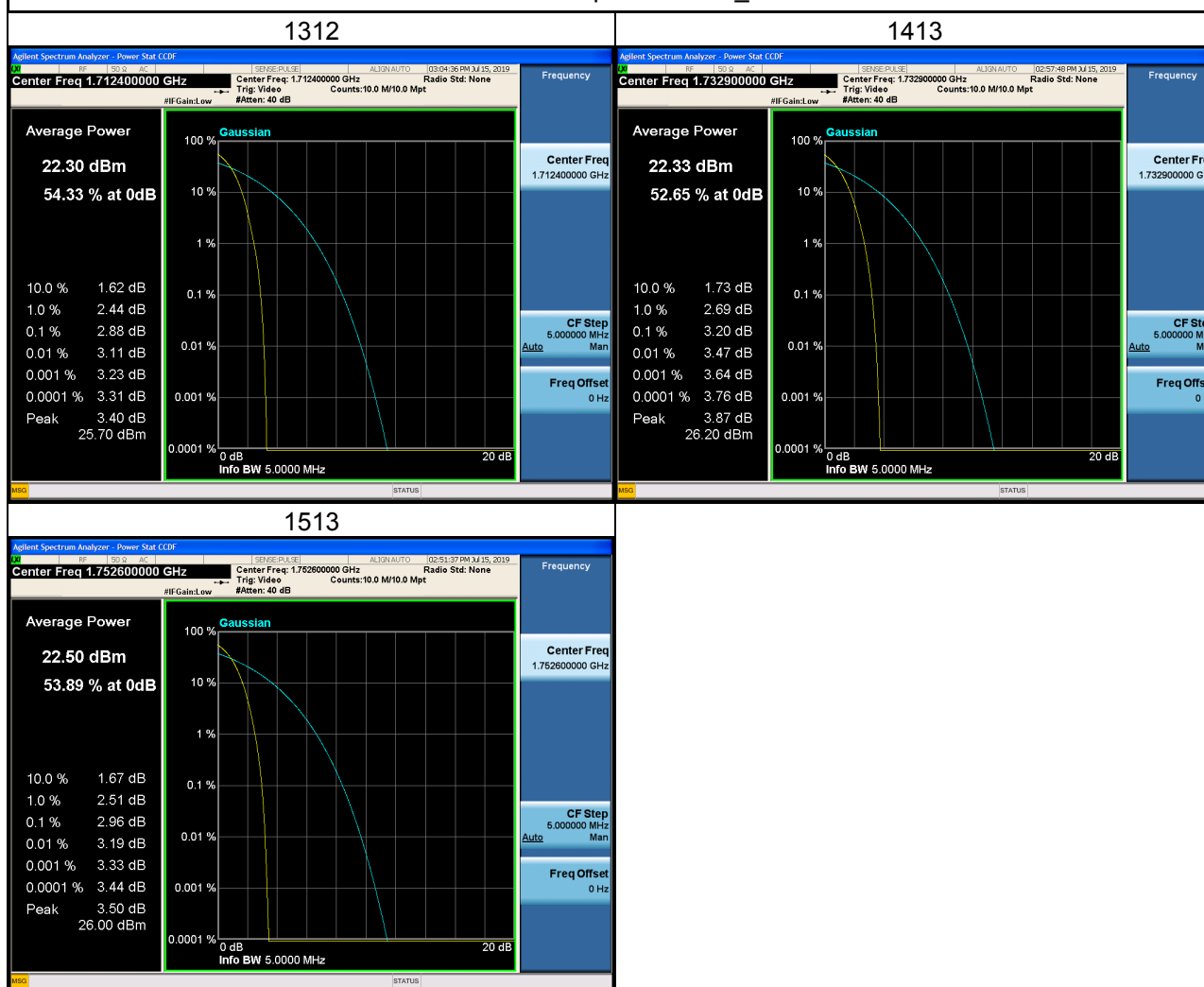
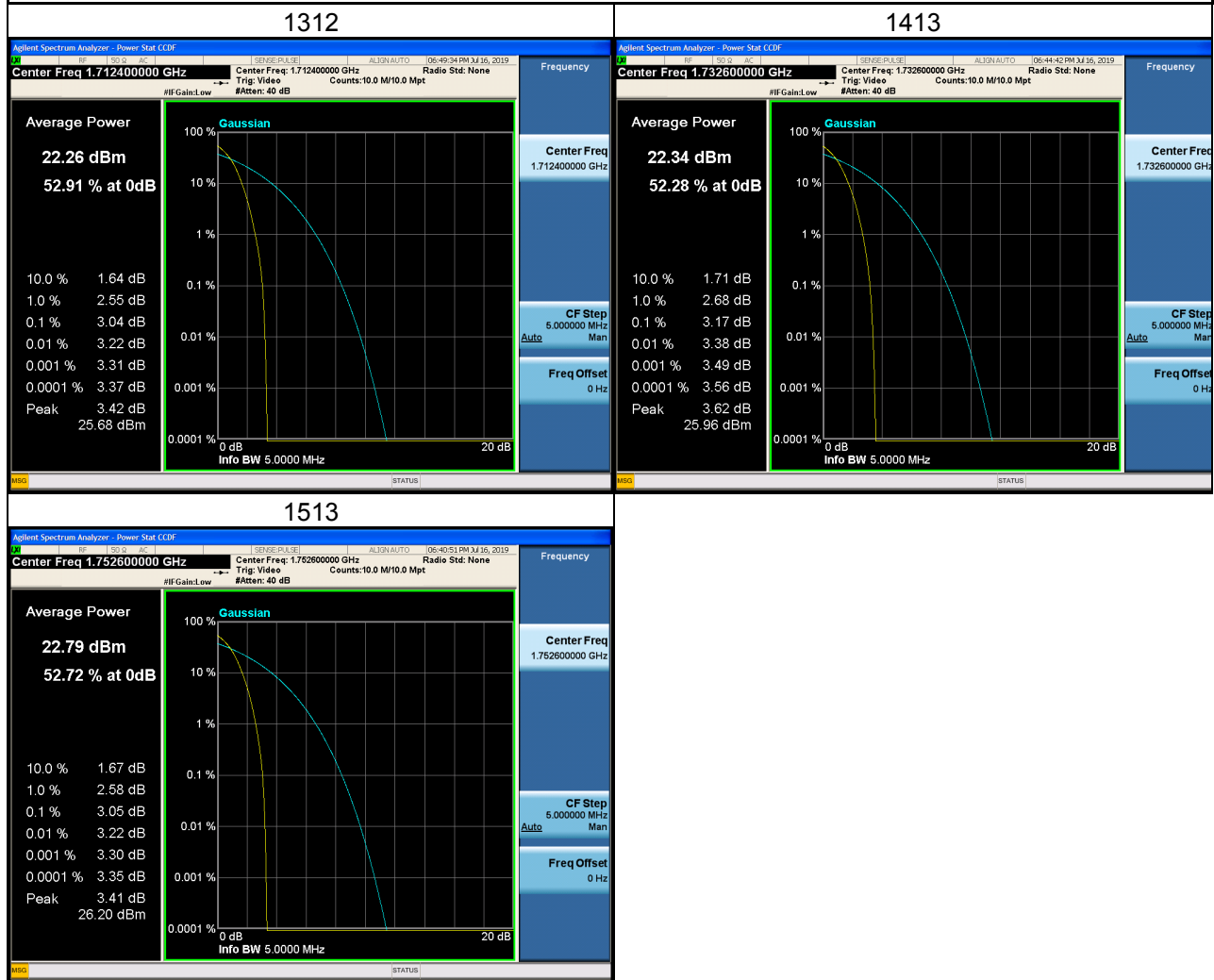


## APPENDIX H - PEAK TO AVERAGE RATIO

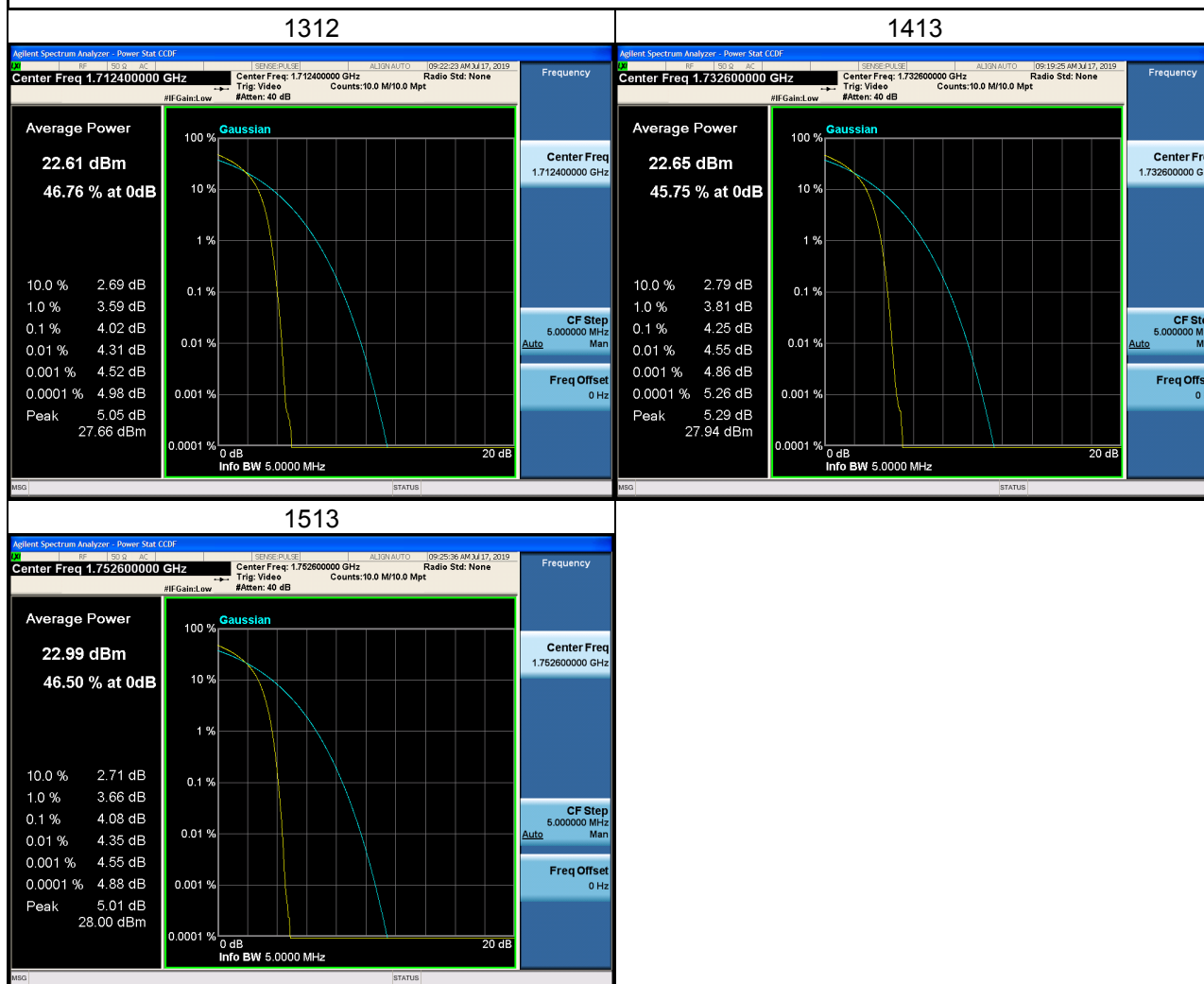
# WCDMA Band IV Spectrum Plot\_WCDMA



# WCDMA Band IV Spectrum Plot\_HSDPA

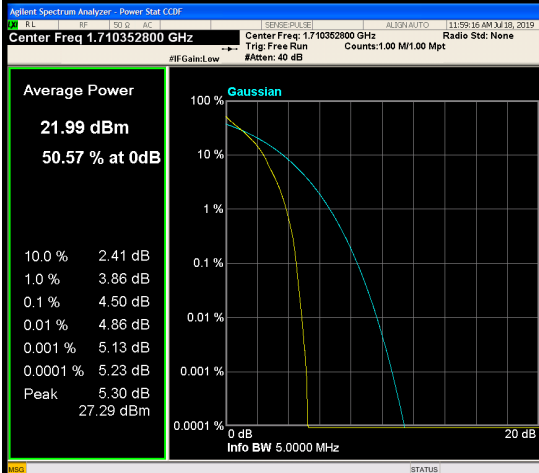


# WCDMA Band IV Spectrum Plot\_HSUPA

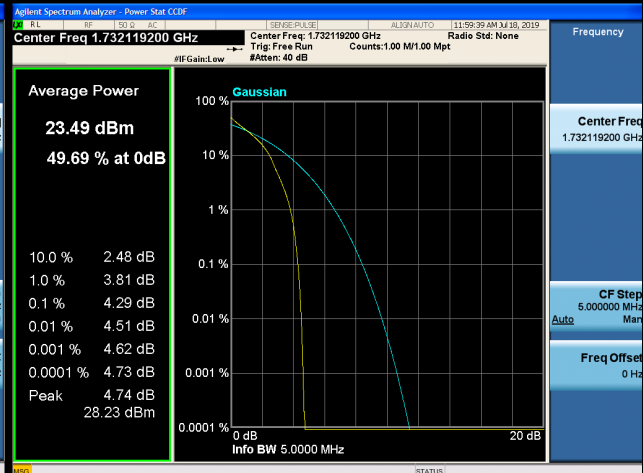


# LTE Band 4 Spectrum Plot\_1.4M

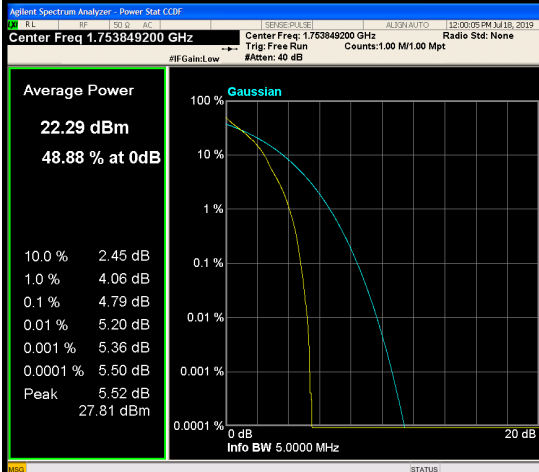
## QPSK-19957



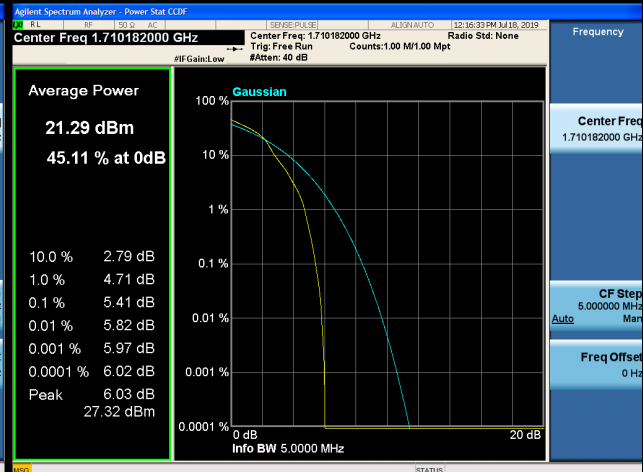
## QPSK-20175



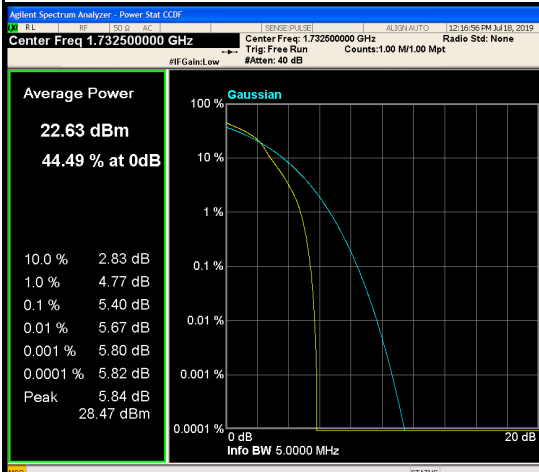
## QPSK-20393



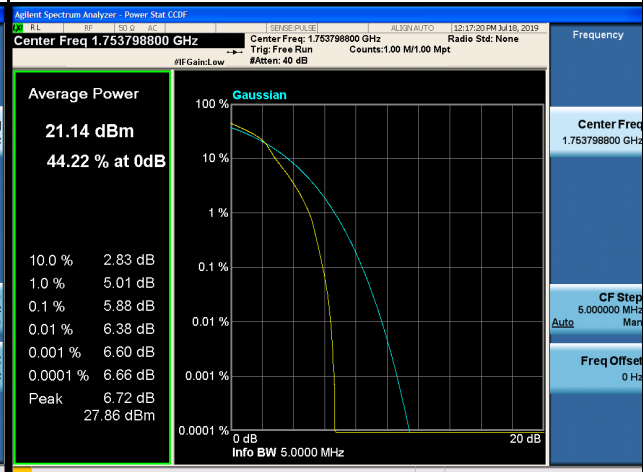
## 16QAM-19957



## 16QAM-20175

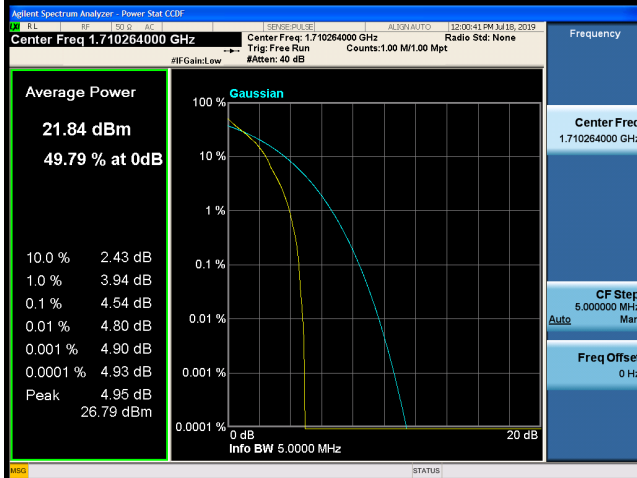


## 16QAM-20393

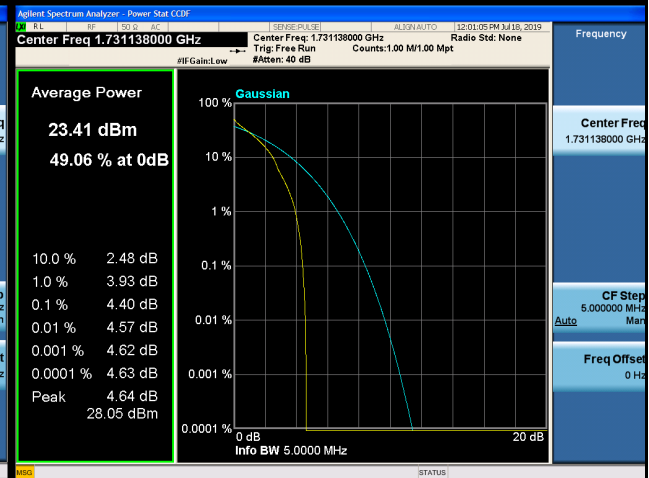


# LTE Band 4 Spectrum Plot\_3M

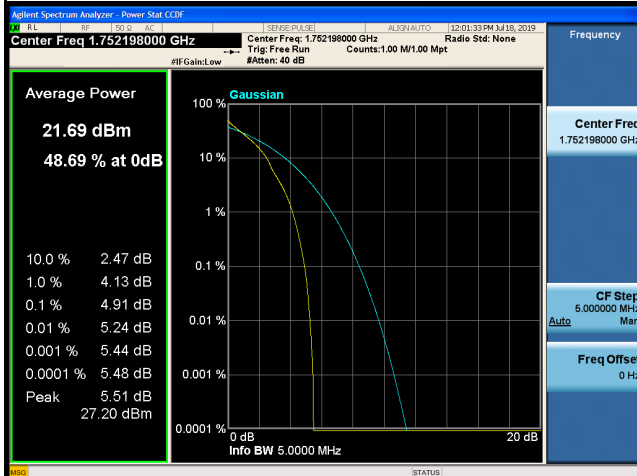
## QPSK-19965



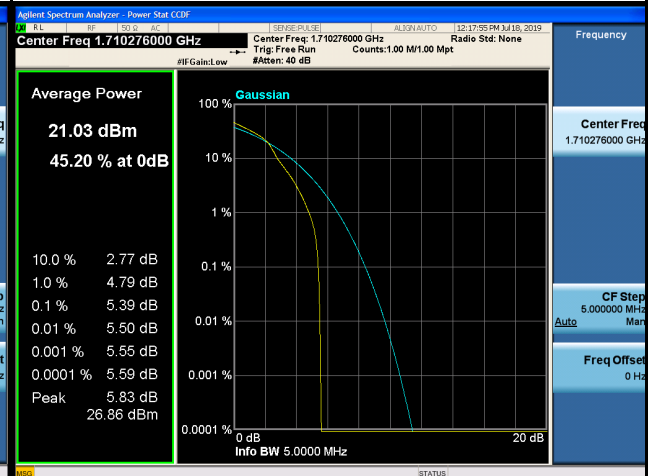
## QPSK-20175



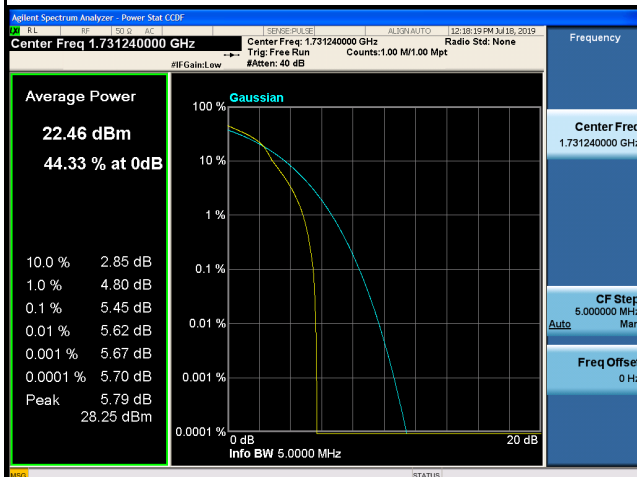
## QPSK-20385



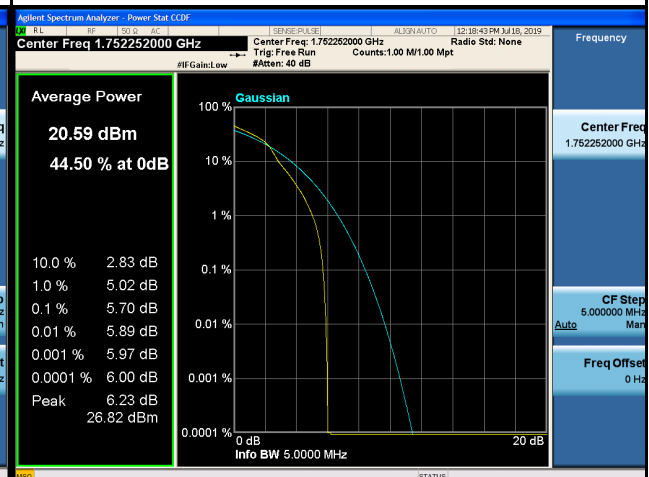
## 16QAM-19965



## 16QAM-20175

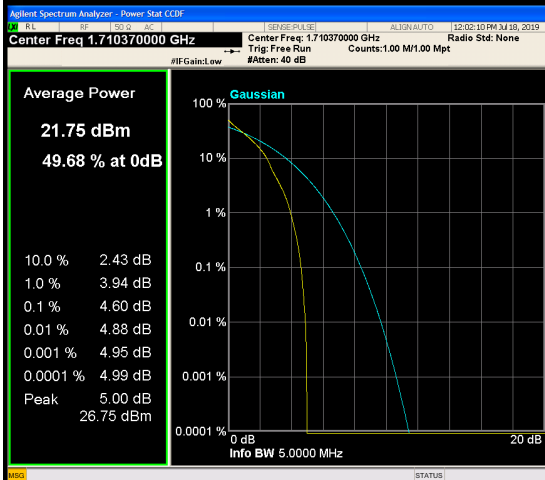


## 16QAM-20385

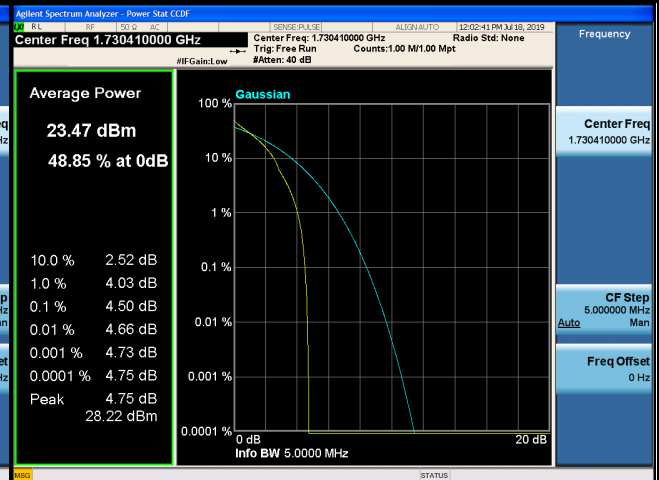


# LTE Band 4 Spectrum Plot\_5M

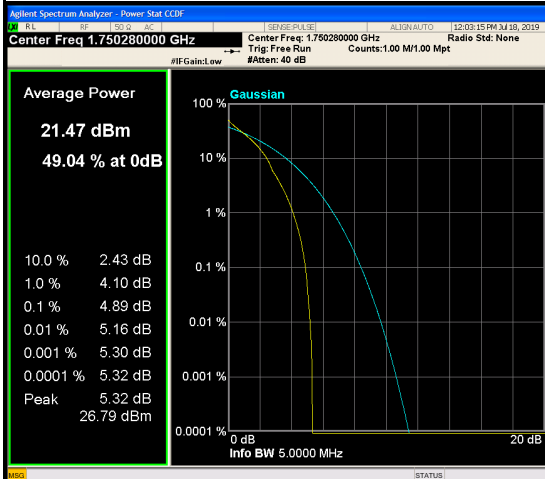
## QPSK-19975



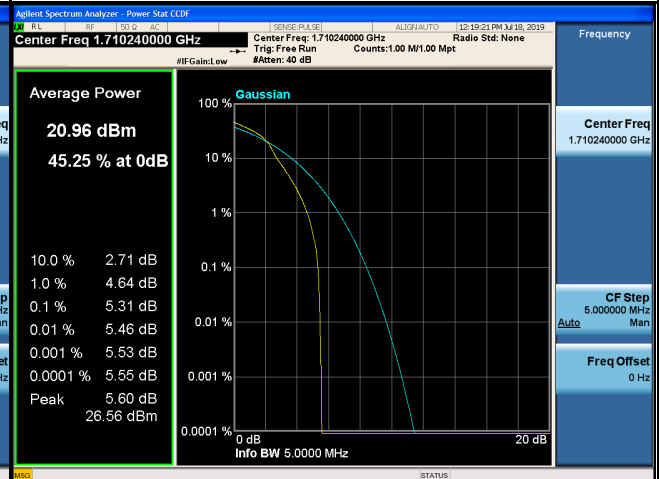
## QPSK-20175



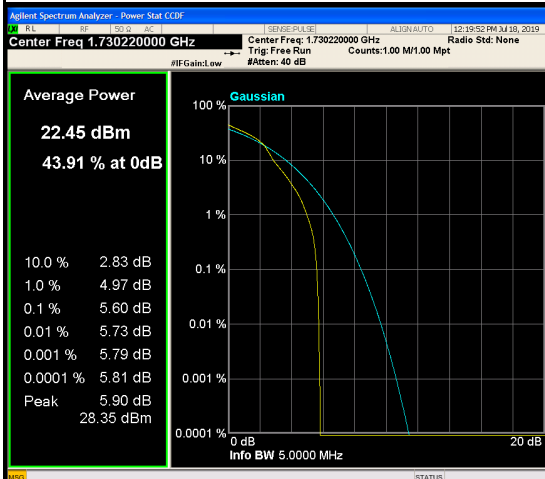
## QPSK-20375



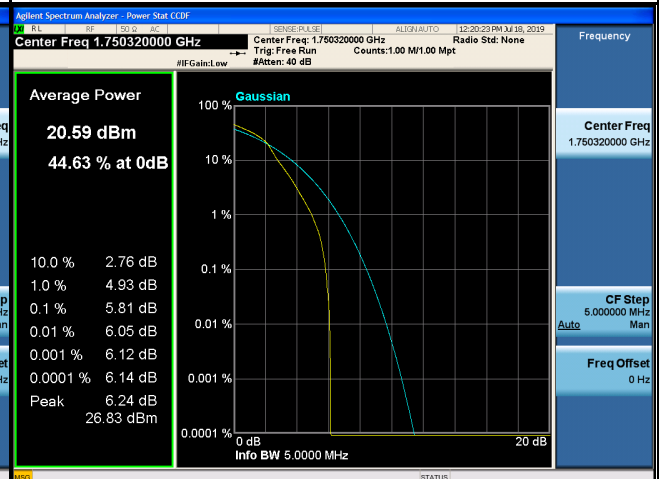
## 16QAM-19975



## 16QAM-20175



## 16QAM-20375



# LTE Band 4 Spectrum Plot\_10M



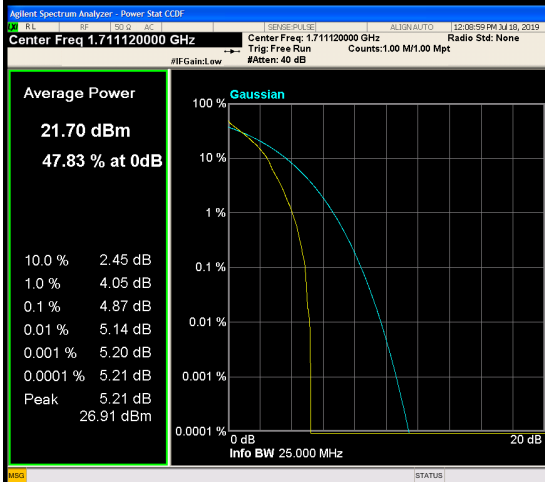


# LTE Band 4 Spectrum Plot\_15M

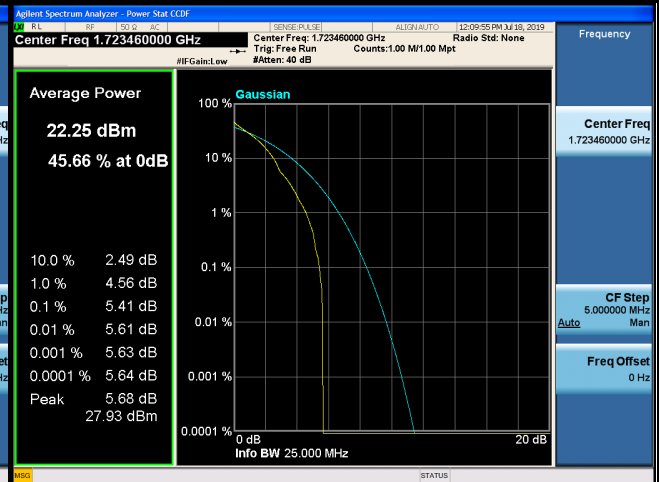


# LTE Band 4 Spectrum Plot\_20M

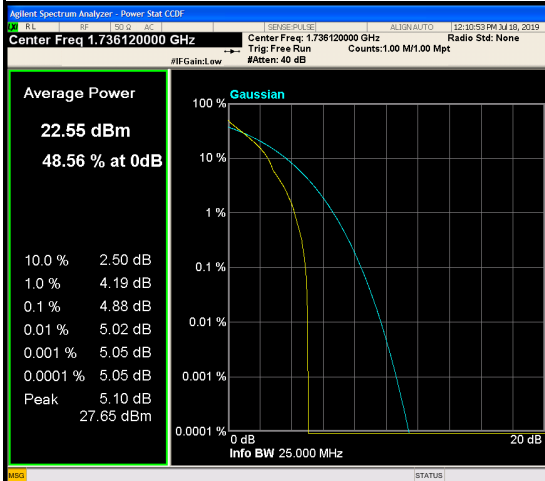
## QPSK-20050



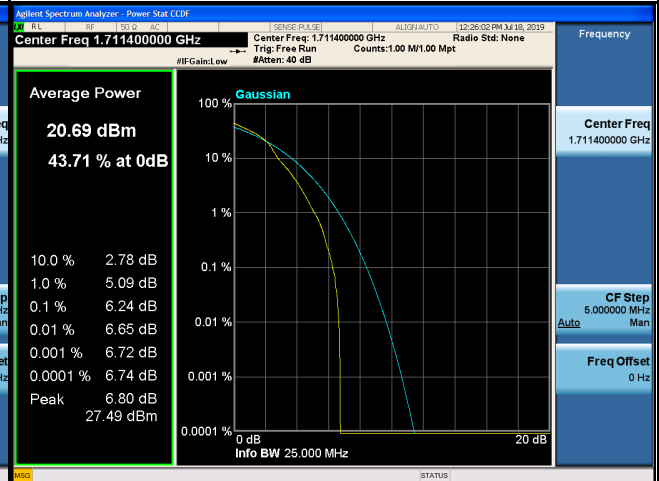
## QPSK-20175



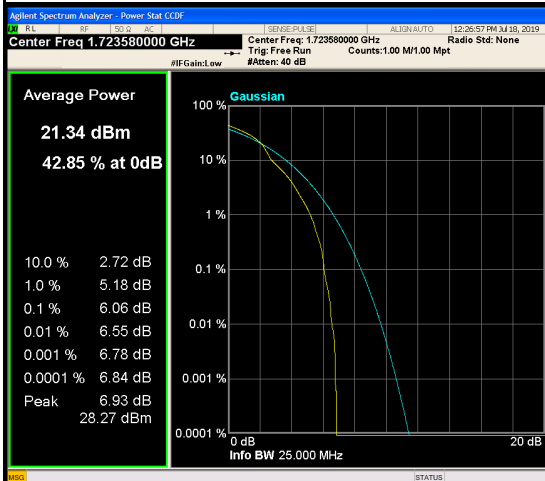
## QPSK-20300



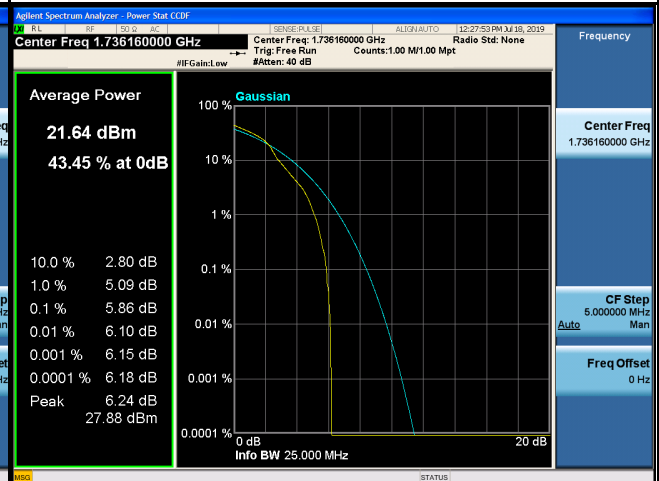
## 16QAM-20050



## 16QAM-20175



## 16QAM-20300



# LTE Band 7 Spectrum Plot\_5M

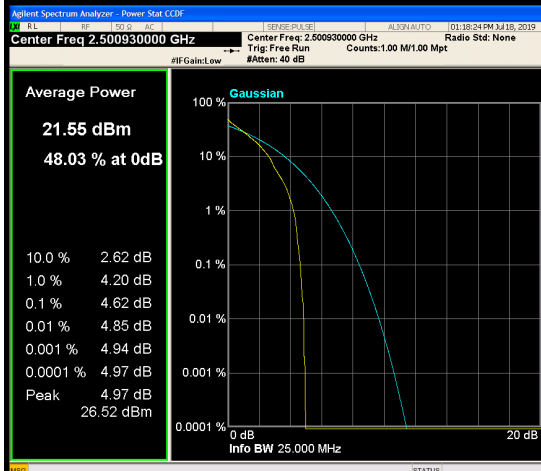


# LTE Band 7 Spectrum Plot\_10M

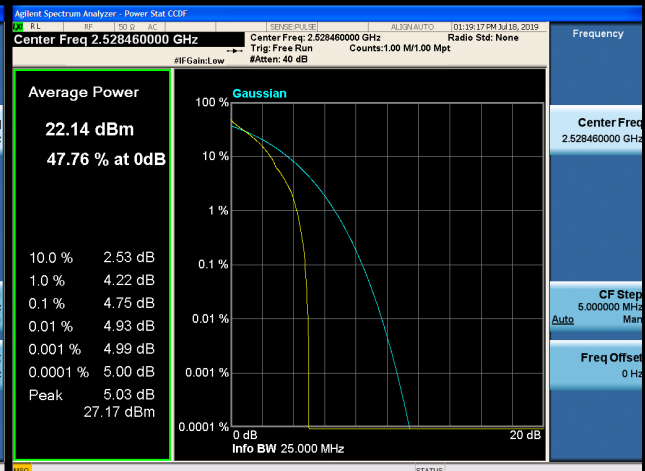


# LTE Band 7 Spectrum Plot\_15M

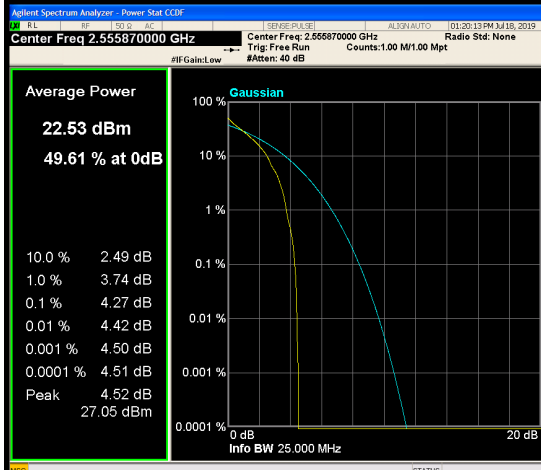
## QPSK-20825



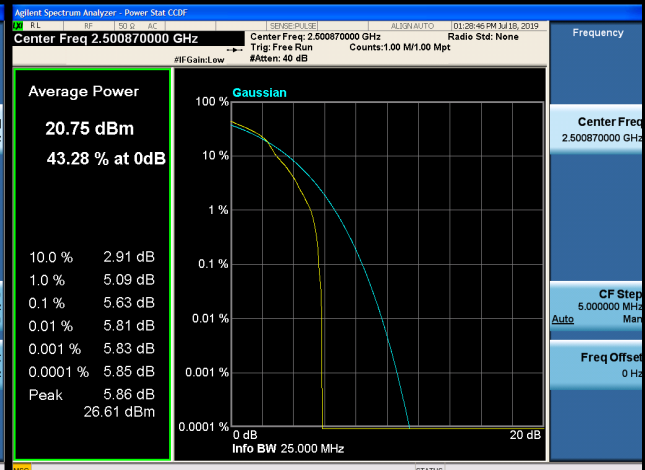
## QPSK-21100



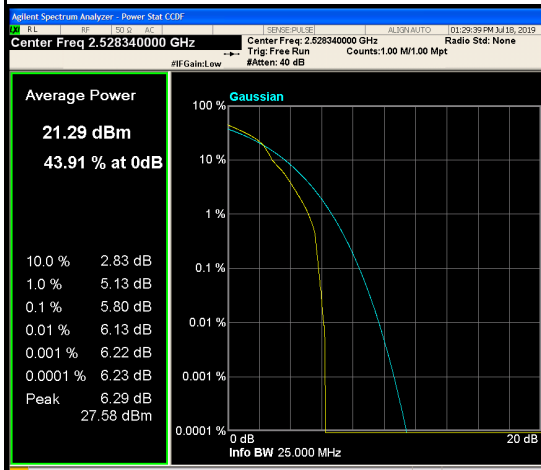
## QPSK-21375



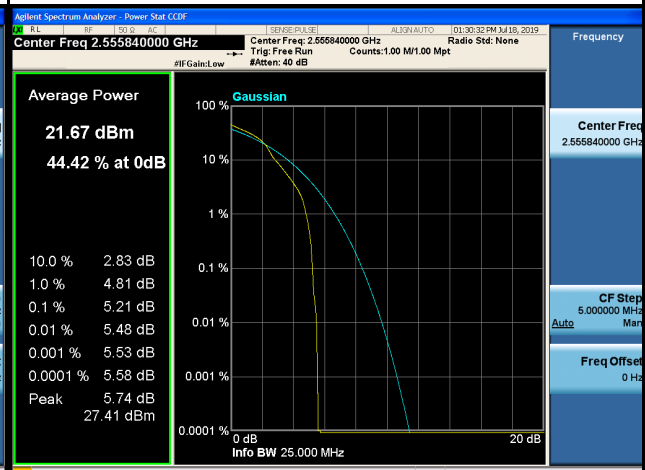
## 16QAM-20825



## 16QAM-21100



## 16QAM-21375



# LTE Band 7 Spectrum Plot\_20M



# LTE Band 12 Spectrum Plot\_1.4M



# LTE Band 12 Spectrum Plot\_3M





# LTE Band 12 Spectrum Plot\_5M



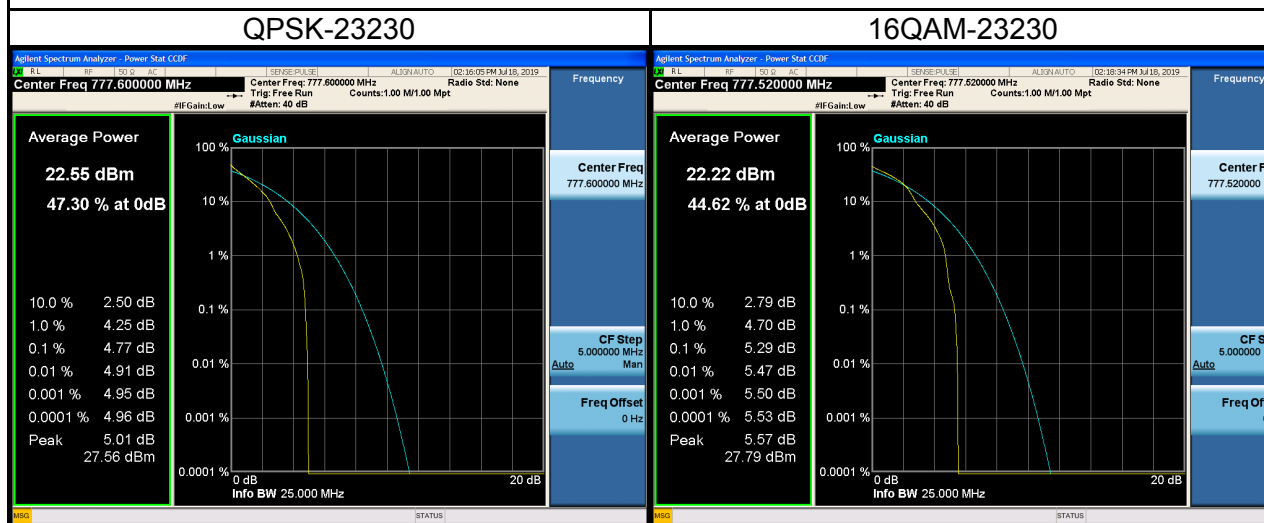
# LTE Band 12 Spectrum Plot\_10M



# LTE Band 13 Spectrum Plot\_5M



# LTE Band 13 Spectrum Plot\_10M



## APPENDIX I - FREQUENCY STABILITY

|            |                       |
|------------|-----------------------|
| Test Mode: | WCDMA Band IV _CH1413 |
|------------|-----------------------|

### Temperature vs. Frequency Stability

| Temperature(°C)      | Frequency Error (Hz) | Frequency Error (ppm) | Limit(ppm) |
|----------------------|----------------------|-----------------------|------------|
| -30                  | 6.47                 | 0.003734272           | ±2.5       |
| -20                  | 2.88                 | 0.001662242           |            |
| -10                  | 7.24                 | 0.004178691           |            |
| 0                    | 8.30                 | 0.004790488           |            |
| 10                   | 2.82                 | 0.001627612           |            |
| 20                   | 5.52                 | 0.003185963           |            |
| 30                   | 7.12                 | 0.004109431           |            |
| 40                   | 5.75                 | 0.003318712           |            |
| 50                   | 5.13                 | 0.002960868           |            |
| 60                   | 3.63                 | 0.002095117           |            |
| 75                   | 6.51                 | 0.003757359           |            |
| Max. Deviation (ppm) | 8.3                  | 0.004790488           |            |

### Voltage vs. Frequency Stability

| Voltage(Volts)       | Frequency Error (Hz) | Frequency Error (ppm) | Limit(ppm) |
|----------------------|----------------------|-----------------------|------------|
| 3.8                  | 2.29                 | 0.001321713           | ±2.5       |
| 4.0                  | 2.44                 | 0.001408288           |            |
| 4.2                  | 3.66                 | 0.002112432           |            |
| Max. Deviation (ppm) | 3.66                 | 0.002112432           |            |

|            |                         |
|------------|-------------------------|
| Test Mode: | LTE Band 4_CH20175_1.4M |
|------------|-------------------------|

### Temperature vs. Frequency Stability

| Temperature(°C)      | Frequency Error (Hz) | Frequency Error (ppm) | Limit(ppm) |
|----------------------|----------------------|-----------------------|------------|
| -30                  | 3.66                 | 0.002112554           | ±2.5       |
| -20                  | 5.80                 | 0.003347763           |            |
| -10                  | -0.70                | -0.00040404           |            |
| 0                    | -5.25                | -0.003030303          |            |
| 10                   | -3.34                | -0.00192785           |            |
| 20                   | -2.07                | -0.001194805          |            |
| 30                   | 1.03                 | 0.000594517           |            |
| 40                   | 5.92                 | 0.003417027           |            |
| 50                   | 3.65                 | 0.002106782           |            |
| 60                   | -1.34                | -0.000773449          |            |
| 75                   | 6.36                 | 0.003670996           |            |
| Max. Deviation (ppm) | 6.36                 | 0.003670996           |            |

### Voltage vs. Frequency Stability

| Voltage(Volts)       | Frequency Error (Hz) | Frequency Error (ppm) | Limit(ppm) |
|----------------------|----------------------|-----------------------|------------|
| 3.8                  | 6.89                 | 0.003976912           | ±2.5       |
| 4.0                  | 5.50                 | 0.003174603           |            |
| 4.2                  | 3.26                 | 0.001881674           |            |
| Max. Deviation (ppm) | 6.89                 | 0.003976912           |            |

|            |                       |
|------------|-----------------------|
| Test Mode: | LTE Band 4_CH20175_3M |
|------------|-----------------------|

### Temperature vs. Frequency Stability

| Temperature(°C)      | Frequency Error (Hz) | Frequency Error (ppm) | Limit(ppm) |
|----------------------|----------------------|-----------------------|------------|
| -30                  | 3.73                 | 0.002152958           | ±2.5       |
| -20                  | 5.99                 | 0.003457431           |            |
| -10                  | 2.32                 | 0.001339105           |            |
| 0                    | -3.85                | -0.002222222          |            |
| 10                   | -5.51                | -0.003180375          |            |
| 20                   | -1.03                | -0.000594517          |            |
| 30                   | -4.97                | -0.002868687          |            |
| 40                   | 7.77                 | 0.004484848           |            |
| 50                   | -4.21                | -0.002430014          |            |
| 60                   | 3.92                 | 0.002262626           |            |
| 75                   | 3.04                 | 0.00175469            |            |
| Max. Deviation (ppm) | 7.77                 | 0.004484848           |            |

### Voltage vs. Frequency Stability

| Voltage(Volts)       | Frequency Error (Hz) | Frequency Error (ppm) | Limit(ppm) |
|----------------------|----------------------|-----------------------|------------|
| 3.8                  | -5.22                | -0.003012987          | ±2.5       |
| 4.0                  | -3.34                | -0.00192785           |            |
| 4.2                  | 5.96                 | 0.003440115           |            |
| Max. Deviation (ppm) | 5.96                 | 0.003440115           |            |



|            |                       |
|------------|-----------------------|
| Test Mode: | LTE Band 4_CH20175_5M |
|------------|-----------------------|

### Temperature vs. Frequency Stability

| Temperature(°C)      | Frequency Error (Hz) | Frequency Error (ppm) | Limit(ppm) |
|----------------------|----------------------|-----------------------|------------|
| -30                  | -5.24                | -0.003024531          | ±2.5       |
| -20                  | 2.14                 | 0.001235209           |            |
| -10                  | 1.80                 | 0.001038961           |            |
| 0                    | 3.49                 | 0.00201443            |            |
| 10                   | -1.82                | -0.001050505          |            |
| 20                   | 2.62                 | 0.001512266           |            |
| 30                   | 2.67                 | 0.001541126           |            |
| 40                   | -5.26                | -0.003036075          |            |
| 50                   | 4.89                 | 0.002822511           |            |
| 60                   | 3.73                 | 0.002152958           |            |
| 75                   | -5.32                | -0.003070707          |            |
| Max. Deviation (ppm) | -5.32                | -0.003070707          |            |

### Voltage vs. Frequency Stability

| Voltage(Volts)       | Frequency Error (Hz) | Frequency Error (ppm) | Limit(ppm) |
|----------------------|----------------------|-----------------------|------------|
| 3.8                  | -3.43                | -0.001979798          | ±2.5       |
| 4.0                  | -5.71                | -0.003295815          |            |
| 4.2                  | -5.65                | -0.003261183          |            |
| Max. Deviation (ppm) | -5.71                | -0.003295815          |            |

|            |                        |
|------------|------------------------|
| Test Mode: | LTE Band 4_CH20175_10M |
|------------|------------------------|

### Temperature vs. Frequency Stability

| Temperature(°C)      | Frequency Error (Hz) | Frequency Error (ppm) | Limit(ppm) |
|----------------------|----------------------|-----------------------|------------|
| -30                  | 5.21                 | 0.003007215           | ±2.5       |
| -20                  | -5.42                | -0.003128427          |            |
| -10                  | -4.33                | -0.002499278          |            |
| 0                    | -4.29                | -0.00247619           |            |
| 10                   | 0.23                 | 0.000132756           |            |
| 20                   | 3.84                 | 0.00221645            |            |
| 30                   | -1.19                | -0.000686869          |            |
| 40                   | 5.79                 | 0.003341991           |            |
| 50                   | 3.66                 | 0.002112554           |            |
| 60                   | -4.72                | -0.002724387          |            |
| 75                   | -5.03                | -0.002903319          |            |
| Max. Deviation (ppm) | 5.79                 | 0.003341991           |            |

### Voltage vs. Frequency Stability

| Voltage(Volts)       | Frequency Error (Hz) | Frequency Error (ppm) | Limit(ppm) |
|----------------------|----------------------|-----------------------|------------|
| 3.8                  | -2.93                | -0.001691198          | ±2.5       |
| 4.0                  | 6.02                 | 0.003474747           |            |
| 4.2                  | -1.81                | -0.001044733          |            |
| Max. Deviation (ppm) | 6.02                 | 0.003474747           |            |

|            |                        |
|------------|------------------------|
| Test Mode: | LTE Band 4_CH20175_15M |
|------------|------------------------|

### Temperature vs. Frequency Stability

| Temperature(°C)      | Frequency Error (Hz) | Frequency Error (ppm) | Limit(ppm) |
|----------------------|----------------------|-----------------------|------------|
| -30                  | -1.16                | -0.000669553          | ±2.5       |
| -20                  | -2.29                | -0.001321789          |            |
| -10                  | 6.75                 | 0.003896104           |            |
| 0                    | 6.01                 | 0.003468975           |            |
| 10                   | 1.78                 | 0.001027417           |            |
| 20                   | -0.18                | -0.000103896          |            |
| 30                   | -1.70                | -0.000981241          |            |
| 40                   | 5.12                 | 0.002955267           |            |
| 50                   | -2.55                | -0.001471861          |            |
| 60                   | 2.26                 | 0.001304473           |            |
| 75                   | -4.49                | -0.002591631          |            |
| Max. Deviation (ppm) | 6.75                 | 0.003896104           |            |

### Voltage vs. Frequency Stability

| Voltage(Volts)       | Frequency Error (Hz) | Frequency Error (ppm) | Limit(ppm) |
|----------------------|----------------------|-----------------------|------------|
| 3.8                  | 6.48                 | 0.00374026            | ±2.5       |
| 4.0                  | 2.53                 | 0.001460317           |            |
| 4.2                  | -2.39                | -0.001379509          |            |
| Max. Deviation (ppm) | 6.48                 | 0.00374026            |            |

|            |                        |
|------------|------------------------|
| Test Mode: | LTE Band 4_CH20175_20M |
|------------|------------------------|

### Temperature vs. Frequency Stability

| Temperature(°C)      | Frequency Error (Hz) | Frequency Error (ppm) | Limit(ppm) |
|----------------------|----------------------|-----------------------|------------|
| -30                  | -5.59                | -0.003226551          | ±2.5       |
| -20                  | 3.03                 | 0.001748918           |            |
| -10                  | -4.62                | -0.002666667          |            |
| 0                    | 5.40                 | 0.003116883           |            |
| 10                   | 6.62                 | 0.003821068           |            |
| 20                   | 1.82                 | 0.001050505           |            |
| 30                   | -0.91                | -0.000525253          |            |
| 40                   | 4.88                 | 0.002816739           |            |
| 50                   | -4.97                | -0.002868687          |            |
| 60                   | 5.12                 | 0.002955267           |            |
| 75                   | 4.59                 | 0.002649351           |            |
| Max. Deviation (ppm) | 6.62                 | 0.003821068           |            |

### Voltage vs. Frequency Stability

| Voltage(Volts)       | Frequency Error (Hz) | Frequency Error (ppm) | Limit(ppm) |
|----------------------|----------------------|-----------------------|------------|
| 3.8                  | 4.08                 | 0.002354978           | ±2.5       |
| 4.0                  | 0.20                 | 0.00011544            |            |
| 4.2                  | -2.91                | -0.001679654          |            |
| Max. Deviation (ppm) | 4.08                 | 0.002354978           |            |

|            |                       |
|------------|-----------------------|
| Test Mode: | LTE Band 7_CH21100_5M |
|------------|-----------------------|

### Temperature vs. Frequency Stability

| Temperature(°C)      | Frequency Error (Hz) | Frequency Error (ppm) | Limit(ppm) |
|----------------------|----------------------|-----------------------|------------|
| -30                  | -5.76                | -0.002272189          | ±2.5       |
| -20                  | 0.63                 | 0.000248521           |            |
| -10                  | 1.18                 | 0.000465483           |            |
| 0                    | 2.58                 | 0.001017751           |            |
| 10                   | -1.25                | -0.000493097          |            |
| 20                   | 7.24                 | 0.002856016           |            |
| 30                   | 4.31                 | 0.001700197           |            |
| 40                   | -2.81                | -0.001108481          |            |
| 50                   | 6.33                 | 0.002497041           |            |
| 60                   | 2.18                 | 0.000859961           |            |
| 75                   | -0.56                | -0.000220907          |            |
| Max. Deviation (ppm) | 7.24                 | 0.002856016           |            |

### Voltage vs. Frequency Stability

| Voltage(Volts)       | Frequency Error (Hz) | Frequency Error (ppm) | Limit(ppm) |
|----------------------|----------------------|-----------------------|------------|
| 3.8                  | 0.28                 | 0.000110454           | ±2.5       |
| 4.0                  | -3.94                | -0.001554241          |            |
| 4.2                  | 2.32                 | 0.000915187           |            |
| Max. Deviation (ppm) | -3.94                | -0.001554241          |            |

|            |                        |
|------------|------------------------|
| Test Mode: | LTE Band 7_CH21100_10M |
|------------|------------------------|

### Temperature vs. Frequency Stability

| Temperature(°C)      | Frequency Error (Hz) | Frequency Error (ppm) | Limit(ppm) |
|----------------------|----------------------|-----------------------|------------|
| -30                  | 3.34                 | 0.001317554           | ±2.5       |
| -20                  | 6.69                 | 0.002639053           |            |
| -10                  | 4.68                 | 0.001846154           |            |
| 0                    | -0.74                | -0.000291913          |            |
| 10                   | -4.57                | -0.001802761          |            |
| 20                   | 4.48                 | 0.001767258           |            |
| 30                   | 6.94                 | 0.002737673           |            |
| 40                   | 2.48                 | 0.000978304           |            |
| 50                   | 7.16                 | 0.002824458           |            |
| 60                   | -2.85                | -0.00112426           |            |
| 75                   | 3.58                 | 0.001412229           |            |
| Max. Deviation (ppm) | 7.16                 | 0.002824458           |            |

### Voltage vs. Frequency Stability

| Voltage(Volts)       | Frequency Error (Hz) | Frequency Error (ppm) | Limit(ppm) |
|----------------------|----------------------|-----------------------|------------|
| 3.8                  | 6.07                 | 0.002394477           | ±2.5       |
| 4.0                  | 2.72                 | 0.001072978           |            |
| 4.2                  | -3.76                | -0.001483235          |            |
| Max. Deviation (ppm) | 6.07                 | 0.002394477           |            |

|            |                        |
|------------|------------------------|
| Test Mode: | LTE Band 7_CH21100_15M |
|------------|------------------------|

### Temperature vs. Frequency Stability

| Temperature(°C)      | Frequency Error (Hz) | Frequency Error (ppm) | Limit(ppm) |
|----------------------|----------------------|-----------------------|------------|
| -30                  | 0.30                 | 0.000118343           | ±2.5       |
| -20                  | 1.89                 | 0.000745562           |            |
| -10                  | 5.25                 | 0.002071006           |            |
| 0                    | -5.18                | -0.002043393          |            |
| 10                   | -0.40                | -0.000157791          |            |
| 20                   | -0.87                | -0.000343195          |            |
| 30                   | 0.97                 | 0.000382643           |            |
| 40                   | -4.64                | -0.001830375          |            |
| 50                   | 4.33                 | 0.001708087           |            |
| 60                   | -3.61                | -0.001424063          |            |
| 75                   | 4.84                 | 0.00190927            |            |
| Max. Deviation (ppm) | 5.25                 | 0.002071006           |            |

### Voltage vs. Frequency Stability

| Voltage(Volts)       | Frequency Error (Hz) | Frequency Error (ppm) | Limit(ppm) |
|----------------------|----------------------|-----------------------|------------|
| 3.8                  | -4.86                | -0.00191716           | ±2.5       |
| 4.0                  | 4.13                 | 0.001629191           |            |
| 4.2                  | -3.49                | -0.001376726          |            |
| Max. Deviation (ppm) | -4.86                | -0.00191716           |            |

|            |                        |
|------------|------------------------|
| Test Mode: | LTE Band 7_CH21100_20M |
|------------|------------------------|

### Temperature vs. Frequency Stability

| Temperature(°C)      | Frequency Error (Hz) | Frequency Error (ppm) | Limit(ppm) |
|----------------------|----------------------|-----------------------|------------|
| -30                  | -4.86                | -0.00191716           | ±2.5       |
| -20                  | -5.01                | -0.001976331          |            |
| -10                  | -1.34                | -0.0005286            |            |
| 0                    | 4.58                 | 0.001806706           |            |
| 10                   | 3.71                 | 0.001463511           |            |
| 20                   | -2.84                | -0.001120316          |            |
| 30                   | 3.05                 | 0.001203156           |            |
| 40                   | 1.40                 | 0.000552268           |            |
| 50                   | -4.31                | -0.001700197          |            |
| 60                   | -5.91                | -0.002331361          |            |
| 75                   | 2.61                 | 0.001029586           |            |
| Max. Deviation (ppm) | -5.91                | -0.002331361          |            |

### Voltage vs. Frequency Stability

| Voltage(Volts)       | Frequency Error (Hz) | Frequency Error (ppm) | Limit(ppm) |
|----------------------|----------------------|-----------------------|------------|
| 3.8                  | 1.53                 | 0.00060355            | ±2.5       |
| 4.0                  | -5.68                | -0.002240631          |            |
| 4.2                  | -3.02                | -0.001191321          |            |
| Max. Deviation (ppm) | -5.68                | -0.002240631          |            |



Test Mode: LTE Band 12\_CH23095\_1.4M

### Temperature vs. Frequency Stability

| Temperature(°C)      | Frequency Error (Hz) | Frequency Error (ppm) | Limit(ppm) |
|----------------------|----------------------|-----------------------|------------|
| -30                  | 2.47                 | 0.003491166           | ±2.5       |
| -20                  | 2.56                 | 0.003618375           |            |
| -10                  | -5.04                | -0.007123675          |            |
| 0                    | -2.11                | -0.002982332          |            |
| 10                   | -0.17                | -0.000240283          |            |
| 20                   | -1.30                | -0.001837456          |            |
| 30                   | 1.20                 | 0.001696113           |            |
| 40                   | -4.54                | -0.006416961          |            |
| 50                   | 3.59                 | 0.005074205           |            |
| 60                   | 4.29                 | 0.006063604           |            |
| 75                   | -3.29                | -0.004650177          |            |
| Max. Deviation (ppm) | -5.04                | -0.007123675          |            |

### Voltage vs. Frequency Stability

| Voltage(Volts)       | Frequency Error (Hz) | Frequency Error (ppm) | Limit(ppm) |
|----------------------|----------------------|-----------------------|------------|
| 3.8                  | 1.39                 | 0.001964664           | ±2.5       |
| 4.0                  | 5.58                 | 0.007886926           |            |
| 4.2                  | 0.84                 | 0.001187279           |            |
| Max. Deviation (ppm) | 5.58                 | 0.007886926           |            |

|            |                        |
|------------|------------------------|
| Test Mode: | LTE Band 12_CH23095_3M |
|------------|------------------------|

### Temperature vs. Frequency Stability

| Temperature(°C)      | Frequency Error (Hz) | Frequency Error (ppm) | Limit(ppm) |
|----------------------|----------------------|-----------------------|------------|
| -30                  | -4.75                | -0.006713781          | ±2.5       |
| -20                  | -0.98                | -0.001385159          |            |
| -10                  | -3.74                | -0.005286219          |            |
| 0                    | 6.95                 | 0.009823322           |            |
| 10                   | 5.10                 | 0.007208481           |            |
| 20                   | -0.04                | -5.65371E-05          |            |
| 30                   | -1.82                | -0.002572438          |            |
| 40                   | 6.49                 | 0.009173145           |            |
| 50                   | -1.98                | -0.002798587          |            |
| 60                   | 4.76                 | 0.006727915           |            |
| 75                   | 5.05                 | 0.007137809           |            |
| Max. Deviation (ppm) | 6.95                 | 0.009823322           |            |

### Voltage vs. Frequency Stability

| Voltage(Volts)       | Frequency Error (Hz) | Frequency Error (ppm) | Limit(ppm) |
|----------------------|----------------------|-----------------------|------------|
| 3.8                  | -5.11                | 0.007222615           | ±2.5       |
| 4.0                  | 0.40                 | 0.000565371           |            |
| 4.2                  | 6.09                 | 0.008607774           |            |
| Max. Deviation (ppm) | 6.09                 | 0.008607774           |            |

|            |                        |
|------------|------------------------|
| Test Mode: | LTE Band 12_CH23095_5M |
|------------|------------------------|

### Temperature vs. Frequency Stability

| Temperature(°C)      | Frequency Error (Hz) | Frequency Error (ppm) | Limit(ppm) |
|----------------------|----------------------|-----------------------|------------|
| -30                  | 4.31                 | 0.006091873           | ±2.5       |
| -20                  | 5.70                 | 0.008056537           |            |
| -10                  | -2.40                | -0.003392226          |            |
| 0                    | -5.73                | -0.00809894           |            |
| 10                   | -1.91                | -0.002699647          |            |
| 20                   | -4.01                | -0.005667845          |            |
| 30                   | -2.83                | -0.004                |            |
| 40                   | 3.40                 | 0.004805654           |            |
| 50                   | 4.73                 | 0.006685512           |            |
| 60                   | -5.11                | -0.007222615          |            |
| 75                   | 2.78                 | 0.003929329           |            |
| Max. Deviation (ppm) | -5.73                | -0.00809894           |            |

### Voltage vs. Frequency Stability

| Voltage(Volts)       | Frequency Error (Hz) | Frequency Error (ppm) | Limit(ppm) |
|----------------------|----------------------|-----------------------|------------|
| 3.8                  | -1.63                | -0.002303887          | ±2.5       |
| 4.0                  | -3.40                | -0.004805654          |            |
| 4.2                  | -5.80                | -0.00819788           |            |
| Max. Deviation (ppm) | -5.8                 | -0.00819788           |            |

|            |                         |
|------------|-------------------------|
| Test Mode: | LTE Band 12_CH23095_10M |
|------------|-------------------------|

### Temperature vs. Frequency Stability

| Temperature(°C)      | Frequency Error (Hz) | Frequency Error (ppm) | Limit(ppm) |
|----------------------|----------------------|-----------------------|------------|
| -30                  | -5.70                | -0.008056537          | ±2.5       |
| -20                  | 0.60                 | 0.000848057           |            |
| -10                  | -4.24                | -0.005992933          |            |
| 0                    | 5.55                 | 0.007844523           |            |
| 10                   | 5.77                 | 0.008155477           |            |
| 20                   | -1.73                | -0.00244523           |            |
| 30                   | -4.37                | -0.006176678          |            |
| 40                   | 6.73                 | 0.009512367           |            |
| 50                   | -4.79                | -0.006770318          |            |
| 60                   | 5.21                 | 0.007363958           |            |
| 75                   | -1.02                | -0.001441696          |            |
| Max. Deviation (ppm) | 6.73                 | 0.009512367           |            |

### Voltage vs. Frequency Stability

| Voltage(Volts)       | Frequency Error (Hz) | Frequency Error (ppm) | Limit(ppm) |
|----------------------|----------------------|-----------------------|------------|
| 3.8                  | -4.21                | -0.00595053           | ±2.5       |
| 4.0                  | 6.92                 | 0.009780919           |            |
| 4.2                  | -0.08                | -0.000113074          |            |
| Max. Deviation (ppm) | 6.92                 | 0.009780919           |            |

|            |                        |
|------------|------------------------|
| Test Mode: | LTE Band 13_CH23230_5M |
|------------|------------------------|

### Temperature vs. Frequency Stability

| Temperature(°C)      | Frequency Error (Hz) | Frequency Error (ppm) | Limit(ppm) |
|----------------------|----------------------|-----------------------|------------|
| -30                  | 2.63                 | 0.003363171           | ±2.5       |
| -20                  | -5.21                | -0.006662404          |            |
| -10                  | 3.41                 | 0.004360614           |            |
| 0                    | -4.80                | -0.006138107          |            |
| 10                   | 6.81                 | 0.00870844            |            |
| 20                   | 5.74                 | 0.007340153           |            |
| 30                   | -2.92                | -0.003734015          |            |
| 40                   | 2.86                 | 0.003657289           |            |
| 50                   | 6.79                 | 0.008682864           |            |
| 60                   | -6.44                | -0.008235294          |            |
| 75                   | 2.19                 | 0.002800512           |            |
| Max. Deviation (ppm) | 6.81                 | 0.00870844            |            |

### Voltage vs. Frequency Stability

| Voltage(Volts)       | Frequency Error (Hz) | Frequency Error (ppm) | Limit(ppm) |
|----------------------|----------------------|-----------------------|------------|
| 3.8                  | -3.95                | -0.005051151          | ±2.5       |
| 4.0                  | 5.37                 | 0.006867008           |            |
| 4.2                  | 3.05                 | 0.003900256           |            |
| Max. Deviation (ppm) | 5.37                 | 0.006867008           |            |

|            |                         |
|------------|-------------------------|
| Test Mode: | LTE Band 13_CH23230_10M |
|------------|-------------------------|

### Temperature vs. Frequency Stability

| Temperature(°C)      | Frequency Error (Hz) | Frequency Error (ppm) | Limit(ppm) |
|----------------------|----------------------|-----------------------|------------|
| -30                  | -2.12                | -0.002710997          | ±2.5       |
| -20                  | 1.65                 | 0.002109974           |            |
| -10                  | 0.90                 | 0.001150895           |            |
| 0                    | -4.67                | -0.005971867          |            |
| 10                   | 0.71                 | 0.000907928           |            |
| 20                   | 1.46                 | 0.001867008           |            |
| 30                   | 3.28                 | 0.004194373           |            |
| 40                   | 1.78                 | 0.002276215           |            |
| 50                   | -5.43                | -0.006943734          |            |
| 60                   | -4.16                | -0.005319693          |            |
| 75                   | 5.35                 | 0.006841432           |            |
| Max. Deviation (ppm) | -5.43                | -0.006943734          |            |

### Voltage vs. Frequency Stability

| Voltage(Volts)       | Frequency Error (Hz) | Frequency Error (ppm) | Limit(ppm) |
|----------------------|----------------------|-----------------------|------------|
| 3.8                  | 1.06                 | 0.001355499           | ±2.5       |
| 4.0                  | 5.66                 | 0.007237852           |            |
| 4.2                  | -1.37                | -0.001751918          |            |
| Max. Deviation (ppm) | 5.66                 | 0.007237852           |            |

End of Test Report