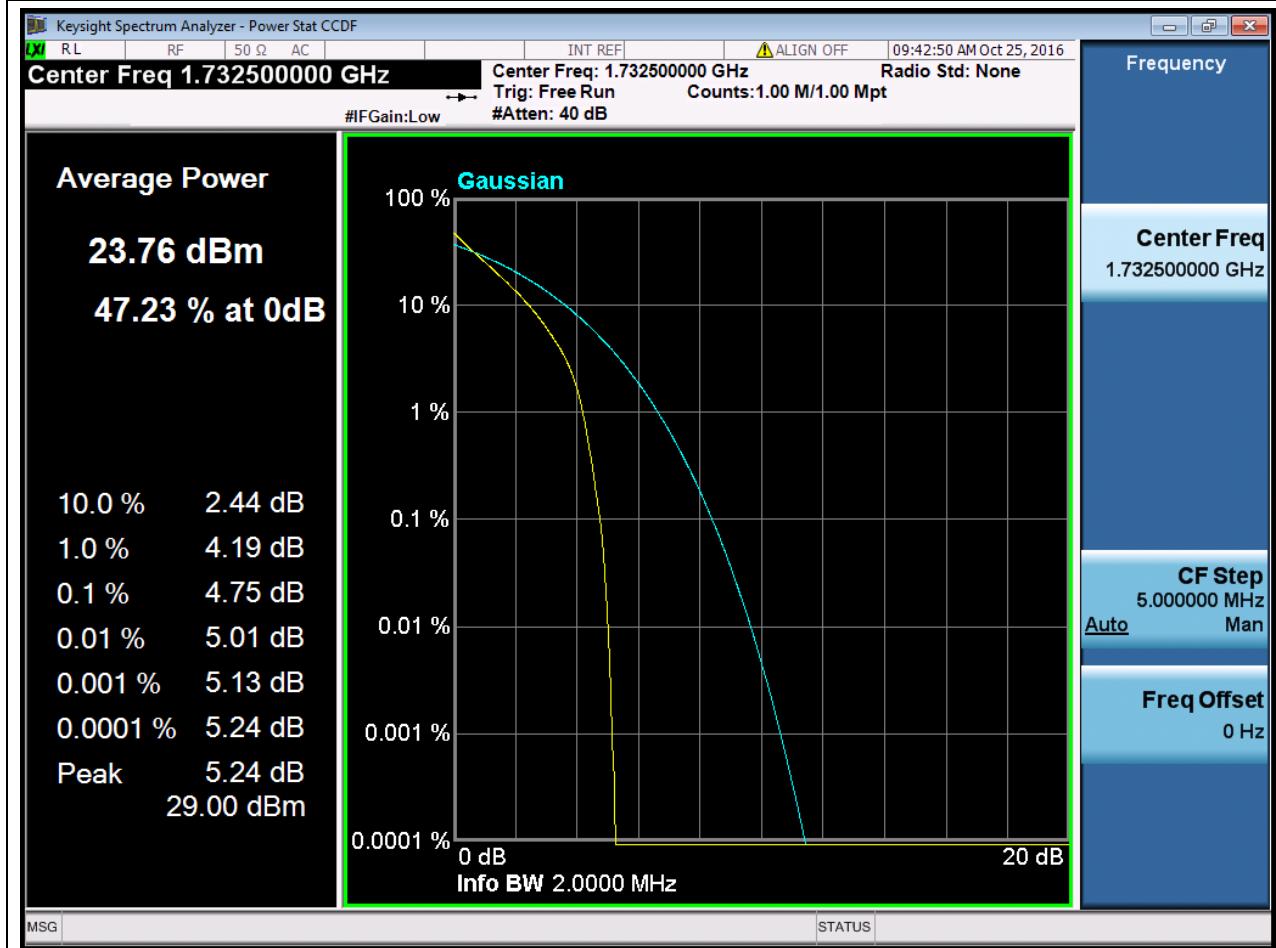


1.5. LTE Peak to Average Ratio(NTNV)(Subtest:5, Channel:20175, Bandwidth:1.4, Modulation:QPSK, RB Number: 3, RB Position:MID)



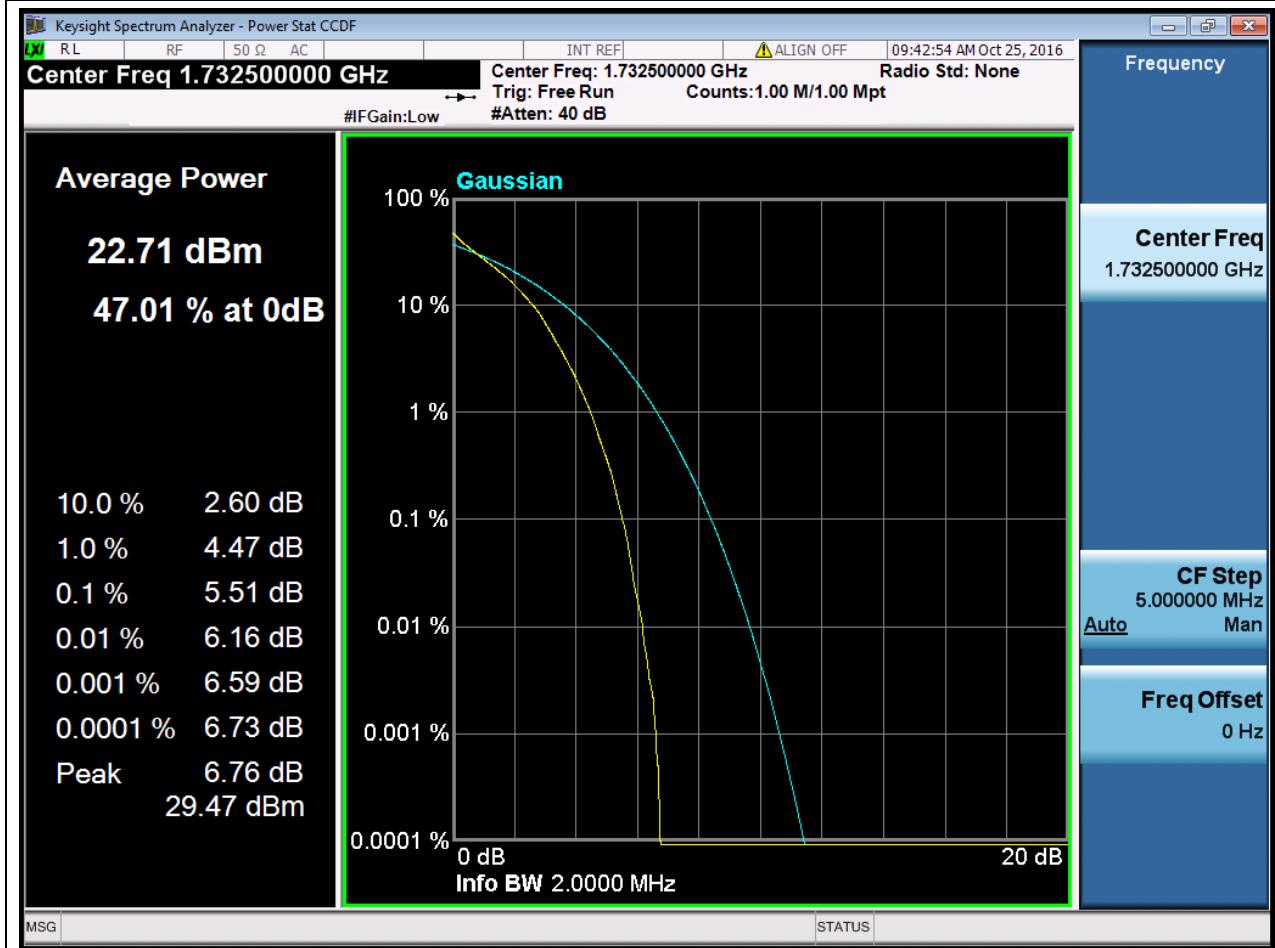
1.6. LTE Peak to Average Ratio(NTVV)(Subtest:6, Channel:20175, Bandwidth:1.4, Modulation:QPSK, RB Number: 3, RB Position:HIGH)

| Center Frequency(MHz) | PAR Percent (%) | PAR (dB) | Upper Limit (dB) | Verdict |
|-----------------------|-----------------|----------|------------------|---------|
| 1732.5 | 0.1 | 4.75 | 13 | Pass |



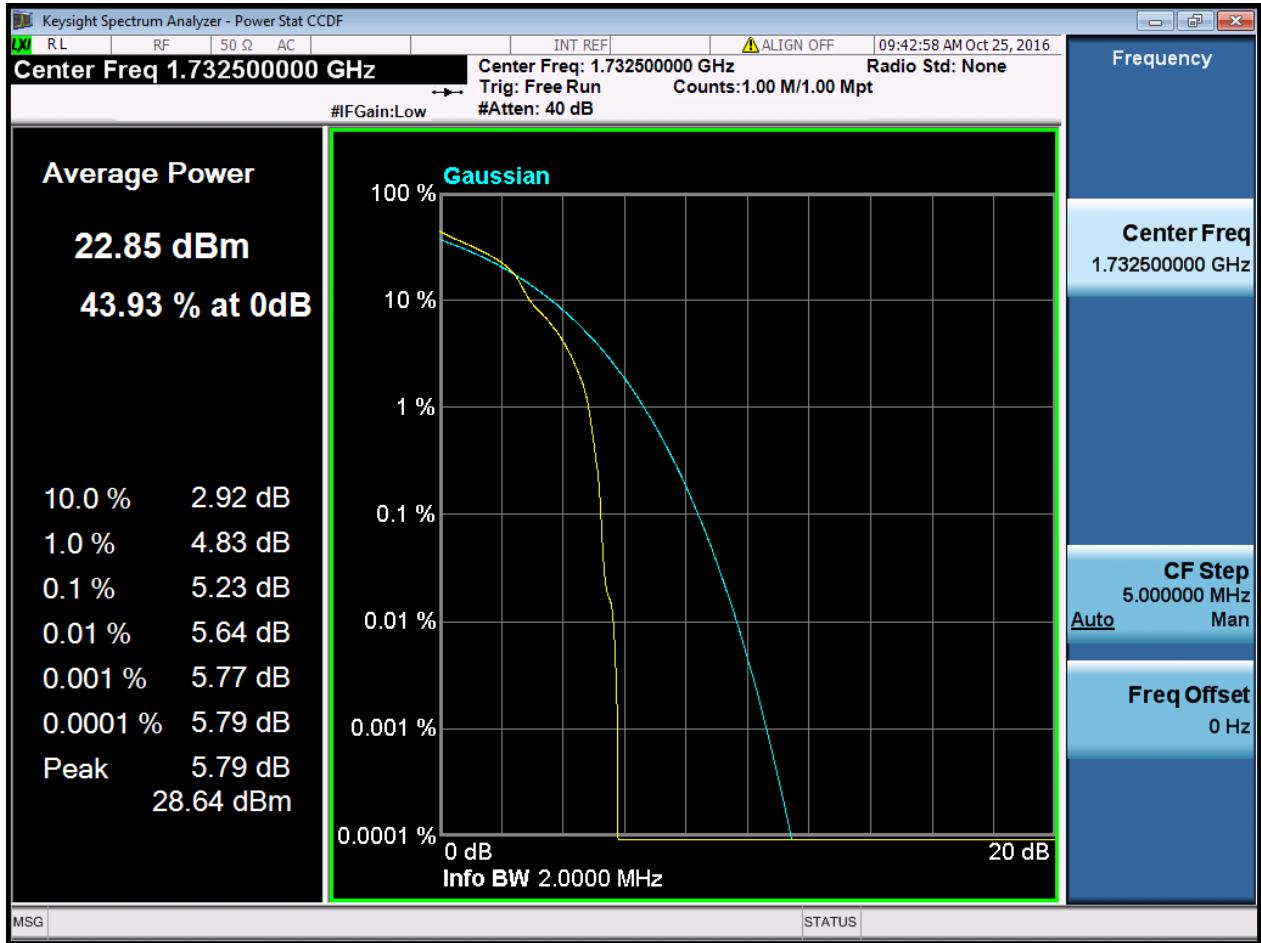
1.7. LTE Peak to Average Ratio(NTVV)(Subtest:7, Channel:20175, Bandwidth:1.4, Modulation:QPSK, RB Number: 6, RB Position:LOW)

| Center Frequency(MHz) | PAR Percent (%) | PAR (dB) | Upper Limit (dB) | Verdict |
|-----------------------|-----------------|----------|------------------|---------|
| 1732.5 | 0.1 | 5.51 | 13 | Pass |



1.8. LTE Peak to Average Ratio(NTNV)(Subtest:8, Channel:20175, Bandwidth:1.4, Modulation:16QAM, RB Number: 1, RB Position:LOW)

| Center Frequency(MHz) | PAR Percent (%) | PAR (dB) | Upper Limit (dB) | Verdict |
|-----------------------|-----------------|----------|------------------|---------|
| 1732.5 | 0.1 | 5.23 | 13 | Pass |



| | |
|-----------------------|-----------|
| Average Power | |
| 22.85 dBm | |
| 43.93 % at 0dB | |
| | |
| 10.0 % | 2.92 dB |
| 1.0 % | 4.83 dB |
| 0.1 % | 5.23 dB |
| 0.01 % | 5.64 dB |
| 0.001 % | 5.77 dB |
| 0.0001 % | 5.79 dB |
| Peak | 5.79 dB |
| | 28.64 dBm |

Gaussian

100 %
10 %
1 %
0.1 %
0.01 %
0.001 %
0.0001 %

0 dB 20 dB

Info BW 2.0000 MHz

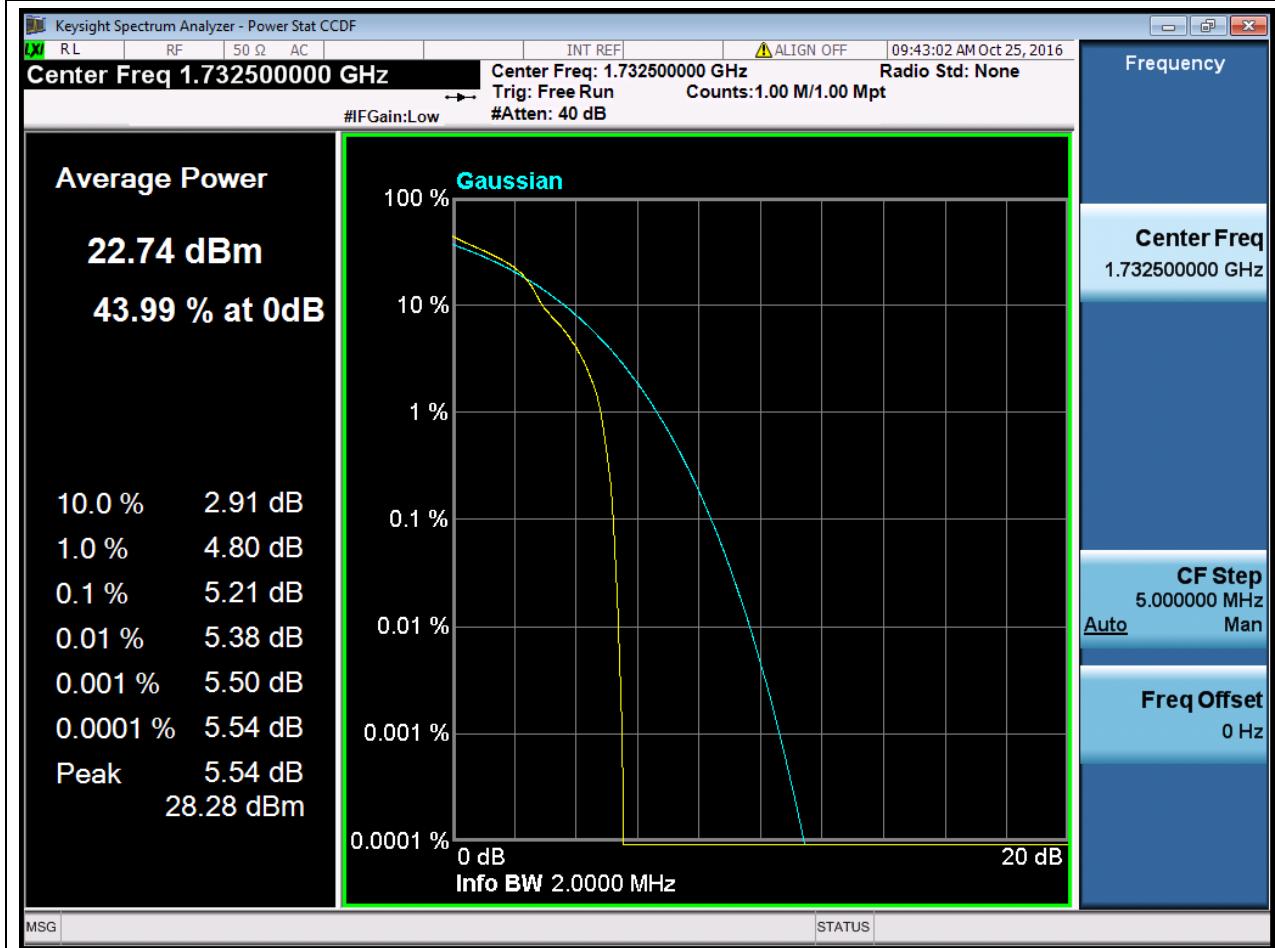
Frequency
Center Freq
1.732500000 GHz

CF Step
5.000000 MHz
Auto Man

Freq Offset
0 Hz

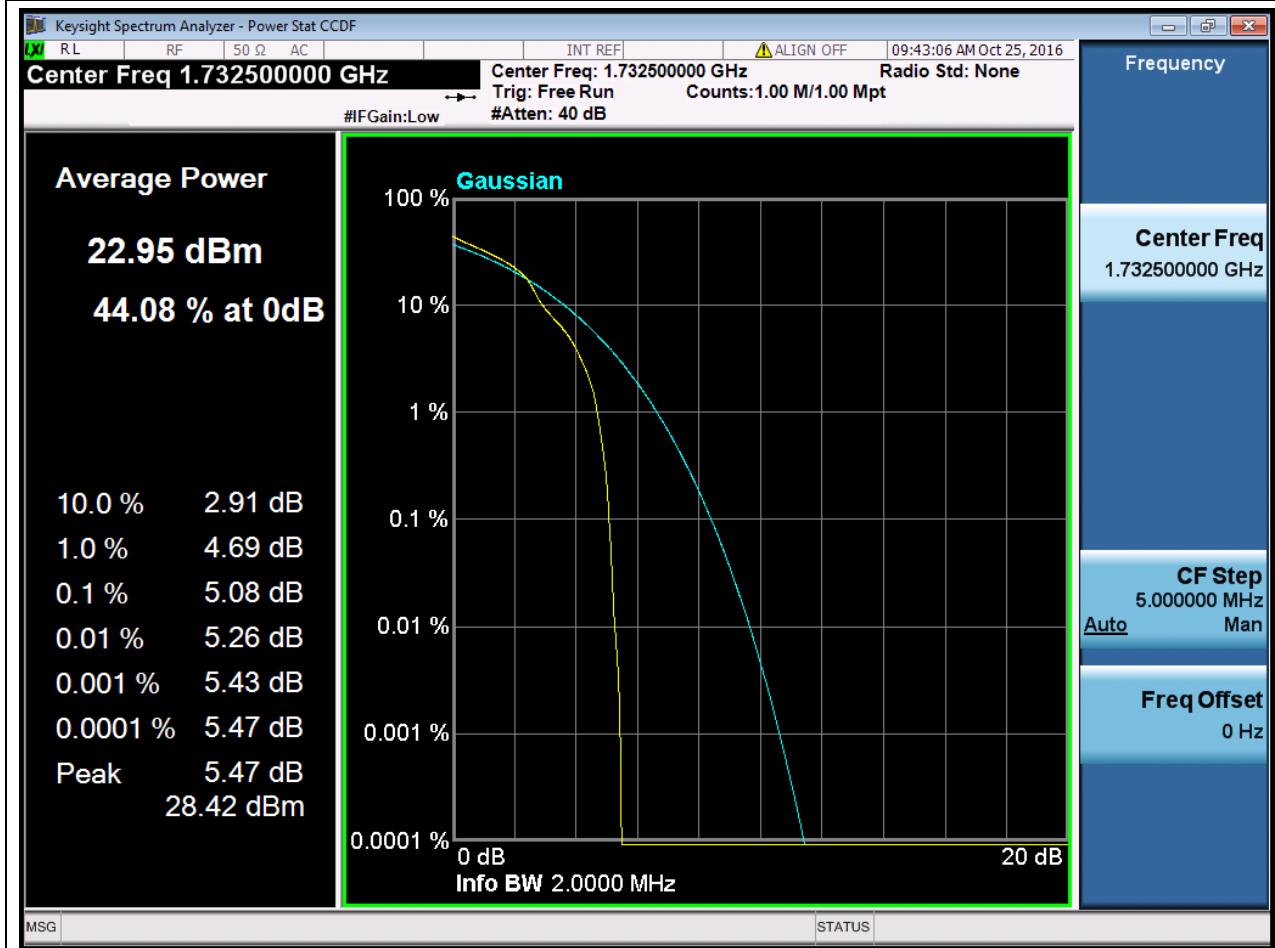
1.9. LTE Peak to Average Ratio(NTNV)(Subtest:9, Channel:20175, Bandwidth:1.4, Modulation:16QAM, RB Number: 1, RB Position:MID)

| Center Frequency(MHz) | PAR Percent (%) | PAR (dB) | Upper Limit (dB) | Verdict |
|-----------------------|-----------------|----------|------------------|---------|
| 1732.5 | 0.1 | 5.21 | 13 | Pass |



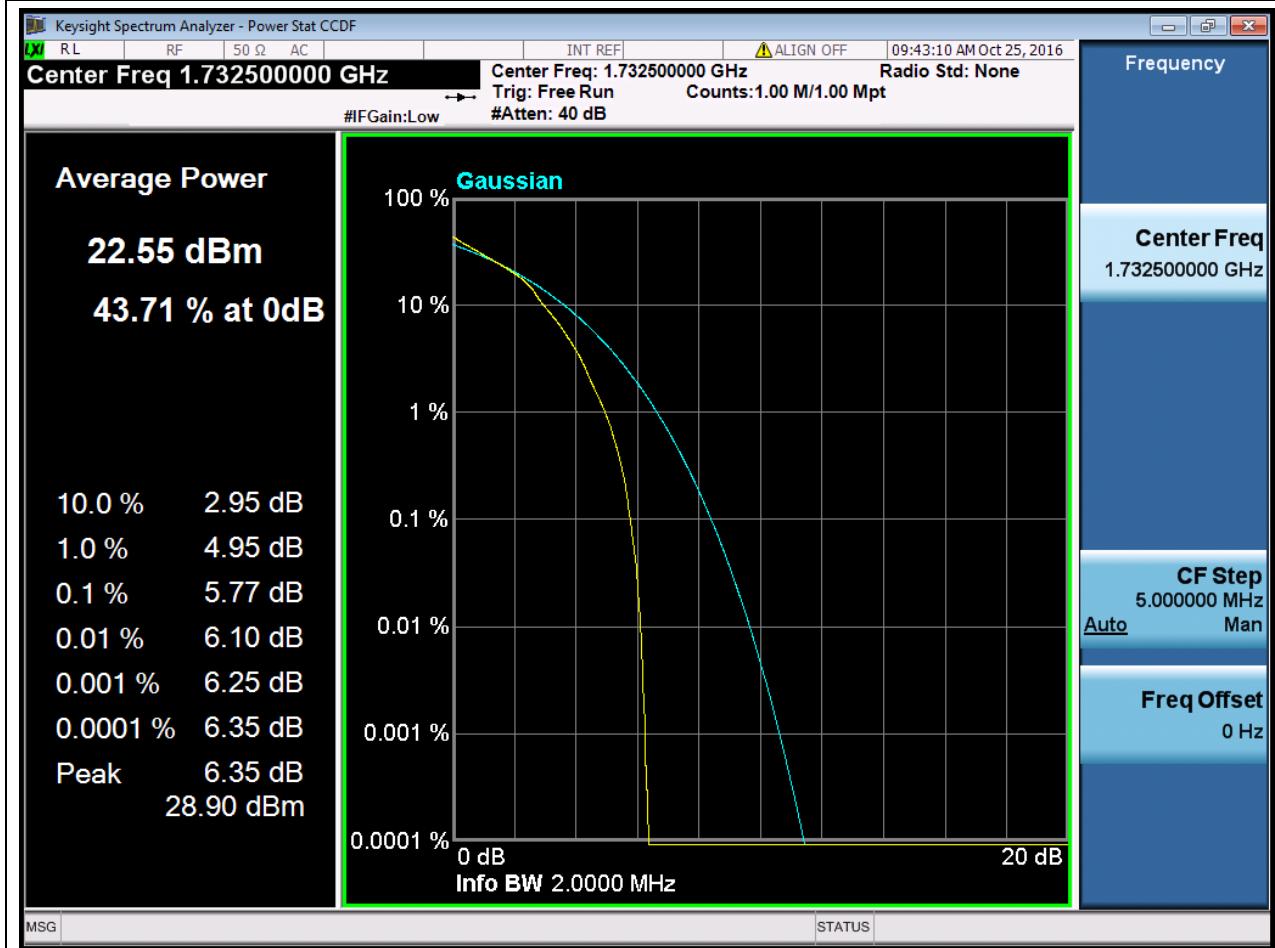
1.10. LTE Peak to Average Ratio(NTNV)(Subtest:10, Channel:20175, Bandwidth:1.4, Modulation:16QAM, RB Number: 1, RB Position:HIGH)

| Center Frequency(MHz) | PAR Percent (%) | PAR (dB) | Upper Limit (dB) | Verdict |
|-----------------------|-----------------|----------|------------------|---------|
| 1732.5 | 0.1 | 5.08 | 13 | Pass |



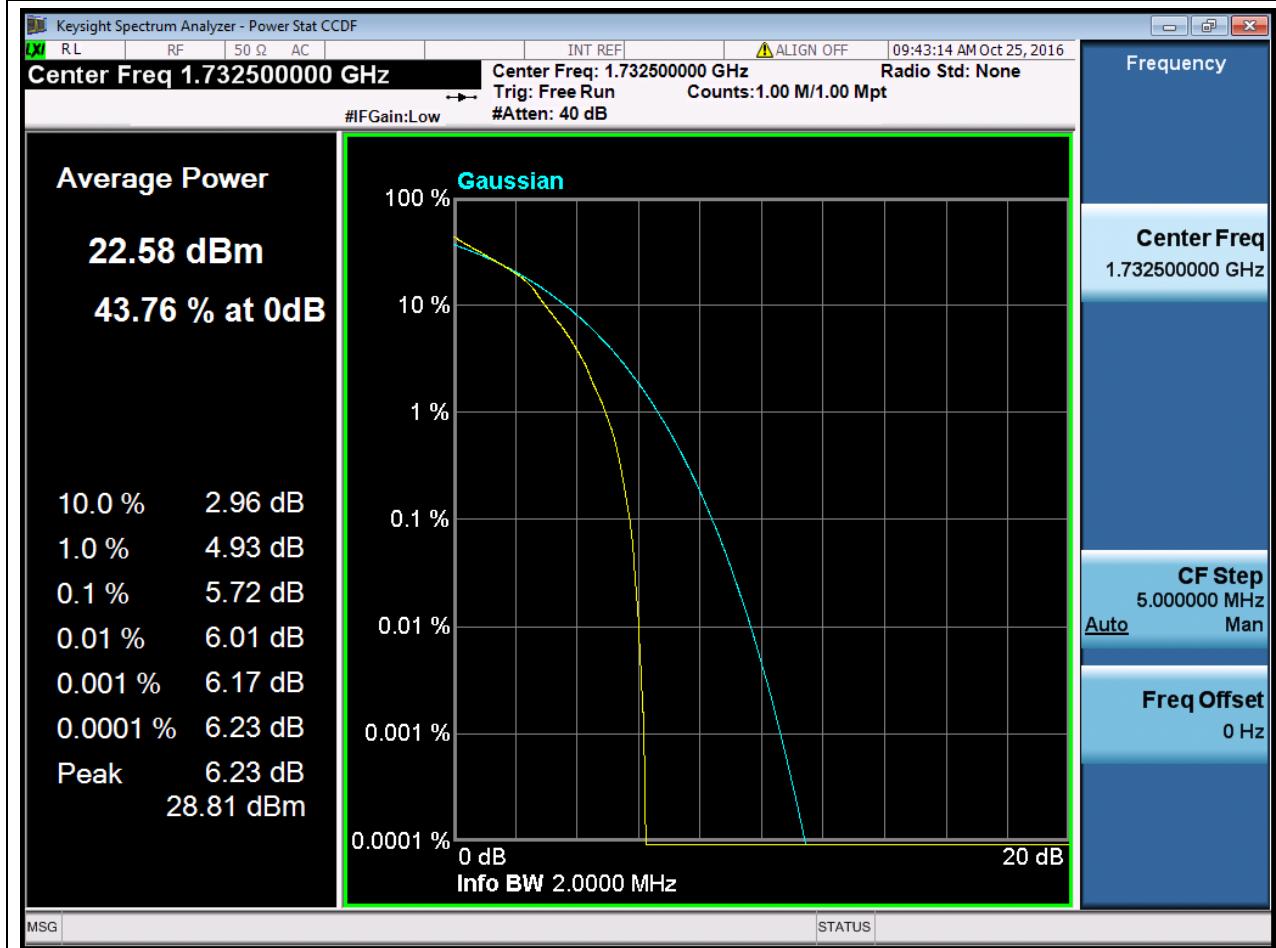
1.11. LTE Peak to Average Ratio(NTNV)(Subtest:11, Channel:20175, Bandwidth:1.4, Modulation:16QAM, RB Number: 3, RB Position:LOW)

| Center Frequency(MHz) | PAR Percent (%) | PAR (dB) | Upper Limit (dB) | Verdict |
|-----------------------|-----------------|----------|------------------|---------|
| 1732.5 | 0.1 | 5.77 | 13 | Pass |



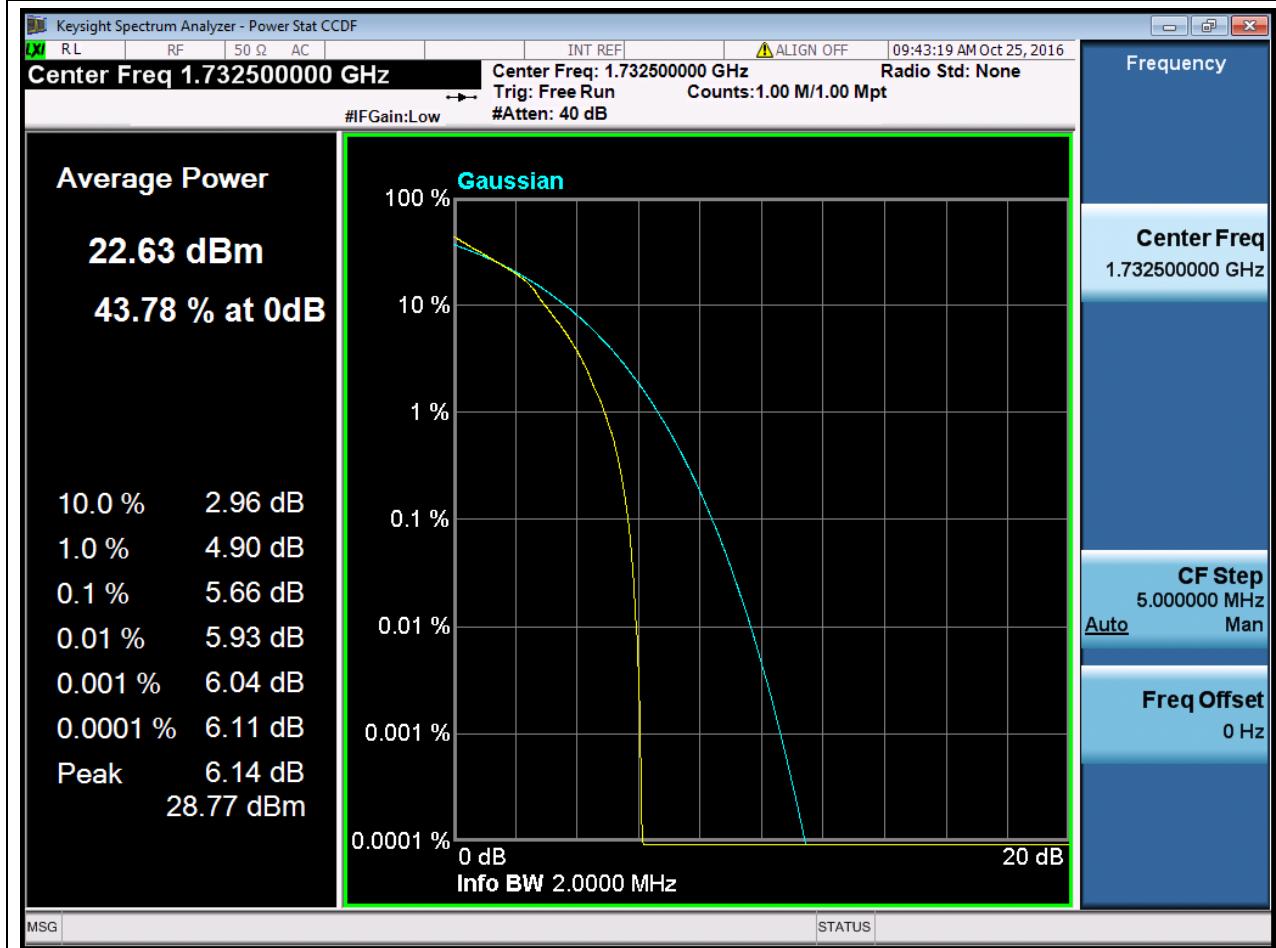
1.12. LTE Peak to Average Ratio(NTNV)(Subtest:12, Channel:20175, Bandwidth:1.4, Modulation:16QAM, RB Number: 3, RB Position:MID)

| Center Frequency(MHz) | PAR Percent (%) | PAR (dB) | Upper Limit (dB) | Verdict |
|-----------------------|-----------------|----------|------------------|---------|
| 1732.5 | 0.1 | 5.71 | 13 | Pass |



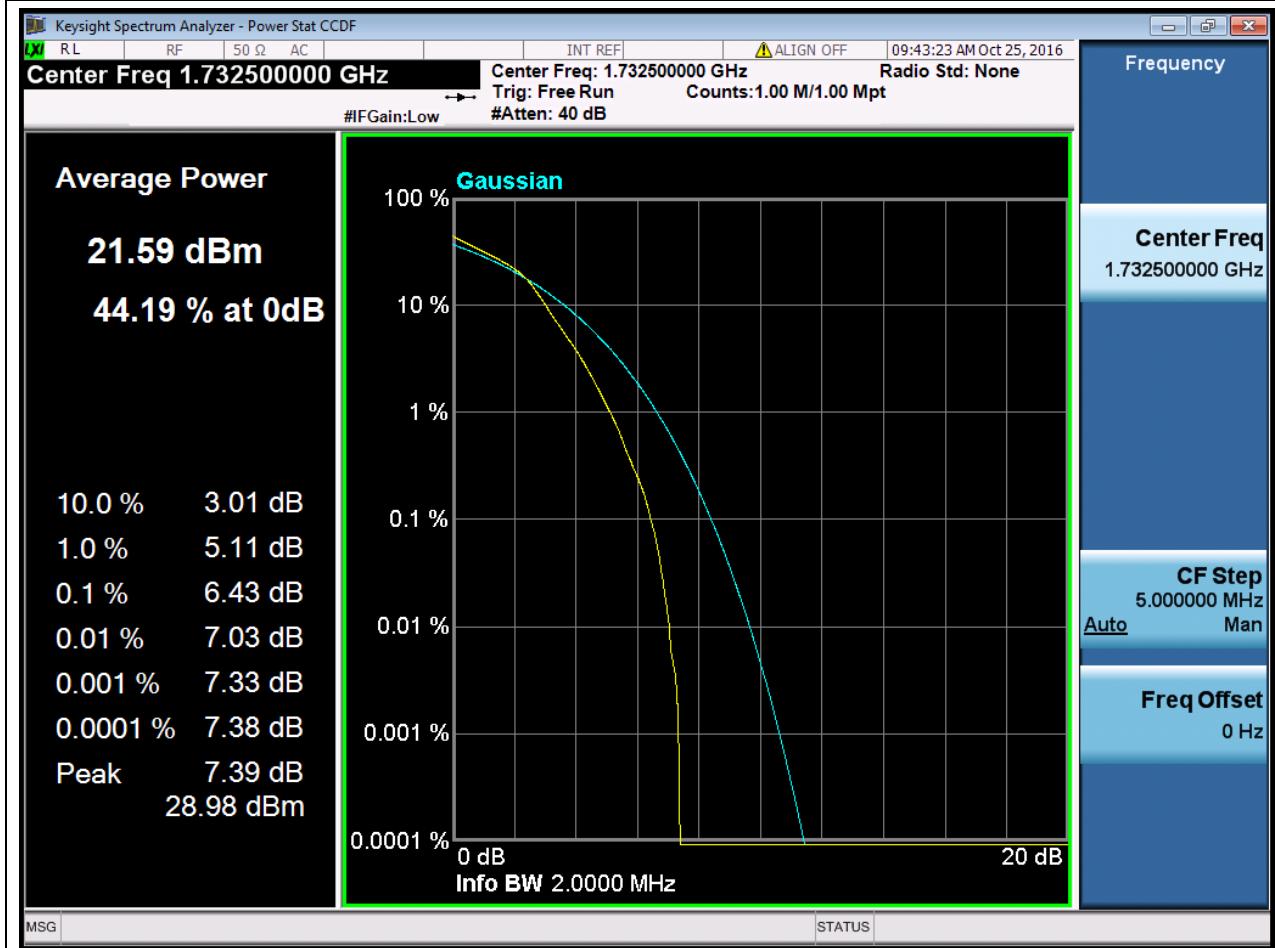
1.13. LTE Peak to Average Ratio(NTNV)(Subtest:13, Channel:20175, Bandwidth:1.4, Modulation:16QAM, RB Number: 3, RB Position:HIGH)

| Center Frequency(MHz) | PAR Percent (%) | PAR (dB) | Upper Limit (dB) | Verdict |
|-----------------------|-----------------|----------|------------------|---------|
| 1732.5 | 0.1 | 5.66 | 13 | Pass |



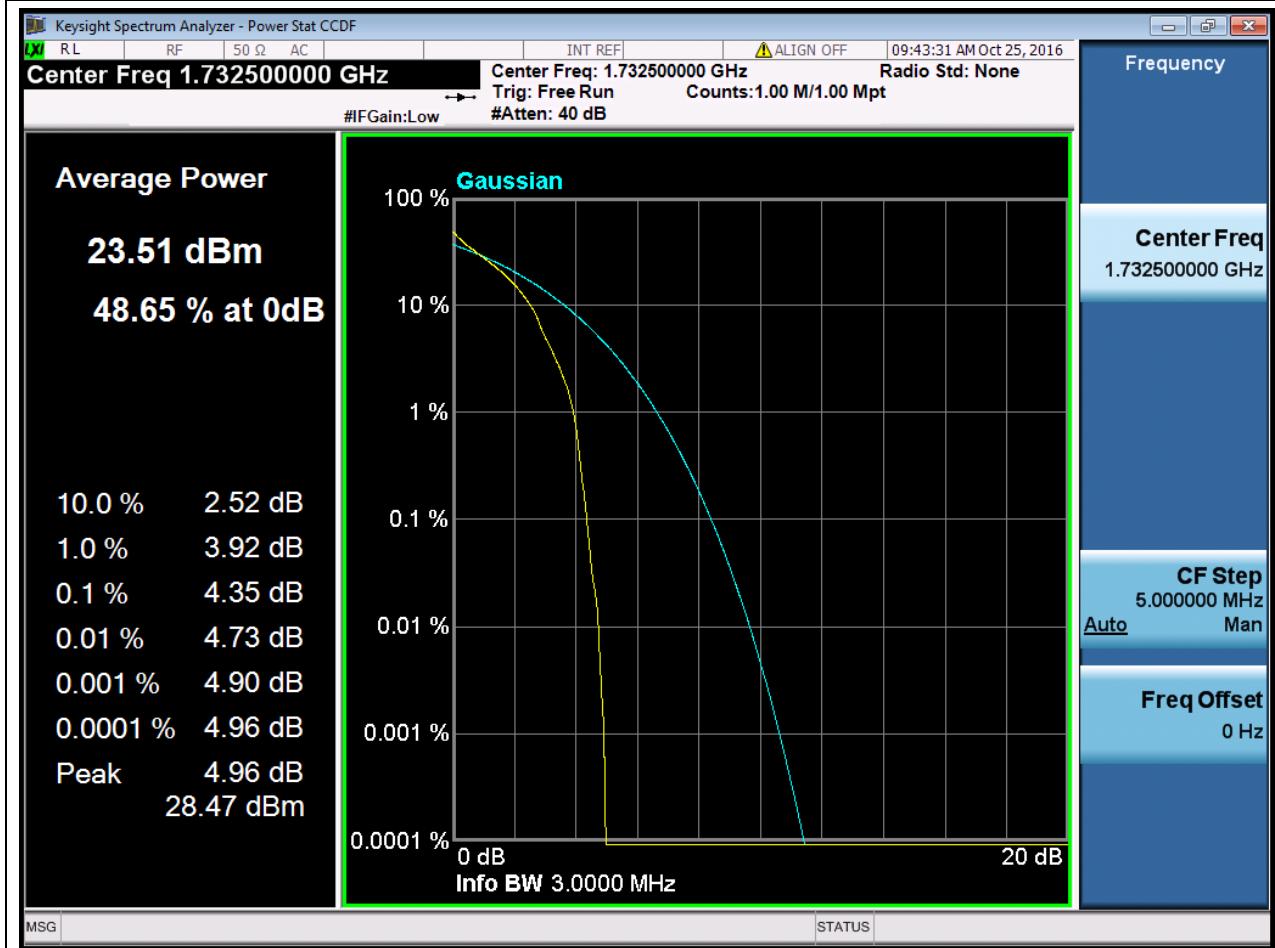
1.14. LTE Peak to Average Ratio(NTNV)(Subtest:14, Channel:20175, Bandwidth:1.4, Modulation:16QAM, RB Number: 6, RB Position:LOW)

| Center Frequency(MHz) | PAR Percent (%) | PAR (dB) | Upper Limit (dB) | Verdict |
|-----------------------|-----------------|----------|------------------|---------|
| 1732.5 | 0.1 | 6.43 | 13 | Pass |



1.15. LTE Peak to Average Ratio(NTNV)(Subtest:15, Channel:20175, Bandwidth:3, Modulation:QPSK, RB Number: 1, RB Position:LOW)

| Center Frequency(MHz) | PAR Percent (%) | PAR (dB) | Upper Limit (dB) | Verdict |
|-----------------------|-----------------|----------|------------------|---------|
| 1732.5 | 0.1 | 4.35 | 13 | Pass |



1.16. LTE Peak to Average Ratio(NTNV)(Subtest:16, Channel:20175, Bandwidth:3, Modulation:QPSK, RB Number: 1, RB Position:MID)

| Center Frequency(MHz) | PAR Percent (%) | PAR (dB) | Upper Limit (dB) | Verdict |
|-----------------------|-----------------|----------|------------------|---------|
| 1732.5 | 0.1 | 4.27 | 13 | Pass |

Keysight Spectrum Analyzer - Power Stat CCDF

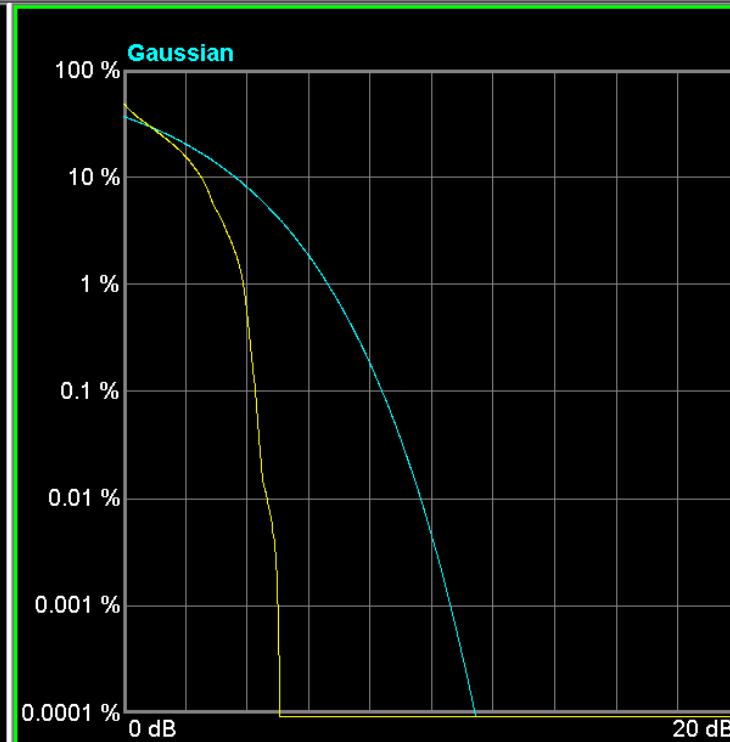
RL RF 50 Ω AC INT REF ALIGN OFF 09:43:35 AM Oct 25, 2016

Center Freq 1.732500000 GHz Center Freq: 1.732500000 GHz Radio Std: None
Trig: Free Run Counts: 1.00 M/1.00 Mpt
#IFGain:Low #Atten: 40 dB

Average Power 23.37 dBm
48.41 % at 0dB

10.0 % 2.51 dB
1.0 % 3.88 dB
0.1 % 4.27 dB
0.01 % 4.65 dB
0.001 % 5.01 dB
0.0001 % 5.06 dB
Peak 5.06 dB
28.43 dBm

Gaussian

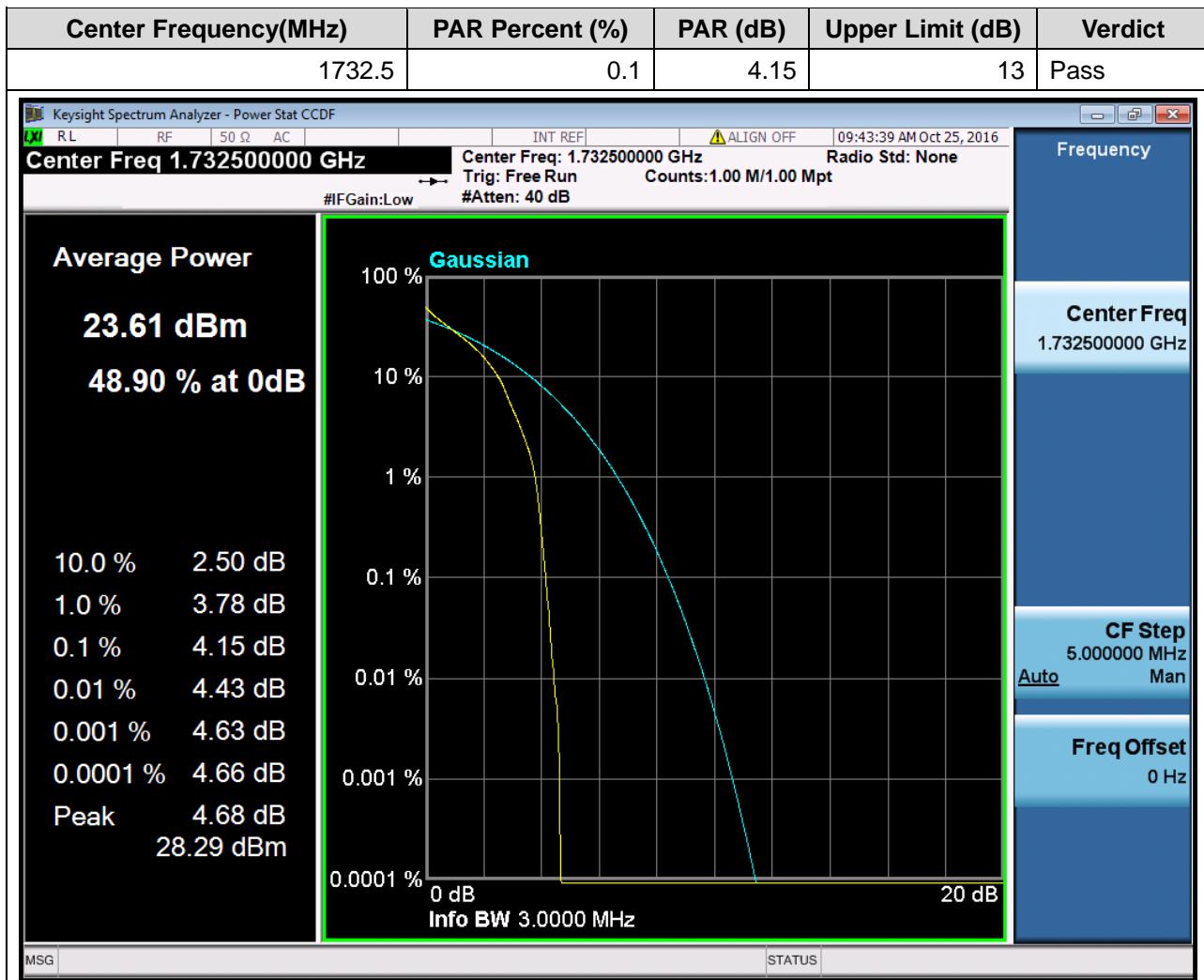


Info BW 3.0000 MHz

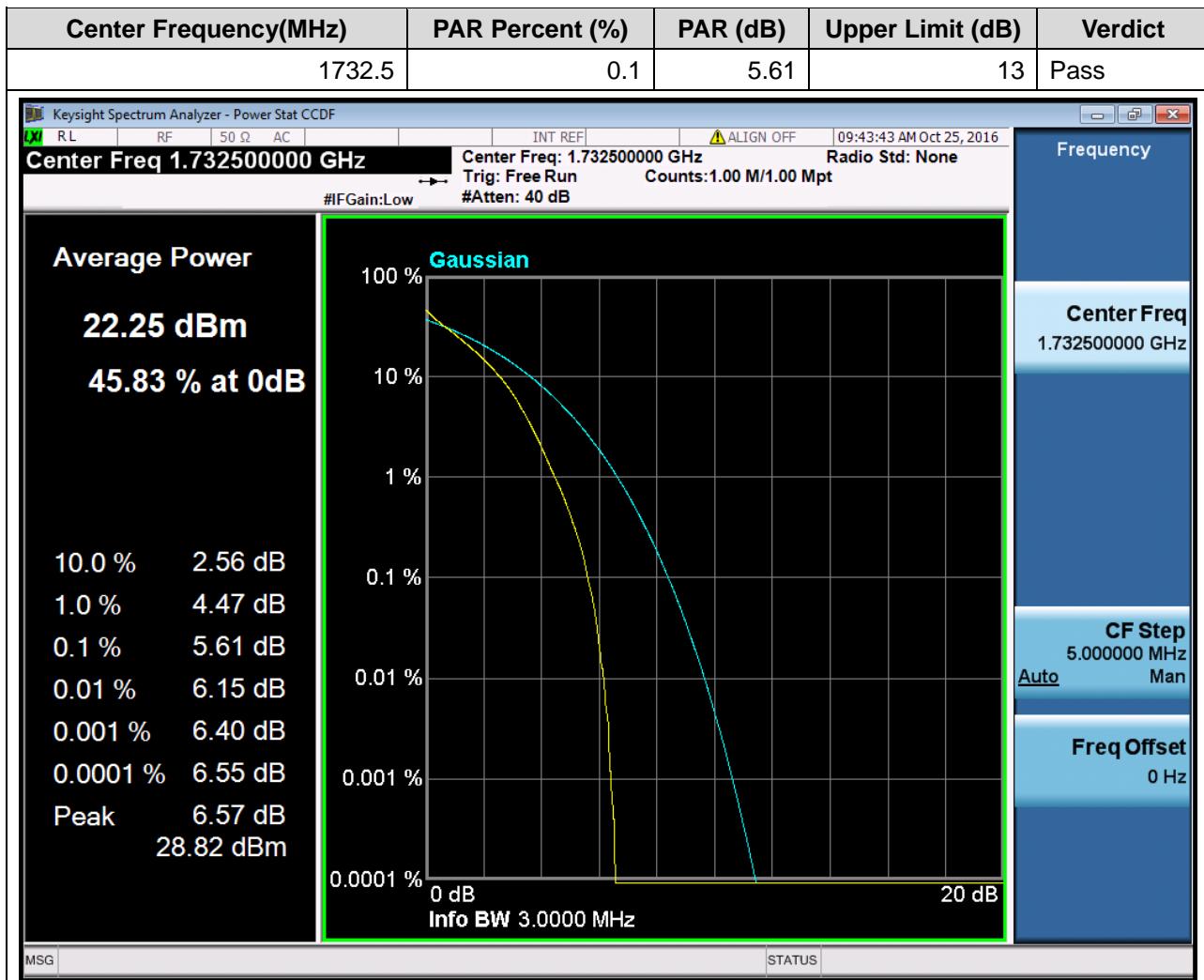
Frequency
Center Freq 1.732500000 GHz
CF Step 5.000000 MHz
Auto Man
Freq Offset 0 Hz

MSG STATUS

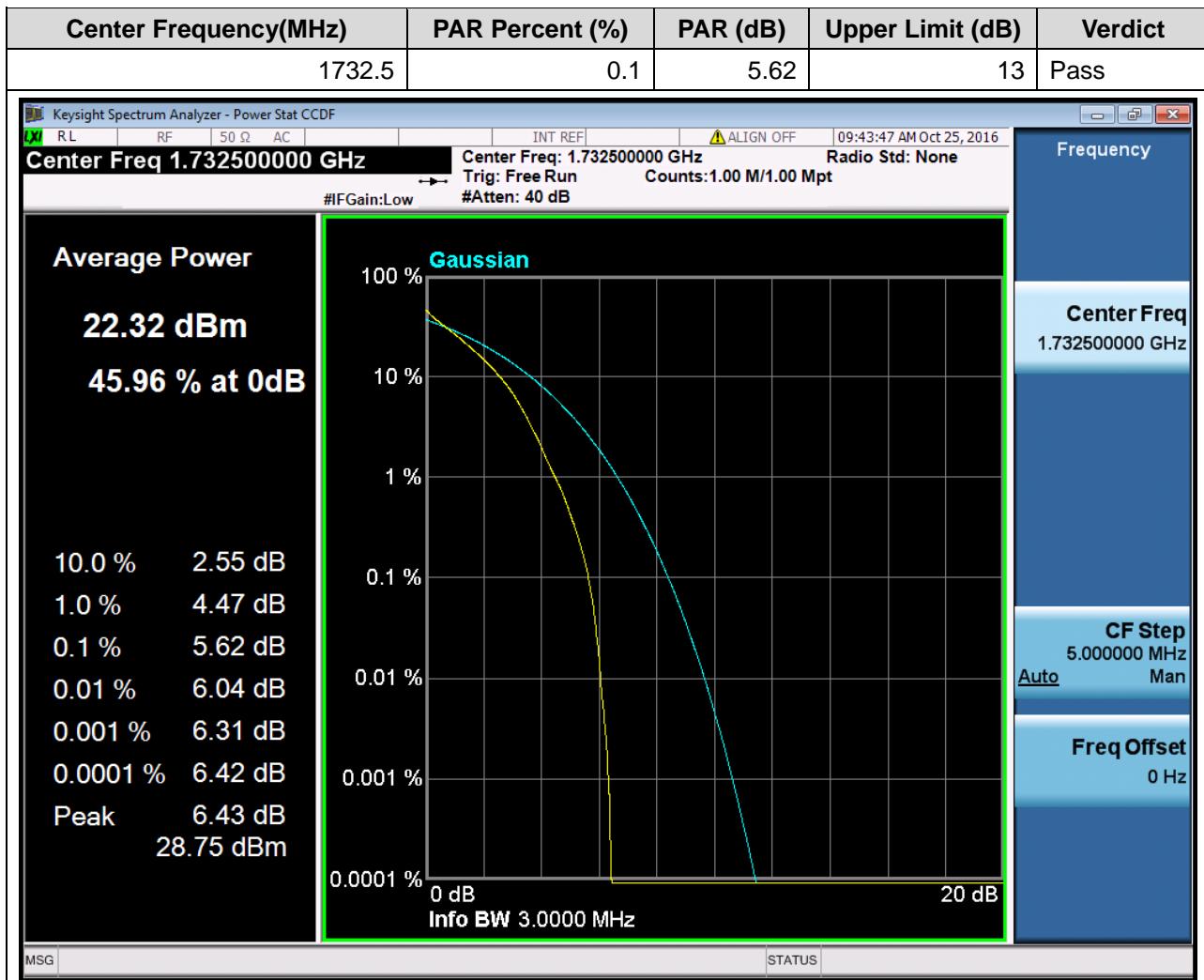
1.17. LTE Peak to Average Ratio(NTNV)(Subtest:17, Channel:20175, Bandwidth:3, Modulation:QPSK, RB Number: 1, RB Position:HIGH)



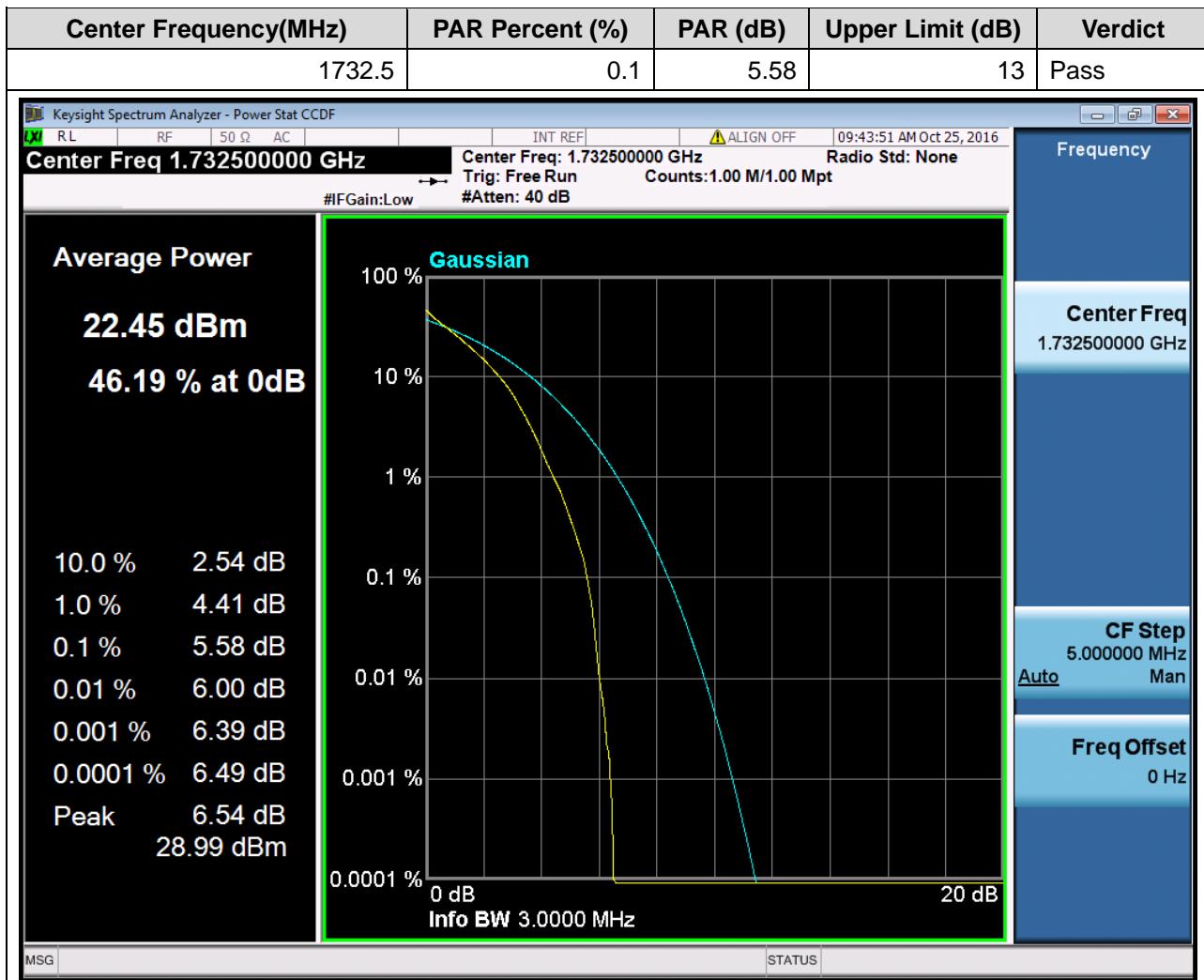
1.18. LTE Peak to Average Ratio(NTNV)(Subtest:18, Channel:20175, Bandwidth:3, Modulation:QPSK, RB Number: 8, RB Position:LOW)



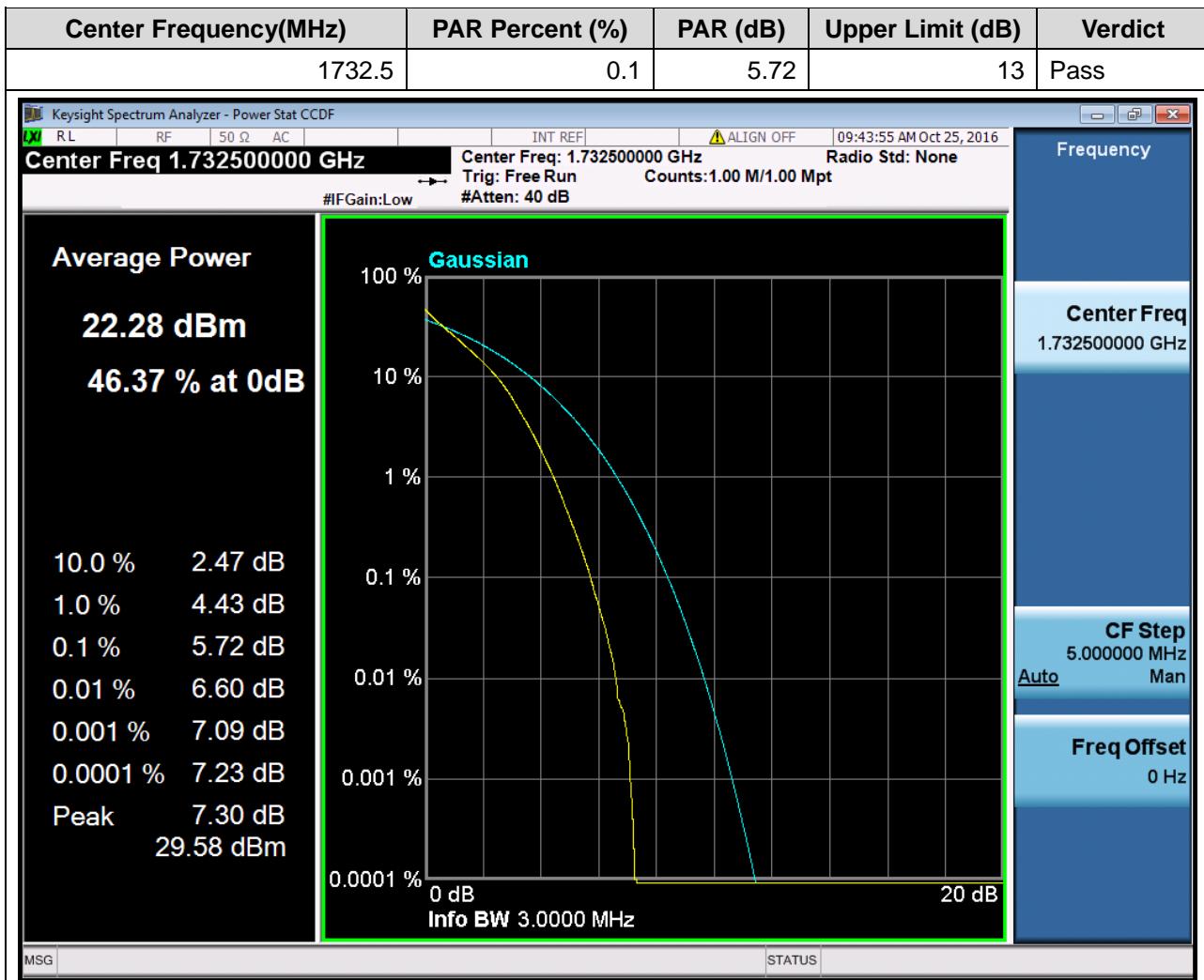
1.19. LTE Peak to Average Ratio(NTNV)(Subtest:19, Channel:20175, Bandwidth:3, Modulation:QPSK, RB Number: 8, RB Position:MID)



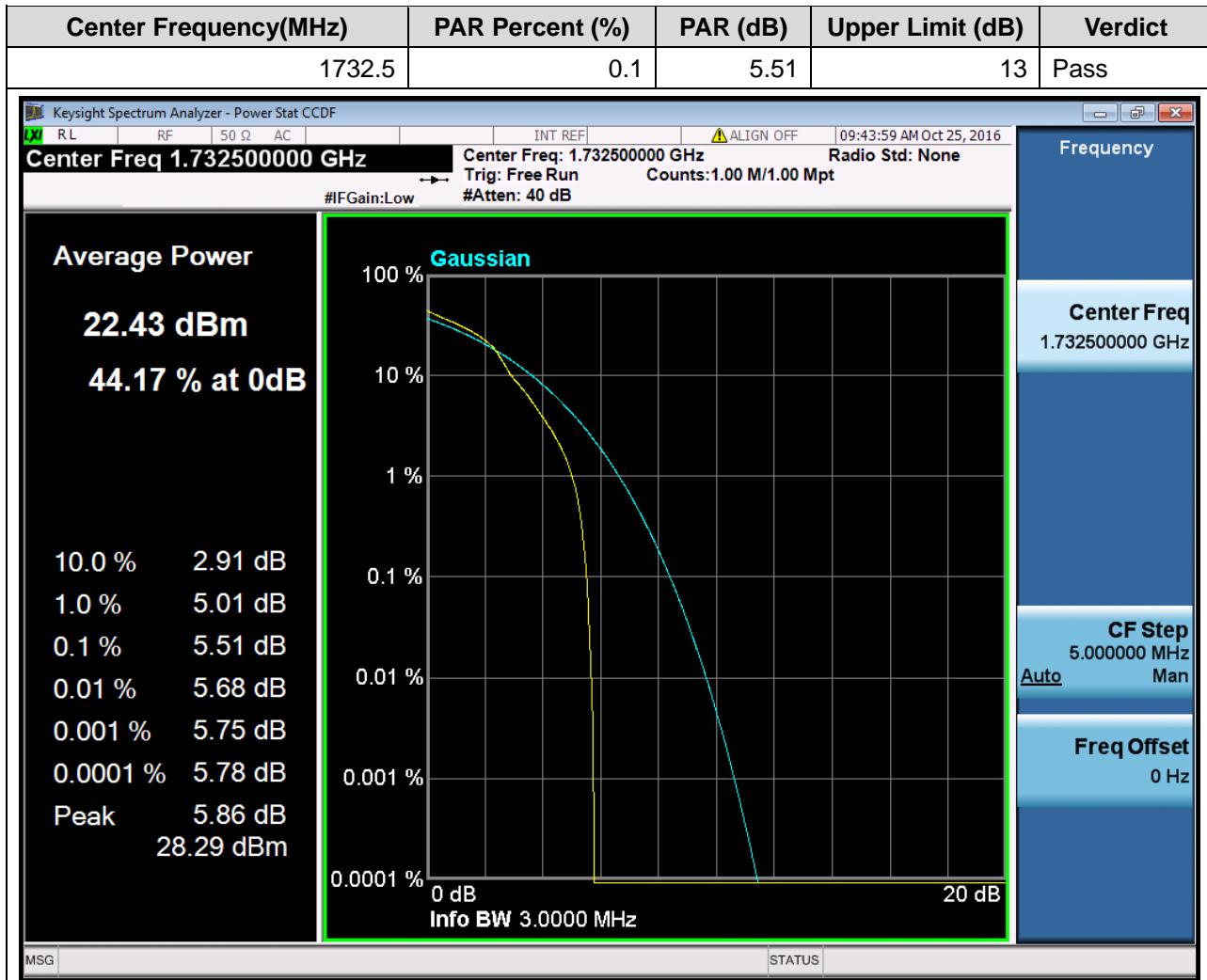
1.20. LTE Peak to Average Ratio(NTNV)(Subtest:20, Channel:20175, Bandwidth:3, Modulation:QPSK, RB Number: 8, RB Position:HIGH)



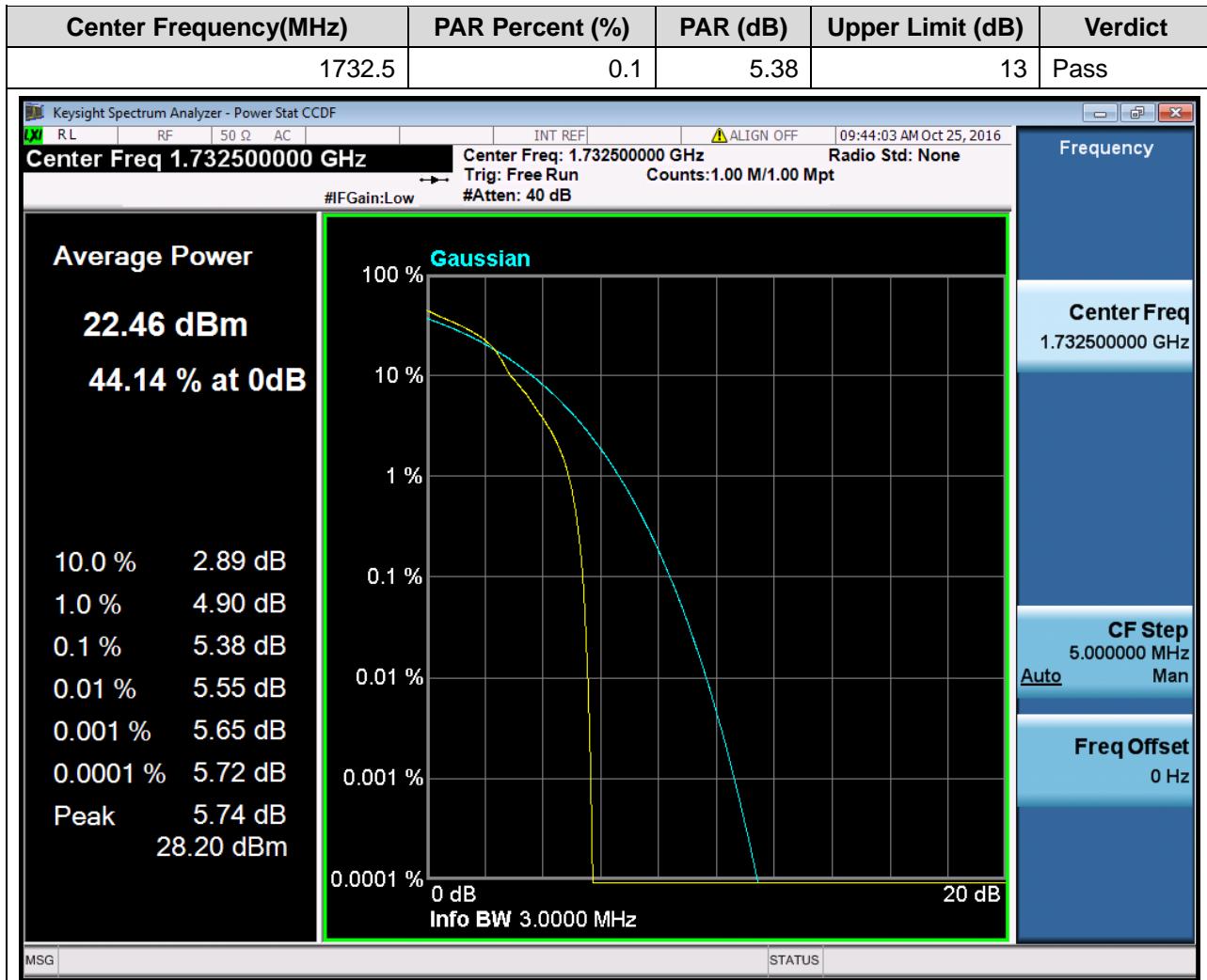
1.21. LTE Peak to Average Ratio(NTNV)(Subtest:21, Channel:20175, Bandwidth:3, Modulation:QPSK, RB Number: 15, RB Position:LOW)



1.22. LTE Peak to Average Ratio(NTNV)(Subtest:22, Channel:20175, Bandwidth:3, Modulation:16QAM, RB Number: 1, RB Position:LOW)

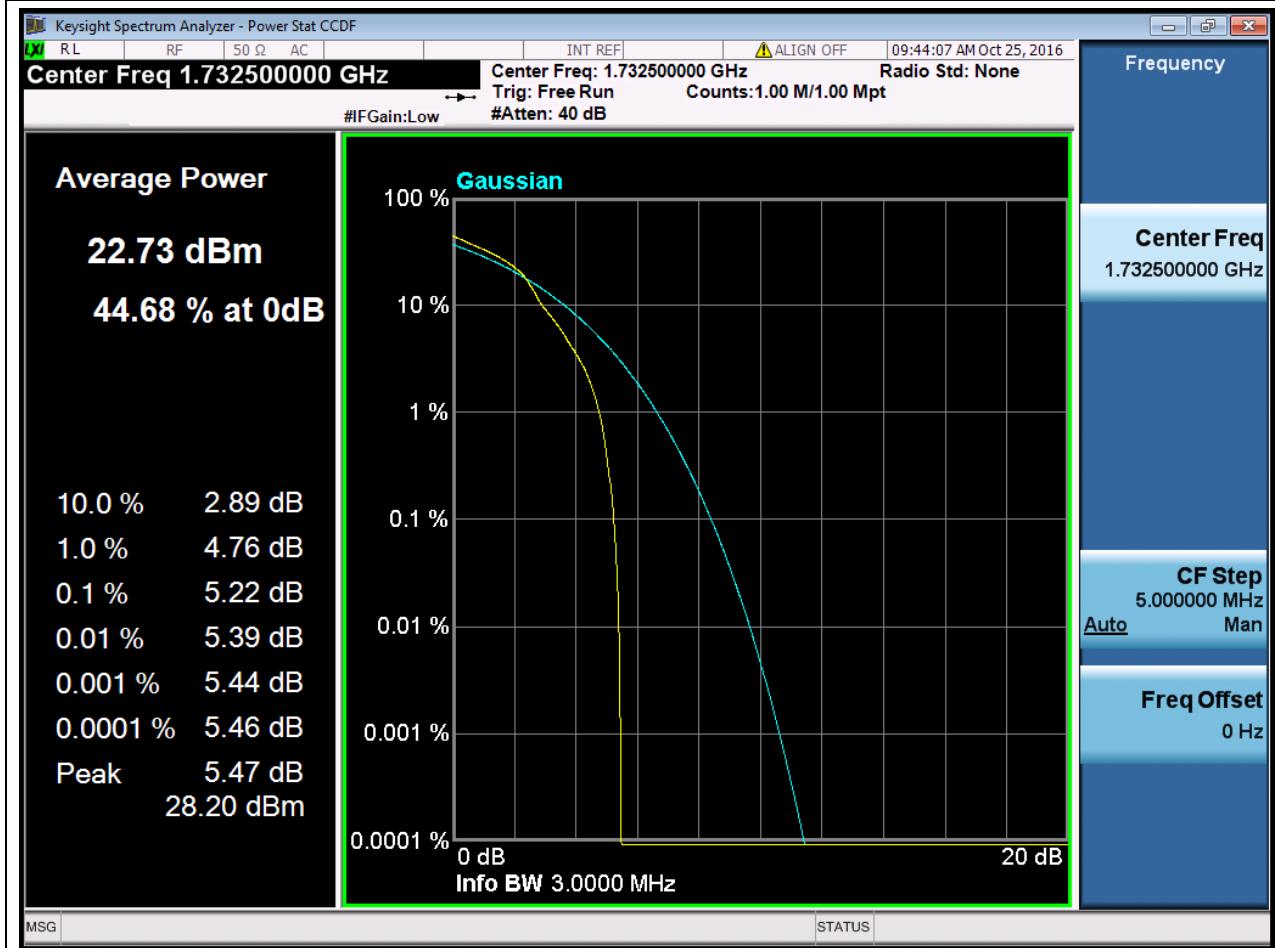


1.23. LTE Peak to Average Ratio(NTNV)(Subtest:23, Channel:20175, Bandwidth:3, Modulation:16QAM, RB Number: 1, RB Position:MID)



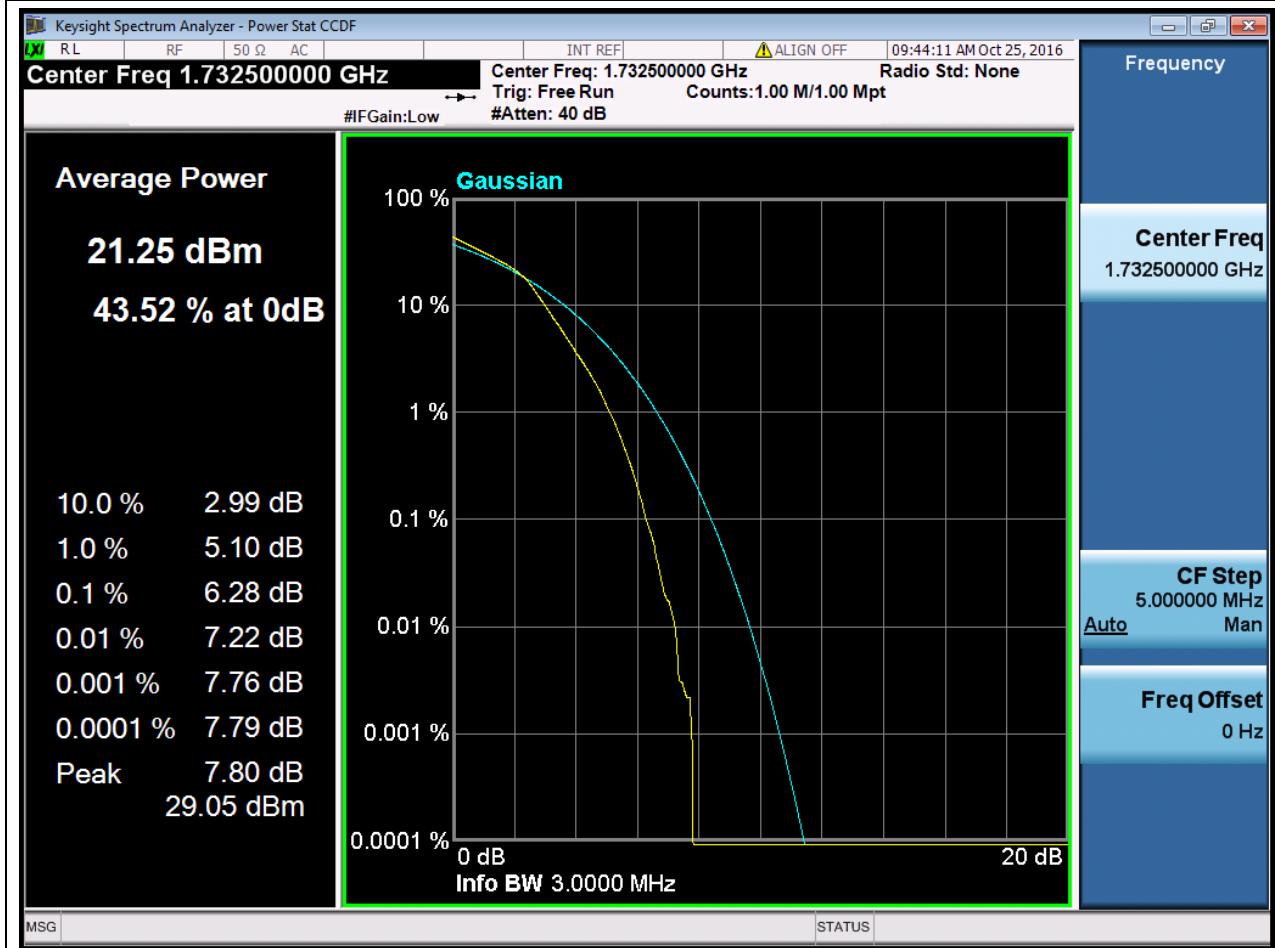
1.24. LTE Peak to Average Ratio(NTNV)(Subtest:24, Channel:20175, Bandwidth:3, Modulation:16QAM, RB Number: 1, RB Position:HIGH)

| Center Frequency(MHz) | PAR Percent (%) | PAR (dB) | Upper Limit (dB) | Verdict |
|-----------------------|-----------------|----------|------------------|---------|
| 1732.5 | 0.1 | 5.22 | 13 | Pass |

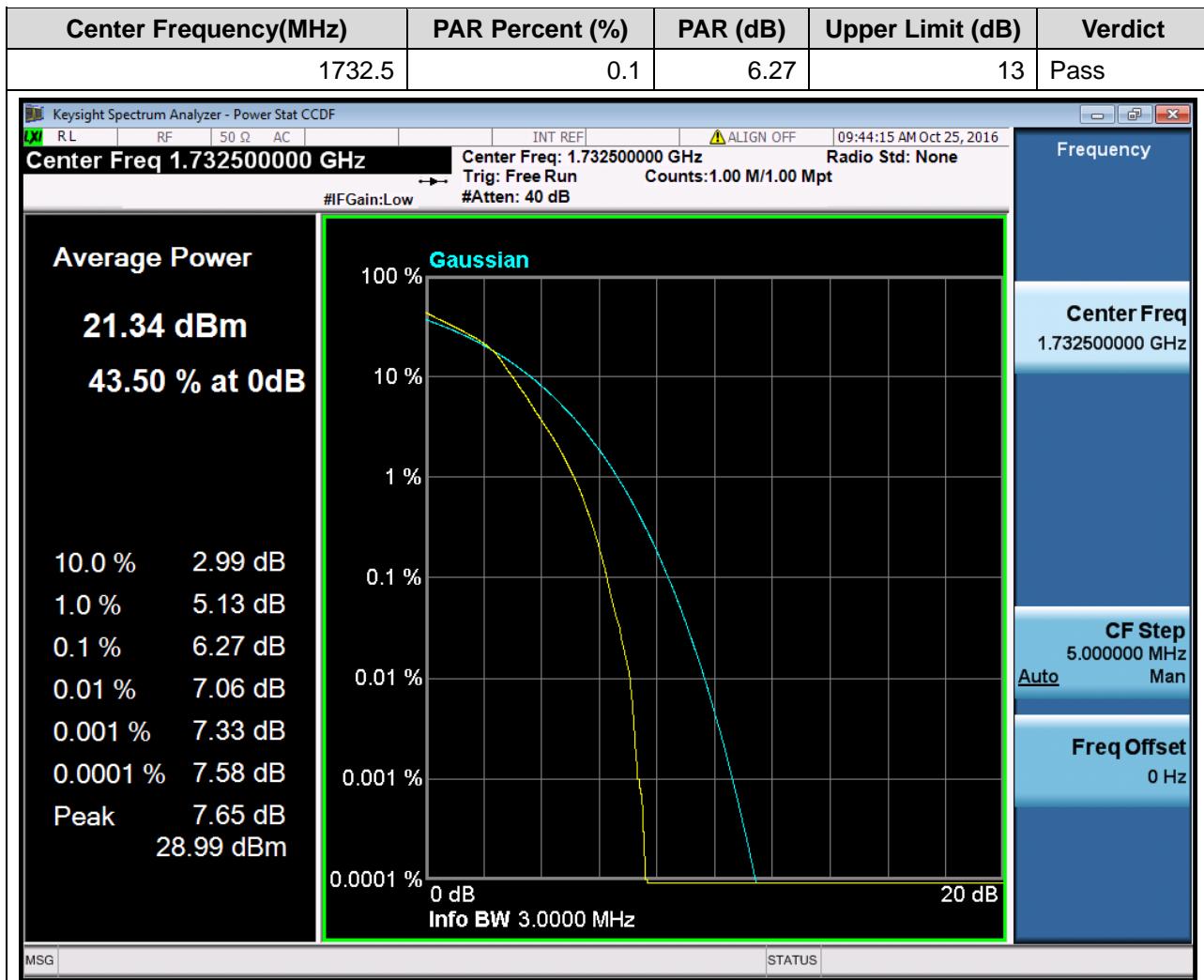


1.25. LTE Peak to Average Ratio(NTNV)(Subtest:25, Channel:20175, Bandwidth:3, Modulation:16QAM, RB Number: 8, RB Position:LOW)

| Center Frequency(MHz) | PAR Percent (%) | PAR (dB) | Upper Limit (dB) | Verdict |
|-----------------------|-----------------|----------|------------------|---------|
| 1732.5 | 0.1 | 6.28 | 13 | Pass |

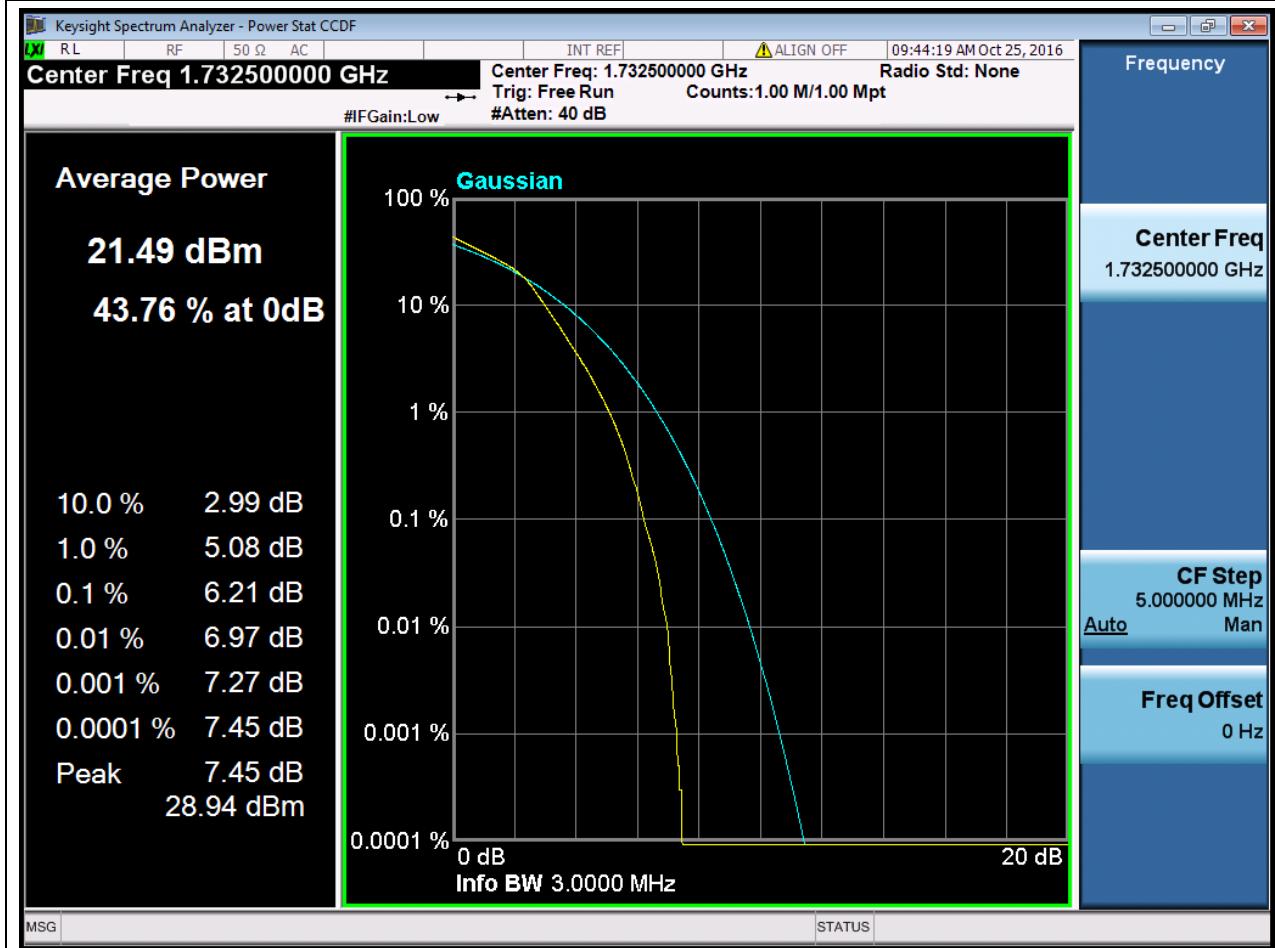


1.26. LTE Peak to Average Ratio(NTNV)(Subtest:26, Channel:20175, Bandwidth:3, Modulation:16QAM, RB Number: 8, RB Position:MID)



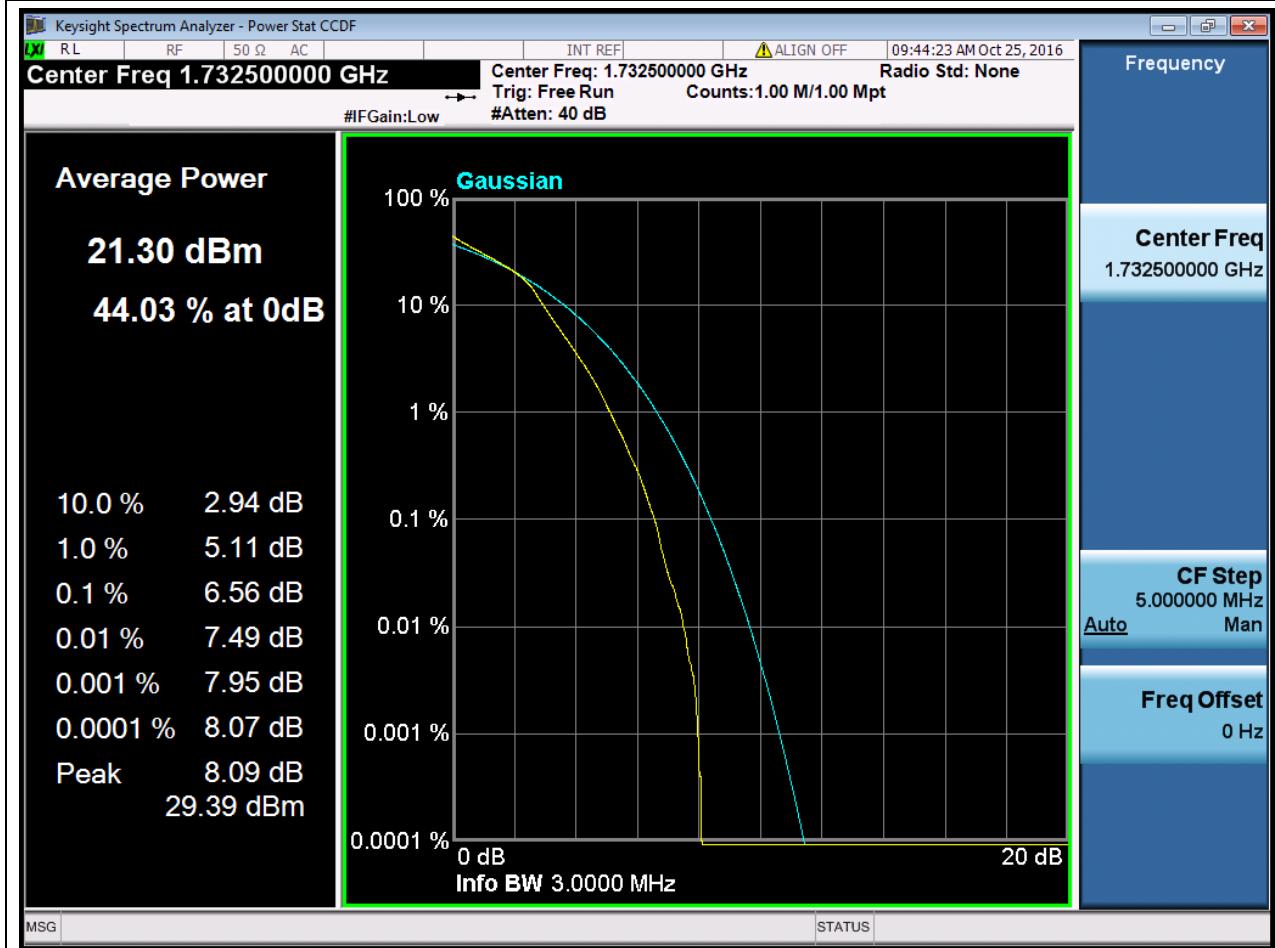
1.27. LTE Peak to Average Ratio(NTNV)(Subtest:27, Channel:20175, Bandwidth:3, Modulation:16QAM, RB Number: 8, RB Position:HIGH)

| Center Frequency(MHz) | PAR Percent (%) | PAR (dB) | Upper Limit (dB) | Verdict |
|-----------------------|-----------------|----------|------------------|---------|
| 1732.5 | 0.1 | 6.21 | 13 | Pass |

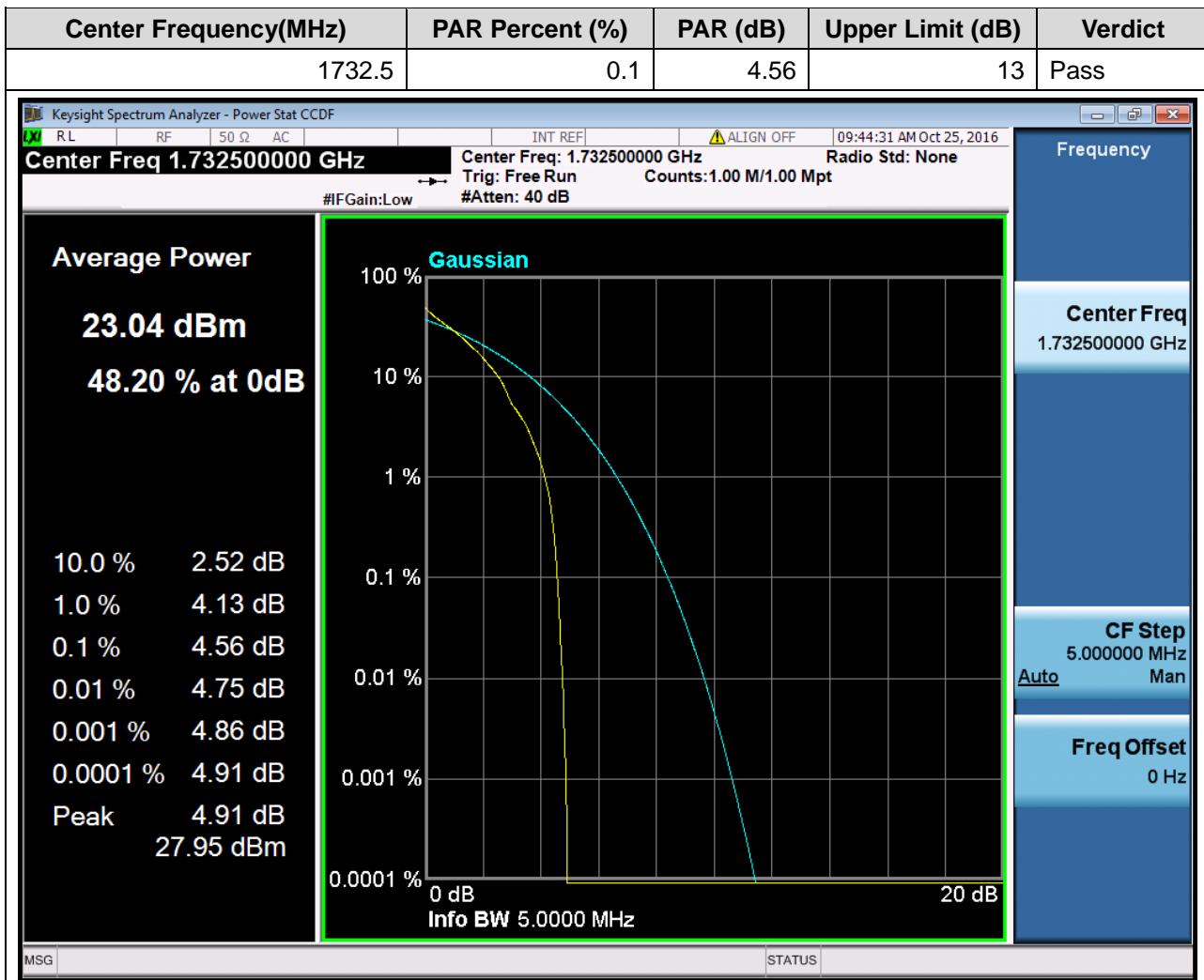


1.28. LTE Peak to Average Ratio(NTNV)(Subtest:28, Channel:20175, Bandwidth:3, Modulation:16QAM, RB Number: 15, RB Position:LOW)

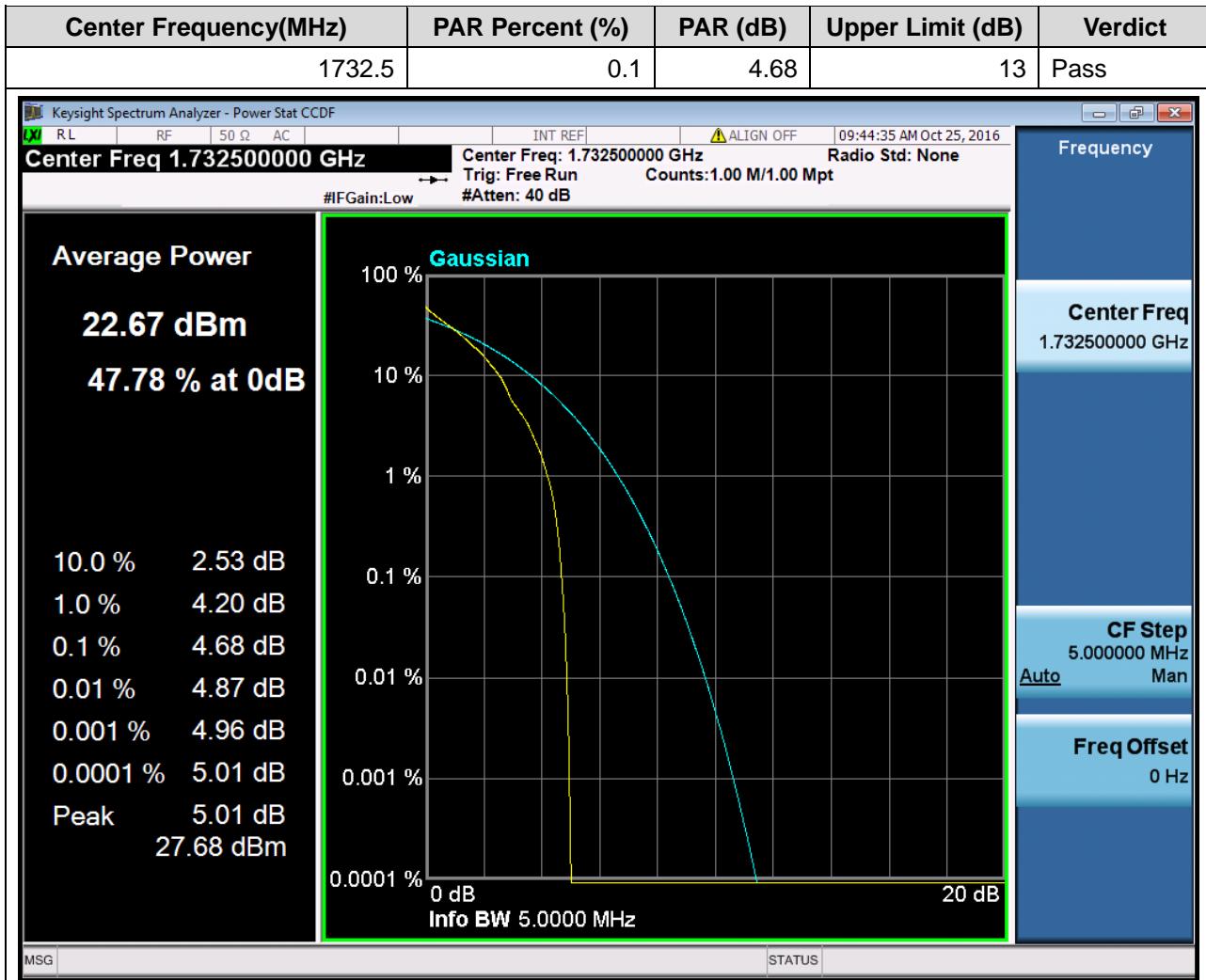
| Center Frequency(MHz) | PAR Percent (%) | PAR (dB) | Upper Limit (dB) | Verdict |
|-----------------------|-----------------|----------|------------------|---------|
| 1732.5 | 0.1 | 6.56 | 13 | Pass |



1.29. LTE Peak to Average Ratio(NTNV)(Subtest:29, Channel:20175, Bandwidth:5, Modulation:QPSK, RB Number: 1, RB Position:LOW)

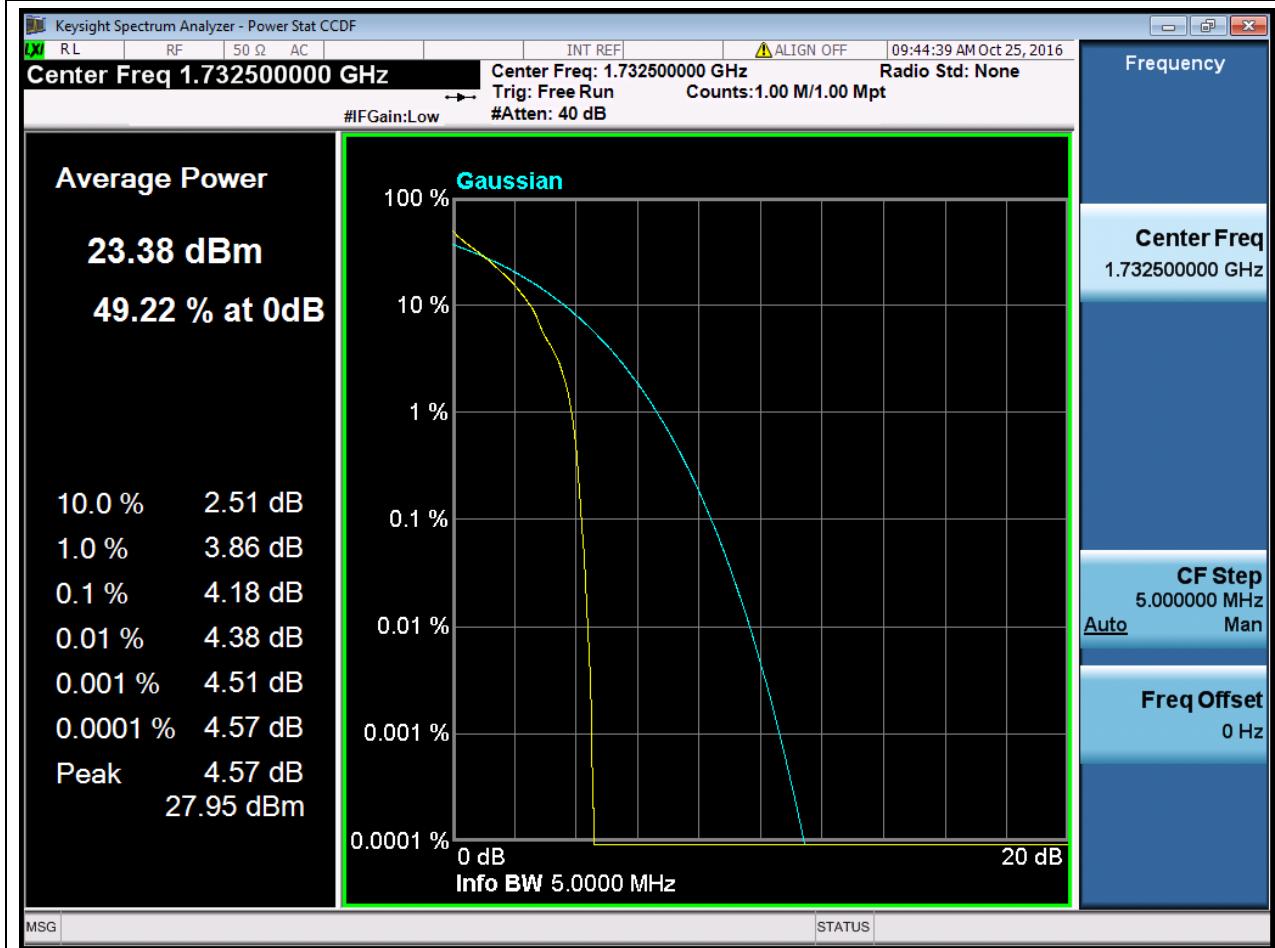


1.30. LTE Peak to Average Ratio(NTNV)(Subtest:30, Channel:20175, Bandwidth:5, Modulation:QPSK, RB Number: 1, RB Position:MID)



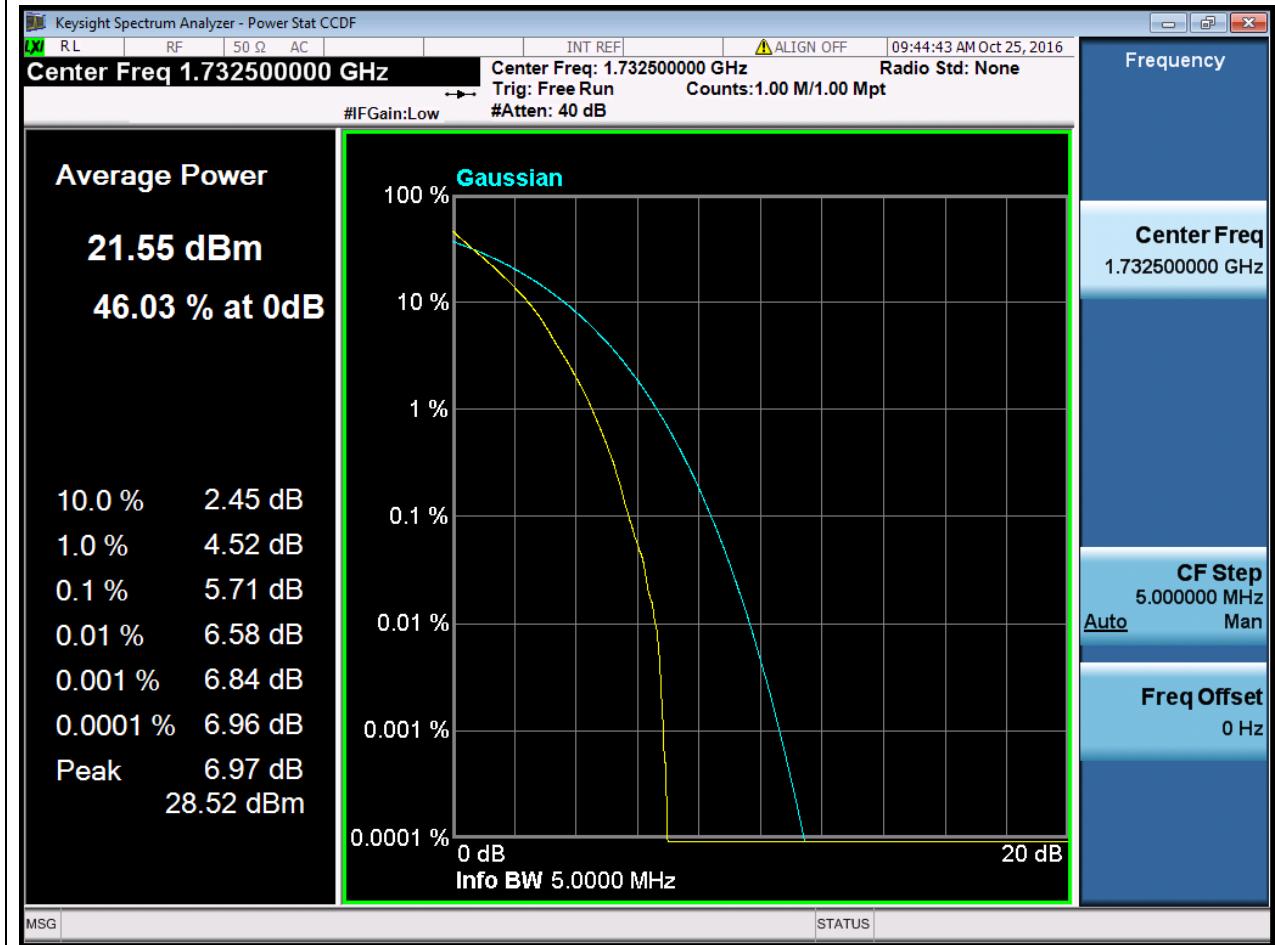
1.31. LTE Peak to Average Ratio(NTNV)(Subtest:31, Channel:20175, Bandwidth:5, Modulation:QPSK, RB Number: 1, RB Position:HIGH)

| Center Frequency(MHz) | PAR Percent (%) | PAR (dB) | Upper Limit (dB) | Verdict |
|-----------------------|-----------------|----------|------------------|---------|
| 1732.5 | 0.1 | 4.18 | 13 | Pass |



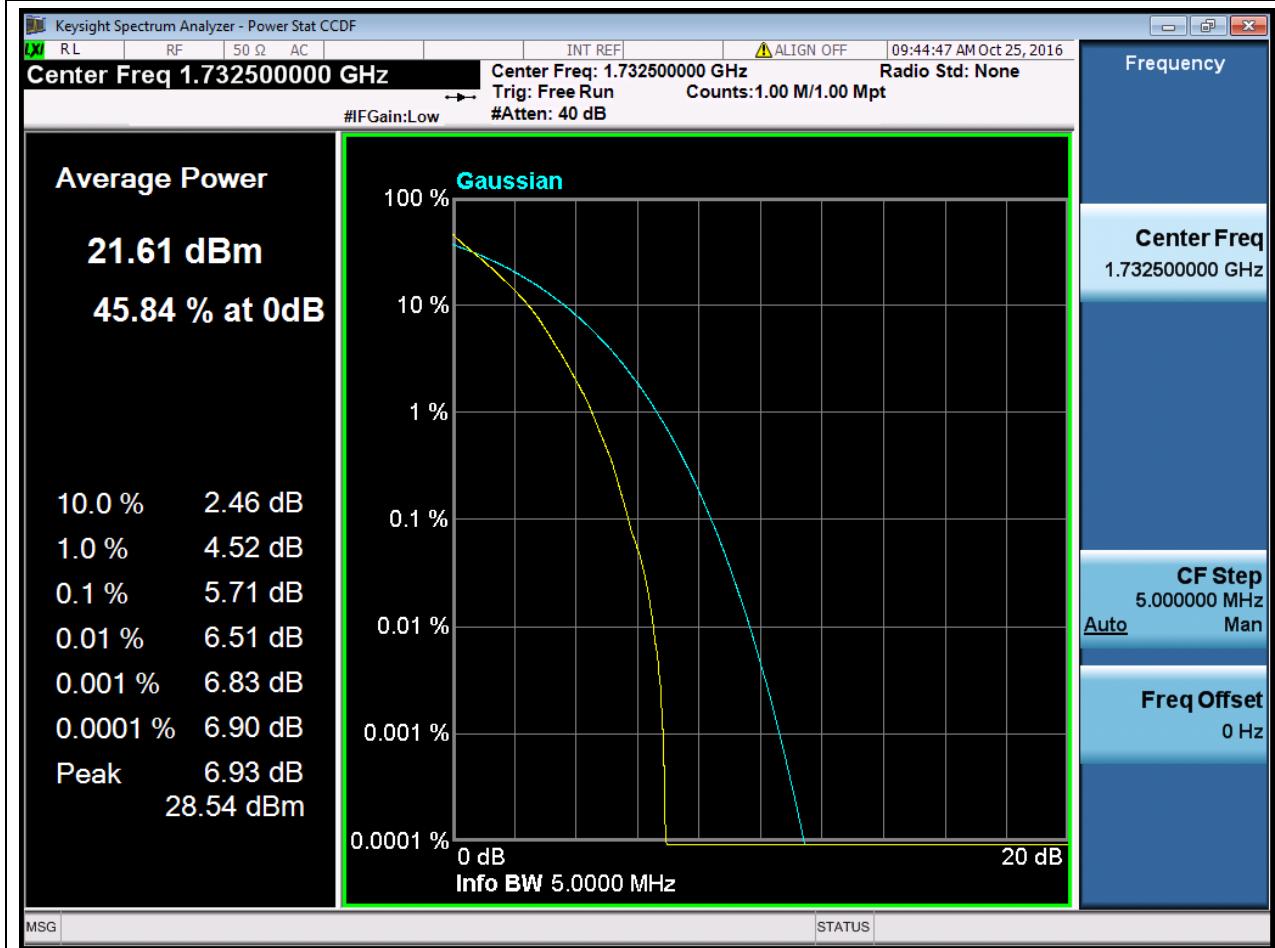
1.32. LTE Peak to Average Ratio(NTNV)(Subtest:32, Channel:20175, Bandwidth:5, Modulation:QPSK, RB Number: 12, RB Position:LOW)

| Center Frequency(MHz) | PAR Percent (%) | PAR (dB) | Upper Limit (dB) | Verdict |
|-----------------------|-----------------|----------|------------------|---------|
| 1732.5 | 0.1 | 5.71 | 13 | Pass |

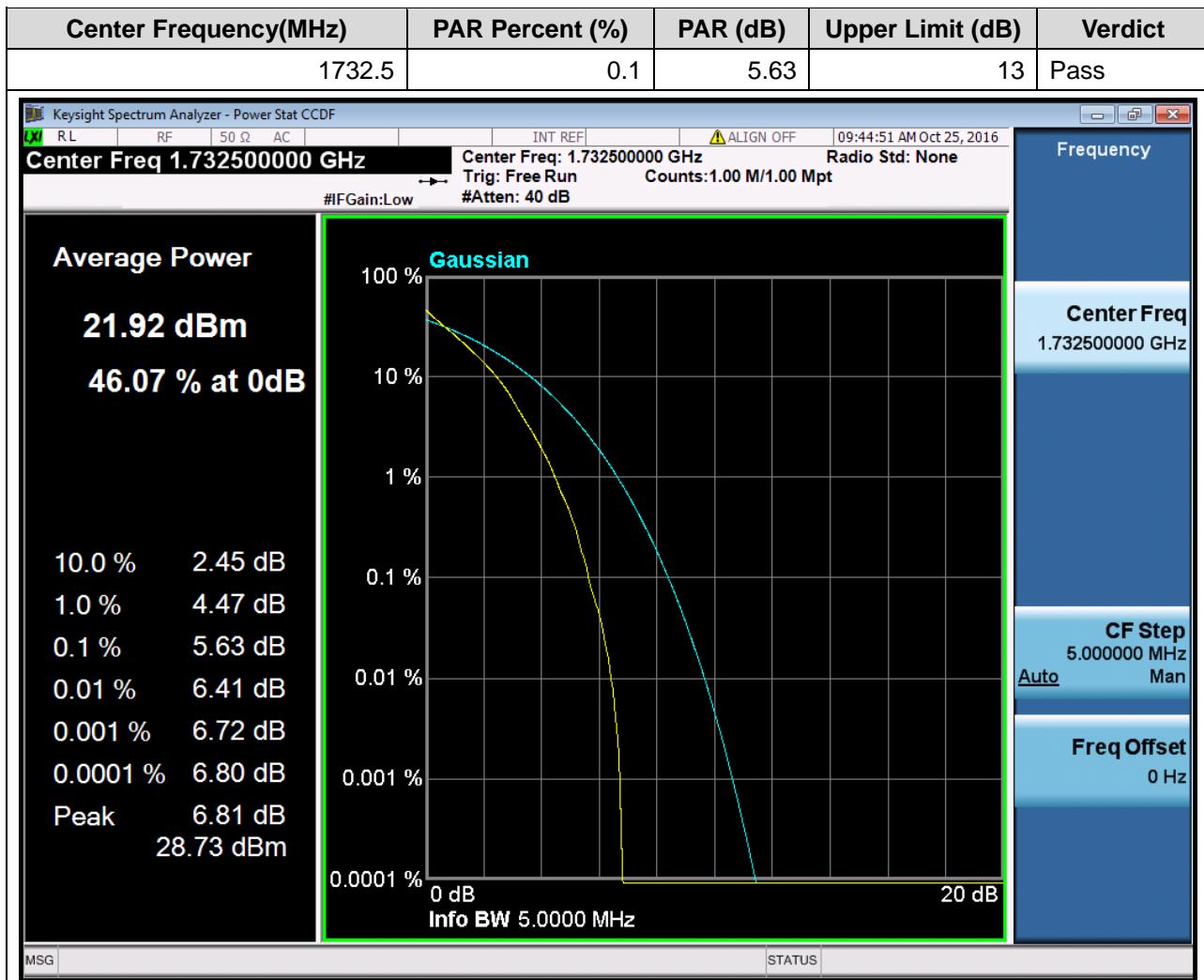


1.33. LTE Peak to Average Ratio(NTNV)(Subtest:33, Channel:20175, Bandwidth:5, Modulation:QPSK, RB Number: 12, RB Position:MID)

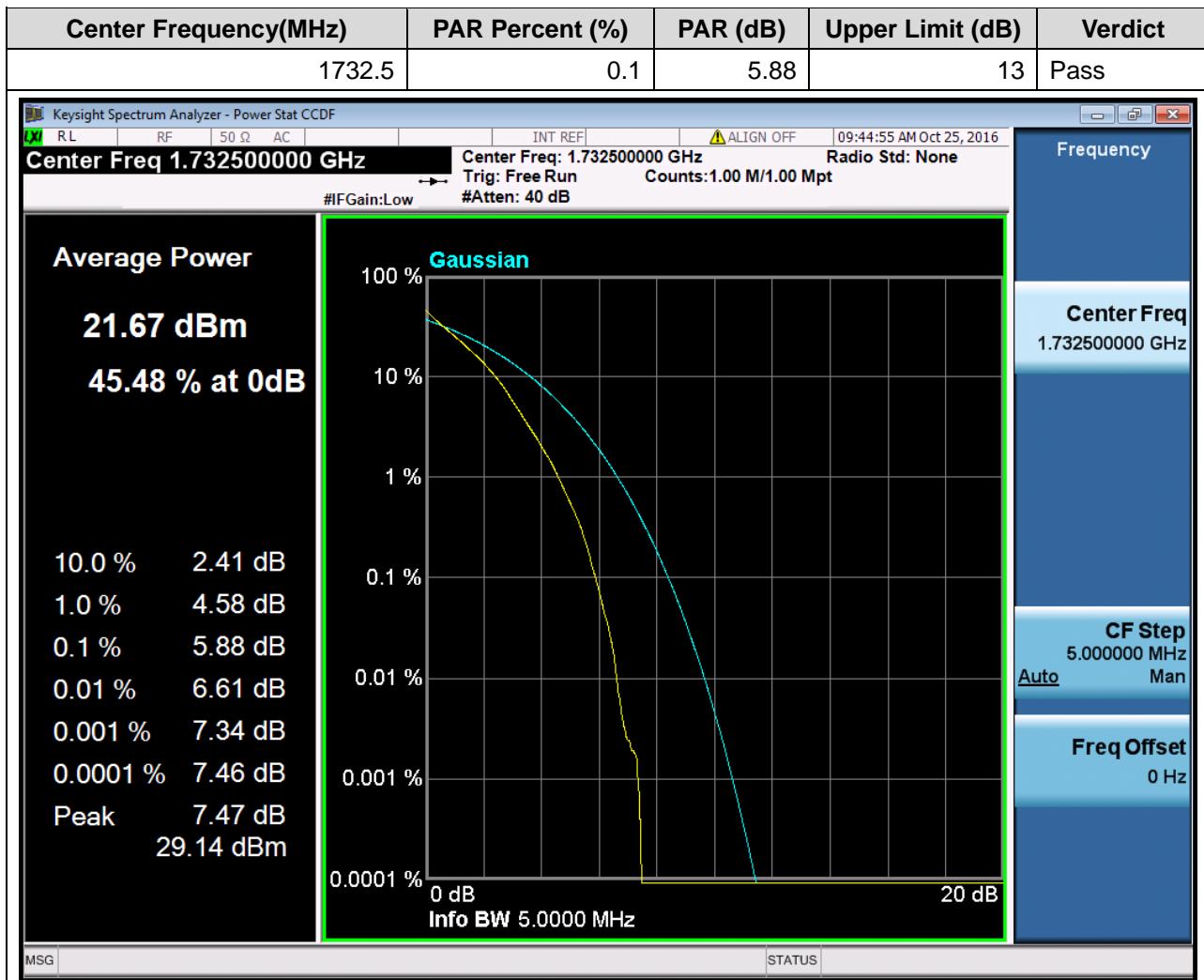
| Center Frequency(MHz) | PAR Percent (%) | PAR (dB) | Upper Limit (dB) | Verdict |
|-----------------------|-----------------|----------|------------------|---------|
| 1732.5 | 0.1 | 5.71 | 13 | Pass |



1.34. LTE Peak to Average Ratio(NTNV)(Subtest:34, Channel:20175, Bandwidth:5, Modulation:QPSK, RB Number: 12, RB Position:HIGH)



1.35. LTE Peak to Average Ratio(NTNV)(Subtest:35, Channel:20175, Bandwidth:5, Modulation:QPSK, RB Number: 25, RB Position:LOW)



1.36. LTE Peak to Average Ratio(NTNV)(Subtest:36, Channel:20175, Bandwidth:5, Modulation:16QAM, RB Number: 1, RB Position:LOW)

| Center Frequency(MHz) | PAR Percent (%) | PAR (dB) | Upper Limit (dB) | Verdict |
|-----------------------|-----------------|----------|------------------|---------|
| 1732.5 | 0.1 | 5.66 | 13 | Pass |

Keysight Spectrum Analyzer - Power Stat CCDF

RL RF 50 Ω AC INT REF ALIGN OFF 09:44:59 AM Oct 25, 2016

Center Freq 1.732500000 GHz Center Freq: 1.732500000 GHz Radio Std: None
Trig: Free Run Counts: 1.00 M/1.00 Mpt
#IFGain:Low #Atten: 40 dB

Average Power 22.01 dBm
43.38 % at 0dB

10.0 % 2.99 dB
1.0 % 5.10 dB
0.1 % 5.66 dB
0.01 % 6.05 dB
0.001 % 6.12 dB
0.0001 % 6.15 dB
Peak 6.16 dB
28.17 dBm

Gaussian

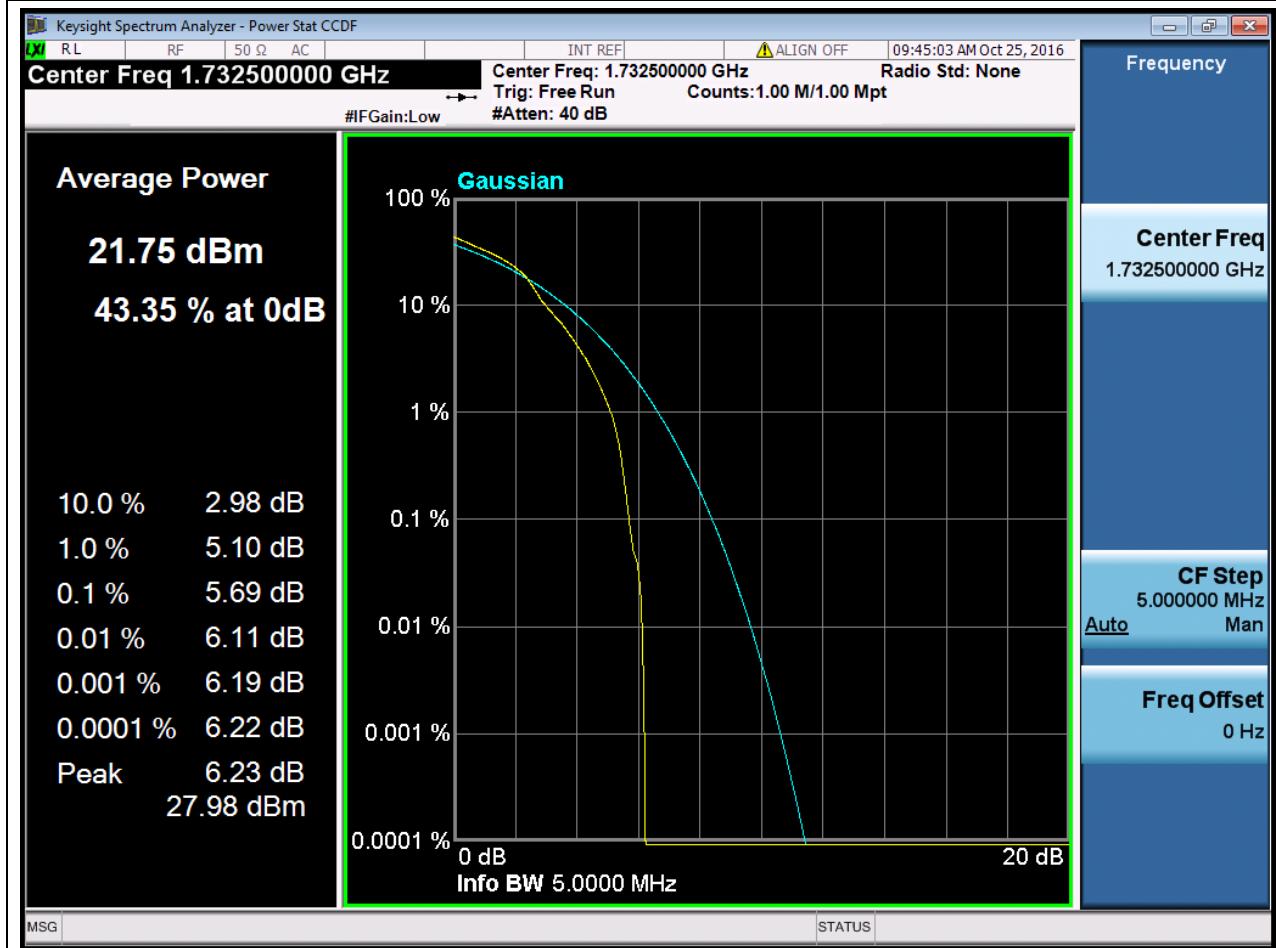


Frequency
Center Freq 1.732500000 GHz
CF Step 5.000000 MHz
Auto Man
Freq Offset 0 Hz

MSG STATUS

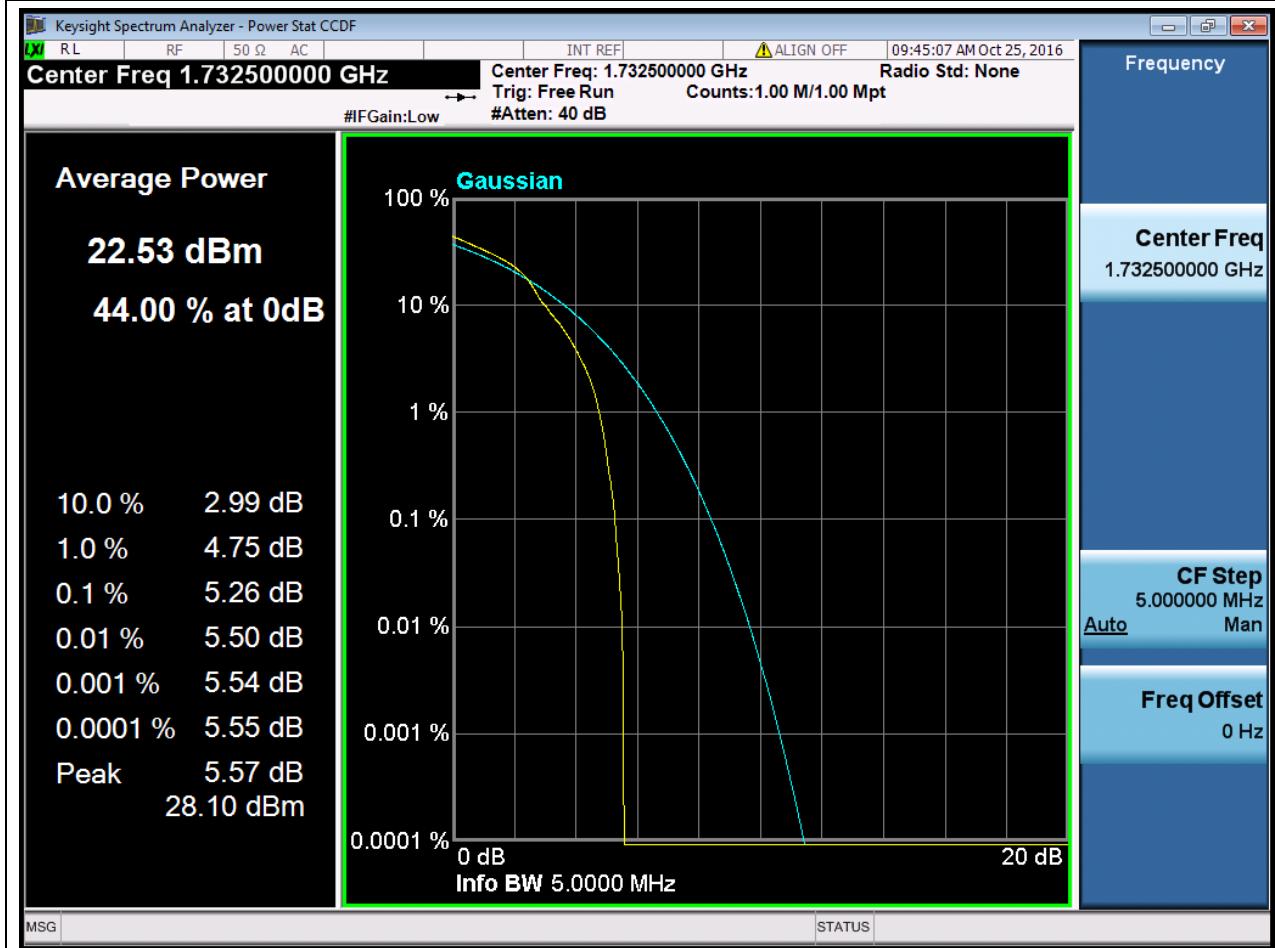
1.37. LTE Peak to Average Ratio(NTNV)(Subtest:37, Channel:20175, Bandwidth:5, Modulation:16QAM, RB Number: 1, RB Position:MID)

| Center Frequency(MHz) | PAR Percent (%) | PAR (dB) | Upper Limit (dB) | Verdict |
|-----------------------|-----------------|----------|------------------|---------|
| 1732.5 | 0.1 | 5.69 | 13 | Pass |



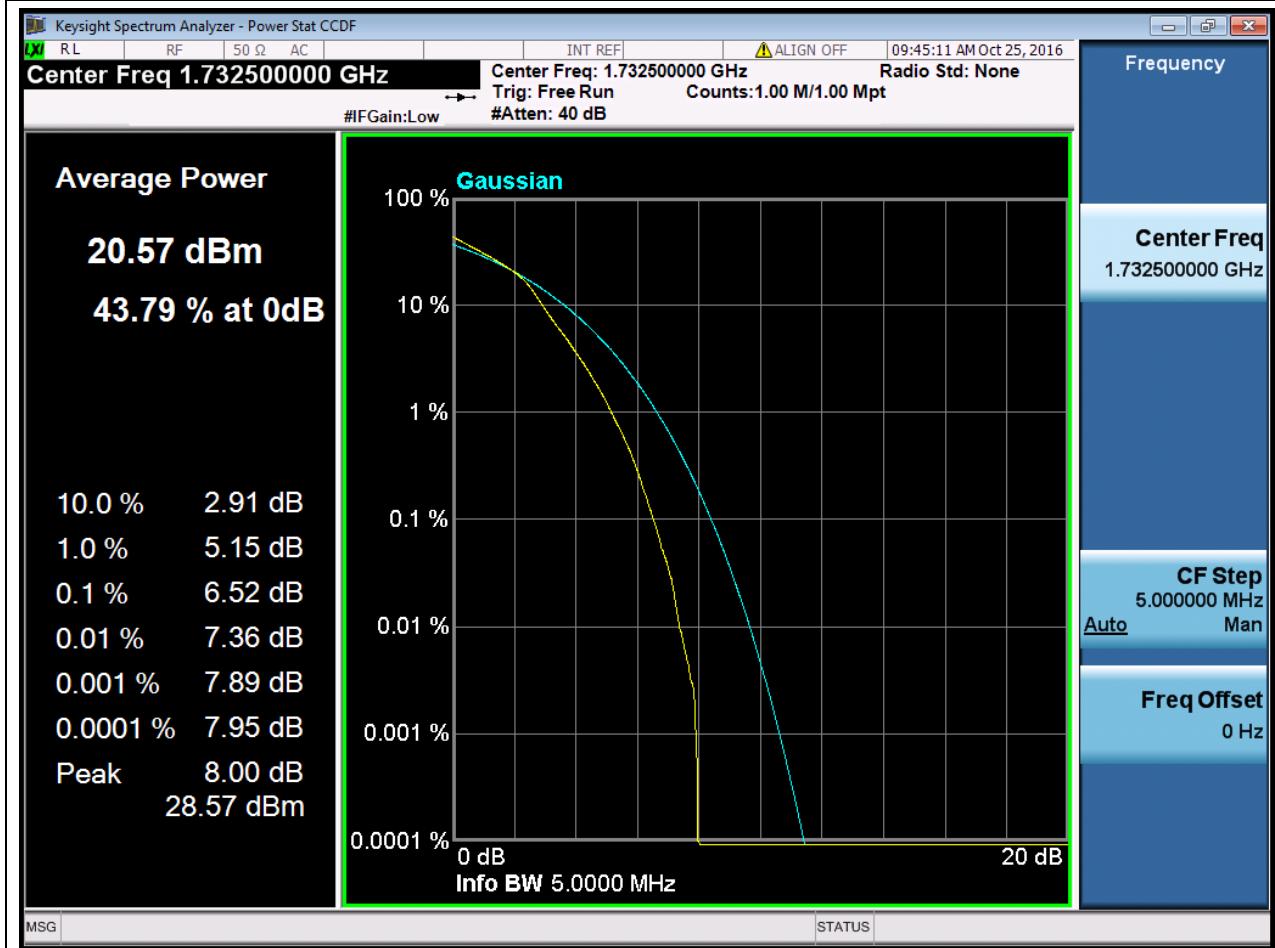
1.38. LTE Peak to Average Ratio(NTNV)(Subtest:38, Channel:20175, Bandwidth:5, Modulation:16QAM, RB Number: 1, RB Position:HIGH)

| Center Frequency(MHz) | PAR Percent (%) | PAR (dB) | Upper Limit (dB) | Verdict |
|-----------------------|-----------------|----------|------------------|---------|
| 1732.5 | 0.1 | 5.26 | 13 | Pass |



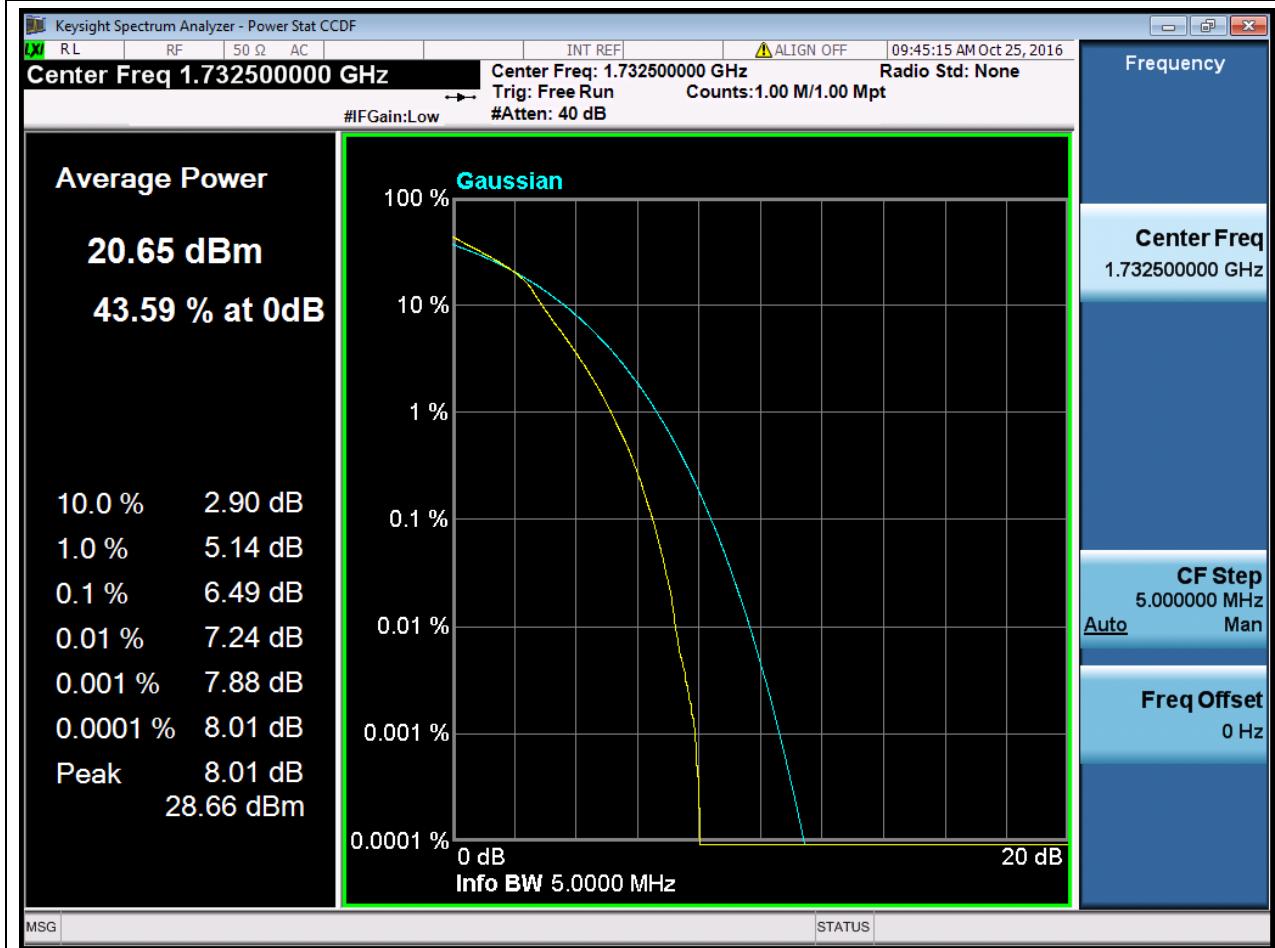
1.39. LTE Peak to Average Ratio(NTNV)(Subtest:39, Channel:20175, Bandwidth:5, Modulation:16QAM, RB Number: 12, RB Position:LOW)

| Center Frequency(MHz) | PAR Percent (%) | PAR (dB) | Upper Limit (dB) | Verdict |
|-----------------------|-----------------|----------|------------------|---------|
| 1732.5 | 0.1 | 6.52 | 13 | Pass |



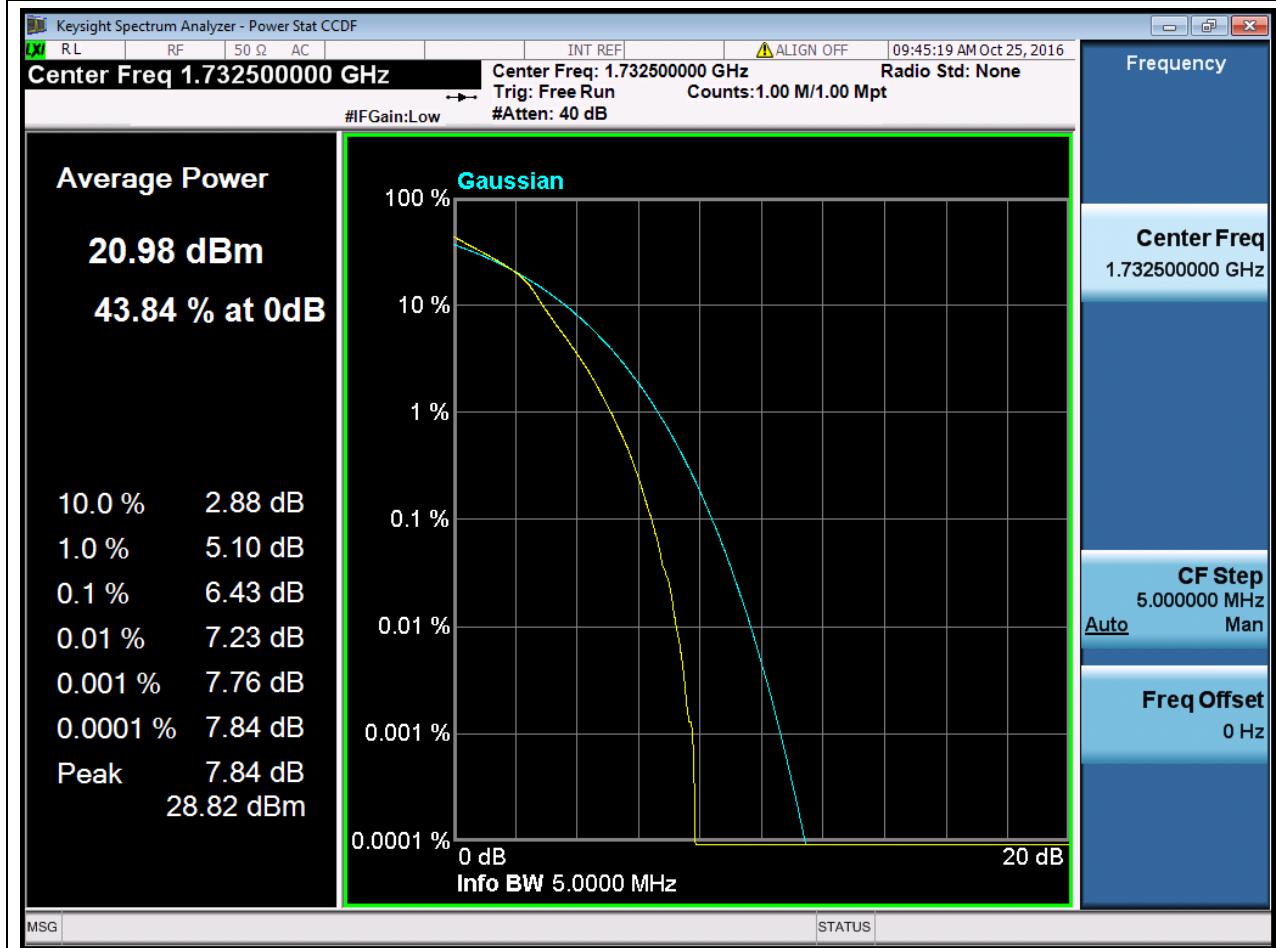
1.40. LTE Peak to Average Ratio(NTNV)(Subtest:40, Channel:20175, Bandwidth:5, Modulation:16QAM, RB Number: 12, RB Position:MID)

| Center Frequency(MHz) | PAR Percent (%) | PAR (dB) | Upper Limit (dB) | Verdict |
|-----------------------|-----------------|----------|------------------|---------|
| 1732.5 | 0.1 | 6.49 | 13 | Pass |



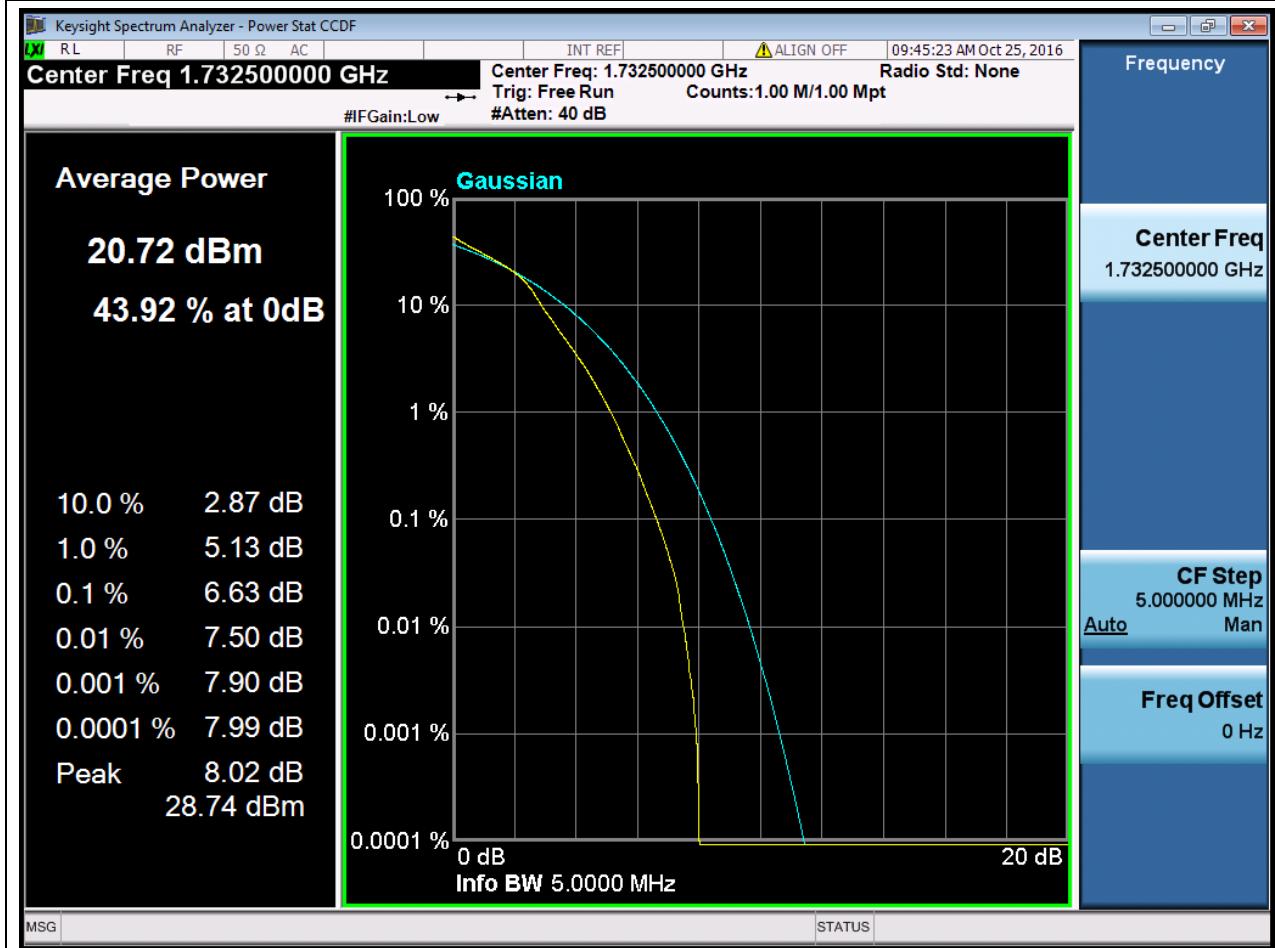
1.41. LTE Peak to Average Ratio(NTNV)(Subtest:41, Channel:20175, Bandwidth:5, Modulation:16QAM, RB Number: 12, RB Position:HIGH)

| Center Frequency(MHz) | PAR Percent (%) | PAR (dB) | Upper Limit (dB) | Verdict |
|-----------------------|-----------------|----------|------------------|---------|
| 1732.5 | 0.1 | 6.43 | 13 | Pass |



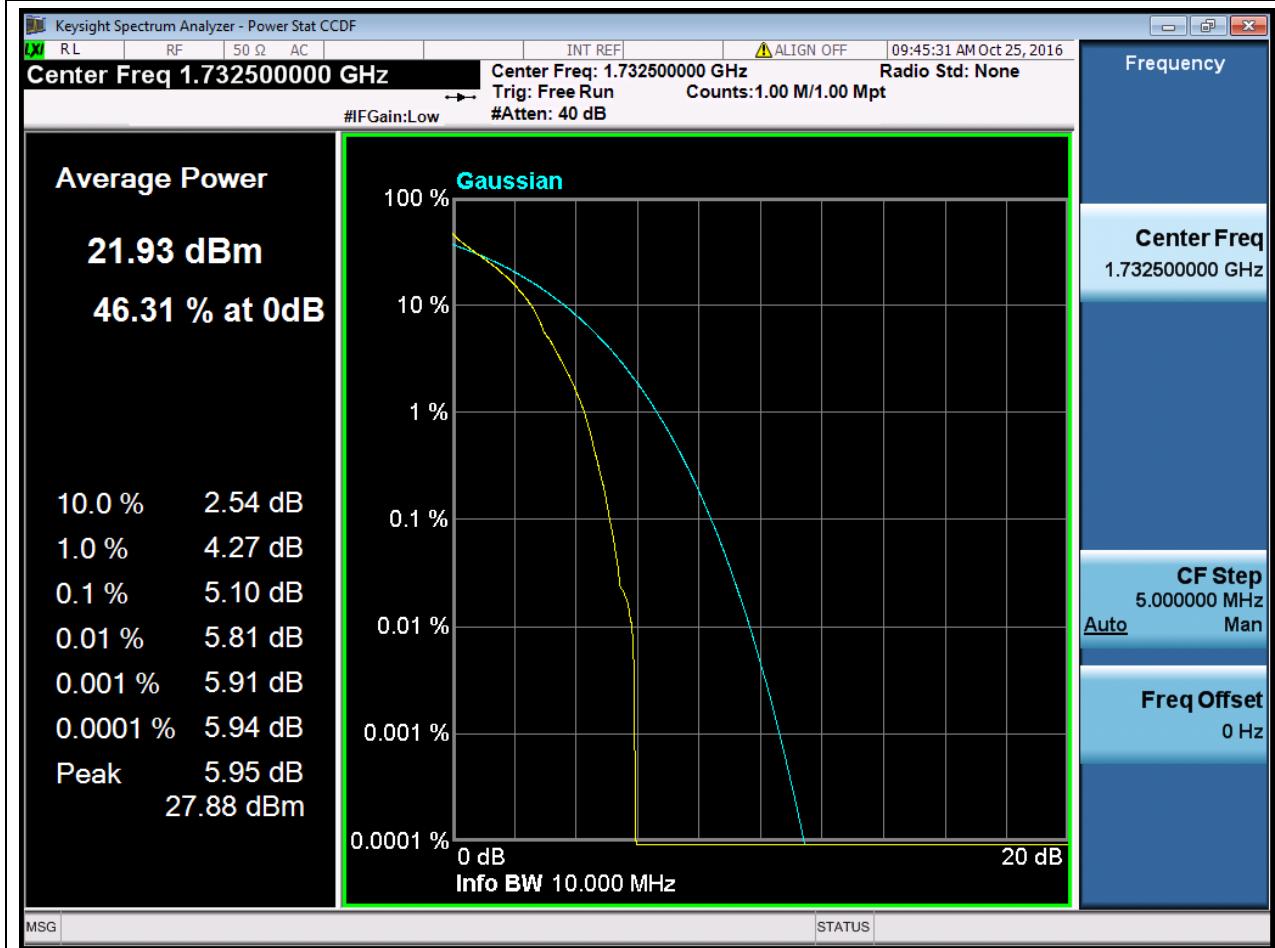
1.42. LTE Peak to Average Ratio(NTNV)(Subtest:42, Channel:20175, Bandwidth:5, Modulation:16QAM, RB Number: 25, RB Position:LOW)

| Center Frequency(MHz) | PAR Percent (%) | PAR (dB) | Upper Limit (dB) | Verdict |
|-----------------------|-----------------|----------|------------------|---------|
| 1732.5 | 0.1 | 6.63 | 13 | Pass |



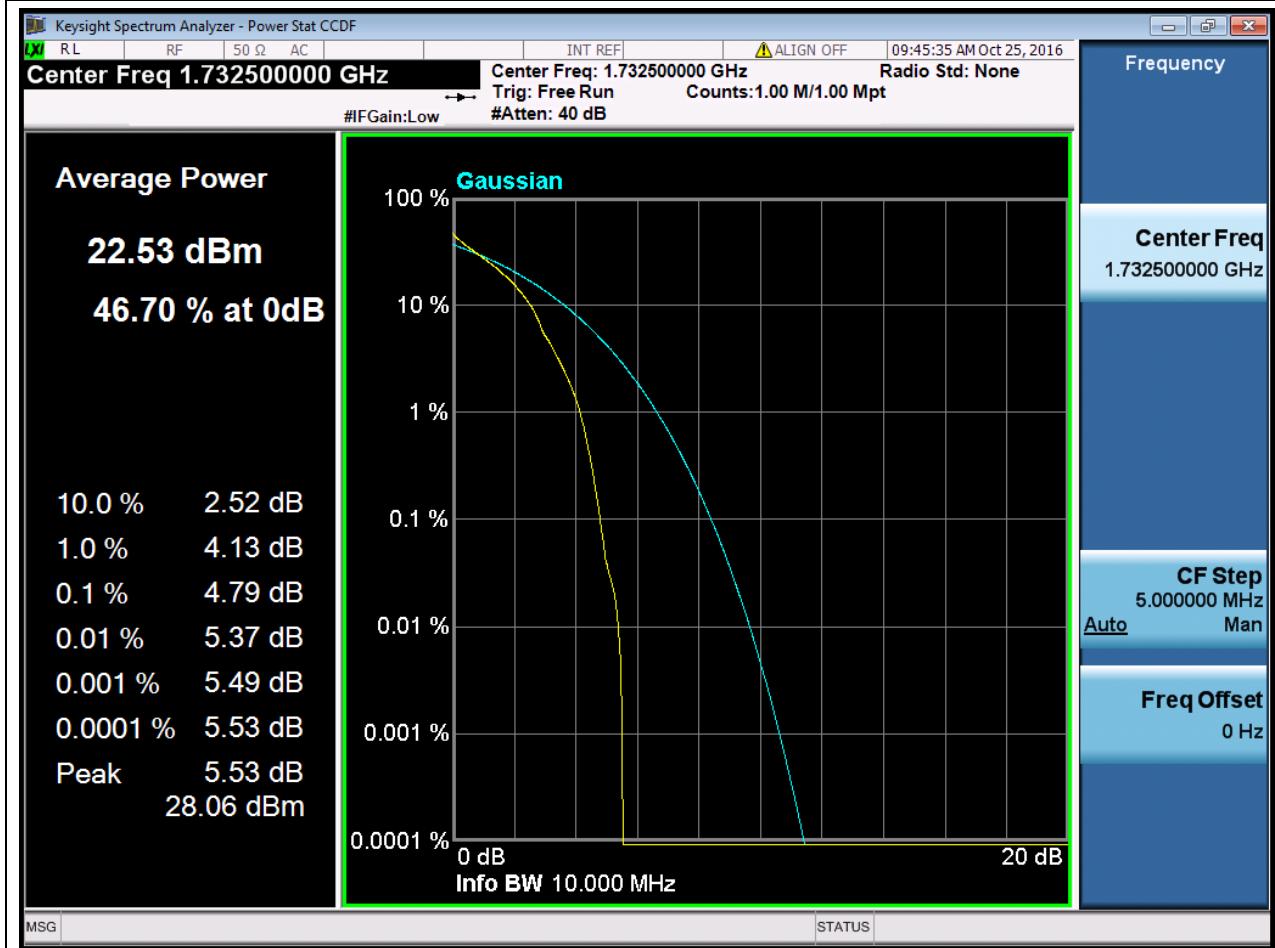
1.43. LTE Peak to Average Ratio(NTNV)(Subtest:43, Channel:20175, Bandwidth:10, Modulation:QPSK, RB Number: 1, RB Position:LOW)

| Center Frequency(MHz) | PAR Percent (%) | PAR (dB) | Upper Limit (dB) | Verdict |
|-----------------------|-----------------|----------|------------------|---------|
| 1732.5 | 0.1 | 5.1 | 13 | Pass |



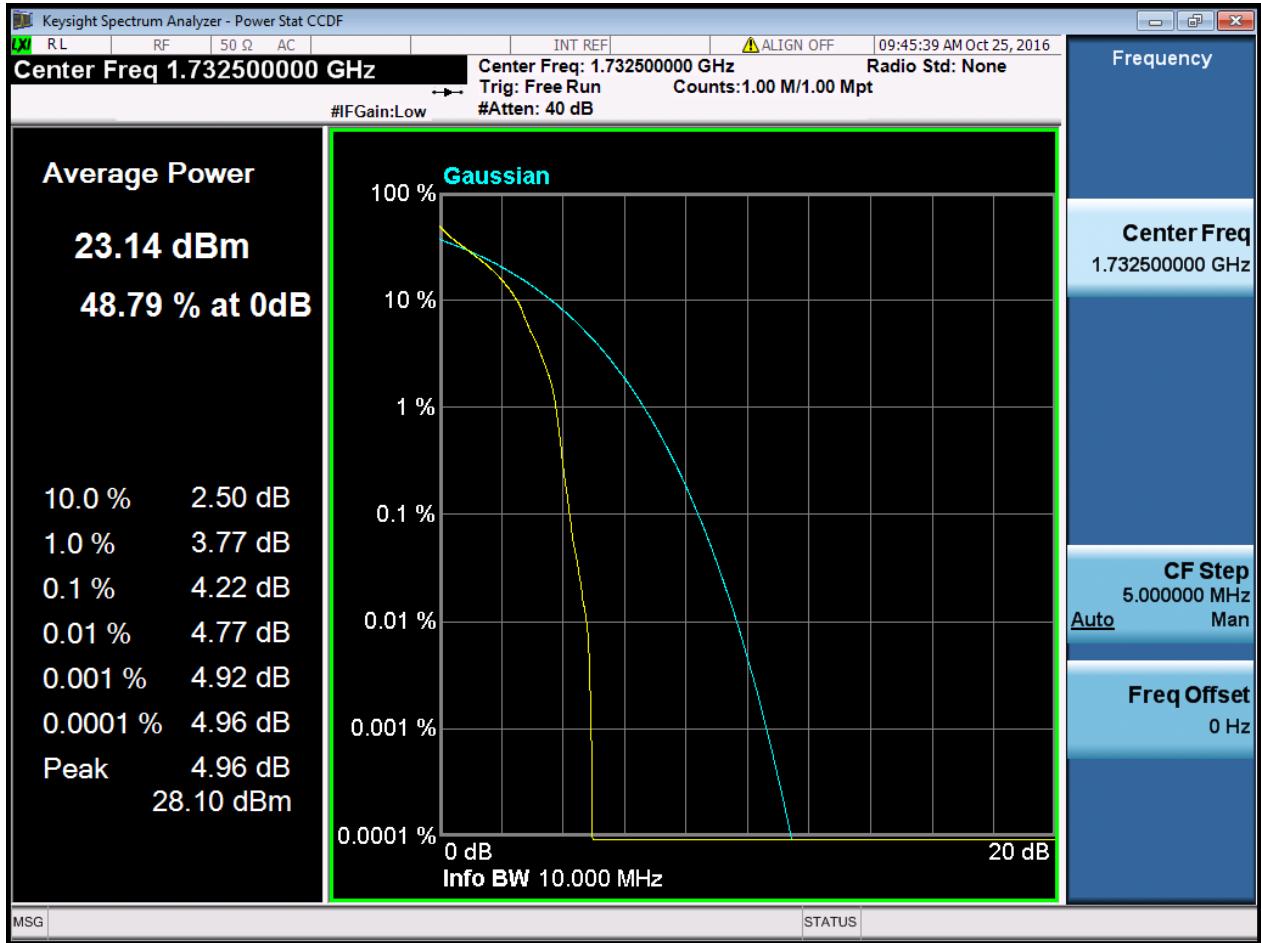
1.44. LTE Peak to Average Ratio(NTNV)(Subtest:44, Channel:20175, Bandwidth:10, Modulation:QPSK, RB Number: 1, RB Position:MID)

| Center Frequency(MHz) | PAR Percent (%) | PAR (dB) | Upper Limit (dB) | Verdict |
|-----------------------|-----------------|----------|------------------|---------|
| 1732.5 | 0.1 | 4.79 | 13 | Pass |



1.45. LTE Peak to Average Ratio(NTNV)(Subtest:45, Channel:20175, Bandwidth:10, Modulation:QPSK, RB Number: 1, RB Position:HIGH)

| Center Frequency(MHz) | PAR Percent (%) | PAR (dB) | Upper Limit (dB) | Verdict |
|-----------------------|-----------------|----------|------------------|---------|
| 1732.5 | 0.1 | 4.22 | 13 | Pass |



Average Power
23.14 dBm
48.79 % at 0dB

| | |
|----------|-----------|
| 10.0 % | 2.50 dB |
| 1.0 % | 3.77 dB |
| 0.1 % | 4.22 dB |
| 0.01 % | 4.77 dB |
| 0.001 % | 4.92 dB |
| 0.0001 % | 4.96 dB |
| Peak | 4.96 dB |
| | 28.10 dBm |

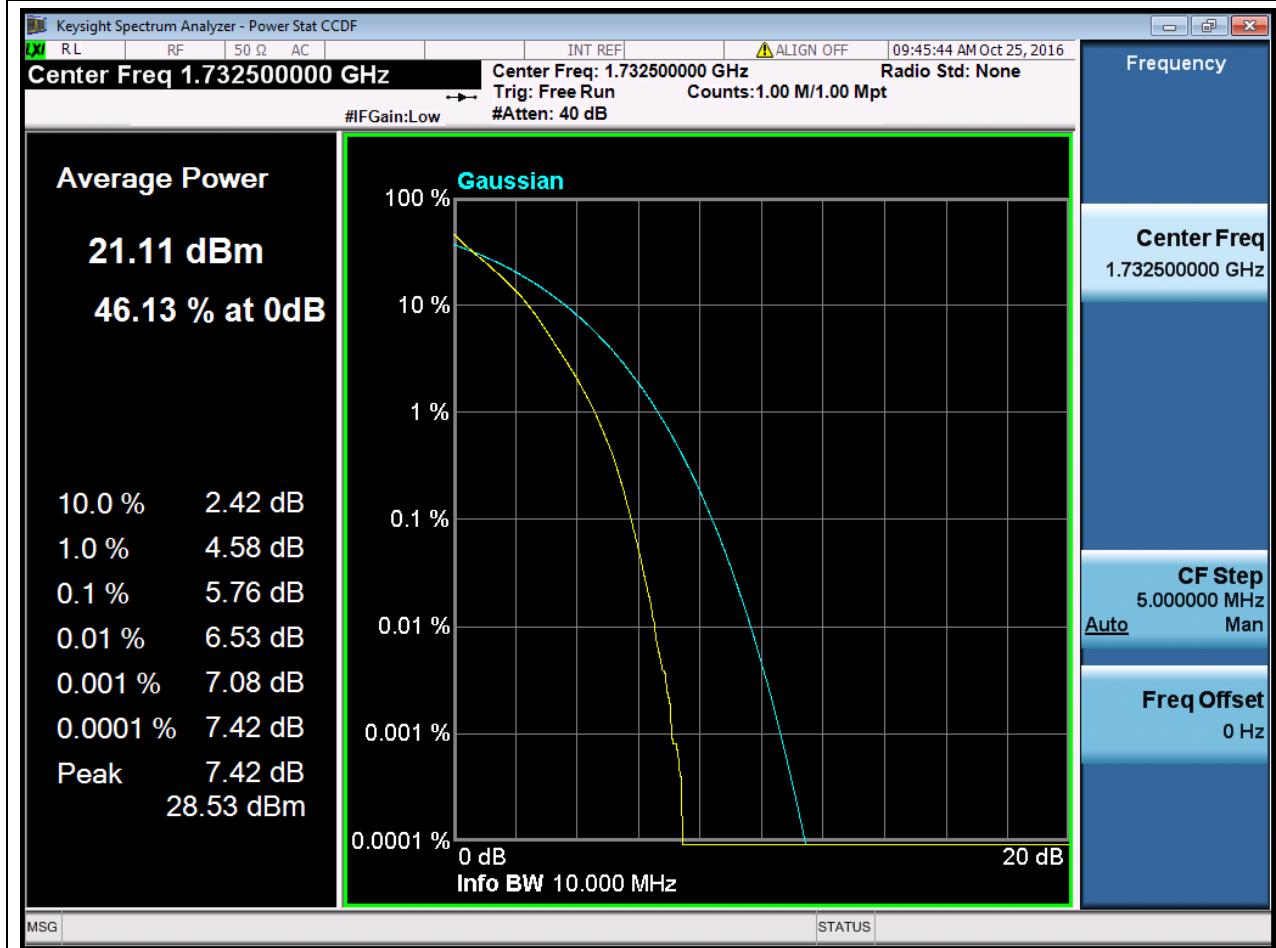
Gaussian

Center Freq: 1.732500000 GHz Radio Std: None
 Trig: Free Run Counts: 1.00 M/1.00 Mpt
 #IFGain:Low #Atten: 40 dB

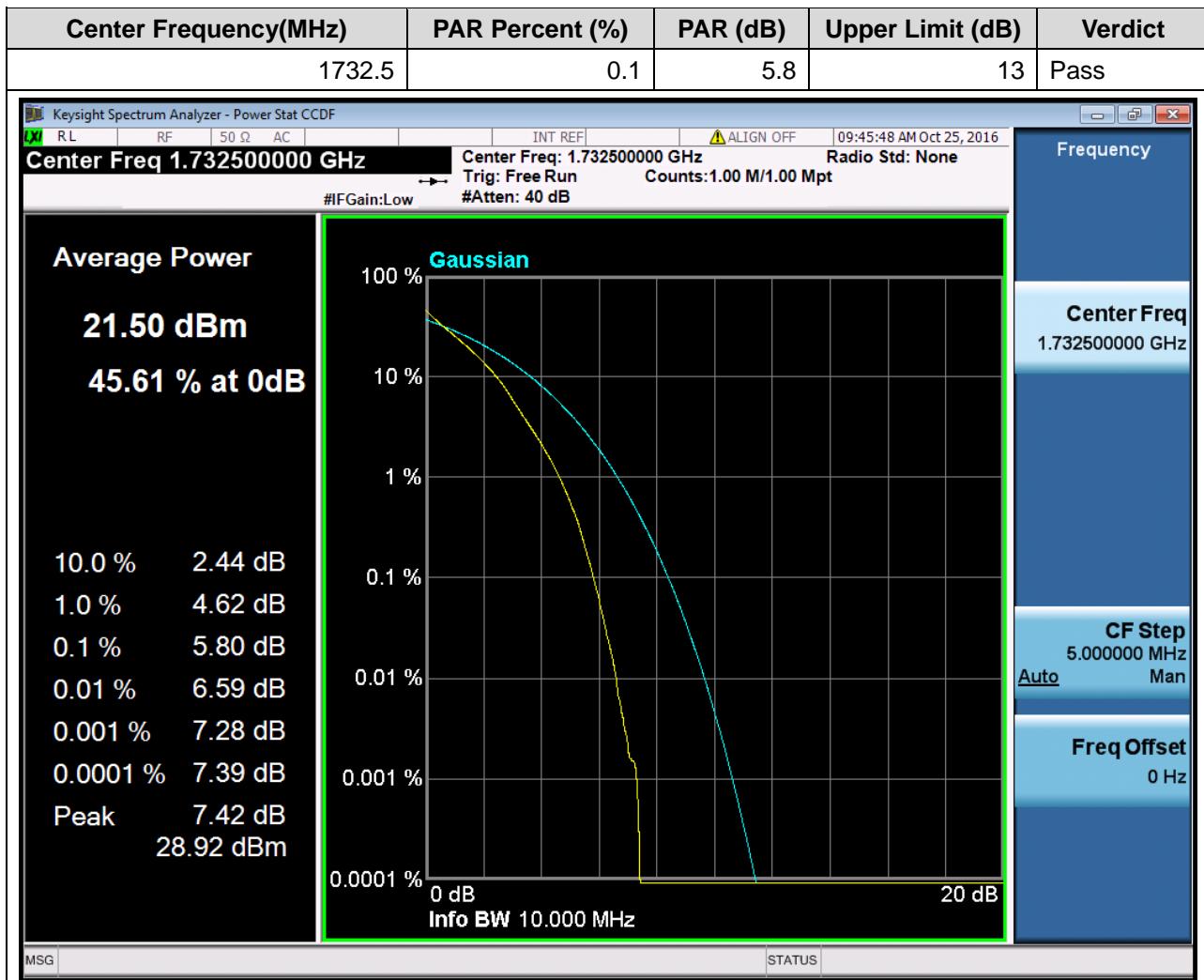
Frequency: 1.732500000 GHz
 CF Step: 5.000000 MHz
 Auto
 Freq Offset: 0 Hz

1.46. LTE Peak to Average Ratio(NTNV)(Subtest:46, Channel:20175, Bandwidth:10, Modulation:QPSK, RB Number: 25, RB Position:LOW)

| Center Frequency(MHz) | PAR Percent (%) | PAR (dB) | Upper Limit (dB) | Verdict |
|-----------------------|-----------------|----------|------------------|---------|
| 1732.5 | 0.1 | 5.76 | 13 | Pass |

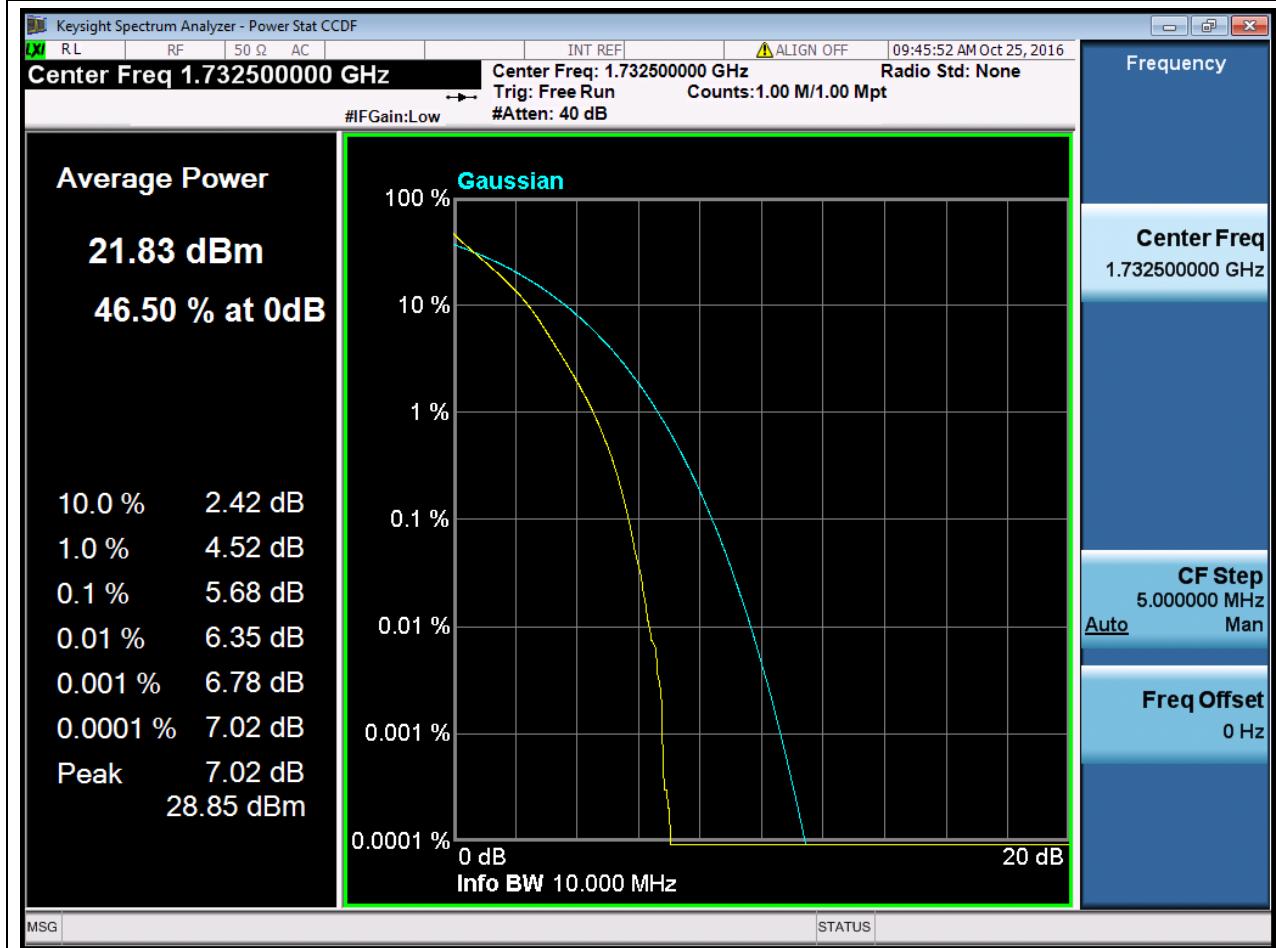


1.47. LTE Peak to Average Ratio(NTNV)(Subtest:47, Channel:20175, Bandwidth:10, Modulation:QPSK, RB Number: 25, RB Position:MID)



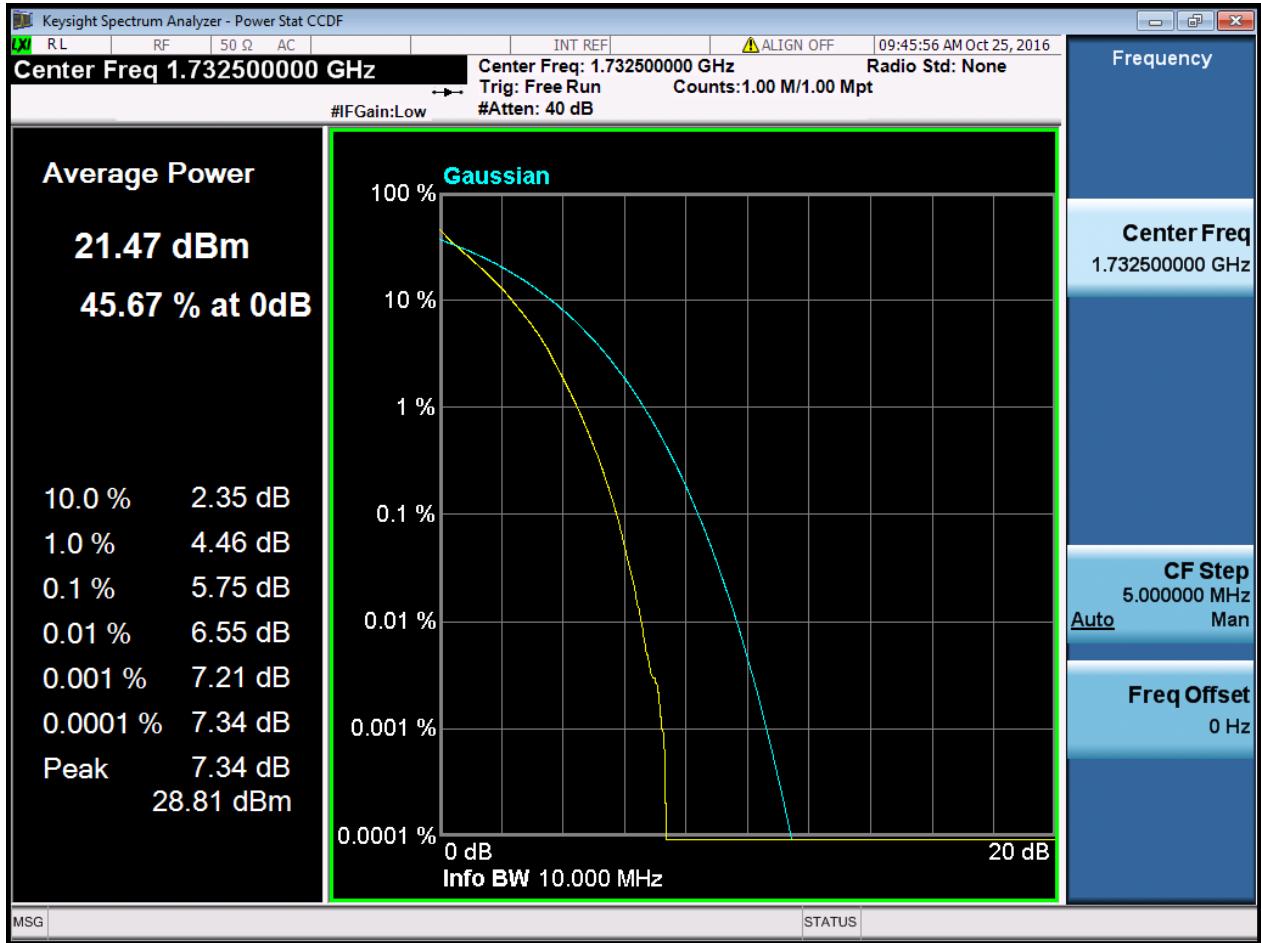
1.48. LTE Peak to Average Ratio(NTNV)(Subtest:48, Channel:20175, Bandwidth:10, Modulation:QPSK, RB Number: 25, RB Position:HIGH)

| Center Frequency(MHz) | PAR Percent (%) | PAR (dB) | Upper Limit (dB) | Verdict |
|-----------------------|-----------------|----------|------------------|---------|
| 1732.5 | 0.1 | 5.68 | 13 | Pass |



1.49. LTE Peak to Average Ratio(NTNV)(Subtest:49, Channel:20175, Bandwidth:10, Modulation:QPSK, RB Number: 50, RB Position:LOW)

| Center Frequency(MHz) | PAR Percent (%) | PAR (dB) | Upper Limit (dB) | Verdict |
|-----------------------|-----------------|----------|------------------|---------|
| 1732.5 | 0.1 | 5.75 | 13 | Pass |



Average Power
21.47 dBm
45.67 % at 0dB

| | |
|----------|-----------|
| 10.0 % | 2.35 dB |
| 1.0 % | 4.46 dB |
| 0.1 % | 5.75 dB |
| 0.01 % | 6.55 dB |
| 0.001 % | 7.21 dB |
| 0.0001 % | 7.34 dB |
| Peak | 7.34 dB |
| | 28.81 dBm |

Gaussian

100 %
 10 %
 1 %
 0.1 %
 0.01 %
 0.001 %
 0.0001 %

0 dB 20 dB

Info BW 10.000 MHz

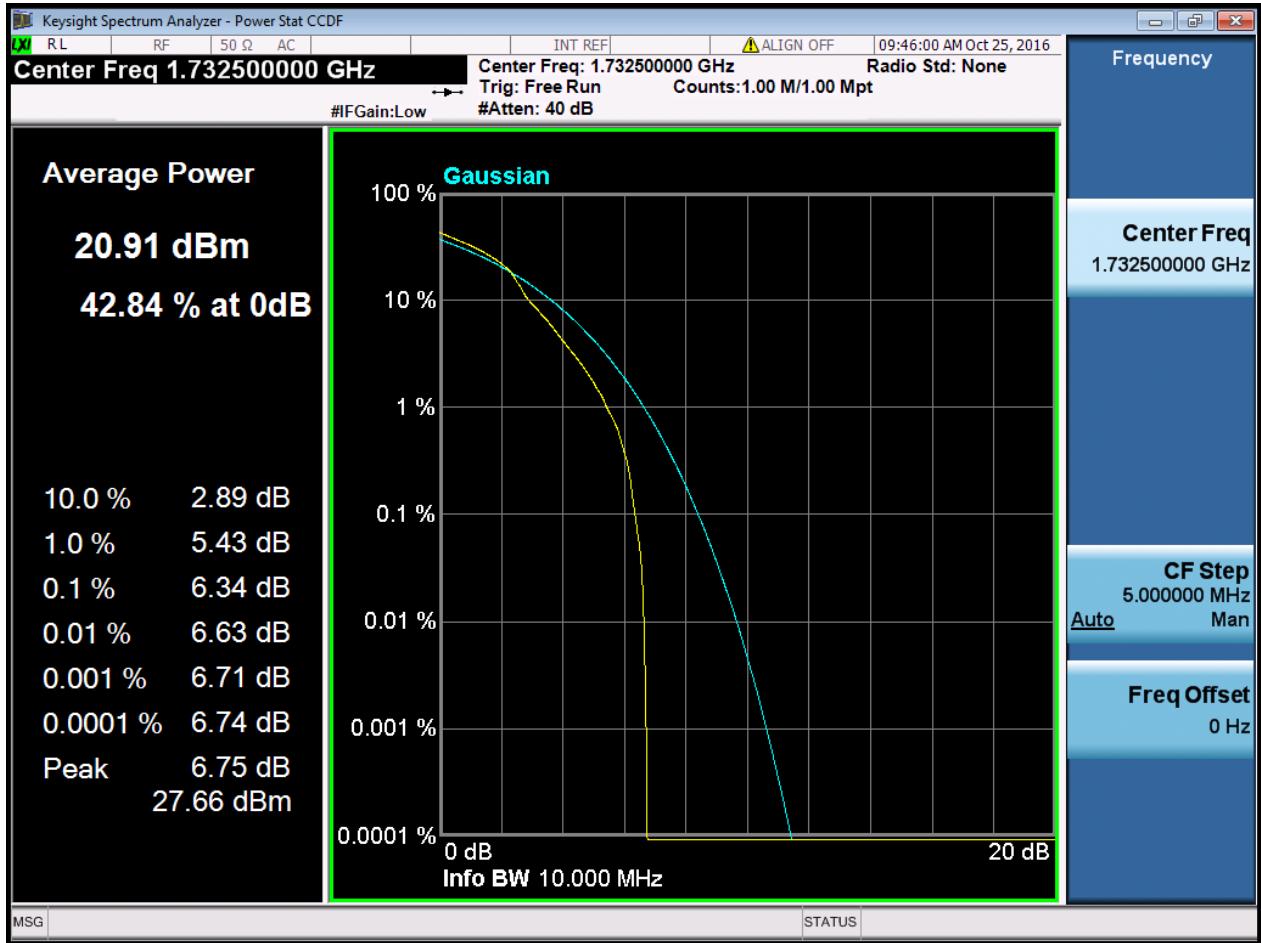
Frequency
Center Freq
 1.732500000 GHz

CF Step
 5.000000 MHz
 Auto

Freq Offset
 0 Hz

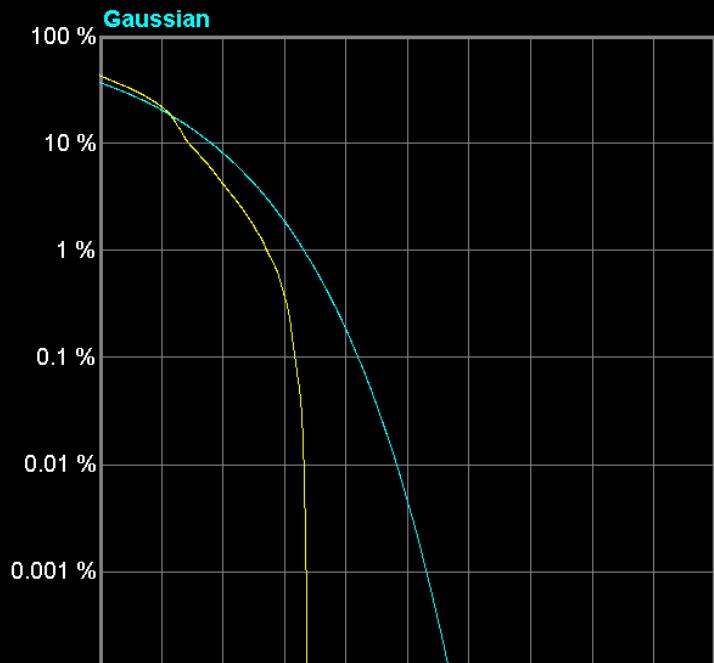
1.50. LTE Peak to Average Ratio(NTNV)(Subtest:50, Channel:20175, Bandwidth:10, Modulation:16QAM, RB Number: 1, RB Position:LOW)

| Center Frequency(MHz) | PAR Percent (%) | PAR (dB) | Upper Limit (dB) | Verdict |
|-----------------------|-----------------|----------|------------------|---------|
| 1732.5 | 0.1 | 6.34 | 13 | Pass |



| | |
|---------------|-----------------------|
| Average Power | 20.91 dBm |
| | 42.84 % at 0dB |
| 10.0 % | 2.89 dB |
| 1.0 % | 5.43 dB |
| 0.1 % | 6.34 dB |
| 0.01 % | 6.63 dB |
| 0.001 % | 6.71 dB |
| 0.0001 % | 6.74 dB |
| Peak | 6.75 dB |
| | 27.66 dBm |

Gaussian



0 dB 20 dB

Info BW 10.000 MHz

Frequency

Center Freq
1.732500000 GHz

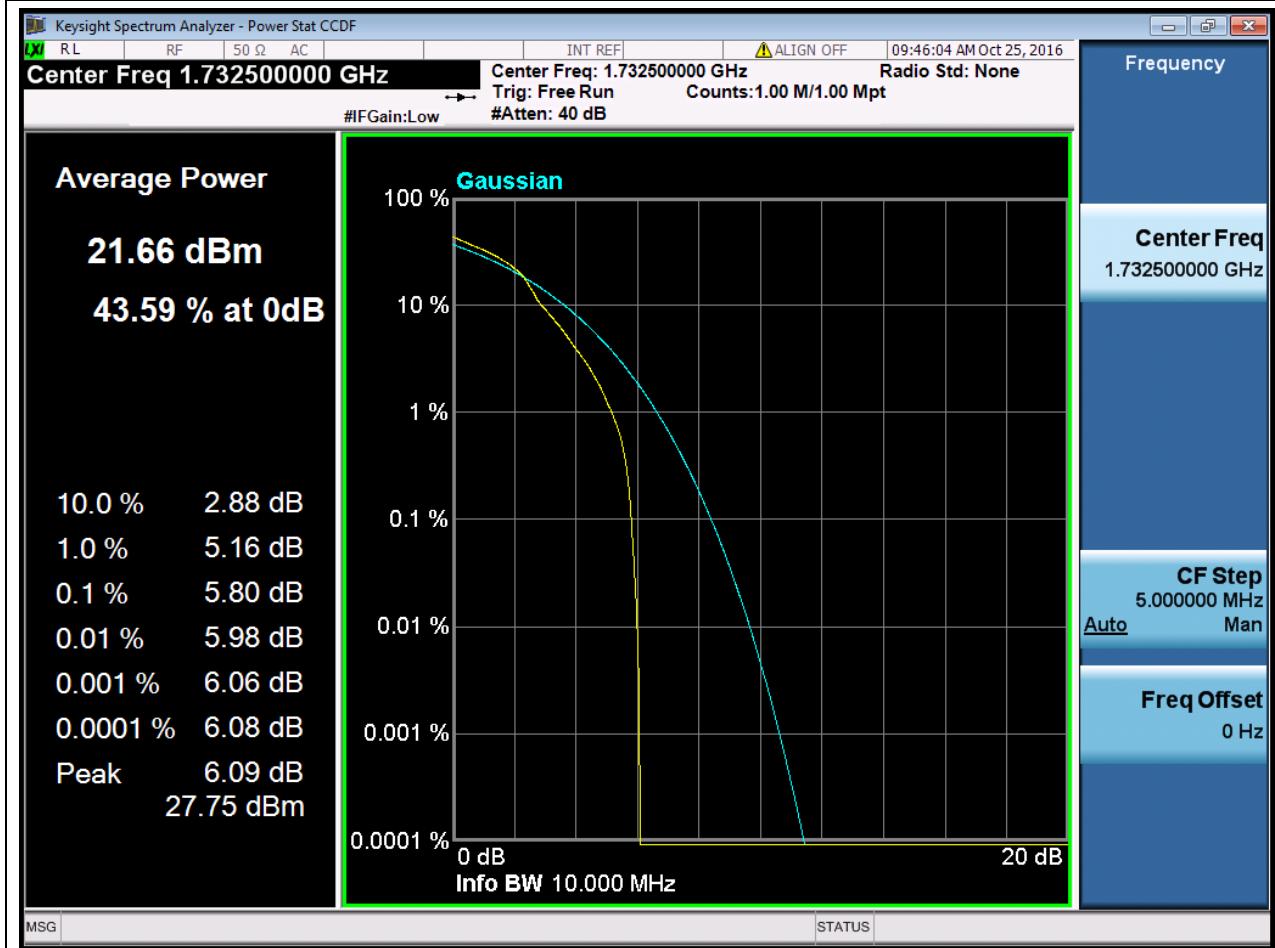
CF Step
5.000000 MHz

Auto Man

Freq Offset
0 Hz

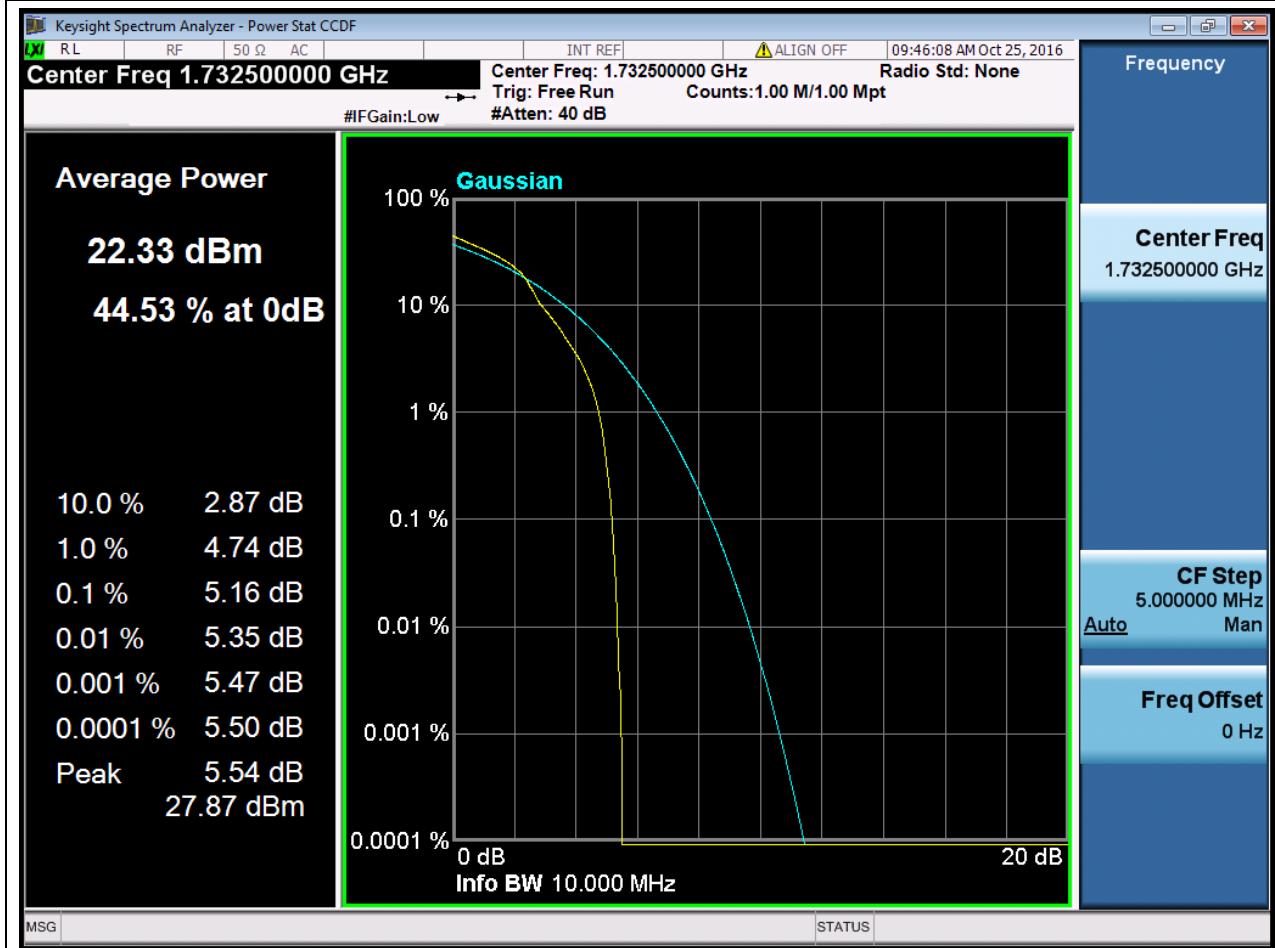
1.51. LTE Peak to Average Ratio(NTNV)(Subtest:51, Channel:20175, Bandwidth:10, Modulation:16QAM, RB Number: 1, RB Position:MID)

| Center Frequency(MHz) | PAR Percent (%) | PAR (dB) | Upper Limit (dB) | Verdict |
|-----------------------|-----------------|----------|------------------|---------|
| 1732.5 | 0.1 | 5.8 | 13 | Pass |



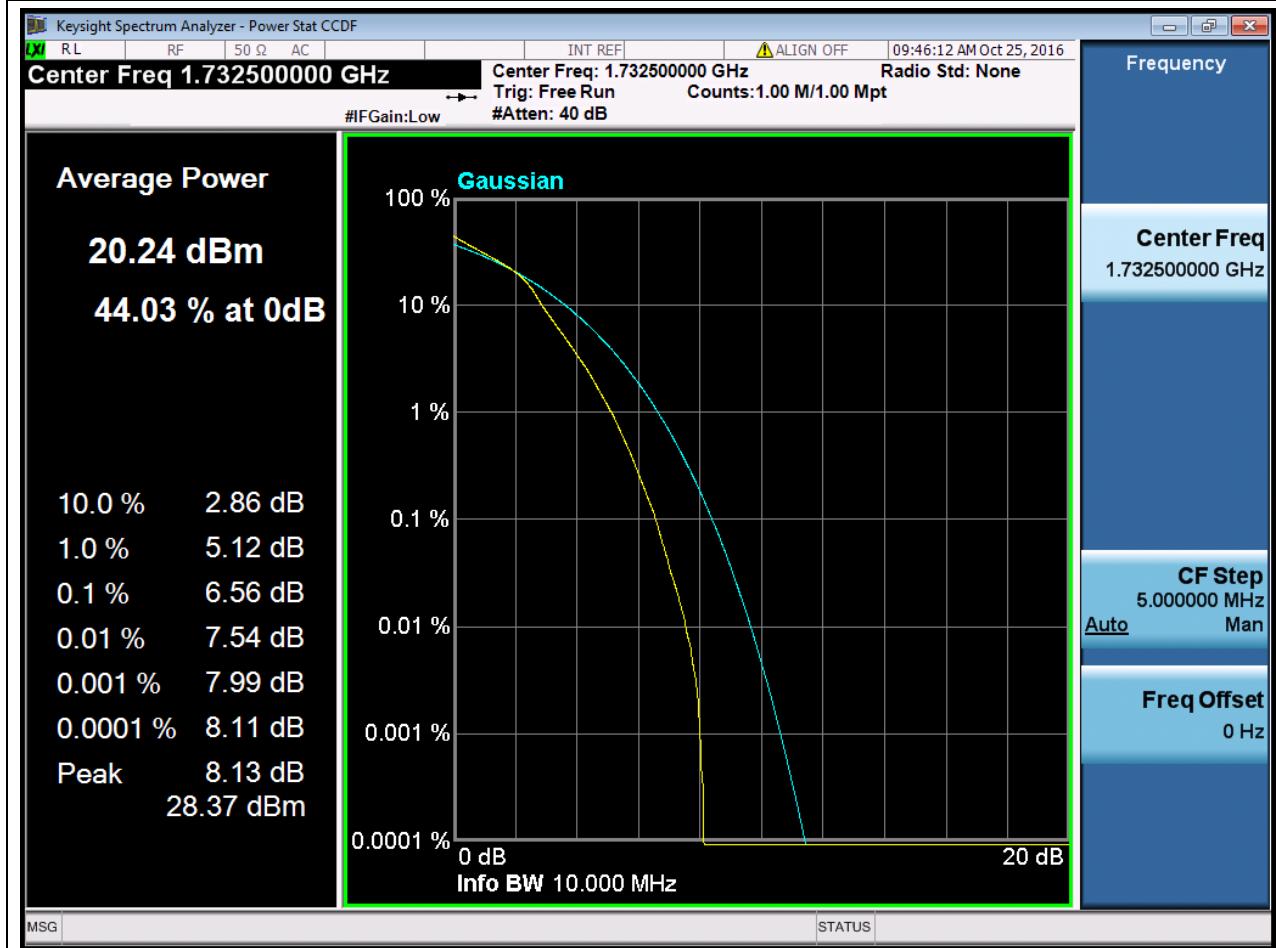
1.52. LTE Peak to Average Ratio(NTNV)(Subtest:52, Channel:20175, Bandwidth:10, Modulation:16QAM, RB Number: 1, RB Position:HIGH)

| Center Frequency(MHz) | PAR Percent (%) | PAR (dB) | Upper Limit (dB) | Verdict |
|-----------------------|-----------------|----------|------------------|---------|
| 1732.5 | 0.1 | 5.16 | 13 | Pass |



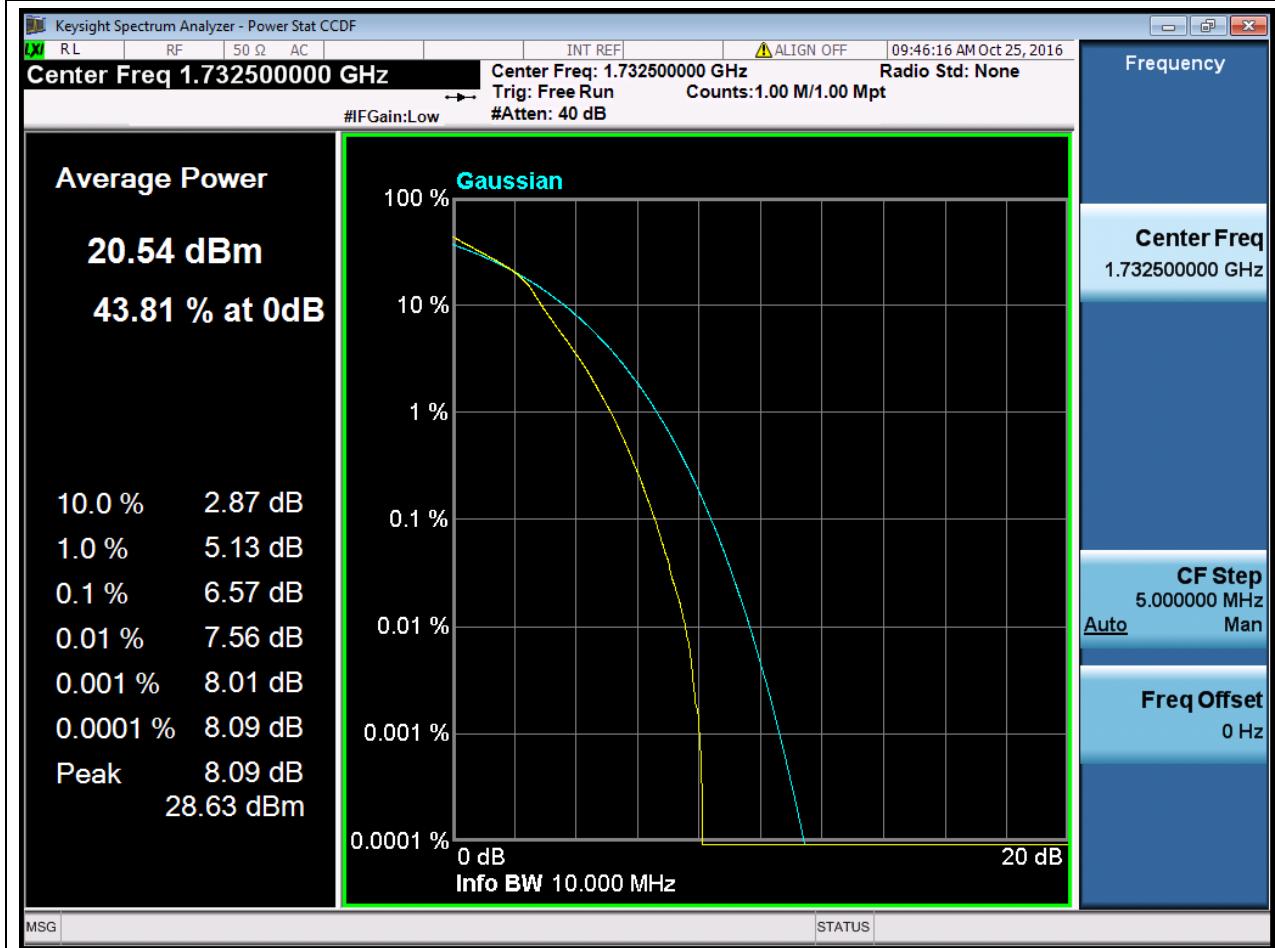
1.53. LTE Peak to Average Ratio(NTNV)(Subtest:53, Channel:20175, Bandwidth:10, Modulation:16QAM, RB Number: 25, RB Position:LOW)

| Center Frequency(MHz) | PAR Percent (%) | PAR (dB) | Upper Limit (dB) | Verdict |
|-----------------------|-----------------|----------|------------------|---------|
| 1732.5 | 0.1 | 6.56 | 13 | Pass |



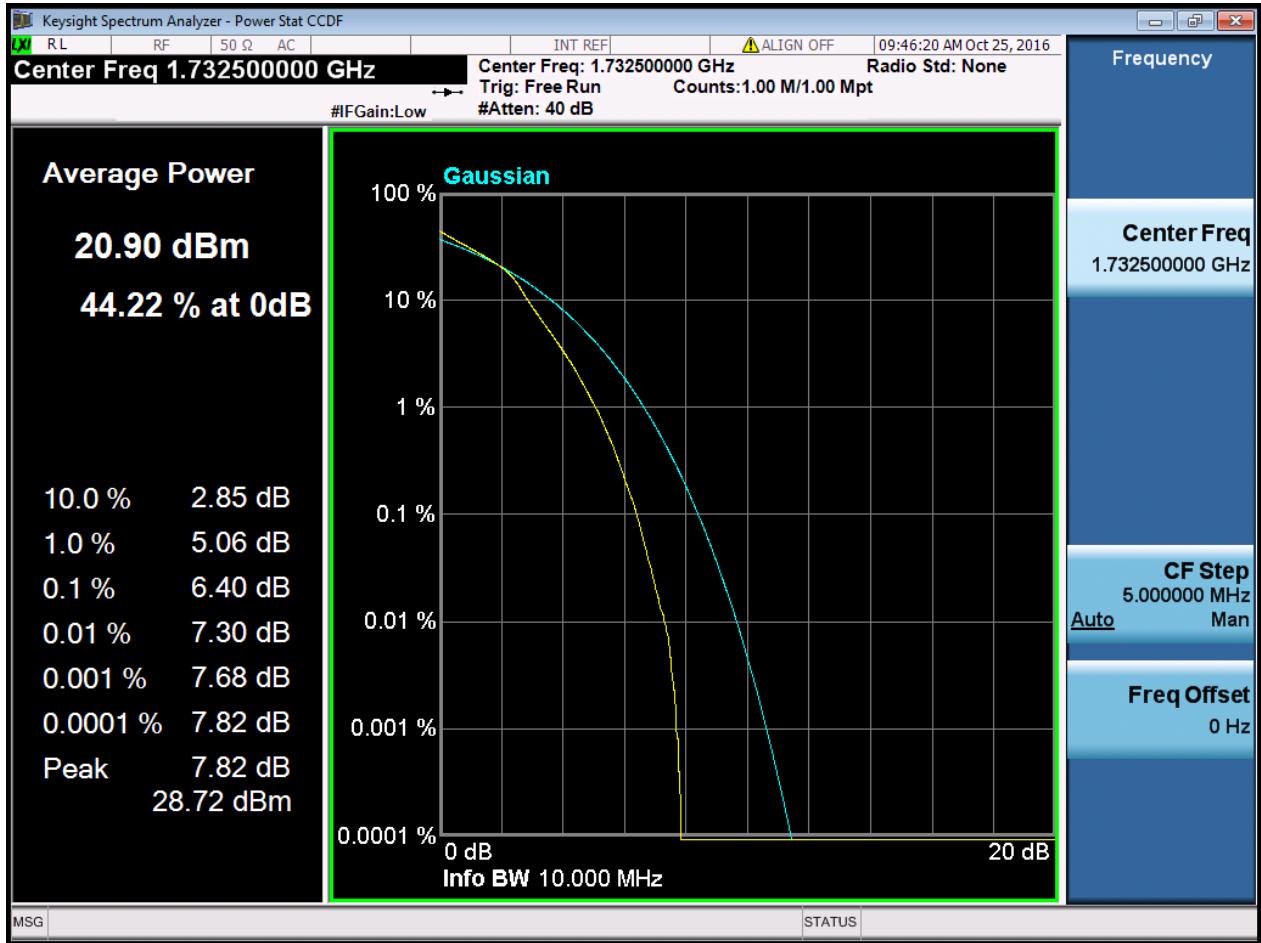
1.54. LTE Peak to Average Ratio(NTNV)(Subtest:54, Channel:20175, Bandwidth:10, Modulation:16QAM, RB Number: 25, RB Position:MID)

| Center Frequency(MHz) | PAR Percent (%) | PAR (dB) | Upper Limit (dB) | Verdict |
|-----------------------|-----------------|----------|------------------|---------|
| 1732.5 | 0.1 | 6.57 | 13 | Pass |



1.55. LTE Peak to Average Ratio(NTNV)(Subtest:55, Channel:20175, Bandwidth:10, Modulation:16QAM, RB Number: 25, RB Position:HIGH)

| Center Frequency(MHz) | PAR Percent (%) | PAR (dB) | Upper Limit (dB) | Verdict |
|-----------------------|-----------------|----------|------------------|---------|
| 1732.5 | 0.1 | 6.4 | 13 | Pass |



Average Power
20.90 dBm
44.22 % at 0dB

| | |
|----------|-----------|
| 10.0 % | 2.85 dB |
| 1.0 % | 5.06 dB |
| 0.1 % | 6.40 dB |
| 0.01 % | 7.30 dB |
| 0.001 % | 7.68 dB |
| 0.0001 % | 7.82 dB |
| Peak | 7.82 dB |
| | 28.72 dBm |

Center Freq 1.732500000 GHz Center Freq: 1.732500000 GHz
 Radio Std: None
 Trig: Free Run Counts: 1.00 M/1.00 Mpt
 #IFGain:Low #Atten: 40 dB

Frequency
 CF Step 5.000000 MHz Man
 Freq Offset 0 Hz

1.56. LTE Peak to Average Ratio(NTNV)(Subtest:56, Channel:20175, Bandwidth:10, Modulation:16QAM, RB Number: 50, RB Position:LOW)

| Center Frequency(MHz) | PAR Percent (%) | PAR (dB) | Upper Limit (dB) | Verdict |
|-----------------------|-----------------|----------|------------------|---------|
| 1732.5 | 0.1 | 6.45 | 13 | Pass |

Keysight Spectrum Analyzer - Power Stat CCDF

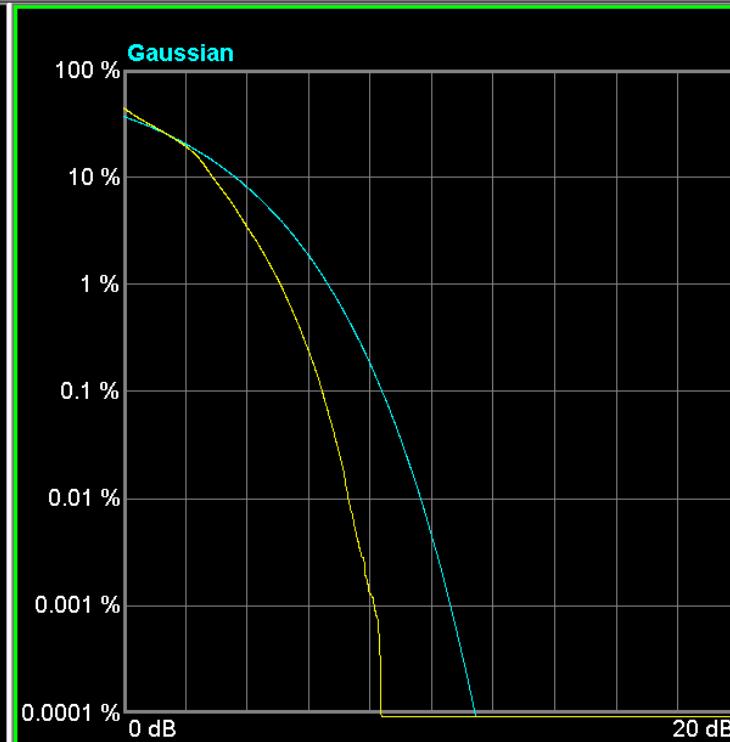
RL RF 50 Ω AC INT REF ALIGN OFF 09:46:24 AM Oct 25, 2016

Center Freq 1.732500000 GHz Center Freq: 1.732500000 GHz Radio Std: None
Trig: Free Run Counts: 1.00 M/1.00 Mpt
#IFGain:Low #Atten: 40 dB

Average Power 20.52 dBm
44.01 % at 0dB

10.0 % 2.89 dB
1.0 % 5.09 dB
0.1 % 6.45 dB
0.01 % 7.29 dB
0.001 % 8.13 dB
0.0001 % 8.36 dB
Peak 8.36 dB
28.88 dBm

Gaussian

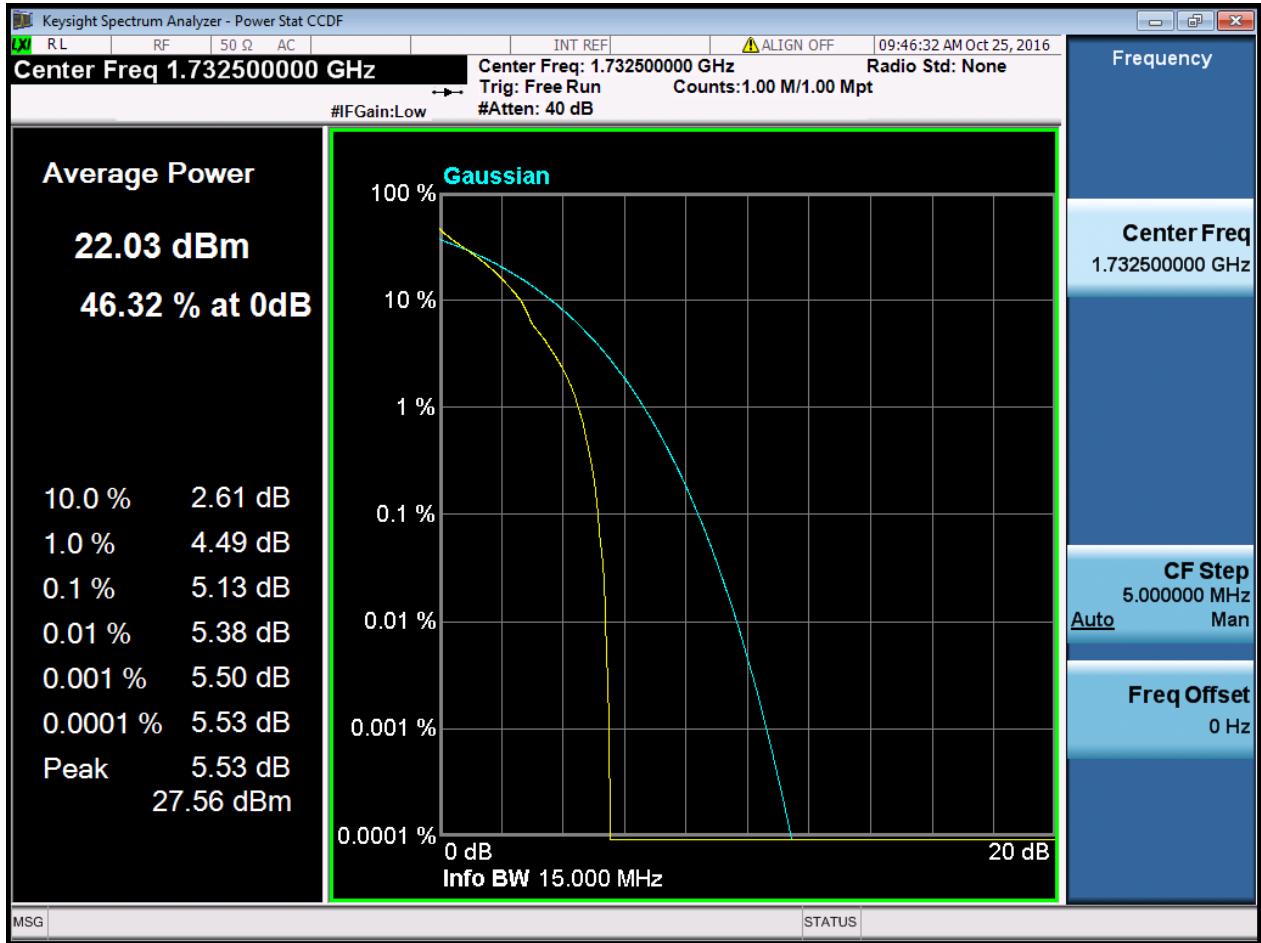


Frequency
Center Freq 1.732500000 GHz
CF Step 5.000000 MHz
Auto Man
Freq Offset 0 Hz

MSG STATUS

1.57. LTE Peak to Average Ratio(NTNV)(Subtest:57, Channel:20175, Bandwidth:15, Modulation:QPSK, RB Number: 1, RB Position:LOW)

| Center Frequency(MHz) | PAR Percent (%) | PAR (dB) | Upper Limit (dB) | Verdict |
|-----------------------|-----------------|----------|------------------|---------|
| 1732.5 | 0.1 | 5.13 | 13 | Pass |

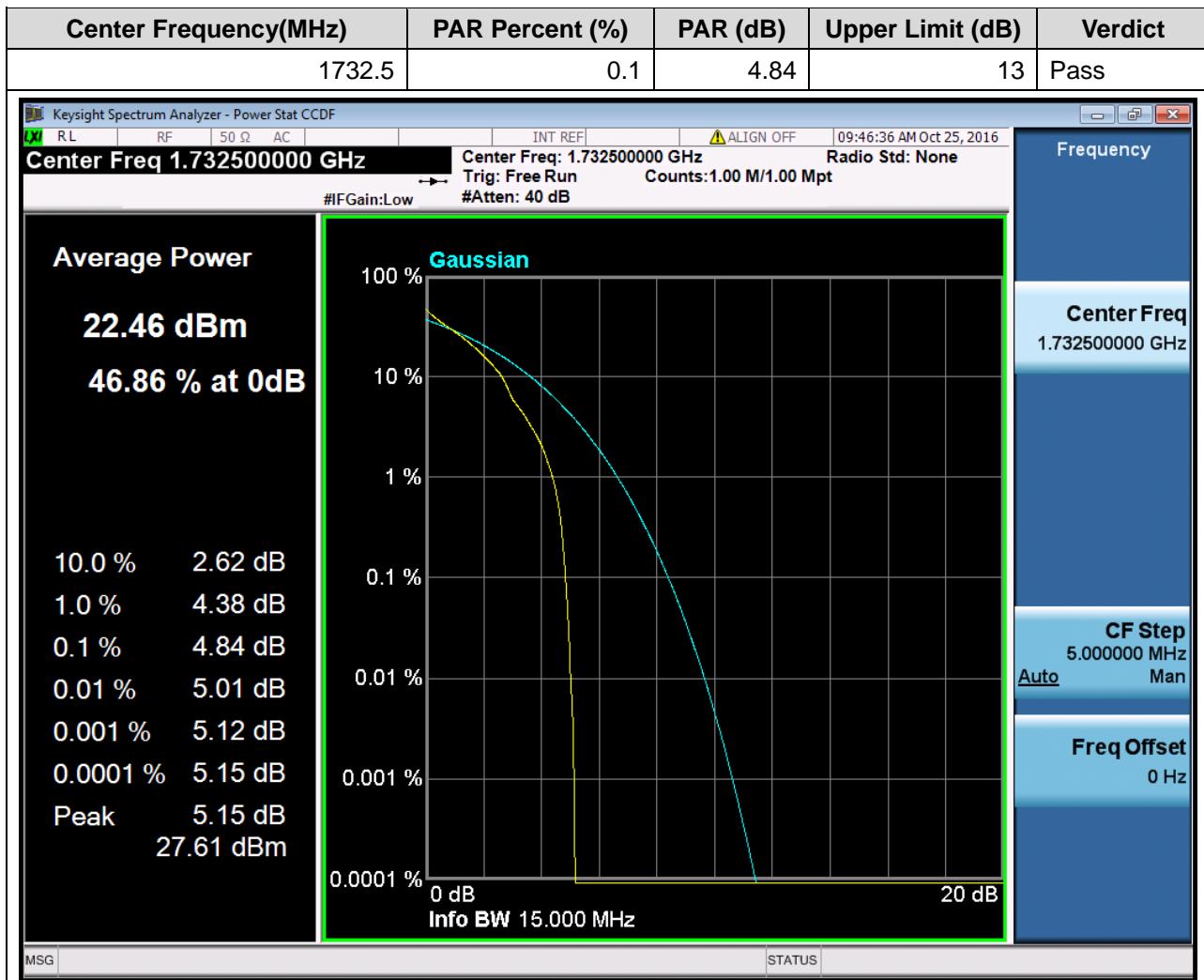


Average Power
22.03 dBm
46.32 % at 0dB

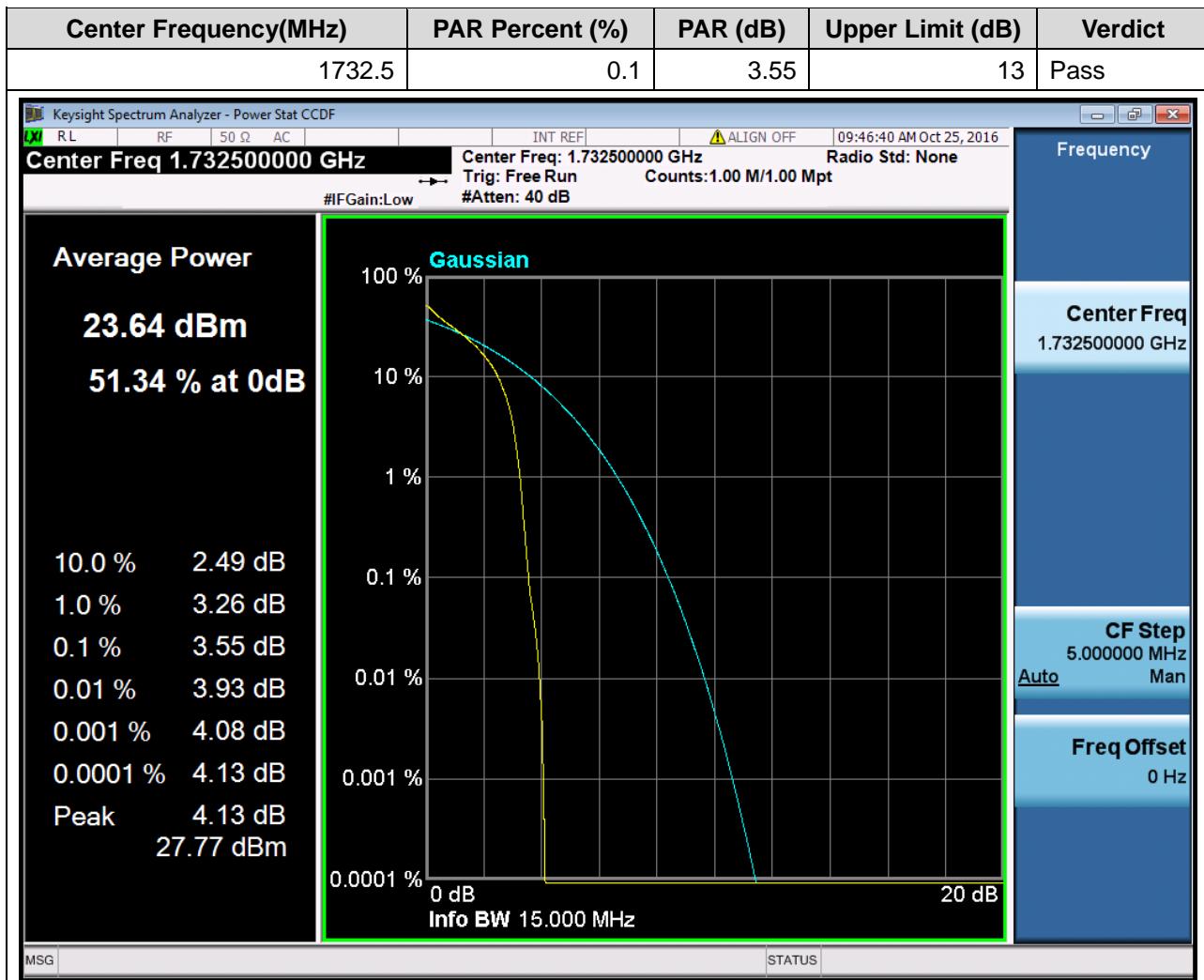
| | |
|----------|-----------|
| 10.0 % | 2.61 dB |
| 1.0 % | 4.49 dB |
| 0.1 % | 5.13 dB |
| 0.01 % | 5.38 dB |
| 0.001 % | 5.50 dB |
| 0.0001 % | 5.53 dB |
| Peak | 5.53 dB |
| | 27.56 dBm |

Info BW 15.000 MHz

1.58. LTE Peak to Average Ratio(NTNV)(Subtest:58, Channel:20175, Bandwidth:15, Modulation:QPSK, RB Number: 1, RB Position:MID)

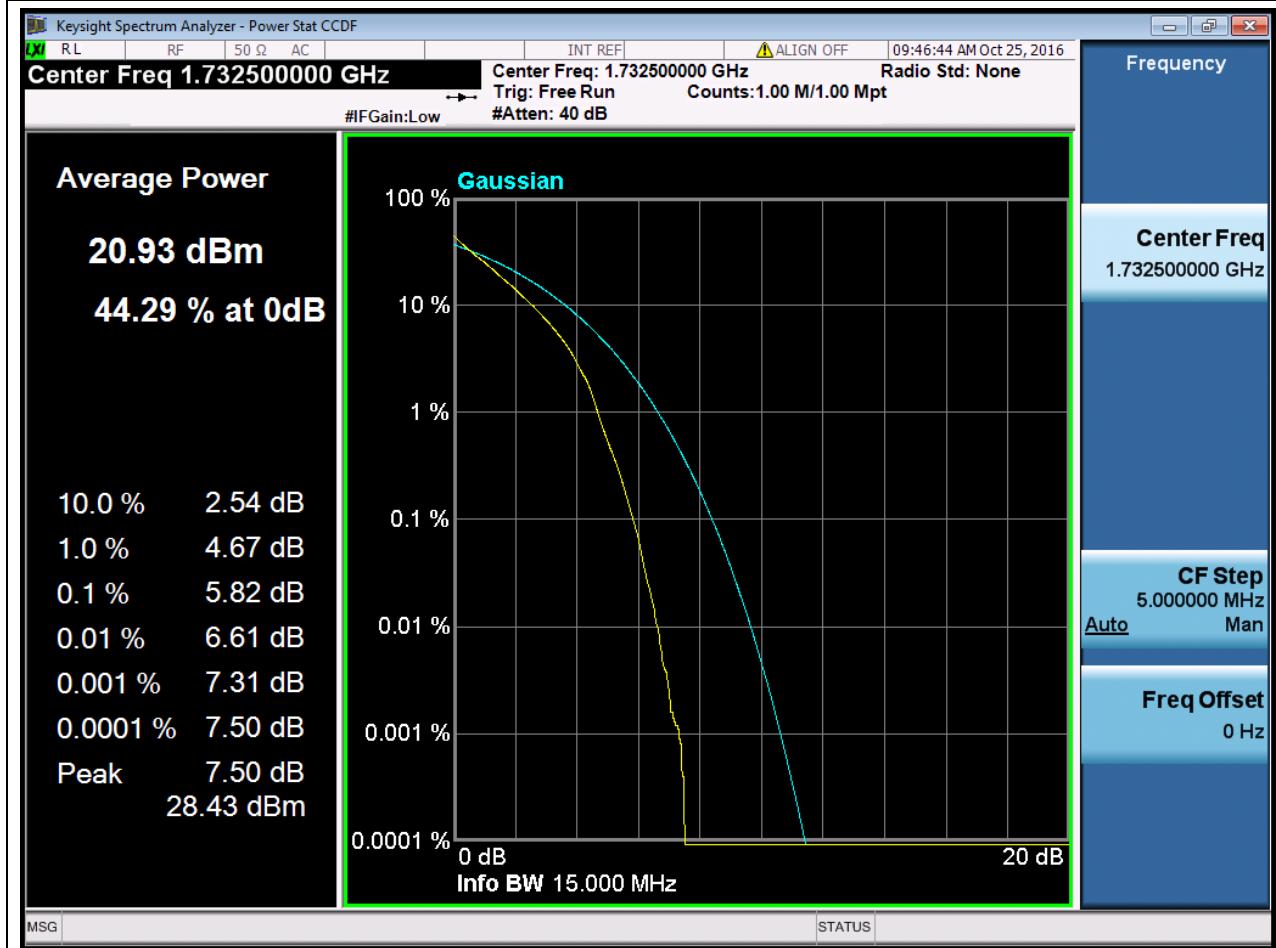


1.59. LTE Peak to Average Ratio(NTNV)(Subtest:59, Channel:20175, Bandwidth:15, Modulation:QPSK, RB Number: 1, RB Position:HIGH)



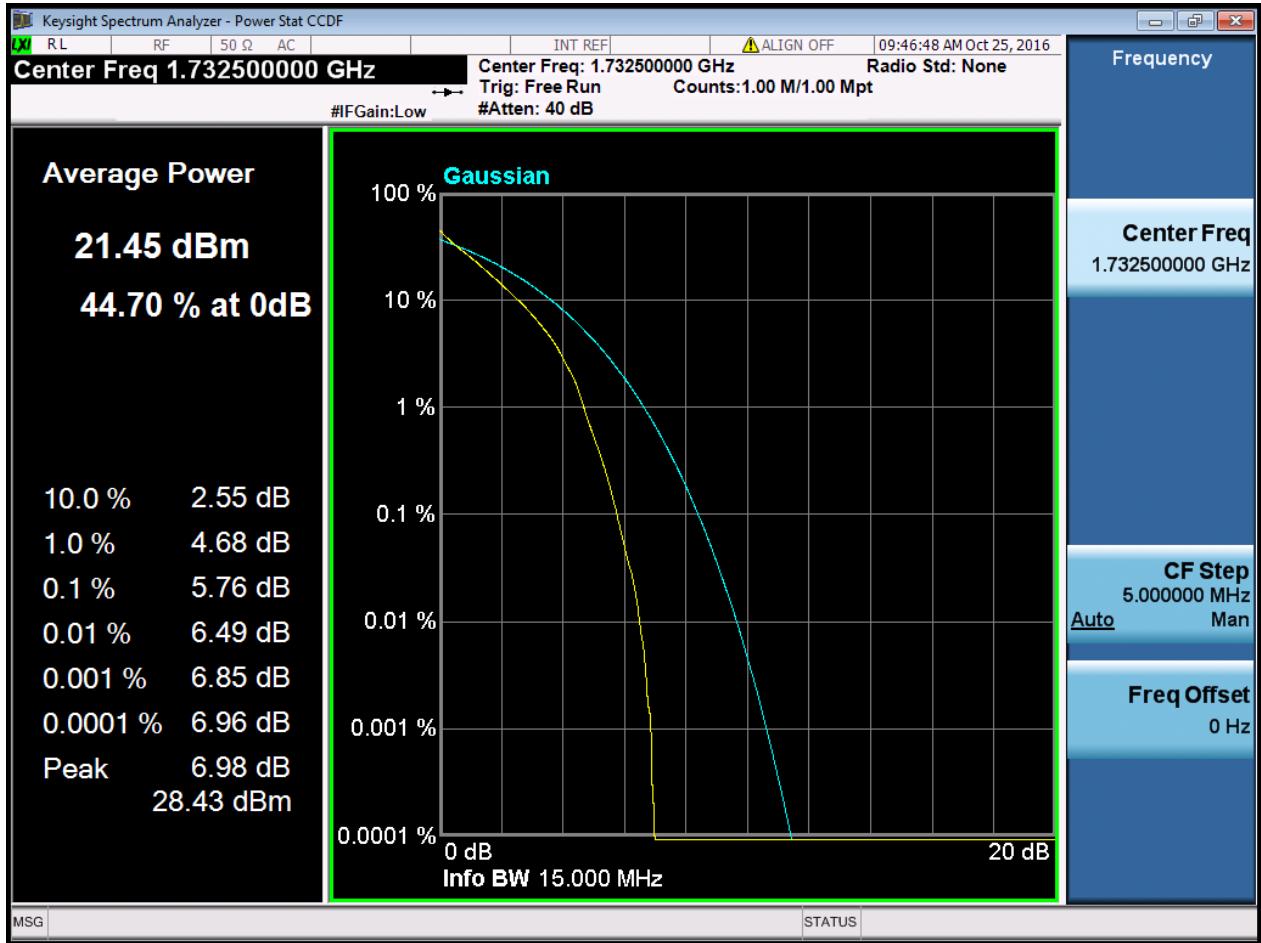
1.60. LTE Peak to Average Ratio(NTNV)(Subtest:60, Channel:20175, Bandwidth:15, Modulation:QPSK, RB Number: 36, RB Position:LOW)

| Center Frequency(MHz) | PAR Percent (%) | PAR (dB) | Upper Limit (dB) | Verdict |
|-----------------------|-----------------|----------|------------------|---------|
| 1732.5 | 0.1 | 5.82 | 13 | Pass |



1.61. LTE Peak to Average Ratio(NTNV)(Subtest:61, Channel:20175, Bandwidth:15, Modulation:QPSK, RB Number: 36, RB Position:MID)

| Center Frequency(MHz) | PAR Percent (%) | PAR (dB) | Upper Limit (dB) | Verdict |
|-----------------------|-----------------|----------|------------------|---------|
| 1732.5 | 0.1 | 5.76 | 13 | Pass |

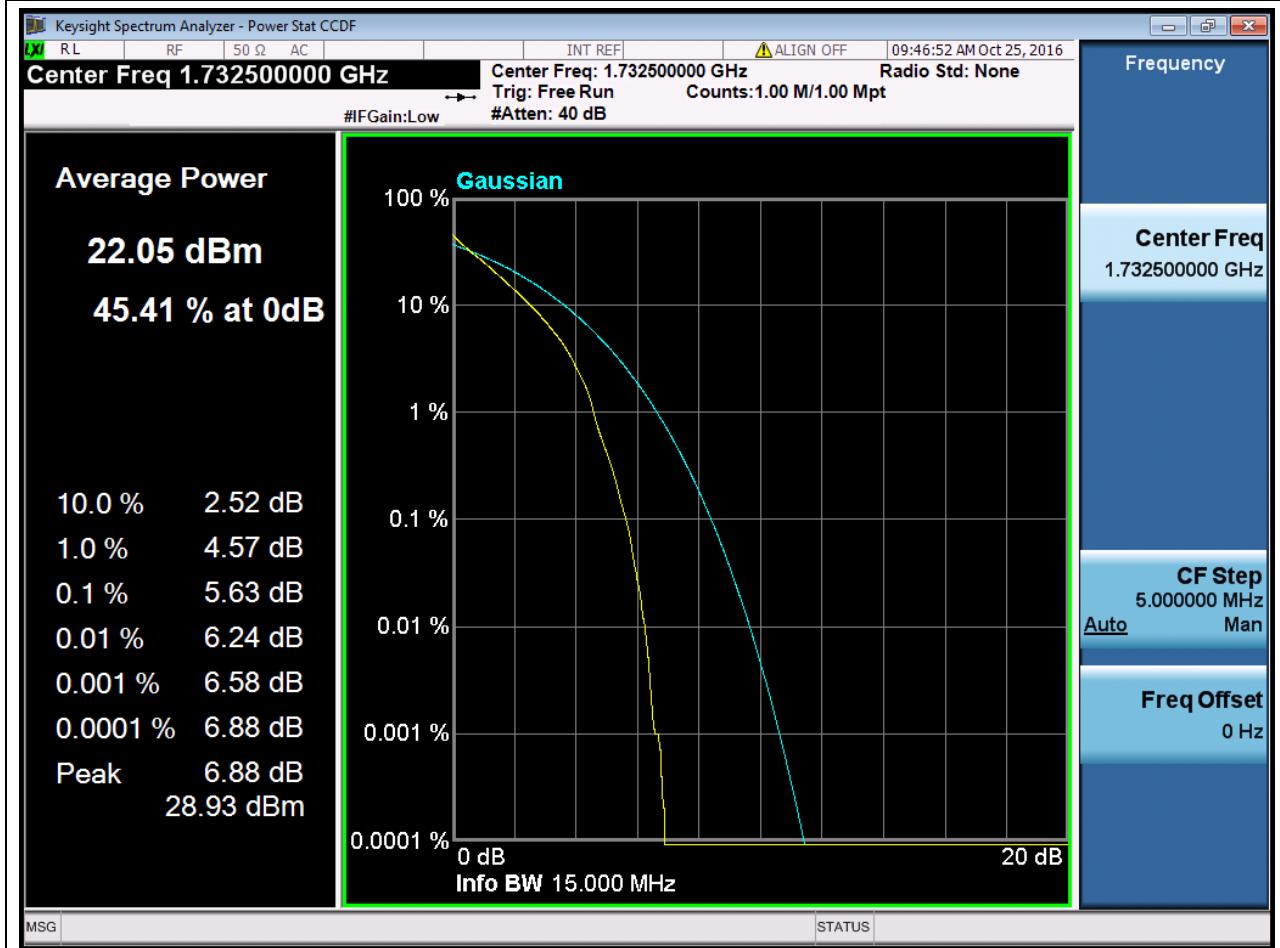


The screenshot shows the Keysight Spectrum Analyzer interface for a Power Stat CCDF analysis. The center frequency is set to 1.732500000 GHz. The plot displays a Gaussian distribution of power. The x-axis represents power in dB, ranging from 0 dB to 20 dB. The y-axis represents percentage, ranging from 0.0001 % to 100 % on a logarithmic scale. The measured PAR is 0.1% at 0 dB. The plot also indicates an Info BW of 15.000 MHz.

| Average Power | 21.45 dBm |
|---------------|----------------|
| | 44.70 % at 0dB |
| 10.0 % | 2.55 dB |
| 1.0 % | 4.68 dB |
| 0.1 % | 5.76 dB |
| 0.01 % | 6.49 dB |
| 0.001 % | 6.85 dB |
| 0.0001 % | 6.96 dB |
| Peak | 6.98 dB |
| | 28.43 dBm |

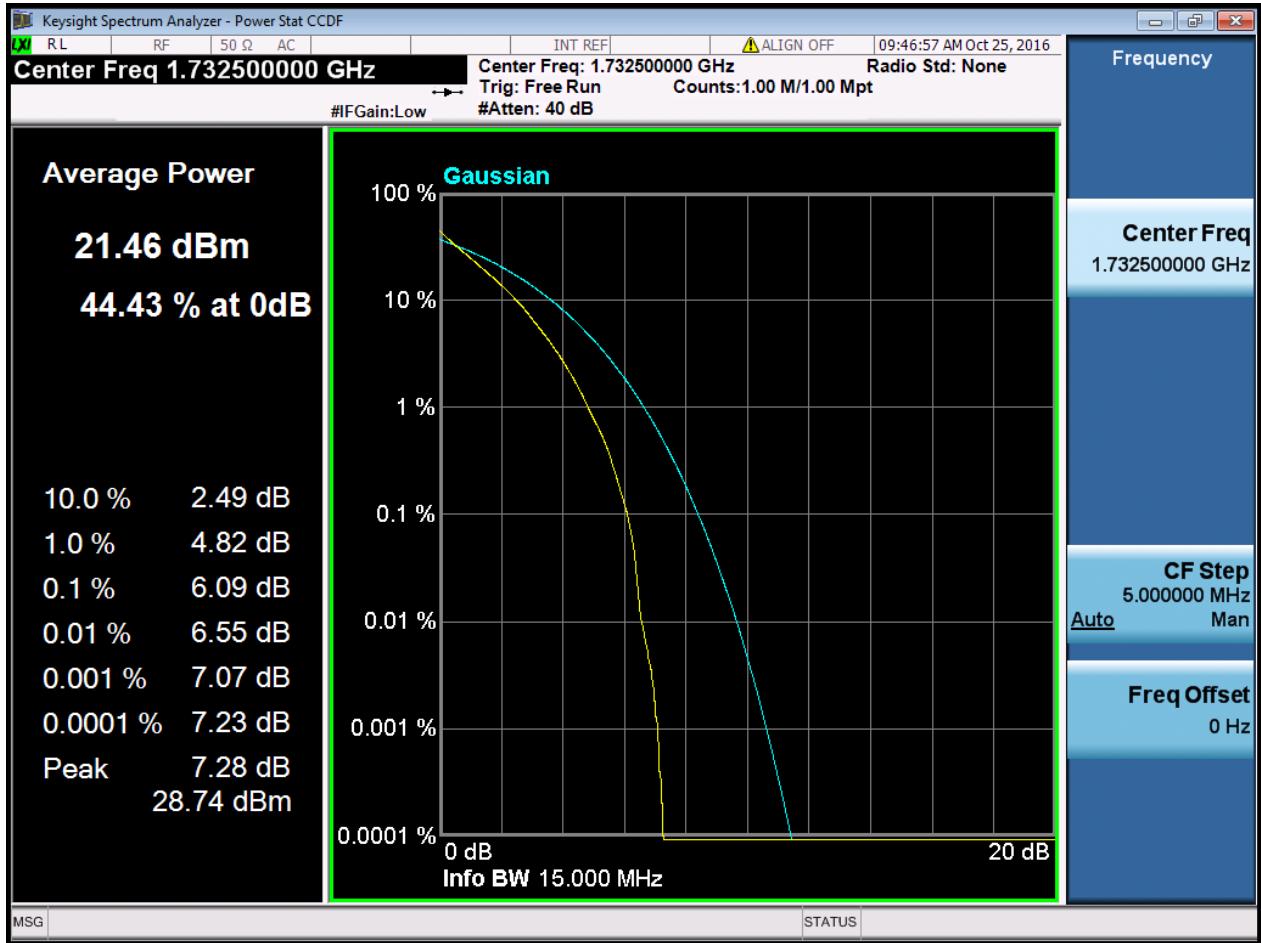
1.62. LTE Peak to Average Ratio(NTNV)(Subtest:62, Channel:20175, Bandwidth:15, Modulation:QPSK, RB Number: 36, RB Position:HIGH)

| Center Frequency(MHz) | PAR Percent (%) | PAR (dB) | Upper Limit (dB) | Verdict |
|-----------------------|-----------------|----------|------------------|---------|
| 1732.5 | 0.1 | 5.63 | 13 | Pass |



1.63. LTE Peak to Average Ratio(NTNV)(Subtest:63, Channel:20175, Bandwidth:15, Modulation:QPSK, RB Number: 75, RB Position:LOW)

| Center Frequency(MHz) | PAR Percent (%) | PAR (dB) | Upper Limit (dB) | Verdict |
|-----------------------|-----------------|----------|------------------|---------|
| 1732.5 | 0.1 | 6.09 | 13 | Pass |



Average Power
21.46 dBm
44.43 % at 0dB

| | |
|----------|-----------|
| 10.0 % | 2.49 dB |
| 1.0 % | 4.82 dB |
| 0.1 % | 6.09 dB |
| 0.01 % | 6.55 dB |
| 0.001 % | 7.07 dB |
| 0.0001 % | 7.23 dB |
| Peak | 7.28 dB |
| | 28.74 dBm |

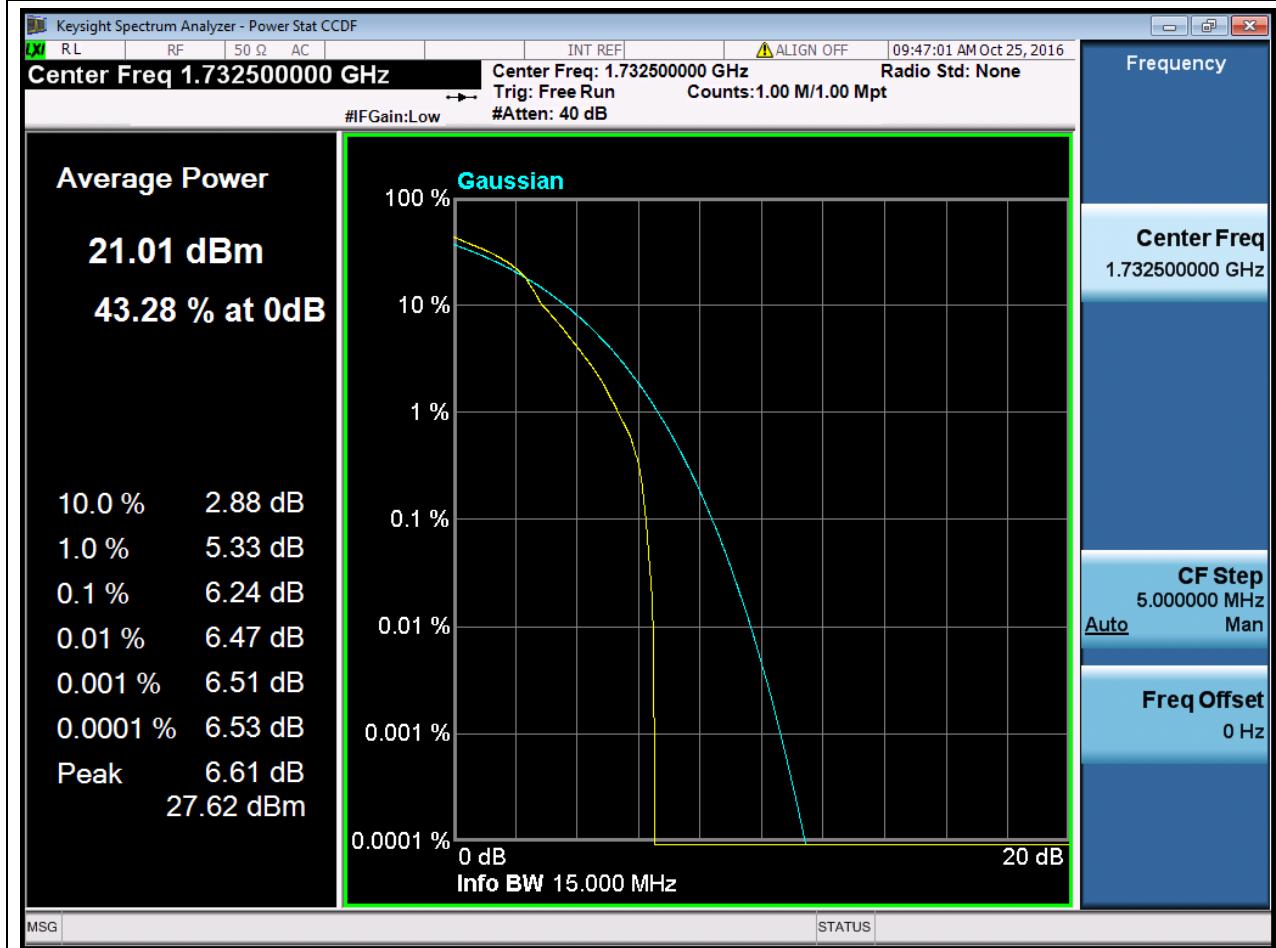
Center Freq
1.732500000 GHz

CF Step
5.000000 MHz

Freq Offset
0 Hz

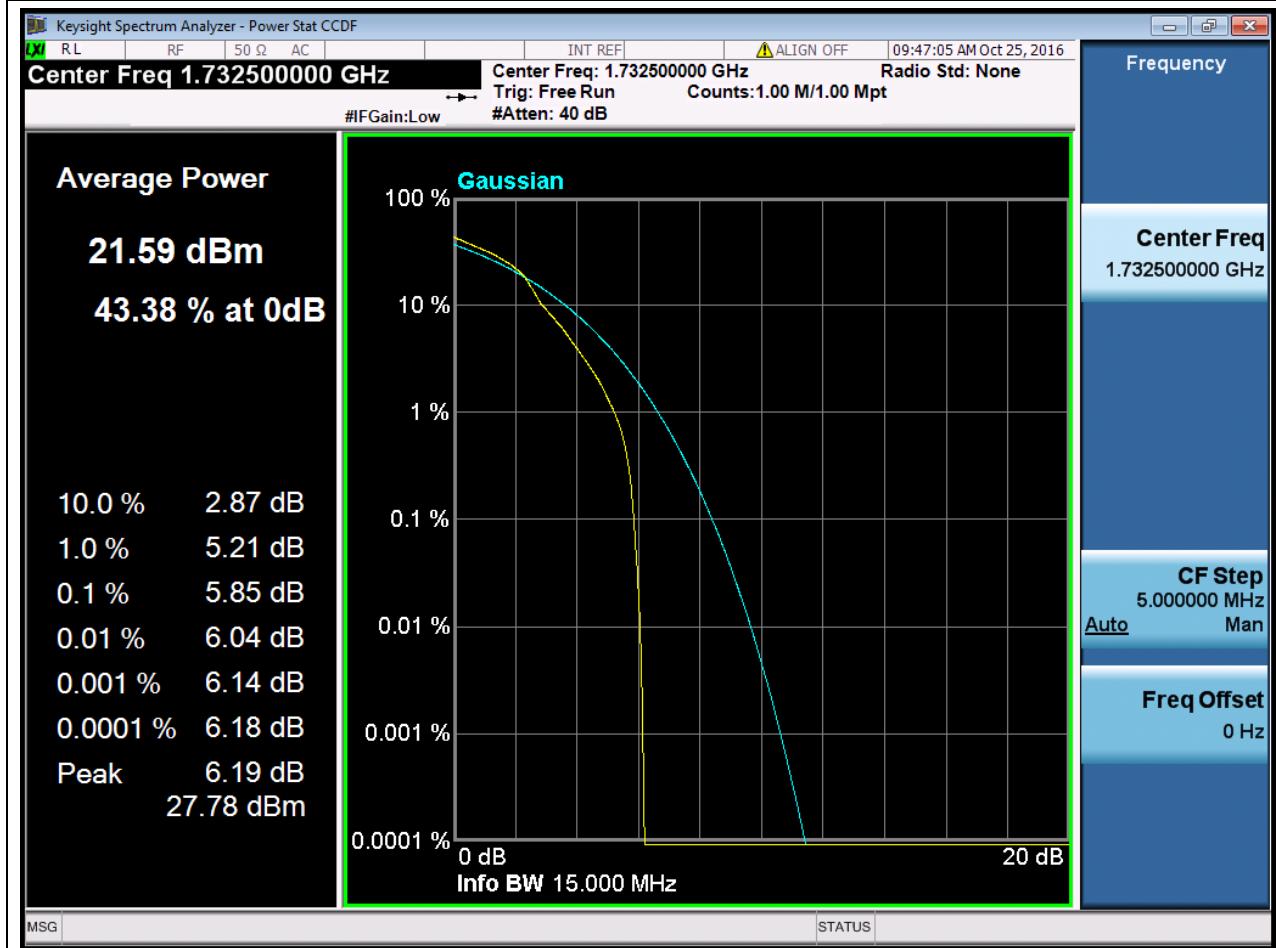
1.64. LTE Peak to Average Ratio(NTNV)(Subtest:64, Channel:20175, Bandwidth:15, Modulation:16QAM, RB Number: 1, RB Position:LOW)

| Center Frequency(MHz) | PAR Percent (%) | PAR (dB) | Upper Limit (dB) | Verdict |
|-----------------------|-----------------|----------|------------------|---------|
| 1732.5 | 0.1 | 6.24 | 13 | Pass |



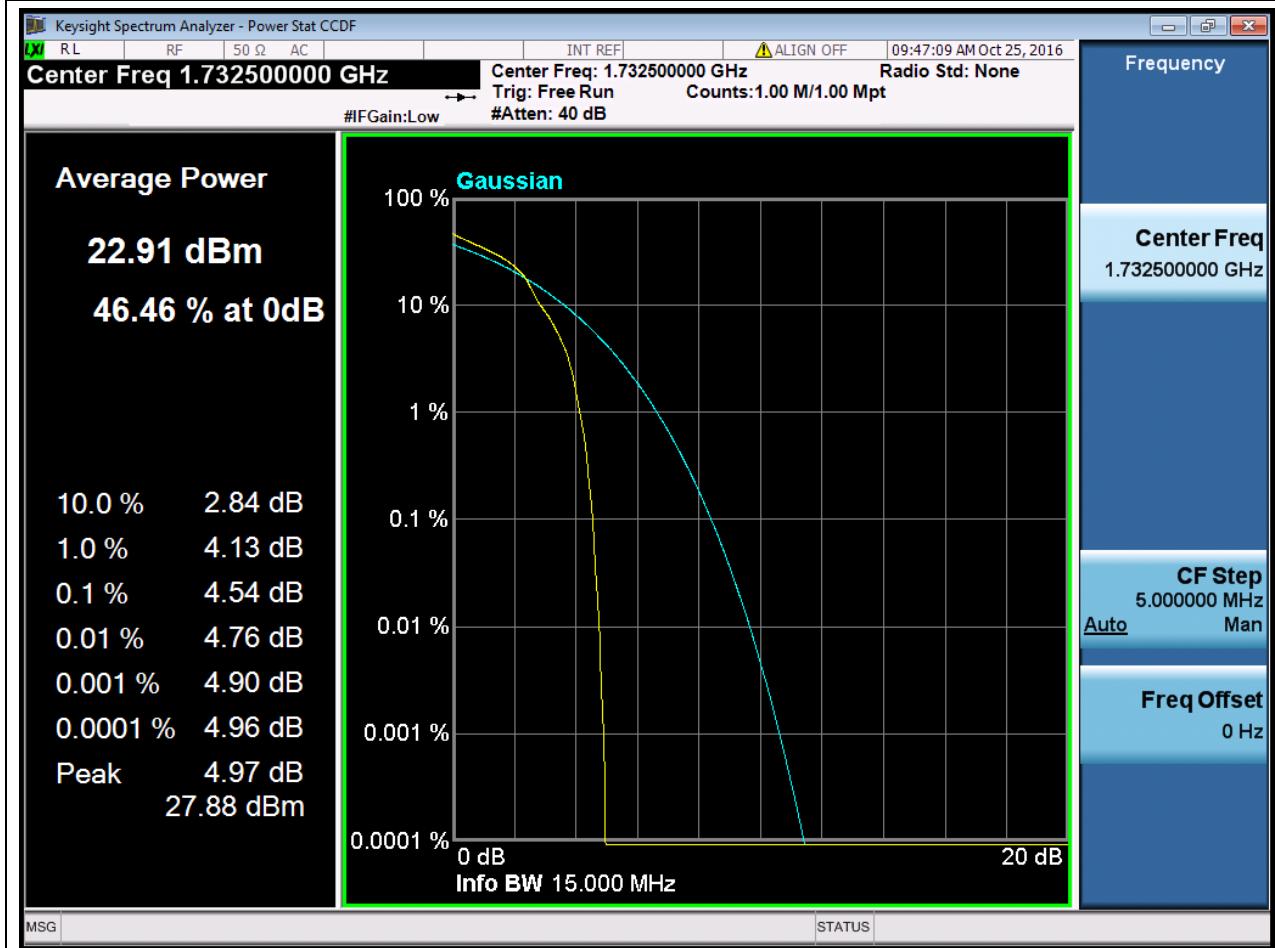
1.65. LTE Peak to Average Ratio(NTNV)(Subtest:65, Channel:20175, Bandwidth:15, Modulation:16QAM, RB Number: 1, RB Position:MID)

| Center Frequency(MHz) | PAR Percent (%) | PAR (dB) | Upper Limit (dB) | Verdict |
|-----------------------|-----------------|----------|------------------|---------|
| 1732.5 | 0.1 | 5.85 | 13 | Pass |



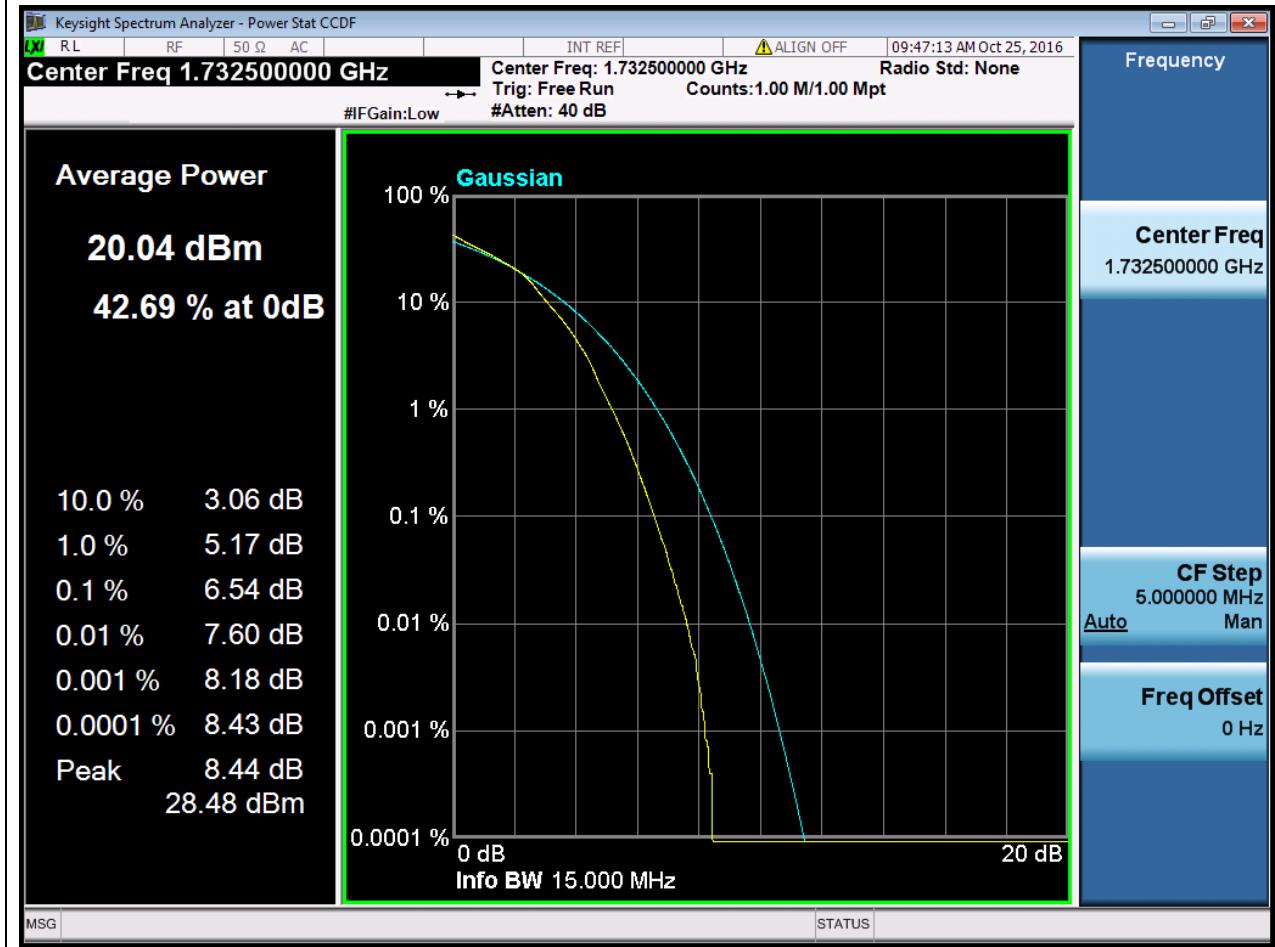
1.66. LTE Peak to Average Ratio(NTNV)(Subtest:66, Channel:20175, Bandwidth:15, Modulation:16QAM, RB Number: 1, RB Position:HIGH)

| Center Frequency(MHz) | PAR Percent (%) | PAR (dB) | Upper Limit (dB) | Verdict |
|-----------------------|-----------------|----------|------------------|---------|
| 1732.5 | 0.1 | 4.54 | 13 | Pass |

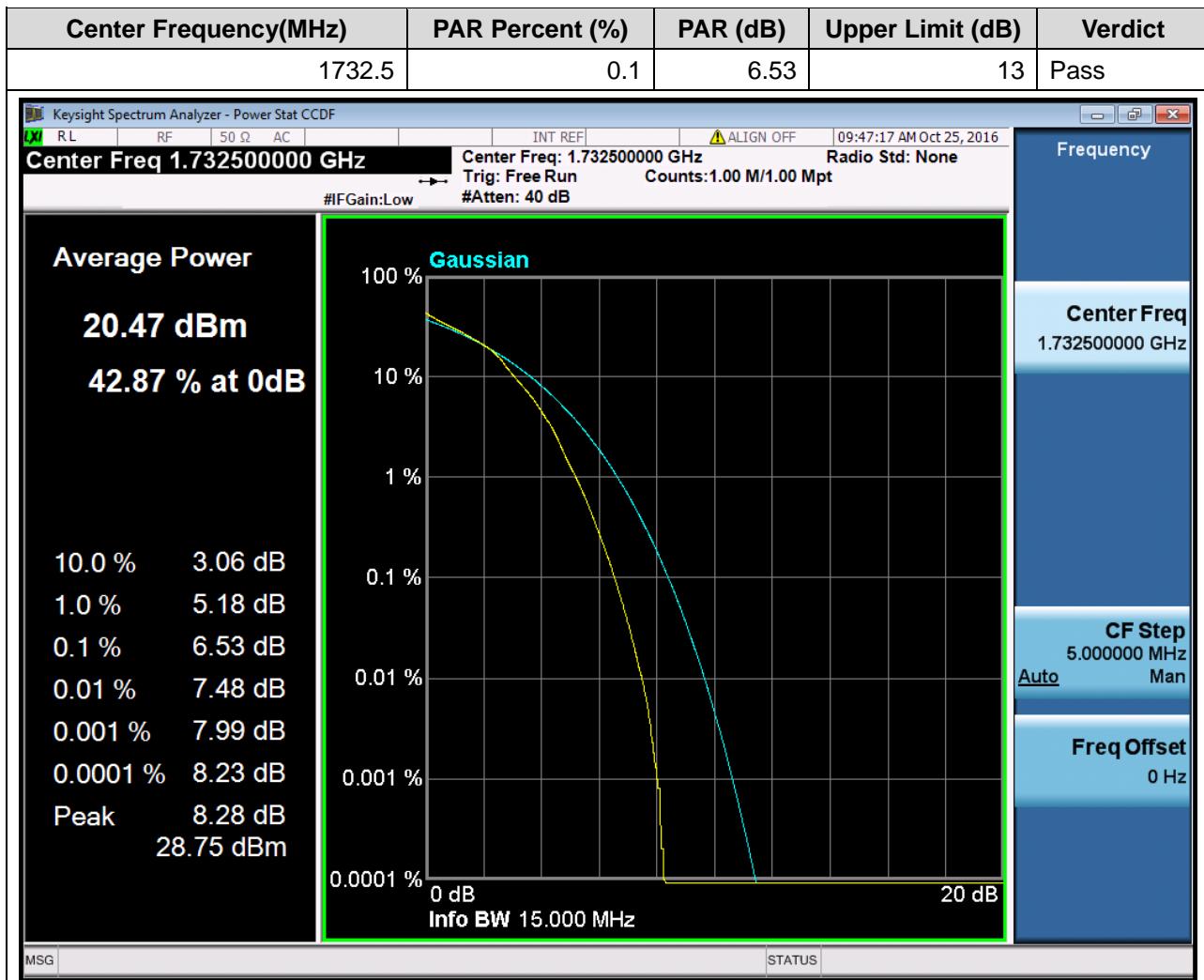


1.67. LTE Peak to Average Ratio(NTNV)(Subtest:67, Channel:20175, Bandwidth:15, Modulation:16QAM, RB Number: 36, RB Position:LOW)

| Center Frequency(MHz) | PAR Percent (%) | PAR (dB) | Upper Limit (dB) | Verdict |
|-----------------------|-----------------|----------|------------------|---------|
| 1732.5 | 0.1 | 6.54 | 13 | Pass |

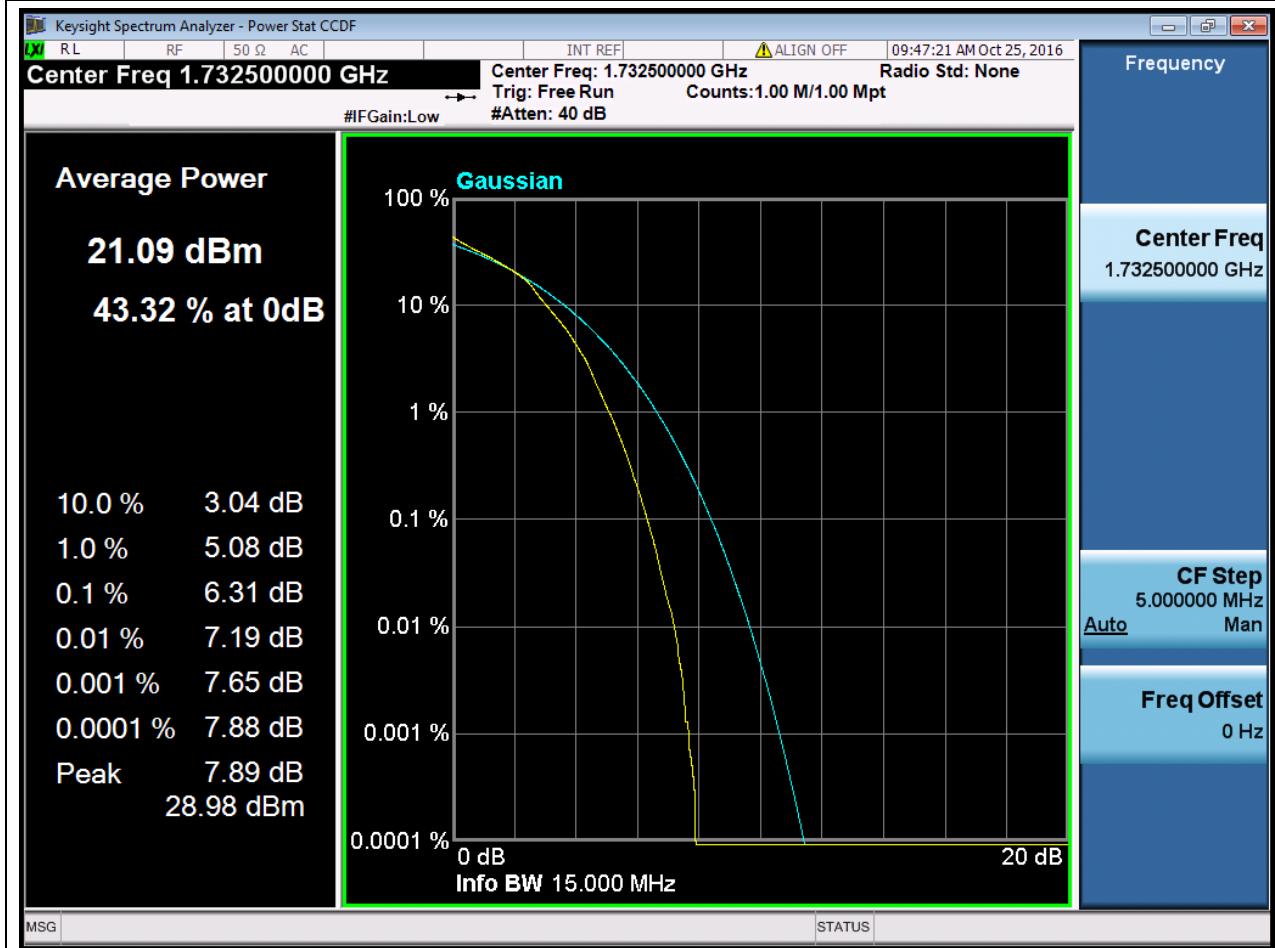


1.68. LTE Peak to Average Ratio(NTNV)(Subtest:68, Channel:20175, Bandwidth:15, Modulation:16QAM, RB Number: 36, RB Position:MID)



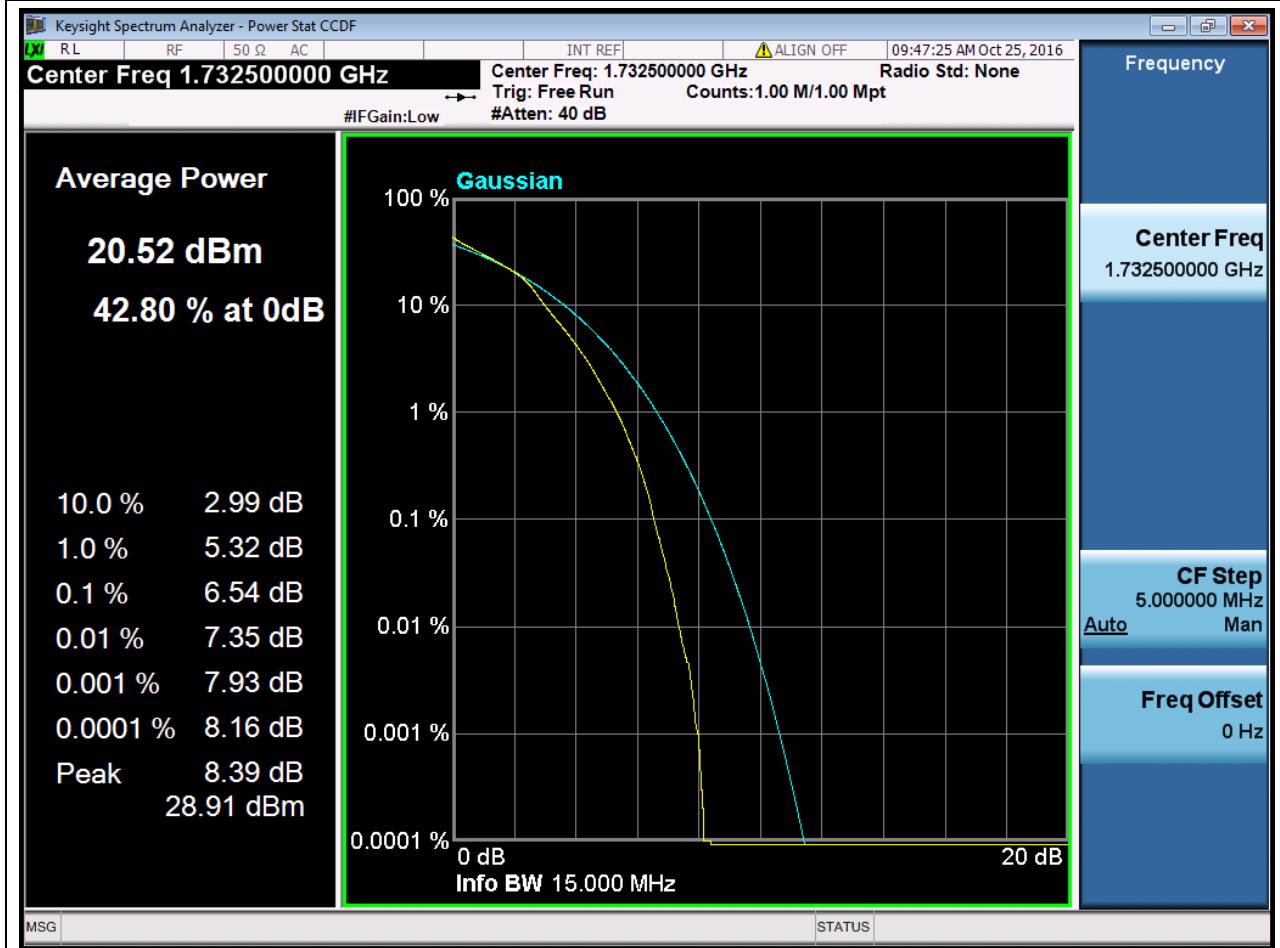
1.69. LTE Peak to Average Ratio(NTNV)(Subtest:69, Channel:20175, Bandwidth:15, Modulation:16QAM, RB Number: 36, RB Position:HIGH)

| Center Frequency(MHz) | PAR Percent (%) | PAR (dB) | Upper Limit (dB) | Verdict |
|-----------------------|-----------------|----------|------------------|---------|
| 1732.5 | 0.1 | 6.31 | 13 | Pass |



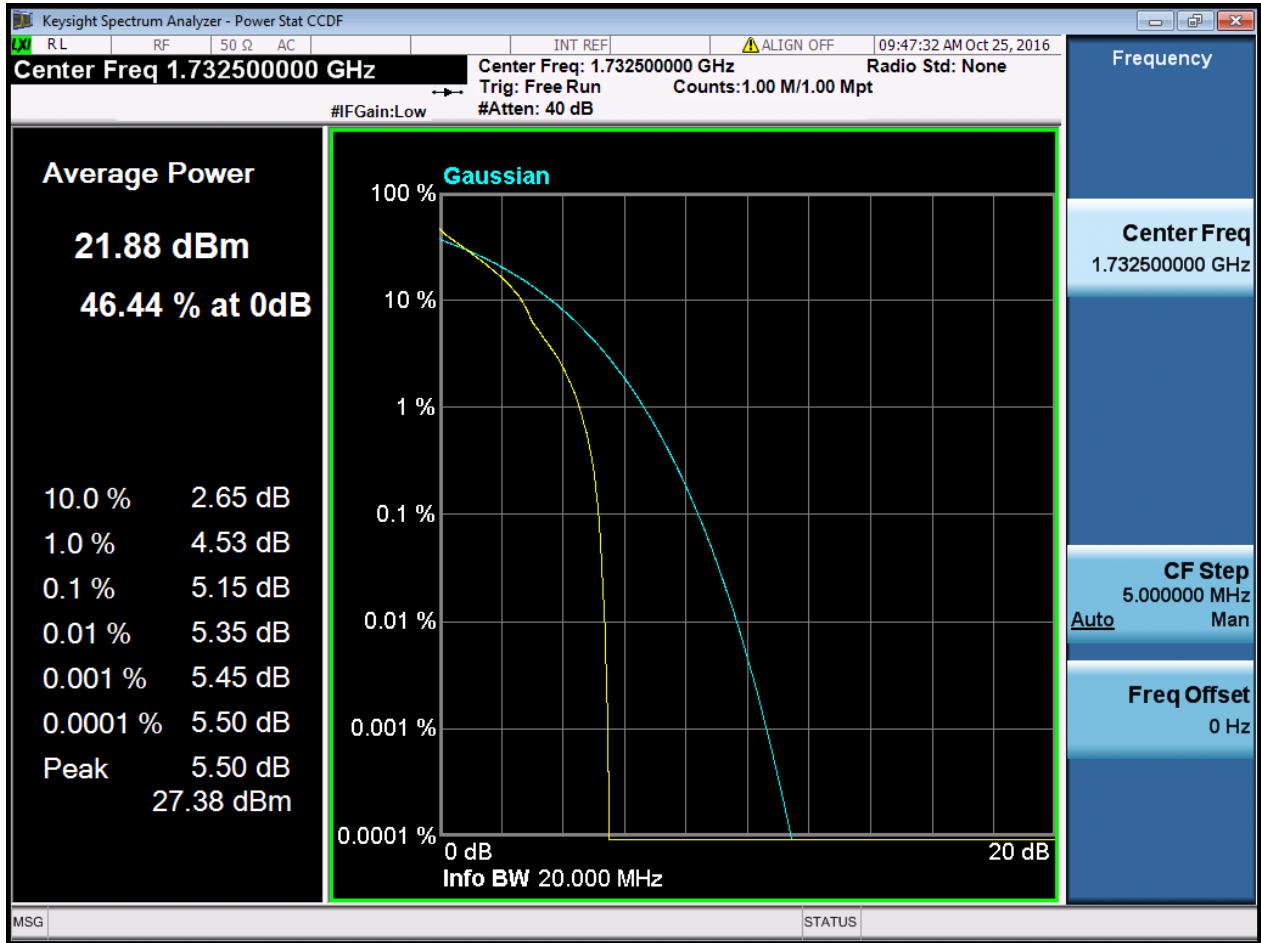
1.70. LTE Peak to Average Ratio(NTNV)(Subtest:70, Channel:20175, Bandwidth:15, Modulation:16QAM, RB Number: 75, RB Position:LOW)

| Center Frequency(MHz) | PAR Percent (%) | PAR (dB) | Upper Limit (dB) | Verdict |
|-----------------------|-----------------|----------|------------------|---------|
| 1732.5 | 0.1 | 6.54 | 13 | Pass |



1.71. LTE Peak to Average Ratio(NTNV)(Subtest:71, 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 | 5.15 | 13 | Pass |



Average Power
21.88 dBm
46.44 % at 0dB

| | |
|----------|-----------|
| 10.0 % | 2.65 dB |
| 1.0 % | 4.53 dB |
| 0.1 % | 5.15 dB |
| 0.01 % | 5.35 dB |
| 0.001 % | 5.45 dB |
| 0.0001 % | 5.50 dB |
| Peak | 5.50 dB |
| | 27.38 dBm |

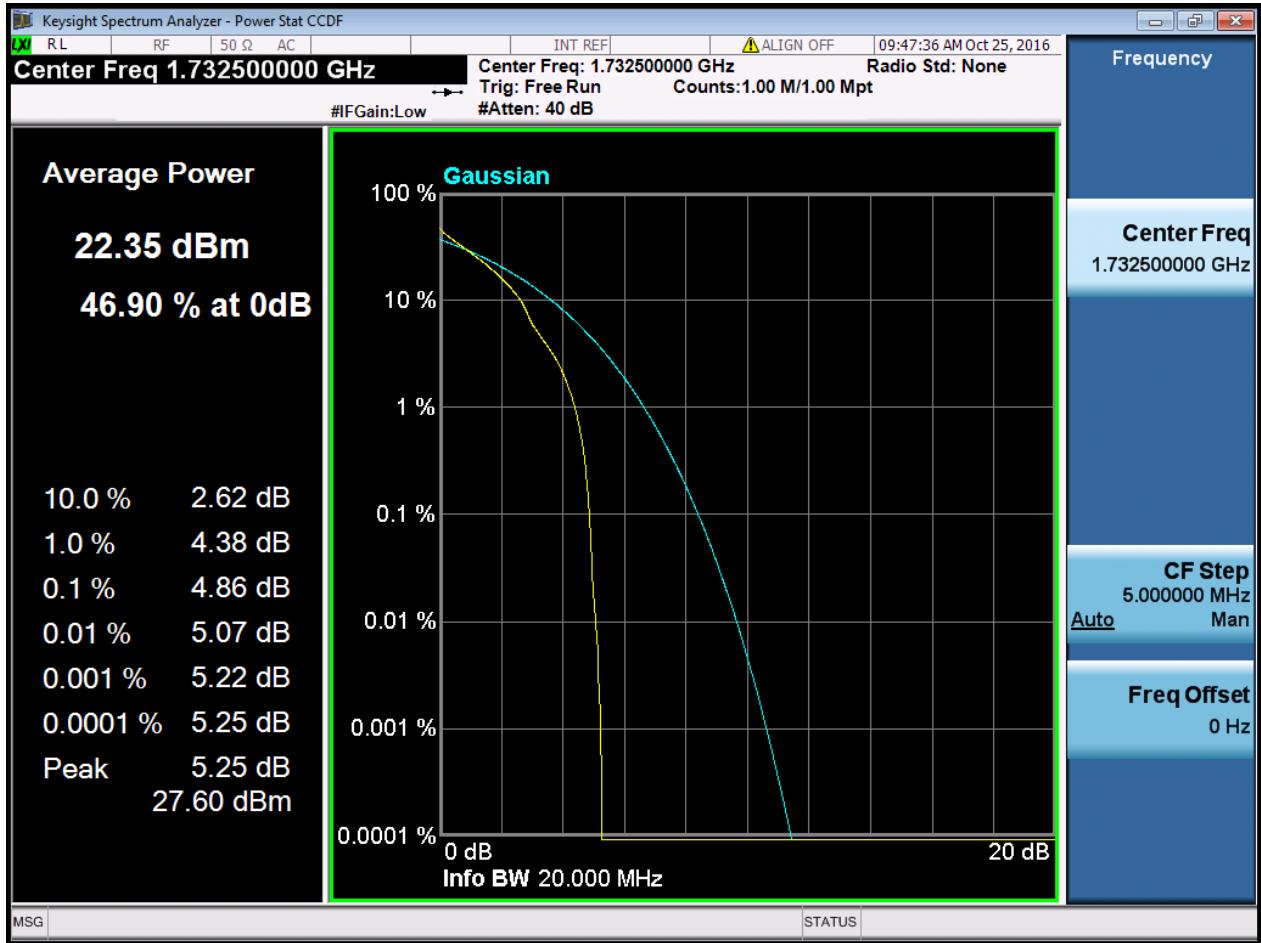
Gaussian
 Info BW 20.000 MHz

Center Freq 1.732500000 GHz
 Radio Std: None
 Trig: Free Run Counts:1.00 M/1.00 Mpt
 #IFGain:Low #Atten: 40 dB

Frequency
 Center Freq 1.732500000 GHz
 CF Step 5.000000 MHz Man
 Auto
 Freq Offset 0 Hz

1.72. LTE Peak to Average Ratio(NTNV)(Subtest:72, Channel:20175, Bandwidth:20, Modulation:QPSK, RB Number: 1, RB Position:MID)

| Center Frequency(MHz) | PAR Percent (%) | PAR (dB) | Upper Limit (dB) | Verdict |
|-----------------------|-----------------|----------|------------------|---------|
| 1732.5 | 0.1 | 4.86 | 13 | Pass |

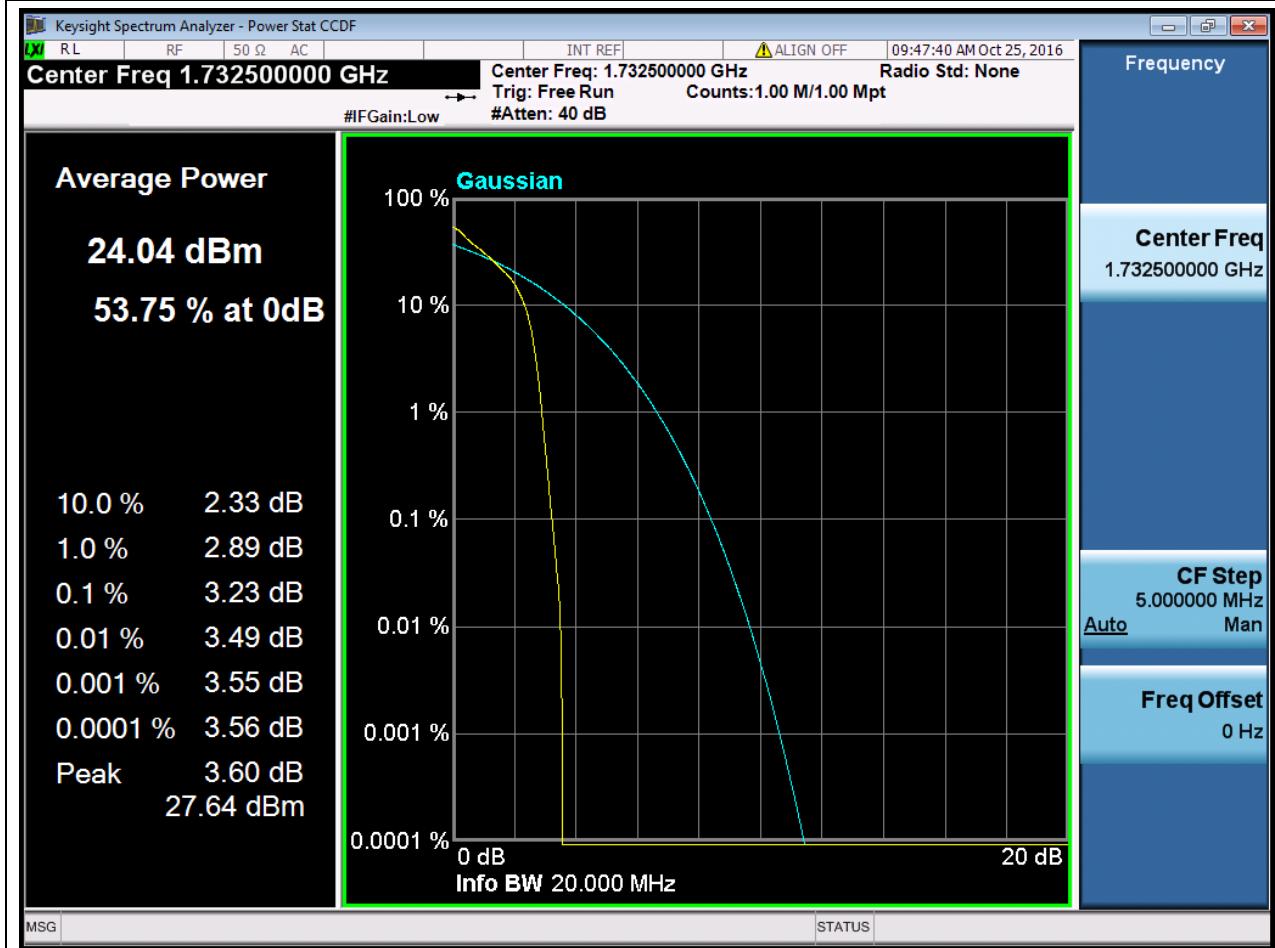


The screenshot shows the Keysight Spectrum Analyzer interface for a Power Stat CCDF test. The main window displays a Gaussian-shaped cumulative distribution curve on a log-linear scale. The x-axis represents power in dB (from 0 dB to 20 dB) and the y-axis represents percentage (from 0.0001% to 100%). A yellow stepped line indicates the measured data points, which closely follow the Gaussian curve. The center frequency is set to 1.732500000 GHz. The average power is listed as 22.35 dBm, and the 46.90 % at 0dB value is highlighted. A table on the left provides detailed data points for the PAR calculation.

| Percentage | Power (dBm) |
|------------|-------------|
| 10.0 % | 2.62 dB |
| 1.0 % | 4.38 dB |
| 0.1 % | 4.86 dB |
| 0.01 % | 5.07 dB |
| 0.001 % | 5.22 dB |
| 0.0001 % | 5.25 dB |
| Peak | 5.25 dB |
| | 27.60 dBm |

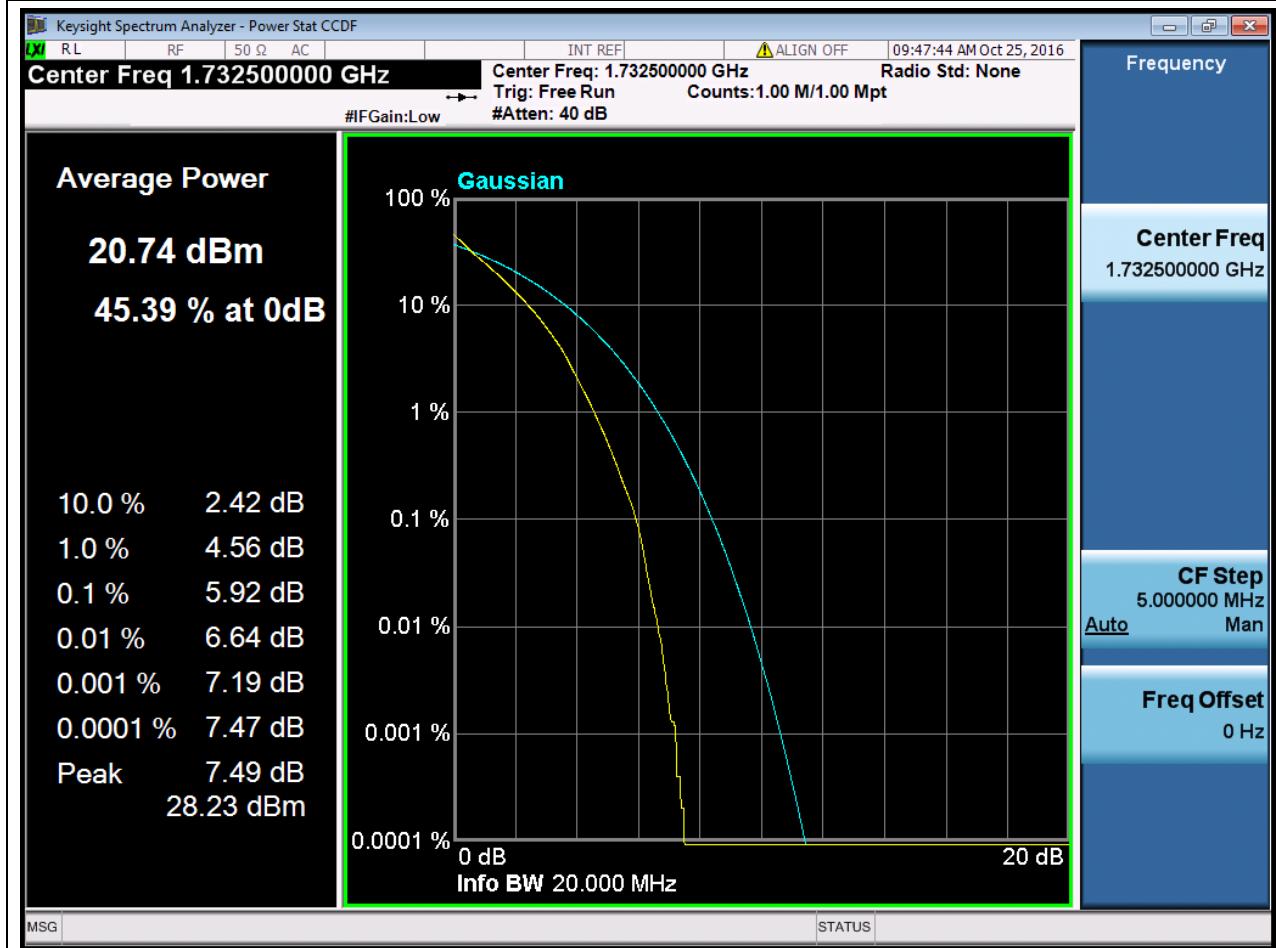
1.73. LTE Peak to Average Ratio(NTNV)(Subtest:73, Channel:20175, Bandwidth:20, Modulation:QPSK, RB Number: 1, RB Position:HIGH)

| Center Frequency(MHz) | PAR Percent (%) | PAR (dB) | Upper Limit (dB) | Verdict |
|-----------------------|-----------------|----------|------------------|---------|
| 1732.5 | 0.1 | 3.23 | 13 | Pass |

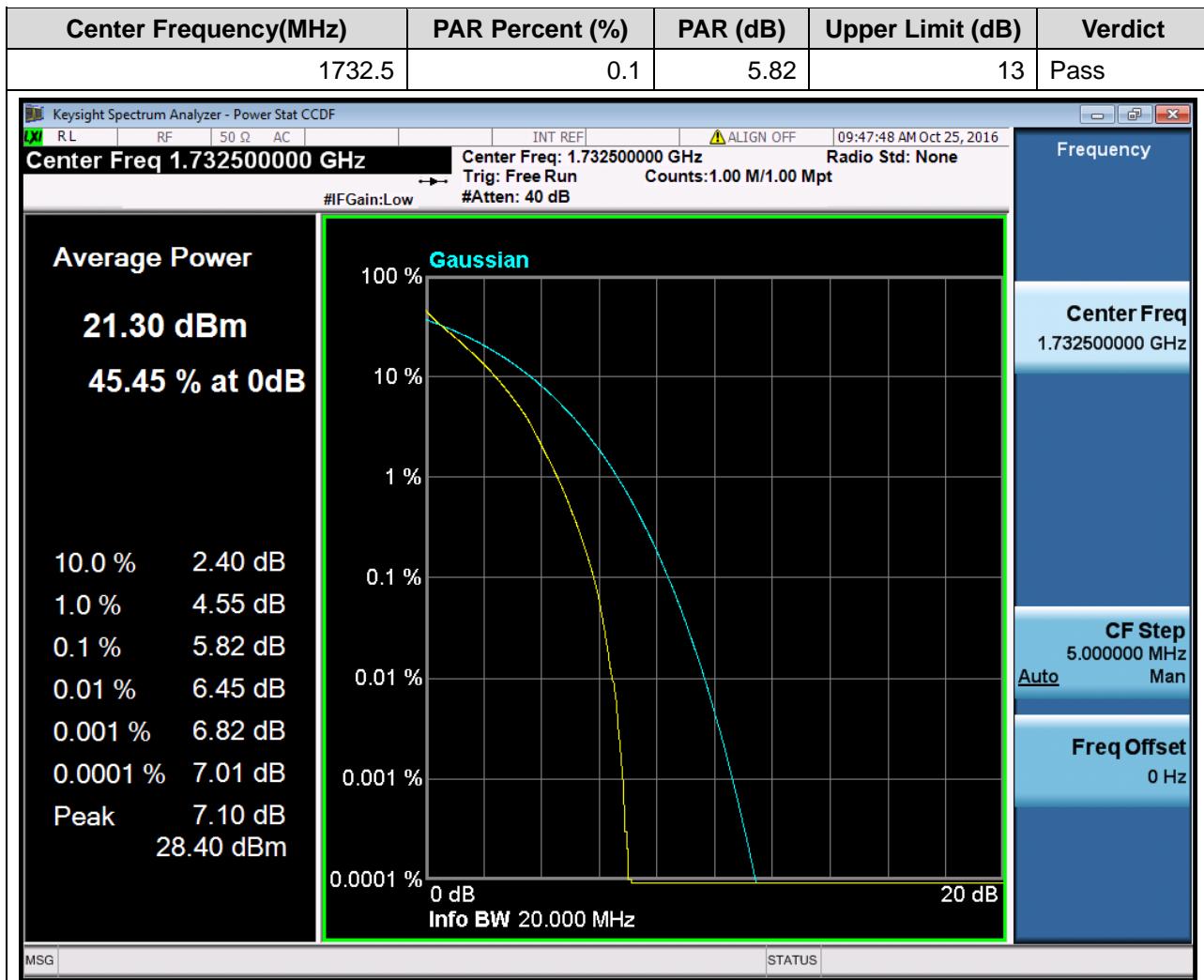


1.74. LTE Peak to Average Ratio(NTNV)(Subtest:74, Channel:20175, Bandwidth:20, Modulation:QPSK, RB Number: 50, RB Position:LOW)

| Center Frequency(MHz) | PAR Percent (%) | PAR (dB) | Upper Limit (dB) | Verdict |
|-----------------------|-----------------|----------|------------------|---------|
| 1732.5 | 0.1 | 5.92 | 13 | Pass |

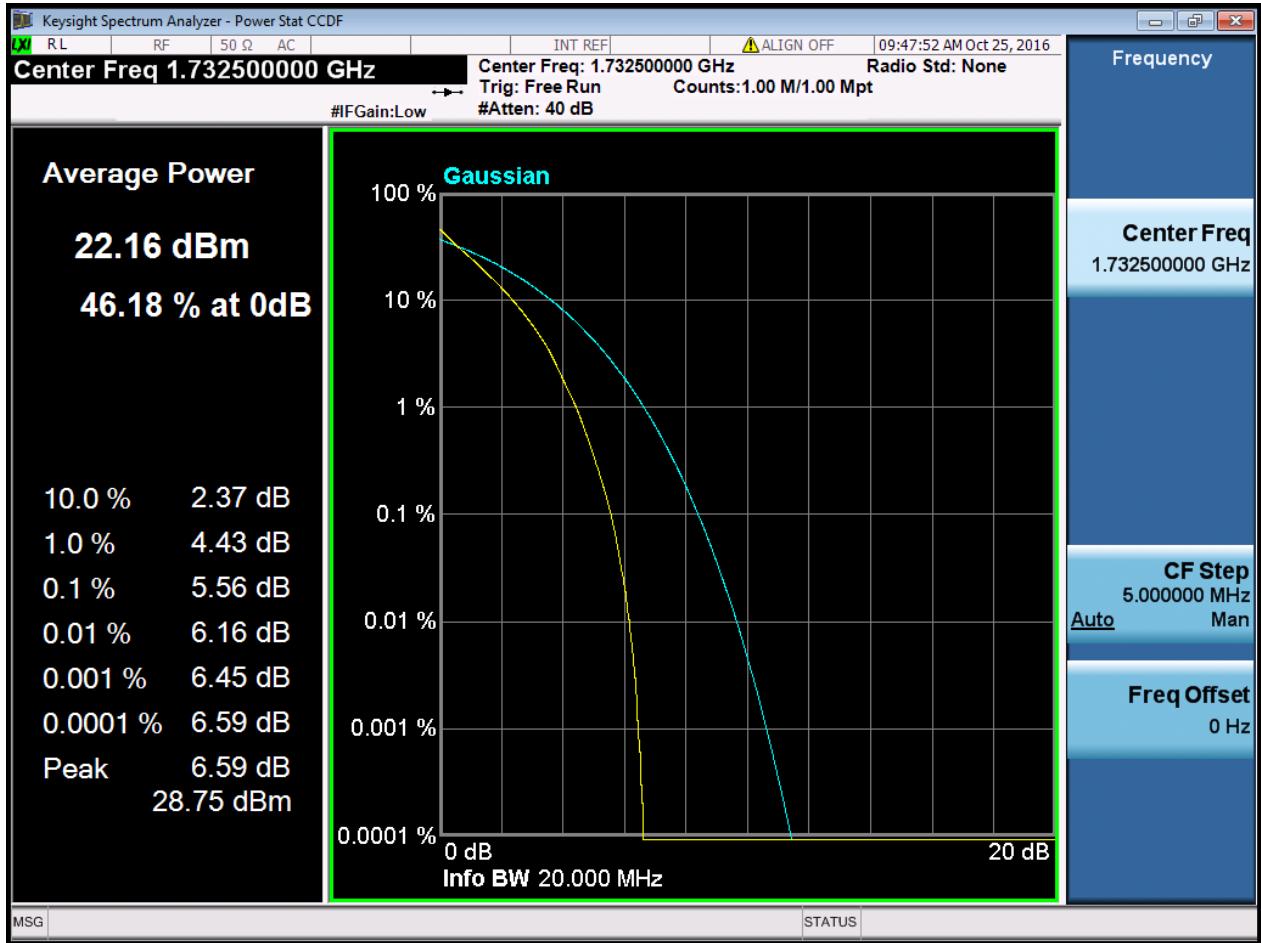


1.75. LTE Peak to Average Ratio(NTNV)(Subtest:75, Channel:20175, Bandwidth:20, Modulation:QPSK, RB Number: 50, RB Position:MID)



1.76. LTE Peak to Average Ratio(NTNV)(Subtest:76, Channel:20175, Bandwidth:20, Modulation:QPSK, RB Number: 50, RB Position:HIGH)

| Center Frequency(MHz) | PAR Percent (%) | PAR (dB) | Upper Limit (dB) | Verdict |
|-----------------------|-----------------|----------|------------------|---------|
| 1732.5 | 0.1 | 5.56 | 13 | Pass |



Average Power
22.16 dBm
46.18 % at 0dB

| | |
|----------|-----------|
| 10.0 % | 2.37 dB |
| 1.0 % | 4.43 dB |
| 0.1 % | 5.56 dB |
| 0.01 % | 6.16 dB |
| 0.001 % | 6.45 dB |
| 0.0001 % | 6.59 dB |
| Peak | 6.59 dB |
| | 28.75 dBm |

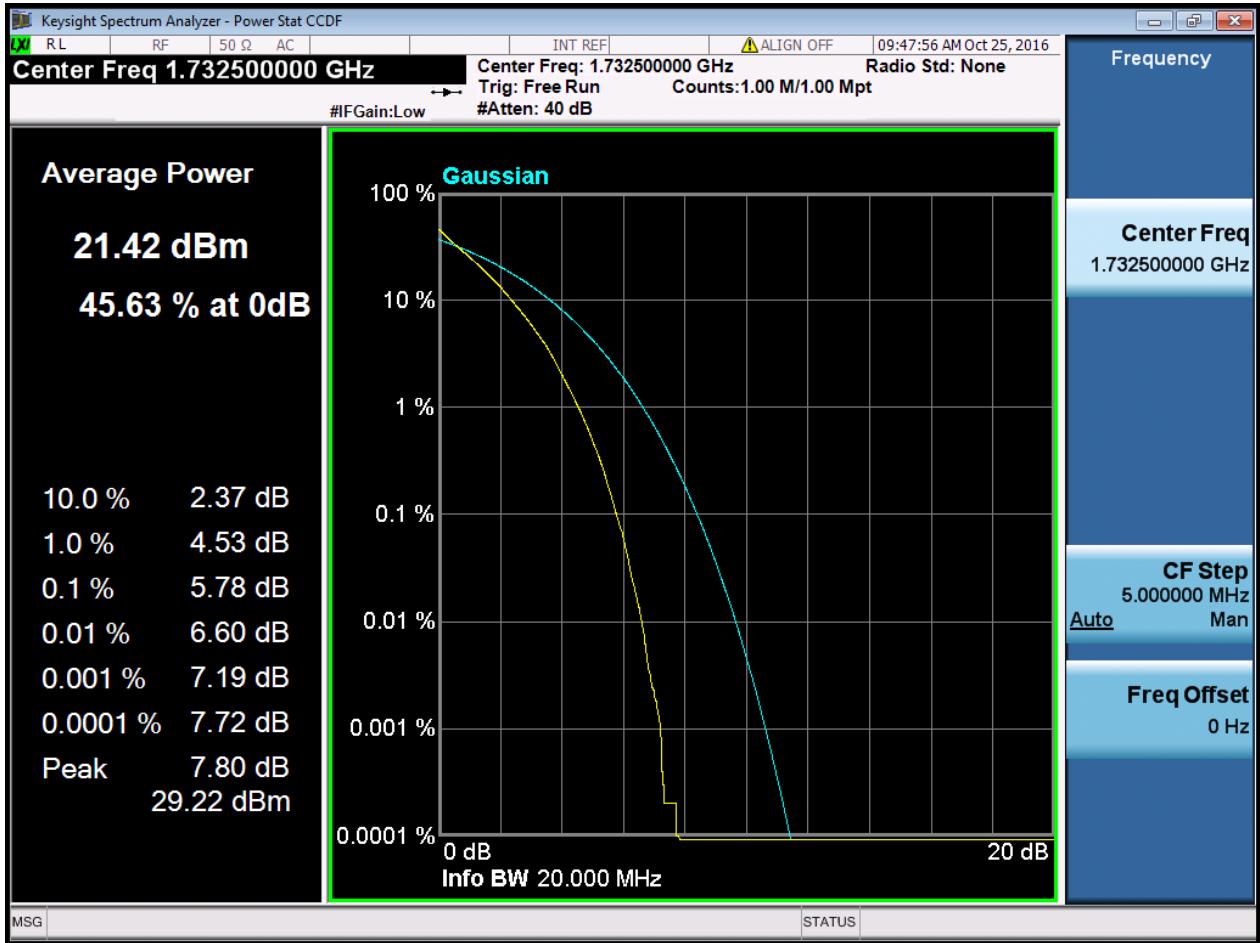
Center Freq 1.732500000 GHz Center Freq: 1.732500000 GHz Radio Std: None
 Trig: Free Run Counts: 1.00 M/1.00 Mpt
 #IFGain:Low #Atten: 40 dB

Frequency
Center Freq 1.732500000 GHz
CF Step 5.000000 MHz Man
Auto
Freq Offset 0 Hz

MSG STATUS

1.77. LTE Peak to Average Ratio(NTNV)(Subtest:77, 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 | 5.78 | 13 | Pass |



Average Power
21.42 dBm
45.63 % at 0dB

| | |
|----------|-----------|
| 10.0 % | 2.37 dB |
| 1.0 % | 4.53 dB |
| 0.1 % | 5.78 dB |
| 0.01 % | 6.60 dB |
| 0.001 % | 7.19 dB |
| 0.0001 % | 7.72 dB |
| Peak | 7.80 dB |
| | 29.22 dBm |

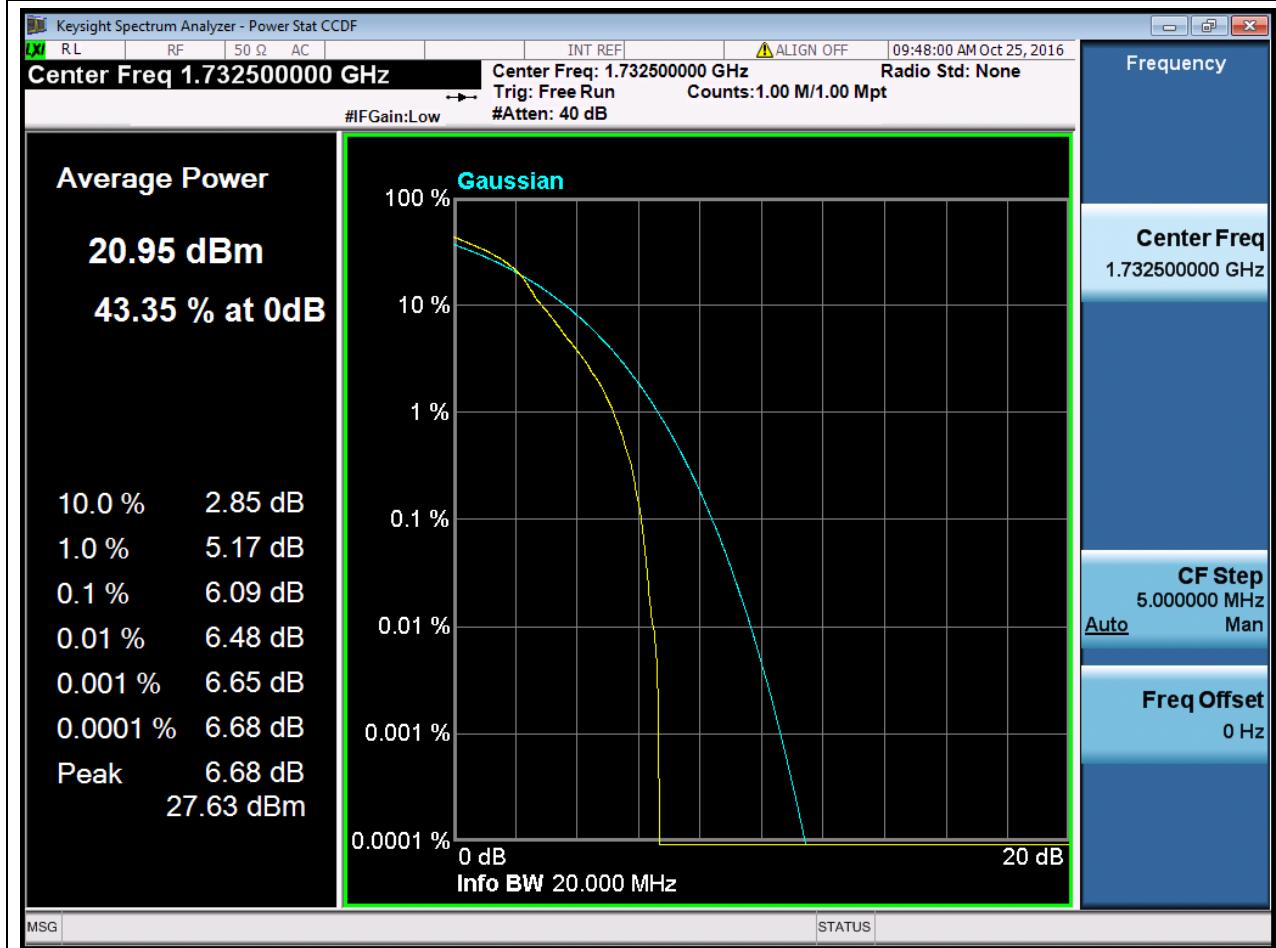
Center Freq
1.732500000 GHz

CF Step
5.000000 MHz

Freq Offset
0 Hz

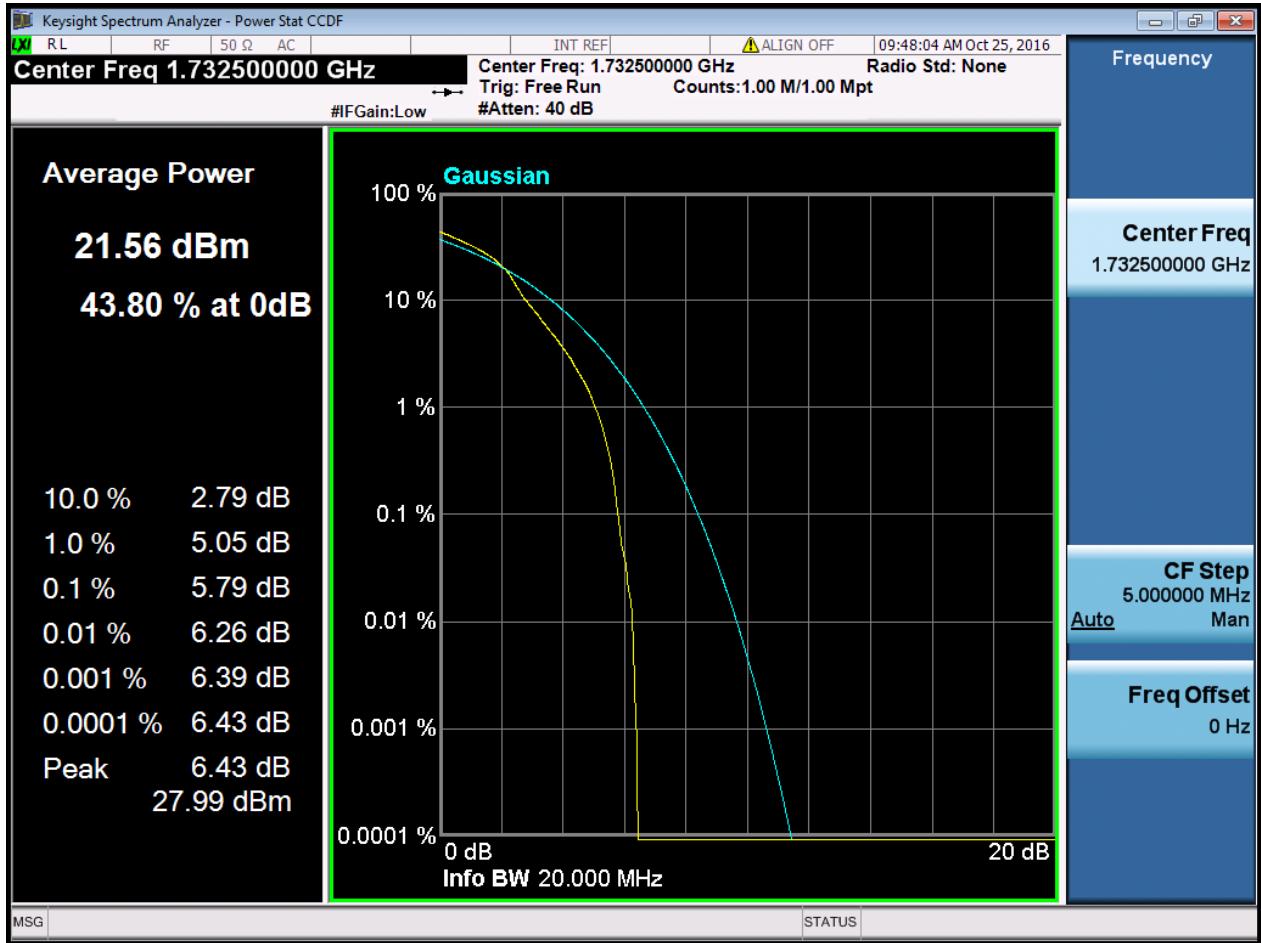
1.78. LTE Peak to Average Ratio(NTNV)(Subtest:78, Channel:20175, Bandwidth:20, Modulation:16QAM, RB Number: 1, RB Position:LOW)

| Center Frequency(MHz) | PAR Percent (%) | PAR (dB) | Upper Limit (dB) | Verdict |
|-----------------------|-----------------|----------|------------------|---------|
| 1732.5 | 0.1 | 6.09 | 13 | Pass |



1.79. LTE Peak to Average Ratio(NTNV)(Subtest:79, Channel:20175, Bandwidth:20, Modulation:16QAM, RB Number: 1, RB Position:MID)

| Center Frequency(MHz) | PAR Percent (%) | PAR (dB) | Upper Limit (dB) | Verdict |
|-----------------------|-----------------|----------|------------------|---------|
| 1732.5 | 0.1 | 5.79 | 13 | Pass |



Average Power
21.56 dBm
43.80 % at 0dB

| | |
|----------|-----------|
| 10.0 % | 2.79 dB |
| 1.0 % | 5.05 dB |
| 0.1 % | 5.79 dB |
| 0.01 % | 6.26 dB |
| 0.001 % | 6.39 dB |
| 0.0001 % | 6.43 dB |
| Peak | 6.43 dB |
| | 27.99 dBm |

Gaussian

100 %
 10 %
 1 %
 0.1 %
 0.01 %
 0.001 %
 0.0001 %

0 dB 20 dB

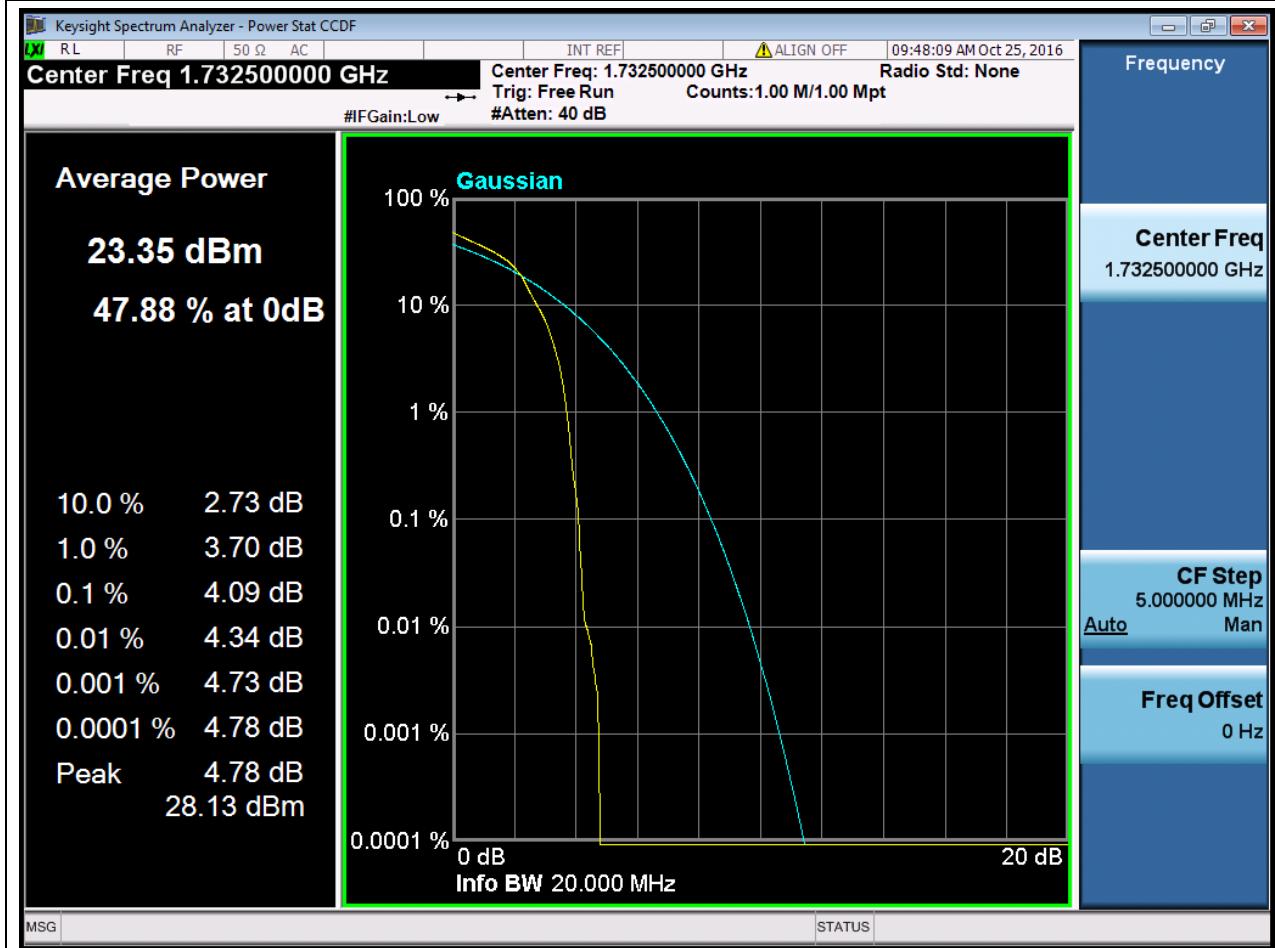
Info BW 20.000 MHz

Center Freq 1.732500000 GHz
 Radio Std: None
 Trig: Free Run Counts: 1.00 M/1.00 Mpt
 #IFGain:Low #Atten: 40 dB

Frequency
 Center Freq 1.732500000 GHz
 CF Step 5.000000 MHz Man
 Auto
 Freq Offset 0 Hz

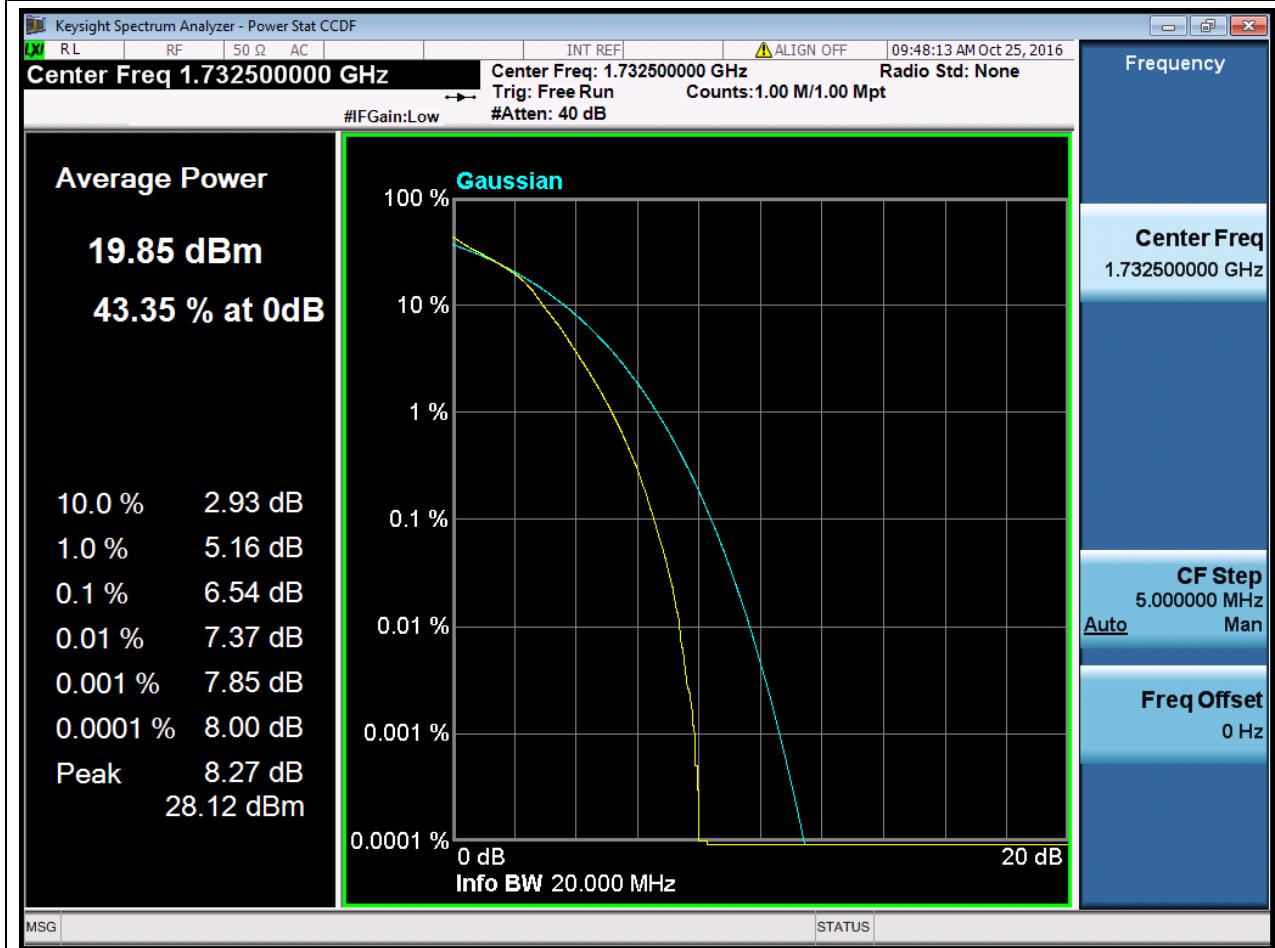
1.80. LTE Peak to Average Ratio(NTNV)(Subtest:80, Channel:20175, Bandwidth:20, Modulation:16QAM, RB Number: 1, RB Position:HIGH)

| Center Frequency(MHz) | PAR Percent (%) | PAR (dB) | Upper Limit (dB) | Verdict |
|-----------------------|-----------------|----------|------------------|---------|
| 1732.5 | 0.1 | 4.09 | 13 | Pass |

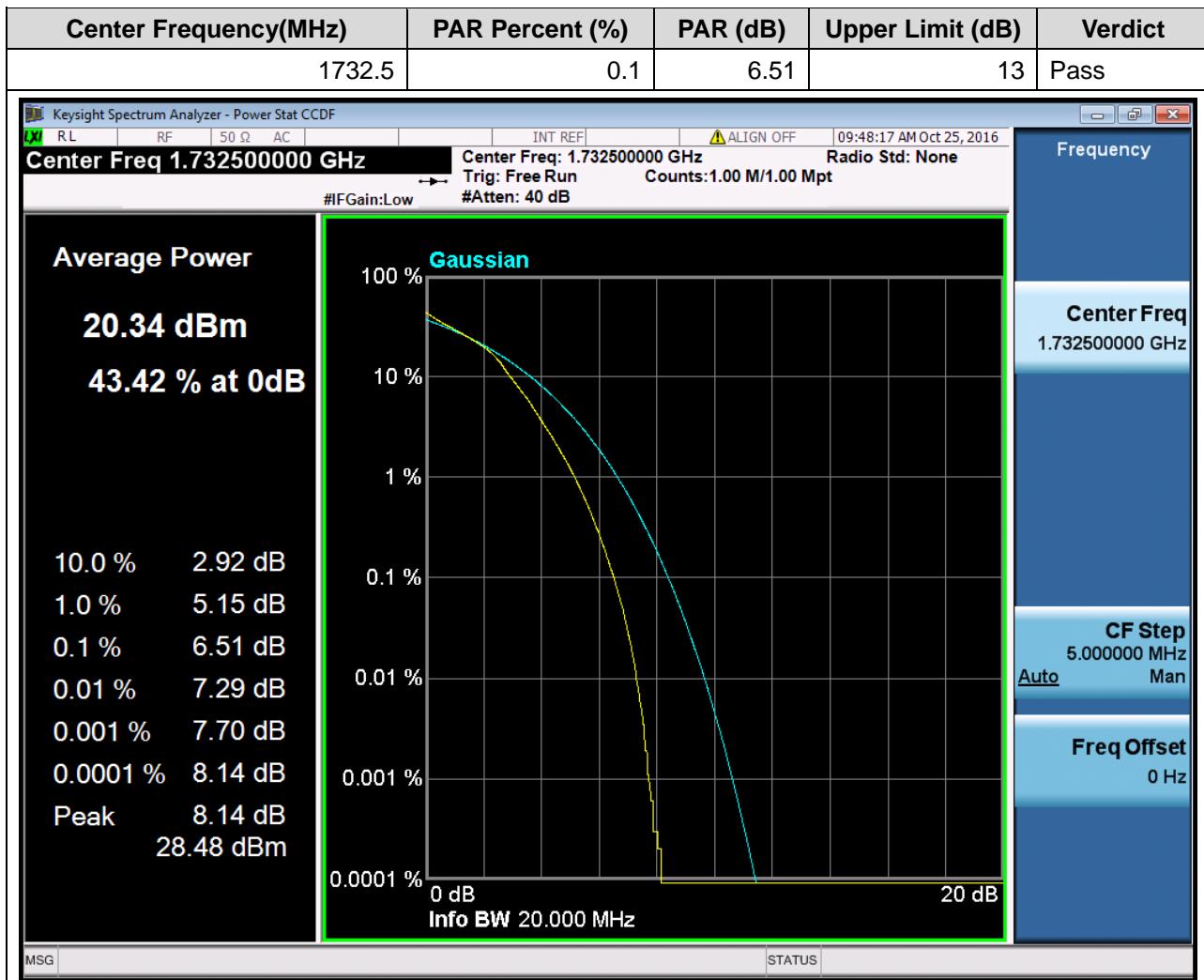


1.81. LTE Peak to Average Ratio(NTNV)(Subtest:81, Channel:20175, Bandwidth:20, Modulation:16QAM, RB Number: 50, RB Position:LOW)

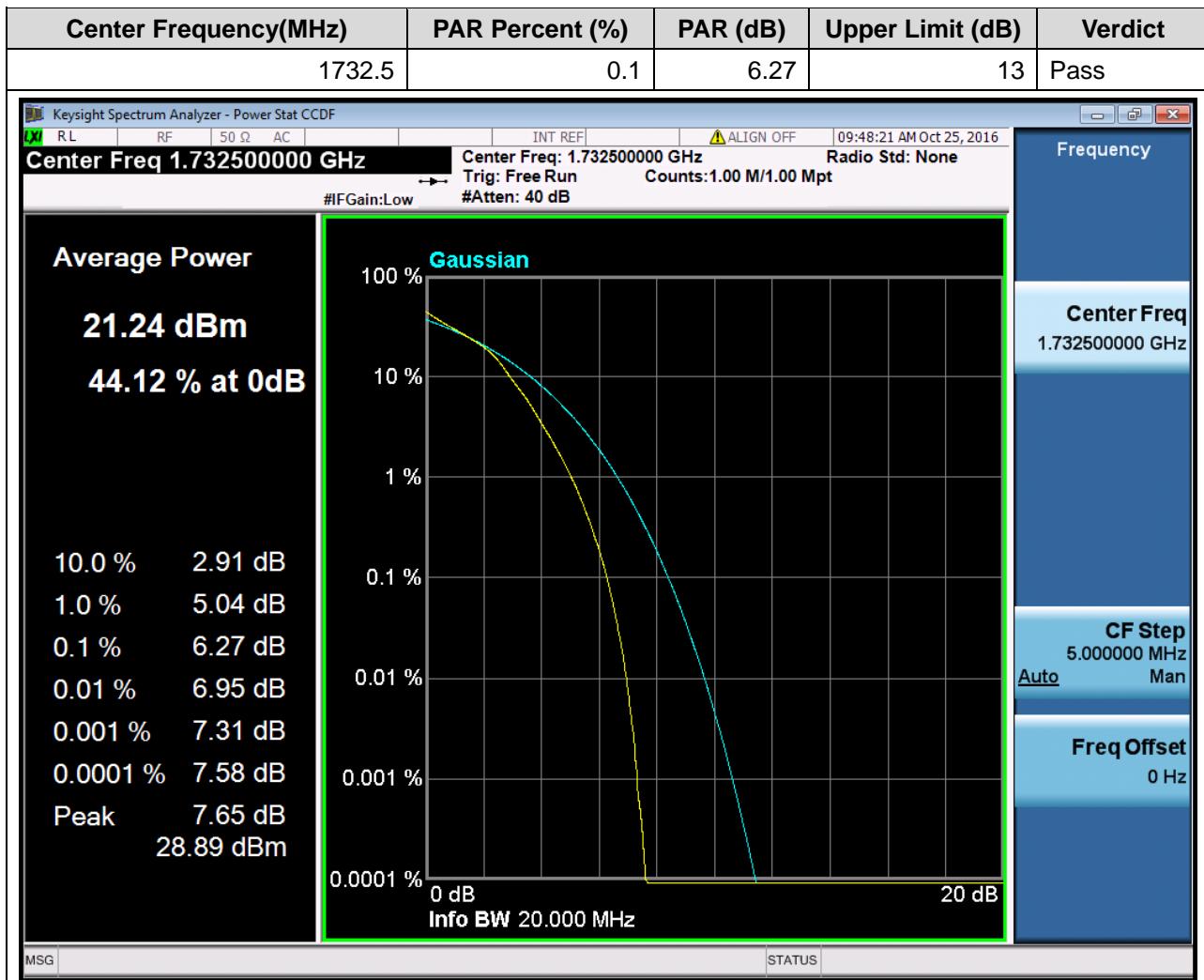
| Center Frequency(MHz) | PAR Percent (%) | PAR (dB) | Upper Limit (dB) | Verdict |
|-----------------------|-----------------|----------|------------------|---------|
| 1732.5 | 0.1 | 6.54 | 13 | Pass |



1.82. LTE Peak to Average Ratio(NTNV)(Subtest:82, Channel:20175, Bandwidth:20, Modulation:16QAM, RB Number: 50, RB Position:MID)

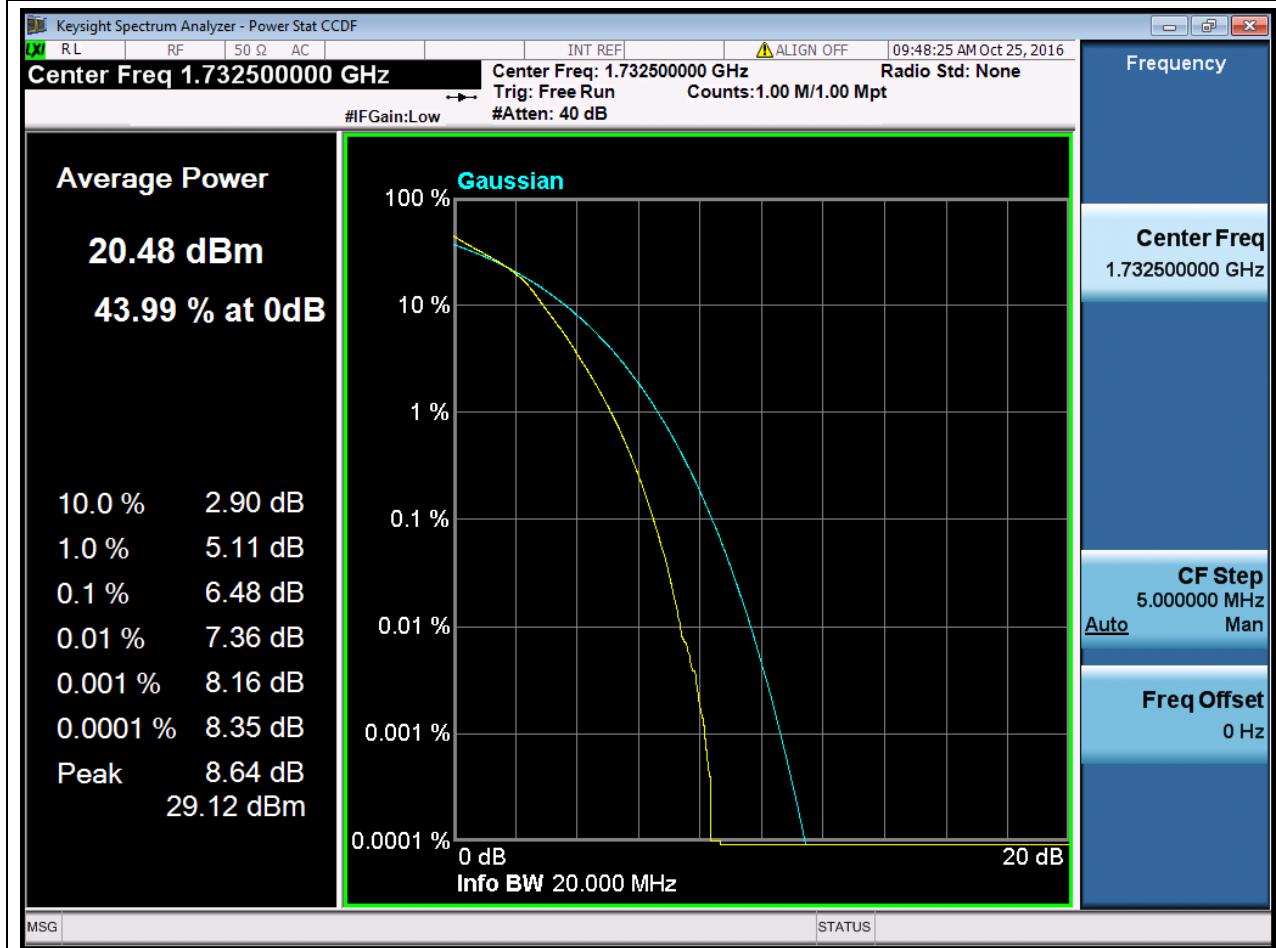


1.83. LTE Peak to Average Ratio(NTNV)(Subtest:83, Channel:20175, Bandwidth:20, Modulation:16QAM, RB Number: 50, RB Position:HIGH)



1.84. LTE Peak to Average Ratio(NTNV)(Subtest:84, Channel:20175, Bandwidth:20, Modulation:16QAM, RB Number: 100, RB Position:LOW)

| Center Frequency(MHz) | PAR Percent (%) | PAR (dB) | Upper Limit (dB) | Verdict |
|-----------------------|-----------------|----------|------------------|---------|
| 1732.5 | 0.1 | 6.48 | 13 | Pass |



END