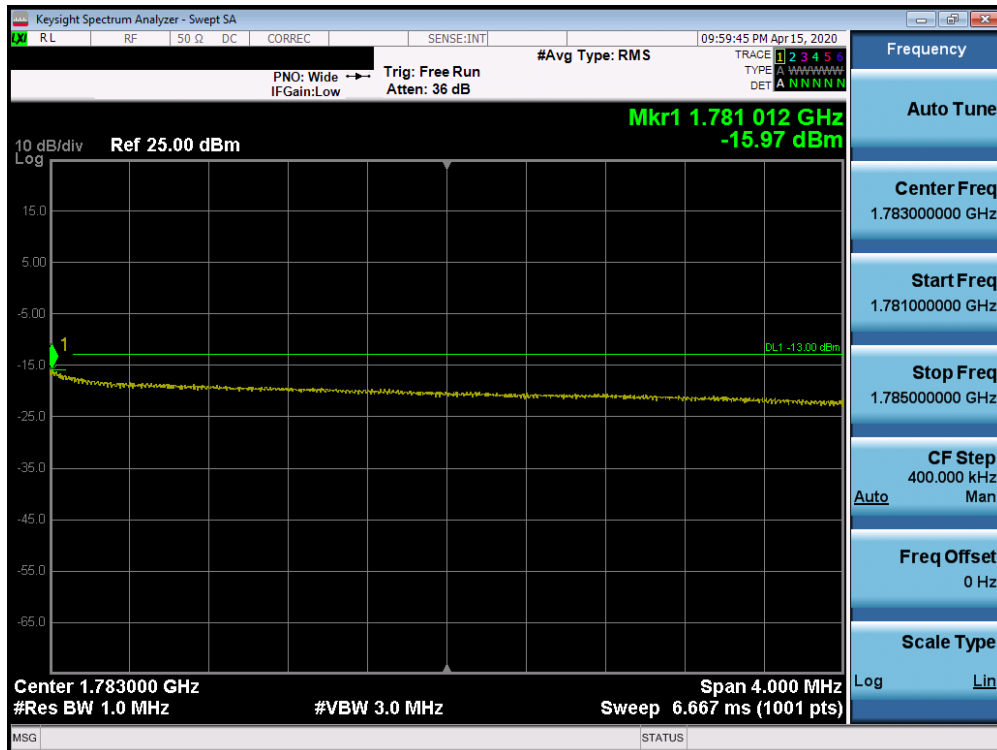


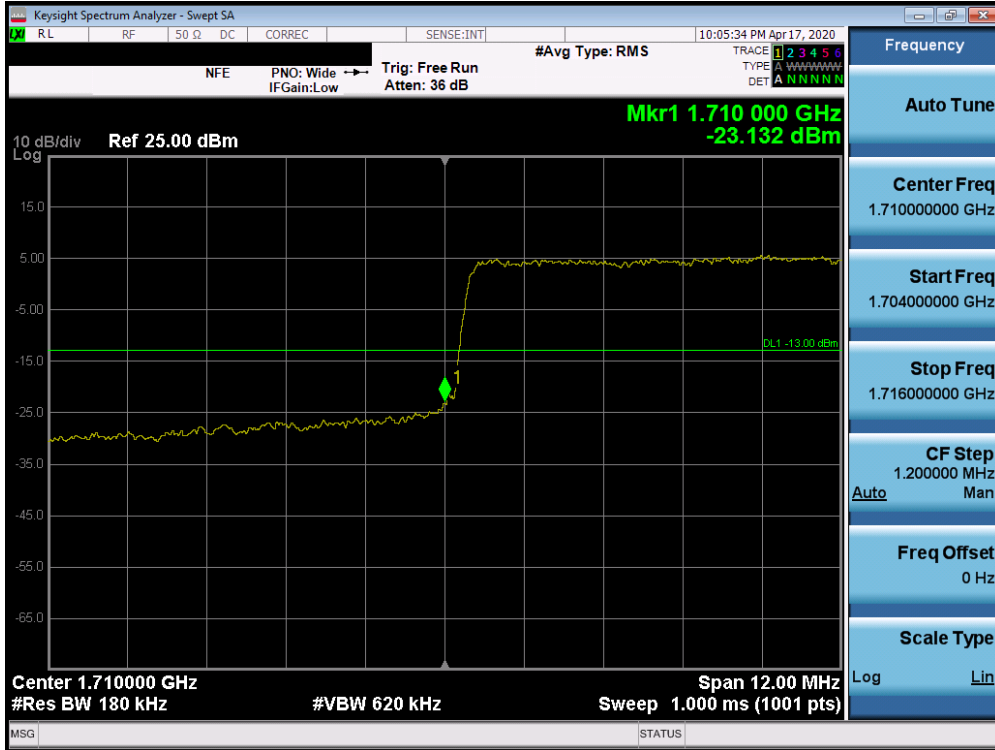


Plot 7-463. Upper Band Edge Plot (n66 - 10MHz DFT-s-OFDM-QPSK - Full RB Configuration)

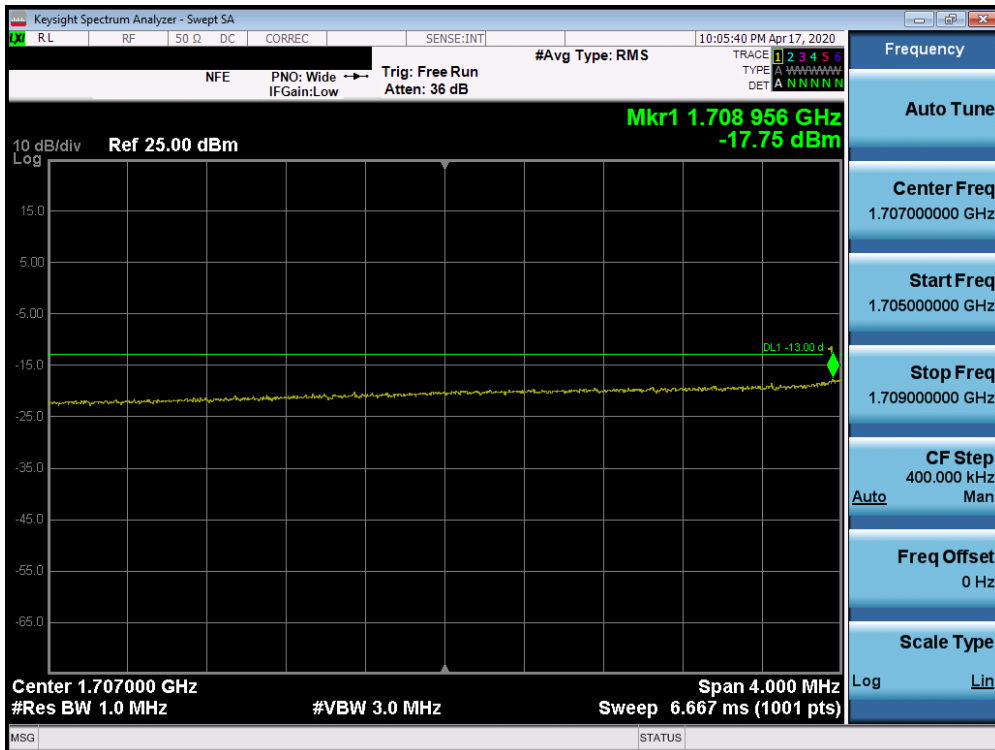


Plot 7-464. Upper Extended Band Edge Plot (n66 - 10MHz DFT-s-OFDM-QPSK - Full RB Configuration)

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 261 of 420

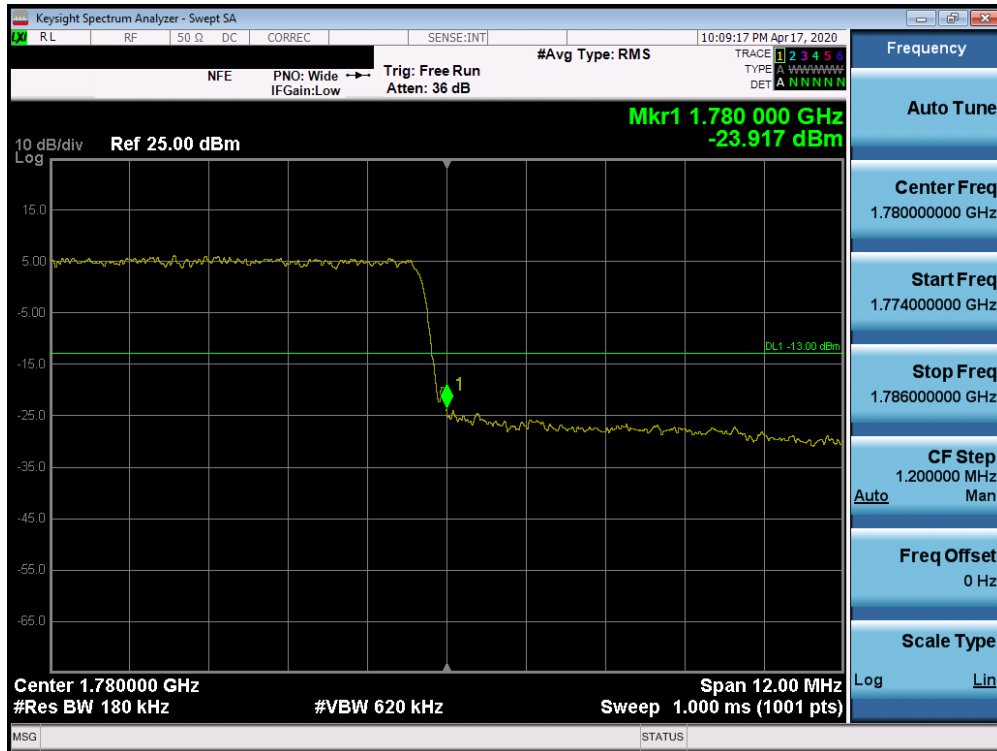


Plot 7-465. Lower Band Edge Plot (n66 - 15MHz DFT-s-OFDM-QPSK - Full RB Configuration)

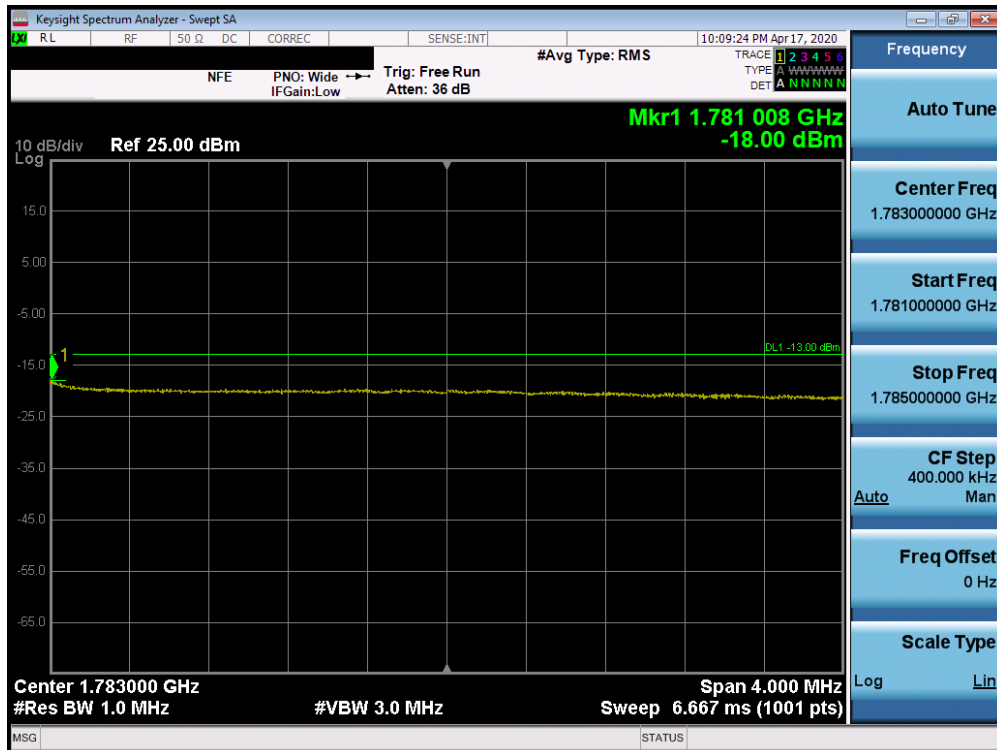


Plot 7-466. Lower Extended Band Edge Plot (n66 - 15MHz DFT-s-OFDM-QPSK - Full RB Configuration)

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 262 of 420

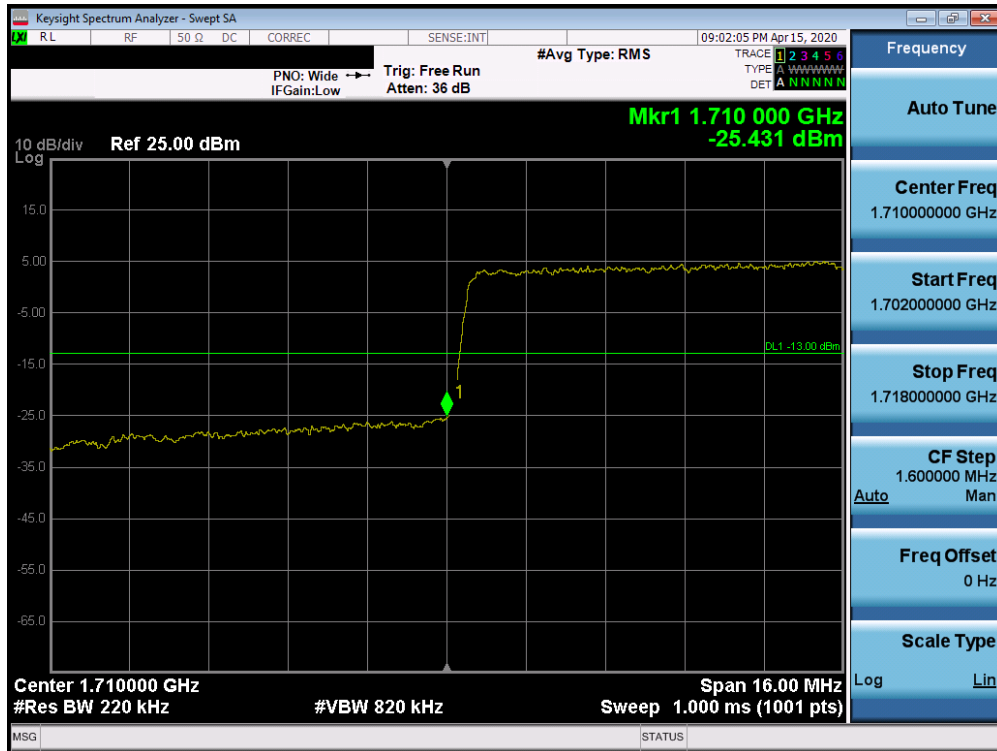


Plot 7-467. Upper Band Edge Plot (n66 - 15MHz DFT-s-OFDM-QPSK - Full RB Configuration)

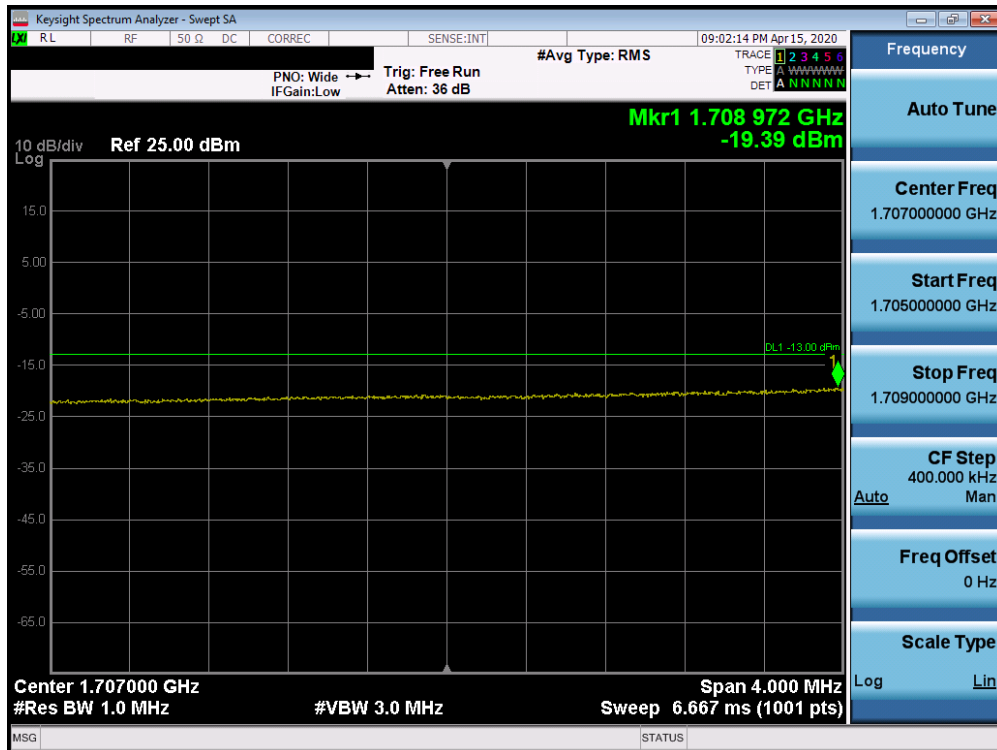


Plot 7-468. Upper Extended Band Edge Plot (n66 - 15MHz DFT-s-OFDM-QPSK - Full RB Configuration)

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 263 of 420



Plot 7-469. Lower Band Edge Plot (n66 - 20MHz DFT-s-OFDM-QPSK - Full RB Configuration)

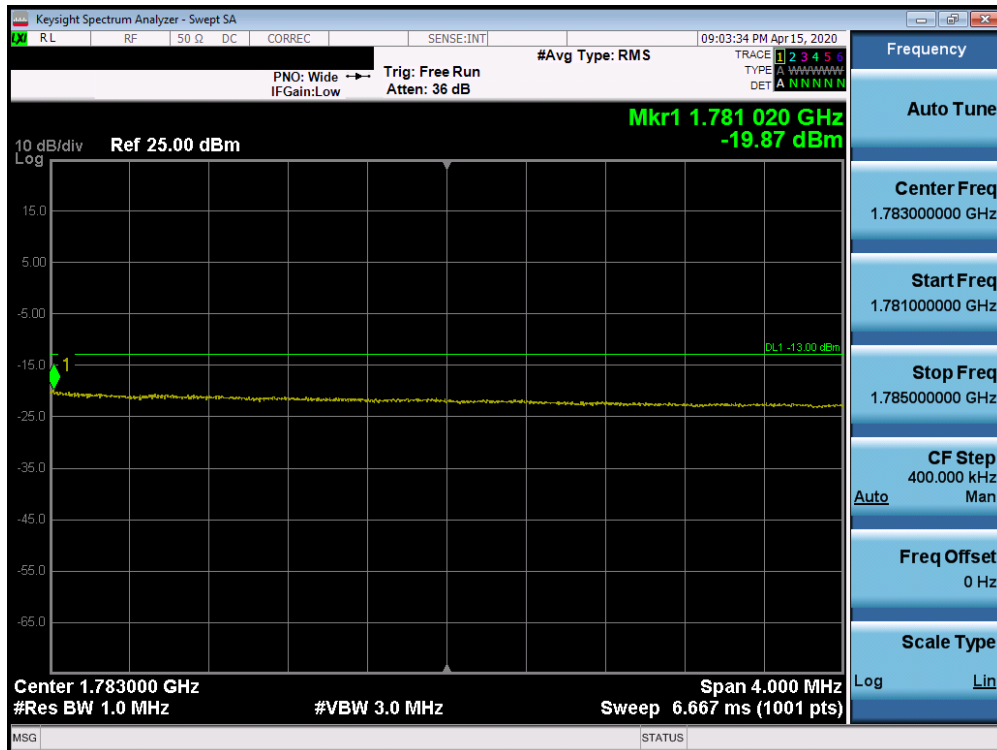


Plot 7-470. Lower Extended Band Edge Plot (n66 - 20MHz DFT-s-OFDM-QPSK - Full RB Configuration)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	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 264 of 420



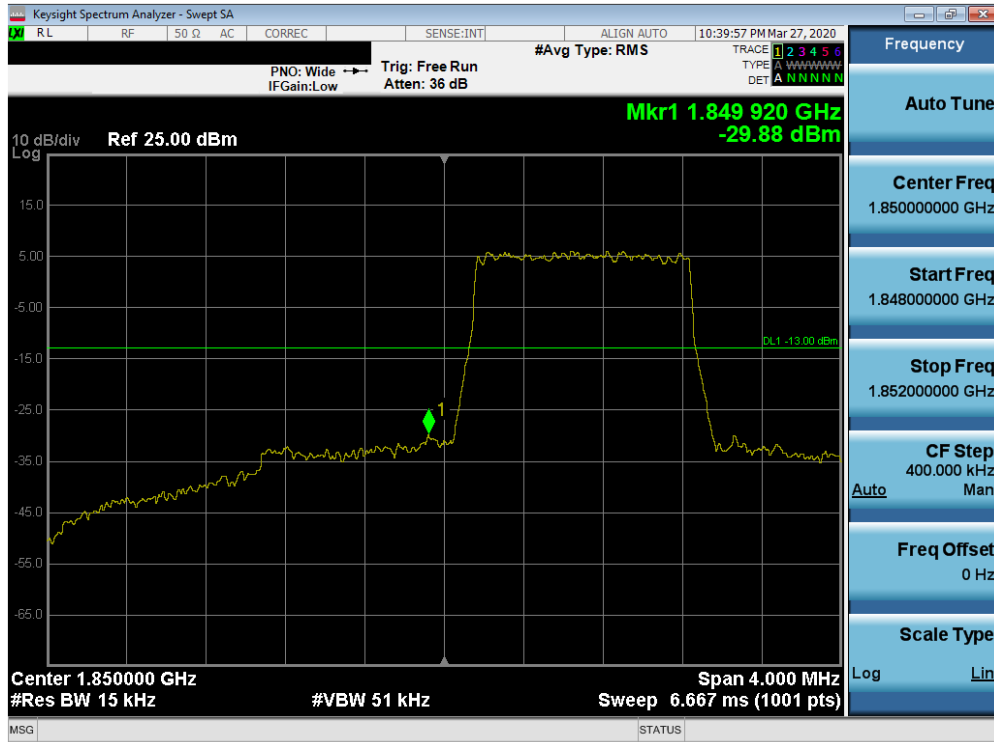
Plot 7-471. Upper Band Edge Plot (n66 - 20MHz DFT-s-OFDM-QPSK - Full RB Configuration)



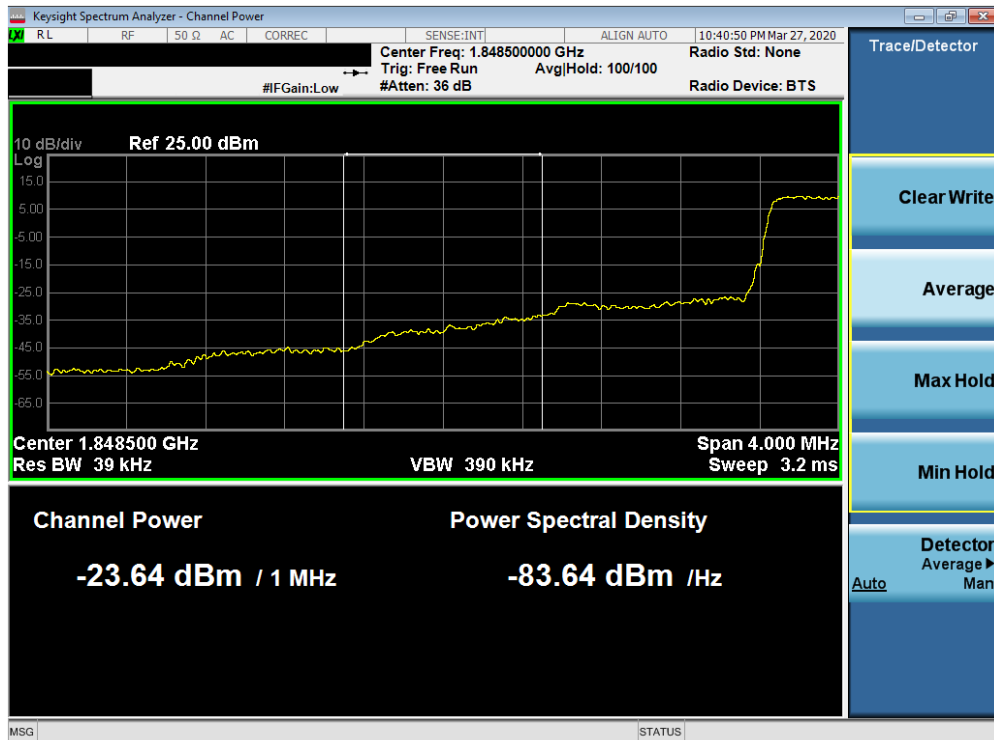
Plot 7-472. Upper Extended Band Edge Plot (n66 - 20MHz DFT-s-OFDM-QPSK - Full RB Configuration)

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 265 of 420

Band 25/2



Plot 7-473. Lower Band Edge Plot (Band 25/2 - 1.4MHz QPSK - Full RB Configuration)

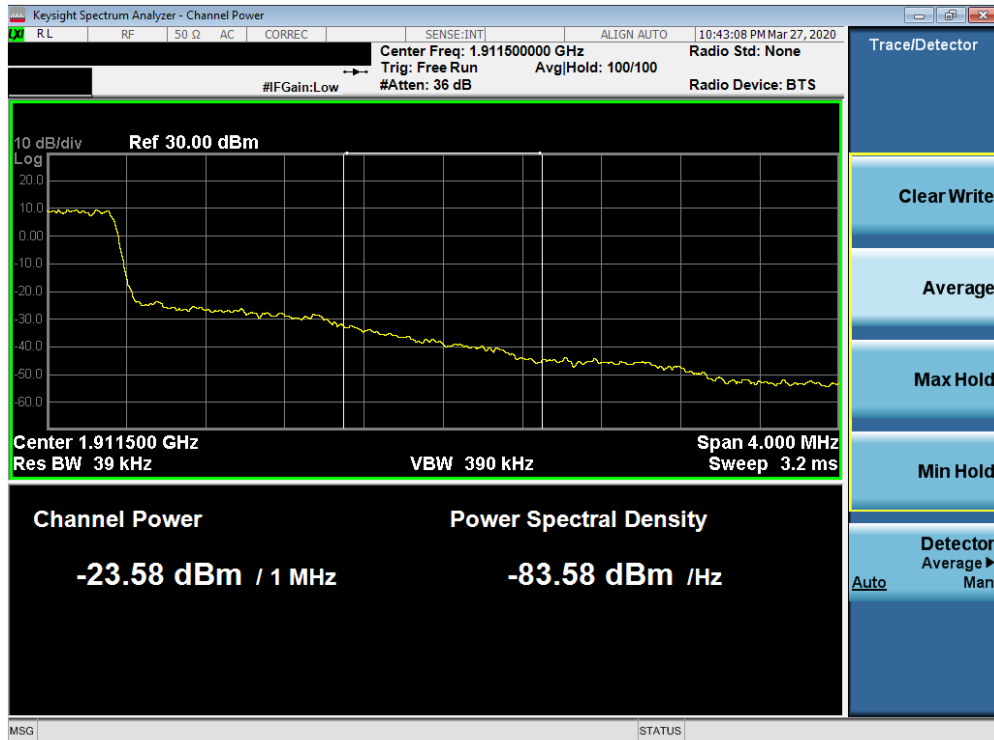


Plot 7-474. Lower Extended Band Edge Plot (Band 25/2 - 1.4MHz QPSK - Full RB Configuration)

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 266 of 420

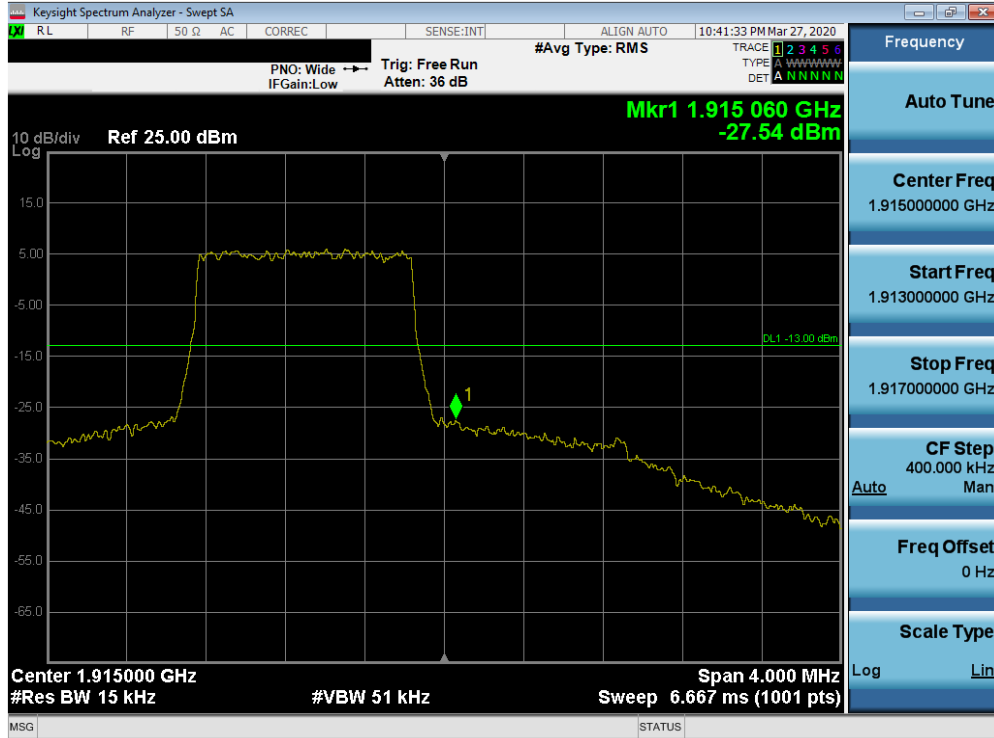


Plot 7-475. Upper Band Edge Plot (Band 2 - 1.4MHz QPSK - Full RB Configuration)

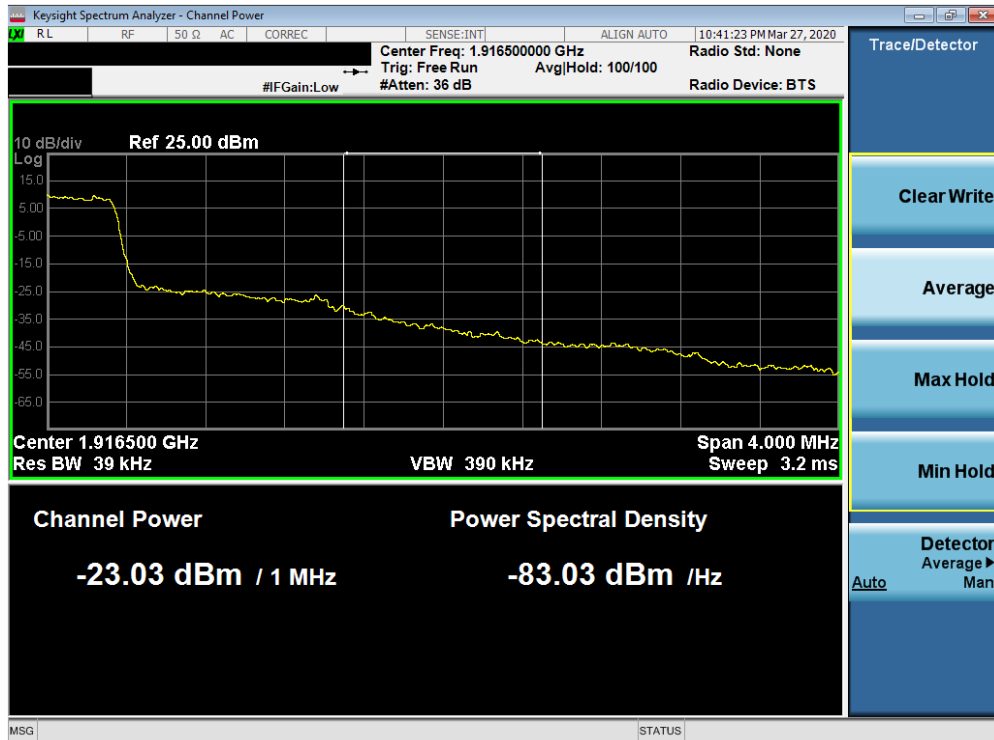


Plot 7-476. Upper Extended Band Edge Plot (Band 2 - 1.4MHz QPSK - Full RB Configuration)

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 267 of 420

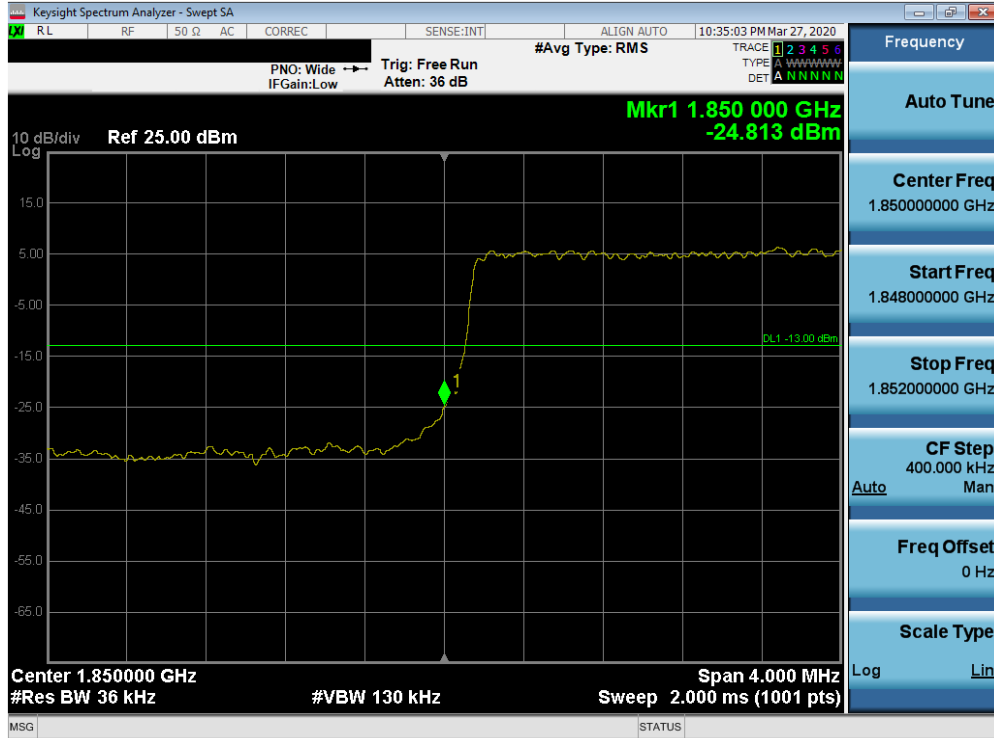


Plot 7-477. Upper Band Edge Plot (Band 25 - 1.4MHz QPSK - Full RB Configuration)

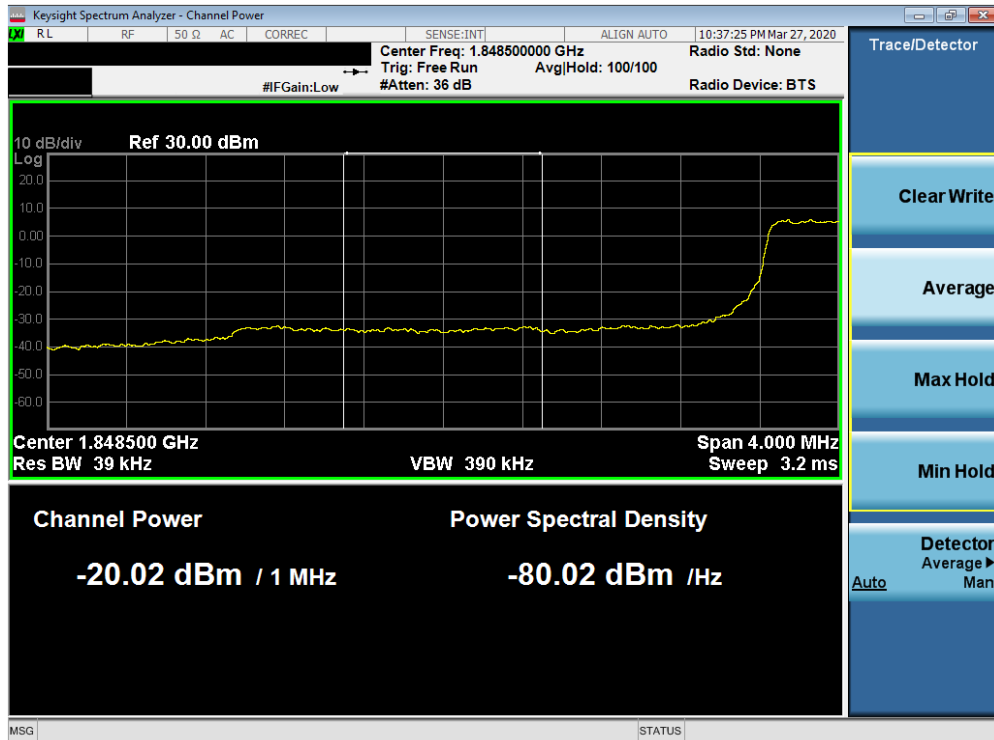


Plot 7-478. Upper Extended Band Edge Plot (Band 25 - 1.4MHz QPSK - Full RB Configuration)

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 268 of 420



Plot 7-479. Lower Band Edge Plot (Band 25/2 - 3.0MHz QPSK - Full RB Configuration)

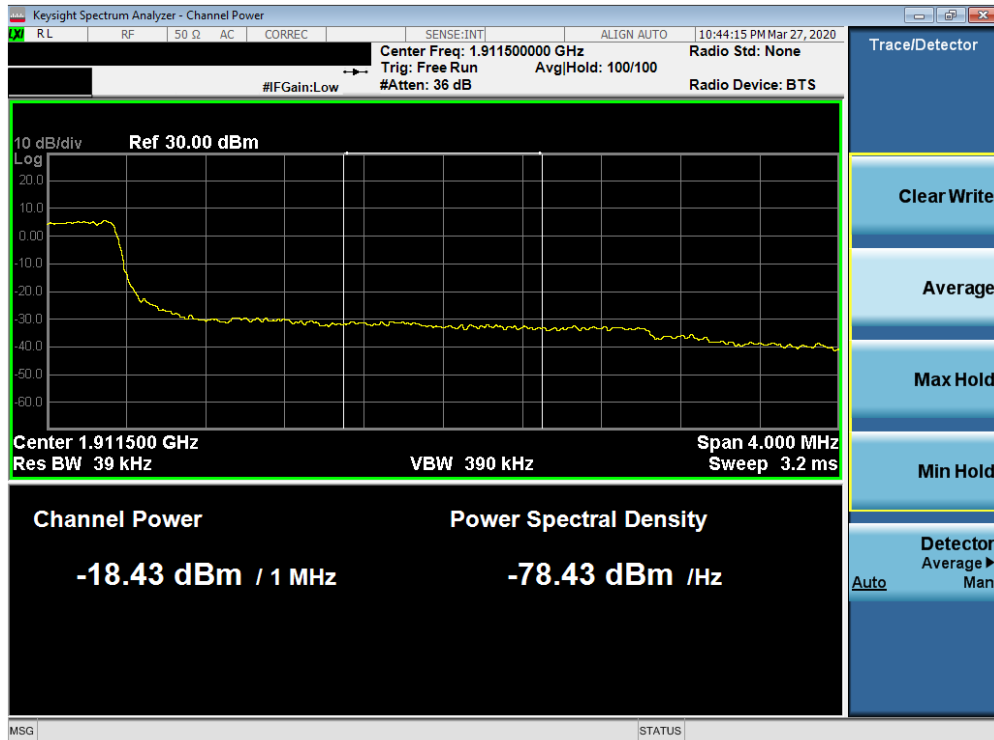


Plot 7-480. Lower Extended Band Edge Plot (Band 25/2 - 3.0MHz QPSK - Full RB Configuration)

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 269 of 420

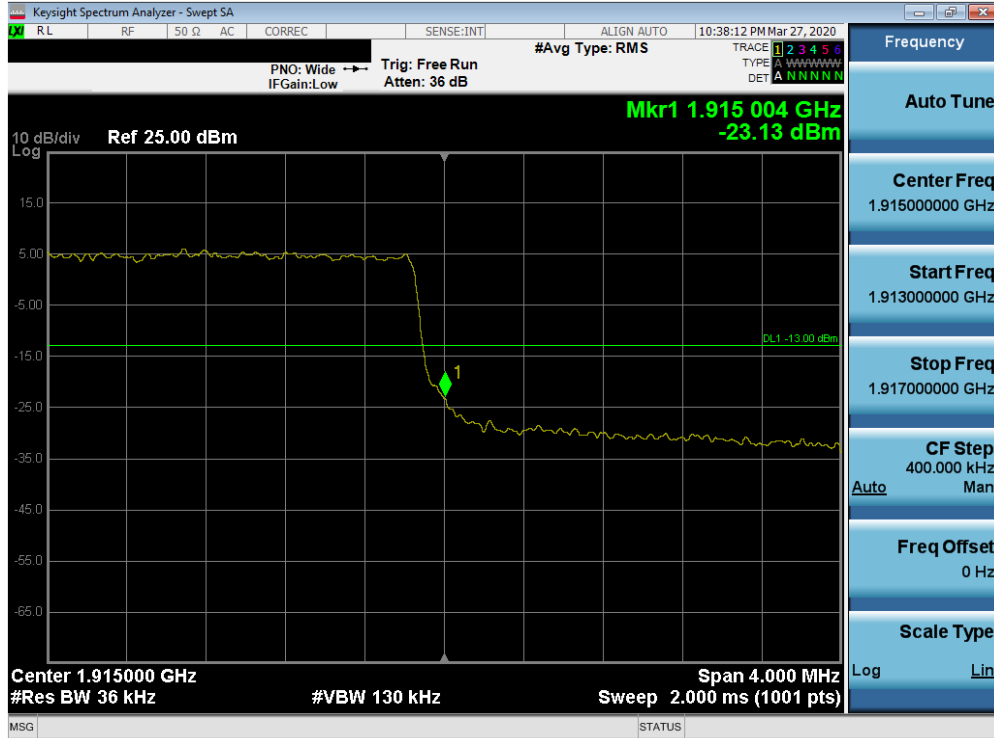


Plot 7-481. Upper Band Edge Plot (Band 2 - 3.0MHz QPSK - Full RB Configuration)

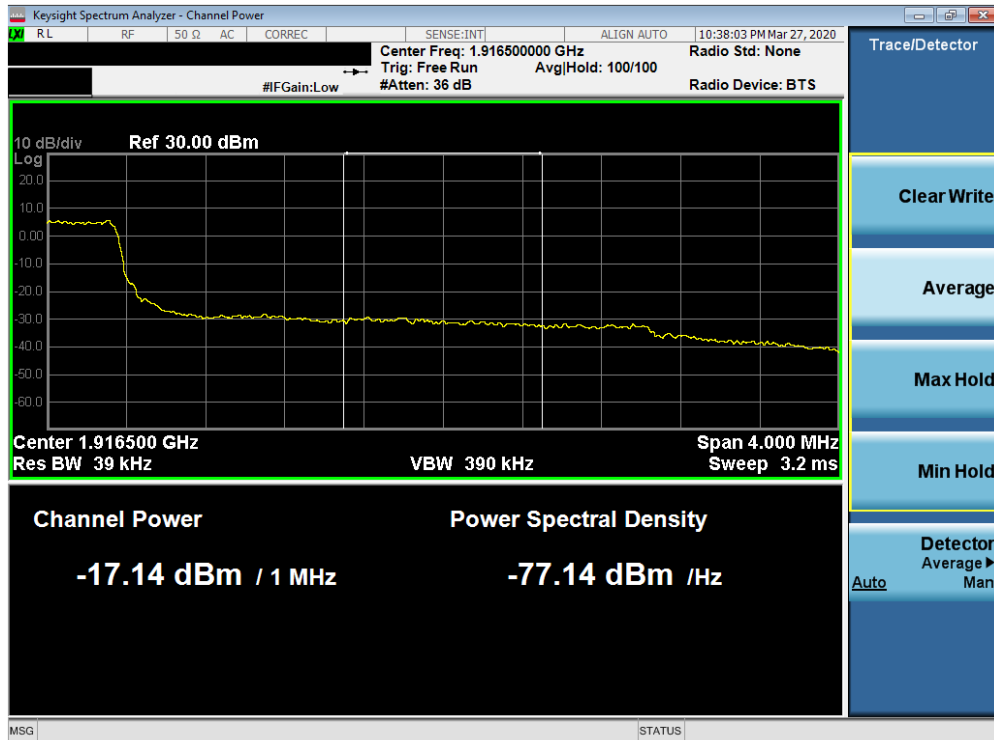


Plot 7-482. Upper Extended Band Edge Plot (Band 2 - 3.0MHz QPSK - Full RB Configuration)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	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 270 of 420

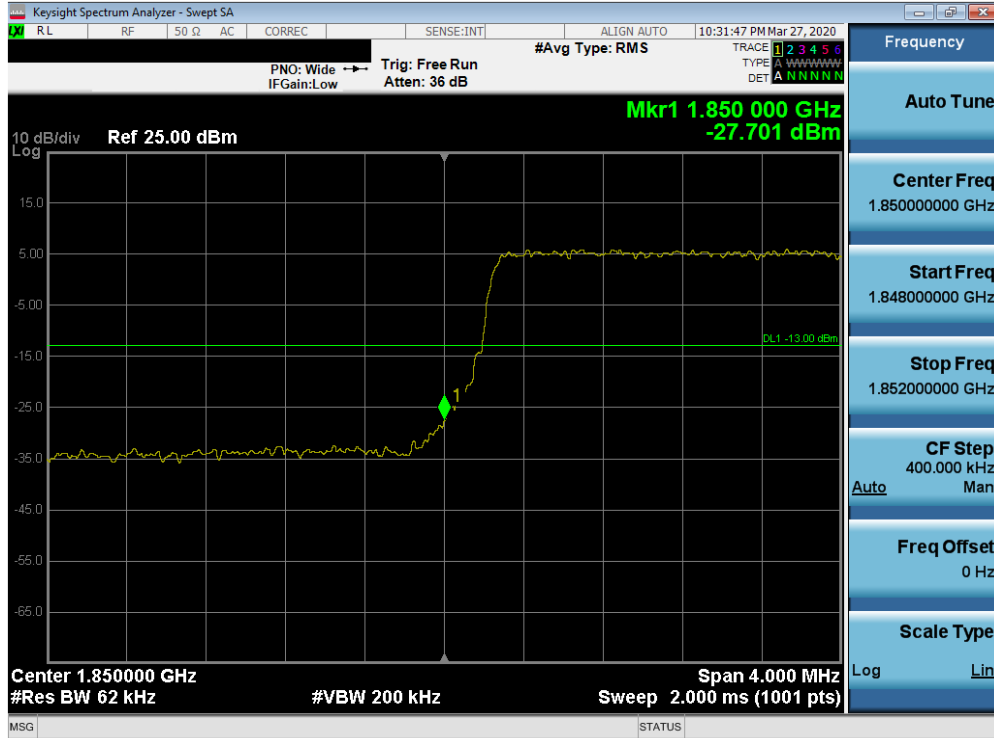


Plot 7-483. Upper Band Edge Plot (Band 25 - 3.0MHz QPSK - Full RB Configuration)

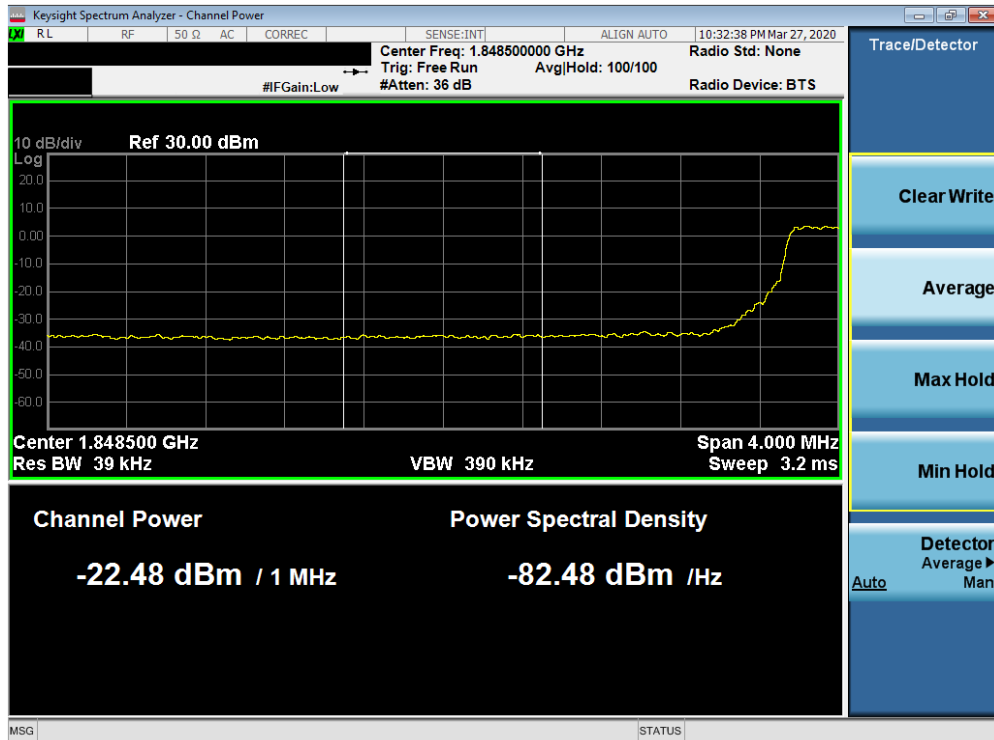


Plot 7-484. Upper Extended Band Edge Plot (Band 25 - 3.0MHz QPSK - Full RB Configuration)

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 271 of 420



Plot 7-485. Lower Band Edge Plot (Band 25/2 - 5.0MHz QPSK - Full RB Configuration)

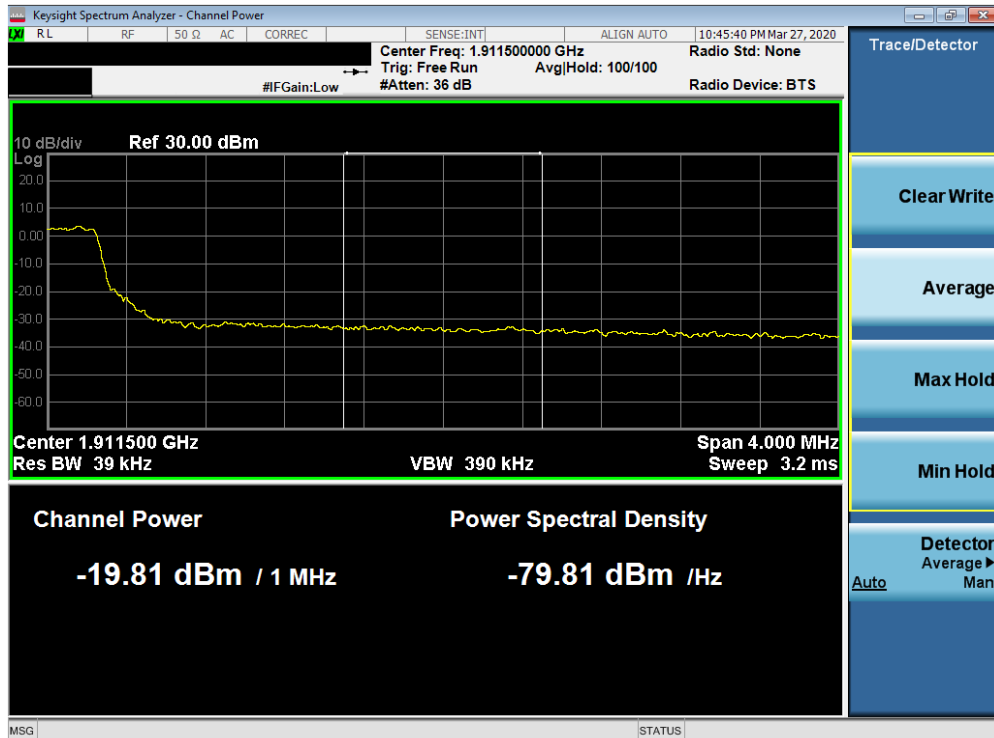


Plot 7-486. Lower Extended Band Edge Plot (Band 25/2 - 5.0MHz QPSK - Full RB Configuration)

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 272 of 420

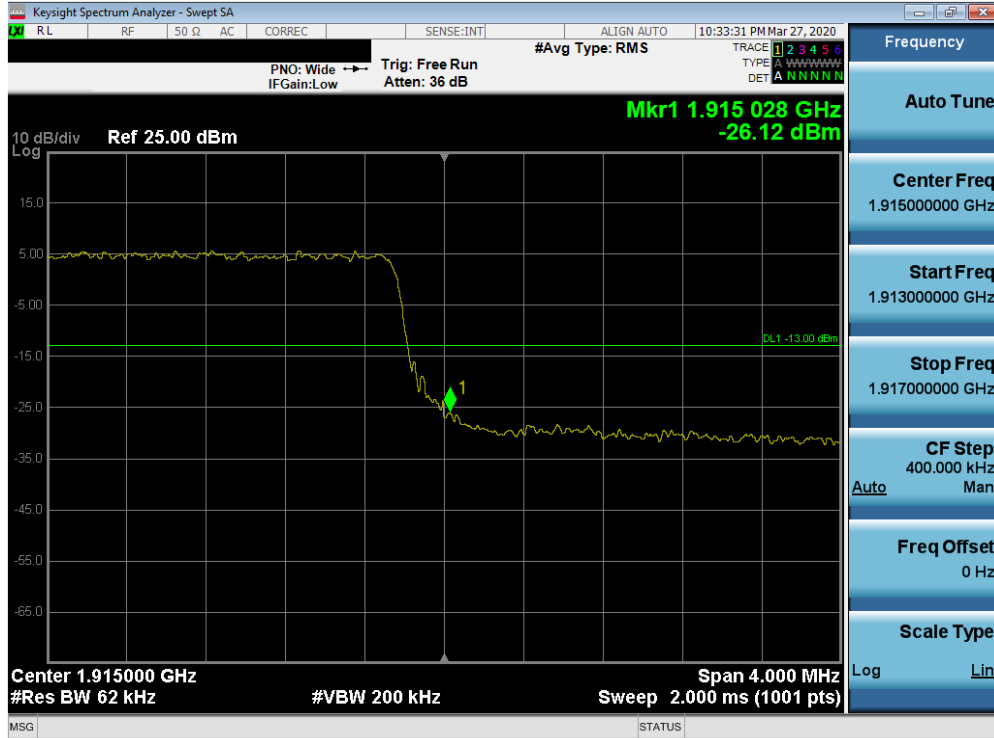


Plot 7-487. Upper Band Edge Plot (Band 2 - 5.0MHz QPSK - Full RB Configuration)

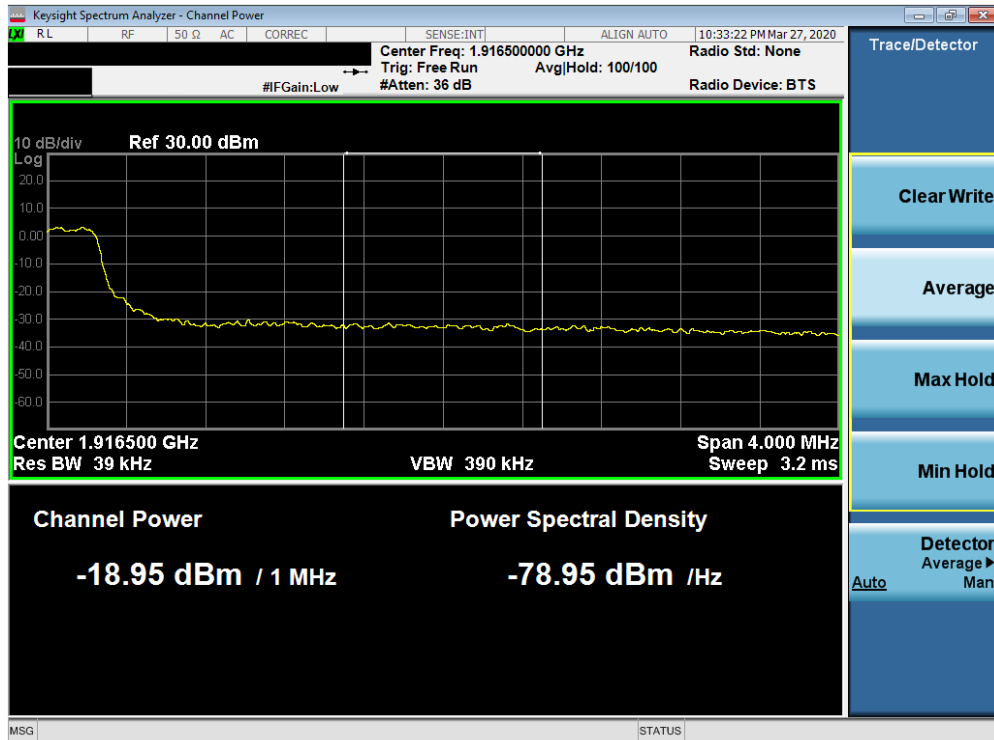


Plot 7-488. Upper Extended Band Edge Plot (Band 2 - 5.0MHz QPSK - Full RB Configuration)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	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 273 of 420

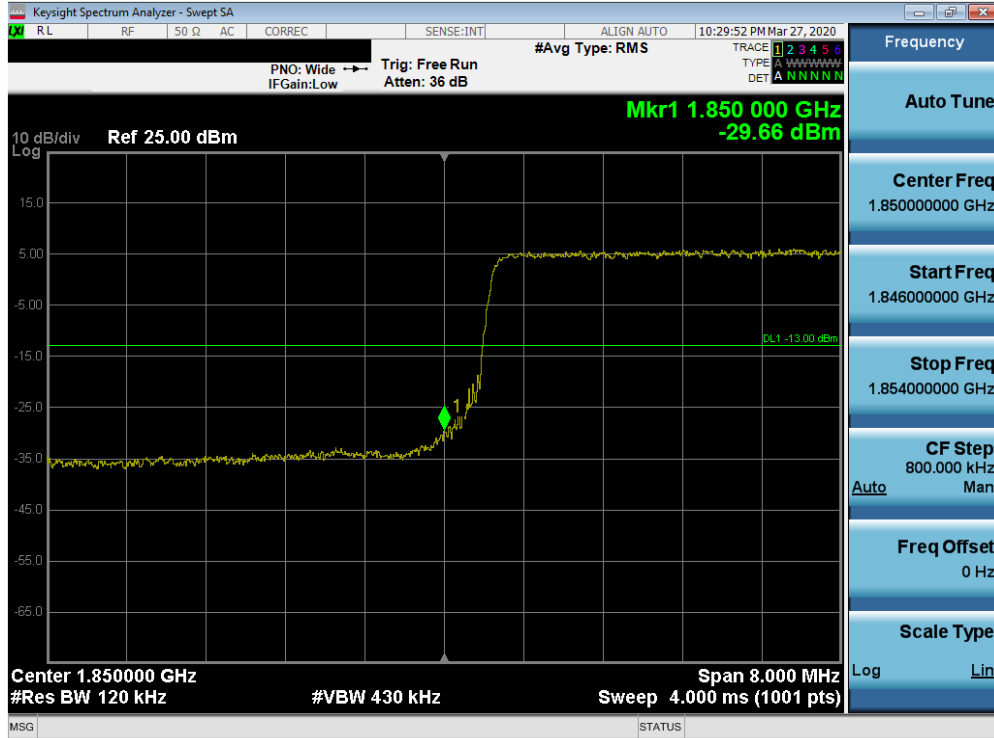


Plot 7-489. Upper Band Edge Plot (Band 25 - 5.0MHz QPSK - Full RB Configuration)

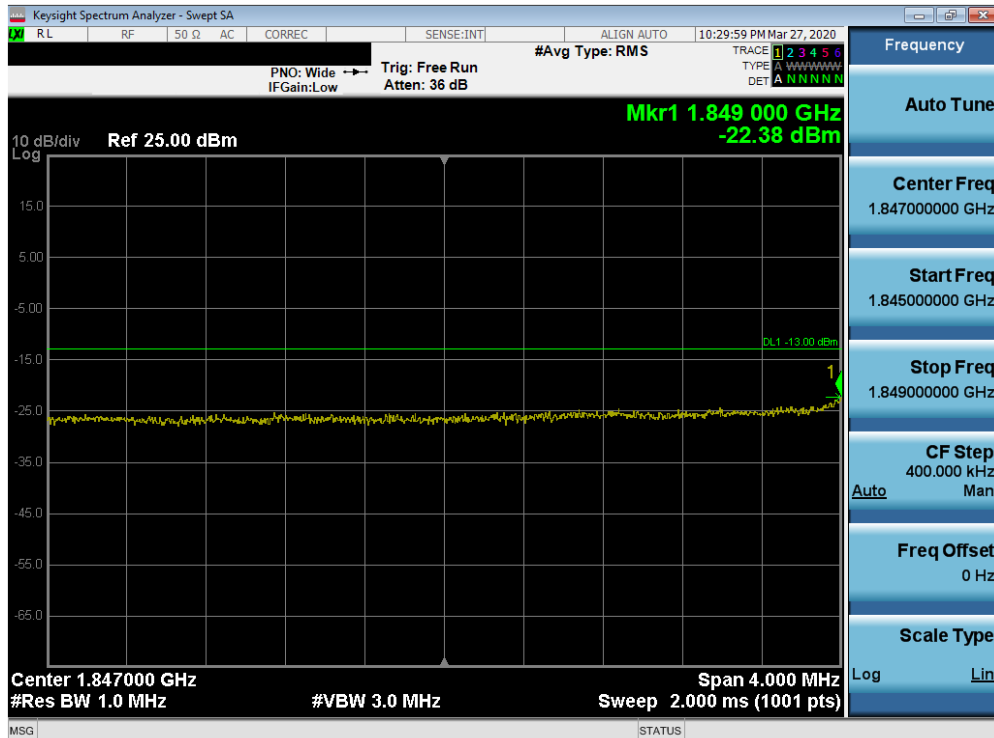


Plot 7-490. Upper Extended Band Edge Plot (Band 25 - 5.0MHz QPSK - Full RB Configuration)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	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 274 of 420



Plot 7-491. Lower Band Edge Plot (Band 25/2 - 10.0MHz QPSK - Full RB Configuration)

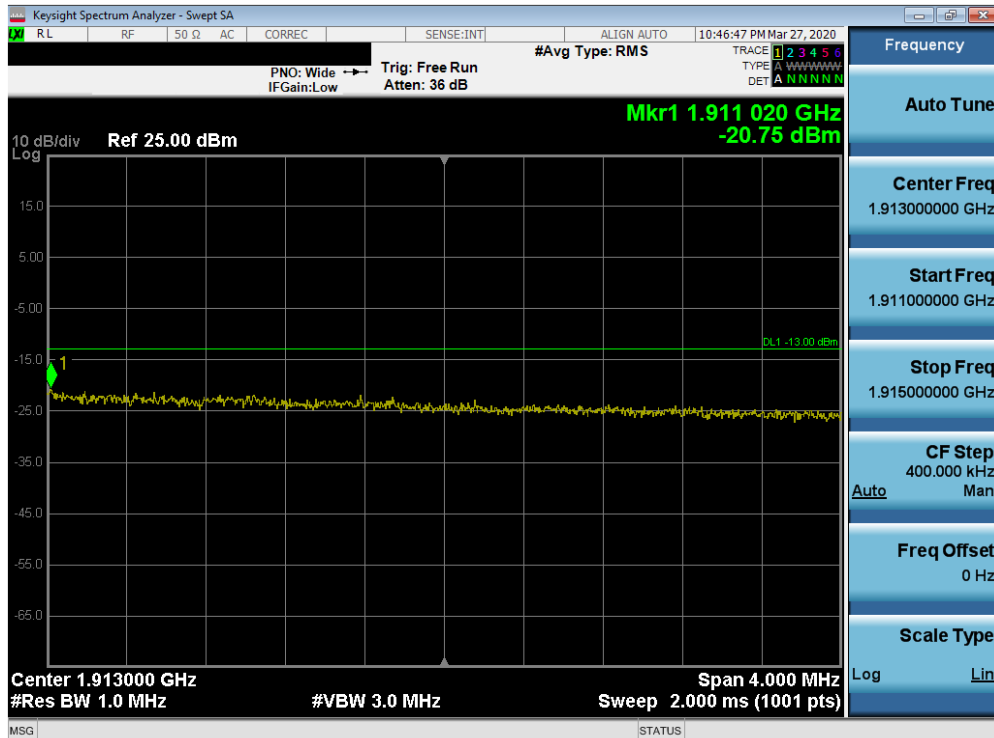


Plot 7-492. Lower Extended Band Edge Plot (Band 25/2 - 10.0MHz QPSK - Full RB Configuration)

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 275 of 420

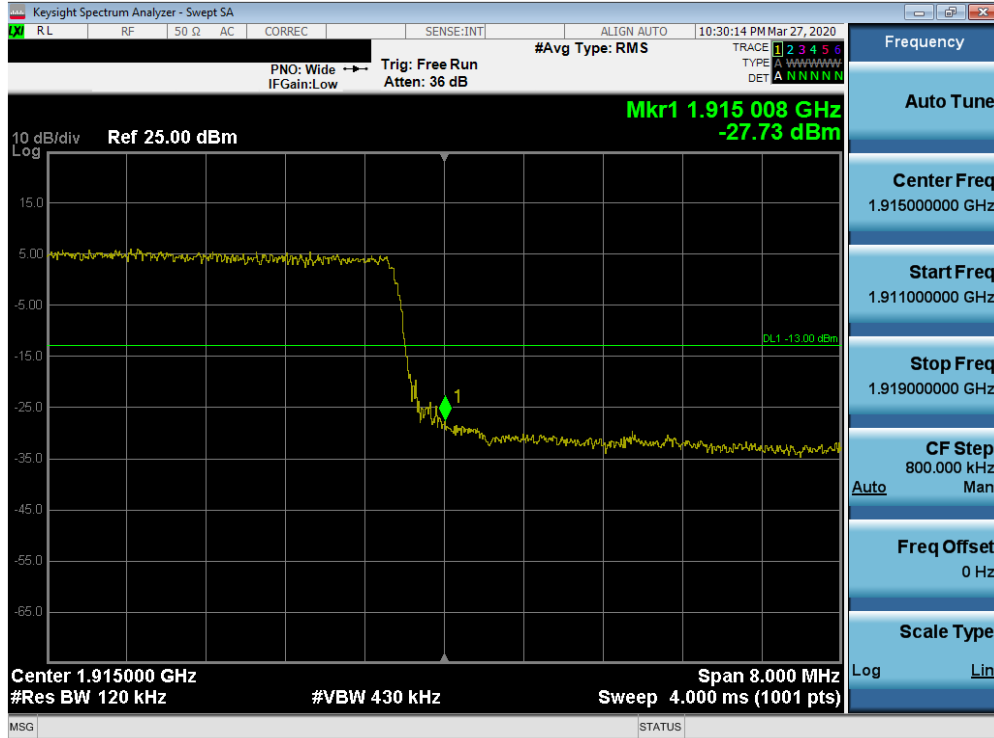


Plot 7-493. Upper Band Edge Plot (Band 2 - 10.0MHz QPSK - Full RB Configuration)

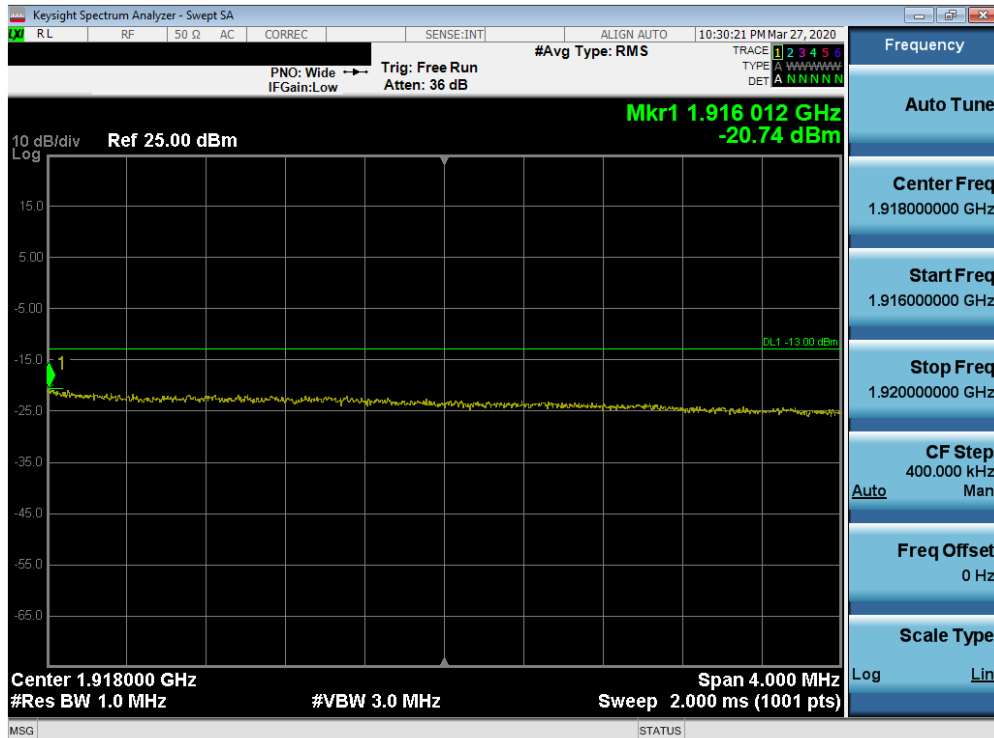


Plot 7-494. Upper Extended Band Edge Plot (Band 2 - 10.0MHz QPSK - Full RB Configuration)

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 276 of 420

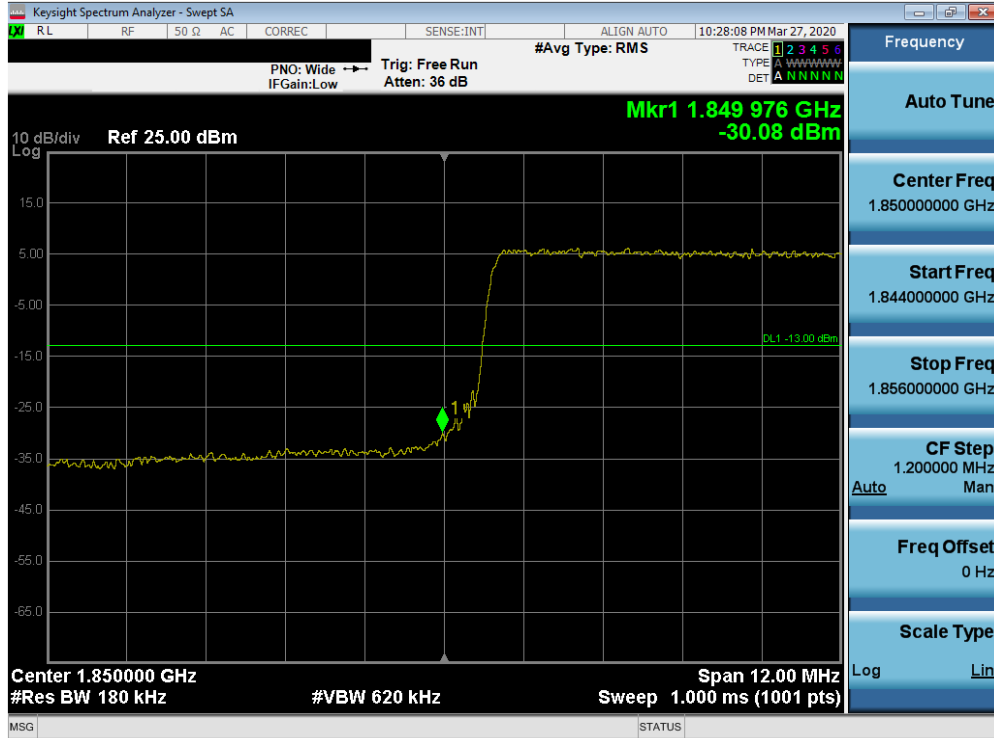


Plot 7-495. Upper Band Edge Plot (Band 25 - 10.0MHz QPSK - Full RB Configuration)

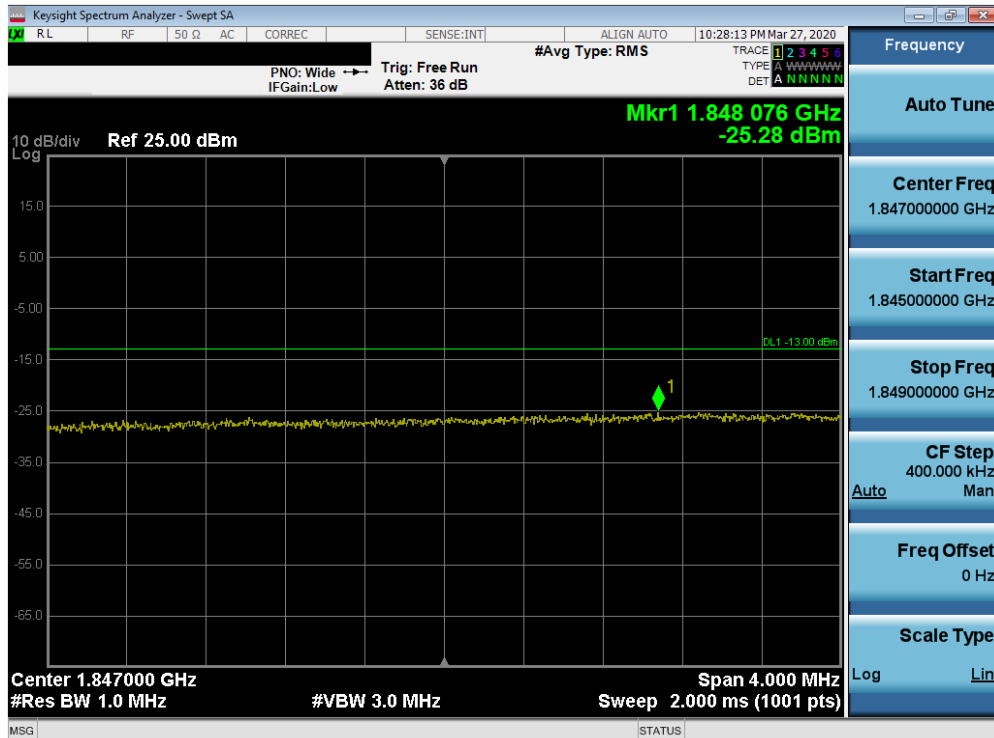


Plot 7-496. Upper Extended Band Edge Plot (Band 25 - 10.0MHz QPSK - Full RB Configuration)

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 277 of 420

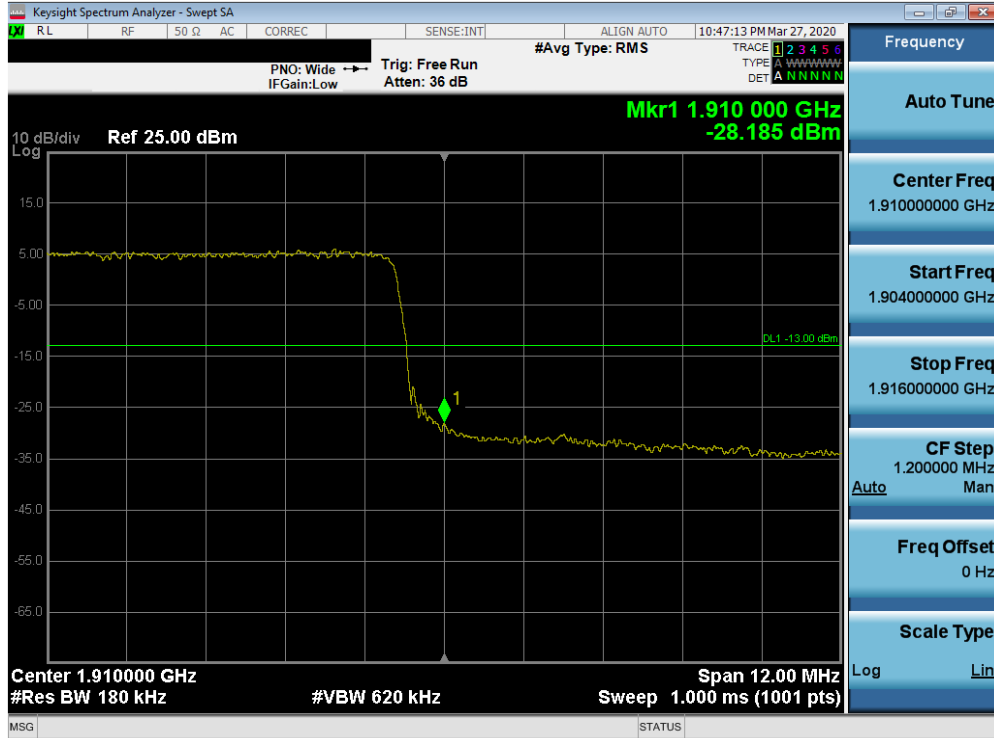


Plot 7-497. Lower Band Edge Plot (Band 25/2 - 15.0MHz QPSK - Full RB Configuration)

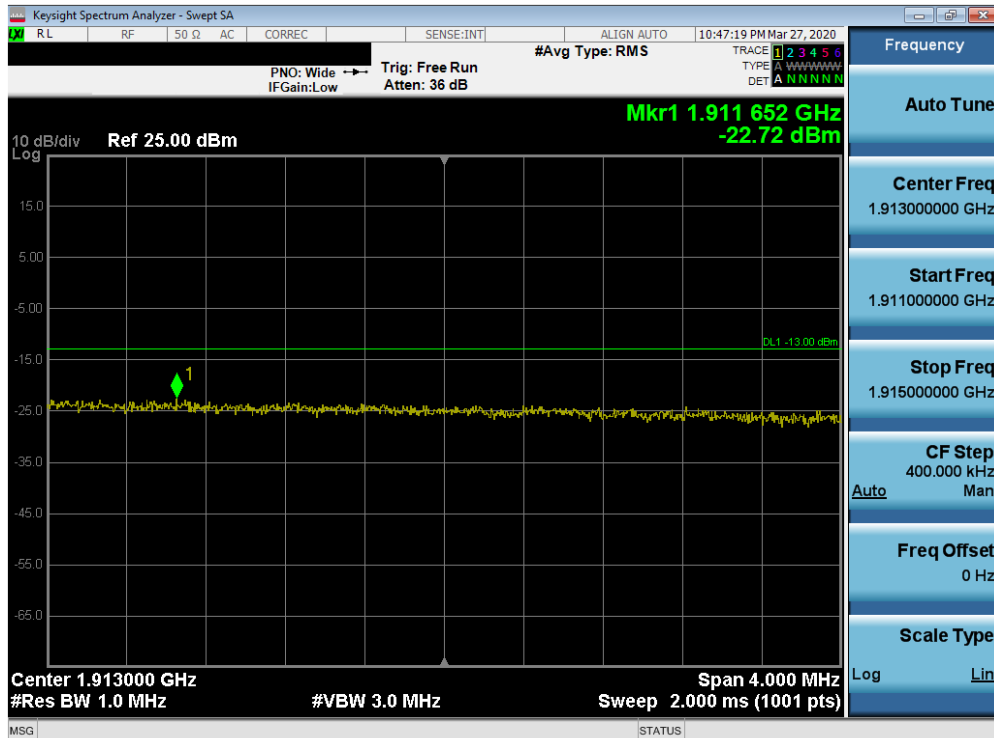


Plot 7-498. Lower Extended Band Edge Plot (Band 25/2 - 15.0MHz QPSK - Full RB Configuration)

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 278 of 420



Plot 7-499. Upper Band Edge Plot (Band 2 - 15.0MHz QPSK - Full RB Configuration)



Plot 7-500. Upper Extended Band Edge Plot (Band 2 - 15.0MHz QPSK - 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 279 of 420

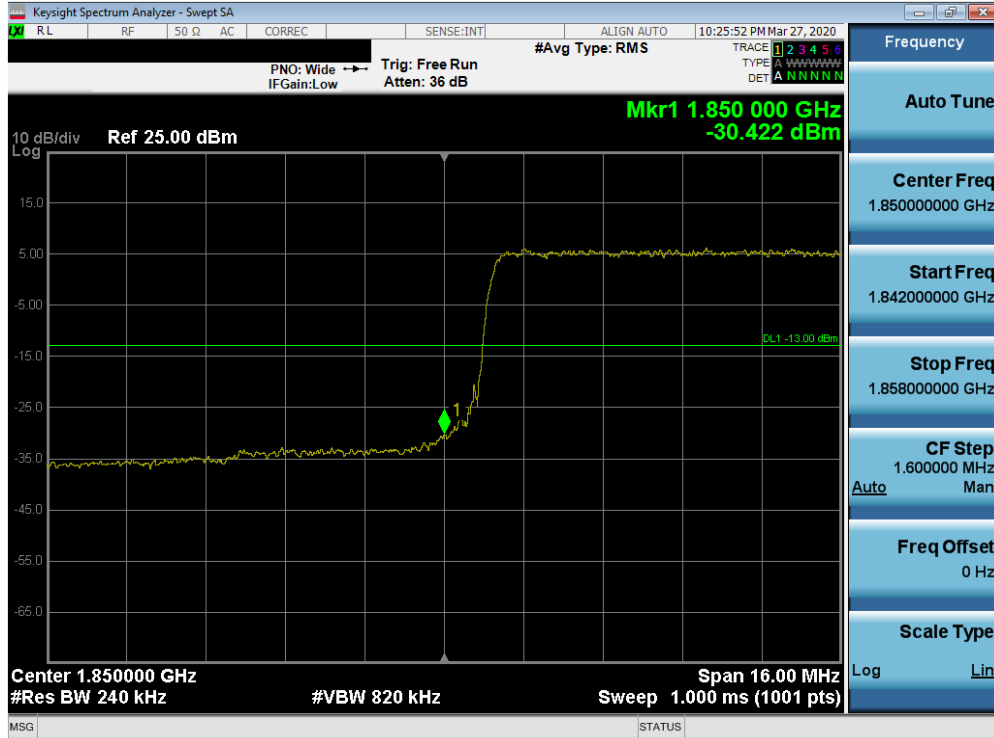


Plot 7-501. Upper Band Edge Plot (Band 25 - 15.0MHz QPSK - Full RB Configuration)

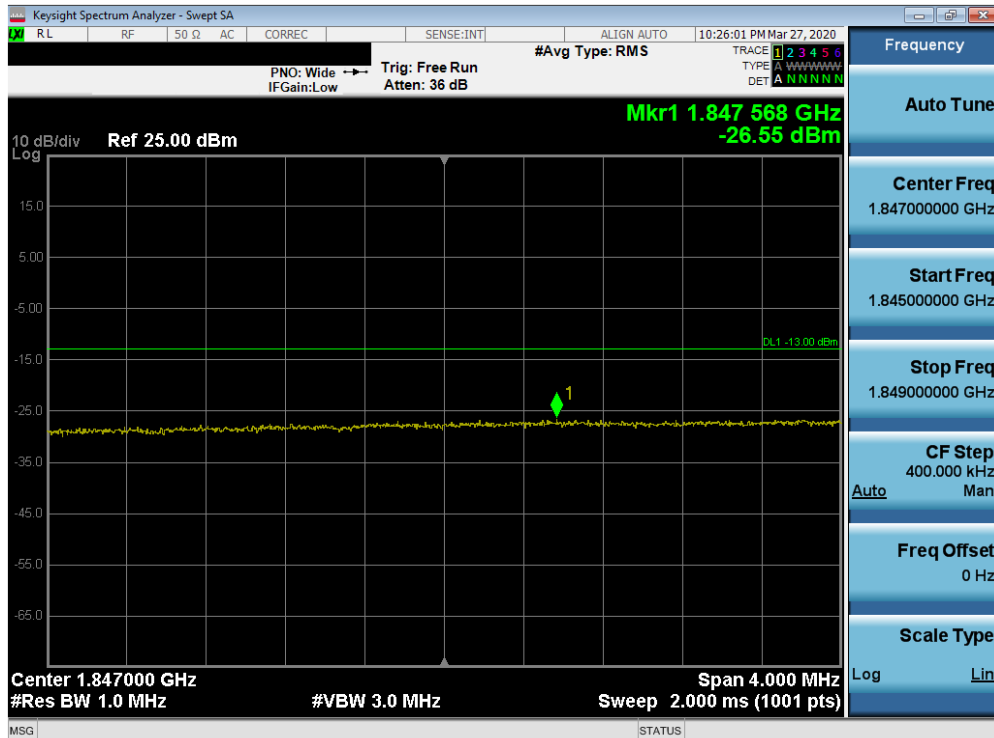


Plot 7-502. Upper Extended Band Edge Plot (Band 25 - 15.0MHz QPSK - Full RB Configuration)

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 280 of 420

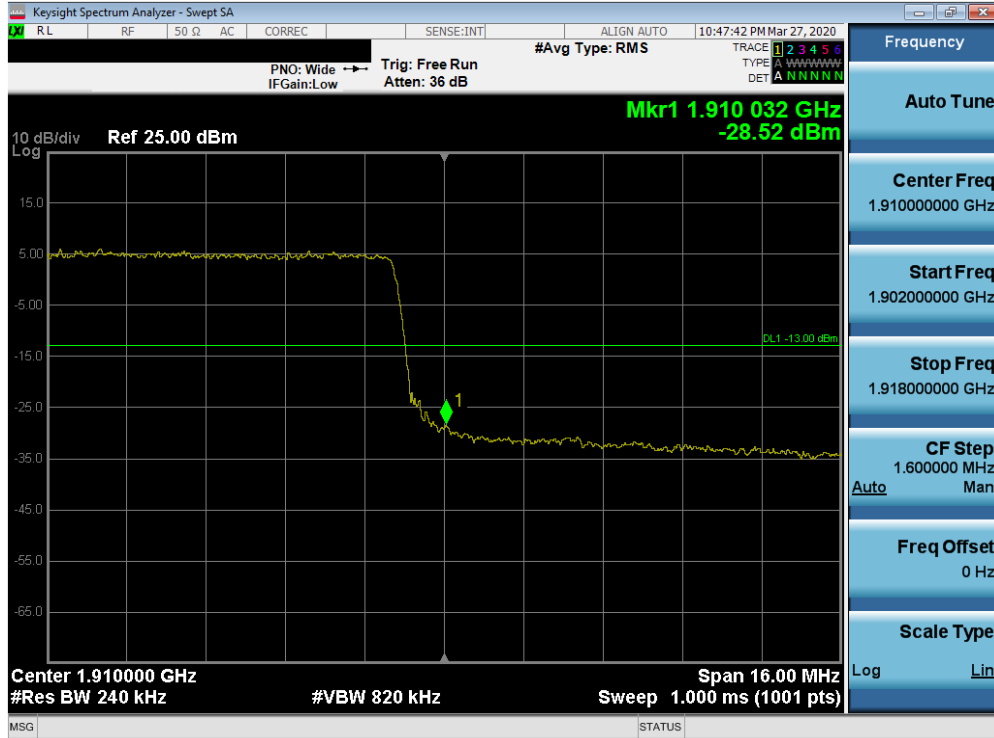


Plot 7-503. Lower Band Edge Plot (Band 25/2 - 20.0MHz QPSK - Full RB Configuration)

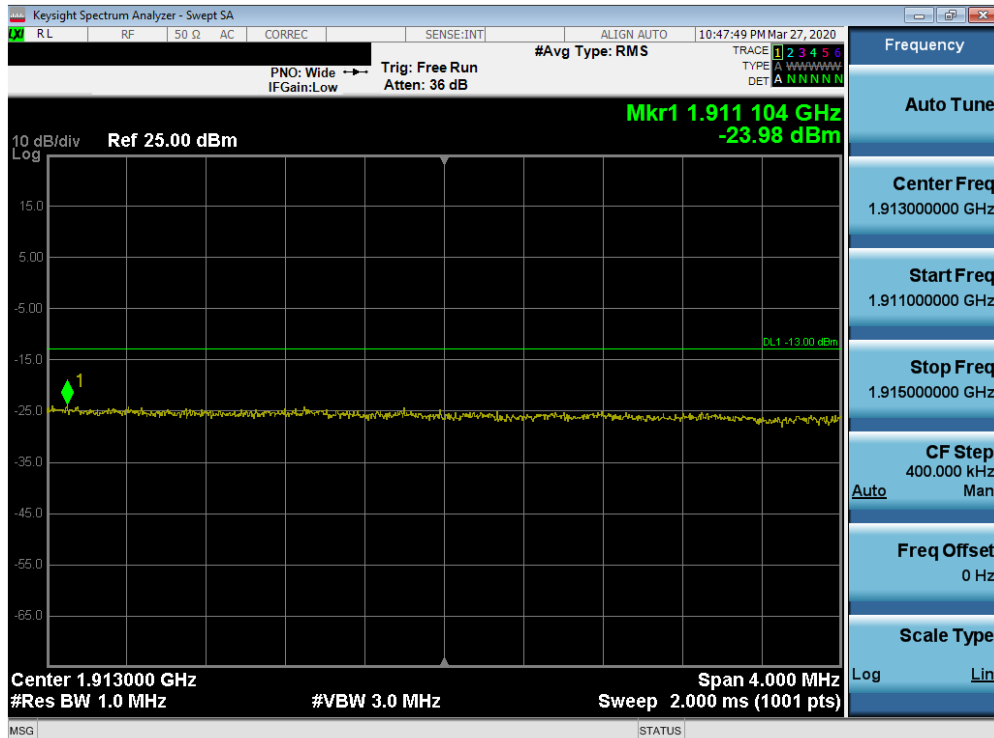


Plot 7-504. Lower Extended Band Edge Plot (Band 25/2 - 20.0MHz QPSK - Full RB Configuration)

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 281 of 420



Plot 7-505. Upper Band Edge Plot (Band 2 - 20.0MHz QPSK - Full RB Configuration)



Plot 7-506. Upper Extended Band Edge Plot (Band 2 - 20.0MHz QPSK - 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 282 of 420



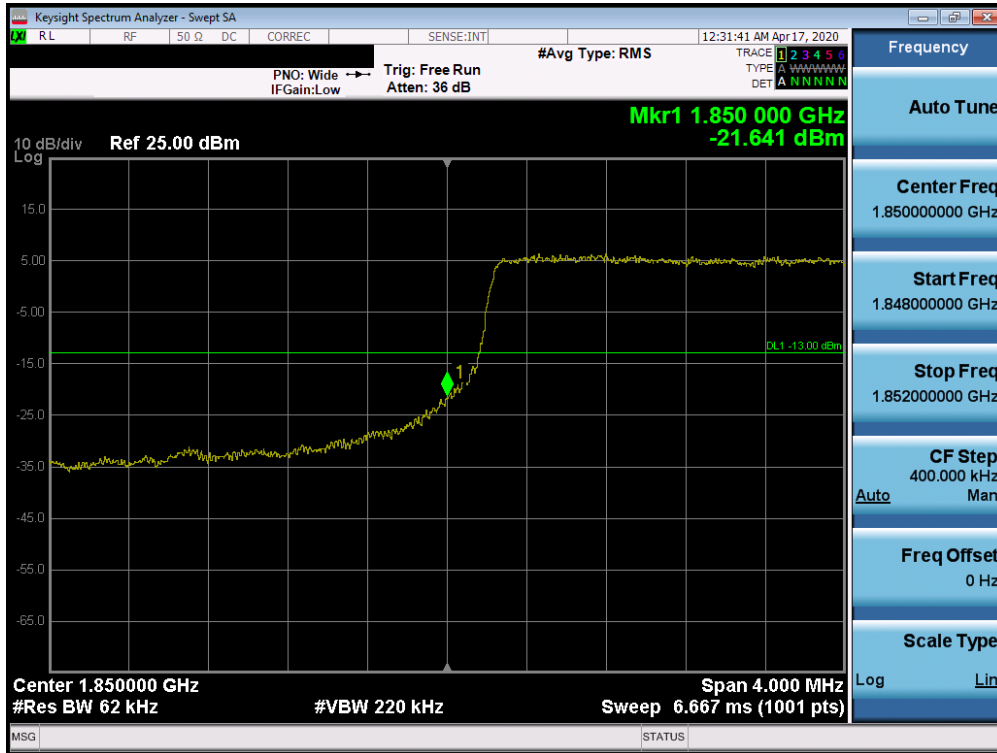
Plot 7-507. Upper Band Edge Plot (Band 25 - 20.0MHz QPSK - Full RB Configuration)



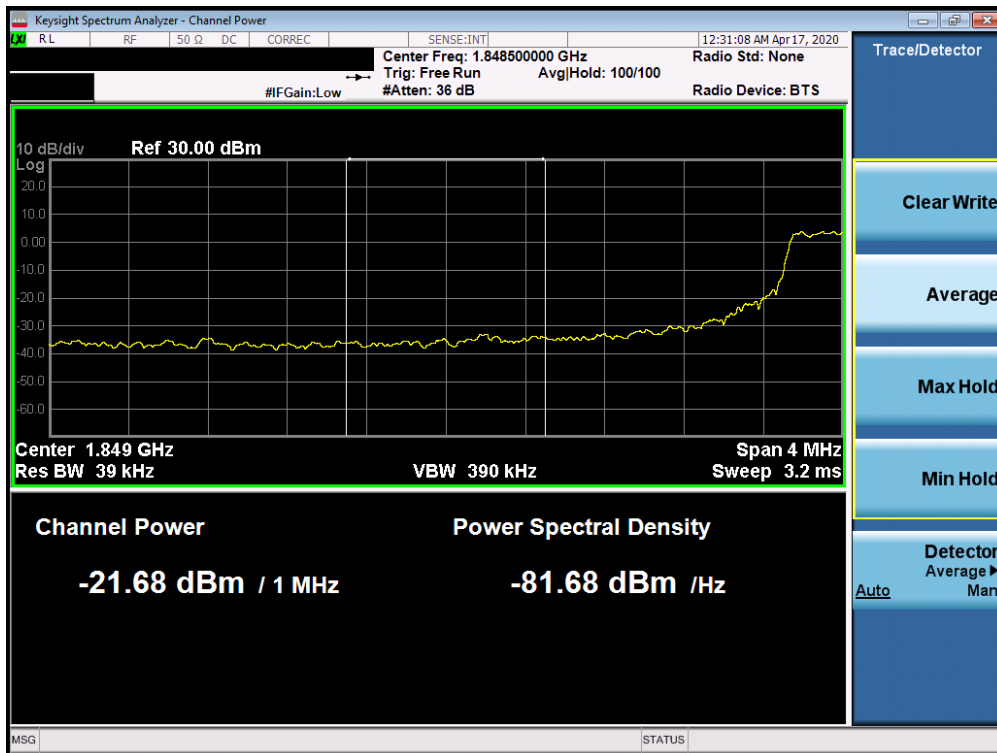
Plot 7-508. Upper Extended Band Edge Plot (Band 25 - 20.0MHz QPSK - Full RB Configuration)

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 283 of 420

NR Band n2



Plot 7-509. Lower Band Edge Plot (n2 - 5MHz DFT-s-OFDM-QPSK - Full RB Configuration)



Plot 7-510. Lower Extended Band Edge Plot (n2 - 5MHz DFT-s-OFDM-QPSK - 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 284 of 420

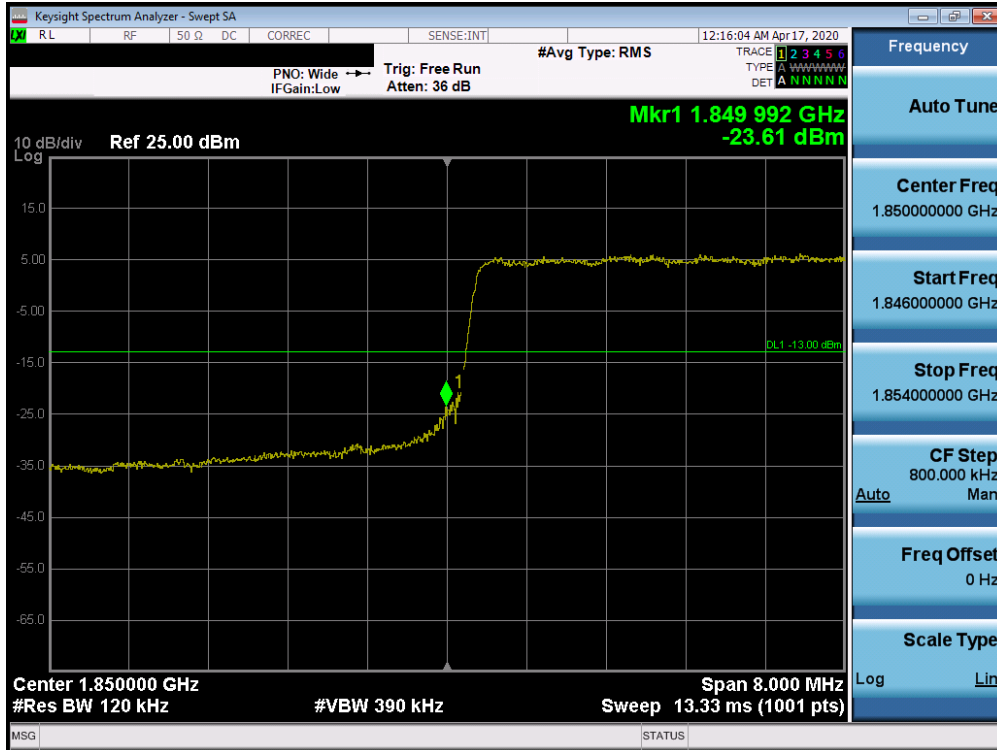


Plot 7-511. Upper Band Edge Plot (n2 - 5MHz DFT-s-OFDM-QPSK - Full RB Configuration)

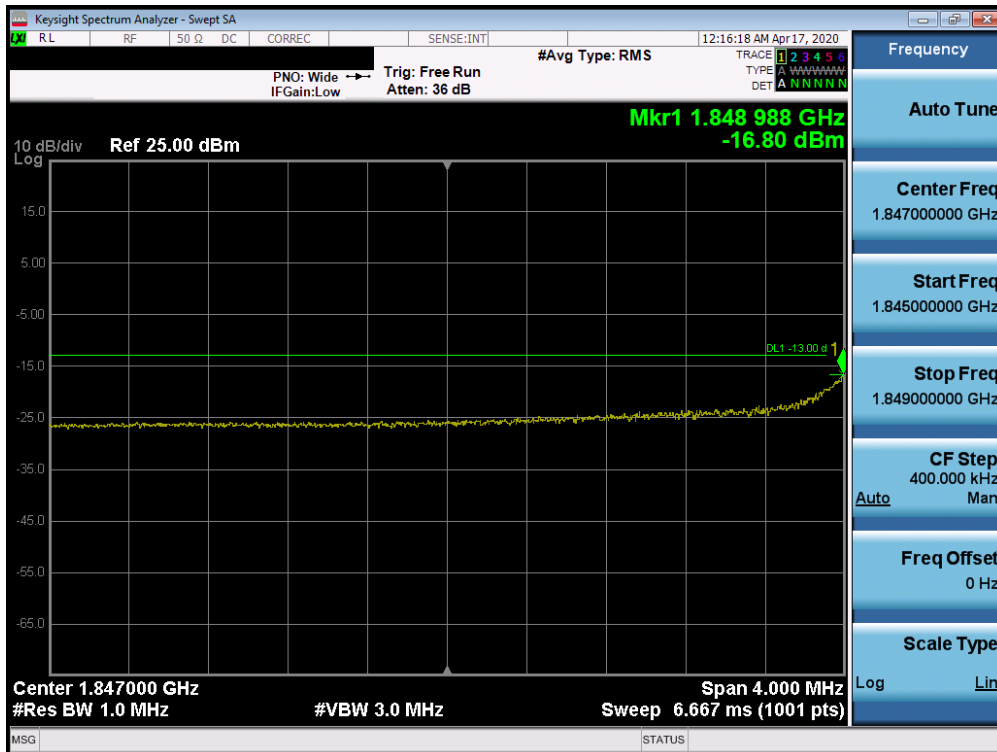


Plot 7-512. Upper Extended Band Edge Plot (n2 - 5MHz DFT-s-OFDM-QPSK - Full RB Configuration)

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 285 of 420



Plot 7-513. Lower Band Edge Plot (n2 - 10MHz DFT-s-OFDM-QPSK - Full RB Configuration)

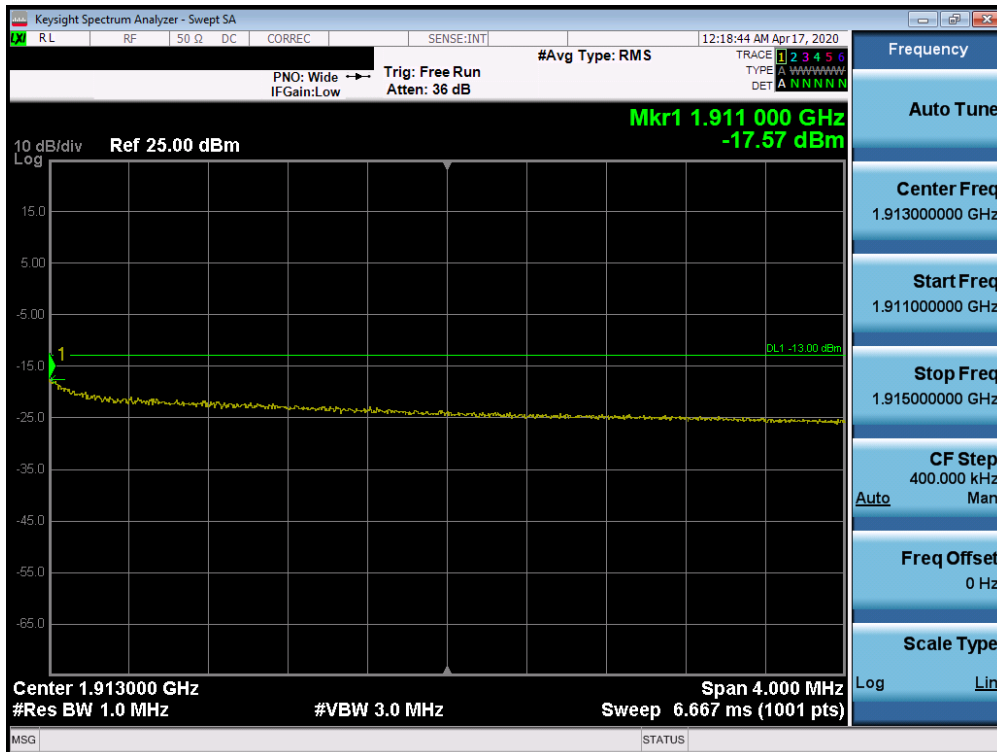


Plot 7-514. Lower Extended Band Edge Plot (n2 - 10MHz DFT-s-OFDM-QPSK - Full RB Configuration)

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 286 of 420

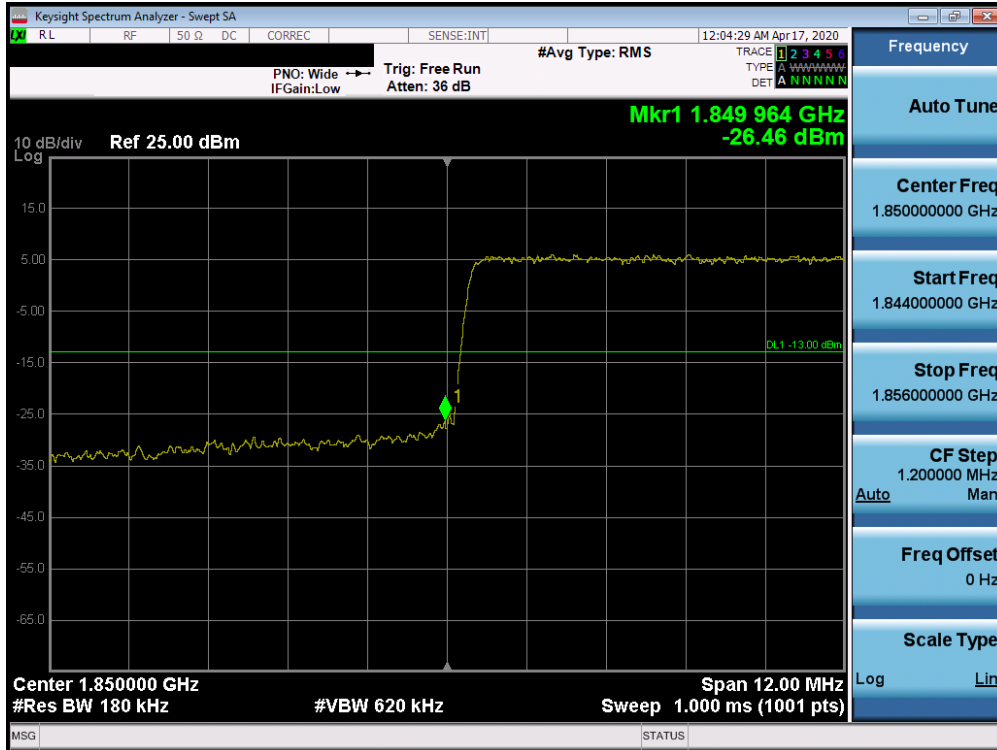


Plot 7-515. Upper Band Edge Plot (n2 - 10MHz DFT-s-OFDM-QPSK - Full RB Configuration)

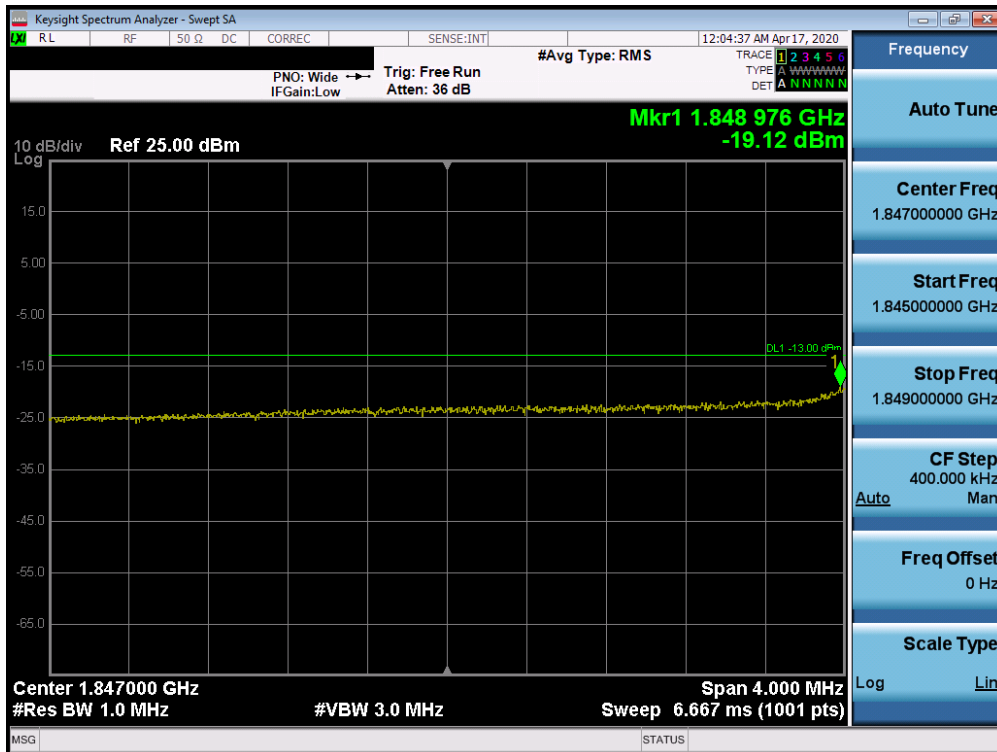


Plot 7-516. Upper Extended Band Edge Plot (n2 - 10MHz DFT-s-OFDM-QPSK - Full RB Configuration)

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 287 of 420



Plot 7-517. Lower Band Edge Plot (n2 - 15MHz DFT-s-OFDM-QPSK - Full RB Configuration)

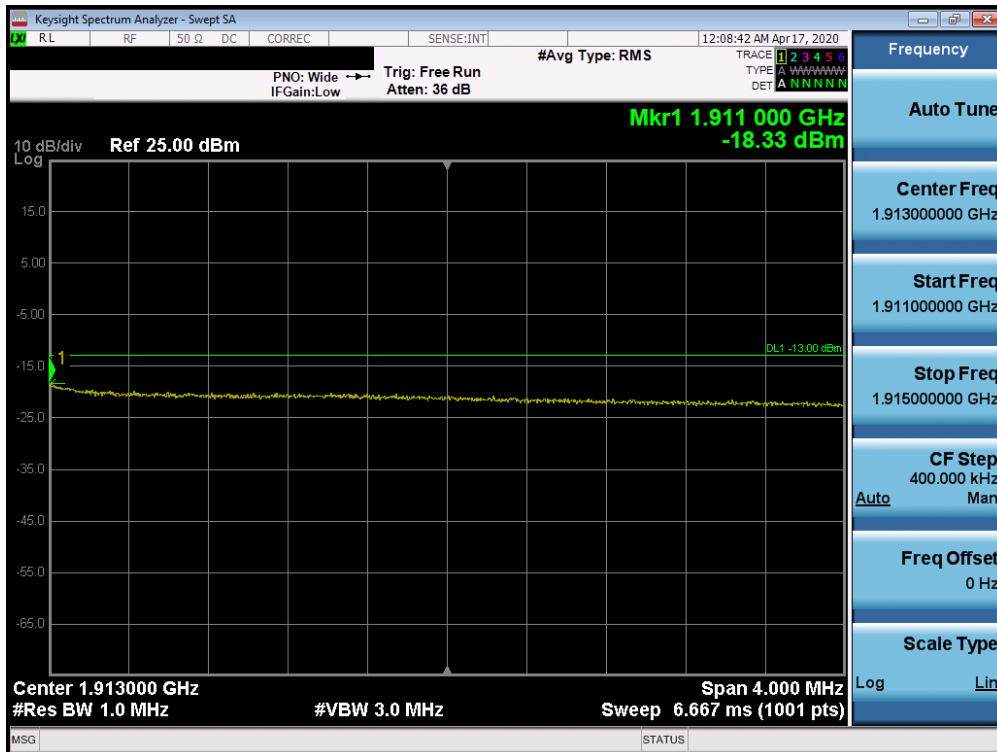


Plot 7-518. Lower Extended Band Edge Plot (n2 - 15MHz DFT-s-OFDM-QPSK - Full RB Configuration)

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 288 of 420

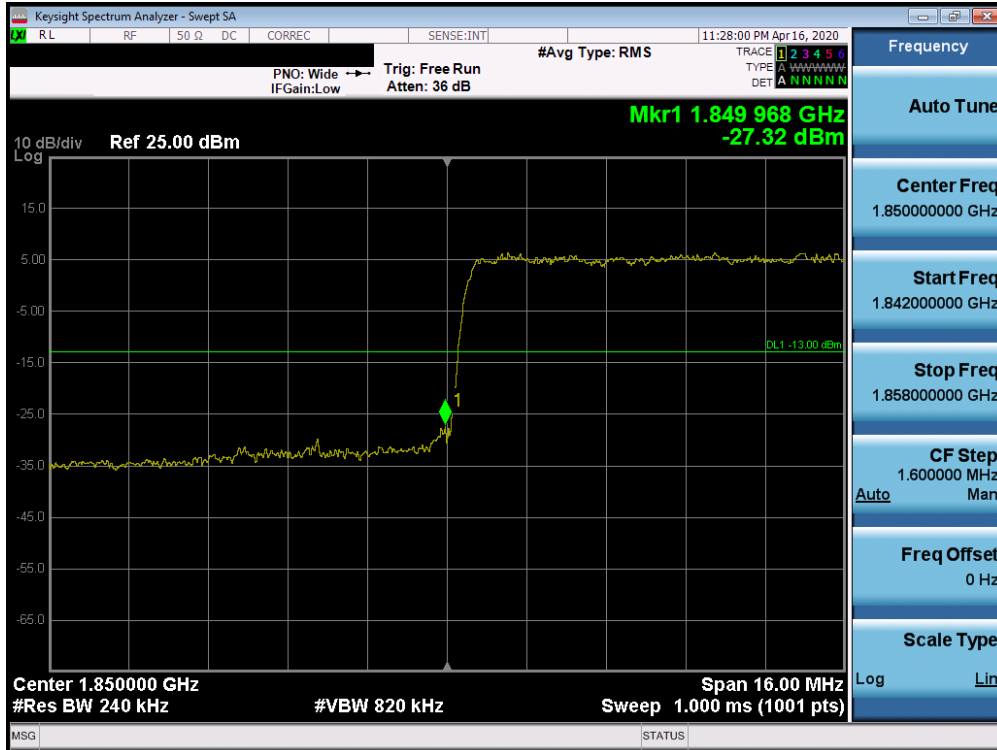


Plot 7-519. Upper Band Edge Plot (n2 - 15MHz DFT-s-OFDM-QPSK - Full RB Configuration)

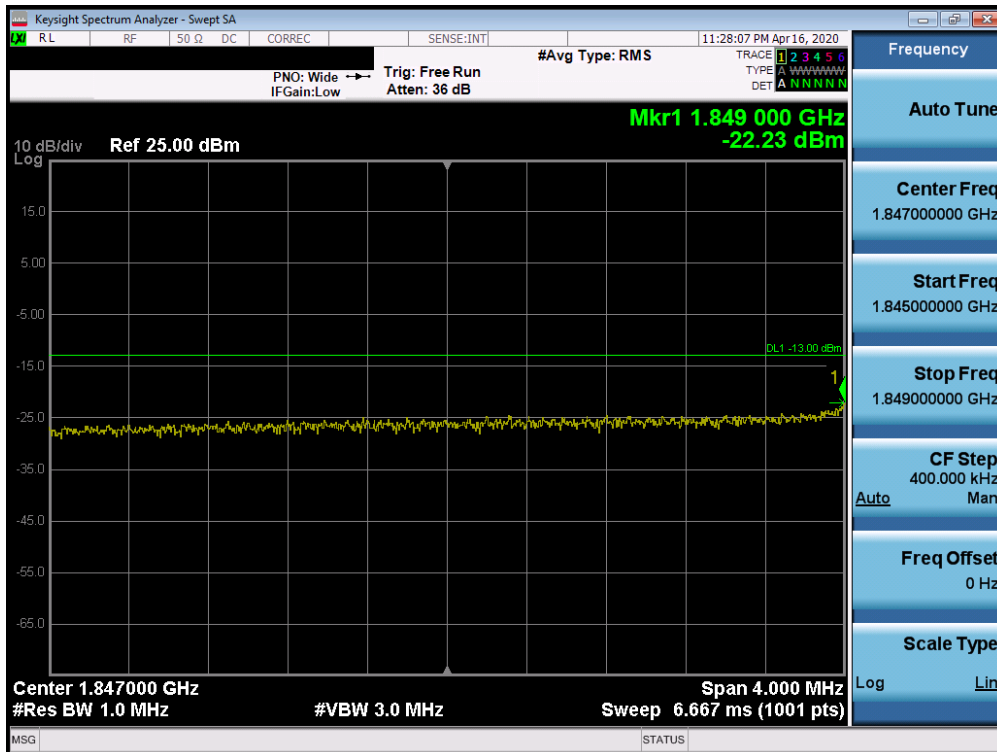


Plot 7-520. Upper Extended Band Edge Plot (n2 - 15MHz DFT-s-OFDM-QPSK - Full RB Configuration)

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 289 of 420



Plot 7-521. Lower Band Edge Plot (n2 - 20MHz DFT-s-OFDM-QPSK - Full RB Configuration)

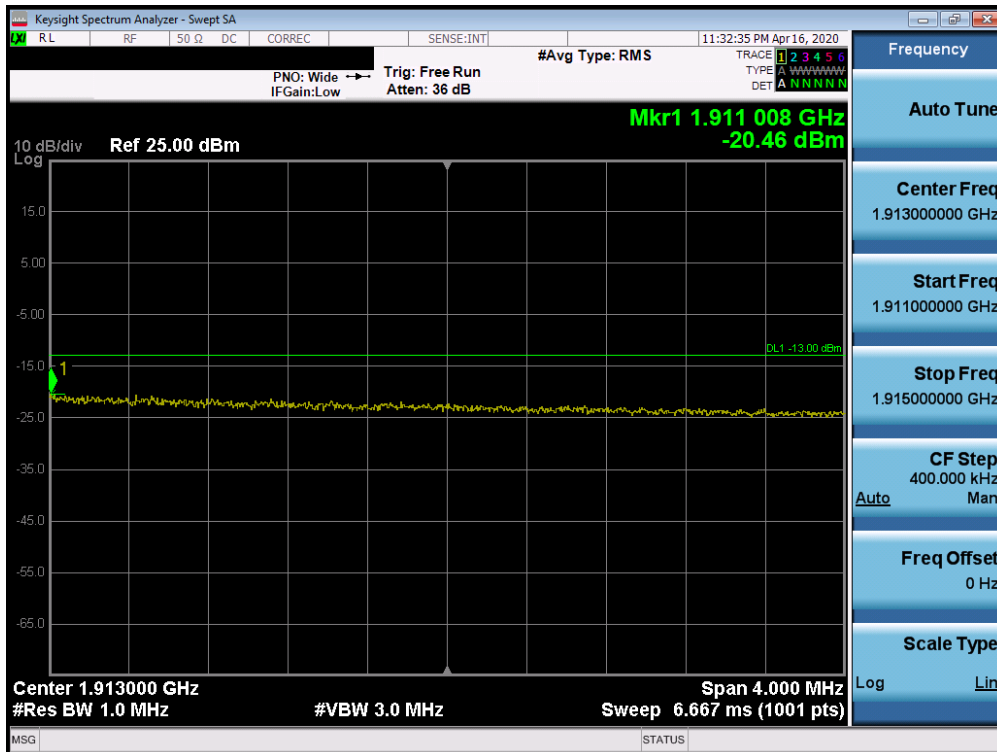


Plot 7-522. Lower Extended Band Edge Plot (n2 - 20MHz DFT-s-OFDM-QPSK - Full RB Configuration)

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 290 of 420



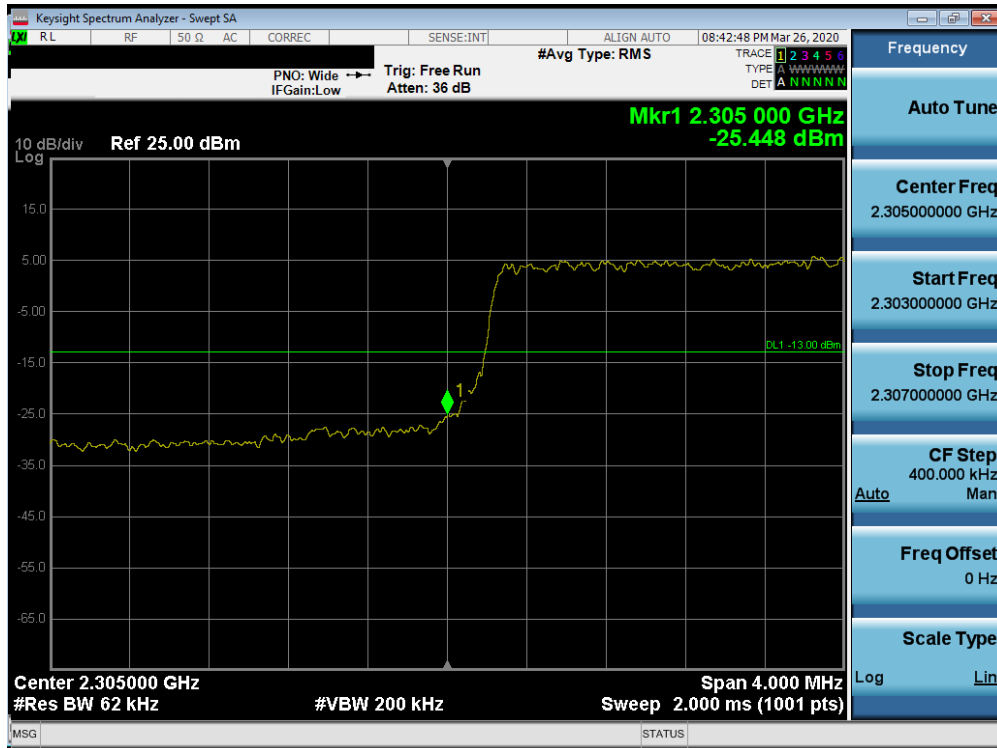
Plot 7-523. Upper Band Edge Plot (n2 - 20MHz DFT-s-OFDM-QPSK - Full RB Configuration)



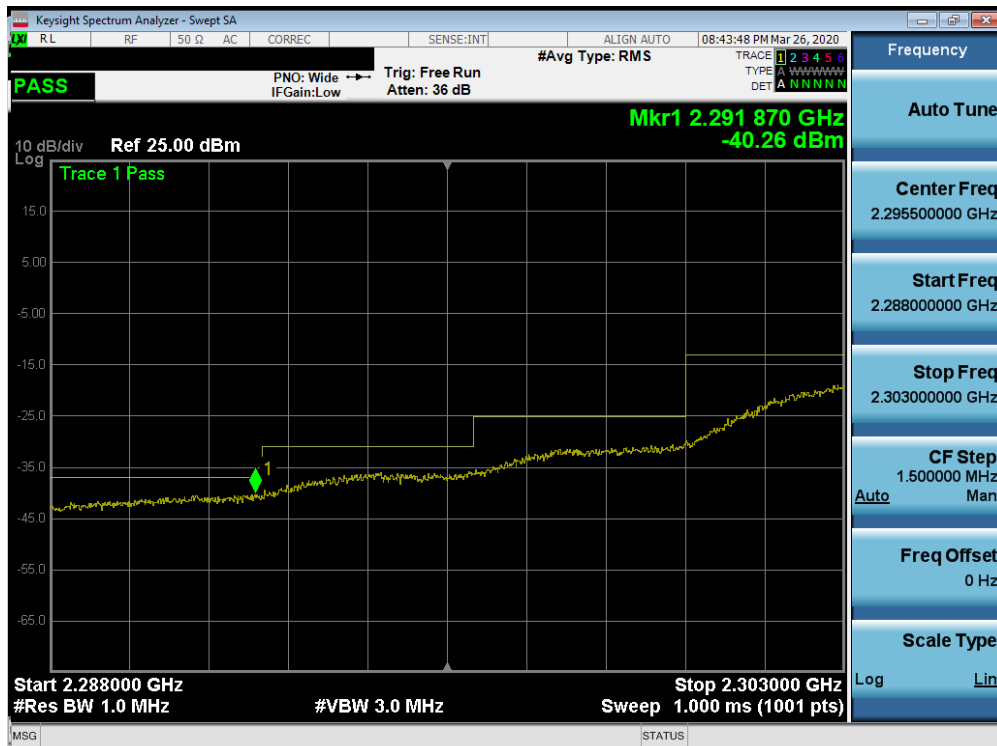
Plot 7-524. Upper Extended Band Edge Plot (n2 - 20MHz DFT-s-OFDM-QPSK - Full RB Configuration)

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 291 of 420

Band 30



Plot 7-525. Lower Band Edge Plot (Band 30 - 5.0MHz QPSK - Full RB Configuration)

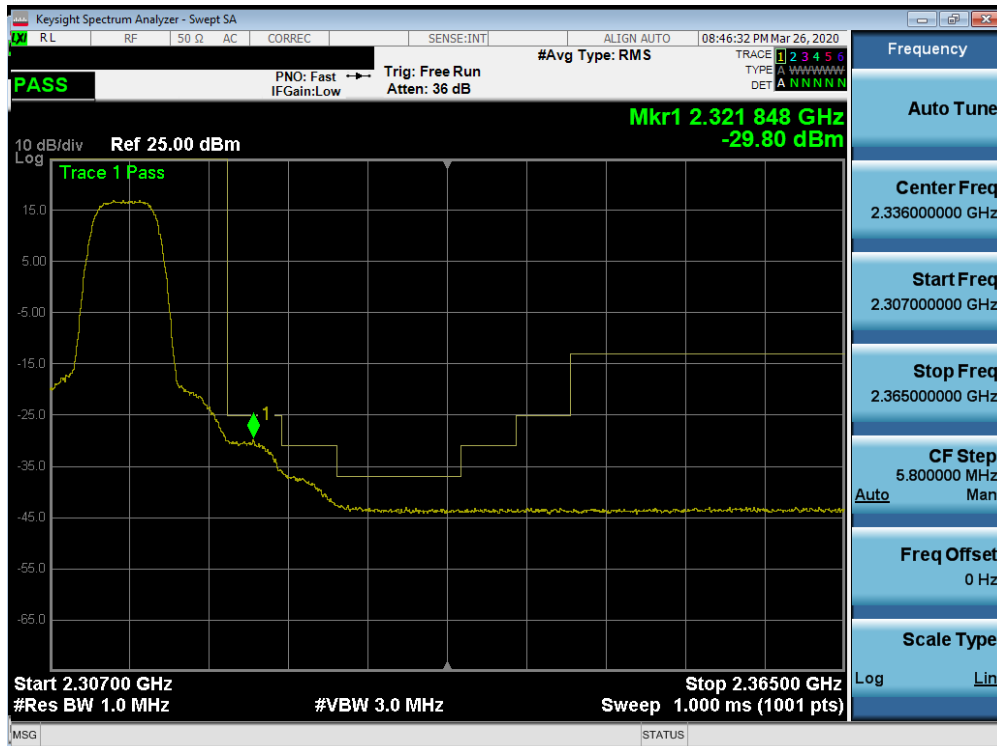


Plot 7-526. Lower Extended Band Edge Plot (Band 30 - 5.0MHz QPSK - Full RB Configuration)

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 292 of 420

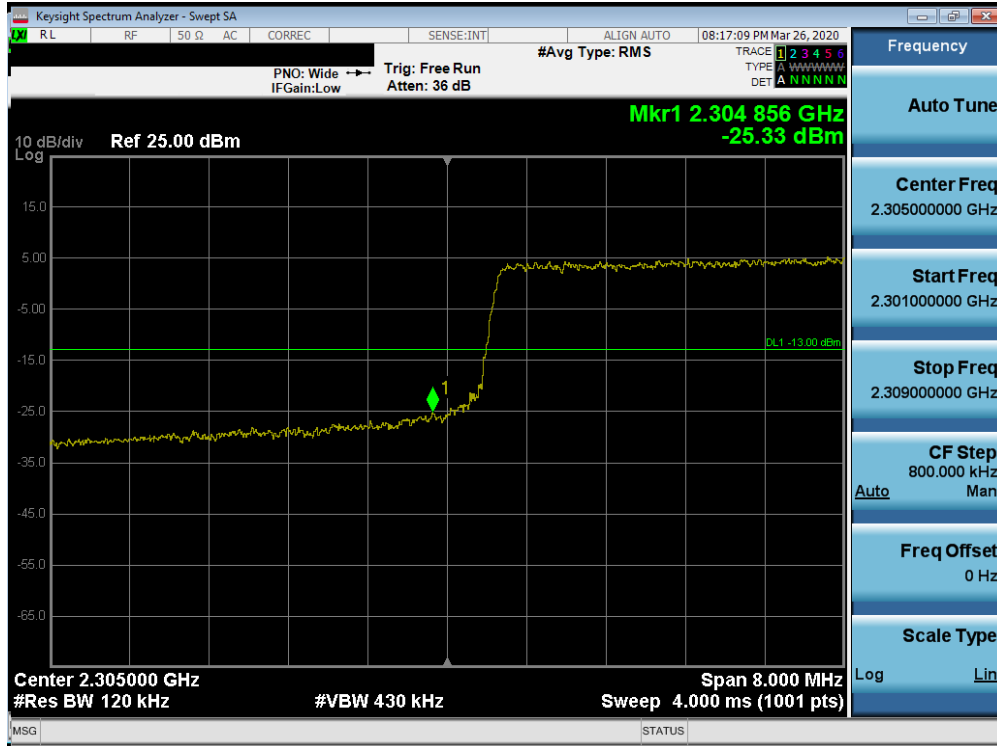


Plot 7-527. Upper Band Edge Plot (Band 30 - 5.0MHz QPSK - Full RB Configuration)



Plot 7-528. Upper Extended Band Edge Plot (Band 30 - 5.0MHz QPSK - 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 293 of 420



Plot 7-529. Lower Band Edge Plot (Band 30 - 10.0MHz QPSK - Full RB Configuration)



Plot 7-530. Lower Extended Band Edge Plot (Band 30 - 10.0MHz QPSK - 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 294 of 420



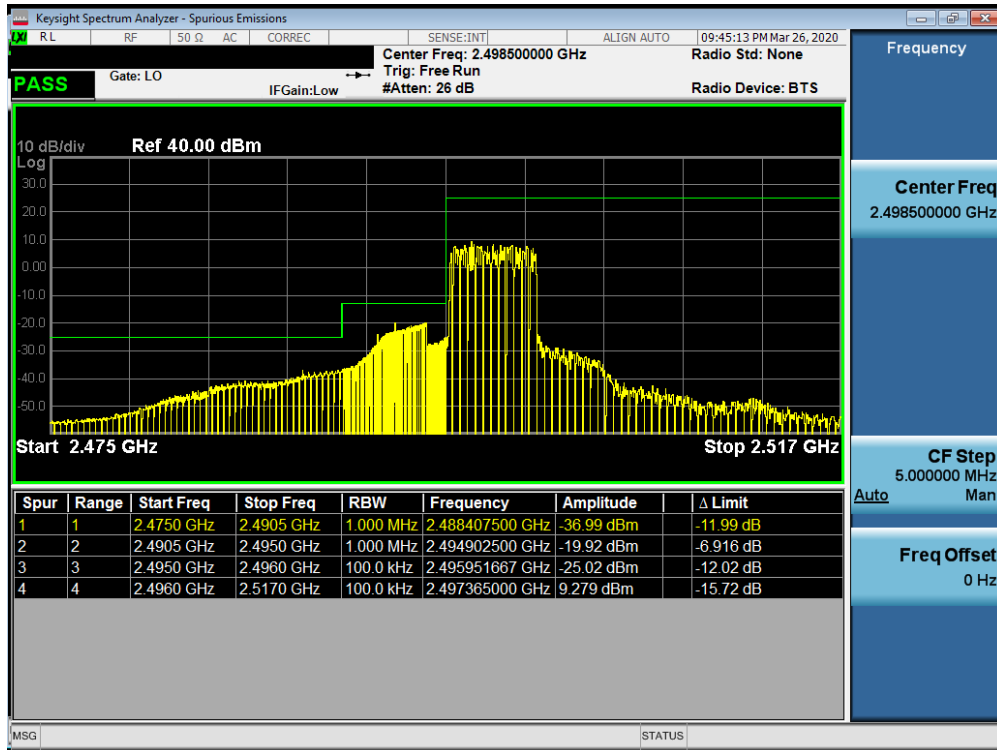
Plot 7-531. Upper Band Edge Plot (Band 30 - 10.0MHz QPSK - Full RB Configuration)



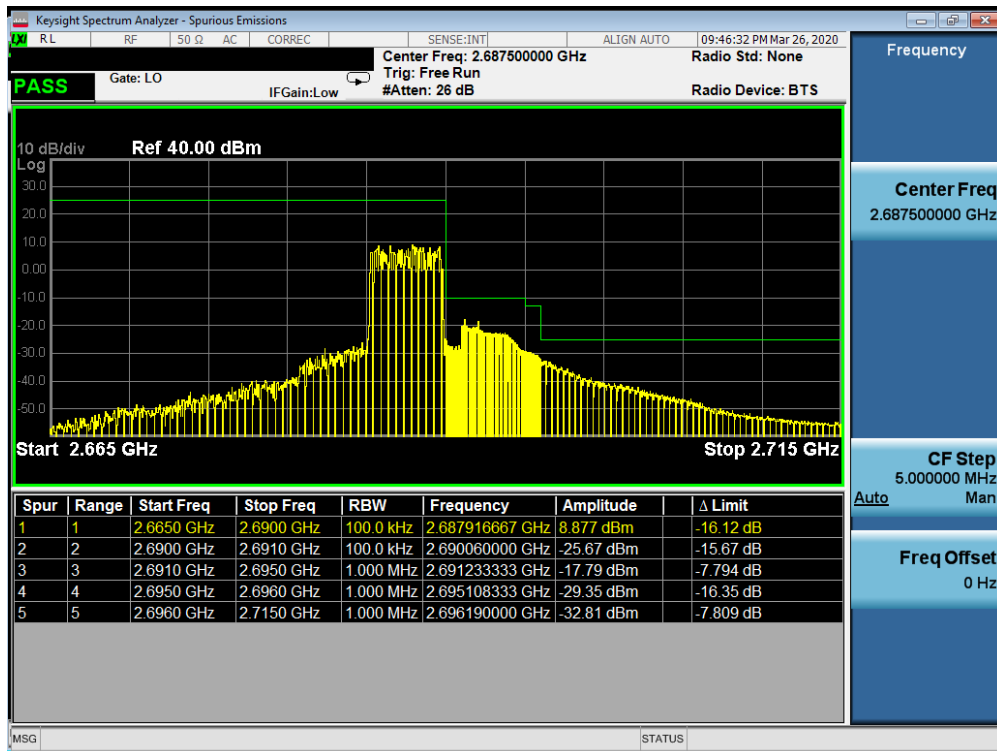
Plot 7-532. Upper Extended Band Edge Plot (Band 30 - 10.0MHz QPSK - Full RB Configuration)

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 295 of 420

Band 41 PC2

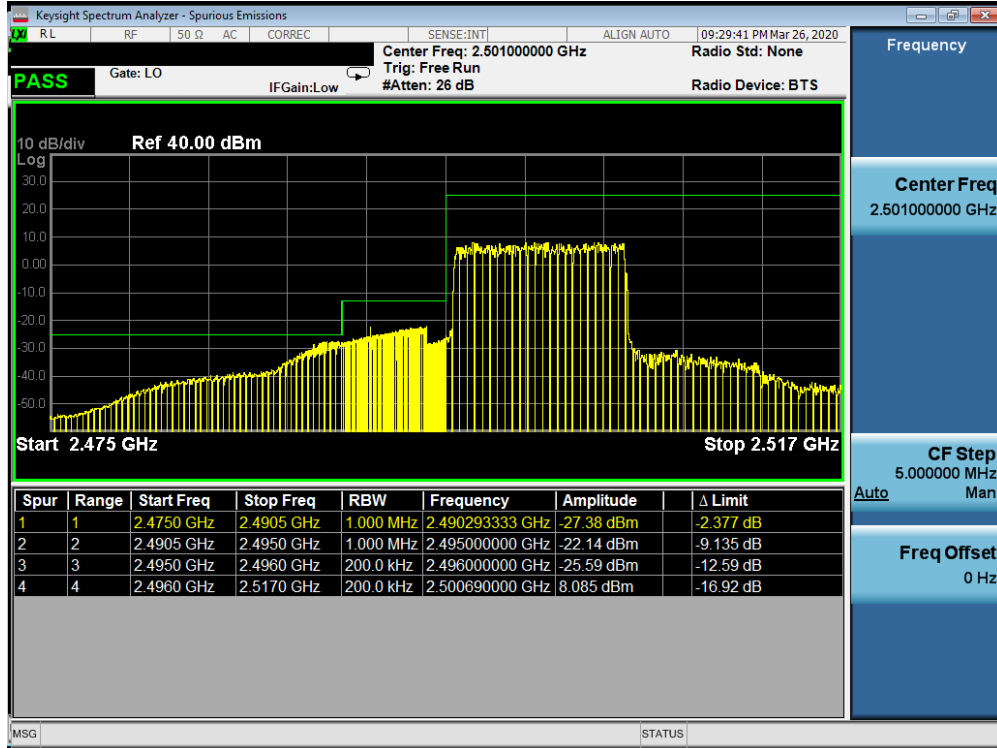


Plot 7-533. Lower ACP Plot at 2496 MHz (Band 41 PC2- 5.0MHz QPSK - Full RB Configuration)

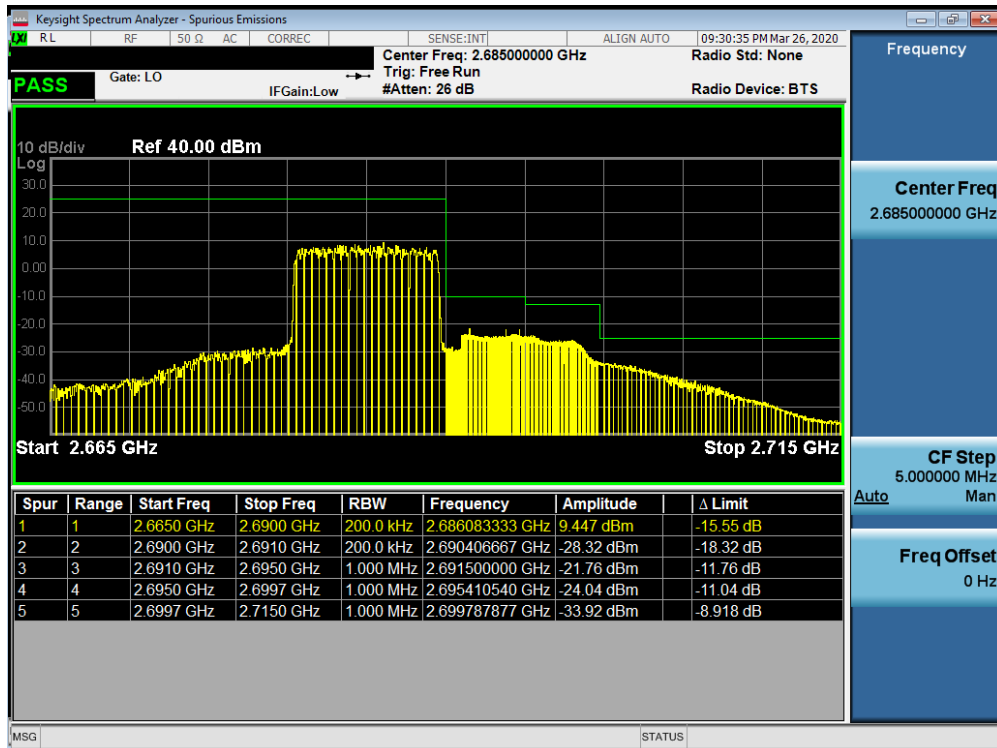


Plot 7-534. Upper ACP Plot (Band 41 PC2- 5.0MHz QPSK - Full RB Configuration)

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 296 of 420

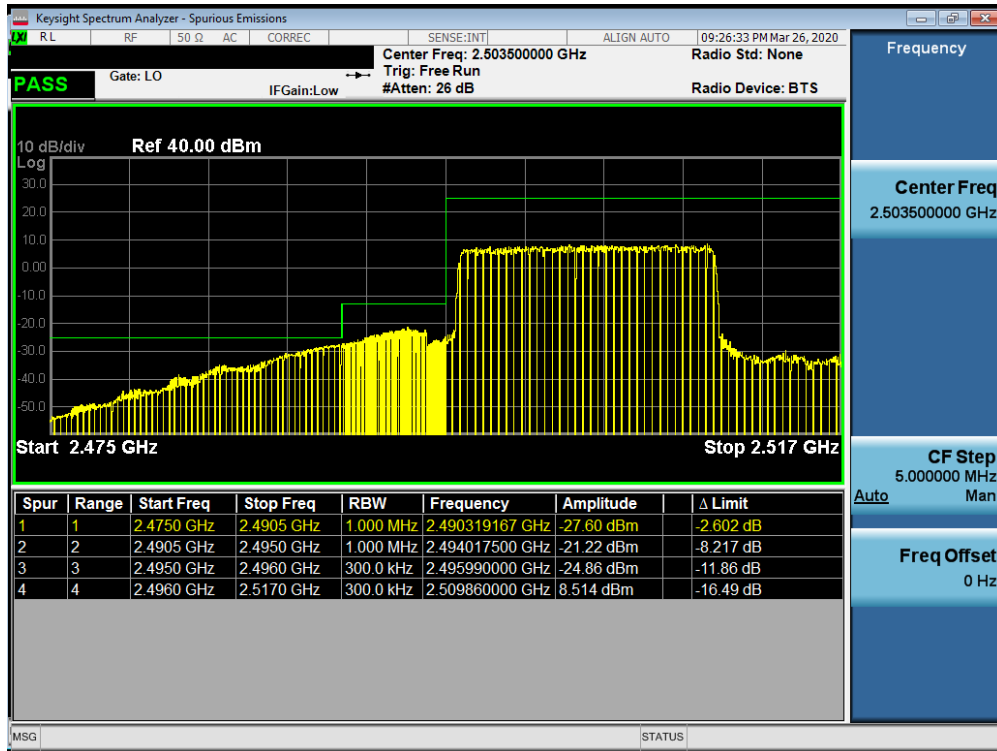


Plot 7-535. Lower ACP Plot at 2496 MHz (Band 41 PC2- 10.0MHz QPSK - Full RB Configuration)

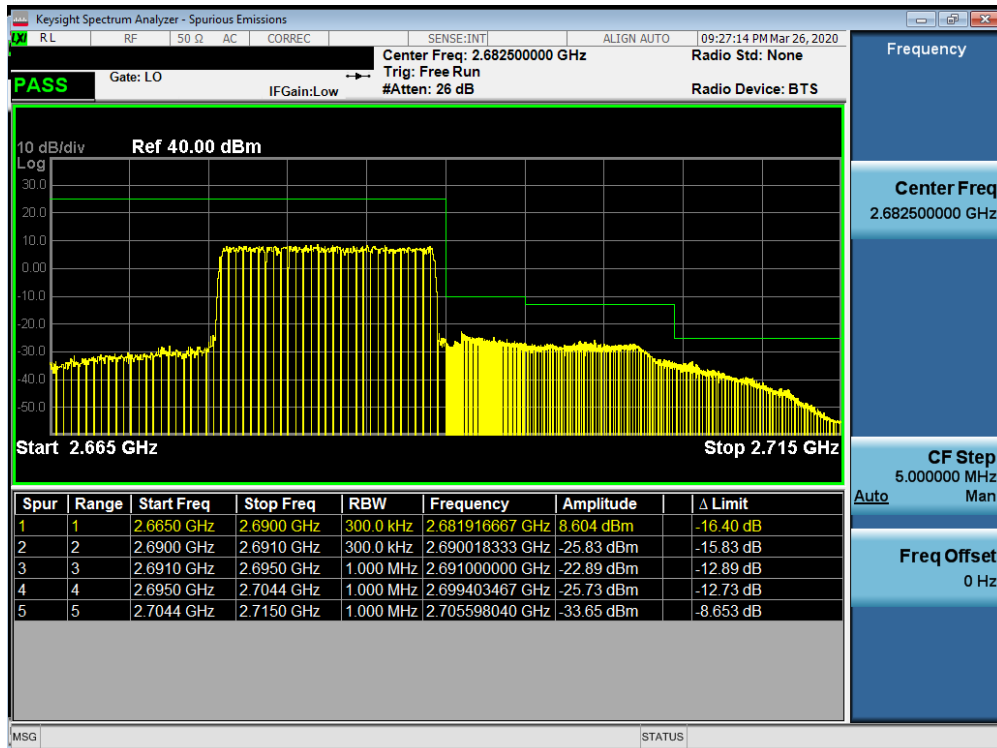


Plot 7-536. Upper ACP Plot (Band 41 PC2- 10.0MHz QPSK - Full RB Configuration)

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 297 of 420

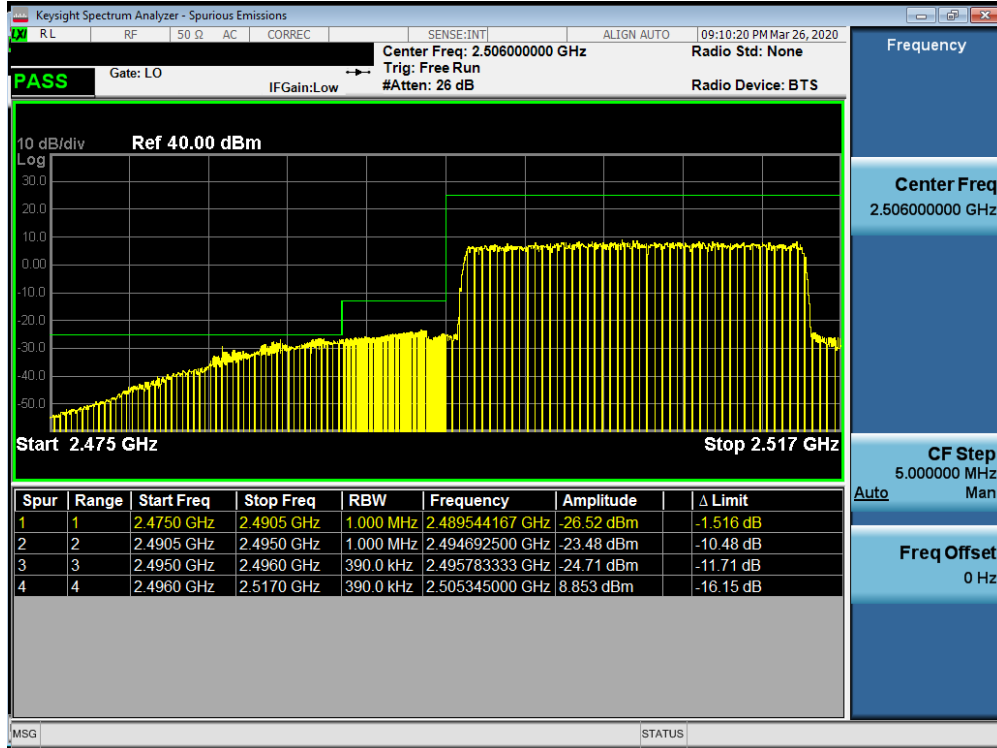


Plot 7-537. Lower ACP Plot at 2496 MHz (Band 41 PC2- 15.0MHz QPSK - Full RB Configuration)

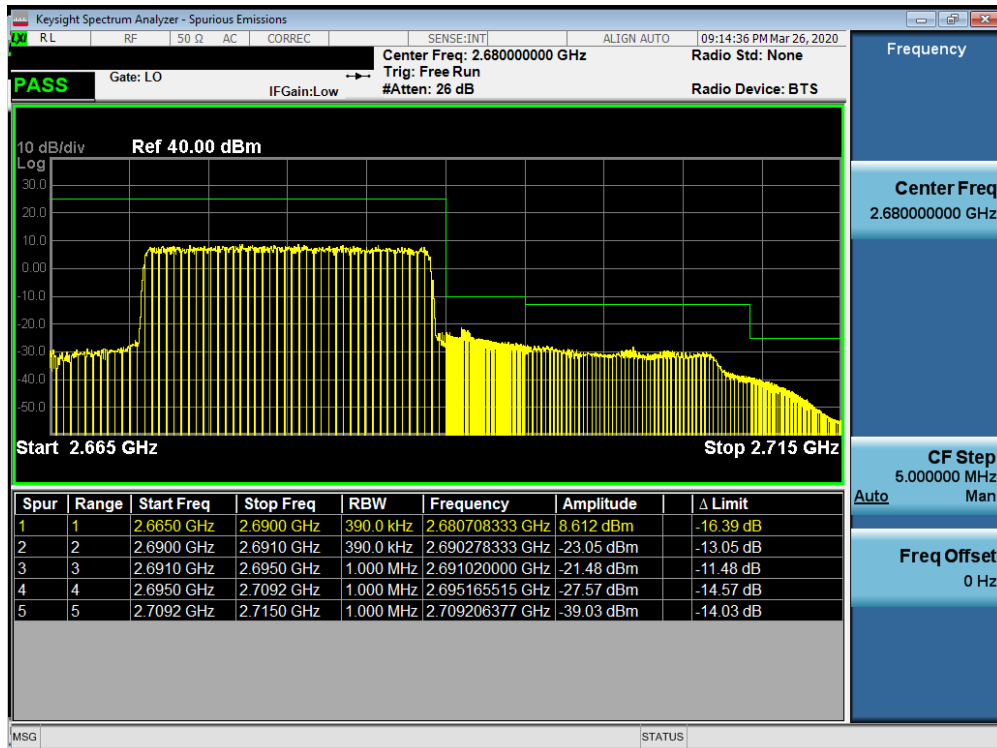


Plot 7-538. Upper ACP Plot (Band 41 PC2- 15.0MHz QPSK - Full RB Configuration)

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 298 of 420



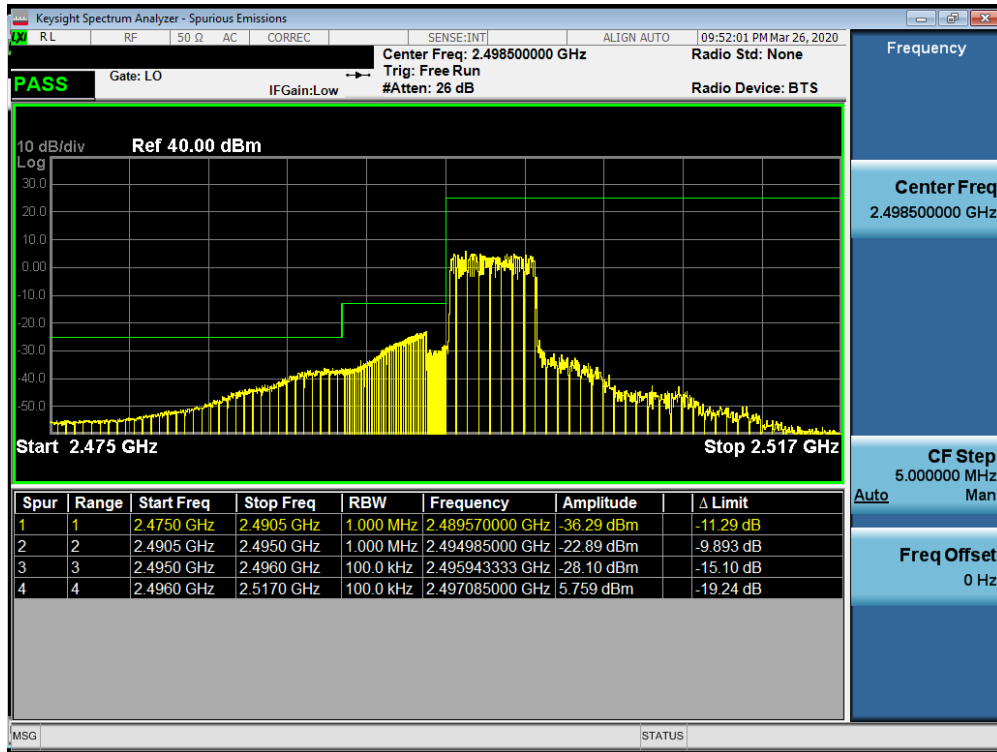
Plot 7-539. Lower ACP Plot at 2496 MHz (Band 41 PC2 - 20.0MHz QPSK - Full RB Configuration)



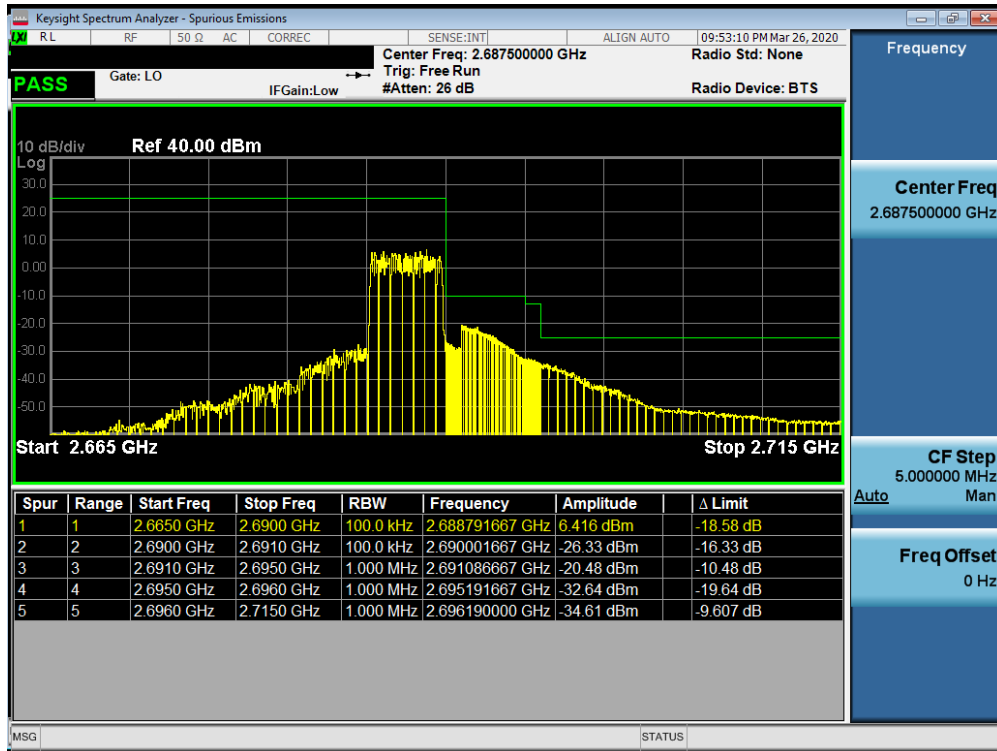
Plot 7-540. Upper ACP Plot (Band 41 PC2 - 20.0MHz QPSK - Full RB Configuration)

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	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 299 of 420

Band 41 PC3

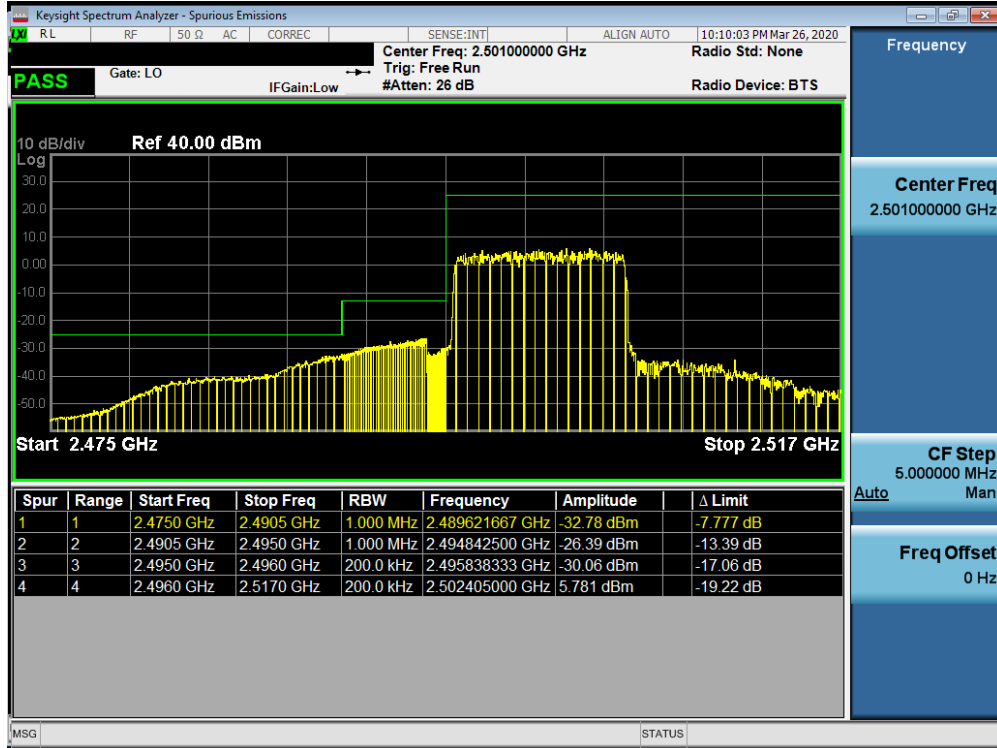


Plot 7-541. Lower ACP Plot at 2496 MHz (Band 41 PC3 - 5.0MHz QPSK - Full RB Configuration)

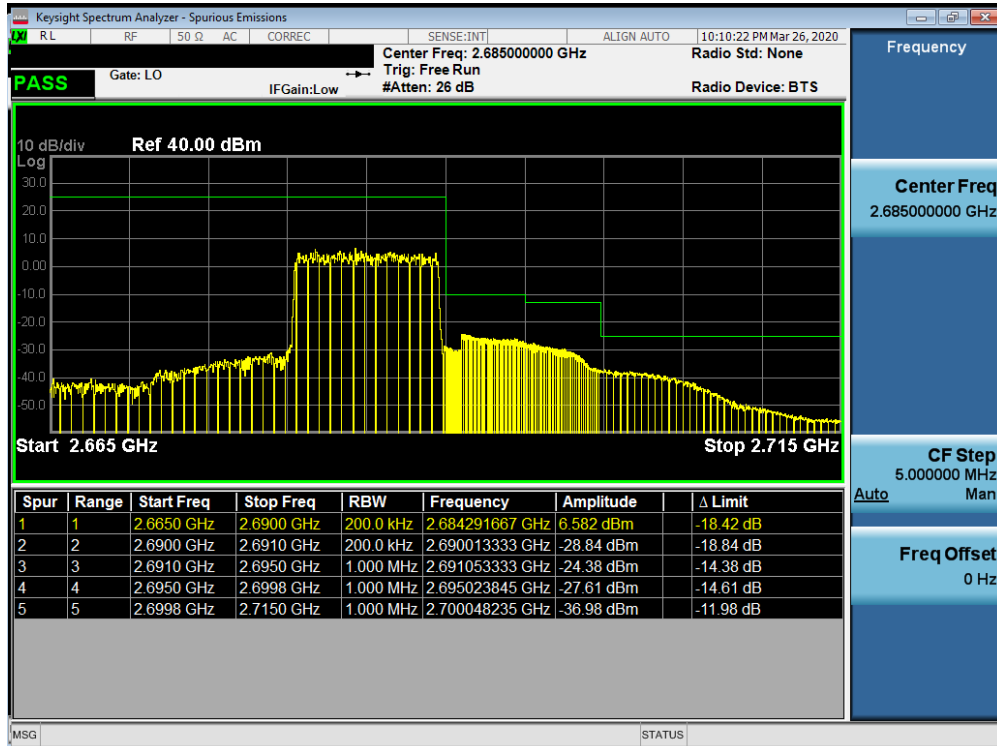


Plot 7-542. Upper ACP Plot (Band 41 PC3 - 5.0MHz QPSK - Full RB Configuration)

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 300 of 420

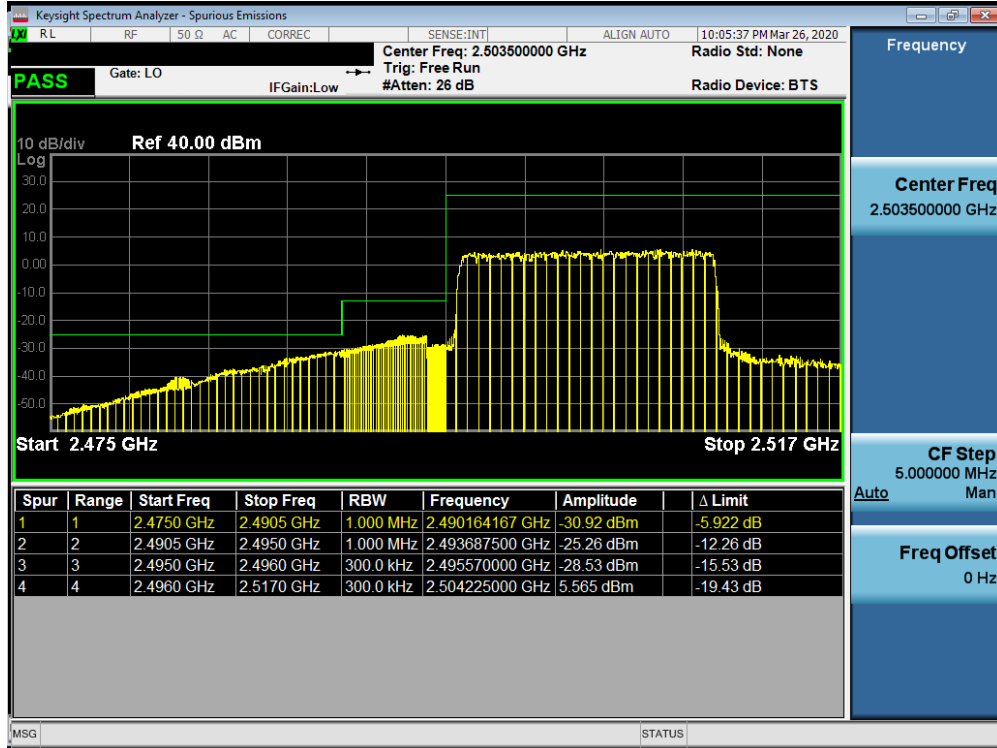


Plot 7-543. Lower ACP Plot at 2496 MHz (Band 41 PC3 - 10.0MHz QPSK - Full RB Configuration)

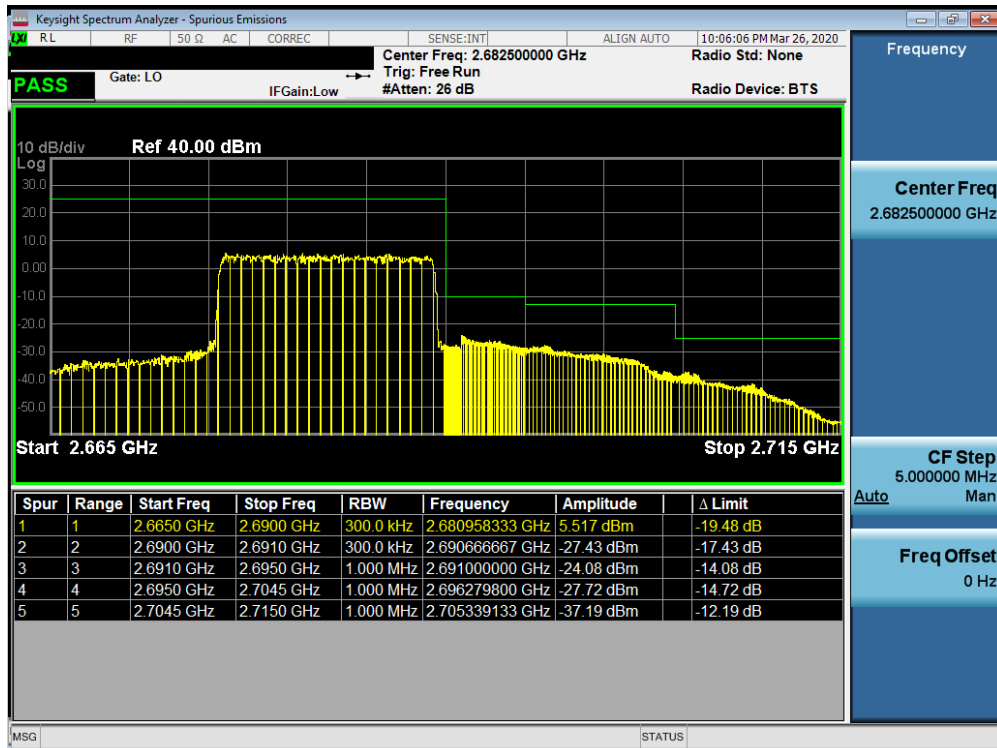


Plot 7-544. Upper ACP Plot (Band 41 PC3 - 10.0MHz QPSK - Full RB Configuration)

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 301 of 420

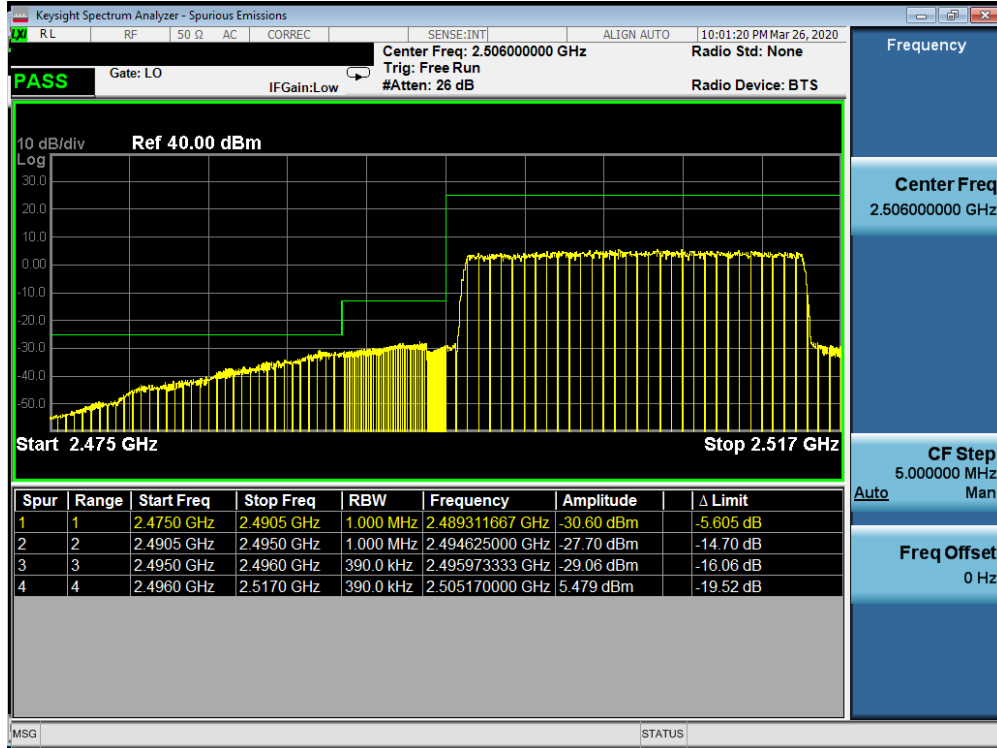


Plot 7-545. Lower ACP Plot at 2496 MHz (Band 41 PC3 - 15.0MHz QPSK - Full RB Configuration)

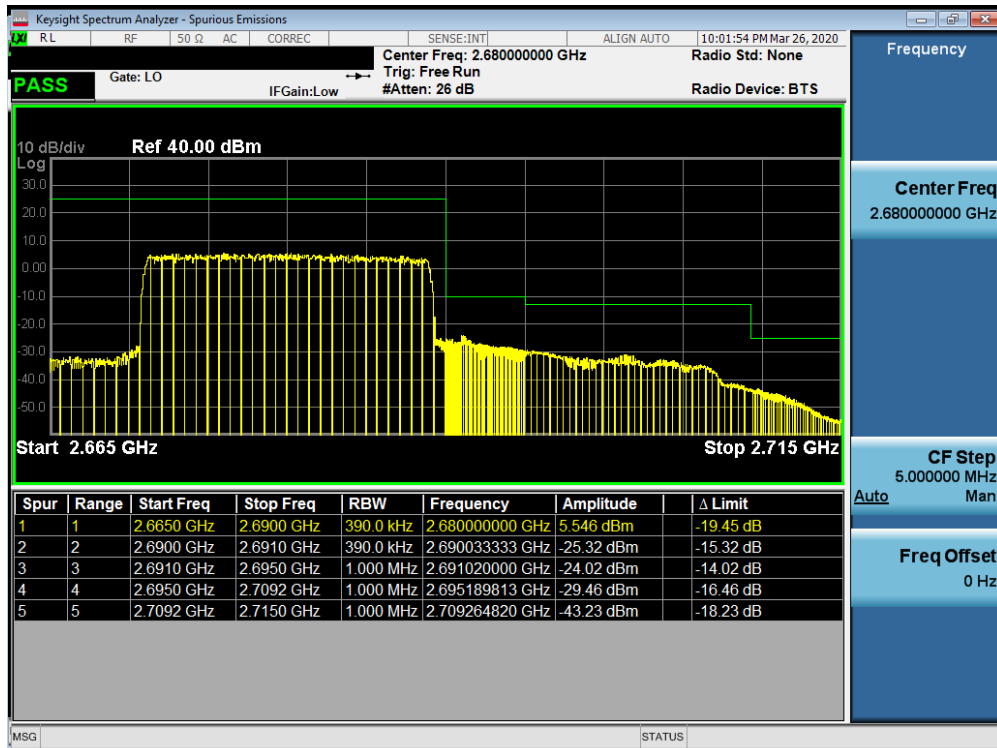


Plot 7-546. Upper ACP Plot (Band 41 PC3 - 15.0MHz QPSK - Full RB Configuration)

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 302 of 420



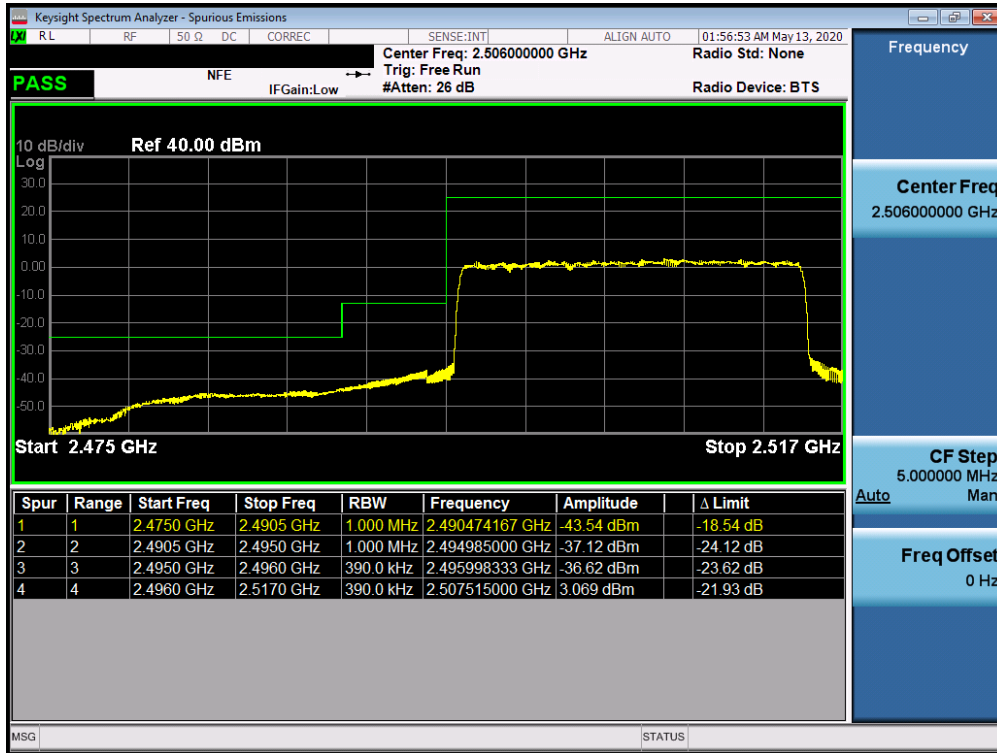
Plot 7-547. Lower ACP Plot at 2496 MHz (Band 41 PC3 - 20.0MHz QPSK - Full RB Configuration)



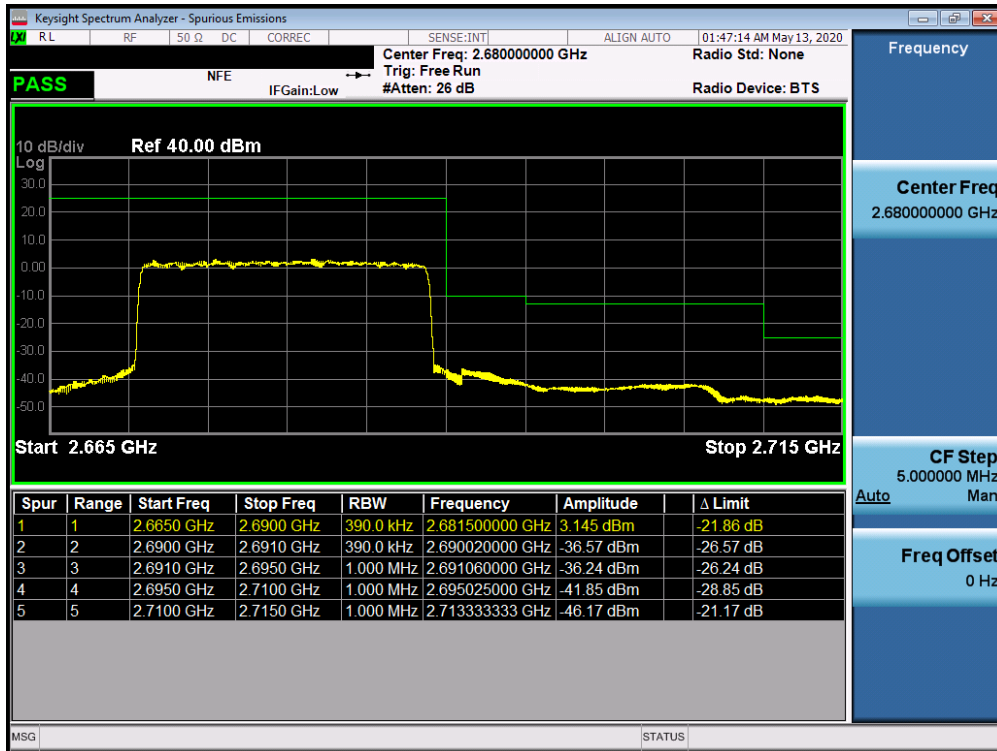
Plot 7-548. Upper ACP Plot (Band 41 PC3 - 20.0MHz QPSK - Full RB Configuration)

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 303 of 420

NR Band n41

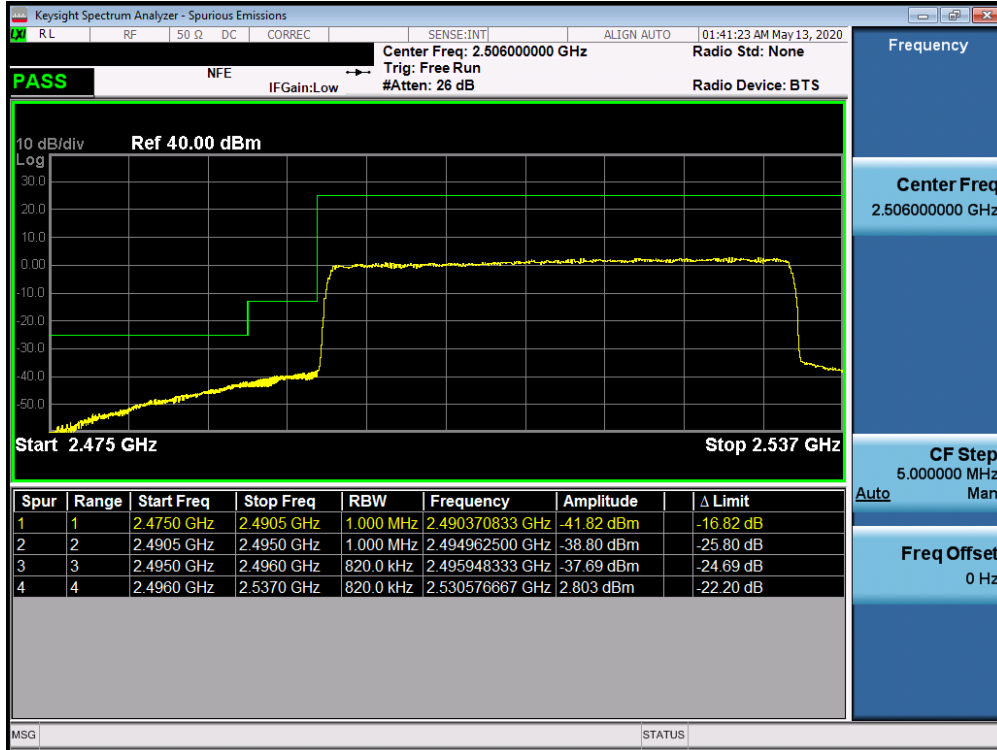


Plot 7-549. Lower ACP Plot at 2496 MHz (n41 - 20.0MHz DFT-s-OFDM-QPSK - Full RB Configuration)

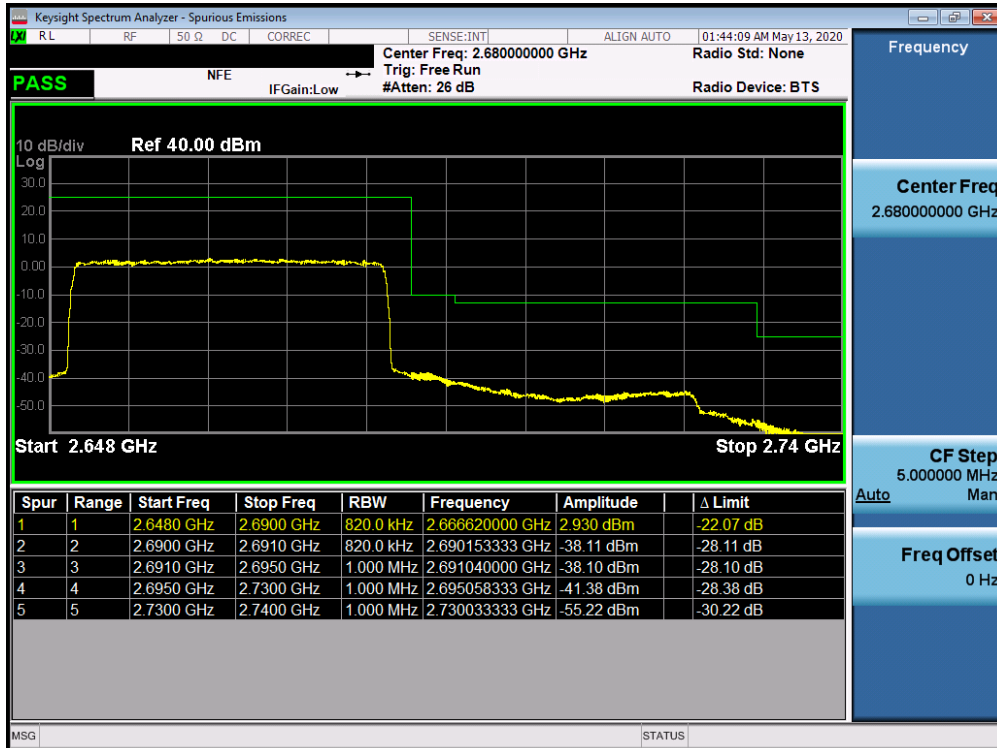


Plot 7-550. Upper ACP Plot (Band 41 - 20.0MHz DFT-s-OFDM-QPSK - Full RB Configuration)

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 304 of 420

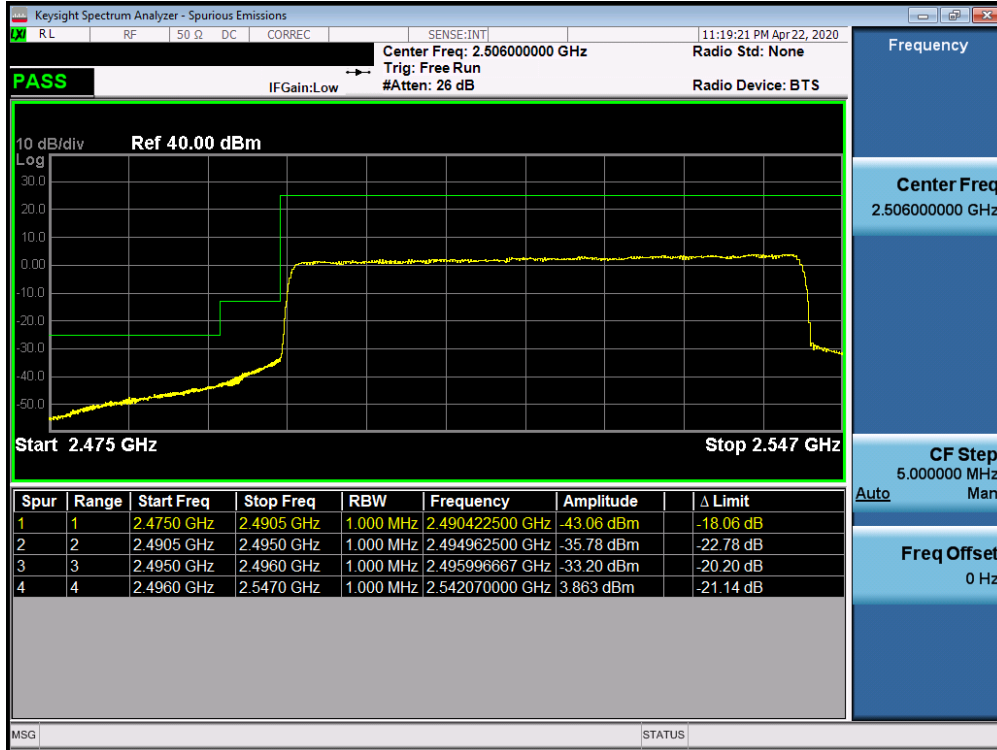


Plot 7-551. Lower ACP Plot at 2496 MHz (n41 - 40.0MHz DFT-s-OFDM-QPSK - Full RB Configuration)

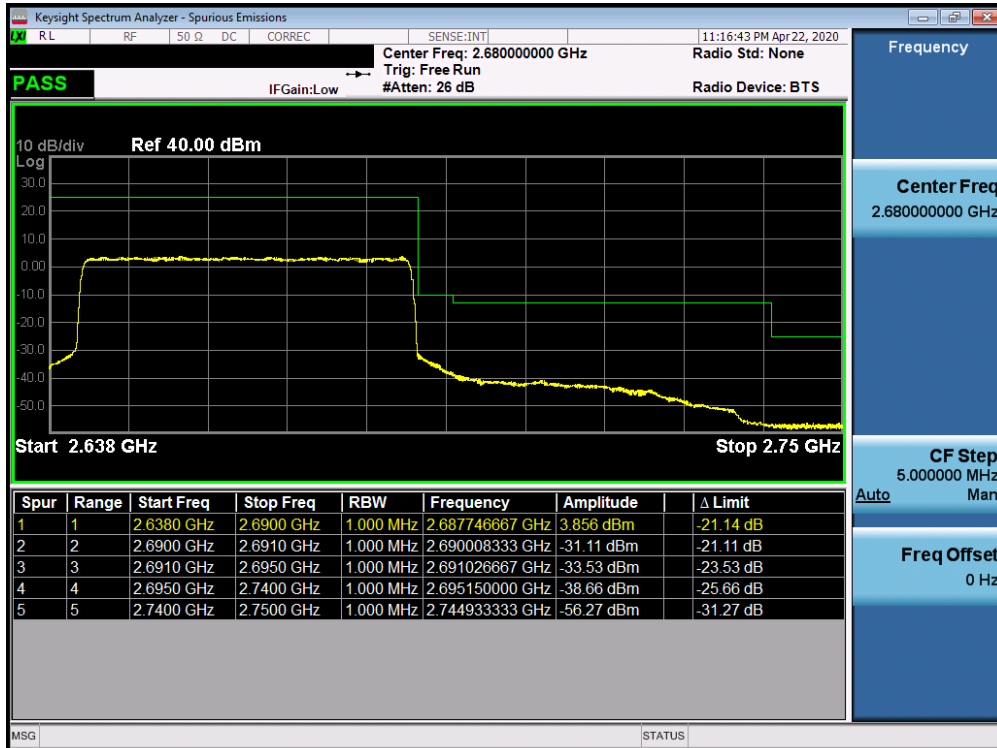


Plot 7-552. Upper ACP Plot (Band 41 - 40.0MHz DFT-s-OFDM-QPSK - Full RB Configuration)

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 305 of 420

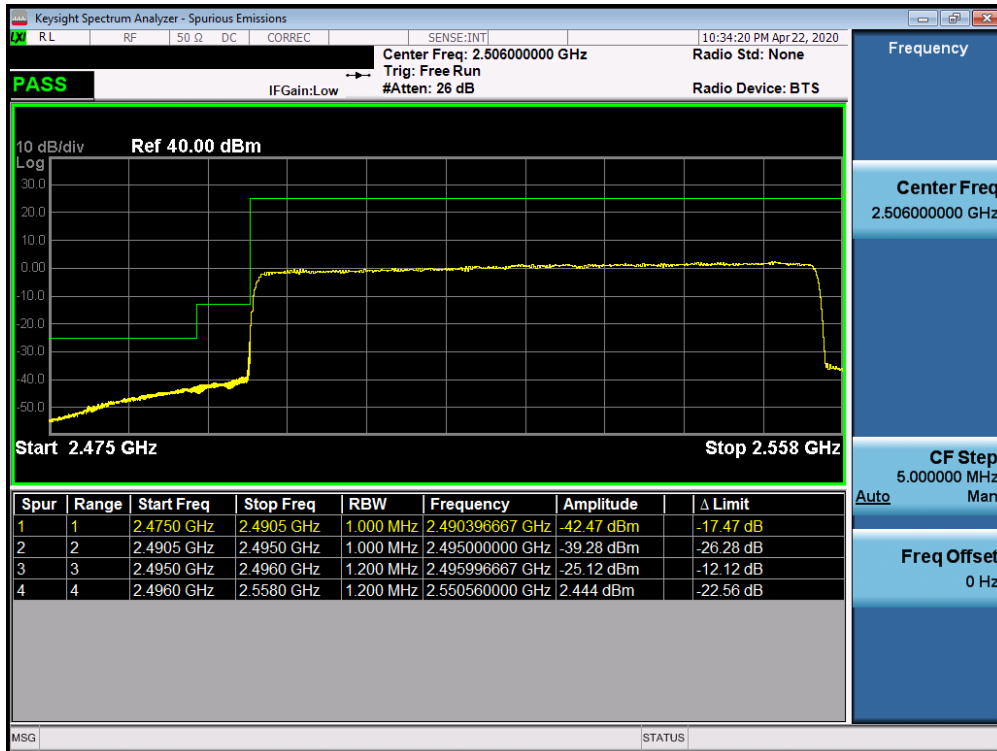


Plot 7-553. Lower ACP Plot at 2496 MHz (n41 - 50.0MHz DFT-s-OFDM-QPSK - Full RB Configuration)

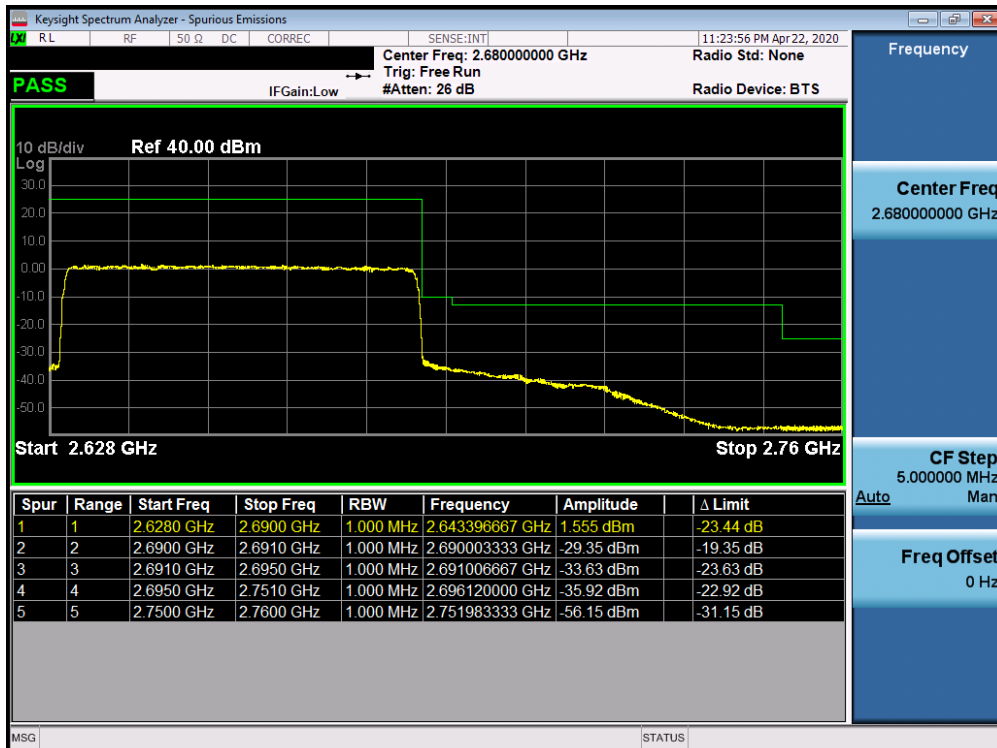


Plot 7-554. Upper ACP Plot (Band 41 - 50.0MHz DFT-s-OFDM-QPSK - Full RB Configuration)

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 306 of 420

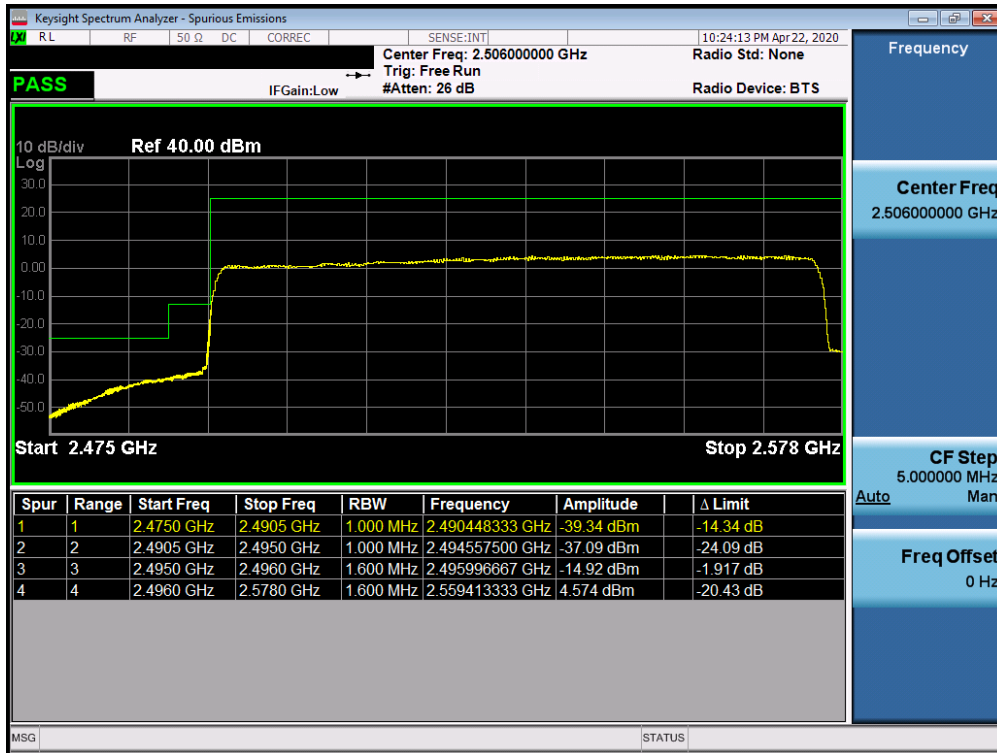


Plot 7-555. Lower ACP Plot at 2496 MHz (n41 - 60.0MHz DFT-s-OFDM-QPSK - Full RB Configuration)

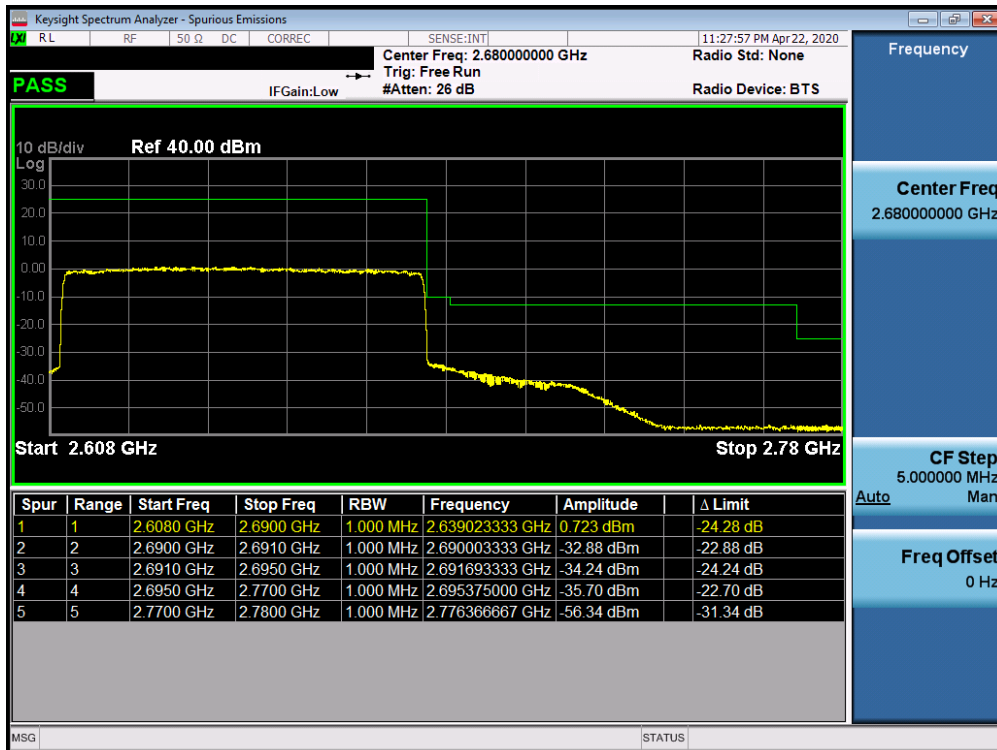


Plot 7-556. Upper ACP Plot (Band 41 - 60.0MHz DFT-s-OFDM-QPSK - Full RB Configuration)

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 307 of 420

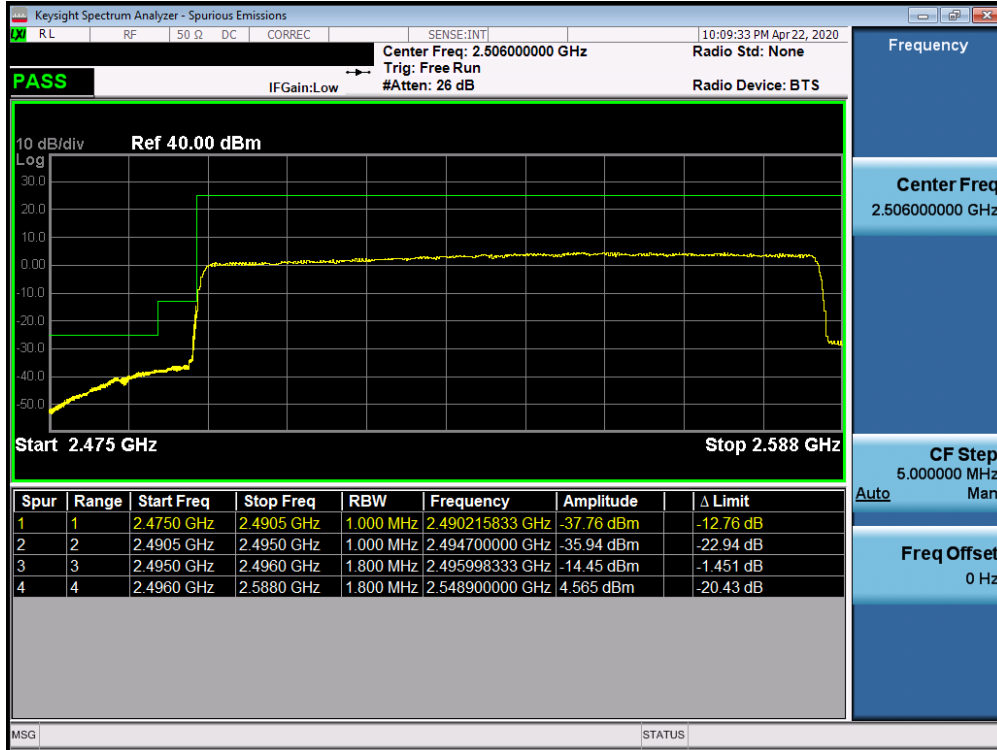


Plot 7-557. Lower ACP Plot at 2496 MHz (n41 - 80.0MHz DFT-s-OFDM-QPSK - Full RB Configuration)

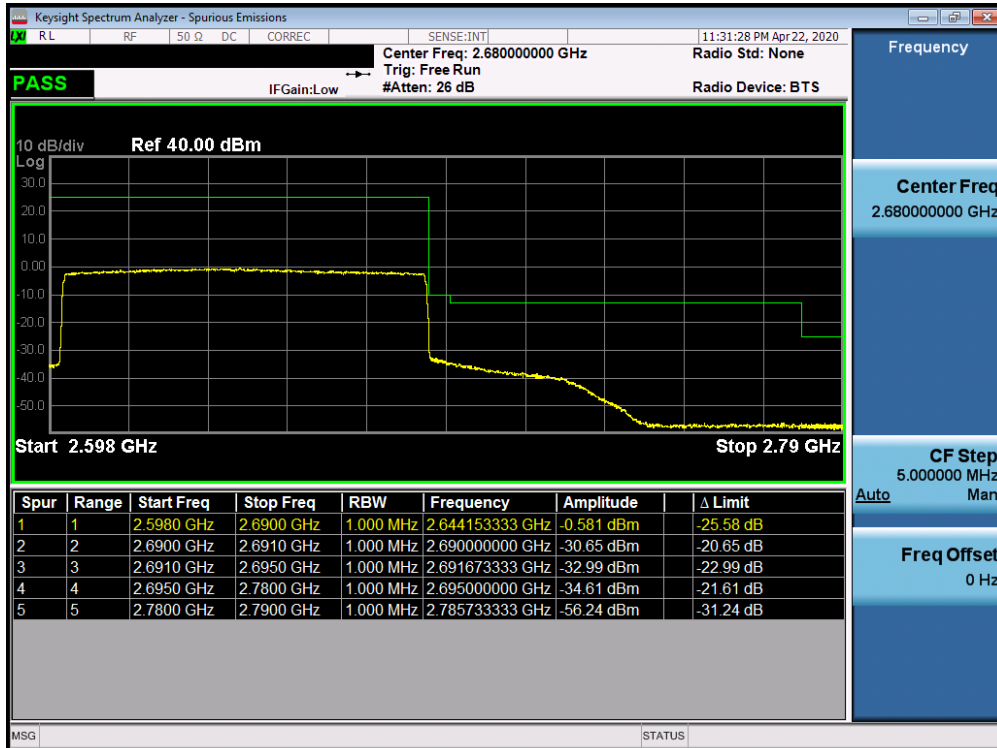


Plot 7-558. Upper ACP Plot (Band 41 - 80.0MHz DFT-s-OFDM-QPSK - Full RB Configuration)

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 308 of 420

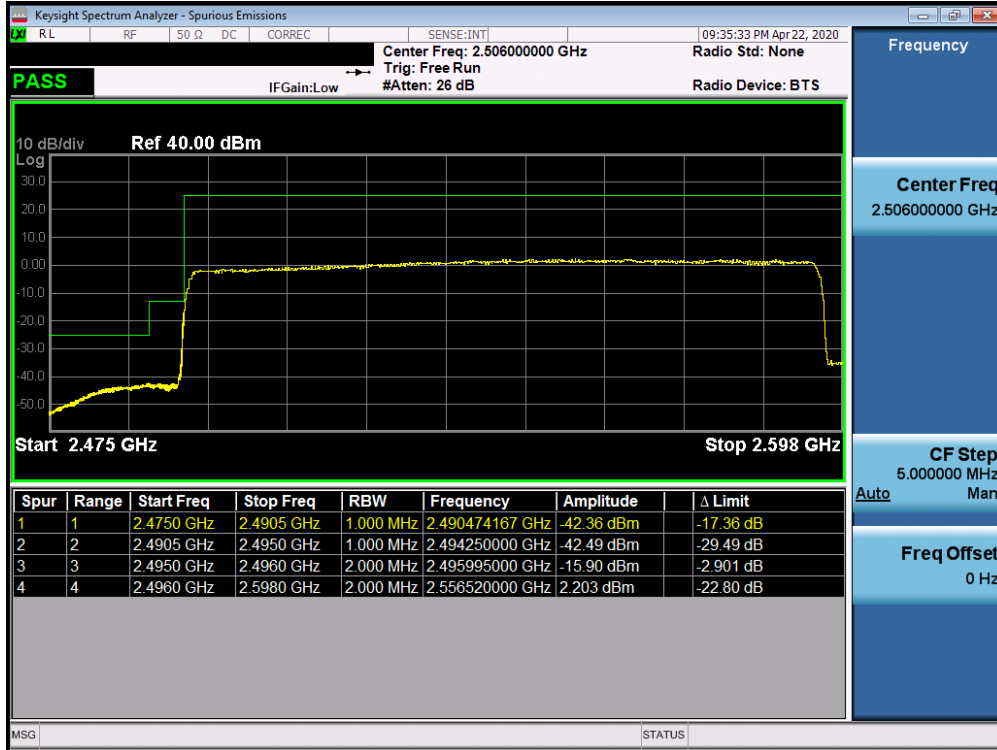


Plot 7-559. Lower ACP Plot at 2496 MHz (n41 - 90.0MHz DFT-s-OFDM-QPSK - Full RB Configuration)

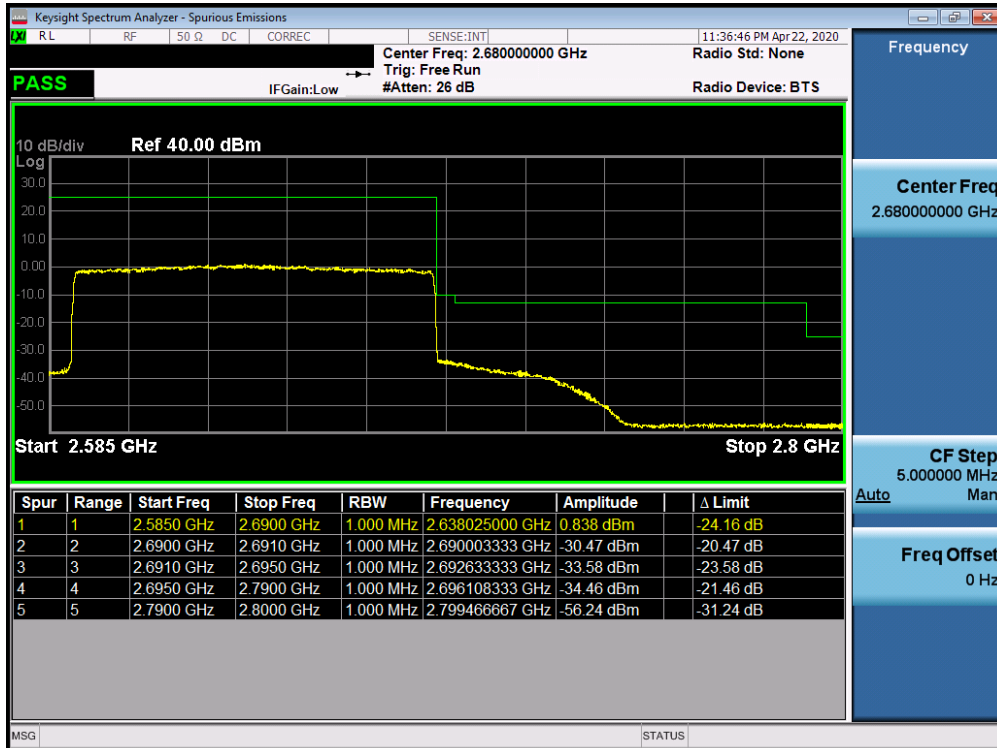


Plot 7-560. Upper ACP Plot (Band 41 - 90.0MHz DFT-s-OFDM-QPSK - Full RB Configuration)

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 309 of 420



Plot 7-561. Lower ACP Plot at 2496 MHz (n41 - 100.0MHz DFT-s-OFDM-QPSK - Full RB Configuration)



Plot 7-562. Upper ACP Plot (Band 41 - 100.0MHz DFT-s-OFDM-QPSK - 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 310 of 420

7.5 Peak-Average Ratio

Test Overview

A peak to average ratio measurement is performed at the conducted port of the EUT. The spectrum analyzers Complementary Cumulative Distribution Function (CCDF) measurement profile is used to determine the largest deviation between the average and the peak power of the EUT in a given bandwidth. The CCDF curve shows how much time the peak waveform spends at or above a given average power level. The percent of time the signal spends at or above the level defines the probability for that particular power level.

Test Procedure Used

KDB 971168 D01 v03r01 – Section 5.7.1

Test Settings

1. The signal analyzer’s CCDF measurement profile is enabled
2. Frequency = carrier center frequency
3. Measurement BW \geq OBW or specified reference bandwidth
4. The signal analyzer was set to collect one million samples to generate the CCDF curve
5. The measurement interval was set depending on the type of signal analyzed. For continuous signals (>98% duty cycle), the measurement interval was set to 1ms. For burst transmissions, the spectrum analyzer is set to use an internal “RF Burst” trigger that is synced with an incoming pulse and the measurement interval is set to less than the duration of the “on time” of one burst to ensure that energy is only captured during a time in which the transmitter is operating at maximum power

Test Setup

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

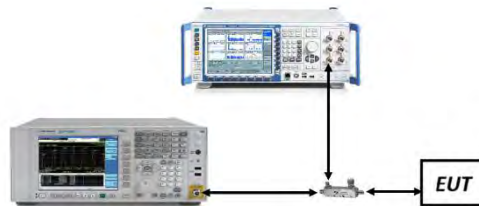


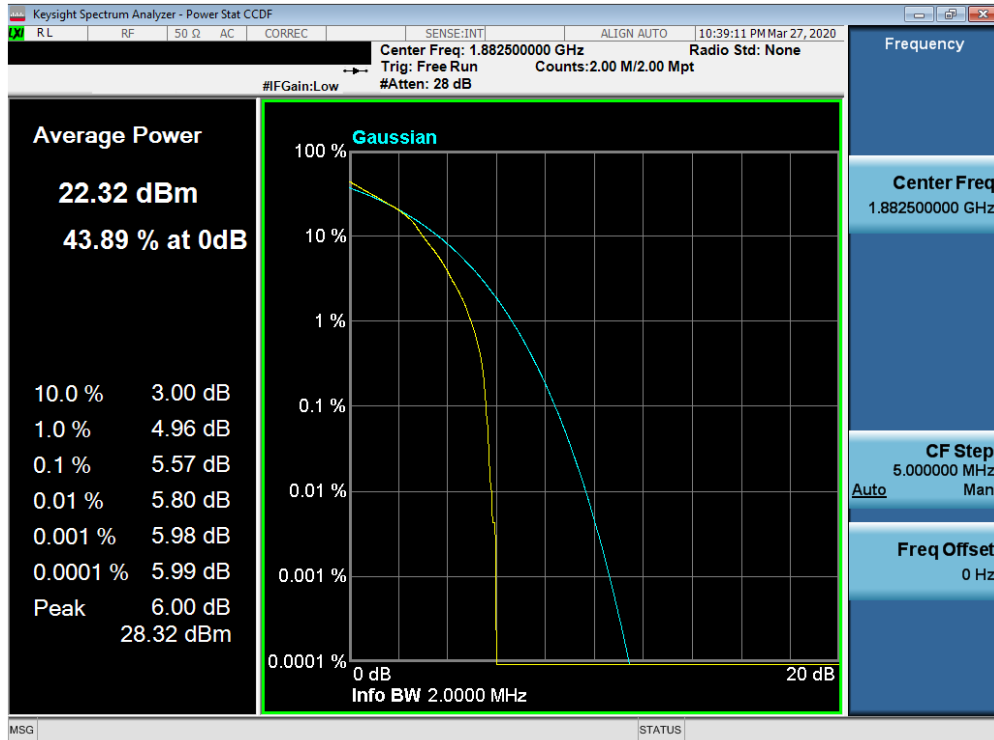
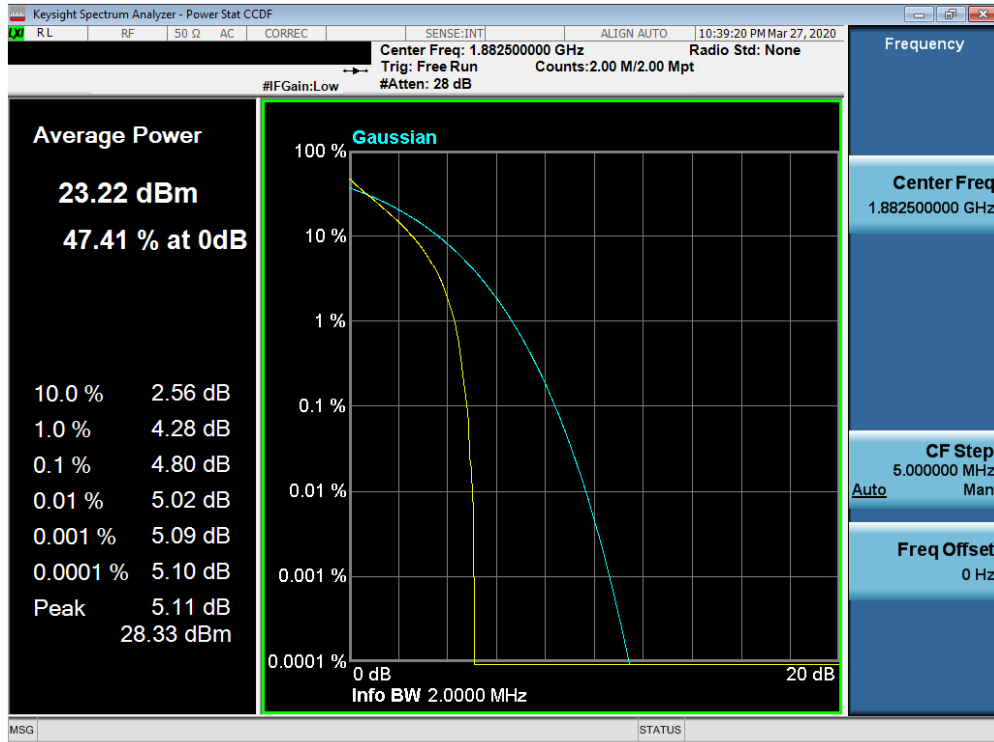
Figure 7-4. Test Instrument & Measurement Setup

Test Notes

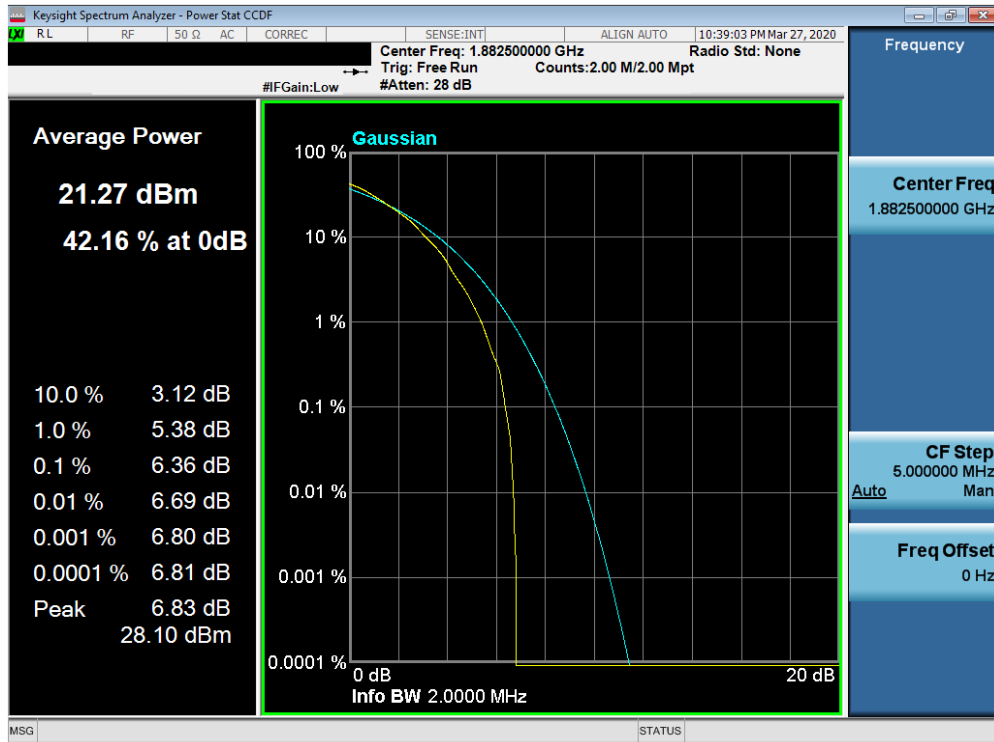
None.

FCC ID: A3LSMA716U	PCTEST Proud to be part of element	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 311 of 420

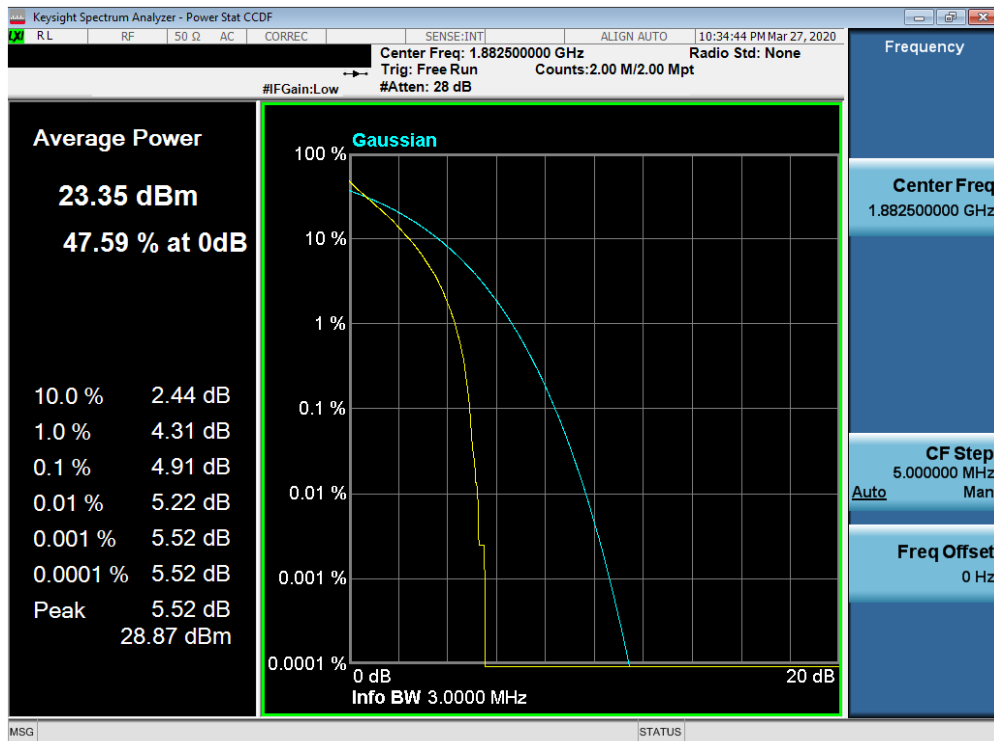
Band 25/2



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 312 of 420

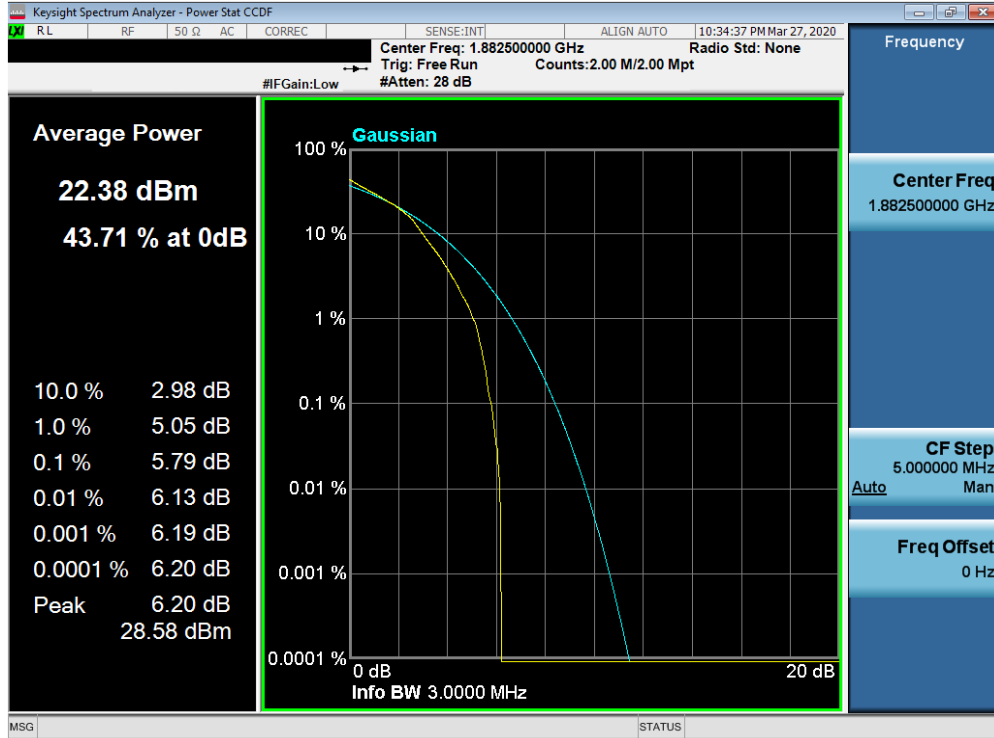


Plot 7-565. PAR Plot (Band 25/2 - 1.4MHz 64-QAM - Full RB Configuration)

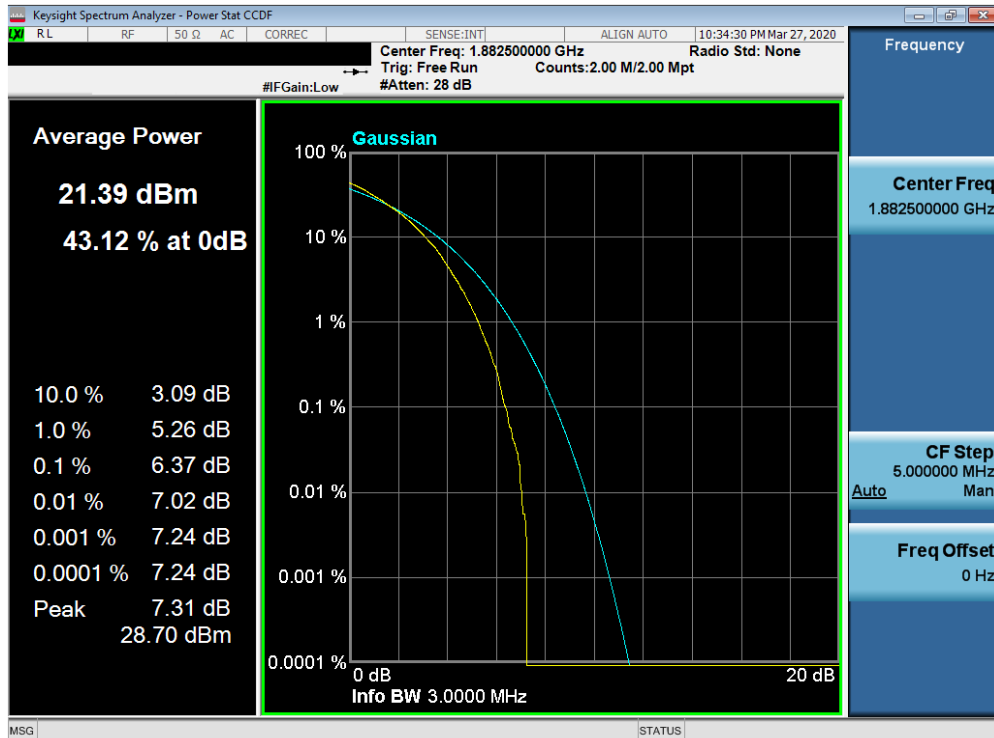


Plot 7-566. PAR Plot (Band 25/2 - 3.0MHz QPSK - Full RB Configuration)

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 313 of 420

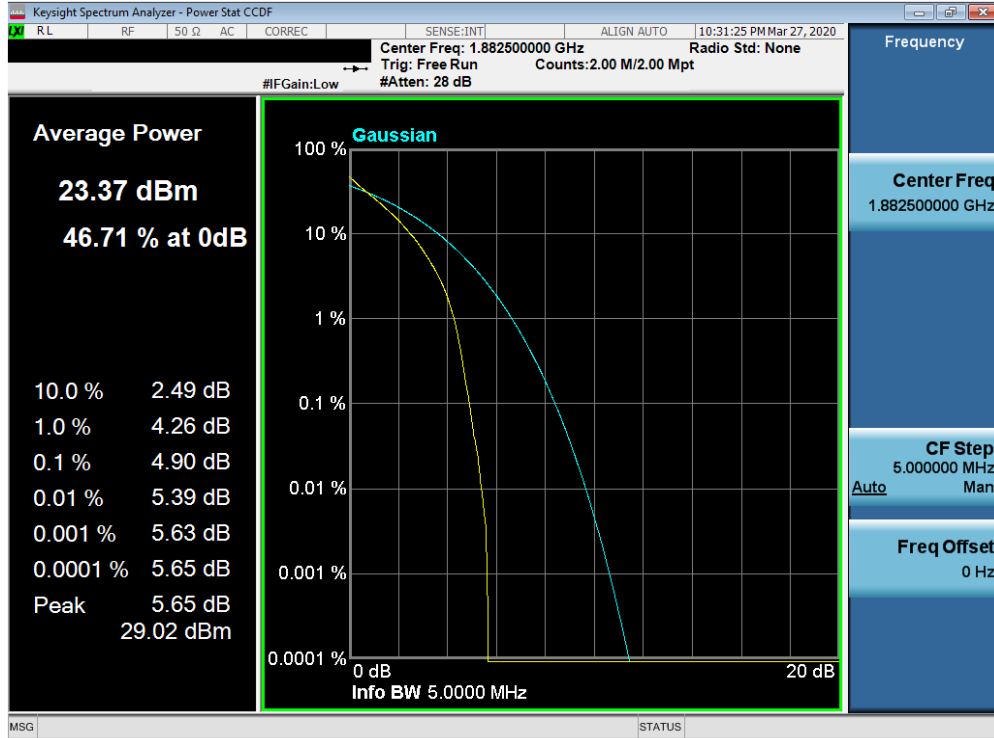


Plot 7-567. PAR Plot (Band 25/2 - 3.0MHz 16-QAM - Full RB Configuration)

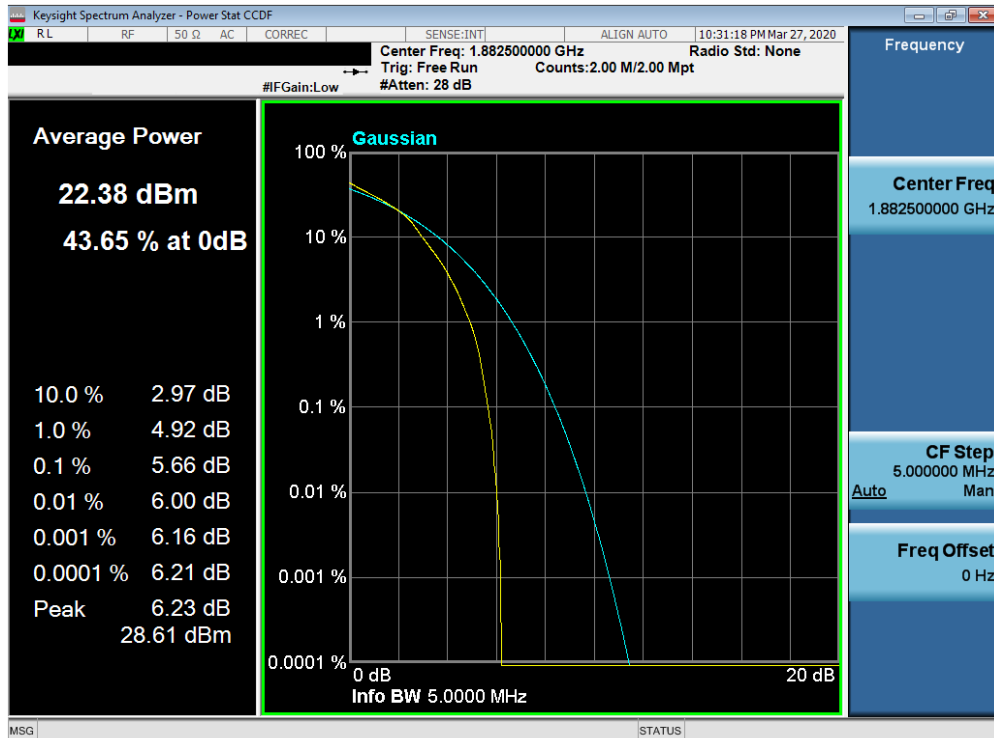


Plot 7-568. PAR Plot (Band 25/2 - 3.0MHz 64-QAM - Full RB Configuration)

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 314 of 420

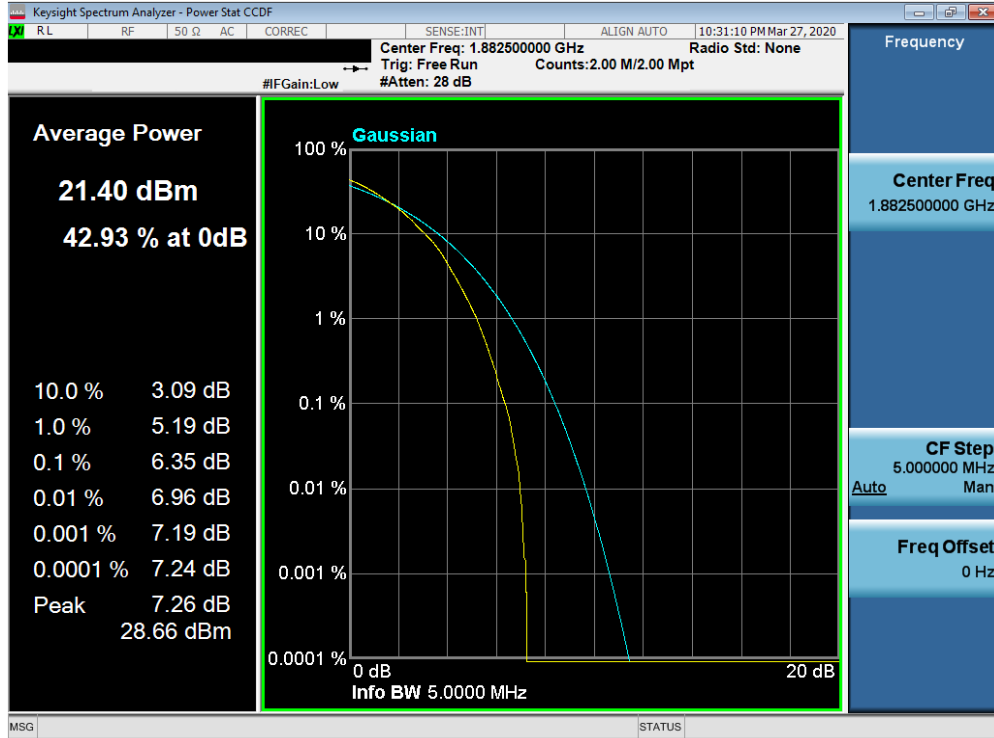


Plot 7-569. PAR Plot (Band 25/2 - 5.0MHz QPSK - Full RB Configuration)

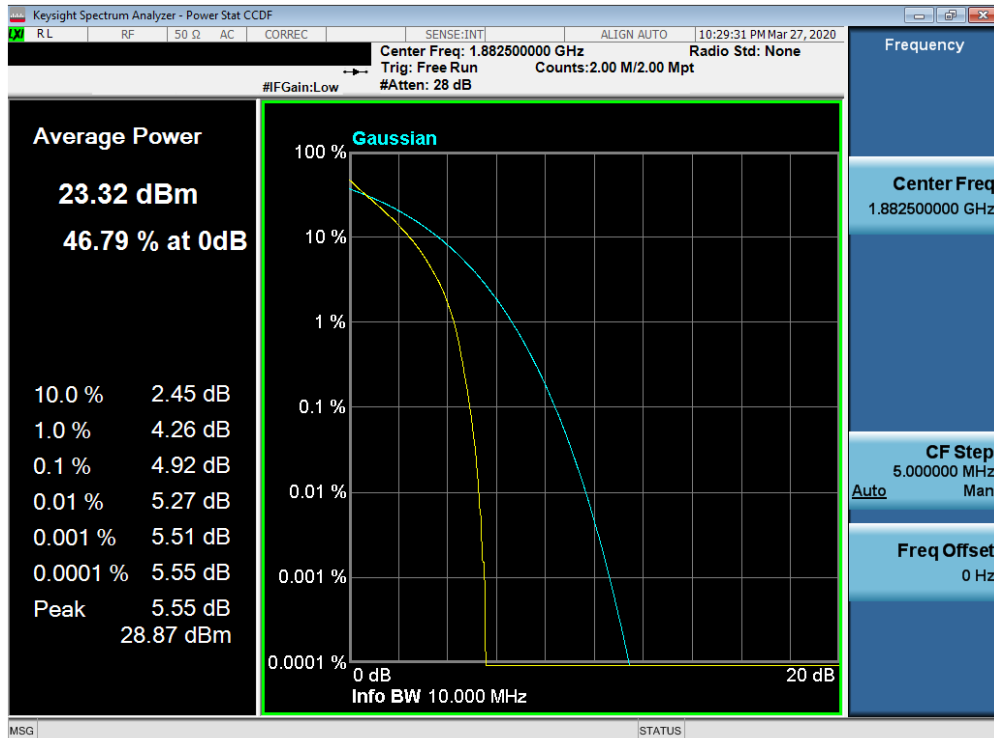


Plot 7-570. PAR Plot (Band 25/2 - 5.0MHz 16-QAM - Full RB Configuration)

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 315 of 420

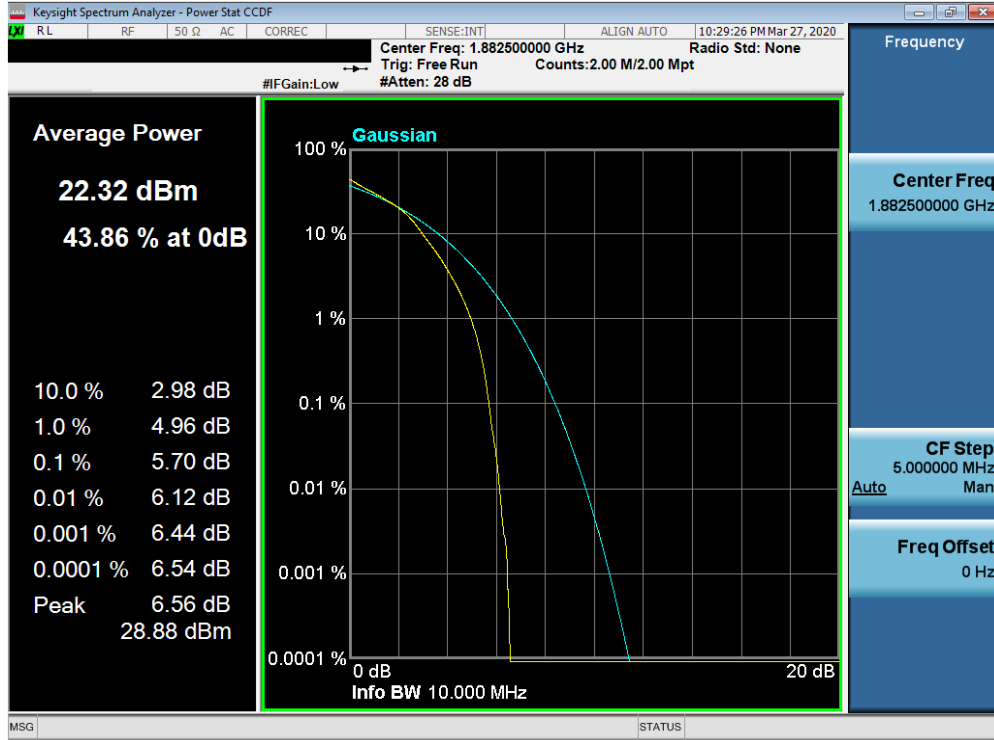


Plot 7-571. PAR Plot (Band 25/2 - 5.0MHz 64-QAM - Full RB Configuration)

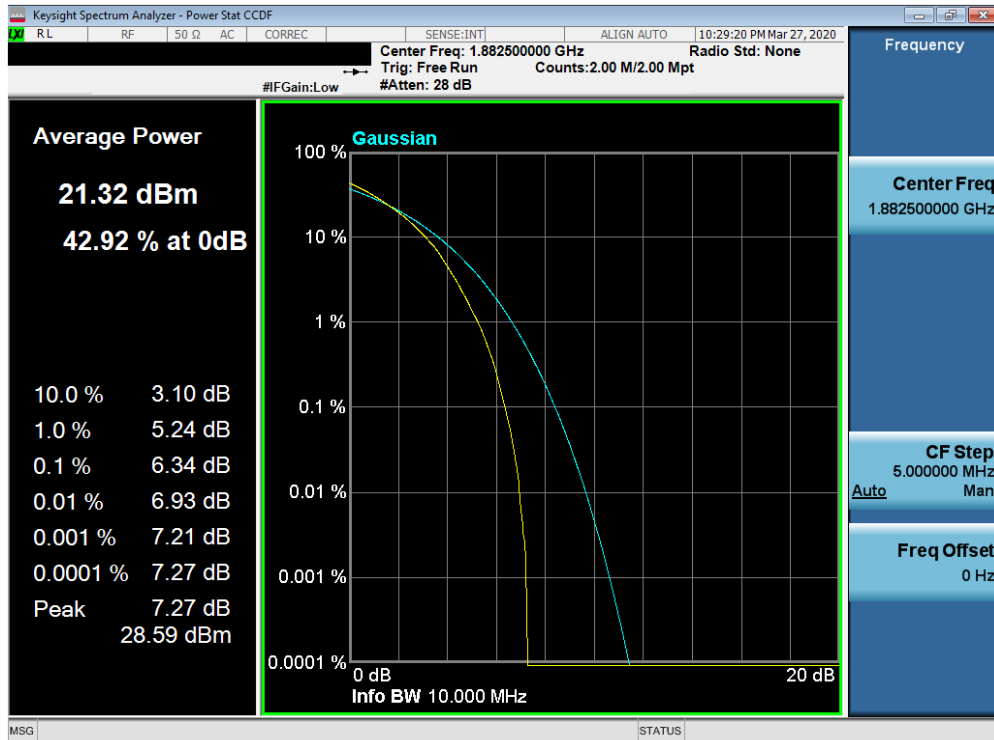


Plot 7-572. PAR Plot (Band 25/2 - 10.0MHz QPSK - Full RB Configuration)

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 316 of 420

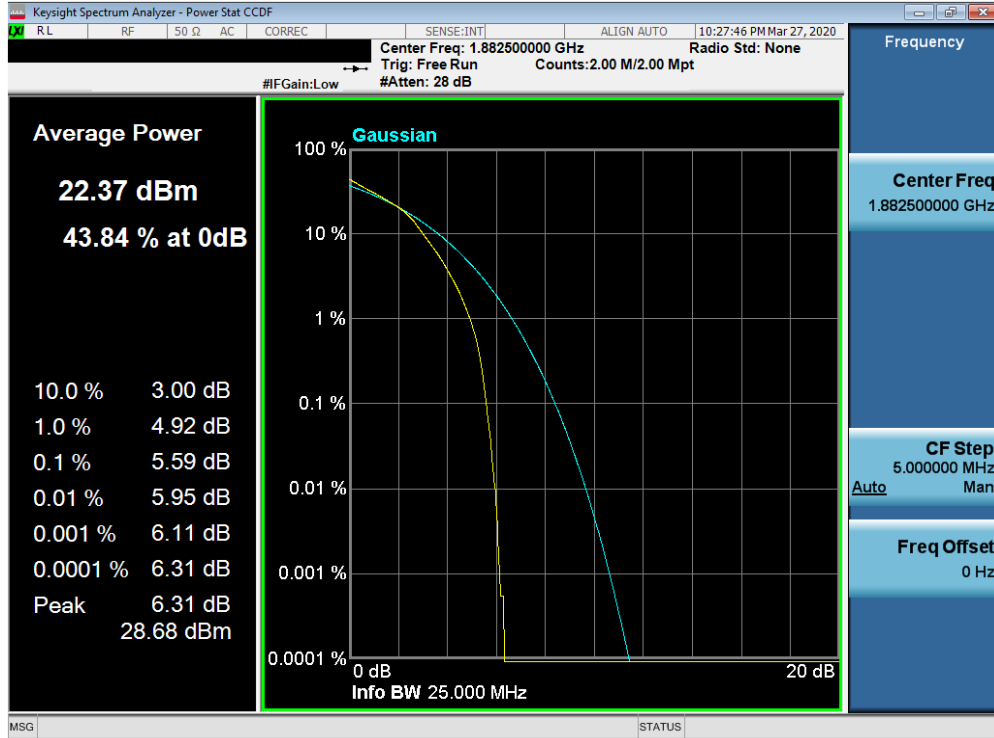


Plot 7-573. PAR Plot (Band 25/2 - 10.0MHz 16-QAM - Full RB Configuration)

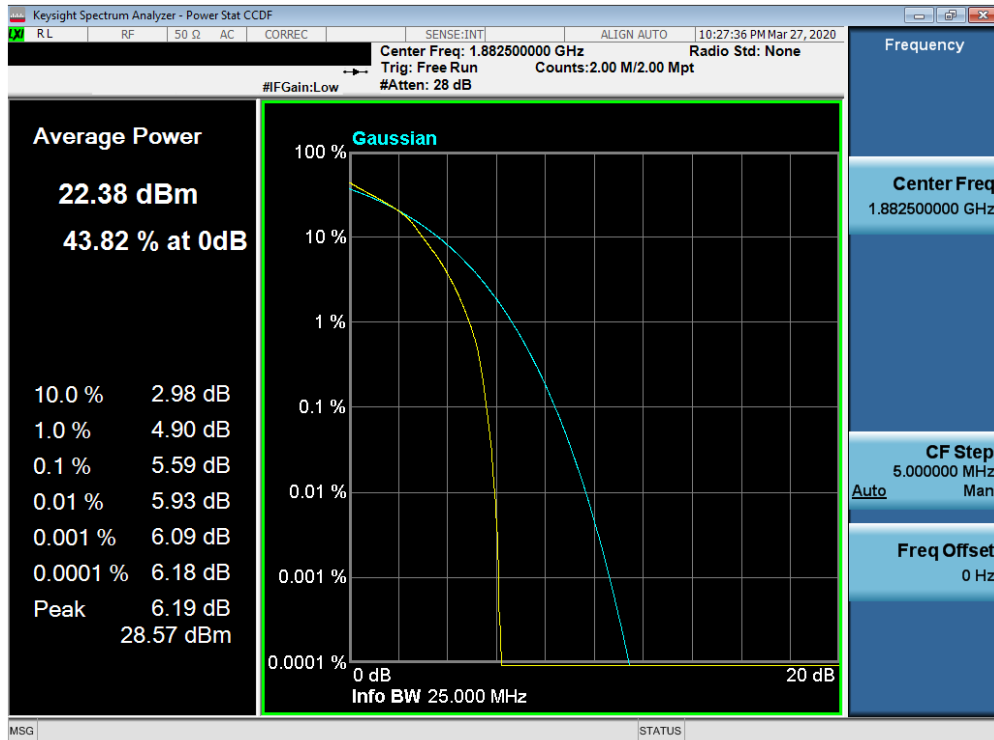


Plot 7-574. PAR Plot (Band 25/2 - 10.0MHz 64-QAM - Full RB Configuration)

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 317 of 420

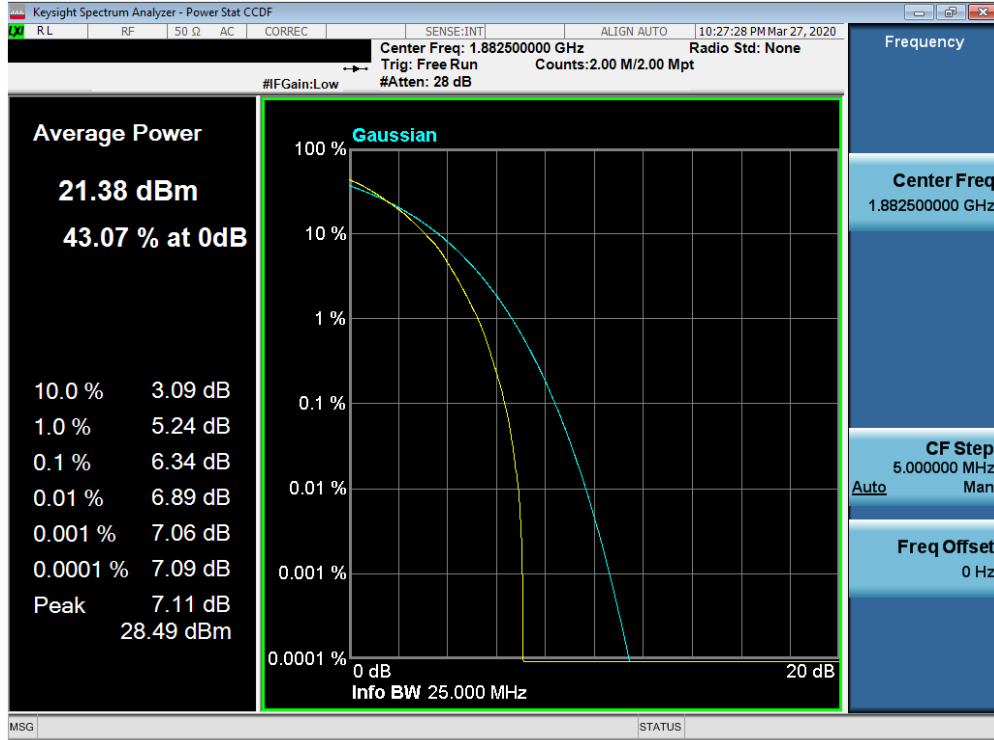


Plot 7-575. PAR Plot (Band 25/2 - 15.0MHz QPSK - Full RB Configuration)

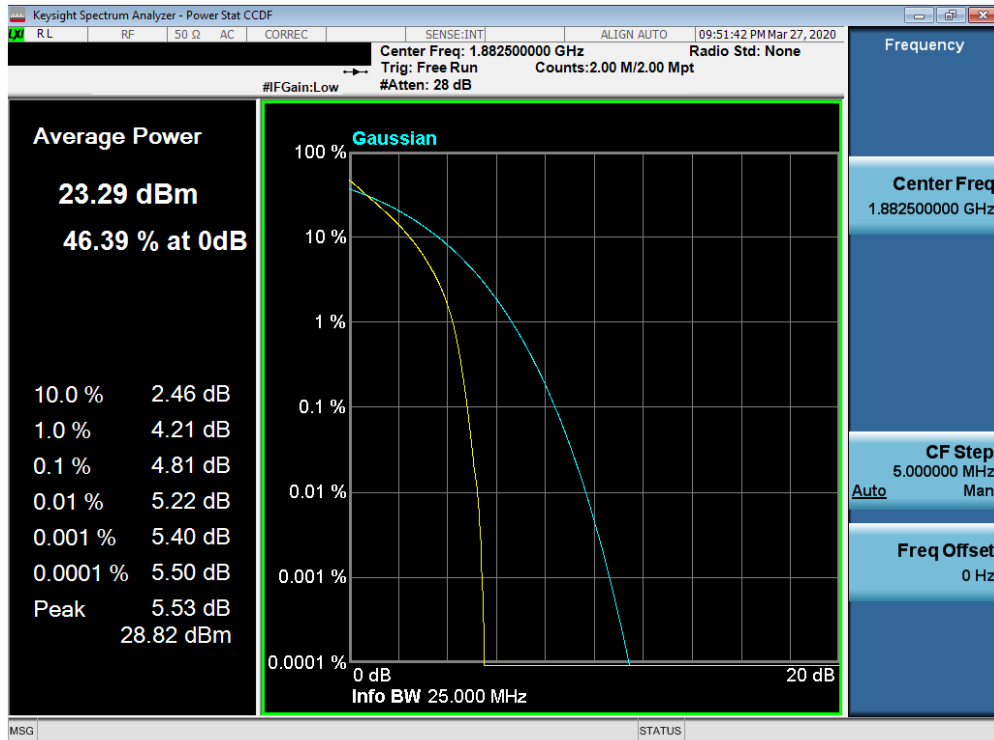


Plot 7-576. PAR Plot (Band 25/2 - 15.0MHz 16-QAM - Full RB Configuration)

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 318 of 420



Plot 7-577. PAR Plot (Band 25/2 - 15.0MHz 64-QAM - Full RB Configuration)



Plot 7-578. PAR Plot (Band 25/2 - 20.0MHz QPSK - 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 319 of 420