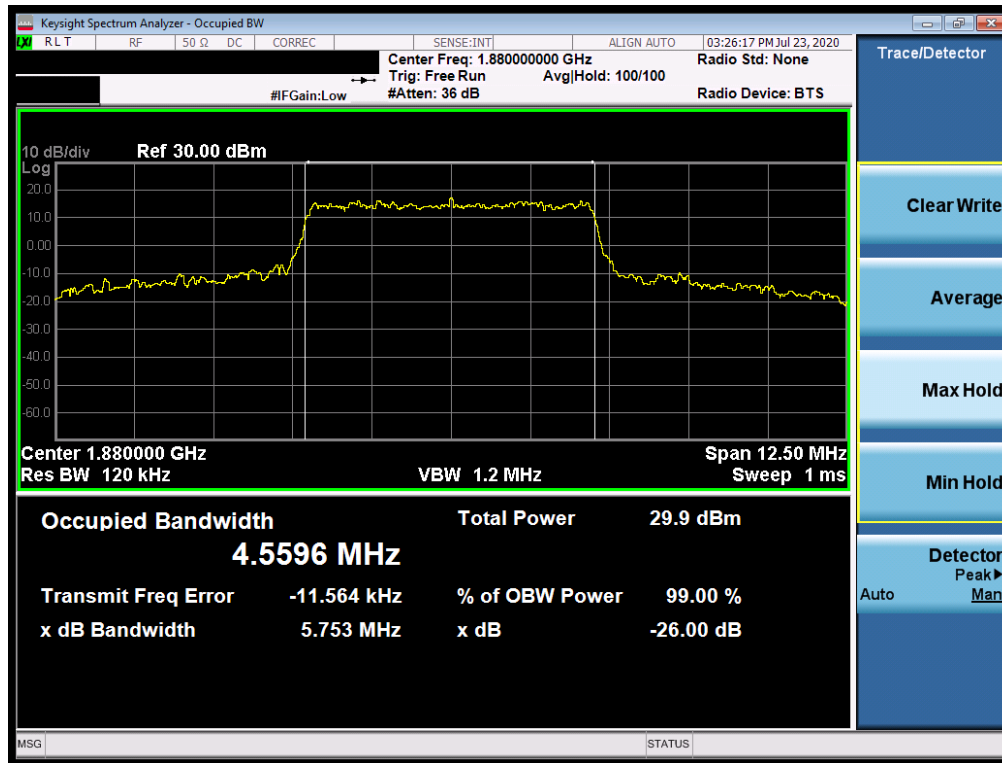


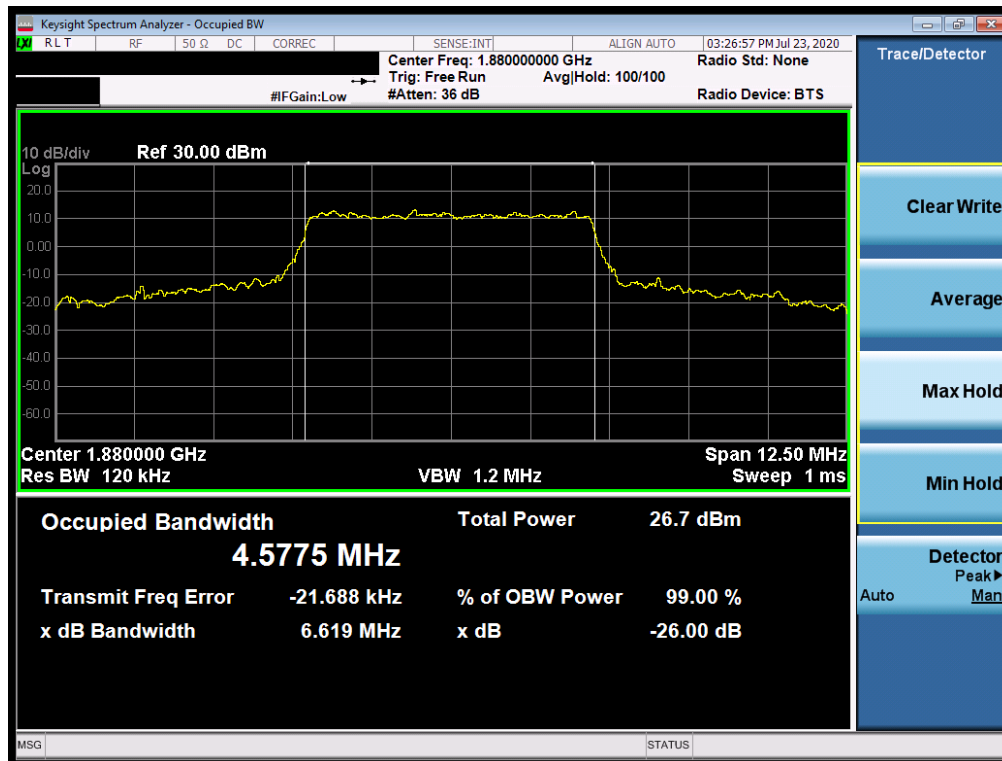


Plot 7-109. Occupied Bandwidth Plot (NR Band n2 - 5.0MHz CP-OFDM 16QAM - Full RB)

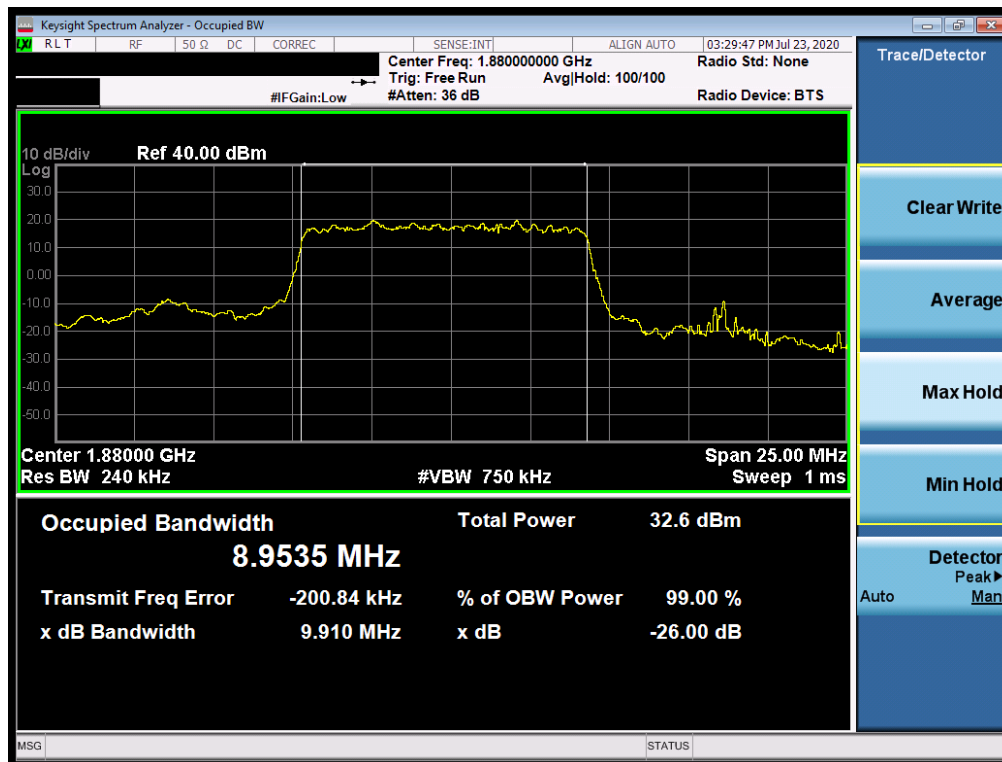


Plot 7-110. Occupied Bandwidth Plot (NR Band n2 - 5.0MHz CP-OFDM 64QAM - Full RB)

|                                         |                                              |                                       |    |                                 |
|-----------------------------------------|----------------------------------------------|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFF100VM                       | <b>PCTEST</b><br>Proud to be part of element | MEASUREMENT REPORT<br>(CERTIFICATION) | LG | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M2006150096-03.ZNF | Test Dates:<br>06/26/2020-08/18/2020         | EUT Type:<br>Portable Handset         |    | Page 72 of 301                  |

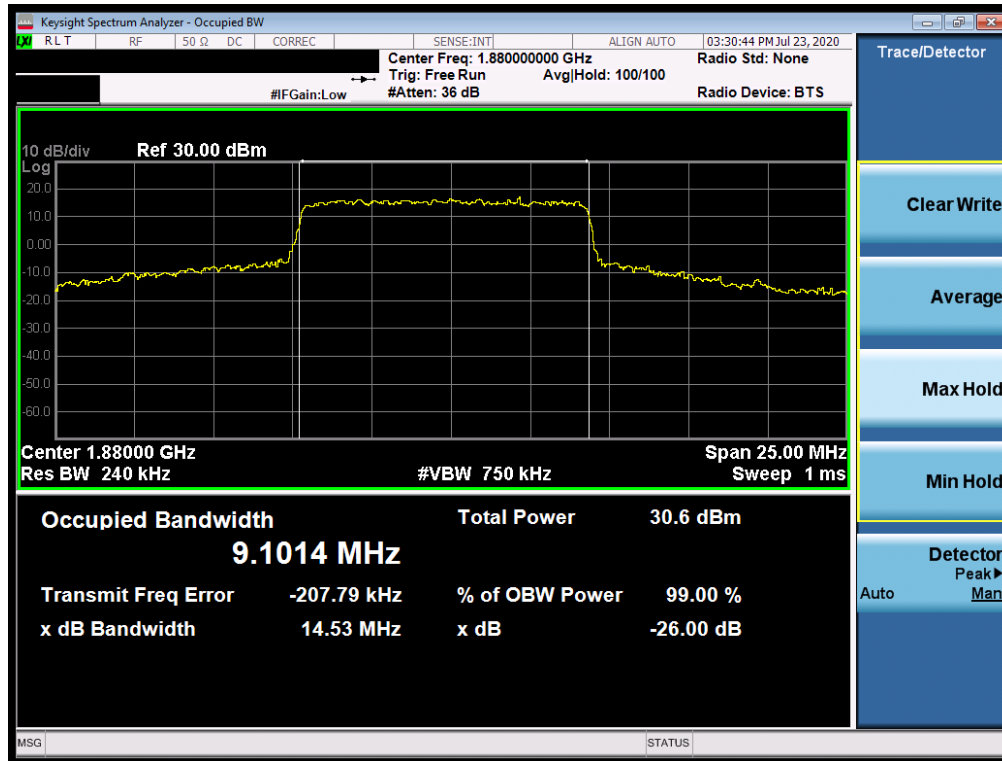


Plot 7-111. Occupied Bandwidth Plot (NR Band n2 - 5.0MHz CP-OFDM 256QAM - Full RB)

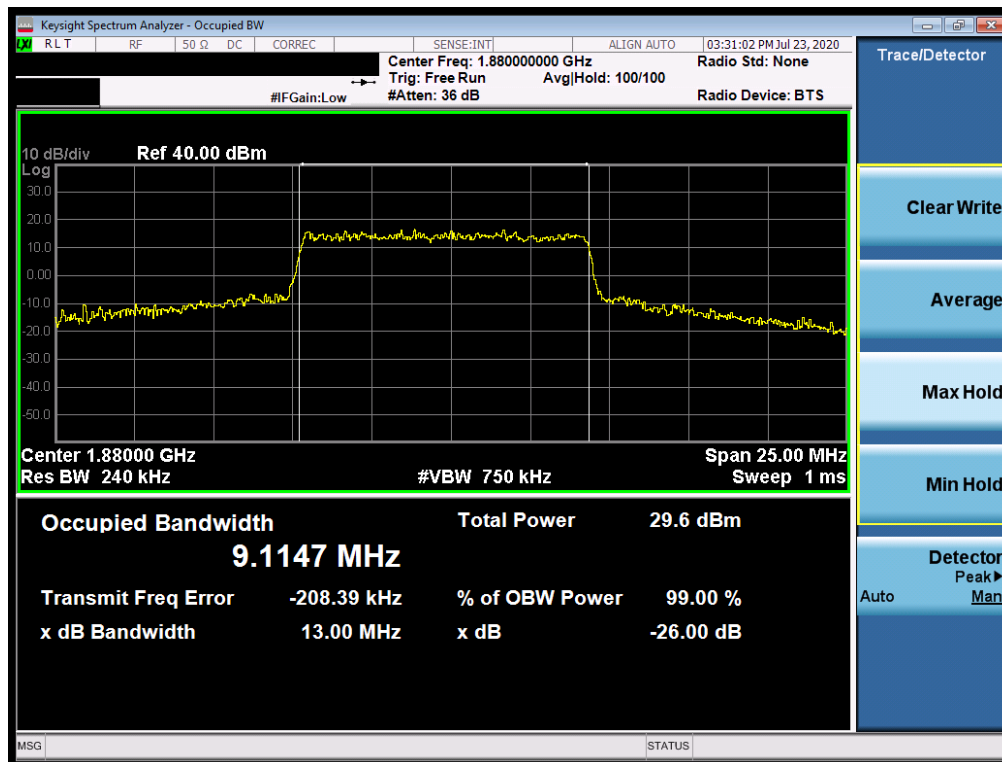


Plot 7-112. Occupied Bandwidth Plot (NR Band n2 - 10.0MHz DFT-s-OFDM BPSK - Full RB)

|                                         |                                              |                                       |    |                                 |
|-----------------------------------------|----------------------------------------------|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFF100VM                       | <b>PCTEST</b><br>Proud to be part of element | MEASUREMENT REPORT<br>(CERTIFICATION) | LG | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M2006150096-03.ZNF | Test Dates:<br>06/26/2020-08/18/2020         | EUT Type:<br>Portable Handset         |    | Page 73 of 301                  |



Plot 7-113. Occupied Bandwidth Plot (NR Band n2 - 10.0MHz CP-OFDM QPSK - Full RB)

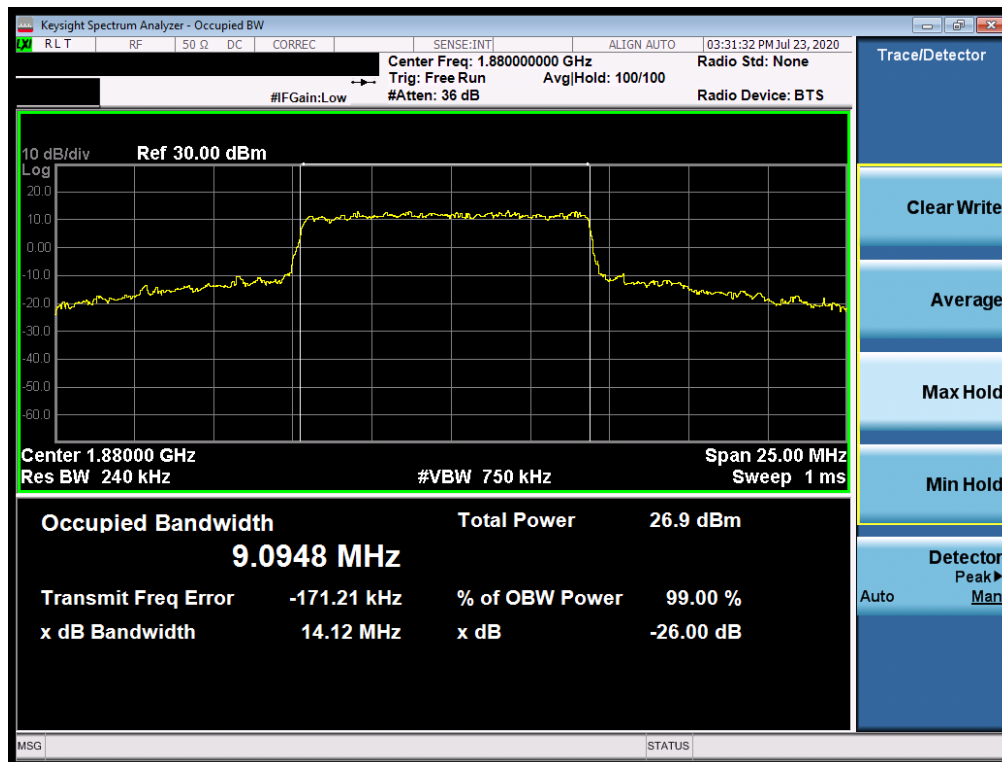


Plot 7-114. Occupied Bandwidth Plot (NR Band n2 - 10.0MHz CP-OFDM 16QAM - Full RB)

|                                         |                                              |                                       |    |                                 |
|-----------------------------------------|----------------------------------------------|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFF100VM                       | <b>PCTEST</b><br>Proud to be part of element | MEASUREMENT REPORT<br>(CERTIFICATION) | LG | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M2006150096-03.ZNF | Test Dates:<br>06/26/2020-08/18/2020         | EUT Type:<br>Portable Handset         |    | Page 74 of 301                  |



Plot 7-115. Occupied Bandwidth Plot (NR Band n2 - 10.0MHz CP-OFDM 64QAM - Full RB)

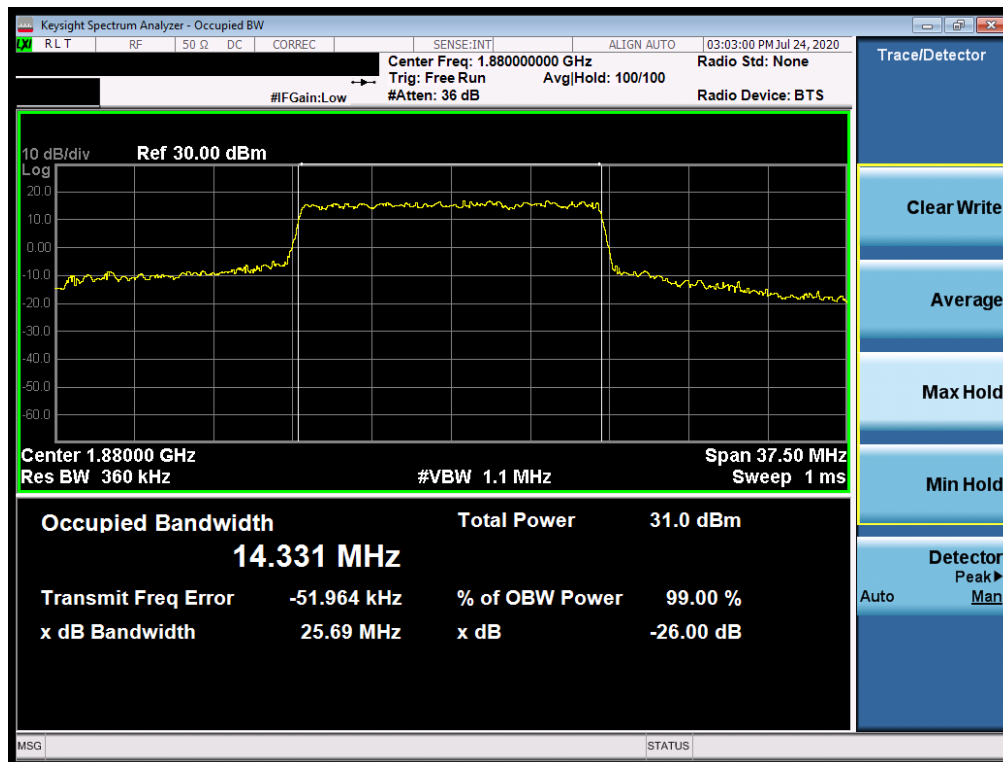


Plot 7-116. Occupied Bandwidth Plot (NR Band n2 - 10.0MHz CP-OFDM 256QAM - Full RB)

|                                         |                                              |                                       |    |                                 |
|-----------------------------------------|----------------------------------------------|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFF100VM                       | <b>PCTEST</b><br>Proud to be part of element | MEASUREMENT REPORT<br>(CERTIFICATION) | LG | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M2006150096-03.ZNF | Test Dates:<br>06/26/2020-08/18/2020         | EUT Type:<br>Portable Handset         |    | Page 75 of 301                  |



Plot 7-117. Occupied Bandwidth Plot (NR Band n2 - 15.0MHz DFT-s-OFDM BPSK - Full RB)

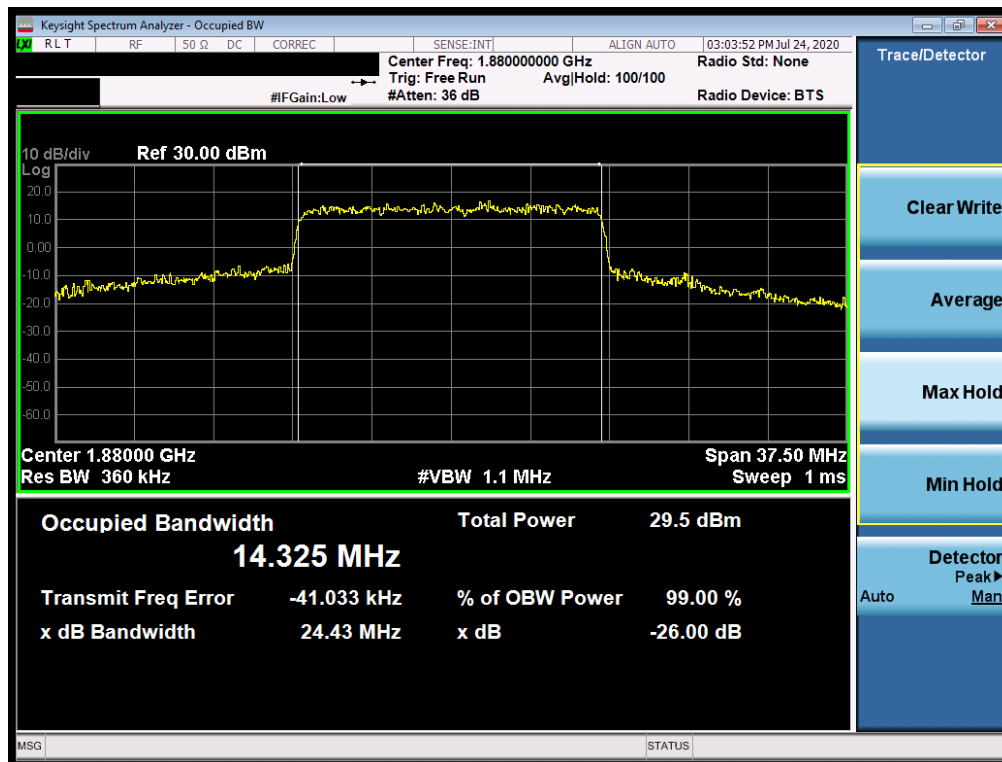


Plot 7-118. Occupied Bandwidth Plot (NR Band n2 - 15.0MHz CP-OFDM QPSK - Full RB)

|                                         |                                              |                                       |    |                                 |
|-----------------------------------------|----------------------------------------------|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFF100VM                       | <b>PCTEST</b><br>Proud to be part of element | MEASUREMENT REPORT<br>(CERTIFICATION) | LG | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M2006150096-03.ZNF | Test Dates:<br>06/26/2020-08/18/2020         | EUT Type:<br>Portable Handset         |    | Page 76 of 301                  |

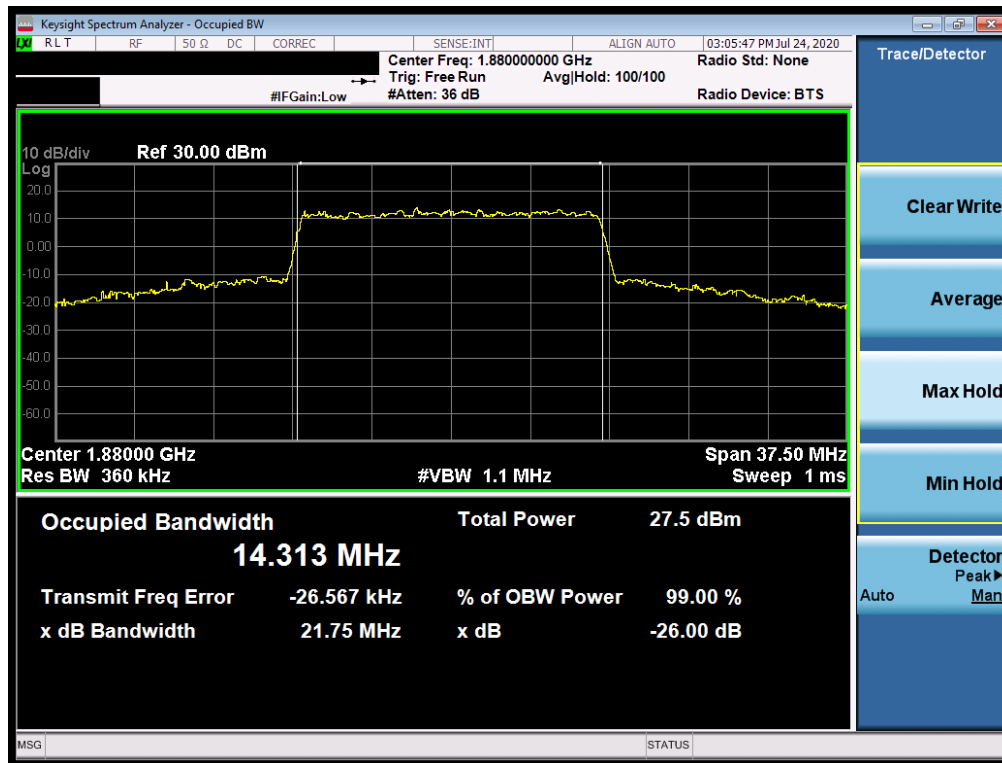


Plot 7-119. Occupied Bandwidth Plot (NR Band n2 - 15.0MHz CP-OFDM 16QAM - Full RB)

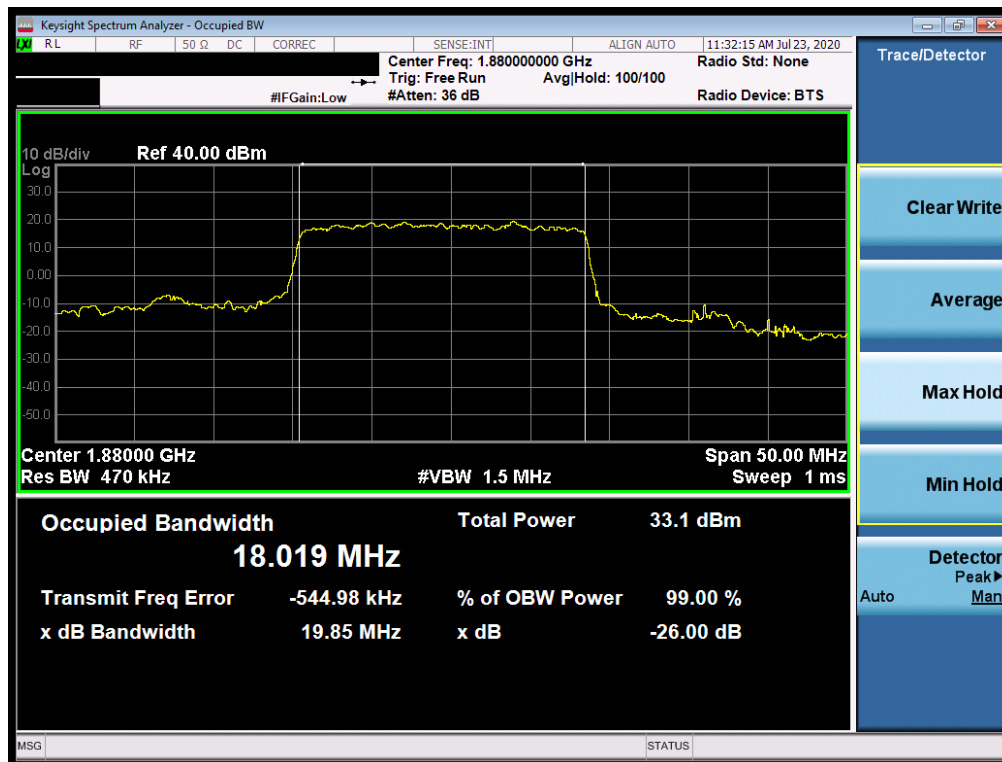


Plot 7-120. Occupied Bandwidth Plot (NR Band n2 - 15.0MHz CP-OFDM 64QAM - Full RB)

|                                         |                                              |                                       |    |                                 |
|-----------------------------------------|----------------------------------------------|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFF100VM                       | <b>PCTEST</b><br>Proud to be part of element | MEASUREMENT REPORT<br>(CERTIFICATION) | LG | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M2006150096-03.ZNF | Test Dates:<br>06/26/2020-08/18/2020         | EUT Type:<br>Portable Handset         |    | Page 77 of 301                  |



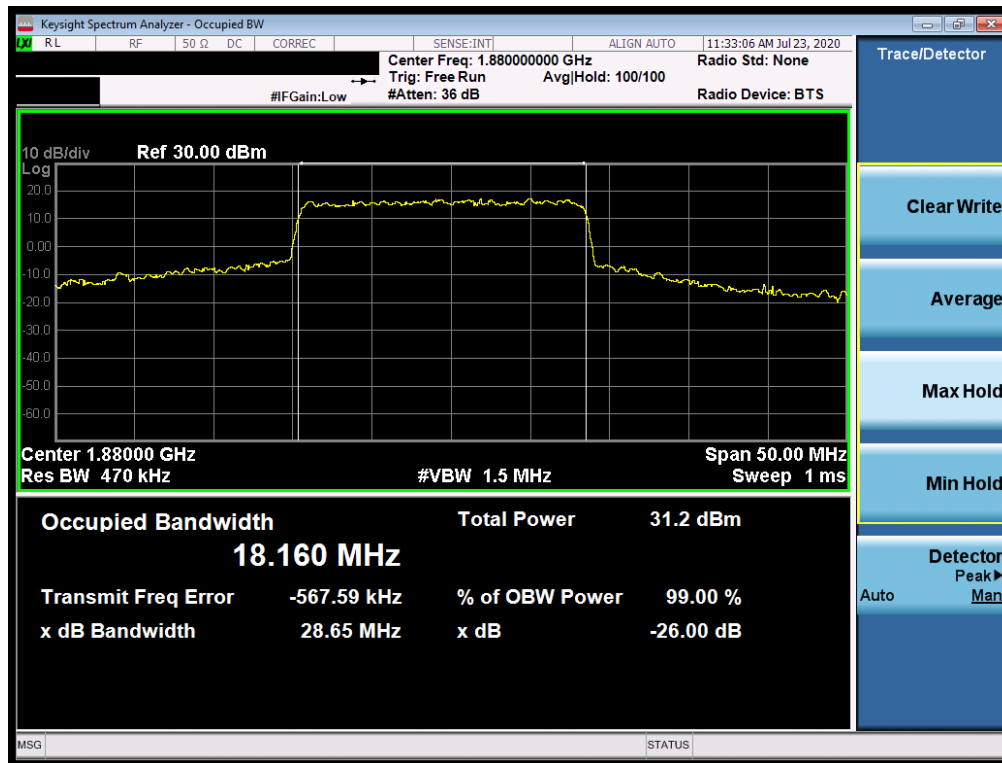
Plot 7-121. Occupied Bandwidth Plot (NR Band n2 - 15.0MHz CP-OFDM 256QAM - Full RB)



Plot 7-122. Occupied Bandwidth Plot (NR Band n2 - 20.0MHz DFT-s-OFDM BPSK - Full RB)

|                                         |                                              |                                       |    |                                 |
|-----------------------------------------|----------------------------------------------|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFF100VM                       | <b>PCTEST</b><br>Proud to be part of element | MEASUREMENT REPORT<br>(CERTIFICATION) | LG | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M2006150096-03.ZNF | Test Dates:<br>06/26/2020-08/18/2020         | EUT Type:<br>Portable Handset         |    | Page 78 of 301                  |





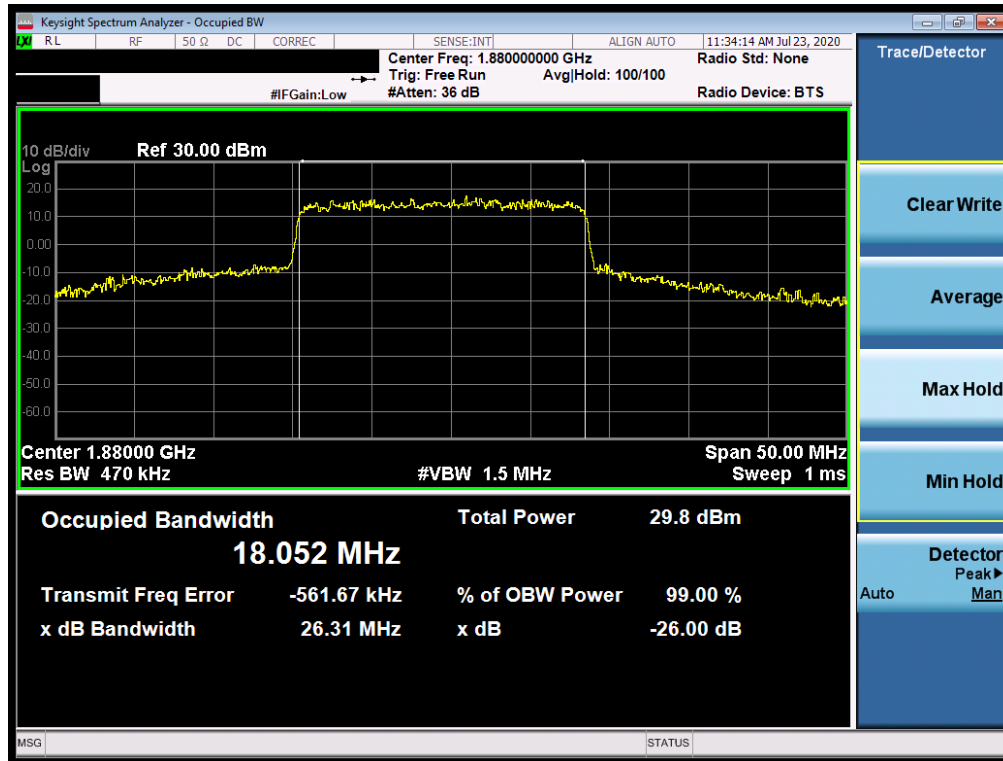
Plot 7-123. Occupied Bandwidth Plot (NR Band n2 - 20.0MHz CP-OFDM QPSK - Full RB)



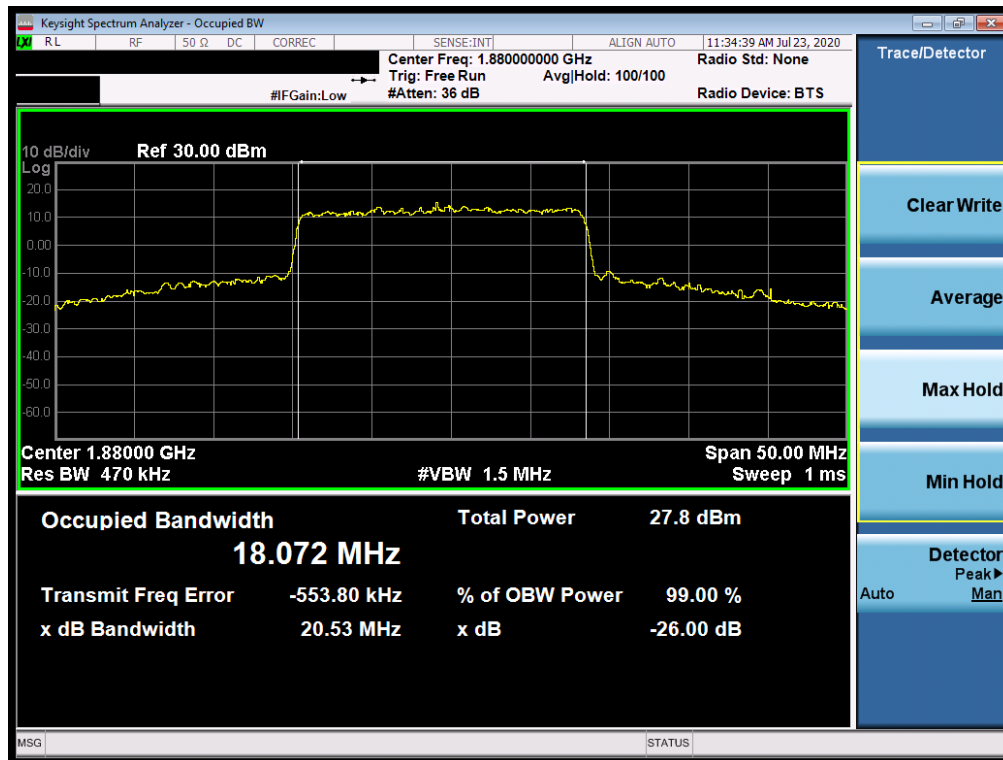
Plot 7-124. Occupied Bandwidth Plot (NR Band n2 - 20.0MHz CP-OFDM 16QAM - Full RB)

|                                         |                                              |                                       |    |                                 |
|-----------------------------------------|----------------------------------------------|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFF100VM                       | <b>PCTEST</b><br>Proud to be part of element | MEASUREMENT REPORT<br>(CERTIFICATION) | LG | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M2006150096-03.ZNF | Test Dates:<br>06/26/2020-08/18/2020         | EUT Type:<br>Portable Handset         |    | Page 79 of 301                  |





Plot 7-125. Occupied Bandwidth Plot (NR Band n2 - 20.0MHz CP-OFDM 64QAM - Full RB)



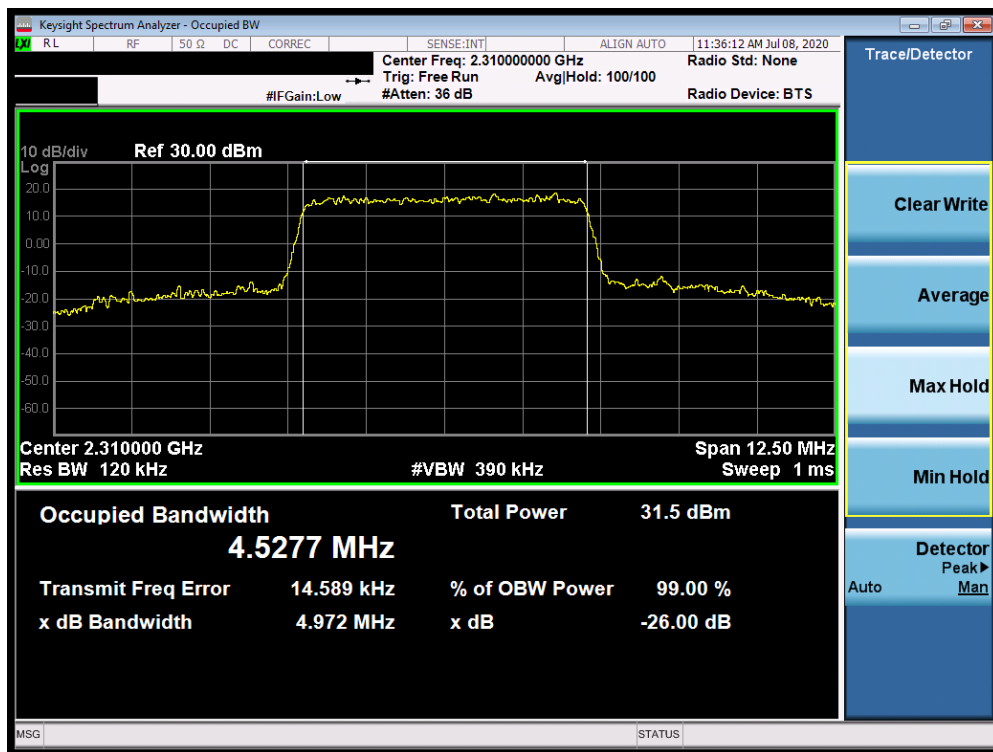
Plot 7-126. Occupied Bandwidth Plot (NR Band n2 - 20.0MHz CP-OFDM 256QAM - Full RB)

|                                         |                                              |                                       |    |                                 |
|-----------------------------------------|----------------------------------------------|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFF100VM                       | <b>PCTEST</b><br>Proud to be part of element | MEASUREMENT REPORT<br>(CERTIFICATION) | LG | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M2006150096-03.ZNF | Test Dates:<br>06/26/2020-08/18/2020         | EUT Type:<br>Portable Handset         |    | Page 80 of 301                  |

## Band 30

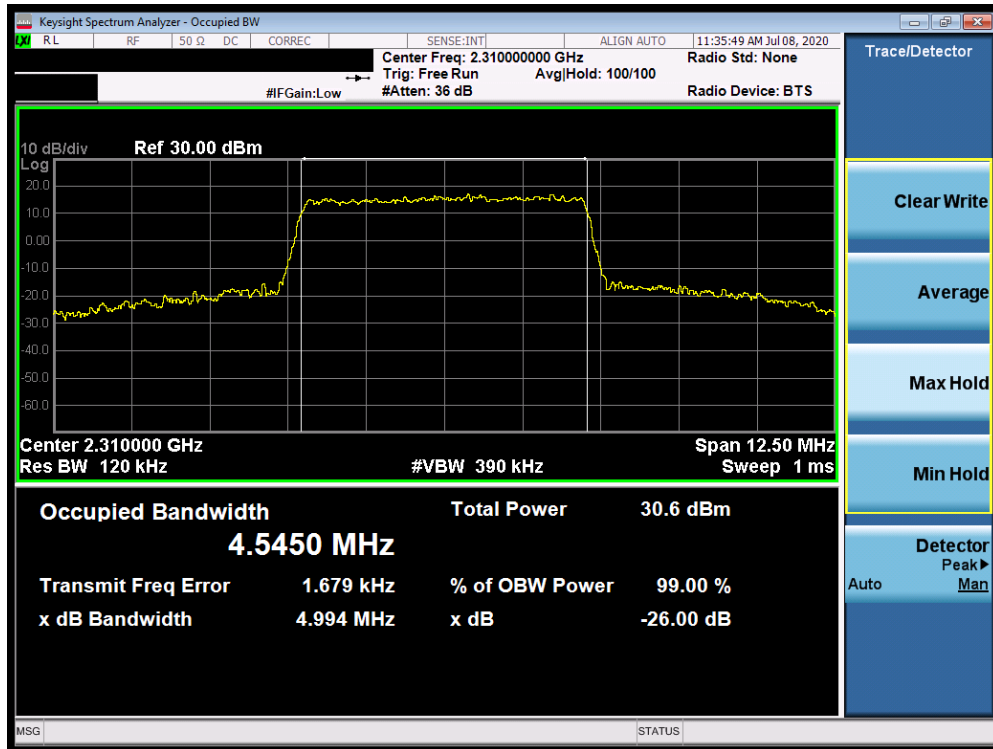


Plot 7-127. Occupied Bandwidth Plot (Band 30 - 5.0MHz QPSK - Full RB Configuration)

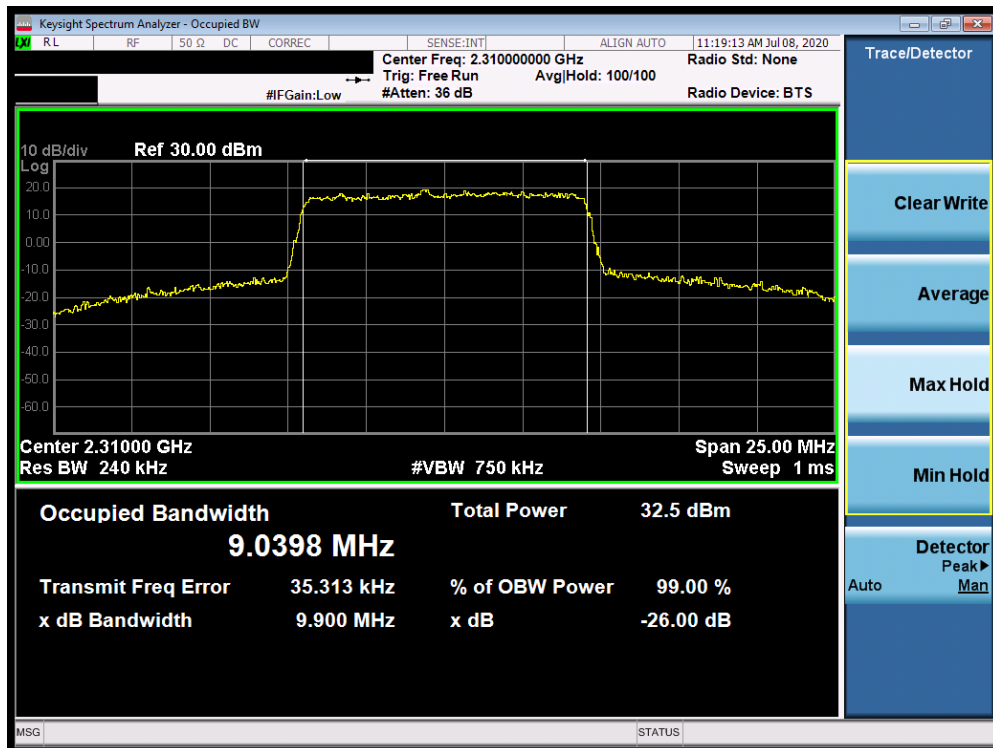


Plot 7-128. Occupied Bandwidth Plot (Band 30 - 5.0MHz 16-QAM - Full RB Configuration)

|                                         |                                              |                                       |    |                                 |
|-----------------------------------------|----------------------------------------------|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFF100VM                       | <b>PCTEST</b><br>Proud to be part of element | MEASUREMENT REPORT<br>(CERTIFICATION) | LG | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M2006150096-03.ZNF | Test Dates:<br>06/26/2020-08/18/2020         | EUT Type:<br>Portable Handset         |    | Page 81 of 301                  |



Plot 7-129. Occupied Bandwidth Plot (Band 30 - 5.0MHz 64-QAM - Full RB Configuration)



Plot 7-130. Occupied Bandwidth Plot (Band 30 - 10.0MHz QPSK - Full RB Configuration)

|                                         |                                              |                                       |    |                                 |
|-----------------------------------------|----------------------------------------------|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFF100VM                       | <b>PCTEST</b><br>Proud to be part of element | MEASUREMENT REPORT<br>(CERTIFICATION) | LG | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M2006150096-03.ZNF | Test Dates:<br>06/26/2020-08/18/2020         | EUT Type:<br>Portable Handset         |    | Page 82 of 301                  |



Plot 7-131. Occupied Bandwidth Plot (Band 30 - 10.0MHz 16-QAM - Full RB Configuration)



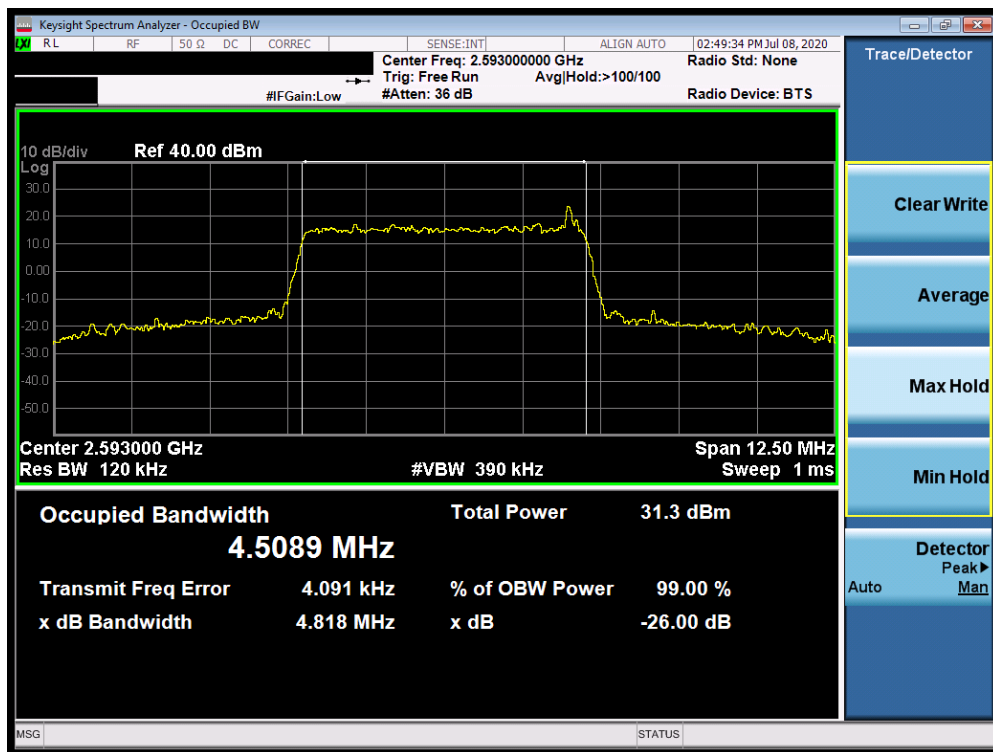
Plot 7-132. Occupied Bandwidth Plot (Band 30 - 10.0MHz 64-QAM - Full RB Configuration)

|                                         |                                              |                                       |           |                                 |
|-----------------------------------------|----------------------------------------------|---------------------------------------|-----------|---------------------------------|
| FCC ID: ZNFF100VM                       | <b>PCTEST</b><br>Proud to be part of element | MEASUREMENT REPORT<br>(CERTIFICATION) | <b>LG</b> | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M2006150096-03.ZNF | Test Dates:<br>06/26/2020-08/18/2020         | EUT Type:<br>Portable Handset         |           | Page 83 of 301                  |

## Band 41



Plot 7-133. Occupied Bandwidth Plot (Band 41 – 5.0MHz QPSK - Full RB Configuration)

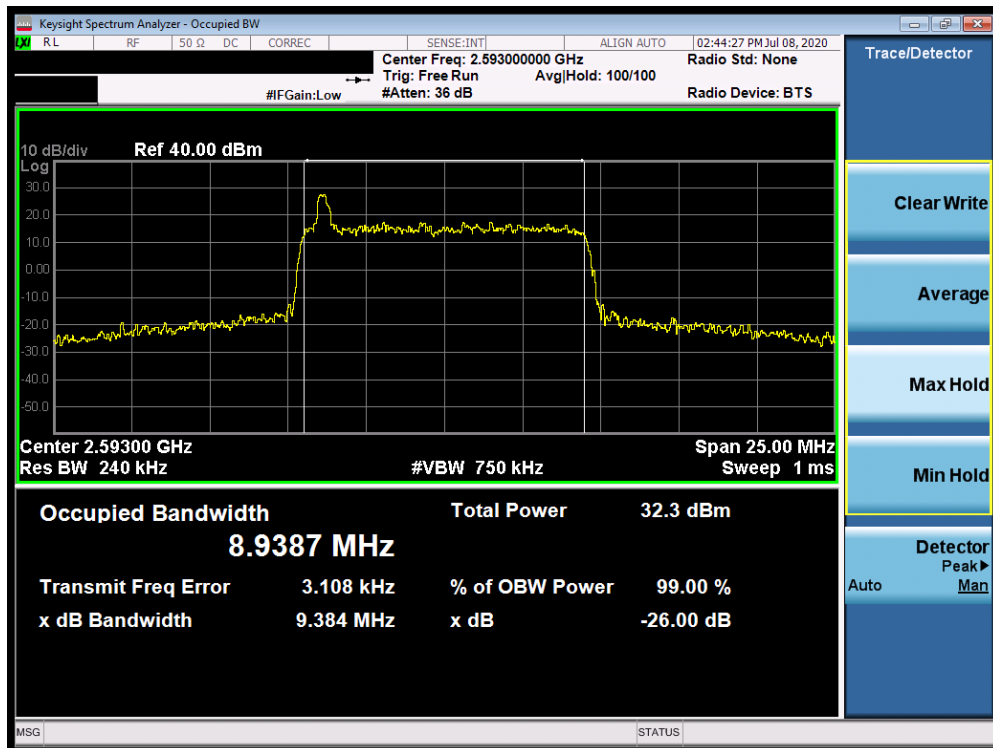


Plot 7-134. Occupied Bandwidth Plot (Band 41 – 5.0MHz 16-QAM - Full RB Configuration)

|                                         |                                              |                                       |    |                                 |
|-----------------------------------------|----------------------------------------------|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFF100VM                       | <b>PCTEST</b><br>Proud to be part of element | MEASUREMENT REPORT<br>(CERTIFICATION) | LG | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M2006150096-03.ZNF | Test Dates:<br>06/26/2020-08/18/2020         | EUT Type:<br>Portable Handset         |    | Page 84 of 301                  |



Plot 7-135. Occupied Bandwidth Plot (Band 41 – 5.0MHz 64-QAM - Full RB Configuration)

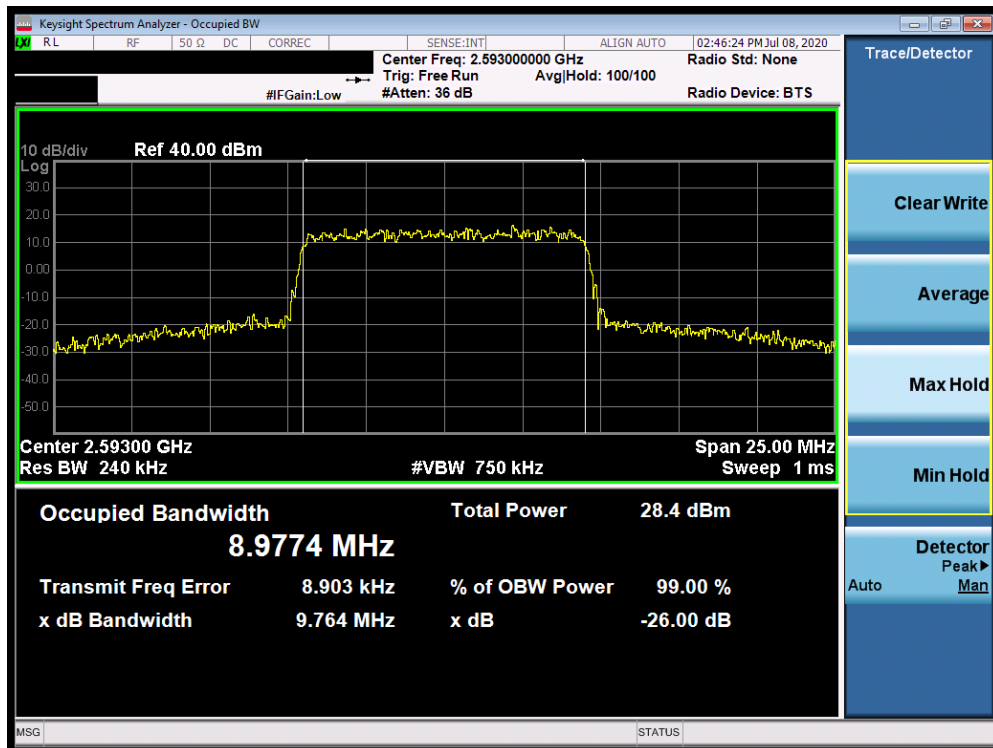


Plot 7-136. Occupied Bandwidth Plot (Band 41 - 10.0MHz QPSK - Full RB Configuration)

|                                         |                                              |                                       |           |                                 |
|-----------------------------------------|----------------------------------------------|---------------------------------------|-----------|---------------------------------|
| FCC ID: ZNFF100VM                       | <b>PCTEST</b><br>Proud to be part of element | MEASUREMENT REPORT<br>(CERTIFICATION) | <b>LG</b> | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M2006150096-03.ZNF | Test Dates:<br>06/26/2020-08/18/2020         | EUT Type:<br>Portable Handset         |           | Page 85 of 301                  |



Plot 7-137. Occupied Bandwidth Plot (Band 41 - 10.0MHz 16-QAM - Full RB Configuration)



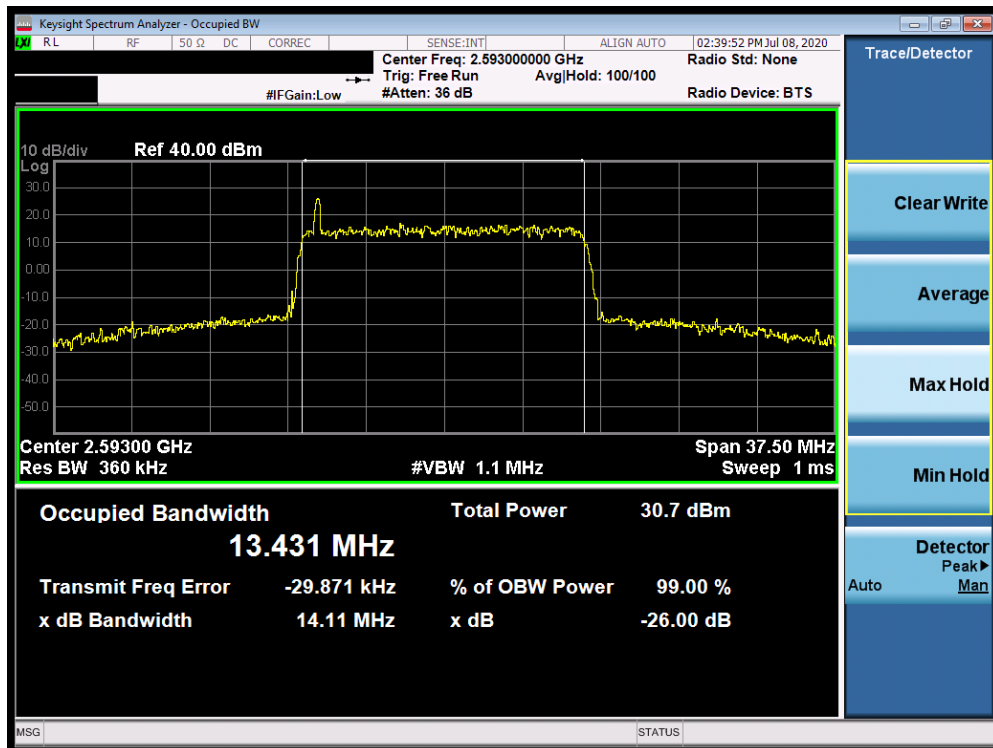
Plot 7-138. Occupied Bandwidth Plot (Band 41 - 10.0MHz 64-QAM - Full RB Configuration)

|                                         |                                              |                                       |    |                                 |
|-----------------------------------------|----------------------------------------------|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFF100VM                       | <b>PCTEST</b><br>Proud to be part of element | MEASUREMENT REPORT<br>(CERTIFICATION) | LG | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M2006150096-03.ZNF | Test Dates:<br>06/26/2020-08/18/2020         | EUT Type:<br>Portable Handset         |    | Page 86 of 301                  |





Plot 7-139. Occupied Bandwidth Plot (Band 41 - 15.0MHz QPSK - Full RB Configuration)

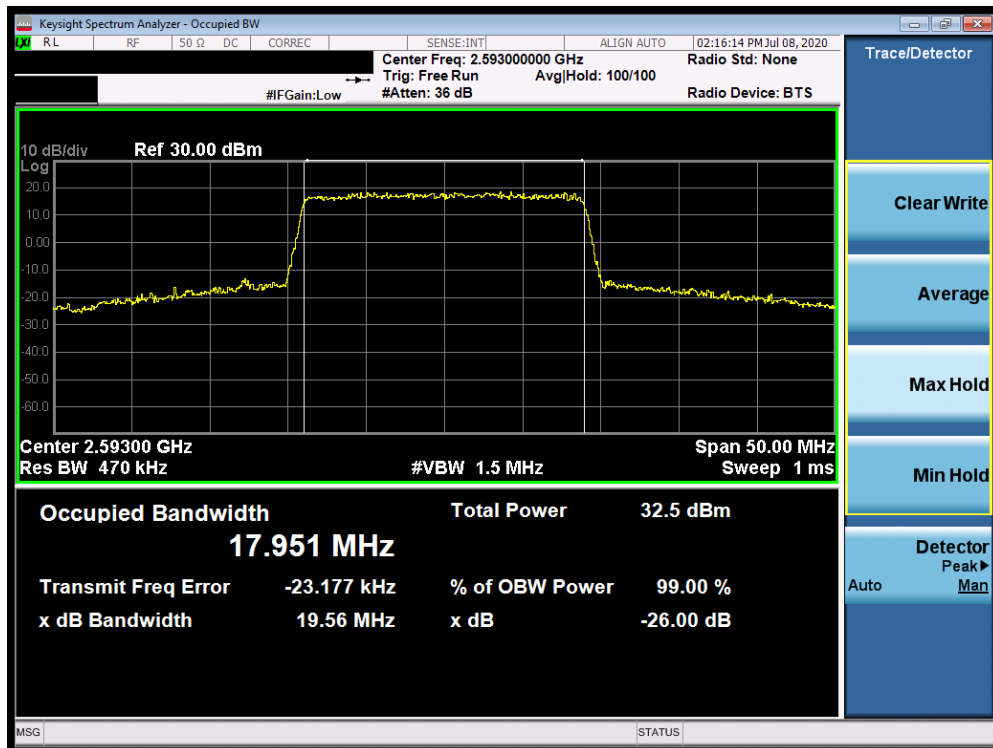


Plot 7-140. Occupied Bandwidth Plot (Band 41 - 15.0MHz 16-QAM - Full RB Configuration)

|                                         |                                              |                                       |    |                                 |
|-----------------------------------------|----------------------------------------------|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFF100VM                       | <b>PCTEST</b><br>Proud to be part of element | MEASUREMENT REPORT<br>(CERTIFICATION) | LG | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M2006150096-03.ZNF | Test Dates:<br>06/26/2020-08/18/2020         | EUT Type:<br>Portable Handset         |    | Page 87 of 301                  |



Plot 7-141. Occupied Bandwidth Plot (Band 41 - 15.0MHz 64-QAM - Full RB Configuration)

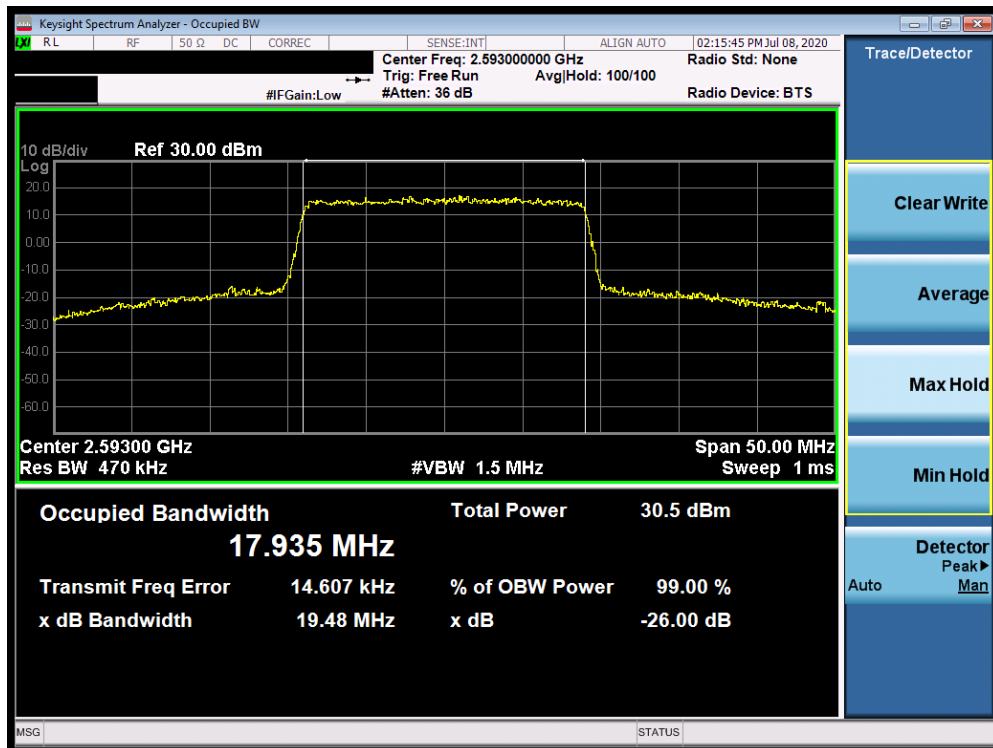


Plot 7-142. Occupied Bandwidth Plot (Band 41 - 20.0MHz QPSK - Full RB Configuration)

|                                         |                                              |                                       |           |                                 |
|-----------------------------------------|----------------------------------------------|---------------------------------------|-----------|---------------------------------|
| FCC ID: ZNFF100VM                       | <b>PCTEST</b><br>Proud to be part of element | MEASUREMENT REPORT<br>(CERTIFICATION) | <b>LG</b> | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M2006150096-03.ZNF | Test Dates:<br>06/26/2020-08/18/2020         | EUT Type:<br>Portable Handset         |           | Page 88 of 301                  |



Plot 7-143. Occupied Bandwidth Plot (Band 41 - 20.0MHz 16-QAM - Full RB Configuration)



Plot 7-144. Occupied Bandwidth Plot (Band 41 - 20.0MHz 64-QAM - Full RB Configuration)

|                                         |                                              |                                       |           |                                 |
|-----------------------------------------|----------------------------------------------|---------------------------------------|-----------|---------------------------------|
| FCC ID: ZNFF100VM                       | <b>PCTEST</b><br>Proud to be part of element | MEASUREMENT REPORT<br>(CERTIFICATION) | <b>LG</b> | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M2006150096-03.ZNF | Test Dates:<br>06/26/2020-08/18/2020         | EUT Type:<br>Portable Handset         |           | Page 89 of 301                  |

## 7.3 Spurious and Harmonic Emissions at Antenna Terminal

### Test Overview

The level of the carrier and the various conducted spurious and harmonic frequencies is measured by means of a calibrated spectrum analyzer. The spectrum is scanned from the lowest frequency generated in the equipment up to a frequency including its 10<sup>th</sup> harmonic. 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 of any spurious emission is  $43 + 10 \log_{10}(P_{[Watts]})$ , where  $P$  is the transmitter power in Watts.***

### Test Procedure Used

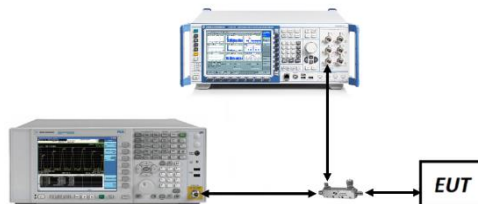
KDB 971168 D01 v03r01 – Section 6.0

### Test Settings

1. Start frequency was set to 30MHz and stop frequency was set to at least 10 \* the fundamental frequency (separated into at least two plots per channel)
2. Detector = RMS
3. Trace mode = trace average
4. Sweep time = auto couple
5. The trace was allowed to stabilize
6. Please see test notes below for RBW and VBW settings

### Test Setup

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



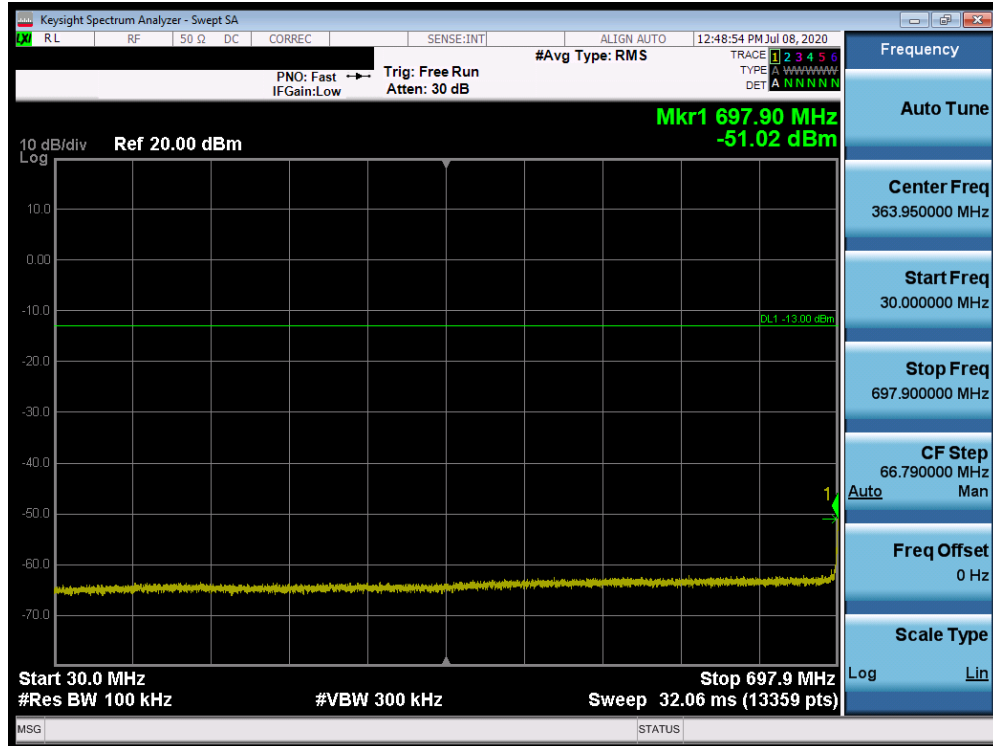
**Figure 7-2. Test Instrument & Measurement Setup**

### Test Notes

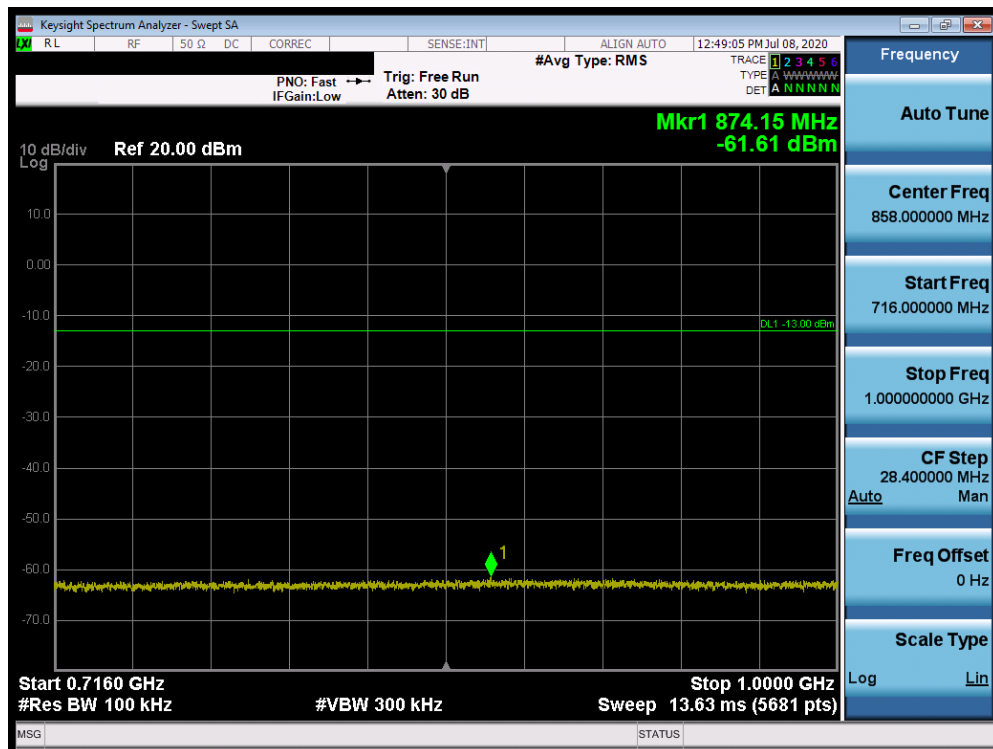
Compliance with the applicable limits is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz or greater for frequencies less than 1 GHz. However, in the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. 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 emission are attenuated at least 26 dB below the transmitter power.

|                                         |                                              |                                       |    |                                 |
|-----------------------------------------|----------------------------------------------|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFF100VM                       | <b>PCTEST</b><br>Proud to be part of element | MEASUREMENT REPORT<br>(CERTIFICATION) | LG | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M2006150096-03.ZNF | Test Dates:<br>06/26/2020-08/18/2020         | EUT Type:<br>Portable Handset         |    | Page 90 of 301                  |

## Band 12



Plot 7-145. Conducted Spurious Plot (Band 12 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

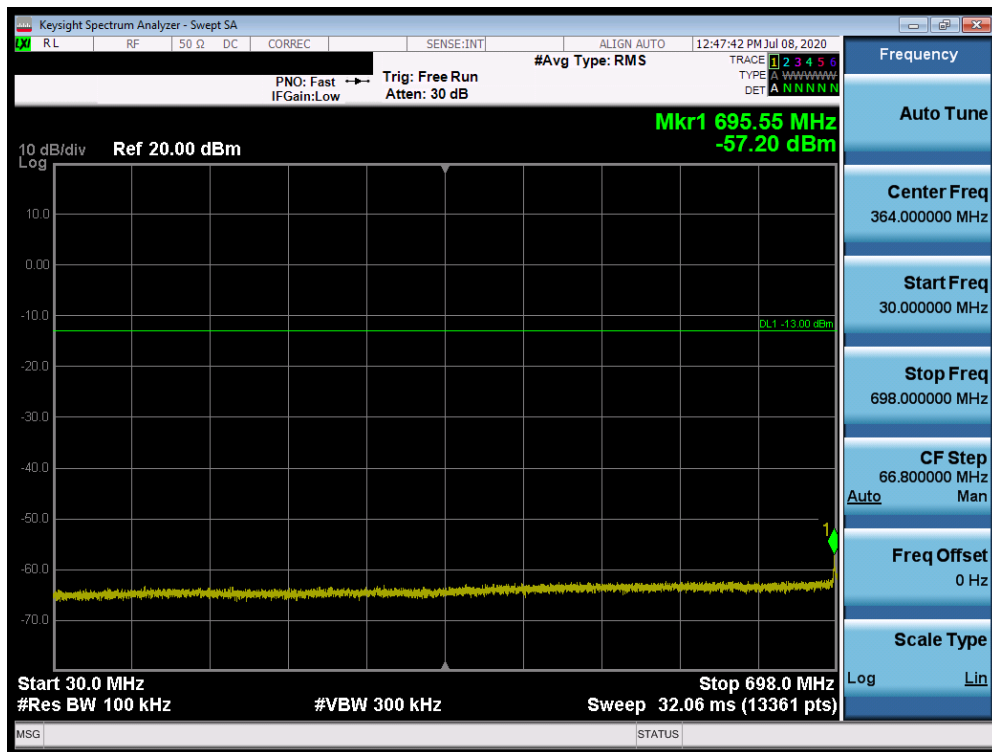


Plot 7-146. Conducted Spurious Plot (Band 12 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

|                                         |                                              |                                       |    |                                 |
|-----------------------------------------|----------------------------------------------|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFF100VM                       | <b>PCTEST</b><br>Proud to be part of element | MEASUREMENT REPORT<br>(CERTIFICATION) | LG | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M2006150096-03.ZNF | Test Dates:<br>06/26/2020-08/18/2020         | EUT Type:<br>Portable Handset         |    | Page 91 of 301                  |

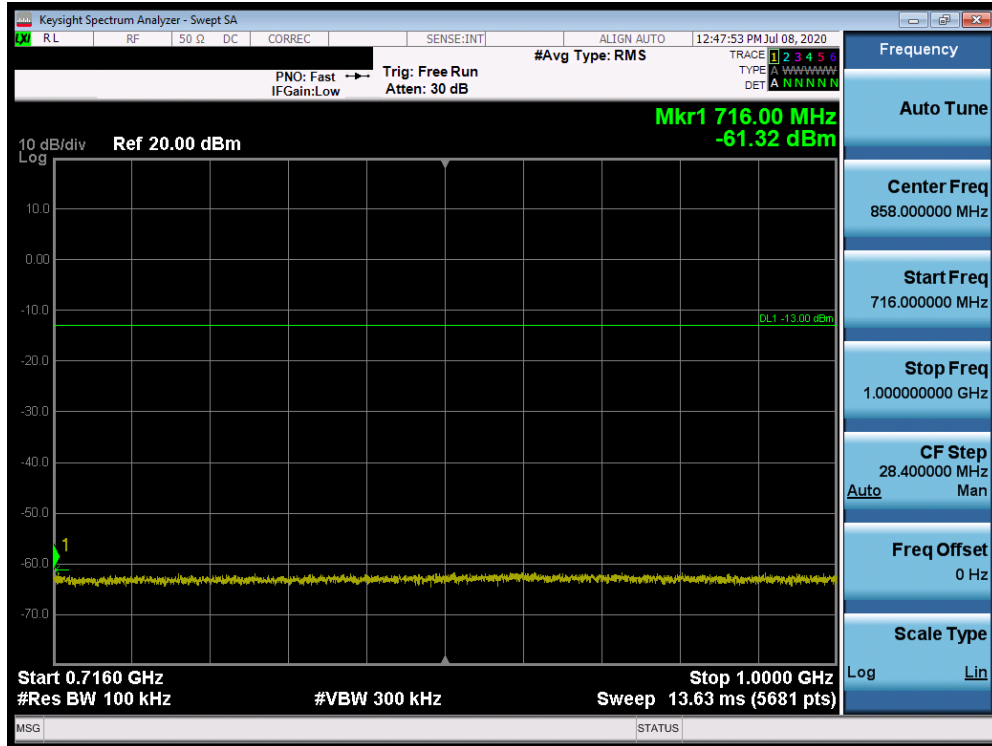


Plot 7-147. Conducted Spurious Plot (Band 12 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

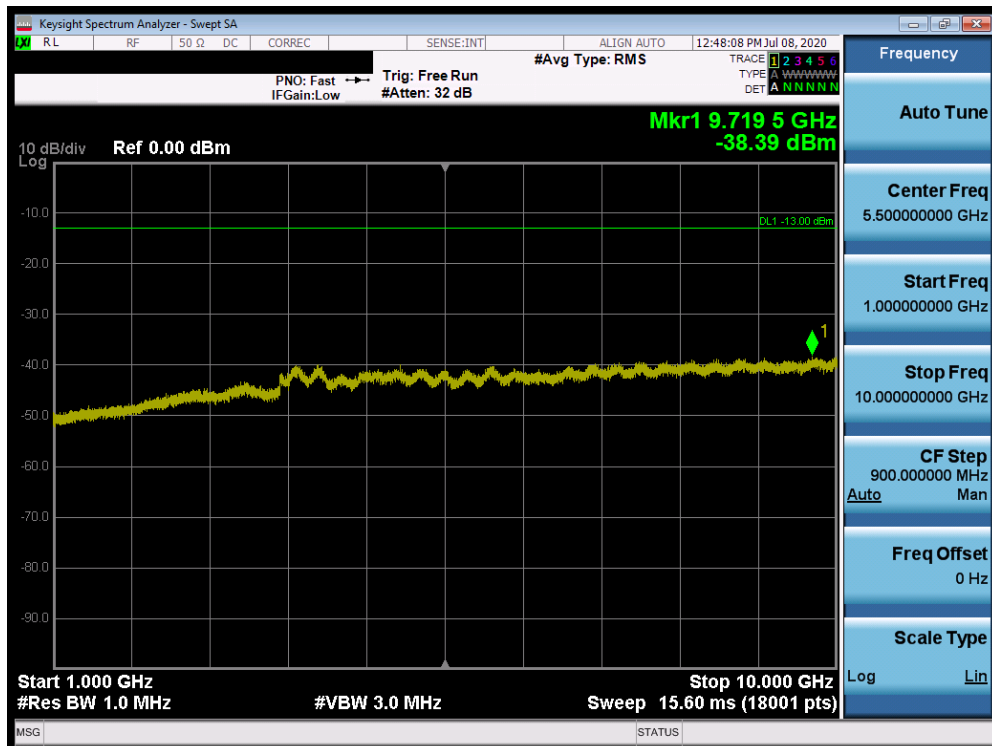


Plot 7-148. Conducted Spurious Plot (Band 12 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

|                                         |                                              |                                       |    |                                 |
|-----------------------------------------|----------------------------------------------|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFF100VM                       | <b>PCTEST</b><br>Proud to be part of element | MEASUREMENT REPORT<br>(CERTIFICATION) | LG | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M2006150096-03.ZNF | Test Dates:<br>06/26/2020-08/18/2020         | EUT Type:<br>Portable Handset         |    | Page 92 of 301                  |



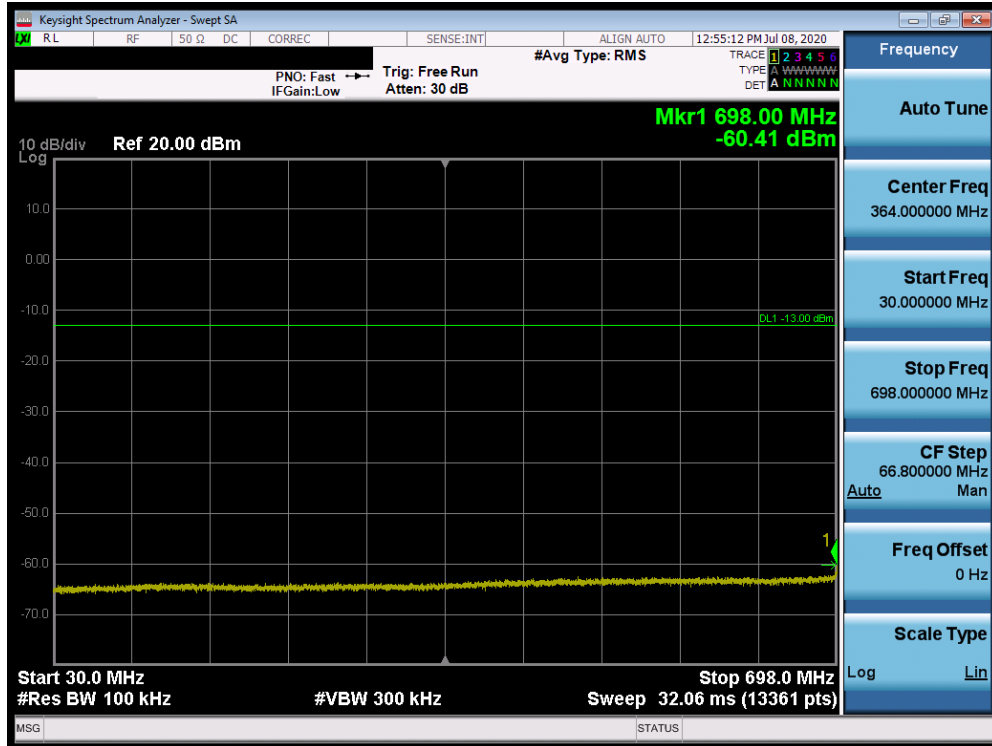
Plot 7-149. Conducted Spurious Plot (Band 12 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)



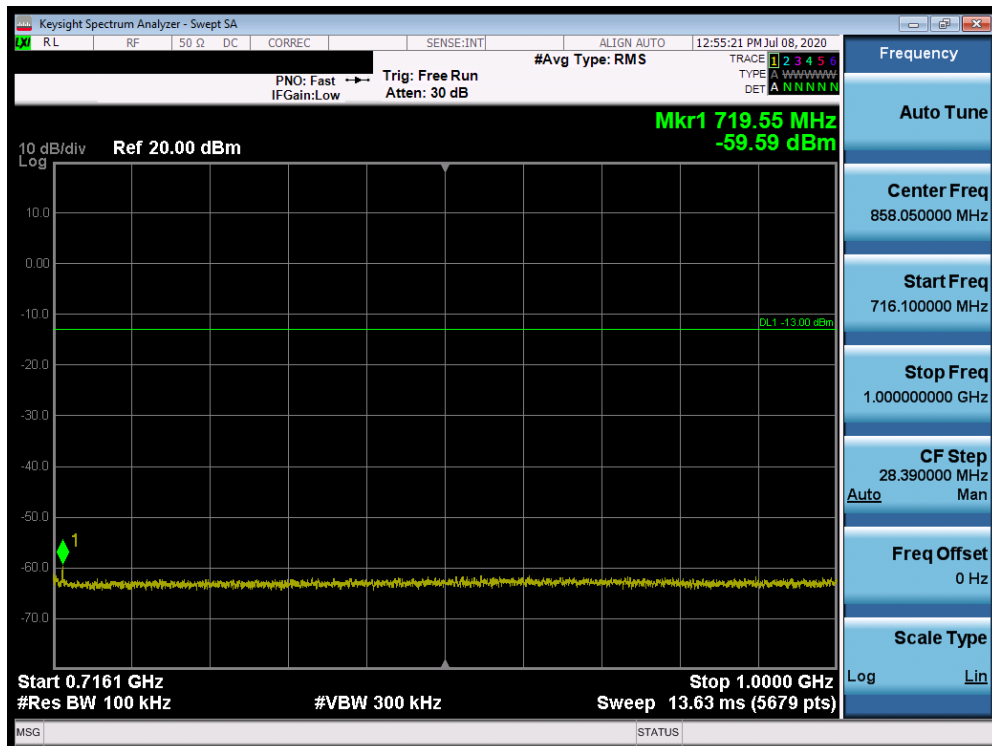
Plot 7-150. Conducted Spurious Plot (Band 12 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

|                                         |                                              |                                       |    |                                 |
|-----------------------------------------|----------------------------------------------|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFF100VM                       | <b>PCTEST</b><br>Proud to be part of element | MEASUREMENT REPORT<br>(CERTIFICATION) | LG | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M2006150096-03.ZNF | Test Dates:<br>06/26/2020-08/18/2020         | EUT Type:<br>Portable Handset         |    | Page 93 of 301                  |



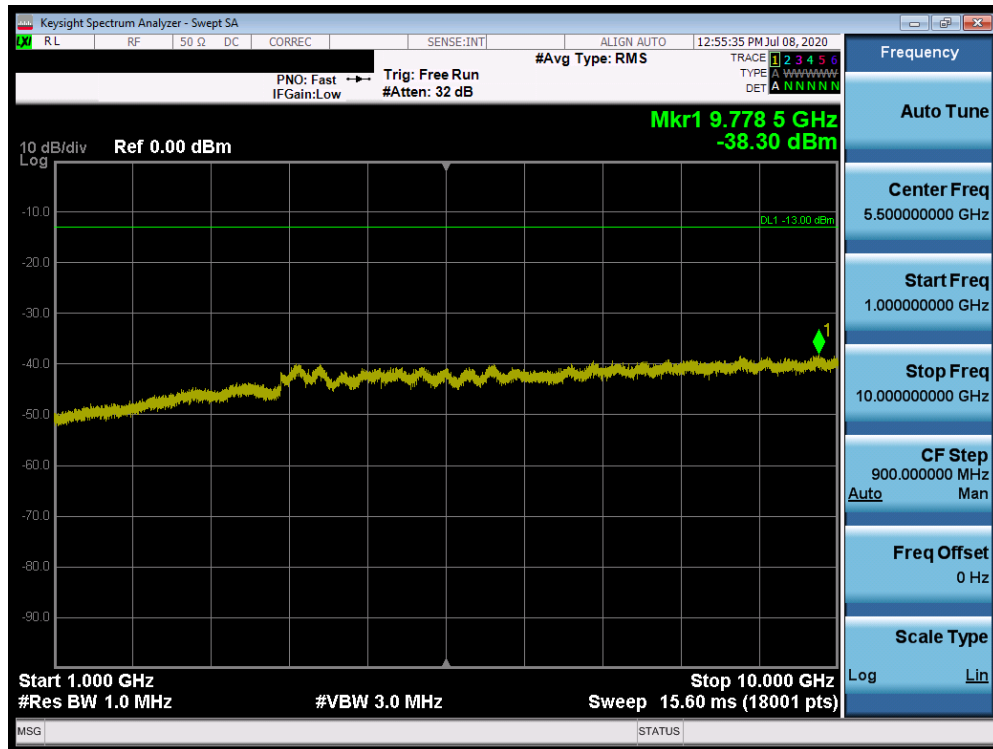


Plot 7-151. Conducted Spurious Plot (Band 12 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)



Plot 7-152. Conducted Spurious Plot (Band 12 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

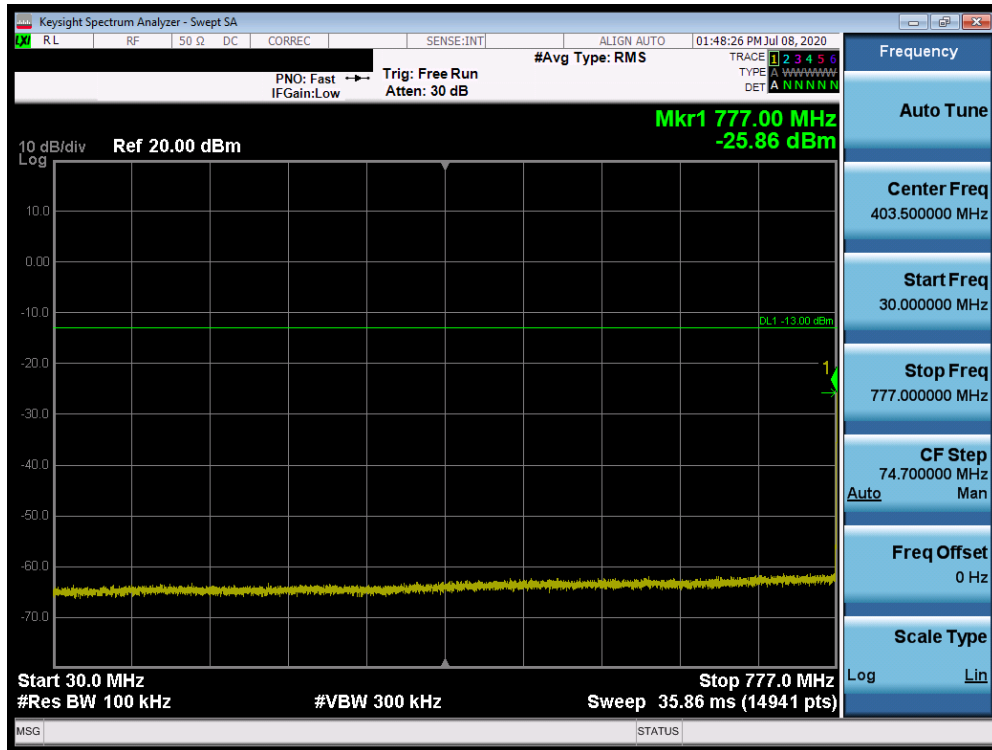
|                                         |                                              |                                       |    |                                 |
|-----------------------------------------|----------------------------------------------|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFF100VM                       | <b>PCTEST</b><br>Proud to be part of element | MEASUREMENT REPORT<br>(CERTIFICATION) | LG | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M2006150096-03.ZNF | Test Dates:<br>06/26/2020-08/18/2020         | EUT Type:<br>Portable Handset         |    | Page 94 of 301                  |



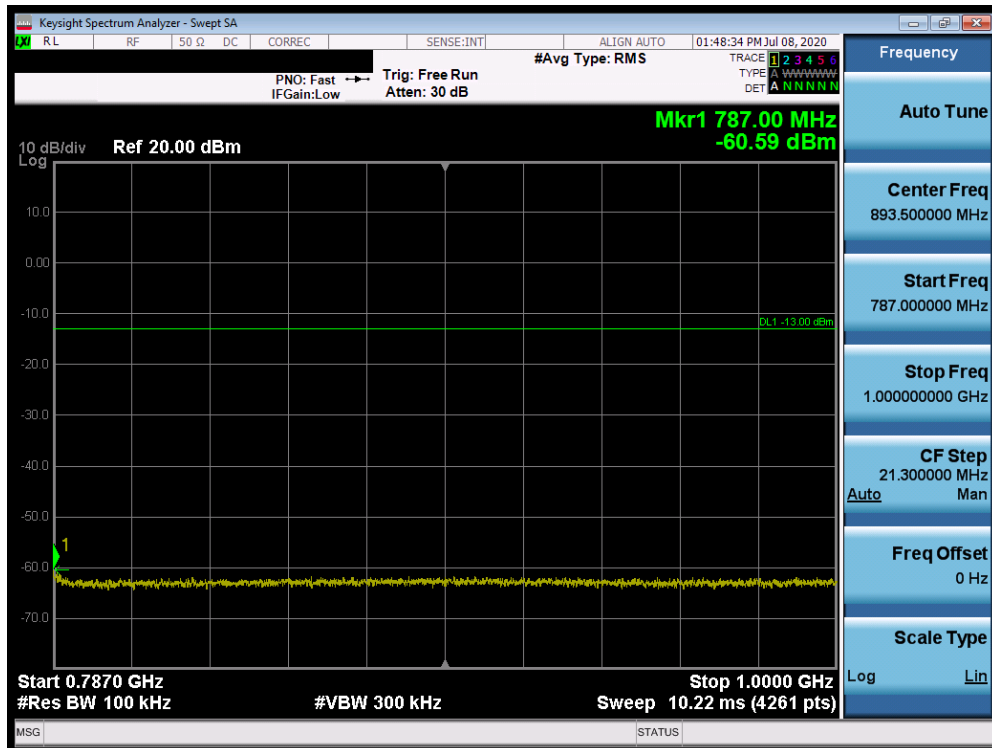
Plot 7-153. Conducted Spurious Plot (Band 12 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

|                                         |                                              |                                       |    |                                 |
|-----------------------------------------|----------------------------------------------|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFF100VM                       | <b>PCTEST</b><br>Proud to be part of element | MEASUREMENT REPORT<br>(CERTIFICATION) | LG | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M2006150096-03.ZNF | Test Dates:<br>06/26/2020-08/18/2020         | EUT Type:<br>Portable Handset         |    | Page 95 of 301                  |

## Band 13



Plot 7-154. Conducted Spurious Plot (Band 13 - 10.0MHz QPSK - RB Size 1, RB Offset 0)



Plot 7-155. Conducted Spurious Plot (Band 13 - 10.0MHz QPSK - RB Size 1, RB Offset 0)

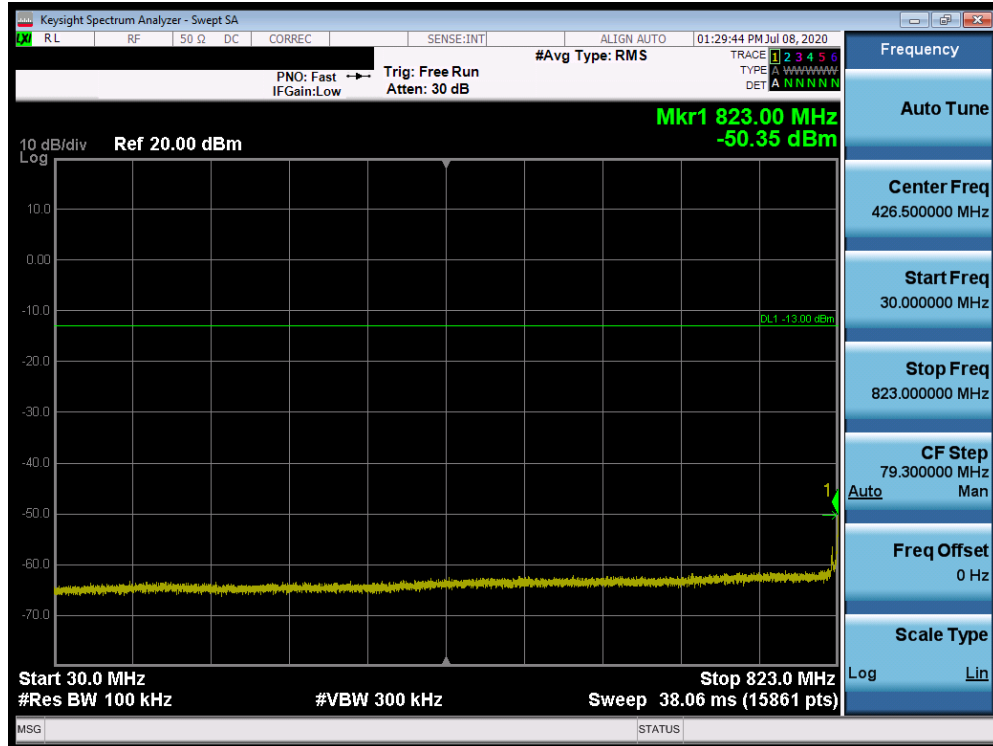
|                                         |                                              |                                       |           |                                 |
|-----------------------------------------|----------------------------------------------|---------------------------------------|-----------|---------------------------------|
| FCC ID: ZNFF100VM                       | <b>PCTEST</b><br>Proud to be part of element | MEASUREMENT REPORT<br>(CERTIFICATION) | <b>LG</b> | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M2006150096-03.ZNF | Test Dates:<br>06/26/2020-08/18/2020         | EUT Type:<br>Portable Handset         |           | Page 96 of 301                  |



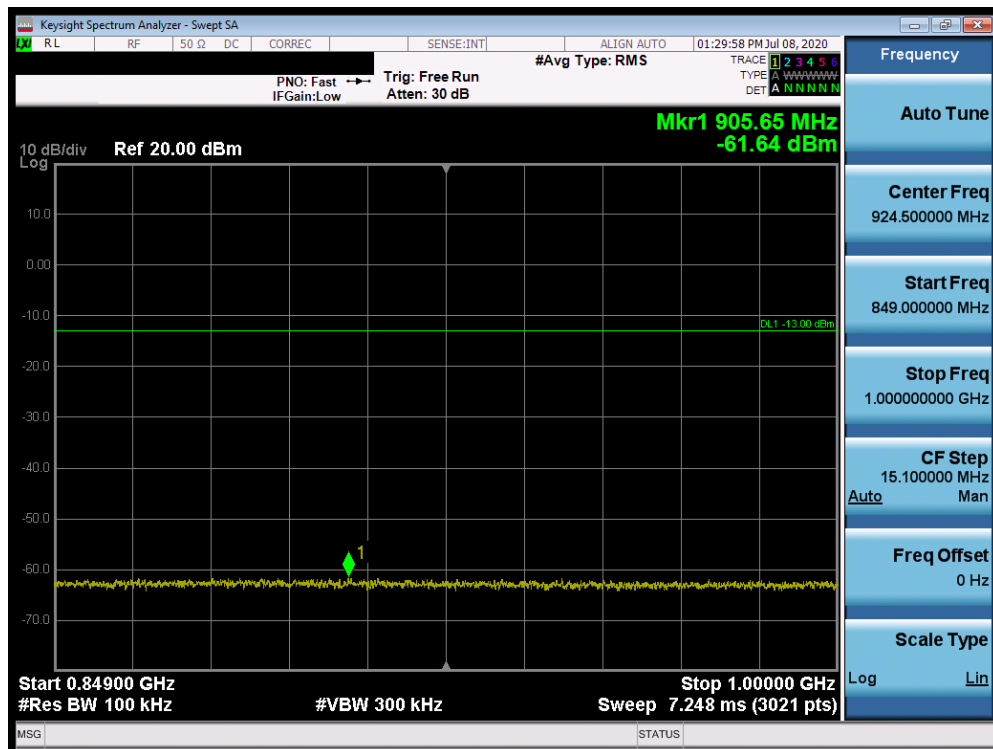
Plot 7-156. Conducted Spurious Plot (Band 13 - 10.0MHz QPSK - RB Size 1, RB Offset 0)

|                                         |                                              |                                       |    |                                 |
|-----------------------------------------|----------------------------------------------|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFF100VM                       | <b>PCTEST</b><br>Proud to be part of element | MEASUREMENT REPORT<br>(CERTIFICATION) | LG | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M2006150096-03.ZNF | Test Dates:<br>06/26/2020-08/18/2020         | EUT Type:<br>Portable Handset         |    | Page 97 of 301                  |

## Band 5



Plot 7-157. Conducted Spurious Plot (Band 5 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

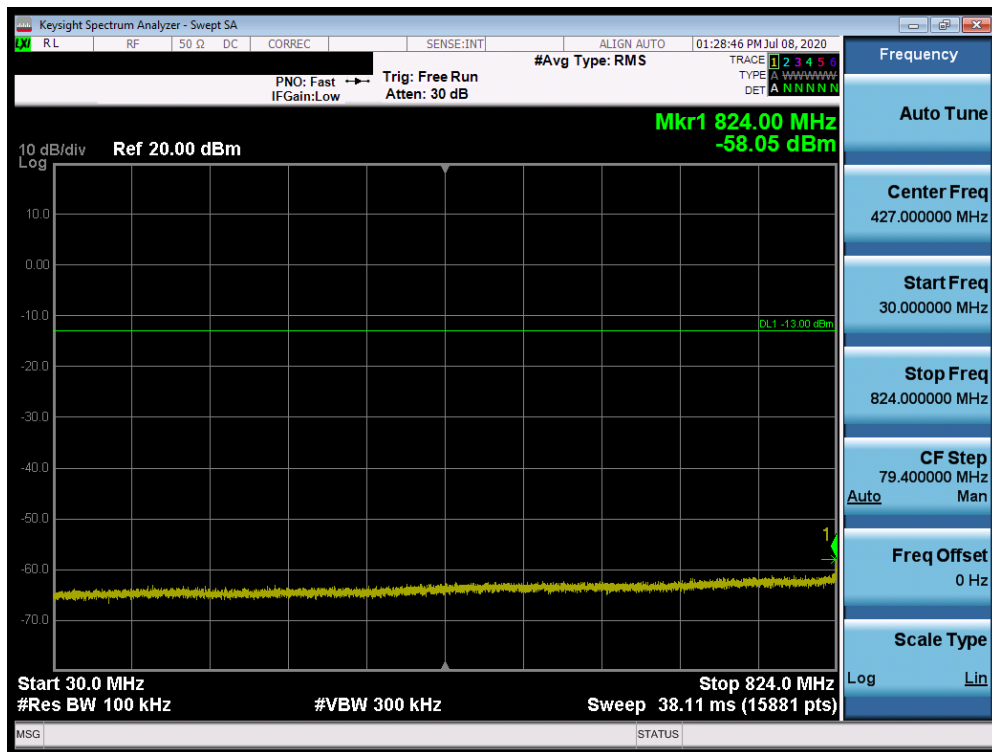


Plot 7-158. Conducted Spurious Plot (Band 5 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

|                                         |                                              |                                       |    |                                 |
|-----------------------------------------|----------------------------------------------|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFF100VM                       | <b>PCTEST</b><br>Proud to be part of element | MEASUREMENT REPORT<br>(CERTIFICATION) | LG | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M2006150096-03.ZNF | Test Dates:<br>06/26/2020-08/18/2020         | EUT Type:<br>Portable Handset         |    | Page 98 of 301                  |

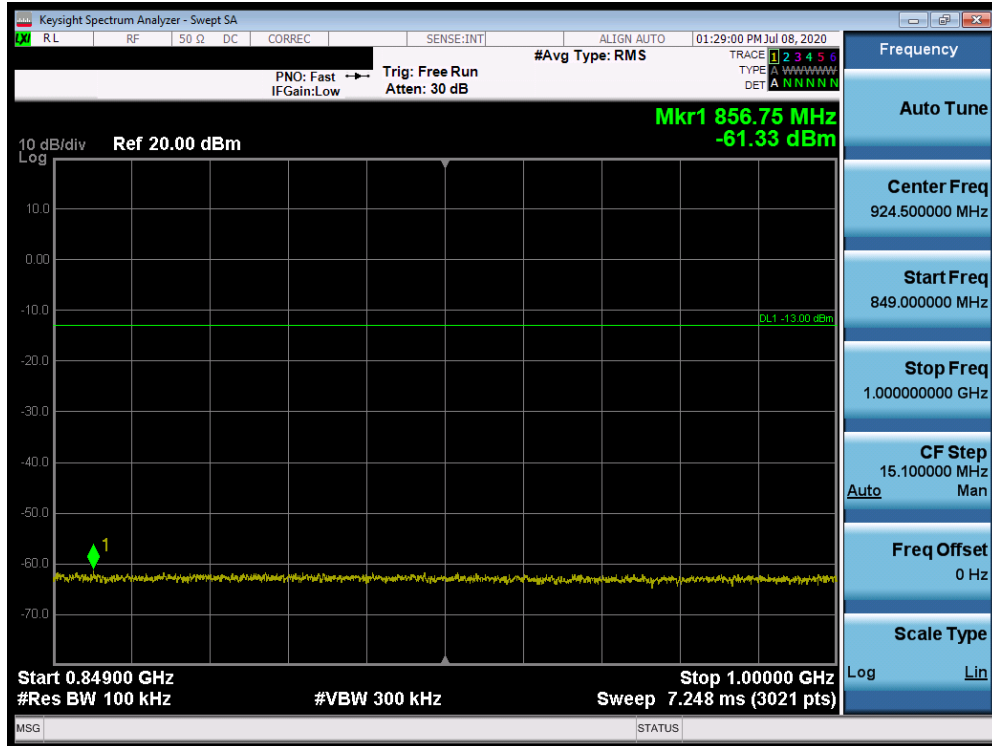


Plot 7-159. Conducted Spurious Plot (Band 5 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

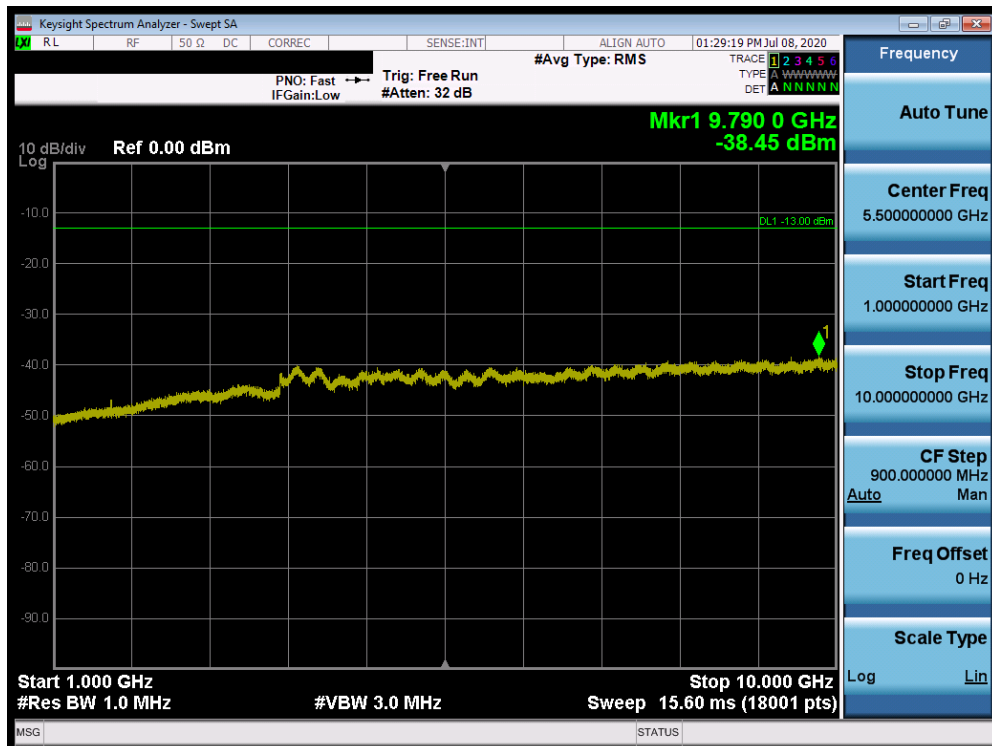


Plot 7-160. Conducted Spurious Plot (Band 5 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

|                                         |                                              |                                       |    |                                 |
|-----------------------------------------|----------------------------------------------|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFF100VM                       | <b>PCTEST</b><br>Proud to be part of element | MEASUREMENT REPORT<br>(CERTIFICATION) | LG | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M2006150096-03.ZNF | Test Dates:<br>06/26/2020-08/18/2020         | EUT Type:<br>Portable Handset         |    | Page 99 of 301                  |



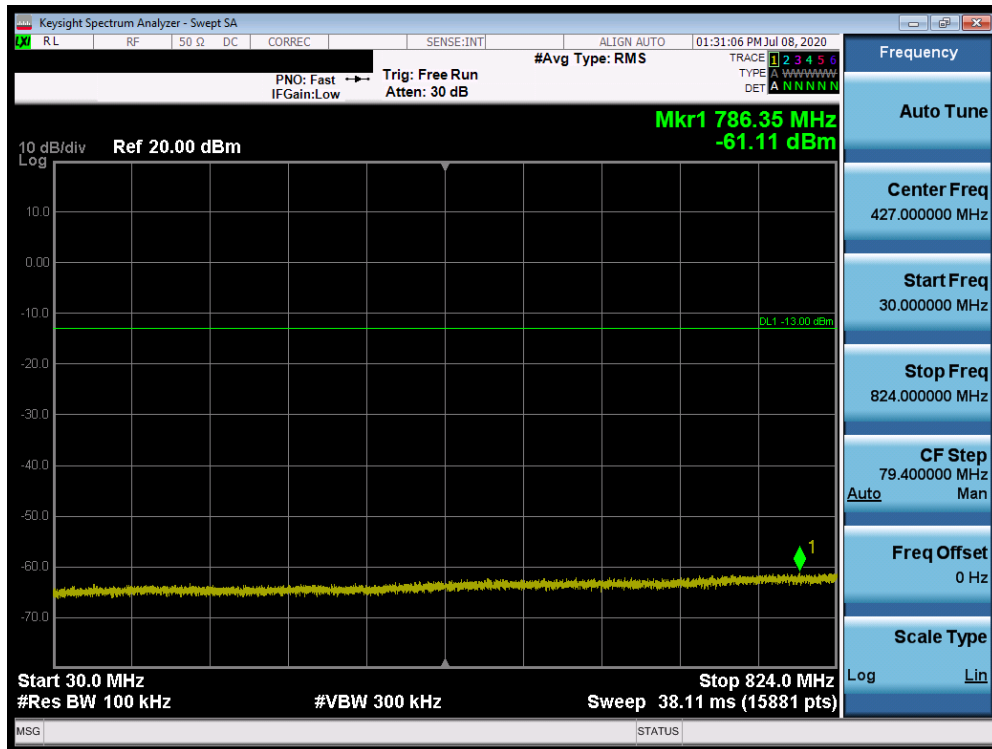
Plot 7-161. Conducted Spurious Plot (Band 5 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)



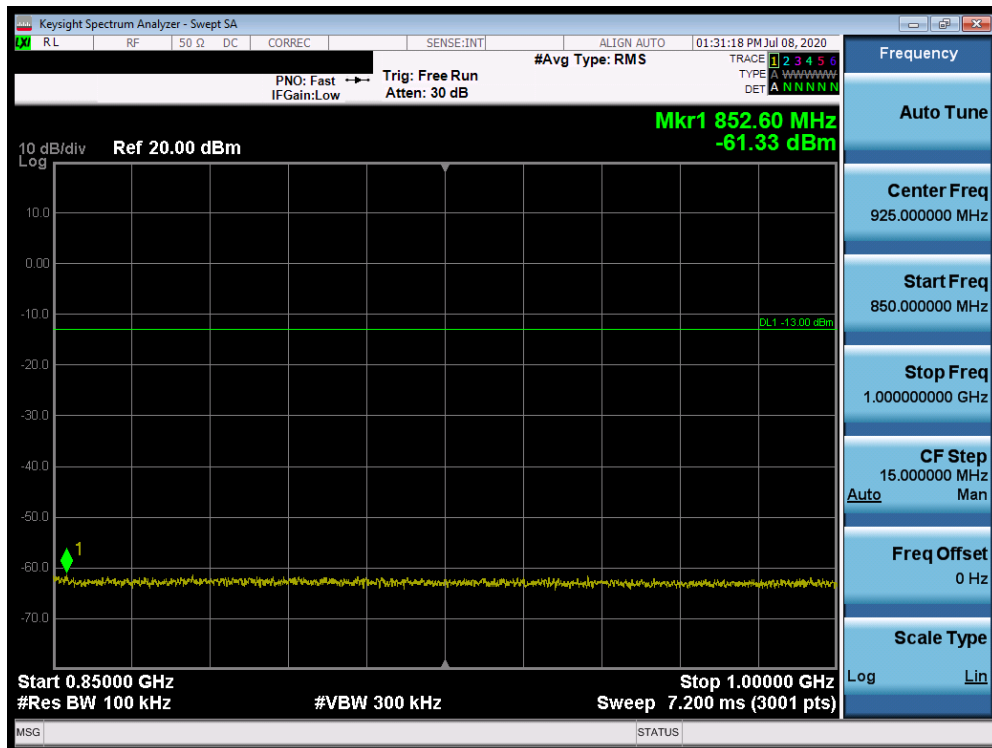
Plot 7-162. Conducted Spurious Plot (Band 5 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

|                                         |                                              |                                       |    |                                 |
|-----------------------------------------|----------------------------------------------|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFF100VM                       | <b>PCTEST</b><br>Proud to be part of element | MEASUREMENT REPORT<br>(CERTIFICATION) | LG | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M2006150096-03.ZNF | Test Dates:<br>06/26/2020-08/18/2020         | EUT Type:<br>Portable Handset         |    | Page 100 of 301                 |



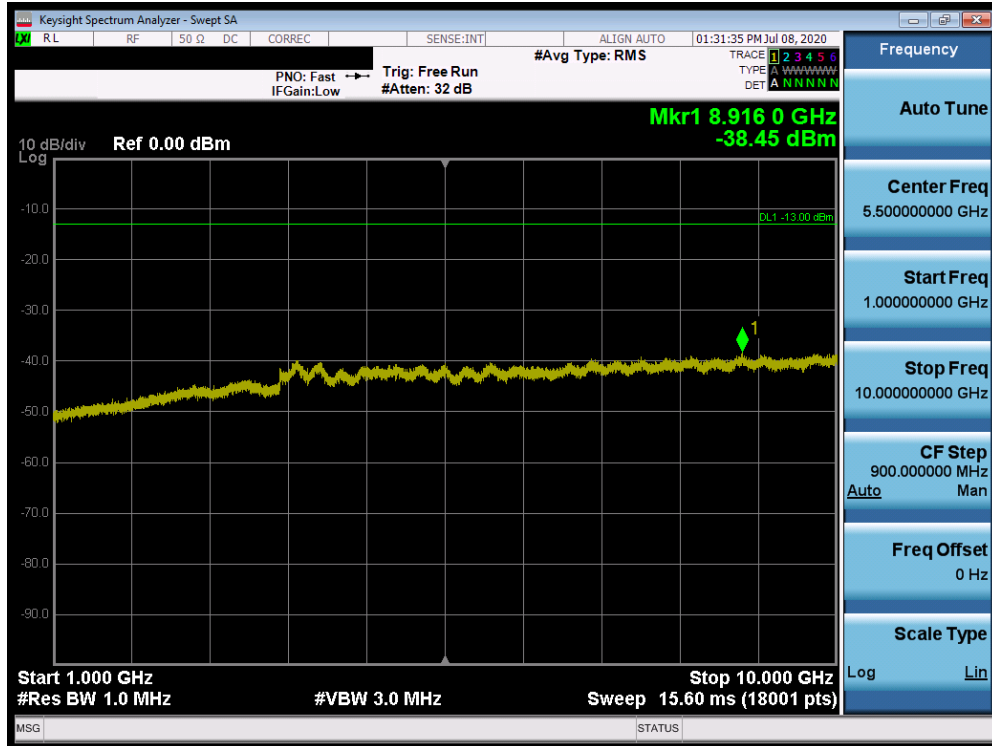


Plot 7-163. Conducted Spurious Plot (Band 5 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)



Plot 7-164. Conducted Spurious Plot (Band 5 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

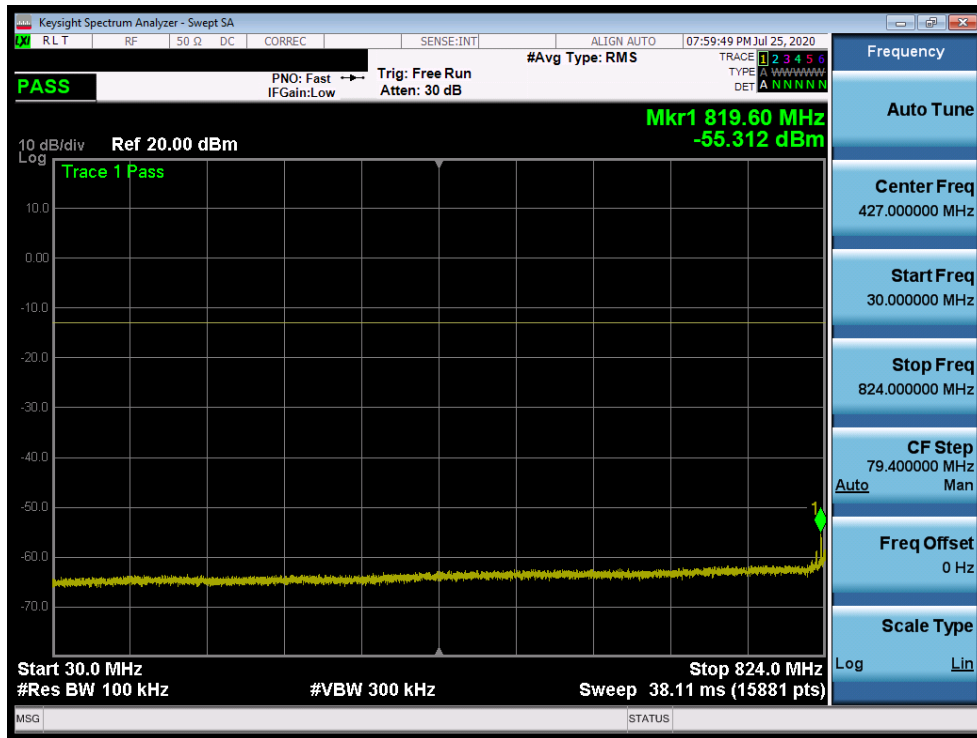
|                                         |                                              |                                       |    |                                 |
|-----------------------------------------|----------------------------------------------|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFF100VM                       | <b>PCTEST</b><br>Proud to be part of element | MEASUREMENT REPORT<br>(CERTIFICATION) | LG | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M2006150096-03.ZNF | Test Dates:<br>06/26/2020-08/18/2020         | EUT Type:<br>Portable Handset         |    | Page 101 of 301                 |



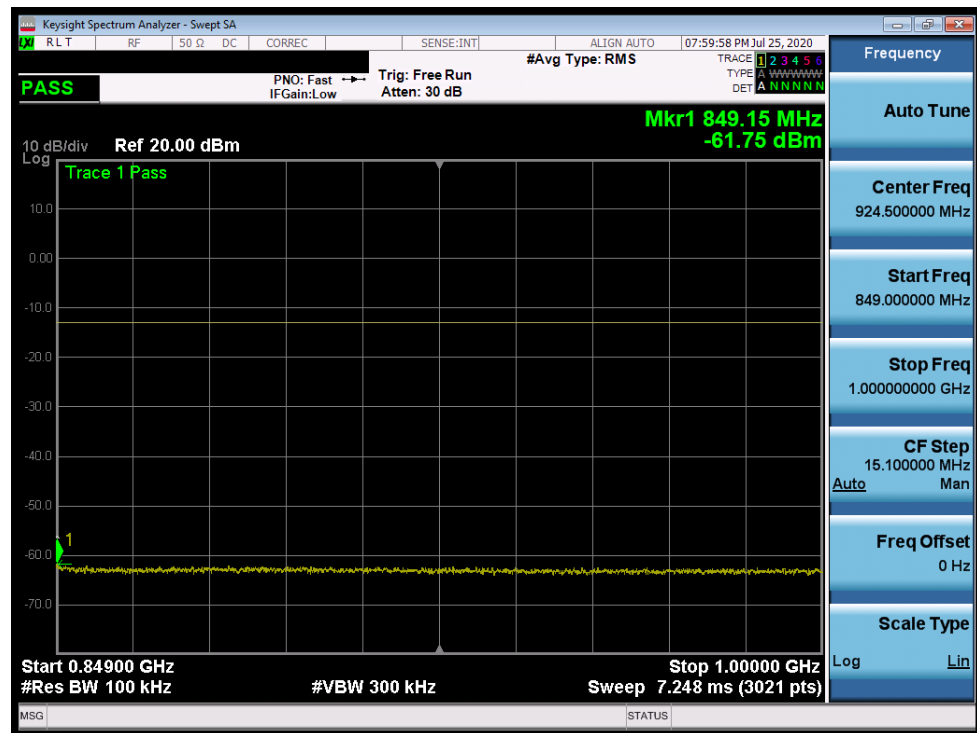
Plot 7-165. Conducted Spurious Plot (Band 5 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

|                                         |                                              |                                       |    |                                 |
|-----------------------------------------|----------------------------------------------|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFF100VM                       | <b>PCTEST</b><br>Proud to be part of element | MEASUREMENT REPORT<br>(CERTIFICATION) | LG | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M2006150096-03.ZNF | Test Dates:<br>06/26/2020-08/18/2020         | EUT Type:<br>Portable Handset         |    | Page 102 of 301                 |

## NR Band n5



Plot 7-166. Conducted Spurious Plot (NR Band n5 - 20.0MHz - RB Size 1, RB Offset 0 - Low Channel)



Plot 7-167. Conducted Spurious Plot (NR Band n5 - 20.0MHz DFT-s-OFDM BPSK - RB Size 1, RB Offset 0 - Low Channel)

|                                         |                                              |                                       |    |                                 |
|-----------------------------------------|----------------------------------------------|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFF100VM                       | <b>PCTEST</b><br>Proud to be part of element | MEASUREMENT REPORT<br>(CERTIFICATION) | LG | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M2006150096-03.ZNF | Test Dates:<br>06/26/2020-08/18/2020         | EUT Type:<br>Portable Handset         |    | Page 103 of 301                 |

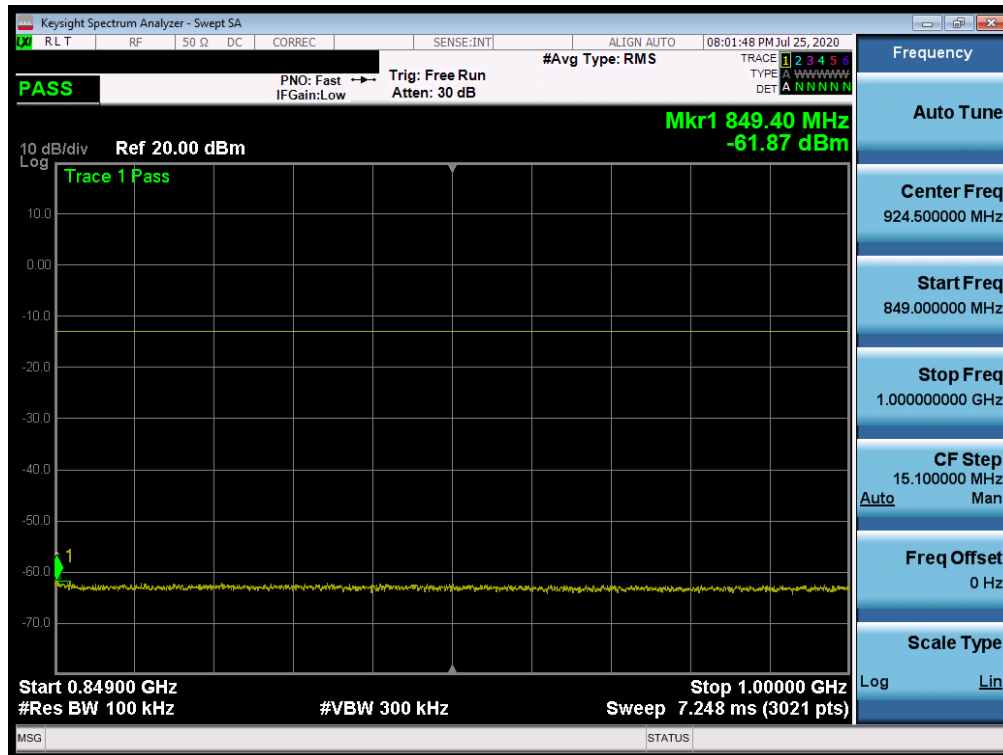


Plot 7-168. Conducted Spurious Plot (NR Band n5 - 20.0MHz - RB Size 1, RB Offset 0 - Low Channel)

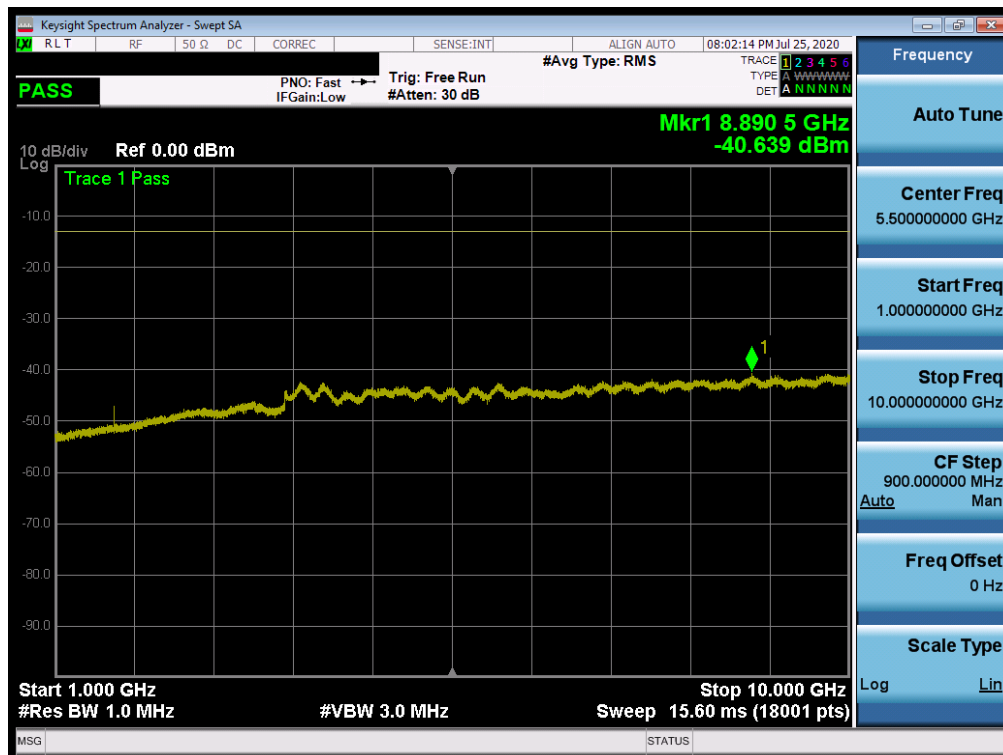


Plot 7-169. Conducted Spurious Plot (NR Band n5 - 20.0MHz - RB Size 1, RB Offset 0 - Mid Channel)

|                                         |                                              |                                       |    |                                 |
|-----------------------------------------|----------------------------------------------|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFF100VM                       | <b>PCTEST</b><br>Proud to be part of element | MEASUREMENT REPORT<br>(CERTIFICATION) | LG | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M2006150096-03.ZNF | Test Dates:<br>06/26/2020-08/18/2020         | EUT Type:<br>Portable Handset         |    | Page 104 of 301                 |

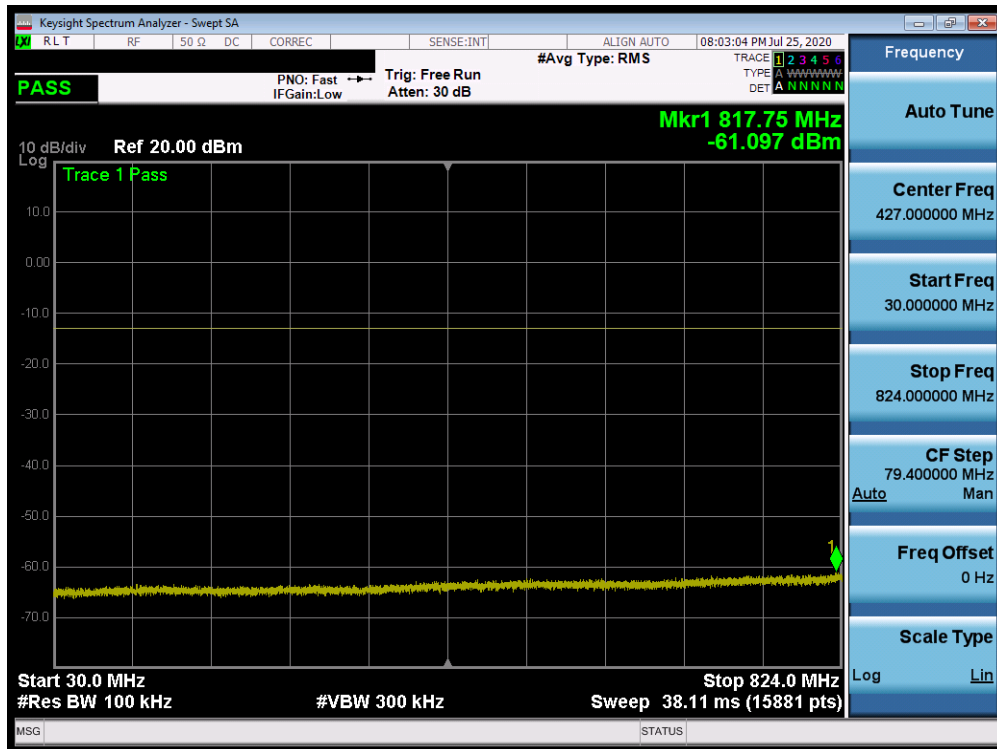


Plot 7-170. Conducted Spurious Plot (NR Band n5 - 20.0MHz - RB Size 1, RB Offset 0 - Mid Channel)

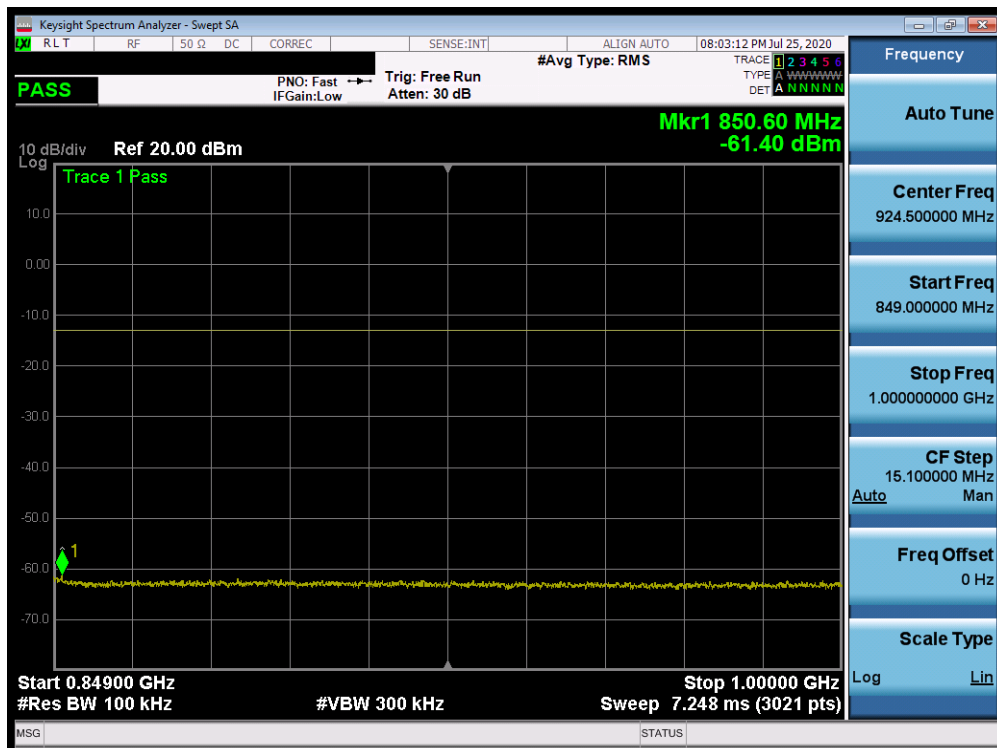


Plot 7-171. Conducted Spurious Plot (NR Band n5 - 20.0MHz - RB Size 1, RB Offset 0 - Mid Channel)

|                                         |                                              |                                       |    |                                 |
|-----------------------------------------|----------------------------------------------|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFF100VM                       | <b>PCTEST</b><br>Proud to be part of element | MEASUREMENT REPORT<br>(CERTIFICATION) | LG | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M2006150096-03.ZNF | Test Dates:<br>06/26/2020-08/18/2020         | EUT Type:<br>Portable Handset         |    | Page 105 of 301                 |



Plot 7-172. Conducted Spurious Plot (NR Band n5 - 20.0MHz - RB Size 1, RB Offset 0 - High Channel)



Plot 7-173. Conducted Spurious Plot (NR Band n5 - 20.0MHz - RB Size 1, RB Offset 0 - High Channel)

|                                         |                                              |                                       |    |                                 |
|-----------------------------------------|----------------------------------------------|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFF100VM                       | <b>PCTEST</b><br>Proud to be part of element | MEASUREMENT REPORT<br>(CERTIFICATION) | LG | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M2006150096-03.ZNF | Test Dates:<br>06/26/2020-08/18/2020         | EUT Type:<br>Portable Handset         |    | Page 106 of 301                 |

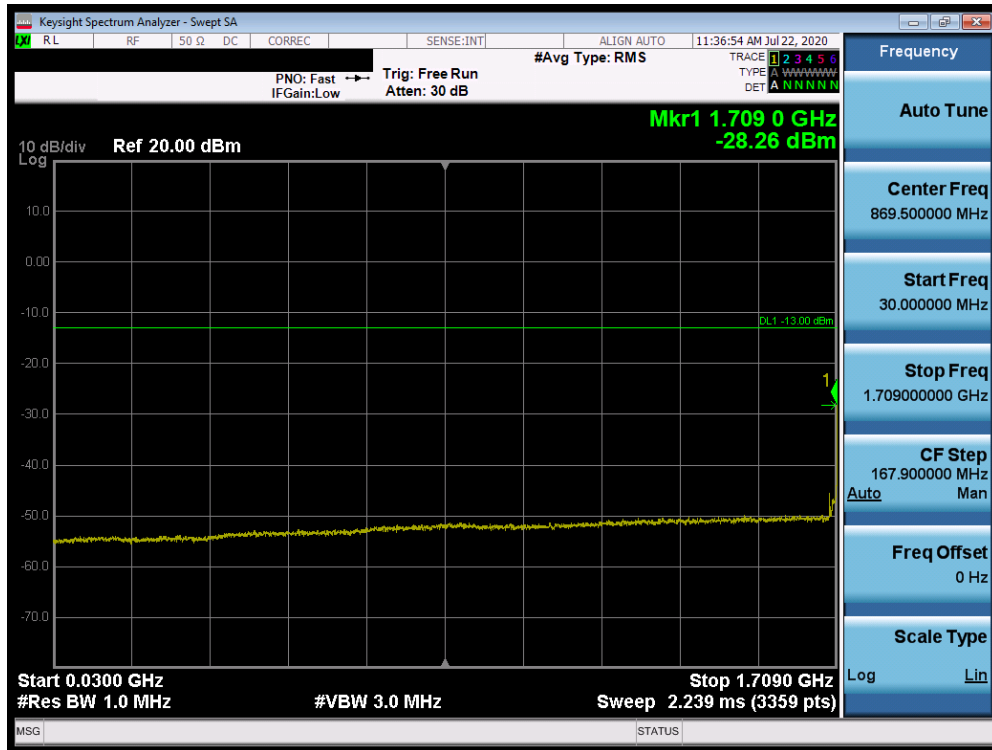


Plot 7-174. Conducted Spurious Plot (NR Band n5 - 20.0MHz - RB Size 1, RB Offset 0 - High Channel)

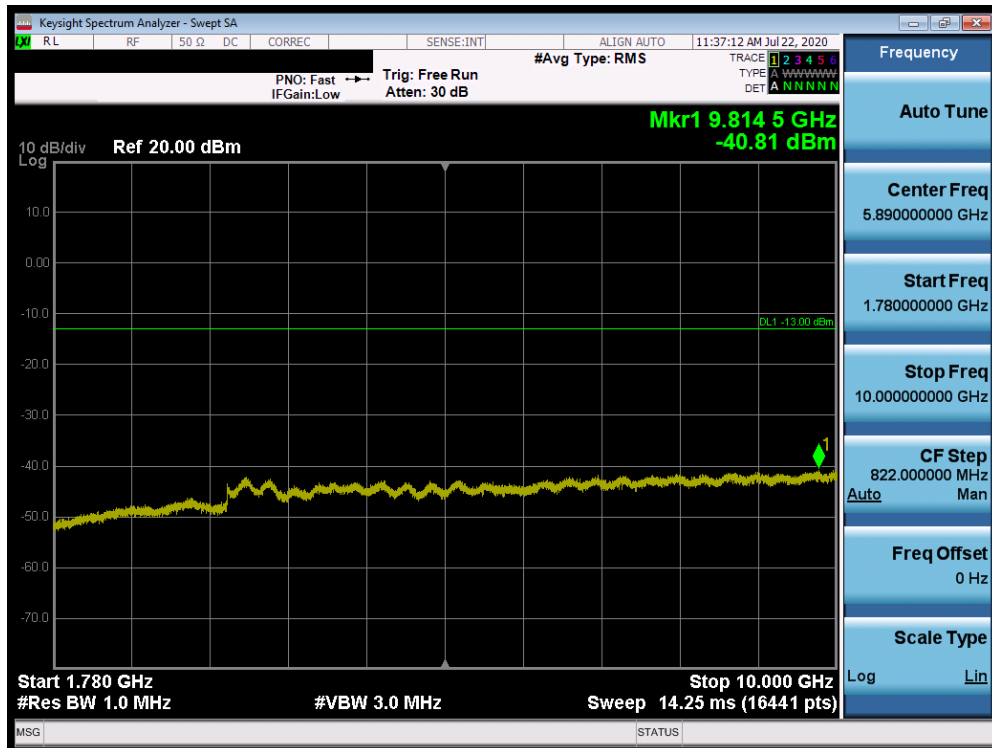
|                                         |                                              |                                       |    |                                 |
|-----------------------------------------|----------------------------------------------|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFF100VM                       | <b>PCTEST</b><br>Proud to be part of element | MEASUREMENT REPORT<br>(CERTIFICATION) | LG | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M2006150096-03.ZNF | Test Dates:<br>06/26/2020-08/18/2020         | EUT Type:<br>Portable Handset         |    | Page 107 of 301                 |



## Band 66/4

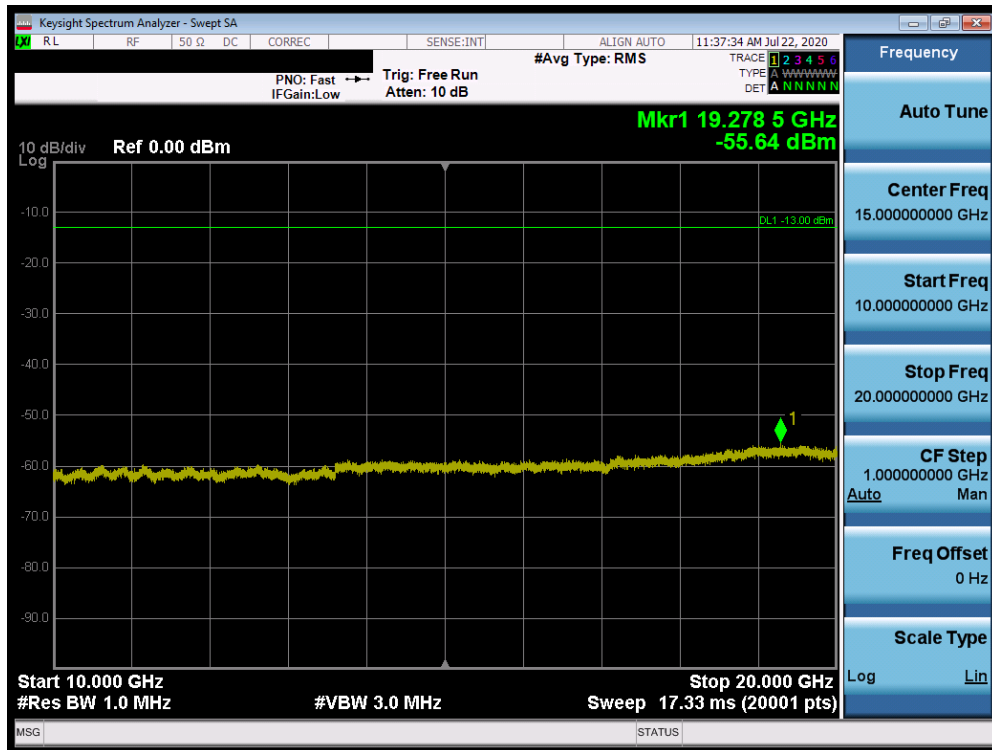


Plot 7-175. Conducted Spurious Plot (Band 66/4 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)



Plot 7-176. Conducted Spurious Plot (Band 66/4 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

|                                         |                                              |                                       |    |                                 |
|-----------------------------------------|----------------------------------------------|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFF100VM                       | <b>PCTEST</b><br>Proud to be part of element | MEASUREMENT REPORT<br>(CERTIFICATION) | LG | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M2006150096-03.ZNF | Test Dates:<br>06/26/2020-08/18/2020         | EUT Type:<br>Portable Handset         |    | Page 108 of 301                 |

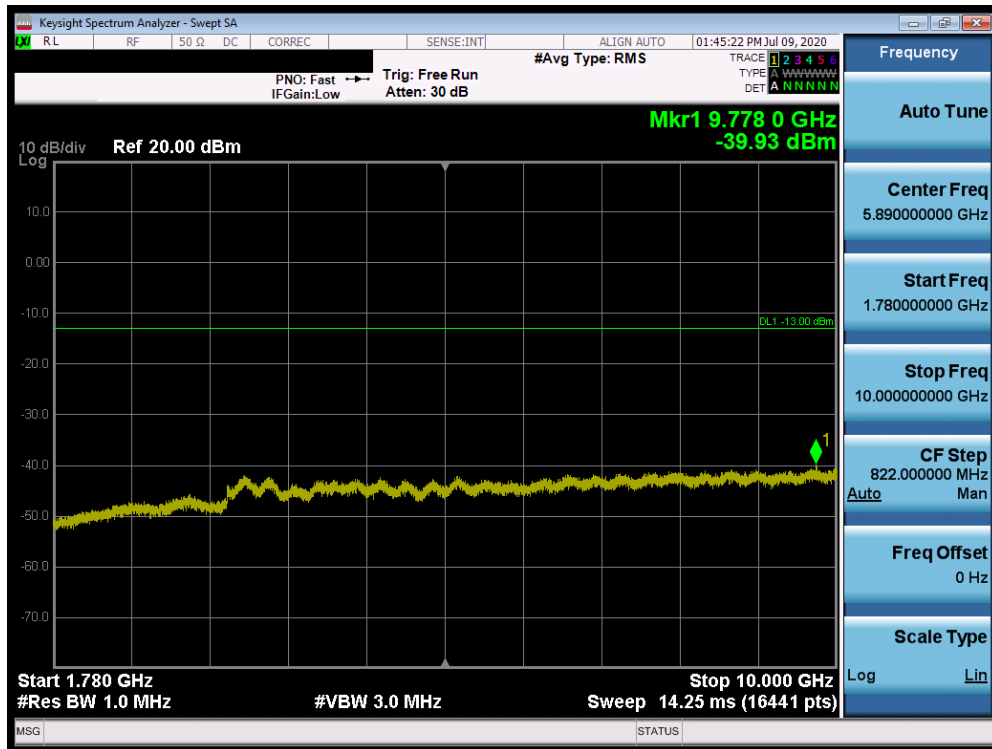


Plot 7-177. Conducted Spurious Plot (Band 66/4 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

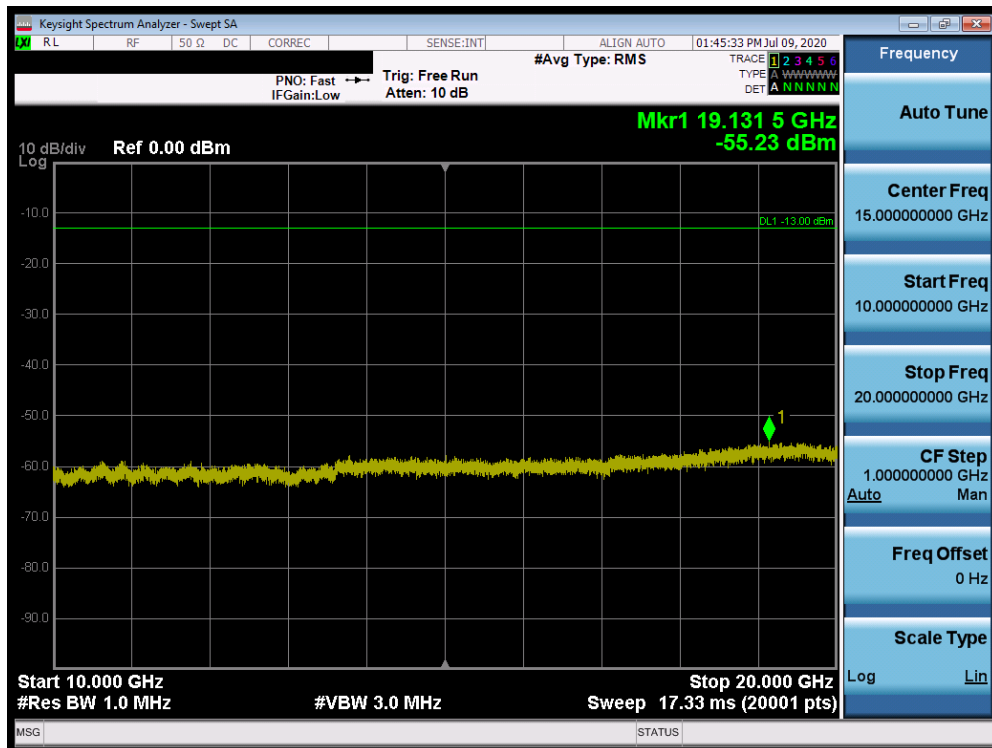


Plot 7-178. Conducted Spurious Plot (Band 66/4 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

|                                         |                                              |                                       |    |                                 |
|-----------------------------------------|----------------------------------------------|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFF100VM                       | <b>PCTEST</b><br>Proud to be part of element | MEASUREMENT REPORT<br>(CERTIFICATION) | LG | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M2006150096-03.ZNF | Test Dates:<br>06/26/2020-08/18/2020         | EUT Type:<br>Portable Handset         |    | Page 109 of 301                 |

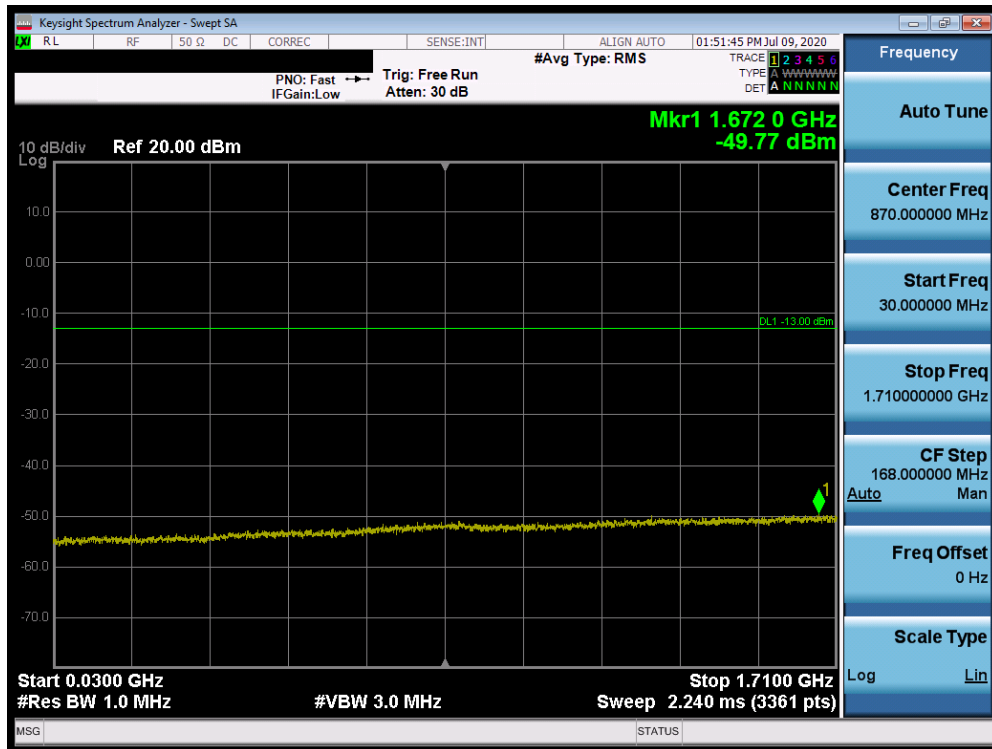


Plot 7-179. Conducted Spurious Plot (Band 66/4 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

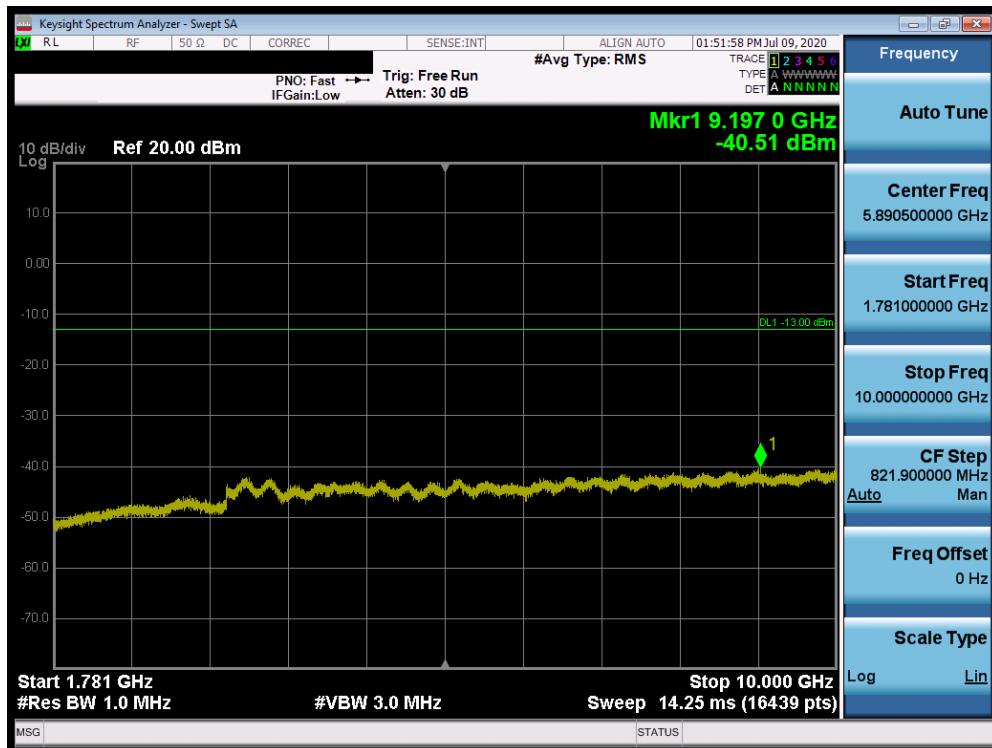


Plot 7-180. Conducted Spurious Plot (Band 66/4 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

|                                         |                                              |                                       |    |                                 |
|-----------------------------------------|----------------------------------------------|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFF100VM                       | <b>PCTEST</b><br>Proud to be part of element | MEASUREMENT REPORT<br>(CERTIFICATION) | LG | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M2006150096-03.ZNF | Test Dates:<br>06/26/2020-08/18/2020         | EUT Type:<br>Portable Handset         |    | Page 110 of 301                 |

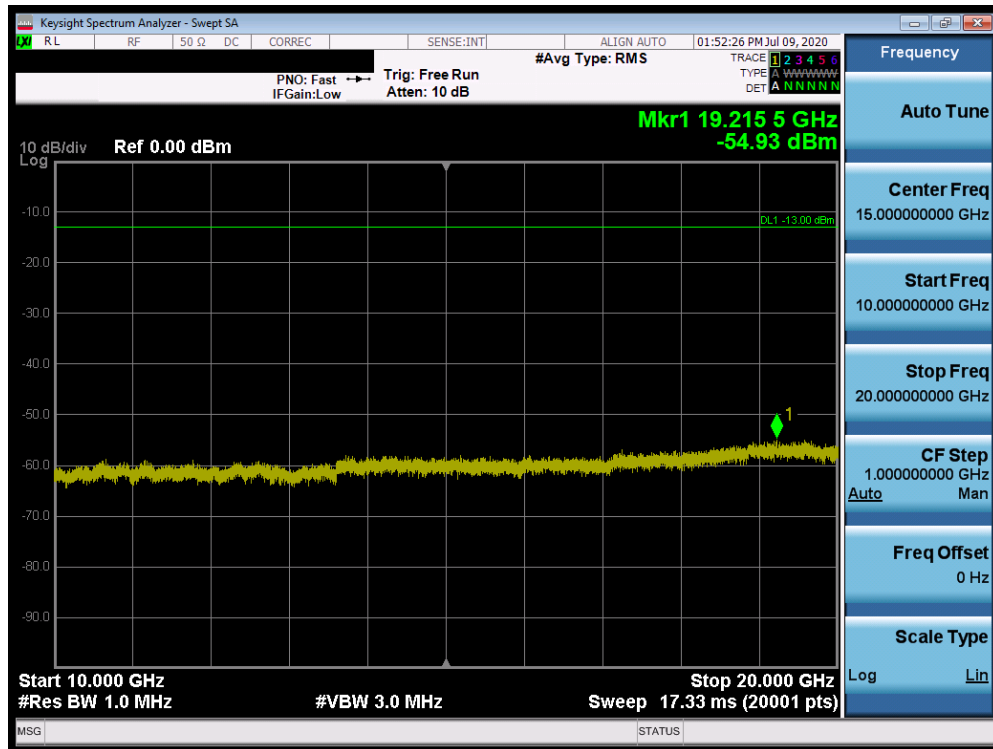


Plot 7-181. Conducted Spurious Plot (Band 66/4 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)



Plot 7-182. Conducted Spurious Plot (Band 66/4 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

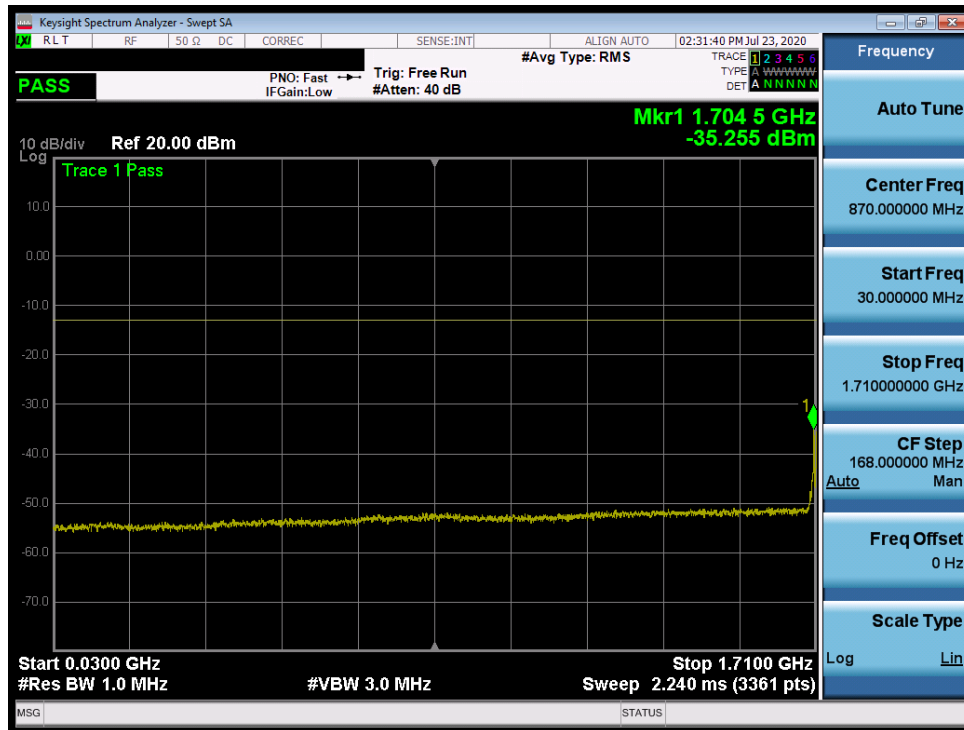
|                                         |                                              |                                       |  |                                 |
|-----------------------------------------|----------------------------------------------|---------------------------------------|--|---------------------------------|
| FCC ID: ZNFF100VM                       | <b>PCTEST</b><br>Proud to be part of element | MEASUREMENT REPORT<br>(CERTIFICATION) |  | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M2006150096-03.ZNF | Test Dates:<br>06/26/2020-08/18/2020         | EUT Type:<br>Portable Handset         |  | Page 111 of 301                 |



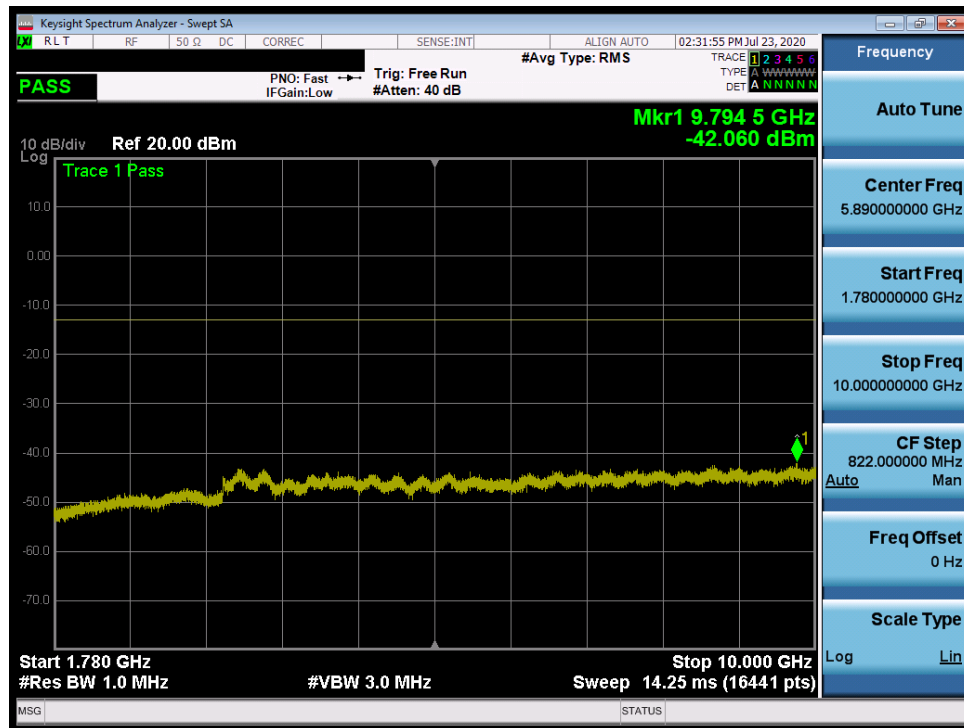
Plot 7-183. Conducted Spurious Plot (Band 66/4 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

|                                         |                                              |                                       |    |                                 |
|-----------------------------------------|----------------------------------------------|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFF100VM                       | <b>PCTEST</b><br>Proud to be part of element | MEASUREMENT REPORT<br>(CERTIFICATION) | LG | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M2006150096-03.ZNF | Test Dates:<br>06/26/2020-08/18/2020         | EUT Type:<br>Portable Handset         |    | Page 112 of 301                 |

## NR Band n66

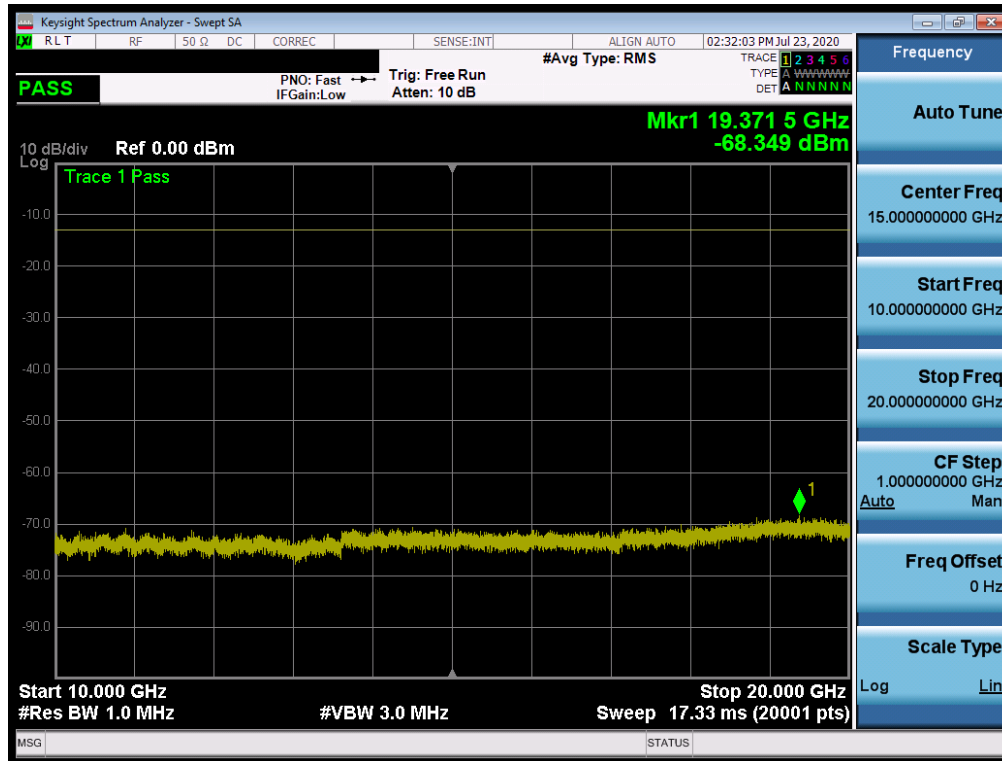


Plot 7-184. Conducted Spurious Plot (NR Band n66 -20.0MHz - RB Size 1, RB Offset 0 - Low Channel)

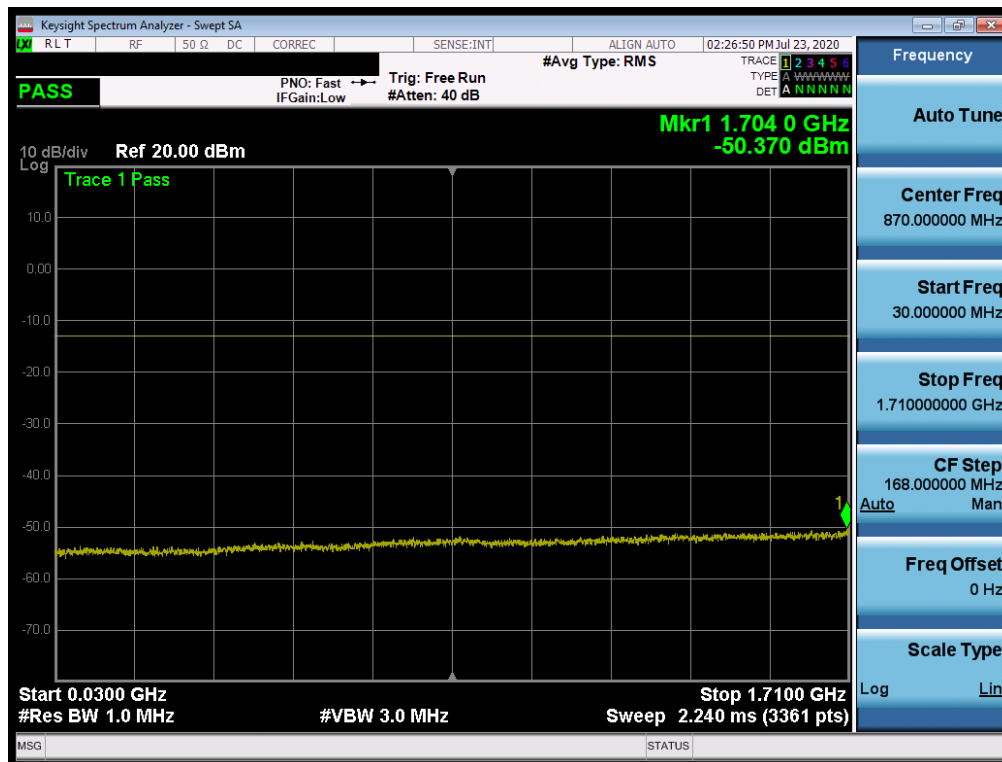


Plot 7-185. Conducted Spurious Plot (NR Band n66 - 20.0MHz - RB Size 1, RB Offset 0 - Low Channel)

|                                         |                                              |                                       |    |                                 |
|-----------------------------------------|----------------------------------------------|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFF100VM                       | <b>PCTEST</b><br>Proud to be part of element | MEASUREMENT REPORT<br>(CERTIFICATION) | LG | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M2006150096-03.ZNF | Test Dates:<br>06/26/2020-08/18/2020         | EUT Type:<br>Portable Handset         |    | Page 113 of 301                 |



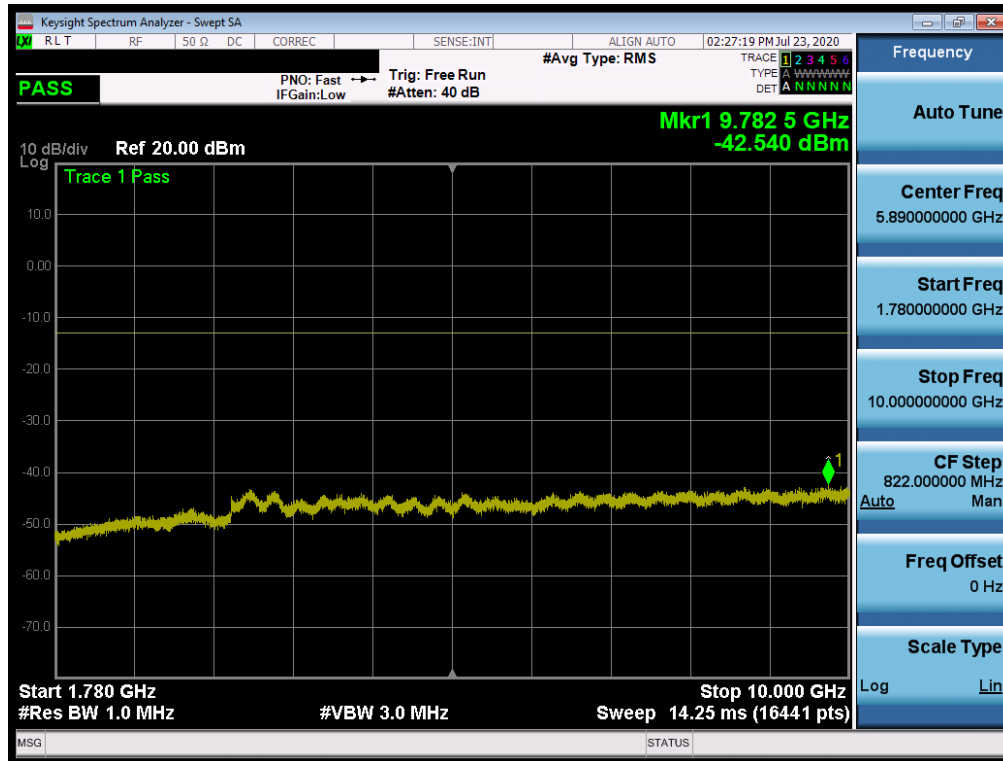
Plot 7-186. Conducted Spurious Plot (NR Band n66 - 20.0MHz - RB Size 1, RB Offset 0 - Low Channel)



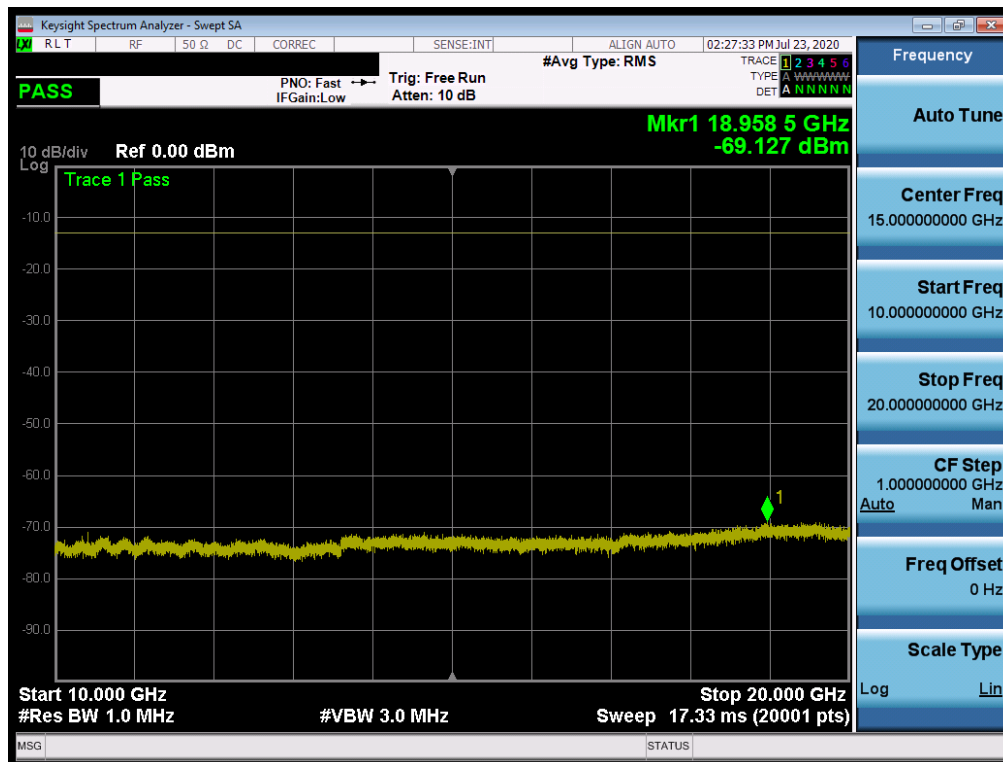
Plot 7-187. Conducted Spurious Plot (NR Band n66 - 20.0MHz - RB Size 1, RB Offset 0 - Mid Channel)

|                                         |                                              |                                       |    |                                 |
|-----------------------------------------|----------------------------------------------|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFF100VM                       | <b>PCTEST</b><br>Proud to be part of element | MEASUREMENT REPORT<br>(CERTIFICATION) | LG | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M2006150096-03.ZNF | Test Dates:<br>06/26/2020-08/18/2020         | EUT Type:<br>Portable Handset         |    | Page 114 of 301                 |



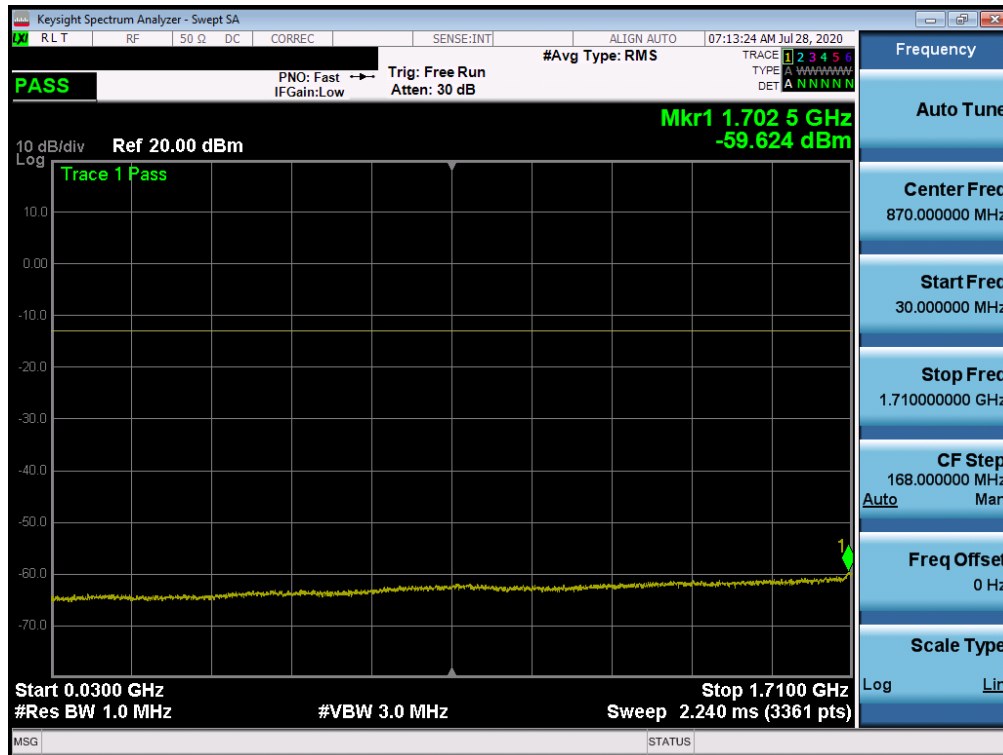


Plot 7-188. Conducted Spurious Plot (NR Band n66 - 20.0MHz - RB Size 1, RB Offset 0 - Mid Channel)

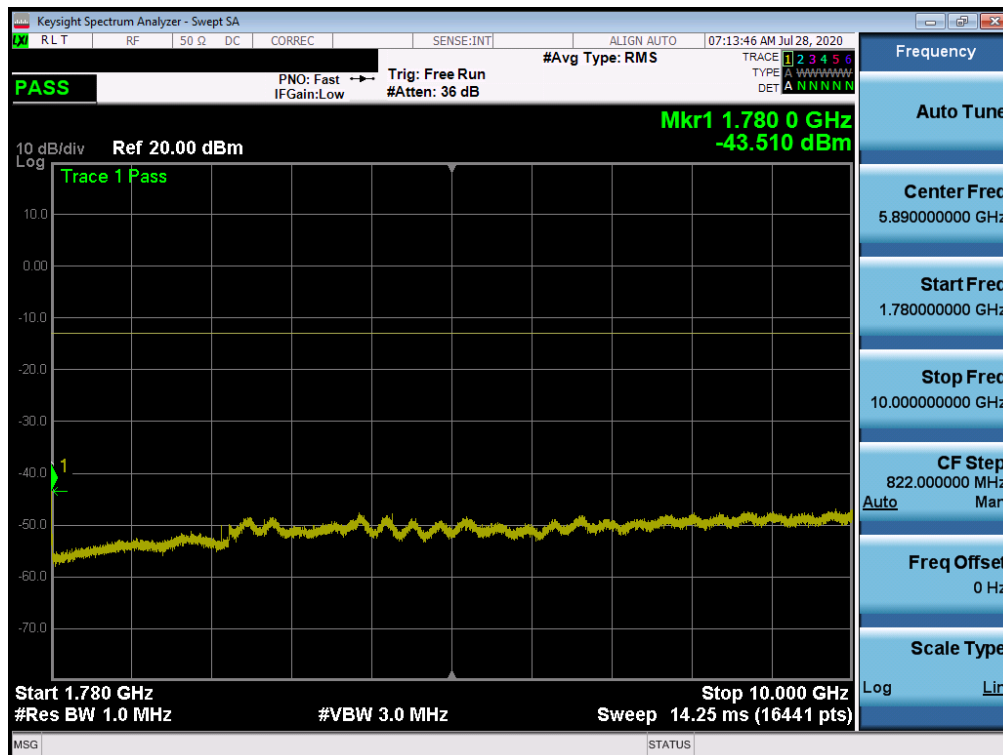


Plot 7-189. Conducted Spurious Plot (NR Band n66 - 20.0MHz - RB Size 1, RB Offset 0 - Mid Channel)

|                                         |                                              |                                       |    |                                 |
|-----------------------------------------|----------------------------------------------|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFF100VM                       | <b>PCTEST</b><br>Proud to be part of element | MEASUREMENT REPORT<br>(CERTIFICATION) | LG | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M2006150096-03.ZNF | Test Dates:<br>06/26/2020-08/18/2020         | EUT Type:<br>Portable Handset         |    | Page 115 of 301                 |

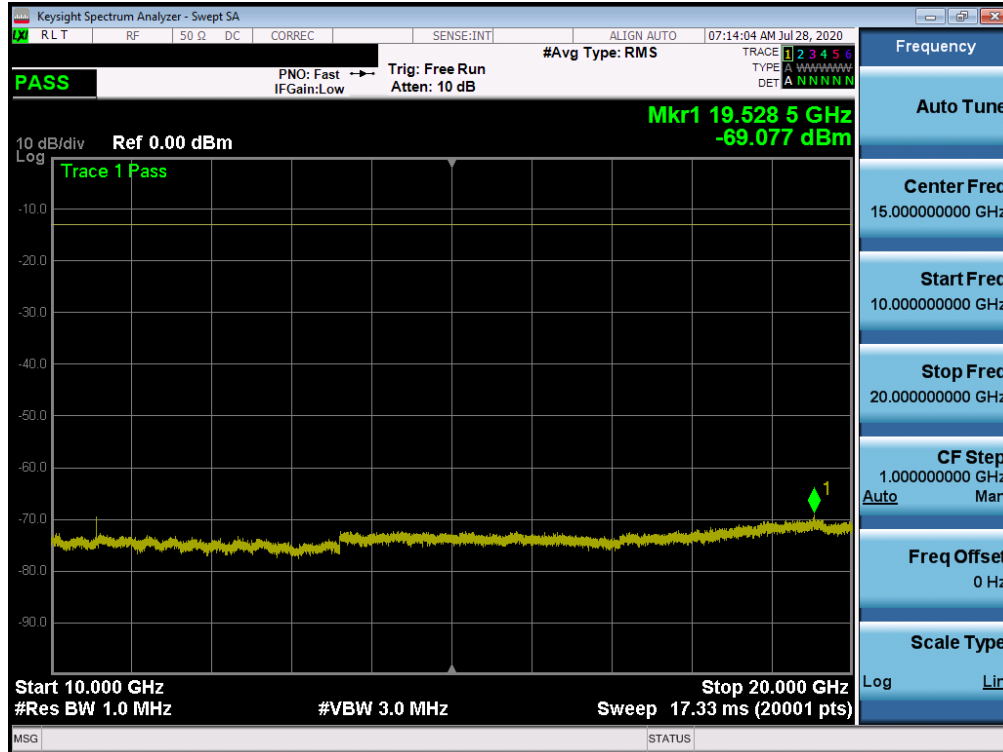


Plot 7-190. Conducted Spurious Plot (NR Band n66 - 20.0MHz - RB Size 1, RB Offset 0 - High Channel)



Plot 7-191. Conducted Spurious Plot (NR Band n66 - 20.0MHz - RB Size 1, RB Offset 0 - High Channel)

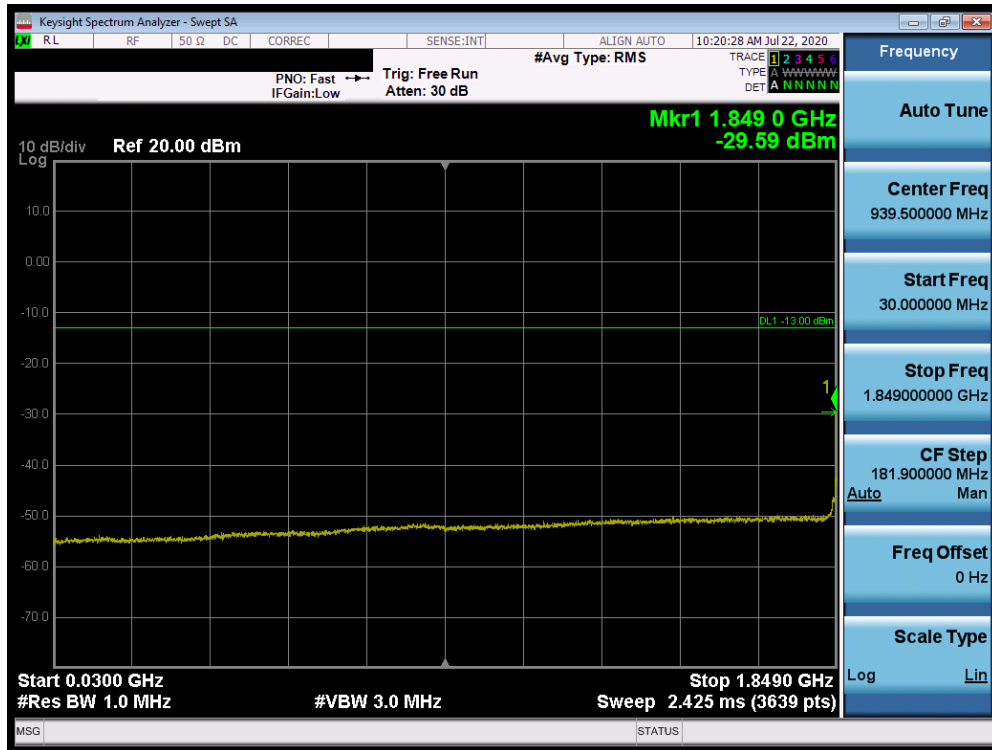
|                                         |                                              |                                       |    |                                 |
|-----------------------------------------|----------------------------------------------|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFF100VM                       | <b>PCTEST</b><br>Proud to be part of element | MEASUREMENT REPORT<br>(CERTIFICATION) | LG | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M2006150096-03.ZNF | Test Dates:<br>06/26/2020-08/18/2020         | EUT Type:<br>Portable Handset         |    | Page 116 of 301                 |



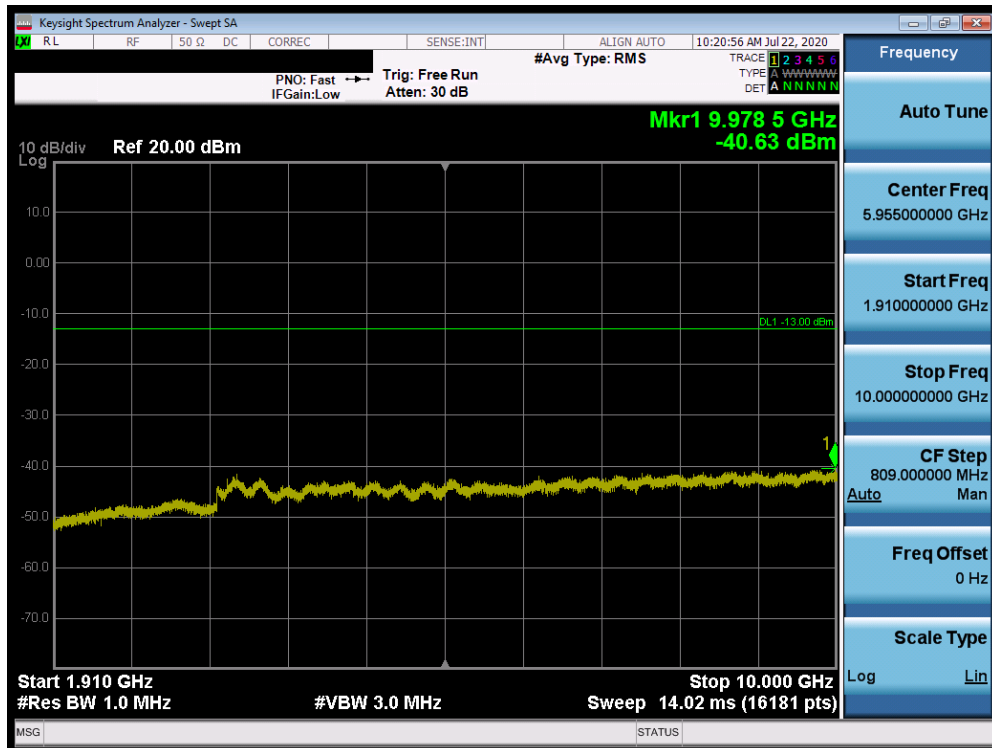
Plot 7-192. Conducted Spurious Plot (NR Band n66 - 20.0MHz - RB Size 1, RB Offset 0 - High Channel)

|                                         |                                              |                                       |    |                                 |
|-----------------------------------------|----------------------------------------------|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFF100VM                       | <b>PCTEST</b><br>Proud to be part of element | MEASUREMENT REPORT<br>(CERTIFICATION) | LG | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M2006150096-03.ZNF | Test Dates:<br>06/26/2020-08/18/2020         | EUT Type:<br>Portable Handset         |    | Page 117 of 301                 |

## Band 2

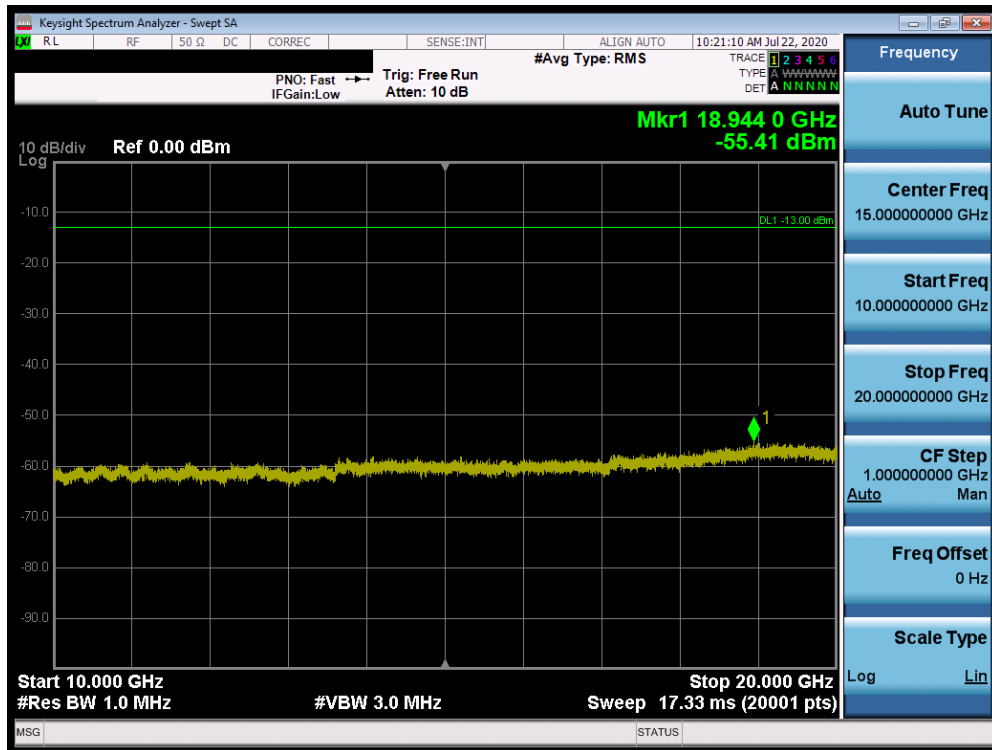


Plot 7-193. Conducted Spurious Plot (Band 2 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

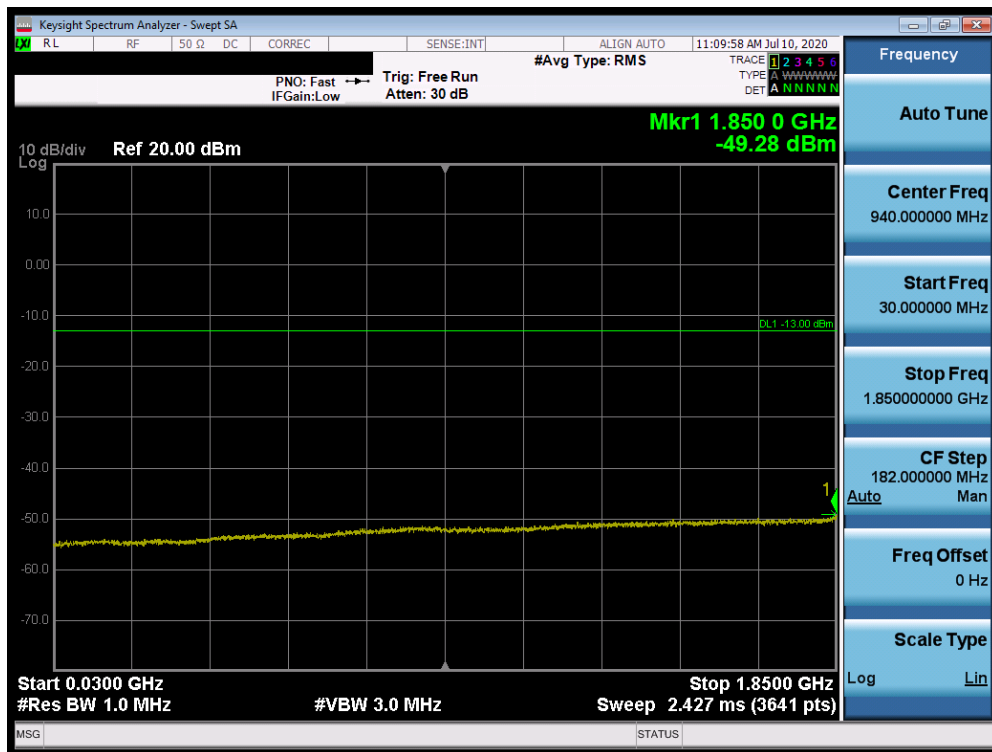


Plot 7-194. Conducted Spurious Plot (Band 2 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

|                                         |                                              |                                       |    |                                 |
|-----------------------------------------|----------------------------------------------|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFF100VM                       | <b>PCTEST</b><br>Proud to be part of element | MEASUREMENT REPORT<br>(CERTIFICATION) | LG | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M2006150096-03.ZNF | Test Dates:<br>06/26/2020-08/18/2020         | EUT Type:<br>Portable Handset         |    | Page 118 of 301                 |

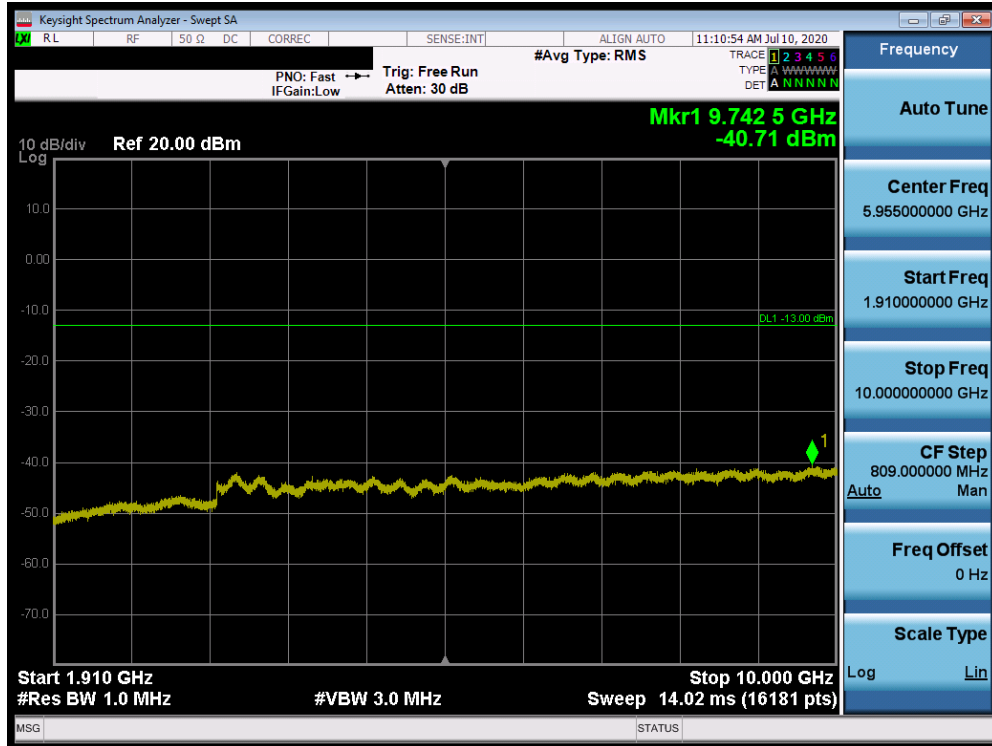


Plot 7-195. Conducted Spurious Plot (Band 2 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

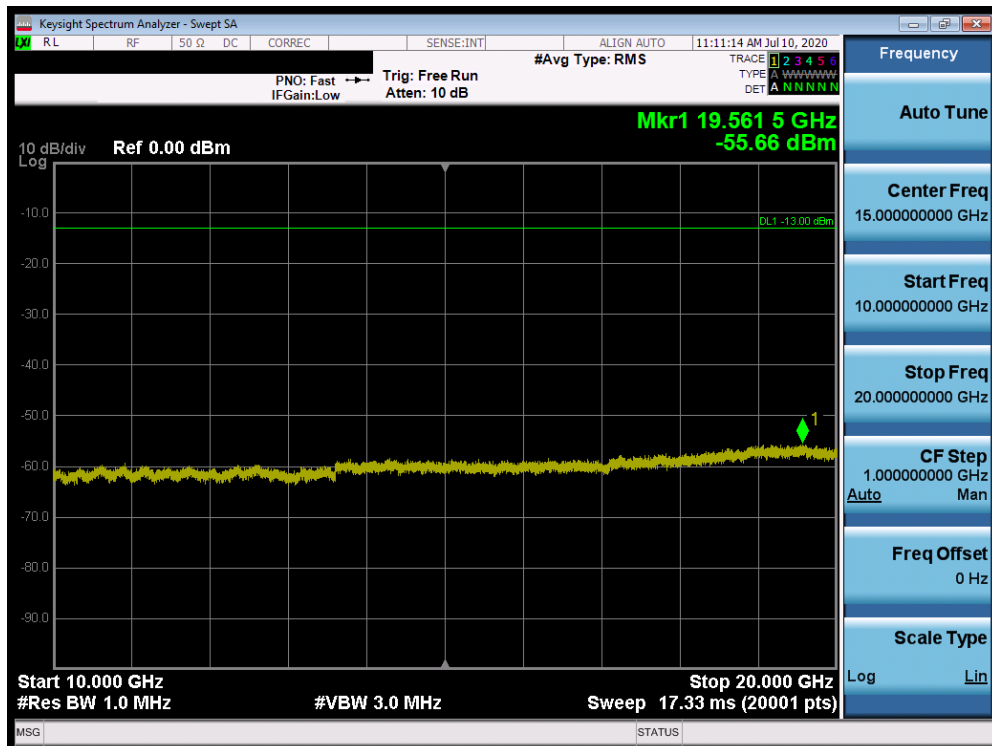


Plot 7-196. Conducted Spurious Plot (Band 2 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

|                                         |                                              |                                       |    |                                 |
|-----------------------------------------|----------------------------------------------|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFF100VM                       | <b>PCTEST</b><br>Proud to be part of element | MEASUREMENT REPORT<br>(CERTIFICATION) | LG | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M2006150096-03.ZNF | Test Dates:<br>06/26/2020-08/18/2020         | EUT Type:<br>Portable Handset         |    | Page 119 of 301                 |

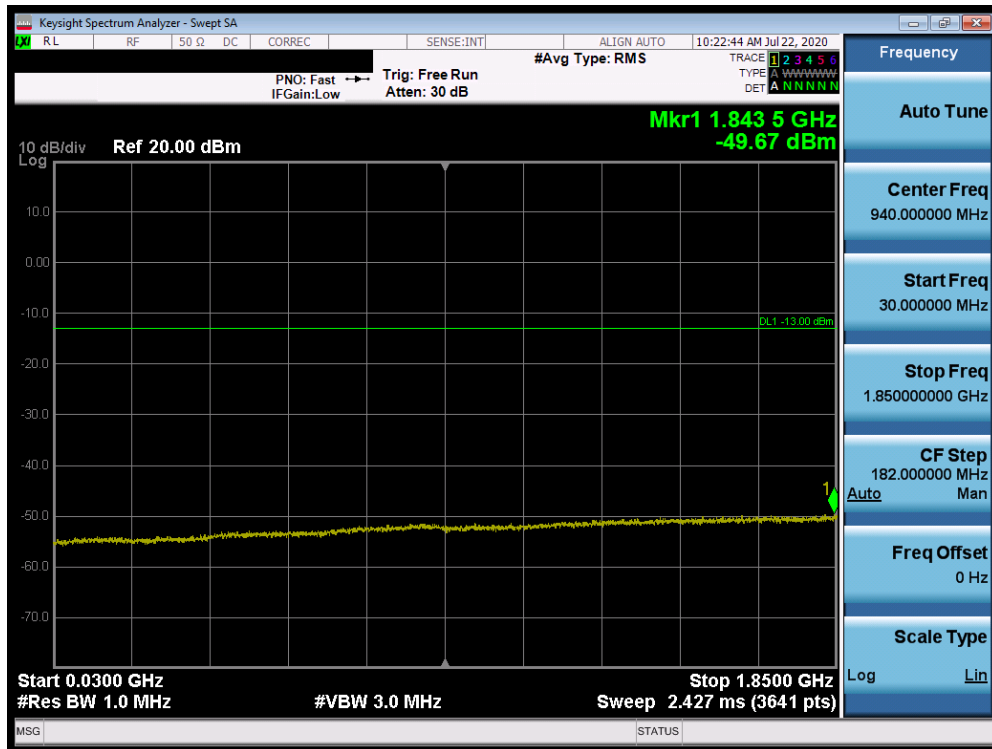


Plot 7-197. Conducted Spurious Plot (Band 2 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

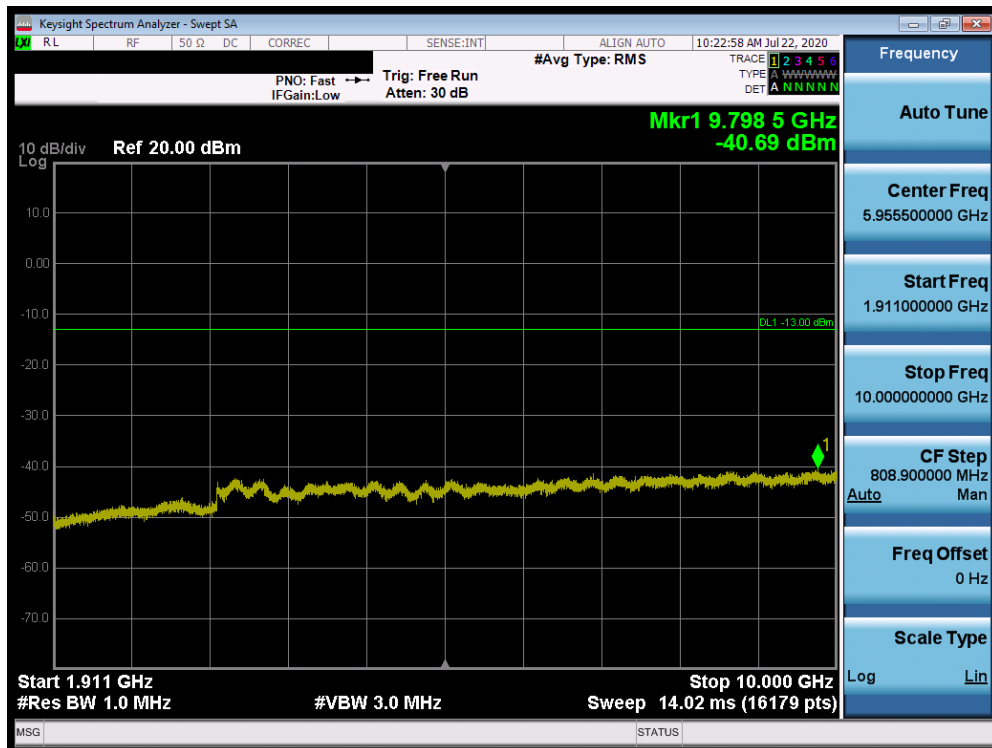


Plot 7-198. Conducted Spurious Plot (Band 2 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

|                                         |                                              |                                       |    |                                 |
|-----------------------------------------|----------------------------------------------|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFF100VM                       | <b>PCTEST</b><br>Proud to be part of element | MEASUREMENT REPORT<br>(CERTIFICATION) | LG | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M2006150096-03.ZNF | Test Dates:<br>06/26/2020-08/18/2020         | EUT Type:<br>Portable Handset         |    | Page 120 of 301                 |



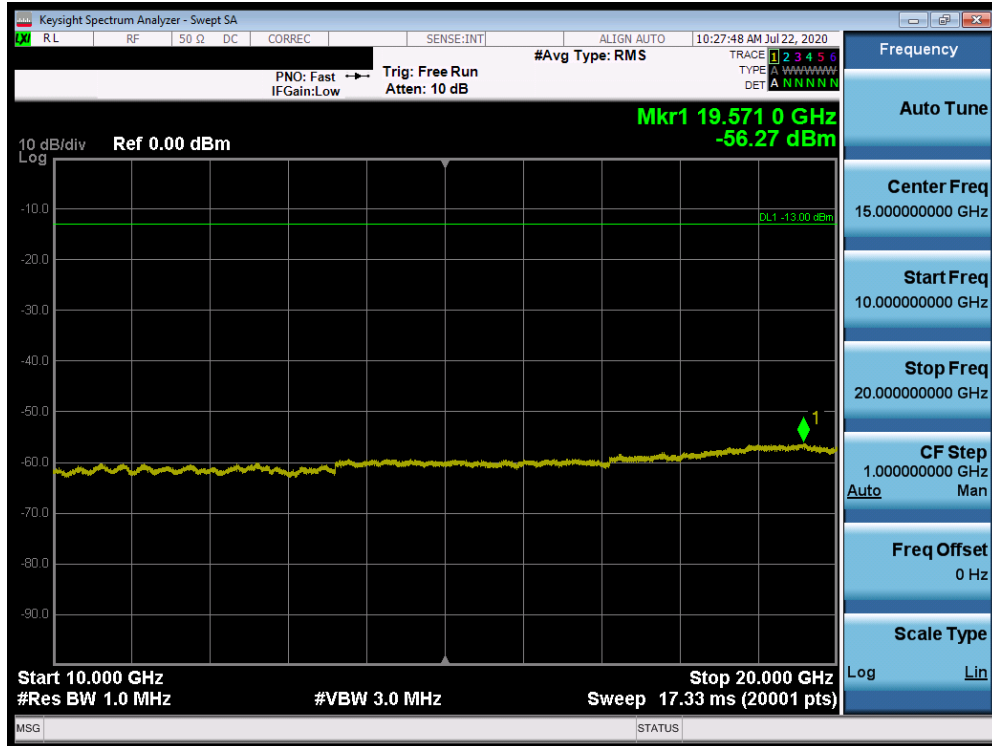
Plot 7-199. Conducted Spurious Plot (Band 2 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)



Plot 7-200. Conducted Spurious Plot (Band 2 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

|                                         |                                              |                                       |    |                                 |
|-----------------------------------------|----------------------------------------------|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFF100VM                       | <b>PCTEST</b><br>Proud to be part of element | MEASUREMENT REPORT<br>(CERTIFICATION) | LG | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M2006150096-03.ZNF | Test Dates:<br>06/26/2020-08/18/2020         | EUT Type:<br>Portable Handset         |    | Page 121 of 301                 |

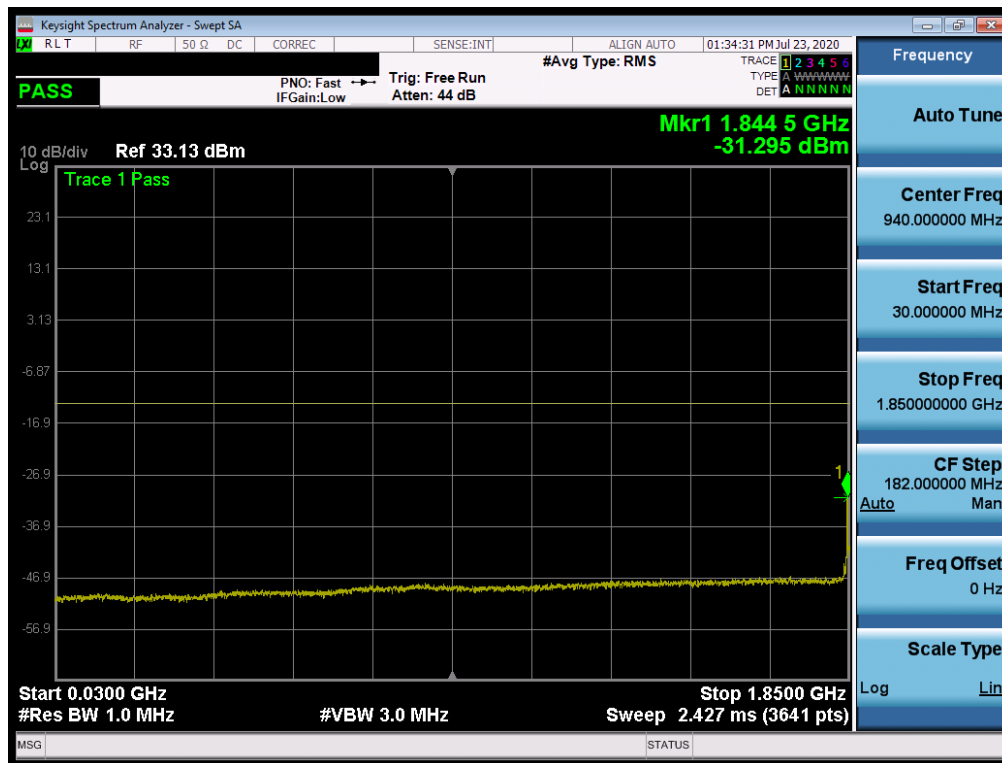




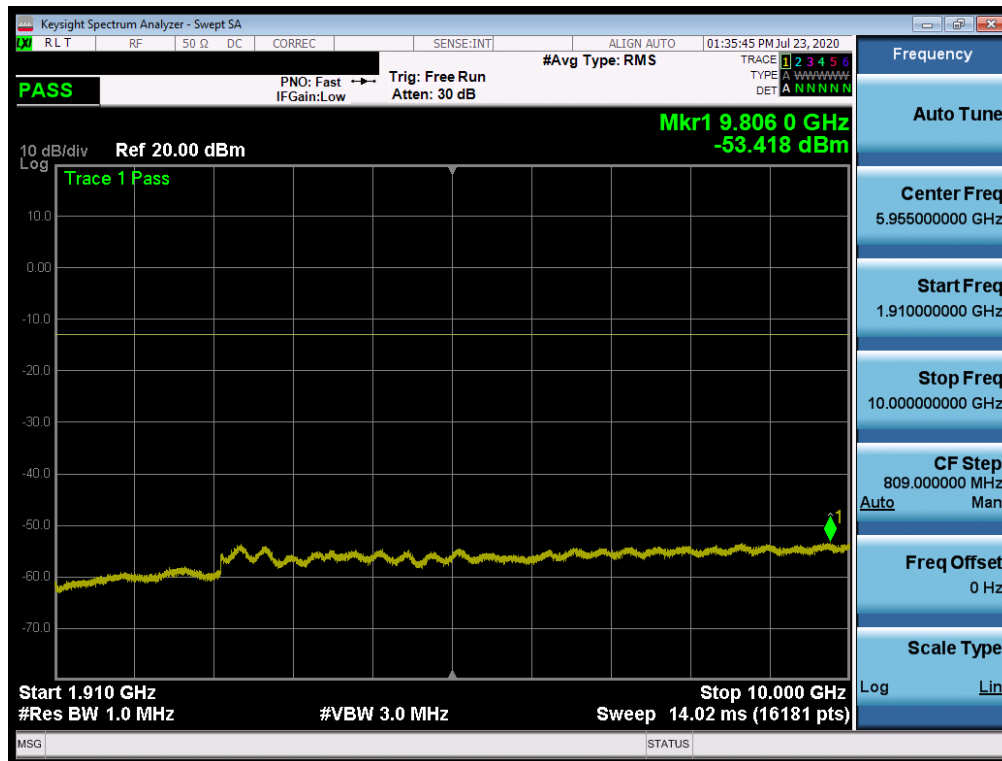
Plot 7-201. Conducted Spurious Plot (Band 2 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

|                                         |                                              |                                       |    |                                 |
|-----------------------------------------|----------------------------------------------|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFF100VM                       | <b>PCTEST</b><br>Proud to be part of element | MEASUREMENT REPORT<br>(CERTIFICATION) | LG | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M2006150096-03.ZNF | Test Dates:<br>06/26/2020-08/18/2020         | EUT Type:<br>Portable Handset         |    | Page 122 of 301                 |

## NR Band n2

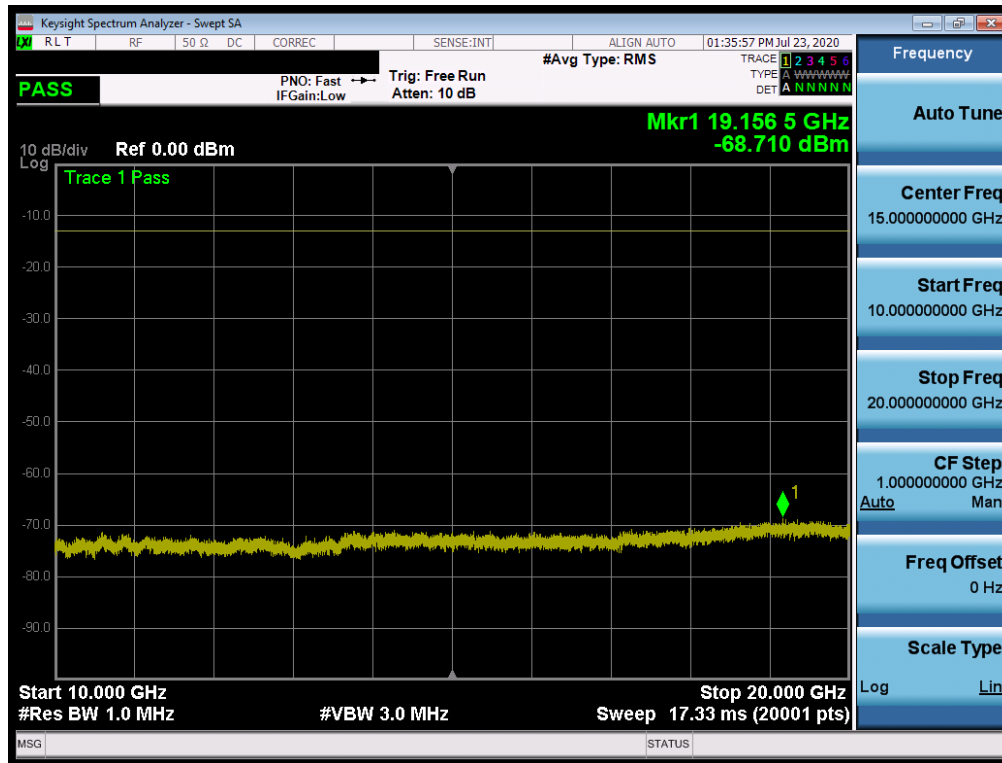


Plot 7-202. Conducted Spurious Plot (NR Band n2 -20.0MHz - RB Size 1, RB Offset 0 - Low Channel)

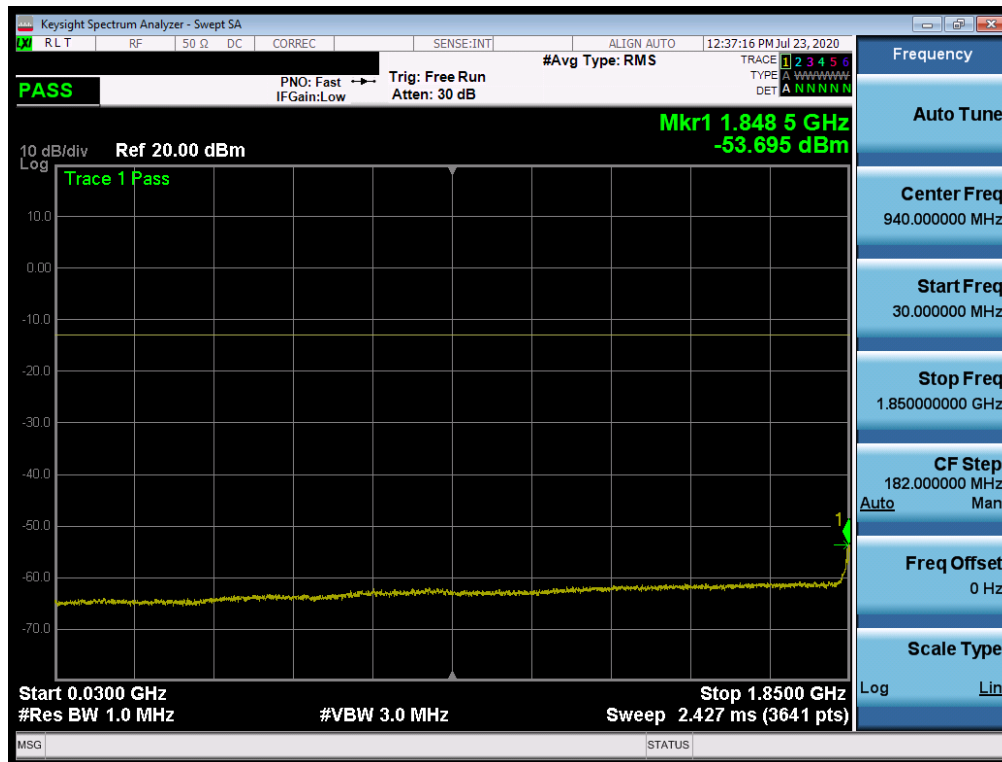


Plot 7-203. Conducted Spurious Plot (NR Band n2 -20.0MHz - RB Size 1, RB Offset 0 - Low Channel)

|                                         |                                              |                                       |                                 |
|-----------------------------------------|----------------------------------------------|---------------------------------------|---------------------------------|
| FCC ID: ZNFF100VM                       | <b>PCTEST</b><br>Proud to be part of element | MEASUREMENT REPORT<br>(CERTIFICATION) | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M2006150096-03.ZNF | Test Dates:<br>06/26/2020-08/18/2020         | EUT Type:<br>Portable Handset         | Page 123 of 301                 |

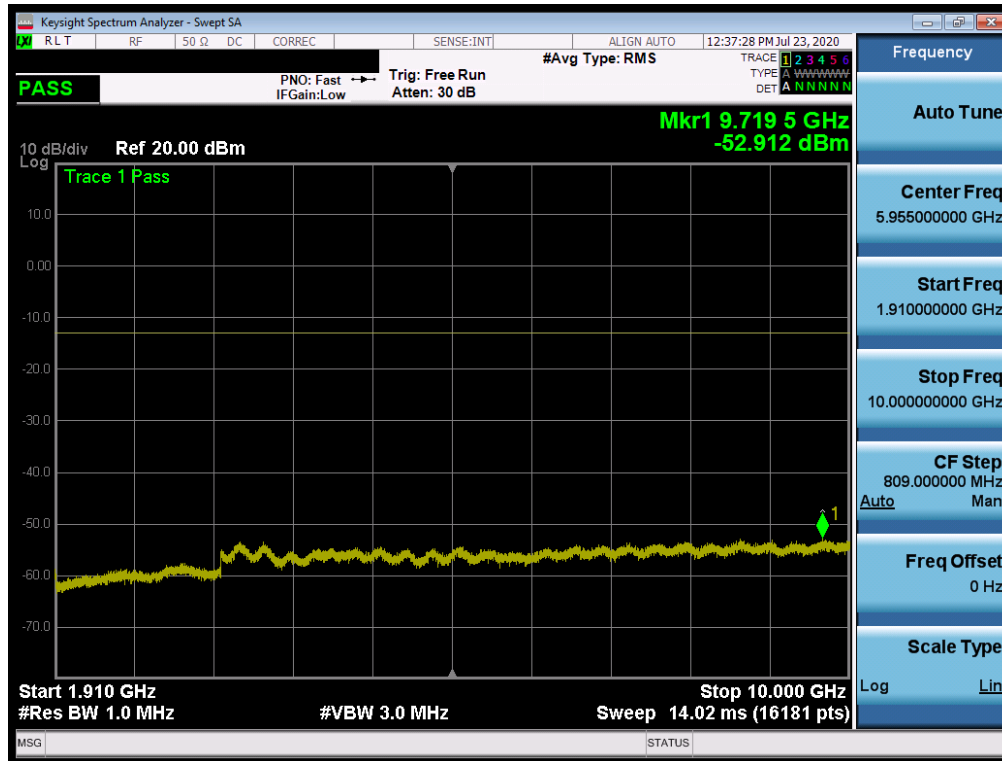


Plot 7-204. Conducted Spurious Plot (NR Band n2 - 20.0MHz - RB Size 1, RB Offset 0 - Low Channel)

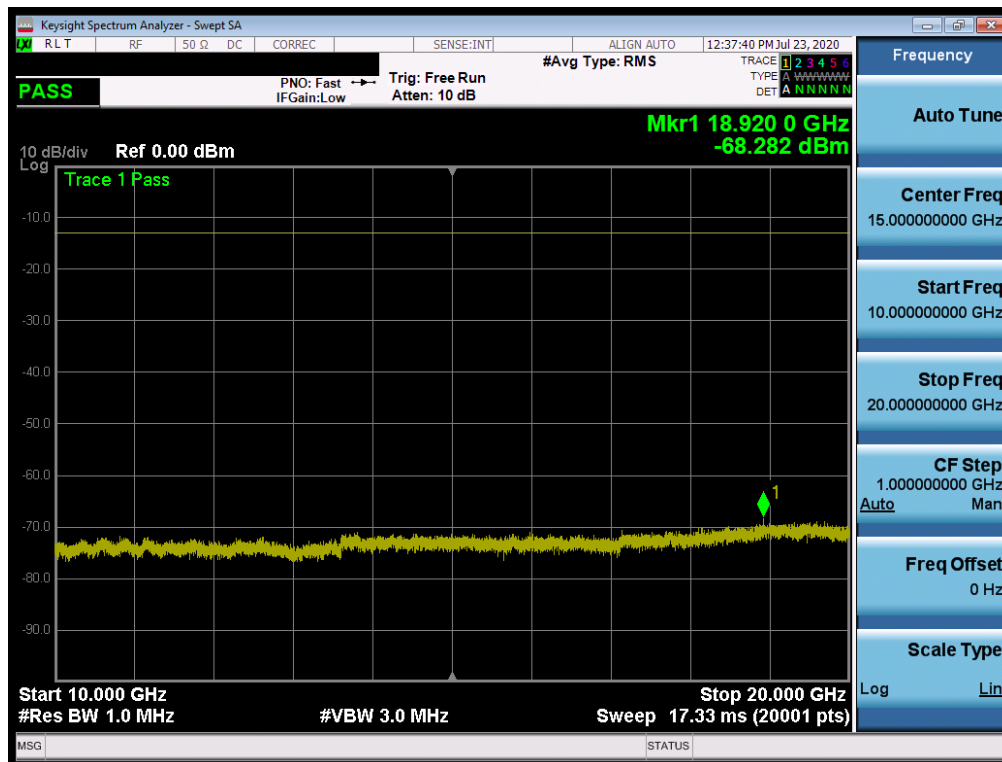


Plot 7-205. Conducted Spurious Plot (NR Band n2 - 20.0MHz - RB Size 1, RB Offset 0 - Mid Channel)

|                                         |                                              |                                       |    |                                 |
|-----------------------------------------|----------------------------------------------|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFF100VM                       | <b>PCTEST</b><br>Proud to be part of element | MEASUREMENT REPORT<br>(CERTIFICATION) | LG | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M2006150096-03.ZNF | Test Dates:<br>06/26/2020-08/18/2020         | EUT Type:<br>Portable Handset         |    | Page 124 of 301                 |

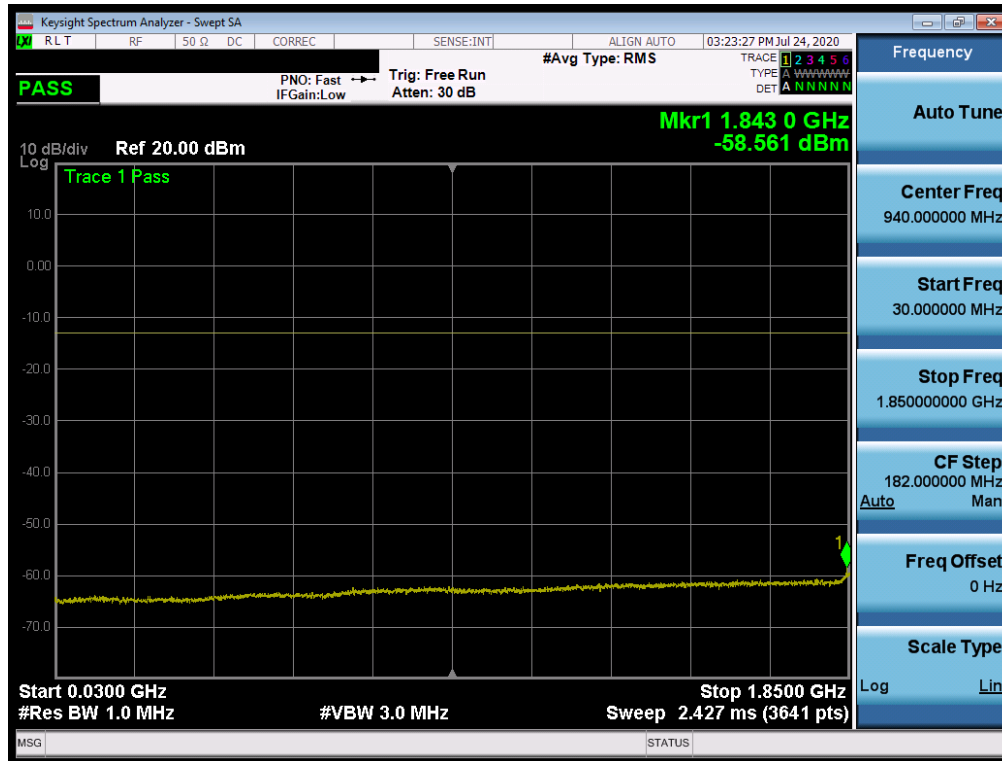


Plot 7-206. Conducted Spurious Plot (NR Band n2 - 20.0MHz - RB Size 1, RB Offset 0 - Mid Channel)

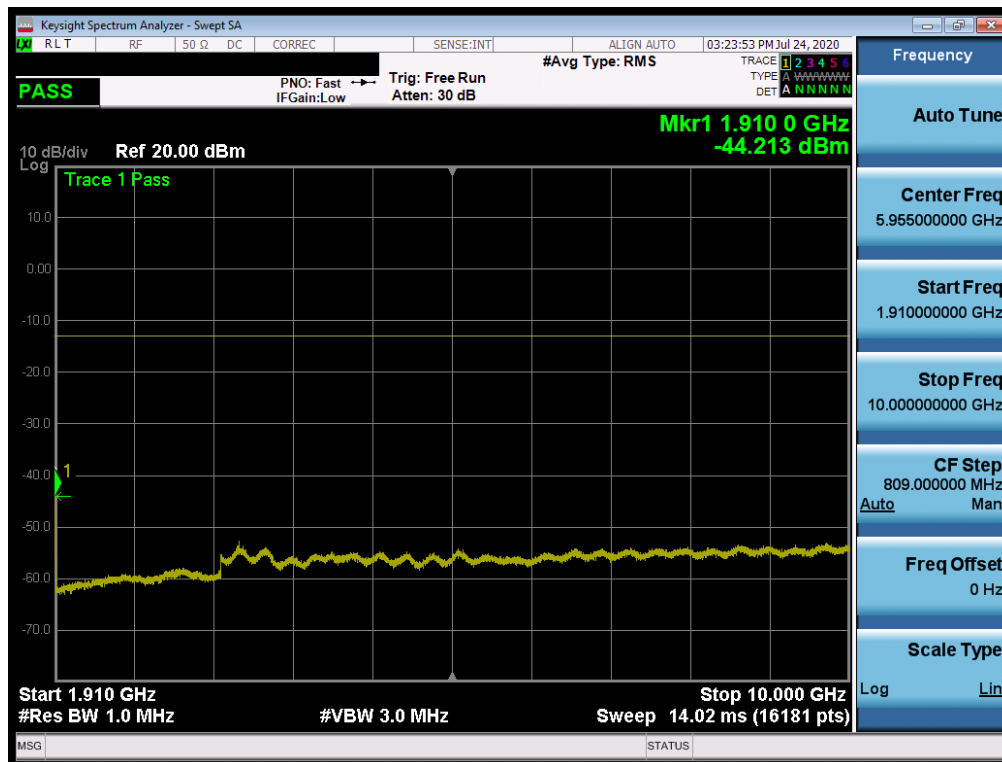


Plot 7-207. Conducted Spurious Plot (NR Band n2 - 20.0MHz - RB Size 1, RB Offset 0 - Mid Channel)

|                                         |                                              |                                       |    |                                 |
|-----------------------------------------|----------------------------------------------|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFF100VM                       | <b>PCTEST</b><br>Proud to be part of element | MEASUREMENT REPORT<br>(CERTIFICATION) | LG | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M2006150096-03.ZNF | Test Dates:<br>06/26/2020-08/18/2020         | EUT Type:<br>Portable Handset         |    | Page 125 of 301                 |

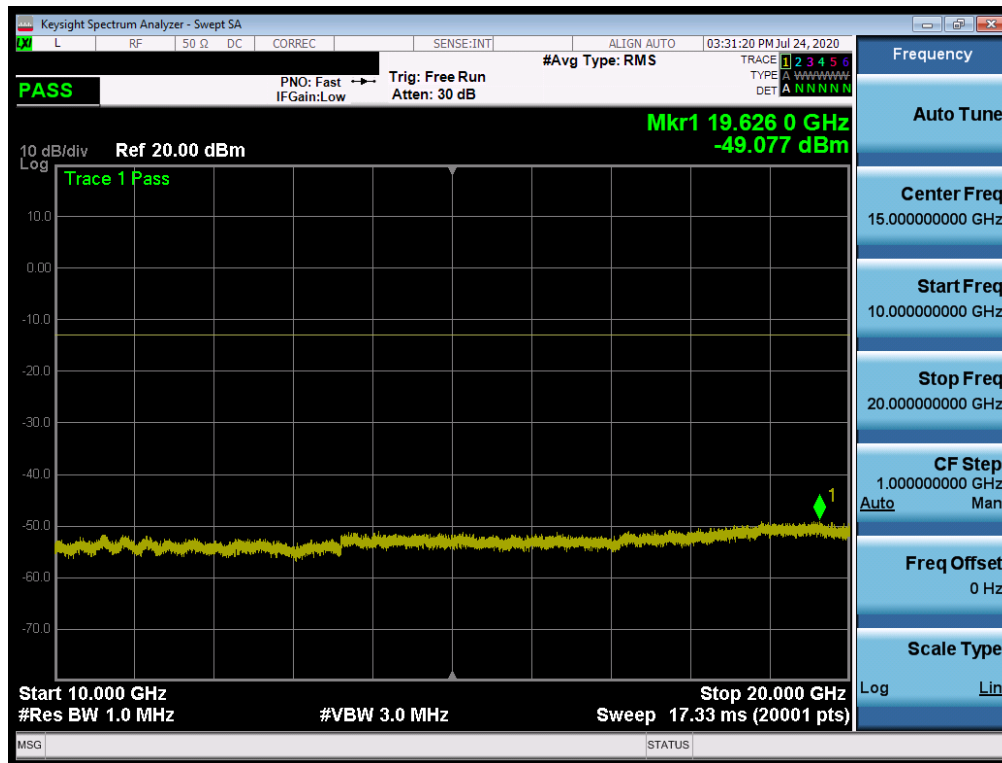


Plot 7-208. Conducted Spurious Plot (NR Band n2 - 20.0MHz - RB Size 1, RB Offset 0 - High Channel)



Plot 7-209. Conducted Spurious Plot (NR Band n2 - 20.0MHz - RB Size 1, RB Offset 0 - High Channel)

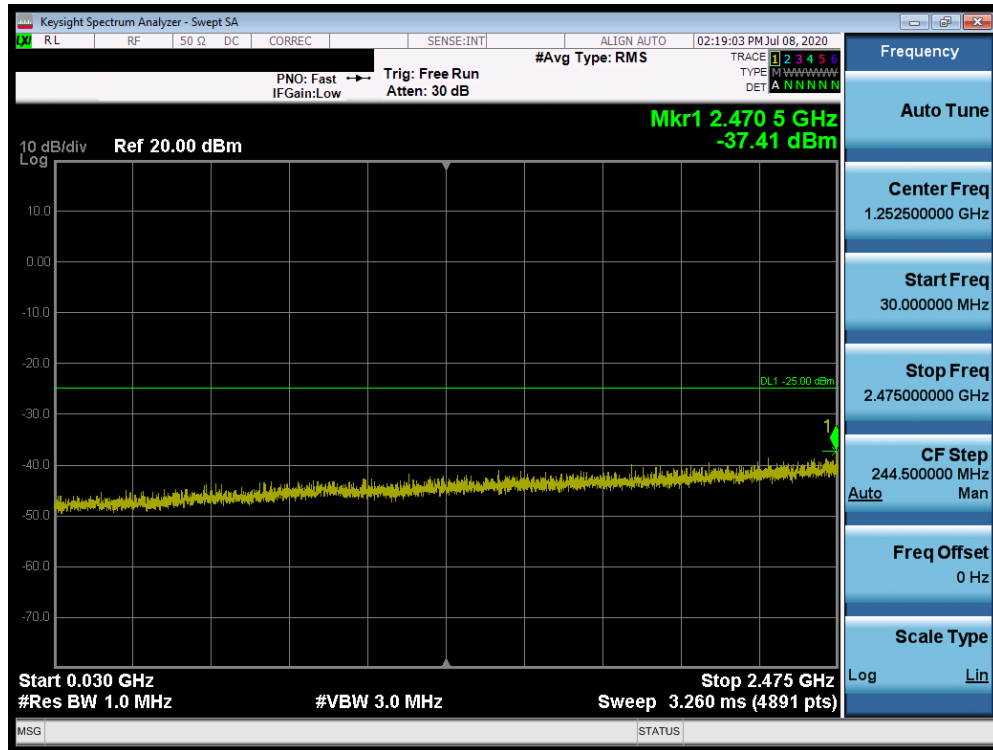
|                                         |                                              |                                       |    |                                 |
|-----------------------------------------|----------------------------------------------|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFF100VM                       | <b>PCTEST</b><br>Proud to be part of element | MEASUREMENT REPORT<br>(CERTIFICATION) | LG | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M2006150096-03.ZNF | Test Dates:<br>06/26/2020-08/18/2020         | EUT Type:<br>Portable Handset         |    | Page 126 of 301                 |



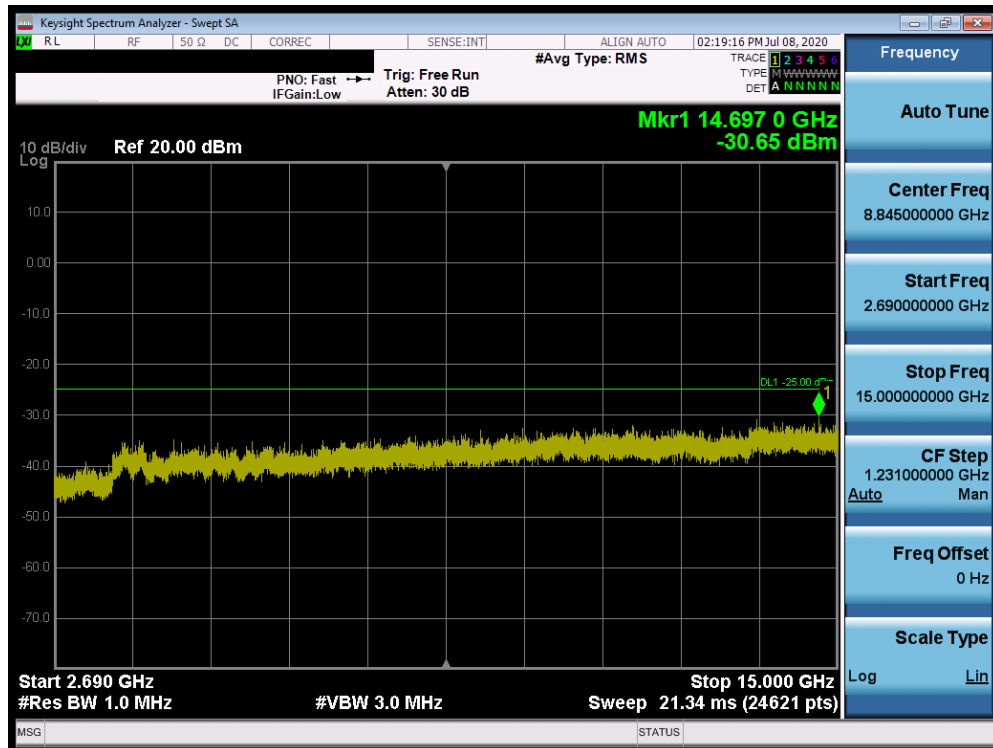
Plot 7-210. Conducted Spurious Plot (NR Band n2 - 20.0MHz - RB Size 1, RB Offset 0 - High Channel)

|                                         |                                              |                                       |    |                                 |
|-----------------------------------------|----------------------------------------------|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFF100VM                       | <b>PCTEST</b><br>Proud to be part of element | MEASUREMENT REPORT<br>(CERTIFICATION) | LG | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M2006150096-03.ZNF | Test Dates:<br>06/26/2020-08/18/2020         | EUT Type:<br>Portable Handset         |    | Page 127 of 301                 |

## Band 41



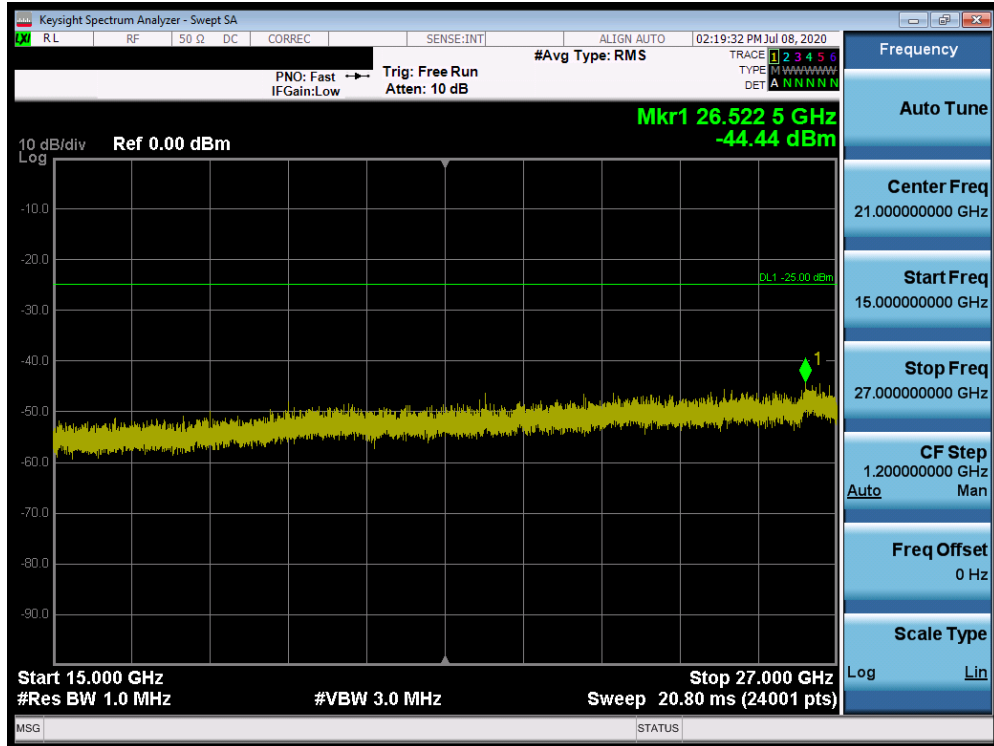
Plot 7-211. Conducted Spurious Plot (Band 41 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)



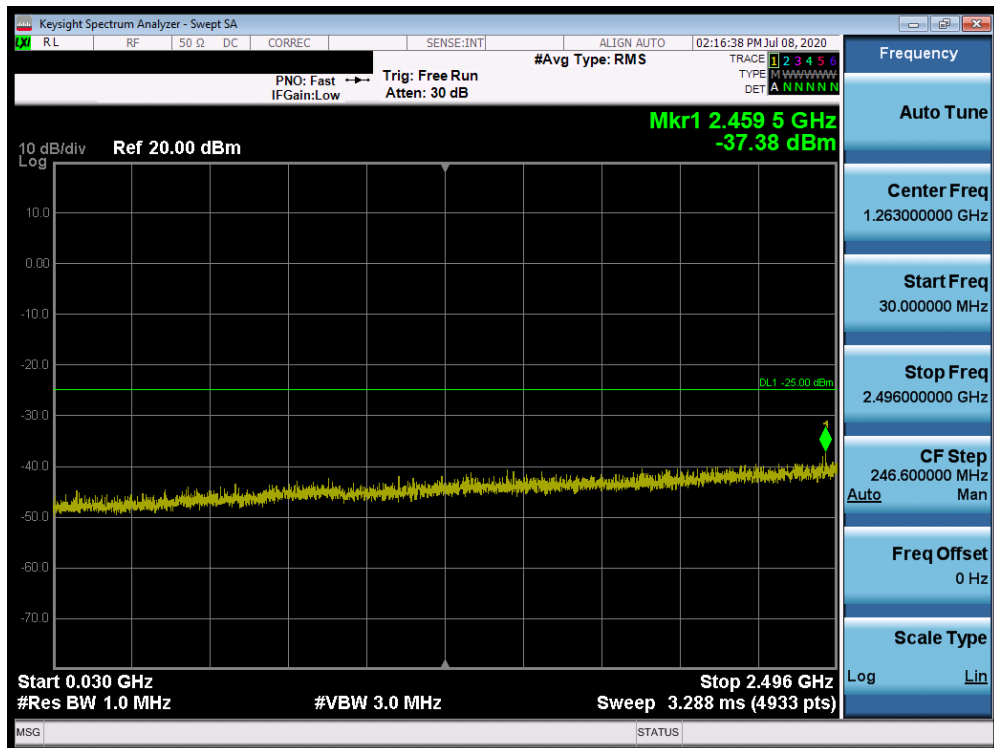
Plot 7-212. Conducted Spurious Plot (Band 41 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

|                                         |                                              |                                       |    |                                 |
|-----------------------------------------|----------------------------------------------|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFF100VM                       | <b>PCTEST</b><br>Proud to be part of element | MEASUREMENT REPORT<br>(CERTIFICATION) | LG | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M2006150096-03.ZNF | Test Dates:<br>06/26/2020-08/18/2020         | EUT Type:<br>Portable Handset         |    | Page 128 of 301                 |



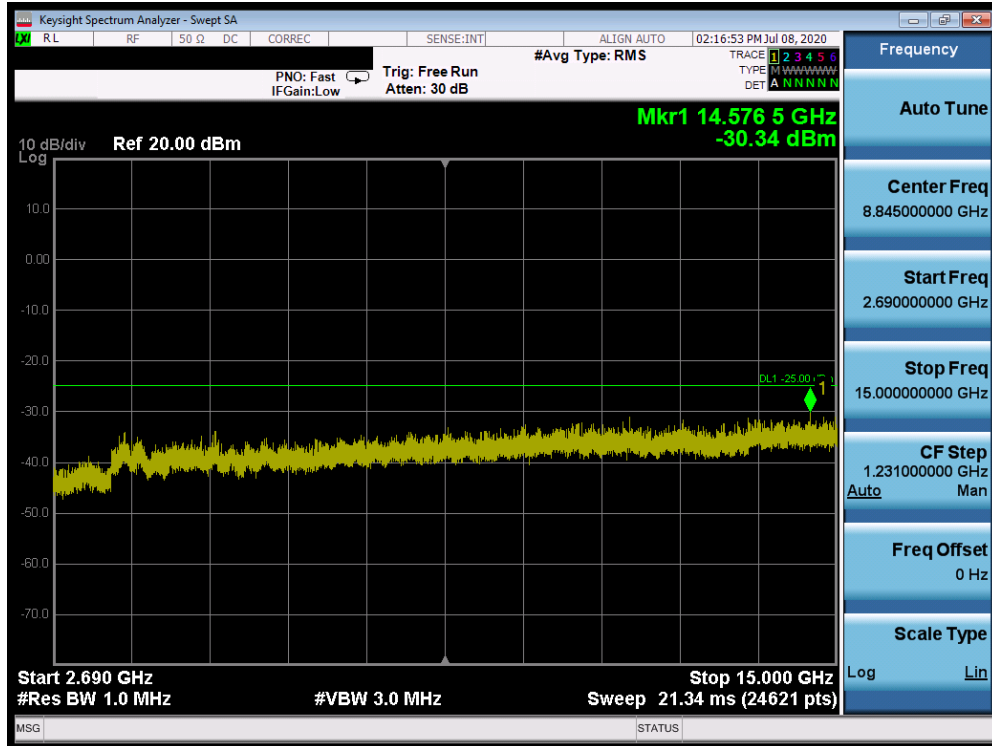


**Plot 7-213. Conducted Spurious Plot (Band 41 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)**

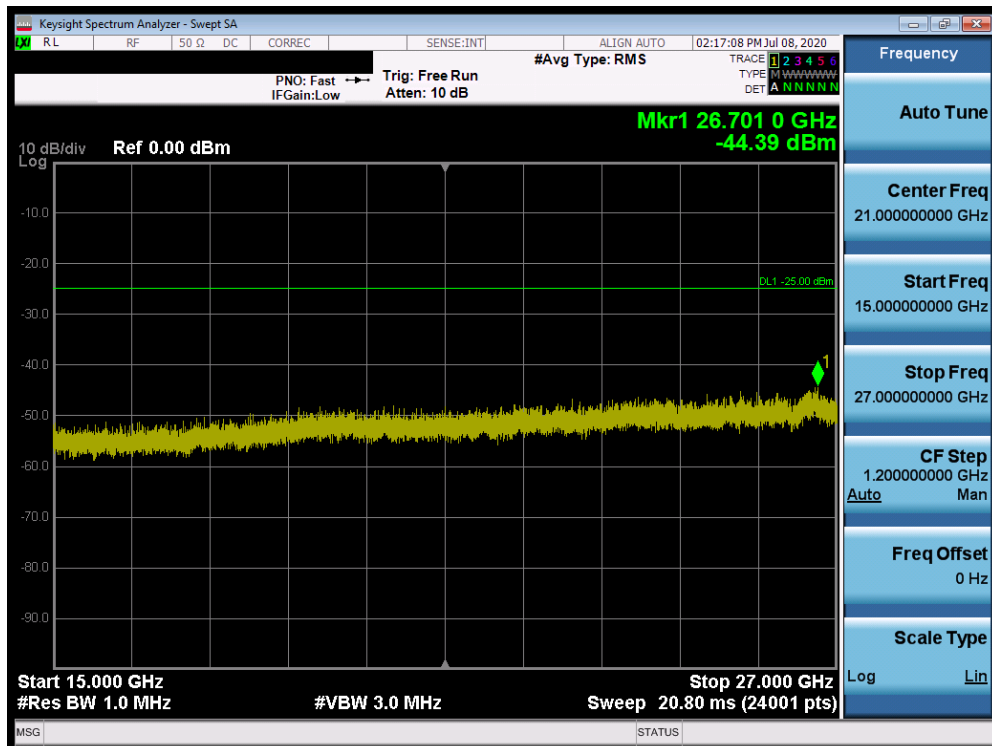


**Plot 7-214. Conducted Spurious Plot (Band 41 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)**

|                                                |                                                                                                                                                                                                                         |                                      |                                        |
|------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|----------------------------------------|
| FCC ID: ZNFF100VM                              |  <b>MEASUREMENT REPORT<br/>(CERTIFICATION)</b>  |                                      | <b>Approved by:</b><br>Quality Manager |
| <b>Test Report S/N:</b><br>1M2006150096-03.ZNF | <b>Test Dates:</b><br>06/26/2020-08/18/2020                                                                                                                                                                             | <b>EUT Type:</b><br>Portable Handset | Page 129 of 301                        |



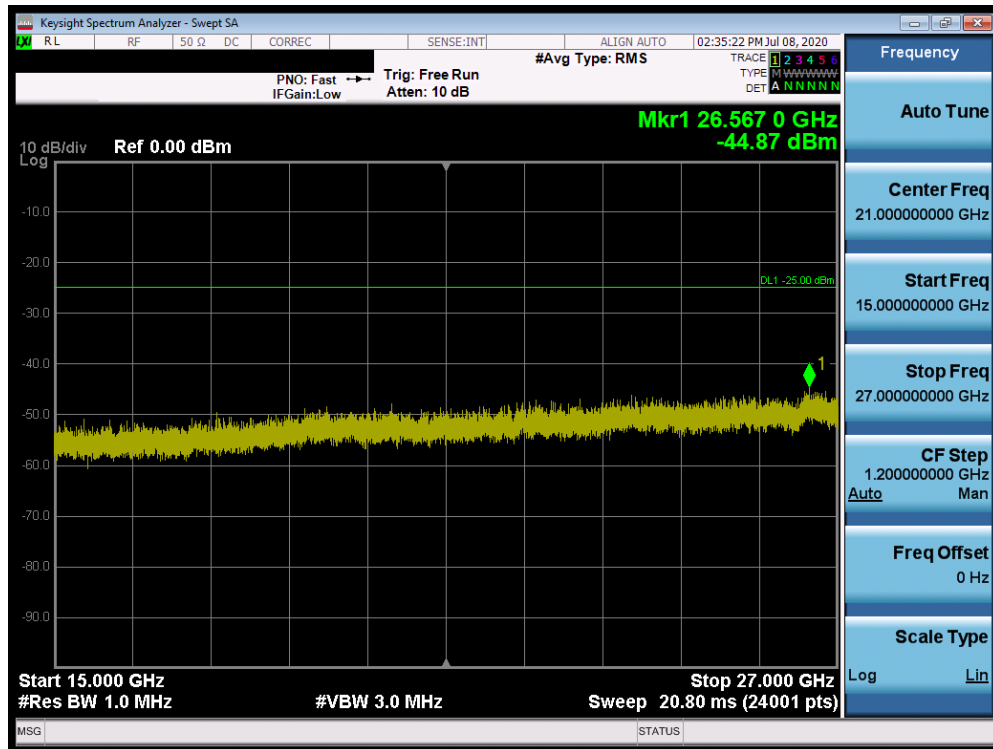
Plot 7-215. Conducted Spurious Plot (Band 41 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)



Plot 7-216. Conducted Spurious Plot (Band 41 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

|                                         |                                              |                                       |    |                                 |
|-----------------------------------------|----------------------------------------------|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFF100VM                       | <b>PCTEST</b><br>Proud to be part of element | MEASUREMENT REPORT<br>(CERTIFICATION) | LG | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M2006150096-03.ZNF | Test Dates:<br>06/26/2020-08/18/2020         | EUT Type:<br>Portable Handset         |    | Page 130 of 301                 |





Plot 7-219. Conducted Spurious Plot (Band 41 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

|                                         |                                              |                                       |    |                                 |
|-----------------------------------------|----------------------------------------------|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFF100VM                       | <b>PCTEST</b><br>Proud to be part of element | MEASUREMENT REPORT<br>(CERTIFICATION) | LG | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M2006150096-03.ZNF | Test Dates:<br>06/26/2020-08/18/2020         | EUT Type:<br>Portable Handset         |    | Page 132 of 301                 |

## 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 of any spurious emission is  $43 + 10 \log_{10}(P_{[Watts]})$ , where  $P$  is the transmitter power in Watts.***

### Test Procedure Used

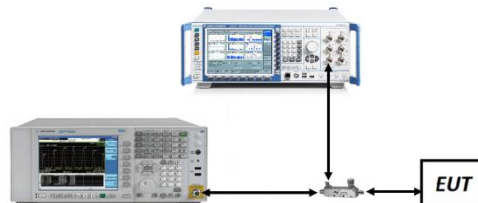
KDB 971168 D01 v03r01 – Section 6.0

### 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  $\geq 3 \times$  RBW
5. Detector = RMS
6. Number of sweep points  $\geq 2 \times$  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: ZNFF100VM                       | <b>PCTEST</b><br>Proud to be part of element | MEASUREMENT REPORT<br>(CERTIFICATION) | LG | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1M2006150096-03.ZNF | Test Dates:<br>06/26/2020-08/18/2020         | EUT Type:<br>Portable Handset         |    | Page 133 of 301                 |

### Test Notes

Per 22.917(b) in the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed to demonstrate compliance with the out-of-band emissions limit. 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 emission are attenuated at least 26 dB below the transmitter power.

|                                                |                                                                                                                                                                                                                      |                                               |                                                                                                 |                                        |
|------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|-------------------------------------------------------------------------------------------------|----------------------------------------|
| <b>FCC ID:</b> ZNFF100VM                       |  <b>PCTEST</b><br>Proud to be part of  element | <b>MEASUREMENT REPORT<br/>(CERTIFICATION)</b> |  <b>LG</b> | <b>Approved by:</b><br>Quality Manager |
| <b>Test Report S/N:</b><br>1M2006150096-03.ZNF | <b>Test Dates:</b><br>06/26/2020-08/18/2020                                                                                                                                                                          | <b>EUT Type:</b><br>Portable Handset          |                                                                                                 | Page 134 of 301                        |