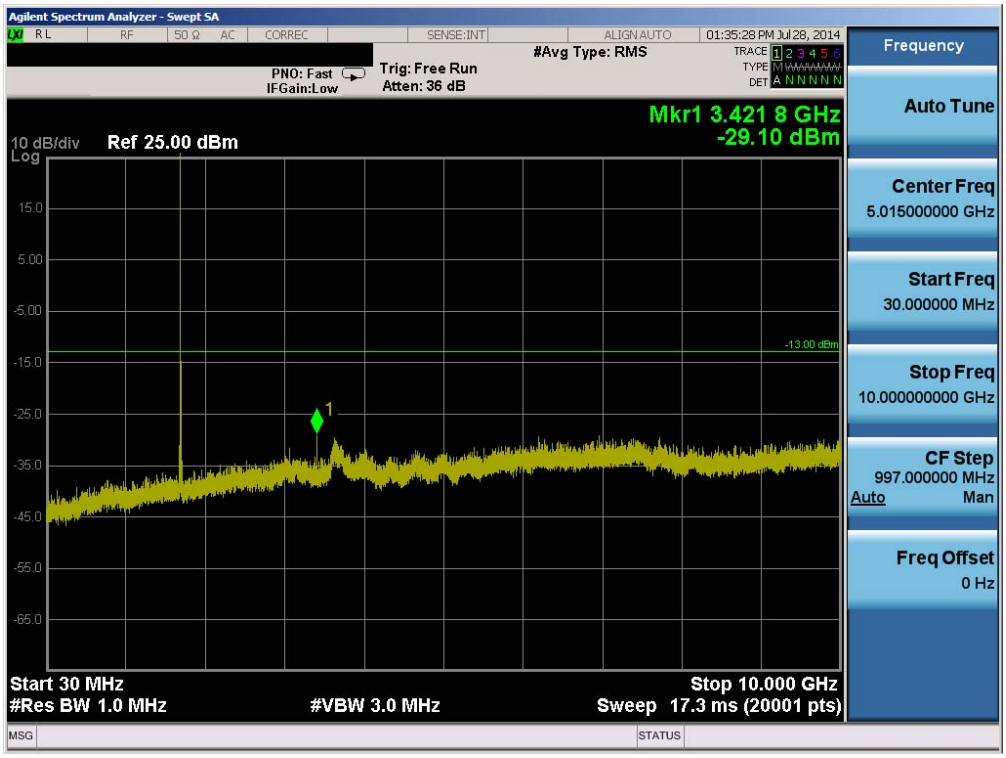
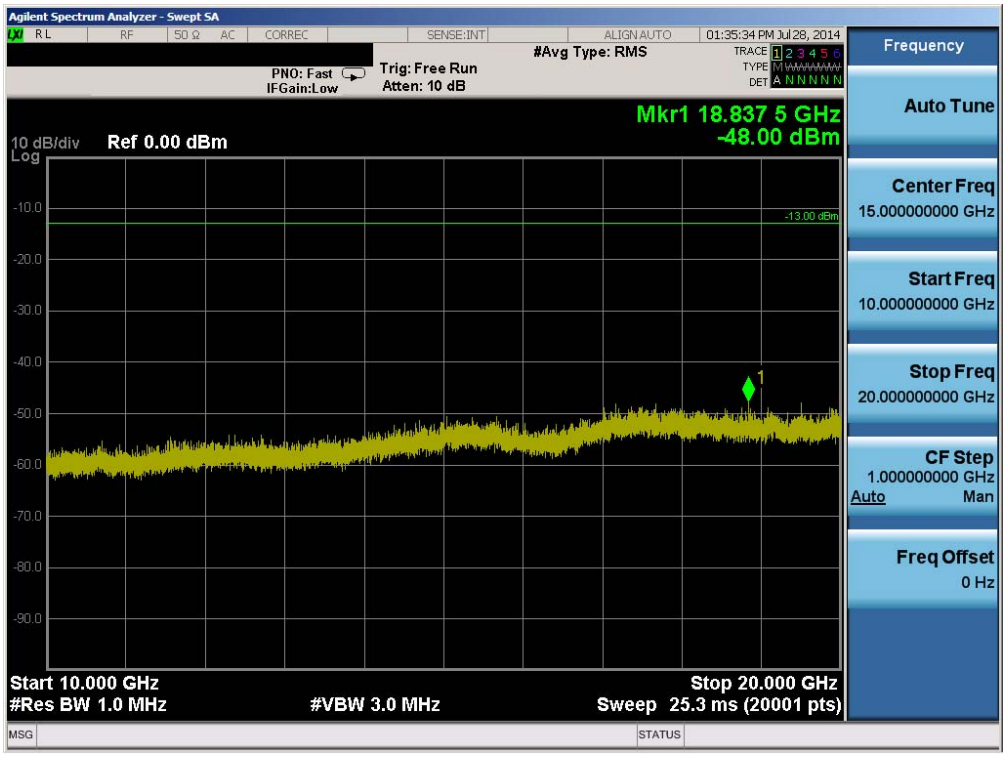


Plot 6-107. Conducted Spurious Plot (Band 4 – 10.0MHz QPSK – RB Size 1, RB Offset 0– Low Channel)



Plot 6-108. Conducted Spurious Plot (Band 4 – 10.0MHz QPSK – RB Size 1, RB Offset 0 – Low Channel)

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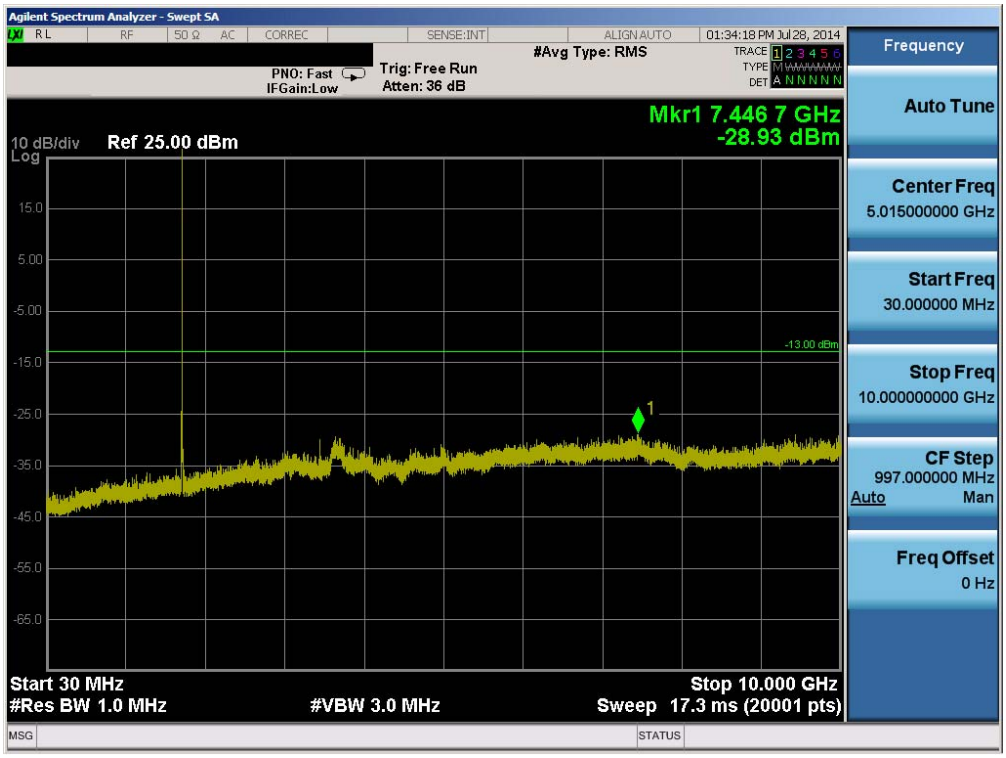
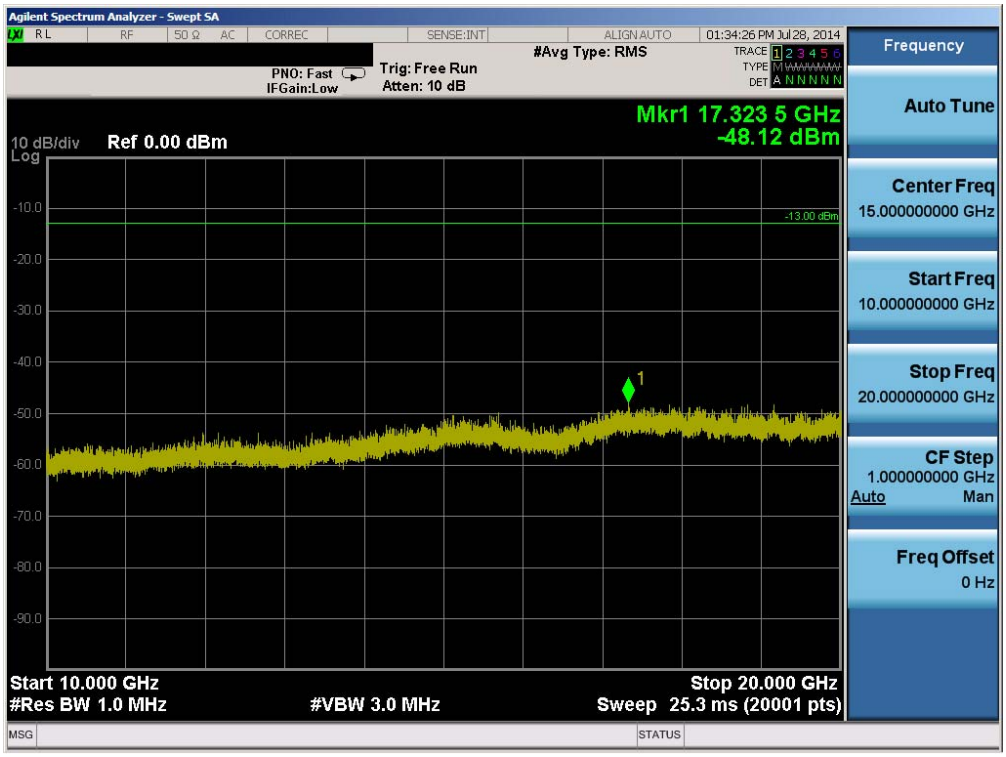


Plot 6-109. Conducted Spurious Plot (Band 4 – 10.0MHz QPSK – RB Size 1, RB Offset 0 – Mid Channel)



Plot 6-110. Conducted Spurious Plot (Band 4 – 10.0MHz QPSK – RB Size 1, RB Offset 0 – Mid Channel)

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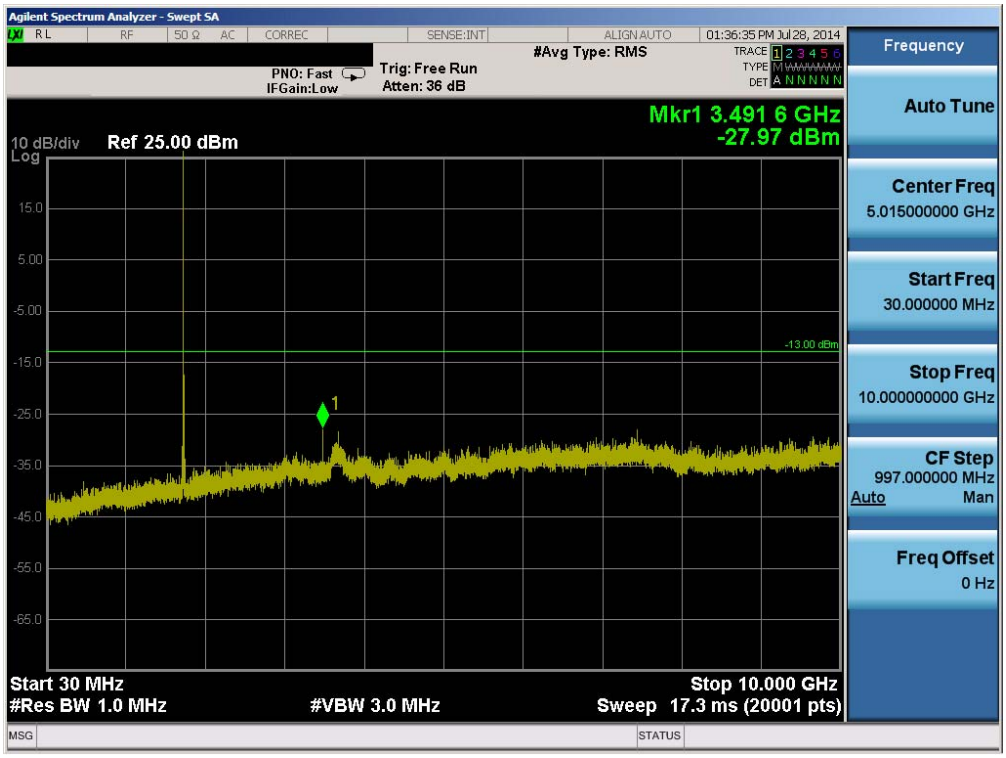
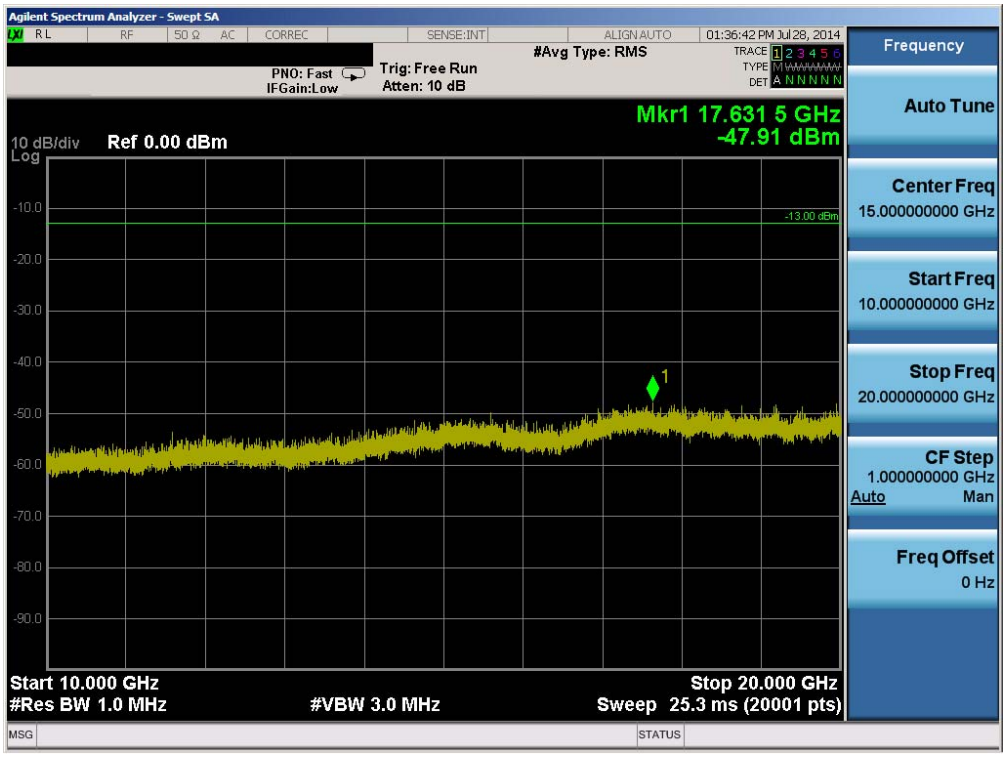


Plot 6-111. Conducted Spurious Plot (Band 4 – 10.0MHz QPSK – RB Size 1, RB Offset 0 – High Channel)



Plot 6-112. Conducted Spurious Plot (Band 4 – 10.0MHz QPSK – RB Size 1, RB Offset 0 – High Channel)

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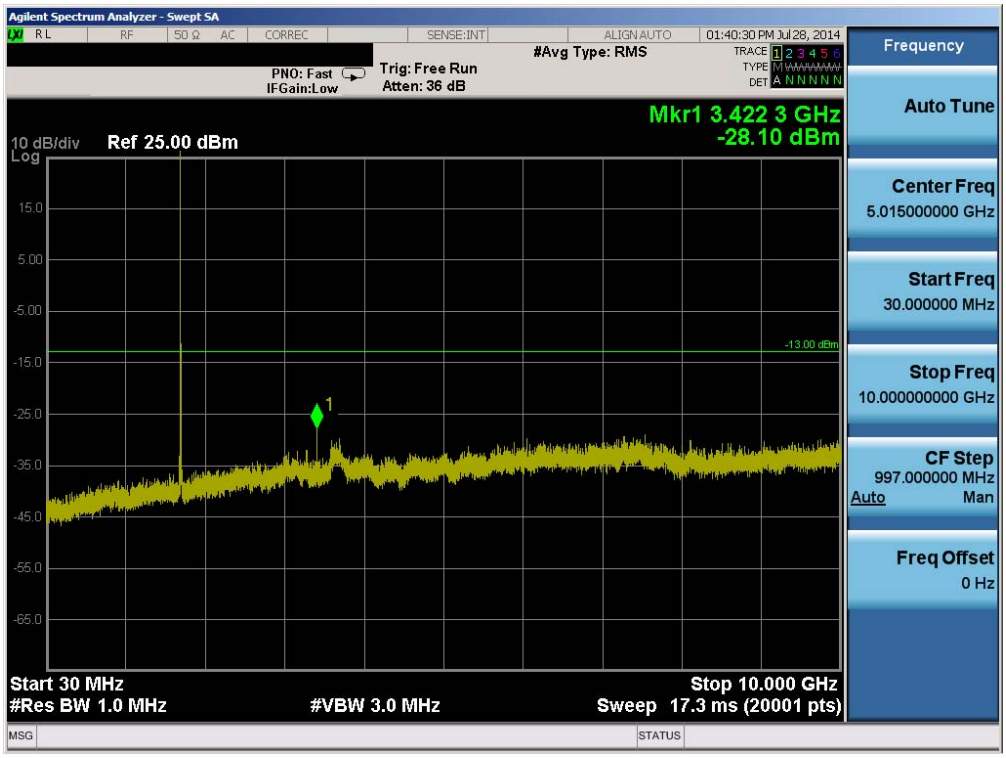
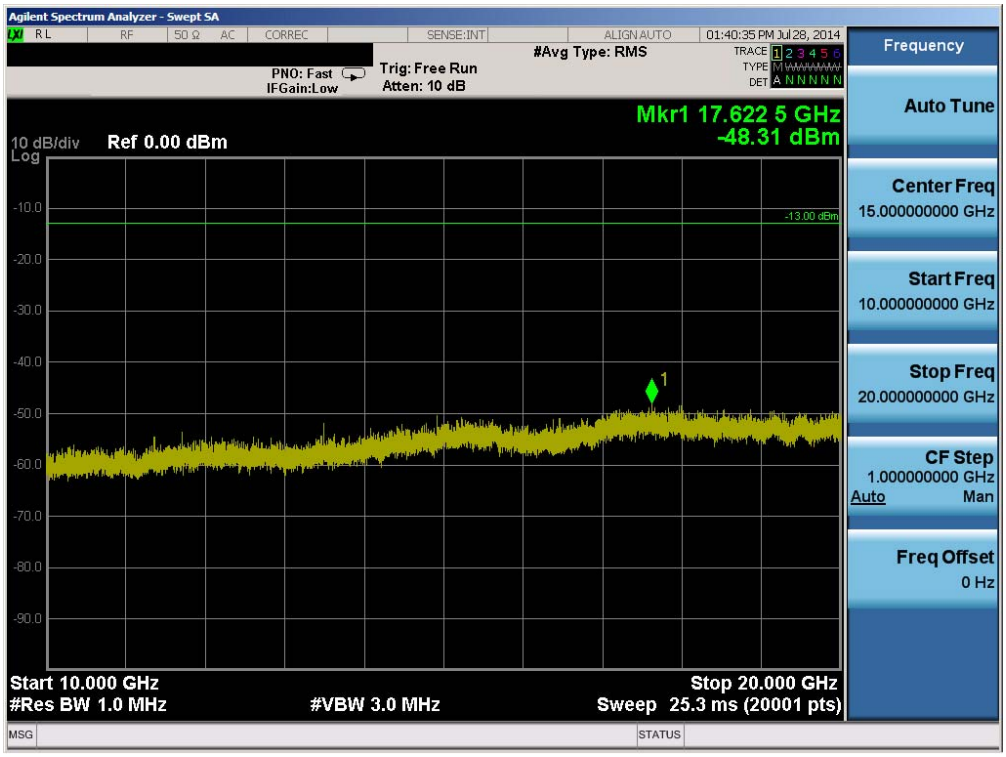


Plot 6-113. Conducted Spurious Plot (Band 4 – 15.0MHz QPSK – RB Size 1, RB Offset 0 – Low Channel)



Plot 6-114. Conducted Spurious Plot (Band 4 – 15.0MHz QPSK – RB Size 1, RB Offset 0 – Low Channel)

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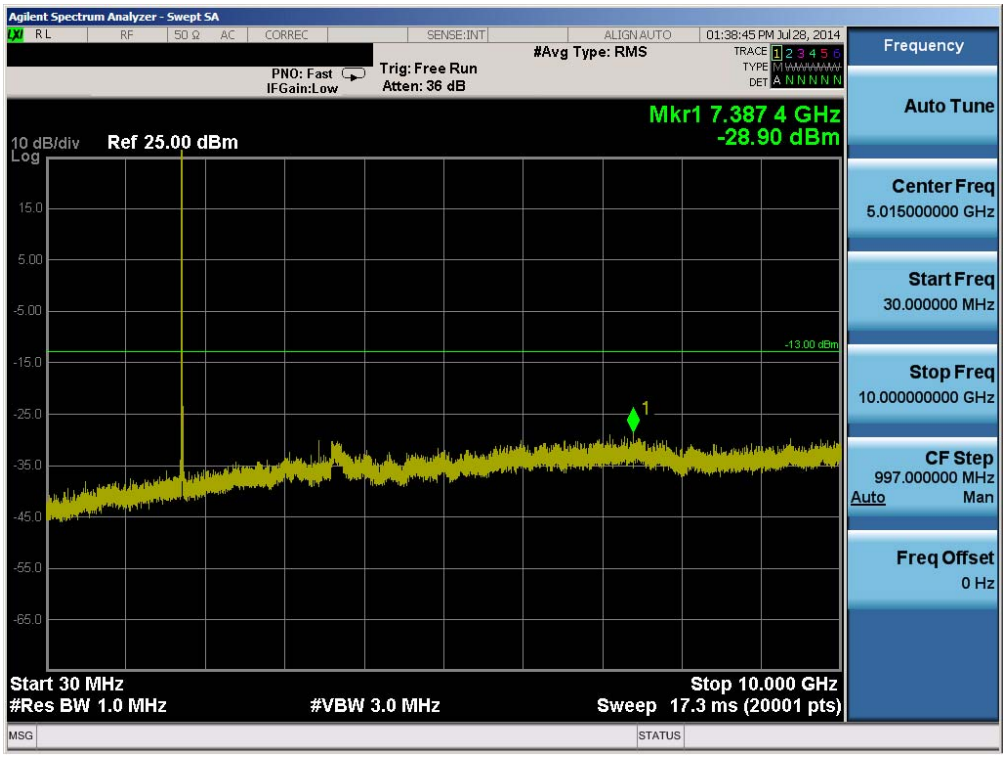
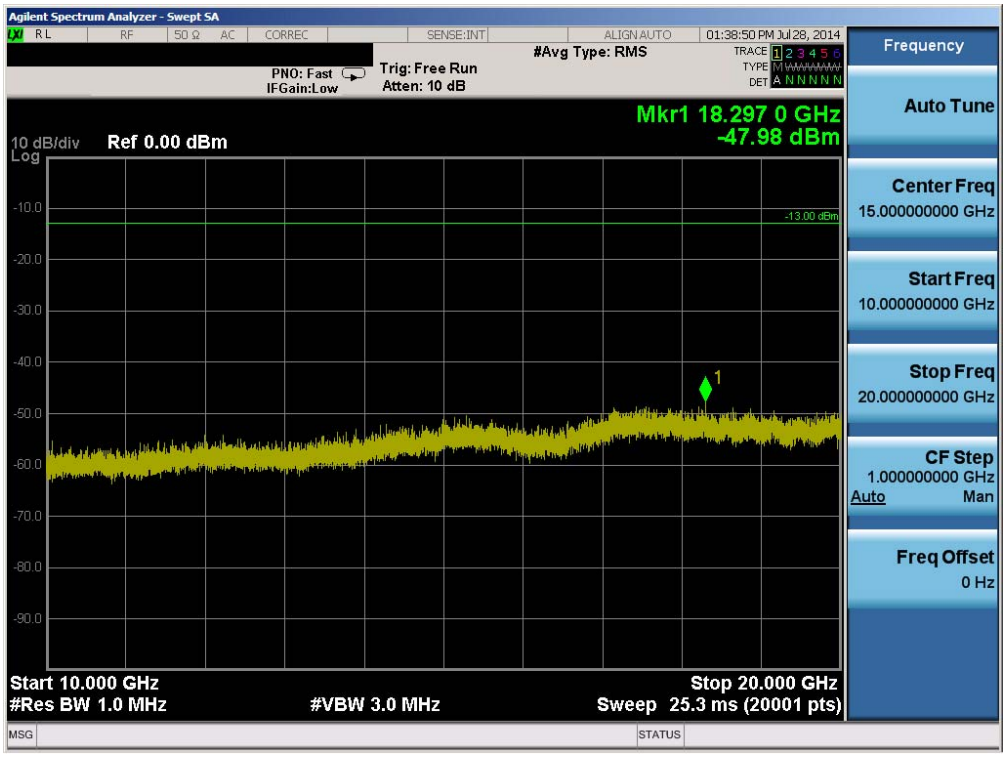


Plot 6-115. Conducted Spurious Plot (Band 4 – 15.0MHz QPSK – RB Size 1, RB Offset 0 – Mid Channel)



Plot 6-116. Conducted Spurious Plot (Band 4 – 15.0MHz QPSK – RB Size 1, RB Offset 0 – Mid Channel)

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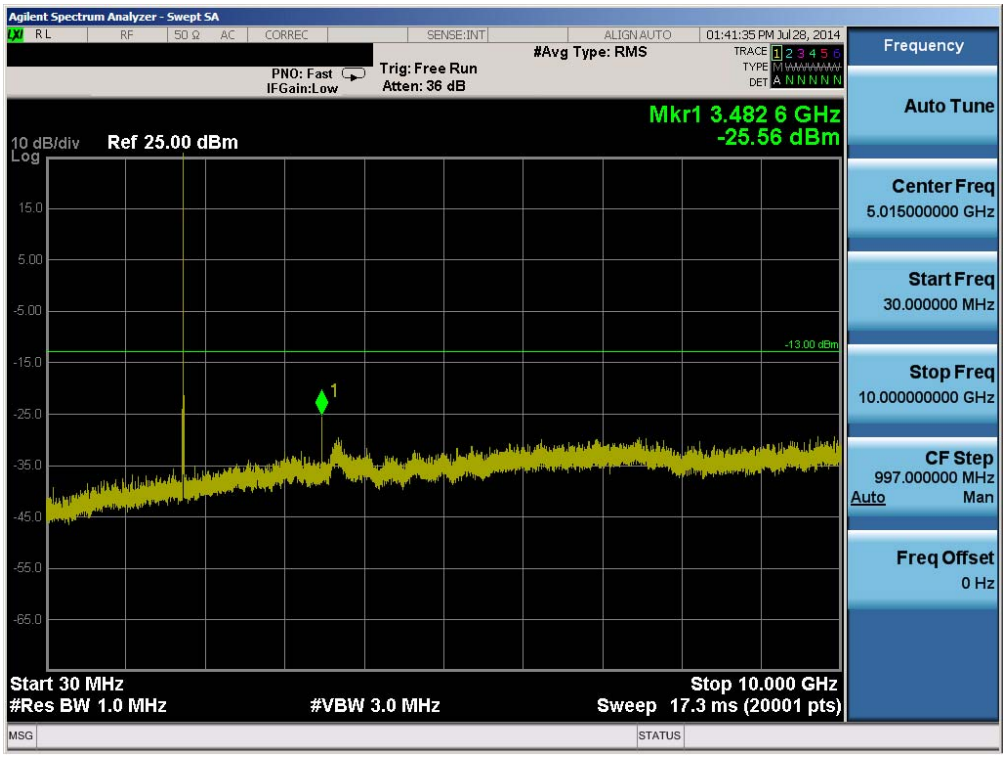
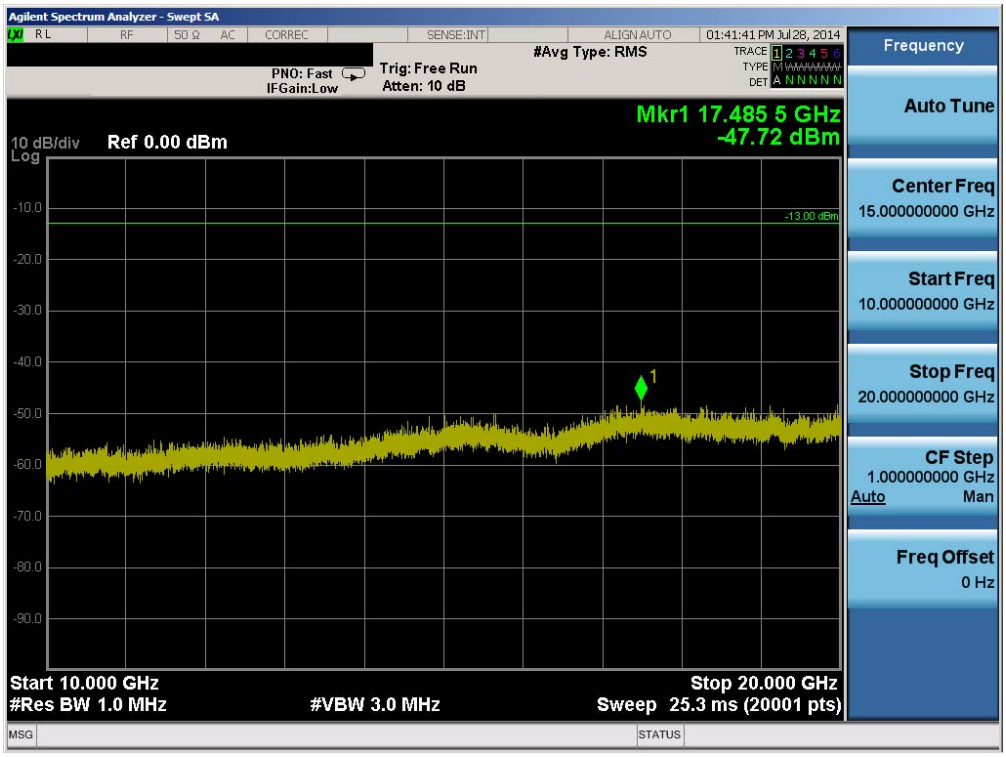


Plot 6-117. Conducted Spurious Plot (Band 4 – 15.0MHz QPSK – RB Size 1, RB Offset 0 – High Channel)



Plot 6-118. Conducted Spurious Plot (Band 4 – 15.0MHz QPSK – RB Size 1, RB Offset 0 – High Channel)

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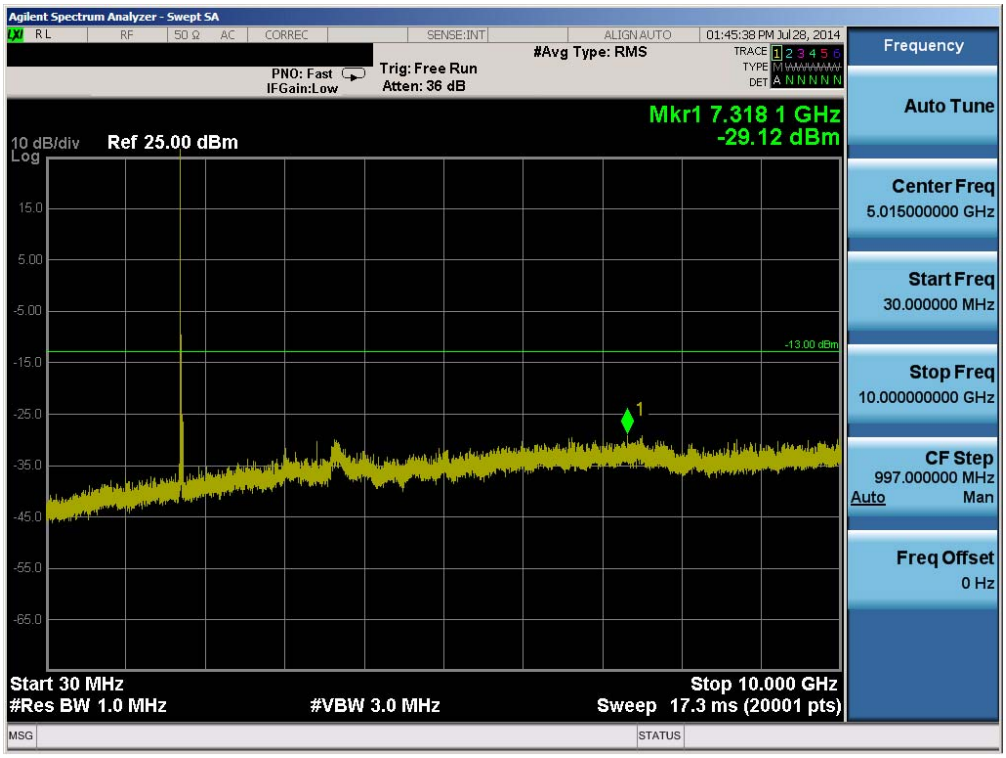
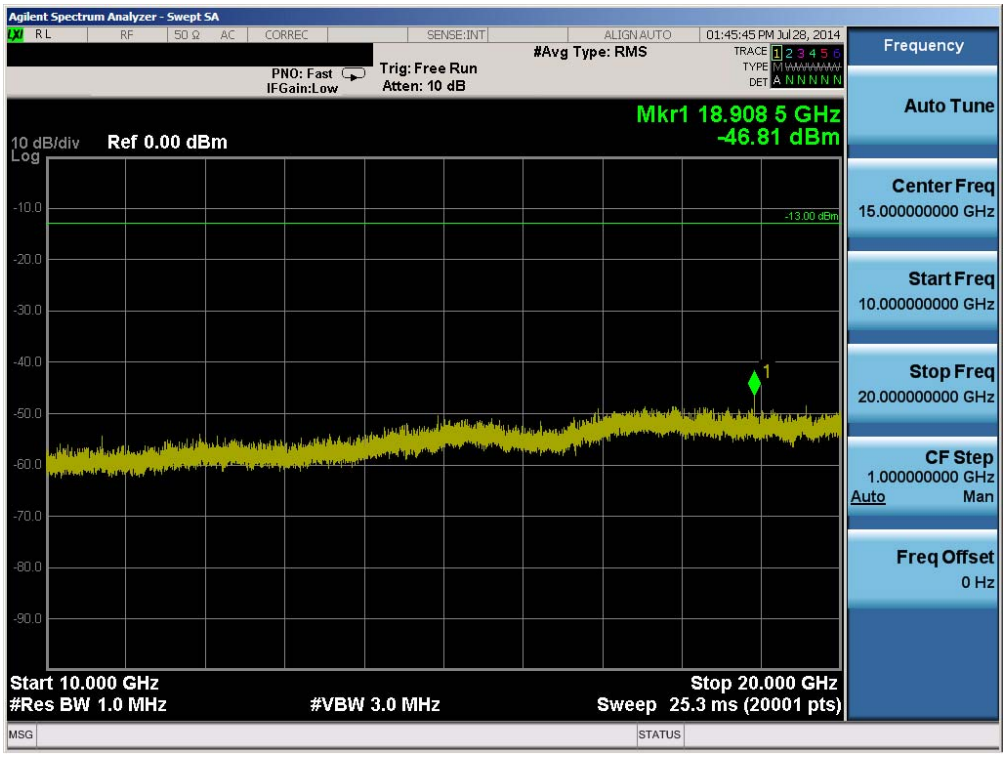


Plot 6-119. Conducted Spurious Plot (Band 4 – 20.0MHz QPSK – RB Size 1, RB Offset 0– Low Channel)



Plot 6-120. Conducted Spurious Plot (Band 4 – 20.0MHz QPSK – RB Size 1, RB Offset 0 – Low Channel)

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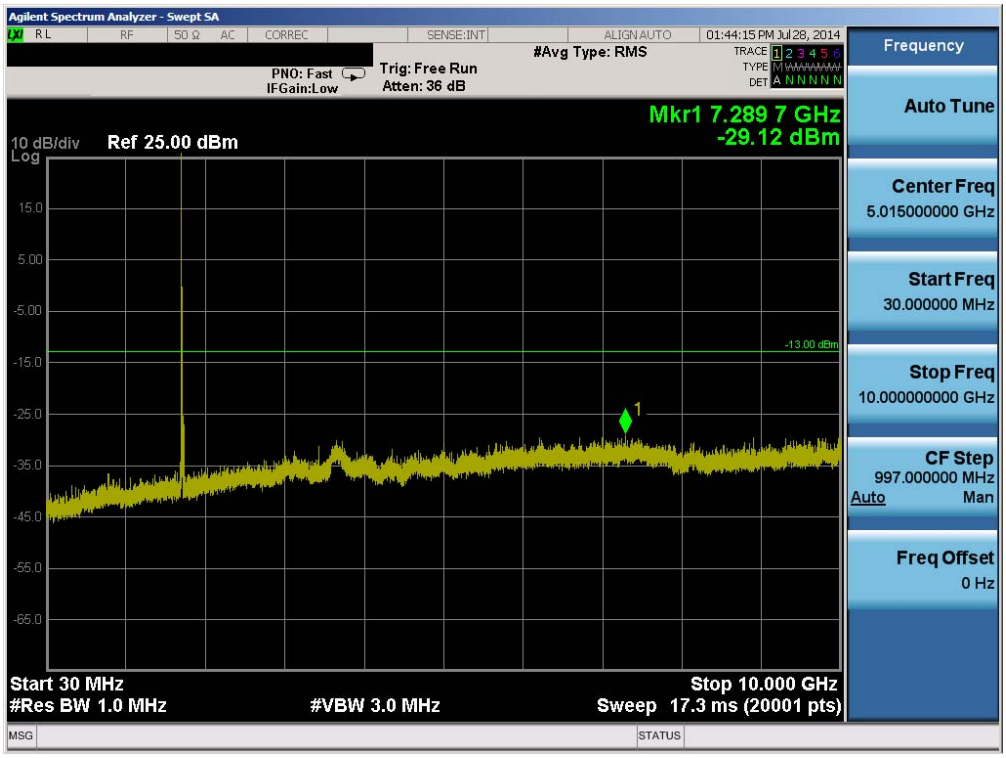
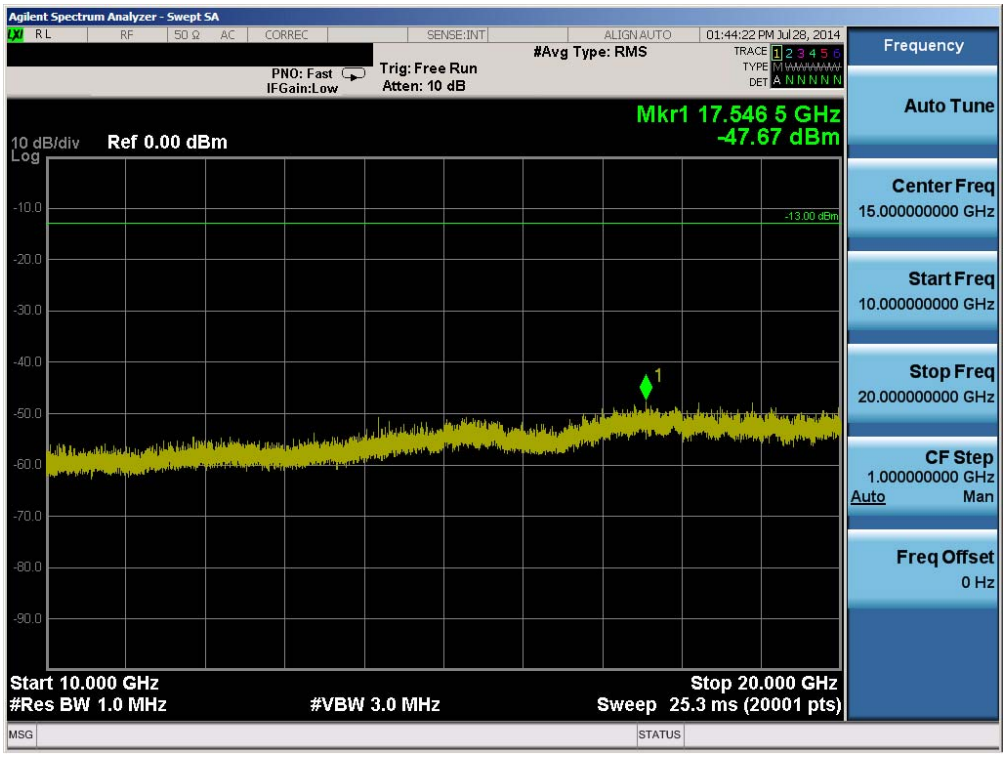


Plot 6-121. Conducted Spurious Plot (Band 4 – 20.0MHz QPSK – RB Size 1, RB Offset 0 – Mid Channel)



Plot 6-122. Conducted Spurious Plot (Band 4 – 20.0MHz QPSK – RB Size 1, RB Offset 0 – Mid Channel)

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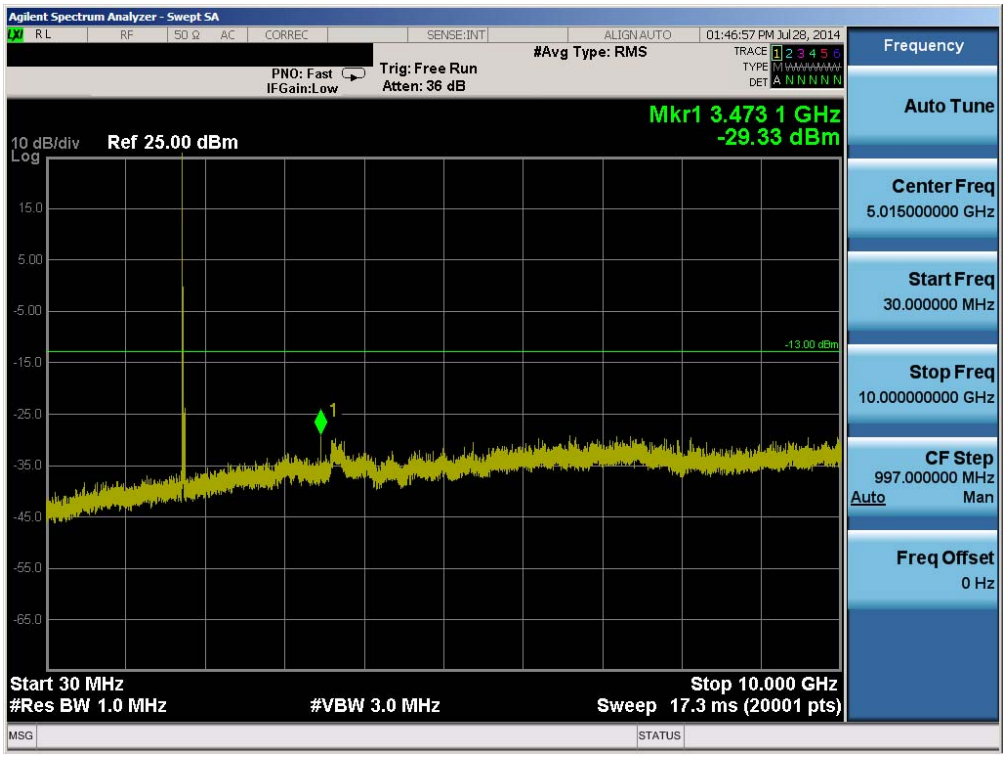
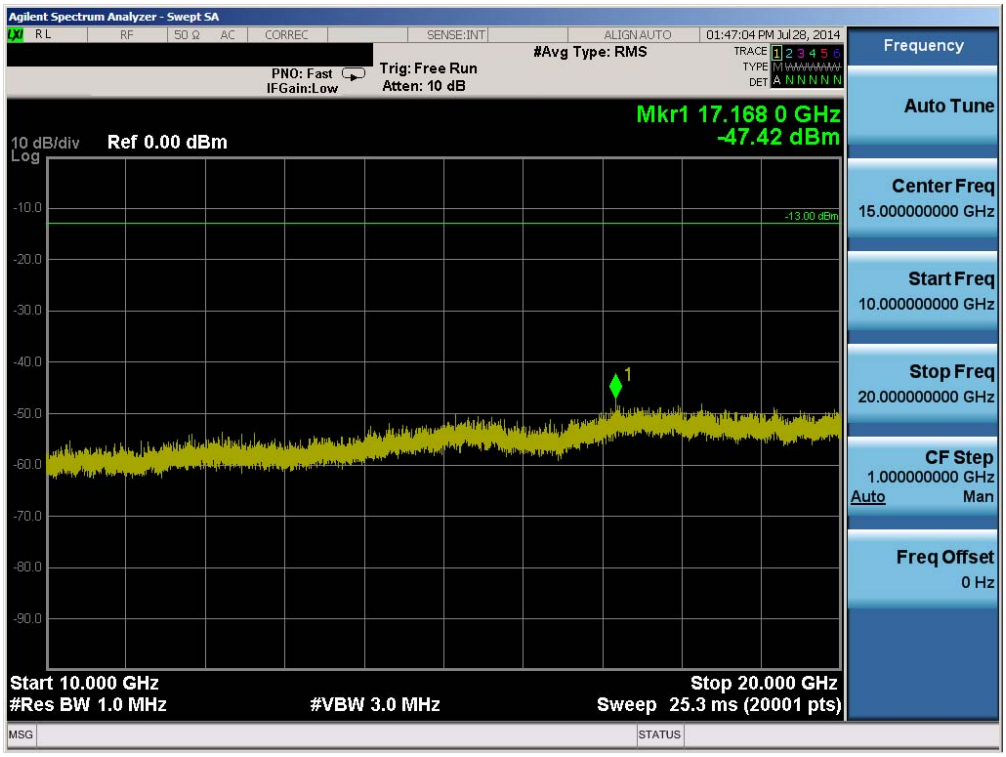


Plot 6-123. Conducted Spurious Plot (Band 4 – 20.0MHz QPSK – RB Size 1, RB Offset 0 – High Channel)



Plot 6-124. Conducted Spurious Plot (Band 4 – 20.0MHz QPSK – RB Size 1, RB Offset 0 – High Channel)

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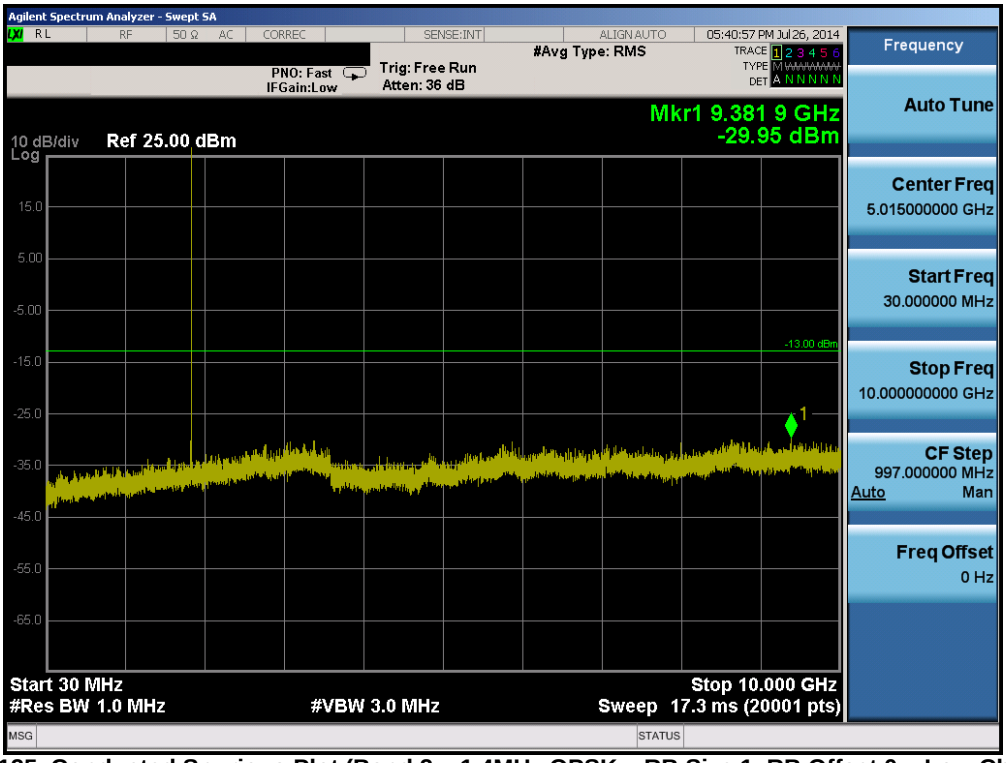
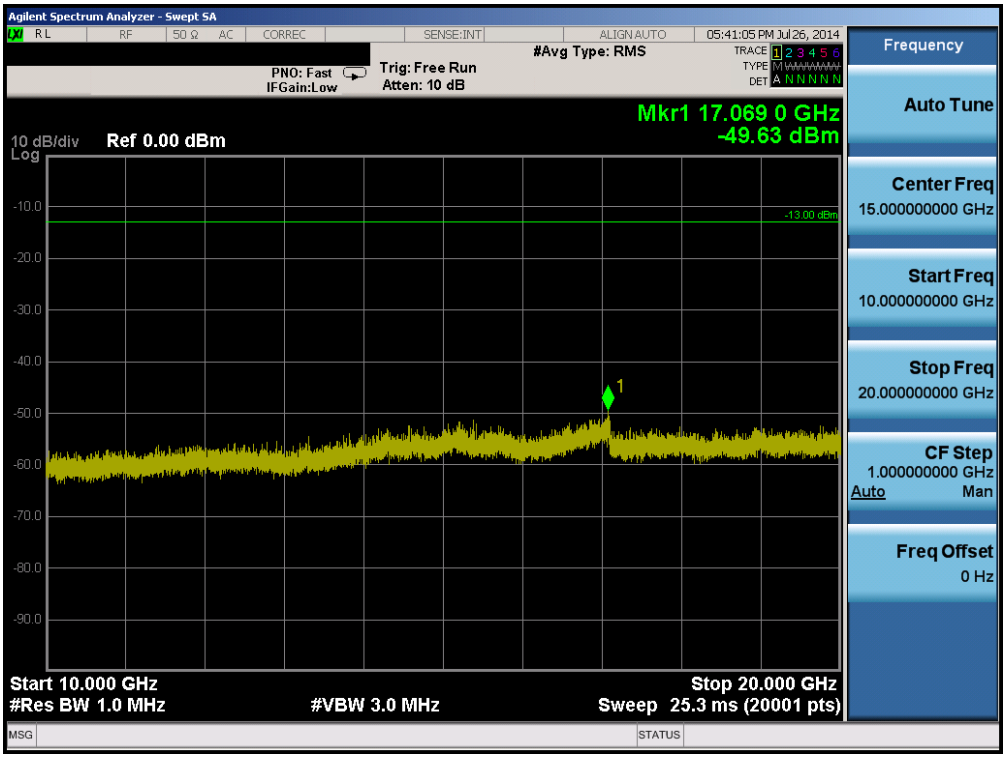


Plot 6-125. Conducted Spurious Plot (Band 2 – 1.4MHz QPSK – RB Size 1, RB Offset 0 – Low Channel)



Plot 6-126. Conducted Spurious Plot (Band 2 – 1.4MHz QPSK – RB Size 1, RB Offset 0 – Low Channel)

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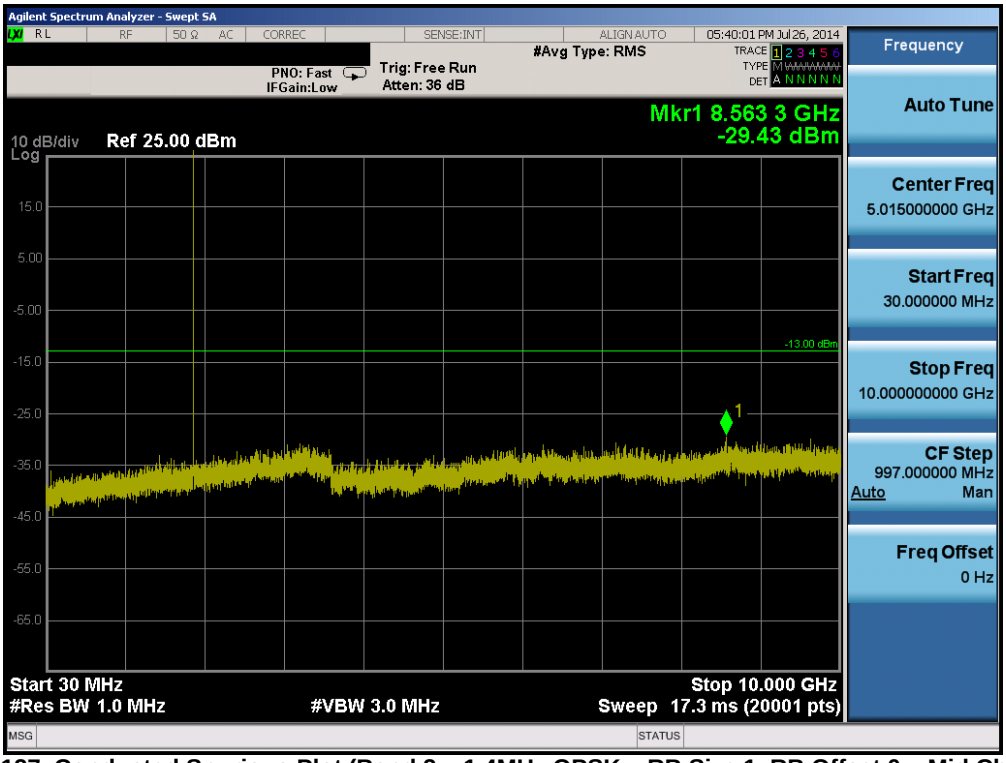
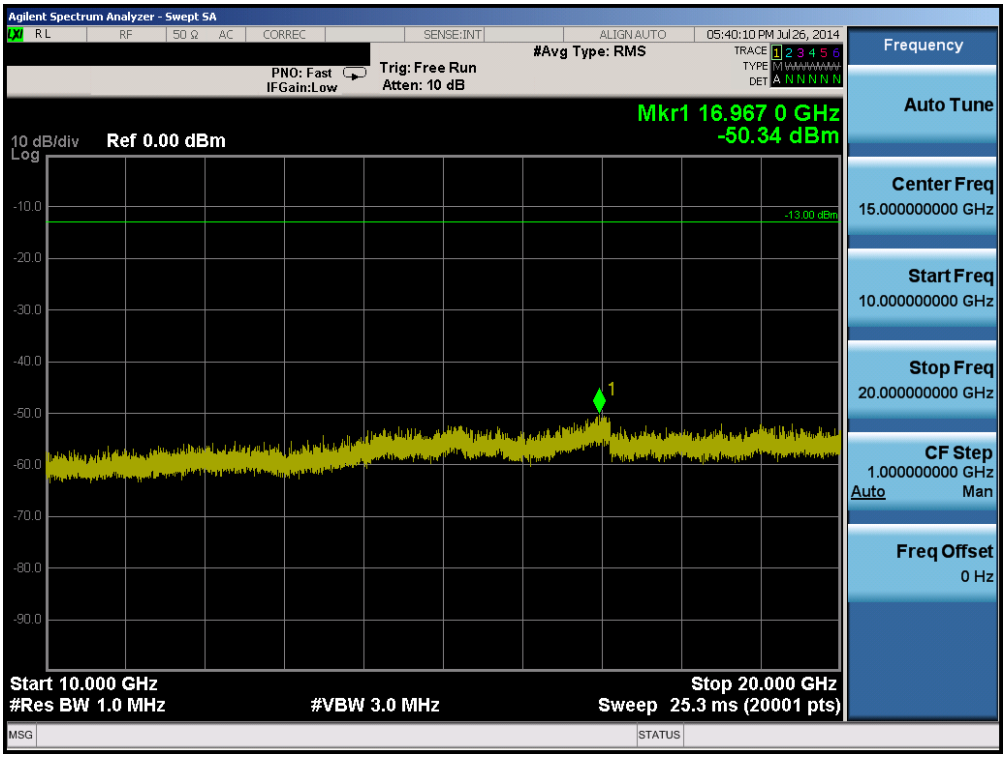


Plot 6-127. Conducted Spurious Plot (Band 2 – 1.4MHz QPSK – RB Size 1, RB Offset 0 – Mid Channel)



Plot 6-128. Conducted Spurious Plot (Band 2 – 1.4MHz QPSK – RB Size 1, RB Offset 0 – Mid Channel)

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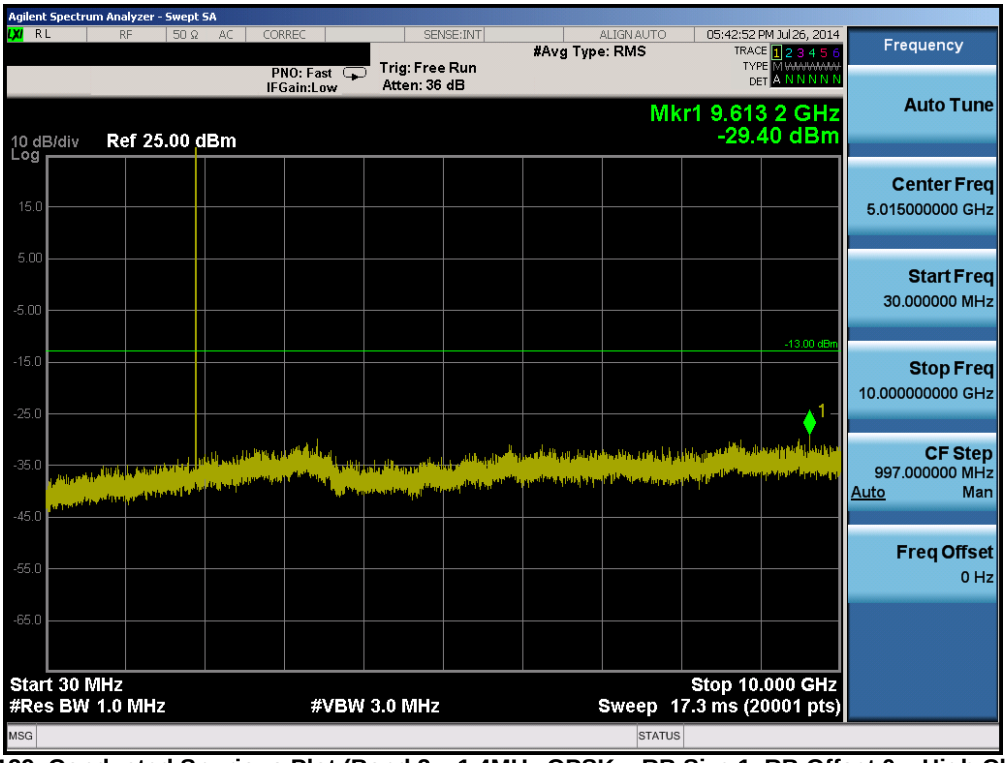
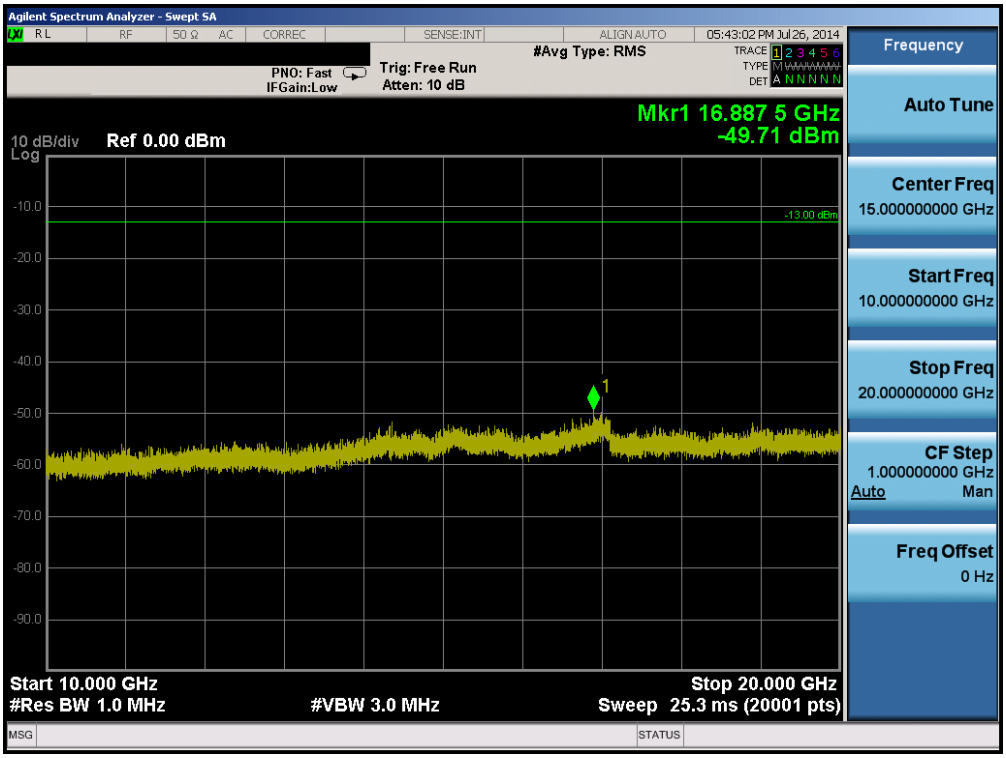


Plot 6-129. Conducted Spurious Plot (Band 2 – 1.4MHz QPSK – RB Size 1, RB Offset 0 – High Channel)



Plot 6-130. Conducted Spurious Plot (Band 2 – 1.4MHz QPSK – RB Size 1, RB Offset 0 – High Channel)

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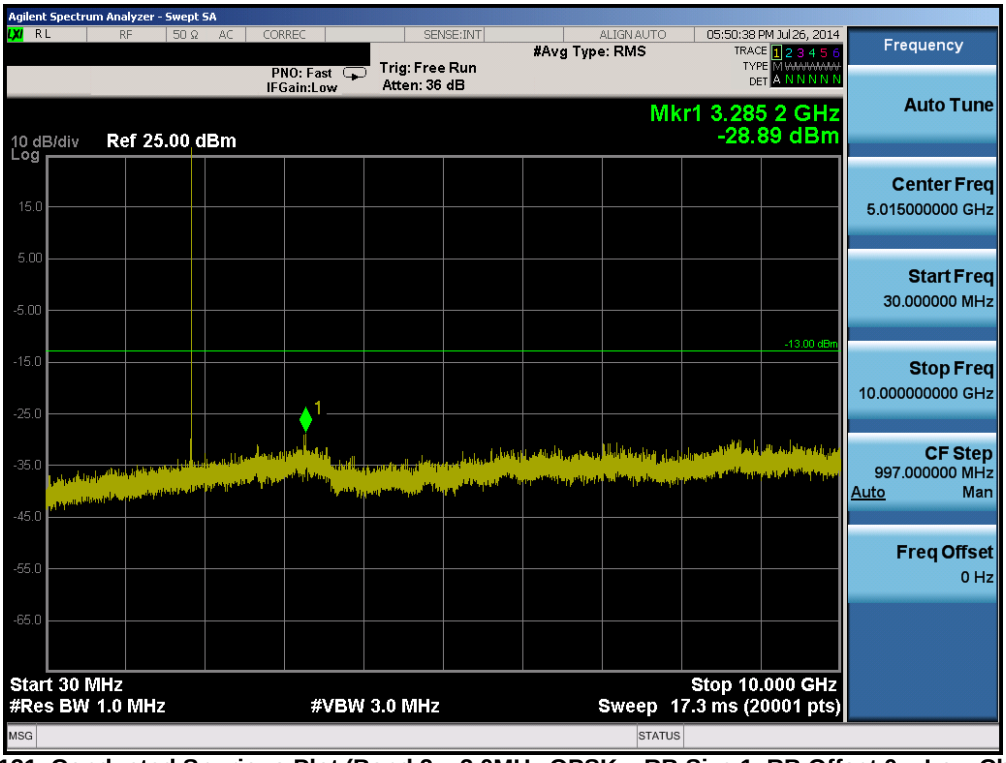
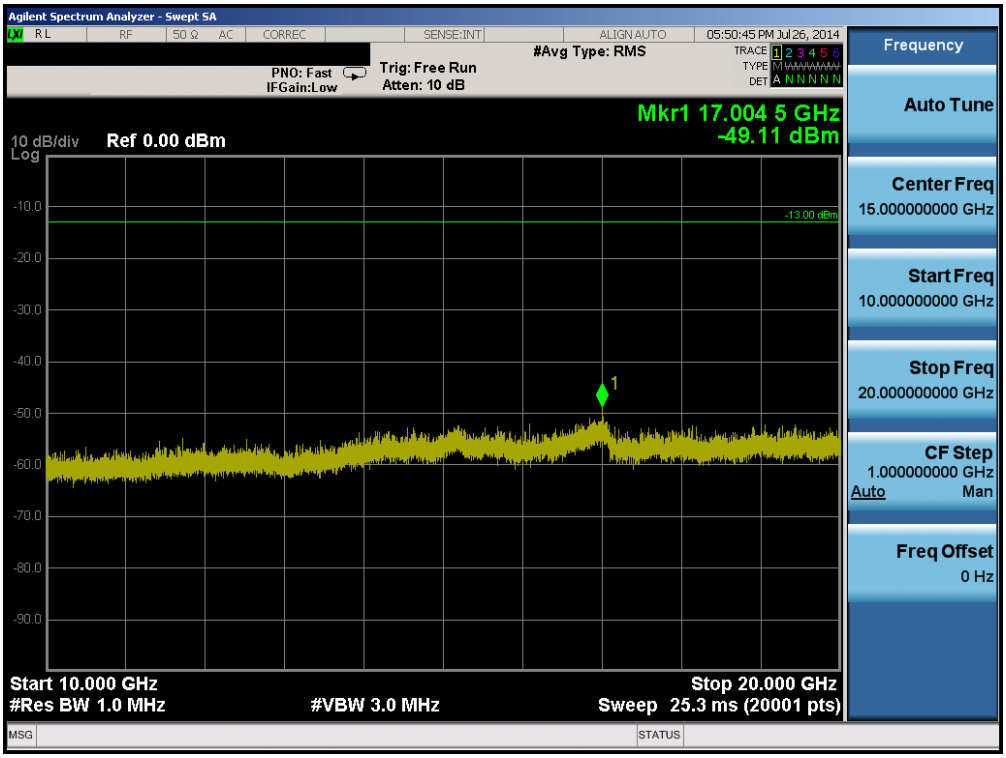


Plot 6-131. Conducted Spurious Plot (Band 2 – 3.0MHz QPSK – RB Size 1, RB Offset 0 – Low Channel)



Plot 6-132. Conducted Spurious Plot (Band 2 – 3.0MHz QPSK – RB Size 1, RB Offset 0 – Low Channel)

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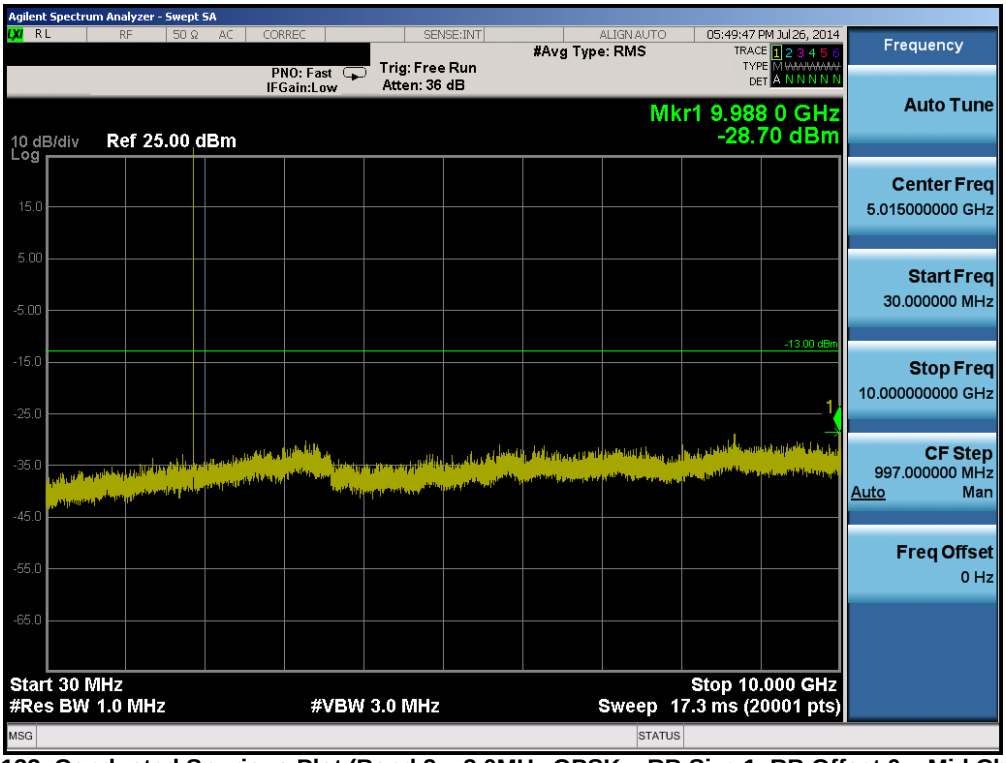
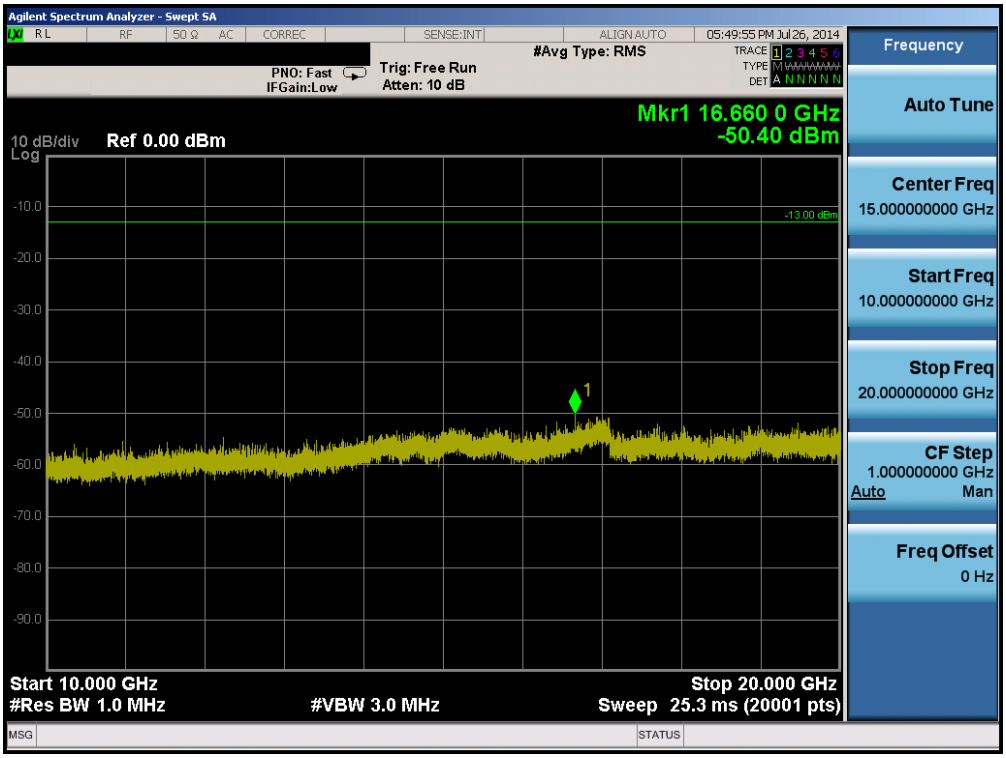


Plot 6-133. Conducted Spurious Plot (Band 2 – 3.0MHz QPSK – RB Size 1, RB Offset 0 – Mid Channel)



Plot 6-134. Conducted Spurious Plot (Band 2 – 3.0MHz QPSK – RB Size 1, RB Offset 0 – Mid Channel)

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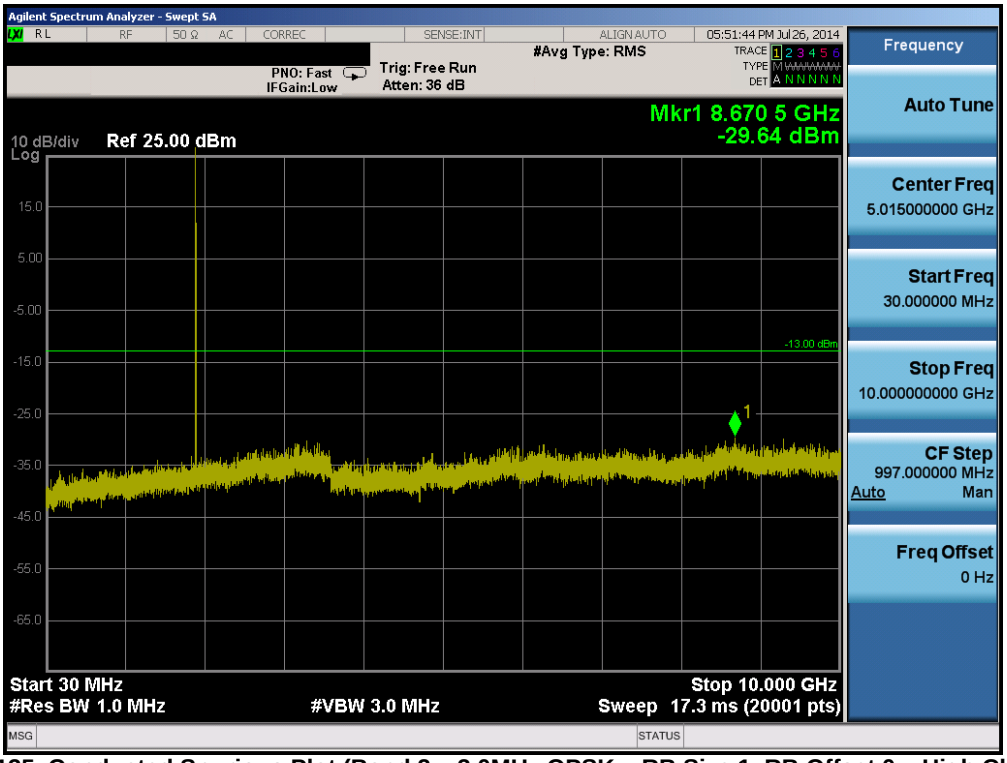
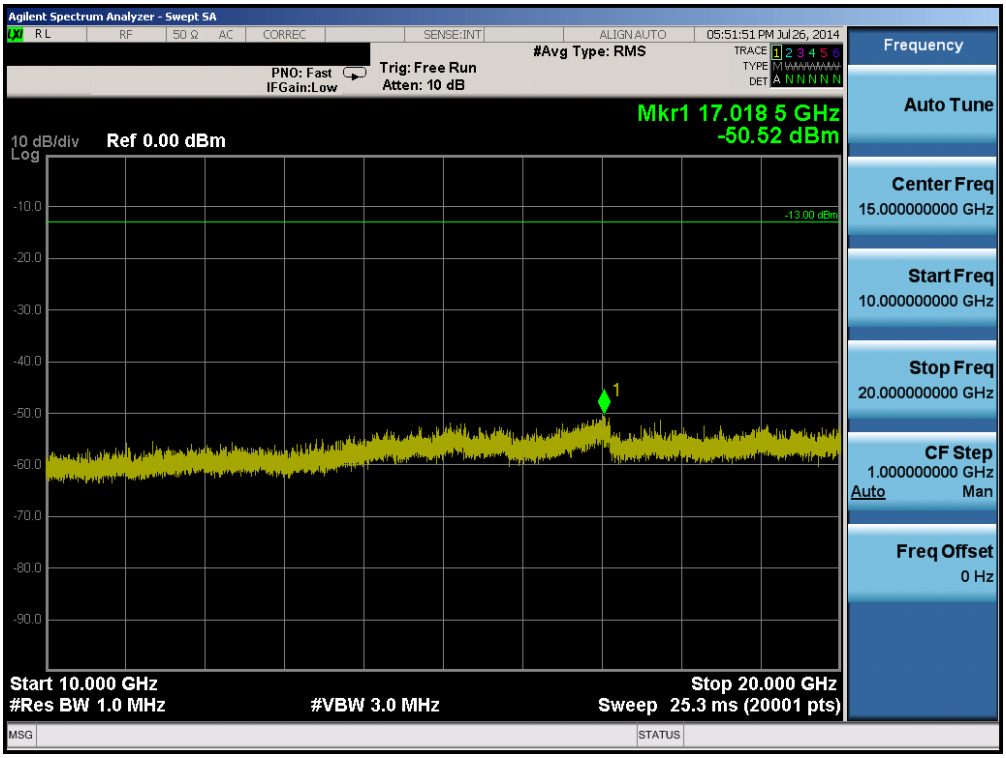


Plot 6-135. Conducted Spurious Plot (Band 2 – 3.0MHz QPSK – RB Size 1, RB Offset 0 – High Channel)



Plot 6-136. Conducted Spurious Plot (Band 2 – 3.0MHz QPSK – RB Size 1, RB Offset 0 – High Channel)

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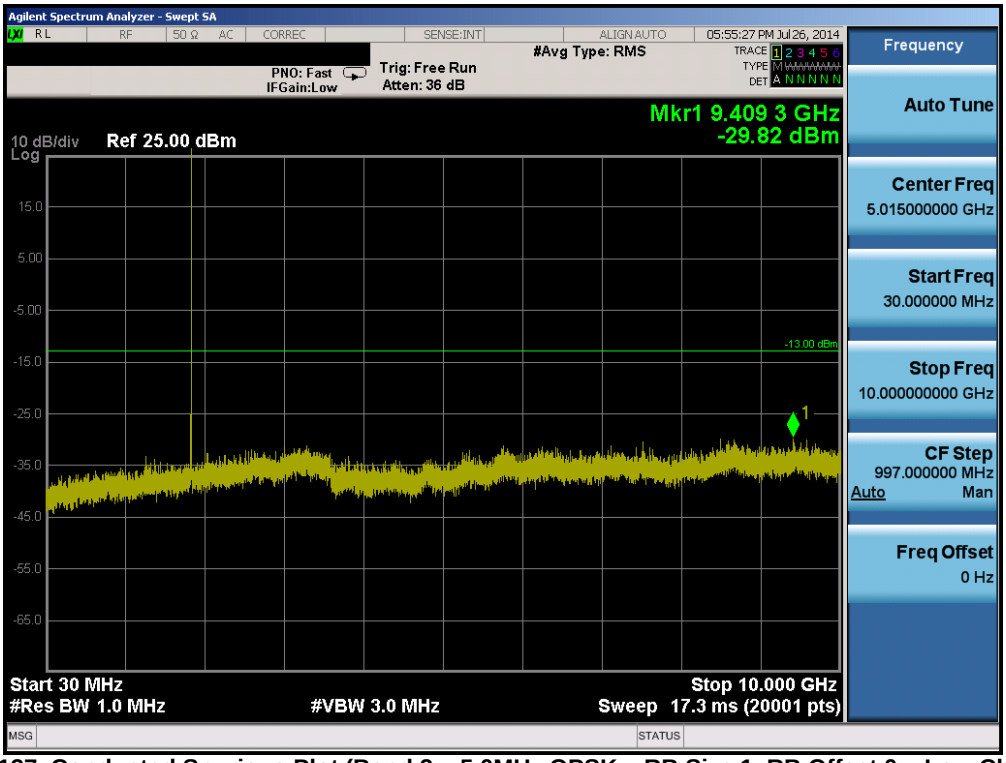
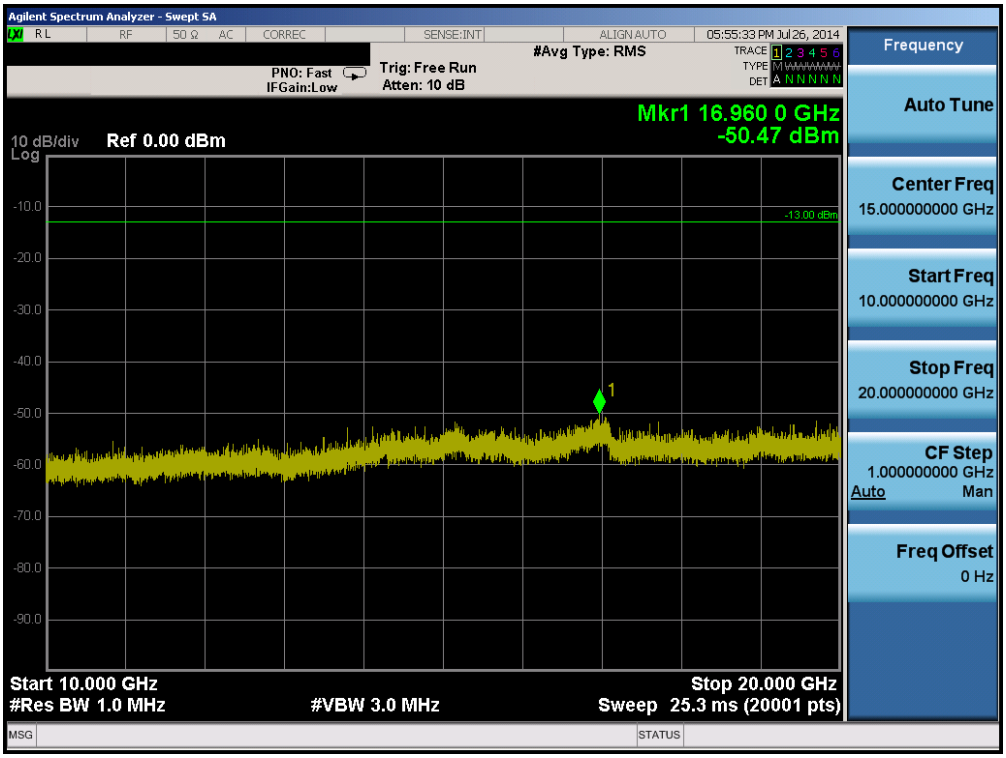


Plot 6-137. Conducted Spurious Plot (Band 2 – 5.0MHz QPSK – RB Size 1, RB Offset 0 – Low Channel)



Plot 6-138. Conducted Spurious Plot (Band 2 – 5.0MHz QPSK – RB Size 1, RB Offset 0 – Low Channel)

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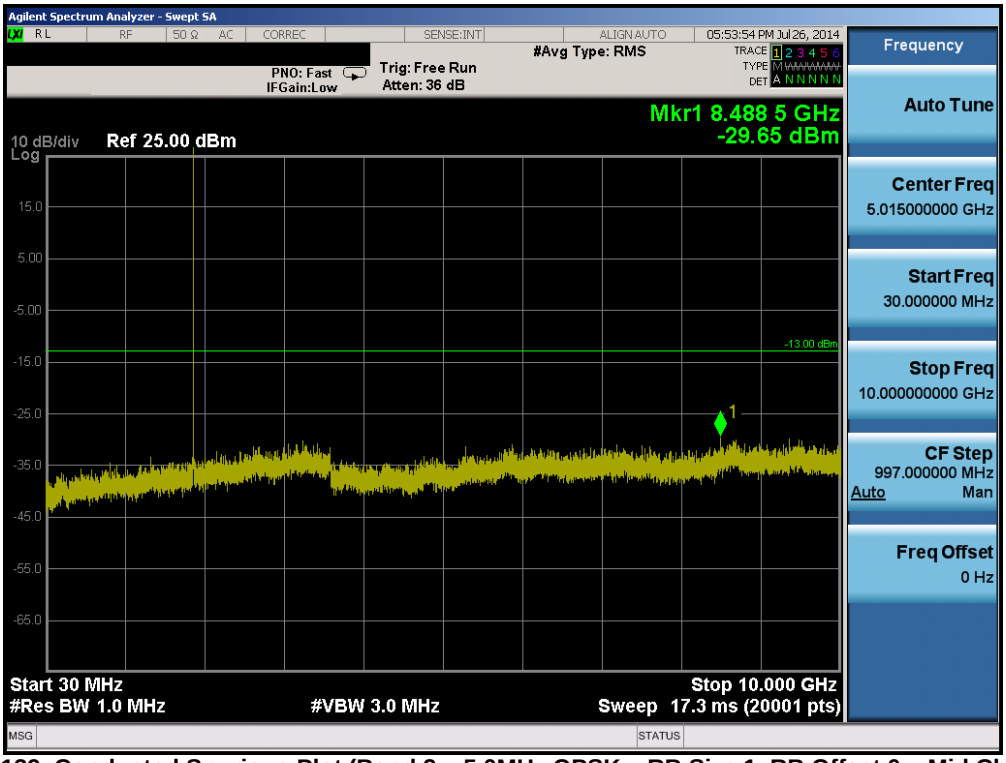
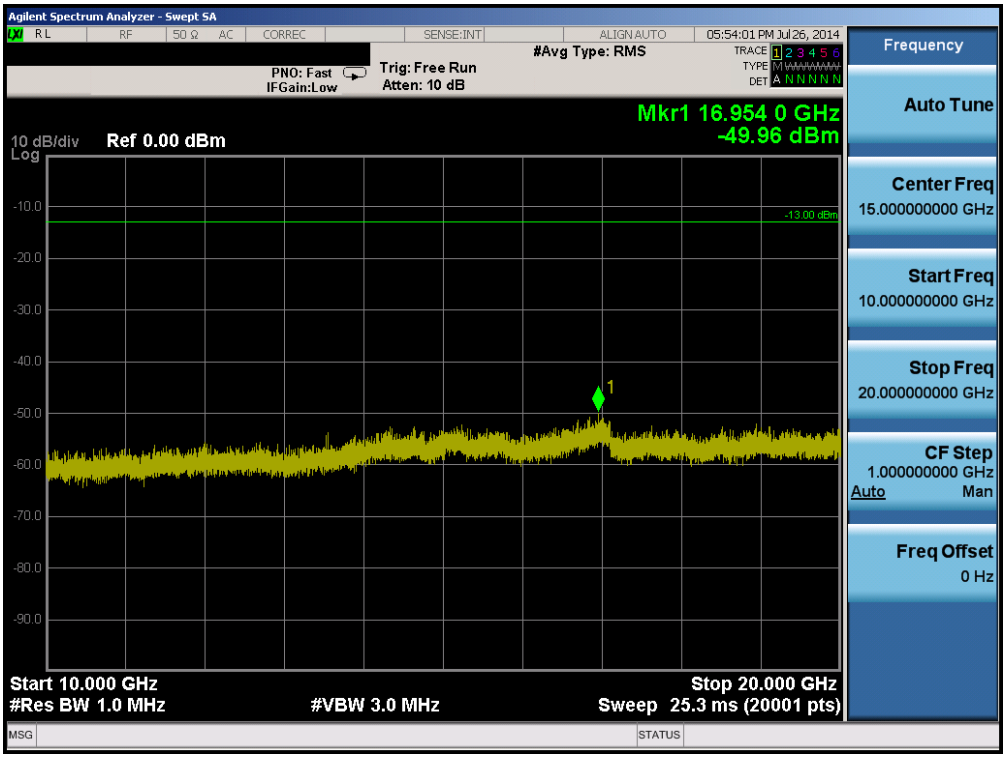


Plot 6-139. Conducted Spurious Plot (Band 2 – 5.0MHz QPSK – RB Size 1, RB Offset 0 – Mid Channel)



Plot 6-140. Conducted Spurious Plot (Band 2 – 5.0MHz QPSK – RB Size 1, RB Offset 0 – Mid Channel)

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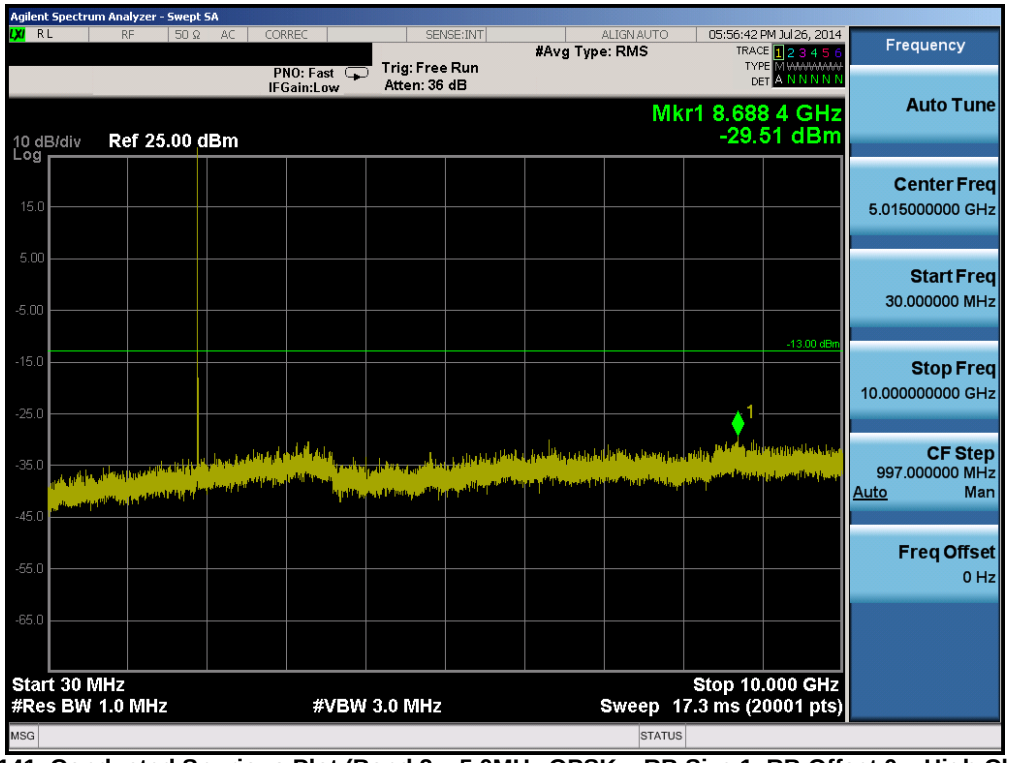
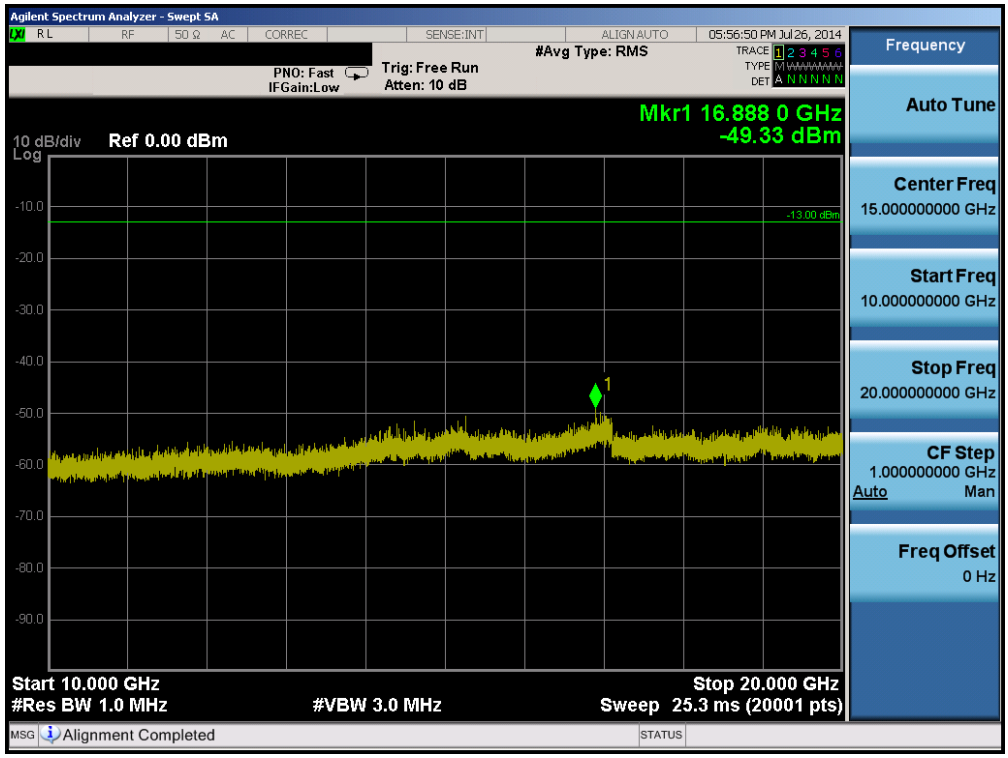


Plot 6-141. Conducted Spurious Plot (Band 2 – 5.0MHz QPSK – RB Size 1, RB Offset 0 – High Channel)



Plot 6-142. Conducted Spurious Plot (Band 2 – 5.0MHz QPSK – RB Size 1, RB Offset 0 – High Channel)

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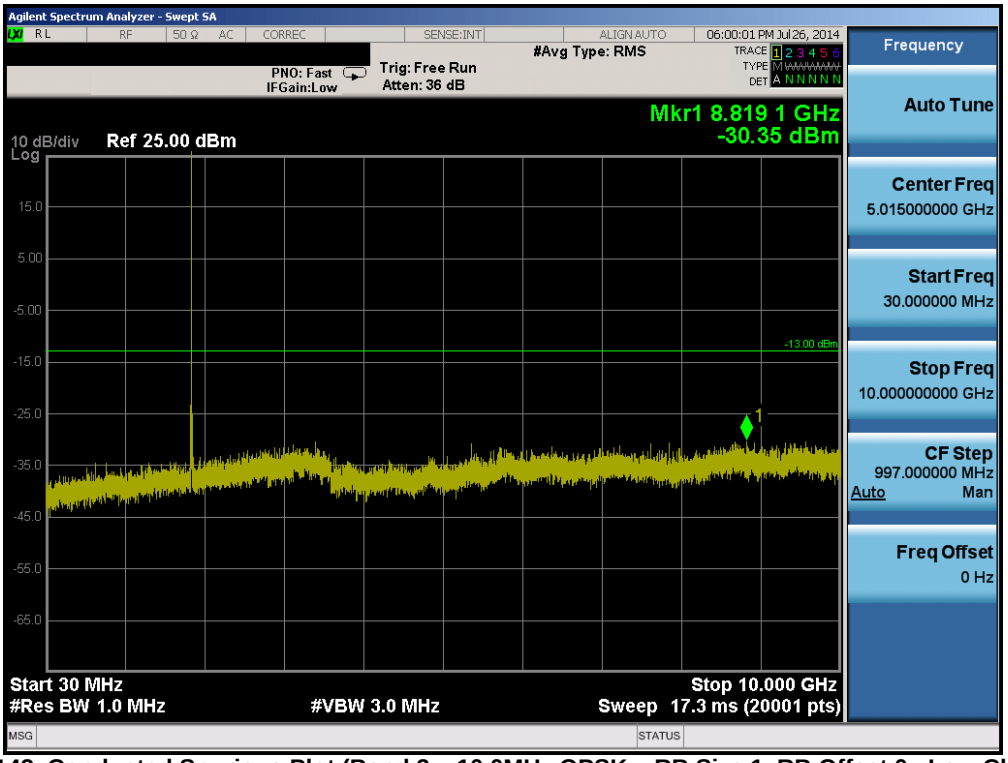
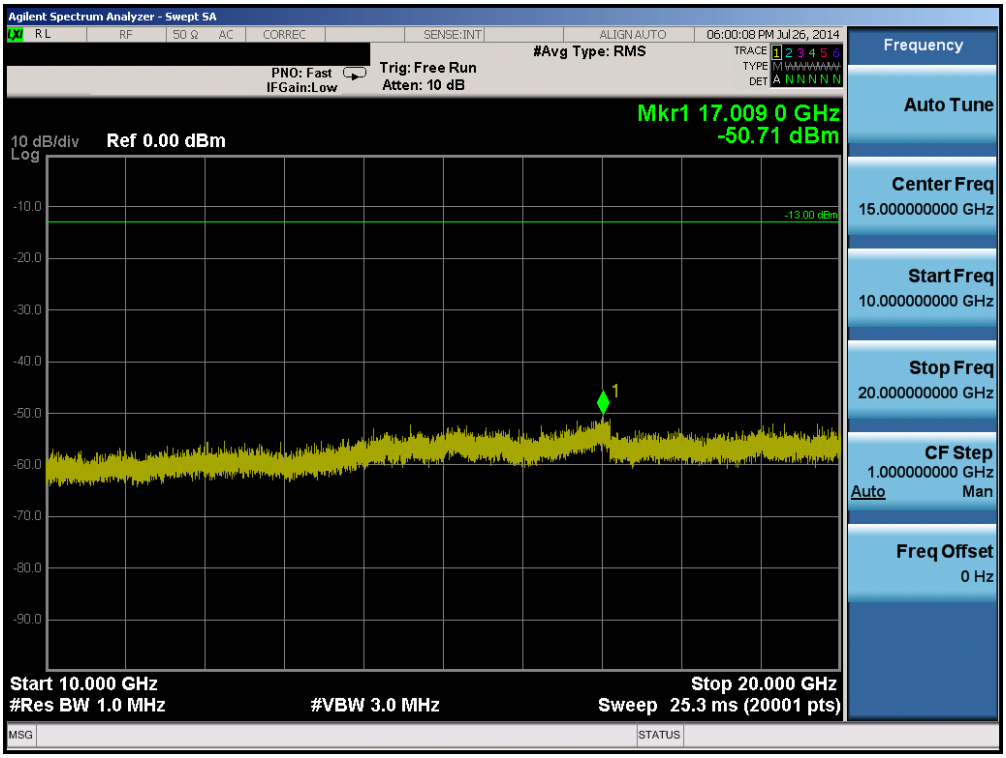


Plot 6-143. Conducted Spurious Plot (Band 2 – 10.0MHz QPSK – RB Size 1, RB Offset 0– Low Channel)



Plot 6-144. Conducted Spurious Plot (Band 2 – 10.0MHz QPSK – RB Size 1, RB Offset 0 – Low Channel)

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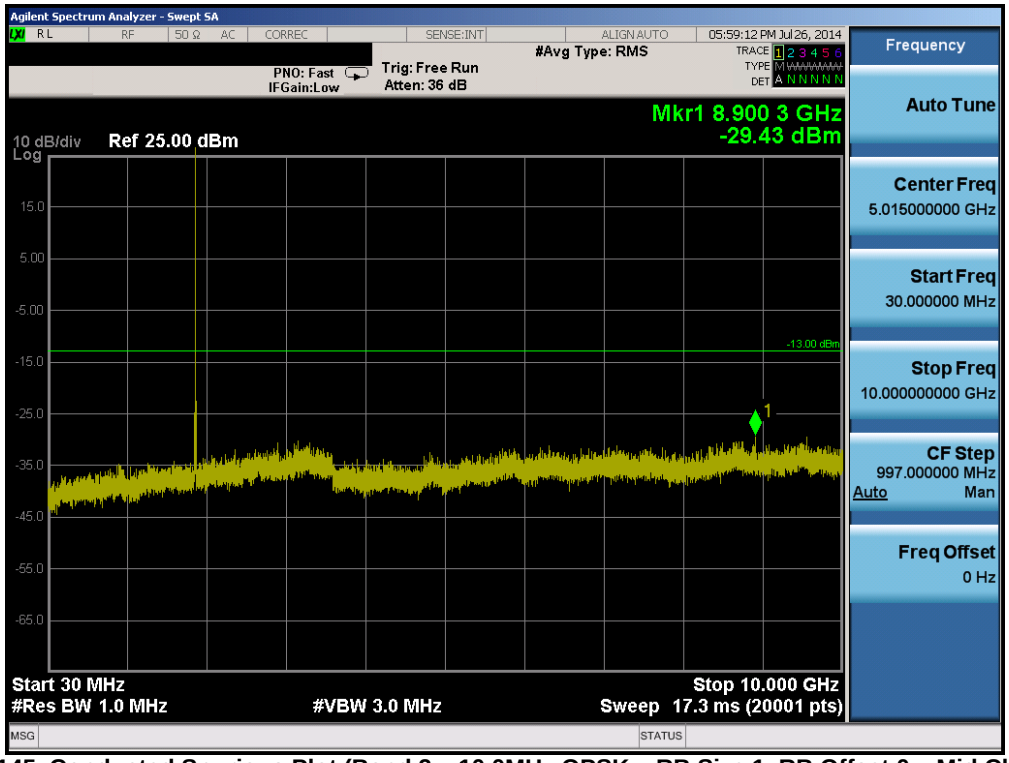
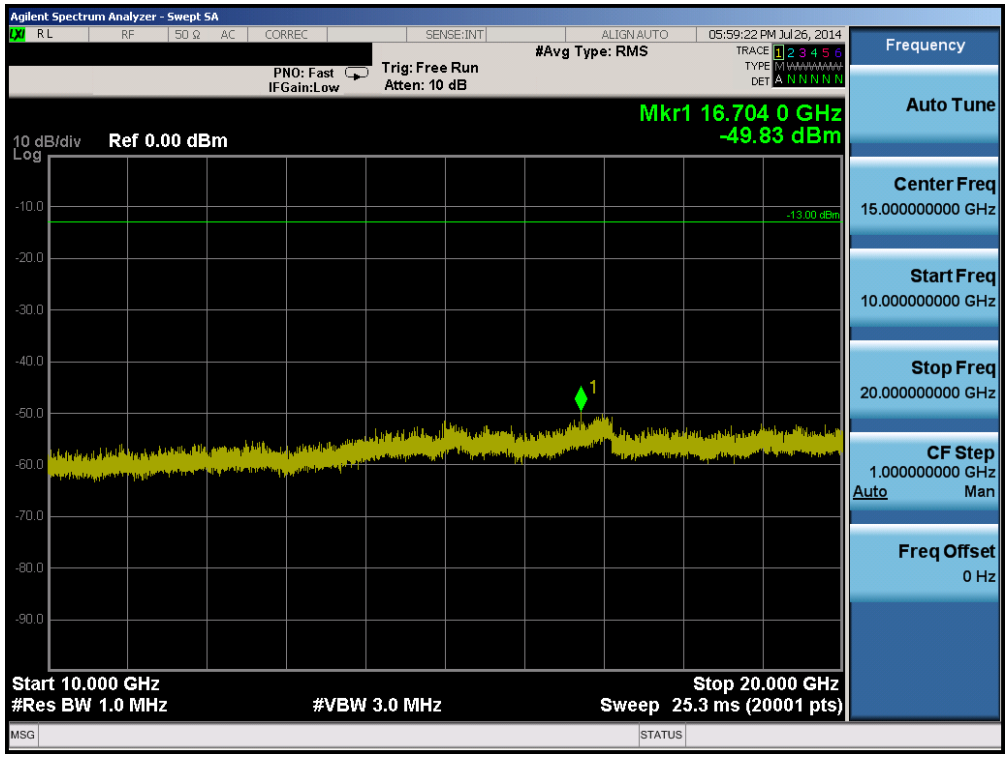


Plot 6-145. Conducted Spurious Plot (Band 2 – 10.0MHz QPSK – RB Size 1, RB Offset 0 – Mid Channel)



Plot 6-146. Conducted Spurious Plot (Band 2 – 10.0MHz QPSK – RB Size 1, RB Offset 0 – Mid Channel)

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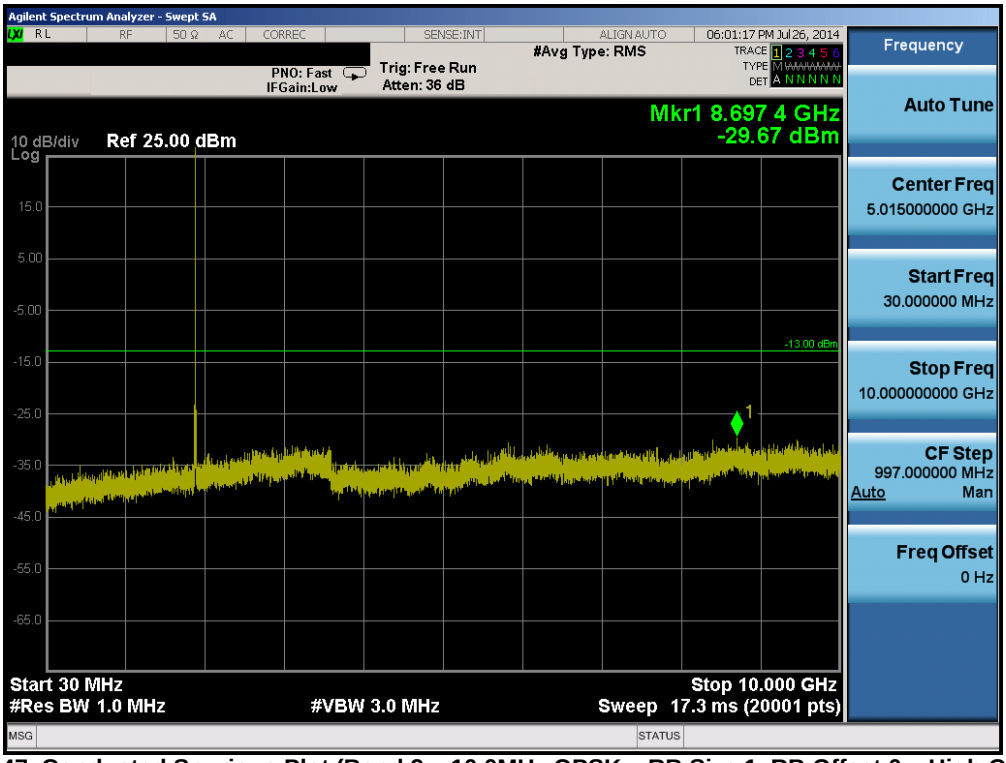
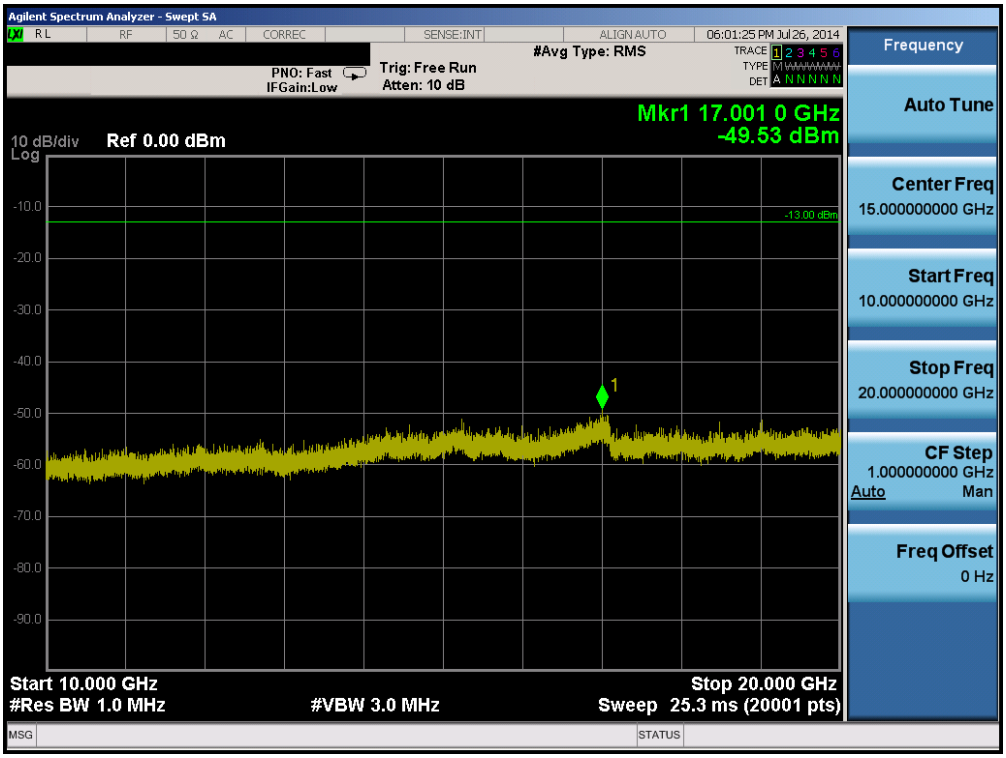


Plot 6-147. Conducted Spurious Plot (Band 2 – 10.0MHz QPSK – RB Size 1, RB Offset 0 – High Channel)



Plot 6-148. Conducted Spurious Plot (Band 2 – 10.0MHz QPSK – RB Size 1, RB Offset 0 – High Channel)

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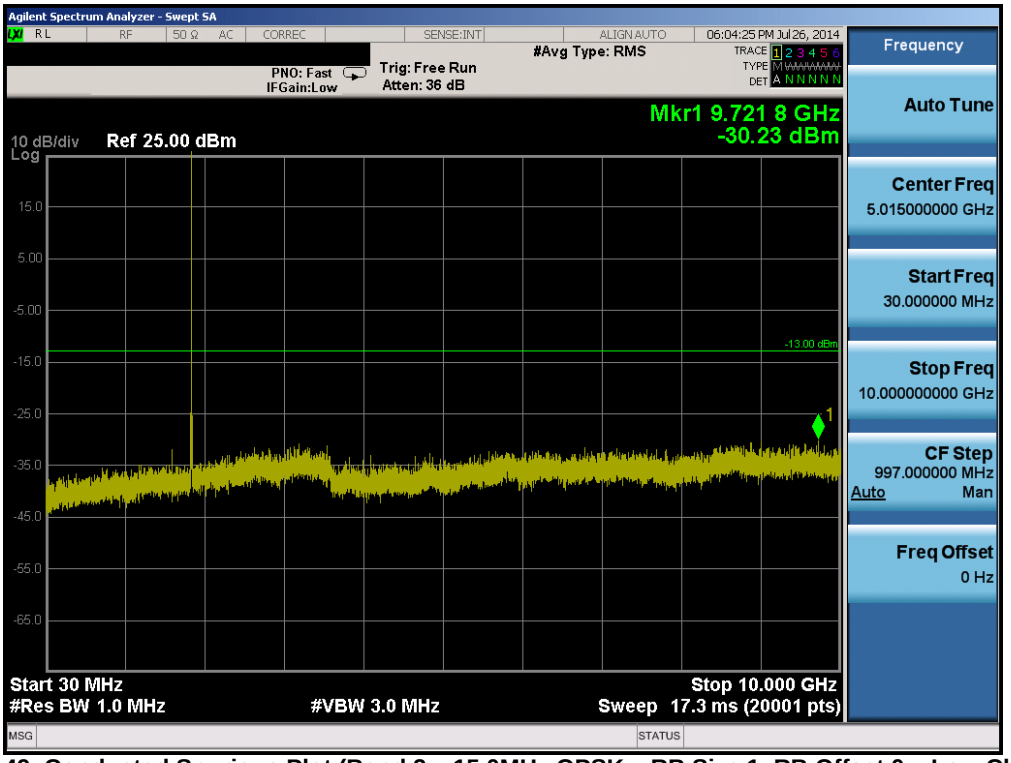
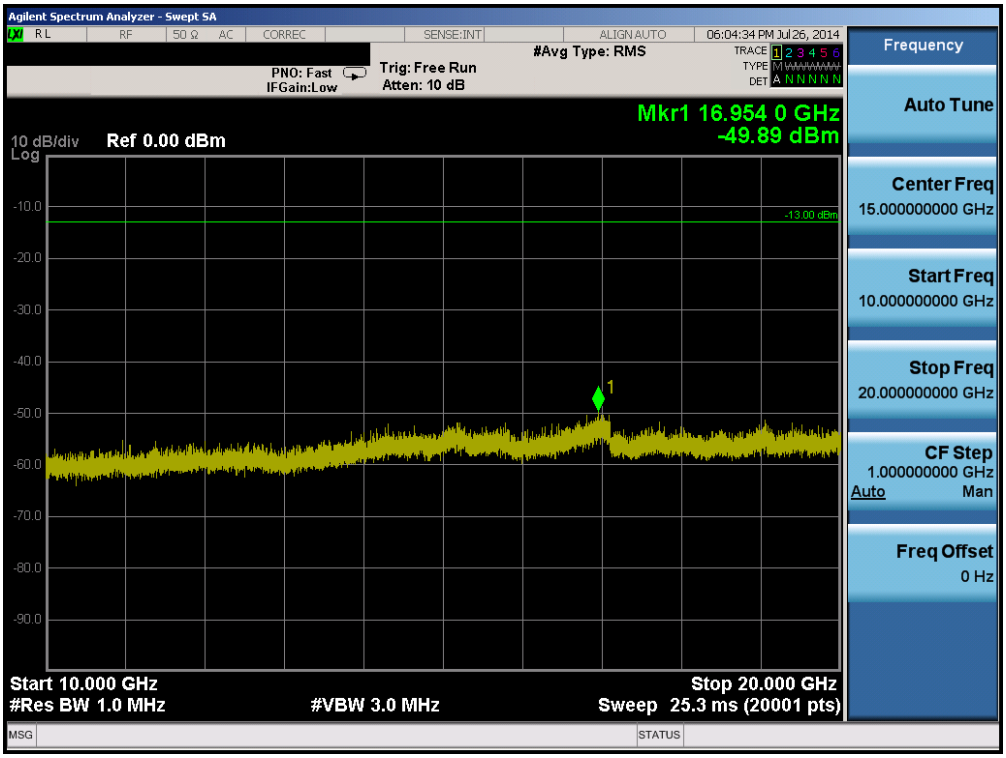


Plot 6-149. Conducted Spurious Plot (Band 2 – 15.0MHz QPSK – RB Size 1, RB Offset 0 – Low Channel)



Plot 6-150. Conducted Spurious Plot (Band 2 – 15.0MHz QPSK – RB Size 1, RB Offset 0 – Low Channel)

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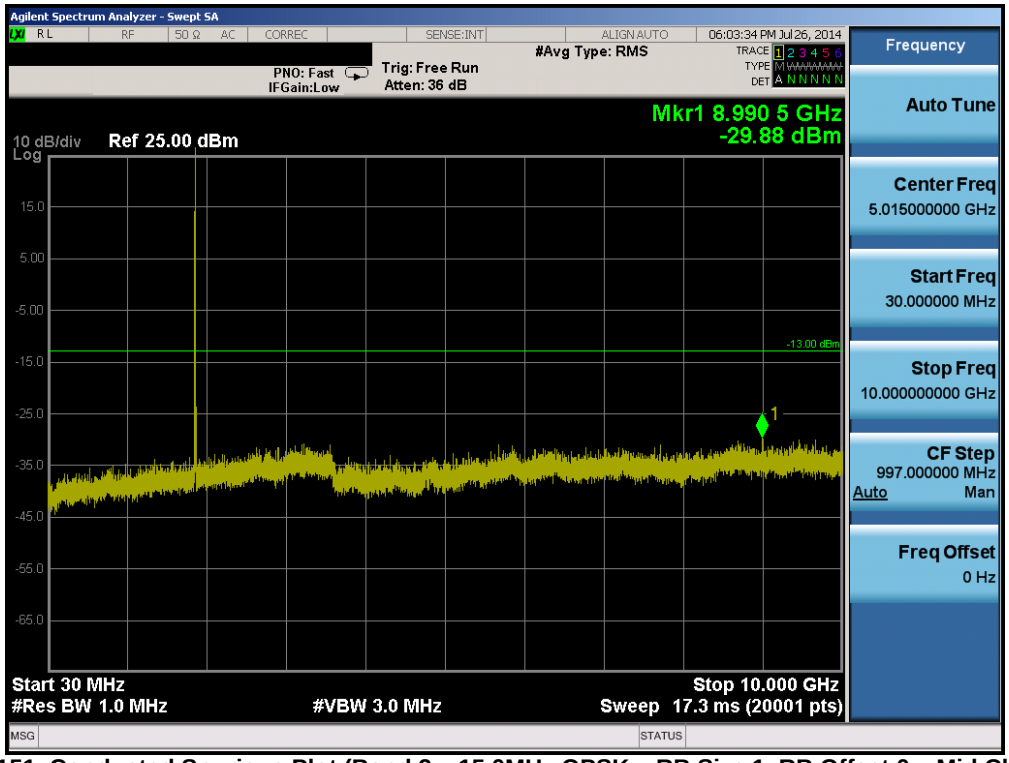
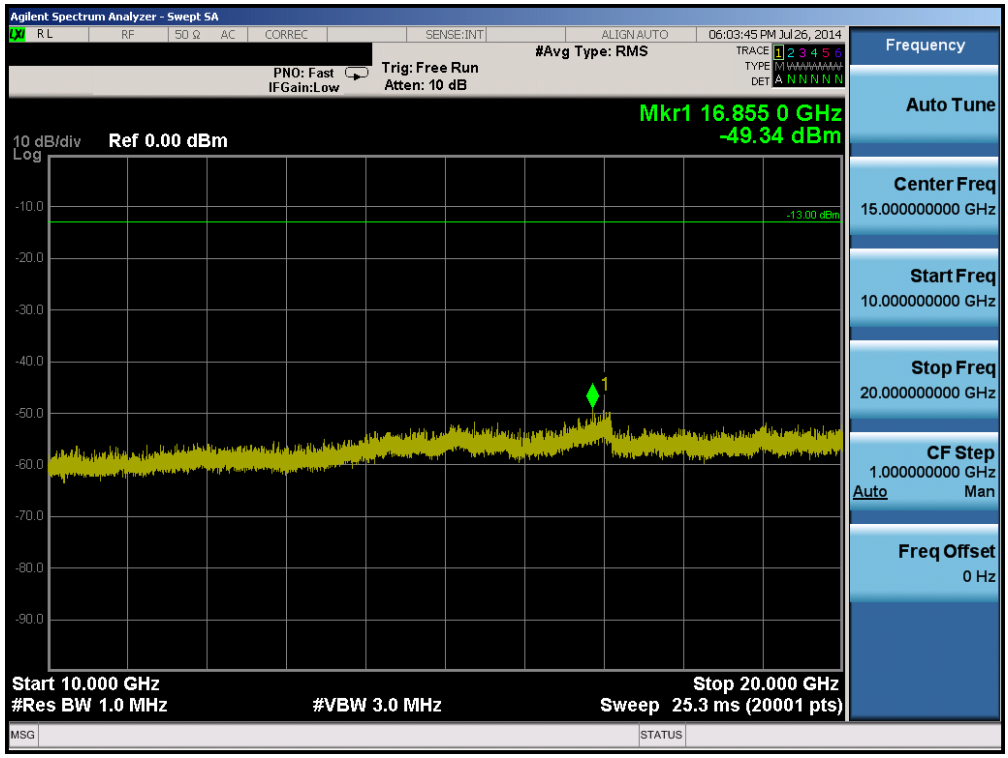


Plot 6-151. Conducted Spurious Plot (Band 2 – 15.0MHz QPSK – RB Size 1, RB Offset 0 – Mid Channel)



Plot 6-152. Conducted Spurious Plot (Band 2 – 15.0MHz QPSK – RB Size 1, RB Offset 0 – Mid Channel)

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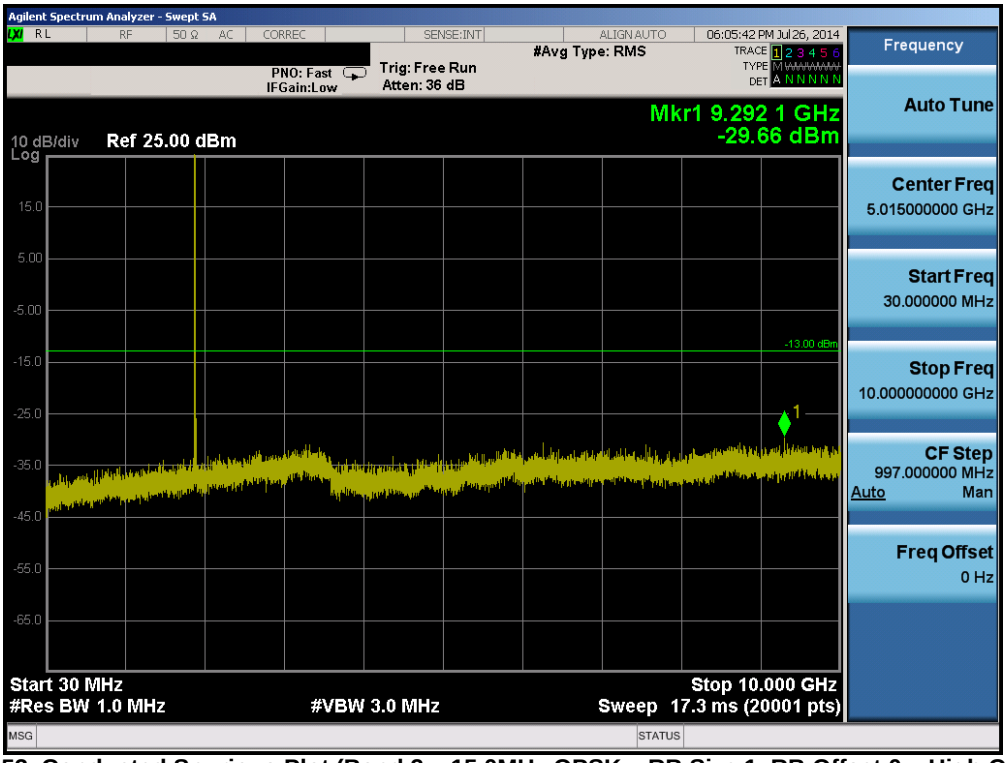
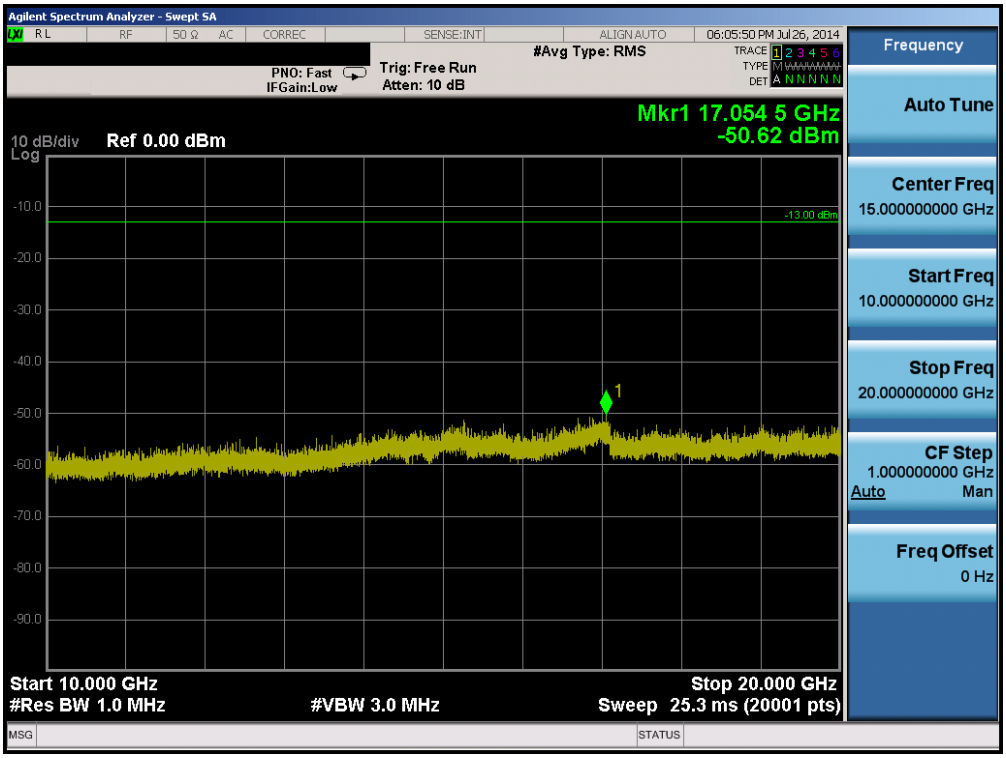


Plot 6-153. Conducted Spurious Plot (Band 2 – 15.0MHz QPSK – RB Size 1, RB Offset 0 – High Channel)



Plot 6-154. Conducted Spurious Plot (Band 2 – 15.0MHz QPSK – RB Size 1, RB Offset 0 – High Channel)

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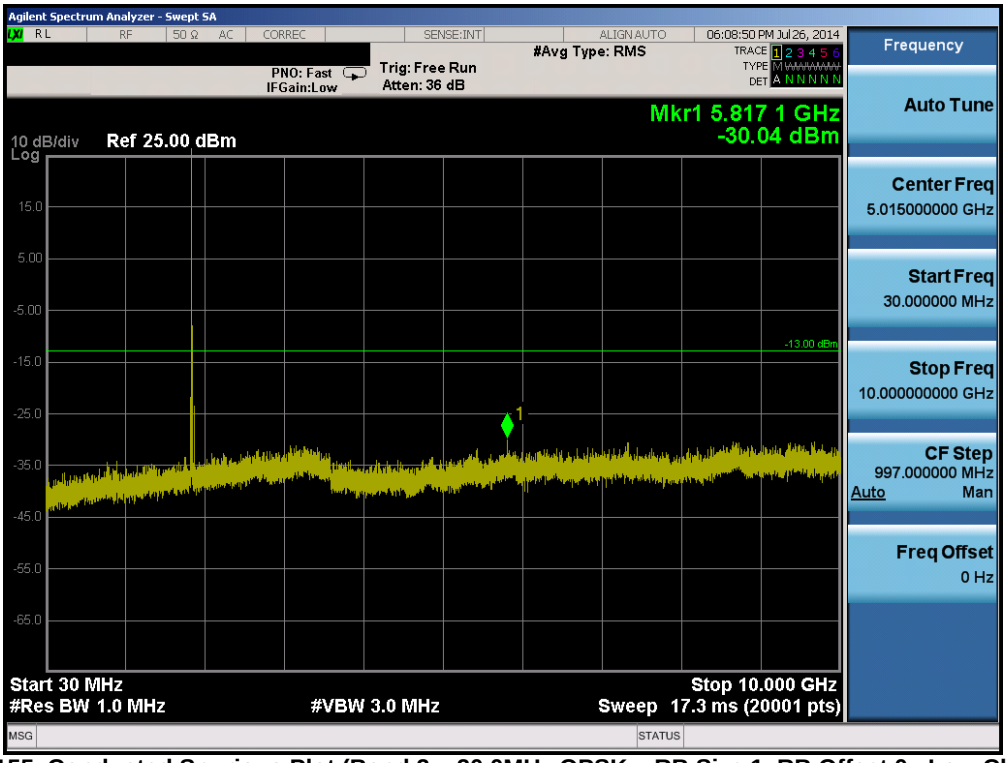
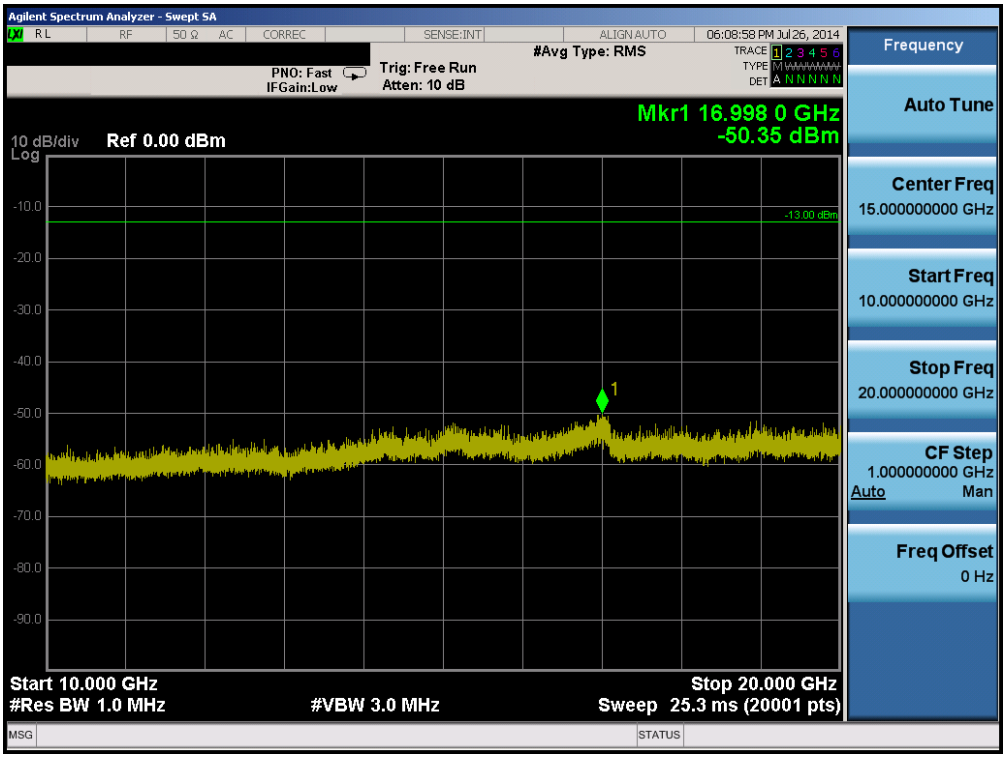


Plot 6-155. Conducted Spurious Plot (Band 2 – 20.0MHz QPSK – RB Size 1, RB Offset 0– Low Channel)



Plot 6-156. Conducted Spurious Plot (Band 2 – 20.0MHz QPSK – RB Size 1, RB Offset 0 – Low Channel)

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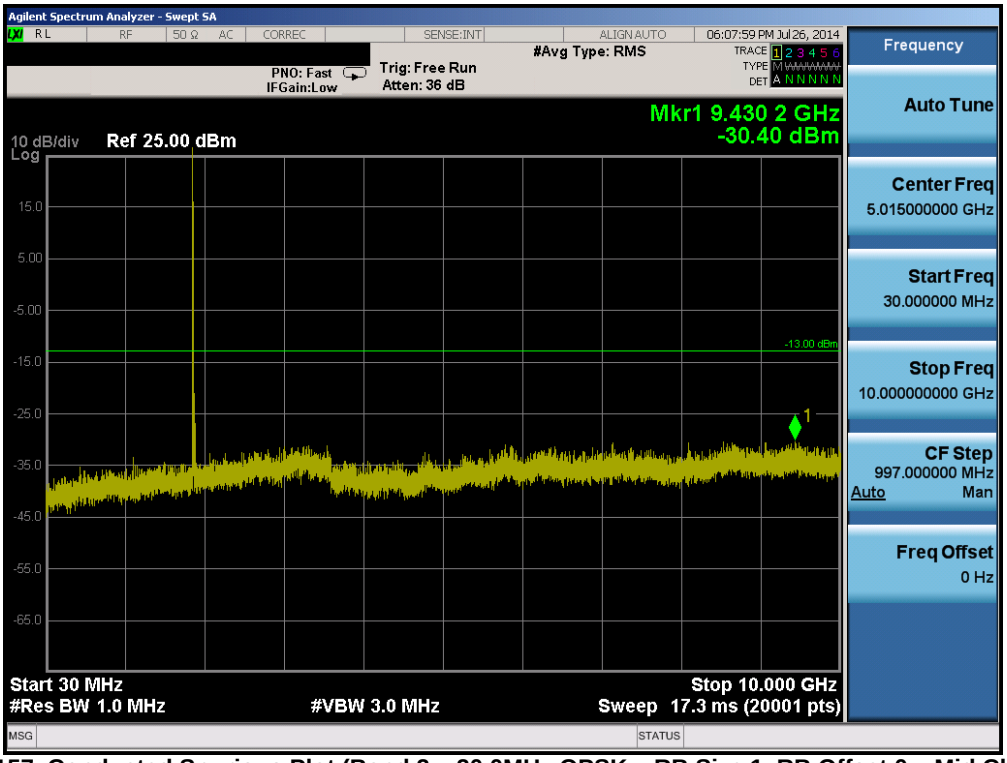
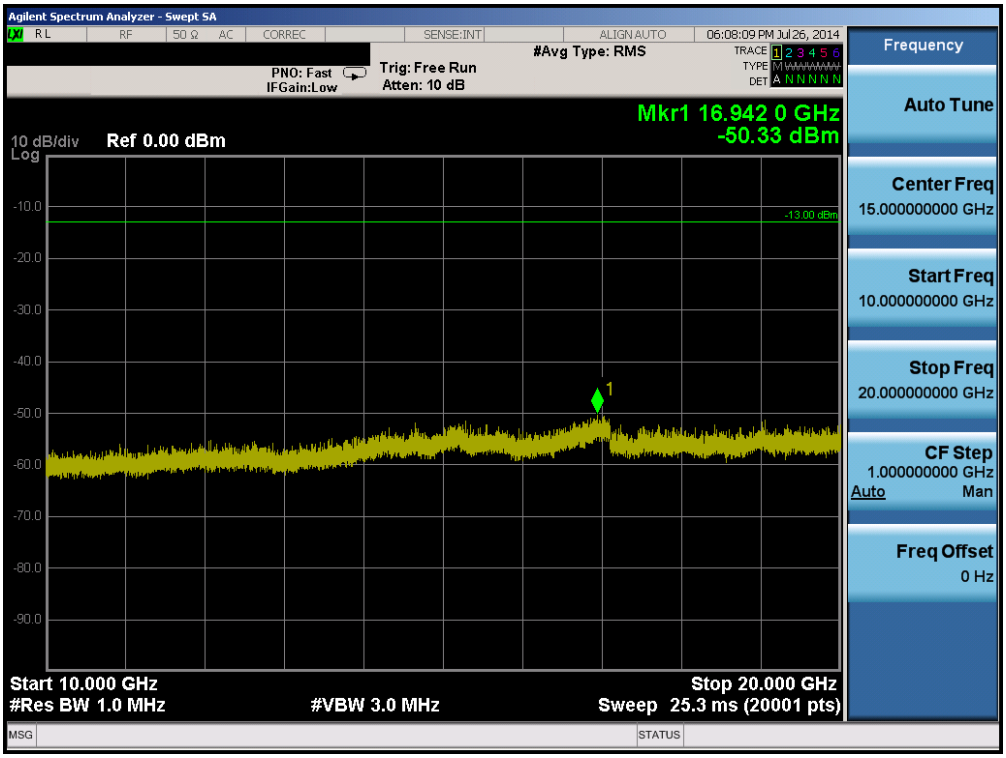


Plot 6-157. Conducted Spurious Plot (Band 2 – 20.0MHz QPSK – RB Size 1, RB Offset 0 – Mid Channel)



Plot 6-158. Conducted Spurious Plot (Band 2 – 20.0MHz QPSK – RB Size 1, RB Offset 0 – Mid Channel)

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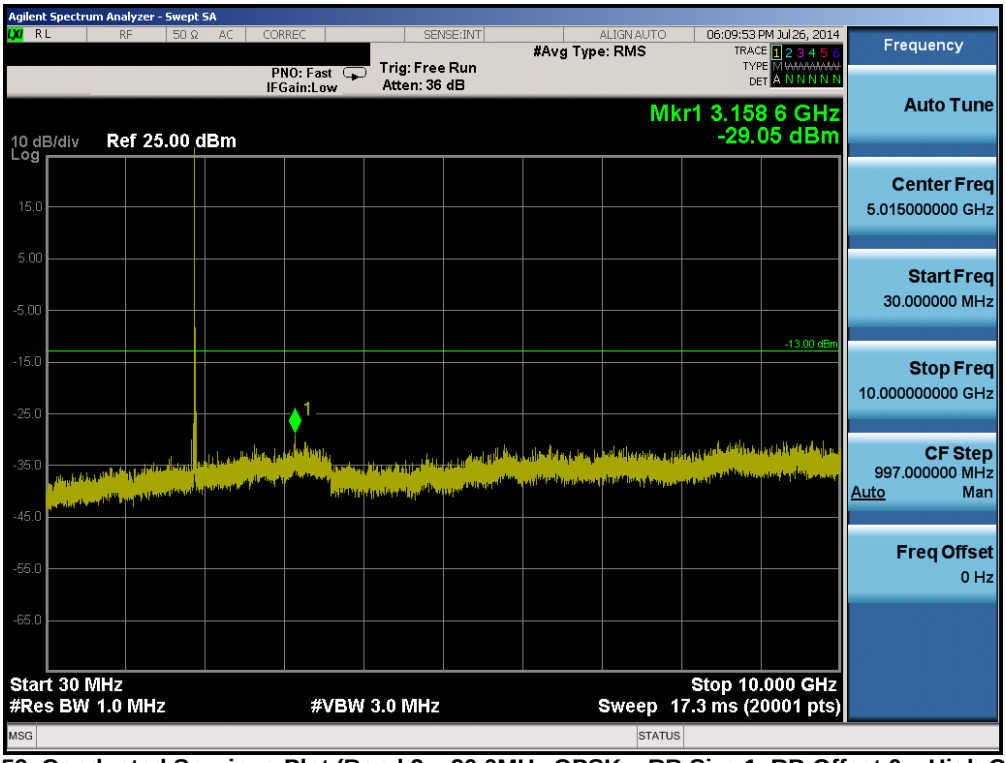
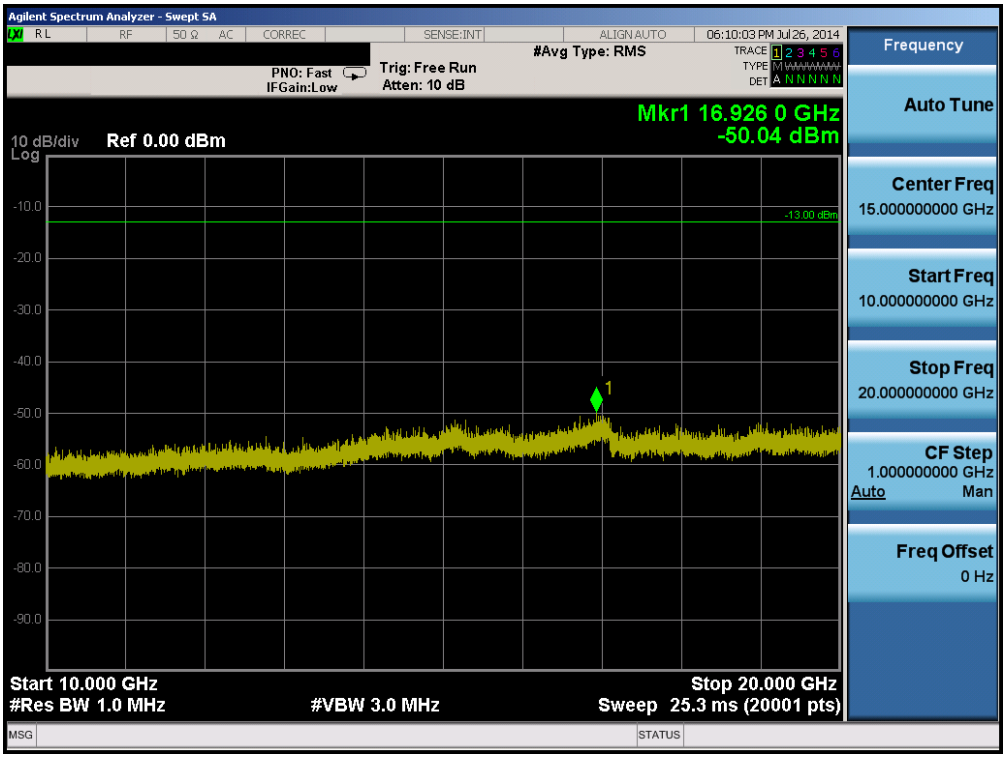


Plot 6-159. Conducted Spurious Plot (Band 2 – 20.0MHz QPSK – RB Size 1, RB Offset 0 – High Channel)



Plot 6-160. Conducted Spurious Plot (Band 2 – 20.0MHz QPSK – RB Size 1, RB Offset 0 – High Channel)

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6.4 Band Edge Emissions at Antenna Terminal

§2.1051 §22.917(a) §24.238(a) §27.53(m) §27.53(m) §27.53(h)

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 + $\log_{10}(P_{[Watts]})$, where P is the transmitter power in Watts.

Test Procedure Used

KDB 971168 v02r01 – 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 ≥ 1% of the emission bandwidth
4. VBW ≥ 3 x RBW
5. Detector = RMS
6. Number of sweep points ≥ 2 x Span/RBW
7. Trace mode = max hold
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.

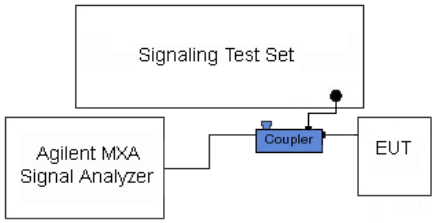

Figure 6-3. Test Instrument & Measurement Setup

Test Notes

Per 22.917(b) 24.238(a) 27.53(h) 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.

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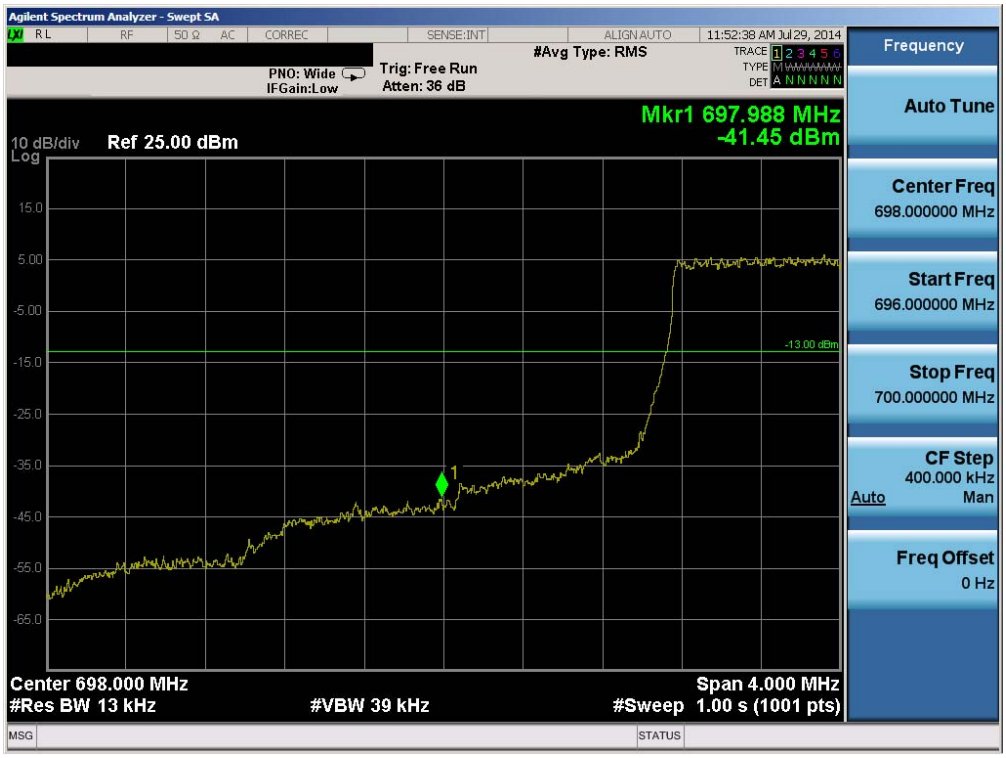

Plot 6-161. Lower Band Edge Plot (Band 12 – 1.4MHz QPSK – RB Size 6)

Plot 6-162. Lower Extended Band Edge Plot (Band 12 – 1.4MHz QPSK – RB Size 6)

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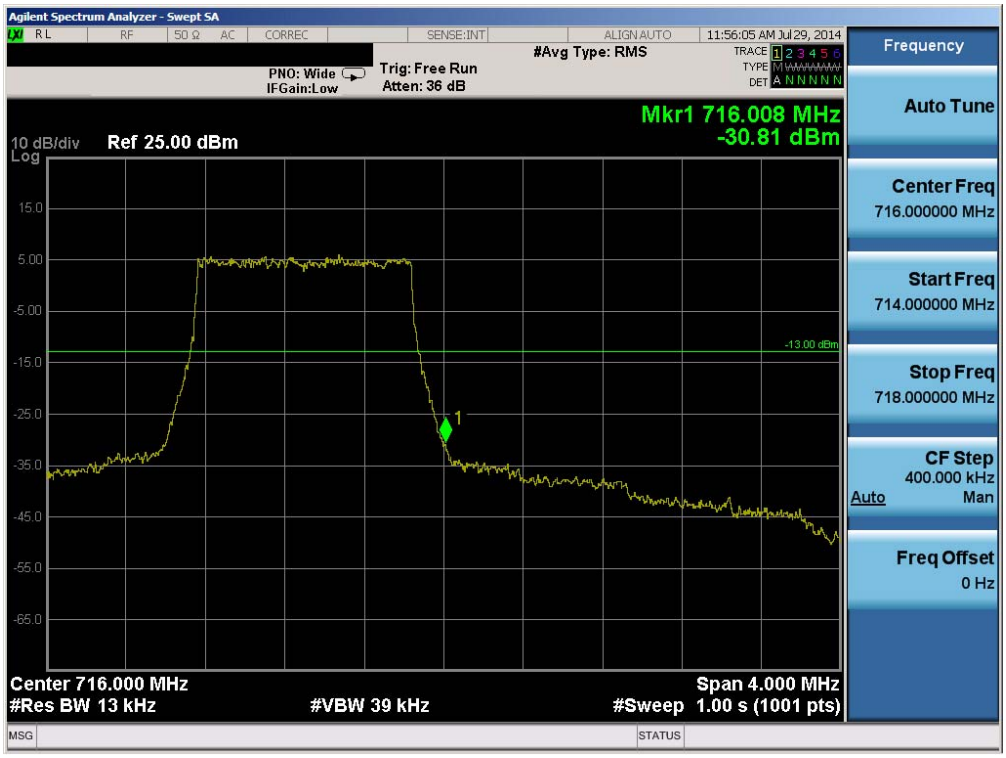

Plot 6-163. Upper Band Edge Plot (Band 12 – 1.4MHz QPSK – RB Size 6)

Plot 6-164. Upper Extended Band Edge Plot (Band 12 – 1.4MHz QPSK – RB Size 6)

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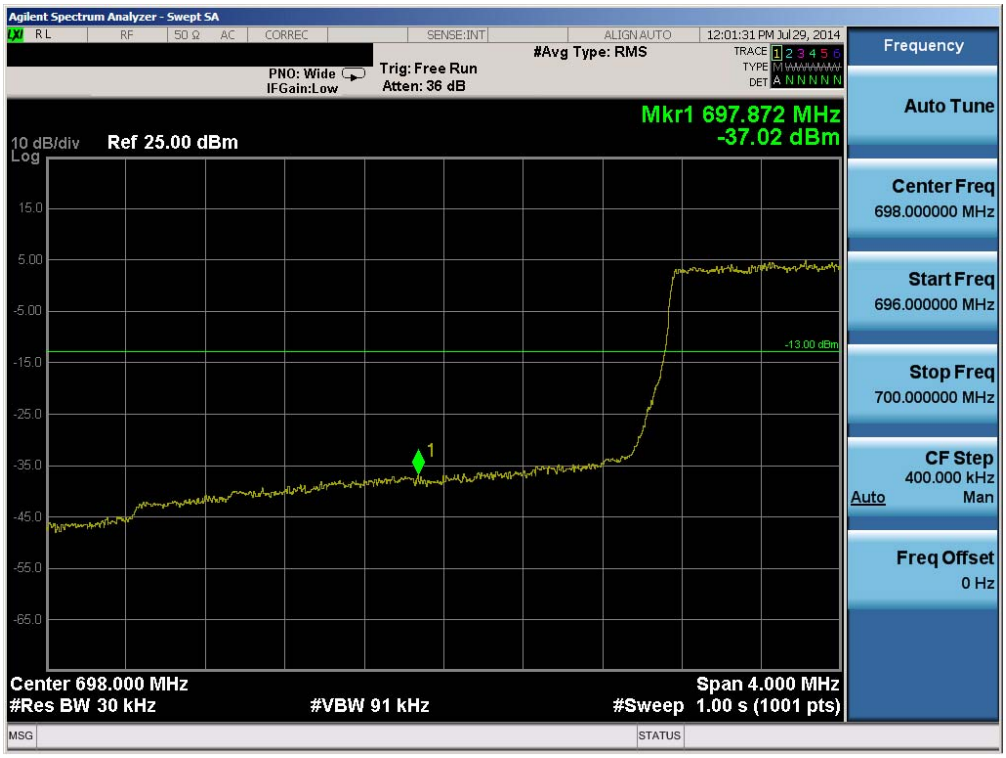
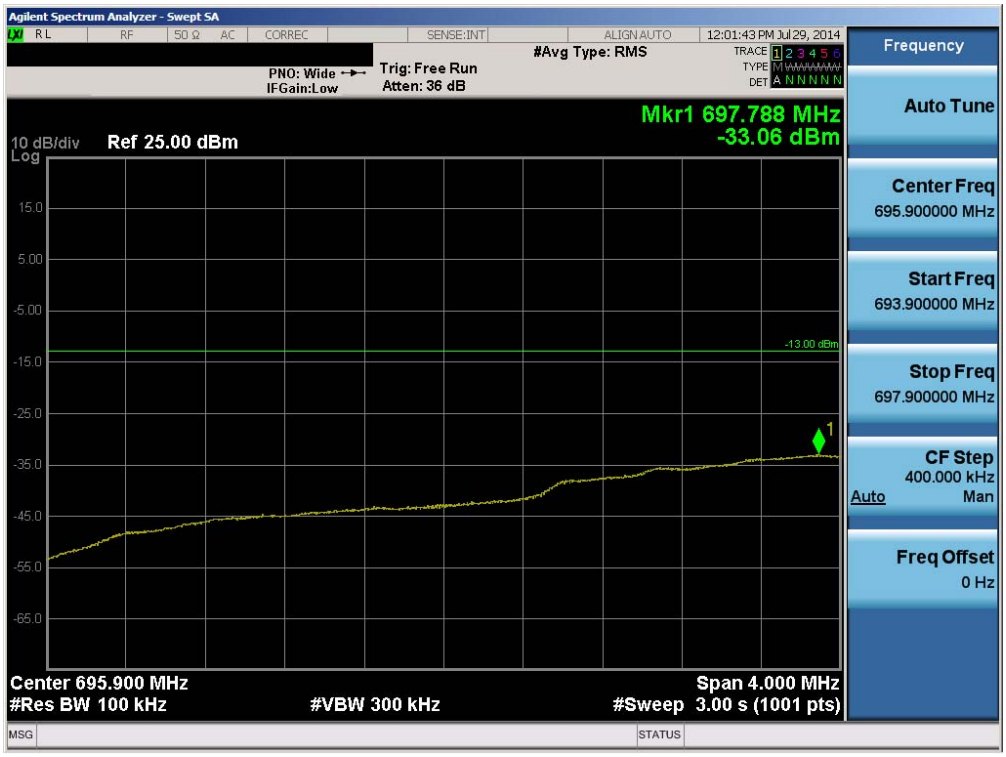


Plot 6-165. Lower Band Edge Plot (Band 12 – 3.0MHz QPSK – RB Size 15)



Plot 6-166. Lower Extended Band Edge Plot (Band 12 – 3.0MHz QPSK – RB Size 15)

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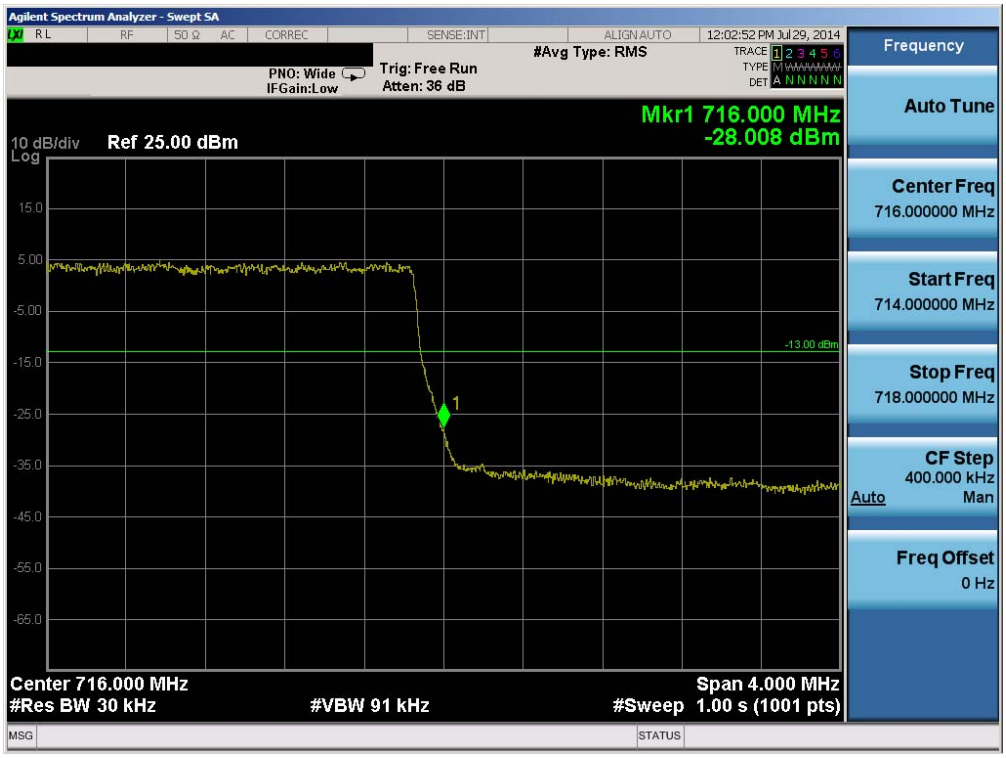
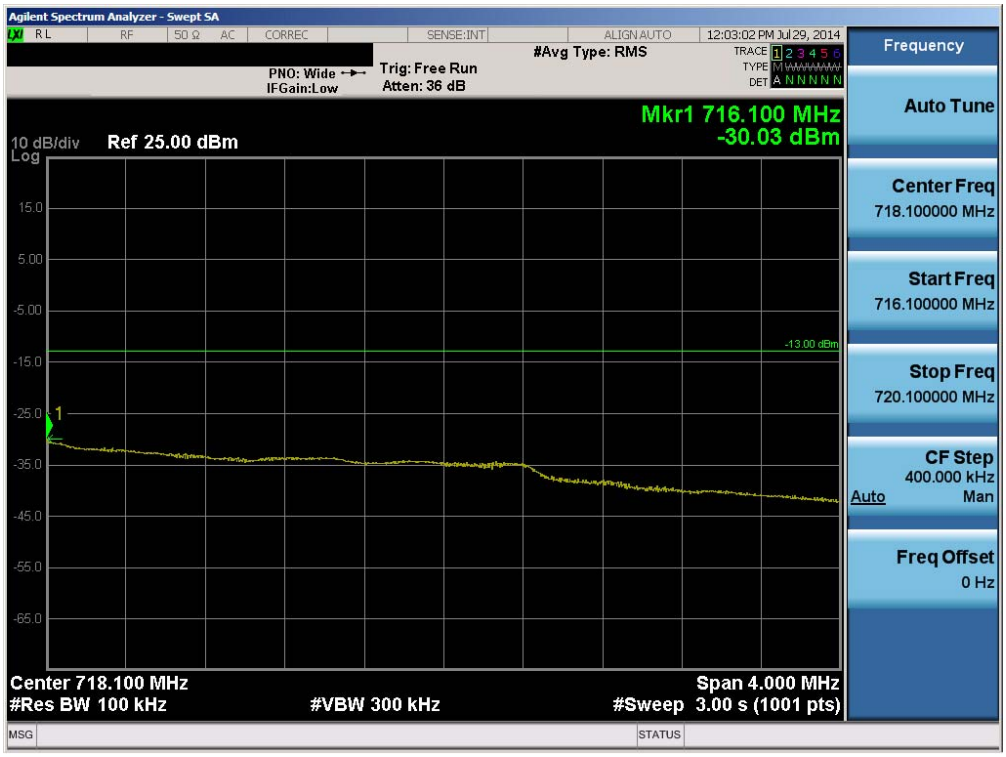


Plot 6-167. Upper Band Edge Plot (Band 12 – 3.0MHz QPSK – RB Size 15)



Plot 6-168. Upper Extended Band Edge Plot (Band 12 – 3.0MHz QPSK – RB Size 15)

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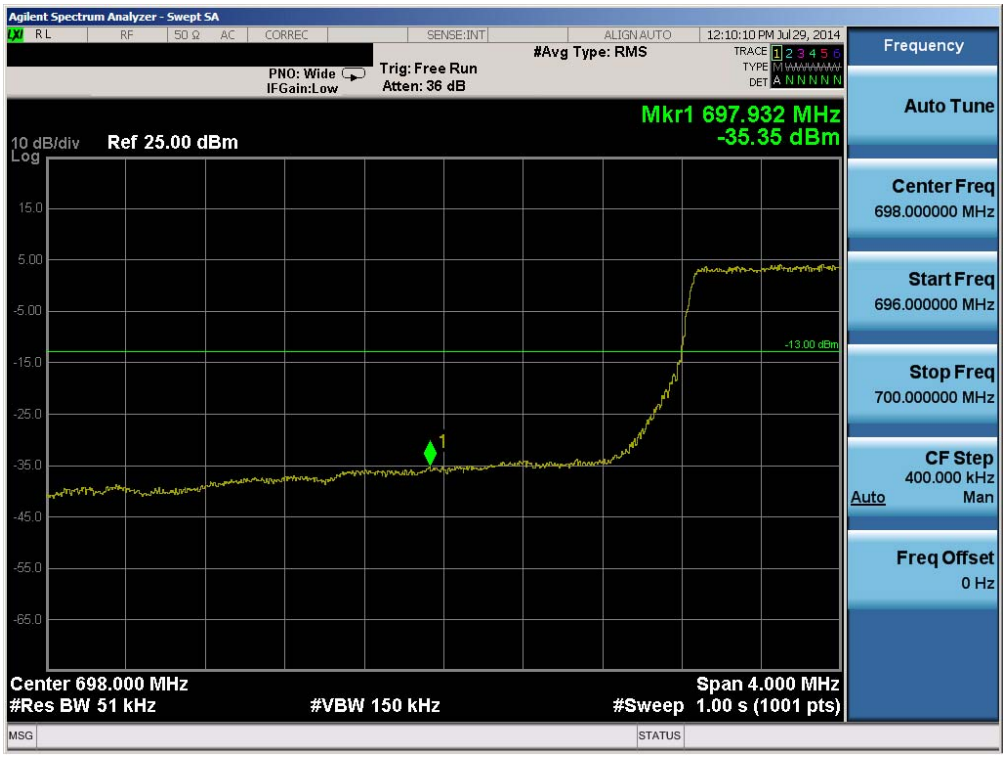
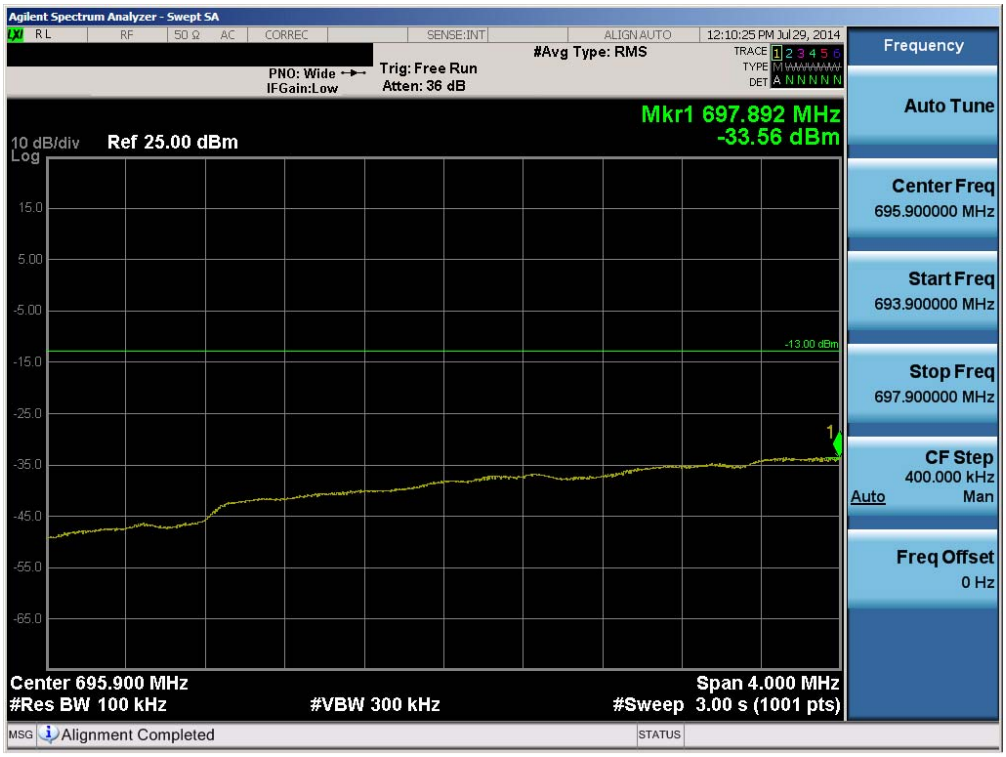


Plot 6-169. Lower Band Edge Plot (Band 12 – 5.0MHz QPSK – RB Size 25)



Plot 6-170. Lower Extended Band Edge Plot (Band 12 – 5.0MHz QPSK – RB Size 25)

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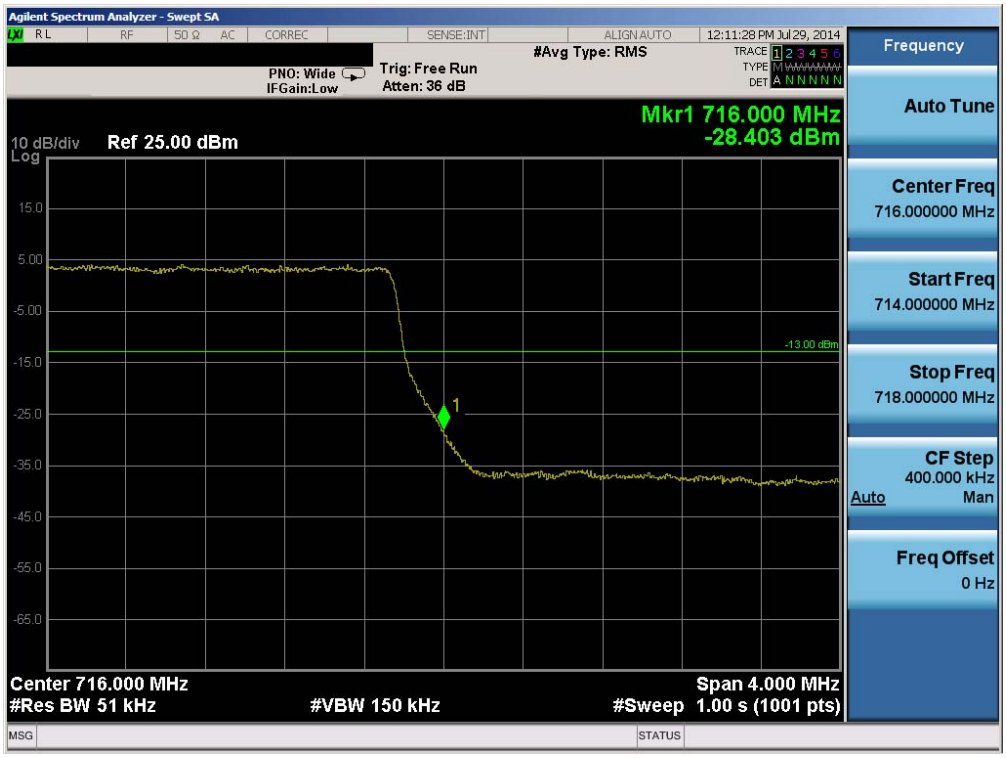

Plot 6-171. Upper Band Edge Plot (Band 12 – 5.0MHz QPSK – RB Size 25)

Plot 6-172. Upper Extended Band Edge Plot (Band 12 – 5.0MHz QPSK – RB Size 25)

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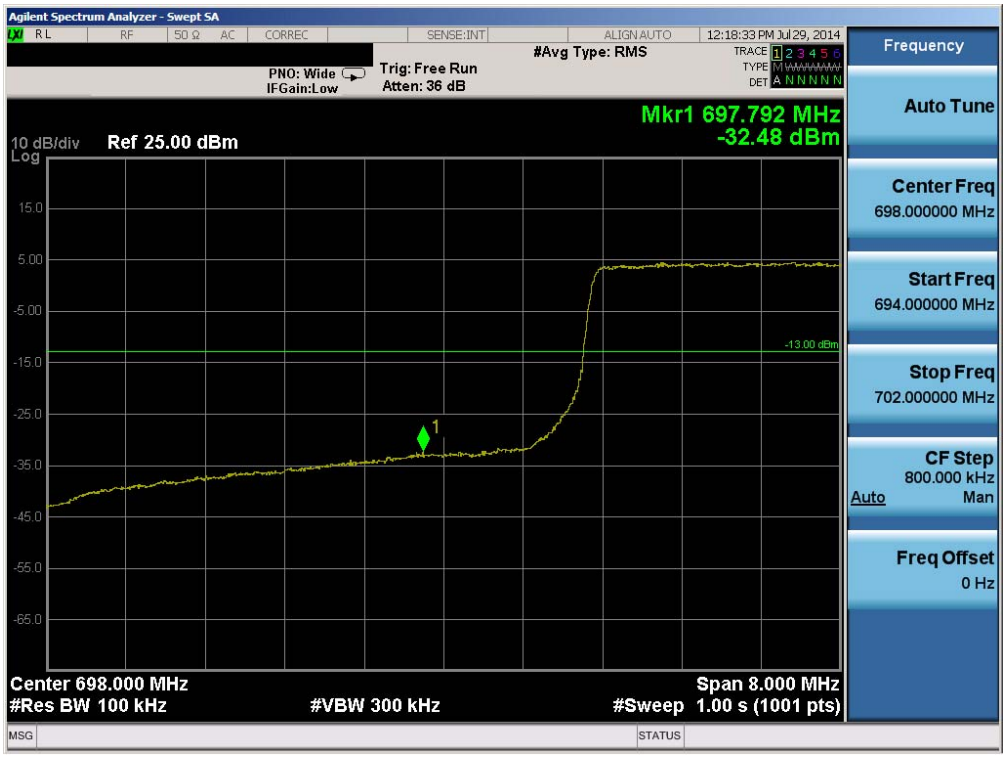

Plot 6-173. Lower Band Edge Plot (Band 12 – 10.0MHz QPSK – RB Size 50)

Plot 6-174. Lower Extended Band Edge Plot (Band 12 – 10.0MHz QPSK – RB Size 50)

Plot 6-175. Upper Band Edge Plot (Band 12 – 10.0MHz QPSK – RB Size 50)

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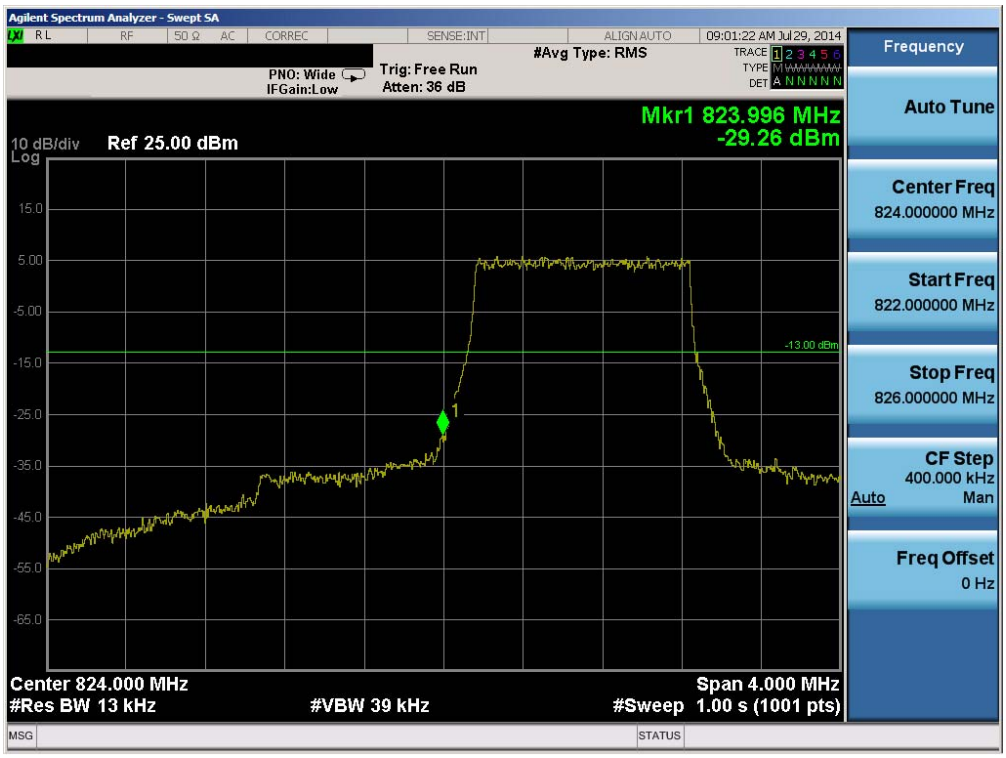

Plot 6-176. Lower Band Edge Plot (Band 5 – 1.4MHz QPSK – RB Size 6)

Plot 6-177. Lower Extended Band Edge Plot (Band 5 – 1.4MHz QPSK – RB Size 6)

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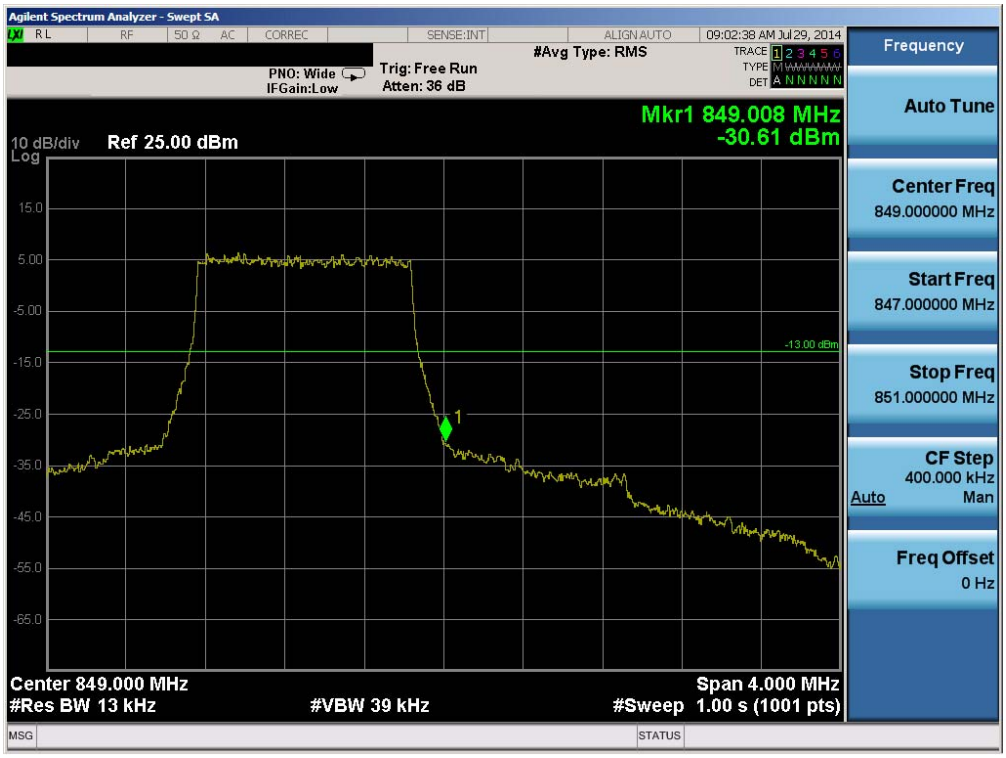

Plot 6-178. Upper Band Edge Plot (Band 5 – 1.4MHz QPSK – RB Size 6)

Plot 6-179. Upper Extended Band Edge Plot (Band 5 – 1.4MHz QPSK – RB Size 6)

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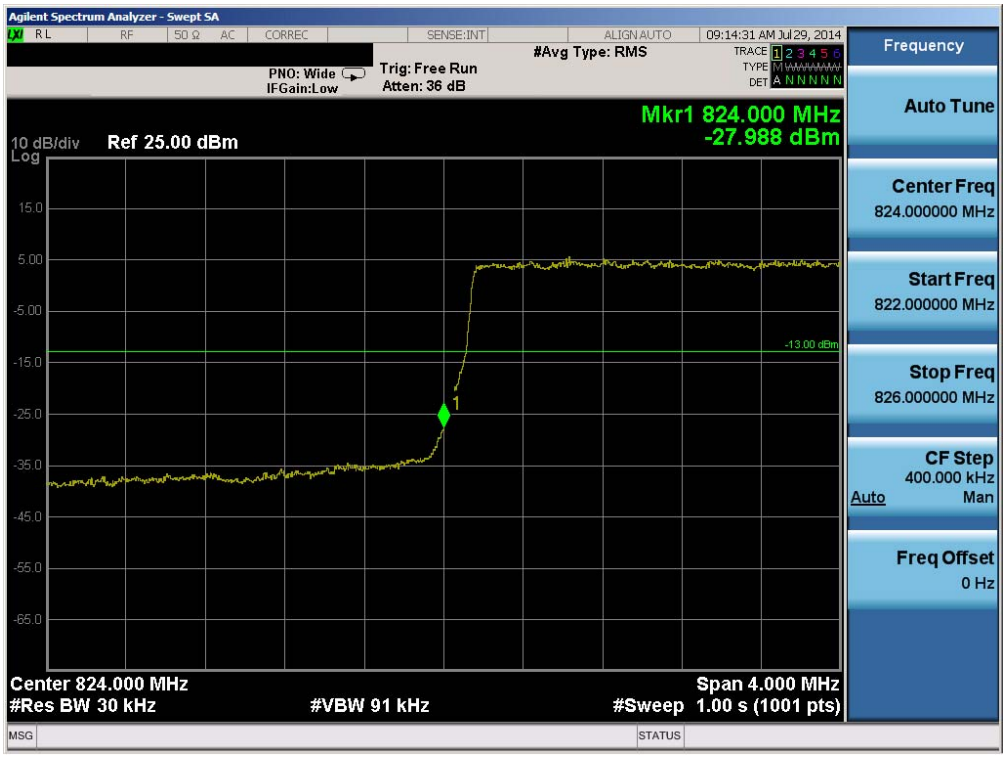

Plot 6-180. Lower Band Edge Plot (Band 5 – 3.0MHz QPSK – RB Size 15)

Plot 6-181. Lower Extended Band Edge Plot (Band 5 – 3.0MHz QPSK – RB Size 15)

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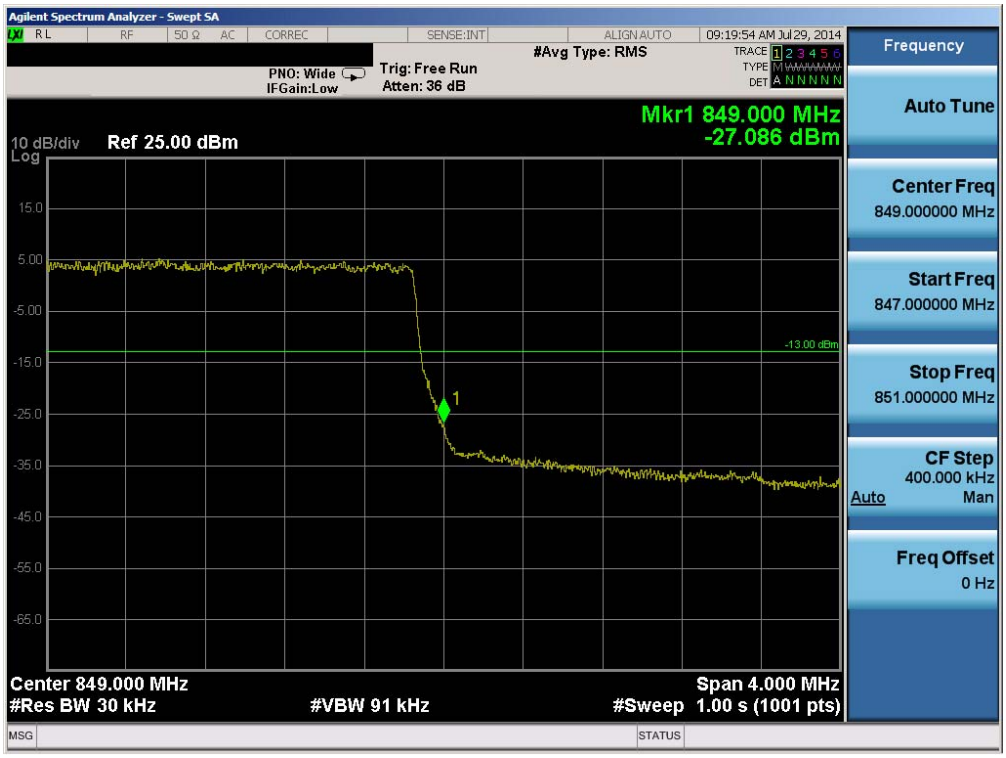

Plot 6-182. Upper Band Edge Plot (Band 5 – 3.0MHz QPSK – RB Size 15)

Plot 6-183. Upper Extended Band Edge Plot (Band 5 – Band 5 – 3.0MHz QPSK – RB Size 15)

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