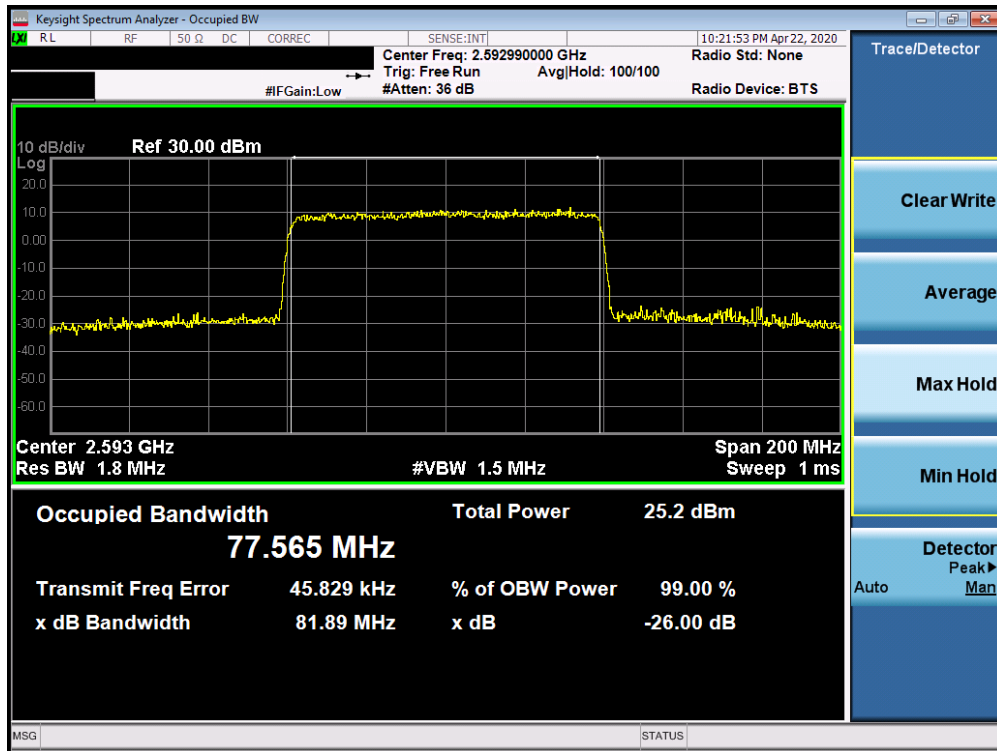
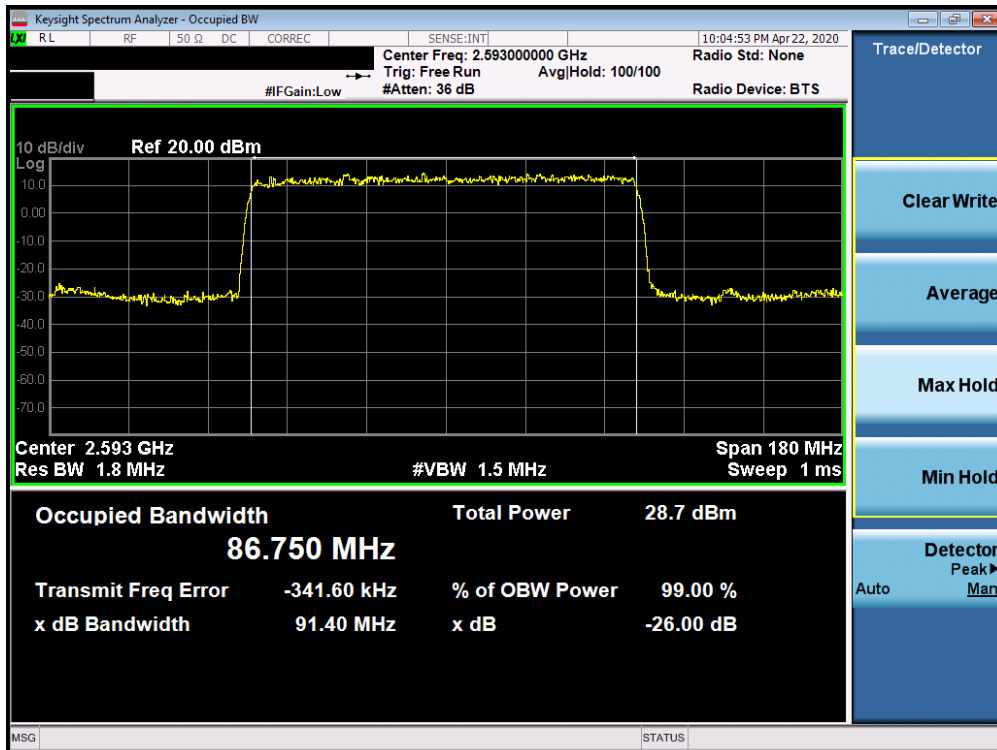


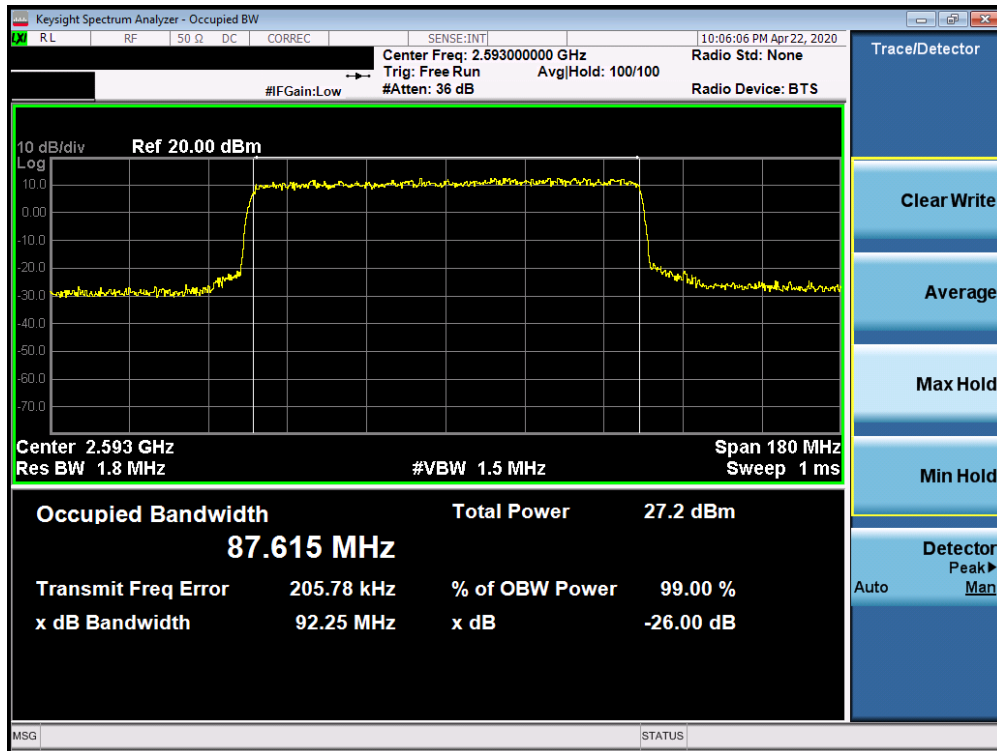


Plot 7-228. Occupied Bandwidth Plot (n41 80MHz 256QAM-CP-OFDM- Full RB Configuration)

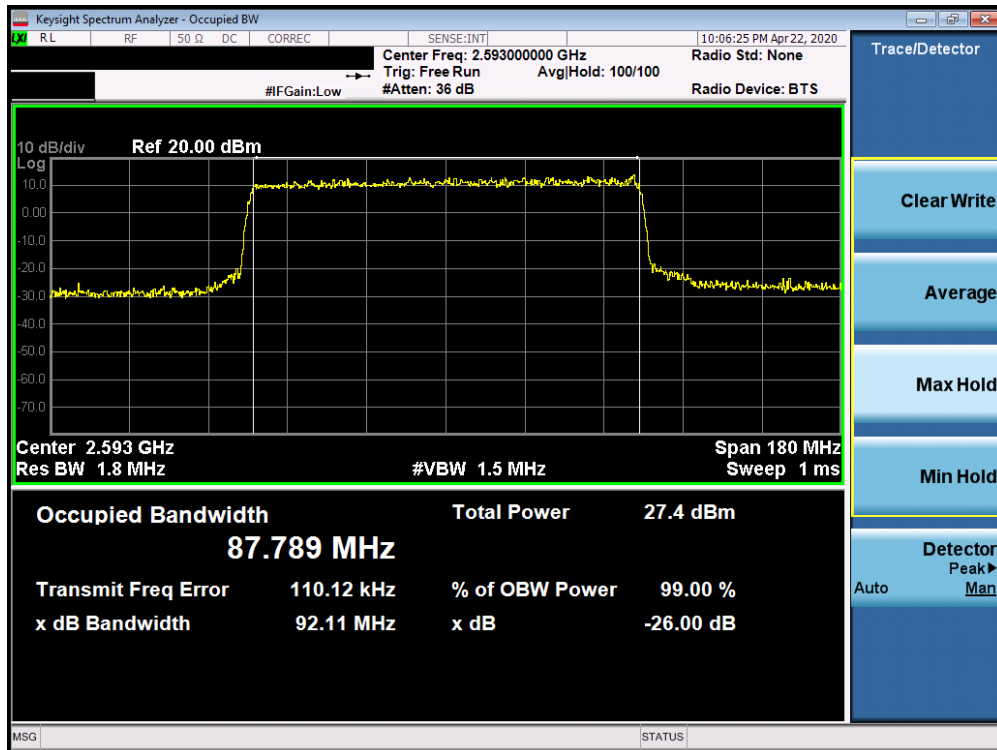


Plot 7-229. Occupied Bandwidth Plot (n41 90MHz BPSK-DFT-s-OFDM - Full RB Configuration)

FCC ID: A3LSMA716U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 133 of 420

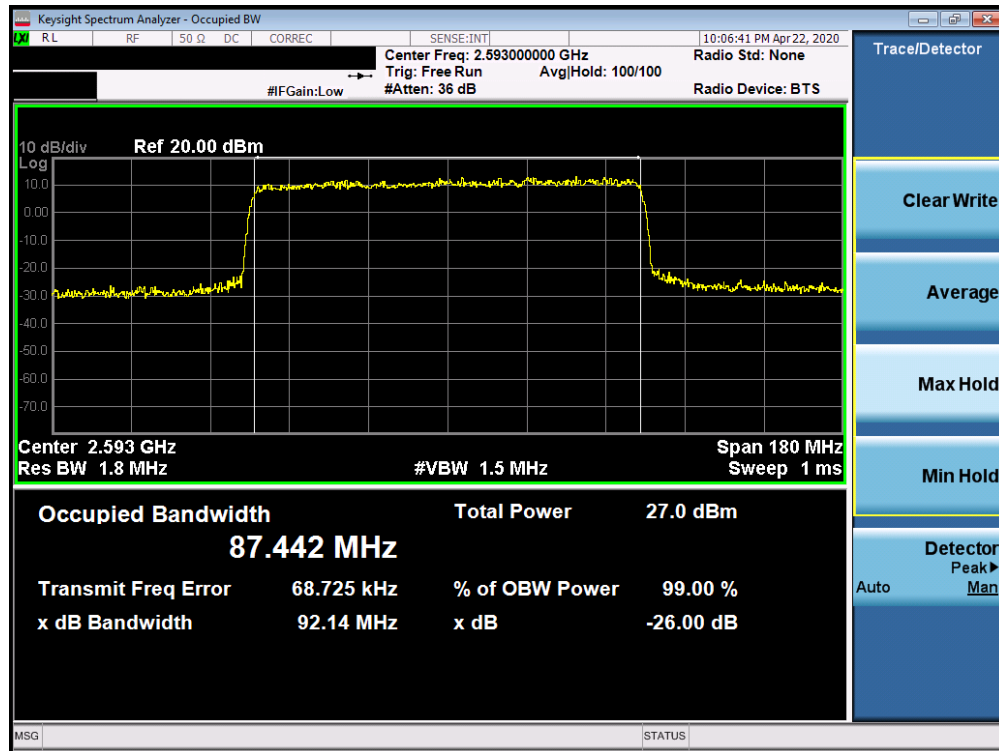


Plot 7-230. Occupied Bandwidth Plot (n41 90MHz QPSK-CP-OFDM - Full RB Configuration)

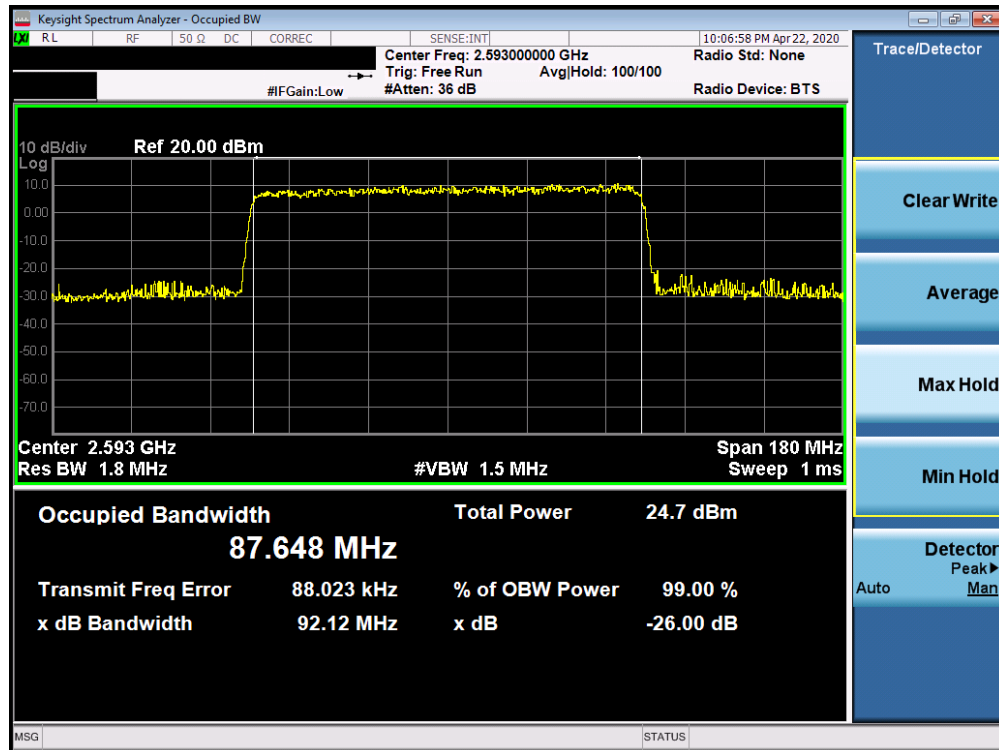


Plot 7-231. Occupied Bandwidth Plot (n41 90MHz 16QAM-CP-OFDM - Full RB Configuration)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 134 of 420

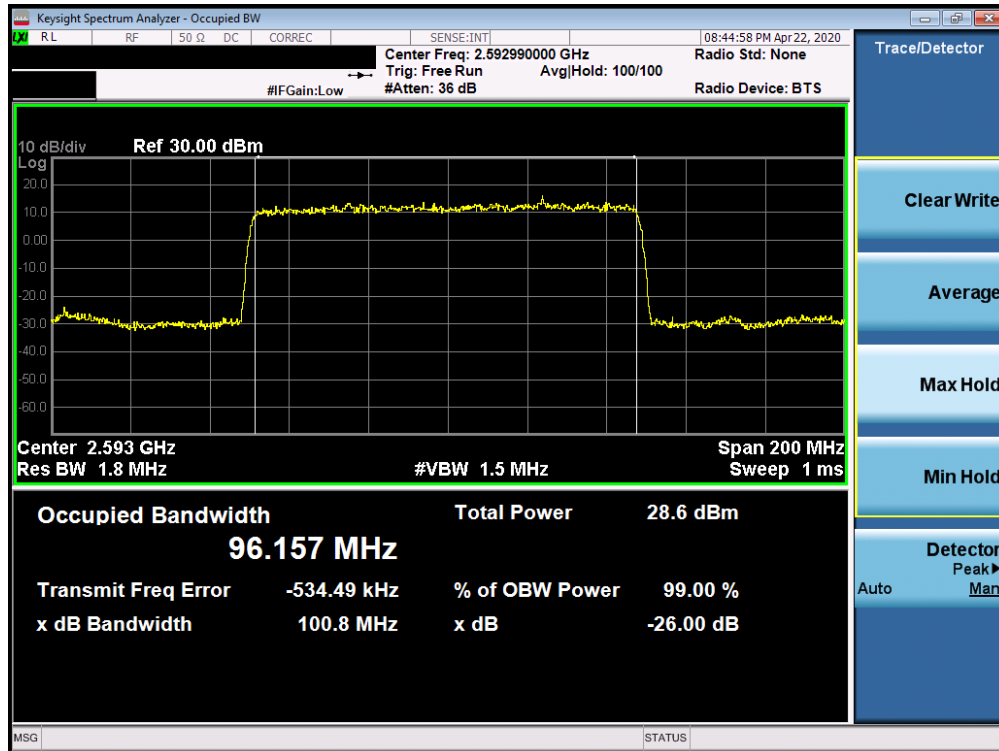


Plot 7-232. Occupied Bandwidth Plot (n41 90MHz 64QAM-CP-OFDM- Full RB Configuration)

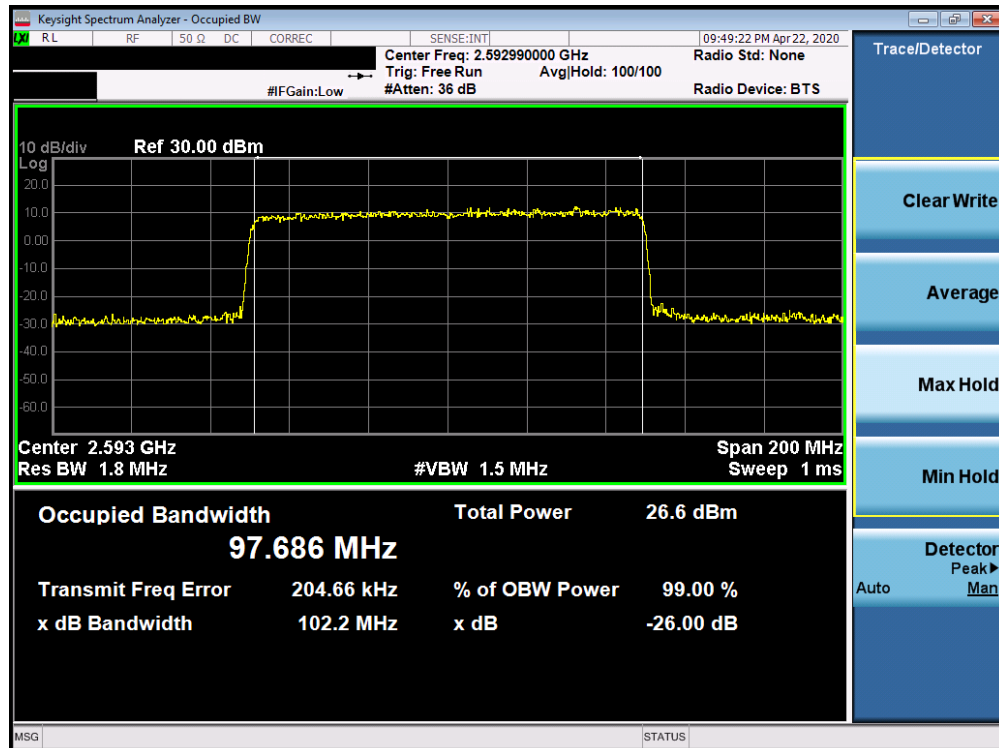


Plot 7-233. Occupied Bandwidth Plot (n41 90MHz 256QAM-CP-OFDM- Full RB Configuration)

FCC ID: A3LSMA716U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 135 of 420

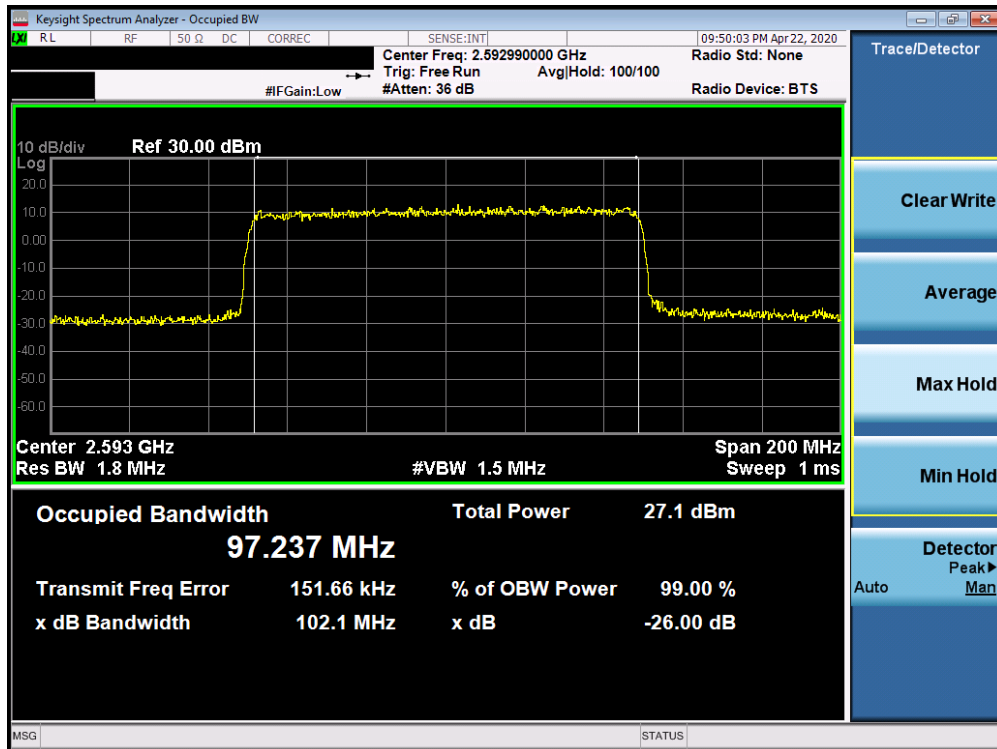


Plot 7-234. Occupied Bandwidth Plot (n41 100MHz BPSK-DFT-s-OFDM - Full RB Configuration)

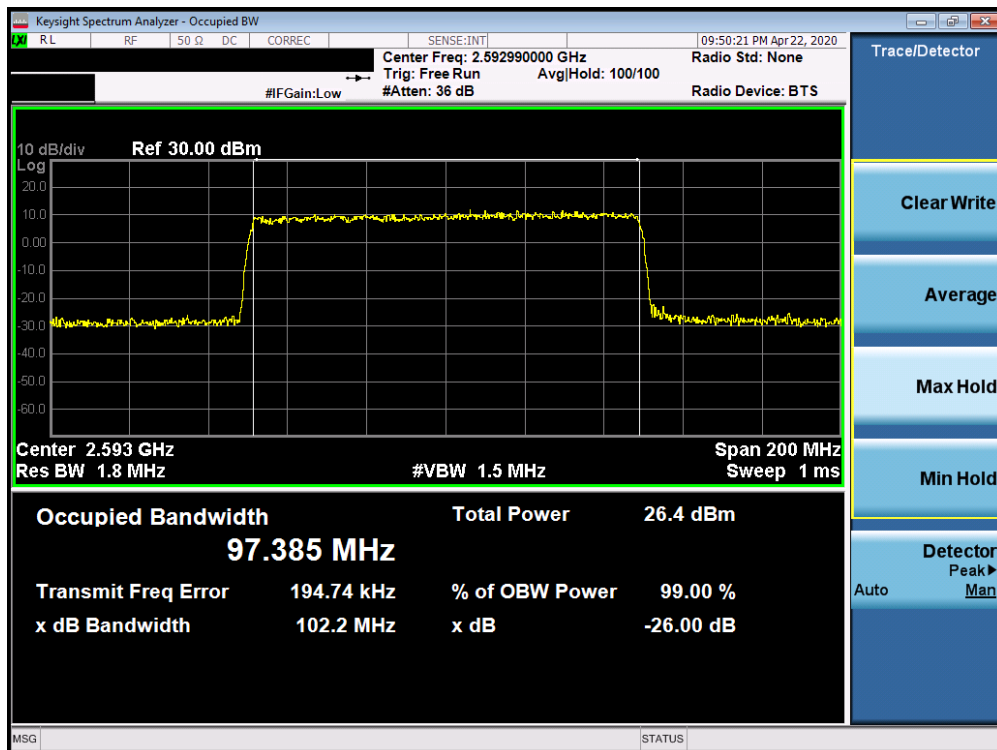


Plot 7-235. Occupied Bandwidth Plot (n41 100MHz QPSK-CP-OFDM - Full RB Configuration)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 136 of 420

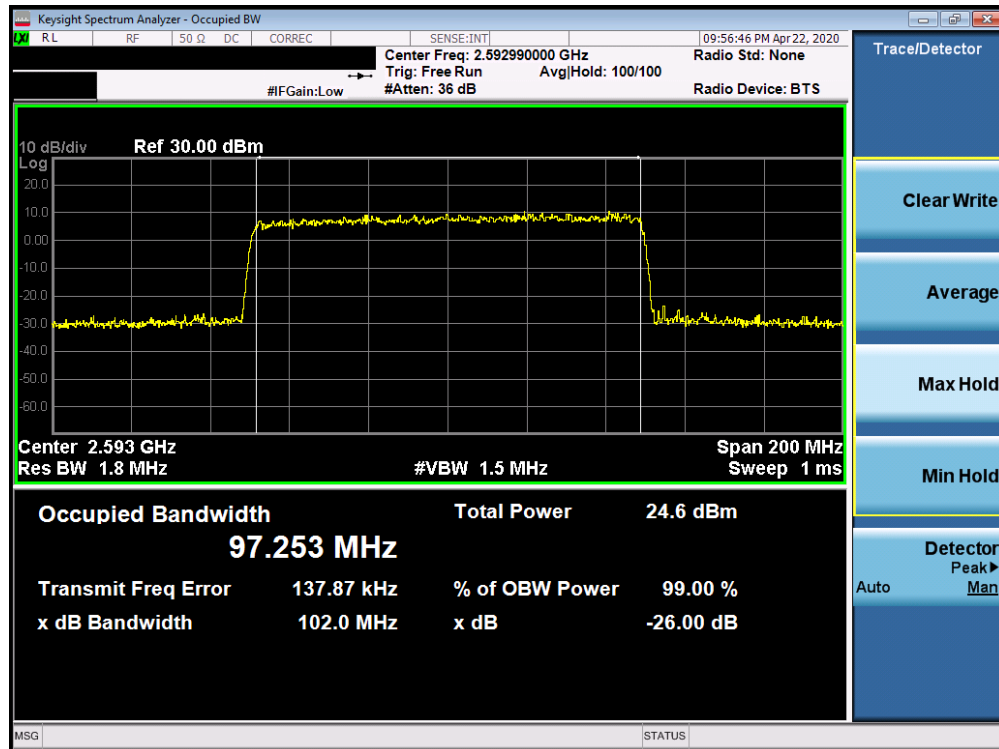


Plot 7-236. Occupied Bandwidth Plot (n41 100MHz 16QAM-CP-OFDM - Full RB Configuration)



Plot 7-237. Occupied Bandwidth Plot (n41 100MHz 64QAM-CP-OFDM- Full RB Configuration)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 137 of 420



Plot 7-238. Occupied Bandwidth Plot (n41 100MHz 256QAM-CP-OFDM- Full RB Configuration)

FCC ID: A3LSMA716U	 Proud to be part of 	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 138 of 420

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.



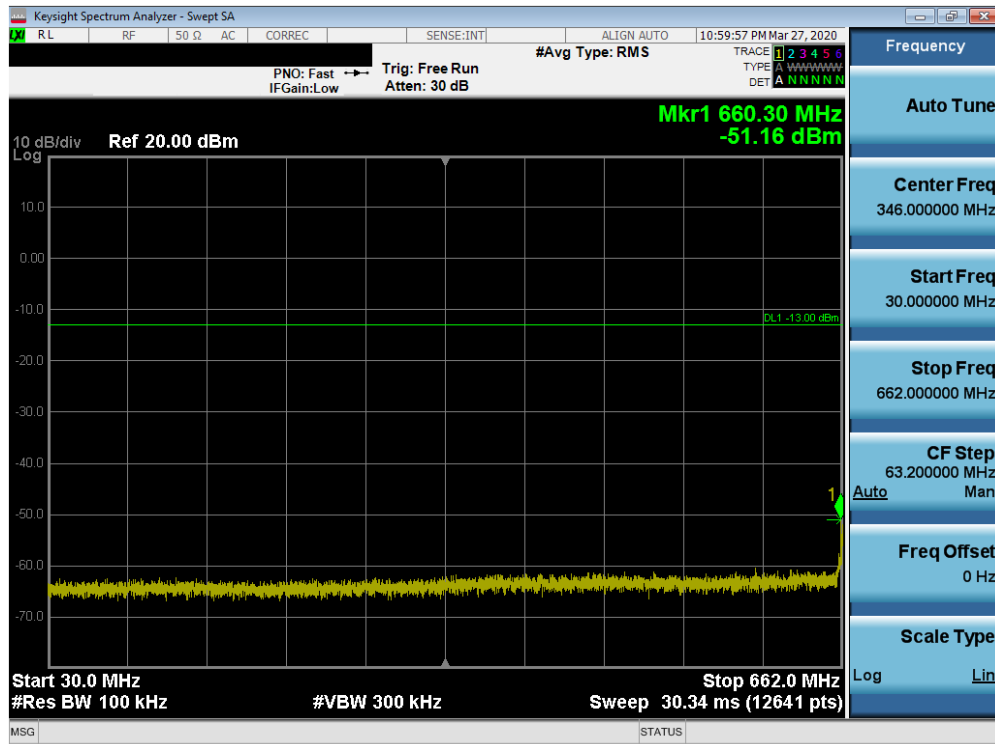
Figure 7-2. Test Instrument & Measurement Setup

Test Notes

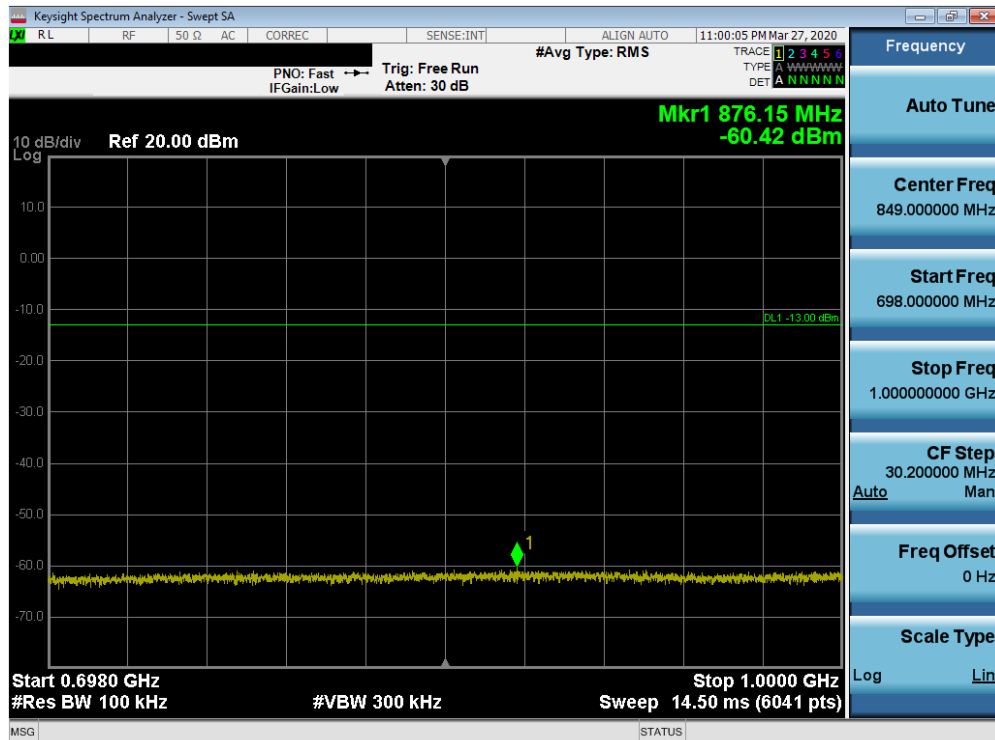
Compliance with the applicable limits is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz or greater for frequencies less than 1 GHz and 1 MHz or greater for frequencies greater than 1 GHz. However, in the 1 MHz bands immediately outside and adjacent to the 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: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 139 of 420

Band 71

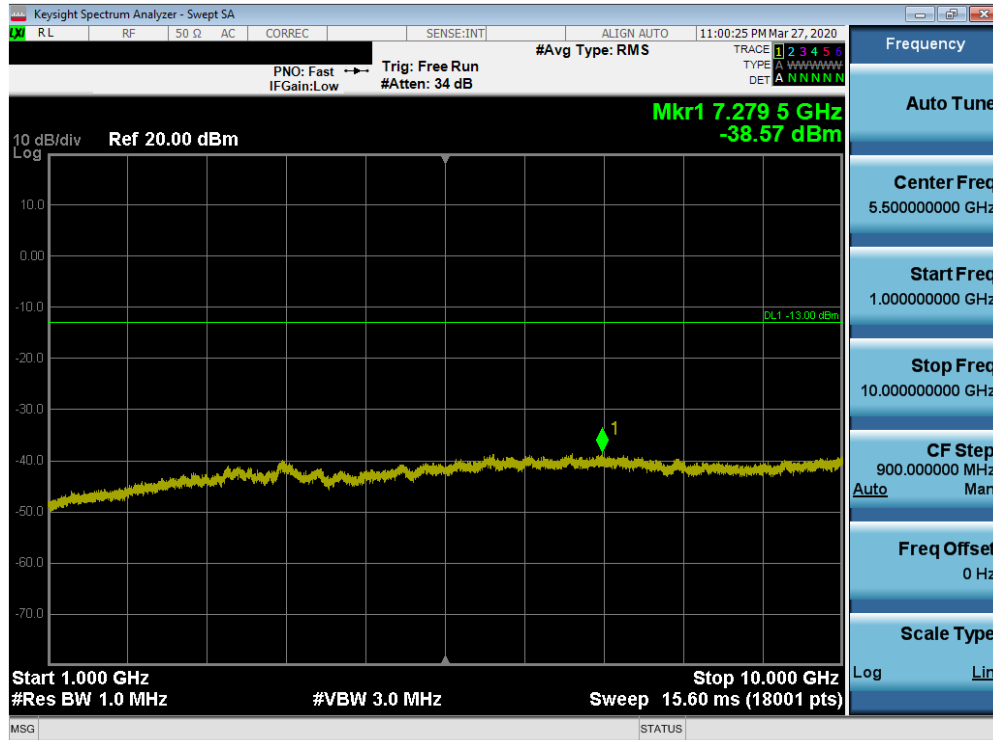


Plot 7-239. Conducted Spurious Plot (Band 71 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

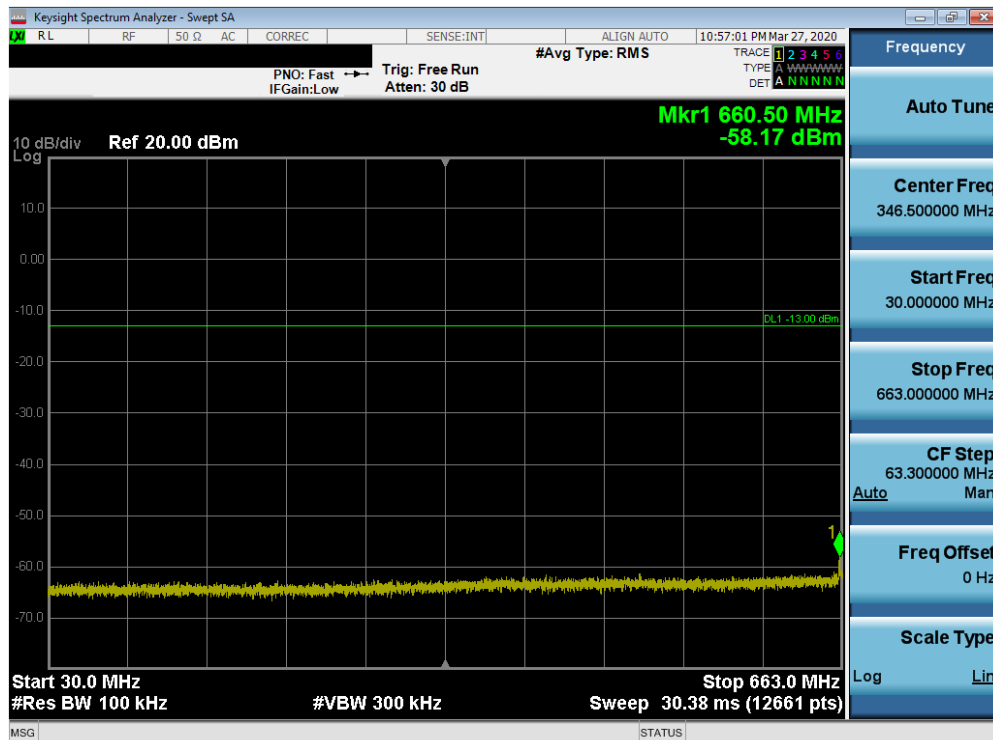


Plot 7-240. Conducted Spurious Plot (Band 71 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 140 of 420

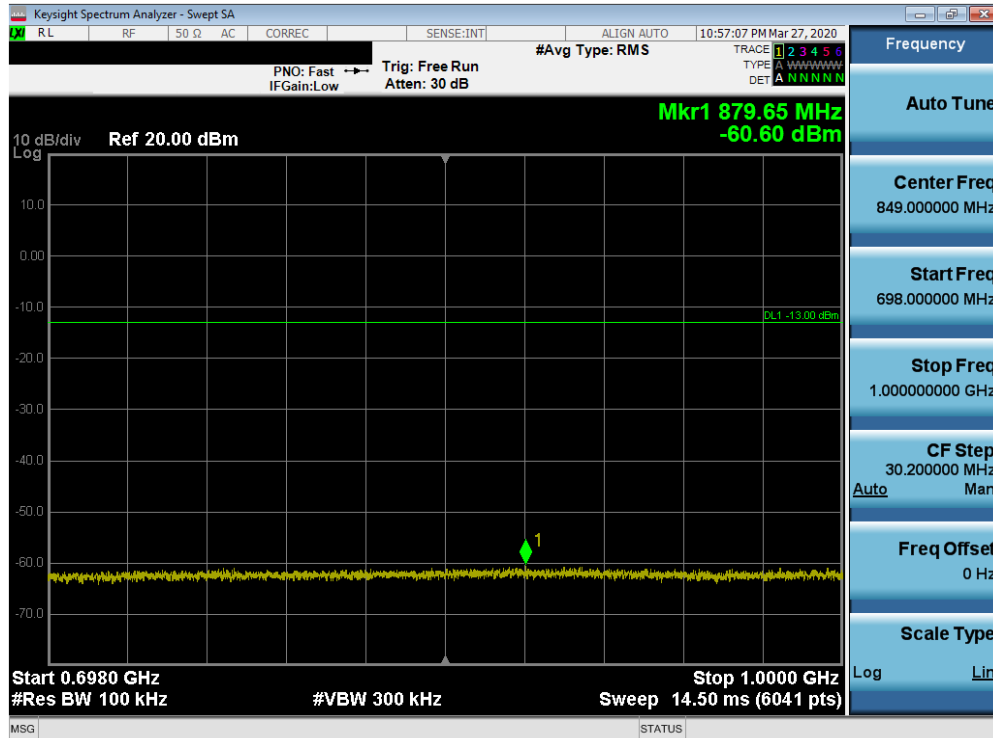


Plot 7-241. Conducted Spurious Plot (Band 71 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

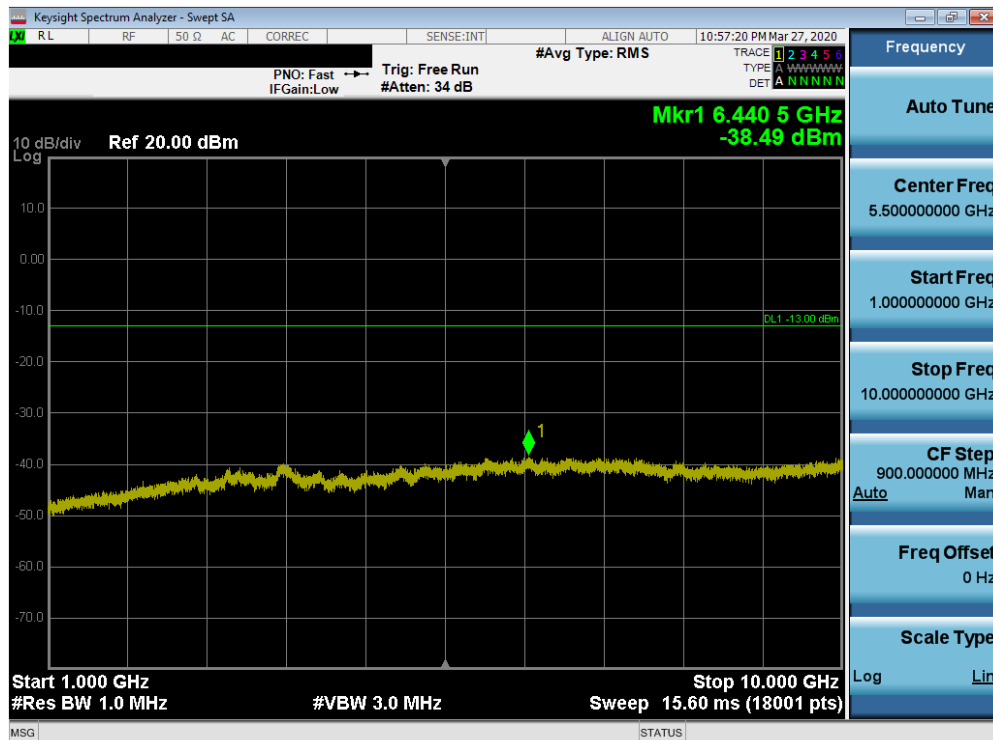


Plot 7-242. Conducted Spurious Plot (Band 71 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 141 of 420

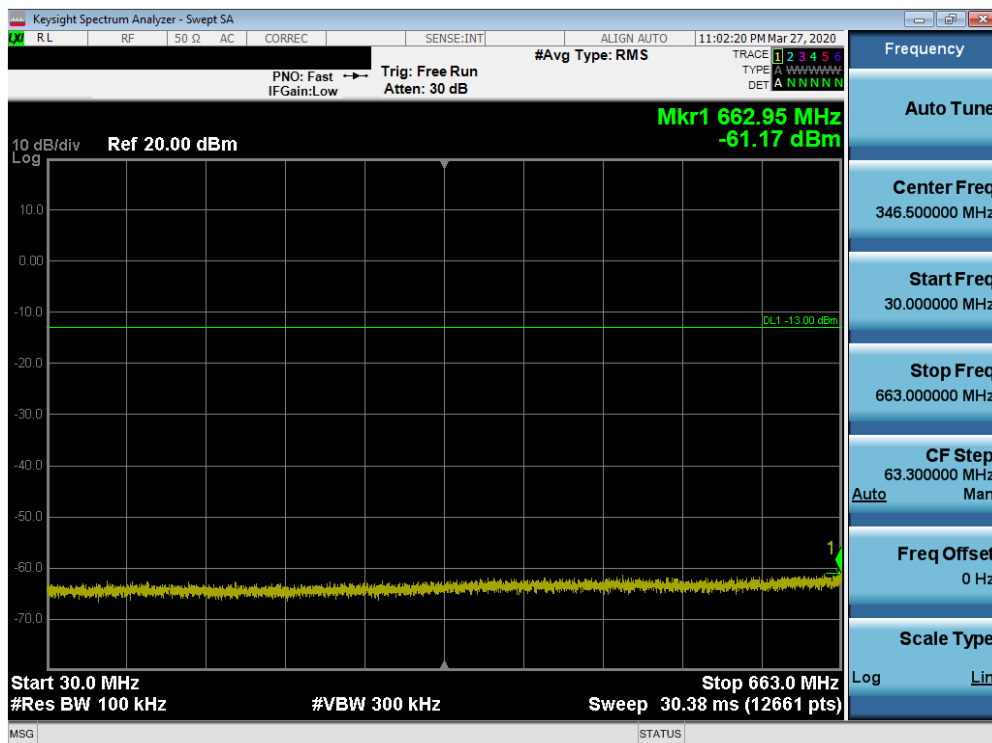


Plot 7-243. Conducted Spurious Plot (Band 71 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

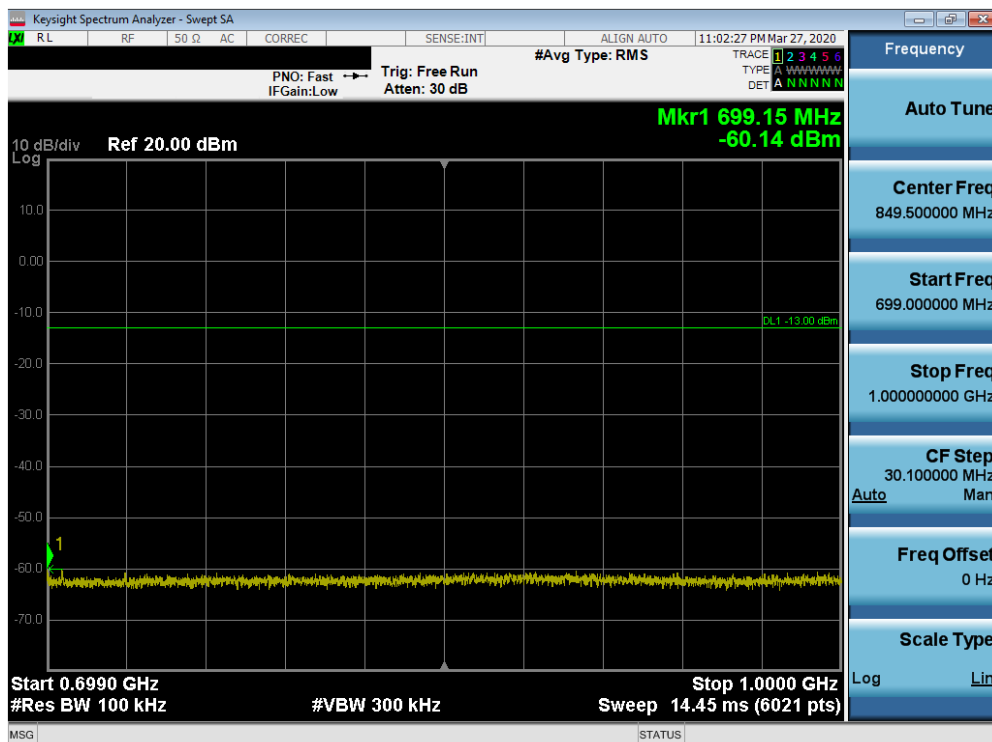


Plot 7-244. Conducted Spurious Plot (Band 71 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 142 of 420

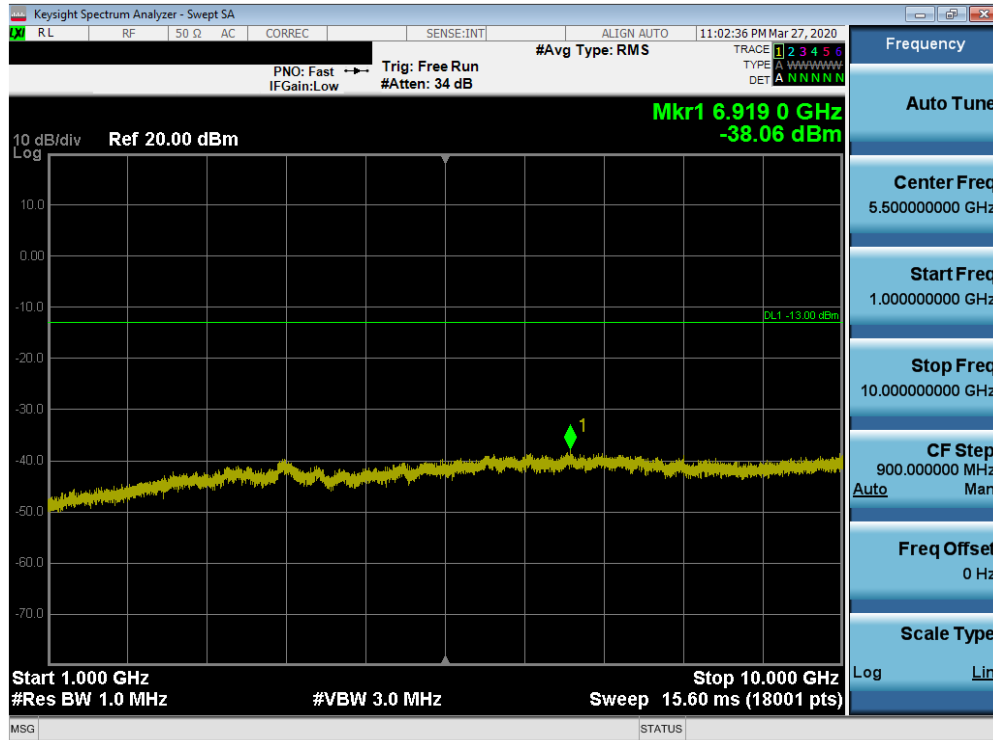


Plot 7-245. Conducted Spurious Plot (Band 71 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)



Plot 7-246. Conducted Spurious Plot (Band 71 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

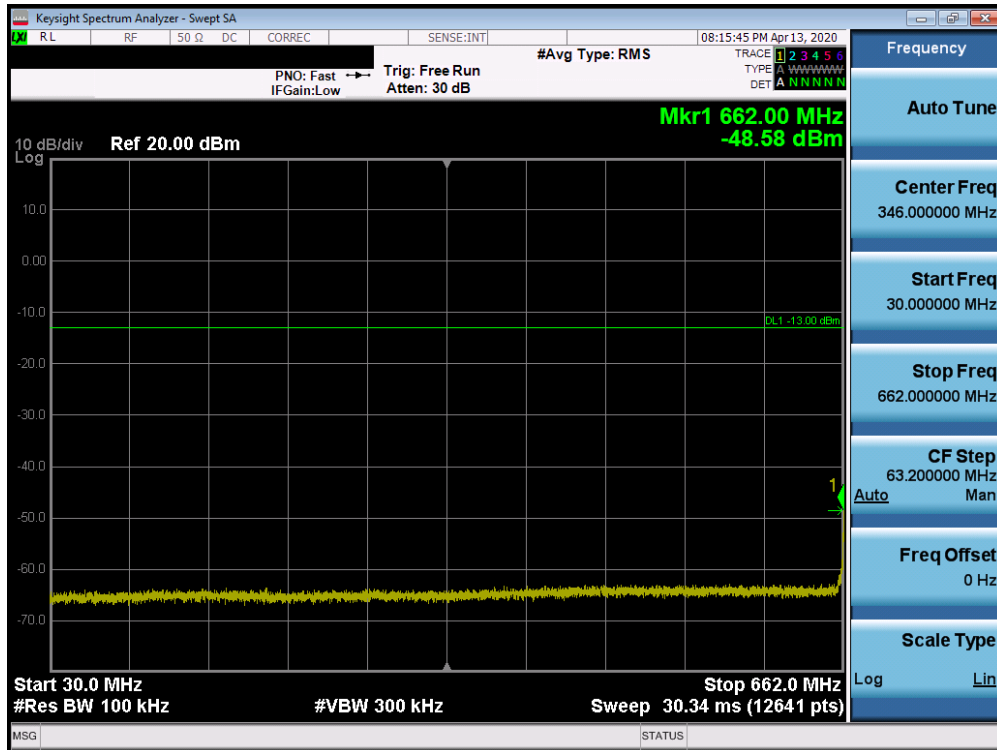
FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 143 of 420



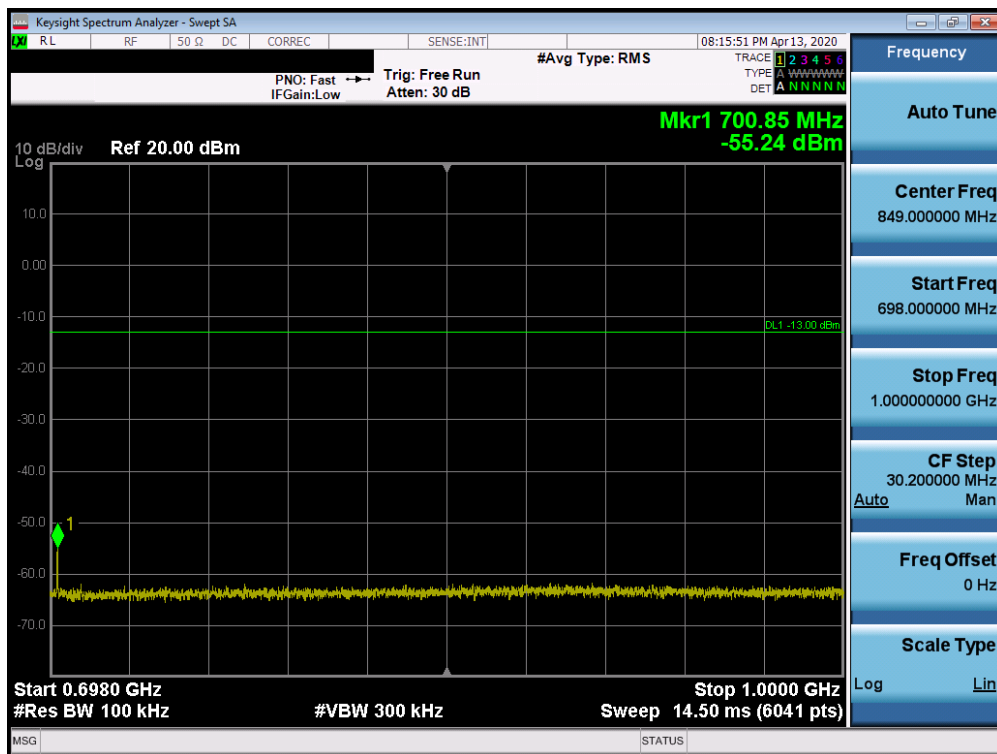
Plot 7-247. Conducted Spurious Plot (Band 71 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 144 of 420

NR Band n71

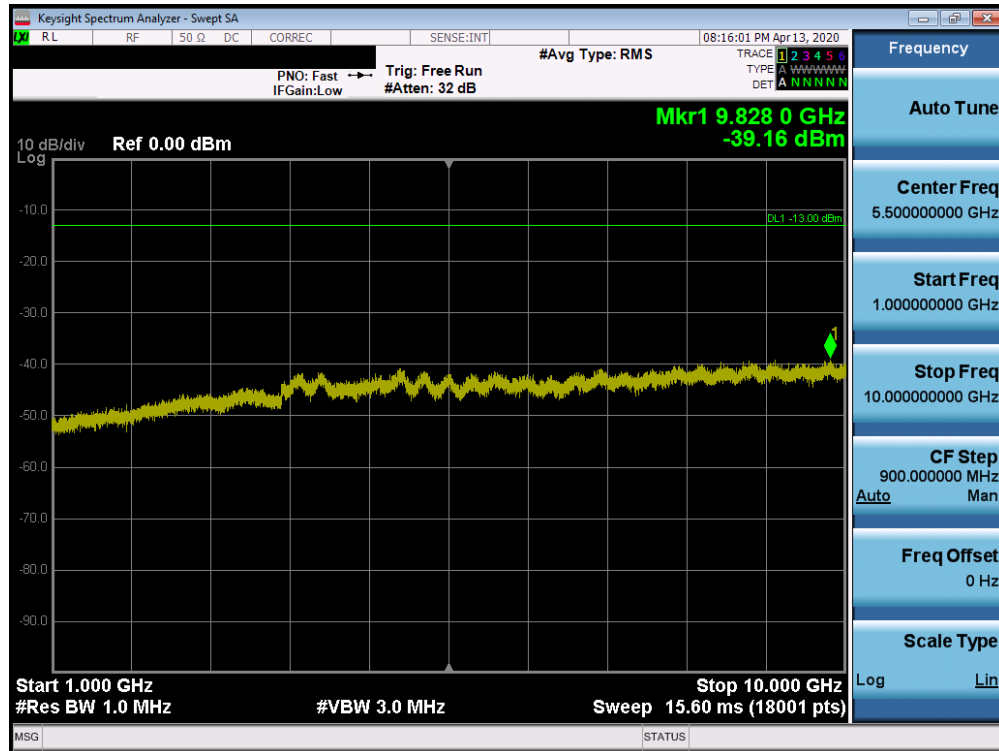


Plot 7-248. Conducted Spurious Plot (n71 - 20MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - Low Channel)

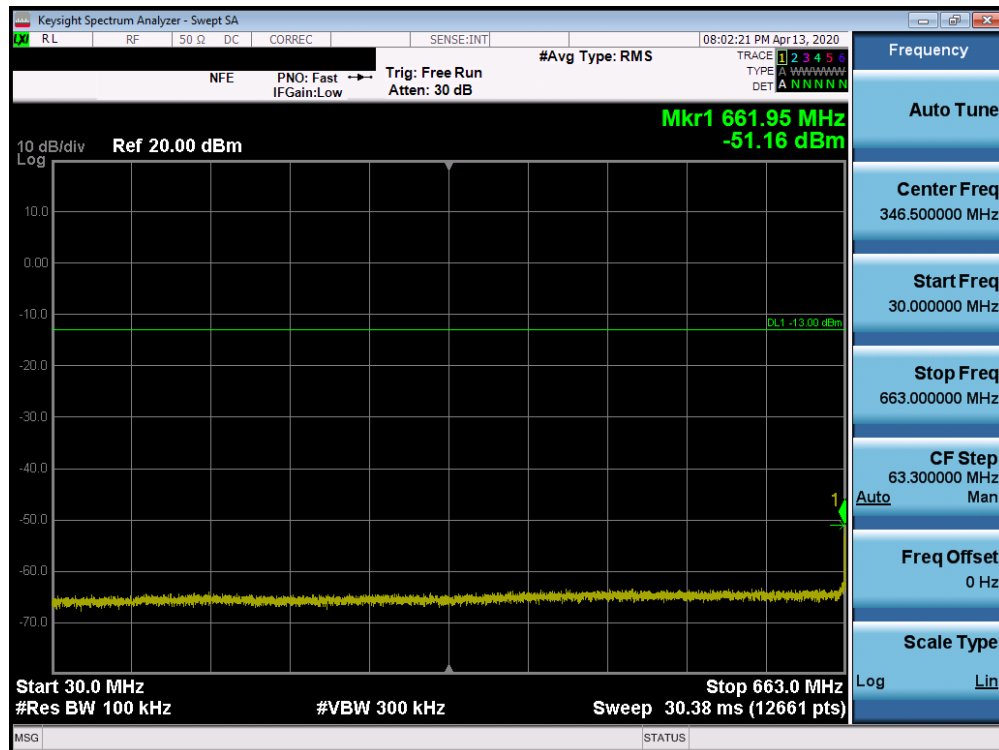


Plot 7-249. Conducted Spurious Plot (n71 - 20MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - Low Channel)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 145 of 420

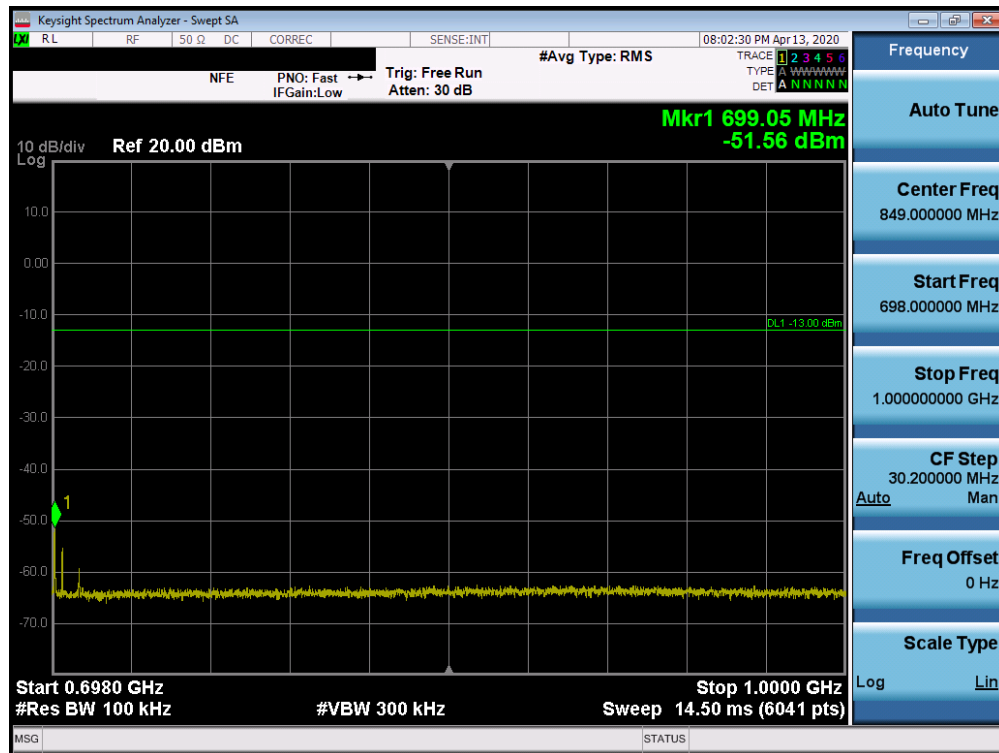


Plot 7-250. Conducted Spurious Plot (n71 - 20MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - Low Channel)

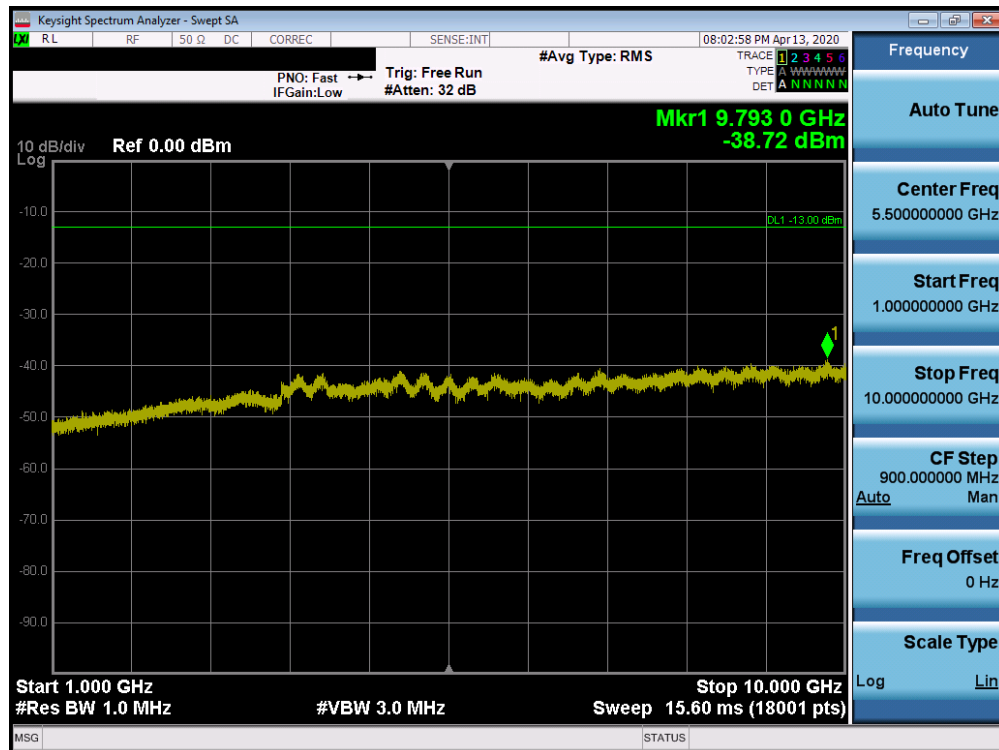


Plot 7-251. Conducted Spurious Plot (n71 - 20MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - Mid Channel)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 146 of 420

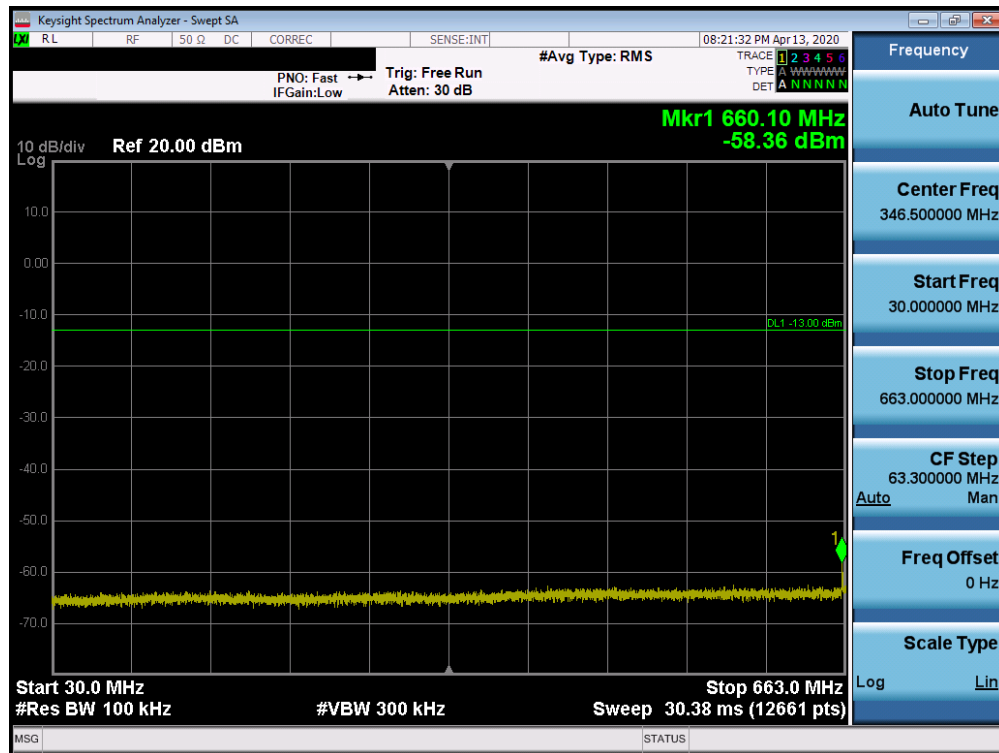


Plot 7-252. Conducted Spurious Plot (n71 - 20MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - Mid Channel)

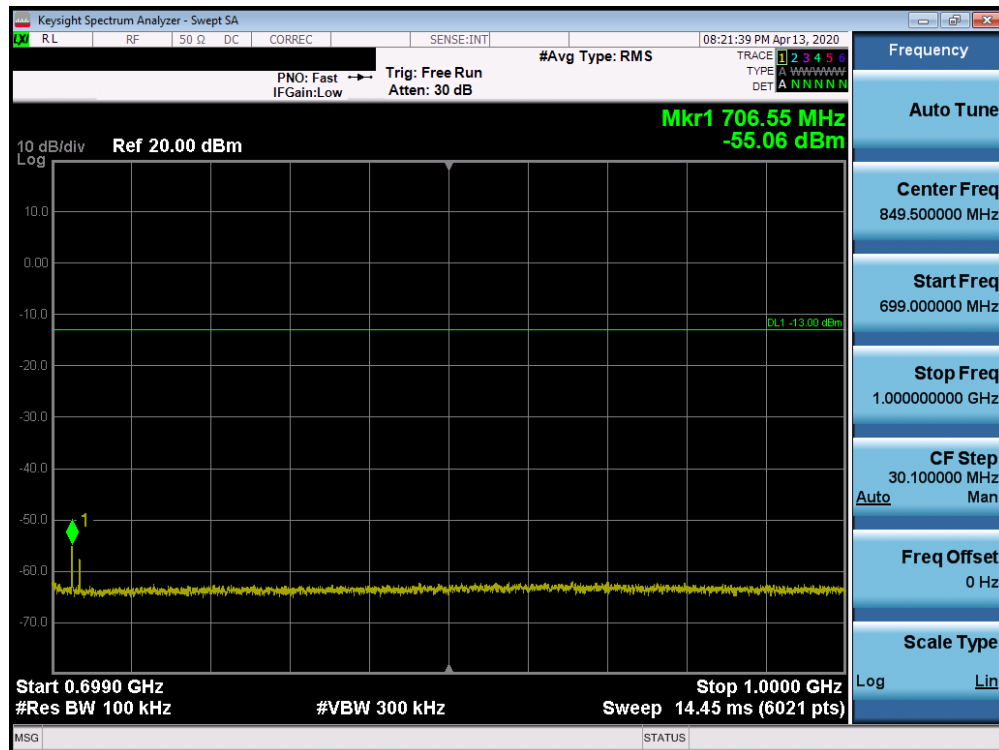


Plot 7-253. Conducted Spurious Plot (n71 - 20MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - Mid Channel)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 147 of 420

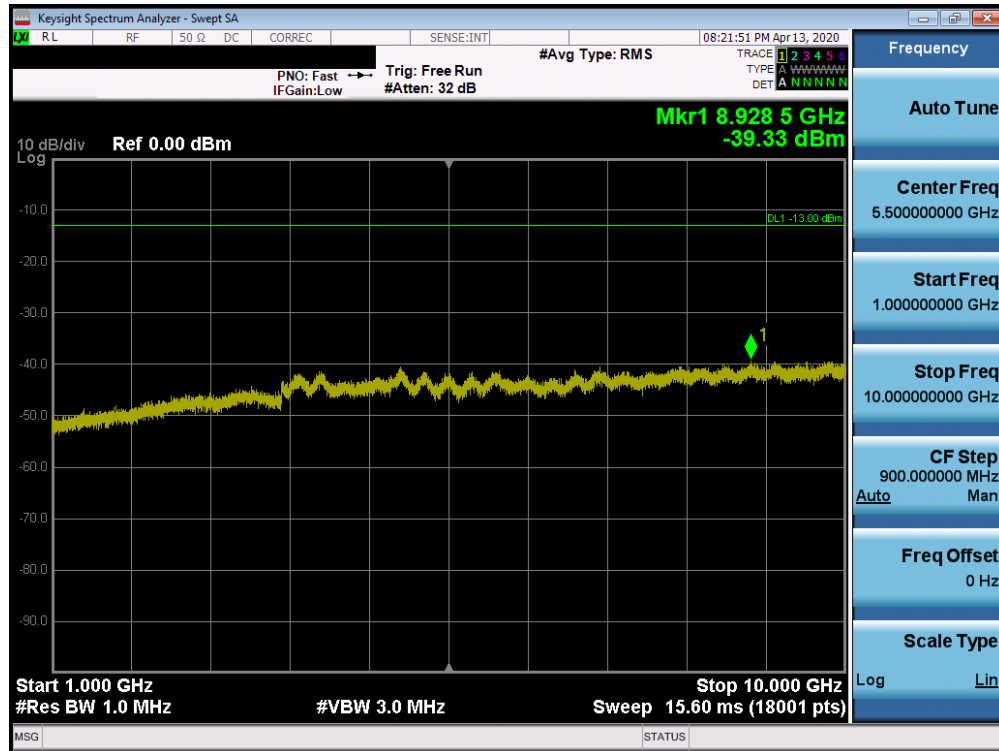


Plot 7-254. Conducted Spurious Plot (n71 - 20MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - High Channel)



Plot 7-255. Conducted Spurious Plot (n71 - 20MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - High Channel)

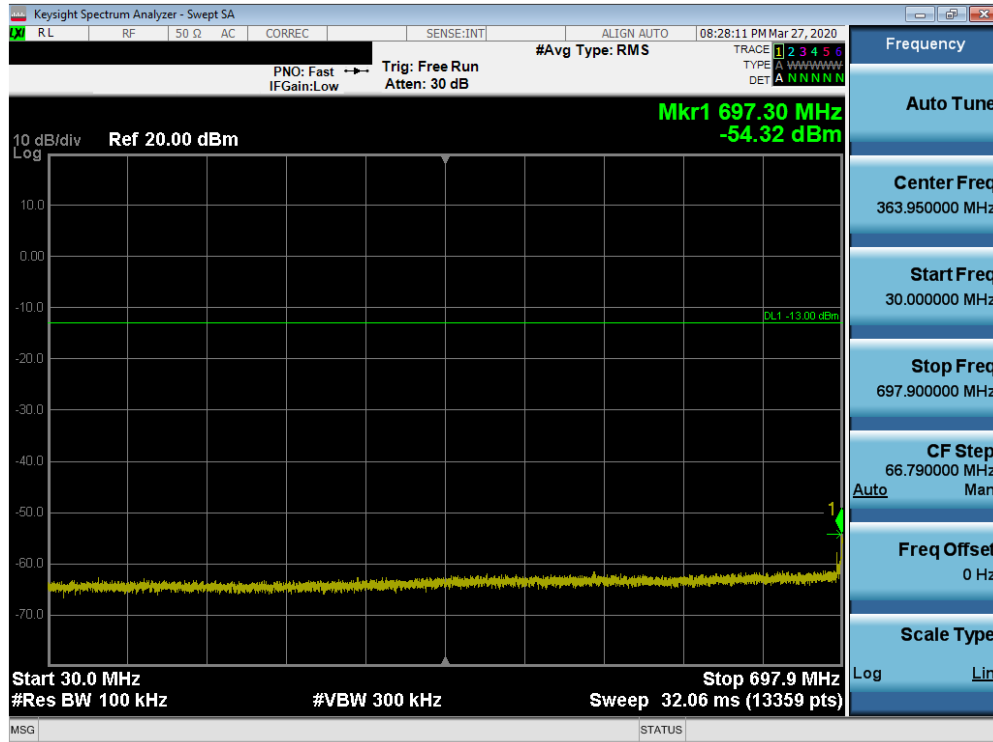
FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 148 of 420



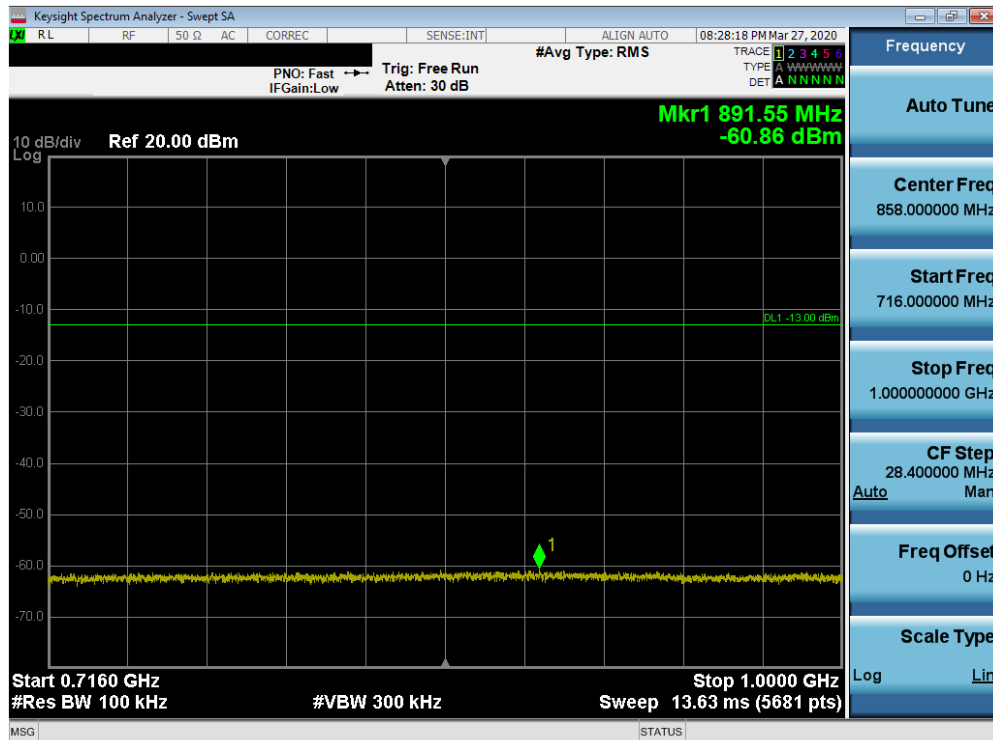
Plot 7-256. Conducted Spurious Plot (n71 - 20MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - High Channel)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 149 of 420

Band 12

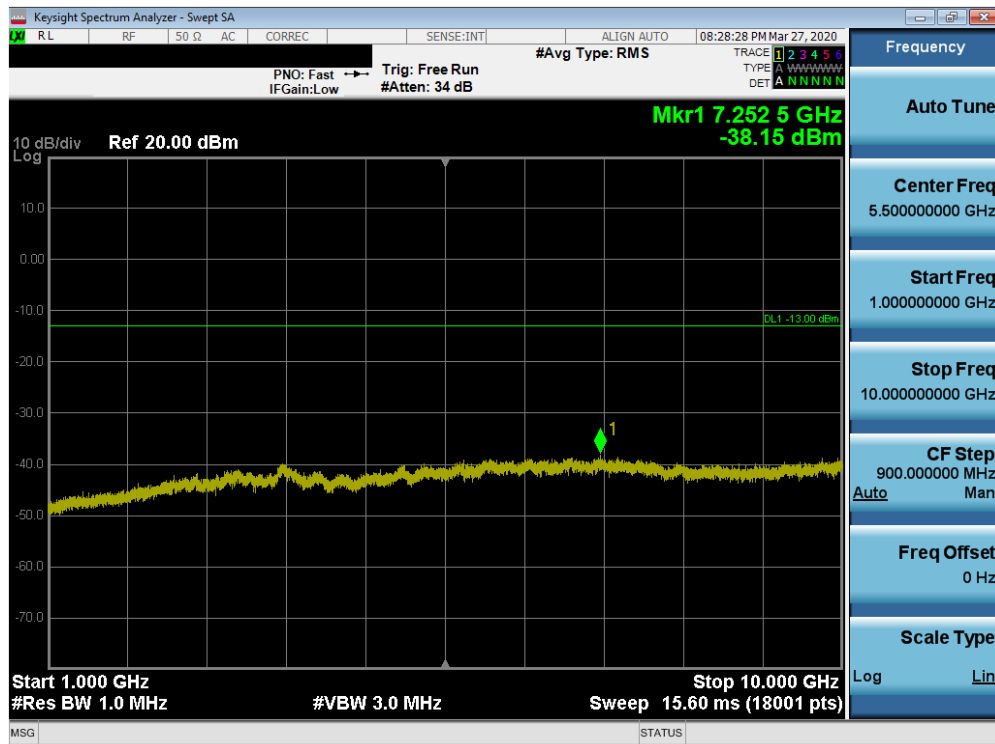


Plot 7-257. Conducted Spurious Plot (Band 12 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

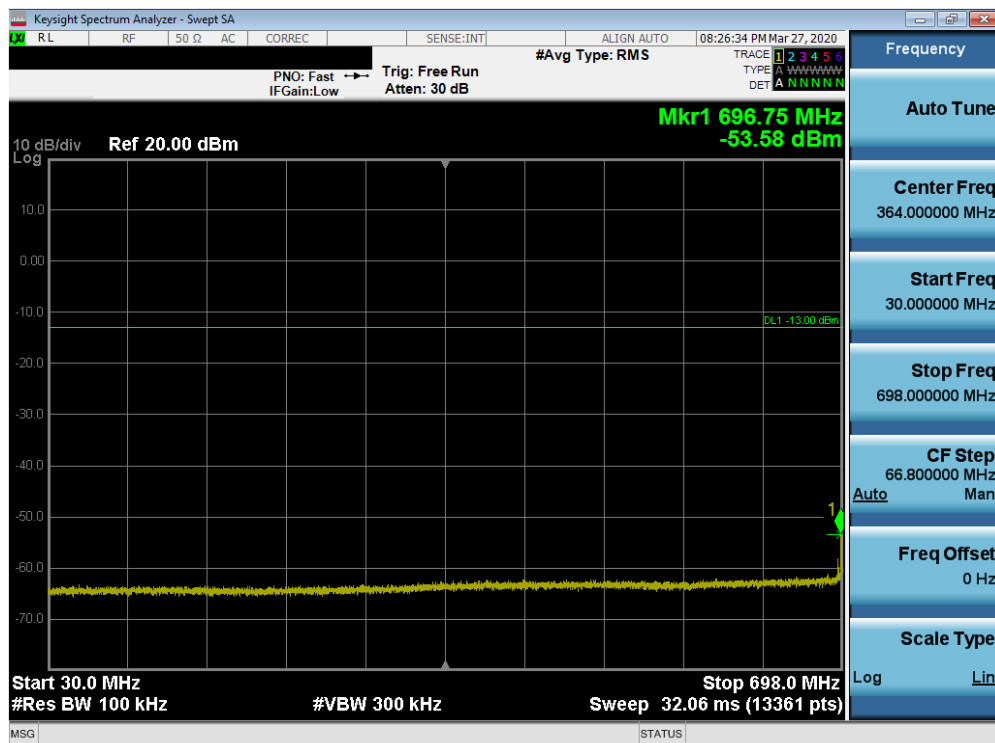


Plot 7-258. Conducted Spurious Plot (Band 12 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 150 of 420

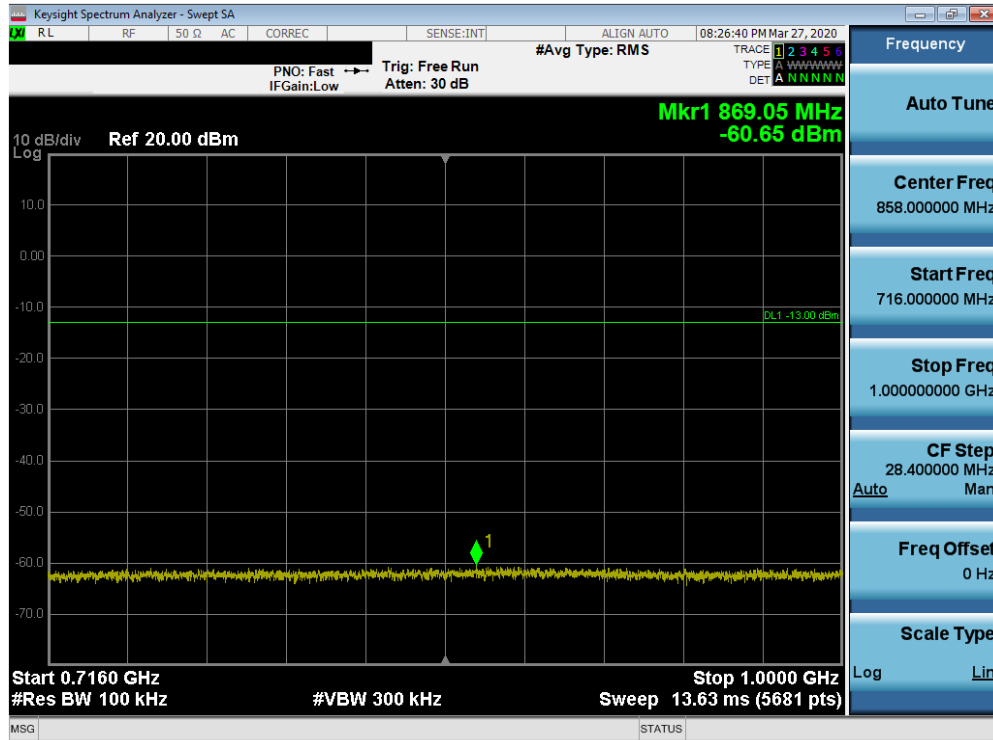


Plot 7-259. Conducted Spurious Plot (Band 12 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

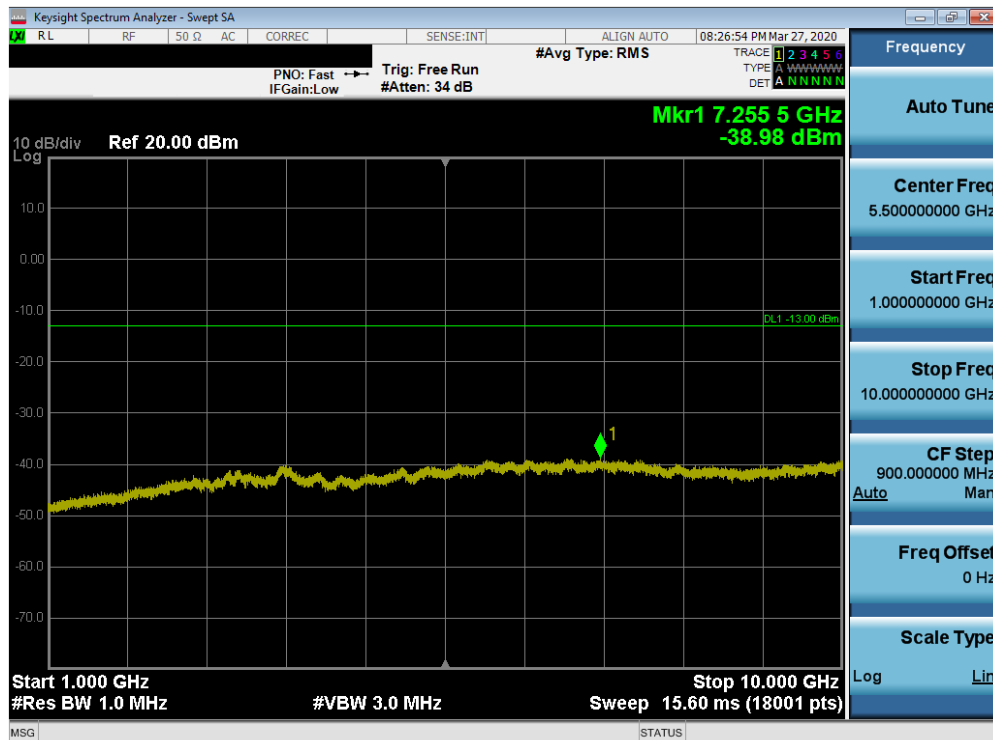


Plot 7-260. Conducted Spurious Plot (Band 12 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 151 of 420

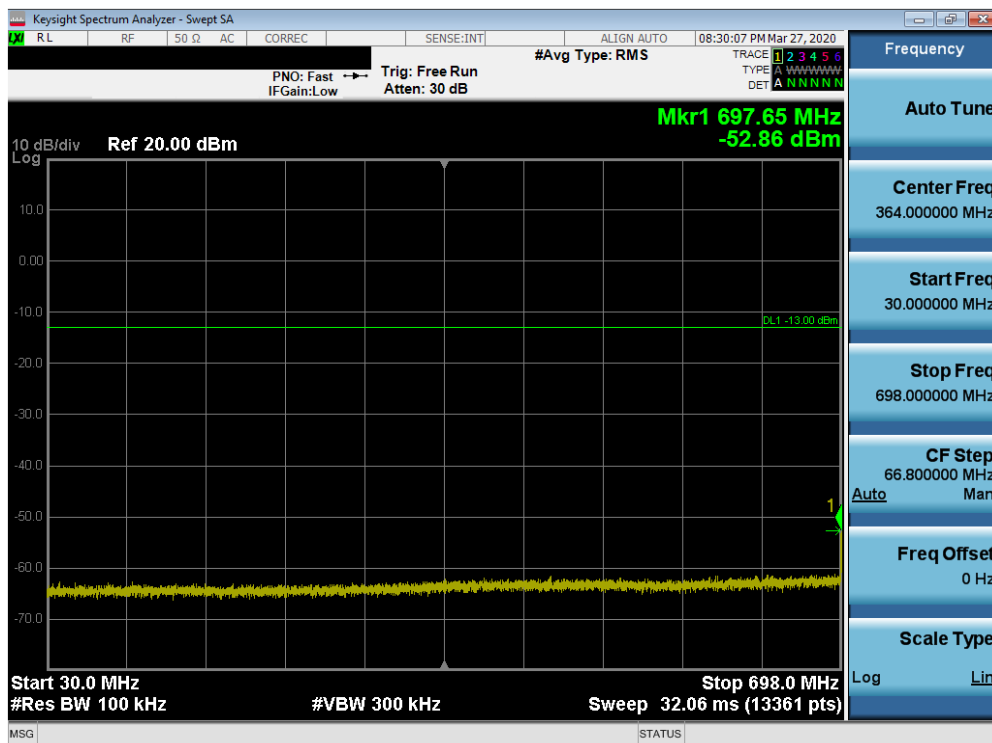


Plot 7-261. Conducted Spurious Plot (Band 12 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

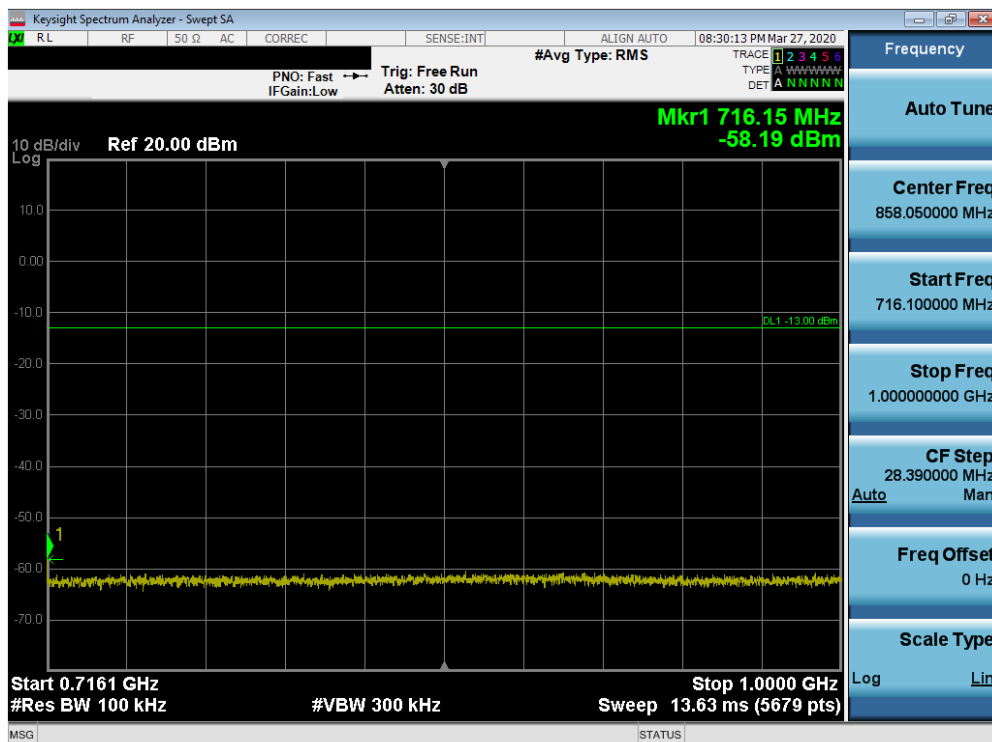


Plot 7-262. Conducted Spurious Plot (Band 12 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 152 of 420

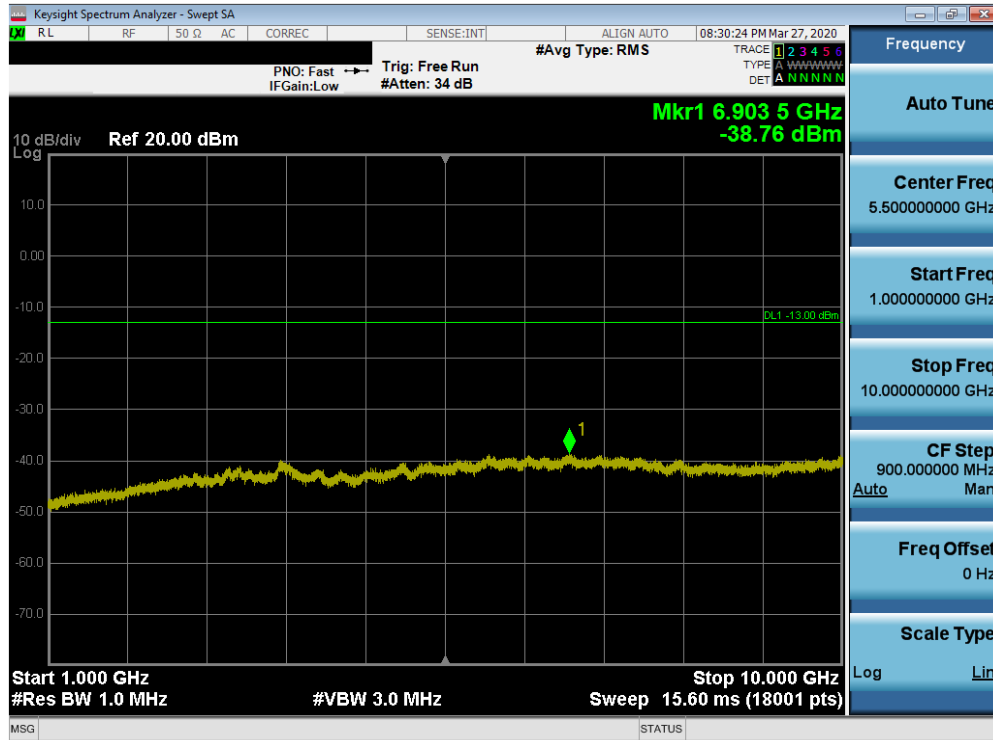


Plot 7-263. Conducted Spurious Plot (Band 12 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)



Plot 7-264. Conducted Spurious Plot (Band 12 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

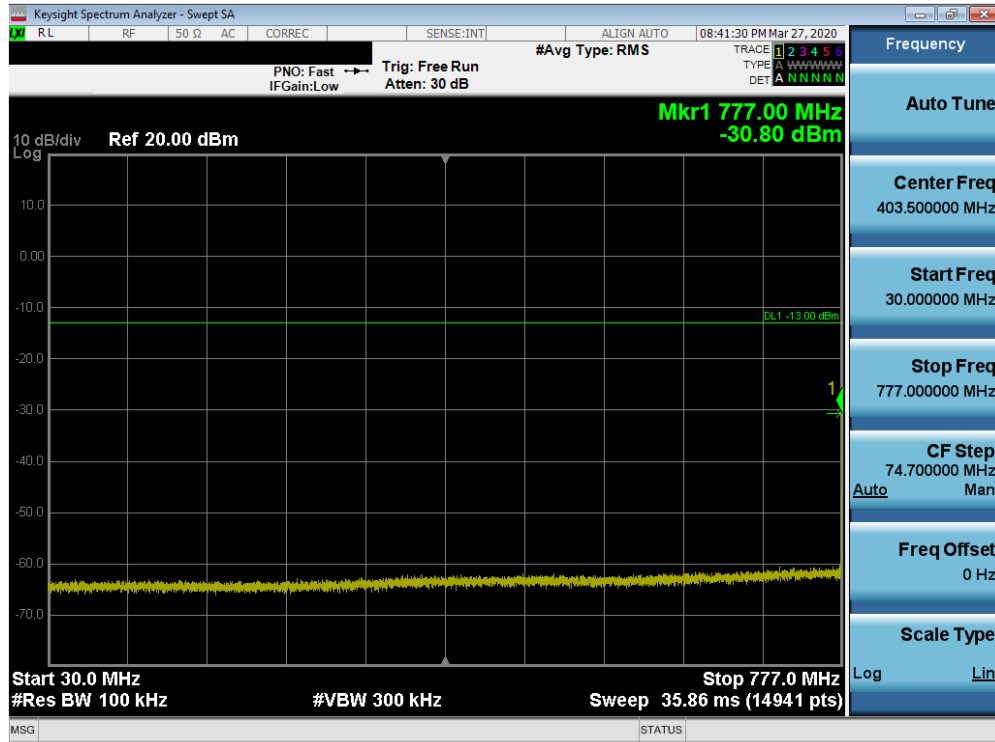
FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 153 of 420



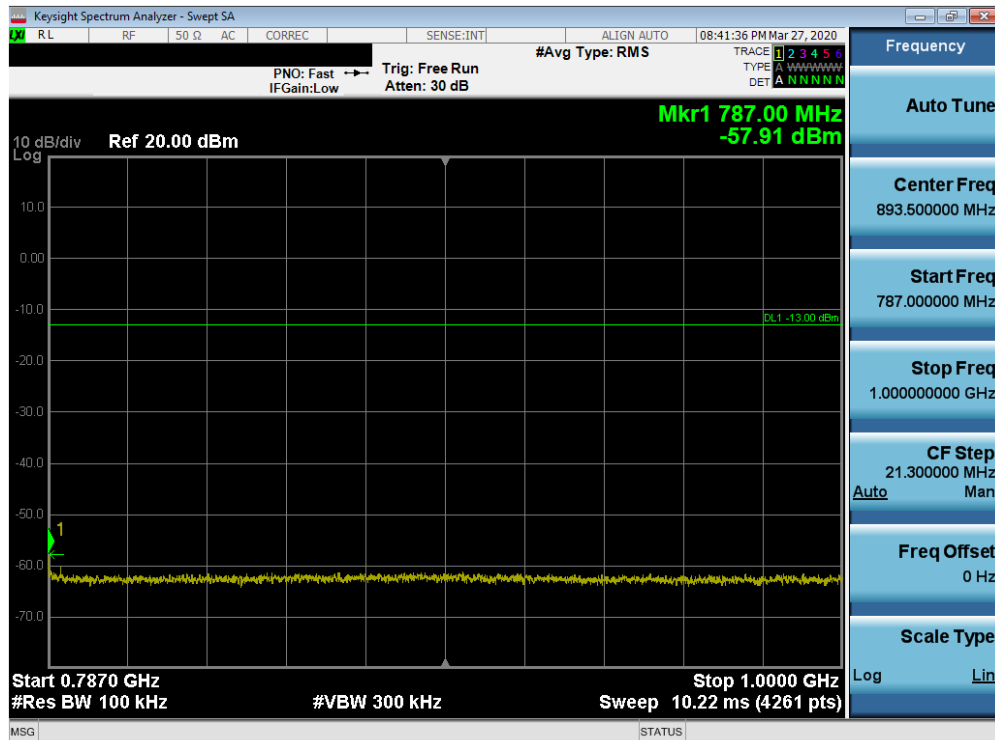
Plot 7-265. Conducted Spurious Plot (Band 12 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 154 of 420

Band 13

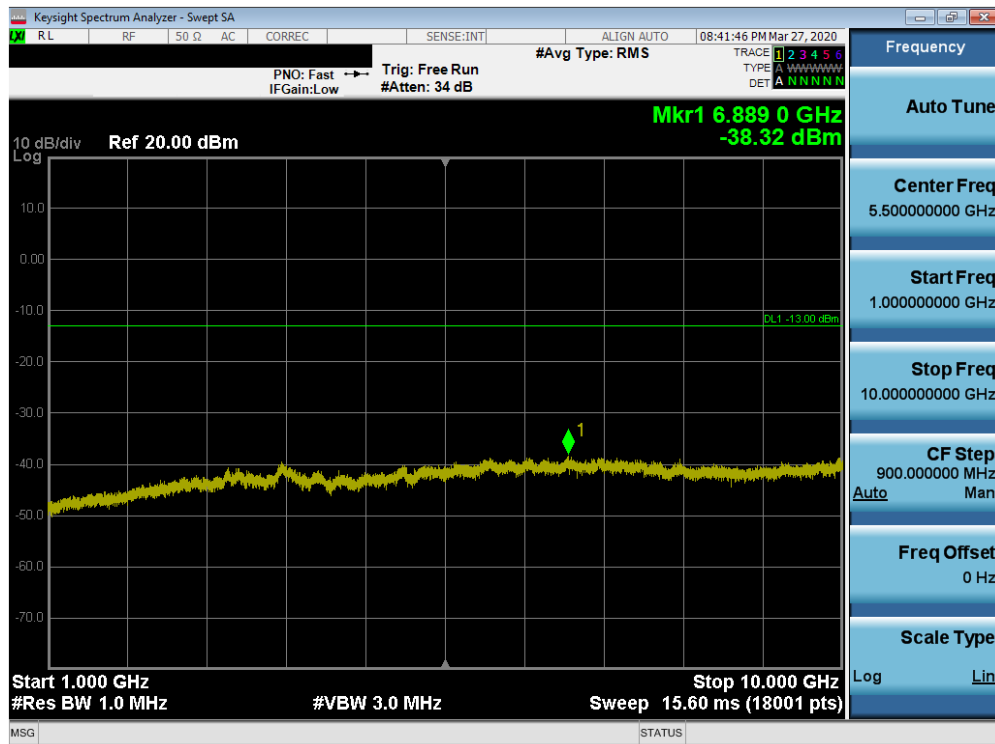


Plot 7-266. Conducted Spurious Plot (Band 13 - 10.0MHz QPSK - RB Size 1, RB Offset 0)



Plot 7-267. Conducted Spurious Plot (Band 13 - 10.0MHz QPSK - RB Size 1, RB Offset 0)

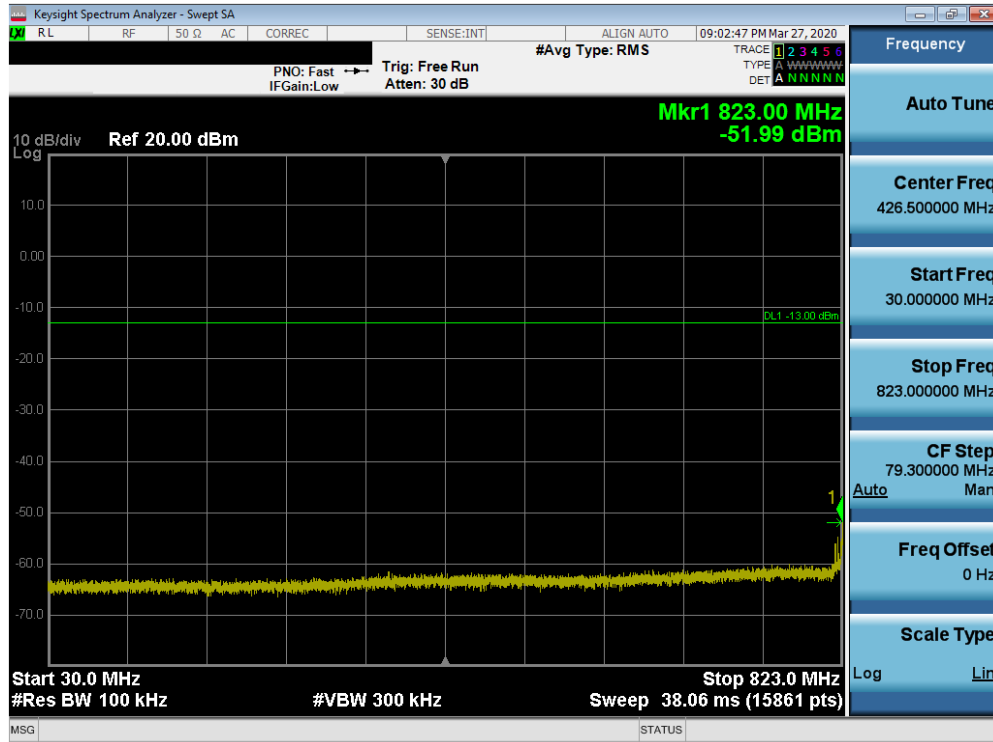
FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 155 of 420



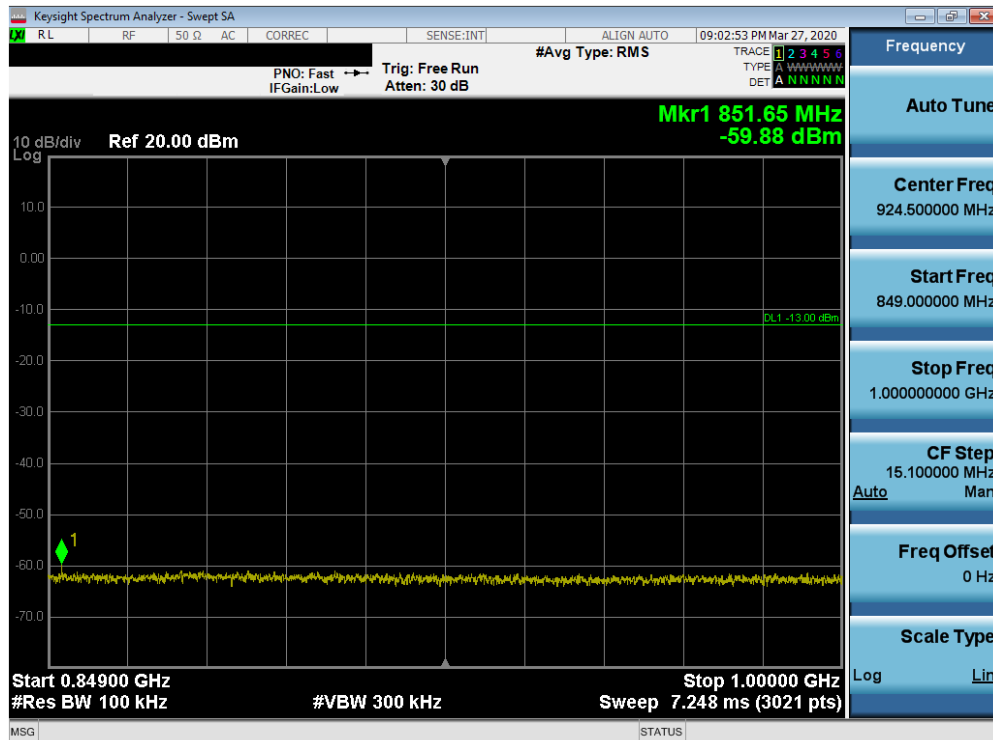
Plot 7-268. Conducted Spurious Plot (Band 13 - 10.0MHz QPSK - RB Size 1, RB Offset 0)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 156 of 420

Band 26/5

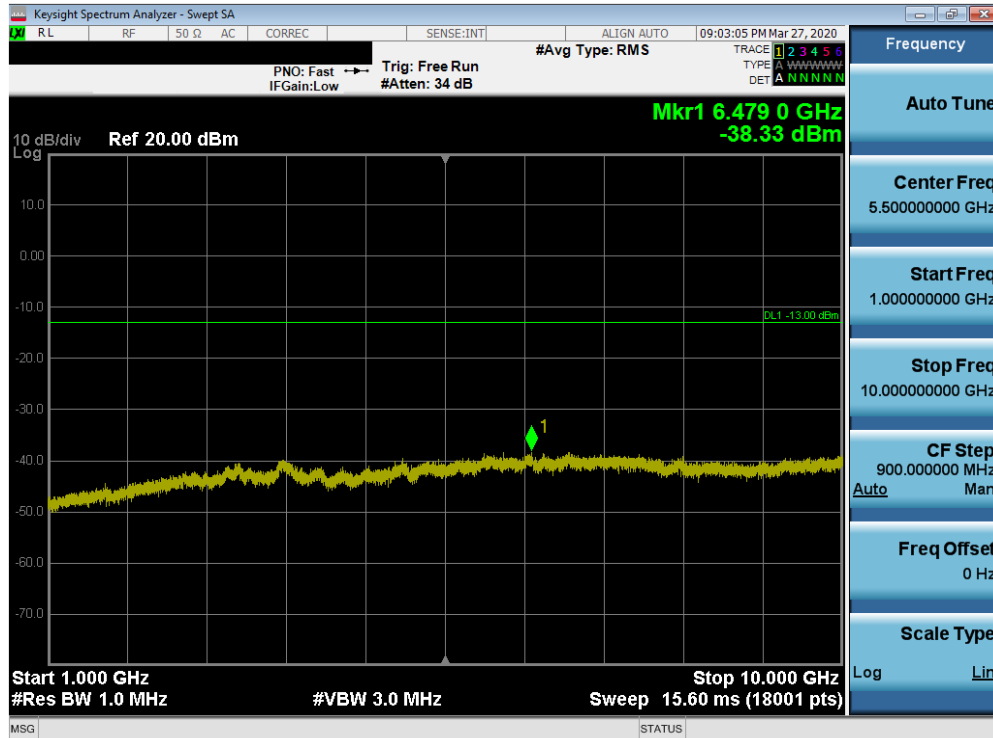


Plot 7-269. Conducted Spurious Plot (Band 26/5 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

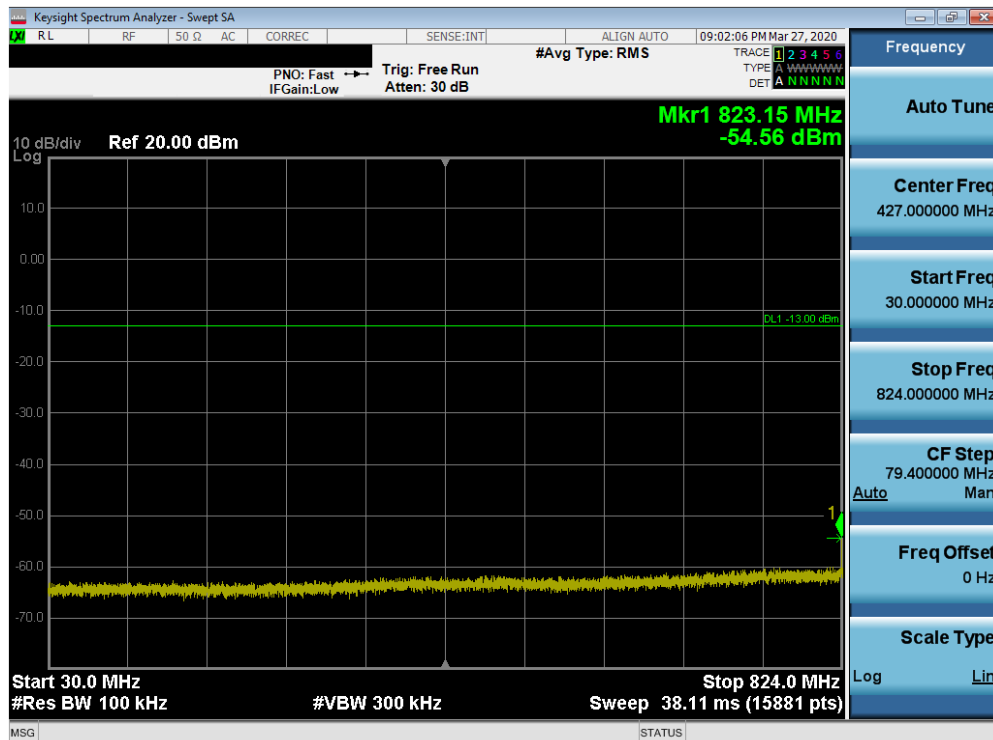


Plot 7-270. Conducted Spurious Plot (Band 26/5 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 157 of 420

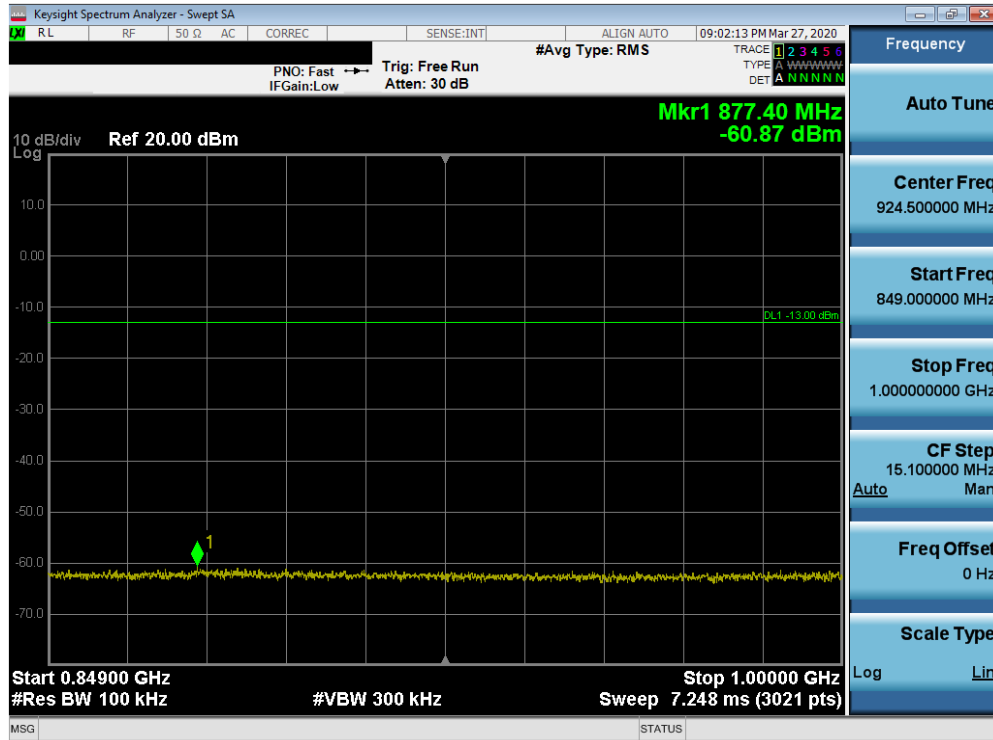


Plot 7-271. Conducted Spurious Plot (Band 26/5 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

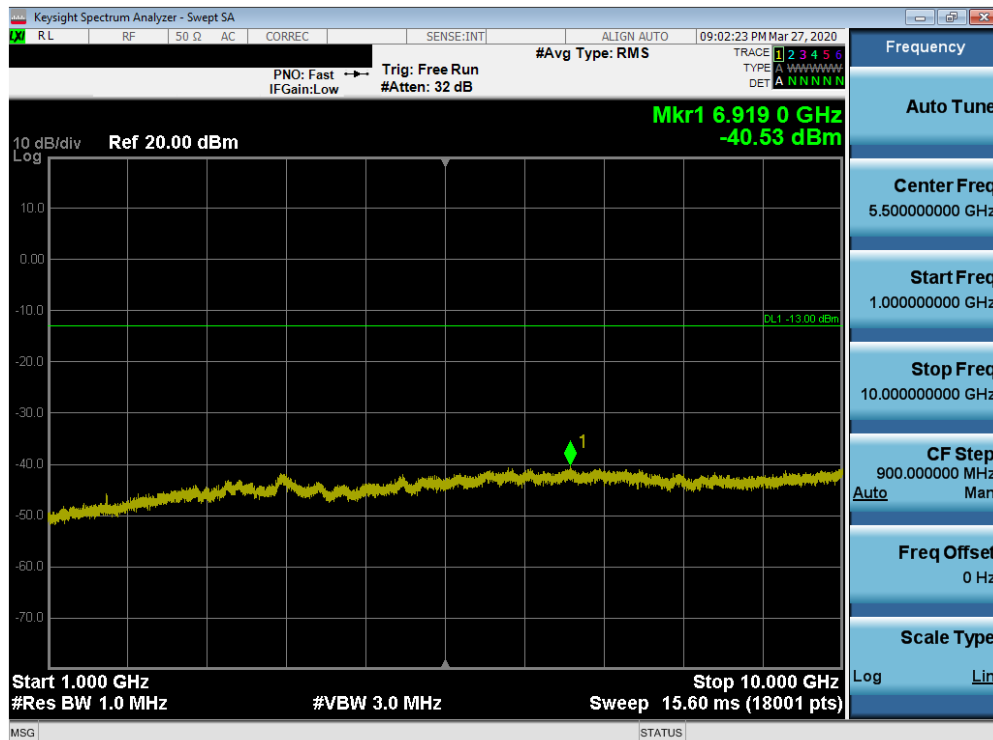


Plot 7-272. Conducted Spurious Plot (Band 26/5 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 158 of 420

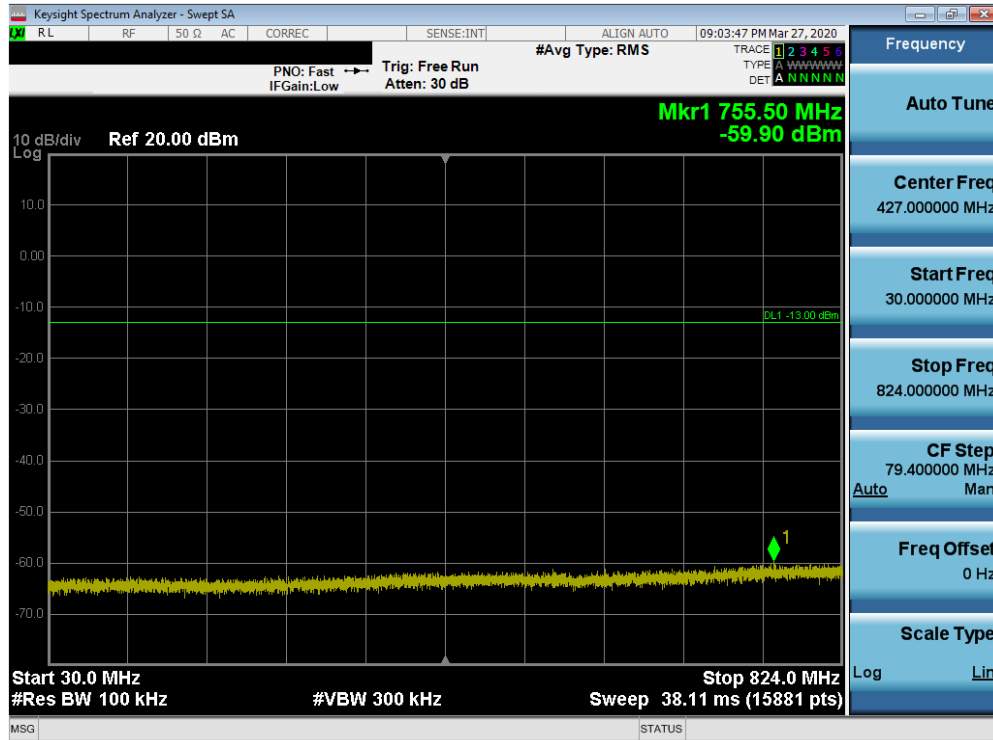


Plot 7-273. Conducted Spurious Plot (Band 26/5 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

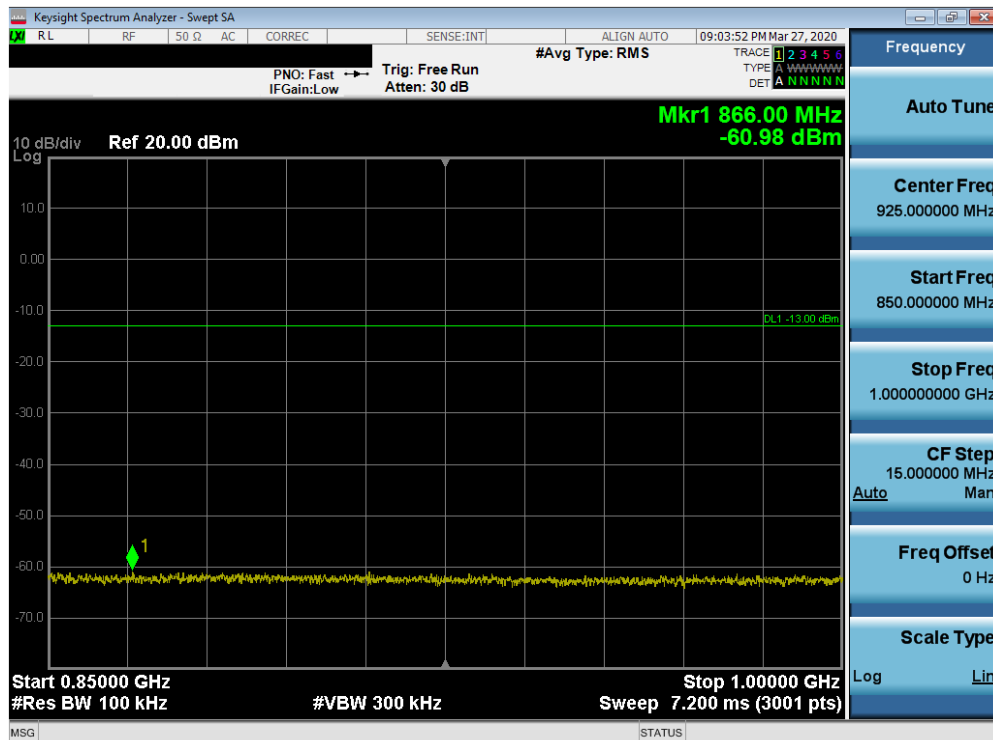


Plot 7-274. Conducted Spurious Plot (Band 26/5 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 159 of 420

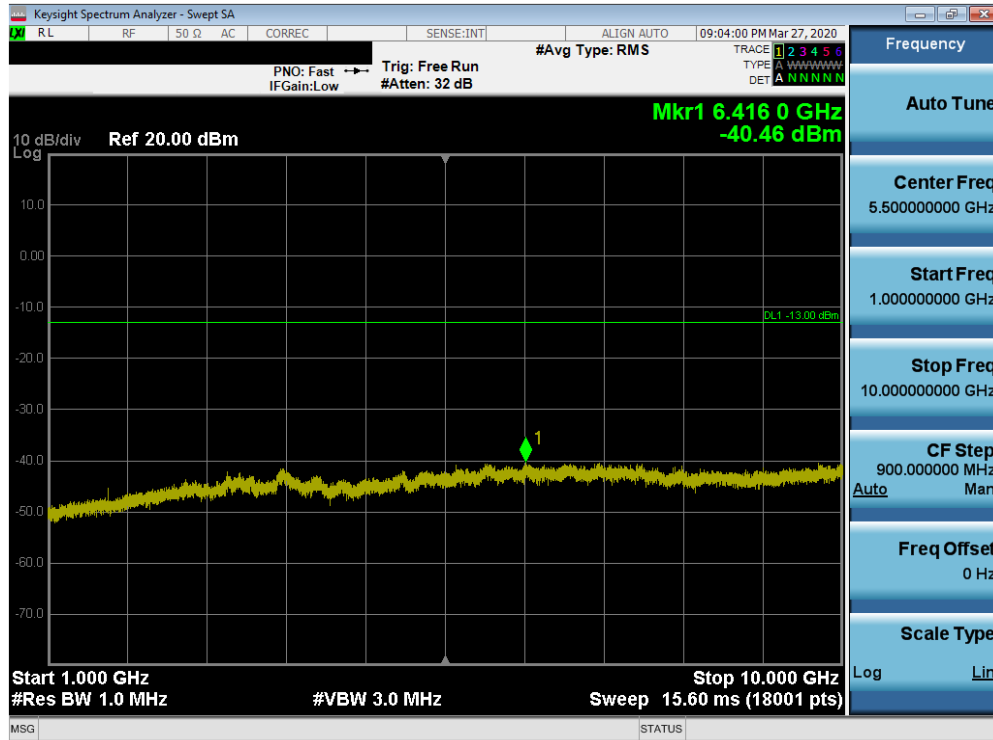


Plot 7-275. Conducted Spurious Plot (Band 26/5 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

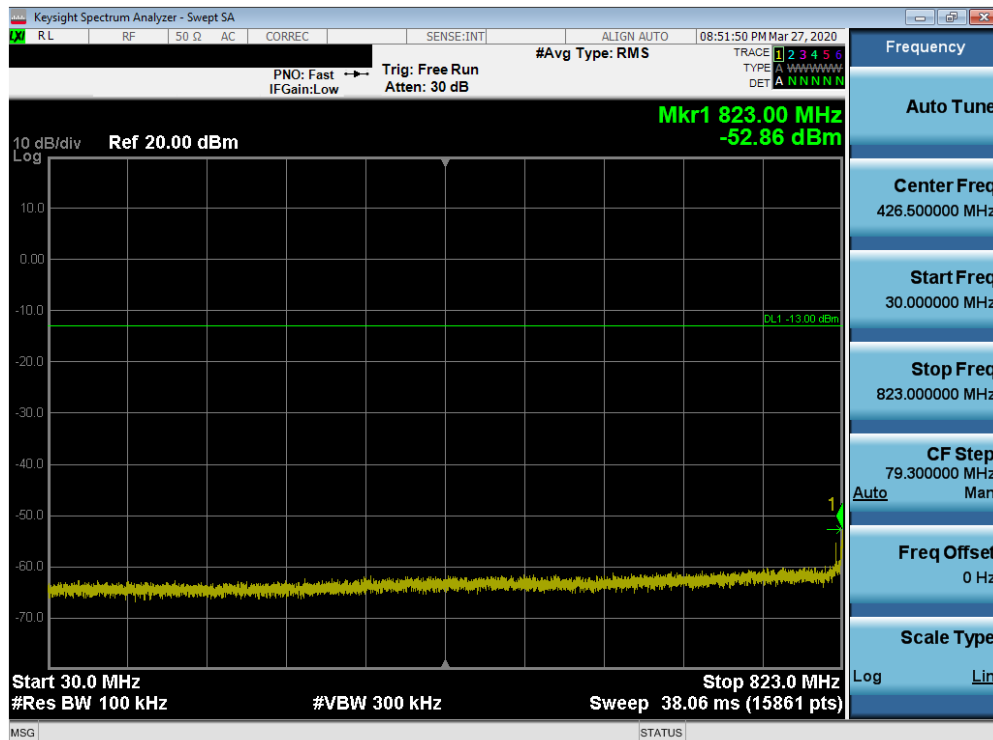


Plot 7-276. Conducted Spurious Plot (Band 26/5 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 160 of 420

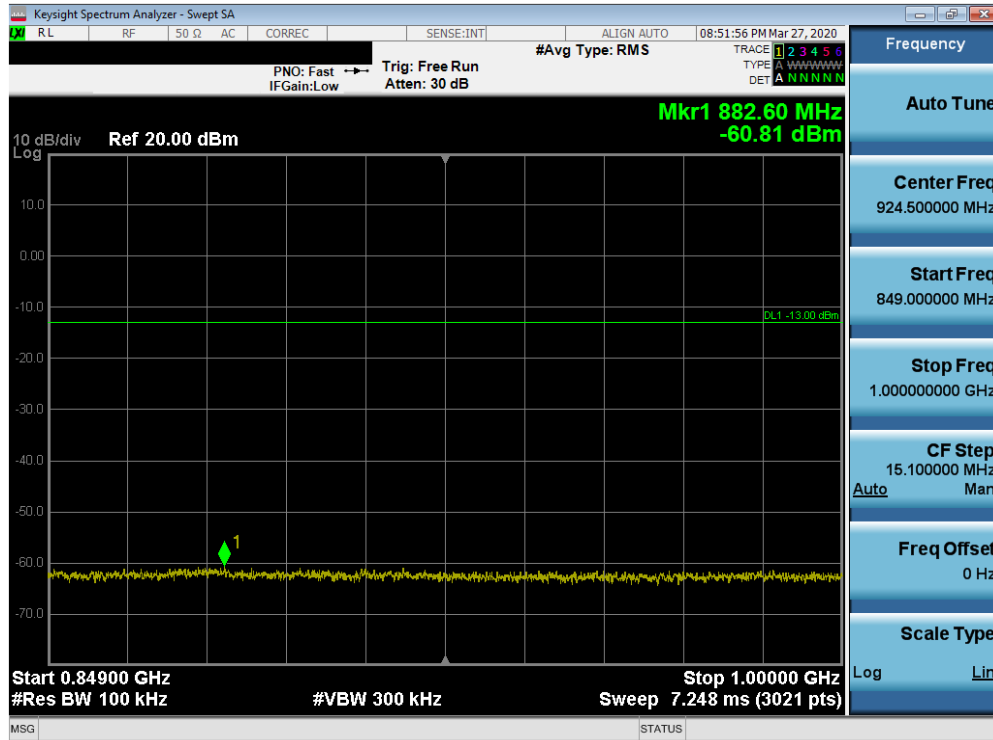


Plot 7-277. Conducted Spurious Plot (Band 26/5 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

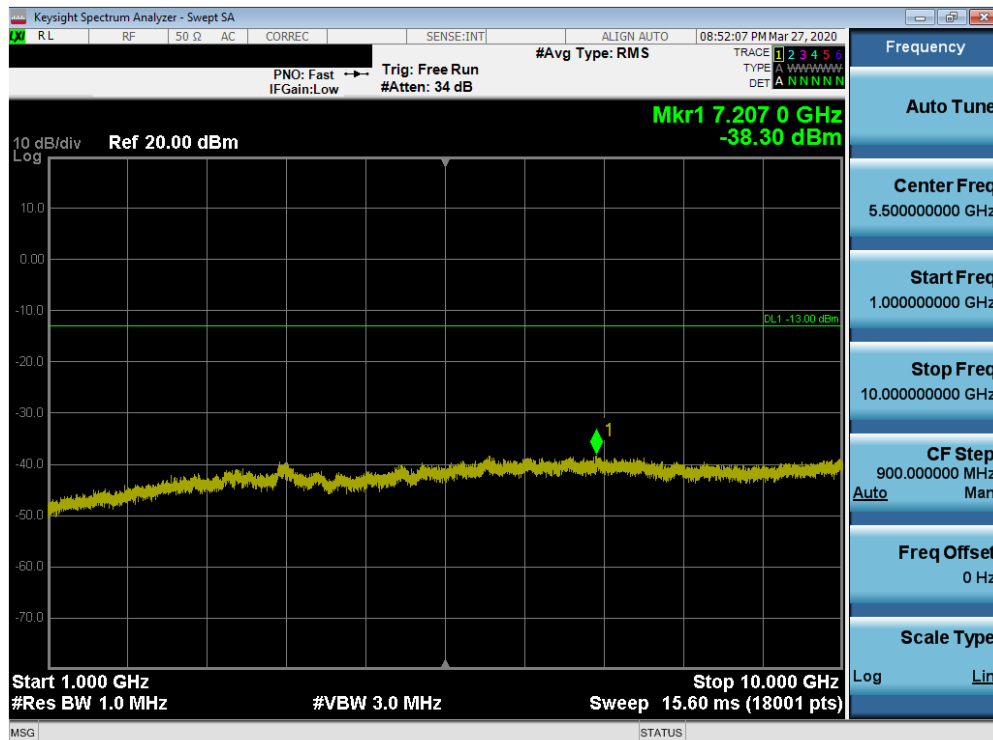


Plot 7-278. Conducted Spurious Plot (Band 26 - 15.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 161 of 420

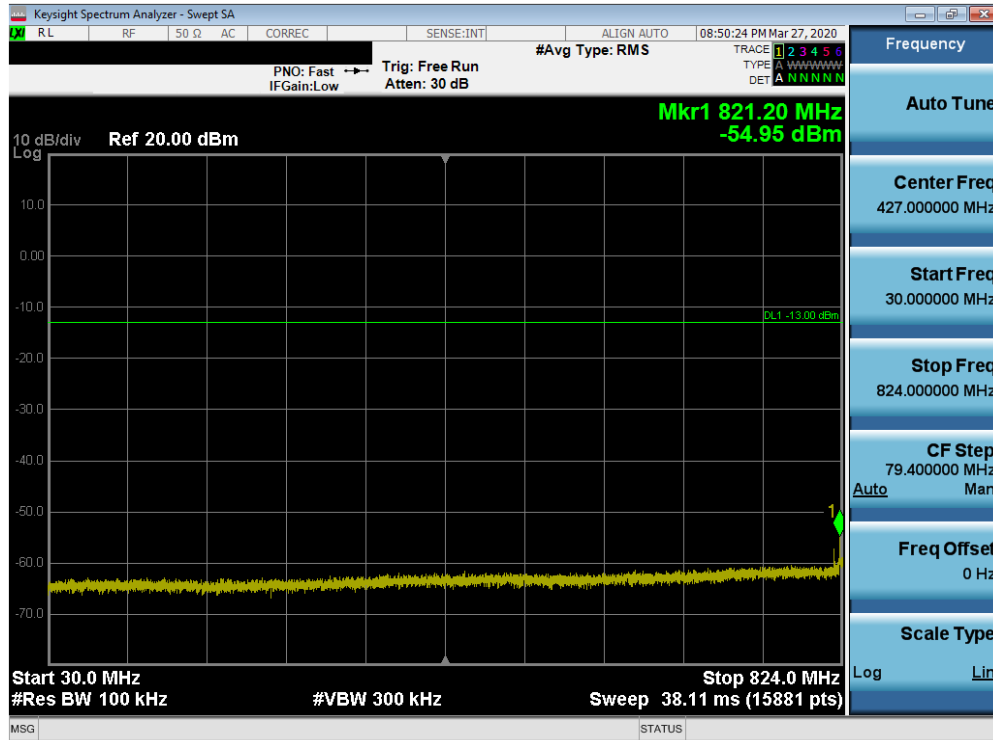


Plot 7-279. Conducted Spurious Plot (Band 26 - 15.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

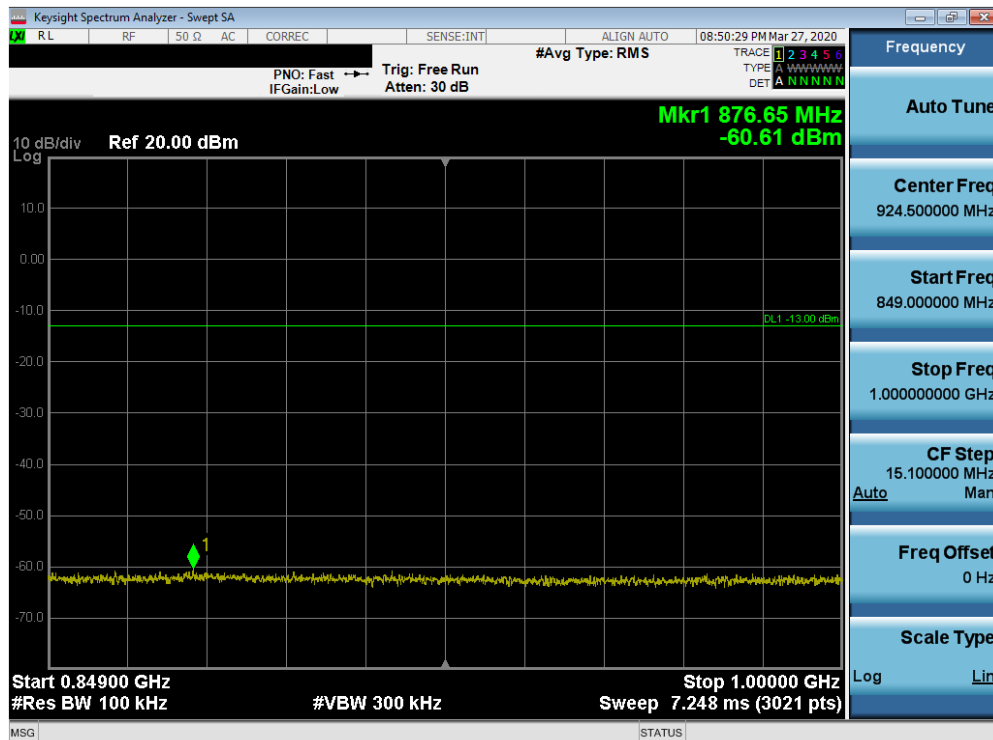


Plot 7-280. Conducted Spurious Plot (Band 26 - 15.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 162 of 420

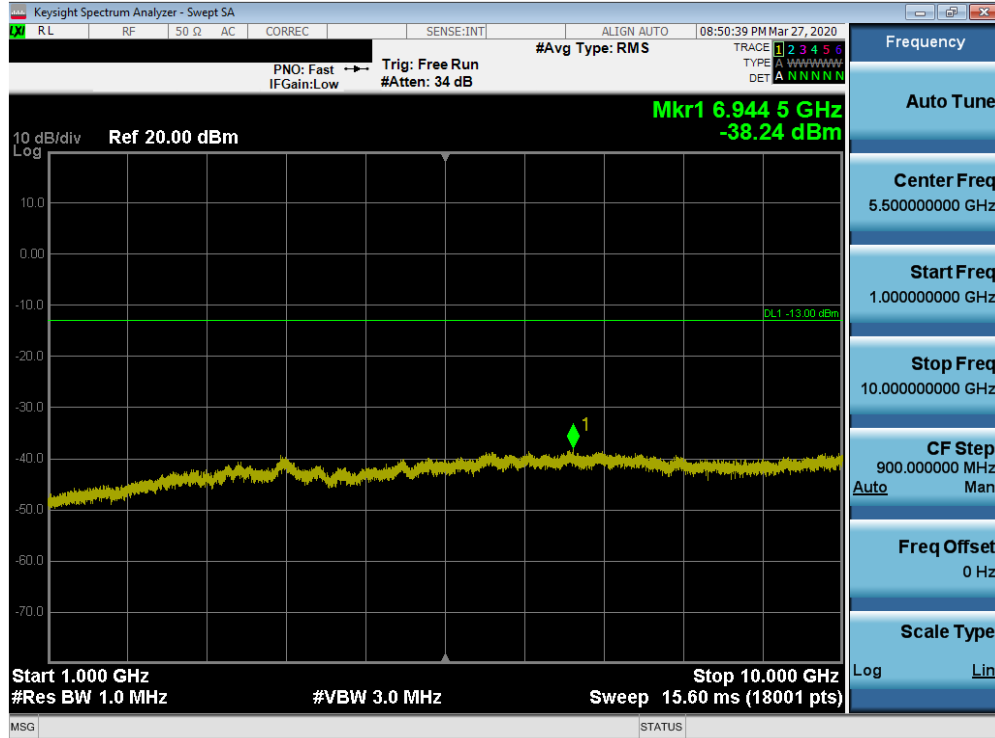


Plot 7-281. Conducted Spurious Plot (Band 26 - 15.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

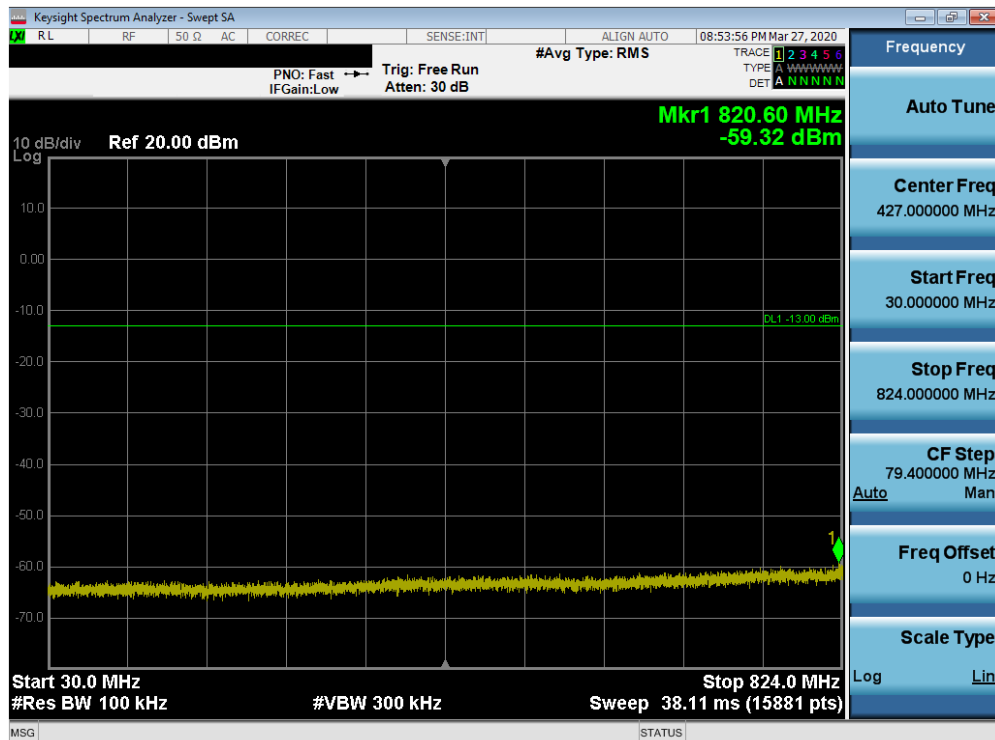


Plot 7-282. Conducted Spurious Plot (Band 26 - 15.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 163 of 420

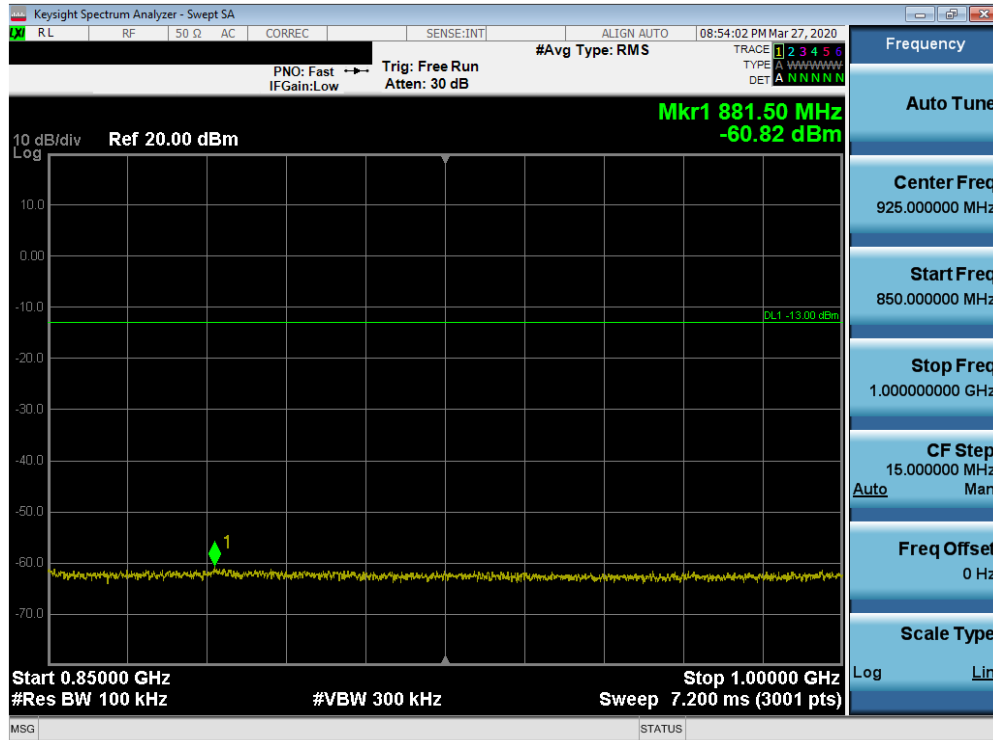


Plot 7-283. Conducted Spurious Plot (Band 26 - 15.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

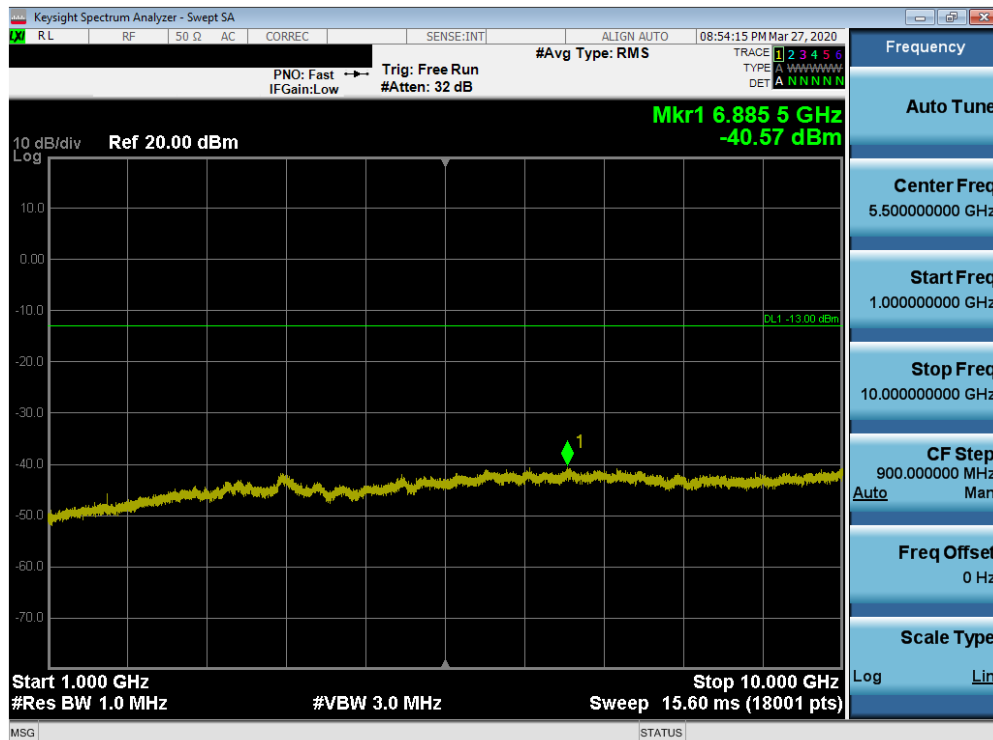


Plot 7-284. Conducted Spurious Plot (Band 26 - 15.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

FCC ID: A3LSMA716U	 MEASUREMENT REPORT (CERTIFICATION) 	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset Page 164 of 420



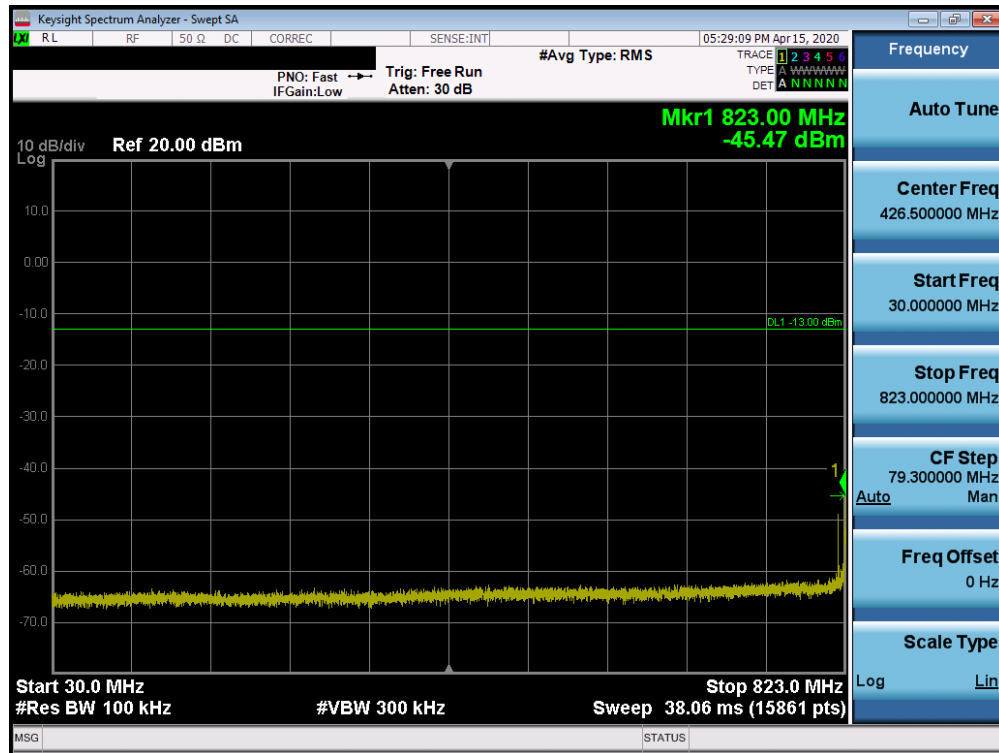
Plot 7-285. Conducted Spurious Plot (Band 26 - 15.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)



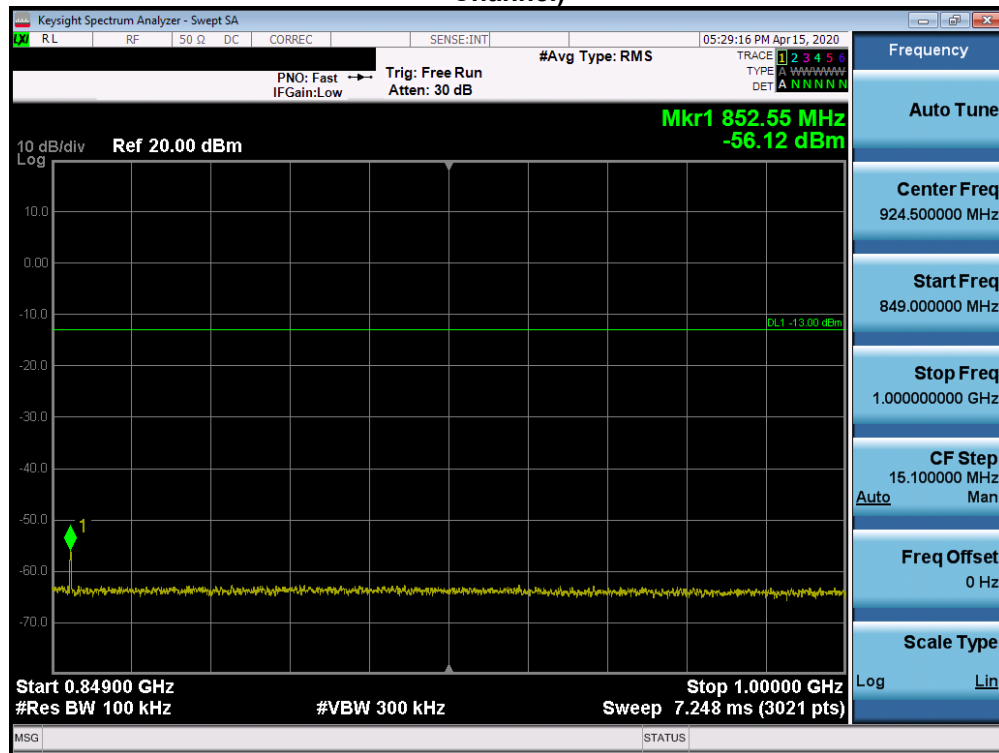
Plot 7-286. Conducted Spurious Plot (Band 26 - 15.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 165 of 420

NR Band n5

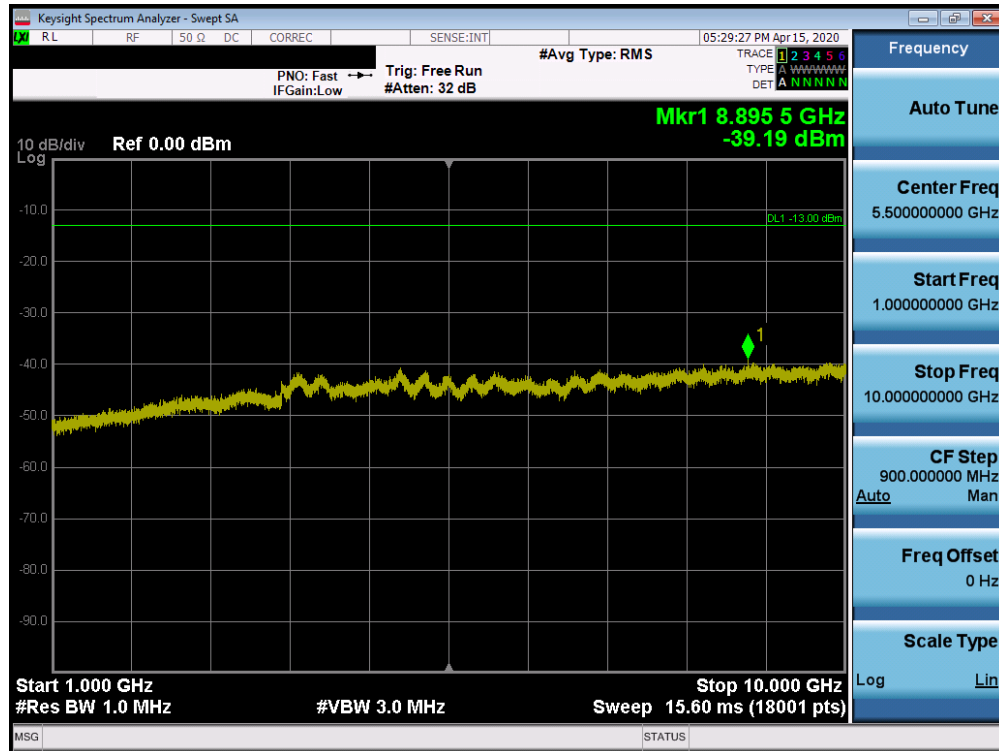


Plot 7-287. Conducted Spurious Plot (n5 - 20.0MHz DFT-s-OFDM BPSK - RB Size 1, RB Offset 0 - Low Channel)

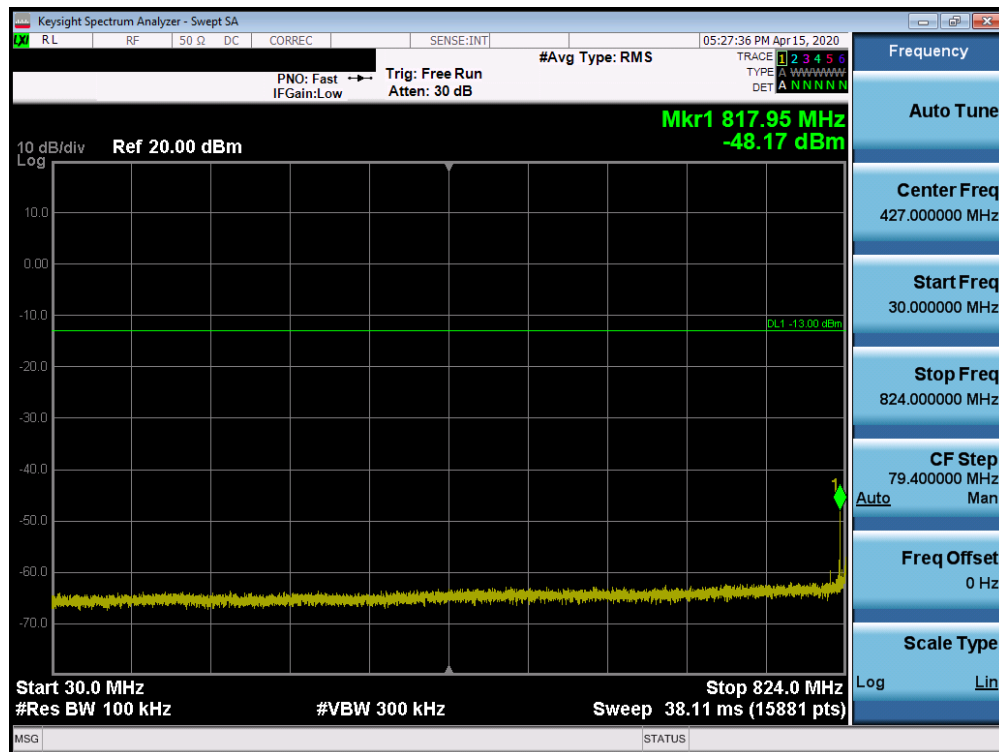


Plot 7-288. Conducted Spurious Plot (n5 - 20.0MHz DFT-s-OFDM BPSK - RB Size 1, RB Offset 0 - Low Channel)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 166 of 420

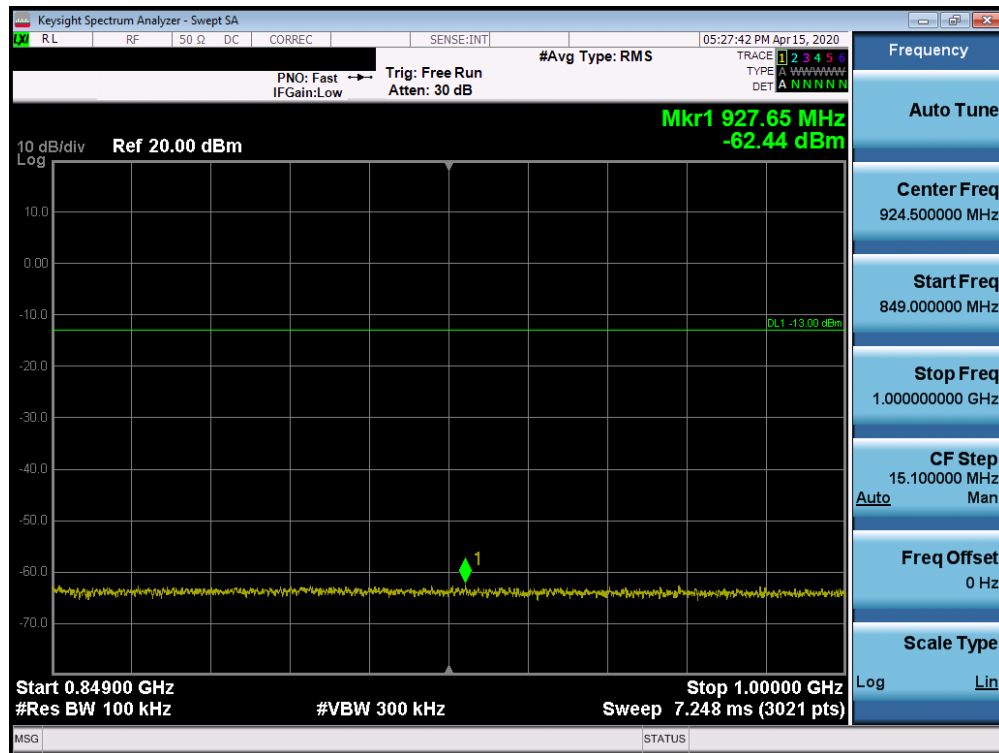


Plot 7-289. Conducted Spurious Plot (n5 - 20.0MHz DFT-s-OFDM BPSK - RB Size 1, RB Offset 0 - Low Channel)

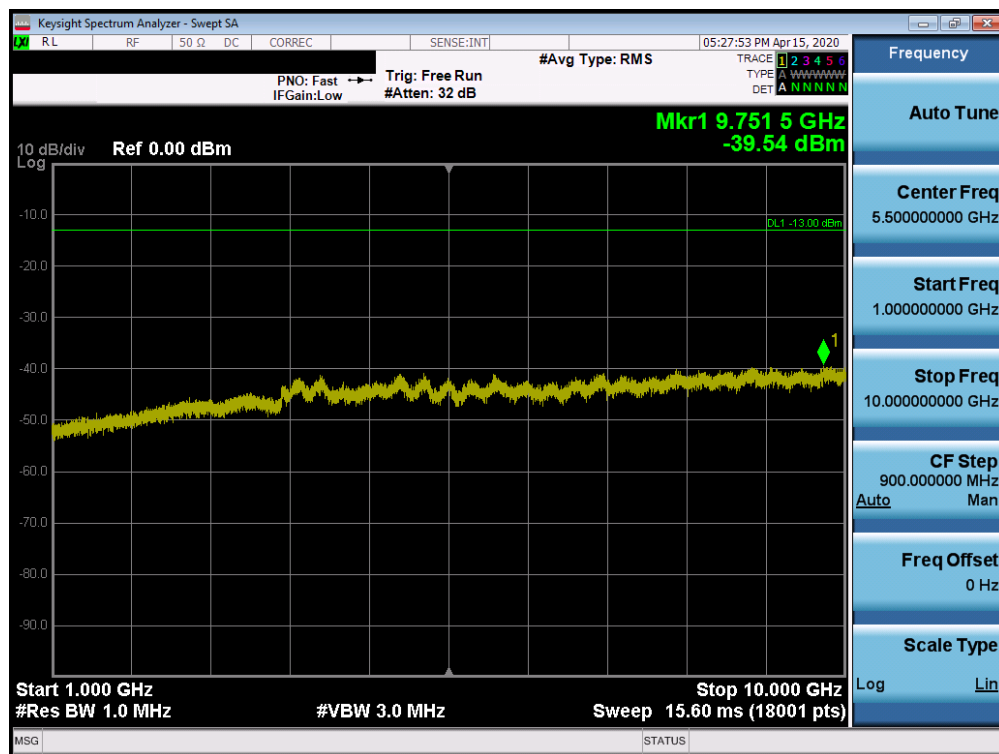


Plot 7-290. Conducted Spurious Plot (n5 - 20.0MHz DFT-s-OFDM BPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 167 of 420

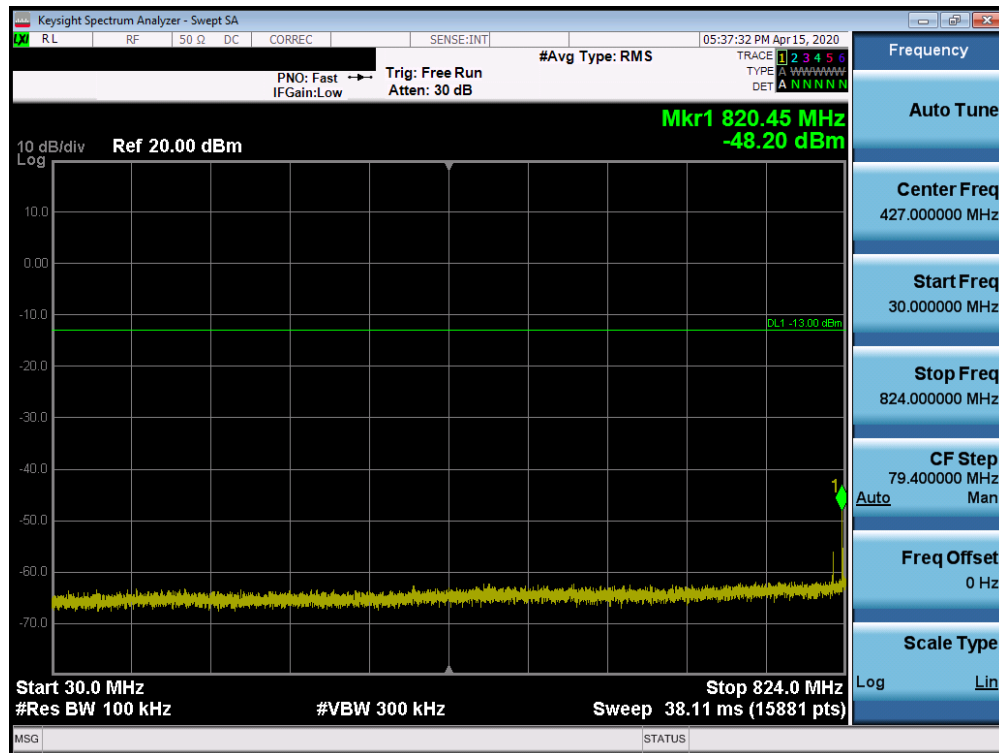


Plot 7-291. Conducted Spurious Plot (n5 - 20.0MHz DFT-s-OFDM BPSK - RB Size 1, RB Offset 0 - Mid Channel)

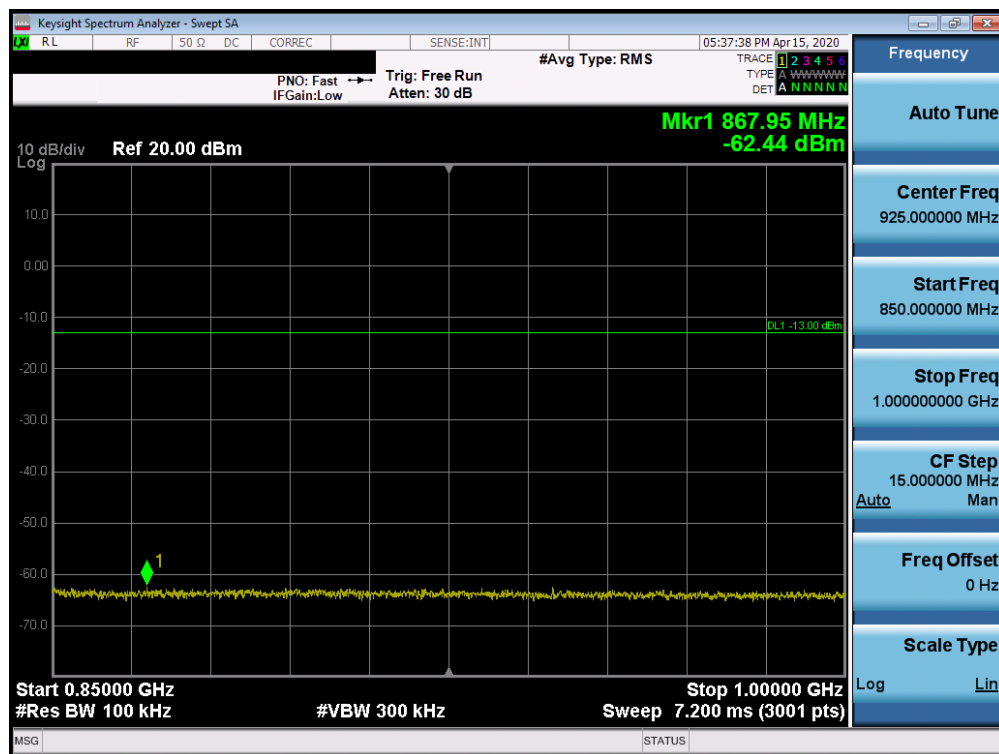


Plot 7-292. Conducted Spurious Plot (n5 - 20.0MHz DFT-s-OFDM BPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 168 of 420

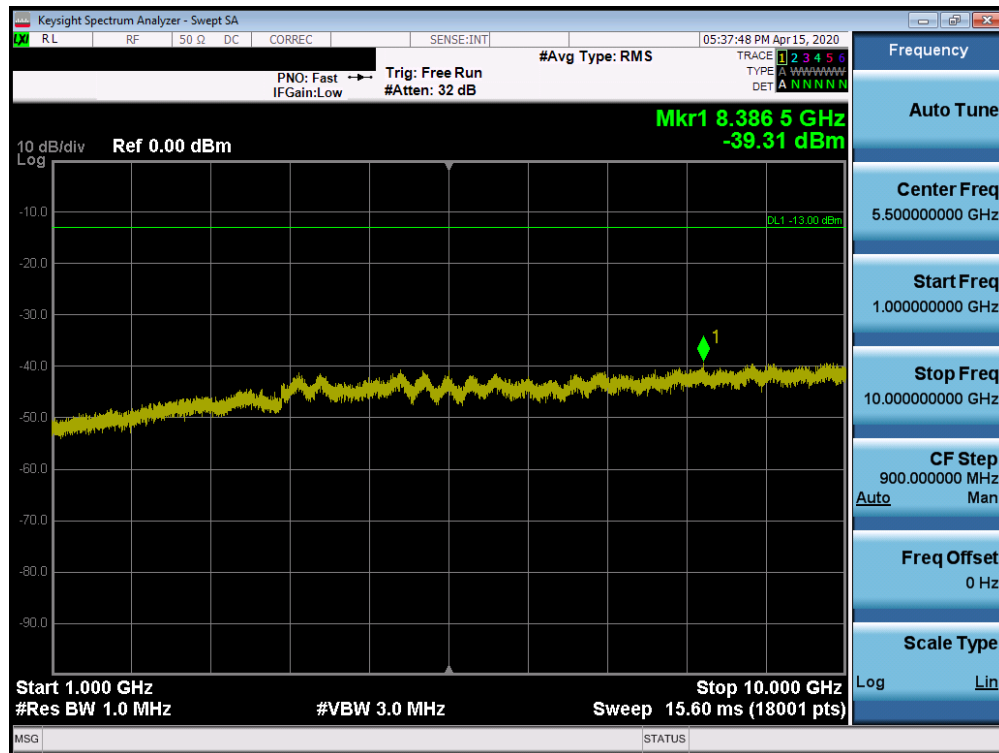


Plot 7-293. Conducted Spurious Plot (n5 - 20.0MHz DFT-s-OFDM BPSK - RB Size 1, RB Offset 0 - High Channel)



Plot 7-294. Conducted Spurious Plot (n5 - 20.0MHz DFT-s-OFDM BPSK - RB Size 1, RB Offset 0 - High Channel)

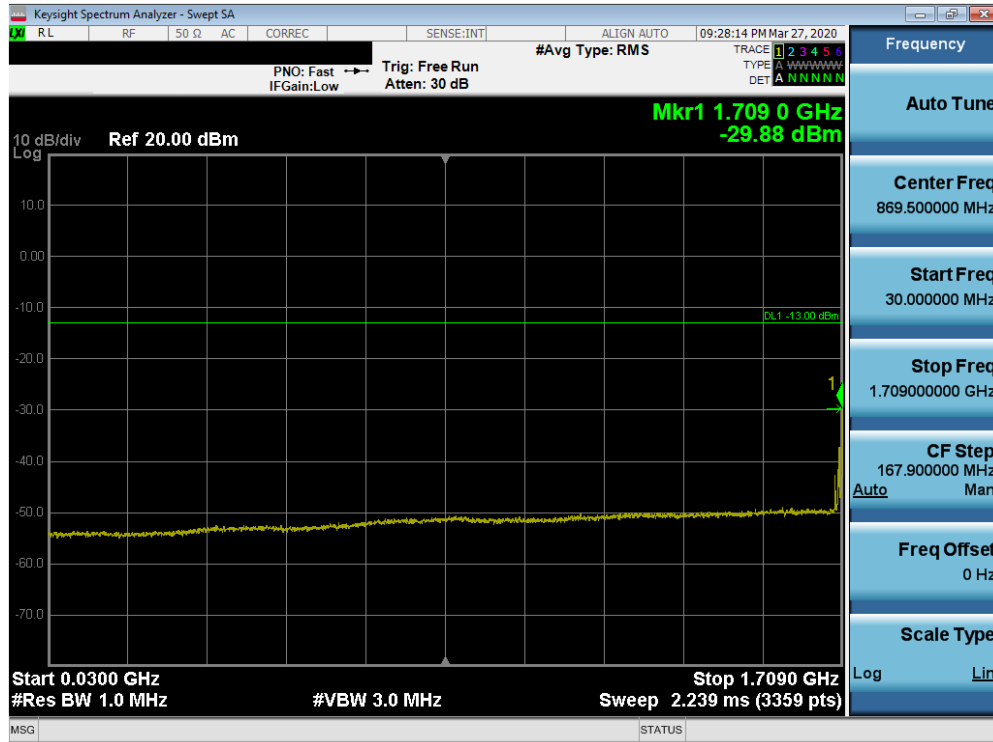
FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 169 of 420



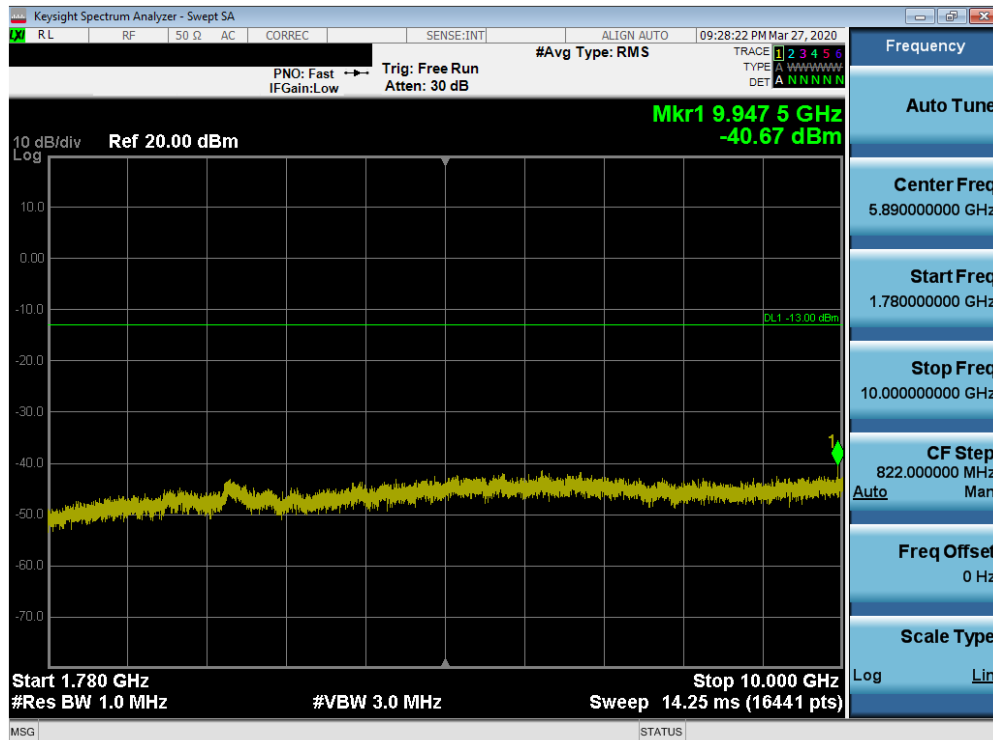
Plot 7-295. Conducted Spurious Plot (n5 - 20.0MHz DFT-s-OFDM BPSK - RB Size 1, RB Offset 0 - High Channel)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 170 of 420

Band 66/4

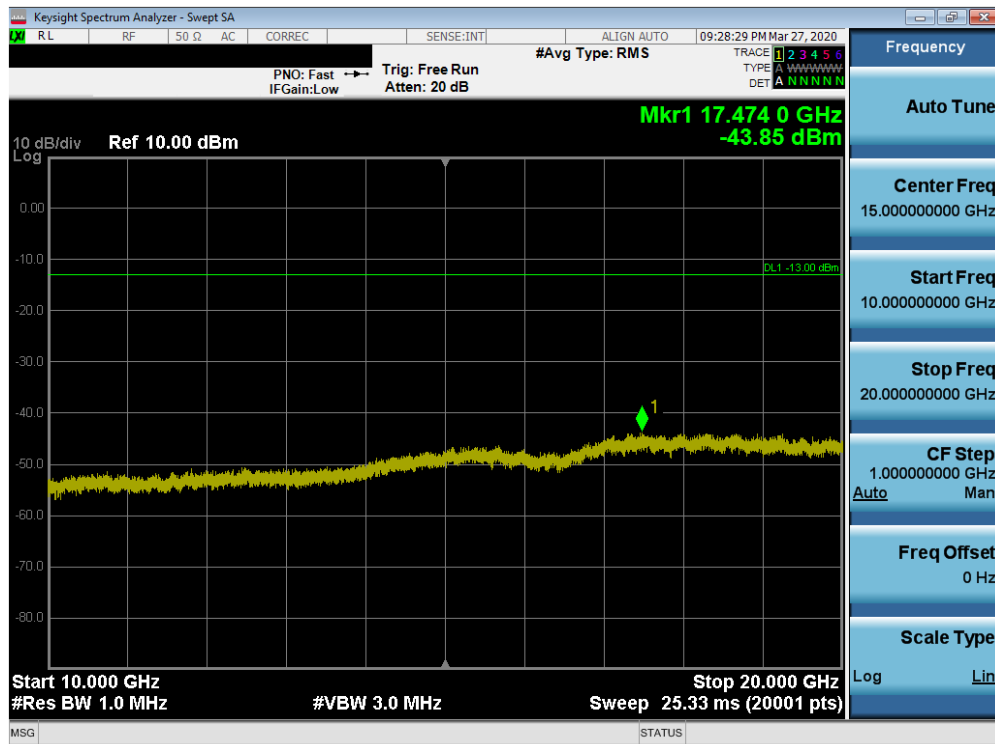


Plot 7-296. Conducted Spurious Plot (Band 66/4 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

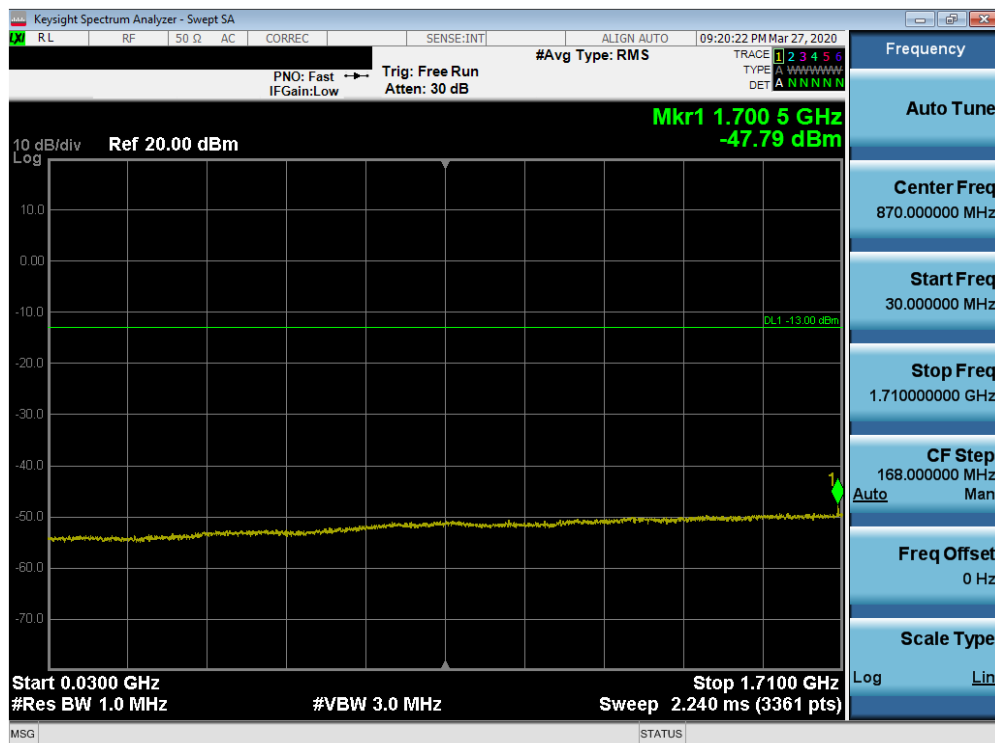


Plot 7-297. Conducted Spurious Plot (Band 66/4 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 171 of 420

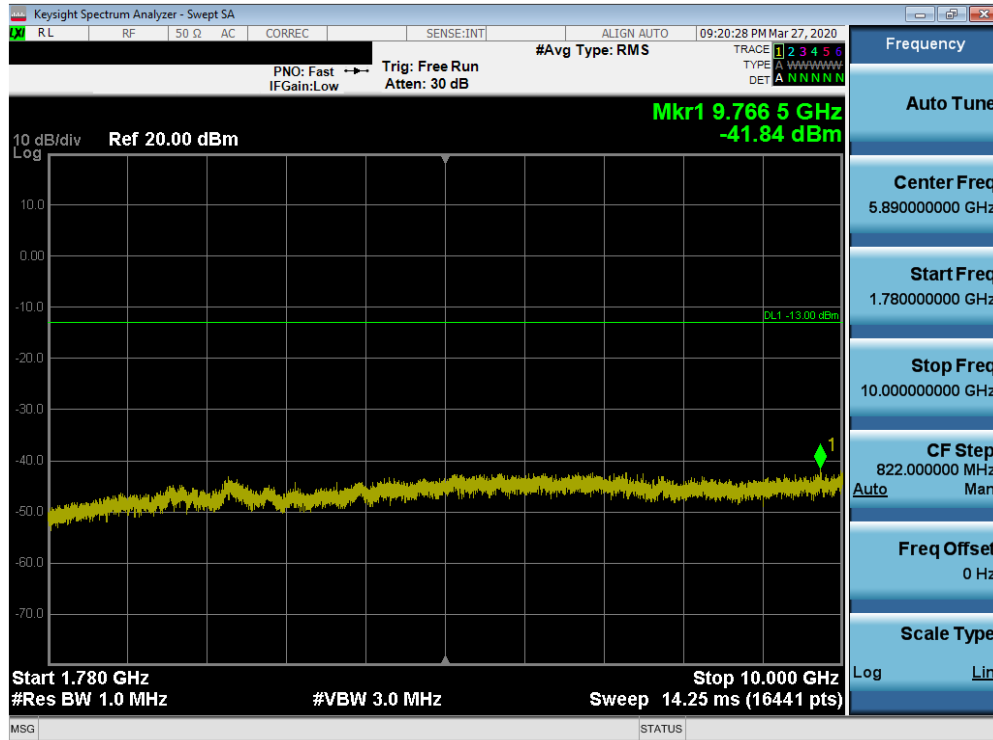


Plot 7-298. Conducted Spurious Plot (Band 66/4 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

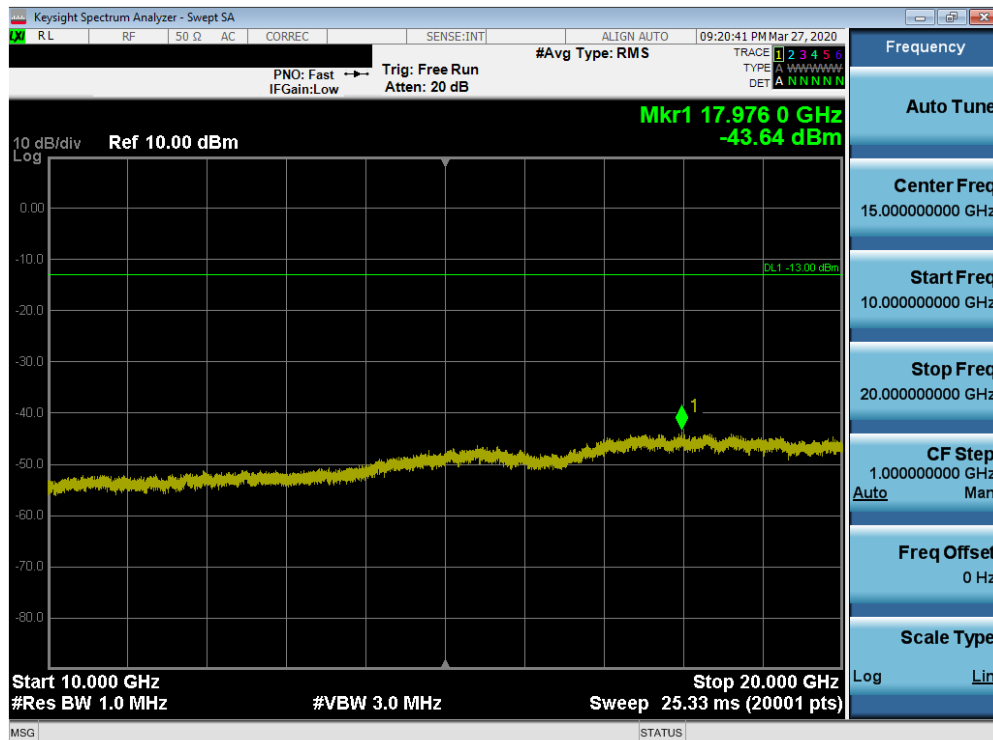


Plot 7-299. Conducted Spurious Plot (Band 66/4 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 172 of 420

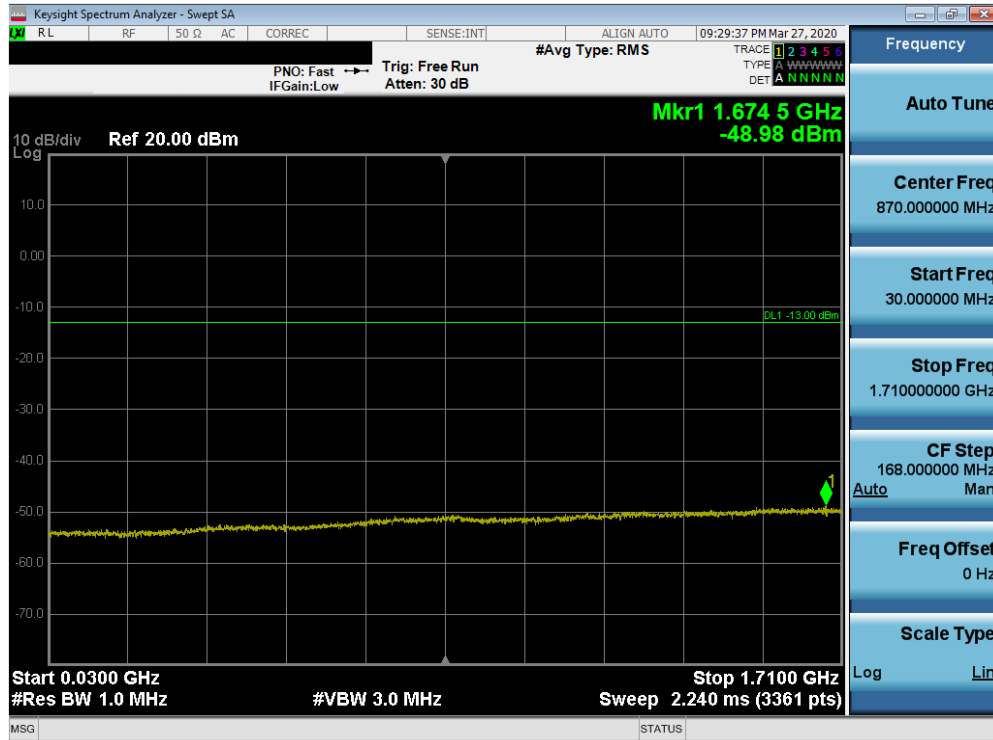


Plot 7-300. Conducted Spurious Plot (Band 66/4 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

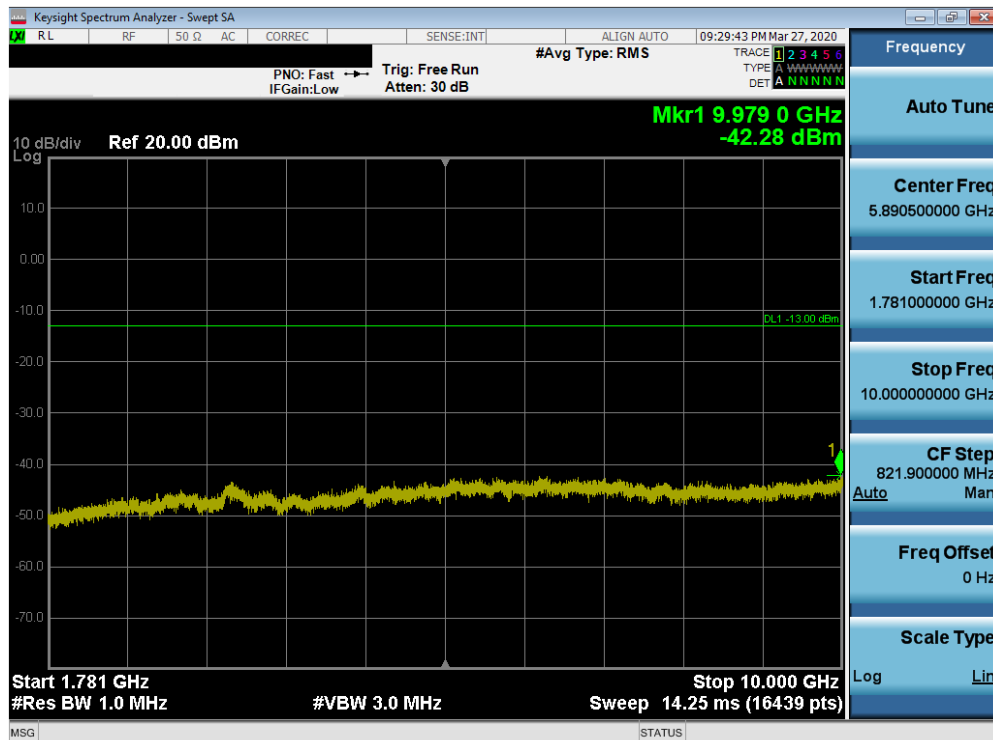


Plot 7-301. Conducted Spurious Plot (Band 66/4 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 173 of 420

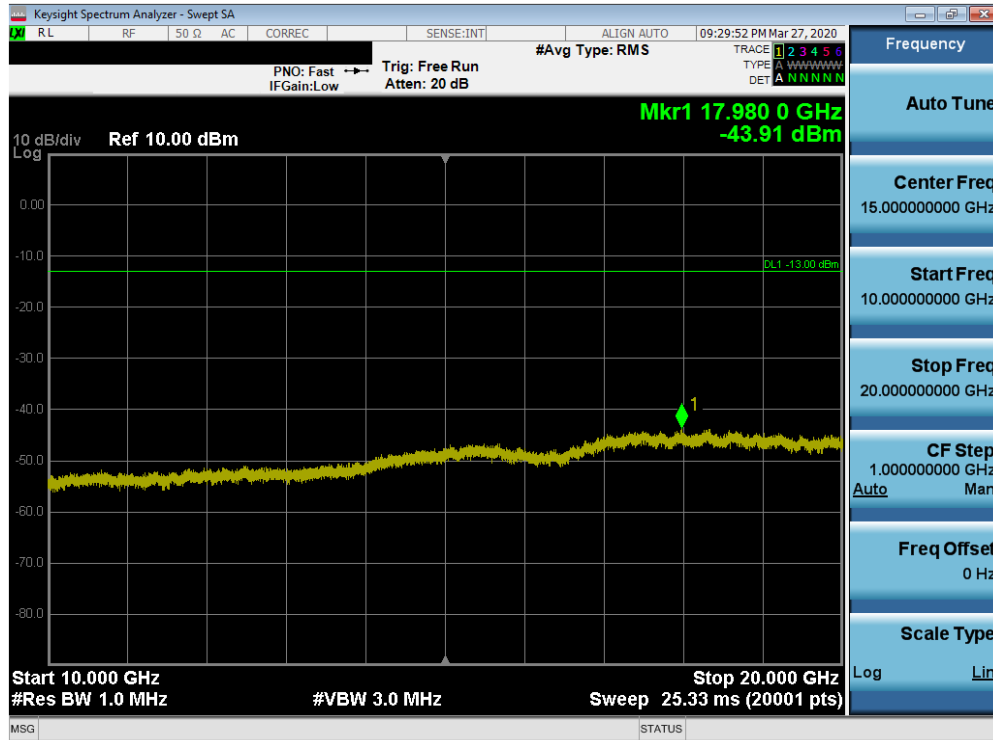


Plot 7-302. Conducted Spurious Plot (Band 66/4 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)



Plot 7-303. Conducted Spurious Plot (Band 66/4 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

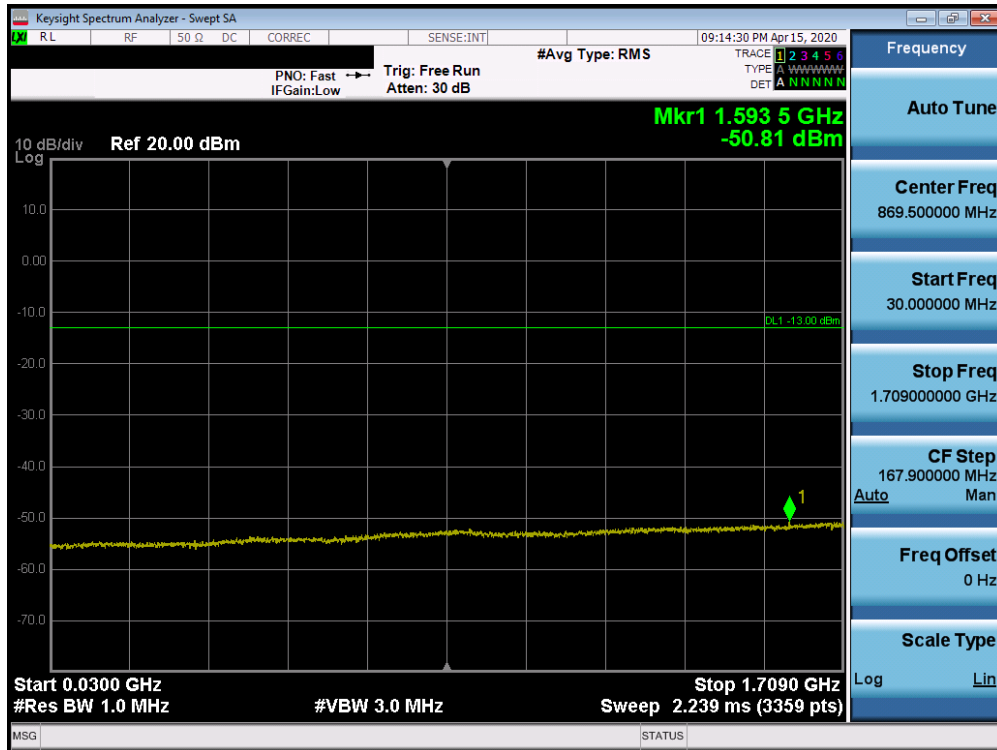
FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 174 of 420



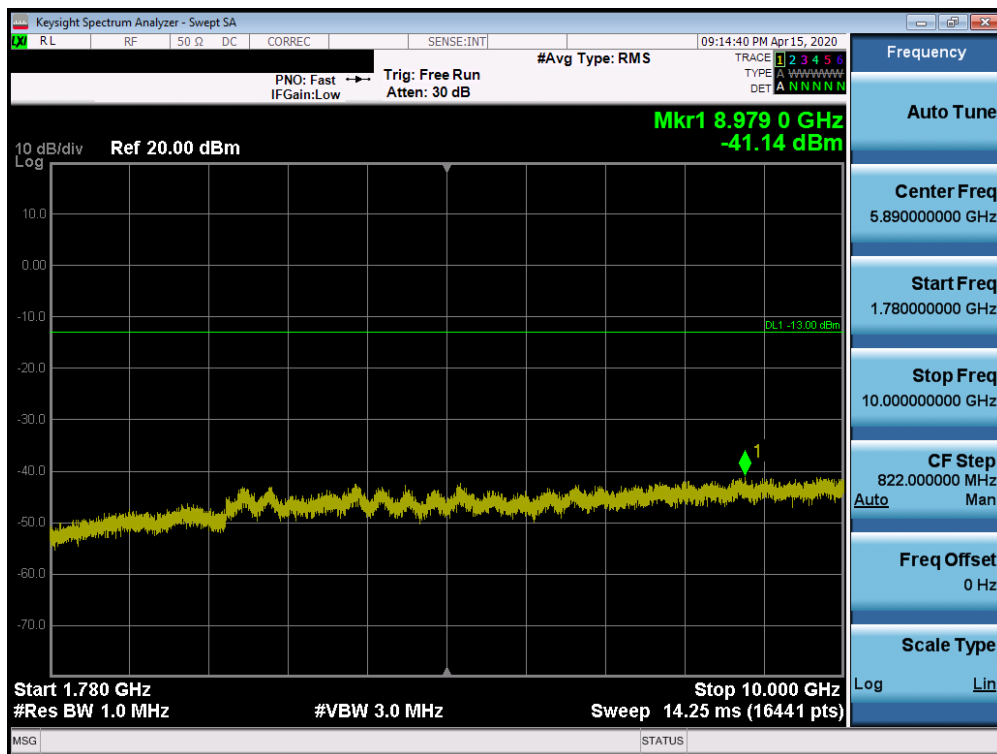
Plot 7-304. Conducted Spurious Plot (Band 66/4 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 175 of 420

NR Band n66

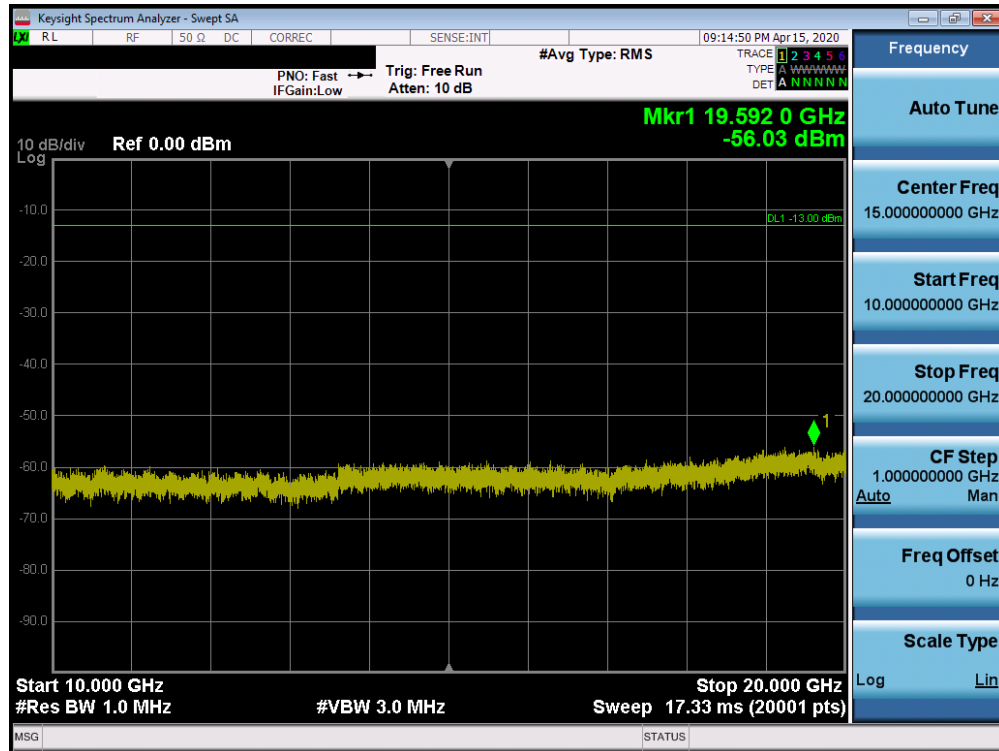


Plot 7-305. Conducted Spurious Plot (n66 - 20MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - Low Channel)

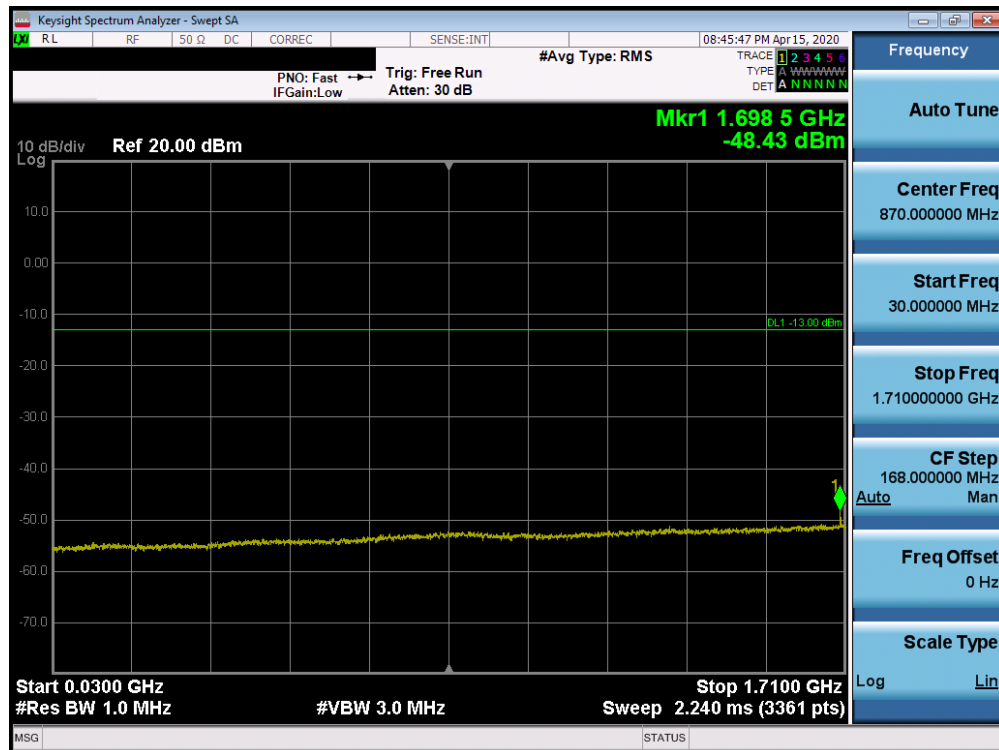


Plot 7-306. Conducted Spurious Plot (n66 - 20MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - Low Channel)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 176 of 420

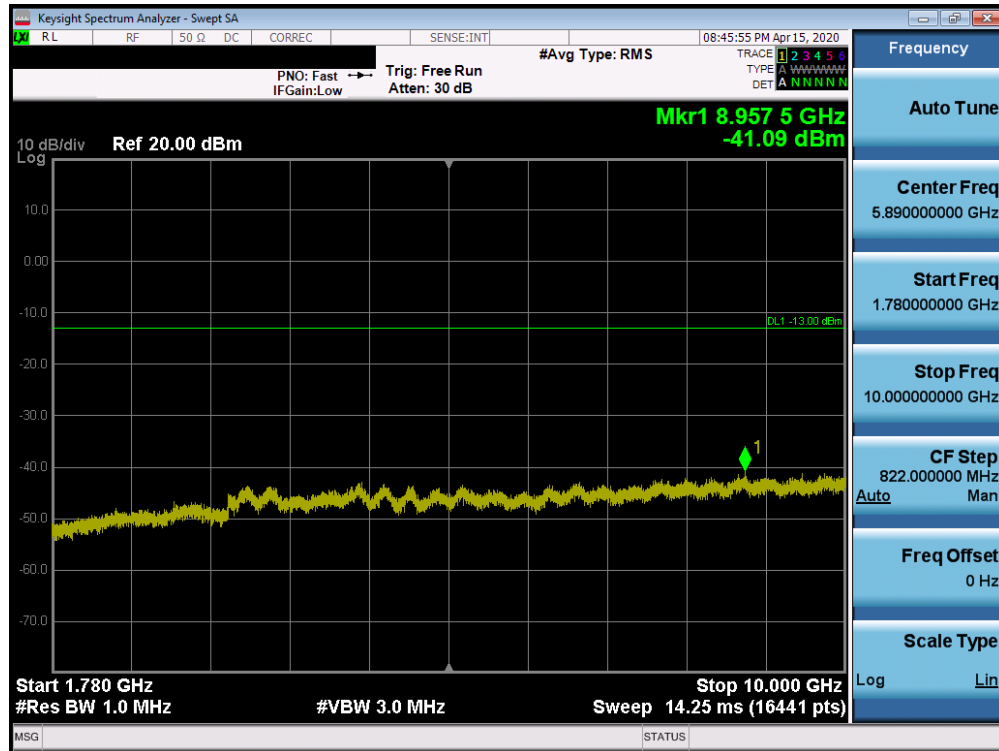


Plot 7-307. Conducted Spurious Plot (n66 - 20MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - Low Channel)

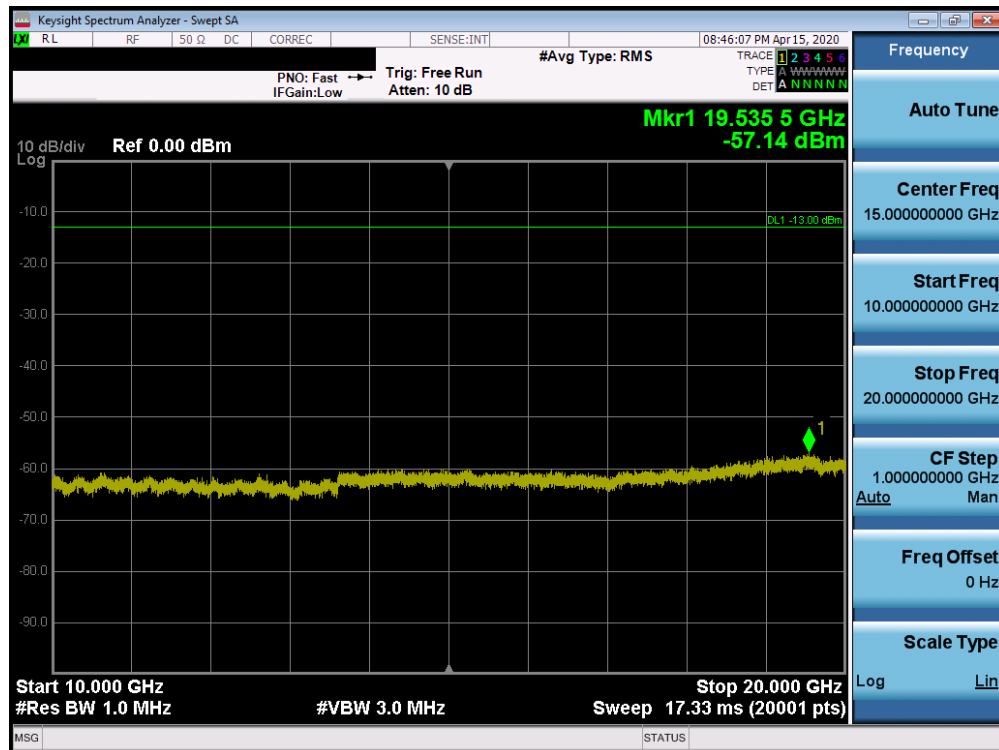


Plot 7-308. Conducted Spurious Plot (n66 - 20MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - Mid Channel)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 177 of 420

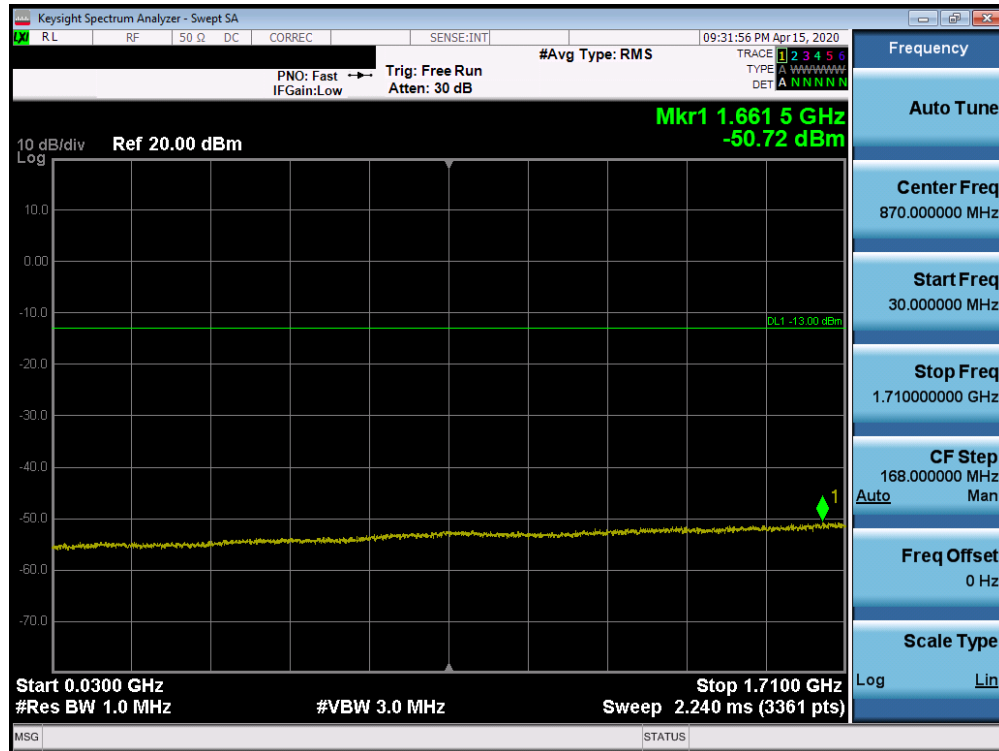


Plot 7-309. Conducted Spurious Plot (n66 - 20MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - Mid Channel)

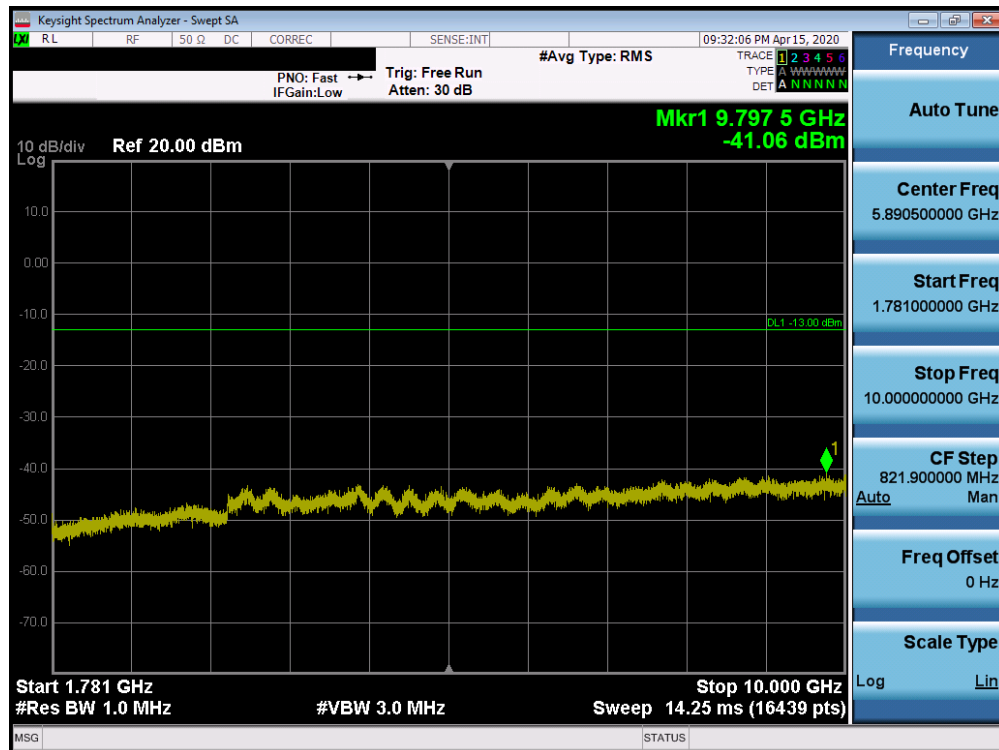


Plot 7-310. Conducted Spurious Plot (n66 - 20MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - Mid Channel)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 178 of 420

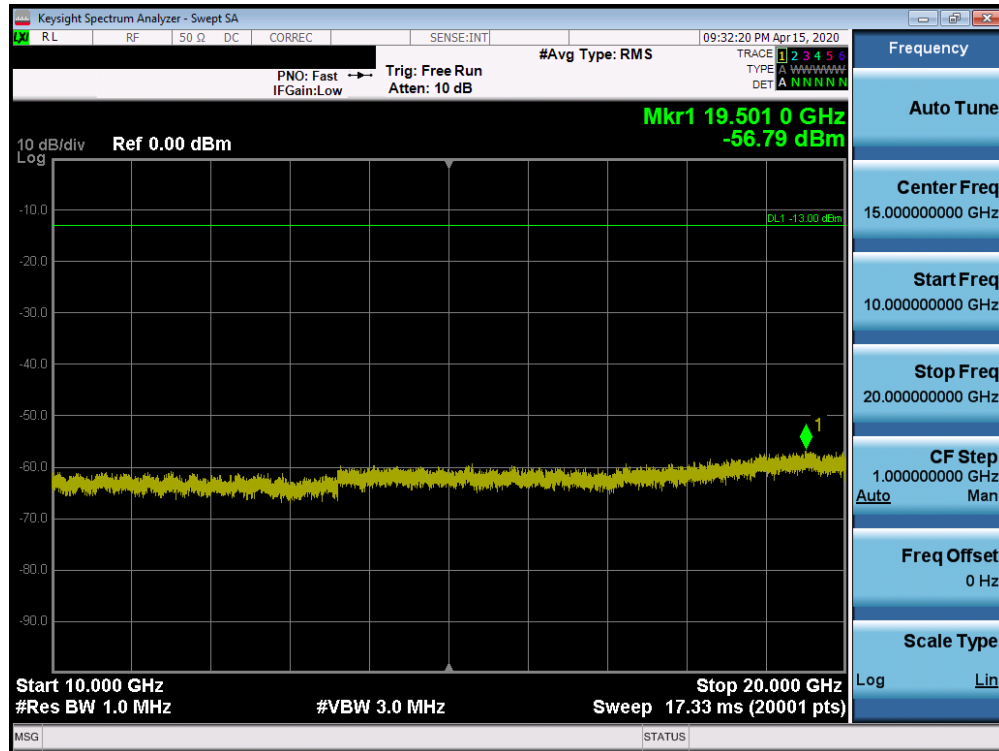


Plot 7-311. Conducted Spurious Plot (n66 - 20MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - High Channel)



Plot 7-312. Conducted Spurious Plot (n66 - 20MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - High Channel)

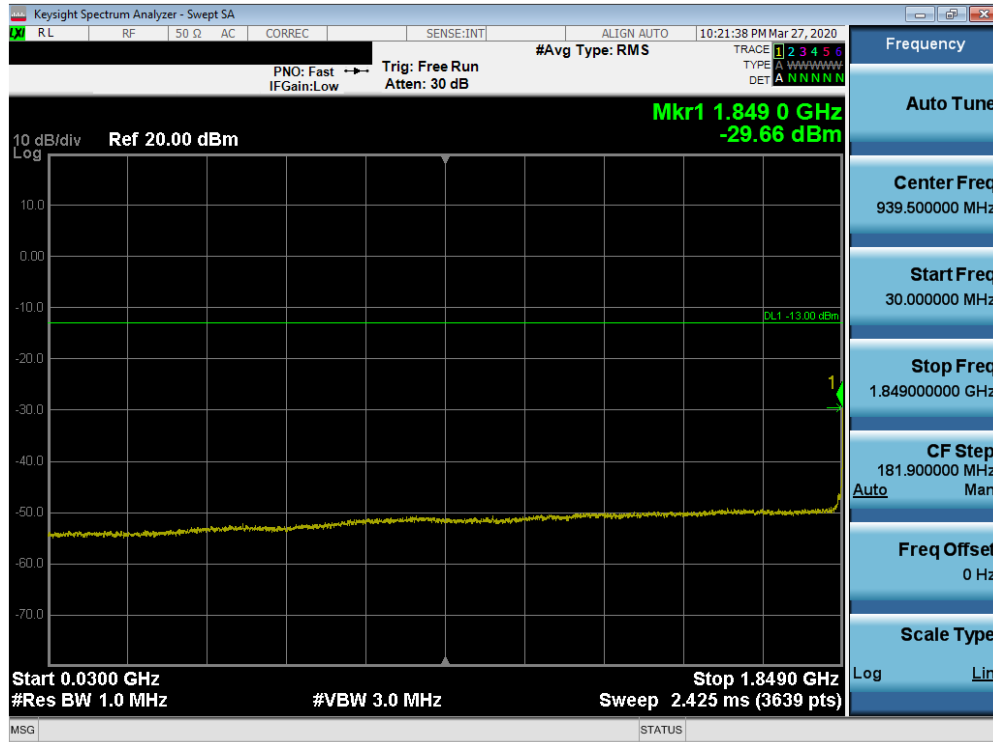
FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 179 of 420



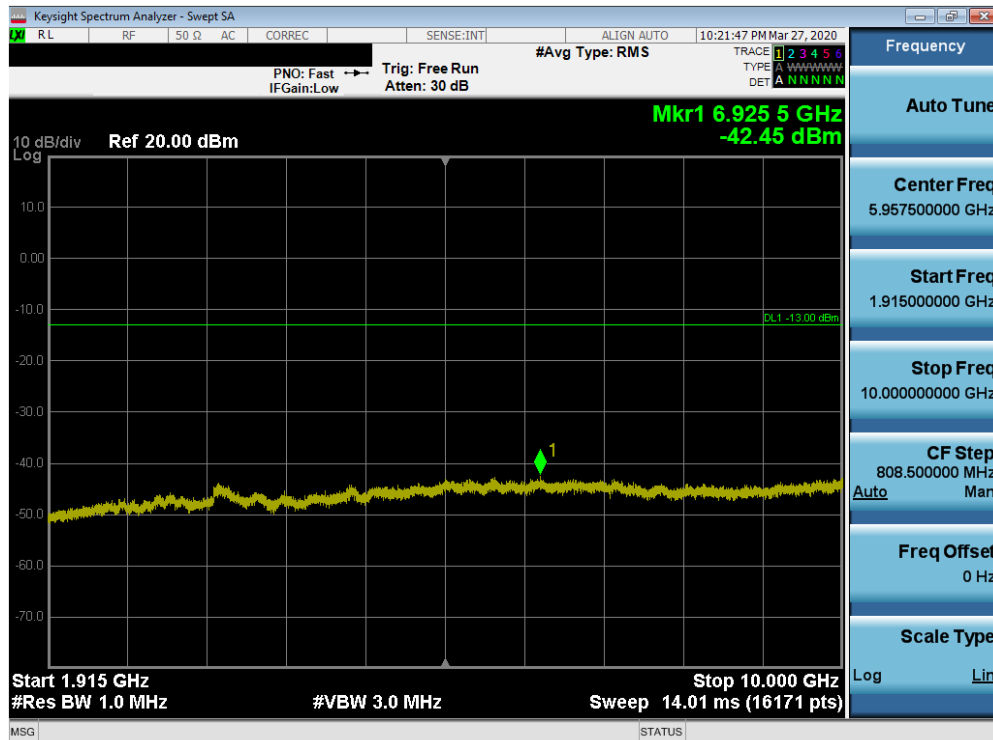
Plot 7-313. Conducted Spurious Plot (n66 - 20MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - High Channel)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 180 of 420

Band 25/2

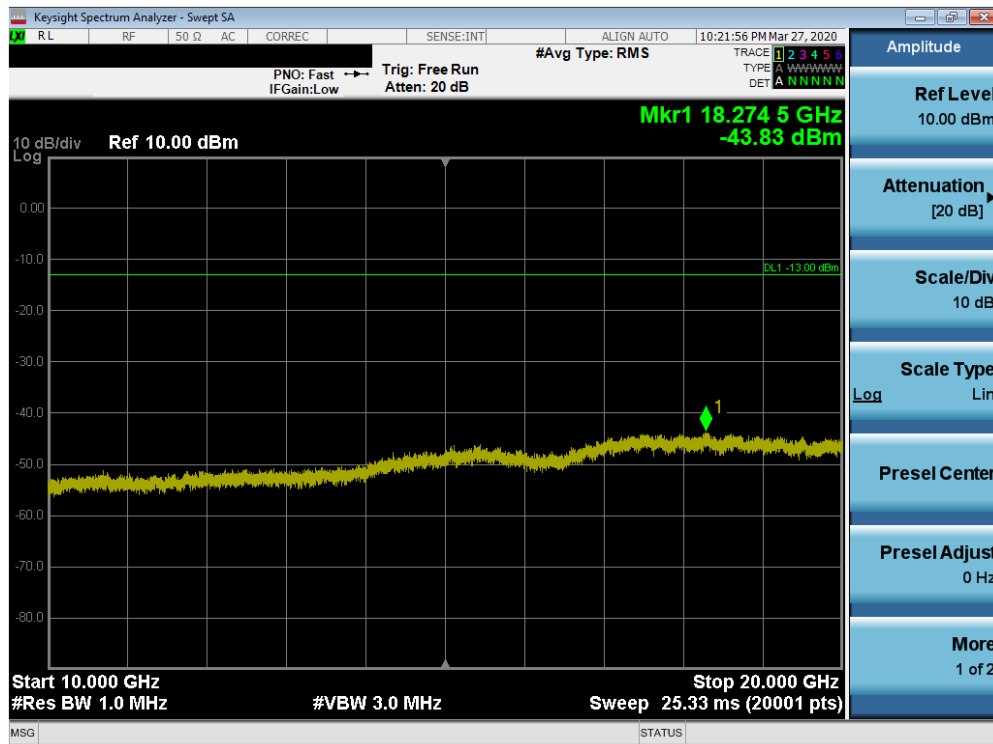


Plot 7-314. Conducted Spurious Plot (Band 25/2 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

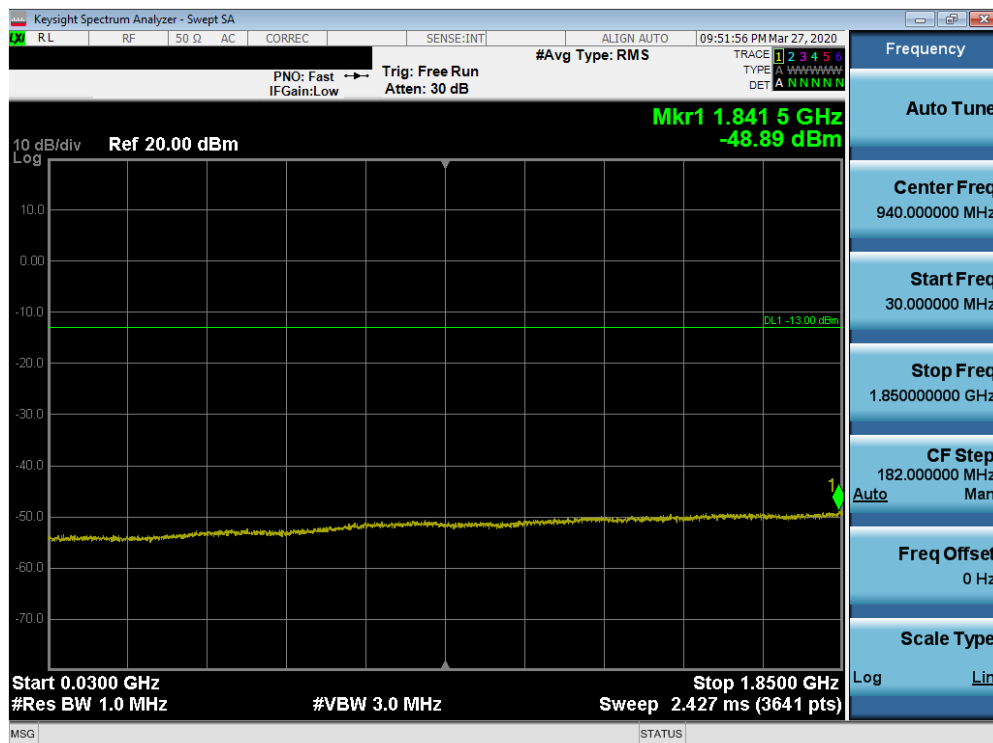


Plot 7-315. Conducted Spurious Plot (Band 25/2 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 181 of 420

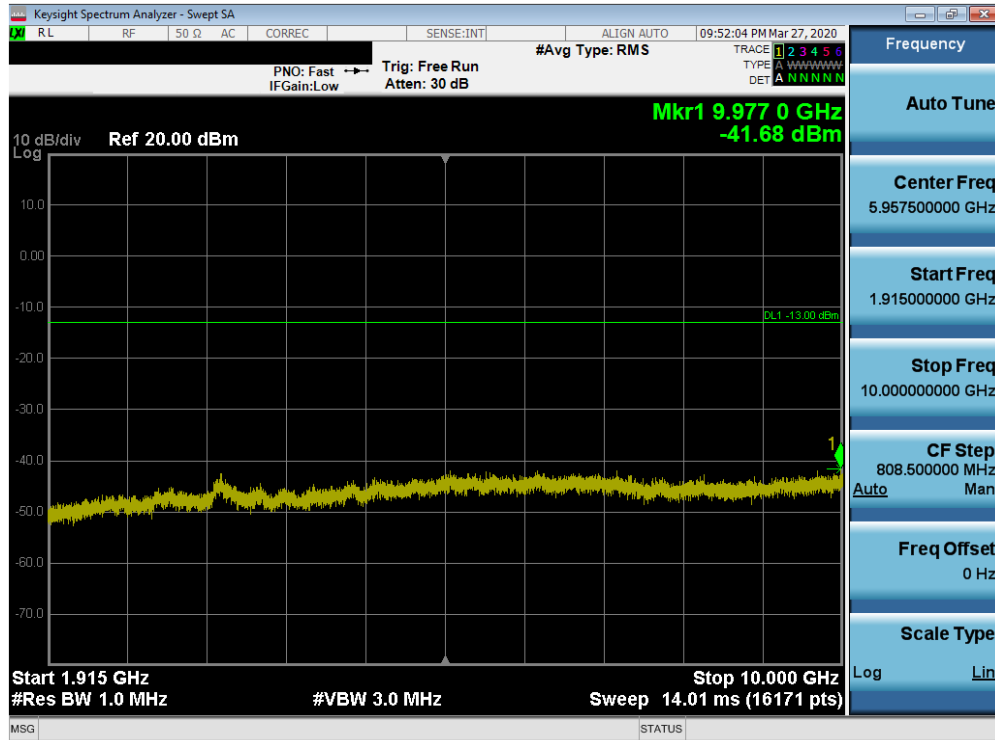


Plot 7-316. Conducted Spurious Plot (Band 25/2 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

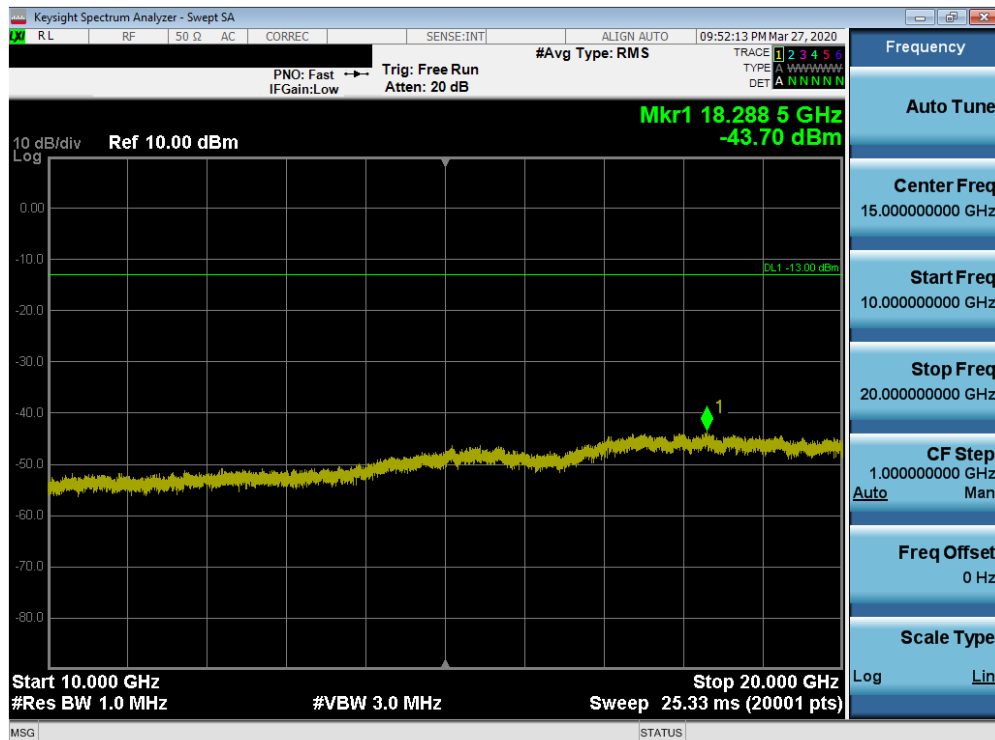


Plot 7-317. Conducted Spurious Plot (Band 25/2 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 182 of 420

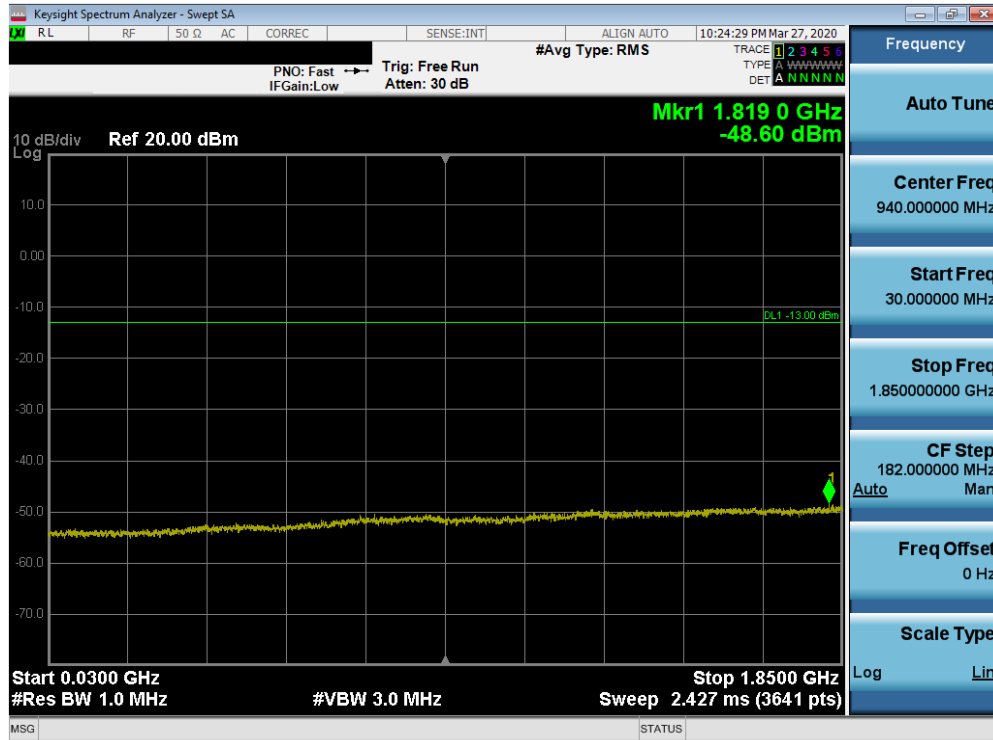


Plot 7-318. Conducted Spurious Plot (Band 25/2 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

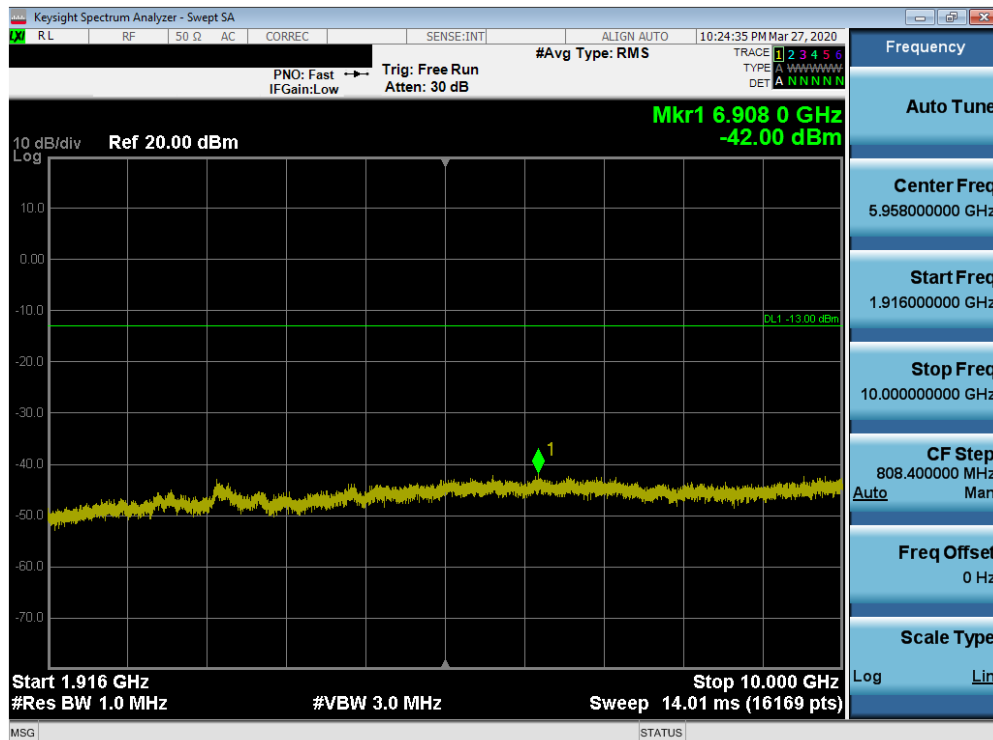


Plot 7-319. Conducted Spurious Plot (Band 25/2 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 183 of 420

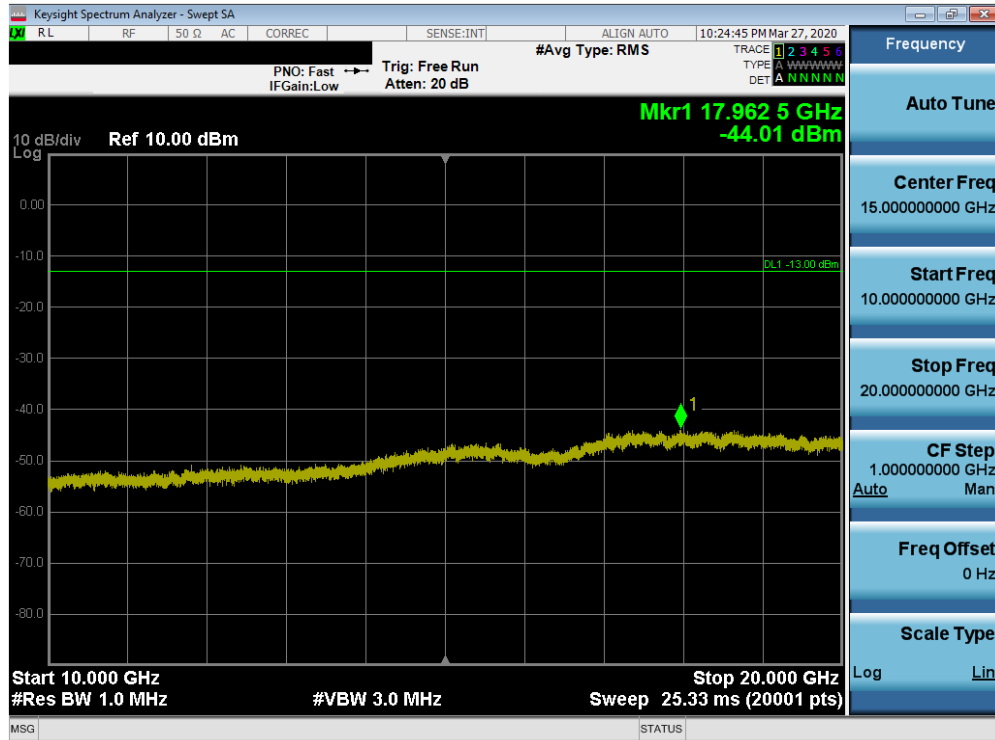


Plot 7-320. Conducted Spurious Plot (Band 25/2 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)



Plot 7-321. Conducted Spurious Plot (Band 25/2 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

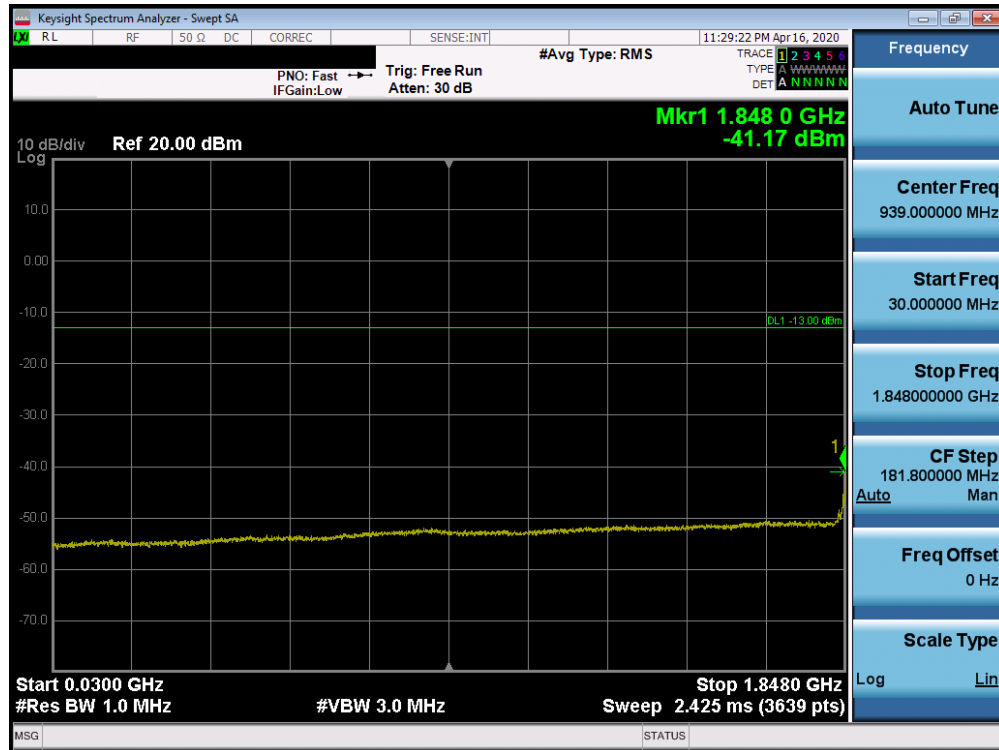
FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 184 of 420



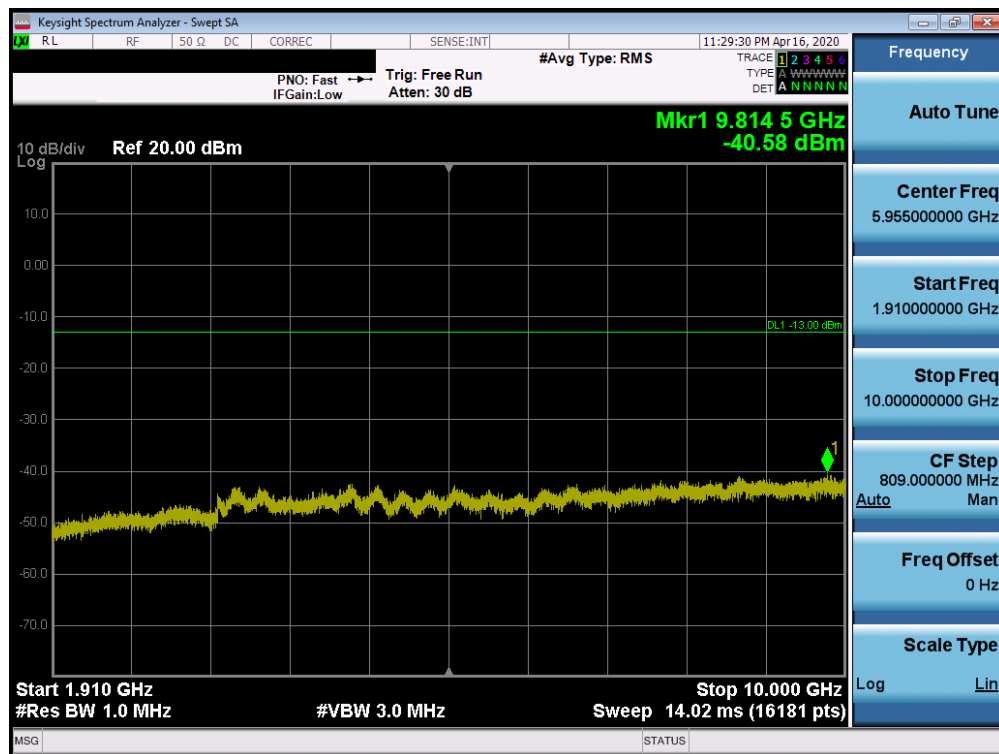
Plot 7-322. Conducted Spurious Plot (Band 25/2 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 185 of 420

NR Band n2

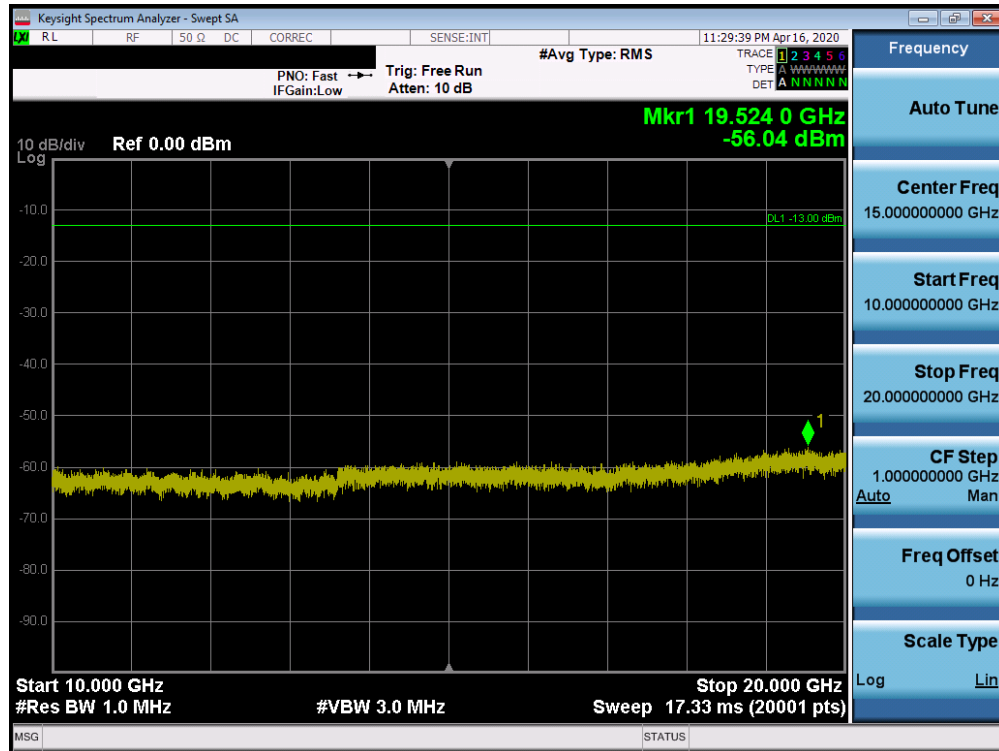


Plot 7-323. Conducted Spurious Plot (n2 - 20MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - Low Channel)

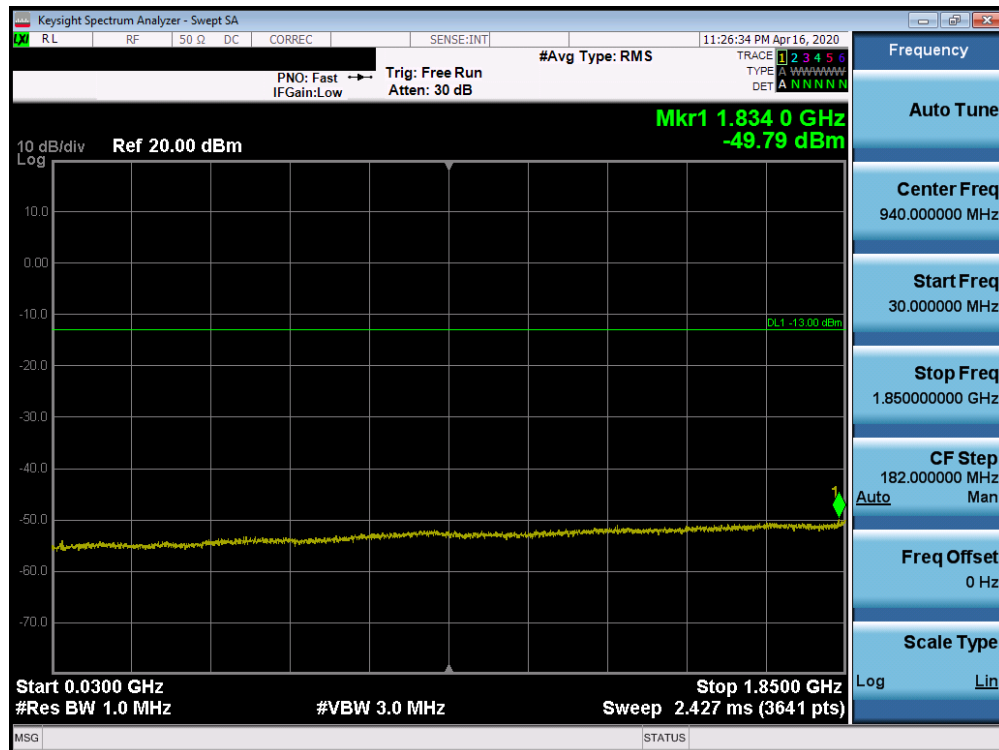


Plot 7-324. Conducted Spurious Plot (n2 - 20MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - Low Channel)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 186 of 420



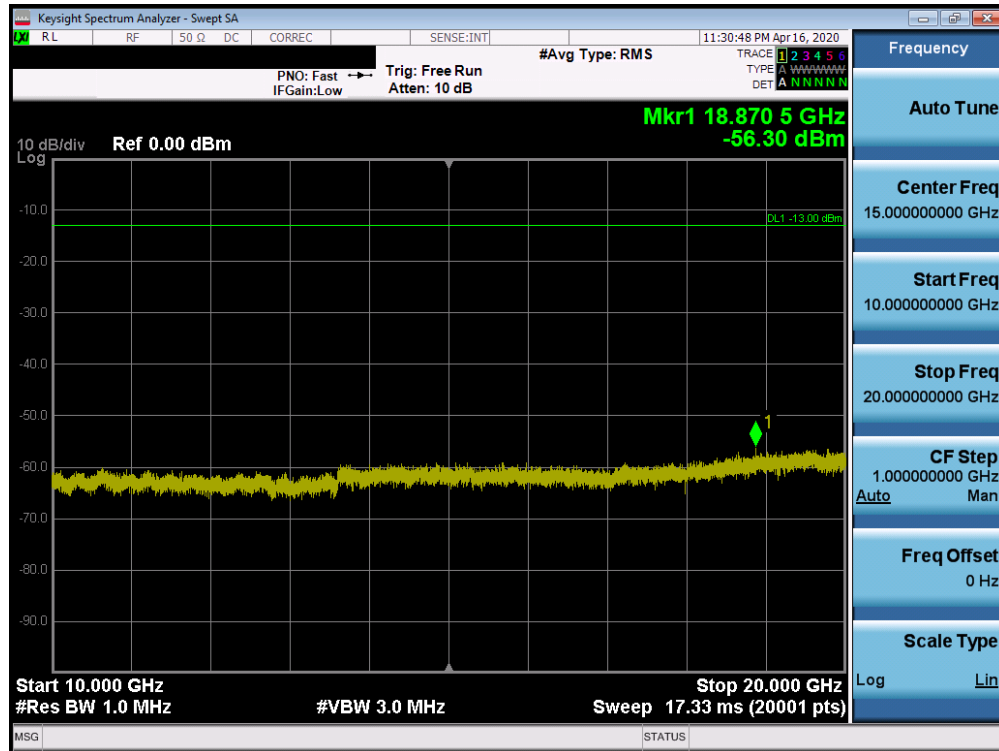
Plot 7-325. Conducted Spurious Plot (n2 - 20MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - Low Channel)



Plot 7-326. Conducted Spurious Plot (n2 - 20MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - Mid Channel)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 187 of 420

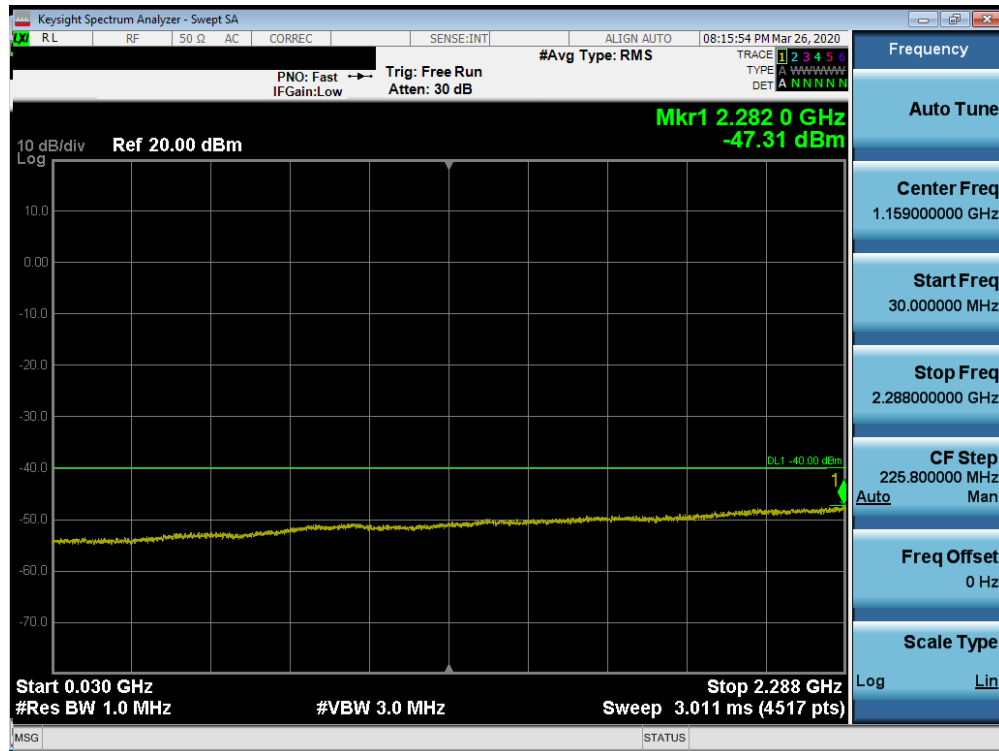




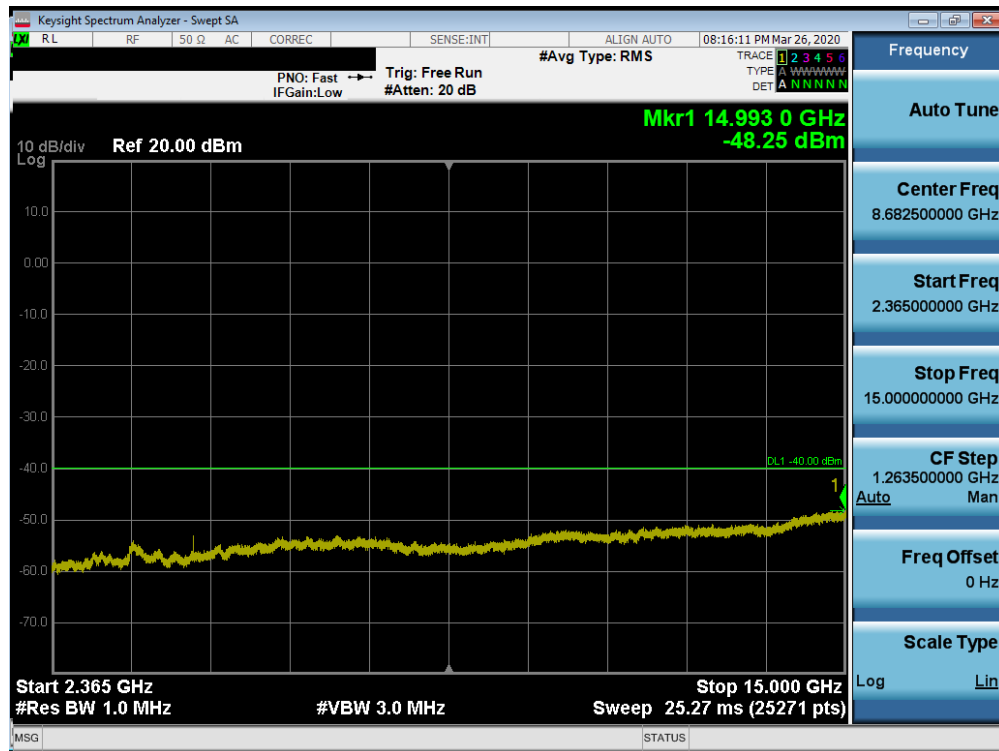
Plot 7-331. Conducted Spurious Plot (n2 - 20MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - High Channel)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 190 of 420

Band 30

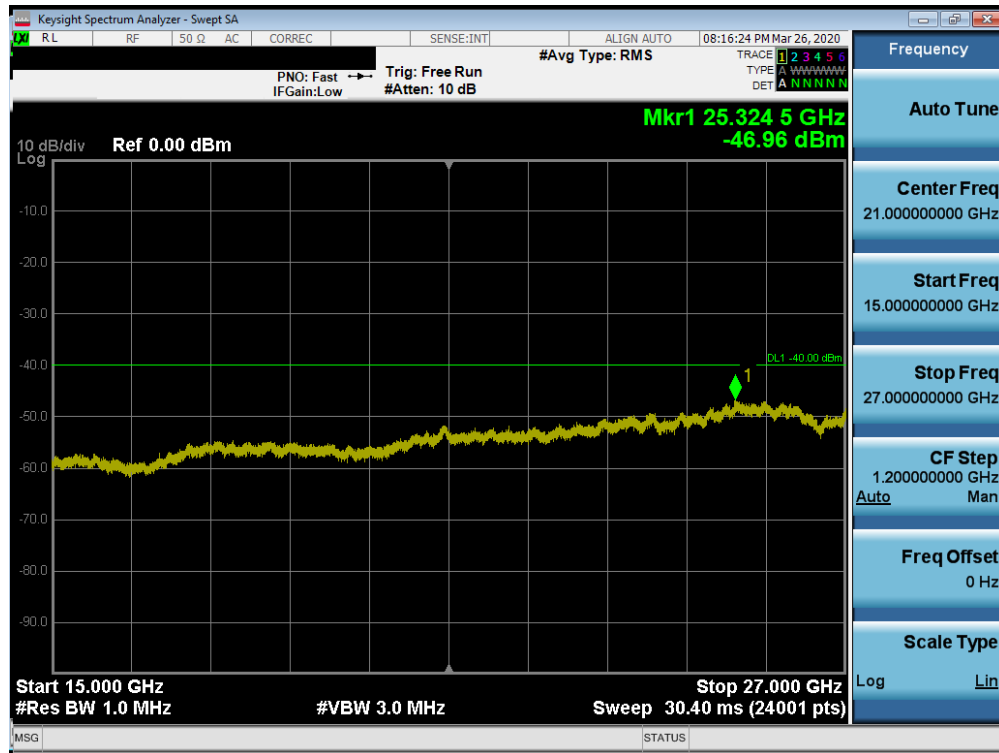


Plot 7-332. Conducted Spurious Plot (Band 30 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)



Plot 7-333. Conducted Spurious Plot (Band 30 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

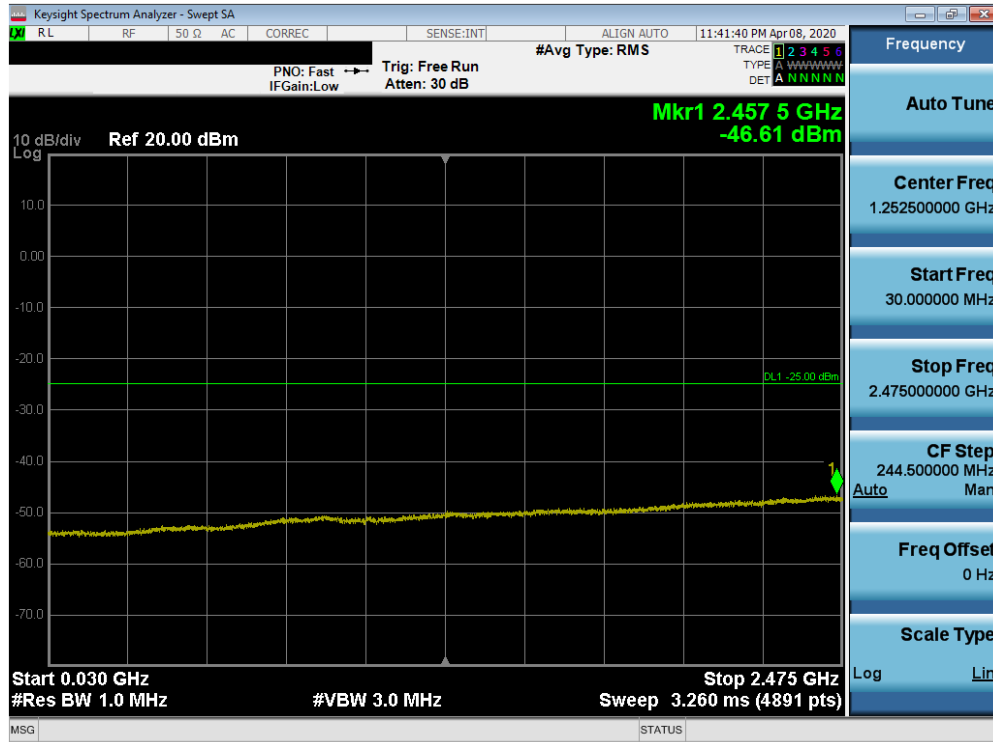
FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 191 of 420



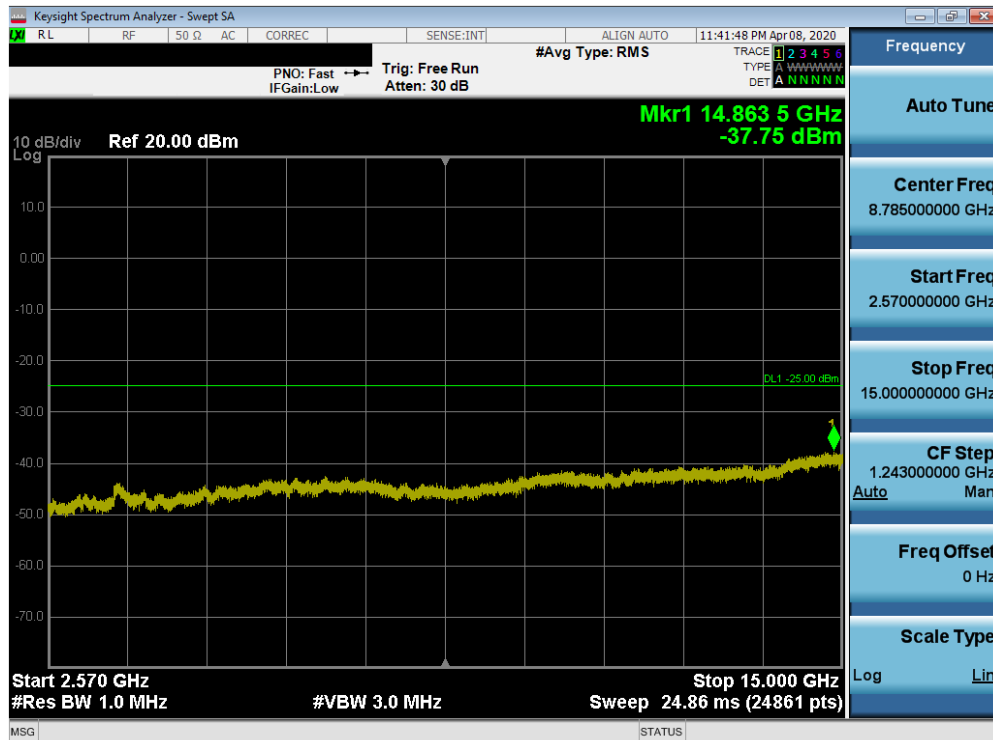
Plot 7-334. Conducted Spurious Plot (Band 30 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 192 of 420

Band 7

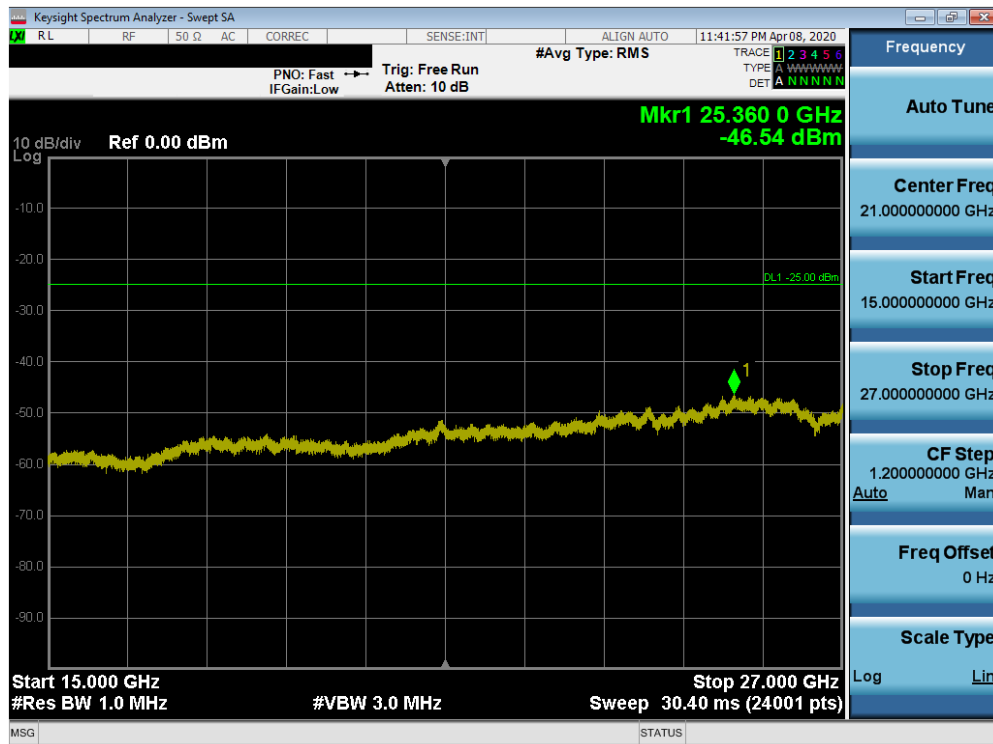


Plot 7-335. Conducted Spurious Plot (Band 7 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

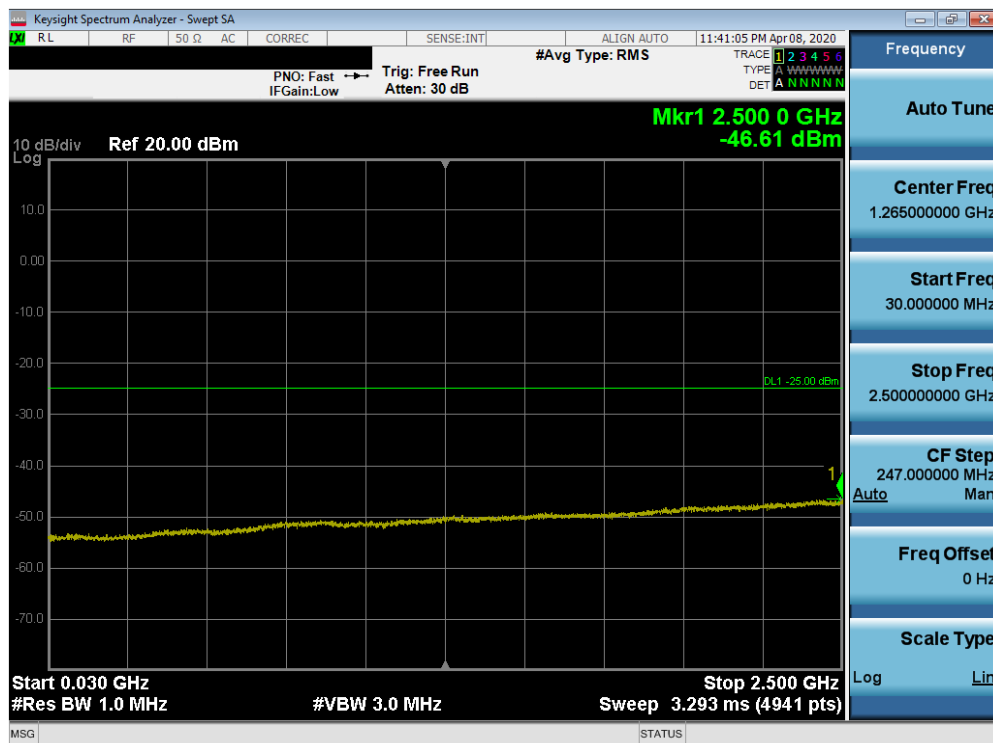


Plot 7-336. Conducted Spurious Plot (Band 7 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 193 of 420

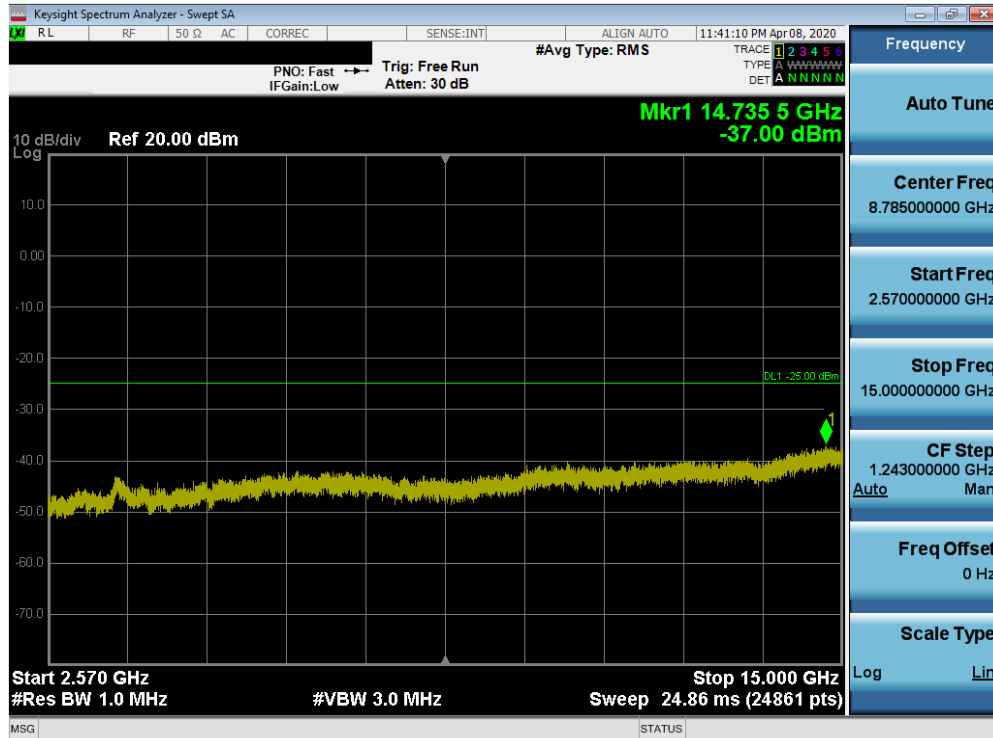


Plot 7-337. Conducted Spurious Plot (Band 7 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

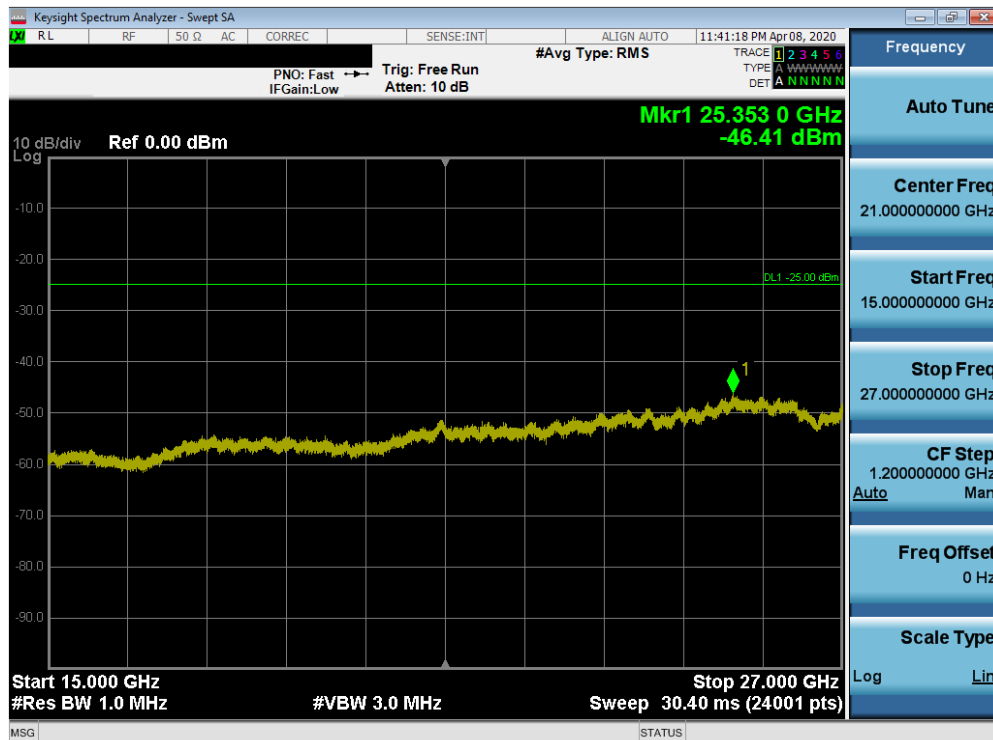


Plot 7-338. Conducted Spurious Plot (Band 7 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 194 of 420

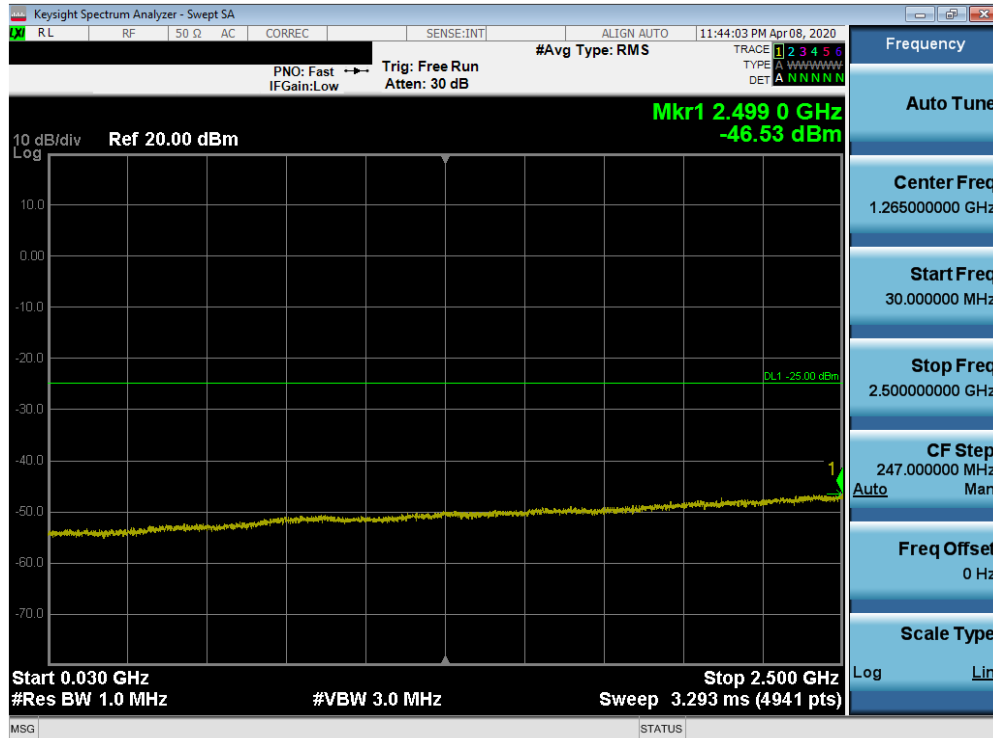


Plot 7-339. Conducted Spurious Plot (Band 7 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

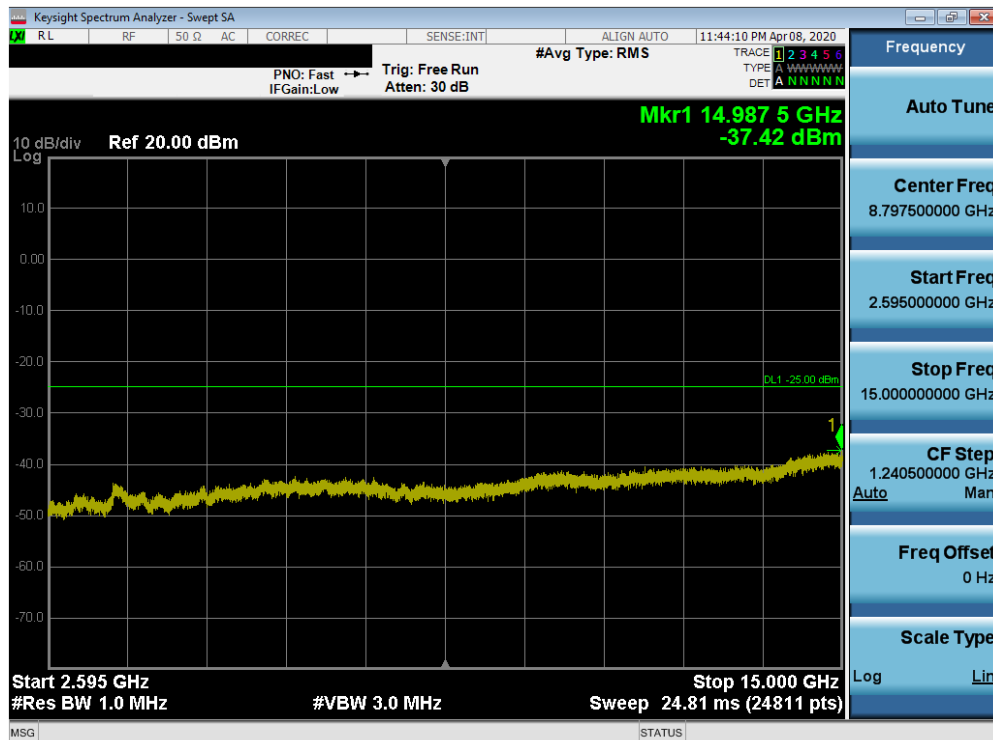


Plot 7-340. Conducted Spurious Plot (Band 7 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 195 of 420

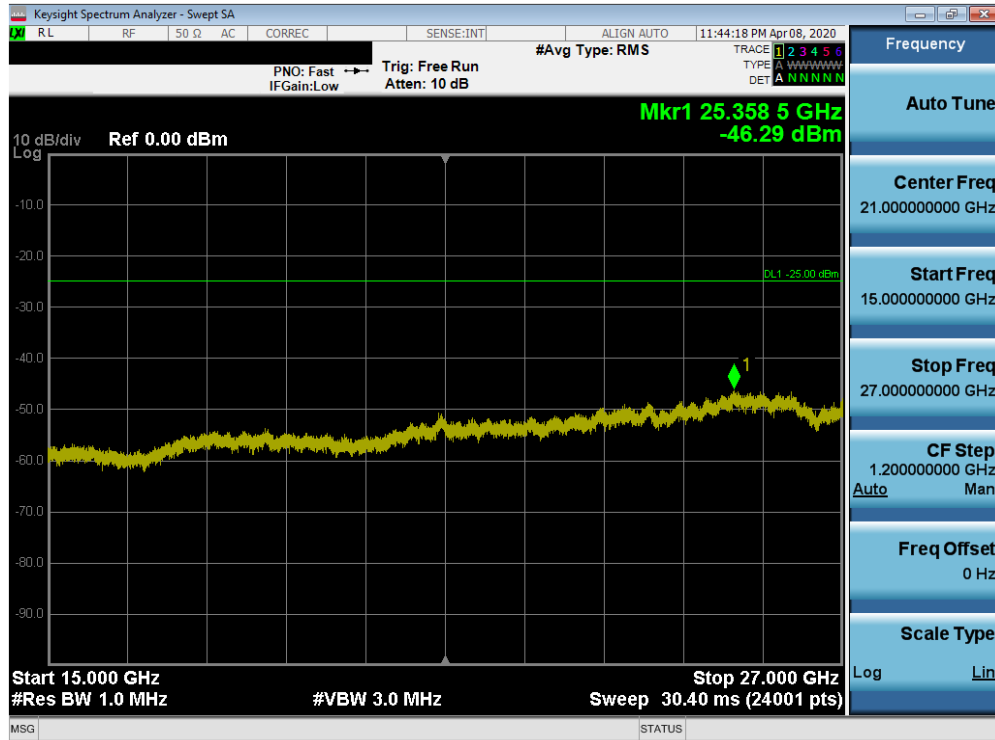


Plot 7-341. Conducted Spurious Plot (Band 7 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)



Plot 7-342. Conducted Spurious Plot (Band 7 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 196 of 420



Plot 7-343. Conducted Spurious Plot (Band 7 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2003200047-11.A3L	Test Dates: 3/23 - 5/7/2020	EUT Type: Portable Handset		Page 197 of 420