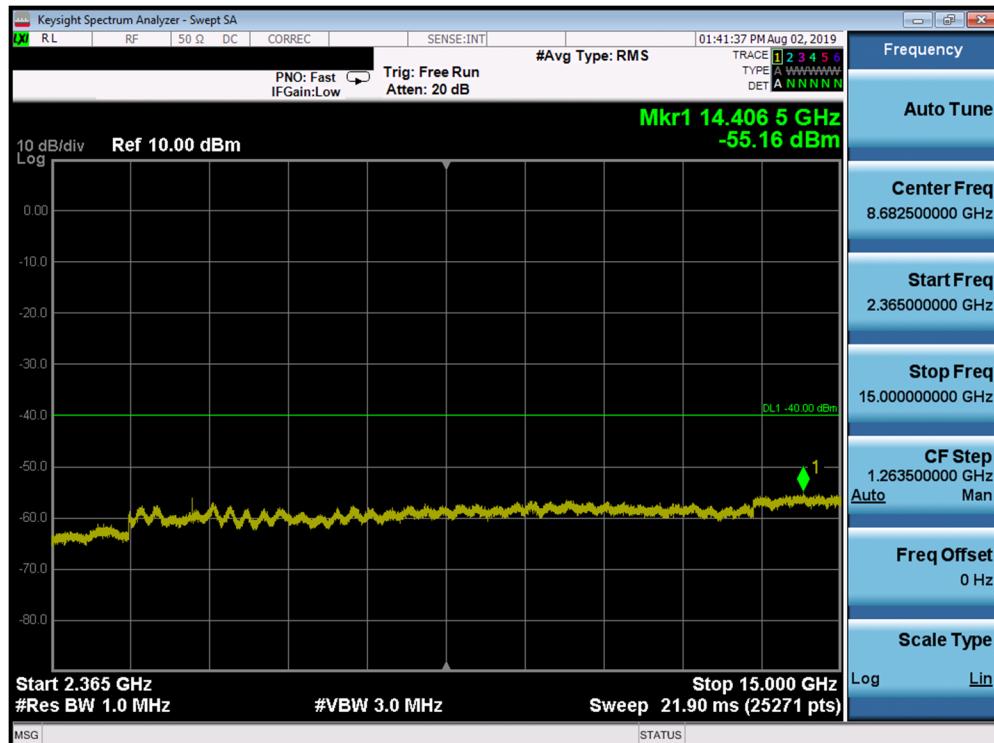


Band 30 – Main Antenna

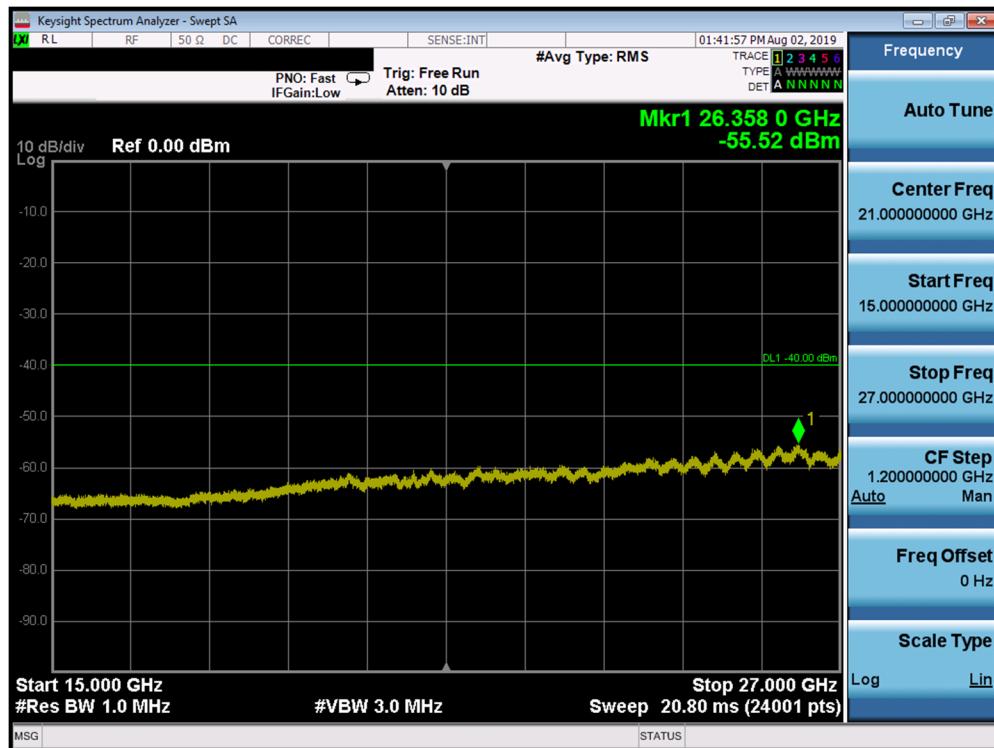


Plot 7-13. Conducted Spurious Plot (Band 30 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)



Plot 7-14. Conducted Spurious Plot (Band 30 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

| | | | |
|---|---|---------------------------------------|---------------------------------|
| FCC ID: XIA-IFWA661 |  | MEASUREMENT REPORT (CERTIFICATION) | Approved by: Quality Manager |
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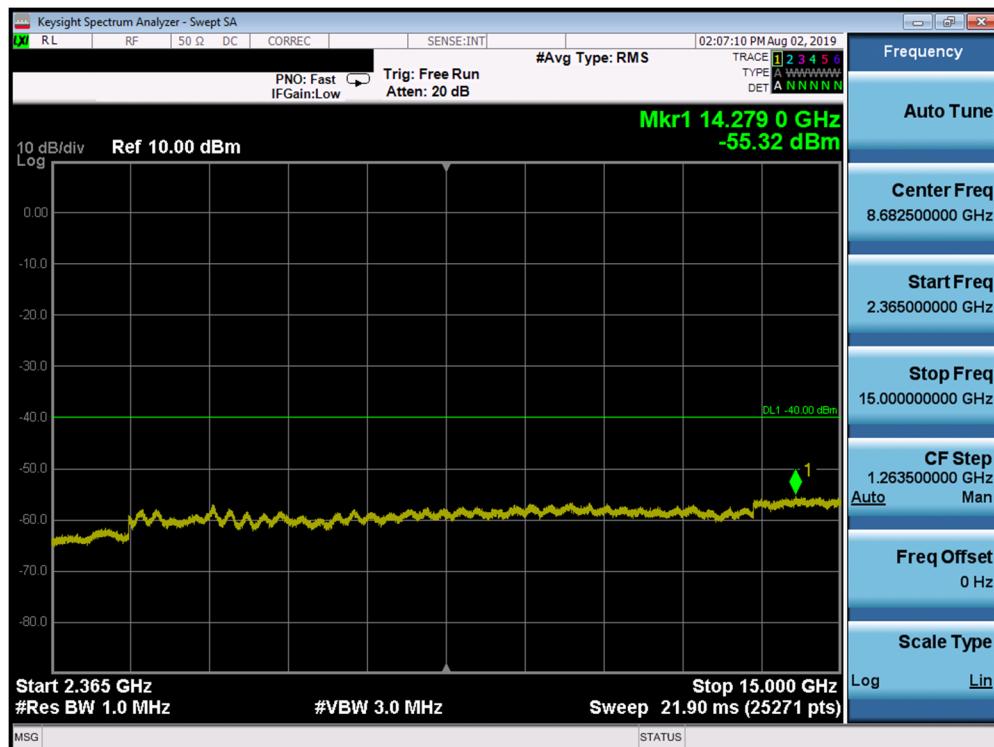
Plot 7-15. Conducted Spurious Plot (Band 30 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
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Band 30 – Diversity Antenna

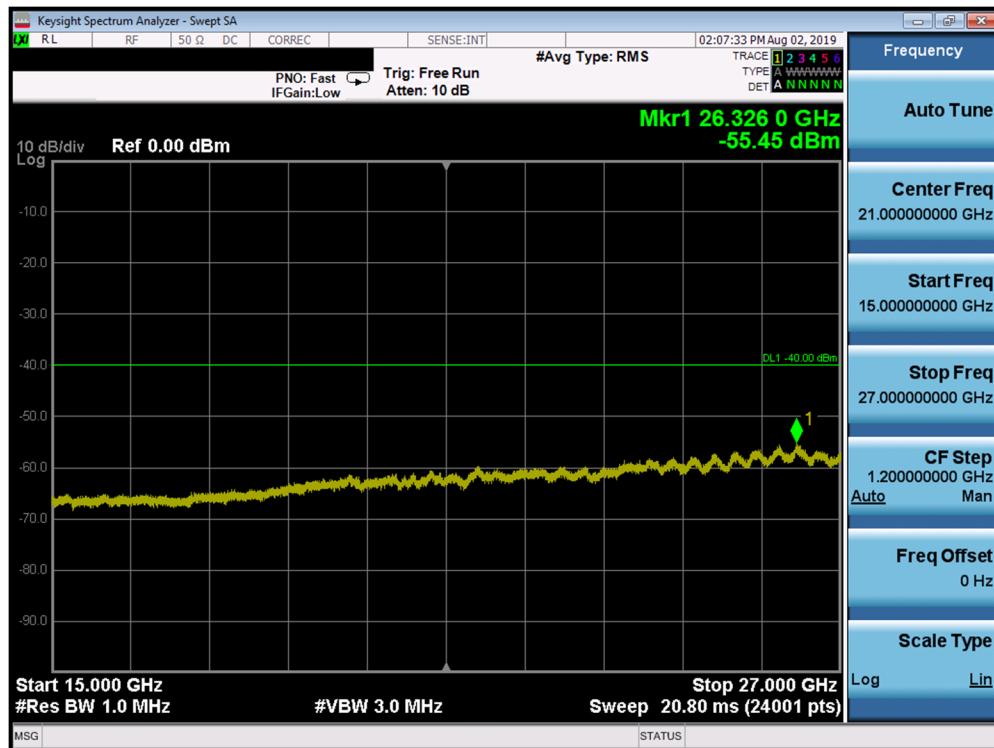


Plot 7-16. Conducted Spurious Plot (Band 30 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)



Plot 7-17. Conducted Spurious Plot (Band 30 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

| | | | |
|---|---|---------------------------------------|---------------------------------|
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Plot 7-18. Conducted Spurious Plot (Band 30 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

| | | | | |
|---|--|---------------------------------------|---|---------------------------------|
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7.4 Band Edge Emissions at Antenna Terminal

Test Overview

All out of band emissions are measured with a spectrum analyzer connected to the antenna terminal of the EUT while the EUT is operating at its maximum duty cycle, at maximum power, and at the appropriate frequencies. All data rates were investigated to determine the worst case configuration. All modes of operation were investigated and the worst case configuration results are reported in this section.

The minimum permissible attenuation level for Band 30 is > 43 + 10 log10 (P[Watts] at 2300-2305MHz & 2345-2360MHz, > 55 + 10 log10 (P[Watts]) at 2320-2324MHz & 2341-2345MHz, > 61 + 10 log10 (P[Watts]) at 2324-2328MHz & 2337-2341MHz, > 67 + 10 log10 (P[Watts]) at 2288-2292MHz & 2328-2337MHz, and > 70 + 10 log10 (P[Watts]) at frequencies < 2288MHz & >2365MHz.

Test Procedure Used

KDB 971168 D01 v03r01 – Section 6.0

Test Settings

1. Start and stop frequency were set such that the band edge would be placed in the center of the plot
2. Span was set large enough so as to capture all out of band emissions near the band edge
3. RBW \geq 1% of the emission bandwidth
4. VBW \geq 3 x RBW
5. Detector = RMS
6. Number of sweep points \geq 2 x Span/RBW
7. Trace mode = trace average
8. Sweep time = auto couple
9. The trace was allowed to stabilize

Test Setup

The EUT and measurement equipment were set up as shown in the diagram below.

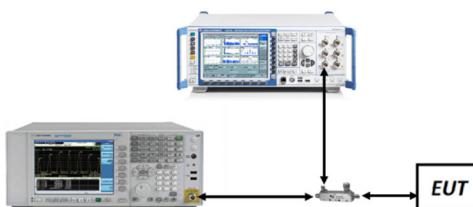


Figure 7-3. Test Instrument & Measurement Setup

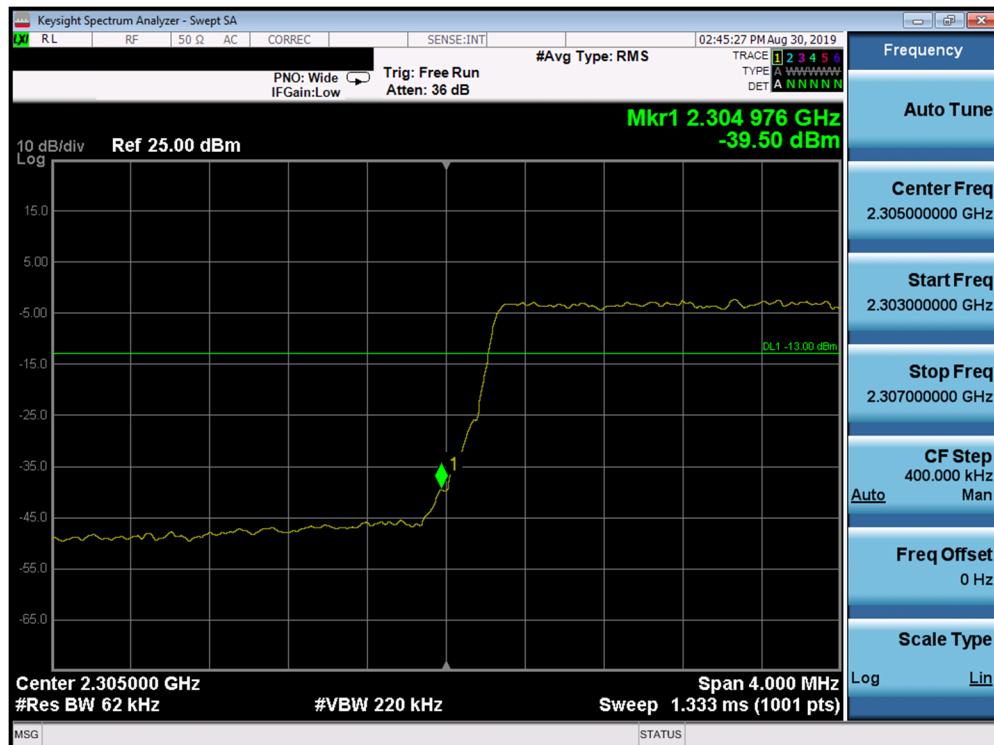
| FCC ID: XIA-IFWA661 | PCTEST ENGINEERING LABORATORY, INC. | | MEASUREMENT REPORT (CERTIFICATION) | Approved by: Quality Manager |
|---|--|---------------------------------|---------------------------------------|---------------------------------|
| Test Report S/N: 1M1907090120-1-R2.XIA | Test Dates: 7/31-10/2/2019 | EUT Type: Outdoor LTE Router | NetCommWireless | Page 25 of 48 |

Test Notes

Per 27.53(a)(5) in the 1 MHz bands immediately outside and adjacent to the channel blocks at 2305, 2310, 2315, 2320, 2345, 2350, 2355, and 2360 MHz, a resolution bandwidth of at least 1 percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. A narrower resolution bandwidth is permitted in all cases to improve measurement accuracy provided the measured power is integrated over the full required measurement bandwidth (i.e., 1 MHz). The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

| | | | | | |
|---|--|---------------------------------------|--|---|---------------------------------|
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Band 30 – Main Antenna



Plot 7-19. Lower Band Edge Plot (Band 30 - 5.0MHz QPSK - Full RB Configuration)

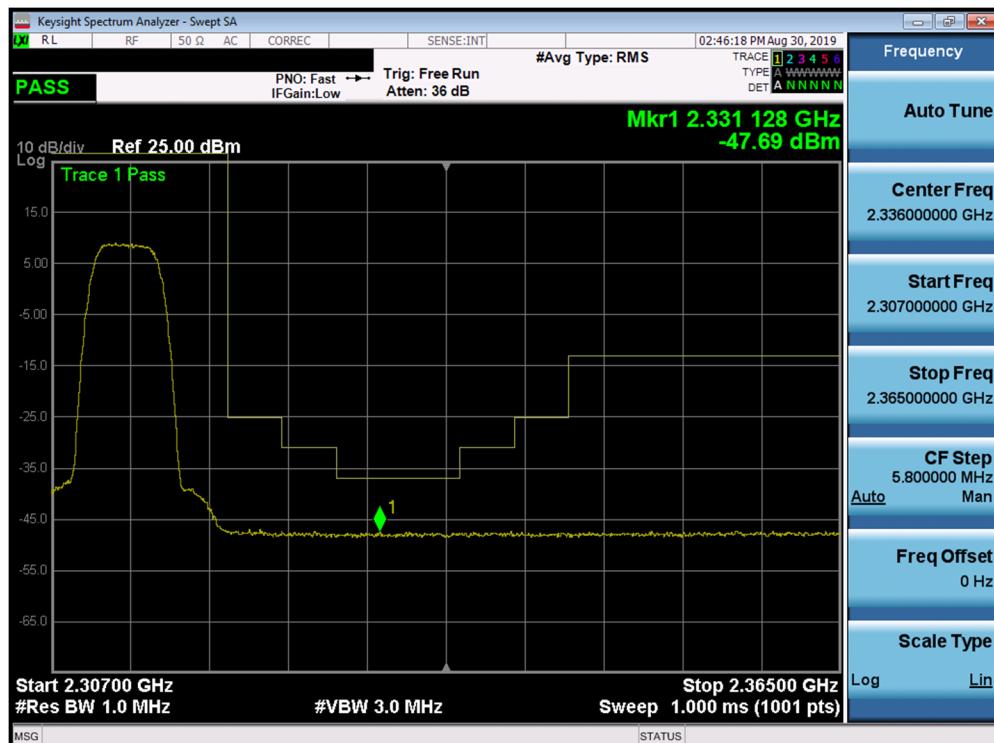


Plot 7-20. Lower Extended Band Edge Plot (Band 30 - 5.0MHz QPSK - Full RB Configuration)

| | | | |
|---|---|---------------------------------------|--|
| FCC ID: XIA-IFWA661 |  | MEASUREMENT REPORT (CERTIFICATION) | Approved by: NetCommWireless |
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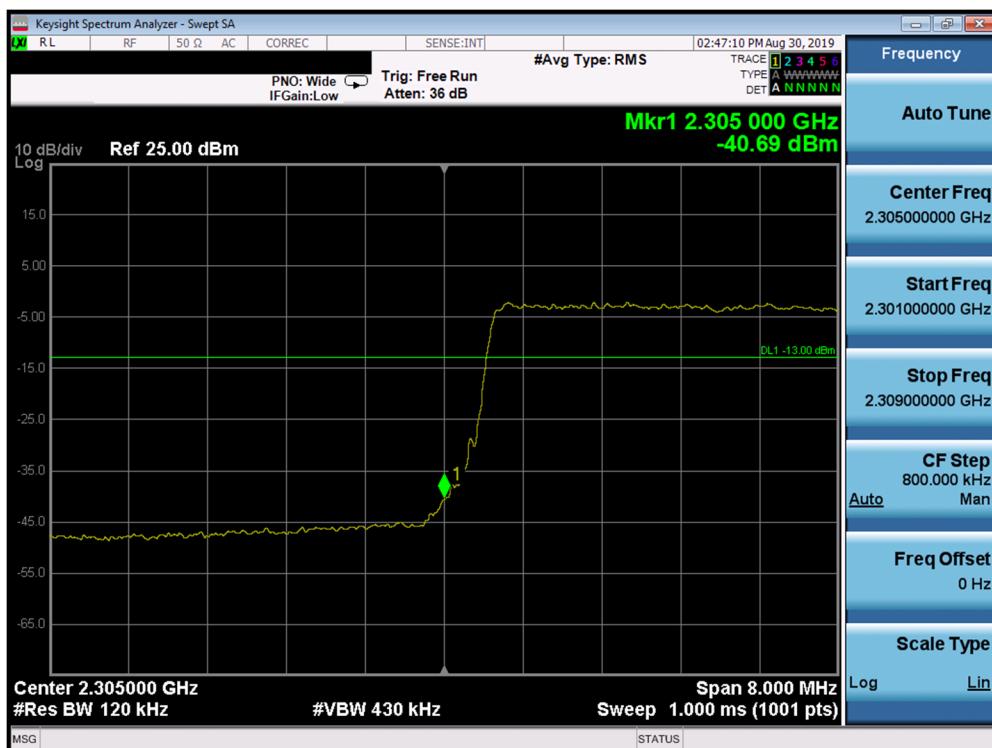


Plot 7-21. Upper Band Edge Plot (Band 30 - 5.0MHz QPSK - Full RB Configuration)



Plot 7-22. Upper Extended Band Edge Plot (Band 30 - 5.0MHz QPSK - Full RB Configuration)

| | | | |
|---|--|---------------------------------------|---------------------------------|
| FCC ID: XIA-IFWA661 |  PCTEST Engineering Laboratory, Inc. | MEASUREMENT REPORT (CERTIFICATION) | Approved by: Quality Manager |
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Plot 7-23. Lower Band Edge Plot (Band 30 - 10.0MHz QPSK - Full RB Configuration)



Plot 7-24. Lower Extended Band Edge Plot (Band 30 - 10.0MHz QPSK - Full RB Configuration)

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| FCC ID: XIA-IFWA661 | PCTEST ENGINEERING LABORATORY, INC. | MEASUREMENT REPORT (CERTIFICATION) | Approved by: Quality Manager |
| Test Report S/N: 1M1907090120-1-R2.XIA | Test Dates: 7/31-10/2/2019 | EUT Type: Outdoor LTE Router | Page 29 of 48 |