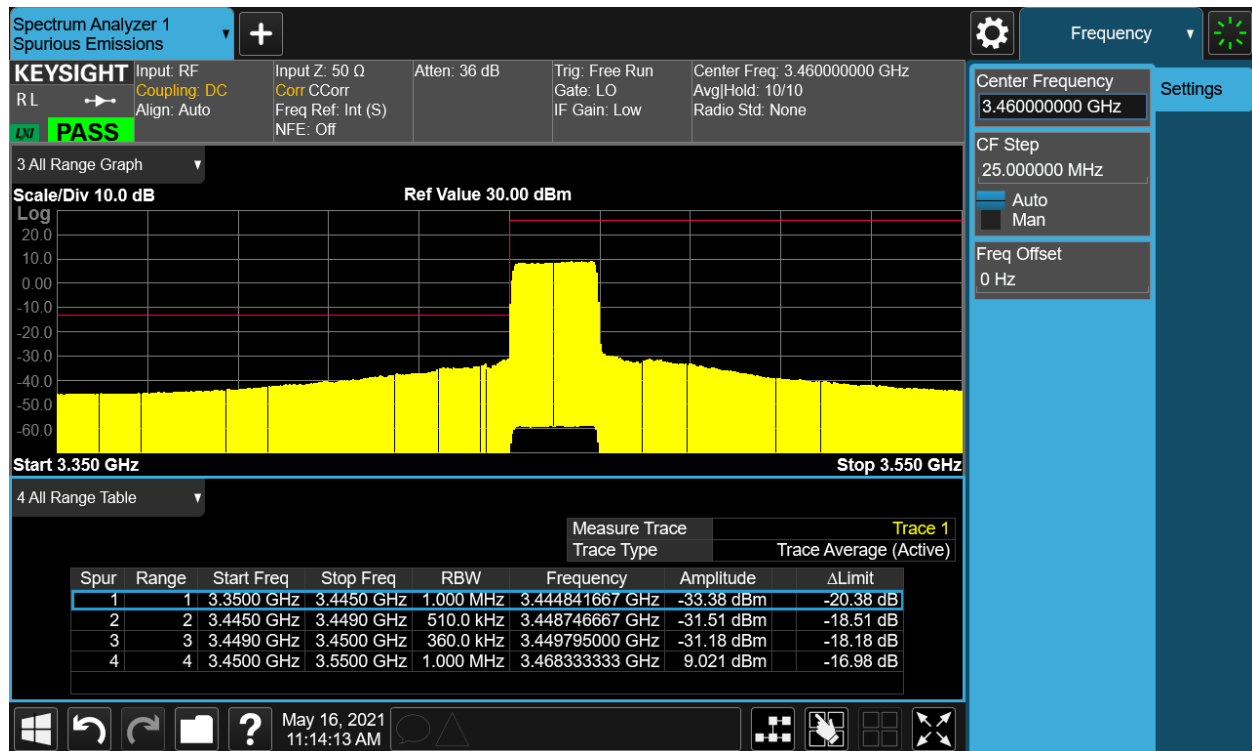
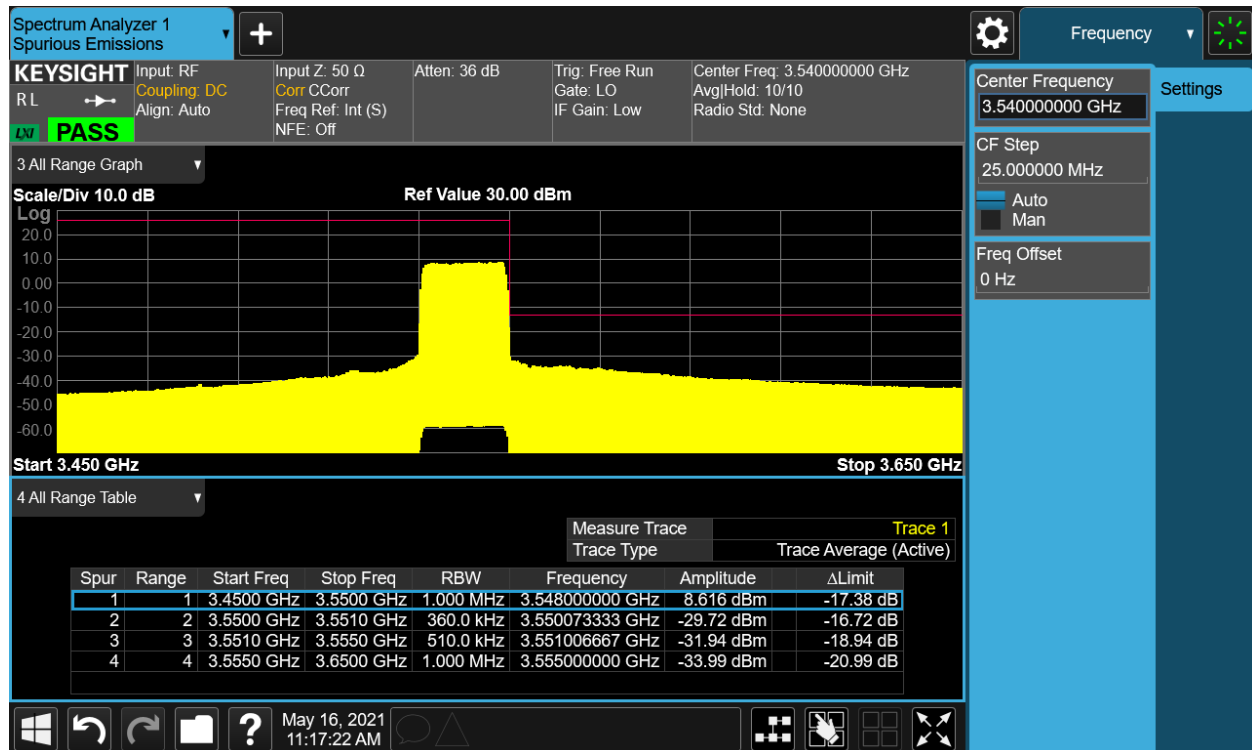




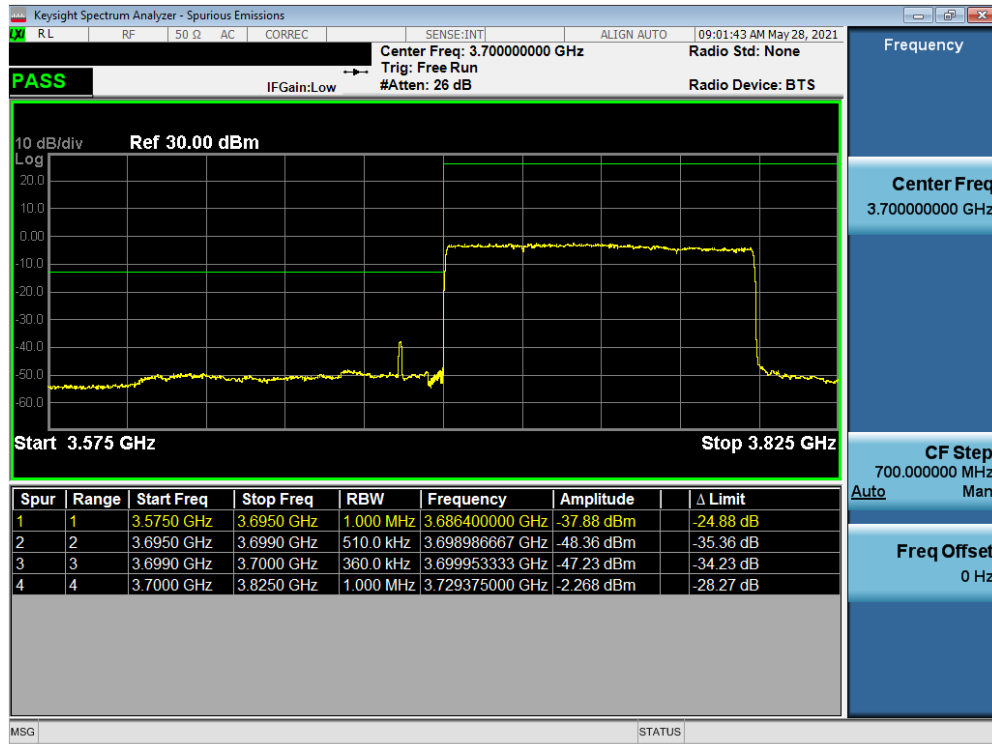
Plot 7-137. Lower Band Edge Plot (NR Band n77 PC2 - 20MHz CP-OFDM QPSK – Full RB Configuration)



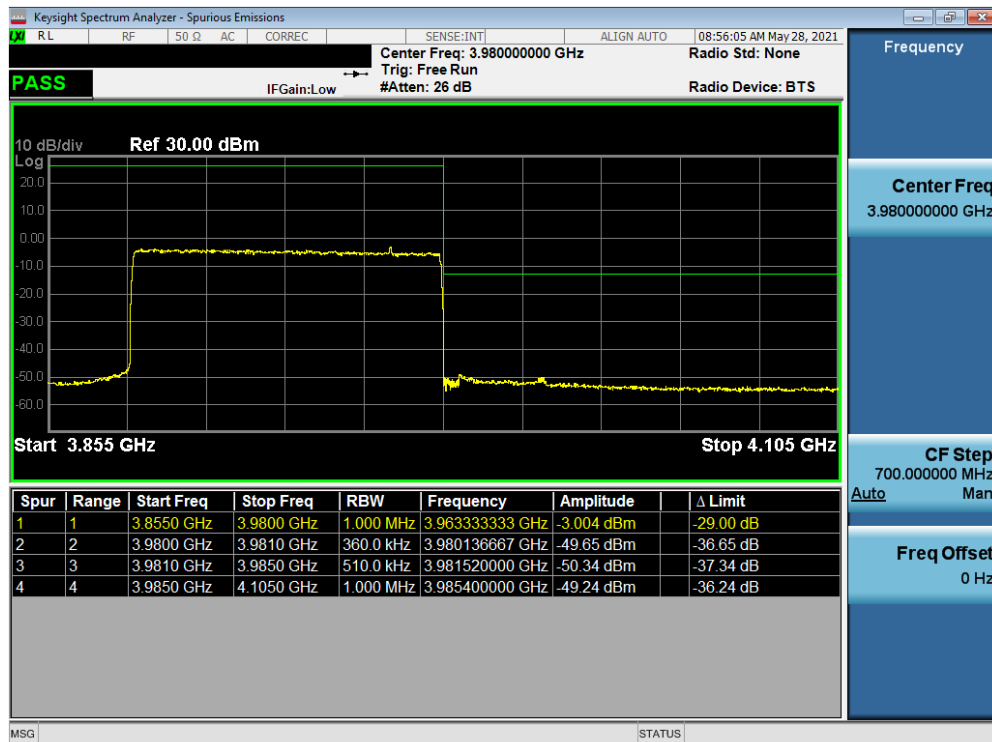
Plot 7-138. Upper Band Edge Plot (NR Band n77 PC2 - 20MHz CP-OFDM QPSK – Full RB Configuration)

FCC ID: A3LSMF711U1	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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NR Band n77 (PC2) – C-Band – SRS-2



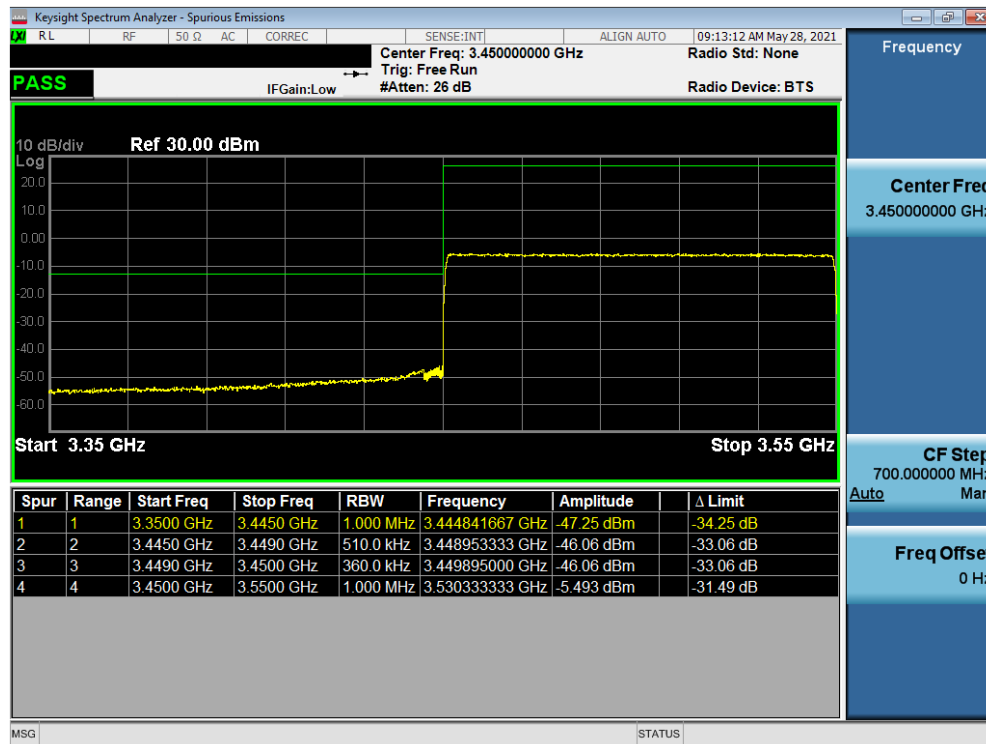
Plot 7-139. Lower Band Edge Plot (NR Band n77 PC2 - 100MHz DFT-s-OFDM QPSK – Full RB Configuration)



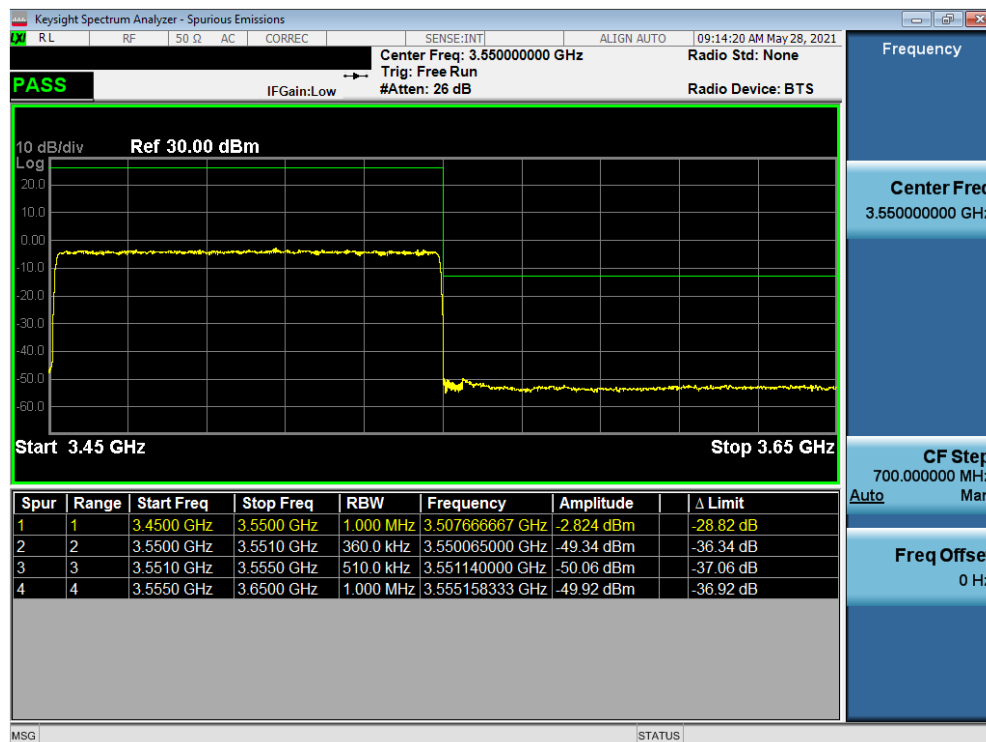
Plot 7-140. Upper Band Edge Plot (NR Band n77 PC2 - 100MHz DFT-s-OFDM QPSK – Full RB Configuration)

FCC ID: A3LSMF711U1	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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NR Band n77 (PC2) – DoD-Band – SRS-2



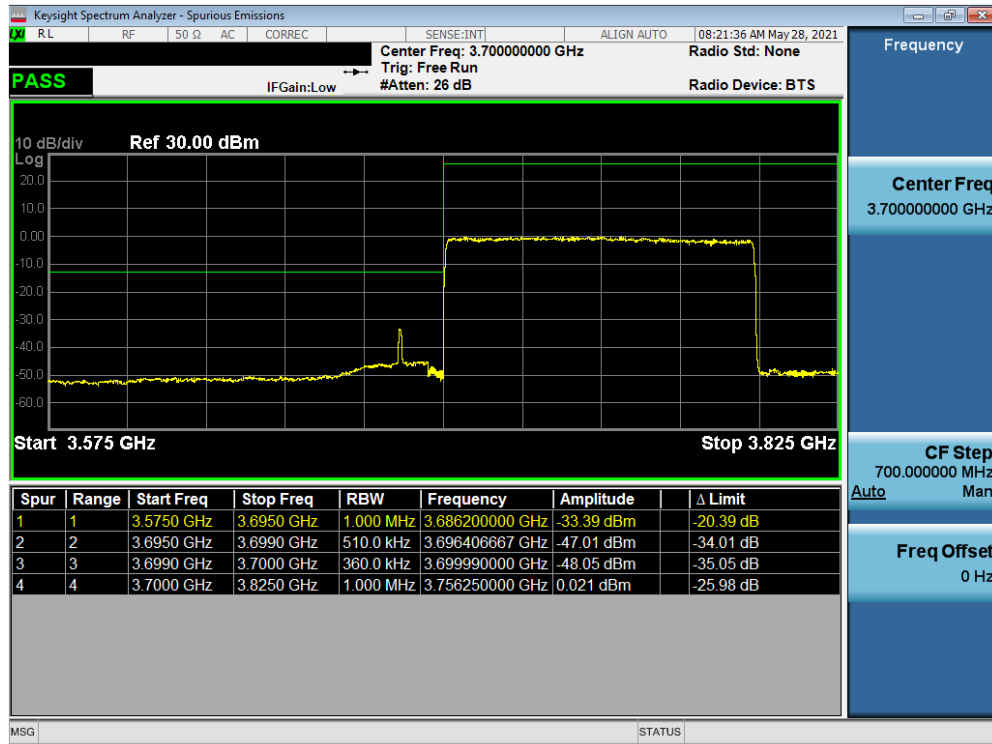
Plot 7-141. Lower Band Edge Plot (NR Band n77 PC2 - 100MHz DFT-s-OFDM QPSK – Full RB Configuration)



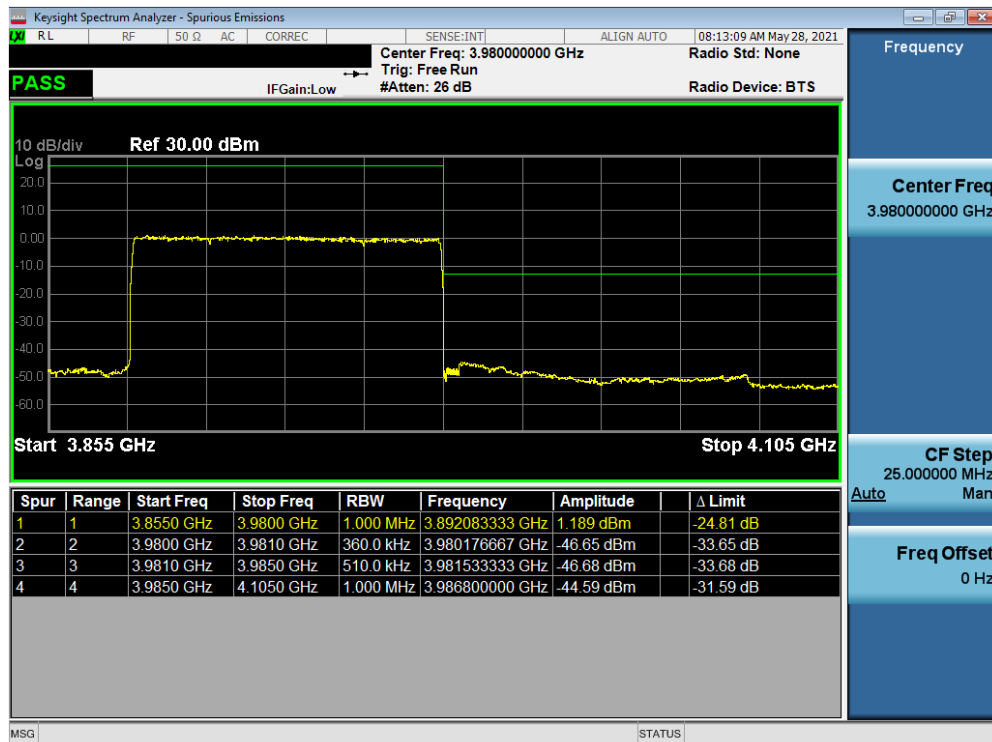
Plot 7-142. Upper Band Edge Plot (NR Band n77 PC2 - 100MHz DFT-s-OFDM QPSK – Full RB Configuration)

FCC ID: A3LSMF711U1	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
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NR Band n77 (PC2) – C-Band – SRS-3



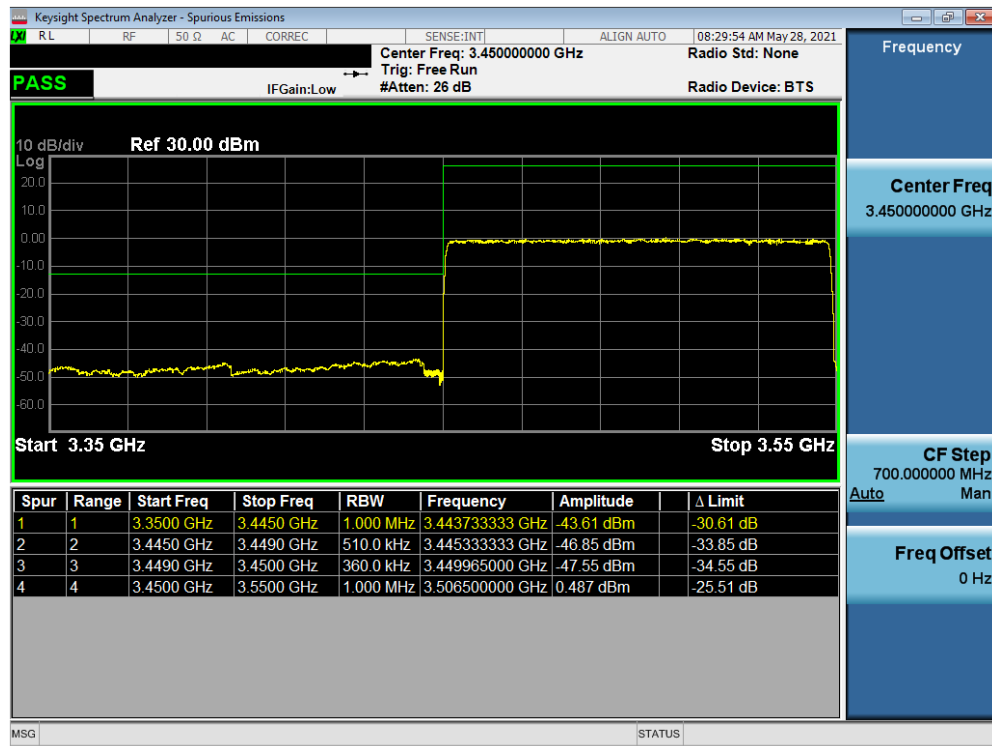
Plot 7-143. Lower Band Edge Plot (NR Band n77 PC2 - 100MHz DFT-s-OFDM QPSK – Full RB Configuration)



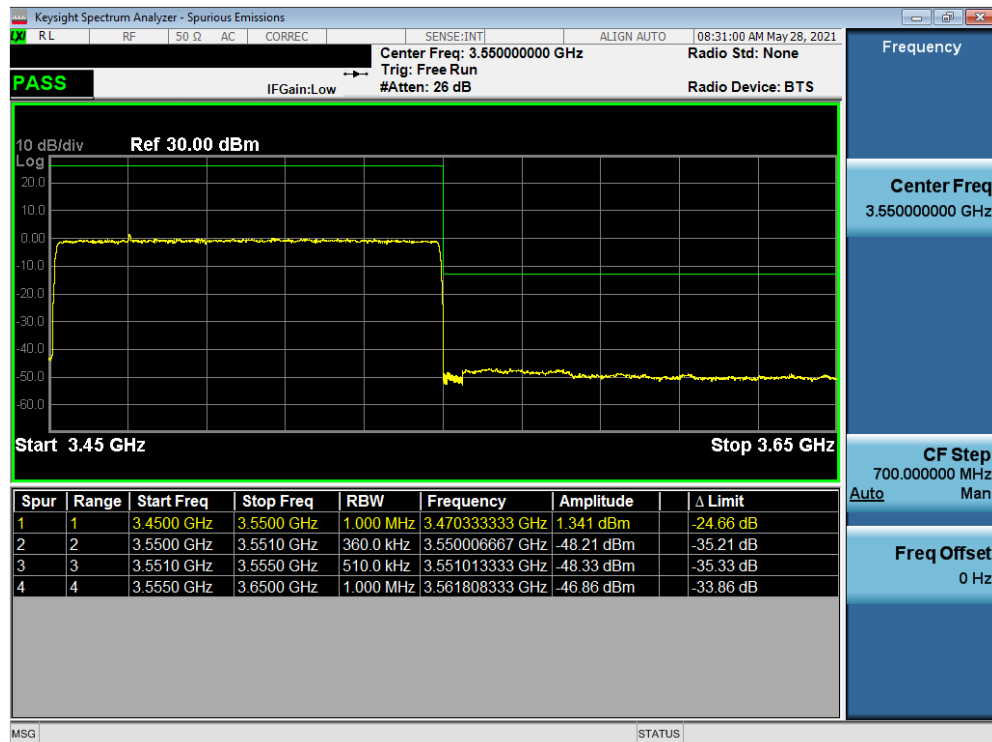
Plot 7-144. Upper Band Edge Plot (NR Band n77 PC2 - 100MHz DFT-s-OFDM QPSK – Full RB Configuration)

FCC ID: A3LSMF711U1	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
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NR Band n77 (PC2) – DoD-Band – SRS-3



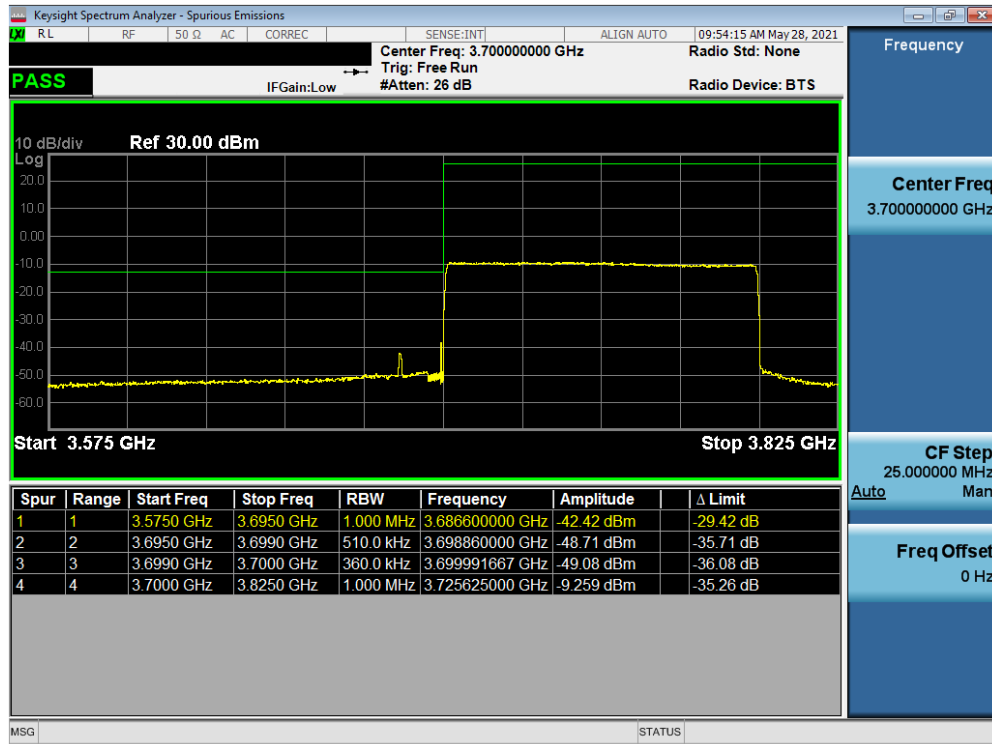
Plot 7-145. Lower Band Edge Plot (NR Band n77 PC2 - 100MHz DFT-s-OFDM QPSK – Full RB Configuration)



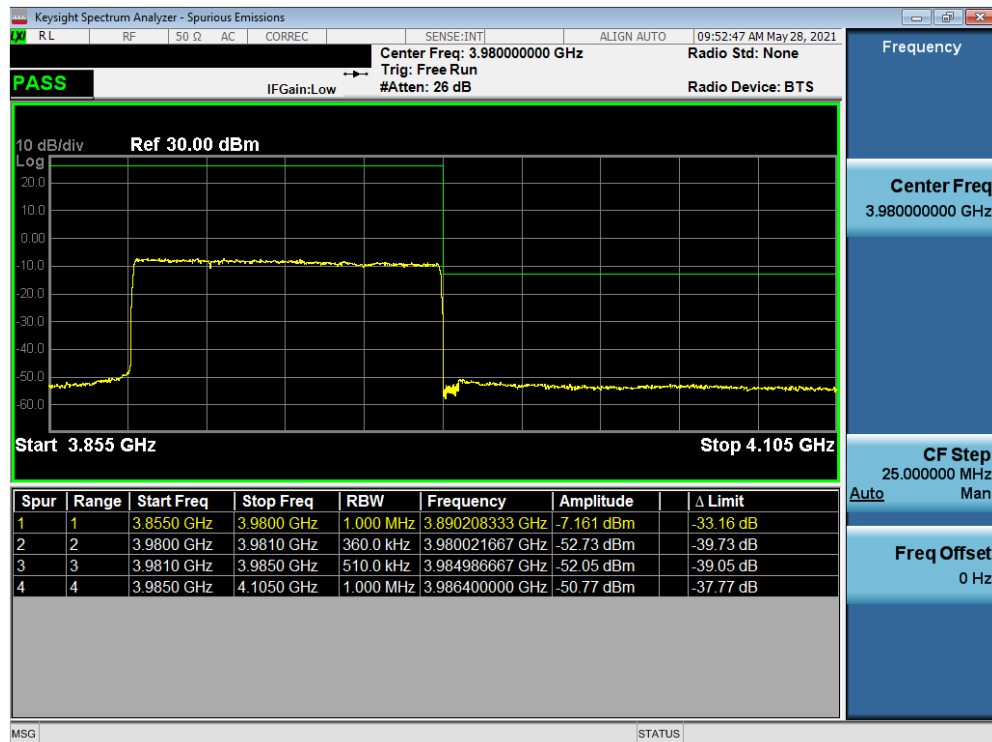
Plot 7-146. Upper Band Edge Plot (NR Band n77 PC2 - 100MHz DFT-s-OFDM QPSK – Full RB Configuration)

FCC ID: A3LSMF711U1	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
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NR Band n77 (PC2) – C-Band – SRS-4



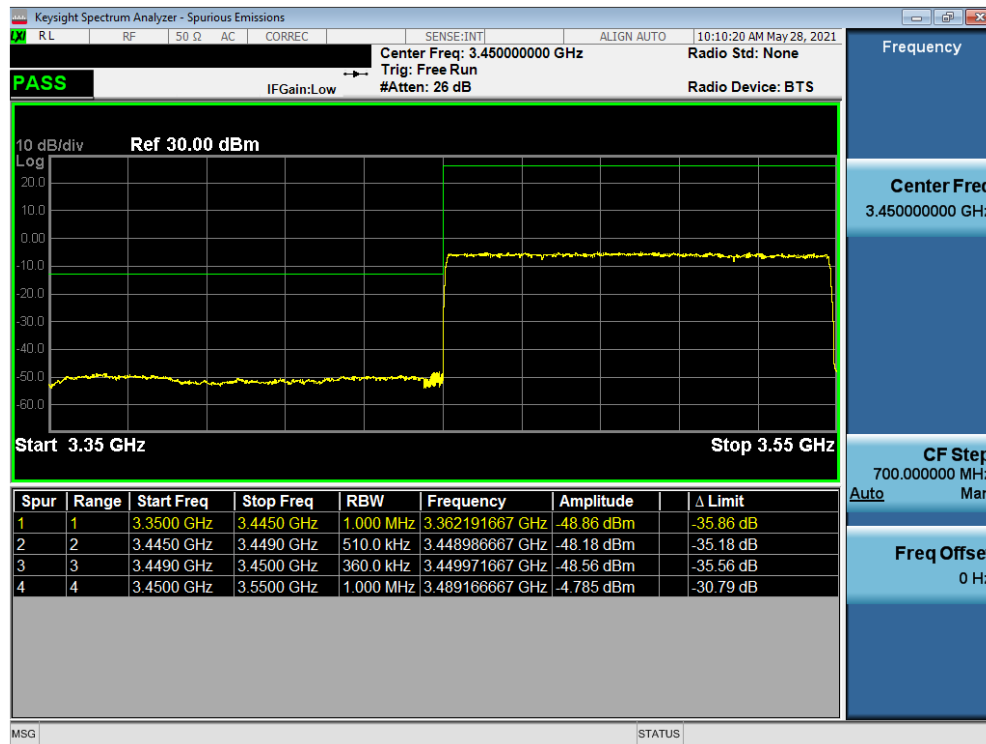
Plot 7-147. Lower Band Edge Plot (NR Band n77 PC2 - 100MHz DFT-s-OFDM QPSK – Full RB Configuration)



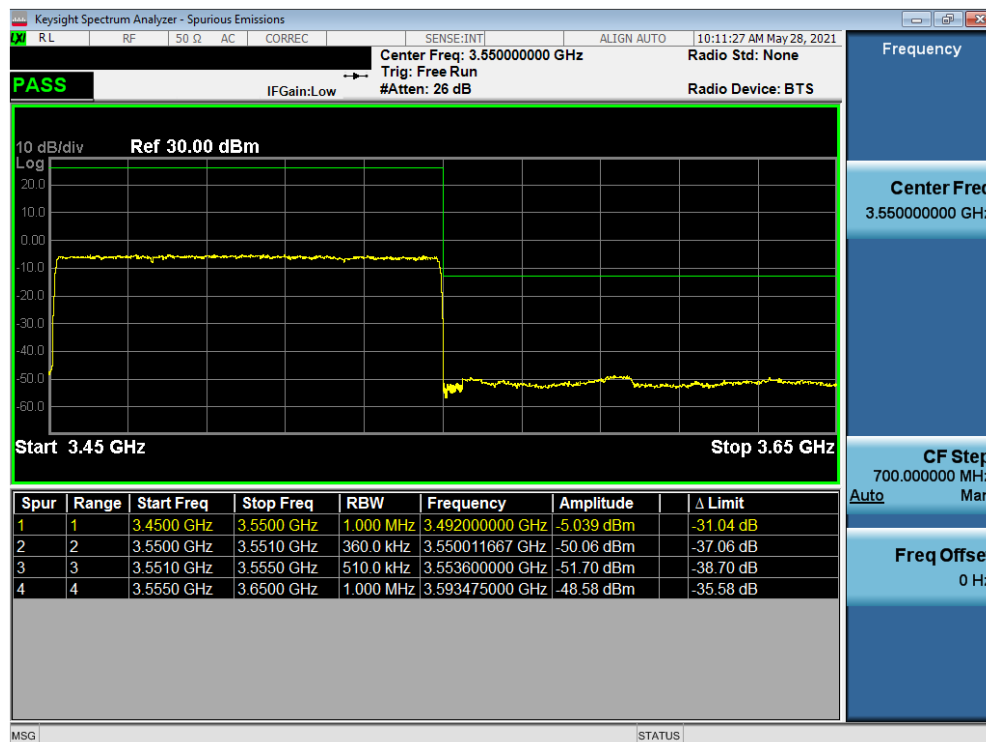
Plot 7-148. Upper Band Edge Plot (NR Band n77 PC2 - 100MHz DFT-s-OFDM QPSK – Full RB Configuration)

FCC ID: A3LSMF711U1	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
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NR Band n77 (PC2) – DoD-Band – SRS-4



Plot 7-149. Lower Band Edge Plot (NR Band n77 PC2 - 100MHz DFT-s-OFDM QPSK – Full RB Configuration)



Plot 7-150. Upper Band Edge Plot (NR Band n77 PC2 - 100MHz DFT-s-OFDM QPSK – Full RB Configuration)

FCC ID: A3LSMF711U1	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
Test Report S/N: 1M2107290086-20.A3L	Test Dates: 4/16/2021 - 6/9/2021	EUT Type: Portable Handset		Page 102 of 161

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.

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.



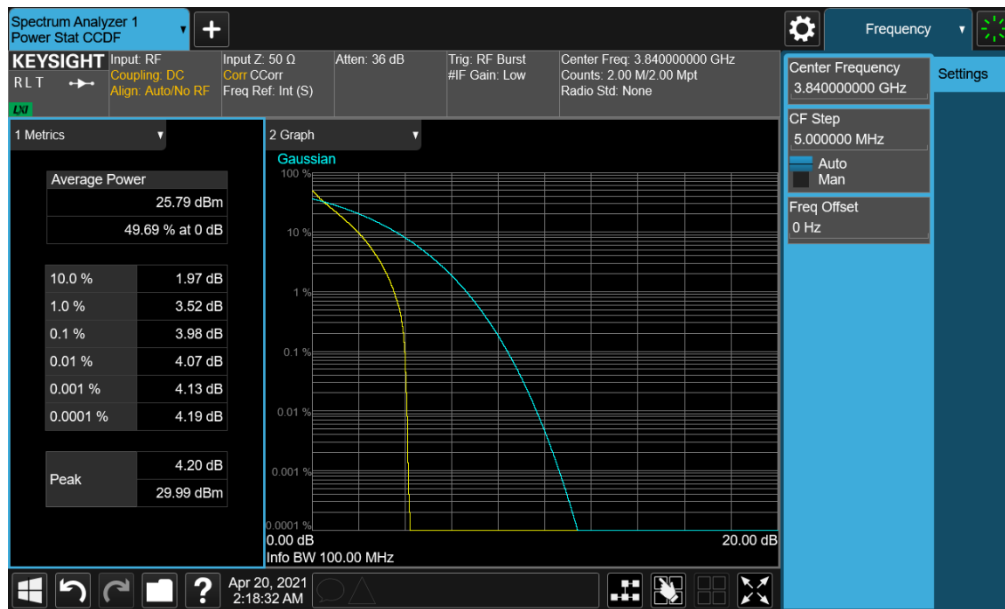
Figure 7-5. Test Instrument & Measurement Setup

Test Notes

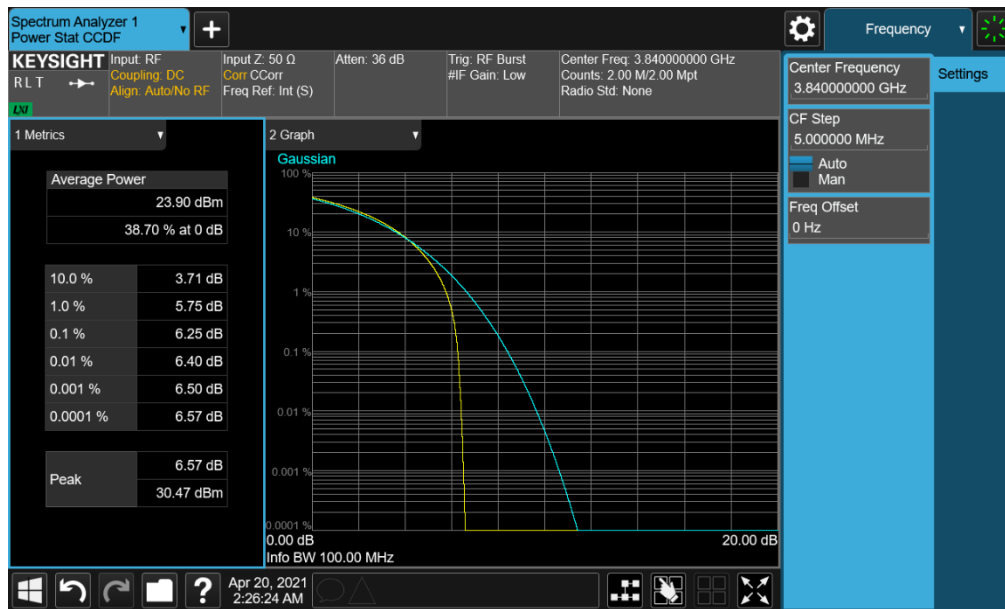
- 1) The Peak to Average Ratio was only measured on the antenna with the highest conducted power for each band (SRS-1).

FCC ID: A3LSMF711U1	 PART 27 MEASUREMENT REPORT 	Approved by: Technical Manager
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NR Band n77 (PC2) – C-Band – SRS-1



Plot 7-151. PAR Plot (NR Band n77 PC2 - 100MHz $\pi/2$ BPSK - Full RB)

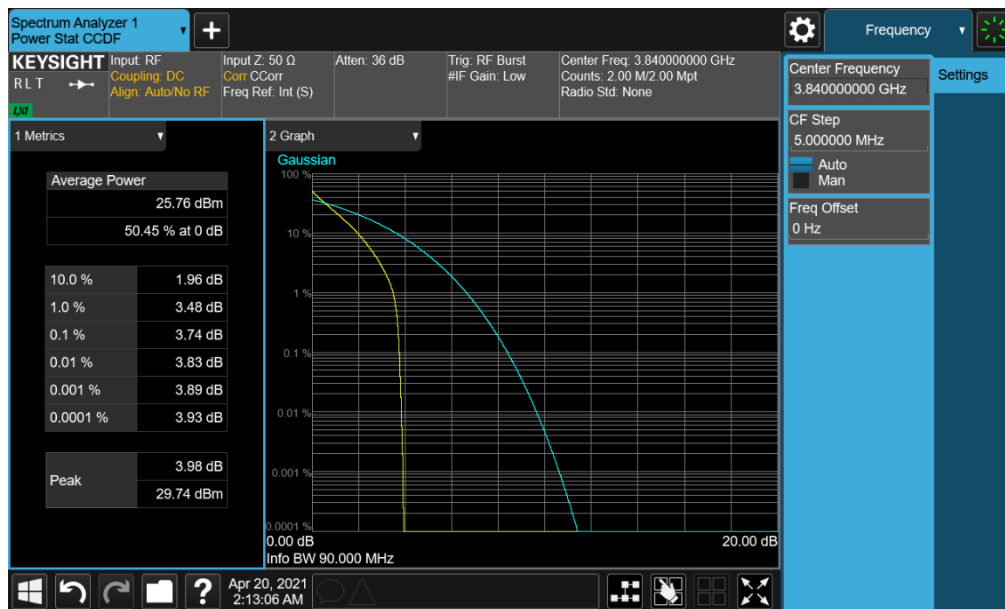


Plot 7-152. PAR Plot (NR Band n77 PC2 - 100MHz CP-OFDM QPSK - Full RB)

FCC ID: A3LSMF711U1	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
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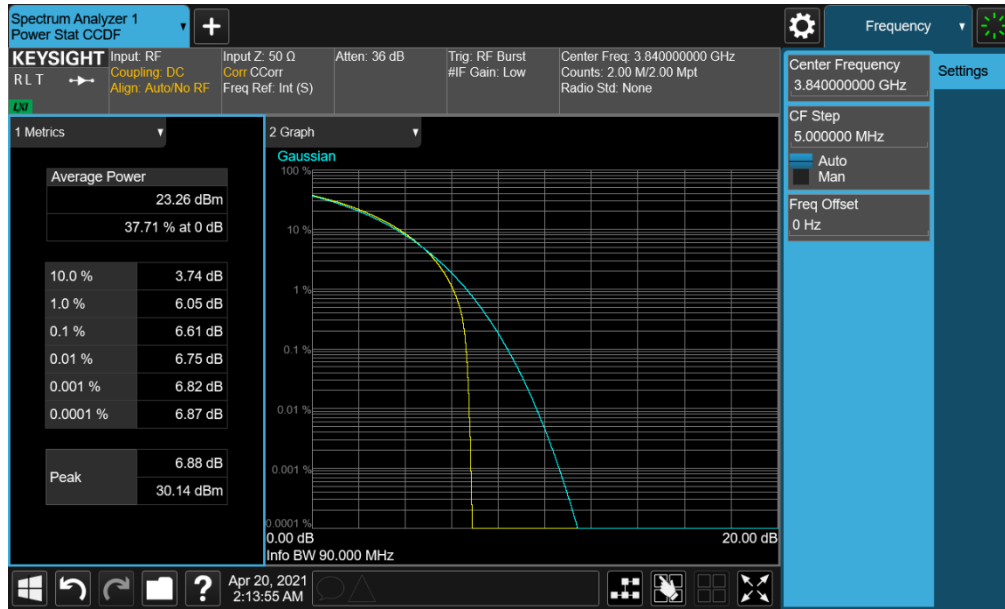


Plot 7-153. PAR Plot (NR Band n77 PC2 - 100MHz CP-OFDM 256-QAM - Full RB)



Plot 7-154. PAR Plot (NR Band n77 PC2 - 90MHz $\pi/2$ BPSK - Full RB)

FCC ID: A3LSMF711U1	 PART 27 MEASUREMENT REPORT 		Approved by: Technical Manager
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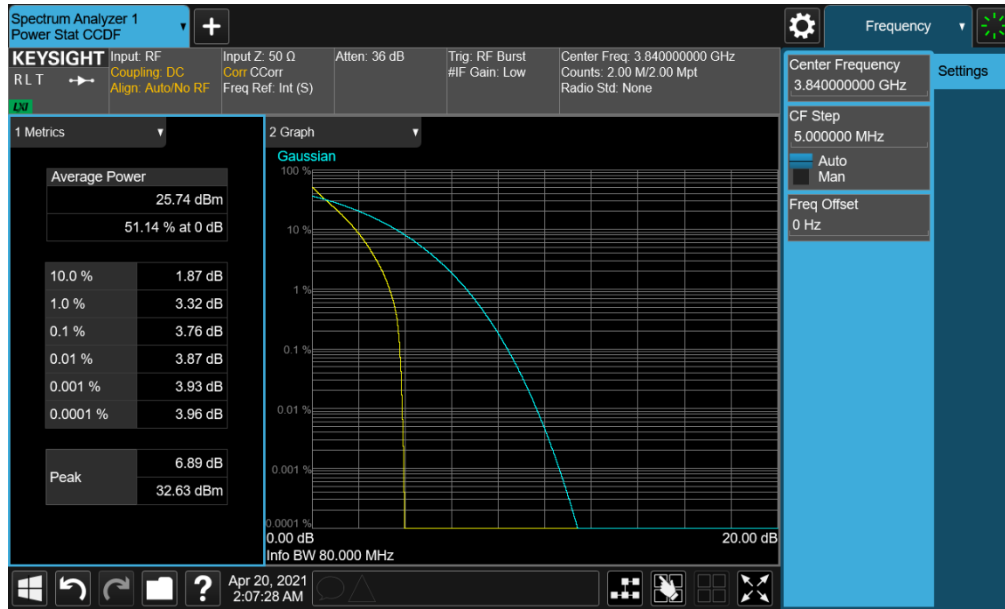


Plot 7-155. PAR Plot (NR Band n77 PC2 - 90MHz CP-OFDM QPSK - Full RB)

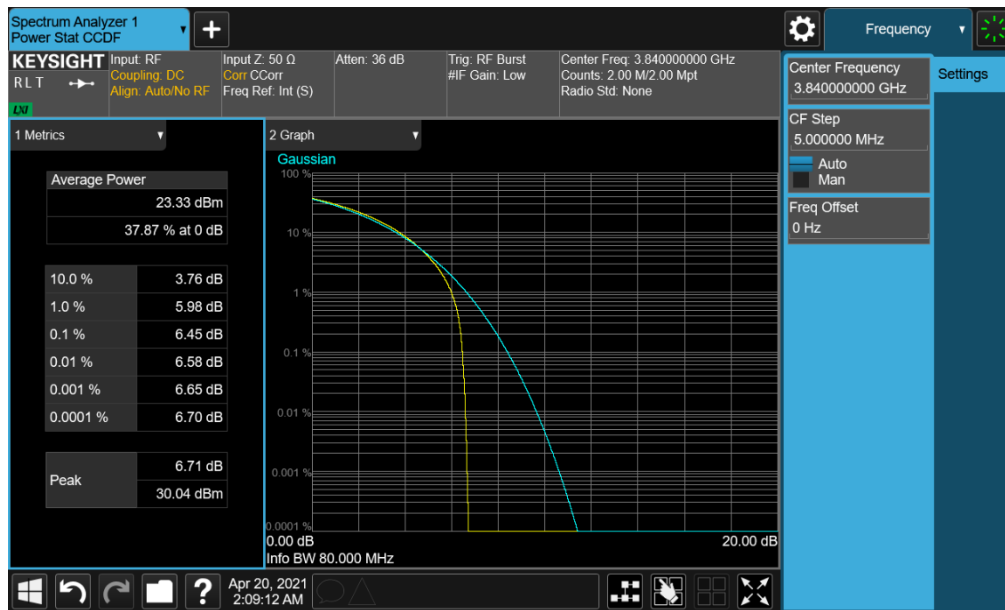


Plot 7-156. PAR Plot (NR Band n77 PC2 - 90MHz CP-OFDM 256-QAM - Full RB)

FCC ID: A3LSMF711U1	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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Plot 7-157. PAR Plot (NR Band n77 PC2 - 80MHz $\pi/2$ BPSK - Full RB)

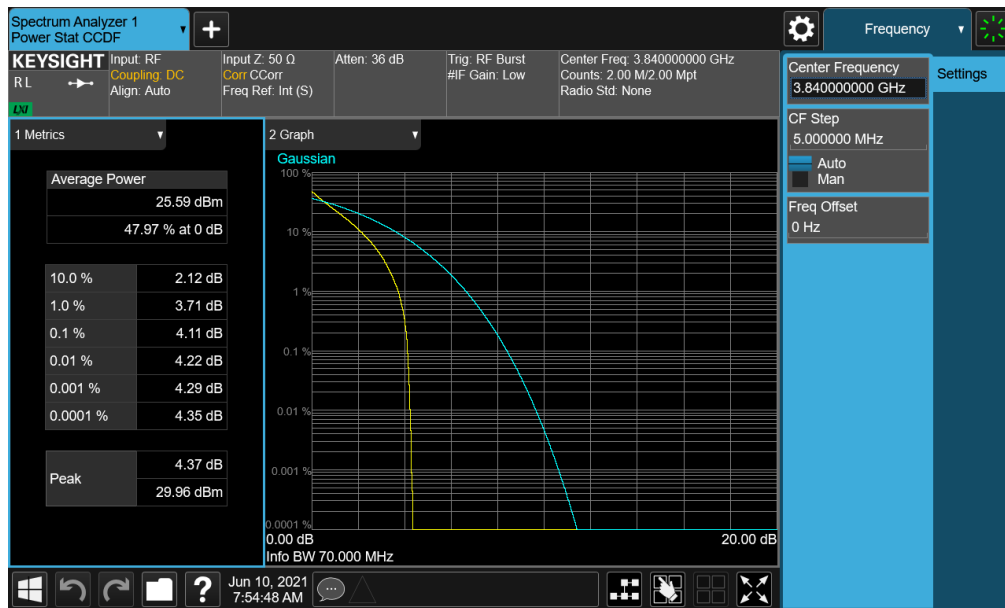


Plot 7-158. PAR Plot (NR Band n77 PC2 - 80MHz CP-OFDM QPSK - Full RB)

FCC ID: A3LSMF711U1	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2107290086-20.A3L	Test Dates: 4/16/2021 - 6/9/2021	EUT Type: Portable Handset	Page 107 of 161

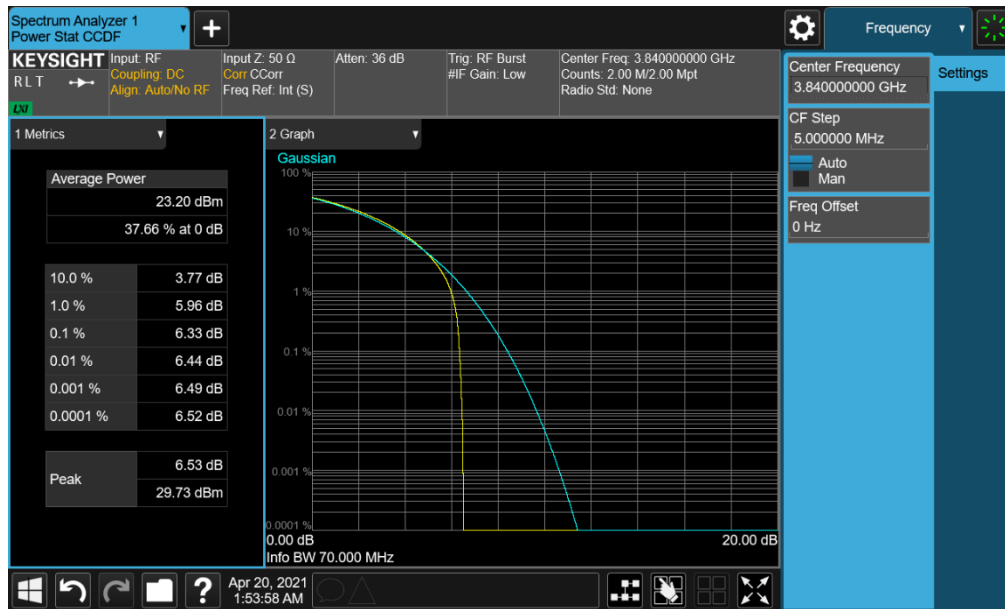


Plot 7-159. PAR Plot (NR Band n77 PC2 - 80MHz CP-OFDM 256-QAM - Full RB)



Plot 7-160. PAR Plot (NR Band n77 PC2 - 70MHz $\pi/2$ BPSK - Full RB)

FCC ID: A3LSMF711U1	 PART 27 MEASUREMENT REPORT 		Approved by: Technical Manager
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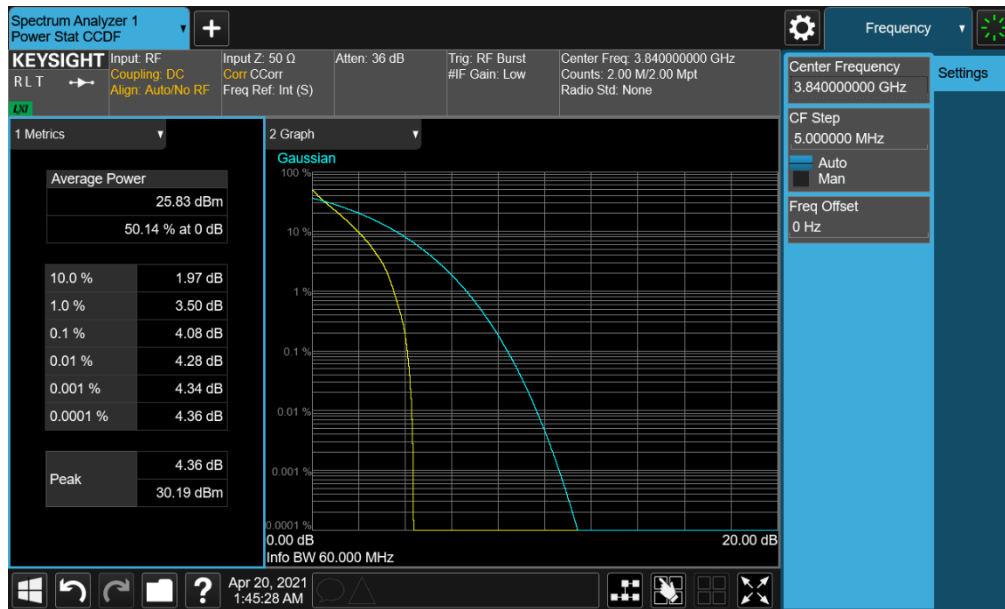


Plot 7-161. PAR Plot (NR Band n77 PC2 - 70MHz CP-OFDM QPSK - Full RB)

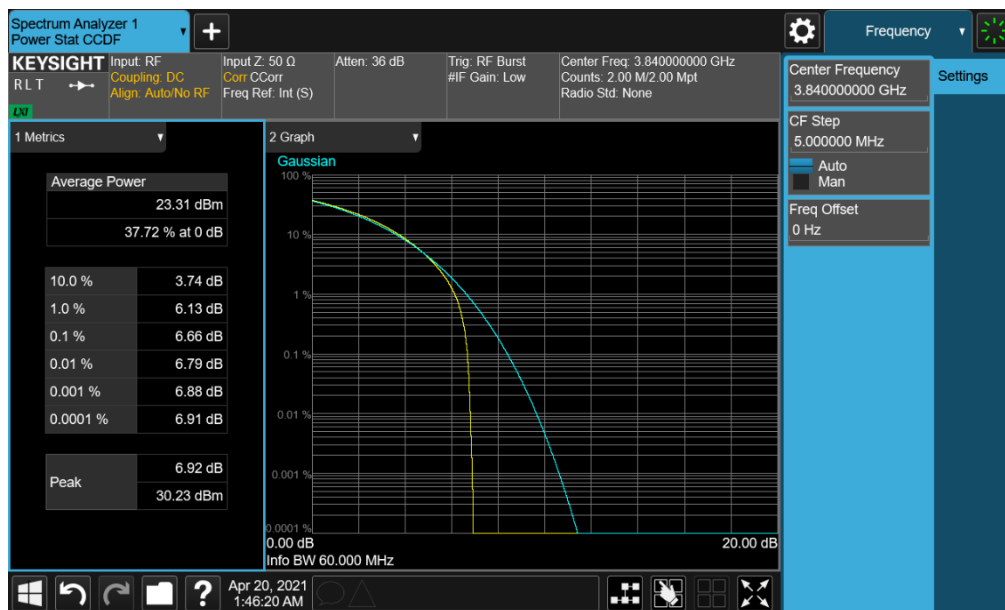


Plot 7-162. PAR Plot (NR Band n77 PC2 - 70MHz CP-OFDM 256-QAM - Full RB)

FCC ID: A3LSMF711U1	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2107290086-20-A3L	Test Dates: 4/16/2021 - 6/9/2021	EUT Type: Portable Handset	Page 109 of 161

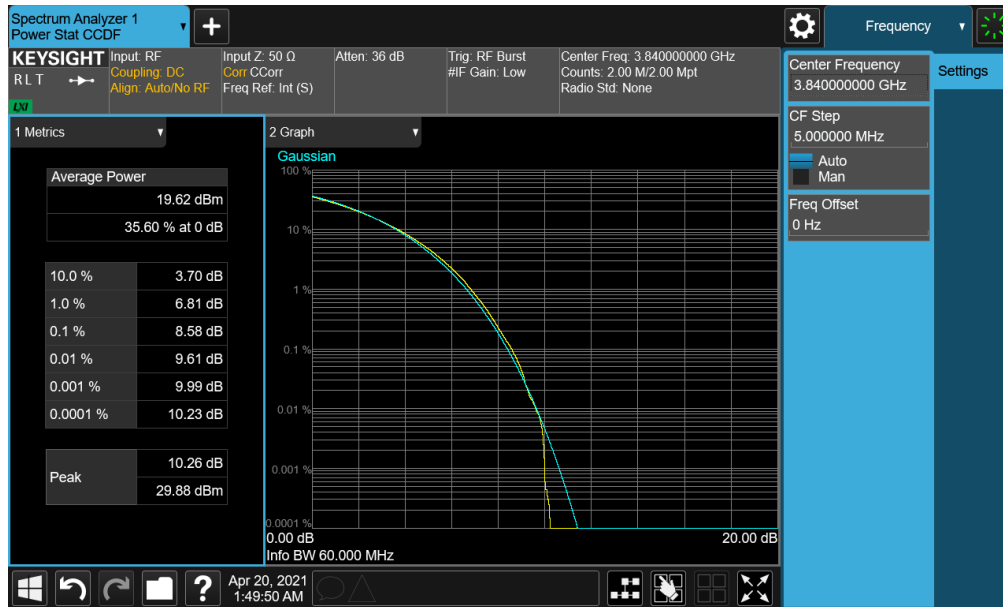


Plot 7-163. PAR Plot (NR Band n77 PC2 - 60MHz $\pi/2$ BPSK - Full RB)

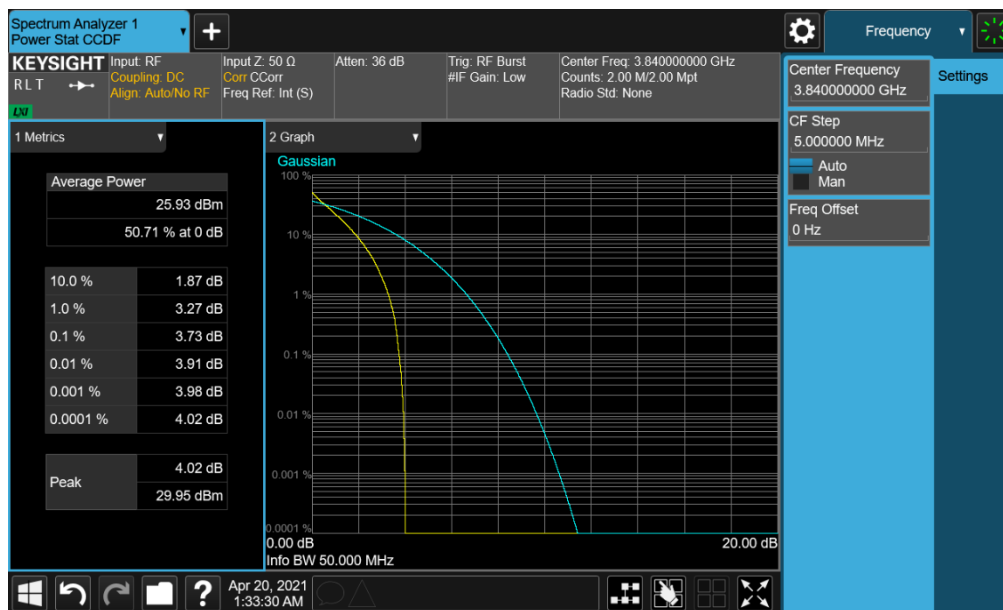


Plot 7-164. PAR Plot (NR Band n77 PC2 - 60MHz CP-OFDM QPSK - Full RB)

FCC ID: A3LSMF711U1	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
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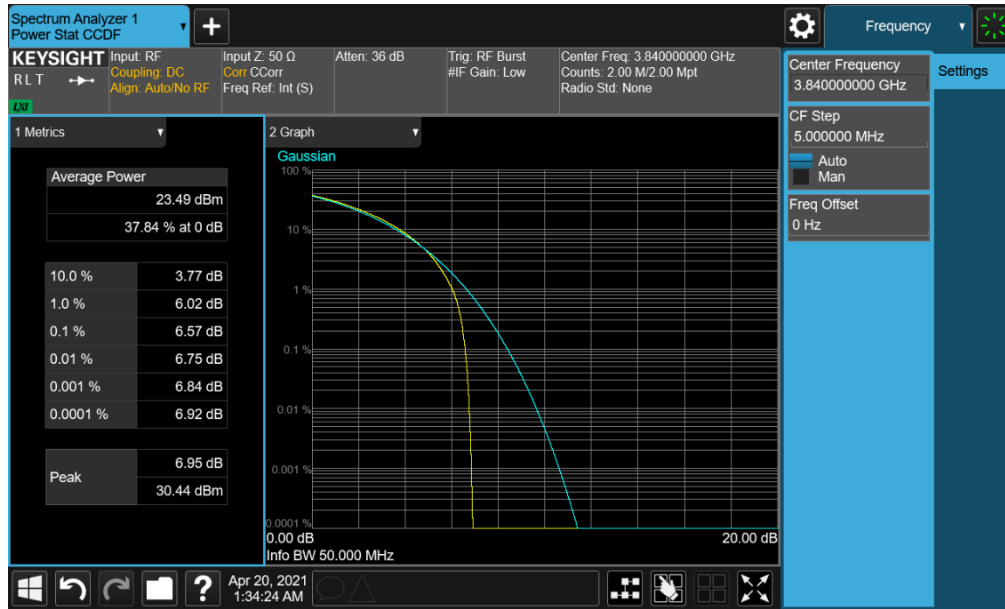


Plot 7-165. PAR Plot (NR Band n77 PC2 - 60MHz CP-OFDM 256-QAM - Full RB)



Plot 7-166. PAR Plot (NR Band n77 PC2 - 50MHz $\pi/2$ BPSK - Full RB)

FCC ID: A3LSMF711U1	 PART 27 MEASUREMENT REPORT 		Approved by: Technical Manager
Test Report S/N: 1M2107290086-20-A3L	Test Dates: 4/16/2021 - 6/9/2021	EUT Type: Portable Handset	Page 111 of 161

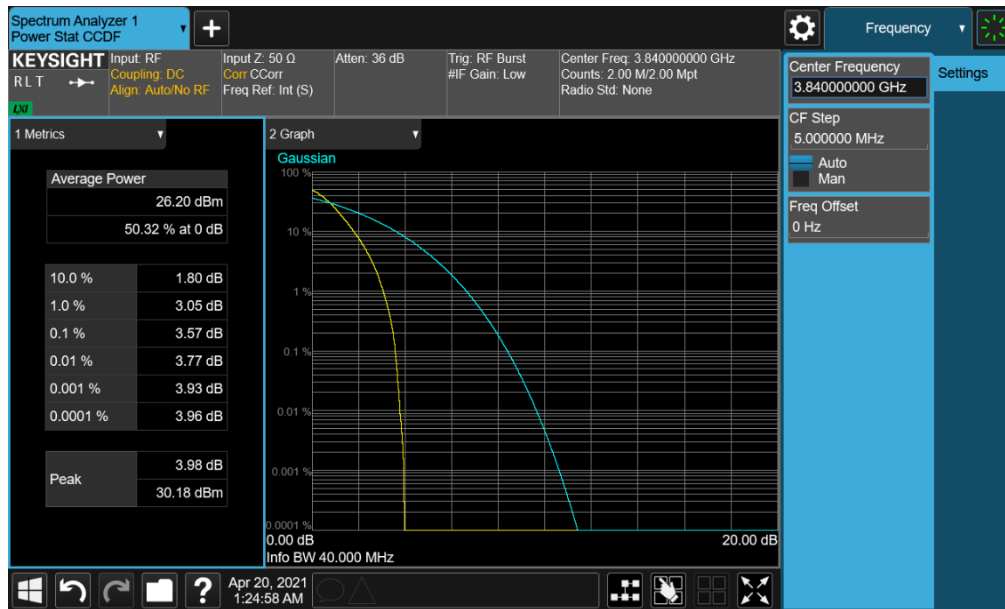


Plot 7-167. PAR Plot (NR Band n77 PC2 - 50MHz CP-OFDM QPSK - Full RB)

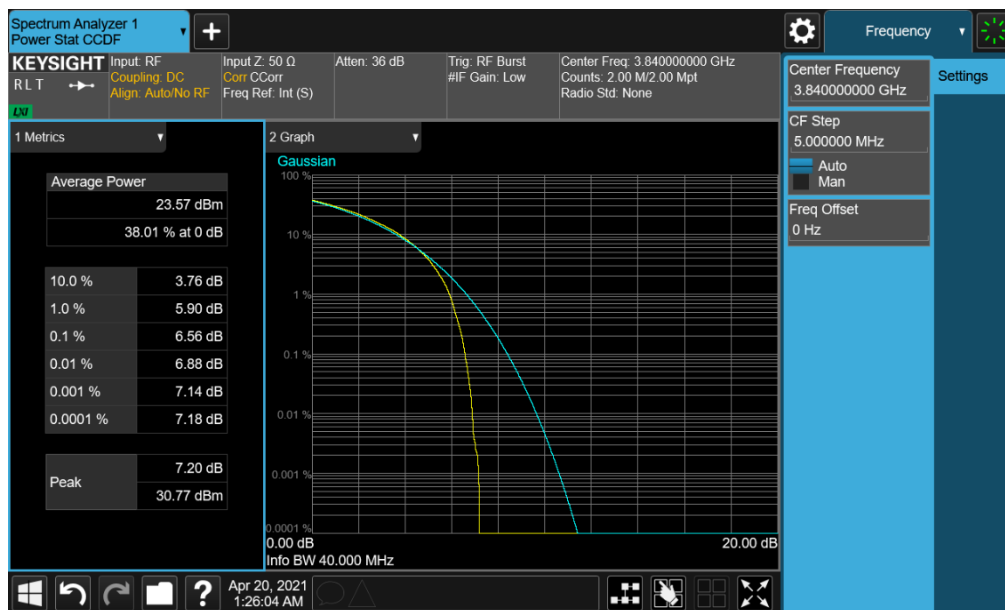


Plot 7-168. PAR Plot (NR Band n77 PC2 - 50MHz CP-OFDM 256-QAM - Full RB)

FCC ID: A3LSMF711U1	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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Plot 7-169. PAR Plot (NR Band n77 PC2 - 40MHz $\pi/2$ BPSK - Full RB)

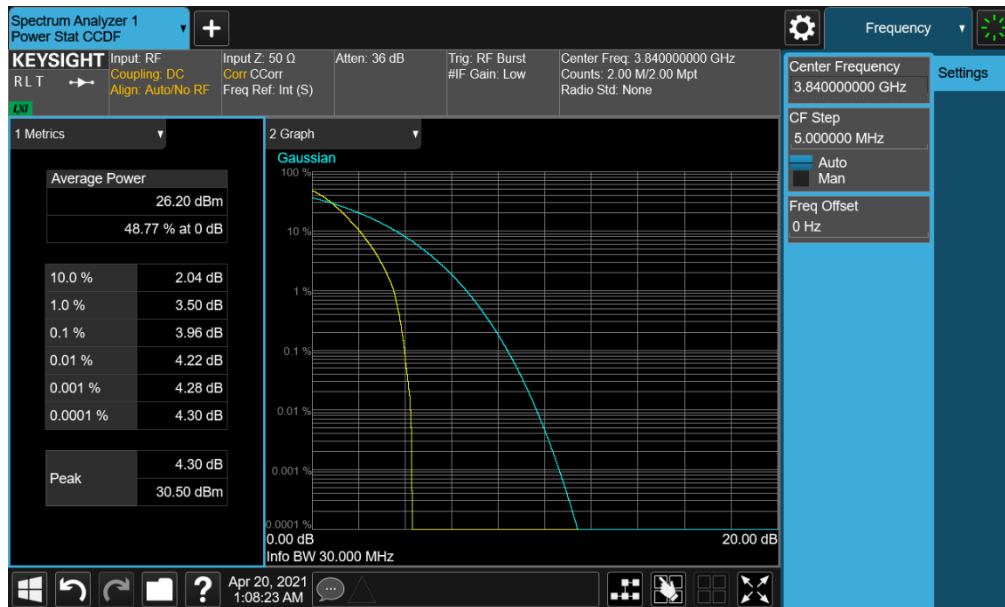


Plot 7-170. PAR Plot (NR Band n77 PC2 - 40MHz CP-OFDM QPSK - Full RB)

FCC ID: A3LSMF711U1	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2107290086-20.A3L	Test Dates: 4/16/2021 - 6/9/2021	EUT Type: Portable Handset	Page 113 of 161

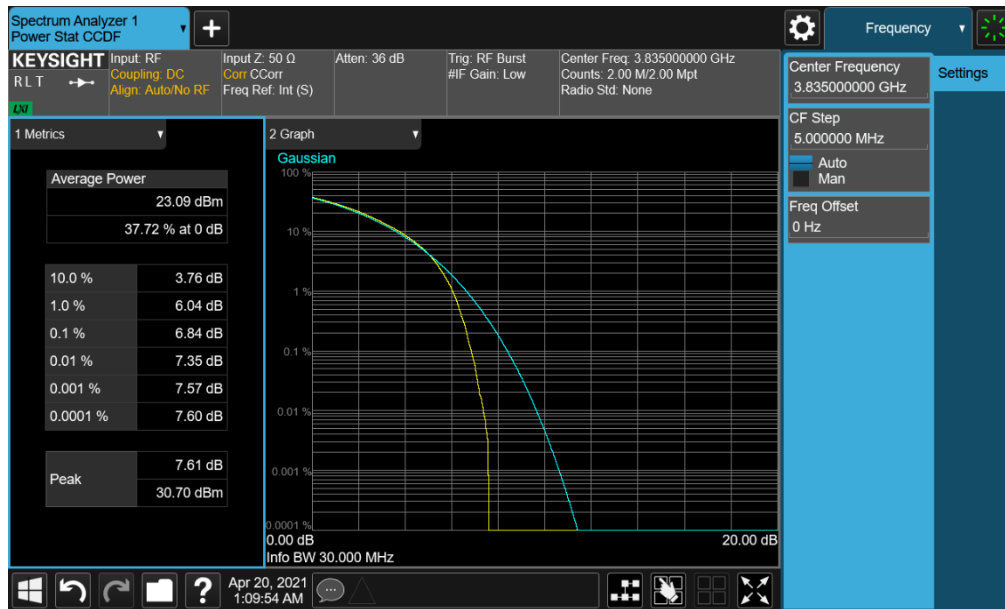


Plot 7-171. PAR Plot (NR Band n77 PC2 - 40MHz CP-OFDM 256-QAM - Full RB)



Plot 7-172. PAR Plot (NR Band n77 PC2 - 30MHz $\pi/2$ BPSK - Full RB)

FCC ID: A3LSMF711U1	 PART 27 MEASUREMENT REPORT 		Approved by: Technical Manager
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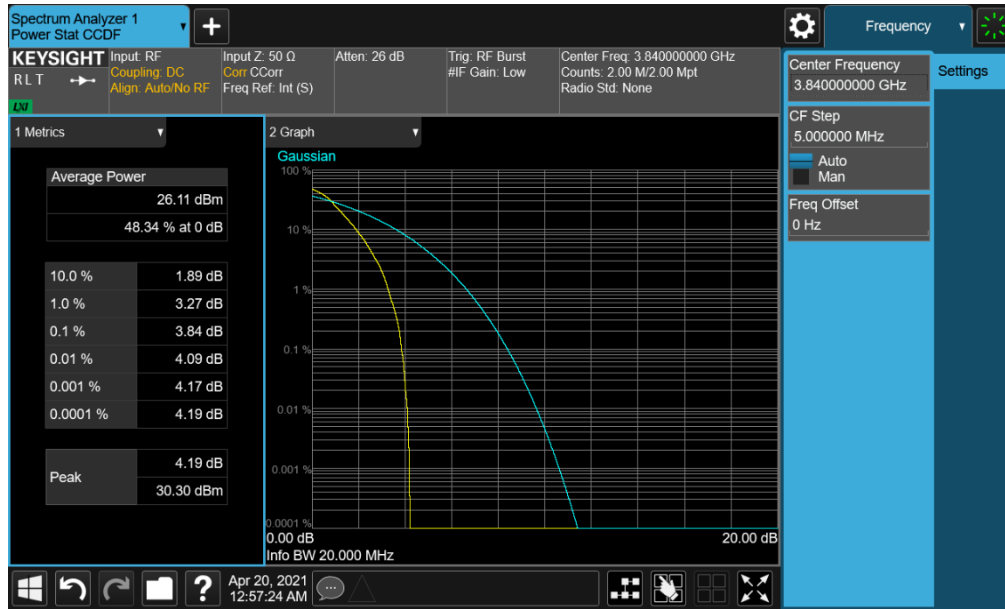


Plot 7-173. PAR Plot (NR Band n77 PC2 - 30MHz CP-OFDM QPSK - Full RB)

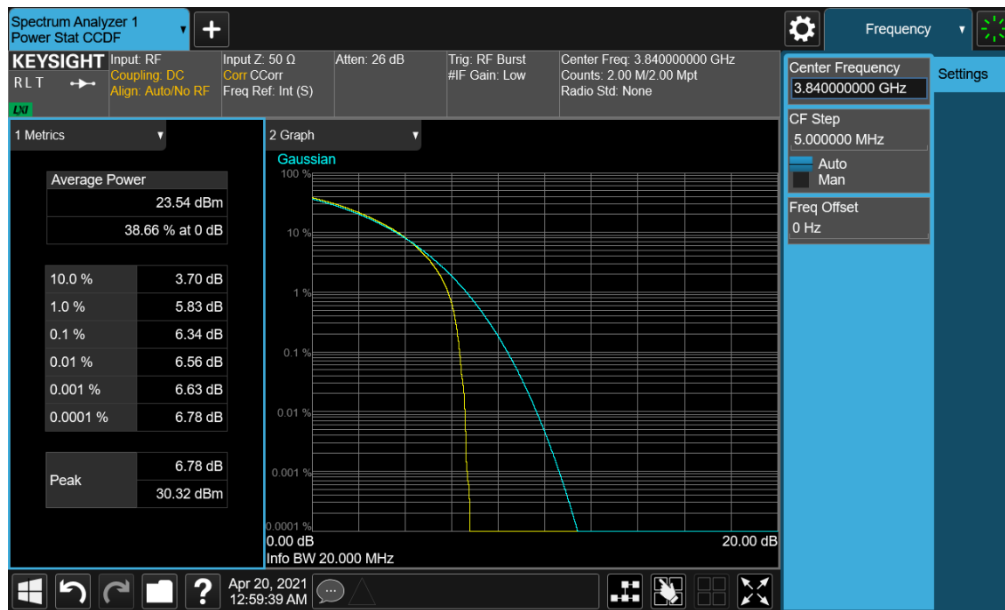


Plot 7-174. PAR Plot (NR Band n77 PC2 - 30MHz CP-OFDM 256-QAM - Full RB)

FCC ID: A3LSMF711U1	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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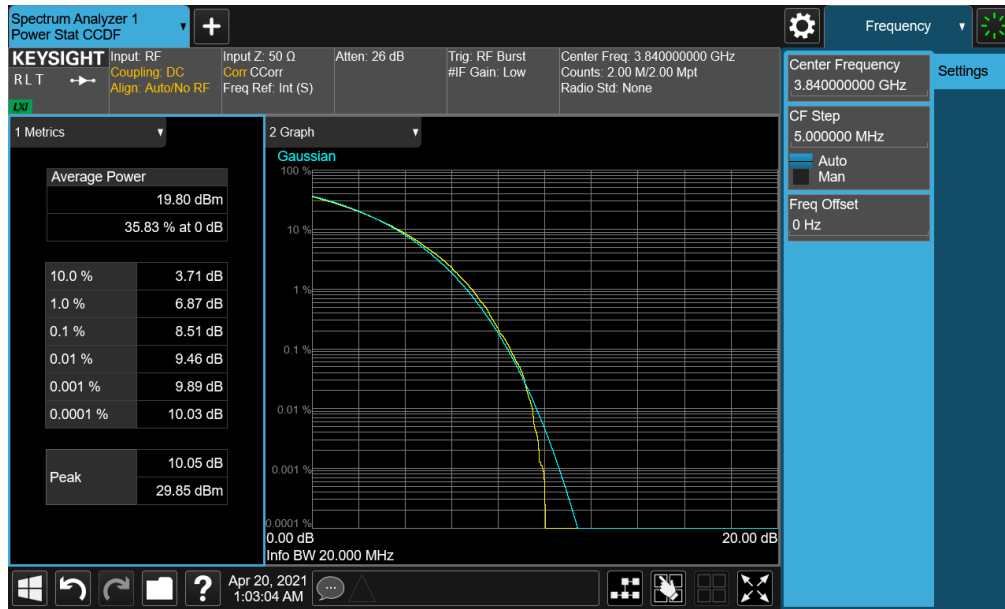


Plot 7-175. PAR Plot (NR Band n77 PC2 - 20MHz $\pi/2$ BPSK - Full RB)



Plot 7-176. PAR Plot (NR Band n77 PC2 - 20MHz CP-OFDM QPSK - Full RB)

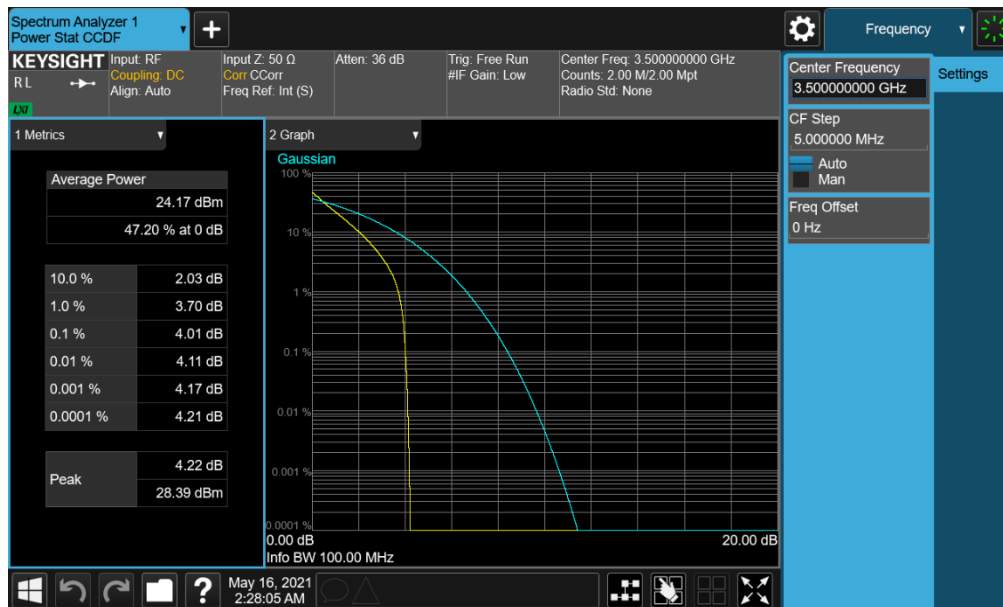
FCC ID: A3LSMF711U1	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2107290086-20-A3L	Test Dates: 4/16/2021 - 6/9/2021	EUT Type: Portable Handset	Page 116 of 161



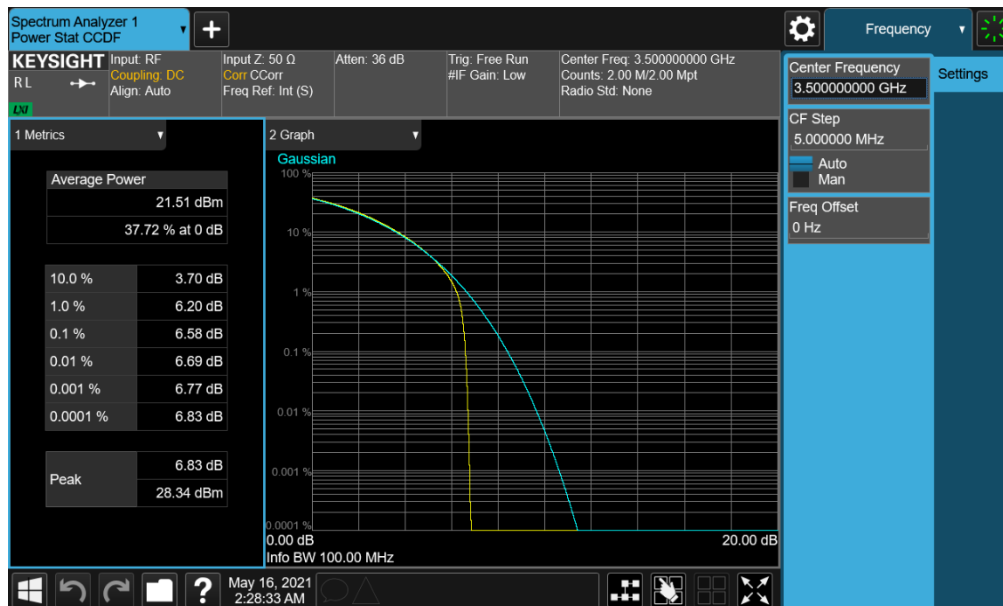
Plot 7-177. PAR Plot (NR Band n77 PC2 - 20MHz CP-OFDM 256-QAM - Full RB)

FCC ID: A3LSMF711U1	PCTEST Proud to be part of element	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
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NR Band n77 (PC2) – DoD-Band – SRS-1



Plot 7-178. PAR Plot (NR Band n77 PC2 - 100MHz $\pi/2$ BPSK - Full RB)

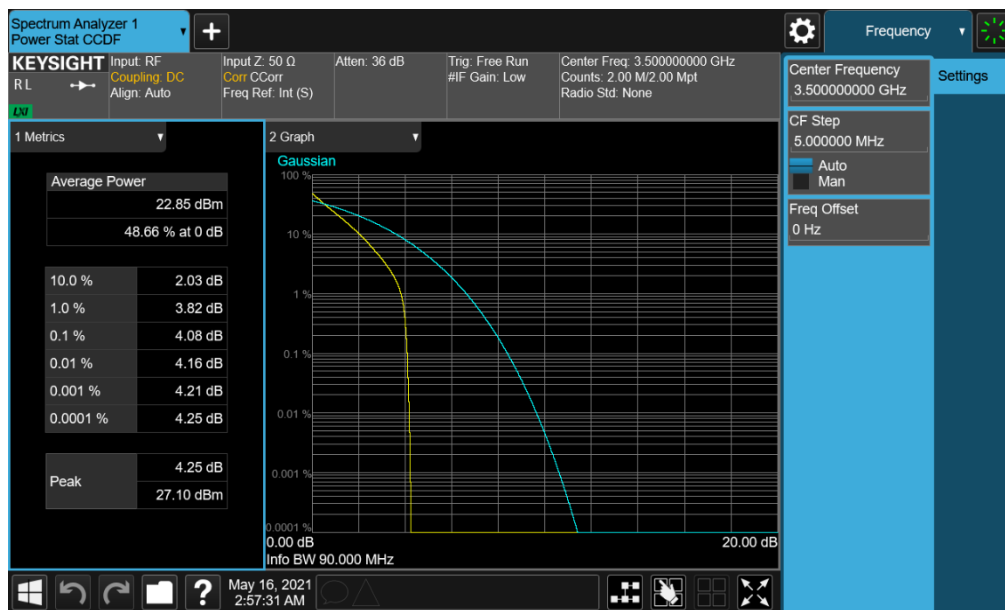


Plot 7-179. PAR Plot (NR Band n77 PC2 - 100MHz CP-OFDM QPSK - Full RB)

FCC ID: A3LSMF711U1	 PART 27 MEASUREMENT REPORT 		Approved by: Technical Manager
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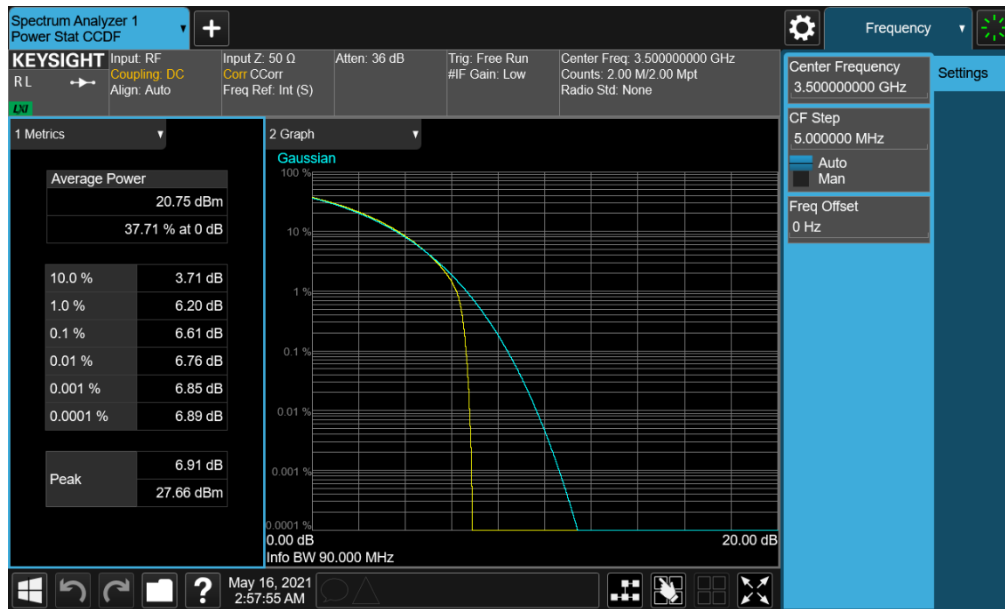


Plot 7-180. PAR Plot (NR Band n77 PC2 - 100MHz CP-OFDM 256-QAM - Full RB)



Plot 7-181. PAR Plot (NR Band n77 PC2 - 90MHz $\pi/2$ BPSK - Full RB)

FCC ID: A3LSMF711U1	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2107290086-20.A3L	Test Dates: 4/16/2021 - 6/9/2021	EUT Type: Portable Handset	Page 119 of 161

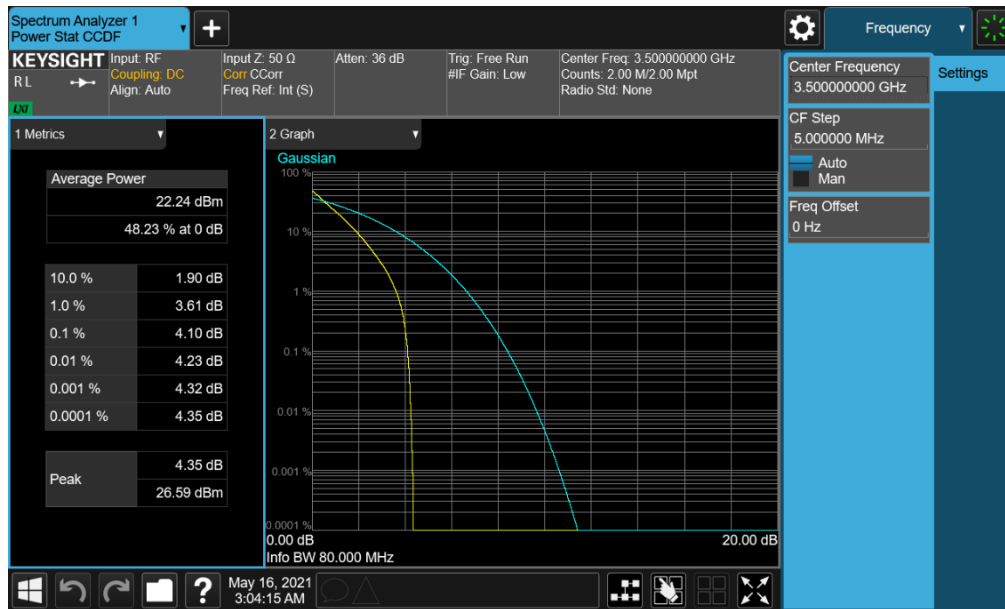


Plot 7-182. PAR Plot (NR Band n77 PC2 - 90MHz CP-OFDM QPSK - Full RB)

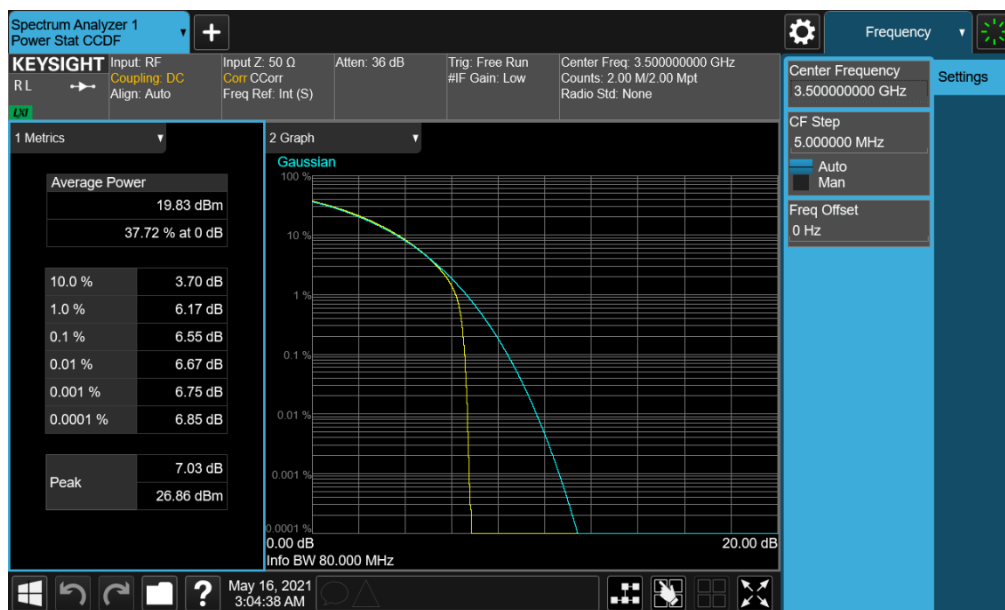


Plot 7-183. PAR Plot (NR Band n77 PC2 - 90MHz CP-OFDM 256-QAM - Full RB)

FCC ID: A3LSMF711U1	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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Plot 7-184. PAR Plot (NR Band n77 PC2 - 80MHz $\pi/2$ BPSK - Full RB)

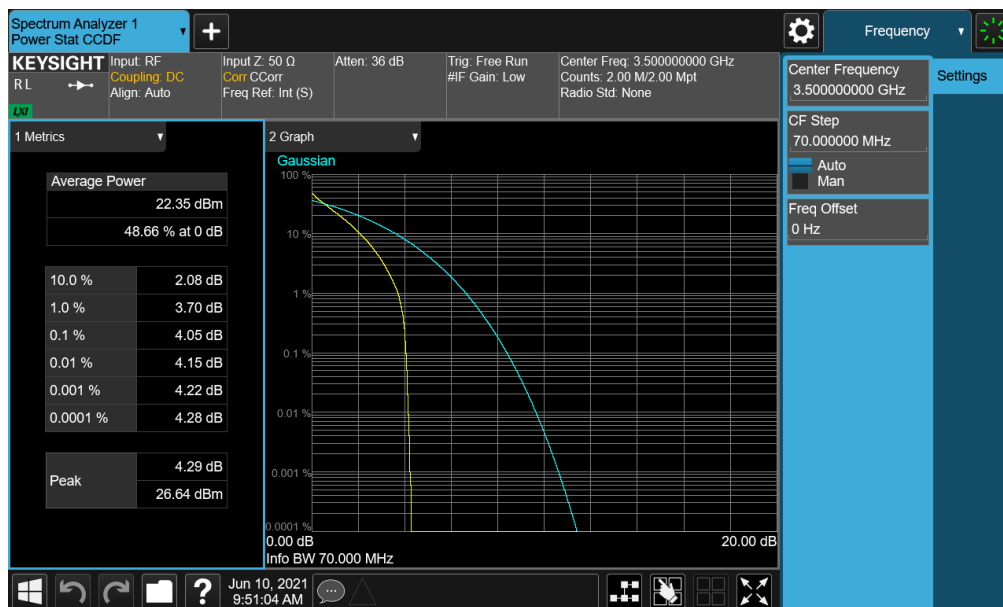


Plot 7-185. PAR Plot (NR Band n77 PC2 - 80MHz CP-OFDM QPSK - Full RB)

FCC ID: A3LSMF711U1	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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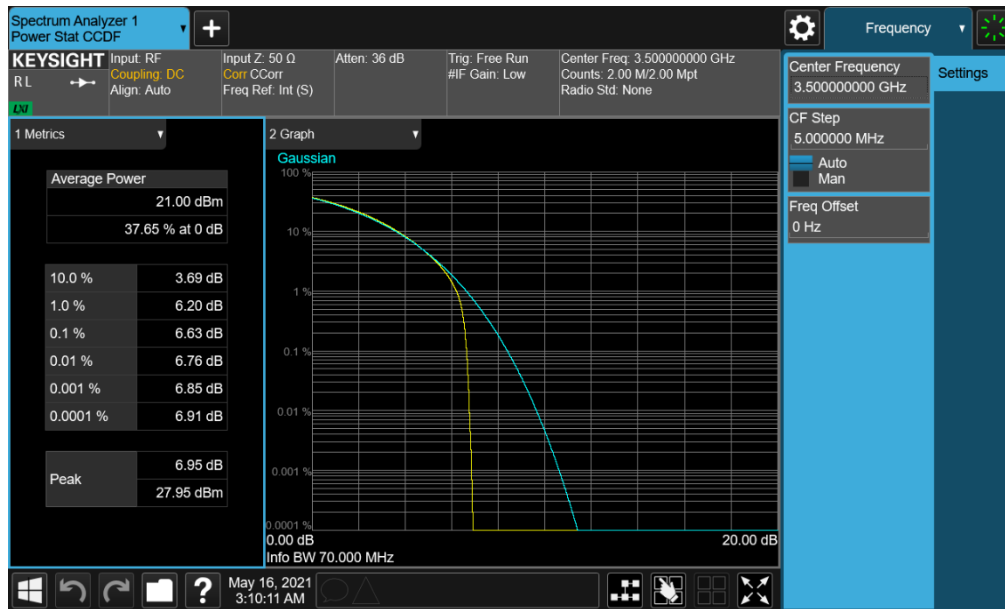


Plot 7-186. PAR Plot (NR Band n77 PC2 - 80MHz CP-OFDM 256-QAM - Full RB)



Plot 7-187. PAR Plot (NR Band n77 PC2 - 70MHz $\pi/2$ BPSK - Full RB)

FCC ID: A3LSMF711U1	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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Plot 7-188. PAR Plot (NR Band n77 PC2 - 70MHz CP-OFDM QPSK - Full RB)



Plot 7-189. PAR Plot (NR Band n77 PC2 - 70MHz CP-OFDM 256-QAM - Full RB)

FCC ID: A3LSMF711U1	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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