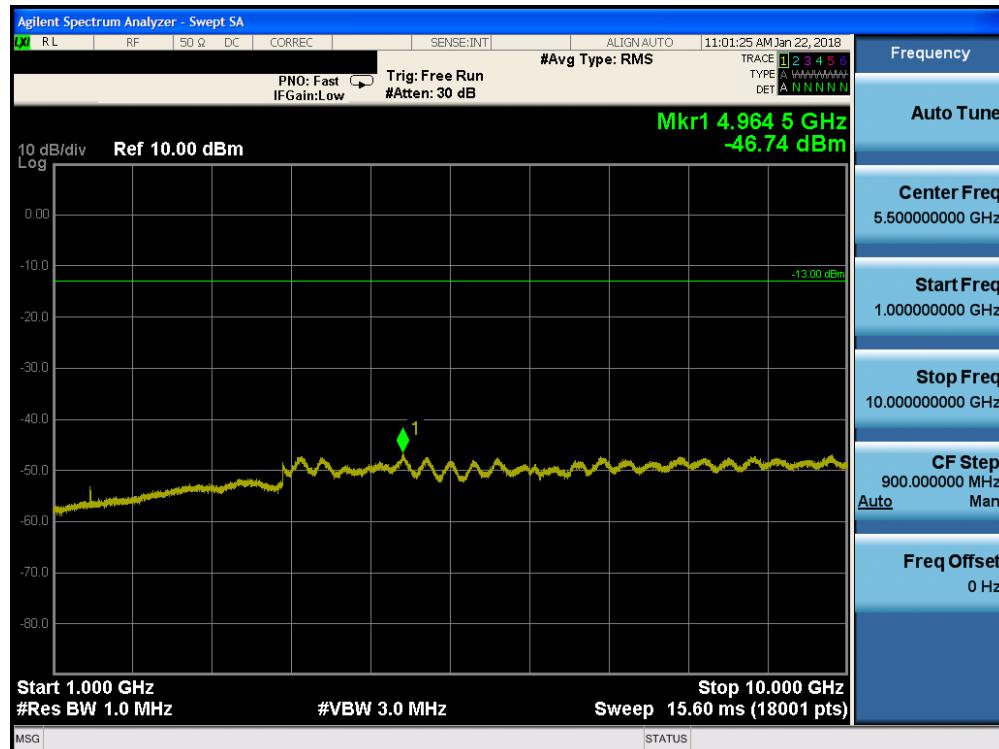
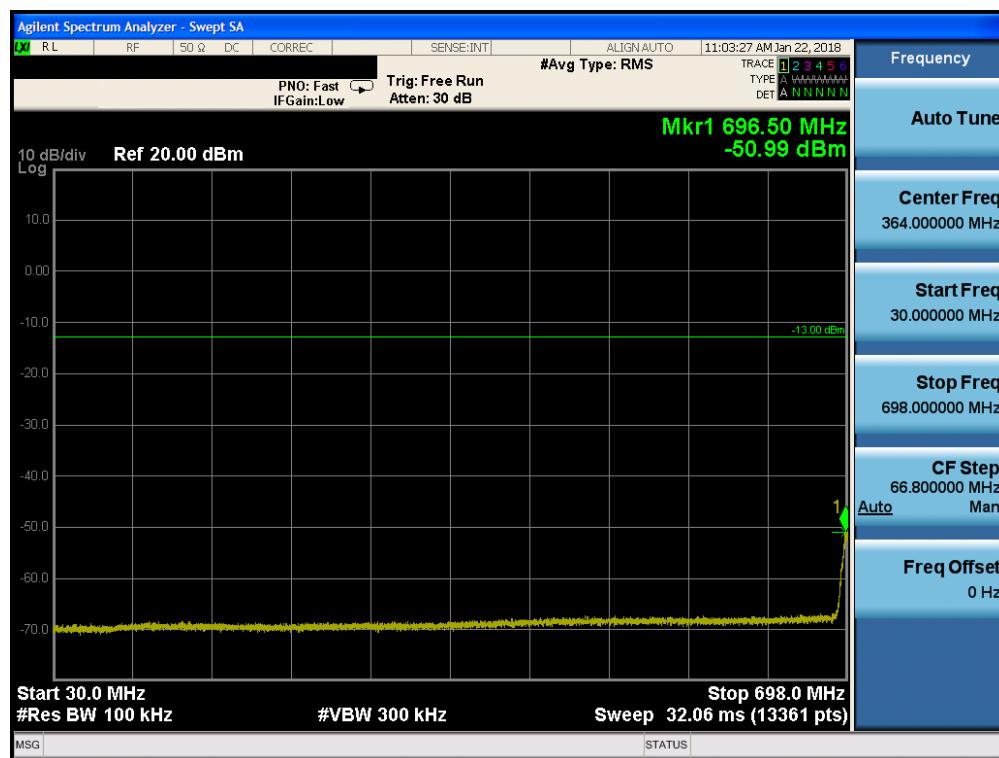


**Plot 7-102. Conducted Spurious Plot (Band 17 - 5.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)**

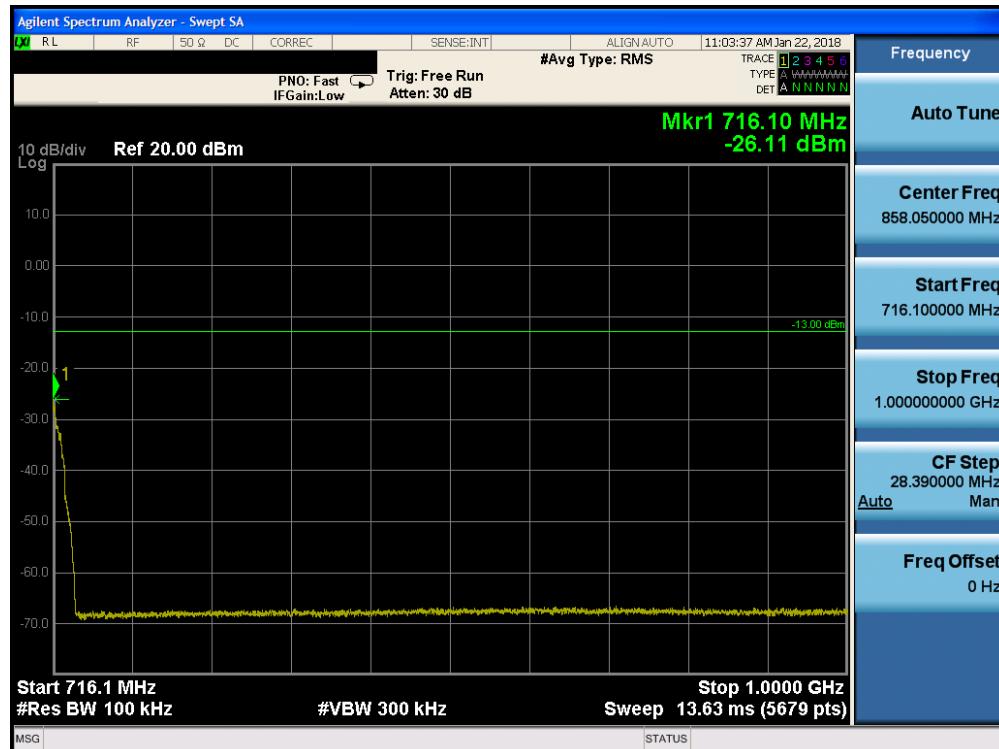


**Plot 7-103. Conducted Spurious Plot (Band 17 - 5.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)**

FCC ID: BCGA1954		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C1710060006-03-R2.BCG	Test Dates: 10/31/2017-2/15/2018	EUT Type: Tablet Device	Page 70 of 260

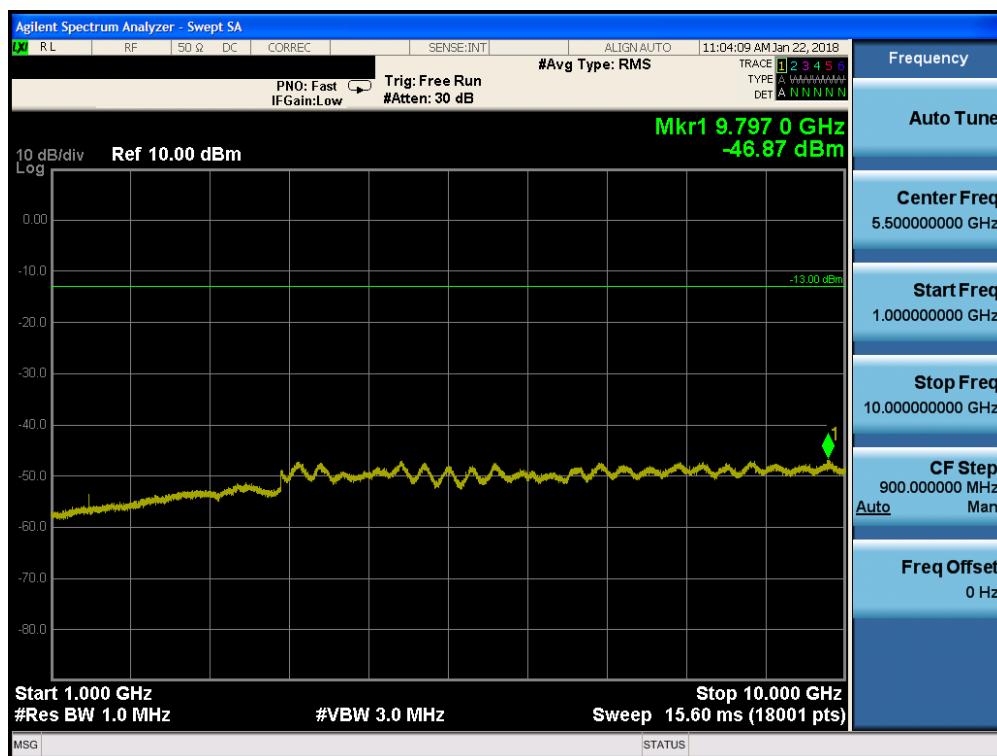


Plot 7-104. Conducted Spurious Plot (Band 17 - 5.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)



Plot 7-105. Conducted Spurious Plot (Band 17 - 5.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

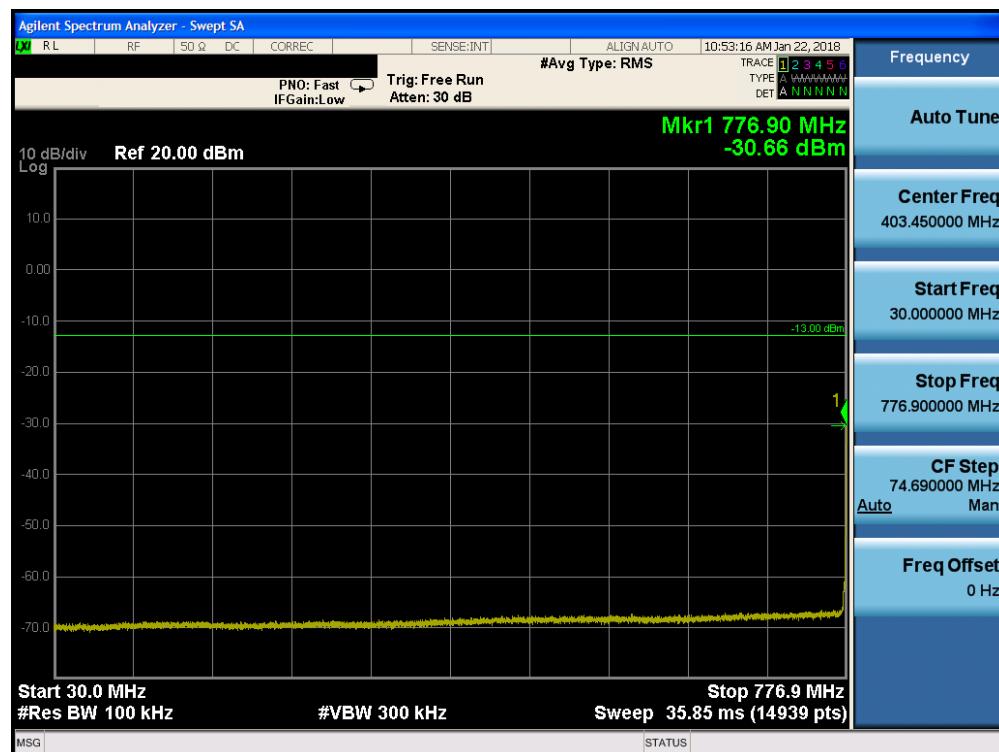
FCC ID: BCGA1954	<b>PCTEST</b> ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C1710060006-03-R2.BCG	Test Dates: 10/31/2017-2/15/2018	EUT Type: Tablet Device	Page 71 of 260



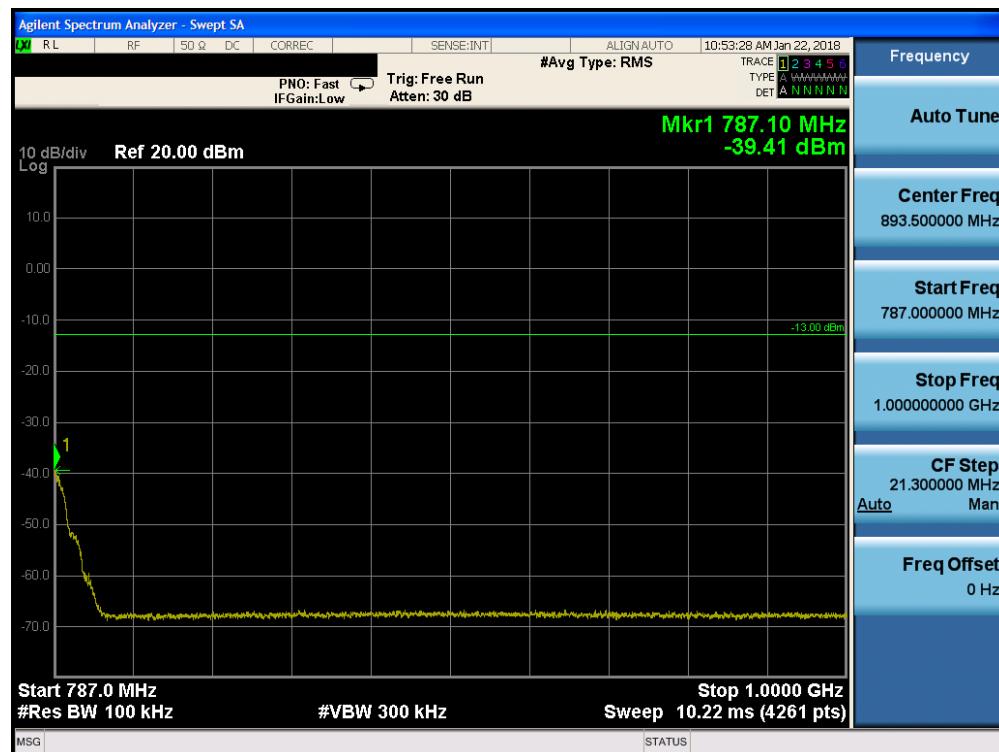
Plot 7-106. Conducted Spurious Plot (Band 17 - 5.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

FCC ID: BCGA1954	<b>PCTEST</b> ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C1710060006-03-R2.BCG	Test Dates: 10/31/2017-2/15/2018	EUT Type: Tablet Device	Page 72 of 260

## Band 13

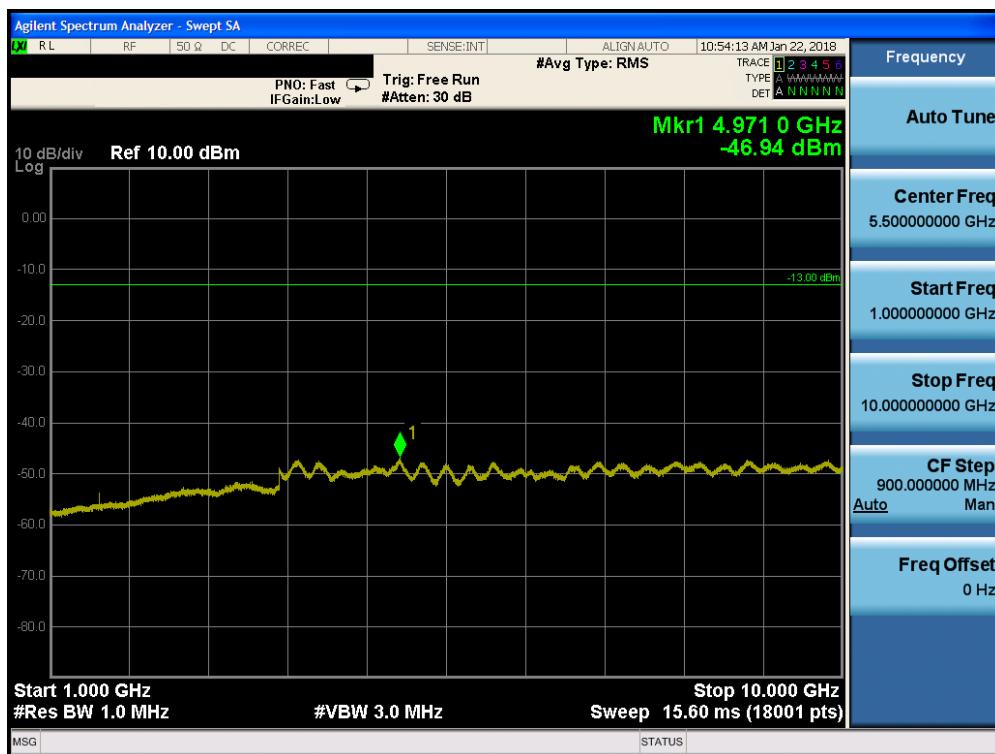


Plot 7-107. Conducted Spurious Plot (Band 13 - 5.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

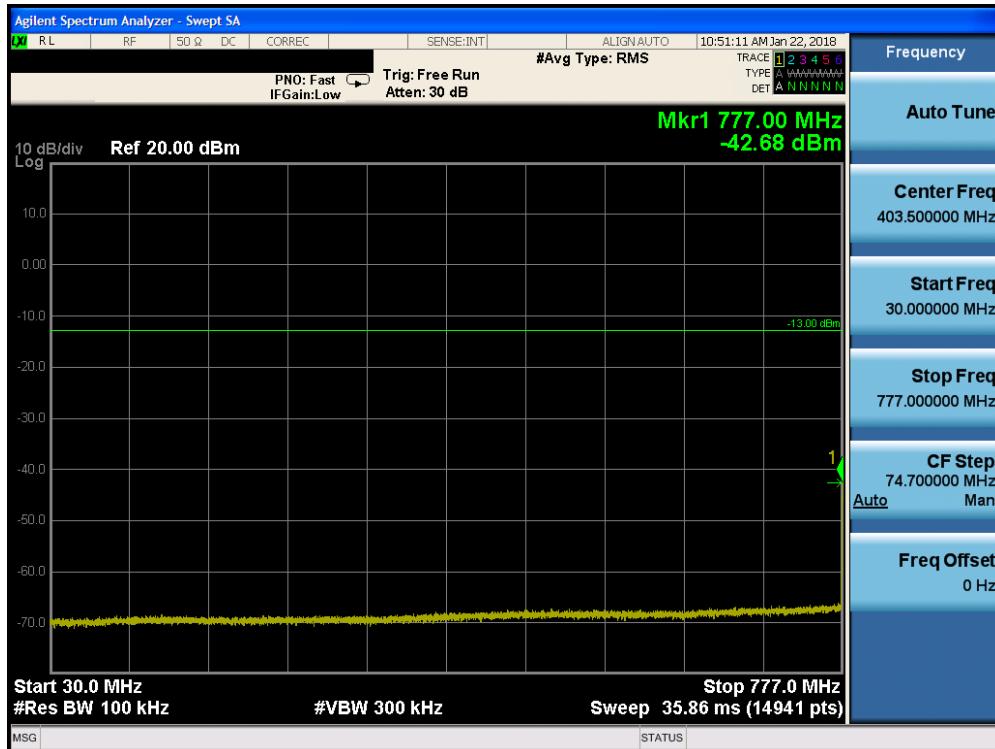


Plot 7-108. Conducted Spurious Plot (Band 13 - 5.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

FCC ID: BCGA1954	 <b>MEASUREMENT REPORT (CERTIFICATION)</b>		Approved by: Quality Manager
Test Report S/N: 1C1710060006-03-R2.BCG	Test Dates: 10/31/2017-2/15/2018	EUT Type: Tablet Device	Page 73 of 260

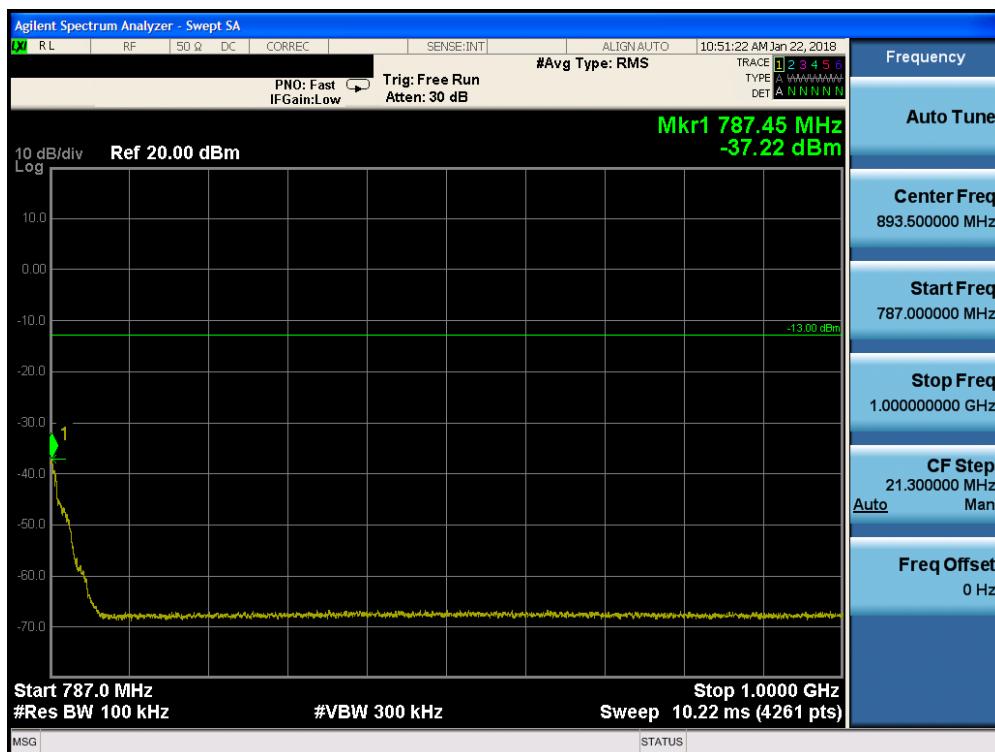


Plot 7-109. Conducted Spurious Plot (Band 13 - 5.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

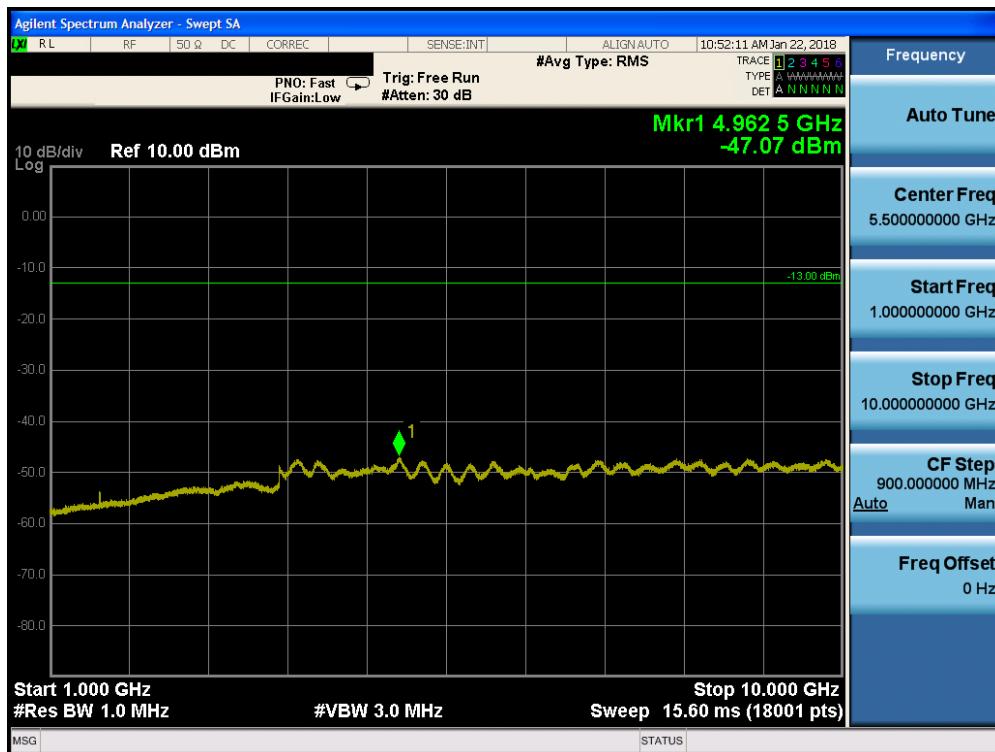


Plot 7-110. Conducted Spurious Plot (Band 13 - 5.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: BCGA1954	<b>PCTEST</b> ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C1710060006-03-R2.BCG	Test Dates: 10/31/2017-2/15/2018	EUT Type: Tablet Device	Page 74 of 260

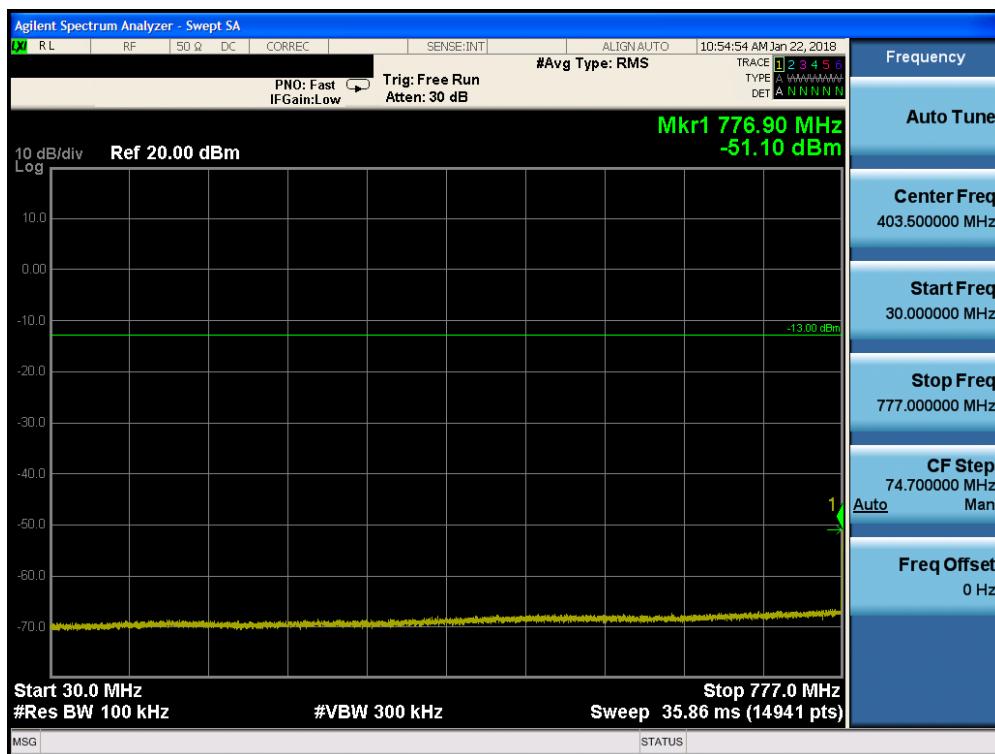


Plot 7-111. Conducted Spurious Plot (Band 13 - 5.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

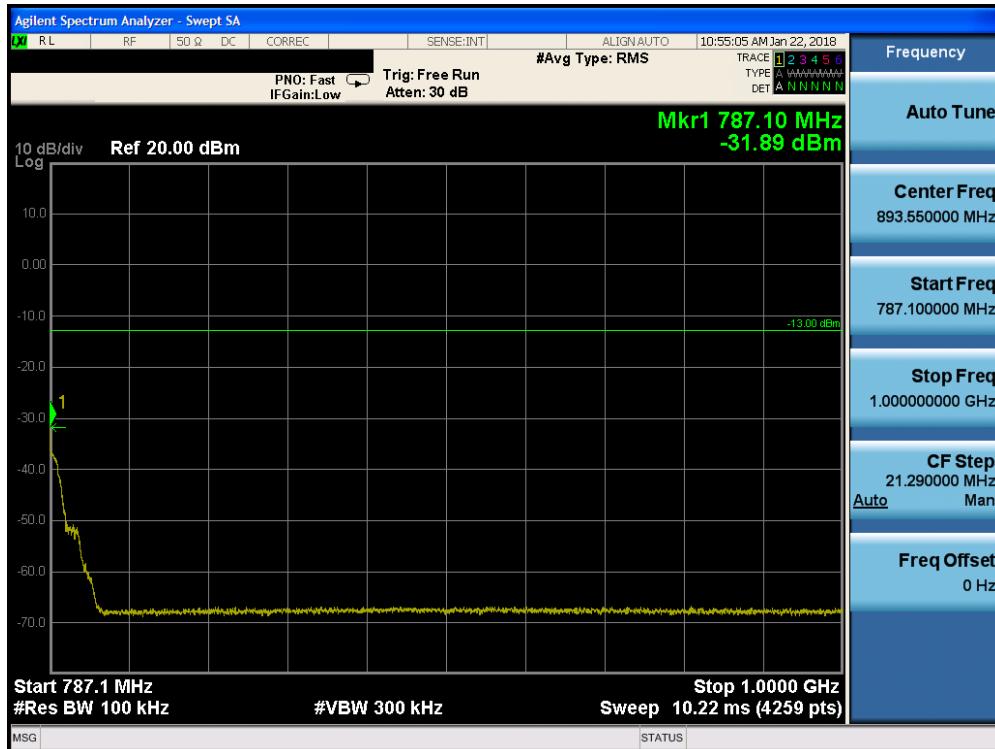


Plot 7-112. Conducted Spurious Plot (Band 13 - 5.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: BCGA1954	<b>PCTEST</b> ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C1710060006-03-R2.BCG	Test Dates: 10/31/2017-2/15/2018	EUT Type: Tablet Device	Page 75 of 260



Plot 7-113. Conducted Spurious Plot (Band 13 - 5.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)



Plot 7-114. Conducted Spurious Plot (Band 13 - 5.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

FCC ID: BCGA1954	<b>PCTEST</b> ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C1710060006-03-R2.BCG	Test Dates: 10/31/2017-2/15/2018	EUT Type: Tablet Device	Page 76 of 260



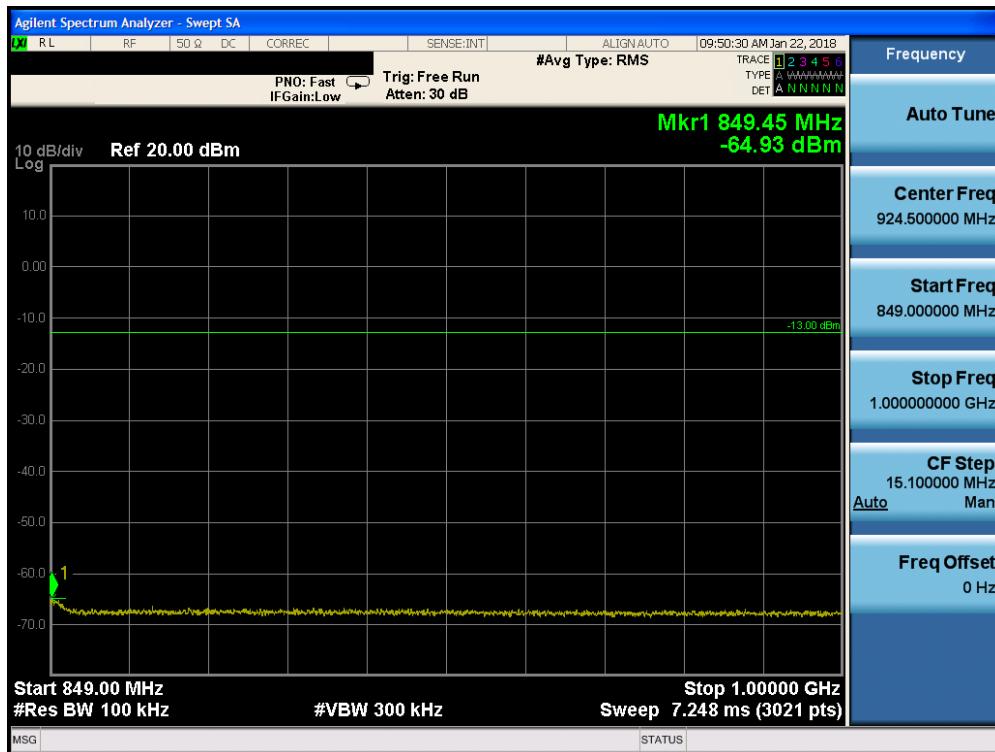
Plot 7-115. Conducted Spurious Plot (Band 13 - 5.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

FCC ID: BCGA1954	<b>PCTEST</b> ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C1710060006-03-R2.BCG	Test Dates: 10/31/2017-2/15/2018	EUT Type: Tablet Device	Page 77 of 260

## Band 26

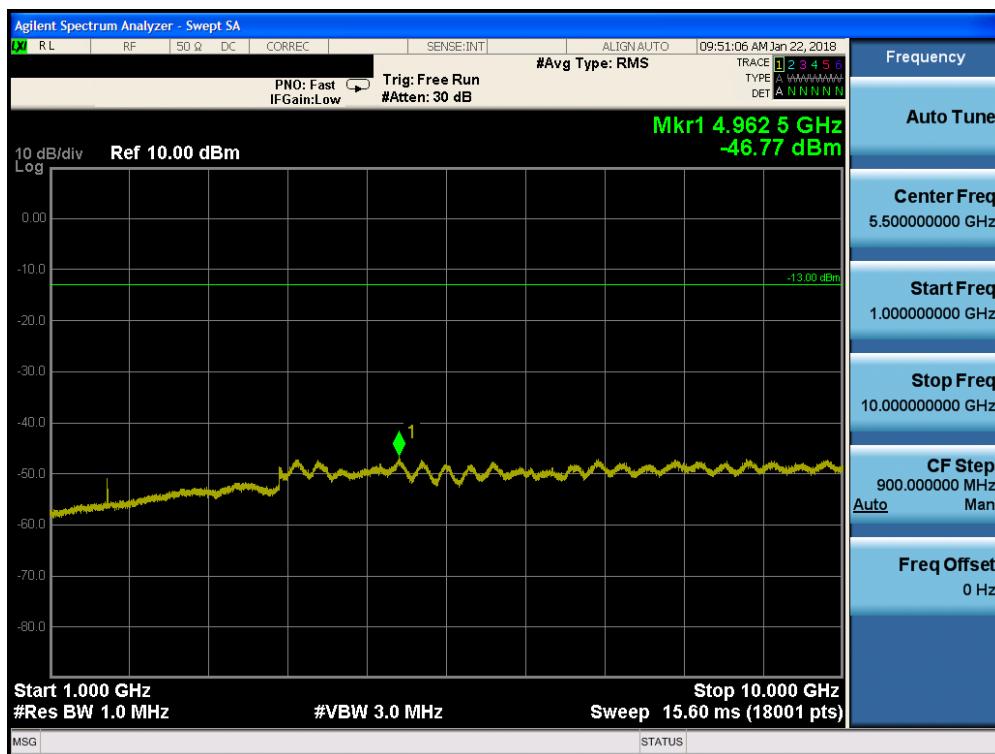


Plot 7-116. Conducted Spurious Plot (Band 26 - 3.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)



Plot 7-117. Conducted Spurious Plot (Band 26 - 3.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

FCC ID: BCGA1954	 <b>MEASUREMENT REPORT (CERTIFICATION)</b>		Approved by: Quality Manager
Test Report S/N: 1C1710060006-03-R2.BCG	Test Dates: 10/31/2017-2/15/2018	EUT Type: Tablet Device	Page 78 of 260

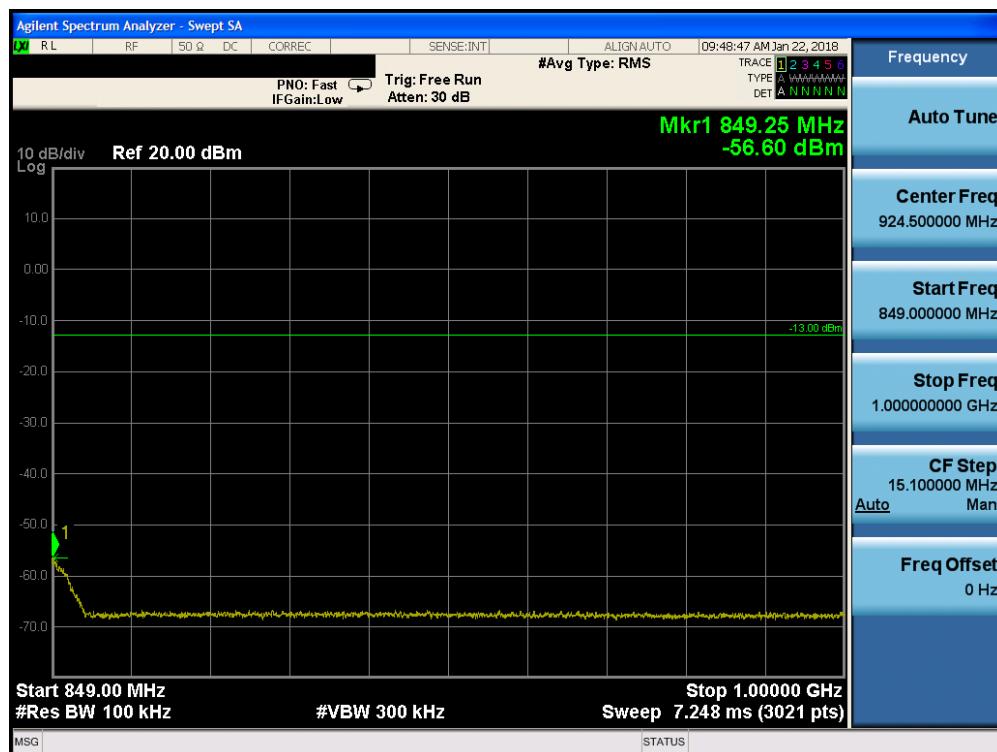


Plot 7-118. Conducted Spurious Plot (Band 26 - 3.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

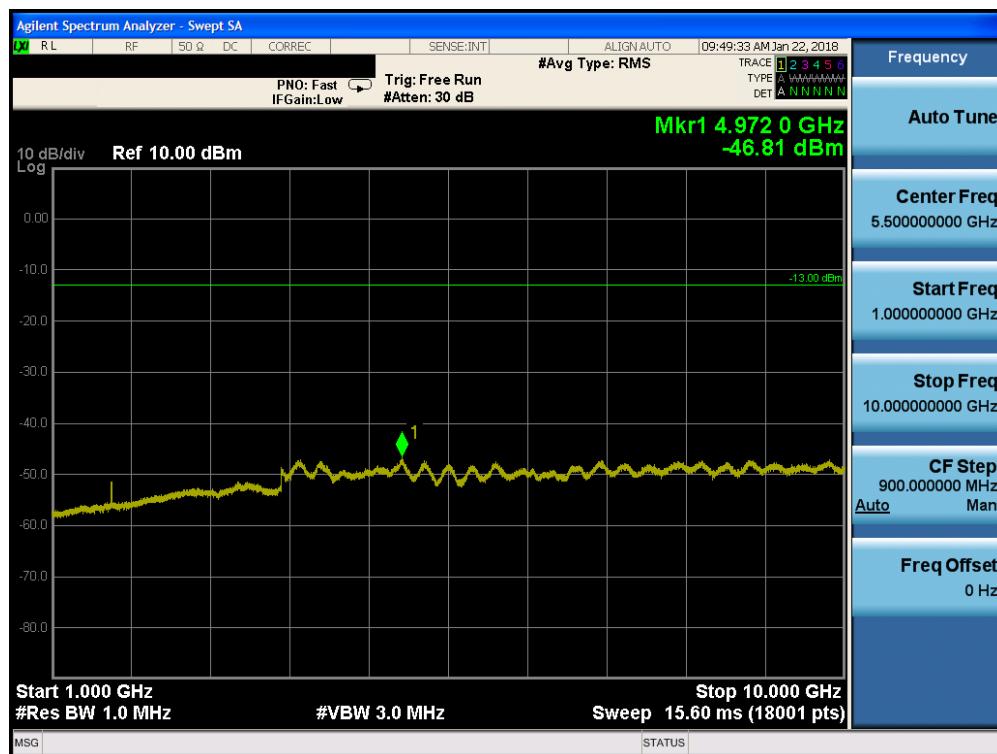


Plot 7-119. Conducted Spurious Plot (Band 26 - 3.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: BCGA1954	<b>PCTEST</b> ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C1710060006-03-R2.BCG	Test Dates: 10/31/2017-2/15/2018	EUT Type: Tablet Device	Page 79 of 260

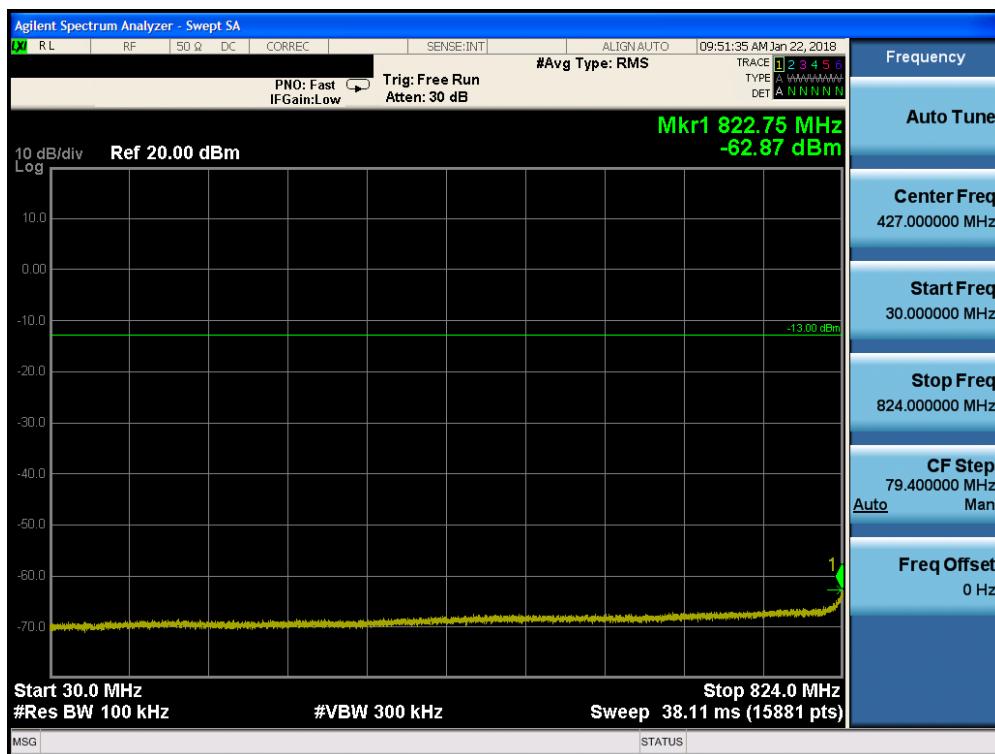


Plot 7-120. Conducted Spurious Plot (Band 26 - 3.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

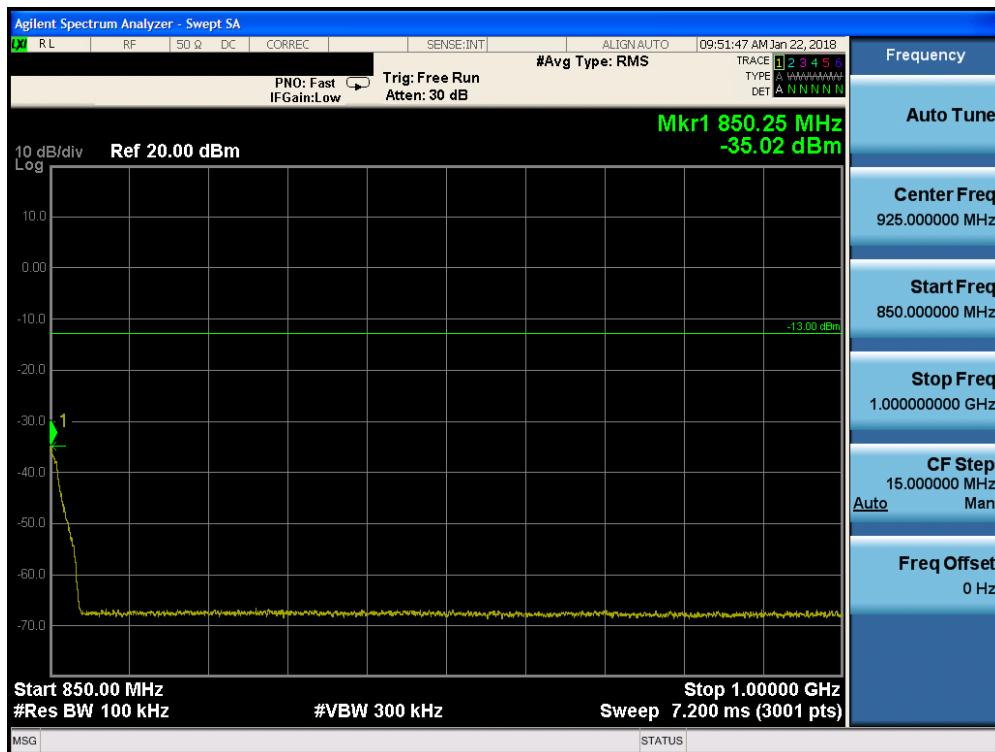


Plot 7-121. Conducted Spurious Plot (Band 26 - 3.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: BCGA1954	<b>PCTEST</b> ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C1710060006-03-R2.BCG	Test Dates: 10/31/2017-2/15/2018	EUT Type: Tablet Device	Page 80 of 260

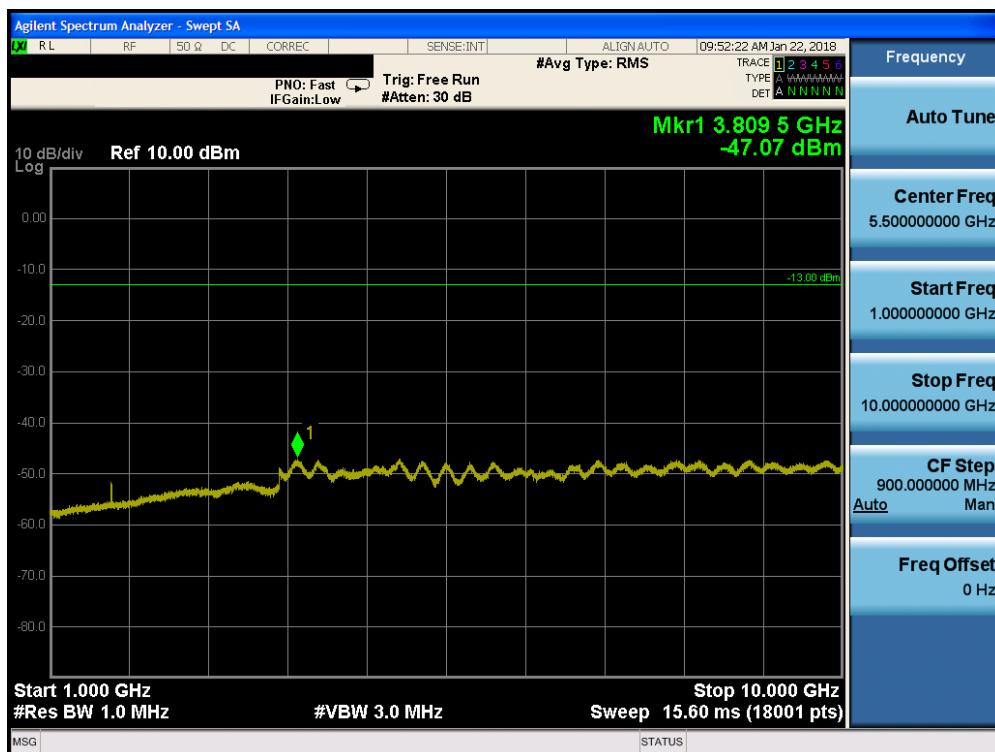


Plot 7-122. Conducted Spurious Plot (Band 26 - 3.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)



Plot 7-123. Conducted Spurious Plot (Band 26 - 3.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

FCC ID: BCGA1954	<b>PCTEST</b> ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C1710060006-03-R2.BCG	Test Dates: 10/31/2017-2/15/2018	EUT Type: Tablet Device	Page 81 of 260



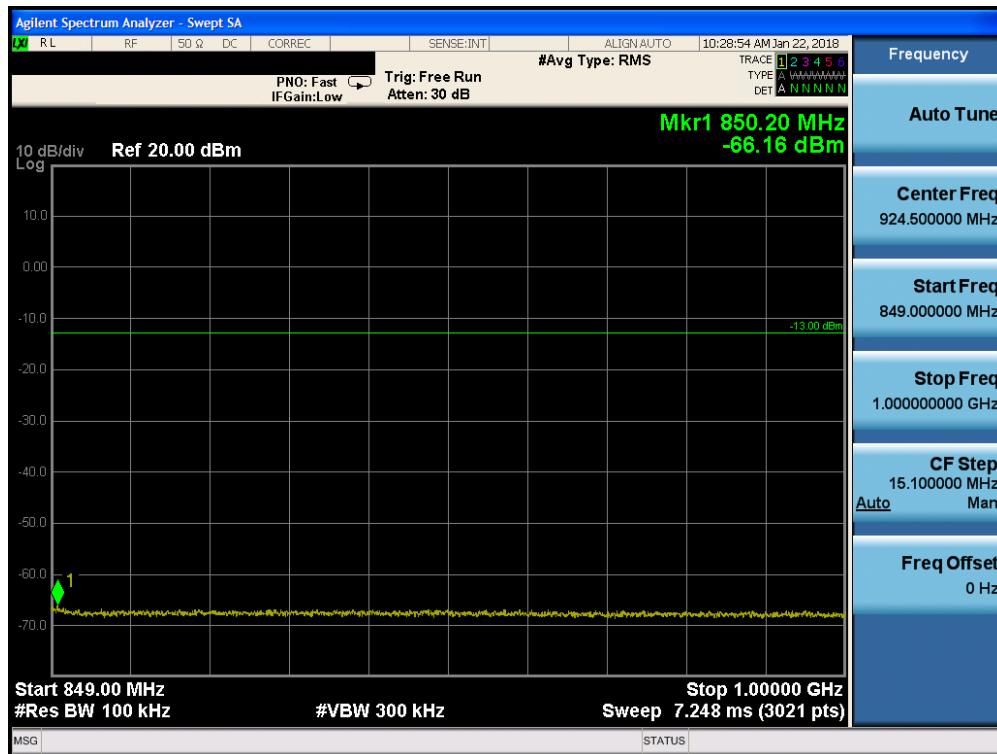
Plot 7-124. Conducted Spurious Plot (Band 26 - 3.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

FCC ID: BCGA1954	<b>PCTEST</b> ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C1710060006-03-R2.BCG	Test Dates: 10/31/2017-2/15/2018	EUT Type: Tablet Device	Page 82 of 260

## Band 5

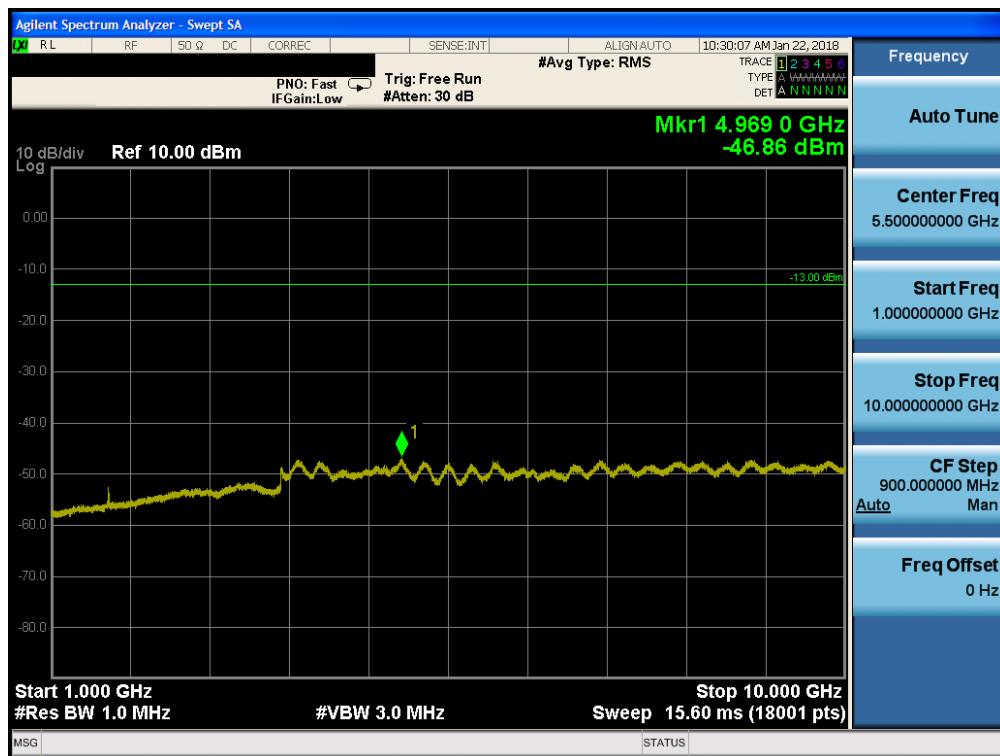


Plot 7-125. Conducted Spurious Plot (Band 5 - 3.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

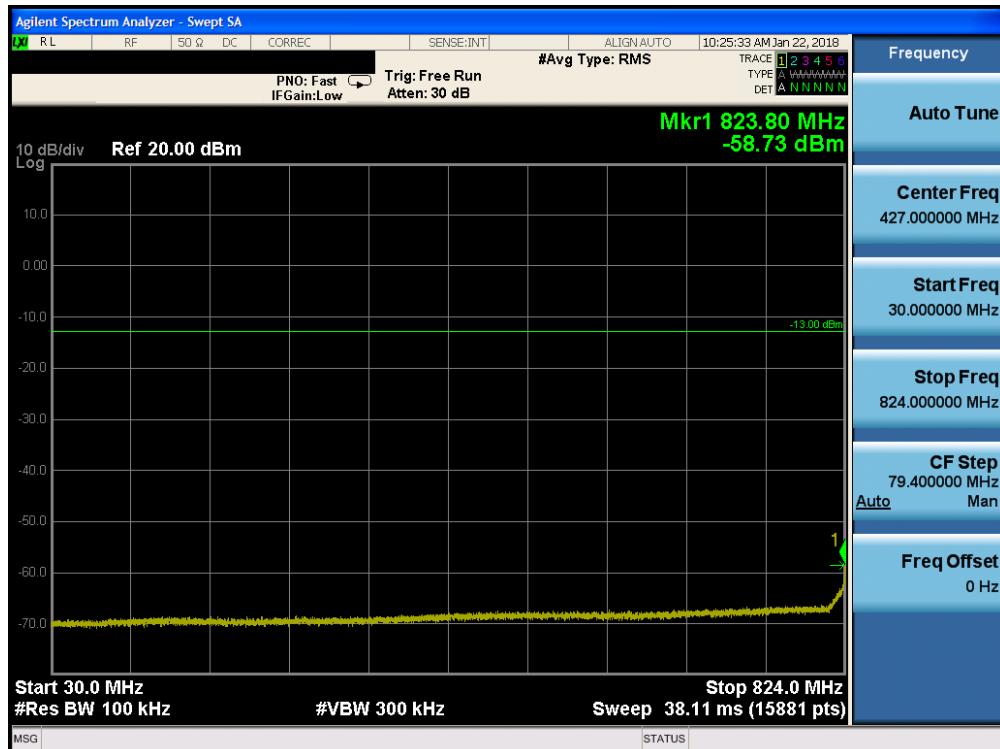


Plot 7-126. Conducted Spurious Plot (Band 5 - 3.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

FCC ID: BCGA1954	 <b>MEASUREMENT REPORT (CERTIFICATION)</b>		Approved by: Quality Manager
Test Report S/N: 1C1710060006-03-R2.BCG	Test Dates: 10/31/2017-2/15/2018	EUT Type: Tablet Device	Page 83 of 260

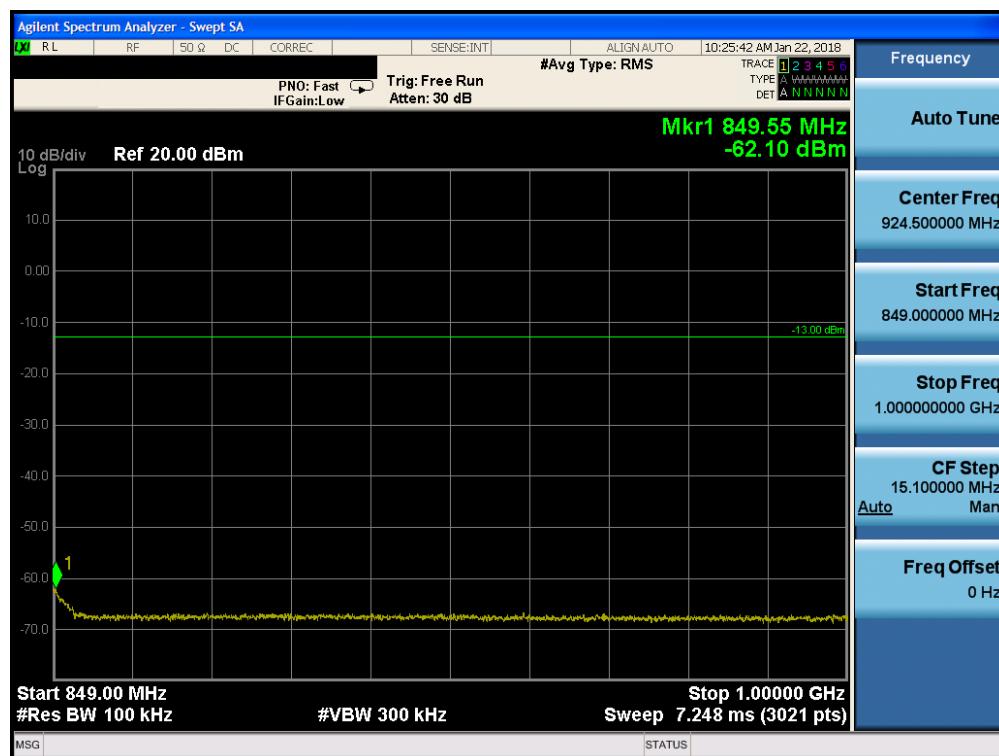


Plot 7-127. Conducted Spurious Plot (Band 5 - 3.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

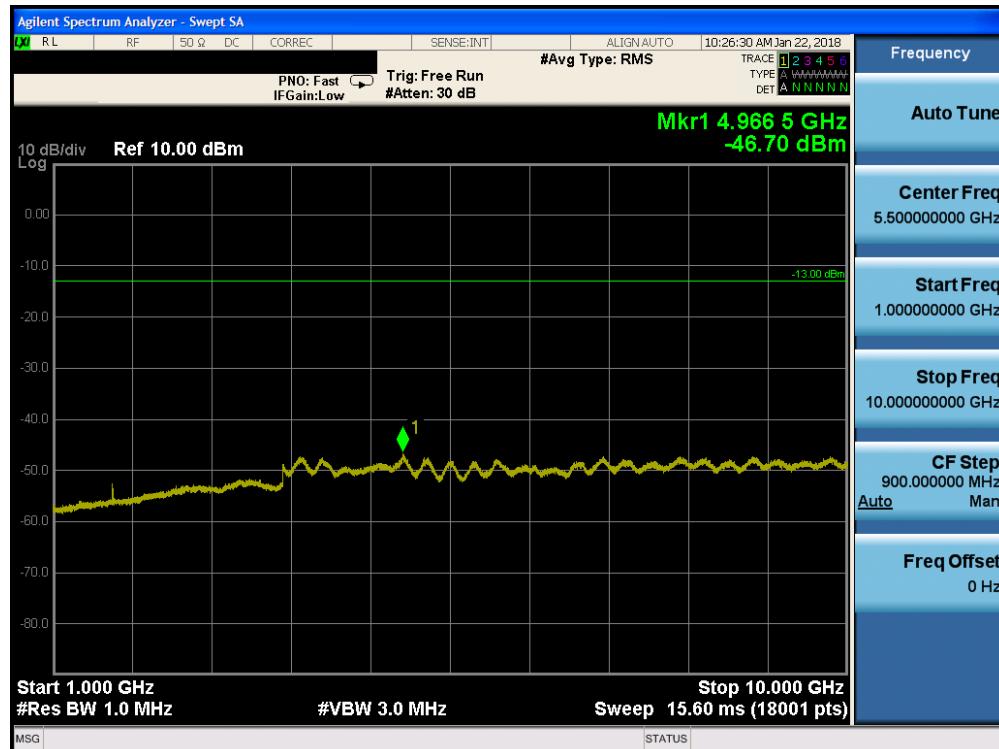


Plot 7-128. Conducted Spurious Plot (Band 5 - 3.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: BCGA1954	<b>PCTEST</b> ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C1710060006-03-R2.BCG	Test Dates: 10/31/2017-2/15/2018	EUT Type: Tablet Device	Page 84 of 260

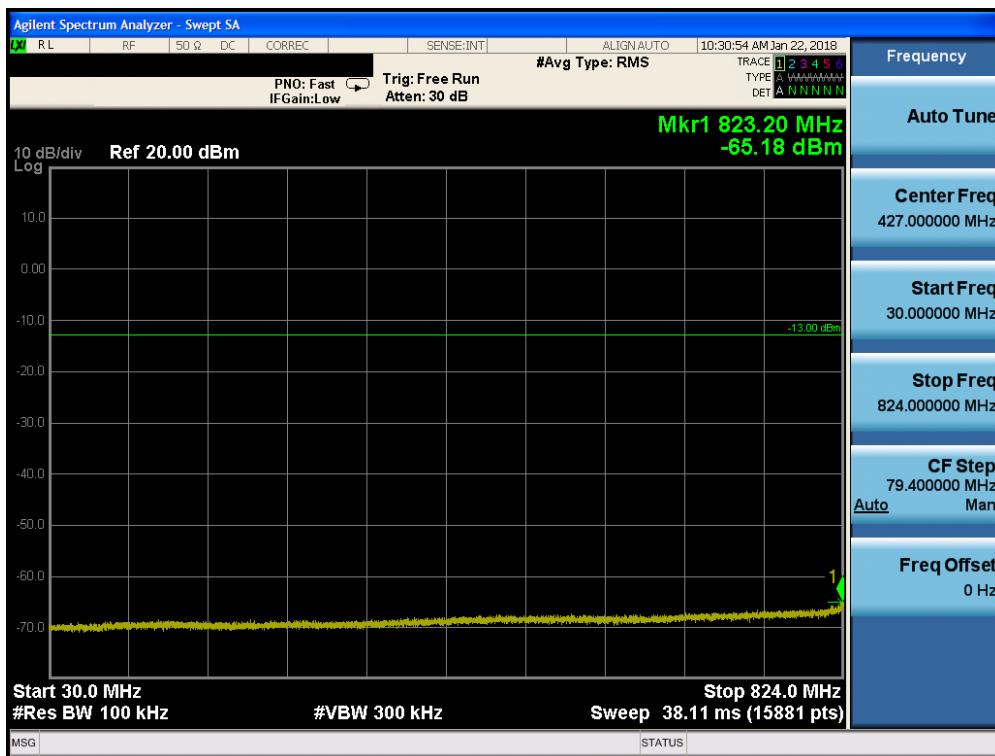


Plot 7-129. Conducted Spurious Plot (Band 5 - 3.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

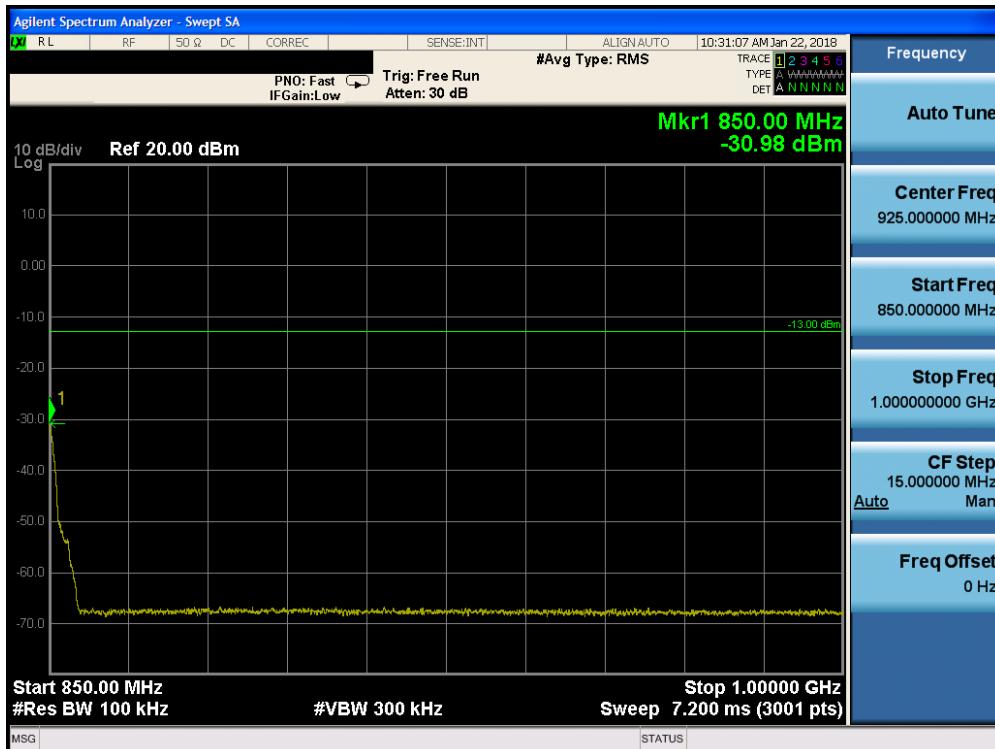


Plot 7-130. Conducted Spurious Plot (Band 5 - 3.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: BCGA1954	<b>PCTEST</b> ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C1710060006-03-R2.BCG	Test Dates: 10/31/2017-2/15/2018	EUT Type: Tablet Device	Page 85 of 260

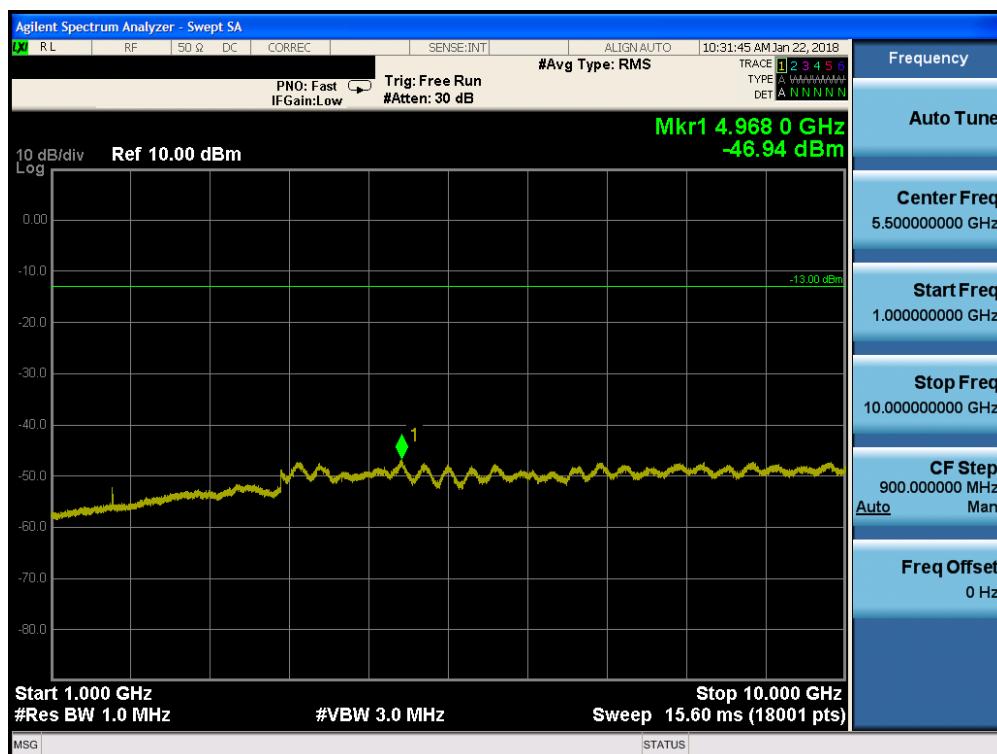


Plot 7-131. Conducted Spurious Plot (Band 5 - 3.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)



Plot 7-132. Conducted Spurious Plot (Band 5 - 3.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

FCC ID: BCGA1954	<b>PCTEST</b> ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C1710060006-03-R2.BCG	Test Dates: 10/31/2017-2/15/2018	EUT Type: Tablet Device	Page 86 of 260



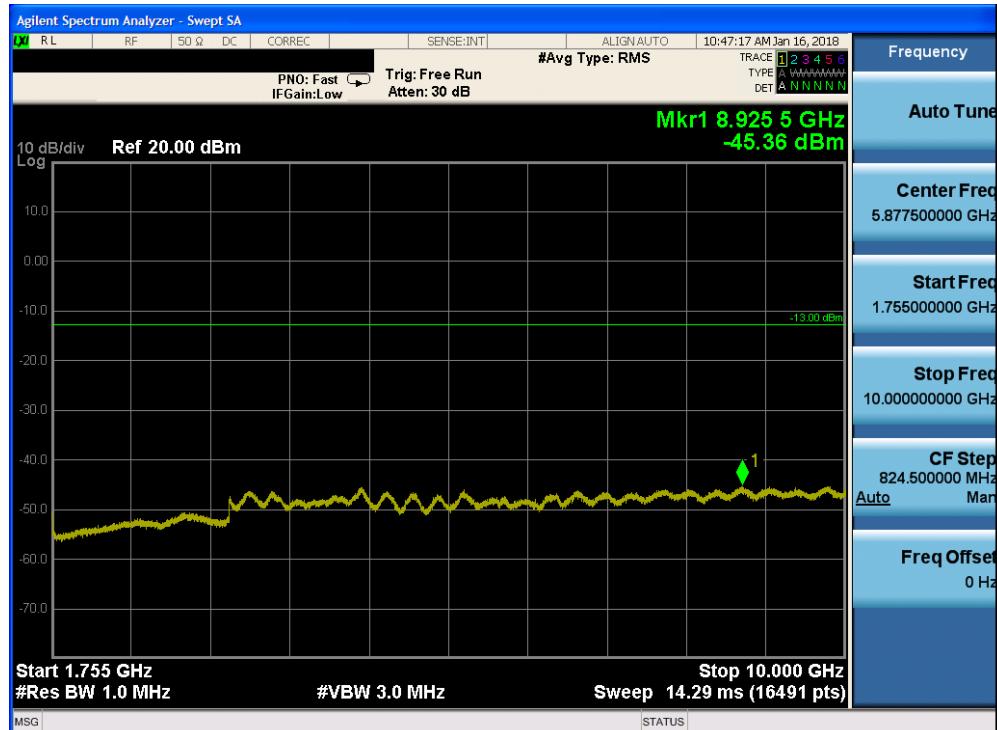
Plot 7-133. Conducted Spurious Plot (Band 5 - 3.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

FCC ID: BCGA1954	 <b>MEASUREMENT REPORT (CERTIFICATION)</b>	Approved by: Quality Manager
Test Report S/N: 1C1710060006-03-R2.BCG	Test Dates: 10/31/2017-2/15/2018	EUT Type: Tablet Device

## Band 4

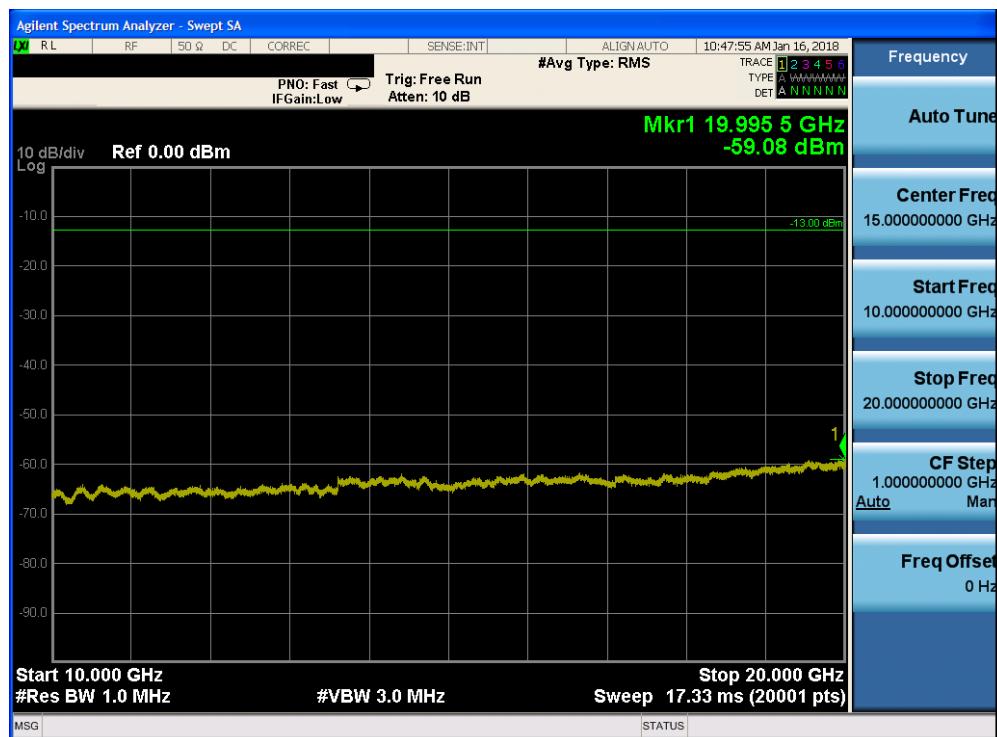


Plot 7-134. Conducted Spurious Plot (Band 4 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)



Plot 7-135. Conducted Spurious Plot (Band 4 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

FCC ID: BCGA1954	 <b>PCTEST</b> ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C1710060006-03-R2.BCG	Test Dates: 10/31/2017-2/15/2018	EUT Type: Tablet Device	Page 88 of 260

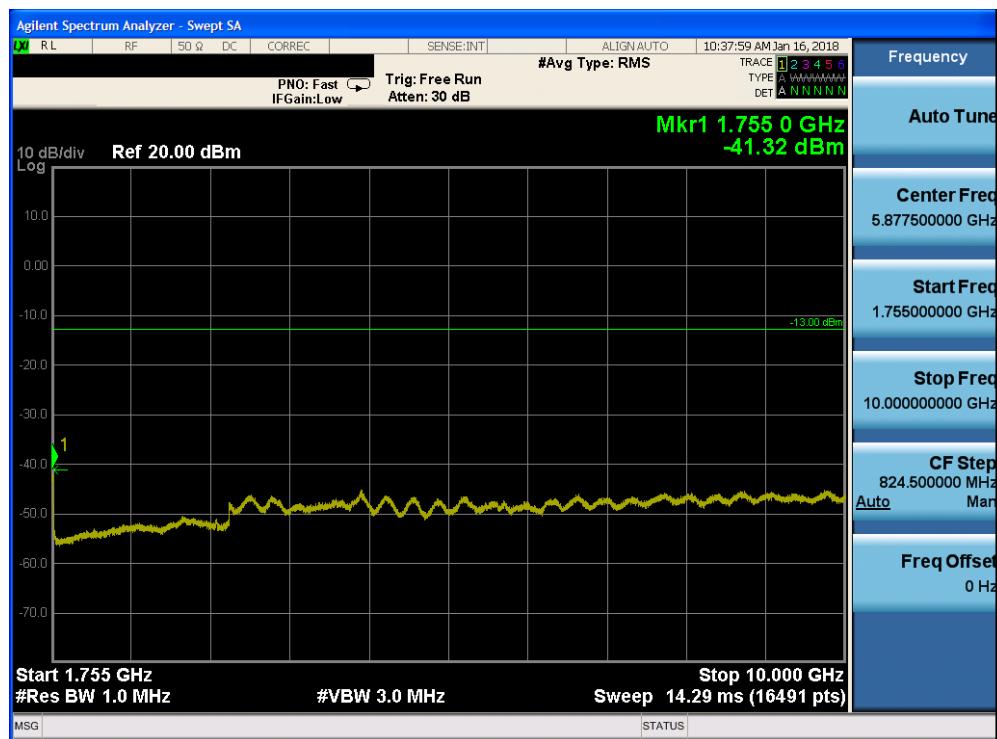


Plot 7-136. Conducted Spurious Plot (Band 4 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

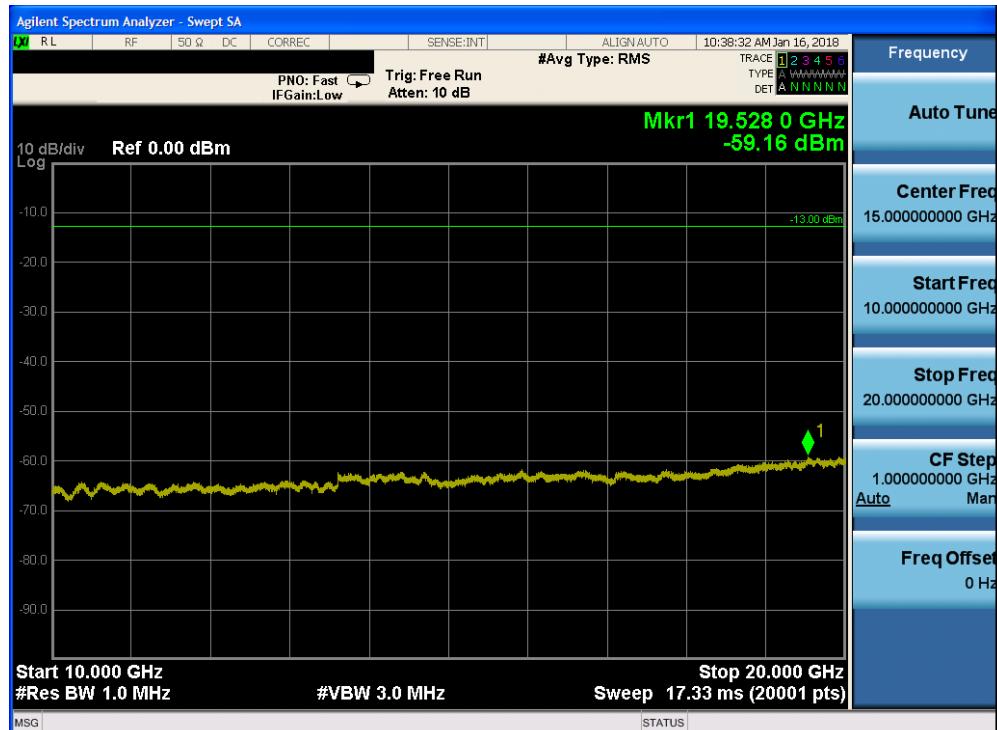


Plot 7-137. Conducted Spurious Plot (Band 4 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: BCGA1954	<b>PCTEST</b> ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C1710060006-03-R2.BCG	Test Dates: 10/31/2017-2/15/2018	EUT Type: Tablet Device	Page 89 of 260



Plot 7-138. Conducted Spurious Plot (Band 4 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

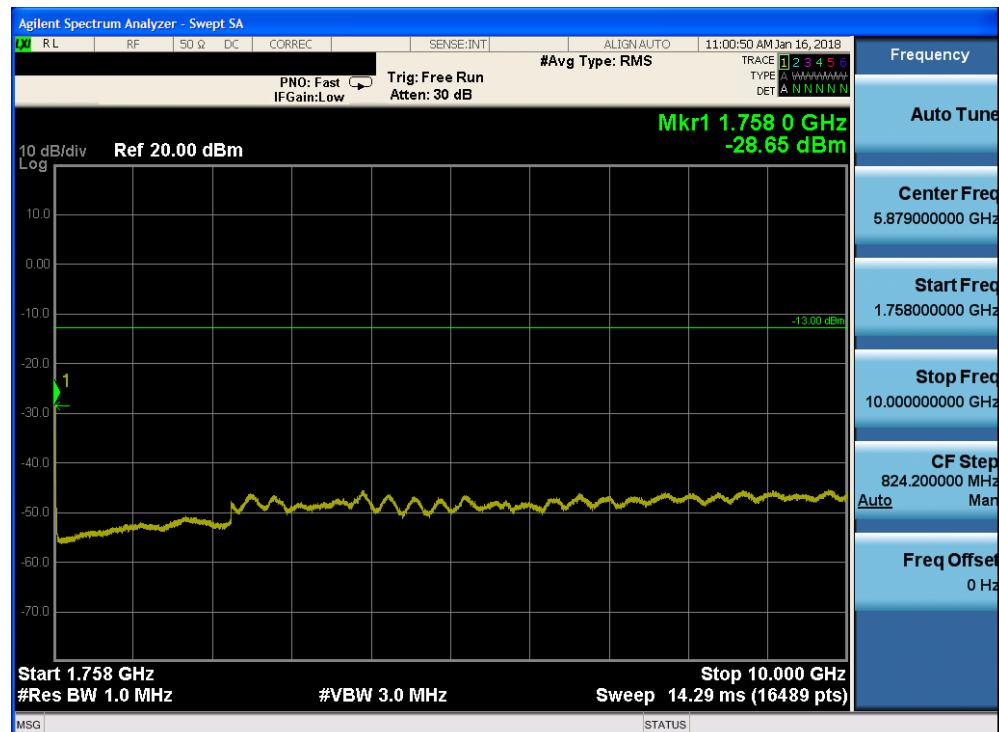


Plot 7-139. Conducted Spurious Plot (Band 4 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: BCGA1954	<b>PCTEST</b> ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C1710060006-03-R2.BCG	Test Dates: 10/31/2017-2/15/2018	EUT Type: Tablet Device	Page 90 of 260

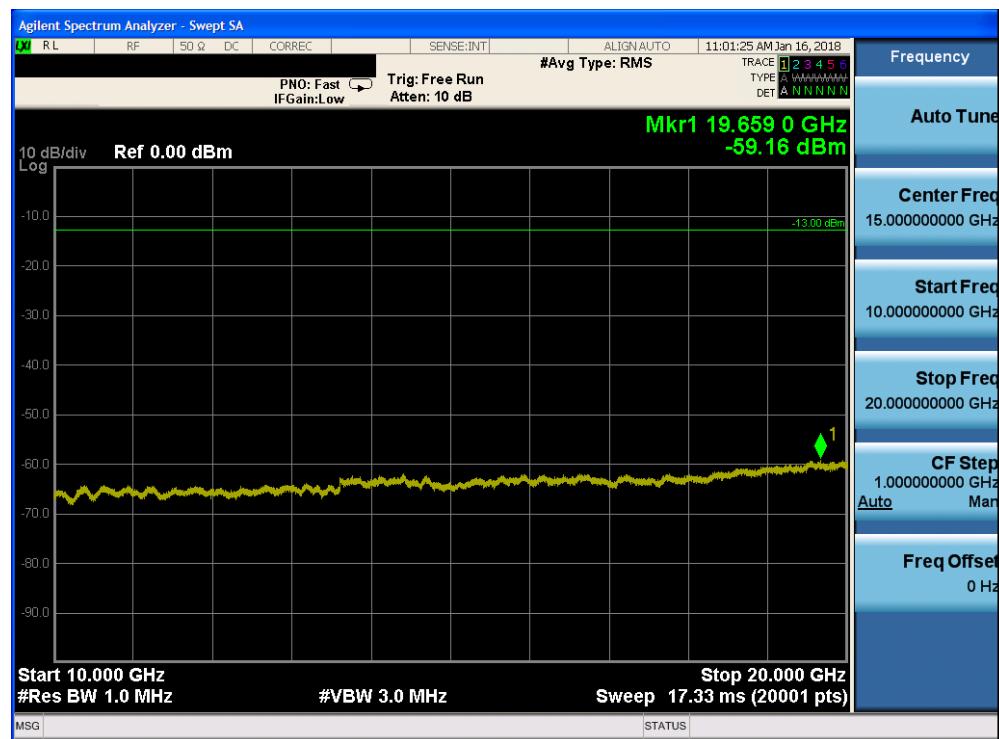


Plot 7-140. Conducted Spurious Plot (Band 4 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)



Plot 7-141. Conducted Spurious Plot (Band 4 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

FCC ID: BCGA1954	<b>PCTEST</b> ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C1710060006-03-R2.BCG	Test Dates: 10/31/2017-2/15/2018	EUT Type: Tablet Device	Page 91 of 260



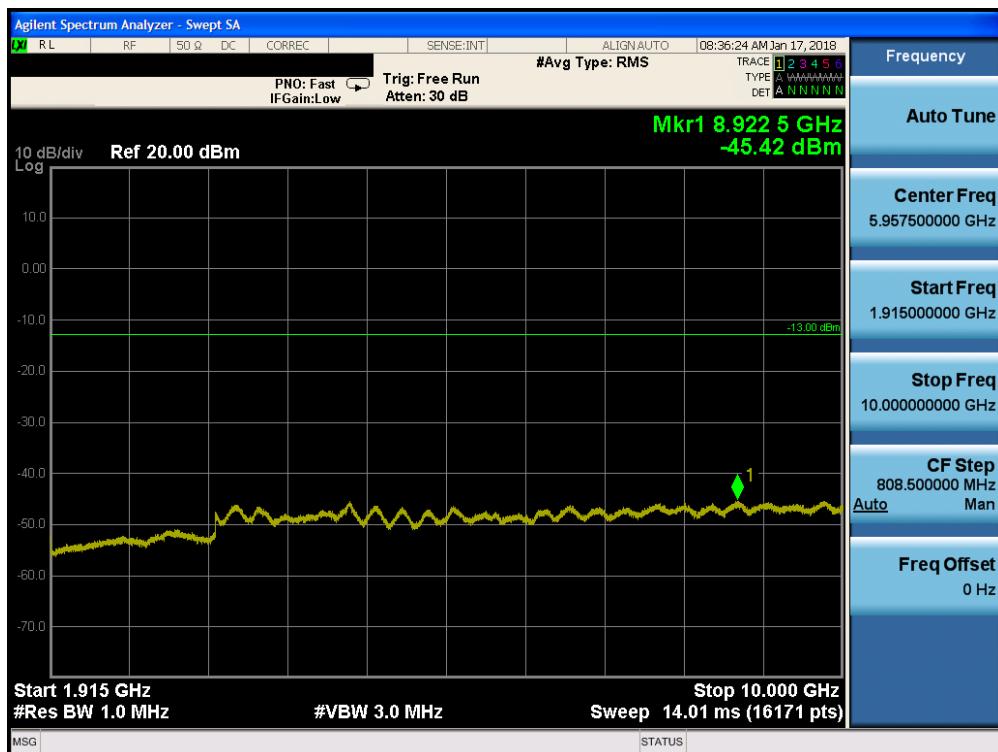
Plot 7-142. Conducted Spurious Plot (Band 4 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

FCC ID: BCGA1954	<b>PCTEST</b> ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C1710060006-03-R2.BCG	Test Dates: 10/31/2017-2/15/2018	EUT Type: Tablet Device	Page 92 of 260

## Band 25

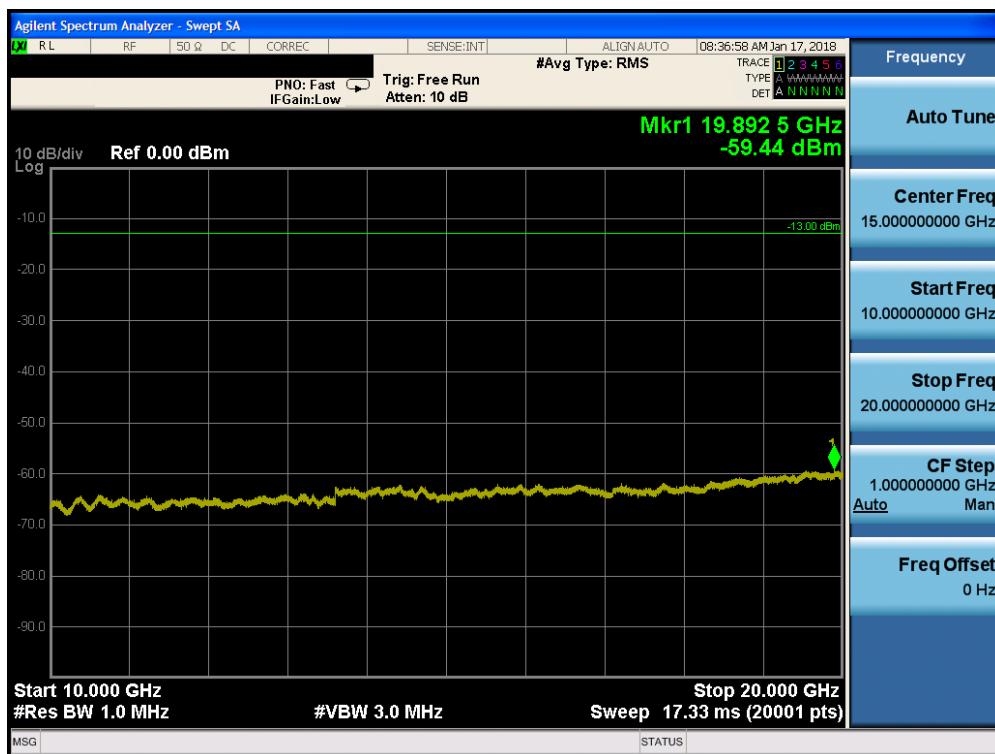


Plot 7-143. Conducted Spurious Plot (Band 25 - 15.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

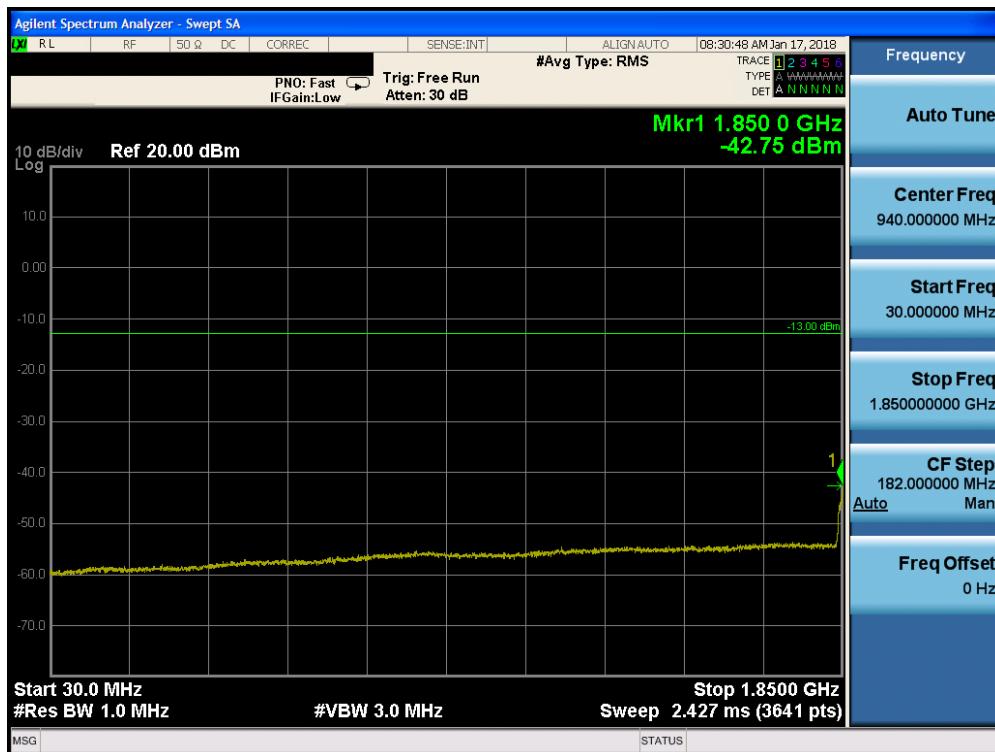


Plot 7-144. Conducted Spurious Plot (Band 25 - 15.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

FCC ID: BCGA1954	 <b>MEASUREMENT REPORT (CERTIFICATION)</b>			Approved by: Quality Manager
Test Report S/N: 1C1710060006-03-R2.BCG	Test Dates: 10/31/2017-2/15/2018	EUT Type: Tablet Device		Page 93 of 260

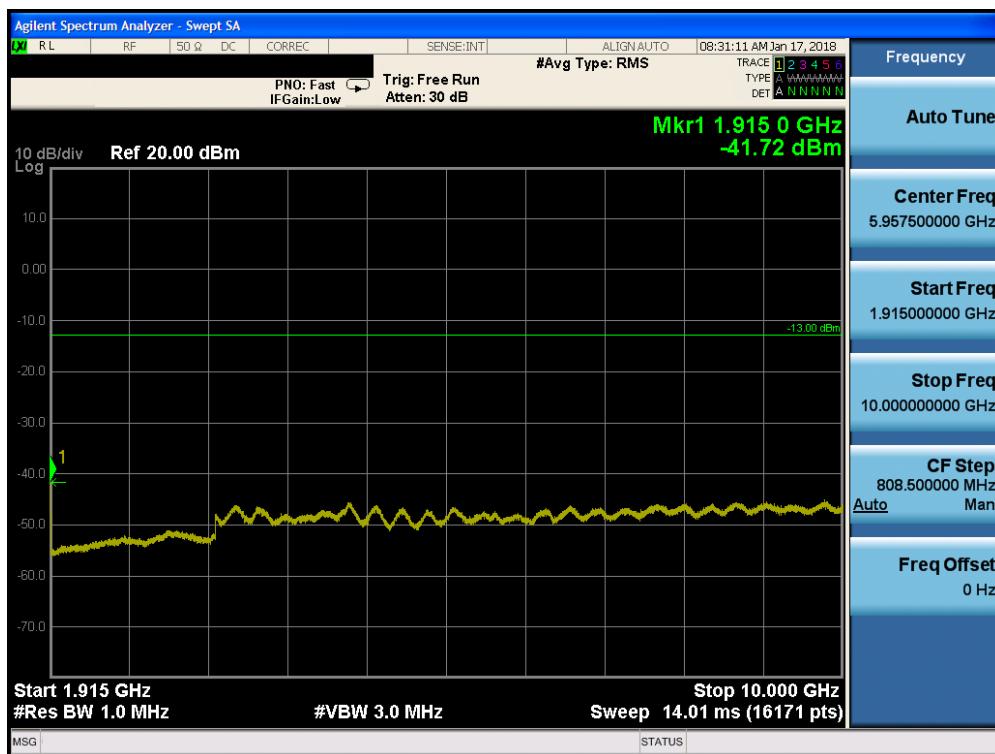


Plot 7-145. Conducted Spurious Plot (Band 25 - 15.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

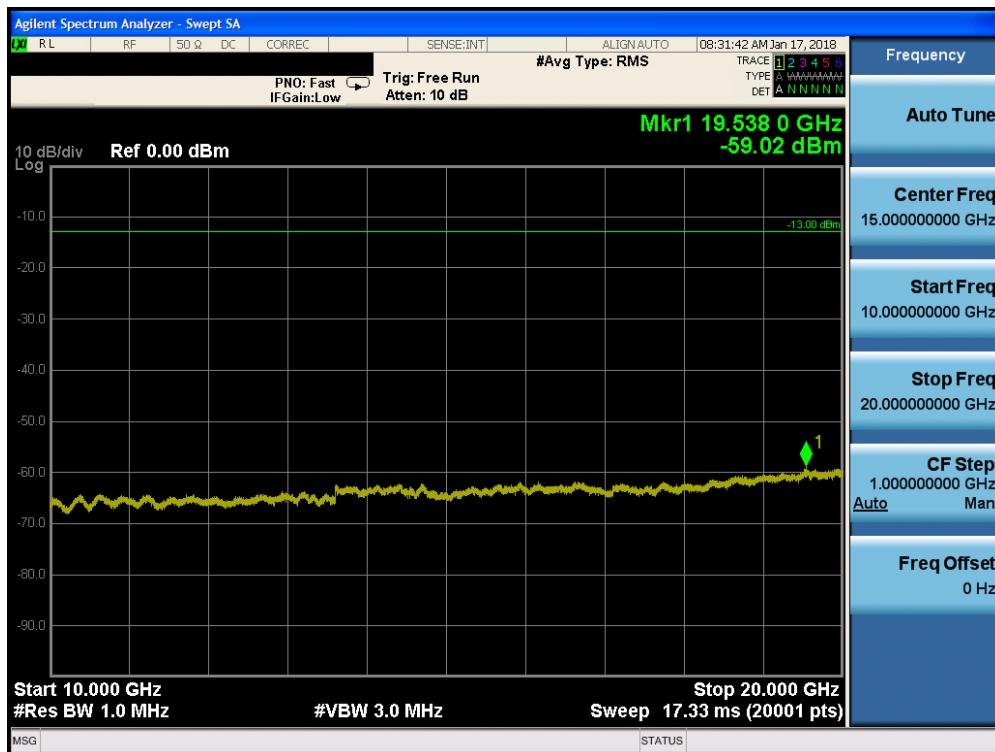


Plot 7-146. Conducted Spurious Plot (Band 25 - 15.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: BCGA1954	<b>PCTEST</b> ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C1710060006-03-R2.BCG	Test Dates: 10/31/2017-2/15/2018	EUT Type: Tablet Device	Page 94 of 260



Plot 7-147. Conducted Spurious Plot (Band 25 - 15.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

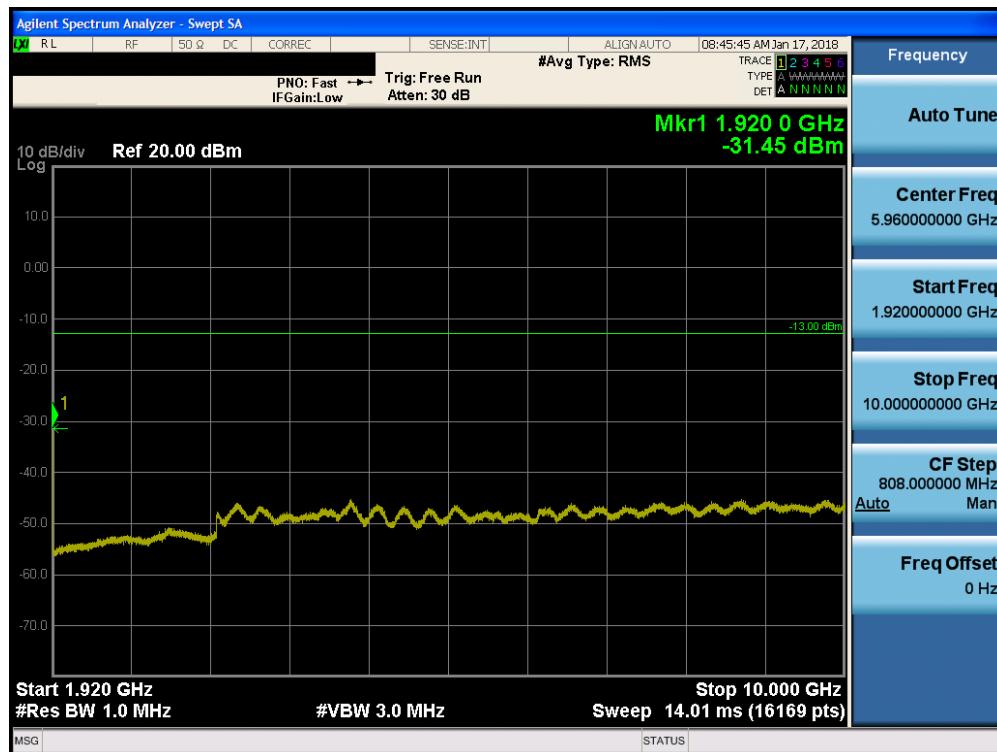


Plot 7-148. Conducted Spurious Plot (Band 25 - 15.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: BCGA1954	<b>PCTEST</b> ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C1710060006-03-R2.BCG	Test Dates: 10/31/2017-2/15/2018	EUT Type: Tablet Device	Page 95 of 260

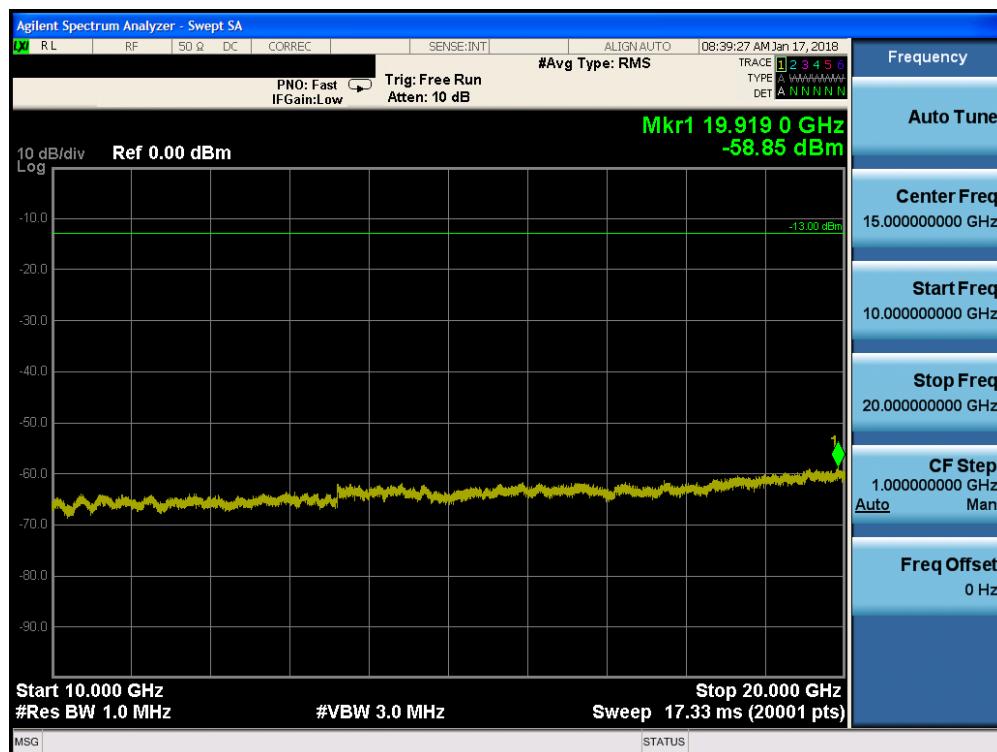


Plot 7-149. Conducted Spurious Plot (Band 25 - 15.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)



Plot 7-150. Conducted Spurious Plot (Band 25 - 15.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

FCC ID: BCGA1954		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C1710060006-03-R2.BCG	Test Dates: 10/31/2017-2/15/2018	EUT Type: Tablet Device	Page 96 of 260



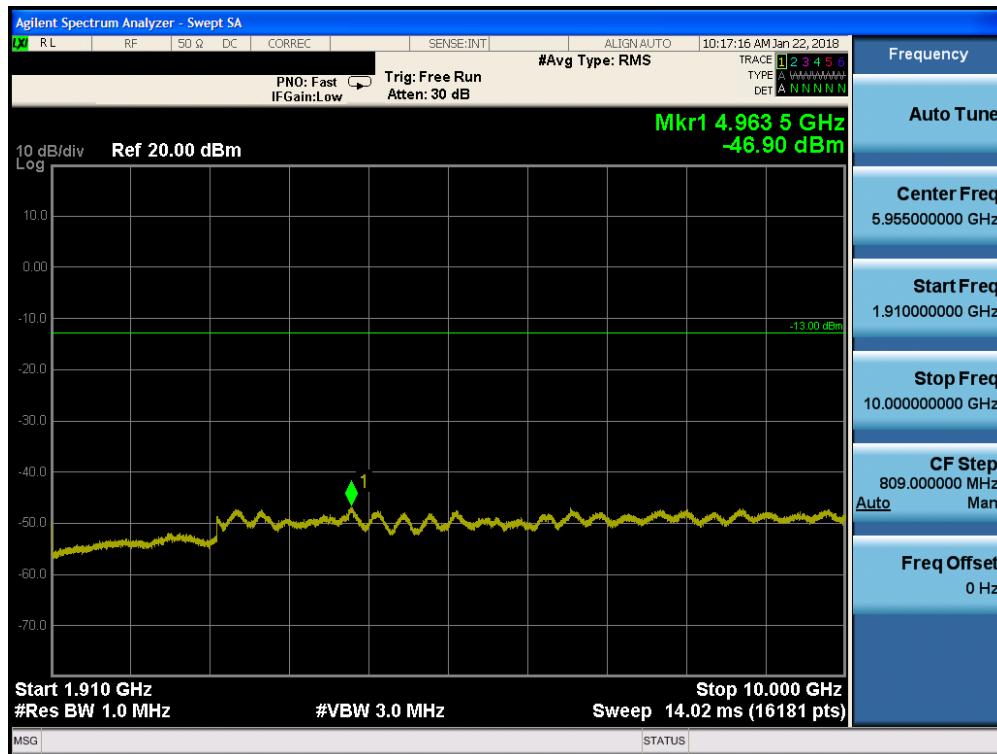
Plot 7-151. Conducted Spurious Plot (Band 25 - 15.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

FCC ID: BCGA1954	<b>PCTEST</b> ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C1710060006-03-R2.BCG	Test Dates: 10/31/2017-2/15/2018	EUT Type: Tablet Device	Page 97 of 260

## Band 2

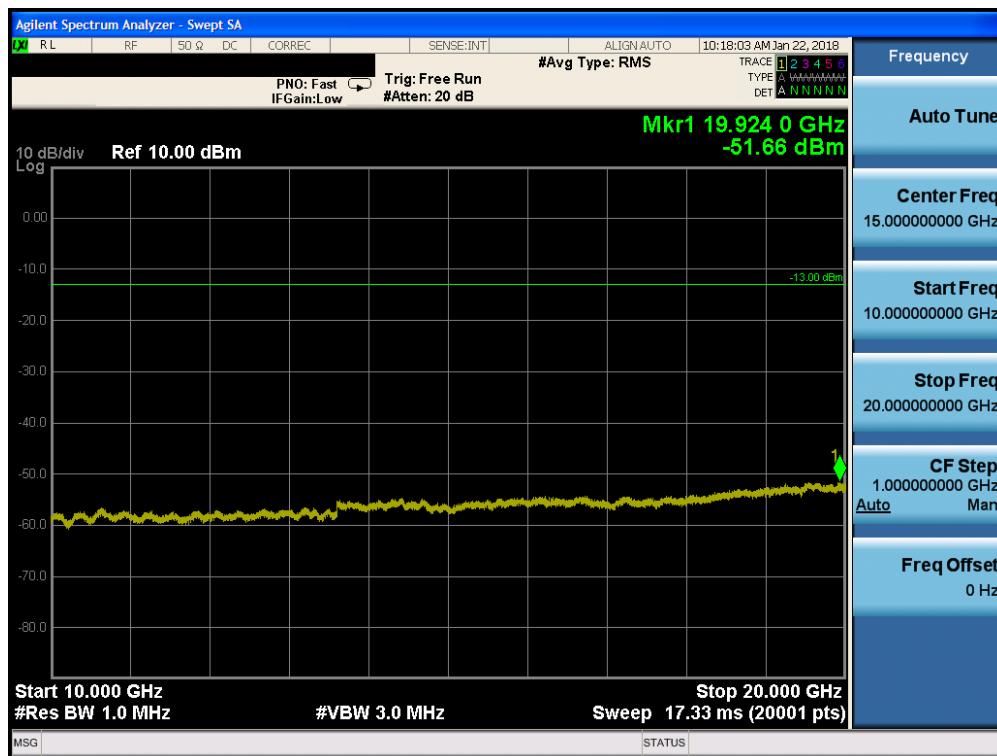


Plot 7-152. Conducted Spurious Plot (Band 2 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

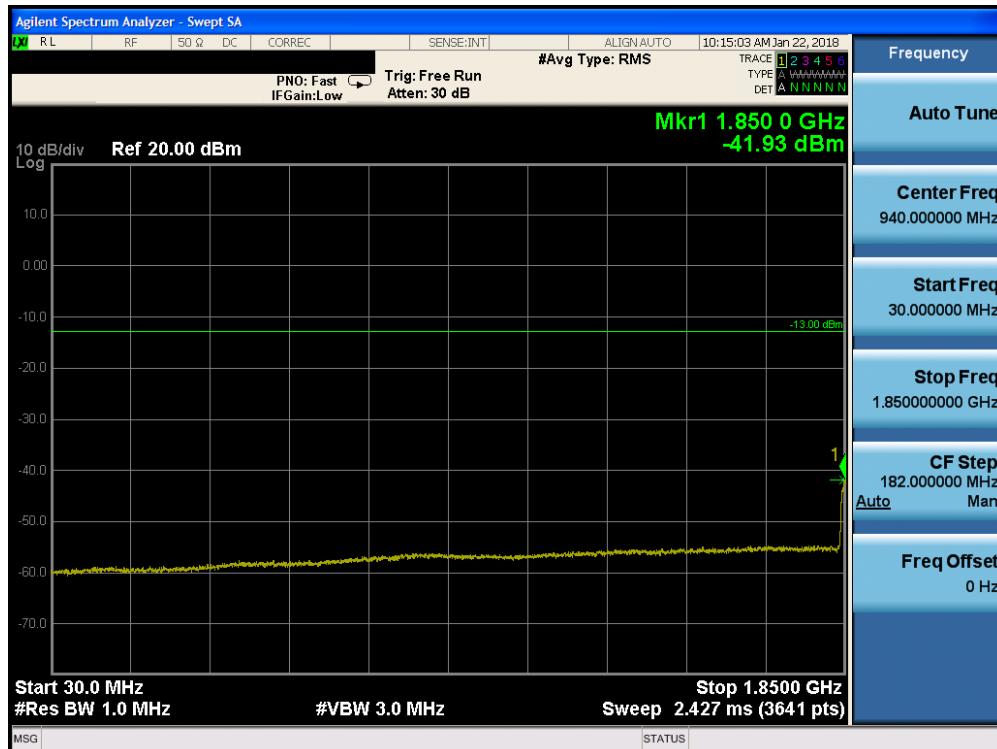


Plot 7-153. Conducted Spurious Plot (Band 2 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

FCC ID: BCGA1954	 <b>PCTEST</b> ENGINEERING LABORATORY, INC.	<b>MEASUREMENT REPORT (CERTIFICATION)</b>	Approved by: Quality Manager
Test Report S/N: 1C1710060006-03-R2.BCG	Test Dates: 10/31/2017-2/15/2018	EUT Type: Tablet Device	Page 98 of 260

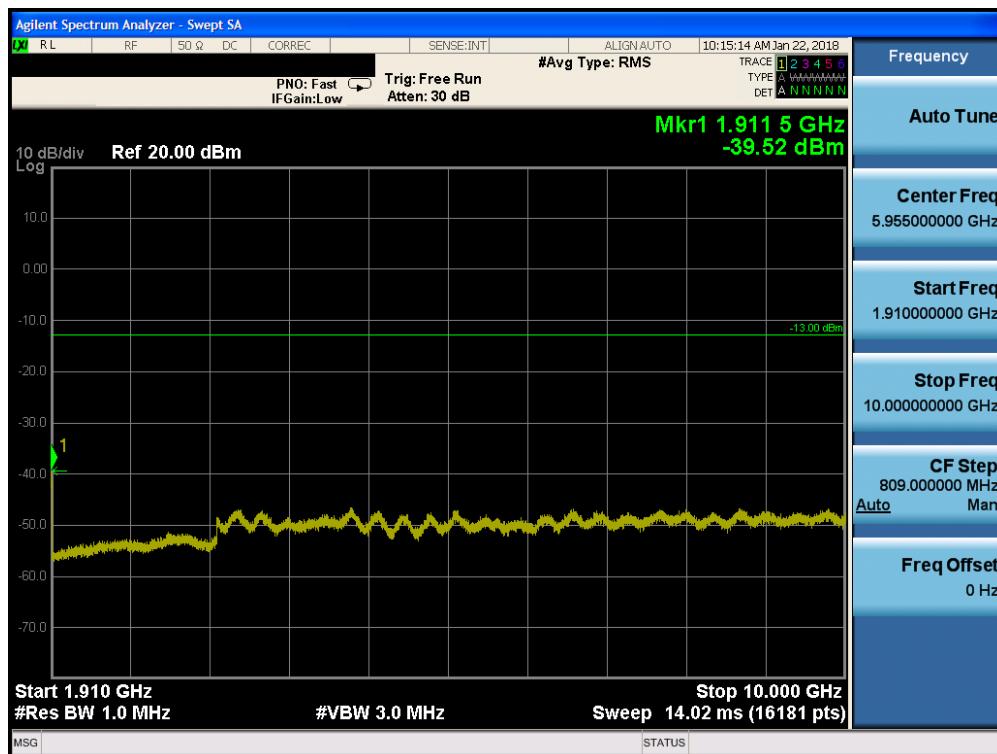


Plot 7-154. Conducted Spurious Plot (Band 2 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

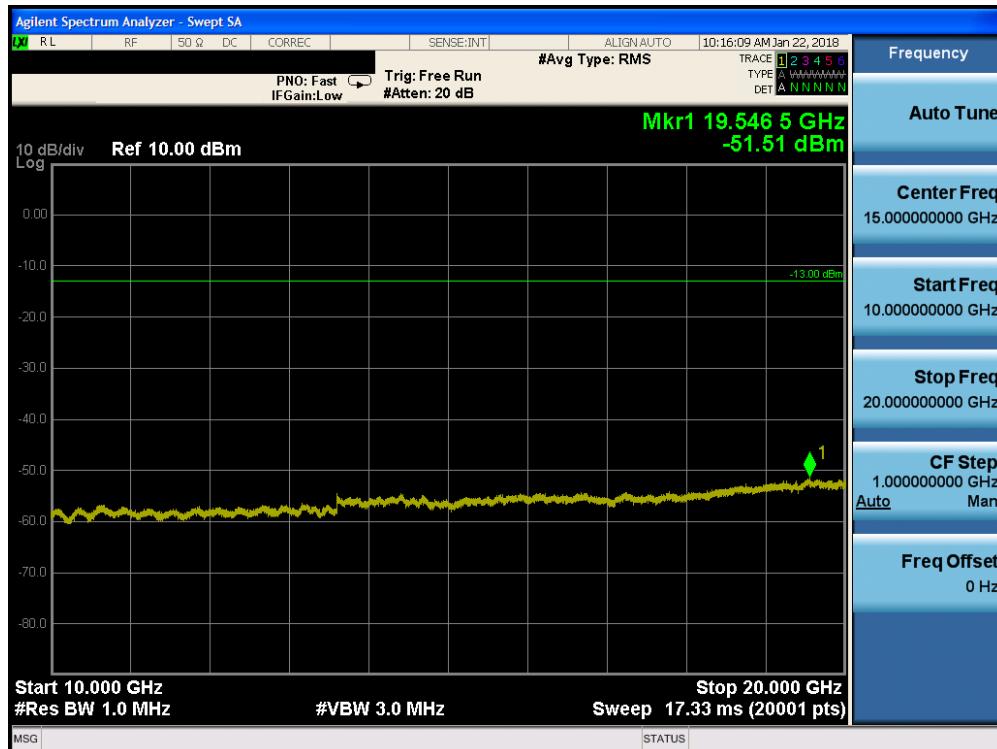


Plot 7-155. Conducted Spurious Plot (Band 2 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: BCGA1954	<b>PCTEST</b> ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C1710060006-03-R2.BCG	Test Dates: 10/31/2017-2/15/2018	EUT Type: Tablet Device	Page 99 of 260

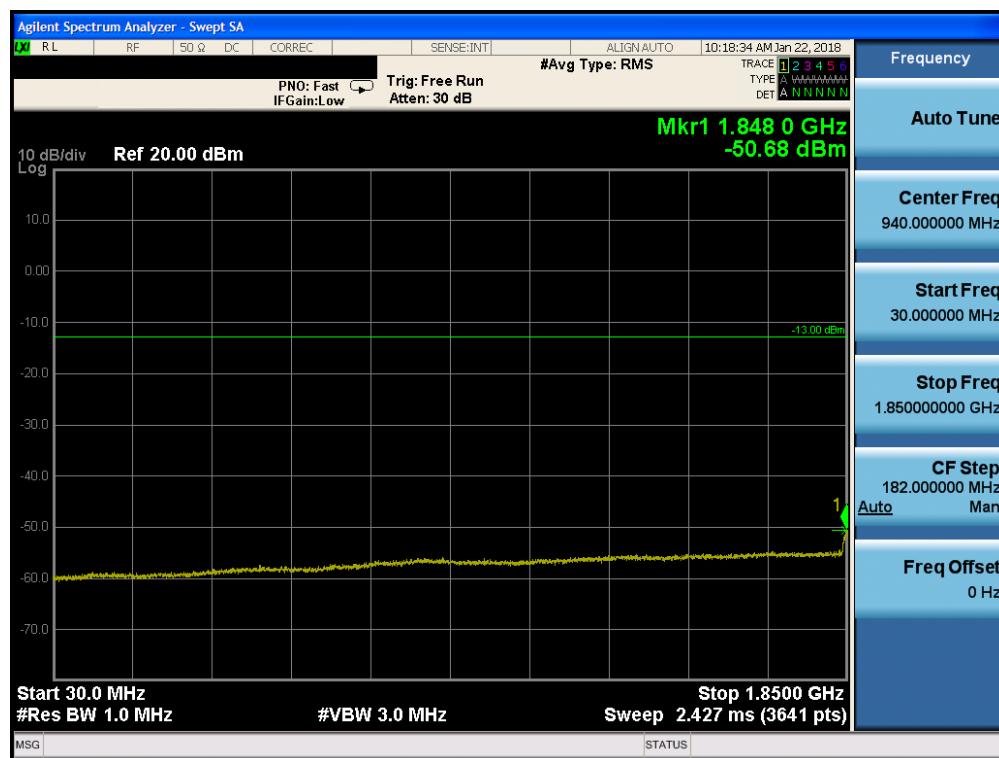


Plot 7-156. Conducted Spurious Plot (Band 2 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

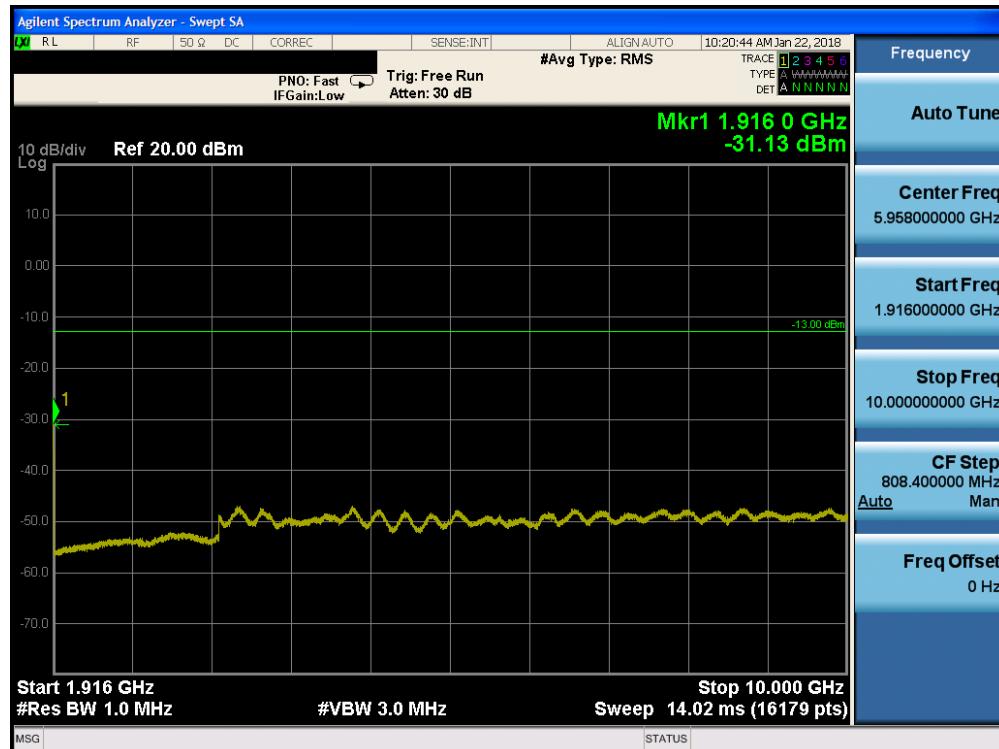


Plot 7-157. Conducted Spurious Plot (Band 2 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: BCGA1954	<b>PCTEST</b> ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C1710060006-03-R2.BCG	Test Dates: 10/31/2017-2/15/2018	EUT Type: Tablet Device	Page 100 of 260

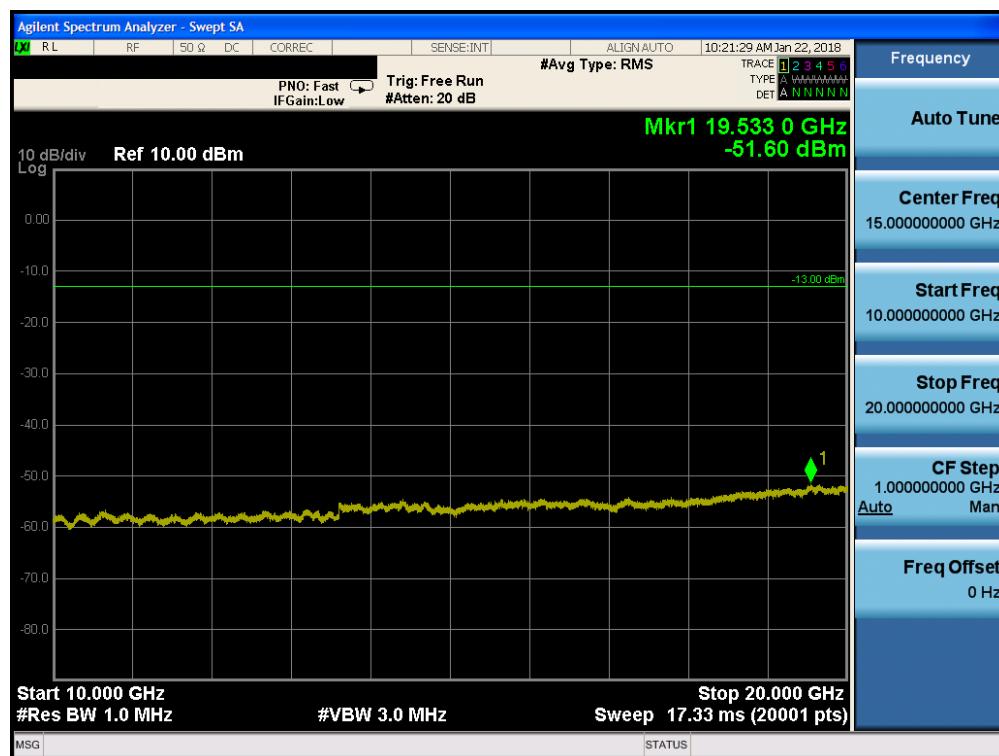


Plot 7-158. Conducted Spurious Plot (Band 2 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)



Plot 7-159. Conducted Spurious Plot (Band 2 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

FCC ID: BCGA1954	<b>PCTEST</b> ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C1710060006-03-R2.BCG	Test Dates: 10/31/2017-2/15/2018	EUT Type: Tablet Device	Page 101 of 260



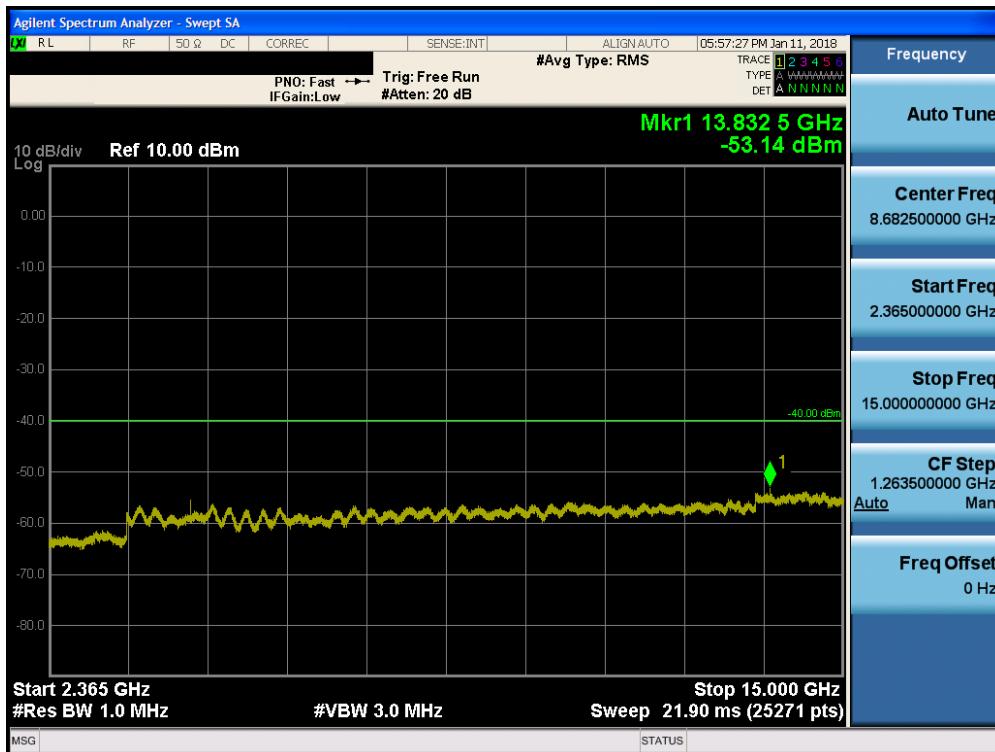
Plot 7-160. Conducted Spurious Plot (Band 2 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

FCC ID: BCGA1954	<b>PCTEST</b> ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C1710060006-03-R2.BCG	Test Dates: 10/31/2017-2/15/2018	EUT Type: Tablet Device	Page 102 of 260

## Band 30

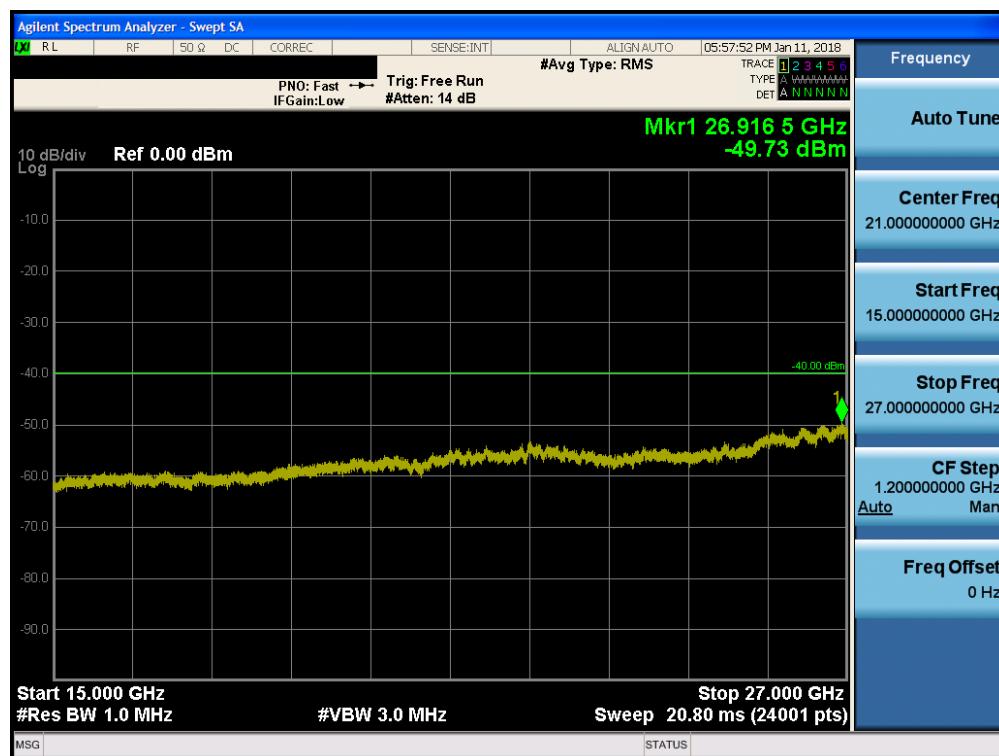


Plot 7-161. Conducted Spurious Plot (Band 30 - 5.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

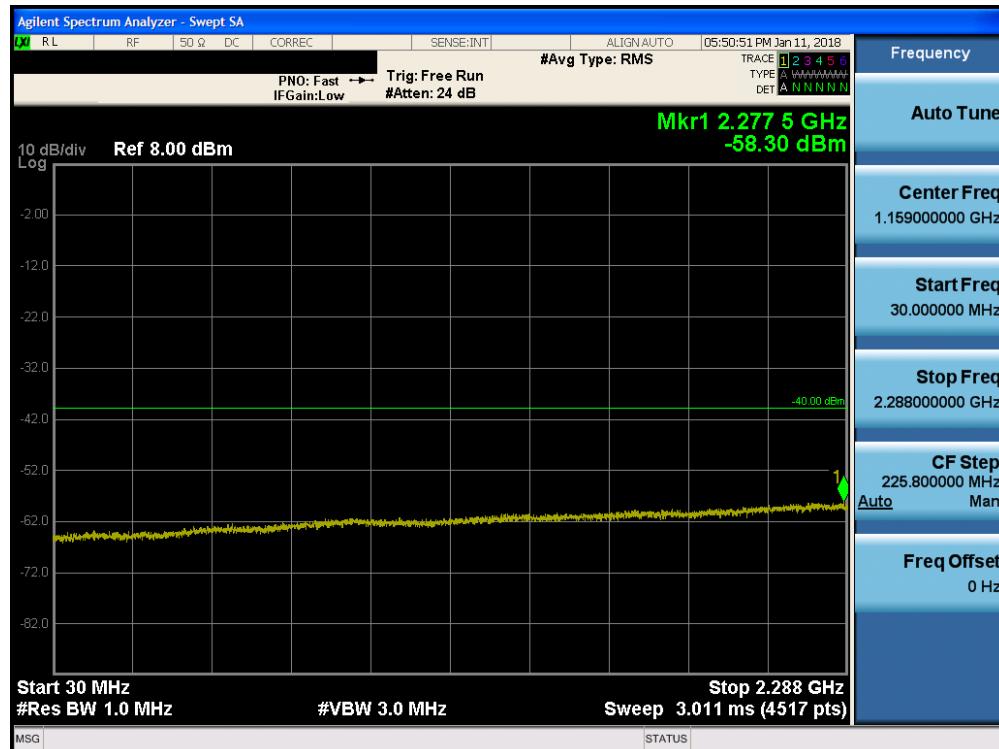


Plot 7-162. Conducted Spurious Plot (Band 30 - 5.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

FCC ID: BCGA1954	 PCTEST Engineering Laboratory, Inc.	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C1710060006-03-R2.BCG	Test Dates: 10/31/2017-2/15/2018	EUT Type: Tablet Device	Page 103 of 260

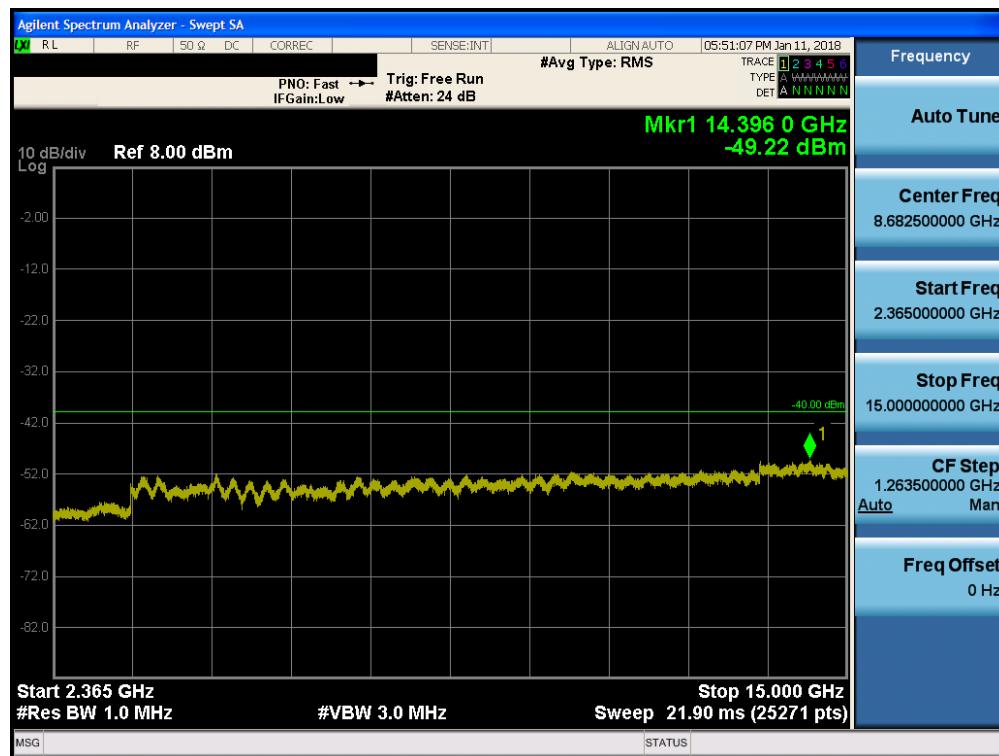


Plot 7-163. Conducted Spurious Plot (Band 30 - 5.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

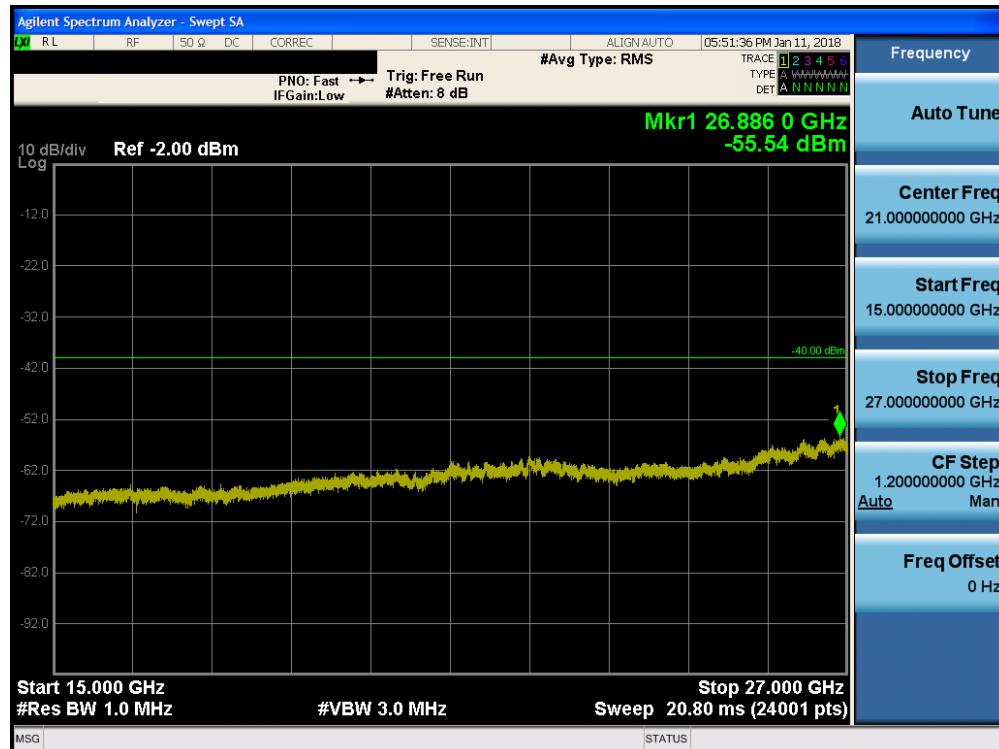


Plot 7-164. Conducted Spurious Plot (Band 30 - 5.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: BCGA1954	<b>PCTEST</b> ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C1710060006-03-R2.BCG	Test Dates: 10/31/2017-2/15/2018	EUT Type: Tablet Device	Page 104 of 260



Plot 7-165. Conducted Spurious Plot (Band 30 - 5.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

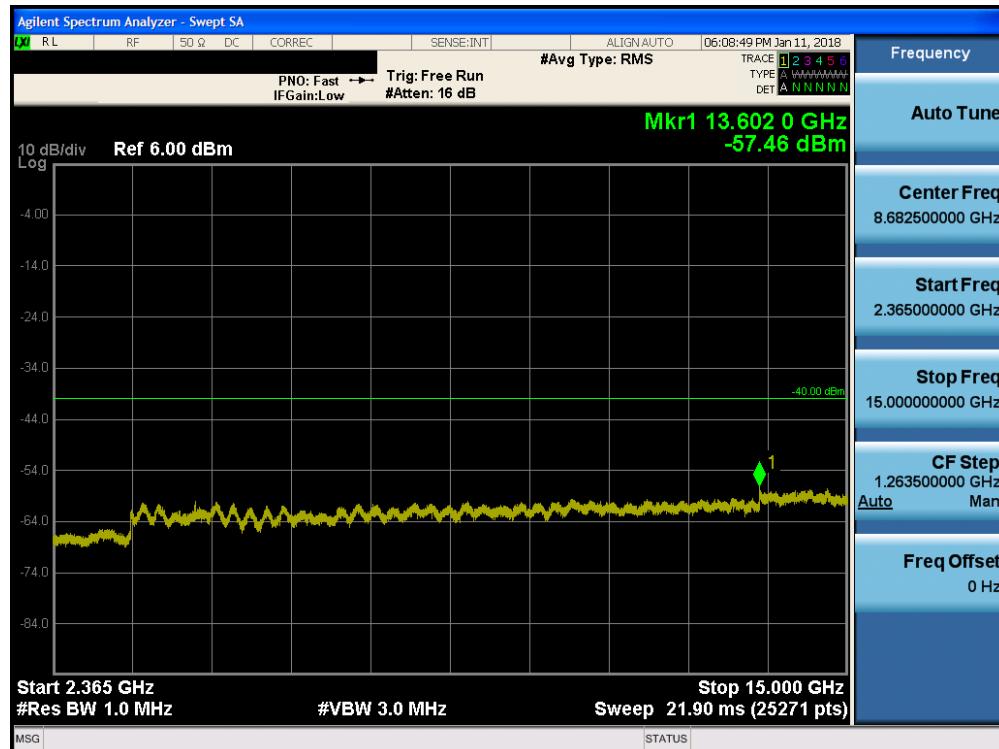


Plot 7-166. Conducted Spurious Plot (Band 30 - 5.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: BCGA1954	<b>PCTEST</b> ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C1710060006-03-R2.BCG	Test Dates: 10/31/2017-2/15/2018	EUT Type: Tablet Device	Page 105 of 260

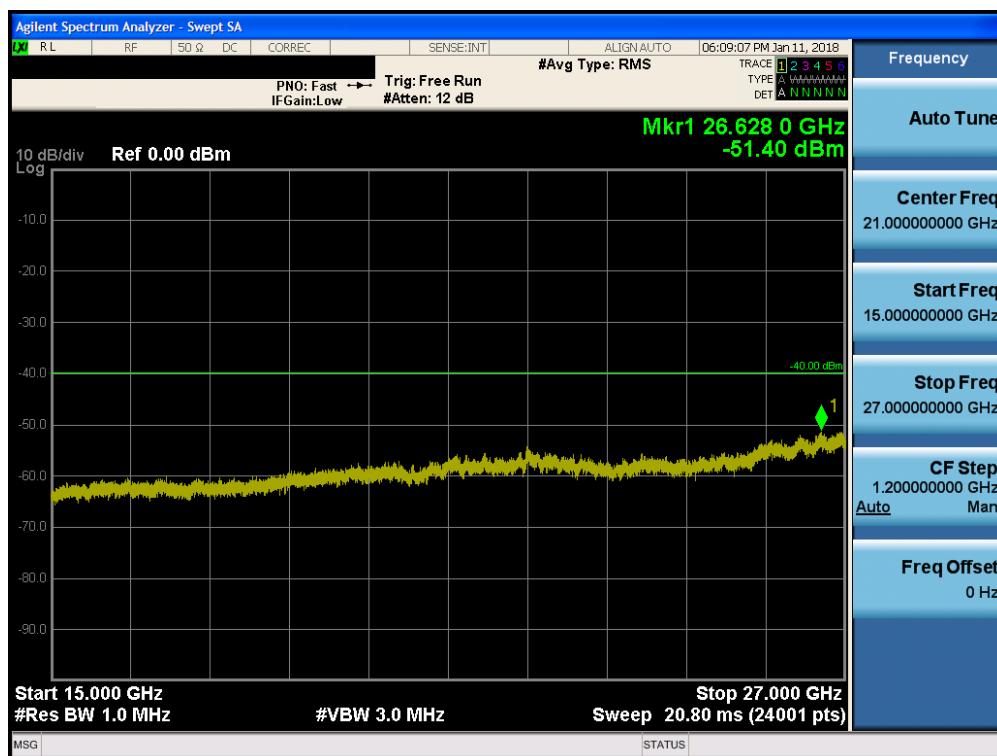


Plot 7-167. Conducted Spurious Plot (Band 30 - 5.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)



Plot 7-168. Conducted Spurious Plot (Band 30 - 5.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

FCC ID: BCGA1954	<b>PCTEST</b> ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C1710060006-03-R2.BCG	Test Dates: 10/31/2017-2/15/2018	EUT Type: Tablet Device	Page 106 of 260



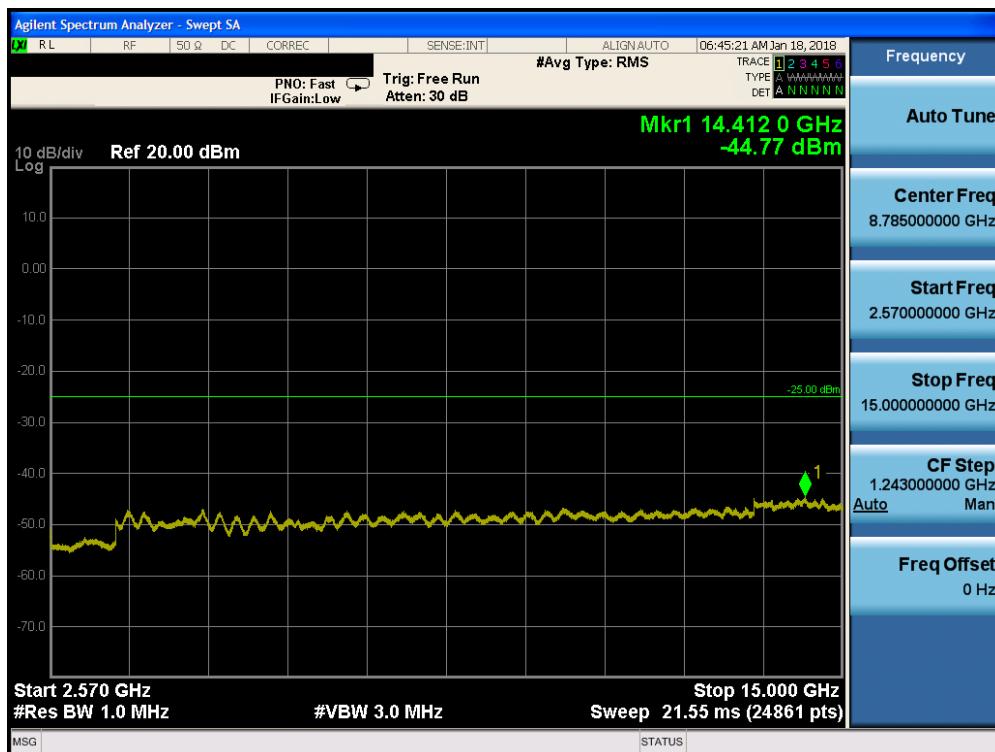
Plot 7-169. Conducted Spurious Plot (Band 30 - 5.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

FCC ID: BCGA1954	<b>PCTEST</b> ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C1710060006-03-R2.BCG	Test Dates: 10/31/2017-2/15/2018	EUT Type: Tablet Device	Page 107 of 260

## Band 7



Plot 7-170. Conducted Spurious Plot (Band 7 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

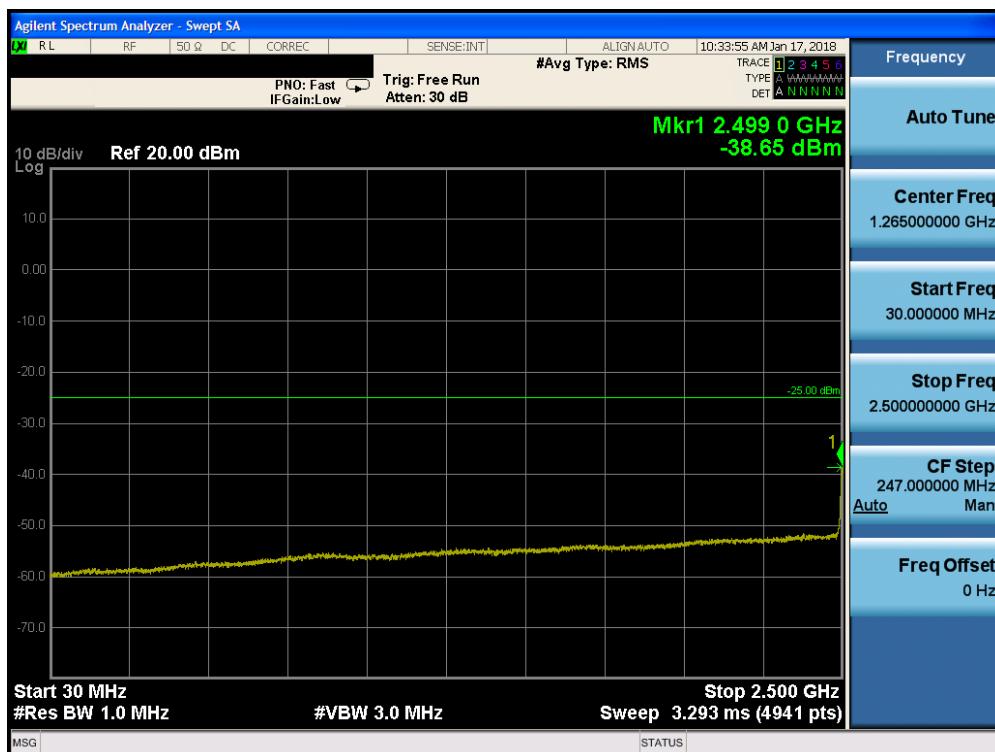


Plot 7-171. Conducted Spurious Plot (Band 7 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

FCC ID: BCGA1954	 <b>MEASUREMENT REPORT (CERTIFICATION)</b>		Approved by: Quality Manager
Test Report S/N: 1C1710060006-03-R2.BCG	Test Dates: 10/31/2017-2/15/2018	EUT Type: Tablet Device	Page 108 of 260

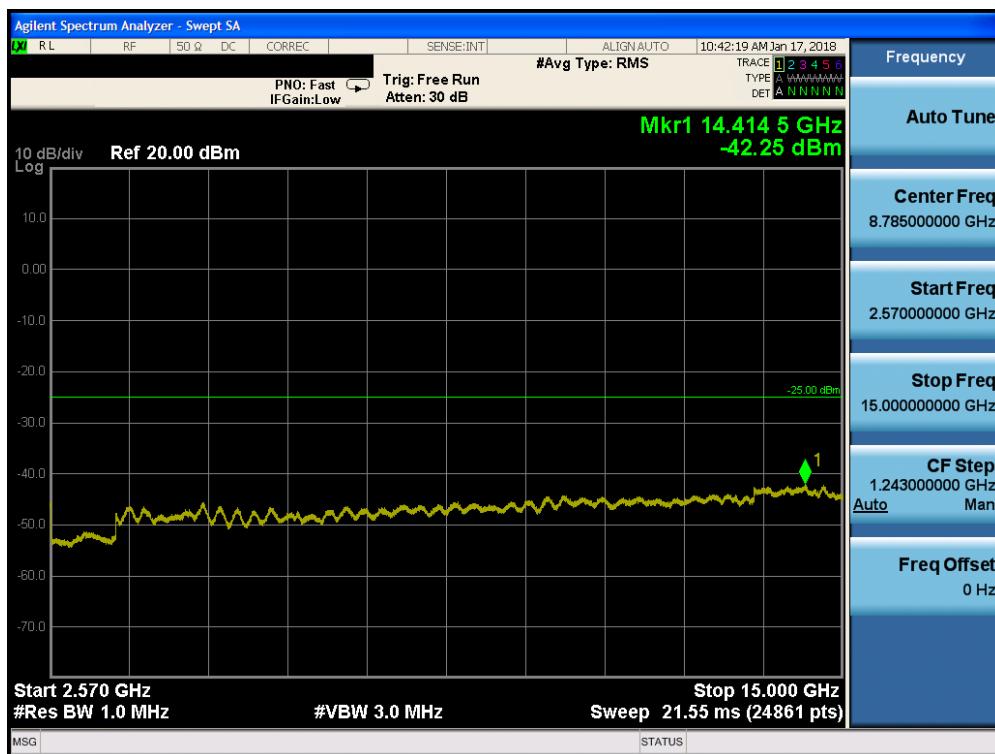


Plot 7-172. Conducted Spurious Plot (Band 7 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)



Plot 7-173. Conducted Spurious Plot (Band 7 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: BCGA1954	<b>PCTEST</b> ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C1710060006-03-R2.BCG	Test Dates: 10/31/2017-2/15/2018	EUT Type: Tablet Device	Page 109 of 260



Plot 7-174. Conducted Spurious Plot (Band 7 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

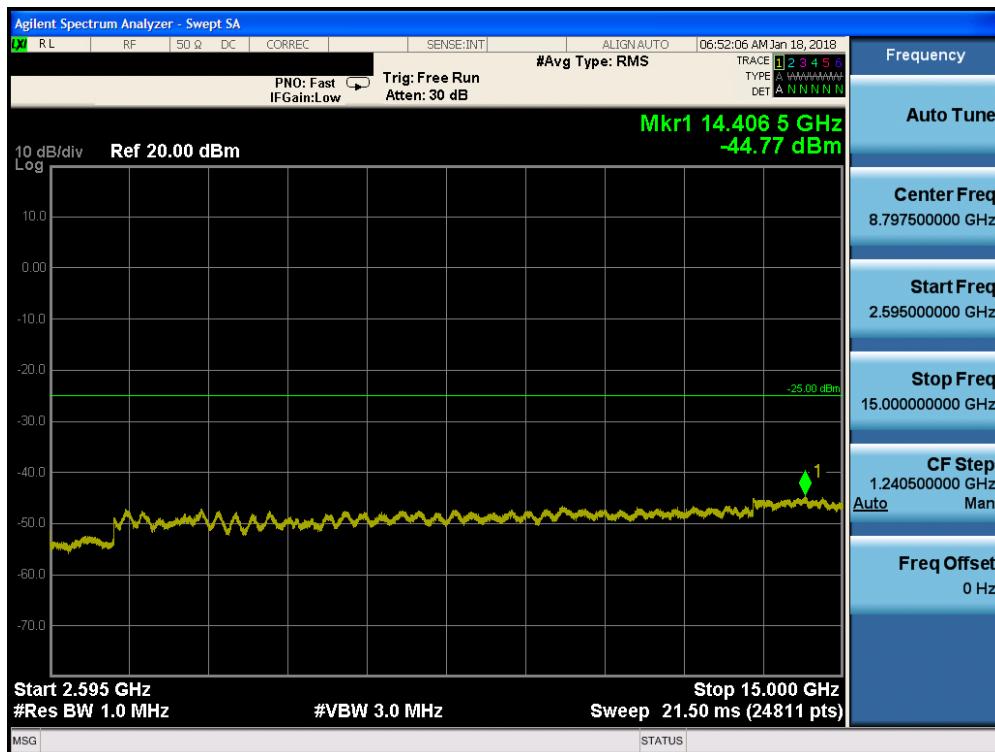


Plot 7-175. Conducted Spurious Plot (Band 7 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: BCGA1954	<b>PCTEST</b> ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C1710060006-03-R2.BCG	Test Dates: 10/31/2017-2/15/2018	EUT Type: Tablet Device	Page 110 of 260



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



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

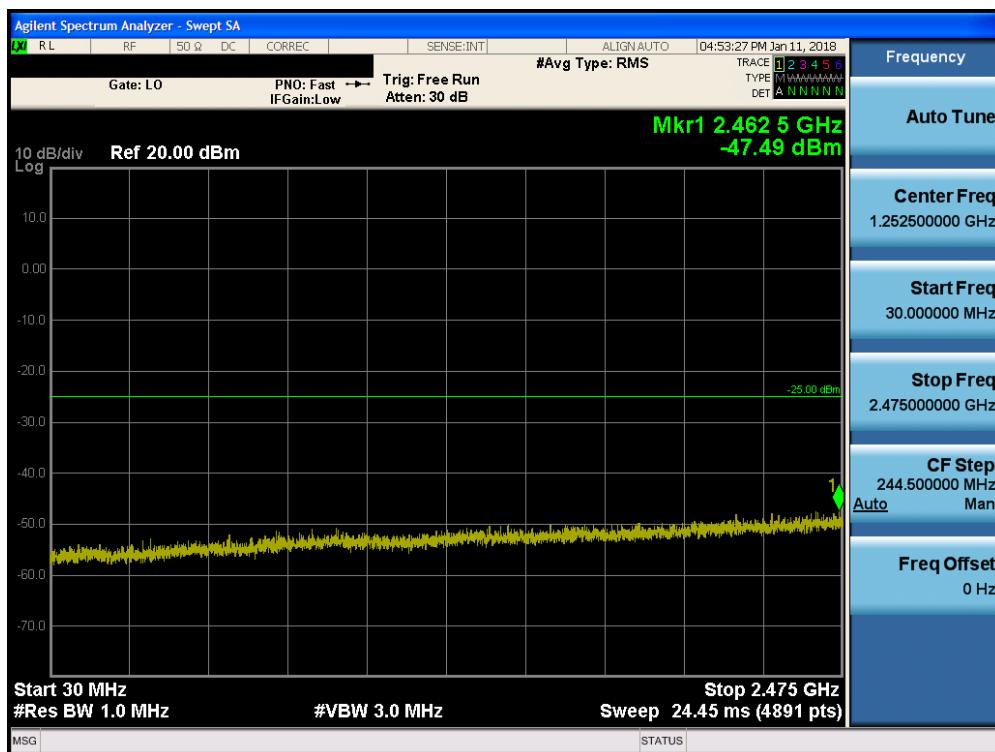
FCC ID: BCGA1954	<b>PCTEST</b> ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C1710060006-03-R2.BCG	Test Dates: 10/31/2017-2/15/2018	EUT Type: Tablet Device	Page 111 of 260



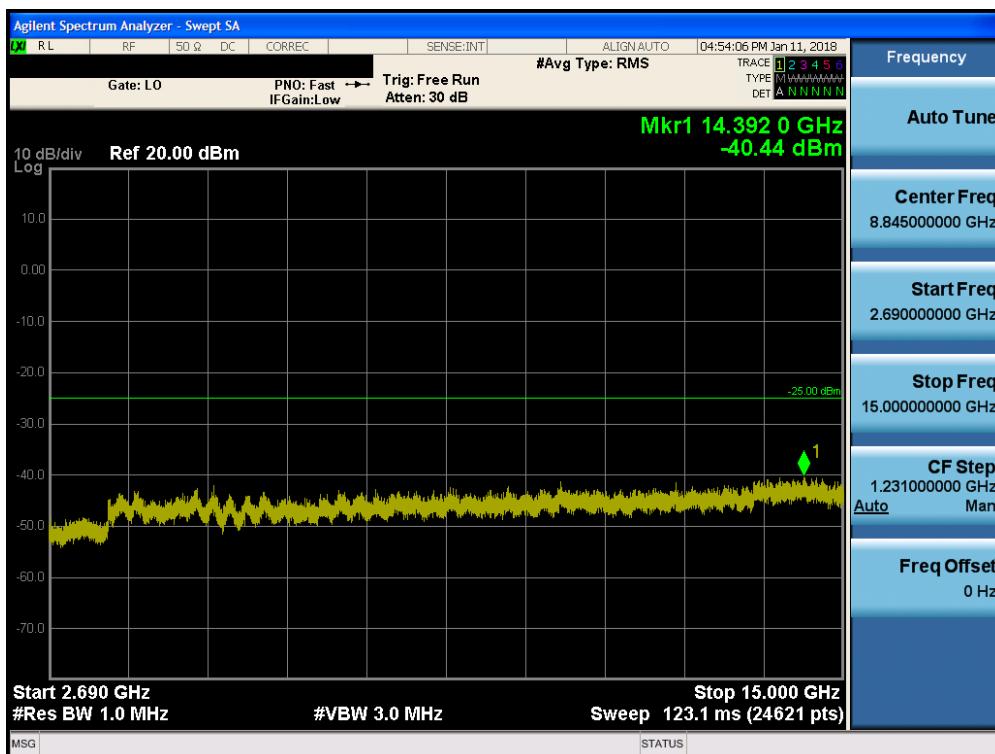
Plot 7-178. Conducted Spurious Plot (Band 7 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

FCC ID: BCGA1954	<b>PCTEST</b> ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C1710060006-03-R2.BCG	Test Dates: 10/31/2017-2/15/2018	EUT Type: Tablet Device	Page 112 of 260

## Band 41

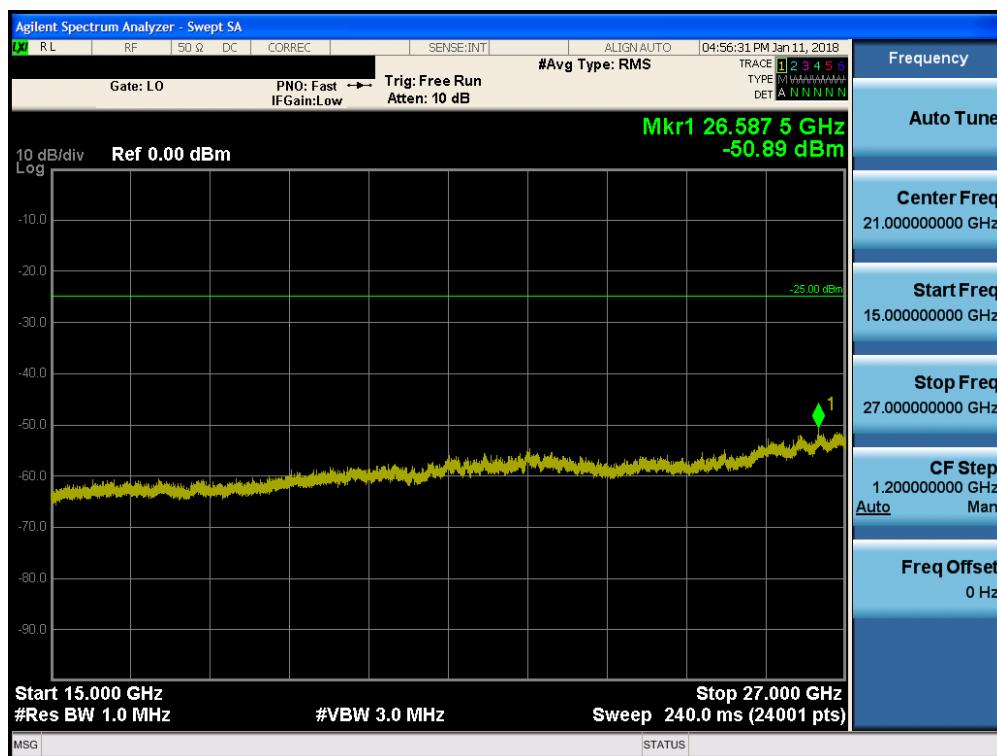


Plot 7-179. Conducted Spurious Plot (Band 41 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

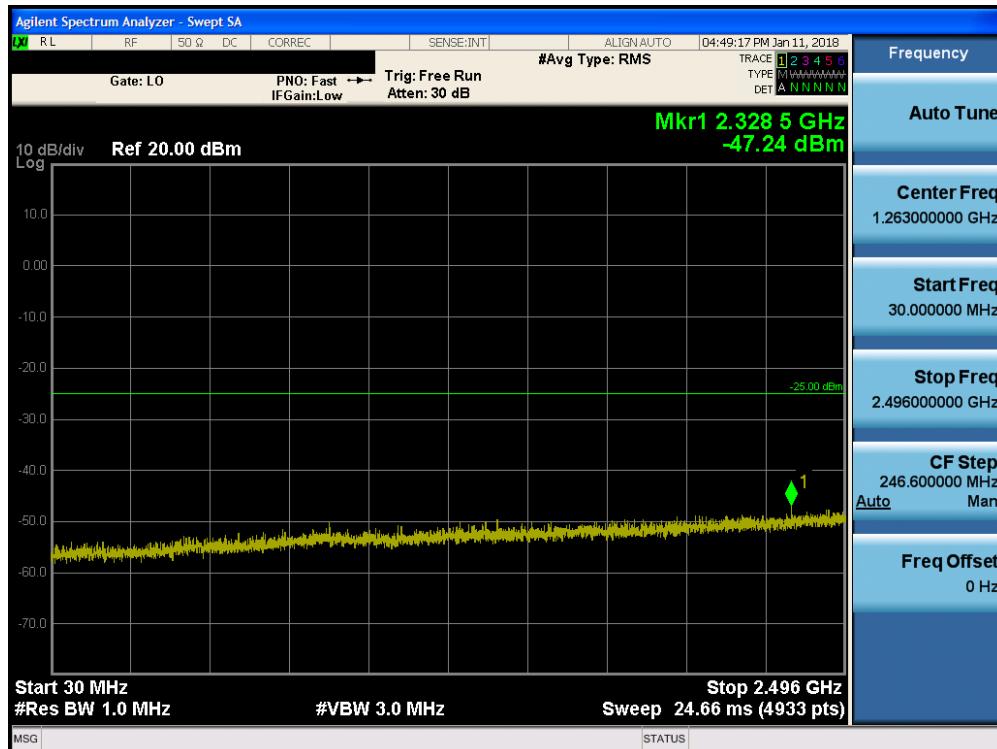


Plot 7-180. Conducted Spurious Plot (Band 41 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

FCC ID: BCGA1954	 PCTEST Engineering Laboratory, Inc.	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C1710060006-03-R2.BCG	Test Dates: 10/31/2017-2/15/2018	EUT Type: Tablet Device	Page 113 of 260

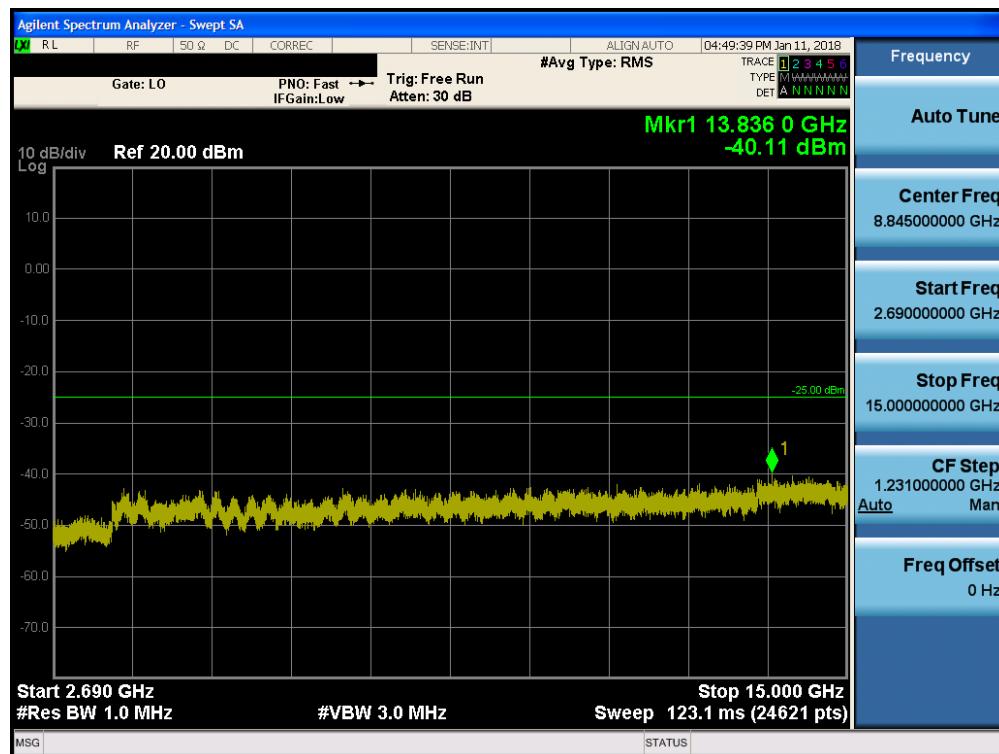


Plot 7-181. Conducted Spurious Plot (Band 41 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

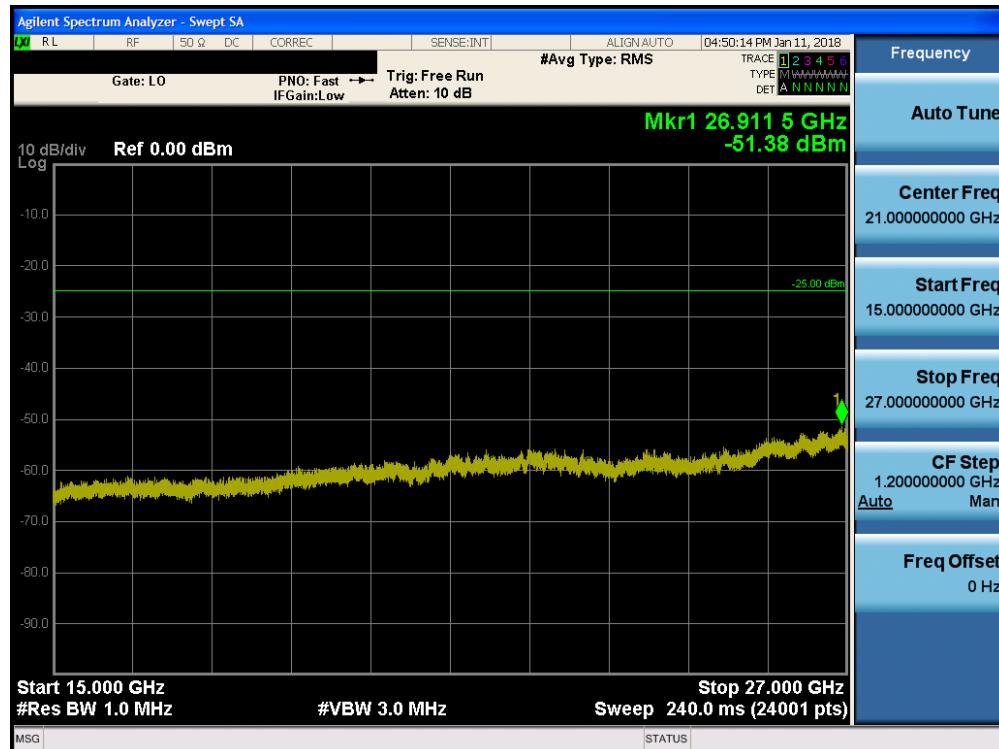


Plot 7-182. Conducted Spurious Plot (Band 41 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: BCGA1954	<b>PCTEST</b> ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C1710060006-03-R2.BCG	Test Dates: 10/31/2017-2/15/2018	EUT Type: Tablet Device	Page 114 of 260

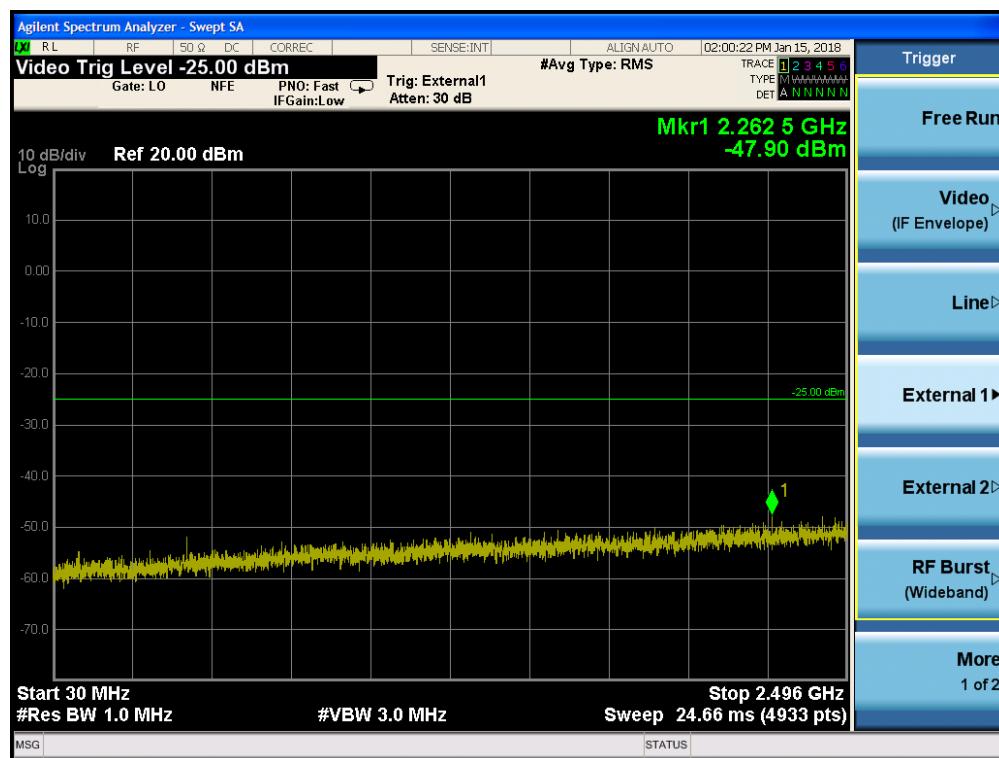


Plot 7-183. Conducted Spurious Plot (Band 41 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

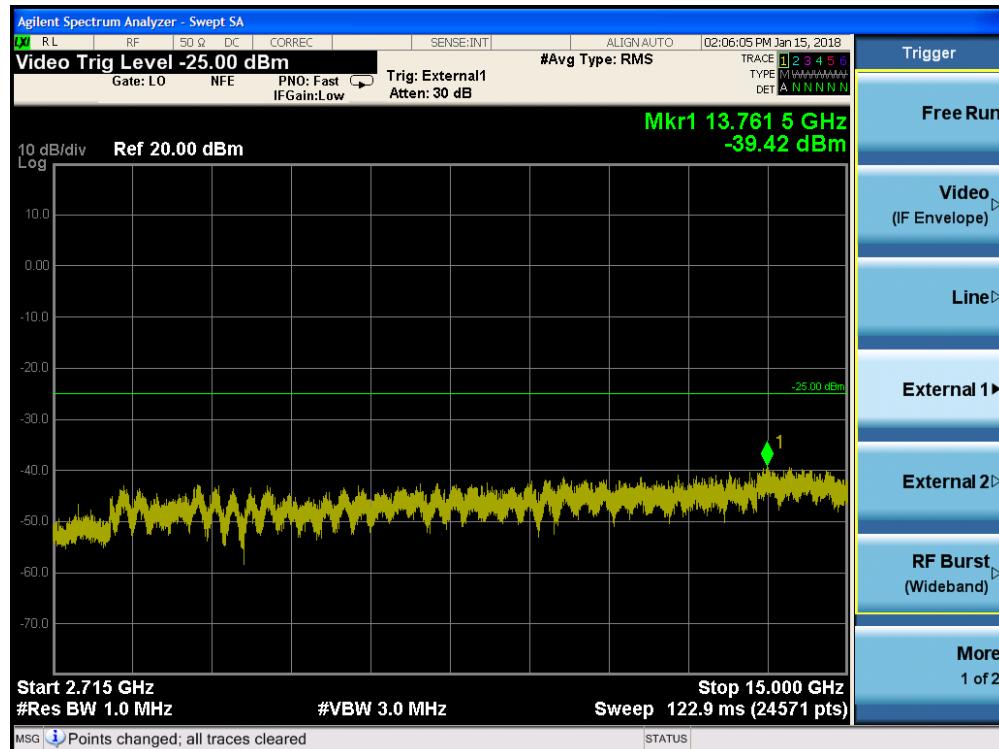


Plot 7-184. Conducted Spurious Plot (Band 41 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: BCGA1954	<b>PCTEST</b> ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C1710060006-03-R2.BCG	Test Dates: 10/31/2017-2/15/2018	EUT Type: Tablet Device	Page 115 of 260

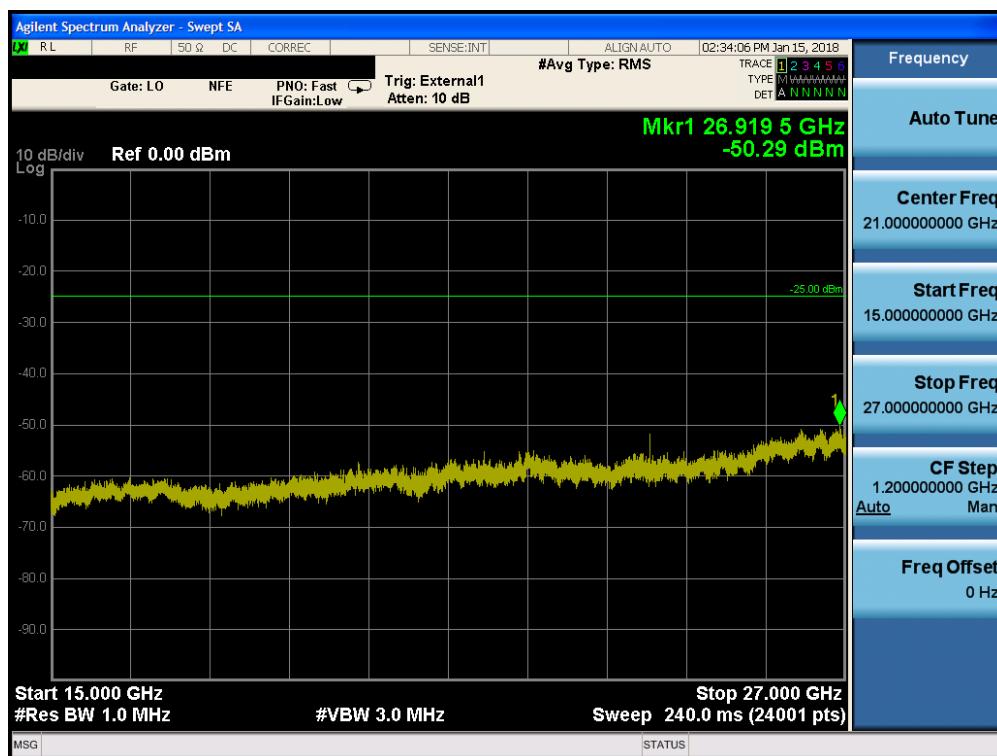


Plot 7-185. Conducted Spurious Plot (Band 41 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)



Plot 7-186. Conducted Spurious Plot (Band 41 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

FCC ID: BCGA1954	<b>PCTEST</b> ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C1710060006-03-R2.BCG	Test Dates: 10/31/2017-2/15/2018	EUT Type: Tablet Device	Page 116 of 260



Plot 7-187. Conducted Spurious Plot (Band 41 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

FCC ID: BCGA1954	<b>PCTEST</b> ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C1710060006-03-R2.BCG	Test Dates: 10/31/2017-2/15/2018	EUT Type: Tablet Device	Page 117 of 260

## 7.4 Band Edge Emissions at Antenna Terminal

§2.1051 §22.917(a) §24.238(a) §27.53(c) §27.53(g) §27.53(h) §27.53(m) §27.53(a)(4)

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

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

***The minimum permissible attenuation level for Band 7 and 41 is as noted in the Test Notes on the following page.***

### Test Procedure Used

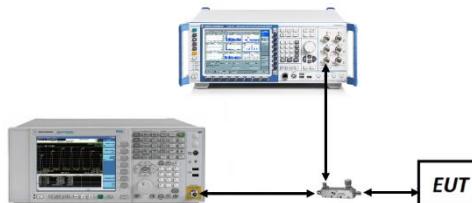
KDB 971168 D01 v03 – Section 6.0

### 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 for continuous emissions, max hold for pulse emissions
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: BCGA1954	 <b>MEASUREMENT REPORT (CERTIFICATION)</b>		Approved by: Quality Manager
Test Report S/N: 1C1710060006-03-R2.BCG	Test Dates: 10/31/2017-2/15/2018	EUT Type: Tablet Device	Page 118 of 260

## Test Notes

Per 22.917(b), 24.238(a), 27.53(h), RSS-130(4.6), RSS-132(5.5), RSS-133(6.5), RSS-139(6.5) and RSS-199(4.5) 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.

Per 27.53(g), RSS-130(4.6) for operations in the 698-746 MHz band, in the 100 kHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least 30 kHz may be employed to demonstrate compliance with the out-of-band emissions limit.

Per 27.53(c)(5) for operations in the 776-788 MHz band, in the 100 kHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least 30 kHz may be employed to demonstrate compliance with the out-of-band emissions limit.

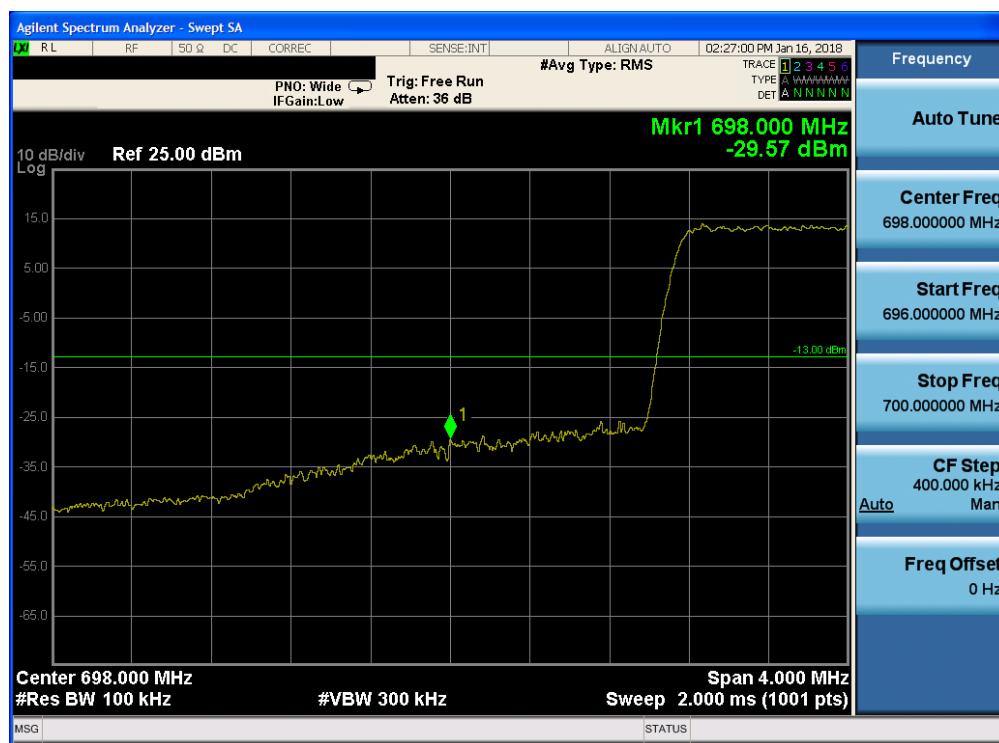
For all plots showing emissions in the 763 – 775MHz and 793 – 805MHz band, the FCC limit per 27.53(c)(4) is  $65 + 10\log_{10}(P) = -35\text{dBm}$  in a 6.25kHz bandwidth.

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

Per 27.53(m), RSS-199(4.5) for operations in the BRS/EBS bands, the attenuation factor shall be not less than  $40 + 10 \log (P)$  dB on all frequencies between the channel edge and 5 megahertz from the channel edge,  $43 + 10 \log (P)$  dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and  $55 + 10 \log (P)$  dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth. In addition, the attenuation factor shall not be less than  $43 + 10 \log (P)$  dB on all frequencies between 2490.5 MHz and 2496 MHz and  $55 + 10 \log (P)$  dB at or below 2490.5 MHz.

FCC ID: BCGA1954	 <b>MEASUREMENT REPORT (CERTIFICATION)</b>		Approved by: Quality Manager
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## Band 12



Plot 7-188. Lower Band Edge Plot (Band 12 - 1.4MHz QPSK - Full RB Configuration)



Plot 7-189. Upper Band Edge Plot (Band 12 - 1.4MHz QPSK - Full RB Configuration)

FCC ID: BCGA1954	 <b>PCTEST</b> ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C1710060006-03-R2.BCG	Test Dates: 10/31/2017-2/15/2018	EUT Type: Tablet Device	Page 120 of 260

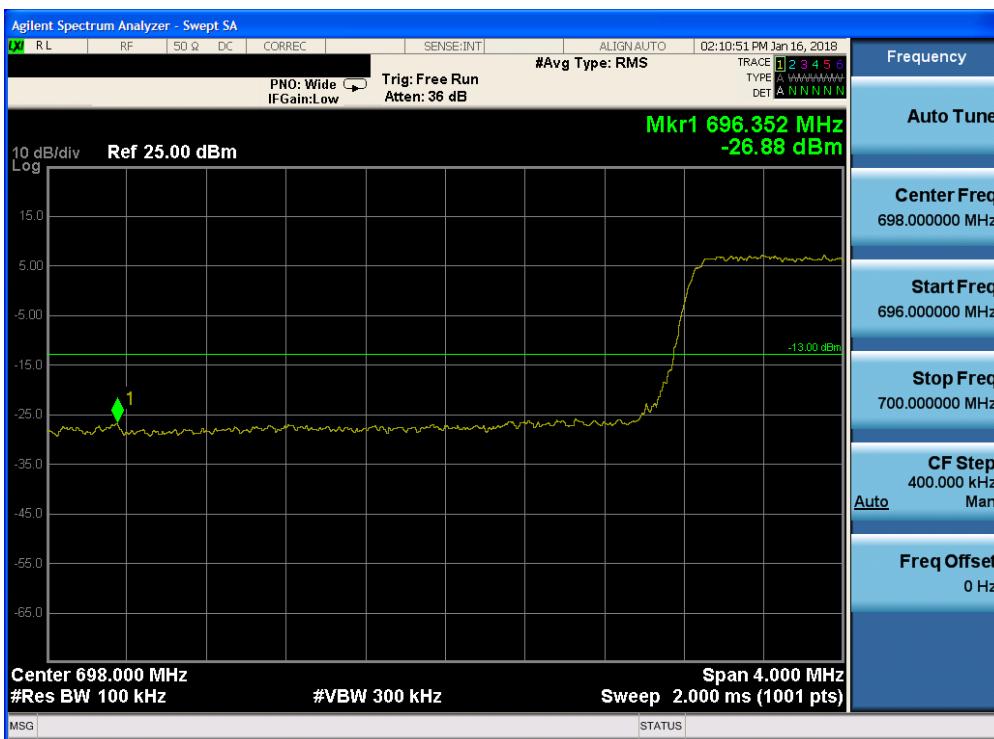


Plot 7-190. Lower Band Edge Plot (Band 12 - 3.0MHz QPSK - Full RB Configuration)



Plot 7-191. Upper Band Edge Plot (Band 12 - 3.0MHz QPSK - Full RB Configuration)

FCC ID: BCGA1954	<b>PCTEST</b> ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C1710060006-03-R2.BCG	Test Dates: 10/31/2017-2/15/2018	EUT Type: Tablet Device	Page 121 of 260

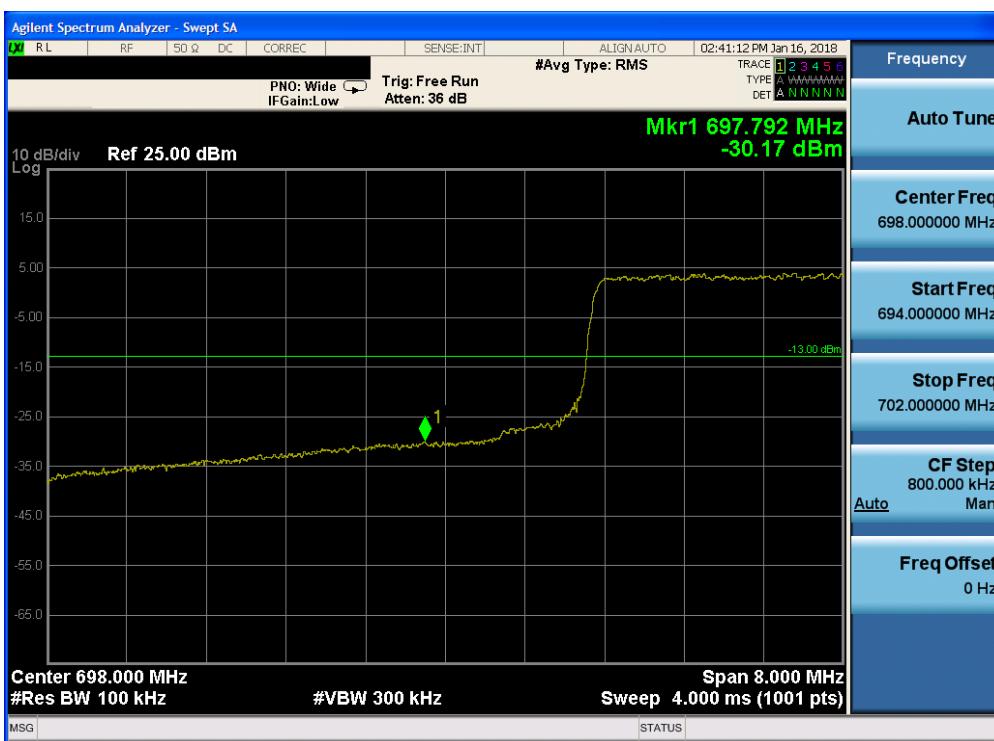


Plot 7-192. Lower Band Edge Plot (Band 12 - 5.0MHz QPSK - Full RB Configuration)

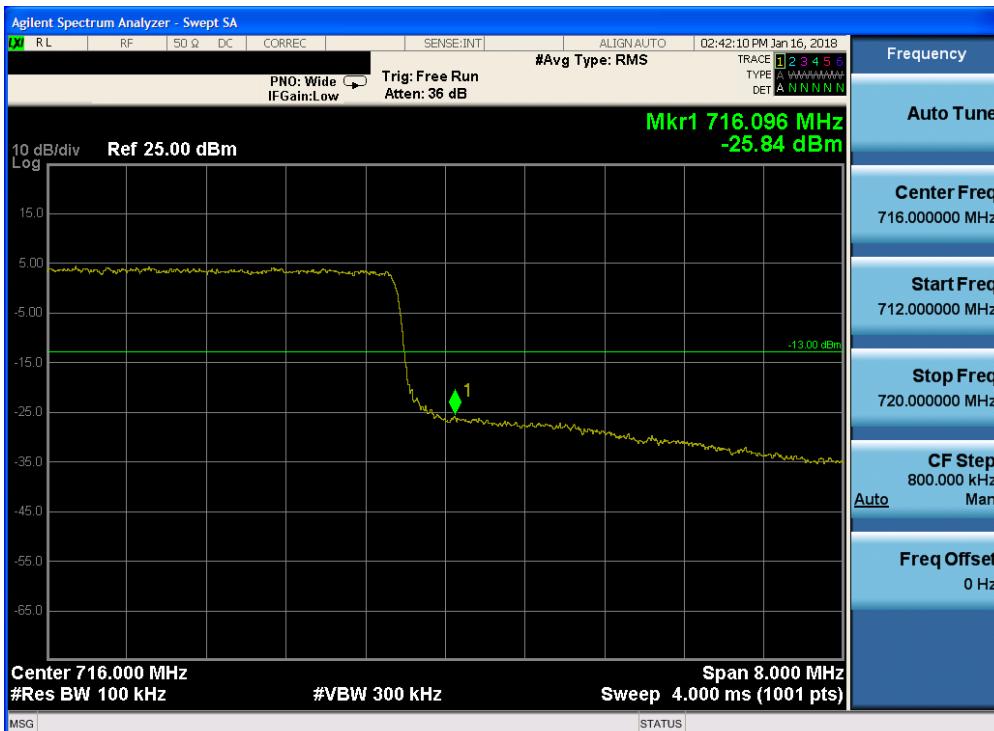


Plot 7-193. Upper Band Edge Plot (Band 12 - 5.0MHz QPSK - Full RB Configuration)

FCC ID: BCGA1954	 PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C1710060006-03-R2.BCG	Test Dates: 10/31/2017-2/15/2018	EUT Type: Tablet Device	Page 122 of 260



Plot 7-194. Lower Band Edge Plot (Band 12 - 10.0MHz QPSK - Full RB Configuration)



Plot 7-195. Upper Band Edge Plot (Band 12 - 10.0MHz QPSK - Full RB Configuration)

FCC ID: BCGA1954	<b>PCTEST</b> ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C1710060006-03-R2.BCG	Test Dates: 10/31/2017-2/15/2018	EUT Type: Tablet Device	Page 123 of 260

## Band 17

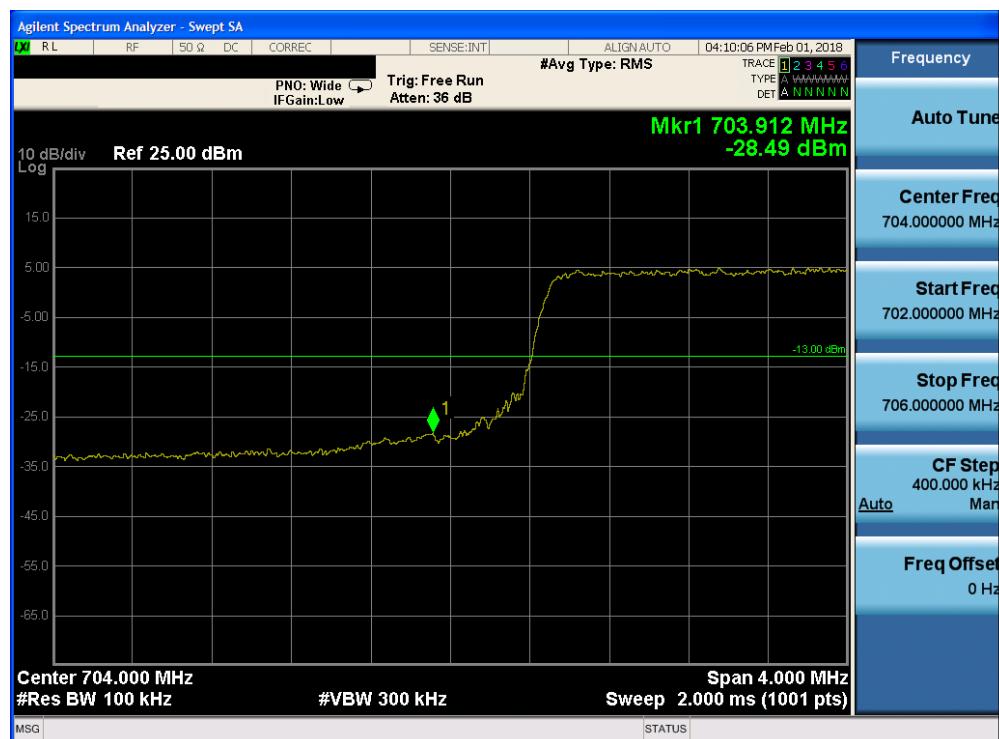


Plot 7-196. Lower Band Edge Plot (Band 17 - 5.0MHz QPSK - Full RB Configuration)



Plot 7-197. Upper Band Edge Plot (Band 17 - 5.0MHz QPSK - Full RB Configuration)

FCC ID: BCGA1954	 <b>PCTEST</b> ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1710060006-03-R2.BCG	Test Dates: 10/31/2017-2/15/2018	EUT Type: Tablet Device		Page 124 of 260



Plot 7-198. Lower Band Edge Plot (Band 17 - 10.0MHz QPSK - Full RB Configuration)



Plot 7-199. Upper Band Edge Plot (Band 17 - 10.0MHz QPSK - Full RB Configuration)

FCC ID: BCGA1954	<b>PCTEST</b> ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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## Band 13

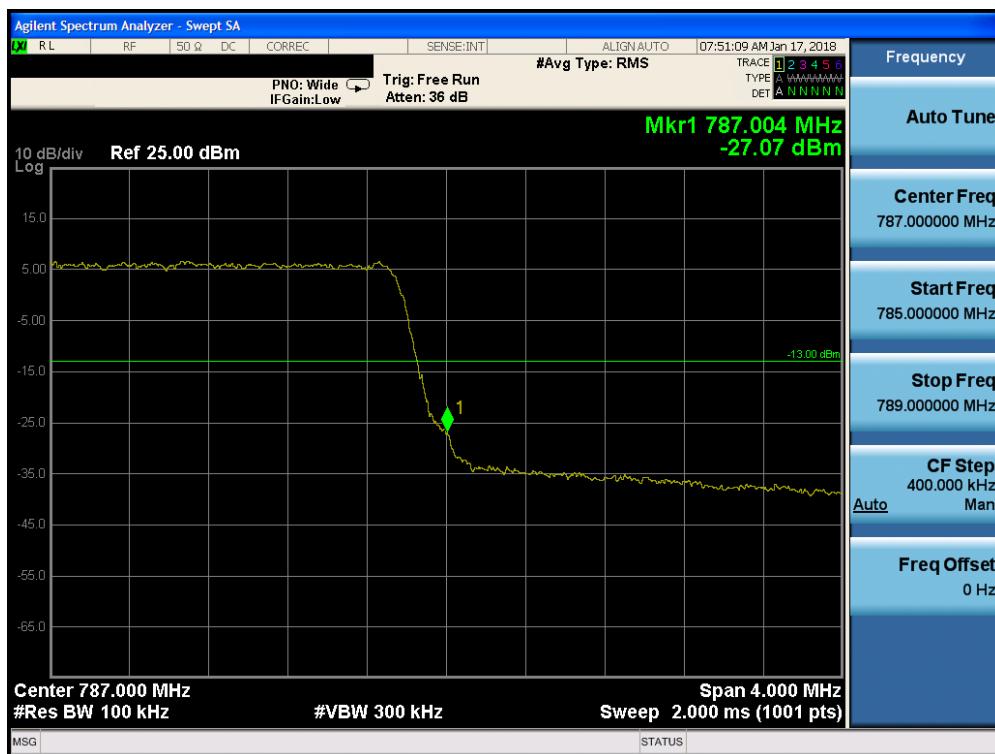


Plot 7-200. Lower Band Edge Plot (Band 13 - 5.0MHz QPSK - Full RB Configuration)



Plot 7-201. Lower Emission Mask Edge Plot (Band 13 - 5.0MHz QPSK - Full RB Configuration)

FCC ID: BCGA1954	 PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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Plot 7-202. Upper Band Edge Plot (Band 13 - 5.0MHz QPSK - Full RB Configuration)



Plot 7-203. Upper Emission Mask Edge Plot (Band 13 - 5.0MHz QPSK - Full RB Configuration)

FCC ID: BCGA1954	<b>PCTEST</b> ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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Plot 7-204. Lower Band Edge Plot (Band 13 - 10.0MHz QPSK - Full RB Configuration)



Plot 7-205. Lower Emission Mask Edge Plot (Band 13 - 10.0MHz QPSK - Full RB Configuration)

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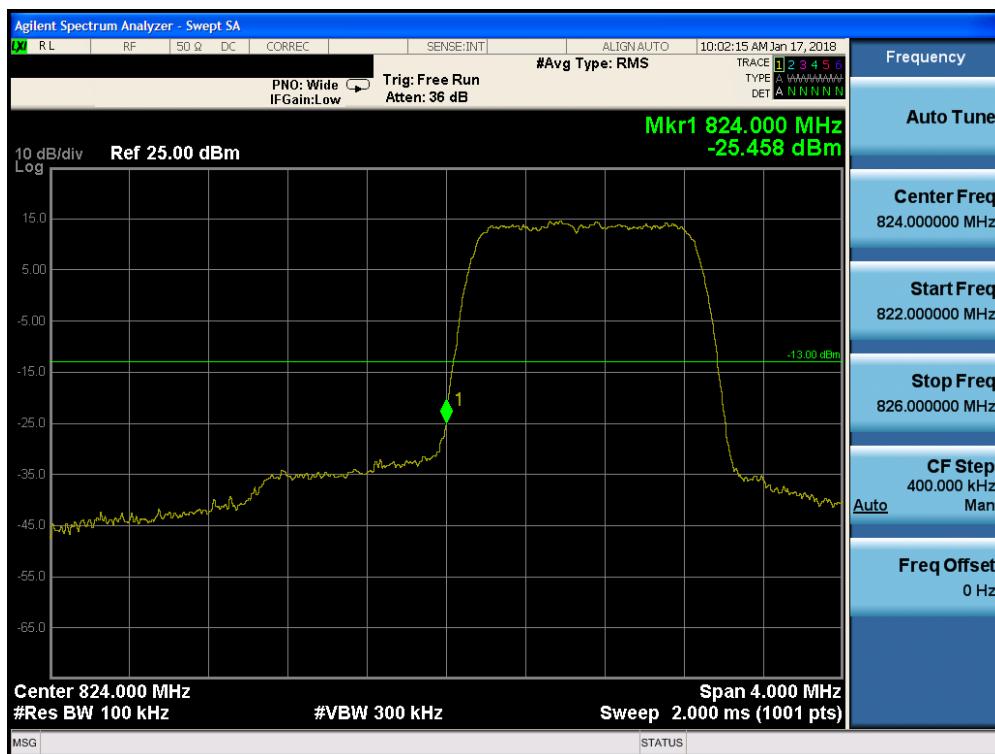
Plot 7-206. Upper Band Edge Plot (Band 13 - 10.0MHz QPSK - Full RB Configuration)



Plot 7-207. Upper Emission Mask Edge Plot (Band 13 - 10.0MHz QPSK - Full RB Configuration)

FCC ID: BCGA1954	<b>PCTEST</b> ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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## Band 26



Plot 7-208. Lower Band Edge Plot (Band 26 - 1.4MHz QPSK - Full RB Configuration)



Plot 7-209. Upper Band Edge Plot (Band 26 - 1.4MHz QPSK - Full RB Configuration)

FCC ID: BCGA1954	 <b>MEASUREMENT REPORT (CERTIFICATION)</b>		Approved by: Quality Manager
Test Report S/N: 1C1710060006-03-R2.BCG	Test Dates: 10/31/2017-2/15/2018	EUT Type: Tablet Device	Page 130 of 260