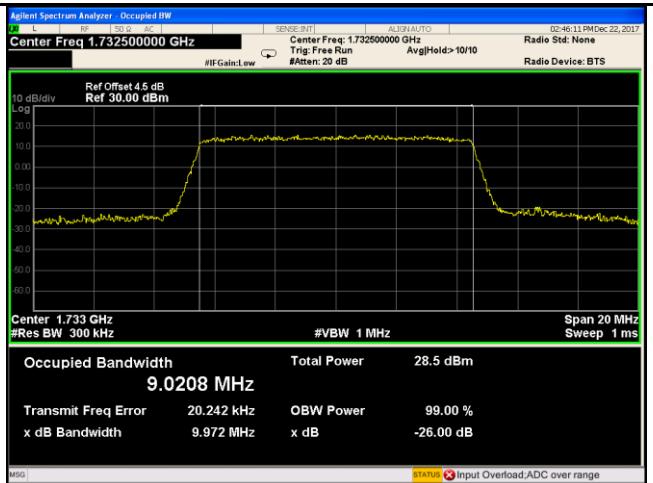
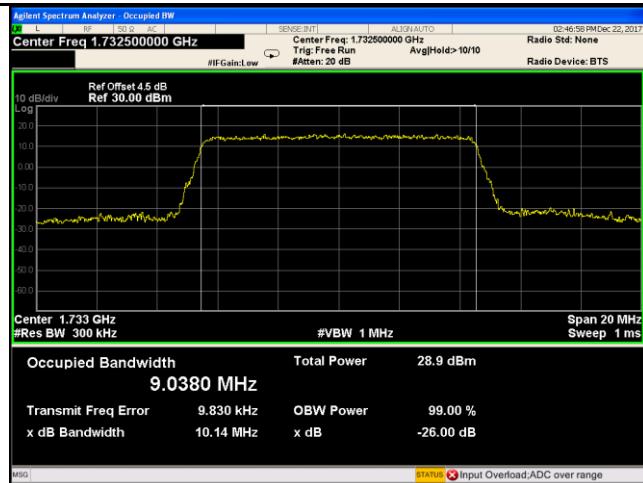
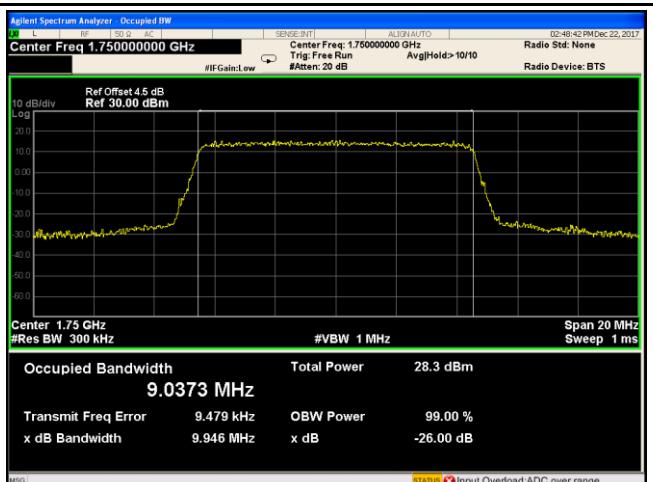
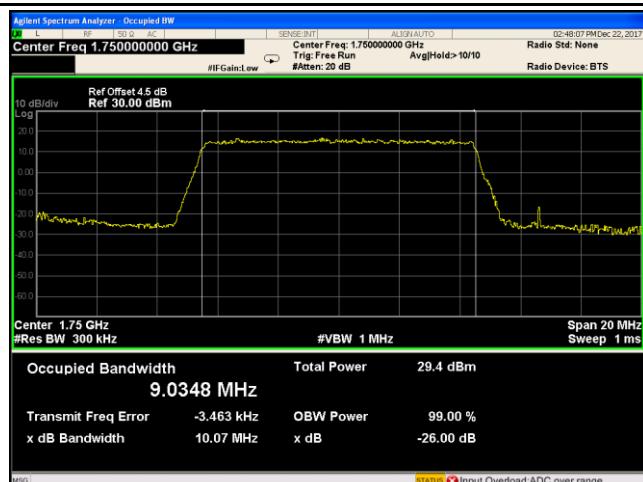


LTE Band IV - Low CH QPSK-10

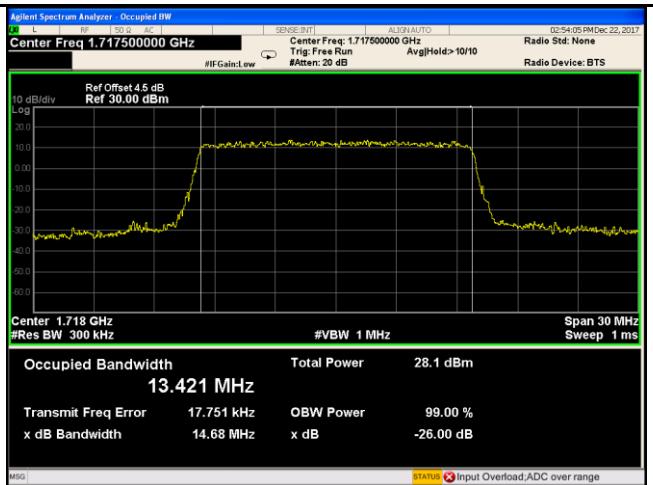
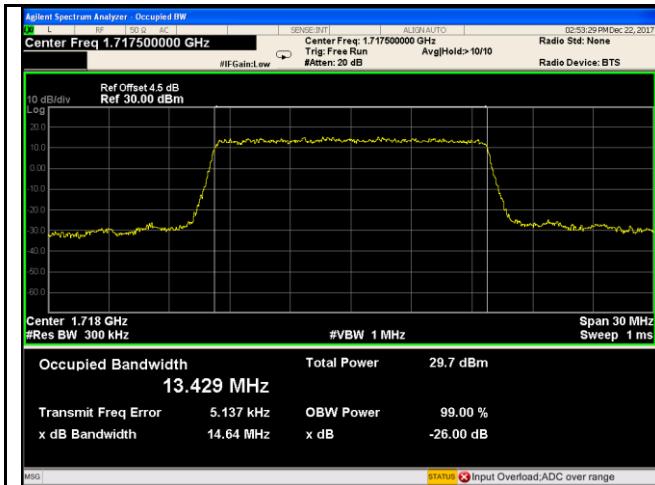


LTE Band IV - Middle CH QPSK-10

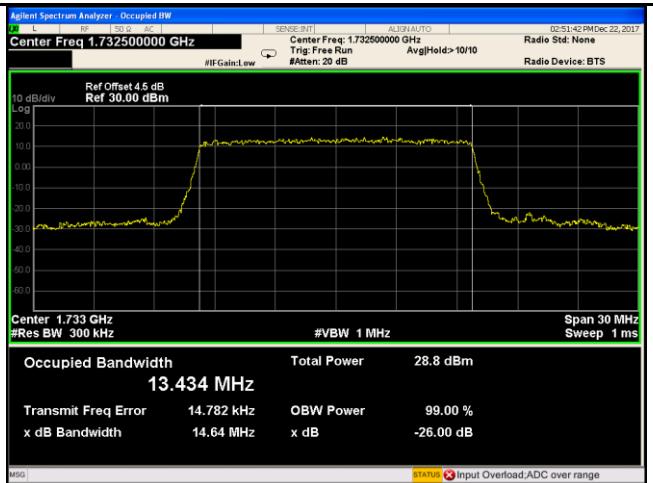
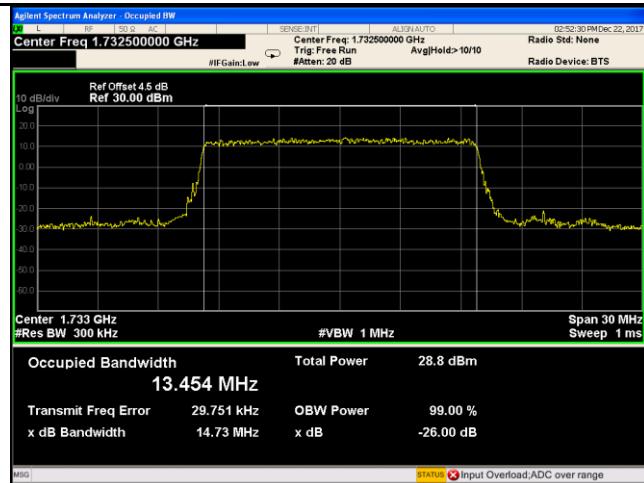


LTE Band IV - High CH QPSK-10

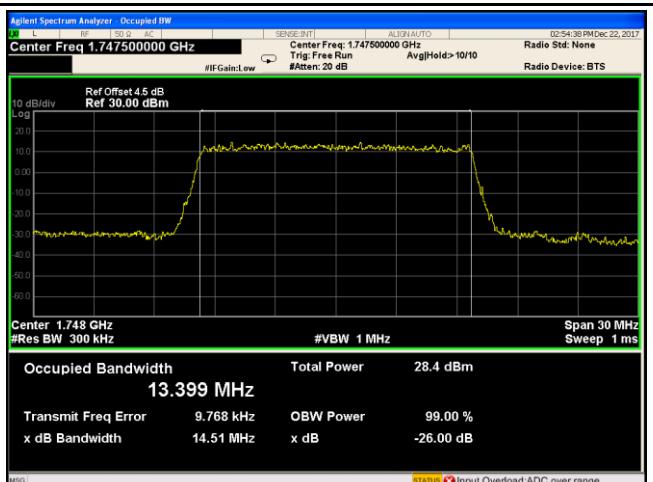
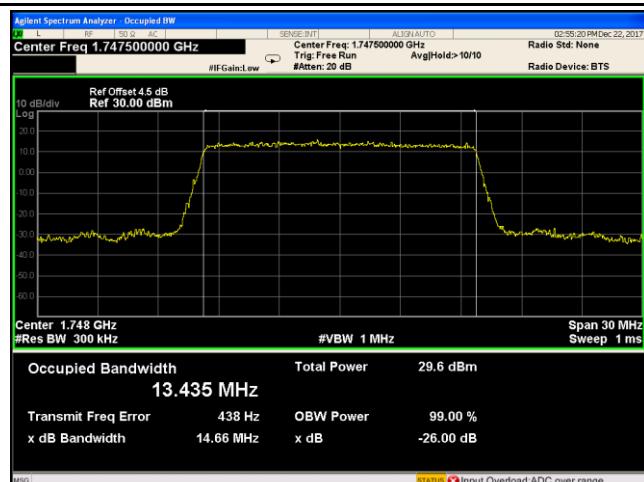
LTE Band IV - High CH 16QAM-10



LTE Band IV - Low CH QPSK-15

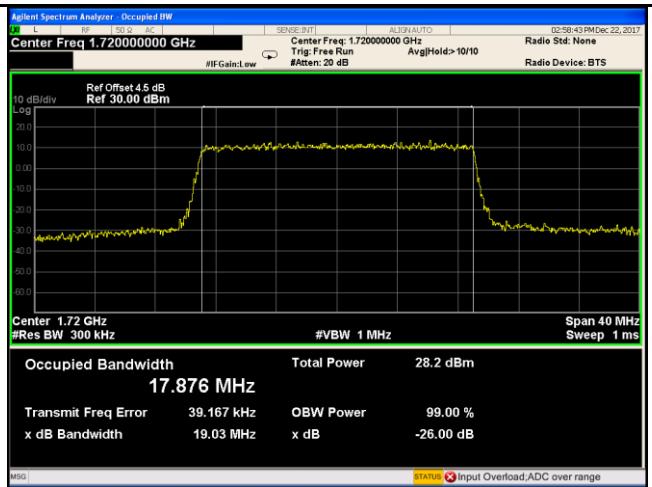
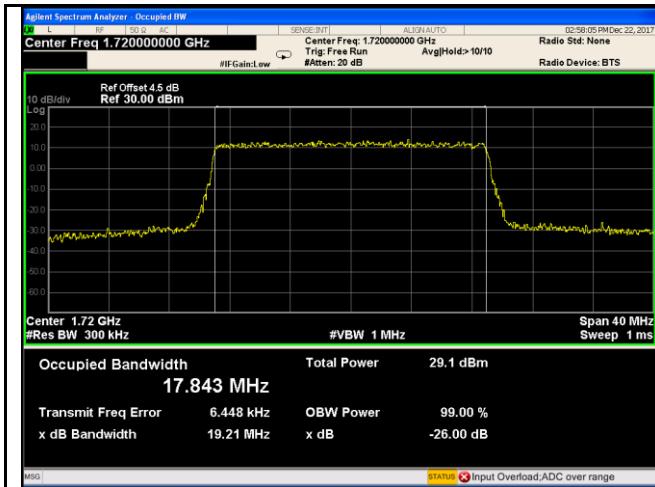


LTE Band IV - Middle CH QPSK-15

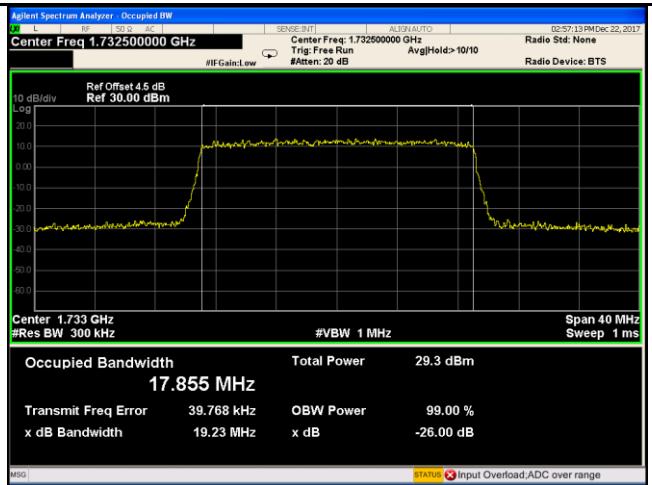


LTE Band IV - High CH QPSK-15

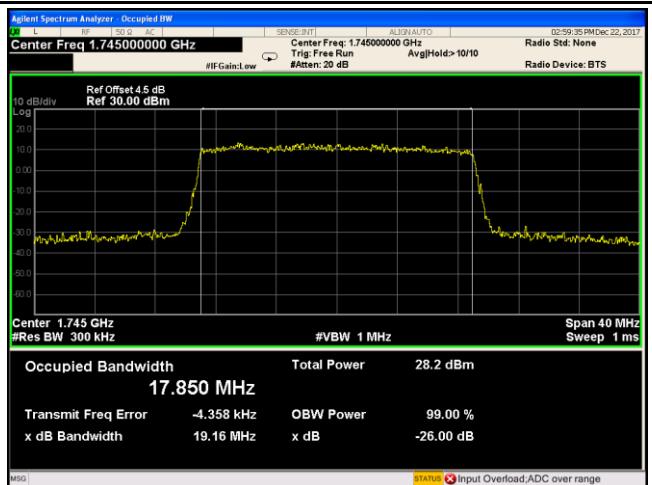
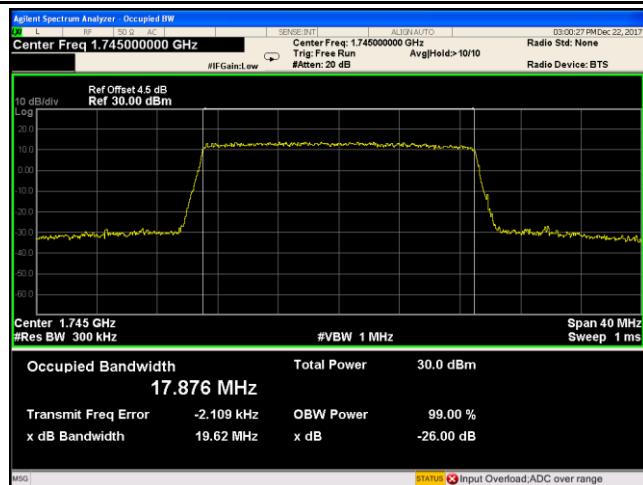
LTE Band IV - High CH 16QAM-15



LTE Band IV - Low CH QPSK-20



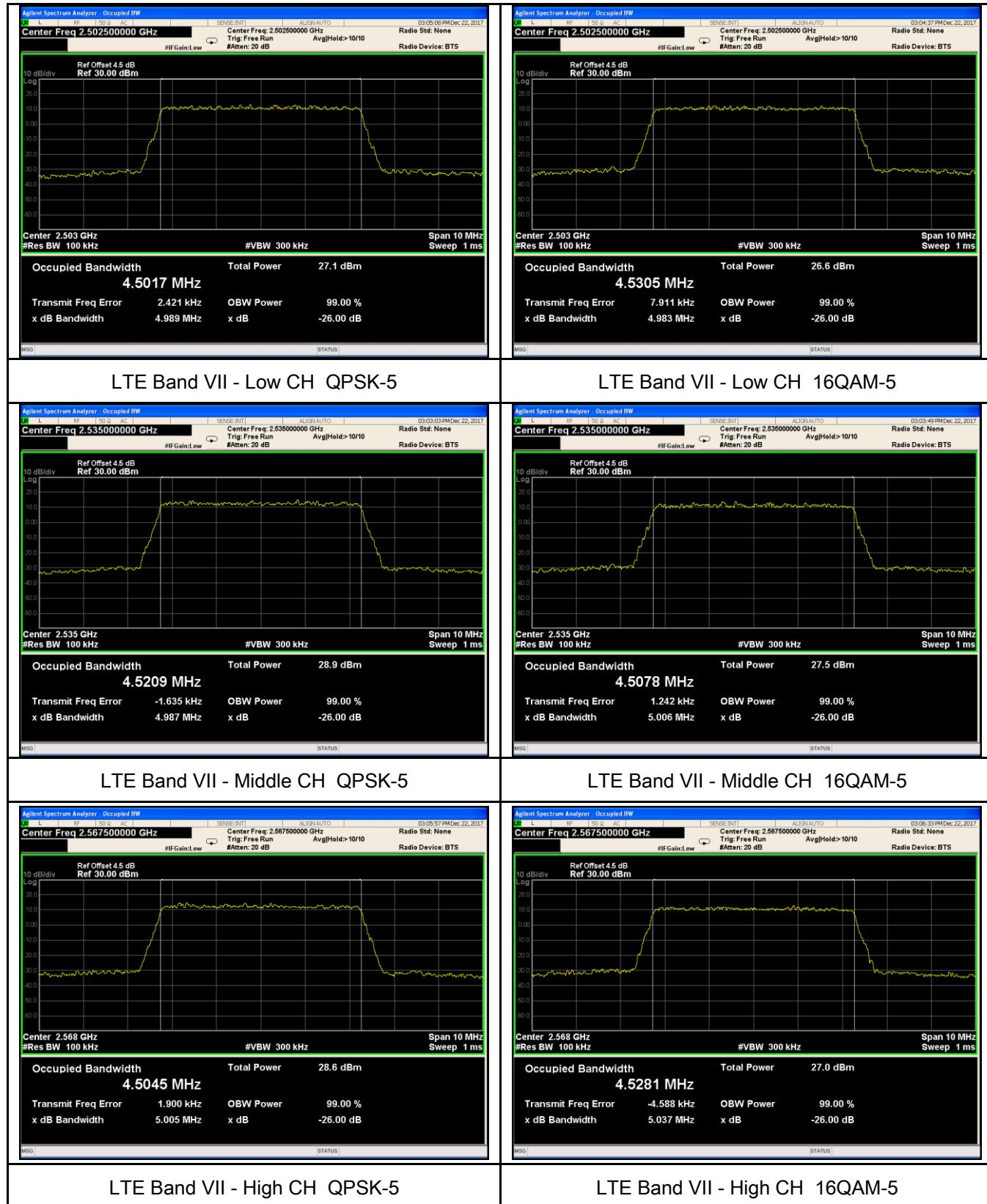
LTE Band IV - Middle CH QPSK-20

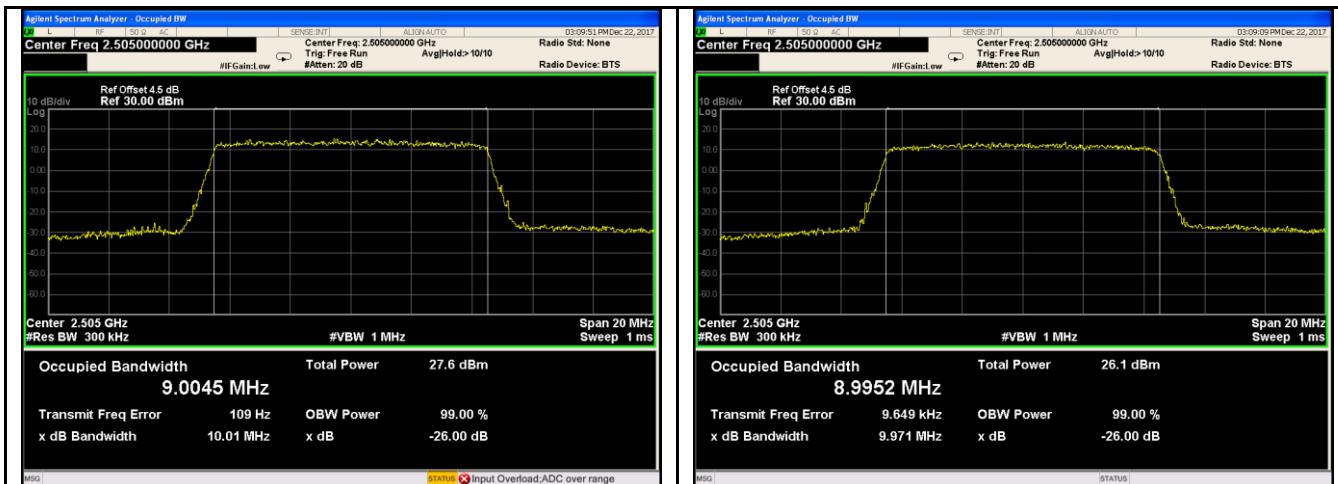


LTE Band IV - High CH QPSK-20

LTE Band IV - High CH 16QAM-20

LTE Band VII (Part 27)





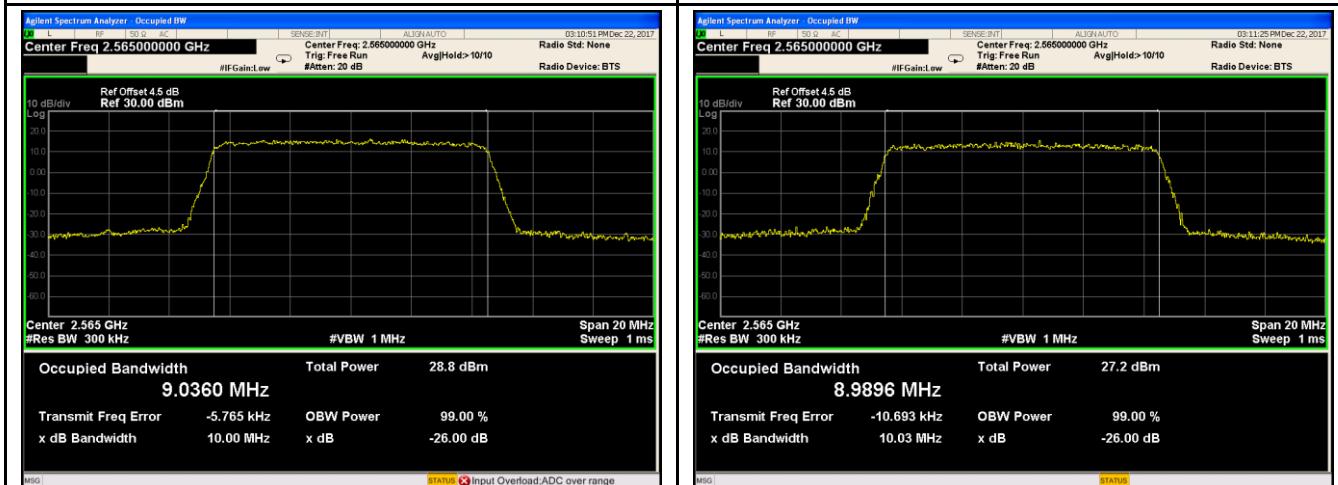
LTE Band VII - Low CH QPSK-10

LTE Band VII - Low CH 16QAM-10



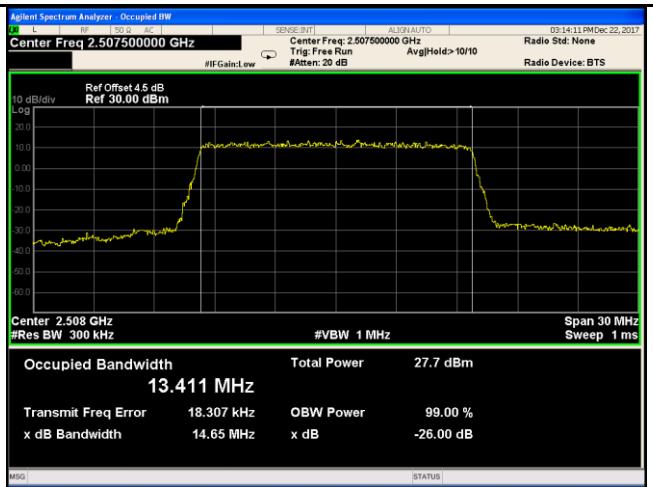
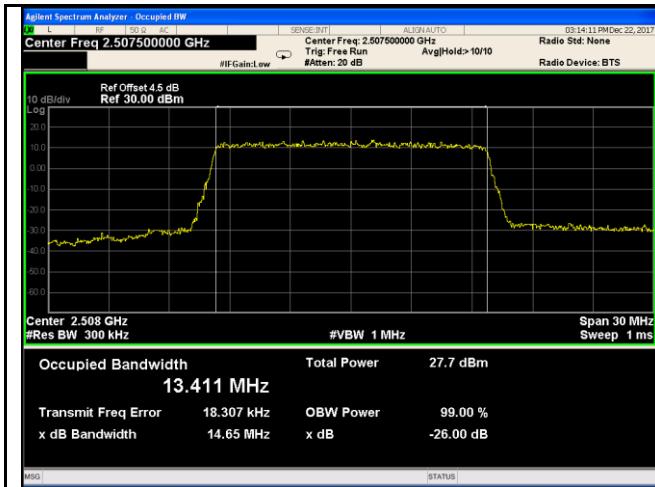
LTE Band VII - Middle CH QPSK-10

LTE Band VII - Middle CH 16QAM-10

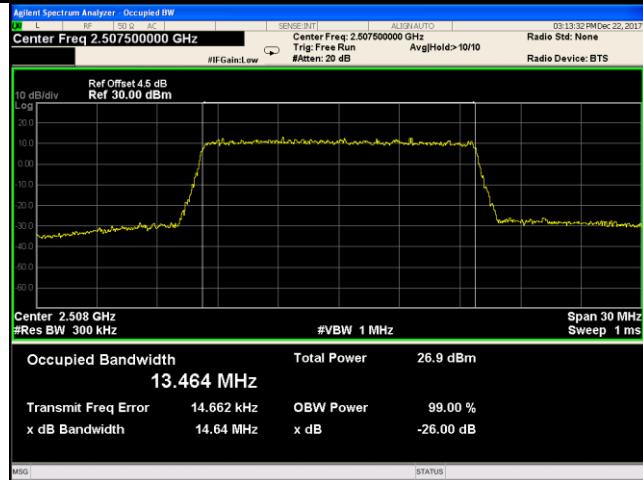


LTE Band VII - High CH QPSK-10

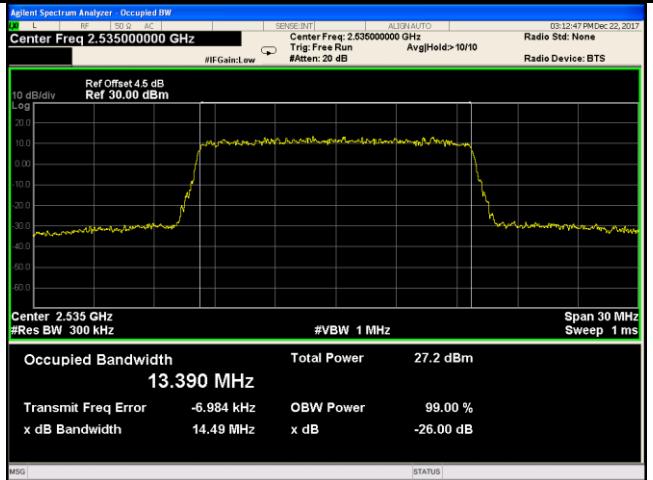
LTE Band VII - High CH 16QAM-10



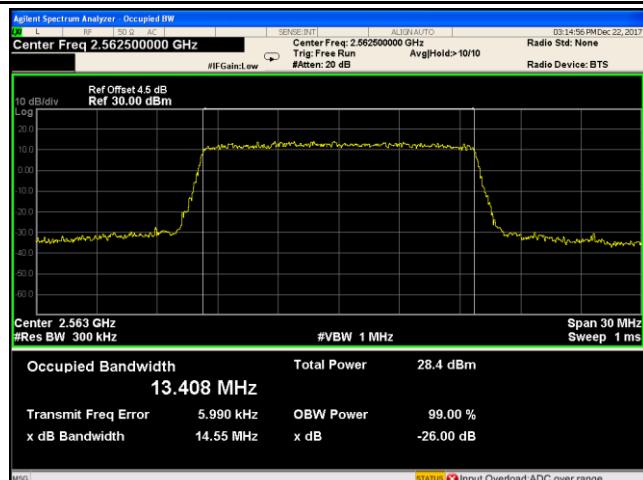
LTE Band VII - Low CH QPSK-15



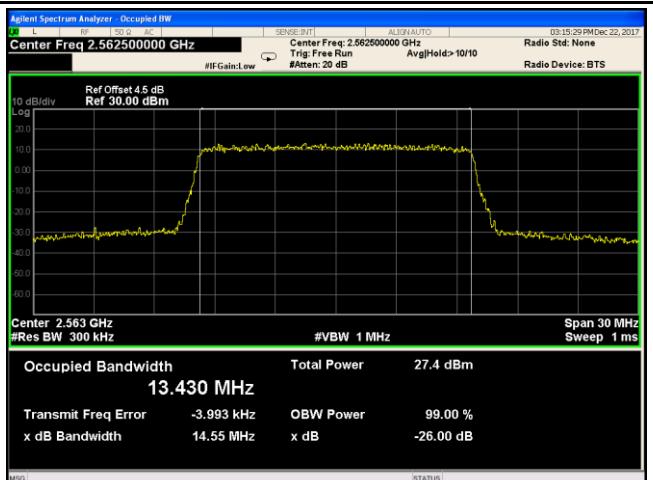
LTE Band VII - Low CH 16QAM-15



LTE Band VII - Middle CH QPSK-15



LTE Band VII - Middle CH 16QAM-15



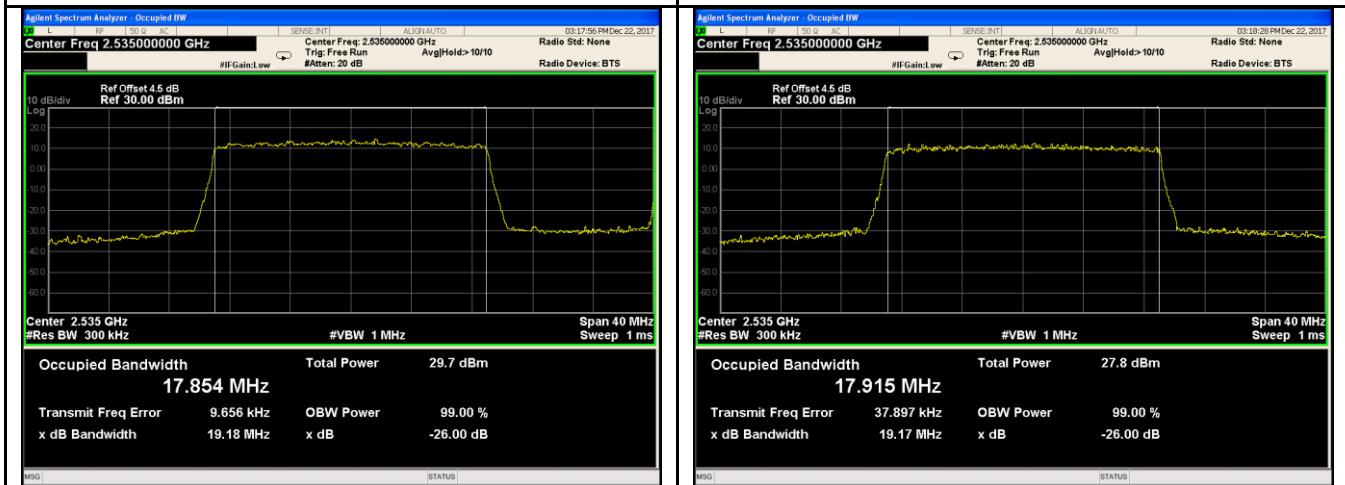
LTE Band VII - High CH QPSK-15

LTE Band VII - High CH 16QAM-15



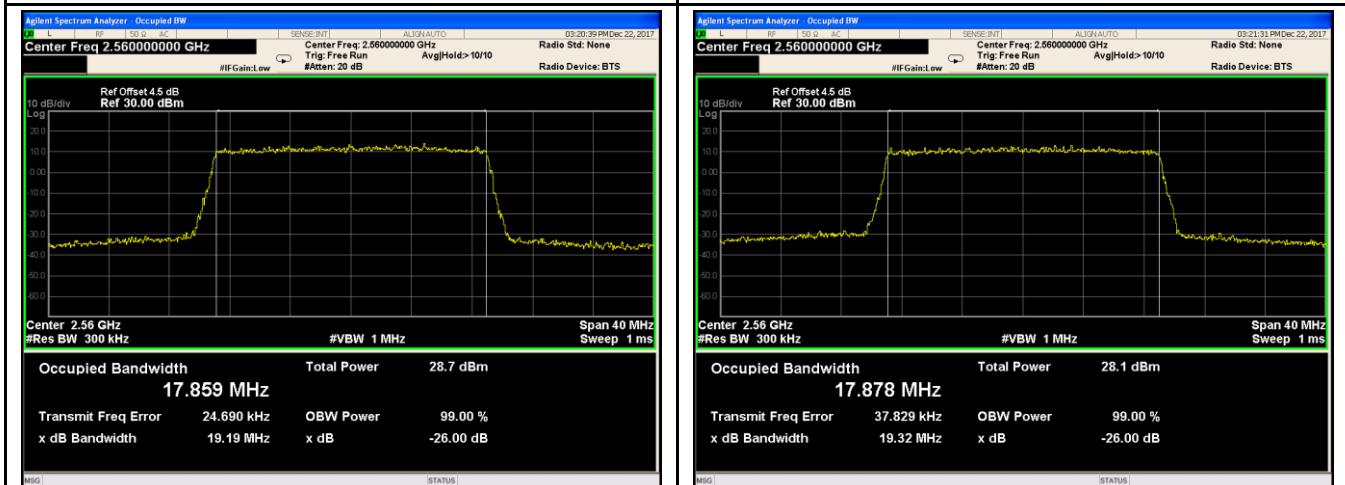
LTE Band VII - Low CH QPSK-20

LTE Band VII - Low CH 16QAM-20



LTE Band VII - Middle CH QPSK-20

LTE Band VII - Middle CH 16QAM-20



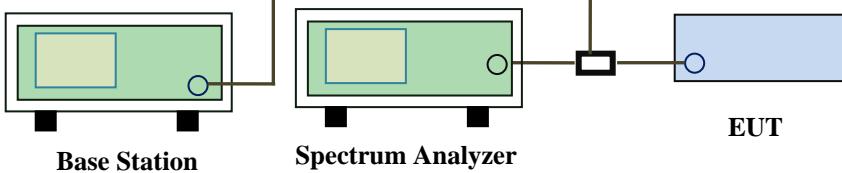
LTE Band VII - High CH QPSK-20

LTE Band VII - High CH 16QAM-20

6.5 Spurious Emissions at Antenna Terminals

| | |
|----------------------|-------------------|
| Temperature | 25 °C |
| Relative Humidity | 55% |
| Atmospheric Pressure | 1017mbar |
| Test date : | December 23, 2017 |
| Tested By : | Aaron Liang |

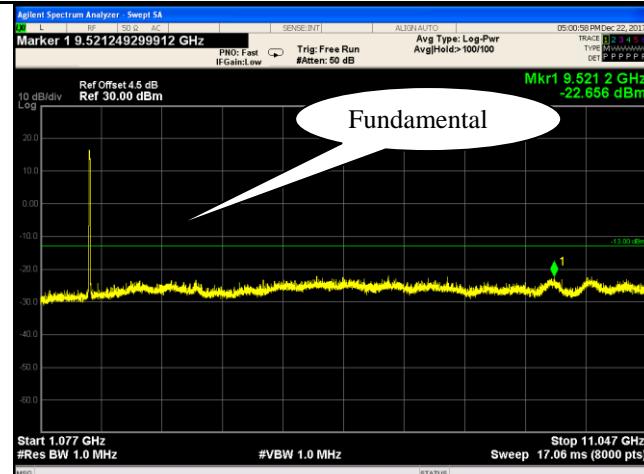
Requirement(s):

| Spec | Item | Requirement | Applicable |
|---|--|---|-------------------------------------|
| §2.1051, §22.917(a)& §24.238(a) § 27.53(h) | a) | The power of any emission outside of the authorized operating frequency ranges must be lower than the transmitter power (P) by a factor of at least $43 + 10 \log (P)$ dB | <input checked="" type="checkbox"/> |
| Test Setup |  <p style="text-align: center;">Base Station Spectrum Analyzer EUT</p> | | |
| Test Procedure | <ul style="list-style-type: none"> - The EUT was connected to Spectrum Analyzer and Base Station via power divider. - The Band Edges of low and high channels for the highest RF powers were measured. - Setting RBW as roughly BW/100. | | |
| Remark | | | |
| Result | <input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail | | |

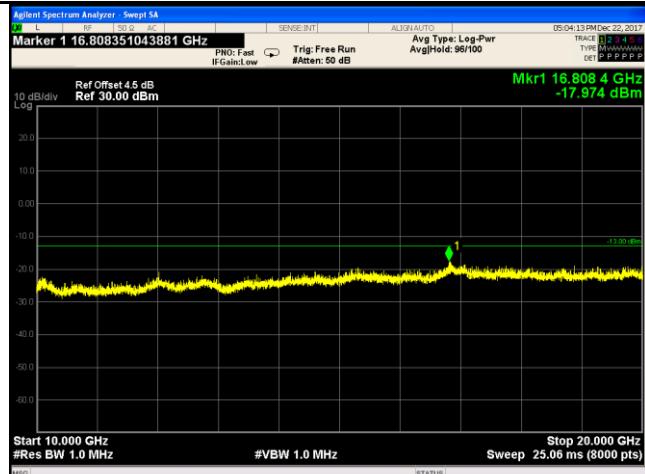
Test Data Yes N/A
 Test Plot Yes (See below) N/A

Test Plots 30MHz-5GHz

LTE Band II (Part 24E)



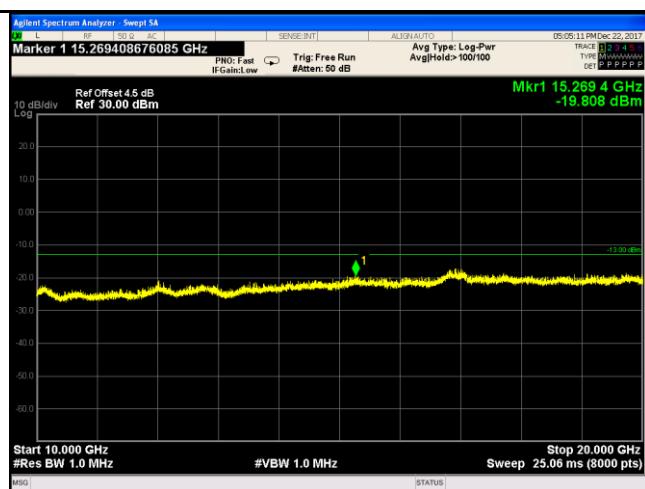
LTE Band II - Low Channel-1



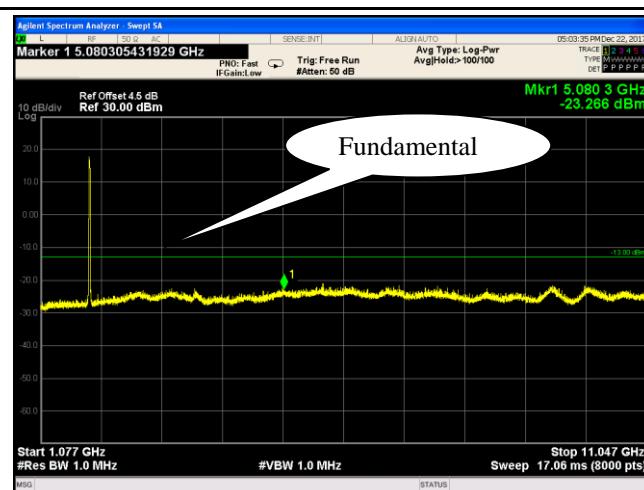
LTE Band II - Low Channel-2



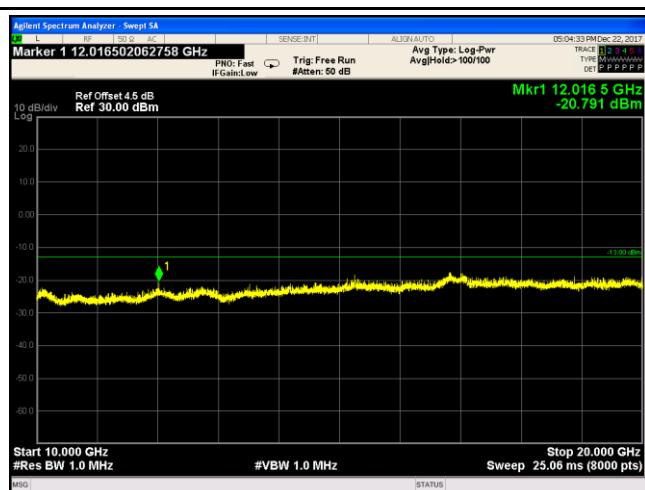
LTE Band II Middle Channel-1



LTE Band II Middle Channel-2

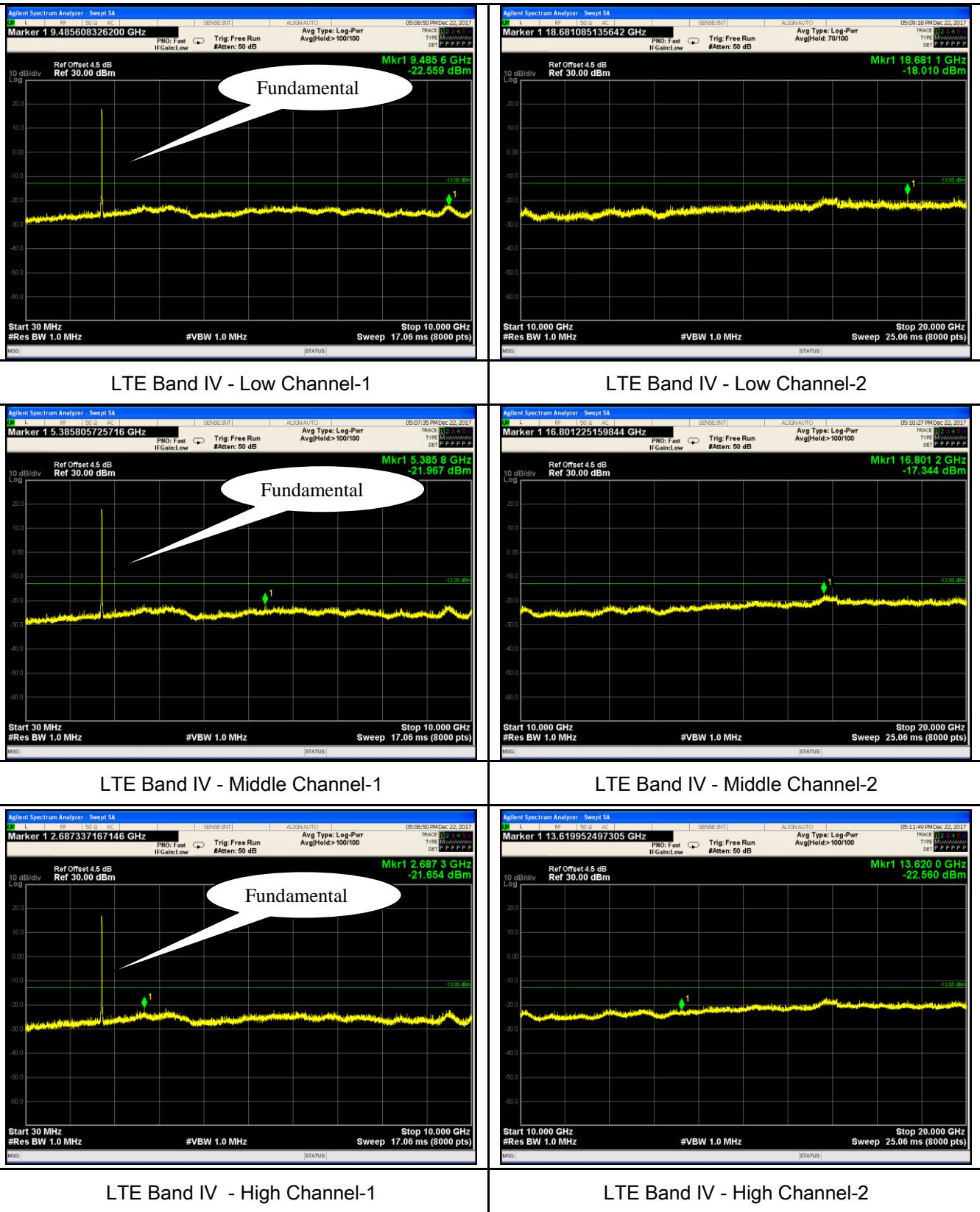


LTE Band II - High Channel-1

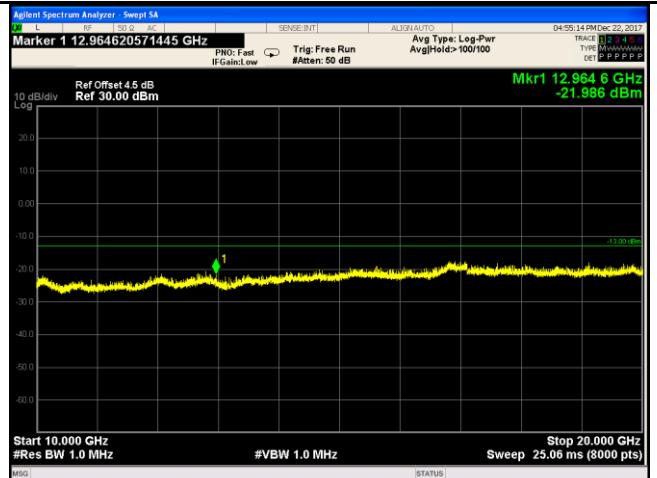
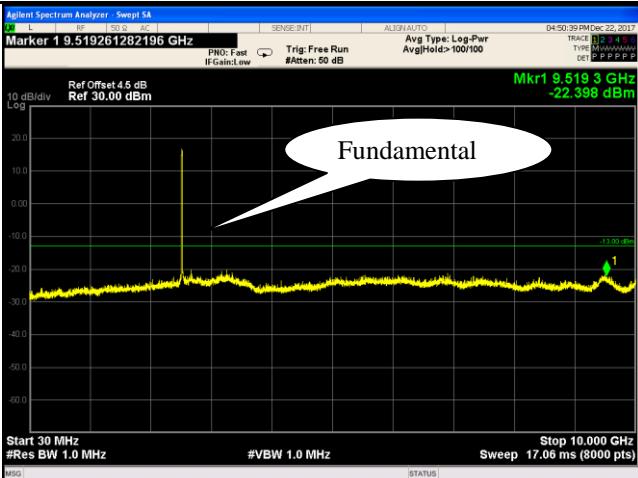


LTE Band II - High Channel-2

LTE Band IV (Part27) result

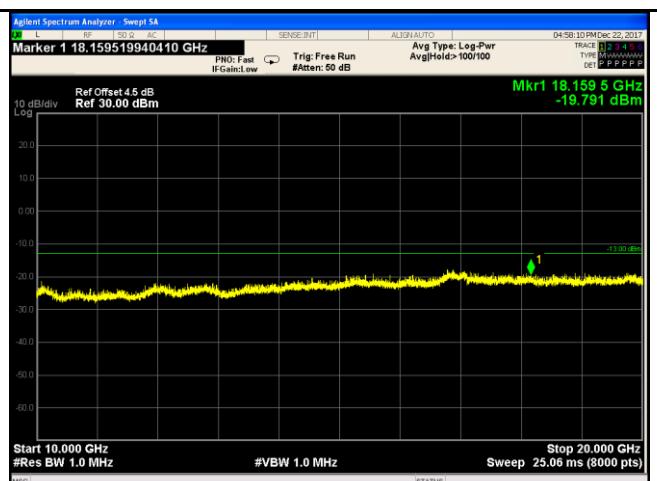
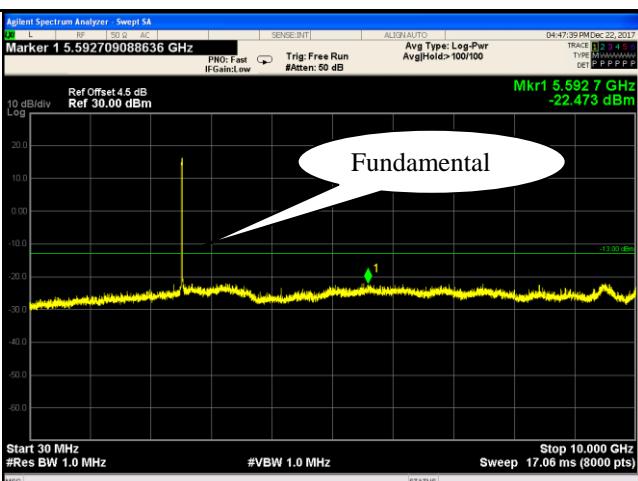


LTE Band VII (Part 27)



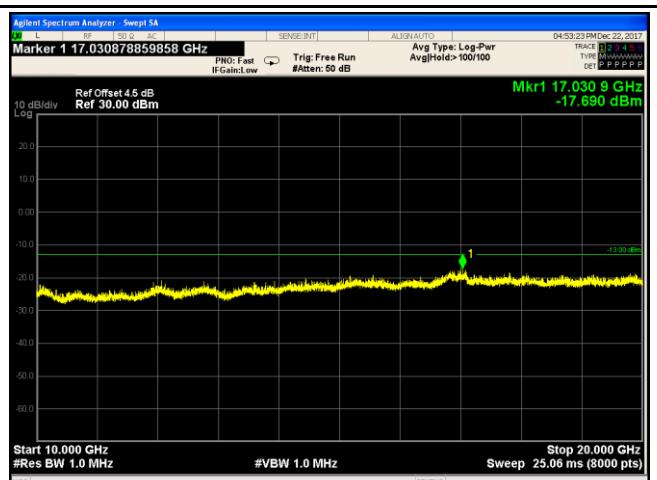
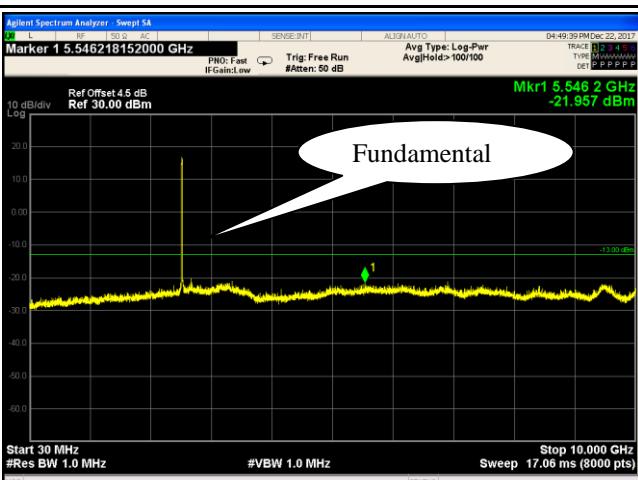
LTE Band VII - Low Channel-1

LTE Band VII - Low Channel-2



LTE Band VII- Middle Channel-1

LTE Band VII - Middle Channel-2



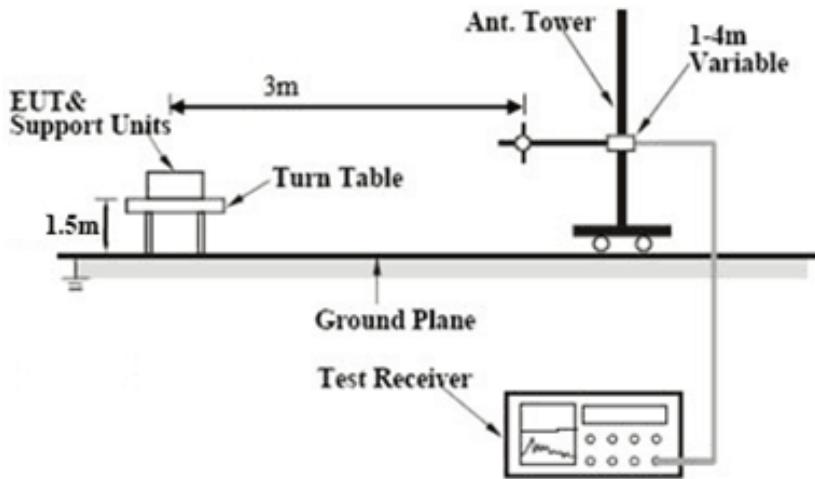
LTE Band VII - High Channel-1

LTE Band VII - High Channel-2

6.6 Spurious Radiated Emissions

| | |
|----------------------|-------------------|
| Temperature | 23 °C |
| Relative Humidity | 54% |
| Atmospheric Pressure | 1020mbar |
| Test date : | December 28, 2017 |
| Tested By : | Aaron Liang |

Requirement(s):

| Spec | Item | Requirement | Applicable |
|--|---|---|-------------------------------------|
| §2.1053, §22.917 & §24.238 § 27.53(h) | a) | The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitter power (P) by a factor of at least $43 + 10 \log (P)$ dB. The spectrum is scanned from 30 MHz up to a frequency including its 10th harmonic. | <input checked="" type="checkbox"/> |
| Test setup |  | | |
| Test Procedure | <ol style="list-style-type: none"> The transmitter was placed on a wooden turntable, and it was transmitting into a non-radiating load which was also placed on the turntable. The measurement antenna was placed at a distance of 3 meters from the EUT. During the tests, the antenna height and polarization as well as EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. The test was performed by placing the EUT on 3-orthogonal axis. Remove the EUT and replace it with substitution antenna. A signal generator was connected to the substitution antenna by a non-radiating cable. The absolute levels of the spurious emissions were measured by the substitution. <p>Sample Calculation:</p> <p>EUT Field Strength = Raw Amplitude (dBμV/m) – Amplifier Gain (dB) + Antenna</p> | | |

| | |
|--------|--|
| | Factor (dB) + Cable Loss (dB) + Filter Attenuation (dB, if used) |
| Remark | |
| Result | <input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail |

Test Data Yes N/A

Test Plot Yes (See below) N/A

LTE Band II (Part 24E) result

Low channel

| Frequency (MHz) | Substituted level (dBm) | Polarity (H/V) | Antenna Gain Correction (dB) | Cable Loss (dB) | Corrected Reading (dBm) | Limit (dBm) | Margin (dB) |
|-----------------|-------------------------|----------------|------------------------------|-----------------|-------------------------|-------------|-------------|
| 3720 | -49.03 | V | 10.25 | 2.73 | -41.51 | -13 | -28.51 |
| 3720 | -48.53 | H | 10.25 | 2.73 | -41.01 | -13 | -28.01 |
| 833.41 | -53.97 | V | 6.37 | 0.42 | -48.02 | -13 | -35.02 |
| 753.78 | -52.91 | H | 6.39 | 0.43 | -46.95 | -13 | -33.95 |

Middle channel

| Frequency (MHz) | Substituted level (dBm) | Polarity (H/V) | Antenna Gain Correction (dB) | Cable Loss (dB) | Corrected Reading (dBm) | Limit (dBm) | Margin (dB) |
|-----------------|-------------------------|----------------|------------------------------|-----------------|-------------------------|-------------|-------------|
| 3760 | -48.01 | V | 10.25 | 2.73 | -40.49 | -13 | -27.49 |
| 3760 | -49.17 | H | 10.25 | 2.73 | -41.65 | -13 | -28.65 |
| 494.12 | -54.04 | V | 6.42 | 0.36 | -47.98 | -13 | -34.98 |
| 330.09 | -53.09 | H | 5.64 | 0.22 | -47.67 | -13 | -34.67 |

High channel

| Frequency (MHz) | Substituted level (dBm) | Polarity (H/V) | Antenna Gain Correction (dB) | Cable Loss (dB) | Corrected Reading (dBm) | Limit (dBm) | Margin (dB) |
|-----------------|-------------------------|----------------|------------------------------|-----------------|-------------------------|-------------|-------------|
| 3800 | -47.91 | V | 10.36 | 2.73 | -40.28 | -13 | -27.28 |
| 3800 | -49.87 | H | 10.36 | 2.73 | -42.24 | -13 | -29.24 |
| 517.14 | -53.63 | V | 6.35 | 0.33 | -47.61 | -13 | -34.61 |
| 838.59 | -51.68 | H | 6.4 | 0.41 | -45.69 | -13 | -32.69 |

Note:

- 1, The testing has been conformed to 10*1907.5MHz=19,075MHz
- 2, All other emissions more than 30 dB below the limit
- 3, X-Axis, Y-Axis and Z-Axis were investigated. The results above show only the worst case.
- 4, The radiated spurious test above 18GHz is subcontracted to SIEMIC (Nanjing-China) Laboratories. and found 30dB below the limit at least.

LTE Band IV (Part27) result

Low channel

| Frequency (MHz) | Substituted level (dBm) | Polarity (H/V) | Antenna Gain Correction (dB) | Cable Loss (dB) | Corrected Reading (dBm) | Limit (dBm) | Margin (dB) |
|-----------------|-------------------------|----------------|------------------------------|-----------------|-------------------------|-------------|-------------|
| 3440 | -49.6 | V | 10.06 | 2.52 | -42.06 | -13 | -29.06 |
| 3440 | -49.59 | H | 10.06 | 2.52 | -42.05 | -13 | -29.05 |
| 278.48 | -52.31 | V | 5.57 | 0.29 | -47.03 | -13 | -34.03 |
| 525.84 | -53.38 | H | 4.6 | 0.18 | -48.96 | -13 | -35.96 |

Middle channel

| Frequency (MHz) | Substituted level (dBm) | Polarity (H/V) | Antenna Gain Correction (dB) | Cable Loss (dB) | Corrected Reading (dBm) | Limit (dBm) | Margin (dB) |
|-----------------|-------------------------|----------------|------------------------------|-----------------|-------------------------|-------------|-------------|
| 3465 | -47.59 | V | 10.09 | 2.52 | -40.02 | -13 | -27.02 |
| 3465 | -49.75 | H | 10.09 | 2.52 | -42.18 | -13 | -29.18 |
| 309.76 | -52.44 | V | 5.55 | 0.28 | -47.17 | -13 | -34.17 |
| 638.38 | -53.85 | H | 6.36 | 0.46 | -47.95 | -13 | -34.95 |

High channel

| Frequency (MHz) | Substituted level (dBm) | Polarity (H/V) | Antenna Gain Correction (dB) | Cable Loss (dB) | Corrected Reading (dBm) | Limit (dBm) | Margin (dB) |
|-----------------|-------------------------|----------------|------------------------------|-----------------|-------------------------|-------------|-------------|
| 3490 | -48.63 | V | 10.09 | 2.52 | -41.06 | -13 | -28.06 |
| 3490 | -49.17 | H | 10.09 | 2.52 | -41.6 | -13 | -28.6 |
| 211.07 | -53.7 | V | 5.56 | 0.27 | -48.41 | -13 | -35.41 |
| 619.36 | -52 | H | 6.36 | 0.44 | -46.08 | -13 | -33.08 |

Note:

- 1, The testing has been conformed to 10*1752.5MHz=17,525MHz
- 2, All other emissions more than 30 dB below the limit
- 3, X-Axis, Y-Axis and Z-Axis were investigated. The results above show only the worst case.

LTE Band VII (Part27) result

Low channel

| Frequency (MHz) | Substituted level (dBm) | Polarity (H/V) | Antenna Gain Correction (dB) | Cable Loss (dB) | Corrected Reading (dBm) | Limit (dBm) | Margin (dB) |
|-----------------|-------------------------|----------------|------------------------------|-----------------|-------------------------|-------------|-------------|
| 5020 | -48.93 | V | 10.29 | 0.98 | -39.62 | -13 | -26.62 |
| 5020 | -49.96 | H | 10.29 | 0.98 | -40.65 | -13 | -27.65 |
| 352.02 | -54.01 | V | 5.62 | 0.29 | -48.68 | -13 | -35.68 |
| 360.84 | -52.87 | H | 5.64 | 0.28 | -47.51 | -13 | -34.51 |

Middle channel

| Frequency (MHz) | Substituted level (dBm) | Polarity (H/V) | Antenna Gain Correction (dB) | Cable Loss (dB) | Corrected Reading (dBm) | Limit (dBm) | Margin (dB) |
|-----------------|-------------------------|----------------|------------------------------|-----------------|-------------------------|-------------|-------------|
| 5070 | -48.68 | V | 10.3 | 0.99 | -39.37 | -13 | -26.37 |
| 5070 | -49.5 | H | 10.3 | 0.99 | -40.19 | -13 | -27.19 |
| 455.07 | -53.92 | V | 6.02 | 0.32 | -48.22 | -13 | -35.22 |
| 752.18 | -54.51 | H | 6.44 | 0.47 | -48.54 | -13 | -35.54 |

High channel

| Frequency (MHz) | Substituted level (dBm) | Polarity (H/V) | Antenna Gain Correction (dB) | Cable Loss (dB) | Corrected Reading (dBm) | Limit (dBm) | Margin (dB) |
|-----------------|-------------------------|----------------|------------------------------|-----------------|-------------------------|-------------|-------------|
| 5120 | -48.58 | V | 10.32 | 1 | -39.26 | -13 | -26.26 |
| 5120 | -50.15 | H | 10.32 | 1 | -40.83 | -13 | -27.83 |
| 426.42 | -53.79 | V | 5.99 | 0.33 | -48.13 | -13 | -35.13 |
| 492.99 | -51.82 | H | 5.98 | 0.32 | -46.16 | -13 | -33.16 |

Note:

- 1, The testing has been conformed to $10 * 2567.5 \text{ MHz} = 25,675 \text{ MHz}$
- 2, All other emissions more than 30 dB below the limit
- 3, X-Axis, Y-Axis and Z -Axis were investigated. The results above show only the worst case.
- 4, The radiated spurious test above 18GHz is subcontracted to SIEMIC (Nanjing-China) Laboratories. and found 30dB below the limit at least.

6.7 Band Edge

| | |
|----------------------|-------------------|
| Temperature | 26 °C |
| Relative Humidity | 56% |
| Atmospheric Pressure | 1022mbar |
| Test date : | December 26, 2017 |
| Tested By : | Aaron Liang |

Requirement(s):

| Spec | Item | Requirement | Applicable |
|--|------|---|-------------------------------------|
| §22.917(a) §24.238(a) § 27.53(h) | a) | The power of any emission outside of the authorized operating frequency ranges must be lower than the transmitter power (P) by a factor of at least $43 + 10 \log (P)$ dB. | <input checked="" type="checkbox"/> |
| Test setup | | <p style="text-align: center;"> Base Station Spectrum Analyzer EUT </p> | |
| Procedure | | <ul style="list-style-type: none"> - The EUT was connected to Spectrum Analyzer and Base Station via power divider. - The Band Edges of low and high channels for the highest RF powers were measured. Setting RBW as roughly BW/100. | |
| Remark | | | |
| Result | | <input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail | |

Test Data Yes N/A

Test Plot Yes (See below) N/A

LTE Band II (Part 24E) result

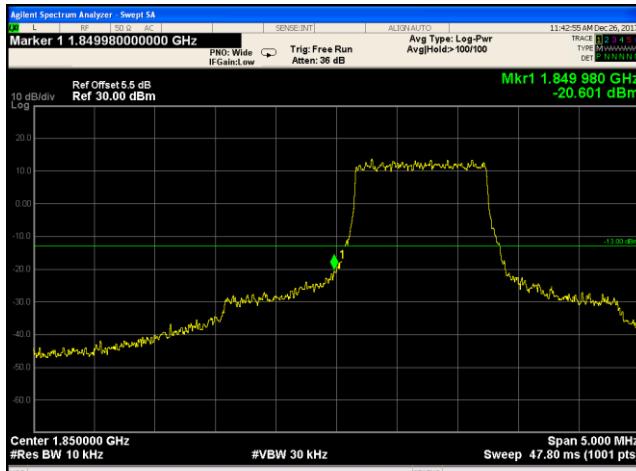
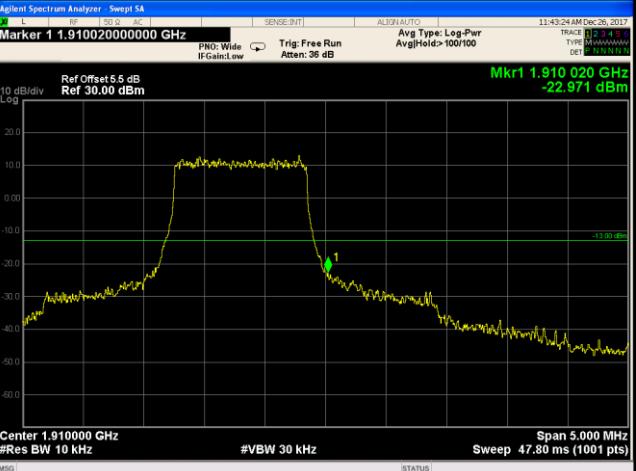
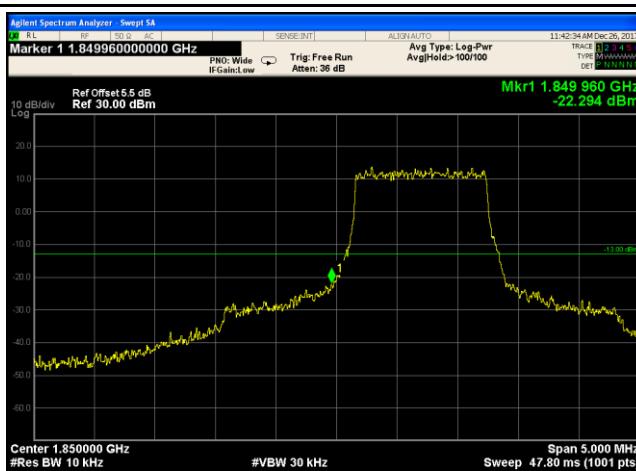
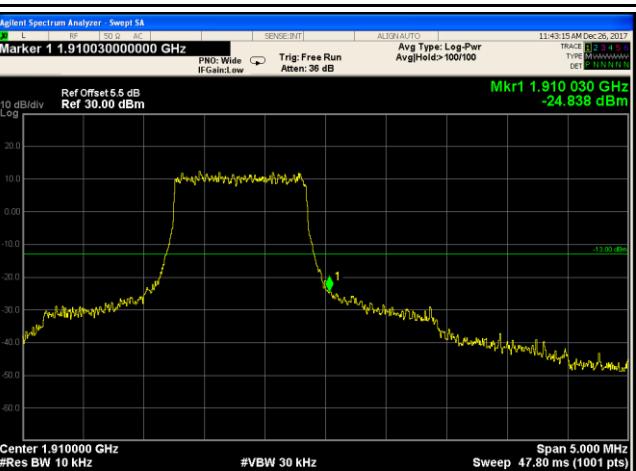
| BW(MHz) | Channel | Frequency (MHz) | Mode | Emission (dBm) | Limit (dBm) |
|---------|---------|-----------------|-------|----------------|-------------|
| 1.4 | 18607 | 1850 | QPSK | -20.601 | -13 |
| | | | 16QAM | -22.294 | -13 |
| 1.4 | 18900 | 1910 | QPSK | -22.971 | -13 |
| | | | 16QAM | -24.838 | -13 |
| 3 | 18615 | 1850 | QPSK | -17.662 | -13 |
| | | | 16QAM | -15.789 | -13 |
| 3 | 19185 | 1910 | QPSK | -22.072 | -13 |
| | | | 16QAM | -24.244 | -13 |
| 5 | 18625 | 1850 | QPSK | -18.140 | -13 |
| | | | 16QAM | -18.179 | -13 |
| 5 | 19175 | 1910 | QPSK | -19.636 | -13 |
| | | | 16QAM | -20.715 | -13 |
| 10 | 18650 | 1850 | QPSK | -20.239 | -13 |
| | | | 16QAM | -20.333 | -13 |
| 10 | 19150 | 1910 | QPSK | -22.828 | -13 |
| | | | 16QAM | -24.050 | -13 |
| 15 | 18675 | 1850 | QPSK | -24.951 | -13 |
| | | | 16QAM | -24.480 | -13 |
| 15 | 19125 | 1910 | QPSK | -24.987 | -13 |
| | | | 16QAM | -28.465 | -13 |
| 20 | 18700 | 1850 | QPSK | -25.932 | -13 |
| | | | 16QAM | -26.702 | -13 |
| 20 | 19100 | 1910 | QPSK | -28.238 | -13 |
| | | | 16QAM | -28.708 | -13 |

LTE Band IV (Part 27) result

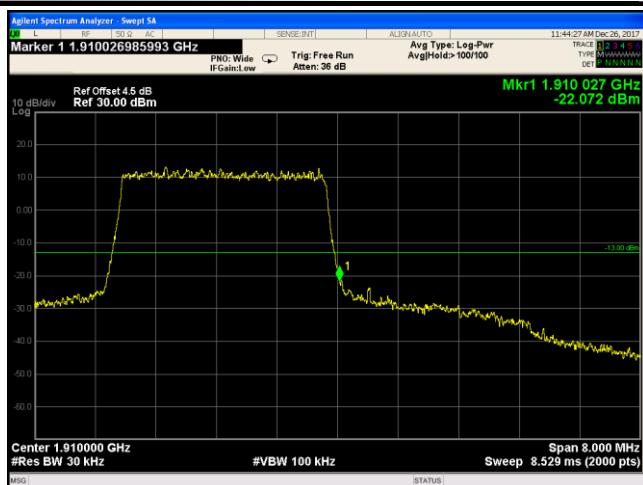
| BW(MHz) | Channel | Frequency (MHz) | Mode | Emission (dBm) | Limit (dBm) |
|---------|---------|-----------------|-------|----------------|-------------|
| 1.4 | 19957 | 1709.9 | QPSK | -22.635 | -13 |
| | | | 16QAM | -23.853 | -13 |
| 1.4 | 20393 | 1755 | QPSK | -21.955 | -13 |
| | | | 16QAM | -24.687 | -13 |
| 3 | 19965 | 1709.9 | QPSK | -18.678 | -13 |
| | | | 16QAM | -16.501 | -13 |
| 3 | 20385 | 1755 | QPSK | -18.482 | -13 |
| | | | 16QAM | -19.484 | -13 |
| 5 | 19975 | 1709.9 | QPSK | -20.984 | -13 |
| | | | 16QAM | -23.386 | -13 |
| 5 | 20375 | 1755 | QPSK | -18.841 | -13 |
| | | | 16QAM | -18.841 | -13 |
| 10 | 20000 | 1709.9 | QPSK | -19.837 | -13 |
| | | | 16QAM | -19.466 | -13 |
| 10 | 20350 | 1755 | QPSK | -20.401 | -13 |
| | | | 16QAM | -20.401 | -13 |
| 15 | 20025 | 1709.9 | QPSK | -23.288 | -13 |
| | | | 16QAM | -23.687 | -13 |
| 15 | 20325 | 1755 | QPSK | -22.715 | -13 |
| | | | 16QAM | -23.986 | -13 |
| 20 | 20050 | 1709.9 | QPSK | -23.618 | -13 |
| | | | 16QAM | -25.653 | -13 |
| 20 | 20300 | 1755 | QPSK | -27.398 | -13 |
| | | | 16QAM | -29.257 | -13 |

Test Plots

LTE Band II (Part 24E)

| | |
|--|---|
|  <p>Agilent Spectrum Analyzer - Swept SA Marker 1 1.849980000000 GHz</p> <p>Ref Offset 5.5 dB Ref 30.00 dBm</p> <p>10 dB/div Log</p> <p>Center 1.850000 GHz #Res BW 10 kHz #VBW 30 kHz Span 5.000 MHz Sweep 47.80 ms (1001 pts)</p> |  <p>Agilent Spectrum Analyzer - Swept SA Marker 1 1.910020000000 GHz</p> <p>Ref Offset 5.5 dB Ref 30.00 dBm</p> <p>10 dB/div Log</p> <p>Center 1.910000 GHz #Res BW 10 kHz #VBW 30 kHz Span 5.000 MHz Sweep 47.80 ms (1001 pts)</p> |
| <p>LTE Band II - Low Channel QPSK-1.4</p> <p>Note: Offset=Cable loss (4.5) + 10log $(13.14/10)=4.5+1.0=5.5\text{ dB}$</p> | <p>LTE Band II - High Channel QPSK-1.4</p> <p>Note: Offset=Cable loss (4.5) + 10log $(13.37/10)=4.5+1.0=5.5\text{ dB}$</p> |
|  <p>Agilent Spectrum Analyzer - Swept SA Marker 1 1.849960000000 GHz</p> <p>Ref Offset 5.5 dB Ref 30.00 dBm</p> <p>10 dB/div Log</p> <p>Center 1.850000 GHz #Res BW 10 kHz #VBW 30 kHz Span 5.000 MHz Sweep 47.80 ms (1001 pts)</p> |  <p>Agilent Spectrum Analyzer - Swept SA Marker 1 1.910030000000 GHz</p> <p>Ref Offset 5.5 dB Ref 30.00 dBm</p> <p>10 dB/div Log</p> <p>Center 1.910000 GHz #Res BW 10 kHz #VBW 30 kHz Span 5.000 MHz Sweep 47.80 ms (1001 pts)</p> |
| <p>LTE Band II - Low Channel 16QAM-1.4</p> <p>Note: Offset=Cable loss (4.5) + 10log $(12.86/10)=4.5+1.0=5.5\text{ dB}$</p> | <p>LTE Band II - High Channel 16QAM-1.4</p> <p>Note: Offset=Cable loss (4.5) + 10log $(13.54/10)=4.5+1.0=5.5\text{ dB}$</p> |

| | |
|-------------|-----------------|
| Test Report | 17071364-FCC-R5 |
| Page | 76 of 116 |

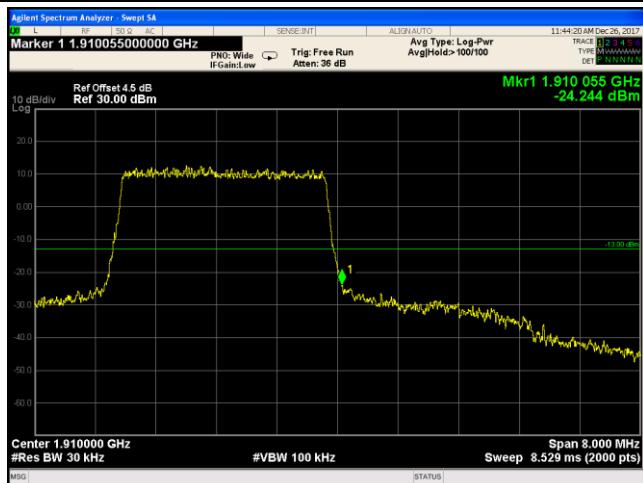


LTE Band II - Low Channel QPSK-3

Note: Offset=Cable loss (4.5) + 10log
 $(30.62/30)=4.5+0.0=4.5$ dB

LTE Band II - High Channel QPSK-3

Note: Offset=Cable loss (4.5) + 10log
 $(30.55/30)=4.5+0.0=4.5$ dB



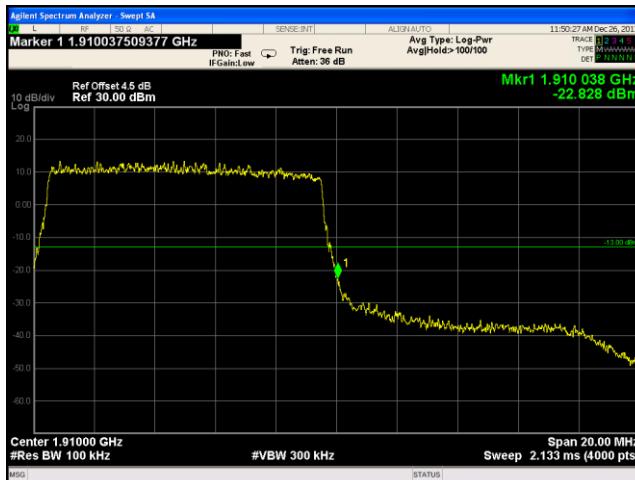
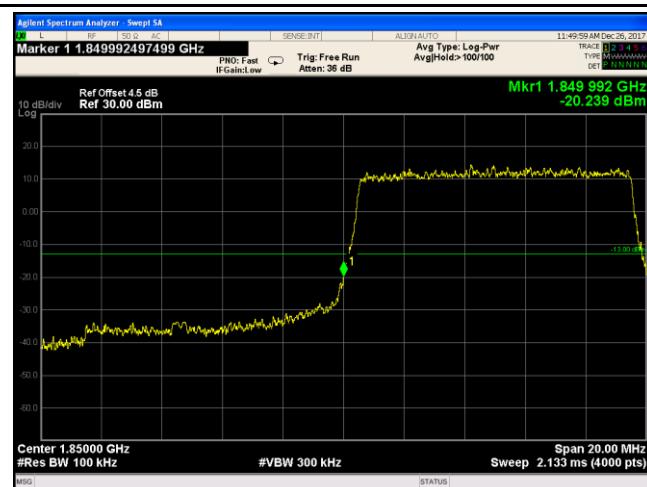
LTE Band II - Low Channel 16QAM-3

Note: Offset=Cable loss (4.5) + 10log
 $(30.78/30)=4.5+0.0=4.5$ dB

LTE Band II - High Channel 16QAM-3

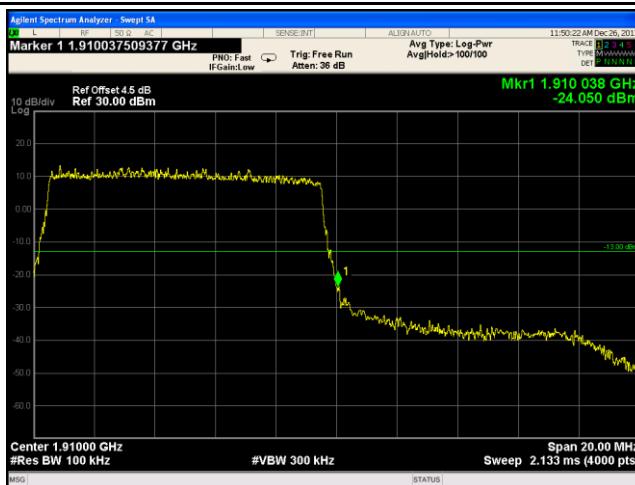
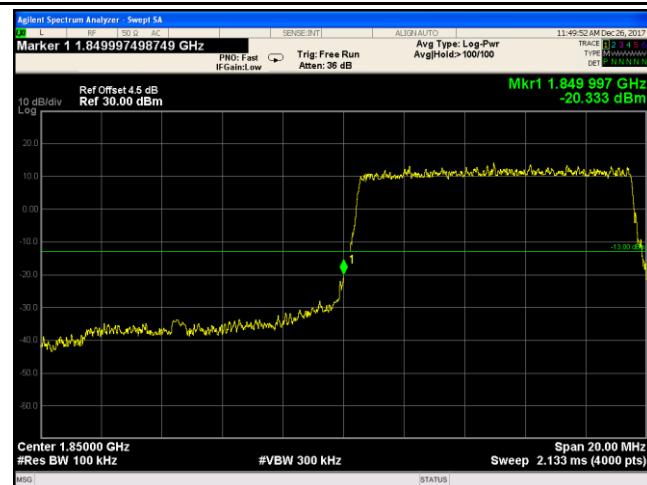
Note: Offset=Cable loss (4.5) + 10log
 $(30.84/30)=4.5+0.0=4.5$ dB

| | |
|--|---|
|  <p>Marker 1 1.849992496248 GHz PNO: Wide IFGain:Low Trig: Free Run AvgType: Log-Pwr AvgHold: >100/100</p> <p>Mkr1 1.849 992 GHz -18.140 dBm</p> <p>10 dB/div Ref Offset 5.7 dB Ref 30.00 dBm</p> <p>Center 1.850000 GHz #Res BW 30 kHz #VBW 100 kHz Span 10.00 MHz Sweep 10.66 ms (2000 pts)</p> |  <p>Marker 1 1.910016008004 GHz PNO: Wide IFGain:Low Trig: Free Run AvgType: Log-Pwr AvgHold: >100/100</p> <p>Mkr1 1.910 016 GHz -19.636 dBm</p> <p>10 dB/div Ref Offset 5.7 dB Ref 30.00 dBm</p> <p>Center 1.910000 GHz #Res BW 30 kHz #VBW 100 kHz Span 10.00 MHz Sweep 10.66 ms (2000 pts)</p> |
| <p>LTE Band II - Low Channel QPSK-5</p> | <p>LTE Band II - High Channel QPSK-5</p> |
| <p>Note: Offset=Cable loss (4.5) + 10log (49.52/30)=4.5+2.2=6.7 dB</p> | <p>Note: Offset=Cable loss (4.5) + 10log (50.19/30)=4.5+2.2=6.7 dB</p> |
|  <p>Marker 1 1.849997498749 GHz PNO: Wide IFGain:Low Trig: Free Run AvgType: Log-Pwr AvgHold: >100/100</p> <p>Mkr1 1.849 997 GHz -18.179 dBm</p> <p>10 dB/div Ref Offset 5.7 dB Ref 30.00 dBm</p> <p>Center 1.850000 GHz #Res BW 30 kHz #VBW 100 kHz Span 10.00 MHz Sweep 10.66 ms (2000 pts)</p> |  <p>Marker 1 1.910006003002 GHz PNO: Wide IFGain:Low Trig: Free Run AvgType: Log-Pwr AvgHold: >100/100</p> <p>Mkr1 1.910 006 GHz -20.715 dBm</p> <p>10 dB/div Ref Offset 5.7 dB Ref 30.00 dBm</p> <p>Center 1.910000 GHz #Res BW 30 kHz #VBW 100 kHz Span 10.00 MHz Sweep 10.66 ms (2000 pts)</p> |
| <p>LTE Band II - Low Channel 16QAM-5</p> | <p>LTE Band II - High Channel 16QAM-5</p> |
| <p>Note: Offset=Cable loss (4.5) + 10log (49.90/30)=4.5+2.2=6.7 dB</p> | <p>Note: Offset=Cable loss (4.5) + 10log (49.64/30)=4.5+2.2=6.7 dB</p> |



LTE Band II - Low Channel QPSK-10

LTE Band II - High Channel QPSK-10



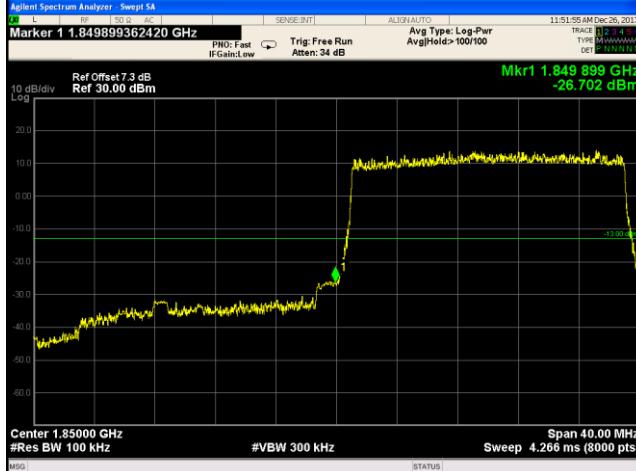
LTE Band II - Low Channel 16QAM-10

LTE Band II - High Channel 16QAM-10

Note: Offset=Cable loss (4.5) + 10log
(101.00/100)=4.5+0.0=4.5 dB

Note: Offset=Cable loss (4.5) + 10log
(99.63/100)=4.5+0.0=4.5 dB

| | |
|--|---|
|  <p>Agilent Spectrum Analyzer - Swept SA Marker 1 1.849994374297 GHz</p> <p>PWD: Fast IFGain:Low Trig: Free Run Avg Type: Log-Pwr AvgHold>100/100</p> <p>Ref Offset 5.2 dB Ref 30.00 dBm</p> <p>Mkr1 1.849 994 GHz -24.480 dBm</p> <p>10 dB/div Log</p> <p>20.0 10.0 0.0 -10.0 -20.0 -30.0 -40.0 -50.0 -60.0</p> <p>Center 1.85000 GHz #Res BW 100 kHz #VBW 300 kHz Sweep 3.200 ms (8000 pts)</p> |  <p>Agilent Spectrum Analyzer - Swept SA Marker 1 1.910012503126 GHz</p> <p>PWD: Fast IFGain:Low Trig: Free Run Avg Type: Log-Pwr AvgHold>100/100</p> <p>Ref Offset 5.2 dB Ref 30.00 dBm</p> <p>Mkr1 1.910 013 GHz -28.465 dBm</p> <p>10 dB/div Log</p> <p>20.0 10.0 0.0 -10.0 -20.0 -30.0 -40.0 -50.0 -60.0</p> <p>Center 1.91000 GHz #Res BW 100 kHz #VBW 300 kHz Sweep 3.200 ms (8000 pts)</p> |
| <p>LTE Band II - Low Channel QPSK-15</p> | <p>LTE Band II - High Channel QPSK-15</p> |
| <p>Note: Offset=Cable loss (4.5) + 10log $(144.7/100)=4.5+1.7=6.2$ dB</p> | <p>Note: Offset=Cable loss (4.5) + 10log $(147.9/100)=4.5+1.7=6.2$ dB</p> |
|  <p>Agilent Spectrum Analyzer - Swept SA Marker 1 1.849994374297 GHz</p> <p>PWD: Fast IFGain:Low Trig: Free Run Avg Type: Log-Pwr AvgHold>100/100</p> <p>Ref Offset 5.2 dB Ref 30.00 dBm</p> <p>Mkr1 1.849 994 GHz -24.480 dBm</p> <p>10 dB/div Log</p> <p>20.0 10.0 0.0 -10.0 -20.0 -30.0 -40.0 -50.0 -60.0</p> <p>Center 1.85000 GHz #Res BW 100 kHz #VBW 300 kHz Sweep 3.200 ms (8000 pts)</p> |  <p>Agilent Spectrum Analyzer - Swept SA Marker 1 1.910012503126 GHz</p> <p>PWD: Fast IFGain:Low Trig: Free Run Avg Type: Log-Pwr AvgHold>100/100</p> <p>Ref Offset 5.2 dB Ref 30.00 dBm</p> <p>Mkr1 1.910 013 GHz -28.465 dBm</p> <p>10 dB/div Log</p> <p>20.0 10.0 0.0 -10.0 -20.0 -30.0 -40.0 -50.0 -60.0</p> <p>Center 1.91000 GHz #Res BW 100 kHz #VBW 300 kHz Sweep 3.200 ms (8000 pts)</p> |
| <p>LTE Band II - Low Channel 16QAM-15</p> | <p>LTE Band II - High Channel 16QAM-15</p> |
| <p>Note: Offset=Cable loss (4.5) + 10log $(147.2/100)=4.5+1.7=6.2$ dB</p> | <p>Note: Offset=Cable loss (4.5) + 10log $(146.8/100)=4.5+1.7=6.2$ dB</p> |

| | |
|--|--|
|  <p>Agilent Spectrum Analyzer - Swept SA Marker 1 1.849874359295 GHz</p> <p>Ref Offset 7.3 dB Ref 30.00 dBm</p> <p>10 dB/div Log</p> <p>Mkr1 1.849 874 GHz -25.932 dBm</p> <p>Center 1.85000 GHz #Res BW 100 kHz #VBW 300 kHz Span 4.00 MHz Sweep 4.266 ms (8000 pts)</p> |  <p>Agilent Spectrum Analyzer - Swept SA Marker 1 1.910015001875 GHz</p> <p>Ref Offset 7.4 dB Ref 30.00 dBm</p> <p>10 dB/div Log</p> <p>Mkr1 1.910 015 GHz -28.238 dBm</p> <p>Center 1.91000 GHz #Res BW 100 kHz #VBW 300 kHz Span 4.00 MHz Sweep 4.266 ms (8000 pts)</p> |
| <p>LTE Band II - Low Channel QPSK-20</p> <p>Note: Offset=Cable loss (4.5) + 10log $(191.5/100)=4.5+2.8=7.3$ dB</p> | <p>LTE Band II - High Channel QPSK-20</p> <p>Note: Offset=Cable loss (4.5) + 10log $(189.8/100)=4.5+2.9=7.4$ dB</p> |
|  <p>Agilent Spectrum Analyzer - Swept SA Marker 1 1.8498989362420 GHz</p> <p>Ref Offset 7.3 dB Ref 30.00 dBm</p> <p>10 dB/div Log</p> <p>Mkr1 1.849 889 GHz -26.702 dBm</p> <p>Center 1.85000 GHz #Res BW 100 kHz #VBW 300 kHz Span 4.00 MHz Sweep 4.266 ms (8000 pts)</p> |  <p>Agilent Spectrum Analyzer - Swept SA Marker 1 1.910005000625 GHz</p> <p>Ref Offset 7.4 dB Ref 30.00 dBm</p> <p>10 dB/div Log</p> <p>Mkr1 1.910 005 GHz -28.708 dBm</p> <p>Center 1.91000 GHz #Res BW 100 kHz #VBW 300 kHz Span 4.00 MHz Sweep 4.266 ms (8000 pts)</p> |
| <p>LTE Band II - Low Channel 16QAM-20</p> <p>Note: Offset=Cable loss (4.5) + 10log $(191.9/100)=4.5+2.8=7.3$ dB</p> | <p>LTE Band II - High Channel 16QAM-20</p> <p>Note: Offset=Cable loss (4.5) + 10log $(192.5/100)=4.5+2.9=7.4$ dB</p> |