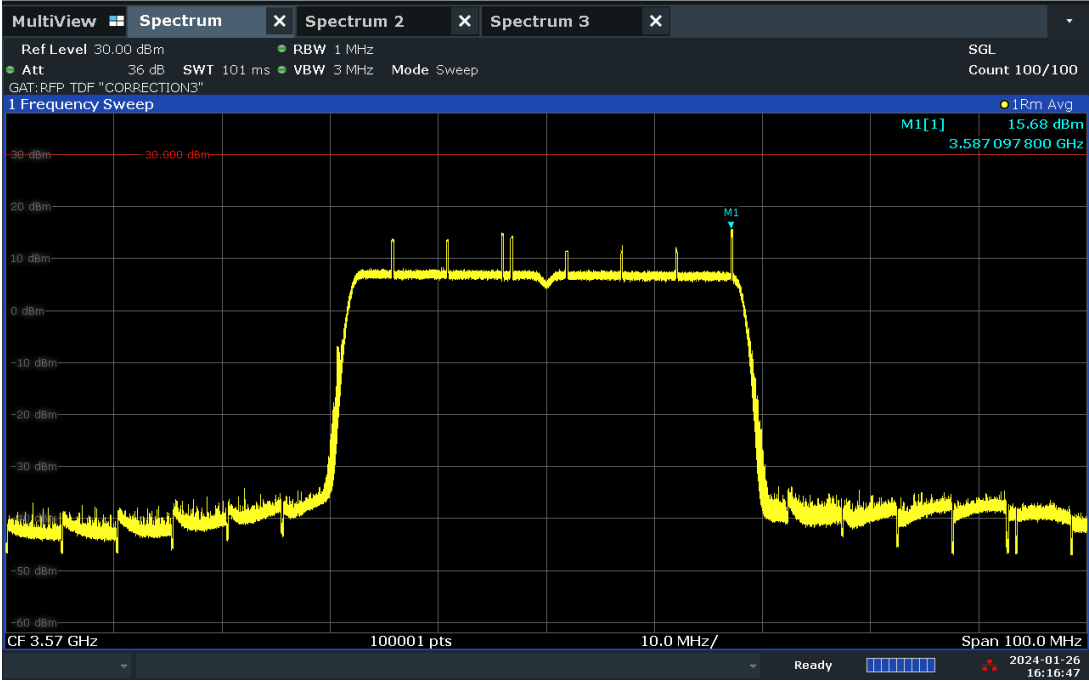
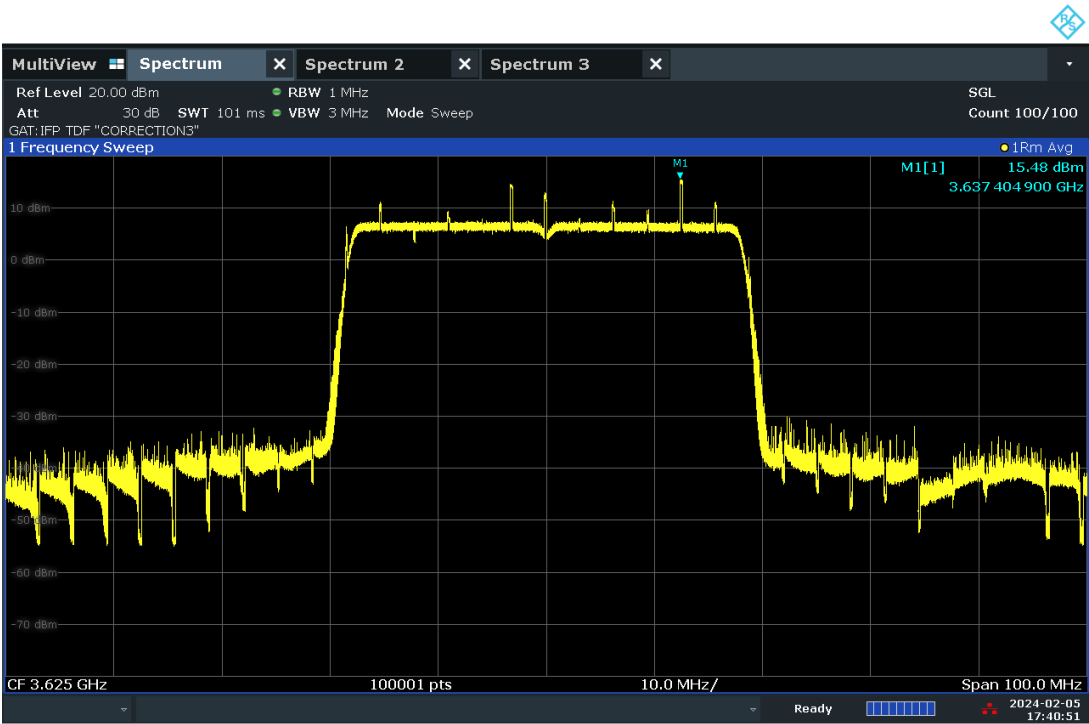




ACLRRResults



Plot 7.111. Power Spectral Density (40MHz 64QAM, Low Channel – ANT1)



05:40:52 PM 02/05/2024

Plot 7.112. Power Spectral Density (40MHz 256QAM, Mid Channel – ANT1)

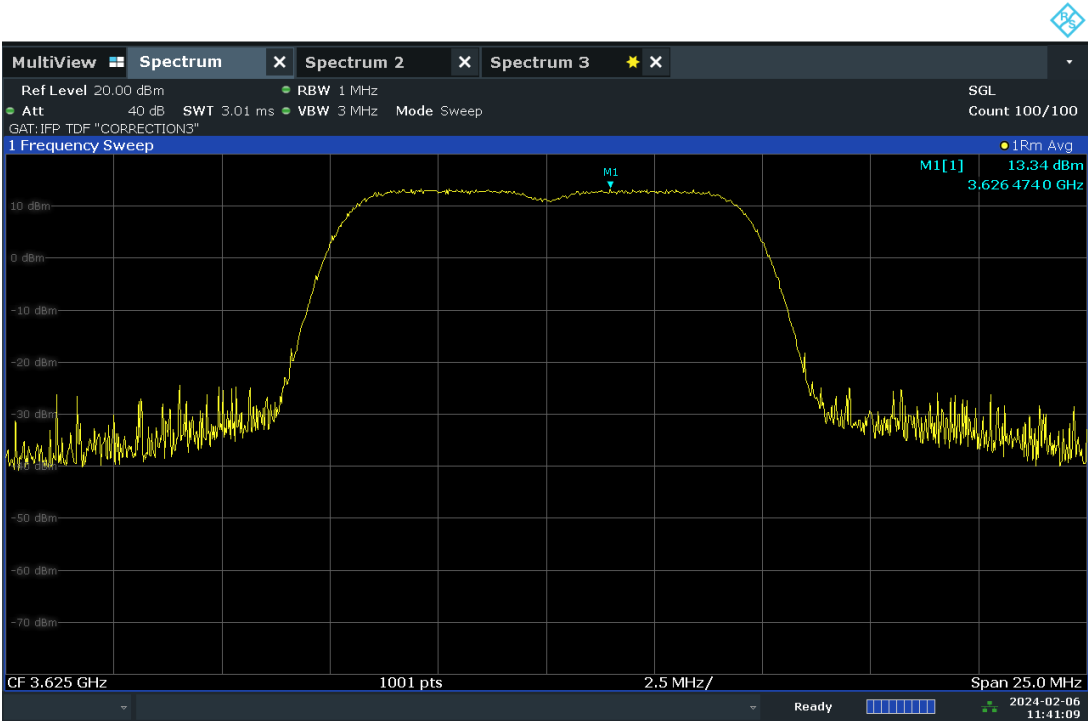
FCC ID: 2AS22-FLCOCH2	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2401230005-01.2AS22	Test Dates: 11/29/23-9/3/2024	EUT Type: CBRS CPE	Page 78 of 152

©2024 ELEMENT

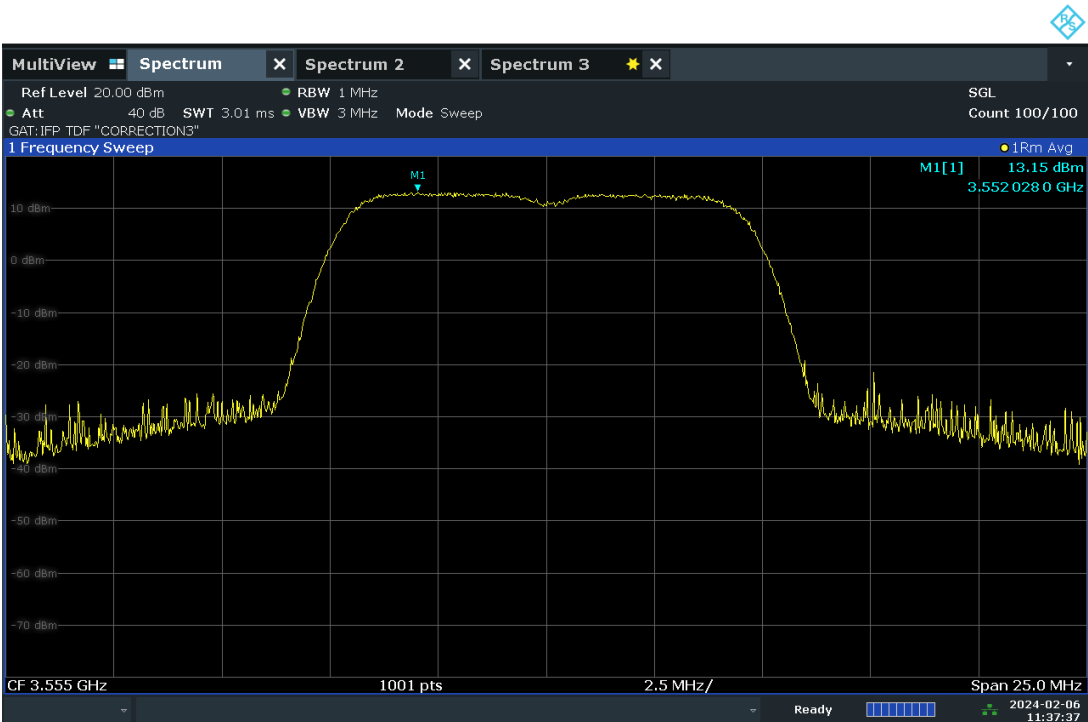
V3.0 1/6/2022

Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from Element. If you have any questions about this or have an inquiry about obtaining additional rights to this report or assembly of contents thereof, please contact ct.info@element.com.

Antenna 2 Power Spectral Density

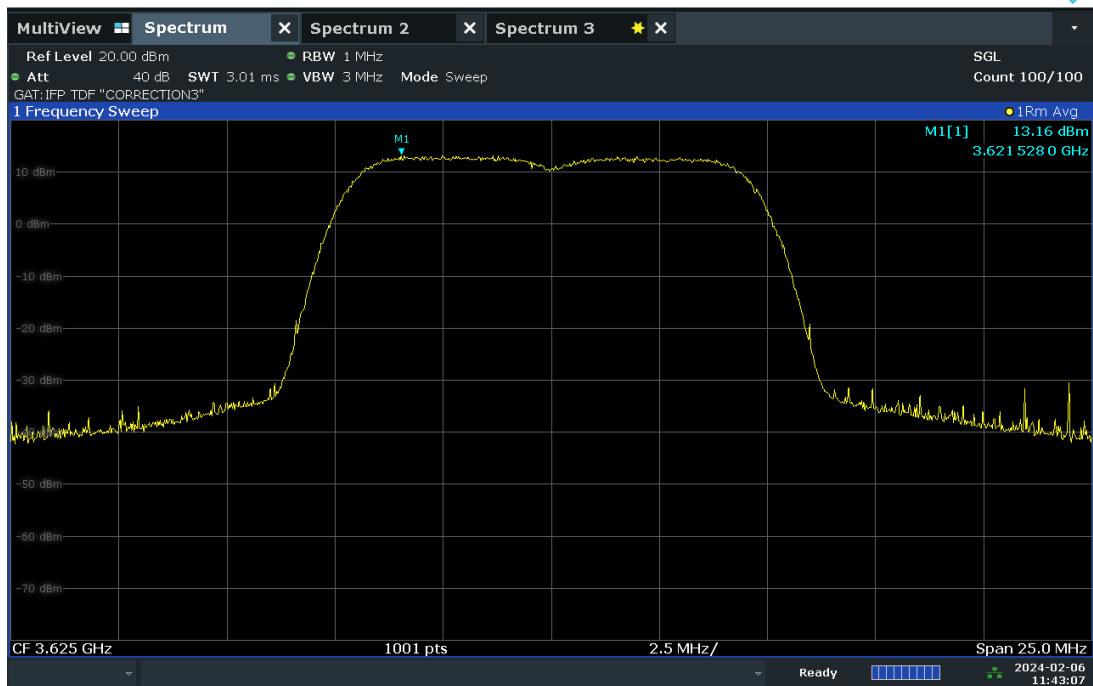


Plot 7.113. Power Spectral Density (10MHz QPSK, Mid Channel – ANT2)



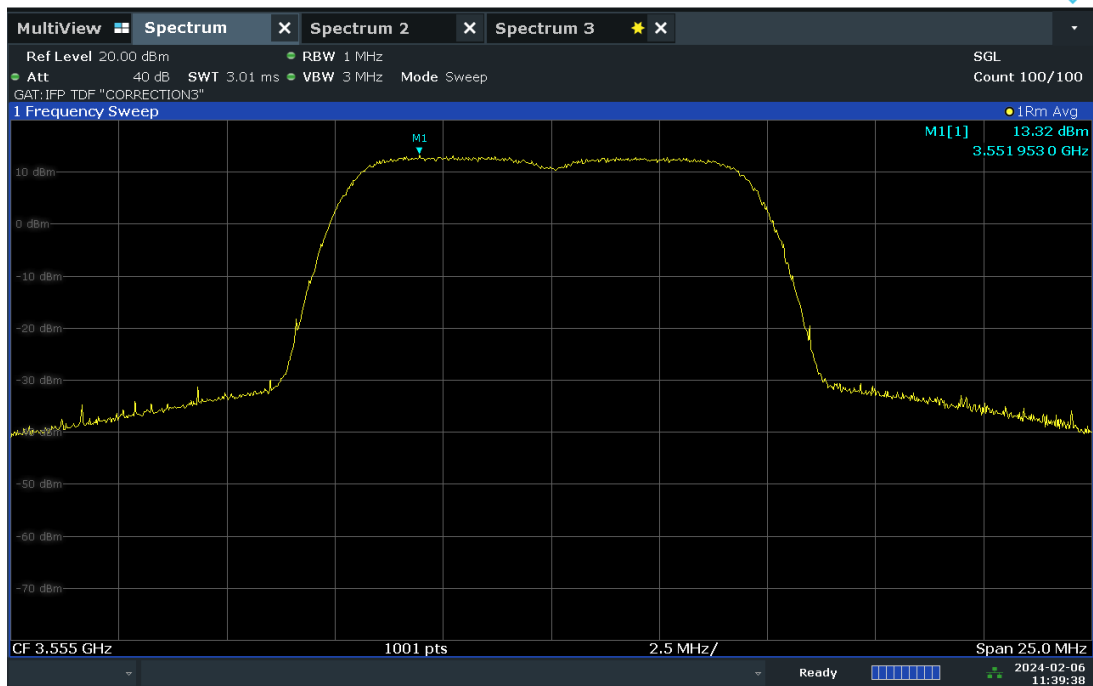
Plot 7.114. Power Spectral Density (10MHz 16QAM, Low Channel – ANT2)

FCC ID: 2AS22-FLCOCH2	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2401230005-01.2AS22	Test Dates: 11/29/23-9/3/2024	EUT Type: CBRS CPE	Page 79 of 152



11:43:07 AM 02/06/2024

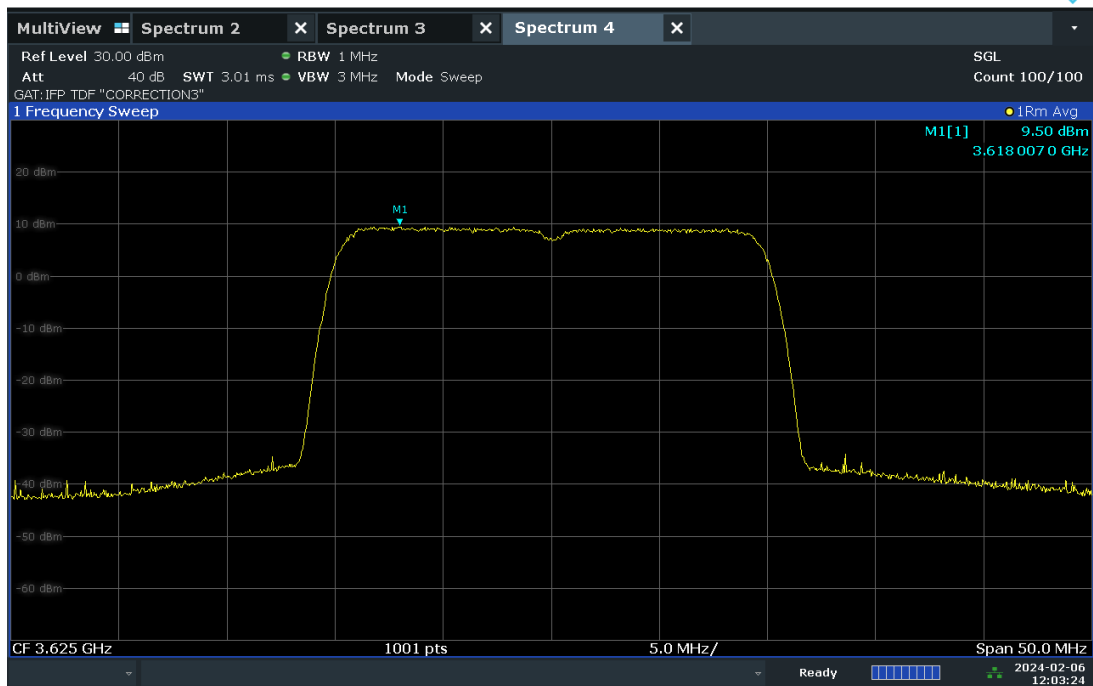
Plot 7.115. Power Spectral Density (10MHz 64QAM, Mid Channel – ANT2)



11:39:39 AM 02/06/2024

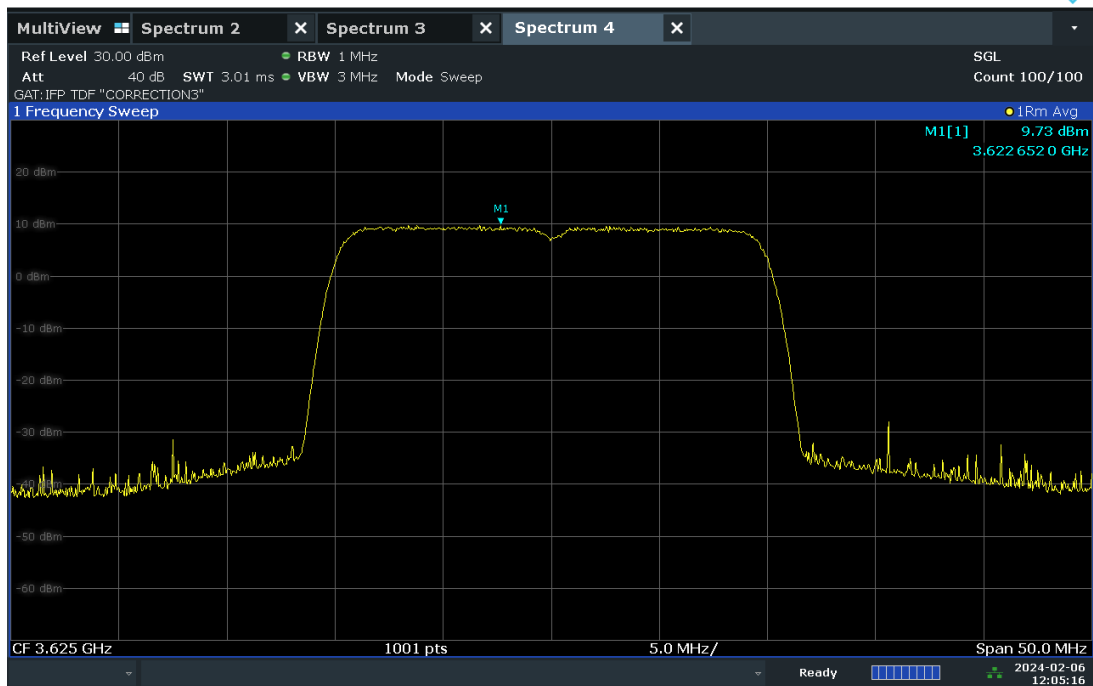
Plot 7.116. Power Spectral Density (10MHz 256QAM, Low Channel – ANT2)

FCC ID: 2AS22-FLCOCH2	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2401230005-01.2AS22	Test Dates: 11/29/23-9/3/2024	EUT Type: CBRS CPE	Page 80 of 152



12:03:25 PM 02/06/2024

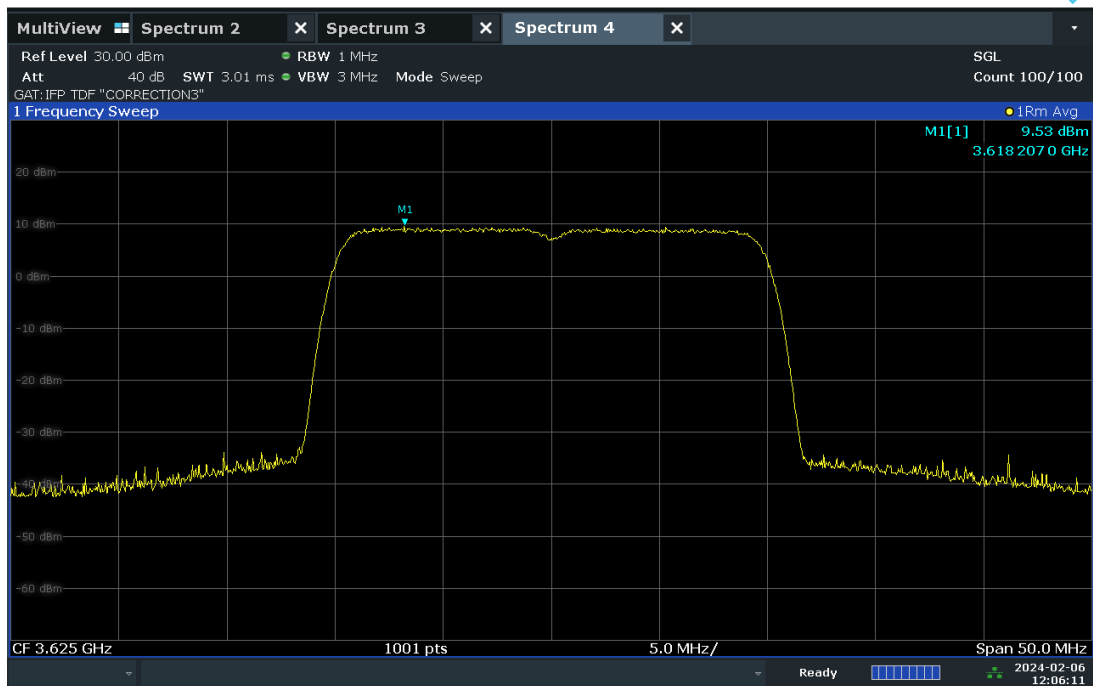
Plot 7.117. Power Spectral Density (20MHz QPSK, Mid Channel – ANT2)



12:05:17 PM 02/06/2024

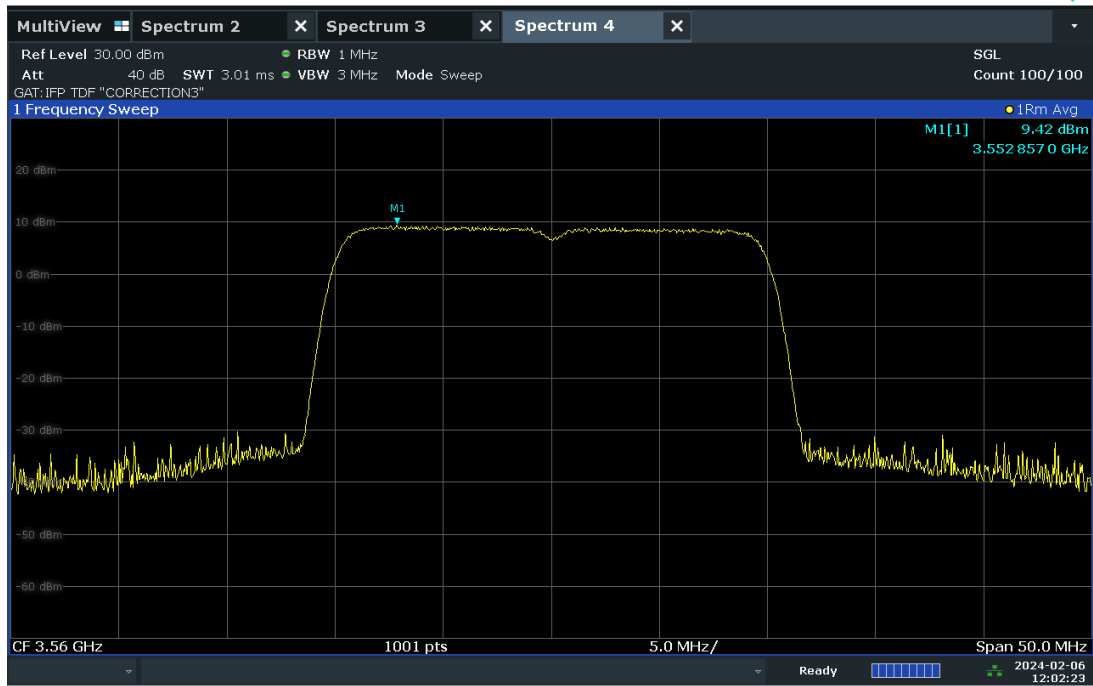
Plot 7.118. Power Spectral Density (20MHz 16QAM, Mid Channel – ANT2)

FCC ID: 2AS22-FLCOCH2	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2401230005-01.2AS22	Test Dates: 11/29/23-9/3/2024	EUT Type: CBRS CPE	Page 81 of 152



12:06:12 PM 02/06/2024

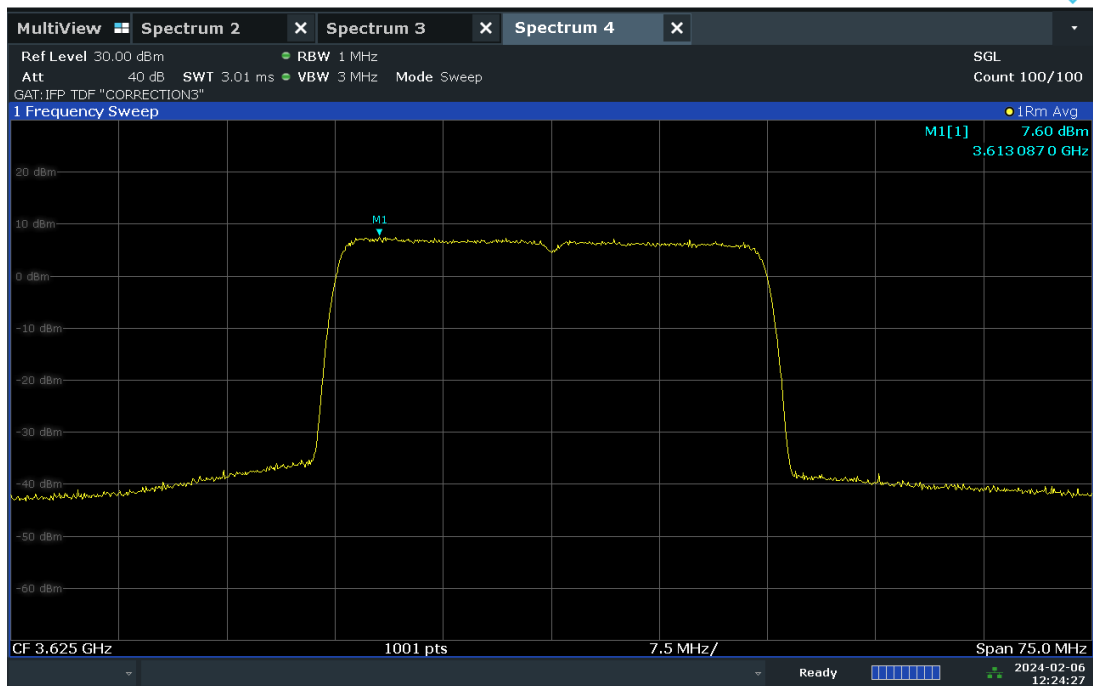
Plot 7.119. Power Spectral Density (20MHz 64QAM, Mid Channel – ANT2)



12:02:23 PM 02/06/2024

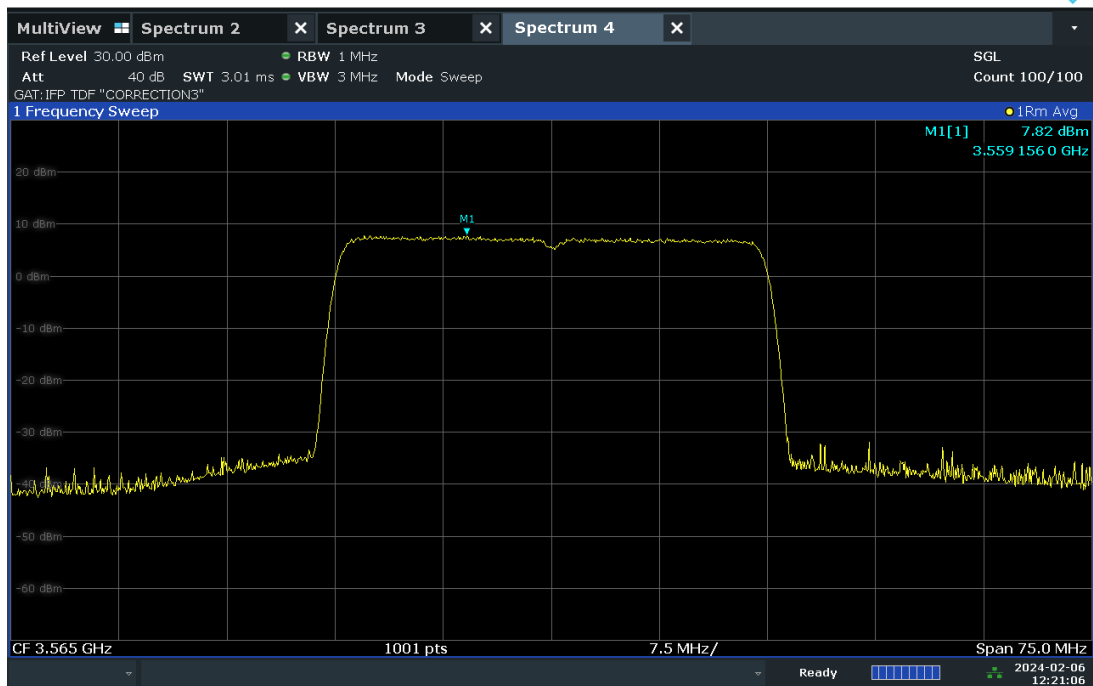
Plot 7.120. Power Spectral Density (20MHz 256QAM, Low Channel – ANT2)

FCC ID: 2AS22-FLCOCH2	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2401230005-01.2AS22	Test Dates: 11/29/23-9/3/2024	EUT Type: CBRS CPE	Page 82 of 152



12:24:28 PM 02/06/2024

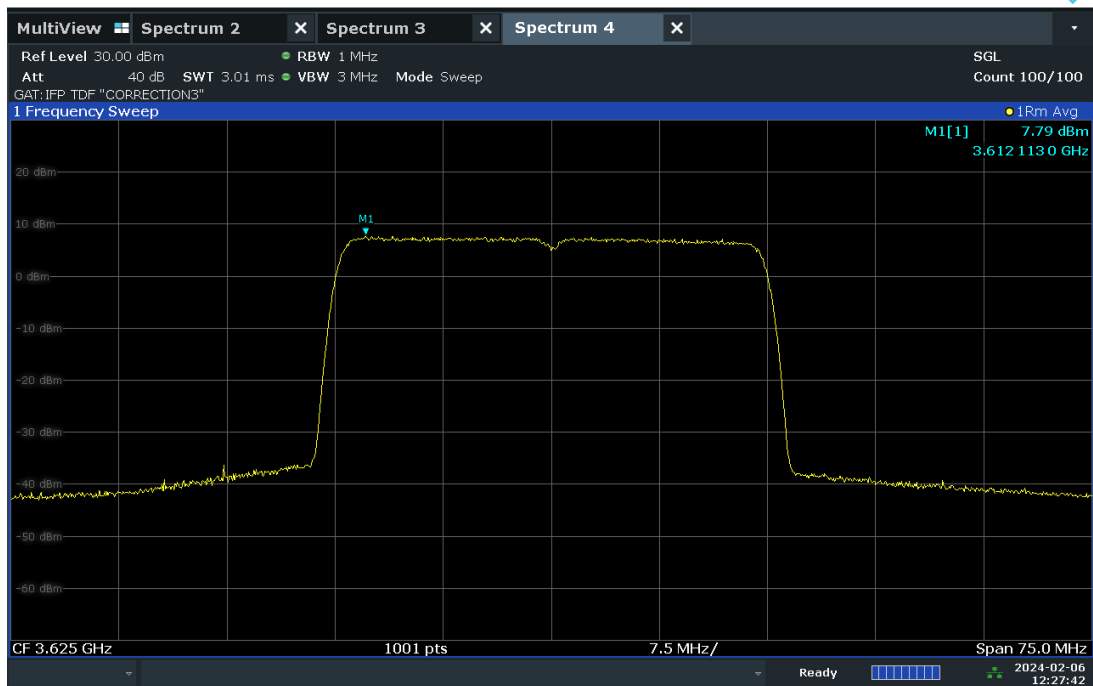
Plot 7.121. Power Spectral Density (30MHz QPSK, Mid Channel – ANT2)



12:21:07 PM 02/06/2024

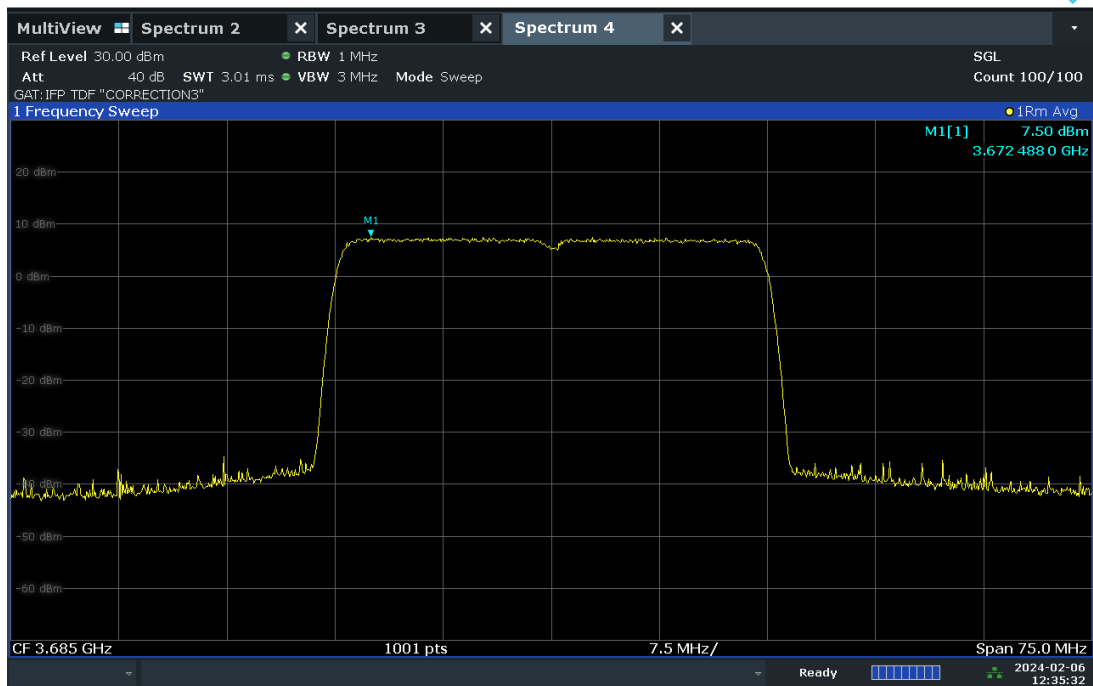
Plot 7.122. Power Spectral Density (30MHz 16QAM, Low Channel – ANT2)

FCC ID: 2AS22-FLCOCH2	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2401230005-01.2AS22	Test Dates: 11/29/23-9/3/2024	EUT Type: CBRS CPE	Page 83 of 152



12:27:43 PM 02/06/2024

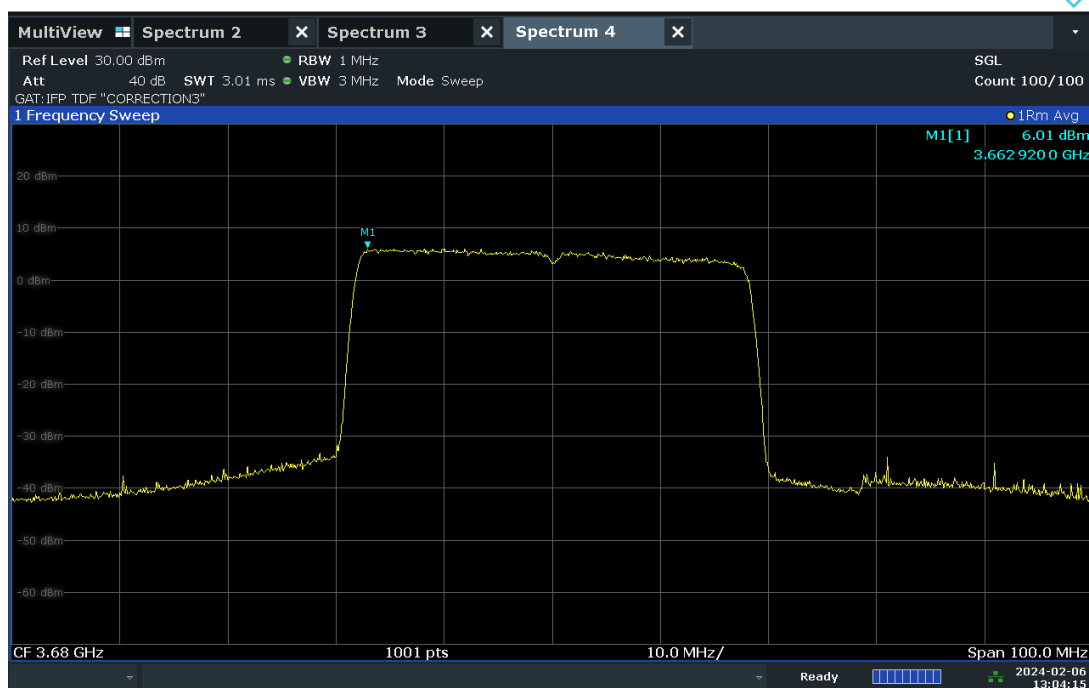
Plot 7.123. Power Spectral Density (30MHz 64QAM, Mid Channel – ANT2)



12:35:33 PM 02/06/2024

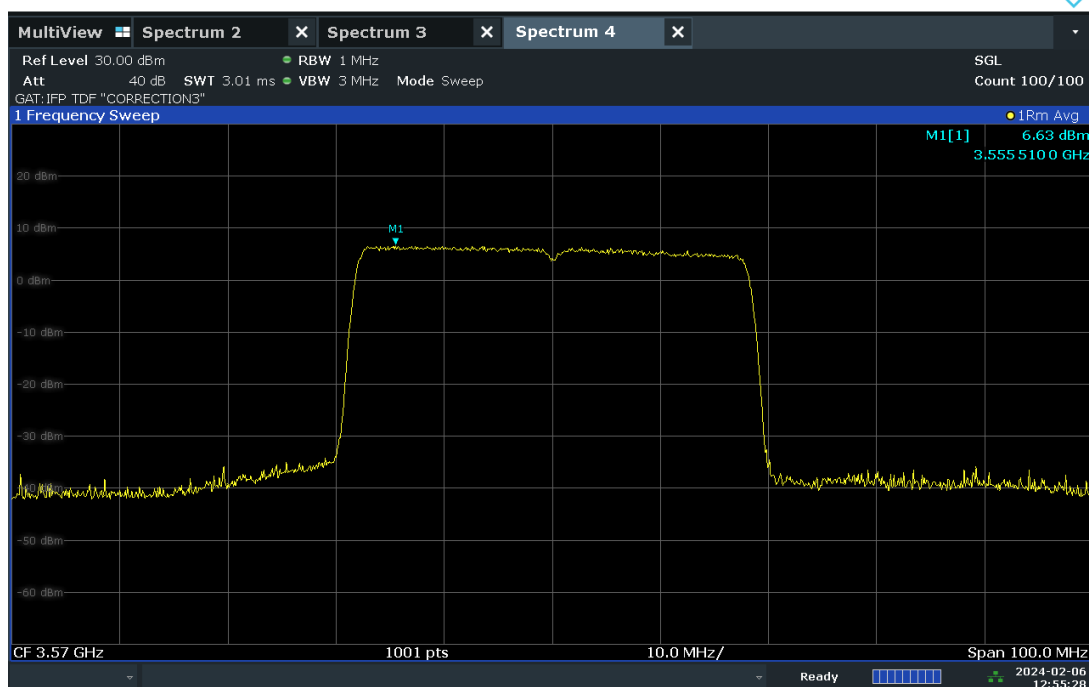
Plot 7.124. Power Spectral Density (30MHz 256QAM, High Channel – ANT2)

FCC ID: 2AS22-FLCOCH2	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2401230005-01.2AS22	Test Dates: 11/29/23-9/3/2024	EUT Type: CBRS CPE	Page 84 of 152



01:04:16 PM 02/06/2024

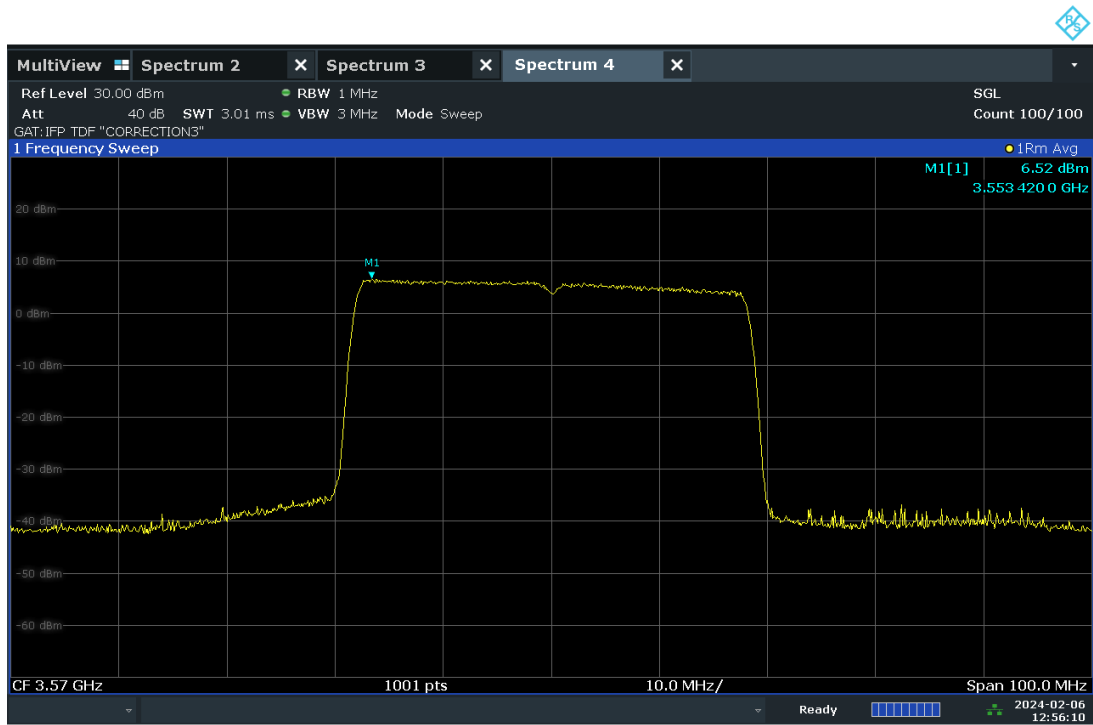
Plot 7.125. Power Spectral Density (40MHz QPSK, High Channel – ANT2)



12:55:29 PM 02/06/2024

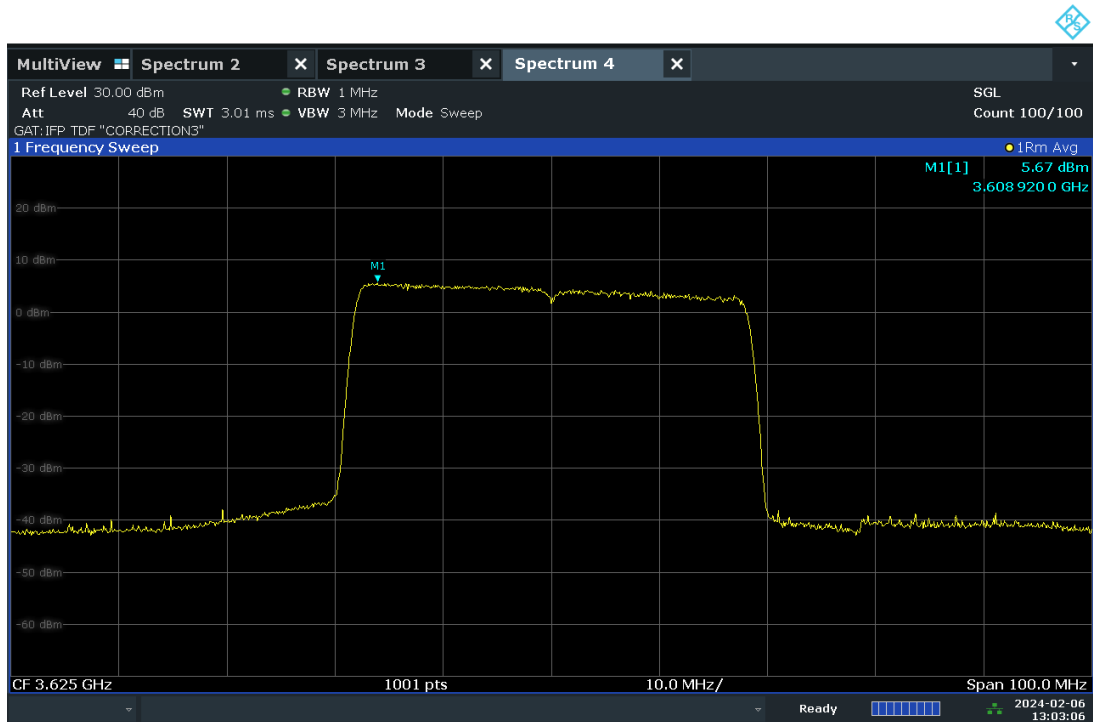
Plot 7.126. Power Spectral Density (40MHz 16QAM, Low Channel – ANT2)

FCC ID: 2AS22-FLCOCH2	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2401230005-01.2AS22	Test Dates: 11/29/23-9/3/2024	EUT Type: CBRS CPE	Page 85 of 152



12:56:10 PM 02/06/2024

Plot 7.127. Power Spectral Density (40MHz 64QAM, Low Channel – ANT2)



01:03:07 PM 02/06/2024

Plot 7.128. Power Spectral Density (40MHz 256QAM, Mid Channel – ANT2)

FCC ID: 2AS22-FLCOCH2	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2401230005-01.2AS22	Test Dates: 11/29/23-9/3/2024	EUT Type: CBRS CPE	Page 86 of 152

Note:

Per ANSI C63.26-2015 Section 5.2.5.3 and KDB 662911 v02r01 Section E)2), the power spectral density at Channel A and Channel B were first measured separately as shown in the section above. The measured values were then summed in linear power units then converted back to dBm.

Per ANSI C63.26-2015 Section 6.4.6 and KDB 662911 v02r01 Section F.2.c, since the transmissions are orthogonally polarized, the directional gain is equal to the single transmission gain of 9.00dBi

Sample MIMO Calculation:

At 3625 MHz in QPSK, 20MHz BW mode, the average conducted power spectral density was measured to be 16.53 dBm/MHz for Ant1 and 9.50 dBm/MHz for Ant2.

$$\text{Ant1} + \text{Ant2} = \text{MIMO}$$

$$(16.53 \text{ dBm} + 9.50 \text{ dBm}) = (44.978 \text{ mW} + 8.913 \text{ mW}) = 53.891 \text{ mW} = 17.32 \text{ dBm}$$

Sample e.i.r.p Power Spectral Density Calculation:

At 3625 MHz in QPSK, 20MHz BW mode, the average MIMO power density was calculated to be 17.32 dBm with directional gain of 13.00 dBi.

$$\text{e.i.r.p. Power Spectral Density(dBm)} = \text{Power Spectral Density (dBm)} + \text{Ant gain (dBi)}$$

$$17.32 \text{ dBm} + 13.00 \text{ dBi} = 30.32 \text{ dBm}$$

FCC ID: 2AS22-FLCOCH2	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2401230005-01.2AS22	Test Dates: 11/29/23-9/3/2024	EUT Type: CBRS CPE	Page 87 of 152

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

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 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

None.

FCC ID: 2AS22-FLCOCH2	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2401230005-01.2AS22	Test Dates: 11/29/23-9/3/2024	EUT Type: CBRS CPE	Page 88 of 152

Bandwidth	Modulation	26dB BW [MHz]	PAR at 0.1% [dB]	PAR Limit [dB]	Margin [dB]
40 MHz	QPSK	38.27	6.06	13.00	-6.94
	16QAM	38.42	6.30	13.00	-6.70
	64QAM	38.22	6.17	13.00	-6.83
	256QAM	38.54	6.06	13.00	-6.94
30 MHz	QPSK	30.95	6.21	13.00	-6.79
	16QAM	30.70	6.55	13.00	-6.45
	64QAM	30.80	6.02	13.00	-6.98
	256QAM	30.82	6.32	13.00	-6.68
20 MHz	QPSK	20.76	7.46	13.00	-5.54
	16QAM	20.88	6.12	13.00	-6.88
	64QAM	20.83	6.17	13.00	-6.83
	256QAM	20.72	6.14	13.00	-6.86
10 MHz	QPSK	10.32	6.13	13.00	-6.87
	16QAM	9.48	6.11	13.00	-6.89
	64QAM	10.27	6.24	13.00	-6.76
	256QAM	9.58	6.21	13.00	-6.79

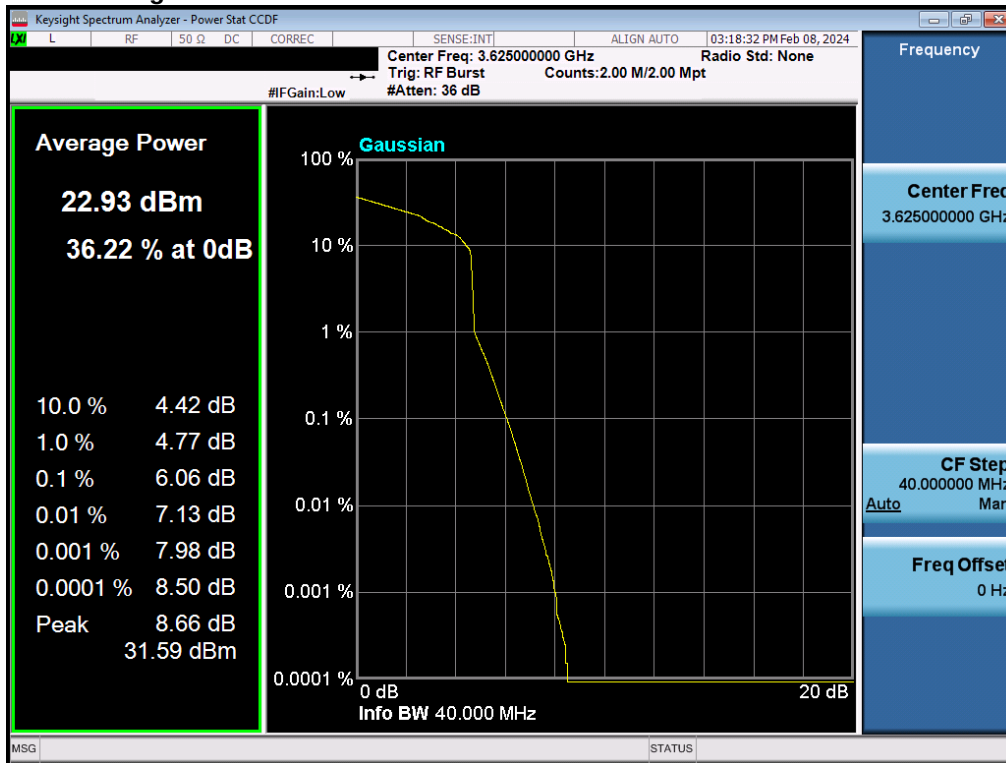
Table 7-7 Peak to Average Power Ratio Measurements – ANT1

Bandwidth	Modulation	26dB BW [MHz]	PAR at 0.1% [dB]	PAR Limit [dB]	Margin [dB]
40 MHz	QPSK	38.15	7.60	13.00	-5.40
	16QAM	38.62	7.64	13.00	-5.36
	64QAM	38.38	7.80	13.00	-5.20
	256QAM	38.83	7.69	13.00	-5.31
30 MHz	QPSK	30.86	7.87	13.00	-5.13
	16QAM	30.95	7.68	13.00	-5.32
	64QAM	31.09	8.62	13.00	-4.38
	256QAM	30.83	7.70	13.00	-5.30
20 MHz	QPSK	20.72	7.65	13.00	-5.35
	16QAM	20.69	10.79	13.00	-2.21
	64QAM	20.86	7.65	13.00	-5.35
	256QAM	20.75	7.62	13.00	-5.38
10 MHz	QPSK	14.32	9.90	13.00	-3.10
	16QAM	10.30	7.68	13.00	-5.32
	64QAM	10.04	7.60	13.00	-5.40
	256QAM	9.95	10.79	13.00	-2.21

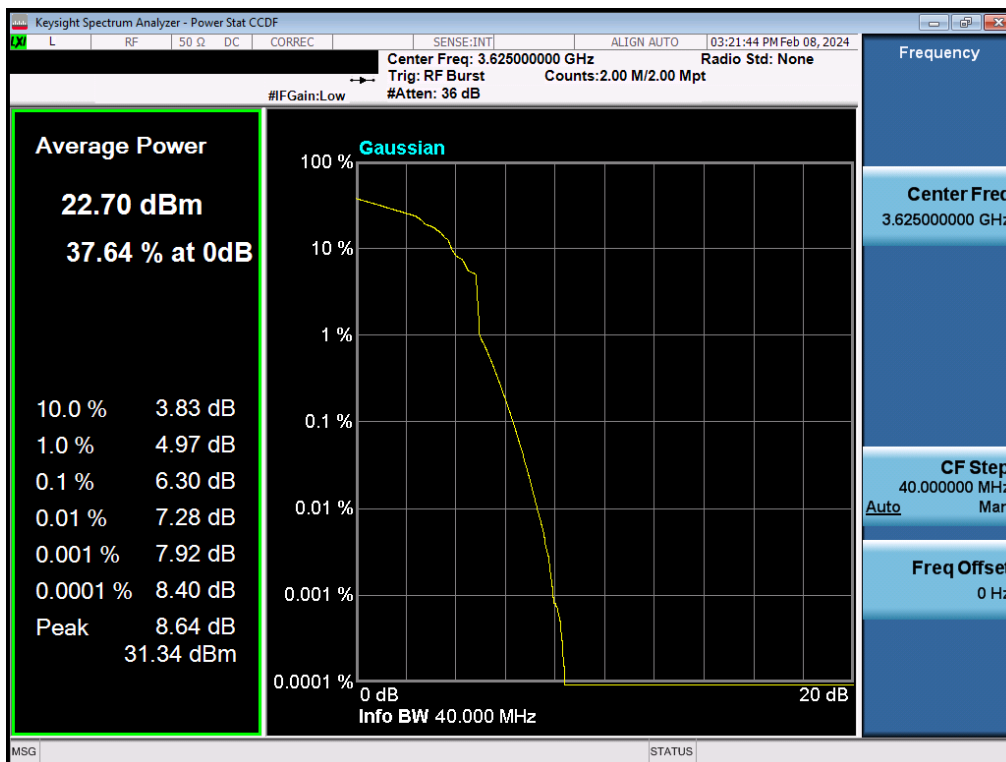
Table 7-8 Peak to Average Power Ratio Measurements – ANT2

FCC ID: 2AS22-FLCOCH2	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2401230005-01.2AS22	Test Dates: 11/29/23-9/3/2024	EUT Type: CBRS CPE	Page 89 of 152

Antenna 1 Peak to Average Ratio

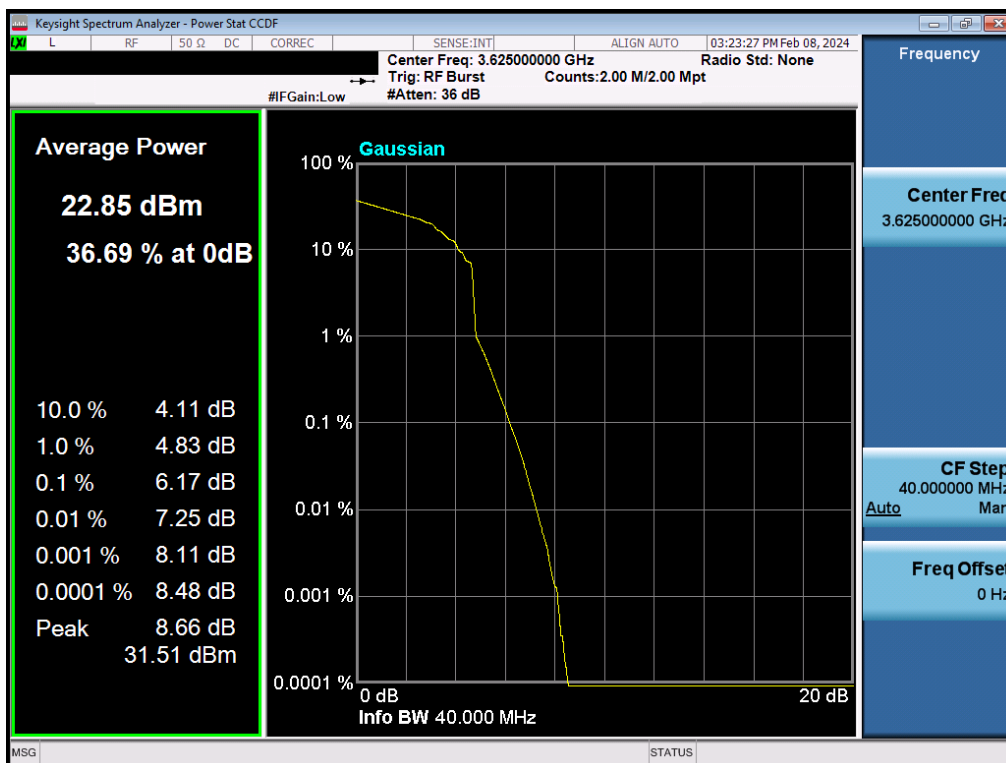


Plot 7.129. Peak to Average Power Ratio Plot (40MHz, QPSK – Mid Channel) – ANT1

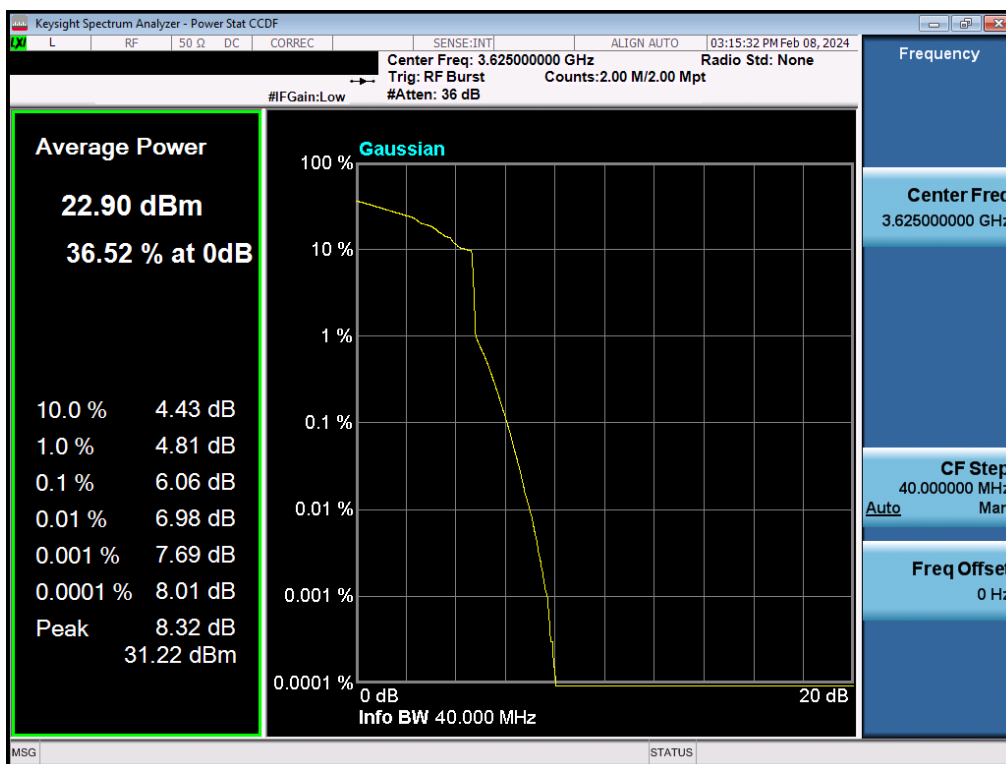


Plot 7.130. Peak to Average Power Ratio Plot (40MHz, 16QAM – Mid Channel) – ANT1

FCC ID: 2AS22-FLCOCH2	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2401230005-01.2AS22	Test Dates: 11/29/23-9/3/2024	EUT Type: CBRS CPE	Page 90 of 152

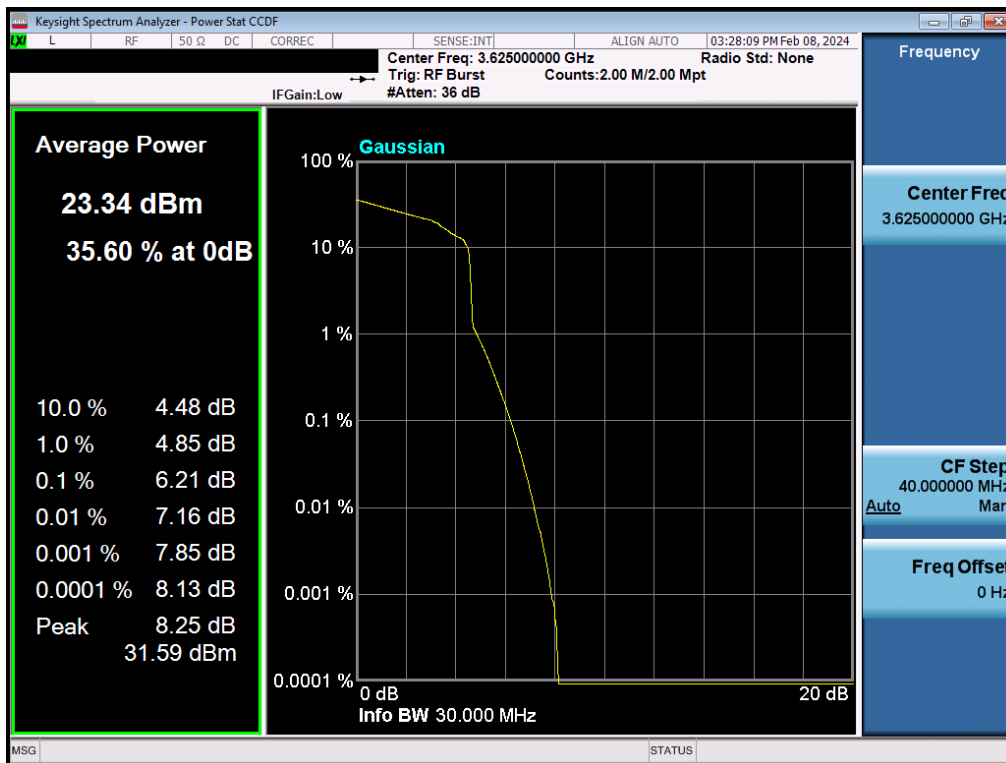


Plot 7.131. Peak to Average Power Ratio Plot (40MHz, 64QAM – Mid Channel) – ANT1

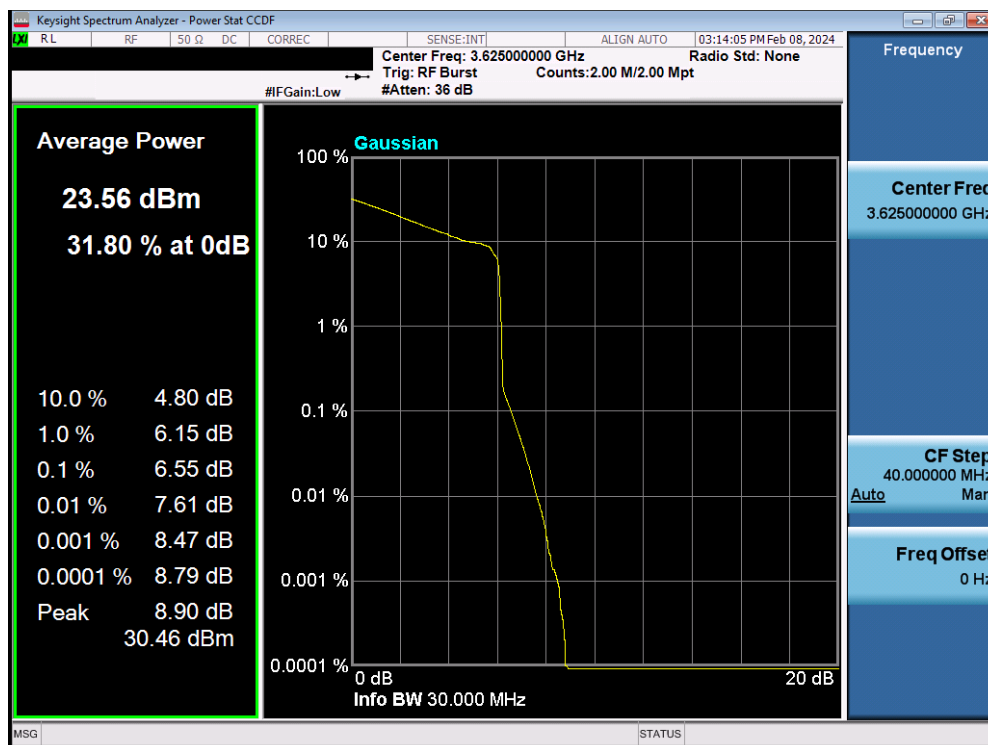


Plot 7.132. Peak to Average Power Ratio Plot (40MHz, 256QAM – Mid Channel) – ANT1

FCC ID: 2AS22-FLCOCH2	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2401230005-01.2AS22	Test Dates: 11/29/23-9/3/2024	EUT Type: CBRS CPE	Page 91 of 152

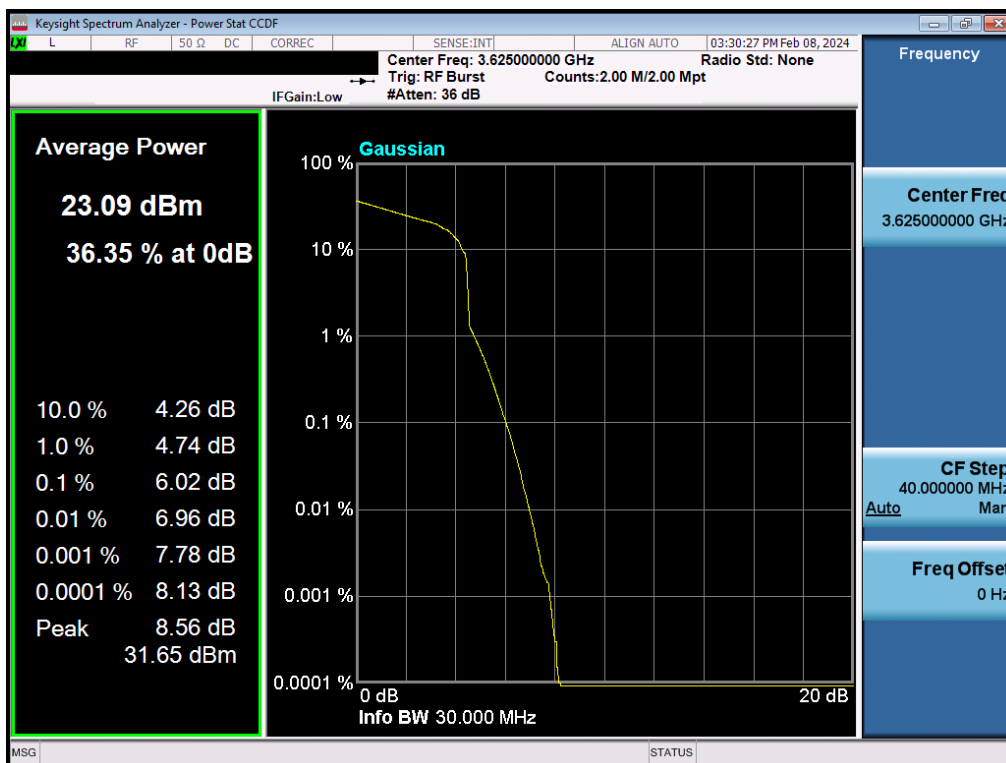


Plot 7.133. Peak to Average Power Ratio Plot (30MHz, QPSK – Mid Channel) – ANT1

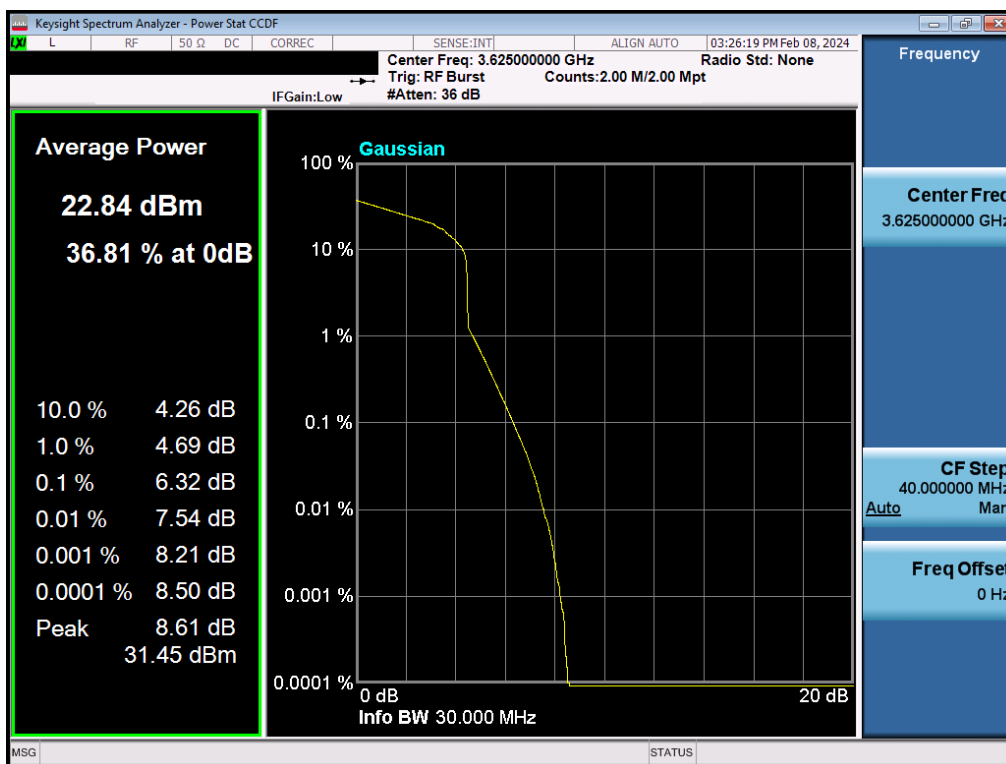


Plot 7.134. Peak to Average Power Ratio Plot (30MHz, 16QAM – Mid Channel) – ANT1

FCC ID: 2AS22-FLCOCH2	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2401230005-01.2AS22	Test Dates: 11/29/23-9/3/2024	EUT Type: CBRS CPE	Page 92 of 152

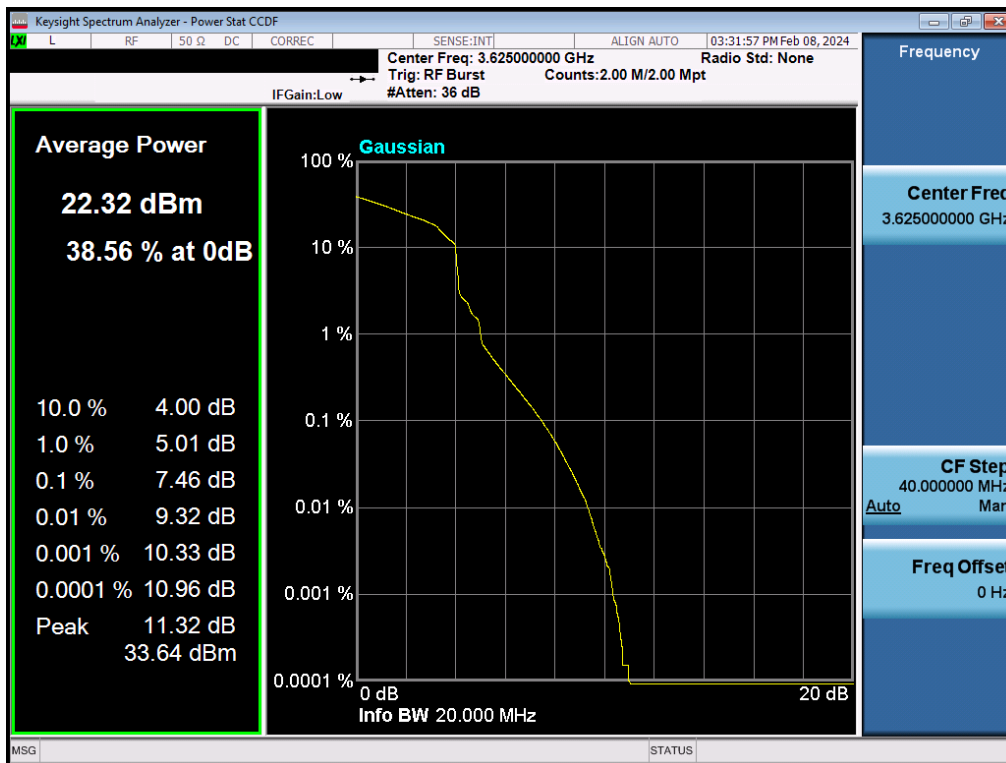


Plot 7.135. Peak to Average Power Ratio Plot (30MHz, 64QAM – Mid Channel) – ANT1

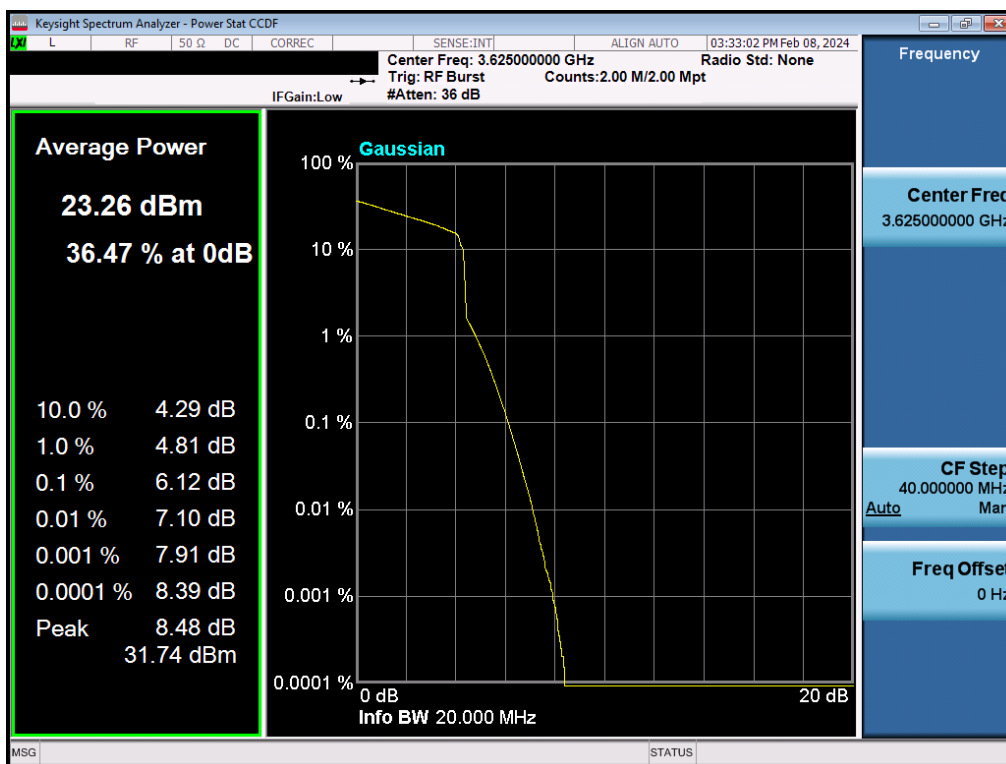


Plot 7.136. Peak to Average Power Ratio Plot (30MHz, 256QAM – Mid Channel) – ANT1

FCC ID: 2AS22-FLCOCH2	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2401230005-01.2AS22	Test Dates: 11/29/23-9/3/2024	EUT Type: CBRS CPE	Page 93 of 152

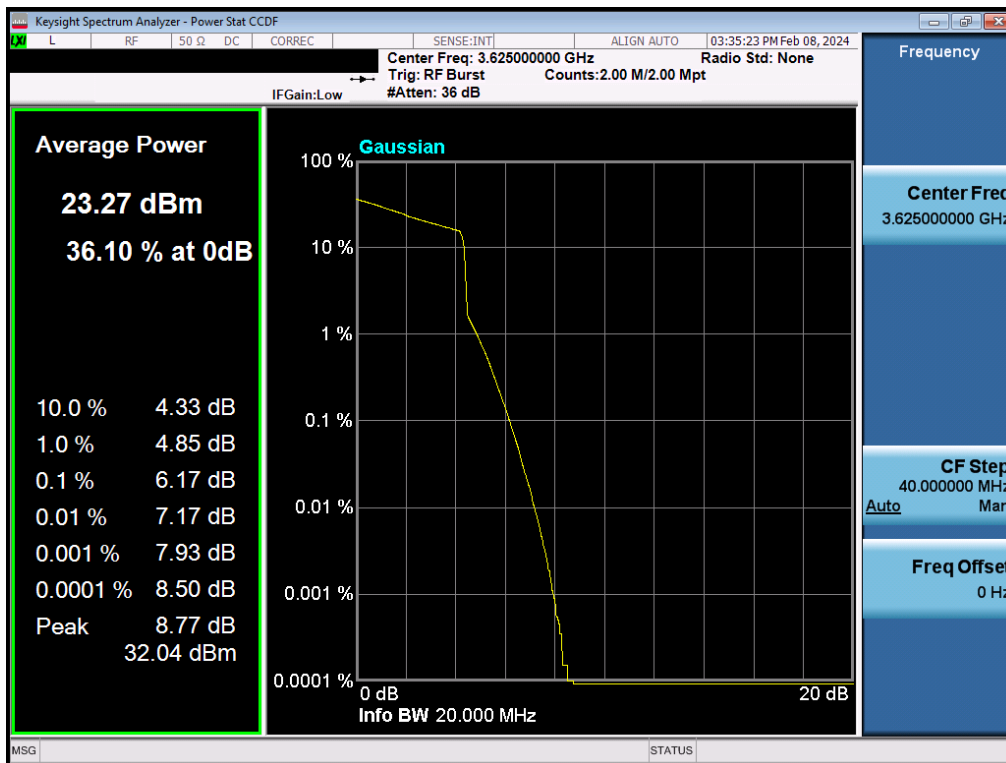


Plot 7.137. Peak to Average Power Ratio Plot (20MHz, QPSK – Mid Channel) – ANT1

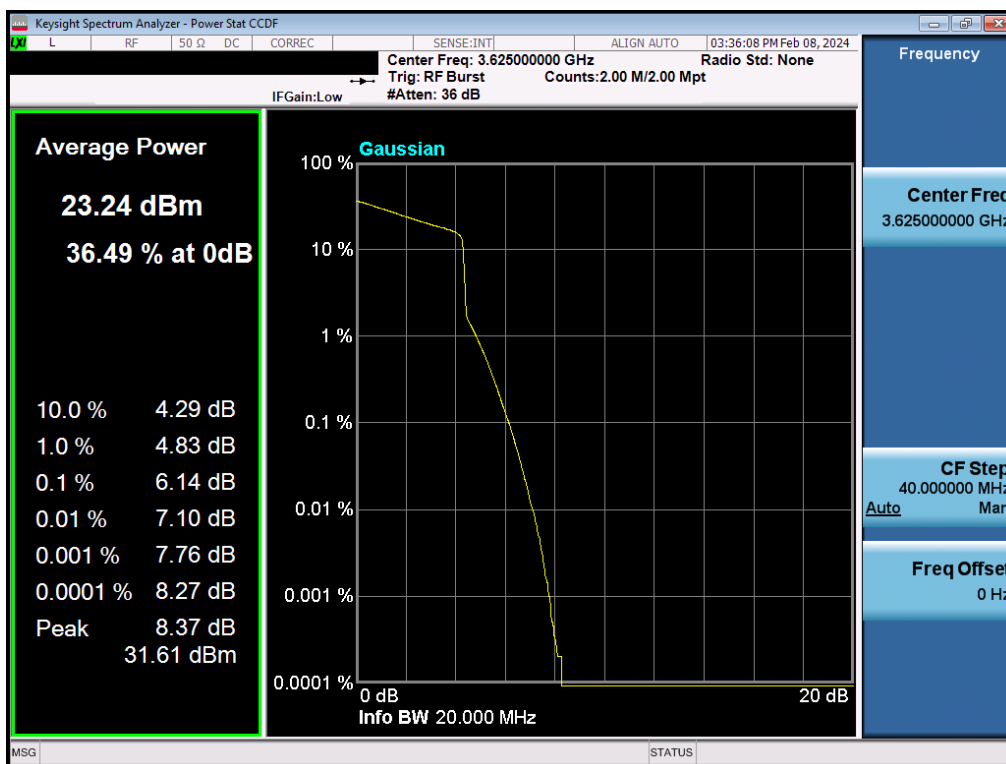


Plot 7.138. Peak to Average Power Ratio Plot (20MHz, 16QAM – Mid Channel) – ANT1

FCC ID: 2AS22-FLCOCH2	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2401230005-01.2AS22	Test Dates: 11/29/23-9/3/2024	EUT Type: CBRS CPE	Page 94 of 152

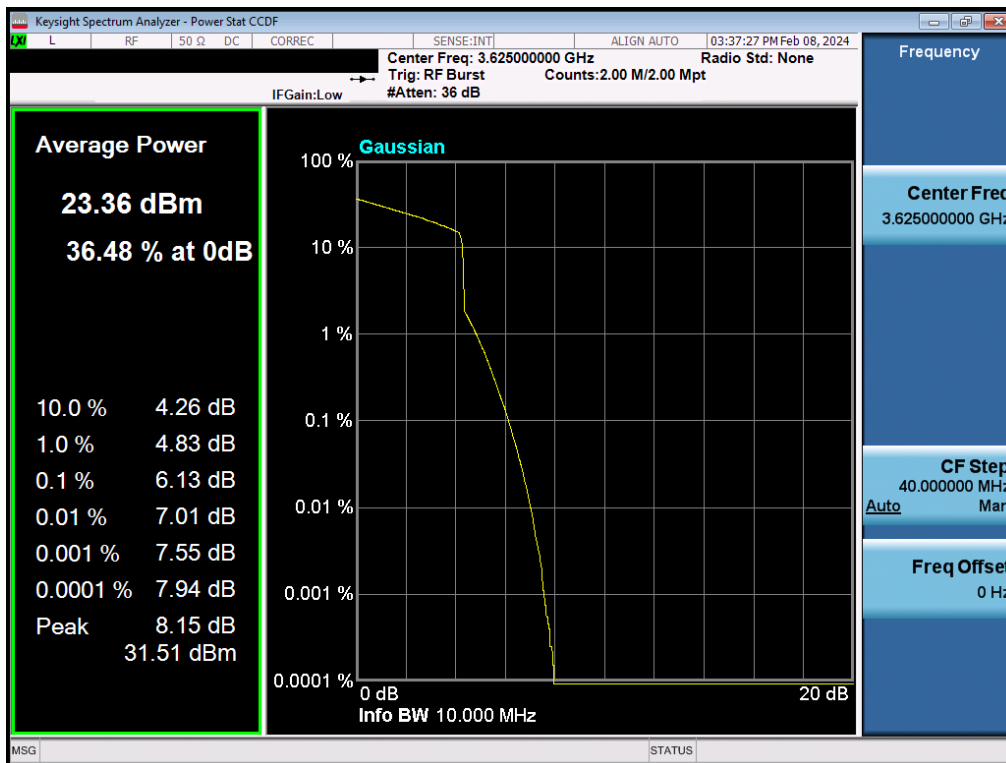


Plot 7.139. Peak to Average Power Ratio Plot (20MHz, 64QAM – Mid Channel) – ANT1

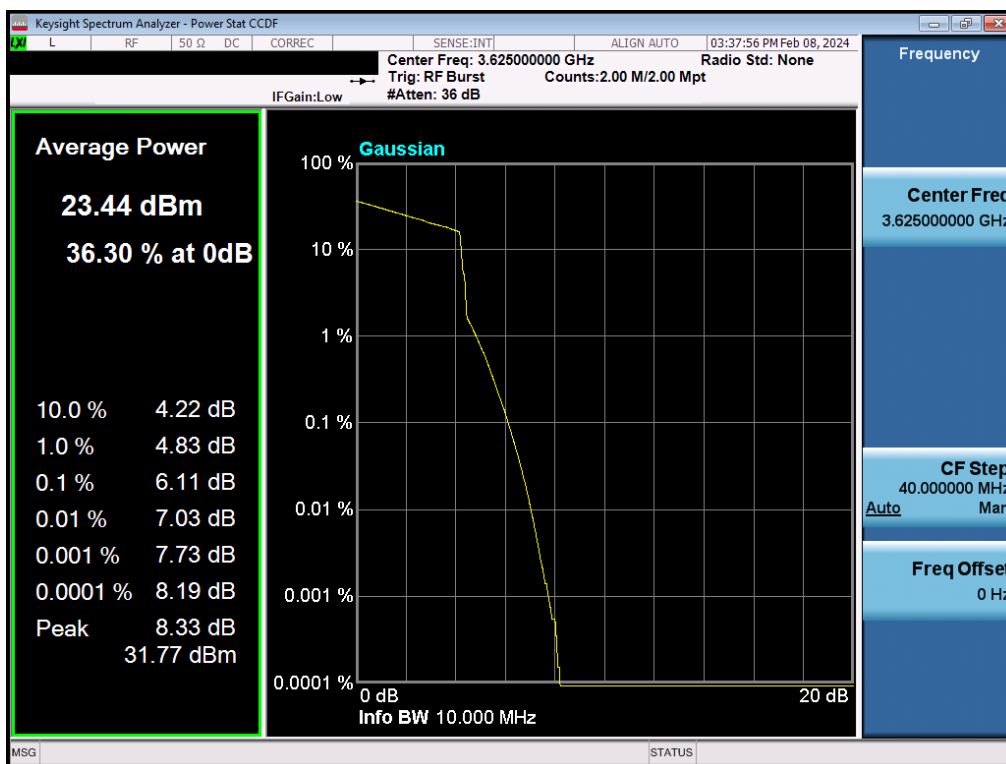


Plot 7.140. Peak to Average Power Ratio Plot (20MHz, 256QAM – Mid Channel) – ANT1

FCC ID: 2AS22-FLCOCH2	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2401230005-01.2AS22	Test Dates: 11/29/23-9/3/2024	EUT Type: CBRS CPE	Page 95 of 152

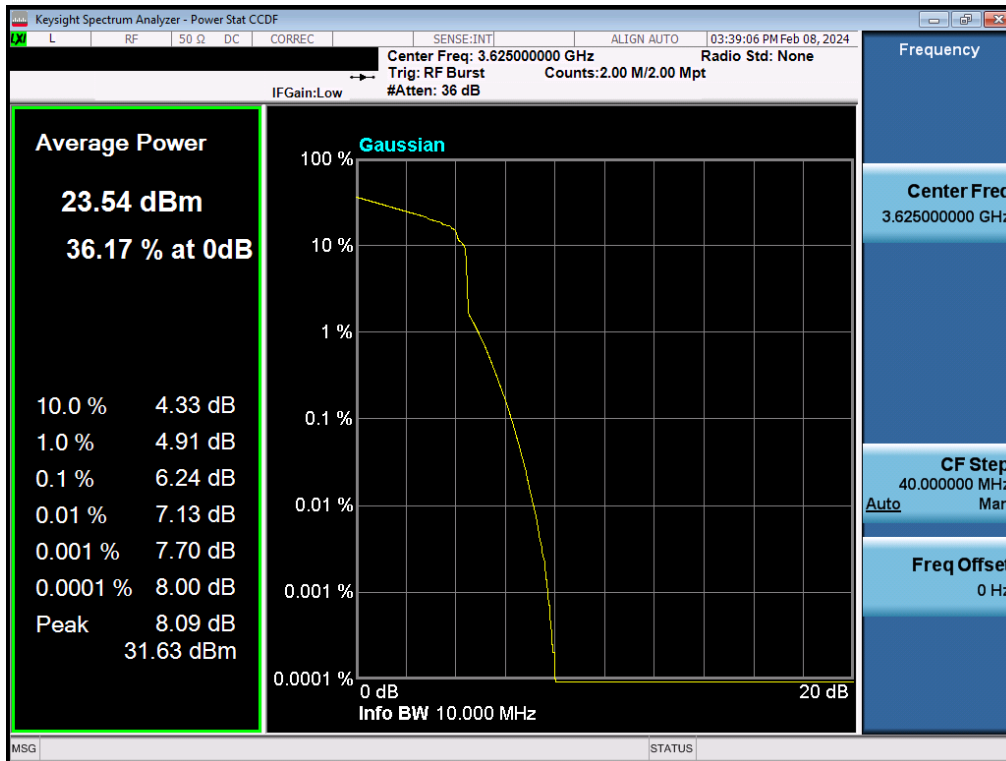


Plot 7.141. Peak to Average Power Ratio Plot (10MHz, QPSK – Mid Channel) – ANT1

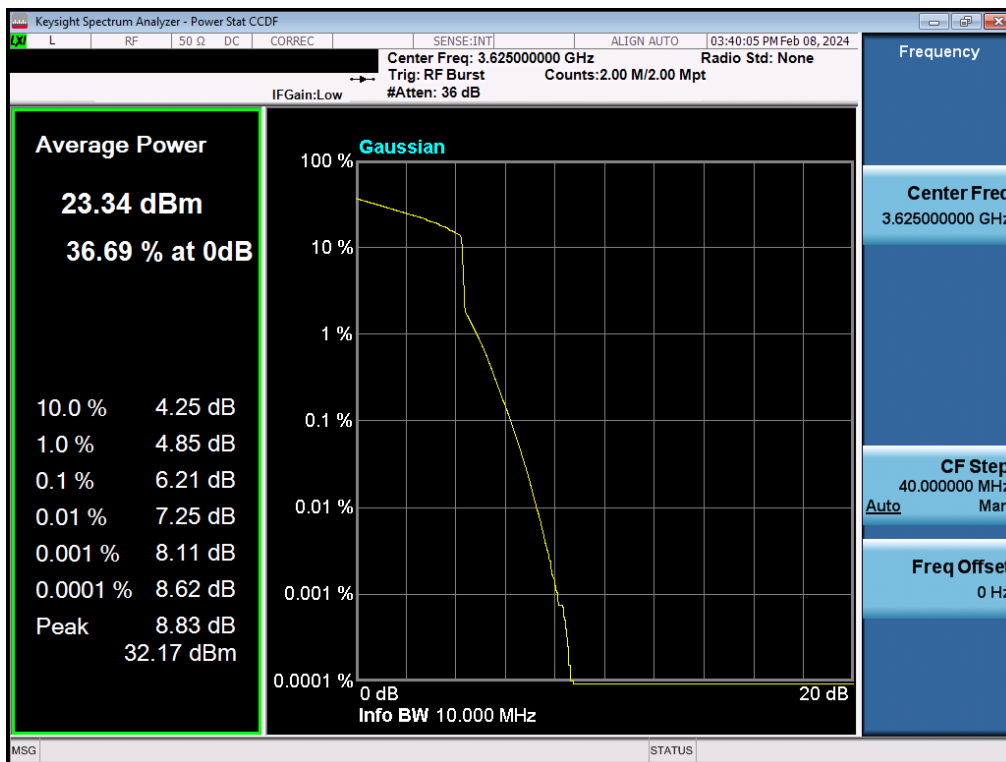


Plot 7.142. Peak to Average Power Ratio Plot (10MHz, 16QAM – Mid Channel) – ANT1

FCC ID: 2AS22-FLCOCH2	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2401230005-01.2AS22	Test Dates: 11/29/23-9/3/2024	EUT Type: CBRS CPE	Page 96 of 152



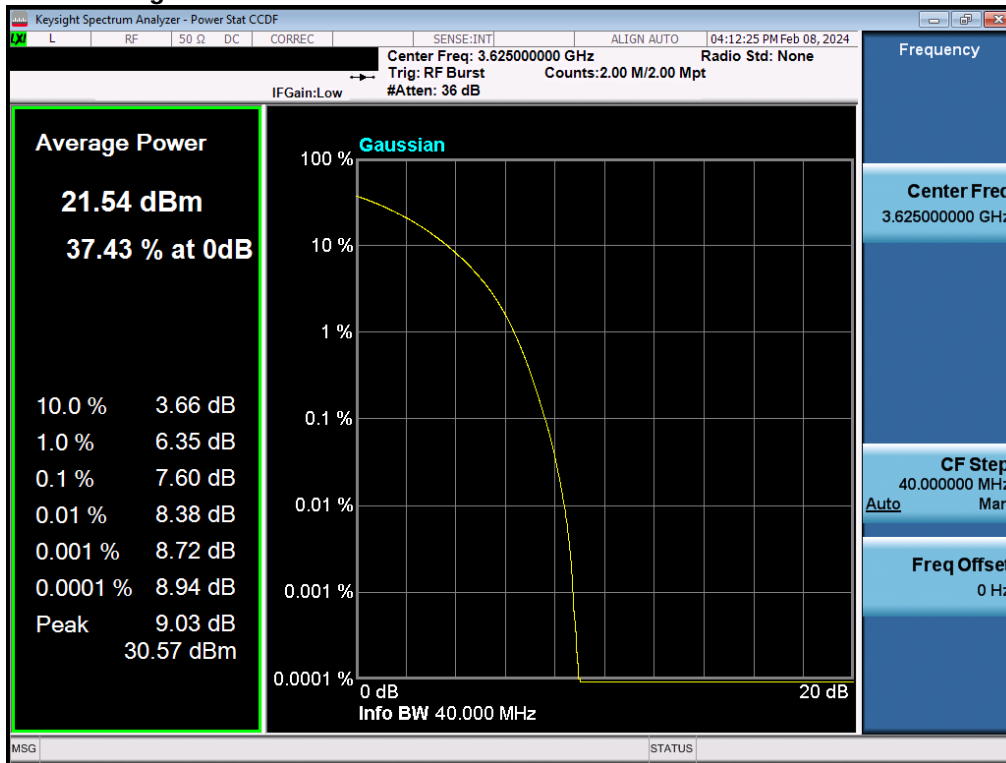
Plot 7.143. Peak to Average Power Ratio Plot (10MHz, 64QAM – Mid Channel) – ANT1



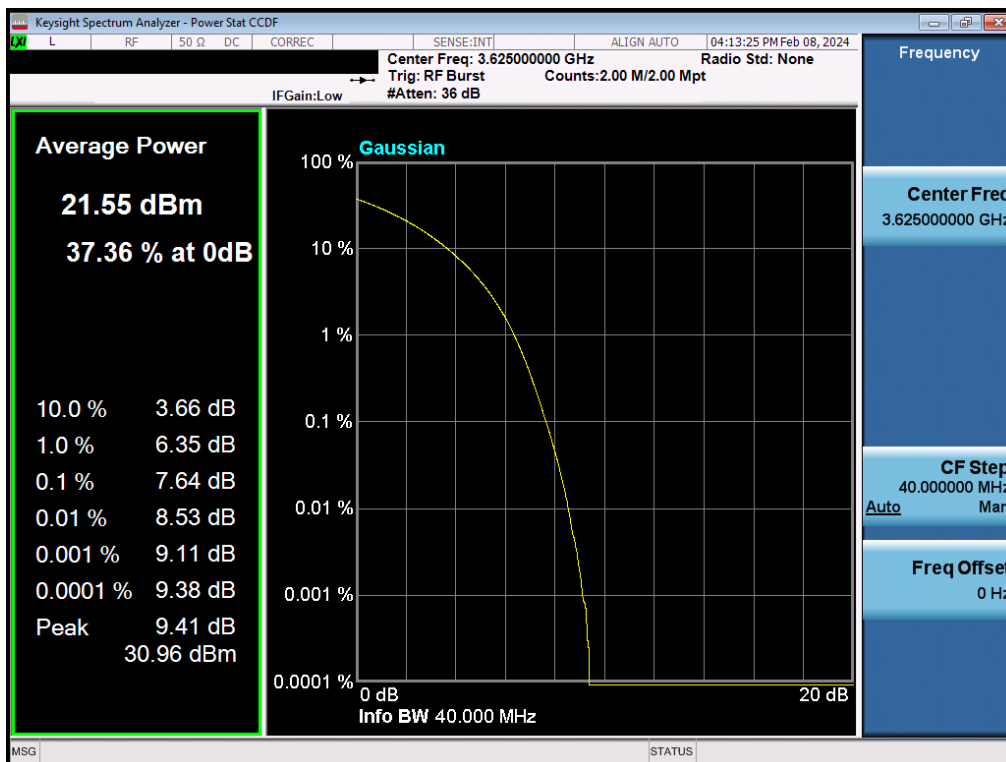
Plot 7.144. Peak to Average Power Ratio Plot (10MHz, 256QAM – Mid Channel) – ANT1

FCC ID: 2AS22-FLCOCH2	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2401230005-01.2AS22	Test Dates: 11/29/23-9/3/2024	EUT Type: CBRS CPE	Page 97 of 152

Antenna 2 Peak to Average Ratio

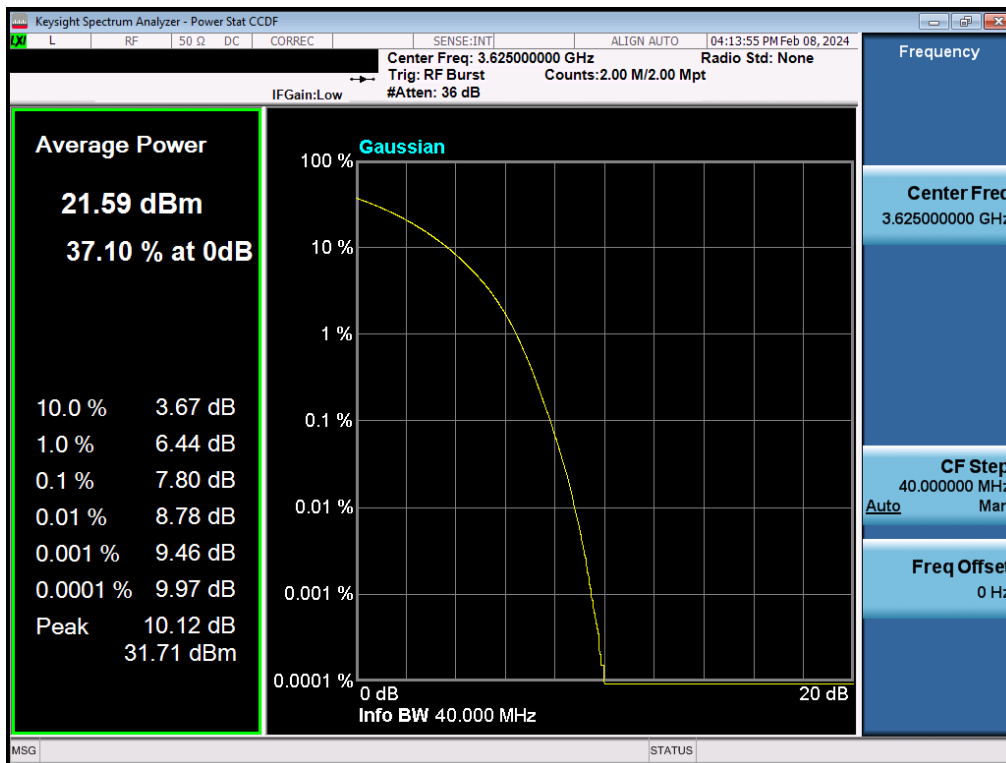


Plot 7.145. Peak to Average Power Ratio Plot (40MHz, QPSK – Mid Channel) – ANT2

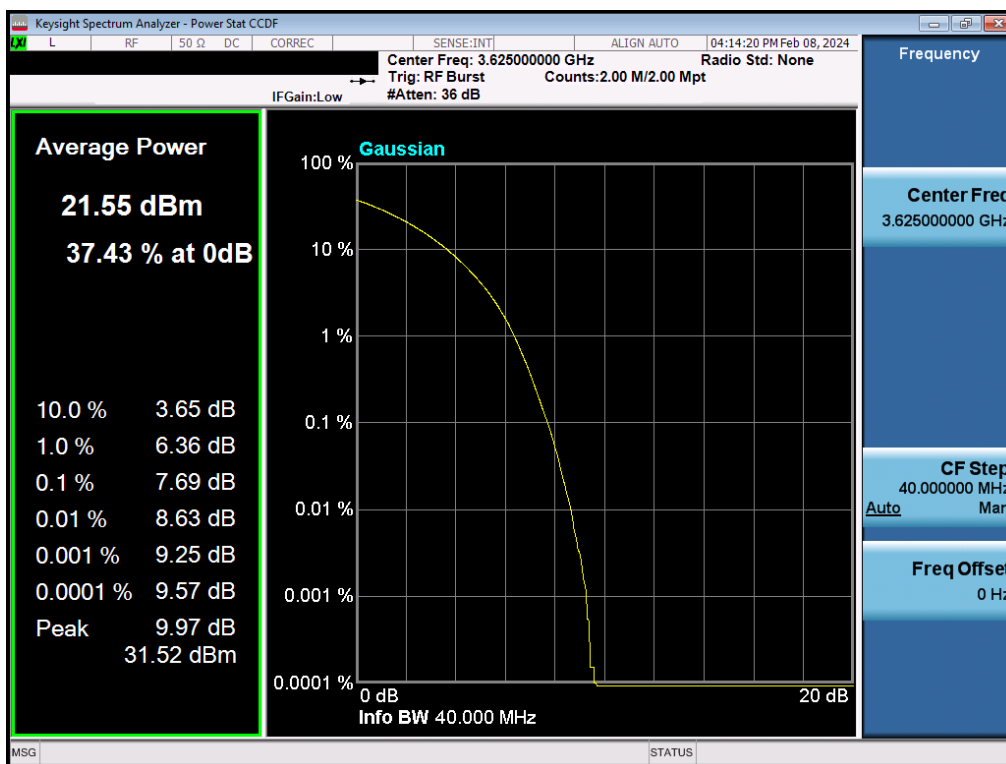


Plot 7.146. Peak to Average Power Ratio Plot (40MHz, 16QAM – Mid Channel) – ANT2

FCC ID: 2AS22-FLCOCH2	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2401230005-01.2AS22	Test Dates: 11/29/23-9/3/2024	EUT Type: CBRS CPE	Page 98 of 152

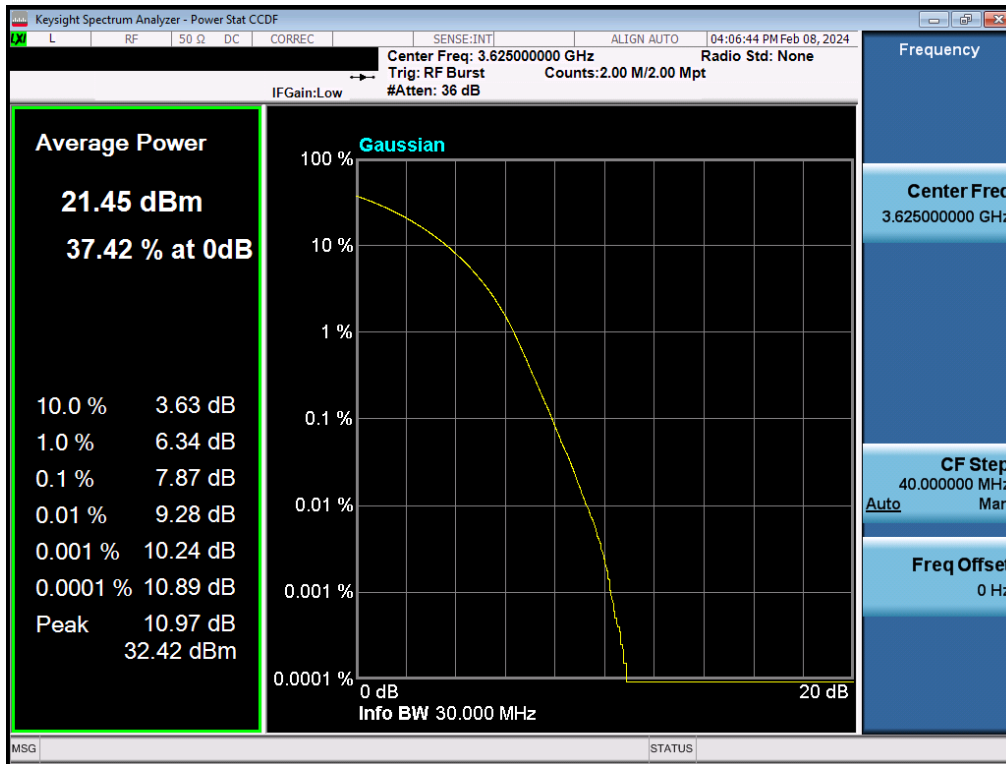


Plot 7.147. Peak to Average Power Ratio Plot (40MHz, 64QAM – Mid Channel) – ANT2

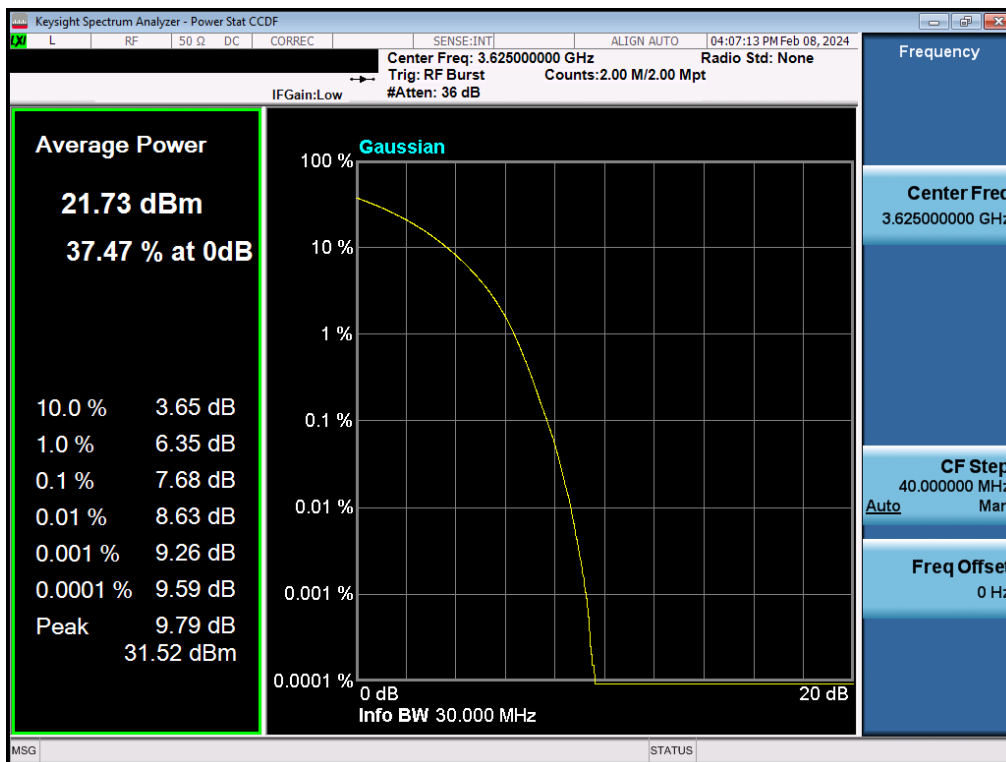


Plot 7.148. Peak to Average Power Ratio Plot (40MHz, 256QAM – Mid Channel) – ANT2

FCC ID: 2AS22-FLCOCH2	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2401230005-01.2AS22	Test Dates: 11/29/23-9/3/2024	EUT Type: CBRS CPE	Page 99 of 152

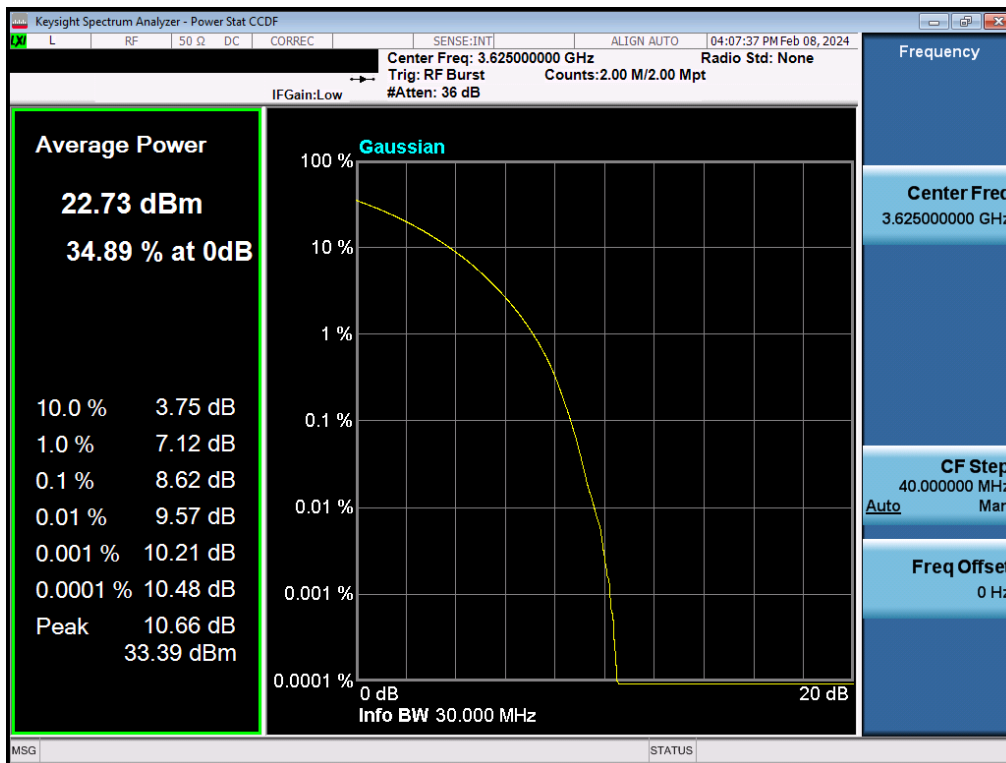


Plot 7.149. Peak to Average Power Ratio Plot (30MHz, QPSK – Mid Channel) – ANT2

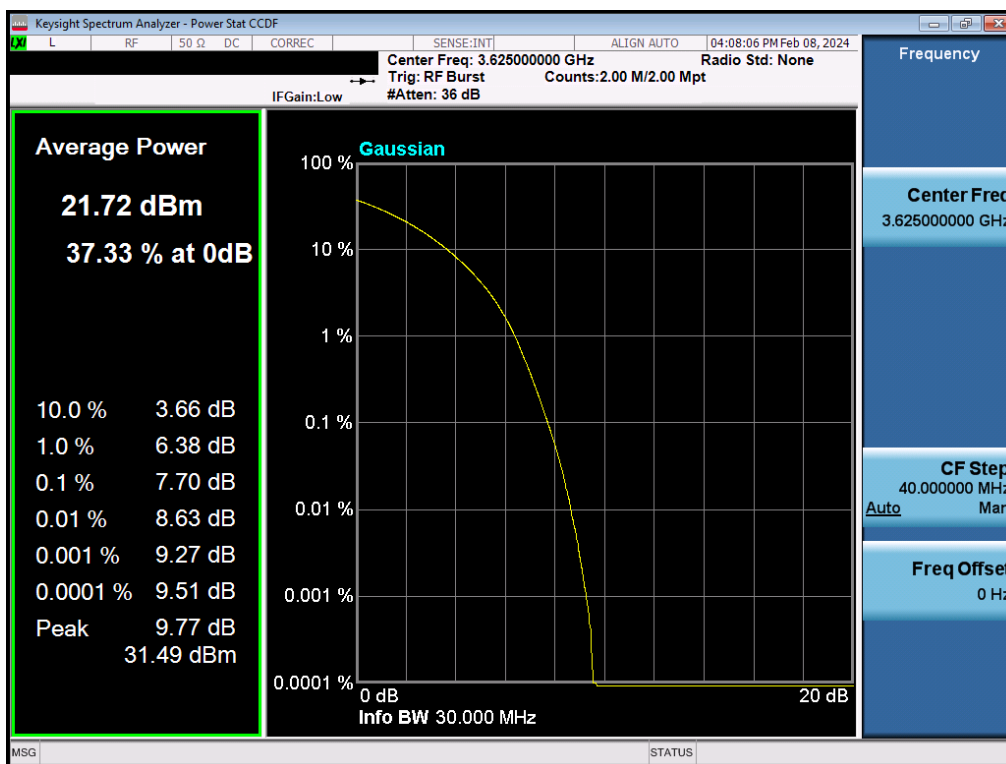


Plot 7.150. Peak to Average Power Ratio Plot (30MHz, 16QAM – Mid Channel) – ANT2

FCC ID: 2AS22-FLCOCH2	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2401230005-01.2AS22	Test Dates: 11/29/23-9/3/2024	EUT Type: CBRS CPE	Page 100 of 152

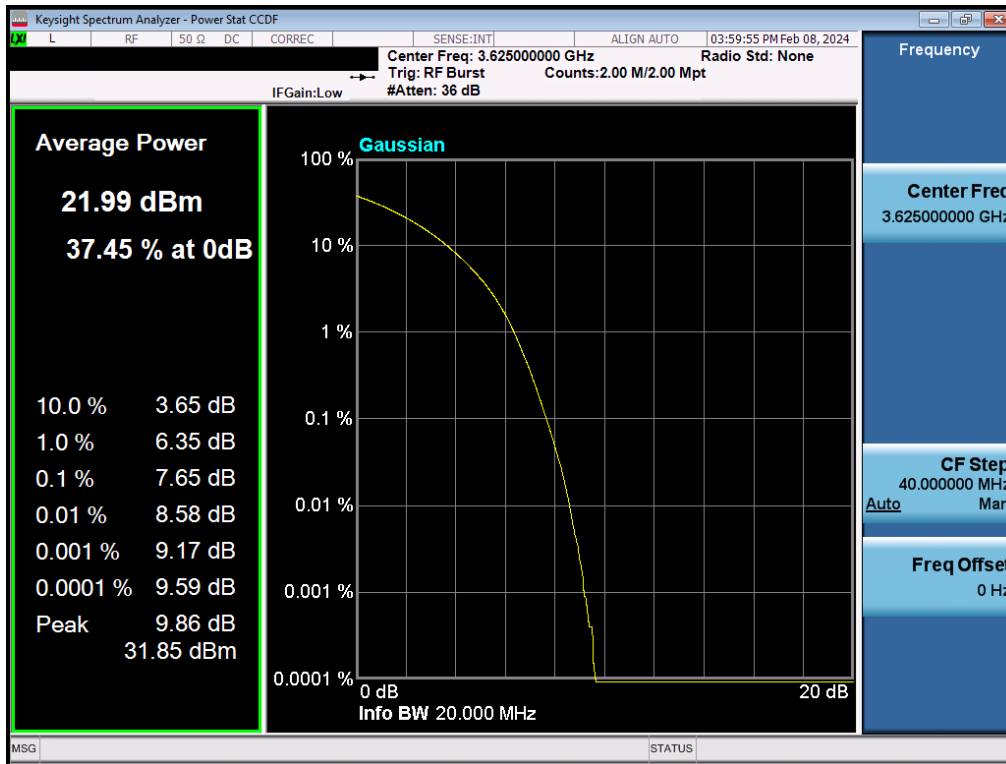


Plot 7.151. Peak to Average Power Ratio Plot (30MHz, 64QAM – Mid Channel) – ANT2

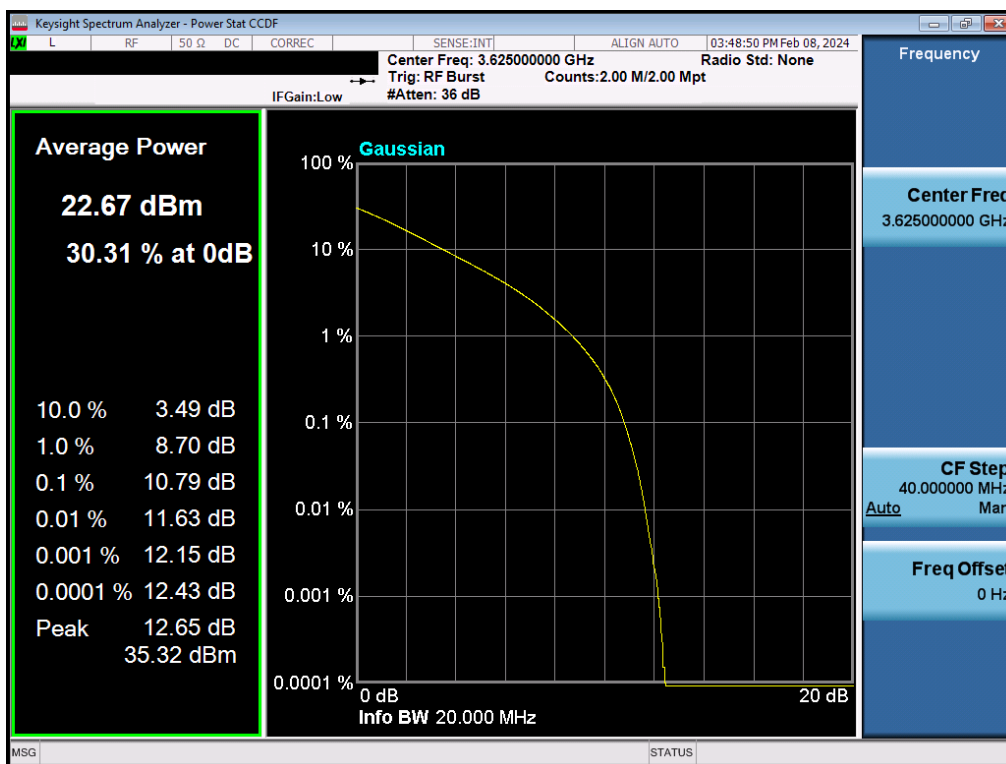


Plot 7.152. Peak to Average Power Ratio Plot (30MHz, 256QAM – Mid Channel) – ANT2

FCC ID: 2AS22-FLCOCH2	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2401230005-01.2AS22	Test Dates: 11/29/23-9/3/2024	EUT Type: CBRS CPE	Page 101 of 152

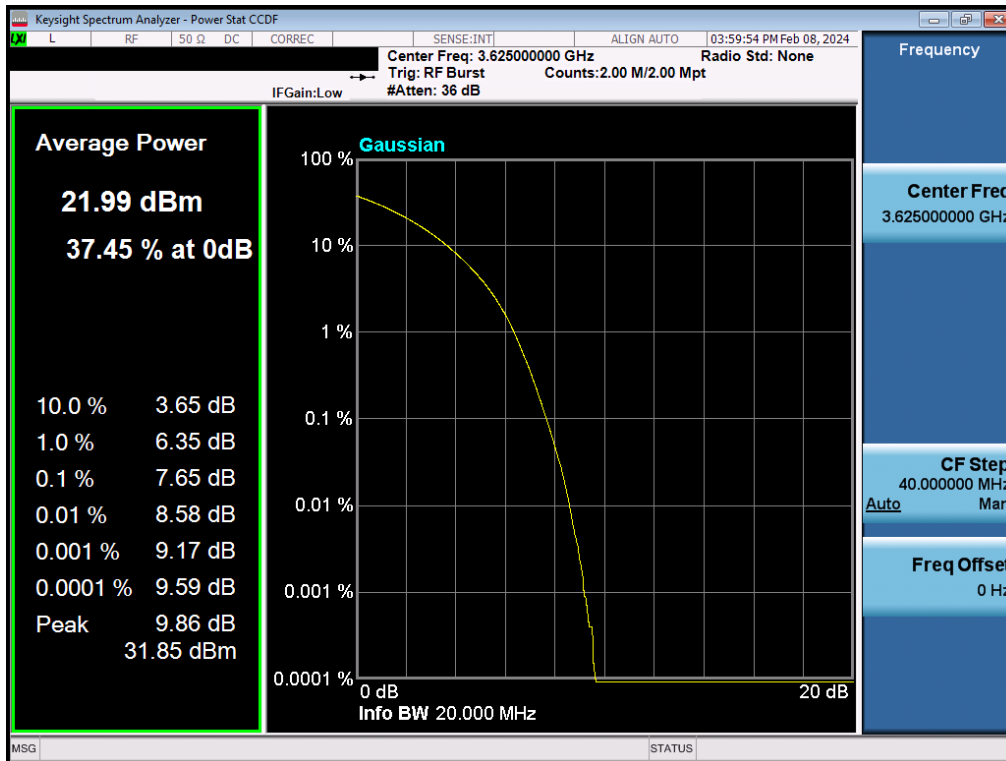


Plot 7.153. Peak to Average Power Ratio Plot (20MHz, QPSK – Mid Channel) – ANT2

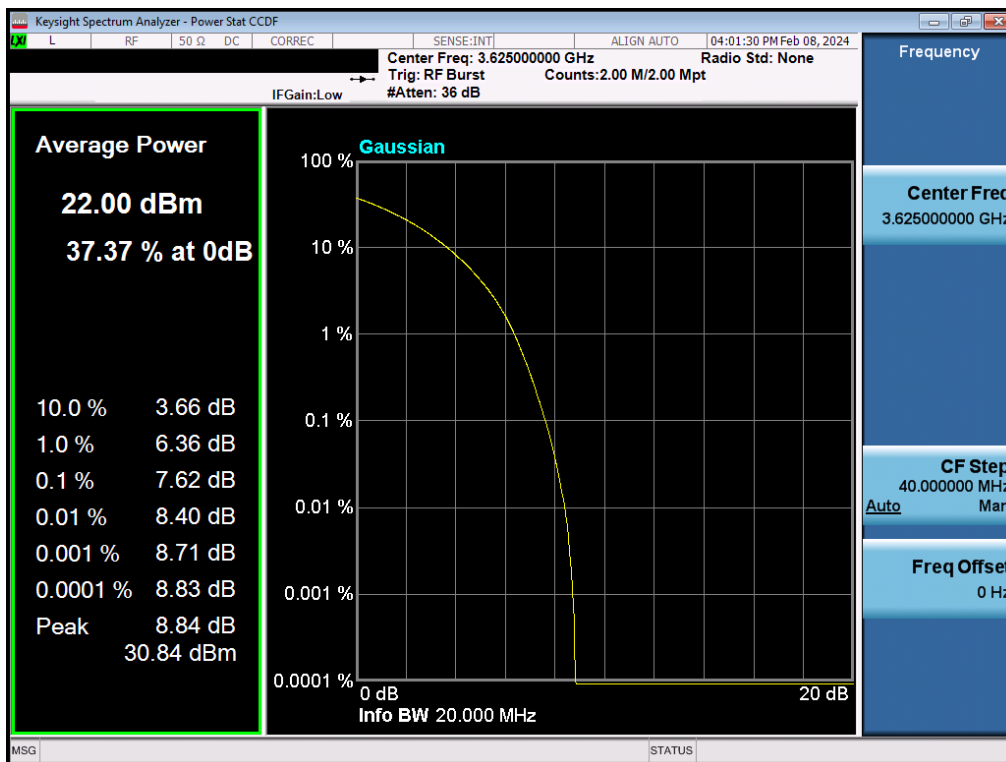


Plot 7.154. Peak to Average Power Ratio Plot (20MHz, 16QAM – Mid Channel) – ANT2

FCC ID: 2AS22-FLCOCH2	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2401230005-01.2AS22	Test Dates: 11/29/23-9/3/2024	EUT Type: CBRS CPE	Page 102 of 152

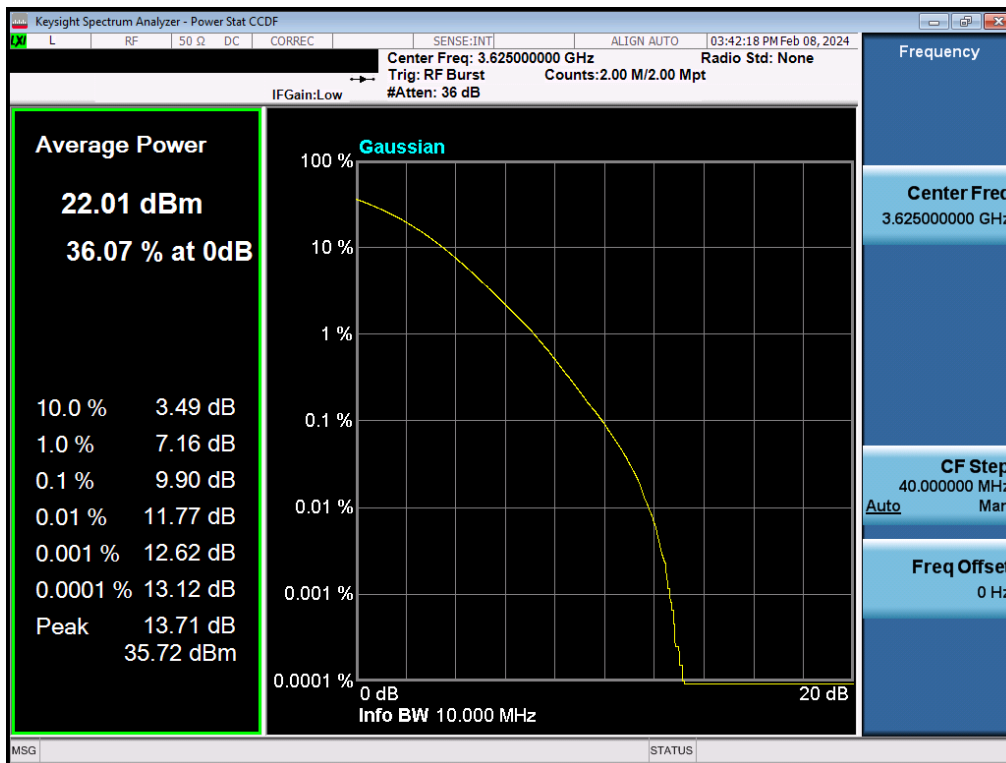


Plot 7.155. Peak to Average Power Ratio Plot (20MHz, 64QAM – Mid Channel) – ANT2

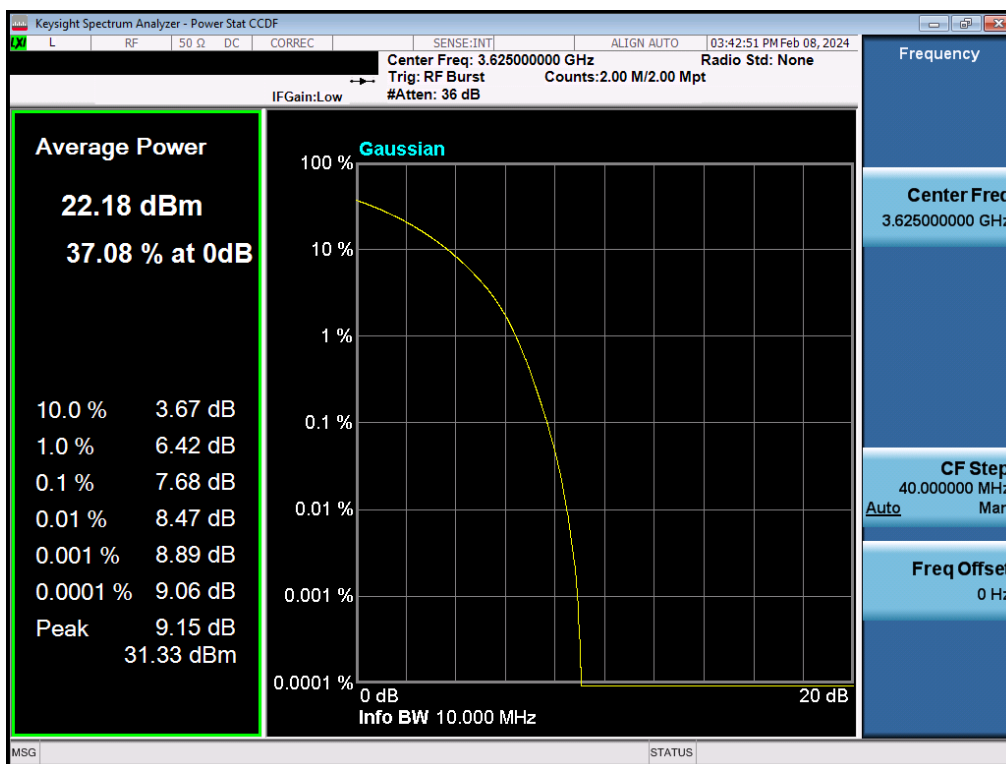


Plot 7.156. Peak to Average Power Ratio Plot (20MHz, 256QAM – Mid Channel) – ANT2

FCC ID: 2AS22-FLCOCH2	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2401230005-01.2AS22	Test Dates: 11/29/23-9/3/2024	EUT Type: CBRS CPE	Page 103 of 152

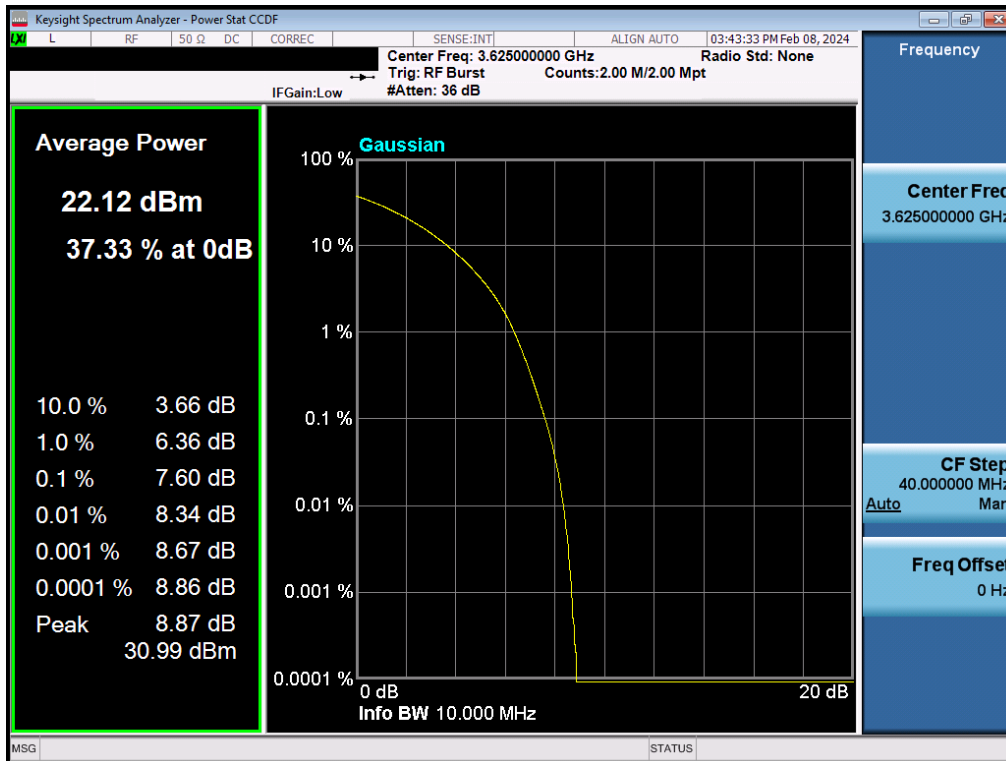


Plot 7.157. Peak to Average Power Ratio Plot (10MHz, QPSK – Mid Channel) – ANT2

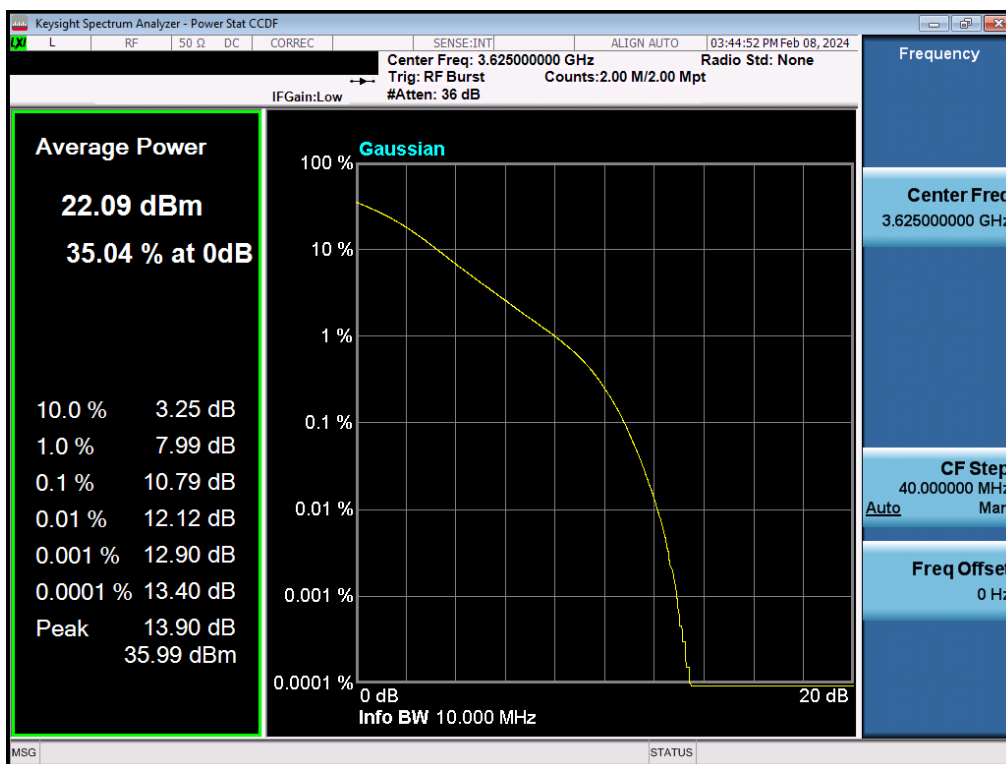


Plot 7.158. Peak to Average Power Ratio Plot (10MHz, 16QAM – Mid Channel) – ANT2

FCC ID: 2AS22-FLCOCH2	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2401230005-01.2AS22	Test Dates: 11/29/23-9/3/2024	EUT Type: CBRS CPE	Page 104 of 152



Plot 7.159. Peak to Average Power Ratio Plot (10MHz, 64QAM – Mid Channel) – ANT2



Plot 7.160. Peak to Average Power Ratio Plot (10MHz, 256QAM – Mid Channel) – ANT2

FCC ID: 2AS22-FLCOCH2	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2401230005-01.2AS22	Test Dates: 11/29/23-9/3/2024	EUT Type: CBRS CPE	Page 105 of 152

7.7 Spurious and Harmonic Emissions at Antenna Terminal

Test Overview

The level of the carrier and the various conducted spurious and harmonic frequencies is measured by means of a calibrated spectrum analyzer. The spectrum is scanned from the lowest frequency generated in the equipment up to a frequency including its 10th harmonic. All out of band emissions are measured with a spectrum analyzer connected to the antenna terminal of the EUT while the EUT is operating at its maximum duty cycle, at maximum power, and at the appropriate frequencies. All data rates were investigated to determine the worst-case configuration. All modes of operation were investigated and the worst-case configuration results are reported in this section.

The conducted power of any emissions below 3530 MHz or above 3720 MHz shall not exceed -40 dBm/Mhz.

Test Procedure Used

ANSI C63.26-2015 – Section 5.7.4

Test Settings

1. Start frequency was set to 30MHz and stop frequency was set to at least 10 * the fundamental frequency (separated into at least two plots per channel)
2. Detector = RMS
3. Trace mode = Max Hold
4. Sweep time = auto couple
5. The trace was allowed to stabilize
6. Please see test notes below for RBW and VBW settings

Test Setup

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

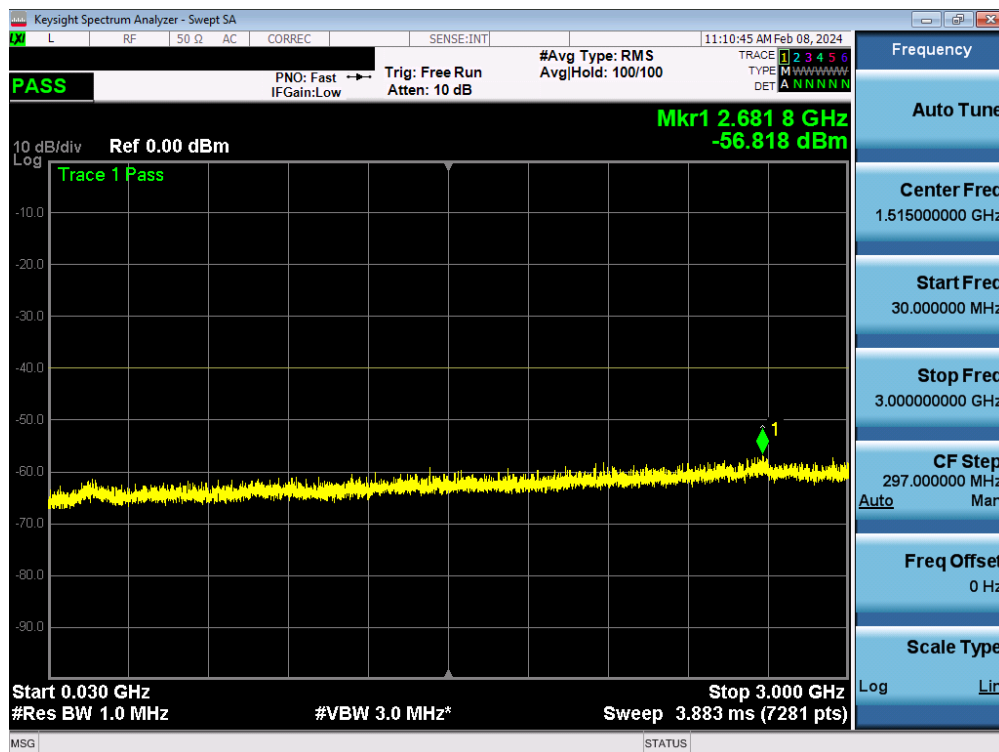


Figure 7-6. Test Instrument & Measurement Setup

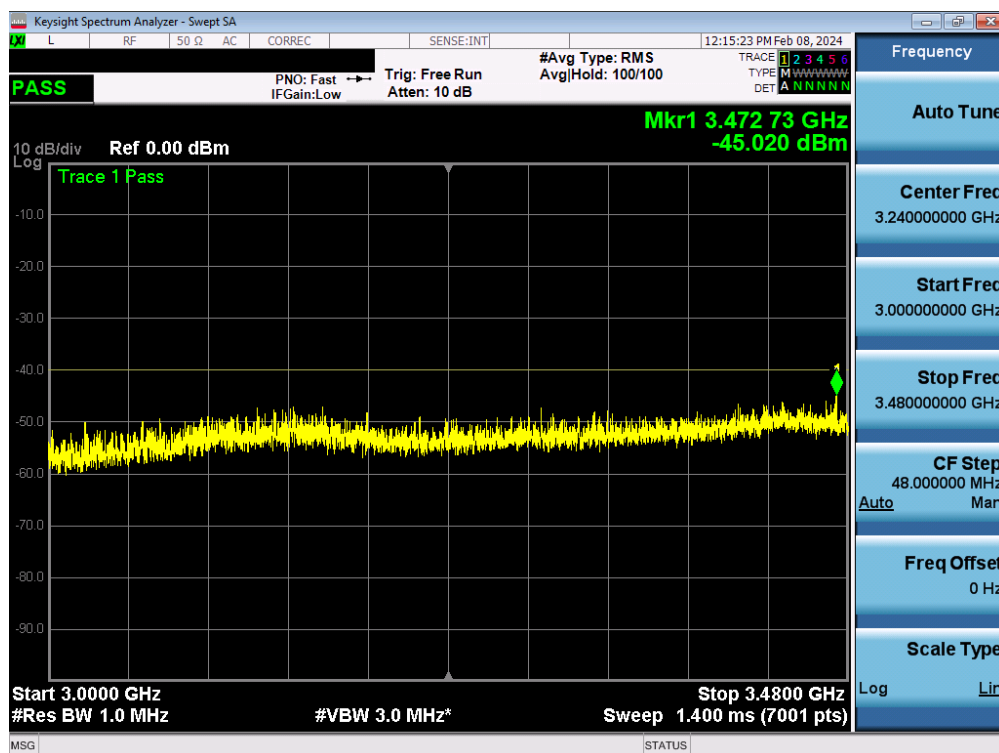
Test Notes

1. Compliance with the applicable limits is based on the use of measurement instrumentation employing a resolution bandwidth of 1 MHz.
2. The Plots in this section have a 3dB correction applied to the individual plots to address the MIMO requirements in ANSI C63.26
3. Unwanted emissions between 3510MHz and 3530MHz, as well as between 3720 MHz and 3740 MHz, are observed and reported in section 7.8.

FCC ID: 2AS22-FLCOCH2	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2401230005-01.2AS22	Test Dates: 11/29/23-9/3/2024	EUT Type: CBRS CPE	Page 106 of 152

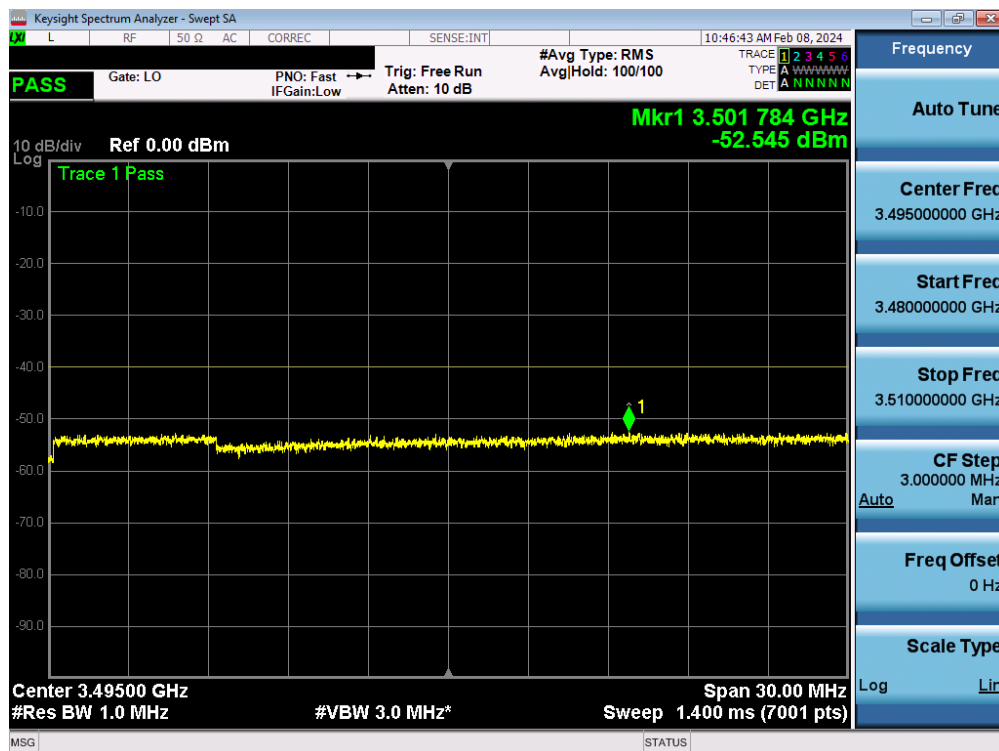


Plot 7.161. Conducted Spurious Plot (10MHz QPSK, Low Channel – ANT1)

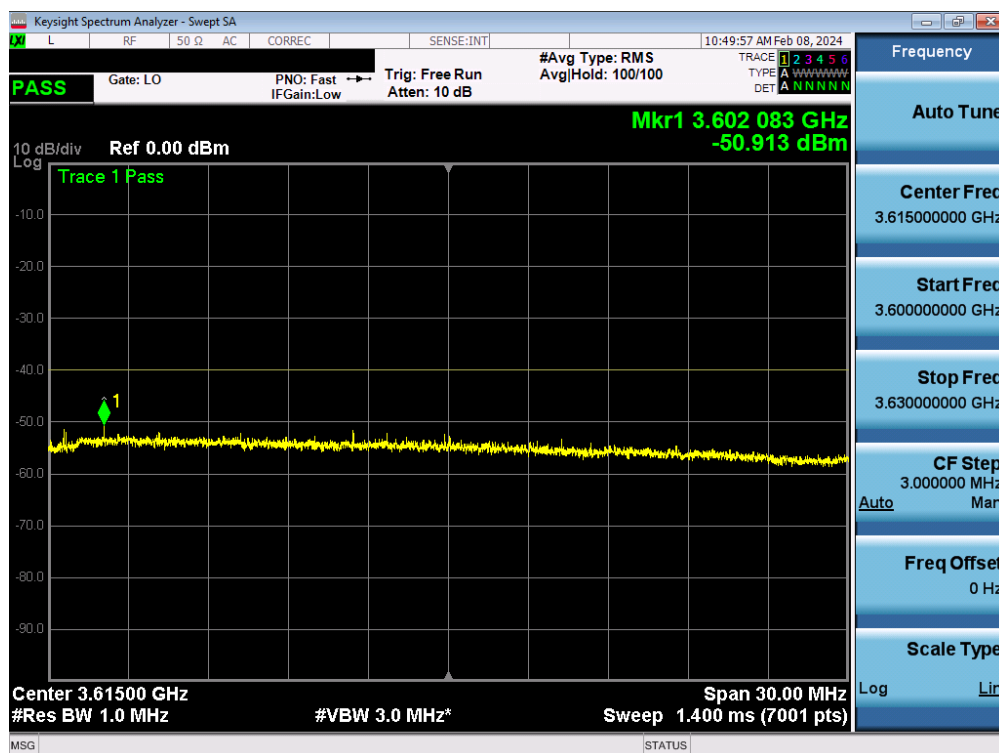


Plot 7.162. Conducted Spurious Plot (10MHz QPSK, Low Channel – ANT1)

FCC ID: 2AS22-FLCOCH2	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2401230005-01.2AS22	Test Dates: 11/29/23-9/3/2024	EUT Type: CBRS CPE	Page 107 of 152

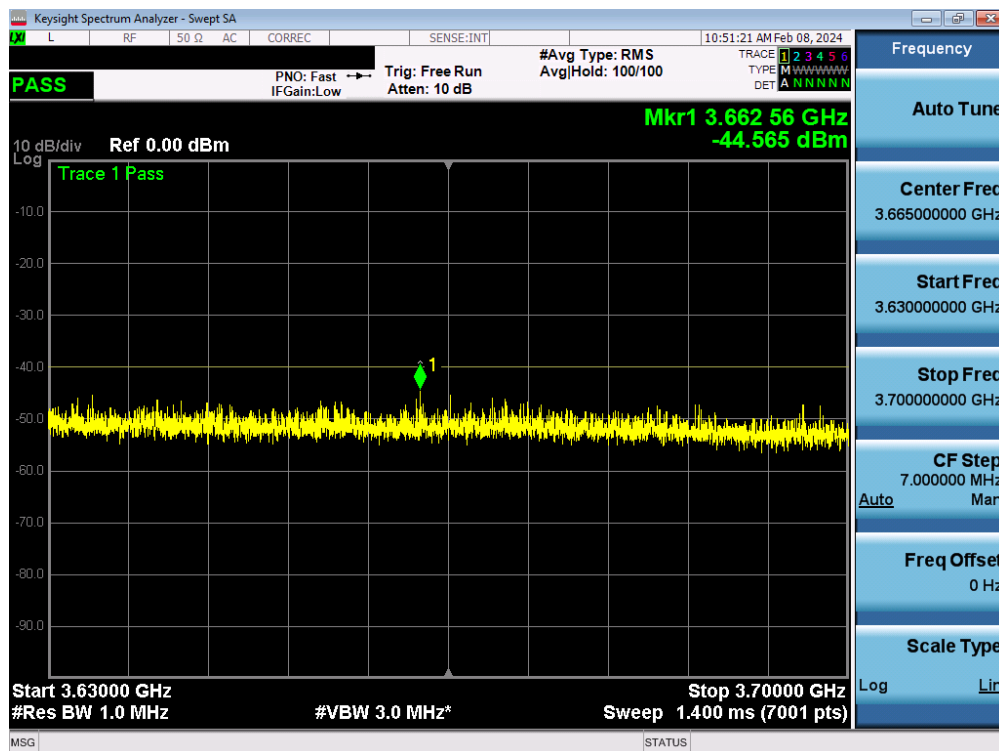


Plot 7.163. Conducted Spurious Plot (10MHz QPSK, Low Channel – ANT1)

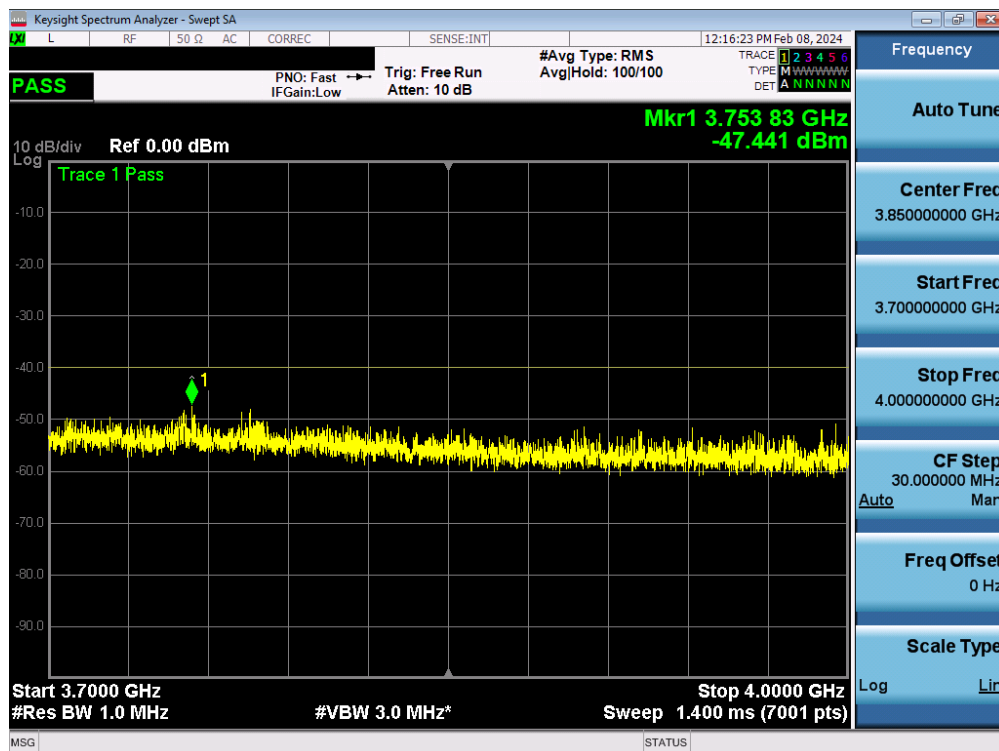


Plot 7.164. Conducted Spurious Plot (10MHz QPSK, Low Channel – ANT1)

FCC ID: 2AS22-FLCOCH2	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2401230005-01.2AS22	Test Dates: 11/29/23-9/3/2024	EUT Type: CBRS CPE	Page 108 of 152

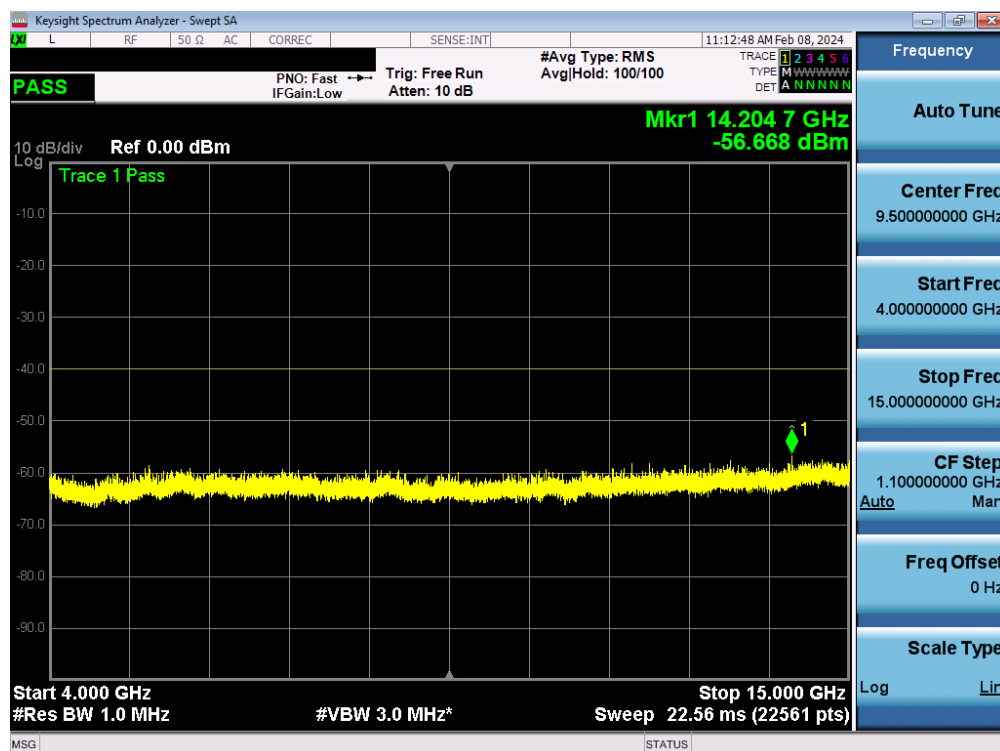


Plot 7.165. Conducted Spurious Plot (10MHz QPSK, Low Channel – ANT1)

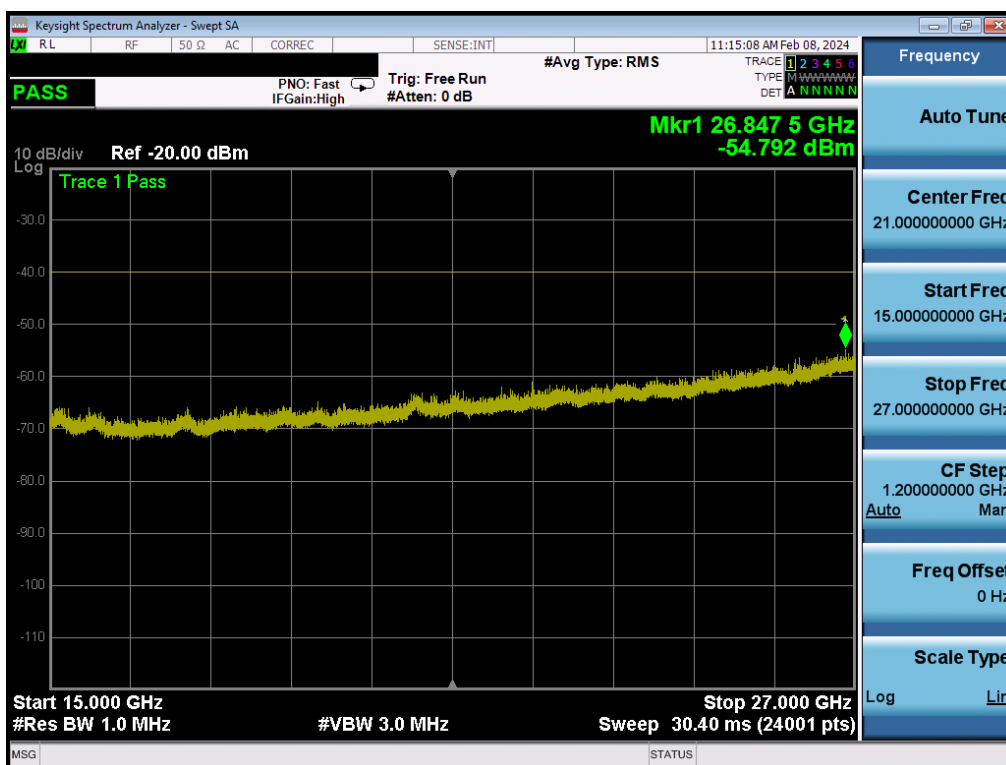


Plot 7.166. Conducted Spurious Plot (10MHz QPSK, Low Channel – ANT1)

FCC ID: 2AS22-FLCOCH2	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2401230005-01.2AS22	Test Dates: 11/29/23-9/3/2024	EUT Type: CBRS CPE	Page 109 of 152

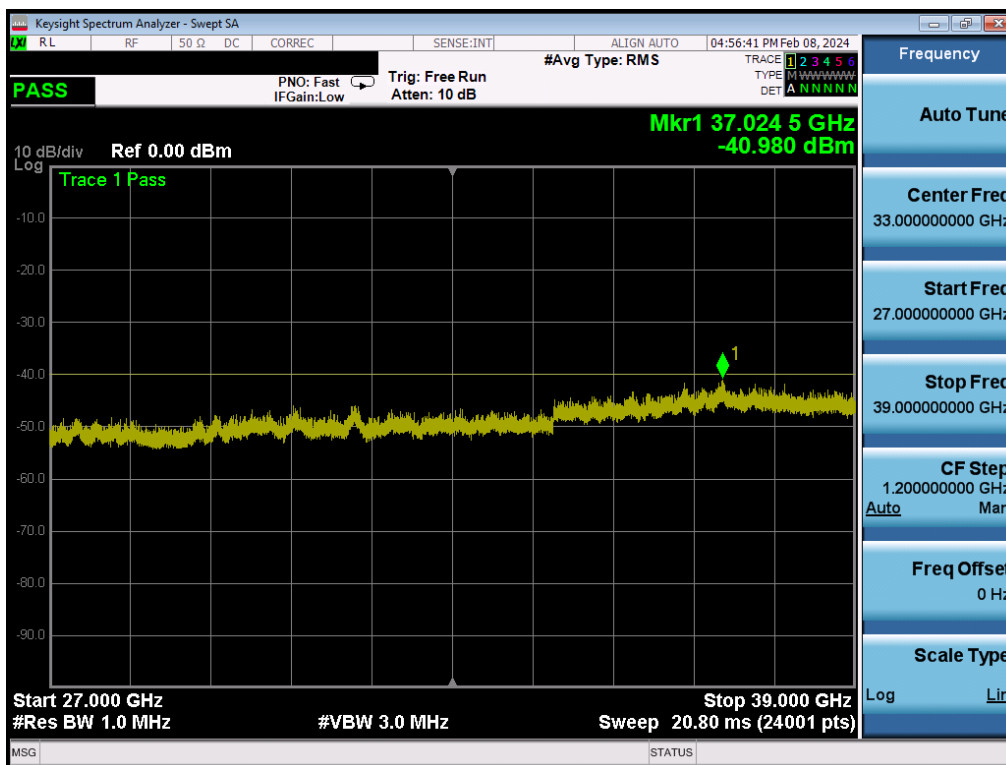


Plot 7.167. Conducted Spurious Plot (10MHz QPSK, Low Channel – ANT1)

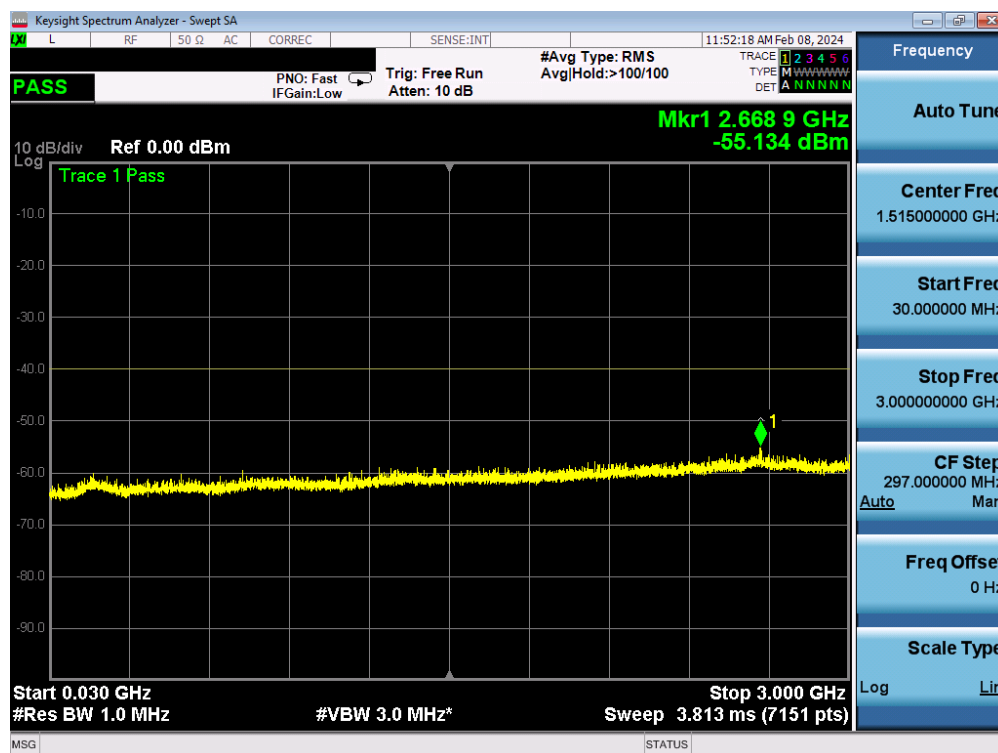


Plot 7.168. Conducted Spurious Plot (10MHz QPSK, Low Channel – ANT1)

FCC ID: 2AS22-FLCOCH2	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2401230005-01.2AS22	Test Dates: 11/29/23-9/3/2024	EUT Type: CBRS CPE	Page 110 of 152

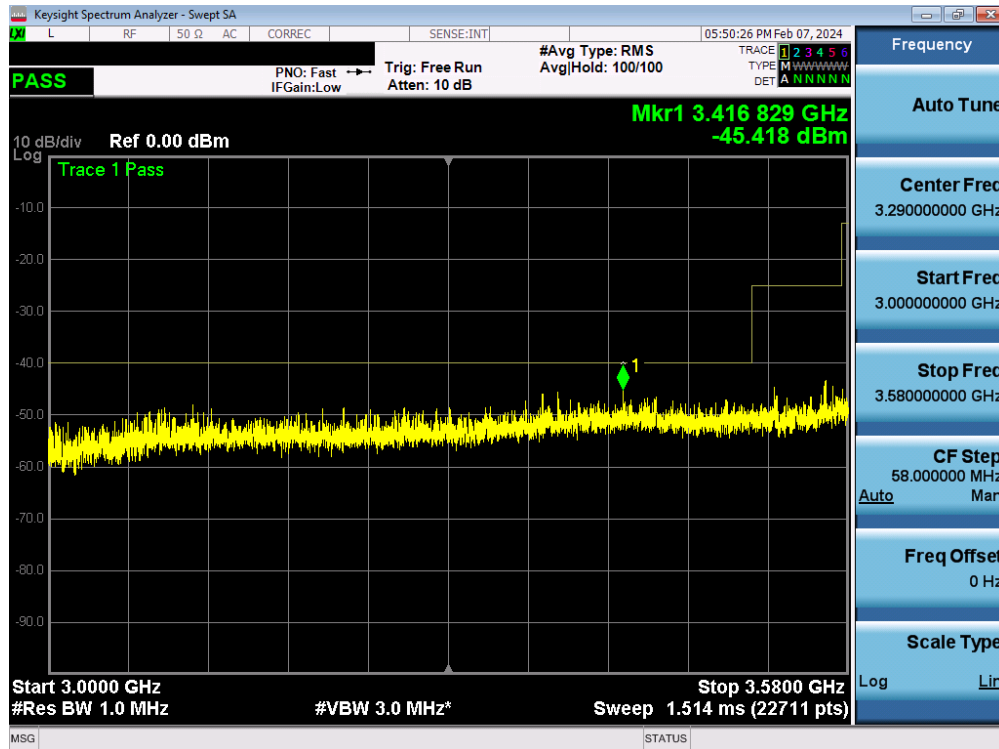


Plot 7.169. Conducted Spurious Plot (10MHz QPSK, Low Channel – ANT1)

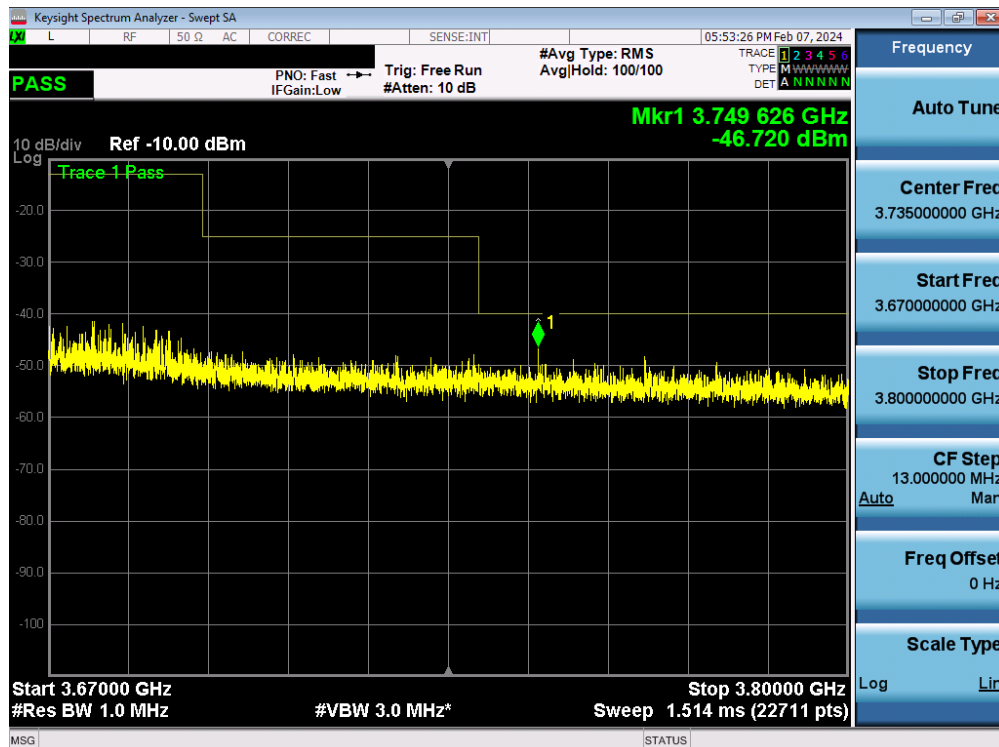


Plot 7.170. Conducted Spurious Plot (10MHz QPSK, Mid Channel – ANT1)

FCC ID: 2AS22-FLCOCH2	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2401230005-01.2AS22	Test Dates: 11/29/23-9/3/2024	EUT Type: CBRS CPE	Page 111 of 152

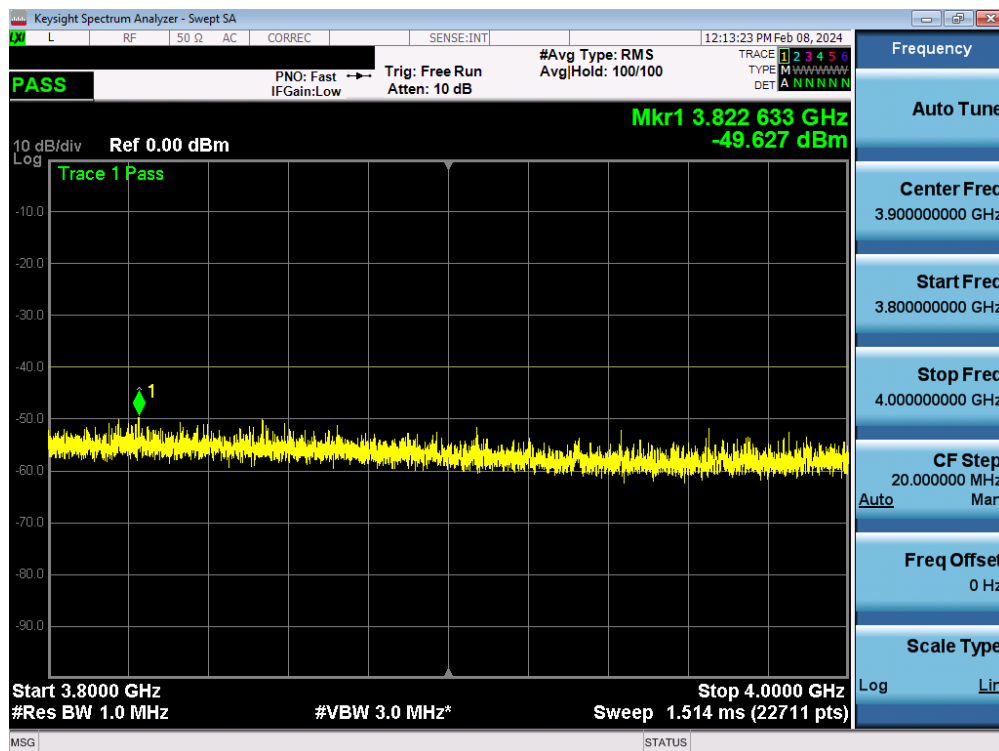


Plot 7.171. Conducted Spurious Plot (10MHz QPSK, Mid Channel – ANT1)

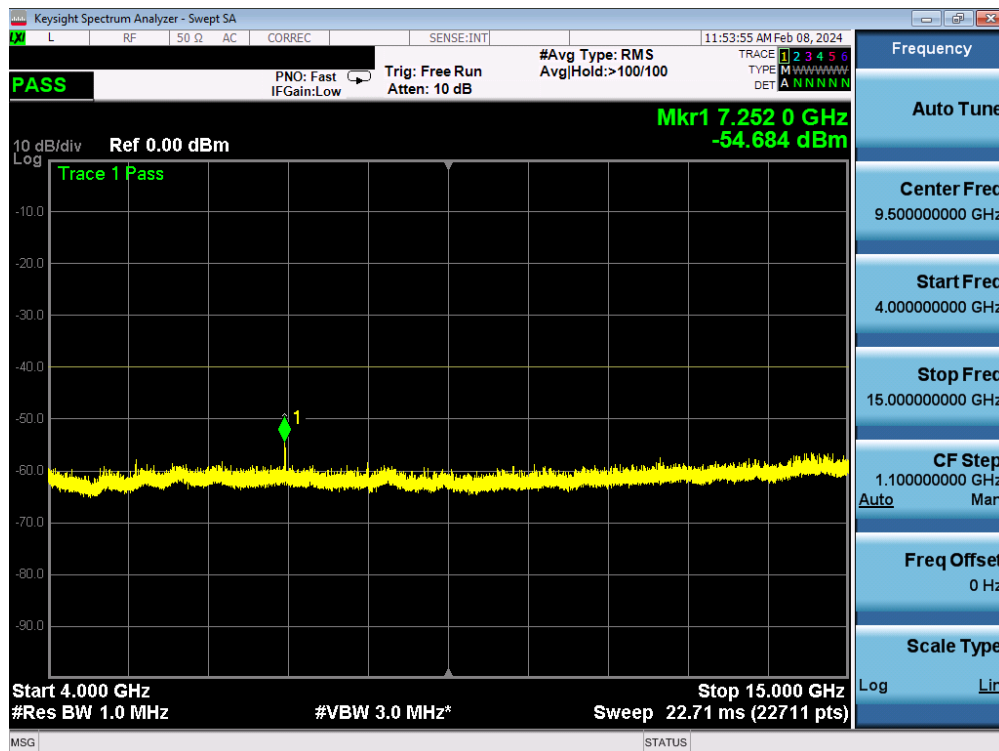


Plot 7.172. Conducted Spurious Plot (10MHz QPSK, Mid Channel – ANT1)

FCC ID: 2AS22-FLCOCH2	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2401230005-01.2AS22	Test Dates: 11/29/23-9/3/2024	EUT Type: CBRS CPE	Page 112 of 152

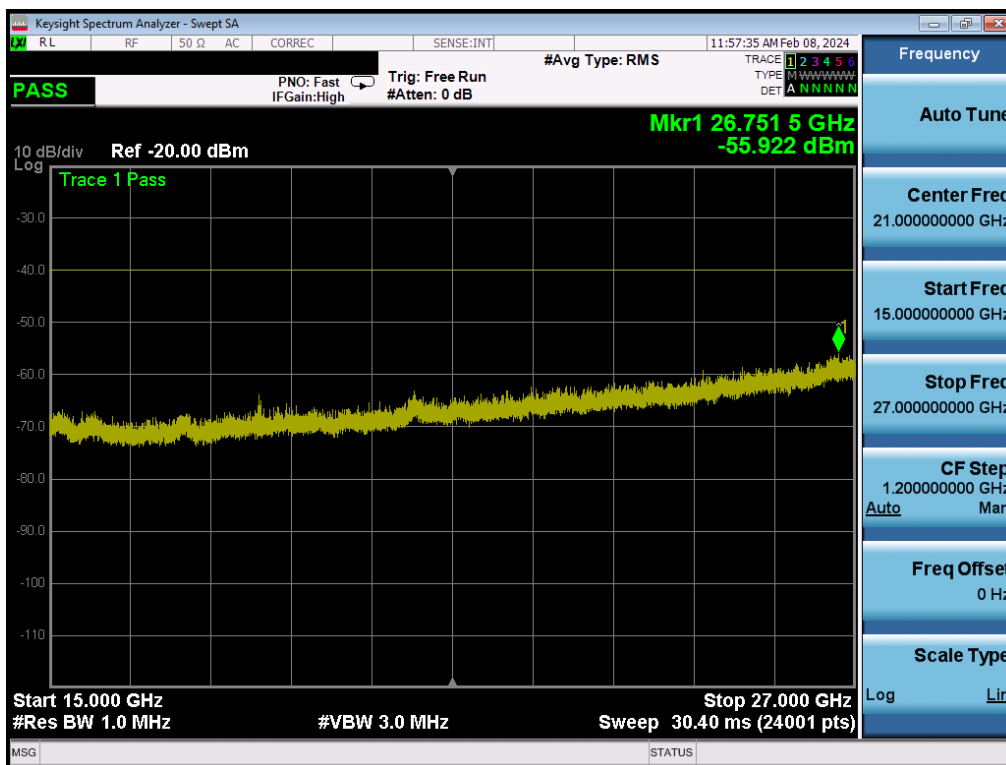


Plot 7.173. Conducted Spurious Plot (10MHz QPSK, Mid Channel – ANT1)

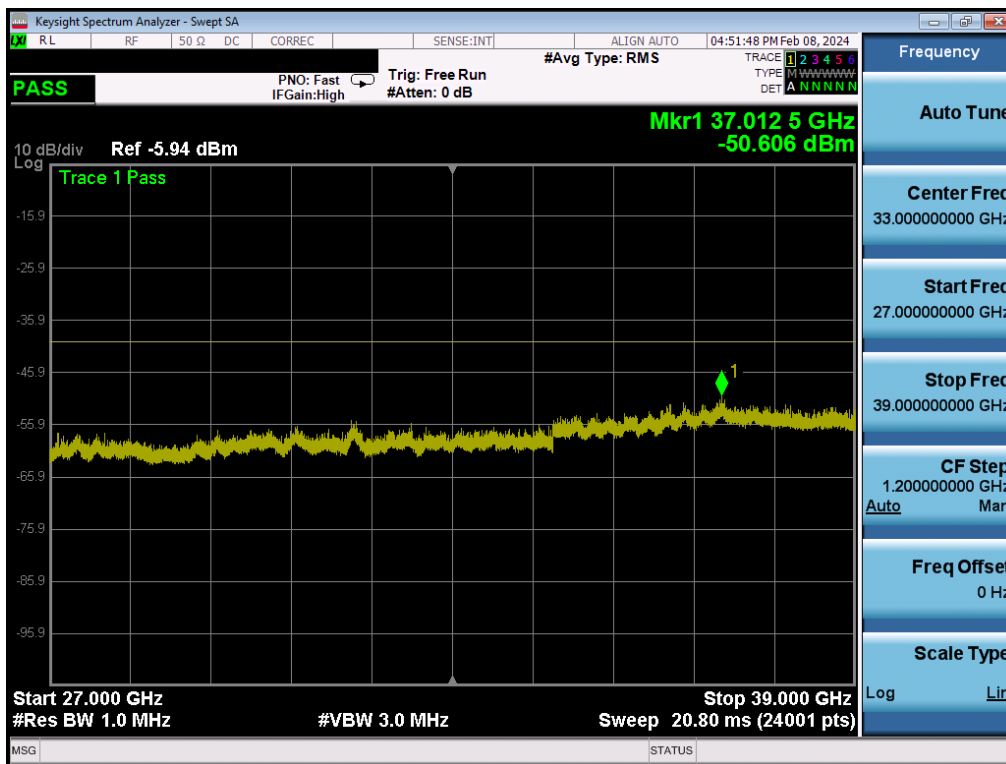


Plot 7.174. Conducted Spurious Plot (10MHz QPSK, Mid Channel – ANT1)

FCC ID: 2AS22-FLCOCH2	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2401230005-01.2AS22	Test Dates: 11/29/23-9/3/2024	EUT Type: CBRS CPE	Page 113 of 152

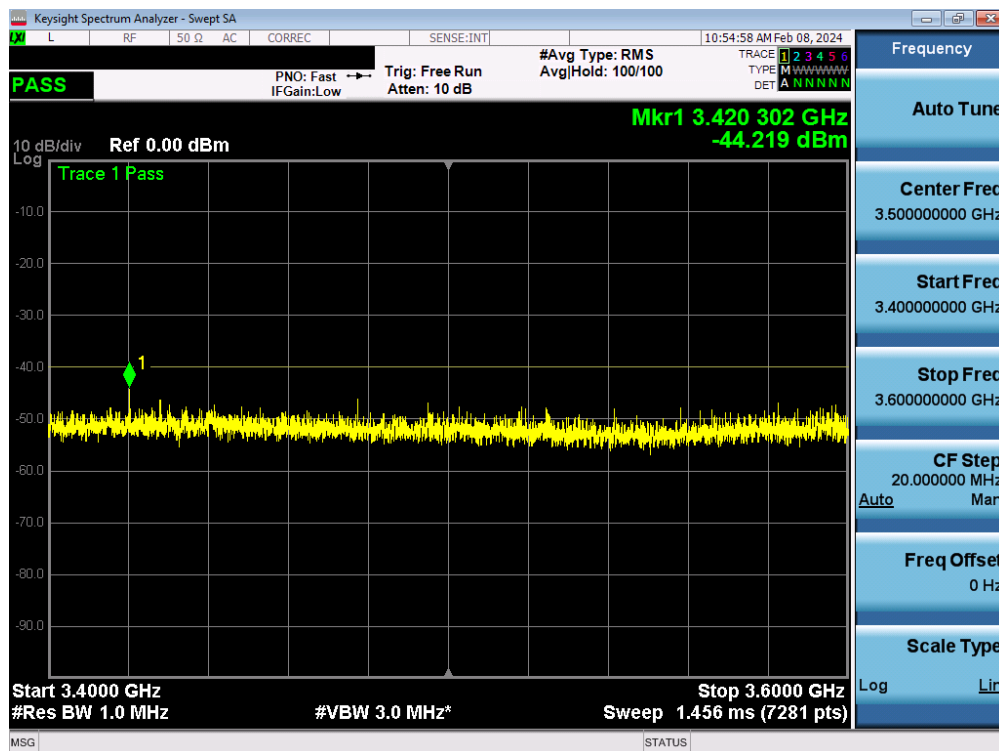


Plot 7.175. Conducted Spurious Plot (10MHz QPSK, Mid Channel – ANT1)

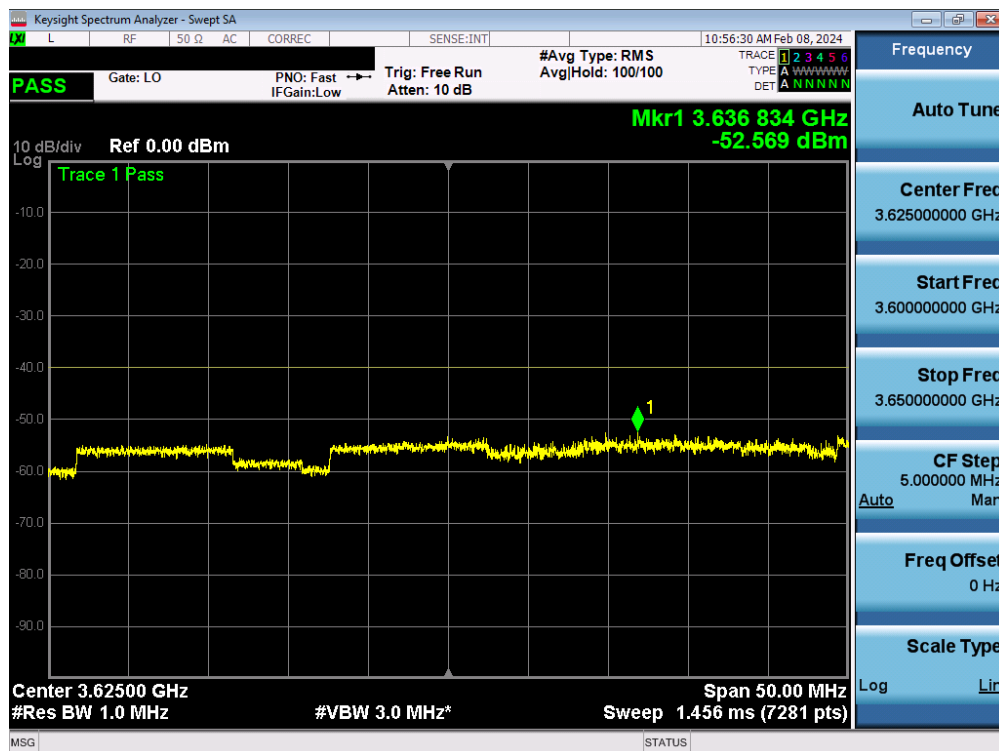


Plot 7.176. Conducted Spurious Plot (10MHz QPSK, Mid Channel – ANT1)

FCC ID: 2AS22-FLCOCH2	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2401230005-01.2AS22	Test Dates: 11/29/23-9/3/2024	EUT Type: CBRS CPE	Page 114 of 152

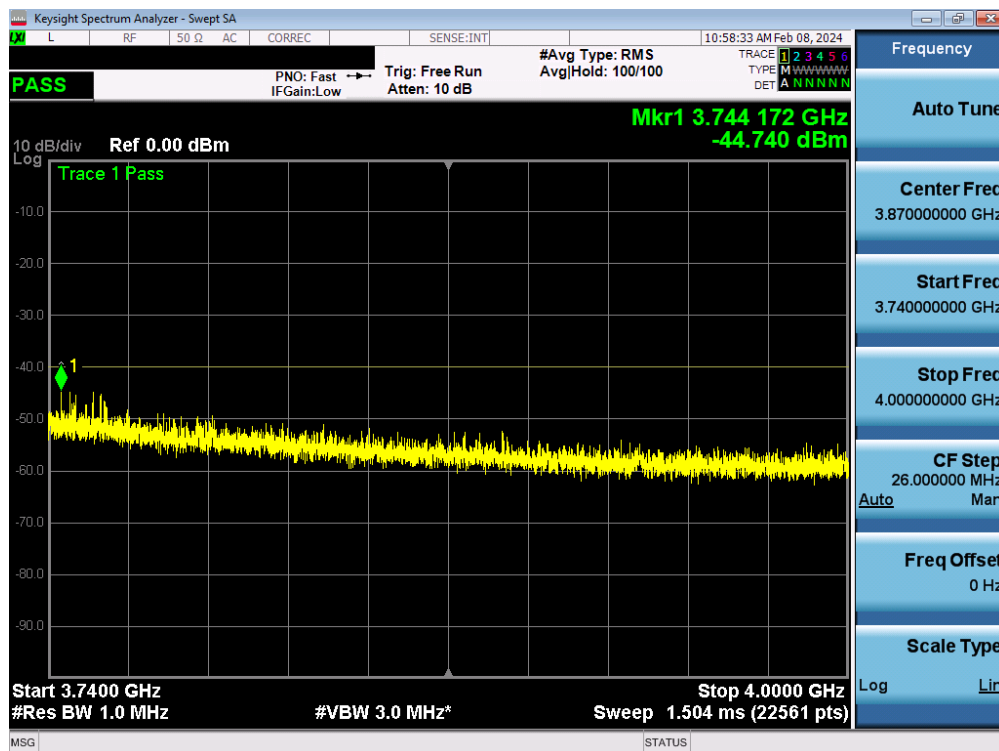


Plot 7.179. Conducted Spurious Plot (10MHz QPSK, High Channel – ANT1)

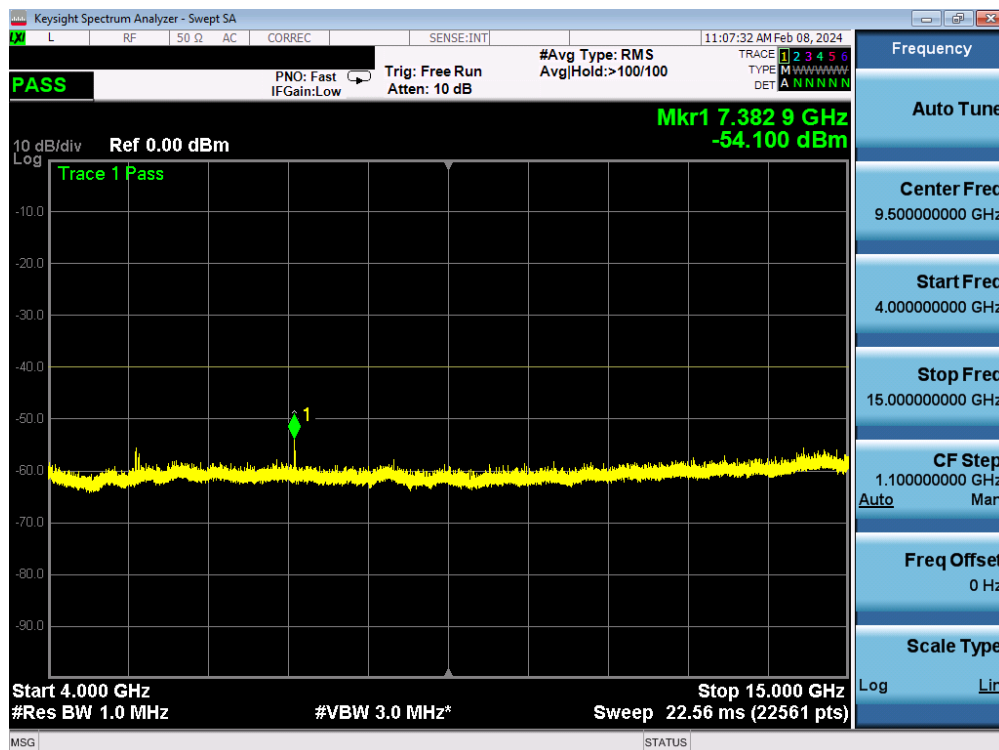


Plot 7.180. Conducted Spurious Plot (10MHz QPSK, High Channel – ANT1)

FCC ID: 2AS22-FLCOCH2	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2401230005-01.2AS22	Test Dates: 11/29/23-9/3/2024	EUT Type: CBRS CPE	Page 116 of 152

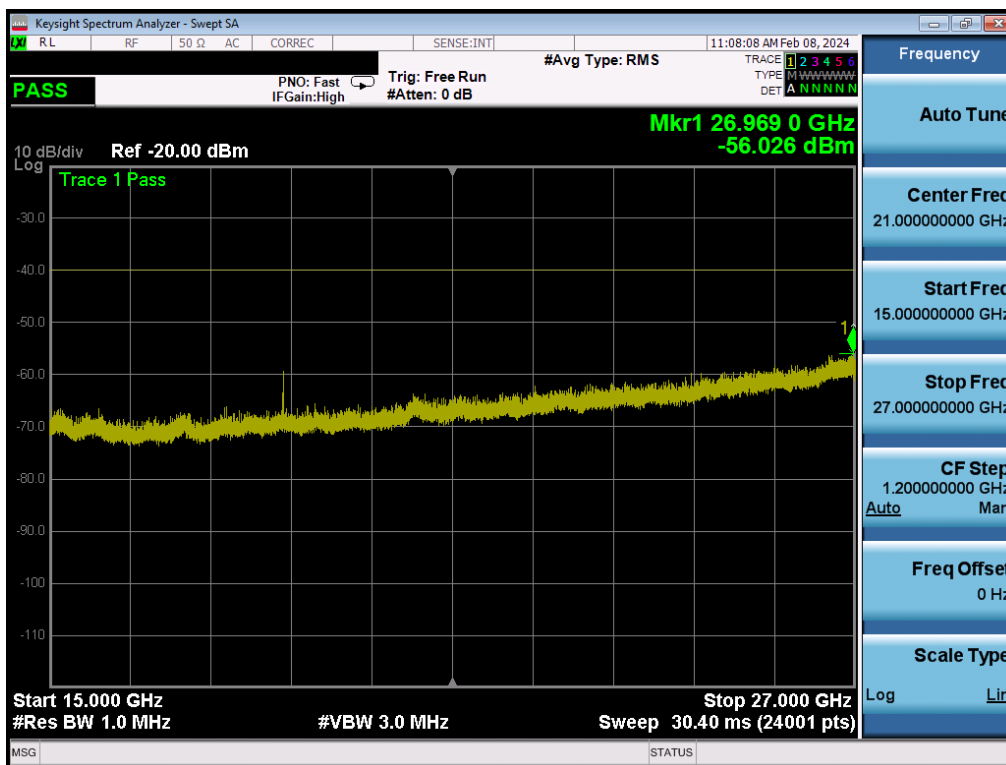


Plot 7.181. Conducted Spurious Plot (10MHz QPSK, High Channel – ANT1)



Plot 7.182. Conducted Spurious Plot (10MHz QPSK, High Channel – ANT1)

FCC ID: 2AS22-FLCOCH2	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2401230005-01.2AS22	Test Dates: 11/29/23-9/3/2024	EUT Type: CBRS CPE	Page 117 of 152



Keysight Spectrum Analyzer - Swept SA

R.L. RF 50 Ω DC CORREC SENSE:INT ALIGN AUTO 04:44:47 PM Feb 08, 2024

PASS PNO: Fast IFGain:High Trig: Free Run #Avg Type: RMS

TRACE 1 2 3 4 5 6 TYPE M DET A NNNNN

10 dB/div Log Ref -5.94 dBm

Trace 1 Pass

Mkr1 37.123 5 GHz -51.568 dBm

Start 27.000 GHz Stop 39.000 GHz

#Res BW 1.0 MHz #VBW 3.0 MHz Sweep 20.80 ms (24001 pts)

Frequency

Auto Tune

Center Freq 33.000000000 GHz

Start Freq 27.000000000 GHz

Stop Freq 39.000000000 GHz

CF Step 1.200000000 GHz

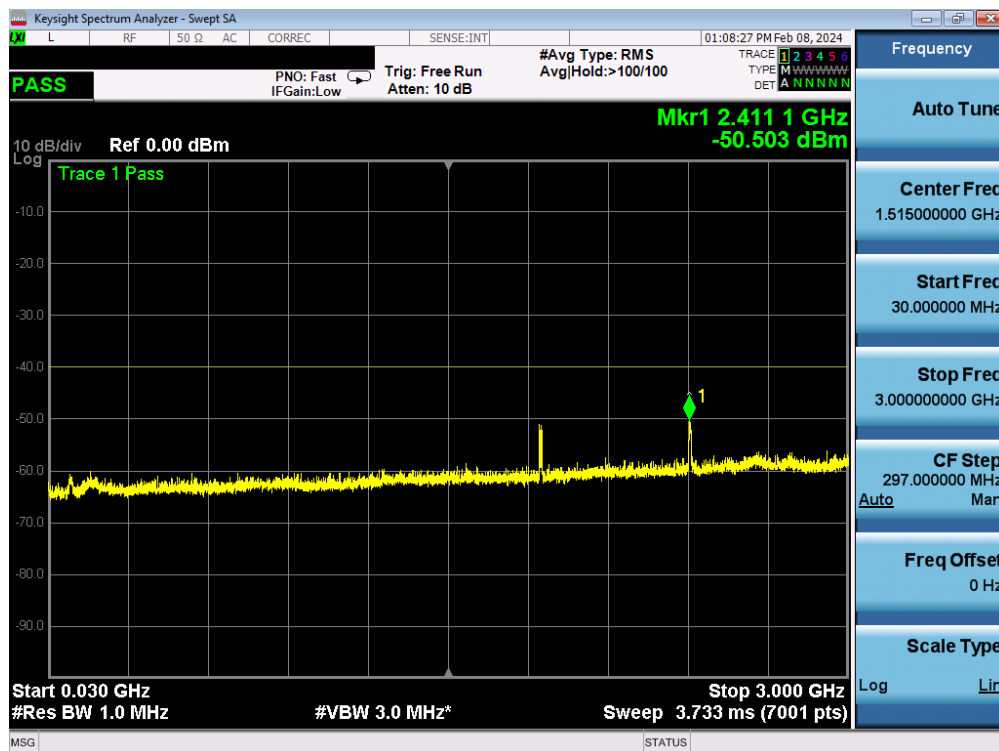
Auto Man

Freq Offset 0 Hz

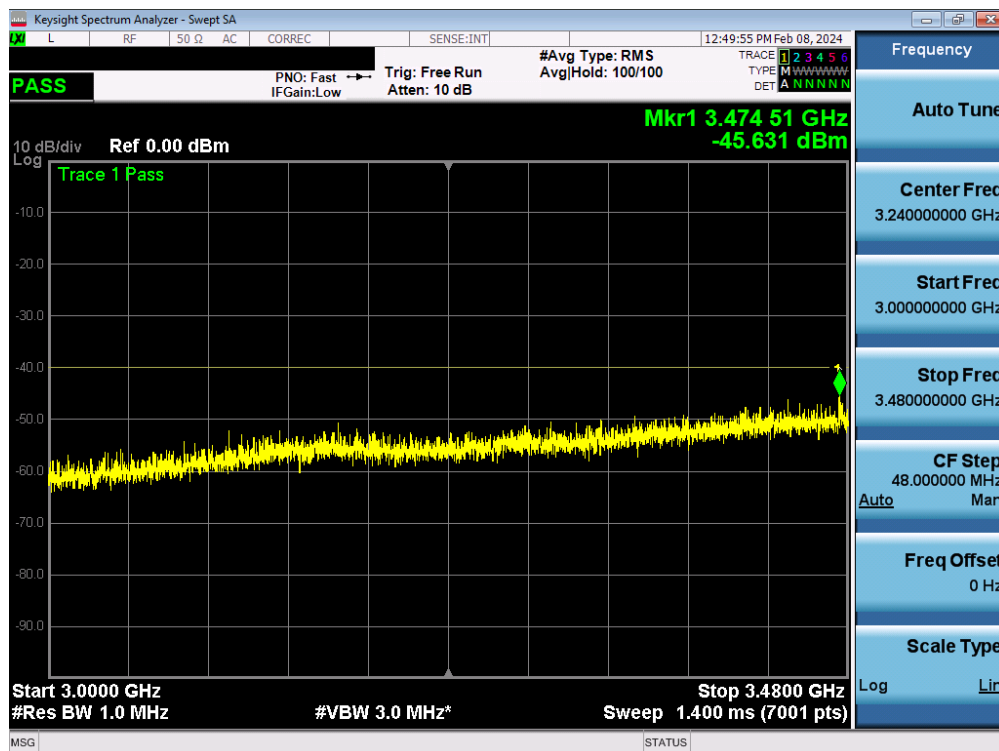
Scale Type

Log Lin

FCC ID: 2AS22-FLCOCH2	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2401230005-01.2A.S22	Test Dates: 11/29/23-9/3/2024	EUT Type: CBRS CPE	Page 118 of 152

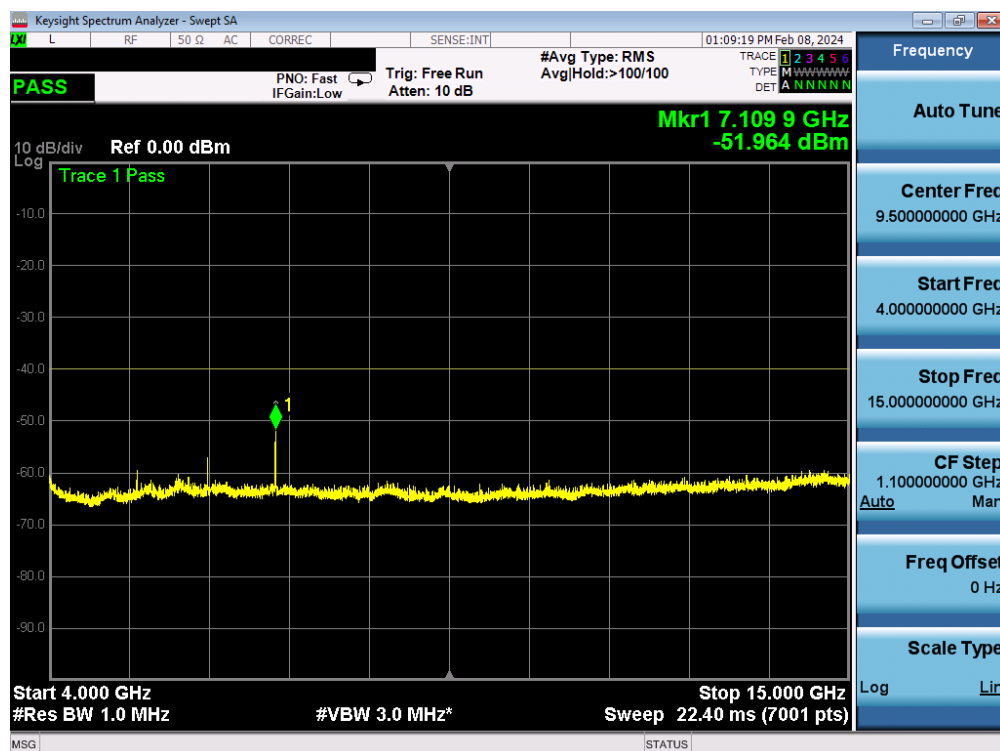


Plot 7.185. Conducted Spurious Plot (10MHz QPSK, Low Channel - ANT2)

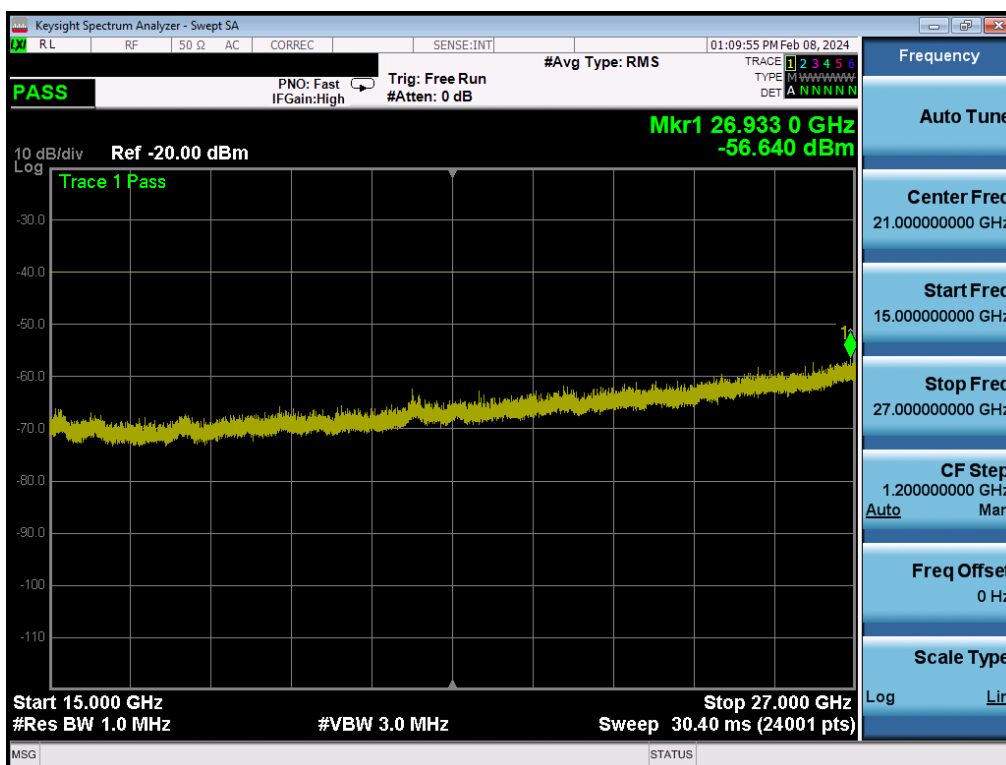


Plot 7.186. Conducted Spurious Plot (10MHz QPSK, Low Channel - ANT2)

FCC ID: 2AS22-FLCOCH2	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2401230005-01.2AS22	Test Dates: 11/29/23-9/3/2024	EUT Type: CBRS CPE	Page 119 of 152

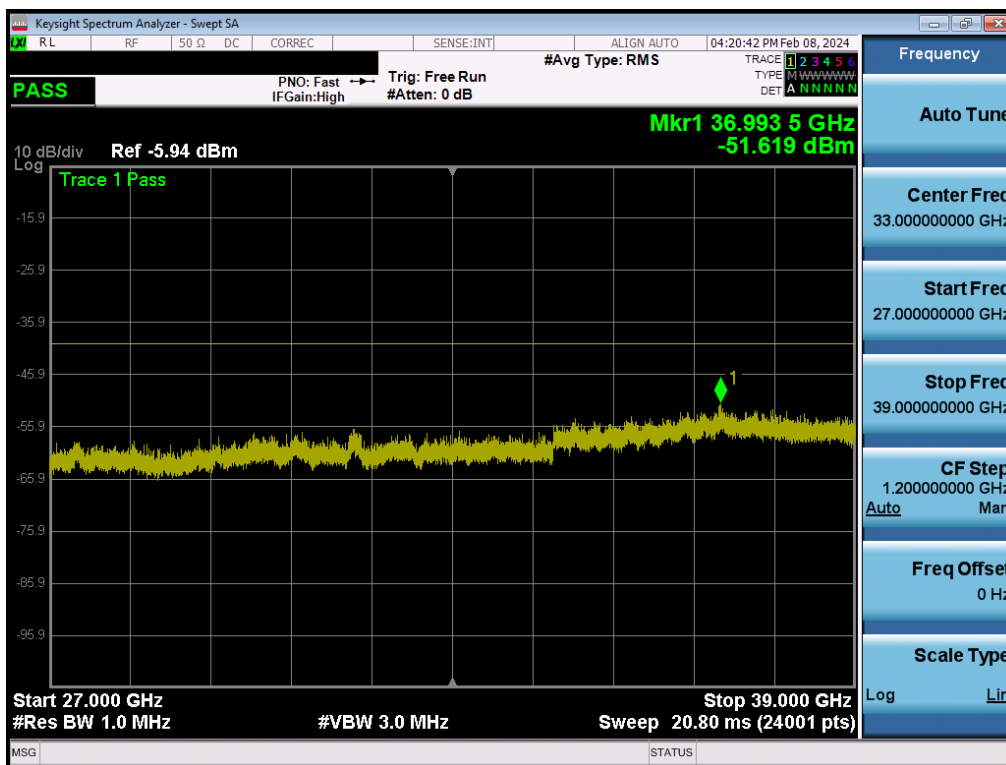


Plot 7.189. Conducted Spurious Plot (10MHz QPSK, Low Channel – ANT2)

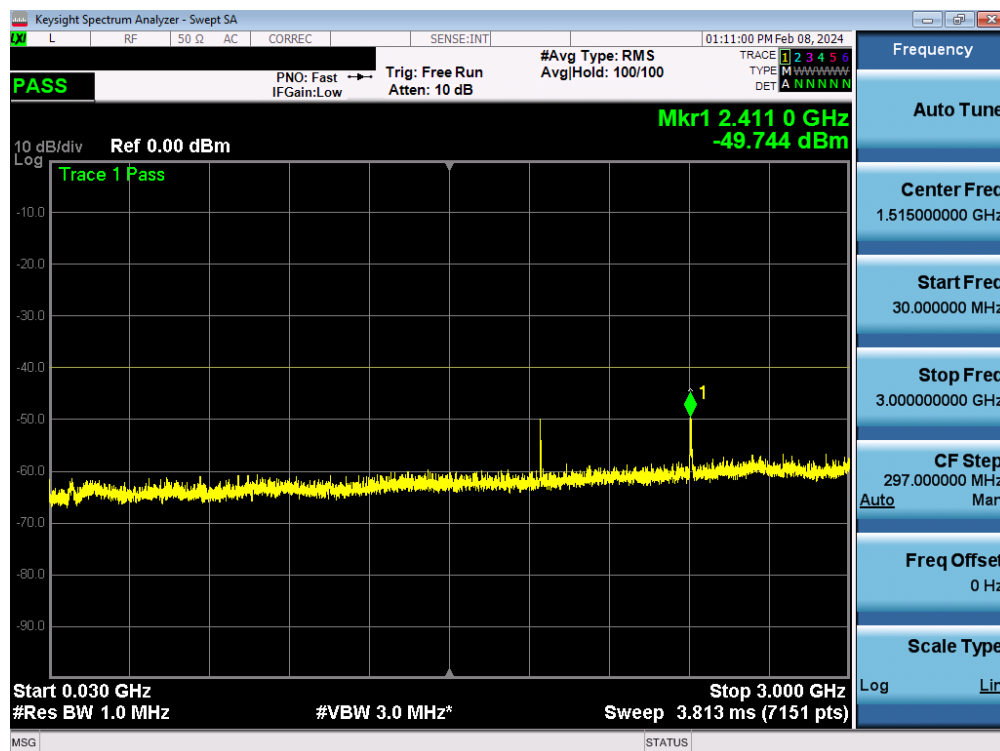


Plot 7.190. Conducted Spurious Plot (10MHz QPSK, Low Channel – ANT2)

FCC ID: 2AS22-FLCOCH2	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2401230005-01.2AS22	Test Dates: 11/29/23-9/3/2024	EUT Type: CBRS CPE	Page 121 of 152

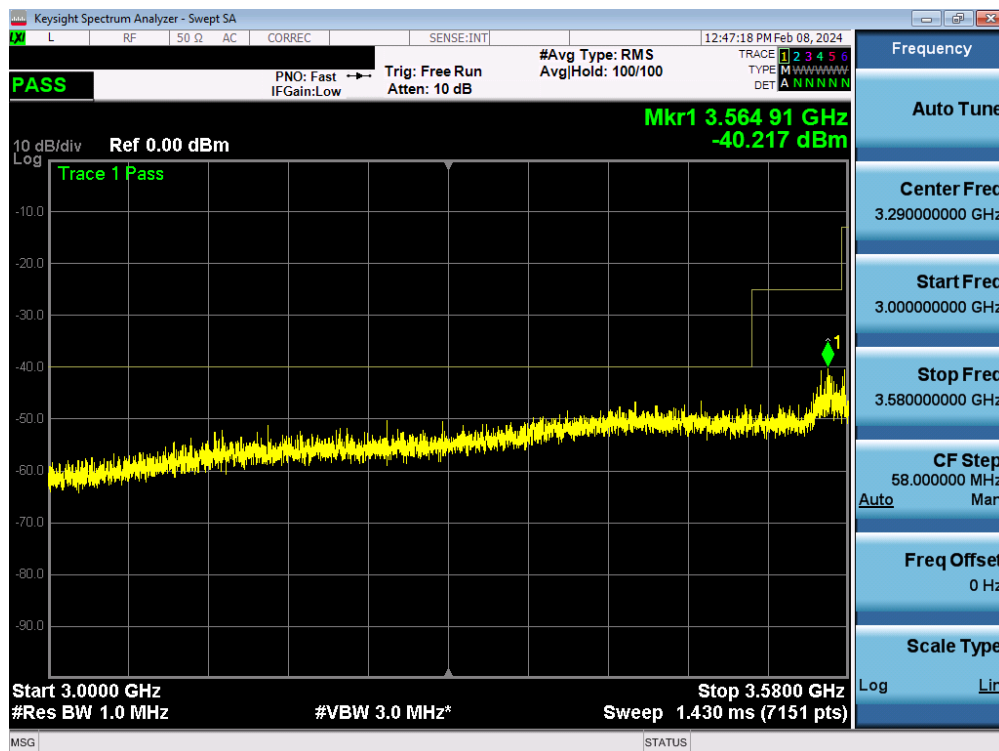


Plot 7.191. Conducted Spurious Plot (10MHz QPSK, Low Channel – ANT2)

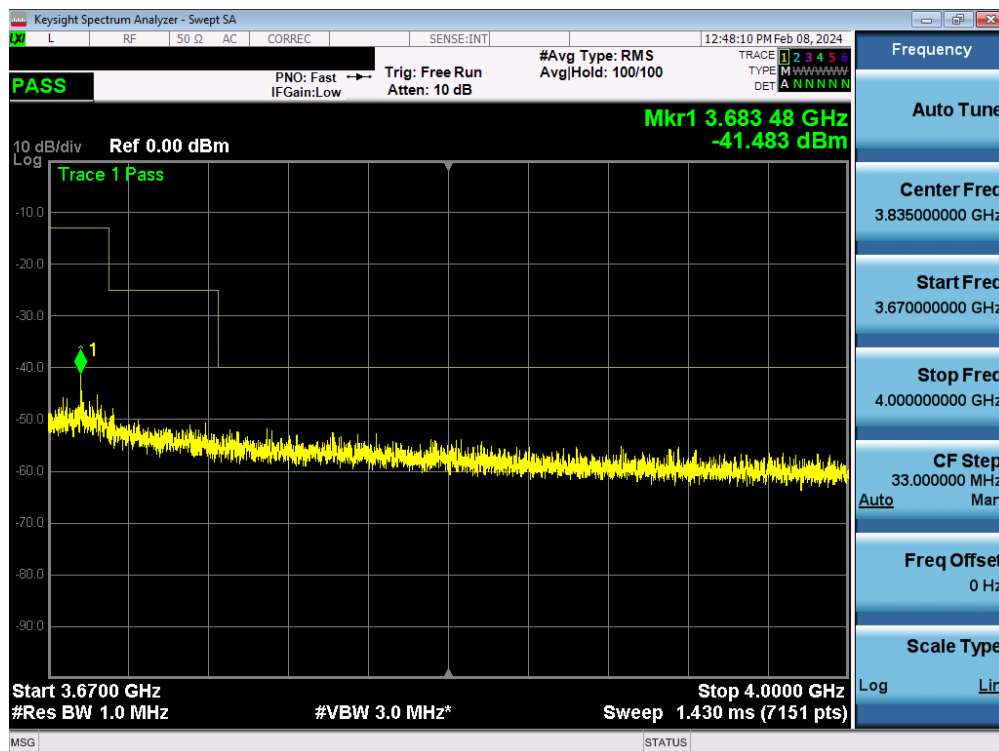


Plot 7.192. Conducted Spurious Plot (10MHz QPSK, Mid Channel – ANT2)

FCC ID: 2AS22-FLCOCH2	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2401230005-01.2AS22	Test Dates: 11/29/23-9/3/2024	EUT Type: CBRS CPE	Page 122 of 152

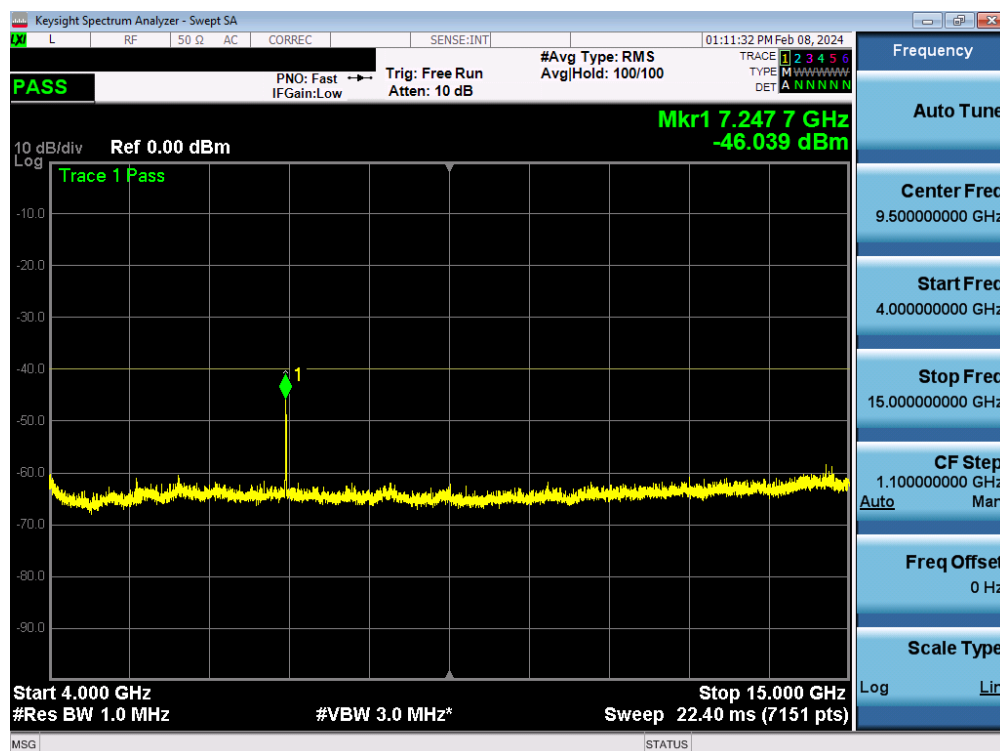


Plot 7.193. Conducted Spurious Plot (10MHz QPSK, Mid Channel – ANT2)

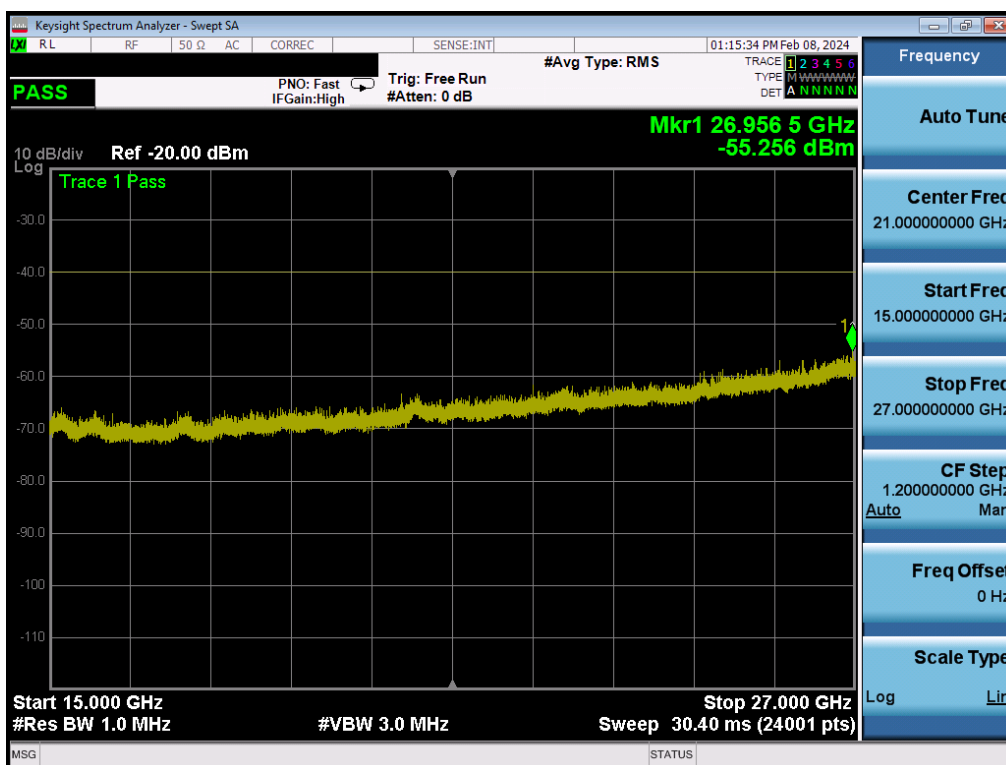


Plot 7.194. Conducted Spurious Plot (10MHz QPSK, Mid Channel – ANT2)

FCC ID: 2AS22-FLCOCH2	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2401230005-01.2AS22	Test Dates: 11/29/23-9/3/2024	EUT Type: CBRS CPE	Page 123 of 152

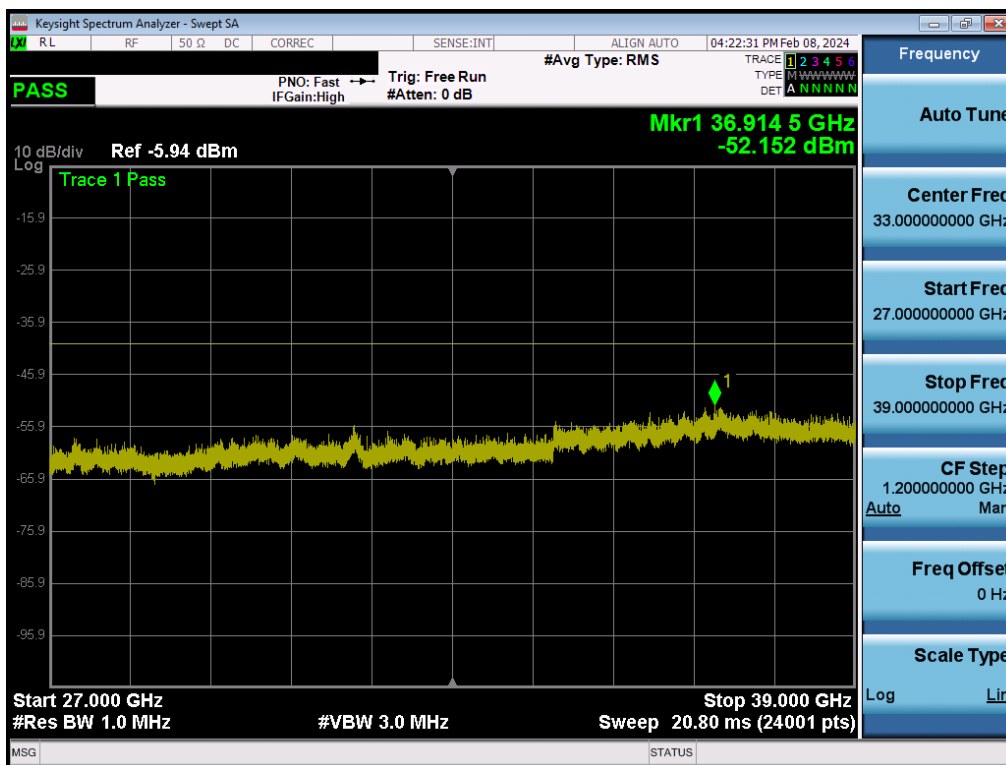


Plot 7.195. Conducted Spurious Plot (10MHz QPSK, Mid Channel – ANT2)

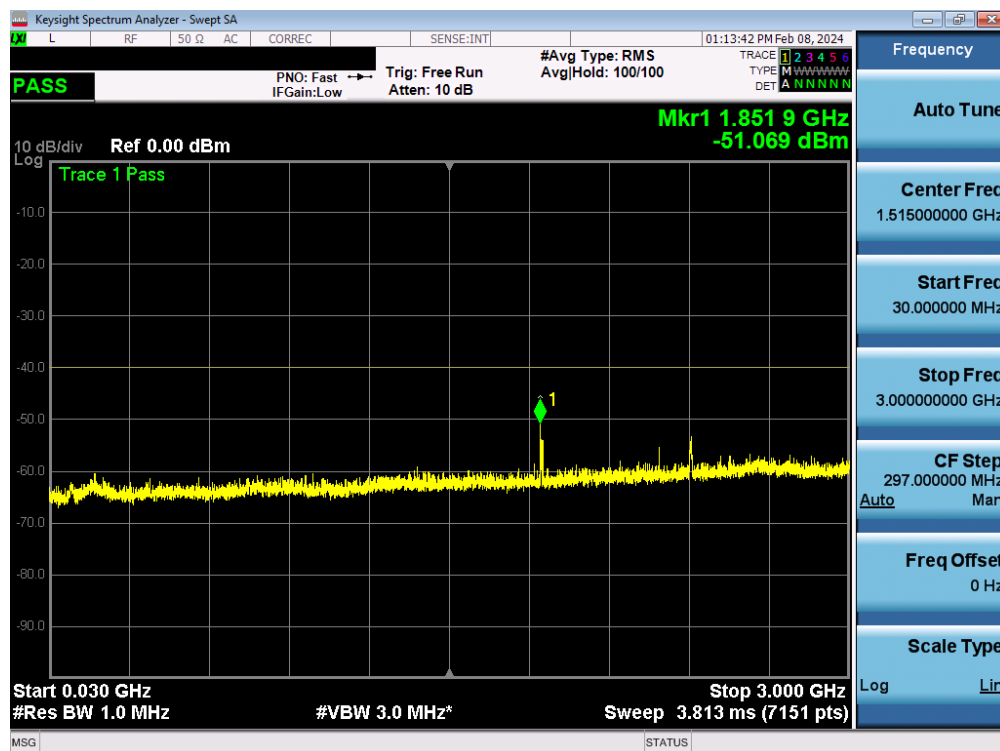


Plot 7.196. Conducted Spurious Plot (10MHz QPSK, Mid Channel – ANT2)

FCC ID: 2AS22-FLCOCH2	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2401230005-01.2AS22	Test Dates: 11/29/23-9/3/2024	EUT Type: CBRS CPE	Page 124 of 152

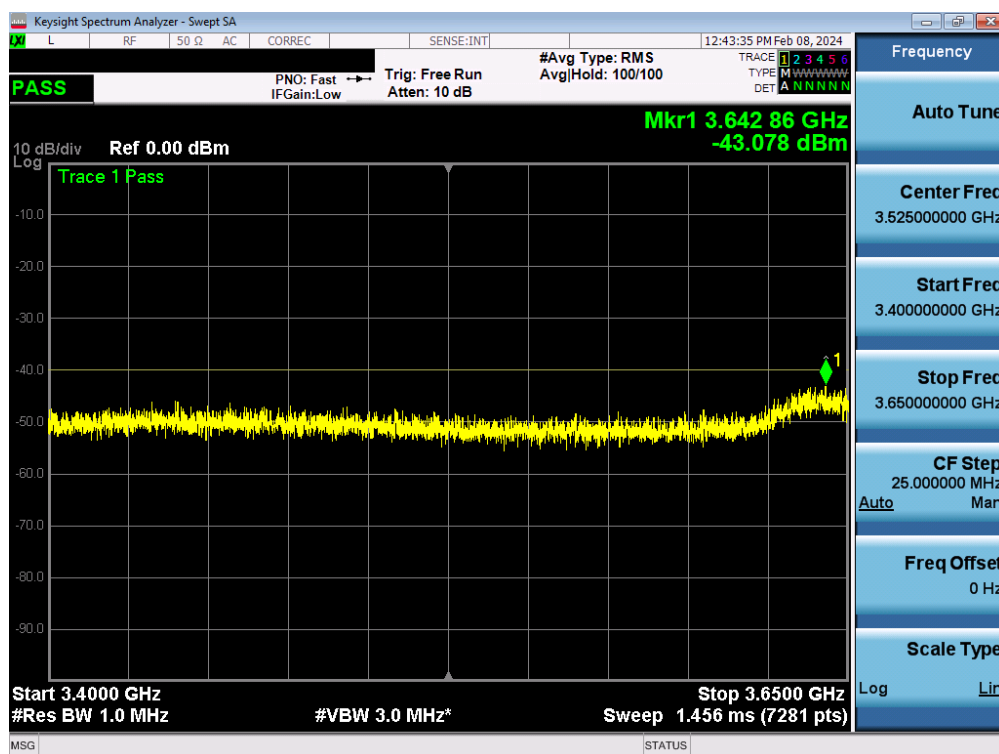
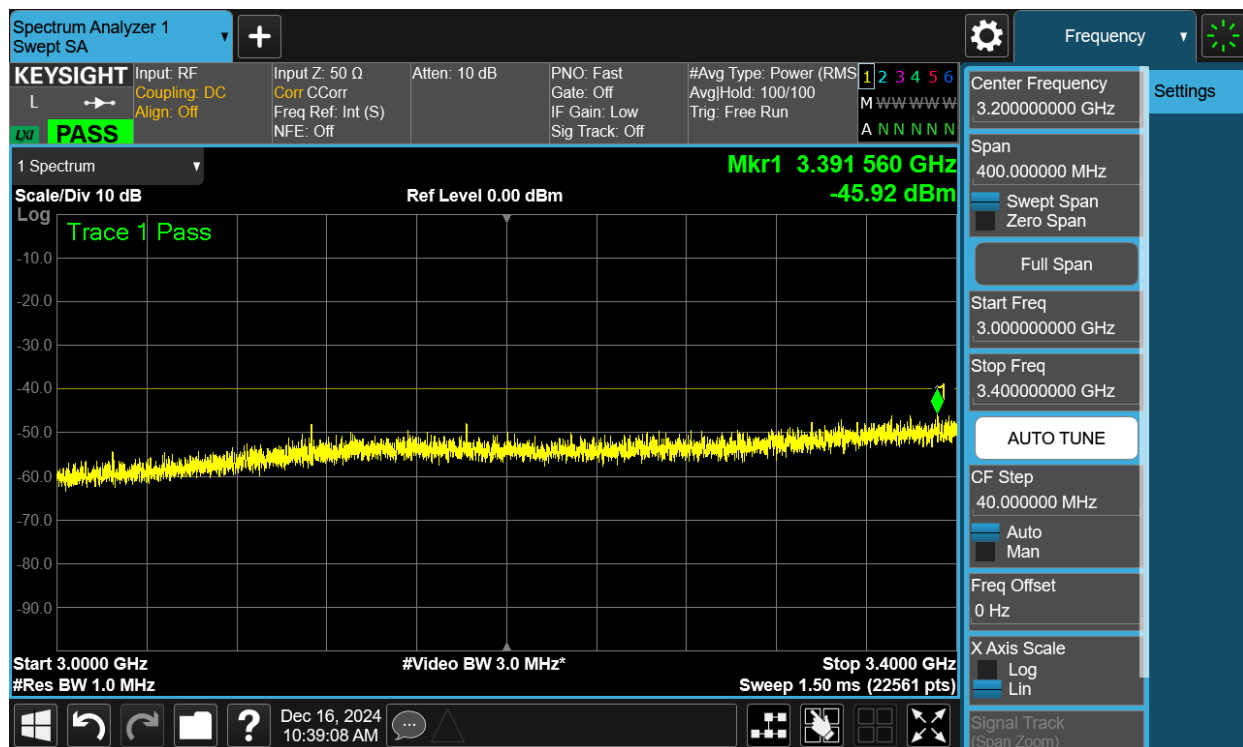


Plot 7.197. Conducted Spurious Plot (10MHz QPSK, Mid Channel – ANT2)

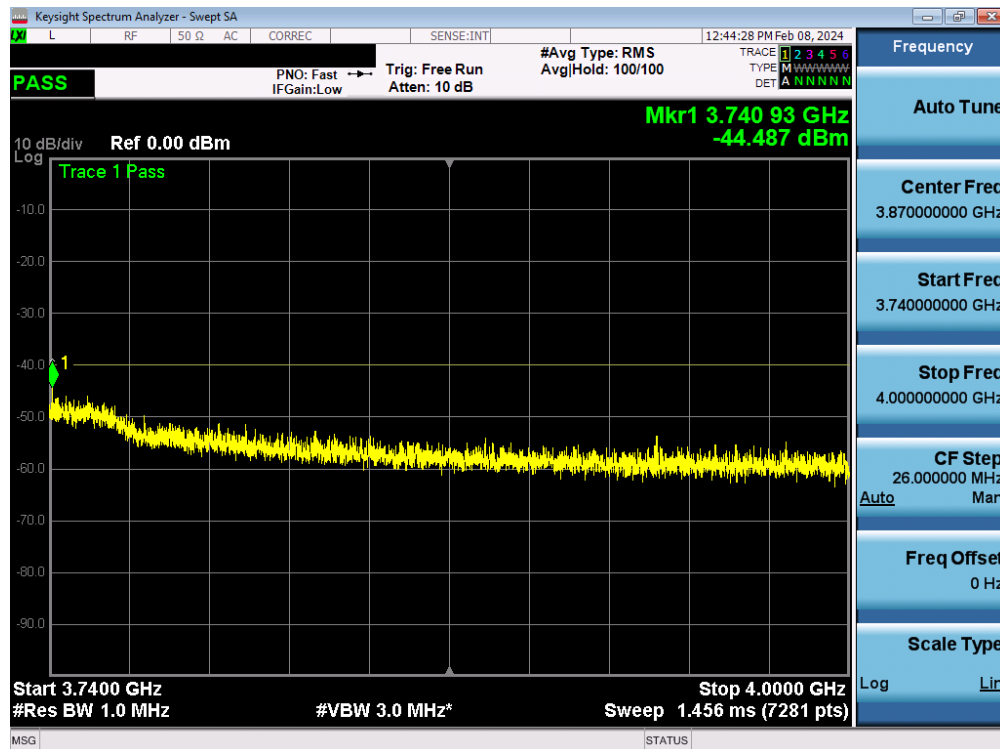


Plot 7.198. Conducted Spurious Plot (10MHz QPSK, High Channel – ANT2)

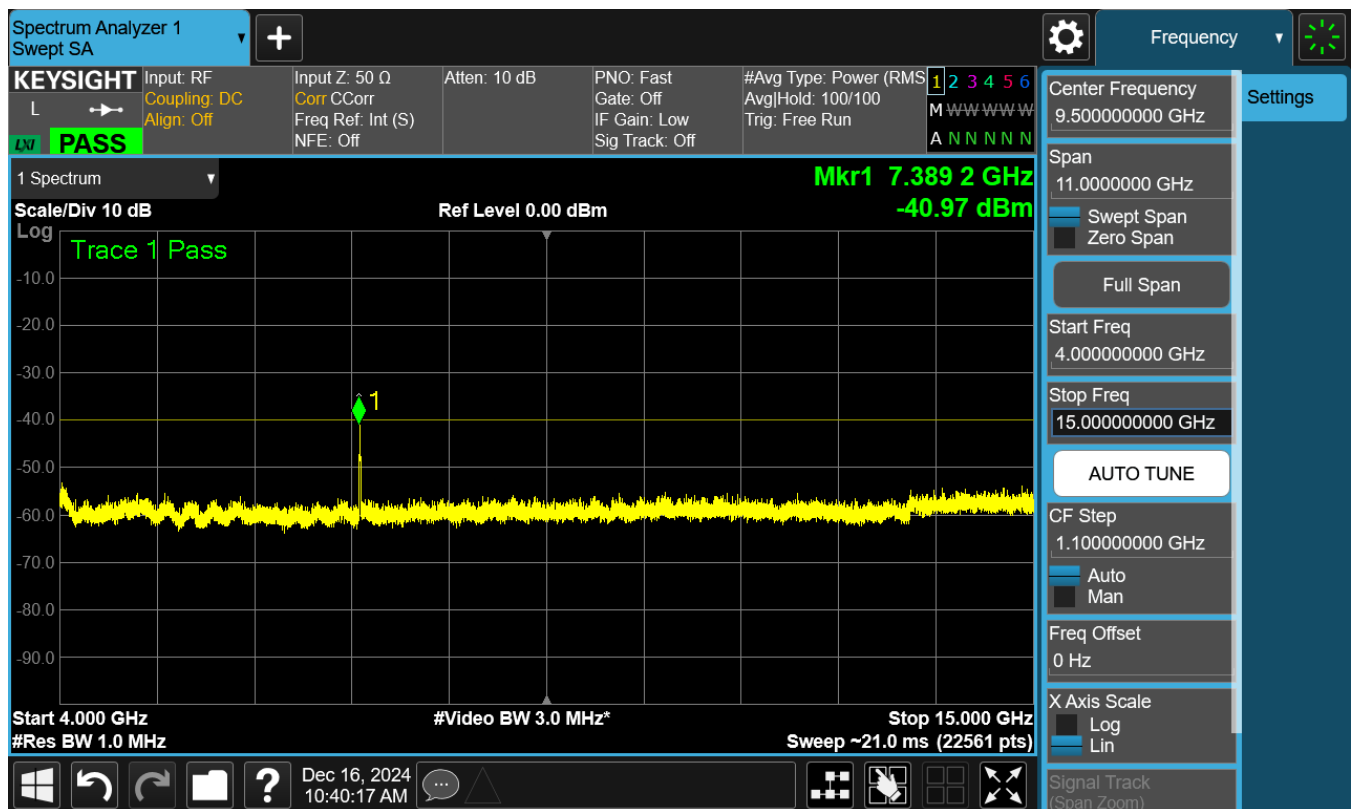
FCC ID: 2AS22-FLCOCH2	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2401230005-01.2AS22	Test Dates: 11/29/23-9/3/2024	EUT Type: CBRS CPE	Page 125 of 152



FCC ID: 2AS22-FLCOCH2	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2401230005-01.2AS22	Test Dates: 11/29/23-9/3/2024	EUT Type: CBRS CPE	Page 126 of 152

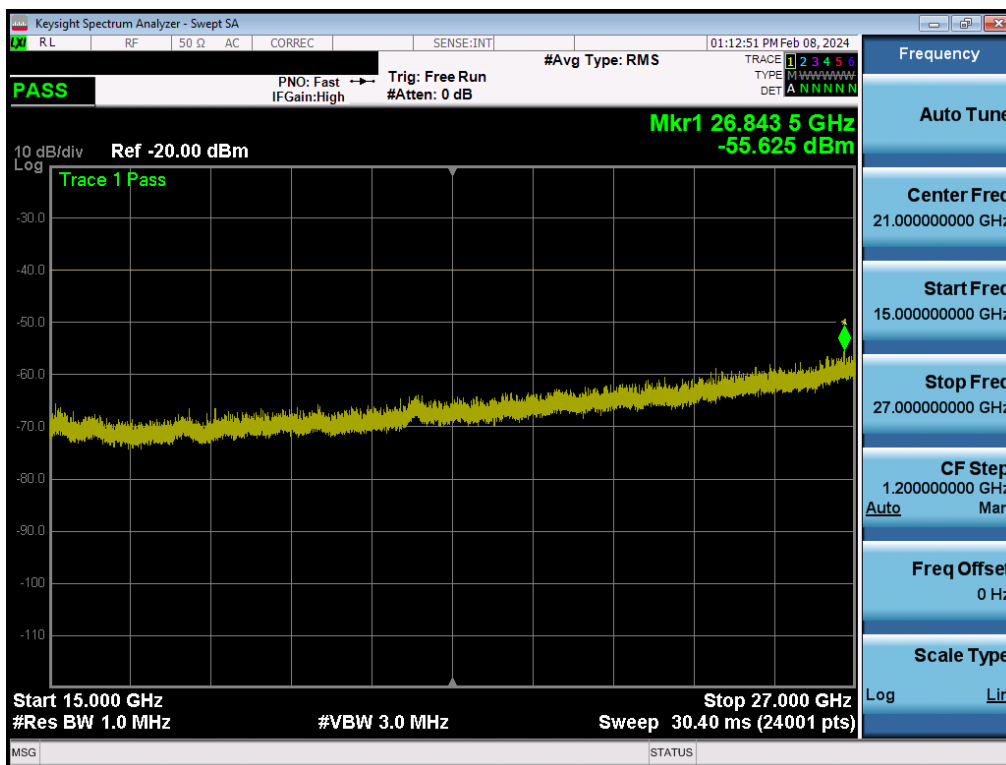


Plot 7.201. Conducted Spurious Plot (10MHz QPSK, High Channel – ANT2)

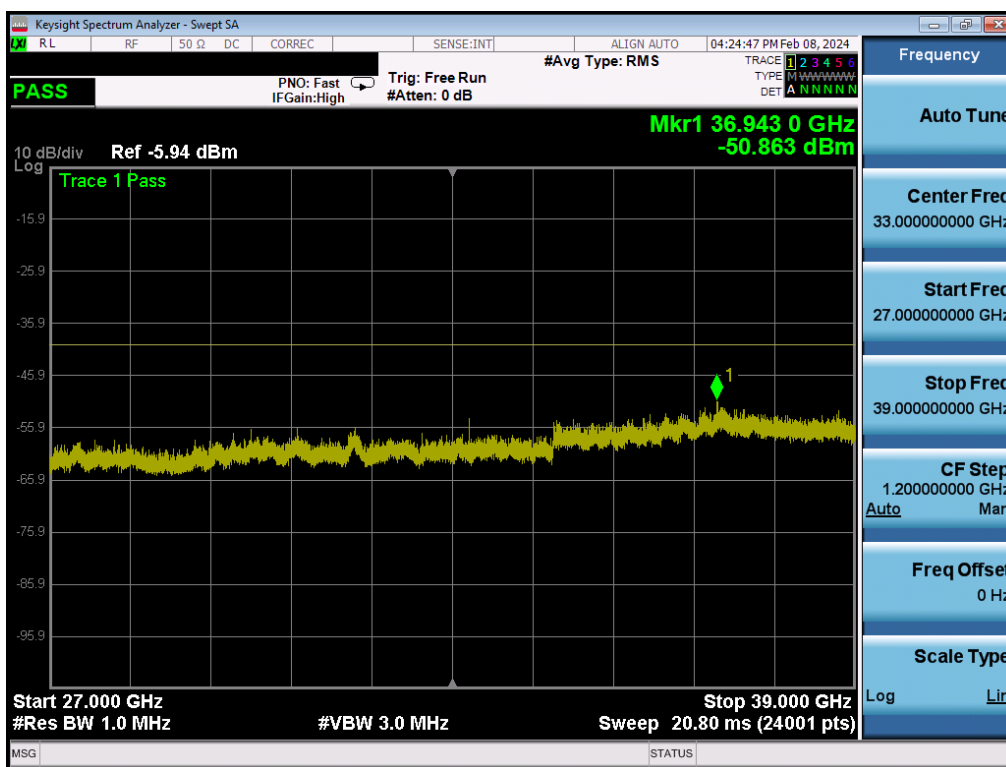


Plot 7.202. Conducted Spurious Plot (10MHz QPSK, High Channel – ANT2)

FCC ID: 2AS22-FLCOCH2	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2401230005-01.2AS22	Test Dates: 11/29/23-9/3/2024	EUT Type: CBRS CPE	Page 127 of 152



Plot 7.203. Conducted Spurious Plot (10MHz QPSK, High Channel – ANT2)



Plot 7.204. Conducted Spurious Plot (10MHz QPSK, High Channel – ANT2)

FCC ID: 2AS22-FLCOCH2	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2401230005-01.2AS22	Test Dates: 11/29/23-9/3/2024	EUT Type: CBRS CPE	Page 128 of 152

7.8 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.

For an End User Device, the conducted power of any emission outside the fundamental emission (whether in or outside of the authorized band) shall not exceed -13 dBm/MHz within 0 to B MHz (where B is the bandwidth in MHz of the assigned channel or multiple contiguous channels of the End User Device) above the upper CBSD-assigned channel edge and within 0 to B MHz below the lower CBSD-assigned channel edge. At all frequencies greater than B MHz above the upper CBSD assigned channel edge and less than B MHz below the lower CBSD-assigned channel edge, the conducted power of any end user device emission shall not exceed -25 dBm/MHz. The conducted power of emissions below 3530 MHz or above 3720 MHz shall not exceed -40 dBm/MHz.

Test Procedure Used

ANSI C63.26-2015 – Section 5.7.3

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 $\geq 3 \times$ RBW
5. Detector = RMS
6. Number of sweep points $\geq 2 \times$ Span/RBW
7. Trace mode = trace average
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 7-7. Test Instrument & Measurement Setup

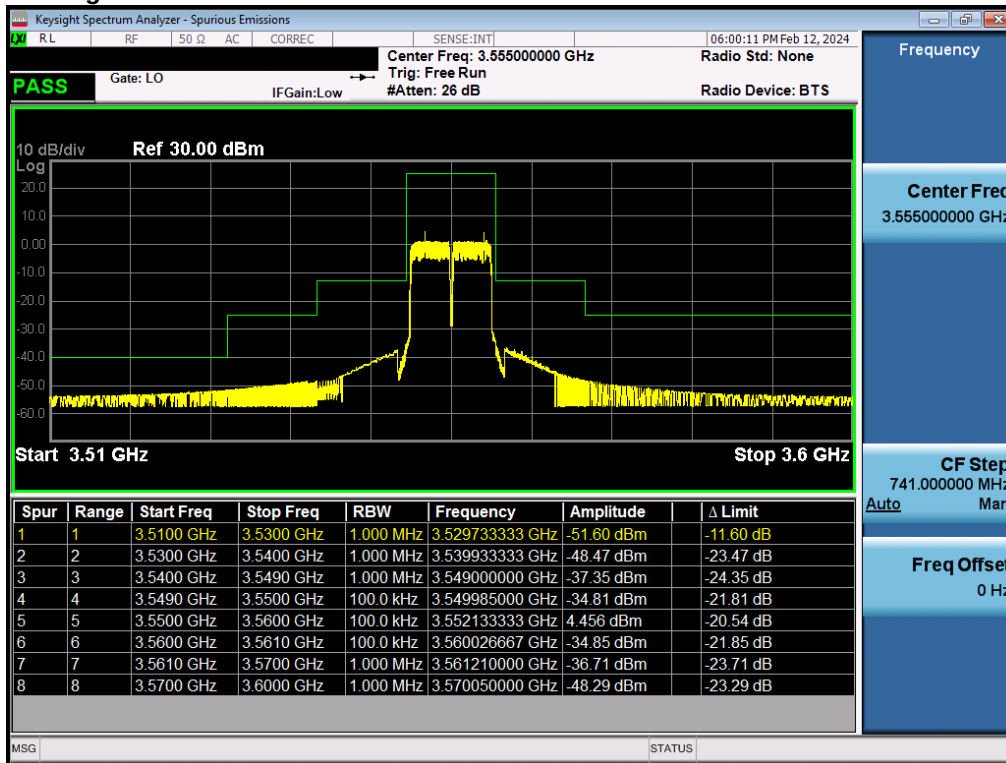
FCC ID: 2AS22-FLCOCH2	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2401230005-01.2AS22	Test Dates: 11/29/23-9/3/2024	EUT Type: CBRS CPE	Page 129 of 152

Test Notes

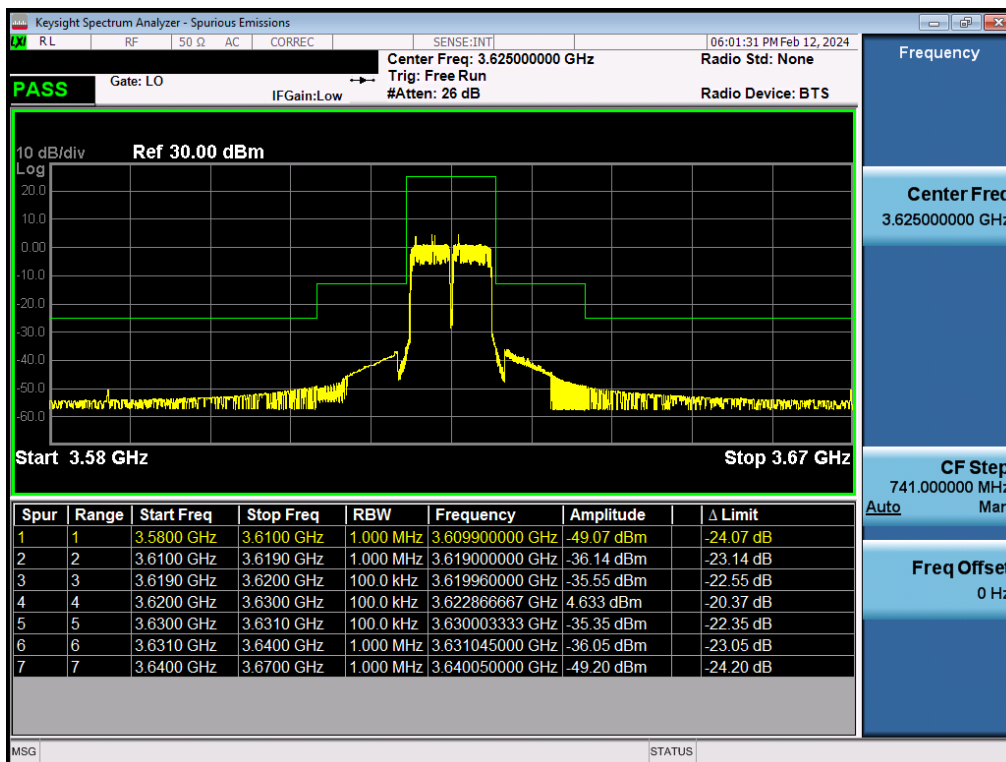
1. Per 96.41(e)(3)(i), compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 1 megahertz or greater. However, in the 1 megahertz bands immediately outside and adjacent to the licensee's authorized frequency channel, a resolution bandwidth of no less than one percent of the fundamental emission bandwidth 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 reference bandwidth (i.e., 1 MHz or 1 percent of emission bandwidth, as specified). The fundamental 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.
2. The Plots in this section have a 3dB correction applied to the individual plots to address the MIMO requirements in ANSI C63.26

FCC ID: 2AS22-FLCOCH2	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2401230005-01.2AS22	Test Dates: 11/29/23-9/3/2024	EUT Type: CBRS CPE	Page 130 of 152

Antenna 1 Band Edge Measurements

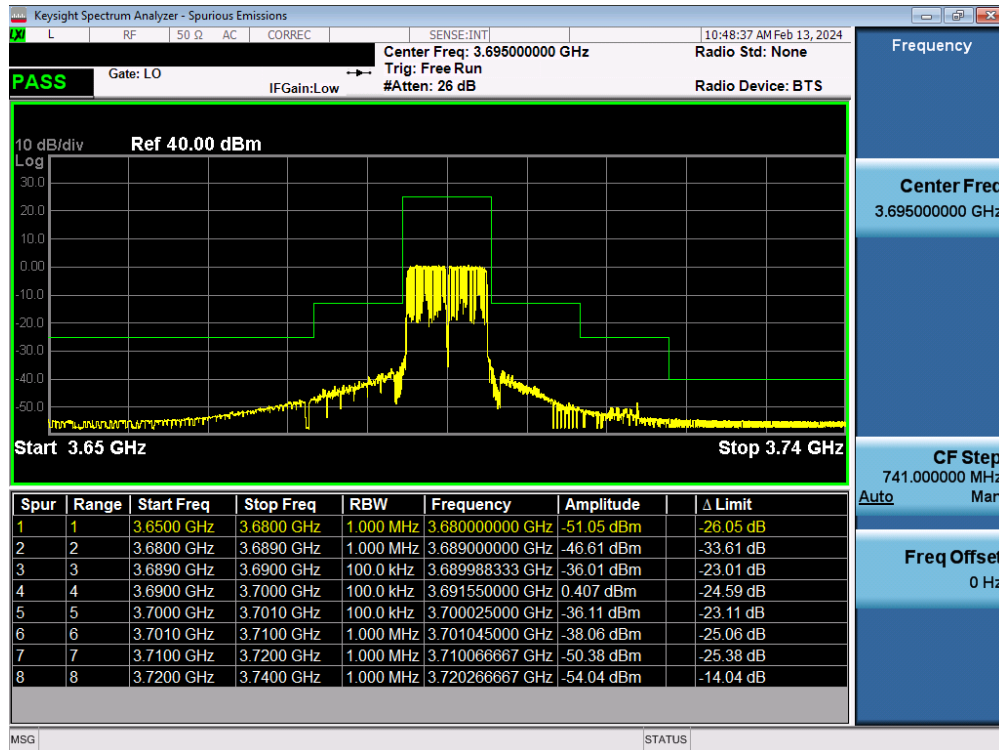


Plot 7.205. Conducted Band Edge Plot (10MHz, QPSK, Low Channel, ANT1)

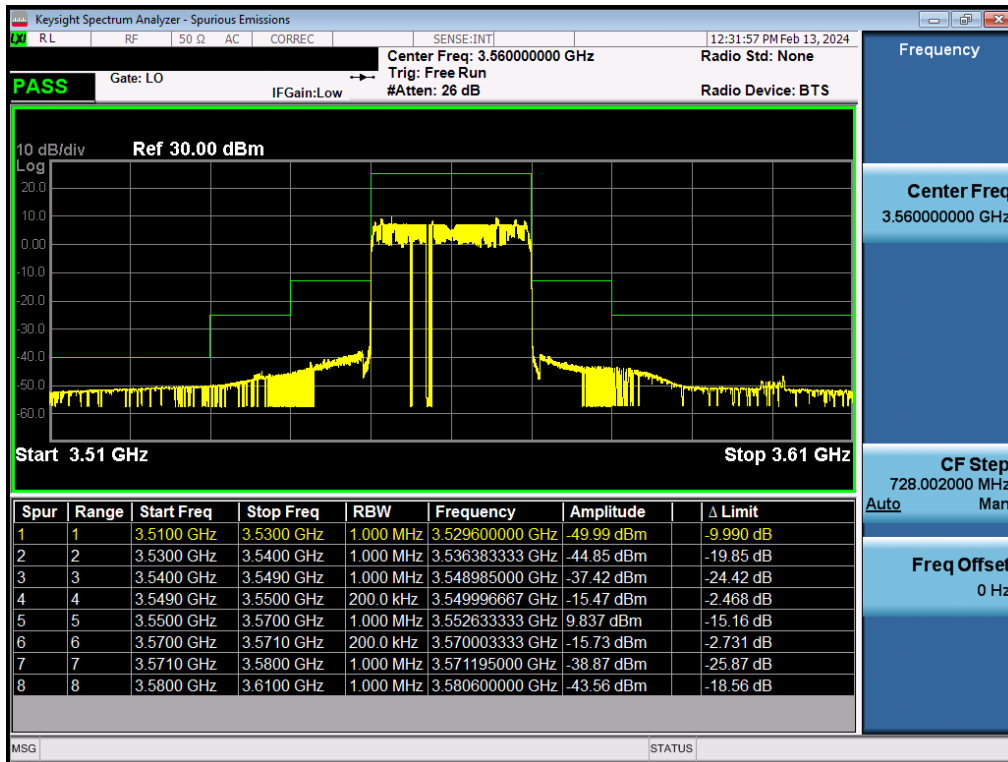


Plot 7.206. Conducted Band Edge Plot (10MHz, QPSK, Mid Channel, ANT1)

FCC ID: 2AS22-FLCOCH2	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2401230005-01.2AS22	Test Dates: 11/29/23-9/3/2024	EUT Type: CBRS CPE	Page 131 of 152

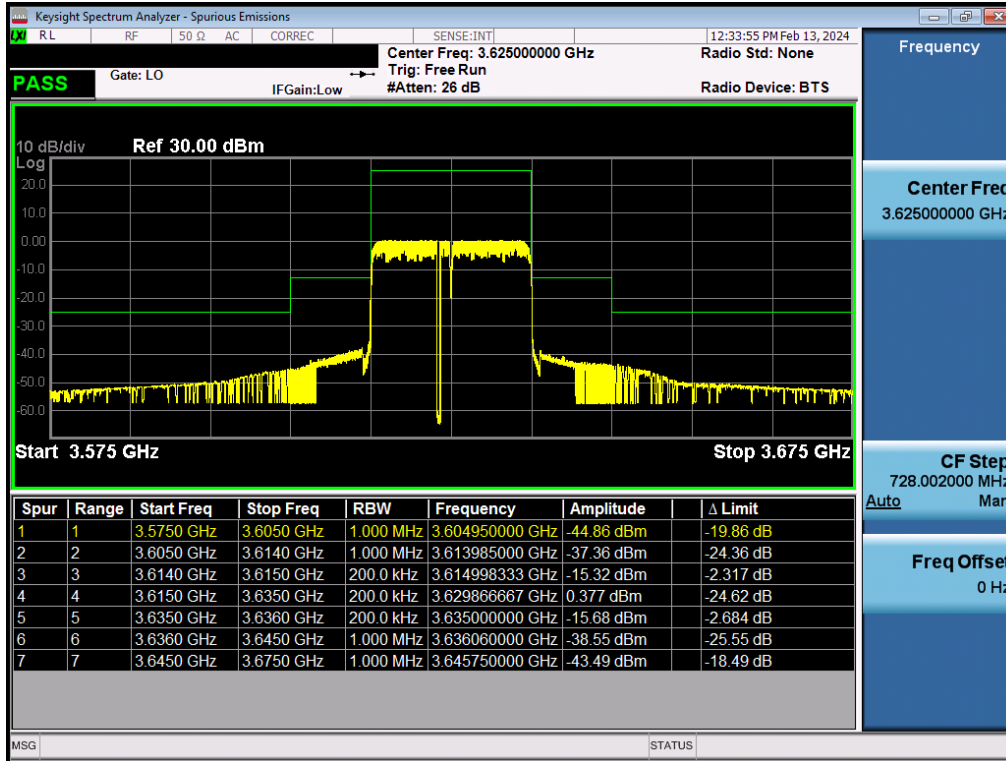


Plot 7.207. Conducted Band Edge Plot (10MHz, QPSK, High Channel, ANT1)

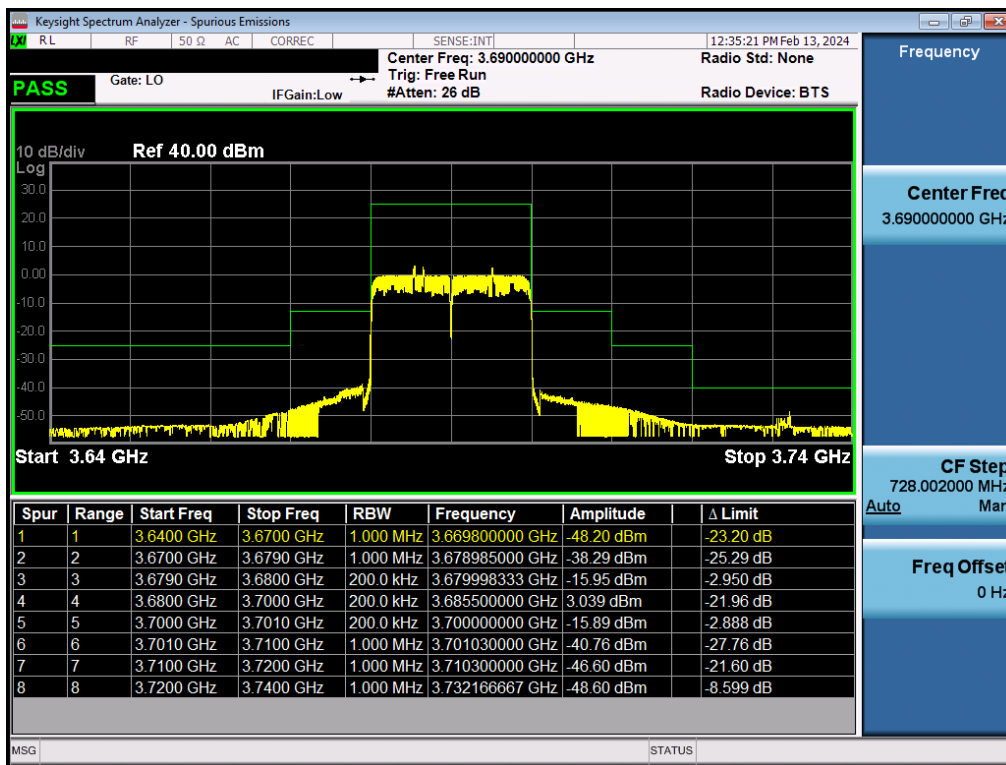


Plot 7.208. Conducted Band Edge Plot (20MHz, QPSK, Low Channel, ANT1)

FCC ID: 2AS22-FLCOCH2	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2401230005-01.2AS22	Test Dates: 11/29/23-9/3/2024	EUT Type: CBRS CPE	Page 132 of 152

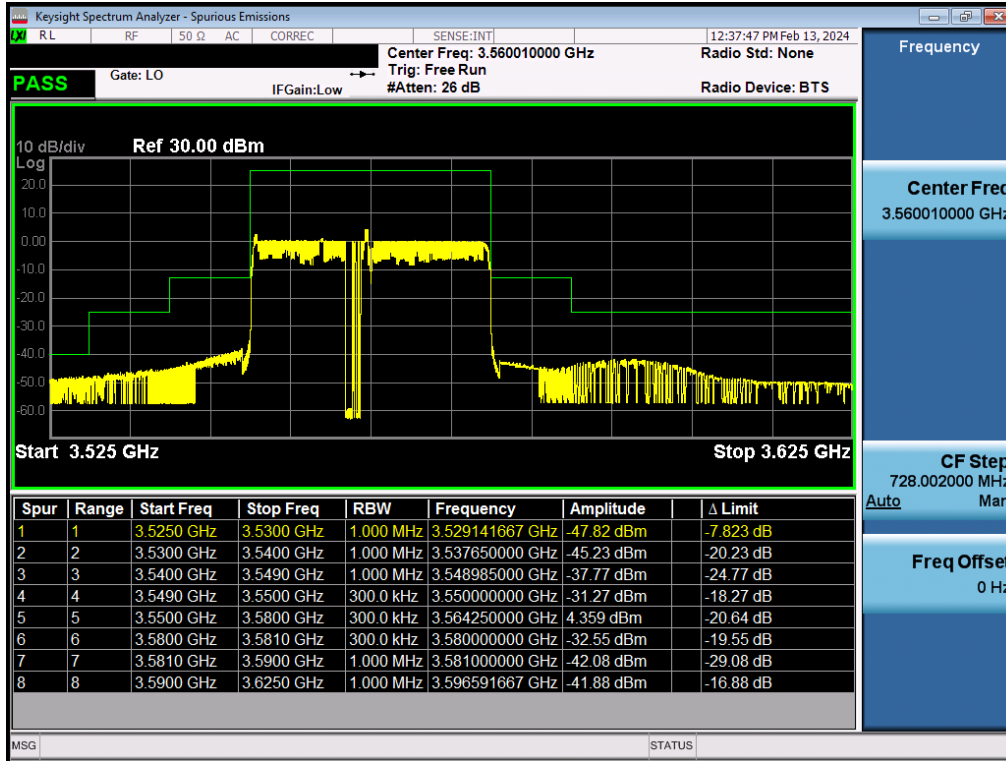


Plot 7.209. Conducted Band Edge Plot (20MHz, QPSK, Mid Channel, ANT1)

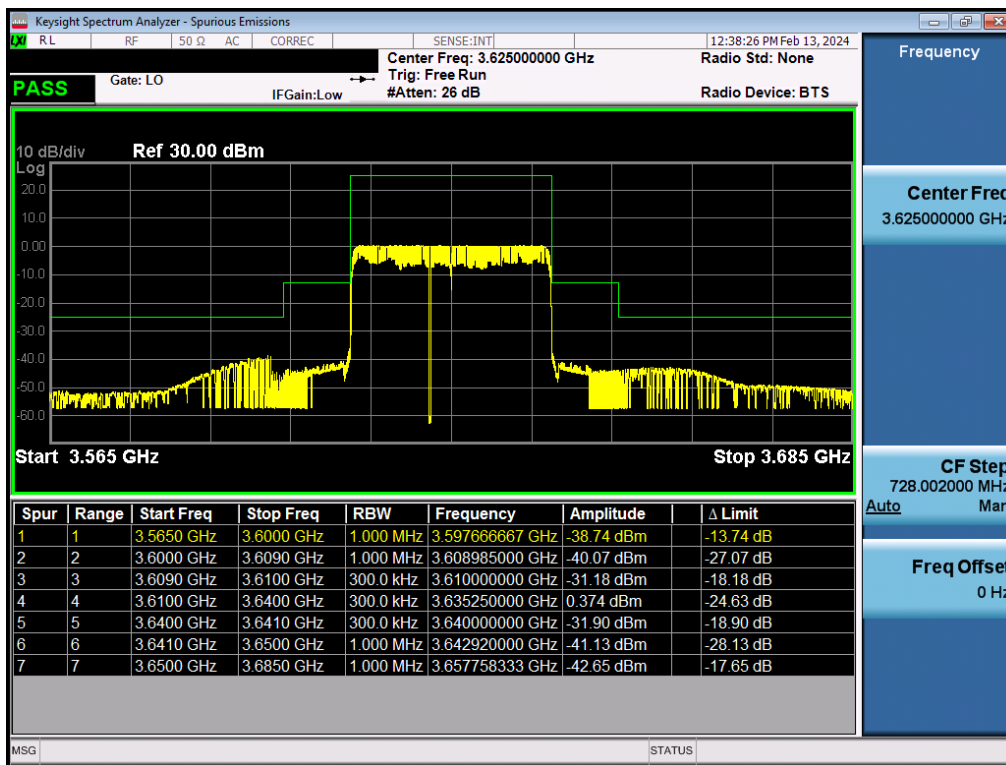


Plot 7.210. Conducted Band Edge Plot (20MHz, QPSK, High Channel, ANT1)

FCC ID: 2AS22-FLCOCH2	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2401230005-01.2AS22	Test Dates: 11/29/23-9/3/2024	EUT Type: CBRS CPE	Page 133 of 152



Plot 7.211. Conducted Band Edge Plot (30MHz, QPSK, Low Channel, ANT1)



Plot 7.212. Conducted Band Edge Plot (30MHz, QPSK, Mid Channel, ANT1)

FCC ID: 2AS22-FLCOCH2	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2401230005-01.2AS22	Test Dates: 11/29/23-9/3/2024	EUT Type: CBRS CPE	Page 134 of 152