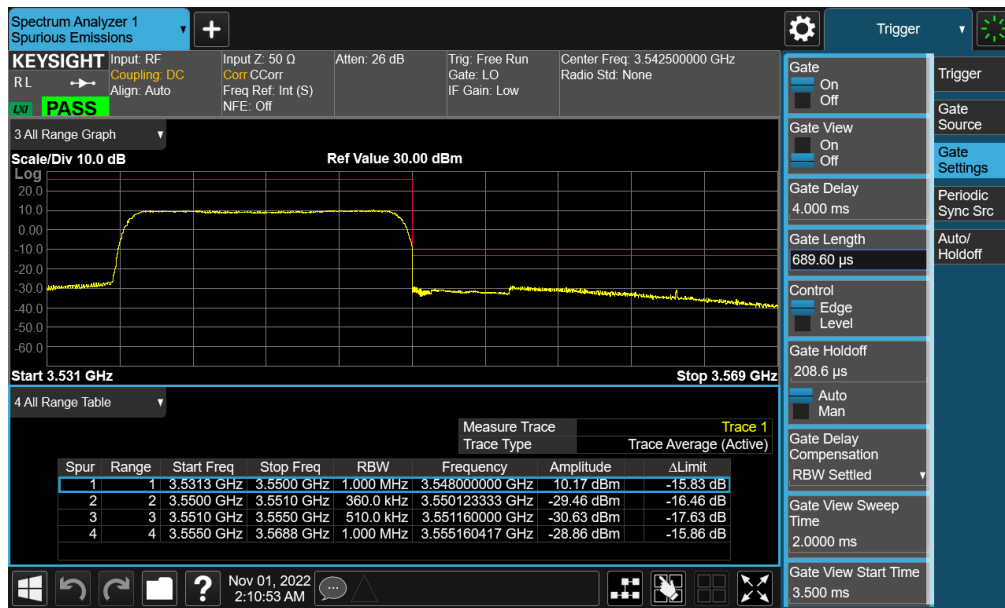
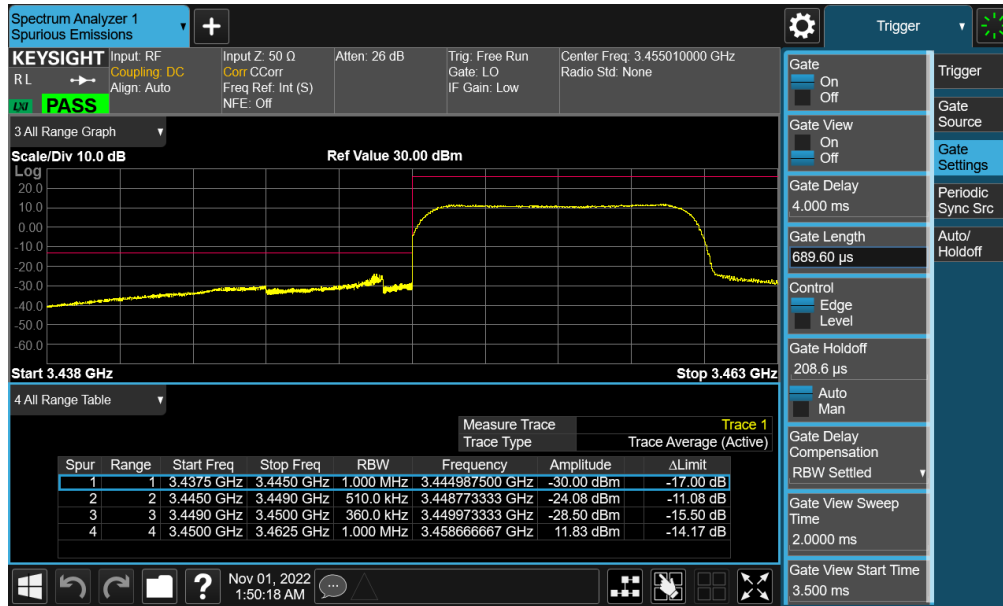


Plot 7-141. Lower ACP Plot (NR Band n77 - DoD Band - 15MHz DFT-s- $\pi/2$  BPSK - Full RB - SRS-1)

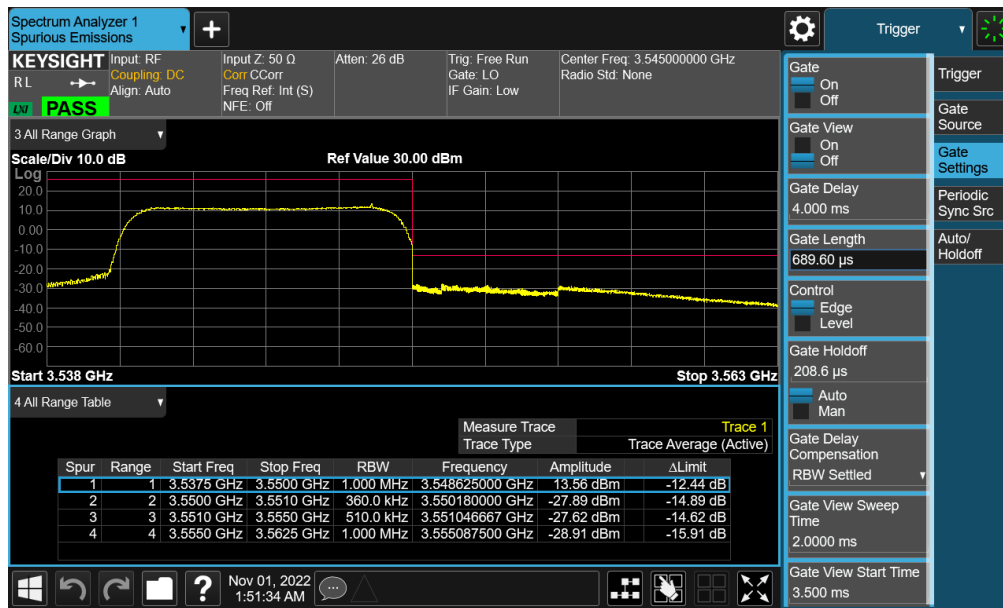


Plot 7-142. Upper ACP Plot (NR Band n77 - DoD Band - 15MHz DFT-s-OFDM  $\pi/2$  BPSK - Full RB - SRS-1)

FCC ID: A3LSMS916U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2209010097-05.A3L	Test Dates: 10/08/2022 - 11/08/2022	EUT Type: Portable Handset	Page 100 of 202



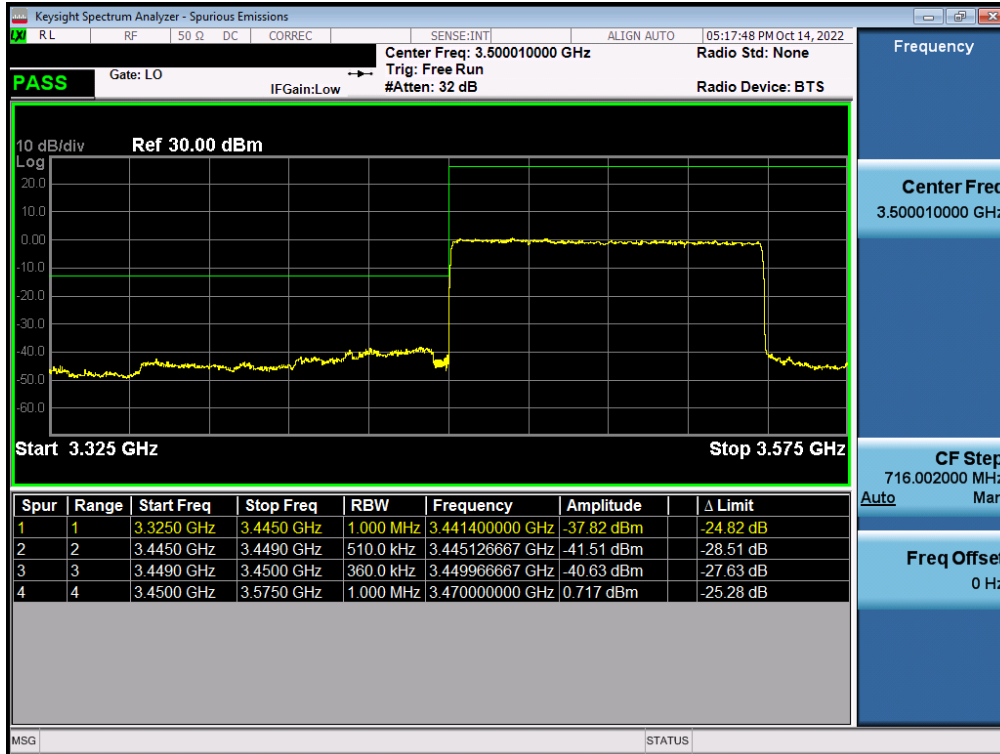
Plot 7-143. Lower ACP Plot (NR Band n77 - DoD Band - 10MHz CP-OFDM QPSK - Full RB - SRS-1)



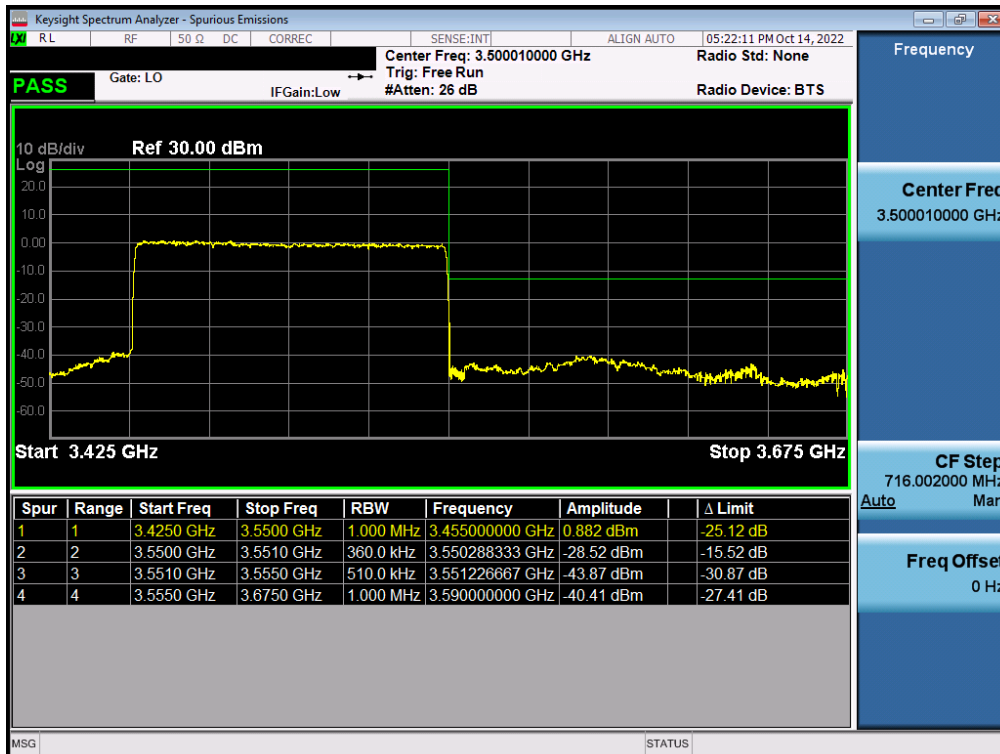
Plot 7-144. Upper ACP Plot (NR Band n77 - DoD Band - 10MHz CP-OFDM QPSK - Full RB - SRS-1)

FCC ID: A3LSMS916U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2209010097-05.A3L	Test Dates: 10/08/2022 - 11/08/2022	EUT Type: Portable Handset	Page 101 of 202

# NR Band n77 (PC2) - DoD Band – SRS-2



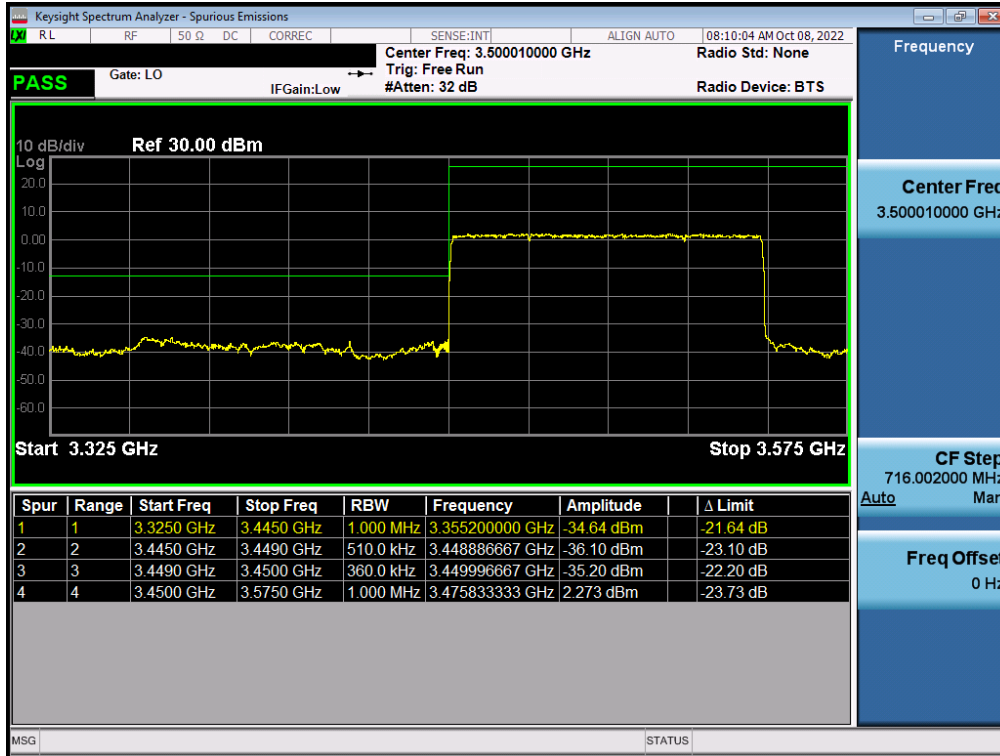
Plot 7-145. Lower ACP Plot (NR Band n77 - DoD Band – 100MHz DFT-s-OFDM  $\pi/2$  BPSK – Full RB - SRS-2)



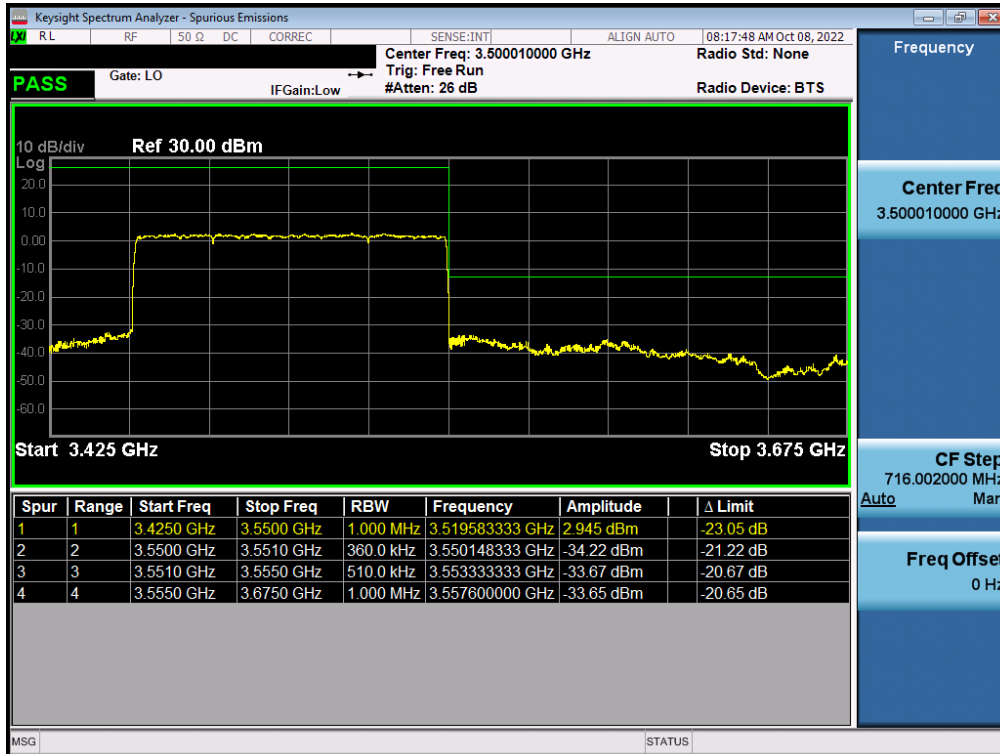
Plot 7-146. Upper ACP Plot (NR Band n77 - DoD Band – 100MHz CP-OFDM QPSK – Full RB - SRS-2)

FCC ID: A3LSMS916U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2209010097-05.A3L	Test Dates: 10/08/2022 - 11/08/2022	EUT Type: Portable Handset	Page 102 of 202

# NR Band n77 (PC2) - DoD Band – SRS-3



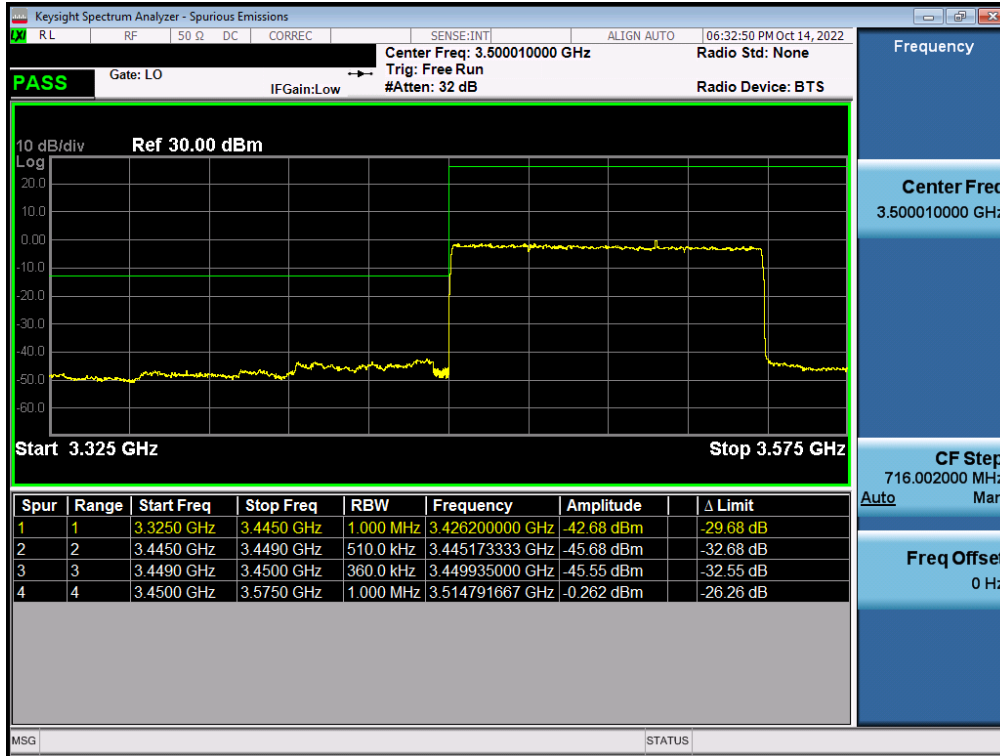
Plot 7-147. Lower ACP Plot (NR Band n77 - DoD Band – 100MHz DFT-s-OFDM  $\pi/2$  BPSK – Full RB - SRS-3)



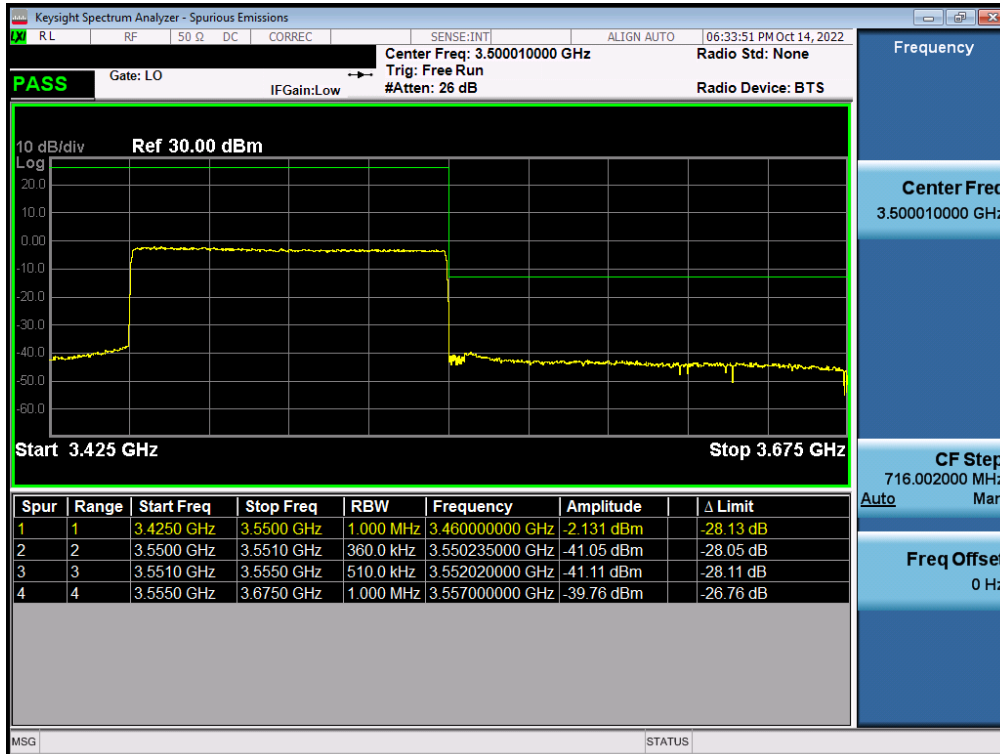
Plot 7-148. Upper ACP Plot (NR Band n77 - DoD Band – 100MHz DFT-s-OFDM  $\pi/2$  BPSK – Full RB - SRS-3)

FCC ID: A3LSMS916U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2209010097-05.A3L	Test Dates: 10/08/2022 - 11/08/2022	EUT Type: Portable Handset	Page 103 of 202

# NR Band n77 (PC2) - DoD Band – SRS-4



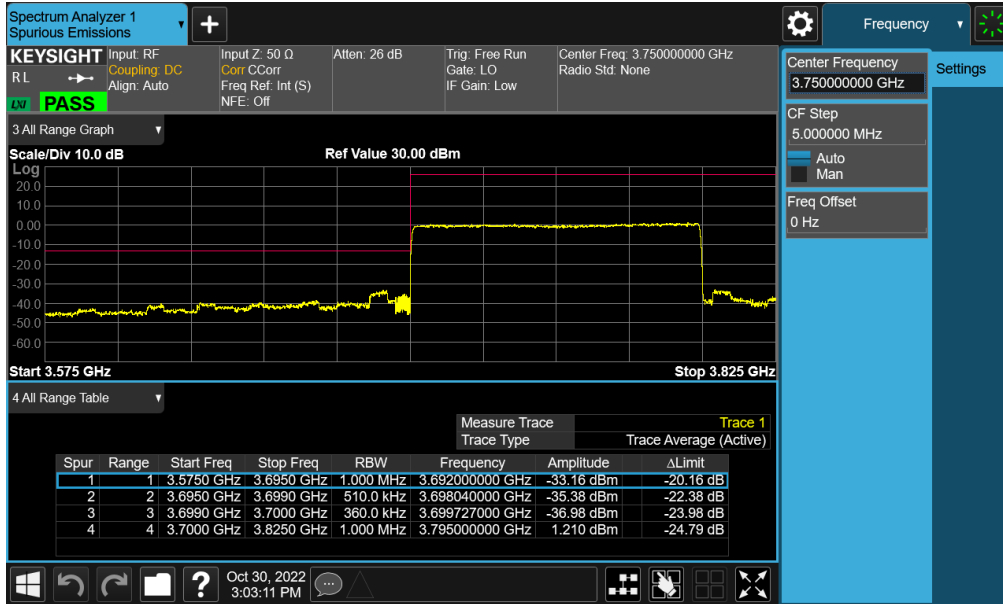
Plot 7-149. Lower ACP Plot (NR Band n77 - DoD Band – 100MHz DFT-s-OFDM  $\pi/2$  BPSK – Full RB - SRS-4)



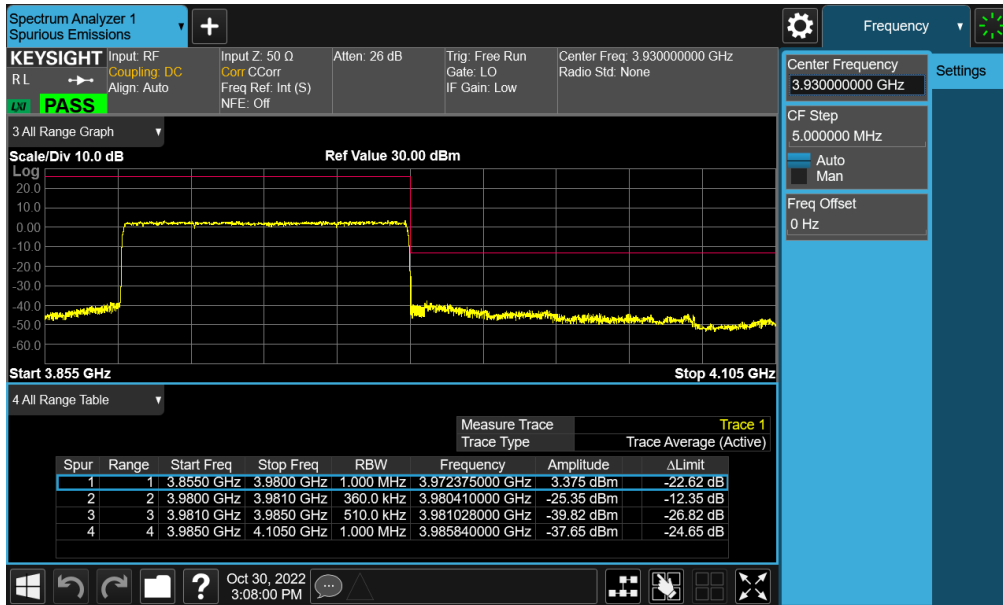
Plot 7-150. Upper ACP Plot (NR Band n77 - DoD Band – 100MHz DFT-s-OFDM  $\pi/2$  BPSK – Full RB - SRS-4)

FCC ID: A3LSMS916U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2209010097-05.A3L	Test Dates: 10/08/2022 - 11/08/2022	EUT Type: Portable Handset	Page 104 of 202

# NR Band n77 (PC2) - C-Band – SRS-1

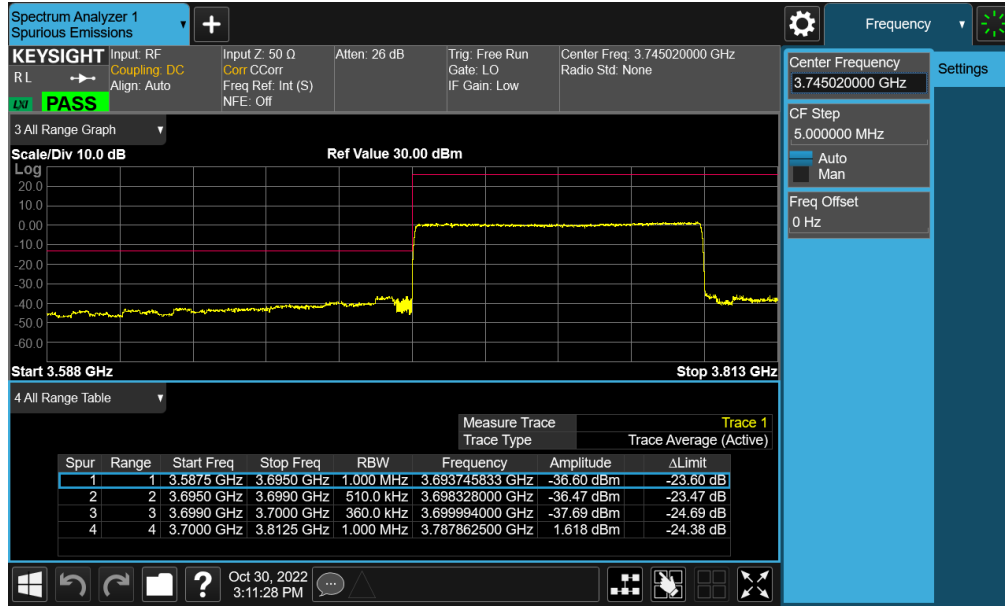


Plot 7-151. Lower ACP Plot (NR Band n77 - C-Band – 100MHz DFT-s-OFDM  $\pi/2$  BPSK – Full RB - SRS-1)

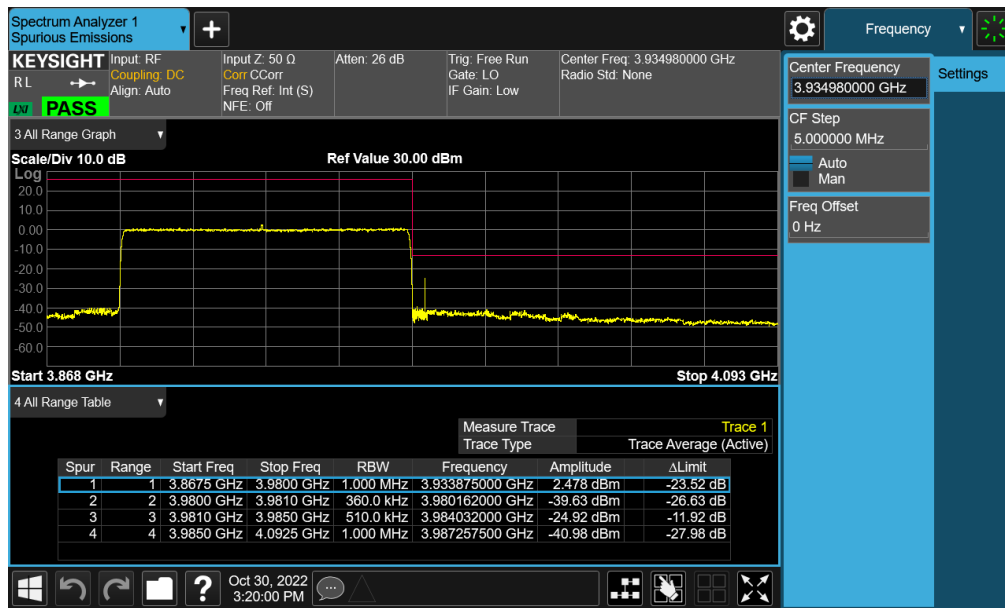


Plot 7-152. Upper ACP Plot (NR Band n77 - C-Band – 100MHz CP-OFDM QPSK – Full RB - SRS-1)

FCC ID: A3LSMS916U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2209010097-05.A3L	Test Dates: 10/08/2022 - 11/08/2022	EUT Type: Portable Handset	Page 105 of 202

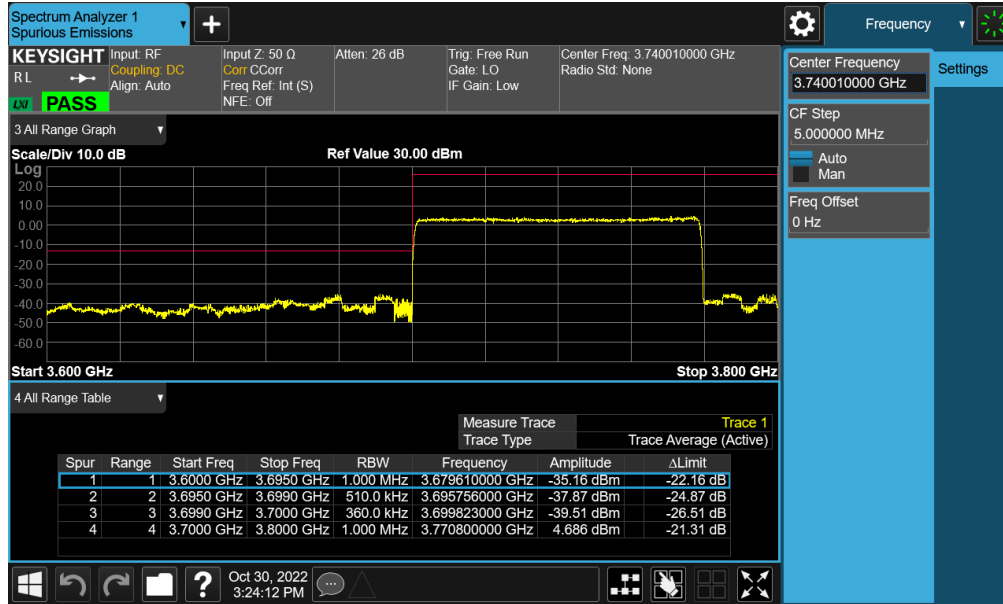


Plot 7-153. Lower ACP Plot (NR Band n77 - C-Band – 90MHz DFT-s-OFDM  $\pi/2$  BPSK – Full RB - SRS-1)

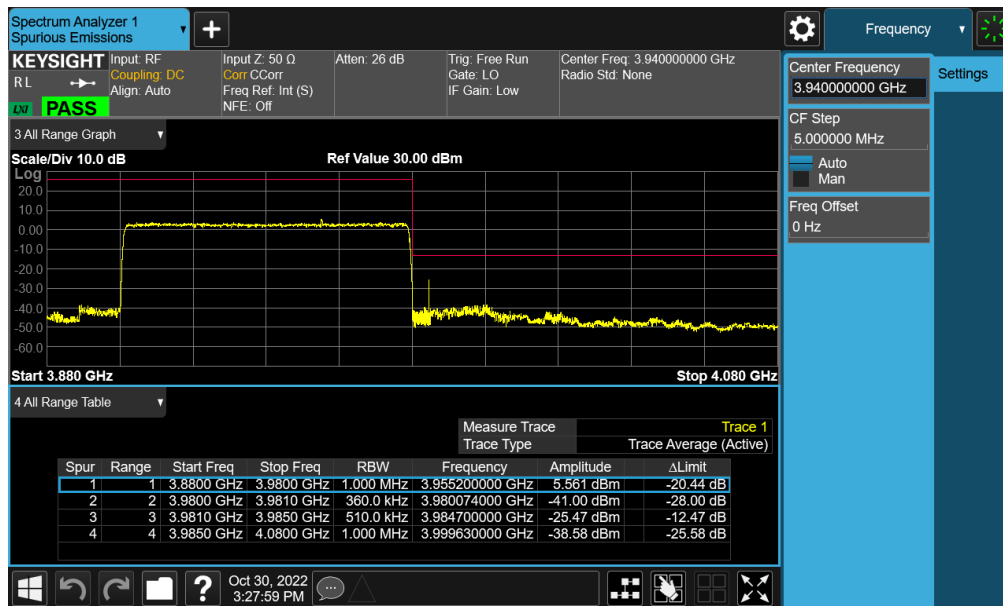


Plot 7-154. Upper ACP Plot (NR Band n77 - C-Band – 90MHz DFT-s-OFDM  $\pi/2$  BPSK – Full RB - SRS-1)

FCC ID: A3LSMS916U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2209010097-05.A3L	Test Dates: 10/08/2022 - 11/08/2022	EUT Type: Portable Handset	Page 106 of 202



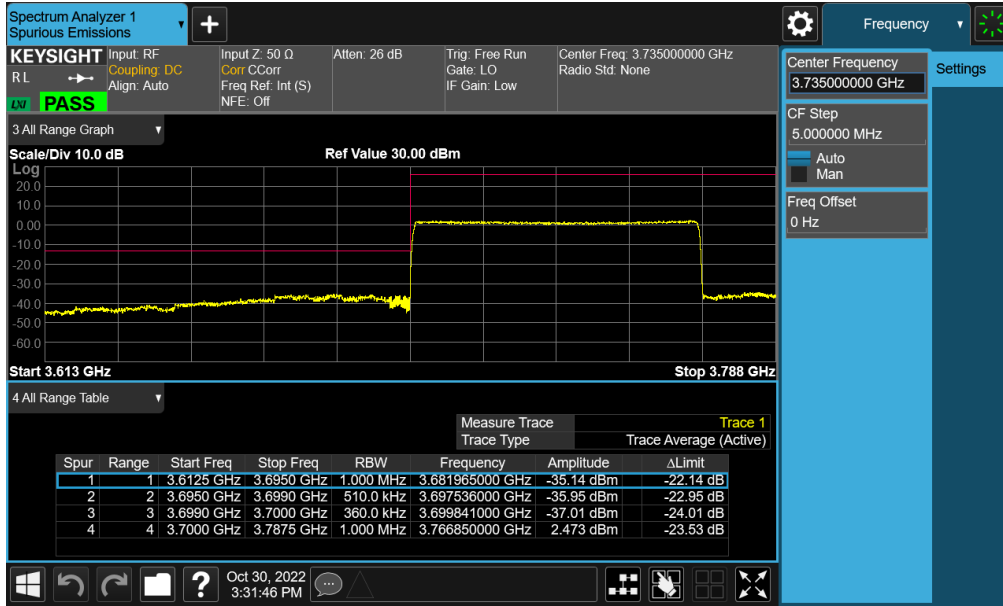
Plot 7-155. Lower ACP Plot (NR Band n77 - C-Band – 80MHz CP-OFDM  $\pi/2$  BPSK – Full RB - SRS-1)



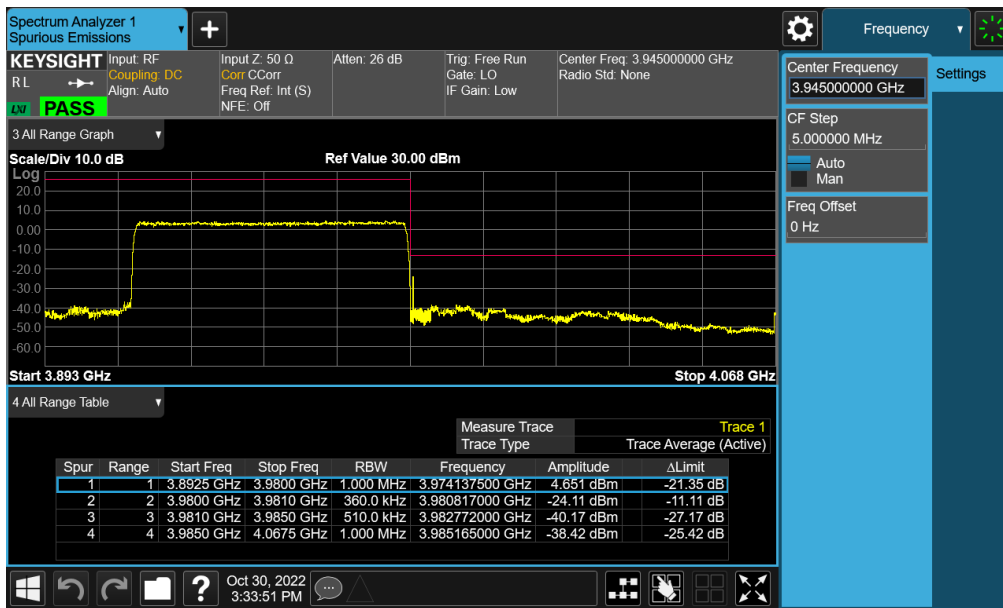
Plot 7-156. Upper ACP Plot (NR Band n77 - C-Band – 80MHz DFT-s-OFDM  $\pi/2$  BPSK – Full RB - SRS-1)

FCC ID: A3LSMS916U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2209010097-05.A3L	Test Dates: 10/08/2022 - 11/08/2022	EUT Type: Portable Handset	Page 107 of 202



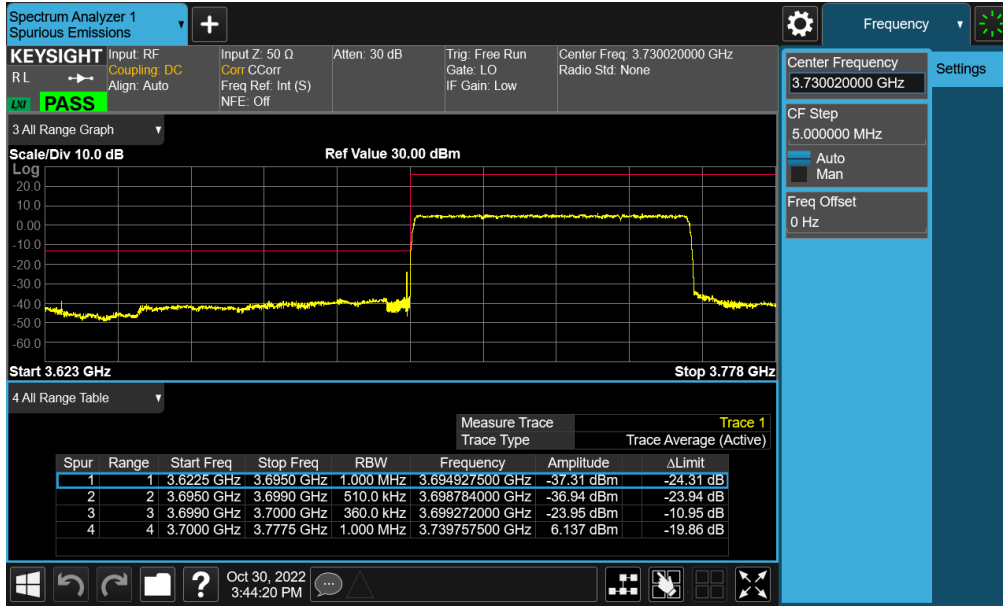


Plot 7-157. Lower ACP Plot (NR Band n77 - C-Band - 70MHz CP-OFDM QPSK - Full RB - SRS-1)

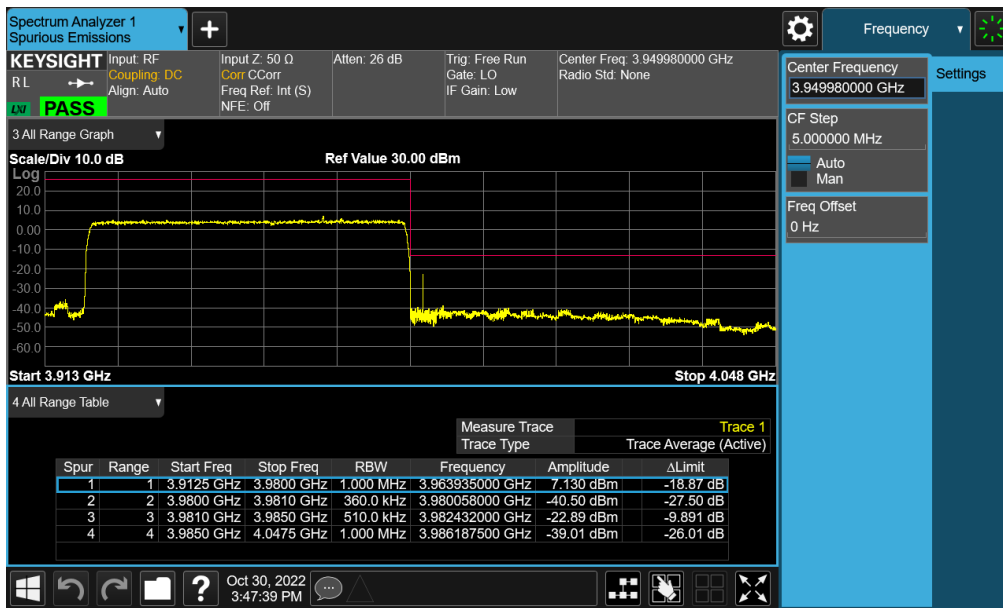


Plot 7-158. Upper ACP Plot (NR Band n77 - C-Band - 70MHz DFT-s-OFDM  $\pi/2$  BPSK - Full RB - SRS-1)

FCC ID: A3LSMS916U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2209010097-05.A3L	Test Dates: 10/08/2022 - 11/08/2022	EUT Type: Portable Handset	Page 108 of 202

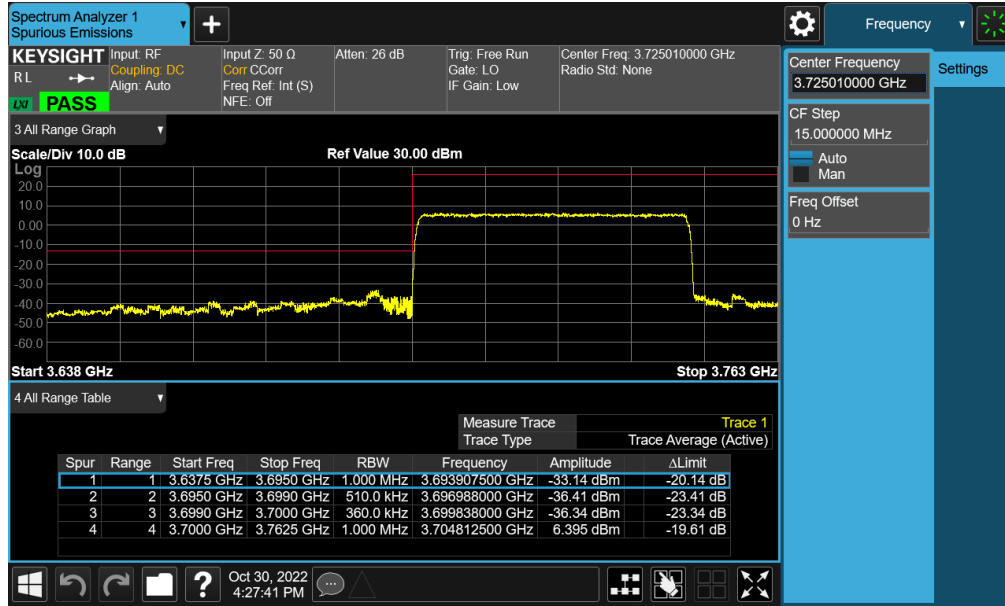


Plot 7-159. Lower ACP Plot (NR Band n77 - C-Band – 60MHz CP-OFDM QPSK – Full RB - SRS-1)

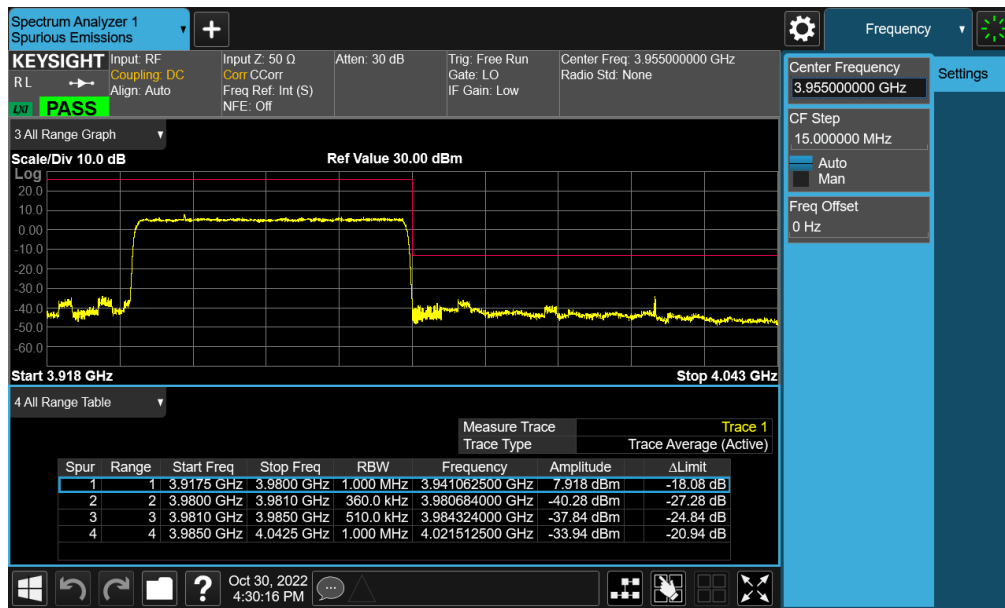


Plot 7-160. Upper ACP Plot (NR Band n77 - C-Band – 60MHz CP-OFDM QPSK – Full RB - SRS-1)

FCC ID: A3LSMS916U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2209010097-05.A3L	Test Dates: 10/08/2022 - 11/08/2022	EUT Type: Portable Handset	Page 109 of 202

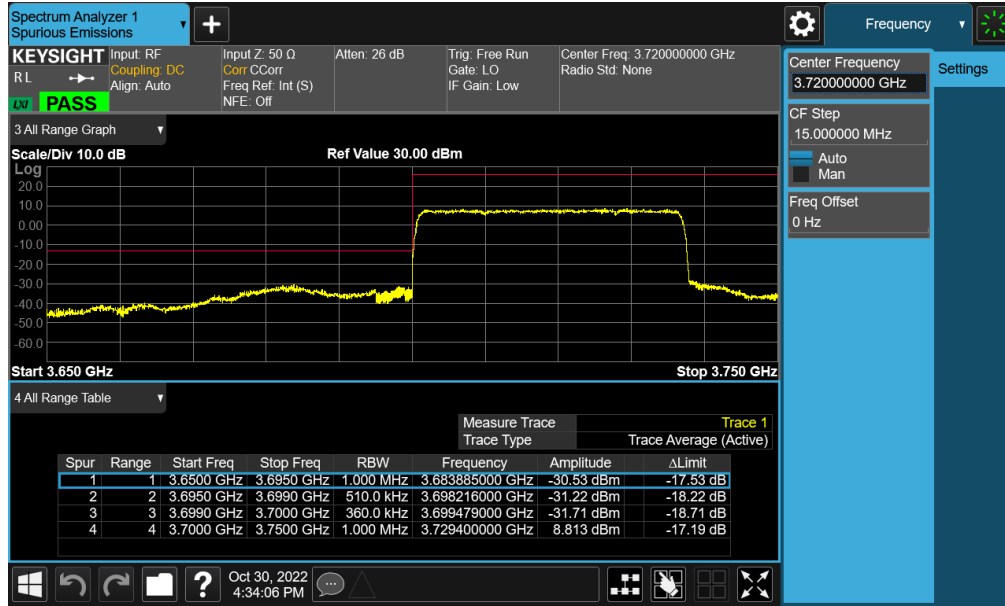


Plot 7-161. Lower ACP Plot (NR Band n77 - C-Band - 50MHz CP-OFDM QPSK - Full RB - SRS-1)

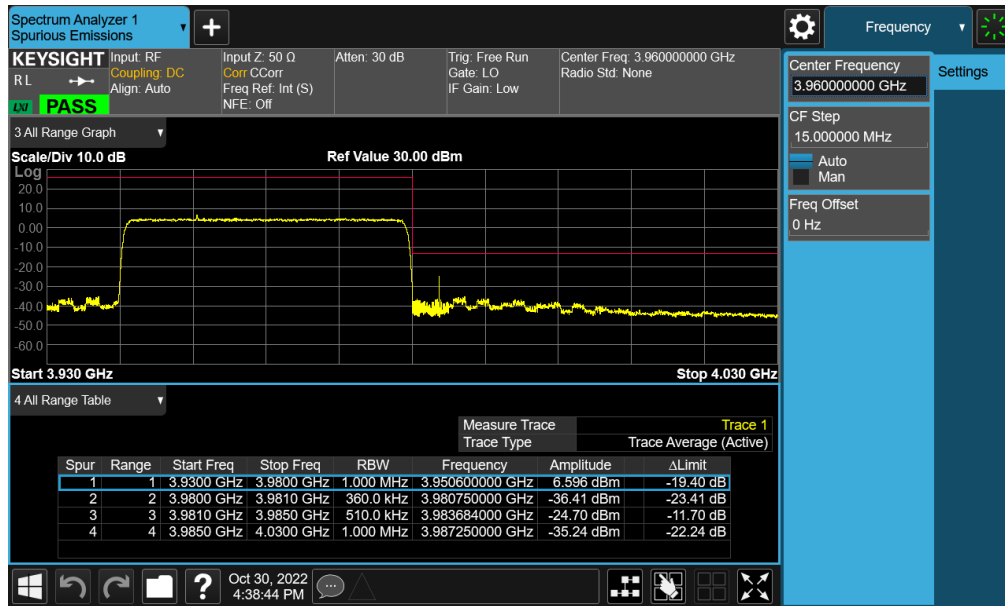


Plot 7-162. Upper ACP Plot (NR Band n77 - C-Band - 50MHz DFT-s-OFDM  $\pi/2$  BPSK - Full RB - SRS-1)

FCC ID: A3LSMS916U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2209010097-05.A3L	Test Dates: 10/08/2022 - 11/08/2022	EUT Type: Portable Handset	Page 110 of 202

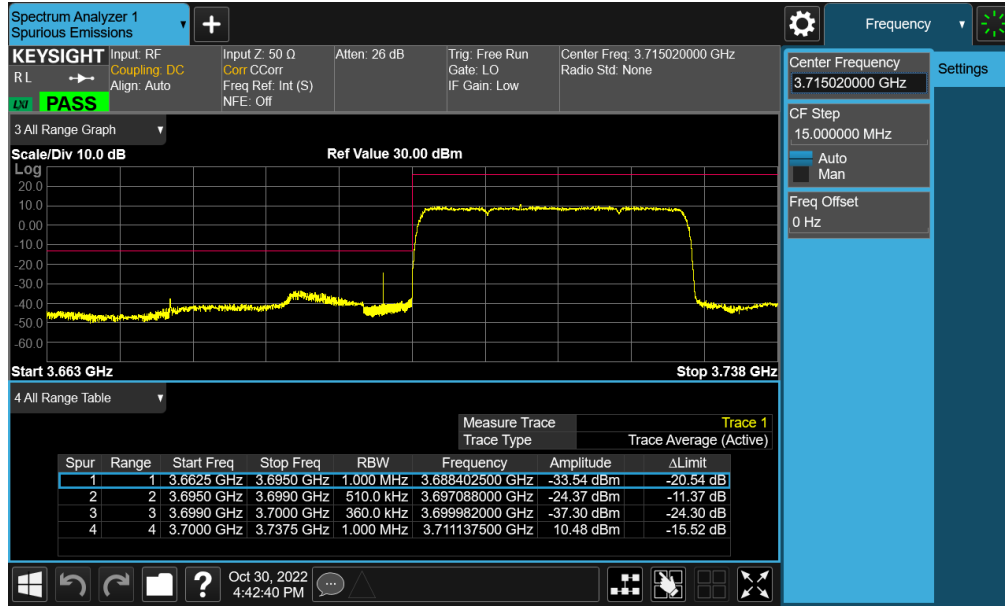


Plot 7-163. Lower ACP Plot (NR Band n77 - C-Band – 40MHz CP-OFDM QPSK – Full RB - SRS-1)

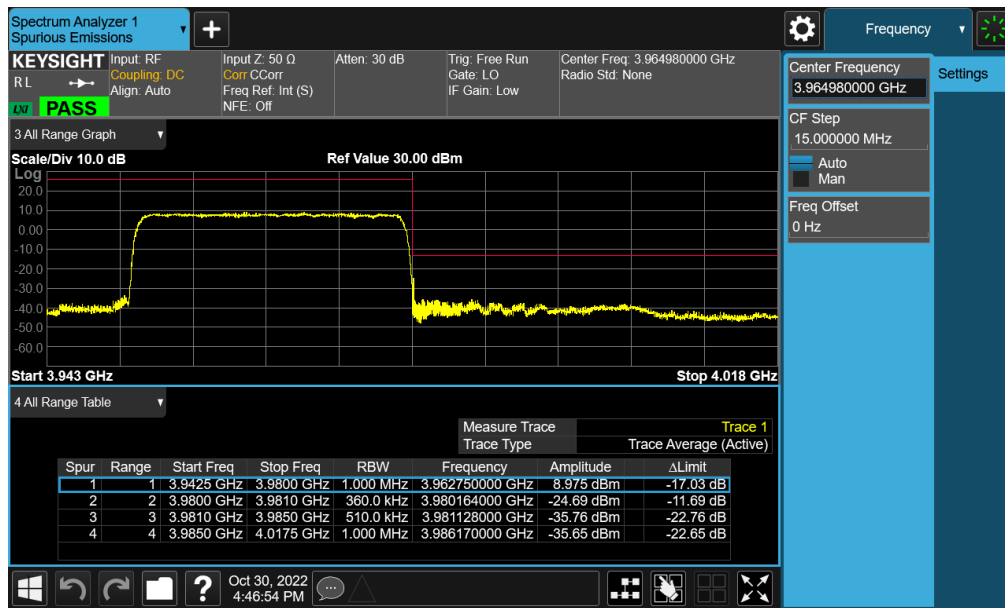


Plot 7-164. Upper ACP Plot (NR Band n77 - C-Band – 40MHz CP-OFDM QPSK – Full RB - SRS-1)

FCC ID: A3LSMS916U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2209010097-05.A3L	Test Dates: 10/08/2022 - 11/08/2022	EUT Type: Portable Handset	Page 111 of 202

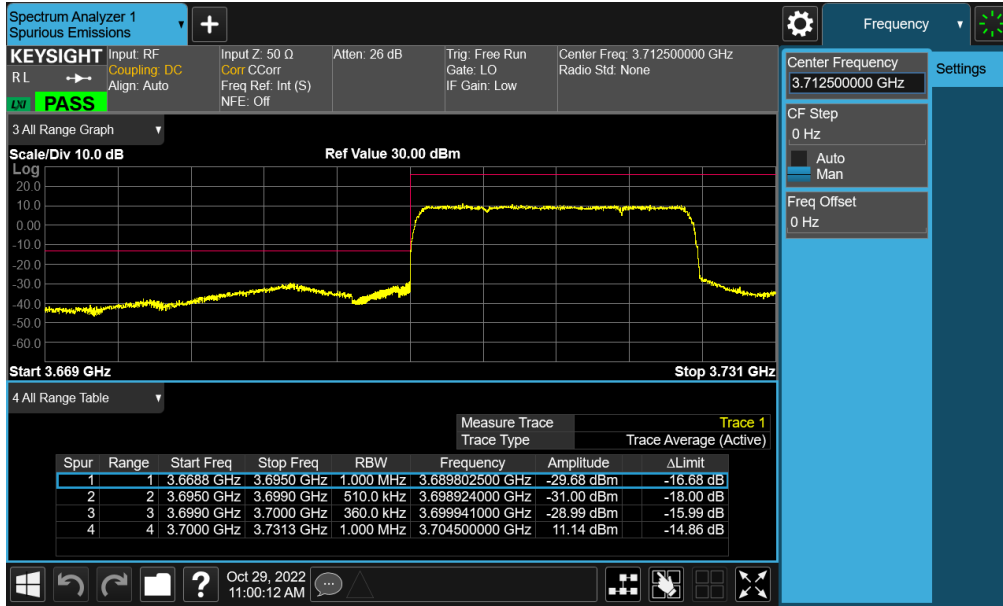


Plot 7-165. Lower ACP Plot (NR Band n77 - C-Band – 30MHz DFT-s-OFDM  $\pi/2$  BPSK – Full RB - SRS-1)

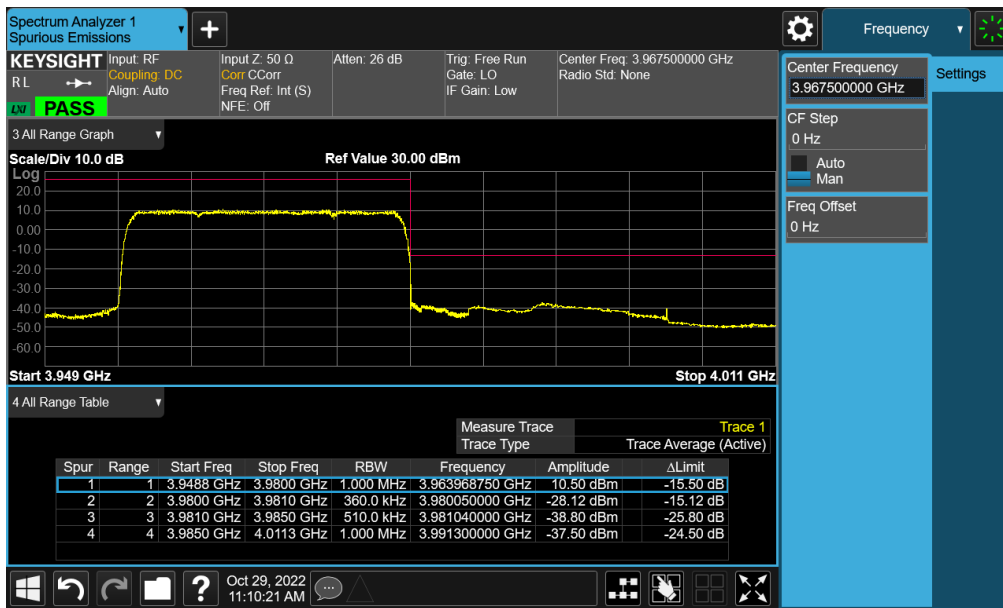


Plot 7-166. Upper ACP Plot (NR Band n77 - C-Band – 30MHz DFT-s-OFDM  $\pi/2$  BPSK – Full RB - SRS-1)

FCC ID: A3LSMS916U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2209010097-05.A3L	Test Dates: 10/08/2022 - 11/08/2022	EUT Type: Portable Handset	Page 112 of 202

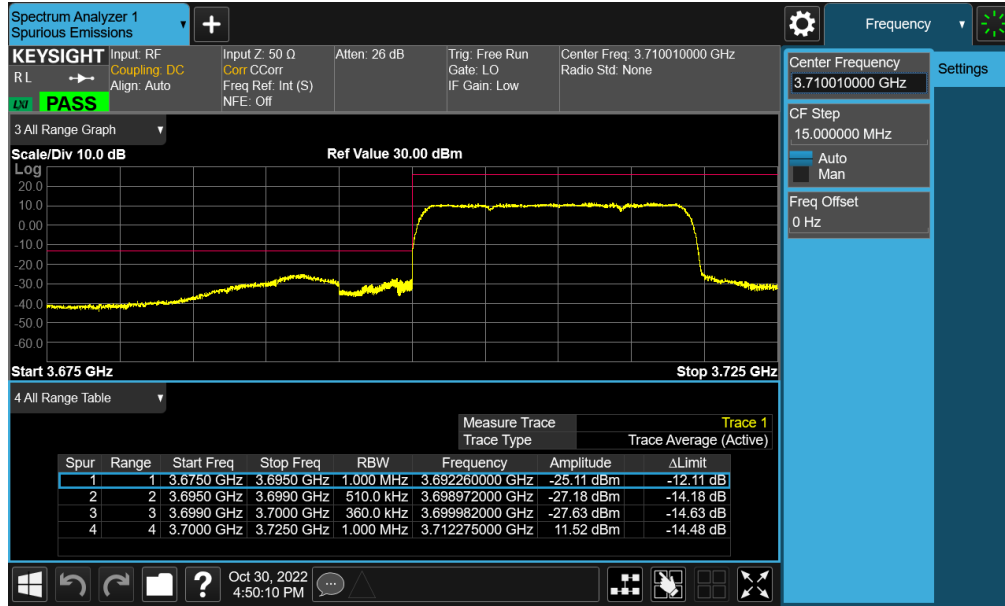


Plot 7-167. Lower ACP Plot (NR Band n77 - C-Band - 25MHz CP QPSK - Full RB - SRS-1)

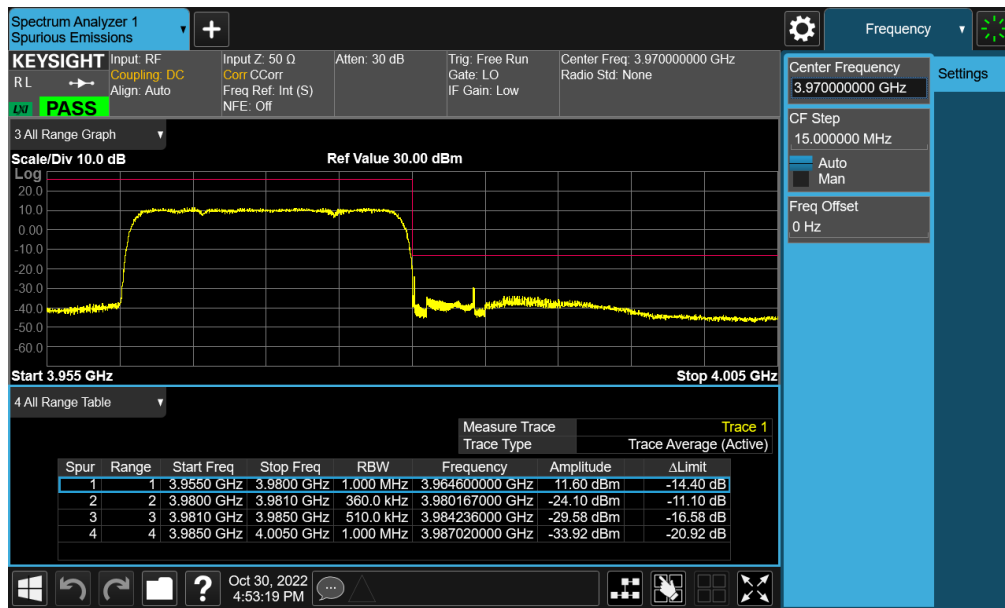


Plot 7-168. Upper ACP Plot (NR Band n77 - C-Band - 25MHz CP QPSK - Full RB - SRS-1)

FCC ID: A3LSMS916U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2209010097-05.A3L	Test Dates: 10/08/2022 - 11/08/2022	EUT Type: Portable Handset	Page 113 of 202

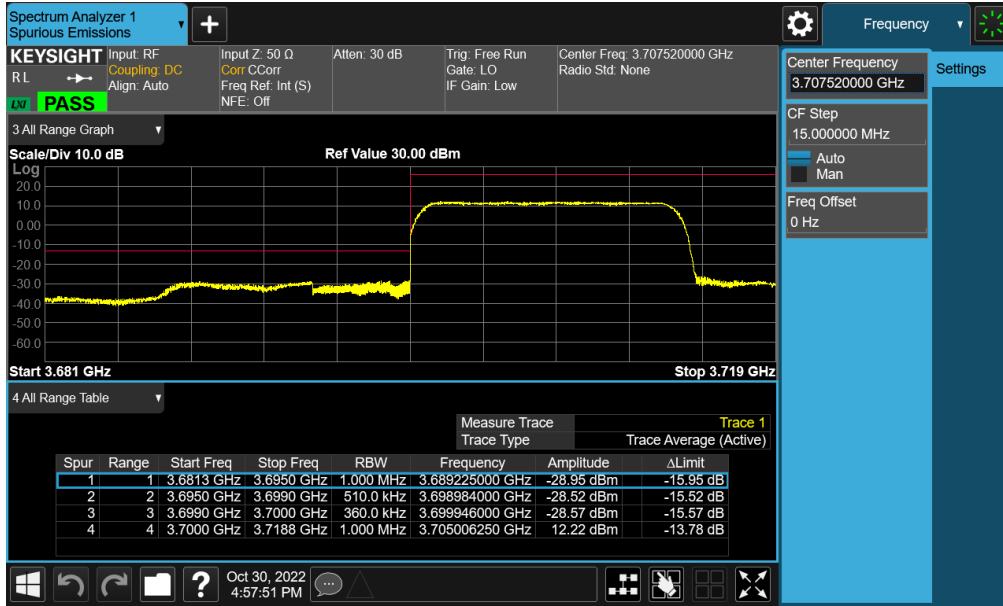


Plot 7-169. Lower ACP Plot (NR Band n77 - C-Band – 20MHz DFT-s-OFDM  $\pi/2$  BPSK – Full RB - SRS-1)

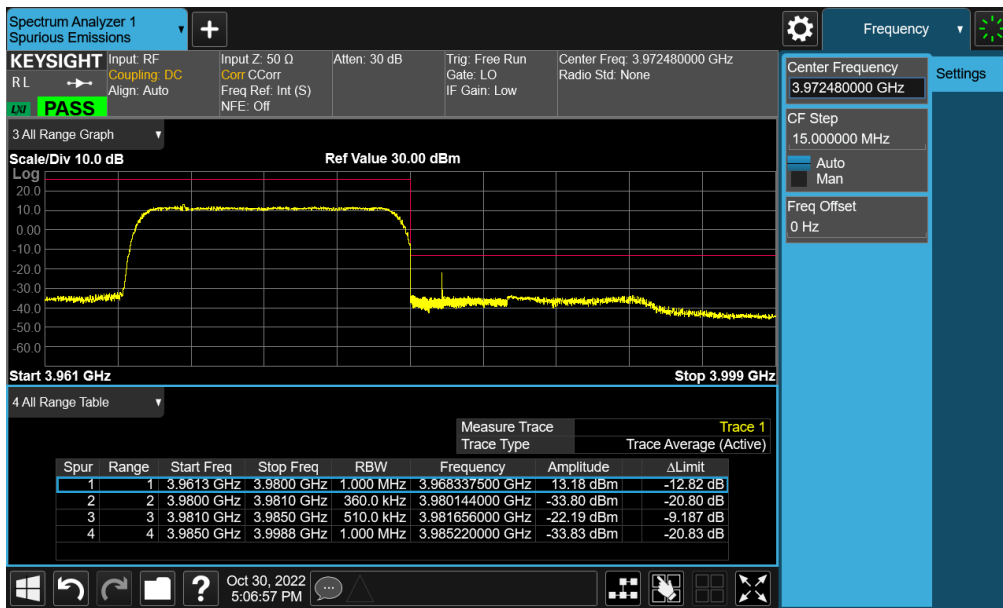


Plot 7-170. Upper ACP Plot (NR Band n77 - C-Band – 20MHz DFT-s-OFDM  $\pi/2$  BPSK – Full RB - SRS-1)

FCC ID: A3LSMS916U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2209010097-05.A3L	Test Dates: 10/08/2022 - 11/08/2022	EUT Type: Portable Handset	Page 114 of 202



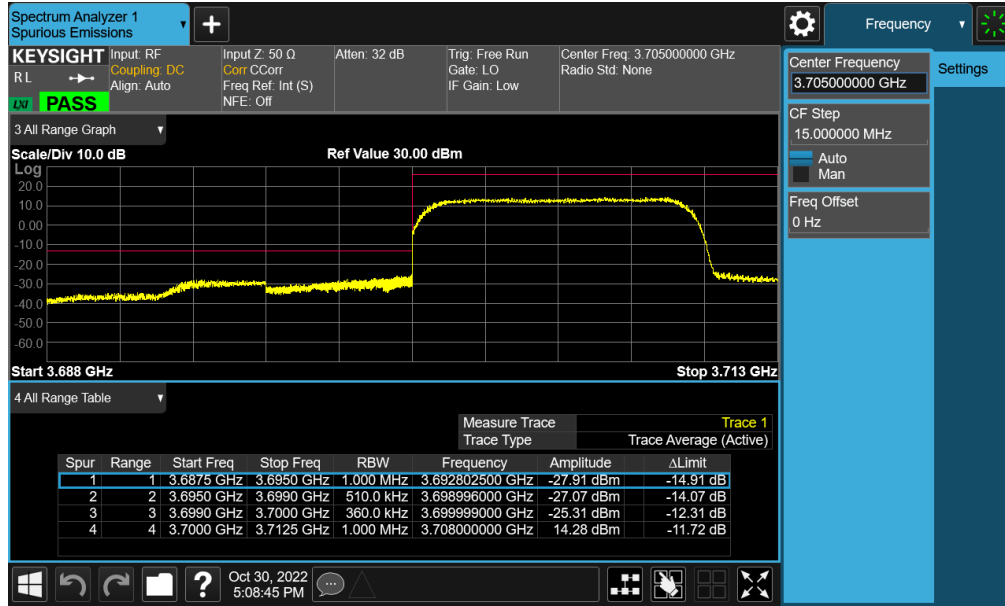
Plot 7-171. Lower ACP Plot (NR Band n77 - C-Band – 15MHz DFT-s-OFDM  $\pi/2$  BPSK – Full RB - SRS-1)



Plot 7-172. Upper ACP Plot (NR Band n77 - C-Band – 15MHz DFT-s-OFDM  $\pi/2$  BPSK – Full RB - SRS-1)

FCC ID: A3LSMS916U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2209010097-05.A3L	Test Dates: 10/08/2022 - 11/08/2022	EUT Type: Portable Handset	Page 115 of 202





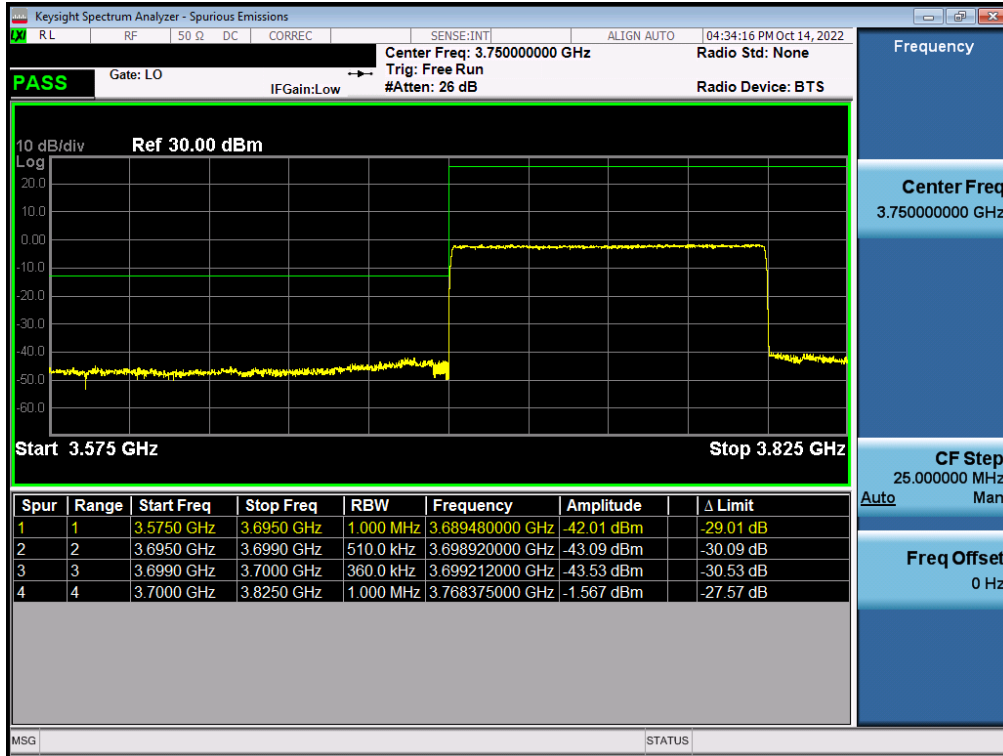
Plot 7-173. Lower ACP Plot (NR Band n77 - C-Band – 10MHz DFT-s-OFDM  $\pi/2$  BPSK – Full RB - SRS-1)



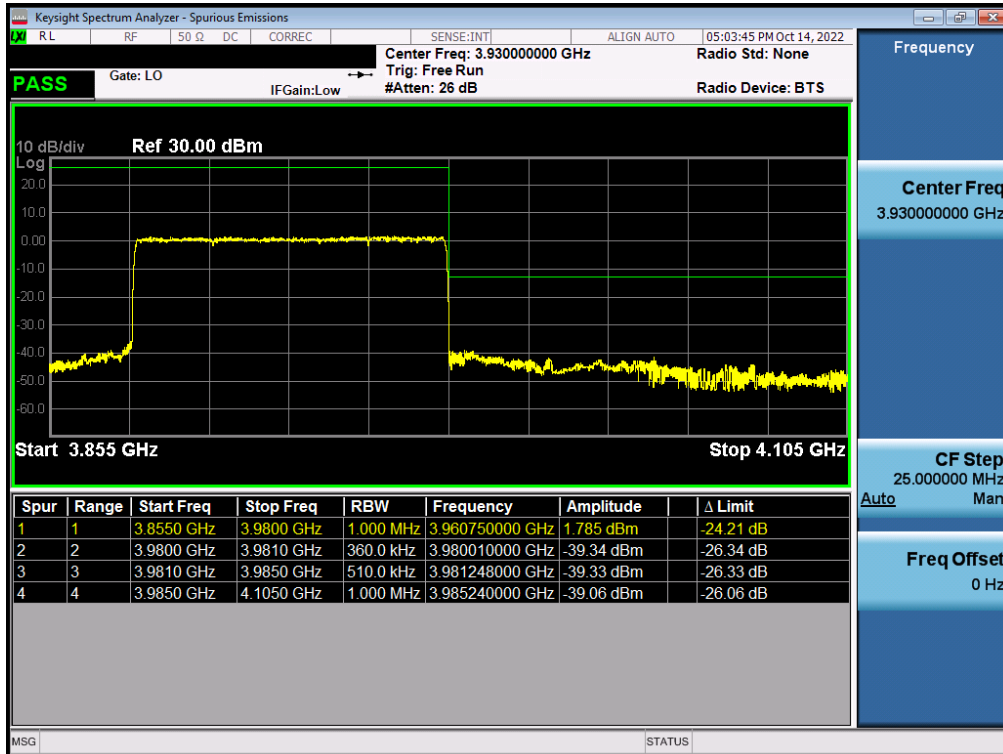
Plot 7-174. Upper ACP Plot (NR Band n77 - C-Band – 10MHz DFT-s-OFDM  $\pi/2$  BPSK – Full RB - SRS-1)

FCC ID: A3LSMS916U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2209010097-05.A3L	Test Dates: 10/08/2022 - 11/08/2022	EUT Type: Portable Handset	Page 116 of 202

# NR Band n77 (PC2) - C-Band – SRS-2



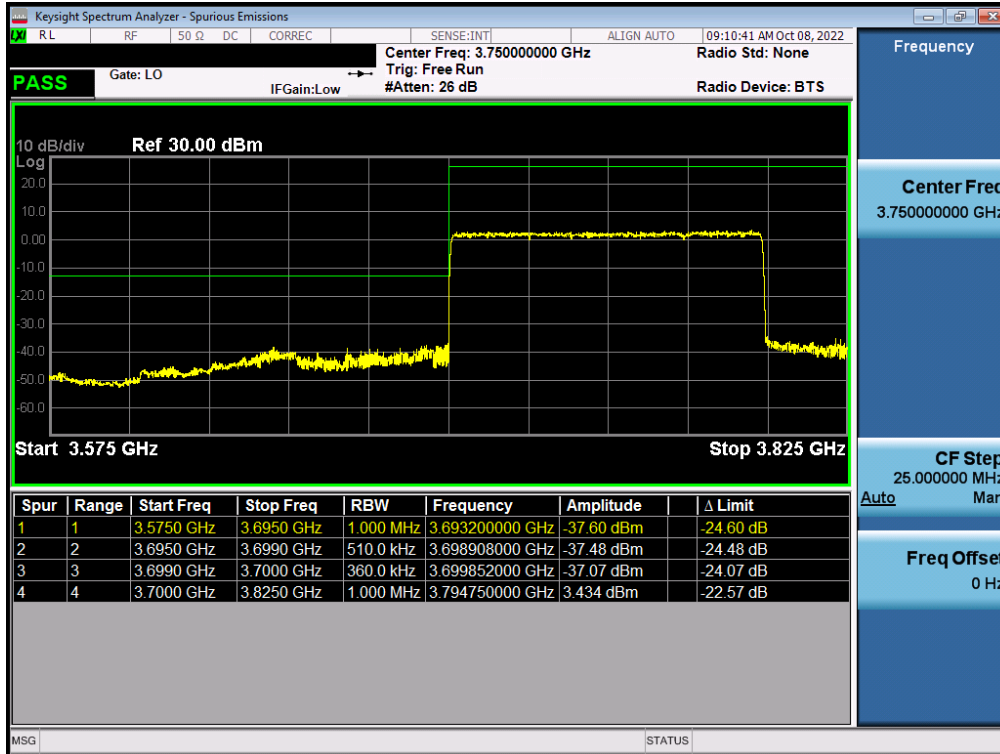
Plot 7-175. Lower ACP Plot (NR Band n77 - C-Band – 100MHz DFT-s-OFDM  $\pi/2$  BPSK – Full RB - SRS-2)



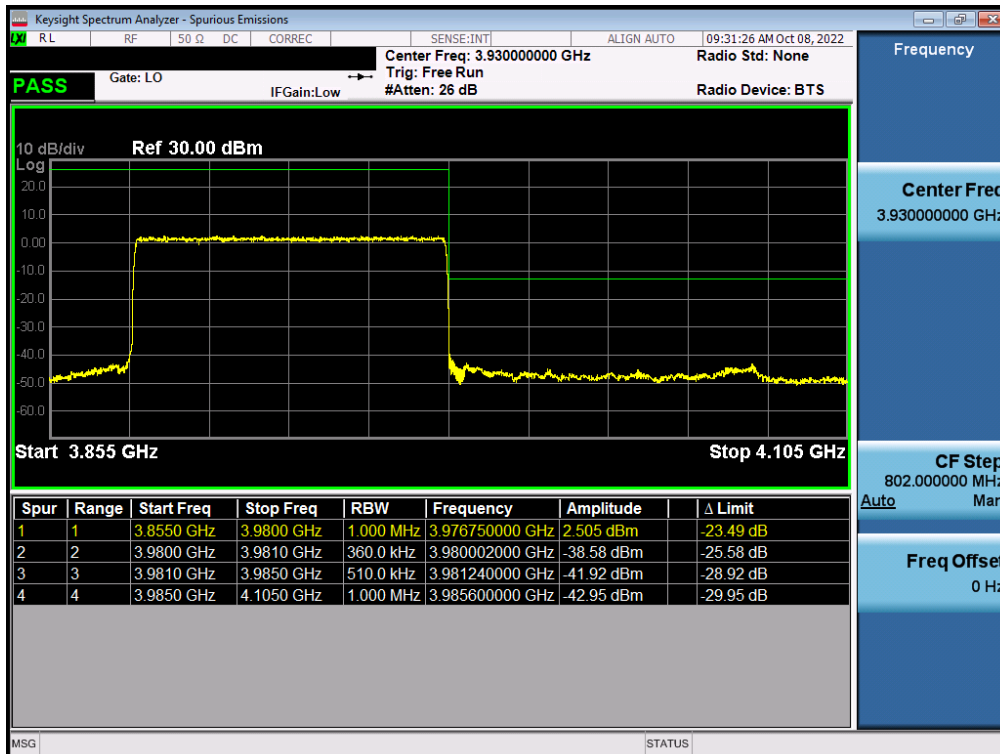
Plot 7-176. Upper ACP Plot (NR Band n77 - C-Band – 100MHz DFT-s-OFDM  $\pi/2$  BPSK – Full RB - SRS-2)

FCC ID: A3LSMS916U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2209010097-05.A3L	Test Dates: 10/08/2022 - 11/08/2022	EUT Type: Portable Handset	Page 117 of 202

### NR Band n77 (PC2) - C-Band – SRS-3



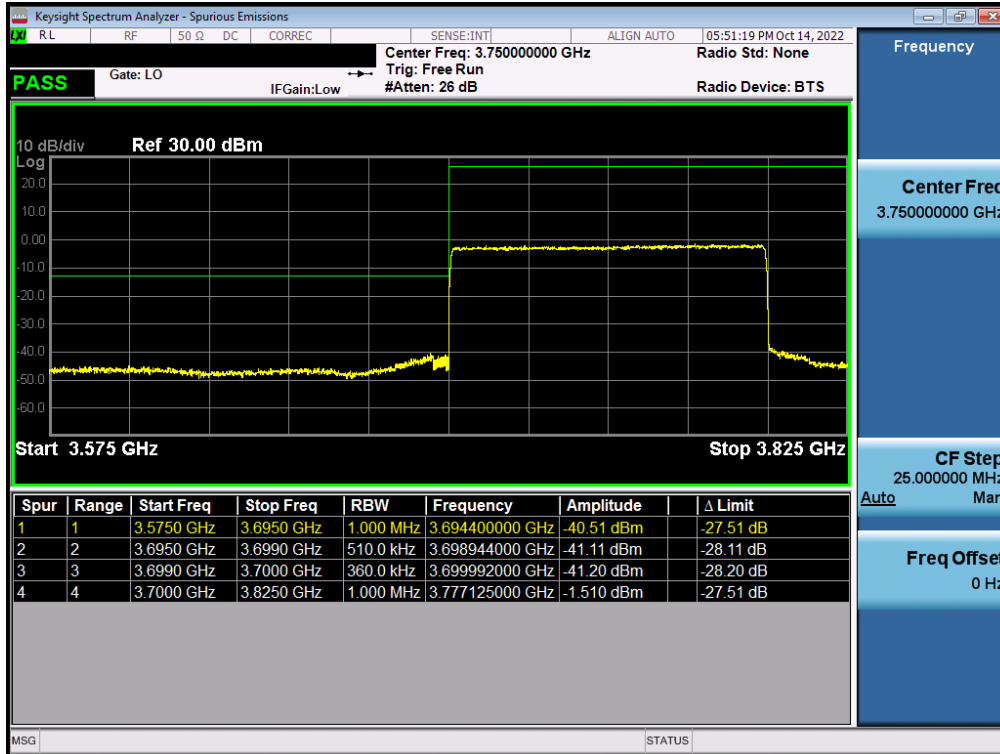
Plot 7-177. Lower ACP Plot (NR Band n77 - C-Band – 100MHz DFT-s-OFDM  $\pi/2$  BPSK – Full RB - SRS-3)



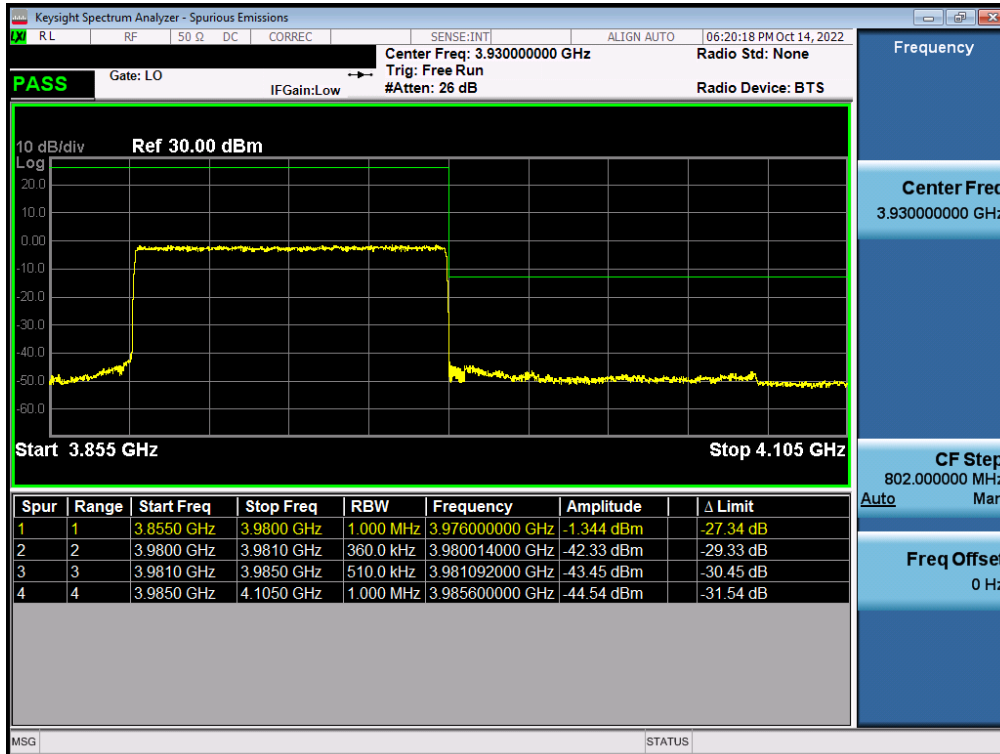
Plot 7-178. Upper ACP Plot (NR Band n77 - C-Band – 100MHz DFT-s-OFDM  $\pi/2$  BPSK – Full RB - SRS-3)

FCC ID: A3LSMS916U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2209010097-05.A3L	Test Dates: 10/08/2022 - 11/08/2022	EUT Type: Portable Handset	Page 118 of 202

# NR Band n77 (PC2) - C-Band – SRS-4



Plot 7-179. Lower ACP Plot (NR Band n77 - C-Band – 100MHz DFT-s-OFDM  $\pi/2$  BPSK – Full RB - SRS-4)



Plot 7-180. Upper ACP Plot (NR Band n77 - C-Band – 100MHz DFT-s-OFDM  $\pi/2$  BPSK – Full RB - SRS-4)

FCC ID: A3LSMS916U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2209010097-05.A3L	Test Dates: 10/08/2022 - 11/08/2022	EUT Type: Portable Handset	Page 119 of 202

## 7.6 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.

***The peak-to-average power ratio (PAPR) of the transmitter output power must not exceed 13 dB.***

### Test Procedure Used

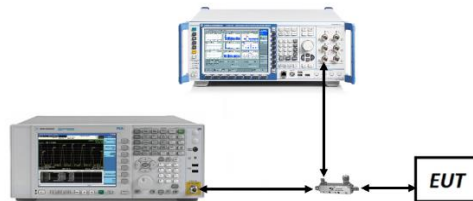
ANSI C63.26-2015 – Section 5.2.3.4

### 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.



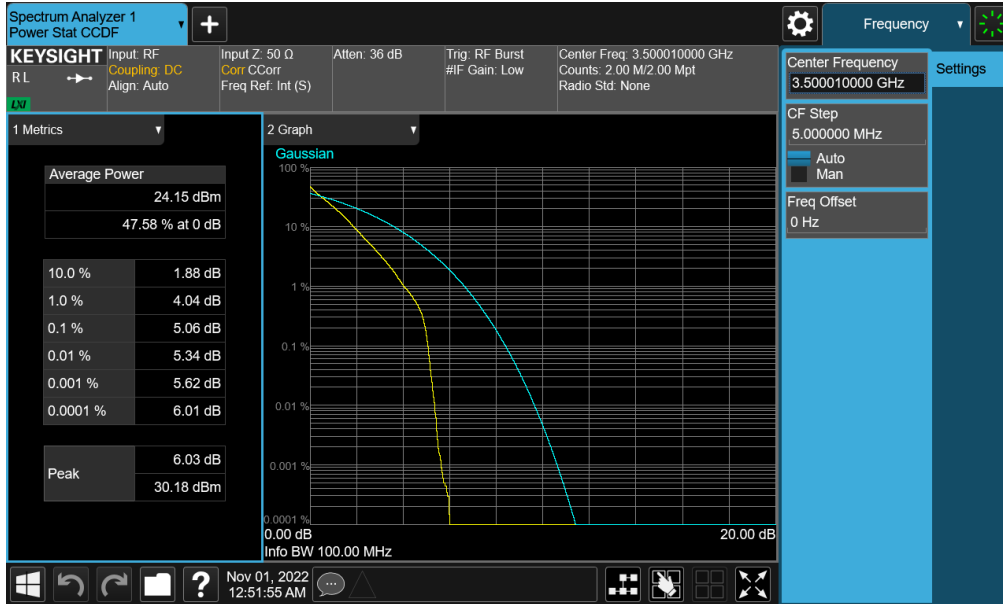
**Figure 7-5. Test Instrument & Measurement Setup**

### Test Notes

The Peak to Average Ratio was only measured on the antenna (SRS-1) with the highest power for each band.

FCC ID: A3LSMS916U	<b>PART 27 MEASUREMENT REPORT</b>		Approved by: Technical Manager
Test Report S/N: 1M2209010097-05.A3L	Test Dates: 10/08/2022 - 11/08/2022	EUT Type: Portable Handset	Page 120 of 202

## NR Band n77 (PC2) - DoD Band

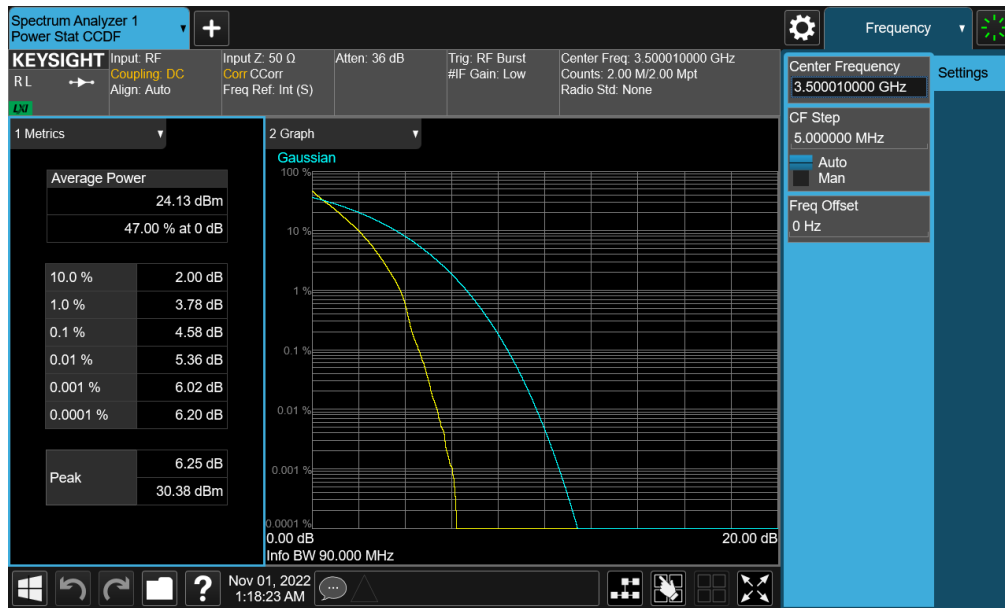


Plot 7-181. PAR Plot (NR Band n77 - DoD Band – 100MHz DFT-s-OFDM  $\pi/2$  BPSK - Full RB)



Plot 7-182. PAR Plot (NR Band n77 - DoD Band – 100MHz CP-OFDM QPSK - Full RB)

FCC ID: A3LSMS916U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2209010097-05.A3L	Test Dates: 10/08/2022 - 11/08/2022	EUT Type: Portable Handset	Page 121 of 202



FCC ID: A3LSMS916U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2209010097-05.A3L	Test Dates: 10/08/2022 - 11/08/2022	EUT Type: Portable Handset	Page 122 of 202



Plot 7-185. PAR Plot (NR Band n77 - DoD Band - 90MHz CP-OFDM QPSK - Full RB)



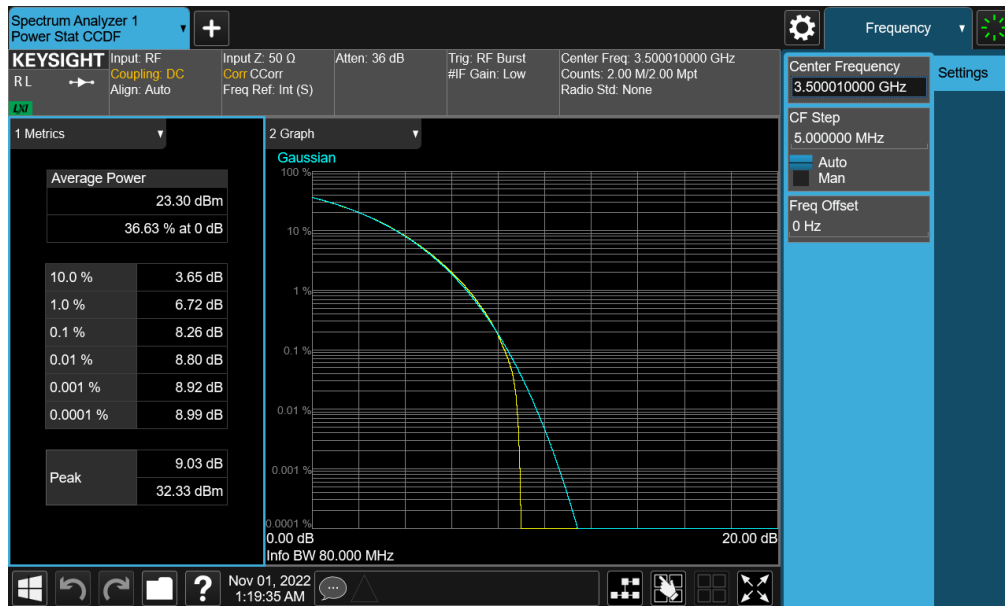
Plot 7-186. PAR Plot (NR Band n77 - DoD Band - 90MHz CP-OFDM 256-QAM - Full RB)

FCC ID: A3LSMS916U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2209010097-05.A3L	Test Dates: 10/08/2022 - 11/08/2022	EUT Type: Portable Handset	Page 123 of 202





**Plot 7-187. PAR Plot (NR Band n77 - DoD Band – 80MHz DFT-s-OFDM  $\pi/2$  BPSK - Full RB)**

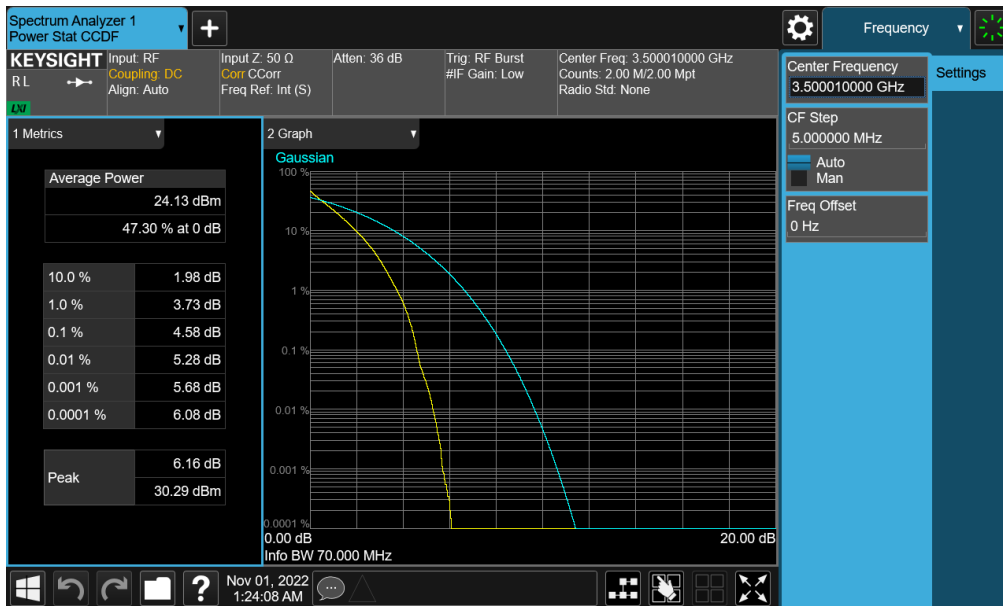


**Plot 7-188. PAR Plot (NR Band n77 - DoD Band – 80MHz CP-OFDM QPSK - Full RB)**

FCC ID: A3LSMS916U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2209010097-05.A3L	Test Dates: 10/08/2022 - 11/08/2022	EUT Type: Portable Handset	Page 124 of 202



**Plot 7-189. PAR Plot (NR Band n77 - DoD Band – 80MHz CP-OFDM 256-QAM - Full RB)**

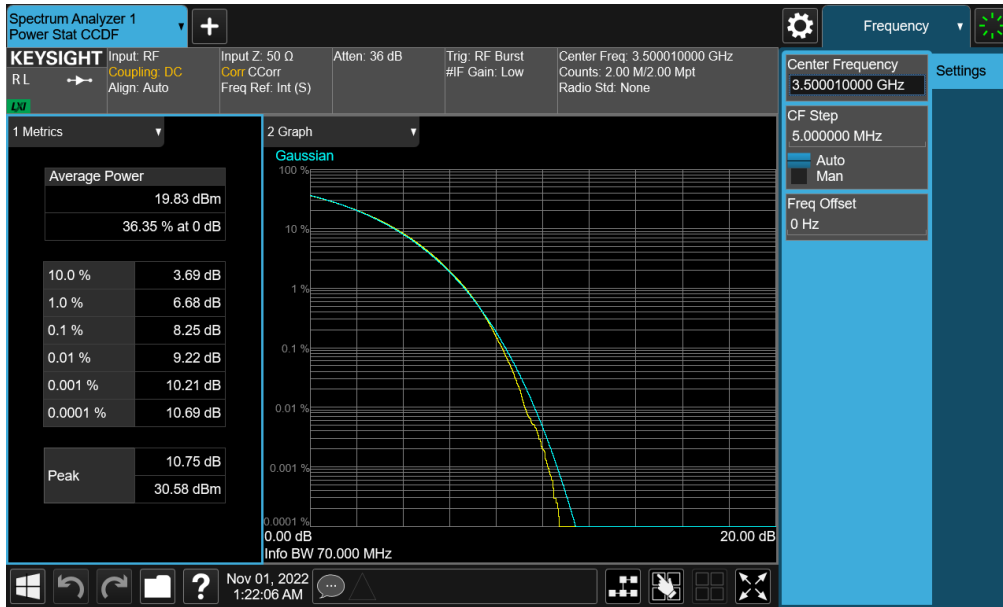


**Plot 7-190. PAR Plot (NR Band n77 - DoD Band – 70MHz DFT-s-OFDM π/2 BPSK - Full RB)**

FCC ID: A3LSMS916U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2209010097-05.A3L	Test Dates: 10/08/2022 - 11/08/2022	EUT Type: Portable Handset	Page 125 of 202

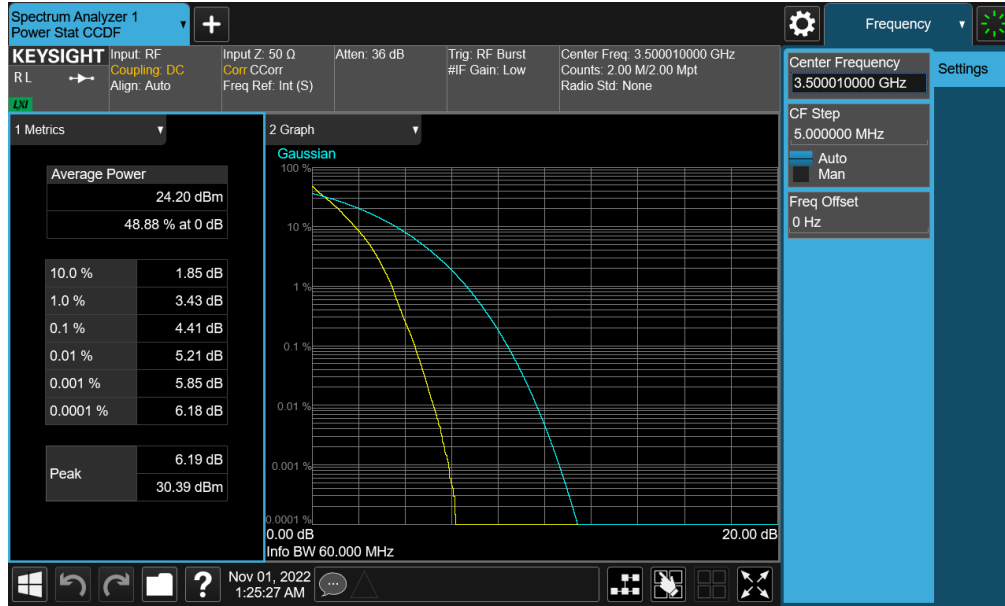


**Plot 7-191. PAR Plot (NR Band n77 - DoD Band – 70MHz CP-OFDM QPSK - Full RB)**

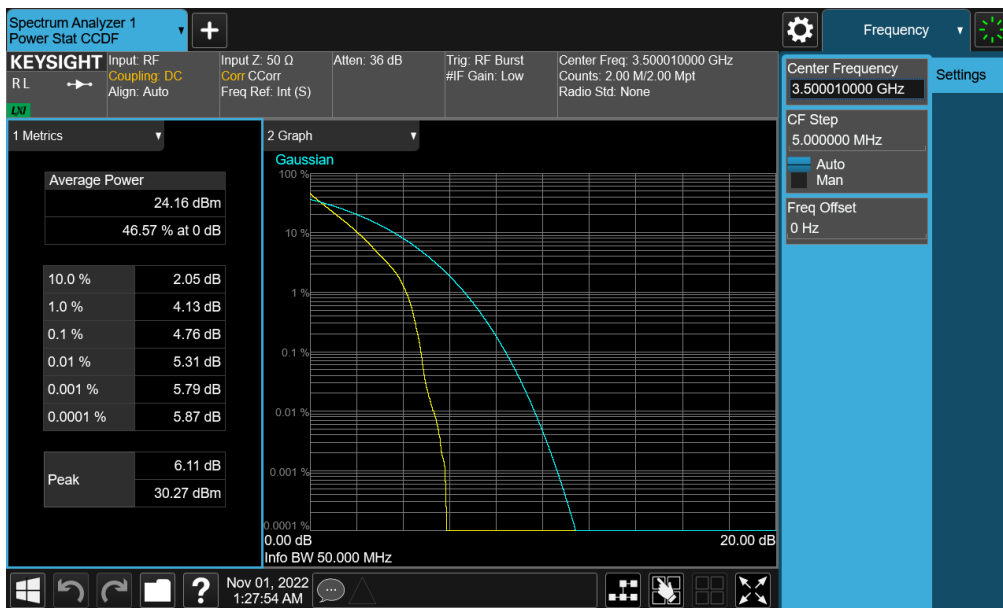


**Plot 7-192. PAR Plot (NR Band n77 - DoD Band – 70MHz CP-OFDM 256-QAM - Full RB)**

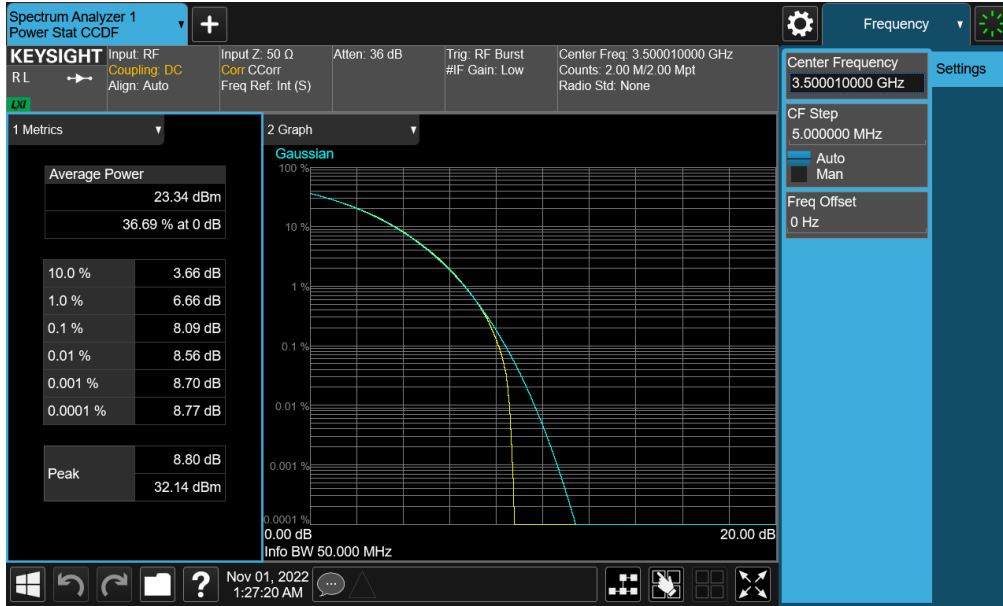
FCC ID: A3LSMS916U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2209010097-05.A3L	Test Dates: 10/08/2022 - 11/08/2022	EUT Type: Portable Handset	Page 126 of 202



FCC ID: A3LSMS916U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2209010097-05.A3L	Test Dates: 10/08/2022 - 11/08/2022	EUT Type: Portable Handset	Page 127 of 202



FCC ID: A3LSMS916U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2209010097-05.A3L	Test Dates: 10/08/2022 - 11/08/2022	EUT Type: Portable Handset	Page 128 of 202

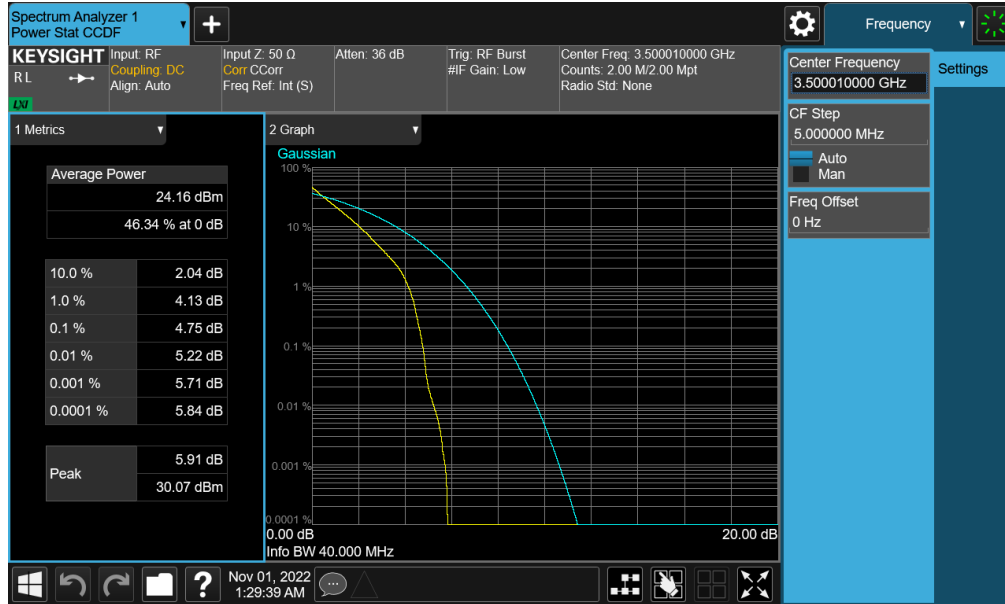


**Plot 7-197. PAR Plot (NR Band n77 - DoD Band – 50MHz CP-OFDM QPSK - Full RB)**

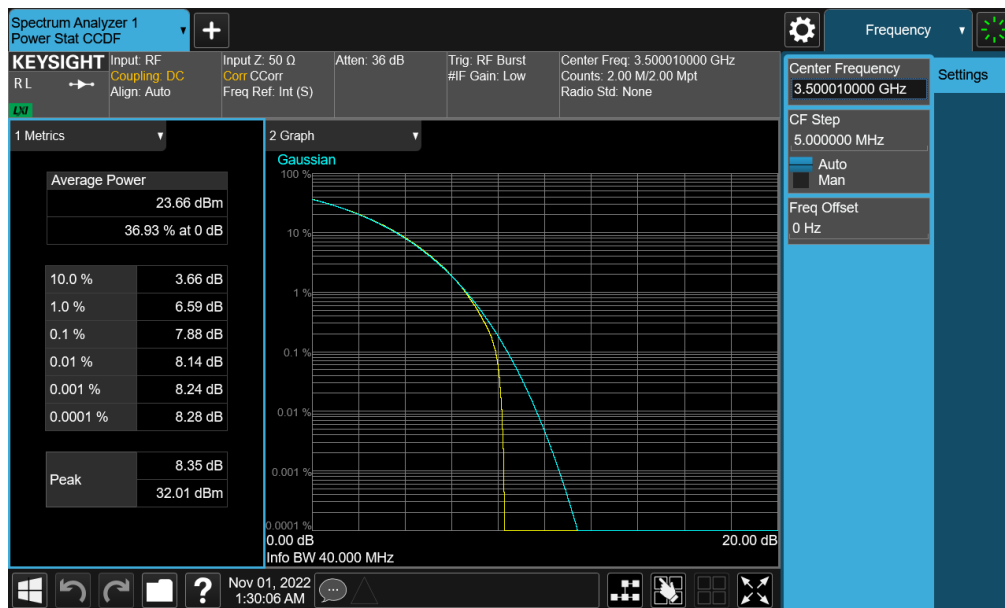


**Plot 7-198. PAR Plot (NR Band n77 - DoD Band – 50MHz CP-OFDM 256-QAM - Full RB)**

FCC ID: A3LSMS916U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2209010097-05.A3L	Test Dates: 10/08/2022 - 11/08/2022	EUT Type: Portable Handset	Page 129 of 202



**Plot 7-199. PAR Plot (NR Band n77 - DoD Band – 40MHz DFT-s-OFDM  $\pi/2$  BPSK - Full RB)**

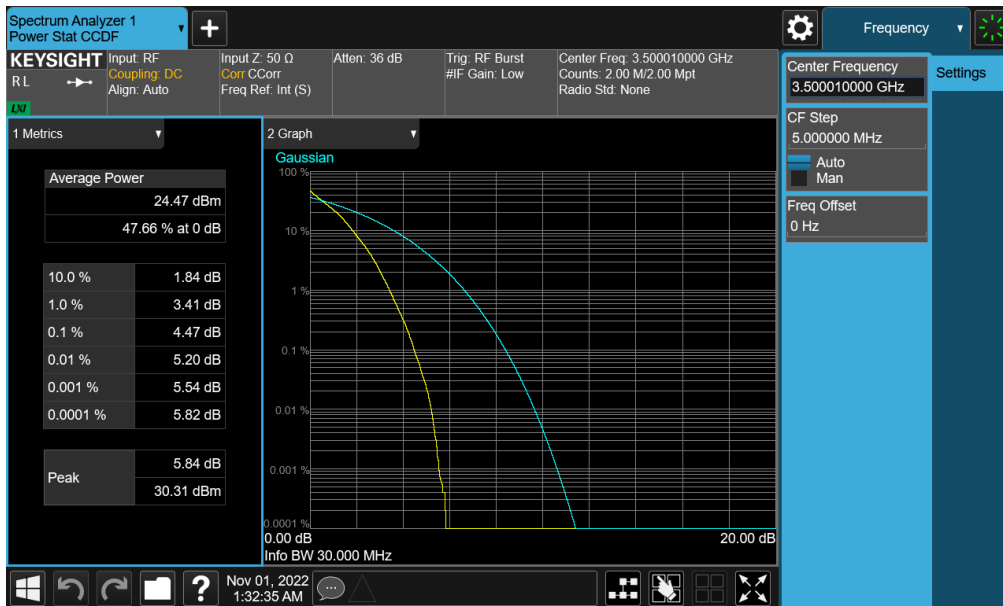


**Plot 7-200. PAR Plot (NR Band n77 - DoD Band – 40MHz CP-OFDM QPSK - Full RB)**

FCC ID: A3LSMS916U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2209010097-05.A3L	Test Dates: 10/08/2022 - 11/08/2022	EUT Type: Portable Handset	Page 130 of 202



Plot 7-201. PAR Plot (NR Band n77 - DoD Band – 40MHz CP-OFDM 256-QAM - Full RB)



Plot 7-202. PAR Plot (NR Band n77 - DoD Band – 30MHz DFT-s-OFDM  $\pi/2$  BPSK - Full RB)

FCC ID: A3LSMS916U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2209010097-05.A3L	Test Dates: 10/08/2022 - 11/08/2022	EUT Type: Portable Handset	Page 131 of 202



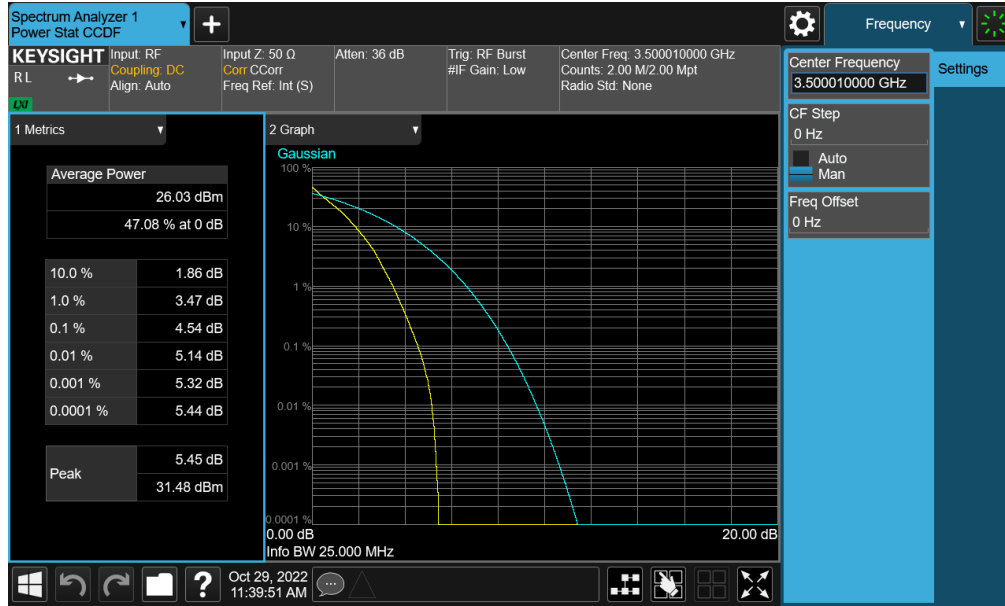


**Plot 7-203. PAR Plot (NR Band n77 - DoD Band – 30MHz CP-OFDM QPSK - Full RB)**



**Plot 7-204. PAR Plot (NR Band n77 - DoD Band – 30MHz CP-OFDM 256-QAM - Full RB)**

FCC ID: A3LSMS916U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2209010097-05.A3L	Test Dates: 10/08/2022 - 11/08/2022	EUT Type: Portable Handset	Page 132 of 202



Plot 7-205. PAR Plot (NR Band n77 - DoD Band – 25MHz DFT-s-OFDM  $\pi/2$  BPSK - Full RB)



Plot 7-206. PAR Plot (NR Band n77 - DoD Band – 25MHz CP-OFDM QPSK - Full RB)

FCC ID: A3LSMS916U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2209010097-05.A3L	Test Dates: 10/08/2022 - 11/08/2022	EUT Type: Portable Handset	Page 133 of 202