



FCC Test Report

ANNEX 3 LTE BAND 4

FCC ID: 2A8LQ-WE006US

Applicant: Hareau SAS (Weenect)
Address: 101 rue de Sèvres, 75272 Paris cedex 06
Manufacturer: Toplovo Industrial Co., Limited
Address: 4F, Building B2b, Yingzhan Industrial Park, Kengzi Town, Pingshan district, Shenzhen, China. 518122
EUT: WE006US Gps tracker
Trade Mark: N/A
Model Number: WE006US
WE006US belongs to general model number WE006
Date of Receipt: Aug. 15, 2022
Test Date: Aug. 15, 2022 – Oct. 25, 2022
Date of Report: Oct. 25, 2022
Prepared By: Shenzhen DL Testing Technology Co., Ltd.
Address: 101-201, Building C, Shuanghuan, No.8, Baoqing Road, Baolong Industrial Zone, Baolong Street, Longgang District, Shenzhen, Guangdong, China
FCC CFR Title 47 Part27
FCC CFR Title 47 Part24 Subpart E
Applicable Standards: TIA-603 Rev E 2016
FCC KDB 971168 D01 Power Meas. License Digital Systems v03v01
ANSI C63.26:2015
Test Result: Pass
Report Number: DL-20220825029E

Prepared (Test Engineer): Pxing Huang
Reviewer (Supervisor): Jack Bu
Approved (Manager): Jade Yang



This test report is based on a single evaluation of one sample of above mentioned products. It is not permitted to be duplicated in extracts without written approval of Shenzhen DL Testing Technology Co., Ltd.



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**1. EMISSION TEST RESULTS****1.1. -26dB and 99% Occupied Bandwidth****1.1.1. Test Result**

The frequencies of band 4 and 66 overlap, so the data shows part of it.

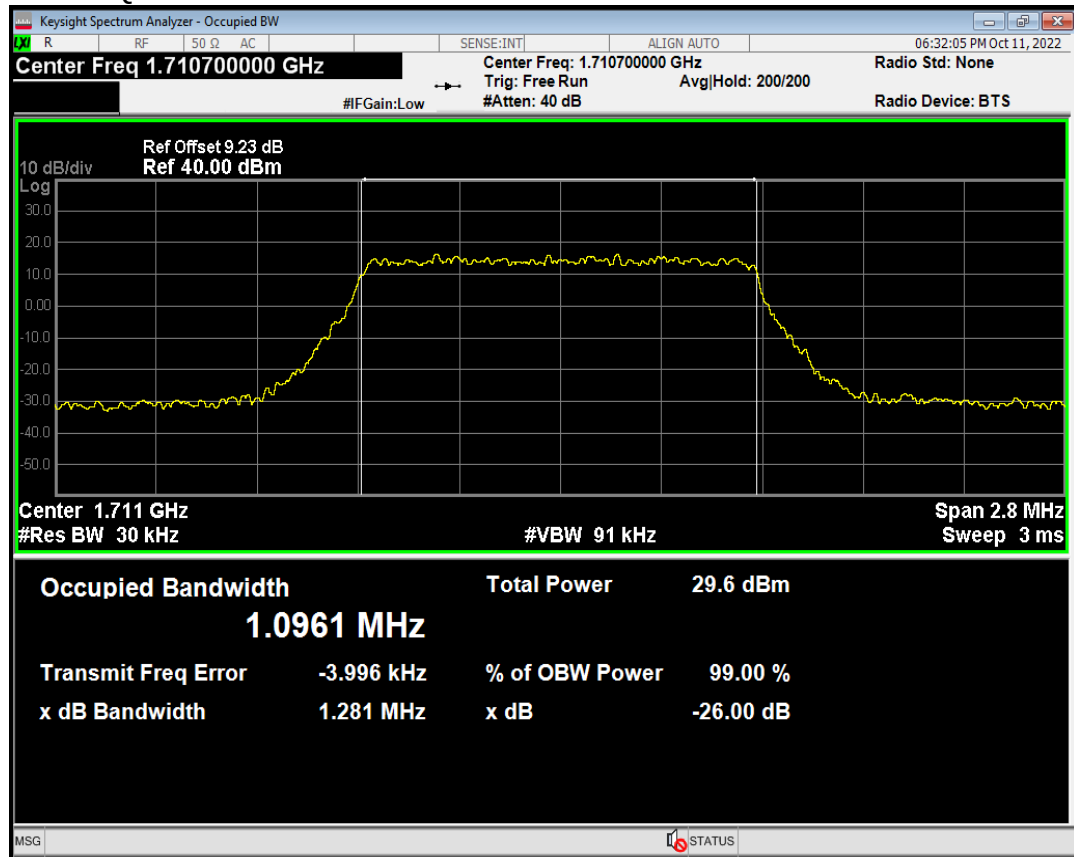
EUT Mode Bandwidth	Frequency (MHz)	Modulation	99% Occupy bandwidth (MHz)	-26dB bandwidth (MHz)
LTE Band 4 1.4MHz	1710.7	QPSK	1.096	1.281
		16-QAM	1.098	1.295
	1732.5	QPSK	1.095	1.291
		16-QAM	1.102	1.281
	1754.3	QPSK	1.091	1.285
		16-QAM	1.089	1.290
LTE Band 4 3 MHz	1711.5	QPSK	2.708	2.999
		16-QAM	2.699	2.939
	1732.5	QPSK	2.708	2.985
		16-QAM	2.698	2.981
	1753.5	QPSK	2.704	2.985
		16-QAM	2.695	2.983
LTE Band 4 5 MHz	1712.5	QPSK	4.515	4.967
		16-QAM	4.515	4.999
	1732.5	QPSK	4.499	4.971
		16-QAM	4.514	5.006
	1752.5	QPSK	4.516	4.992
		16-QAM	4.512	5.046
LTE Band 4 10 MHz	1715	QPSK	8.983	9.795
	1732.5	QPSK	8.953	9.773
	1750	QPSK	8.983	9.740
LTE Band 4 15 MHz	1717.5	QPSK	13.432	14.567
	1732.5	QPSK	13.383	14.504
	1747.5	QPSK	13.434	14.724
LTE Band 4 20 MHz	1720	QPSK	17.916	19.305
	1732.5	QPSK	17.848	19.371
	1745	QPSK	17.947	19.414

Note: Measurement Uncertainty: $\pm 20\text{Hz}$.

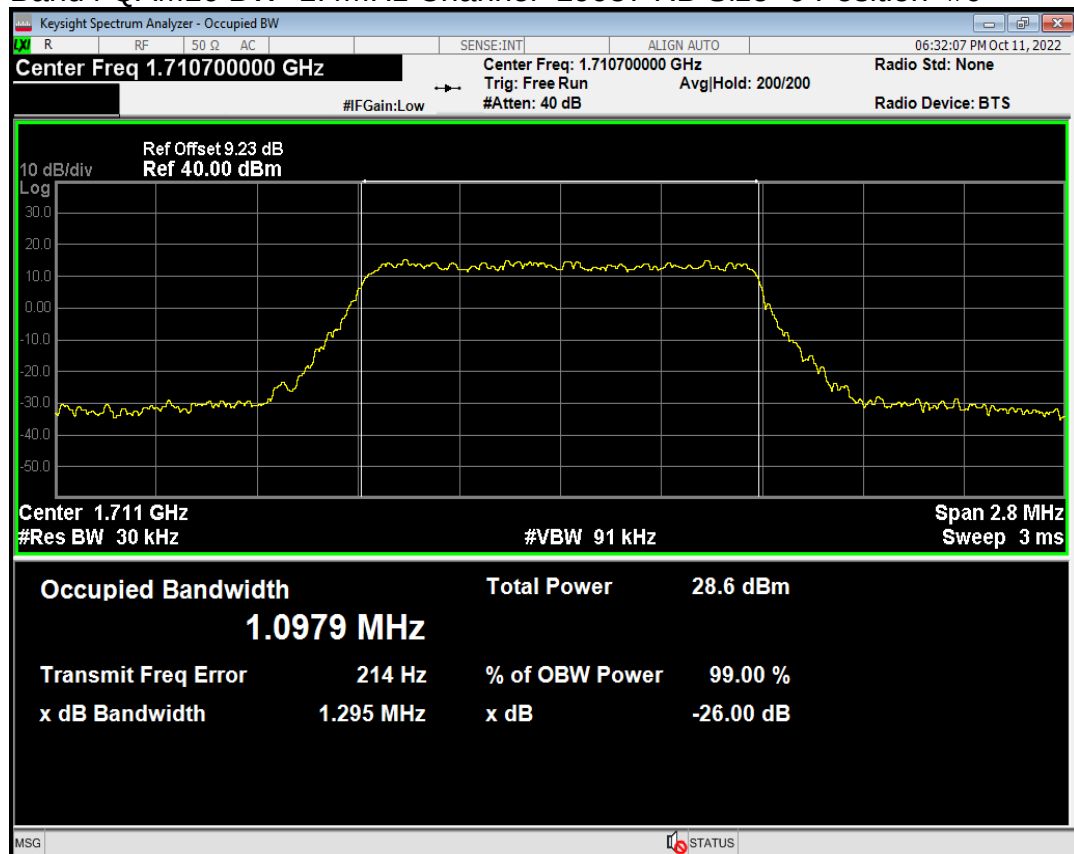
Test plot as follows:



Band4 QPSK BW=1.4MHz Channel=19957 RB Size=6 Position=#0

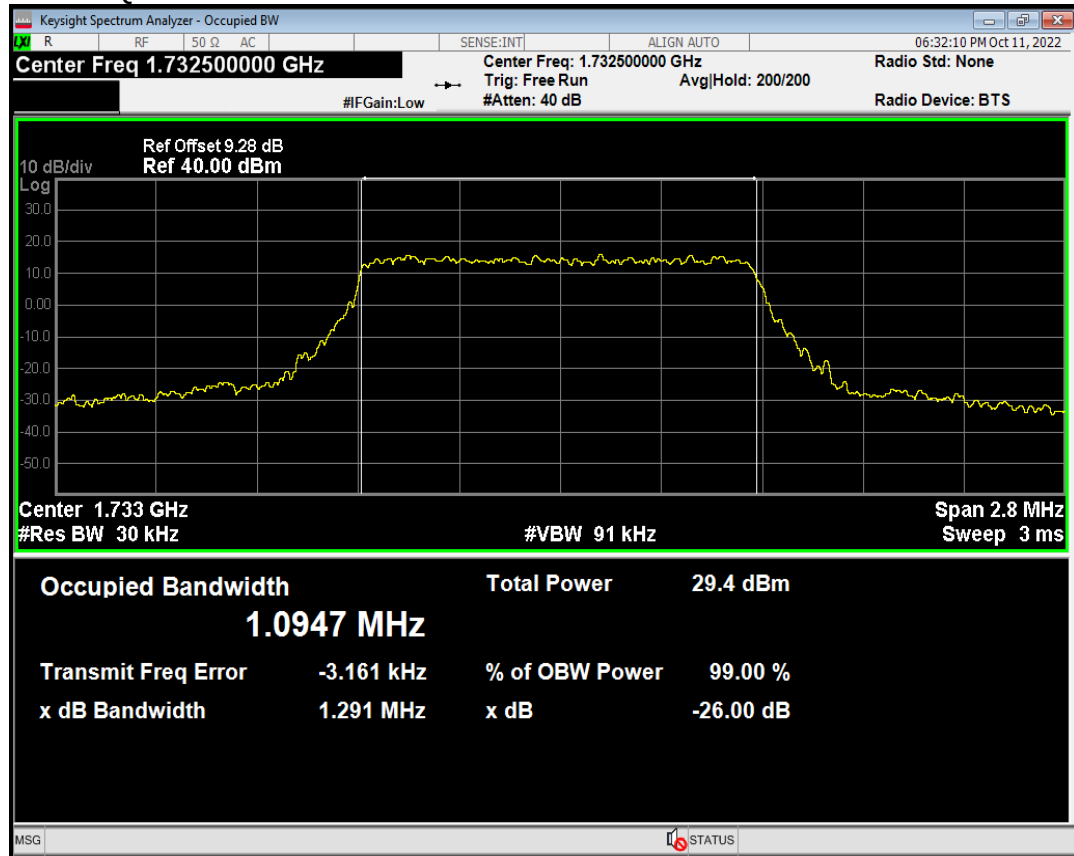


Band4 QAM16 BW=1.4MHz Channel=19957 RB Size=6 Position=#0

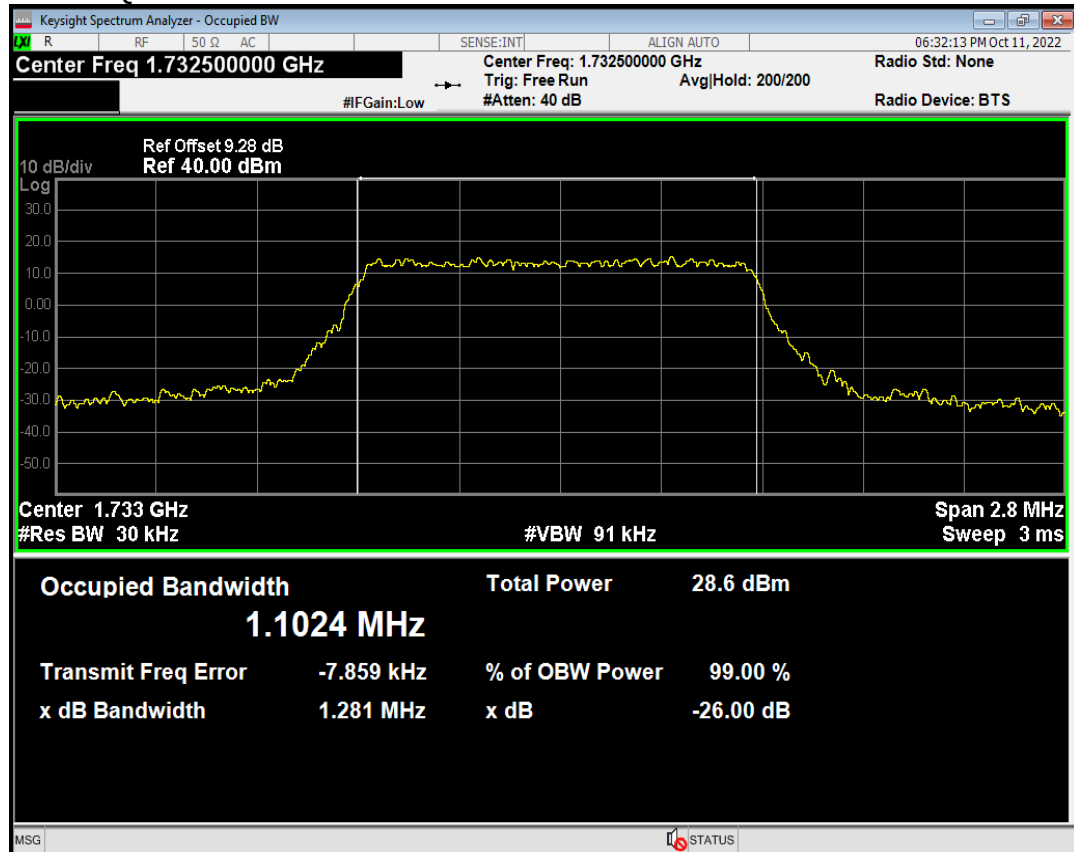




Band4 QPSK BW=1.4MHz Channel=20175 RB Size=6 Position=#0

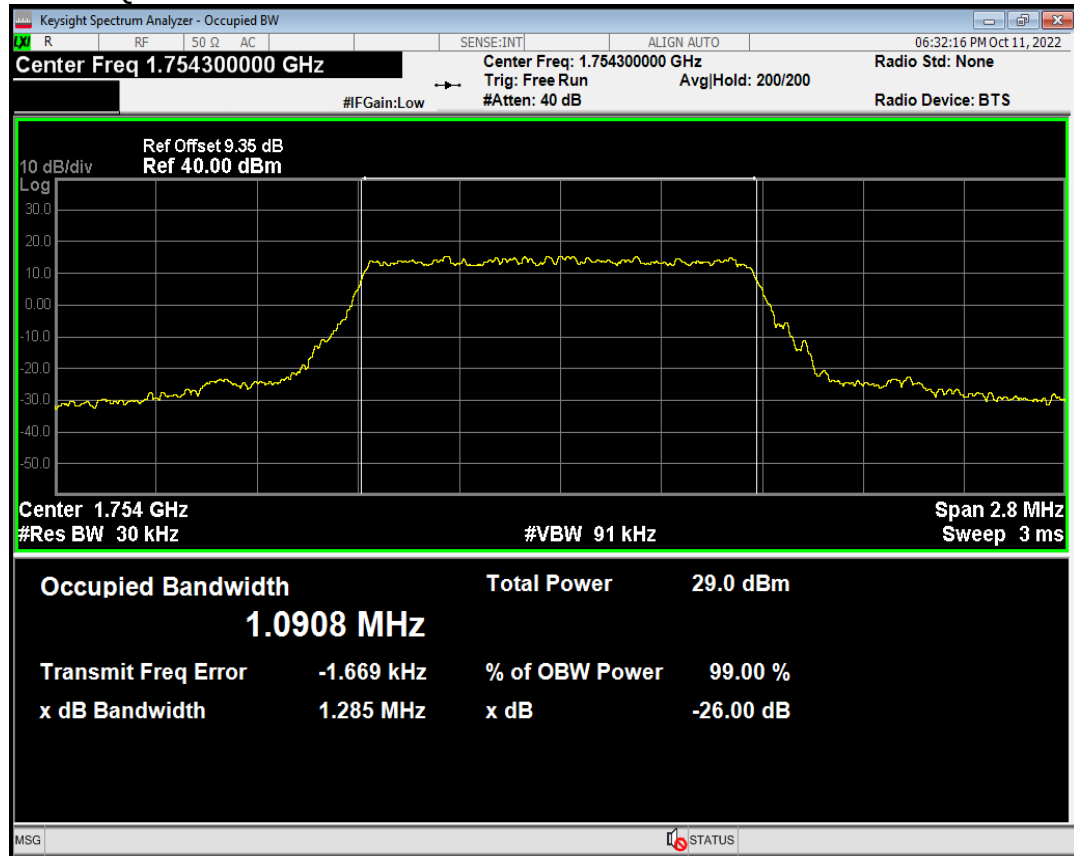


Band4 QAM16 BW=1.4MHz Channel=20175 RB Size=6 Position=#0

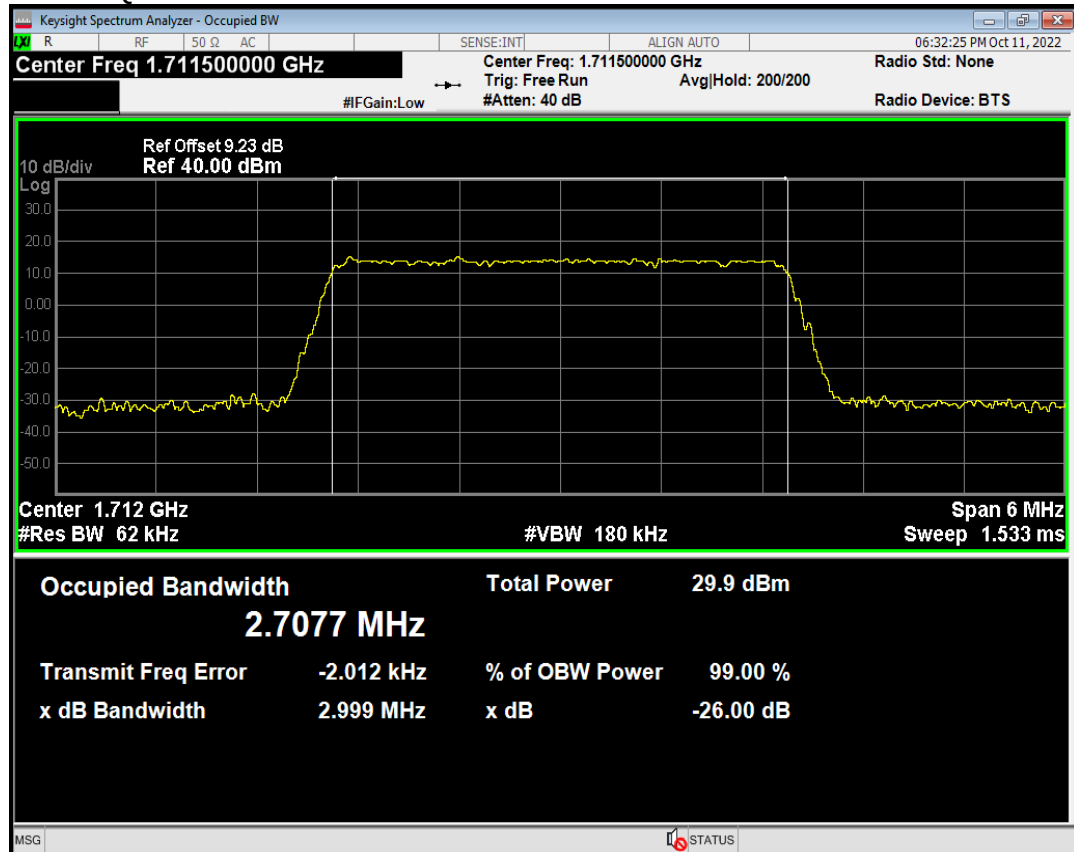




Band4 QPSK BW=1.4MHz Channel=20393 RB Size=6 Position=#0

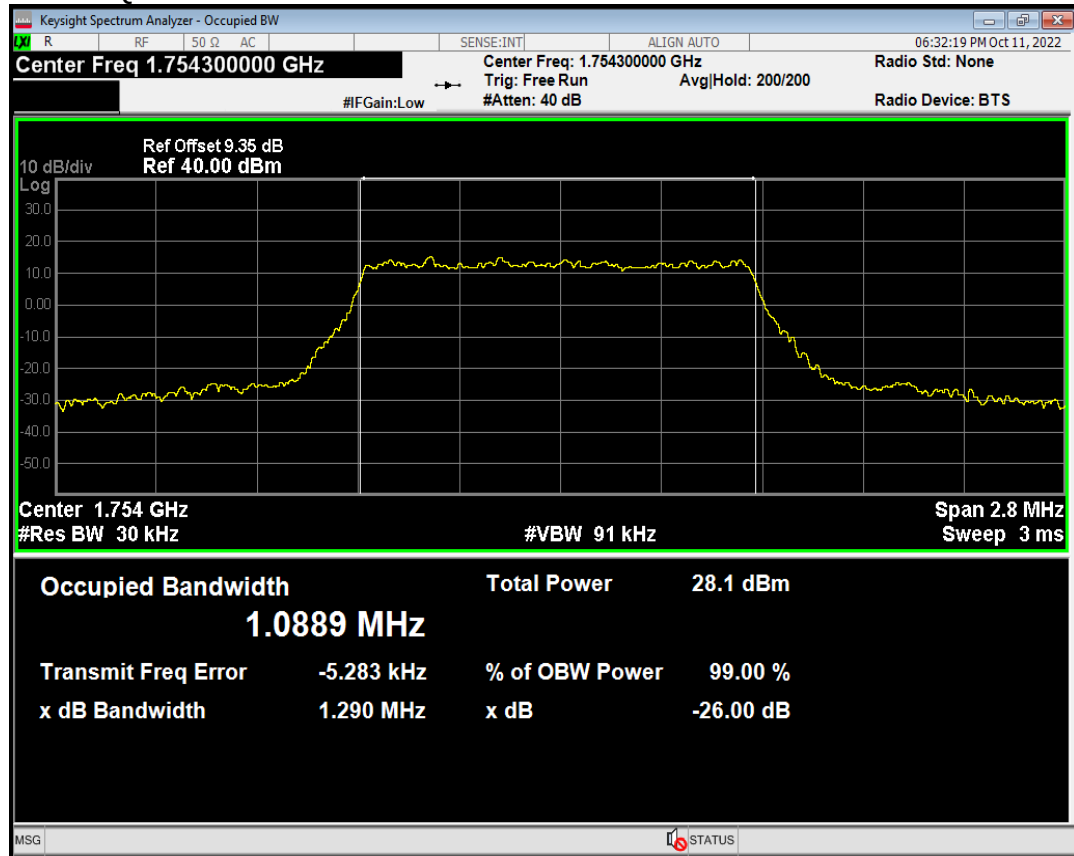


Band4 QPSK BW=3MHz Channel=19965 RB Size=15 Position=#0

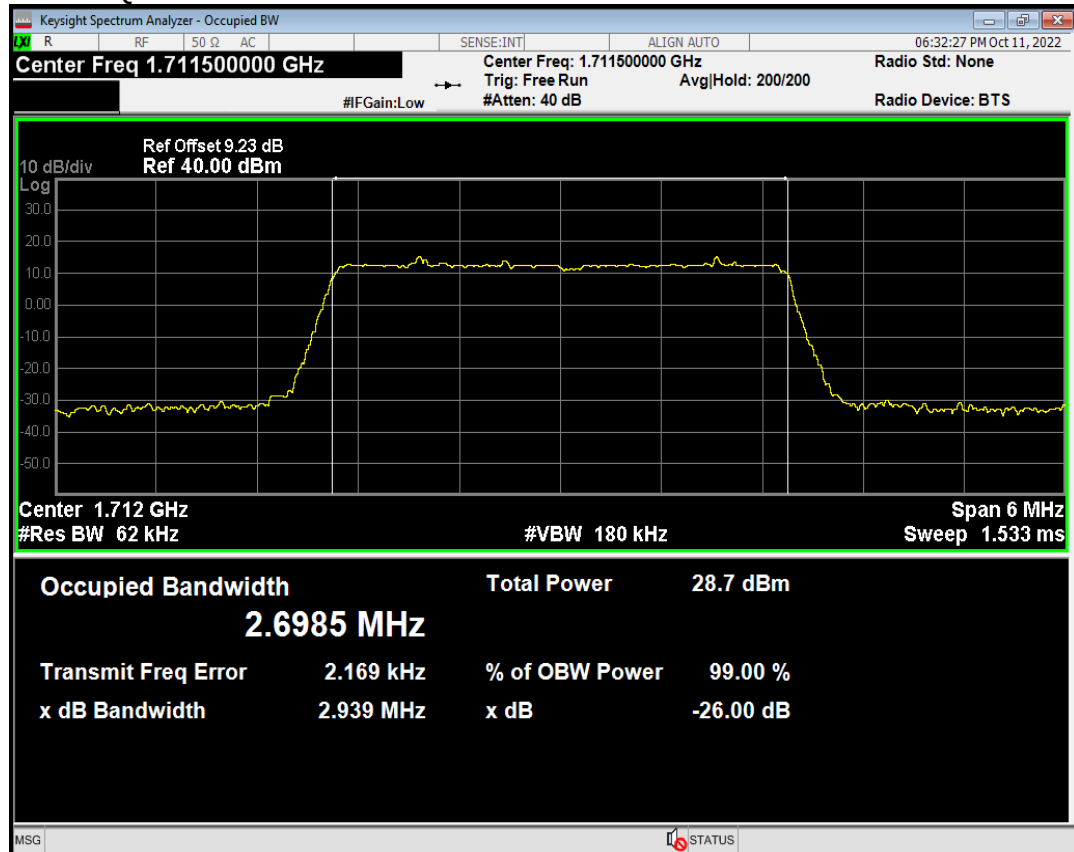




Band4 QAM16 BW=1.4MHz Channel=20393 RB Size=6 Position=#0

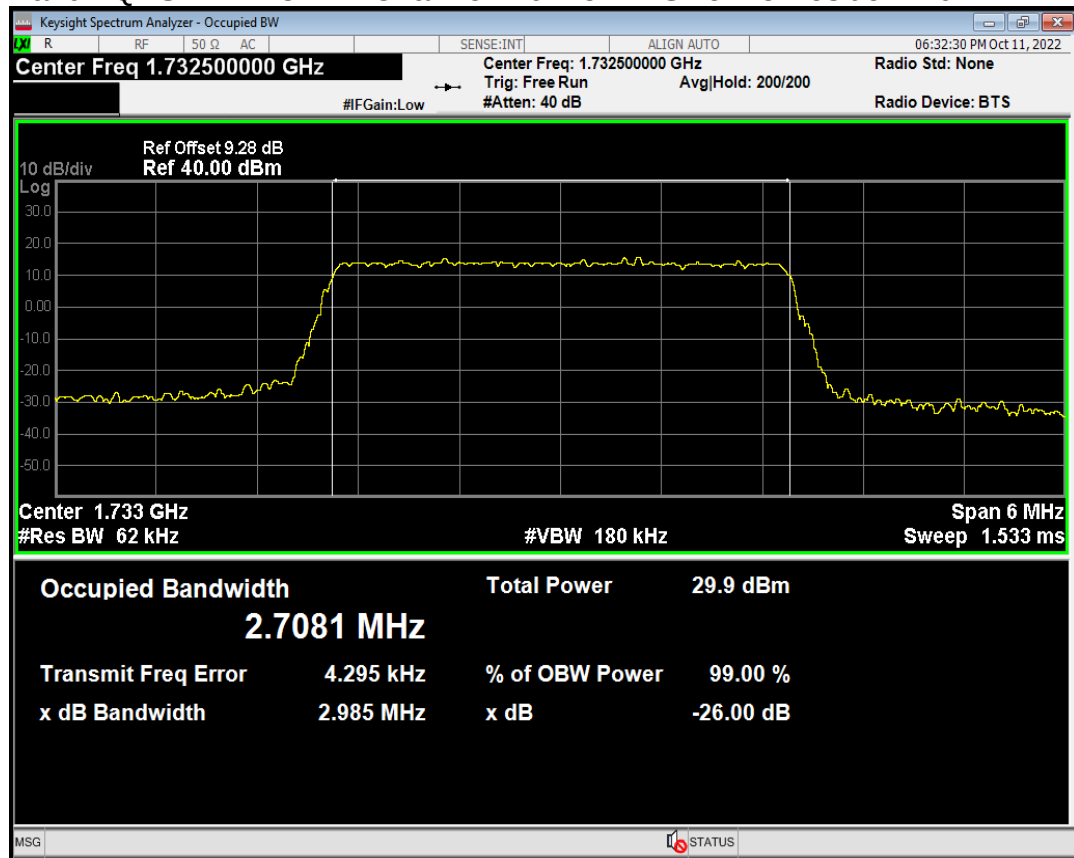


Band4 QAM16 BW=3MHz Channel=19965 RB Size=15 Position=#0

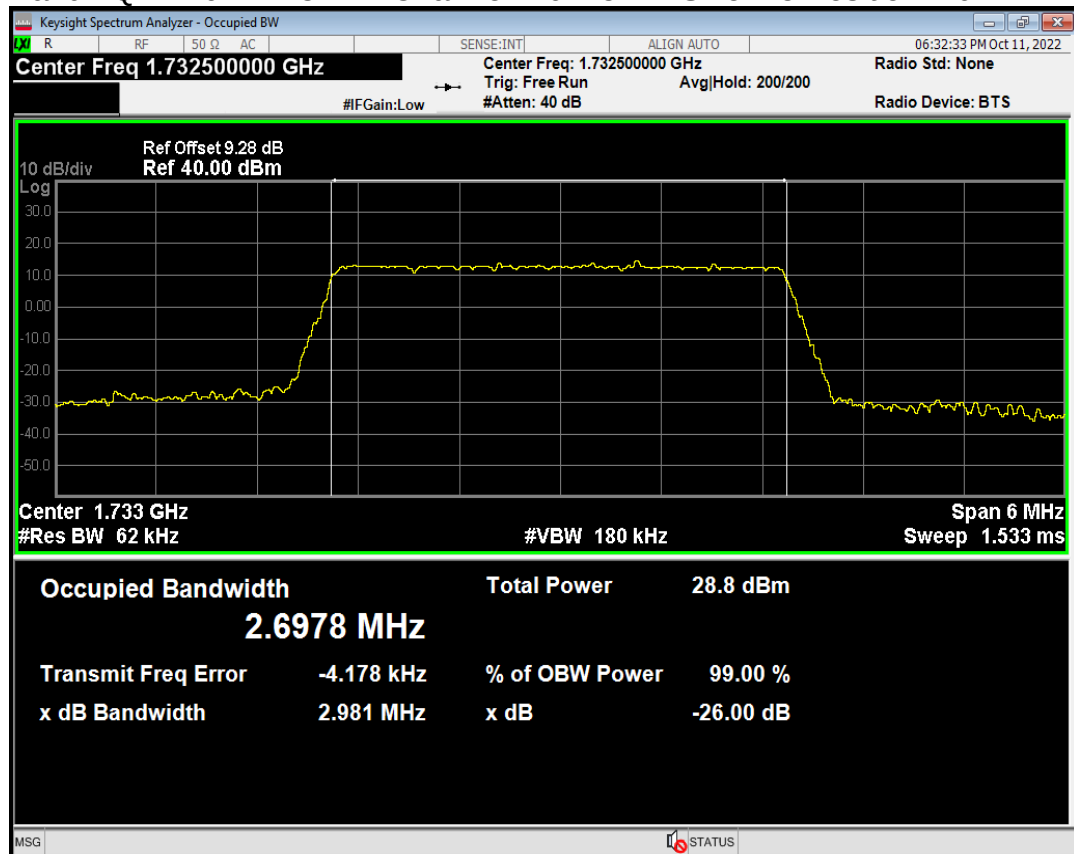




Band4 QPSK BW=3MHz Channel=20175 RB Size=15 Position=#0

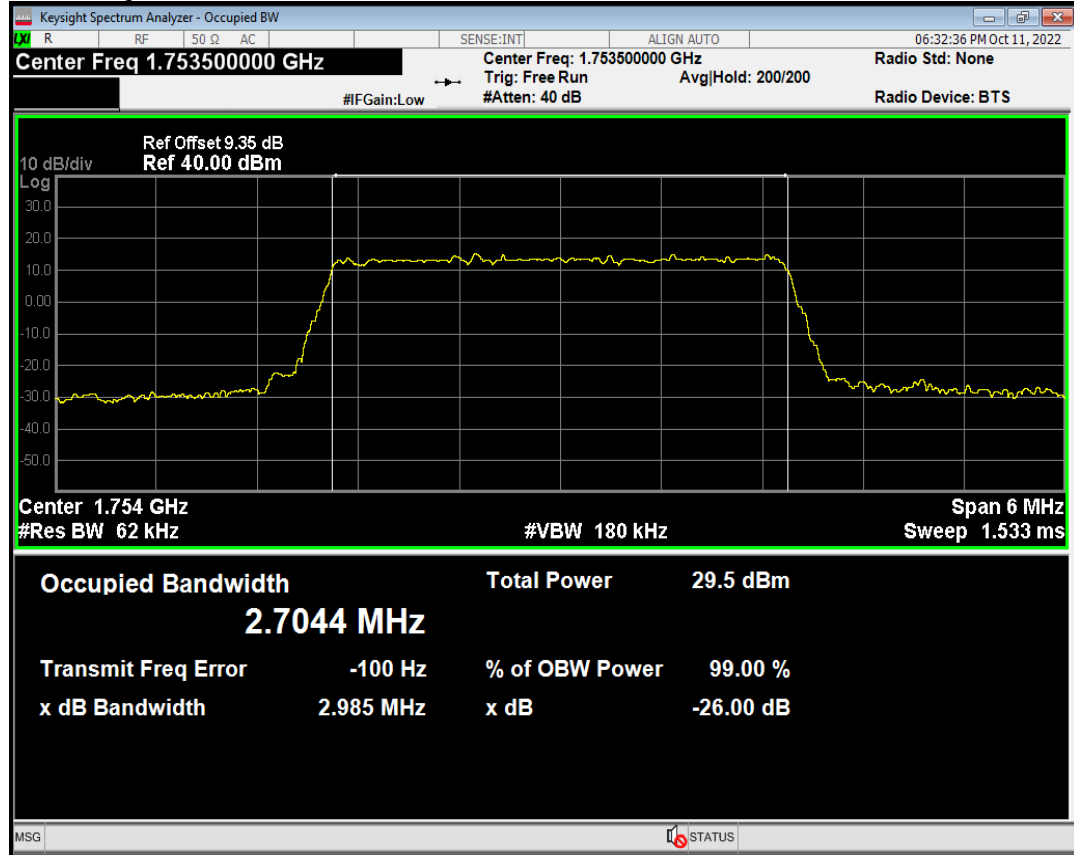


Band4 QAM16 BW=3MHz Channel=20175 RB Size=15 Position=#0

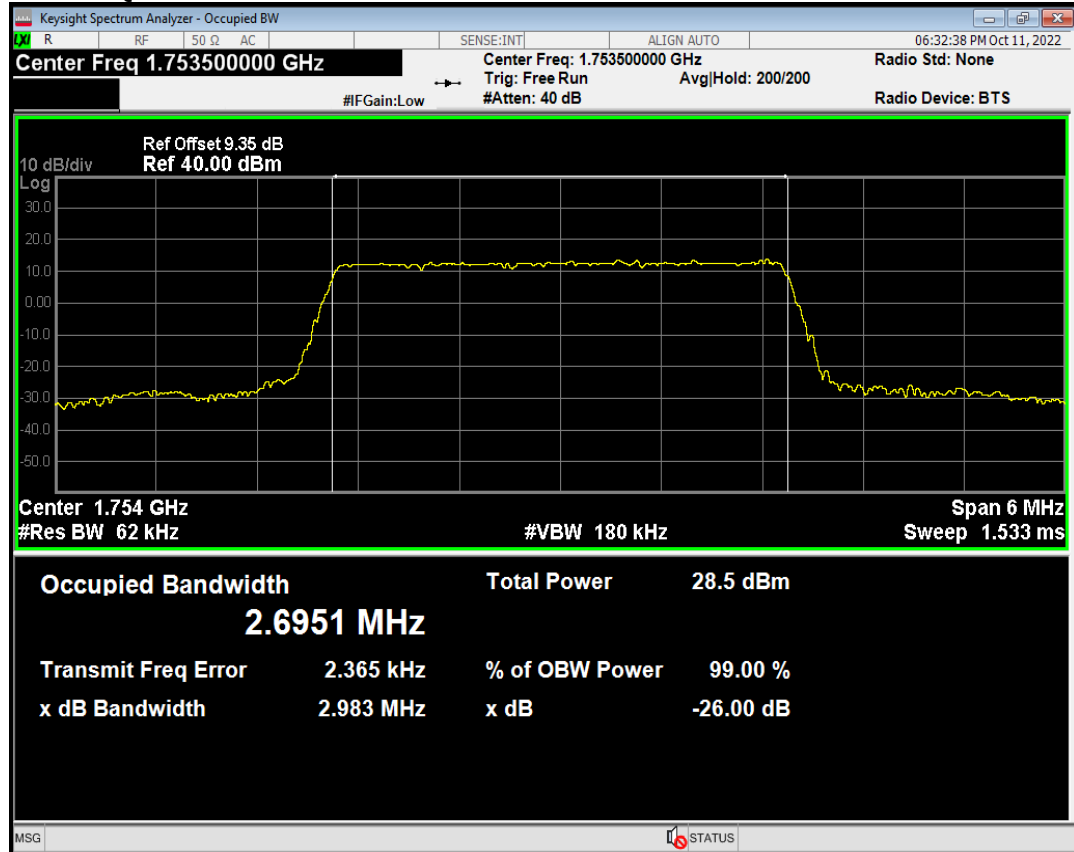




Band4 QPSK BW=3MHz Channel=20385 RB Size=15 Position=#0

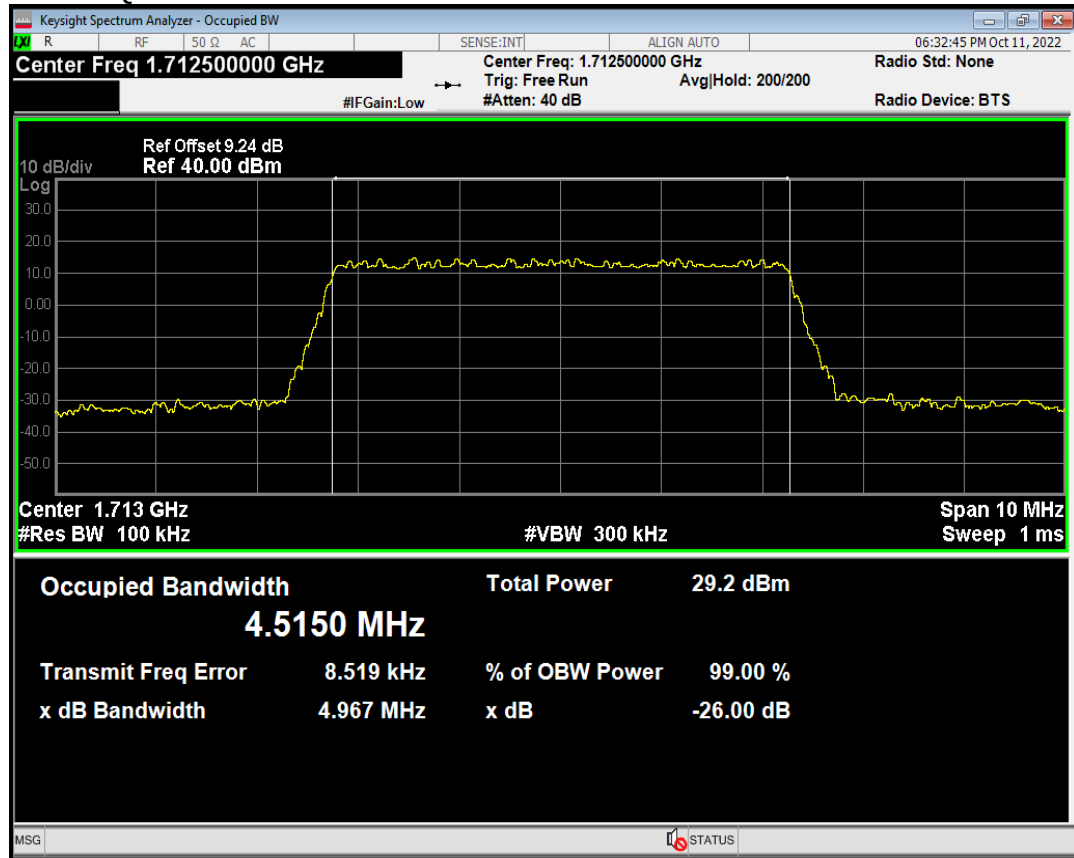


Band4 QAM16 BW=3MHz Channel=20385 RB Size=15 Position=#0

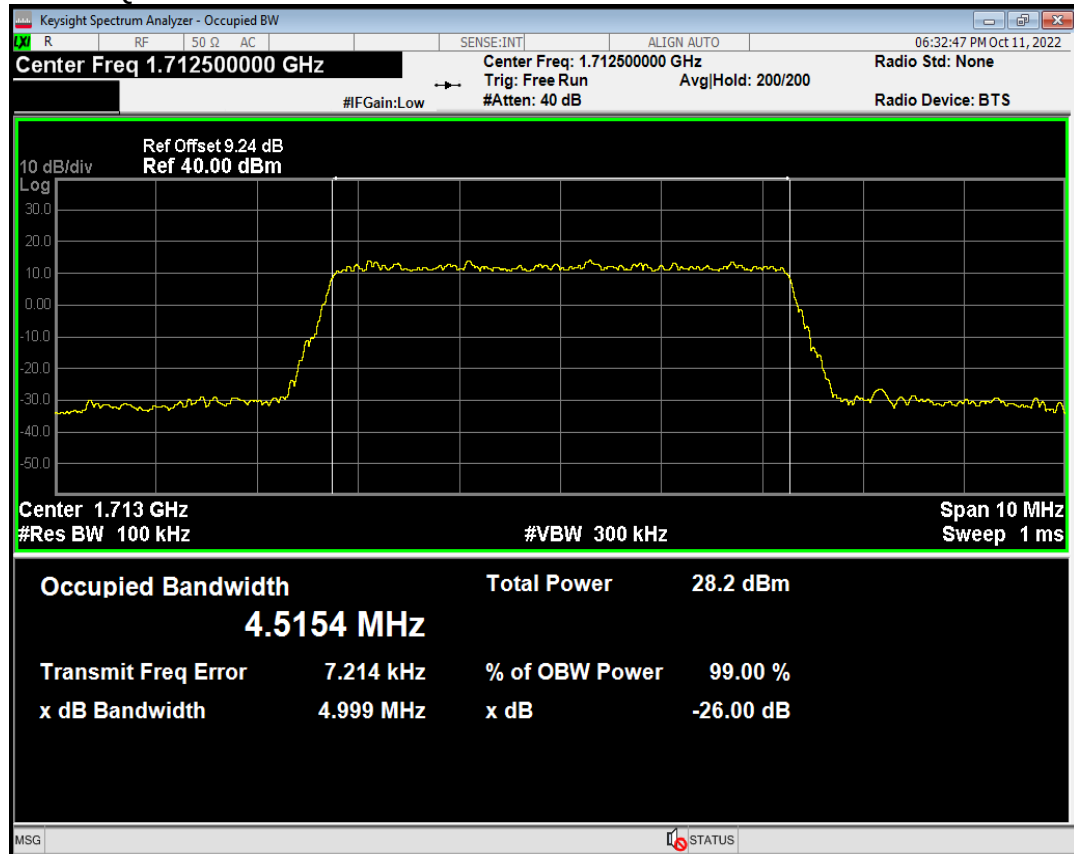




Band4 QPSK BW=5MHz Channel=19975 RB Size=25 Position=#0

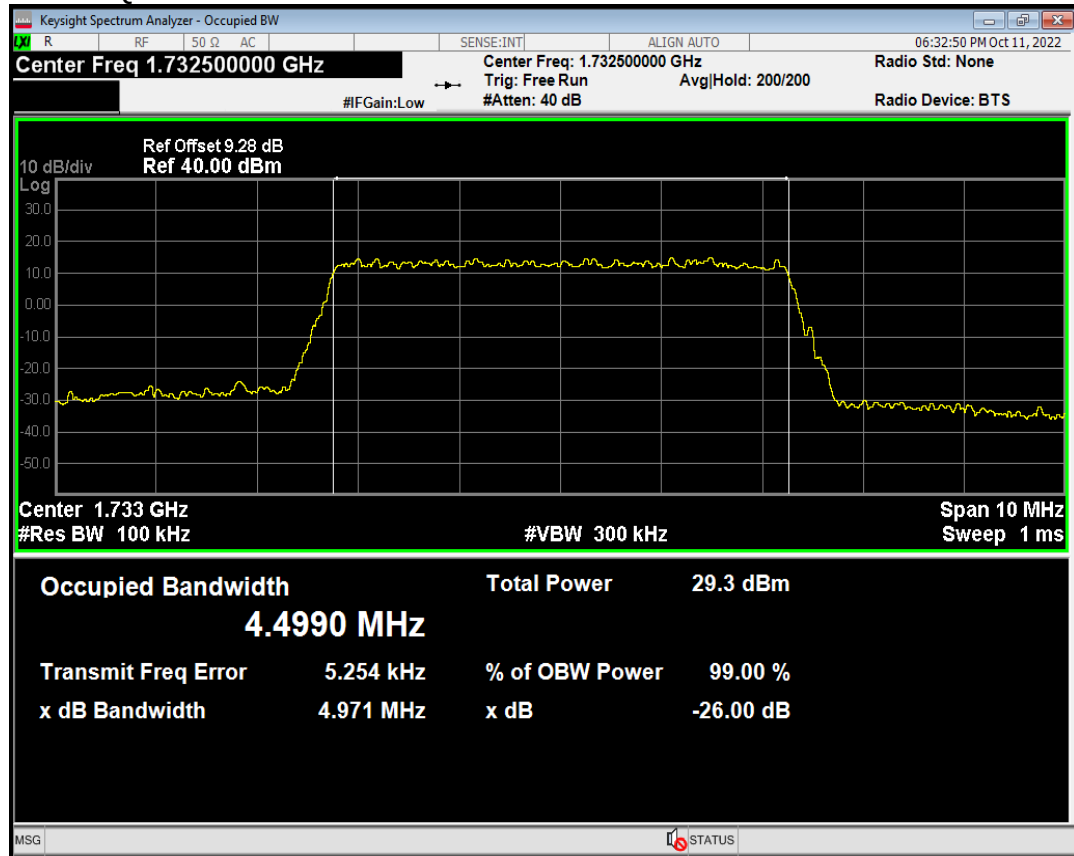


Band4 QAM16 BW=5MHz Channel=19975 RB Size=25 Position=#0

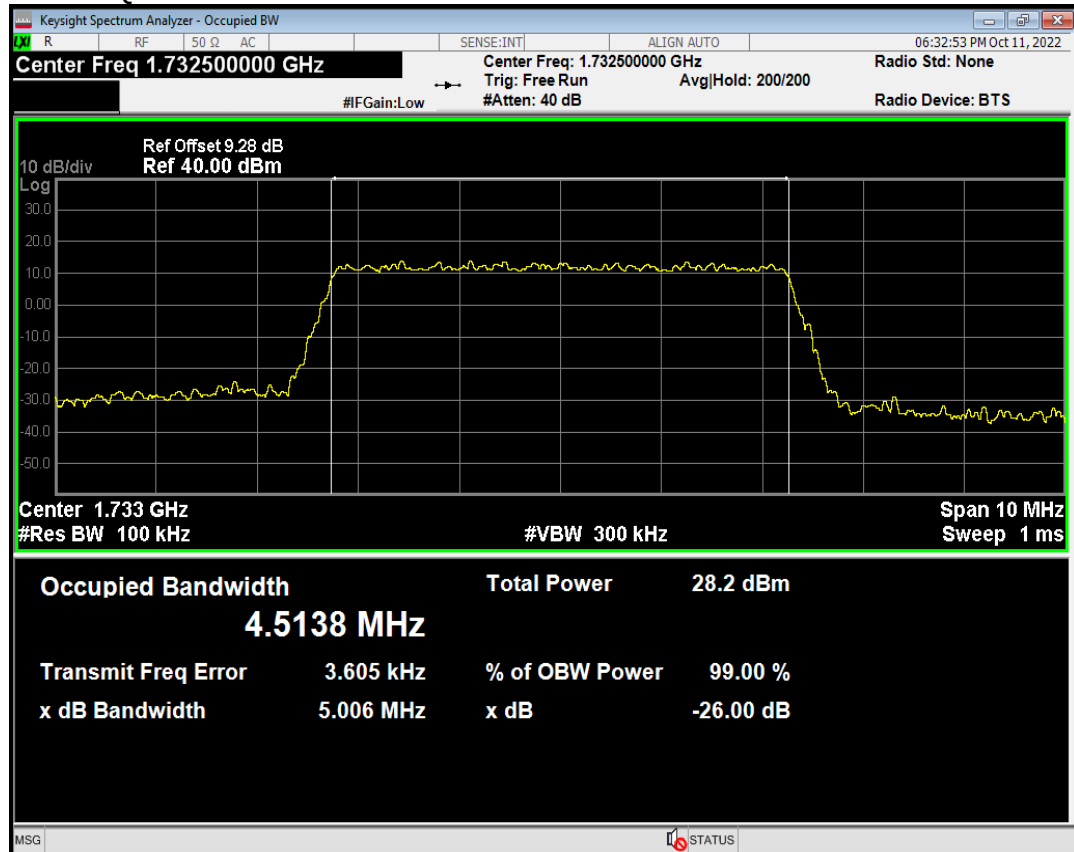




Band4 QPSK BW=5MHz Channel=20175 RB Size=25 Position=#0

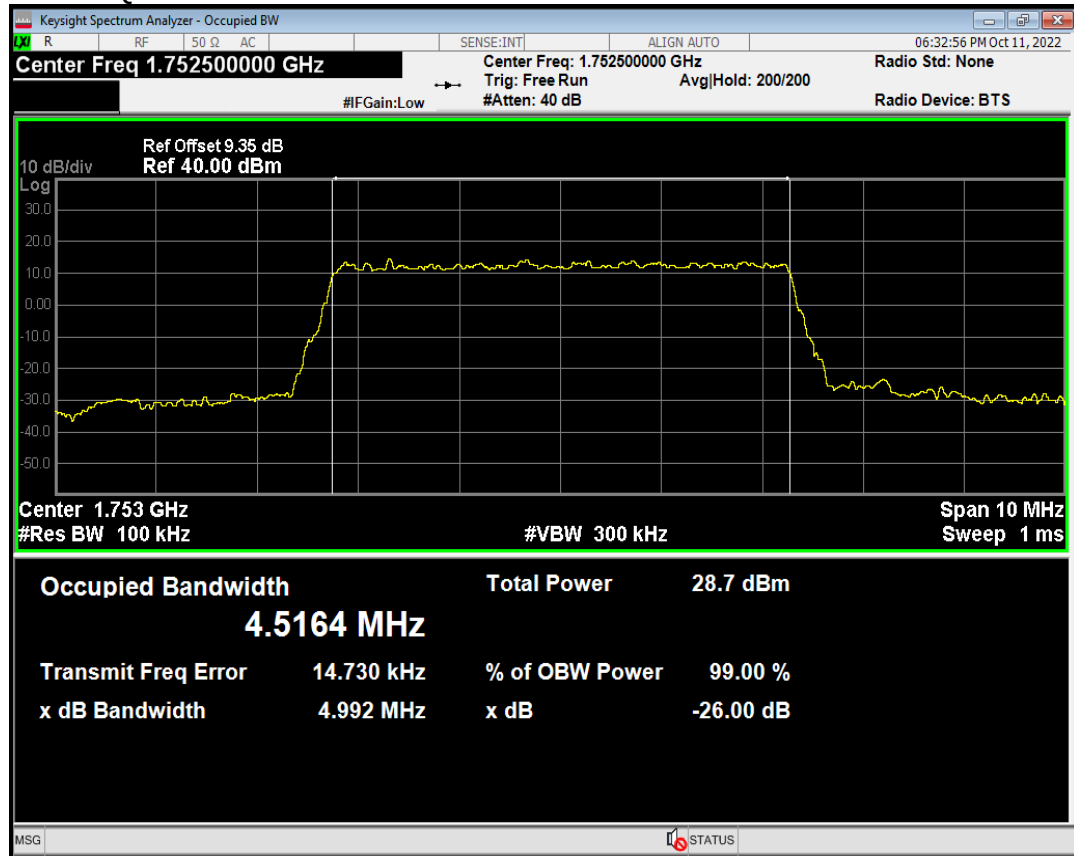


Band4 QAM16 BW=5MHz Channel=20175 RB Size=25 Position=#0

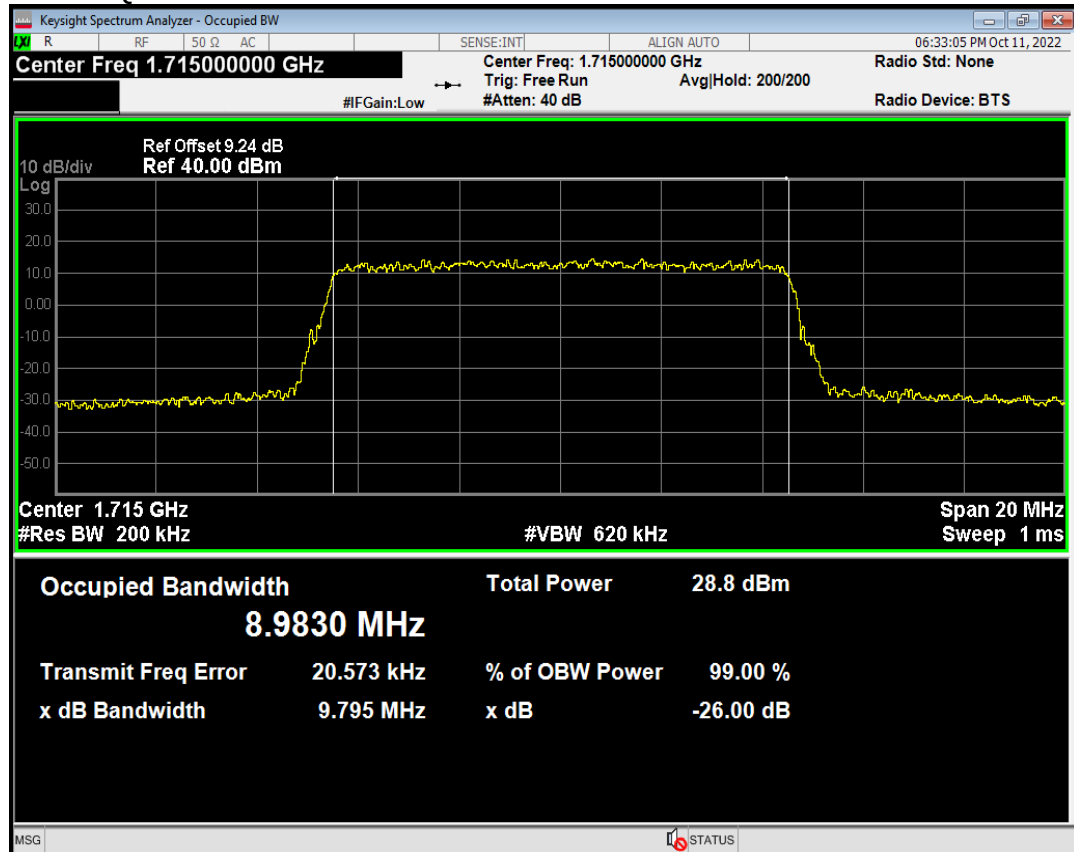




Band4 QPSK BW=5MHz Channel=20375 RB Size=25 Position=#0

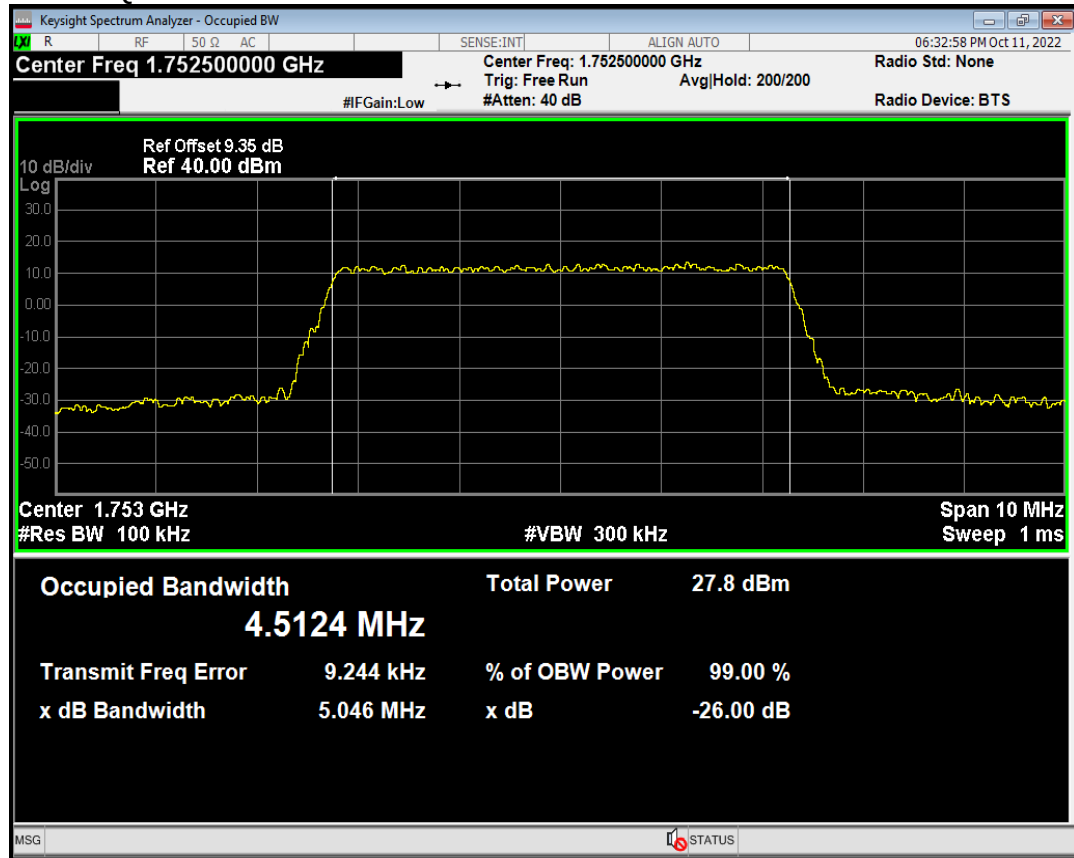


Band4 QPSK BW=10MHz Channel=20000 RB Size=50 Position=#0

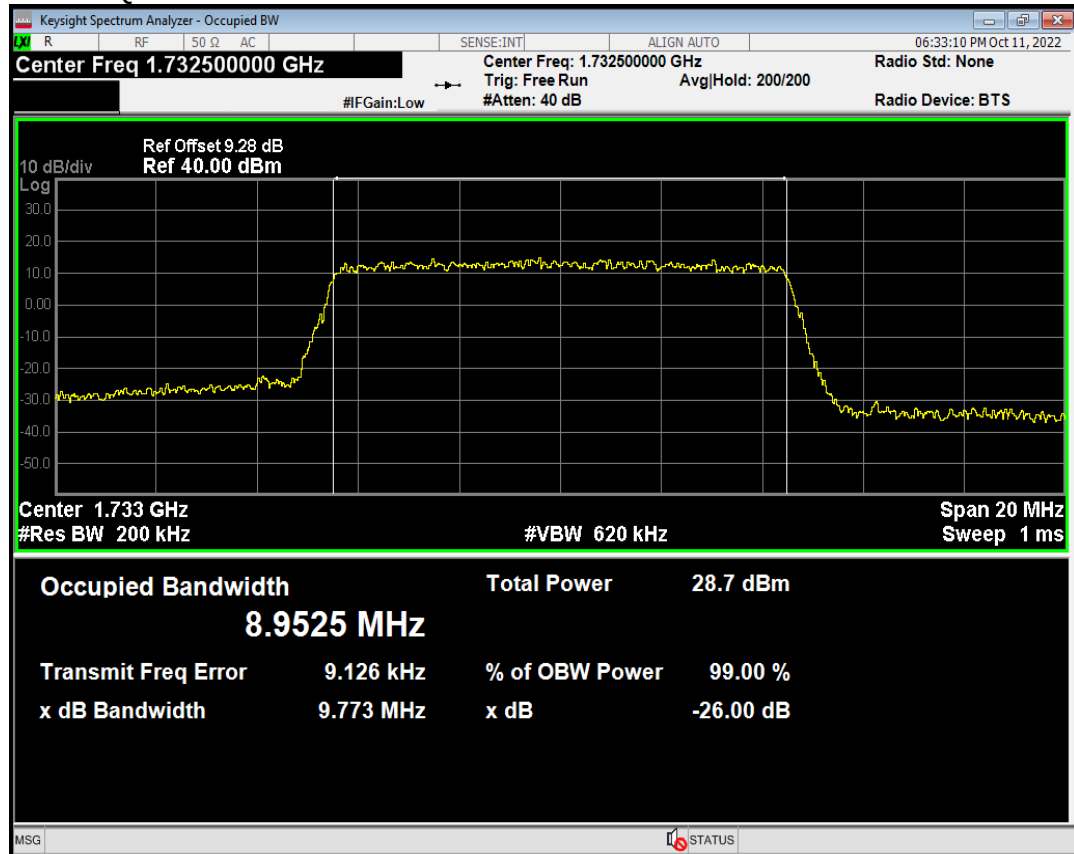




Band4 QAM16 BW=5MHz Channel=20375 RB Size=25 Position=#0

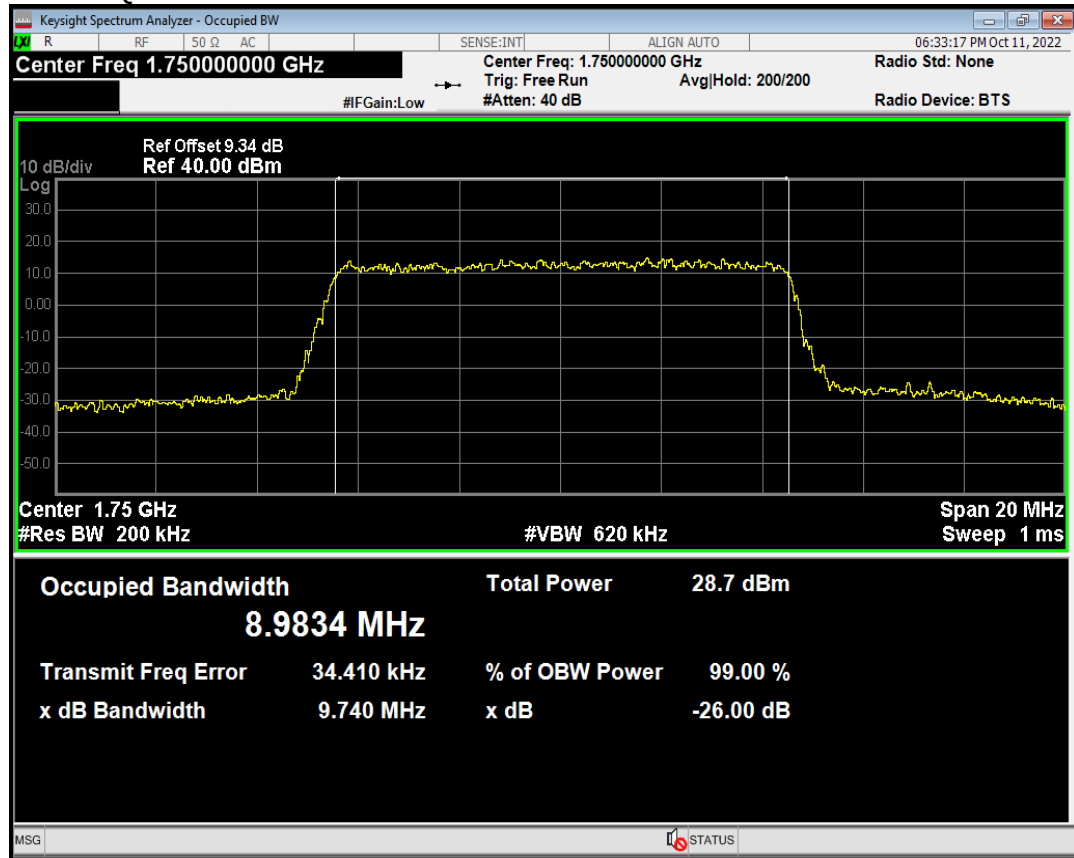


Band4 QPSK BW=10MHz Channel=20175 RB Size=50 Position=#0

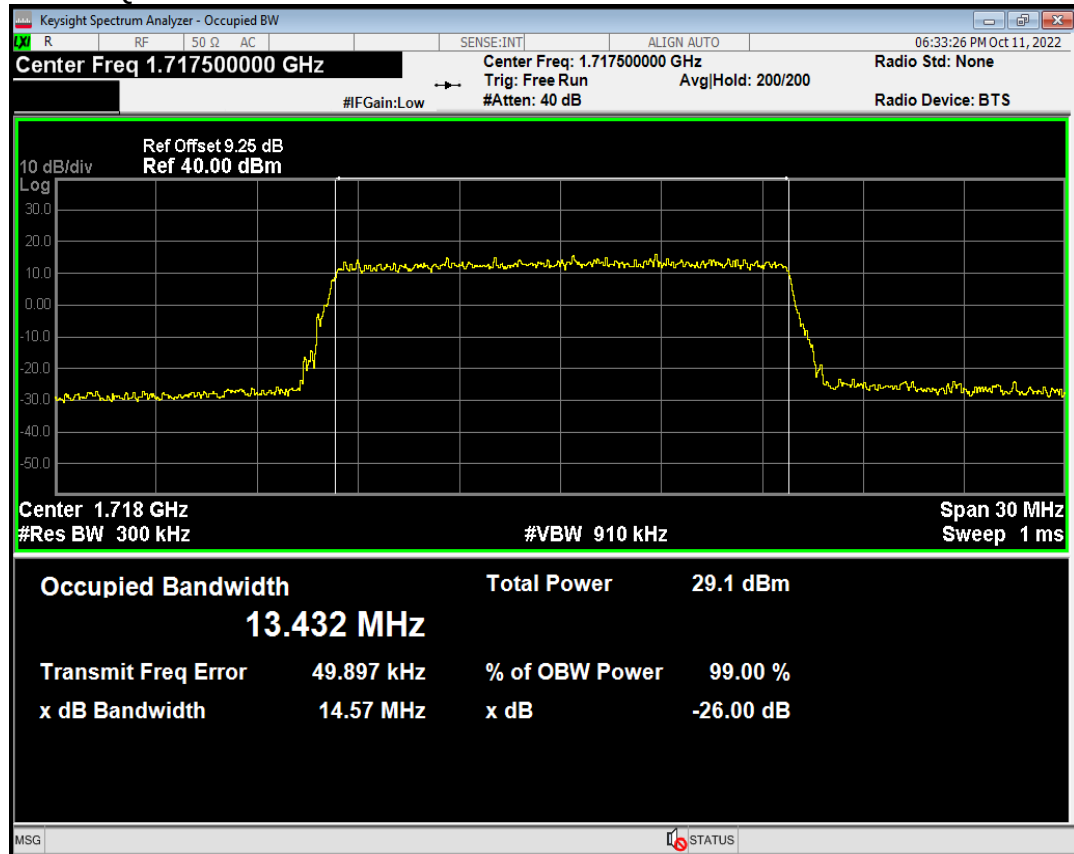




Band4 QPSK BW=10MHz Channel=20350 RB Size=50 Position=#0

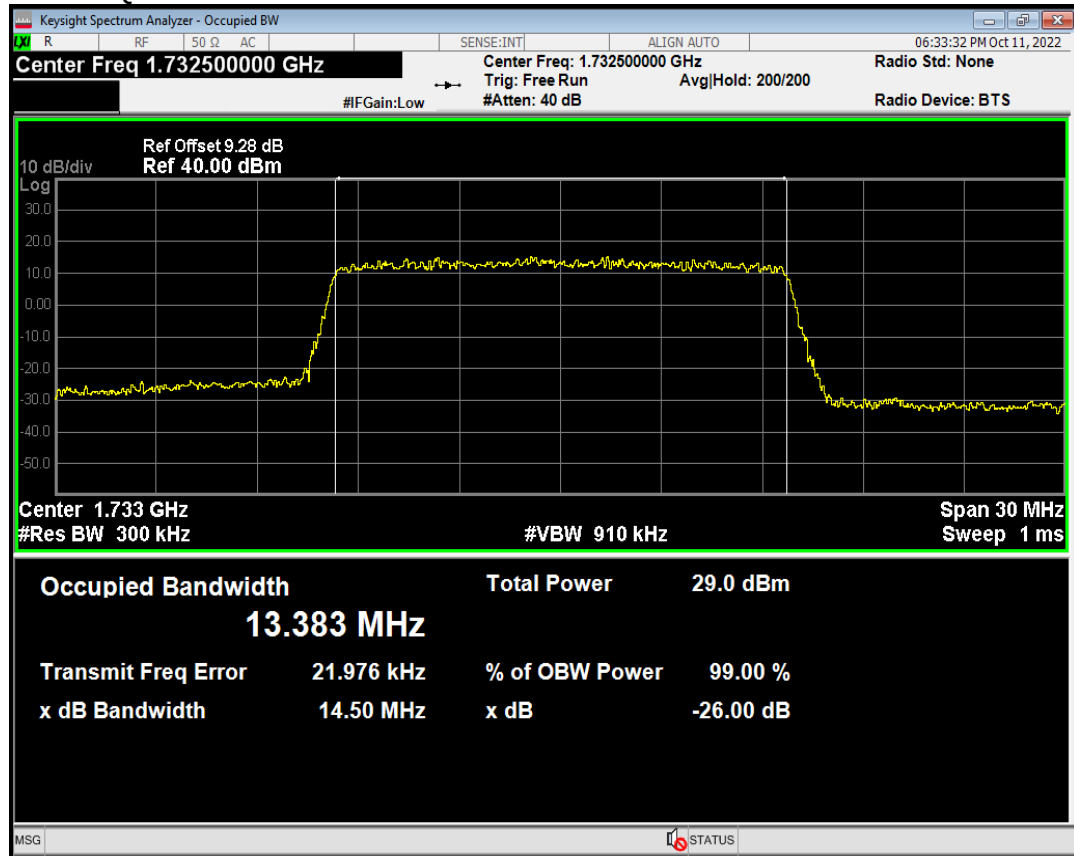


Band4 QPSK BW=15MHz Channel=20025 RB Size=75 Position=#0

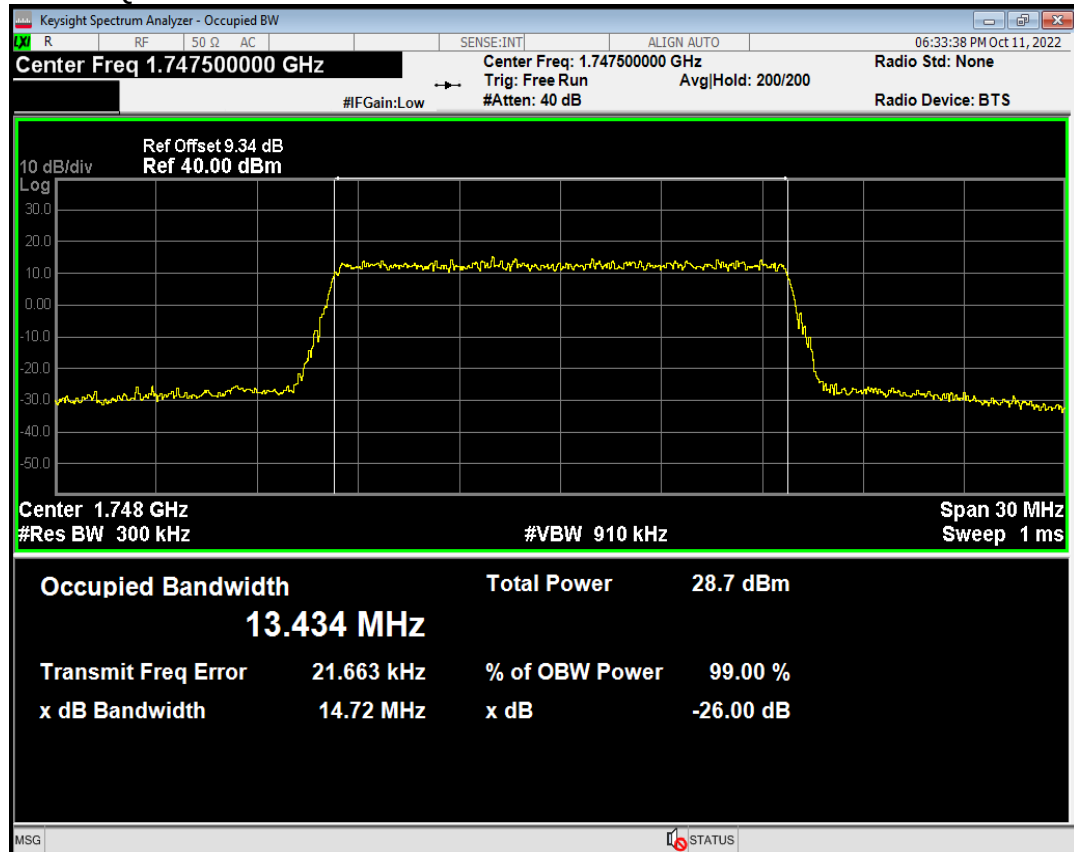




Band4 QPSK BW=15MHz Channel=20175 RB Size=75 Position=#0

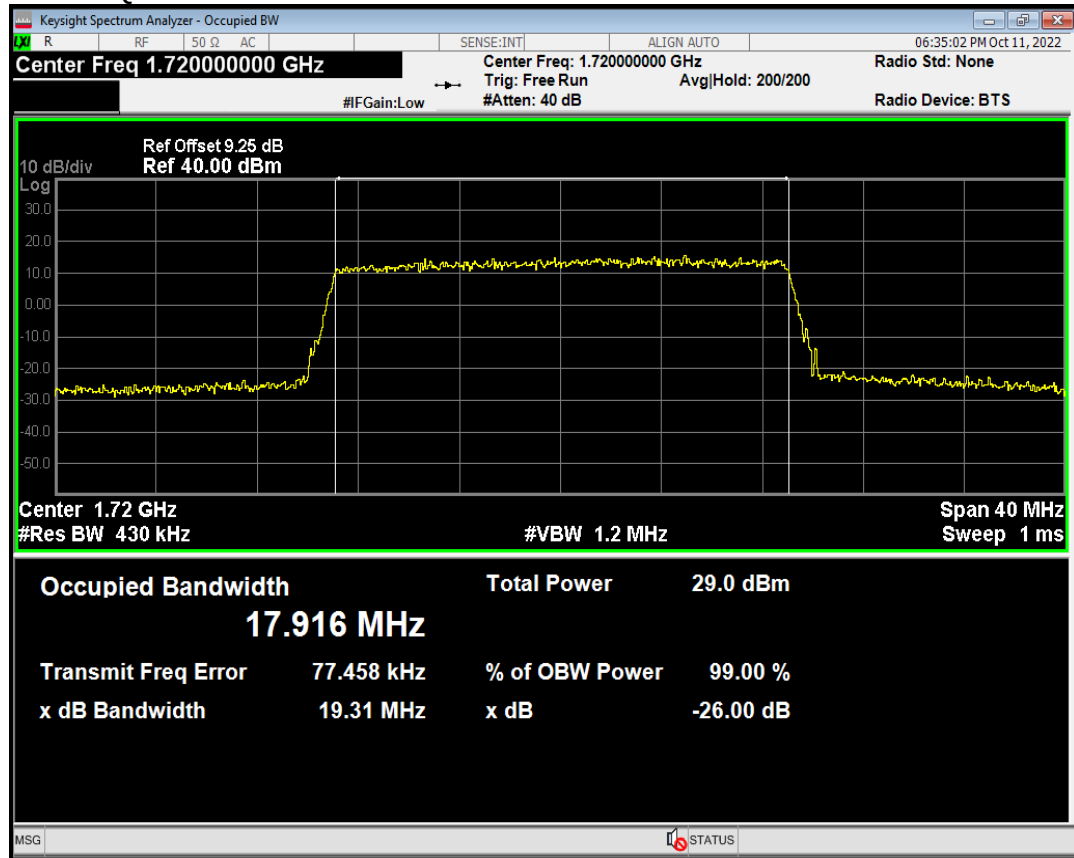


Band4 QPSK BW=15MHz Channel=20325 RB Size=75 Position=#0

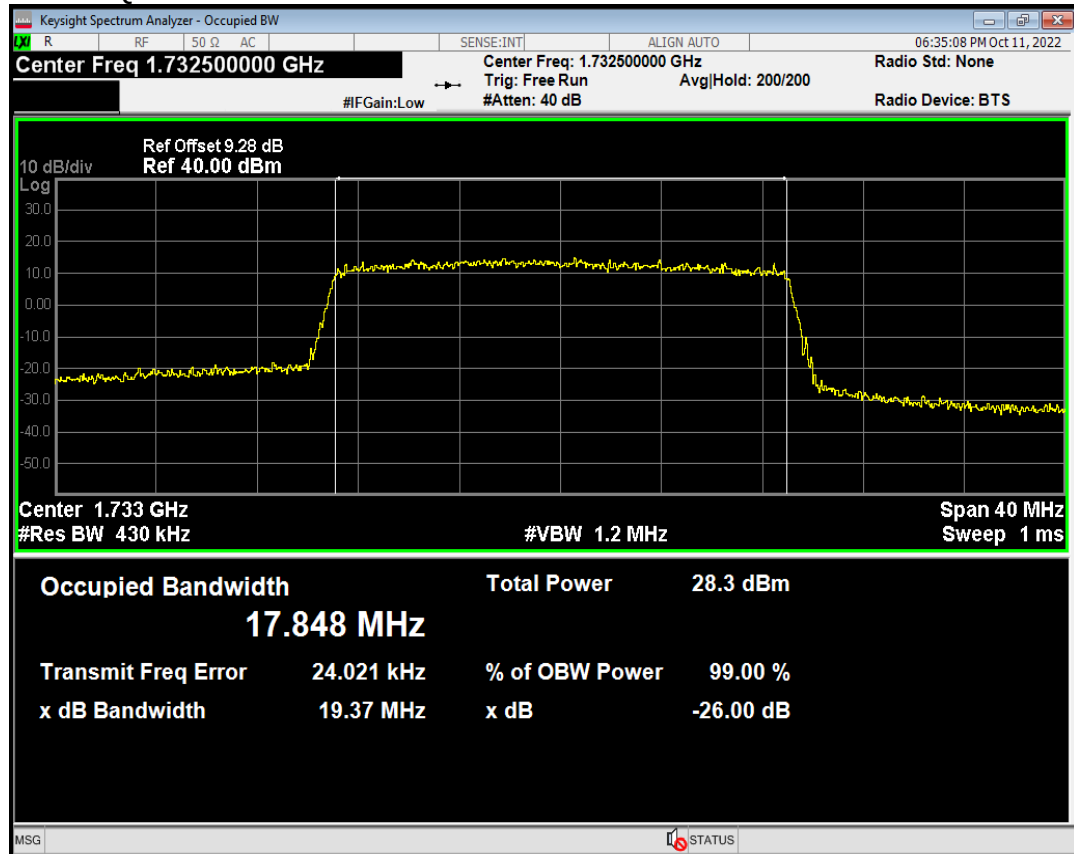




Band4 QPSK BW=20MHz Channel=20050 RB Size=100 Position=#0

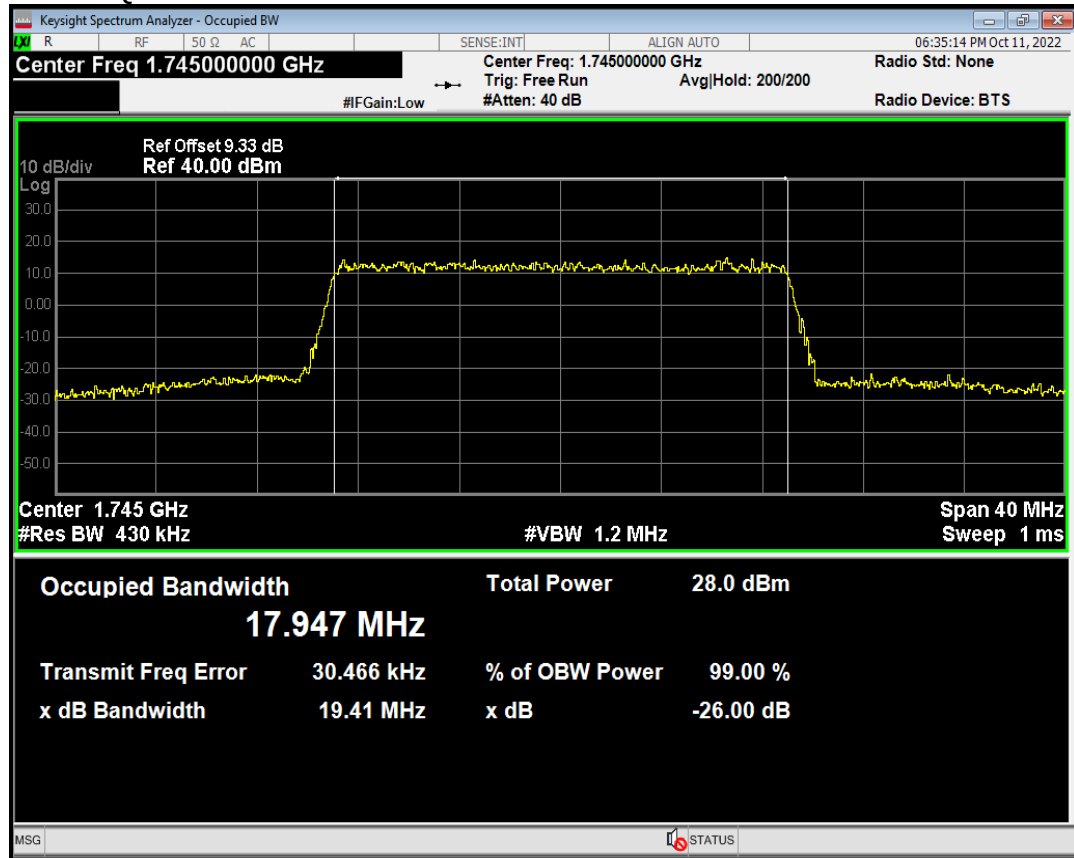


Band4 QPSK BW=20MHz Channel=20175 RB Size=100 Position=#0





Band4 QPSK BW=20MHz Channel=20300 RB Size=100 Position=#0





1.2. Conducted Spurious Emissions

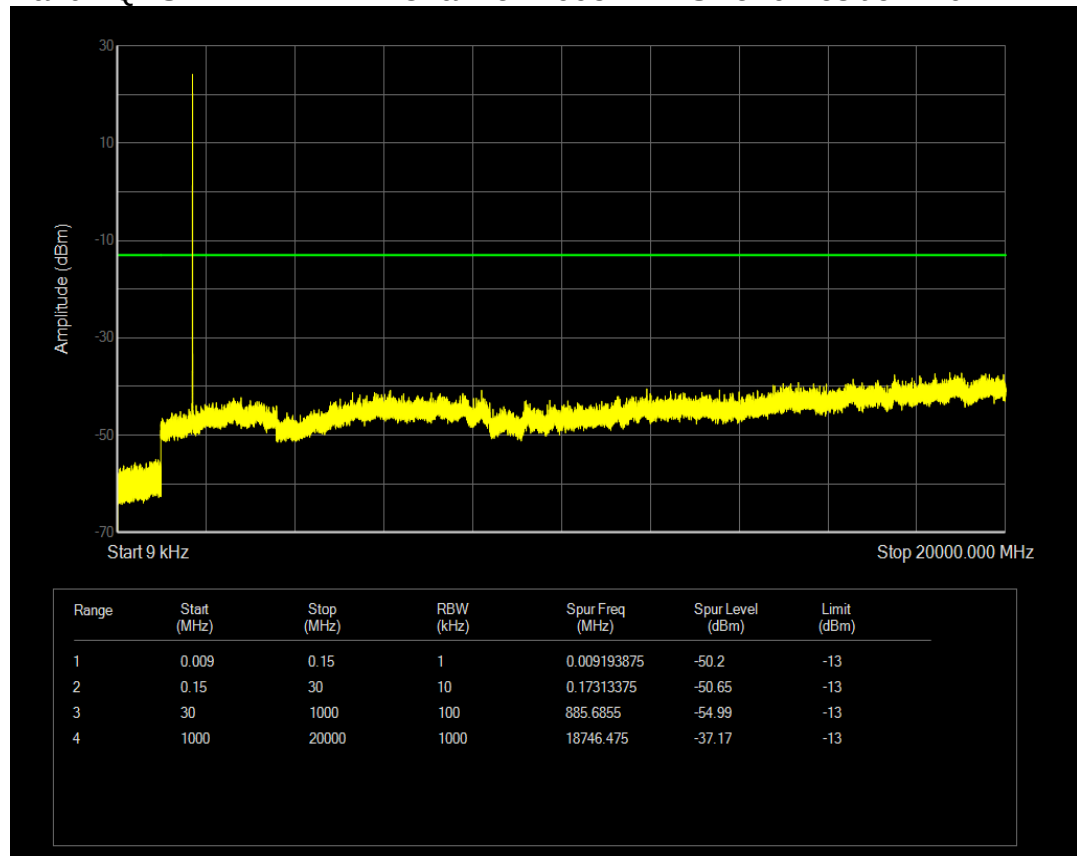
1.2.1. Test Result

The measurement frequency range is from 0.009MHz to the 10th harmonic of the fundamental frequency. The lowest, middle and highest channels are tested to verify the out of band emissions.

For LTE mode, the plot only show the QPSK,RB100's data.

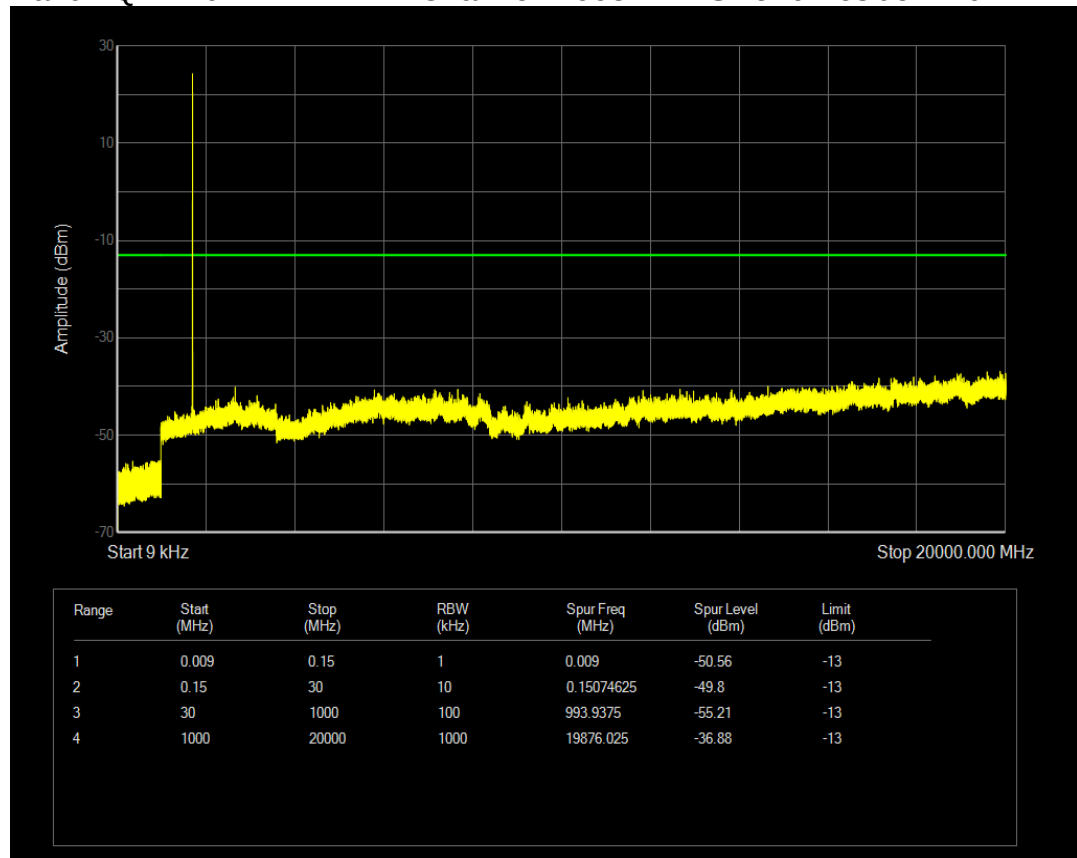
Pass, the table and plot please see annex.

Band4 QPSK BW=1.4MHz Channel=19957 RB Size=6 Position=#0

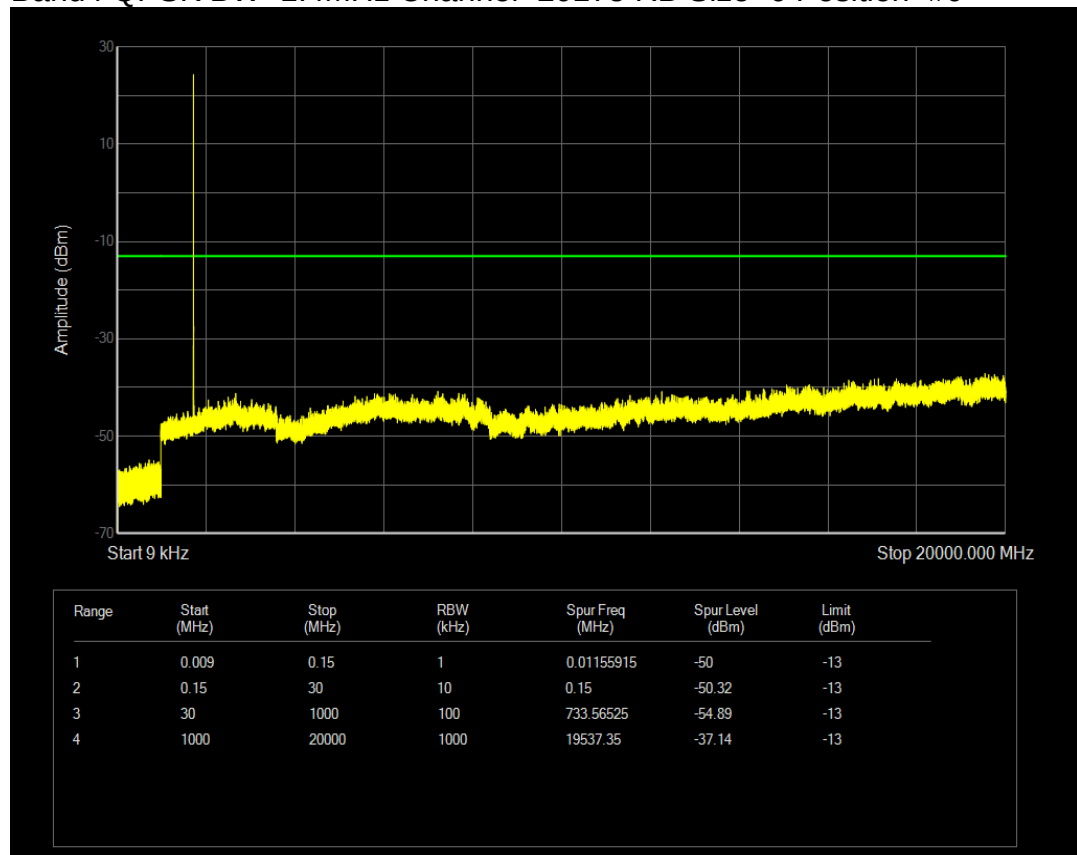




Band4 QAM16 BW=1.4MHz Channel=19957 RB Size=6 Position=#0

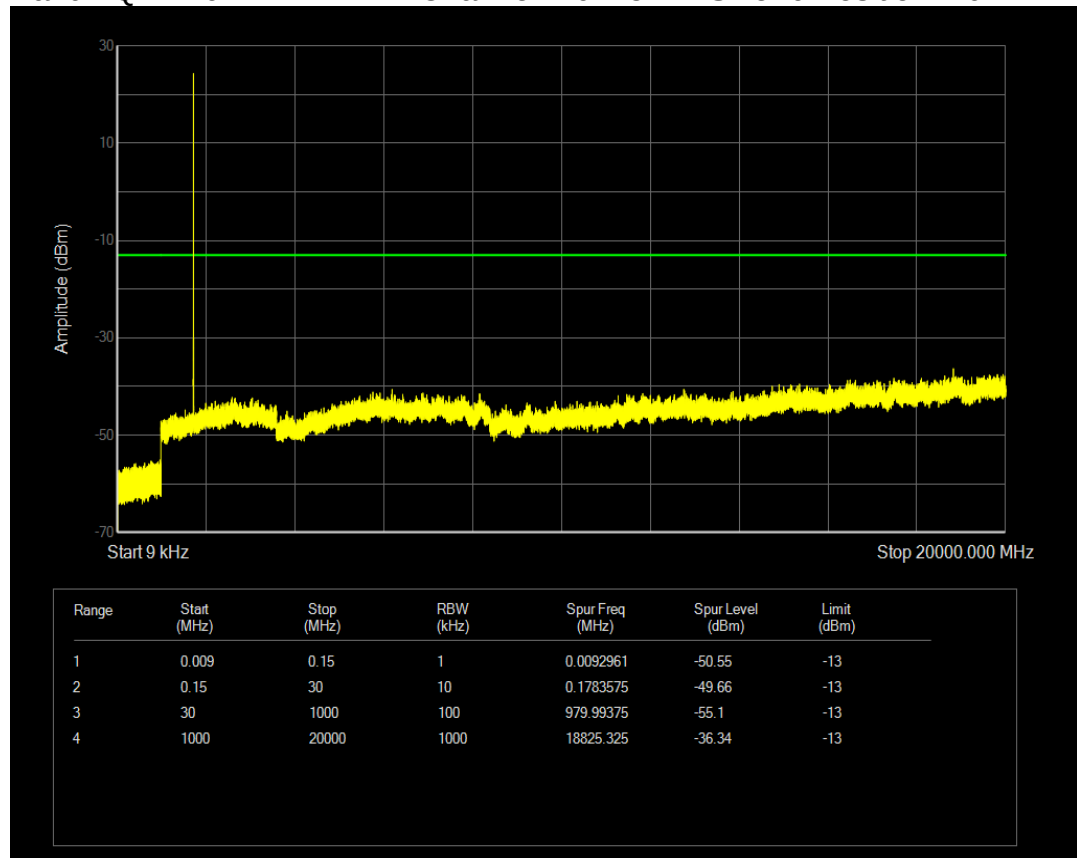


Band4 QPSK BW=1.4MHz Channel=20175 RB Size=6 Position=#0

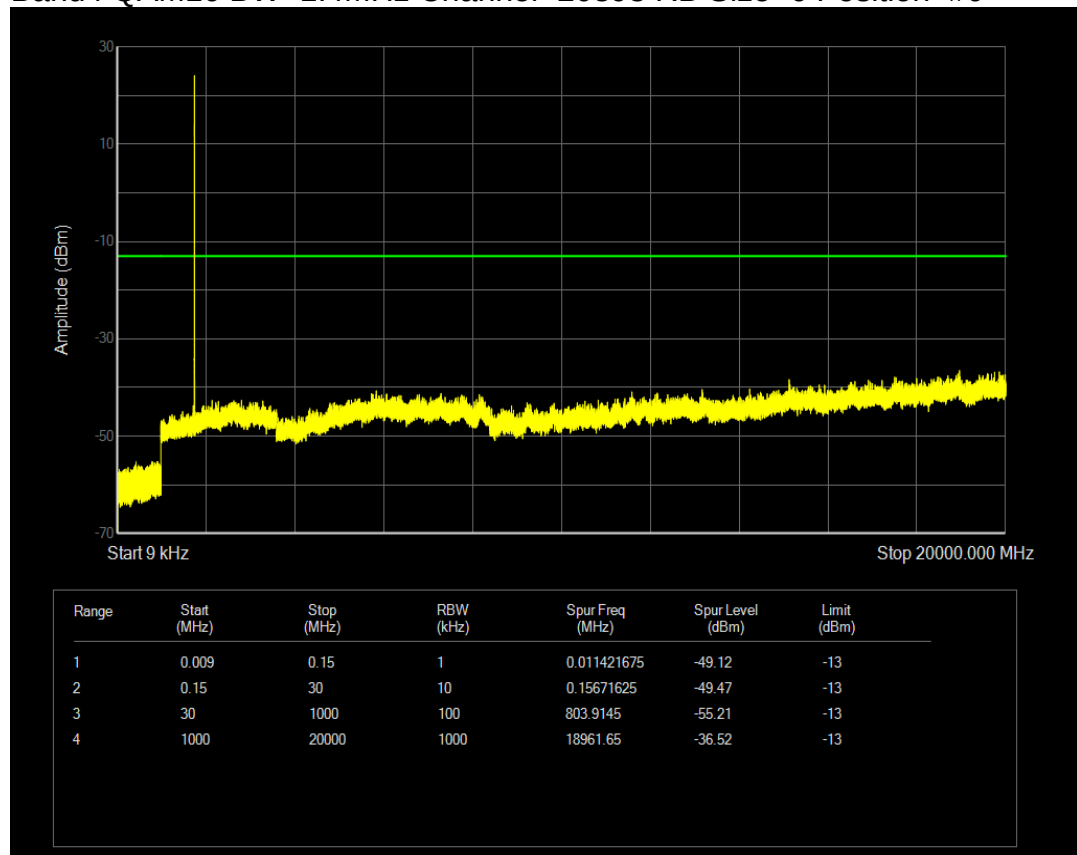




Band4 QAM16 BW=1.4MHz Channel=20175 RB Size=6 Position=#0

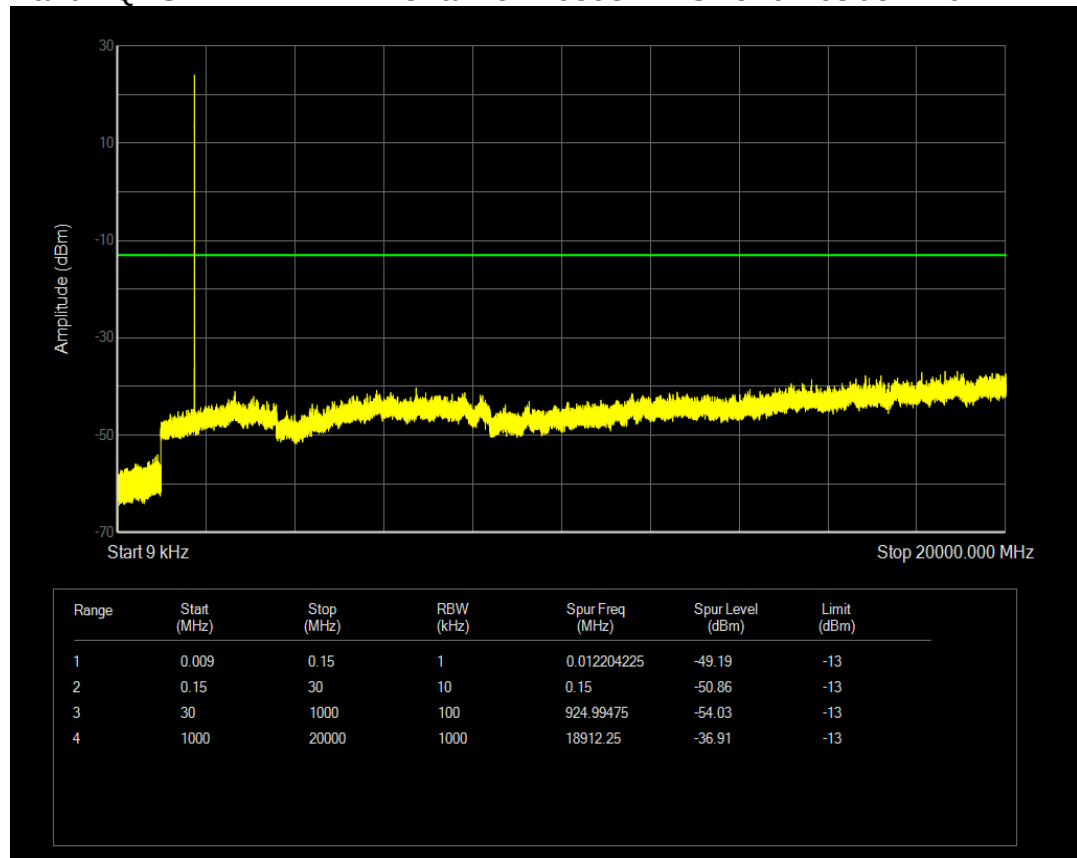


Band4 QAM16 BW=1.4MHz Channel=20393 RB Size=6 Position=#0

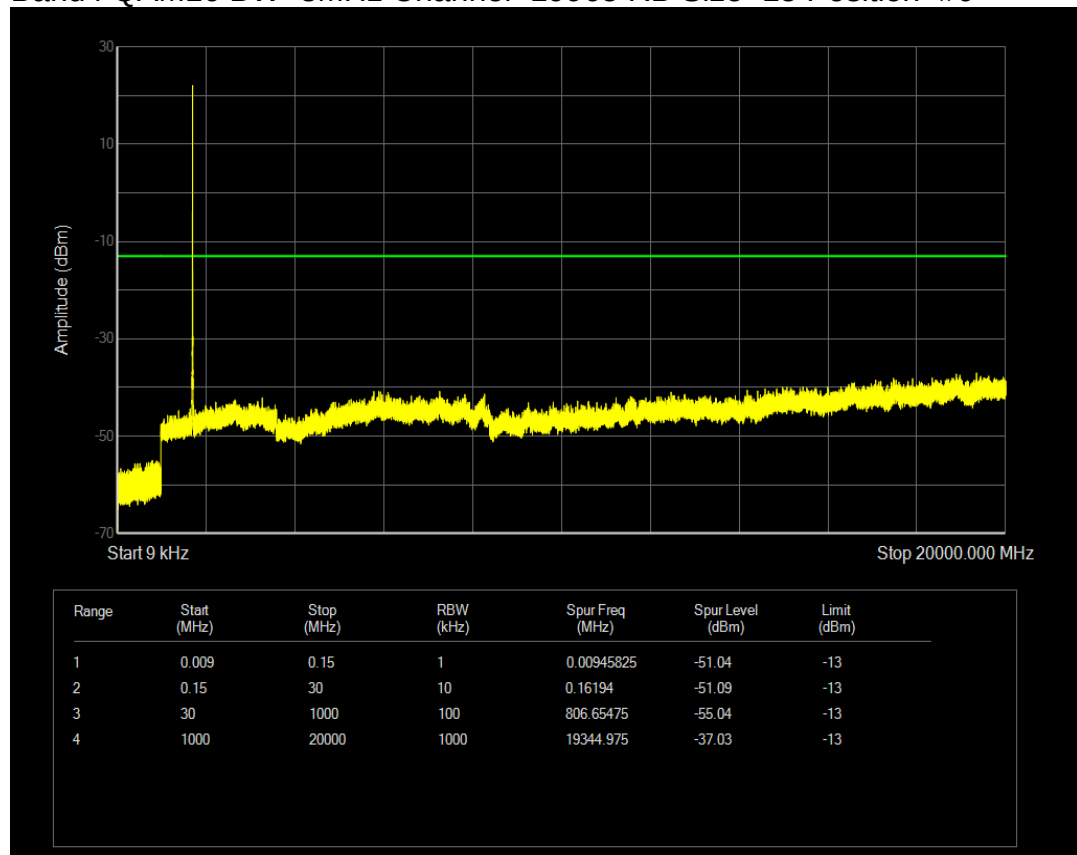




Band4 QPSK BW=1.4MHz Channel=20393 RB Size=6 Position=#0

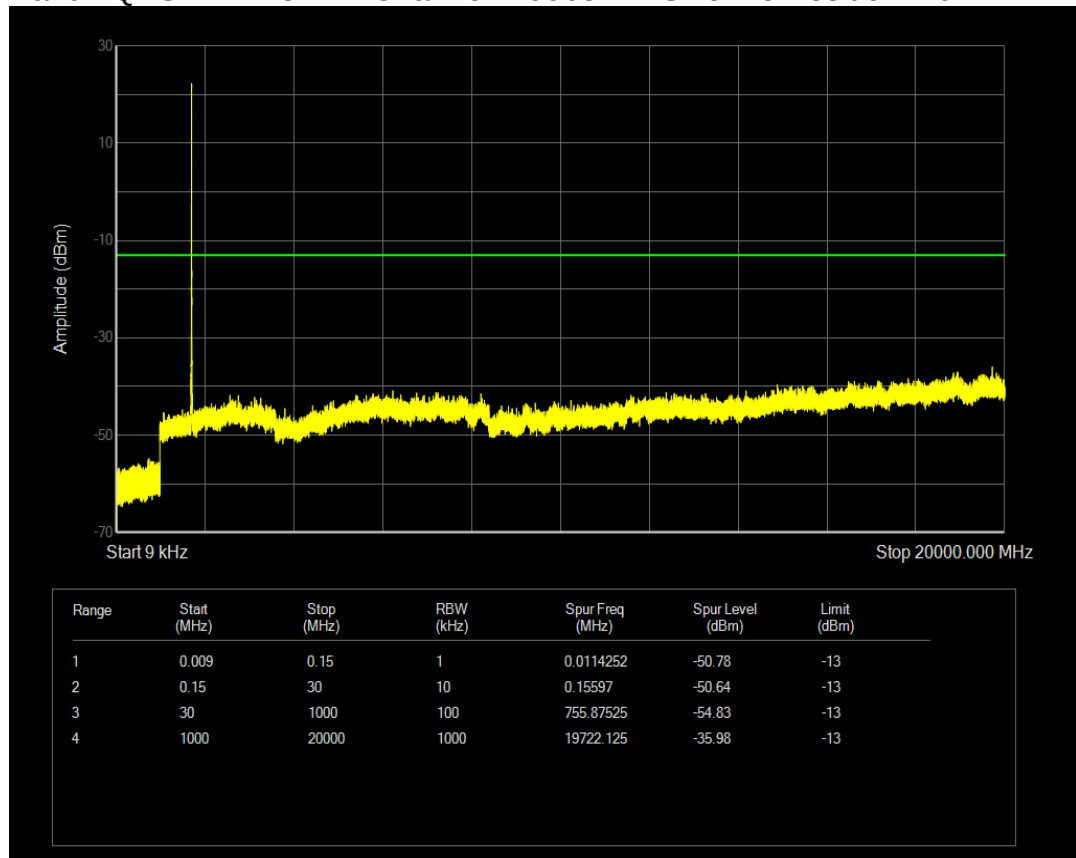


Band4 QAM16 BW=3MHz Channel=19965 RB Size=15 Position=#0

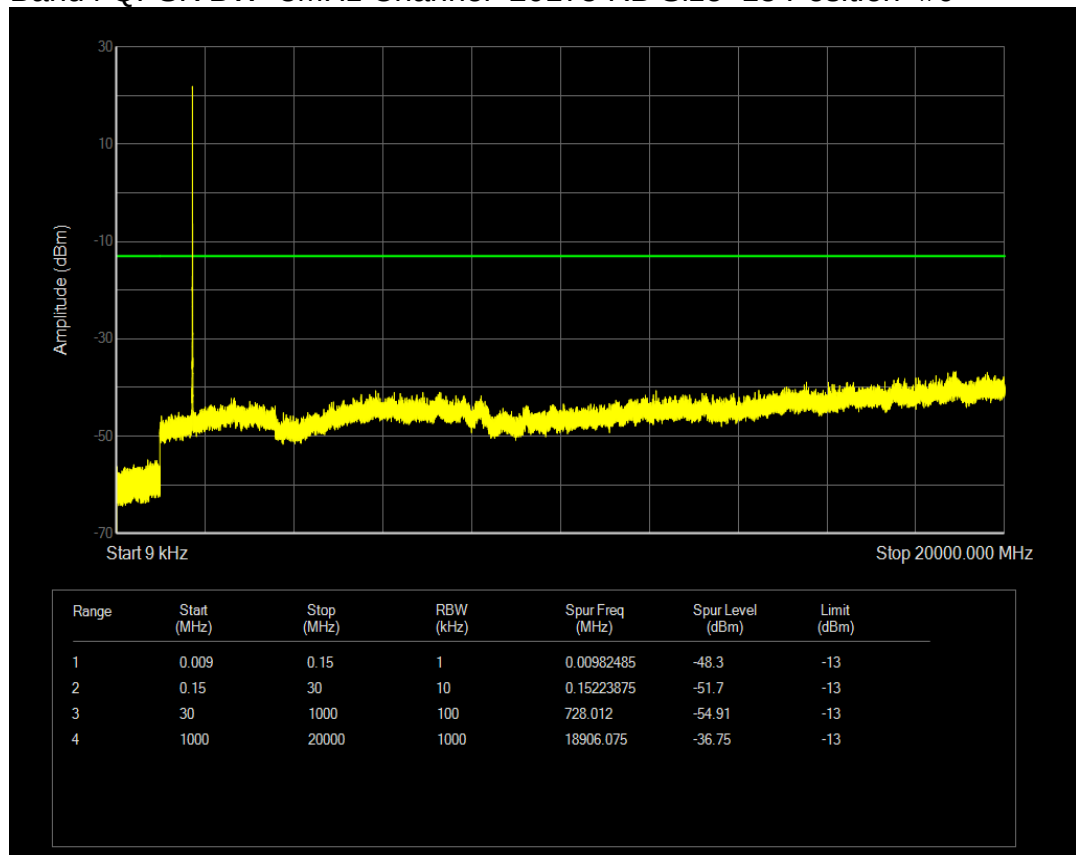




Band4 QPSK BW=3MHz Channel=19965 RB Size=15 Position=#0

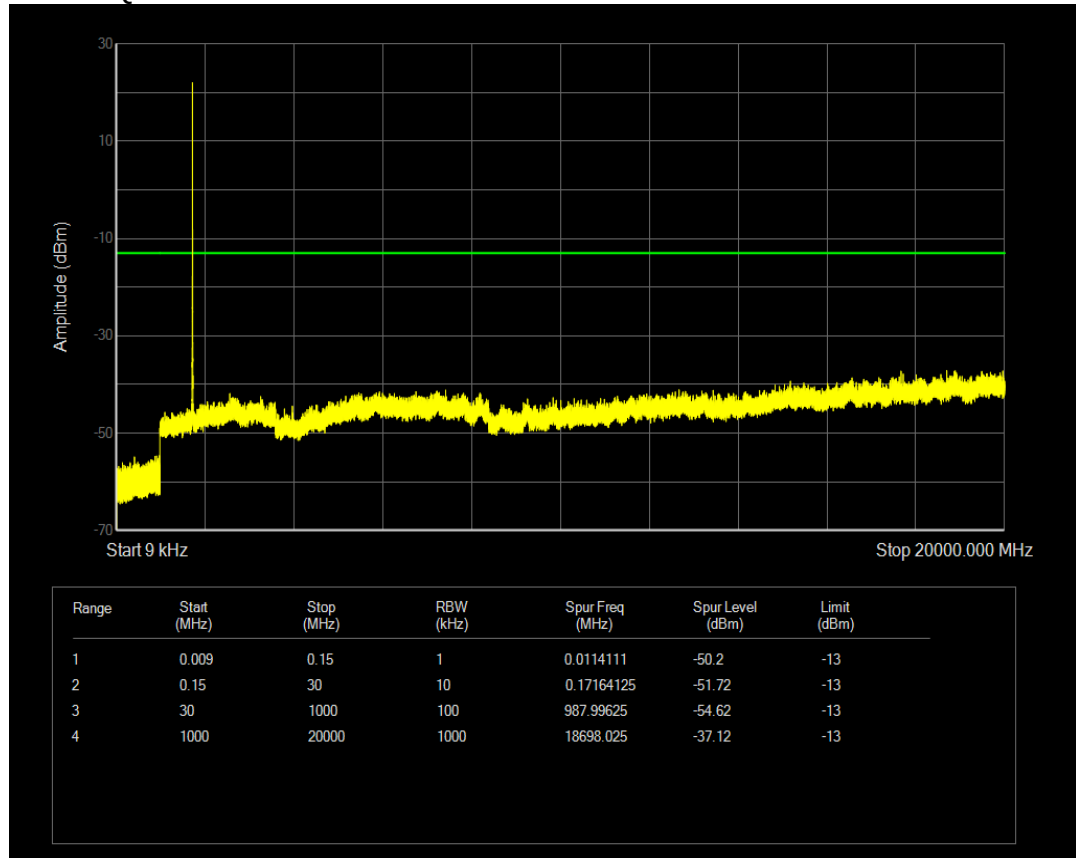


Band4 QPSK BW=3MHz Channel=20175 RB Size=15 Position=#0

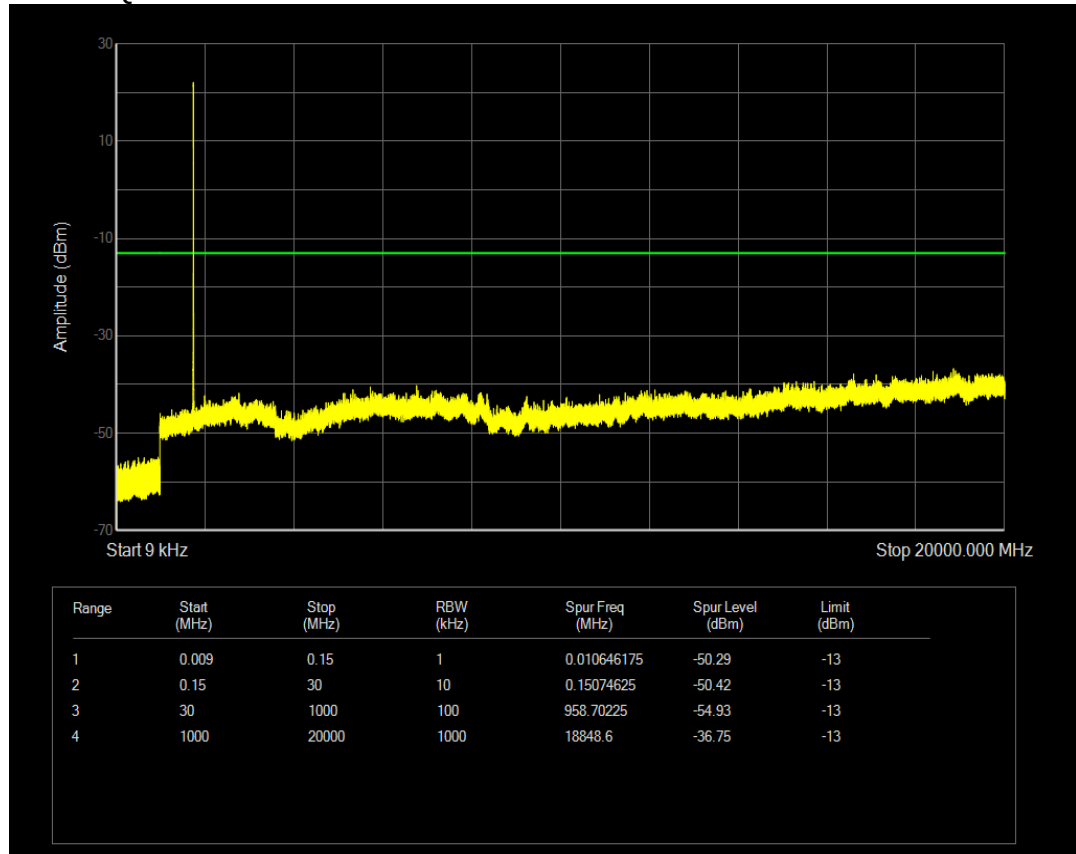




Band4 QAM16 BW=3MHz Channel=20175 RB Size=15 Position=#0

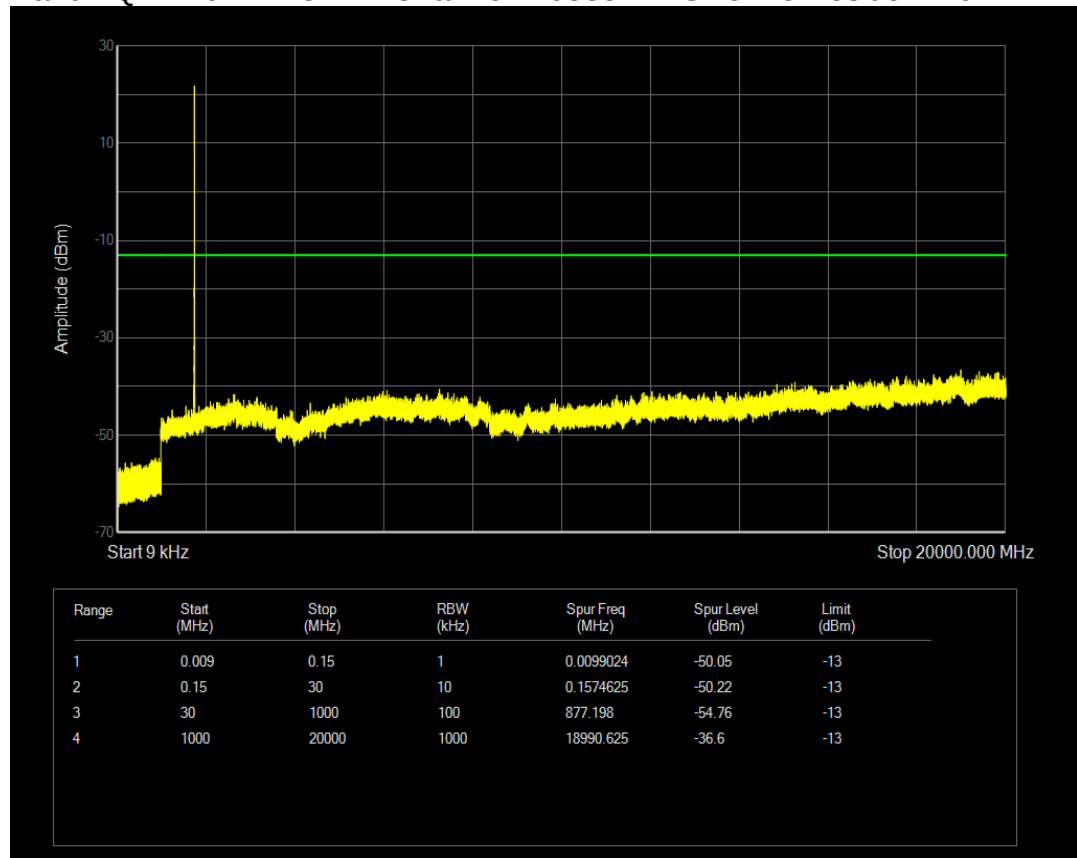


Band4 QPSK BW=3MHz Channel=20385 RB Size=15 Position=#0

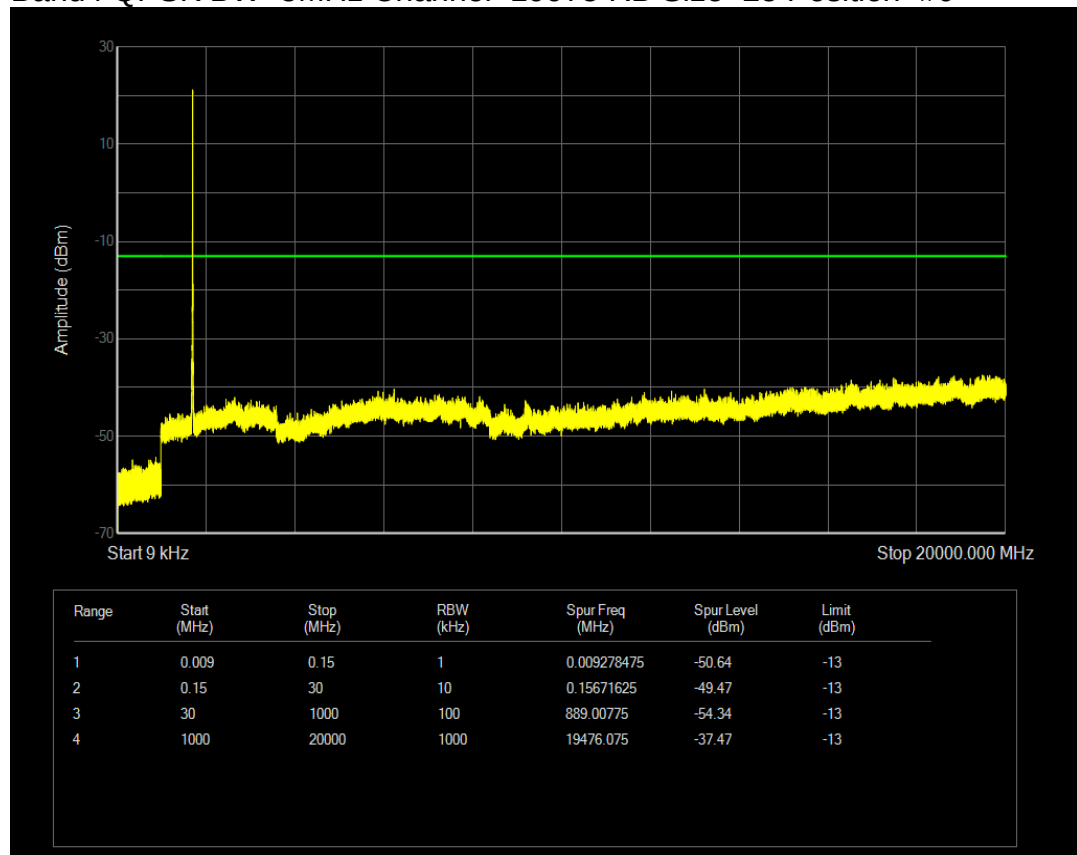




Band4 QAM16 BW=3MHz Channel=20385 RB Size=15 Position=#0

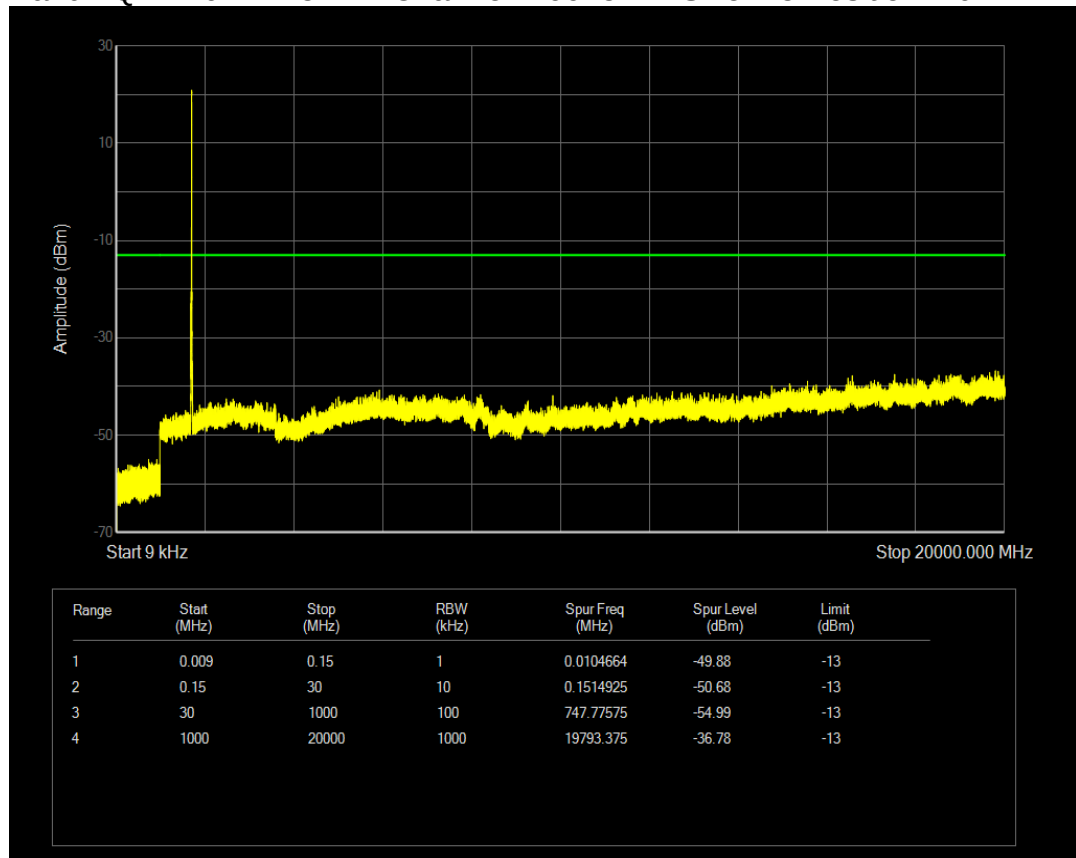


Band4 QPSK BW=5MHz Channel=19975 RB Size=25 Position=#0

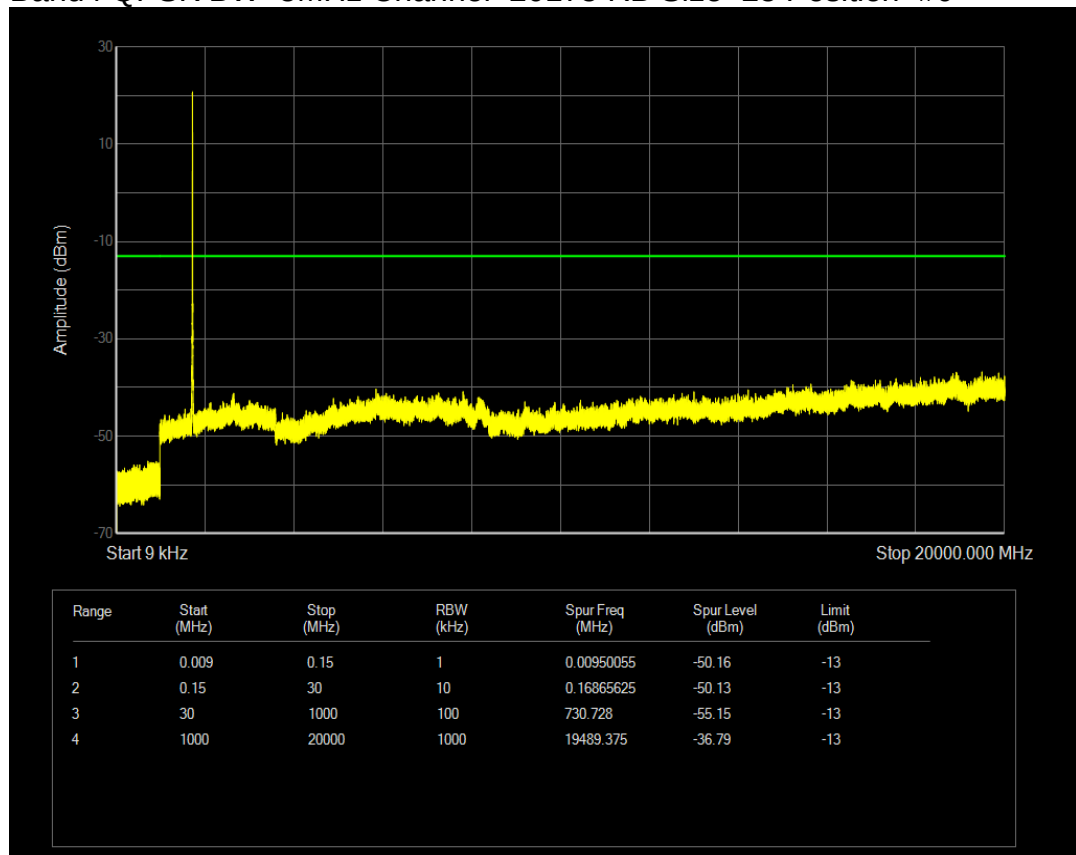




Band4 QAM16 BW=5MHz Channel=19975 RB Size=25 Position=#0

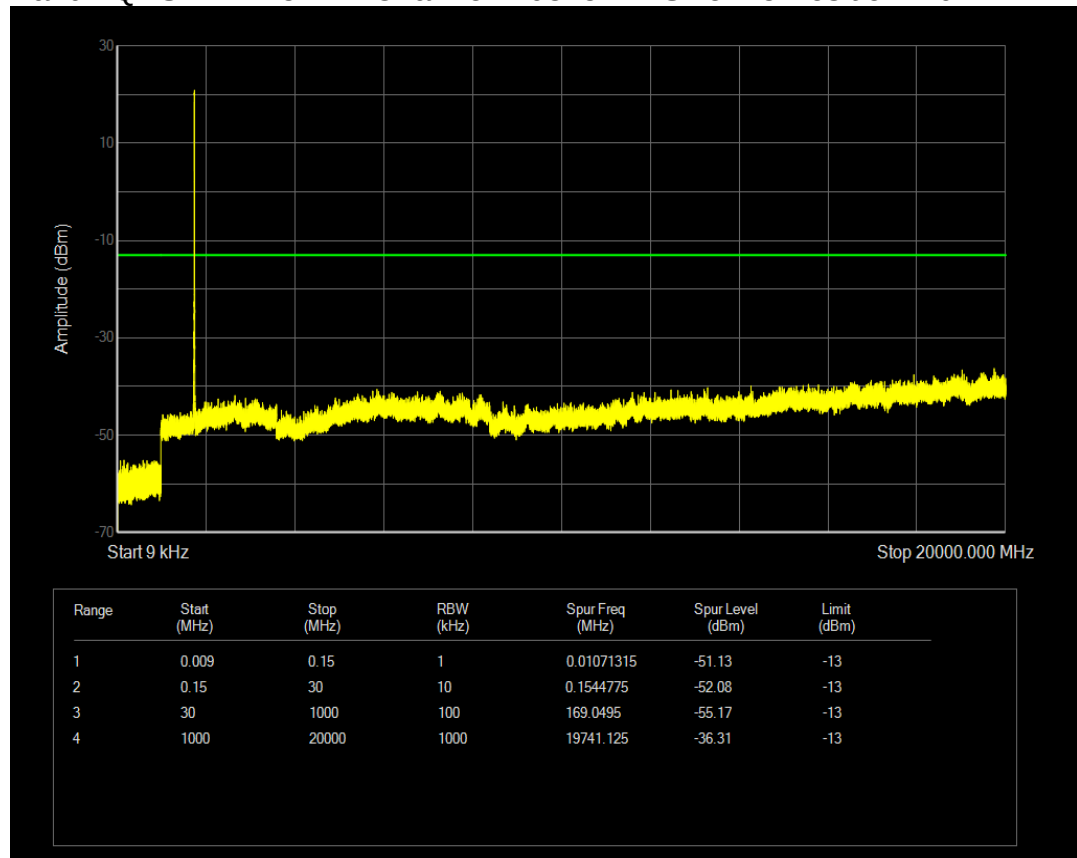


Band4 QPSK BW=5MHz Channel=20175 RB Size=25 Position=#0

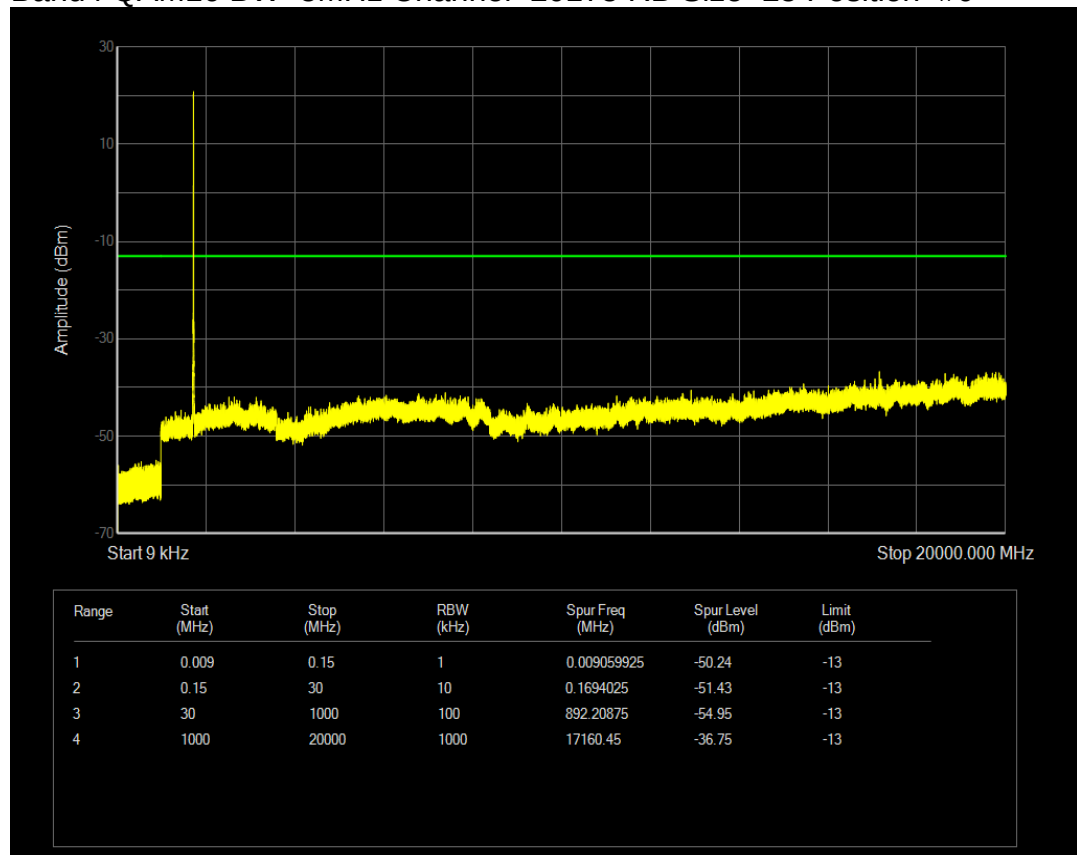




Band4 QPSK BW=5MHz Channel=20375 RB Size=25 Position=#0

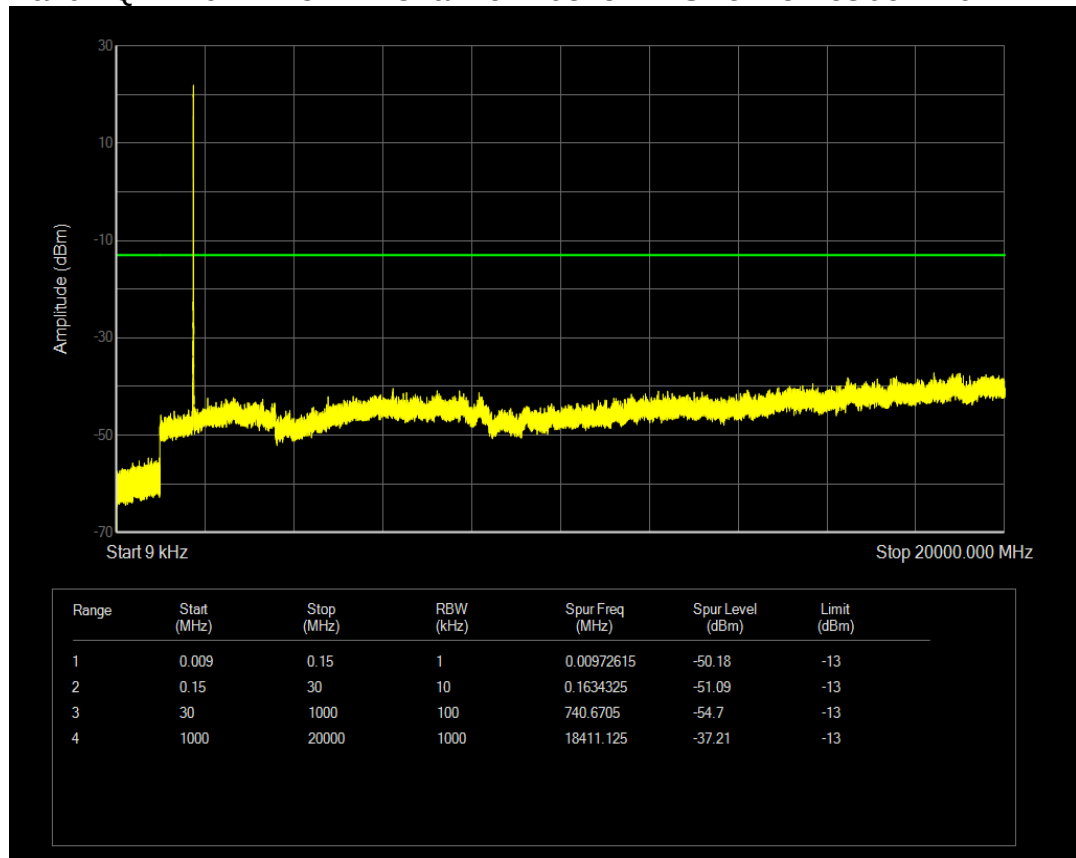


Band4 QAM16 BW=5MHz Channel=20175 RB Size=25 Position=#0

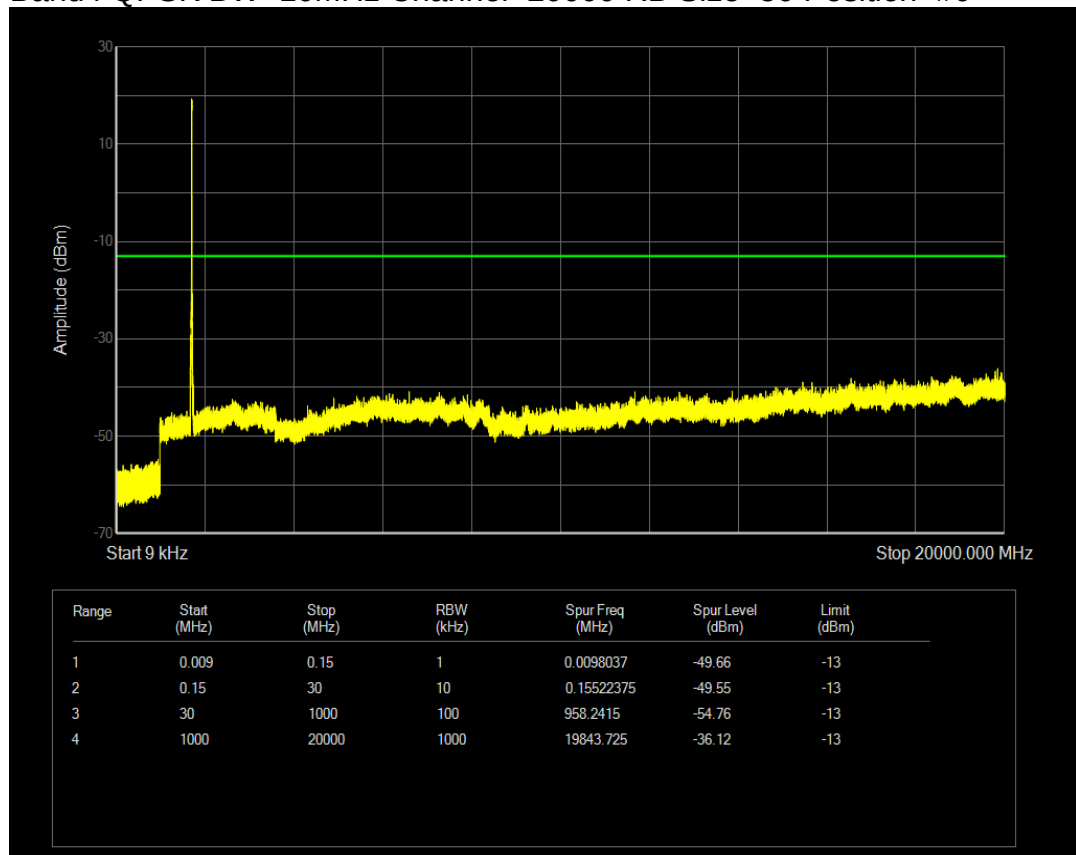




Band4 QAM16 BW=5MHz Channel=20375 RB Size=25 Position=#0

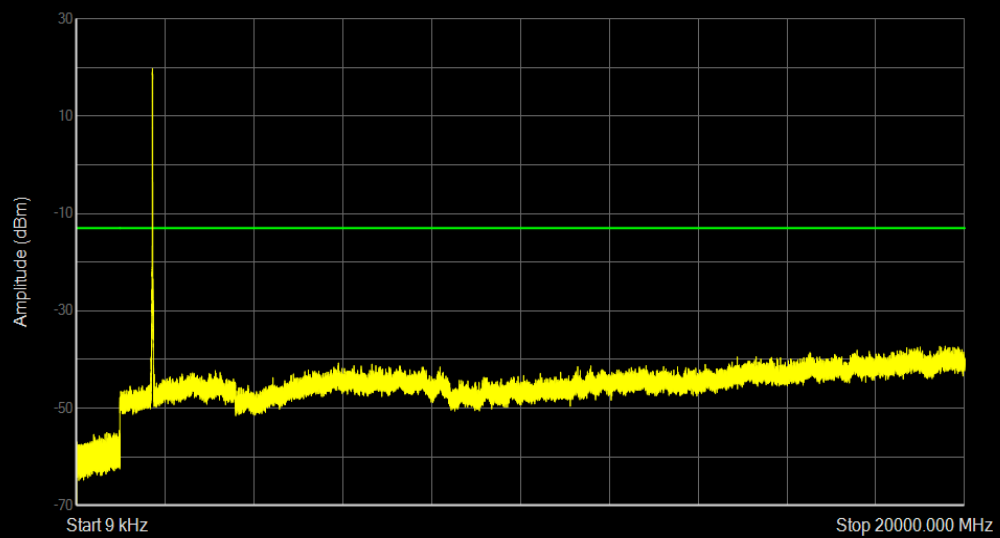


Band4 QPSK BW=10MHz Channel=20000 RB Size=50 Position=#0



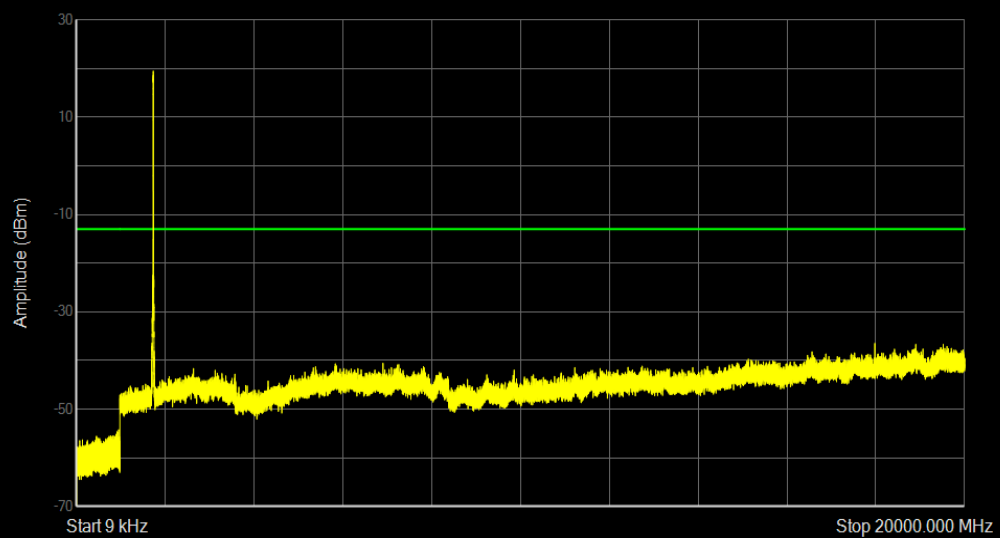


Band4 QPSK BW=10MHz Channel=20175 RB Size=50 Position=#0



Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.009609825	-50.34	-13
2	0.15	30	10	0.15	-49.92	-13
3	30	1000	100	984.965	-54.6	-13
4	1000	20000	1000	19563.475	-37.27	-13

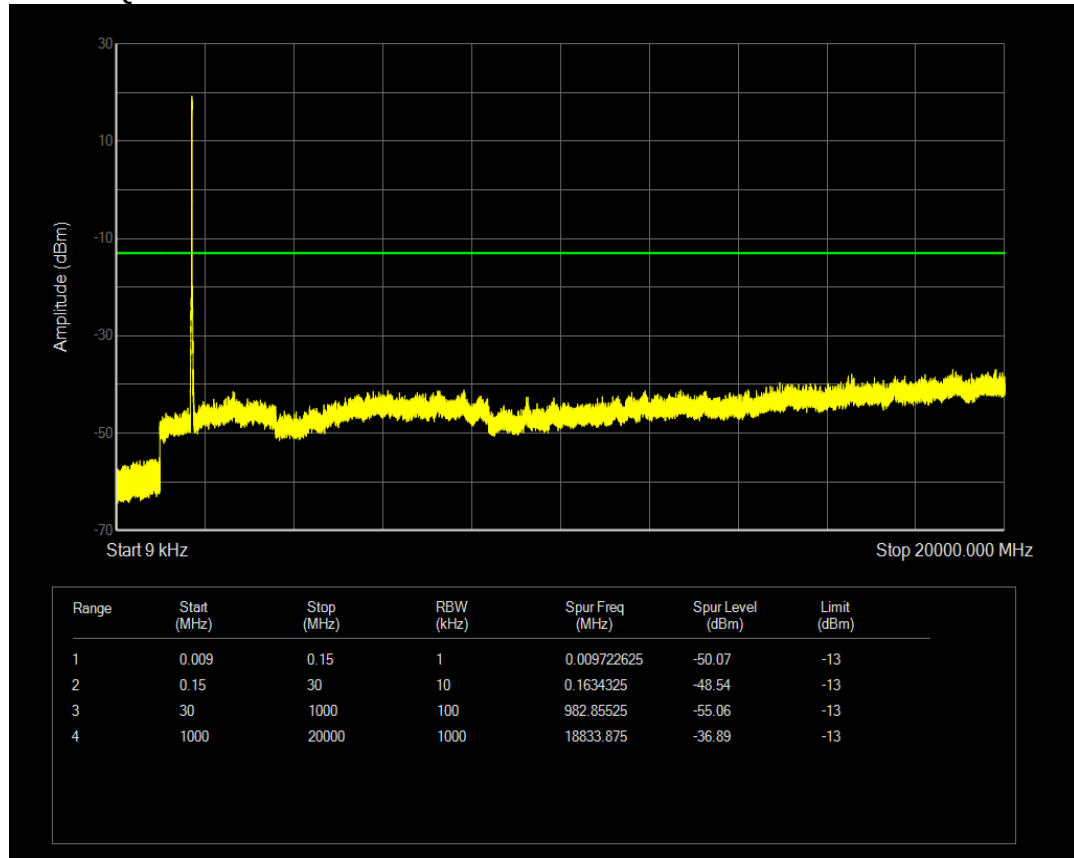
Band4 QPSK BW=10MHz Channel=20350 RB Size=50 Position=#0



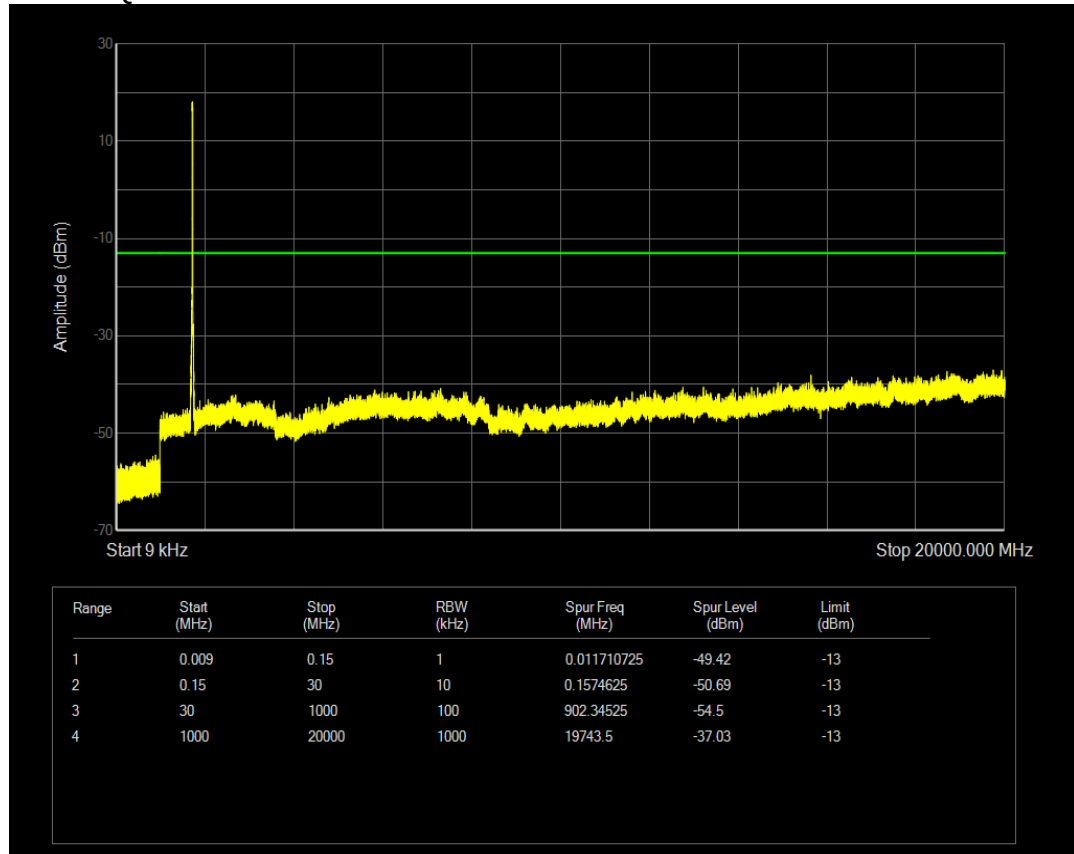
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.009447675	-48.84	-13
2	0.15	30	10	0.15	-48.98	-13
3	30	1000	100	972.258	-54.24	-13
4	1000	20000	1000	17980.3	-36.49	-13



Band4 QPSK BW=15MHz Channel=20025 RB Size=75 Position=#0

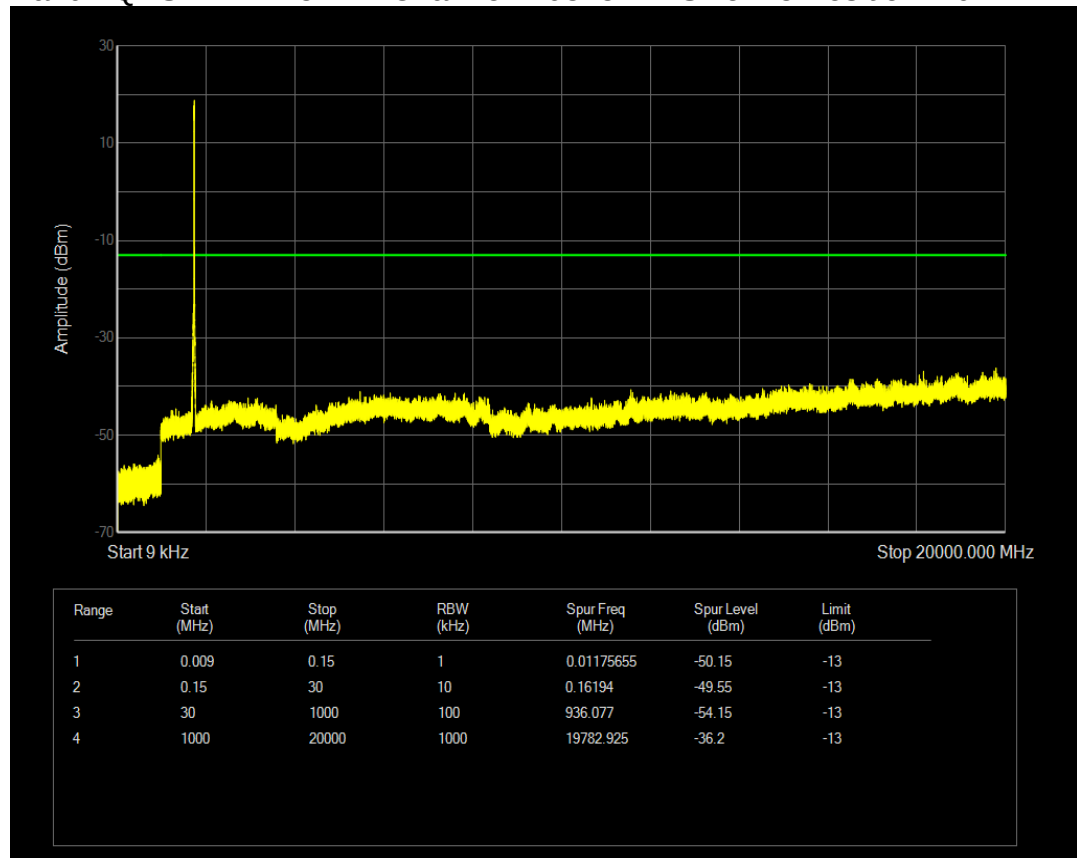


Band4 QPSK BW=15MHz Channel=20175 RB Size=75 Position=#0

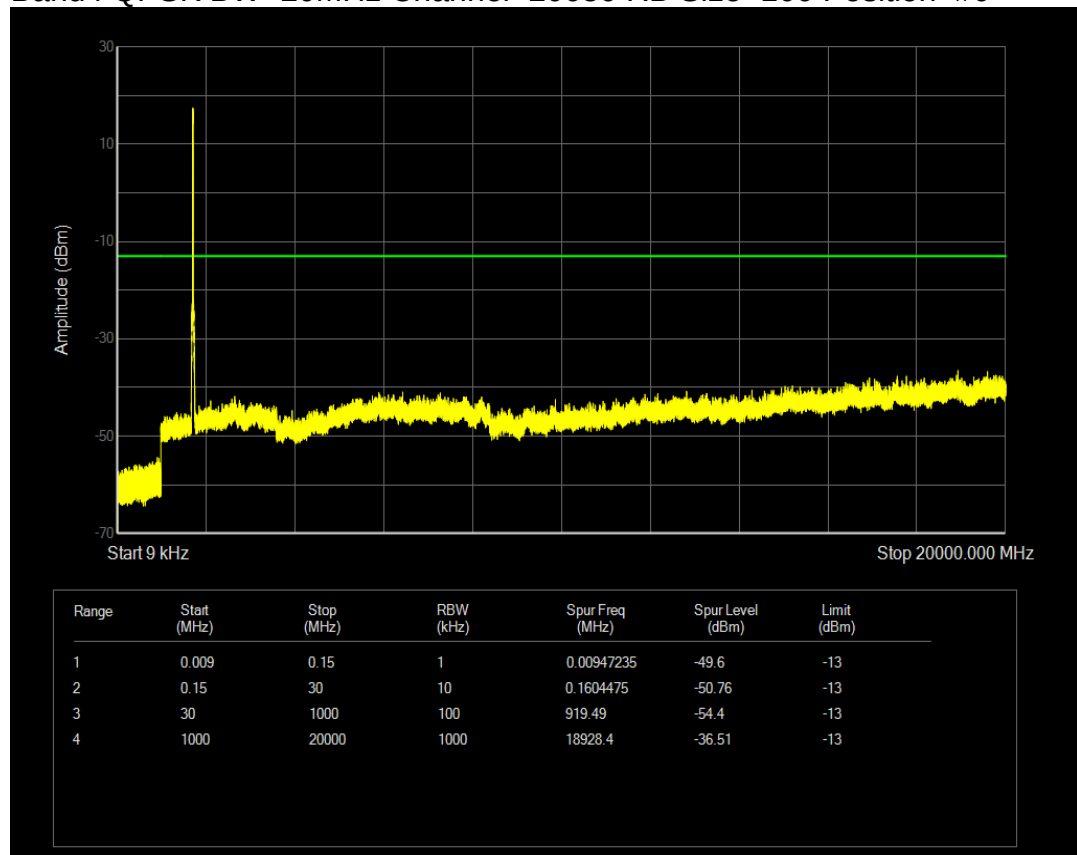




Band4 QPSK BW=15MHz Channel=20325 RB Size=75 Position=#0

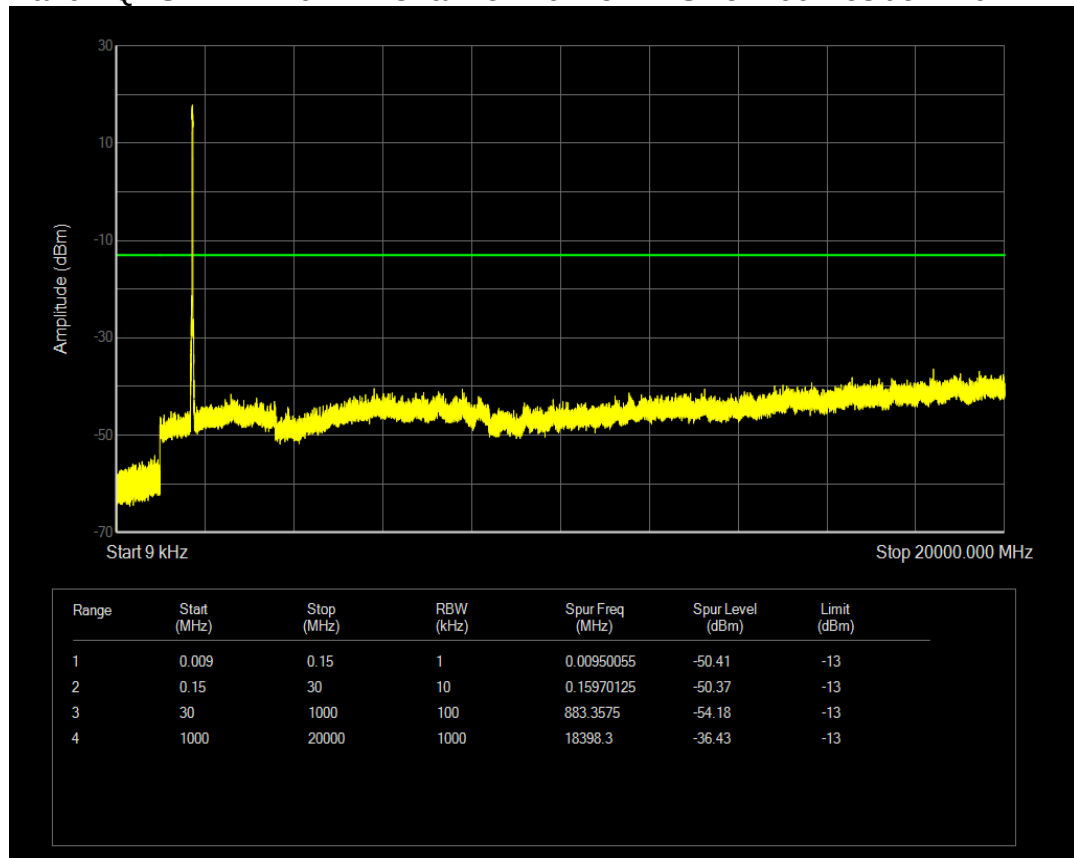


Band4 QPSK BW=20MHz Channel=20050 RB Size=100 Position=#0

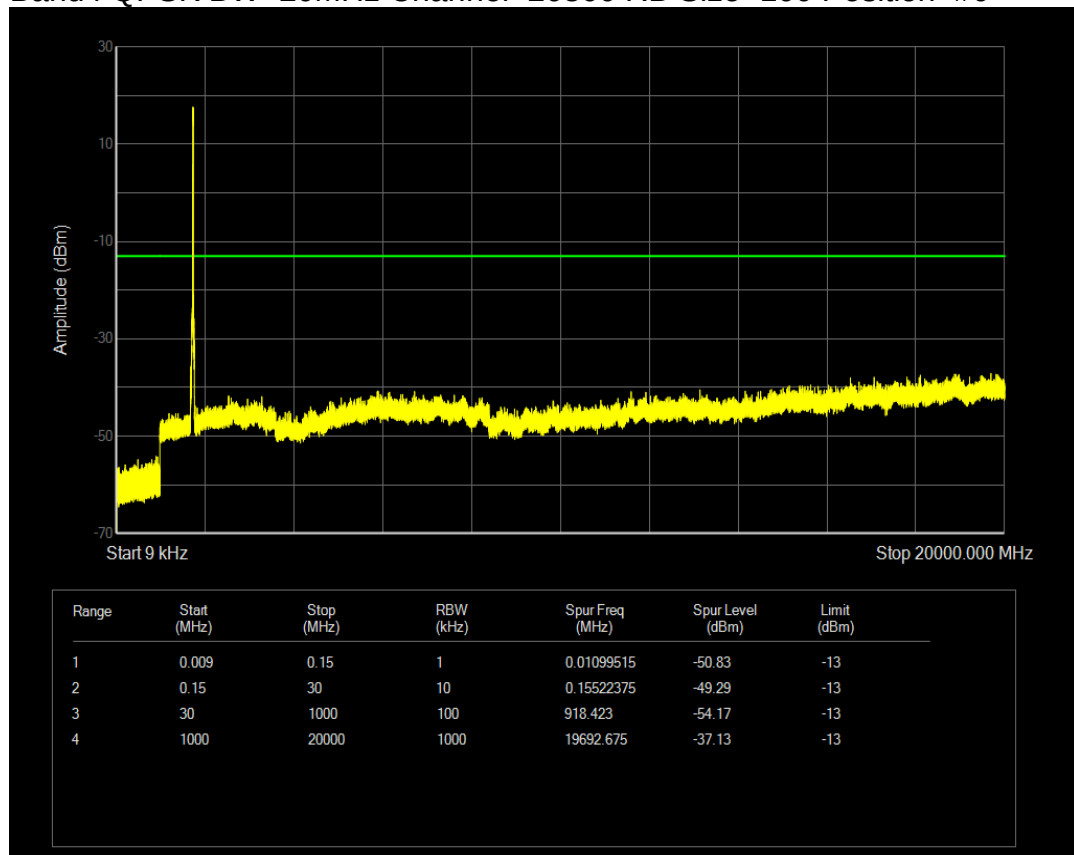




Band4 QPSK BW=20MHz Channel=20175 RB Size=100 Position=#0



Band4 QPSK BW=20MHz Channel=20300 RB Size=100 Position=#0



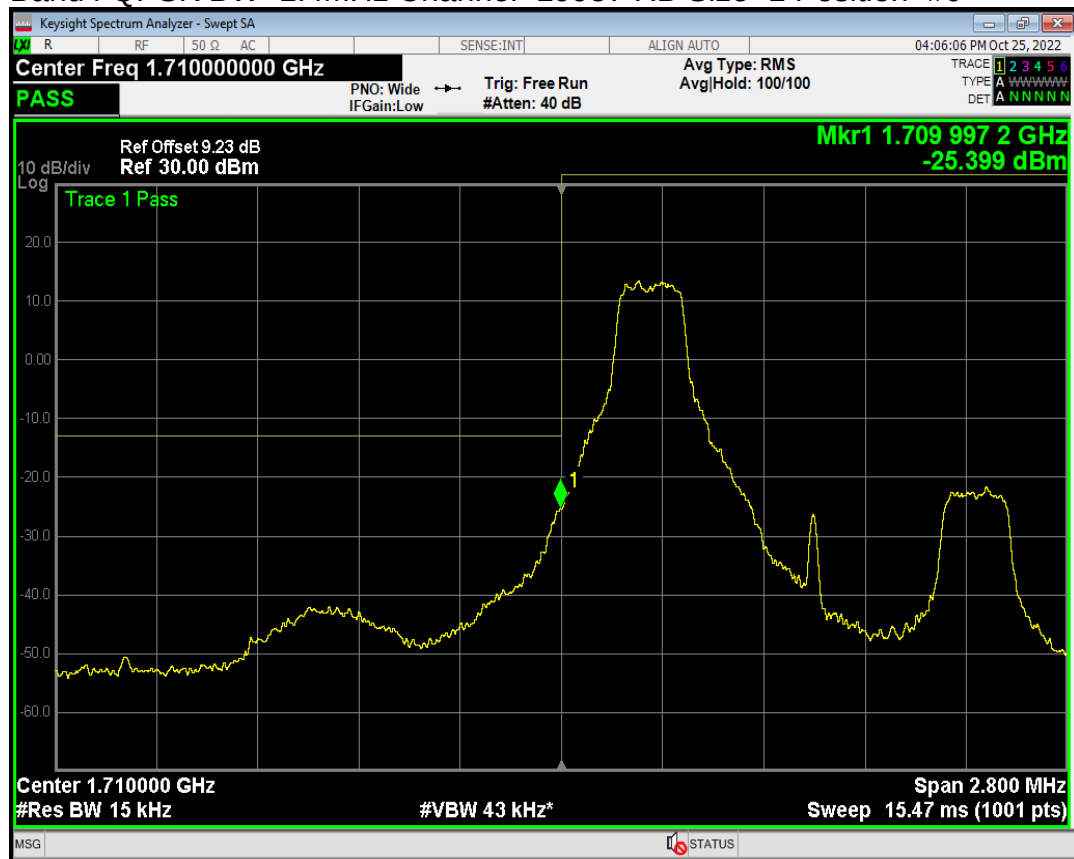


1.3. Conducted Out of Band Emissions

1.3.1. Test Result

The measurement frequency range is from 30MHz to the 10th harmonic of the fundamental frequency. The lowest, middle and highest channels are tested to verify the out of band emissions.

Band4 QPSK BW=1.4MHz Channel=19957 RB Size=1 Position=#0





Band4 QPSK BW=1.4MHz Channel=19957 RB Size=1 Position=#Max



Band4 QAM16 BW=1.4MHz Channel=19957 RB Size=1 Position=#0





Band4 QAM16 BW=1.4MHz Channel=19957 RB Size=1 Position=#Max

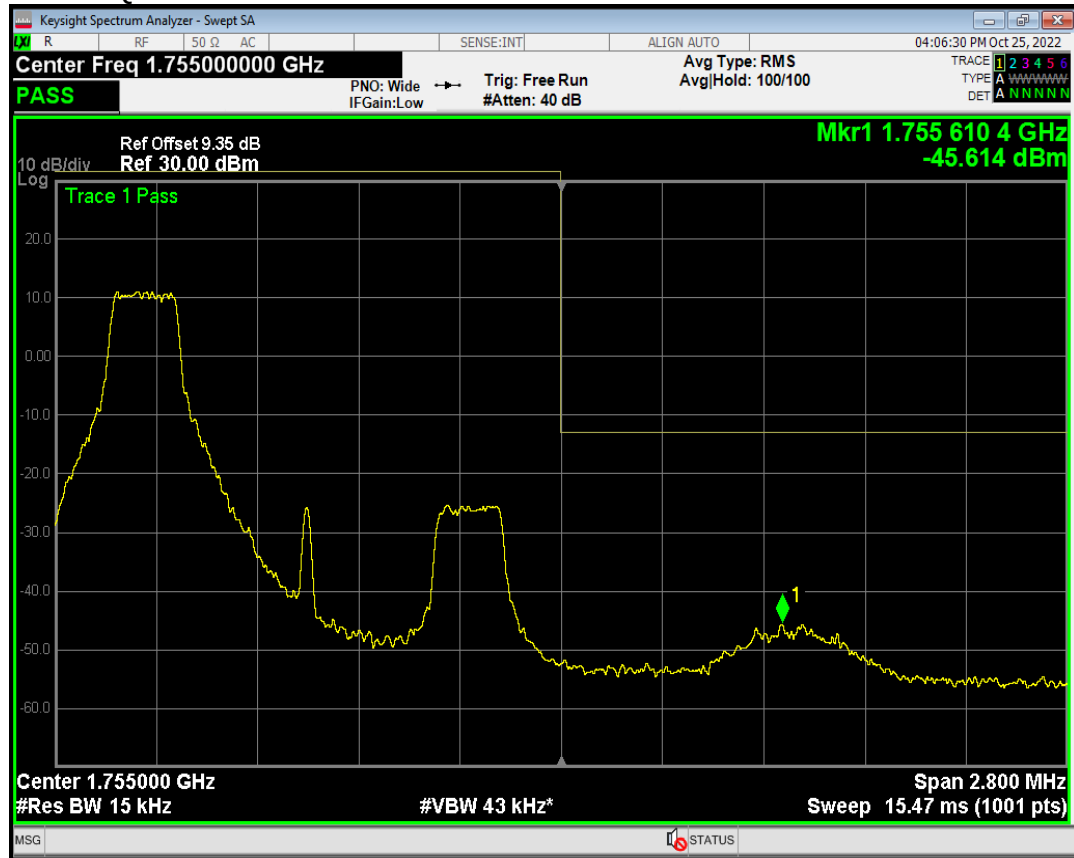


Band4 QPSK BW=1.4MHz Channel=20393 RB Size=1 Position=#0





Band4 QAM16 BW=1.4MHz Channel=20393 RB Size=1 Position=#0

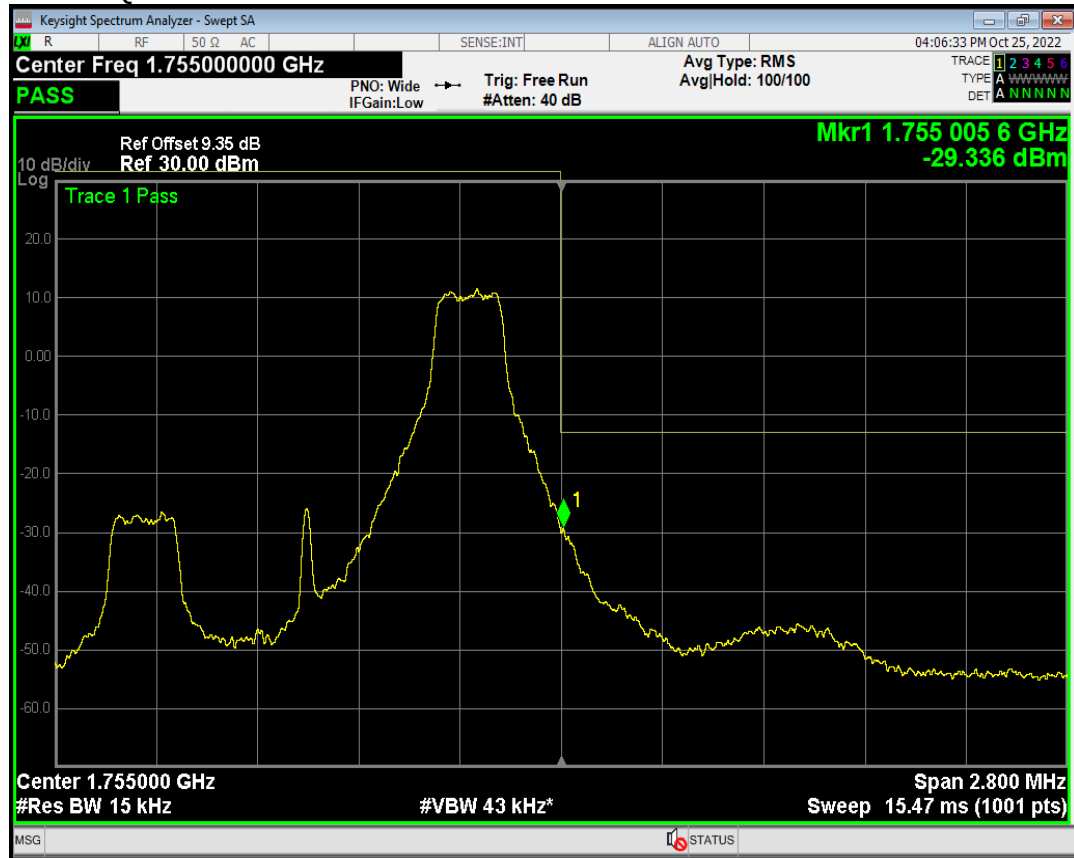


Band4 QPSK BW=1.4MHz Channel=20393 RB Size=1 Position=#Max

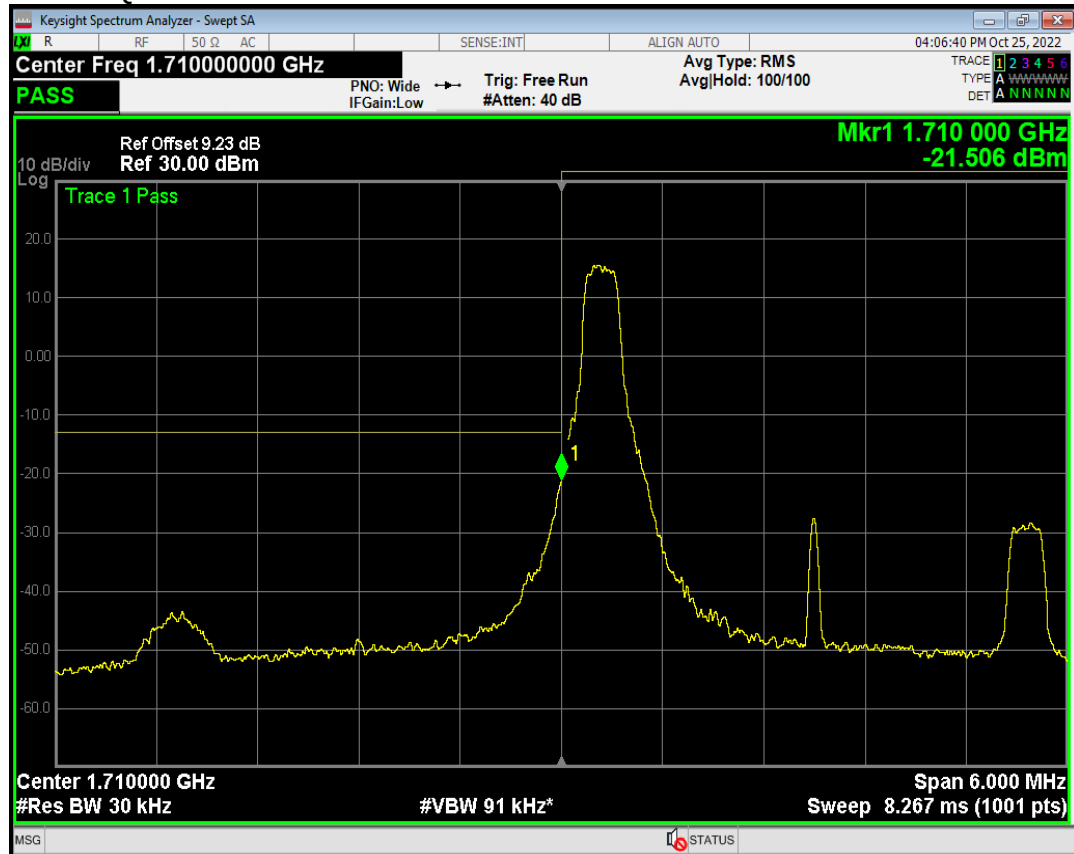




Band4 QAM16 BW=1.4MHz Channel=20393 RB Size=1 Position=#Max

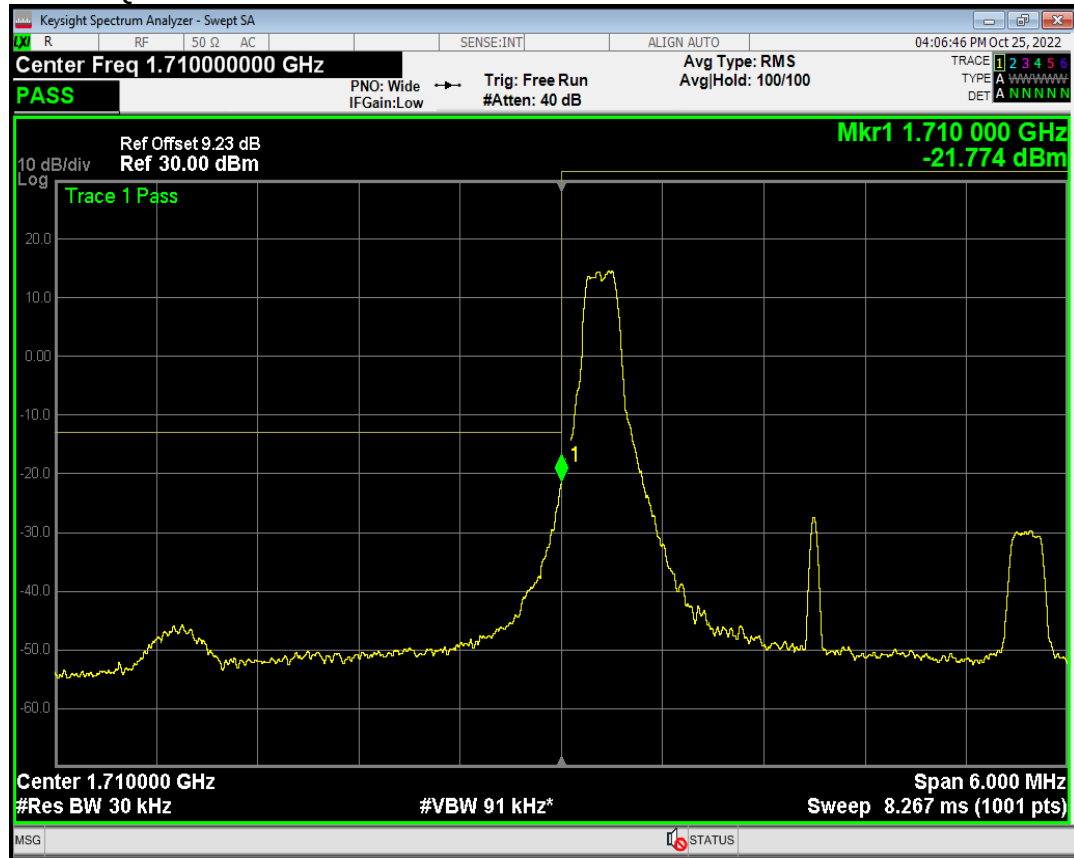


Band4 QPSK BW=3MHz Channel=19965 RB Size=1 Position=#0

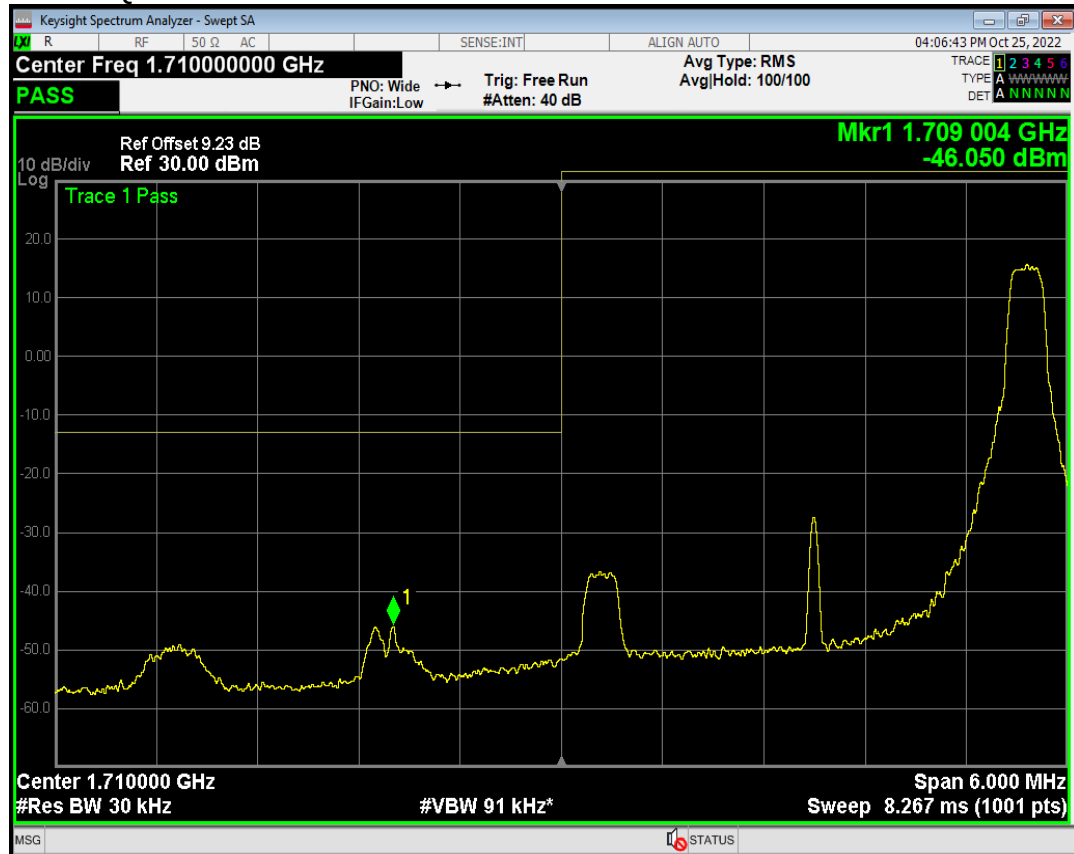




Band4 QAM16 BW=3MHz Channel=19965 RB Size=1 Position=#0

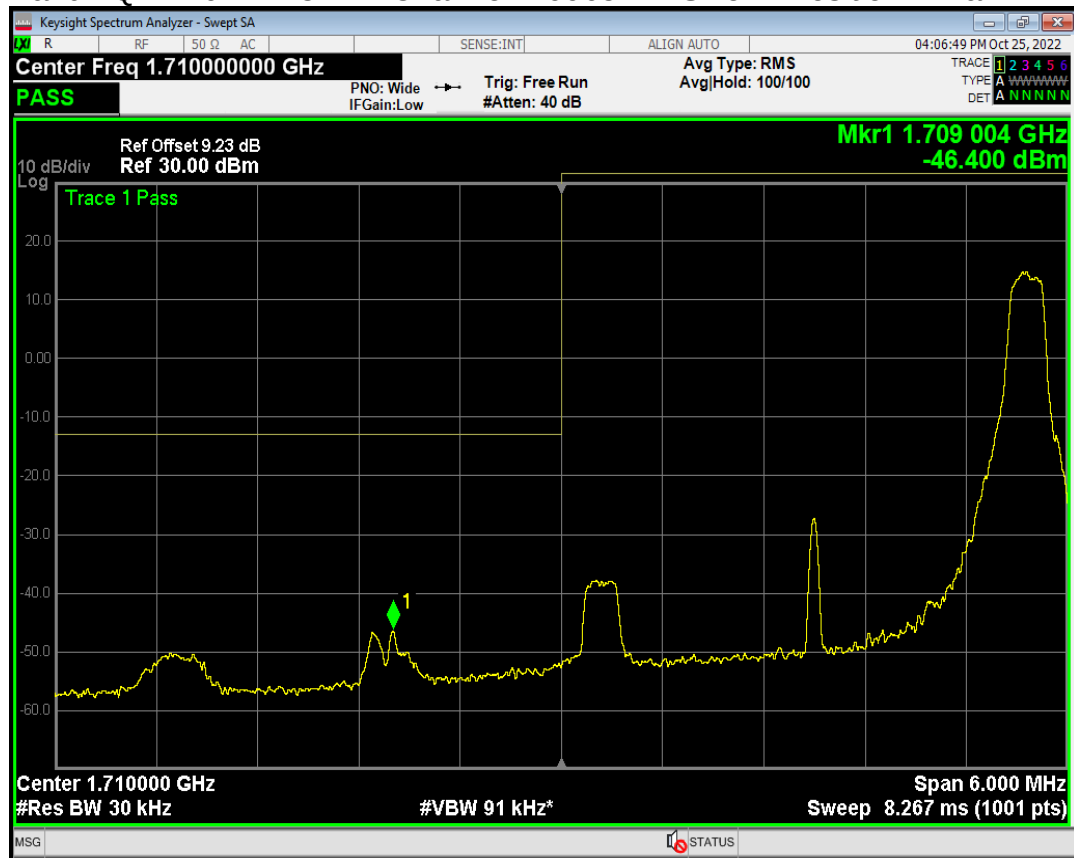


Band4 QPSK BW=3MHz Channel=19965 RB Size=1 Position=#Max

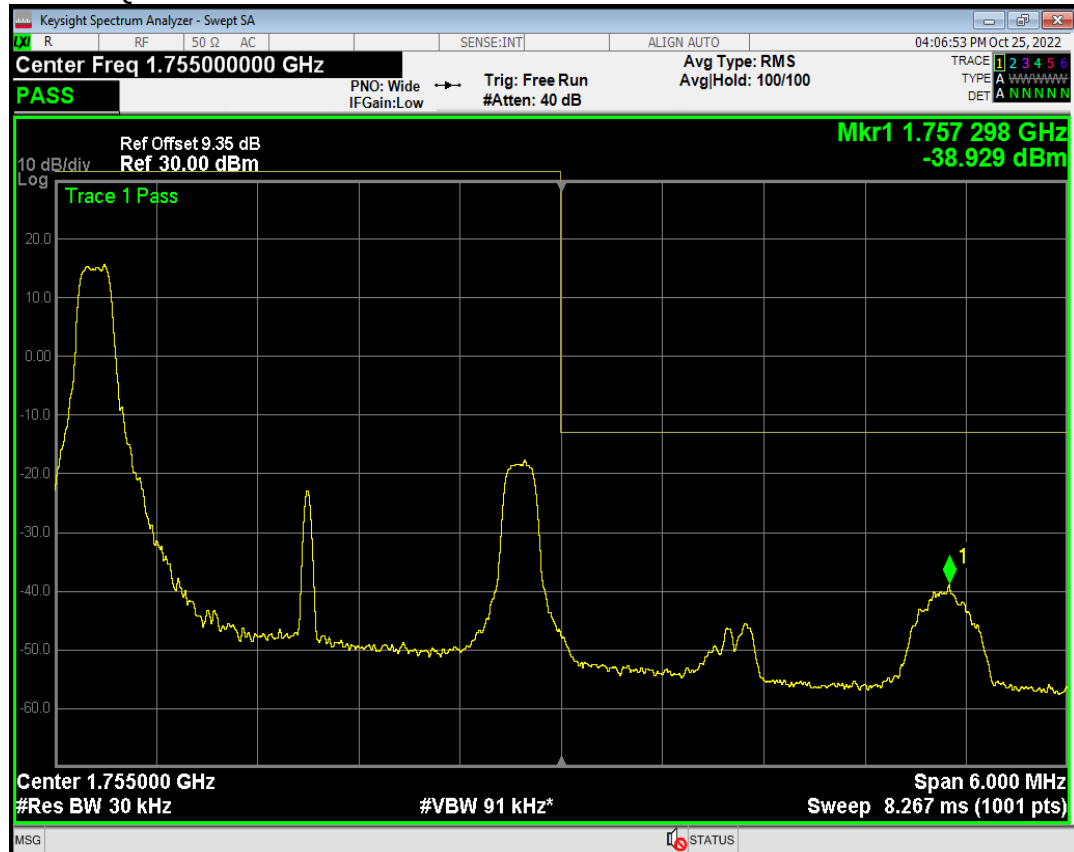




Band4 QAM16 BW=3MHz Channel=19965 RB Size=1 Position=#Max

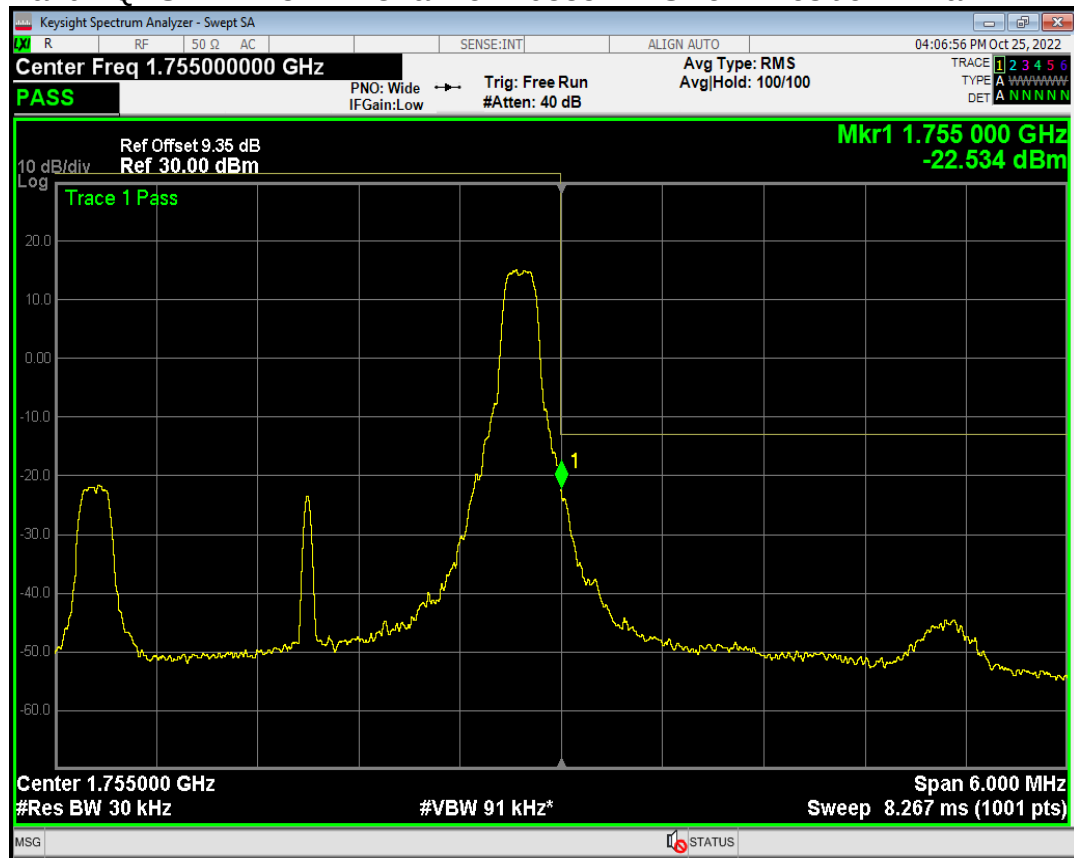


Band4 QPSK BW=3MHz Channel=20385 RB Size=1 Position=#0

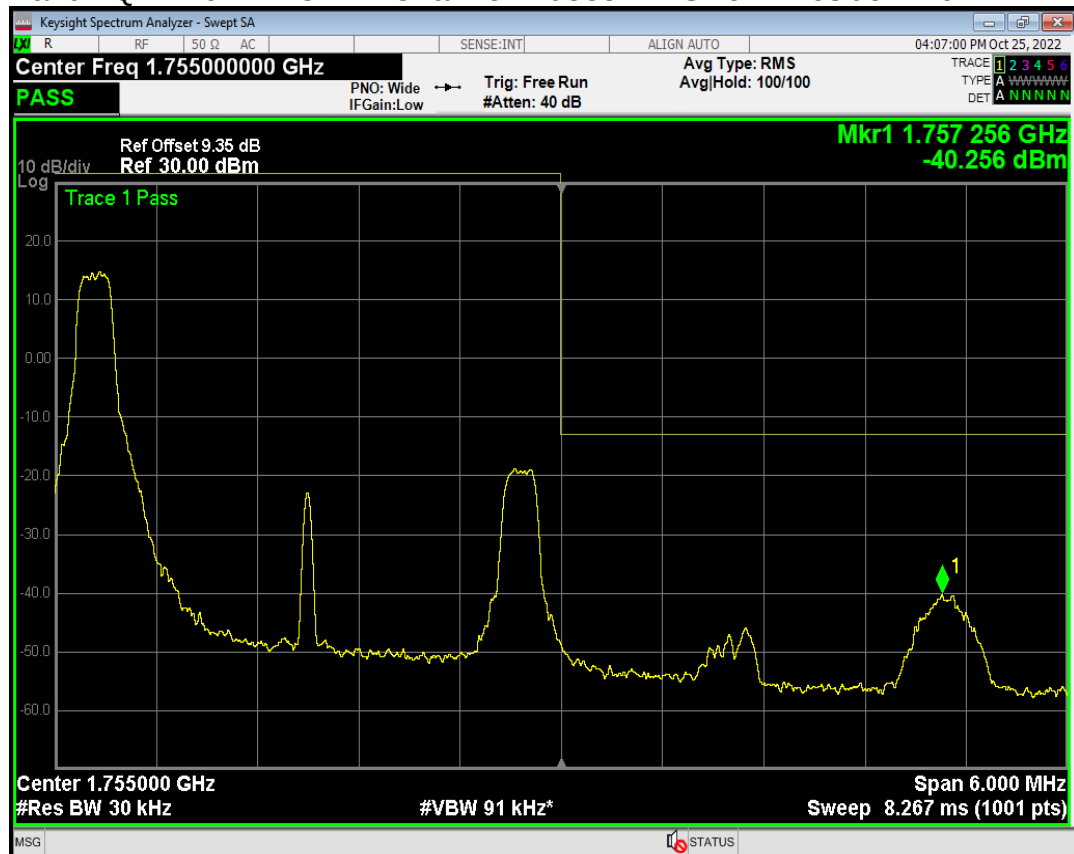




Band4 QPSK BW=3MHz Channel=20385 RB Size=1 Position=#Max

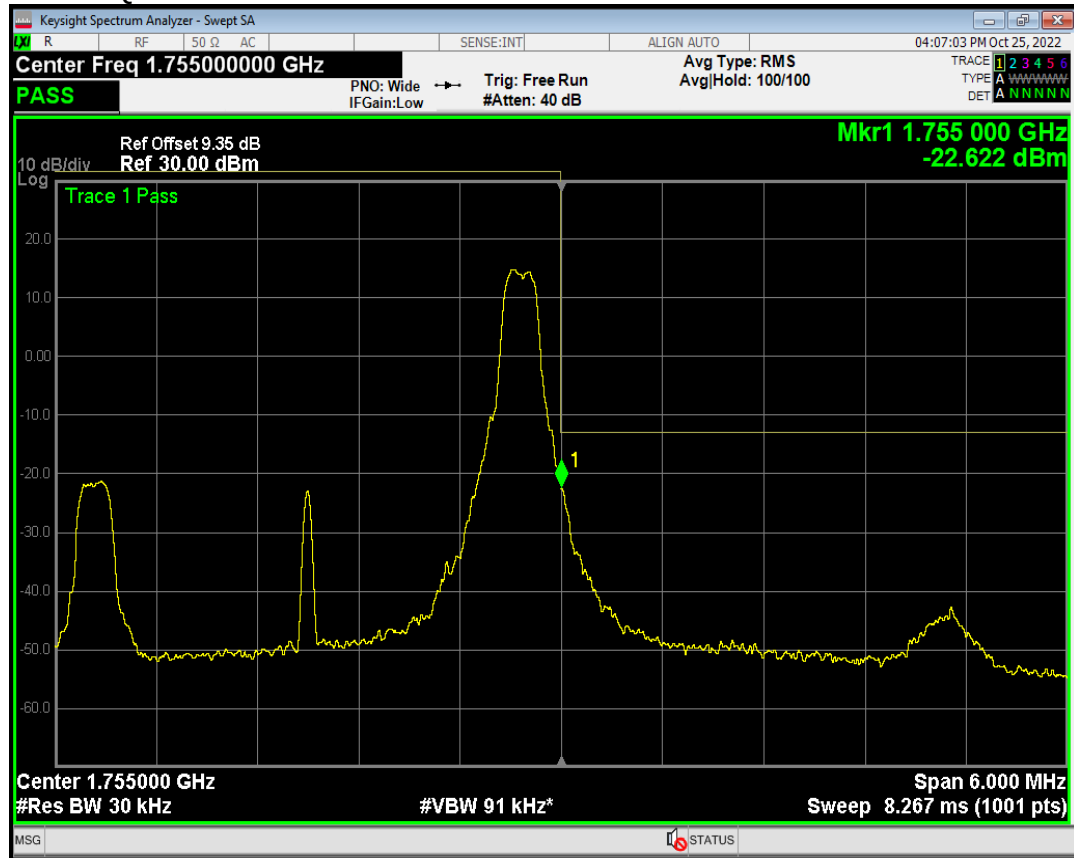


Band4 QAM16 BW=3MHz Channel=20385 RB Size=1 Position=#0

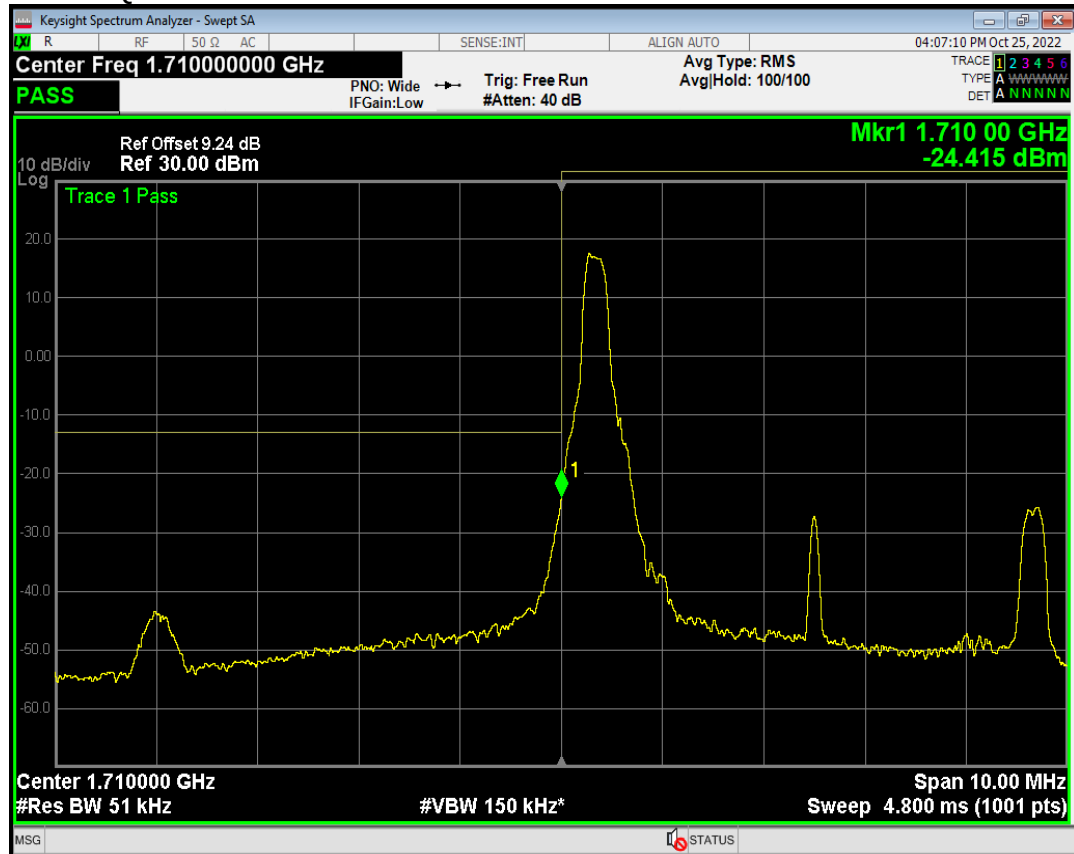




Band4 QAM16 BW=3MHz Channel=20385 RB Size=1 Position=#Max

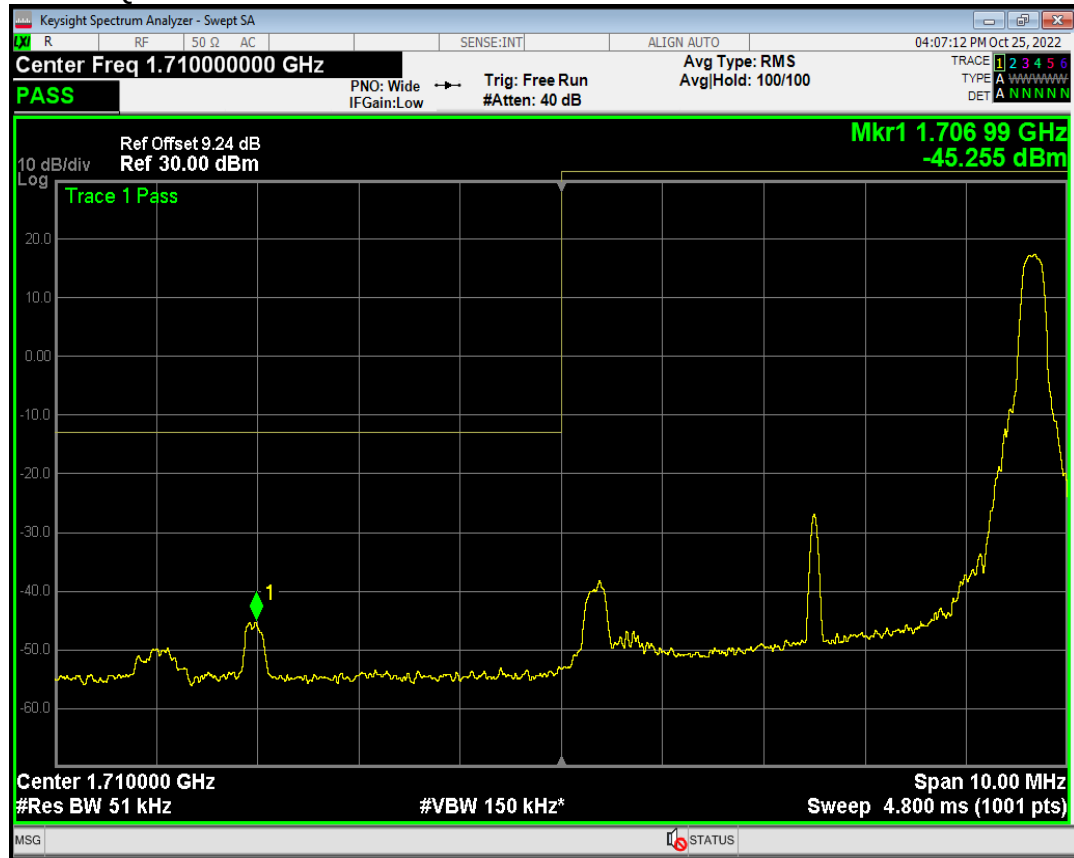


Band4 QPSK BW=5MHz Channel=19975 RB Size=1 Position=#0

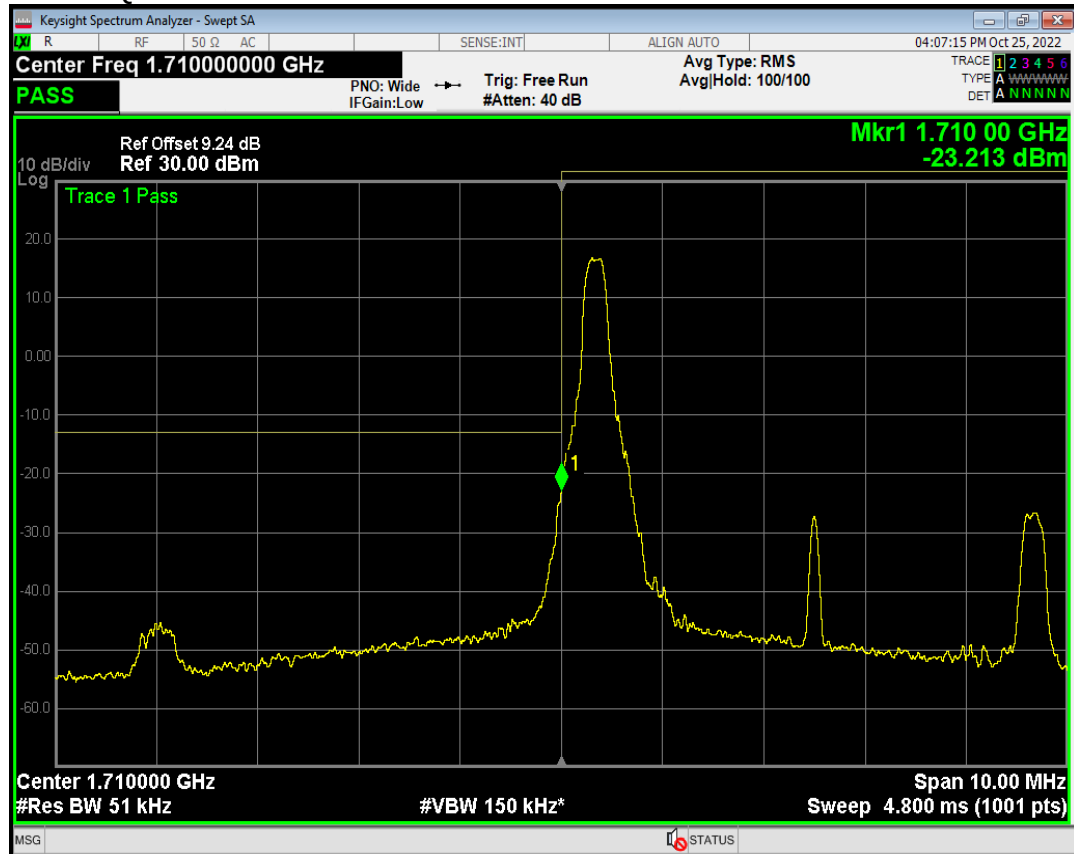




Band4 QPSK BW=5MHz Channel=19975 RB Size=1 Position=#Max

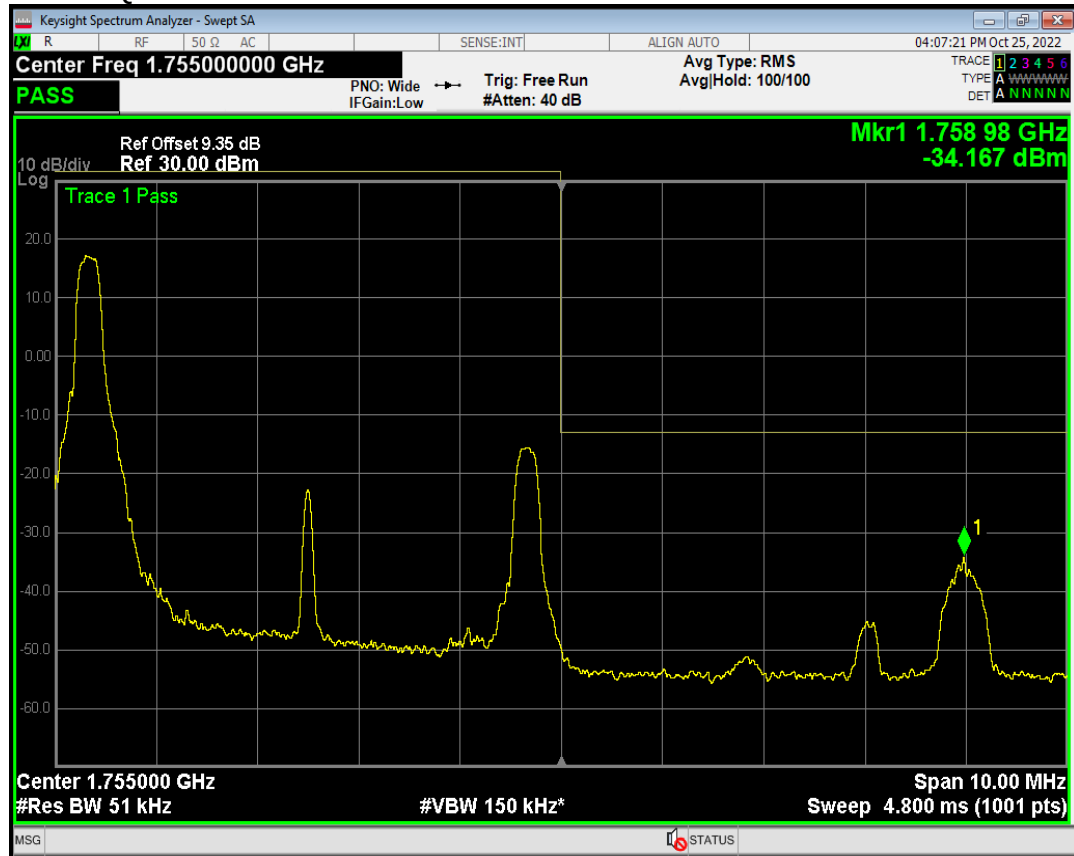


Band4 QAM16 BW=5MHz Channel=19975 RB Size=1 Position=#0

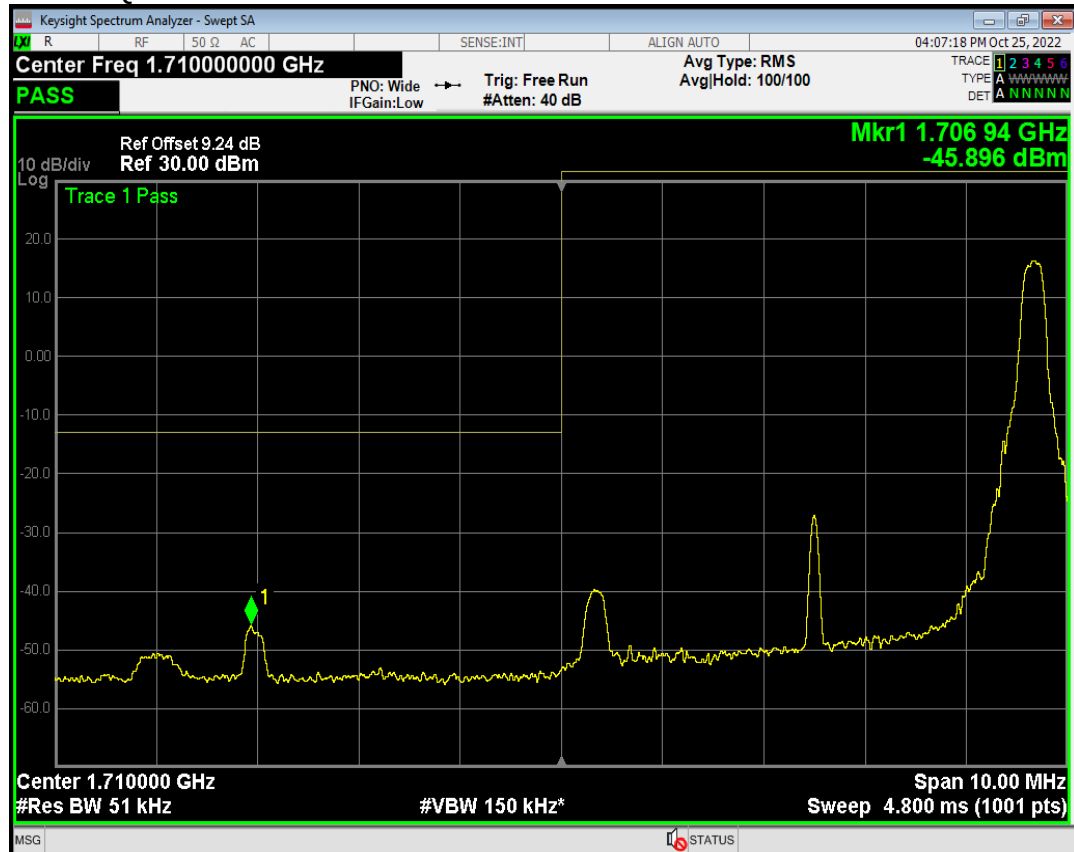




Band4 QPSK BW=5MHz Channel=20375 RB Size=1 Position=#0

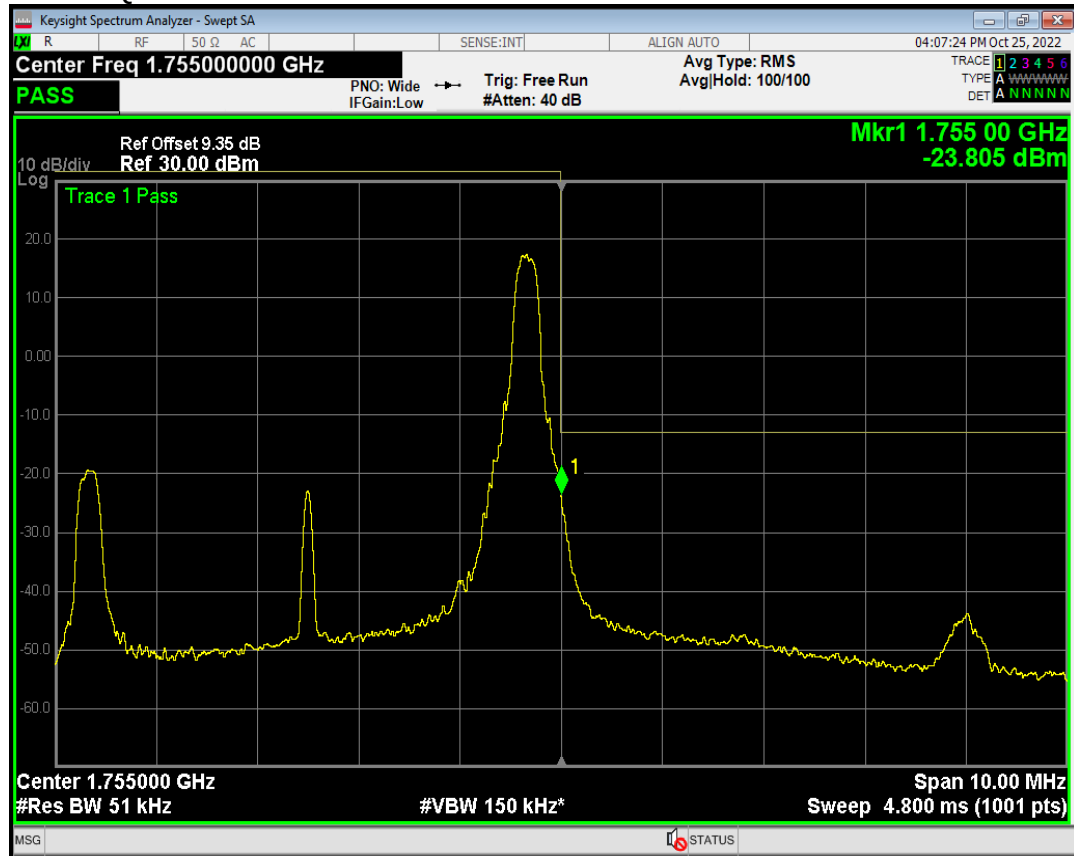


Band4 QAM16 BW=5MHz Channel=19975 RB Size=1 Position=#Max

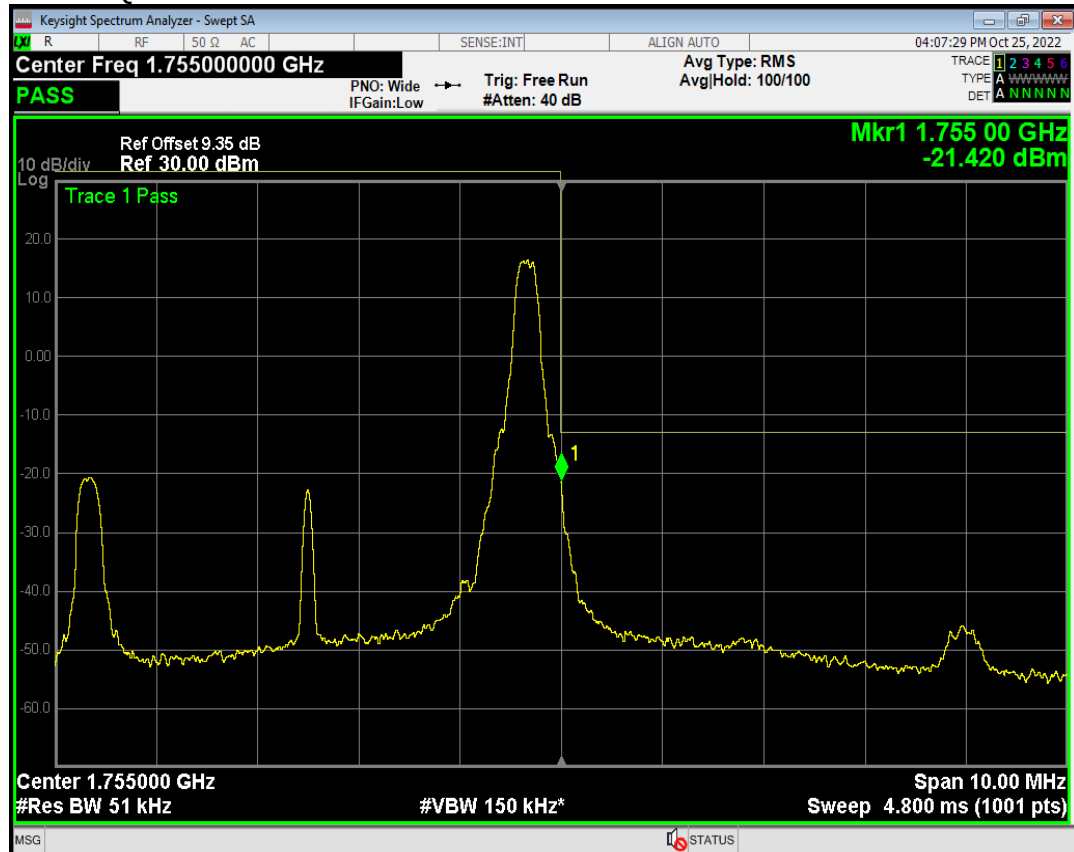




Band4 QPSK BW=5MHz Channel=20375 RB Size=1 Position=#Max

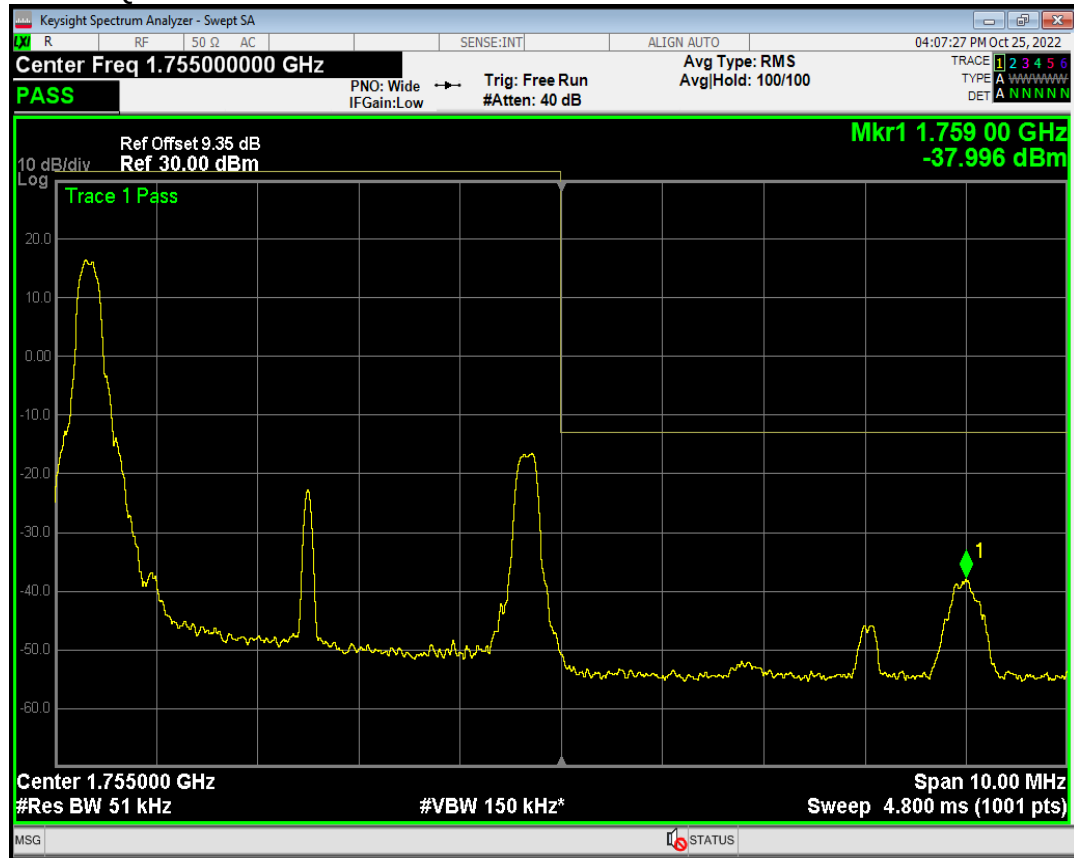


Band4 QAM16 BW=5MHz Channel=20375 RB Size=1 Position=#Max

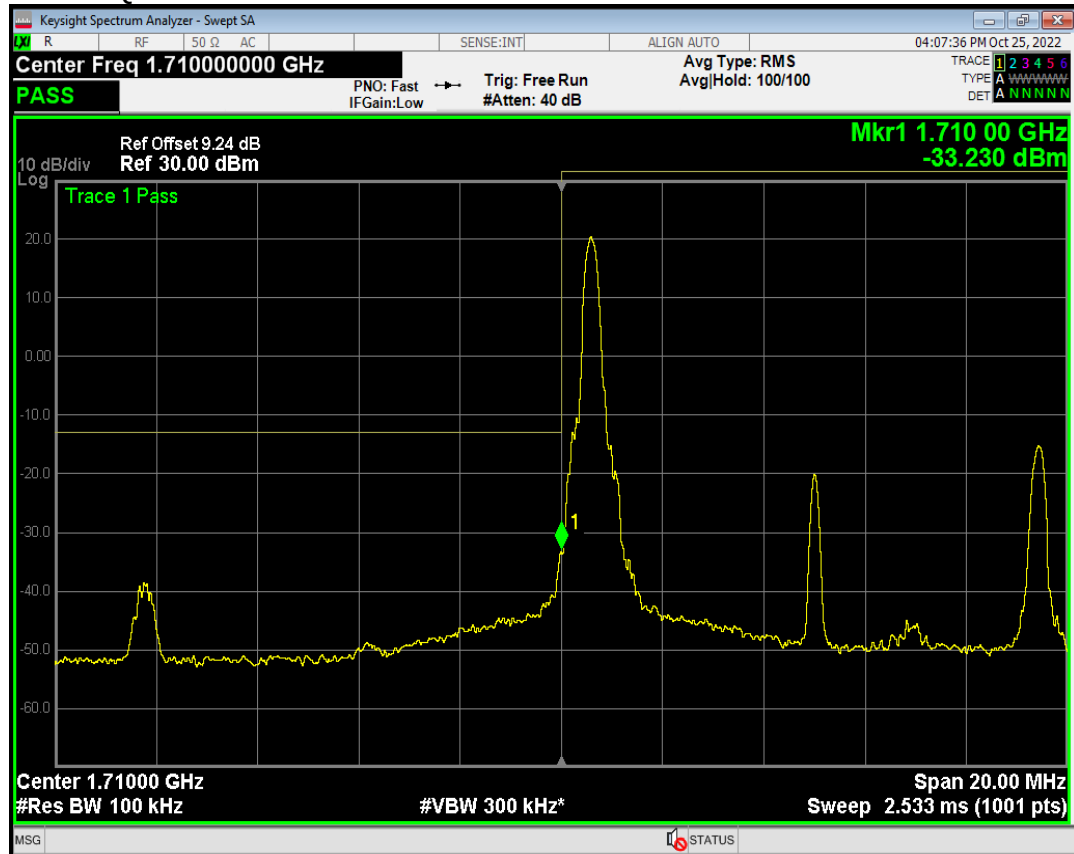




Band4 QAM16 BW=5MHz Channel=20375 RB Size=1 Position=#0

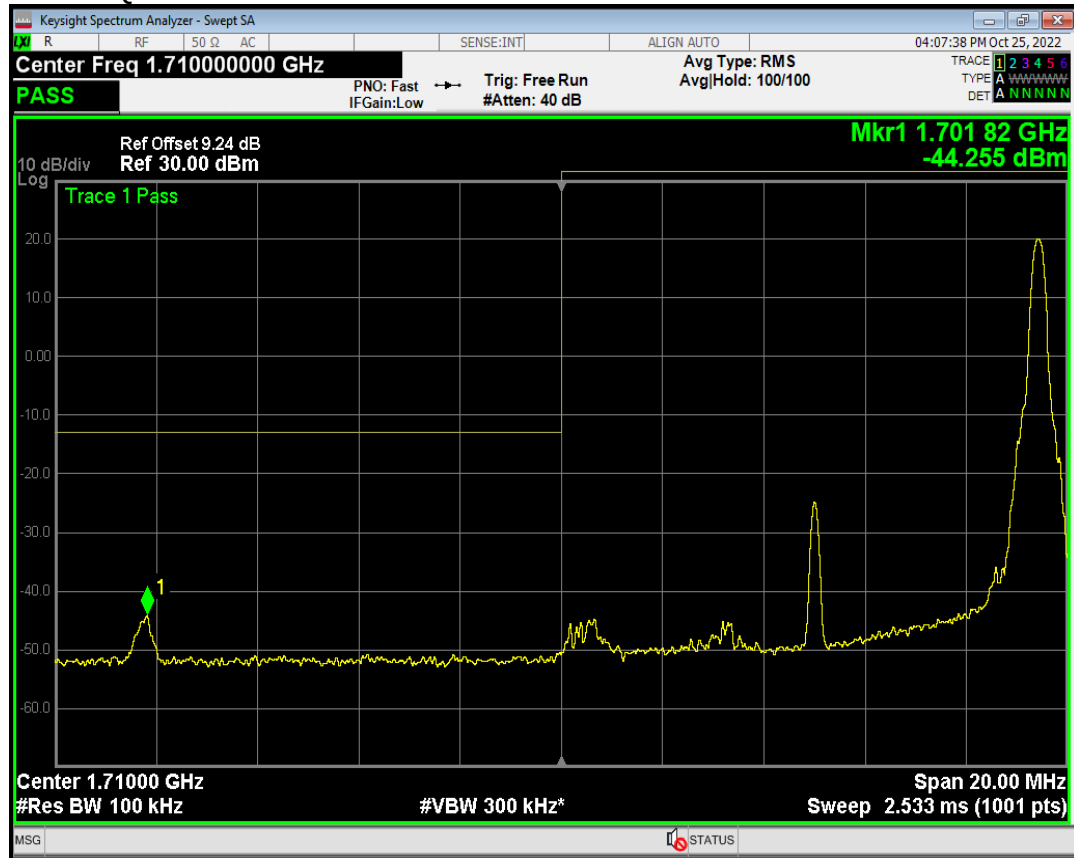


Band4 QPSK BW=10MHz Channel=20000 RB Size=1 Position=#0

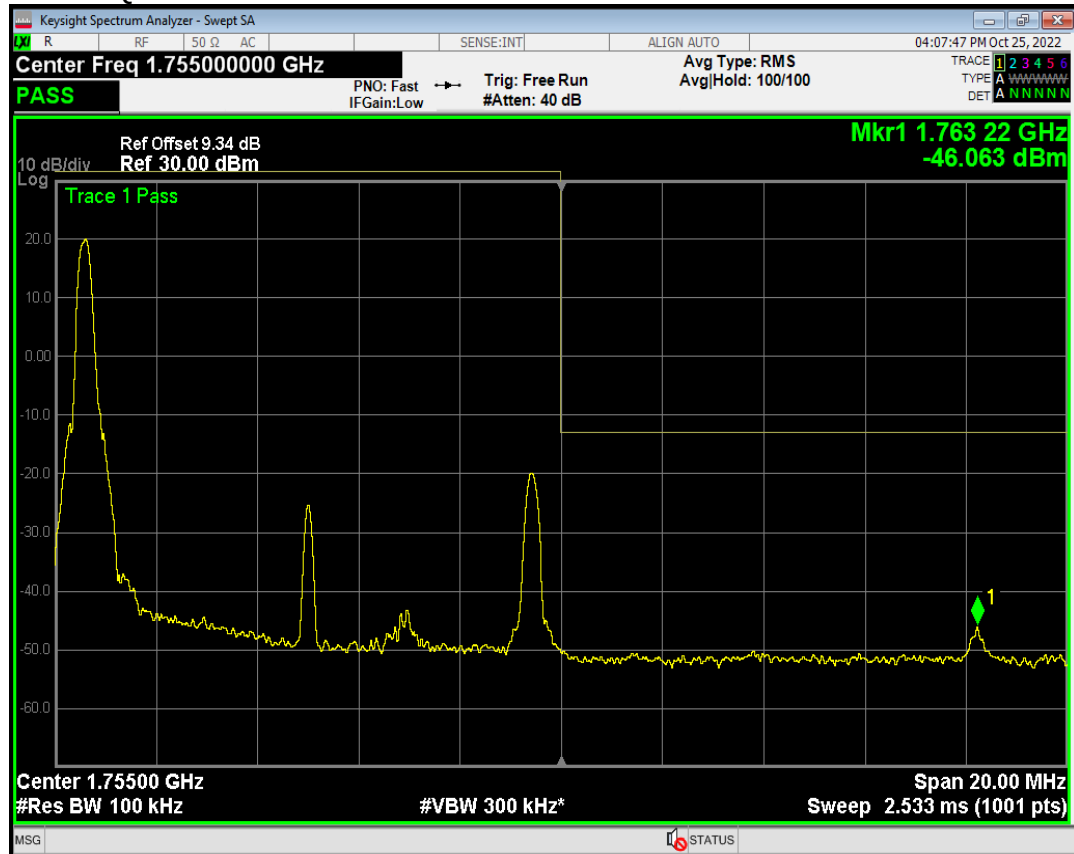




Band4 QPSK BW=10MHz Channel=20000 RB Size=1 Position=#Max

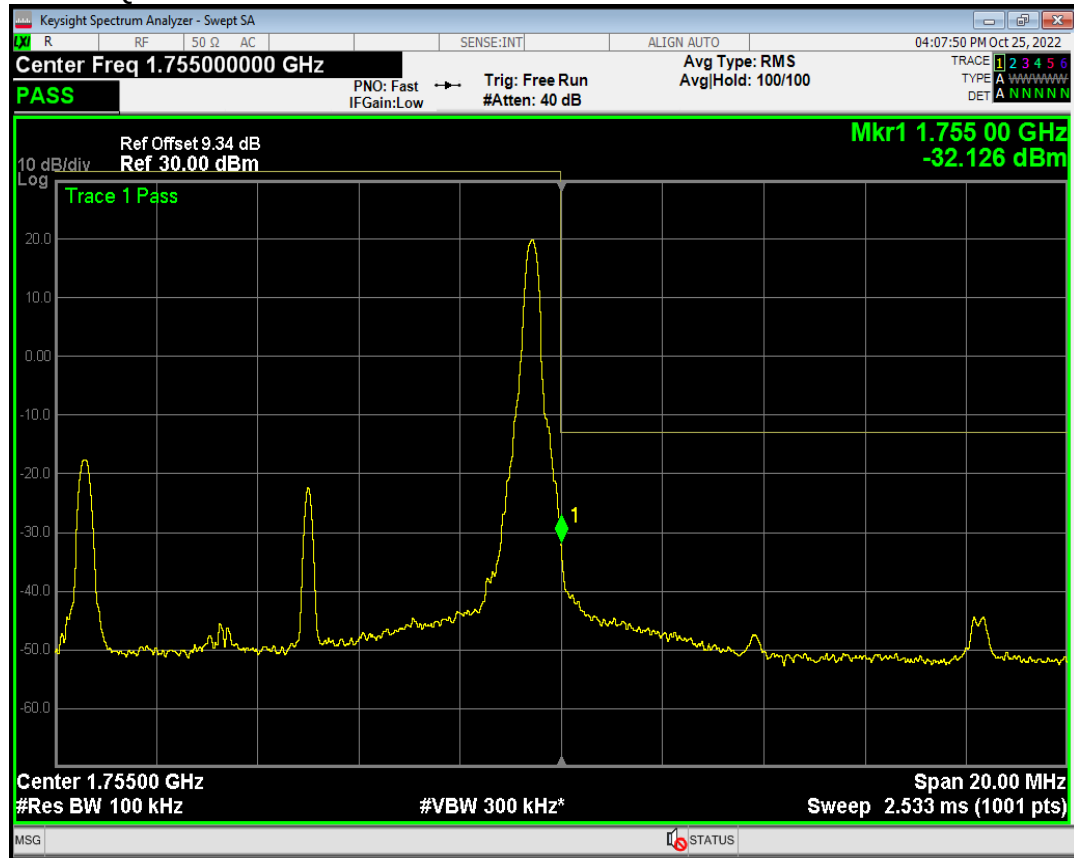


Band4 QPSK BW=10MHz Channel=20350 RB Size=1 Position=#0

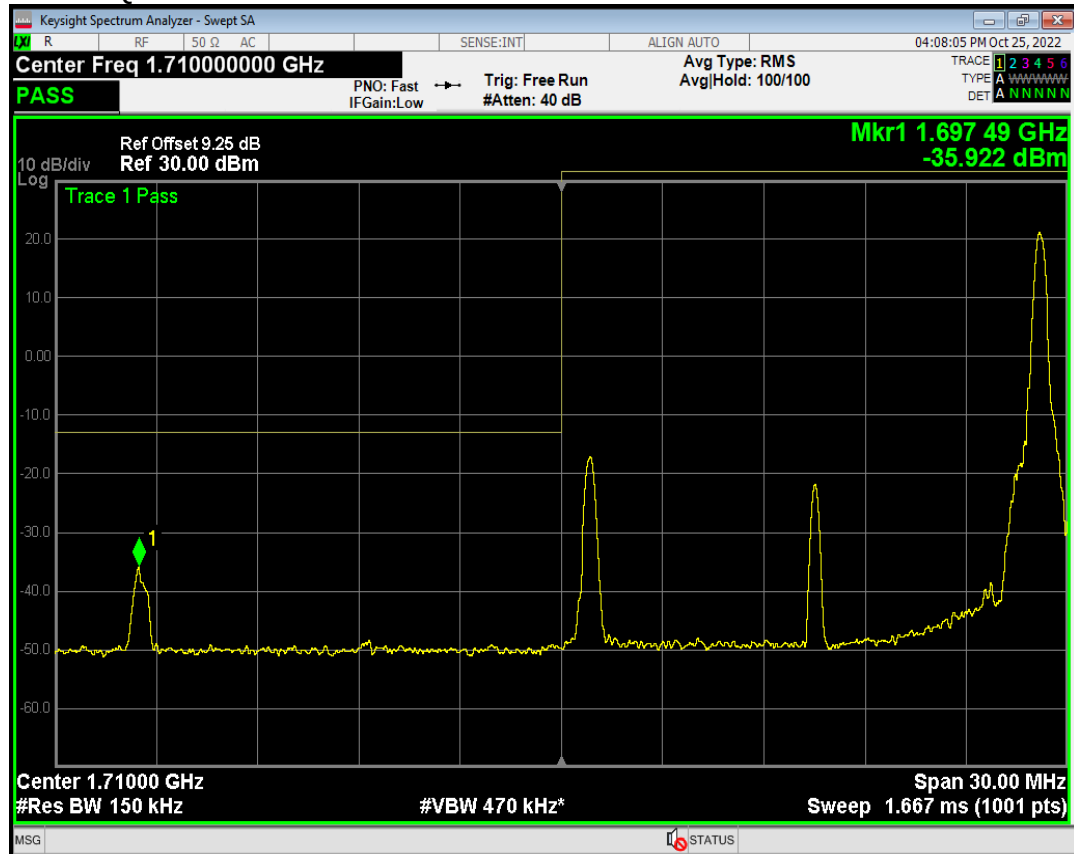




Band4 QPSK BW=10MHz Channel=20350 RB Size=1 Position=#Max

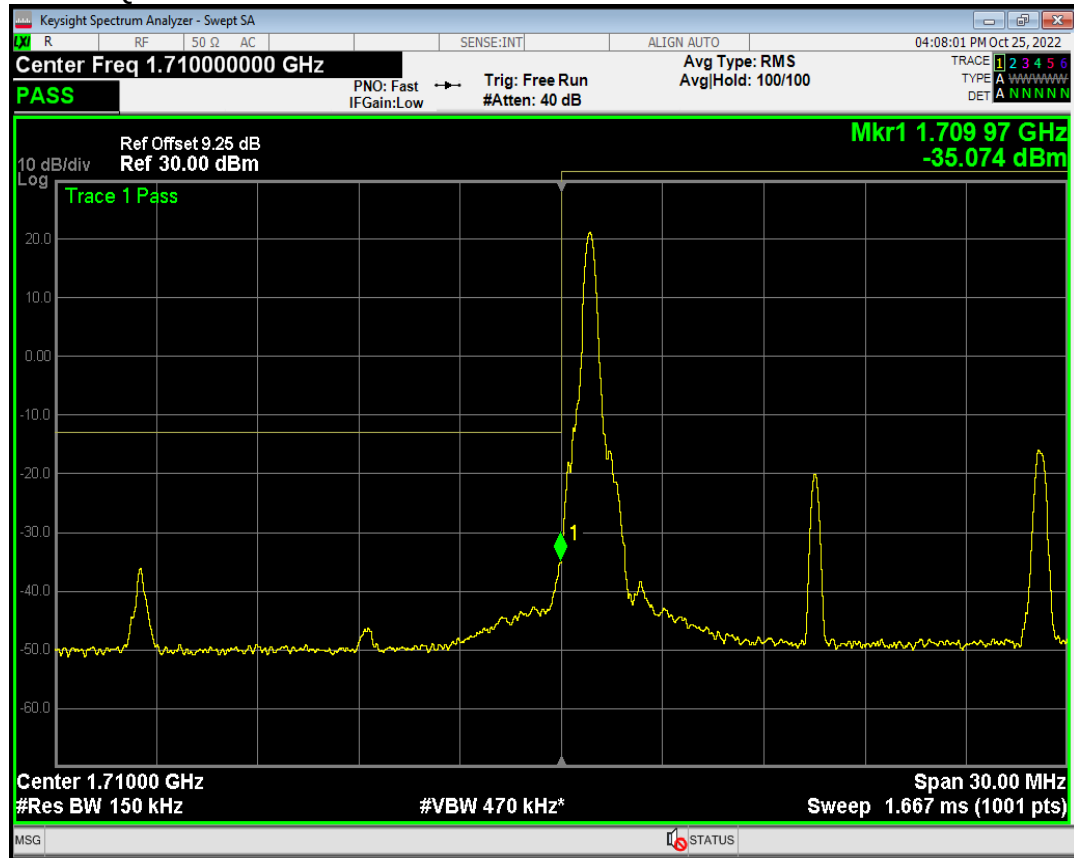


Band4 QPSK BW=15MHz Channel=20025 RB Size=1 Position=#Max

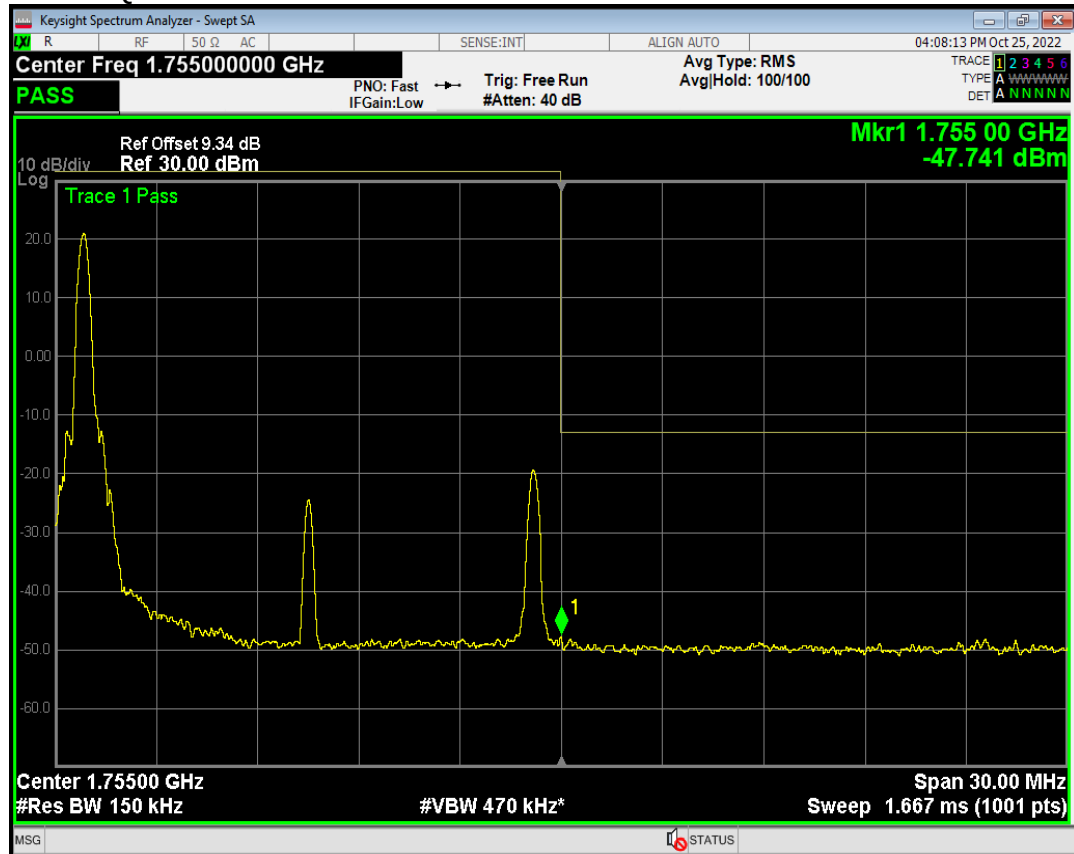




Band4 QPSK BW=15MHz Channel=20025 RB Size=1 Position=#0

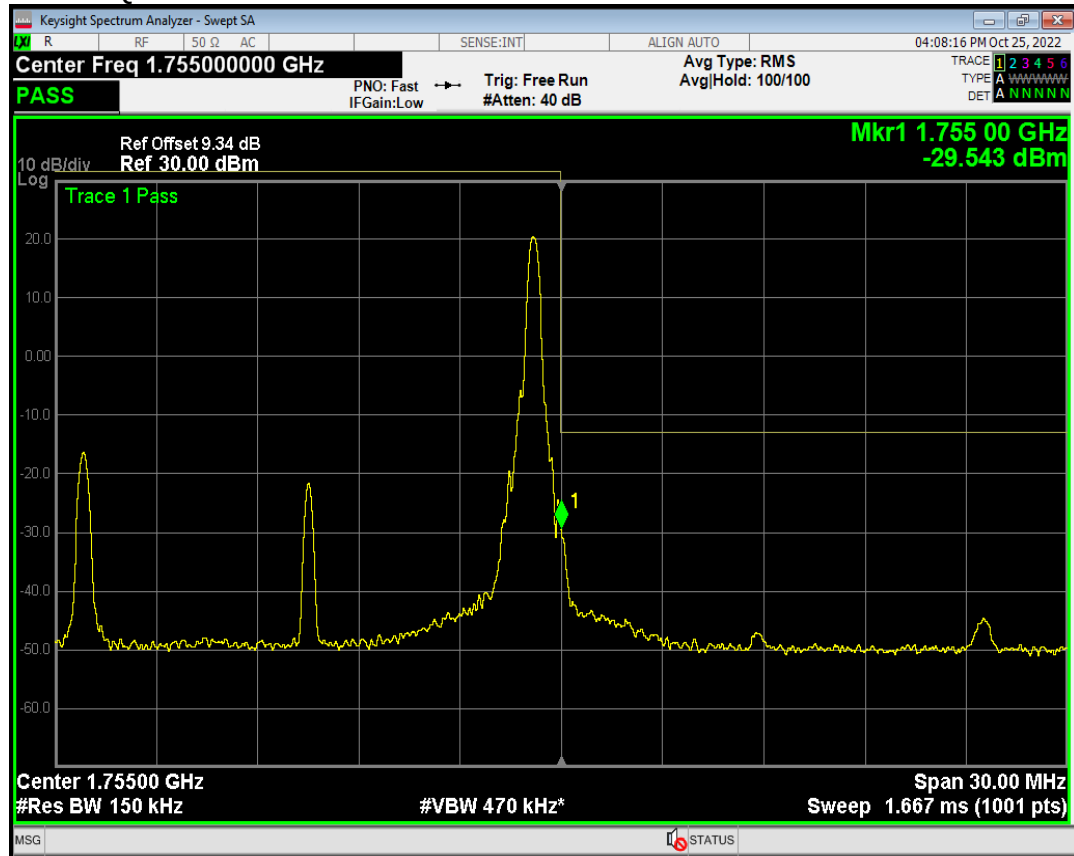


Band4 QPSK BW=15MHz Channel=20325 RB Size=1 Position=#0

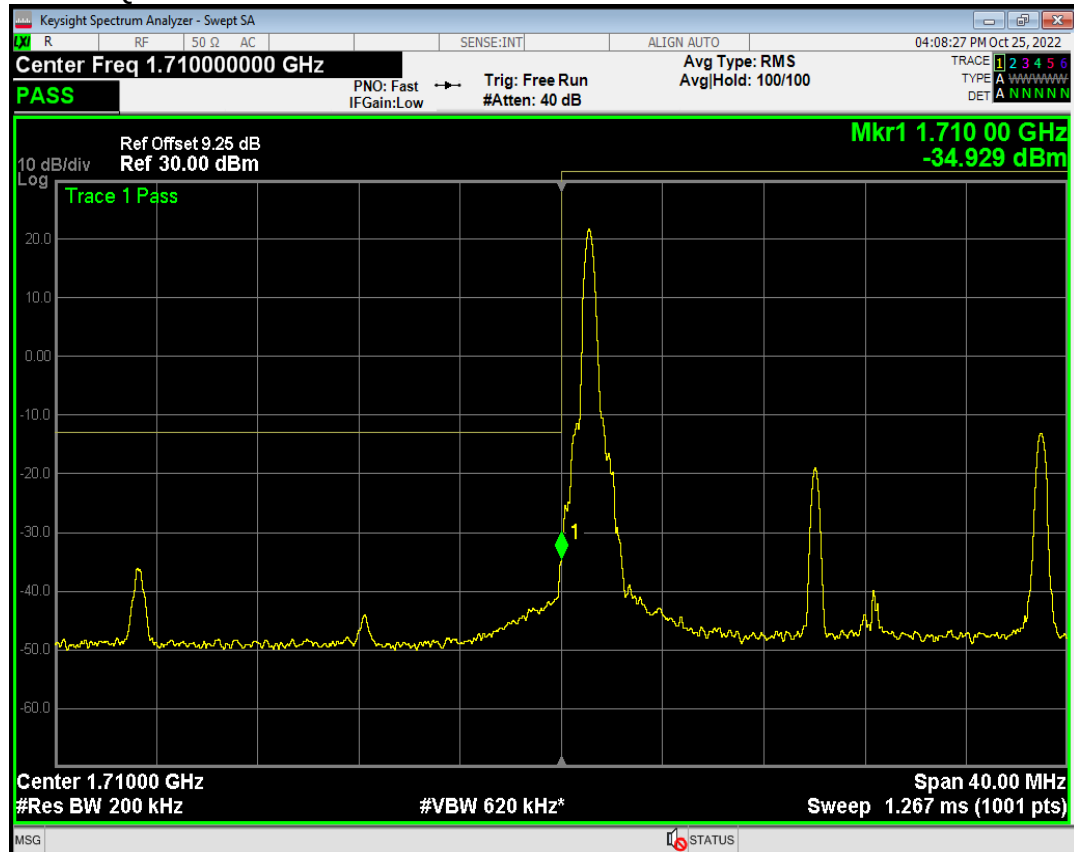




Band4 QPSK BW=15MHz Channel=20325 RB Size=1 Position=#Max

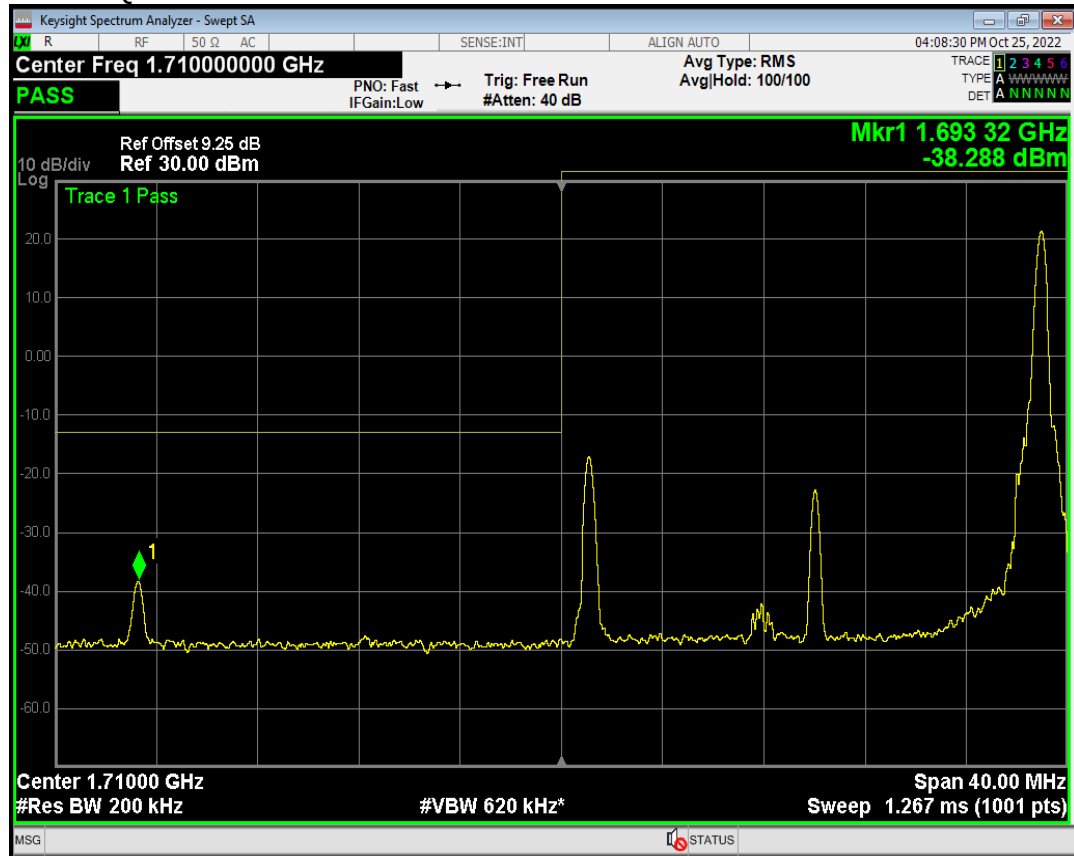


Band4 QPSK BW=20MHz Channel=20050 RB Size=1 Position=#0

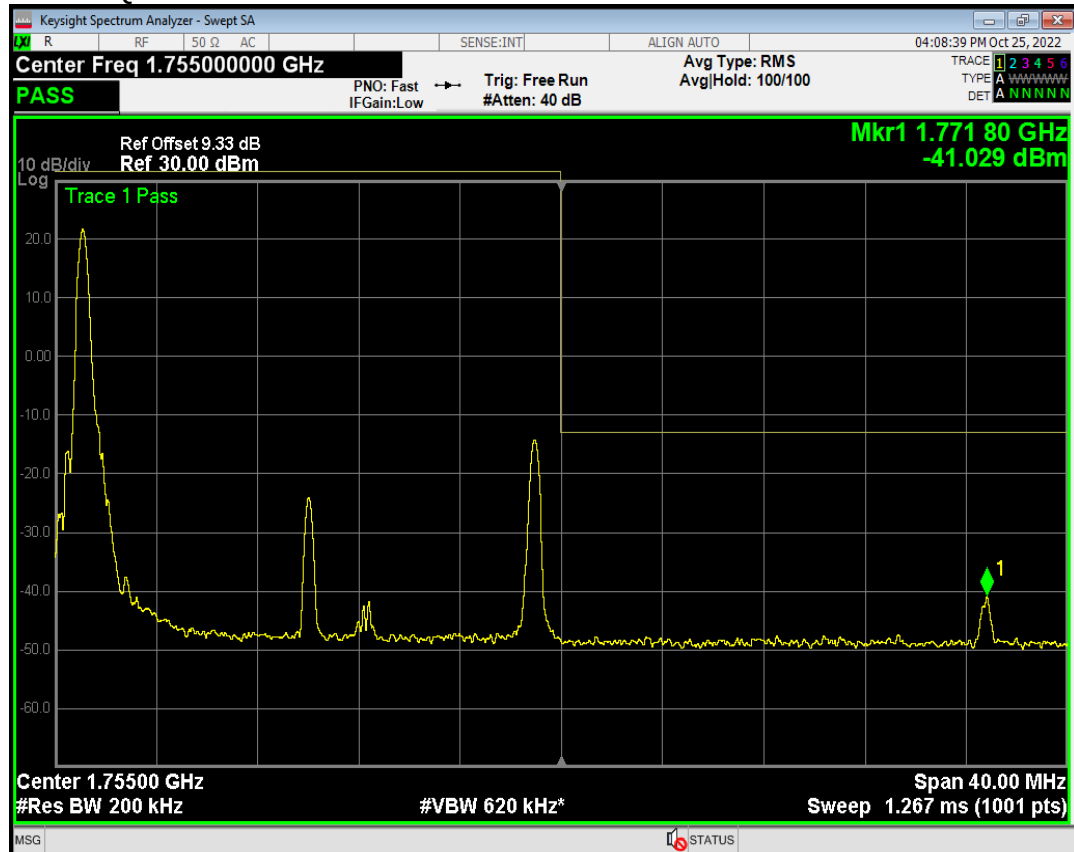




Band4 QPSK BW=20MHz Channel=20050 RB Size=1 Position=#Max

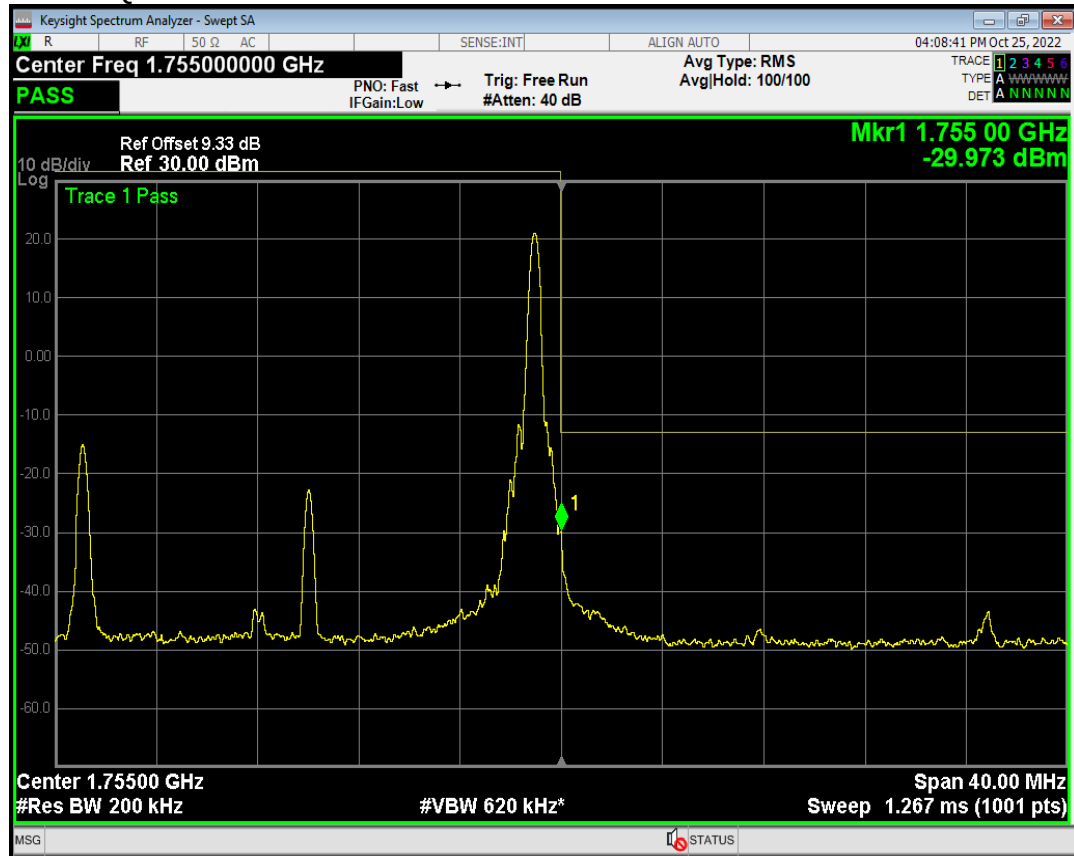


Band4 QPSK BW=20MHz Channel=20300 RB Size=1 Position=#0

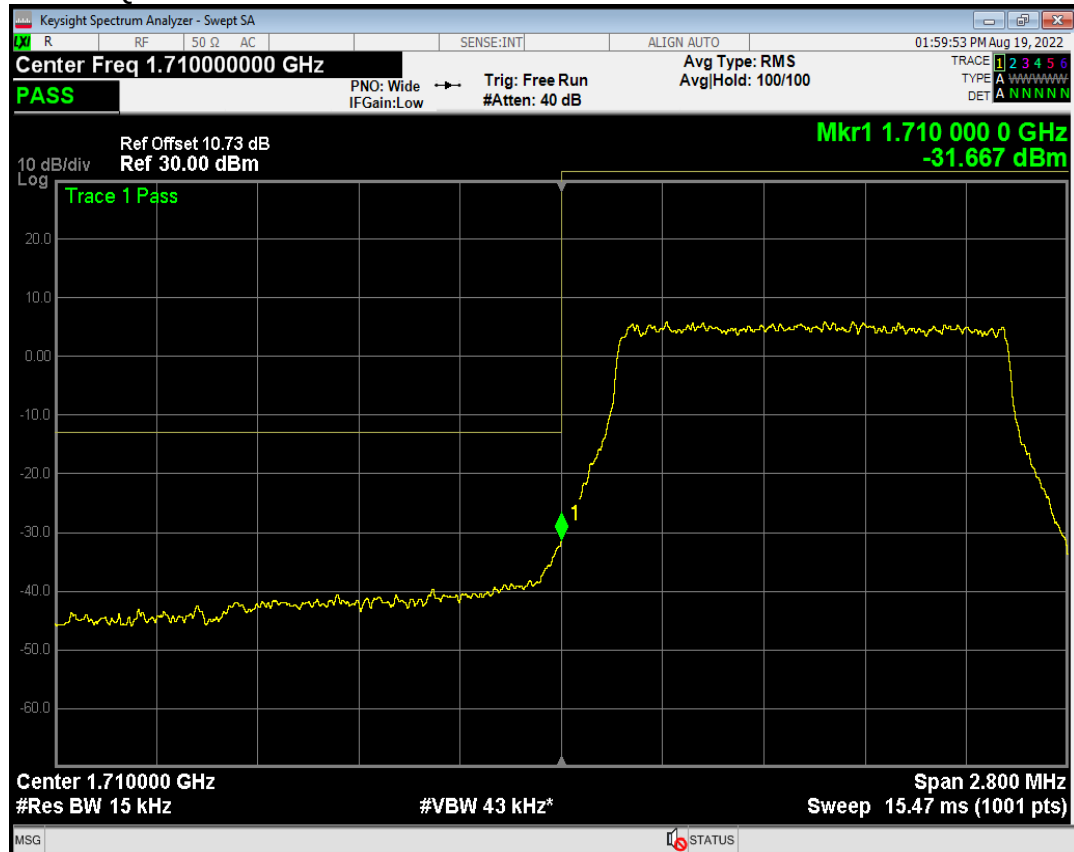




Band4 QPSK BW=20MHz Channel=20300 RB Size=1 Position=#Max



Band4 QPSK BW=1.4MHz Channel=19957 RB Size=6 Position=#0

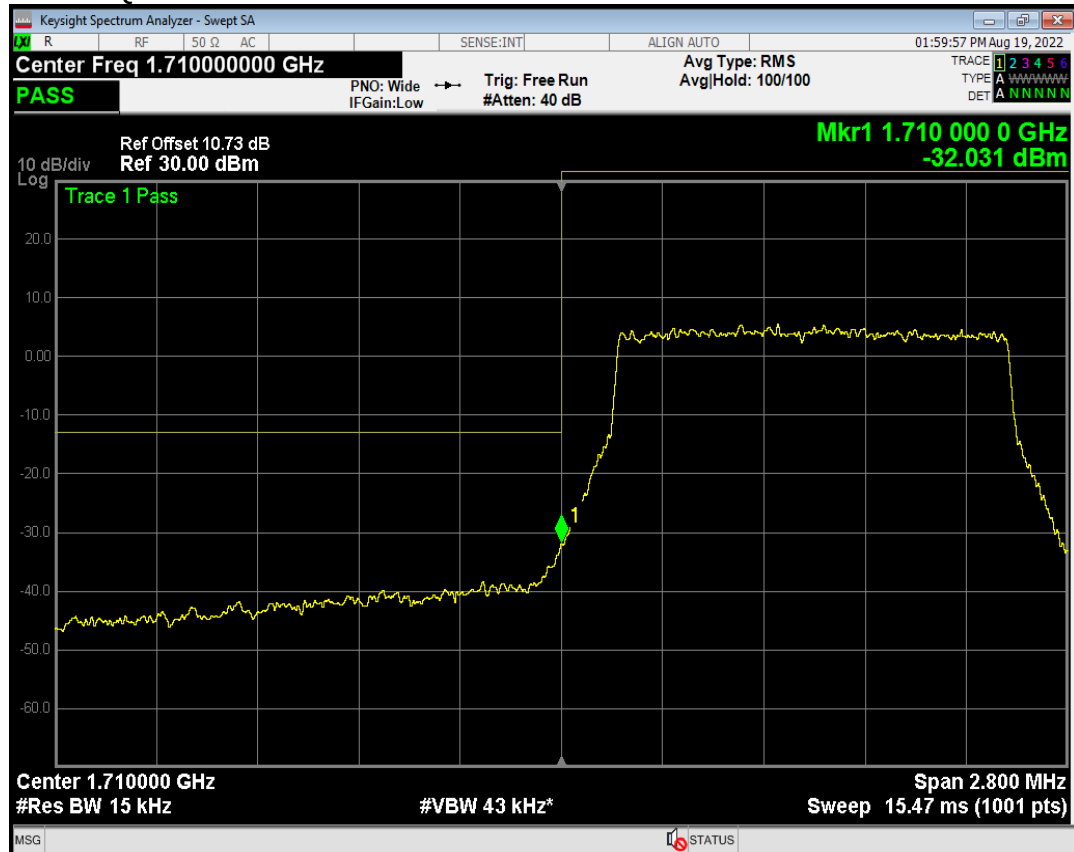




Band4 QPSK BW=1.4MHz Channel=20393 RB Size=6 Position=#0



Band4 QAM16 BW=1.4MHz Channel=19957 RB Size=6 Position=#0

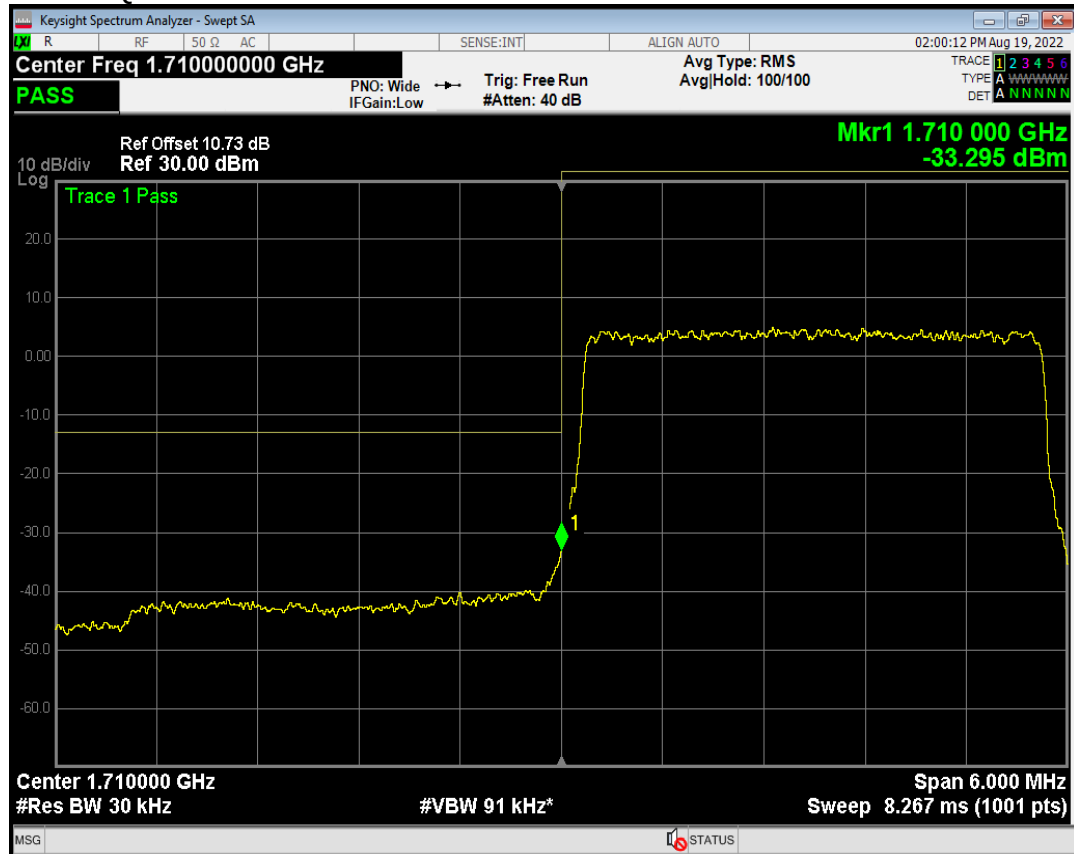




Band4 QAM16 BW=1.4MHz Channel=20393 RB Size=6 Position=#0

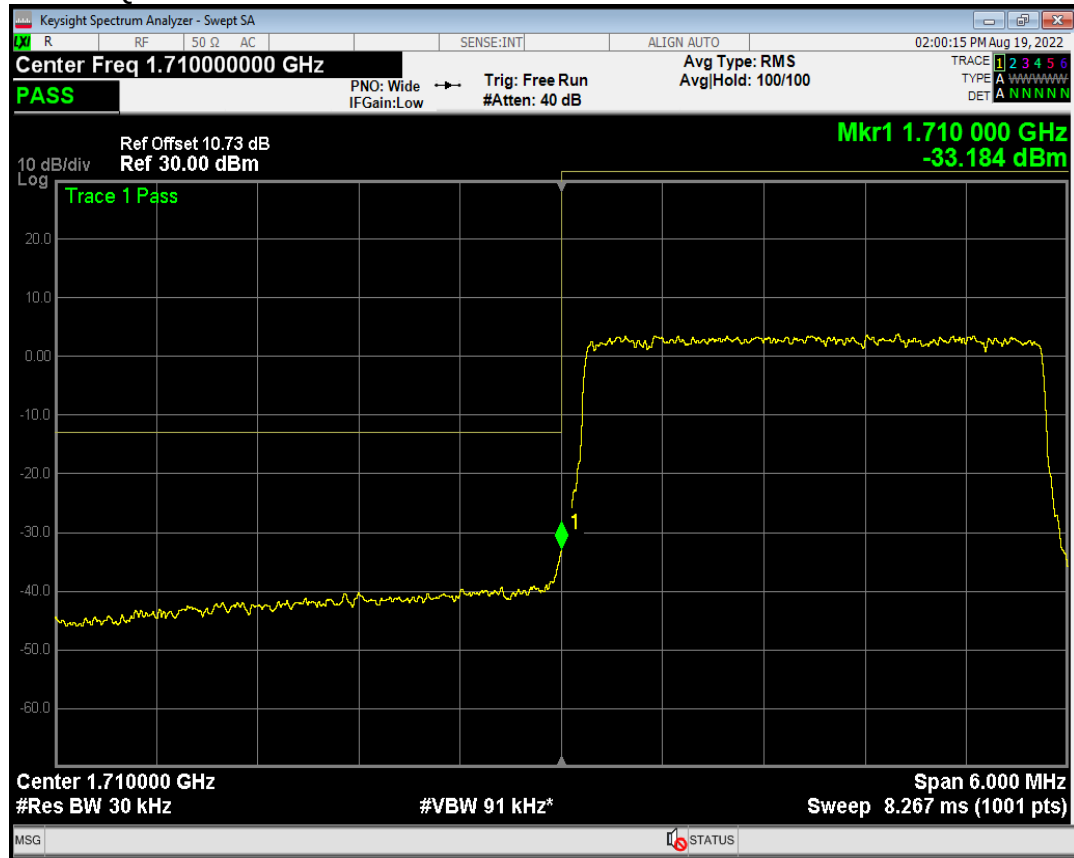


Band4 QPSK BW=3MHz Channel=19965 RB Size=15 Position=#0

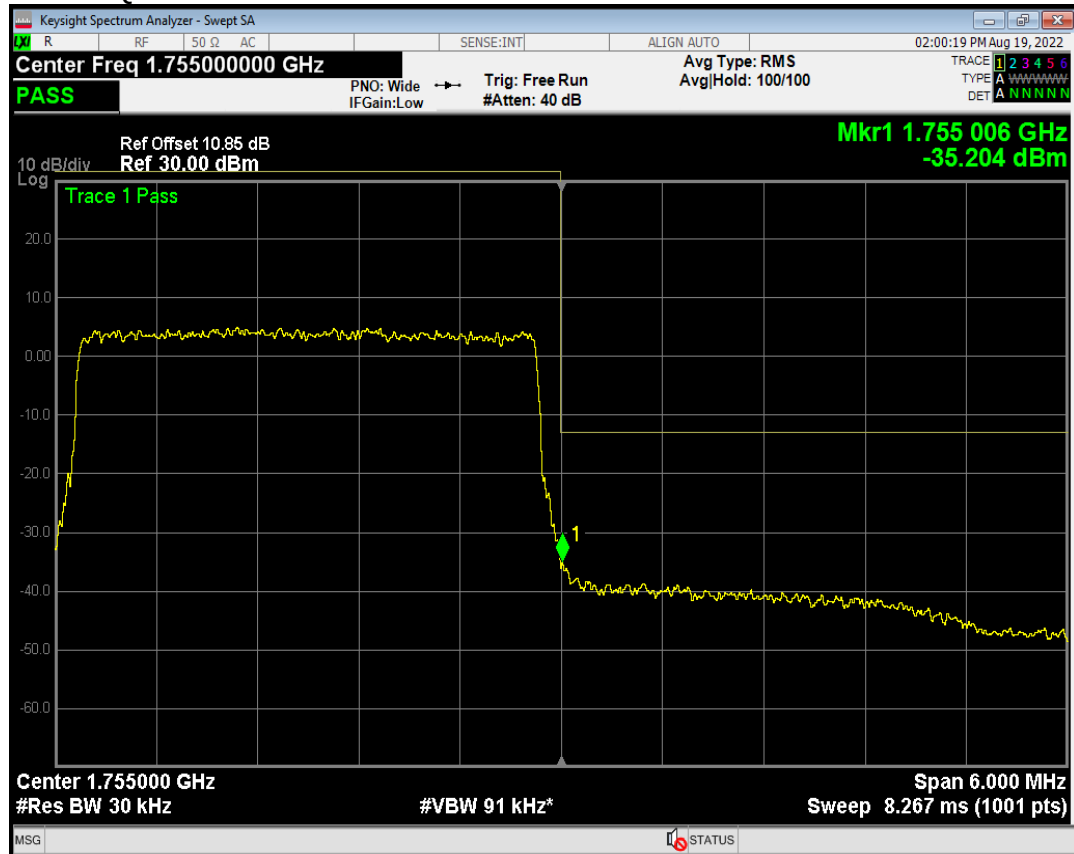




Band4 QAM16 BW=3MHz Channel=19965 RB Size=15 Position=#0

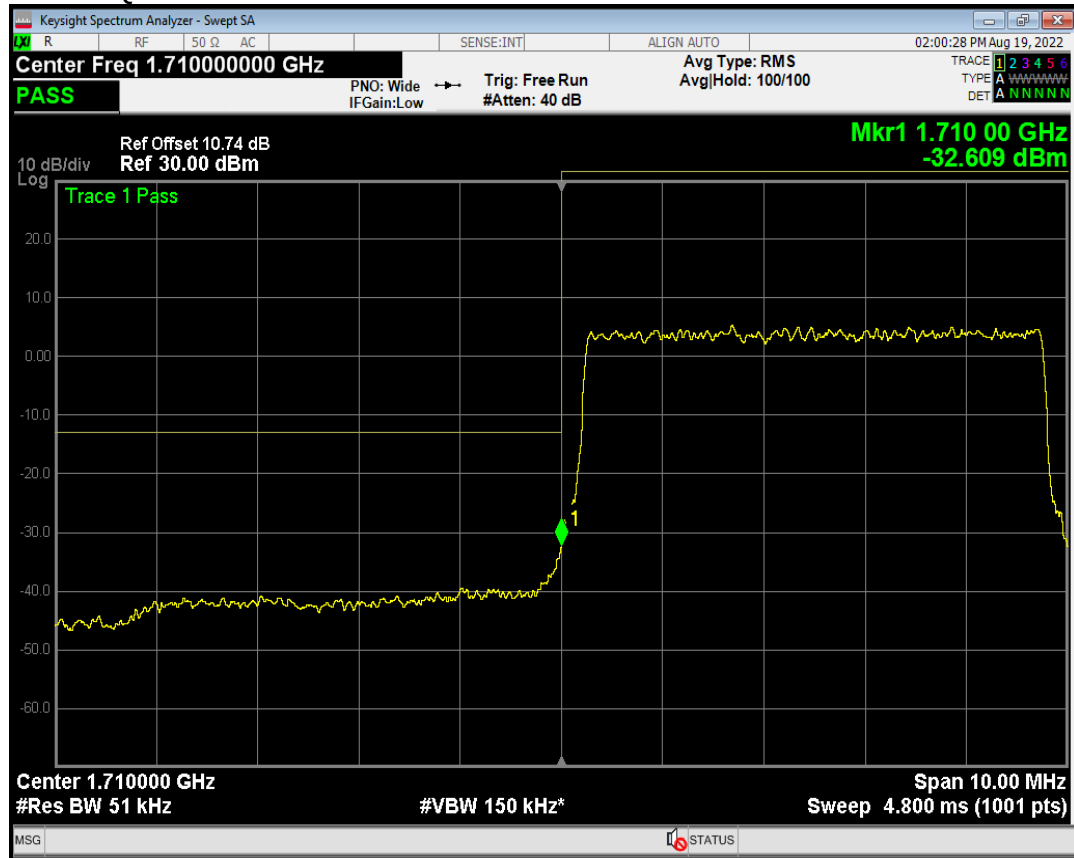


Band4 QPSK BW=3MHz Channel=20385 RB Size=15 Position=#0

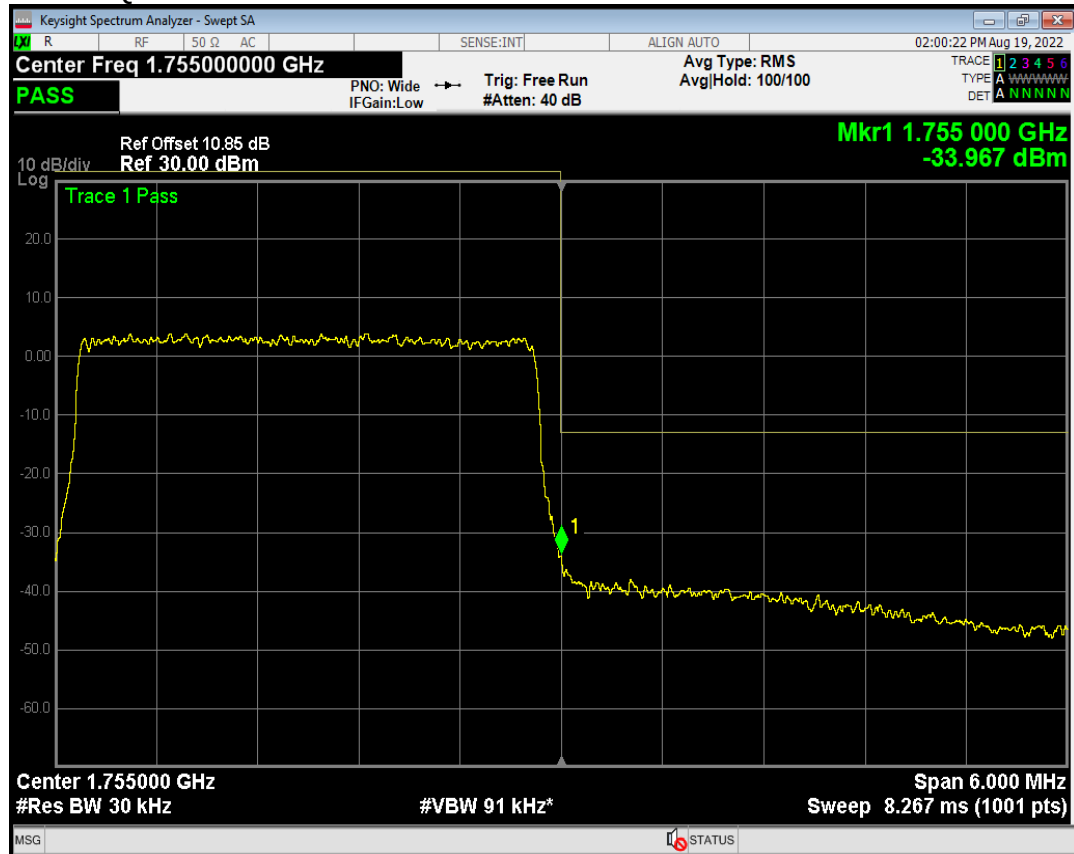




Band4 QPSK BW=5MHz Channel=19975 RB Size=25 Position=#0

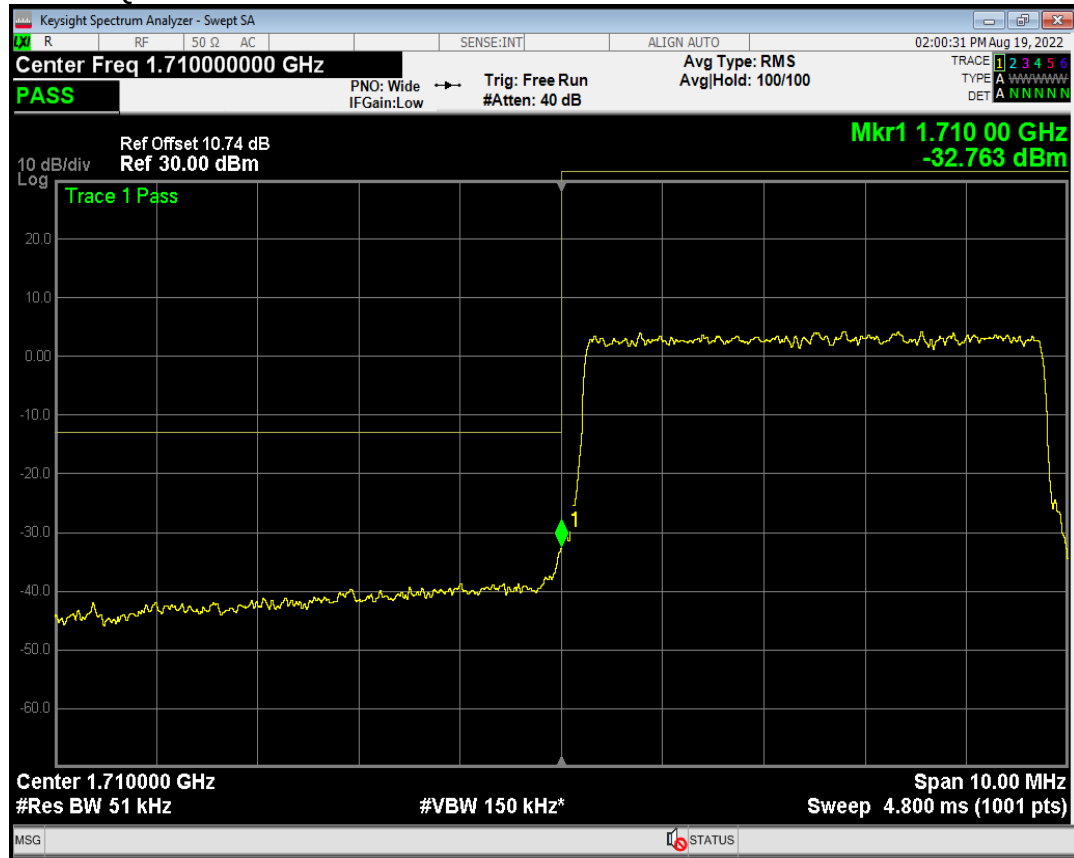


Band4 QAM16 BW=3MHz Channel=20385 RB Size=15 Position=#0

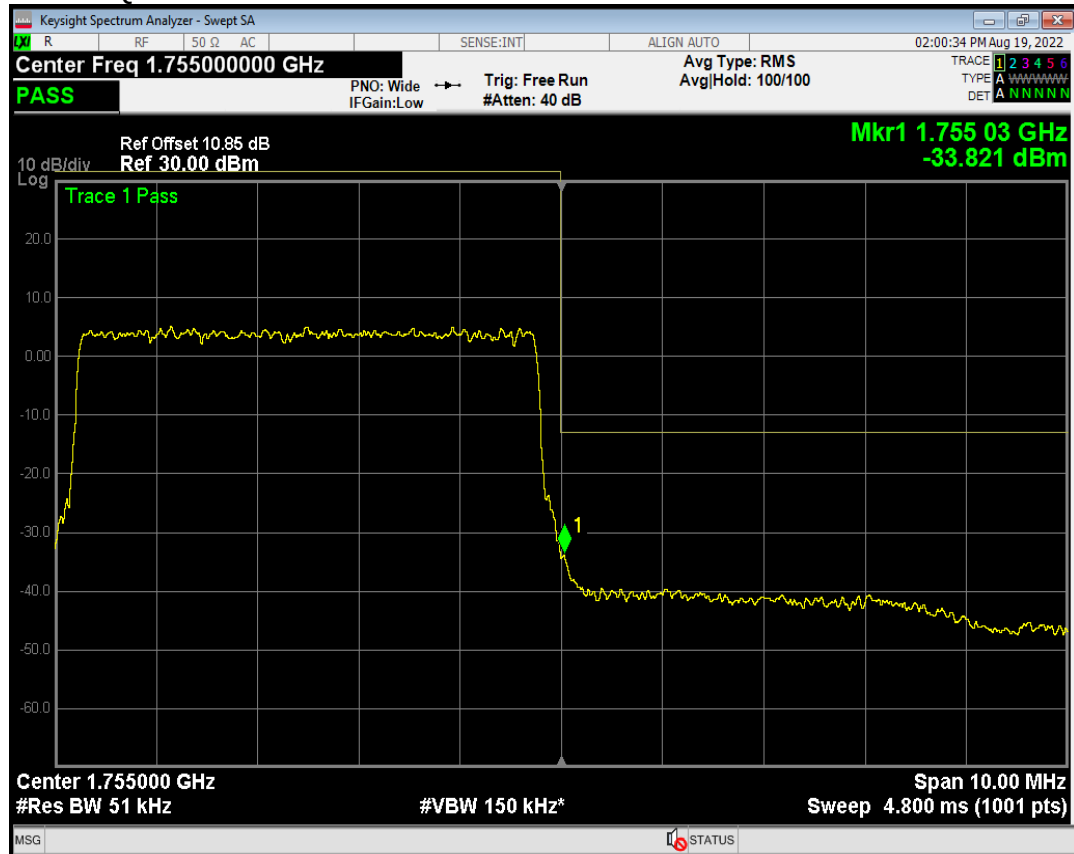




Band4 QAM16 BW=5MHz Channel=19975 RB Size=25 Position=#0

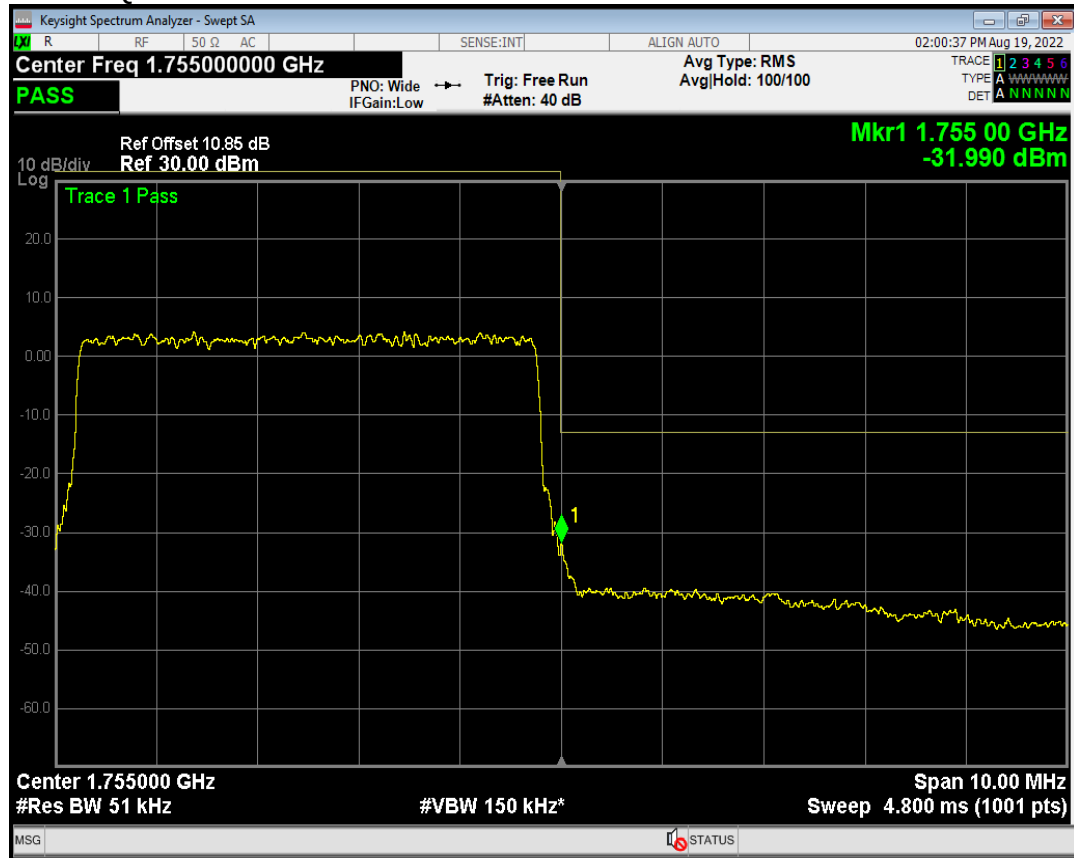


Band4 QPSK BW=5MHz Channel=20375 RB Size=25 Position=#0

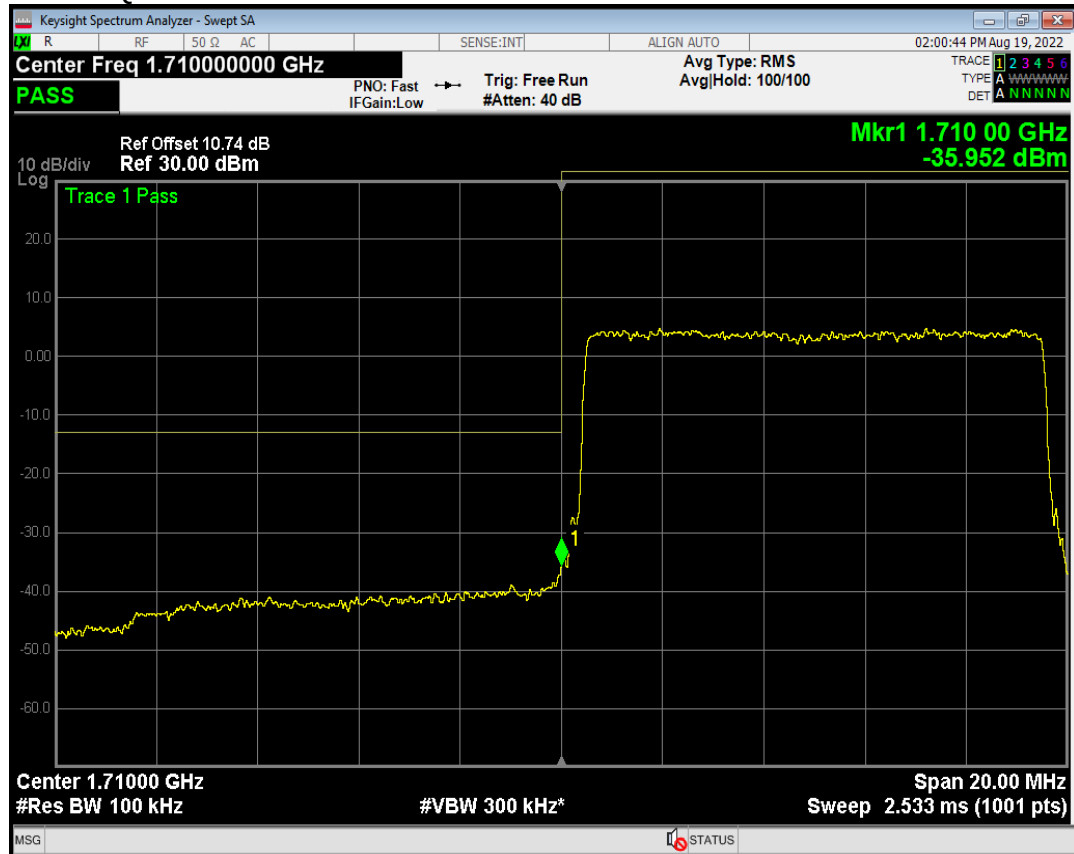




Band4 QAM16 BW=5MHz Channel=20375 RB Size=25 Position=#0



Band4 QPSK BW=10MHz Channel=20000 RB Size=50 Position=#0

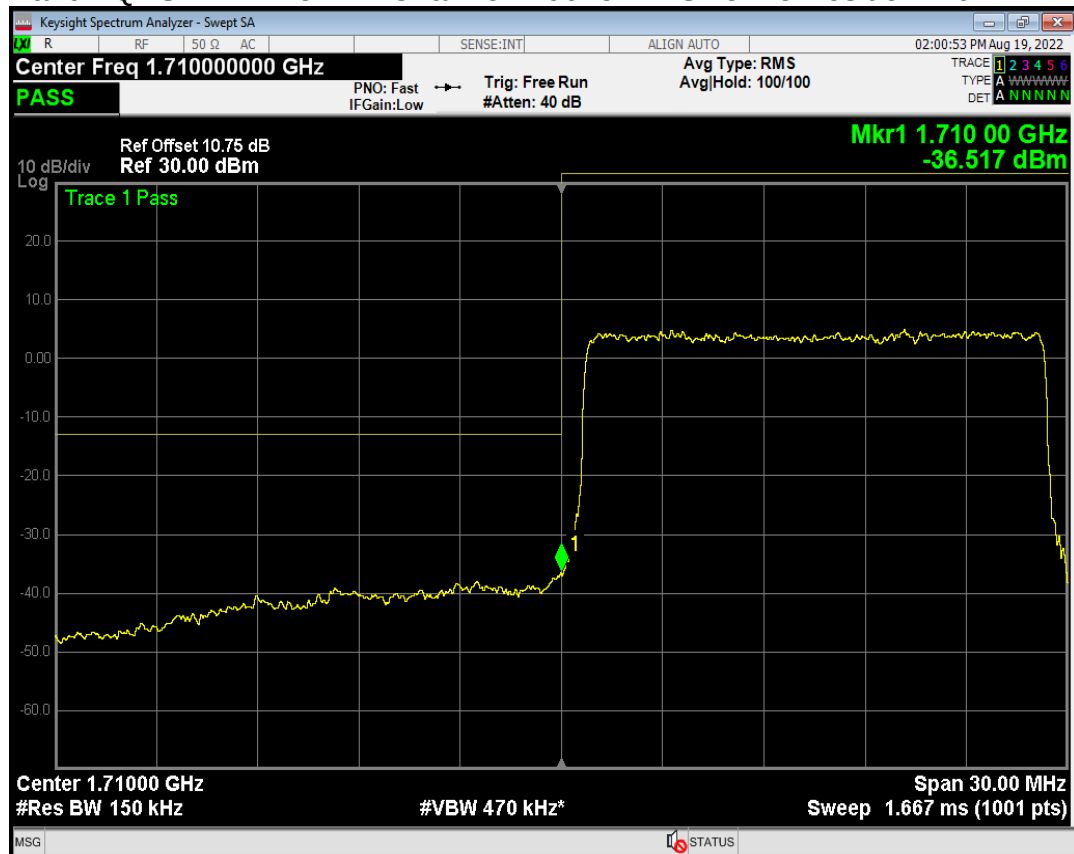




Band4 QPSK BW=10MHz Channel=20350 RB Size=50 Position=#0



Band4 QPSK BW=15MHz Channel=20025 RB Size=75 Position=#0

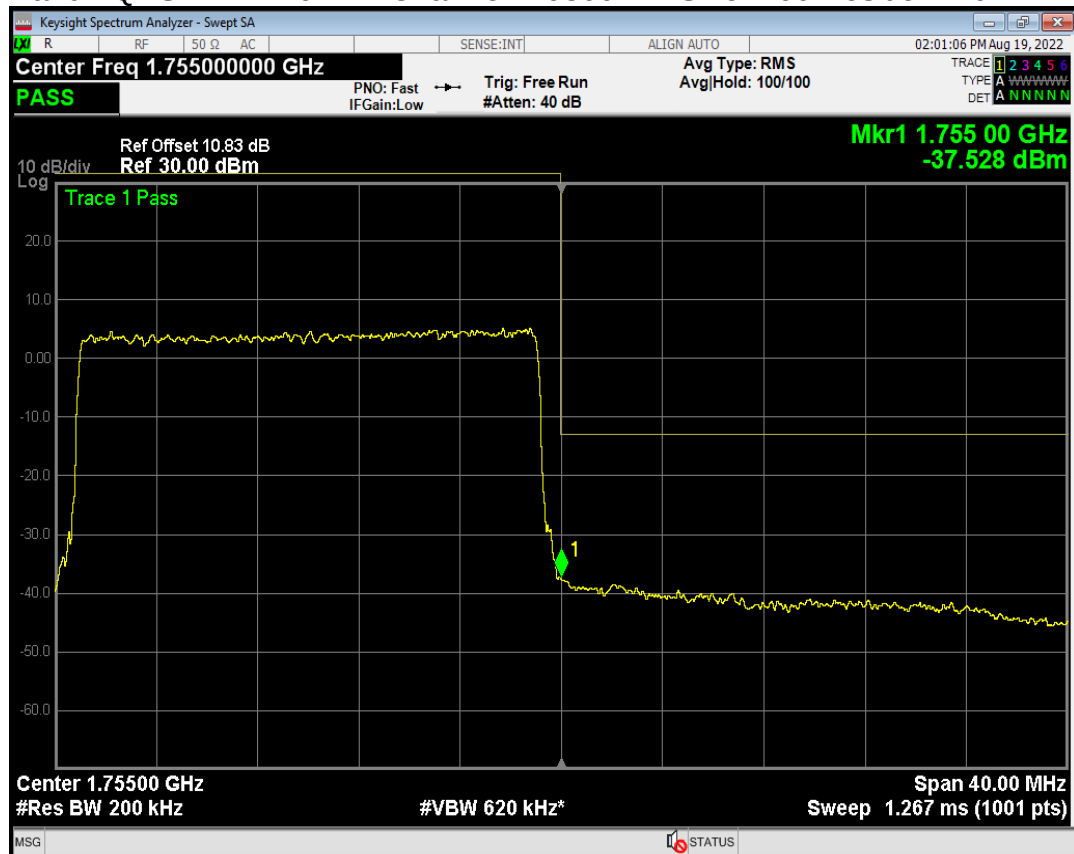




Band4 QPSK BW=15MHz Channel=20325 RB Size=75 Position=#0

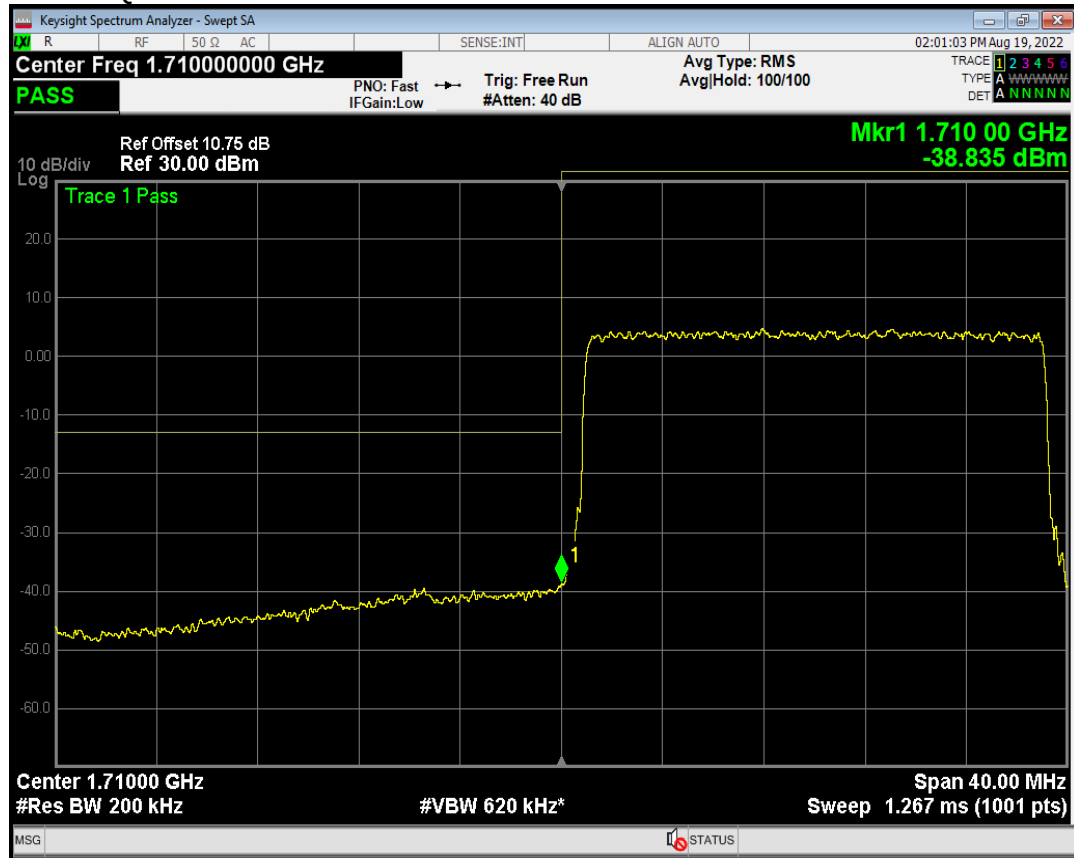


Band4 QPSK BW=20MHz Channel=20300 RB Size=100 Position=#0





Band4 QPSK BW=20MHz Channel=20050 RB Size=100 Position=#0



***** END *****