

TEST REPORT

FCC Sub6 n77 Test for SM-F741U
Certification

APPLICANT

SAMSUNG Electronics Co., Ltd.

REPORT NO.

HCT-RF-2404-FC036-R1

DATE OF ISSUE

May 3, 2024

Tested by
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**TEST
REPORT**

REPORT NO.
HCT-RF-2404-FC036-R1

DATE OF ISSUE
May 03, 2024

Additional Model
SM-F741U1

Applicant	SAMSUNG Electronics Co., Ltd. 129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16677, Rep. of Korea
Product Name	Mobile Phone
Model Name	SM-F741U
Date of Test	February 27, 2024 ~ April 19, 2024
FCC ID	A3LSMF741U
Location of Test	<input checked="" type="checkbox"/> Permanent Testing Lab <input type="checkbox"/> On Site Testing (Address: 74, Seoicheon-ro 578beon-gil, Majang-myeon, Icheon-si, Gyeonggi-do, 17383 Republic of Korea)
FCC Classification:	PCS Licensed Transmitter Held to Ear (PCE)
FCC Rule Part(s):	§ 27

REVISION HISTORY

The revision history for this test report is shown in table.

Revision No.	Date of Issue	Description
0	April 26, 2024	Initial Release
1	May 03, 2024	Revised the date of test (Page 2.)

Notice

Content

The measurements shown in this report were made in accordance with the procedures specified in CFR47 section § 2.947. I assume full responsibility for the accuracy and completeness of these measurements, and for the qualifications of all persons taking them.

HCT CO., LTD. Certifies that no party to this application has subject to a denial of Federal benefits that includes FCC benefits pursuant to section 5301 of the Anti-Drug Abuse Act of 1998,21 U.S.C.853(a)

The results shown in this test report only apply to the sample(s), as received, provided by the applicant, unless otherwise stated.

The test results have only been applied with the test methods required by the standard(s).

When confirmation of authenticity of this test report is required, please contact www.hct.co.kr

The test results in this test report are not associated with the ((KS Q) ISO/IEC 17025) accreditation by KOLAS (Korea Laboratory Accreditation Scheme) / A2LA (American Association for Laboratory Accreditation) that are under the ILAC (International Laboratory Accreditation Cooperation) Mutual Recognition Agreement (MRA).

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MEASUREMENT REPORT**1. GENERAL INFORMATION**

Applicant Name:	SAMSUNG Electronics Co., Ltd.
Address:	129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16677, Rep. of Korea
FCC ID:	A3LSMF741U
Application Type:	Certification
FCC Classification:	PCS Licensed Transmitter Held to Ear (PCE)
FCC Rule Part(s):	§ 27
EUT Type:	Mobile phone
Model(s):	SM-F741U
Additional Model(s)	SM-F741U1
SCS(kHz):	30
Bandwidth(MHz):	10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100
Waveform:	CP-OFDM, DFT-S-OFDM
Modulation:	DFT-S-OFDM: PI/2 BPSK, QPSK, 16QAM, 64QAM, 256QAM CP-OFDM: QPSK, 16QAM, 64QAM, 256QAM
Tx Frequency: (3450 MHz - 3550 MHz)	3455.01 MHz – 3544.99 MHz (Sub6 n77(78)(10 MHz)) 3457.50 MHz – 3542.50 MHz (Sub6 n77(78)(15 MHz)) 3460.02 MHz – 3540.00 MHz (Sub6 n77(78)(20 MHz)) 3462.50 MHz – 3537.50 MHz (Sub6 n77(78)(25 MHz)) 3465.00 MHz – 3534.99 MHz (Sub6 n77(78)(30 MHz)) 3470.01 MHz – 3529.98 MHz (Sub6 n77(78)(40 MHz)) 3475.02 MHz – 3525.00 MHz (Sub6 n77(78)(50 MHz)) 3480.00 MHz – 3519.99 MHz (Sub6 n77(78)(60 MHz)) 3485.01 MHz – 3514.98 MHz (Sub6 n77(78)(70 MHz)) 3490.02 MHz – 3510.00 MHz (Sub6 n77(78)(80 MHz)) 3495.00 MHz – 3504.99 MHz (Sub6 n77(78)(90 MHz)) 3500.01 MHz (Sub6 n77(78)(100 MHz))
Tx Frequency: (3700 MHz - 3980 MHz)	3705.00 MHz – 3975.00 MHz (Sub6 n77(78)(10 MHz)) 3707.51 MHz – 3972.48 MHz (Sub6 n77(78)(15 MHz)) 3710.01 MHz – 3969.99 MHz (Sub6 n77(78)(20 MHz)) 3712.50 MHz – 3967.50 MHz (Sub6 n77(78)(25 MHz)) 3715.02 MHz – 3964.98 MHz (Sub6 n77(78)(30 MHz)) 3720.00 MHz – 3960.00 MHz (Sub6 n77(78)(40 MHz)) 3725.10 MHz – 3954.99 MHz (Sub6 n77(78)(50 MHz)) 3730.02 MHz – 3949.98 MHz (Sub6 n77(78)(60 MHz)) 3735.00 MHz – 3945.00 MHz (Sub6 n77(78)(70 MHz)) 3740.01 MHz – 3939.99 MHz (Sub6 n77(78)(80 MHz)) 3745.02 MHz – 3934.98 MHz (Sub6 n77(78)(90 MHz)) 3750.00 MHz – 3930.00 MHz (Sub6 n77(78)(100 MHz))
Date(s) of Tests:	February 27, 2024 ~ April 19, 2024
Serial number:	Radiated : R3CX30BD5JJ Conducted : 7b5599c1a7507ece

1.1. MAXIMUM OUTPUT POWER

1. 3450 MHz - 3550 MHz

Mode (MHz)	Tx Frequency (MHz)	Emission Designator	Modulation	EIRP	
				Max. Power (W)	Max. Power (dBm)
Sub6 n77(78) (10)	3455.01 – 3544.99	8M63G7D	PI/2 BPSK	0.371	25.69
		8M67G7D	QPSK	0.346	25.39
		8M69W7D	16QAM	0.275	24.39
		8M74W7D	64QAM	0.197	22.94
		8M75W7D	256QAM	0.121	20.84
Sub6 n77(78) (15)	3457.50 – 3542.50	13M0G7D	PI/2 BPSK	0.351	25.45
		13M0G7D	QPSK	0.340	25.32
		13M0W7D	16QAM	0.251	24.00
		13M0W7D	64QAM	0.200	23.02
		13M0W7D	256QAM	0.114	20.57
Sub6 n77(78) (20)	3460.02 – 3540.00	18M0G7D	PI/2 BPSK	0.344	25.36
		18M0G7D	QPSK	0.337	25.27
		17M9W7D	16QAM	0.257	24.10
		18M0W7D	64QAM	0.190	22.79
		18M0W7D	256QAM	0.113	20.52
Sub6 n77(78) (25)	3462.50 – 3537.50	23M0G7D	PI/2 BPSK	0.356	25.52
		23M0G7D	QPSK	0.352	25.47
		23M0W7D	16QAM	0.255	24.07
		23M0W7D	64QAM	0.181	22.58
		22M0W7D	256QAM	0.116	20.63
Sub6 n77(78) (30)	3465.00 – 3534.99	26M9G7D	PI/2 BPSK	0.358	25.54
		26M9G7D	QPSK	0.344	25.37
		27M0W7D	16QAM	0.265	24.23
		26M9W7D	64QAM	0.196	22.92
		26M9W7D	256QAM	0.121	20.81
Sub6 n77(78) (40)	3470.01 – 3529.98	35M9G7D	PI/2 BPSK	0.356	25.51
		35M9G7D	QPSK	0.352	25.47
		35M8W7D	16QAM	0.271	24.33
		35M8W7D	64QAM	0.205	23.11
		35M8W7D	256QAM	0.121	20.82
Sub6 n77(78) (50)	3475.02 – 3525.00	46M1G7D	PI/2 BPSK	0.381	25.81
		45M8G7D	QPSK	0.372	25.71
		45M9W7D	16QAM	0.292	24.65
		45M8W7D	64QAM	0.213	23.28
		45M9W7D	256QAM	0.126	21.00
Sub6 n77(78) (60)	3480.00 – 3519.99	58M0G7D	PI/2 BPSK	0.381	25.81
		58M1G7D	QPSK	0.358	25.54
		58M0W7D	16QAM	0.292	24.66
		58M1W7D	64QAM	0.209	23.20
		58M2W7D	256QAM	0.125	20.97
Sub6 n77(78) (70)	3485.01 – 3514.98	64M6G7D	PI/2 BPSK	0.407	26.10
		64M5G7D	QPSK	0.384	25.84
		64M6W7D	16QAM	0.290	24.62
		64M4W7D	64QAM	0.213	23.29
		64M6W7D	256QAM	0.129	21.12
Sub6 n77(78) (80)	3490.02 – 3510.00	77M6G7D	PI/2 BPSK	0.409	26.12
		77M3G7D	QPSK	0.394	25.96
		77M4W7D	16QAM	0.304	24.83
		77M3W7D	64QAM	0.222	23.47
		77M5W7D	256QAM	0.132	21.21
Sub6 n77(78) (90)	3495.00 – 3504.99	87M0G7D	PI/2 BPSK	0.393	25.94
		87M1G7D	QPSK	0.390	25.91
		86M9W7D	16QAM	0.299	24.75
		87M0W7D	64QAM	0.226	23.54
		87M0W7D	256QAM	0.133	21.24
Sub6 n77(78) (100)	3500.01	96M7G7D	PI/2 BPSK	0.387	25.88
		96M9G7D	QPSK	0.374	25.73
		96M7W7D	16QAM	0.305	24.84
		96M6W7D	64QAM	0.226	23.54
		96M7W7D	256QAM	0.129	21.12

2. 3700 MHz - 3980 MHz

Mode (MHz)	Tx Frequency (MHz)	Emission Designator	Modulation	EIRP	
				Max. Power (W)	Max. Power (dBm)
Sub6 n77(78) (10)	3705.00 – 3975.00	8M67G7D	PI/2 BPSK	0.422	26.25
		8M63G7D	QPSK	0.399	26.01
		8M65W7D	16QAM	0.308	24.89
		8M65W7D	64QAM	0.232	23.65
		8M62W7D	256QAM	0.140	21.46
Sub6 n77(78) (15)	3707.51 – 3972.48	12M9G7D	PI/2 BPSK	0.432	26.35
		13M0G7D	QPSK	0.414	26.17
		12M9W7D	16QAM	0.330	25.19
		13M0W7D	64QAM	0.231	23.64
		12M9W7D	256QAM	0.145	21.61
Sub6 n77(78) (20)	3710.01 – 3969.99	17M9G7D	PI/2 BPSK	0.440	26.43
		18M0G7D	QPSK	0.442	26.45
		18M0W7D	16QAM	0.324	25.10
		17M9W7D	64QAM	0.250	23.98
		17M9W7D	256QAM	0.141	21.50
Sub6 n77(78) (25)	3712.50 – 3967.50	22M9G7D	PI/2 BPSK	0.400	26.02
		22M9G7D	QPSK	0.385	25.86
		23M0W7D	16QAM	0.311	24.93
		23M0W7D	64QAM	0.227	23.56
		23M0W7D	256QAM	0.134	21.28
Sub6 n77(78) (30)	3715.02 – 3964.98	27M0G7D	PI/2 BPSK	0.400	26.02
		26M9G7D	QPSK	0.394	25.96
		26M9W7D	16QAM	0.308	24.89
		26M9W7D	64QAM	0.224	23.50
		26M9W7D	256QAM	0.134	21.26
Sub6 n77(78) (40)	3720.00 – 3960.00	35M9G7D	PI/2 BPSK	0.415	26.18
		35M9G7D	QPSK	0.402	26.04
		35M9W7D	16QAM	0.303	24.82
		35M8W7D	64QAM	0.225	23.52
		35M9W7D	256QAM	0.138	21.39
Sub6 n77(78) (50)	3725.10 – 3954.99	45M9G7D	PI/2 BPSK	0.436	26.39
		45M9G7D	QPSK	0.426	26.29
		45M8W7D	16QAM	0.325	25.12
		45M9W7D	64QAM	0.239	23.79
		45M8W7D	256QAM	0.151	21.79
Sub6 n77(78) (60)	3730.02 – 3949.98	58M0G7D	PI/2 BPSK	0.424	26.27
		58M0G7D	QPSK	0.420	26.23
		57M9W7D	16QAM	0.317	25.01
		57M9W7D	64QAM	0.235	23.71
		58M1W7D	256QAM	0.139	21.42
Sub6 n77(78) (70)	3735.00 – 3945.00	64M5G7D	PI/2 BPSK	0.435	26.38
		64M5G7D	QPSK	0.424	26.27
		64M6W7D	16QAM	0.329	25.17
		64M5W7D	64QAM	0.248	23.95
		64M6W7D	256QAM	0.146	21.63
Sub6 n77(78) (80)	3740.01 – 3939.99	77M2G7D	PI/2 BPSK	0.447	26.50
		77M3G7D	QPSK	0.418	26.21
		77M2W7D	16QAM	0.344	25.37
		77M4W7D	64QAM	0.245	23.89
		77M4W7D	256QAM	0.146	21.63
Sub6 n77(78) (90)	3745.02 – 3934.98	86M9G7D	PI/2 BPSK	0.440	26.43
		87M0G7D	QPSK	0.422	26.25
		87M0W7D	16QAM	0.316	24.99
		87M0W7D	64QAM	0.239	23.78
		86M9W7D	256QAM	0.144	21.59
Sub6 n77(78) (100)	3750.00 – 3930.00	96M6G7D	PI/2 BPSK	0.416	26.19
		96M8G7D	QPSK	0.397	25.99
		96M8W7D	16QAM	0.312	24.94
		96M8W7D	64QAM	0.232	23.66
		96M6W7D	256QAM	0.142	21.51

2. INTRODUCTION

2.1. DESCRIPTION OF EUT

The EUT was a Mobile Phone with GSM/GPRS/EGPRS/UMTS and LTE, Sub 6, mmWave.

It also supports IEEE 802.11 a/b/g/n/ac/ax (20/40/80/160 MHz), Bluetooth(iPA, ePA), BT LE(iPA, ePA), NFC, WPT, WIFI 6E.

2.2. MEASURING INSTRUMENT CALIBRATION

The measuring equipment, which was utilized in performing the tests documented herein, has been calibrated in accordance with the manufacturer's recommendations for utilizing calibration equipment, which is traceable to recognized national standards.

2.3. TEST FACILITY

The Fully-anechoic chamber and conducted measurement facility used to collect the radiated data are located at the **74, Seoicheon-ro 578beon-gil, Majang-myeon, Icheon-si, Gyeonggi-do, 17383, Rep. of KOREA.**

3. DESCRIPTION OF TESTS

3.1 TEST PROCEDURE

Test Description	Test Procedure Used
Occupied Bandwidth	- KDB 971168 D01 v03r01 – Section 4.3 - ANSI C63.26-2015 – Section 5.4.4
Band Edge	- KDB 971168 D01 v03r01 – Section 6.0 - ANSI C63.26-2015 – Section 5.7
Spurious and Harmonic Emissions at Antenna Terminal	- KDB 971168 D01 v03r01 – Section 6.0 - ANSI C63.26-2015 – Section 5.7
Conducted Output Power	- N/A (See SAR Report)
Peak- to- Average Ratio	- KDB 971168 D01 v03r01 – Section 5.7 - ANSI C63.26-2015 – Section 5.2.3.4
Frequency stability	- ANSI C63.26-2015 – Section 5.6
Effective Radiated Power/ Effective Isotropic Radiated Power	- KDB 971168 D01 v03r01 – Section 5.2 & 5.8 - ANSI/TIA-603-E-2016 – Section 2.2.17
Radiated Spurious and Harmonic Emissions	- KDB 971168 D01 v03r01 – Section 6.2 - ANSI/TIA-603-E-2016 – Section 2.2.12

3.2 RADIATED POWER

Test Overview

Radiated tests are performed in the Fully-anechoic chamber.

The equipment under test is placed on a non-conductive table 3-meters away from the receive antenna in accordance with ANSI/TIA-603-E-2016 Clause 2.2.17.

Test Settings

1. Radiated power measurements are performed using the signal analyzer's "channel power" measurement capability for signals with continuous operation.
2. RBW = 1 – 5 % of the expected OBW, not to exceed 1 MHz
3. VBW \geq 3 x RBW
4. Span = 1.5 times the OBW
5. No. of sweep points > 2 x span / RBW
6. Detector = RMS
7. Trigger is set to "free run" for signals with continuous operation with the sweep times set to "auto".
8. The integration bandwidth was roughly set equal to the measured OBW of the signal for signals with continuous operation.
9. Trace mode = trace averaging (RMS) over 100 sweeps
10. The trace was allowed to stabilize

Test Note

1. The turntable is rotated through 360 degrees, and the receiving antenna scans in order to determine the level of the maximized emission.
2. A half wave dipole is then substituted in place of the EUT. For emissions above 1 GHz, a horn antenna is substituted in place of the EUT. The substitute antenna is driven by a signal generator and the previously recorded signal was duplicated.

The power is calculated by the following formula;

$$P_d \text{ (dBm)} = P_g \text{ (dBm)} - \text{cable loss (dB)} + \text{antenna gain (dB)}$$

Where: P_d is the dipole equivalent power and P_g is the generator output power into the substitution antenna.

3. The maximum value is calculated by adding the forward power to the calibrated source plus its appropriate gain value.
These steps are repeated with the receiving antenna in both vertical and horizontal polarization. the difference between the gain of the horn and an isotropic antenna are taken into consideration
4. The EUT was tested in three orthogonal planes(X, Y, Z) and in all possible test configurations and positioning.
5. All measurements are performed as RMS average measurements while the EUT is operating at its maximum duty cycle, at maximum power, and at the appropriate frequencies.

3.3 RADIATED SPURIOUS EMISSIONS

Test Overview

Radiated tests are performed in the Fully-anechoic chamber.

Radiated Spurious Emission Measurements at 3 meters by Substitution Method according to ANSI/TIA-603-E-2016.

Test Settings

1. RBW = 100 kHz for emissions below 1 GHz and 1 MHz for emissions above 1 GHz
2. VBW \geq 3 x RBW
3. Span = 1.5 times the OBW
4. No. of sweep points > 2 x span / RBW
5. Detector = Peak
6. Trace mode = Max Hold
7. The trace was allowed to stabilize
8. Test channel : Low/ Middle/ High
9. Frequency range : We are performed all frequency to 10th harmonics from 9 kHz.

Test Note

1. Measurements value show only up to 3 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
2. The EUT was tested in three orthogonal planes(X, Y, Z) and in all possible test configurations and positioning.
The worst case emissions are reported with the EUT positioning, modulations, RB sizes and offsets, and channel bandwidth configurations shown in the test data
3. For spurious emissions above 1 GHz, a horn antenna is substituted in place of the EUT. The substitute antenna is driven by a signal generator and the previously recorded signal was duplicated.

The spurious emissions is calculated by the following formula;

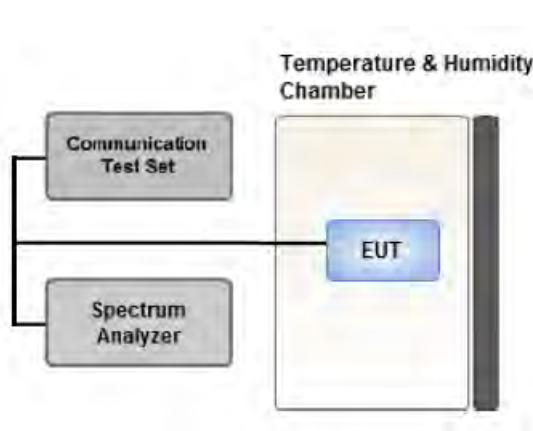
$$\text{Result } (\text{dBm}) = \text{Pg } (\text{dBm}) - \text{cable loss } (\text{dB}) + \text{antenna gain } (\text{dBi})$$

Where: Pg is the generator output power into the substitution antenna.

If the fundamental frequency is below 1 GHz, RF output power has been converted to EIRP.

$$\text{EIRP } (\text{dBm}) = \text{ERP } (\text{dBm}) + 2.15$$

3.4 PEAK- TO- AVERAGE RATIO



Test setup

① CCDF Procedure for PAPR

Test Settings

1. Set resolution/measurement bandwidth \geq signal's occupied bandwidth;
2. Set the number of counts to a value that stabilizes the measured CCDF curve;
3. Set the measurement interval as follows:
 - .- for continuous transmissions, set to 1 ms,
 - .- or burst transmissions, employ an external trigger that is synchronized with the EUT burst timing sequence, or use the internal burst trigger with a trigger level that allows the burst to stabilize and set the measurement interval to a time that is less than or equal to the burst duration.
4. Record the maximum PAPR level associated with a probability of 0.1 %.

② Alternate Procedure for PAPR

Use one of the procedures presented in 5.2(ANSI C63.26-2015) to measure the total peak power and record as P_{Pk} .

Use one of the applicable procedures presented 5.2(ANSI C63.26-2015) to measure the total average power and record as P_{Avg} . Determine the P.A.R. from:

$$P.A.R \text{ (dB)} = P_{Pk} \text{ (dBm)} - P_{Avg} \text{ (dBm)} \quad (P_{Avg} = \text{Average Power} + \text{Duty cycle Factor})$$

Test Settings(Peak Power)

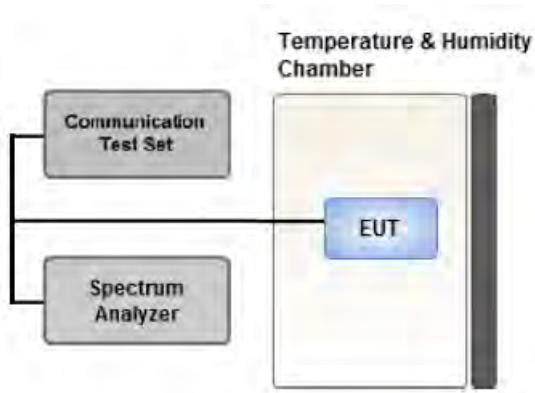
The measurement instrument must have a RBW that is greater than or equal to the OBW of the signal to be measured and a VBW $\geq 3 \times$ RBW.

1. Set the RBW \geq OBW.
2. Set VBW $\geq 3 \times$ RBW.
3. Set span $\geq 2 \times$ OBW.
4. Sweep time $\geq 10 \times (\text{number of points in sweep}) \times (\text{transmission symbol period})$.
5. Detector = peak.
6. Trace mode = max hold.
7. Allow trace to fully stabilize.
8. Use the peak marker function to determine the peak amplitude level.

Test Settings(Average Power)

1. Set span to $2 \times$ to $3 \times$ the OBW.
2. Set RBW \geq OBW.
3. Set VBW $\geq 3 \times$ RBW.
4. Set number of measurement points in sweep $\geq 2 \times$ span / RBW.
5. Sweep time:
Set $\geq [10 \times (\text{number of points in sweep}) \times (\text{transmission period})]$ for single sweep
(automation-compatible) measurement. The transmission period is the (on + off) time.
6. Detector = power averaging (rms).
7. Set sweep trigger to “free run.”
8. Trace average at least 100 traces in power averaging (rms) mode if sweep is set to auto-couple. (To accurately determine the average power over the on and off period of the transmitter, it can be necessary to increase the number of traces to be averaged above 100 or, if using a manually configured sweep time, increase the sweep time.)
9. Use the peak marker function to determine the maximum amplitude level.
10. Add $[10 \log (1/\text{duty cycle})]$ to the measured maximum power level to compute the average power during continuous transmission. For example, add $[10 \log (1/0.25)] = 6 \text{ dB}$ if the duty cycle is a constant 25 %.

3.5 OCCUPIED BANDWIDTH.



Test setup

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 power of a given emission.

The EUT makes a call to the communication simulator.

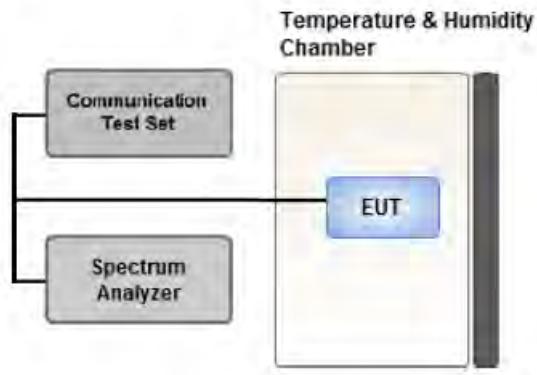
The conducted occupied bandwidth used the power splitter via EUT RF power connector between simulation base station and spectrum analyzer.

The communication simulator station system controlled a EUT to export maximum output power under transmission mode and specific channel frequency. Use OBW measurement function of Spectrum analyzer to measure 99 % occupied bandwidth

Test Settings

1. The signal analyzer's automatic bandwidth measurement capability was used to perform the 99 % occupied bandwidth and the 26 dB bandwidth. The bandwidth measurement was not influenced by any intermediate power nulls in the fundamental emission.
2. RBW = 1 – 5 % of the expected OBW
3. VBW \geq 3 x RBW
4. Detector = Peak
5. Trace mode = max hold
6. Sweep = auto couple
7. The trace was allowed to stabilize
8. If necessary, steps 2 – 7 were repeated after changing the RBW such that it would be within 1 – 5 % of the 99 % occupied bandwidth observed in Step 7

3.6 SPURIOUS AND HARMONIC EMISSIONS AT ANTENNA TERMINAL



Test setup

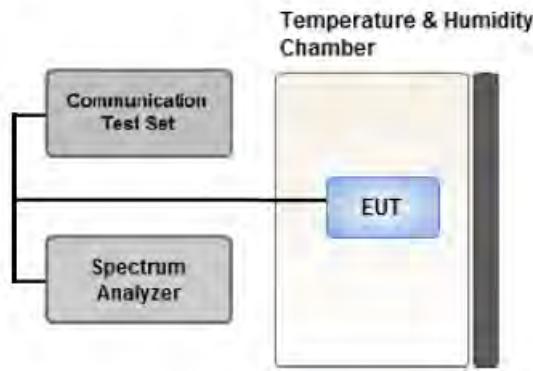
Test Overview

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

Test Settings

1. RBW = 1 MHz
2. VBW \geq 3 MHz
3. Detector = RMS
4. Trace Mode = trace average
5. Sweep time = auto
6. Number of points in sweep \geq 2 x Span / RBW

3.7 BAND EDGE



Test setup

Test Overview

All out of band emissions are measured with a spectrum analyzer connected to the antenna terminal of the EUT while the EUT is operating at its maximum duty cycle, at maximum power, and at the appropriate frequencies. All data rates were investigated to determine the worst case configuration.

All modes of

operation were investigated and the worst case configuration results are reported in this section.

Test Settings

1. Start and stop frequency were set such that the band edge would be placed in the center of the plot
2. Span was set large enough so as to capture all out of band emissions near the band edge
3. RBW > 1 % of the emission bandwidth
4. VBW > 3 x RBW
5. Detector = RMS
6. Number of sweep points $\geq 2 \times \text{Span}/\text{RBW}$
7. Trace mode = trace average
8. Sweep time = auto couple
9. The trace was allowed to stabilize

Test Notes

For mobile operations in the 3450-3550 MHz band, the conducted power of any emission outside the licensee's authorized bandwidth shall not exceed -13 dBm/MHz .

Compliance with this paragraph is based on the use of measurement instrumentation employing a resolution bandwidth of 1 megahertz or greater.

However, in the 1 megahertz bands immediately outside and adjacent to the licensee's frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed, but limited to a maximum of 200 kHz.

In the bands between 1 and 5 MHz removed from the licensee's frequency block, the minimum resolution bandwidth for the measurement shall be 500 kHz.

The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

For mobile operations in the 3700-3980 MHz band, the conducted power of any emission outside the licensee's authorized bandwidth shall not exceed -13 dBm/MHz .

Measurement instrumentation employing a resolution bandwidth of 1 megahertz or greater.

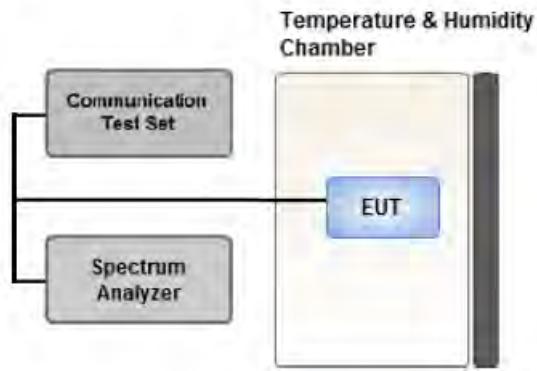
However, in the 1 megahertz bands immediately outside and adjacent to the licensee's frequency block, the minimum resolution bandwidth for the measurement shall be either one percent of the emission bandwidth of the fundamental emission of the transmitter or 350 kHz.

In the bands between 1 and 5 MHz removed from the licensee's frequency block, the minimum resolution bandwidth for the measurement shall be 500 kHz.

The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power. .

Where Margin < 1 dB the emission level is either corrected by $10 \log(1 \text{ MHz} / \text{RB})$ or the emission is integrated over a 1 MHz bandwidth to determine the final result. When using the integration method the integration window is either centered on the emission or, for emissions at the band edge, centered by an offset of 500 kHz from the block edge so that the integration window is the 1 MHz adjacent to the block edge.

3.8 FREQUENCY STABILITY / VARIATION OF AMBIENT TEMPERATURE



Test setup

Test Overview

Frequency stability testing is performed in accordance with the guidelines of ANSI C63.26-2015.

The frequency stability of the transmitter is measured by:

1. Temperature:

The temperature is varied from -30 °C to +50 °C in 10 °C increments using an environmental chamber.

2. Primary Supply Voltage:

.- Unless otherwise specified, vary primary supply voltage from 85 % to 115 % of the nominal value for other than hand carried battery equipment.

.- For hand carried, battery powered equipment, reduce the primary ac or dc supply voltage to the battery operating end point, which shall be specified by the manufacturer.

Test Settings

1. The carrier frequency of the transmitter is measured at room temperature (20 °C to provide a reference).

2. The equipment is turned on in a “standby” condition for fifteen minutes before applying power to the transmitter.

Measurement of the carrier frequency of the transmitter is made within one minute after applying power to the transmitter.

3. Frequency measurements are made at 10 °C intervals ranging from -30 °C to +50 °C. A period of at least one half-hour is provided to allow stabilization of the equipment at each temperature level.

3.9 WORST CASE(RADIATED TEST)

- Waveform : All Waveform of operation were investigated and the worst case configuration results are reported.

(Worst case: DFT-S-OFDM)

- The EUT was tested in three orthogonal planes(X, Y, Z) and in all possible test configurations and positioning.

- The EUT was tested in three modes(Open, Half-open, Closed), the worst case configuration results are reported. (Worst case: Open mode, Closed mode)

- NR n77 (3450 – 3550 MHz / 3700 – 3980 MHz) overlaps the entire frequency range of NR n78 (3450 - 3550 MHz / 3700 – 3800 MHz) and they have the same Tune-up power.

- All modes of operation were investigated and the worst case configuration results are reported.

Mode: SA, NSA, SRS

Worst case: SA

Mode : Stand alone, Stand alone + External accessories (Earphone, AC adapter, etc)

Worst case : Stand alone

- We were performed the RSE test in condition of co-location.

Mode : Stand alone, Simultaneous transmission scenarios

Worst case : Stand alone

- All power classes were tested, and the results were reported for the worst case PC2. (PC2 Only)

- Radiated Spurious emissions are measured while operating in EN-DC mode with Sub 6 NR carrier as well as an LTE carrier (anchor).

All EN-DC mode of operation (=anchor) were investigated and the test results were measured No Peak Found.

The test results which are attenuated more than 20 dB below the permissible value, so it was not reported.

- All RB sizes, offsets of operation were investigated and the worst case configuration results are reported.

Please refer to the table below.

- In the case of radiated spurious emissions, all bandwidth of operation were investigated and the worst case bandwidth results are reported.

(Worst case : 80 MHz (3740 MHz – 3939 MHz), 80 MHz(3490 MHz – 3510 MHz))

- SM-F741U & additional models were tested and the worst case results are reported.

(Worst case : SM-F741U)

[3450 MHz - 3550 MHz Worst case]

Test Description	Modulation n	RB size	RB offset	Axis
Effective Isotropic Radiated Power	PI/2 BPSK, QPSK, 16QAM, 64QAM, 256QAM	See Section 8.1		X
Radiated Spurious and Harmonic Emissions	PI/2 BPSK	See Section 8.2		X

[3700 MHz - 3980 MHz Worst case]

Test Description	Modulation n	RB size	RB offset	Axis
Effective Isotropic Radiated Power	PI/2 BPSK, QPSK, 16QAM, 64QAM, 256QAM	See Section 9.1		X, Z
Radiated Spurious and Harmonic Emissions	PI/2 BPSK	See Section 9.2		X

3.10 WORST CASE(CONDUCTED TEST)

- Waveform : All Waveform of operation were investigated and the worst case configuration results are reported.
(Worst case: DFT-S-OFDM)
- Modulation : All Modulation of operation were investigated and the worst case configuration results are reported.
(Worst case: PI/2 BPSK)
- NR n77 (3450 – 3550 MHz / 3700 – 3980 MHz) overlaps the entire frequency range of NR n78 (3450 - 3550 MHz / 3700 – 3800 MHz) and they have the same Tune-up power.
- All modes of operation were investigated and the worst case configuration results are reported.
Mode: SA, NSA, SRS
Worst case: SA
 - All power classes were tested, and the results were reported for the worst case PC2. (PC2 Only)
 - All RB sizes, offsets of operation were investigated and the worst case configuration results are reported.Please refer to the table below.
- SM-F741U & additional models were tested and the worst case results are reported.
(Worst case : SM-F741U)

[Worst case]

Test Description	Modulation	Bandwidth (MHz)	Frequency	RB size	RB offset
Occupied Bandwidth,	PI/2 BPSK, QPSK, 16QAM, 64QAM, 256QAM	10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100	Mid	Full RB	0
Peak-To-Average Ratio	PI/2 BPSK, QPSK, 16QAM, 64QAM, 256QAM	10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100	Mid	Full RB	0
Band Edge	PI/2 BPSK	10	Low High	1 1	0 23
		15	Low High	1 1	0 37
		20	Low High	1 1	0 50
		25	Low High	1 1	0 64
		30	Low High	1 1	0 77
		40	Low High	1 1	0 105
		50	Low High	1 1	0 132
		60	Low High	1 1	0 161
		70	Low High	1 1	0 188
		80	Low High	1 1	0 216
		90	Low High	1 1	0 244
		100	Low High	1 1	0 272
		10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100	Low, High	Full RB	0
Spurious and Harmonic Emissions at Antenna Terminal	PI/2 BPSK	10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100	Low, Mid, High	1	1

4. LIST OF TEST EQUIPMENT

Equipment	Model	Manufacture	Serial No.	Due to Calibration	Calibration Interval
Precision Dipole Antenna	UHAP	Schwarzbeck	01273	03/10/2026	Biennial
Precision Dipole Antenna	UHAP	Schwarzbeck	01274	03/10/2026	Biennial
Horn Antenna(1~18 GHz)	BBHA 9120D	Schwarzbeck	02289	02/14/2026	Biennial
Horn Antenna(1~18 GHz)	BBHA 9120D	Schwarzbeck	9120D-1299	04/27/2025	Biennial
Horn Antenna(15~40 GHz)	BBHA 9170	Schwarzbeck	BBHA9170342	09/29/2024	Biennial
Horn Antenna(15~40 GHz)	BBHA 9170	Schwarzbeck	BBHA9170124	03/28/2025	Biennial
Loop Antenna(9 kHz~30 MHz)	FMZB1513	Rohde & Schwarz	1513-175	01/16/2025	Biennial
Bilog Antenna	VULB9160	Schwarzbeck	3150	03/09/2025	Biennial
Hybrid Antenna	VULB9160	Schwarzbeck	760	02/24/2025	Biennial
RF Switching System	FBSR-06B (1G HPF + LNA)	T&M SYSTEM	F3L1	05/22/2024	Annual
RF Switching System	FBSR-06B (3G HPF + LNA)	T&M SYSTEM	F3L2	05/22/2024	Annual
RF Switching System	FBSR-06B (6G HPF + LNA)	T&M SYSTEM	F3L3	05/22/2024	Annual
RF Switching System	FBSR-06B (LNA)	T&M SYSTEM	F3L4	05/22/2024	Annual
Power Amplifier	CBL18265035	CERNEX	22966	11/17/2024	Annual
Power Amplifier	CBL26405040	CERNEX	25956	02/26/2025	Annual
DC Power Supply	E3632A	Hewlett Packard	MY40004427	08/25/2024	Annual
Power Splitter(DC~26.5 GHz)	11667B	Hewlett Packard	11275	02/29/2025	Annual
Chamber	SU-642	ESPEC	93008124	02/19/2025	Annual
Signal Analyzer(10 Hz~26.5 GHz)	N9020A	Agilent	MY51110063	04/04/2025	Annual
ATTENUATOR(20 dB)	8493C	Hewlett Packard	17280	04/17/2025	Annual
Spectrum Analyzer(10 Hz~40 GHz)	FSV40	REOHDE & SCHWARZ	101436	02/13/2025	Annual
Base Station	8960 (E5515C)	Agilent	MY48360800	08/10/2024	Annual
Wideband Radio Communication Tester	MT8821C	Anritsu Corp.	6262287701	05/22/2024	Annual
Wideband Radio Communication Tester	MT8000A	Anritsu Corp.	6262302511	05/23/2024	Annual
SIGNAL GENERATOR (100 kHz~40 GHz)	SMB100A	REOHDE & SCHWARZ	177633	06/22/2024	Annual
Signal Analyzer(5 Hz~40.0 GHz)	N9030B	KEYSIGHT	MY55480167	05/24/2024	Annual
4-Way Divider	ZC4PD-K1844+	Mini-Circuits	942907	09/19/2024	Annual
FCC LTE Mobile Conducted RF Automation Test Software	-	HCT CO., LTD.,	-	-	-

Note:

1. Equipment listed above that has a calibration due date during the testing period, the testing is completed before equipment expiration date.
2. Especially, all antenna for measurement is calibrated in accordance with the requirements of C63.5 (Version : 2017).

5. MEASUREMENT UNCERTAINTY

The measurement uncertainties shown below were calculated in accordance with the requirements of ANSI C63.4:2014.

All measurement uncertainty values are shown with a coverage factor of $k=2$ to indicate a 95 % level of confidence. The measurement data shown herein meets or exceeds the U_{CISPR} measurement uncertainty values specified in CISPR 16-4-2 and, thus, can be compared directly to specified limits to determine compliance.

Parameter	Expanded Uncertainty (\pm dB)
Conducted Disturbance (150 kHz ~ 30 MHz)	1.98 (Confidence level about 95 %, $k=2$)
Radiated Disturbance (9 kHz ~ 30 MHz)	4.36 (Confidence level about 95 %, $k=2$)
Radiated Disturbance (30 MHz ~ 1 GHz)	5.70 (Confidence level about 95 %, $k=2$)
Radiated Disturbance (1 GHz ~ 18 GHz)	5.52 (Confidence level about 95 %, $k=2$)
Radiated Disturbance (18 GHz ~ 40 GHz)	5.66 (Confidence level about 95 %, $k=2$)
Radiated Disturbance (Above 40 GHz)	5.58 (Confidence level about 95 %, $k=2$)

6. SUMMARY OF TEST RESULTS

6.1 Test Condition : Conducted Test

Test Description	FCC Part Section(s)	Test Limit	Test Result
Occupied Bandwidth	§ 2.1049	N/A	PASS
Band Edge / Spurious and Harmonic Emissions at Antenna Terminal.	§ 2.1051, § 27.53(n)(2), § 27.53(l)(2)	<-13 dBm	PASS
Conducted Output Power	§ 2.1046	N/A	<u>See Note1</u>
Peak- to- Average Ratio	§ 27.50(k)(4), § 27.50(j)(4)	< 13 dB	PASS
Frequency stability / variation of ambient temperature	§ 2.1055, § 27.54	Emission must remain in band	PASS

Note:

1. See SAR Report
2. All conducted tests were tested using 5G Wireless Tester.

6.2 Test Condition : Radiated Test

Test Description	FCC Part Section(s)	Test Limit	Test Result
Equivalent Isotropic Radiated Power	§ 27.50(k)(3), § 27.50(j)(3)	< 1 Watts max. EIRP	PASS
Radiated Spurious and Harmonic Emissions	§ 2.1051, § 27.53(n)(2), § 27.53(l)(2)	<-13 dBm	PASS

Note:

1. Radiated tests were tested using 5G Wireless Tester.

7. SAMPLE CALCULATION

7.1 ERP Sample Calculation

Ch./ Freq.		Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBD)	C.L	Pol.	ERP	
channel	Freq.(MHz)						W	dBm
128	824.20	-21.37	38.40	-10.61	0.95	H	0.483	26.84

$$\text{ERP} = \text{Substitute LEVEL(dBm)} + \text{Ant. Gain} - \text{CL(Cable Loss)}$$

- 1) The EUT mounted on a non-conductive turntable is 2.5 meter above test site ground level.
- 2) During the test, the turn table is rotated until the maximum signal is found.
- 3) Record the field strength meter's level.
- 4) Replace the EUT with dipole/Horn antenna that is connected to a calibrated signal generator.
- 5) Increase the signal generator output till the field strength meter's level is equal to the item (3).
- 6) The signal generator output level with Ant. Gain and cable loss are the rating of effective radiated power.

7.2 EIRP Sample Calculation

Ch./ Freq.		Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol.	EIRP	
channel	Freq.(MHz)						W	dBm
20175	1,732.50	-15.75	18.45	9.90	1.76	H	0.456	26.59

$$\text{EIRP} = \text{Substitute LEVEL(dBm)} + \text{Ant. Gain} - \text{CL(Cable Loss)}$$

- 1) The EUT mounted on a non-conductive turntable is 2.5 meter above test site ground level.
- 2) During the test, the turn table is rotated until the maximum signal is found.
- 3) Record the field strength meter's level.
- 4) Replace the EUT with dipole/Horn antenna that is connected to a calibrated signal generator.
- 5) Increase the signal generator output till the field strength meter's level is equal to the item (3).
- 6) The signal generator output level with Ant. Gain and cable loss are the rating of equivalent isotropic radiated power.

7.3. Emission Designator

GSM Emission Designator

Emission Designator = 249KGXW
GSM BW = 249 kHz
G = Phase Modulation
X = Cases not otherwise covered
W = Combination (Audio/Data)

EDGE Emission Designator

Emission Designator = 249KG7W
GSM BW = 249 kHz
G = Phase Modulation
7 = Quantized/Digital Info
W = Combination (Audio/Data)

WCDMA Emission Designator

Emission Designator = 4M17F9W
WCDMA BW = 4.17 MHz
F = Frequency Modulation
9 = Composite Digital Info
W = Combination (Audio/Data)

QPSK Modulation

Emission Designator = 4M48G7D
LTE BW = 4.48 MHz
G = Phase Modulation
7 = Quantized/Digital Info
D = Data transmission; telemetry; telecommand

QAM Modulation

Emission Designator = 4M48W7D
LTE BW = 4.48 MHz
W = Amplitude/Angle Modulated
7 = Quantized/Digital Info
D = Data transmission; telemetry; telecommand

8. TEST DATA(3450 MHz - 3550 MHz)

8.1 EQUIVALENT ISOTROPIC RADIATED POWER

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol	Limit	EIRP		RB		
									W	W	dBm	Size	Offset
3455.01	Sub6 n77(78)/ 10 MHz [30 kHz]	PI/2 BPSK	-22.44	15.50	11.20	2.96	H	< 1.00	0.237	23.75		1	22
		QPSK	-22.62	15.32	11.20	2.96	H		0.228	23.57			
		16-QAM	-23.84	14.10	11.20	2.96	H		0.172	22.35			
		64-QAM	-25.14	12.80	11.20	2.96	H		0.127	21.05			
		256-QAM	-27.49	10.45	11.20	2.96	H		0.074	18.70			
		PI/2 BPSK	-21.43	16.82	11.30	3.00	H		0.325	25.12			
3500.01	Sub6 n77(78)/ 10 MHz [30 kHz]	QPSK	-21.76	16.49	11.30	3.00	H	< 1.00	0.301	24.79		1	22
		16-QAM	-22.86	15.39	11.30	3.00	H		0.234	23.69			
		64-QAM	-24.28	13.97	11.30	3.00	H		0.169	22.27			
		256-QAM	-26.53	11.72	11.30	3.00	H		0.100	20.02			
		PI/2 BPSK	-20.71	17.36	11.35	3.02	H		0.371	25.69			
		QPSK	-21.01	17.06	11.35	3.02	H		0.346	25.39			
3544.99	Sub6 n77(78)/ 10 MHz [30 kHz]	16-QAM	-22.01	16.06	11.35	3.02	H	< 1.00	0.275	24.39		1	12
		64-QAM	-23.46	14.61	11.35	3.02	H		0.197	22.94			
		256-QAM	-25.56	12.51	11.35	3.02	H		0.121	20.84			

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol	Limit	EIRP		RB		
									W	W	dBm	Size	Offset
3457.50	Sub6 n77(78)/ 15 MHz [30 kHz]	PI/2 BPSK	-22.56	15.35	11.20	2.95	H	< 1.00	0.229	23.60		1	36
		QPSK	-22.61	15.30	11.20	2.95	H		0.226	23.55			
		16-QAM	-23.73	14.18	11.20	2.95	H		0.175	22.43			
		64-QAM	-25.16	12.75	11.20	2.95	H		0.126	21.00			
		256-QAM	-27.31	10.60	11.20	2.95	H		0.077	18.85			
		PI/2 BPSK	-21.67	16.58	11.30	3.00	H		0.308	24.88			
3500.01	Sub6 n77(78)/ 15 MHz [30 kHz]	QPSK	-21.78	16.47	11.30	3.00	H	< 1.00	0.300	24.77		1	36
		16-QAM	-22.89	15.36	11.30	3.00	H		0.232	23.66			
		64-QAM	-24.26	13.99	11.30	3.00	H		0.169	22.29			
		256-QAM	-26.55	11.70	11.30	3.00	H		0.100	20.00			
		PI/2 BPSK	-20.78	17.17	11.30	3.02	H		0.351	25.45			
		QPSK	-20.91	17.04	11.30	3.02	H		0.340	25.32			
3542.50	Sub6 n77(78)/ 15 MHz [30 kHz]	16-QAM	-22.23	15.72	11.30	3.02	H	< 1.00	0.251	24.00		1	36
		64-QAM	-23.21	14.74	11.30	3.02	H		0.200	23.02			
		256-QAM	-25.66	12.29	11.30	3.02	H		0.114	20.57			

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L.	Pol	Limit	EIRP		RB		
									W	W	dBm	Size	Offset
3460.02	Sub6 n77(78)/ 20 MHz [30 kHz]	PI/2 BPSK	-22.34	15.57	11.20	2.95	H	< 1.00	0.241	23.82		1	49
		QPSK	-22.41	15.50	11.20	2.95	H		0.237	23.75			
		16-QAM	-23.55	14.36	11.20	2.95	H		0.182	22.61			
		64-QAM	-24.91	13.00	11.20	2.95	H		0.133	21.25			
		256-QAM	-27.33	10.58	11.20	2.95	H		0.076	18.83			
3500.01	Sub6 n77(78)/ 20 MHz [30 kHz]	PI/2 BPSK	-21.57	16.68	11.30	3.00	H	< 1.00	0.315	24.98		1	49
		QPSK	-21.84	16.41	11.30	3.00	H		0.296	24.71			
		16-QAM	-22.86	15.39	11.30	3.00	H		0.234	23.69			
		64-QAM	-24.20	14.05	11.30	3.00	H		0.172	22.35			
		256-QAM	-26.41	11.84	11.30	3.00	H		0.103	20.14			
3540.00	Sub6 n77(78)/ 20 MHz [30 kHz]	PI/2 BPSK	-20.87	17.08	11.30	3.02	H	< 1.00	0.344	25.36		1	49
		QPSK	-20.96	16.99	11.30	3.02	H		0.337	25.27			
		16-QAM	-22.13	15.82	11.30	3.02	H		0.257	24.10			
		64-QAM	-23.44	14.51	11.30	3.02	H		0.190	22.79			
		256-QAM	-25.71	12.24	11.30	3.02	H		0.113	20.52			

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol	Limit	EIRP		RB		
									W	W	dBm	Size	Offset
3462.50	Sub6 n77(78)/ 25 MHz [30 kHz]	PI/2 BPSK	-22.43	15.48	11.20	2.95	H	< 1.00	0.236	23.73		1	63
		QPSK	-22.49	15.42	11.20	2.95	H		0.233	23.67			
		16-QAM	-23.57	14.34	11.20	2.95	H		0.182	22.59			
		64-QAM	-24.97	12.94	11.20	2.95	H		0.132	21.19			
		256-QAM	-27.19	10.72	11.20	2.95	H		0.079	18.97			
		PI/2 BPSK	-21.55	16.70	11.30	3.00	H		0.316	25.00			
3500.01	Sub6 n77(78)/ 25 MHz [30 kHz]	QPSK	-21.50	16.75	11.30	3.00	H	< 1.00	0.320	25.05		1	63
		16-QAM	-22.86	15.39	11.30	3.00	H		0.234	23.69			
		64-QAM	-24.05	14.20	11.30	3.00	H		0.178	22.50			
		256-QAM	-26.19	12.06	11.30	3.00	H		0.109	20.36			
		PI/2 BPSK	-20.71	17.24	11.30	3.02	H		0.356	25.52			
		QPSK	-20.76	17.19	11.30	3.02	H		0.352	25.47			
3537.50	Sub6 n77(78)/ 25 MHz [30 kHz]	16-QAM	-22.16	15.79	11.30	3.02	H	< 1.00	0.255	24.07		1	63
		64-QAM	-23.65	14.30	11.30	3.02	H		0.181	22.58			
		256-QAM	-25.60	12.35	11.30	3.02	H		0.116	20.63			

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol	Limit	EIRP		RB		
									W	W	dBm	Size	Offset
3465.00	Sub6 h77(78)/ 30 MHz [30 kHz]	PI/2 BPSK	-22.27	15.60	11.20	2.95	H	< 1.00	0.243	23.85		1	76
		QPSK	-22.35	15.52	11.20	2.95	H		0.238	23.77			
		16-QAM	-23.41	14.46	11.20	2.95	H		0.187	22.71			
		64-QAM	-24.71	13.16	11.20	2.95	H		0.138	21.41			
		256-QAM	-27.06	10.81	11.20	2.95	H		0.081	19.06			
3500.01	Sub6 h77(78)/ 30 MHz [30 kHz]	PI/2 BPSK	-21.22	17.03	11.30	3.00	H	< 1.00	0.341	25.33		1	76
		QPSK	-21.38	16.87	11.30	3.00	H		0.329	25.17			
		16-QAM	-22.41	15.84	11.30	3.00	H		0.259	24.14			
		64-QAM	-23.80	14.45	11.30	3.00	H		0.188	22.75			
		256-QAM	-26.06	12.19	11.30	3.00	H		0.112	20.49			
3534.99	Sub6 h77(78)/ 30 MHz [30 kHz]	PI/2 BPSK	-20.67	17.24	11.30	3.01	H	< 1.00	0.358	25.54		1	76
		QPSK	-20.84	17.07	11.30	3.01	H		0.344	25.37			
		16-QAM	-21.98	15.93	11.30	3.01	H		0.265	24.23			
		64-QAM	-23.29	14.62	11.30	3.01	H		0.196	22.92			
		256-QAM	-25.40	12.51	11.30	3.01	H		0.120	20.81			

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol	Limit	EIRP		RB		
									W	W	dBm	Size	Offset
3470.01	Sub6 h77(78)/ 40 MHz [30 kHz]	PI/2 BPSK	-21.91	15.92	11.20	2.95	H	< 1.00	0.261	24.17		1	104
		QPSK	-22.03	15.80	11.20	2.95	H		0.254	24.05			
		16-QAM	-23.31	14.52	11.20	2.95	H		0.189	22.77			
		64-QAM	-24.60	13.23	11.20	2.95	H		0.141	21.48			
		256-QAM	-26.76	11.07	11.20	2.95	H		0.086	19.32			
3500.01	Sub6 h77(78)/ 40 MHz [30 kHz]	PI/2 BPSK	-21.06	17.19	11.30	3.00	H	< 1.00	0.354	25.49		1	104
		QPSK	-21.29	16.96	11.30	3.00	H		0.336	25.26			
		16-QAM	-22.31	15.94	11.30	3.00	H		0.265	24.24			
		64-QAM	-23.71	14.54	11.30	3.00	H		0.192	22.84			
		256-QAM	-25.86	12.39	11.30	3.00	H		0.117	20.69			
3529.98	Sub6 h77(78)/ 40 MHz [30 kHz]	PI/2 BPSK	-20.68	17.20	11.30	2.99	H	< 1.00	0.356	25.51		1	104
		QPSK	-20.72	17.16	11.30	2.99	H		0.352	25.47			
		16-QAM	-21.86	16.02	11.30	2.99	H		0.271	24.33			
		64-QAM	-23.08	14.80	11.30	2.99	H		0.205	23.11			
		256-QAM	-25.37	12.51	11.30	2.99	H		0.121	20.82			

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol	Limit	EIRP		RB		
									W	W	dBm	Size	Offset
3475.02	Sub6 h77(78)/ 50 MHz [30 kHz]	PI/2 BPSK	-21.61	16.27	11.20	2.97	H	< 1.00	0.282	24.50		1	131
		QPSK	-21.72	16.16	11.20	2.97	H		0.275	24.39			
		16-QAM	-22.95	14.93	11.20	2.97	H		0.207	23.16			
		64-QAM	-24.12	13.76	11.20	2.97	H		0.158	21.99			
		256-QAM	-26.31	11.57	11.20	2.97	H		0.095	19.80			
3500.01	Sub6 h77(78)/ 50 MHz [30 kHz]	PI/2 BPSK	-20.83	17.42	11.30	3.00	H	< 1.00	0.373	25.72		1	131
		QPSK	-20.97	17.28	11.30	3.00	H		0.361	25.58			
		16-QAM	-21.90	16.35	11.30	3.00	H		0.292	24.65			
		64-QAM	-23.27	14.98	11.30	3.00	H		0.213	23.28			
		256-QAM	-25.55	12.70	11.30	3.00	H		0.126	21.00			
3525.00	Sub6 h77(78)/ 50 MHz [30 kHz]	PI/2 BPSK	-20.41	17.49	11.30	2.98	H	< 1.00	0.381	25.81		1	131
		QPSK	-20.51	17.39	11.30	2.98	H		0.372	25.71			
		16-QAM	-21.82	16.08	11.30	2.98	H		0.275	24.40			
		64-QAM	-23.03	14.87	11.30	2.98	H		0.208	23.19			
		256-QAM	-25.28	12.62	11.30	2.98	H		0.124	20.94			

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol	Limit	EIRP		RB		
									W	W	dBm	Size	Offset
3480.00	Sub6 h77(78)/ 60 MHz [30 kHz]	PI/2 BPSK	-21.56	16.38	11.20	2.99	H	< 1.00	0.288	24.59		1	160
		QPSK	-21.61	16.33	11.20	2.99	H		0.284	24.54			
		16-QAM	-22.89	15.05	11.20	2.99	H		0.212	23.26			
		64-QAM	-24.11	13.83	11.20	2.99	H		0.160	22.04			
		256-QAM	-26.26	11.68	11.20	2.99	H		0.097	19.89			
3500.01	Sub6 h77(78)/ 60 MHz [30 kHz]	PI/2 BPSK	-20.74	17.51	11.30	3.00	H	< 1.00	0.381	25.81		1	160
		QPSK	-21.01	17.24	11.30	3.00	H		0.358	25.54			
		16-QAM	-21.89	16.36	11.30	3.00	H		0.292	24.66			
		64-QAM	-23.35	14.90	11.30	3.00	H		0.209	23.20			
		256-QAM	-25.58	12.67	11.30	3.00	H		0.125	20.97			
3519.99	Sub6 h77(78)/ 60 MHz [30 kHz]	PI/2 BPSK	-20.72	17.20	11.30	2.97	H	< 1.00	0.357	25.53		1	160
		QPSK	-21.09	16.83	11.30	2.97	H		0.328	25.16			
		16-QAM	-21.99	15.93	11.30	2.97	H		0.267	24.26			
		64-QAM	-23.31	14.61	11.30	2.97	H		0.197	22.94			
		256-QAM	-25.57	12.35	11.30	2.97	H		0.117	20.68			

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol	Limit	EIRP		RB		
									W	W	dBm	Size	Offset
3485.01	Sub6 n77(78)/ 70 MHz [30 kHz]	PI/2 BPSK	-20.85	17.16	11.20	3.00	H	< 1.00	0.344	25.36		1	187
		QPSK	-21.09	16.92	11.20	3.00	H		0.325	25.12			
		16-QAM	-22.32	15.69	11.20	3.00	H		0.245	23.89			
		64-QAM	-23.61	14.40	11.20	3.00	H		0.182	22.60			
		256-QAM	-25.90	12.11	11.20	3.00	H		0.107	20.31			
		PI/2 BPSK	-20.45	17.80	11.30	3.00	H		0.407	26.10			
3500.01	Sub6 n77(78)/ 70 MHz [30 kHz]	QPSK	-20.71	17.54	11.30	3.00	H	< 1.00	0.384	25.84		1	187
		16-QAM	-21.93	16.32	11.30	3.00	H		0.290	24.62			
		64-QAM	-23.26	14.99	11.30	3.00	H		0.213	23.29			
		256-QAM	-25.43	12.82	11.30	3.00	H		0.129	21.12			
		PI/2 BPSK	-20.65	17.41	11.30	2.98	H		0.375	25.74			
		QPSK	-20.71	17.35	11.30	2.98	H		0.370	25.68			
3514.98	Sub6 n77(78)/ 70 MHz [30 kHz]	16-QAM	-21.86	16.20	11.30	2.98	H	< 1.00	0.284	24.53		1	187
		64-QAM	-23.25	14.81	11.30	2.98	H		0.206	23.14			
		256-QAM	-25.41	12.65	11.30	2.98	H		0.125	20.98			

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol	Limit	EIRP		RB		
									W	W	dBm	Size	Offset
3490.02	Sub6 h77(78)/ 80 MHz [30 kHz]	PI/2 BPSK	-20.69	17.39	11.20	3.00	H	< 1.00	0.362	25.59		1	215
		QPSK	-20.73	17.35	11.20	3.00	H		0.359	25.55			
		16-QAM	-21.84	16.24	11.20	3.00	H		0.278	24.44			
		64-QAM	-23.16	14.92	11.20	3.00	H		0.205	23.12			
		256-QAM	-25.45	12.63	11.20	3.00	H		0.121	20.83			
3500.01	Sub6 h77(78)/ 80 MHz [30 kHz]	PI/2 BPSK	-20.51	17.74	11.30	3.00	H	< 1.00	0.402	26.04		1	215
		QPSK	-20.59	17.66	11.30	3.00	H		0.394	25.96			
		16-QAM	-21.72	16.53	11.30	3.00	H		0.304	24.83			
		64-QAM	-23.08	15.17	11.30	3.00	H		0.222	23.47			
		256-QAM	-25.34	12.91	11.30	3.00	H		0.132	21.21			
3510.00	Sub6 h77(78)/ 80 MHz [30 kHz]	PI/2 BPSK	-20.41	17.80	11.30	2.98	H	< 1.00	0.409	26.12		1	215
		QPSK	-20.65	17.56	11.30	2.98	H		0.387	25.88			
		16-QAM	-21.75	16.46	11.30	2.98	H		0.301	24.78			
		64-QAM	-23.08	15.13	11.30	2.98	H		0.221	23.45			
		256-QAM	-25.36	12.85	11.30	2.98	H		0.131	21.17			

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol	Limit	EIRP		RB		
									W	W	dBm	Size	Offset
3495.00	Sub6 h77(78)/ 90 MHz [30 kHz]	PI/2 BPSK	-20.68	17.49	11.25	3.00	H	< 1.00	0.375	25.74		1	243
		QPSK	-20.51	17.66	11.25	3.00	H		0.390	25.91			
		16-QAM	-21.83	16.34	11.25	3.00	H		0.288	24.59			
		64-QAM	-23.12	15.05	11.25	3.00	H		0.214	23.30			
		256-QAM	-25.36	12.81	11.25	3.00	H		0.128	21.06			
3500.01	Sub6 h77(78)/ 90 MHz [30 kHz]	PI/2 BPSK	-20.65	17.80	11.10	3.00	H	< 1.00	0.389	25.90		1	243
		QPSK	-20.64	17.61	11.30	3.00	H		0.390	25.91			
		16-QAM	-21.91	16.34	11.30	3.00	H		0.291	24.64			
		64-QAM	-23.01	15.24	11.30	3.00	H		0.226	23.54			
		256-QAM	-25.31	12.94	11.30	3.00	H		0.133	21.24			
3504.99	Sub6 h77(78)/ 90 MHz [30 kHz]	PI/2 BPSK	-20.60	17.63	11.30	2.99	H	< 1.00	0.393	25.94		1	243
		QPSK	-20.71	17.52	11.30	2.99	H		0.383	25.83			
		16-QAM	-21.79	16.44	11.30	2.99	H		0.299	24.75			
		64-QAM	-23.03	15.20	11.30	2.99	H		0.224	23.51			
		256-QAM	-25.34	12.89	11.30	2.99	H		0.132	21.20			

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol	Limit	EIRP		RB		
									W	W	dBm	Size	Offset
3500.01	Sub6 n77(78)/ 100 MHz [30 kHz]	PI/2 BPSK	-20.67	17.58	11.30	3.00	H	< 1.00	0.387	25.88		1	271
		QPSK	-20.82	17.43	11.30	3.00	H		0.374	25.73			
		16-QAM	-21.71	16.54	11.30	3.00	H		0.305	24.84			
		64-QAM	-23.01	15.24	11.30	3.00	H		0.226	23.54			
		256-QAM	-25.43	12.82	11.30	3.00	H		0.129	21.12			

8.2 RADIATED SPURIOUS EMISSIONS

- NR Band: N77(78)
- Bandwidth: 80 MHz
- Modulation: PI/2 BPSK
- Distance: 1 meters
- SCS: 30 kHz

Ch	Freq (MHz)	Measured Level (dBm)	Ant. Gain (dBi)	Substitute Level (dBm)	C.L	Pol	Result (dBm)	Limit (dBm)	RB	
									Size	Offset
632668 (3490.02)	6 980.04	-65.08	10.90	-59.16	4.30	V	-52.56	-13.00	1	215
	10 470.06	-65.81	11.30	-55.66	5.43	V	-49.79	-13.00		
	13 960.08	-61.88	12.30	-52.23	6.37	V	-46.30	-13.00		
	17 450.10	-65.60	15.80	-46.12	7.26	V	-37.58	-13.00		
633334 (3500.01)	7 000.02	-63.99	10.90	-58.07	4.32	V	-51.49	-13.00	1	215
	10 500.03	-65.33	11.30	-54.73	5.41	V	-48.84	-13.00		
	14 000.04	-58.75	12.30	-49.40	6.35	V	-43.45	-13.00		
	17 500.05	-69.10	15.70	-49.01	7.23	V	-40.54	-13.00		
634000 (3510.00)	7 020.00	-63.89	10.90	-57.45	4.36	V	-50.91	-13.00	1	215
	10 530.00	-65.36	11.30	-54.66	5.41	V	-48.77	-13.00		
	14 040.00	-60.85	12.30	-51.66	6.40	V	-45.76	-13.00		
	17 550.00	-68.52	15.40	-46.71	7.31	V	-38.62	-13.00		

8.3 PEAK-TO-AVERAGE RATIO

Band	Band Width	Frequency (MHz)	Modulation	Resource Block Size	Resource Block Offset	Data (dB)	
Sub6 n77(78)	10 MHz	3500.01	BPSK	Full RB	0	3.99	
			QPSK			4.56	
			16-QAM			5.49	
	15 MHz		64-QAM			5.88	
			256-QAM			6.53	
			BPSK			3.95	
	20 MHz		QPSK			4.42	
			16-QAM			5.37	
			64-QAM			5.87	
			256-QAM			6.36	
			BPSK			3.91	
			QPSK			4.42	
	25 MHz		16-QAM			5.40	
			64-QAM			5.87	
			256-QAM			6.58	
			BPSK			4.07	
			QPSK			4.58	
			16-QAM			5.70	
	30 MHz		64-QAM			6.06	
			256-QAM			6.65	
			BPSK			3.92	
			QPSK			4.47	
			16-QAM			5.37	
			64-QAM			5.95	
	40 MHz		256-QAM			6.48	
			BPSK			3.91	
			QPSK			4.45	
			16-QAM			5.43	
			64-QAM			5.92	
			256-QAM			6.47	
	50 MHz		BPSK			4.05	
			QPSK			4.56	
			16-QAM			5.49	
			64-QAM			5.98	
			256-QAM			6.56	
			BPSK			4.29	
	60 MHz		QPSK			4.79	
			16-QAM			5.76	
			64-QAM			6.15	
			256-QAM			6.51	
			BPSK			4.30	
			QPSK			4.58	
	70 MHz		16-QAM			5.61	
			64-QAM			5.94	
			256-QAM			6.54	

		BPSK		4.20
		QPSK		4.69
		16-QAM		5.68
		64-QAM		6.18
		256-QAM		6.54
	80 MHz	BPSK		4.28
		QPSK		4.59
	90 MHz	16-QAM		5.49
		64-QAM		5.92
		256-QAM		6.41
	100 MHz	BPSK		4.45
		QPSK		5.00
		16-QAM		5.90
		64-QAM		6.33
		256-QAM		6.61

Note:

1. Plots of the EUT's Peak- to- Average Ratio are shown Page 91 ~ 150.

8.4 OCCUPIED BANDWIDTH

Band	Band Width	Frequency (MHz)	Modulation	Resource Block Size	Resource Block Offset	Data (MHz)	
Sub6 n77(78)	10 MHz	3500.01	BPSK	Full RB	0	8.6323	
			QPSK			8.6661	
			16-QAM			8.6919	
	15 MHz		64-QAM			8.7418	
			256-QAM			8.7478	
			BPSK			12.980	
	20 MHz		QPSK			13.029	
			16-QAM			12.964	
			64-QAM			12.964	
			256-QAM			12.962	
			BPSK			17.985	
			QPSK			17.978	
	25 MHz		16-QAM			17.917	
			64-QAM			17.996	
			256-QAM			18.024	
			BPSK			22.989	
			QPSK			23.012	
			16-QAM			22.978	
	30 MHz		64-QAM			23.029	
			256-QAM			22.931	
			BPSK			26.943	
			QPSK			26.915	
			16-QAM			27.006	
			64-QAM			26.897	
	40 MHz		256-QAM			26.927	
			BPSK			35.931	
			QPSK			35.926	
			16-QAM			35.828	
			64-QAM			35.804	
			256-QAM			35.789	
	50 MHz		BPSK			46.050	
			QPSK			45.814	
			16-QAM			45.914	
			64-QAM			45.803	
			256-QAM			45.918	
			BPSK			58.014	
	60 MHz		QPSK			58.047	
			16-QAM			58.025	
			64-QAM			58.050	
			256-QAM			58.177	
			BPSK			64.621	
			QPSK			64.491	
	70 MHz		16-QAM			64.551	
			64-QAM			64.431	
			256-QAM			64.627	

		BPSK		77.643
		QPSK		77.297
		16-QAM		77.386
		64-QAM		77.286
		256-QAM		77.449
	80 MHz	BPSK		87.014
		QPSK		87.048
	90 MHz	16-QAM		86.876
		64-QAM		87.013
		256-QAM		87.034
	100 MHz	BPSK		96.667
		QPSK		96.920
		16-QAM		96.654
		64-QAM		96.554
		256-QAM		96.649

Note:

1. Plots of the EUT's Occupied Bandwidth are shown Page 151 ~ 210.

8.5 CONDUCTED SPURIOUS EMISSIONS

Band	Band Width (MHz)	Frequency (MHz)	Frequency of Maximum Harmonic (GHz)	Factor (dB)	Measurement Maximum Data (dBm)	Result (dBm)	Limit (dBm)
Sub6 n77(78)	10	3455.01	4.5833	37.190	-70.852	-33.662	
		3500.01	7.9881	37.805	-70.527	-32.722	
	15	3544.98	4.8236	37.190	-70.455	-33.265	
		3457.50	9.9516	37.805	-70.501	-32.696	
		3500.01	4.9138	37.190	-69.747	-32.557	
	20	3542.49	8.3166	37.805	-69.701	-31.896	
		3460.02	6.0165	37.805	-70.911	-33.106	
		3500.01	7.2263	37.805	-70.561	-32.756	
	25	3540.00	8.8041	37.805	-70.536	-32.731	
		3462.51	8.2667	37.805	-71.127	-33.322	
		3500.01	9.4696	37.805	-70.388	-32.583	
	30	3537.48	9.2129	37.805	-70.960	-33.155	
		3465.00	9.1476	37.805	-70.470	-32.665	
		3500.01	8.0045	37.805	-70.212	-32.407	
	40	3534.99	6.0095	37.805	-70.474	-32.669	
		3470.01	8.0165	37.805	-70.368	-32.563	
		3500.01	8.0190	37.805	-70.262	-32.457	
	50	3529.98	9.6635	37.805	-71.055	-33.250	
		3475.02	9.7183	37.805	-70.314	-32.509	
		3500.01	5.1895	37.805	-70.764	-32.959	
	60	3525.00	8.0170	37.805	-70.261	-32.456	
		3480.00	8.0279	37.805	-70.946	-33.141	
		3500.01	9.7124	37.805	-70.478	-32.673	
	70	3519.99	8.0145	37.805	-70.417	-32.612	
		3485.01	9.1326	37.805	-70.567	-32.762	
		3500.01	4.9462	37.190	-70.841	-33.651	
	80	3514.98	5.2084	37.805	-69.492	-31.687	
		3490.02	8.3126	37.805	-70.360	-32.555	
		3500.01	8.0035	37.805	-70.617	-32.812	
	90	3510.00	8.5718	37.805	-69.476	-31.671	
		3495.00	7.9955	37.805	-70.202	-32.397	
		3500.01	8.0040	37.805	-70.069	-32.264	
	100	3504.99	7.7473	37.805	-70.308	-32.503	
		3500.01	8.6102	37.805	-69.962	-32.157	

-13.00

Note:

1. Plots of the EUT's Conducted Spurious Emissions are shown Page 211 ~ 278.

2. Duty Cycle factor already applied on the factor.

- Duty Cycle Factor(dB) = 6.990



- Factor(dB) = Duty Cycle factor + Cable Loss + Ext. Attenuator + Power Splitter

- Result(dBm) = Reading + Factor

3. Factor(dB)

Frequency Range (GHz)	Factor [dB]
0.03 – 1	34.484
1 – 5	37.190
5 – 10	37.805
10 – 15	38.330
15 – 20	38.703
Above 20	39.345

8.6 BAND EDGE

1. Plots of the EUT's Band Edge are shown Page 279 ~ 422.

2. Duty Cycle factor already applied on the factor.

- Factor(dB) = Duty Cycle factor + Cable Loss + Ext. Attenuator + Power Splitter

- Result(dBm) = Reading + Factor

- Duty Cycle Factor(dB) = 6.990

8.7 FREQUENCY STABILITY / VARIATION OF AMBIENT TEMPERATURE

- BandWidth: 10 MHz
 Voltage(100 %): 3.880 VDC
 Batt. Endpoint: 3.300 VDC
 LIMIT: Emission must remain in band

Test. Frequency (MHz)	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3455.010	100 %	+20(Ref)	3455 009 992	0.0	0.000 000	0.000
	100 %	-30	3455 009 983	-8.4	0.000 000	-0.002
	100 %	-20	3455 009 983	-8.5	0.000 000	-0.002
	100 %	-10	3455 009 984	-7.5	0.000 000	-0.002
	100 %	0	3455 009 984	-7.9	0.000 000	-0.002
	100 %	+10	3455 009 988	-3.7	0.000 000	-0.001
	100 %	+30	3455 009 986	-5.9	0.000 000	-0.002
	100 %	+40	3455 009 988	-4.0	0.000 000	-0.001
	100 %	+50	3455 009 989	-3.3	0.000 000	-0.001
	Batt. Endpoint	+20	3455 009 987	-4.6	0.000 000	-0.001
3544.980	100 %	+20(Ref)	3544 979 998	0.0	0.000 000	0.000
	100 %	-30	3544 979 992	-6.0	0.000 000	-0.002
	100 %	-20	3544 979 993	-5.3	0.000 000	-0.001
	100 %	-10	3544 979 994	-4.2	0.000 000	-0.001
	100 %	0	3544 979 991	-7.1	0.000 000	-0.002
	100 %	+10	3544 979 995	-3.2	0.000 000	-0.001
	100 %	+30	3544 979 992	-6.0	0.000 000	-0.002
	100 %	+40	3544 979 995	-3.9	0.000 000	-0.001
	100 %	+50	3544 979 996	-2.0	0.000 000	-0.001
	Batt. Endpoint	+20	3544 979 995	-3.1	0.000 000	-0.001

- BandWidth: 15 MHz
 Voltage(100 %): 3.880 VDC
 Batt. Endpoint: 3.300 VDC
 LIMIT: Emission must remain in band

Test. Frequency (MHz)	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3457.500	100 %	+20(Ref)	3457 499 997	0.0	0.000 000	0.000
	100 %	-30	3457 499 992	-5.8	0.000 000	-0.002
	100 %	-20	3457 499 990	-7.2	0.000 000	-0.002
	100 %	-10	3457 499 998	0.7	0.000 000	0.000
	100 %	0	3457 499 995	-1.9	0.000 000	-0.001
	100 %	+10	3457 499 997	-0.3	0.000 000	0.000
	100 %	+30	3457 499 993	-4.5	0.000 000	-0.001
	100 %	+40	3457 499 995	-2.0	0.000 000	-0.001
	100 %	+50	3457 499 996	-1.7	0.000 000	0.000
	Batt. Endpoint	+20	3457 499 994	-3.0	0.000 000	-0.001
3542.490	100 %	+20(Ref)	3542 490 001	0.0	0.000 000	0.000
	100 %	-30	3542 489 997	-3.7	0.000 000	-0.001
	100 %	-20	3542 489 996	-5.2	0.000 000	-0.001
	100 %	-10	3542 490 000	-0.9	0.000 000	0.000
	100 %	0	3542 490 000	-1.4	0.000 000	0.000
	100 %	+10	3542 489 995	-5.9	0.000 000	-0.002
	100 %	+30	3542 489 991	-9.7	0.000 000	-0.003
	100 %	+40	3542 489 998	-2.6	0.000 000	-0.001
	100 %	+50	3542 490 000	-1.3	0.000 000	0.000
	Batt. Endpoint	+20	3542 489 997	-4.1	0.000 000	-0.001

- BandWidth: 20 MHz
- Voltage(100 %): 3.880 VDC
- Batt. Endpoint: 3.300 VDC
- LIMIT: Emission must remain in band

Test. Frequency (MHz)	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3460.020	100 %	+20(Ref)	3460 019 998	0.0	0.000 000	0.000
	100 %	-30	3460 019 994	-3.8	0.000 000	-0.001
	100 %	-20	3460 019 996	-2.1	0.000 000	-0.001
	100 %	-10	3460 019 994	-3.6	0.000 000	-0.001
	100 %	0	3460 019 996	-2.0	0.000 000	-0.001
	100 %	+10	3460 019 996	-1.8	0.000 000	-0.001
	100 %	+30	3460 019 998	0.0	0.000 000	0.000
	100 %	+40	3460 019 994	-4.0	0.000 000	-0.001
	100 %	+50	3460 019 994	-4.2	0.000 000	-0.001
	Batt. Endpoint	+20	3460 019 996	-1.9	0.000 000	-0.001
3540.000	100 %	+20(Ref)	3540 000 000	0.0	0.000 000	0.000
	100 %	-30	3540 000 002	2.7	0.000 000	0.001
	100 %	-20	3539 999 999	-0.1	0.000 000	0.000
	100 %	-10	3539 999 997	-2.6	0.000 000	-0.001
	100 %	0	3539 999 998	-1.3	0.000 000	0.000
	100 %	+10	3539 999 999	-0.6	0.000 000	0.000
	100 %	+30	3539 999 996	-3.9	0.000 000	-0.001
	100 %	+40	3539 999 997	-3.0	0.000 000	-0.001
	100 %	+50	3540 000 000	0.1	0.000 000	0.000
	Batt. Endpoint	+20	3539 999 993	-6.9	0.000 000	-0.002

- BandWidth: 25 MHz
- Voltage(100 %): 3.880 VDC
- Batt. Endpoint: 3.300 VDC
- LIMIT: Emission must remain in band

Test. Frequency (MHz)	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3462.510	100 %	+20(Ref)	3462 509 995	0.0	0.000 000	0.000
	100 %	-30	3462 509 992	-2.9	0.000 000	-0.001
	100 %	-20	3462 509 988	-7.0	0.000 000	-0.002
	100 %	-10	3462 509 992	-3.1	0.000 000	-0.001
	100 %	0	3462 509 997	2.0	0.000 000	0.001
	100 %	+10	3462 509 994	-0.9	0.000 000	0.000
	100 %	+30	3462 509 994	-0.4	0.000 000	0.000
	100 %	+40	3462 509 993	-1.8	0.000 000	-0.001
	100 %	+50	3462 509 992	-3.0	0.000 000	-0.001
	Batt. Endpoint	+20	3462 509 991	-3.5	0.000 000	-0.001
3537.480	100 %	+20(Ref)	3537 479 996	0.0	0.000 000	0.000
	100 %	-30	3537 479 992	-3.8	0.000 000	-0.001
	100 %	-20	3537 479 991	-4.5	0.000 000	-0.001
	100 %	-10	3537 479 991	-4.7	0.000 000	-0.001
	100 %	0	3537 479 990	-6.1	0.000 000	-0.002
	100 %	+10	3537 479 991	-4.8	0.000 000	-0.001
	100 %	+30	3537 479 990	-6.4	0.000 000	-0.002
	100 %	+40	3537 479 992	-4.4	0.000 000	-0.001
	100 %	+50	3537 479 990	-5.6	0.000 000	-0.002
	Batt. Endpoint	+20	3537 479 998	2.3	0.000 000	0.001

- BandWidth: 30 MHz
 Voltage(100 %): 3.880 VDC
 Batt. Endpoint: 3.300 VDC
 LIMIT: Emission must remain in band

Test. Frequency (MHz)	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3465.000	100 %	+20(Ref)	3465 000 002	0.0	0.000 000	0.000
	100 %	-30	3464 999 995	-6.8	0.000 000	-0.002
	100 %	-20	3464 999 998	-3.8	0.000 000	-0.001
	100 %	-10	3465 000 002	0.6	0.000 000	0.000
	100 %	0	3465 000 000	-1.5	0.000 000	0.000
	100 %	+10	3464 999 999	-2.9	0.000 000	-0.001
	100 %	+30	3464 999 997	-4.6	0.000 000	-0.001
	100 %	+40	3464 999 996	-5.4	0.000 000	-0.002
	100 %	+50	3464 999 998	-4.0	0.000 000	-0.001
	Batt. Endpoint	+20	3464 999 999	-2.2	0.000 000	-0.001
3534.990	100 %	+20(Ref)	3534 989 992	0.0	0.000 000	0.000
	100 %	-30	3534 989 985	-6.4	0.000 000	-0.002
	100 %	-20	3534 989 987	-4.9	0.000 000	-0.001
	100 %	-10	3534 989 988	-3.4	0.000 000	-0.001
	100 %	0	3534 989 987	-4.8	0.000 000	-0.001
	100 %	+10	3534 989 988	-3.9	0.000 000	-0.001
	100 %	+30	3534 989 982	-9.3	0.000 000	-0.003
	100 %	+40	3534 989 986	-5.3	0.000 000	-0.001
	100 %	+50	3534 989 985	-6.4	0.000 000	-0.002
	Batt. Endpoint	+20	3534 989 985	-6.2	0.000 000	-0.002

- BandWidth: 40 MHz
- Voltage(100 %): 3.880 VDC
- Batt. Endpoint: 3.300 VDC
- LIMIT: Emission must remain in band

Test. Frequency (MHz)	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3470.010	100 %	+20(Ref)	3470 009 997	0.0	0.000 000	0.000
	100 %	-30	3470 009 993	-3.2	0.000 000	-0.001
	100 %	-20	3470 009 995	-1.6	0.000 000	0.000
	100 %	-10	3470 009 997	0.4	0.000 000	0.000
	100 %	0	3470 009 996	-0.4	0.000 000	0.000
	100 %	+10	3470 009 992	-4.5	0.000 000	-0.001
	100 %	+30	3470 009 995	-1.6	0.000 000	0.000
	100 %	+40	3470 009 998	1.1	0.000 000	0.000
	100 %	+50	3470 009 996	-0.7	0.000 000	0.000
	Batt. Endpoint	+20	3470 009 994	-2.9	0.000 000	-0.001
3529.980	100 %	+20(Ref)	3529 979 993	0.0	0.000 000	0.000
	100 %	-30	3529 979 991	-2.2	0.000 000	-0.001
	100 %	-20	3529 979 987	-6.4	0.000 000	-0.002
	100 %	-10	3529 979 987	-6.4	0.000 000	-0.002
	100 %	0	3529 979 988	-5.0	0.000 000	-0.001
	100 %	+10	3529 979 996	3.2	0.000 000	0.001
	100 %	+30	3529 979 995	1.4	0.000 000	0.000
	100 %	+40	3529 979 992	-1.3	0.000 000	0.000
	100 %	+50	3529 979 985	-8.1	0.000 000	-0.002
	Batt. Endpoint	+20	3529 979 991	-1.9	0.000 000	-0.001

- BandWidth: 50 MHz
 Voltage(100 %): 3.880 VDC
 Batt. Endpoint: 3.300 VDC
 LIMIT: Emission must remain in band

Test. Frequency (MHz)	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3475.020	100 %	+20(Ref)	3475 020 002	0.0	0.000 000	0.000
	100 %	-30	3475 019 999	-3.4	0.000 000	-0.001
	100 %	-20	3475 020 004	2.4	0.000 000	0.001
	100 %	-10	3475 020 003	1.2	0.000 000	0.000
	100 %	0	3475 020 005	2.5	0.000 000	0.001
	100 %	+10	3475 020 003	1.2	0.000 000	0.000
	100 %	+30	3475 020 002	0.4	0.000 000	0.000
	100 %	+40	3475 019 999	-3.2	0.000 000	-0.001
	100 %	+50	3475 020 003	1.1	0.000 000	0.000
	Batt. Endpoint	+20	3475 020 002	0.0	0.000 000	0.000
3525.000	100 %	+20(Ref)	3524 999 999	0.0	0.000 000	0.000
	100 %	-30	3524 999 992	-7.5	0.000 000	-0.002
	100 %	-20	3524 999 996	-3.3	0.000 000	-0.001
	100 %	-10	3524 999 996	-3.9	0.000 000	-0.001
	100 %	0	3524 999 997	-1.9	0.000 000	-0.001
	100 %	+10	3524 999 996	-3.9	0.000 000	-0.001
	100 %	+30	3524 999 990	-9.2	0.000 000	-0.003
	100 %	+40	3524 999 995	-4.7	0.000 000	-0.001
	100 %	+50	3524 999 994	-5.7	0.000 000	-0.002
	Batt. Endpoint	+20	3524 999 996	-3.5	0.000 000	-0.001

- BandWidth: 60 MHz
 Voltage(100 %): 3.880 VDC
 Batt. Endpoint: 3.300 VDC
 LIMIT: Emission must remain in band

Test. Frequency (MHz)	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3480.000	100 %	+20(Ref)	3479 999 998	0.0	0.000 000	0.000
	100 %	-30	3479 999 995	-3.0	0.000 000	-0.001
	100 %	-20	3479 999 996	-2.3	0.000 000	-0.001
	100 %	-10	3479 999 997	-1.0	0.000 000	0.000
	100 %	0	3479 999 996	-1.7	0.000 000	0.000
	100 %	+10	3480 000 000	1.5	0.000 000	0.000
	100 %	+30	3479 999 997	-1.0	0.000 000	0.000
	100 %	+40	3479 999 992	-6.4	0.000 000	-0.002
	100 %	+50	3479 999 994	-4.6	0.000 000	-0.001
	Batt. Endpoint	+20	3479 999 995	-2.8	0.000 000	-0.001
3519.990	100 %	+20(Ref)	3519 989 997	0.0	0.000 000	0.000
	100 %	-30	3519 989 996	-0.6	0.000 000	0.000
	100 %	-20	3519 989 995	-1.8	0.000 000	-0.001
	100 %	-10	3519 989 991	-5.1	0.000 000	-0.001
	100 %	0	3519 989 991	-5.5	0.000 000	-0.002
	100 %	+10	3519 989 992	-4.2	0.000 000	-0.001
	100 %	+30	3519 989 996	-0.9	0.000 000	0.000
	100 %	+40	3519 989 997	0.1	0.000 000	0.000
	100 %	+50	3519 989 994	-2.9	0.000 000	-0.001
	Batt. Endpoint	+20	3519 989 992	-4.5	0.000 000	-0.001

- BandWidth: 70 MHz
 Voltage(100 %): 3.880 VDC
 Batt. Endpoint: 3.300 VDC
 LIMIT: Emission must remain in band

Test. Frequency (MHz)	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3485.010	100 %	+20(Ref)	3485 009 996	0.0	0.000 000	0.000
	100 %	-30	3485 009 997	0.5	0.000 000	0.000
	100 %	-20	3485 009 992	-4.5	0.000 000	-0.001
	100 %	-10	3485 009 993	-2.8	0.000 000	-0.001
	100 %	0	3485 009 994	-1.9	0.000 000	-0.001
	100 %	+10	3485 009 993	-3.1	0.000 000	-0.001
	100 %	+30	3485 009 993	-3.2	0.000 000	-0.001
	100 %	+40	3485 009 992	-4.4	0.000 000	-0.001
	100 %	+50	3485 009 993	-3.3	0.000 000	-0.001
	Batt. Endpoint	+20	3485 009 989	-7.1	0.000 000	-0.002
3514.980	100 %	+20(Ref)	3514 979 990	0.0	0.000 000	0.000
	100 %	-30	3514 979 985	-4.8	0.000 000	-0.001
	100 %	-20	3514 979 981	-8.3	0.000 000	-0.002
	100 %	-10	3514 979 983	-6.4	0.000 000	-0.002
	100 %	0	3514 979 982	-7.2	0.000 000	-0.002
	100 %	+10	3514 979 985	-5.1	0.000 000	-0.001
	100 %	+30	3514 979 983	-6.6	0.000 000	-0.002
	100 %	+40	3514 979 983	-6.6	0.000 000	-0.002
	100 %	+50	3514 979 983	-7.0	0.000 000	-0.002
	Batt. Endpoint	+20	3514 979 988	-1.7	0.000 000	0.000

- BandWidth: 80 MHz
 Voltage(100 %): 3.880 VDC
 Batt. Endpoint: 3.300 VDC
 LIMIT: Emission must remain in band

Test. Frequency (MHz)	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3490.020	100 %	+20(Ref)	3490 019 998	0.0	0.000 000	0.000
	100 %	-30	3490 019 993	-4.4	0.000 000	-0.001
	100 %	-20	3490 019 995	-2.3	0.000 000	-0.001
	100 %	-10	3490 019 997	-0.1	0.000 000	0.000
	100 %	0	3490 019 994	-3.2	0.000 000	-0.001
	100 %	+10	3490 019 993	-4.4	0.000 000	-0.001
	100 %	+30	3490 019 993	-4.1	0.000 000	-0.001
	100 %	+40	3490 019 995	-2.4	0.000 000	-0.001
	100 %	+50	3490 019 993	-4.6	0.000 000	-0.001
	Batt. Endpoint	+20	3490 019 994	-3.7	0.000 000	-0.001
3510.000	100 %	+20(Ref)	3509 999 997	0.0	0.000 000	0.000
	100 %	-30	3509 999 997	0.3	0.000 000	0.000
	100 %	-20	3509 999 995	-1.3	0.000 000	0.000
	100 %	-10	3509 999 994	-2.2	0.000 000	-0.001
	100 %	0	3509 999 991	-5.9	0.000 000	-0.002
	100 %	+10	3509 999 990	-6.6	0.000 000	-0.002
	100 %	+30	3509 999 992	-4.2	0.000 000	-0.001
	100 %	+40	3509 999 994	-2.2	0.000 000	-0.001
	100 %	+50	3509 999 997	0.5	0.000 000	0.000
	Batt. Endpoint	+20	3509 999 988	-8.2	0.000 000	-0.002

- BandWidth: 90 MHz
 Voltage(100 %): 3.880 VDC
 Batt. Endpoint: 3.300 VDC
 LIMIT: Emission must remain in band

Test. Frequency (MHz)	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3495.000	100 %	+20(Ref)	3494 999 999	0.0	0.000 000	0.000
	100 %	-30	3494 999 996	-2.9	0.000 000	-0.001
	100 %	-20	3494 999 995	-3.8	0.000 000	-0.001
	100 %	-10	3495 000 001	1.9	0.000 000	0.001
	100 %	0	3495 000 001	2.0	0.000 000	0.001
	100 %	+10	3494 999 994	-5.0	0.000 000	-0.001
	100 %	+30	3494 999 994	-4.6	0.000 000	-0.001
	100 %	+40	3494 999 998	-0.6	0.000 000	0.000
	100 %	+50	3494 999 998	-1.3	0.000 000	0.000
	Batt. Endpoint	+20	3494 999 997	-2.2	0.000 000	-0.001
3504.990	100 %	+20(Ref)	3504 989 992	0.0	0.000 000	0.000
	100 %	-30	3504 989 984	-8.4	0.000 000	-0.002
	100 %	-20	3504 989 989	-2.8	0.000 000	-0.001
	100 %	-10	3504 989 994	1.4	0.000 000	0.000
	100 %	0	3504 989 988	-3.9	0.000 000	-0.001
	100 %	+10	3504 989 986	-6.1	0.000 000	-0.002
	100 %	+30	3504 989 987	-5.0	0.000 000	-0.001
	100 %	+40	3504 989 990	-2.0	0.000 000	-0.001
	100 %	+50	3504 989 988	-4.4	0.000 000	-0.001
	Batt. Endpoint	+20	3504 989 991	-0.8	0.000 000	0.000

- BandWidth: 100 MHz
- Voltage(100 %): 3.880 VDC
- Batt. Endpoint: 3.300 VDC
- LIMIT: Emission must remain in band

Test. Frequency (MHz)	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3500.010	100 %	+20(Ref)	3500 009 996	0.0	0.000 000	0.000
	100 %	-30	3500 009 990	-5.3	0.000 000	-0.002
	100 %	-20	3500 009 994	-1.9	0.000 000	-0.001
	100 %	-10	3500 009 994	-1.7	0.000 000	0.000
	100 %	0	3500 009 994	-1.9	0.000 000	-0.001
	100 %	+10	3500 009 989	-6.4	0.000 000	-0.002
	100 %	+30	3500 009 992	-3.7	0.000 000	-0.001
	100 %	+40	3500 009 996	0.2	0.000 000	0.000
	100 %	+50	3500 009 991	-5.1	0.000 000	-0.001
	Batt. Endpoint	+20	3500 009 993	-2.7	0.000 000	-0.001

9. TEST DATA (3700 MHz - 3980 MHz)

9.1 EQUIVALENT ISOTROPIC RADIATED POWER

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol	Limit	EIRP		RB	
									W	W	dBm	Size
3705.00	Sub6 n77(78)/ 10 MHz [30 kHz]	PI/2 BPSK	-20.55	17.94	11.40	3.09	H	< 1.00	0.422	26.25		
		QPSK	-20.79	17.70	11.40	3.09	H		0.399	26.01		
		16-QAM	-21.91	16.58	11.40	3.09	H		0.308	24.89	1	12
		64-QAM	-23.15	15.34	11.40	3.09	H		0.232	23.65		
		256-QAM	-25.34	13.15	11.40	3.09	H		0.140	21.46		
3840.00	Sub6 n77(78)/ 10 MHz [30 kHz]	PI/2 BPSK	-23.95	15.73	11.10	3.14	H	< 1.00	0.234	23.69		
		QPSK	-24.20	15.48	11.10	3.14	H		0.221	23.44		
		16-QAM	-25.18	14.50	11.10	3.14	H		0.176	22.46	1	1
		64-QAM	-26.66	13.02	11.10	3.14	H		0.125	20.98		
		256-QAM	-28.77	10.91	11.10	3.14	H		0.077	18.87		
3975.00	Sub6 n77(78)/ 10 MHz [30 kHz]	PI/2 BPSK	-23.76	15.89	10.90	3.20	H	< 1.00	0.229	23.59		
		QPSK	-23.81	15.84	10.90	3.20	H		0.226	23.54		
		16-QAM	-24.91	14.74	10.90	3.20	H		0.175	22.44	1	22
		64-QAM	-26.42	13.23	10.90	3.20	H		0.124	20.93		
		256-QAM	-28.67	10.98	10.90	3.20	H		0.074	18.68		

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L.	Pol	Limit	EIRP		RB		
									W	W	dBm	Size	Offset
3707.51	Sub6 n77(78)/ 15 MHz [30 kHz]	PI/2 BPSK	-20.45	18.04	11.40	3.09	H	< 1.00	0.432	26.35		1	36
		QPSK	-20.63	17.86	11.40	3.09	H		0.414	26.17			
		16-QAM	-21.61	16.88	11.40	3.09	H		0.330	25.19			
		64-QAM	-23.16	15.33	11.40	3.09	H		0.231	23.64			
		256-QAM	-25.19	13.30	11.40	3.09	H		0.145	21.61			
3840.00	Sub6 n77(78)/ 15 MHz [30 kHz]	PI/2 BPSK	-24.11	15.57	11.10	3.14	H	< 1.00	0.225	23.53		1	1
		QPSK	-24.20	15.48	11.10	3.14	H		0.221	23.44			
		16-QAM	-25.33	14.35	11.10	3.14	H		0.170	22.31			
		64-QAM	-26.48	13.20	11.10	3.14	H		0.131	21.16			
		256-QAM	-28.90	10.78	11.10	3.14	H		0.075	18.74			
3972.48	Sub6 n77(78)/ 15 MHz [30 kHz]	PI/2 BPSK	-23.83	15.82	10.90	3.20	H	< 1.00	0.225	23.52		1	19
		QPSK	-23.91	15.74	10.90	3.20	H		0.221	23.44			
		16-QAM	-25.23	14.42	10.90	3.20	H		0.163	22.12			
		64-QAM	-26.41	13.24	10.90	3.20	H		0.124	20.94			
		256-QAM	-28.71	10.94	10.90	3.20	H		0.073	18.64			

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol	Limit	EIRP		RB		
									W	W	dBm	Size	Offset
3710.01	Sub6 h77(78)/ 20 MHz [30 kHz]	PI/2 BPSK	-20.38	18.14	11.40	3.11	H	< 1.00	0.440	26.43		1	49
		QPSK	-20.36	18.16	11.40	3.11	H		0.442	26.45			
		16-QAM	-21.71	16.81	11.40	3.11	H		0.324	25.10			
		64-QAM	-22.83	15.69	11.40	3.11	H		0.250	23.98			
		256-QAM	-25.31	13.21	11.40	3.11	H		0.141	21.50			
3840.00	Sub6 h77(78)/ 20 MHz [30 kHz]	PI/2 BPSK	-24.15	15.53	11.10	3.14	H	< 1.00	0.223	23.49		1	1
		QPSK	-24.21	15.47	11.10	3.14	H		0.220	23.43			
		16-QAM	-25.39	14.29	11.10	3.14	H		0.168	22.25			
		64-QAM	-26.71	12.97	11.10	3.14	H		0.124	20.93			
		256-QAM	-28.92	10.76	11.10	3.14	H		0.074	18.72			
3969.99	Sub6 h77(78)/ 20 MHz [30 kHz]	PI/2 BPSK	-23.86	15.76	10.90	3.20	H	< 1.00	0.222	23.46		1	49
		QPSK	-23.98	15.64	10.90	3.20	H		0.216	23.34			
		16-QAM	-25.20	14.42	10.90	3.20	H		0.163	22.12			
		64-QAM	-26.54	13.08	10.90	3.20	H		0.120	20.78			
		256-QAM	-28.71	10.91	10.90	3.20	H		0.073	18.61			

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol	Limit	EIRP		RB		
									W	W	dBm	Size	Offset
3712.50	Sub6 h77(78)/ 25 MHz [30 kHz]	PI/2 BPSK	-20.93	17.74	11.40	3.12	H	< 1.00	0.400	26.02		1	63
		QPSK	-21.09	17.58	11.40	3.12	H		0.385	25.86			
		16-QAM	-22.02	16.65	11.40	3.12	H		0.311	24.93			
		64-QAM	-23.39	15.28	11.40	3.12	H		0.227	23.56			
		256-QAM	-25.67	13.00	11.40	3.12	H		0.134	21.28			
3840.00	Sub6 h77(78)/ 25 MHz [30 kHz]	PI/2 BPSK	-23.98	15.70	11.10	3.14	H	< 1.00	0.232	23.66		1	1
		QPSK	-24.06	15.62	11.10	3.14	H		0.228	23.58			
		16-QAM	-25.21	14.47	11.10	3.14	H		0.175	22.43			
		64-QAM	-26.32	13.36	11.10	3.14	H		0.136	21.32			
		256-QAM	-28.71	10.97	11.10	3.14	H		0.078	18.93			
3967.50	Sub6 h77(78)/ 25 MHz [30 kHz]	PI/2 BPSK	-23.84	15.85	10.90	3.21	H	< 1.00	0.226	23.54		1	63
		QPSK	-23.95	15.74	10.90	3.21	H		0.220	23.43			
		16-QAM	-24.99	14.70	10.90	3.21	H		0.173	22.39			
		64-QAM	-26.44	13.25	10.90	3.21	H		0.124	20.94			
		256-QAM	-28.69	11.00	10.90	3.21	H		0.074	18.69			

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol	Limit	EIRP		RB		
									W	W	dBm	Size	Offset
3715.02	Sub6 h77(78)/ 30 MHz [30 kHz]	PI/2 BPSK	-20.93	17.74	11.40	3.12	H	< 1.00	0.400	26.02		1	1
		QPSK	-20.99	17.68	11.40	3.12	H		0.394	25.96			
		16-QAM	-22.06	16.61	11.40	3.12	H		0.308	24.89			
		64-QAM	-23.45	15.22	11.40	3.12	H		0.224	23.50			
		256-QAM	-25.69	12.98	11.40	3.12	H		0.134	21.26			
3840.00	Sub6 h77(78)/ 30 MHz [30 kHz]	PI/2 BPSK	-23.95	15.73	11.10	3.14	H	< 1.00	0.234	23.69		1	1
		QPSK	-24.03	15.65	11.10	3.14	H		0.230	23.61			
		16-QAM	-25.26	14.42	11.10	3.14	H		0.173	22.38			
		64-QAM	-26.31	13.37	11.10	3.14	H		0.136	21.33			
		256-QAM	-28.78	10.90	11.10	3.14	H		0.077	18.86			
3964.98	Sub6 h77(78)/ 30 MHz [30 kHz]	PI/2 BPSK	-23.86	15.83	10.90	3.21	H	< 1.00	0.225	23.52		1	76
		QPSK	-23.97	15.72	10.90	3.21	H		0.219	23.41			
		16-QAM	-25.10	14.59	10.90	3.21	H		0.169	22.28			
		64-QAM	-26.65	13.04	10.90	3.21	H		0.118	20.73			
		256-QAM	-28.79	10.90	10.90	3.21	H		0.072	18.59			

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol	Limit	EIRP		RB		
									W	W	dBm	Size	Offset
3720.00	Sub6 n77(78)/ 40 MHz [30 kHz]	PI/2 BPSK	-20.77	17.92	11.40	3.14	H	< 1.00	0.415	26.18		1	1
		QPSK	-20.91	17.78	11.40	3.14	H		0.402	26.04			
		16-QAM	-22.13	16.56	11.40	3.14	H		0.303	24.82			
		64-QAM	-23.43	15.26	11.40	3.14	H		0.225	23.52			
		256-QAM	-25.56	13.13	11.40	3.14	H		0.138	21.39			
3840.00	Sub6 n77(78)/ 40 MHz [30 kHz]	PI/2 BPSK	-24.03	15.65	11.10	3.14	H	< 1.00	0.230	23.61		1	1
		QPSK	-24.16	15.52	11.10	3.14	H		0.223	23.48			
		16-QAM	-25.16	14.52	11.10	3.14	H		0.177	22.48			
		64-QAM	-26.46	13.22	11.10	3.14	H		0.131	21.18			
		256-QAM	-28.61	11.07	11.10	3.14	H		0.080	19.03			
3960.00	Sub6 n77(78)/ 40 MHz [30 kHz]	PI/2 BPSK	-23.93	15.85	10.90	3.21	H	< 1.00	0.226	23.54		1	104
		QPSK	-24.10	15.68	10.90	3.21	H		0.217	23.37			
		16-QAM	-25.10	14.68	10.90	3.21	H		0.173	22.37			
		64-QAM	-26.36	13.42	10.90	3.21	H		0.129	21.11			
		256-QAM	-28.71	11.07	10.90	3.21	H		0.075	18.76			

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level dBm)	Ant. Gain (dBi)	C.L	Pol	Limit	EIRP		RB		
									W	W	dBm	Size	Offset
3725.10	Sub6 n77(78)/ 50 MHz [30 kHz]	PI/2 BPSK	-20.71	18.13	11.40	3.14	H	< 1.00	0.436	26.39		1	1
		QPSK	-20.81	18.03	11.40	3.14	H		0.426	26.29			
		16-QAM	-21.98	16.86	11.40	3.14	H		0.325	25.12			
		64-QAM	-23.31	15.53	11.40	3.14	H		0.239	23.79			
		256-QAM	-25.31	13.53	11.40	3.14	H		0.151	21.79			
3840.00	Sub6 n77(78)/ 50 MHz [30 kHz]	PI/2 BPSK	-23.83	15.85	11.10	3.14	H	< 1.00	0.240	23.81		1	1
		QPSK	-24.06	15.62	11.10	3.14	H		0.228	23.58			
		16-QAM	-25.26	14.42	11.10	3.14	H		0.173	22.38			
		64-QAM	-26.34	13.34	11.10	3.14	H		0.135	21.30			
		256-QAM	-28.63	11.05	11.10	3.14	H		0.080	19.01			
3954.99	Sub6 n77(78)/ 50 MHz [30 kHz]	PI/2 BPSK	-23.69	16.10	10.90	3.21	H	< 1.00	0.239	23.79		1	131
		QPSK	-23.76	16.03	10.90	3.21	H		0.236	23.72			
		16-QAM	-25.01	14.78	10.90	3.21	H		0.177	22.47			
		64-QAM	-26.39	13.40	10.90	3.21	H		0.129	21.09			
		256-QAM	-28.61	11.18	10.90	3.21	H		0.077	18.87			

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol	Limit	EIRP		RB		
									W	W	dBm	Size	Offset
3730.02	Sub6 h77(78)/ 60 MHz [30 kHz]	PI/2 BPSK	-20.85	18.01	11.40	3.14	H	< 1.00	0.424	26.27		1	1
		QPSK	-20.89	17.97	11.40	3.14	H		0.420	26.23			
		16-QAM	-22.11	16.75	11.40	3.14	H		0.317	25.01			
		64-QAM	-23.41	15.45	11.40	3.14	H		0.235	23.71			
		256-QAM	-25.70	13.16	11.40	3.14	H		0.139	21.42			
3840.00	Sub6 h77(78)/ 60 MHz [30 kHz]	PI/2 BPSK	-23.87	15.81	11.10	3.14	H	< 1.00	0.238	23.77		1	1
		QPSK	-24.13	15.55	11.10	3.14	H		0.224	23.51			
		16-QAM	-25.01	14.67	11.10	3.14	H		0.183	22.63			
		64-QAM	-26.27	13.41	11.10	3.14	H		0.137	21.37			
		256-QAM	-28.60	11.08	11.10	3.14	H		0.080	19.04			
3949.98	Sub6 h77(78)/ 60 MHz [30 kHz]	PI/2 BPSK	-23.57	16.21	10.90	3.20	H	< 1.00	0.246	23.91		1	160
		QPSK	-23.61	16.17	10.90	3.20	H		0.244	23.87			
		16-QAM	-24.71	15.07	10.90	3.20	H		0.189	22.77			
		64-QAM	-25.92	13.86	10.90	3.20	H		0.143	21.56			
		256-QAM	-28.25	11.53	10.90	3.20	H		0.084	19.23			

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol	Limit	EIRP		RB		
									W	W	dBm	Size	Offset
3735.00	Sub6 n77(78)/ 70 MHz [30 kHz]	PI/2 BPSK	-20.76	18.10	11.40	3.12	H	< 1.00	0.435	26.38		1	1
		QPSK	-20.87	17.99	11.40	3.12	H		0.424	26.27			
		16-QAM	-21.97	16.89	11.40	3.12	H		0.329	25.17			
		64-QAM	-23.19	15.67	11.40	3.12	H		0.248	23.95			
		256-QAM	-25.51	13.35	11.40	3.12	H		0.146	21.63			
		PI/2 BPSK	-23.49	16.19	11.10	3.14	H		0.260	24.15			
3840.00	Sub6 n77(78)/ 70 MHz [30 kHz]	QPSK	-23.53	16.15	11.10	3.14	H	< 1.00	0.258	24.11		1	1
		16-QAM	-24.66	15.02	11.10	3.14	H		0.199	22.98			
		64-QAM	-26.12	13.56	11.10	3.14	H		0.142	21.52			
		256-QAM	-26.65	13.03	11.10	3.14	H		0.126	20.99			
		PI/2 BPSK	-23.37	16.47	10.85	3.18	H		0.259	24.14			
		QPSK	-23.41	16.43	10.85	3.18	H		0.257	24.10			
3945.00	Sub6 n77(78)/ 70 MHz [30 kHz]	16-QAM	-24.49	15.35	10.85	3.18	H	< 1.00	0.200	23.02		1	187
		64-QAM	-25.87	13.97	10.85	3.18	H		0.146	21.64			
		256-QAM	-28.13	11.71	10.85	3.18	H		0.087	19.38			

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol	Limit	EIRP		RB		
									W	W	dBm	Size	Offset
3740.01	Sub6 h77(78)/ 80 MHz [30 kHz]	PI/2 BPSK	-20.66	18.20	11.40	3.10	H	< 1.00	0.447	26.50		1	1
		QPSK	-20.95	17.91	11.40	3.10	H		0.418	26.21			
		16-QAM	-21.79	17.07	11.40	3.10	H		0.344	25.37			
		64-QAM	-23.27	15.59	11.40	3.10	H		0.245	23.89			
		256-QAM	-25.53	13.33	11.40	3.10	H		0.146	21.63			
3840.00	Sub6 h77(78)/ 80 MHz [30 kHz]	PI/2 BPSK	-23.09	16.59	11.10	3.14	H	< 1.00	0.285	24.55		1	1
		QPSK	-23.19	16.49	11.10	3.14	H		0.279	24.45			
		16-QAM	-24.23	15.45	11.10	3.14	H		0.219	23.41			
		64-QAM	-25.65	14.03	11.10	3.14	H		0.158	21.99			
		256-QAM	-28.09	11.59	11.10	3.14	H		0.090	19.55			
3939.99	Sub6 h77(78)/ 80 MHz [30 kHz]	PI/2 BPSK	-23.26	15.97	11.40	3.10	H	< 1.00	0.267	24.27		1	215
		QPSK	-23.45	15.78	11.40	3.10	H		0.256	24.08			
		16-QAM	-24.49	14.74	11.40	3.10	H		0.201	23.04			
		64-QAM	-25.75	13.48	11.40	3.10	H		0.151	21.78			
		256-QAM	-28.03	11.20	11.40	3.10	H		0.089	19.50			

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol	Limit	EIRP		RB		
									W	W	dBm	Size	Offset
3745.02	Sub6 h77(78)/ 90 MHz [30 kHz]	PI/2 BPSK	-20.57	18.17	11.35	3.09	H	< 1.00	0.440	26.43		1	1
		QPSK	-20.75	17.99	11.35	3.09	H		0.422	26.25			
		16-QAM	-22.01	16.73	11.35	3.09	H		0.316	24.99			
		64-QAM	-23.22	15.52	11.35	3.09	H		0.239	23.78			
		256-QAM	-25.41	13.33	11.35	3.09	H		0.144	21.59			
3840.00	Sub6 h77(78)/ 90 MHz [30 kHz]	PI/2 BPSK	-22.94	16.74	11.10	3.14	H	< 1.00	0.295	24.70		1	1
		QPSK	-23.01	16.67	11.10	3.14	H		0.290	24.63			
		16-QAM	-24.24	15.44	11.10	3.14	H		0.219	23.40			
		64-QAM	-25.52	14.16	11.10	3.14	H		0.163	22.12			
		256-QAM	-27.55	12.13	11.10	3.14	H		0.102	20.09			
3934.98	Sub6 h77(78)/ 90 MHz [30 kHz]	PI/2 BPSK	-23.29	16.63	10.80	3.16	H	< 1.00	0.267	24.27		1	243
		QPSK	-23.36	16.56	10.80	3.16	H		0.263	24.20			
		16-QAM	-24.60	15.32	10.80	3.16	H		0.198	22.96			
		64-QAM	-25.77	14.15	10.80	3.16	H		0.151	21.79			
		256-QAM	-28.06	11.86	10.80	3.16	H		0.089	19.50			

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBm)	Substitute Level (dBm)	Ant. Gain (dBi)	C.L	Pol	Limit	EIRP		RB		
									W	W	dBm	Size	Offset
3750.00	Sub6 h77(78)/ 100 MHz [30 kHz]	PI/2 BPSK	-20.66	17.97	11.30	3.08	H	< 1.00	0.416	26.19		1	1
		QPSK	-20.86	17.77	11.30	3.08	H		0.397	25.99			
		16-QAM	-21.91	16.72	11.30	3.08	H		0.312	24.94			
		64-QAM	-23.19	15.44	11.30	3.08	H		0.232	23.66			
		256-QAM	-25.34	13.29	11.30	3.08	H		0.142	21.51			
3840.00	Sub6 h77(78)/ 100 MHz [30 kHz]	PI/2 BPSK	-22.51	17.17	11.10	3.14	H	< 1.00	0.326	25.13		1	1
		QPSK	-22.56	17.12	11.10	3.14	H		0.322	25.08			
		16-QAM	-23.91	15.77	11.10	3.14	H		0.236	23.73			
		64-QAM	-25.16	14.52	11.10	3.14	H		0.177	22.48			
		256-QAM	-27.41	12.27	11.10	3.14	H		0.105	20.23			
3930.00	Sub6 h77(78)/ 100 MHz [30 kHz]	PI/2 BPSK	-23.03	16.92	10.80	3.16	H	< 1.00	0.286	24.56		1	271
		QPSK	-23.46	16.49	10.80	3.16	H		0.259	24.13			
		16-QAM	-24.36	15.59	10.80	3.16	H		0.210	23.23			
		64-QAM	-25.66	14.29	10.80	3.16	H		0.156	21.93			
		256-QAM	-28.01	11.94	10.80	3.16	H		0.091	19.58			

9.2 RADIATED SPURIOUS EMISSIONS

- NR Band: N77(78)
- Bandwidth: 80 MHz
- Modulation: PI/2 BPSK
- Distance: 1 meters
- SCS: 30 kHz

Ch	Freq (MHz)	Measured Level (dBm)	Ant. Gain (dBi)	Substitute Level (dBm)	C.L	Pol	Result (dBm)	Limit (dBm)	RB	
									Size	Offset
649334 (3740.01)	7 480.02	-65.81	10.90	-58.48	4.49	V	-52.07	-13.00	1	1
	11 220.03	-64.70	11.40	-54.17	5.60	V	-48.37	-13.00		
	14 960.04	-57.37	13.60	-51.17	6.64	V	-44.21	-13.00		
656000 (3840.00)	7 680.00	-65.03	11.10	-58.17	4.55	V	-51.62	-13.00	1	1
	11 520.00	-65.83	11.50	-54.69	5.70	V	-48.89	-13.00		
	15 360.00	-60.79	15.10	-55.00	6.72	V	-46.62	-13.00		
662666 (3940.00)	7 879.98	-65.01	10.60	-57.47	4.63	V	-51.50	-13.00	1	215
	11 819.97	-66.18	12.20	-56.14	5.79	V	-49.73	-13.00		
	15 759.96	-61.24	15.00	-54.72	6.83	V	-46.55	-13.00		

9.3 PEAK-TO-AVERAGE RATIO

Band	Band Width	Frequency (MHz)	Modulation	Resource Block Size	Resource Block Offset	Data (dB)	
Sub6 n77(78)	10 MHz	3840.00	BPSK	Full RB	0	3.98	
			QPSK			4.50	
			16-QAM			5.46	
	15 MHz		64-QAM			5.86	
			256-QAM			6.65	
			BPSK			3.74	
	20 MHz		QPSK			4.35	
			16-QAM			5.33	
			64-QAM			5.81	
			256-QAM			6.65	
			BPSK			3.84	
			QPSK			4.45	
	25 MHz		16-QAM			5.42	
			64-QAM			5.87	
			256-QAM			6.58	
			BPSK			4.26	
			QPSK			4.69	
			16-QAM			5.70	
	30 MHz		64-QAM			6.07	
			256-QAM			6.45	
			BPSK			3.91	
			QPSK			4.47	
			16-QAM			5.38	
			64-QAM			5.92	
	40 MHz		256-QAM			6.57	
			BPSK			4.04	
			QPSK			4.45	
			16-QAM			5.44	
			64-QAM			5.91	
			256-QAM			6.48	
	50 MHz		BPSK			3.93	
			QPSK			4.53	
			16-QAM			5.49	
			64-QAM			5.89	
			256-QAM			6.53	
			BPSK			3.94	
	60 MHz		QPSK			4.61	
			16-QAM			5.55	
			64-QAM			5.97	
			256-QAM			6.53	
			BPSK			4.06	
			QPSK			4.57	
	70 MHz		16-QAM			5.63	
			64-QAM			5.95	
			256-QAM			6.57	

		BPSK		4.11
		QPSK		4.67
		16-QAM		5.62
		64-QAM		6.13
		256-QAM		6.58
	80 MHz	BPSK		4.25
		QPSK		4.71
	90 MHz	16-QAM		5.60
		64-QAM		5.99
		256-QAM		6.59
	100 MHz	BPSK		4.20
		QPSK		4.91
		16-QAM		5.82
		64-QAM		6.29
		256-QAM		6.60

Note:

1. Plots of the EUT's Peak- to- Average Ratio are shown Page 424 ~ 483.

9.4 OCCUPIED BANDWIDTH

Band	Band Width	Frequency (MHz)	Modulation	Resource Block Size	Resource Block Offset	Data (MHz)	
Sub6 n77(78)	10 MHz	3840.00	BPSK	Full RB	0	8.6707	
			QPSK			8.6285	
			16-QAM			8.6458	
	15 MHz		64-QAM			8.6470	
			256-QAM			8.6159	
			BPSK			12.919	
	20 MHz		QPSK			13.006	
			16-QAM			12.944	
			64-QAM			13.002	
			256-QAM			12.941	
			BPSK			17.900	
			QPSK			17.961	
	25 MHz		16-QAM			17.964	
			64-QAM			17.918	
			256-QAM			17.933	
			BPSK			22.941	
			QPSK			22.934	
			16-QAM			23.027	
	30 MHz		64-QAM			22.977	
			256-QAM			22.977	
			BPSK			26.957	
			QPSK			26.918	
			16-QAM			26.936	
			64-QAM			26.905	
	40 MHz		256-QAM			26.942	
			BPSK			35.893	
			QPSK			35.919	
			16-QAM			35.884	
			64-QAM			35.822	
			256-QAM			35.936	
	50 MHz		BPSK			45.859	
			QPSK			45.920	
			16-QAM			45.801	
			64-QAM			45.878	
			256-QAM			45.830	
			BPSK			57.965	
	60 MHz		QPSK			58.038	
			16-QAM			57.913	
			64-QAM			57.909	
			256-QAM			58.045	
			BPSK			64.486	
			QPSK			64.470	
	70 MHz		16-QAM			64.569	
			64-QAM			64.509	
			256-QAM			64.570	

		BPSK		77.241
		QPSK		77.321
		16-QAM		77.207
		64-QAM		77.375
		256-QAM		77.422
	80 MHz	BPSK		86.935
		QPSK		86.956
	90 MHz	16-QAM		86.990
		64-QAM		87.020
		256-QAM		86.928
	100 MHz	BPSK		96.560
		QPSK		96.761
		16-QAM		96.759
		64-QAM		96.762
		256-QAM		96.623

Note:

1. Plots of the EUT's Occupied Bandwidth are shown Page 484 ~ 543.

9.5 CONDUCTED SPURIOUS EMISSIONS

Band	Band Width (MHz)	Frequency (MHz)	Frequency of Maximum Harmonic (GHz)	Factor (dB)	Measurement Maximum Data (dBm)	Result (dBm)	Limit (dBm)
Sub6 n77(78)	10	3705.00	7.4397	37.805	-69.970	-32.165	-13.00
		3840.00	8.8908	37.805	-70.692	-32.887	
		3975.00	8.0225	37.805	-70.669	-32.864	
	15	3707.52	8.0065	37.805	-69.845	-32.040	
		3840.00	8.0030	37.805	-70.950	-33.145	
		3972.48	9.9596	37.805	-70.875	-33.070	
	20	3710.01	4.9158	37.190	-70.432	-33.242	
		3840.00	8.8186	37.805	-70.534	-32.729	
		3969.99	8.8559	37.805	-70.703	-32.898	
	25	3712.50	4.9676	37.190	-70.050	-32.860	
		3840.00	5.9741	37.805	-70.335	-32.530	
		3967.50	7.9811	37.805	-70.436	-32.631	
	30	3715.02	7.1635	37.805	-70.660	-32.855	
		3840.00	4.6272	37.190	-70.437	-33.247	
		3964.98	5.2393	37.805	-70.613	-32.808	
	40	3720.00	5.4716	37.805	-70.856	-33.051	
		3840.00	6.0100	37.805	-70.408	-32.603	
		3960.00	9.9681	37.805	-70.039	-32.234	
	50	3725.10	9.4237	37.805	-71.138	-33.333	
		3840.00	8.2976	37.805	-70.201	-32.396	
		3954.99	8.8230	37.805	-70.630	-32.825	
	60	3730.02	5.1900	37.805	-70.983	-33.178	
		3840.00	8.0239	37.805	-69.556	-31.751	
		3949.98	8.2553	37.805	-71.270	-33.465	
	70	3735.00	8.2926	37.805	-70.156	-32.351	
		3840.00	4.9048	37.190	-70.582	-33.392	
		3945.00	9.4756	37.805	-70.455	-32.650	
	80	3740.01	6.9367	37.805	-70.965	-33.160	
		3840.00	8.8360	37.805	-70.484	-32.679	
		3939.99	8.0135	37.805	-70.701	-32.896	
	90	3745.02	9.1157	37.805	-70.975	-33.170	
		3840.00	9.6939	37.805	-70.495	-32.690	
		3934.98	8.2906	37.805	-69.705	-31.900	
	100	3750.00	9.1745	37.805	-70.943	-33.138	
		3840.00	9.6710	37.805	-70.145	-32.340	
		3930.00	8.2562	37.805	-69.944	-32.139	

Note:

1. Plots of the EUT's Conducted Spurious Emissions are shown Page 544 ~ 615.
2. Duty Cycle factor already applied on the factor.

- Duty Cycle Factor(dB) = 6.990



- Factor(dB) = Duty Cycle factor + Cable Loss + Ext. Attenuator + Power Splitter
- Result(dBm) = Reading + Factor

3. Factor(dB)

Frequency Range (GHz)	Factor [dB]
0.03 – 1	34.484
1 – 5	37.190
5 – 10	37.805
10 – 15	38.330
15 – 20	38.703
Above 20	39.345

9.6 BAND EDGE

1. Plots of the EUT's Band Edge are shown Page 616 ~ 759.
2. Duty Cycle factor already applied on the factor.
 - Factor(dB) = Duty Cycle factor + Cable Loss + Ext. Attenuator + Power Splitter
 - Result(dBm) = Reading + Factor
 - Duty Cycle Factor(dB) = 6.990

9.7 FREQUENCY STABILITY / VARIATION OF AMBIENT TEMPERATURE

- BandWidth: 10 MHz
 Voltage(100 %): 3.880 VDC
 Batt. Endpoint: 3.300 VDC
 LIMIT: Emission must remain in band

Test. Frequency (MHz)	Voltage (%)	Temp. (°C)	Frequency (Hz)	Frequency Error (Hz)	Deviation (%)	ppm
3705.000	100 %	+20(Ref)	3704 999 997	0.0	0.000 000	0.000
	100 %	-30	3704 999 992	-4.7	0.000 000	-0.001
	100 %	-20	3704 999 989	-7.6	0.000 000	-0.002
	100 %	-10	3704 999 993	-4.0	0.000 000	-0.001
	100 %	0	3704 999 992	-4.9	0.000 000	-0.001
	100 %	+10	3704 999 994	-2.0	0.000 000	-0.001
	100 %	+30	3704 999 995	-1.3	0.000 000	0.000
	100 %	+40	3704 999 993	-4.0	0.000 000	-0.001
	100 %	+50	3704 999 993	-3.9	0.000 000	-0.001
	Batt. Endpoint	+20	3704 999 989	-7.2	0.000 000	-0.002
3975.000	100 %	+20(Ref)	3975 000 000	0.0	0.000 000	0.000
	100 %	-30	3974 999 998	-2.2	0.000 000	-0.001
	100 %	-20	3975 000 003	2.3	0.000 000	0.001
	100 %	-10	3974 999 999	-0.9	0.000 000	0.000
	100 %	0	3974 999 999	-1.4	0.000 000	0.000
	100 %	+10	3974 999 993	-7.2	0.000 000	-0.002
	100 %	+30	3975 000 004	3.5	0.000 000	0.001
	100 %	+40	3974 999 992	-8.0	0.000 000	-0.002
	100 %	+50	3975 000 003	2.5	0.000 000	0.001
	Batt. Endpoint	+20	3974 999 998	-2.5	0.000 000	-0.001

- BandWidth: 15 MHz
 Voltage(100 %): 3.880 VDC
 Batt. Endpoint: 3.300 VDC
 LIMIT: Emission must remain in band

Test. Frequency (MHz)	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3707.520	100 %	+20(Ref)	3707 520 002	0.0	0.000 000	0.000
	100 %	-30	3707 520 000	-1.4	0.000 000	0.000
	100 %	-20	3707 519 994	-7.3	0.000 000	-0.002
	100 %	-10	3707 519 997	-5.3	0.000 000	-0.001
	100 %	0	3707 520 001	-0.5	0.000 000	0.000
	100 %	+10	3707 520 001	-1.1	0.000 000	0.000
	100 %	+30	3707 520 004	1.9	0.000 000	0.001
	100 %	+40	3707 520 000	-2.0	0.000 000	-0.001
	100 %	+50	3707 520 000	-2.0	0.000 000	-0.001
	Batt. Endpoint	+20	3707 520 005	3.3	0.000 000	0.001
3972.480	100 %	+20(Ref)	3972 479 998	0.0	0.000 000	0.000
	100 %	-30	3972 479 996	-2.0	0.000 000	0.000
	100 %	-20	3972 479 993	-4.4	0.000 000	-0.001
	100 %	-10	3972 479 996	-1.5	0.000 000	0.000
	100 %	0	3972 479 992	-5.8	0.000 000	-0.001
	100 %	+10	3972 479 994	-4.0	0.000 000	-0.001
	100 %	+30	3972 479 995	-2.4	0.000 000	-0.001
	100 %	+40	3972 479 995	-3.0	0.000 000	-0.001
	100 %	+50	3972 479 994	-4.0	0.000 000	-0.001
	Batt. Endpoint	+20	3972 479 995	-2.3	0.000 000	-0.001

- BandWidth: 20 MHz
 Voltage(100 %): 3.880 VDC
 Batt. Endpoint: 3.300 VDC
 LIMIT: Emission must remain in band

Test. Frequency (MHz)	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3710.010	100 %	+20(Ref)	3710 009 998	0.0	0.000 000	0.000
	100 %	-30	3710 009 998	-0.5	0.000 000	0.000
	100 %	-20	3710 009 995	-3.0	0.000 000	-0.001
	100 %	-10	3710 009 998	-0.1	0.000 000	0.000
	100 %	0	3710 010 002	4.1	0.000 000	0.001
	100 %	+10	3710 009 996	-1.7	0.000 000	0.000
	100 %	+30	3710 009 998	-0.1	0.000 000	0.000
	100 %	+40	3710 009 994	-3.6	0.000 000	-0.001
	100 %	+50	3710 009 996	-1.7	0.000 000	0.000
	Batt. Endpoint	+20	3710 009 997	-1.3	0.000 000	0.000
3969.990	100 %	+20(Ref)	3969 989 998	0.0	0.000 000	0.000
	100 %	-30	3969 989 992	-5.6	0.000 000	-0.001
	100 %	-20	3969 989 995	-2.2	0.000 000	-0.001
	100 %	-10	3969 989 996	-1.1	0.000 000	0.000
	100 %	0	3969 989 996	-1.8	0.000 000	0.000
	100 %	+10	3969 989 996	-1.7	0.000 000	0.000
	100 %	+30	3969 989 998	0.5	0.000 000	0.000
	100 %	+40	3969 989 993	-4.7	0.000 000	-0.001
	100 %	+50	3969 989 995	-2.4	0.000 000	-0.001
	Batt. Endpoint	+20	3969 989 995	-2.2	0.000 000	-0.001

- BandWidth: 25 MHz
 Voltage(100 %): 3.880 VDC
 Batt. Endpoint: 3.300 VDC
 LIMIT: Emission must remain in band

Test. Frequency (MHz)	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3712.500	100 %	+20(Ref)	3712 499 993	0.0	0.000 000	0.000
	100 %	-30	3712 499 992	-1.1	0.000 000	0.000
	100 %	-20	3712 499 986	-7.0	0.000 000	-0.002
	100 %	-10	3712 499 986	-7.6	0.000 000	-0.002
	100 %	0	3712 499 990	-3.3	0.000 000	-0.001
	100 %	+10	3712 499 992	-1.4	0.000 000	0.000
	100 %	+30	3712 499 993	-0.6	0.000 000	0.000
	100 %	+40	3712 499 993	-0.3	0.000 000	0.000
	100 %	+50	3712 499 989	-4.3	0.000 000	-0.001
	Batt. Endpoint	+20	3712 499 997	3.3	0.000 000	0.001
3967.500	100 %	+20(Ref)	3967 500 000	0.0	0.000 000	0.000
	100 %	-30	3967 500 000	-0.9	0.000 000	0.000
	100 %	-20	3967 500 002	2.0	0.000 000	0.001
	100 %	-10	3967 499 997	-3.0	0.000 000	-0.001
	100 %	0	3967 500 000	-0.4	0.000 000	0.000
	100 %	+10	3967 500 001	0.7	0.000 000	0.000
	100 %	+30	3967 500 000	-0.1	0.000 000	0.000
	100 %	+40	3967 499 999	-1.7	0.000 000	0.000
	100 %	+50	3967 499 998	-2.8	0.000 000	-0.001
	Batt. Endpoint	+20	3967 499 997	-3.6	0.000 000	-0.001

- BandWidth: 30 MHz
- Voltage(100 %): 3.880 VDC
- Batt. Endpoint: 3.300 VDC
- LIMIT: Emission must remain in band

Test. Frequency (MHz)	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3715.020	100 %	+20(Ref)	3715 020 001	0.0	0.000 000	0.000
	100 %	-30	3715 020 003	1.6	0.000 000	0.000
	100 %	-20	3715 019 999	-1.6	0.000 000	0.000
	100 %	-10	3715 019 996	-5.3	0.000 000	-0.001
	100 %	0	3715 019 999	-2.0	0.000 000	-0.001
	100 %	+10	3715 020 004	3.1	0.000 000	0.001
	100 %	+30	3715 020 005	3.5	0.000 000	0.001
	100 %	+40	3715 020 008	6.5	0.000 000	0.002
	100 %	+50	3715 020 000	-1.2	0.000 000	0.000
	Batt. Endpoint	+20	3715 020 000	-1.3	0.000 000	0.000
3964.980	100 %	+20(Ref)	3964 979 995	0.0	0.000 000	0.000
	100 %	-30	3964 979 990	-5.1	0.000 000	-0.001
	100 %	-20	3964 979 988	-7.4	0.000 000	-0.002
	100 %	-10	3964 979 992	-3.1	0.000 000	-0.001
	100 %	0	3964 979 994	-1.8	0.000 000	0.000
	100 %	+10	3964 979 993	-2.1	0.000 000	-0.001
	100 %	+30	3964 979 987	-8.4	0.000 000	-0.002
	100 %	+40	3964 979 994	-1.3	0.000 000	0.000
	100 %	+50	3964 979 991	-4.9	0.000 000	-0.001
	Batt. Endpoint	+20	3964 979 995	-0.9	0.000 000	0.000

- BandWidth: 40 MHz
 Voltage(100 %): 3.880 VDC
 Batt. Endpoint: 3.300 VDC
 LIMIT: Emission must remain in band

Test. Frequency (MHz)	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3720.000	100 %	+20(Ref)	3719 999 995	0.0	0.000 000	0.000
	100 %	-30	3719 999 996	0.4	0.000 000	0.000
	100 %	-20	3719 999 995	-0.3	0.000 000	0.000
	100 %	-10	3719 999 994	-1.6	0.000 000	0.000
	100 %	0	3719 999 992	-3.4	0.000 000	-0.001
	100 %	+10	3719 999 996	0.8	0.000 000	0.000
	100 %	+30	3719 999 993	-1.8	0.000 000	0.000
	100 %	+40	3719 999 994	-1.1	0.000 000	0.000
	100 %	+50	3719 999 994	-1.6	0.000 000	0.000
	Batt. Endpoint	+20	3719 999 996	0.6	0.000 000	0.000
3960.000	100 %	+20(Ref)	3959 999 999	0.0	0.000 000	0.000
	100 %	-30	3959 999 997	-1.9	0.000 000	0.000
	100 %	-20	3960 000 002	3.0	0.000 000	0.001
	100 %	-10	3959 999 993	-5.5	0.000 000	-0.001
	100 %	0	3959 999 998	-0.5	0.000 000	0.000
	100 %	+10	3959 999 999	0.8	0.000 000	0.000
	100 %	+30	3959 999 997	-1.1	0.000 000	0.000
	100 %	+40	3959 999 995	-3.2	0.000 000	-0.001
	100 %	+50	3959 999 996	-2.7	0.000 000	-0.001
	Batt. Endpoint	+20	3959 999 999	0.3	0.000 000	0.000

- BandWidth: 50 MHz
 Voltage(100 %): 3.880 VDC
 Batt. Endpoint: 3.300 VDC
 LIMIT: Emission must remain in band

Test. Frequency (MHz)	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3725.010	100 %	+20(Ref)	3725 009 996	0.0	0.000 000	0.000
	100 %	-30	3725 009 990	-6.1	0.000 000	-0.002
	100 %	-20	3725 009 991	-4.9	0.000 000	-0.001
	100 %	-10	3725 009 989	-6.8	0.000 000	-0.002
	100 %	0	3725 009 992	-4.4	0.000 000	-0.001
	100 %	+10	3725 009 994	-2.6	0.000 000	-0.001
	100 %	+30	3725 009 993	-3.5	0.000 000	-0.001
	100 %	+40	3725 009 994	-2.3	0.000 000	-0.001
	100 %	+50	3725 009 996	-0.6	0.000 000	0.000
	Batt. Endpoint	+20	3725 009 989	-7.2	0.000 000	-0.002
3954.990	100 %	+20(Ref)	3954 989 997	0.0	0.000 000	0.000
	100 %	-30	3954 989 992	-4.7	0.000 000	-0.001
	100 %	-20	3954 989 998	0.7	0.000 000	0.000
	100 %	-10	3954 989 999	2.0	0.000 000	0.001
	100 %	0	3954 990 000	2.7	0.000 000	0.001
	100 %	+10	3954 989 993	-3.7	0.000 000	-0.001
	100 %	+30	3954 989 993	-3.9	0.000 000	-0.001
	100 %	+40	3954 989 998	0.7	0.000 000	0.000
	100 %	+50	3954 989 994	-2.9	0.000 000	-0.001
	Batt. Endpoint	+20	3954 989 996	-1.3	0.000 000	0.000

- BandWidth: 60 MHz
- Voltage(100 %): 3.880 VDC
- Batt. Endpoint: 3.300 VDC
- LIMIT: Emission must remain in band

Test. Frequency (MHz)	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3730.020	100 %	+20(Ref)	3730 019 995	0.0	0.000 000	0.000
	100 %	-30	3730 019 992	-2.4	0.000 000	-0.001
	100 %	-20	3730 019 997	2.2	0.000 000	0.001
	100 %	-10	3730 019 994	-1.1	0.000 000	0.000
	100 %	0	3730 019 991	-3.4	0.000 000	-0.001
	100 %	+10	3730 019 997	1.9	0.000 000	0.001
	100 %	+30	3730 019 996	1.2	0.000 000	0.000
	100 %	+40	3730 019 993	-2.1	0.000 000	-0.001
	100 %	+50	3730 020 000	5.1	0.000 000	0.001
	Batt. Endpoint	+20	3730 019 995	-0.1	0.000 000	0.000
3949.980	100 %	+20(Ref)	3949 979 996	0.0	0.000 000	0.000
	100 %	-30	3949 979 993	-3.7	0.000 000	-0.001
	100 %	-20	3949 979 993	-3.0	0.000 000	-0.001
	100 %	-10	3949 979 992	-4.6	0.000 000	-0.001
	100 %	0	3949 979 993	-3.2	0.000 000	-0.001
	100 %	+10	3949 979 994	-2.4	0.000 000	-0.001
	100 %	+30	3949 979 995	-1.4	0.000 000	0.000
	100 %	+40	3949 979 995	-1.5	0.000 000	0.000
	100 %	+50	3949 979 991	-5.0	0.000 000	-0.001
	Batt. Endpoint	+20	3949 979 994	-2.6	0.000 000	-0.001

- BandWidth: 70 MHz
- Voltage(100 %): 3.880 VDC
- Batt. Endpoint: 3.300 VDC
- LIMIT: Emission must remain in band

Test. Frequency (MHz)	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3735.000	100 %	+20(Ref)	3734 999 999	0.0	0.000 000	0.000
	100 %	-30	3734 999 995	-4.7	0.000 000	-0.001
	100 %	-20	3734 999 997	-2.5	0.000 000	-0.001
	100 %	-10	3735 000 000	0.4	0.000 000	0.000
	100 %	0	3734 999 994	-5.8	0.000 000	-0.002
	100 %	+10	3734 999 991	-8.7	0.000 000	-0.002
	100 %	+30	3734 999 996	-3.5	0.000 000	-0.001
	100 %	+40	3734 999 990	-9.8	0.000 000	-0.003
	100 %	+50	3735 000 001	1.1	0.000 000	0.000
	Batt. Endpoint	+20	3735 000 001	2.0	0.000 000	0.001
3945.000	100 %	+20(Ref)	3944 999 995	0.0	0.000 000	0.000
	100 %	-30	3944 999 996	0.8	0.000 000	0.000
	100 %	-20	3944 999 992	-3.4	0.000 000	-0.001
	100 %	-10	3944 999 988	-7.1	0.000 000	-0.002
	100 %	0	3944 999 991	-4.7	0.000 000	-0.001
	100 %	+10	3944 999 992	-3.2	0.000 000	-0.001
	100 %	+30	3945 000 000	4.8	0.000 000	0.001
	100 %	+40	3944 999 997	1.2	0.000 000	0.000
	100 %	+50	3944 999 993	-2.5	0.000 000	-0.001
	Batt. Endpoint	+20	3944 999 992	-3.2	0.000 000	-0.001

- BandWidth: 80 MHz
- Voltage(100 %): 3.880 VDC
- Batt. Endpoint: 3.300 VDC
- LIMIT: Emission must remain in band

Test. Frequency (MHz)	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3740.010	100 %	+20(Ref)	3740 009 999	0.0	0.000 000	0.000
	100 %	-30	3740 009 995	-3.7	0.000 000	-0.001
	100 %	-20	3740 009 998	-1.1	0.000 000	0.000
	100 %	-10	3740 009 994	-5.1	0.000 000	-0.001
	100 %	0	3740 009 997	-2.1	0.000 000	-0.001
	100 %	+10	3740 009 999	0.2	0.000 000	0.000
	100 %	+30	3740 009 996	-3.2	0.000 000	-0.001
	100 %	+40	3740 009 994	-5.1	0.000 000	-0.001
	100 %	+50	3740 009 997	-2.0	0.000 000	-0.001
	Batt. Endpoint	+20	3740 009 998	-1.1	0.000 000	0.000
3939.990	100 %	+20(Ref)	3939 989 995	0.0	0.000 000	0.000
	100 %	-30	3939 989 991	-3.8	0.000 000	-0.001
	100 %	-20	3939 989 989	-5.9	0.000 000	-0.002
	100 %	-10	3939 989 990	-5.1	0.000 000	-0.001
	100 %	0	3939 989 998	3.5	0.000 000	0.001
	100 %	+10	3939 989 995	0.5	0.000 000	0.000
	100 %	+30	3939 989 990	-5.0	0.000 000	-0.001
	100 %	+40	3939 989 989	-6.1	0.000 000	-0.002
	100 %	+50	3939 989 994	-0.8	0.000 000	0.000
	Batt. Endpoint	+20	3939 989 991	-3.3	0.000 000	-0.001

- BandWidth: 90 MHz
- Voltage(100 %): 3.880 VDC
- Batt. Endpoint: 3.300 VDC
- LIMIT: Emission must remain in band

Test. Frequency (MHz)	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3745.020	100 %	+20(Ref)	3745 020 001	0.0	0.000 000	0.000
	100 %	-30	3745 019 997	-3.8	0.000 000	-0.001
	100 %	-20	3745 019 995	-5.7	0.000 000	-0.002
	100 %	-10	3745 020 002	1.0	0.000 000	0.000
	100 %	0	3745 020 000	-0.7	0.000 000	0.000
	100 %	+10	3745 019 995	-5.7	0.000 000	-0.002
	100 %	+30	3745 019 996	-4.7	0.000 000	-0.001
	100 %	+40	3745 020 001	-0.1	0.000 000	0.000
	100 %	+50	3745 020 004	3.7	0.000 000	0.001
	Batt. Endpoint	+20	3745 019 998	-2.7	0.000 000	-0.001
3934.980	100 %	+20(Ref)	3934 979 994	0.0	0.000 000	0.000
	100 %	-30	3934 979 992	-1.5	0.000 000	0.000
	100 %	-20	3934 979 987	-6.8	0.000 000	-0.002
	100 %	-10	3934 979 989	-4.8	0.000 000	-0.001
	100 %	0	3934 979 989	-4.1	0.000 000	-0.001
	100 %	+10	3934 979 991	-2.5	0.000 000	-0.001
	100 %	+30	3934 979 991	-2.8	0.000 000	-0.001
	100 %	+40	3934 979 989	-4.4	0.000 000	-0.001
	100 %	+50	3934 979 988	-5.9	0.000 000	-0.001
	Batt. Endpoint	+20	3934 979 990	-3.6	0.000 000	-0.001

- BandWidth: 100 MHz
- Voltage(100 %): 3.880 VDC
- Batt. Endpoint: 3.300 VDC
- LIMIT: Emission must remain in band

Test. Frequency (MHz)	Voltage	Temp.	Frequency	Frequency	Deviation	ppm
	(%)	(°C)	(Hz)	Error (Hz)	(%)	
3750.000	100 %	+20(Ref)	3750 000 000	0.0	0.000 000	0.000
	100 %	-30	3749 999 996	-3.1	0.000 000	-0.001
	100 %	-20	3750 000 001	1.1	0.000 000	0.000
	100 %	-10	3749 999 998	-1.9	0.000 000	-0.001
	100 %	0	3749 999 997	-2.1	0.000 000	-0.001
	100 %	+10	3749 999 994	-5.4	0.000 000	-0.001
	100 %	+30	3749 999 989	-10.1	0.000 000	-0.003
	100 %	+40	3749 999 996	-3.6	0.000 000	-0.001
	100 %	+50	3749 999 998	-1.8	0.000 000	0.000
	Batt. Endpoint	+20	3749 999 998	-1.9	0.000 000	-0.001
3930.000	100 %	+20(Ref)	3929 999 994	0.0	0.000 000	0.000
	100 %	-30	3929 999 994	-0.1	0.000 000	0.000
	100 %	-20	3929 999 990	-4.4	0.000 000	-0.001
	100 %	-10	3929 999 993	-1.0	0.000 000	0.000
	100 %	0	3929 999 989	-5.8	0.000 000	-0.001
	100 %	+10	3929 999 995	1.0	0.000 000	0.000
	100 %	+30	3929 999 990	-4.3	0.000 000	-0.001
	100 %	+40	3929 999 992	-2.6	0.000 000	-0.001
	100 %	+50	3929 999 989	-5.4	0.000 000	-0.001
	Batt. Endpoint	+20	3929 999 991	-3.6	0.000 000	-0.001

10. TEST PLOTS(3450 MHz - 3550 MHz)

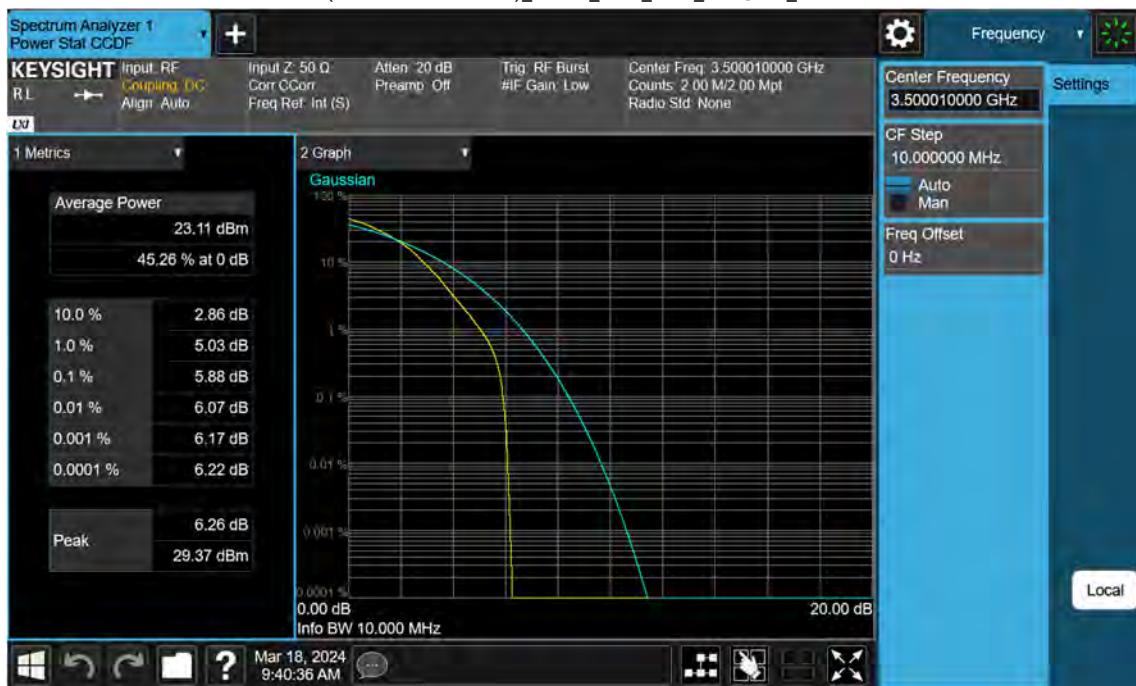




n77(3450~3550 MHz)_10 M_PAR_Mid_16QAM_FullRB

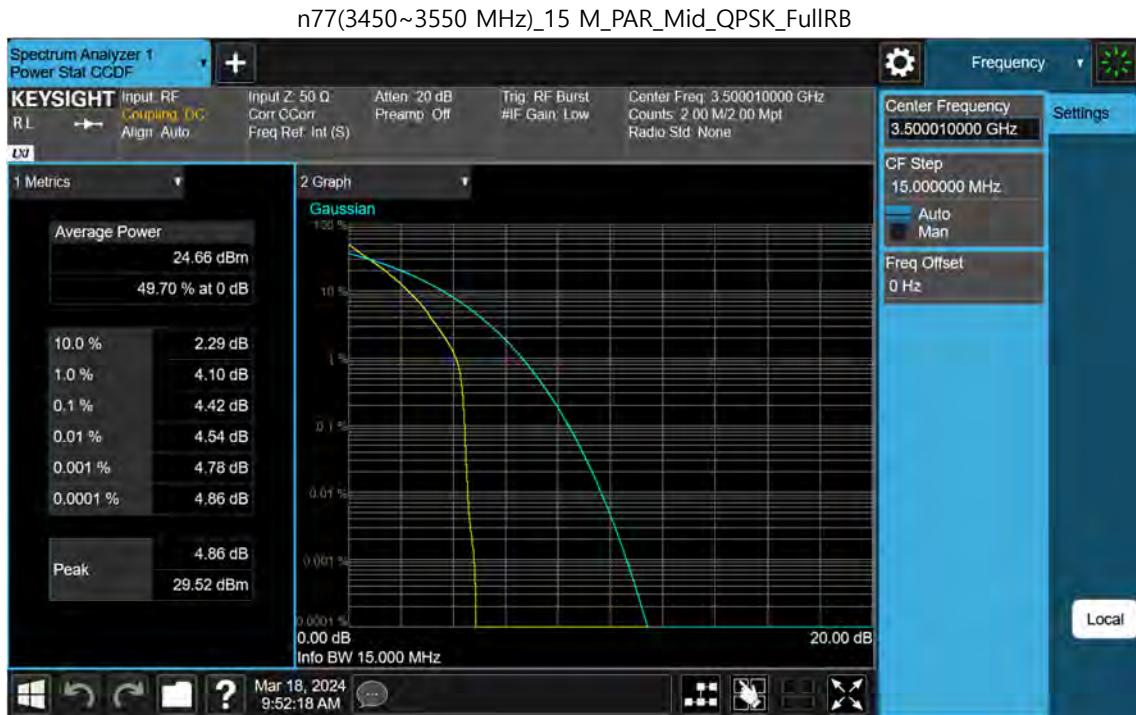


n77(3450~3550 MHz)_10 M_PAR_Mid_64QAM_FullRB









n77(3450~3550 MHz)_15 M_PAR_Mid_16QAM_FullRB



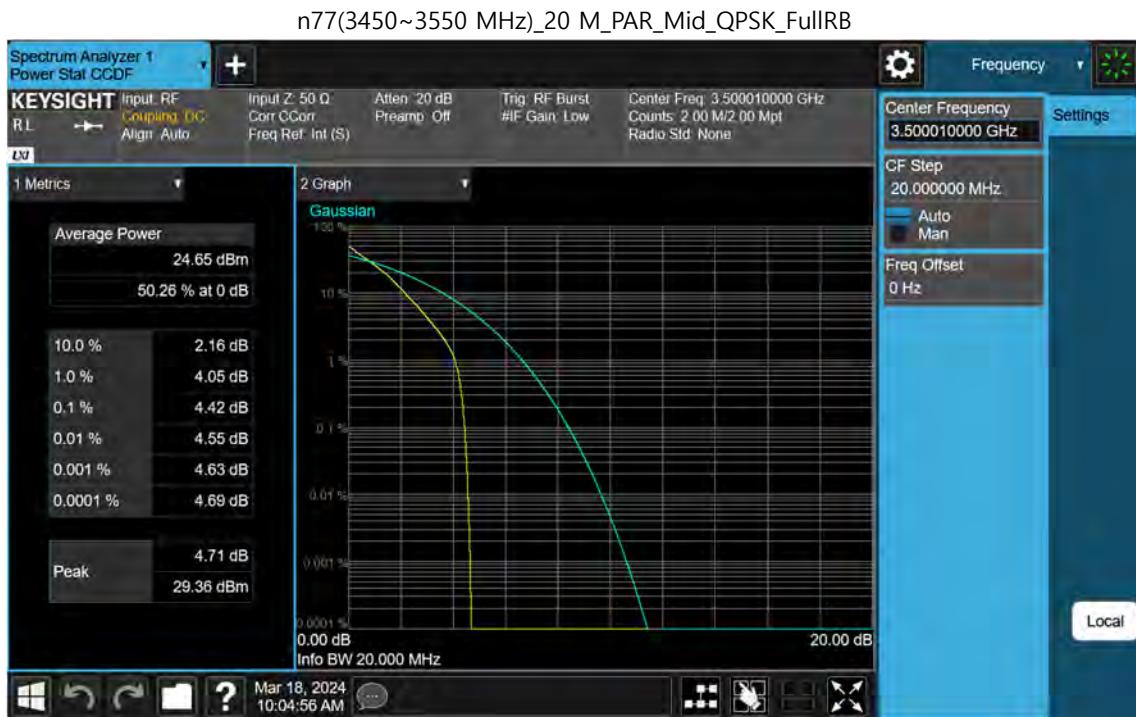
n77(3450~3550 MHz)_15 M_PAR_Mid_64QAM_FullRB



n77(3450~3550 MHz)_15 M_PAR_Mid_256QAM_FullRB







n77(3450~3550 MHz)_20 M_PAR_Mid_16QAM_FullRB



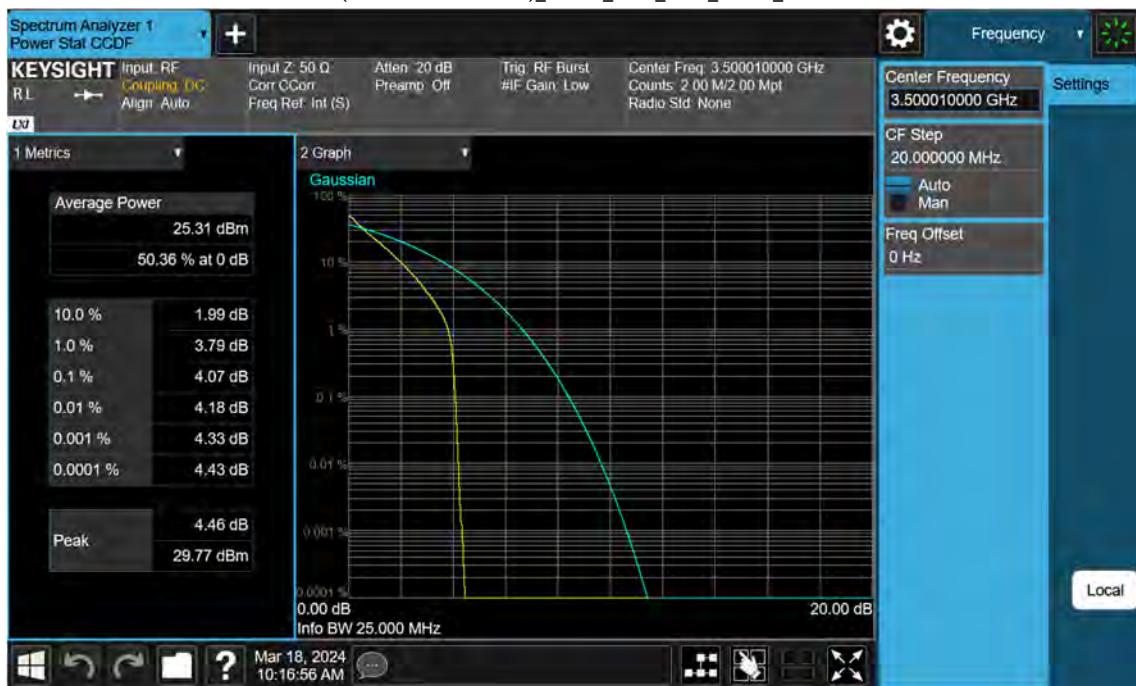
n77(3450~3550 MHz)_20 M_PAR_Mid_64QAM_FullRB

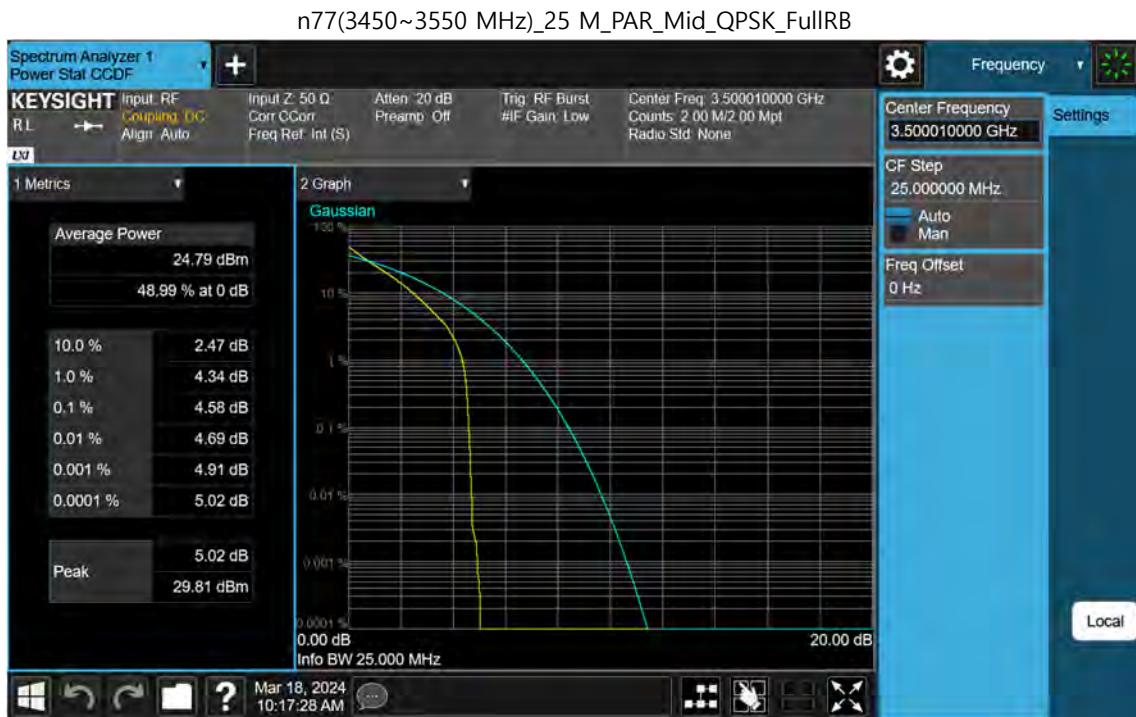


n77(3450~3550 MHz)_20 M_PAR_Mid_256QAM_FullRB



n77(3450~3550 MHz)_25 M_PAR_Mid_BPSK_FullRB





n77(3450~3550 MHz)_25 M_PAR_Mid_16QAM_FullRB

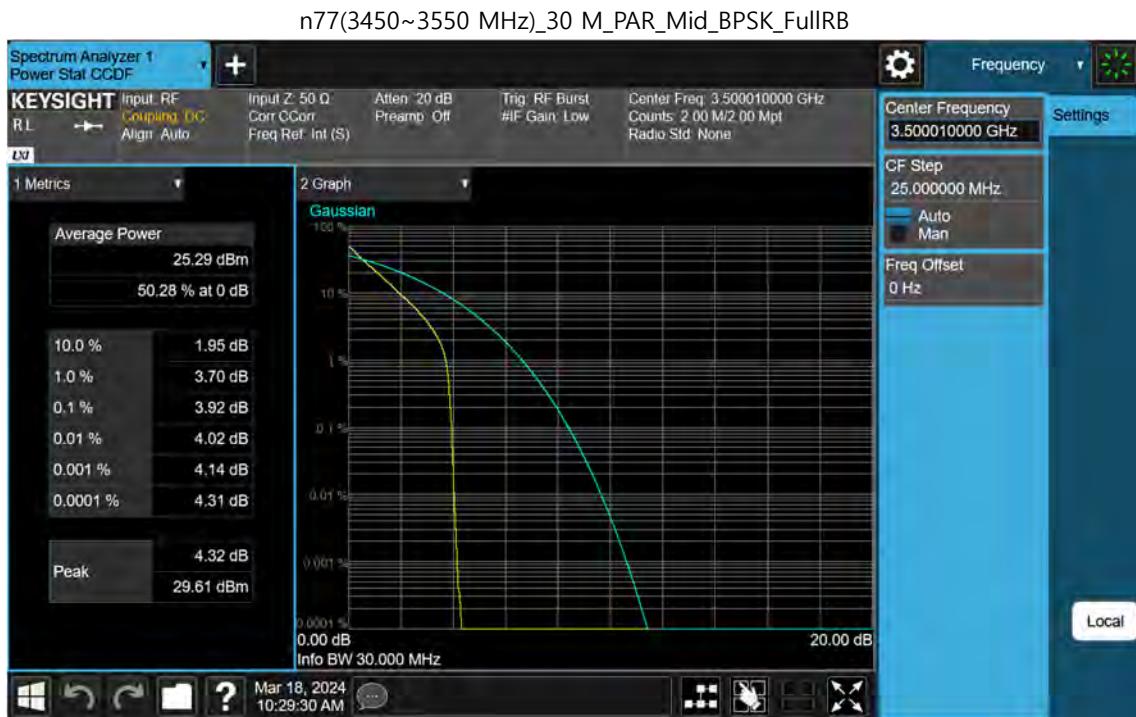


n77(3450~3550 MHz)_25 M_PAR_Mid_64QAM_FullRB

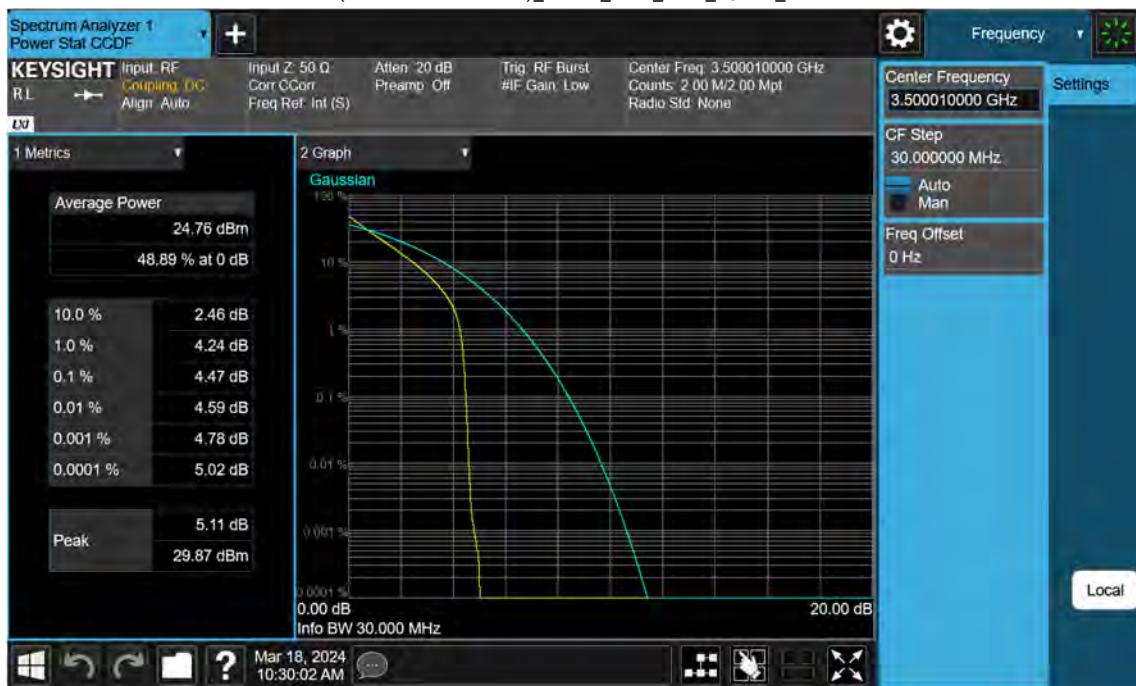


n77(3450~3550 MHz)_25 M_PAR_Mid_256QAM_FullRB





n77(3450~3550 MHz)_30 M_PAR_Mid_QPSK_FullRB



n77(3450~3550 MHz)_30 M_PAR_Mid_16QAM_FullRB

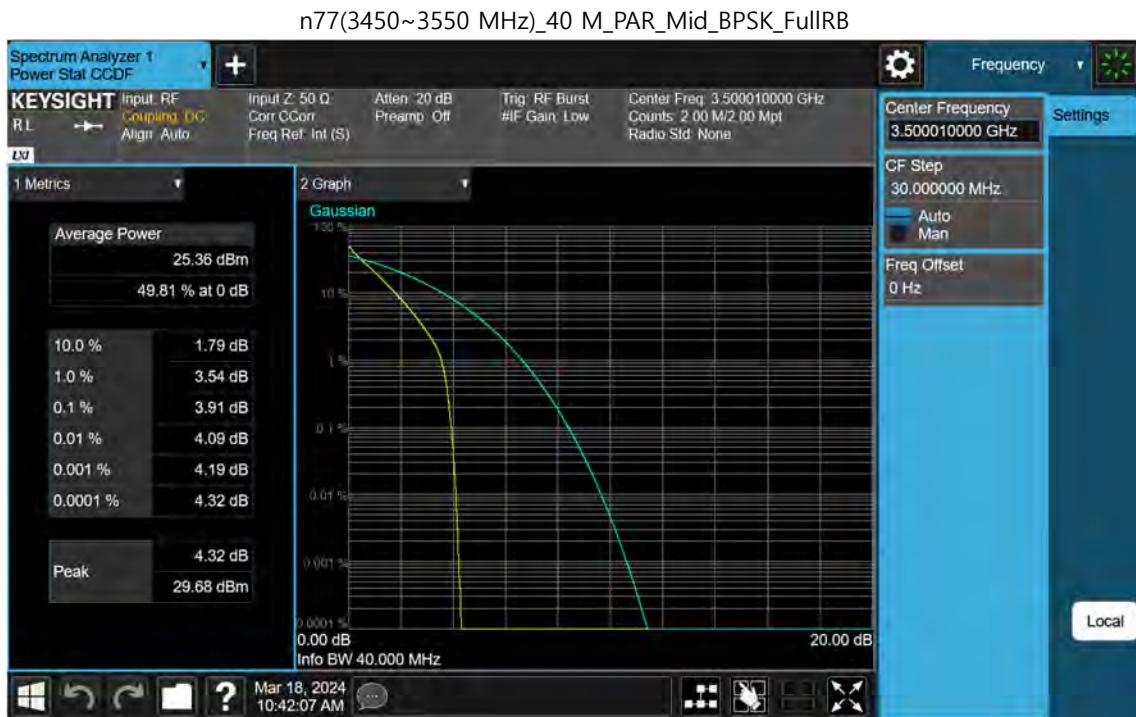


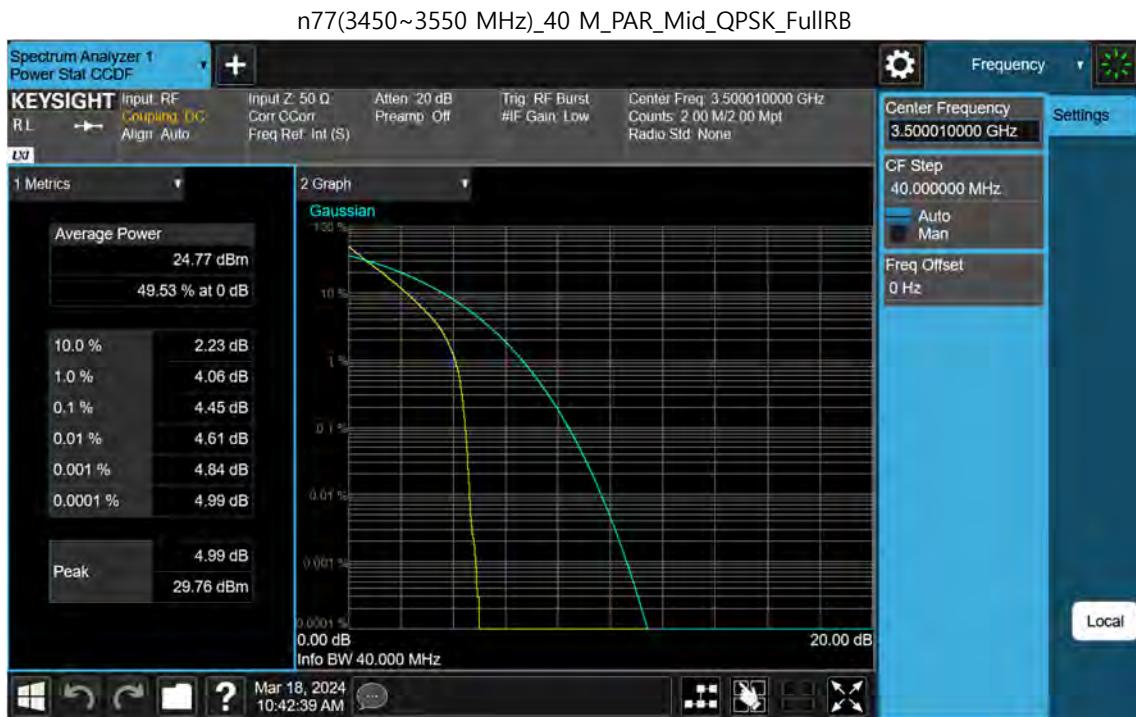
n77(3450~3550 MHz)_30 M_PAR_Mid_64QAM_FullRB



n77(3450~3550 MHz)_30 M_PAR_Mid_256QAM_FullRB







n77(3450~3550 MHz)_40 M_PAR_Mid_16QAM_FullRB



n77(3450~3550 MHz)_40 M_PAR_Mid_64QAM_FullRB

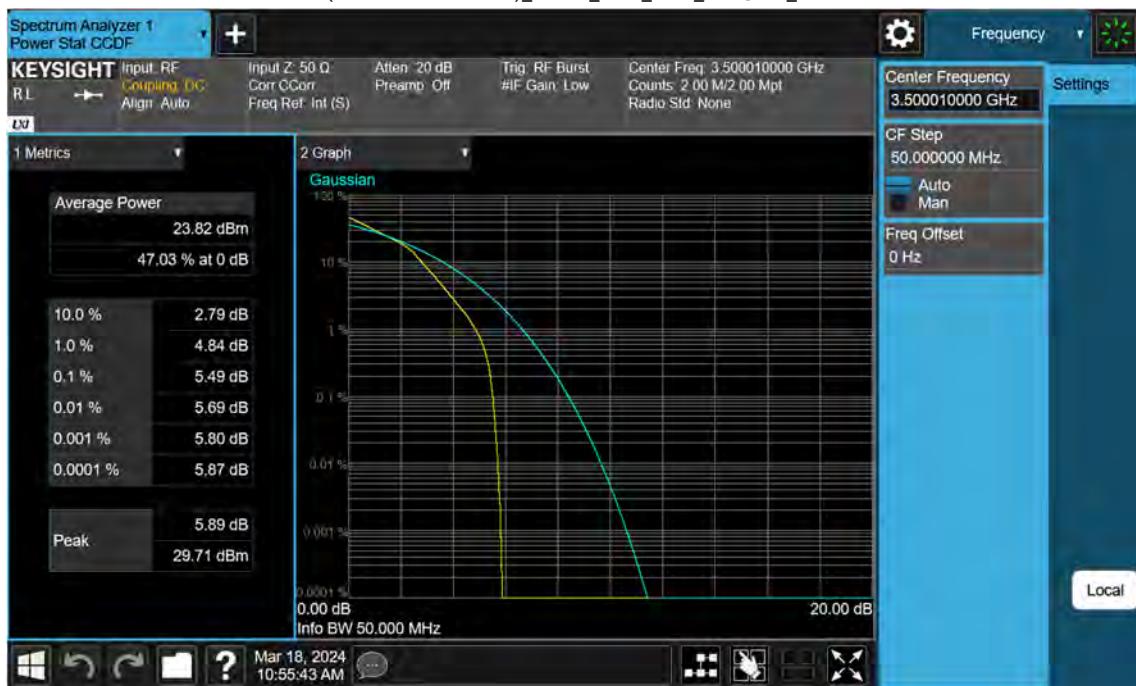








n77(3450~3550 MHz)_50 M_PAR_Mid_16QAM_FullRB

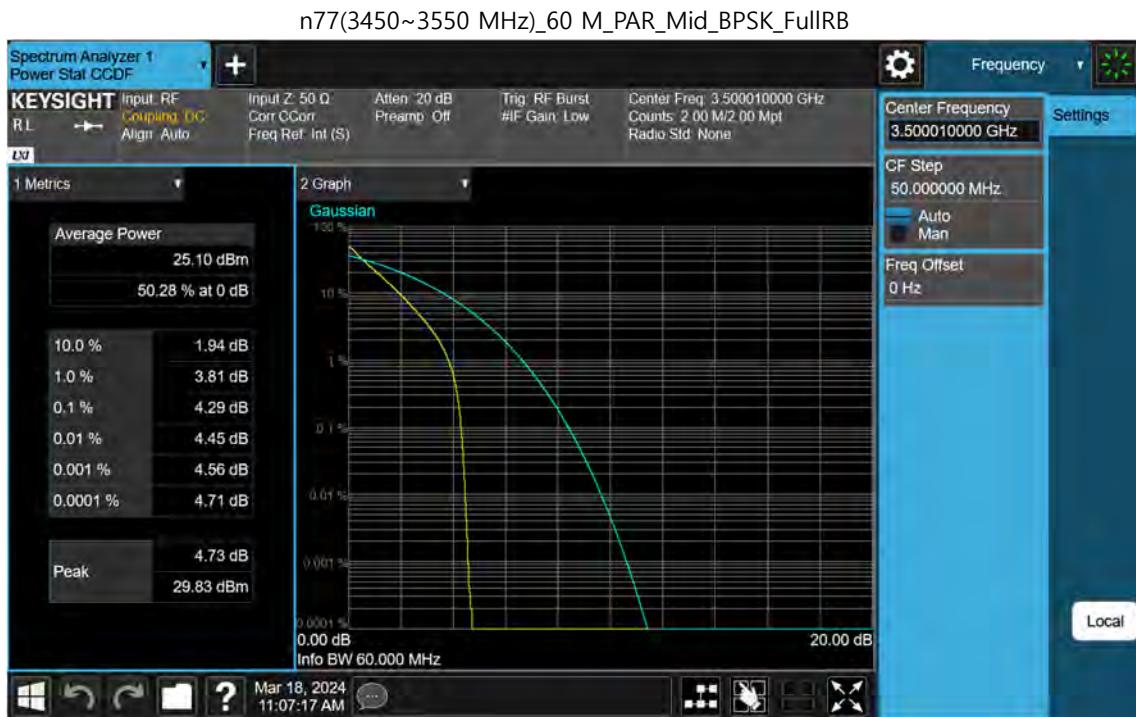


n77(3450~3550 MHz)_50 M_PAR_Mid_64QAM_FullRB



n77(3450~3550 MHz)_50 M_PAR_Mid_256QAM_FullRB







n77(3450~3550 MHz)_60 M_PAR_Mid_16QAM_FullRB

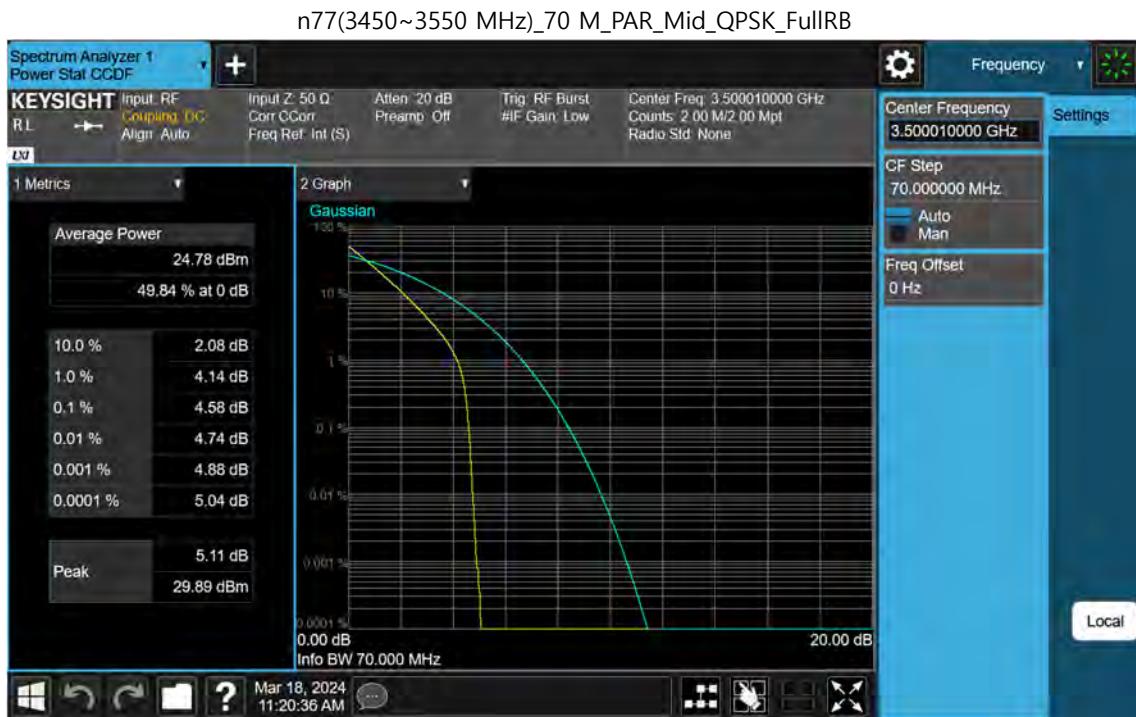


n77(3450~3550 MHz)_60 M_PAR_Mid_64QAM_FullRB

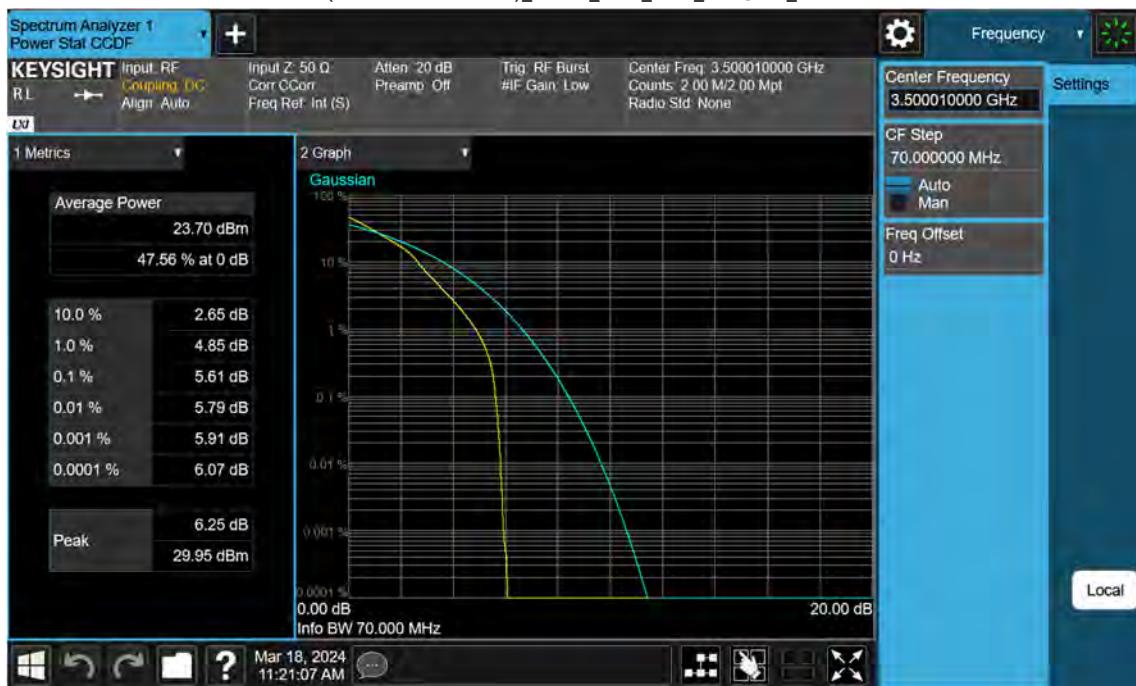








n77(3450~3550 MHz)_70 M_PAR_Mid_16QAM_FullRB

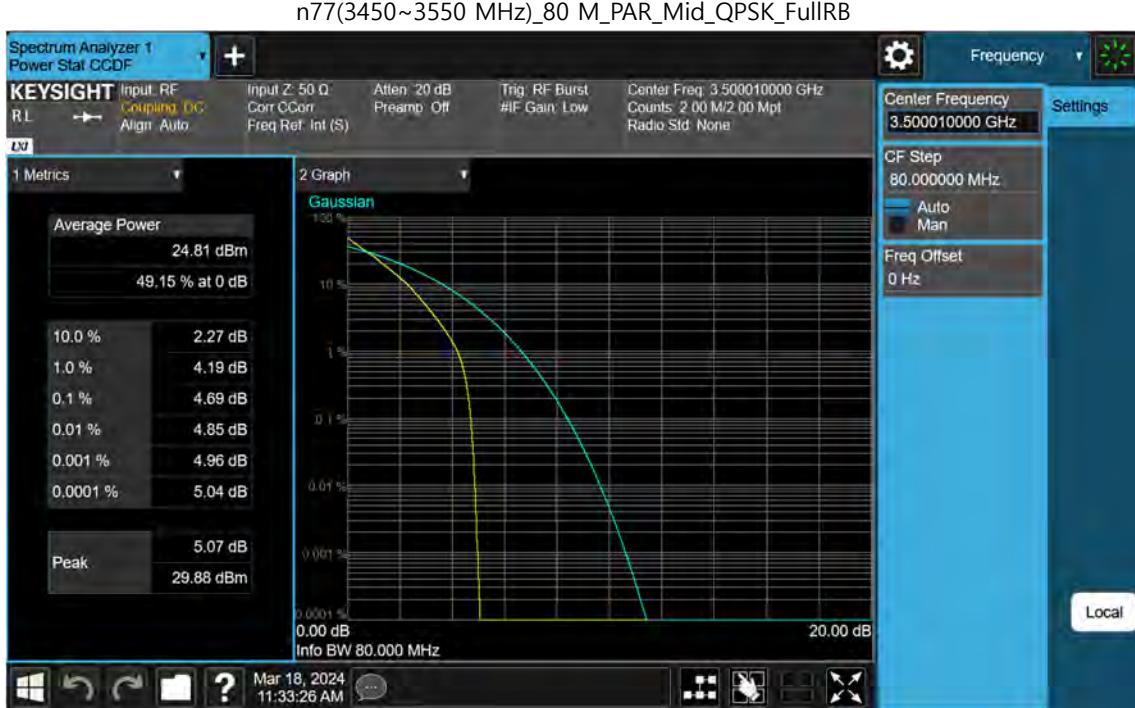


n77(3450~3550 MHz)_70 M_PAR_Mid_64QAM_FullRB









n77(3450~3550 MHz)_80 M_PAR_Mid_16QAM_FullRB

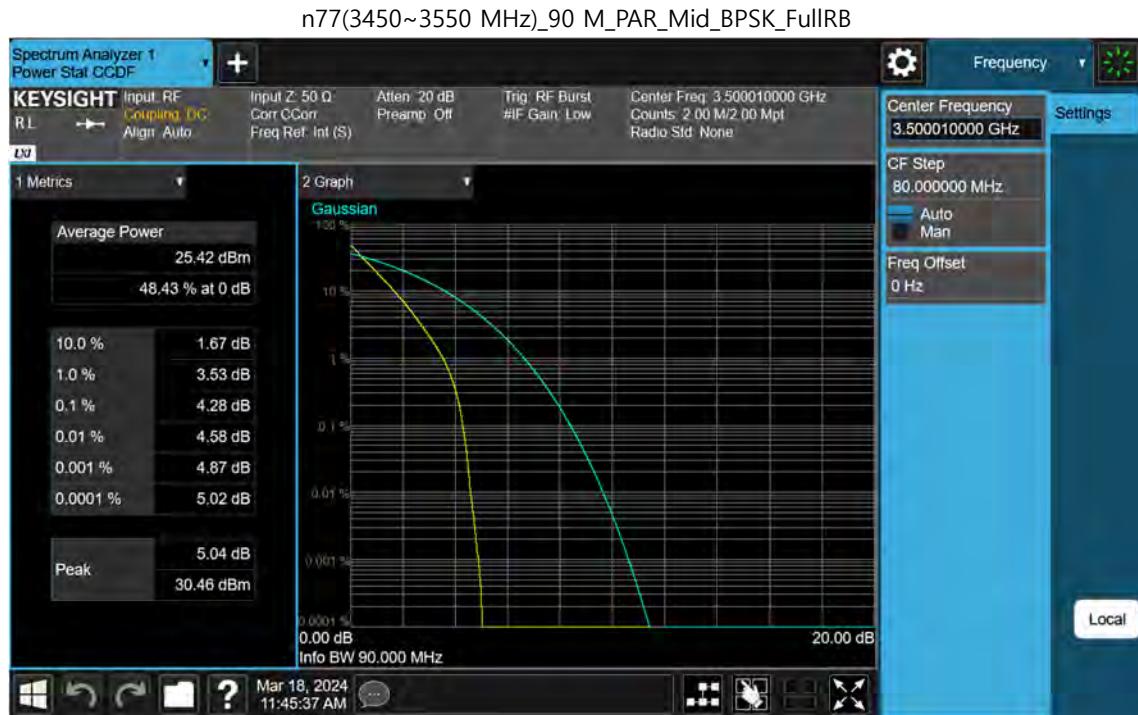


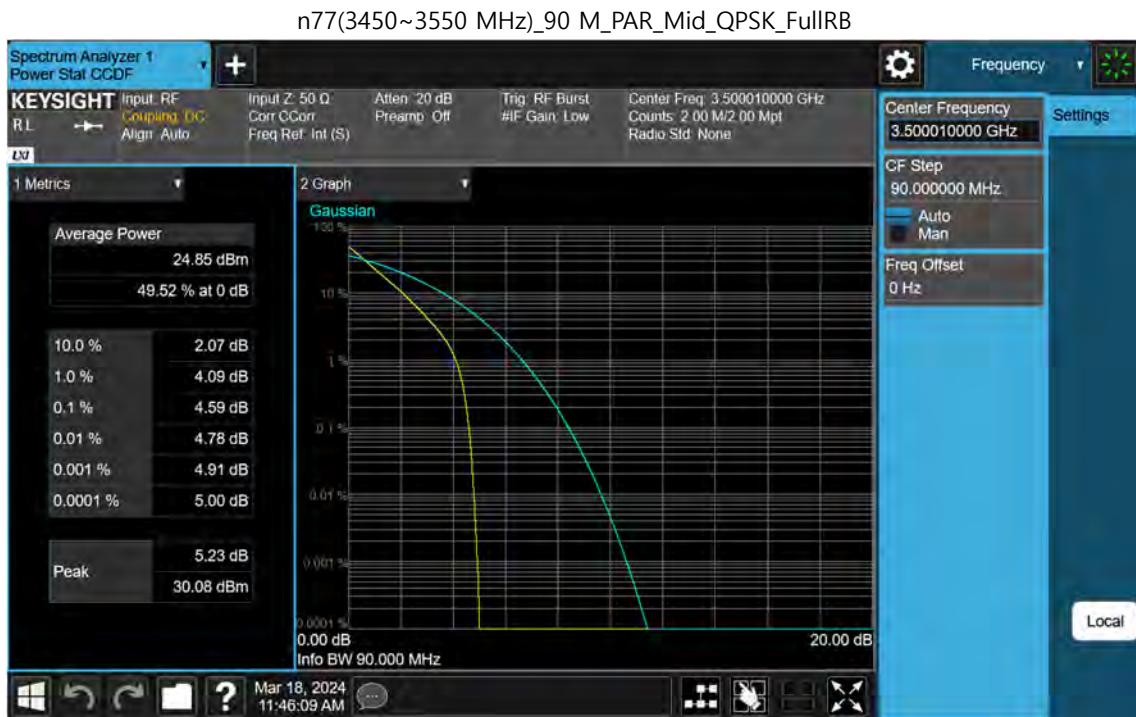
n77(3450~3550 MHz)_80 M_PAR_Mid_64QAM_FullRB

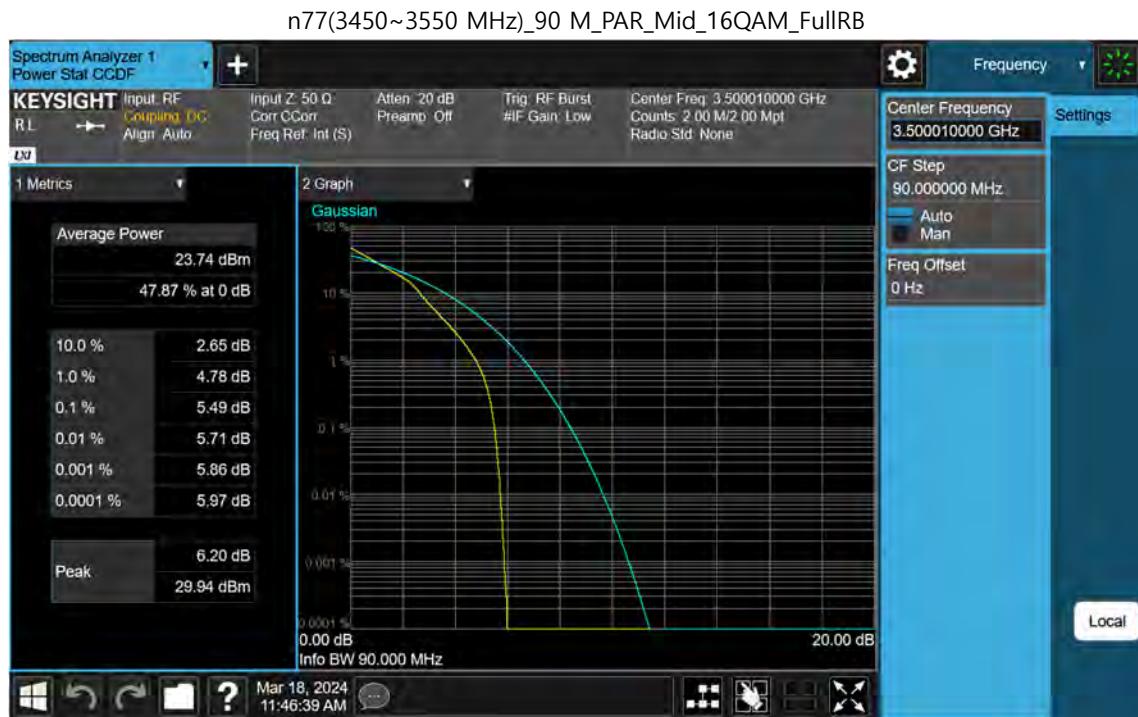


n77(3450~3550 MHz)_80 M_PAR_Mid_256QAM_FullRB





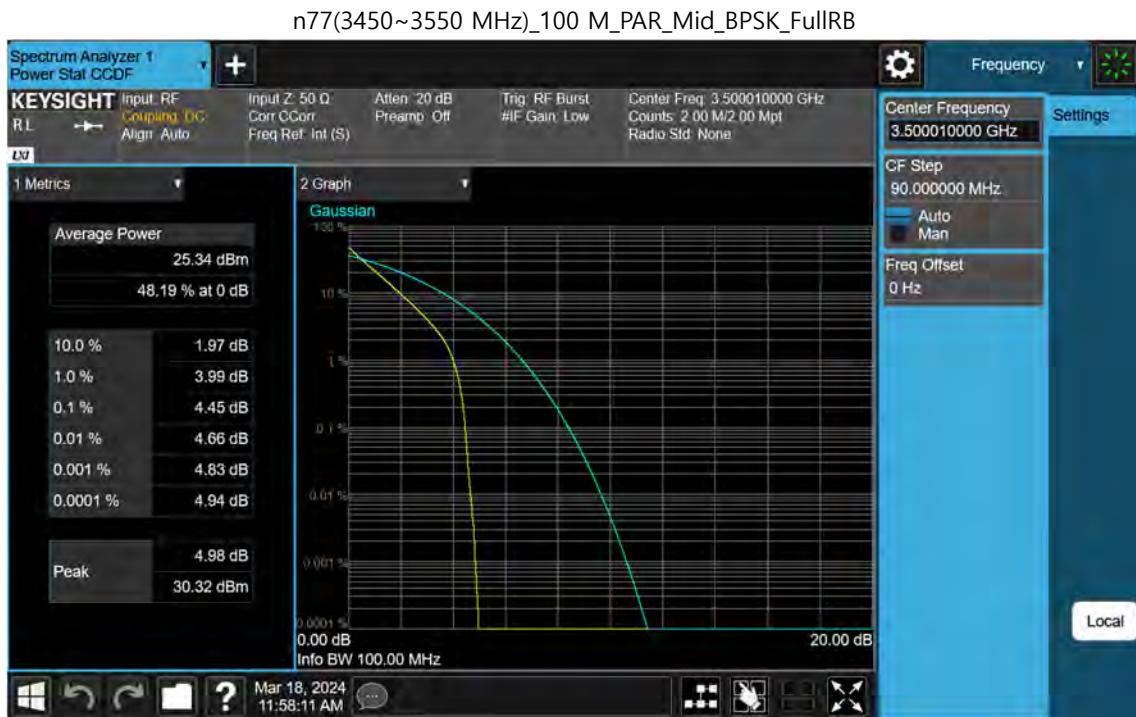




n77(3450~3550 MHz)_90 M_PAR_Mid_64QAM_FullRB



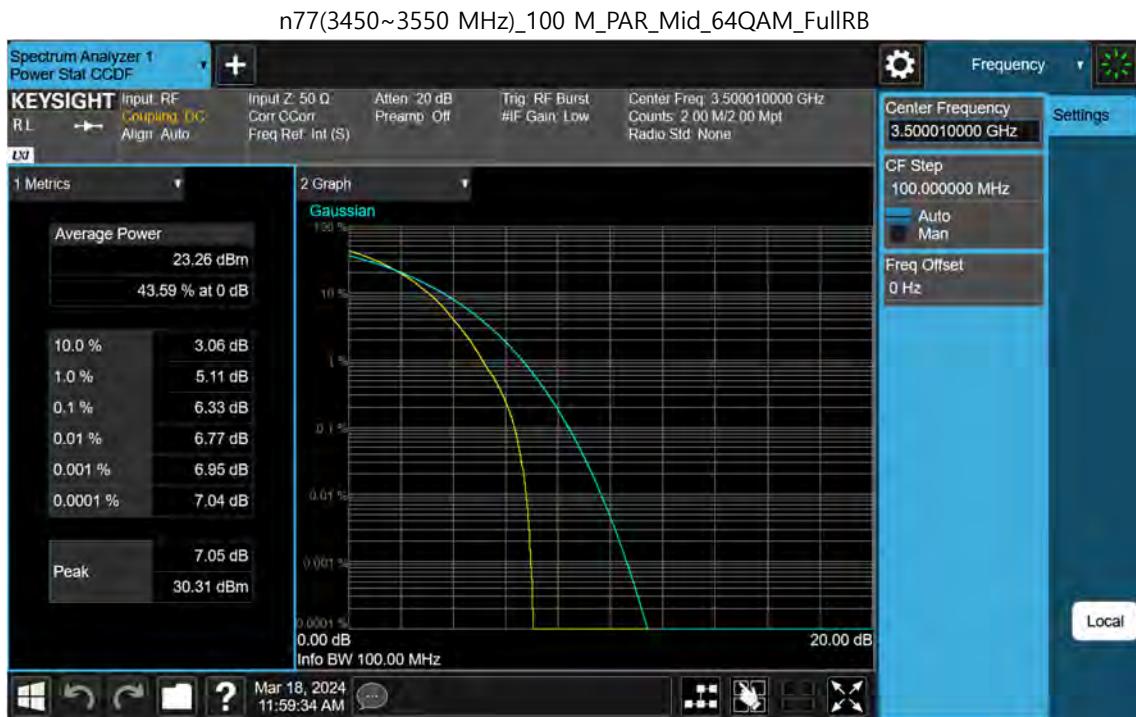






n77(3450~3550 MHz)_100 M_PAR_Mid_16QAM_FullRB





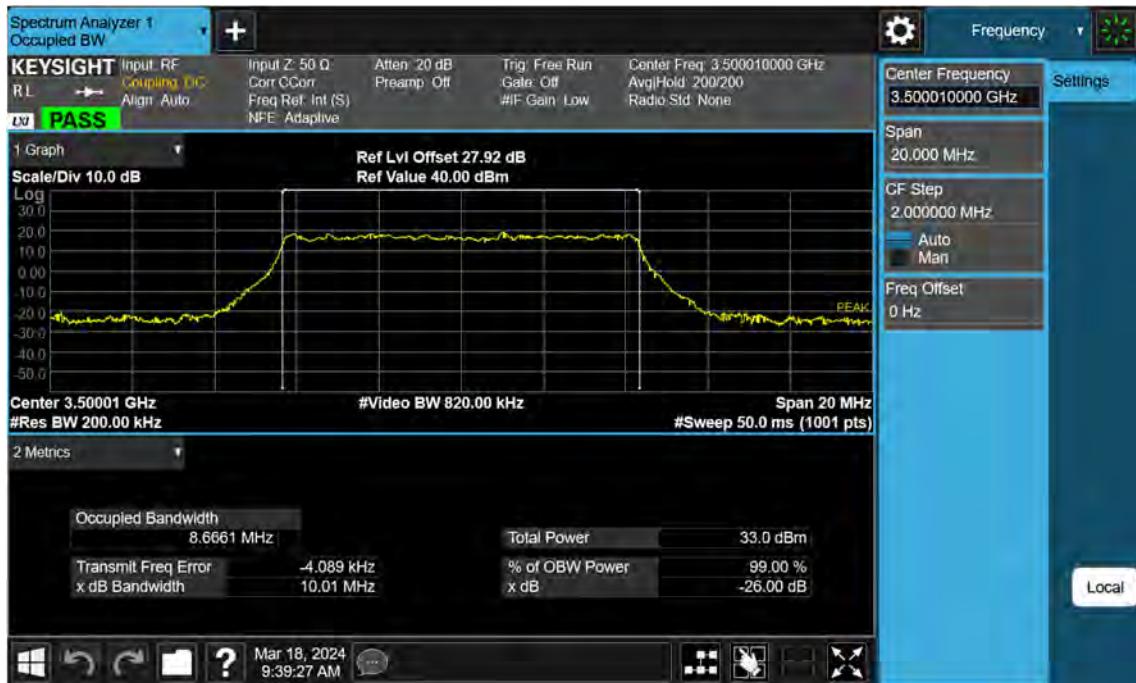
n77(3450~3550 MHz)_100 M_PAR_Mid_256QAM_FullRB



n77(3450~3550 MHz)_10 M_OBW_Mid_BPSK_FullRB



n77(3450~3550 MHz)_10 M_OBW_Mid_QPSK_FullRB



n77(3450~3550 MHz)_10 M_OBW_Mid_16QAM_FullRB

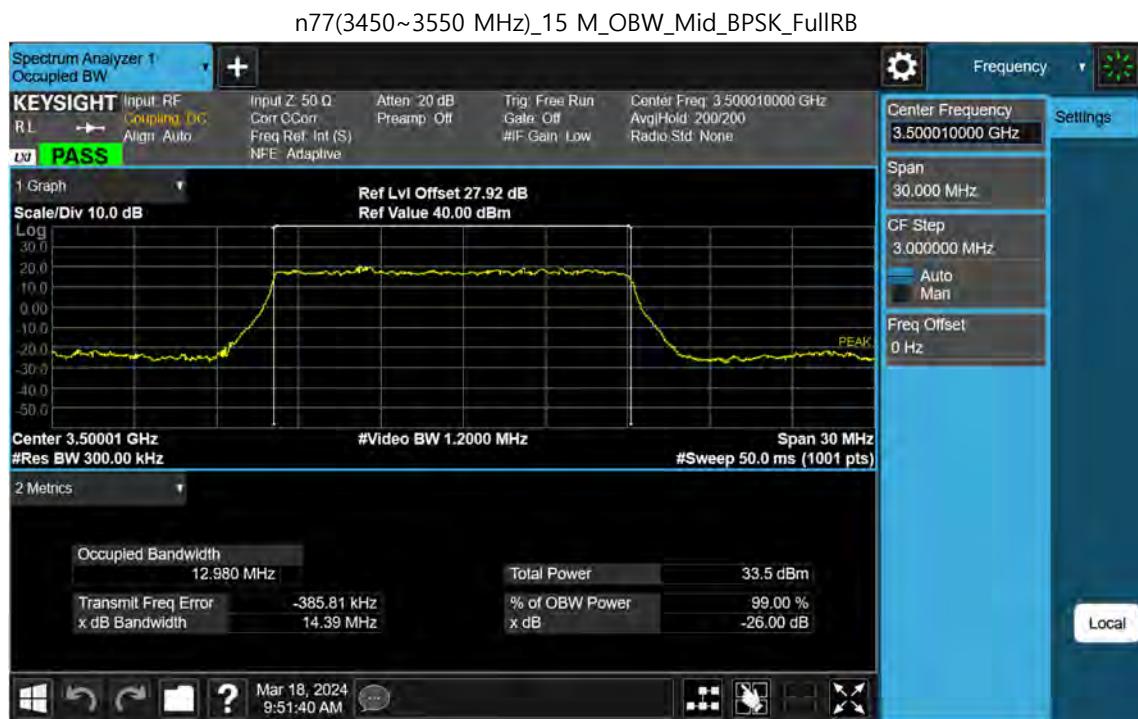


n77(3450~3550 MHz)_10 M_OBW_Mid_64QAM_FullRB



n77(3450~3550 MHz)_10 M_OBW_Mid_256QAM_FullRB





n77(3450~3550 MHz)_15 M_OBW_Mid_QPSK_FullRB



n77(3450~3550 MHz)_15 M_OBW_Mid_16QAM_FullRB



n77(3450~3550 MHz)_15 M_OBW_Mid_64QAM_FullRB



n77(3450~3550 MHz)_15 M_OBW_Mid_256QAM_FullRB





n77(3450~3550 MHz)_20 M_OBW_Mid_QPSK_FullRB



n77(3450~3550 MHz)_20 M_OBW_Mid_16QAM_FullRB

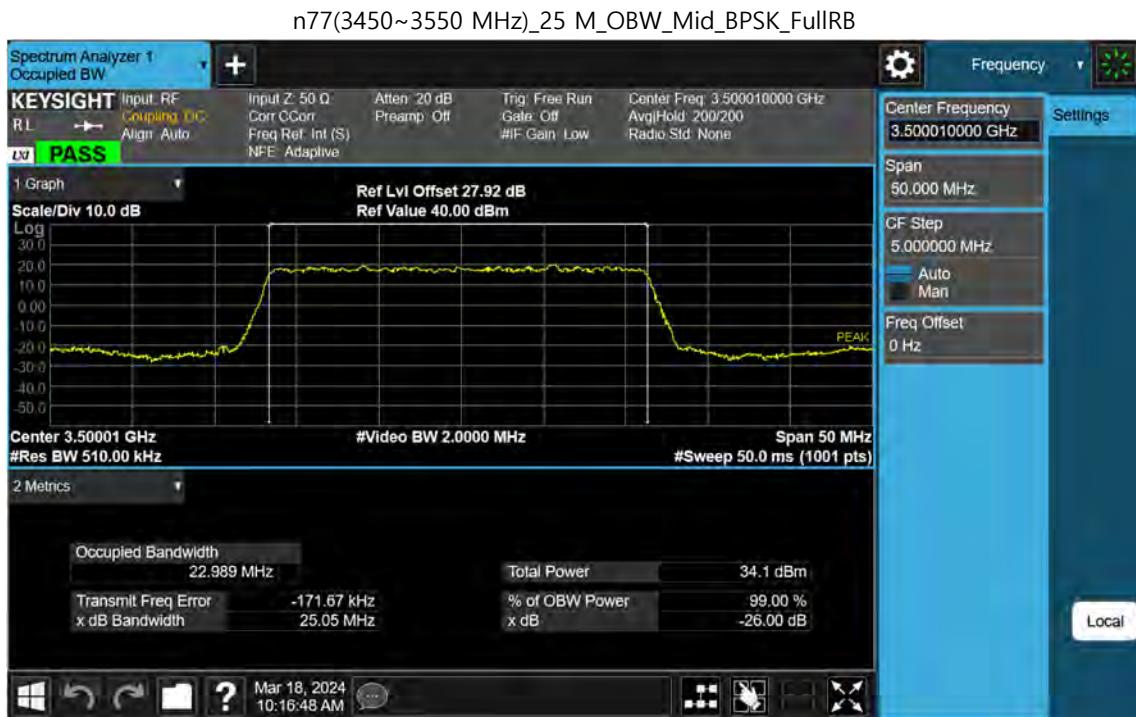


n77(3450~3550 MHz)_20 M_OBW_Mid_64QAM_FullRB



n77(3450~3550 MHz)_20 M_OBW_Mid_256QAM_FullRB





n77(3450~3550 MHz)_25 M_OBW_Mid_QPSK_FullRB



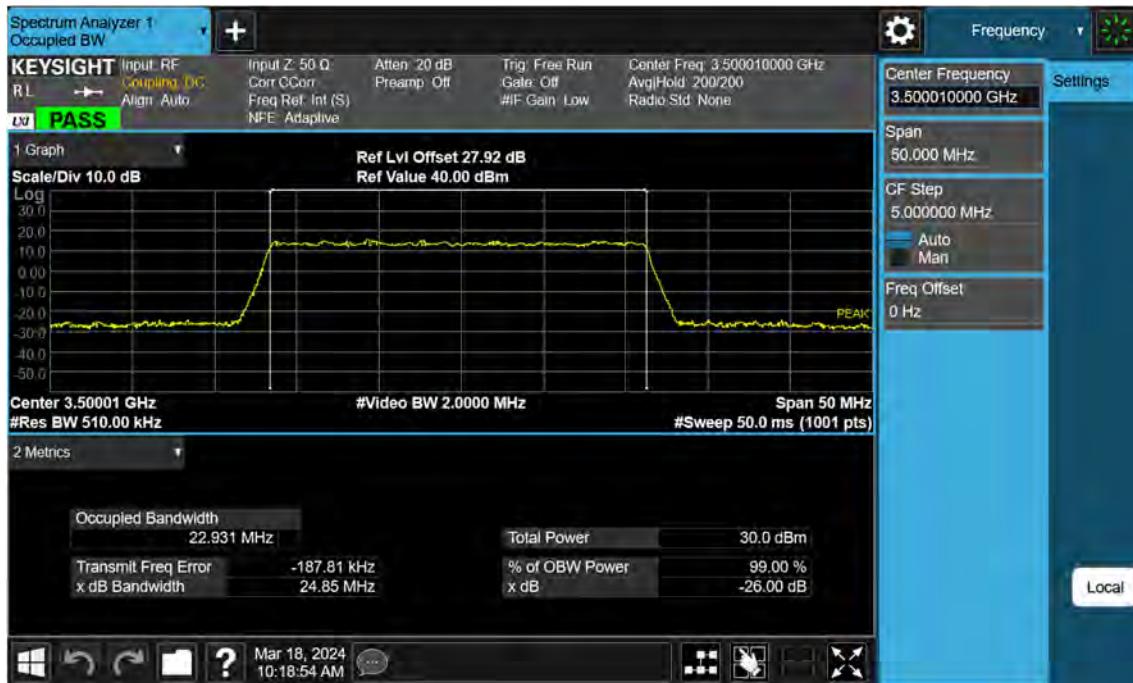
n77(3450~3550 MHz)_25 M_OBW_Mid_16QAM_FullRB

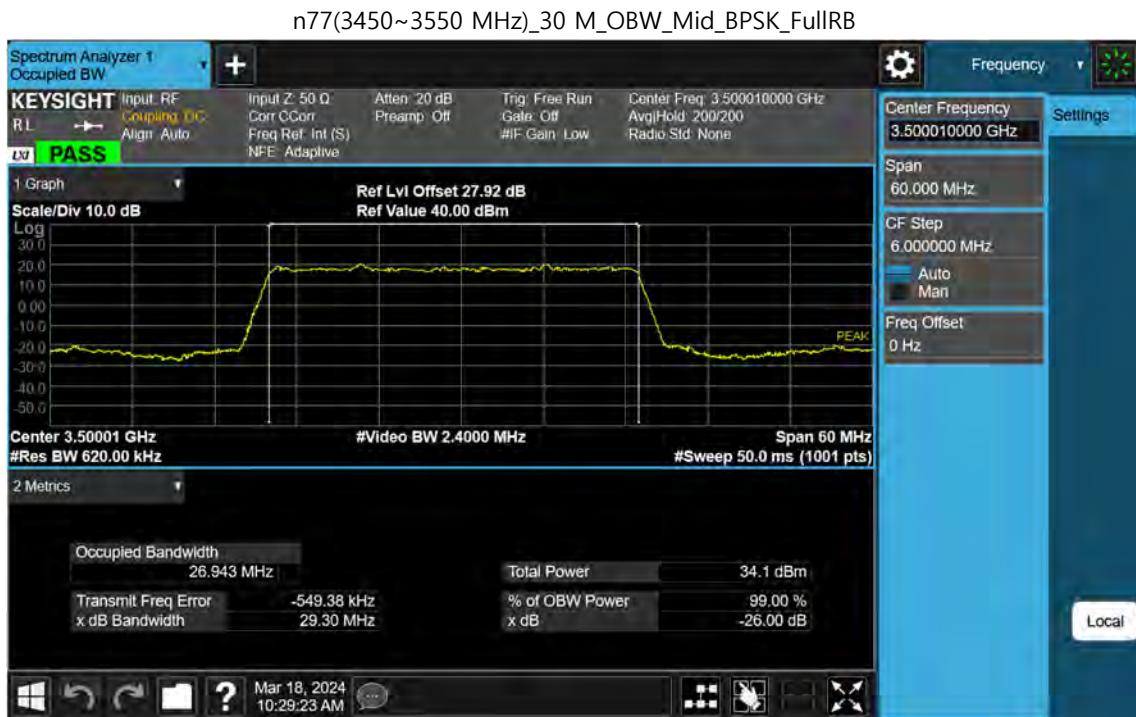


n77(3450~3550 MHz)_25 M_OBW_Mid_64QAM_FullRB



n77(3450~3550 MHz)_25 M_OBW_Mid_256QAM_FullRB





n77(3450~3550 MHz)_30 M_OBW_Mid_QPSK_FullRB



n77(3450~3550 MHz)_30 M_OBW_Mid_16QAM_FullRB

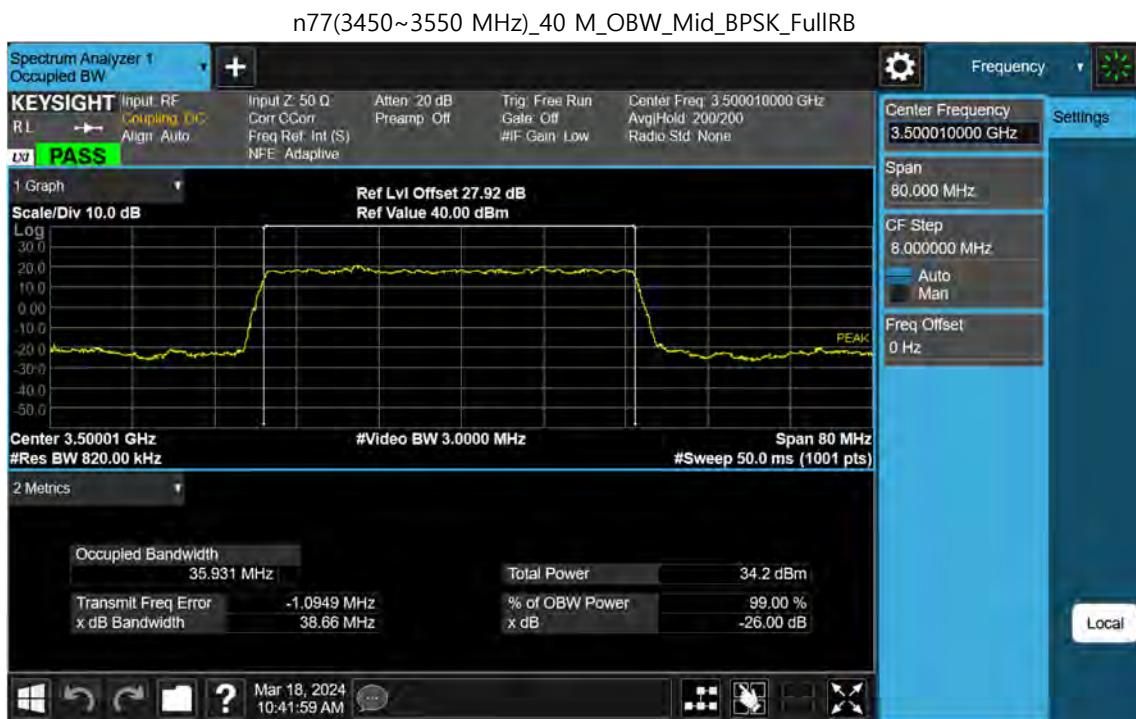


n77(3450~3550 MHz)_30 M_OBW_Mid_64QAM_FullRB



n77(3450~3550 MHz)_30 M_OBW_Mid_256QAM_FullRB





n77(3450~3550 MHz)_40 M_OBW_Mid_QPSK_FullRB



n77(3450~3550 MHz)_40 M_OBW_Mid_16QAM_FullRB

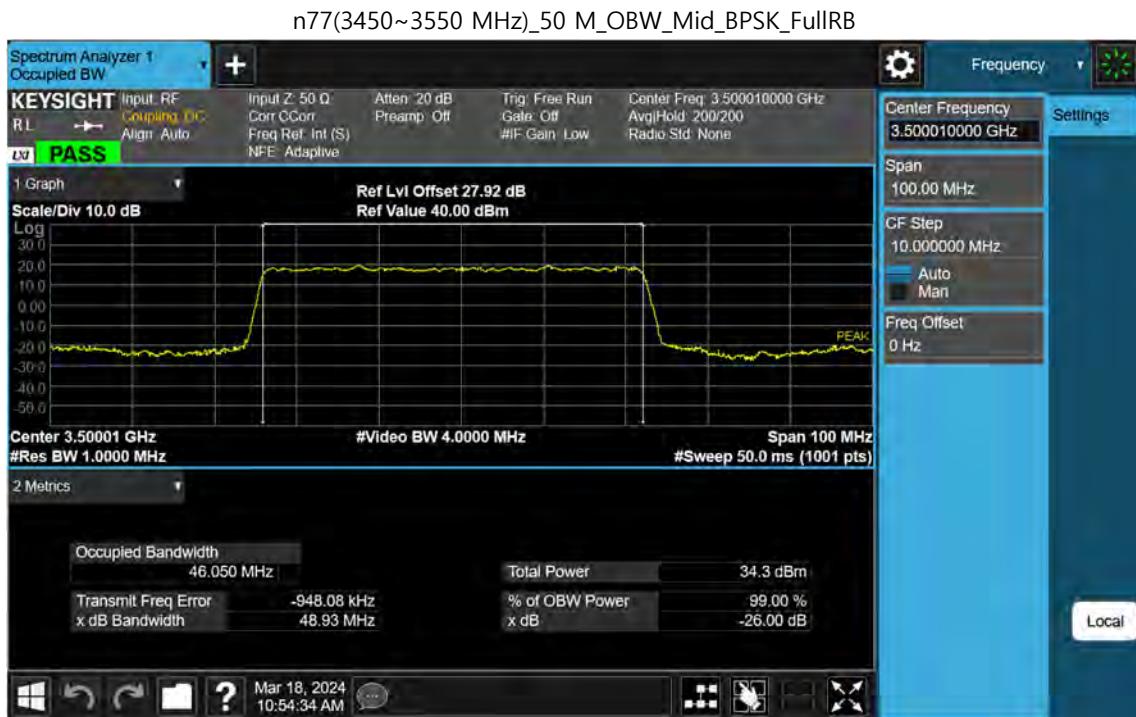


n77(3450~3550 MHz)_40 M_OBW_Mid_64QAM_FullRB

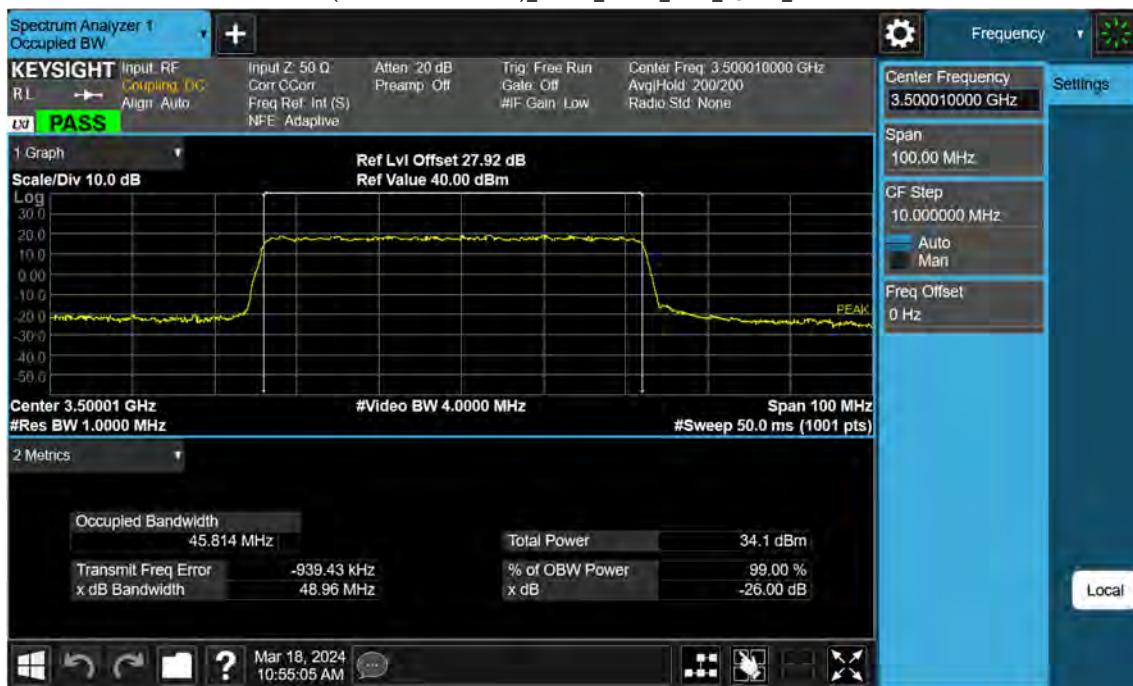


n77(3450~3550 MHz)_40 M_OBW_Mid_256QAM_FullRB





n77(3450~3550 MHz)_50 M_OBW_Mid_QPSK_FullRB



n77(3450~3550 MHz)_50 M_OBW_Mid_16QAM_FullRB



n77(3450~3550 MHz)_50 M_OBW_Mid_64QAM_FullRB



n77(3450~3550 MHz)_50 M_OBW_Mid_256QAM_FullRB



n77(3450~3550 MHz)_60 M_OBW_Mid_BPSK_FullRB



n77(3450~3550 MHz)_60 M_OBW_Mid_QPSK_FullRB



n77(3450~3550 MHz)_60 M_OBW_Mid_16QAM_FullRB



n77(3450~3550 MHz)_60 M_OBW_Mid_64QAM_FullRB



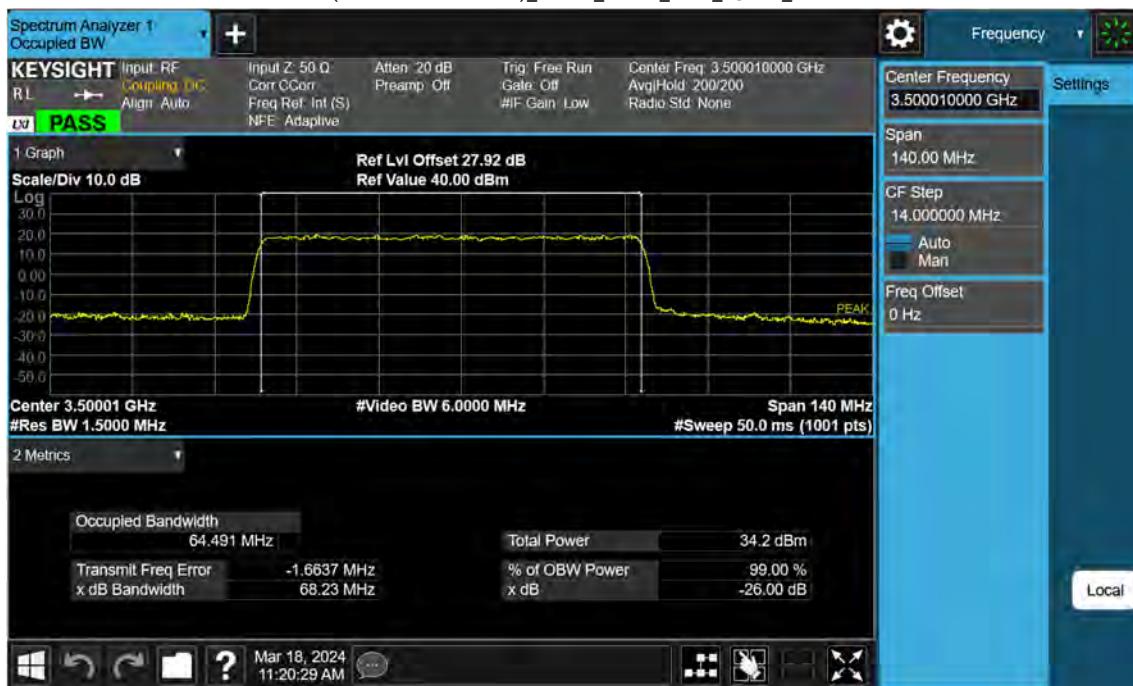
n77(3450~3550 MHz)_60 M_OBW_Mid_256QAM_FullRB



n77(3450~3550 MHz)_70 M_OBW_Mid_BPSK_FullRB



n77(3450~3550 MHz)_70 M_OBW_Mid_QPSK_FullRB



n77(3450~3550 MHz)_70 M_OBW_Mid_16QAM_FullRB



n77(3450~3550 MHz)_70 M_OBW_Mid_64QAM_FullRB



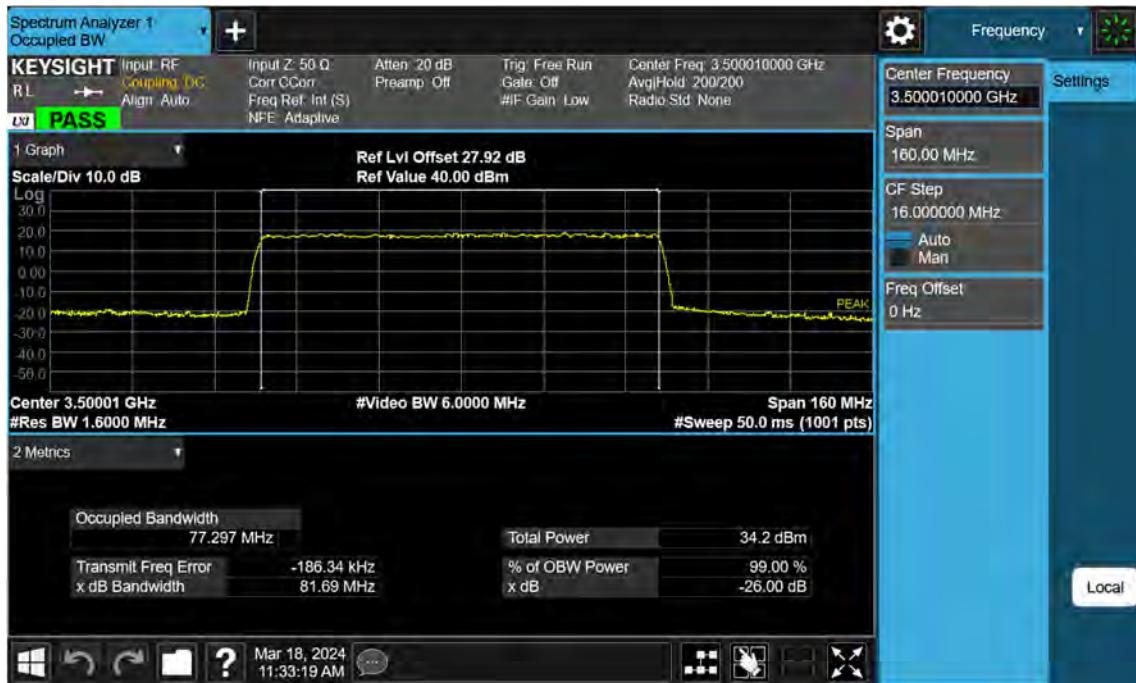
n77(3450~3550 MHz)_70 M_OBW_Mid_256QAM_FullRB



n77(3450~3550 MHz)_80 M_OBW_Mid_BPSK_FullRB



n77(3450~3550 MHz)_80 M_OBW_Mid_QPSK_FullRB



n77(3450~3550 MHz)_80 M_OBW_Mid_16QAM_FullRB

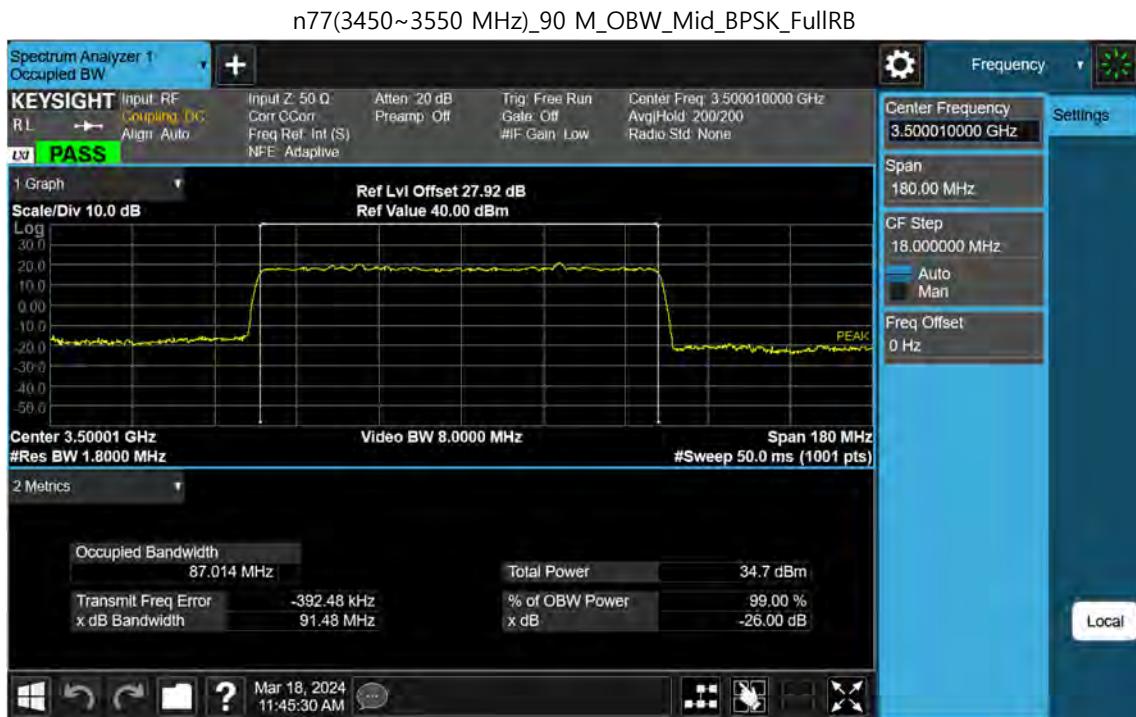


n77(3450~3550 MHz)_80 M_OBW_Mid_64QAM_FullRB

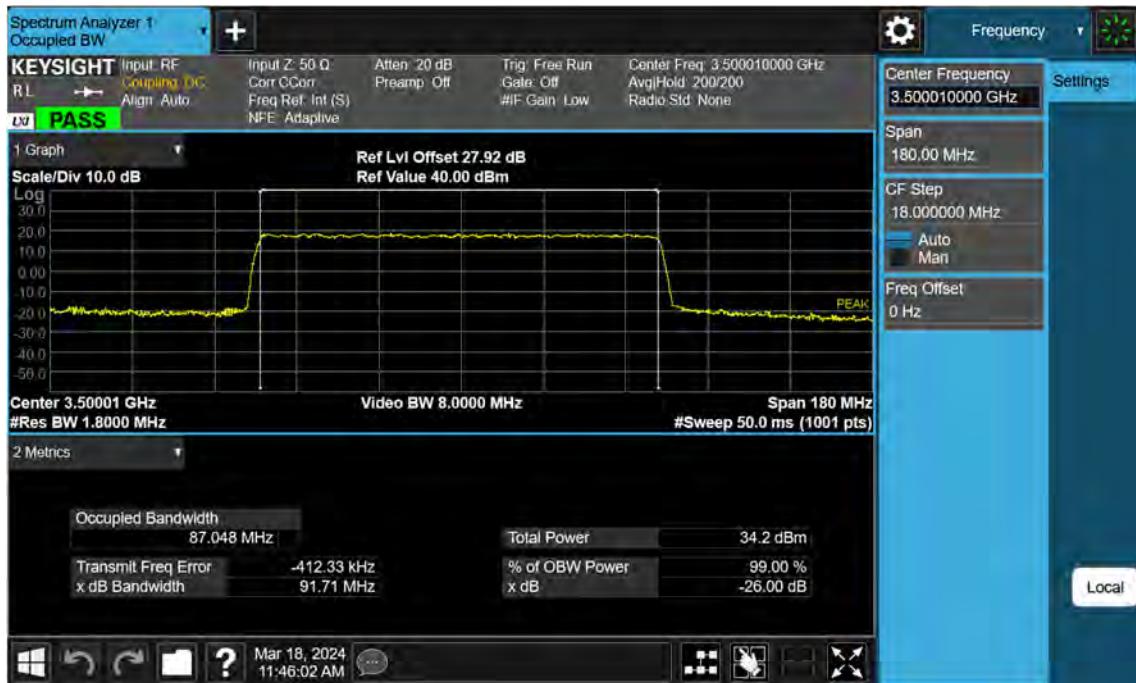


n77(3450~3550 MHz)_80 M_OBW_Mid_256QAM_FullRB





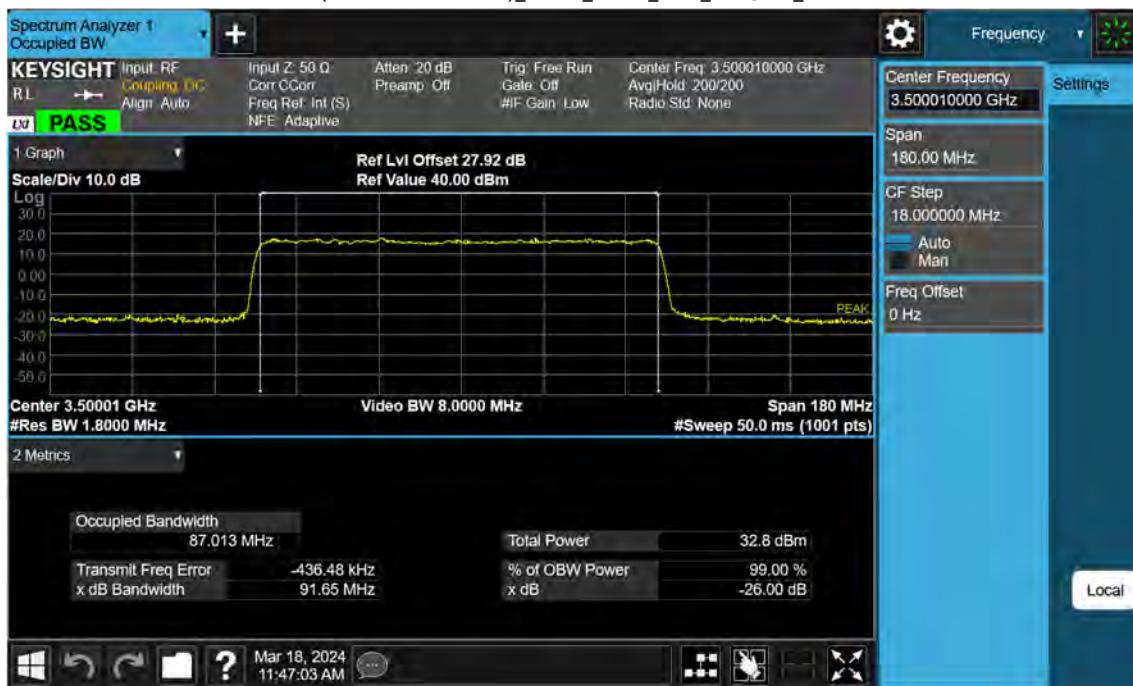
n77(3450~3550 MHz)_90 M_OBW_Mid_QPSK_FullRB



n77(3450~3550 MHz)_90 M_OBW_Mid_16QAM_FullRB



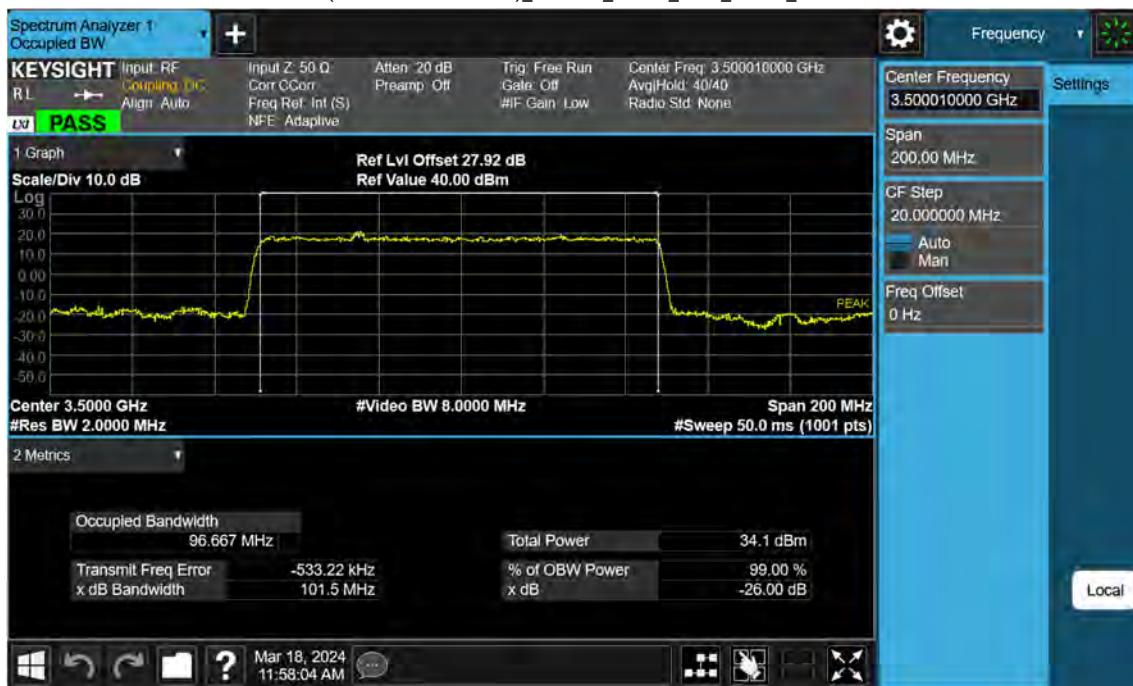
n77(3450~3550 MHz)_90 M_OBW_Mid_64QAM_FullRB



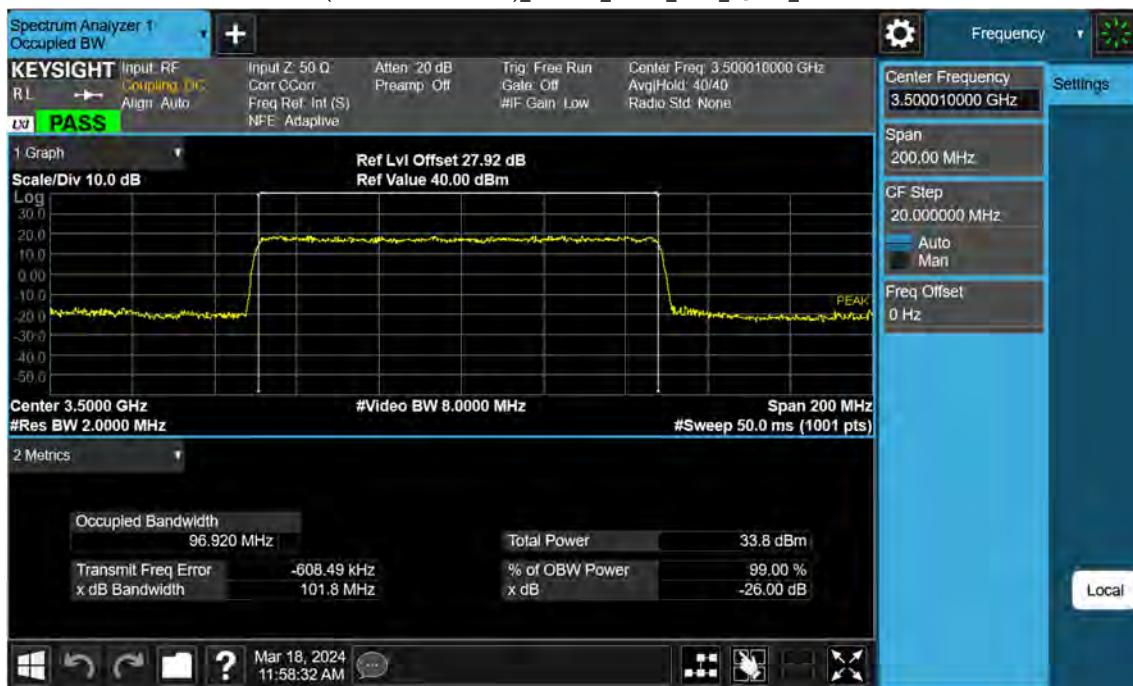
n77(3450~3550 MHz)_90 M_OBW_Mid_256QAM_FullRB



n77(3450~3550 MHz)_100 M_OBW_Mid_BPSK_FullRB



n77(3450~3550 MHz)_100 M_OBW_Mid_QPSK_FullRB



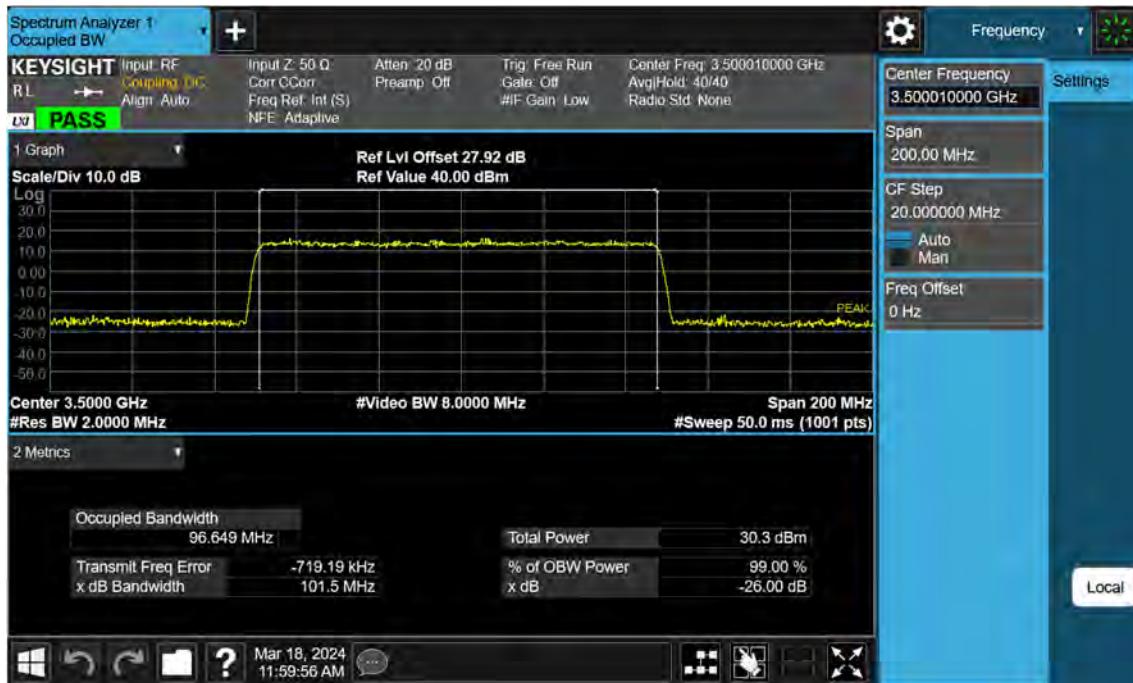
n77(3450~3550 MHz)_100 M_OBW_Mid_16QAM_FullRB



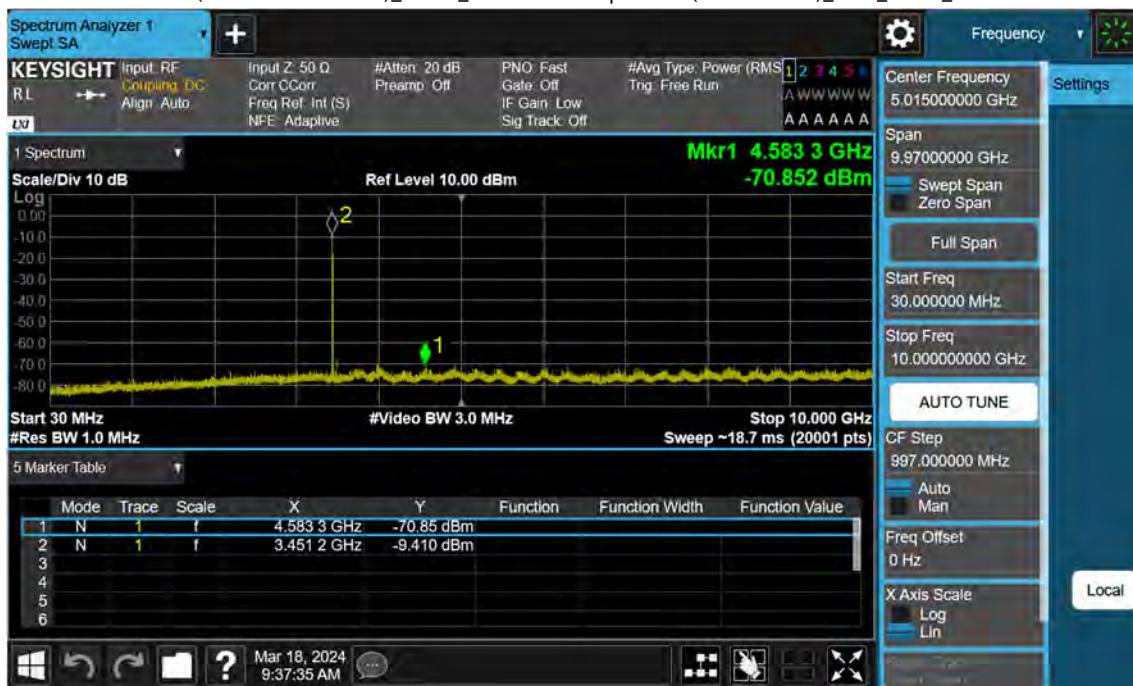
n77(3450~3550 MHz)_100 M_OBW_Mid_64QAM_FullRB



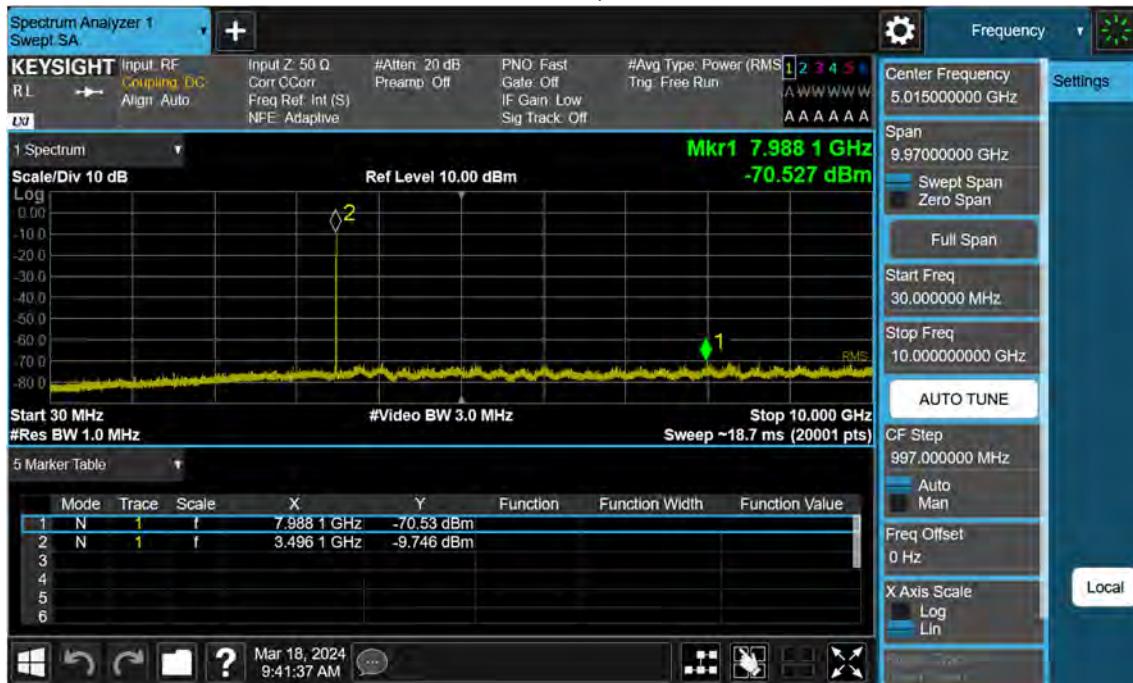
n77(3450~3550 MHz)_100 M_OBW_Mid_256QAM_FullRB



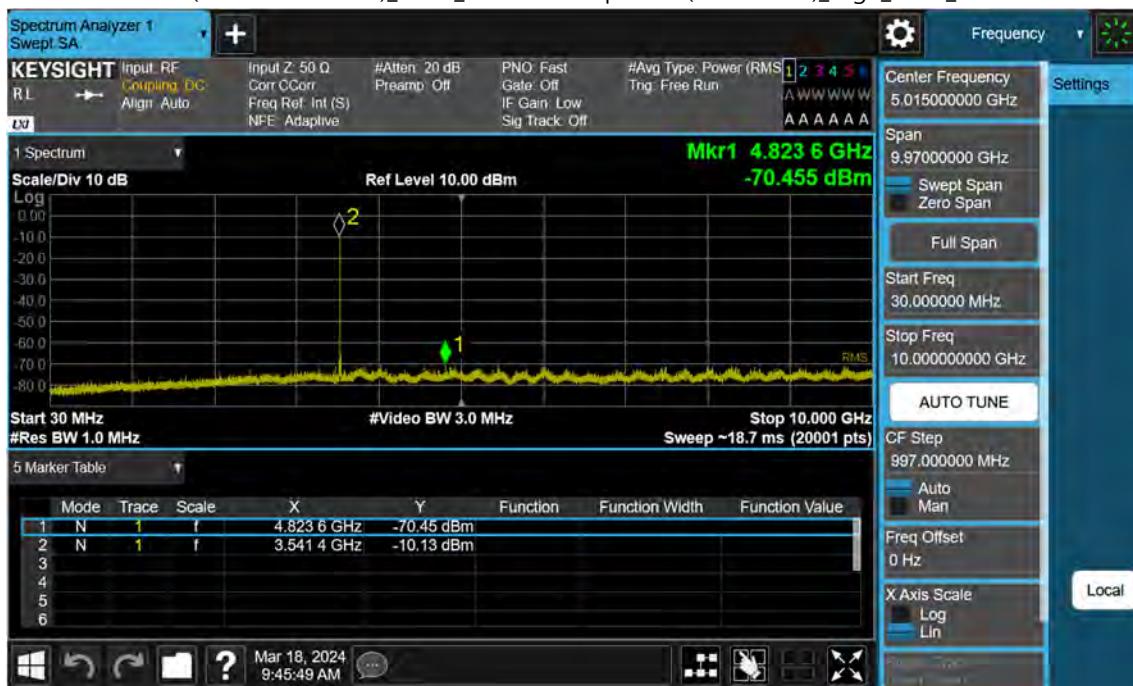
n77(3450~3550 MHz)_10 M_Conducted Spurious(30 M-10 G)_Low_BPSK_1RB



n77(3450~3550 MHz)_10 M_Conducted Spurious(30 M-10 G)_Mid_BPSK_FullRB



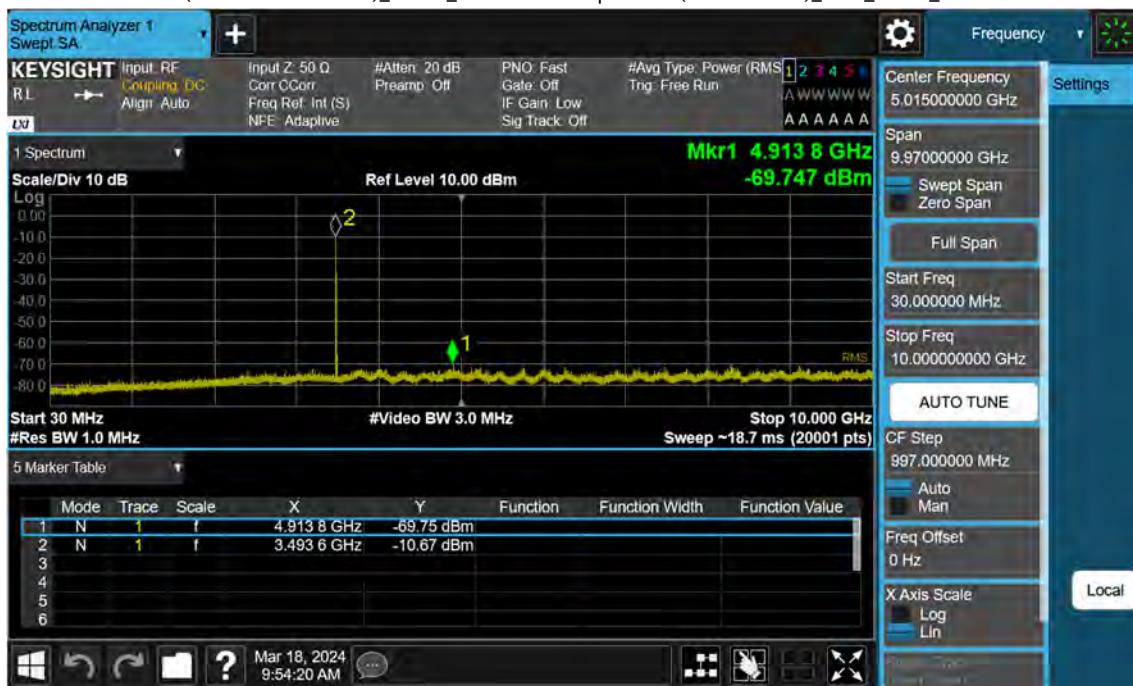
n77(3450~3550 MHz)_10 M_Conducted Spurious(30 M-10 G)_High_BPSK_1RB



n77(3450~3550 MHz)_15 M_Conducted Spurious(30 M-10 G)_Low_BPSK_1RB



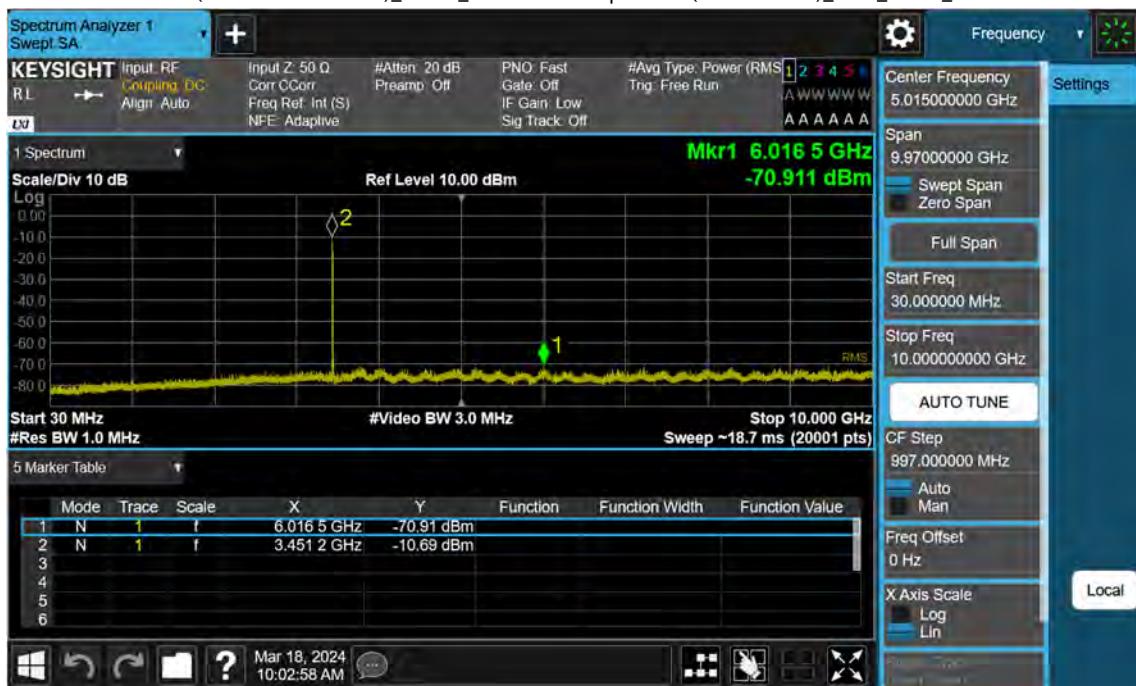
n77(3450~3550 MHz)_15 M_Conducted Spurious(30 M-10 G)_Mid_BPSK_FullRB



n77(3450~3550 MHz)_15 M_Conducted Spurious(30 M-10 G)_High_BPSK_1RB



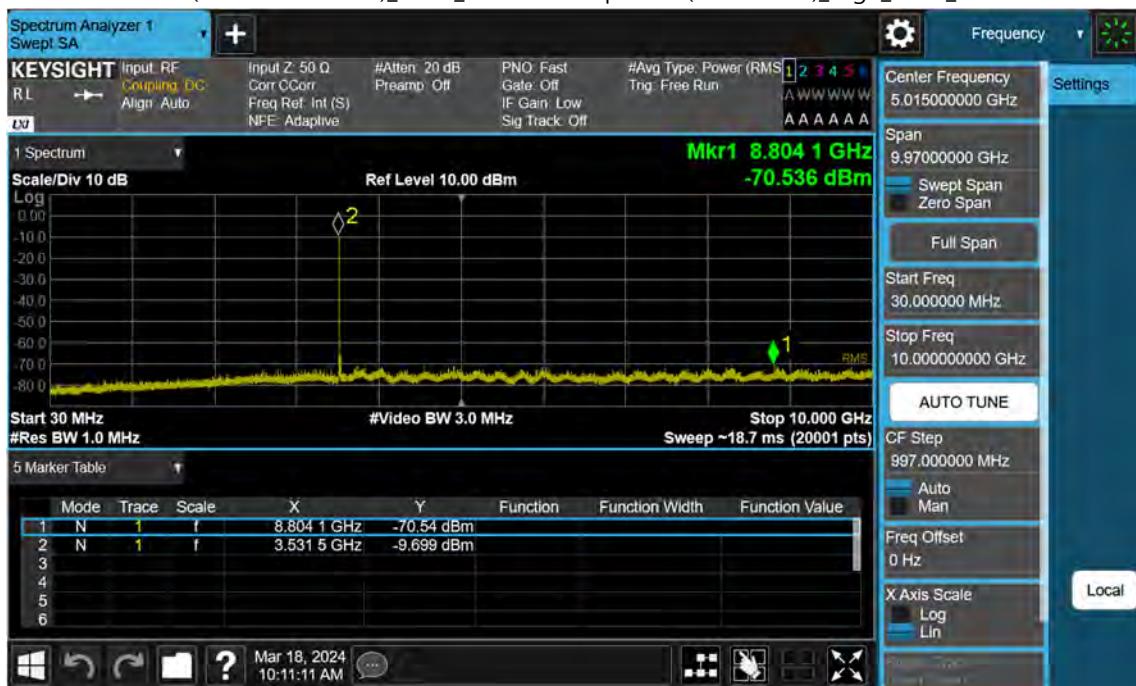
n77(3450~3550 MHz)_20 M_Conducted Spurious(30 M-10 G)_Low_BPSK_1RB



n77(3450~3550 MHz)_20 M_Conducted Spurious(30 M-10 G)_Mid_BPSK_FullRB



n77(3450~3550 MHz)_20 M_Conducted Spurious(30 M-10 G)_High_BPSK_1RB



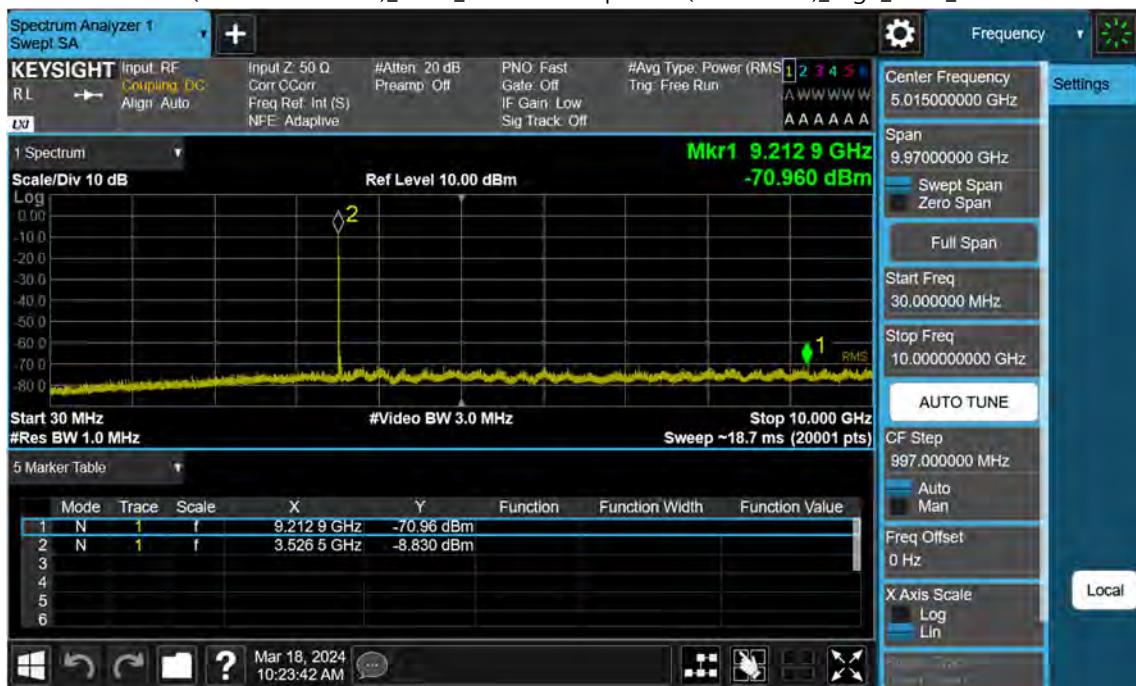
n77(3450~3550 MHz)_25 M_Conducted Spurious(30 M-10 G)_Low_BPSK_1RB



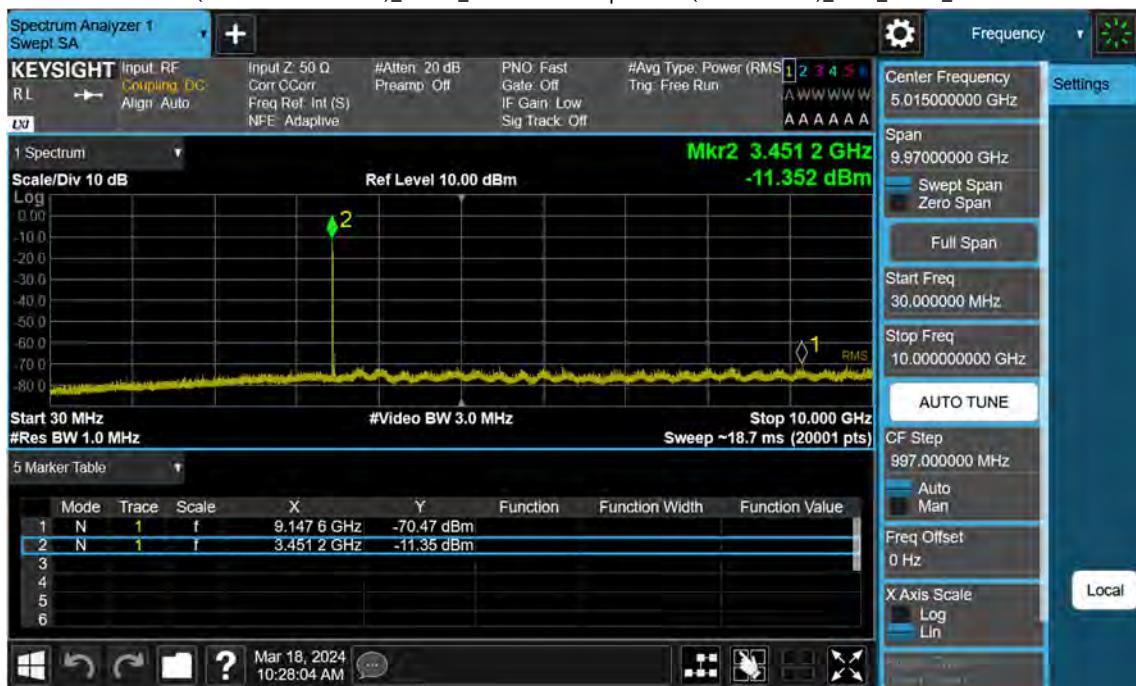
n77(3450~3550 MHz)_25 M_Conducted Spurious(30 M-10 G)_Mid_BPSK_FullRB



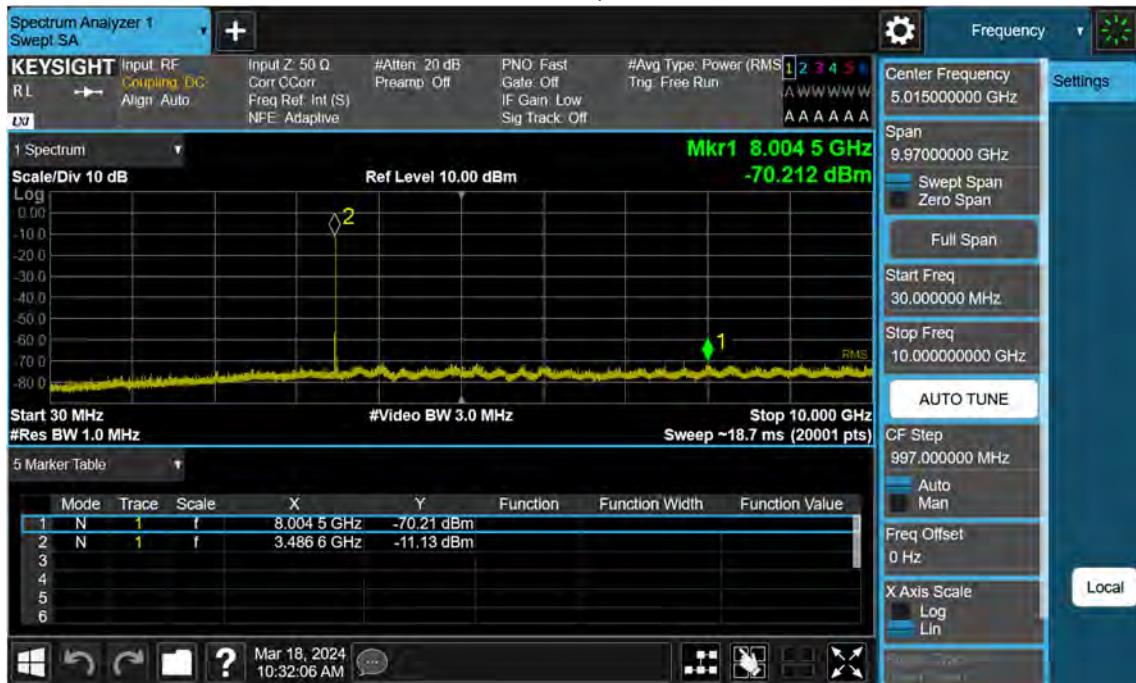
n77(3450~3550 MHz)_25 M_Conducted Spurious(30 M-10 G)_High_BPSK_1RB



n77(3450~3550 MHz)_30 M_Conducted Spurious(30 M-10 G)_Low_BPSK_1RB



n77(3450~3550 MHz)_30 M_Conducted Spurious(30 M-10 G)_Mid_BPSK_FullRB



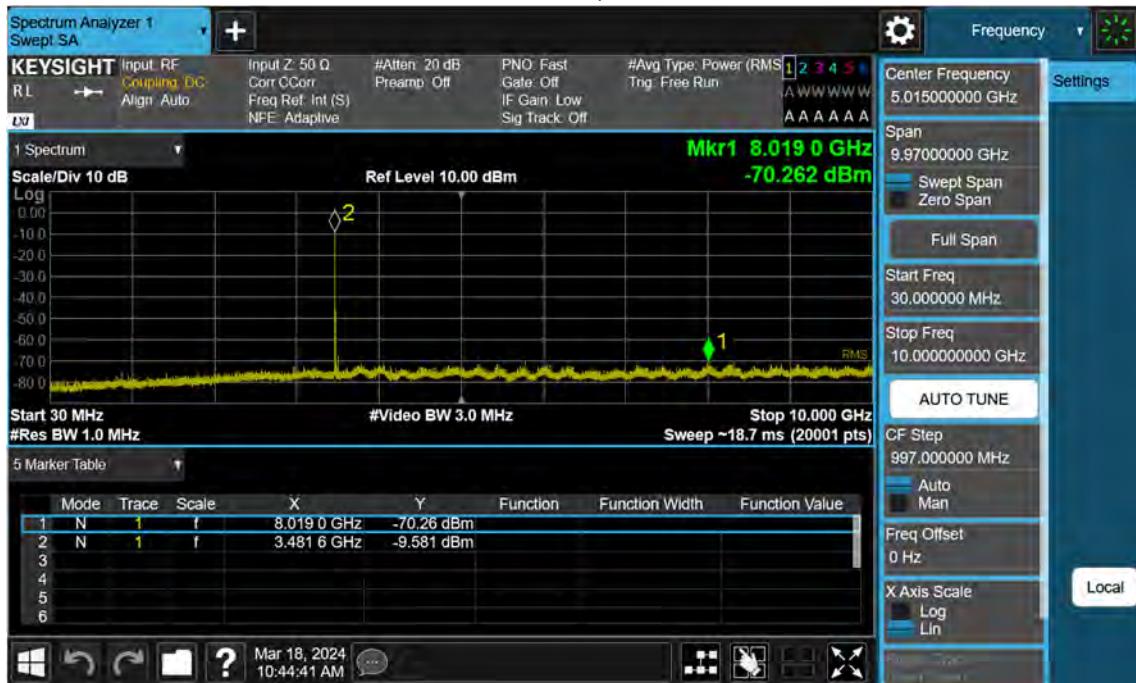
n77(3450~3550 MHz)_30 M_Conducted Spurious(30 M-10 G)_High_BPSK_1RB



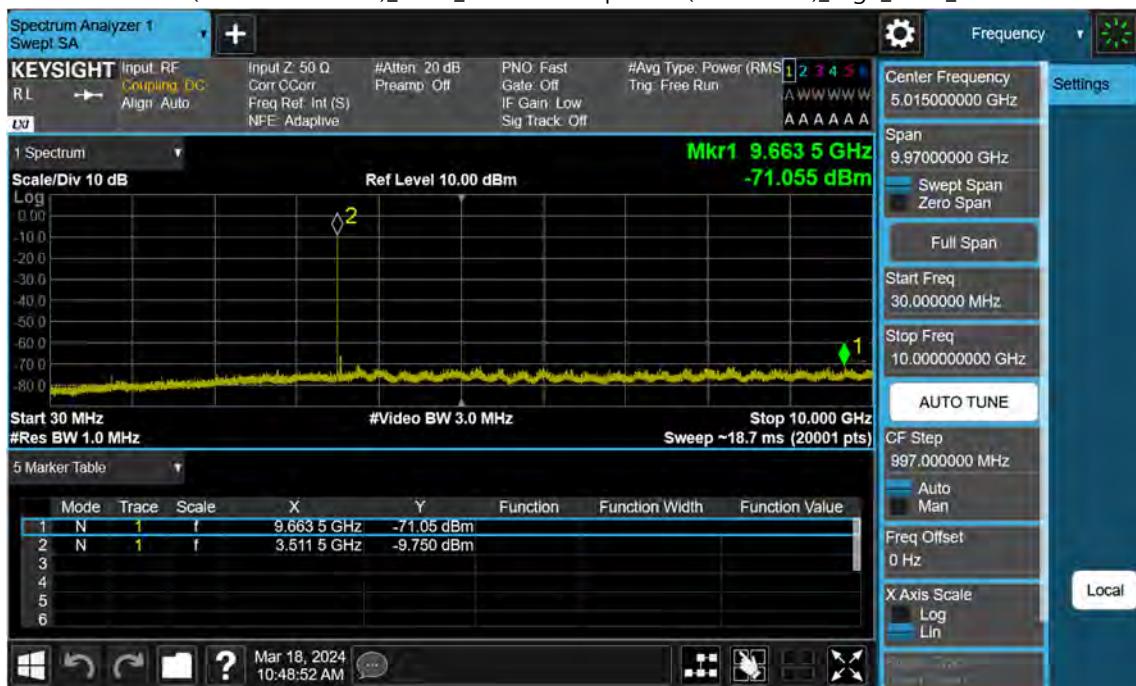
n77(3450~3550 MHz)_40 M_Conducted Spurious(30 M-10 G)_Low_BPSK_1RB



n77(3450~3550 MHz)_40 M_Conducted Spurious(30 M-10 G)_Mid_BPSK_FullRB



n77(3450~3550 MHz)_40 M_Conducted Spurious(30 M-10 G)_High_BPSK_1RB



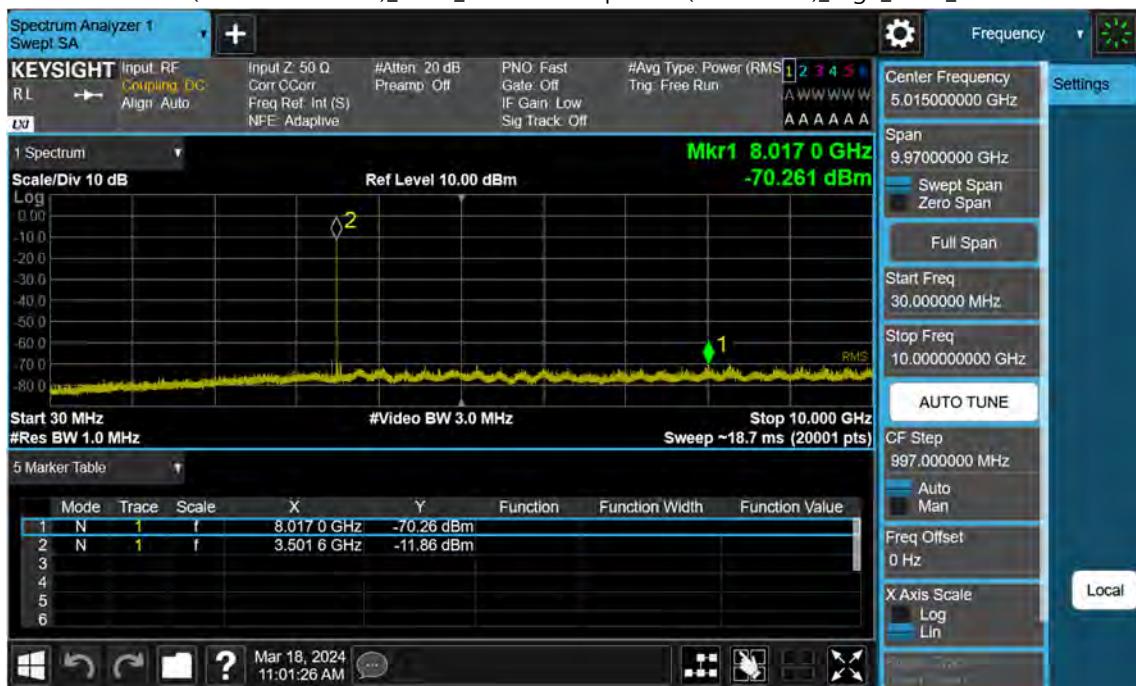
n77(3450~3550 MHz)_50 M_Conducted Spurious(30 M-10 G)_Low_BPSK_1RB



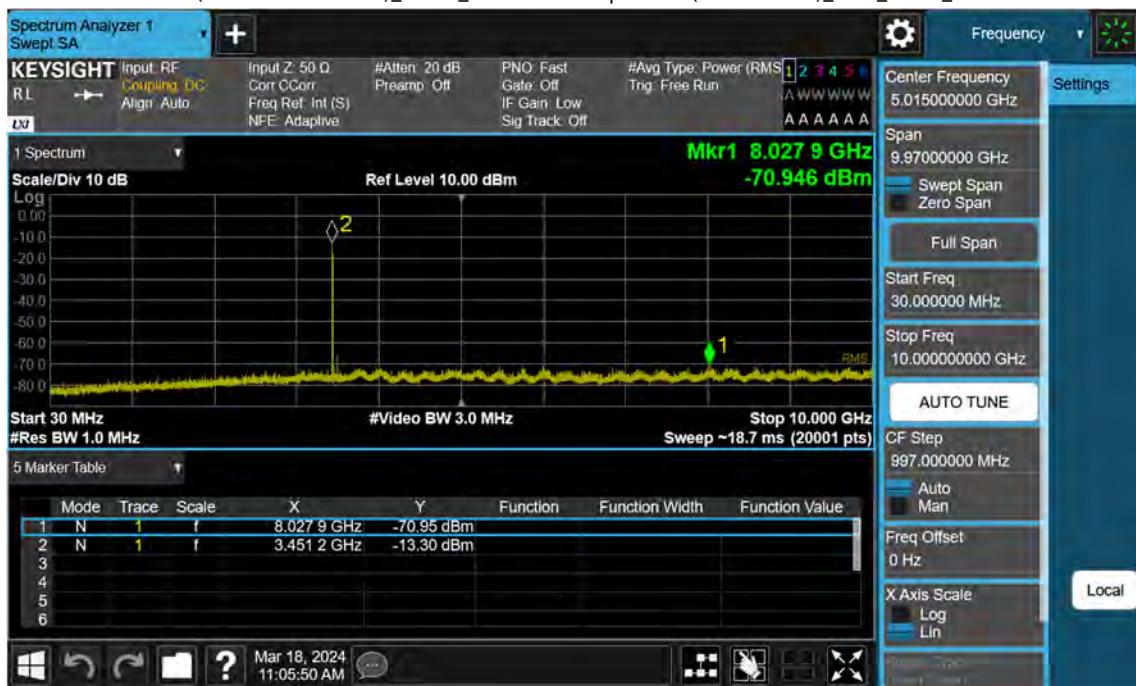
n77(3450~3550 MHz)_50 M_Conducted Spurious(30 M-10 G)_Mid_BPSK_FullRB



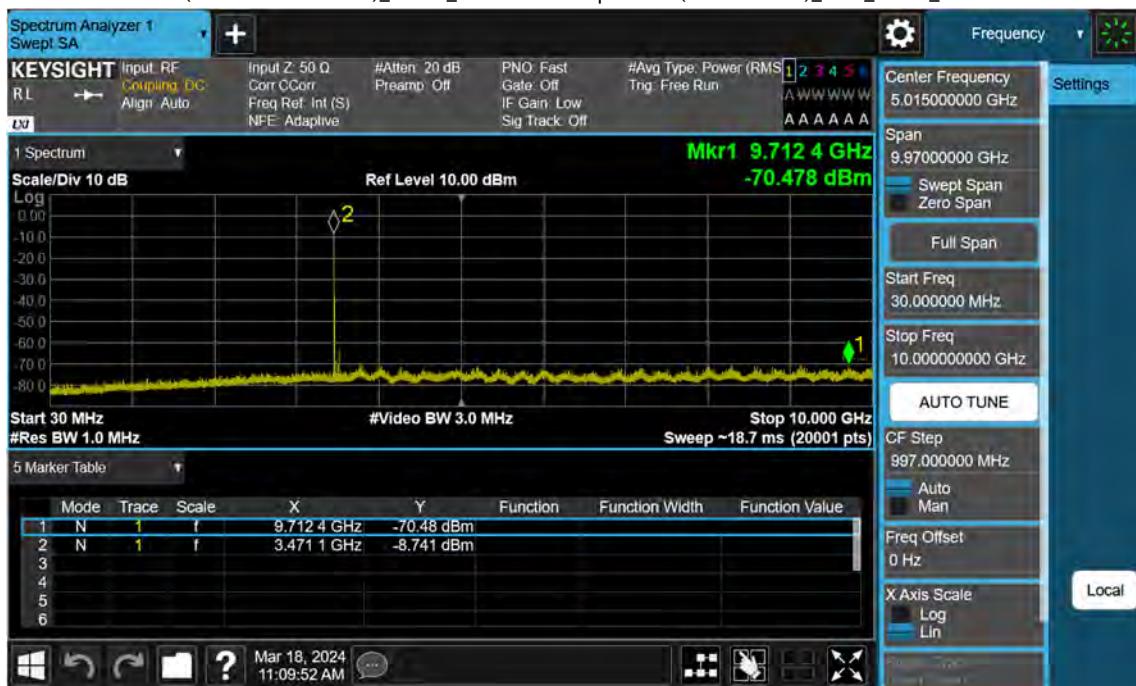
n77(3450~3550 MHz)_50 M_Conducted Spurious(30 M-10 G)_High_BPSK_1RB



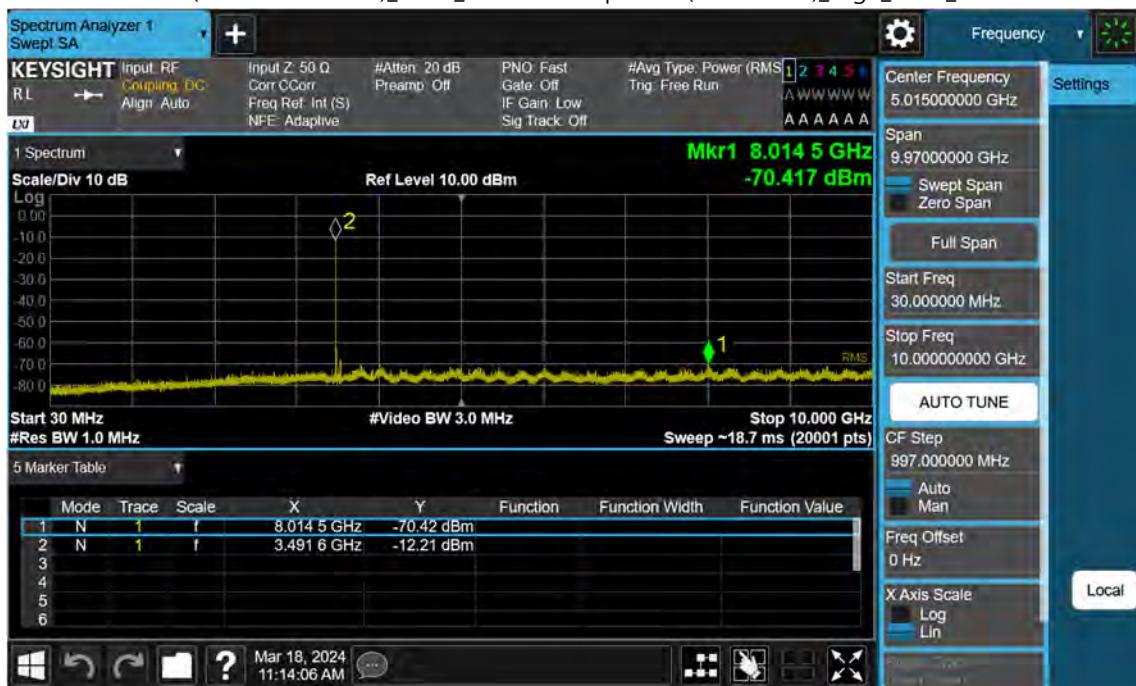
n77(3450~3550 MHz)_60 M_Conducted Spurious(30 M-10 G)_Low_BPSK_1RB



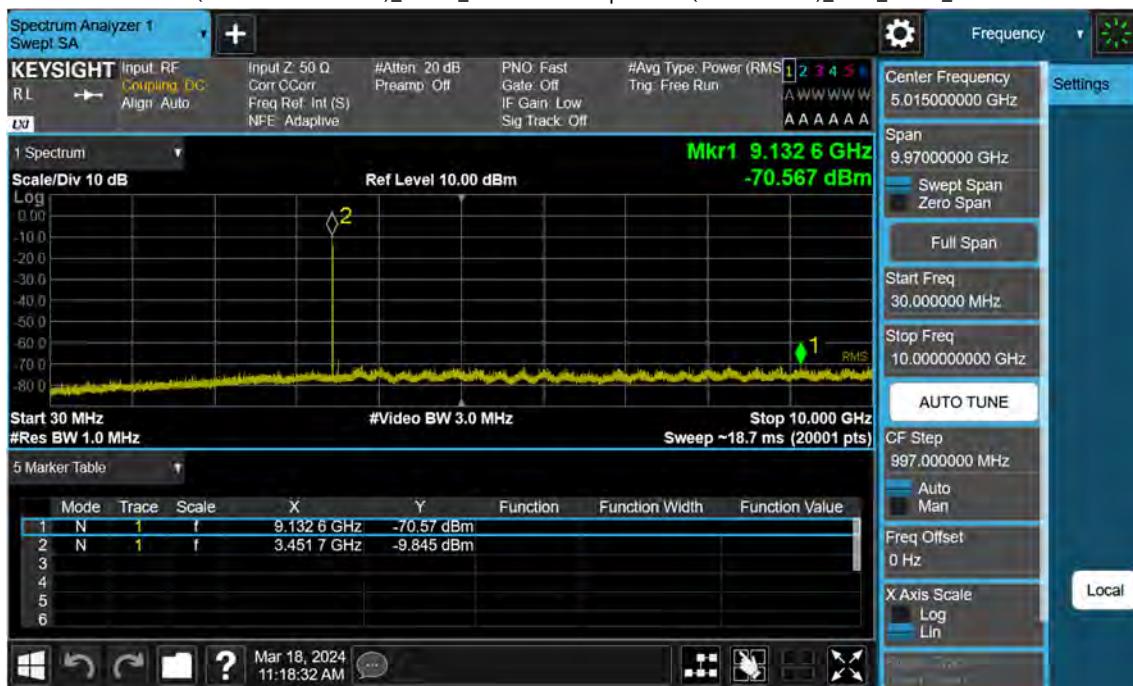
n77(3450~3550 MHz)_60 M_Conducted Spurious(30 M-10 G)_Mid_BPSK_FullRB



n77(3450~3550 MHz)_60 M_Conducted Spurious(30 M-10 G)_High_BPSK_1RB



n77(3450~3550 MHz)_70 M_Conducted Spurious(30 M-10 G)_Low_BPSK_1RB



n77(3450~3550 MHz)_70 M_Conducted Spurious(30 M-10 G)_Mid_BPSK_FullRB



n77(3450~3550 MHz)_70 M_Conducted Spurious(30 M-10 G)_High_BPSK_1RB



n77(3450~3550 MHz)_80 M_Conducted Spurious(30 M-10 G)_Low_BPSK_1RB

