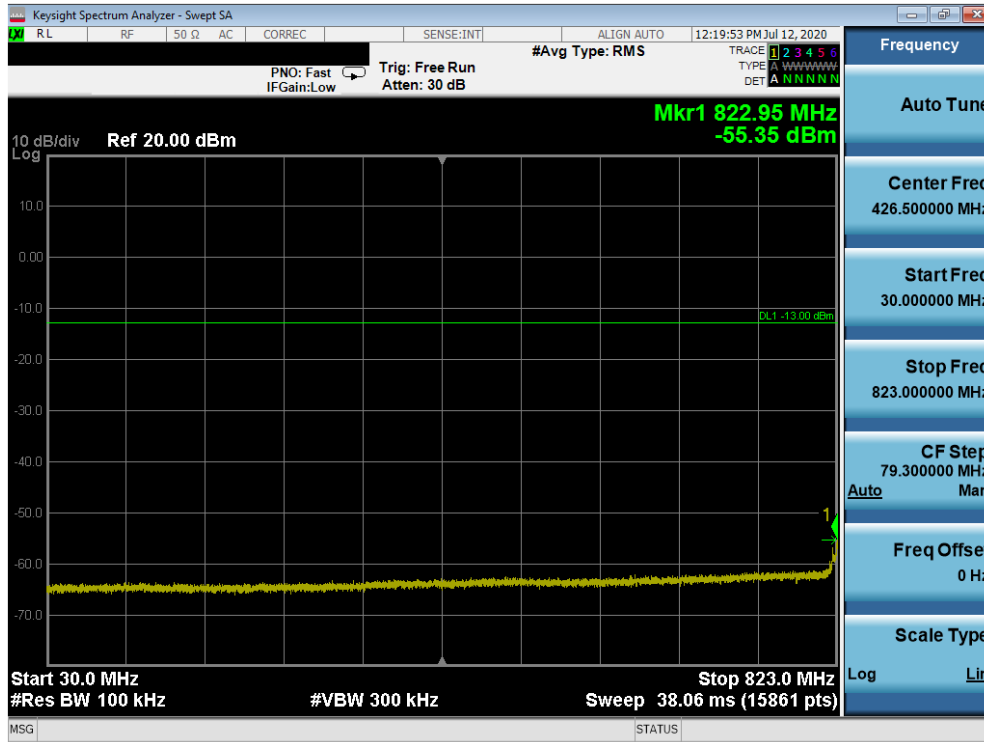
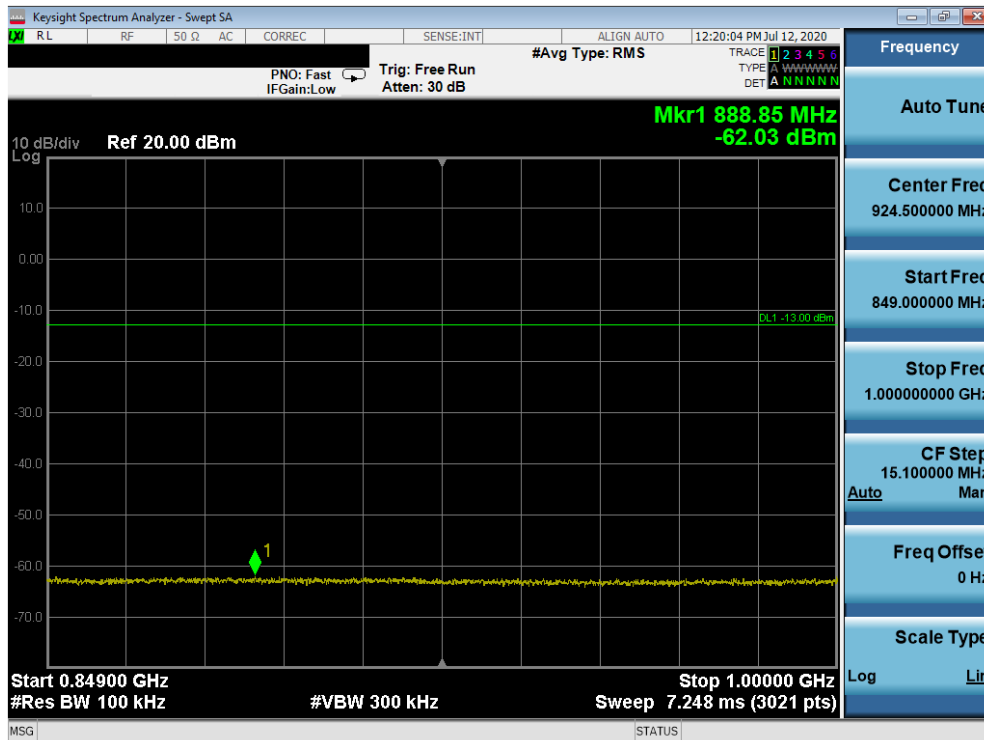


Band 26/5

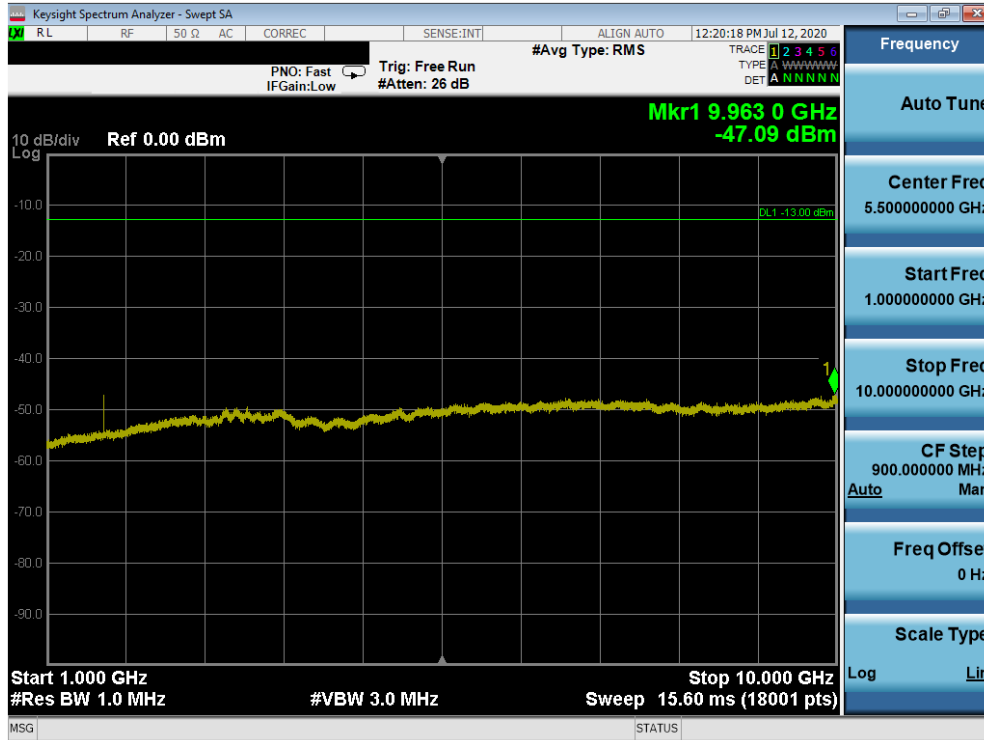


Plot 7-318. Conducted Spurious Plot (Band 26/5 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

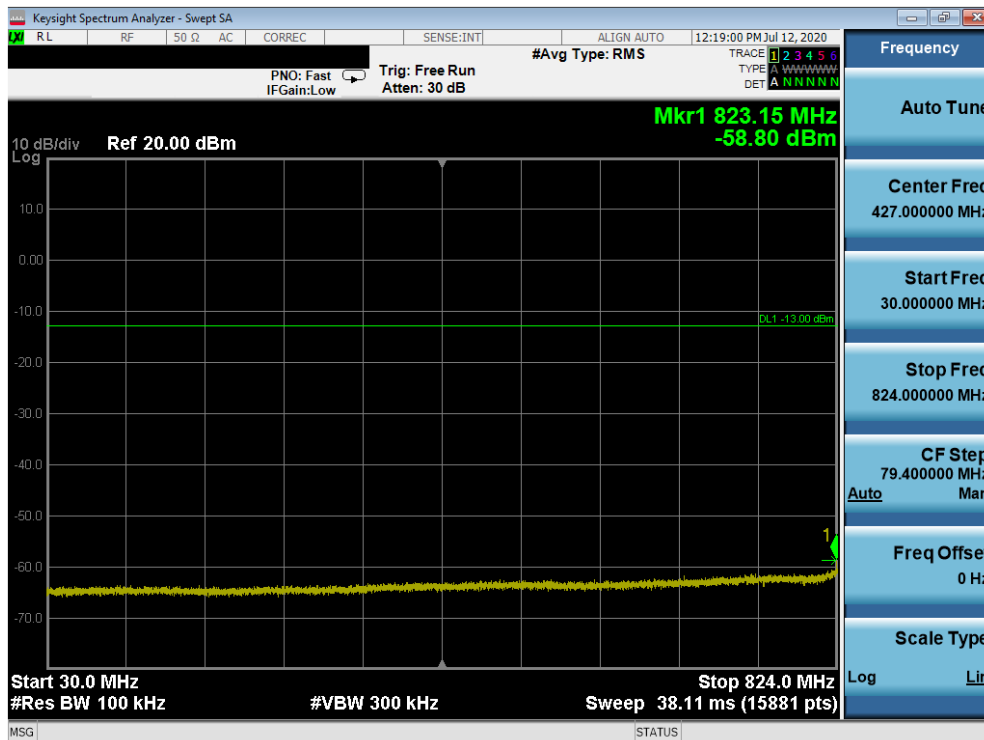


Plot 7-319. Conducted Spurious Plot (Band 26/5 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

FCC ID: A3LSMN981U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2005050081-03.A3L	Test Dates: 5/5 - 7/15/2020	EUT Type: Portable Handset		Page 182 of 485

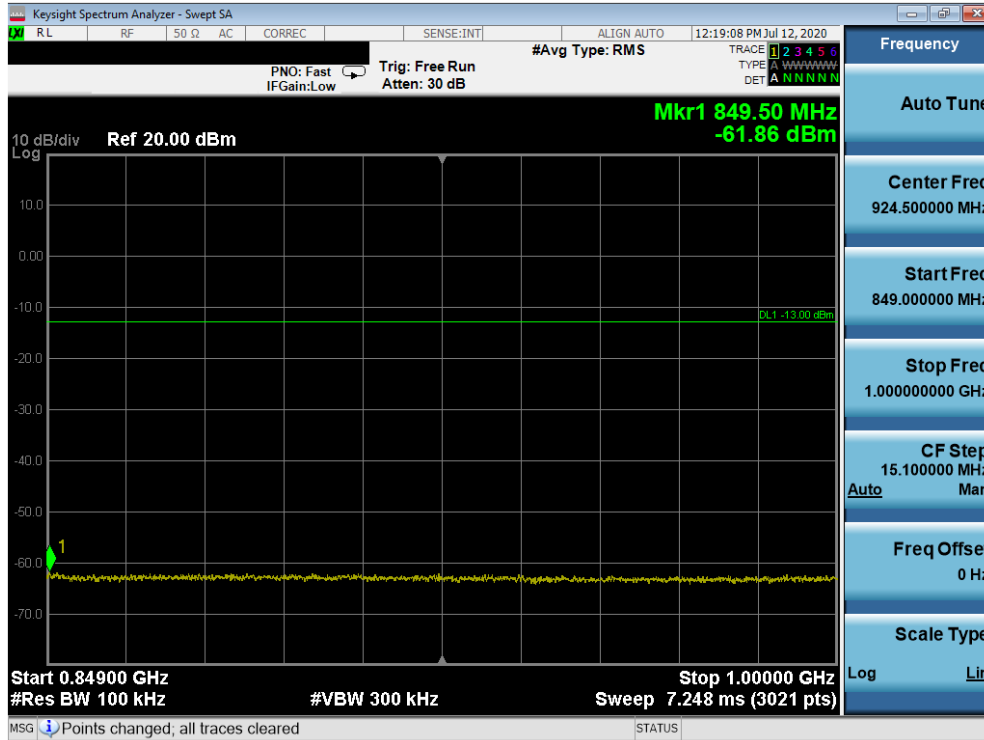


Plot 7-320. Conducted Spurious Plot (Band 26/5 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

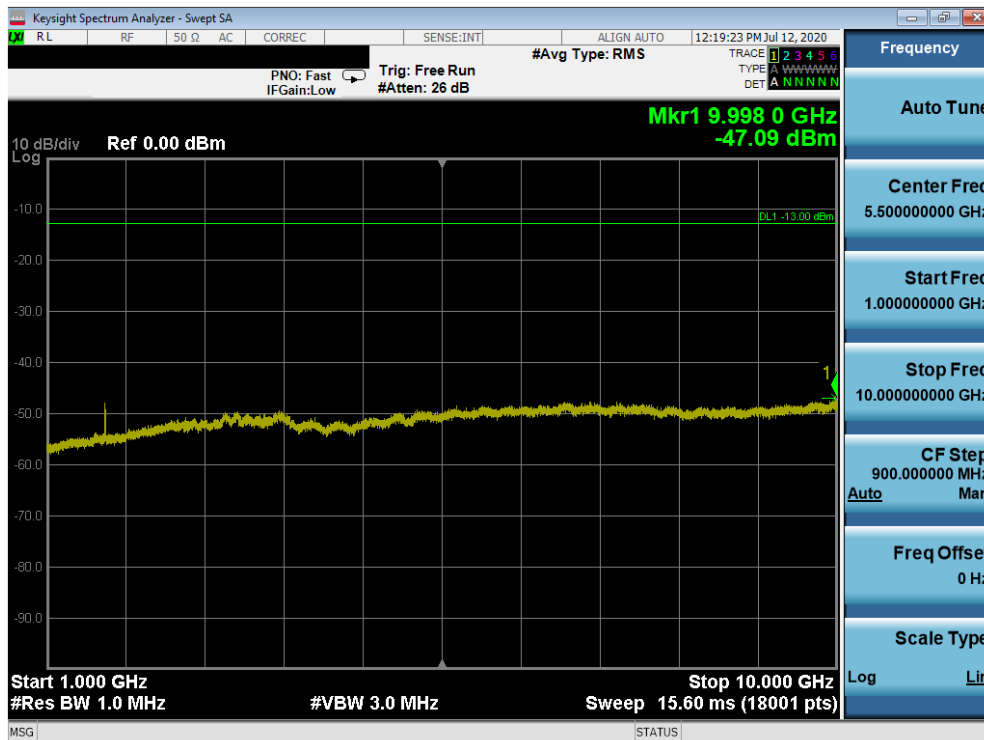


Plot 7-321. Conducted Spurious Plot (Band 26/5 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: A3LSMN981U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2005050081-03.A3L	Test Dates: 5/5 - 7/15/2020	EUT Type: Portable Handset		Page 183 of 485

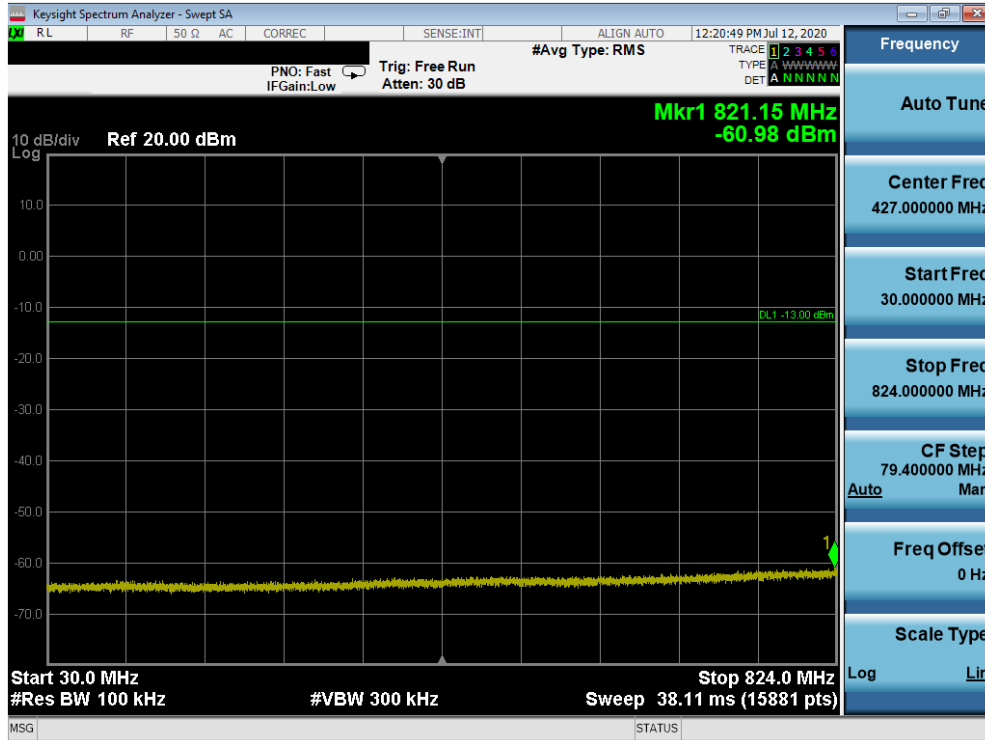


Plot 7-322. Conducted Spurious Plot (Band 26/5 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

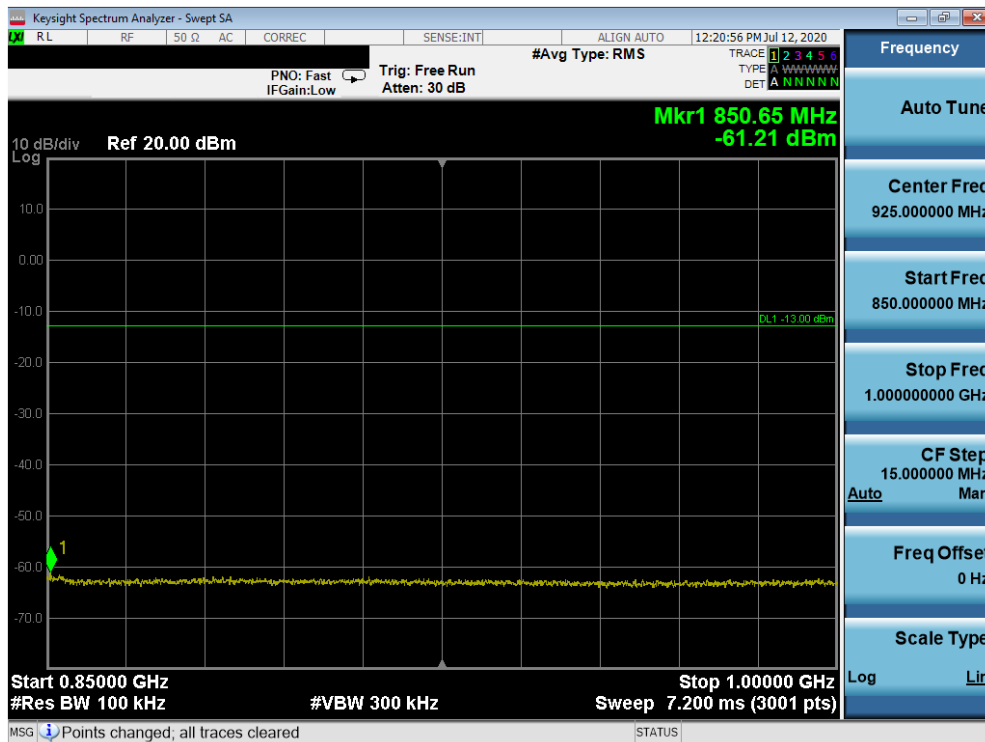


Plot 7-323. Conducted Spurious Plot (Band 26/5 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: A3LSMN981U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2005050081-03.A3L	Test Dates: 5/5 - 7/15/2020	EUT Type: Portable Handset		Page 184 of 485

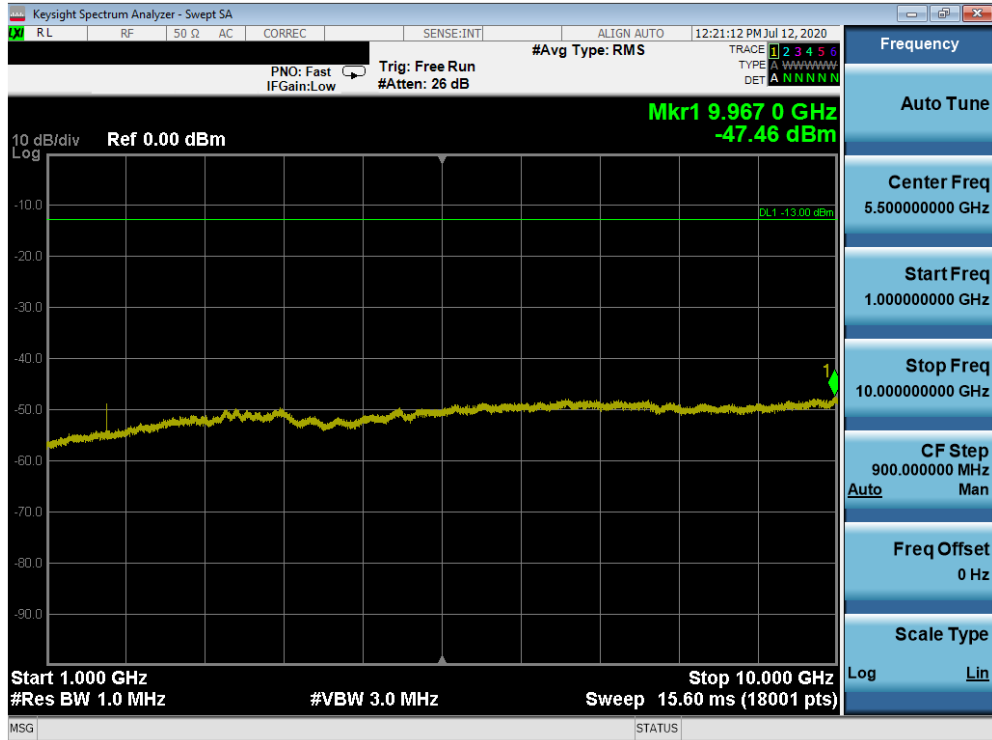


Plot 7-324. Conducted Spurious Plot (Band 26/5 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)



Plot 7-325. Conducted Spurious Plot (Band26/5 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

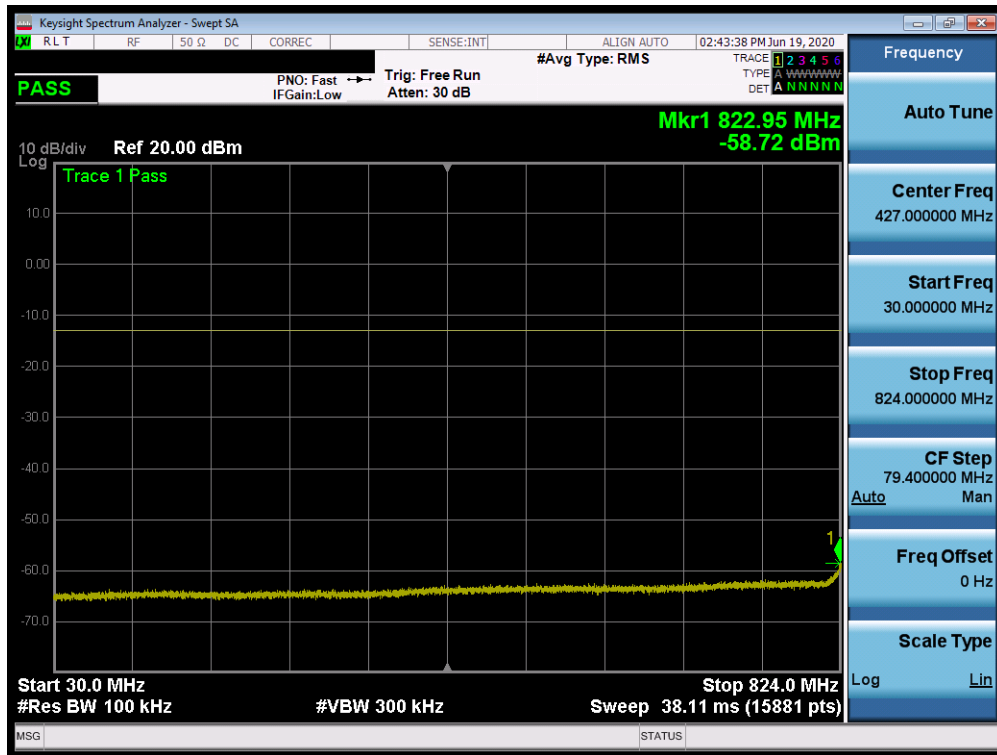
FCC ID: A3LSMN981U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2005050081-03.A3L	Test Dates: 5/5 - 7/15/2020	EUT Type: Portable Handset		Page 185 of 485



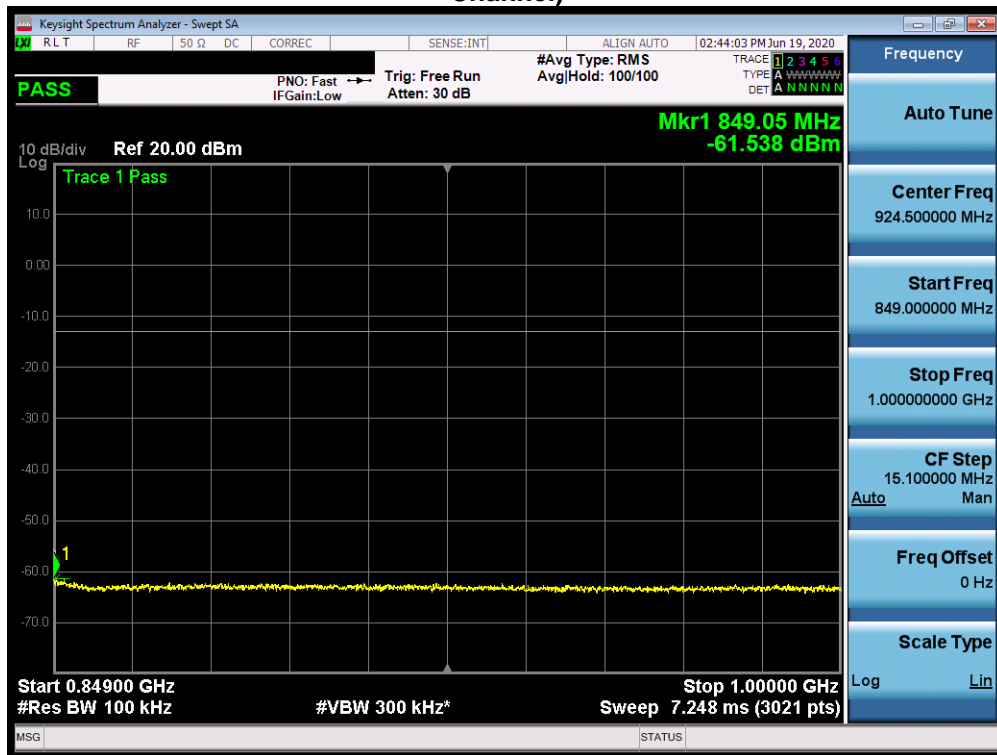
Plot 7-326. Conducted Spurious Plot (Band 26/5 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

FCC ID: A3LSMN981U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2005050081-03.A3L	Test Dates: 5/5 – 7/15/2020	EUT Type: Portable Handset		Page 186 of 485

NR Band n5



Plot 7-327. Conducted Spurious Plot (n5 - 20.0MHz DFT-s-OFDM BPSK - RB Size 1, RB Offset 0 - Low Channel)

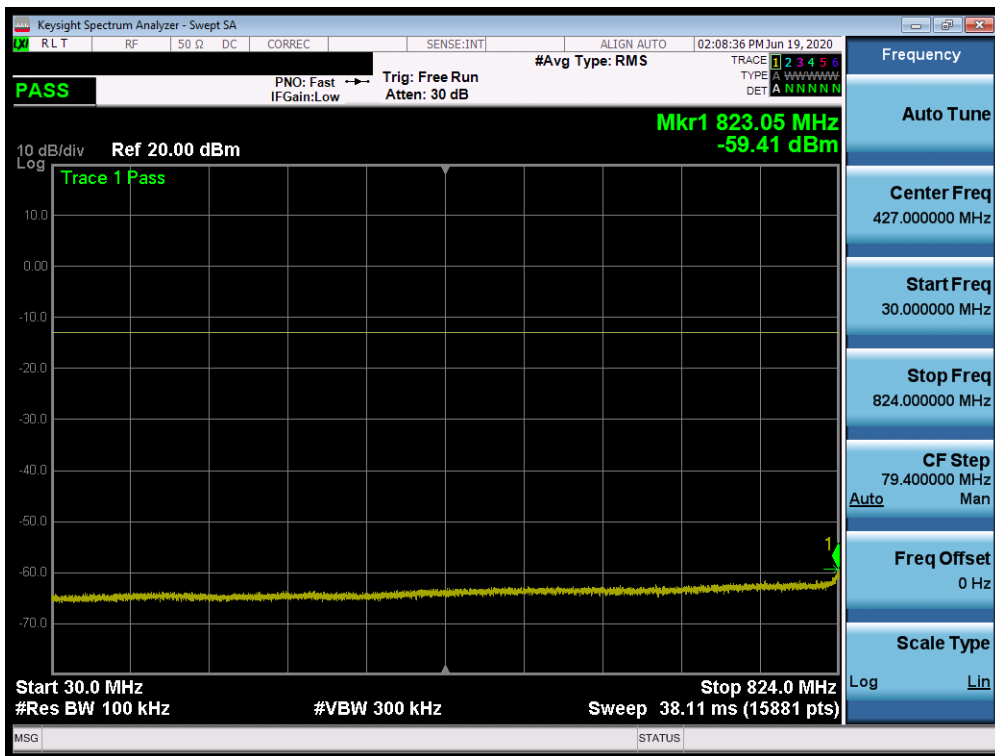


Plot 7-328. Conducted Spurious Plot (n5 - 20.0MHz DFT-s-OFDM BPSK - RB Size 1, RB Offset 0 - Low Channel)

FCC ID: A3LSMN981U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2005050081-03.A3L	Test Dates: 5/5 - 7/15/2020	EUT Type: Portable Handset		Page 187 of 485

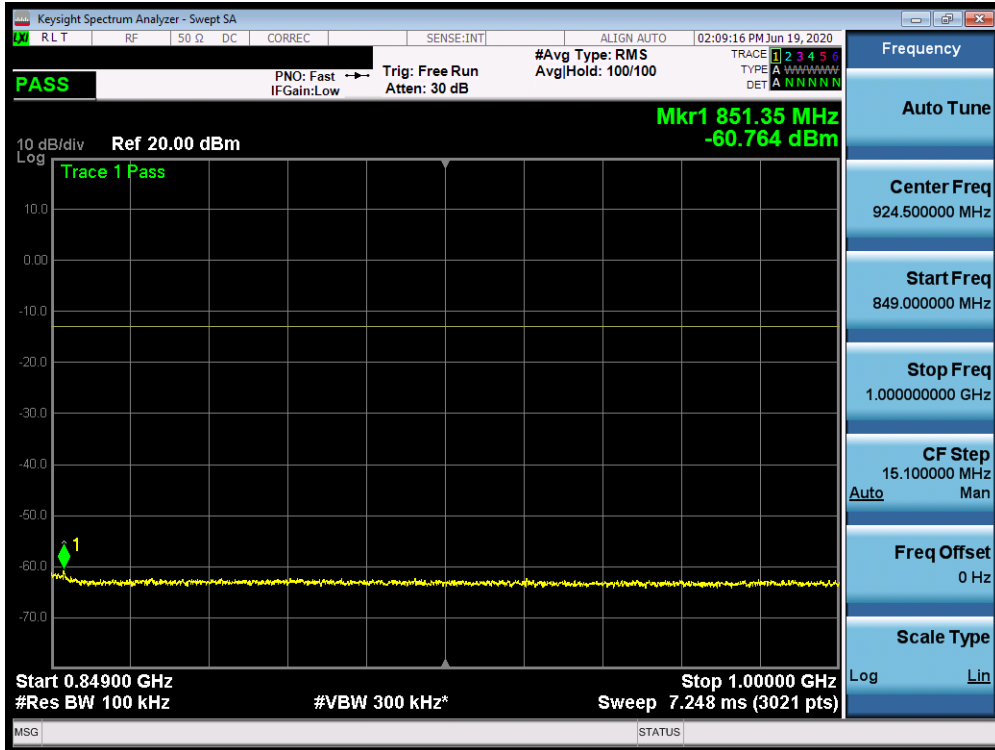


Plot 7-329. Conducted Spurious Plot (n5 - 20.0MHz DFT-s-OFDM BPSK - RB Size 1, RB Offset 0 - Low Channel)

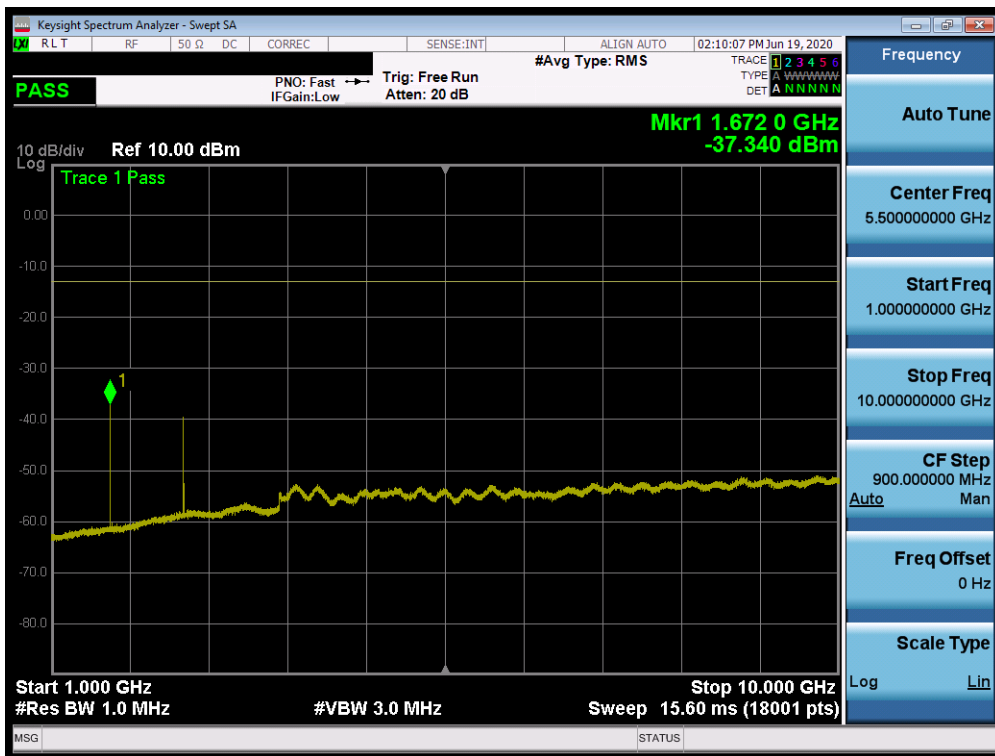


Plot 7-330. Conducted Spurious Plot (n5 - 20.0MHz DFT-s-OFDM BPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: A3LSMN981U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2005050081-03.A3L	Test Dates: 5/5 - 7/15/2020	EUT Type: Portable Handset		Page 188 of 485

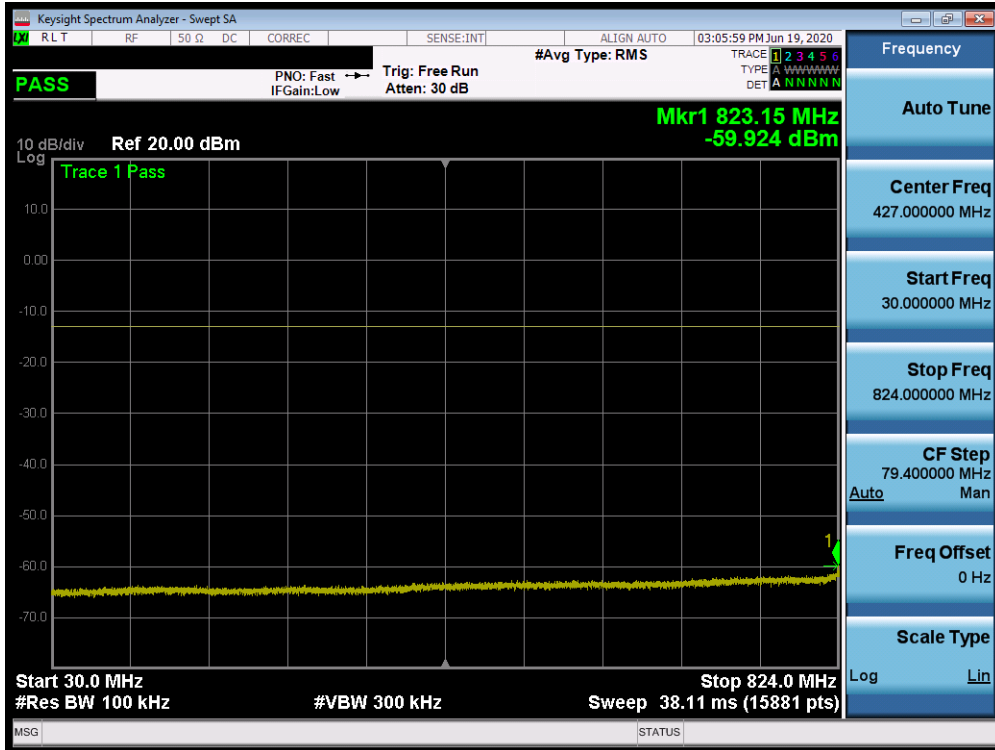


Plot 7-331. Conducted Spurious Plot (n5 - 20.0MHz DFT-s-OFDM BPSK - RB Size 1, RB Offset 0 - Mid Channel)

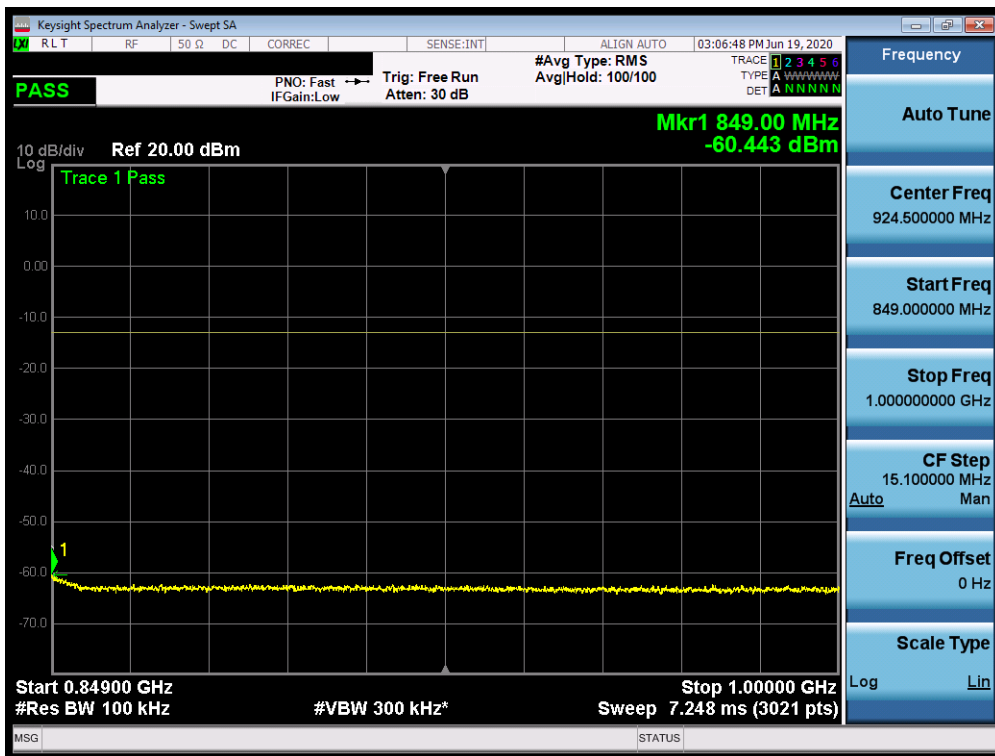


Plot 7-332. Conducted Spurious Plot (n5 - 20.0MHz DFT-s-OFDM BPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: A3LSMN981U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2005050081-03.A3L	Test Dates: 5/5 - 7/15/2020	EUT Type: Portable Handset		Page 189 of 485

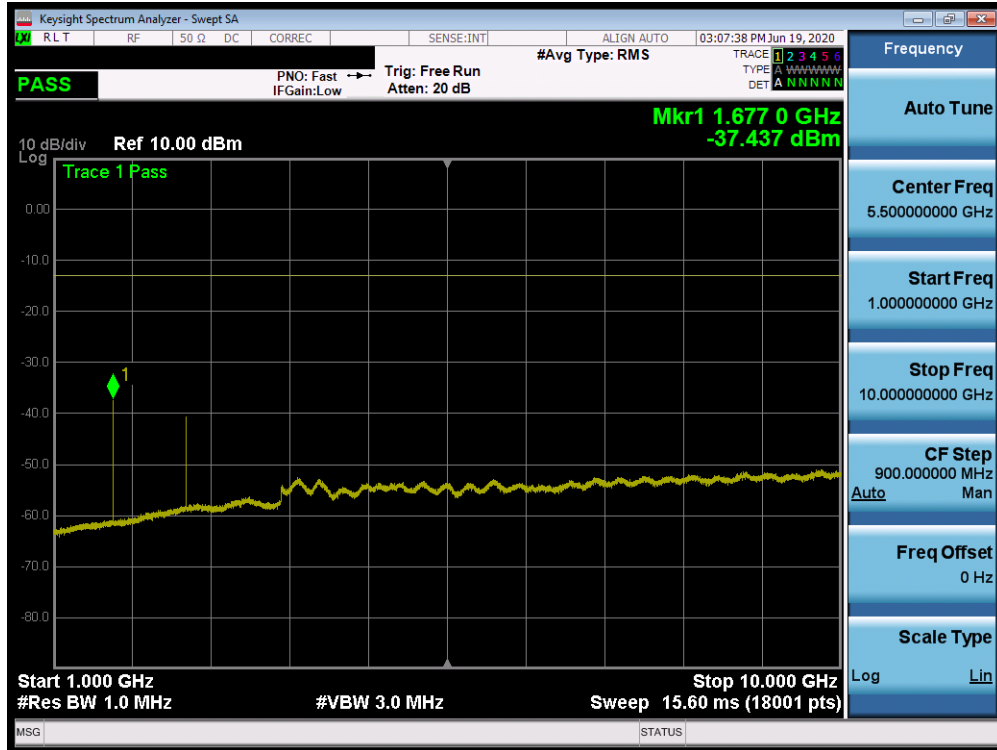


Plot 7-333. Conducted Spurious Plot (n5 - 20.0MHz DFT-s-OFDM BPSK - RB Size 1, RB Offset 0 - High Channel)



Plot 7-334. Conducted Spurious Plot (n5 - 20.0MHz DFT-s-OFDM BPSK - RB Size 1, RB Offset 0 - High Channel)

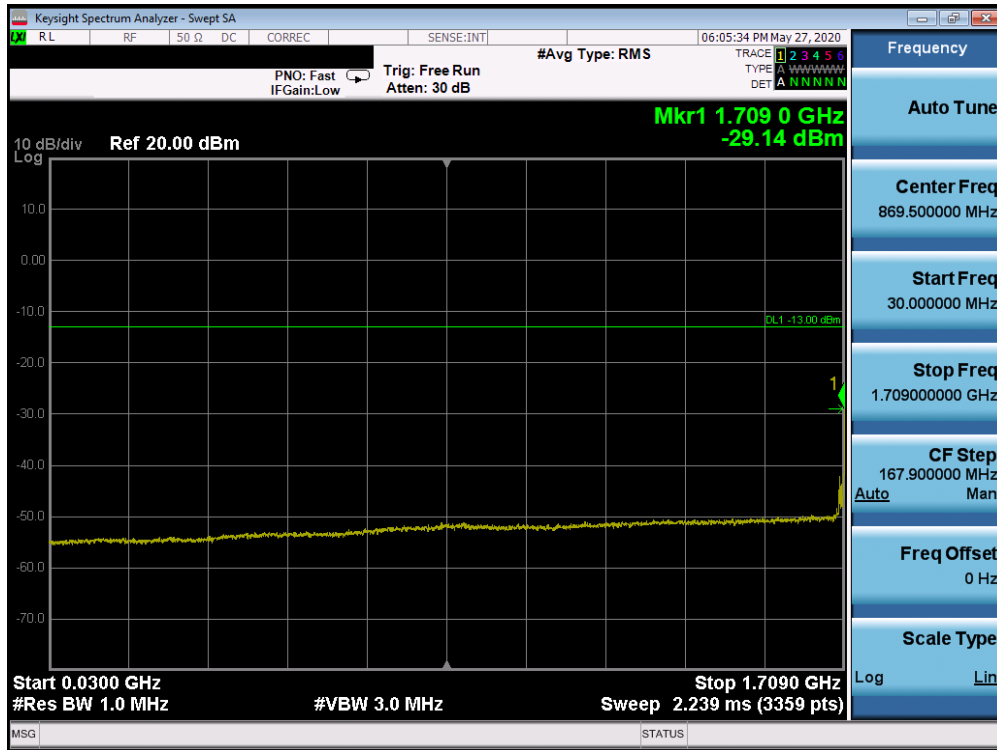
FCC ID: A3LSMN981U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2005050081-03.A3L	Test Dates: 5/5 - 7/15/2020	EUT Type: Portable Handset		Page 190 of 485



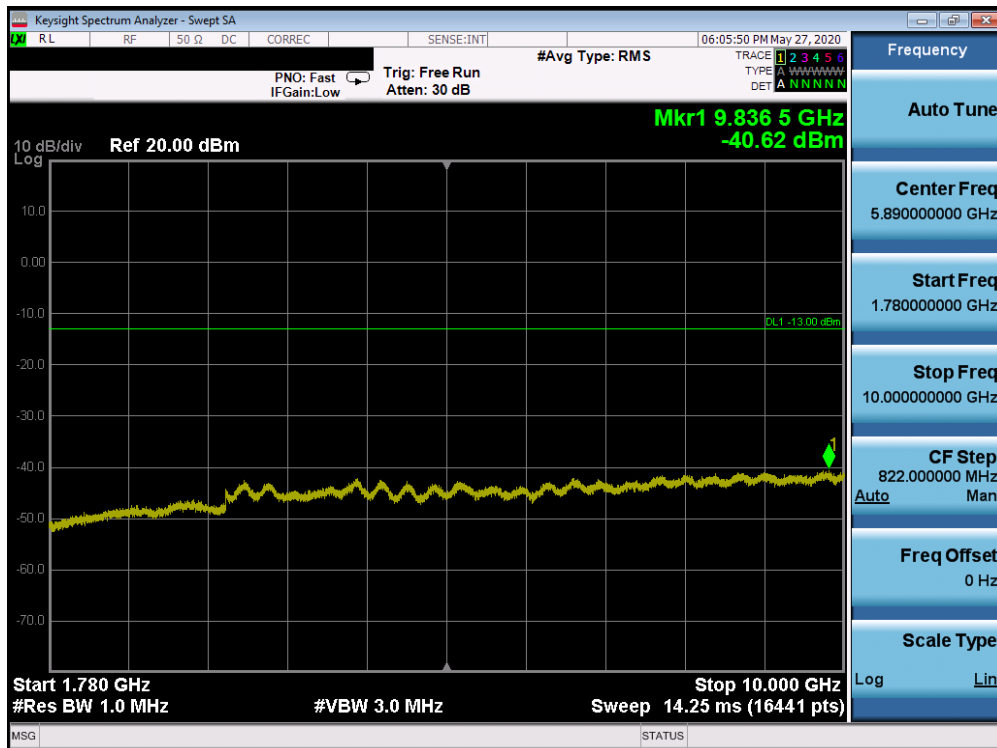
Plot 7-335. Conducted Spurious Plot (n5 - 20.0MHz DFT-s-OFDM BPSK - RB Size 1, RB Offset 0 - High Channel)

FCC ID: A3LSMN981U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2005050081-03.A3L	Test Dates: 5/5 - 7/15/2020	EUT Type: Portable Handset		Page 191 of 485

Band 66/4

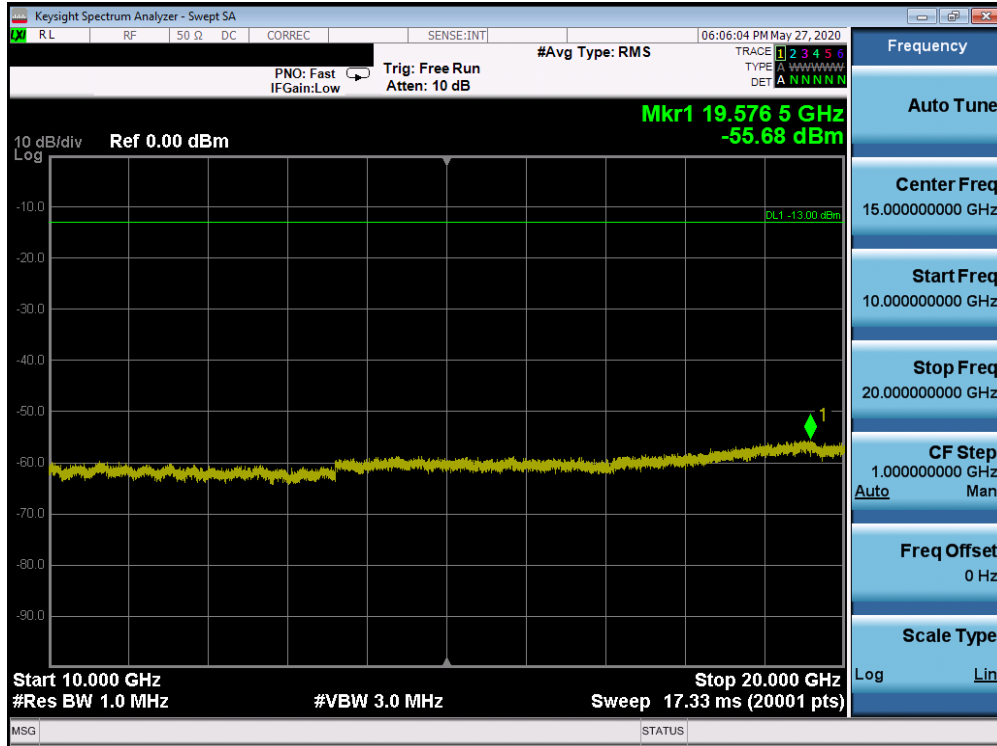


Plot 7-336. Conducted Spurious Plot (Band 66/4 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

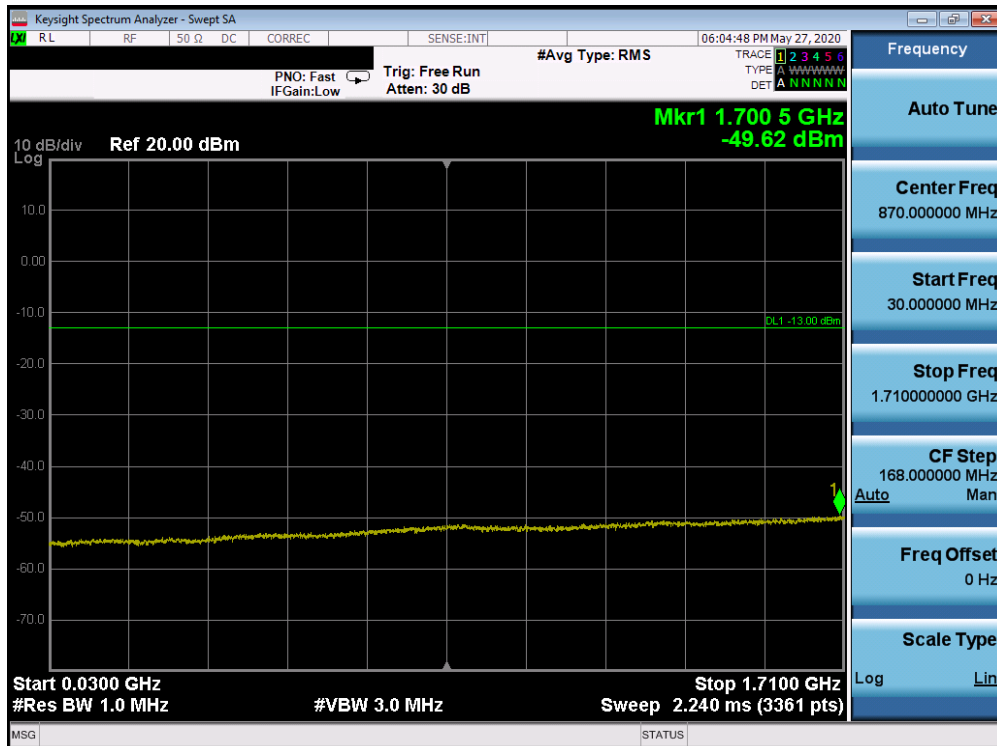


Plot 7-337. Conducted Spurious Plot (Band 66/4 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

FCC ID: A3LSMN981U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2005050081-03.A3L	Test Dates: 5/5 - 7/15/2020	EUT Type: Portable Handset		Page 192 of 485

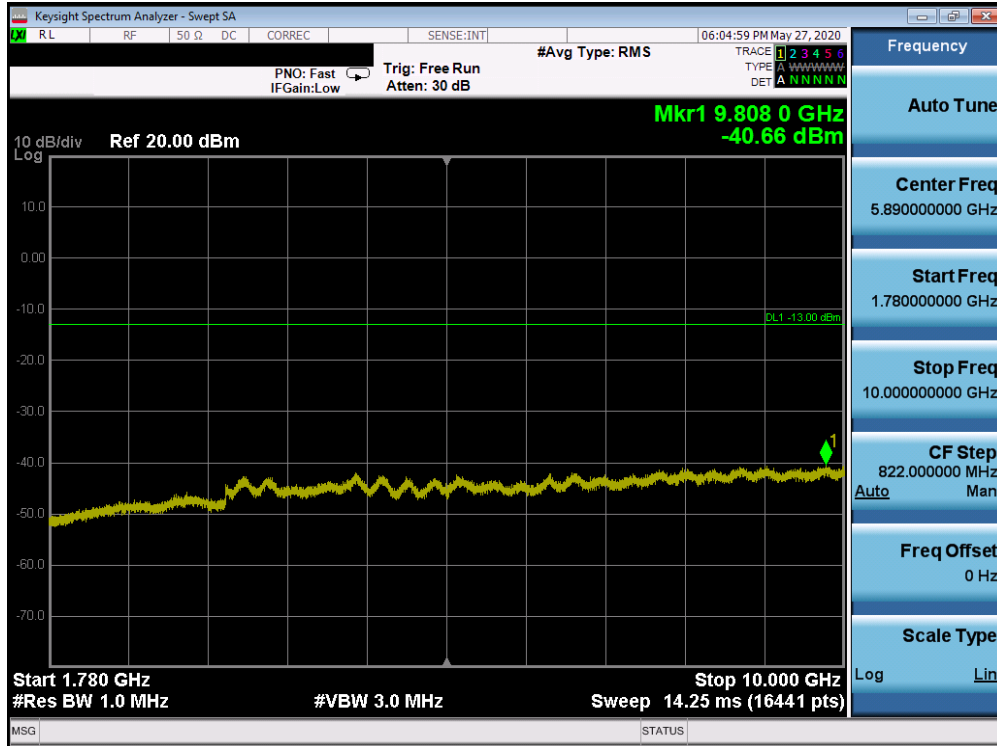


Plot 7-338. Conducted Spurious Plot (Band 66/4 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

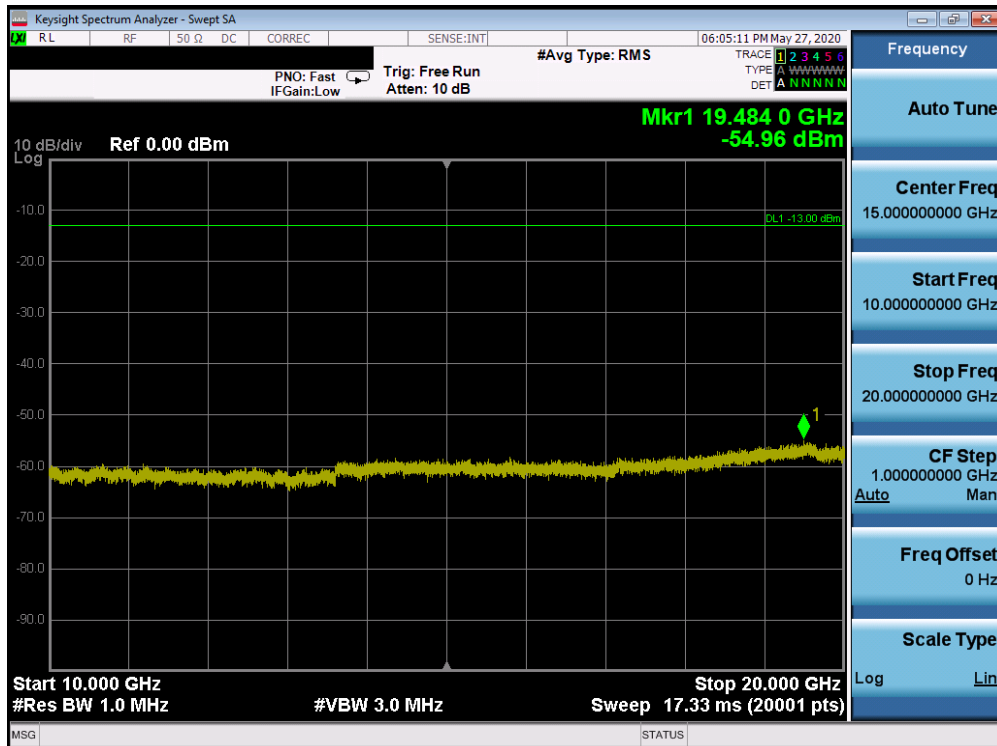


Plot 7-339. Conducted Spurious Plot (Band 66/4 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: A3LSMN981U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2005050081-03.A3L	Test Dates: 5/5 - 7/15/2020	EUT Type: Portable Handset		Page 193 of 485

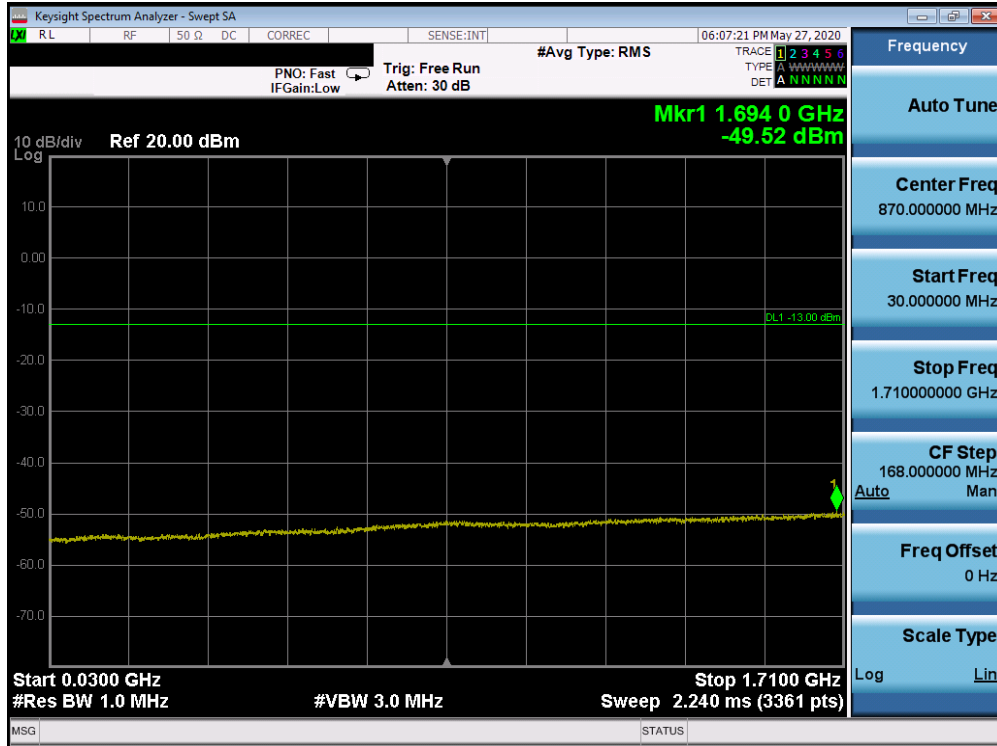


Plot 7-340. Conducted Spurious Plot (Band 66/4 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

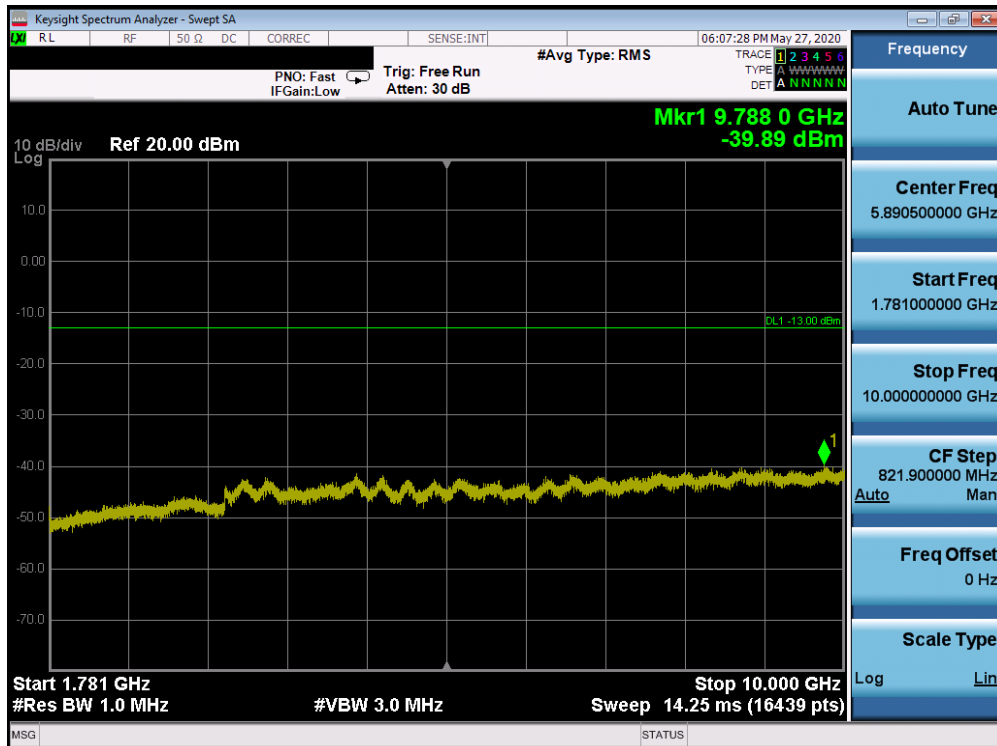


Plot 7-341. Conducted Spurious Plot (Band 66/4 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: A3LSMN981U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2005050081-03.A3L	Test Dates: 5/5 - 7/15/2020	EUT Type: Portable Handset		Page 194 of 485

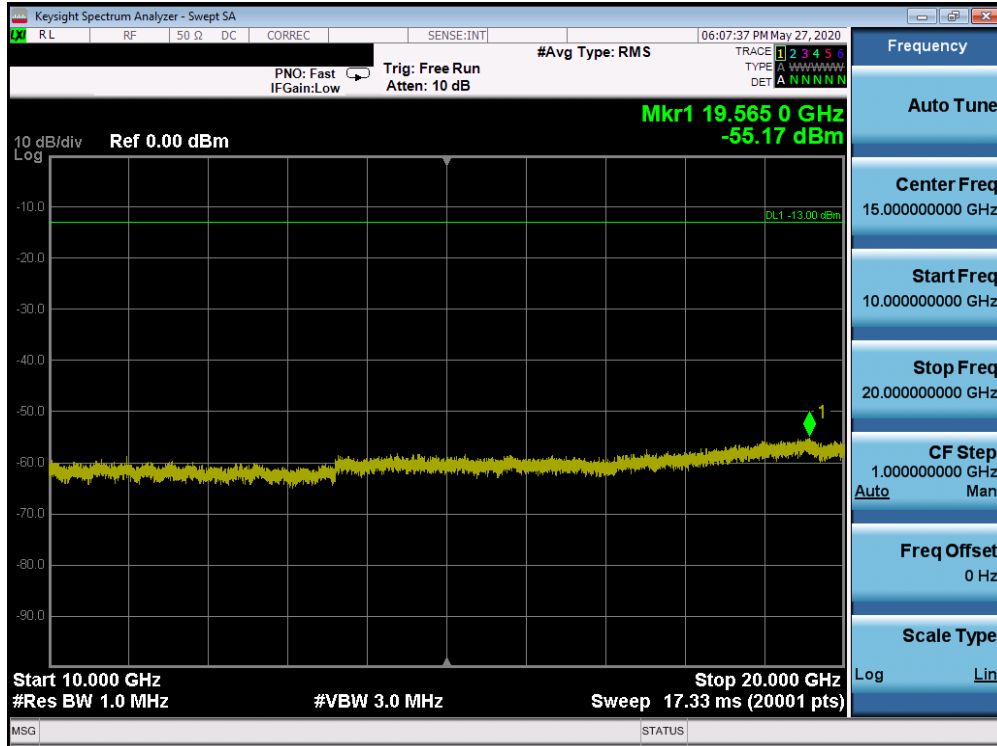


Plot 7-342. Conducted Spurious Plot (Band 66/4 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)



Plot 7-343. Conducted Spurious Plot (Band 66/4 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

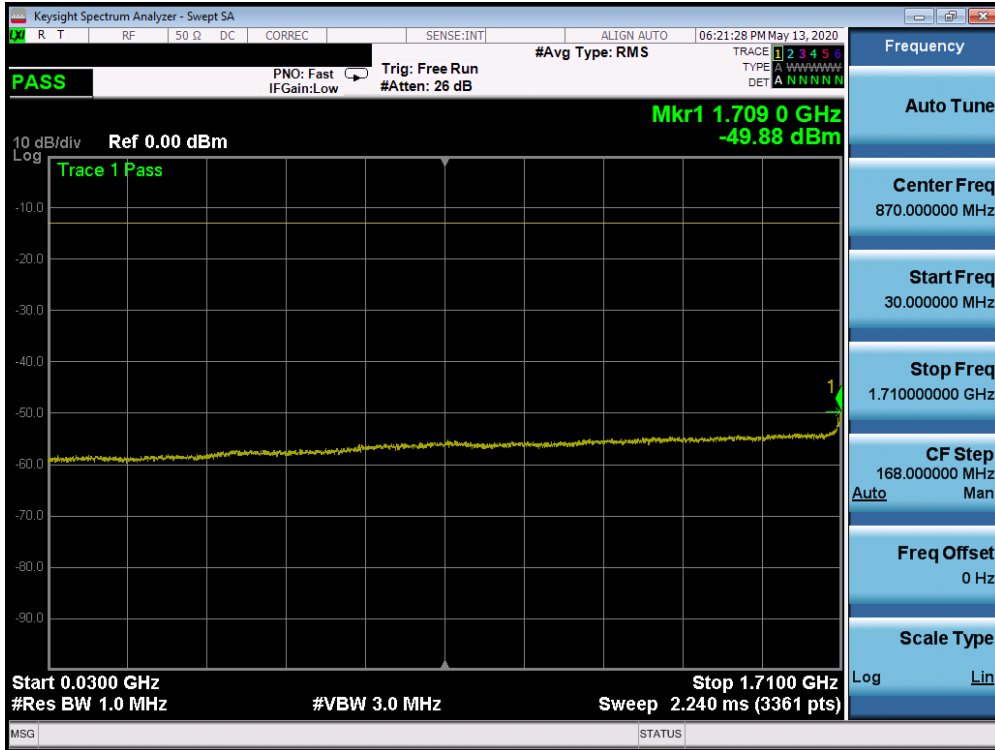
FCC ID: A3LSMN981U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2005050081-03.A3L	Test Dates: 5/5 - 7/15/2020	EUT Type: Portable Handset		Page 195 of 485



Plot 7-344. Conducted Spurious Plot (Band 66/4 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

FCC ID: A3LSMN981U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2005050081-03.A3L	Test Dates: 5/5 – 7/15/2020	EUT Type: Portable Handset		Page 196 of 485

NR Band n66

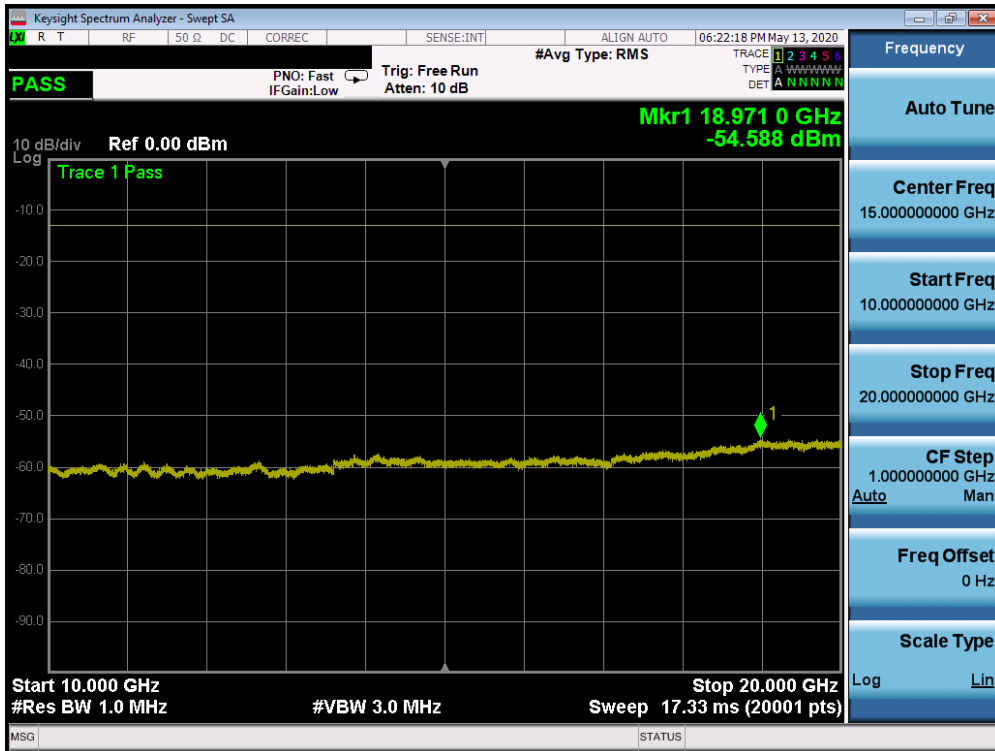


Plot 7-345. Conducted Spurious Plot (n66 - 20MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - Low Channel)

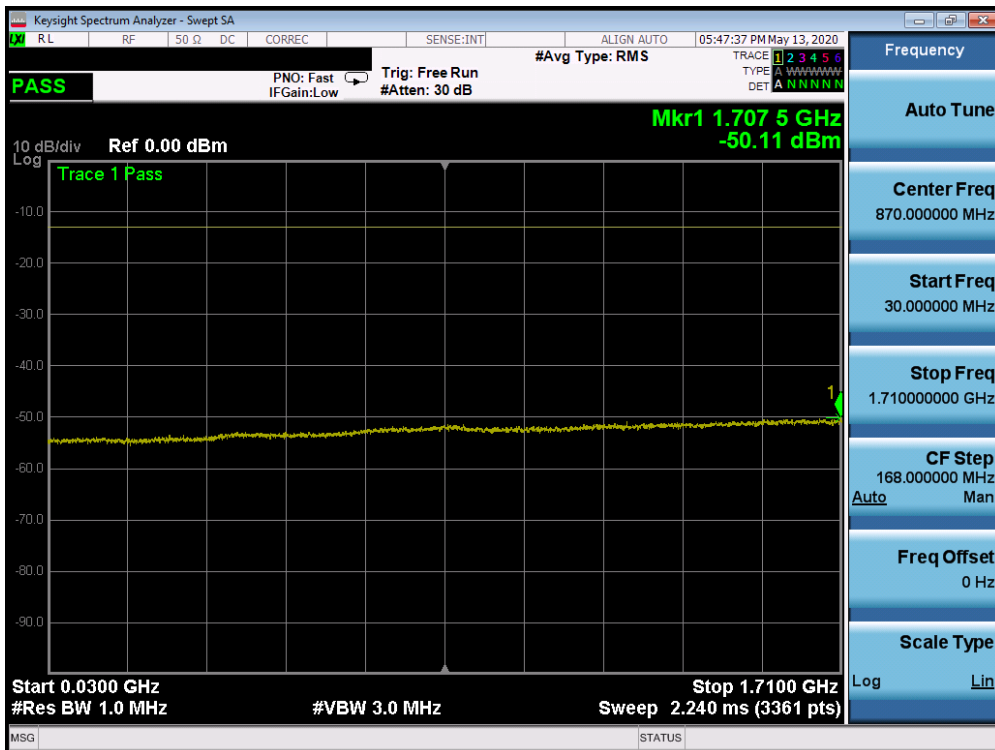


Plot 7-346. Conducted Spurious Plot (n66 - 20MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - Low Channel)

FCC ID: A3LSMN981U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2005050081-03.A3L	Test Dates: 5/5 - 7/15/2020	EUT Type: Portable Handset		Page 197 of 485

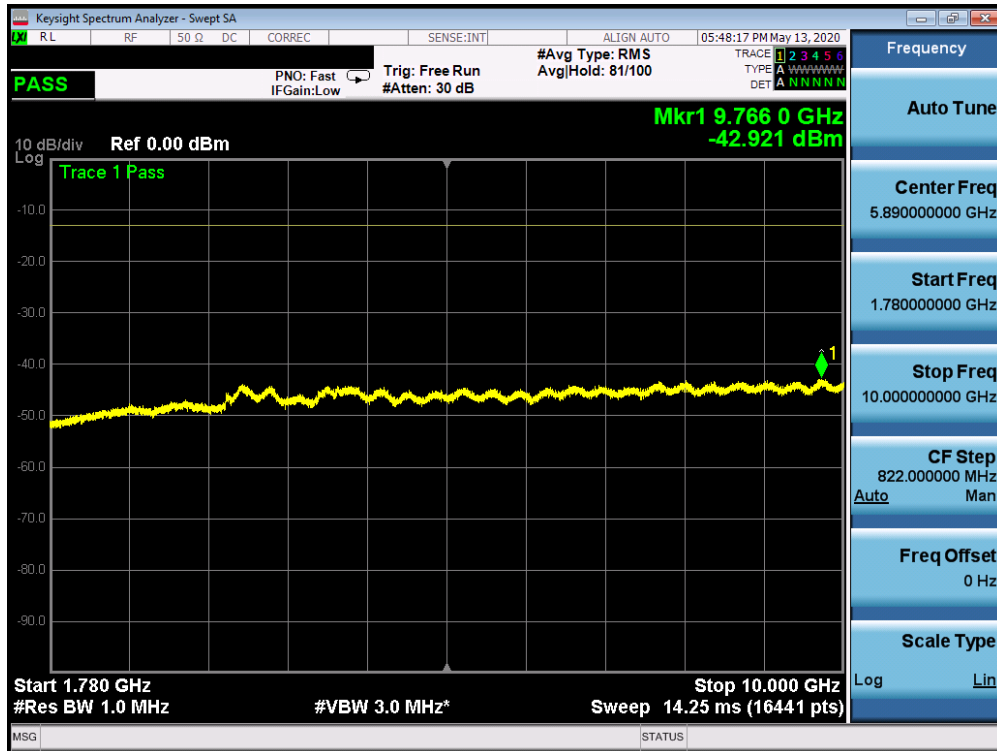


Plot 7-347. Conducted Spurious Plot (n66 - 20MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - Low Channel)

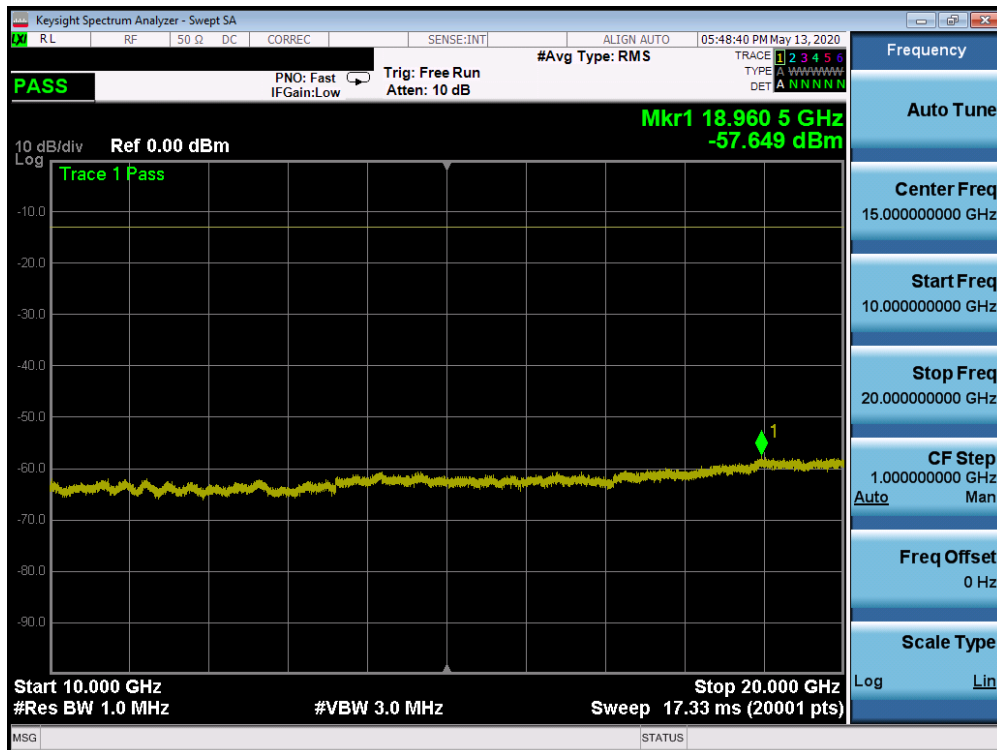


Plot 7-348. Conducted Spurious Plot (n66 - 20MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - Mid Channel)

FCC ID: A3LSMN981U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2005050081-03.A3L	Test Dates: 5/5 - 7/15/2020	EUT Type: Portable Handset		Page 198 of 485

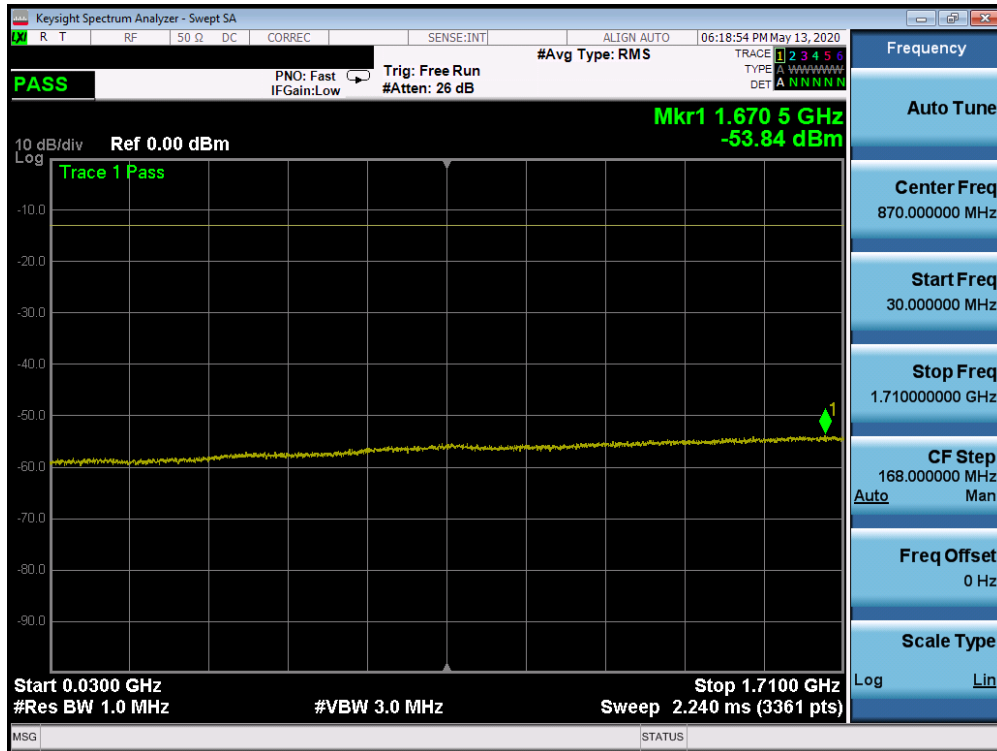


Plot 7-349. Conducted Spurious Plot (n66 - 20MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - Mid Channel)

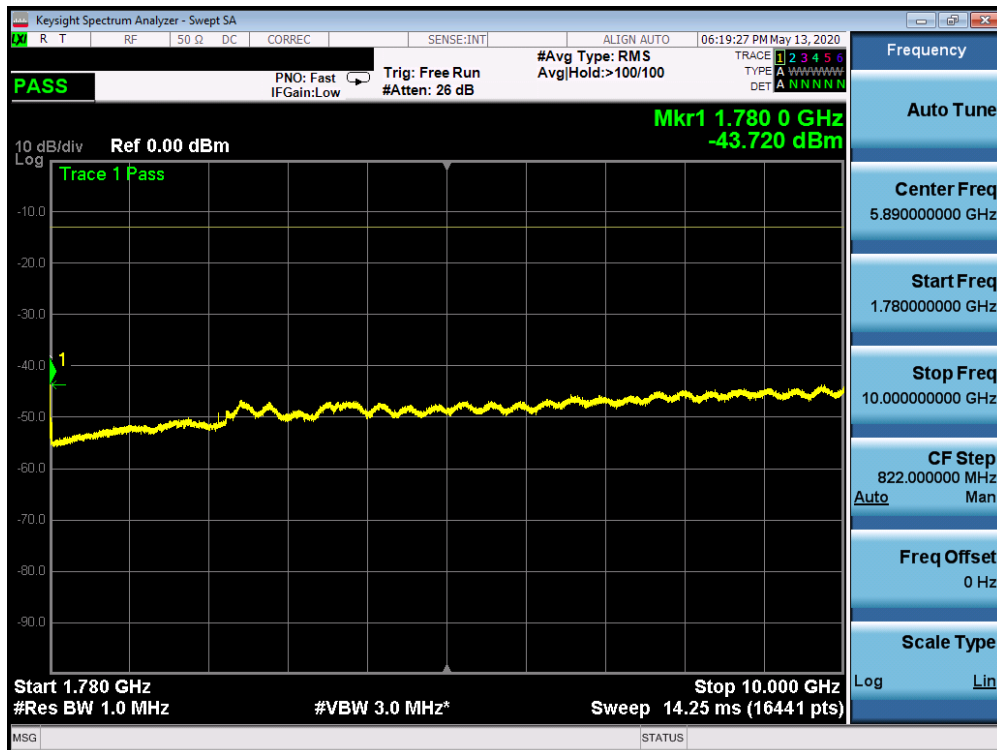


Plot 7-350. Conducted Spurious Plot (n66 - 20MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - Mid Channel)

FCC ID: A3LSMN981U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2005050081-03.A3L	Test Dates: 5/5 - 7/15/2020	EUT Type: Portable Handset		Page 199 of 485

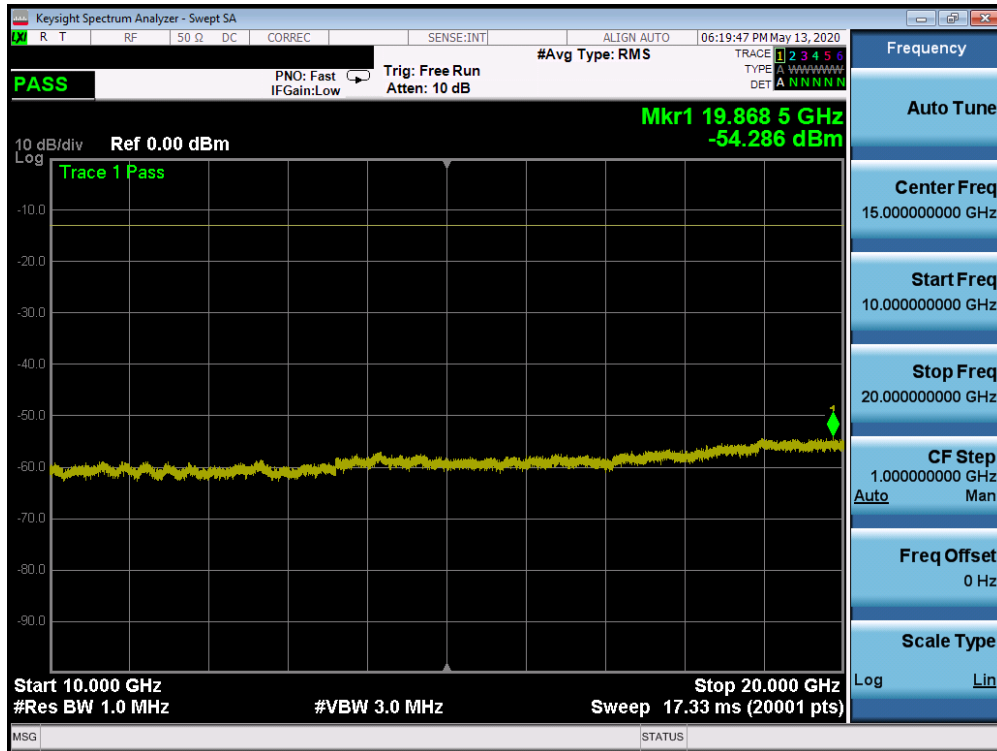


Plot 7-351. Conducted Spurious Plot (n66 - 20MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - High Channel)



Plot 7-352. Conducted Spurious Plot (n66 - 20MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - High Channel)

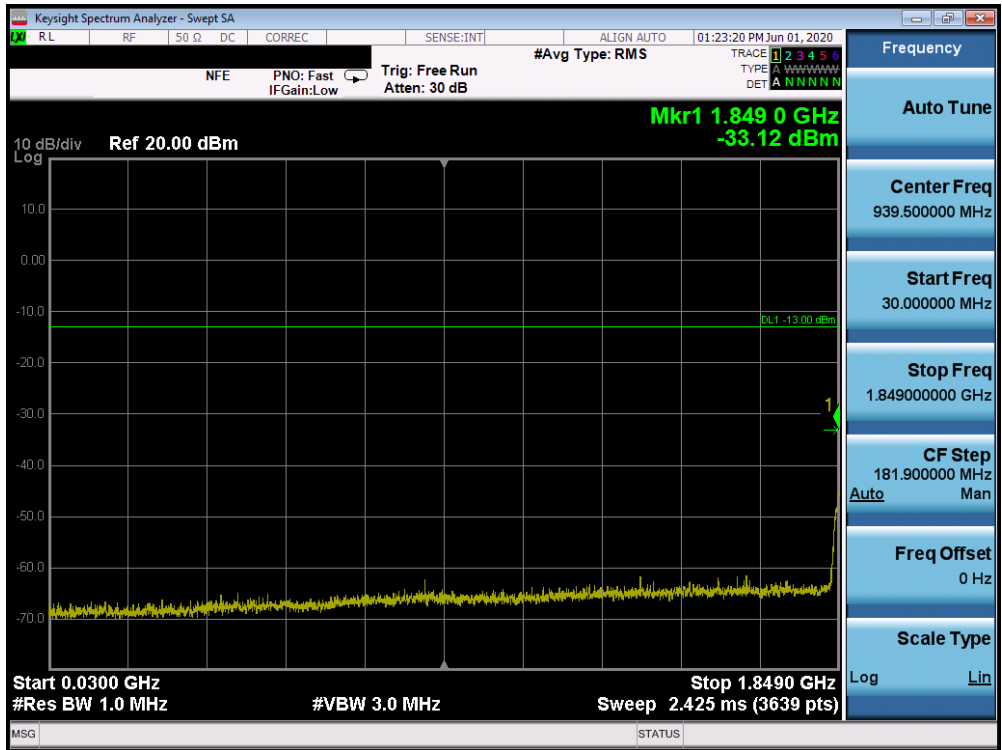
FCC ID: A3LSMN981U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2005050081-03.A3L	Test Dates: 5/5 - 7/15/2020	EUT Type: Portable Handset		Page 200 of 485



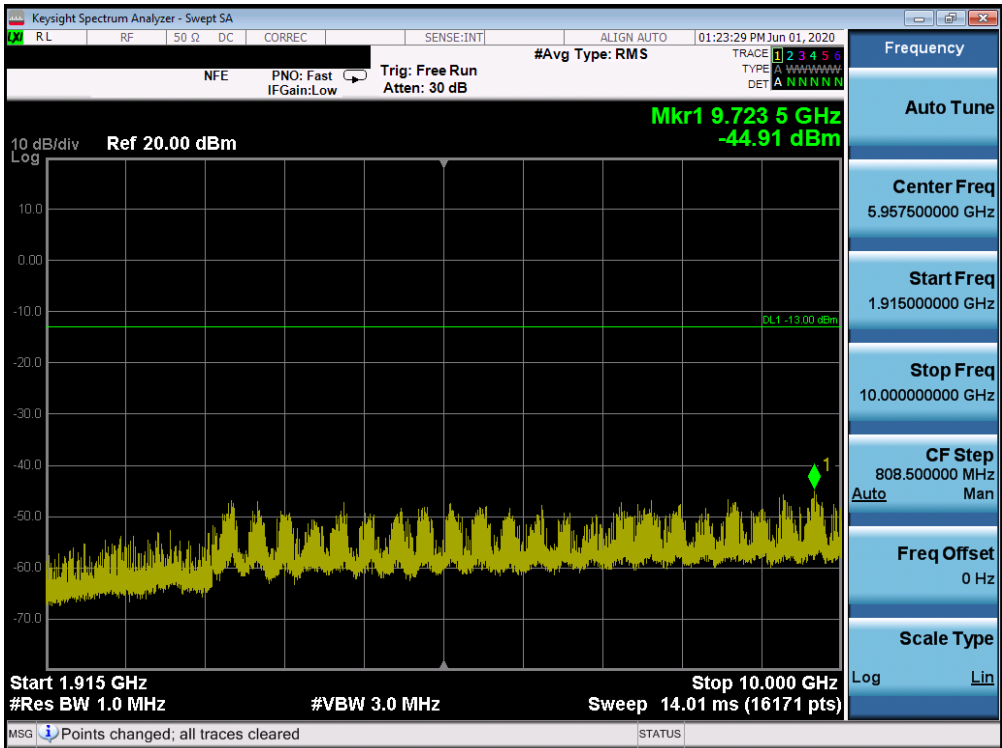
Plot 7-353. Conducted Spurious Plot (n66 - 20MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - High Channel)

FCC ID: A3LSMN981U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2005050081-03.A3L	Test Dates: 5/5 – 7/15/2020	EUT Type: Portable Handset		Page 201 of 485

Band 25/2

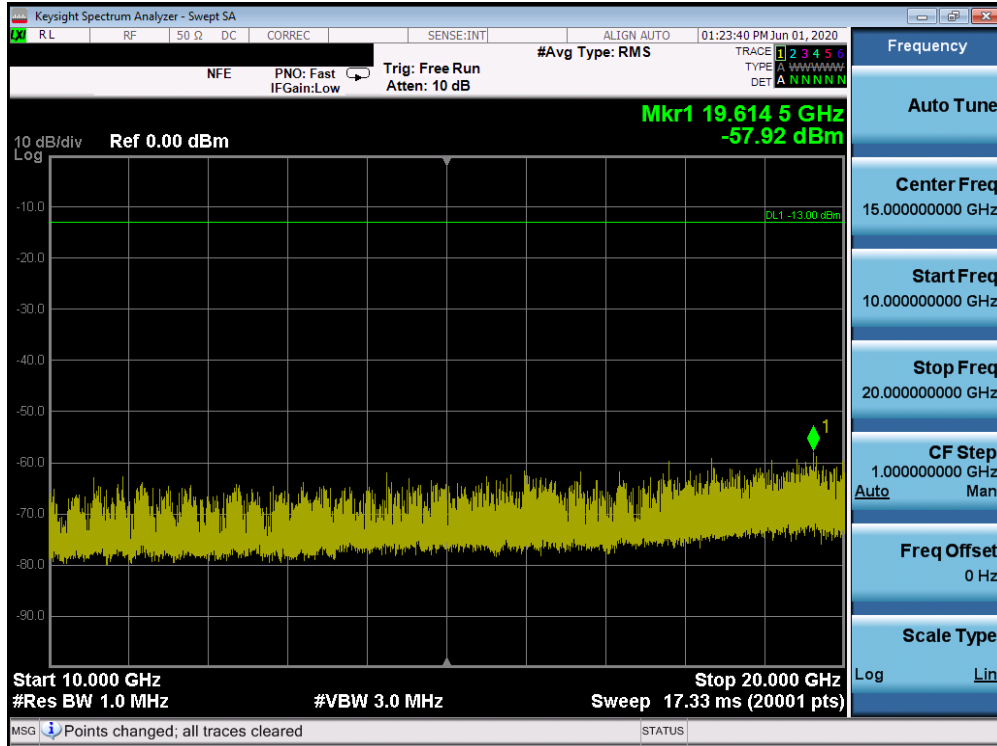


Plot 7-354. Conducted Spurious Plot (Band 25/2 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

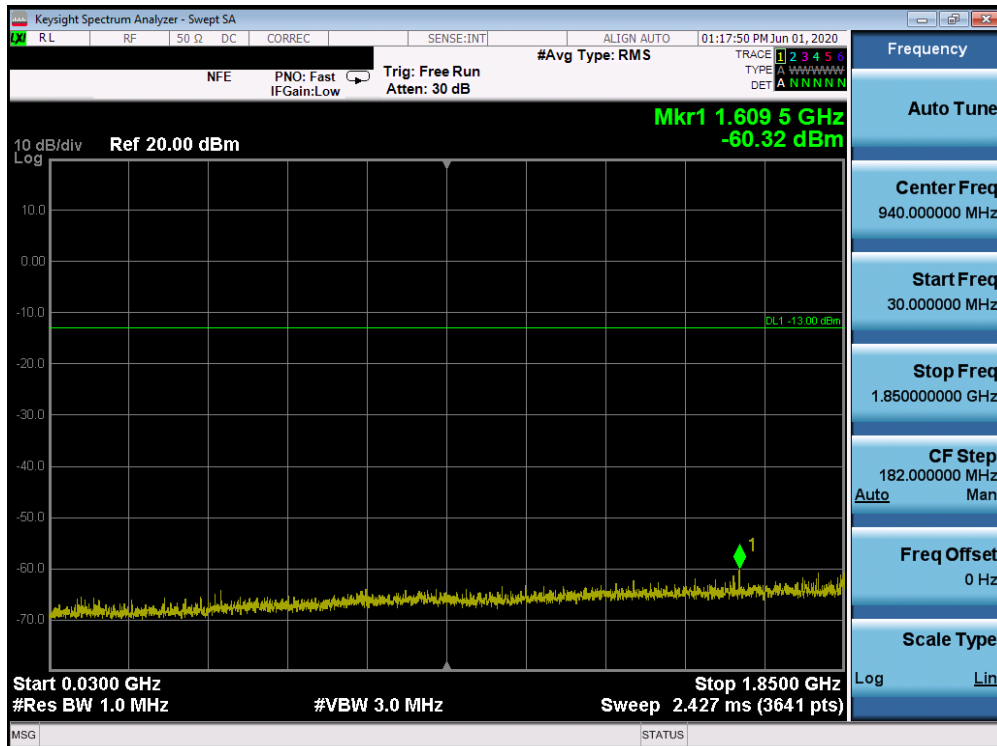


Plot 7-355. Conducted Spurious Plot (Band 25/2 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

FCC ID: A3LSMN981U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2005050081-03.A3L	Test Dates: 5/5 – 7/15/2020	EUT Type: Portable Handset		Page 202 of 485

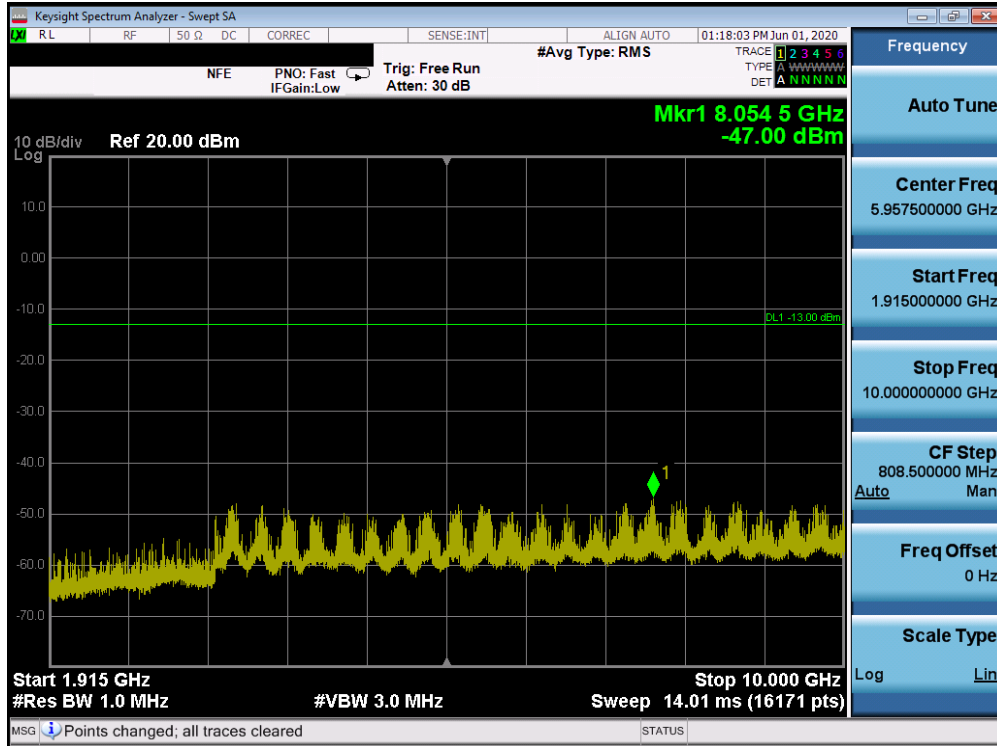


Plot 7-356. Conducted Spurious Plot (Band 25/2 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

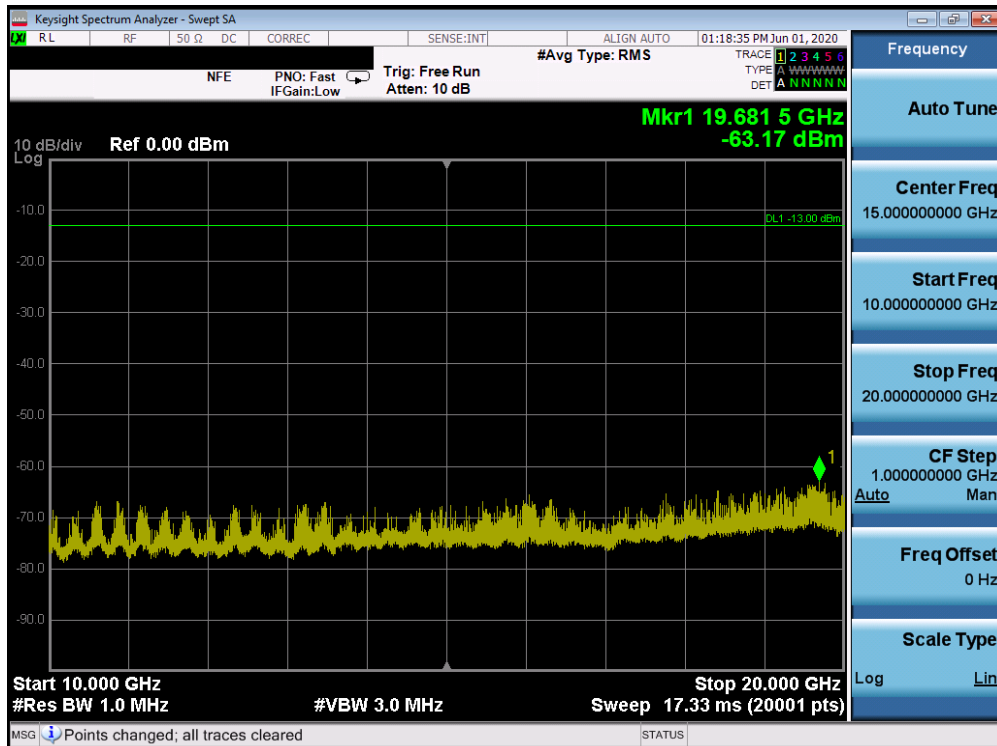


Plot 7-357. Conducted Spurious Plot (Band 25/2 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: A3LSMN981U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2005050081-03.A3L	Test Dates: 5/5 - 7/15/2020	EUT Type: Portable Handset		Page 203 of 485

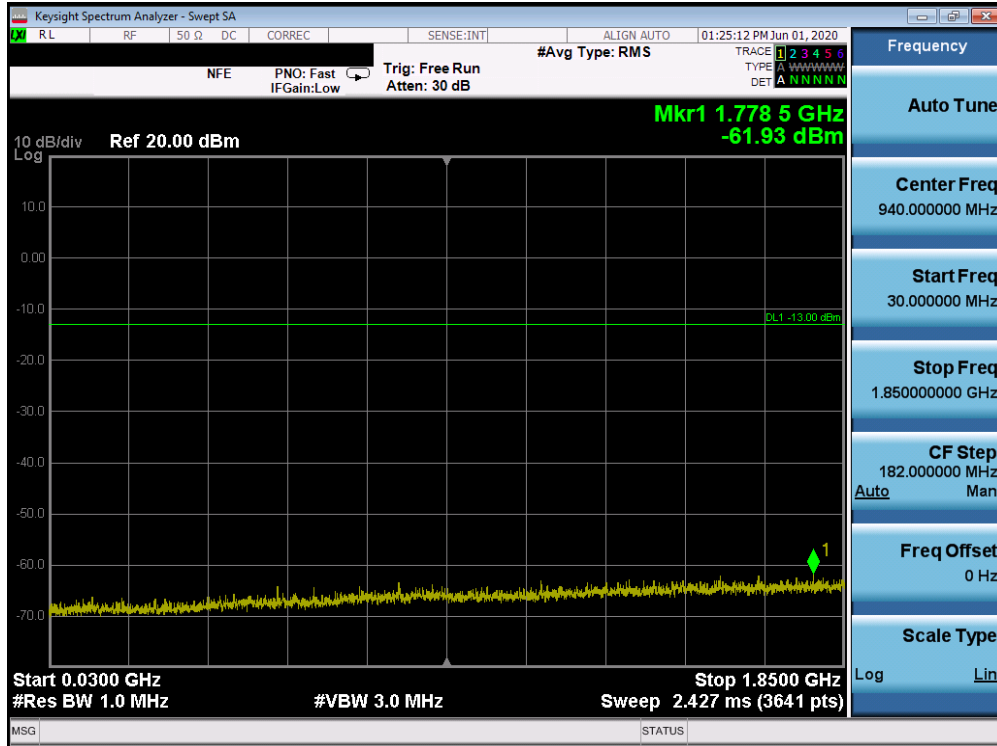


Plot 7-358. Conducted Spurious Plot (Band 25/2 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

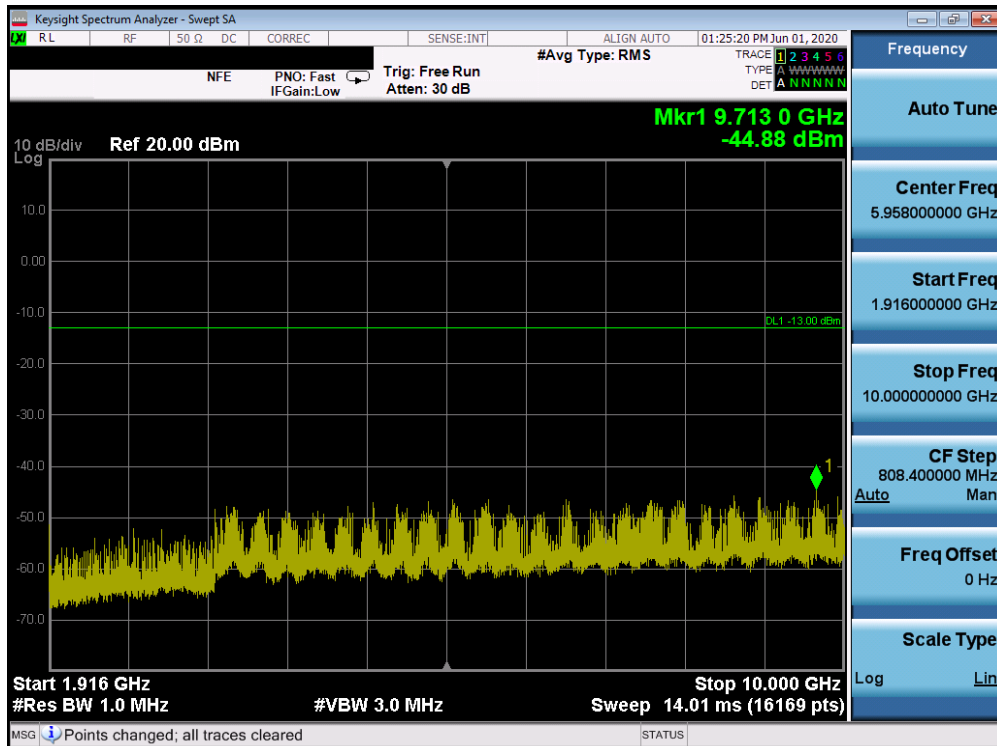


Plot 7-359. Conducted Spurious Plot (Band 25/2 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: A3LSMN981U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2005050081-03.A3L	Test Dates: 5/5 - 7/15/2020	EUT Type: Portable Handset		Page 204 of 485

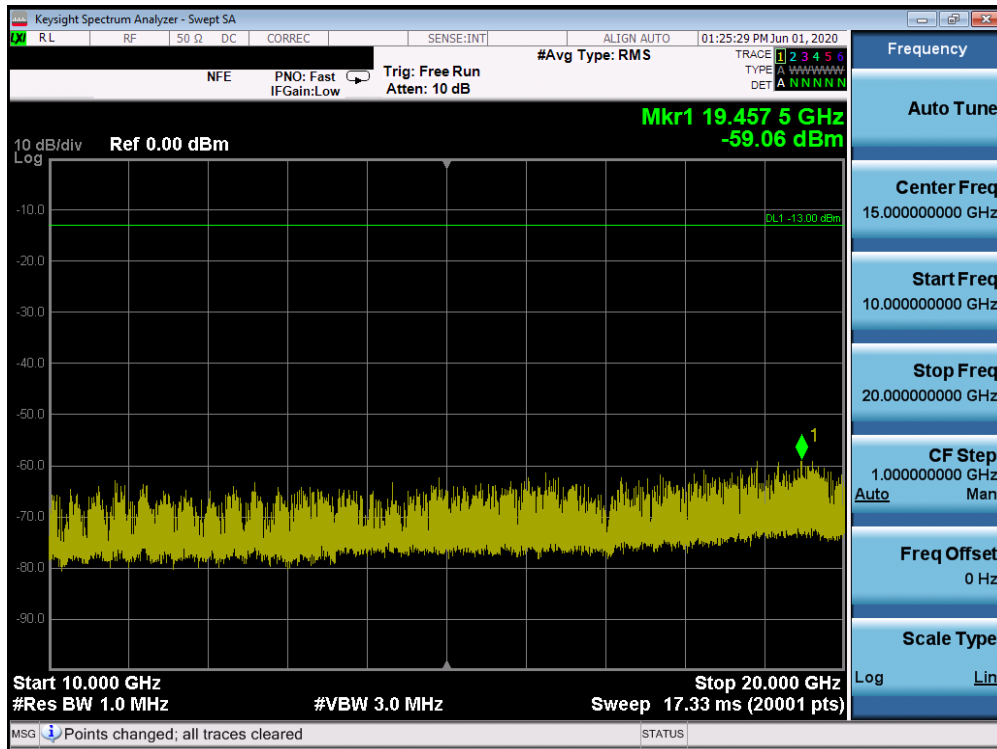


Plot 7-360. Conducted Spurious Plot (Band 25/2 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)



Plot 7-361. Conducted Spurious Plot (Band 25/2 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

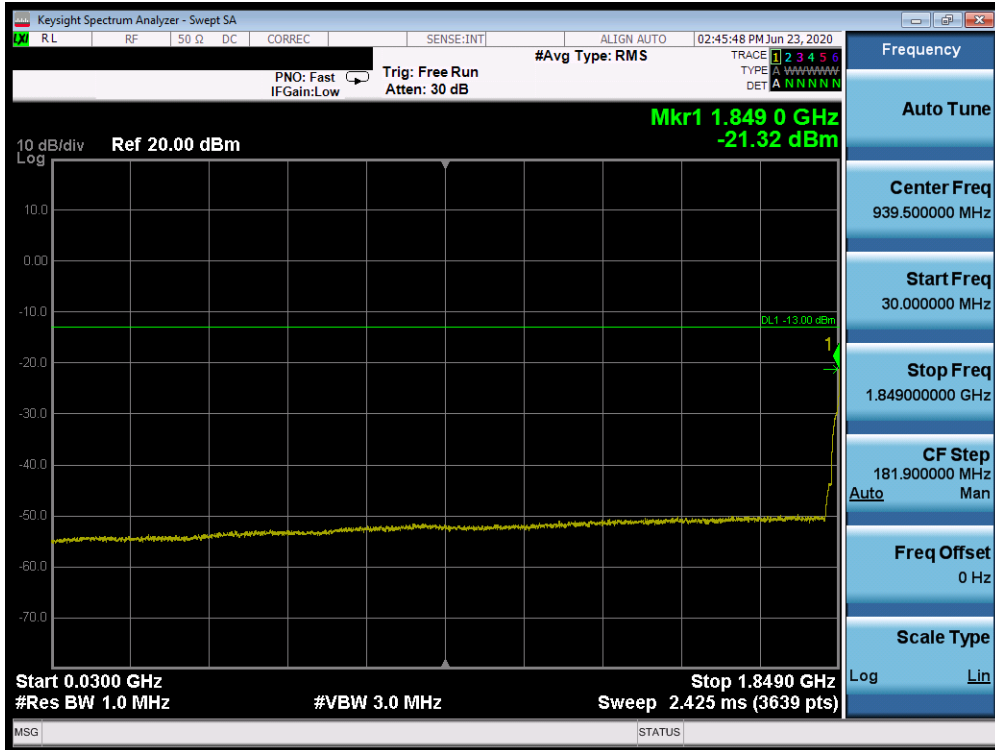
FCC ID: A3LSMN981U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2005050081-03.A3L	Test Dates: 5/5 - 7/15/2020	EUT Type: Portable Handset		Page 205 of 485



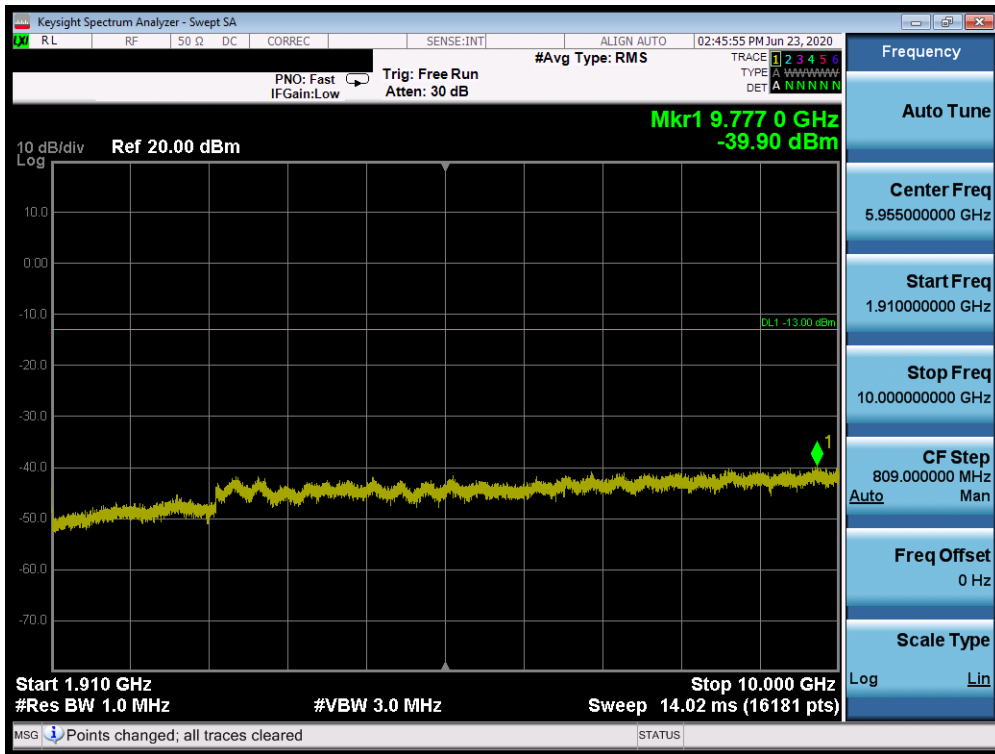
Plot 7-362. Conducted Spurious Plot (Band 25/2 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

FCC ID: A3LSMN981U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2005050081-03.A3L	Test Dates: 5/5 – 7/15/2020	EUT Type: Portable Handset		Page 206 of 485

NR Band n25/2

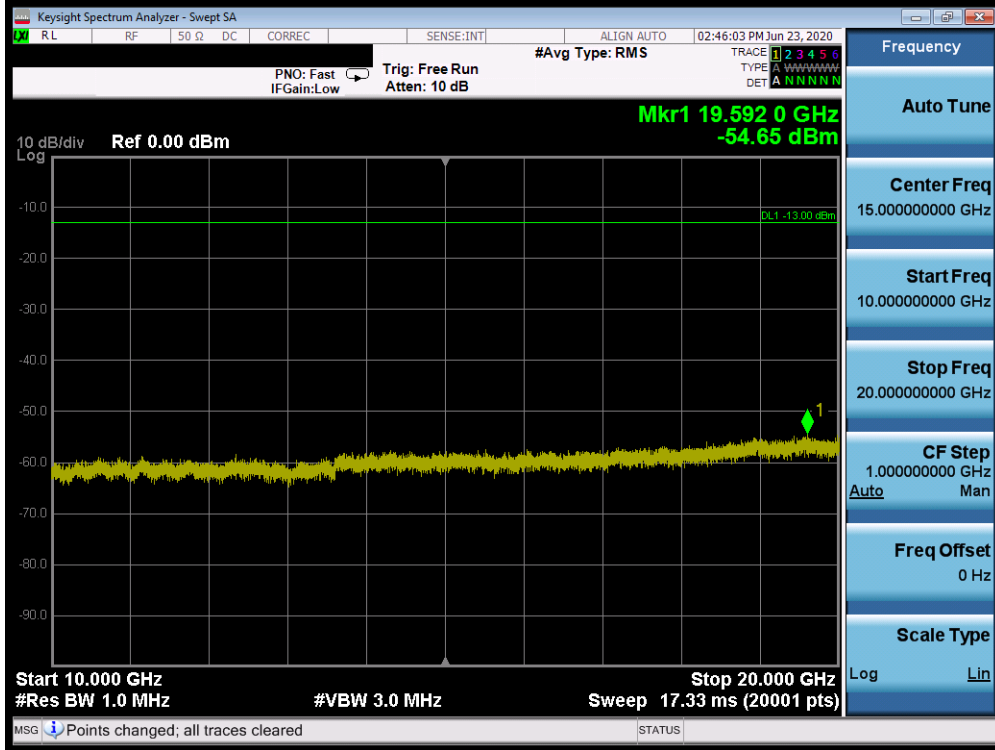


Plot 7-363. Conducted Spurious Plot (n25/2 - 20MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - Low Channel)

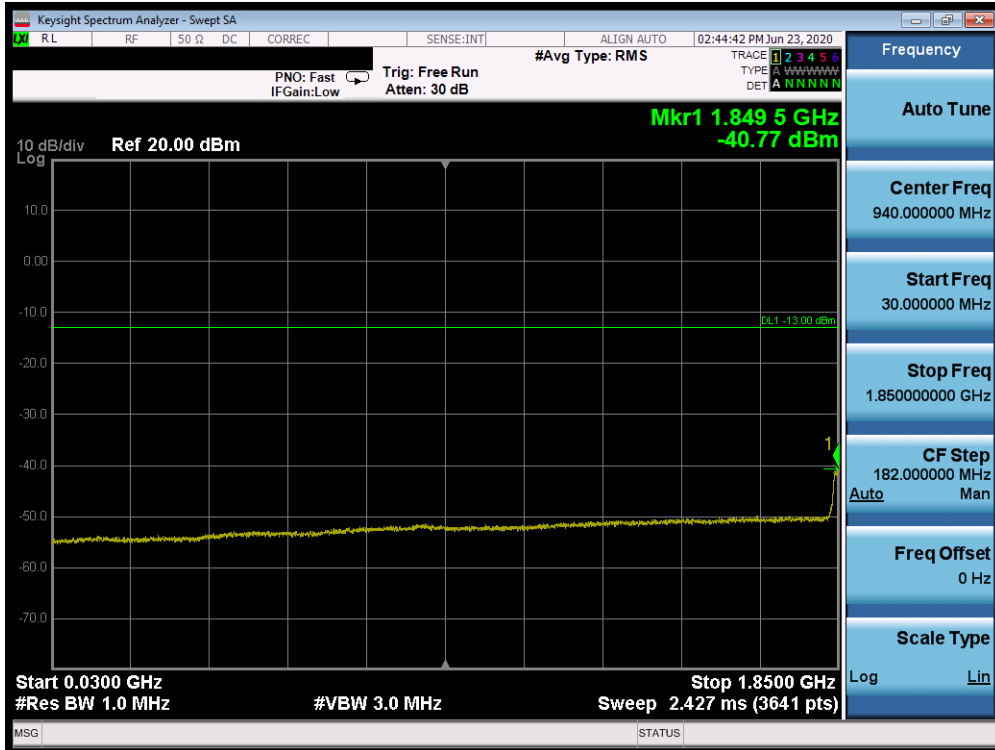


Plot 7-364. Conducted Spurious Plot (n25/2 - 20MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - Low Channel)

FCC ID: A3LSMN981U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2005050081-03.A3L	Test Dates: 5/5 - 7/15/2020	EUT Type: Portable Handset		Page 207 of 485

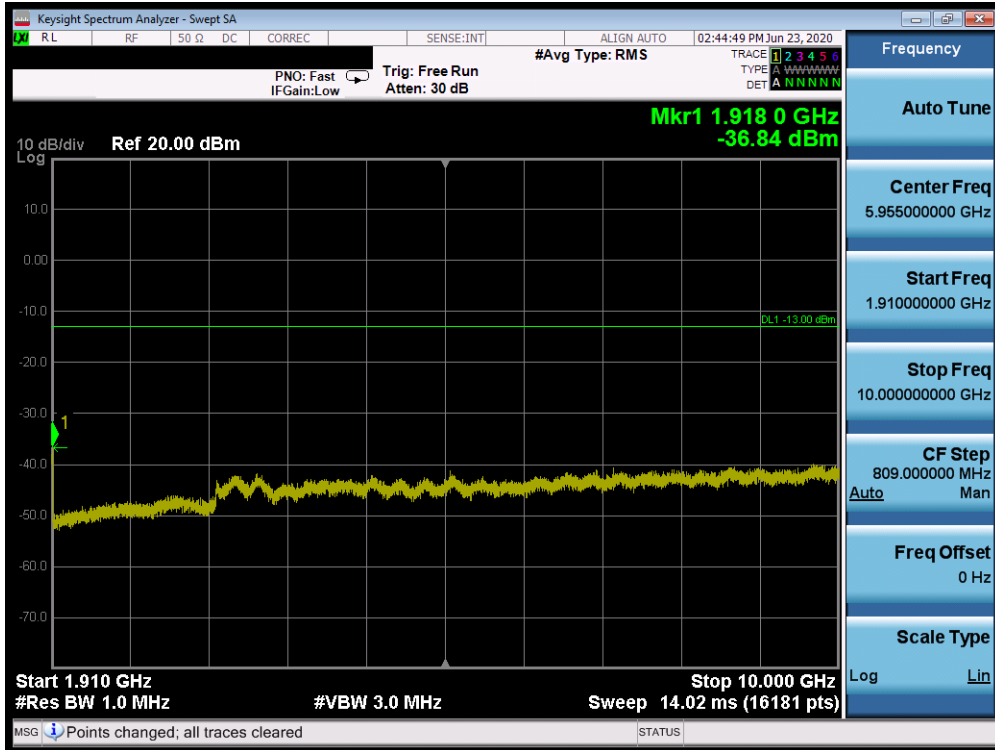


Plot 7-365. Conducted Spurious Plot (n25/2 - 20MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - Low Channel)

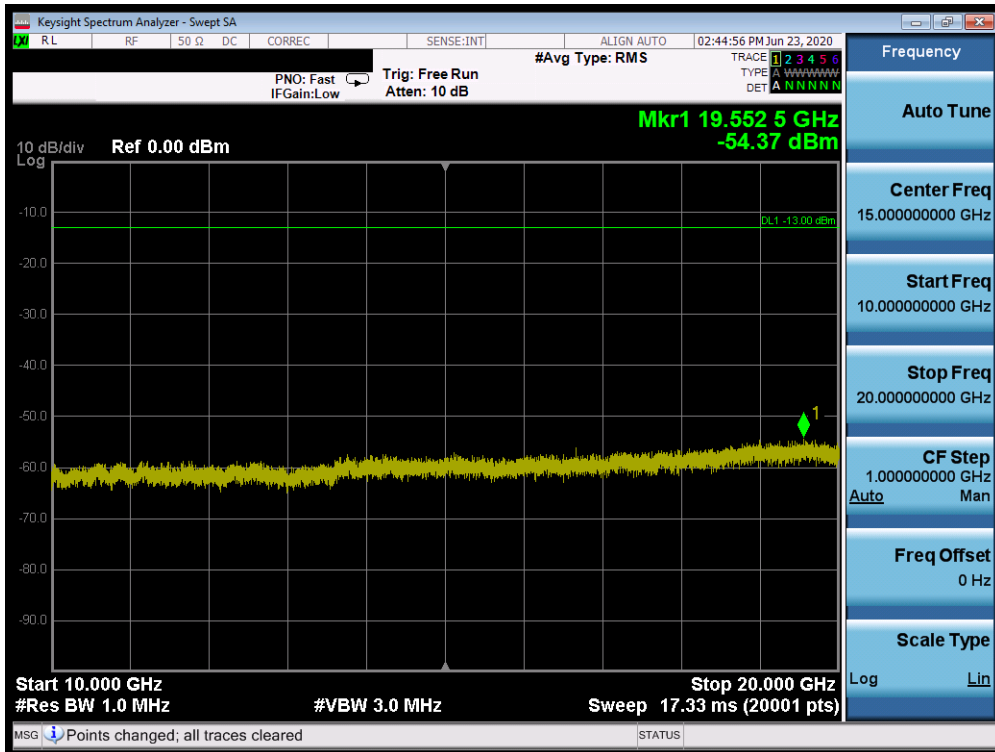


Plot 7-366. Conducted Spurious Plot (n25/2 - 20MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - Mid Channel)

FCC ID: A3LSMN981U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2005050081-03.A3L	Test Dates: 5/5 - 7/15/2020	EUT Type: Portable Handset		Page 208 of 485

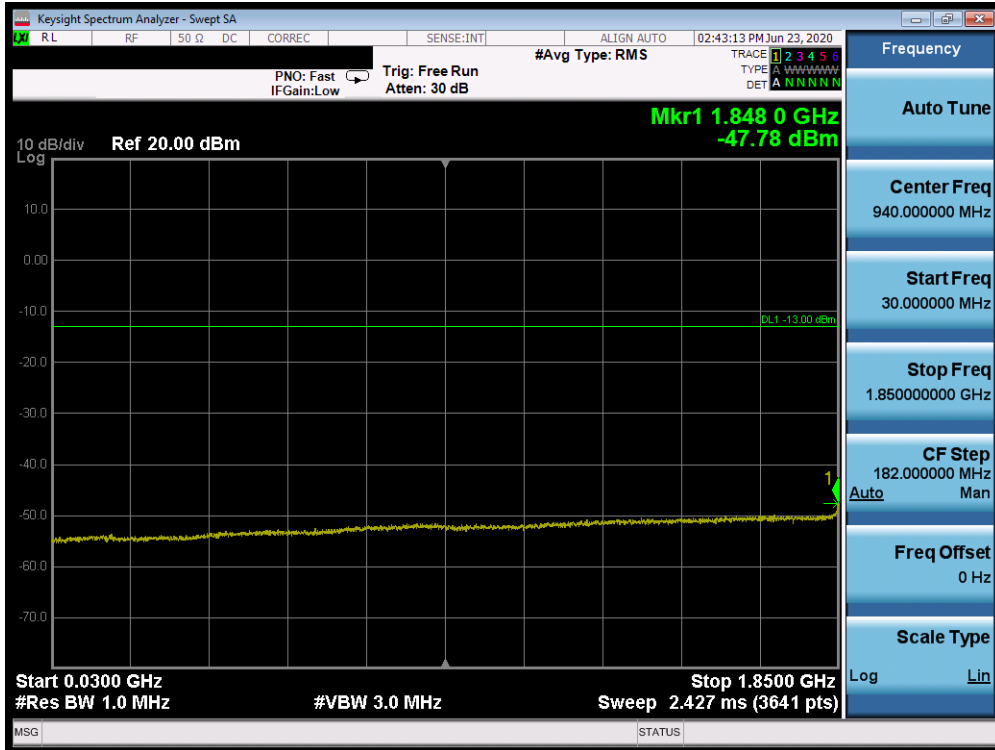


Plot 7-367. Conducted Spurious Plot (n25/2 - 20MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - Mid Channel)

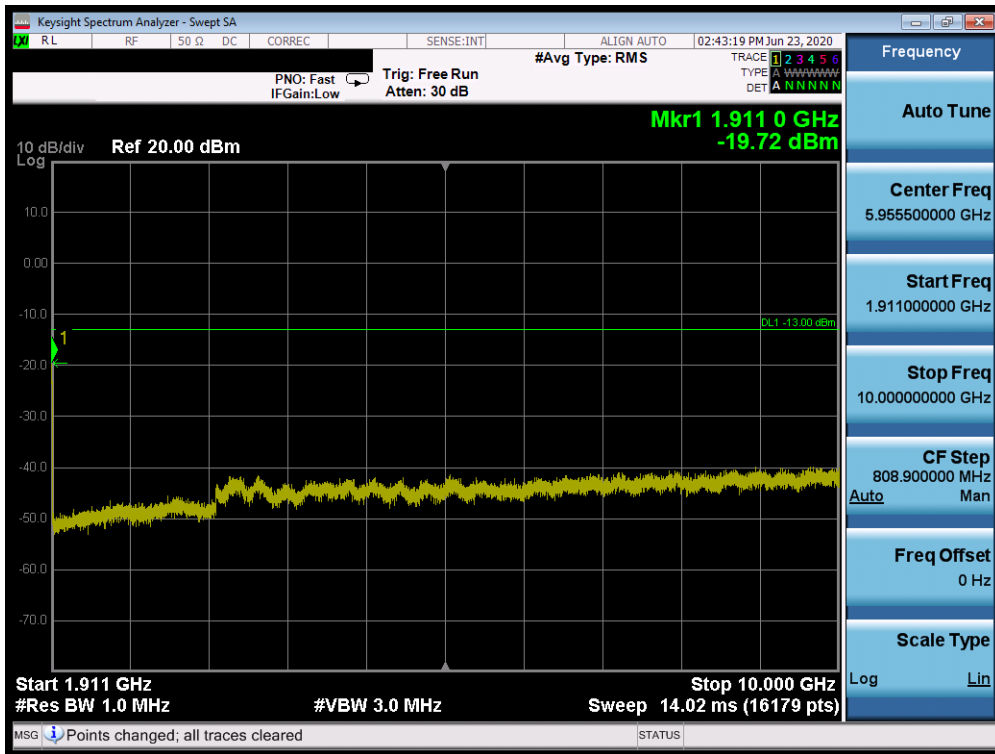


Plot 7-368. Conducted Spurious Plot (n25/2 - 20MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - Mid Channel)

FCC ID: A3LSMN981U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2005050081-03.A3L	Test Dates: 5/5 - 7/15/2020	EUT Type: Portable Handset		Page 209 of 485

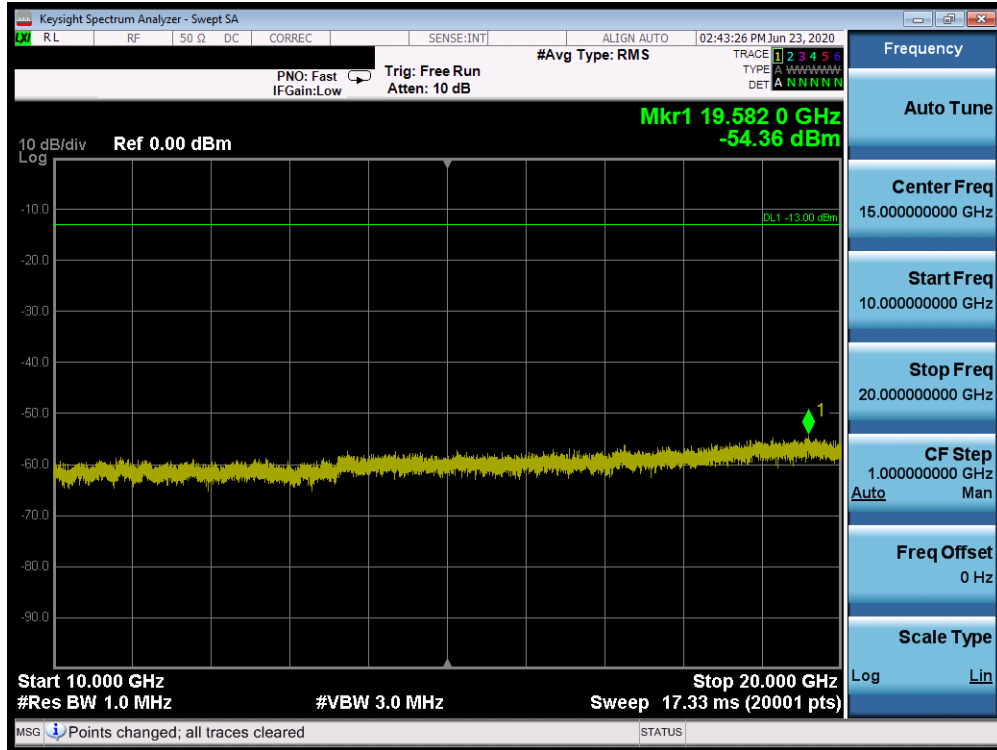


Plot 7-369. Conducted Spurious Plot (n25/2 - 20MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - High Channel)



Plot 7-370. Conducted Spurious Plot (n25/2 - 20MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - High Channel)

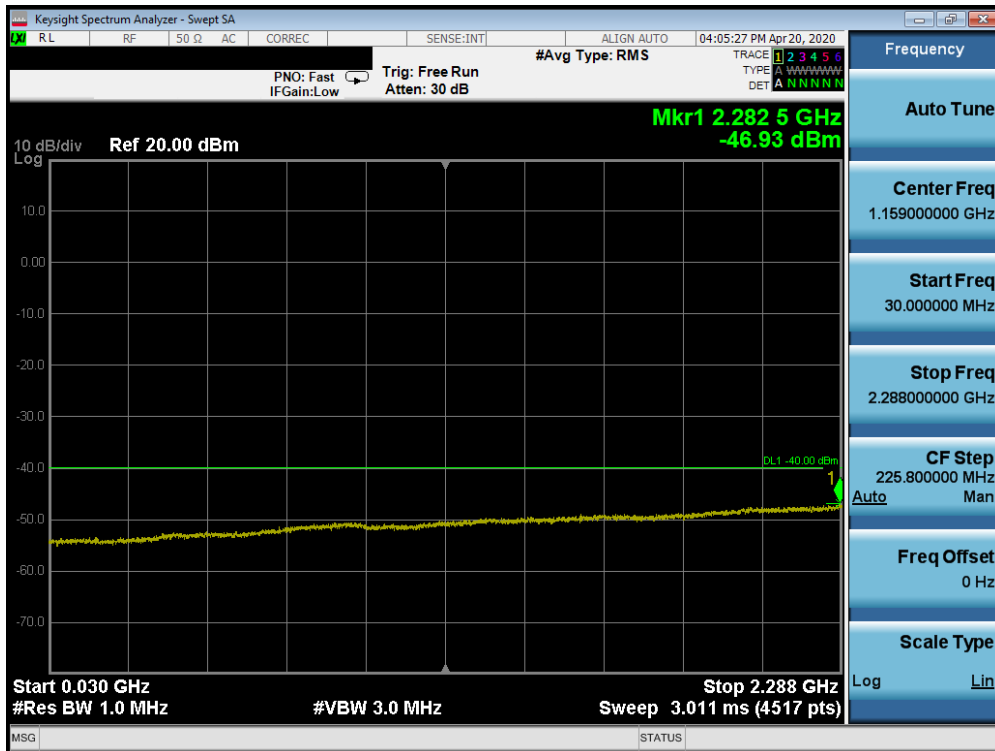
FCC ID: A3LSMN981U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2005050081-03.A3L	Test Dates: 5/5 - 7/15/2020	EUT Type: Portable Handset		Page 210 of 485



Plot 7-371. Conducted Spurious Plot (n25/2 - 20MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - High Channel)

FCC ID: A3LSMN981U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2005050081-03.A3L	Test Dates: 5/5 - 7/15/2020	EUT Type: Portable Handset		Page 211 of 485

Band 30

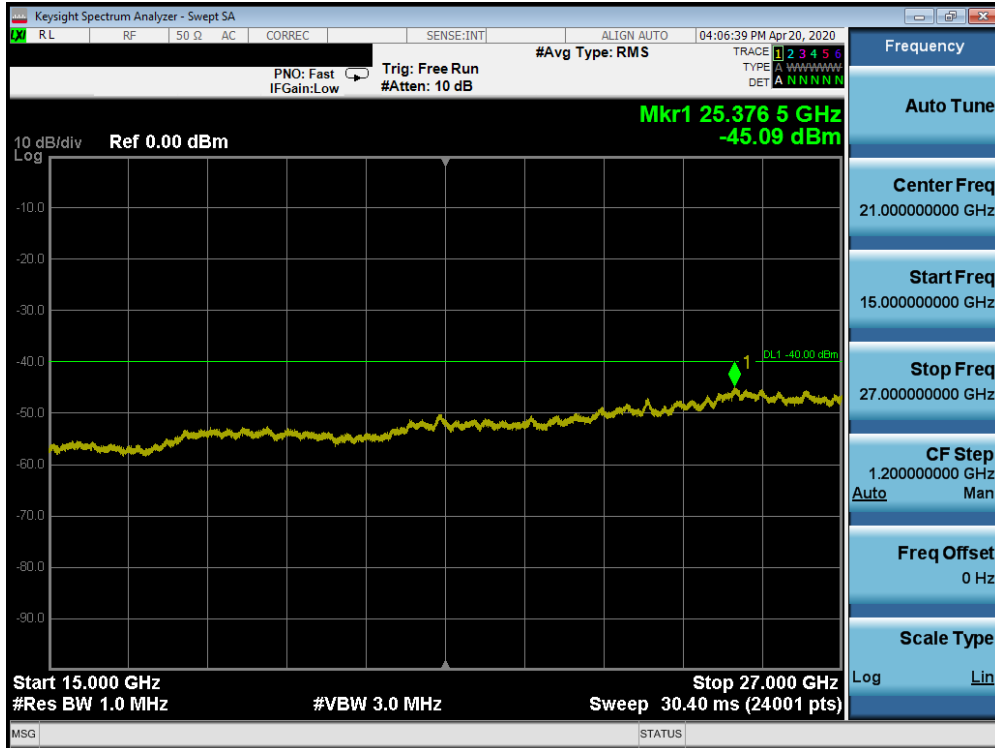


Plot 7-372. Conducted Spurious Plot (Band 30 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)



Plot 7-373. Conducted Spurious Plot (Band 30 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

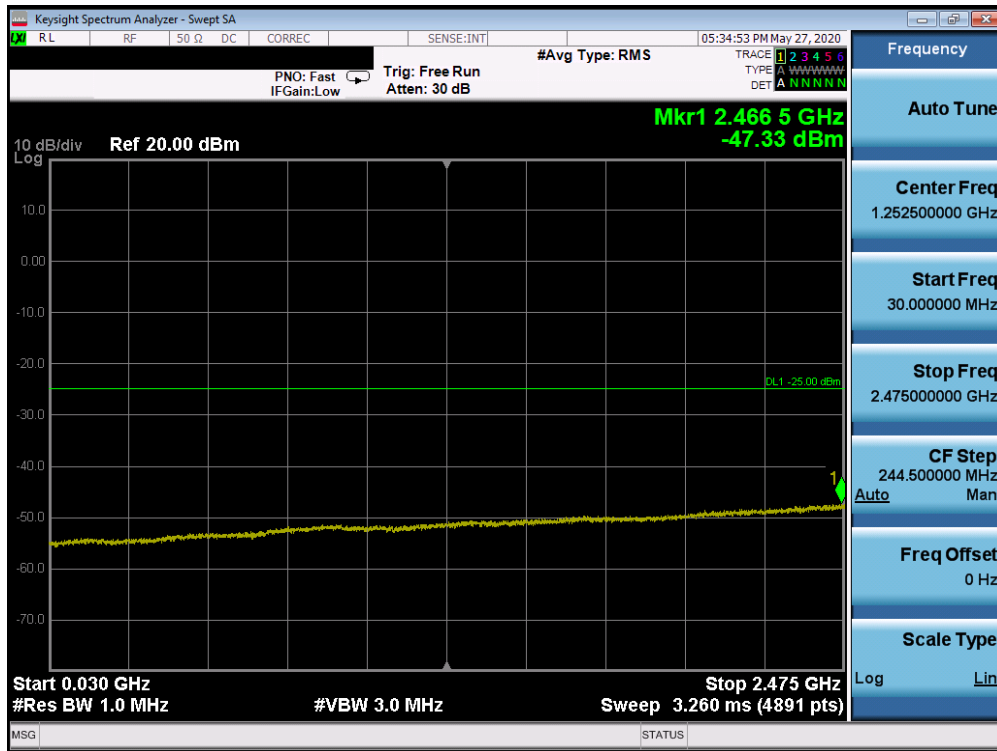
FCC ID: A3LSMN981U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2005050081-03.A3L	Test Dates: 5/5 - 7/15/2020	EUT Type: Portable Handset		Page 212 of 485



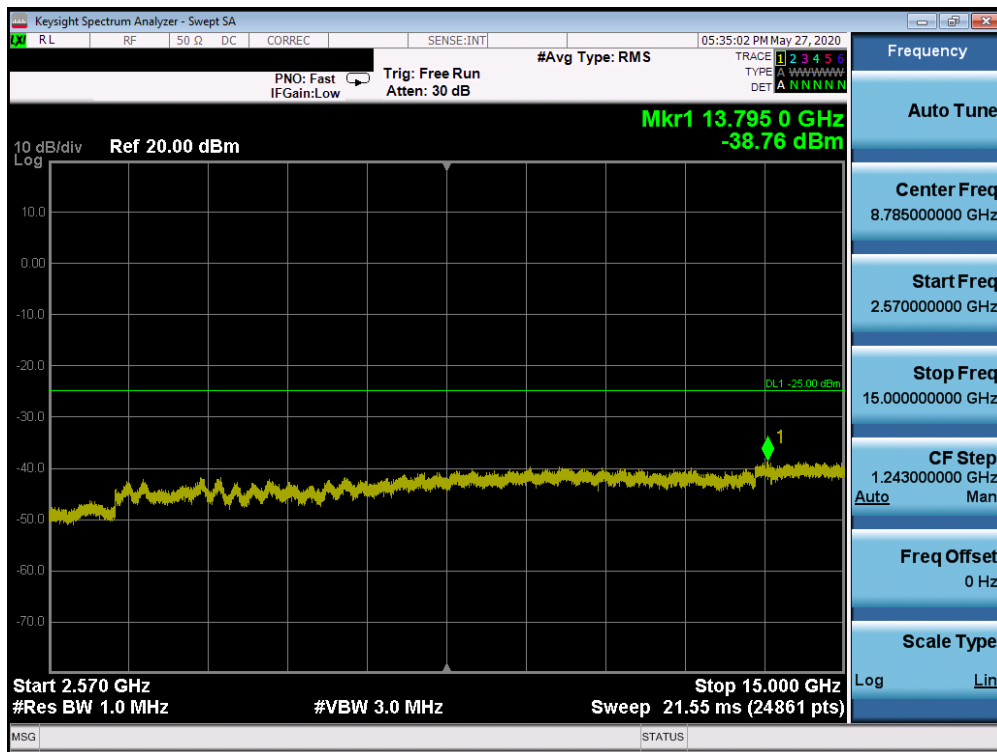
Plot 7-374. Conducted Spurious Plot (Band 30 - 10.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: A3LSMN981U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2005050081-03.A3L	Test Dates: 5/5 – 7/15/2020	EUT Type: Portable Handset		Page 213 of 485

Band 7

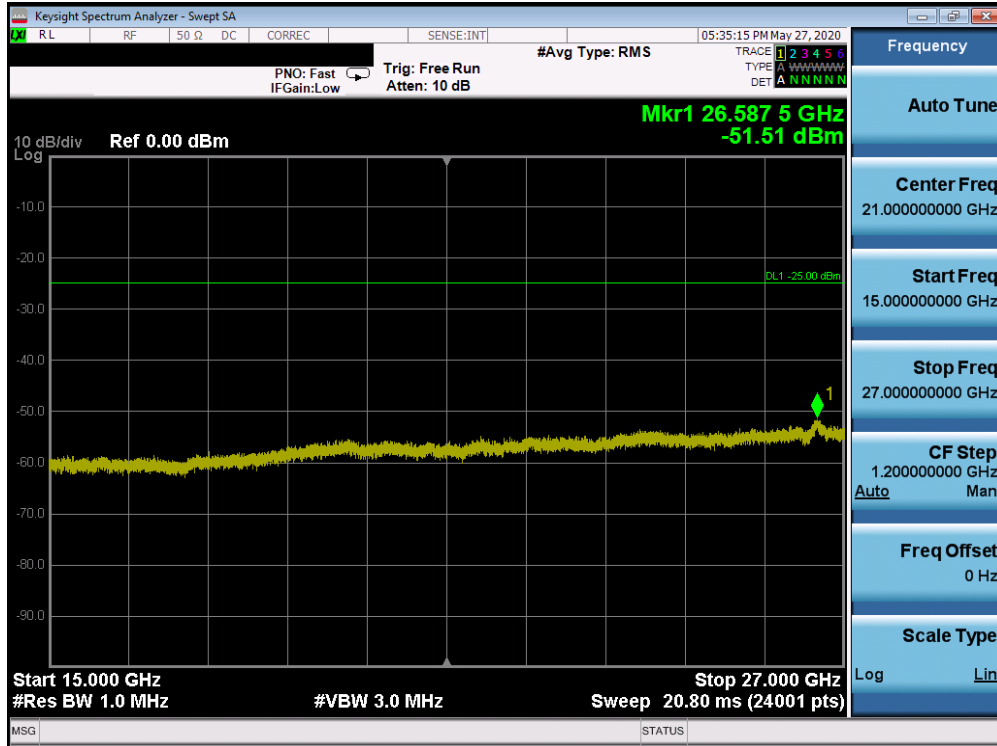


Plot 7-375. Conducted Spurious Plot (Band 7 - 15.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

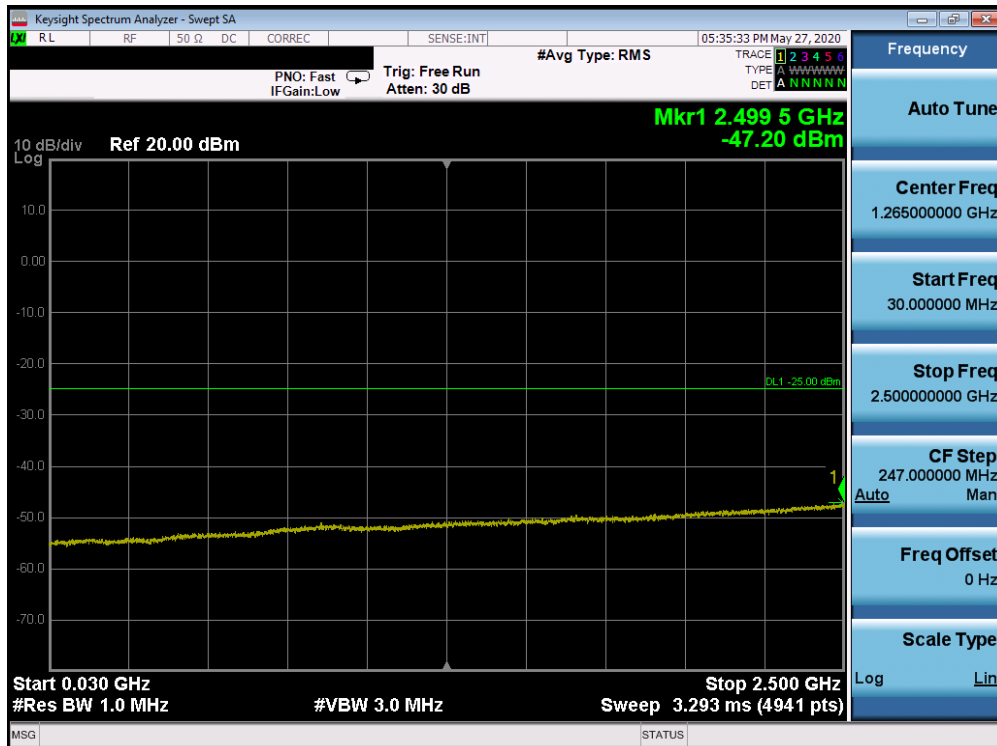


Plot 7-376. Conducted Spurious Plot (Band 7 - 15.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

FCC ID: A3LSMN981U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2005050081-03.A3L	Test Dates: 5/5 - 7/15/2020	EUT Type: Portable Handset		Page 214 of 485

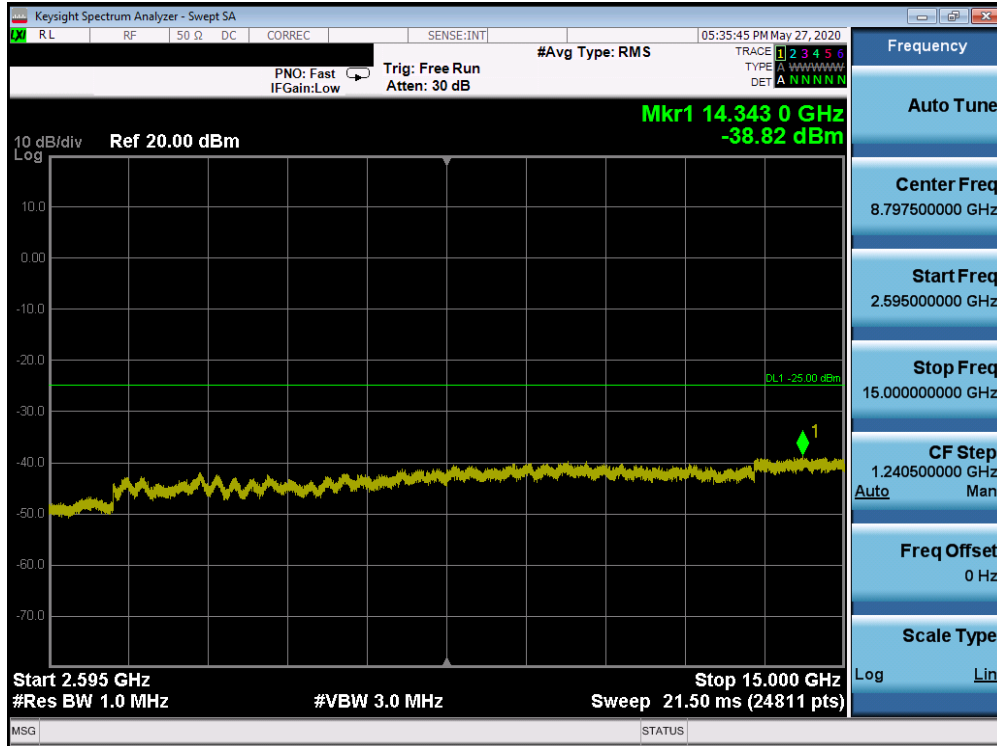


Plot 7-377. Conducted Spurious Plot (Band 7 - 15.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

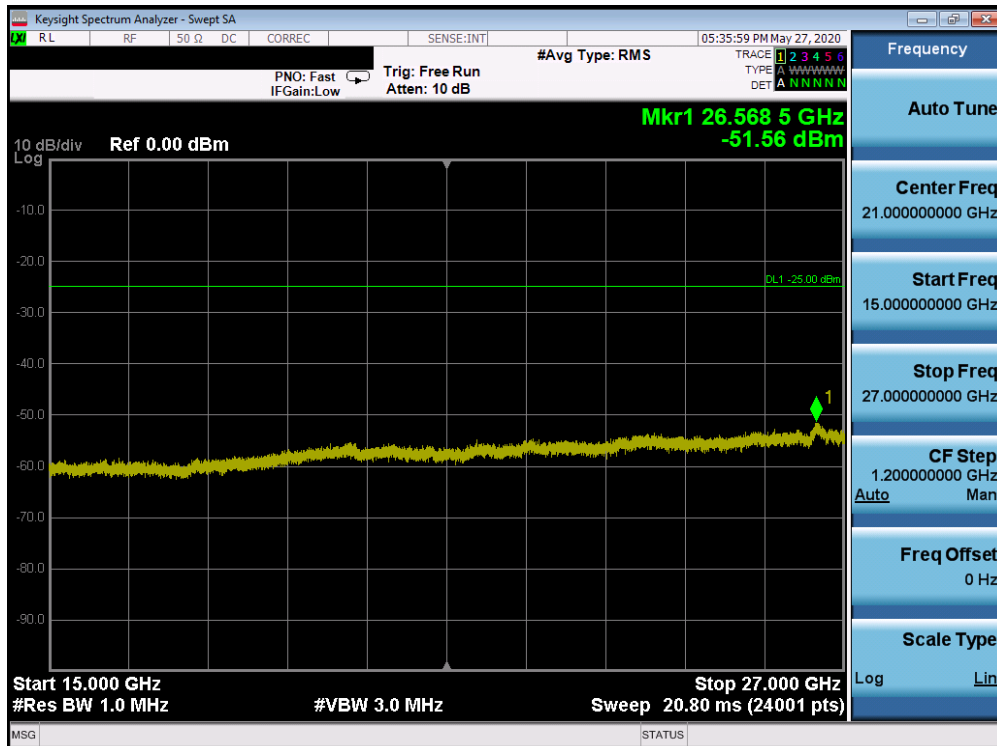


Plot 7-378. Conducted Spurious Plot (Band 7 - 15.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

FCC ID: A3LSMN981U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2005050081-03.A3L	Test Dates: 5/5 - 7/15/2020	EUT Type: Portable Handset		Page 215 of 485

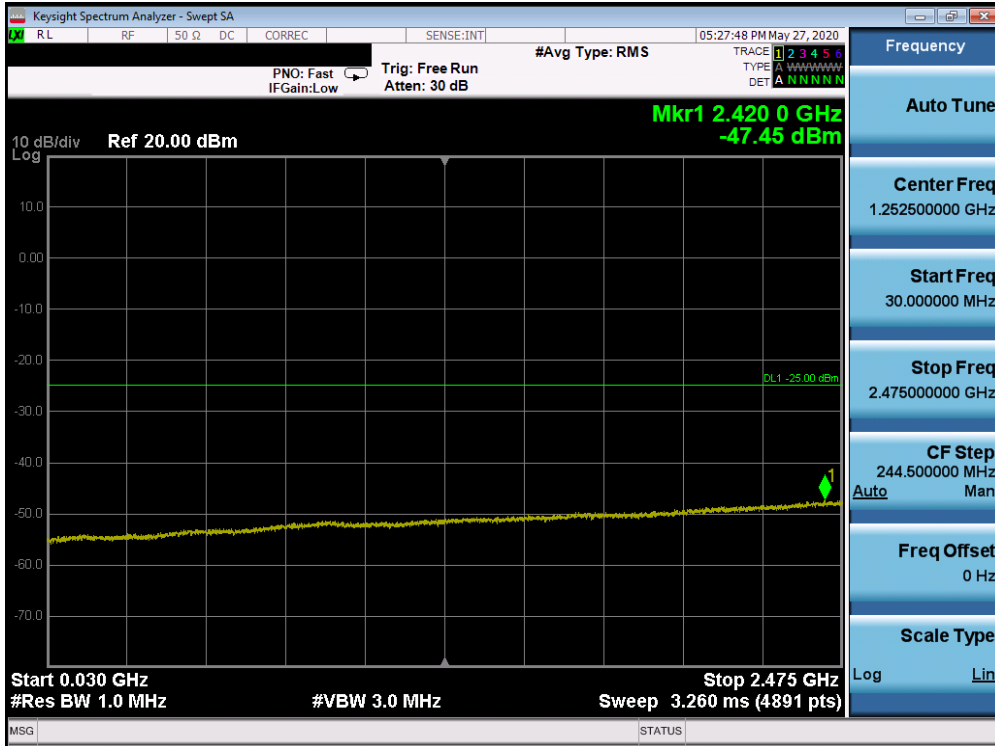


Plot 7-379. Conducted Spurious Plot (Band 7 - 15.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

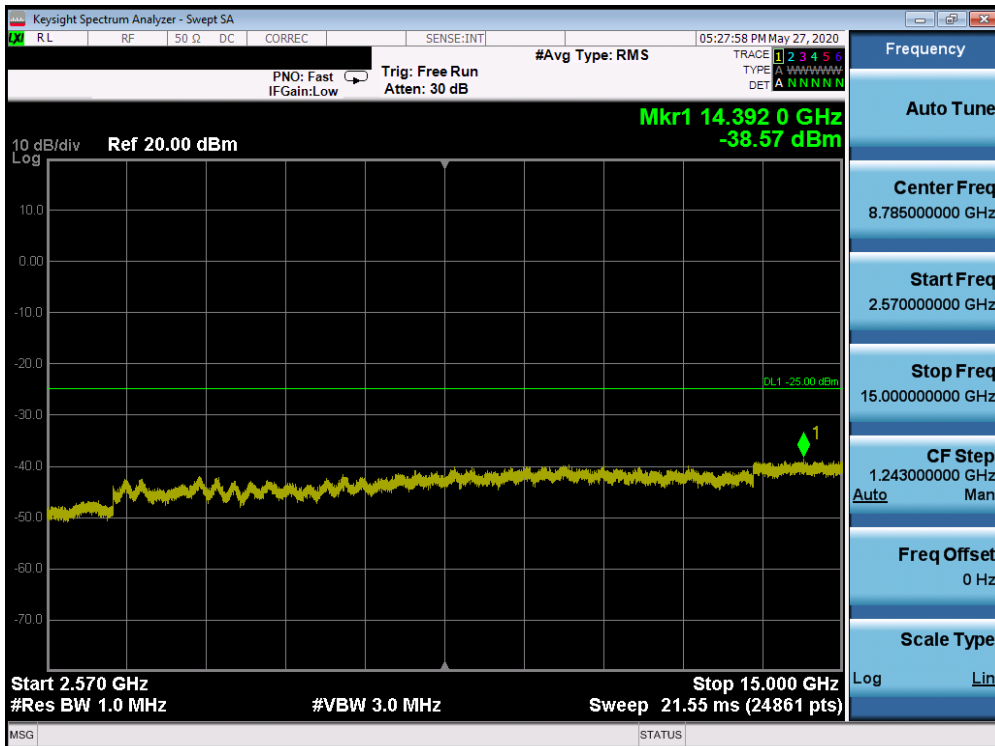


Plot 7-380. Conducted Spurious Plot (Band 7 - 15.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

FCC ID: A3LSMN981U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2005050081-03.A3L	Test Dates: 5/5 - 7/15/2020	EUT Type: Portable Handset		Page 216 of 485

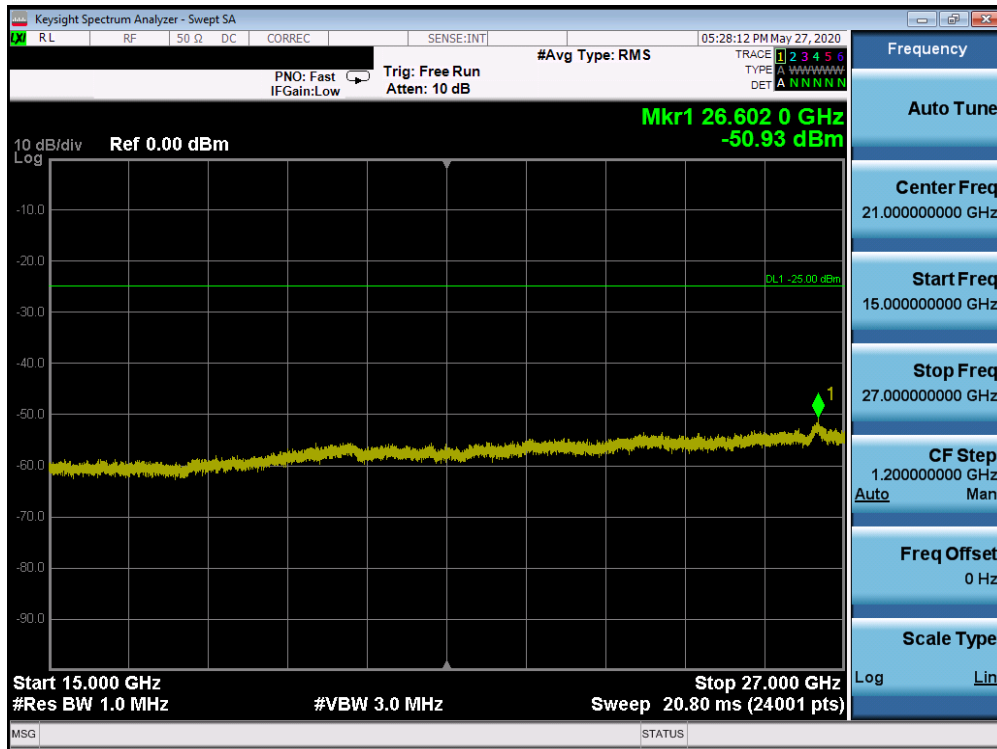


Plot 7-381. Conducted Spurious Plot (Band 7 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

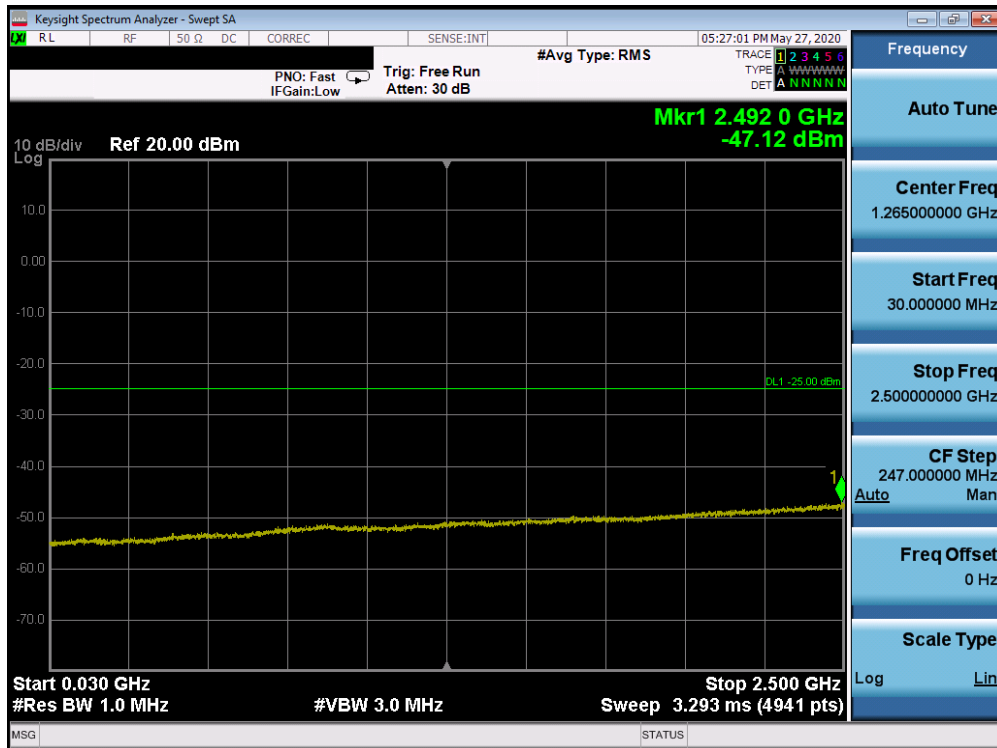


Plot 7-382. Conducted Spurious Plot (Band 7 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

FCC ID: A3LSMN981U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2005050081-03.A3L	Test Dates: 5/5 - 7/15/2020	EUT Type: Portable Handset		Page 217 of 485

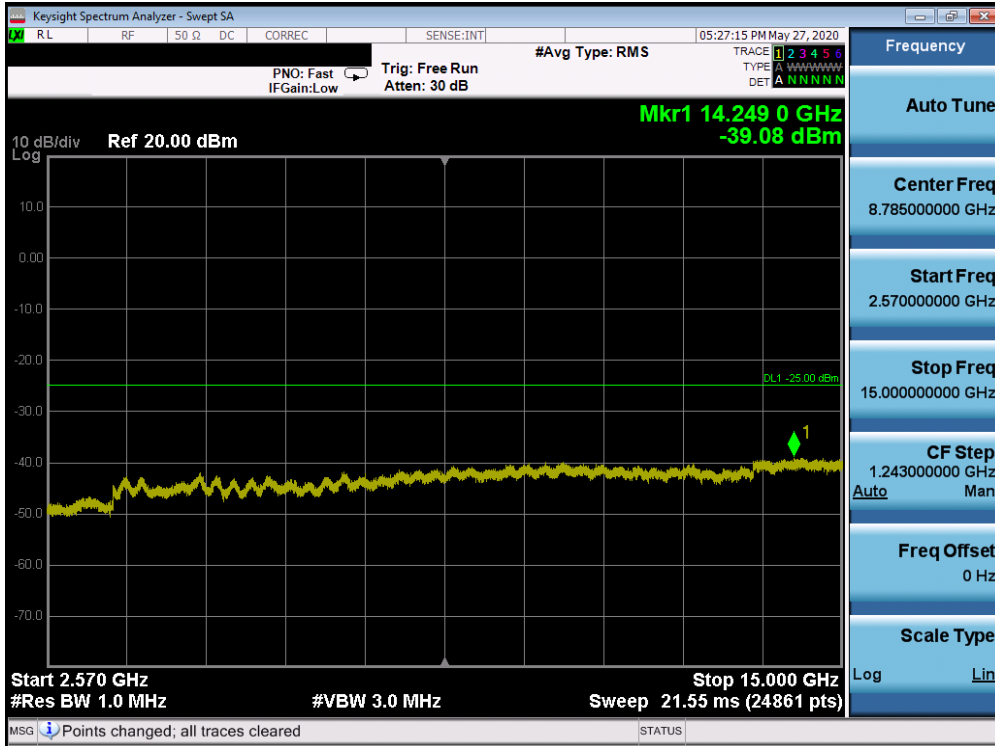


Plot 7-383. Conducted Spurious Plot (Band 7 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

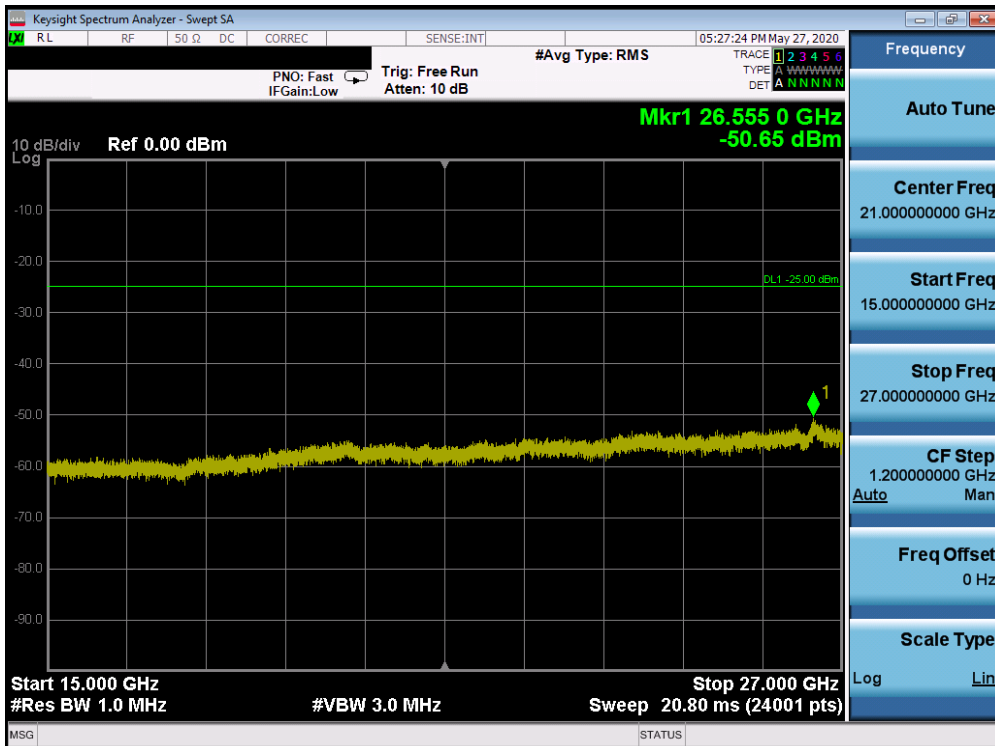


Plot 7-384. Conducted Spurious Plot (Band 7 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: A3LSMN981U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2005050081-03.A3L	Test Dates: 5/5 - 7/15/2020	EUT Type: Portable Handset		Page 218 of 485

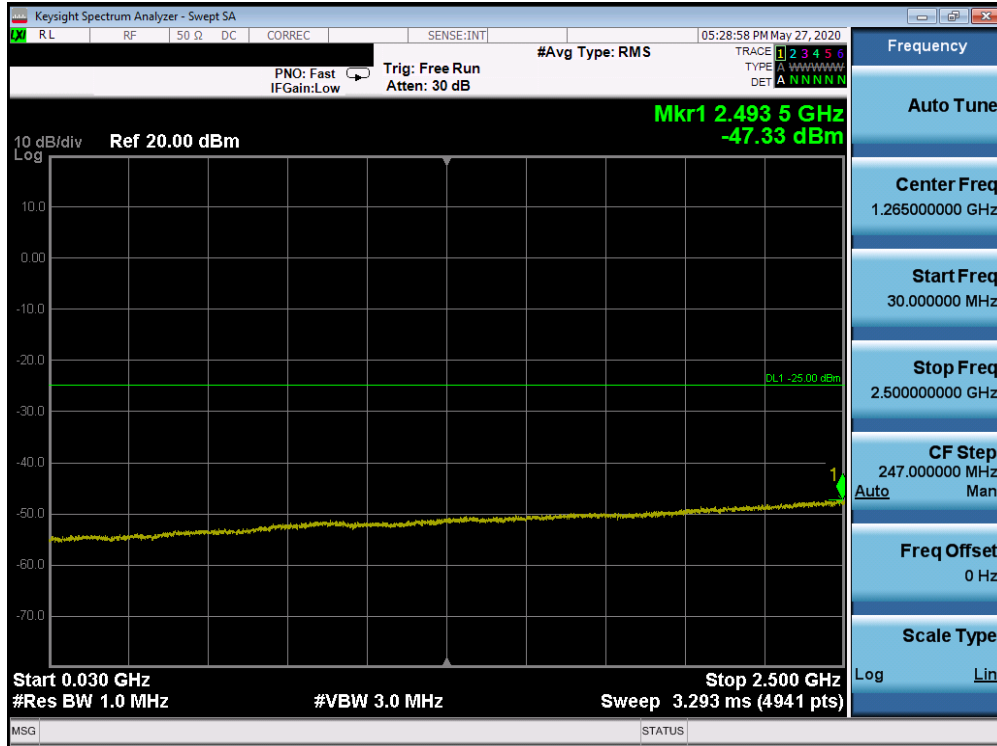


Plot 7-385. Conducted Spurious Plot (Band 7 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

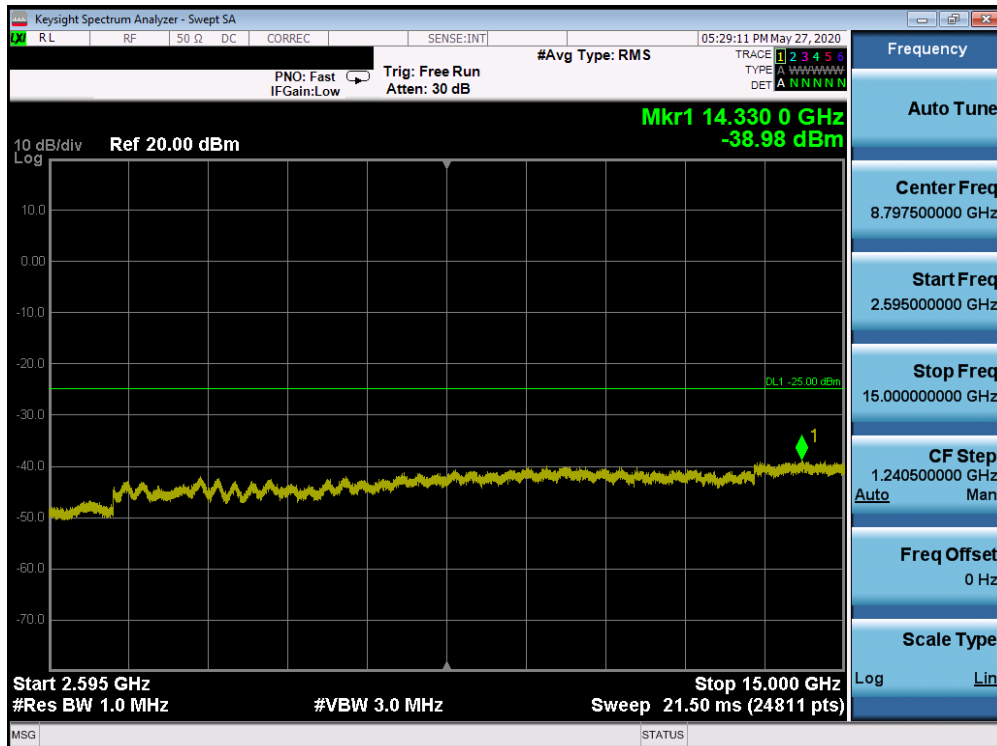


Plot 7-386. Conducted Spurious Plot (Band 7 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: A3LSMN981U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2005050081-03.A3L	Test Dates: 5/5 - 7/15/2020	EUT Type: Portable Handset		Page 219 of 485

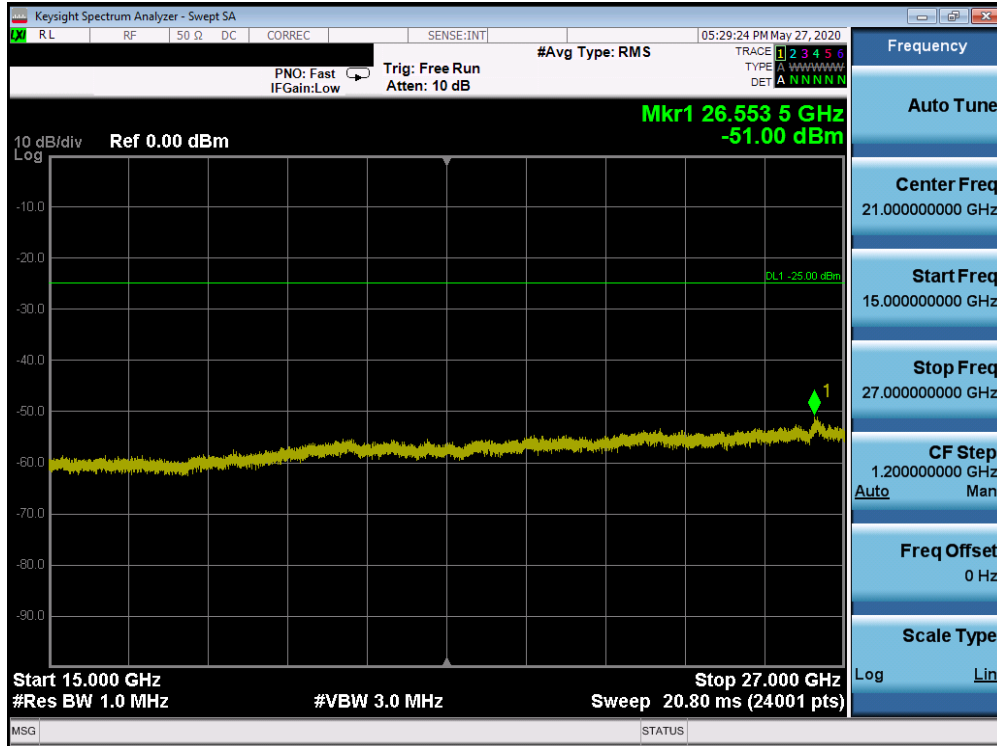


Plot 7-387. Conducted Spurious Plot (Band 7 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)



Plot 7-388. Conducted Spurious Plot (Band 7 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

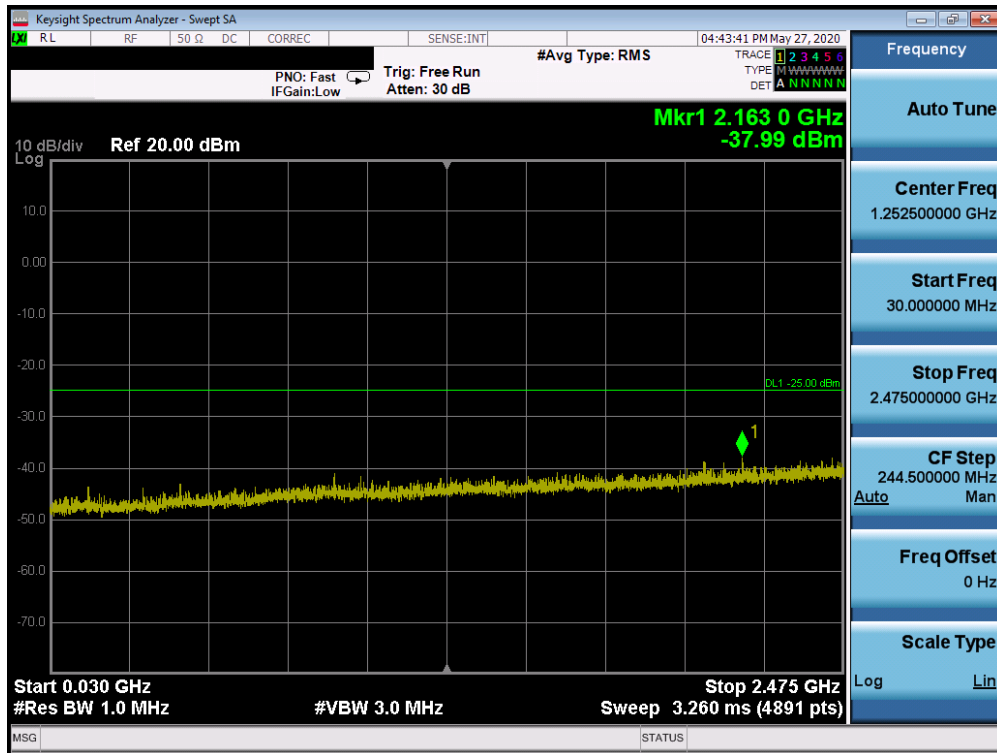
FCC ID: A3LSMN981U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2005050081-03.A3L	Test Dates: 5/5 - 7/15/2020	EUT Type: Portable Handset		Page 220 of 485



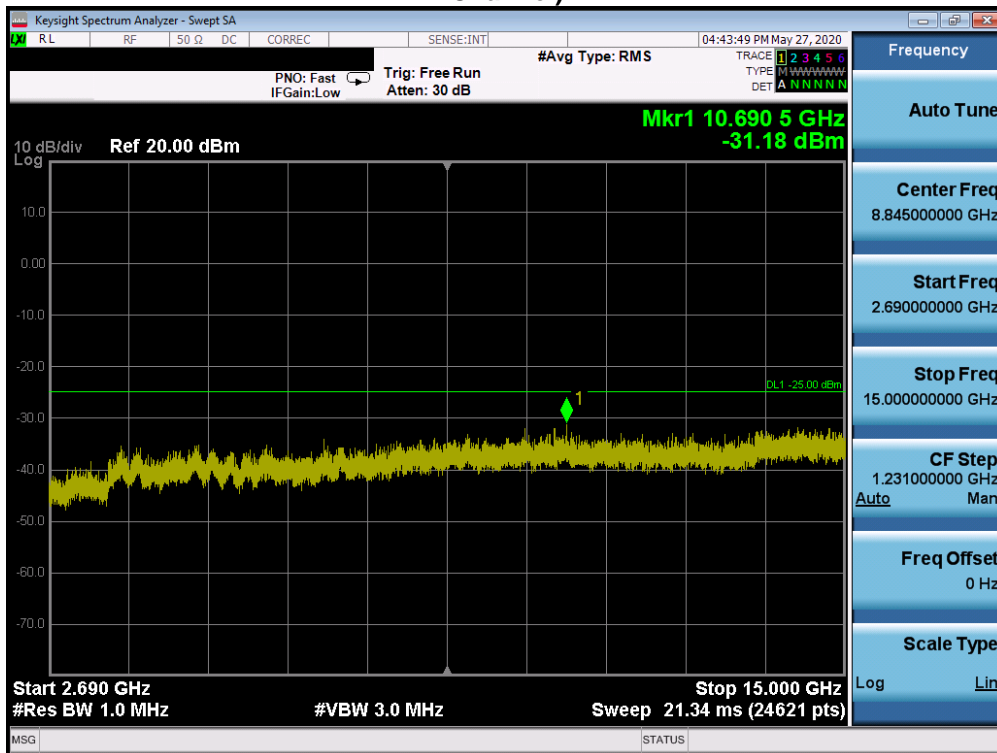
Plot 7-389. Conducted Spurious Plot (Band 7 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - High Channel)

FCC ID: A3LSMN981U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2005050081-03.A3L	Test Dates: 5/5 - 7/15/2020	EUT Type: Portable Handset		Page 221 of 485

Band 41 PC2

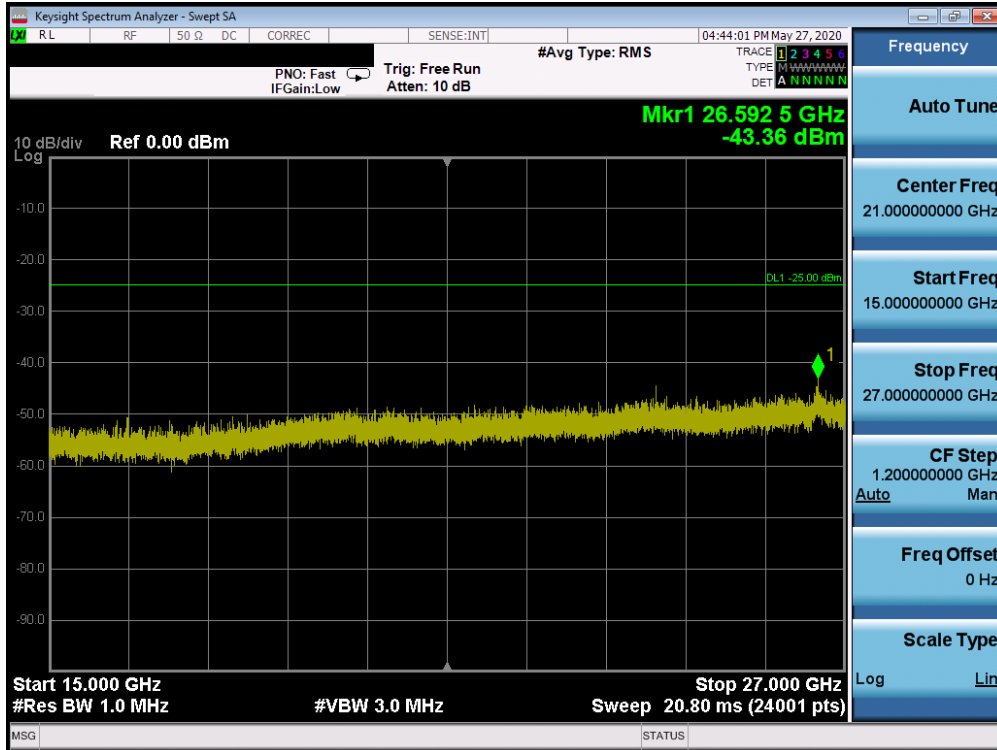


Plot 7-390. Conducted Spurious Plot (Band 41 PC2 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

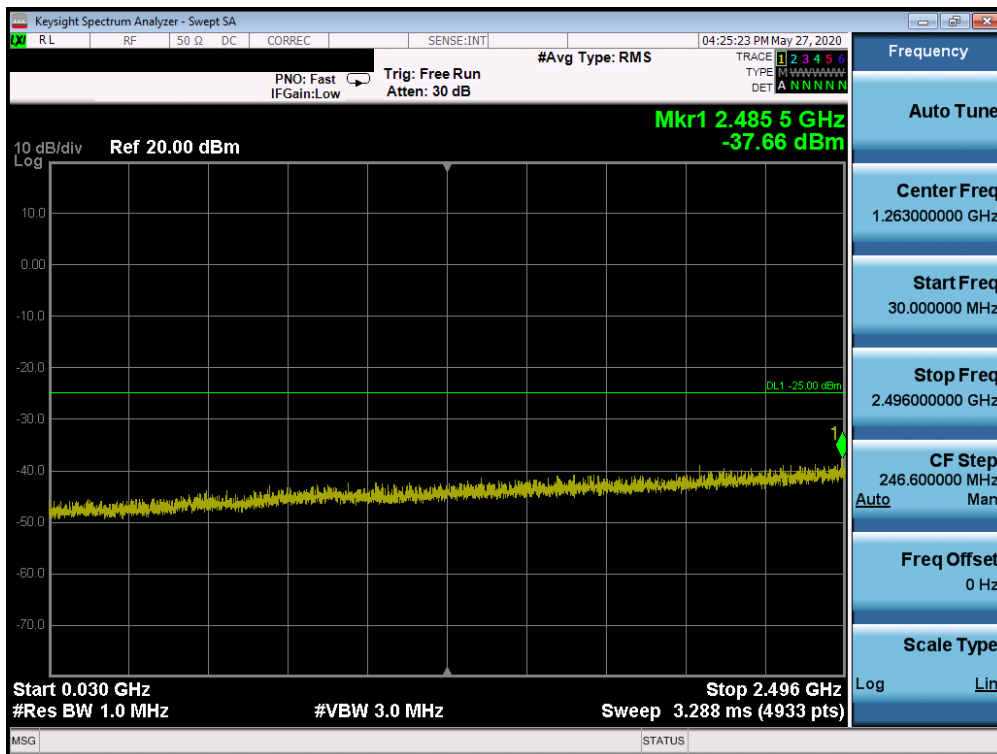


Plot 7-391. Conducted Spurious Plot (Band 41 PC2 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

FCC ID: A3LSMN981U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2005050081-03.A3L	Test Dates: 5/5 - 7/15/2020	EUT Type: Portable Handset		Page 222 of 485

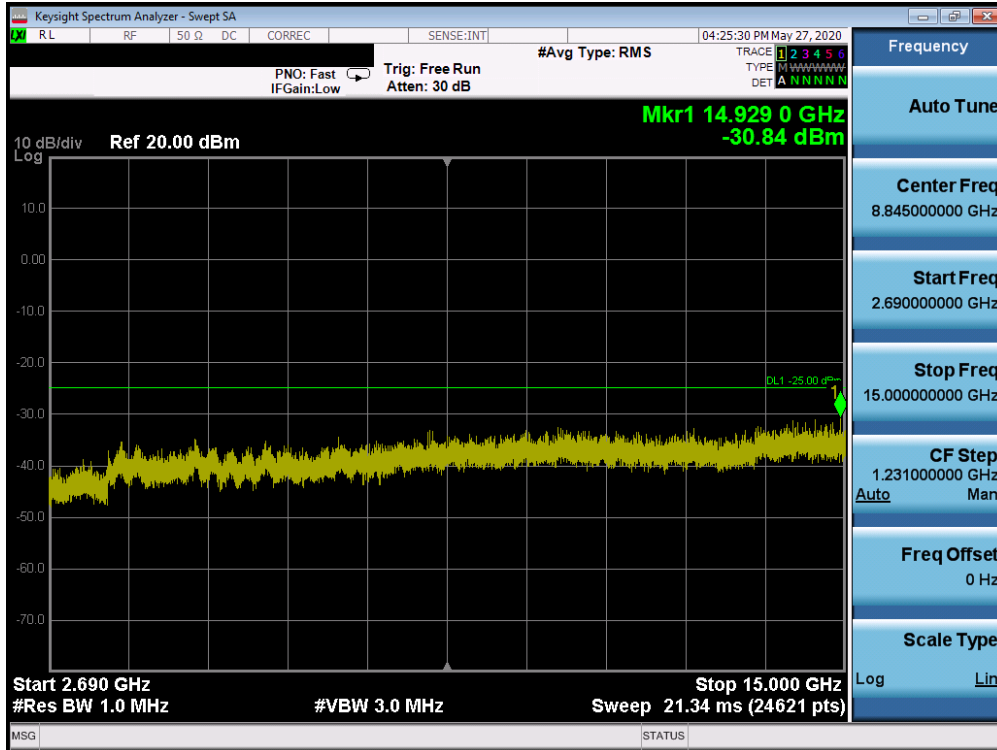


Plot 7-392. Conducted Spurious Plot (Band 41 PC2 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Low Channel)

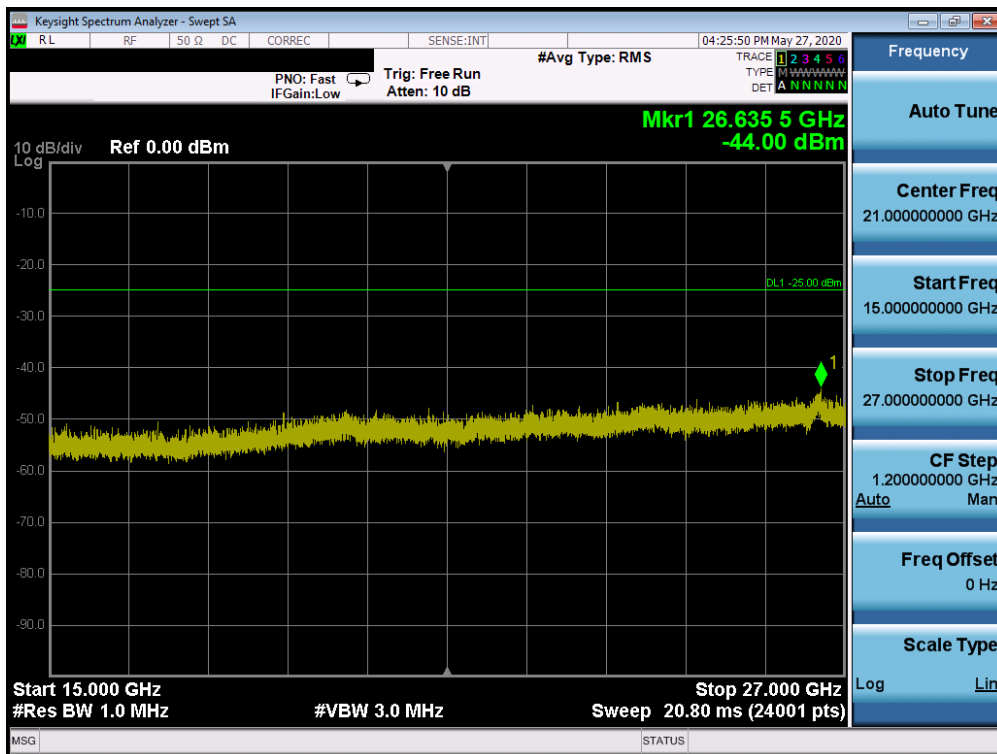


Plot 7-393. Conducted Spurious Plot (Band 41 PC2 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: A3LSMN981U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2005050081-03.A3L	Test Dates: 5/5 - 7/15/2020	EUT Type: Portable Handset		Page 223 of 485

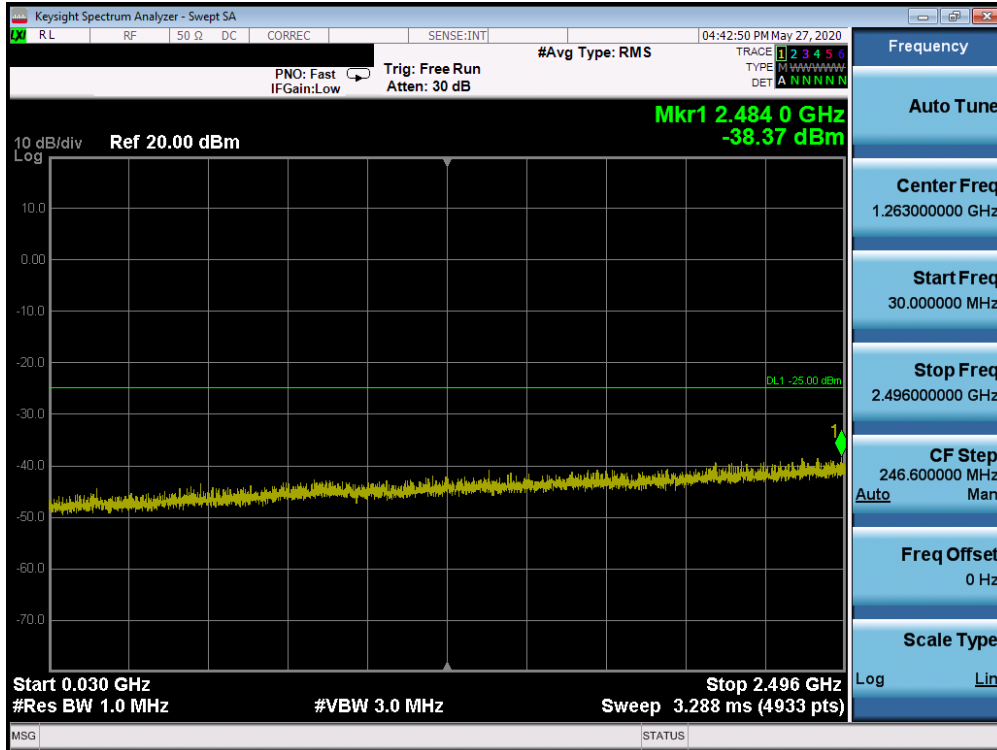


Plot 7-394. Conducted Spurious Plot (Band 41 PC2 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

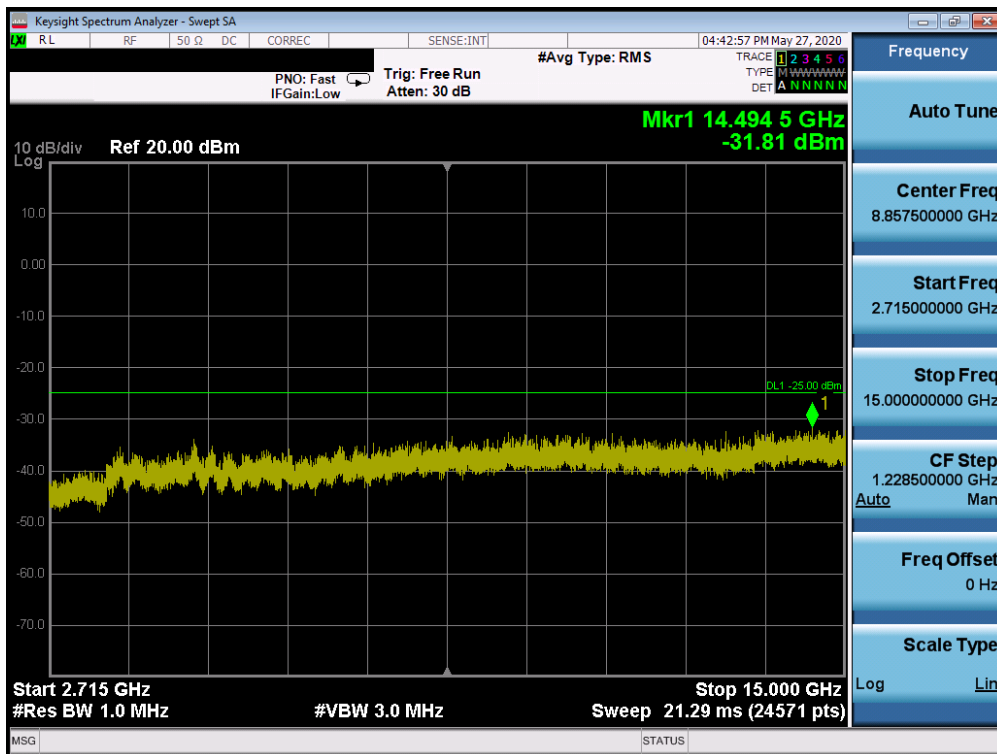


Plot 7-395. Conducted Spurious Plot (Band 41 PC2 - 20.0MHz QPSK - RB Size 1, RB Offset 0 - Mid Channel)

FCC ID: A3LSMN981U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2005050081-03.A3L	Test Dates: 5/5 - 7/15/2020	EUT Type: Portable Handset		Page 224 of 485

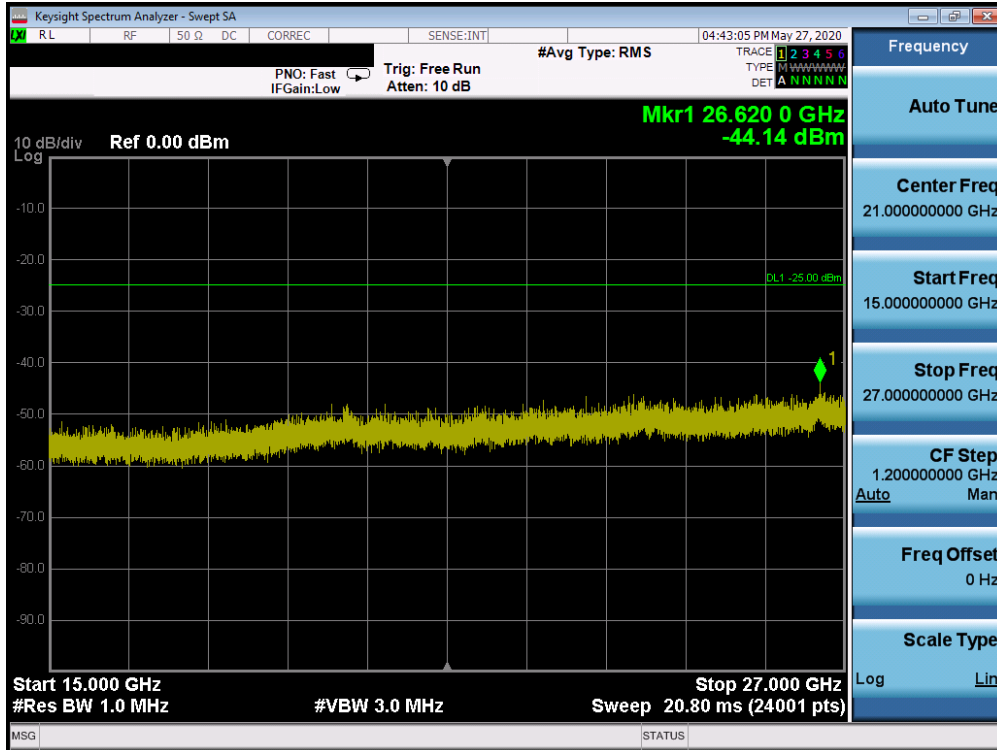


Plot 7-396. Conducted Spurious Plot (Band 41 PC2 - 20.0MHz QPSK - RB Size 1, RB Offset 99 - High Channel)



Plot 7-397. Conducted Spurious Plot (Band 41 PC2 - 20.0MHz QPSK - RB Size 1, RB Offset 99 - High Channel)

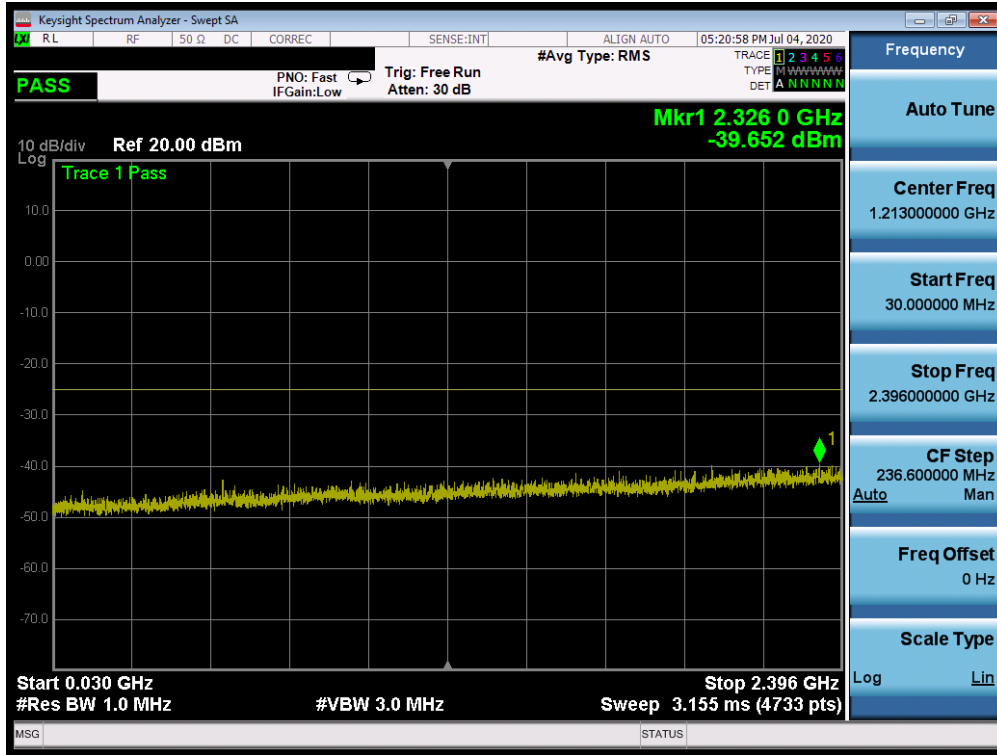
FCC ID: A3LSMN981U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2005050081-03.A3L	Test Dates: 5/5 - 7/15/2020	EUT Type: Portable Handset		Page 225 of 485



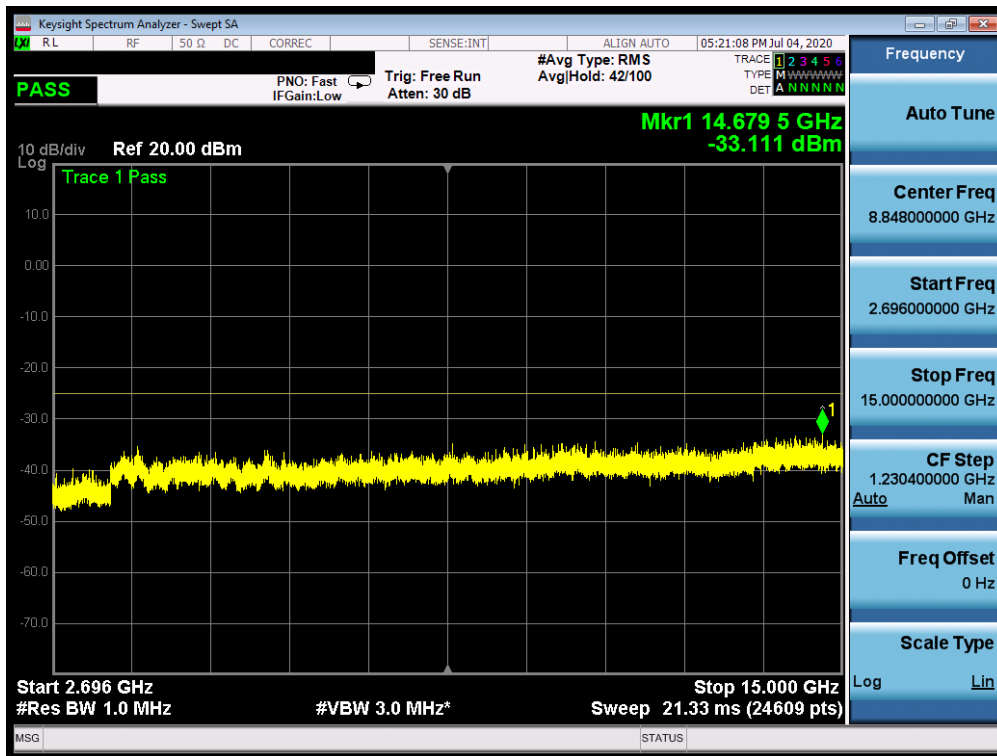
Plot 7-398. Conducted Spurious Plot (Band 41 PC2 - 20.0MHz QPSK - RB Size 1, RB Offset 99 - High Channel)

FCC ID: A3LSMN981U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2005050081-03.A3L	Test Dates: 5/5 – 7/15/2020	EUT Type: Portable Handset		Page 226 of 485

NR Band n41

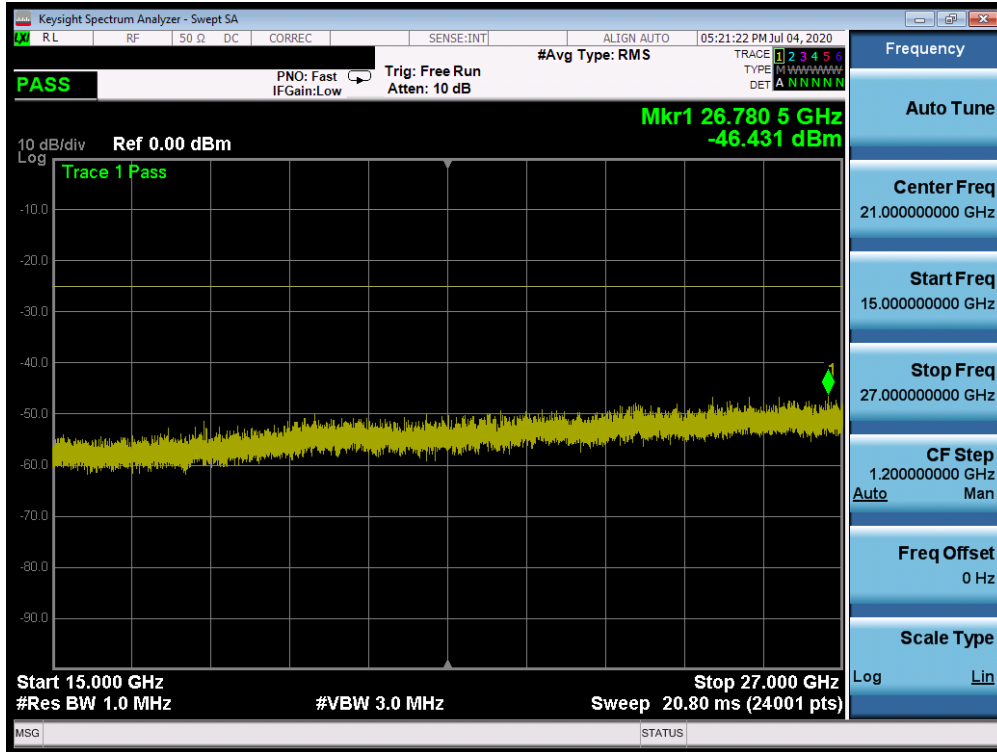


Plot 7-399. Conducted Spurious Plot (n41 - 100MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - Low Channel)

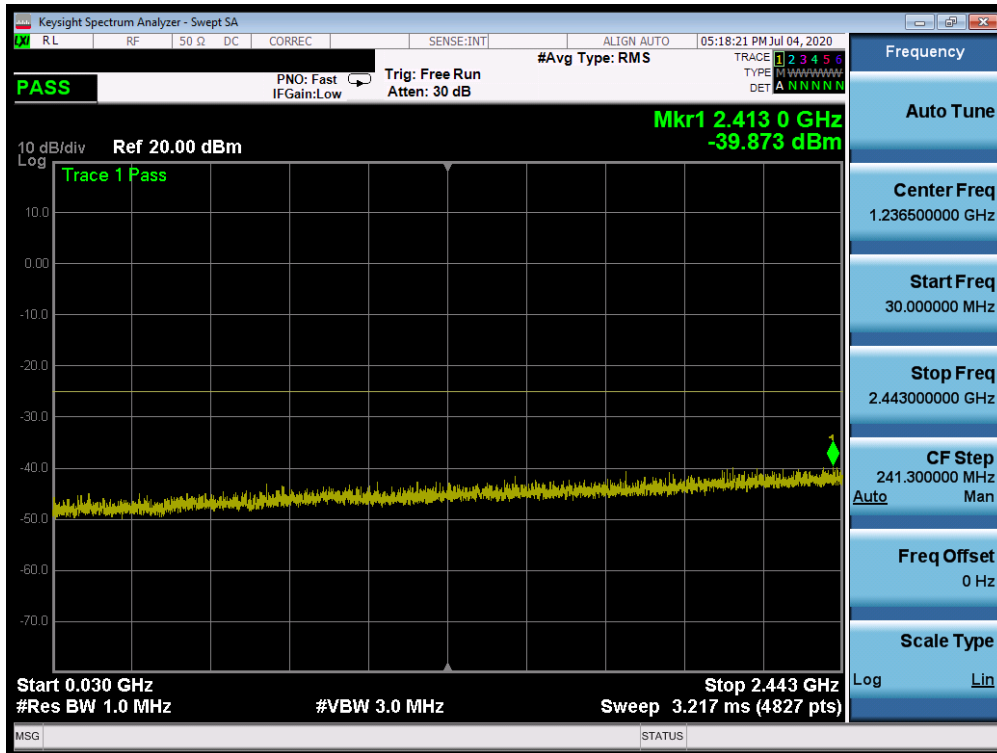


Plot 7-400. Conducted Spurious Plot (n41 - 100MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - Low Channel)

FCC ID: A3LSMN981U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2005050081-03.A3L	Test Dates: 5/5 - 7/15/2020	EUT Type: Portable Handset		Page 227 of 485

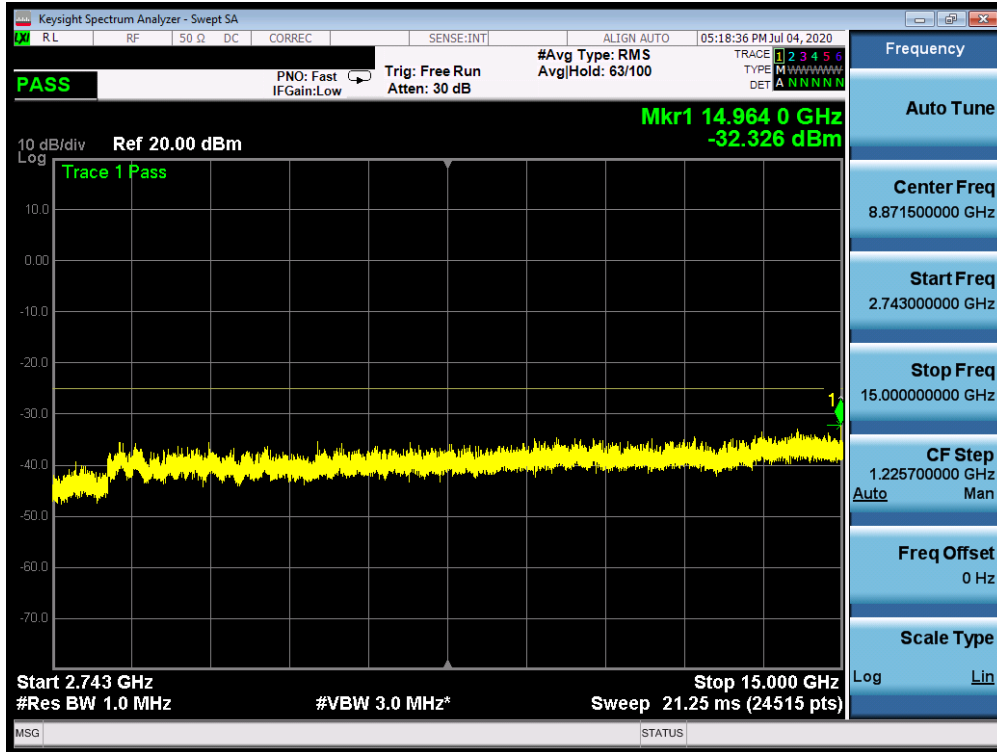


Plot 7-401. Conducted Spurious Plot (n41 - 100MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - Low Channel)

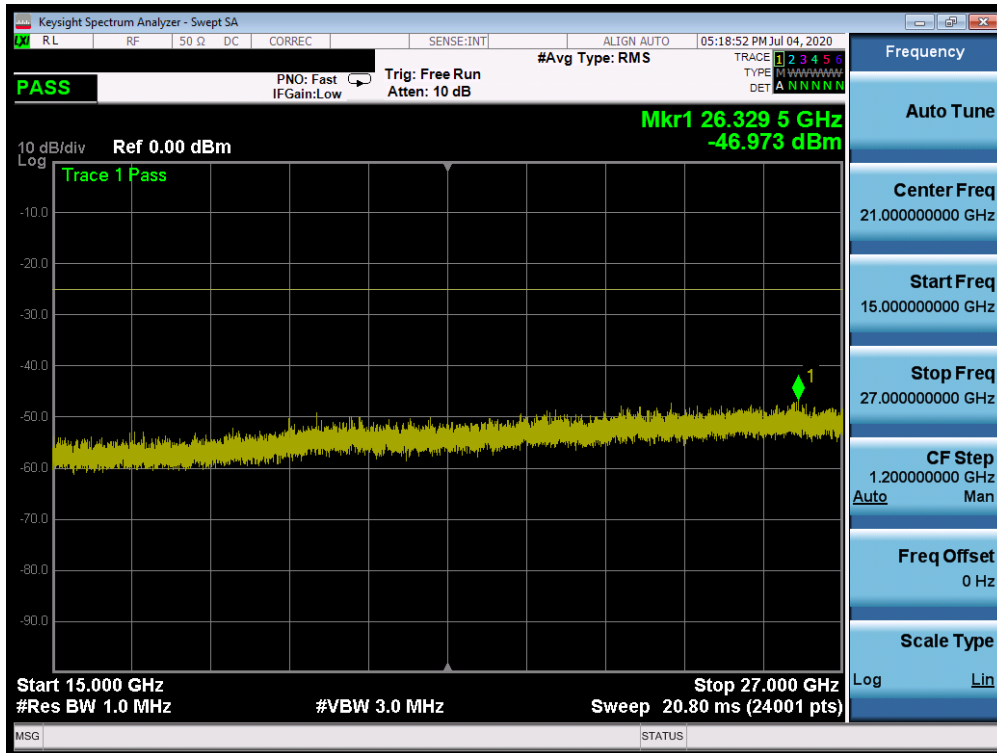


Plot 7-402. Conducted Spurious Plot (n41 - 100MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - Mid Channel)

FCC ID: A3LSMN981U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2005050081-03.A3L	Test Dates: 5/5 - 7/15/2020	EUT Type: Portable Handset		Page 228 of 485

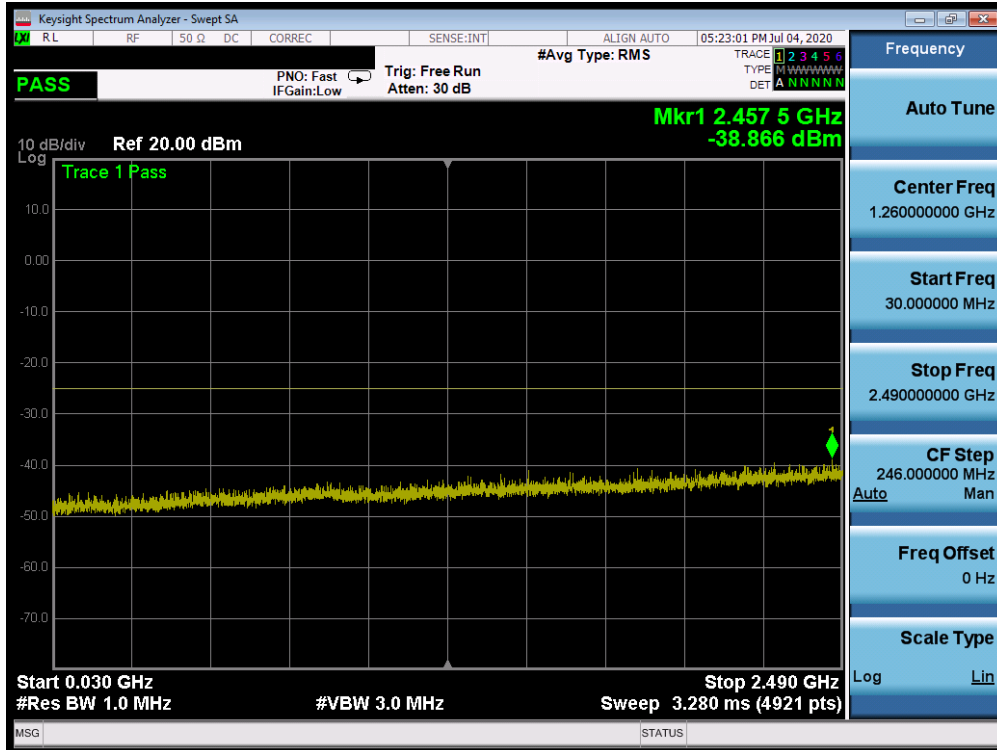


Plot 7-403. Conducted Spurious Plot (n41 - 100MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - Mid Channel)

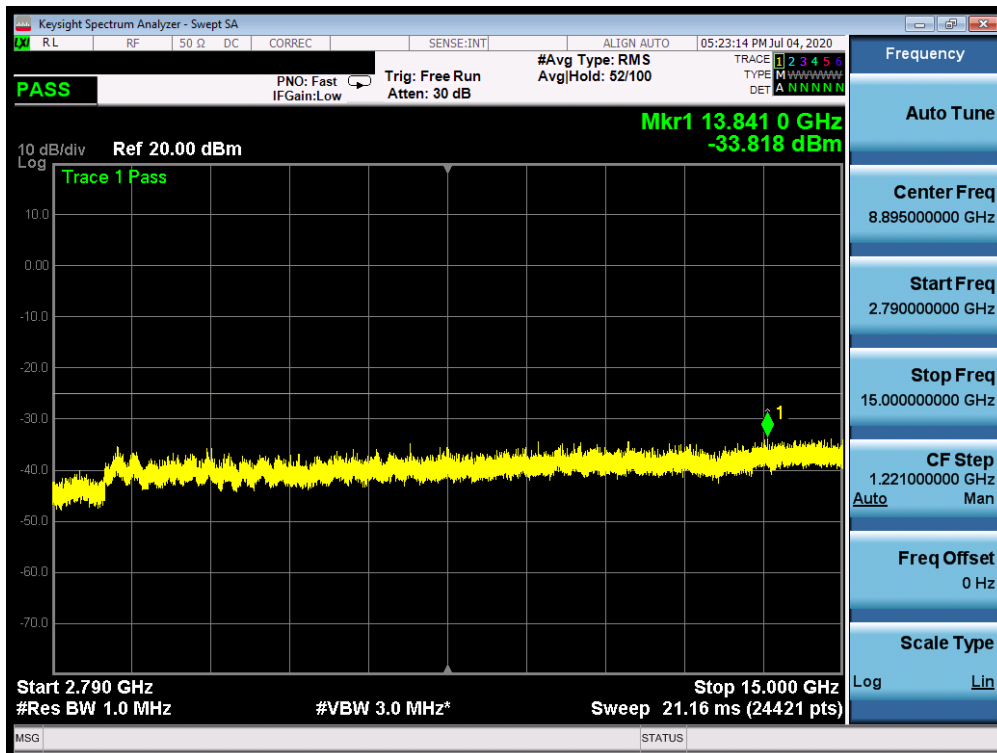


Plot 7-404. Conducted Spurious Plot (n41 - 100MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - Mid Channel)

FCC ID: A3LSMN981U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2005050081-03.A3L	Test Dates: 5/5 - 7/15/2020	EUT Type: Portable Handset		Page 229 of 485

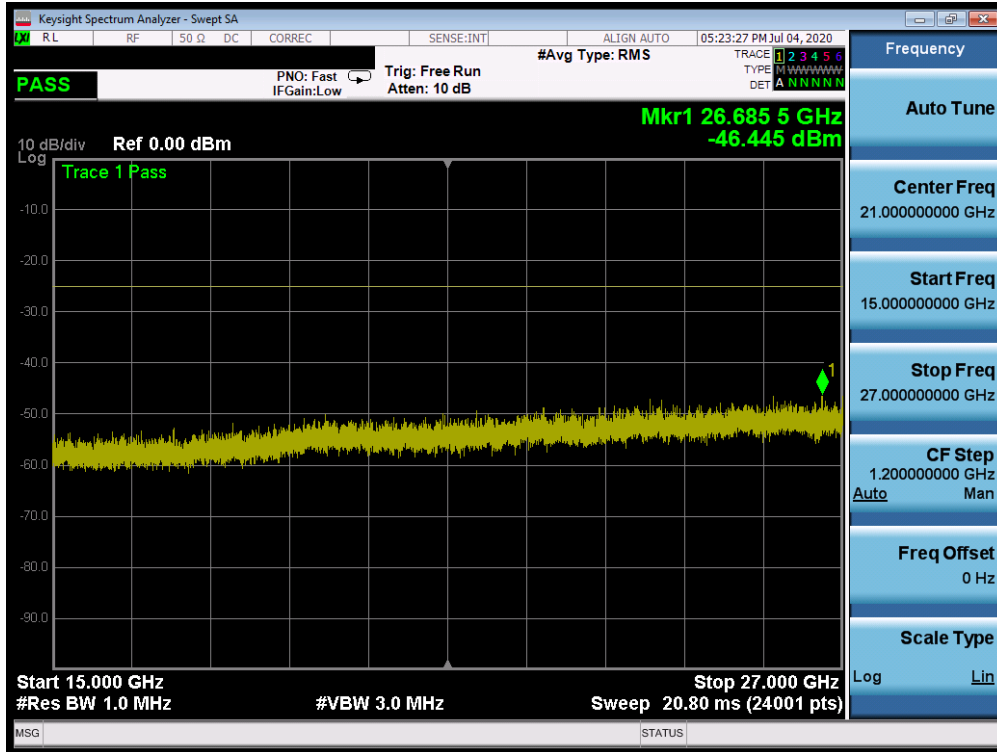


Plot 7-405. Conducted Spurious Plot (n41 - 100MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - High Channel)



Plot 7-406. Conducted Spurious Plot (n41 - 100MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - High Channel)

FCC ID: A3LSMN981U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2005050081-03.A3L	Test Dates: 5/5 - 7/15/2020	EUT Type: Portable Handset		Page 230 of 485



Plot 7-407. Conducted Spurious Plot (n41 - 100MHz DFT-s-OFDM-QPSK - RB Size 1, RB Offset 1 - High Channel)

FCC ID: A3LSMN981U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2005050081-03.A3L	Test Dates: 5/5 – 7/15/2020	EUT Type: Portable Handset		Page 231 of 485

7.4 Band Edge Emissions at Antenna Terminal

Test Overview

All out of band emissions are measured with a spectrum analyzer connected to the antenna terminal of the EUT while the EUT is operating at its maximum duty cycle, at maximum power, and at the appropriate frequencies. All data rates were investigated to determine the worst case configuration. All modes of operation were investigated and the worst case configuration results are reported in this section.

The minimum permissible attenuation level of any spurious emission is $43 + 10 \log_{10}(P_{[Watts]})$, where P is the transmitter power in Watts.

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

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

Test Procedure Used

KDB 971168 D01 v03r01 – Section 6.0

Test Settings

1. Start and stop frequency were set such that the band edge would be placed in the center of the plot
2. Span was set large enough so as to capture all out of band emissions near the band edge
3. RBW \geq 1% of the emission bandwidth
4. VBW \geq 3 x RBW
5. Detector = RMS
6. Number of sweep points \geq 2 x Span/RBW
7. Trace mode = trace average for continuous emissions, max hold for pulse emissions
8. Sweep time = auto couple
9. The trace was allowed to stabilize

Test Setup

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

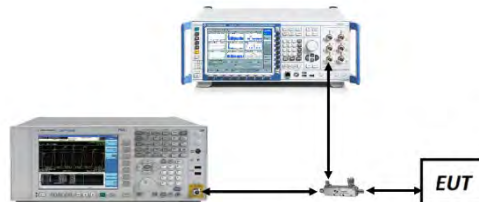


Figure 7-3. Test Instrument & Measurement Setup

FCC ID: A3LSMN981U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M2005050081-03.A3L	Test Dates: 5/5 – 7/15/2020	EUT Type: Portable Handset		Page 232 of 485

Test Notes

Per 22.917(b), 24.238(a), and 27.53(h) in the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed to demonstrate compliance with the out-of-band emissions limit. The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emission are attenuated at least 26 dB below the transmitter power.

Per 27.53(g) for operations in the 663 - 698 MHz and 698 – 746MHz bands, in the 100 kHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least 30 kHz may be employed to demonstrate compliance with the out-of-band emissions limit.

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

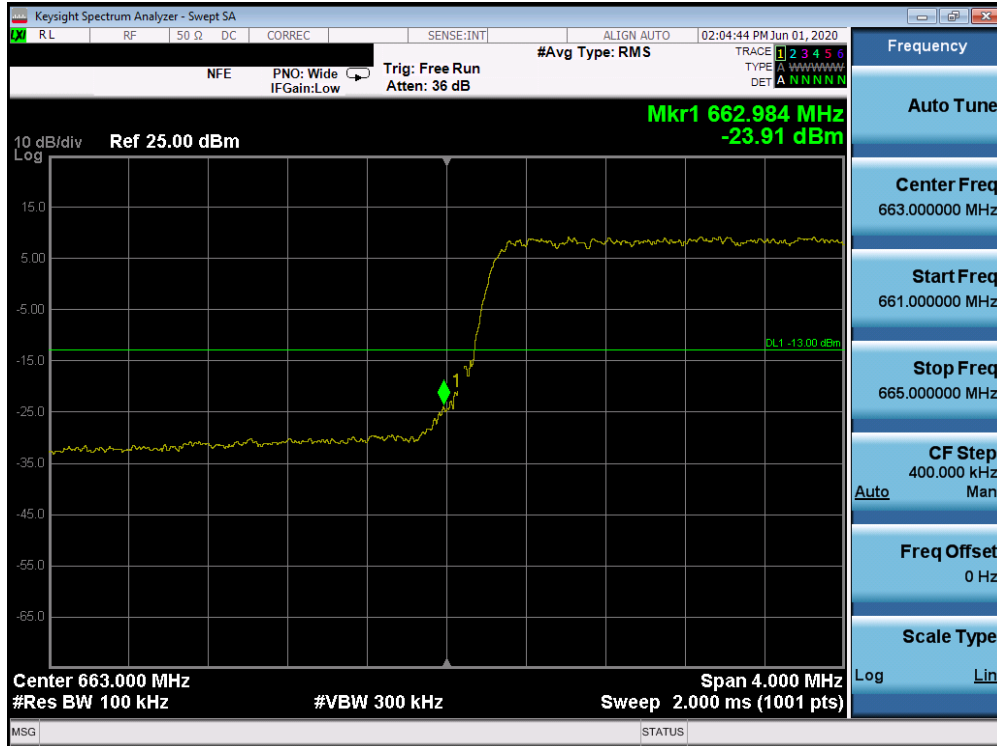
For all plots showing emissions in the 763 – 775MHz and 793 – 805MHz band, the FCC limit per 27.53(c)(4) is $65 + 10 \log_{10}(P) = -35\text{dBm}$ in a 6.25kHz bandwidth.

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

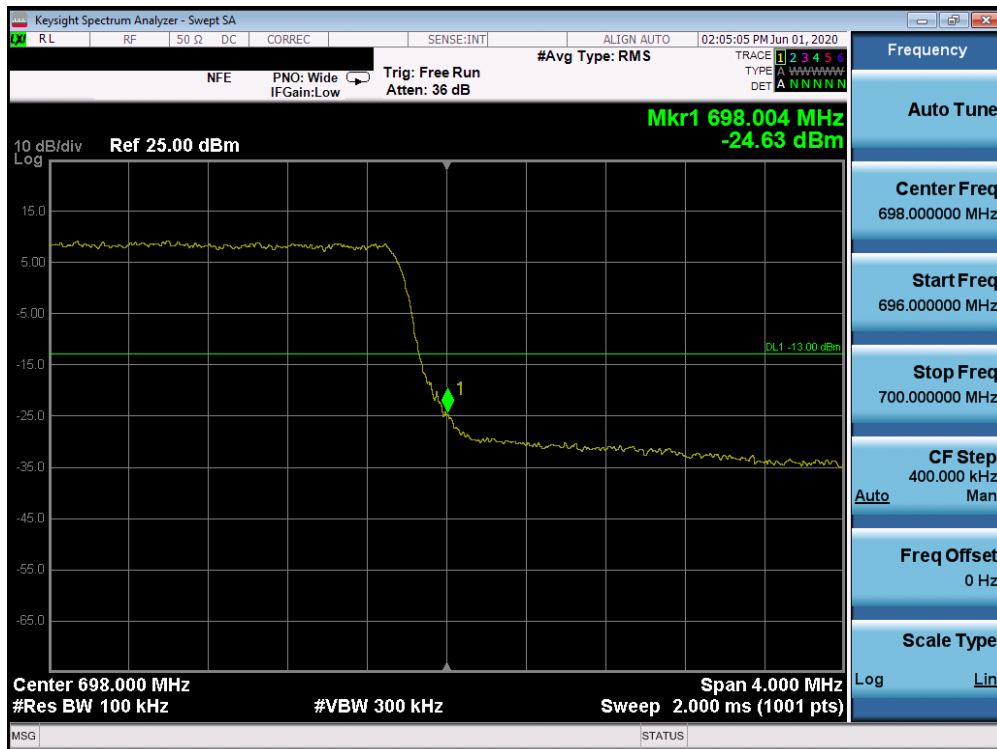
Per 27.53(m) for operations in the BRS/EBS bands, the attenuation factor shall be not less than $40 + 10 \log (P)$ dB on all frequencies between the channel edge and 5 megahertz from the channel edge, $43 + 10 \log (P)$ dB on all frequencies between 5 megahertz and X megahertz from the channel edge,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

FCC ID: A3LSMN981U		MEASUREMENT REPORT (CERTIFICATION)	 Approved by: Quality Manager
Test Report S/N: 1M2005050081-03.A3L	Test Dates: 5/5 – 7/15/2020	EUT Type: Portable Handset	Page 233 of 485

Band 71

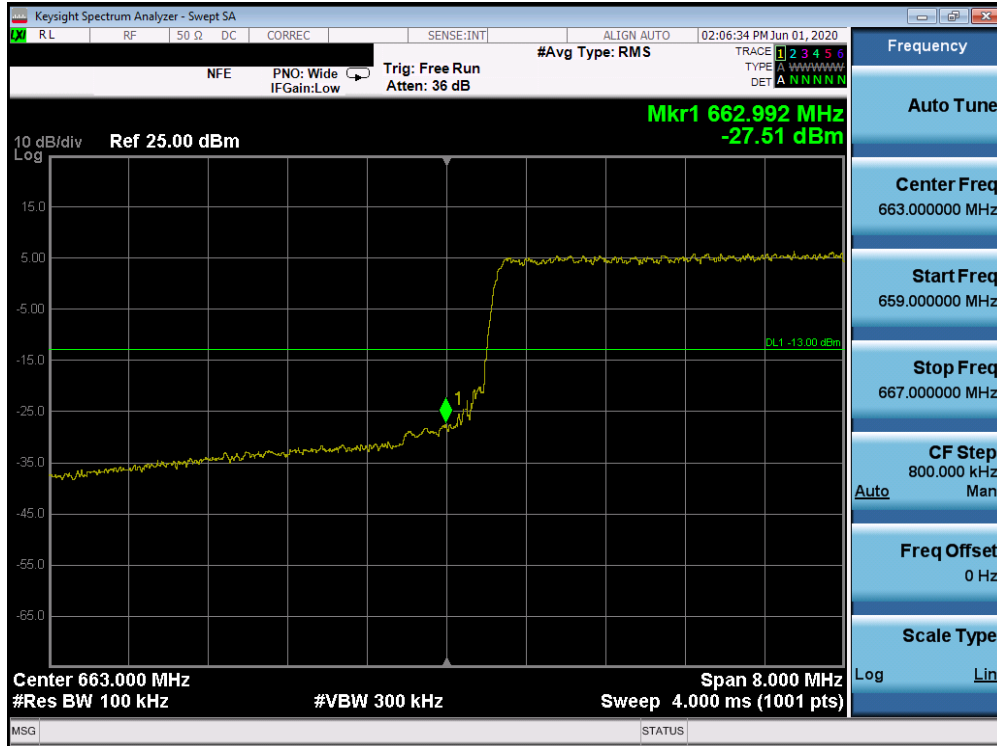


Plot 7-408. Lower Band Edge Plot (Band 71 - 5.0MHz QPSK - Full RB Configuration)



Plot 7-409. Upper Band Edge Plot (Band 71 - 5.0MHz QPSK - Full RB Configuration)

FCC ID: A3LSMN981U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2005050081-03.A3L	Test Dates: 5/5 - 7/15/2020	EUT Type: Portable Handset		Page 234 of 485

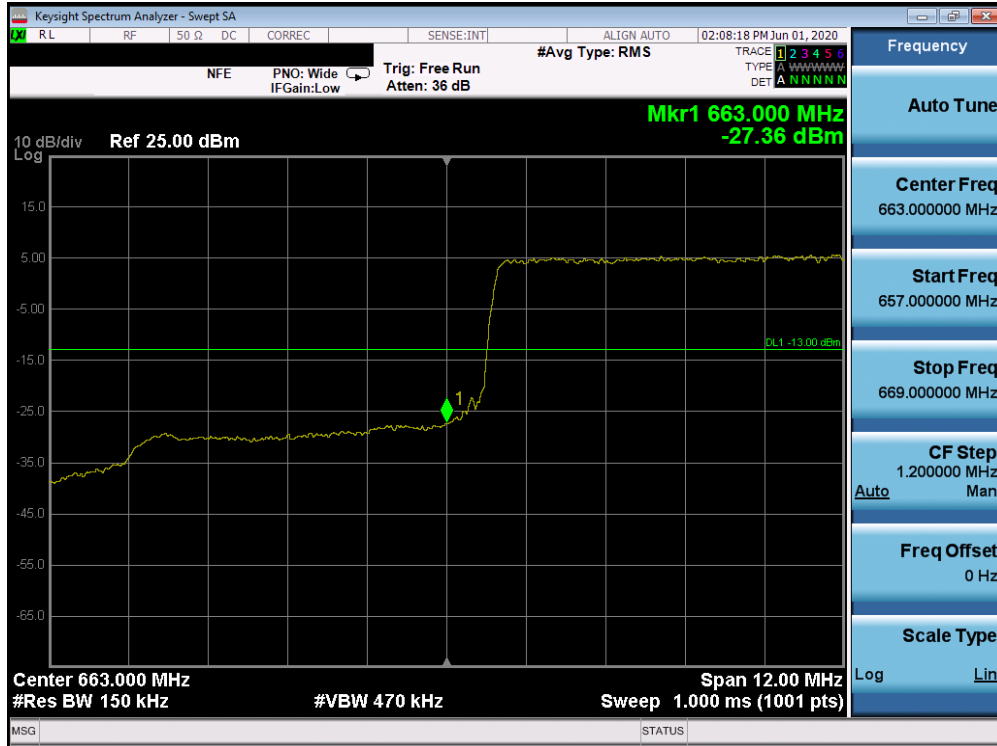


Plot 7-410. Lower Band Edge Plot (Band 71 - 10.0MHz QPSK - Full RB Configuration)

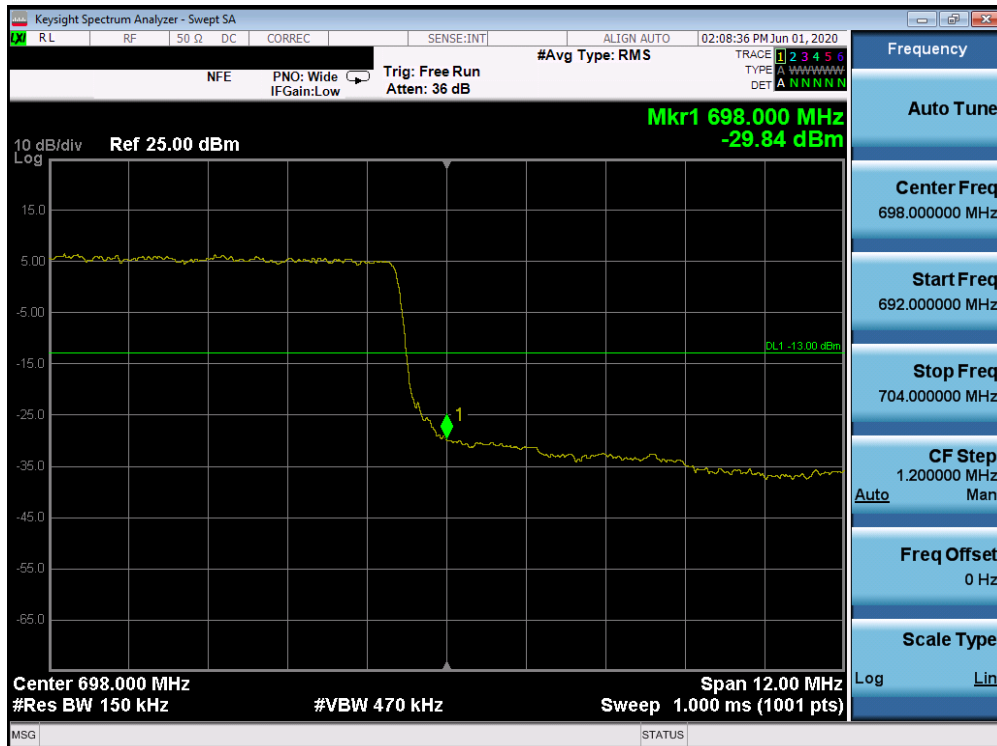


Plot 7-411. Upper Band Edge Plot (Band 71 - 10.0MHz QPSK - Full RB Configuration)

FCC ID: A3LSMN981U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2005050081-03.A3L	Test Dates: 5/5 - 7/15/2020	EUT Type: Portable Handset		Page 235 of 485

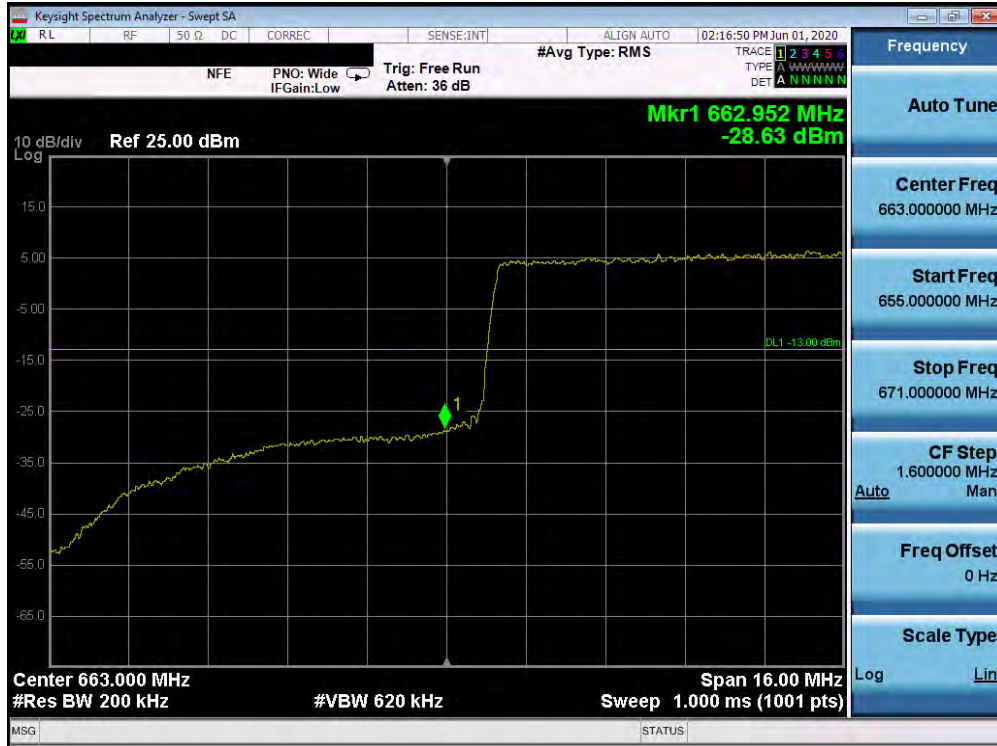


Plot 7-412. Lower Band Edge Plot (Band 71 - 15.0MHz QPSK - Full RB Configuration)



Plot 7-413. Upper Band Edge Plot (Band 71 - 15.0MHz QPSK - Full RB Configuration)

FCC ID: A3LSMN981U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2005050081-03.A3L	Test Dates: 5/5 - 7/15/2020	EUT Type: Portable Handset		Page 236 of 485



Plot 7-414. Lower Band Edge Plot (Band 71 - 20.0MHz QPSK - Full RB Configuration)



Plot 7-415. Upper Band Edge Plot (Band 71 - 20.0MHz QPSK - Full RB Configuration)

FCC ID: A3LSMN981U	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M2005050081-03.A3L	Test Dates: 5/5 - 7/15/2020	EUT Type: Portable Handset		Page 237 of 485