



RF TEST REPORT

Product Name: Ikko ActiveBuds

Model Name: AB-02

FCC ID: 2AWCQ-AB02-2350-IK1

Issued For : Ikko audio technology (sz) co., LTD

805, 8th Floor, Heungkong Financial Center, Intersection of Linhai Avenue and Xinghai Avenue, Nanshan, Shenzhen, China

Issued By : Shenzhen LGT Test Service Co., Ltd.

Room 205, Building 13, Zone B, Zhenxiong Industrial Park,
No.177, Renmin West Road, Jinsha, Kengzi Street, Pingshan District, Shenzhen, Guangdong, China

Report Number: LGT23K031RF07

Sample Received Date: Nov. 10, 2023

Date of Test: Nov. 10, 2023 – Jan. 08, 2024

Date of Issue: Jan. 08, 2024

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TEST REPORT CERTIFICATION

Applicant: Ikko audio technology (sz) co., LTD
Address: 805, 8th Floor, Heungkong Financial Center, Intersection of Linhai Avenue and Xinghai Avenue, Nanshan, Shenzhen, China
Manufacturer: Ikko audio technology (sz) co., LTD
Address: 805, 8th Floor, Heungkong Financial Center, Intersection of Linhai Avenue and Xinghai Avenue, Nanshan, Shenzhen, China
Product Name: Ikko ActiveBuds
Trademark: 
Model Name: AB-02
Sample Status: Normal

APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
FCC Part 22, 27 KDB 971168 D01 v03r01, ANSI C63.26(2015)	PASS

Prepared by:

Zane Shan

Zane Shan
Engineer

Approved by:

Vita Li

Vita Li
Technical Director



Table of Contents	Page
1. TEST FACTORY & MEASUREMENT UNCERTAINTY	5
2. GENERAL INFORMATION	6
3. CONDUCTED OUTPUT POWER	12
4. PEAK-TO-AVERAGE RATIO	13
5. RADIATED POWER AND EFFECTIVE ISOTROPIC RADIATED POWER	14
6. OCCUPIED BANDWIDTH	16
7. CONDUCTED BAND EDGE	17
8. CONDUCTED SPURIOUS EMISSION	19
9. RADIATED SPURIOUS EMISSION	20
10. FREQUENCY STABILITY	22
APPENDIX I-TEST DATA	23
CONDUCTED OUTPUT POWER	23
FREQUENCY STABILITY	31
PEAK-TO-AVERAGE RATIO	35
OCCUPIED BANDWIDTH	52
BAND EDGE	75
OUT-OF-BAND EMISSIONS	107
RADIATED SPURIOUS EMISSION	127

Revision History

Rev.	Issue Date	Contents
00	Jan. 08, 2024	Initial Issue

1. TEST FACTORY & MEASUREMENT UNCERTAINTY

1.1 TEST FACTORY

Company Name:	Shenzhen LGT Test Service Co., Ltd.
Address:	Room 205, Building 13, Zone B, Zhenxiong Industrial Park, No.177, Renmin West Road, Jinsha, Kengzi Street, Pingshan District, Shenzhen, Guangdong, China
Accreditation Certificate	A2LA Certificate No.: 6727.01
	FCC Registration No.: 746540
	CAB ID: CN0136

1.2 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement $y \pm U$, where expanded uncertainty U is based on a standard uncertainty multiplied by a coverage factor of $k=2$, providing a level of confidence of approximately 95 %.

Parameter	Uncertainty
Occupied Channel Bandwidth	$\pm 3.2 \%$
RF Output Power, Conducted	$\pm 0.87\text{dB}$
Power Spectral Density, Conducted	$\pm 2.11 \text{ dB}$
Unwanted Emission, Conducted	$\pm 0.86\text{dB}$
All Emissions, Radiated (Below 1GHz)	$\pm 3.54\text{dB}$
All Emissions, Radiated (1GHz-18GHz)	$\pm 4.22\text{dB}$
All Emissions, Radiated (18GHz-25GHz)	$\pm 4.81\text{dB}$
Temperature	$\pm 0.5^{\circ}\text{C}$
Humidity	$\pm 2\%$

Note: The measurement uncertainty is not included in the test result.

2. GENERAL INFORMATION

2.1 TECHNICAL SPECIFICATIONS AND REGULATIONS

2.1.1 PRODUCT DESCRIPTION

A major technical description of EUT is described as following:

Product Name:	Ikko ActiveBuds
Trademark:	
Model Name:	AB-02
Series Model:	N/A
Model Difference:	N/A
Frequency Bands:	U.S. Bands: LTE FDD Band 5 LTE FDD Band 40 LTE TDD Band 41
SIM Card:	N/A
Antenna:	FPC
Antenna gain:	Band 5: -0.71dBi, Band 40: 1.14dBi, Band 41: 1.12dBi
Rating:	Input: DC 5V, 500mA
Battery:	Capacity: 900mAh Rated Voltage: 3.7V
Extreme Vol. Limits:	3.4V to 4.2V (Nominal 3.7V)
Extreme Temp. Tolerance:	-0°C to +40°C
Hardware Version:	E20_MB_V3.0
Software Version:	DW_8541E_E20E_V30_HXL_AB02_00_GB_FL_4.2V_256X16_G2358_W1258_FDD12357820_TDD3438394041_368X448_202309131903

Note: The antenna information refer the manufacturer provide report, applicable only to the tested sample identified in the report.

2.1.2 PRODUCT SPECIFICATION SUBJECTIVE TO THIS STANDARD

Product Specification Subjective To This Standard	
Tx Frequency	LTE Band 5: 824~849MHz LTE Band 40: 2305-2315MHz LTE Band 40: 2350-2360MHz LTE Band 41: 2555-2655MHz
Rx Frequency	LTE Band 5: 869-894MHz LTE Band 40: 2305-2315MHz LTE Band 40: 2350-2360MHz LTE Band 41: 2555-2655MHz
Bandwidth	LTE Band 5: 1.4MHz / 3MHz / 5MHz / 10MHz LTE Band 40: 5MHz / 10MHz LTE Band 41: 5MHz / 10MHz / 15MHz /20MHz
Type of Modulation	QPSK /16QAM

2.1.3 TEST CONFIGURATION OF EQUIPMENT UNDER TEST

Antenna port conducted and radiated test items listed below are performed according to KDB 971168 D01 v03r01 and ANSI C63.26 2015 Power Meas. License Digital Systems with maximum output power. Radiated measurements are performed by rotating the EUT in three different orthogonal test planes to find the maximum emission.

Remark:

1. The mark 'v' means that this configuration is chosen for testing
2. The mark '-' means that this bandwidth is not supported.
3. The device is investigated from 30MHz to 10 times of fundamental signal for radiated.

ITEMS	Band	Bandwidth (MHz)						Modulation		RB #			Test Channel		
		1.4	3	5	10	15	20	QPSK	16QAM	1	Half	Full	L	M	H
Max. Output Power	5	v	v	v	v			v	v	v	v	v	v	v	v
	40			v	v			v	v	v	v	v	v	v	v
	41			v	v	v	v	v	v	v	v	v	v	v	v
Peak&Avera Ratio	5				v			v	v	v		v	v	v	v
	40				v			v	v	v		v	v	v	v
	41						v	v	v	v		v	v	v	v
26dB&99% Bandwidth	5	v	v	v	v			v	v			v	v	v	v
	40			v	v			v	v			v	v	v	v
	41			v	v	v	v	v	v			v	v	v	v
Conducted Band Edge	5	v	v	v	v			v	v	v		v	v	v	v
	40			v	v			v	v	v		v	v	v	v
	41			v	v	v	v	v	v	v		v	v	v	v
Conducted Spurious Emission	5	v	v	v	v			v	v	v			v	v	v
	40			v	v			v	v	v			v	v	v
	41			v	v	v	v	v	v	v			v	v	v
Frequency Stability	5				v			v				v		v	
	40				v			v				v		v	
	41				v			v				v		v	
E.R.P.& E.I.R.P.	5	v	v	v	v			v	v	v	v	v	v	v	v
	40			v	v			v	v	v	v	v	v	v	v
	41			v	v	v	v	v	v	v	v	v	v	v	v
Radiated Spurious Emission	5	v	v	v	v			v		v			v	v	v
	40			v	v			v		v			v	v	v
	41			v	v	v	v	v		v			v	v	v

2.1.4 RELATED SUBMITTAL(S) / GRANT (S)

This submittal(s) (test report) is intended for filing to comply with the 47 CFR Part 2, 22, 27.

2.1.5 SPECIAL ACCESSORIES

The battery and the charger, earphone supplied by the applicant were used as accessories and being tested with eut intended for fcc grant together.

2.1.6 EUT CONFIGURATION

The EUT configuration for testing is installed on RF field strength measurement to meet the Commission's requirement and operating in a manner which intends to maximize its emission characteristics in a continuous normal application.

2.1.7 EUT EXERCISE

The Transmitter was operated in the maximum output power mode through Communication Tester. The TX frequency was fixed which was for the purpose of the measurements.

2.1.8 CONFIGURATION OF EUT SYSTEM

The EUT configuration for testing is installed on RF field strength measurement to meet the Commission's requirement and operating in a manner which intends to maximize its emission characteristics in a continuous normal application.



Table 2-1 Equipment Used in EUT System

Item	Equipment	Model No.	Length	Note
N/A				N/A

Note:

- (1) For detachable type I/O cable should be specified the length in cm in 『Length』 column.
- (2) “YES” is means “with core”; “NO” is means “without core”.

2.1.9 MEASUREMENT INSTRUMENTS

The radiated emission testing was performed according to the procedures of ANSI C63.26 2015 and FCC CFR 47 rules of 2.1046, 2.1047, 2.1049, 2.1051, 2.1053, 2.1055, 2.1057.

Radiated Test equipment					
Equipment	Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Until
EMI Test Receiver	R&S	ESU8	100372	2023.04.13	2024.04.12
Active loop Antenna	ETS	6502	00049544	2022.06.02	2025.06.01
Spectrum Analyzer	Keysight	N9010B	MY60242508	2023.04.10	2024.04.09
Bilog Antenna(30M-1G)	SCHWARZBECK	VULB 9168	2705	2022.06.05	2025.06.04
Horn Antenna(1-18G)	SCHWARZBECK	3115	10SL0060	2022.06.02	2025.06.01
Horn Antenna(18-40G)	A-INFO	LB-180400-KF	J211060273	2022.06.08	2025.06.07
Pre-amplifier(30M-1G)	EMtrace	RP01A	02019	2023.04.07	2024.04.06
Pre-amplifier(1-26.5G)	Agilent	8449B	3008A4722	2023.04.07	2024.04.06
Pre-amplifier(18-40G)	com-mw	LNPA_18-40-01	18050003	2023.04.07	2024.04.06
Wireless Communications Test Set	R&S	CMW 500	137737	2023.04.13	2024.04.12
Temperature & Humidity	KTJ	TA218B	N.A	2023.04.24	2024.04.23
Testing Software	EMC-I_V1.4.0.3_SKET				

RF Connected Test equipment					
Equipment	Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Until
Signal Generator	Keysight	N5182B	MY59100717	2023.04.10	2024.04.09
Signal Analyzer	Keysight	N9010B	MY60242508	2023.04.13	2024.04.12
Wireless Communications Test Set	R&S	CMW 500	137737	2023.04.13	2024.04.12
Temperature & Humidity	KTJ	TA218B	N/A	2023.04.24	2024.04.23
Temperature & Humidity test chamber	AISRY	LX-1000L	171200018	2023.05.10	2024.05.09
Attenuator	eastsheep	90db	N/A	2023.04.10	2024.04.09
Testing Software	MTS 8310_2.0.0.0_MWRF-TEST				

3. CONDUCTED OUTPUT POWER

3.1 DESCRIPTION OF THE CONDUCTED OUTPUT POWER MEASUREMENT

3.1.1 MEASUREMENT METHOD

A system simulator was used to establish communication with the eut. Its parameters were set to force the eut transmitting at maximum output power. The measured power in the radio frequency on the transmitter output terminals shall be reported.

Configuration follows KDB 971168 D01 v03r01.

3.1.2 TEST SETUP



3.1.3 TEST PROCEDURES

1. The transmitter output port was connected to system simulator.
2. Set EUT at maximum power through the system simulator.
3. Select lowest/middle/highest channels for each band and different modulation.
4. Measure and record the power level from the system simulator.

3.1.4 TEST RESULTS

Note: Test chart See Appendix I

4. PEAK-TO-AVERAGE RATIO

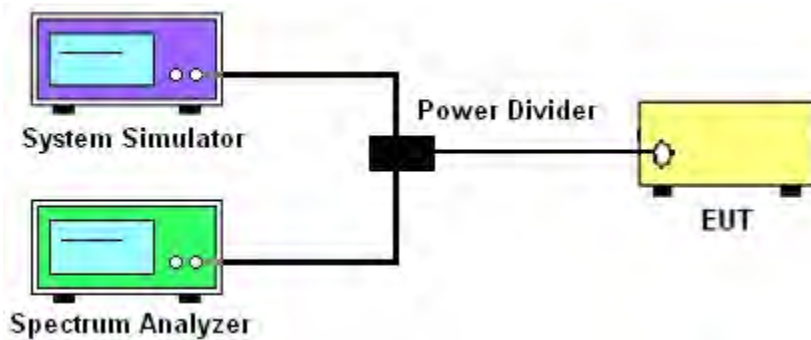
4.1 DESCRIPTION OF THE CONDUCTED OUTPUT POWER MEASUREMENT

4.1.1 MEASUREMENT METHOD

Use one of the procedures presented in 4.1.3 to measure the total peak power and record as P_{Pk}. Use one of the applicable procedures presented 4.1.3 to measure the total average power and record as P_{Avg}. Both the peak and average power levels must be expressed in the same logarithmic units (e.g., dBm). Determine the PAPR from:

$PAPR (dB) = P_{Pk} (dBm) - P_{Avg} (dBm)$.

4.1.2 TEST SETUP



4.1.3 TEST PROCEDURES

1. The testing follows FCC KDB 971168 D01 v03r01 Section 5.7 and ANSI C63.26 2015 Section 5.2.6.
2. The EUT was connected to spectrum and system simulator via a power divider
3. Select lowest, middle, and highest channels for each band and different modulation.
4. Set the test probe and measure the peak and average power of the spectrum analyzer
5. Record the deviation as Peak to Average Ratio.

	LTE					
LTE BW	1.4M	3M	5M	10M	15M	20M
Span	3MHz	6MHz	10MHz	20MHz	30MHz	40MHz
RBW	30kHz	30kHz	100kHz	100kHz	300kHz	300kHz
VBW	100kHz	100kHz	300kHz	300kHz	1000kHz	1000kHz
Detector	PK/AVG	PK/AVG	PK/AVG	PK/AVG	PK/AVG	PK/AVG
Trace	Max	Max	Max	Max	Max	Max
Sweep Count	Auto	Auto	Auto	Auto	Auto	Auto

4.1.4 TEST RESULTS

Note: Test chart See Appendix I

5. RADIATED POWER AND EFFECTIVE ISOTROPIC RADIATED POWER

5.1 DESCRIPTION OF THE ERP/EIRP MEASUREMENT

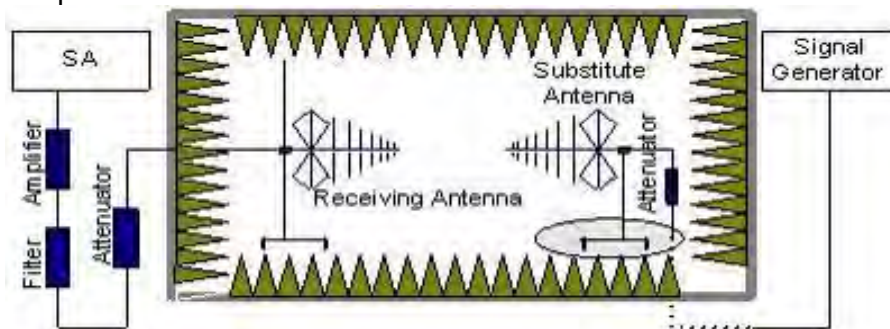
5.1.1 MEASUREMENT METHOD

Effective radiated power output measurements by substitution method according to ANSI C63.26 2015, and the spectrum analyzer configuration follows KDB 971168 D01 Power Meas. License Digital Systems. Mobile and portable (hand-held) stations operating are limited to average ERP, Equivalent isotropic radiated power output measurements by substitution method according to ANSI C63.26 2015, and the spectrum analyzer configuration follows KDB 971168 D01 Power Meas, Mobile and portable (hand-held) stations operating are limited to average EIRP.

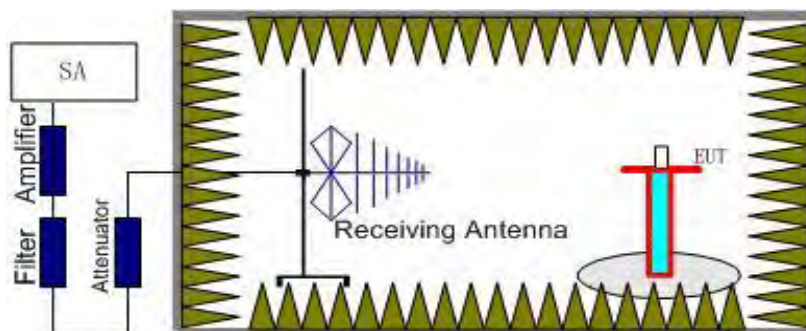
5.1.2 TEST SETUP

The procedure of radiated spurious emissions is as follows:

a) Pre-calibration With pre-calibration method, the Radiated Spurious Emissions(RSE) is calculated as, $RSE = R_x \text{ (dBuV)} + CL \text{ (dB)} + SA \text{ (dB)} + Gain \text{ (dBi)} - 107 \text{ (dBuV to dBm)}$ The SA is calibrated using following setup.



b) EUT was placed on a 1.5m non-conductive stand at a 3 m test distance from the receive antenna. A receiving antenna was placed on the antenna mast 3 m from the test item for emission measurements. The height of receiving antenna is 0.8m. The test setup refers to figure below. Detected emissions were maximized at each frequency by rotating the test item and adjusting the receiving antenna polarization. The radiated emission measurements of all non-harmonic and harmonics of the transmit frequency through the 10th harmonic measured with peak detector and 1MHz bandwidth.



Radiated emissions measurements were made only at the upper, middle, and lower carrier frequencies. It was decided that measurements at these three carrier frequencies would be sufficient to demonstrate compliance with emissions limits because it was seen that all the significant spurs occur well outside the band and no radiation was seen from a carrier in one block of any band into any of the other blocks.

The substitution method is used. Substitution values at each frequency are measured before and saved to the test software. A "reference path loss" is established and the ARpl is the attenuation of "reference path loss", and including the gain of receive antenna, the gain of the preamplifier, the cable loss and the air loss. The measurement results are obtained as described below:

$Power = P_{Mea} + AR_{pl}$

5.1.3 TEST PROCEDURES

1. The testing follows FCC KDB 971168 D01v03r01 Section 5.6 and ANSI C63.26 2015 Section 5.2.
2. The EUT was placed on a non-conductive rotating platform 1.5 meters high in a semi-anechoic chamber. The radiated emission at the fundamental frequency was measured at 3 m with a test antenna and a spectrum analyzer with Peak detector.
3. During the measurement, the system simulator parameters were set to force the EUT transmitting at maximum output power. The maximum emission was recorded from analyzer power level (LVL) from the 360 degrees rotation of the turntable and the test antenna raised and lowered over a range from 1 to 4 m in both horizontally and vertically polarized orientations.
4. Effective Isotropic Radiated Power (EIRP) was measured by substitution method according to ANSI C63.26 2015. The EUT was replaced by dipole antenna (substitution antenna) at same location and then a known power from S.G. was applied into the dipole antenna through a Tx cable, and then recorded the maximum Analyzer reading through raised and lowered the test antenna. $EIRP = S.G \text{ Level} + \text{Gain} - \text{Cable loss}$; $ERP = S.G \text{ Level} + \text{Gain} - \text{Cable loss} - 2.15$.
5. RB Set greater than bandwidth, VB Set spectrum analyzer Maximum support.

5.1.4 TEST RESULTS

Note: Test is divided into three directions, X/Y/Z. X pattern for the worst.

Note: Test chart See Appendix I

6. OCCUPIED BANDWIDTH

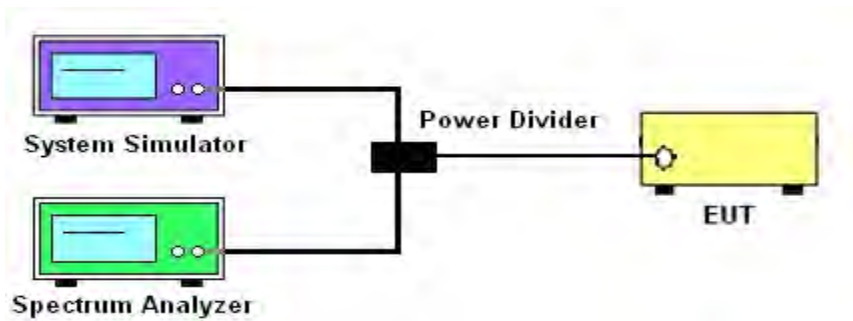
6.1 DESCRIPTION OF OCCUPIED BANDWIDTH MEASUREMENT

6.1.1 MEASUREMENT METHOD

1.The occupied bandwidth is the width of a frequency band such that, below the lower and above the upper frequency limits, the mean powers emitted are each equal to a specified percentage 0.5% of the total mean transmitted power.

2.The 26 db emission bandwidth is defined as the frequency range between two points, one above and one below the carrier frequency, at which the spectral density of the emission is attenuated 26 db below the maximum in-band spectral density of the modulated signal. spectral density (power per unit bandwidth) is to be measured with a detector of resolution bandwidth equal to approximately 1.0% of the emission bandwidth.

6.1.2 TEST SETUP



6.1.3 TEST PROCEDURES

1. The testing follows FCC KDB 971168 D01 v03r01 Section 4.2 and 4.3.
2. The EUT was connected to spectrum and system simulator via a power divider.
3. Select lowest, middle, and highest channels for each band and different modulation.
4. Set the test probe and measure the Occupied Bandwidth of the spectrum analyzer.
5. Measure and record the Occupied Bandwidth from the Spectrum Analyzer.

	LTE					
LTE BW	1.4M	3M	5M	10M	15M	20M
Span	3MHz	6MHz	10MHz	20MHz	30MHz	40MHz
RBW	30kHz	30kHz	100kHz	100kHz	300kHz	300kHz
VBW	100kHz	100kHz	300kHz	300kHz	1000kHz	1000kHz
Detector	PK	PK	PK	PK	PK	PK
Trace	Max	Max	Max	Max	Max	Max
Sweep Count	Auto	Auto	Auto	Auto	Auto	Auto

6.1.4 MEASUREMENT RESULT

Note: Test chart See Appendix I

7. CONDUCTED BAND EDGE

7.1 DESCRIPTION OF CONDUCTED BAND EDGE MEASUREMENT

7.1.1 MEASUREMENT METHOD

1. §22.917(a)

For operations in the 824 – 849 MHz band, the FCC limit is $43 + 10\log_{10}(P[\text{Watts}])$ dB below the transmitter power $P(\text{Watts})$ in a 100kHz bandwidth. However, in the 1MHz bands immediately outside and adjacent to the licensee's frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

2. §24.238 (a)

For operations in the 1850-1910 and 1930-1990 MHz band, the FCC limit is $43 + 10\log_{10}(P[\text{Watts}])$ dB below the transmitter power $P(\text{Watts})$ in a 1MHz bandwidth. However, in the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed

3. §27.53 (h)

For operations in the 1710 – 1755 MHz band, the FCC limit is $43 + 10\log_{10}(P[\text{Watts}])$ dB below the transmitter power $P(\text{Watts})$ in a 1 MHz bandwidth. However, in the 1MHz bands immediately outside and adjacent to the licensee's frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

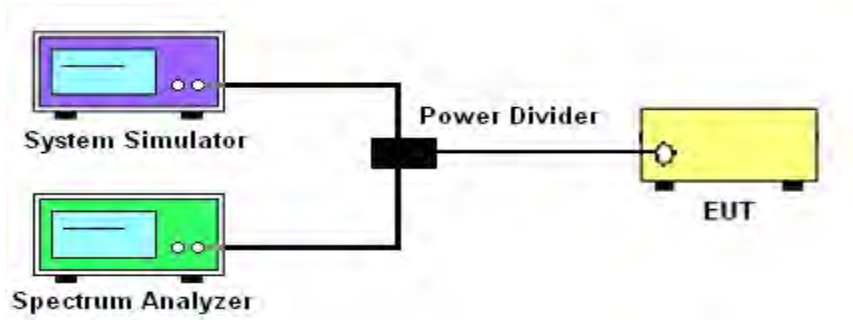
4. §27.53(m)(4)

For operations in the 2500 MHz ~ 2570 MHz band this section, the attenuation factor shall be not less than $40 + 10 \log (P)$ dB on all frequencies between the channel edge and 5 megahertz from the channel edge, $43 + 10 \log (P)$ dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and $55 + 10 \log (P)$ dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less that $43 + 10 \log (P)$ dB on all frequencies between 2490.5 MHz and 2496 MHz and $55 + 10 \log (P)$ dB at or below 2490.5 MHz. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees.

5. §27.53 (g)

For operations in the 698 -746 MHz band, the FCC limit is $43 + 10\log_{10}(P[\text{Watts}])$ dB below the transmitter power $P(\text{Watts})$ in a 100 kHz bandwidth. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

7.1.2 TEST SETUP



7.1.3 TEST PROCEDURES

1. The testing FCC KDB 971168 D01 v03r01 Section 6.0 and ANSI C63.26 2015 Section 5.7.
2. The EUT was connected to spectrum analyzer and system simulator via a power divider.
3. The band edges of low and high channels for the highest RF powers were measured. Set RBW $\geq 1\%$ EBW in the 1MHz band immediately outside and adjacent to the band edge.
4. Set spectrum analyzer with RMS/AVG detector.
5. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
6. The limit line is derived from $43 + 10\log(P)$ dB below the transmitter power P(Watts)

$$= P(W) - [43 + 10\log(P)] \text{ (dB)}$$

$$= [30 + 10\log(P)] \text{ (dBm)} - [43 + 10\log(P)] \text{ (dB)}$$

$$= -13\text{dBm}.$$

Band 7:

$$= P(W) - [55 + 10\log(P)] \text{ (dB)}$$

$$= [30 + 10\log(P)] \text{ (dBm)} - [55 + 10\log(P)] \text{ (dB)}$$

$$= -25\text{dBm}.$$

	LTE					
LTE BW	1.4M	3M	5M	10M	15M	20M
Span	12MHz	13MHz	15MHz	20MHz	25MHz	30MHz
RBW	30kHz	30kHz	100kHz	100kHz	300kHz	300kHz
VBW	100kHz	100kHz	300kHz	300kHz	1000kHz	1000kHz
Detector	RMS	RMS	RMS	RMS	RMS	RMS
Trace	Max	Max	Max	Max	Max	Max
Sweep Count	Auto	Auto	Auto	Auto	Auto	Auto

7.1.4 MEASUREMENT RESULT

Note: Test chart See Appendix I

8. CONDUCTED SPURIOUS EMISSION

8.1 DESCRIPTION OF CONDUCTED SPURIOUS EMISSION MEASUREMENT

8.1.1 MEASUREMENT METHOD

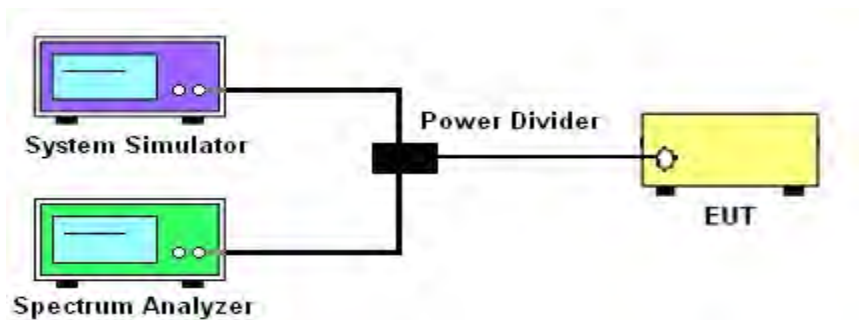
The power of any emission outside of the authorized operating frequency ranges must be lower than the transmitter power (P) by a factor of at least $43 + 10 \log (P)$ dB.

For Band 7:

The power of any emission outside of the authorized operating frequency ranges must be lower than the transmitter power (P) by a factor of at least $55 + 10 \log (P)$ dB.

It is measured by means of a calibrated spectrum analyzer and scanned from 30 MHz up to a frequency including its 10th harmonic.

8.1.2 TEST SETUP



8.1.3 TEST PROCEDURES

1. The testing FCC KDB 971168 D01 v03r01 Section 6.0 and ANSI C63.26 2015 Section 5.7.
2. The EUT was connected to spectrum analyzer and system simulator via a power divider.
3. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement
4. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking the record of maximum spurious emission.
5. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
6. The limit line is derived from $43 + 10\log(P)$ dB below the transmitter power P(Watts)
 $= P(W) - [43 + 10\log(P)] \text{ (dB)} = [30 + 10\log(P)] \text{ (dBm)} - [43 + 10\log(P)] \text{ (dB)}$
 $= -13\text{dBm}.$

For Band 7: $P(W) - [43 + 10\log(P)] \text{ (dB)} = -25\text{dBm}$

	LTE					
LTE BW	1.4M	3M	5M	10M	15M	20M
Span	Auto	Auto	Auto	Auto	Auto	Auto
RBW	1000kHz	1000kHz	1000kHz	1000kHz	1000kHz	1000kHz
VBW	3000kHz	3000kHz	3000kHz	3000kHz	3000kHz	3000kHz
Detector	PK	PK	PK	PK	PK	PK
Trace	Max	Max	Max	Max	Max	Max

8.1.4 TEST RESULTS

Note: Test chart See Appendix I

9. RADIATED SPURIOUS EMISSION

9.1 DESCRIPTION OF RADIATED SPURIOUS EMISSION

9.1.1 MEASUREMENT METHOD

The radiated spurious emission was measured by substitution method according to ANSI C63.26 2015. The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitter power (P) by a factor of at least $43 + 10 \log (P)$ dB.

For Band 7 The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitter power (P) by a factor of at least $55 + 10 \log (P)$ dB. The spectrum is scanned from 30 MHz up to a frequency including its 10th harmonic.

9.1.2 TEST SETUP

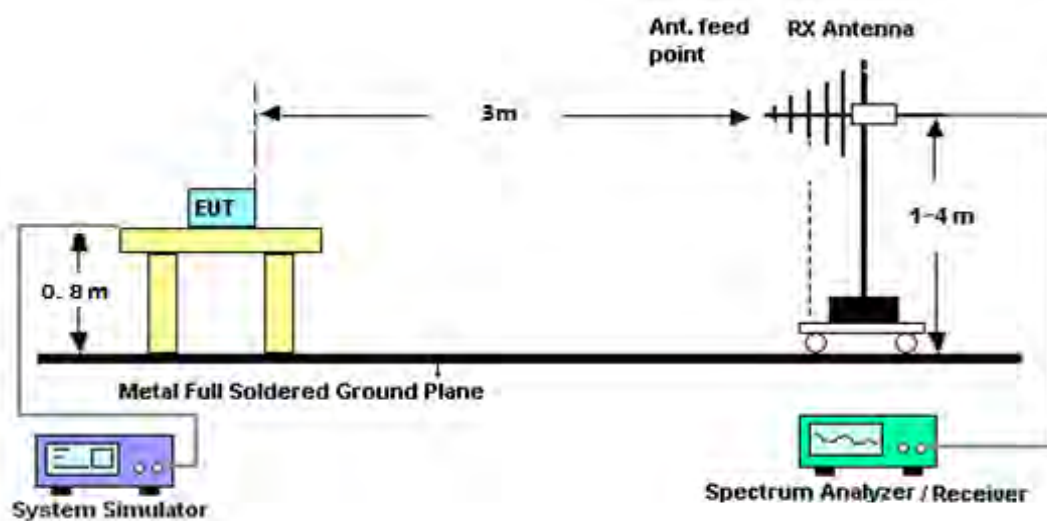
The procedure of radiated spurious emissions is as follows:

a) Pre-calibration With pre-calibration method, the Radiated Spurious Emissions(RSE) is calculated as, $RSE = Rx(\text{dBuV}) + CL(\text{dB}) + SA(\text{dB}) + \text{Gain}(\text{dBi}) - 107(\text{dBuV to dBm})$ The SA is calibrated using following setup.

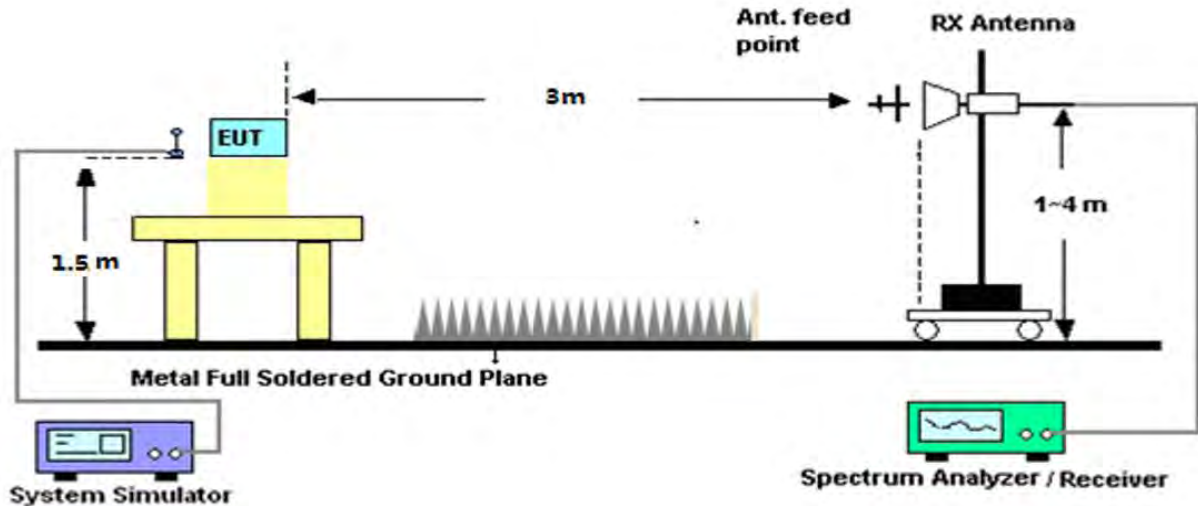
b) EUT was placed on 1.5 m non-conductive stand at a 3 m test distance from the receive antenna. A receiving antenna was placed on the antenna mast 3 m from the test item for emission measurements. The height of receiving antenna is 0.8m. The test setup refers to figure below. Detected emissions were maximized at each frequency by rotating the test item and adjusting the receiving antenna polarization. The radiated emission measurements of all non-harmonic and harmonics of the transmit frequency through the 10th harmonic measured with peak detector and 1MHz bandwidth.

Radiated emissions measurements were made only at the upper, middle, and lower carrier frequencies It was decided that measurements at these three carrier frequencies would be sufficient to demonstrate compliance with emissions limits because it was seen that all the significant spurs occur well outside the band and no radiation was seen from a carrier in one block of any band into any of the other blocks.

The substitution method is used. Substitution values at each frequency are measured before and saved to the test software. A "reference path loss" is established and the ARpl is the attenuation of "reference path loss", and including the gain of receive antenna, the gain of the preamplifier, the cable loss and the air loss. The measurement results are obtained as described below: $\text{Power} = P_{\text{Mea}} + \text{ARpl}$
For radiated test from 30MHz to 1GHz



For radiated test from above 1GHz



9.1.3 TEST PROCEDURES

1. The testing FCC KDB 971168 D01 Section 7 and ANSI C63.26 2015 Section 5.5.
2. The EUT was placed on a rotatable wooden table with 1.5 meter above ground.
3. The EUT was set 3 meters from the receiving antenna, which was mounted on the antenna tower.
4. The table was rotated 360 degrees to determine the position of the highest spurious emission.
5. The height of the receiving antenna is varied between one meter and four meters to search the maximum spurious emission for both horizontal and vertical polarizations
6. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking the record of maximum spurious emission.
7. A horn antenna was substituted in place of the EUT and was driven by a signal generator.
8. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
9. Taking the record of output power at antenna port.
10. Repeat step 7 to step 8 for another polarization.
11. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.

The limit line is derived from $43 + 10\log(P)$ dB below the transmitter power P(Watts)

$$= P(W) - [43 + 10\log(P)] \text{ (dB)}$$

$$= [30 + 10\log(P)] \text{ (dBm)} - [43 + 10\log(P)] \text{ (dB)}$$

$$= -13\text{dBm}$$

For Band 7:

The limit line is derived from $55 + 10\log(P)$ dB below the transmitter power P(Watts)

$$= [30 + 10\log(P)] \text{ (dBm)} - [55 + 10\log(P)] \text{ (dB)}$$

$$= -25\text{dBm}$$

$$P_{\text{Mea}} = S.G \text{ Level} + \text{Ant-Cable loss}; \text{Margin} = P_{\text{Mea}} - \text{Limit}.$$

9.1.4 TEST RESULTS

Note: Test chart See Appendix I

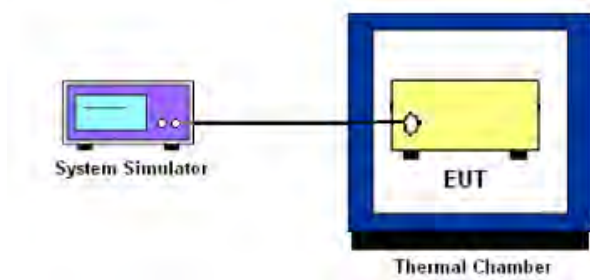
10. FREQUENCY STABILITY

10.1 DESCRIPTION OF FREQUENCY STABILITY MEASUREMENT

10.1.1 MEASUREMENT METHOD

The frequency stability shall be measured by variation of ambient temperature and variation of primary supply voltage to ensure that the fundamental emission stays within the authorized frequency block. The frequency stability of the transmitter shall be maintained within $\pm 0.00025\%$ ($\pm 2.5\text{ppm}$) of the center frequency.

10.1.2 TEST SETUP



10.1.3 TEST PROCEDURES FOR TEMPERATURE VARIATION

1. The EUT was set up in the thermal chamber and connected with the system simulator.
2. With power OFF, the temperature was decreased to -30°C and the EUT was stabilized before testing. Power was applied and the maximum change in frequency was recorded within one minute.
3. With power OFF, the temperature was raised in 10°C step up to 50°C . The EUT was stabilized at each step for at least half an hour. Power was applied and the maximum frequency change was recorded within one minute.

10.1.4 TEST PROCEDURES FOR VOLTAGE VARIATION

1. The testing follows FCC KDB 971168 D01v01r03 Section 9.
2. The EUT was placed in a temperature chamber at $25 \pm 5^{\circ}\text{C}$ and connected with the system simulator.
3. The power supply voltage to the EUT was varied from 85% to 115% of the nominal value measured at the input to the EUT.
4. The variation in frequency was measured for the worst case.

10.1.5 TEST RESULTS

Note: Test chart See Appendix I

APPENDIX I-TEST DATA

Conducted output power

Band	Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	Power (dBm)	Gain (dB)	ERP (dBm)	ERP Limit (dBm)	Verdict
Band5	1.4	20407	1	#0	QPSK	23.86	-0.71	21.00	38.45	PASS
Band5	1.4	20407	1	#Mid	QPSK	23.83	-0.71	20.97	38.45	PASS
Band5	1.4	20407	1	#Max	QPSK	23.87	-0.71	21.01	38.45	PASS
Band5	1.4	20407	3	#0	QPSK	23.61	-0.71	20.75	38.45	PASS
Band5	1.4	20407	3	#Mid	QPSK	23.65	-0.71	20.79	38.45	PASS
Band5	1.4	20407	3	#Max	QPSK	23.72	-0.71	20.86	38.45	PASS
Band5	1.4	20407	6	#0	QPSK	22.54	-0.71	19.68	38.45	PASS
Band5	1.4	20407	1	#0	16QAM	23.48	-0.71	20.62	38.45	PASS
Band5	1.4	20407	1	#Mid	16QAM	23.52	-0.71	20.66	38.45	PASS
Band5	1.4	20407	1	#Max	16QAM	23.45	-0.71	20.59	38.45	PASS
Band5	1.4	20407	3	#0	16QAM	22.70	-0.71	19.84	38.45	PASS
Band5	1.4	20407	3	#Mid	16QAM	22.78	-0.71	19.92	38.45	PASS
Band5	1.4	20407	3	#Max	16QAM	22.68	-0.71	19.82	38.45	PASS
Band5	1.4	20407	6	#0	16QAM	21.44	-0.71	18.58	38.45	PASS
Band5	1.4	20525	1	#0	QPSK	23.13	-0.71	20.27	38.45	PASS
Band5	1.4	20525	1	#Mid	QPSK	23.27	-0.71	20.41	38.45	PASS
Band5	1.4	20525	1	#Max	QPSK	23.15	-0.71	20.29	38.45	PASS
Band5	1.4	20525	3	#0	QPSK	23.37	-0.71	20.51	38.45	PASS
Band5	1.4	20525	3	#Mid	QPSK	23.41	-0.71	20.55	38.45	PASS
Band5	1.4	20525	3	#Max	QPSK	23.35	-0.71	20.49	38.45	PASS
Band5	1.4	20525	6	#0	QPSK	22.18	-0.71	19.32	38.45	PASS
Band5	1.4	20525	1	#0	16QAM	22.56	-0.71	19.70	38.45	PASS
Band5	1.4	20525	1	#Mid	16QAM	22.57	-0.71	19.71	38.45	PASS
Band5	1.4	20525	1	#Max	16QAM	22.61	-0.71	19.75	38.45	PASS
Band5	1.4	20525	3	#0	16QAM	22.12	-0.71	19.26	38.45	PASS
Band5	1.4	20525	3	#Mid	16QAM	22.10	-0.71	19.24	38.45	PASS
Band5	1.4	20525	3	#Max	16QAM	22.09	-0.71	19.23	38.45	PASS
Band5	1.4	20525	6	#0	16QAM	21.03	-0.71	18.17	38.45	PASS
Band5	1.4	20643	1	#0	QPSK	23.49	-0.71	20.63	38.45	PASS
Band5	1.4	20643	1	#Mid	QPSK	23.45	-0.71	20.59	38.45	PASS
Band5	1.4	20643	1	#Max	QPSK	23.45	-0.71	20.59	38.45	PASS
Band5	1.4	20643	3	#0	QPSK	23.42	-0.71	20.56	38.45	PASS
Band5	1.4	20643	3	#Mid	QPSK	23.31	-0.71	20.45	38.45	PASS
Band5	1.4	20643	3	#Max	QPSK	23.29	-0.71	20.43	38.45	PASS
Band5	1.4	20643	6	#0	QPSK	22.35	-0.71	19.49	38.45	PASS
Band5	1.4	20643	1	#0	16QAM	22.83	-0.71	19.97	38.45	PASS
Band5	1.4	20643	1	#Mid	16QAM	23.01	-0.71	20.15	38.45	PASS
Band5	1.4	20643	1	#Max	16QAM	23.05	-0.71	20.19	38.45	PASS
Band5	1.4	20643	3	#0	16QAM	22.51	-0.71	19.65	38.45	PASS
Band5	1.4	20643	3	#Mid	16QAM	22.60	-0.71	19.74	38.45	PASS
Band5	1.4	20643	3	#Max	16QAM	22.60	-0.71	19.74	38.45	PASS
Band5	1.4	20643	6	#0	16QAM	21.39	-0.71	18.53	38.45	PASS
Band5	3	20415	1	#0	QPSK	23.67	-0.71	20.81	38.45	PASS
Band5	3	20415	1	#Mid	QPSK	23.62	-0.71	20.76	38.45	PASS
Band5	3	20415	1	#Max	QPSK	23.60	-0.71	20.74	38.45	PASS
Band5	3	20415	8	#0	QPSK	22.61	-0.71	19.75	38.45	PASS
Band5	3	20415	8	#Mid	QPSK	22.59	-0.71	19.73	38.45	PASS
Band5	3	20415	8	#Max	QPSK	22.66	-0.71	19.80	38.45	PASS
Band5	3	20415	15	#0	QPSK	22.53	-0.71	19.67	38.45	PASS
Band5	3	20415	1	#0	16QAM	23.50	-0.71	20.64	38.45	PASS
Band5	3	20415	1	#Mid	16QAM	23.40	-0.71	20.54	38.45	PASS
Band5	3	20415	1	#Max	16QAM	23.51	-0.71	20.65	38.45	PASS
Band5	3	20415	8	#0	16QAM	21.40	-0.71	18.54	38.45	PASS
Band5	3	20415	8	#Mid	16QAM	21.38	-0.71	18.52	38.45	PASS
Band5	3	20415	8	#Max	16QAM	21.49	-0.71	18.63	38.45	PASS
Band5	3	20415	15	#0	16QAM	21.54	-0.71	18.68	38.45	PASS
Band5	3	20525	1	#0	QPSK	23.17	-0.71	20.31	38.45	PASS
Band5	3	20525	1	#Mid	QPSK	23.26	-0.71	20.40	38.45	PASS
Band5	3	20525	1	#Max	QPSK	23.18	-0.71	20.32	38.45	PASS
Band5	3	20525	8	#0	QPSK	22.09	-0.71	19.23	38.45	PASS
Band5	3	20525	8	#Mid	QPSK	22.07	-0.71	19.21	38.45	PASS

Band5	3	20525	8	#Max	QPSK	22.24	-0.71	19.38	38.45	PASS
Band5	3	20525	15	#0	QPSK	22.03	-0.71	19.17	38.45	PASS
Band5	3	20525	1	#0	16QAM	22.59	-0.71	19.73	38.45	PASS
Band5	3	20525	1	#Mid	16QAM	22.54	-0.71	19.68	38.45	PASS
Band5	3	20525	1	#Max	16QAM	22.48	-0.71	19.62	38.45	PASS
Band5	3	20525	8	#0	16QAM	21.22	-0.71	18.36	38.45	PASS
Band5	3	20525	8	#Mid	16QAM	21.26	-0.71	18.40	38.45	PASS
Band5	3	20525	8	#Max	16QAM	21.20	-0.71	18.34	38.45	PASS
Band5	3	20525	15	#0	16QAM	21.11	-0.71	18.25	38.45	PASS
Band5	3	20635	1	#0	QPSK	23.46	-0.71	20.60	38.45	PASS
Band5	3	20635	1	#Mid	QPSK	23.53	-0.71	20.67	38.45	PASS
Band5	3	20635	1	#Max	QPSK	23.50	-0.71	20.64	38.45	PASS
Band5	3	20635	8	#0	QPSK	22.23	-0.71	19.37	38.45	PASS
Band5	3	20635	8	#Mid	QPSK	22.17	-0.71	19.31	38.45	PASS
Band5	3	20635	8	#Max	QPSK	22.27	-0.71	19.41	38.45	PASS
Band5	3	20635	15	#0	QPSK	22.22	-0.71	19.36	38.45	PASS
Band5	3	20635	1	#0	16QAM	22.77	-0.71	19.91	38.45	PASS
Band5	3	20635	1	#Mid	16QAM	22.81	-0.71	19.95	38.45	PASS
Band5	3	20635	1	#Max	16QAM	22.95	-0.71	20.09	38.45	PASS
Band5	3	20635	8	#0	16QAM	20.97	-0.71	18.11	38.45	PASS
Band5	3	20635	8	#Mid	16QAM	21.05	-0.71	18.19	38.45	PASS
Band5	3	20635	8	#Max	16QAM	21.12	-0.71	18.26	38.45	PASS
Band5	3	20635	15	#0	16QAM	21.08	-0.71	18.22	38.45	PASS
Band5	5	20425	1	#0	QPSK	23.43	-0.71	20.57	38.45	PASS
Band5	5	20425	1	#Mid	QPSK	23.41	-0.71	20.55	38.45	PASS
Band5	5	20425	1	#Max	QPSK	23.27	-0.71	20.41	38.45	PASS
Band5	5	20425	12	#0	QPSK	22.51	-0.71	19.65	38.45	PASS
Band5	5	20425	12	#Mid	QPSK	22.48	-0.71	19.62	38.45	PASS
Band5	5	20425	12	#Max	QPSK	22.50	-0.71	19.64	38.45	PASS
Band5	5	20425	25	#0	QPSK	22.48	-0.71	19.62	38.45	PASS
Band5	5	20425	1	#0	16QAM	22.64	-0.71	19.78	38.45	PASS
Band5	5	20425	1	#Mid	16QAM	22.65	-0.71	19.79	38.45	PASS
Band5	5	20425	1	#Max	16QAM	22.47	-0.71	19.61	38.45	PASS
Band5	5	20425	12	#0	16QAM	21.35	-0.71	18.49	38.45	PASS
Band5	5	20425	12	#Mid	16QAM	21.30	-0.71	18.44	38.45	PASS
Band5	5	20425	12	#Max	16QAM	21.29	-0.71	18.43	38.45	PASS
Band5	5	20425	25	#0	16QAM	21.44	-0.71	18.58	38.45	PASS
Band5	5	20525	1	#0	QPSK	23.14	-0.71	20.28	38.45	PASS
Band5	5	20525	1	#Mid	QPSK	23.26	-0.71	20.40	38.45	PASS
Band5	5	20525	1	#Max	QPSK	23.11	-0.71	20.25	38.45	PASS
Band5	5	20525	12	#0	QPSK	22.03	-0.71	19.17	38.45	PASS
Band5	5	20525	12	#Mid	QPSK	22.22	-0.71	19.36	38.45	PASS
Band5	5	20525	12	#Max	QPSK	21.94	-0.71	19.08	38.45	PASS
Band5	5	20525	25	#0	QPSK	22.08	-0.71	19.22	38.45	PASS
Band5	5	20525	1	#0	16QAM	21.72	-0.71	18.86	38.45	PASS
Band5	5	20525	1	#Mid	16QAM	21.72	-0.71	18.86	38.45	PASS
Band5	5	20525	1	#Max	16QAM	21.67	-0.71	18.81	38.45	PASS
Band5	5	20525	12	#0	16QAM	20.96	-0.71	18.10	38.45	PASS
Band5	5	20525	12	#Mid	16QAM	20.89	-0.71	18.03	38.45	PASS
Band5	5	20525	12	#Max	16QAM	20.86	-0.71	18.00	38.45	PASS
Band5	5	20525	25	#0	16QAM	21.09	-0.71	18.23	38.45	PASS
Band5	5	20625	1	#0	QPSK	23.04	-0.71	20.18	38.45	PASS
Band5	5	20625	1	#Mid	QPSK	23.19	-0.71	20.33	38.45	PASS
Band5	5	20625	1	#Max	QPSK	23.22	-0.71	20.36	38.45	PASS
Band5	5	20625	12	#0	QPSK	22.13	-0.71	19.27	38.45	PASS
Band5	5	20625	12	#Mid	QPSK	22.14	-0.71	19.28	38.45	PASS
Band5	5	20625	12	#Max	QPSK	22.20	-0.71	19.34	38.45	PASS
Band5	5	20625	25	#0	QPSK	22.12	-0.71	19.26	38.45	PASS
Band5	5	20625	1	#0	16QAM	22.00	-0.71	19.14	38.45	PASS
Band5	5	20625	1	#Mid	16QAM	22.13	-0.71	19.27	38.45	PASS
Band5	5	20625	1	#Max	16QAM	22.29	-0.71	19.43	38.45	PASS
Band5	5	20625	12	#0	16QAM	21.06	-0.71	18.20	38.45	PASS
Band5	5	20625	12	#Mid	16QAM	20.98	-0.71	18.12	38.45	PASS
Band5	5	20625	12	#Max	16QAM	21.03	-0.71	18.17	38.45	PASS
Band5	5	20625	25	#0	16QAM	20.91	-0.71	18.05	38.45	PASS
Band5	10	20450	1	#0	QPSK	23.60	-0.71	20.74	38.45	PASS
Band5	10	20450	1	#Mid	QPSK	23.27	-0.71	20.41	38.45	PASS
Band5	10	20450	1	#Max	QPSK	23.39	-0.71	20.53	38.45	PASS

Band5	10	20450	25	#0	QPSK	22.46	-0.71	19.60	38.45	PASS
Band5	10	20450	25	#Mid	QPSK	22.37	-0.71	19.51	38.45	PASS
Band5	10	20450	25	#Max	QPSK	22.29	-0.71	19.43	38.45	PASS
Band5	10	20450	50	#0	QPSK	22.34	-0.71	19.48	38.45	PASS
Band5	10	20450	1	#0	16QAM	23.42	-0.71	20.56	38.45	PASS
Band5	10	20450	1	#Mid	16QAM	23.21	-0.71	20.35	38.45	PASS
Band5	10	20450	1	#Max	16QAM	23.19	-0.71	20.33	38.45	PASS
Band5	10	20450	25	#0	16QAM	21.29	-0.71	18.43	38.45	PASS
Band5	10	20450	25	#Mid	16QAM	21.31	-0.71	18.45	38.45	PASS
Band5	10	20450	25	#Max	16QAM	21.12	-0.71	18.26	38.45	PASS
Band5	10	20450	50	#0	16QAM	21.35	-0.71	18.49	38.45	PASS
Band5	10	20525	1	#0	QPSK	23.25	-0.71	20.39	38.45	PASS
Band5	10	20525	1	#Mid	QPSK	23.37	-0.71	20.51	38.45	PASS
Band5	10	20525	1	#Max	QPSK	23.31	-0.71	20.45	38.45	PASS
Band5	10	20525	25	#0	QPSK	22.04	-0.71	19.18	38.45	PASS
Band5	10	20525	25	#Mid	QPSK	22.07	-0.71	19.21	38.45	PASS
Band5	10	20525	25	#Max	QPSK	22.03	-0.71	19.17	38.45	PASS
Band5	10	20525	50	#0	QPSK	22.12	-0.71	19.26	38.45	PASS
Band5	10	20525	1	#0	16QAM	22.21	-0.71	19.35	38.45	PASS
Band5	10	20525	1	#Mid	16QAM	22.05	-0.71	19.19	38.45	PASS
Band5	10	20525	1	#Max	16QAM	22.22	-0.71	19.36	38.45	PASS
Band5	10	20525	25	#0	16QAM	21.11	-0.71	18.25	38.45	PASS
Band5	10	20525	25	#Mid	16QAM	21.12	-0.71	18.26	38.45	PASS
Band5	10	20525	25	#Max	16QAM	21.05	-0.71	18.19	38.45	PASS
Band5	10	20525	50	#0	16QAM	21.12	-0.71	18.26	38.45	PASS
Band5	10	20600	1	#0	QPSK	23.06	-0.71	20.20	38.45	PASS
Band5	10	20600	1	#Mid	QPSK	23.22	-0.71	20.36	38.45	PASS
Band5	10	20600	1	#Max	QPSK	23.33	-0.71	20.47	38.45	PASS
Band5	10	20600	25	#0	QPSK	22.15	-0.71	19.29	38.45	PASS
Band5	10	20600	25	#Mid	QPSK	22.32	-0.71	19.46	38.45	PASS
Band5	10	20600	25	#Max	QPSK	22.03	-0.71	19.17	38.45	PASS
Band5	10	20600	50	#0	QPSK	22.42	-0.71	19.56	38.45	PASS
Band5	10	20600	1	#0	16QAM	22.00	-0.71	19.14	38.45	PASS
Band5	10	20600	1	#Mid	16QAM	22.30	-0.71	19.44	38.45	PASS
Band5	10	20600	1	#Max	16QAM	22.30	-0.71	19.44	38.45	PASS
Band5	10	20600	25	#0	16QAM	20.99	-0.71	18.13	38.45	PASS
Band5	10	20600	25	#Mid	16QAM	21.03	-0.71	18.17	38.45	PASS
Band5	10	20600	25	#Max	16QAM	21.01	-0.71	18.15	38.45	PASS
Band5	10	20600	50	#0	16QAM	21.06	-0.71	18.20	38.45	PASS

Band	Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP Limit (dBm)	Verdict
Band40(2350-2360)	5	39175	1	#0	QPSK	16.80	1.14	17.94	23.98	PASS
Band40(2350-2360)	5	39175	1	#Mid	QPSK	16.86	1.14	18.00	23.98	PASS
Band40(2350-2360)	5	39175	1	#Max	QPSK	16.77	1.14	17.91	23.98	PASS
Band40(2350-2360)	5	39175	12	#0	QPSK	16.24	1.14	17.38	23.98	PASS
Band40(2350-2360)	5	39175	12	#Mid	QPSK	16.19	1.14	17.33	23.98	PASS
Band40(2350-2360)	5	39175	12	#Max	QPSK	16.24	1.14	17.38	23.98	PASS
Band40(2350-2360)	5	39175	25	#0	QPSK	16.31	1.14	17.45	23.98	PASS
Band40(2350-2360)	5	39175	1	#0	16QAM	16.45	1.14	17.59	23.98	PASS
Band40(2350-2360)	5	39175	1	#Mid	16QAM	16.44	1.14	17.58	23.98	PASS
Band40(2350-2360)	5	39175	1	#Max	16QAM	16.43	1.14	17.57	23.98	PASS
Band40(2350-2360)	5	39175	12	#0	16QAM	15.57	1.14	16.71	23.98	PASS
Band40(2350-2360)	5	39175	12	#Mid	16QAM	15.53	1.14	16.67	23.98	PASS
Band40(2350-2360)	5	39175	12	#Max	16QAM	15.57	1.14	16.71	23.98	PASS
Band40(2350-2360)	5	39175	25	#0	16QAM	15.60	1.14	16.74	23.98	PASS
Band40(2350-2360)	5	39200	1	#0	QPSK	16.80	1.14	17.94	23.98	PASS
Band40(2350-2360)	5	39200	1	#Mid	QPSK	16.87	1.14	18.01	23.98	PASS
Band40(2350-2360)	5	39200	1	#Max	QPSK	16.79	1.14	17.93	23.98	PASS
Band40(2350-2360)	5	39200	12	#0	QPSK	16.20	1.14	17.34	23.98	PASS
Band40(2350-2360)	5	39200	12	#Mid	QPSK	16.18	1.14	17.32	23.98	PASS
Band40(2350-2360)	5	39200	12	#Max	QPSK	16.22	1.14	17.36	23.98	PASS
Band40(2350-2360)	5	39200	25	#0	QPSK	16.25	1.14	17.39	23.98	PASS
Band40(2350-2360)	5	39200	1	#0	16QAM	16.70	1.14	17.84	23.98	PASS
Band40(2350-2360)	5	39200	1	#Mid	16QAM	16.76	1.14	17.90	23.98	PASS
Band40(2350-2360)	5	39200	1	#Max	16QAM	16.71	1.14	17.85	23.98	PASS
Band40(2350-2360)	5	39200	12	#0	16QAM	15.51	1.14	16.65	23.98	PASS
Band40(2350-2360)	5	39200	12	#Mid	16QAM	15.50	1.14	16.64	23.98	PASS
Band40(2350-2360)	5	39200	12	#Max	16QAM	15.53	1.14	16.67	23.98	PASS
Band40(2350-2360)	5	39200	25	#0	16QAM	15.52	1.14	16.66	23.98	PASS
Band40(2350-2360)	5	39225	1	#0	QPSK	16.78	1.14	17.92	23.98	PASS
Band40(2350-2360)	5	39225	1	#Mid	QPSK	16.83	1.14	17.97	23.98	PASS
Band40(2350-2360)	5	39225	1	#Max	QPSK	16.79	1.14	17.93	23.98	PASS
Band40(2350-2360)	5	39225	12	#0	QPSK	16.18	1.14	17.32	23.98	PASS
Band40(2350-2360)	5	39225	12	#Mid	QPSK	16.18	1.14	17.32	23.98	PASS
Band40(2350-2360)	5	39225	12	#Max	QPSK	16.19	1.14	17.33	23.98	PASS
Band40(2350-2360)	5	39225	25	#0	QPSK	16.22	1.14	17.36	23.98	PASS
Band40(2350-2360)	5	39225	1	#0	16QAM	16.37	1.14	17.51	23.98	PASS
Band40(2350-2360)	5	39225	1	#Mid	16QAM	16.41	1.14	17.55	23.98	PASS
Band40(2350-2360)	5	39225	1	#Max	16QAM	16.37	1.14	17.51	23.98	PASS
Band40(2350-2360)	5	39225	12	#0	16QAM	15.46	1.14	16.60	23.98	PASS
Band40(2350-2360)	5	39225	12	#Mid	16QAM	15.42	1.14	16.56	23.98	PASS
Band40(2350-2360)	5	39225	12	#Max	16QAM	15.46	1.14	16.60	23.98	PASS
Band40(2350-2360)	5	39225	25	#0	16QAM	15.54	1.14	16.68	23.98	PASS
Band40(2350-2360)	10	39200	1	#0	QPSK	16.92	1.14	18.06	23.98	PASS
Band40(2350-2360)	10	39200	1	#Mid	QPSK	16.77	1.14	17.91	23.98	PASS
Band40(2350-2360)	10	39200	1	#Max	QPSK	16.89	1.14	18.03	23.98	PASS
Band40(2350-2360)	10	39200	25	#0	QPSK	16.28	1.14	17.42	23.98	PASS
Band40(2350-2360)	10	39200	25	#Mid	QPSK	16.24	1.14	17.38	23.98	PASS
Band40(2350-2360)	10	39200	25	#Max	QPSK	16.27	1.14	17.41	23.98	PASS
Band40(2350-2360)	10	39200	50	#0	QPSK	16.31	1.14	17.45	23.98	PASS
Band40(2350-2360)	10	39200	1	#0	16QAM	16.29	1.14	17.43	23.98	PASS
Band40(2350-2360)	10	39200	1	#Mid	16QAM	16.23	1.14	17.37	23.98	PASS
Band40(2350-2360)	10	39200	1	#Max	16QAM	16.28	1.14	17.42	23.98	PASS
Band40(2350-2360)	10	39200	25	#0	16QAM	15.60	1.14	16.74	23.98	PASS
Band40(2350-2360)	10	39200	25	#Mid	16QAM	15.56	1.14	16.70	23.98	PASS
Band40(2350-2360)	10	39200	25	#Max	16QAM	15.60	1.14	16.74	23.98	PASS
Band40(2350-2360)	10	39200	50	#0	16QAM	15.64	1.14	16.78	23.98	PASS
Band40(2305-2315)	5	38725	1	#0	QPSK	16.41	1.14	17.55	23.98	PASS
Band40(2305-2315)	5	38725	1	#Mid	QPSK	16.43	1.14	17.57	23.98	PASS
Band40(2305-2315)	5	38725	1	#Max	QPSK	16.36	1.14	17.50	23.98	PASS
Band40(2305-2315)	5	38725	12	#0	QPSK	15.85	1.14	16.99	23.98	PASS
Band40(2305-2315)	5	38725	12	#Mid	QPSK	15.75	1.14	16.89	23.98	PASS
Band40(2305-2315)	5	38725	12	#Max	QPSK	15.81	1.14	16.95	23.98	PASS
Band40(2305-2315)	5	38725	25	#0	QPSK	15.88	1.14	17.02	23.98	PASS
Band40(2305-2315)	5	38725	1	#0	16QAM	15.99	1.14	17.13	23.98	PASS

Band40(2305-2315)	5	38725	1	#Mid	16QAM	15.98	1.14	17.12	23.98	PASS
Band40(2305-2315)	5	38725	1	#Max	16QAM	15.92	1.14	17.06	23.98	PASS
Band40(2305-2315)	5	38725	12	#0	16QAM	13.39	1.14	14.53	23.98	PASS
Band40(2305-2315)	5	38725	12	#Mid	16QAM	13.36	1.14	14.50	23.98	PASS
Band40(2305-2315)	5	38725	12	#Max	16QAM	13.33	1.14	14.47	23.98	PASS
Band40(2305-2315)	5	38725	25	#0	16QAM	13.45	1.14	14.59	23.98	PASS
Band40(2305-2315)	5	38750	1	#0	QPSK	16.32	1.14	17.46	23.98	PASS
Band40(2305-2315)	5	38750	1	#Mid	QPSK	16.37	1.14	17.51	23.98	PASS
Band40(2305-2315)	5	38750	1	#Max	QPSK	16.28	1.14	17.42	23.98	PASS
Band40(2305-2315)	5	38750	12	#0	QPSK	15.78	1.14	16.92	23.98	PASS
Band40(2305-2315)	5	38750	12	#Mid	QPSK	15.75	1.14	16.89	23.98	PASS
Band40(2305-2315)	5	38750	12	#Max	QPSK	15.79	1.14	16.93	23.98	PASS
Band40(2305-2315)	5	38750	25	#0	QPSK	15.83	1.14	16.97	23.98	PASS
Band40(2305-2315)	5	38750	1	#0	16QAM	15.97	1.14	17.11	23.98	PASS
Band40(2305-2315)	5	38750	1	#Mid	16QAM	15.96	1.14	17.10	23.98	PASS
Band40(2305-2315)	5	38750	1	#Max	16QAM	15.92	1.14	17.06	23.98	PASS
Band40(2305-2315)	5	38750	12	#0	16QAM	13.41	1.14	14.55	23.98	PASS
Band40(2305-2315)	5	38750	12	#Mid	16QAM	13.38	1.14	14.52	23.98	PASS
Band40(2305-2315)	5	38750	12	#Max	16QAM	13.38	1.14	14.52	23.98	PASS
Band40(2305-2315)	5	38750	25	#0	16QAM	13.33	1.14	14.47	23.98	PASS
Band40(2305-2315)	5	38775	1	#0	QPSK	16.33	1.14	17.47	23.98	PASS
Band40(2305-2315)	5	38775	1	#Mid	QPSK	16.34	1.14	17.48	23.98	PASS
Band40(2305-2315)	5	38775	1	#Max	QPSK	16.29	1.14	17.43	23.98	PASS
Band40(2305-2315)	5	38775	12	#0	QPSK	15.76	1.14	16.90	23.98	PASS
Band40(2305-2315)	5	38775	12	#Mid	QPSK	15.73	1.14	16.87	23.98	PASS
Band40(2305-2315)	5	38775	12	#Max	QPSK	15.76	1.14	16.90	23.98	PASS
Band40(2305-2315)	5	38775	25	#0	QPSK	15.78	1.14	16.92	23.98	PASS
Band40(2305-2315)	5	38775	1	#0	16QAM	16.23	1.14	17.37	23.98	PASS
Band40(2305-2315)	5	38775	1	#Mid	16QAM	16.24	1.14	17.38	23.98	PASS
Band40(2305-2315)	5	38775	1	#Max	16QAM	16.21	1.14	17.35	23.98	PASS
Band40(2305-2315)	5	38775	12	#0	16QAM	13.33	1.14	14.47	23.98	PASS
Band40(2305-2315)	5	38775	12	#Mid	16QAM	13.32	1.14	14.46	23.98	PASS
Band40(2305-2315)	5	38775	12	#Max	16QAM	13.34	1.14	14.48	23.98	PASS
Band40(2305-2315)	5	38775	25	#0	16QAM	13.28	1.14	14.42	23.98	PASS
Band40(2305-2315)	10	38750	1	#0	QPSK	16.47	1.14	17.61	23.98	PASS
Band40(2305-2315)	10	38750	1	#Mid	QPSK	16.34	1.14	17.48	23.98	PASS
Band40(2305-2315)	10	38750	1	#Max	QPSK	16.37	1.14	17.51	23.98	PASS
Band40(2305-2315)	10	38750	25	#0	QPSK	15.87	1.14	17.01	23.98	PASS
Band40(2305-2315)	10	38750	25	#Mid	QPSK	15.78	1.14	16.92	23.98	PASS
Band40(2305-2315)	10	38750	25	#Max	QPSK	15.84	1.14	16.98	23.98	PASS
Band40(2305-2315)	10	38750	50	#0	QPSK	15.93	1.14	17.07	23.98	PASS
Band40(2305-2315)	10	38750	1	#0	16QAM	15.88	1.14	17.02	23.98	PASS
Band40(2305-2315)	10	38750	1	#Mid	16QAM	15.68	1.14	16.82	23.98	PASS
Band40(2305-2315)	10	38750	1	#Max	16QAM	15.80	1.14	16.94	23.98	PASS
Band40(2305-2315)	10	38750	25	#0	16QAM	13.44	1.14	14.58	23.98	PASS
Band40(2305-2315)	10	38750	25	#Mid	16QAM	13.43	1.14	14.57	23.98	PASS
Band40(2305-2315)	10	38750	25	#Max	16QAM	13.41	1.14	14.55	23.98	PASS
Band40(2305-2315)	10	38750	50	#0	16QAM	13.50	1.14	14.64	23.98	PASS

Band	Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	Power (dBm)	Gain (dB)	EIRP (dBm)	EIRP Limit (dBm)	Verdict
Band41(2555-2655)	5	40265	1	#0	QPSK	21.21	1.12	22.33	33.01	PASS
Band41(2555-2655)	5	40265	1	#Mid	QPSK	21.20	1.12	22.32	33.01	PASS
Band41(2555-2655)	5	40265	1	#Max	QPSK	21.15	1.12	22.27	33.01	PASS
Band41(2555-2655)	5	40265	12	#0	QPSK	20.23	1.12	21.35	33.01	PASS
Band41(2555-2655)	5	40265	12	#Mid	QPSK	20.22	1.12	21.34	33.01	PASS
Band41(2555-2655)	5	40265	12	#Max	QPSK	20.26	1.12	21.38	33.01	PASS
Band41(2555-2655)	5	40265	25	#0	QPSK	20.18	1.12	21.30	33.01	PASS
Band41(2555-2655)	5	40265	1	#0	16QAM	20.00	1.12	21.12	33.01	PASS
Band41(2555-2655)	5	40265	1	#Mid	16QAM	19.92	1.12	21.04	33.01	PASS
Band41(2555-2655)	5	40265	1	#Max	16QAM	19.88	1.12	21.00	33.01	PASS
Band41(2555-2655)	5	40265	12	#0	16QAM	19.24	1.12	20.36	33.01	PASS
Band41(2555-2655)	5	40265	12	#Mid	16QAM	19.17	1.12	20.29	33.01	PASS
Band41(2555-2655)	5	40265	12	#Max	16QAM	19.14	1.12	20.26	33.01	PASS
Band41(2555-2655)	5	40265	25	#0	16QAM	19.29	1.12	20.41	33.01	PASS
Band41(2555-2655)	5	40740	1	#0	QPSK	20.11	1.12	21.23	33.01	PASS
Band41(2555-2655)	5	40740	1	#Mid	QPSK	20.14	1.12	21.26	33.01	PASS
Band41(2555-2655)	5	40740	1	#Max	QPSK	20.21	1.12	21.33	33.01	PASS
Band41(2555-2655)	5	40740	12	#0	QPSK	19.38	1.12	20.50	33.01	PASS
Band41(2555-2655)	5	40740	12	#Mid	QPSK	19.32	1.12	20.44	33.01	PASS
Band41(2555-2655)	5	40740	12	#Max	QPSK	19.34	1.12	20.46	33.01	PASS
Band41(2555-2655)	5	40740	25	#0	QPSK	19.30	1.12	20.42	33.01	PASS
Band41(2555-2655)	5	40740	1	#0	16QAM	19.62	1.12	20.74	33.01	PASS
Band41(2555-2655)	5	40740	1	#Mid	16QAM	19.60	1.12	20.72	33.01	PASS
Band41(2555-2655)	5	40740	1	#Max	16QAM	19.58	1.12	20.70	33.01	PASS
Band41(2555-2655)	5	40740	12	#0	16QAM	18.41	1.12	19.53	33.01	PASS
Band41(2555-2655)	5	40740	12	#Mid	16QAM	18.34	1.12	19.46	33.01	PASS
Band41(2555-2655)	5	40740	12	#Max	16QAM	18.33	1.12	19.45	33.01	PASS
Band41(2555-2655)	5	40740	25	#0	16QAM	18.48	1.12	19.60	33.01	PASS
Band41(2555-2655)	5	41215	1	#0	QPSK	20.56	1.12	21.68	33.01	PASS
Band41(2555-2655)	5	41215	1	#Mid	QPSK	20.55	1.12	21.67	33.01	PASS
Band41(2555-2655)	5	41215	1	#Max	QPSK	20.58	1.12	21.70	33.01	PASS
Band41(2555-2655)	5	41215	12	#0	QPSK	19.28	1.12	20.40	33.01	PASS
Band41(2555-2655)	5	41215	12	#Mid	QPSK	19.26	1.12	20.38	33.01	PASS
Band41(2555-2655)	5	41215	12	#Max	QPSK	19.41	1.12	20.53	33.01	PASS
Band41(2555-2655)	5	41215	25	#0	QPSK	19.32	1.12	20.44	33.01	PASS
Band41(2555-2655)	5	41215	1	#0	16QAM	19.13	1.12	20.25	33.01	PASS
Band41(2555-2655)	5	41215	1	#Mid	16QAM	19.05	1.12	20.17	33.01	PASS
Band41(2555-2655)	5	41215	1	#Max	16QAM	19.24	1.12	20.36	33.01	PASS
Band41(2555-2655)	5	41215	12	#0	16QAM	18.13	1.12	19.25	33.01	PASS
Band41(2555-2655)	5	41215	12	#Mid	16QAM	18.28	1.12	19.40	33.01	PASS
Band41(2555-2655)	5	41215	12	#Max	16QAM	18.50	1.12	19.62	33.01	PASS
Band41(2555-2655)	5	41215	25	#0	16QAM	18.55	1.12	19.67	33.01	PASS
Band41(2555-2655)	10	40290	1	#0	QPSK	21.29	1.12	22.41	33.01	PASS
Band41(2555-2655)	10	40290	1	#Mid	QPSK	21.19	1.12	22.31	33.01	PASS
Band41(2555-2655)	10	40290	1	#Max	QPSK	21.32	1.12	22.44	33.01	PASS
Band41(2555-2655)	10	40290	25	#0	QPSK	20.13	1.12	21.25	33.01	PASS
Band41(2555-2655)	10	40290	25	#Mid	QPSK	20.23	1.12	21.35	33.01	PASS
Band41(2555-2655)	10	40290	25	#Max	QPSK	20.19	1.12	21.31	33.01	PASS
Band41(2555-2655)	10	40290	50	#0	QPSK	20.24	1.12	21.36	33.01	PASS
Band41(2555-2655)	10	40290	1	#0	16QAM	20.71	1.12	21.83	33.01	PASS
Band41(2555-2655)	10	40290	1	#Mid	16QAM	20.75	1.12	21.87	33.01	PASS
Band41(2555-2655)	10	40290	1	#Max	16QAM	20.66	1.12	21.78	33.01	PASS
Band41(2555-2655)	10	40290	25	#0	16QAM	19.22	1.12	20.34	33.01	PASS
Band41(2555-2655)	10	40290	25	#Mid	16QAM	19.00	1.12	20.12	33.01	PASS
Band41(2555-2655)	10	40290	25	#Max	16QAM	19.21	1.12	20.33	33.01	PASS
Band41(2555-2655)	10	40290	50	#0	16QAM	19.12	1.12	20.24	33.01	PASS
Band41(2555-2655)	10	40740	1	#0	QPSK	20.55	1.12	21.67	33.01	PASS
Band41(2555-2655)	10	40740	1	#Mid	QPSK	20.41	1.12	21.53	33.01	PASS
Band41(2555-2655)	10	40740	1	#Max	QPSK	20.45	1.12	21.57	33.01	PASS
Band41(2555-2655)	10	40740	25	#0	QPSK	19.45	1.12	20.57	33.01	PASS
Band41(2555-2655)	10	40740	25	#Mid	QPSK	19.40	1.12	20.52	33.01	PASS
Band41(2555-2655)	10	40740	25	#Max	QPSK	19.40	1.12	20.52	33.01	PASS
Band41(2555-2655)	10	40740	50	#0	QPSK	19.31	1.12	20.43	33.01	PASS
Band41(2555-2655)	10	40740	1	#0	16QAM	18.68	1.12	19.80	33.01	PASS

Band41(2555-2655)	10	40740	1	#Mid	16QAM	18.64	1.12	19.76	33.01	PASS
Band41(2555-2655)	10	40740	1	#Max	16QAM	18.54	1.12	19.66	33.01	PASS
Band41(2555-2655)	10	40740	25	#0	16QAM	18.46	1.12	19.58	33.01	PASS
Band41(2555-2655)	10	40740	25	#Mid	16QAM	18.44	1.12	19.56	33.01	PASS
Band41(2555-2655)	10	40740	25	#Max	16QAM	18.17	1.12	19.29	33.01	PASS
Band41(2555-2655)	10	40740	50	#0	16QAM	18.46	1.12	19.58	33.01	PASS
Band41(2555-2655)	10	41190	1	#0	QPSK	20.53	1.12	21.65	33.01	PASS
Band41(2555-2655)	10	41190	1	#Mid	QPSK	20.49	1.12	21.61	33.01	PASS
Band41(2555-2655)	10	41190	1	#Max	QPSK	20.56	1.12	21.68	33.01	PASS
Band41(2555-2655)	10	41190	25	#0	QPSK	19.43	1.12	20.55	33.01	PASS
Band41(2555-2655)	10	41190	25	#Mid	QPSK	19.41	1.12	20.53	33.01	PASS
Band41(2555-2655)	10	41190	25	#Max	QPSK	19.30	1.12	20.42	33.01	PASS
Band41(2555-2655)	10	41190	50	#0	QPSK	19.41	1.12	20.53	33.01	PASS
Band41(2555-2655)	10	41190	1	#0	16QAM	20.22	1.12	21.34	33.01	PASS
Band41(2555-2655)	10	41190	1	#Mid	16QAM	20.06	1.12	21.18	33.01	PASS
Band41(2555-2655)	10	41190	1	#Max	16QAM	20.14	1.12	21.26	33.01	PASS
Band41(2555-2655)	10	41190	25	#0	16QAM	18.27	1.12	19.39	33.01	PASS
Band41(2555-2655)	10	41190	25	#Mid	16QAM	18.29	1.12	19.41	33.01	PASS
Band41(2555-2655)	10	41190	25	#Max	16QAM	18.40	1.12	19.52	33.01	PASS
Band41(2555-2655)	10	41190	50	#0	16QAM	18.37	1.12	19.49	33.01	PASS
Band41(2555-2655)	15	40315	1	#0	QPSK	21.17	1.12	22.29	33.01	PASS
Band41(2555-2655)	15	40315	1	#Mid	QPSK	21.22	1.12	22.34	33.01	PASS
Band41(2555-2655)	15	40315	1	#Max	QPSK	21.38	1.12	22.50	33.01	PASS
Band41(2555-2655)	15	40315	36	#0	QPSK	20.19	1.12	21.31	33.01	PASS
Band41(2555-2655)	15	40315	36	#Mid	QPSK	20.13	1.12	21.25	33.01	PASS
Band41(2555-2655)	15	40315	36	#Max	QPSK	20.16	1.12	21.28	33.01	PASS
Band41(2555-2655)	15	40315	75	#0	QPSK	20.17	1.12	21.29	33.01	PASS
Band41(2555-2655)	15	40315	1	#0	16QAM	20.70	1.12	21.82	33.01	PASS
Band41(2555-2655)	15	40315	1	#Mid	16QAM	20.64	1.12	21.76	33.01	PASS
Band41(2555-2655)	15	40315	1	#Max	16QAM	20.86	1.12	21.98	33.01	PASS
Band41(2555-2655)	15	40315	36	#0	16QAM	19.08	1.12	20.20	33.01	PASS
Band41(2555-2655)	15	40315	36	#Mid	16QAM	19.32	1.12	20.44	33.01	PASS
Band41(2555-2655)	15	40315	36	#Max	16QAM	19.14	1.12	20.26	33.01	PASS
Band41(2555-2655)	15	40315	75	#0	16QAM	19.28	1.12	20.40	33.01	PASS
Band41(2555-2655)	15	40740	1	#0	QPSK	20.62	1.12	21.74	33.01	PASS
Band41(2555-2655)	15	40740	1	#Mid	QPSK	20.43	1.12	21.55	33.01	PASS
Band41(2555-2655)	15	40740	1	#Max	QPSK	20.32	1.12	21.44	33.01	PASS
Band41(2555-2655)	15	40740	36	#0	QPSK	19.38	1.12	20.50	33.01	PASS
Band41(2555-2655)	15	40740	36	#Mid	QPSK	19.37	1.12	20.49	33.01	PASS
Band41(2555-2655)	15	40740	36	#Max	QPSK	19.31	1.12	20.43	33.01	PASS
Band41(2555-2655)	15	40740	75	#0	QPSK	19.30	1.12	20.42	33.01	PASS
Band41(2555-2655)	15	40740	1	#0	16QAM	18.78	1.12	19.90	33.01	PASS
Band41(2555-2655)	15	40740	1	#Mid	16QAM	18.61	1.12	19.73	33.01	PASS
Band41(2555-2655)	15	40740	1	#Max	16QAM	18.73	1.12	19.85	33.01	PASS
Band41(2555-2655)	15	40740	36	#0	16QAM	18.69	1.12	19.81	33.01	PASS
Band41(2555-2655)	15	40740	36	#Mid	16QAM	18.55	1.12	19.67	33.01	PASS
Band41(2555-2655)	15	40740	36	#Max	16QAM	18.49	1.12	19.61	33.01	PASS
Band41(2555-2655)	15	40740	75	#0	16QAM	18.56	1.12	19.68	33.01	PASS
Band41(2555-2655)	15	41165	1	#0	QPSK	20.46	1.12	21.58	33.01	PASS
Band41(2555-2655)	15	41165	1	#Mid	QPSK	20.43	1.12	21.55	33.01	PASS
Band41(2555-2655)	15	41165	1	#Max	QPSK	20.44	1.12	21.56	33.01	PASS
Band41(2555-2655)	15	41165	36	#0	QPSK	19.44	1.12	20.56	33.01	PASS
Band41(2555-2655)	15	41165	36	#Mid	QPSK	19.48	1.12	20.60	33.01	PASS
Band41(2555-2655)	15	41165	36	#Max	QPSK	19.22	1.12	20.34	33.01	PASS
Band41(2555-2655)	15	41165	75	#0	QPSK	19.46	1.12	20.58	33.01	PASS
Band41(2555-2655)	15	41165	1	#0	16QAM	19.84	1.12	20.96	33.01	PASS
Band41(2555-2655)	15	41165	1	#Mid	16QAM	19.57	1.12	20.69	33.01	PASS
Band41(2555-2655)	15	41165	1	#Max	16QAM	19.84	1.12	20.96	33.01	PASS
Band41(2555-2655)	15	41165	36	#0	16QAM	18.48	1.12	19.60	33.01	PASS
Band41(2555-2655)	15	41165	36	#Mid	16QAM	18.24	1.12	19.36	33.01	PASS
Band41(2555-2655)	15	41165	36	#Max	16QAM	18.24	1.12	19.36	33.01	PASS
Band41(2555-2655)	15	41165	75	#0	16QAM	18.40	1.12	19.52	33.01	PASS
Band41(2555-2655)	20	40340	1	#0	QPSK	20.97	1.12	22.09	33.01	PASS
Band41(2555-2655)	20	40340	1	#Mid	QPSK	21.11	1.12	22.23	33.01	PASS
Band41(2555-2655)	20	40340	1	#Max	QPSK	21.25	1.12	22.37	33.01	PASS
Band41(2555-2655)	20	40340	50	#0	QPSK	20.18	1.12	21.30	33.01	PASS
Band41(2555-2655)	20	40340	50	#Mid	QPSK	20.23	1.12	21.35	33.01	PASS
Band41(2555-2655)	20	40340	50	#Max	QPSK	20.34	1.12	21.46	33.01	PASS

Band41(2555-2655)	20	40340	100	#0	QPSK	20.17	1.12	21.29	33.01	PASS
Band41(2555-2655)	20	40340	1	#0	16QAM	20.28	1.12	21.40	33.01	PASS
Band41(2555-2655)	20	40340	1	#Mid	16QAM	20.26	1.12	21.38	33.01	PASS
Band41(2555-2655)	20	40340	1	#Max	16QAM	20.49	1.12	21.61	33.01	PASS
Band41(2555-2655)	20	40340	50	#0	16QAM	19.09	1.12	20.21	33.01	PASS
Band41(2555-2655)	20	40340	50	#Mid	16QAM	19.13	1.12	20.25	33.01	PASS
Band41(2555-2655)	20	40340	50	#Max	16QAM	19.33	1.12	20.45	33.01	PASS
Band41(2555-2655)	20	40340	100	#0	16QAM	19.08	1.12	20.20	33.01	PASS
Band41(2555-2655)	20	40740	1	#0	QPSK	20.68	1.12	21.80	33.01	PASS
Band41(2555-2655)	20	40740	1	#Mid	QPSK	20.37	1.12	21.49	33.01	PASS
Band41(2555-2655)	20	40740	1	#Max	QPSK	20.50	1.12	21.62	33.01	PASS
Band41(2555-2655)	20	40740	50	#0	QPSK	19.47	1.12	20.59	33.01	PASS
Band41(2555-2655)	20	40740	50	#Mid	QPSK	19.28	1.12	20.40	33.01	PASS
Band41(2555-2655)	20	40740	50	#Max	QPSK	19.21	1.12	20.33	33.01	PASS
Band41(2555-2655)	20	40740	100	#0	QPSK	19.34	1.12	20.46	33.01	PASS
Band41(2555-2655)	20	40740	1	#0	16QAM	19.18	1.12	20.30	33.01	PASS
Band41(2555-2655)	20	40740	1	#Mid	16QAM	19.06	1.12	20.18	33.01	PASS
Band41(2555-2655)	20	40740	1	#Max	16QAM	19.01	1.12	20.13	33.01	PASS
Band41(2555-2655)	20	40740	50	#0	16QAM	18.21	1.12	19.33	33.01	PASS
Band41(2555-2655)	20	40740	50	#Mid	16QAM	18.38	1.12	19.50	33.01	PASS
Band41(2555-2655)	20	40740	50	#Max	16QAM	18.11	1.12	19.23	33.01	PASS
Band41(2555-2655)	20	40740	100	#0	16QAM	18.45	1.12	19.57	33.01	PASS
Band41(2555-2655)	20	41140	1	#0	QPSK	20.50	1.12	21.62	33.01	PASS
Band41(2555-2655)	20	41140	1	#Mid	QPSK	20.43	1.12	21.55	33.01	PASS
Band41(2555-2655)	20	41140	1	#Max	QPSK	20.62	1.12	21.74	33.01	PASS
Band41(2555-2655)	20	41140	50	#0	QPSK	19.55	1.12	20.67	33.01	PASS
Band41(2555-2655)	20	41140	50	#Mid	QPSK	19.52	1.12	20.64	33.01	PASS
Band41(2555-2655)	20	41140	50	#Max	QPSK	19.52	1.12	20.64	33.01	PASS
Band41(2555-2655)	20	41140	100	#0	QPSK	19.51	1.12	20.63	33.01	PASS
Band41(2555-2655)	20	41140	1	#0	16QAM	19.83	1.12	20.95	33.01	PASS
Band41(2555-2655)	20	41140	1	#Mid	16QAM	19.08	1.12	20.20	33.01	PASS
Band41(2555-2655)	20	41140	1	#Max	16QAM	19.81	1.12	20.93	33.01	PASS
Band41(2555-2655)	20	41140	50	#0	16QAM	18.33	1.12	19.45	33.01	PASS
Band41(2555-2655)	20	41140	50	#Mid	16QAM	18.65	1.12	19.77	33.01	PASS
Band41(2555-2655)	20	41140	50	#Max	16QAM	18.47	1.12	19.59	33.01	PASS
Band41(2555-2655)	20	41140	100	#0	16QAM	18.65	1.12	19.77	33.01	PASS

Frequency stability

LTE Band 5 (QPSK) / 836.5MHz / BW10M					
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result
	(Volt)	(Hz)	(ppm)		
50	Normal Voltage	-2.71	-0.003	±2.5ppm	PASS
40		2.37	0.003		
30		-2.45	-0.003		
20		-6.69	-0.008		
10		2.54	0.003		
0		2.72	0.003		
-10		2.32	0.003		
-20		-2.64	-0.003		
-30		-2.32	-0.003		
20	Maximum Voltage	0.98	0.004		
20	BEP	-4.31	-0.005		

LTE Band 5 (16QAM) / 836.5MHz / BW10M					
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result
	(Volt)	(Hz)	(ppm)		
50	Normal Voltage	-4.99	-0.006	±2.5ppm	PASS
40		4.85	0.006		
30		-4.90	-0.006		
20		-11.04	-0.013		
10		4.60	0.006		
0		4.86	0.006		
-10		-4.79	-0.006		
-20		-4.41	-0.005		
-30		4.72	0.006		
20	Maximum Voltage	1.97	0.008		
20	BEP	1.96	0.008		

Band40(2305-2315) (QPSK) / 2310MHz / BW10M					
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result
	(Volt)	(Hz)	(ppm)		
50	Normal Voltage	-1.96	-0.009	±2.5ppm	PASS
40		-1.70	-0.007		
30		1.57	0.007		
20		-5.18	-0.022		
10		-1.52	-0.007		
0		-1.51	-0.007		
-10		1.58	0.007		
-20		-1.92	-0.008		
-30		1.64	0.007		
20	Maximum Voltage	-3.08	-0.013	±2.5ppm	PASS
20	BEP	0.79	0.003		

Band40(2305-2315) (16QAM) / 2310MHz / BW10M					
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result
	(Volt)	(Hz)	(ppm)		
50	Normal Voltage	0.97	0.004	±2.5ppm	PASS
40		-1.10	-0.005		
30		-1.05	-0.005		
20		-3.53	-0.015		
10		-0.78	-0.003		
0		0.79	0.003		
-10		-0.74	-0.003		
-20		1.15	0.005		
-30		1.06	0.005		
20	Maximum Voltage	-1.96	-0.008	±2.5ppm	PASS
20	BEP	0.39	0.002		

Band40(2305-2315) (QPSK) / 2310MHz / BW10M					
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result
	(Volt)	(Hz)	(ppm)		
50	Normal Voltage	-1.96	-0.009	±2.5ppm	PASS
40		-1.70	-0.007		
30		1.57	0.007		
20		-5.18	-0.022		
10		-1.52	-0.007		
0		-1.51	-0.007		
-10		1.58	0.007		
-20		-1.92	-0.008		
-30		1.64	0.007		
20	Maximum Voltage	-3.08	-0.013	±2.5ppm	PASS
20	BEP	0.79	0.003		

Band40(2305-2315) (16QAM) / 2310MHz / BW10M					
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result
	(Volt)	(Hz)	(ppm)		
50	Normal Voltage	0.97	0.004	±2.5ppm	PASS
40		-1.10	-0.005		
30		-1.05	-0.005		
20		-3.53	-0.015		
10		-0.78	-0.003		
0		0.79	0.003		
-10		-0.74	-0.003		
-20		1.15	0.005		
-30		1.06	0.005		
20	Maximum Voltage	-1.96	-0.008	±2.5ppm	PASS
20	BEP	0.39	0.002		

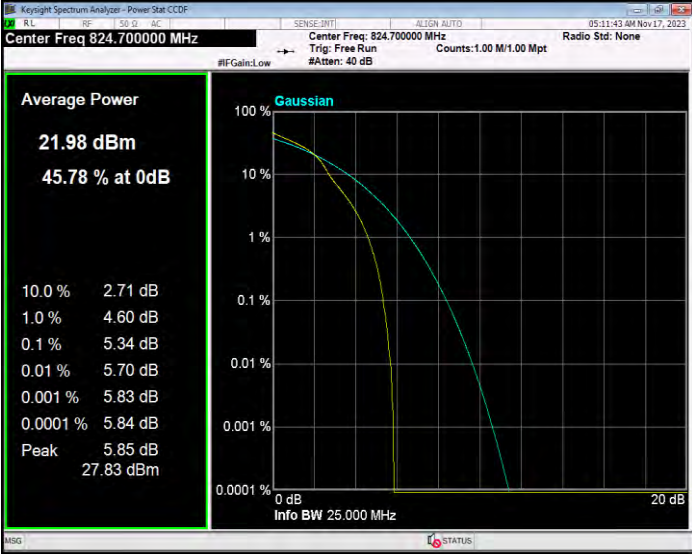
LTE Band 41 (QPSK) / 2605MHz / BW20M					
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result
	(Volt)	(Hz)	(ppm)		
50	Normal Voltage	17.66	0.007	±2.5ppm	PASS
40		-17.22	-0.007		
30		17.63	0.007		
20		-36.55	-0.014		
10		-17.67	-0.007		
0		17.66	0.007		
-10		17.65	0.007		
-20		-17.75	-0.007		
-30		-17.61	-0.007		
20	Maximum Voltage	-28.22	-0.120		
20	BEP	-27.55	-0.117		

LTE Band 41 (16QAM) / 2605MHz / BW20M					
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result
	(Volt)	(Hz)	(ppm)		
50	Normal Voltage	-18.54	-0.007	±2.5ppm	PASS
40		-18.54	-0.007		
30		18.56	0.007		
20		-39.07	-0.015		
10		-18.50	-0.007		
0		-18.42	-0.007		
-10		18.91	0.007		
-20		-18.42	-0.007		
-30		-18.70	-0.007		
20	Maximum Voltage	7.49	0.032		
20	BEP	-29.66	-0.126		

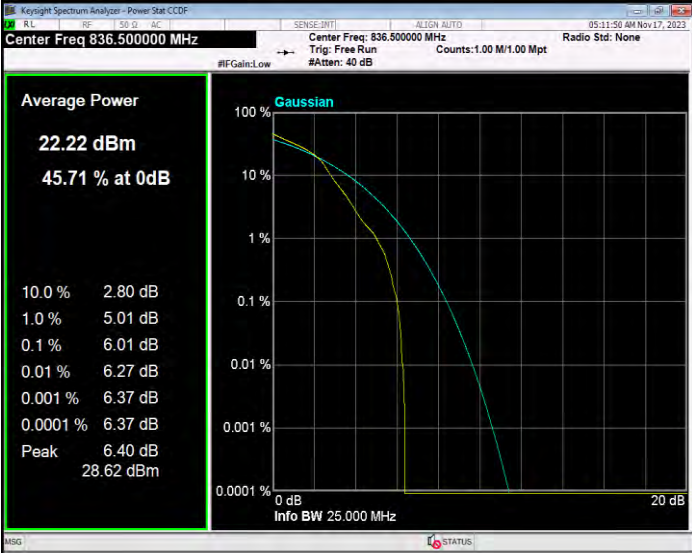
Peak-to-Average Ratio

Band	Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	Result (dB)	high Limit (dB)	Verdict
Band5	1.4	20407	1	#0	QPSK	4.41	13	PASS
Band5	1.4	20407	1	#0	16QAM	5.34	13	PASS
Band5	1.4	20525	1	#0	QPSK	5.08	13	PASS
Band5	1.4	20525	1	#0	16QAM	6.01	13	PASS
Band5	1.4	20643	1	#0	QPSK	5.15	13	PASS
Band5	1.4	20643	1	#0	16QAM	6.06	13	PASS
Band5	3	20415	1	#0	QPSK	4.52	13	PASS
Band5	3	20415	1	#0	16QAM	5.58	13	PASS
Band5	3	20525	1	#0	QPSK	5.07	13	PASS
Band5	3	20525	1	#0	16QAM	5.84	13	PASS
Band5	3	20635	1	#0	QPSK	5.19	13	PASS
Band5	3	20635	1	#0	16QAM	5.89	13	PASS
Band5	5	20425	1	#0	QPSK	4.75	13	PASS
Band5	5	20425	1	#0	16QAM	5.69	13	PASS
Band5	5	20525	1	#0	QPSK	5.09	13	PASS
Band5	5	20525	1	#0	16QAM	5.63	13	PASS
Band5	5	20625	1	#0	QPSK	5.62	13	PASS
Band5	5	20625	1	#0	16QAM	6.36	13	PASS
Band5	10	20450	1	#0	QPSK	4.55	13	PASS
Band5	10	20450	1	#0	16QAM	5.54	13	PASS
Band5	10	20525	1	#0	QPSK	5.34	13	PASS
Band5	10	20525	1	#0	16QAM	6.38	13	PASS
Band5	10	20600	1	#0	QPSK	4.57	13	PASS
Band5	10	20600	1	#0	16QAM	5.54	13	PASS
Band40(2350-2360)	5	39175	1	#0	QPSK	9.78	13	PASS
Band40(2350-2360)	5	39175	1	#0	16QAM	9.70	13	PASS
Band40(2350-2360)	5	39200	1	#0	QPSK	7.25	13	PASS
Band40(2350-2360)	5	39200	1	#0	16QAM	9.54	13	PASS
Band40(2350-2360)	5	39225	1	#0	QPSK	9.12	13	PASS
Band40(2350-2360)	5	39225	1	#0	16QAM	9.34	13	PASS
Band40(2350-2360)	10	39200	1	#0	QPSK	9.16	13	PASS
Band40(2350-2360)	10	39200	1	#0	16QAM	9.69	13	PASS
Band40(2305-2315)	5	38725	1	#0	QPSK	10.24	13	PASS
Band40(2305-2315)	5	38725	1	#0	16QAM	9.58	13	PASS
Band40(2305-2315)	5	38750	1	#0	QPSK	9.48	13	PASS
Band40(2305-2315)	5	38750	1	#0	16QAM	9.79	13	PASS
Band40(2305-2315)	5	38775	1	#0	QPSK	10.29	13	PASS
Band40(2305-2315)	5	38775	1	#0	16QAM	9.63	13	PASS
Band40(2305-2315)	10	38750	1	#0	QPSK	8.26	13	PASS
Band40(2305-2315)	10	38750	1	#0	16QAM	10.48	13	PASS
Band41(2555-2655)	5	40740	1	#0	QPSK	9.56	13	PASS
Band41(2555-2655)	5	40740	1	#0	16QAM	8.43	13	PASS
Band41(2555-2655)	10	40740	1	#0	QPSK	9.29	13	PASS
Band41(2555-2655)	10	40740	1	#0	16QAM	9.33	13	PASS
Band41(2555-2655)	15	40740	1	#0	QPSK	9.10	13	PASS
Band41(2555-2655)	15	40740	1	#0	16QAM	9.54	13	PASS
Band41(2555-2655)	20	40740	1	#0	QPSK	9.57	13	PASS
Band41(2555-2655)	20	40740	1	#0	16QAM	9.02	13	PASS

Band5 16QAM BW=1.4MHz Channel=20407 RB Size=1 Position=#0



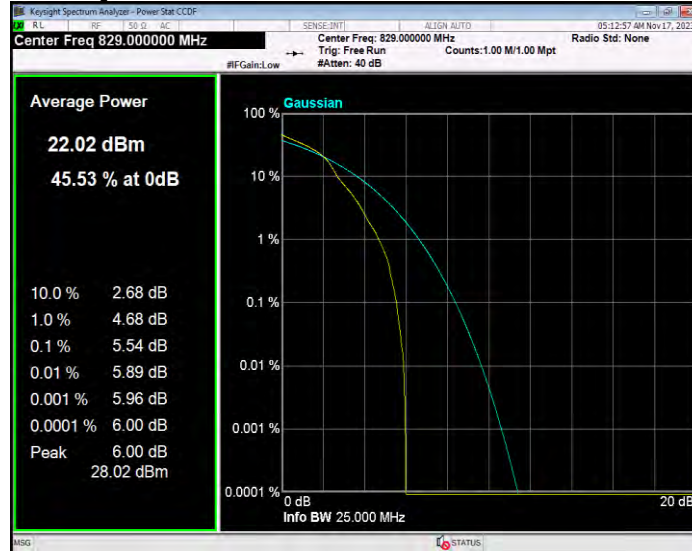
Band5 16QAM BW=1.4MHz Channel=20525 RB Size=1 Position=#0



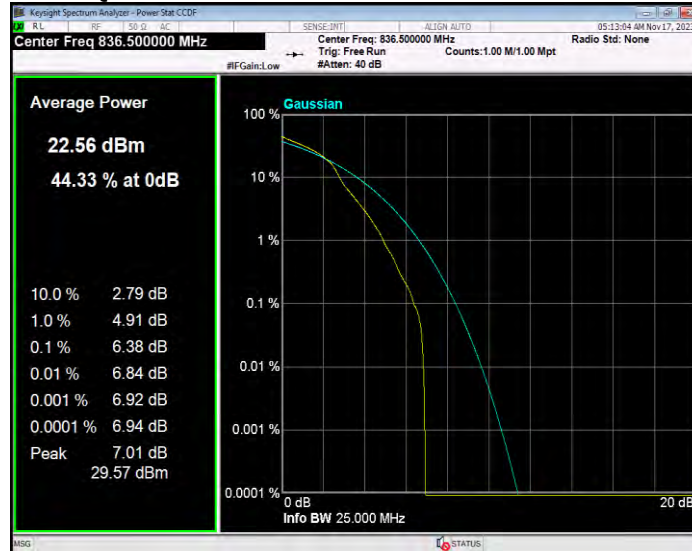
Band5 16QAM BW=1.4MHz Channel=20643 RB Size=1 Position=#0



Band5 16QAM BW=10MHz Channel=20450 RB Size=1 Position=#0



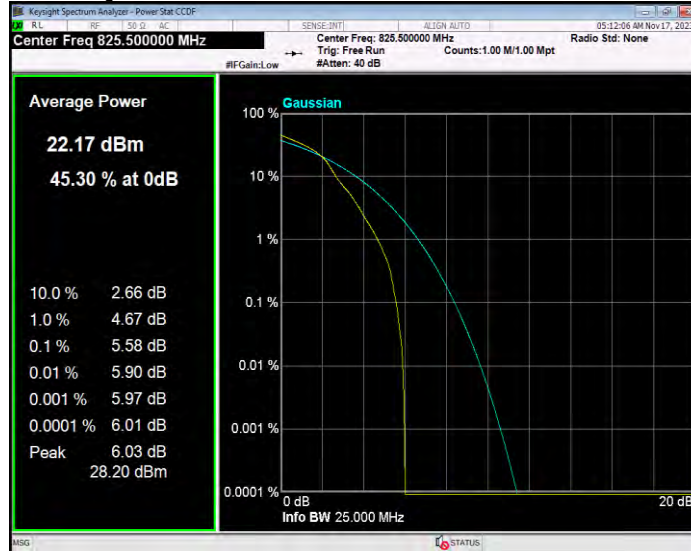
Band5 16QAM BW=10MHz Channel=20525 RB Size=1 Position=#0



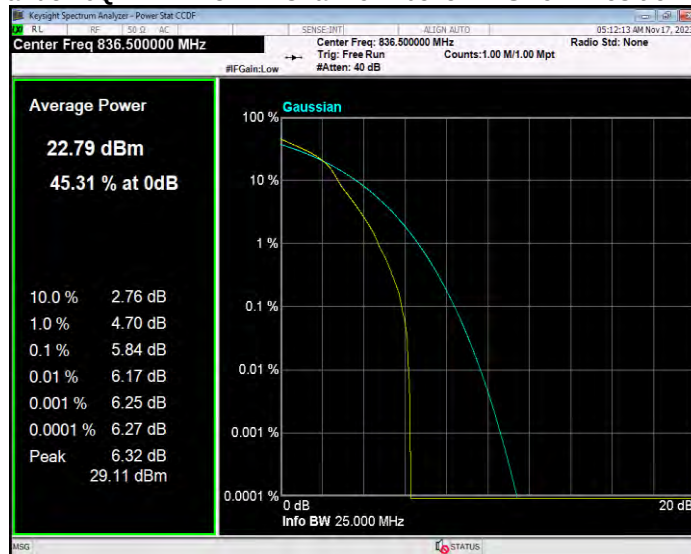
Band5 16QAM BW=10MHz Channel=20600 RB Size=1 Position=#0



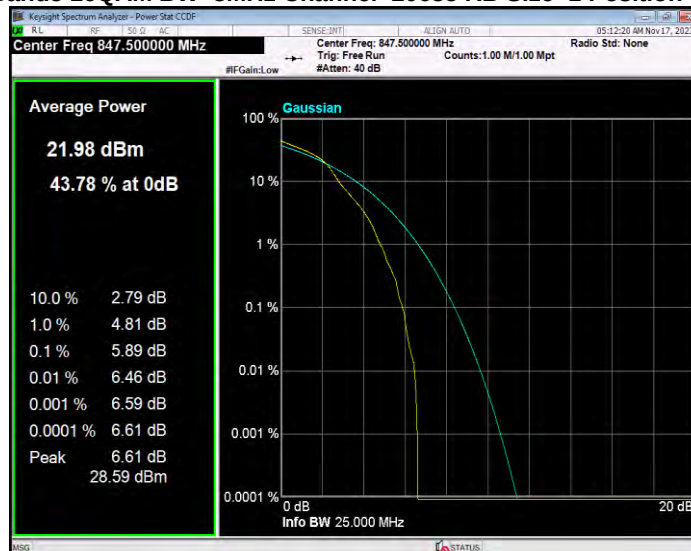
Band5 16QAM BW=3MHz Channel=20415 RB Size=1 Position=#0



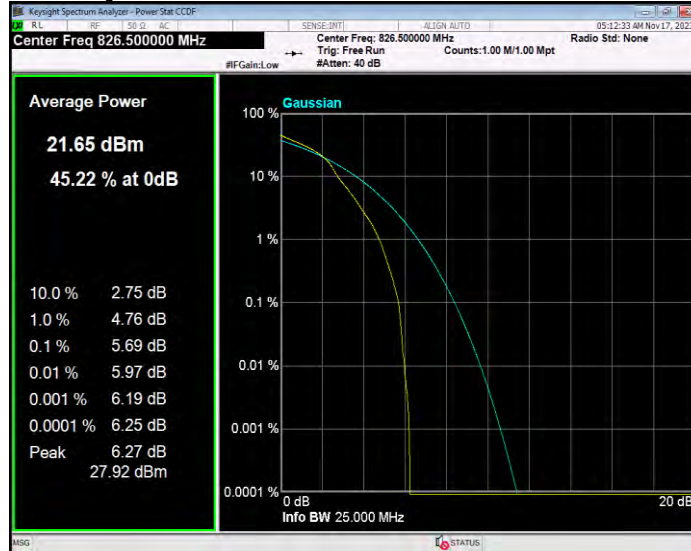
Band5 16QAM BW=3MHz Channel=20525 RB Size=1 Position=#0



Band5 16QAM BW=3MHz Channel=20635 RB Size=1 Position=#0



Band5 16QAM BW=5MHz Channel=20425 RB Size=1 Position=#0



Band5 16QAM BW=5MHz Channel=20525 RB Size=1 Position=#0



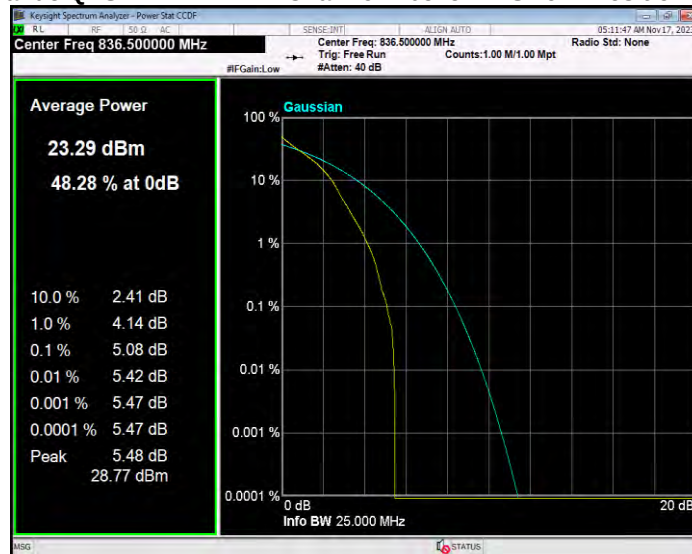
Band5 16QAM BW=5MHz Channel=20625 RB Size=1 Position=#0



Band5 QPSK BW=1.4MHz Channel=20407 RB Size=1 Position=#0



Band5 QPSK BW=1.4MHz Channel=20525 RB Size=1 Position=#0



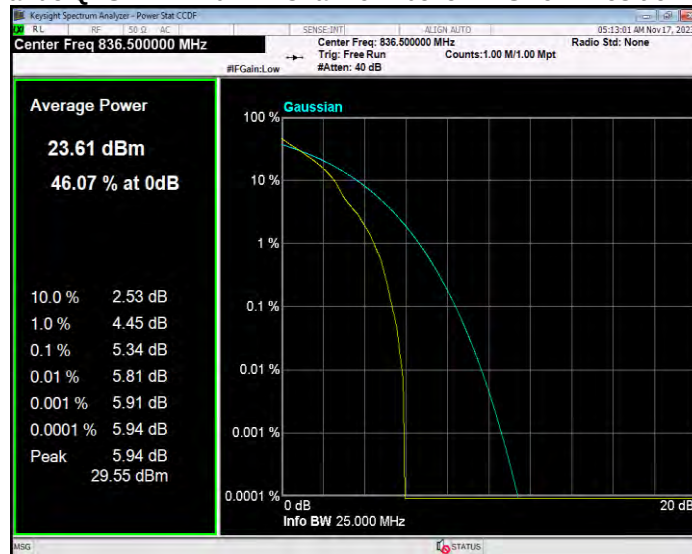
Band5 QPSK BW=1.4MHz Channel=20643 RB Size=1 Position=#0



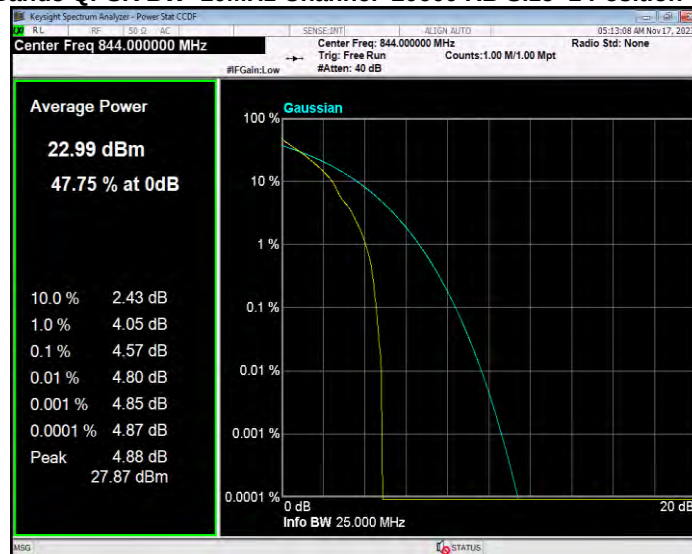
Band5 QPSK BW=10MHz Channel=20450 RB Size=1 Position=#0



Band5 QPSK BW=10MHz Channel=20525 RB Size=1 Position=#0



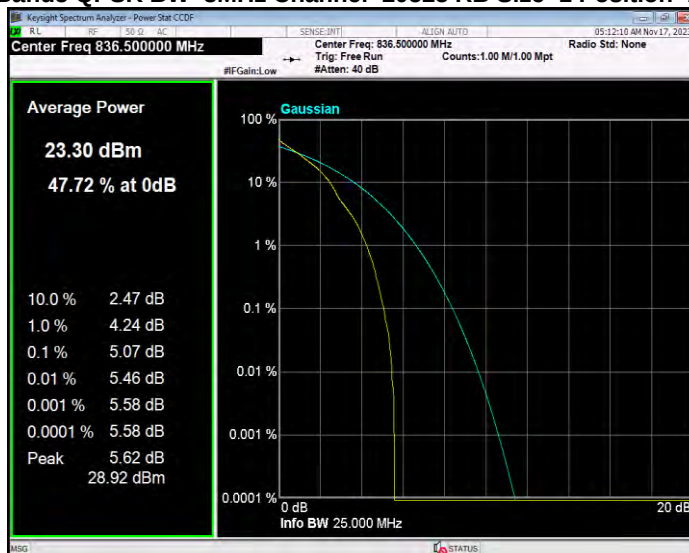
Band5 QPSK BW=10MHz Channel=20600 RB Size=1 Position=#0



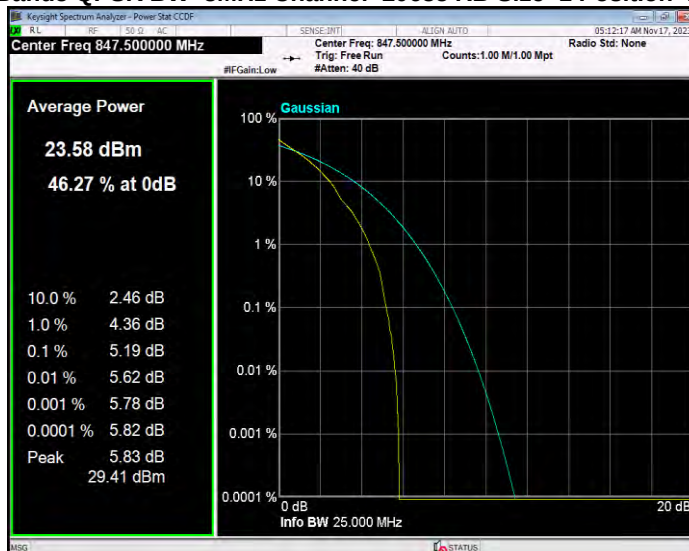
Band5 QPSK BW=3MHz Channel=20415 RB Size=1 Position=#0



Band5 QPSK BW=3MHz Channel=20525 RB Size=1 Position=#0



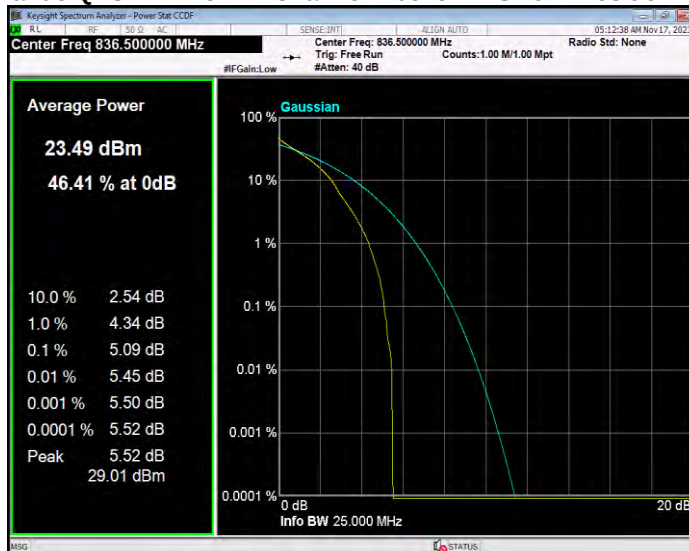
Band5 QPSK BW=3MHz Channel=20635 RB Size=1 Position=#0



Band5 QPSK BW=5MHz Channel=20425 RB Size=1 Position=#0



Band5 QPSK BW=5MHz Channel=20525 RB Size=1 Position=#0



Band5 QPSK BW=5MHz Channel=20625 RB Size=1 Position=#0



Band40(2350-2360) 16QAM BW=10MHz Channel=39200 RB Size=1 Position=#0



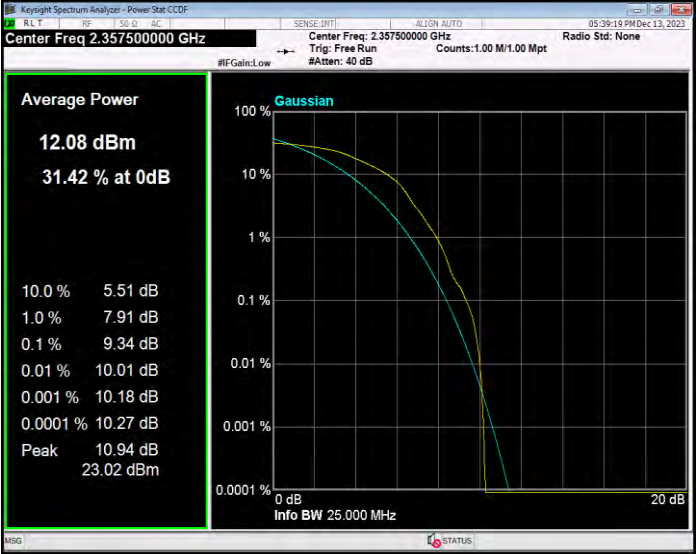
Band40(2350-2360) 16QAM BW=5MHz Channel=39175 RB Size=1 Position=#0



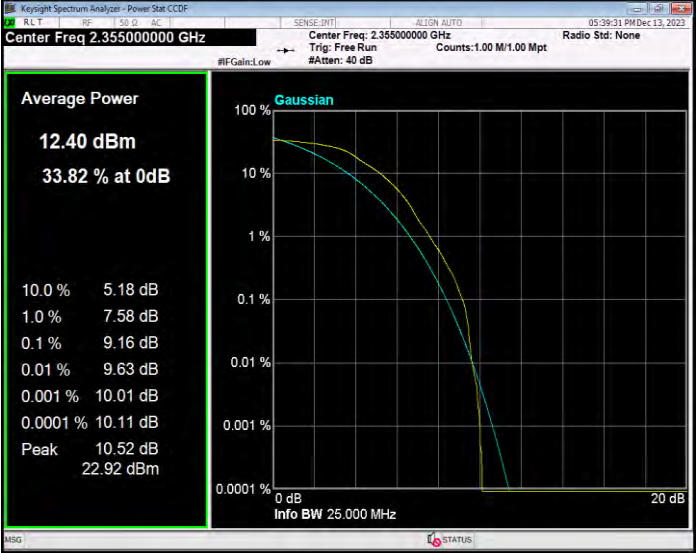
Band40(2350-2360) 16QAM BW=5MHz Channel=39200 RB Size=1 Position=#0



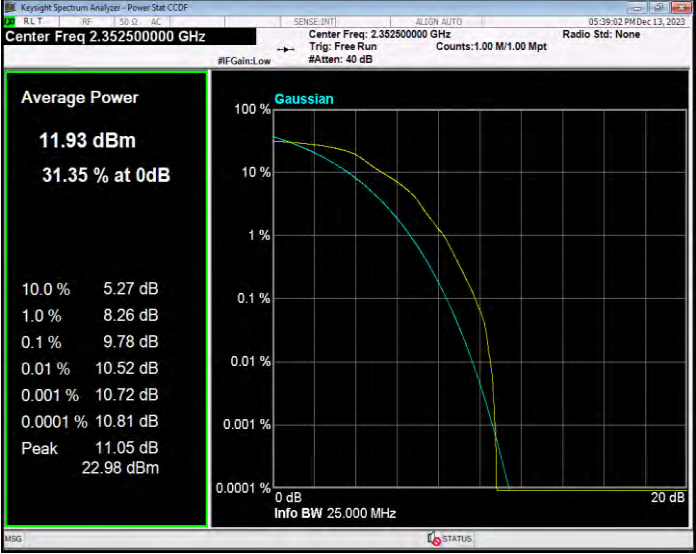
Band40(2350-2360) 16QAM BW=5MHz Channel=39225 RB Size=1 Position=#0



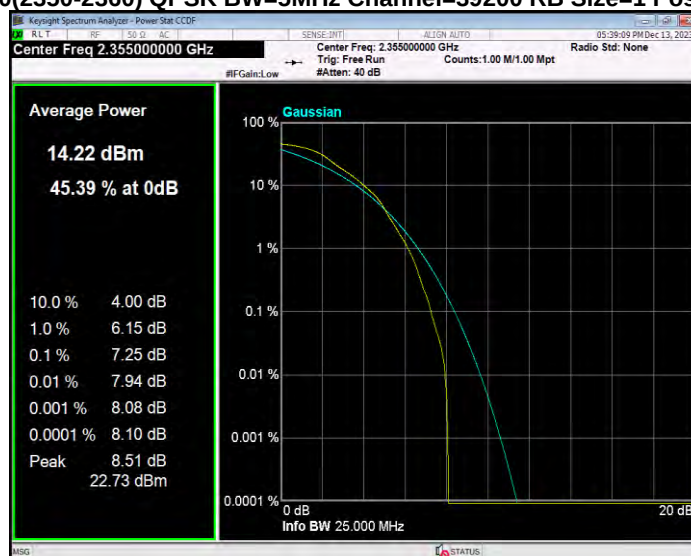
Band40(2350-2360) QPSK BW=10MHz Channel=39200 RB Size=1 Position=#0



Band40(2350-2360) QPSK BW=5MHz Channel=39175 RB Size=1 Position=#0



Band40(2350-2360) QPSK BW=5MHz Channel=39200 RB Size=1 Position=#0



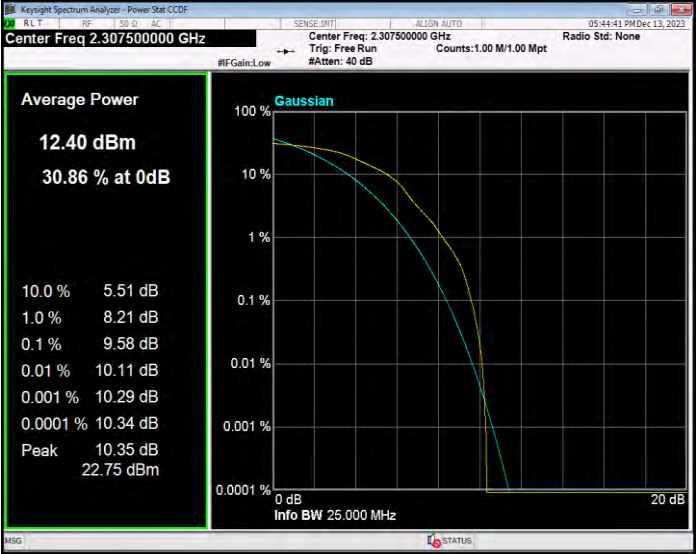
Band40(2350-2360) QPSK BW=5MHz Channel=39225 RB Size=1 Position=#0



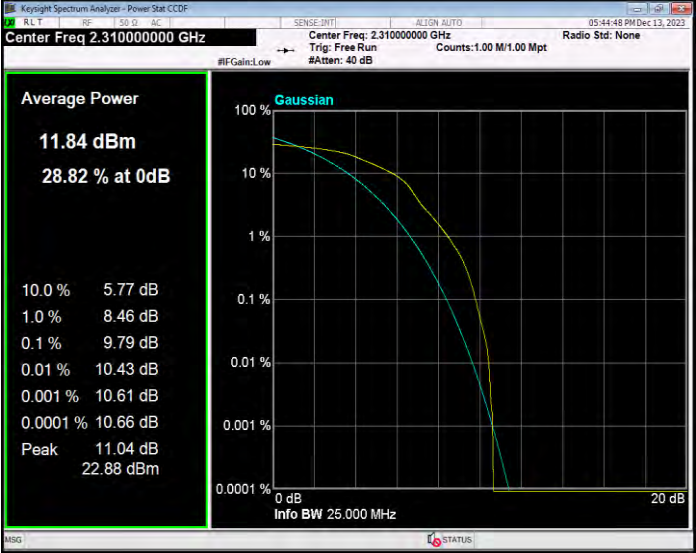
Band40(2305-2315) 16QAM BW=10MHz Channel=38750 RB Size=1 Position=#0



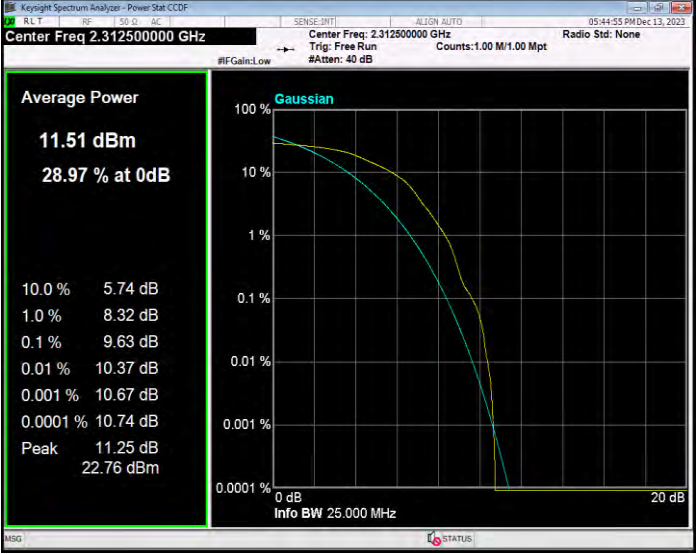
Band40(2305-2315) 16QAM BW=5MHz Channel=38725 RB Size=1 Position=#0



Band40(2305-2315) 16QAM BW=5MHz Channel=38750 RB Size=1 Position=#0



Band40(2305-2315) 16QAM BW=5MHz Channel=38775 RB Size=1 Position=#0



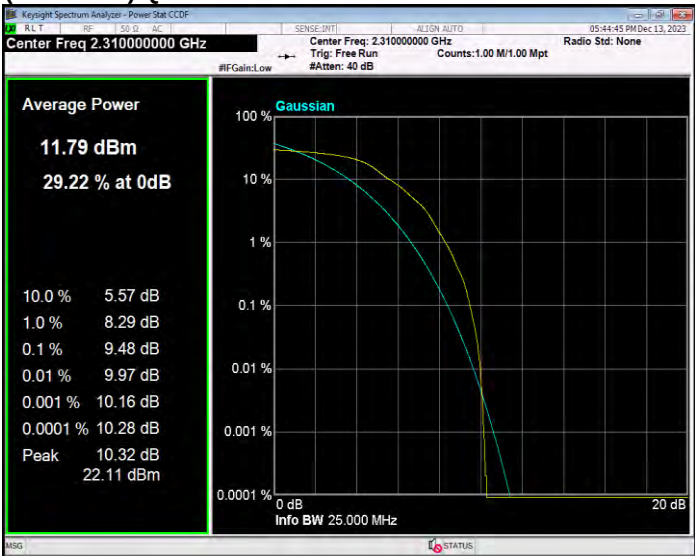
Band40(2305-2315) QPSK BW=10MHz Channel=38750 RB Size=1 Position=#0



Band40(2305-2315) QPSK BW=5MHz Channel=38725 RB Size=1 Position=#0



Band40(2305-2315) QPSK BW=5MHz Channel=38750 RB Size=1 Position=#0



Band40(2305-2315) QPSK BW=5MHz Channel=38775 RB Size=1 Position=#0



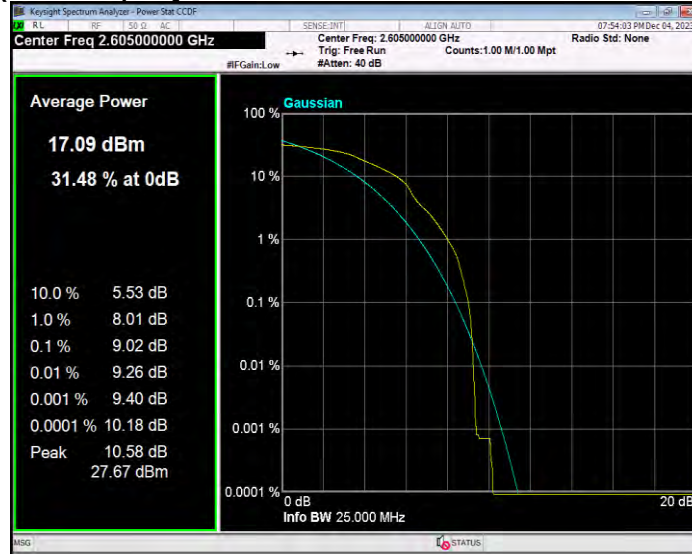
Band41(2555-2655) 16QAM BW=10MHz Channel=40740 RB Size=1 Position=#0



Band41(2555-2655) 16QAM BW=15MHz Channel=40740 RB Size=1 Position=#0



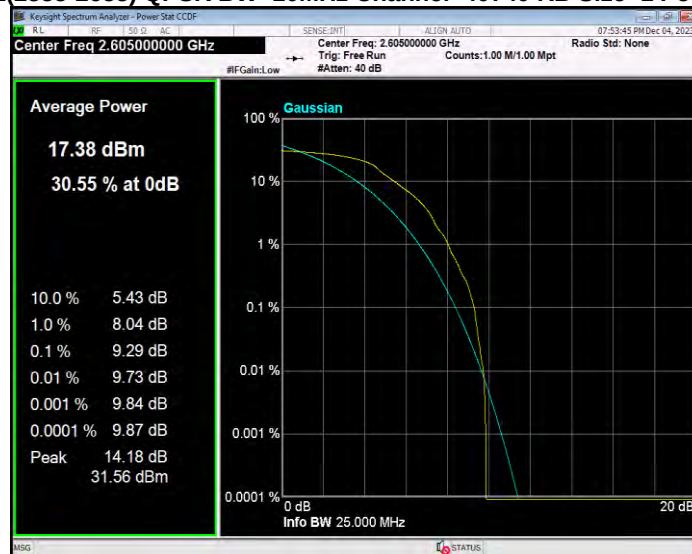
Band41(2555-2655) 16QAM BW=20MHz Channel=40740 RB Size=1 Position=#0



Band41(2555-2655) 16QAM BW=5MHz Channel=40740 RB Size=1 Position=#0



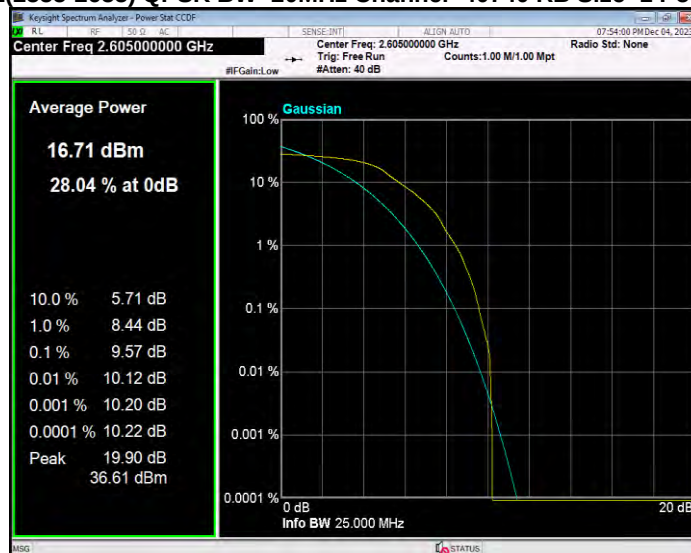
Band41(2555-2655) QPSK BW=10MHz Channel=40740 RB Size=1 Position=#0



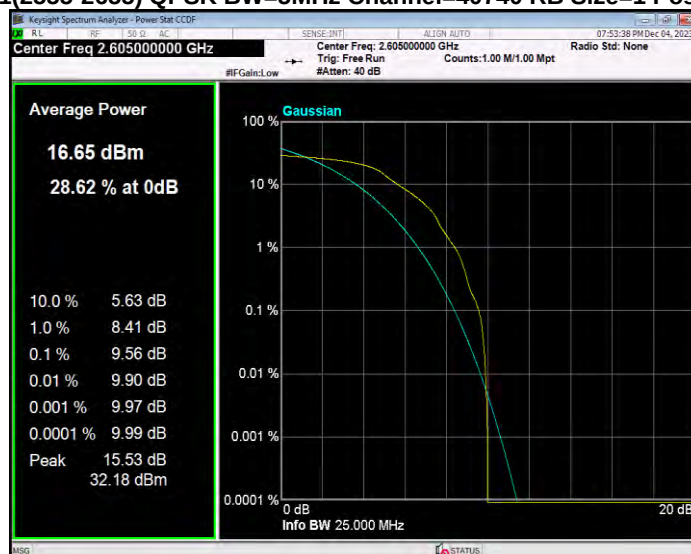
Band41(2555-2655) QPSK BW=15MHz Channel=40740 RB Size=1 Position=#0



Band41(2555-2655) QPSK BW=20MHz Channel=40740 RB Size=1 Position=#0



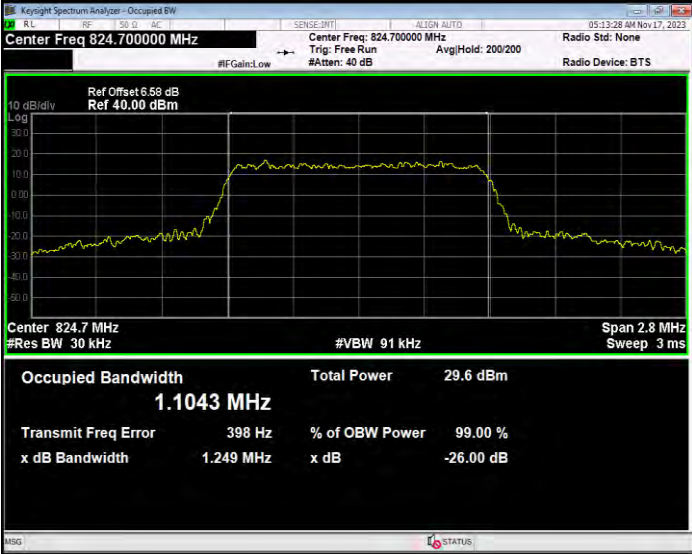
Band41(2555-2655) QPSK BW=5MHz Channel=40740 RB Size=1 Position=#0



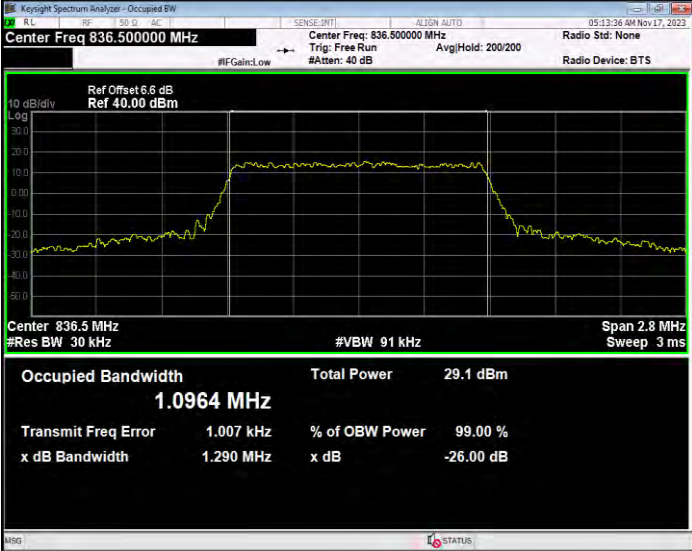
Occupied bandwidth

Band	Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	99% OBW (MHz)	-26dB EBW (MHz)	Verdict
Band5	1.4	20407	6	#0	QPSK	1.101	1.278	PASS
Band5	1.4	20407	6	#0	16QAM	1.104	1.249	PASS
Band5	1.4	20525	6	#0	QPSK	1.095	1.295	PASS
Band5	1.4	20525	6	#0	16QAM	1.096	1.290	PASS
Band5	1.4	20643	6	#0	QPSK	1.102	1.293	PASS
Band5	1.4	20643	6	#0	16QAM	1.101	1.285	PASS
Band5	3	20415	15	#0	QPSK	2.707	3.055	PASS
Band5	3	20415	15	#0	16QAM	2.706	3.070	PASS
Band5	3	20525	15	#0	QPSK	2.717	3.016	PASS
Band5	3	20525	15	#0	16QAM	2.710	3.074	PASS
Band5	3	20635	15	#0	QPSK	2.706	3.052	PASS
Band5	3	20635	15	#0	16QAM	2.716	3.126	PASS
Band5	5	20425	25	#0	QPSK	4.511	5.003	PASS
Band5	5	20425	25	#0	16QAM	4.502	4.921	PASS
Band5	5	20525	25	#0	QPSK	4.514	4.954	PASS
Band5	5	20525	25	#0	16QAM	4.499	5.114	PASS
Band5	5	20625	25	#0	QPSK	4.517	5.083	PASS
Band5	5	20625	25	#0	16QAM	4.516	5.088	PASS
Band5	10	20450	50	#0	QPSK	9.028	9.863	PASS
Band5	10	20450	50	#0	16QAM	8.995	9.911	PASS
Band5	10	20525	50	#0	QPSK	8.939	9.761	PASS
Band5	10	20525	50	#0	16QAM	8.958	9.921	PASS
Band5	10	20600	50	#0	QPSK	9.023	9.974	PASS
Band5	10	20600	50	#0	16QAM	9.051	10.252	PASS
Band40(2350-2360)	5	39175	25	#0	QPSK	4.501	4.835	PASS
Band40(2350-2360)	5	39175	25	#0	16QAM	4.489	4.902	PASS
Band40(2350-2360)	5	39200	25	#0	QPSK	4.510	4.871	PASS
Band40(2350-2360)	5	39200	25	#0	16QAM	4.499	4.876	PASS
Band40(2350-2360)	5	39225	25	#0	QPSK	4.494	5.041	PASS
Band40(2350-2360)	5	39225	25	#0	16QAM	4.503	4.892	PASS
Band40(2350-2360)	10	39200	50	#0	QPSK	8.953	9.639	PASS
Band40(2350-2360)	10	39200	50	#0	16QAM	9.001	9.648	PASS
Band40(2305-2315)	5	38725	25	#0	QPSK	4.499	4.891	PASS
Band40(2305-2315)	5	38725	25	#0	16QAM	4.509	4.860	PASS
Band40(2305-2315)	5	38750	25	#0	QPSK	4.502	4.840	PASS
Band40(2305-2315)	5	38750	25	#0	16QAM	4.495	4.831	PASS
Band40(2305-2315)	5	38775	25	#0	QPSK	4.507	5.043	PASS
Band40(2305-2315)	5	38775	25	#0	16QAM	4.494	4.875	PASS
Band40(2305-2315)	10	38750	50	#0	QPSK	8.998	9.577	PASS
Band40(2305-2315)	10	38750	50	#0	16QAM	8.986	9.706	PASS
Band41(2555-2655)	5	40265	25	#0	QPSK	4.517	5.224	PASS
Band41(2555-2655)	5	40265	25	#0	16QAM	4.522	5.423	PASS
Band41(2555-2655)	5	40740	25	#0	QPSK	4.504	4.919	PASS
Band41(2555-2655)	5	40740	25	#0	16QAM	4.501	4.959	PASS
Band41(2555-2655)	5	41215	25	#0	QPSK	4.504	5.028	PASS
Band41(2555-2655)	5	41215	25	#0	16QAM	4.500	4.986	PASS
Band41(2555-2655)	10	40290	50	#0	QPSK	9.015	9.884	PASS
Band41(2555-2655)	10	40290	50	#0	16QAM	9.023	9.823	PASS
Band41(2555-2655)	10	40740	50	#0	QPSK	8.984	10.150	PASS
Band41(2555-2655)	10	40740	50	#0	16QAM	8.982	9.801	PASS
Band41(2555-2655)	10	41190	50	#0	QPSK	8.983	10.040	PASS
Band41(2555-2655)	10	41190	50	#0	16QAM	9.009	10.166	PASS
Band41(2555-2655)	15	40315	75	#0	QPSK	13.484	14.618	PASS
Band41(2555-2655)	15	40315	75	#0	16QAM	13.507	14.799	PASS
Band41(2555-2655)	15	40740	75	#0	QPSK	13.470	14.799	PASS
Band41(2555-2655)	15	40740	75	#0	16QAM	13.460	15.145	PASS
Band41(2555-2655)	15	41165	75	#0	QPSK	13.498	15.558	PASS
Band41(2555-2655)	15	41165	75	#0	16QAM	13.534	15.418	PASS
Band41(2555-2655)	20	40340	100	#0	QPSK	17.936	19.532	PASS
Band41(2555-2655)	20	40340	100	#0	16QAM	17.862	19.400	PASS
Band41(2555-2655)	20	40740	100	#0	QPSK	17.884	19.991	PASS
Band41(2555-2655)	20	40740	100	#0	16QAM	17.937	19.461	PASS
Band41(2555-2655)	20	41140	100	#0	QPSK	18.041	19.489	PASS
Band41(2555-2655)	20	41140	100	#0	16QAM	18.071	19.638	PASS

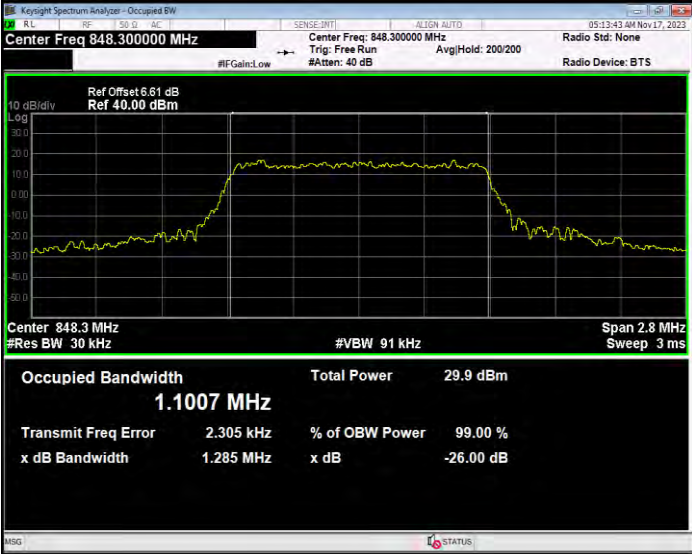
Band5 16QAM BW=1.4MHz Channel=20407 RB Size=6 Position=#0



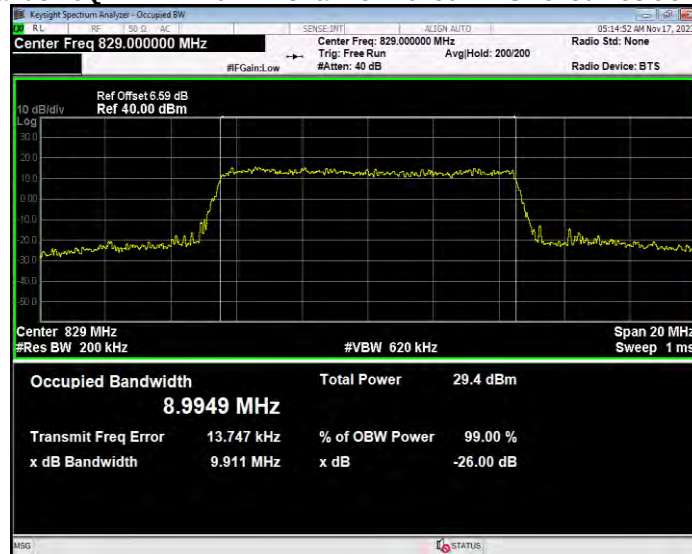
Band5 16QAM BW=1.4MHz Channel=20525 RB Size=6 Position=#0



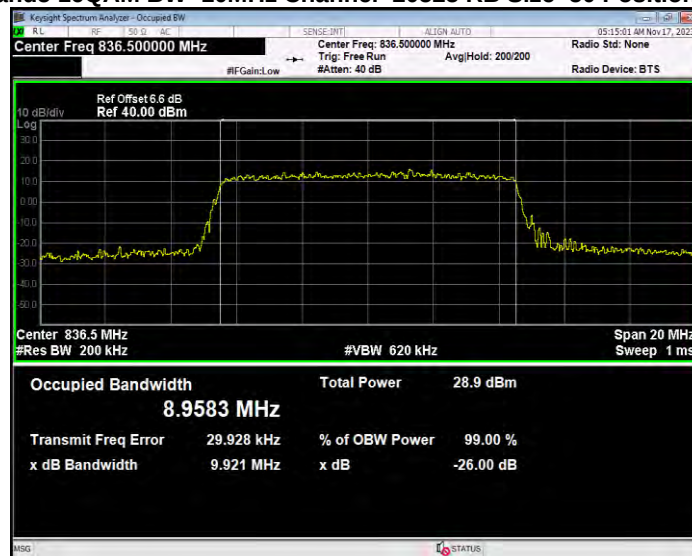
Band5 16QAM BW=1.4MHz Channel=20643 RB Size=6 Position=#0



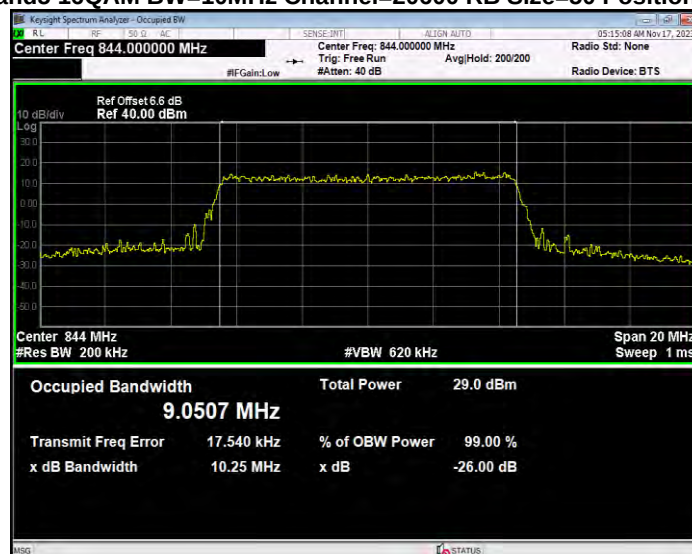
Band5 16QAM BW=10MHz Channel=20450 RB Size=50 Position=#0



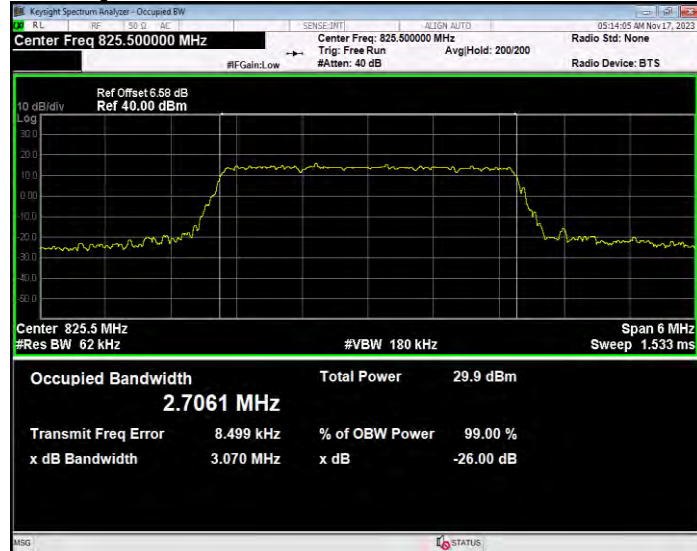
Band5 16QAM BW=10MHz Channel=20525 RB Size=50 Position=#0



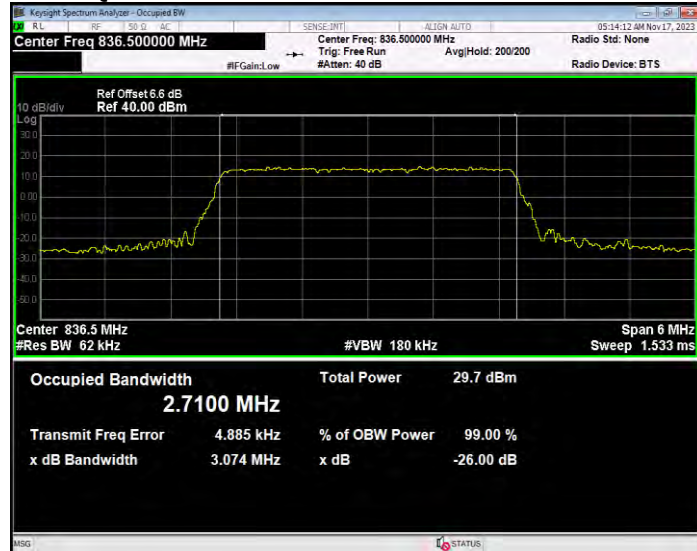
Band5 16QAM BW=10MHz Channel=20600 RB Size=50 Position=#0



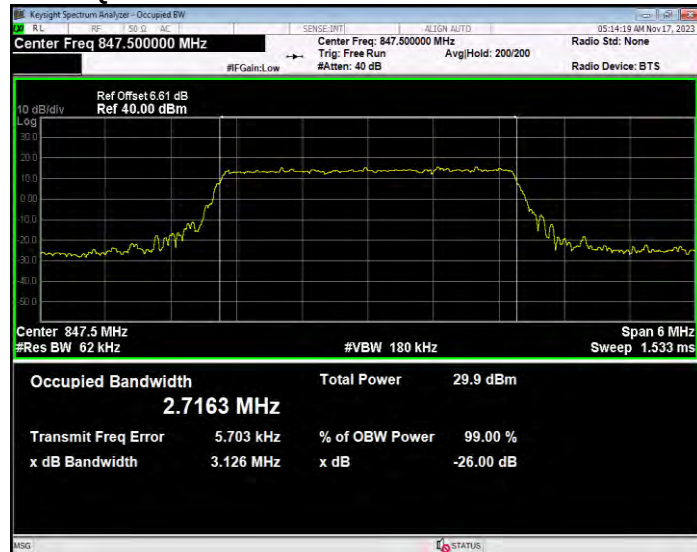
Band5 16QAM BW=3MHz Channel=20415 RB Size=15 Position=#0



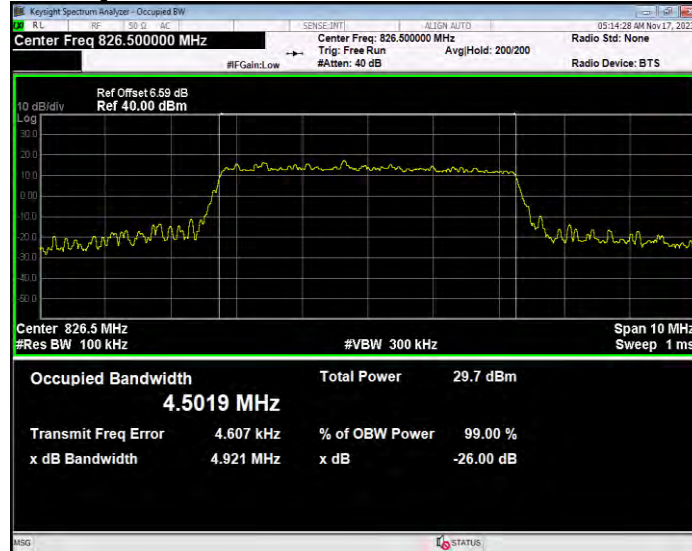
Band5 16QAM BW=3MHz Channel=20525 RB Size=15 Position=#0



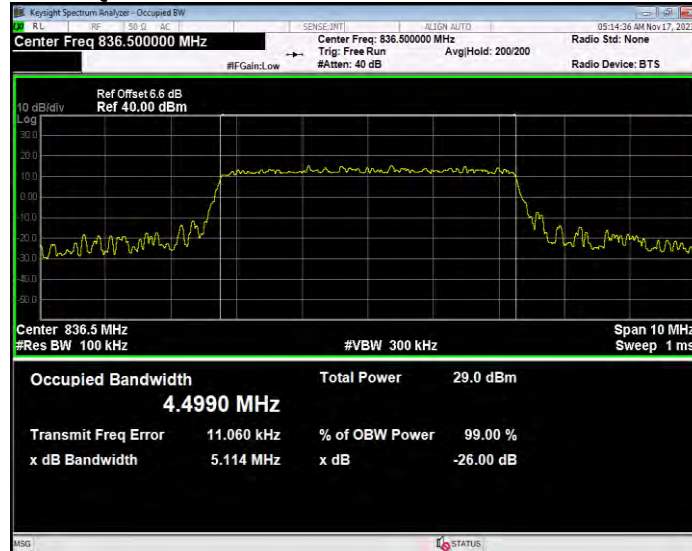
Band5 16QAM BW=3MHz Channel=20635 RB Size=15 Position=#0



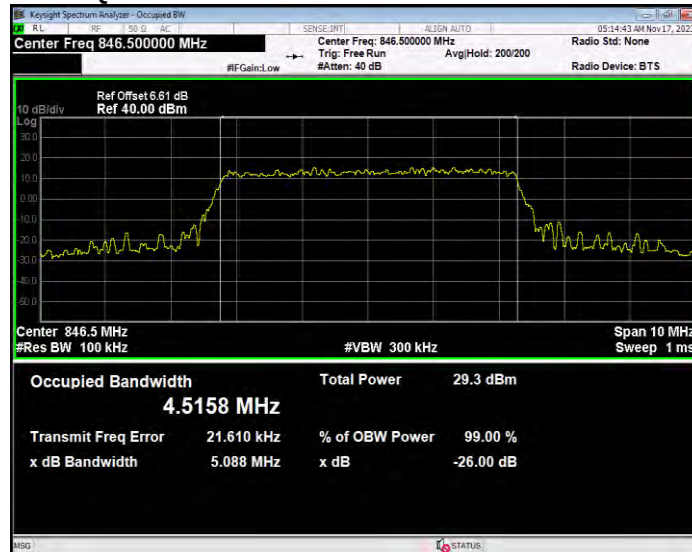
Band5 16QAM BW=5MHz Channel=20425 RB Size=25 Position=#0



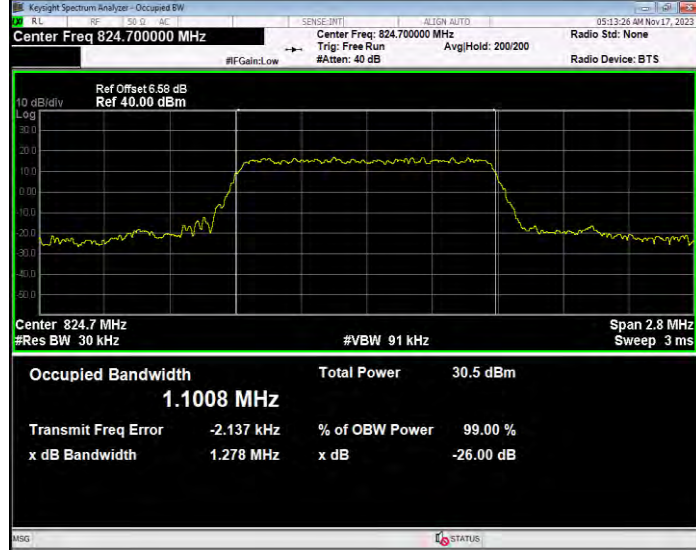
Band5 16QAM BW=5MHz Channel=20525 RB Size=25 Position=#0



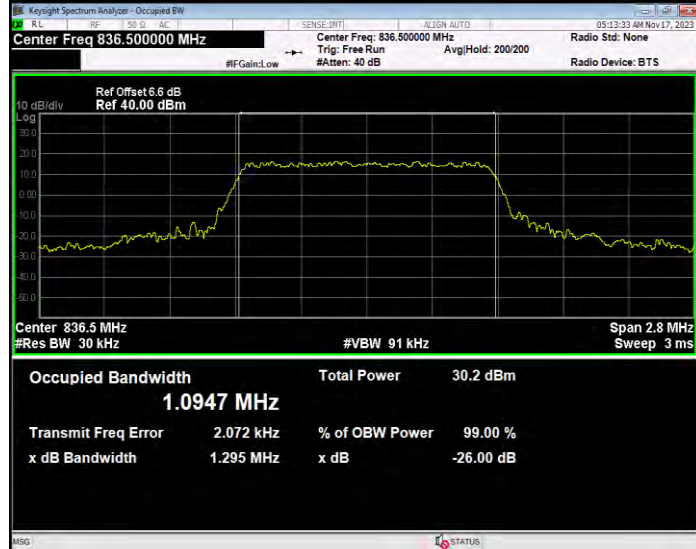
Band5 16QAM BW=5MHz Channel=20625 RB Size=25 Position=#0



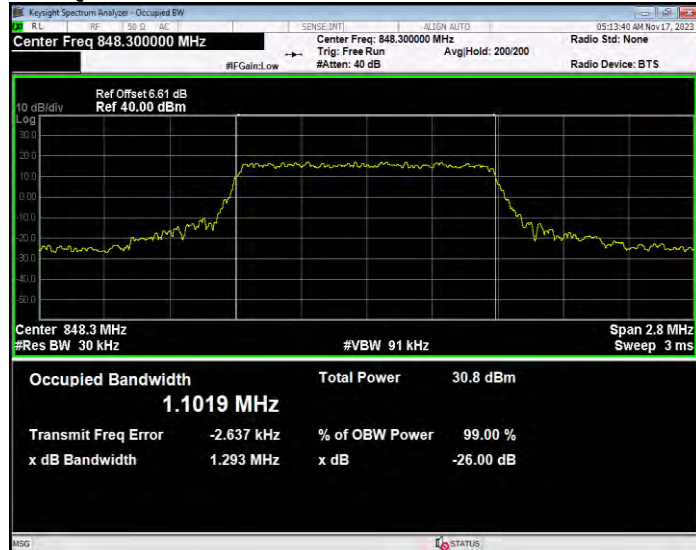
Band5 QPSK BW=1.4MHz Channel=20407 RB Size=6 Position=#0



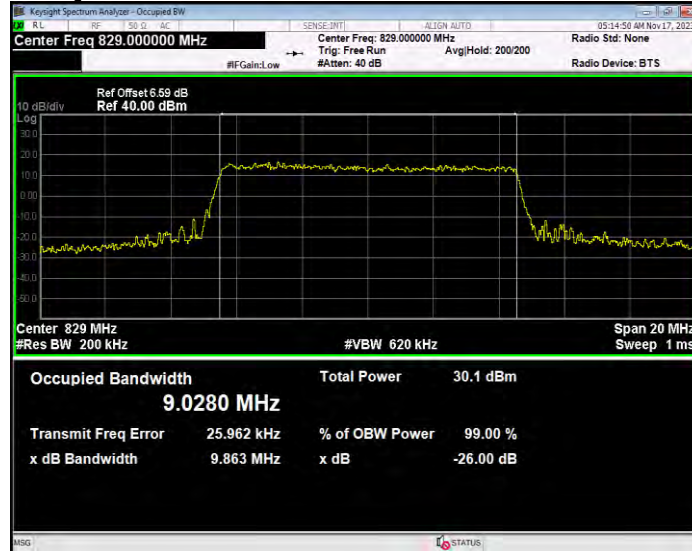
Band5 QPSK BW=1.4MHz Channel=20525 RB Size=6 Position=#0



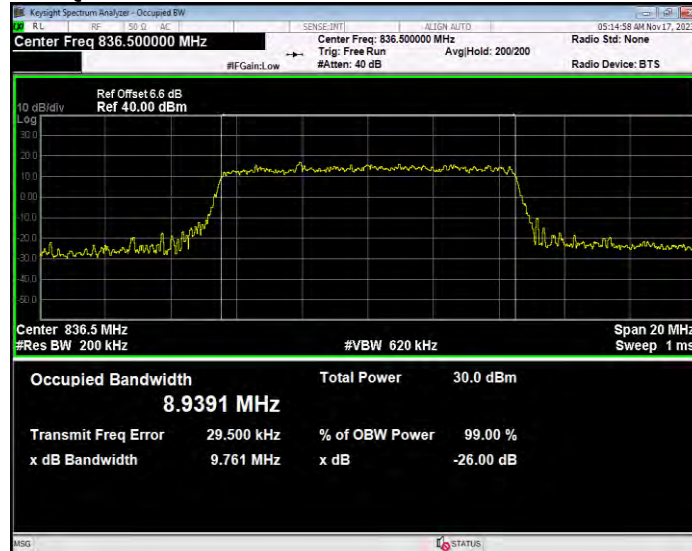
Band5 QPSK BW=1.4MHz Channel=20643 RB Size=6 Position=#0



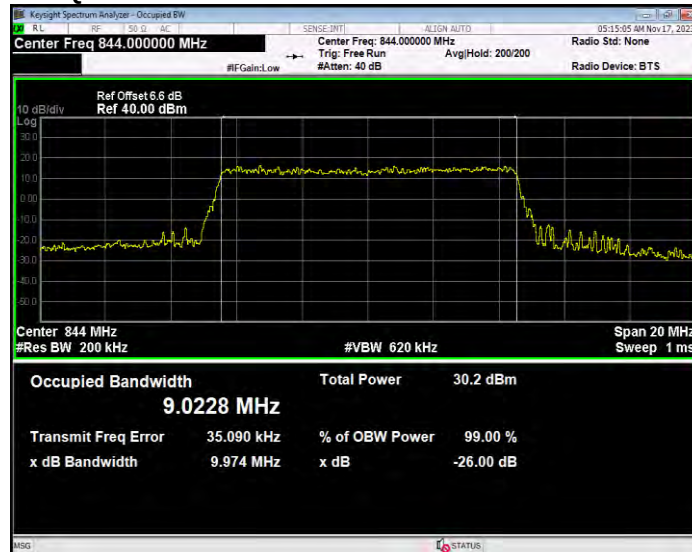
Band5 QPSK BW=10MHz Channel=20450 RB Size=50 Position=#0



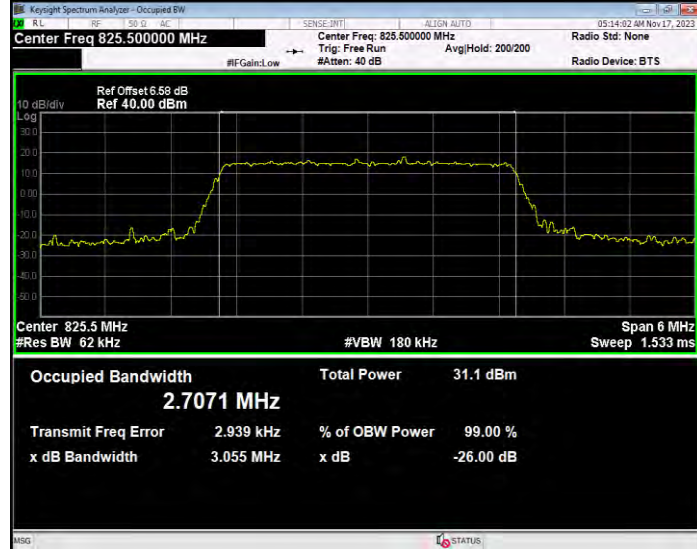
Band5 QPSK BW=10MHz Channel=20525 RB Size=50 Position=#0



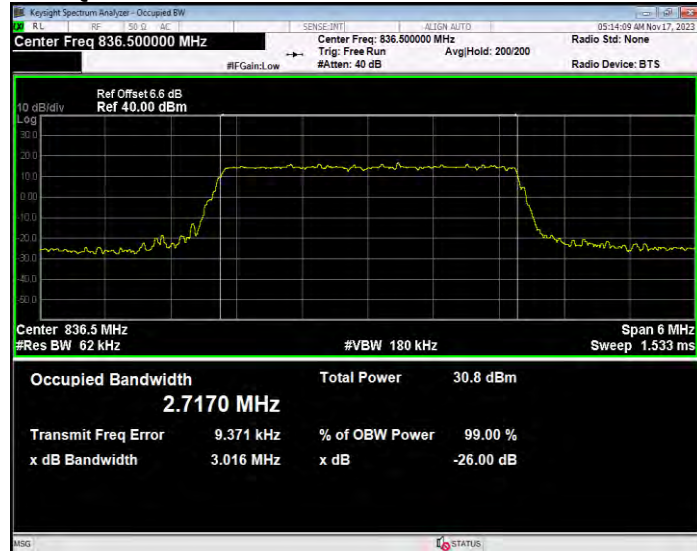
Band5 QPSK BW=10MHz Channel=20600 RB Size=50 Position=#0



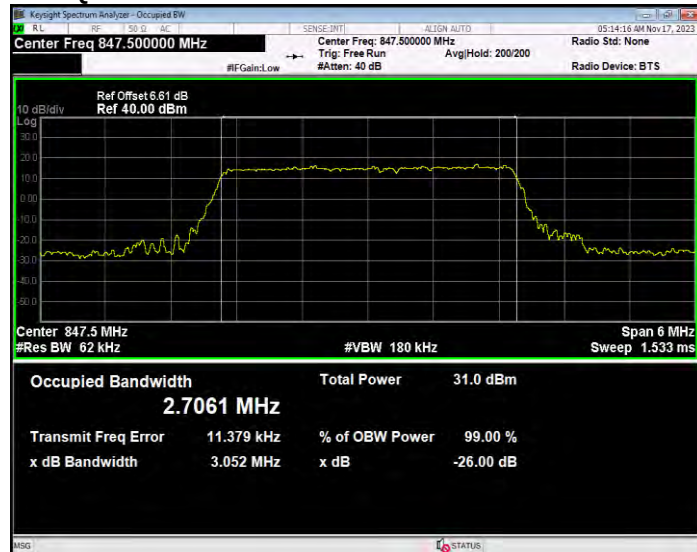
Band5 QPSK BW=3MHz Channel=20415 RB Size=15 Position=#0



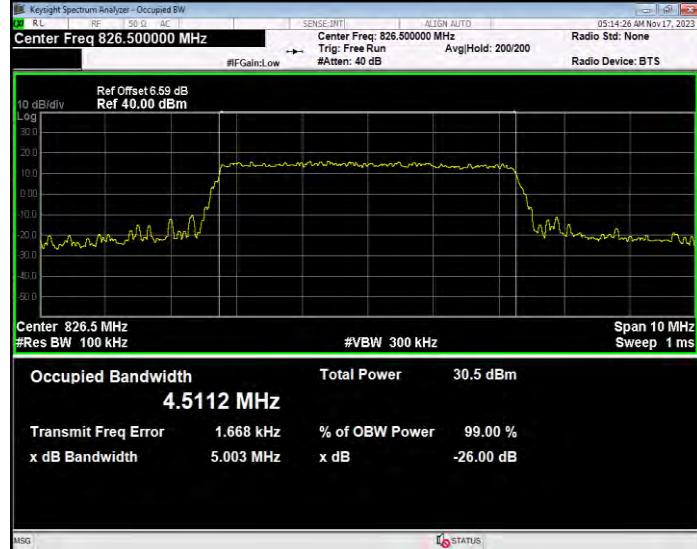
Band5 QPSK BW=3MHz Channel=20525 RB Size=15 Position=#0



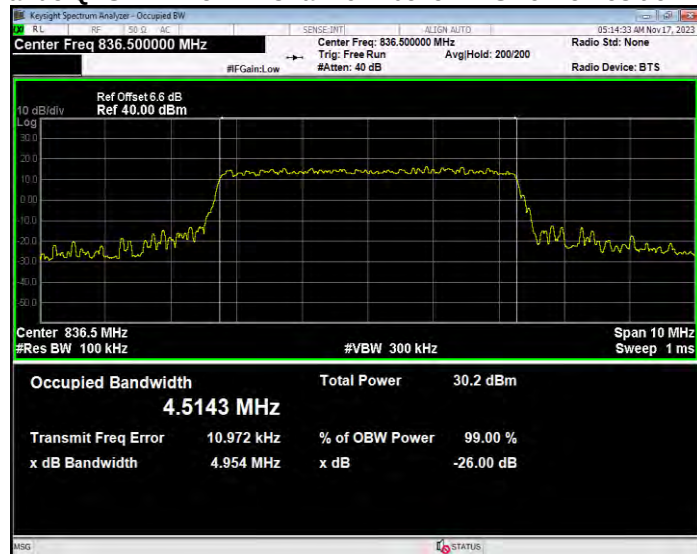
Band5 QPSK BW=3MHz Channel=20635 RB Size=15 Position=#0



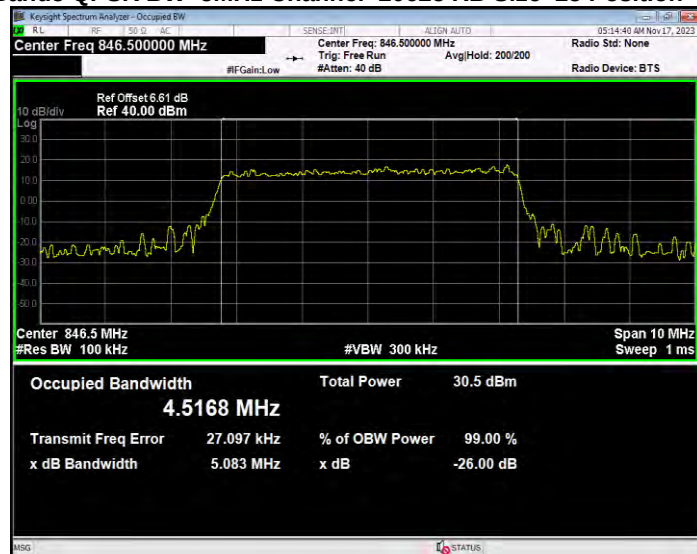
Band5 QPSK BW=5MHz Channel=20425 RB Size=25 Position=#0



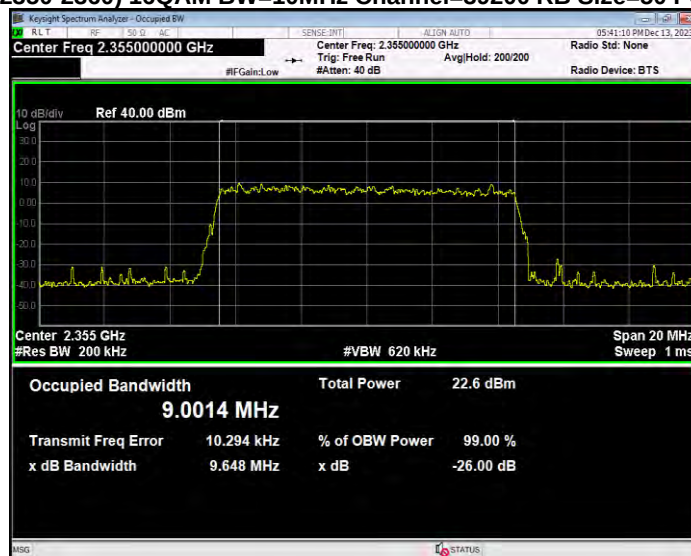
Band5 QPSK BW=5MHz Channel=20525 RB Size=25 Position=#0



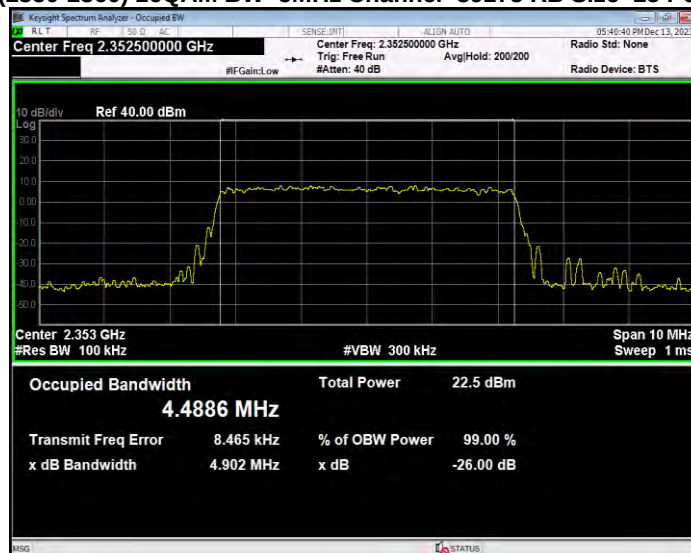
Band5 QPSK BW=5MHz Channel=20625 RB Size=25 Position=#0



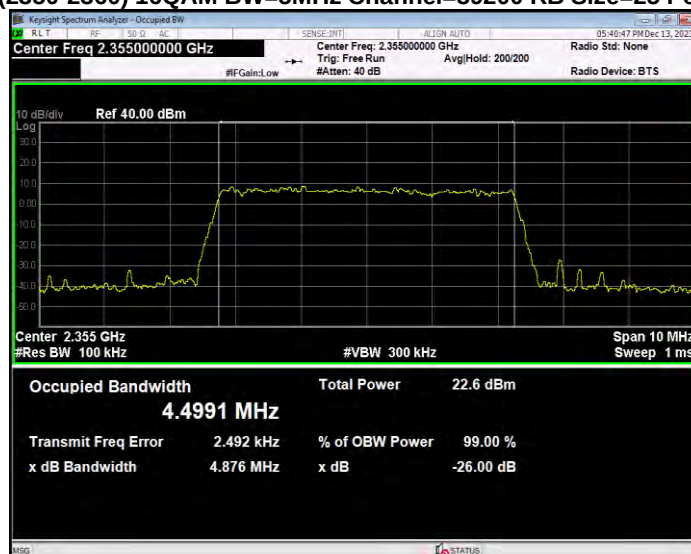
Band40(2350-2360) 16QAM BW=10MHz Channel=39200 RB Size=50 Position=#0



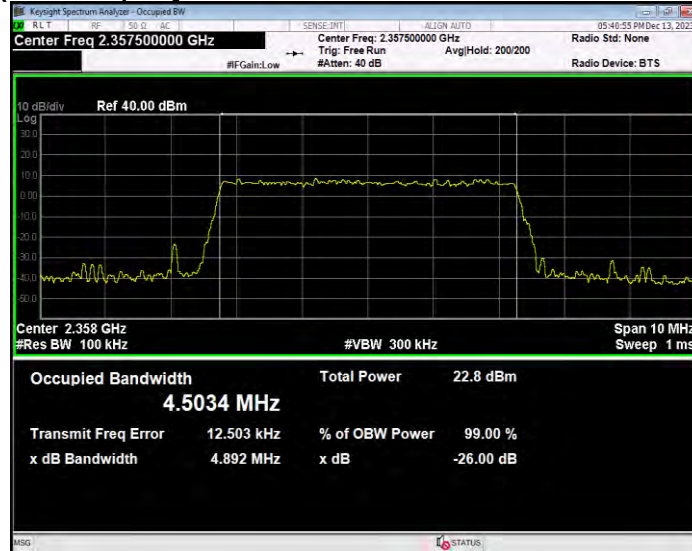
Band40(2350-2360) 16QAM BW=5MHz Channel=39175 RB Size=25 Position=#0



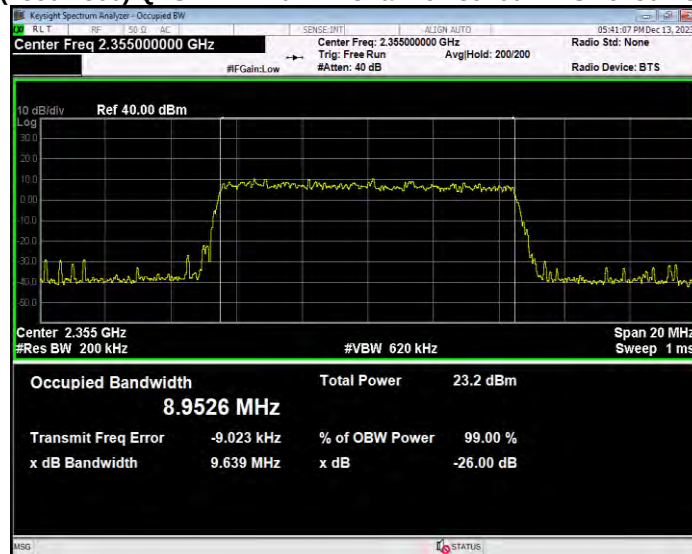
Band40(2350-2360) 16QAM BW=5MHz Channel=39200 RB Size=25 Position=#0



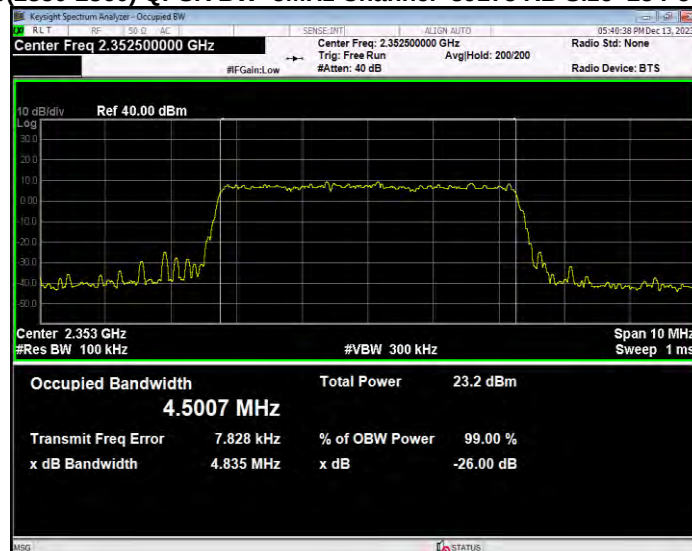
Band40(2350-2360) 16QAM BW=5MHz Channel=39225 RB Size=25 Position=#0



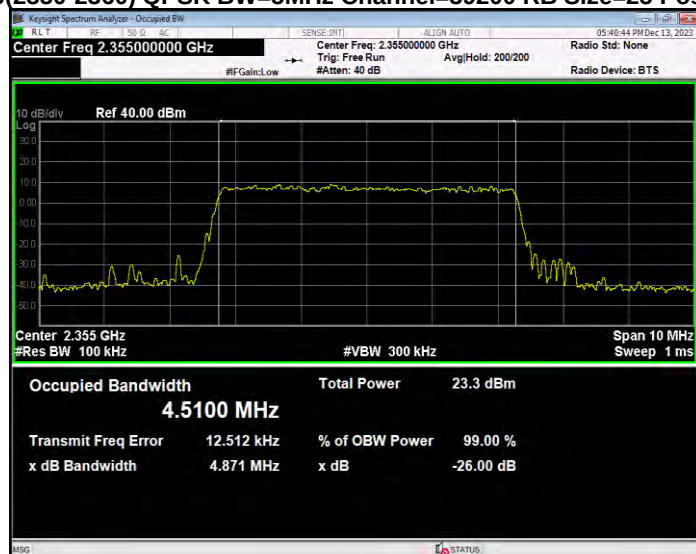
Band40(2350-2360) QPSK BW=10MHz Channel=39200 RB Size=50 Position=#0



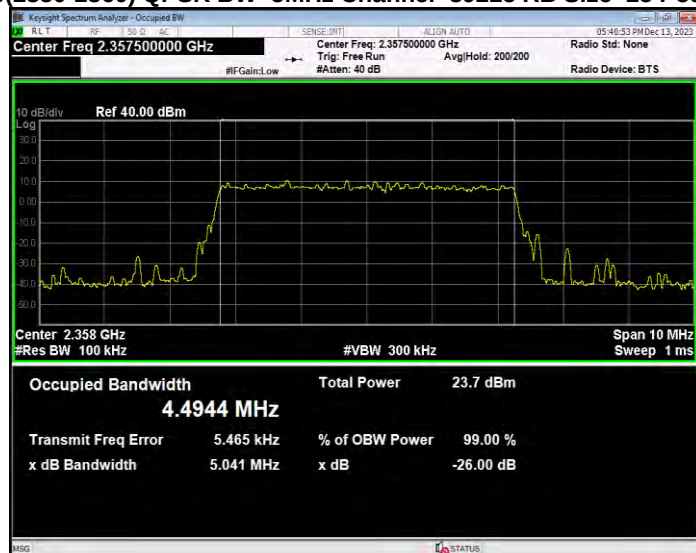
Band40(2350-2360) QPSK BW=5MHz Channel=39175 RB Size=25 Position=#0



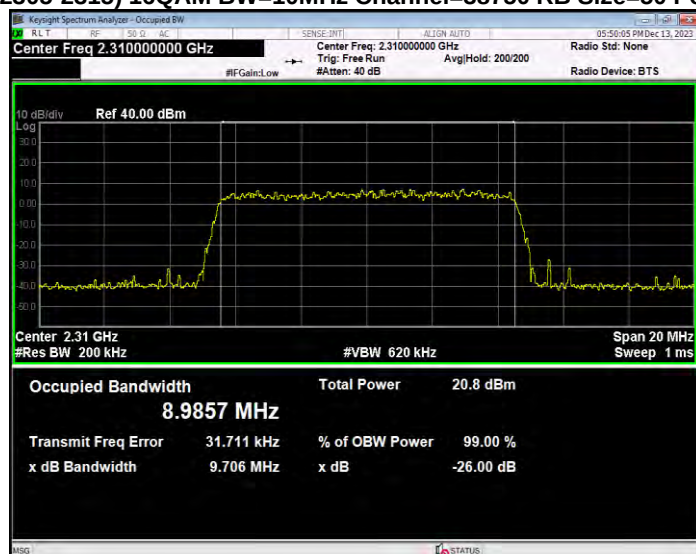
Band40(2350-2360) QPSK BW=5MHz Channel=39200 RB Size=25 Position=#0



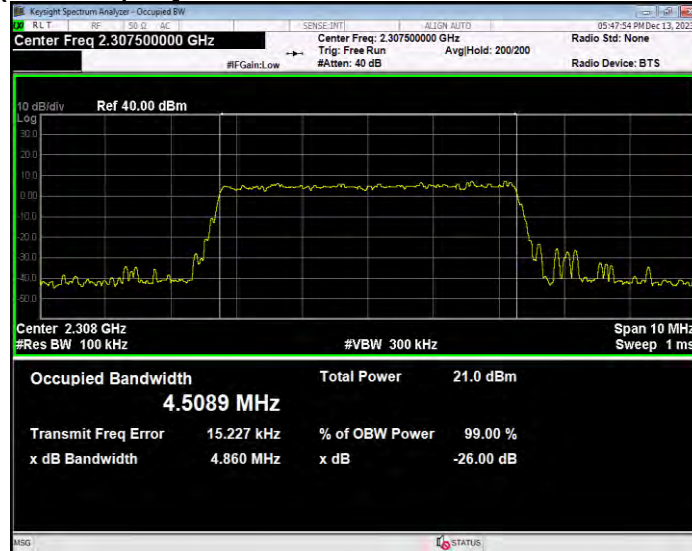
Band40(2350-2360) QPSK BW=5MHz Channel=39225 RB Size=25 Position=#0



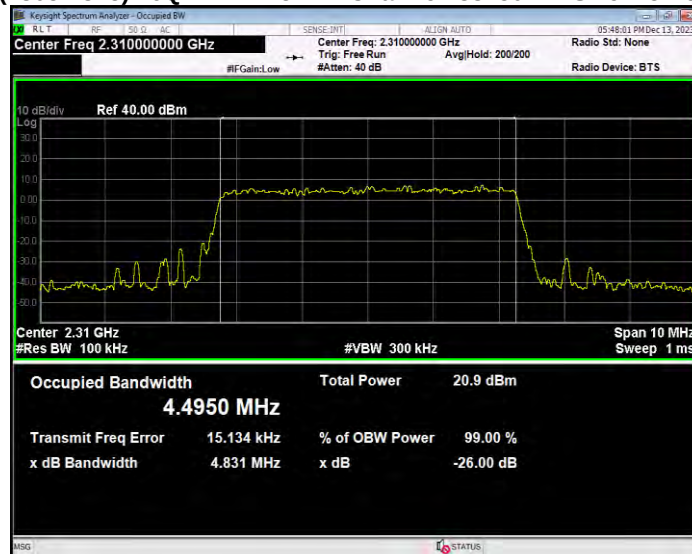
Band40(2305-2315) 16QAM BW=10MHz Channel=38750 RB Size=50 Position=#0



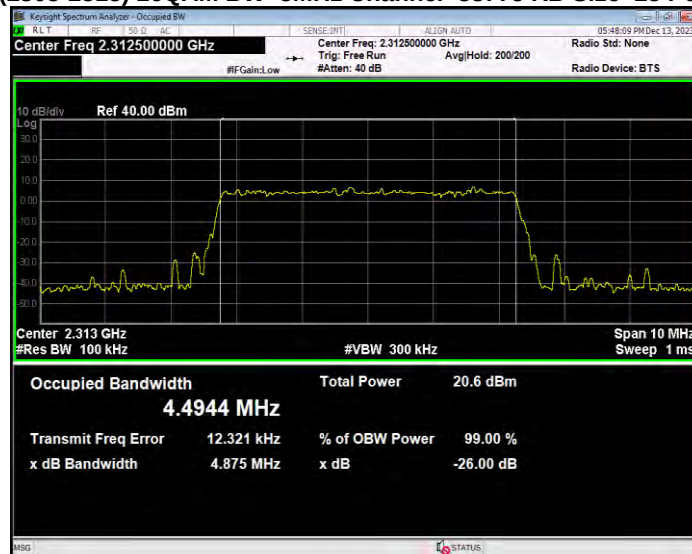
Band40(2305-2315) 16QAM BW=5MHz Channel=38725 RB Size=25 Position=#0



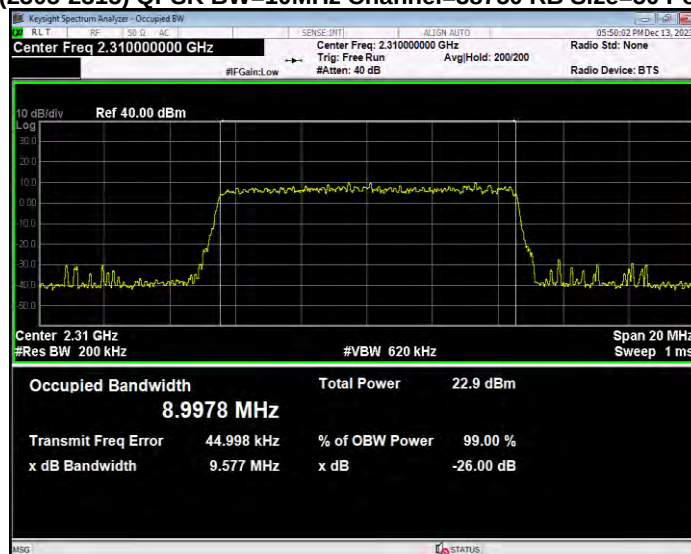
Band40(2305-2315) 16QAM BW=5MHz Channel=38750 RB Size=25 Position=#0



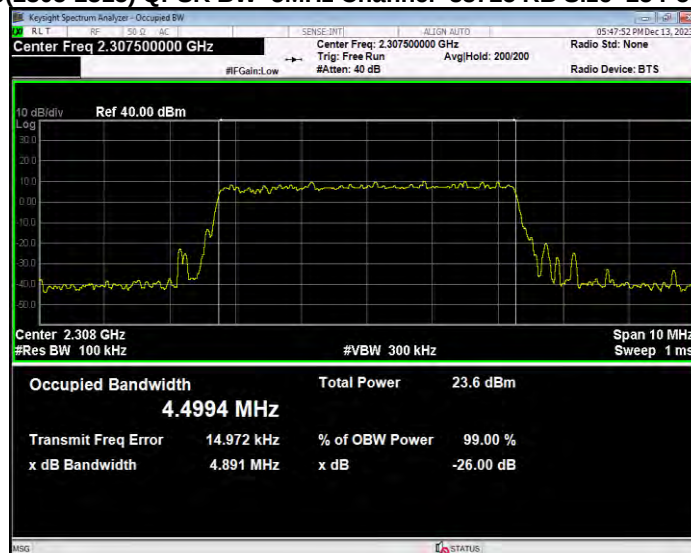
Band40(2305-2315) 16QAM BW=5MHz Channel=38775 RB Size=25 Position=#0



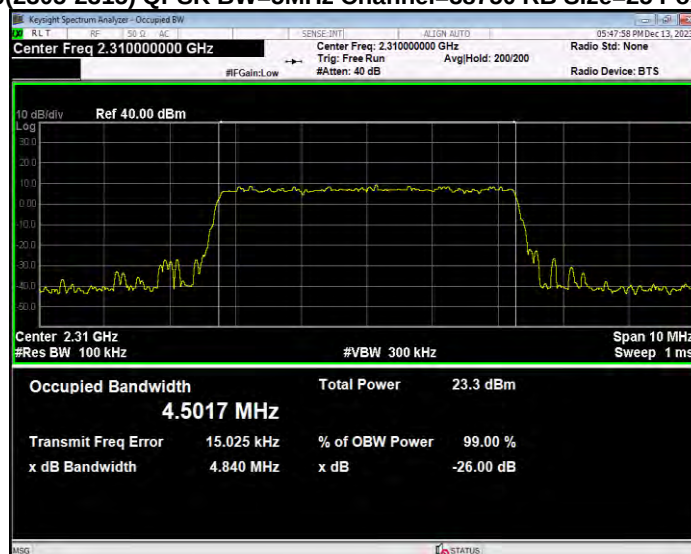
Band40(2305-2315) QPSK BW=10MHz Channel=38750 RB Size=50 Position=#0



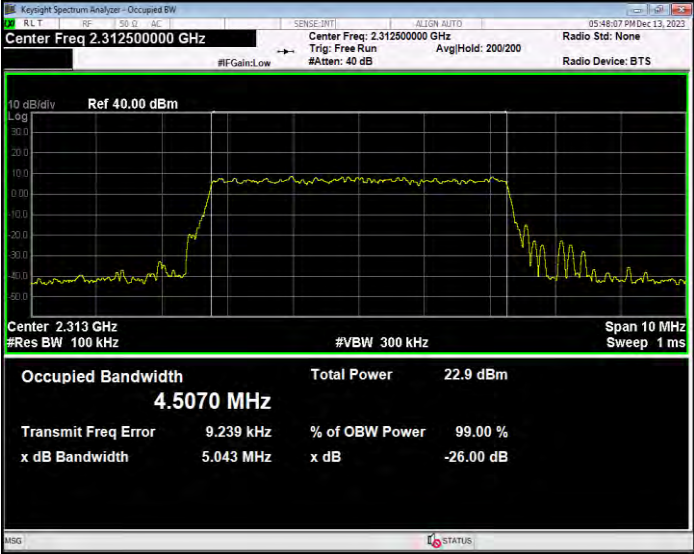
Band40(2305-2315) QPSK BW=5MHz Channel=38725 RB Size=25 Position=#0



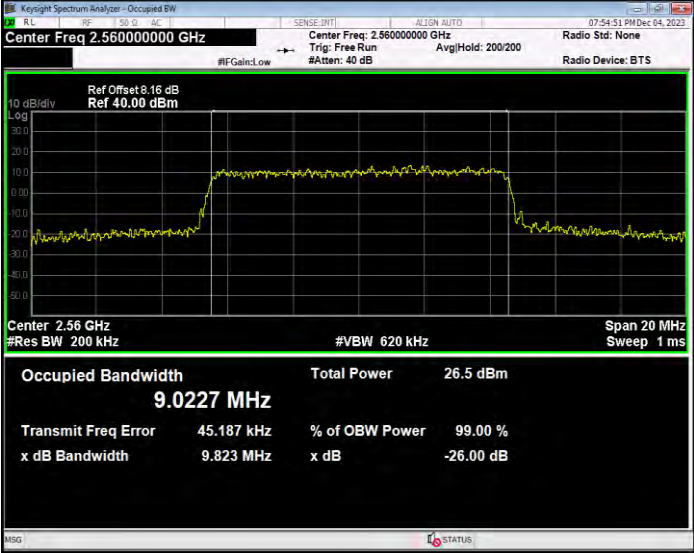
Band40(2305-2315) QPSK BW=5MHz Channel=38750 RB Size=25 Position=#0



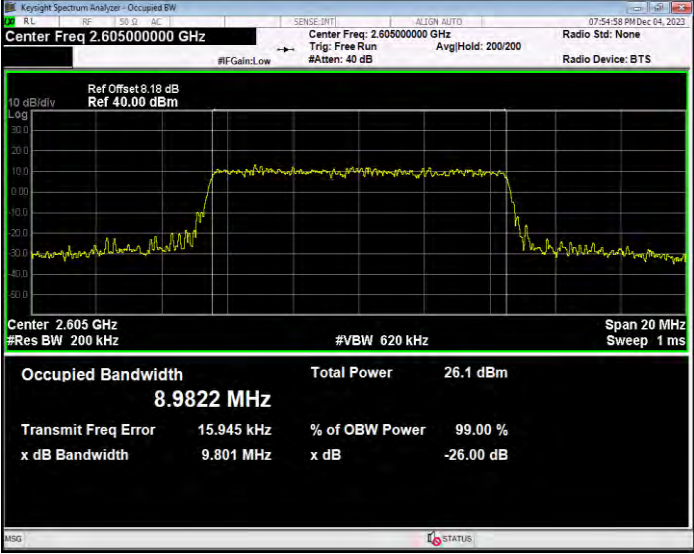
Band40(2305-2315) QPSK BW=5MHz Channel=38775 RB Size=25 Position=#0



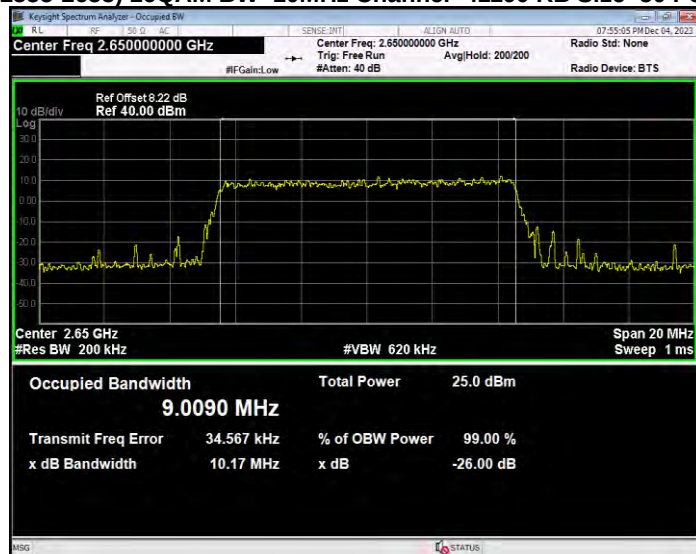
Band41(2555-2655) 16QAM BW=10MHz Channel=40290 RB Size=50 Position=#0



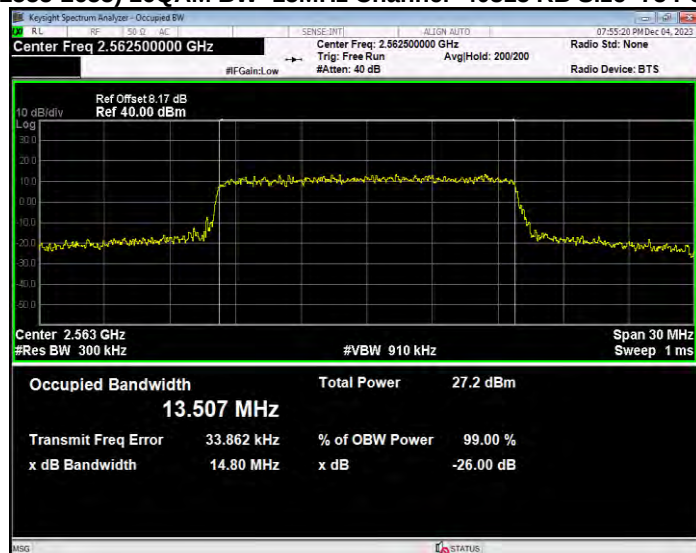
Band41(2555-2655) 16QAM BW=10MHz Channel=40740 RB Size=50 Position=#0



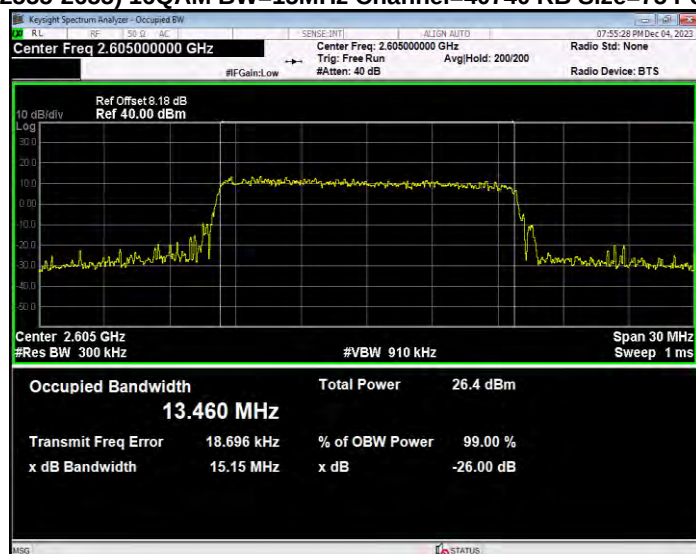
Band41(2555-2655) 16QAM BW=10MHz Channel=41190 RB Size=50 Position=#0



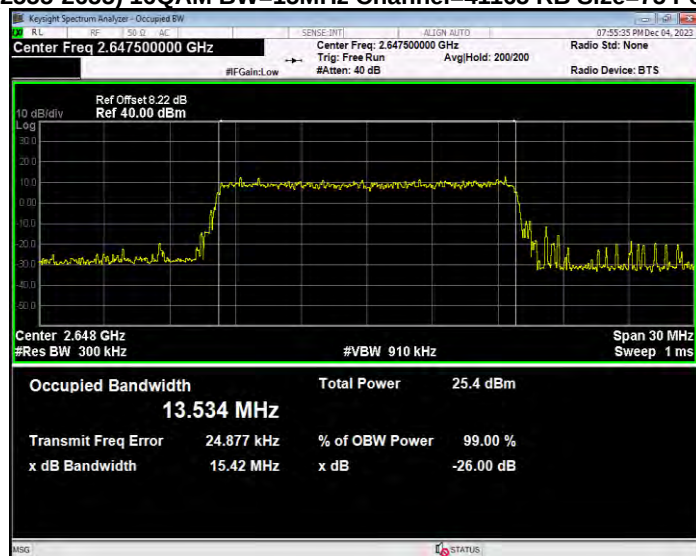
Band41(2555-2655) 16QAM BW=15MHz Channel=40315 RB Size=75 Position=#0



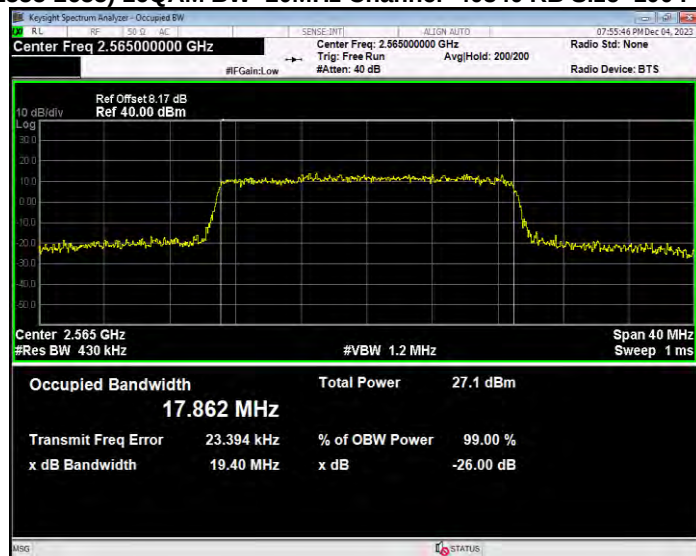
Band41(2555-2655) 16QAM BW=15MHz Channel=40740 RB Size=75 Position=#0



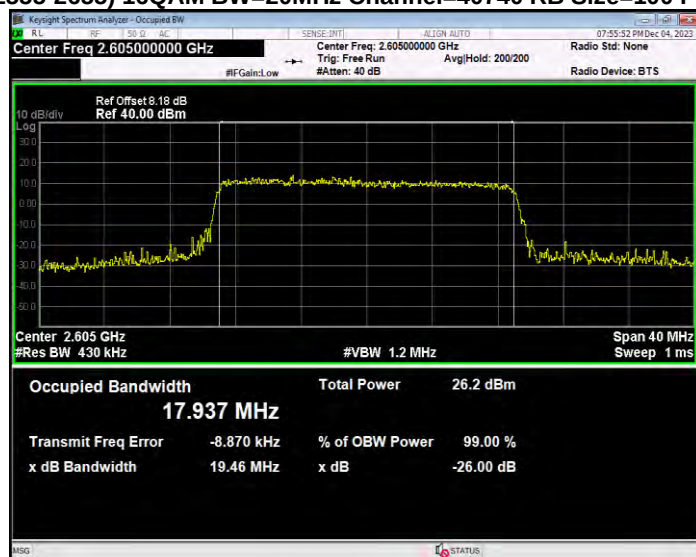
Band41(2555-2655) 16QAM BW=15MHz Channel=41165 RB Size=75 Position=#0



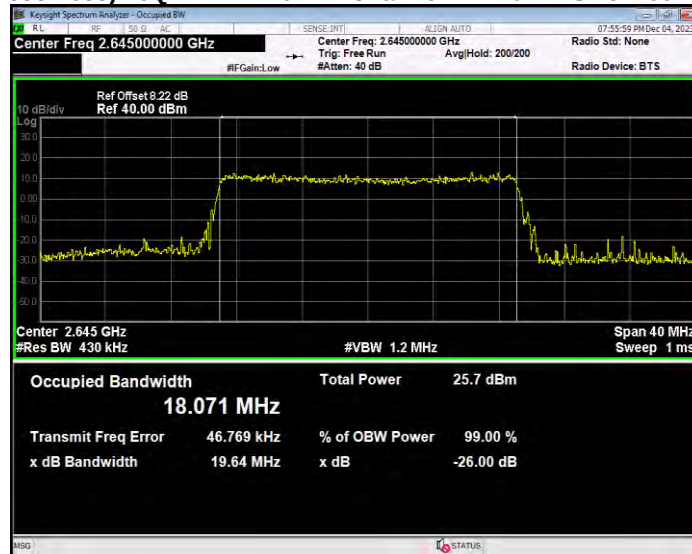
Band41(2555-2655) 16QAM BW=20MHz Channel=40340 RB Size=100 Position=#0



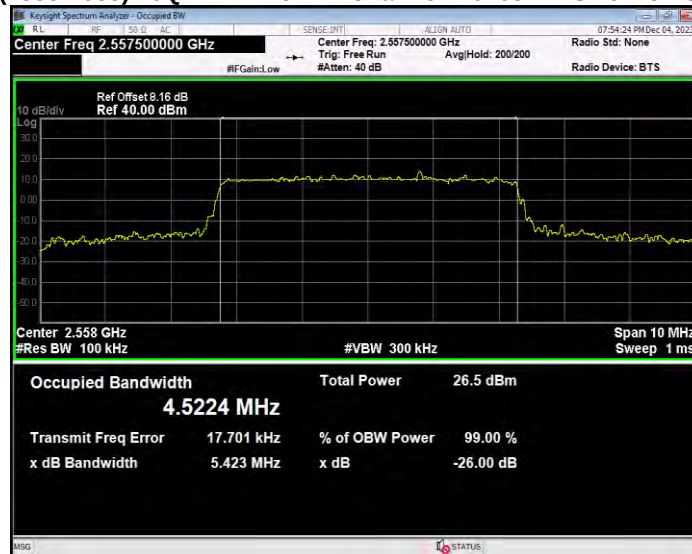
Band41(2555-2655) 16QAM BW=20MHz Channel=40740 RB Size=100 Position=#0



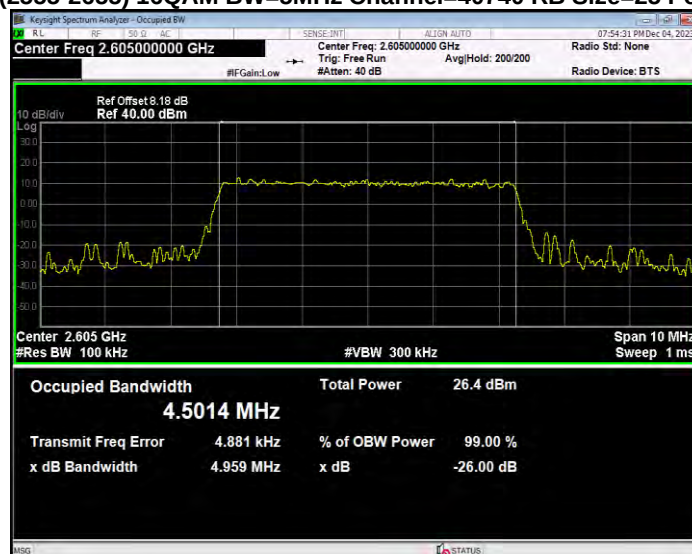
Band41(2555-2655) 16QAM BW=20MHz Channel=41140 RB Size=100 Position=#0



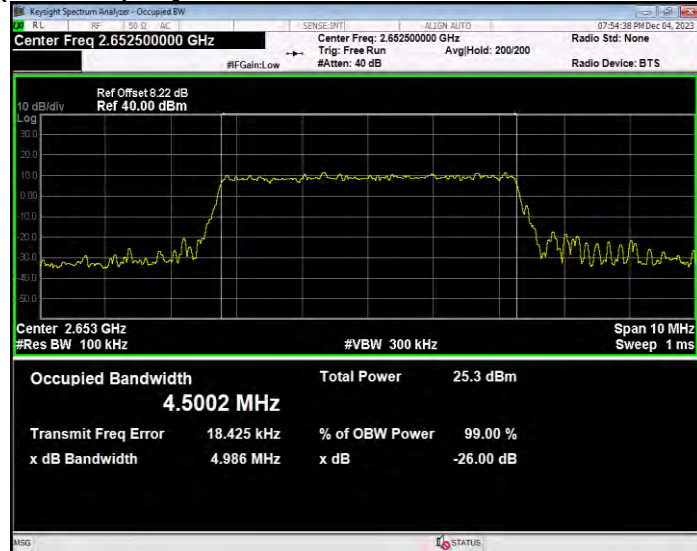
Band41(2555-2655) 16QAM BW=5MHz Channel=40265 RB Size=25 Position=#0



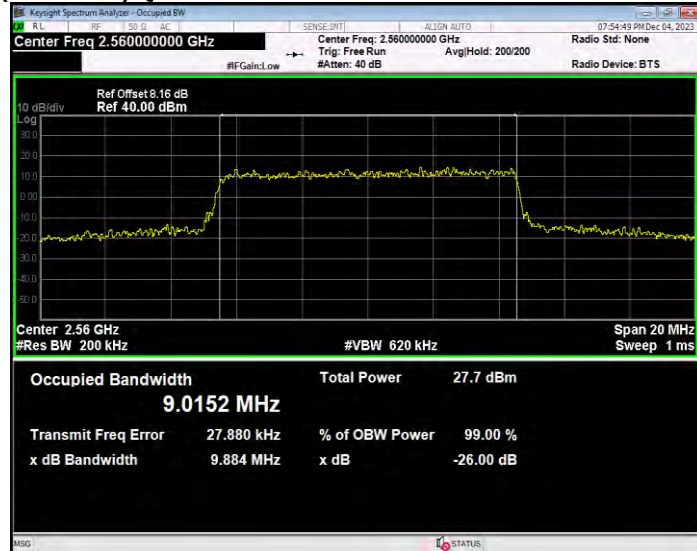
Band41(2555-2655) 16QAM BW=5MHz Channel=40740 RB Size=25 Position=#0



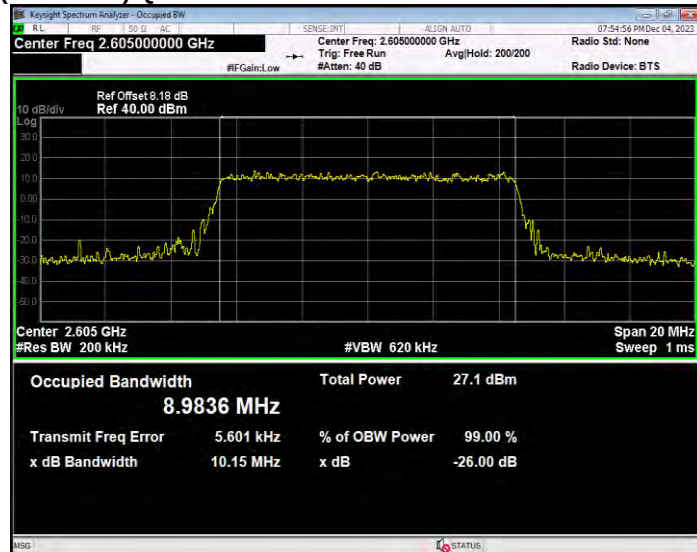
Band41(2555-2655) 16QAM BW=5MHz Channel=41215 RB Size=25 Position=#0



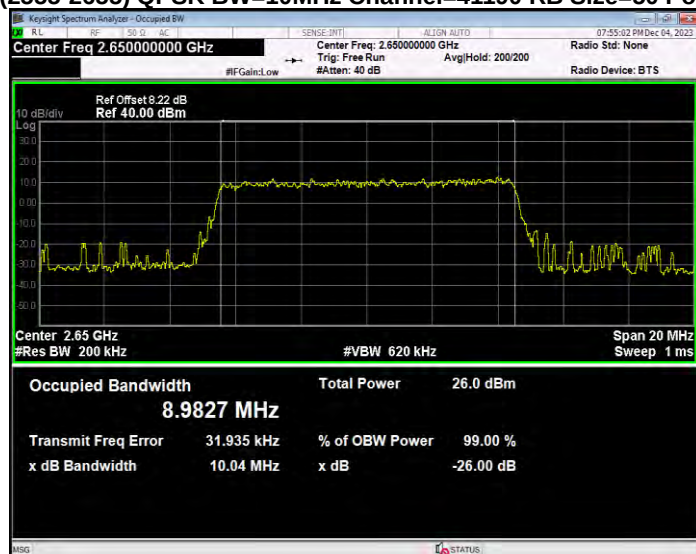
Band41(2555-2655) QPSK BW=10MHz Channel=40290 RB Size=50 Position=#0



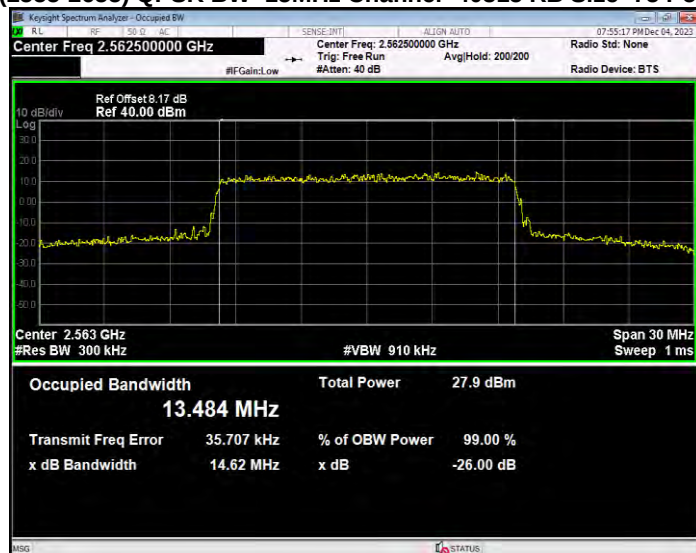
Band41(2555-2655) QPSK BW=10MHz Channel=40740 RB Size=50 Position=#0



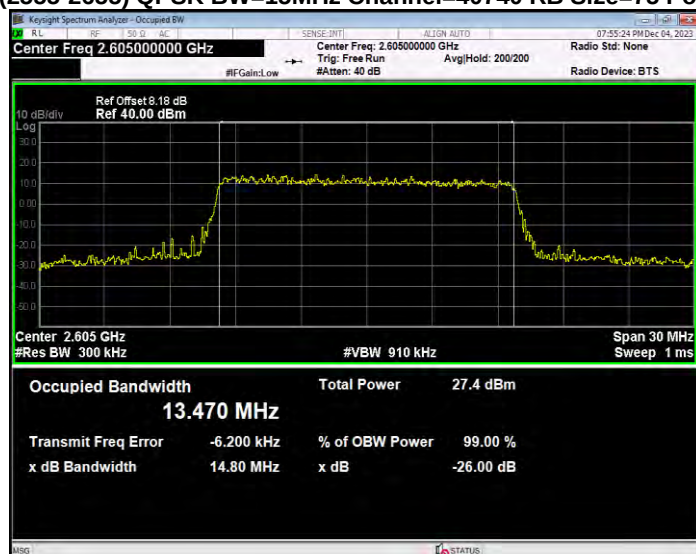
Band41(2555-2655) QPSK BW=10MHz Channel=41190 RB Size=50 Position=#0



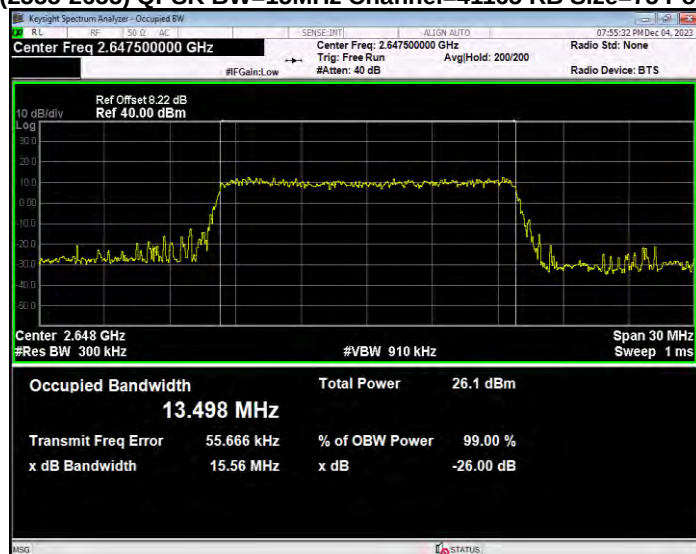
Band41(2555-2655) QPSK BW=15MHz Channel=40315 RB Size=75 Position=#0



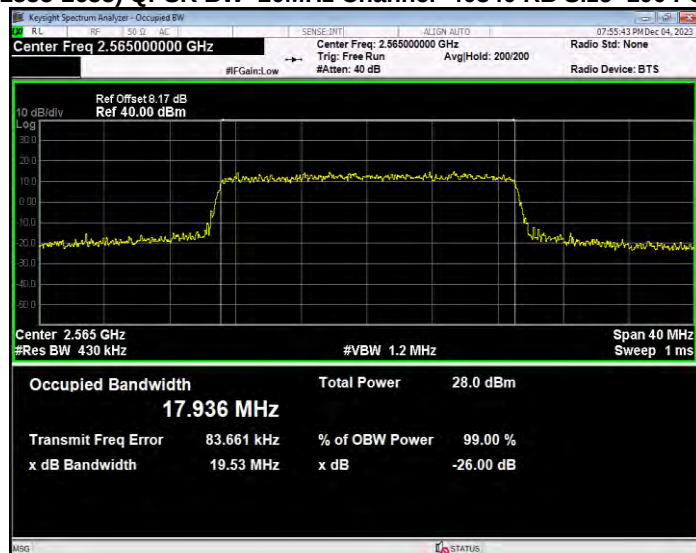
Band41(2555-2655) QPSK BW=15MHz Channel=40740 RB Size=75 Position=#0



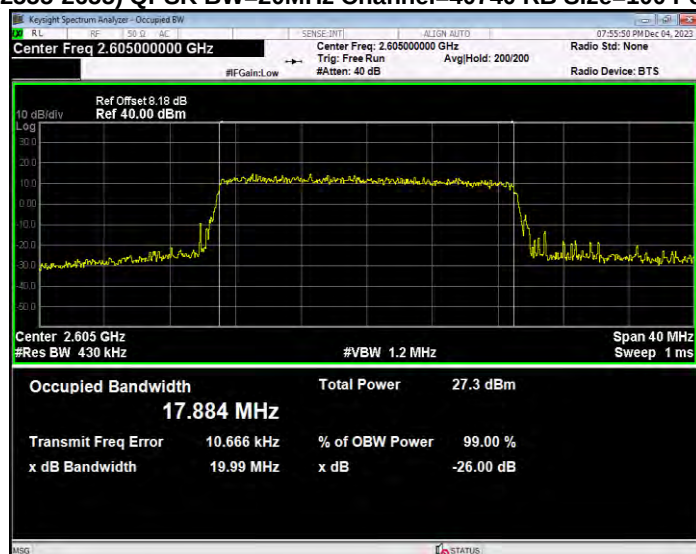
Band41(2555-2655) QPSK BW=15MHz Channel=41165 RB Size=75 Position=#0



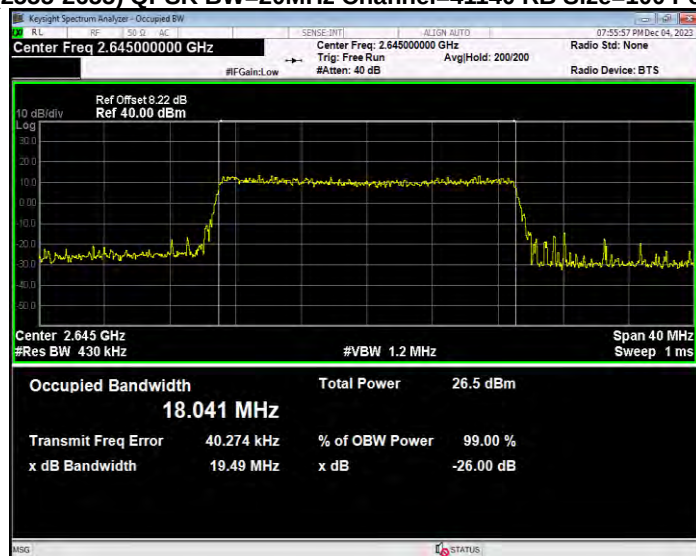
Band41(2555-2655) QPSK BW=20MHz Channel=40340 RB Size=100 Position=#0



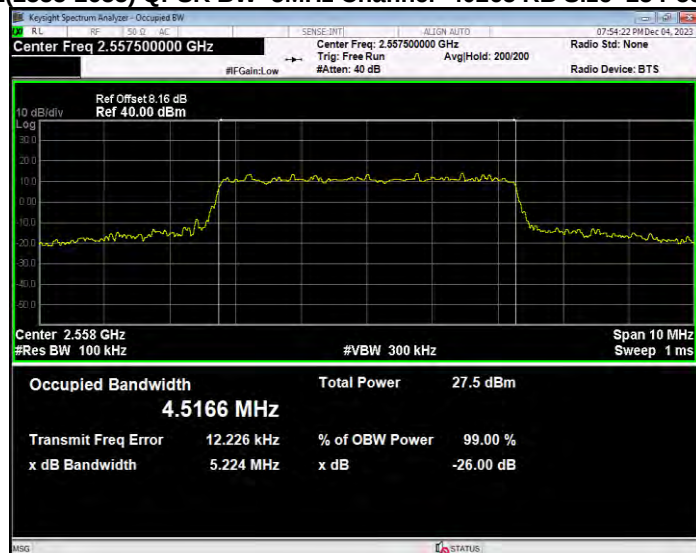
Band41(2555-2655) QPSK BW=20MHz Channel=40740 RB Size=100 Position=#0



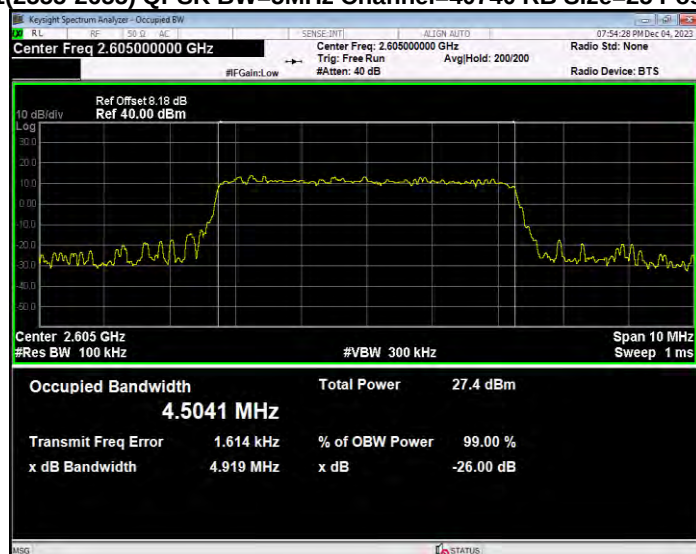
Band41(2555-2655) QPSK BW=20MHz Channel=41140 RB Size=100 Position=#0



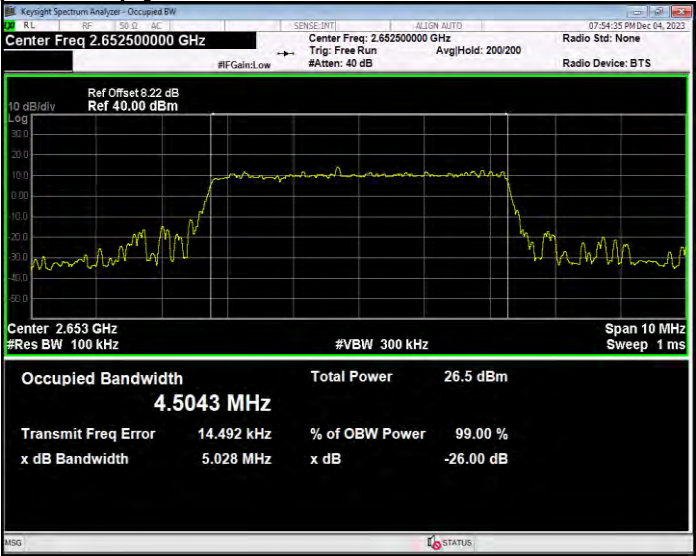
Band41(2555-2655) QPSK BW=5MHz Channel=40265 RB Size=25 Position=#0



Band41(2555-2655) QPSK BW=5MHz Channel=40740 RB Size=25 Position=#0



Band41(2555-2655) QPSK BW=5MHz Channel=41215 RB Size=25 Position=#0

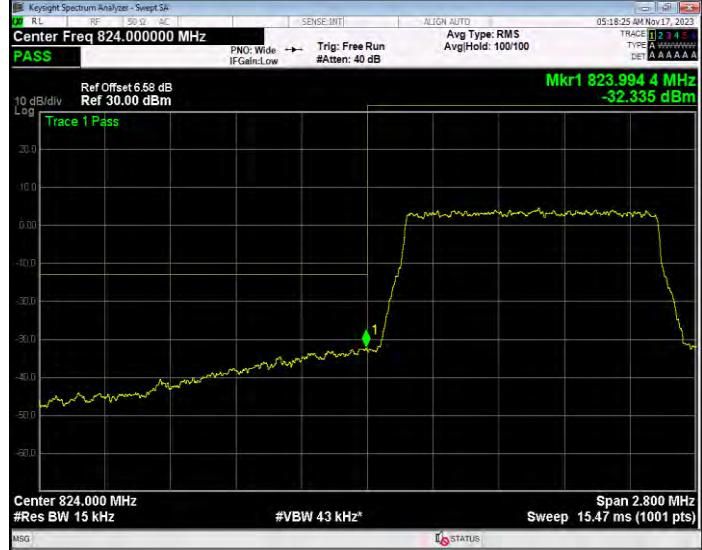


Band edge

Band	Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)	Verdict
Band5	1.4	20407	6	#0	QPSK	824.00	-30.45	-13	PASS
Band5	1.4	20407	6	#0	16QAM	823.99	-32.33	-13	PASS
Band5	1.4	20643	6	#0	QPSK	849.05	-30.92	-13	PASS
Band5	1.4	20643	6	#0	16QAM	849.01	-31.63	-13	PASS
Band5	3	20415	15	#0	QPSK	824.00	-24.10	-13	PASS
Band5	3	20415	15	#0	16QAM	824.00	-23.68	-13	PASS
Band5	3	20635	15	#0	QPSK	849.02	-25.58	-13	PASS
Band5	3	20635	15	#0	16QAM	849.00	-24.26	-13	PASS
Band5	5	20425	25	#0	QPSK	824.00	-28.89	-13	PASS
Band5	5	20425	25	#0	16QAM	824.00	-29.63	-13	PASS
Band5	5	20625	25	#0	QPSK	849.03	-26.84	-13	PASS
Band5	5	20625	25	#0	16QAM	849.00	-27.60	-13	PASS
Band5	10	20450	50	#0	QPSK	823.98	-29.10	-13	PASS
Band5	10	20450	50	#0	16QAM	823.88	-31.42	-13	PASS
Band5	10	20600	50	#0	QPSK	849.00	-31.24	-13	PASS
Band5	10	20600	50	#0	16QAM	849.00	-30.44	-13	PASS
Band40(2350-2360)	5	39175	25	#0	QPSK	2348.92	-15.80	-13	PASS
Band40(2350-2360)	5	39175	25	#0	16QAM	2348.99	-16.07	-13	PASS
Band40(2350-2360)	5	39225	25	#0	QPSK	2353.90	-14.16	-13	PASS
Band40(2350-2360)	5	39225	25	#0	16QAM	2353.98	-16.01	-13	PASS
Band40(2350-2360)	10	39200	50	#0	QPSK	2366.29	-41.22	-40	PASS
Band40(2350-2360)	10	39200	50	#0	16QAM	2365.45	-42.86	-40	PASS
Band40(2305-2315)	5	38725	25	#0	QPSK	2311.01	-23.63	-13	PASS
Band40(2305-2315)	5	38725	25	#0	16QAM	2311.01	-26.32	-13	PASS
Band40(2305-2315)	5	38775	25	#0	QPSK	2316.00	-24.75	-13	PASS
Band40(2305-2315)	5	38775	25	#0	16QAM	2309.00	-26.53	-13	PASS
Band40(2305-2315)	10	38750	50	#0	QPSK	2299.70	-40.28	-25	PASS
Band40(2305-2315)	10	38750	50	#0	16QAM	2324.59	-47.31	-31	PASS
Band41(2555-2655)	5	40265	25	#0	QPSK	2553.74	-17.00	-10	PASS
Band41(2555-2655)	5	40265	25	#0	16QAM	2553.87	-18.15	-10	PASS
Band41(2555-2655)	5	41215	25	#0	QPSK	2661.20	-31.95	-25	PASS
Band41(2555-2655)	5	41215	25	#0	16QAM	2661.50	-33.82	-25	PASS
Band41(2555-2655)	10	40290	50	#0	QPSK	2544.91	-34.60	-25	PASS
Band41(2555-2655)	10	40290	50	#0	16QAM	2544.54	-35.50	-25	PASS
Band41(2555-2655)	10	41190	50	#0	QPSK	2666.49	-35.04	-25	PASS
Band41(2555-2655)	10	41190	50	#0	16QAM	2667.33	-37.30	-25	PASS
Band41(2555-2655)	15	40315	75	#0	QPSK	2549.04	-23.20	-13	PASS
Band41(2555-2655)	15	40315	75	#0	16QAM	2548.87	-25.01	-13	PASS
Band41(2555-2655)	15	41165	75	#0	QPSK	2670.30	-34.73	-25	PASS
Band41(2555-2655)	15	41165	75	#0	16QAM	2673.56	-37.58	-25	PASS
Band41(2555-2655)	20	40340	100	#0	QPSK	2534.84	-38.49	-25	PASS
Band41(2555-2655)	20	40340	100	#0	16QAM	2549.64	-28.13	-13	PASS
Band41(2555-2655)	20	41140	100	#0	QPSK	2675.13	-37.85	-25	PASS
Band41(2555-2655)	20	41140	100	#0	16QAM	2676.00	-38.66	-25	PASS
Band5	1.4	20407	1	#0	QPSK	824.00	-23.04	-13	PASS
Band5	1.4	20407	1	#0	16QAM	824.00	-24.92	-13	PASS
Band5	1.4	20643	1	#0	QPSK	849.00	-36.95	-13	PASS
Band5	1.4	20643	1	#0	16QAM	849.06	-38.03	-13	PASS
Band5	3	20415	1	#0	QPSK	824.00	-13.98	-13	PASS
Band5	3	20415	1	#0	16QAM	824.00	-15.61	-13	PASS
Band5	3	20635	1	#0	QPSK	849.00	-28.35	-13	PASS
Band5	3	20635	1	#0	16QAM	849.00	-27.95	-13	PASS
Band5	5	20425	1	#0	QPSK	824.00	-16.60	-13	PASS
Band5	5	20425	1	#0	16QAM	824.00	-20.55	-13	PASS
Band5	5	20625	1	#0	QPSK	849.45	-37.29	-13	PASS
Band5	5	20625	1	#0	16QAM	849.05	-36.54	-13	PASS
Band5	10	20450	1	#0	QPSK	824.00	-24.56	-13	PASS
Band5	10	20450	1	#0	16QAM	823.96	-24.98	-13	PASS
Band5	10	20600	1	#0	QPSK	849.16	-35.28	-13	PASS
Band5	10	20600	1	#0	16QAM	849.28	-36.32	-13	PASS
Band40(2305-2315)	5	38725	1	#0	QPSK	2303.99	-14.24	-13	PASS
Band40(2305-2315)	5	38725	1	#0	16QAM	2304.00	-14.63	-13	PASS
Band40(2305-2315)	5	38775	1	#0	QPSK	2309.00	-14.64	-13	PASS

Band40(2305-2315)	5	38775	1	#0	16QAM	2309.00	-14.76	-13	PASS
Band40(2305-2315)	10	38750	1	#0	QPSK	2300.63	-21.58	-13	PASS
Band40(2305-2315)	10	38750	1	#0	16QAM	2300.64	-21.79	-13	PASS
Band40(2350-2360)	5	39175	1	#0	QPSK	2349.00	-15.71	-13	PASS
Band40(2350-2360)	5	39175	1	#0	16QAM	2349.00	-15.45	-13	PASS
Band40(2350-2360)	5	39225	1	#0	QPSK	2354.00	-14.44	-13	PASS
Band40(2350-2360)	5	39225	1	#0	16QAM	2354.00	-14.68	-13	PASS
Band40(2350-2360)	10	39200	1	#0	QPSK	2368.23	-45.79	-40	PASS
Band40(2350-2360)	10	39200	1	#0	16QAM	2368.68	-46.64	-40	PASS
Band41(2555-2655)	5	40265	1	#0	QPSK	2548.55	-38.51	-25	PASS
Band41(2555-2655)	5	40265	1	#0	16QAM	2548.45	-39.37	-25	PASS
Band41(2555-2655)	5	41215	1	#0	QPSK	2661.12	-36.93	-25	PASS
Band41(2555-2655)	5	41215	1	#0	16QAM	2663.86	-39.81	-25	PASS
Band41(2555-2655)	10	40290	1	#0	QPSK	2545.00	-38.90	-25	PASS
Band41(2555-2655)	10	40290	1	#0	16QAM	2544.66	-38.97	-25	PASS
Band41(2555-2655)	10	41190	1	#0	QPSK	2665.35	-38.41	-25	PASS
Band41(2555-2655)	10	41190	1	#0	16QAM	2665.61	-39.61	-25	PASS
Band41(2555-2655)	15	40315	1	#0	QPSK	2537.21	-39.71	-25	PASS
Band41(2555-2655)	15	40315	1	#0	16QAM	2538.40	-39.92	-25	PASS
Band41(2555-2655)	15	41165	1	#0	QPSK	2671.53	-39.77	-25	PASS
Band41(2555-2655)	15	41165	1	#0	16QAM	2670.84	-39.88	-25	PASS
Band41(2555-2655)	20	40340	1	#0	QPSK	2534.20	-40.44	-25	PASS
Band41(2555-2655)	20	40340	1	#0	16QAM	2532.44	-39.68	-25	PASS
Band41(2555-2655)	20	41140	1	#0	QPSK	2677.80	-40.06	-25	PASS
Band41(2555-2655)	20	41140	1	#0	16QAM	2676.45	-39.94	-25	PASS

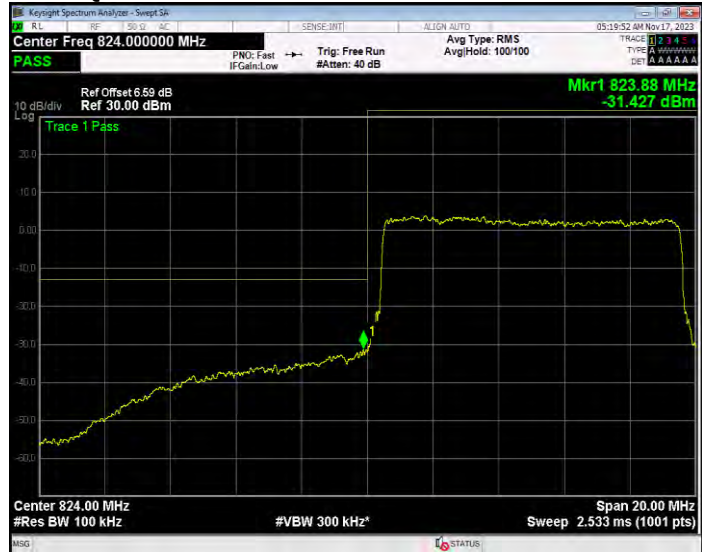
Band5 16QAM BW=1.4MHz Channel=20407 RB Size=6 Position=#0



Band5 16QAM BW=1.4MHz Channel=20643 RB Size=6 Position=#0



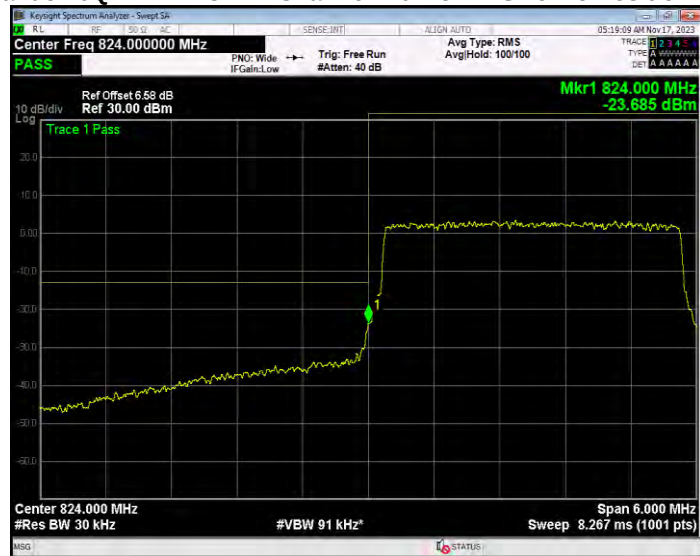
Band5 16QAM BW=10MHz Channel=20450 RB Size=50 Position=#0



Band5 16QAM BW=10MHz Channel=20600 RB Size=50 Position=#0



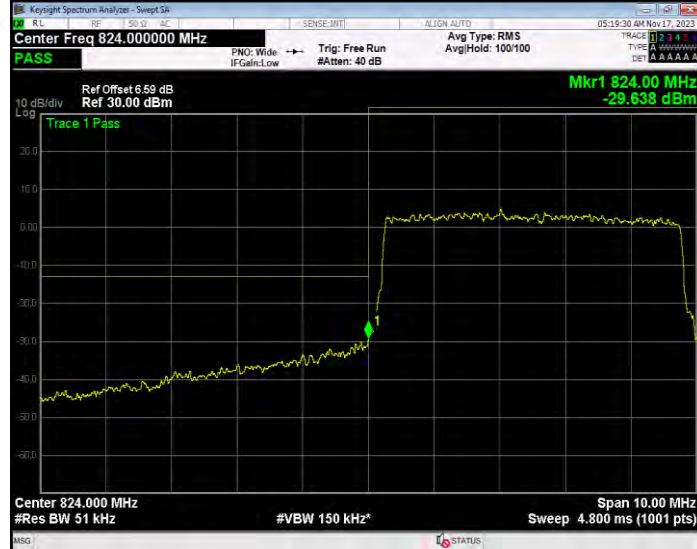
Band5 16QAM BW=3MHz Channel=20415 RB Size=15 Position=#0



Band5 16QAM BW=3MHz Channel=20635 RB Size=15 Position=#0



Band5 16QAM BW=5MHz Channel=20425 RB Size=25 Position=#0



Band5 16QAM BW=5MHz Channel=20625 RB Size=25 Position=#0



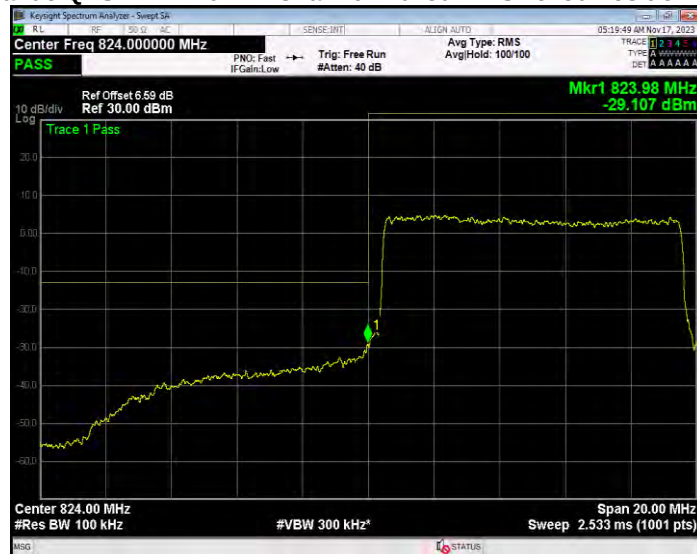
Band5 QPSK BW=1.4MHz Channel=20407 RB Size=6 Position=#0



Band5 QPSK BW=1.4MHz Channel=20643 RB Size=6 Position=#0



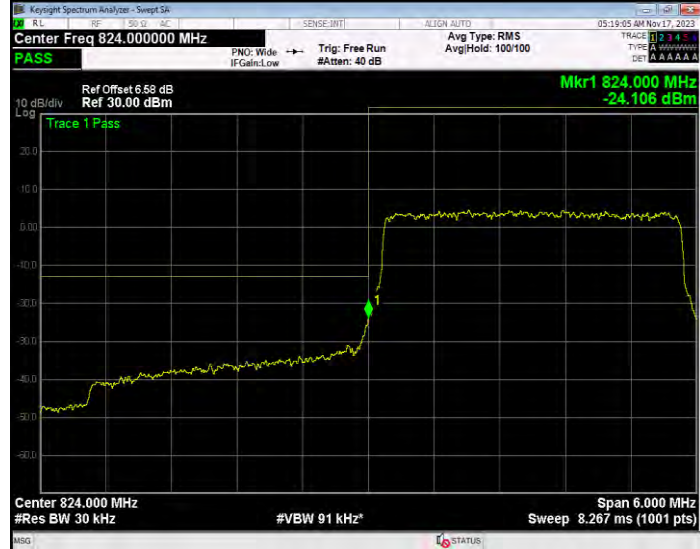
Band5 QPSK BW=10MHz Channel=20450 RB Size=50 Position=#0



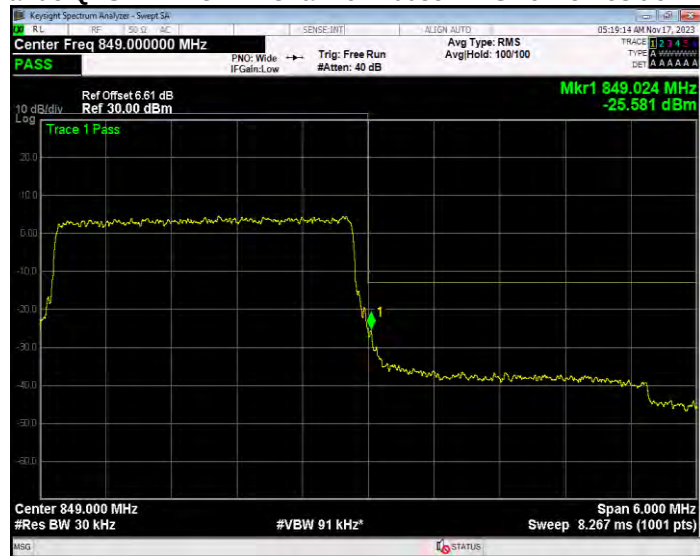
Band5 QPSK BW=10MHz Channel=20600 RB Size=50 Position=#0



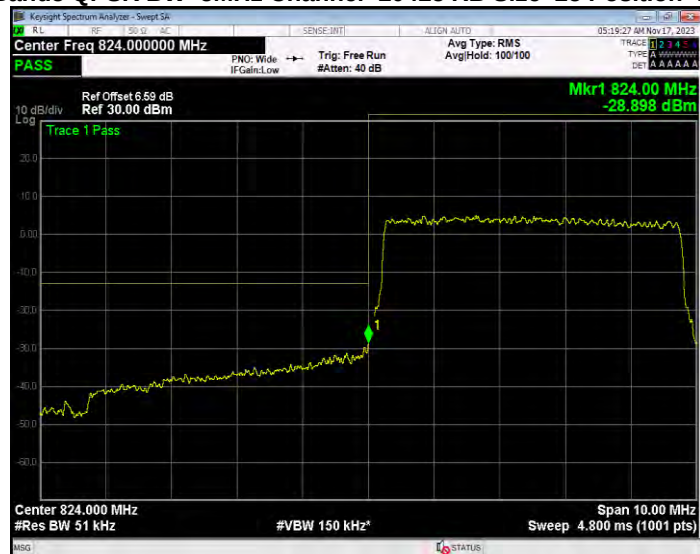
Band5 QPSK BW=3MHz Channel=20415 RB Size=15 Position=#0



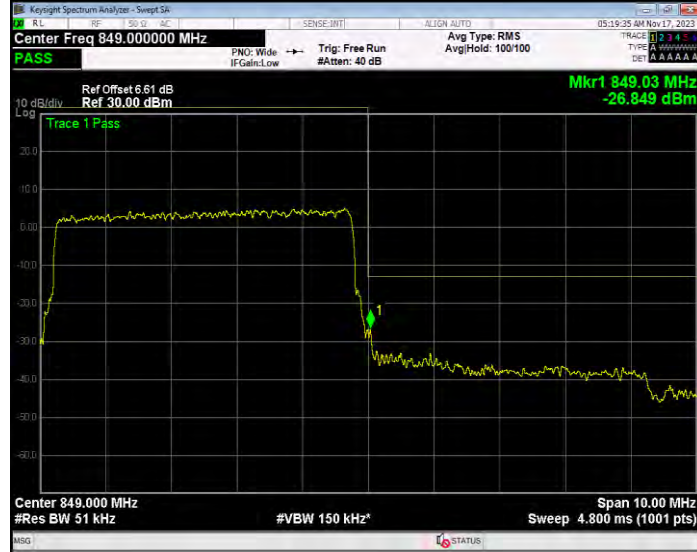
Band5 QPSK BW=3MHz Channel=20635 RB Size=15 Position=#0



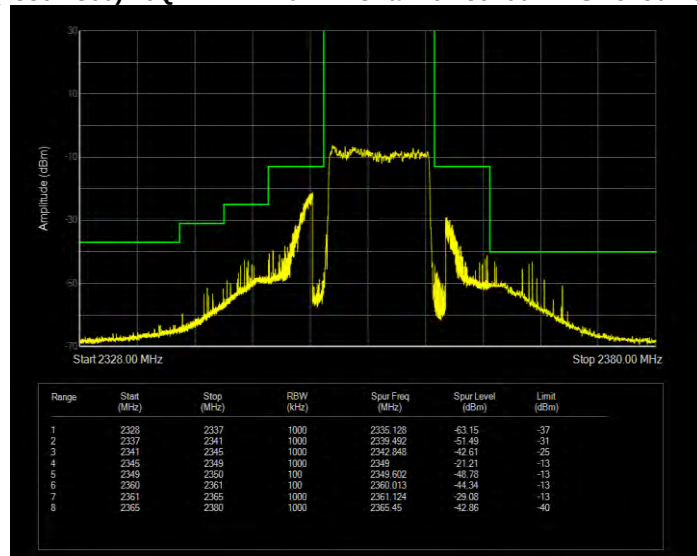
Band5 QPSK BW=5MHz Channel=20425 RB Size=25 Position=#0



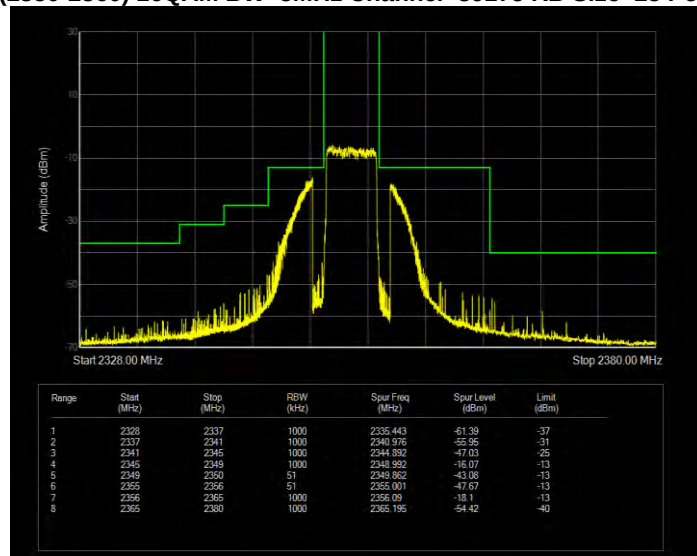
Band5 QPSK BW=5MHz Channel=20625 RB Size=25 Position=#0



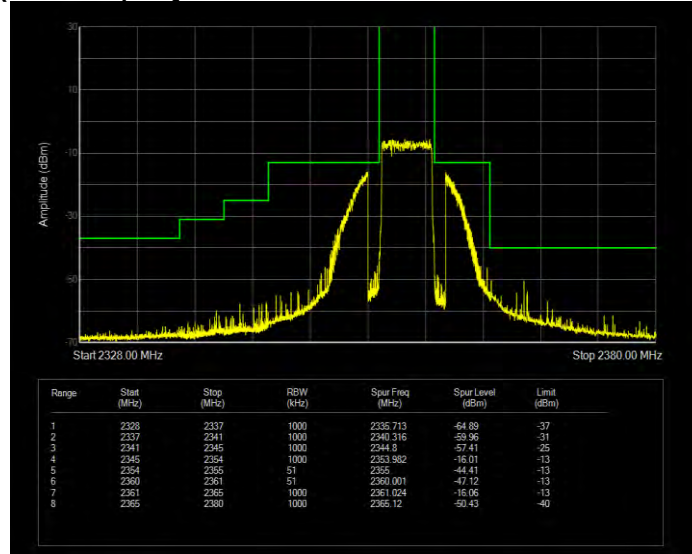
Band40(2350-2360) 16QAM BW=10MHz Channel=39200 RB Size=50 Position=#0



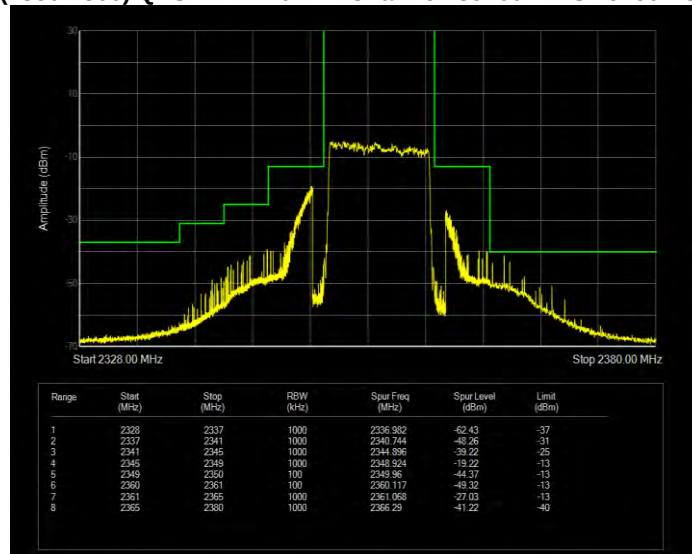
Band40(2350-2360) 16QAM BW=5MHz Channel=39175 RB Size=25 Position=#0



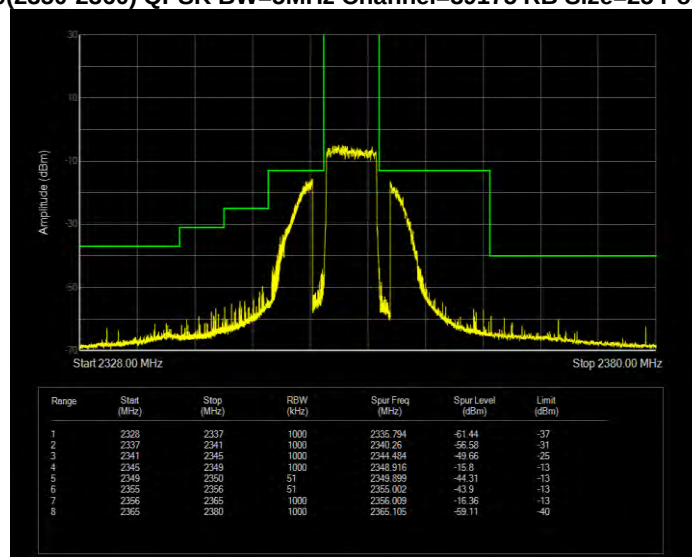
Band40(2350-2360) 16QAM BW=5MHz Channel=39225 RB Size=25 Position=#0



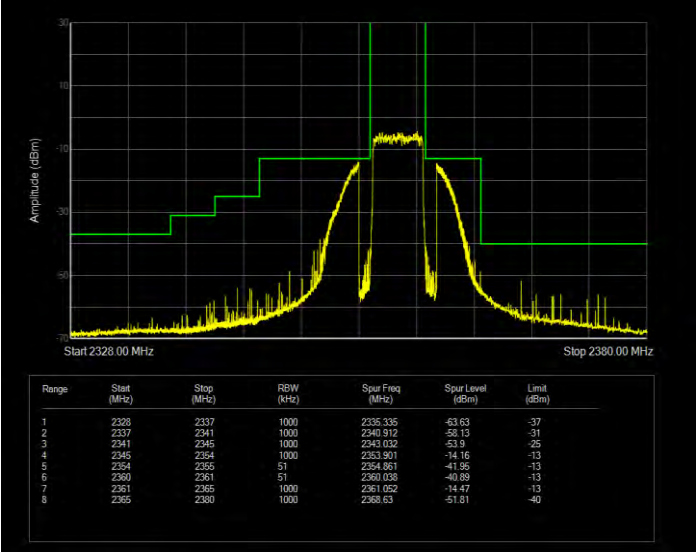
Band40(2350-2360) QPSK BW=10MHz Channel=39200 RB Size=50 Position=#0



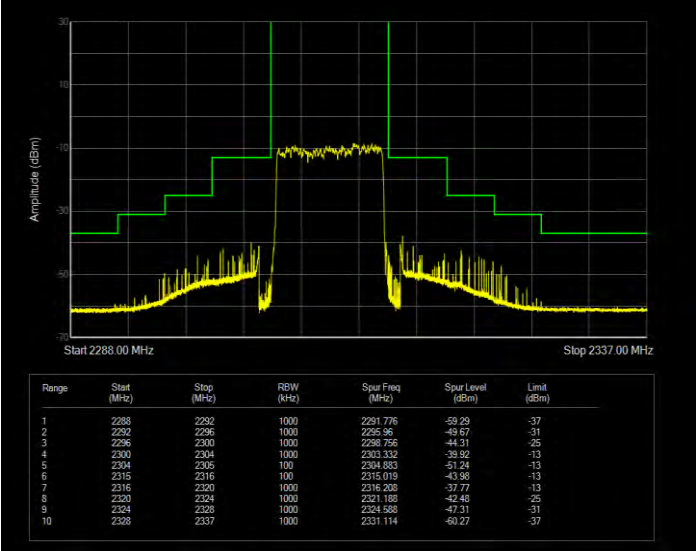
Band40(2350-2360) QPSK BW=5MHz Channel=39175 RB Size=25 Position=#0



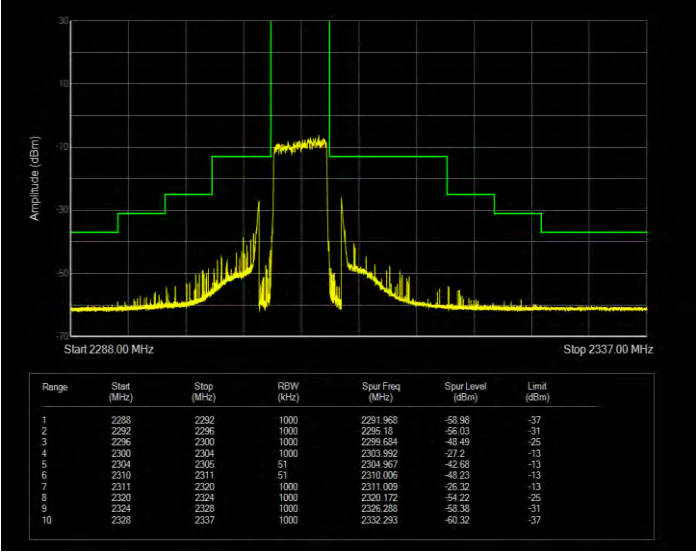
Band40(2350-2360) QPSK BW=5MHz Channel=39225 RB Size=25 Position=#0



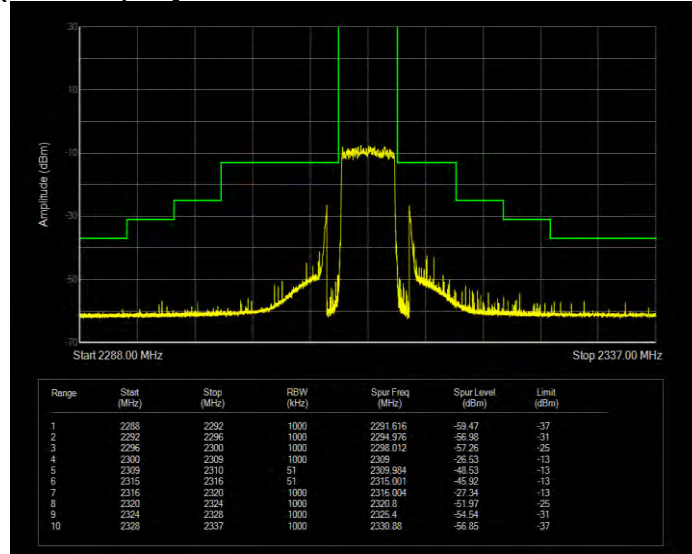
Band40(2305-2315) 16QAM BW=10MHz Channel=38750 RB Size=50 Position=#0



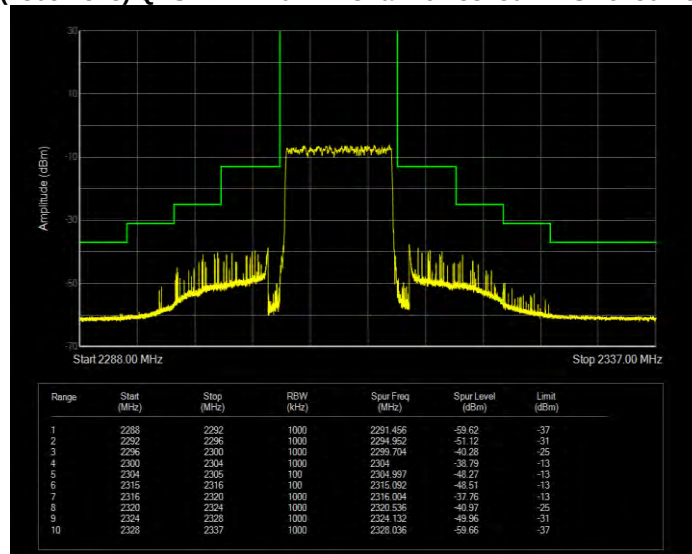
Band40(2305-2315) 16QAM BW=5MHz Channel=38725 RB Size=25 Position=#0



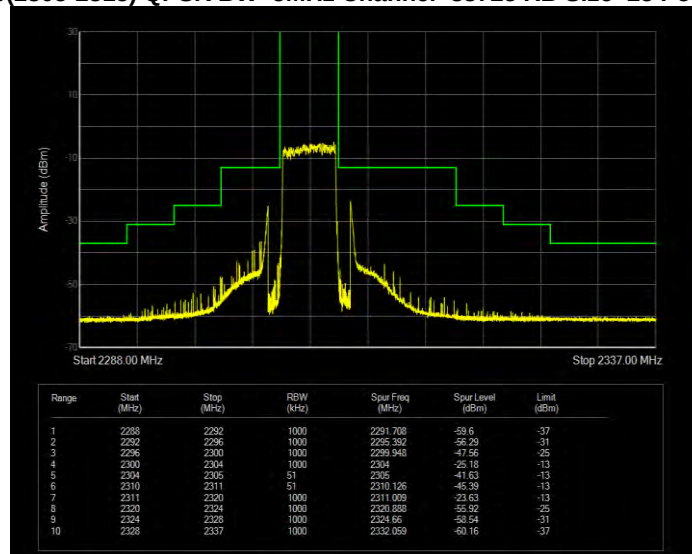
Band40(2305-2315) 16QAM BW=5MHz Channel=38775 RB Size=25 Position=#0



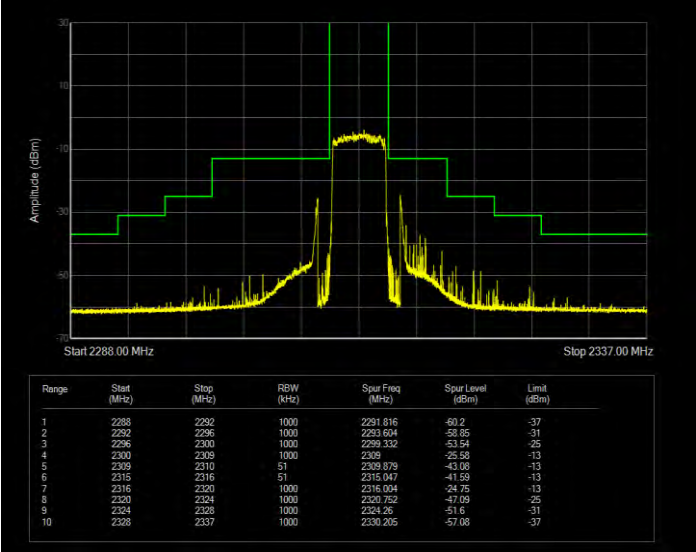
Band40(2305-2315) QPSK BW=10MHz Channel=38750 RB Size=50 Position=#0



Band40(2305-2315) QPSK BW=5MHz Channel=38725 RB Size=25 Position=#0



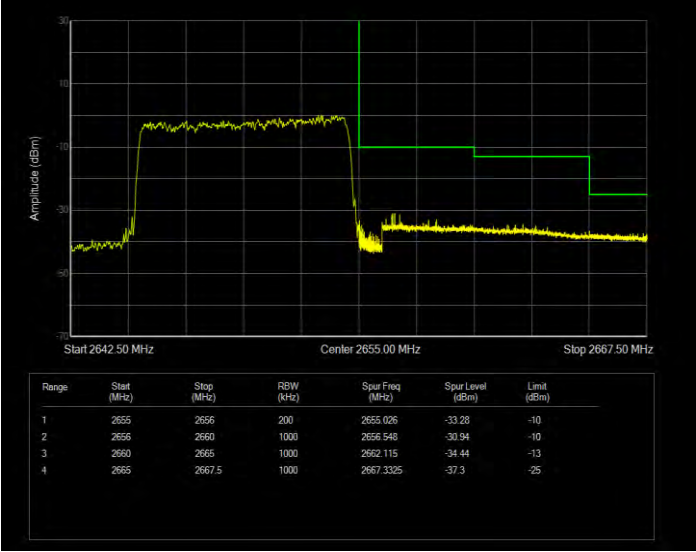
Band40(2305-2315) QPSK BW=5MHz Channel=38775 RB Size=25 Position=#0



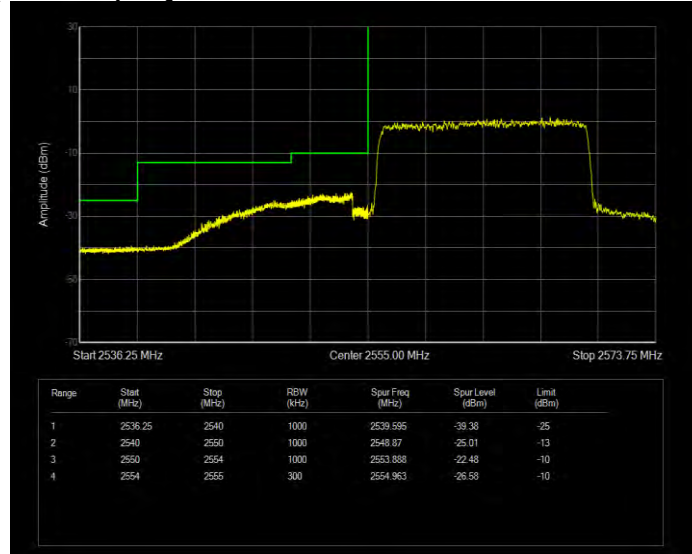
Band41(2555-2655) 16QAM BW=10MHz Channel=40290 RB Size=50 Position=#0



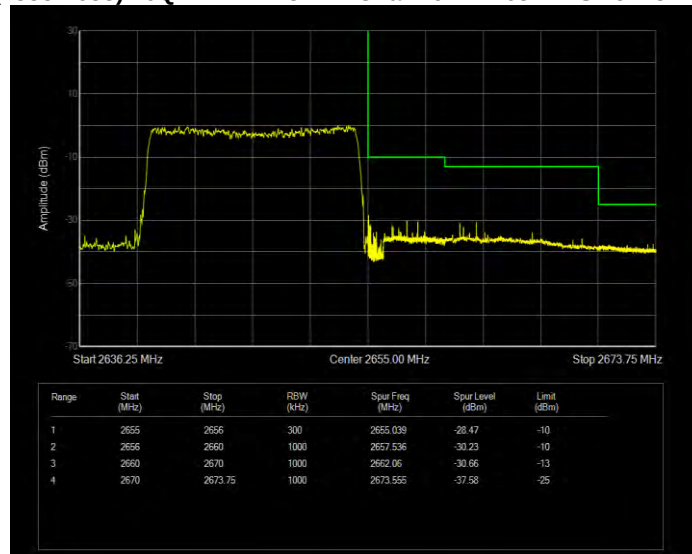
Band41(2555-2655) 16QAM BW=10MHz Channel=41190 RB Size=50 Position=#0



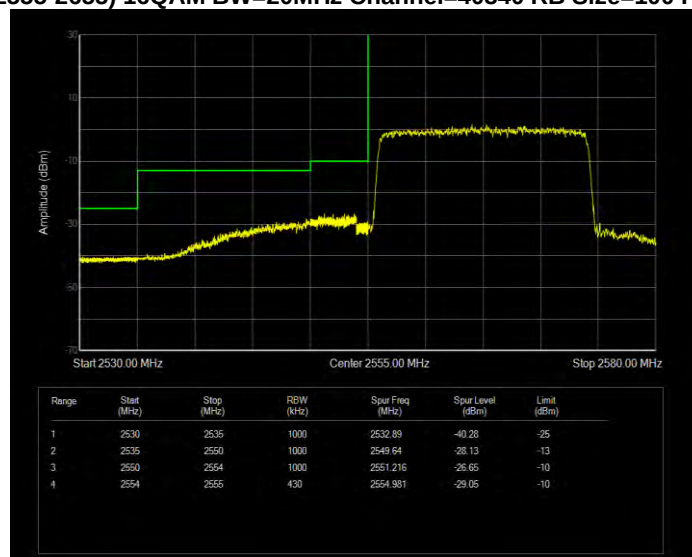
Band41(2555-2655) 16QAM BW=15MHz Channel=40315 RB Size=75 Position=#0



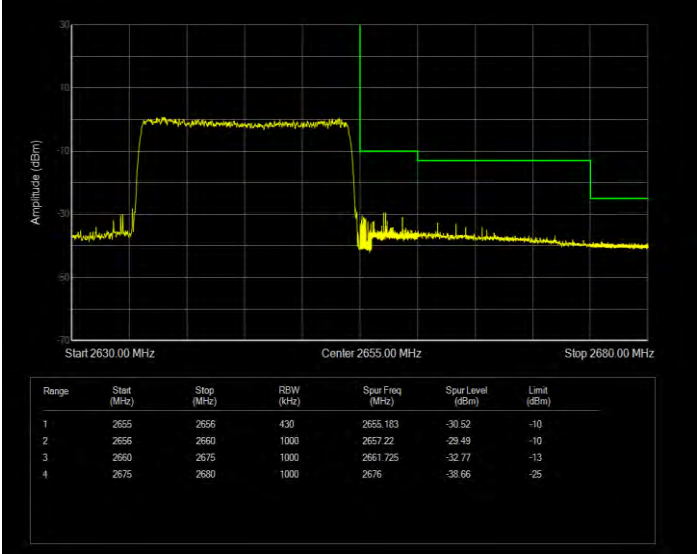
Band41(2555-2655) 16QAM BW=15MHz Channel=41165 RB Size=75 Position=#0



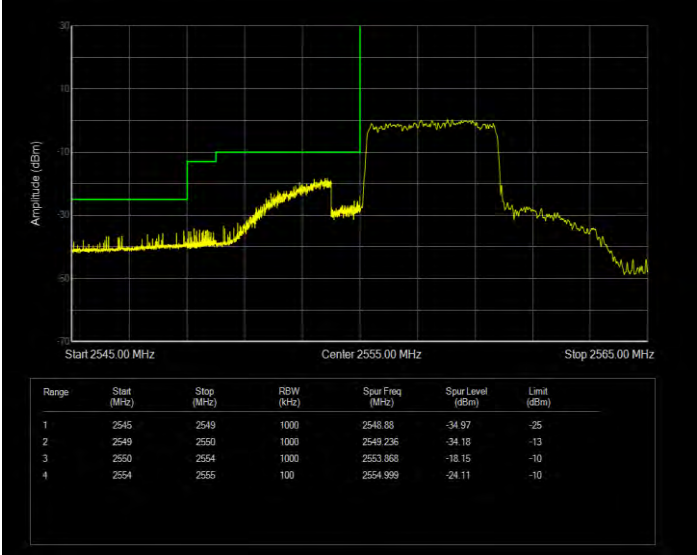
Band41(2555-2655) 16QAM BW=20MHz Channel=40340 RB Size=100 Position=#0



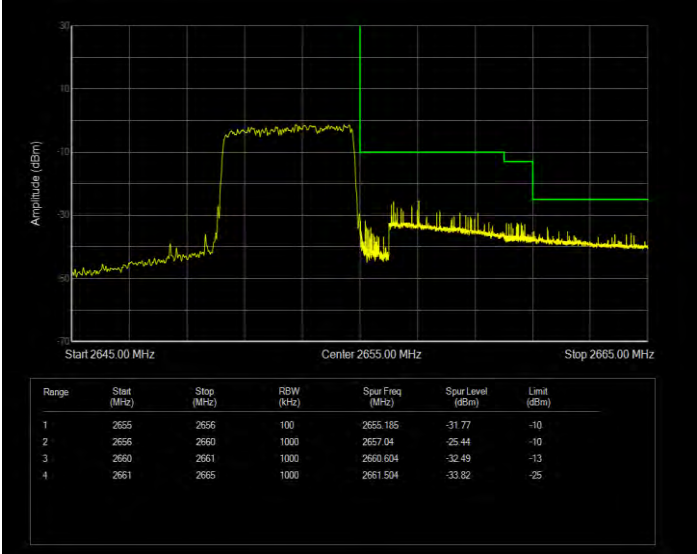
Band41(2555-2655) 16QAM BW=20MHz Channel=41140 RB Size=100 Position=#0



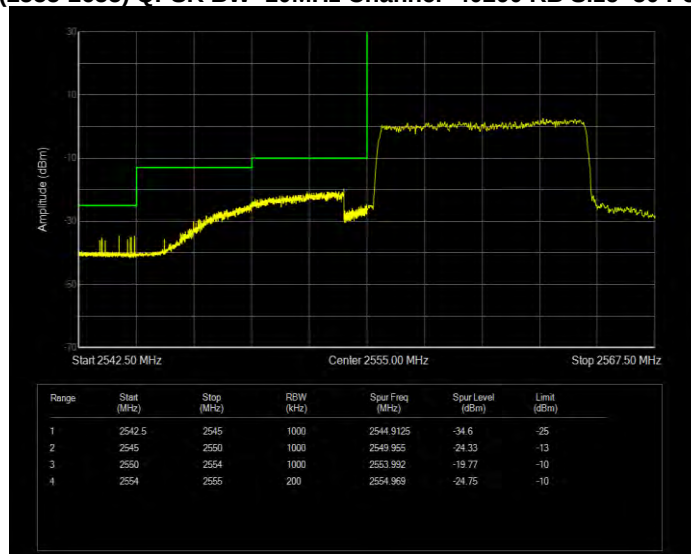
Band41(2555-2655) 16QAM BW=5MHz Channel=40265 RB Size=25 Position=#0



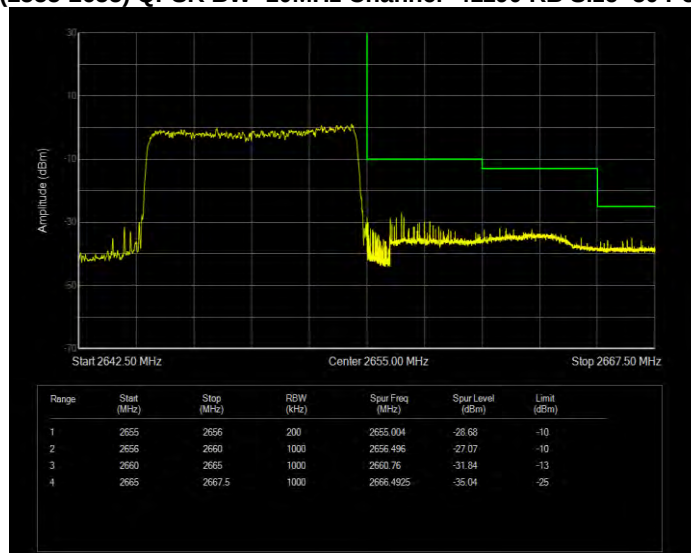
Band41(2555-2655) 16QAM BW=5MHz Channel=41215 RB Size=25 Position=#0



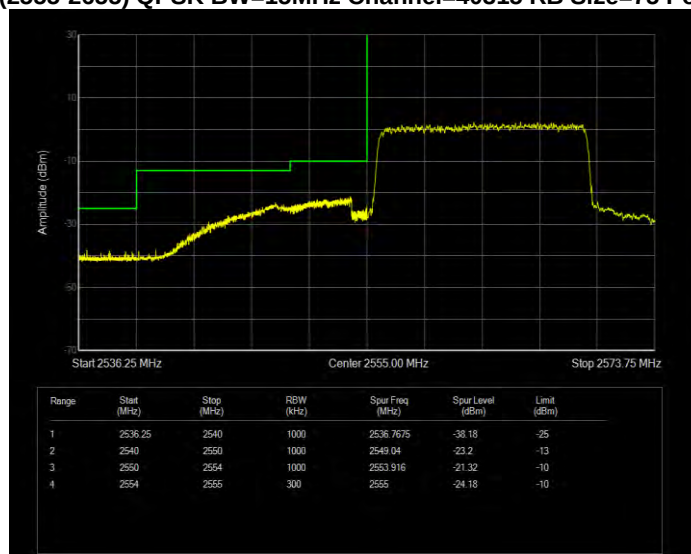
Band41(2555-2655) QPSK BW=10MHz Channel=40290 RB Size=50 Position=#0



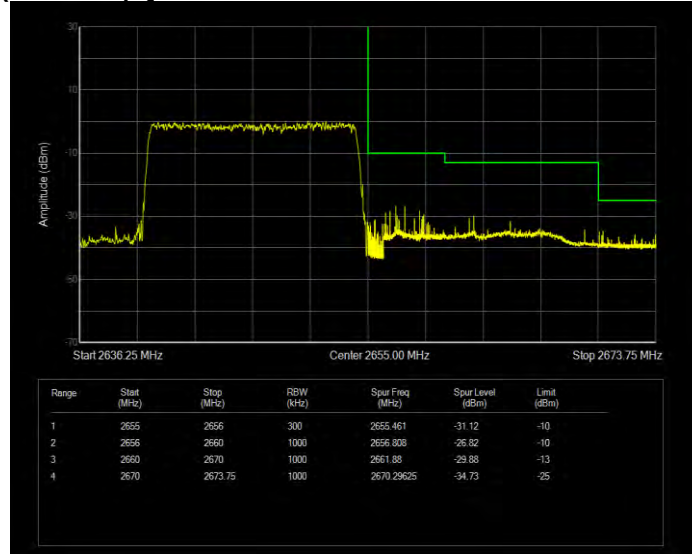
Band41(2555-2655) QPSK BW=10MHz Channel=41190 RB Size=50 Position=#0



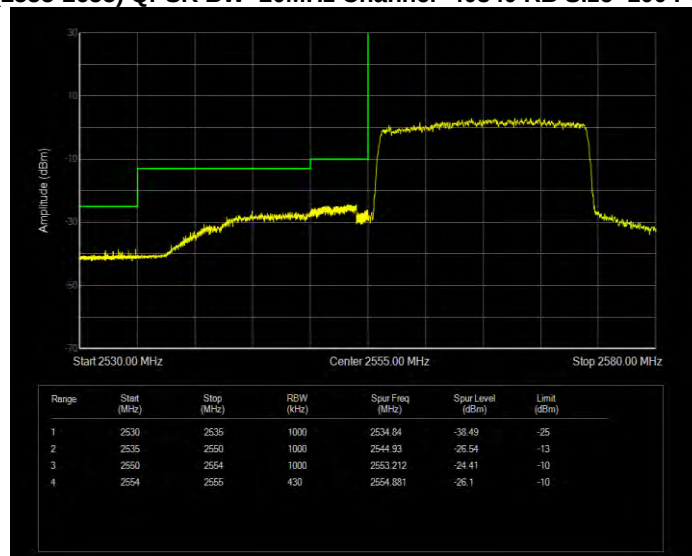
Band41(2555-2655) QPSK BW=15MHz Channel=40315 RB Size=75 Position=#0



Band41(2555-2655) QPSK BW=15MHz Channel=41165 RB Size=75 Position=#0



Band41(2555-2655) QPSK BW=20MHz Channel=40340 RB Size=100 Position=#0



Band41(2555-2655) QPSK BW=20MHz Channel=41140 RB Size=100 Position=#0

