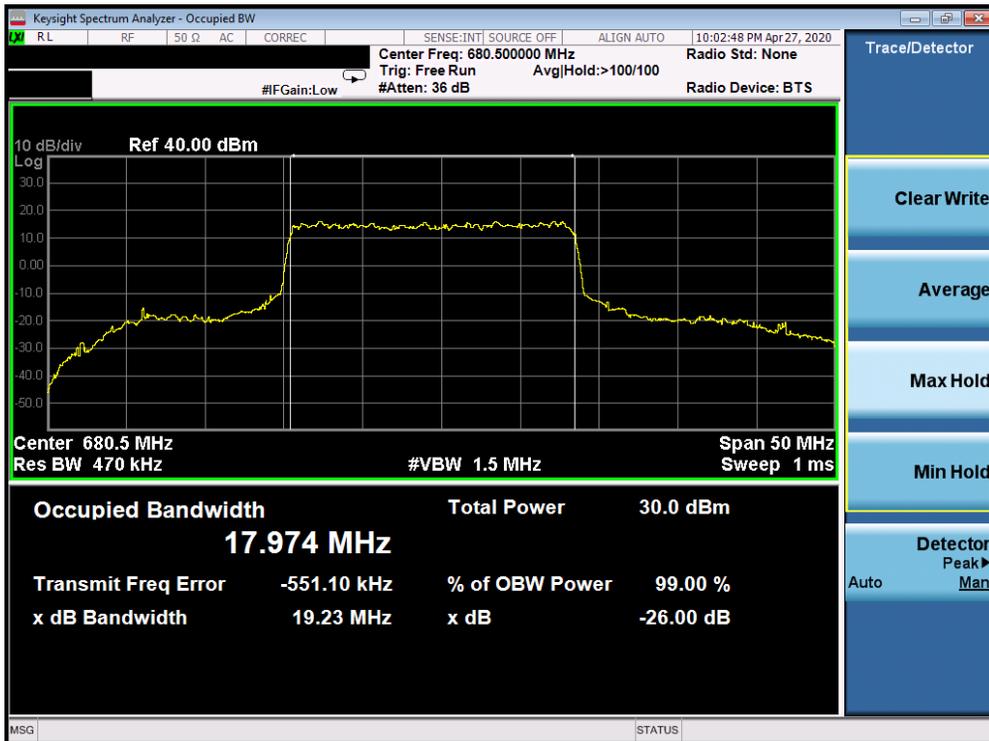


Plot 7-125. Occupied Bandwidth Plot (5G sub6 n71 - 20.0MHz QPSK - Full RB Configuration)

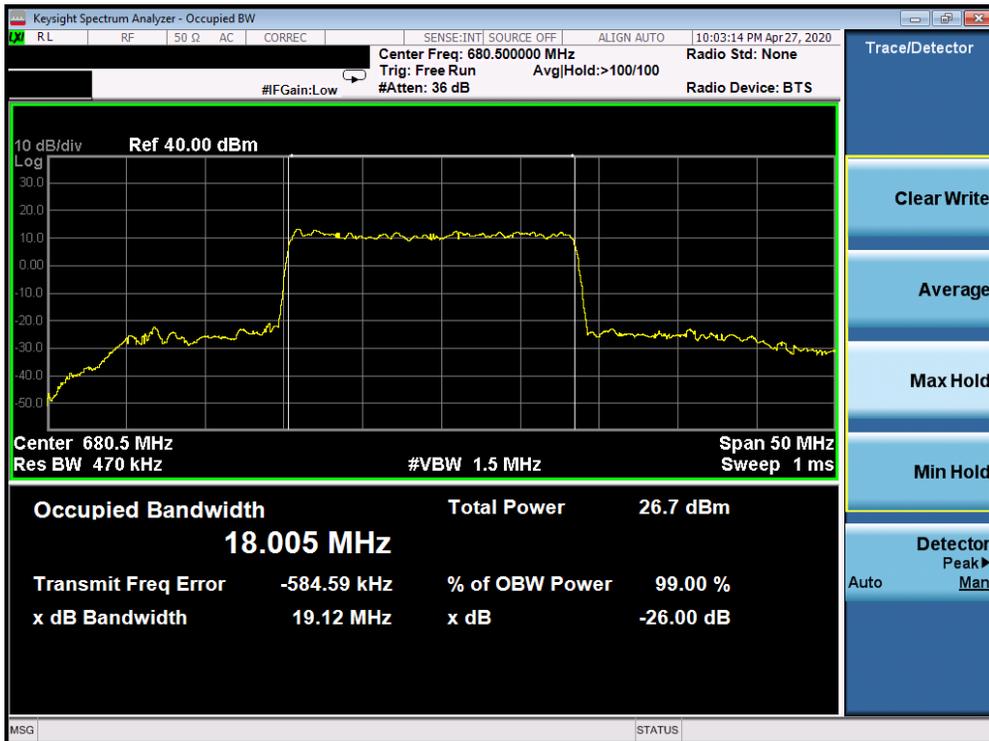


Plot 7-126. Occupied Bandwidth Plot (5G sub6 n71 - 20.0MHz 16-QAM - Full RB Configuration)

| | | | | |
|---|---|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFG900UM | PCTEST Proud to be part of element | MEASUREMENT REPORT (CERTIFICATION) | LG | Approved by: Quality Manager |
| Test Report S/N: 1M2003200048-03.ZNF | Test Dates: 3/23-5/29/2020 | EUT Type: Portable Handset | | Page 80 of 438 |



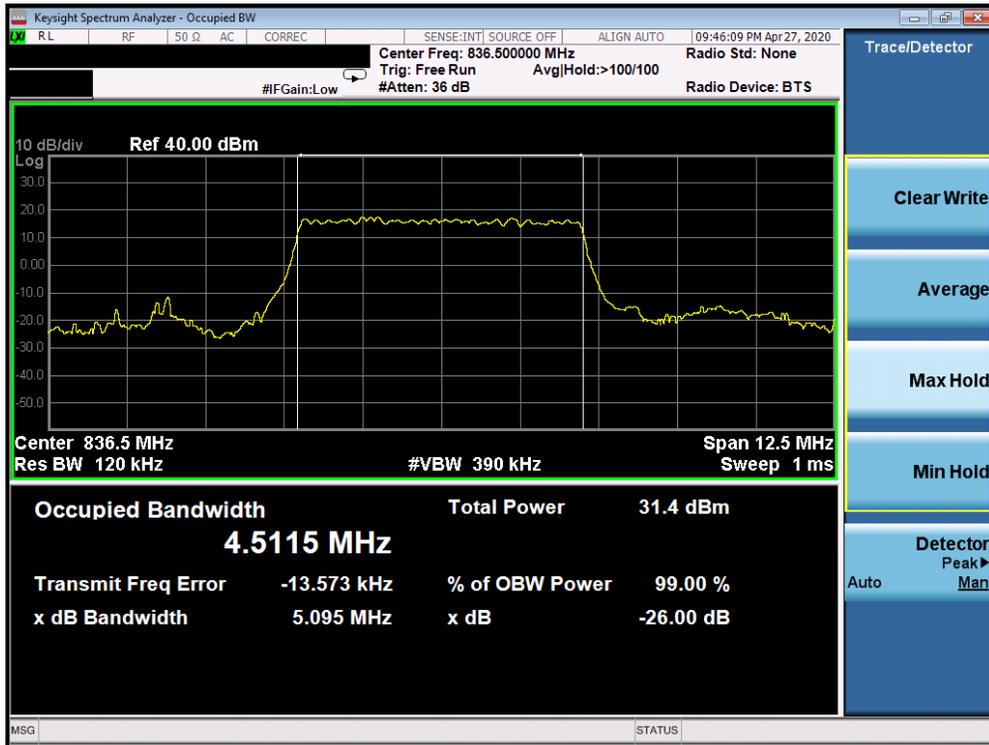
Plot 7-127. Occupied Bandwidth Plot (5G sub6 n71 - 20.0MHz 64-QAM - Full RB Configuration)



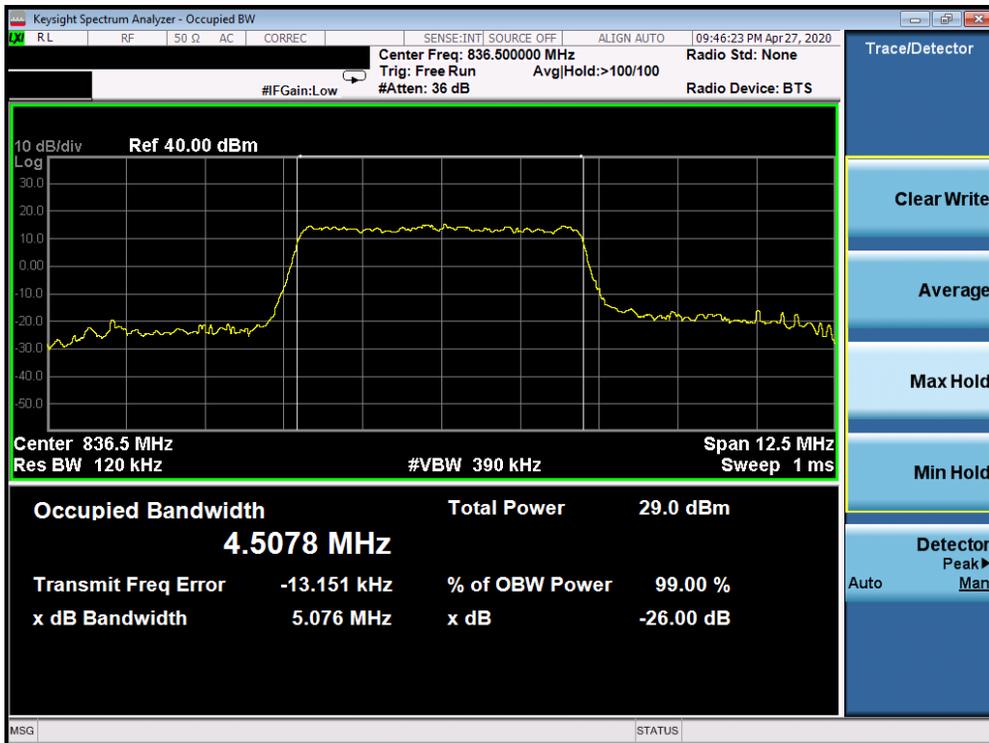
Plot 7-128. Occupied Bandwidth Plot (5G sub6 n71 - 20.0MHz 256-QAM - Full RB Configuration)

| | | | | |
|---|---|---|-----------|---------------------------------|
| FCC ID: ZNFG900UM | PCTEST Proud to be part of element | MEASUREMENT REPORT (CERTIFICATION) | LG | Approved by: Quality Manager |
| Test Report S/N: 1M2003200048-03.ZNF | Test Dates: 3/23-5/29/2020 | EUT Type: Portable Handset | | Page 81 of 438 |

5G sub6 n5

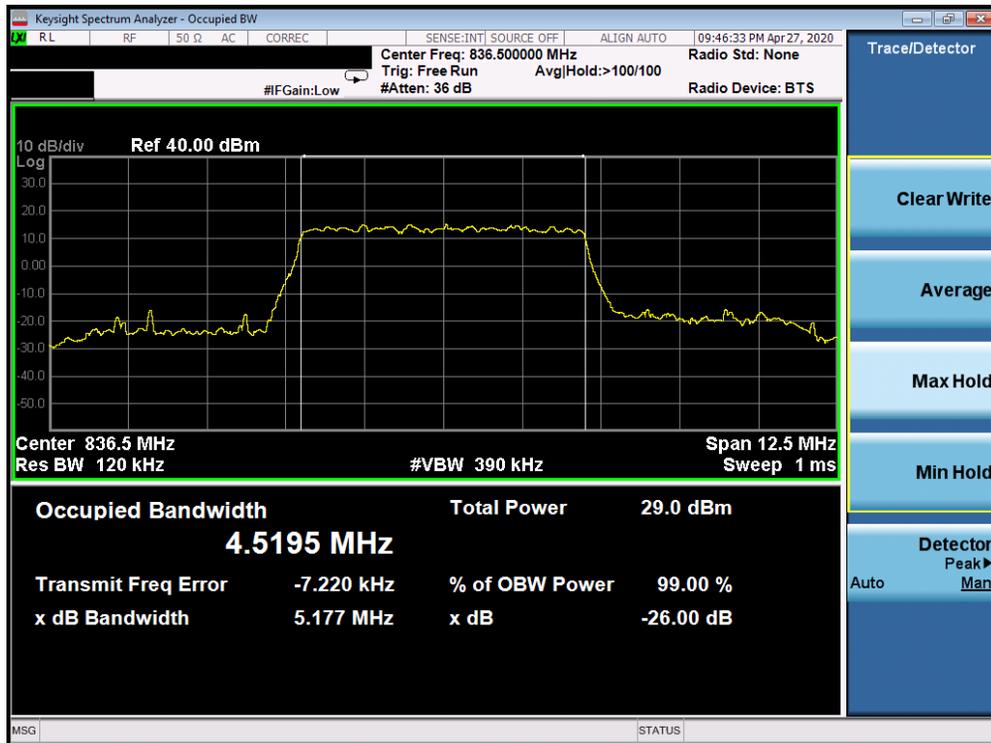


Plot 7-129. Occupied Bandwidth Plot (5G sub6 n5 - 5.0MHz BPSK - Full RB Configuration)

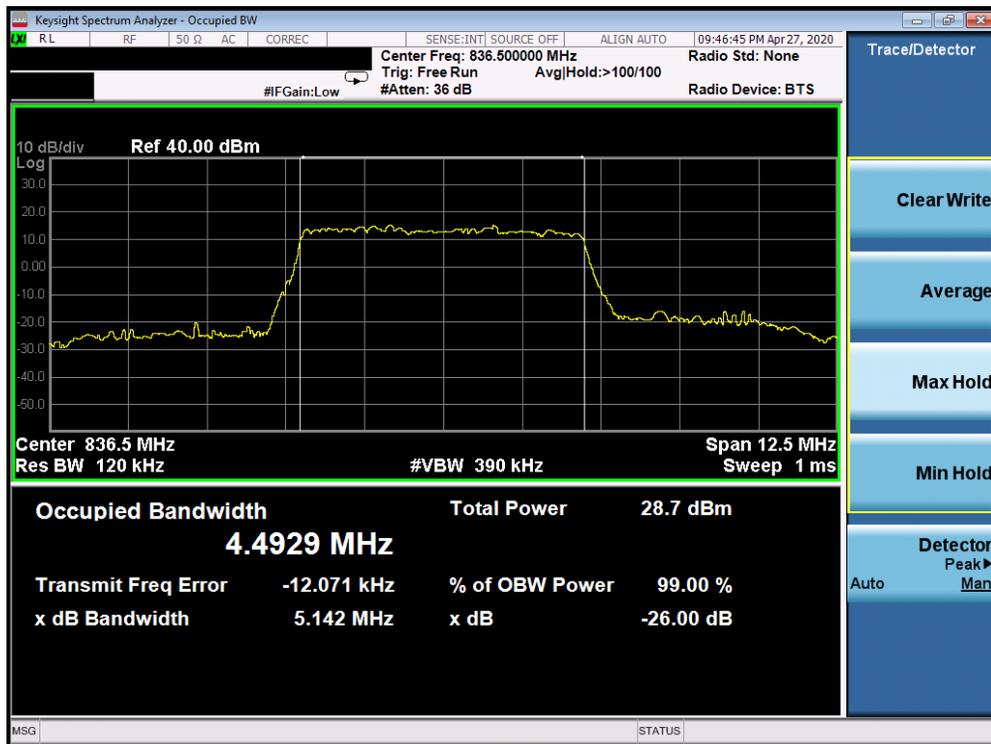


Plot 7-130. Occupied Bandwidth Plot (5G sub6 n5 - 5.0MHz QPSK - Full RB Configuration)

| | | | | |
|---|--|---------------------------------------|-----------|---------------------------------|
| FCC ID: ZNFG900UM | PCTEST Proud to be part of element | MEASUREMENT REPORT (CERTIFICATION) | LG | Approved by: Quality Manager |
| Test Report S/N: 1M2003200048-03.ZNF | Test Dates: 3/23-5/29/2020 | EUT Type: Portable Handset | | Page 82 of 438 |

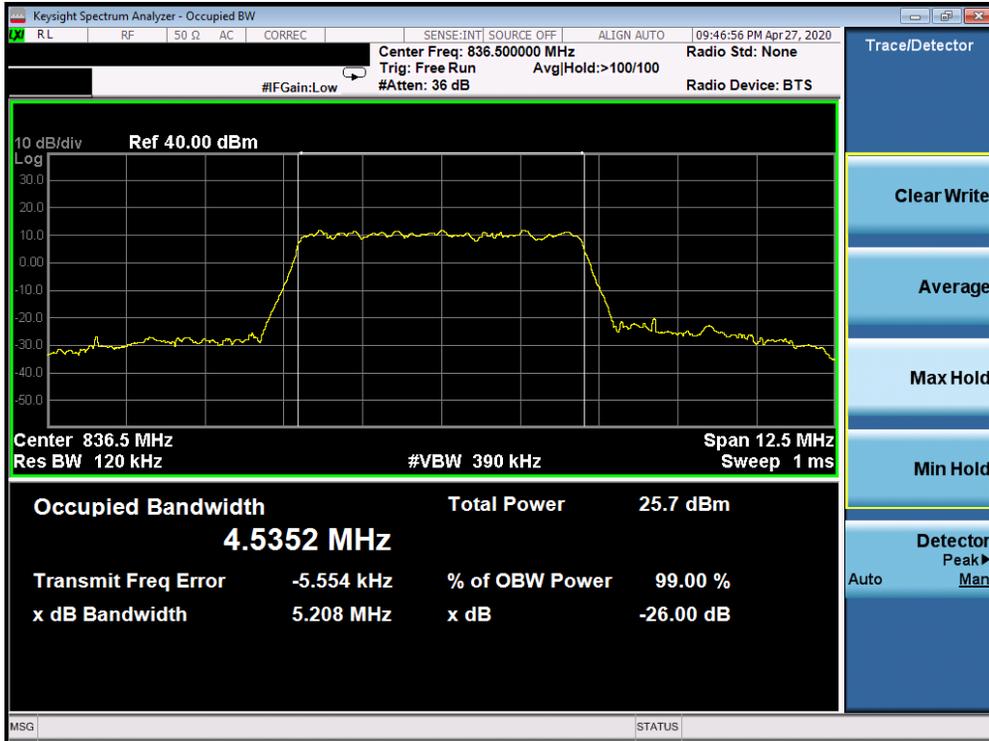


Plot 7-131. Occupied Bandwidth Plot (5G sub6 n5 - 5.0MHz 16-QAM - Full RB Configuration)

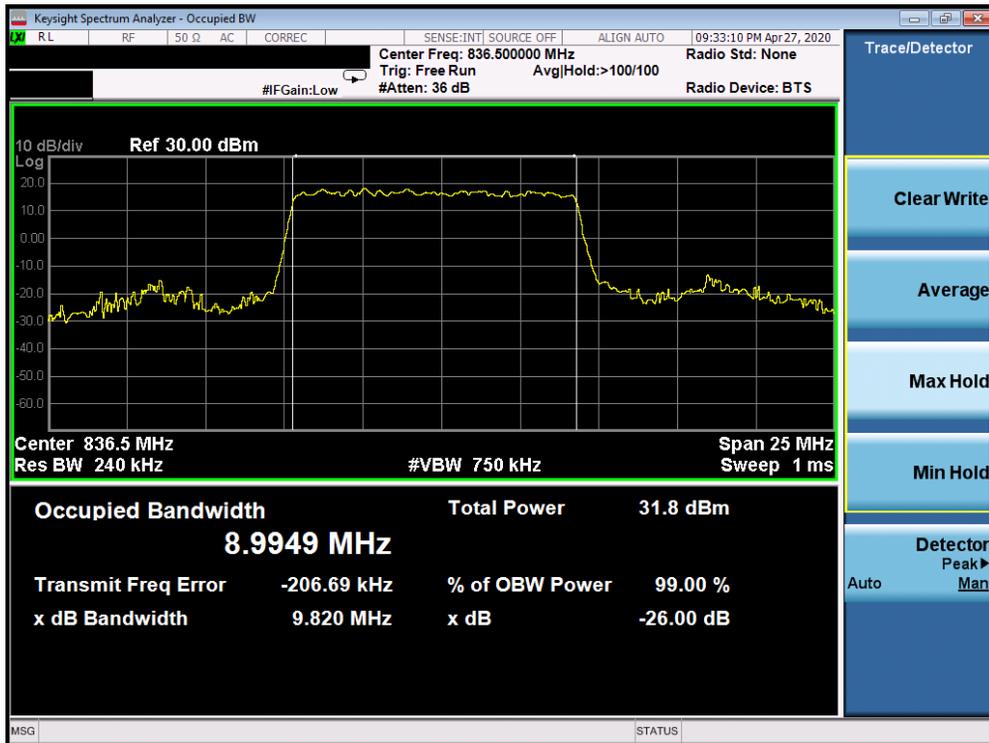


Plot 7-132. Occupied Bandwidth Plot (5G sub6 n5 - 5.0MHz 64-QAM - Full RB Configuration)

| | | | | |
|---|--|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFG900UM | PCTEST Proud to be part of element | MEASUREMENT REPORT (CERTIFICATION) | LG | Approved by: Quality Manager |
| Test Report S/N: 1M2003200048-03.ZNF | Test Dates: 3/23-5/29/2020 | EUT Type: Portable Handset | | Page 83 of 438 |

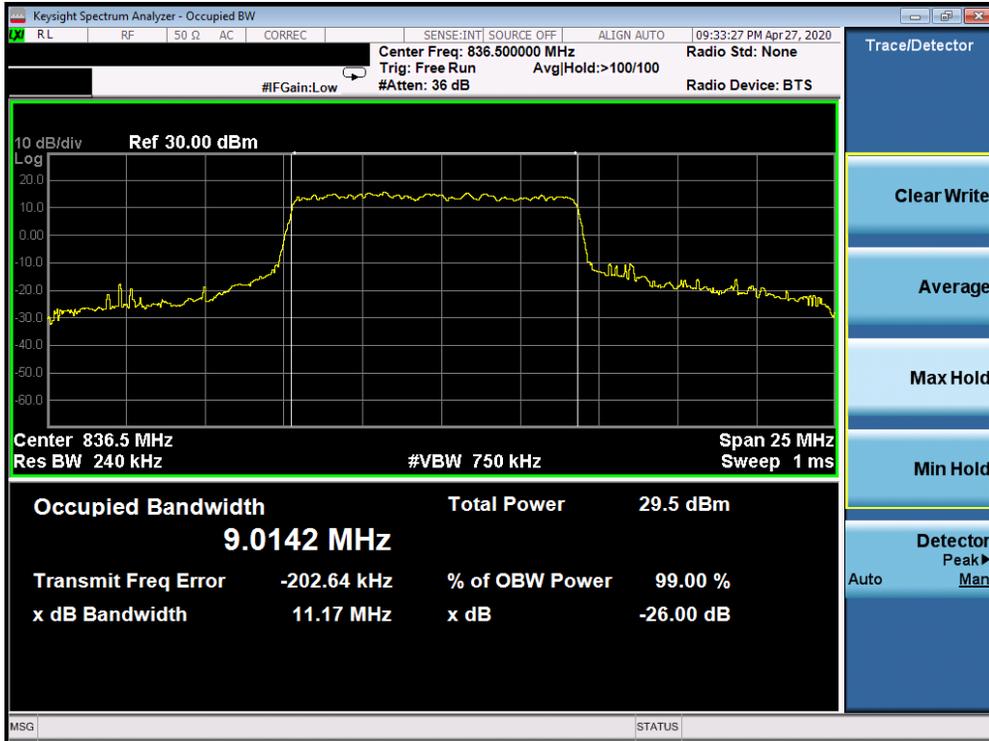


Plot 7-133. Occupied Bandwidth Plot (5G sub6 n5 - 5.0MHz 256-QAM - Full RB Configuration)

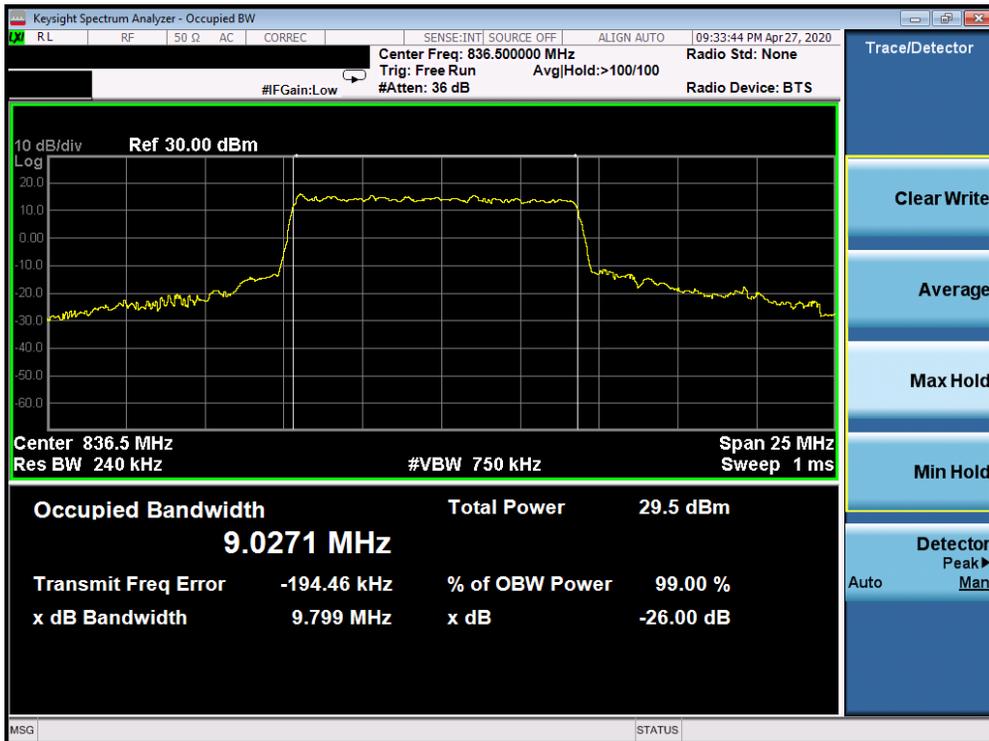


Plot 7-134. Occupied Bandwidth Plot (5G sub6 n5 - 10.0MHz BPSK - Full RB Configuration)

| | | | | |
|---|--|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFG900UM | PCTEST Proud to be part of element | MEASUREMENT REPORT (CERTIFICATION) | LG | Approved by: Quality Manager |
| Test Report S/N: 1M2003200048-03.ZNF | Test Dates: 3/23-5/29/2020 | EUT Type: Portable Handset | | Page 84 of 438 |

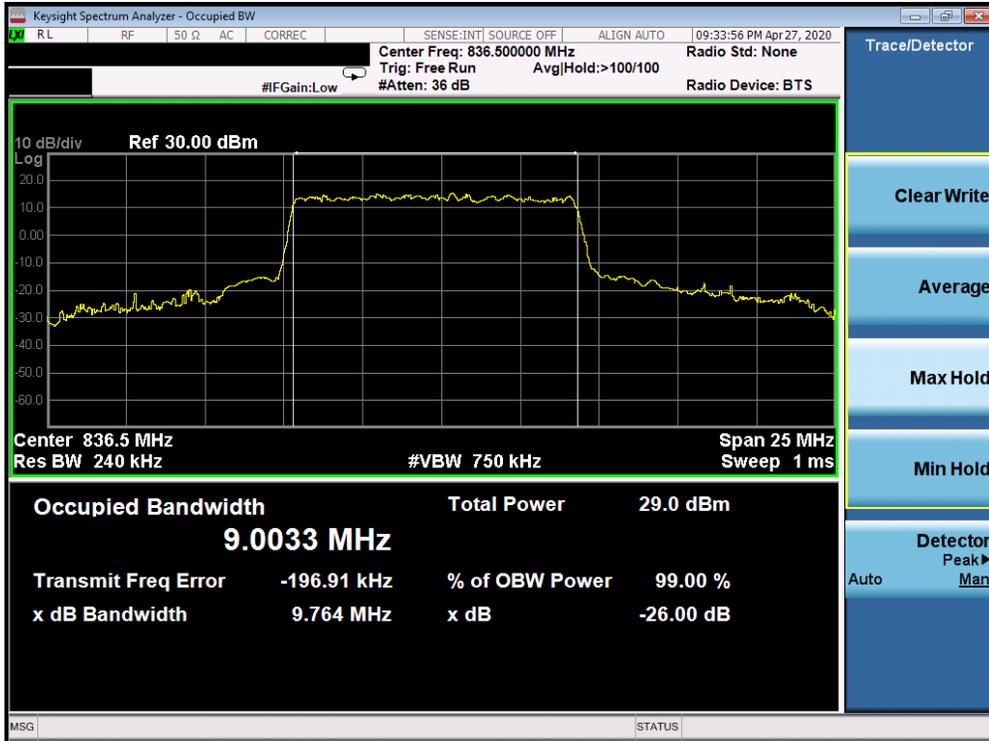


Plot 7-135. Occupied Bandwidth Plot (5G sub6 n5 - 10.0MHz QPSK - Full RB Configuration)

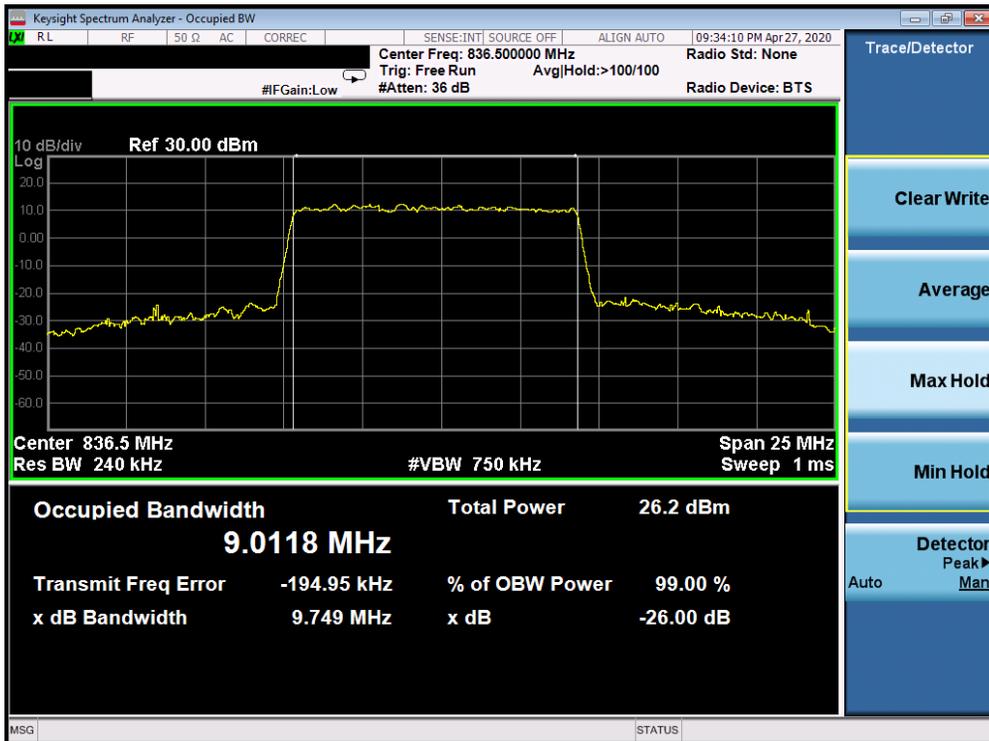


Plot 7-136. Occupied Bandwidth Plot (5G sub6 n5 - 10.0MHz 16-QAM - Full RB Configuration)

| | | | | |
|---|--|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFG900UM | PCTEST Proud to be part of element | MEASUREMENT REPORT (CERTIFICATION) | LG | Approved by: Quality Manager |
| Test Report S/N: 1M2003200048-03.ZNF | Test Dates: 3/23-5/29/2020 | EUT Type: Portable Handset | | Page 85 of 438 |

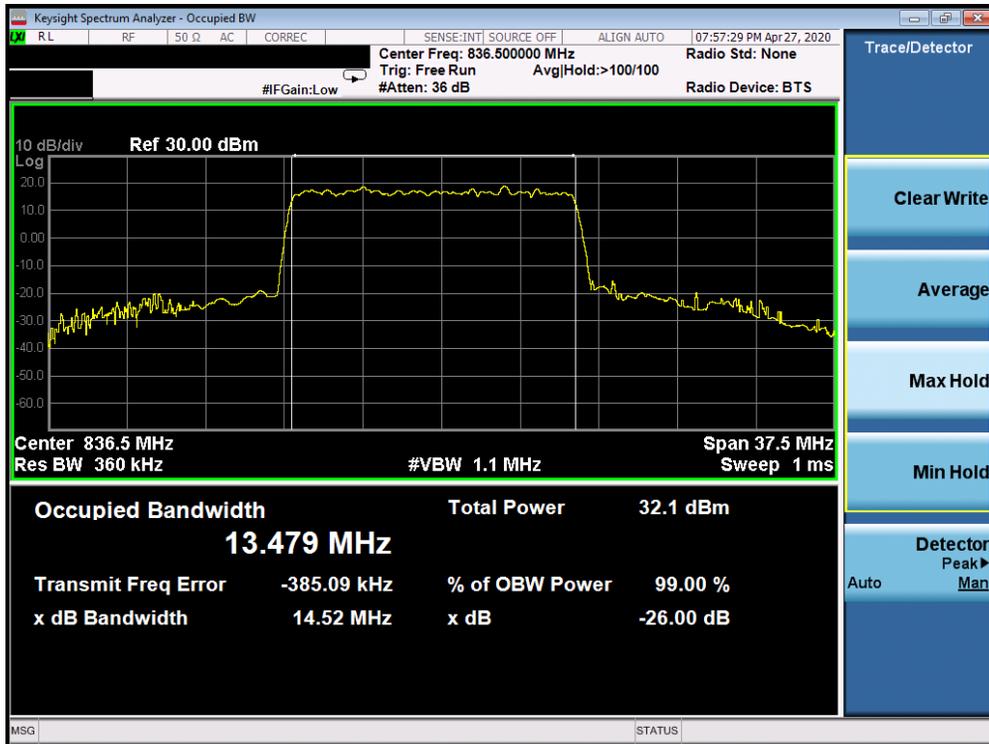


Plot 7-137. Occupied Bandwidth Plot (5G sub6 n5 - 10.0MHz 64-QAM - Full RB Configuration)

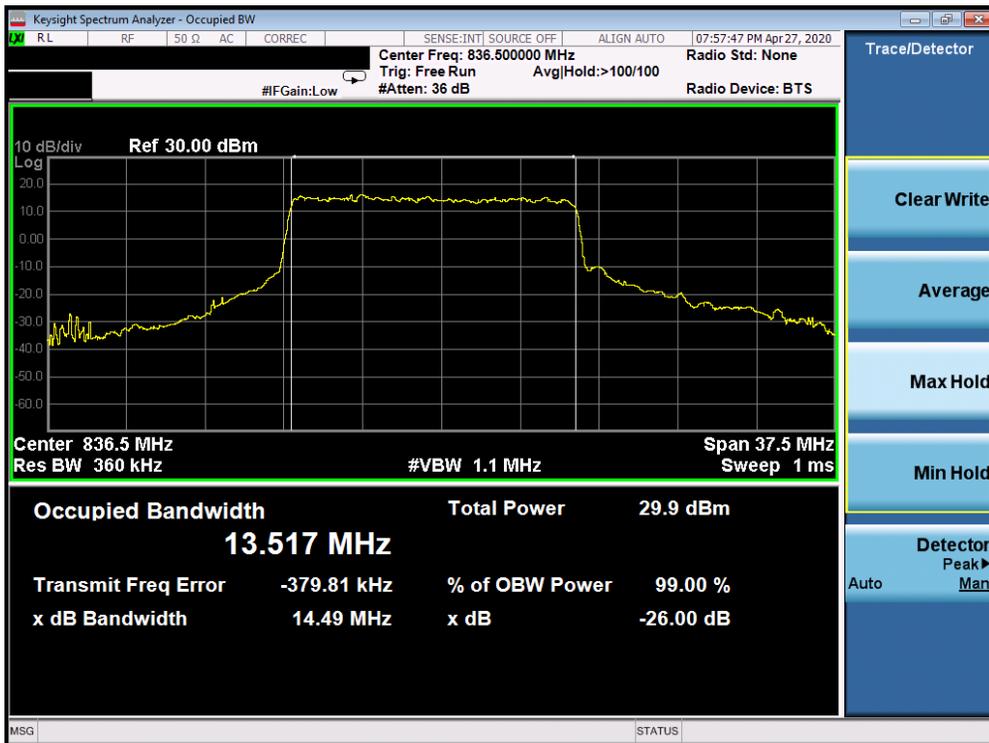


Plot 7-138. Occupied Bandwidth Plot (5G sub6 n5 - 10.0MHz 256-QAM - Full RB Configuration)

| | | | | |
|---|--|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFG900UM | PCTEST Proud to be part of element | MEASUREMENT REPORT (CERTIFICATION) | LG | Approved by: Quality Manager |
| Test Report S/N: 1M2003200048-03.ZNF | Test Dates: 3/23-5/29/2020 | EUT Type: Portable Handset | | Page 86 of 438 |

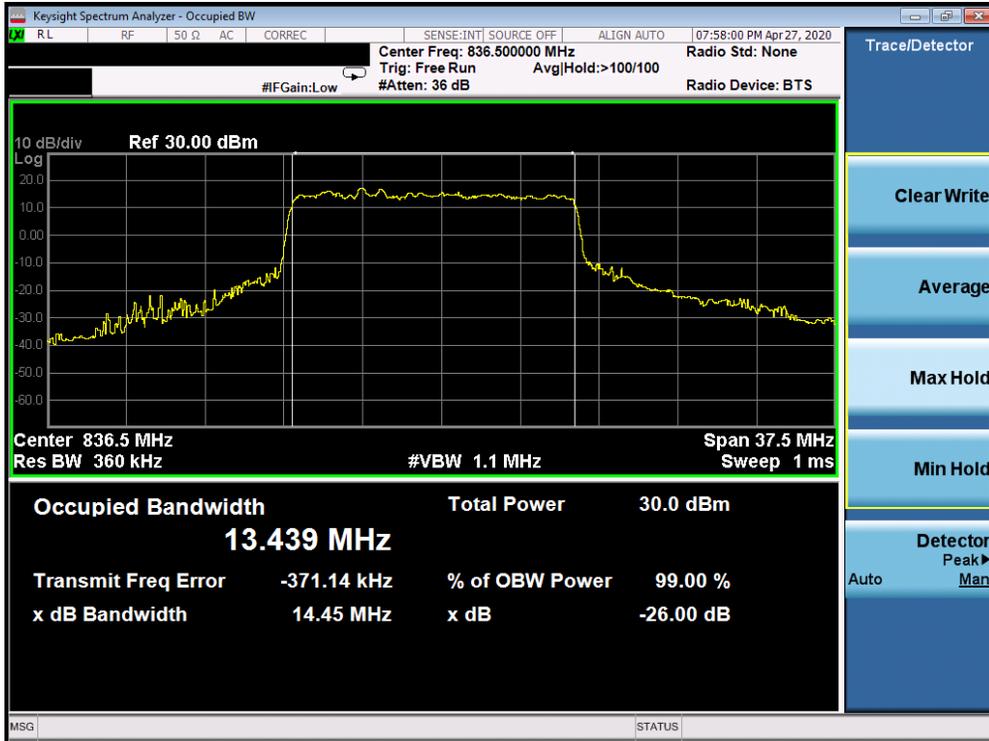


Plot 7-139. Occupied Bandwidth Plot (5G sub6 n5 – 15.0MHz BPSK - Full RB Configuration)

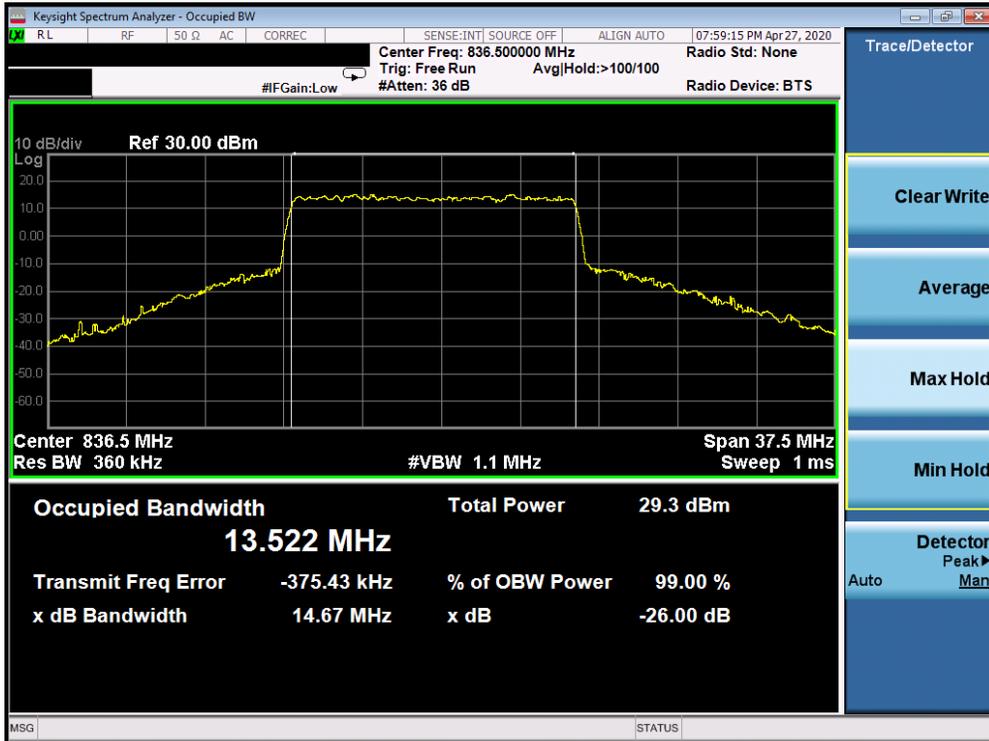


Plot 7-140. Occupied Bandwidth Plot (5G sub6 n5 – 15.0MHz QPSK - Full RB Configuration)

| | | | | |
|---|---|---------------------------------------|-----------|---------------------------------|
| FCC ID: ZNFG900UM | PCTEST Proud to be part of element | MEASUREMENT REPORT (CERTIFICATION) | LG | Approved by: Quality Manager |
| Test Report S/N: 1M2003200048-03.ZNF | Test Dates: 3/23-5/29/2020 | EUT Type: Portable Handset | | Page 87 of 438 |

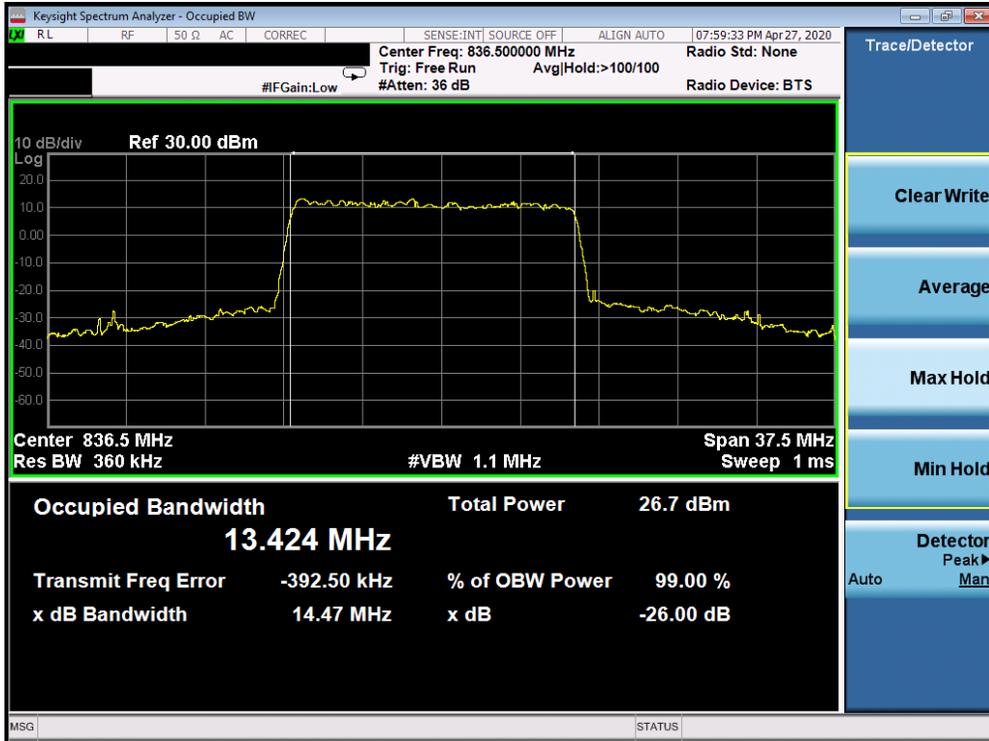


Plot 7-141. Occupied Bandwidth Plot (5G sub6 n5 – 15.0MHz 16-QAM - Full RB Configuration)

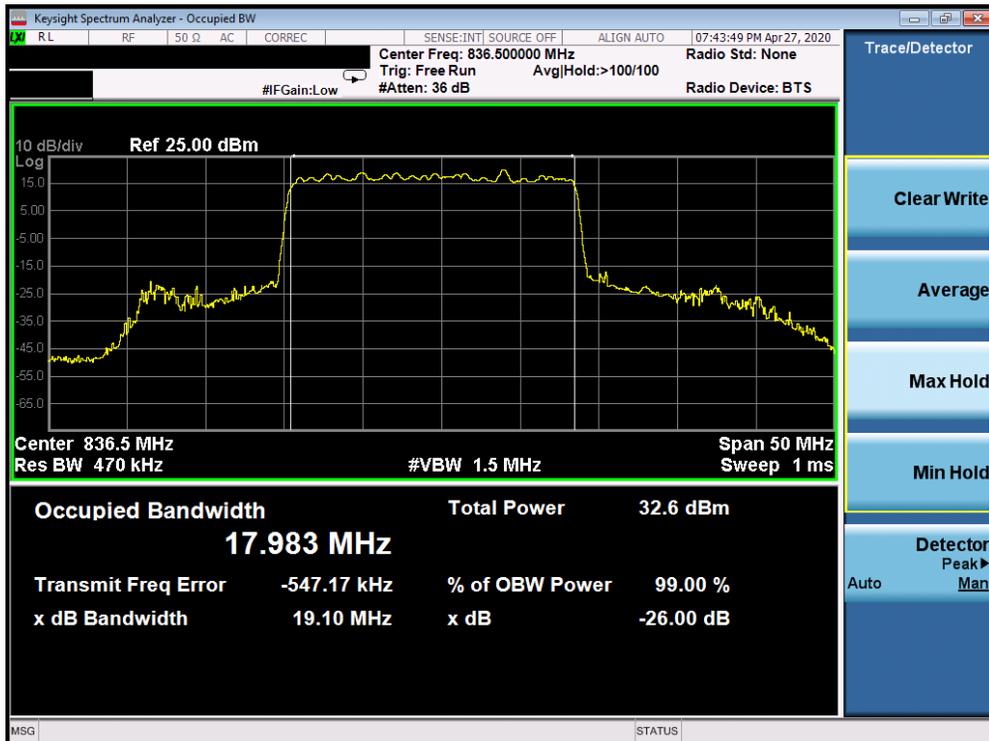


Plot 7-142. Occupied Bandwidth Plot (5G sub6 n5 – 15.0MHz 64-QAM - Full RB Configuration)

| | | | | |
|---|--|---------------------------------------|-----------|---------------------------------|
| FCC ID: ZNFG900UM | PCTEST Proud to be part of element | MEASUREMENT REPORT (CERTIFICATION) | LG | Approved by: Quality Manager |
| Test Report S/N: 1M2003200048-03.ZNF | Test Dates: 3/23-5/29/2020 | EUT Type: Portable Handset | | Page 88 of 438 |

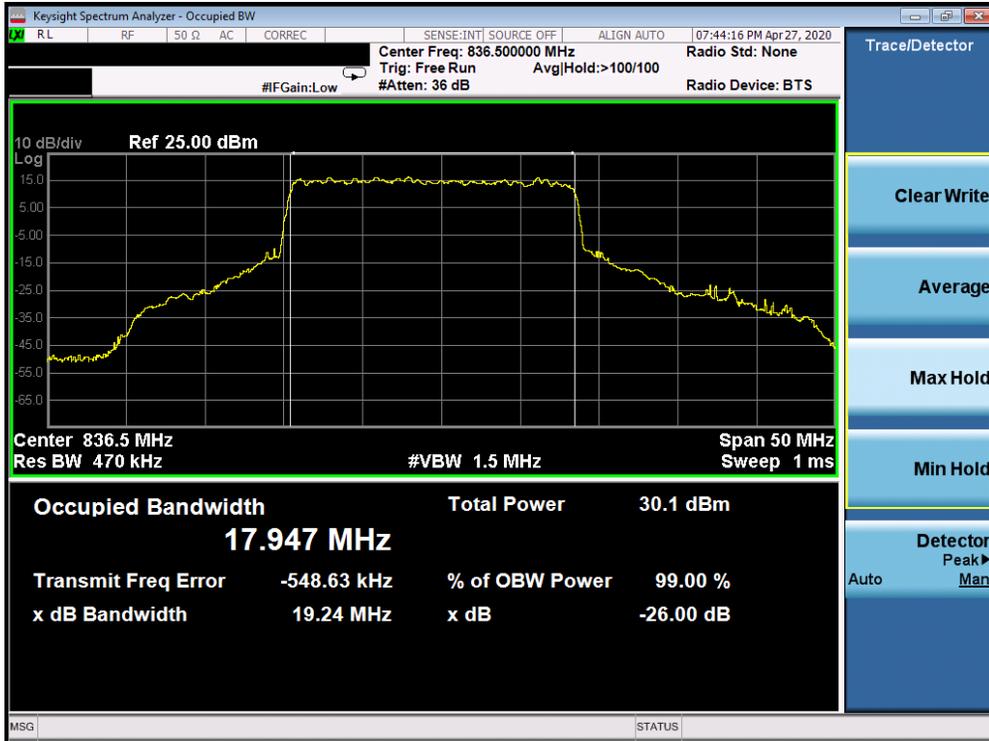


Plot 7-143. Occupied Bandwidth Plot (5G sub6 n5 – 15.0MHz 256-QAM - Full RB Configuration)

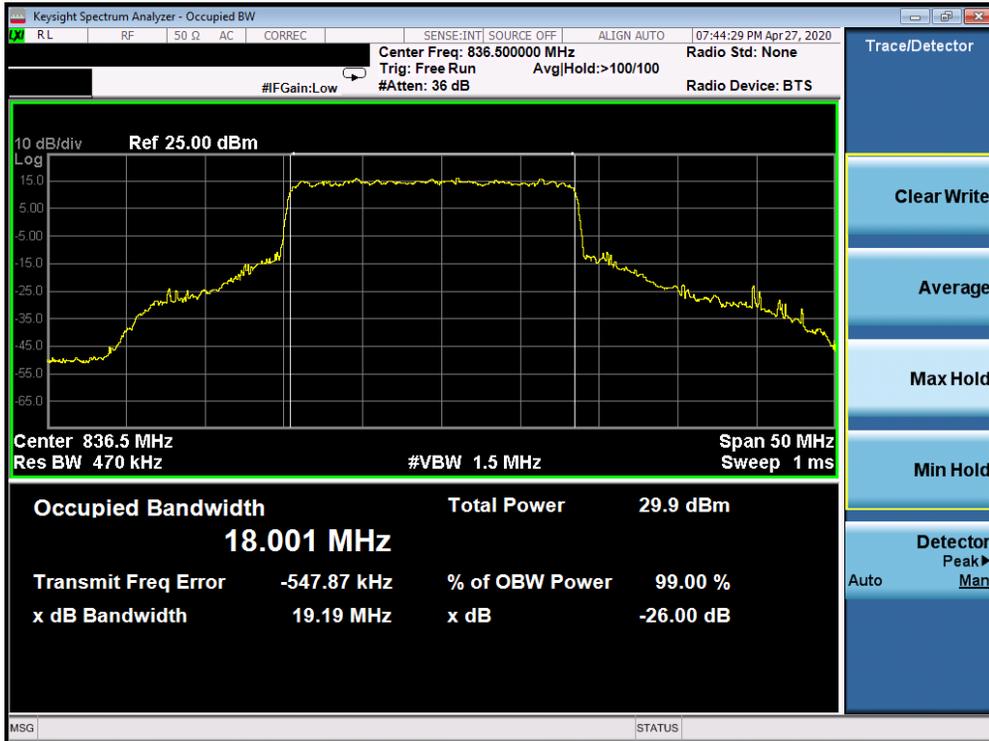


Plot 7-144. Occupied Bandwidth Plot (5G sub6 n5 – 20.0MHz BPSK - Full RB Configuration)

| | | | | |
|---|--|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFG900UM | PCTEST Proud to be part of element | MEASUREMENT REPORT (CERTIFICATION) | LG | Approved by: Quality Manager |
| Test Report S/N: 1M2003200048-03.ZNF | Test Dates: 3/23-5/29/2020 | EUT Type: Portable Handset | | Page 89 of 438 |

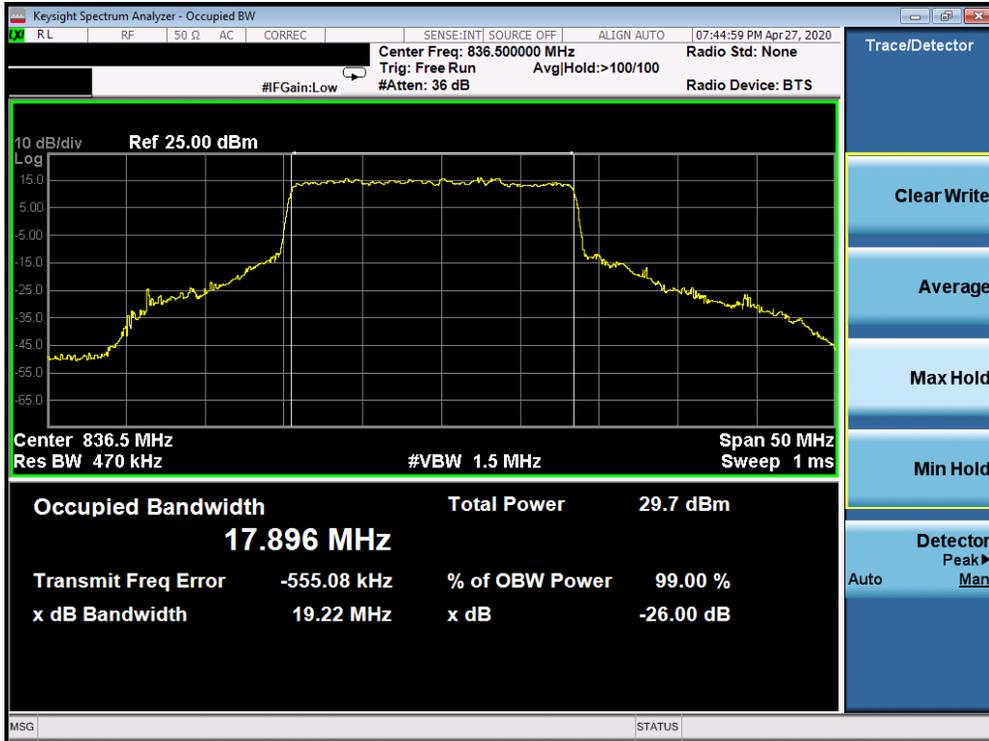


Plot 7-145. Occupied Bandwidth Plot (5G sub6 n5 – 20.0MHz QPSK - Full RB Configuration)

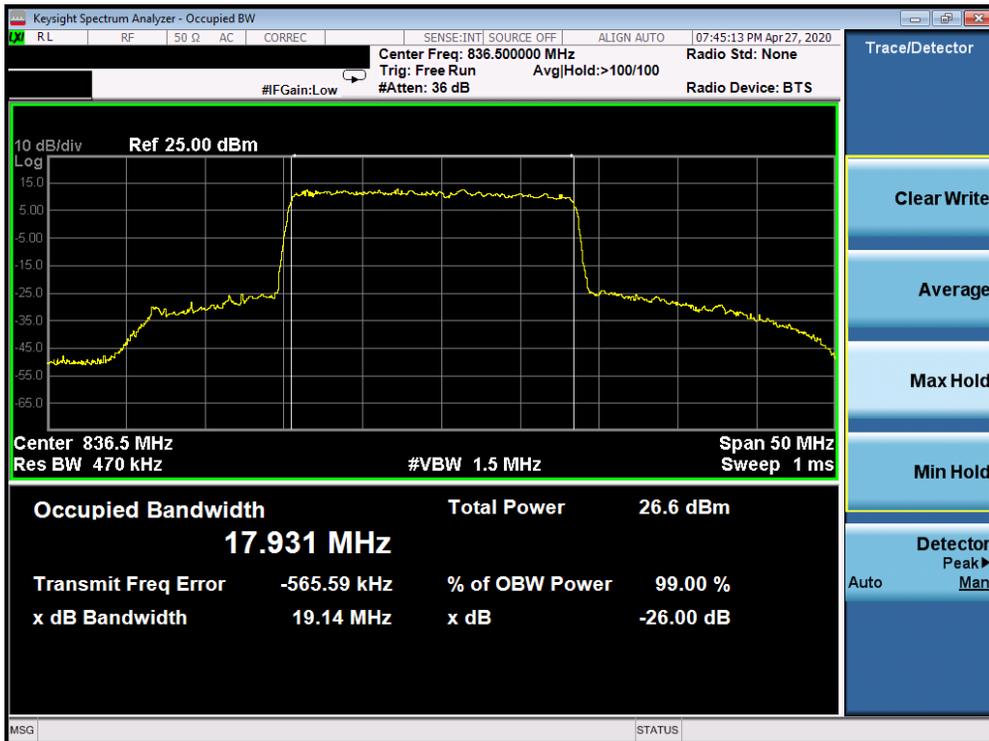


Plot 7-146. Occupied Bandwidth Plot (5G sub6 n5 – 20.0MHz 16-QAM - Full RB Configuration)

| | | | | |
|---|--|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFG900UM | PCTEST Proud to be part of element | MEASUREMENT REPORT (CERTIFICATION) | LG | Approved by: Quality Manager |
| Test Report S/N: 1M2003200048-03.ZNF | Test Dates: 3/23-5/29/2020 | EUT Type: Portable Handset | | Page 90 of 438 |



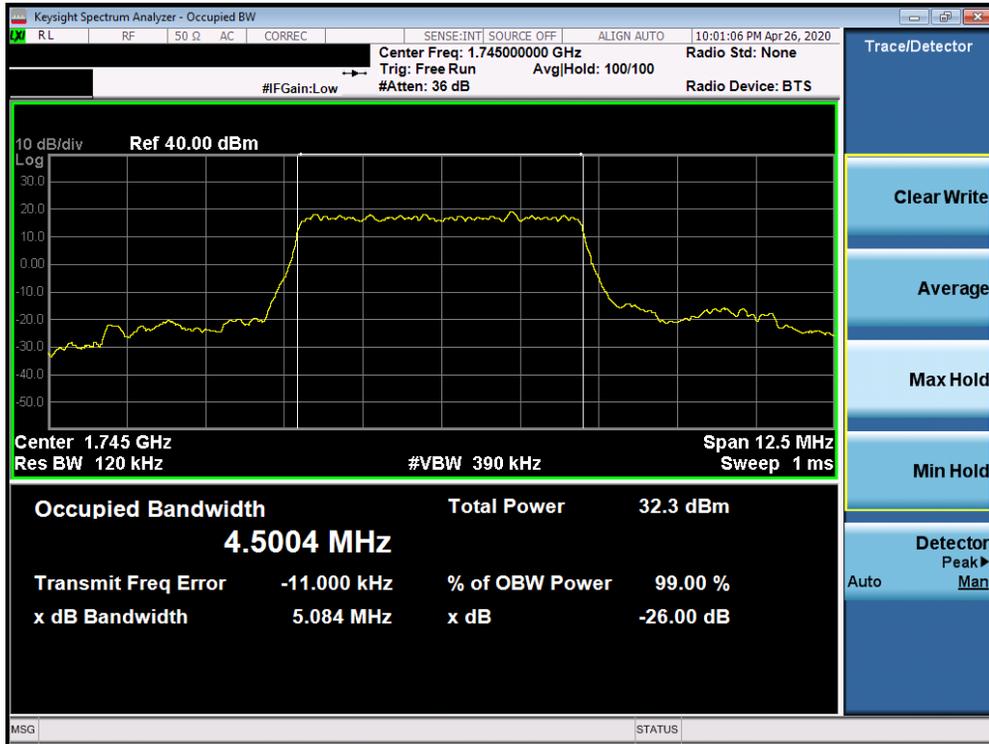
Plot 7-147. Occupied Bandwidth Plot (5G sub6 n5 - 20.0MHz 64-QAM - Full RB Configuration)



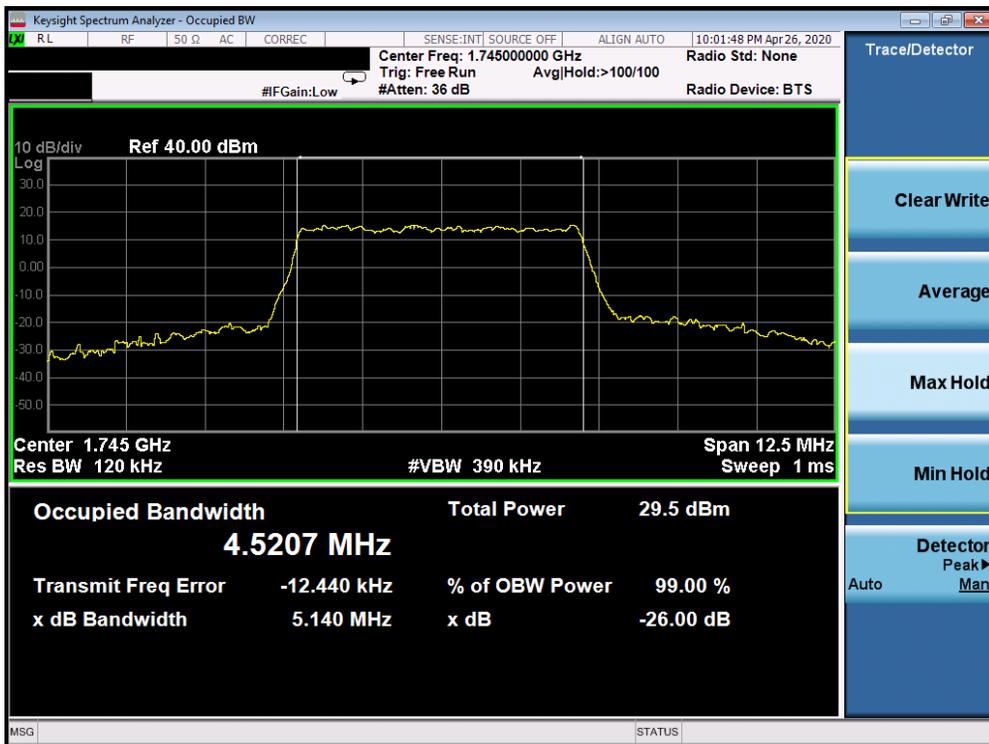
Plot 7-148. Occupied Bandwidth Plot (5G sub6 n5 - 20.0MHz 256-QAM - Full RB Configuration)

| | | | | |
|---|--|---|-----------|---------------------------------|
| FCC ID: ZNFG900UM | PCTEST Proud to be part of element | MEASUREMENT REPORT (CERTIFICATION) | LG | Approved by: Quality Manager |
| Test Report S/N: 1M2003200048-03.ZNF | Test Dates: 3/23-5/29/2020 | EUT Type: Portable Handset | | Page 91 of 438 |

5G sub6 n66

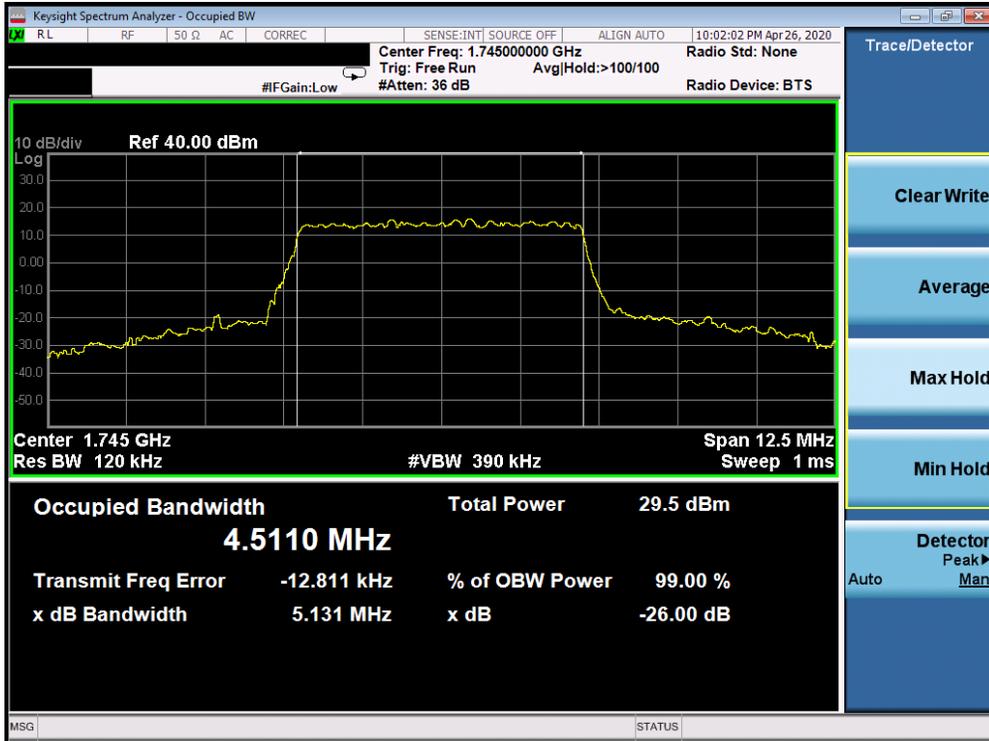


Plot 7-149. Occupied Bandwidth Plot (5G sub6 n66 - 5.0MHz BPSK - Full RB Configuration)

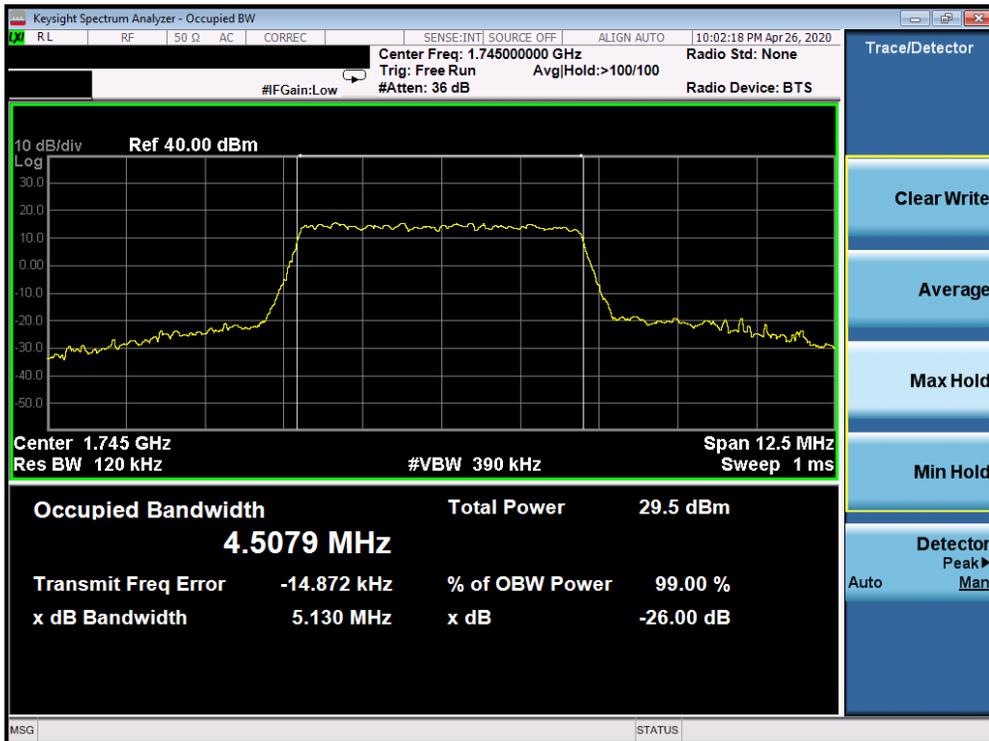


Plot 7-150. Occupied Bandwidth Plot (5G sub6 n66 - 5.0MHz QPSK - Full RB Configuration)

| | | | | |
|---|--|---------------------------------------|-----------|---------------------------------|
| FCC ID: ZNFG900UM | PCTEST Proud to be part of element | MEASUREMENT REPORT (CERTIFICATION) | LG | Approved by: Quality Manager |
| Test Report S/N: 1M2003200048-03.ZNF | Test Dates: 3/23-5/29/2020 | EUT Type: Portable Handset | | Page 92 of 438 |

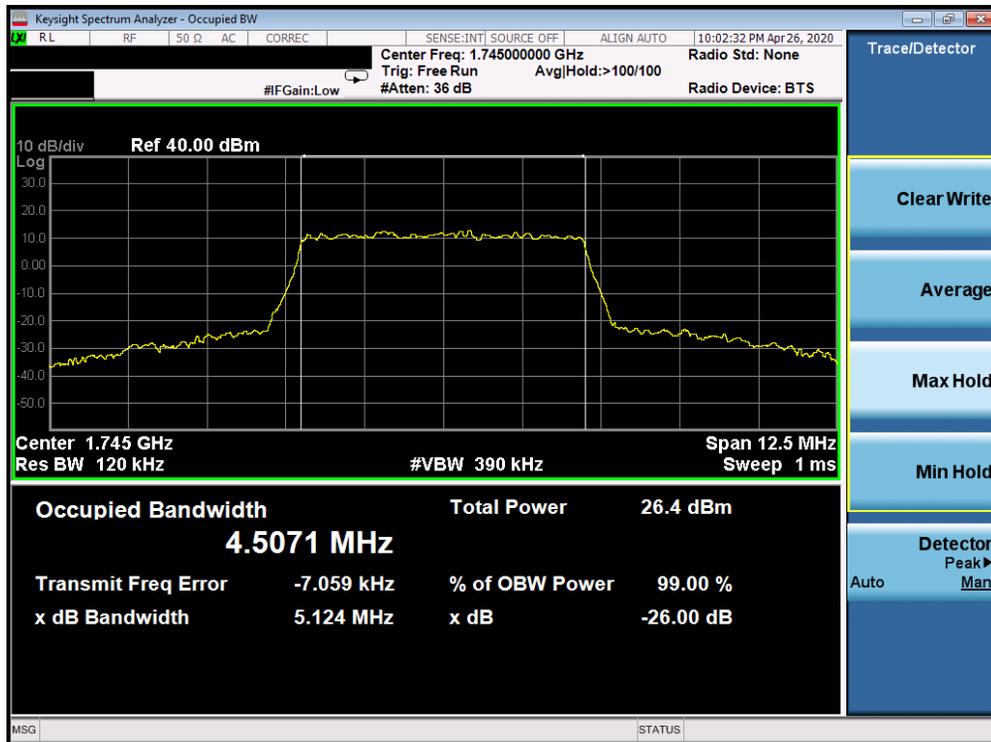


Plot 7-151. Occupied Bandwidth Plot (5G sub6 n66 - 5.0MHz 16-QAM - Full RB Configuration)

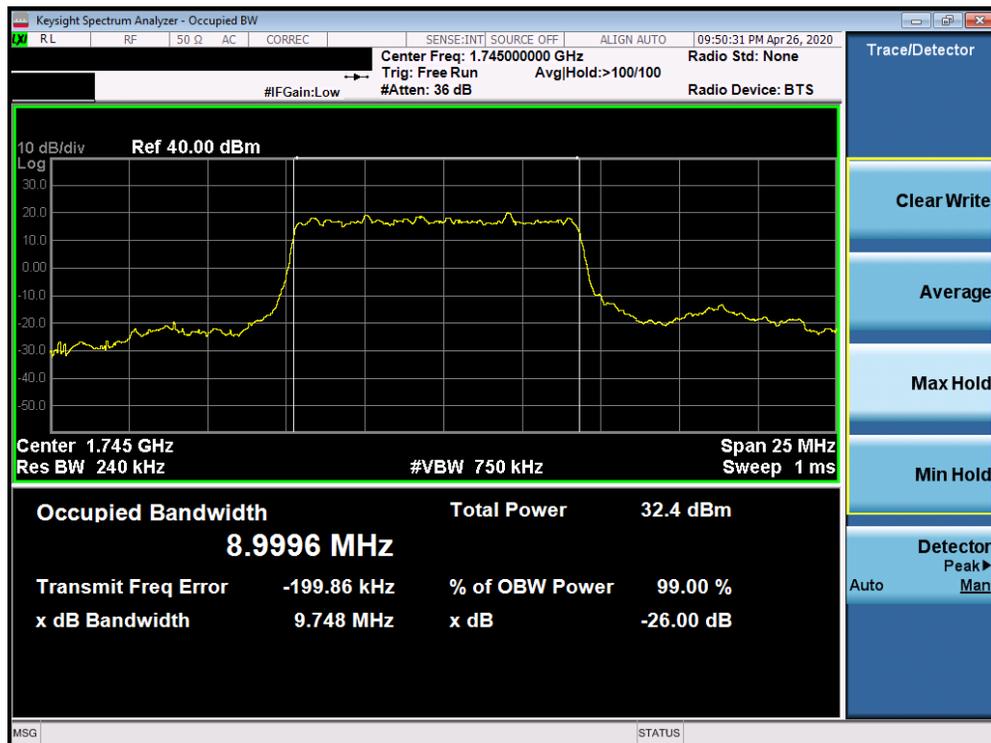


Plot 7-152. Occupied Bandwidth Plot (5G sub6 n66 - 5.0MHz 64-QAM - Full RB Configuration)

| | | | | |
|---|--|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFG900UM | PCTEST Proud to be part of element | MEASUREMENT REPORT (CERTIFICATION) | LG | Approved by: Quality Manager |
| Test Report S/N: 1M2003200048-03.ZNF | Test Dates: 3/23-5/29/2020 | EUT Type: Portable Handset | | Page 93 of 438 |

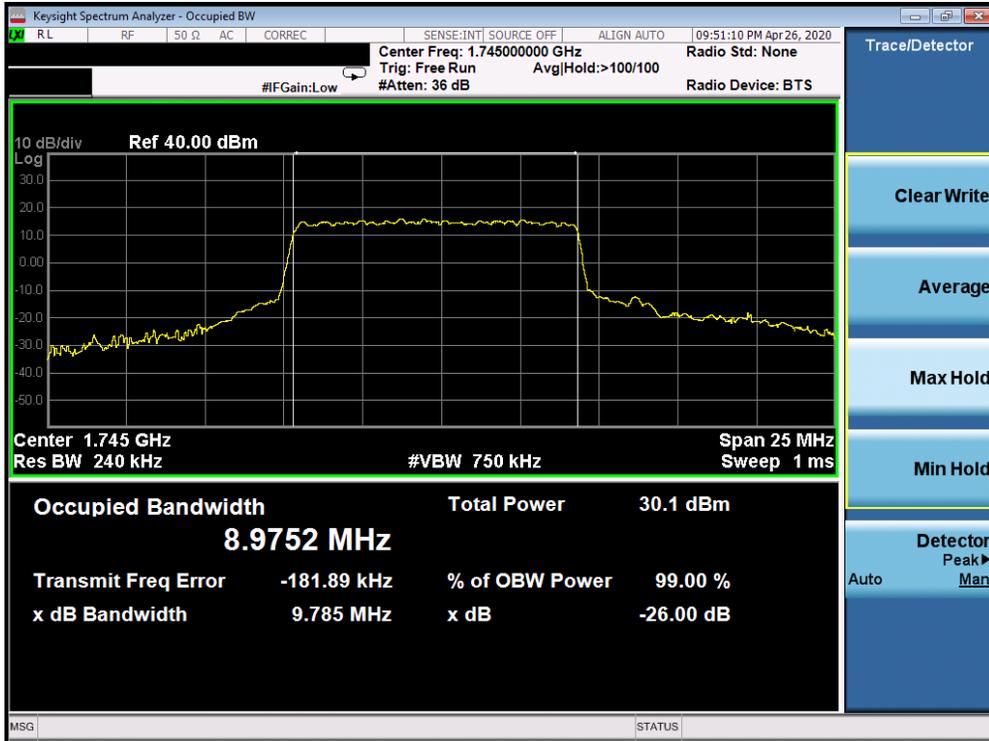


Plot 7-153. Occupied Bandwidth Plot (5G sub6 n66 - 5.0MHz 256-QAM - Full RB Configuration)

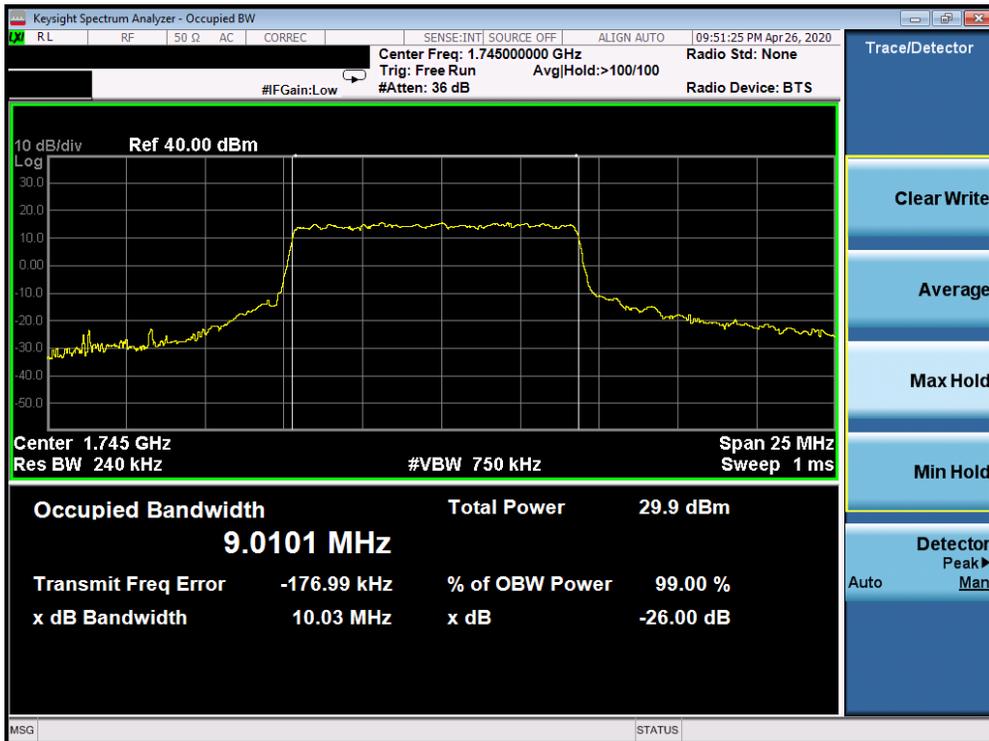


Plot 7-154. Occupied Bandwidth Plot (5G sub6 n66 - 10.0MHz BPSK - Full RB Configuration)

| | | | | |
|---|--|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFG900UM | PCTEST Proud to be part of element | MEASUREMENT REPORT (CERTIFICATION) | LG | Approved by: Quality Manager |
| Test Report S/N: 1M2003200048-03.ZNF | Test Dates: 3/23-5/29/2020 | EUT Type: Portable Handset | | Page 94 of 438 |

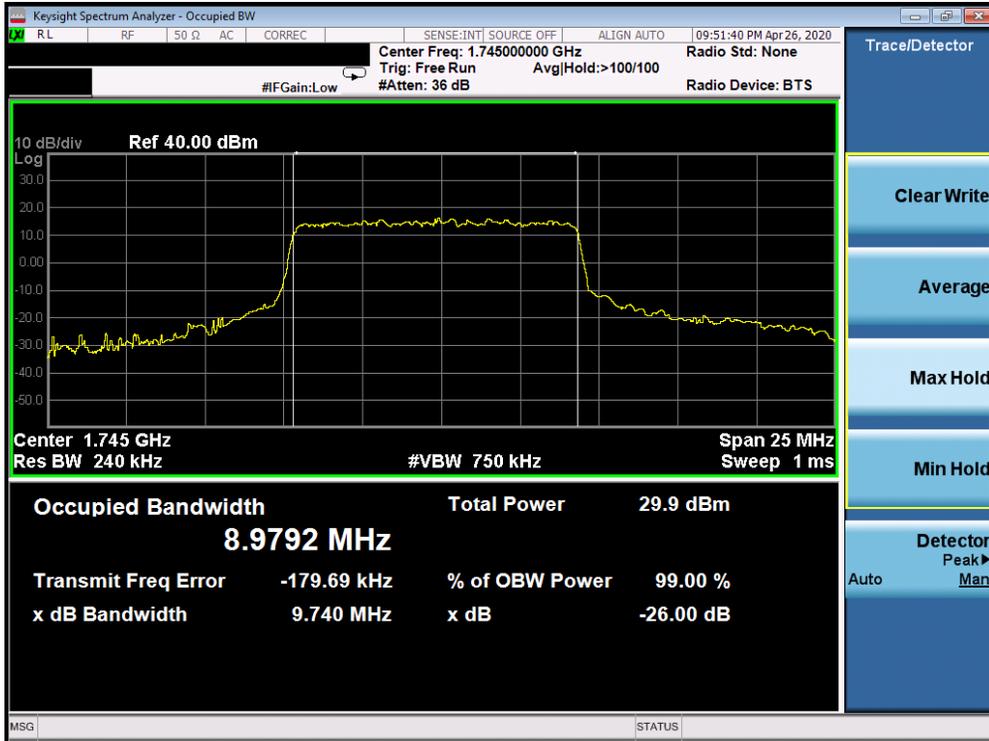


Plot 7-155. Occupied Bandwidth Plot (5G sub6 n66 - 10.0MHz QPSK - Full RB Configuration)

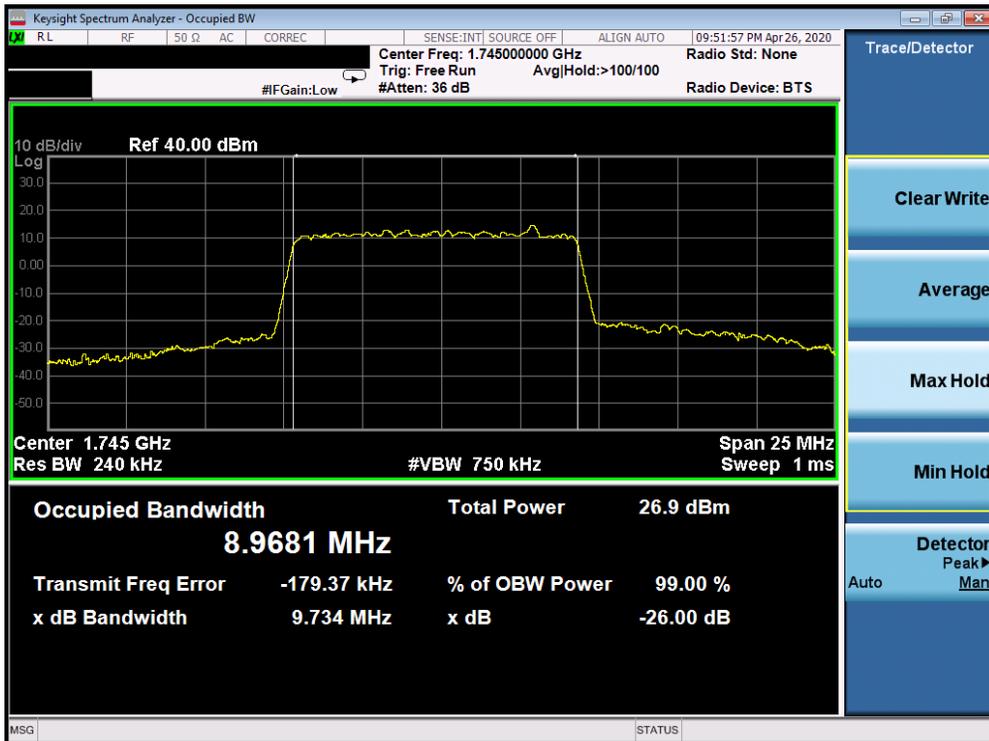


Plot 7-156. Occupied Bandwidth Plot (5G sub6 n66 - 10.0MHz 16-QAM - Full RB Configuration)

| | | | | |
|---|--|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFG900UM | PCTEST Proud to be part of element | MEASUREMENT REPORT (CERTIFICATION) | LG | Approved by: Quality Manager |
| Test Report S/N: 1M2003200048-03.ZNF | Test Dates: 3/23-5/29/2020 | EUT Type: Portable Handset | | Page 95 of 438 |

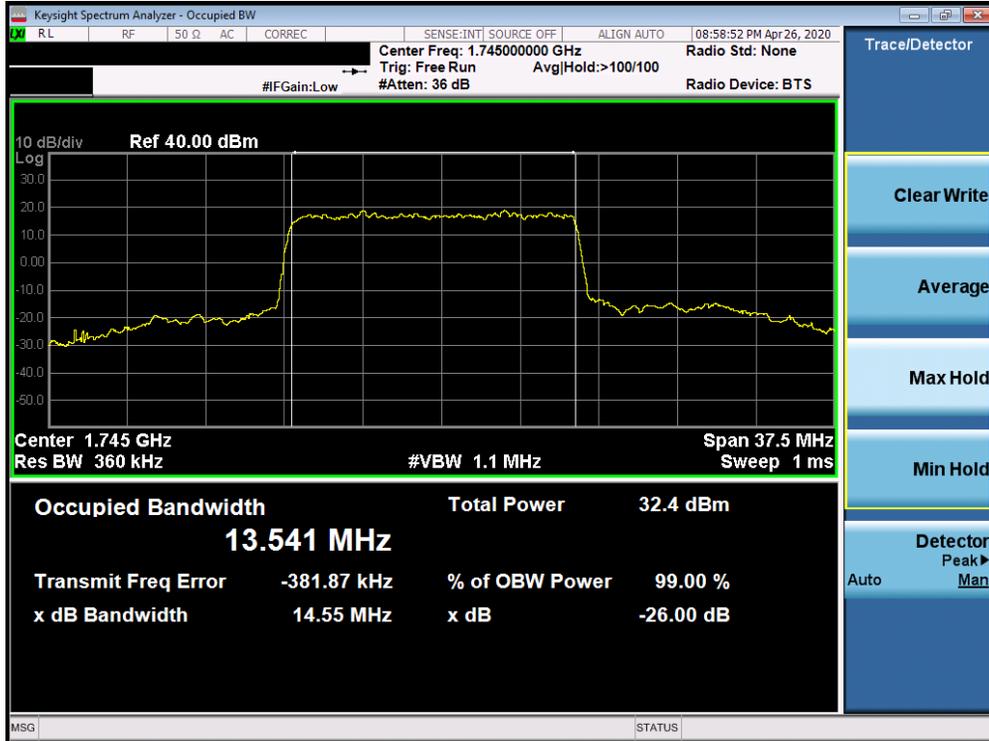


Plot 7-157. Occupied Bandwidth Plot (5G sub6 n66 - 10.0MHz 64-QAM - Full RB Configuration)

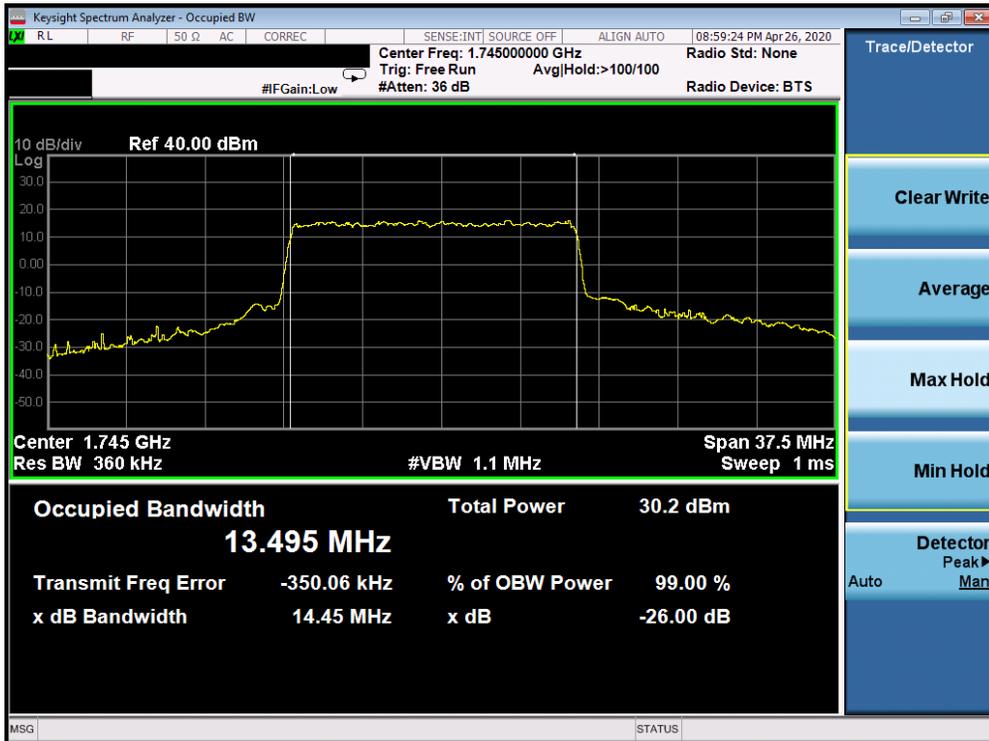


Plot 7-158. Occupied Bandwidth Plot (5G sub6 n66 - 10.0MHz 256-QAM - Full RB Configuration)

| | | | | |
|---|--|---------------------------------------|---|---------------------------------|
| FCC ID: ZNFG900UM |  PCTEST Proud to be part of  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2003200048-03.ZNF | Test Dates: 3/23-5/29/2020 | EUT Type: Portable Handset | | Page 96 of 438 |



Plot 7-159. Occupied Bandwidth Plot (5G sub6 n66 - 15.0MHz BPSK - Full RB Configuration)

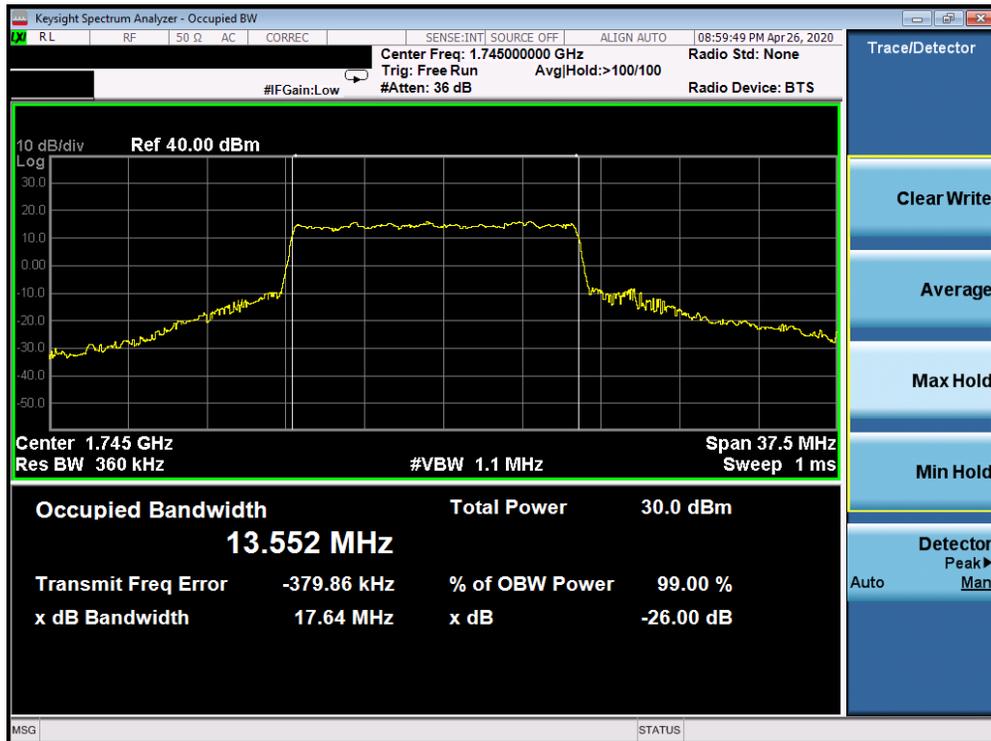


Plot 7-160. Occupied Bandwidth Plot (5G sub6 n66 - 15.0MHz QPSK - Full RB Configuration)

| | | | | |
|---|--|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFG900UM | PCTEST Proud to be part of element | MEASUREMENT REPORT (CERTIFICATION) | LG | Approved by: Quality Manager |
| Test Report S/N: 1M2003200048-03.ZNF | Test Dates: 3/23-5/29/2020 | EUT Type: Portable Handset | | Page 97 of 438 |

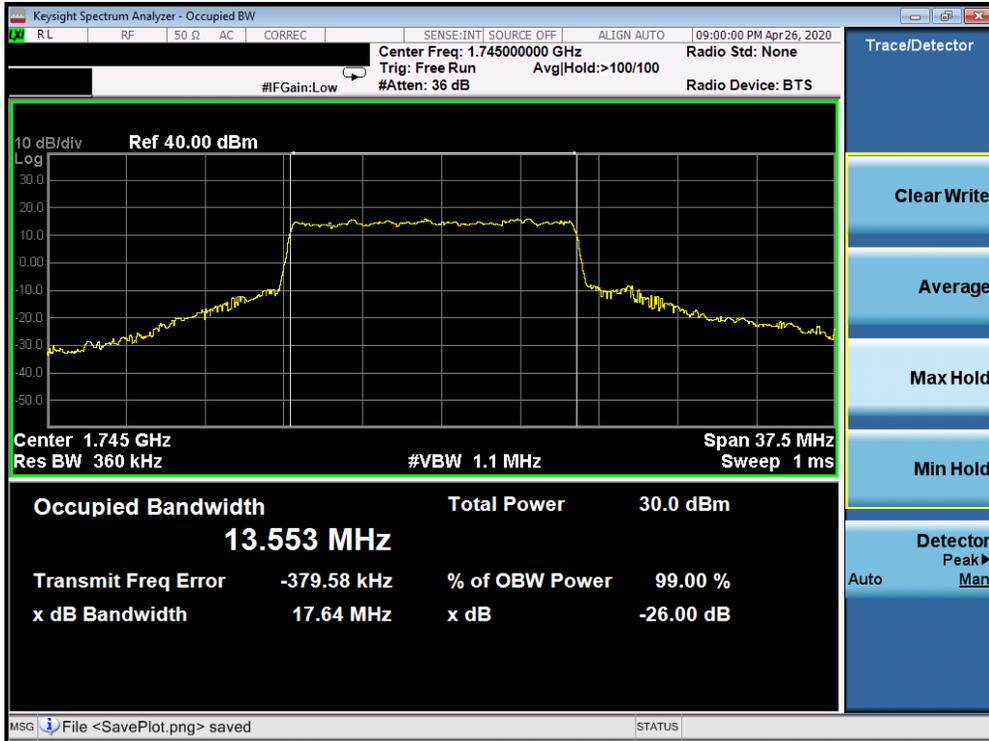


Plot 7-161. Occupied Bandwidth Plot (5G sub6 n66 - 15.0MHz 16-QAM - Full RB Configuration)

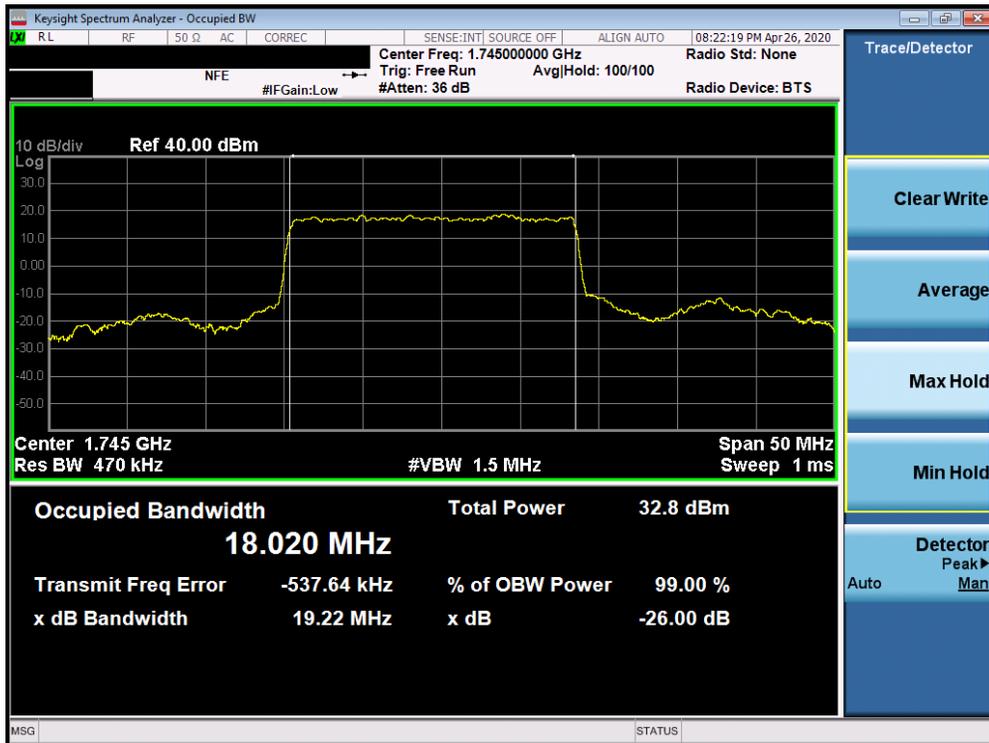


Plot 7-162. Occupied Bandwidth Plot (5G sub6 n66 - 15.0MHz 64-QAM - Full RB Configuration)

| | | | | |
|---|--|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFG900UM | PCTEST Proud to be part of element | MEASUREMENT REPORT (CERTIFICATION) | LG | Approved by: Quality Manager |
| Test Report S/N: 1M2003200048-03.ZNF | Test Dates: 3/23-5/29/2020 | EUT Type: Portable Handset | | Page 98 of 438 |



Plot 7-163. Occupied Bandwidth Plot (5G sub6 n66 - 15.0MHz 256-QAM - Full RB Configuration)

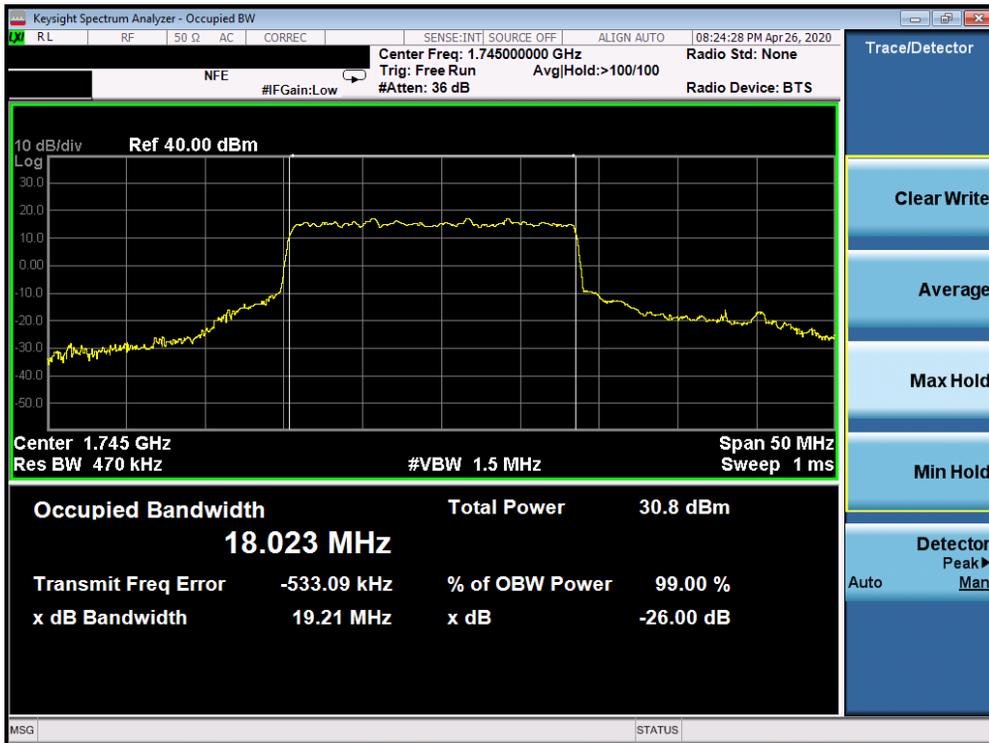


Plot 7-164. Occupied Bandwidth Plot (5G sub6 n66 - 20.0MHz BPSK - Full RB Configuration)

| | | | | |
|---|---|---|-----------|---------------------------------|
| FCC ID: ZNFG900UM | PCTEST Proud to be part of element | MEASUREMENT REPORT (CERTIFICATION) | LG | Approved by: Quality Manager |
| Test Report S/N: 1M2003200048-03.ZNF | Test Dates: 3/23-5/29/2020 | EUT Type: Portable Handset | | Page 99 of 438 |

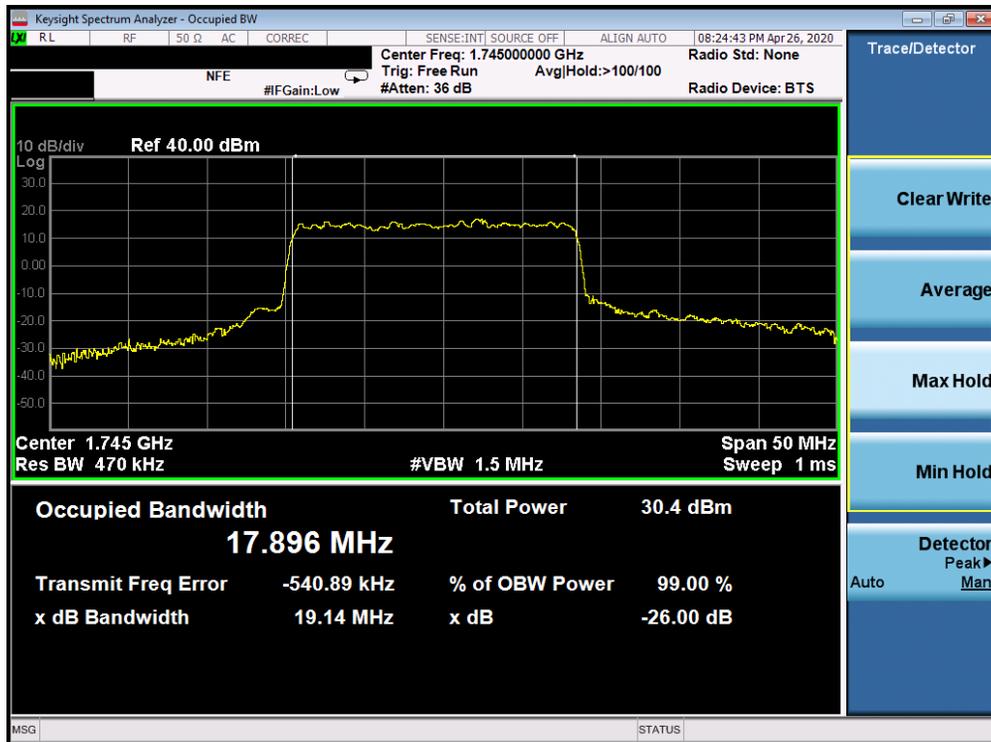


Plot 7-165. Occupied Bandwidth Plot (5G sub6 n66 - 20.0MHz QPSK - Full RB Configuration)

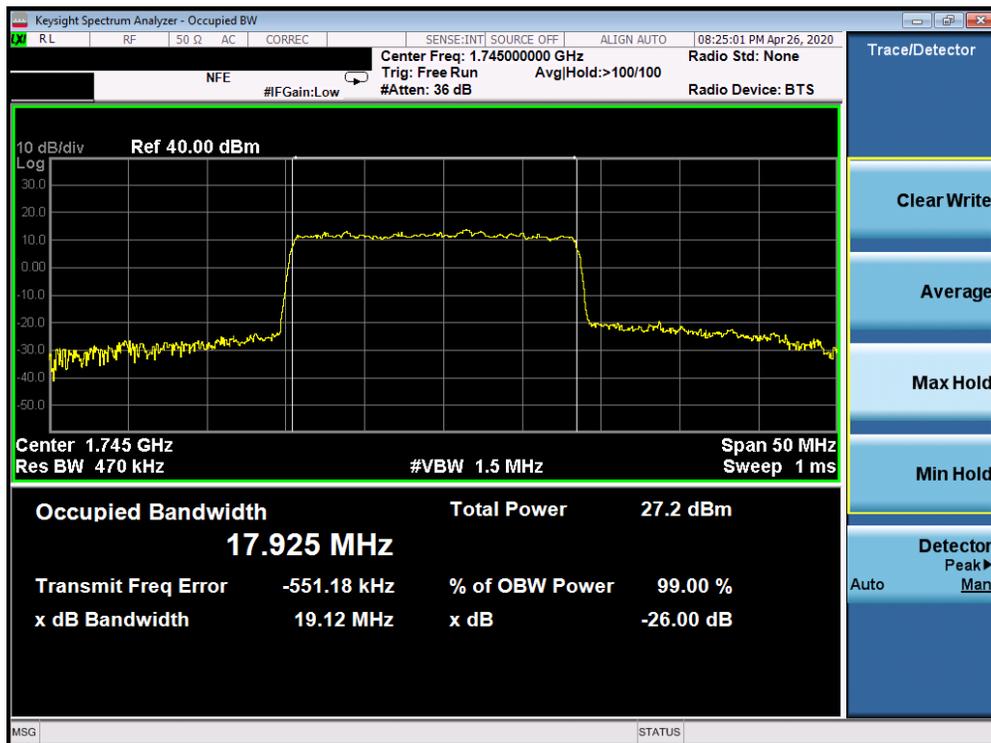


Plot 7-166. Occupied Bandwidth Plot (5G sub6 n66 - 20.0MHz 16-QAM - Full RB Configuration)

| | | | | |
|---|--|---------------------------------------|---|---------------------------------|
| FCC ID: ZNFG900UM |  PCTEST Proud to be part of  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2003200048-03.ZNF | Test Dates: 3/23-5/29/2020 | EUT Type: Portable Handset | | Page 100 of 438 |



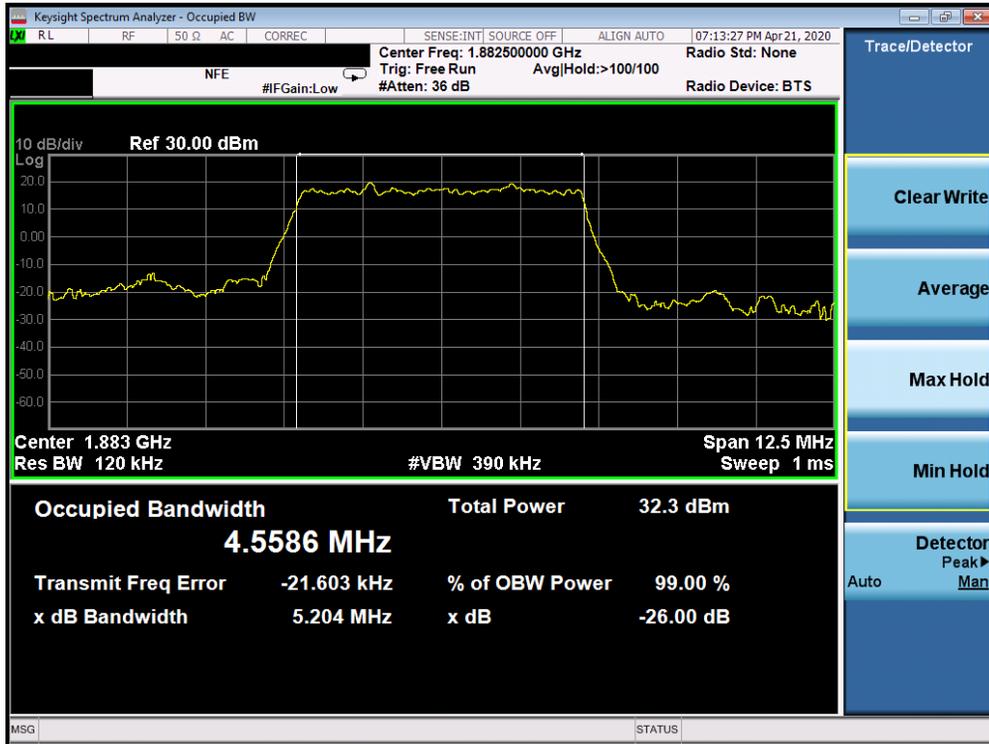
Plot 7-167. Occupied Bandwidth Plot (5G sub6 n66 - 20.0MHz 64-QAM - Full RB Configuration)



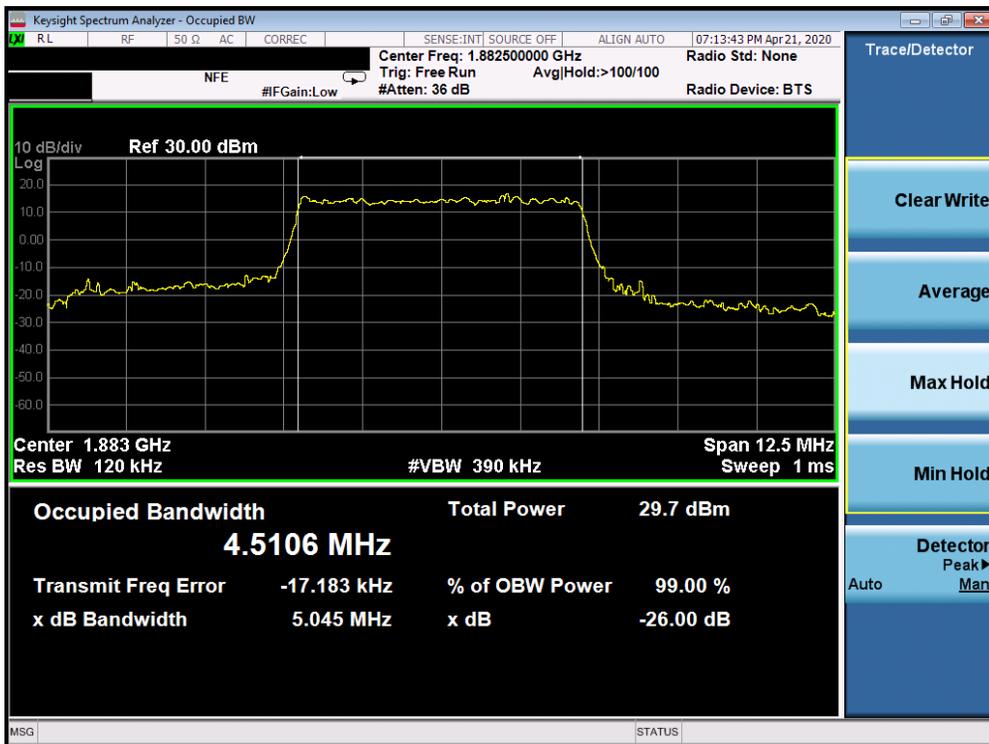
Plot 7-168. Occupied Bandwidth Plot (5G sub6 n66 - 20.0MHz 256-QAM - Full RB Configuration)

| | | | | |
|---|--|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFG900UM | PCTEST Proud to be part of element | MEASUREMENT REPORT (CERTIFICATION) | LG | Approved by: Quality Manager |
| Test Report S/N: 1M2003200048-03.ZNF | Test Dates: 3/23-5/29/2020 | EUT Type: Portable Handset | | Page 101 of 438 |

5G sub6 n25/2

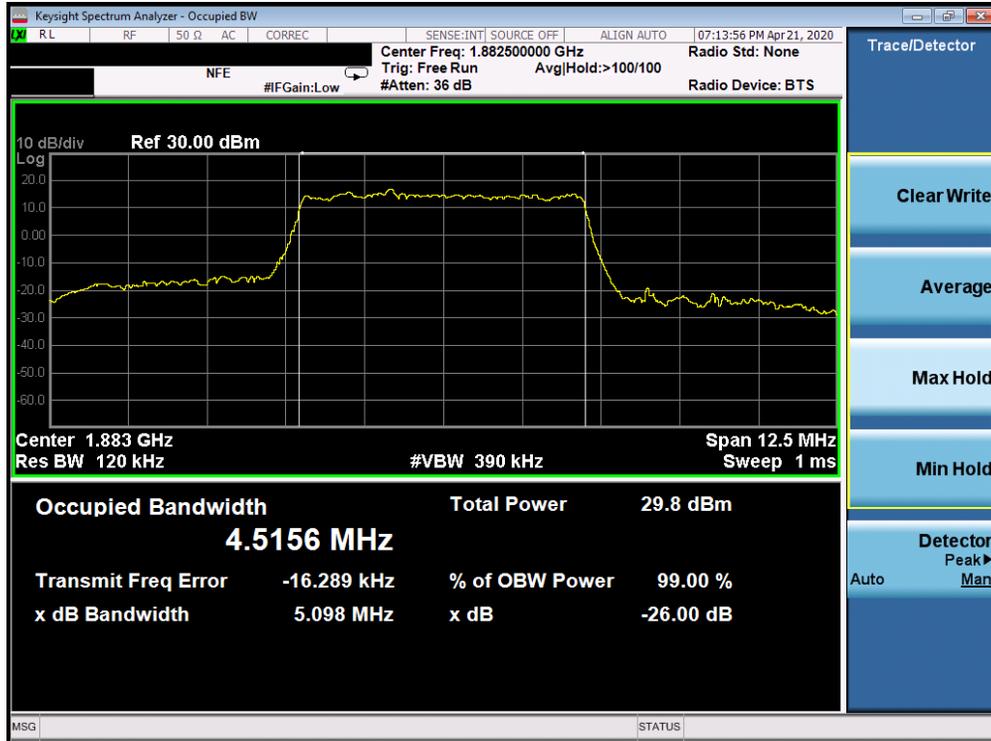


Plot 7-169. Occupied Bandwidth Plot (5G sub6 n25/2 - 5.0MHz BPSK - Full RB Configuration)

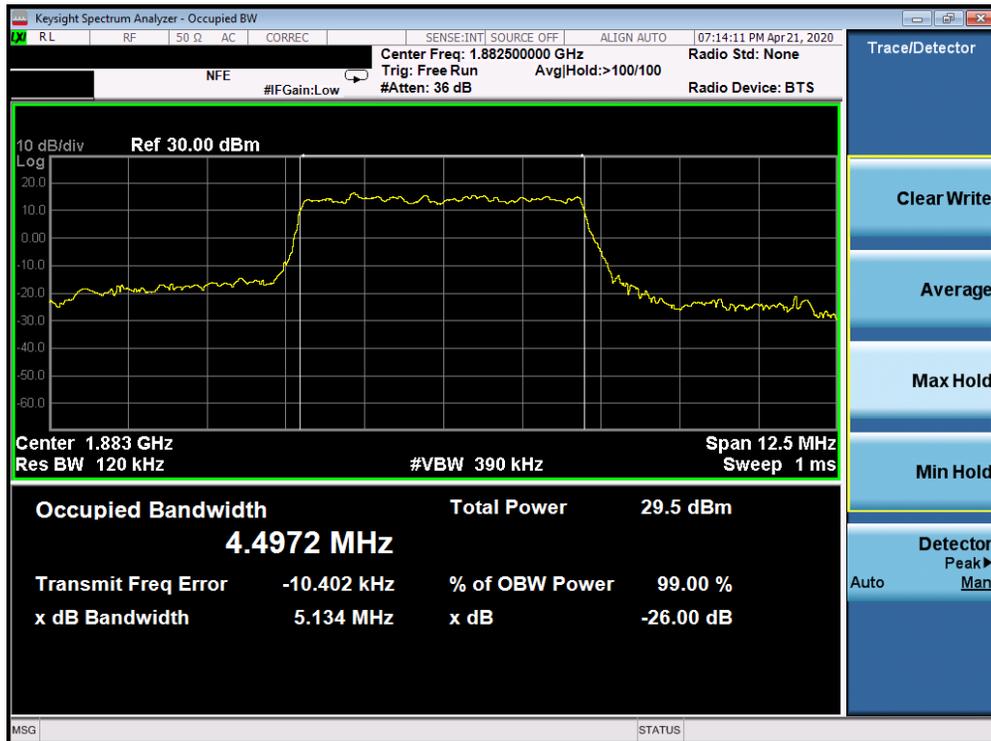


Plot 7-170. Occupied Bandwidth Plot (5G sub6 n25/2 - 5.0MHz QPSK - Full RB Configuration)

| | | | | |
|---|--|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFG900UM | PCTEST Proud to be part of element | MEASUREMENT REPORT (CERTIFICATION) | LG | Approved by: Quality Manager |
| Test Report S/N: 1M2003200048-03.ZNF | Test Dates: 3/23-5/29/2020 | EUT Type: Portable Handset | | Page 102 of 438 |

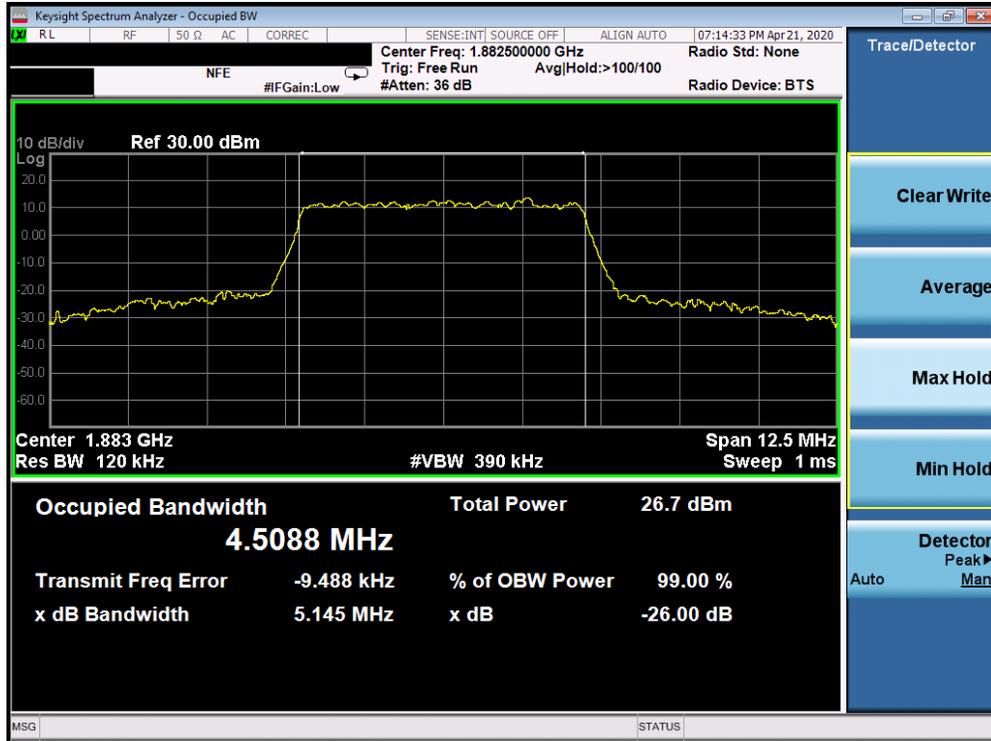


Plot 7-171. Occupied Bandwidth Plot (5G sub6 n25/2 - 5.0MHz 16-QAM - Full RB Configuration)

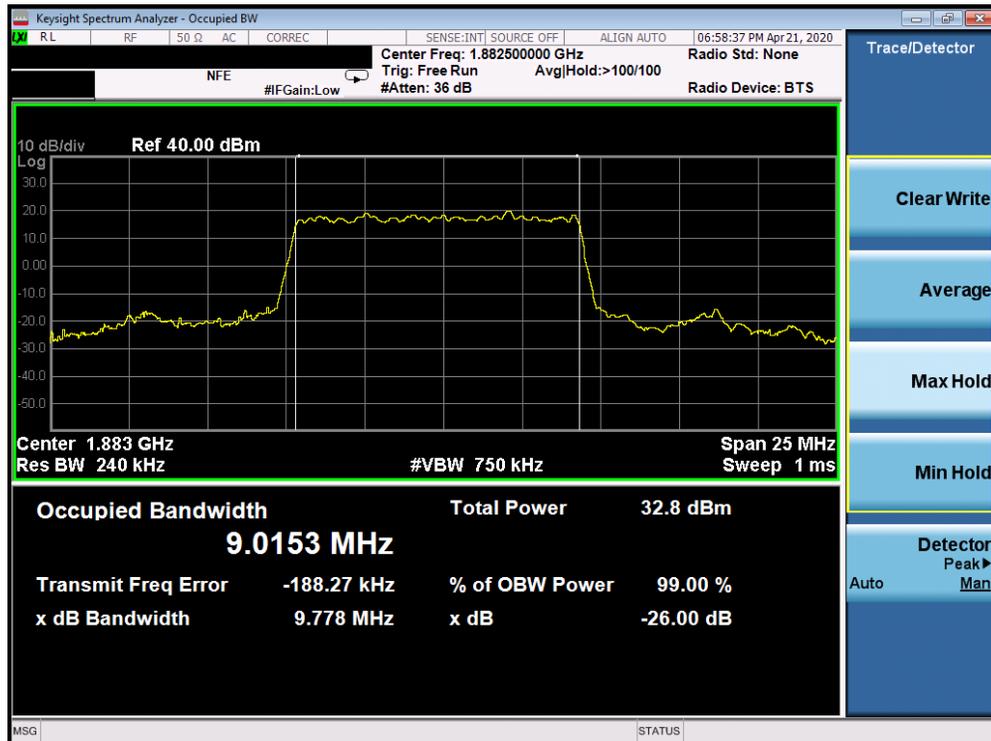


Plot 7-172. Occupied Bandwidth Plot (5G sub6 n25/2 - 5.0MHz 64-QAM - Full RB Configuration)

| | | | | |
|---|--|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFG900UM | PCTEST Proud to be part of element | MEASUREMENT REPORT (CERTIFICATION) | LG | Approved by: Quality Manager |
| Test Report S/N: 1M2003200048-03.ZNF | Test Dates: 3/23-5/29/2020 | EUT Type: Portable Handset | | Page 103 of 438 |

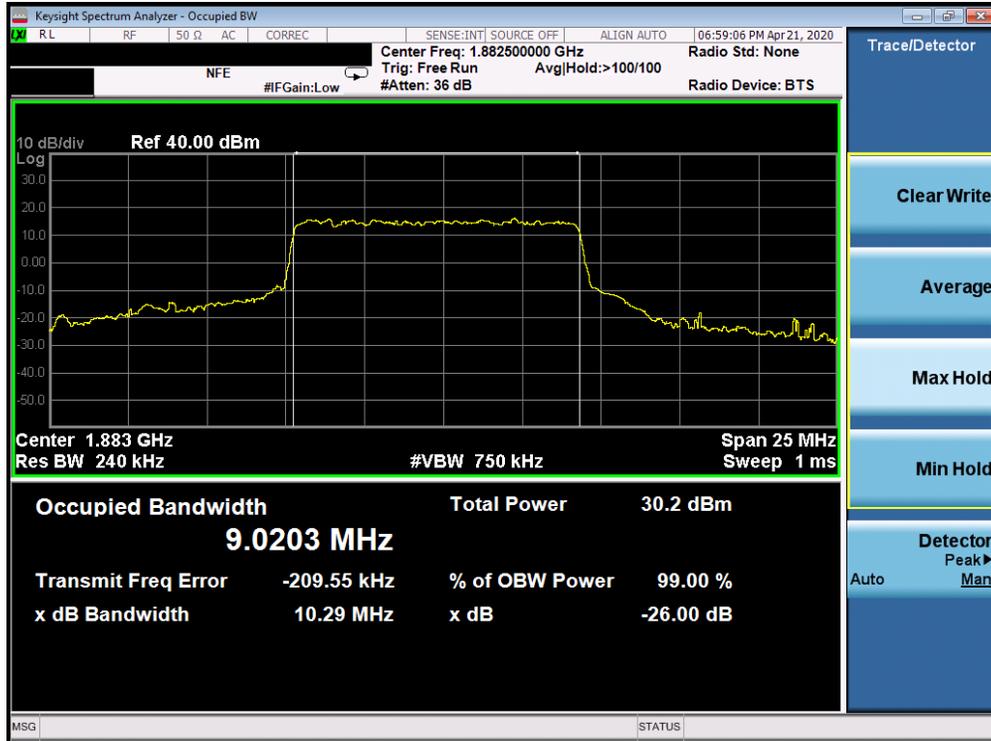


Plot 7-173. Occupied Bandwidth Plot (5G sub6 n25/2 - 5.0MHz 256-QAM - Full RB Configuration)

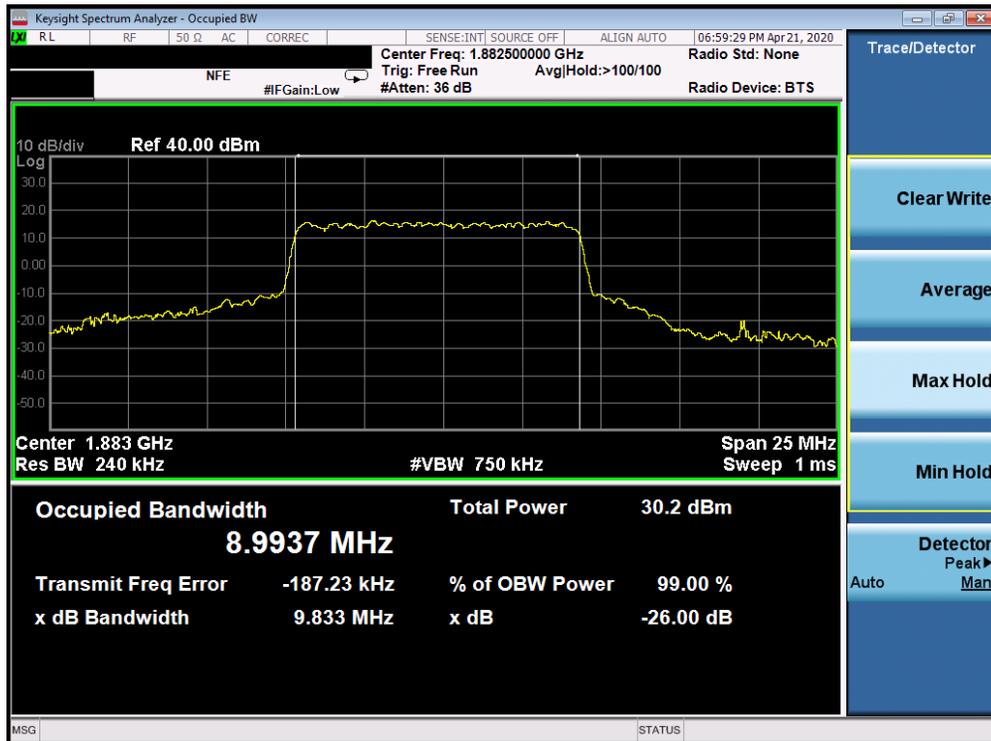


Plot 7-174. Occupied Bandwidth Plot (5G sub6 n25/2 - 10.0MHz BPSK - Full RB Configuration)

| | | | | |
|---|--|---------------------------------------|-----------|---------------------------------|
| FCC ID: ZNFG900UM | PCTEST Proud to be part of element | MEASUREMENT REPORT (CERTIFICATION) | LG | Approved by: Quality Manager |
| Test Report S/N: 1M2003200048-03.ZNF | Test Dates: 3/23-5/29/2020 | EUT Type: Portable Handset | | Page 104 of 438 |

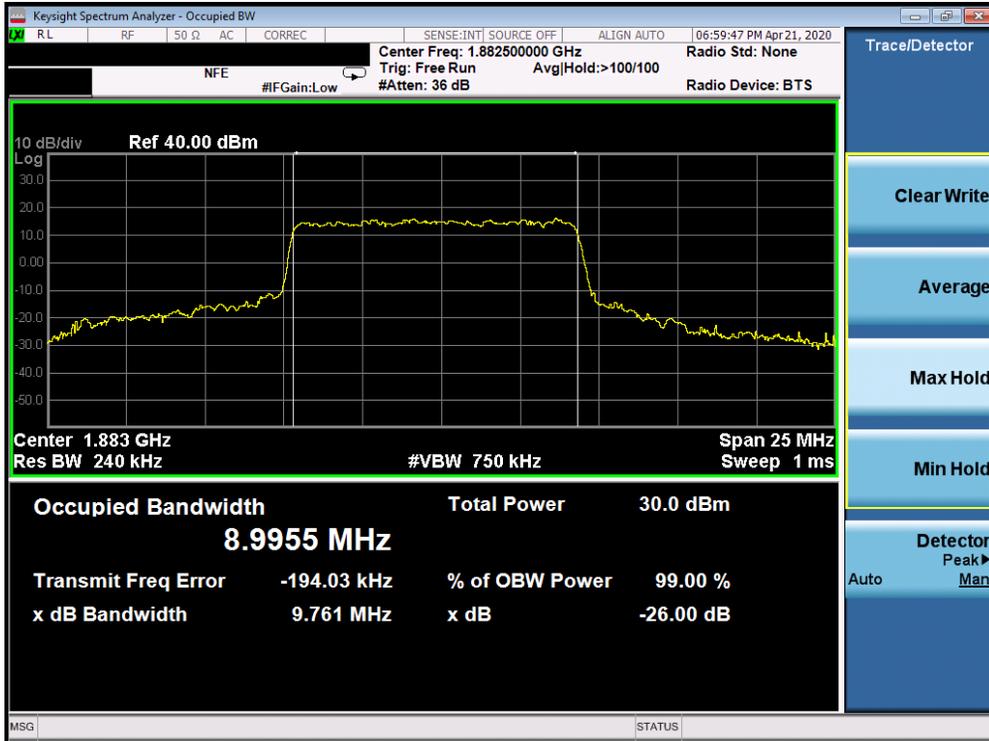


Plot 7-175. Occupied Bandwidth Plot (5G sub6 n25/2 - 10.0MHz QPSK - Full RB Configuration)

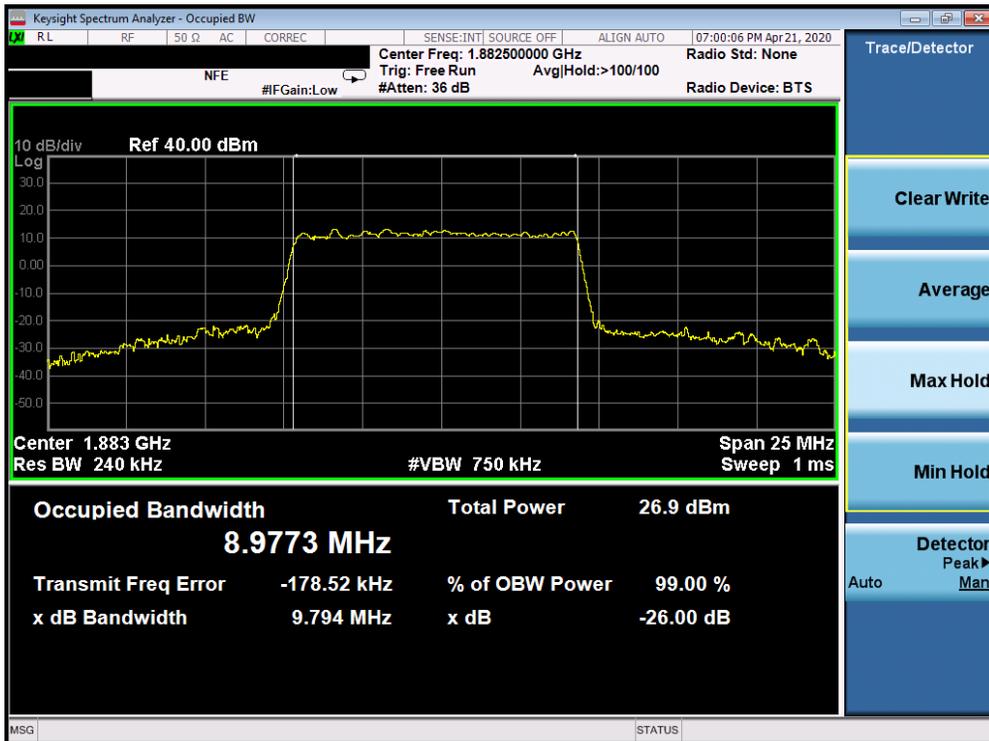


Plot 7-176. Occupied Bandwidth Plot (5G sub6 n25/2 - 10.0MHz 16-QAM - Full RB Configuration)

| | | | | |
|---|--|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFG900UM | PCTEST Proud to be part of element | MEASUREMENT REPORT (CERTIFICATION) | LG | Approved by: Quality Manager |
| Test Report S/N: 1M2003200048-03.ZNF | Test Dates: 3/23-5/29/2020 | EUT Type: Portable Handset | | Page 105 of 438 |

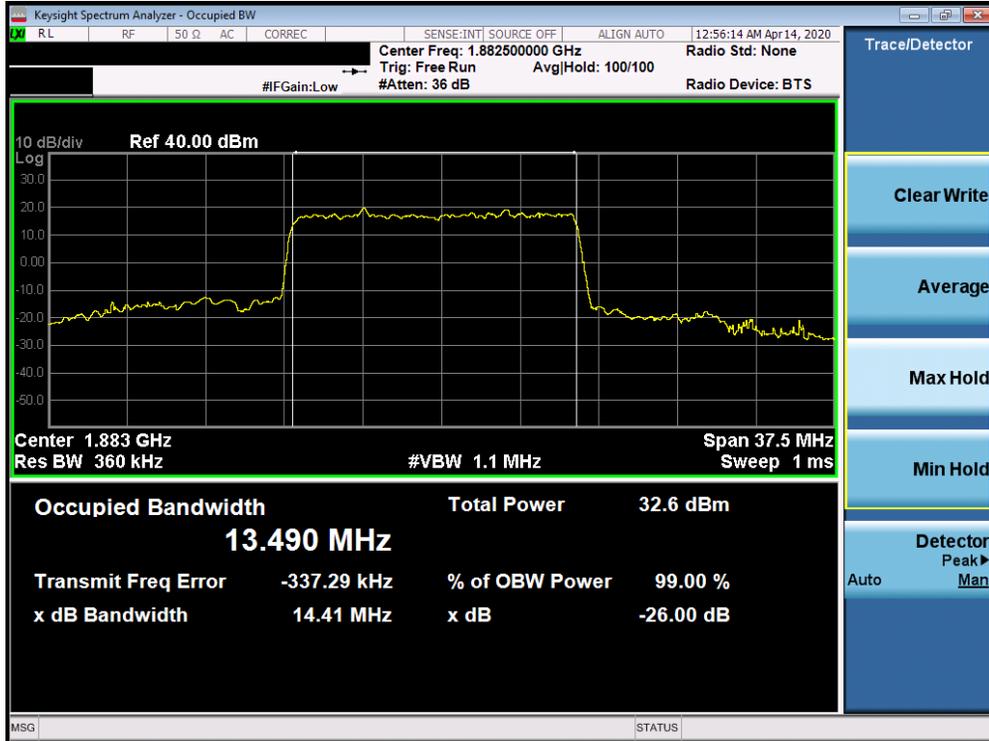


Plot 7-177. Occupied Bandwidth Plot (5G sub6 n25/2 - 10.0MHz 64-QAM - Full RB Configuration)

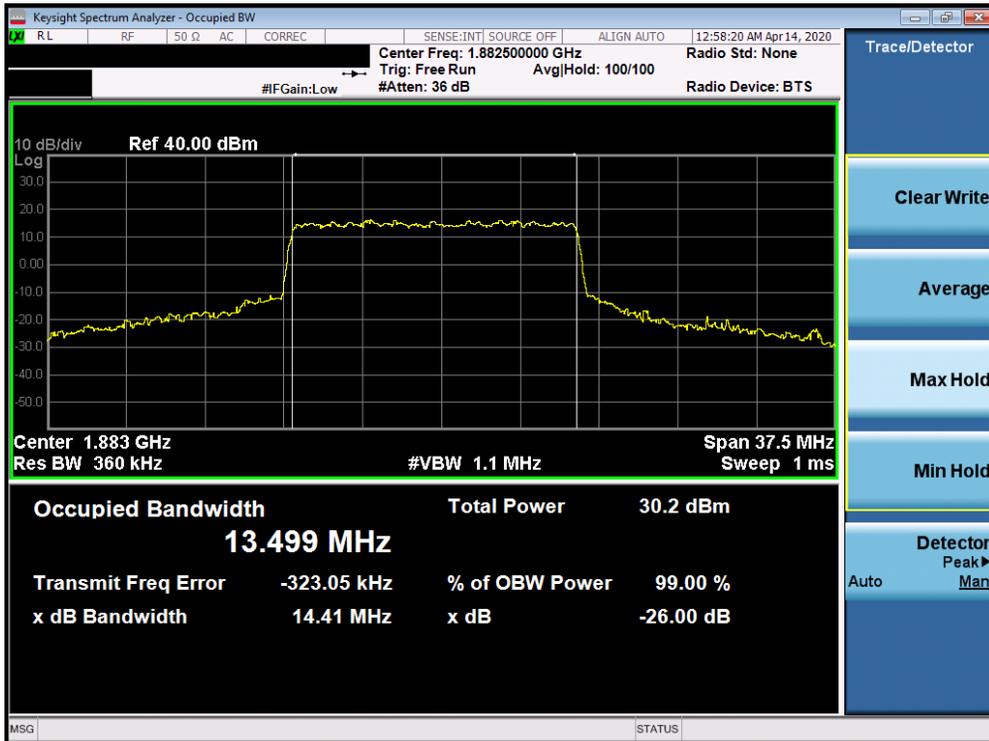


Plot 7-178. Occupied Bandwidth Plot (5G sub6 n25/2 - 10.0MHz 256-QAM - Full RB Configuration)

| | | | | |
|---|--|---------------------------------------|-----------|---------------------------------|
| FCC ID: ZNFG900UM | PCTEST Proud to be part of element | MEASUREMENT REPORT (CERTIFICATION) | LG | Approved by: Quality Manager |
| Test Report S/N: 1M2003200048-03.ZNF | Test Dates: 3/23-5/29/2020 | EUT Type: Portable Handset | | Page 106 of 438 |



Plot 7-179. Occupied Bandwidth Plot (5G sub6 n25/2 - 15.0MHz BPSK - Full RB Configuration)

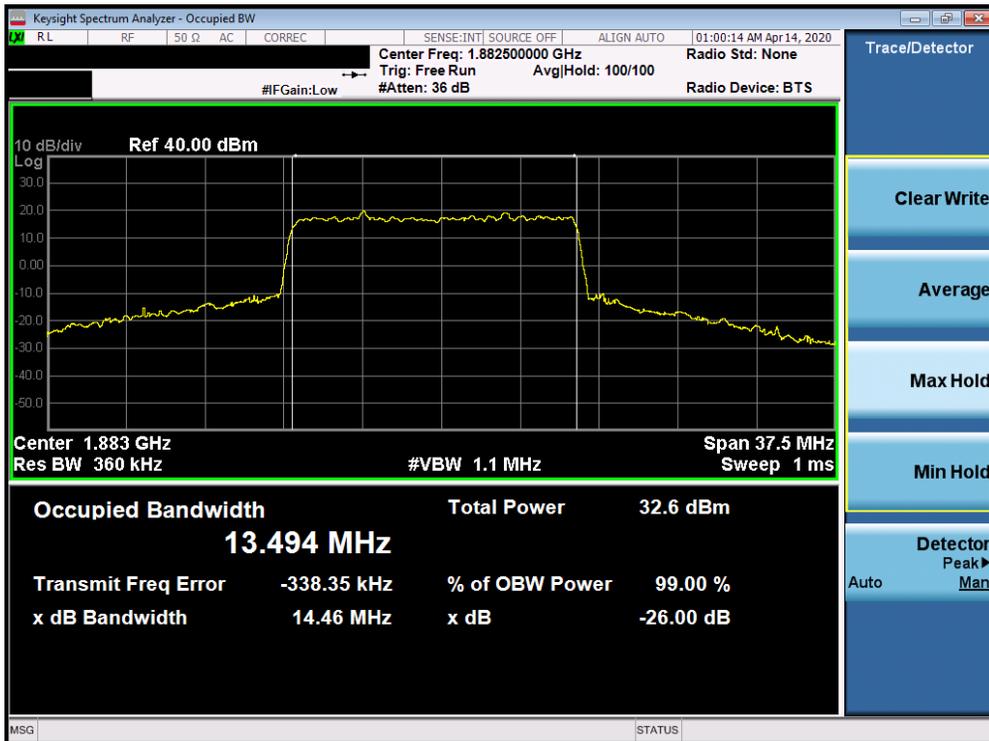


Plot 7-180. Occupied Bandwidth Plot (5G sub6 n25/2 - 15.0MHz QPSK - Full RB Configuration)

| | | | | |
|---|--|---|----|---------------------------------|
| FCC ID: ZNFG900UM | PCTEST Proud to be part of element | MEASUREMENT REPORT (CERTIFICATION) | LG | Approved by: Quality Manager |
| Test Report S/N: 1M2003200048-03.ZNF | Test Dates: 3/23-5/29/2020 | EUT Type: Portable Handset | | Page 107 of 438 |

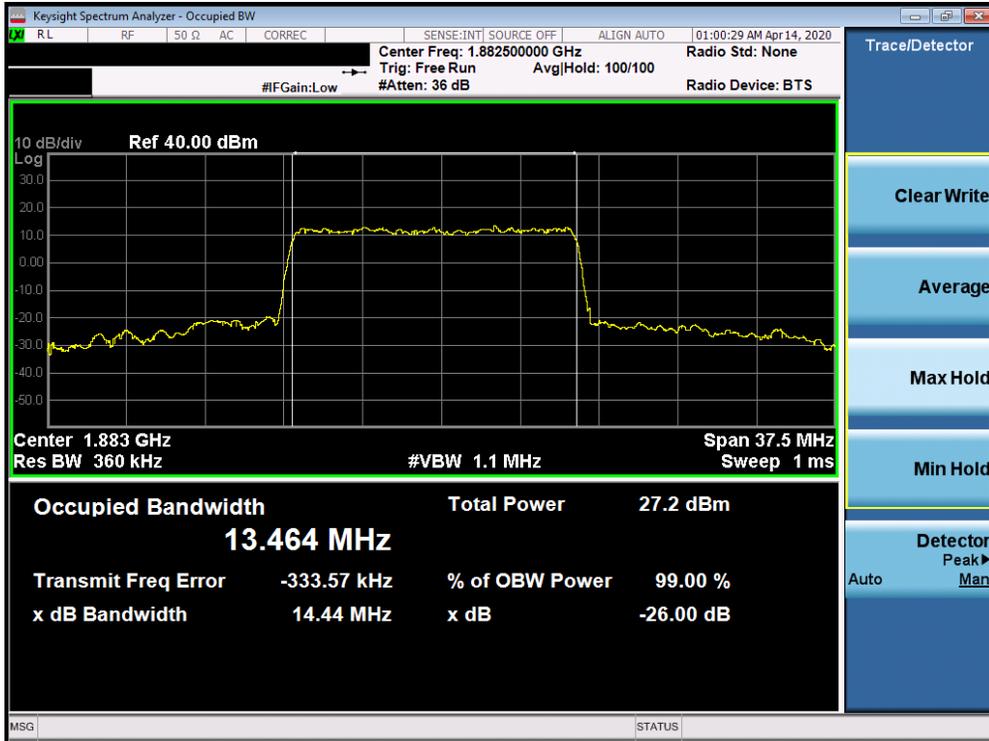


Plot 7-181. Occupied Bandwidth Plot (5G sub6 n25/2 - 15.0MHz 16-QAM - Full RB Configuration)

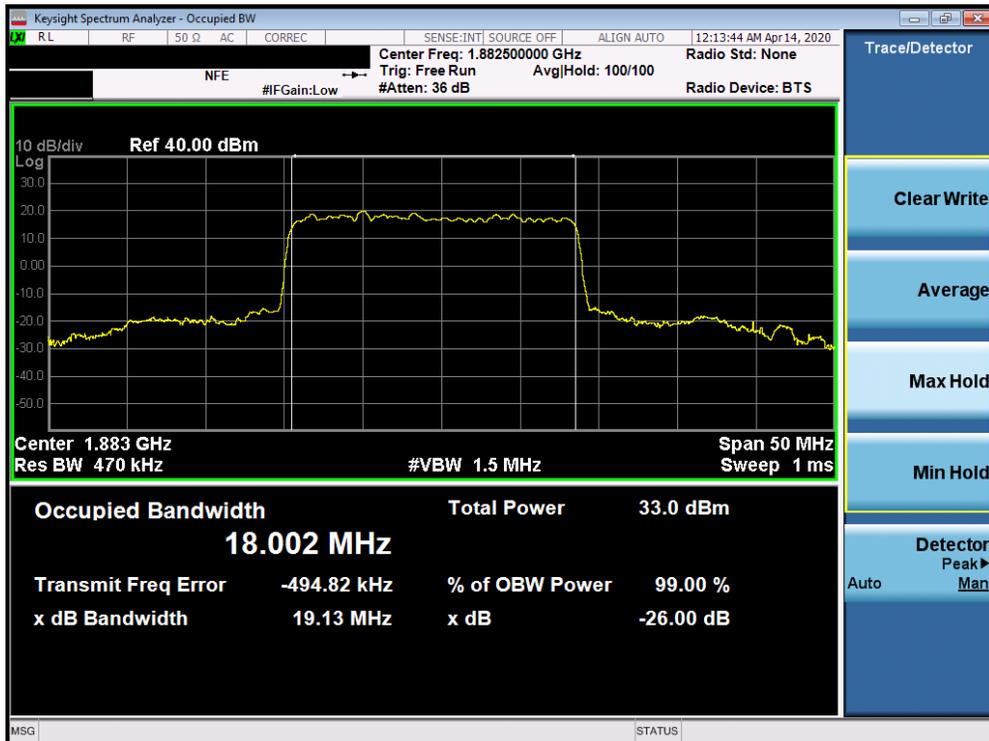


Plot 7-182. Occupied Bandwidth Plot (5G sub6 n25/2 - 15.0MHz 64-QAM - Full RB Configuration)

| | | | | |
|---|--|---------------------------------------|-----------|---------------------------------|
| FCC ID: ZNFG900UM | PCTEST Proud to be part of element | MEASUREMENT REPORT (CERTIFICATION) | LG | Approved by: Quality Manager |
| Test Report S/N: 1M2003200048-03.ZNF | Test Dates: 3/23-5/29/2020 | EUT Type: Portable Handset | | Page 108 of 438 |



Plot 7-183. Occupied Bandwidth Plot (5G sub6 n25/2 - 15.0MHz 256-QAM - Full RB Configuration)

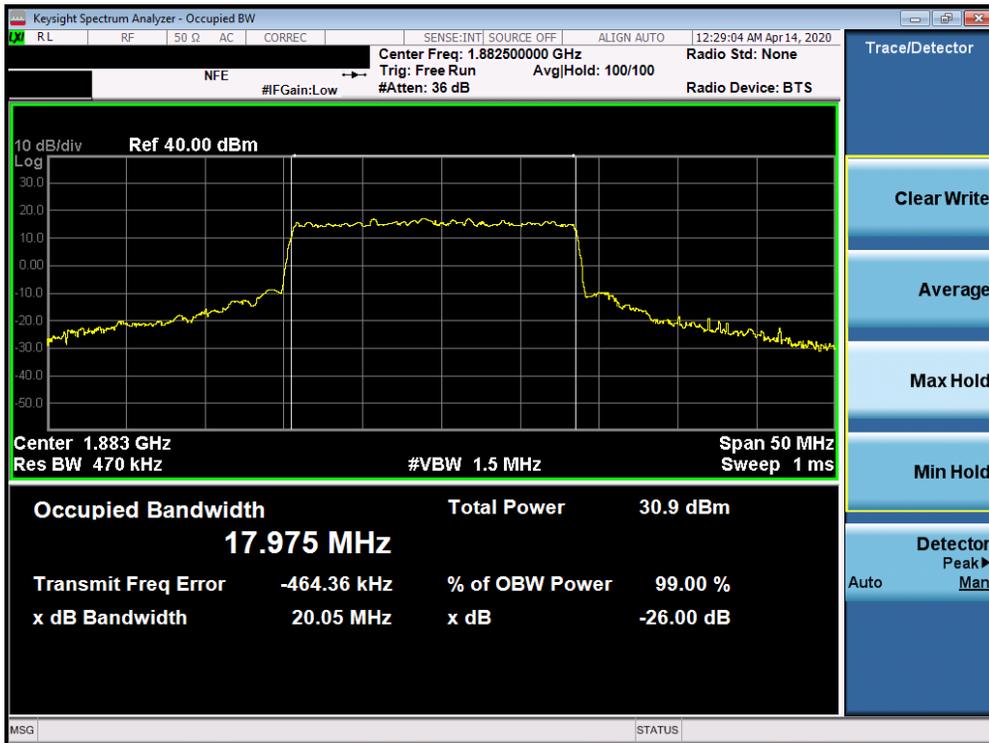


Plot 7-184. Occupied Bandwidth Plot (5G sub6 n25/2 - 20.0MHz BPSK - Full RB Configuration)

| | | | | |
|---|--|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFG900UM | PCTEST Proud to be part of element | MEASUREMENT REPORT (CERTIFICATION) | LG | Approved by: Quality Manager |
| Test Report S/N: 1M2003200048-03.ZNF | Test Dates: 3/23-5/29/2020 | EUT Type: Portable Handset | | Page 109 of 438 |



Plot 7-185. Occupied Bandwidth Plot (5G sub6 n25/2 - 20.0MHz QPSK - Full RB Configuration)

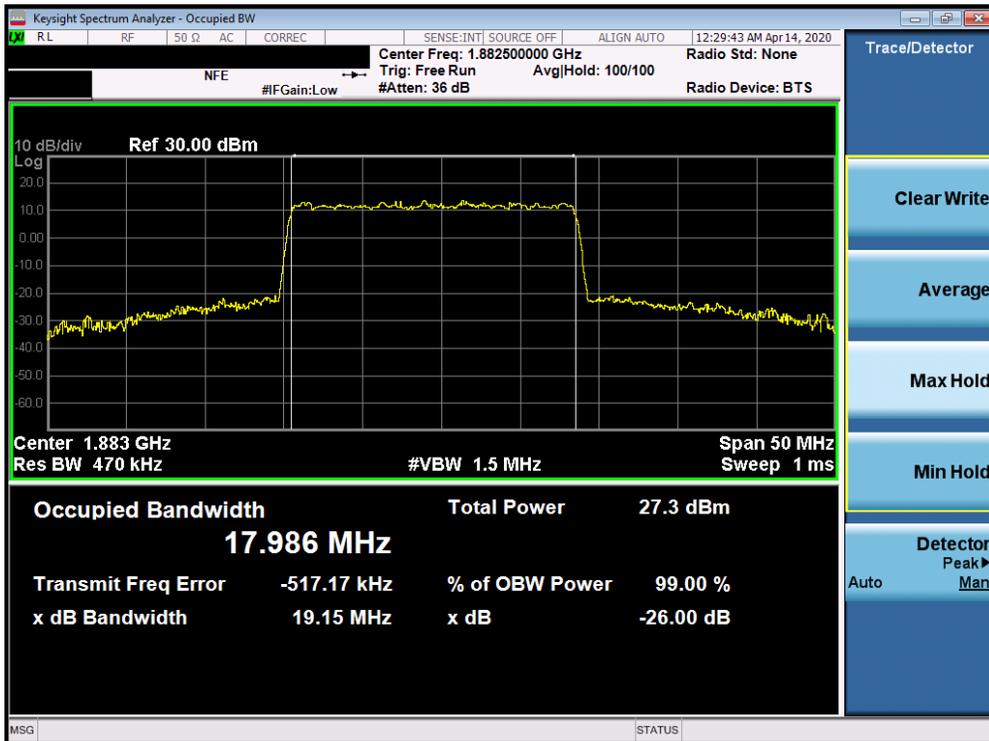


Plot 7-186. Occupied Bandwidth Plot (5G sub6 n25/2 - 20.0MHz 16-QAM - Full RB Configuration)

| | | | | |
|---|---|---------------------------------------|-----------|---------------------------------|
| FCC ID: ZNFG900UM | PCTEST Proud to be part of element | MEASUREMENT REPORT (CERTIFICATION) | LG | Approved by: Quality Manager |
| Test Report S/N: 1M2003200048-03.ZNF | Test Dates: 3/23-5/29/2020 | EUT Type: Portable Handset | | Page 110 of 438 |



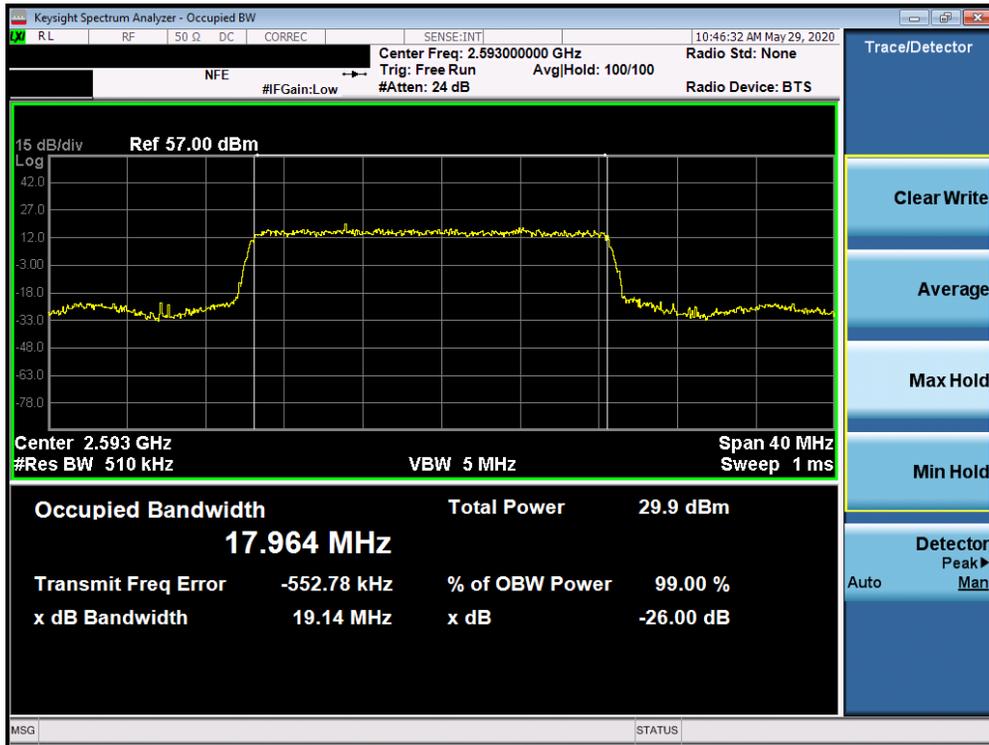
Plot 7-187. Occupied Bandwidth Plot (5G sub6 n25/2 - 20.0MHz 64-QAM - Full RB Configuration)



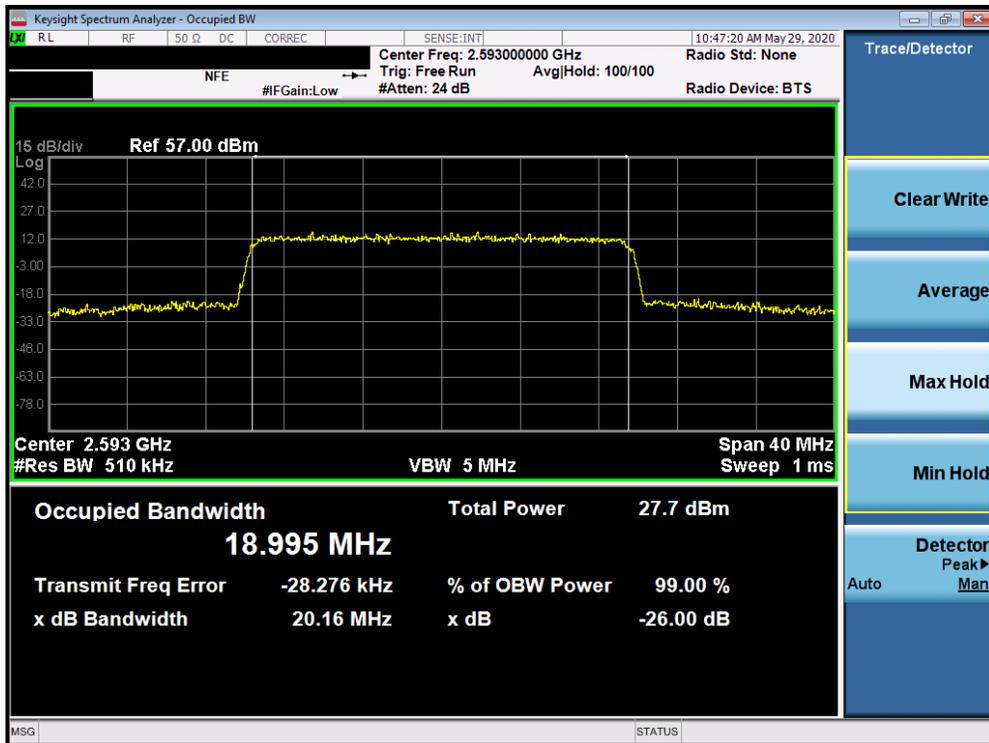
Plot 7-188. Occupied Bandwidth Plot (5G sub6 n25/2 - 20.0MHz 256-QAM - Full RB Configuration)

| | | | | |
|---|---|---------------------------------------|-----------|---------------------------------|
| FCC ID: ZNFG900UM | PCTEST Proud to be part of element | MEASUREMENT REPORT (CERTIFICATION) | LG | Approved by: Quality Manager |
| Test Report S/N: 1M2003200048-03.ZNF | Test Dates: 3/23-5/29/2020 | EUT Type: Portable Handset | | Page 111 of 438 |

5G sub6 n41

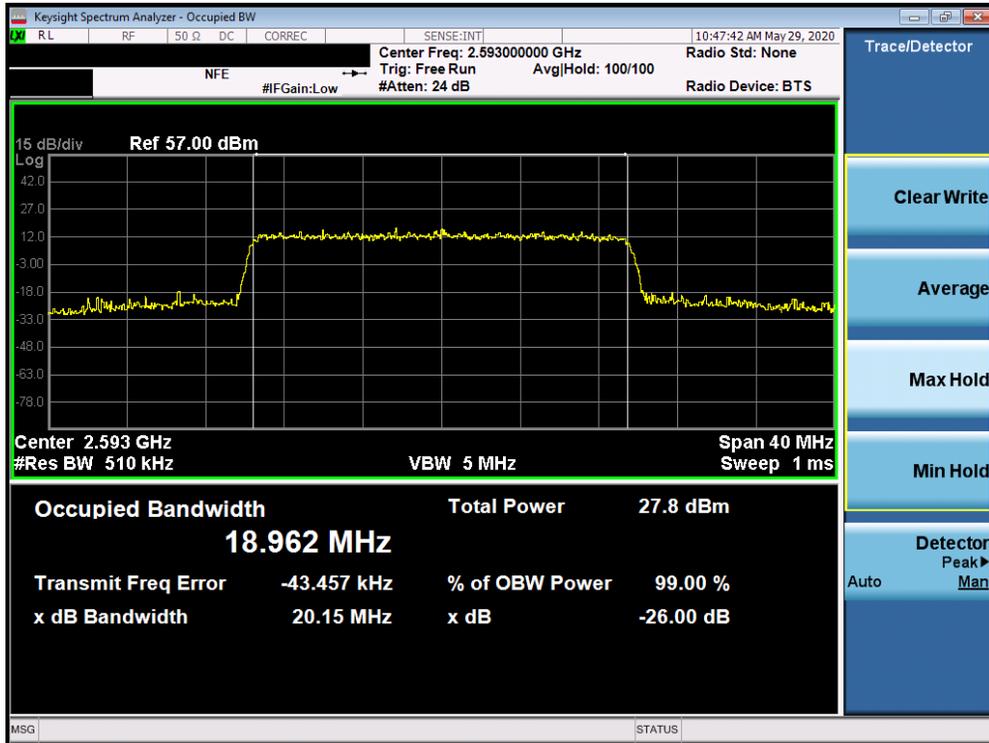


Plot 7-189. Occupied Bandwidth Plot (5G sub6 n41 - 20.0MHz BPSK - Full RB Configuration)

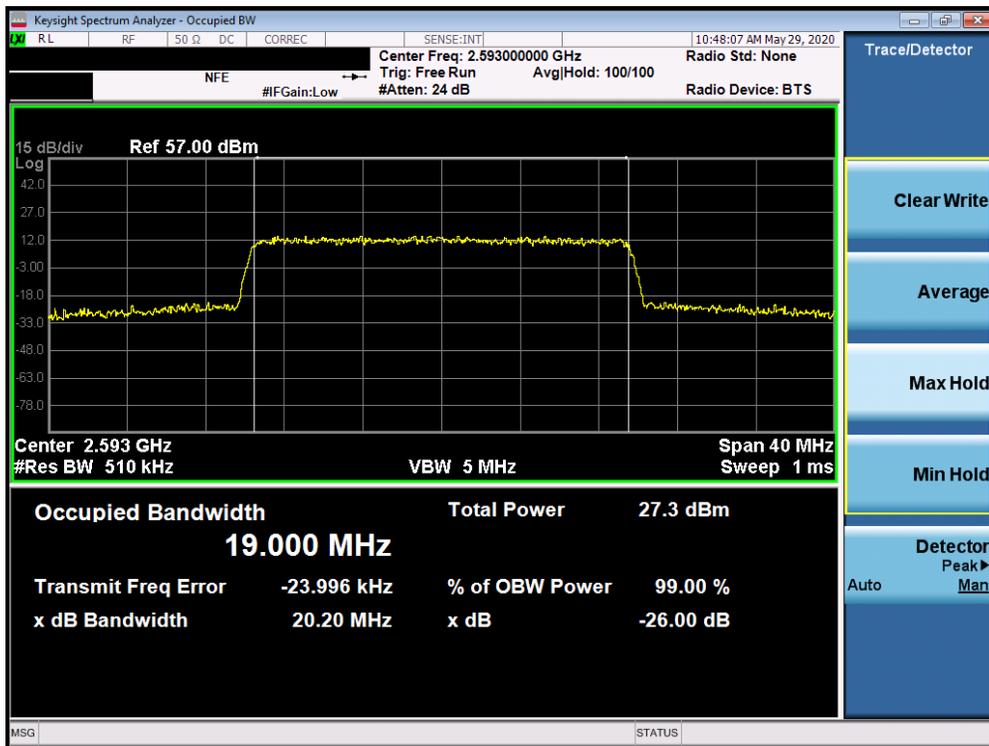


Plot 7-190. Occupied Bandwidth Plot (5G sub6 n41 - 20.0MHz QPSK - Full RB Configuration)

| | | | | |
|---|--|---------------------------------------|-----------|---------------------------------|
| FCC ID: ZNFG900UM | PCTEST Proud to be part of element | MEASUREMENT REPORT (CERTIFICATION) | LG | Approved by: Quality Manager |
| Test Report S/N: 1M2003200048-03.ZNF | Test Dates: 3/23-5/29/2020 | EUT Type: Portable Handset | | Page 112 of 438 |

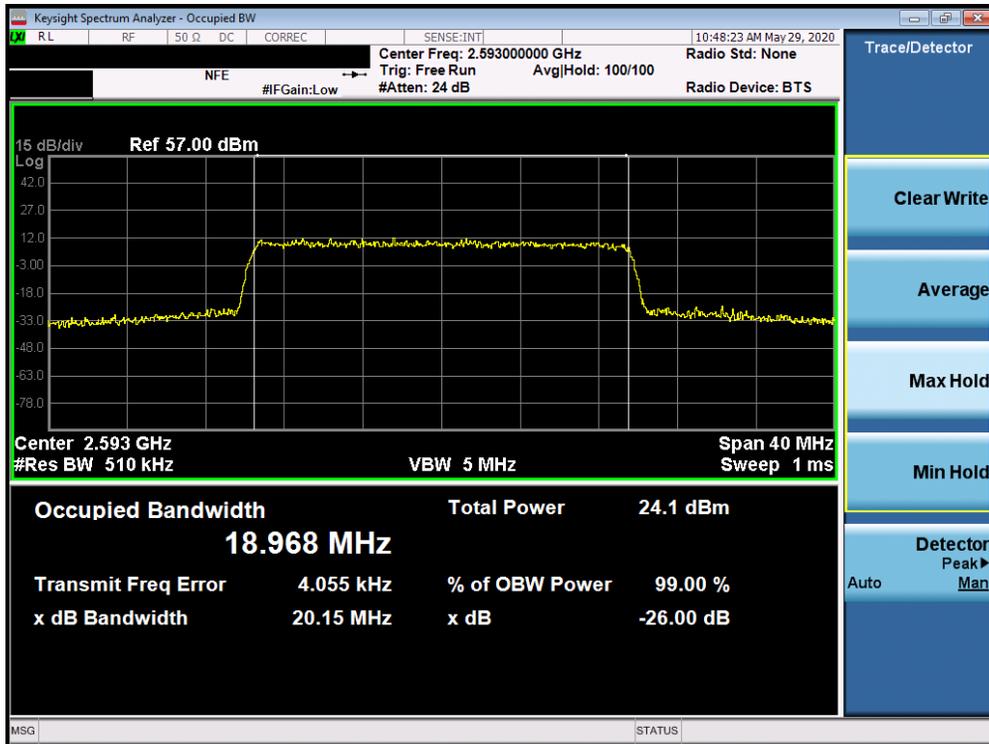


Plot 7-191. Occupied Bandwidth Plot (5G sub6 n41 - 20.0MHz 16-QAM - Full RB Configuration)

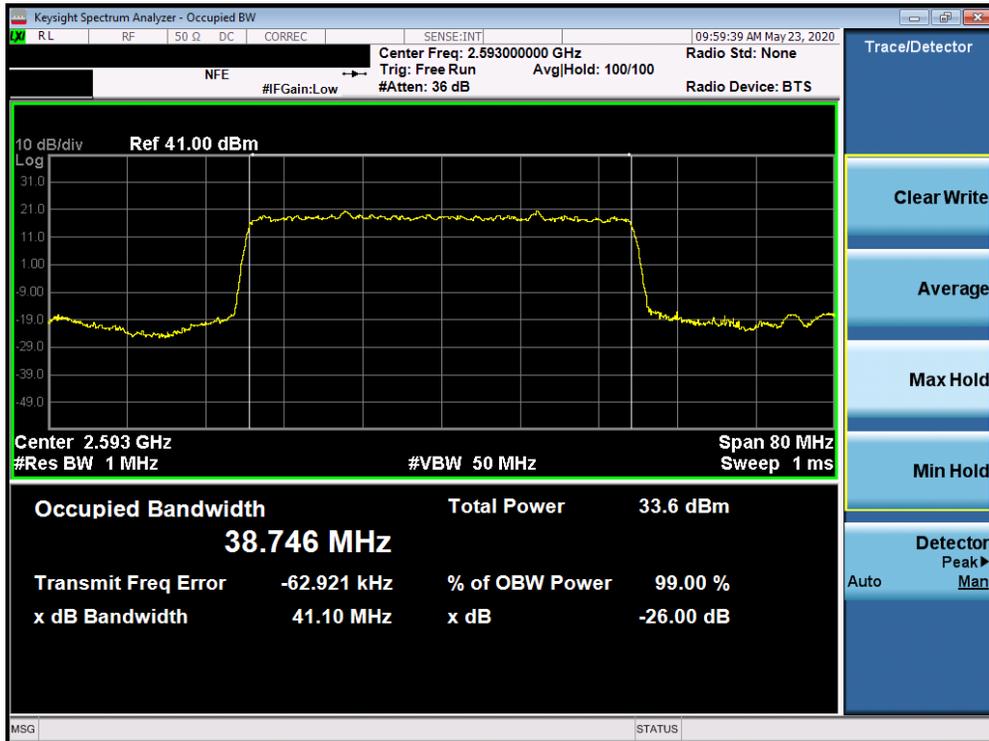


Plot 7-192. Occupied Bandwidth Plot (5G sub6 n41 - 20.0MHz 64-QAM - Full RB Configuration)

| | | | | |
|---|--|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFG900UM | PCTEST Proud to be part of element | MEASUREMENT REPORT (CERTIFICATION) | LG | Approved by: Quality Manager |
| Test Report S/N: 1M2003200048-03.ZNF | Test Dates: 3/23-5/29/2020 | EUT Type: Portable Handset | | Page 113 of 438 |



Plot 7-193. Occupied Bandwidth Plot (5G sub6 n41 - 20.0MHz 256-QAM - Full RB Configuration)

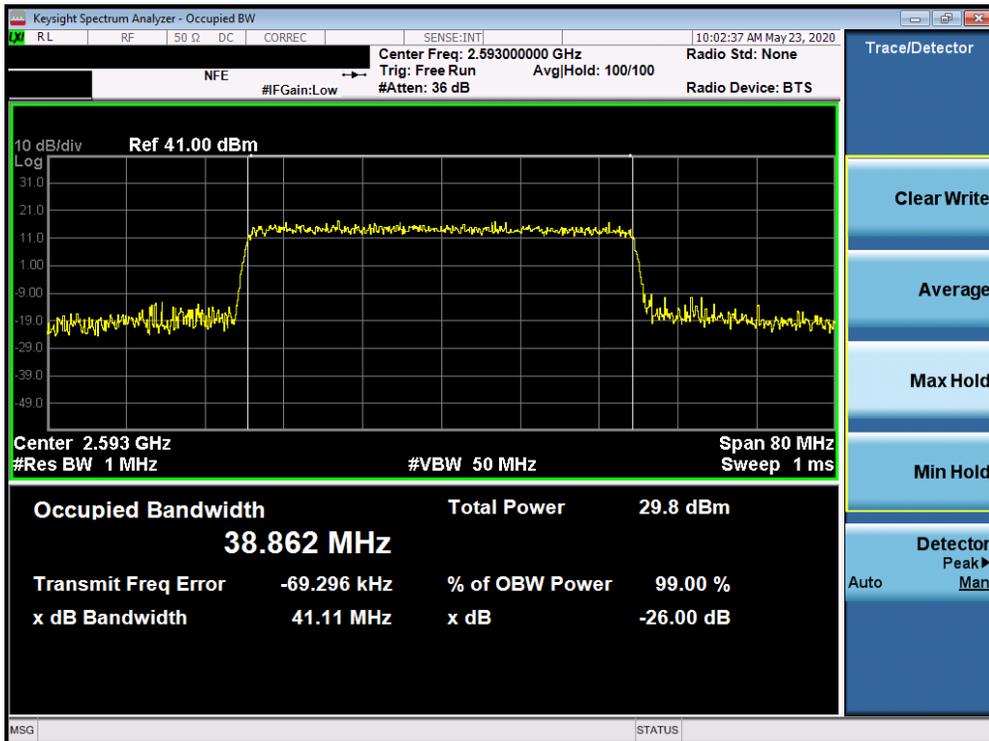


Plot 7-194. Occupied Bandwidth Plot (5G sub6 n41 - 40.0MHz BPSK - Full RB Configuration)

| | | | | |
|---|--|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFG900UM | PCTEST Proud to be part of element | MEASUREMENT REPORT (CERTIFICATION) | LG | Approved by: Quality Manager |
| Test Report S/N: 1M2003200048-03.ZNF | Test Dates: 3/23-5/29/2020 | EUT Type: Portable Handset | | Page 114 of 438 |

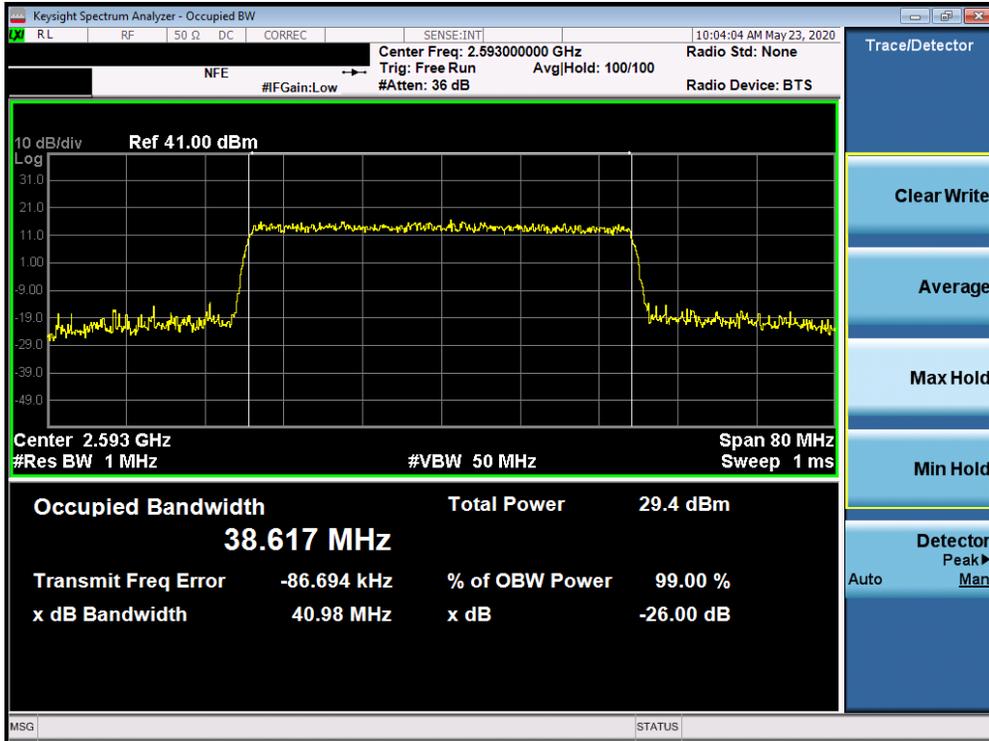


Plot 7-195. Occupied Bandwidth Plot (5G sub6 n41 - 40.0MHz QPSK - Full RB Configuration)

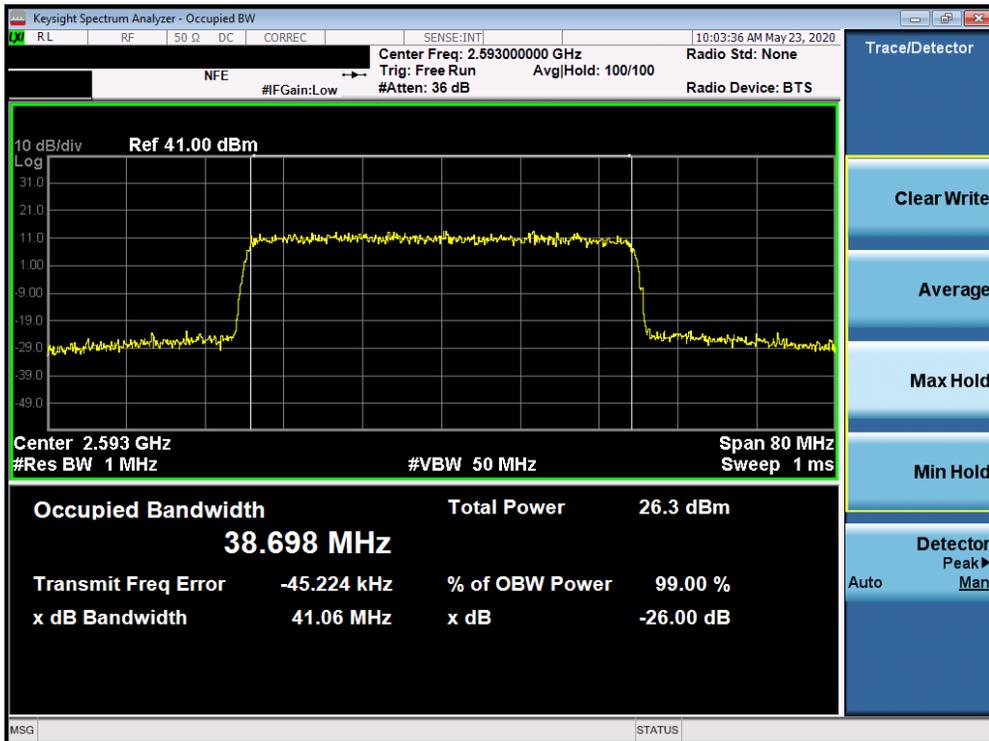


Plot 7-196. Occupied Bandwidth Plot (5G sub6 n41 - 40.0MHz 16-QAM - Full RB Configuration)

| | | | | |
|---|--|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFG900UM | PCTEST Proud to be part of element | MEASUREMENT REPORT (CERTIFICATION) | LG | Approved by: Quality Manager |
| Test Report S/N: 1M2003200048-03.ZNF | Test Dates: 3/23-5/29/2020 | EUT Type: Portable Handset | | Page 115 of 438 |

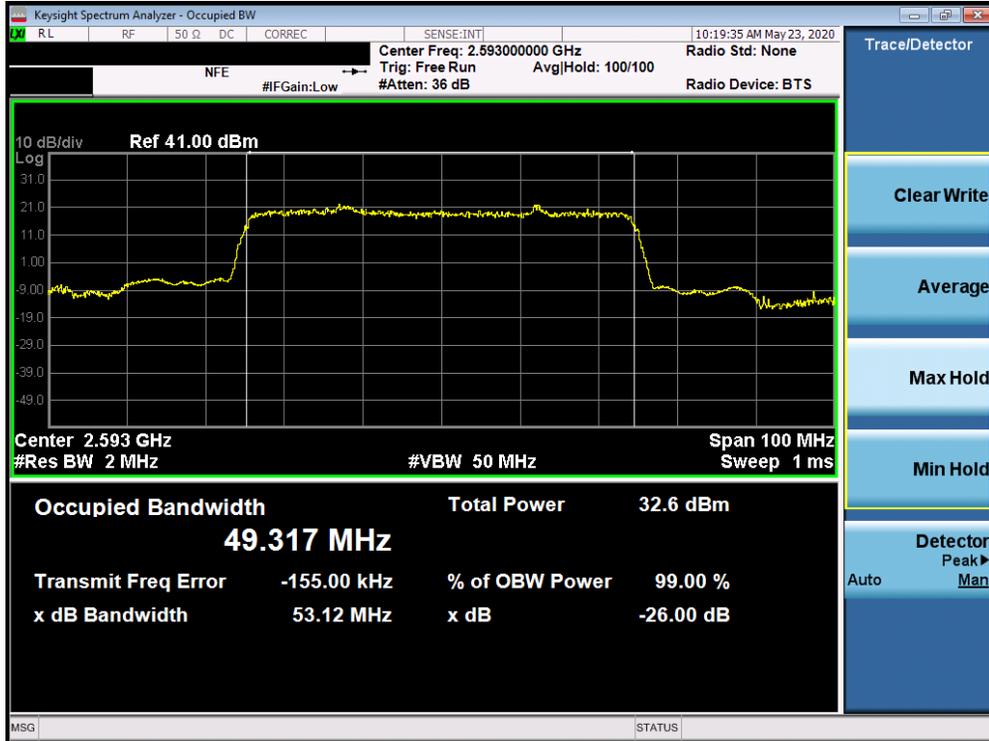


Plot 7-197. Occupied Bandwidth Plot (5G sub6 n41 - 40.0MHz 64-QAM - Full RB Configuration)

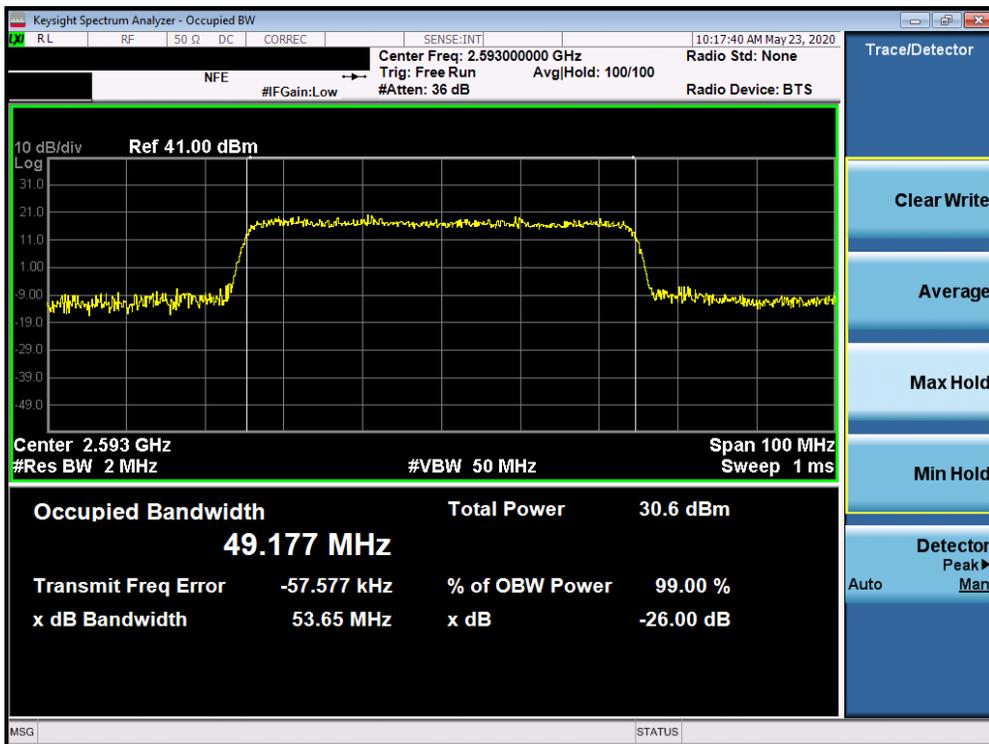


Plot 7-198. Occupied Bandwidth Plot (5G sub6 n41 - 40.0MHz 256-QAM - Full RB Configuration)

| | | | | |
|---|---|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFG900UM | PCTEST Proud to be part of element | MEASUREMENT REPORT (CERTIFICATION) | LG | Approved by: Quality Manager |
| Test Report S/N: 1M2003200048-03.ZNF | Test Dates: 3/23-5/29/2020 | EUT Type: Portable Handset | | Page 116 of 438 |

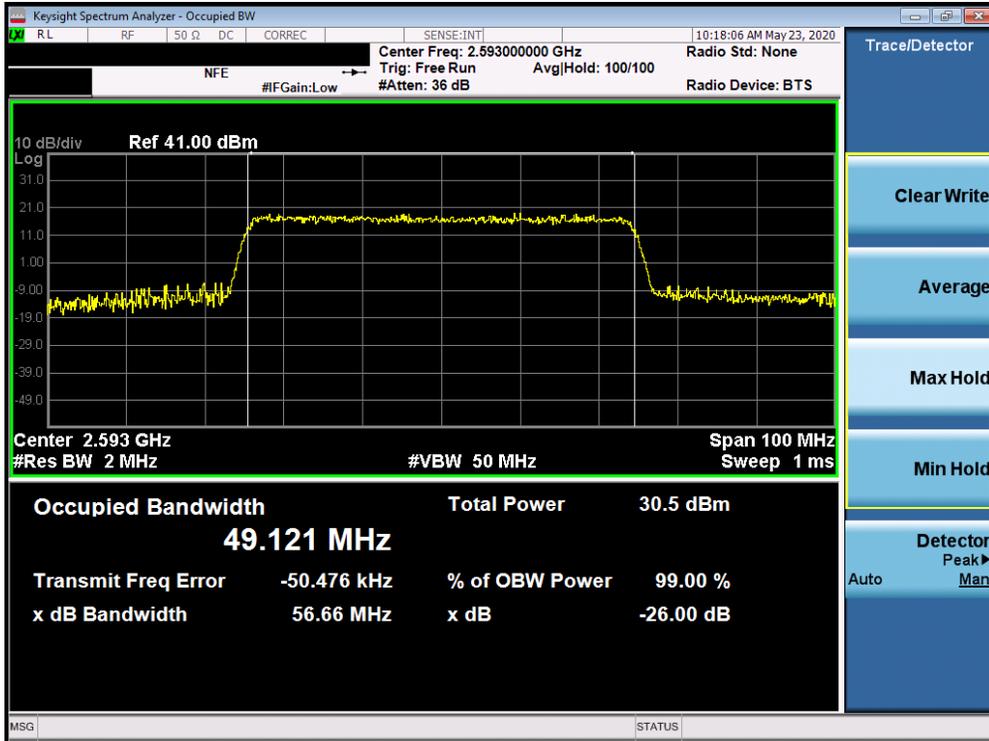


Plot 7-199. Occupied Bandwidth Plot (5G sub6 n41 - 50.0MHz BPSK - Full RB Configuration)

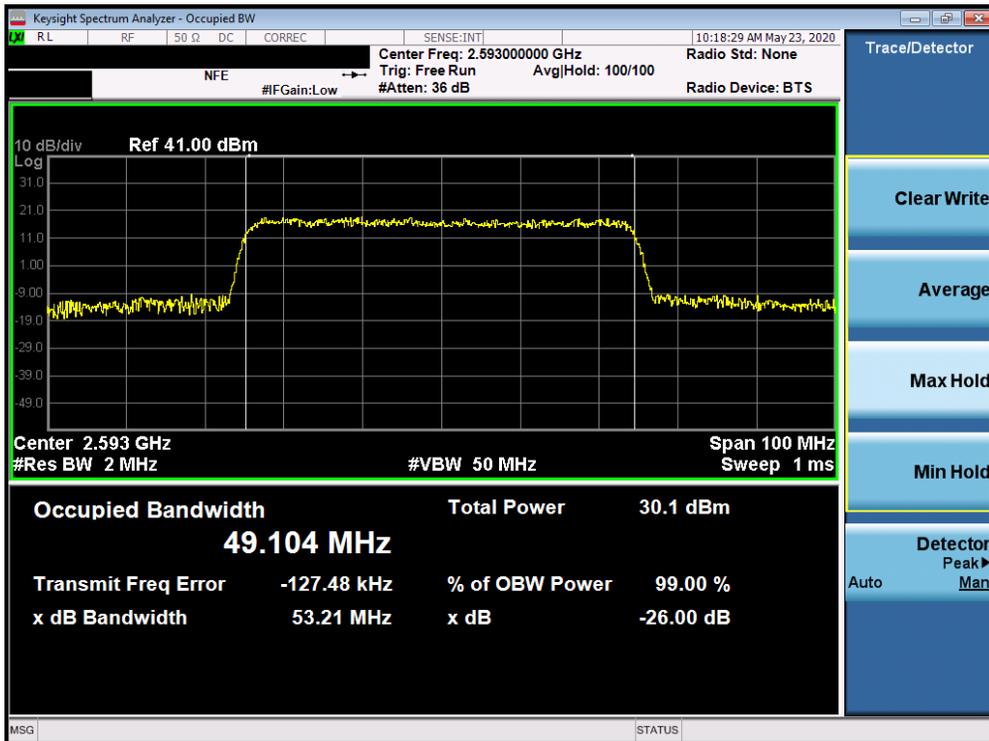


Plot 7-200. Occupied Bandwidth Plot (5G sub6 n41 - 50.0MHz QPSK - Full RB Configuration)

| | | | | |
|---|--|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFG900UM | PCTEST Proud to be part of element | MEASUREMENT REPORT (CERTIFICATION) | LG | Approved by: Quality Manager |
| Test Report S/N: 1M2003200048-03.ZNF | Test Dates: 3/23-5/29/2020 | EUT Type: Portable Handset | | Page 117 of 438 |

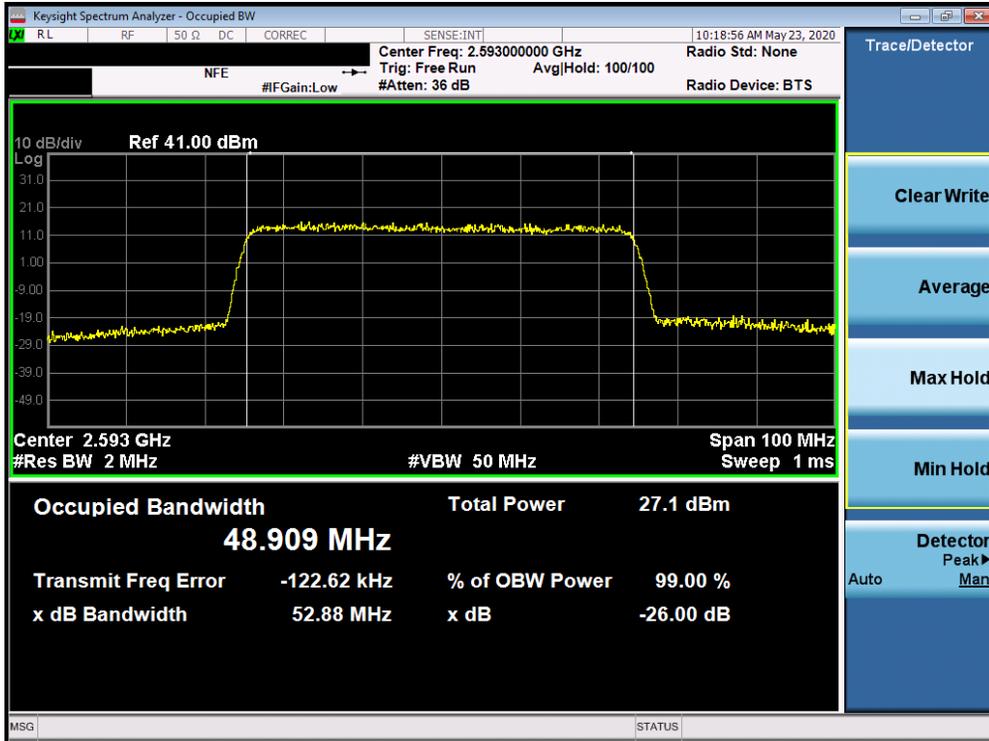


Plot 7-201. Occupied Bandwidth Plot (5G sub6 n41 - 50.0MHz 16-QAM - Full RB Configuration)

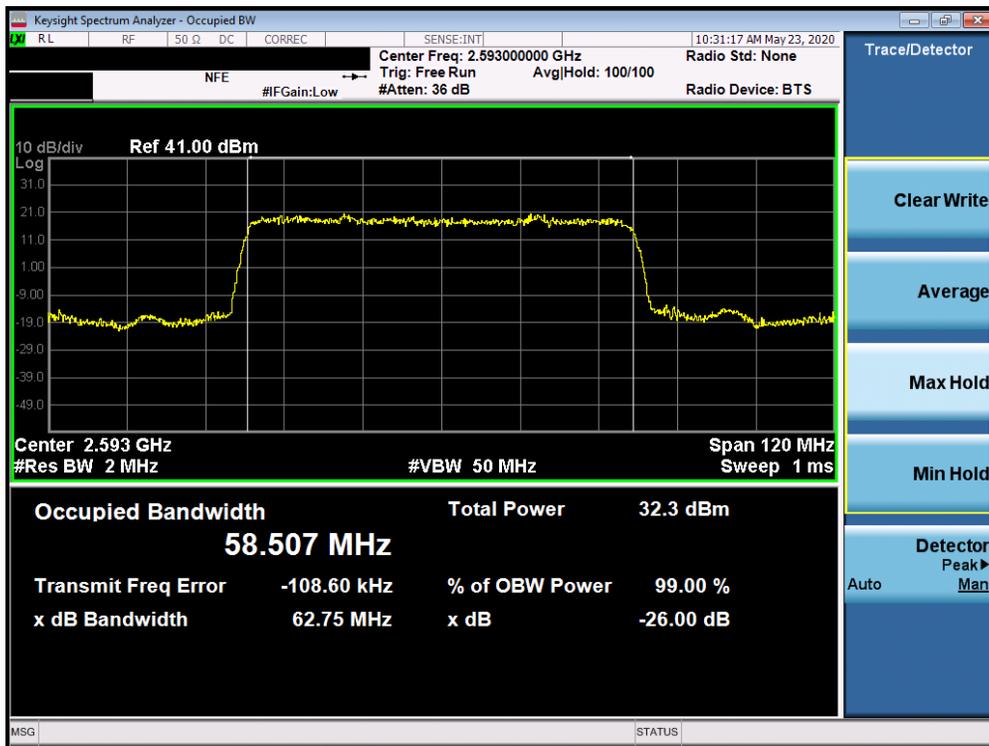


Plot 7-202. Occupied Bandwidth Plot (5G sub6 n41 - 50.0MHz 64-QAM - Full RB Configuration)

| | | | | |
|---|--|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFG900UM | PCTEST Proud to be part of element | MEASUREMENT REPORT (CERTIFICATION) | LG | Approved by: Quality Manager |
| Test Report S/N: 1M2003200048-03.ZNF | Test Dates: 3/23-5/29/2020 | EUT Type: Portable Handset | | Page 118 of 438 |

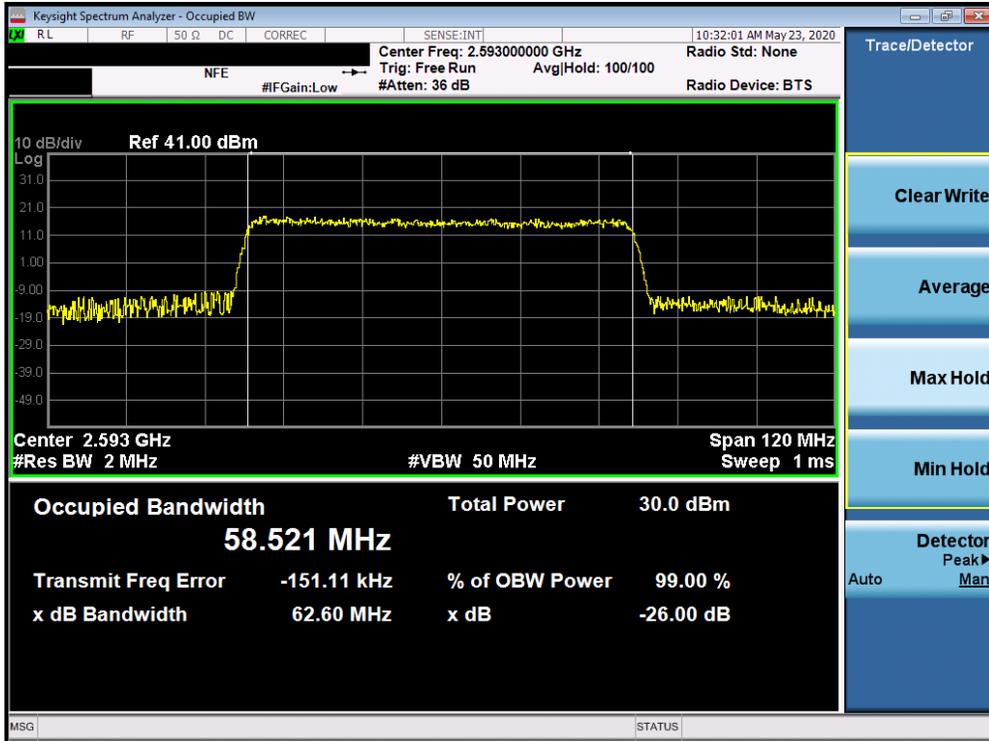


Plot 7-203. Occupied Bandwidth Plot (5G sub6 n41 - 50.0MHz 256-QAM - Full RB Configuration)

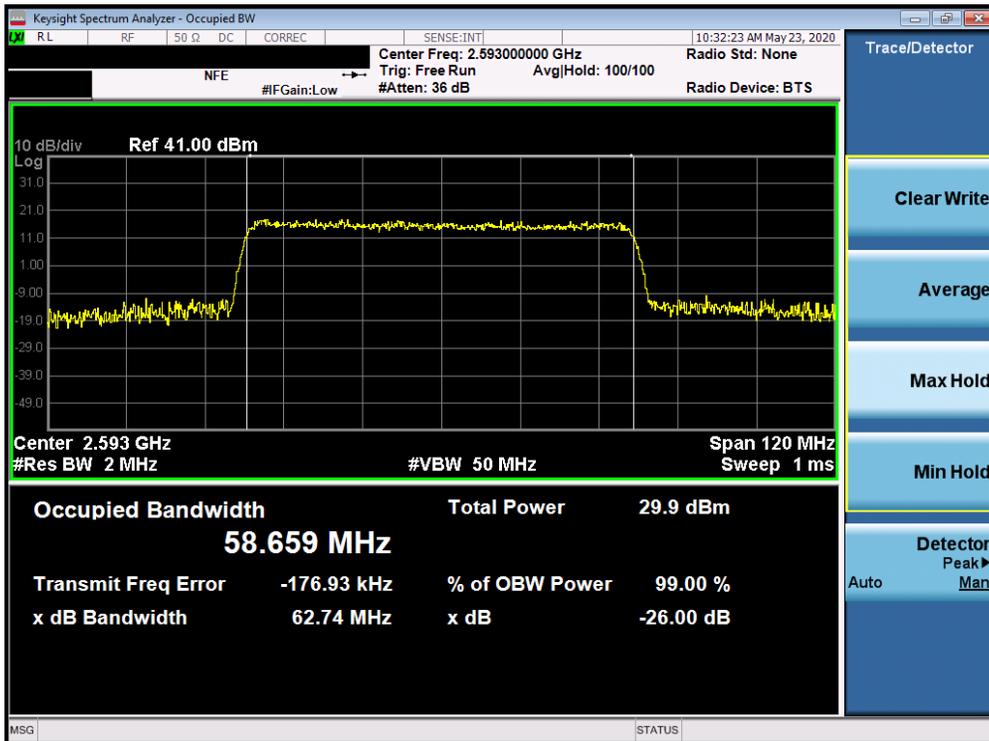


Plot 7-204. Occupied Bandwidth Plot (5G sub6 n41 - 60.0MHz BPSK - Full RB Configuration)

| | | | | |
|---|--|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFG900UM | PCTEST Proud to be part of element | MEASUREMENT REPORT (CERTIFICATION) | LG | Approved by: Quality Manager |
| Test Report S/N: 1M2003200048-03.ZNF | Test Dates: 3/23-5/29/2020 | EUT Type: Portable Handset | | Page 119 of 438 |

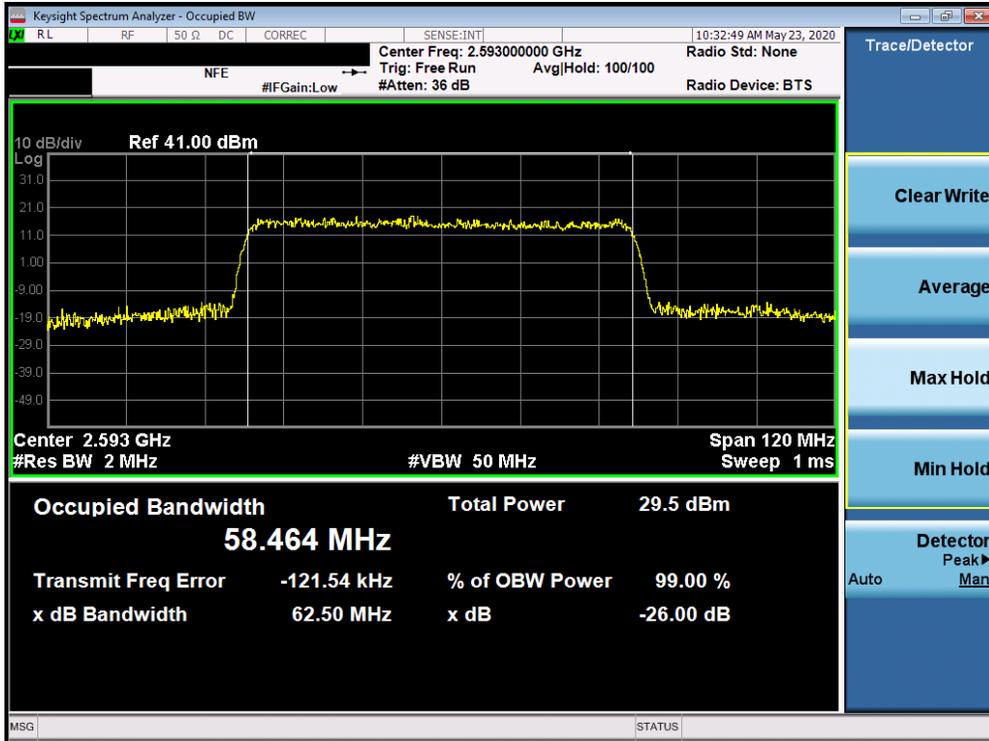


Plot 7-205. Occupied Bandwidth Plot (5G sub6 n41 - 60.0MHz QPSK - Full RB Configuration)

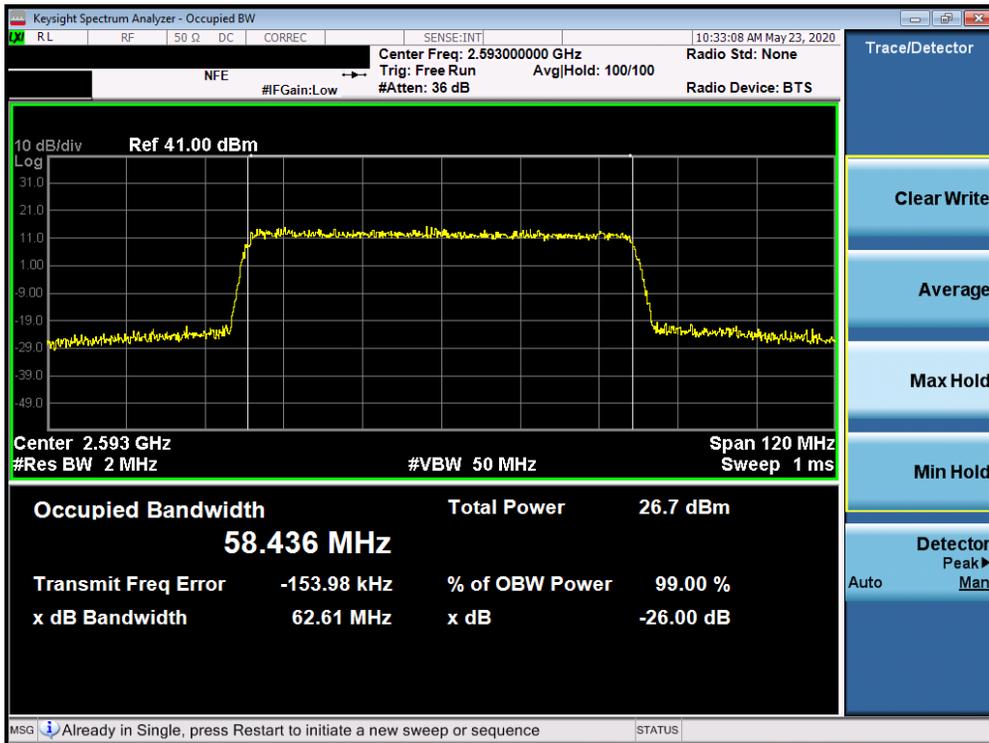


Plot 7-206. Occupied Bandwidth Plot (5G sub6 n41 - 60.0MHz 16-QAM - Full RB Configuration)

| | | | | |
|---|--|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFG900UM | PCTEST Proud to be part of element | MEASUREMENT REPORT (CERTIFICATION) | LG | Approved by: Quality Manager |
| Test Report S/N: 1M2003200048-03.ZNF | Test Dates: 3/23-5/29/2020 | EUT Type: Portable Handset | | Page 120 of 438 |

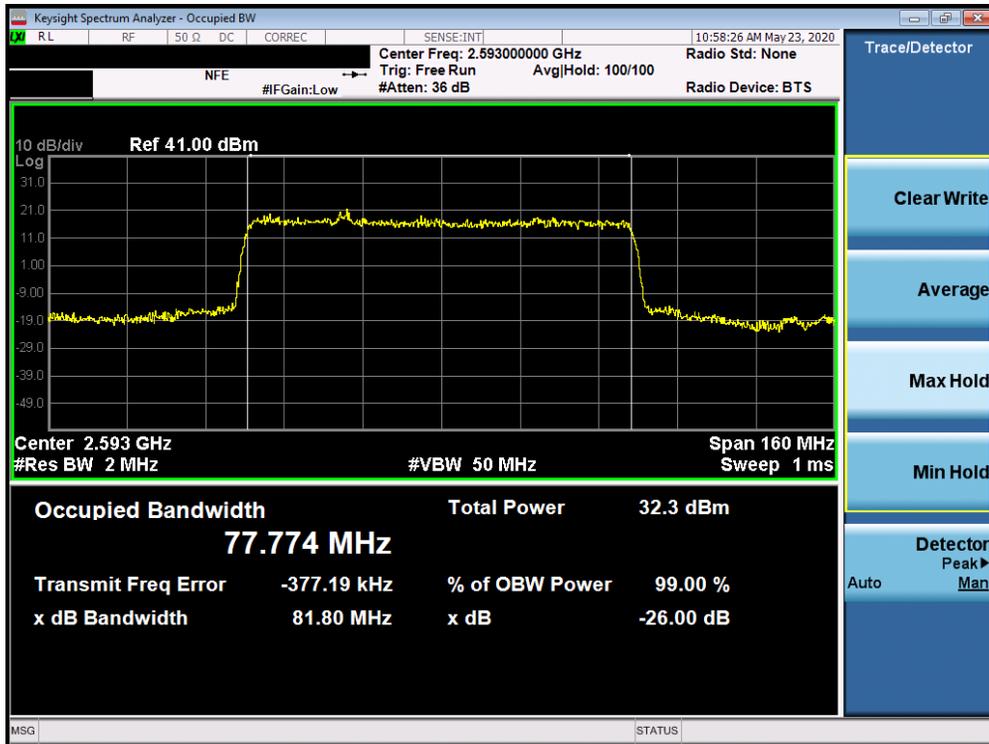


Plot 7-207. Occupied Bandwidth Plot (5G sub6 n41 - 60.0MHz 64-QAM - Full RB Configuration)

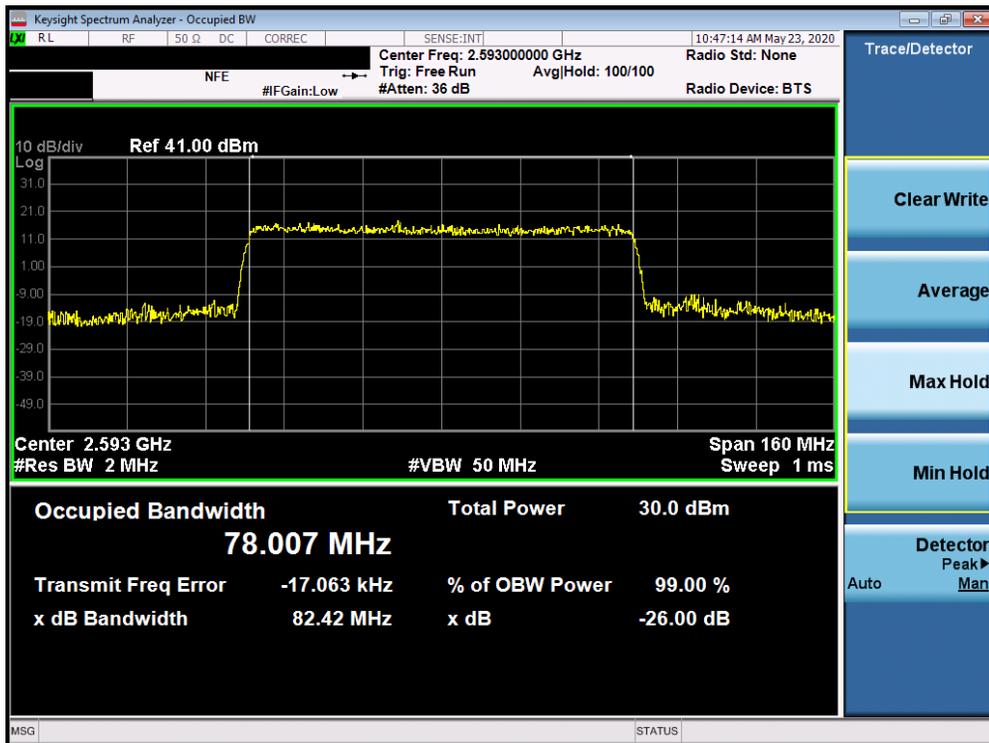


Plot 7-208. Occupied Bandwidth Plot (5G sub6 n41 - 60.0MHz 256-QAM - Full RB Configuration)

| | | | | |
|---|--|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFG900UM | PCTEST Proud to be part of element | MEASUREMENT REPORT (CERTIFICATION) | LG | Approved by: Quality Manager |
| Test Report S/N: 1M2003200048-03.ZNF | Test Dates: 3/23-5/29/2020 | EUT Type: Portable Handset | | Page 121 of 438 |

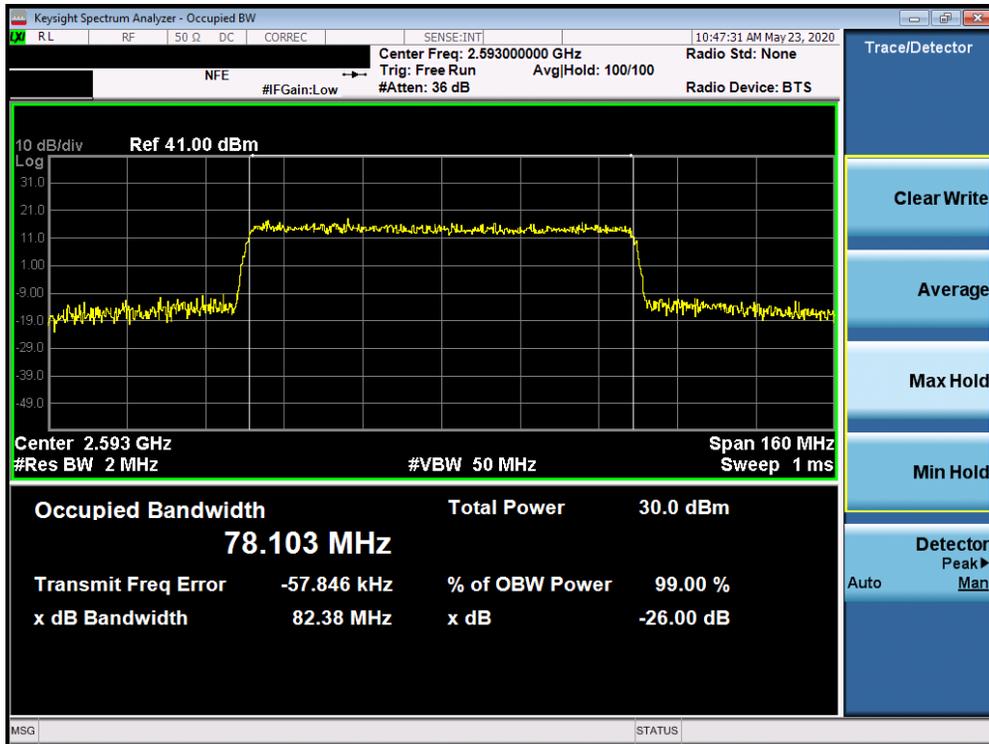


Plot 7-209. Occupied Bandwidth Plot (5G sub6 n41 - 80.0MHz BPSK - Full RB Configuration)

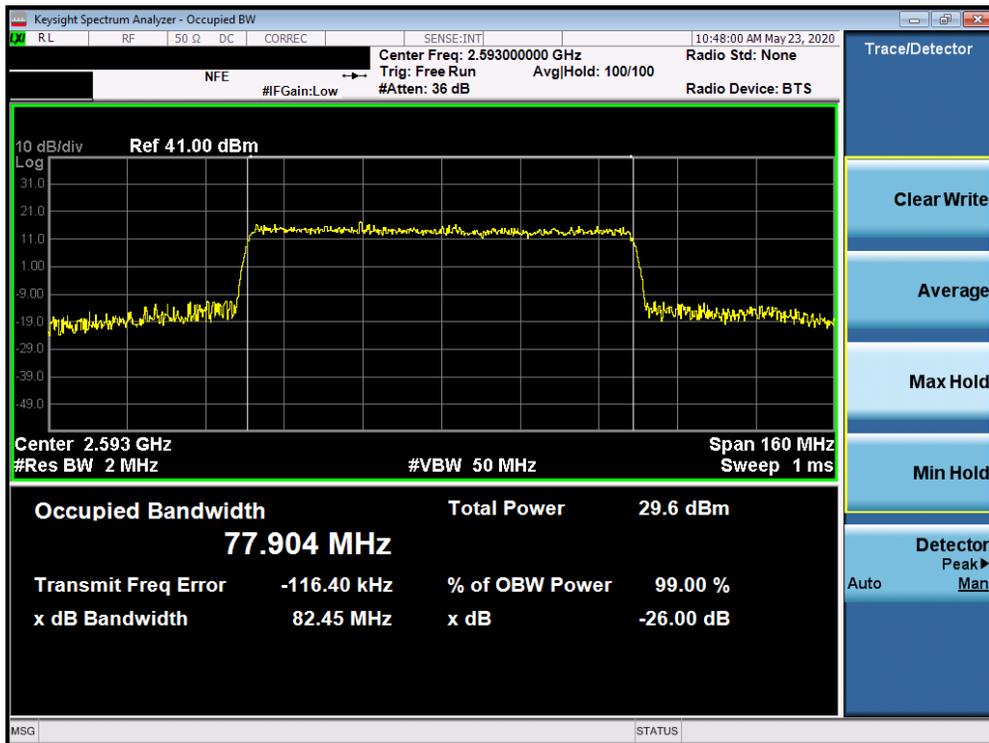


Plot 7-210. Occupied Bandwidth Plot (5G sub6 n41 - 80.0MHz QPSK - Full RB Configuration)

| | | | | |
|---|--|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFG900UM | PCTEST Proud to be part of element | MEASUREMENT REPORT (CERTIFICATION) | LG | Approved by: Quality Manager |
| Test Report S/N: 1M2003200048-03.ZNF | Test Dates: 3/23-5/29/2020 | EUT Type: Portable Handset | | Page 122 of 438 |

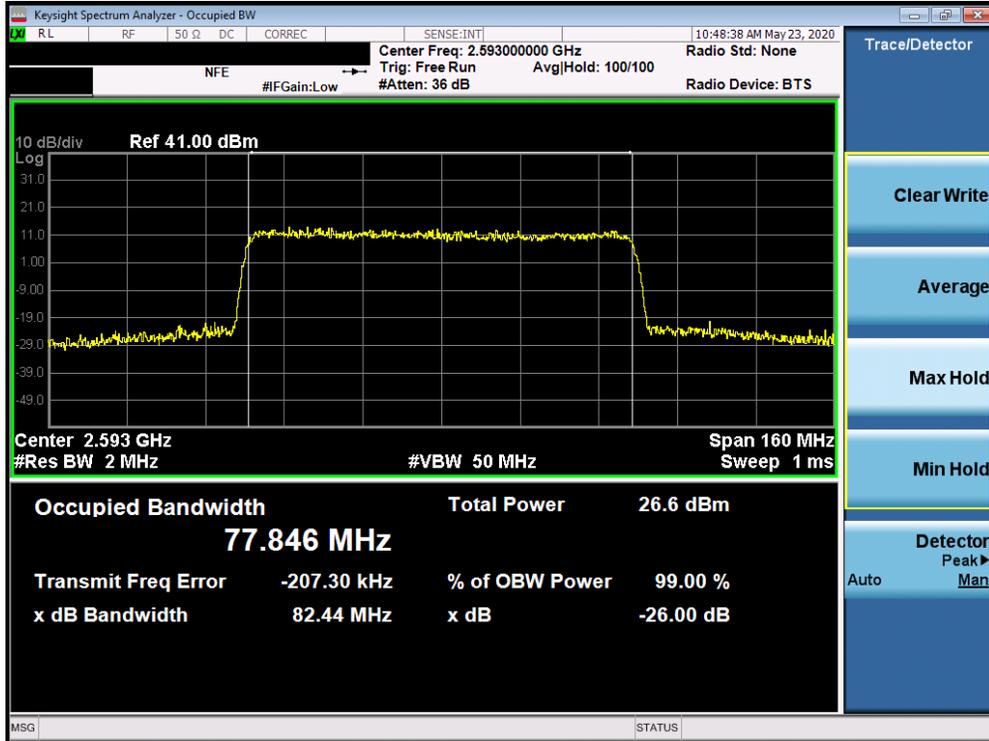


Plot 7-211. Occupied Bandwidth Plot (5G sub6 n41 - 80.0MHz 16-QAM - Full RB Configuration)

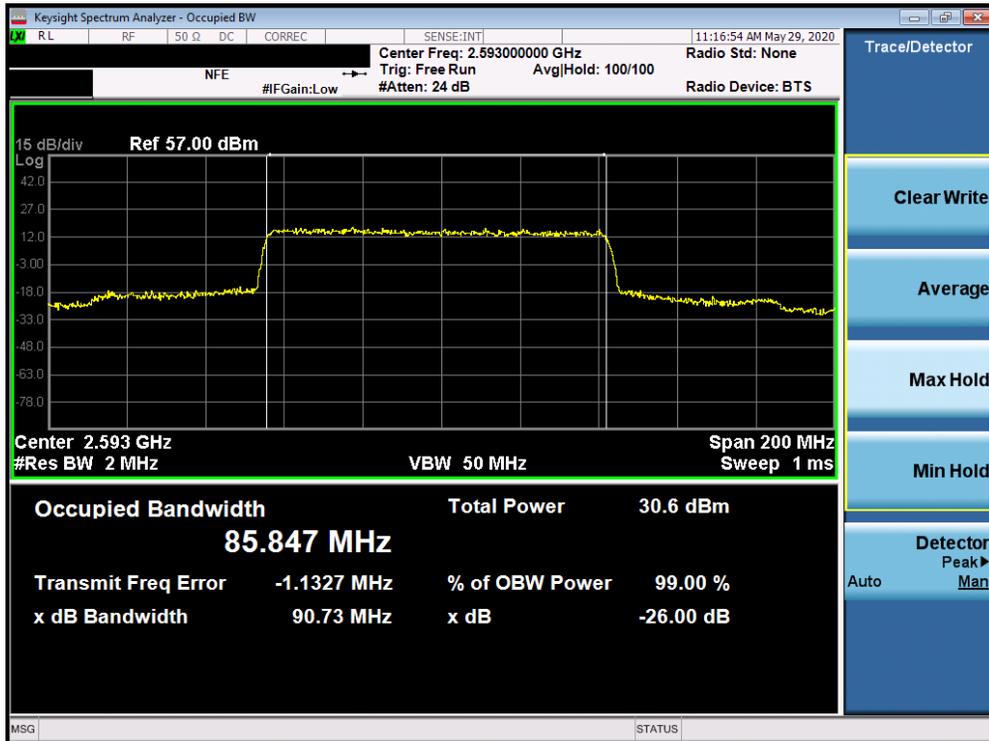


Plot 7-212. Occupied Bandwidth Plot (5G sub6 n41 - 80.0MHz 64-QAM - Full RB Configuration)

| | | | | |
|---|--|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFG900UM | PCTEST Proud to be part of element | MEASUREMENT REPORT (CERTIFICATION) | LG | Approved by: Quality Manager |
| Test Report S/N: 1M2003200048-03.ZNF | Test Dates: 3/23-5/29/2020 | EUT Type: Portable Handset | | Page 123 of 438 |

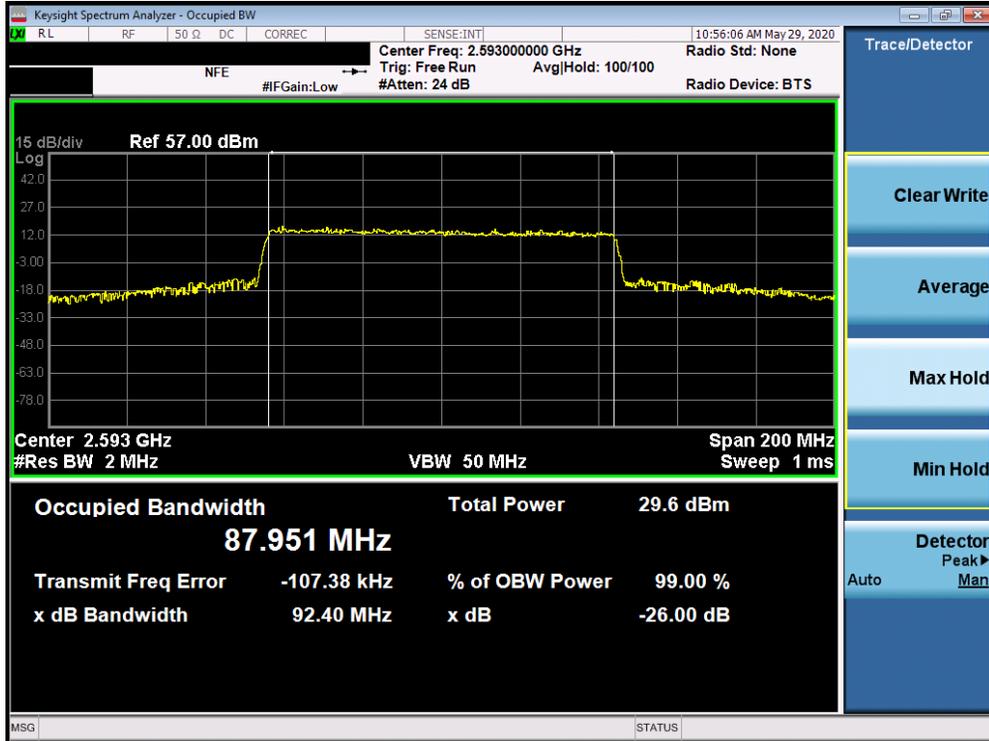


Plot 7-213. Occupied Bandwidth Plot (5G sub6 n41 - 80.0MHz 256-QAM - Full RB Configuration)

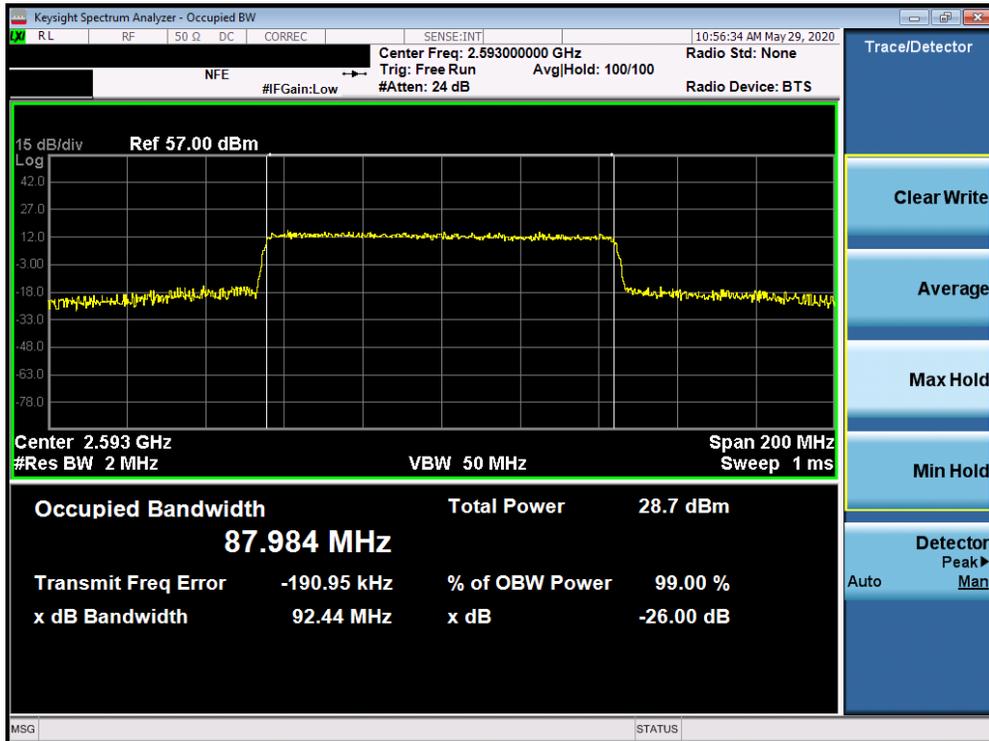


Plot 7-214. Occupied Bandwidth Plot (5G sub6 n41 - 90.0MHz BPSK - Full RB Configuration)

| | | | | |
|---|--|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFG900UM | PCTEST Proud to be part of element | MEASUREMENT REPORT (CERTIFICATION) | LG | Approved by: Quality Manager |
| Test Report S/N: 1M2003200048-03.ZNF | Test Dates: 3/23-5/29/2020 | EUT Type: Portable Handset | | Page 124 of 438 |

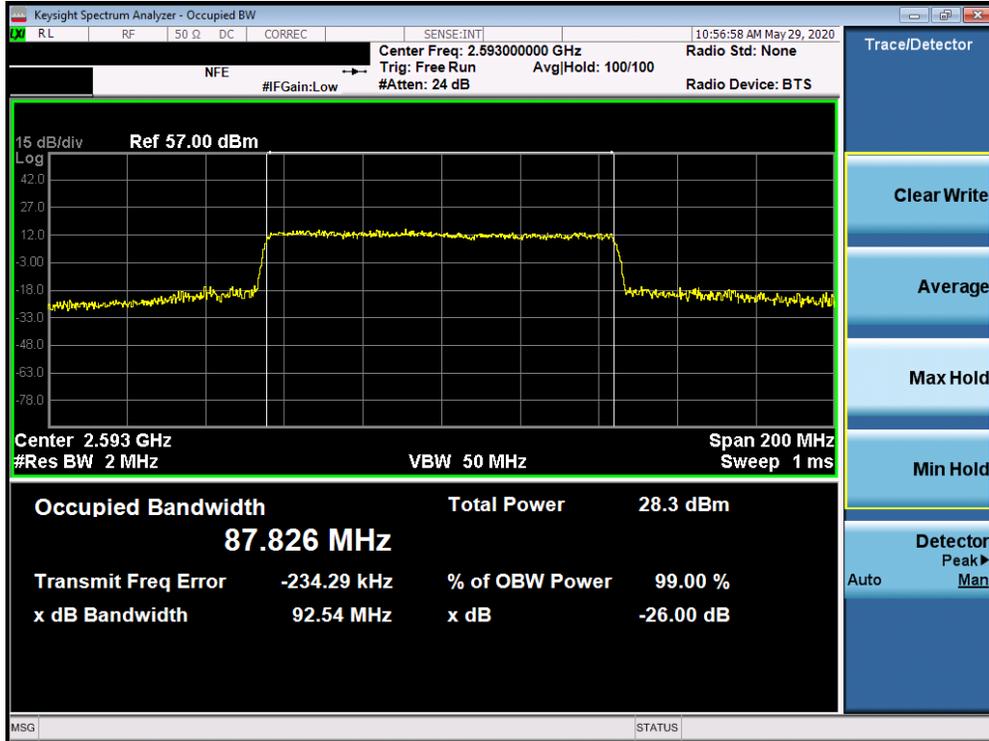


Plot 7-215. Occupied Bandwidth Plot (5G sub6 n41 – 90.0MHz QPSK - Full RB Configuration)

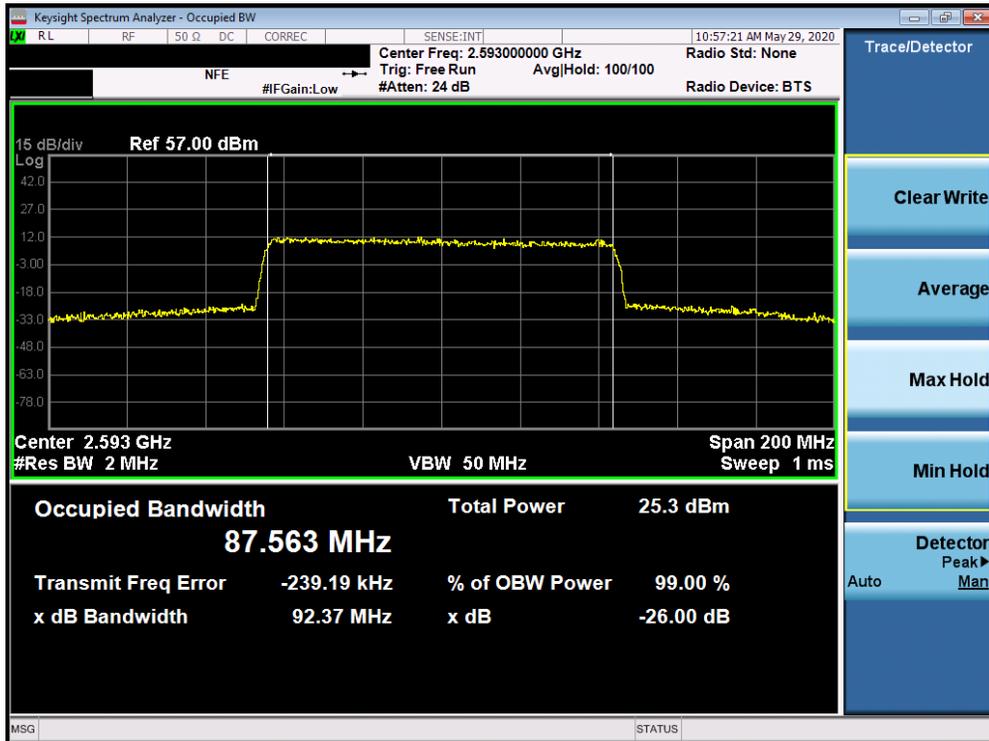


Plot 7-216. Occupied Bandwidth Plot (5G sub6 n41 – 90.0MHz 16-QAM - Full RB Configuration)

| | | | | |
|---|--|---|----|---------------------------------|
| FCC ID: ZNFG900UM | PCTEST Proud to be part of element | MEASUREMENT REPORT (CERTIFICATION) | LG | Approved by: Quality Manager |
| Test Report S/N: 1M2003200048-03.ZNF | Test Dates: 3/23-5/29/2020 | EUT Type: Portable Handset | | Page 125 of 438 |

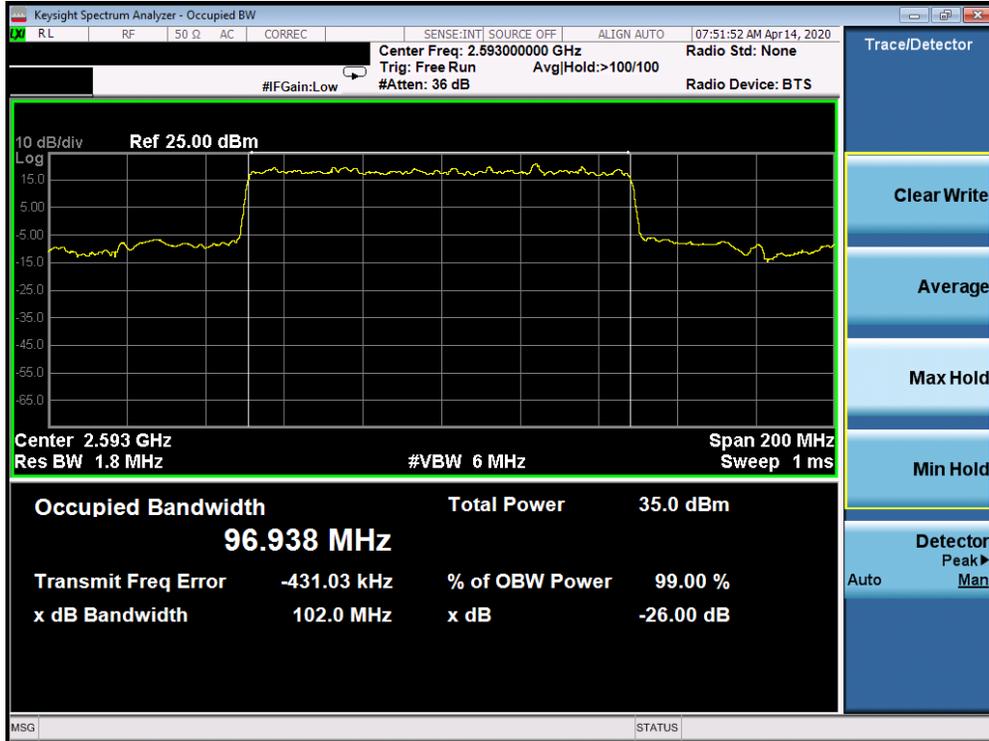


Plot 7-217. Occupied Bandwidth Plot (5G sub6 n41 – 90.0MHz 64-QAM - Full RB Configuration)

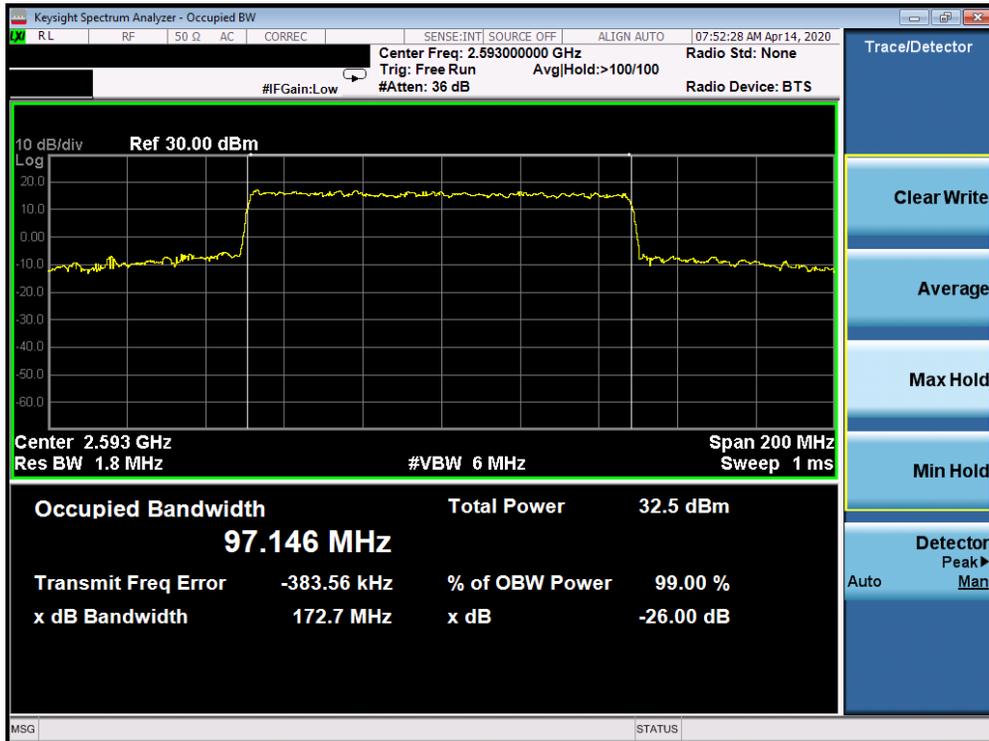


Plot 7-218. Occupied Bandwidth Plot (5G sub6 n41 – 90.0MHz 256-QAM - Full RB Configuration)

| | | | | |
|---|--|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFG900UM | PCTEST Proud to be part of element | MEASUREMENT REPORT (CERTIFICATION) | LG | Approved by: Quality Manager |
| Test Report S/N: 1M2003200048-03.ZNF | Test Dates: 3/23-5/29/2020 | EUT Type: Portable Handset | | Page 126 of 438 |

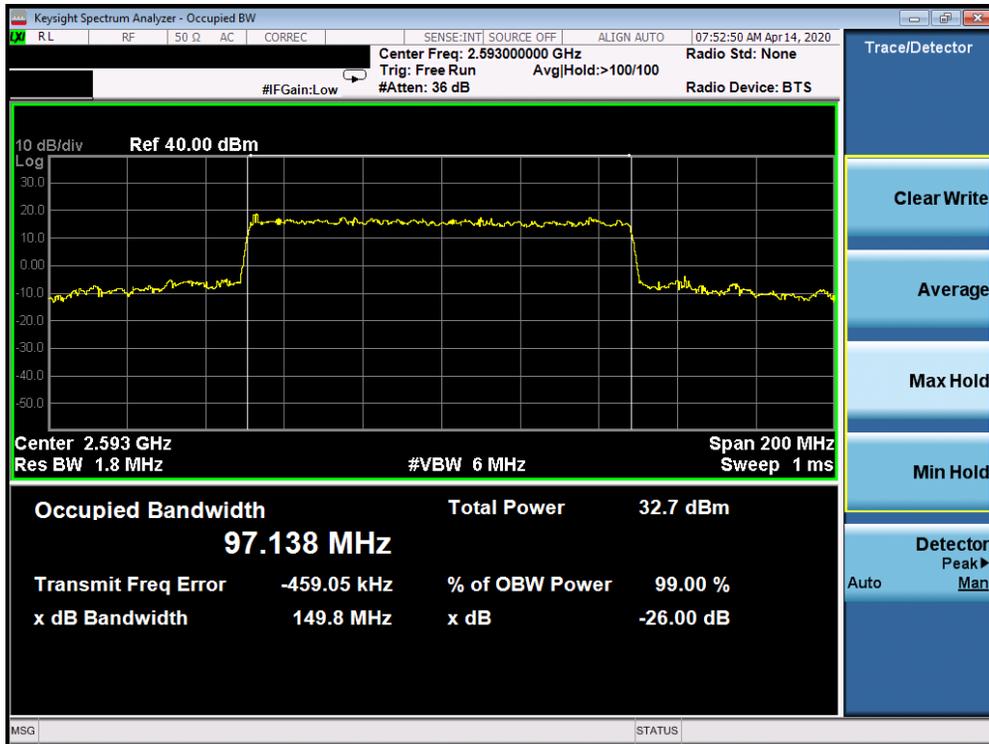


Plot 7-219. Occupied Bandwidth Plot (5G sub6 n41 - 100.0MHz BPSK - Full RB Configuration)



Plot 7-220. Occupied Bandwidth Plot (5G sub6 n41 - 100.0MHz QPSK - Full RB Configuration)

| | | | | |
|---|--|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFG900UM | PCTEST Proud to be part of element | MEASUREMENT REPORT (CERTIFICATION) | LG | Approved by: Quality Manager |
| Test Report S/N: 1M2003200048-03.ZNF | Test Dates: 3/23-5/29/2020 | EUT Type: Portable Handset | | Page 127 of 438 |

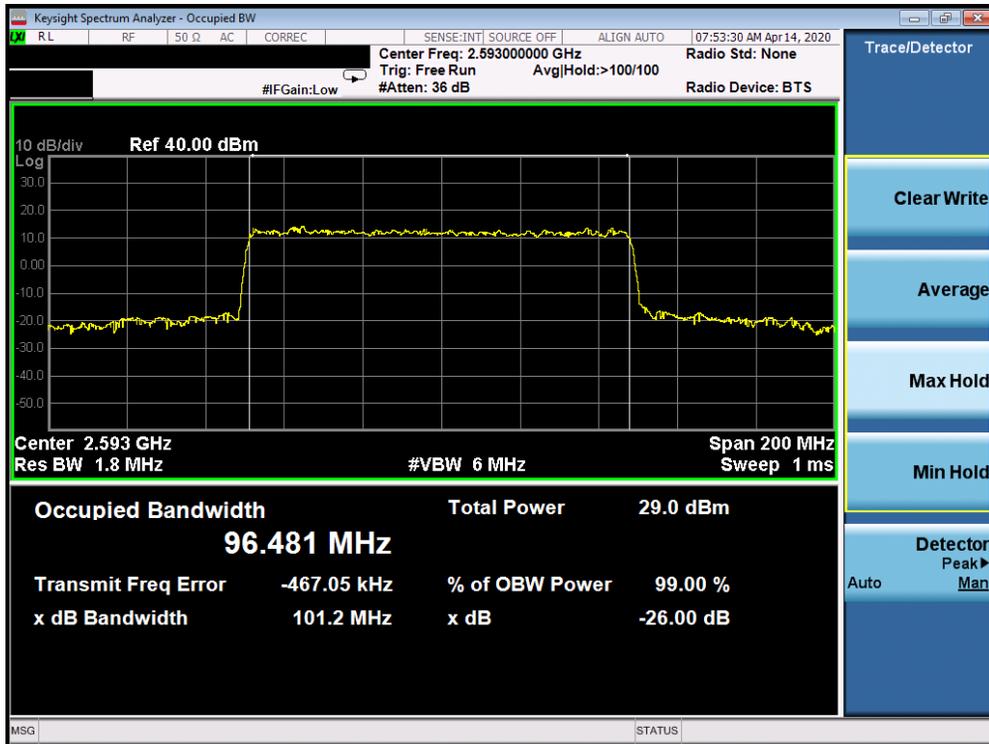


Plot 7-221. Occupied Bandwidth Plot (5G sub6 n41 - 100.0MHz 16-QAM - Full RB Configuration)



Plot 7-222. Occupied Bandwidth Plot (5G sub6 n41 - 100.0MHz 64-QAM - Full RB Configuration)

| | | | | |
|---|--|---------------------------------------|-----------|---------------------------------|
| FCC ID: ZNFG900UM | PCTEST Proud to be part of element | MEASUREMENT REPORT (CERTIFICATION) | LG | Approved by: Quality Manager |
| Test Report S/N: 1M2003200048-03.ZNF | Test Dates: 3/23-5/29/2020 | EUT Type: Portable Handset | | Page 128 of 438 |



Plot 7-223. Occupied Bandwidth Plot (5G sub6 n41 - 100.0MHz 256-QAM - Full RB Configuration)

| | | | | |
|---|---|---|-----------|---------------------------------|
| FCC ID: ZNFG900UM | PCTEST Proud to be part of element | MEASUREMENT REPORT (CERTIFICATION) | LG | Approved by: Quality Manager |
| Test Report S/N: 1M2003200048-03.ZNF | Test Dates: 3/23-5/29/2020 | EUT Type: Portable Handset | | Page 129 of 438 |

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 10th 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.

For Band 30, the minimum permissible attenuation level of any spurious emission <2288MHz and >2365MHz is $70 + 10 \log_{10}(P_{[Watts]})$.

For Band 7 and 41, the minimum permissible attenuation level of any spurious emission is $55 + 10 \log_{10}(P_{[Watts]})$.

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 for continuous emissions, max hold for pulse emissions
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.



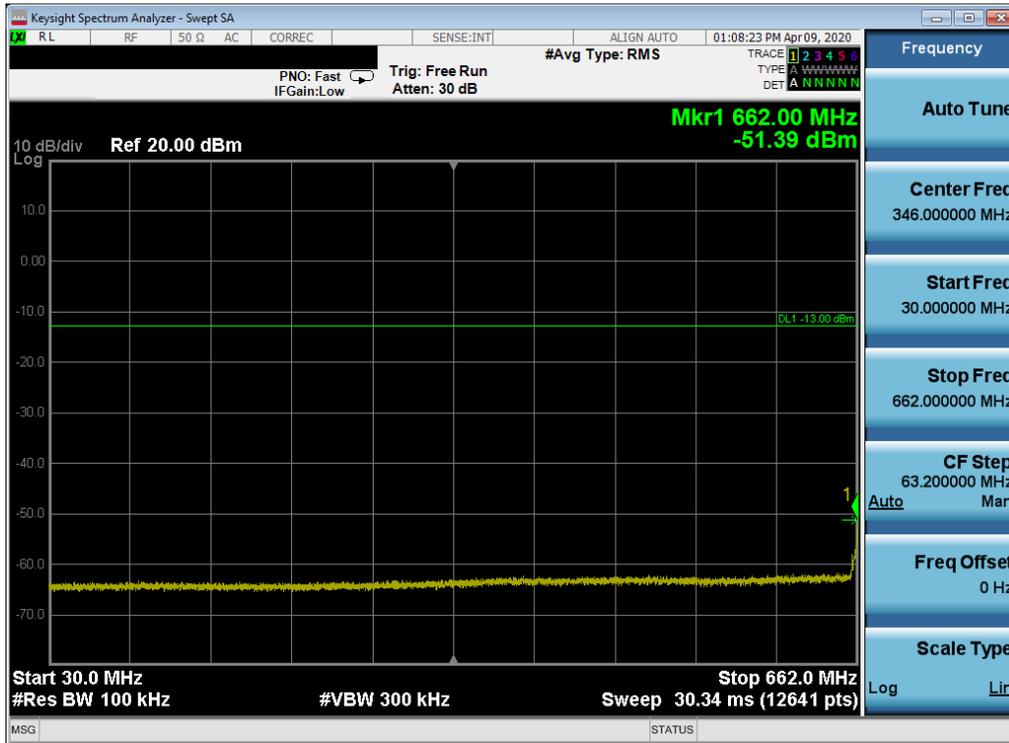
Figure 7-2. Test Instrument & Measurement Setup

Test Notes

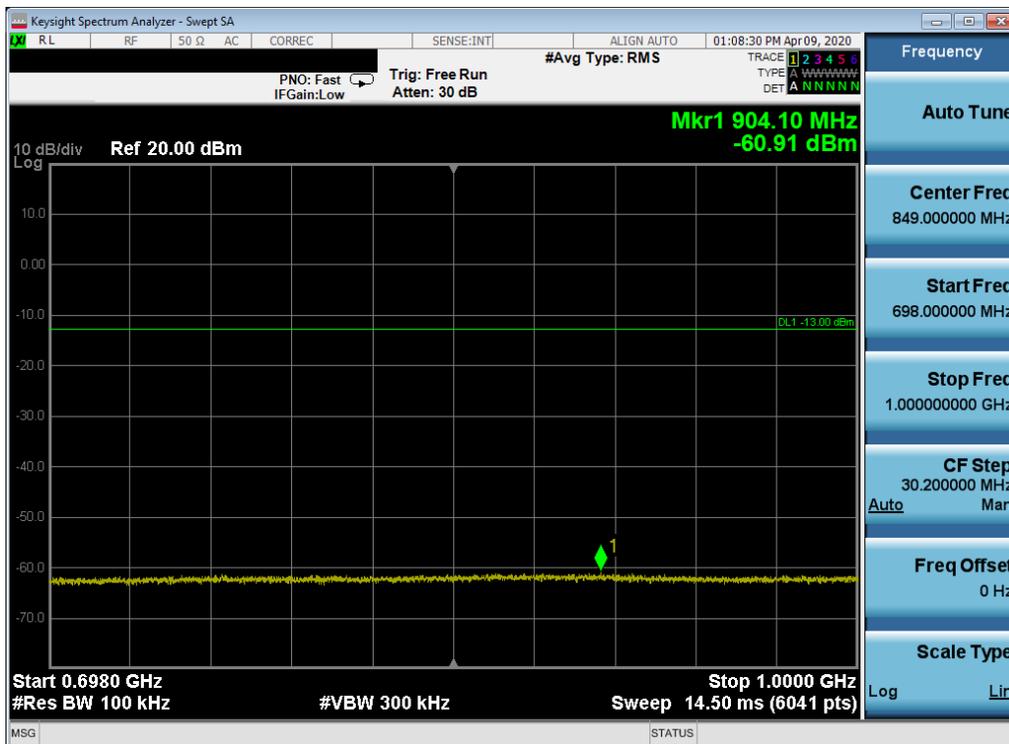
Compliance with the applicable limits is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz or greater for frequencies less than 1 GHz and 1 MHz or greater for frequencies greater than 1 GHz. However, in the 1 MHz bands immediately outside and adjacent to the 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: ZNFG900UM |  PCTEST [®] Proud to be part of element | MEASUREMENT REPORT (CERTIFICATION) |  LG | Approved by: Quality Manager |
| Test Report S/N: 1M2003200048-03.ZNF | Test Dates: 3/23-5/29/2020 | EUT Type: Portable Handset | | Page 130 of 438 |

Band 71

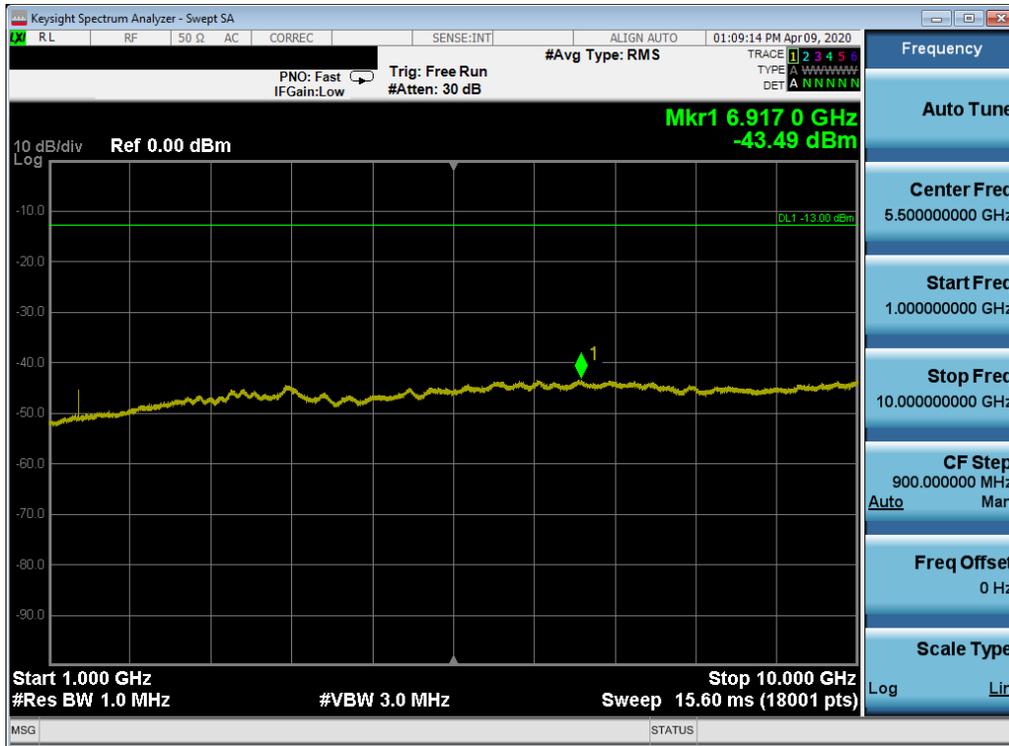


Plot 7-224. Conducted Spurious Plot (Band 71 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

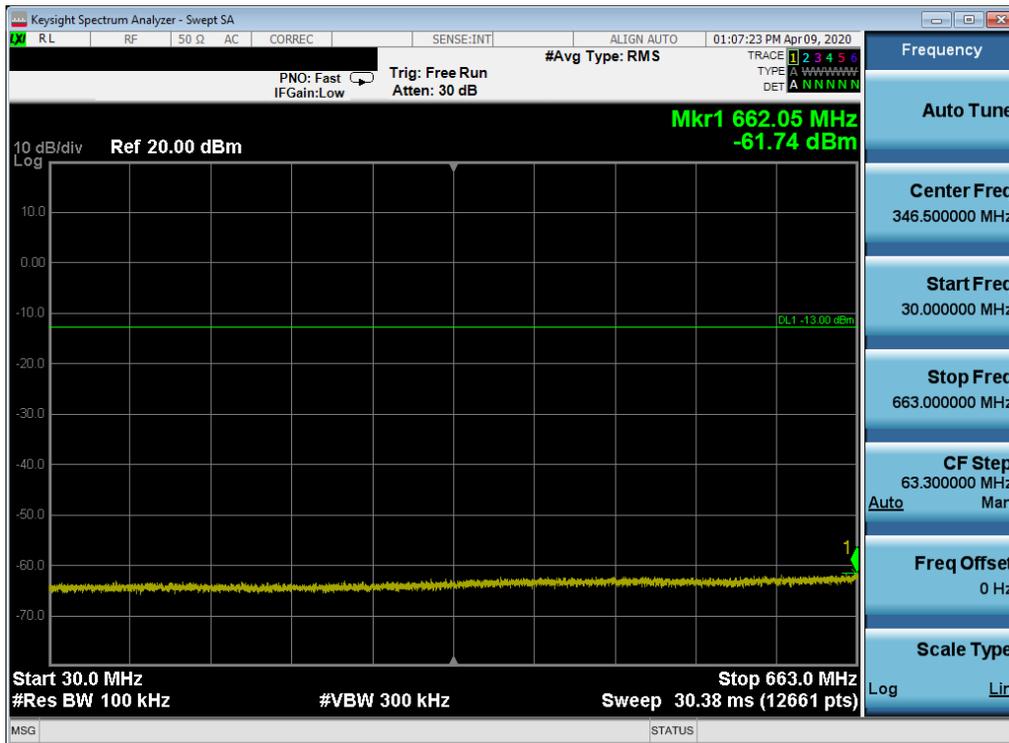


Plot 7-225. Conducted Spurious Plot (Band 71 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

| | | | | |
|---|--|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFG900UM | PCTEST Proud to be part of element | MEASUREMENT REPORT (CERTIFICATION) | LG | Approved by: Quality Manager |
| Test Report S/N: 1M2003200048-03.ZNF | Test Dates: 3/23-5/29/2020 | EUT Type: Portable Handset | | Page 131 of 438 |

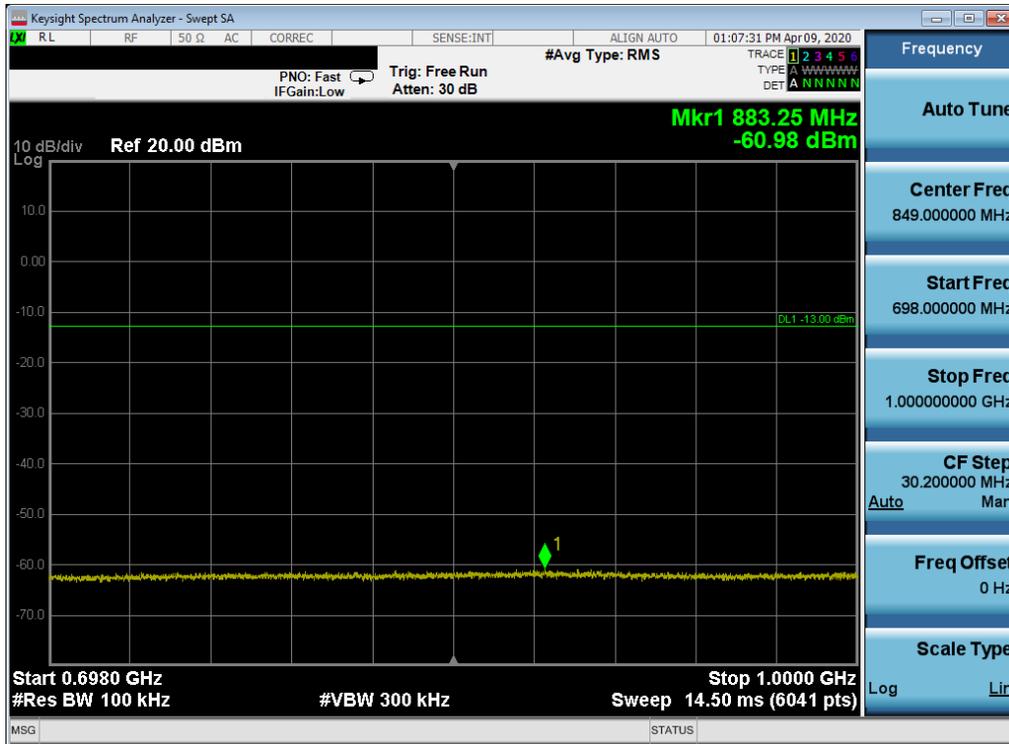


Plot 7-226. Conducted Spurious Plot (Band 71 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

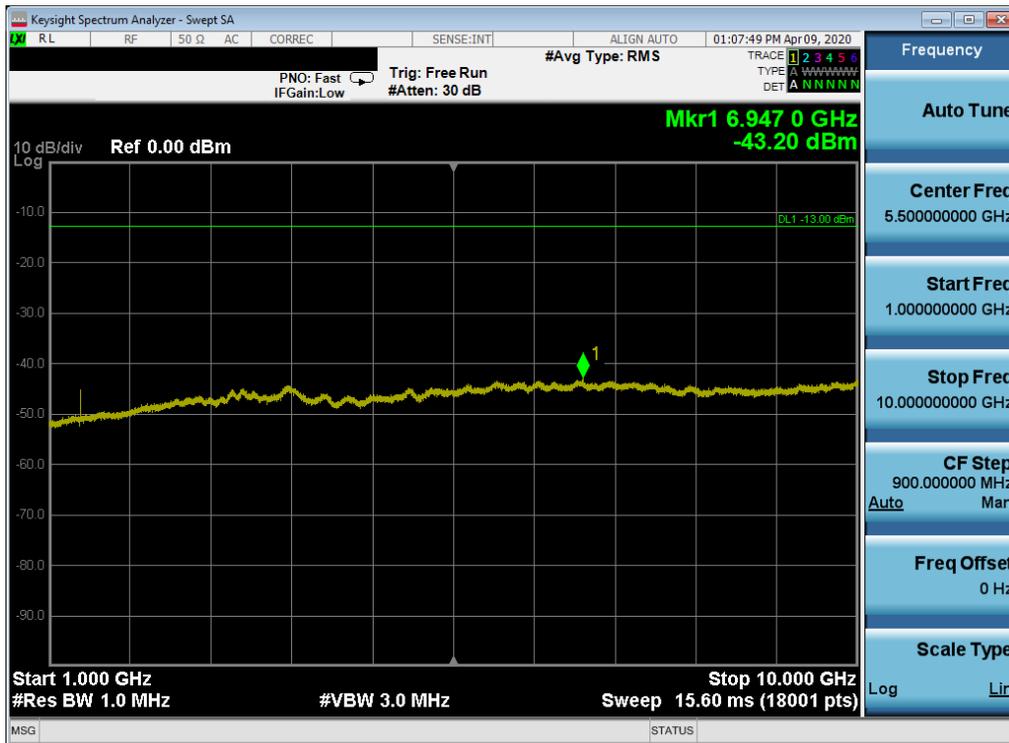


Plot 7-227. Conducted Spurious Plot (Band 71 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

| | | | | |
|---|--|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFG900UM | PCTEST Proud to be part of element | MEASUREMENT REPORT (CERTIFICATION) | LG | Approved by: Quality Manager |
| Test Report S/N: 1M2003200048-03.ZNF | Test Dates: 3/23-5/29/2020 | EUT Type: Portable Handset | | Page 132 of 438 |

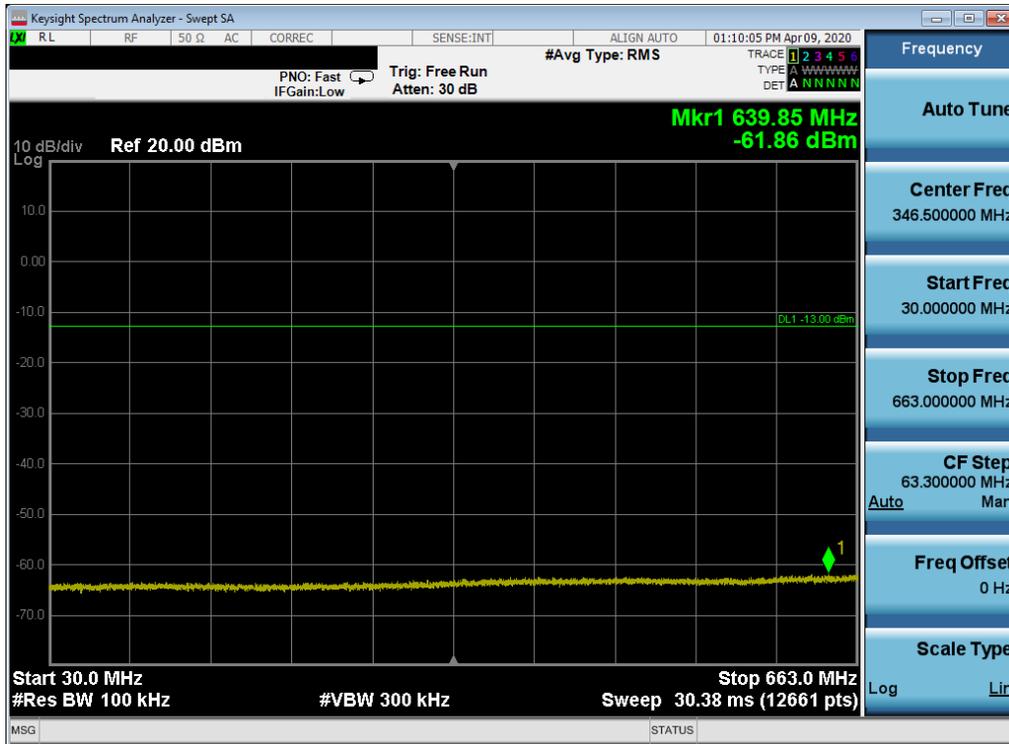


Plot 7-228. Conducted Spurious Plot (Band 71 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

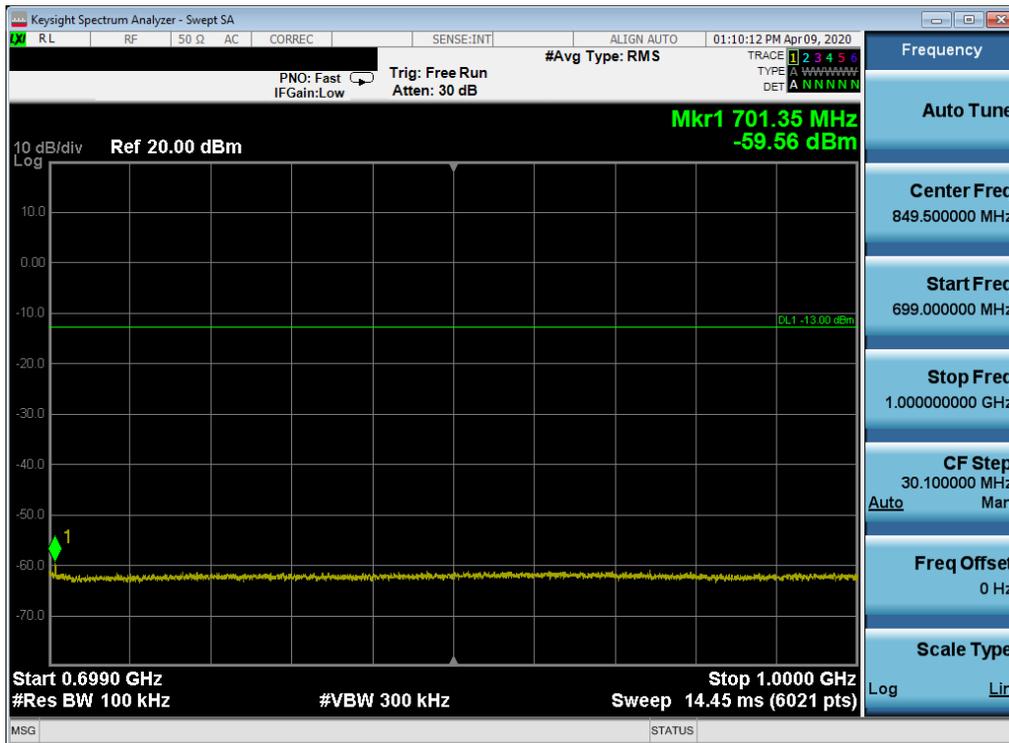


Plot 7-229. Conducted Spurious Plot (Band 71 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

| | | | | |
|---|--|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFG900UM | PCTEST Proud to be part of element | MEASUREMENT REPORT (CERTIFICATION) | LG | Approved by: Quality Manager |
| Test Report S/N: 1M2003200048-03.ZNF | Test Dates: 3/23-5/29/2020 | EUT Type: Portable Handset | | Page 133 of 438 |



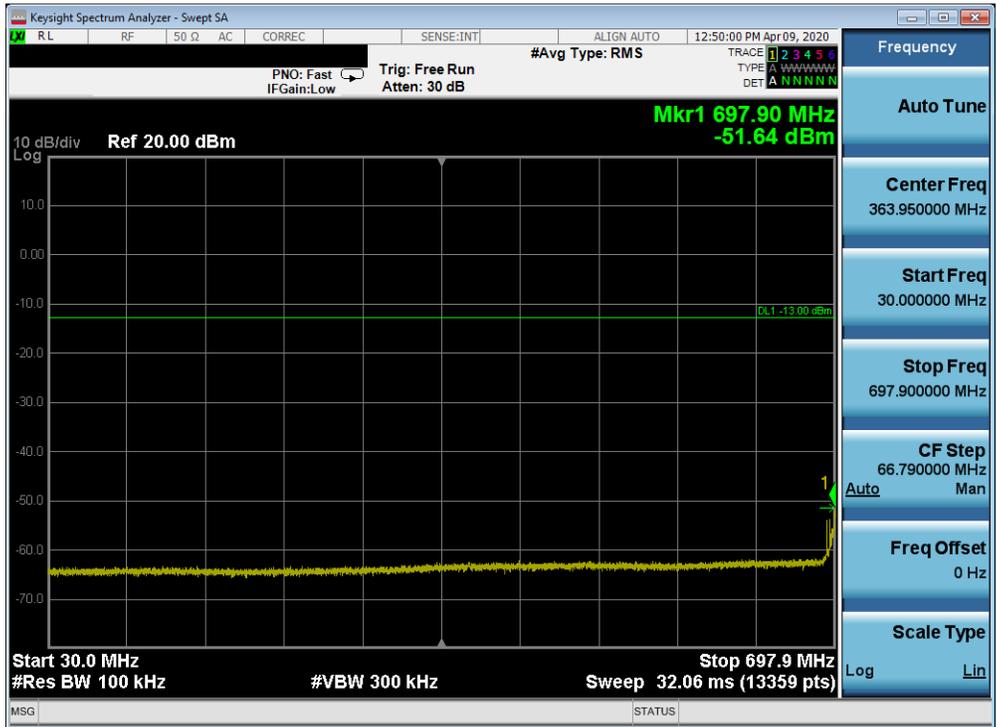
Plot 7-230. Conducted Spurious Plot (Band 71 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)



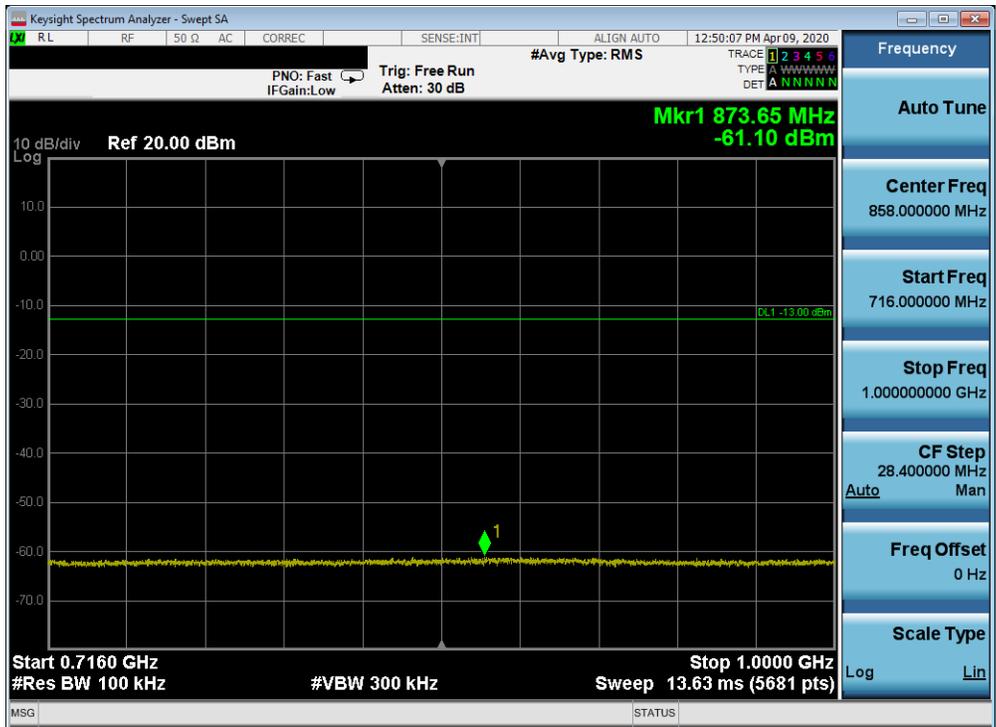
Plot 7-231. Conducted Spurious Plot (Band 71 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

| | | | | |
|---|--|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFG900UM | PCTEST Proud to be part of element | MEASUREMENT REPORT (CERTIFICATION) | LG | Approved by: Quality Manager |
| Test Report S/N: 1M2003200048-03.ZNF | Test Dates: 3/23-5/29/2020 | EUT Type: Portable Handset | | Page 134 of 438 |

Band 12/17

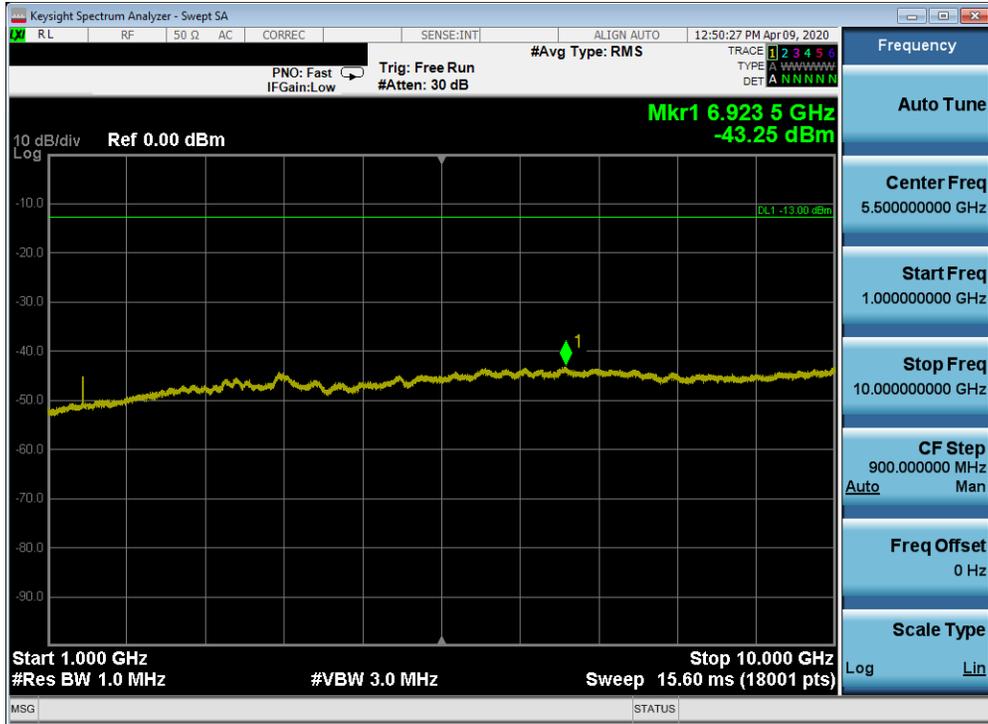


Plot 7-233. Conducted Spurious Plot (Band 12/17 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

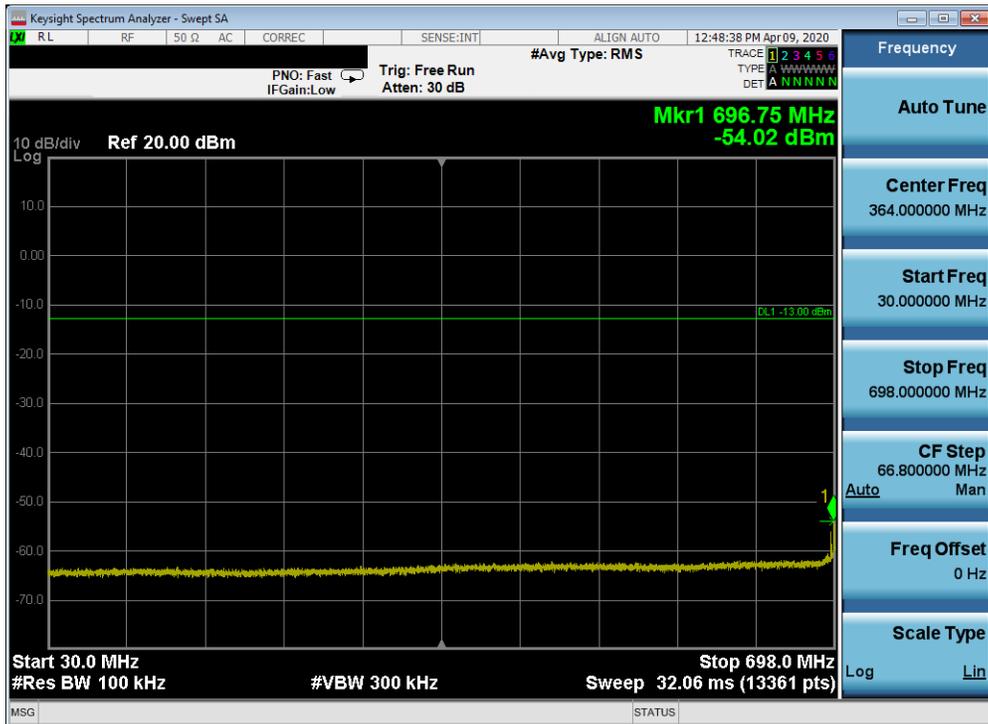


Plot 7-234. Conducted Spurious Plot (Band 12/17 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

| | | | | |
|---|--|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFG900UM | PCTEST Proud to be part of element | MEASUREMENT REPORT (CERTIFICATION) | LG | Approved by: Quality Manager |
| Test Report S/N: 1M2003200048-03.ZNF | Test Dates: 3/23-5/29/2020 | EUT Type: Portable Handset | | Page 136 of 438 |

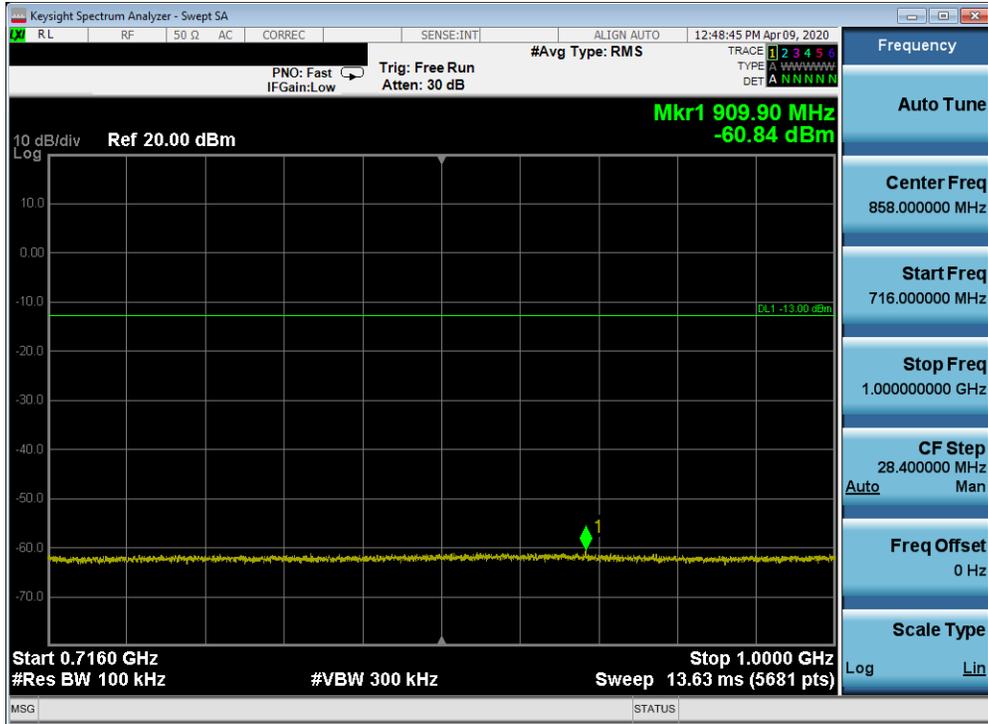


Plot 7-235. Conducted Spurious Plot (Band 12/17 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

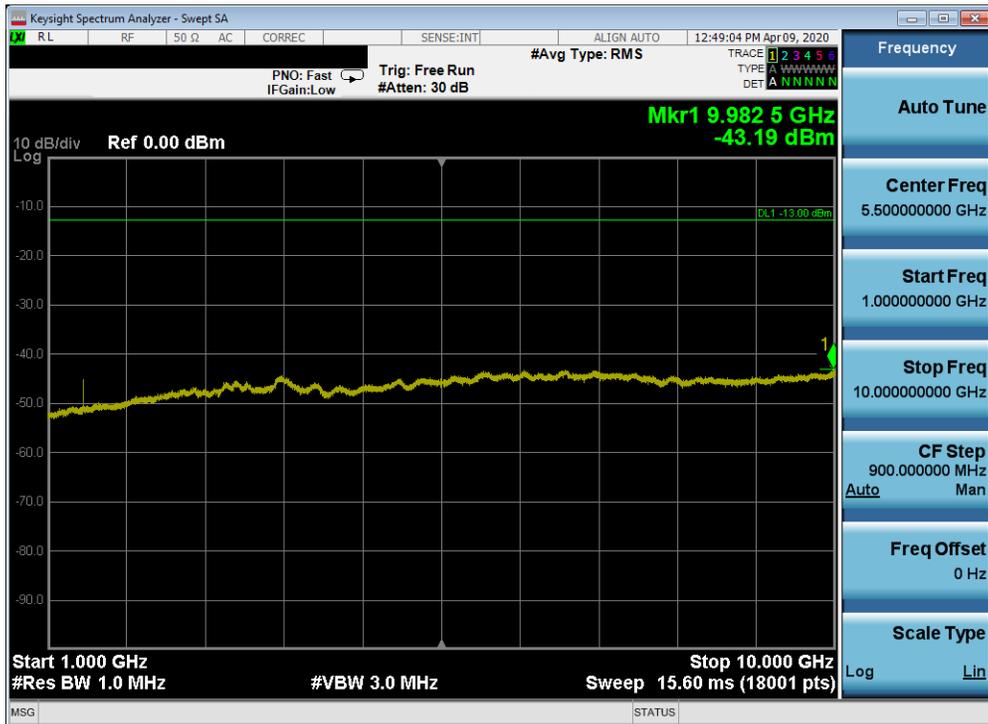


Plot 7-236. Conducted Spurious Plot (Band 12/17 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

| | | | | |
|---|--|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFG900UM | PCTEST Proud to be part of element | MEASUREMENT REPORT (CERTIFICATION) | LG | Approved by: Quality Manager |
| Test Report S/N: 1M2003200048-03.ZNF | Test Dates: 3/23-5/29/2020 | EUT Type: Portable Handset | | Page 137 of 438 |

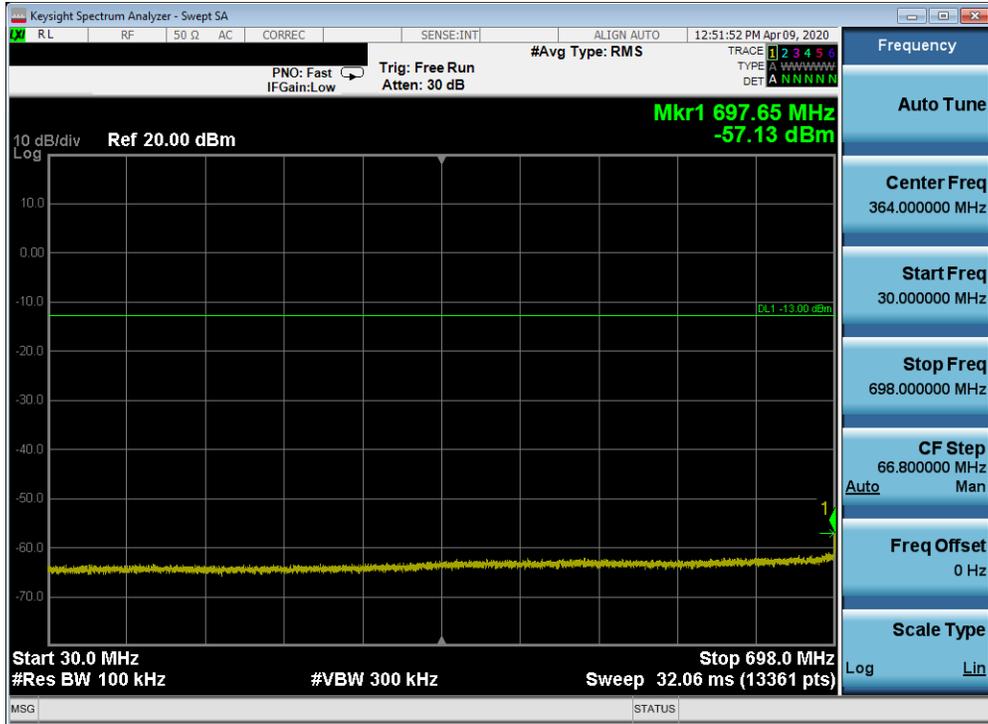


Plot 7-237. Conducted Spurious Plot (Band 12/17 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

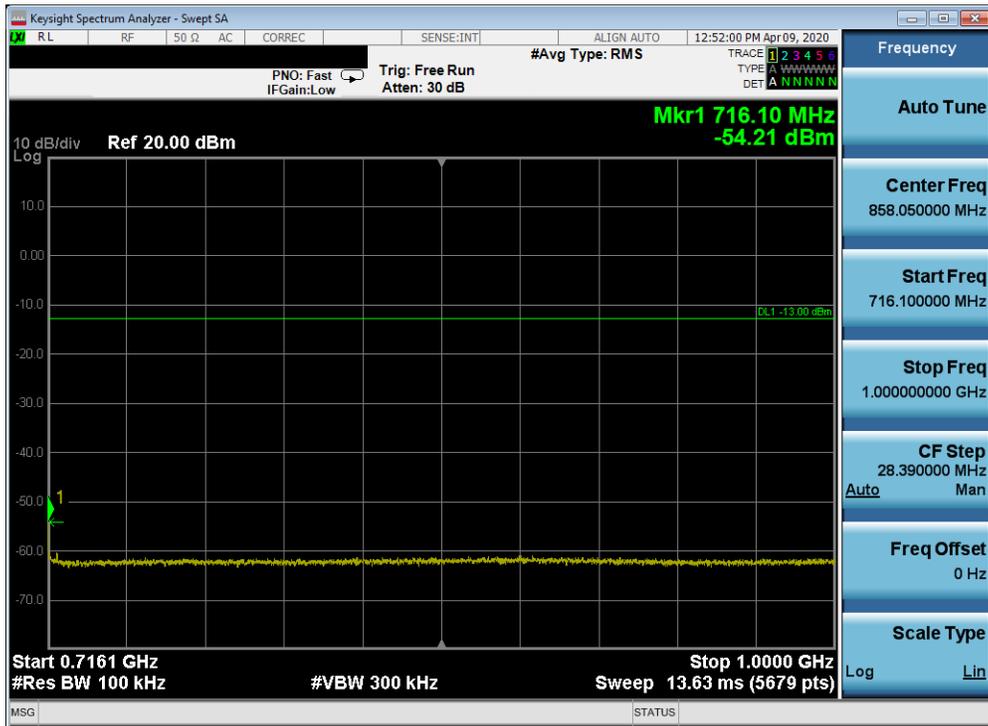


Plot 7-238. Conducted Spurious Plot (Band 12/17 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

| | | | | |
|---|--|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFG900UM | PCTEST Proud to be part of element | MEASUREMENT REPORT (CERTIFICATION) | LG | Approved by: Quality Manager |
| Test Report S/N: 1M2003200048-03.ZNF | Test Dates: 3/23-5/29/2020 | EUT Type: Portable Handset | | Page 138 of 438 |



Plot 7-239. Conducted Spurious Plot (Band 12/17 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)



Plot 7-240. Conducted Spurious Plot (Band 12/17 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

| | | | | |
|---|---------------------------------------|---------------------------------------|----|---------------------------------|
| FCC ID: ZNFG900UM | PCTEST Proud to be part of element | MEASUREMENT REPORT (CERTIFICATION) | LG | Approved by: Quality Manager |
| Test Report S/N: 1M2003200048-03.ZNF | Test Dates: 3/23-5/29/2020 | EUT Type: Portable Handset | | Page 139 of 438 |