TEST REPORT

FCC Sub6 n41 Test for SM-A566E/DS
Certification

APPLICANT
SAMSUNG Electronics Co., Ltd.

REPORT NO.
HCT-RF-2412-FC072

DATE OF ISSUE
December 23, 2024

Tested by
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TEST REPORT

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Additional Model
SM-A566E

Applicant	**SAMSUNG Electronics Co., Ltd.** 129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16677, Rep. of Korea
Product Name Model Name	Mobile Phone SM-A566E/DS
Date of Test	November 08, 2024 ~ December 20, 2024
FCC ID	A3LSMA566E
Location of Test	■ Permanent Testing Lab ☐ On Site Testing (Address: 74, Seoicheon-ro 578beon-gil, Majang-myeon, Icheon-si, Gyeonggi-do, Republic of Korea)
FCC Classification:	PCS Licensed Transmitter Held to Ear (PCE)
Test Standard Used	FCC Rule Part: § 27
Test Results	PASS

REVISION HISTORY

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

Revision No.	Date of Issue	Description
0	December 23, 2024	Initial Release

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).
The laboratory is not accredited for the test results marked *. Information provided by the applicANT Bs marked **. Test results provided by external providers are marked ***.
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).

CONTENTS

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:	A3LSMA566E
Application Type:	Certification
FCC Classification:	PCS Licensed Transmitter Held to Ear (PCE)
FCC Rule Part(s):	§ 27
EUT Type:	Mobile phone
Model(s):	SM-A566E/DS
Additional Model(s)	SM-A566E
SCS(kHz):	30
Bandwidth(MHz):	Sub6 n41 : 10, 15, 20, 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:	2501.010 – 2685.000 : 10 MHz(Sub6 n41) 2503.500 – 2682.480 : 15 MHz(Sub6 n41) 2506.020 – 2679.990 : 20 MHz(Sub6 n41) 2511.000 – 2674.980 : 30 MHz(Sub6 n41) 2516.010 – 2670.000 : 40 MHz(Sub6 n41) 2521.020 – 2664.990 : 50 MHz(Sub6 n41) 2526.000 – 2659.980 : 60 MHz(Sub6 n41) 2531.010 – 2655.000 : 70 MHz(Sub6 n41) 2536.020 – 2649.990 : 80 MHz(Sub6 n41) 2541.000 – 2644.980 : 90 MHz(Sub6 n41) 2546.010 – 2640.000 : 100 MHz(Sub6 n41)
Date(s) of Tests:	November 08, 2024 ~ December 20, 2024
Serial number:	Radiated : R3CXB08Q3NH Conducted : R3CXB08Q38B
Antenna Information	Please refer to the Antenna Approval Specification document.

1.1. MAXIMUM OUTPUT POWER

Mode (MHz)	Tx Frequency (MHz)	Emission Designator	Modulation	EIRP	
				Max. Power (W)	Max. Power (dBm)
Sub6 n41 (10)	2501.010 – 2685.000	8M68G7D	PI/2 BPSK	0.098	19.90
		8M72G7D	QPSK	0.097	19.89
		8M67W7D	16QAM	0.086	19.37
		8M75W7D	64QAM	0.064	18.04
		8M63W7D	256QAM	0.039	15.93
Sub6 n41 (15)	2503.500 – 2682.480	13M0G7D	PI/2 BPSK	0.102	20.07
		13M0G7D	QPSK	0.101	20.06
		13M0W7D	16QAM	0.092	19.64
		13M0W7D	64QAM	0.065	18.12
		13M1W7D	256QAM	0.042	16.24
Sub6 n41 (20)	2506.020 – 2679.990	18M0G7D	PI/2 BPSK	0.100	20.02
		18M0G7D	QPSK	0.099	19.97
		18M0W7D	16QAM	0.091	19.57
		17M9W7D	64QAM	0.066	18.18
		17M9W7D	256QAM	0.040	16.06
Sub6 n41 (30)	2511.000 – 2674.980	27M1G7D	PI/2 BPSK	0.107	20.28
		27M0G7D	QPSK	0.105	20.23
		26M9W7D	16QAM	0.096	19.81
		27M0W7D	64QAM	0.069	18.37
		26M9W7D	256QAM	0.043	16.33
Sub6 n41 (40)	2516.010 – 2670.000	36M0G7D	PI/2 BPSK	0.112	20.51
		36M0G7D	QPSK	0.112	20.48
		35M9W7D	16QAM	0.100	20.01
		36M0W7D	64QAM	0.071	18.51
		35M9W7D	256QAM	0.045	16.58
Sub6 n41 (50)	2521.020 – 2664.990	45M9G7D	PI/2 BPSK	0.104	20.17
		46M0G7D	QPSK	0.100	20.02
		45M9W7D	16QAM	0.094	19.73
		46M0W7D	64QAM	0.069	18.40
		45M8W7D	256QAM	0.041	16.18
Sub6 n41 (60)	2526.000 – 2659.980	58M2G7D	PI/2 BPSK	0.102	20.07
		58M2G7D	QPSK	0.099	19.95
		58M1W7D	16QAM	0.092	19.65
		58M2W7D	64QAM	0.065	18.13
		58M1W7D	256QAM	0.041	16.09

Sub6 n41 (70)	2531.010 – 2655.000	65M0G7D	PI/2 BPSK	0.097	19.85
		64M9G7D	QPSK	0.096	19.82
		64M6W7D	16QAM	0.085	19.31
		64M7W7D	64QAM	0.063	17.97
		64M4W7D	256QAM	0.039	15.94
Sub6 n41 (80)	2536.020 – 2649.990	77M6G7D	PI/2 BPSK	0.101	20.04
		77M4G7D	QPSK	0.100	20.00
		77M8W7D	16QAM	0.092	19.64
		77M6W7D	64QAM	0.065	18.13
		77M7W7D	256QAM	0.041	16.12
Sub6 n41 (90)	2541.000 – 2644.980	87M4G7D	PI/2 BPSK	0.111	20.45
		87M3G7D	QPSK	0.110	20.43
		87M3W7D	16QAM	0.103	20.11
		87M0W7D	64QAM	0.070	18.48
		87M1W7D	256QAM	0.045	16.57
Sub6 n41 (100)	2546.010 – 2640.000	97M1G7D	PI/2 BPSK	0.111	20.44
		96M9G7D	QPSK	0.109	20.39
		96M9W7D	16QAM	0.104	20.16
		97M1W7D	64QAM	0.072	18.57
		97M0W7D	256QAM	0.046	16.63

2. INTRODUCTION

2.1. DESCRIPTION OF EUT

The EUT was a Mobile Phone with GSM/GPRS/EGPRS/UMTS and LTE, Sub 6
It also supports IEEE 802.11 a/b/g/n/ac/ax (20/40/80 MHz), Bluetooth, BT LE, NFC

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, Republic 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
Radiated Power	- ANSI C63.26-2015 – Section 5.2.4.4 - KDB 971168 D01 v03r01 – Section 5.8
Radiated Spurious and Harmonic Emissions	- ANSI C63.26-2015 – Section 5.5.3 - KDB 971168 D01 v03r01 – Section 5.8

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.

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 ≥ 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;

$$P_{d\ (dBm)} = Pg_{(dBm)} - \text{cable loss}_{(dB)} + \text{antenna gain}_{(dB)}$$

   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.

Test Settings

1. RBW = 100 kHz for emissions below 1 GHz and 1 MHz for emissions above 1 GHz
2. VBW ≥ 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 10^{th} 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;

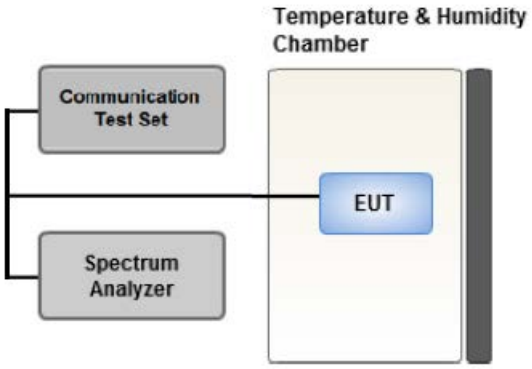
$$\text{Result}_{(dBm)} = \text{Pg}_{(dBm)} - \text{cable loss}_{(dB)} + \text{antenna gain}_{(dBi)}$$

   Where: P_g 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.

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

3.4 PEAK- TO- AVERAGE RATIO



Test setup

① CCDF Procedure for PAPR

Test Settings

1. Set resolution/measurement bandwidth ≥ 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:

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

Test Settings(Peak Power)

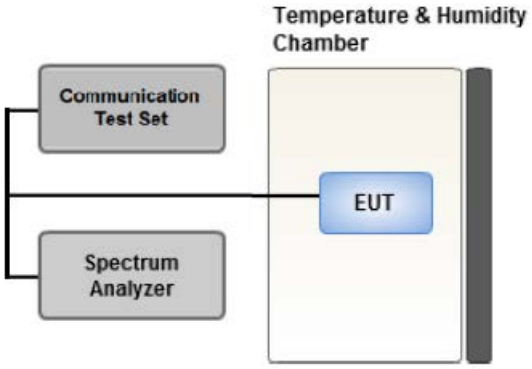
The measurement instrument must have a RBW that is greater than or equal to the OBW of the signal to be measured and a VBW ≥ 3 × RBW.

1. Set the RBW ≥ OBW.
2. Set VBW ≥ 3 × RBW.
3. Set span ≥ 2 × OBW.
4. Sweep time ≥ 10 × (number of points in sweep) × (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 × to 3 × the OBW.
2. Set RBW ≥ OBW.
3. Set VBW ≥ 3 × RBW.
4. Set number of measurement points in sweep ≥ 2 × span / RBW.
5. Sweep time:
   Set ≥ [10 × (number of points in sweep) × (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/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 dB if the duty cycle is a constant 25 %.

3.5 OCCUPIED BANDWIDTH.



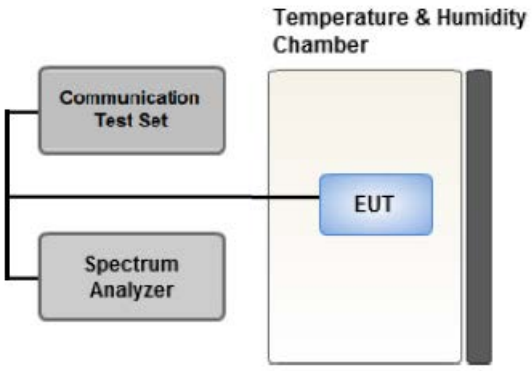
Test setup

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 ≥ 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

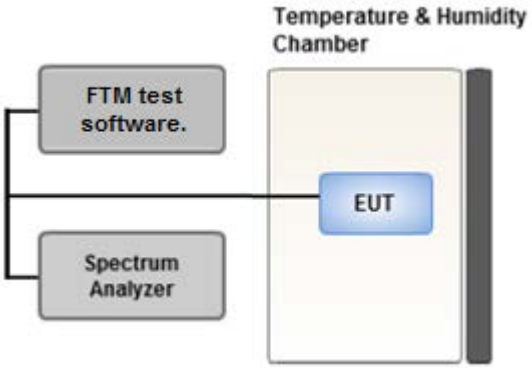
Test Overview

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 ≥ 3 MHz
3. Detector = Peak
4. Trace Mode = Max Hold
5. Sweep time = auto
6. Number of points in sweep ≥ 2 x Span / RBW

3.7 CHANNEL 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 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

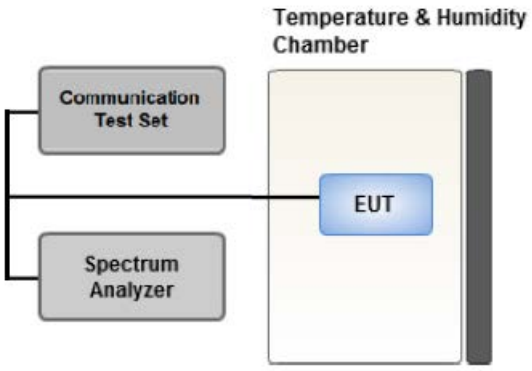
1. Start and stop frequency were set such that the band edge would be placed in the center of the plot
2. Span was set large enough so as to capture all out of band emissions near the band edge
3. Within 1 MHz of the channel edge the RBW should be 2 % of EBW, then 1 MHz after that.
4. VBW > 3 x RBW
5. Detector = RMS
6. Number of sweep points ≥ 2 x Span/RBW
7. Trace mode = trace average
8. Sweep time = auto couple
9. The trace was allowed to stabilize

Test Notes

1. The attenuation factor shall be not less than 40 + 10 log (P) dB on all frequencies between the channel edge and 5 megahertz from the channel edge,
2. 43 + 10 log (P) dB on all frequencies between 5 megahertz and X megahertz from the channel edge.
3. 55 + 10 log (P) dB on all frequencies more than X megahertz from the channel edge.
4. The attenuation factor shall not be less that 43 + 10 log (P) dB on all frequencies between 2490.5 MHz and 2496 MHz.
5. 55 + 10 log (P) dB at or below 2490.5 MHz.
6. X is the greater of 6MHz or the actual emission bandwidth
7. The band edge measurement used the power splitter via EUT RF power connector between simulation base station and spectrum analyzer

Where Margin < 1 dB the emission level is either corrected by 10 log(1 MHz/ 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.
- All modes of operation were investigated and the worst case configuration results are reported.
  Mode: NSA, SA, SRS
  Worst case: SA
  Mode : Stand alone, Stand alone + External accessories (Earphone, AC adapter, etc)
  Worst case : Stand alone
- All simultaneous transmission scenarios of operation were investigated, and the test results showed no additional significant emissions relative to the least restrictive limit were observed.
  Therefore, only the worst case(stand-alone) results were reported.
- 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.
- SM-A566E/DS & additional models were tested and the worst case results are reported.
  (Worst case : SM-A566E/DS)

[Worst case]

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

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)
- All modes of operation were investigated and the worst case configuration results are reported.
  Mode: NSA, SA, SRS
  Worst case: SA
- All RB sizes, offsets of operation were investigated and the worst case configuration results are reported.
  Please refer to the table below.
- SM-A566E/DS & additional models were tested and the worst case results are reported.
  (Worst case : SM-A566E/DS)

[Worst case]

Test Description	Modulation	Bandwidth (MHz)	Frequency	RB size	RB offset
Occupied Bandwidth, Peak-To-Average Ratio	PI/2 BPSK, QPSK, 16QAM, 64QAM, 256QAM	10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100	Mid	Full RB	0
Channel Edge	PI/2 BPSK	10	Low	1	0
			High	1	23
		15	Low	1	0
			High	1	37
		20	Low	1	0
			High	1	50
		30	Low	1	0
			High	1	77
		40	Low	1	0
			High	1	105
		50	Low	1	0
			High	1	132
		60	Low	1	0
			High	1	161
		70	Low	1	0
			High	1	188
		80	Low	1	0
			High	1	216
		90	Low	1	0
			High	1	244
		100	Low	1	0
			High	1	272
		10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100	Low, Mid High	Full RB	0
Spurious and Harmonic Emissions at Antenna Terminal	PI/2 BPSK	10, 15, 20, 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	09/20/2026	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	05/14/2025	Annual
RF Switching System	FBSR-06B (3G HPF + LNA)	T&M SYSTEM	F3L2	05/14/2025	Annual
RF Switching System	FBSR-06B (6G HPF + LNA)	T&M SYSTEM	F3L3	05/14/2025	Annual
RF Switching System	FBSR-06B (LNA)	T&M SYSTEM	F3L4	05/14/2025	Annual
Power Amplifier	CBL18265035	CERNEX	22966	11/07/2025	Annual
Power Amplifier	CBL26405040	CERNEX	25956	02/26/2025	Annual
DC Power Supply	E3632A	Hewlett Packard	MY40004427	08/22/2025	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	08/05/2025	Annual
Wideband Radio Communication Tester	MT8821C	Anritsu Corp.	6262287701	05/16/2025	Annual
Wideband Radio Communication Tester	MT8000A	Anritsu Corp.	6262302511	05/14/2025	Annual
Signal Analyzer(5 Hz~40.0 GHz)	N9030B	KEYSIGHT	MY55480167	05/17/2025	Annual
4-Way Divider	ZC4PD-K1844+	Mini-Circuits	942907	09/10/2025	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 (±kHz)
Occupied Bandwidth	95 (Confidence level about 95 %, k=2)
Frequency stability	28 (Confidence level about 95 %, k=2)

Parameter	Expanded Uncertainty (±dB)
Block Edge	0.70 (Confidence level about 95 %, k=2)
Conducted Spurious Emissions	1.18 (Confidence level about 95 %, k=2)
Peak- to- Average Ratio	0.68 (Confidence level about 95 %, k=2)
Radiated Power	4.74 (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(m)(4)	■ < 40 + 10log10 (P[Watts]) at Channel edges ■ < 43 + 10log10 (P[Watts]) between 5 and X MHz from Channel edges ■ < 55 + 10log10 (P[Watts]) beyond X MHz beyond from Channel edges ■ < 43 + 10 log (P) dB on all frequencies between 2490.5 MHz and 2496 MHz	PASS
Conducted Output Power	§ 2.1046	N/A	See Note1
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(h)(2)	< 2 Watts max. EIRP	PASS
Radiated Spurious and Harmonic Emissions	§ 2.1053, § 27.53(m)(4)	< 55 + 10log10 (P[Watts])	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

ERP = Substitute LEVEL(dBm) + Ant. Gain – 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

EIRP = Substitute LEVEL(dBm) + Ant. Gain – 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

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
2501.010	Sub6 n41 / 10 MHz [30 kHz]	PI/2 BPSK	-25.01	11.79	10.61	2.50	V	< 2.00	0.098	19.90	1	12
		QPSK	-25.02	11.78	10.61	2.50	V		0.098	19.89		
		16-QAM	-25.58	11.22	10.61	2.50	V		0.086	19.33		
		64-QAM	-26.87	9.93	10.61	2.50	V		0.064	18.04		
		256-QAM	-28.98	7.82	10.61	2.50	V		0.039	15.93		
2592.990		PI/2 BPSK	-25.51	11.20	11.00	2.55	V		0.092	19.65	1	1
		QPSK	-25.53	11.18	11.00	2.55	V		0.092	19.63		
		16-QAM	-25.87	10.84	11.00	2.55	V		0.085	19.29		
		64-QAM	-27.54	9.17	11.00	2.55	V		0.058	17.62		
		256-QAM	-29.56	7.15	11.00	2.55	V		0.036	15.60		
2685.000		PI/2 BPSK	-25.93	11.63	10.82	2.61	V		0.096	19.84	1	12
		QPSK	-25.95	11.61	10.82	2.61	V		0.096	19.82		
		16-QAM	-26.40	11.16	10.82	2.61	V		0.087	19.37		
		64-QAM	-27.85	9.71	10.82	2.61	V		0.062	17.92		
		256-QAM	-29.86	7.70	10.82	2.61	V		0.039	15.91		

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
2503.500	Sub6 n41 / 15 MHz [30 kHz]	PI/2 BPSK	-25.16	11.70	10.58	2.51	V	< 2.00	0.095	19.77	1	1
		QPSK	-25.17	11.69	10.58	2.51	V		0.095	19.76		
		16-QAM	-25.63	11.23	10.58	2.51	V		0.085	19.30		
		64-QAM	-27.19	9.67	10.58	2.51	V		0.059	17.74		
		256-QAM	-29.18	7.68	10.58	2.51	V		0.038	15.75		
2592.990		PI/2 BPSK	-25.51	11.20	11.00	2.55	V		0.092	19.65	1	1
		QPSK	-25.54	11.17	11.00	2.55	V		0.092	19.62		
		16-QAM	-25.93	10.78	11.00	2.55	V		0.084	19.23		
		64-QAM	-27.35	9.36	11.00	2.55	V		0.060	17.81		
		256-QAM	-29.47	7.24	11.00	2.55	V		0.037	15.69		
2682.480		PI/2 BPSK	-25.83	11.84	10.84	2.61	V		0.102	20.07	1	1
		QPSK	-25.84	11.83	10.84	2.61	V		0.101	20.06		
		16-QAM	-26.26	11.41	10.84	2.61	V		0.092	19.64		
		64-QAM	-27.78	9.89	10.84	2.61	V		0.065	18.12		
		256-QAM	-29.66	8.01	10.84	2.61	V		0.042	16.24		

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
2506.020	Sub6 n41 / 20 MHz [30 kHz]	PI/2 BPSK	-24.91	11.95	10.58	2.51	V	< 2.00	0.101	20.02	1	25
		QPSK	-24.98	11.88	10.58	2.51	V		0.099	19.95		
		16-QAM	-25.49	11.37	10.58	2.51	V		0.088	19.44		
		64-QAM	-26.88	9.98	10.58	2.51	V		0.064	18.05		
		256-QAM	-29.00	7.86	10.58	2.51	V		0.039	15.93		
2592.990		PI/2 BPSK	-25.64	11.07	11.00	2.55	V		0.090	19.52	1	25
		QPSK	-25.74	10.97	11.00	2.55	V		0.088	19.42		
		16-QAM	-26.16	10.55	11.00	2.55	V		0.079	19.00		
		64-QAM	-27.51	9.20	11.00	2.55	V		0.058	17.65		
		256-QAM	-29.63	7.08	11.00	2.55	V		0.036	15.53		
2679.990		PI/2 BPSK	-25.91	11.76	10.84	2.61	V		0.100	19.99	1	1
		QPSK	-25.93	11.74	10.84	2.61	V		0.099	19.97		
		16-QAM	-26.33	11.34	10.84	2.61	V		0.091	19.57		
		64-QAM	-27.72	9.95	10.84	2.61	V		0.066	18.18		
		256-QAM	-29.84	7.83	10.84	2.61	V		0.040	16.06		

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
2511.000	Sub6 n41 / 30 MHz [30 kHz]	PI/2 BPSK	-24.68	12.24	10.55	2.51	V	< 2.00	0.107	20.28	1	76
		QPSK	-24.73	12.19	10.55	2.51	V		0.105	20.23		
		16-QAM	-25.15	11.77	10.55	2.51	V		0.096	19.81		
		64-QAM	-26.59	10.33	10.55	2.51	V		0.069	18.37		
		256-QAM	-28.63	8.29	10.55	2.51	V		0.043	16.33		
2592.990		PI/2 BPSK	-25.46	11.25	11.00	2.55	V		0.093	19.70	1	1
		QPSK	-25.47	11.24	11.00	2.55	V		0.093	19.69		
		16-QAM	-25.89	10.82	11.00	2.55	V		0.085	19.27		
		64-QAM	-27.41	9.30	11.00	2.55	V		0.060	17.75		
		256-QAM	-29.41	7.30	11.00	2.55	V		0.038	15.75		
2674.980		PI/2 BPSK	-25.76	11.53	10.85	2.62	V		0.095	19.76	1	1
		QPSK	-25.78	11.51	10.85	2.62	V		0.094	19.74		
		16-QAM	-26.08	11.21	10.85	2.62	V		0.088	19.44		
		64-QAM	-27.65	9.64	10.85	2.62	V		0.061	17.87		
		256-QAM	-29.68	7.61	10.85	2.62	V		0.038	15.84		

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
2516.010	Sub6 n41 / 40 MHz [30 kHz]	PI/2 BPSK	-24.41	12.52	10.52	2.53	V	< 2.00	0.113	20.51	1	104
		QPSK	-24.44	12.49	10.52	2.53	V		0.112	20.48		
		16-QAM	-24.91	12.02	10.52	2.53	V		0.100	20.01		
		64-QAM	-26.41	10.52	10.52	2.53	V		0.071	18.51		
		256-QAM	-28.34	8.59	10.52	2.53	V		0.046	16.58		
2592.990		-20.43	-25.58	11.13	11.00	2.55	V		0.091	19.58	1	53
		-20.50	-25.66	11.05	11.00	2.55	V		0.089	19.50		
		-21.70	-26.07	10.64	11.00	2.55	V		0.081	19.09		
		-22.96	-27.44	9.27	11.00	2.55	V		0.059	17.72		
		-25.24	-29.55	7.16	11.00	2.55	V		0.036	15.61		
2670.000		PI/2 BPSK	-25.59	11.31	10.87	2.62	V		0.090	19.56	1	1
		QPSK	-25.61	11.29	10.87	2.62	V		0.090	19.54		
		16-QAM	-26.01	10.89	10.87	2.62	V		0.082	19.14		
		64-QAM	-27.41	9.49	10.87	2.62	V		0.059	17.74		
		256-QAM	-29.47	7.43	10.87	2.62	V		0.037	15.68		

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
2521.020	Sub6 n41 / 50 MHz [30 kHz]	PI/2 BPSK	-24.71	12.22	10.49	2.54	V	< 2.00	0.104	20.17	1	66
		QPSK	-24.86	12.07	10.49	2.54	V		0.101	20.02		
		16-QAM	-25.15	11.78	10.49	2.54	V		0.094	19.73		
		64-QAM	-26.48	10.45	10.49	2.54	V		0.069	18.40		
		256-QAM	-28.70	8.23	10.49	2.54	V		0.042	16.18		
2592.990		-20.43	-25.61	11.10	11.00	2.55	V		0.090	19.55	1	66
		-20.50	-25.63	11.08	11.00	2.55	V		0.090	19.53		
		-21.70	-26.06	10.65	11.00	2.55	V		0.081	19.10		
		-22.96	-27.55	9.16	11.00	2.55	V		0.058	17.61		
		-25.24	-29.63	7.08	11.00	2.55	V		0.036	15.53		
2664.990		PI/2 BPSK	-25.86	11.09	10.88	2.64	V		0.086	19.33	1	1
		QPSK	-25.87	11.08	10.88	2.64	V		0.086	19.32		
		16-QAM	-26.26	10.69	10.88	2.64	V		0.078	18.93		
		64-QAM	-27.66	9.29	10.88	2.64	V		0.057	17.53		
		256-QAM	-29.81	7.14	10.88	2.64	V		0.035	15.38		

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
2526.000	Sub6 41/ 60 MHz [30 kHz]	PI/2 BPSK	-24.54	12.09	10.52	2.54	V	< 2.00	0.102	20.07	1	81
		QPSK	-24.66	11.97	10.52	2.54	V		0.099	19.95		
		16-QAM	-24.96	11.67	10.52	2.54	V		0.092	19.65		
		64-QAM	-26.48	10.15	10.52	2.54	V		0.065	18.13		
		256-QAM	-28.61	8.02	10.52	2.54	V		0.040	16.00		
2592.990		PI/2 BPSK	-25.27	11.44	11.00	2.55	V		0.098	19.89	1	1
		QPSK	-25.28	11.43	11.00	2.55	V		0.097	19.88		
		16-QAM	-25.62	11.09	11.00	2.55	V		0.090	19.54		
		64-QAM	-27.07	9.64	11.00	2.55	V		0.064	18.09		
		256-QAM	-29.07	7.64	11.00	2.55	V		0.041	16.09		
2659.980		PI/2 BPSK	-25.63	11.38	10.90	2.67	V		0.091	19.61	1	81
		QPSK	-25.69	11.32	10.90	2.67	V		0.090	19.55		
		16-QAM	-26.05	10.96	10.90	2.67	V		0.083	19.19		
		64-QAM	-27.50	9.51	10.90	2.67	V		0.059	17.74		
		256-QAM	-29.51	7.50	10.90	2.67	V		0.037	15.73		

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
2531.010	Sub6 41/ 70 MHz [30 kHz]	PI/2 BPSK	-24.66	11.67	10.56	2.54	V	< 2.00	0.093	19.69	1	94
		QPSK	-24.68	11.65	10.56	2.54	V		0.093	19.67		
		16-QAM	-25.04	11.29	10.56	2.54	V		0.085	19.31		
		64-QAM	-26.67	9.66	10.56	2.54	V		0.059	17.68		
		256-QAM	-28.69	7.64	10.56	2.54	V		0.037	15.66		
2592.990		PI/2 BPSK	-25.31	11.40	11.00	2.55	V		0.097	19.85	1	1
		QPSK	-25.34	11.37	11.00	2.55	V		0.096	19.82		
		16-QAM	-25.90	10.81	11.00	2.55	V		0.084	19.26		
		64-QAM	-27.19	9.52	11.00	2.55	V		0.063	17.97		
		256-QAM	-29.22	7.49	11.00	2.55	V		0.039	15.94		
2655.000		PI/2 BPSK	-25.74	11.17	10.91	2.68	V		0.087	19.40	1	94
		QPSK	-25.82	11.09	10.91	2.68	V		0.086	19.32		
		16-QAM	-26.11	10.80	10.91	2.68	V		0.080	19.03		
		64-QAM	-27.59	9.32	10.91	2.68	V		0.057	17.55		
		256-QAM	-29.78	7.13	10.91	2.68	V		0.034	15.36		

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
2536.020	Sub6 41/ 80 MHz [30 kHz]	PI/2 BPSK	-24.47	11.99	10.59	2.54	V	< 2.00	0.101	20.04	1	108
		QPSK	-24.51	11.95	10.59	2.54	V		0.100	20.00		
		16-QAM	-24.87	11.59	10.59	2.54	V		0.092	19.64		
		64-QAM	-26.38	10.08	10.59	2.54	V		0.065	18.13		
		256-QAM	-28.39	8.07	10.59	2.54	V		0.041	16.12		
2592.990		PI/2 BPSK	-25.21	11.50	11.00	2.55	V		0.099	19.95	1	1
		QPSK	-25.24	11.47	11.00	2.55	V		0.098	19.92		
		16-QAM	-25.64	11.07	11.00	2.55	V		0.090	19.52		
		64-QAM	-27.25	9.46	11.00	2.55	V		0.062	17.91		
		256-QAM	-29.17	7.54	11.00	2.55	V		0.040	15.99		
2649.990		PI/2 BPSK	-25.76	11.03	10.93	2.69	V		0.085	19.27	1	108
		QPSK	-25.78	11.01	10.93	2.69	V		0.084	19.25		
		16-QAM	-25.97	10.82	10.93	2.69	V		0.081	19.06		
		64-QAM	-27.66	9.13	10.93	2.69	V		0.055	17.37		
		256-QAM	-29.61	7.18	10.93	2.69	V		0.035	15.42		

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
2541.000	Sub6 41/ 90 MHz [30 kHz]	PI/2 BPSK	-24.35	12.23	10.62	2.53	V	< 2.00	0.108	20.32	1	122
		QPSK	-24.43	12.15	10.62	2.53	V		0.106	20.24		
		16-QAM	-24.81	11.77	10.62	2.53	V		0.097	19.86		
		64-QAM	-26.23	10.35	10.62	2.53	V		0.070	18.44		
		256-QAM	-28.36	8.22	10.62	2.53	V		0.043	16.31		
2592.990		PI/2 BPSK	-24.71	12.00	11.00	2.55	V		0.111	20.45	1	1
		QPSK	-24.73	11.98	11.00	2.55	V		0.110	20.43		
		16-QAM	-25.05	11.66	11.00	2.55	V		0.103	20.11		
		64-QAM	-26.68	10.03	11.00	2.55	V		0.071	18.48		
		256-QAM	-28.59	8.12	11.00	2.55	V		0.045	16.57		
2644.980		PI/2 BPSK	-25.58	11.53	10.95	2.68	V		0.096	19.80	1	122
		QPSK	-25.60	11.51	10.95	2.68	V		0.095	19.78		
		16-QAM	-25.89	11.22	10.95	2.68	V		0.089	19.49		
		64-QAM	-27.43	9.68	10.95	2.68	V		0.062	17.95		
		256-QAM	-29.51	7.60	10.95	2.68	V		0.039	15.87		

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
2546.010	Sub6 41/ 100 MHz [30 kHz]	PI/2 BPSK	-24.81	11.74	10.66	2.53	V	< 2.00	0.097	19.87	1	136
		QPSK	-24.90	11.65	10.66	2.53	V		0.095	19.78		
		16-QAM	-25.23	11.32	10.66	2.53	V		0.088	19.45		
		64-QAM	-26.78	9.77	10.66	2.53	V		0.062	17.90		
		256-QAM	-28.70	7.85	10.66	2.53	V		0.040	15.98		
2592.990		PI/2 BPSK	-24.72	11.99	11.00	2.55	V		0.111	20.44	1	1
		QPSK	-24.77	11.94	11.00	2.55	V		0.109	20.39		
		16-QAM	-25.00	11.71	11.00	2.55	V		0.104	20.16		
		64-QAM	-26.59	10.12	11.00	2.55	V		0.072	18.57		
		256-QAM	-28.53	8.18	11.00	2.55	V		0.046	16.63		
2640.000		PI/2 BPSK	-25.68	11.76	10.96	2.68	V		0.101	20.04	1	1
		QPSK	-25.73	11.71	10.96	2.68	V		0.100	19.99		
		16-QAM	-25.90	11.54	10.96	2.68	V		0.096	19.82		
		64-QAM	-27.61	9.83	10.96	2.68	V		0.065	18.11		
		256-QAM	-29.59	7.85	10.96	2.68	V		0.041	16.13		

8.2 RADIATED SPURIOUS EMISSIONS

▣ NR Band: n41

▣ Bandwidth: 10 MHz

▣ Modulation: PI/2 BPSK

▣ Distance: 1 meter

▣ 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
500202 (2501.010)	5 002.02	-55.03	11.22	-56.74	3.71	H	-49.23	-25.00	1	12
	7 503.03	-57.61	11.54	-50.18	4.60	H	-43.24	-25.00		
	10 004.04	-59.08	11.47	-49.68	5.47	V	-43.68	-25.00		
518598 (2592.990)	5 185.98	-51.99	11.61	-53.16	3.80	H	-45.35	-25.00	1	1
	7 778.97	-60.72	11.26	-53.65	4.70	H	-47.09	-25.00		
	10 371.96	-60.86	11.68	-49.77	5.55	H	-43.64	-25.00		
537000 (2685.000)	5 370.00	-60.03	11.96	-61.66	3.92	V	-53.62	-25.00	1	12
	8 055.00	-62.10	11.24	-54.82	4.81	V	-48.39	-25.00		
	10 740.00	-64.27	11.55	-52.25	5.64	V	-46.34	-25.00		

▣ NR Band: n41

▣ Bandwidth: 15 MHz

▣ Modulation: PI/2 BPSK

▣ Distance: 1 meter

▣ 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
500700 (2503.500)	5 007.00	-55.88	11.20	-57.31	3.71	H	-49.82	-25.00	1	1
	7 510.50	-57.50	11.55	-49.96	4.60	H	-43.01	-25.00		
	10 014.00	-59.05	11.46	-49.66	5.47	H	-43.67	-25.00		
518598 (2592.990)	5 185.98	-52.62	11.61	-53.79	3.80	H	-45.98	-25.00	1	1
	7 778.97	-60.60	11.26	-53.53	4.70	H	-46.97	-25.00		
	10 371.96	-64.66	11.68	-53.57	5.55	H	-47.44	-25.00		
536496 (2682.480)	5 364.96	-57.02	11.95	-58.54	3.91	H	-50.50	-25.00	1	1
	8 047.44	-62.46	11.23	-55.24	4.81	H	-48.82	-25.00		
	10 729.92	-61.09	11.56	-49.02	5.65	H	-43.11	-25.00		

▣ NR Band: n41

▣ Bandwidth: 20 MHz

▣ Modulation: PI/2 BPSK

▣ Distance: 1 meter

▣ 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
501204 (2506.020)	5 012.04	-54.72	11.18	-55.86	3.72	H	-48.40	-25.00	1	25
	7 518.06	-58.59	11.56	-50.95	4.61	H	-44.00	-25.00		
	10 024.08	-58.23	11.46	-48.88	5.47	H	-42.89	-25.00		
	12 530.10	-59.79	12.59	-50.47	6.10	H	-43.98	-25.00		
518598 (2592.990)	5 185.98	-51.65	11.61	-52.82	3.80	H	-45.01	-25.00	1	25
	7 778.97	-62.68	11.26	-55.61	4.70	H	-49.05	-25.00		
	10 371.96	-61.56	11.68	-50.47	5.55	H	-44.34	-25.00		
535998 (2679.990)	5 359.98	-56.21	11.95	-57.64	3.90	H	-49.59	-25.00	1	1
	8 039.97	-57.77	11.22	-50.46	4.80	H	-44.04	-25.00		
	10 719.96	-64.69	11.56	-53.04	5.64	H	-47.12	-25.00		

▣ NR Band: n41

▣ Bandwidth: 30 MHz

▣ Modulation: PI/2 BPSK

▣ Distance: 1 meter

▣ 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
502200 (2511.000)	5 022.00	-54.10	11.17	-54.80	3.69	H	-47.32	-25.00	1	76
	7 533.00	-60.34	11.57	-52.74	4.61	H	-45.78	-25.00		
	10 044.00	-62.45	11.44	-53.13	5.48	H	-47.17	-25.00		
518598 (2592.990)	5 185.98	-51.49	11.61	-52.66	3.80	H	-44.85	-25.00	1	1
	7 778.97	-58.44	11.26	-51.37	4.70	H	-44.81	-25.00		
	10 371.96	-63.28	11.68	-52.19	5.55	H	-46.06	-25.00		
534996 (2674.980)	5 349.96	-54.51	11.94	-56.20	3.85	H	-48.11	-25.00	1	1
	8 024.94	-59.20	11.20	-51.95	4.79	H	-45.54	-25.00		
	10 699.92	-65.69	11.57	-53.69	5.67	H	-47.79	-25.00		

▣ NR Band: n41

▣ Bandwidth: 40 MHz

▣ Modulation: PI/2 BPSK

▣ Distance: 1 meter

▣ 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
503202 (2516.010)	5 032.02	-61.35	11.19	-62.19	3.67	H	-54.67	-25.00	1	104
	7 548.03	-57.23	11.59	-49.86	4.63	H	-42.90	-25.00		
	10 064.04	-63.71	11.42	-54.49	5.47	H	-48.54	-25.00		
518598 (2592.990)	5 185.98	-51.83	11.61	-53.00	3.80	H	-45.19	-25.00	1	53
	7 778.97	-60.71	11.26	-53.64	4.70	H	-47.08	-25.00		
	10 371.96	-64.22	11.68	-53.13	5.55	H	-47.00	-25.00		
534000 (2670.000)	5 340.00	-61.76	11.93	-63.74	3.80	H	-55.61	-25.00	1	1
	8 010.00	-59.02	11.17	-51.70	4.77	H	-45.30	-25.00		
	10 680.00	-63.90	11.57	-51.32	5.71	H	-45.46	-25.00		

▣ NR Band: n41

▣ Bandwidth: 50 MHz

▣ Modulation: PI/2 BPSK

▣ Distance: 1 meter

▣ 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
504204 (2521.020)	5 042.04	-53.77	11.20	-54.81	3.68	H	-47.29	-25.00	1	66
	7 563.06	-59.81	11.60	-52.28	4.64	H	-45.32	-25.00		
	10 084.08	-60.69	11.40	-51.46	5.46	H	-45.52	-25.00		
518598 (2592.990)	5 185.98	-52.09	11.61	-53.26	3.80	H	-45.45	-25.00	1	66
	7 778.97	-60.44	11.26	-53.37	4.70	H	-46.81	-25.00		
	10 371.96	-63.84	11.68	-52.75	5.55	H	-46.62	-25.00		
532998 (2664.990)	5 329.98	-53.20	11.92	-54.93	3.77	H	-46.78	-25.00	1	1
	7 994.97	-62.45	11.13	-54.90	4.77	H	-48.54	-25.00		
	10 659.96	-64.18	11.58	-51.78	5.67	H	-45.87	-25.00		

▣ NR Band: n41

▣ Bandwidth: 60 MHz

▣ Modulation: PI/2 BPSK

▣ Distance: 1 meter

▣ 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
505200 (2526.000)	5 052.00	-54.74	11.22	-56.21	3.73	H	-48.72	-25.00	1	81
	7 578.00	-60.18	11.61	-52.52	4.65	H	-45.56	-25.00		
	10 104.00	-60.52	11.39	-50.96	5.46	H	-45.03	-25.00		
518598 (2592.990)	5 185.98	-56.20	11.61	-57.37	3.80	H	-49.56	-25.00	1	1
	7 778.97	-64.80	11.26	-57.73	4.70	H	-51.17	-25.00		
	10 371.96	-64.54	11.68	-53.45	5.55	H	-47.32	-25.00		
531996 (2659.980)	5 319.96	-53.64	11.91	-55.19	3.79	H	-47.07	-25.00	1	81
	7 979.94	-59.65	11.10	-51.95	4.79	H	-45.64	-25.00		
	10 639.92	-64.21	11.58	-51.83	5.61	H	-45.86	-25.00		

▣ NR Band: n41

▣ Bandwidth: 70 MHz

▣ Modulation: PI/2 BPSK

▣ Distance: 1 meter

▣ 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
506202 (2531.010)	5 062.02	-57.46	11.24	-58.83	3.78	H	-51.37	-25.00	1	94
	7 593.03	-59.59	11.62	-52.31	4.64	H	-45.33	-25.00		
	10 124.04	-59.67	11.37	-49.98	5.47	H	-44.08	-25.00		
	12 655.05	-60.70	12.52	-51.30	6.26	H	-45.04	-25.00		
518598 (2592.990)	5 185.98	-55.99	11.61	-57.16	3.80	H	-49.35	-25.00	1	1
	7 778.97	-64.09	11.26	-57.02	4.70	H	-50.46	-25.00		
	10 371.96	-64.52	11.68	-53.43	5.55	H	-47.30	-25.00		
531000 (2655.000)	5 310.00	-52.96	11.91	-54.07	3.82	H	-45.98	-25.00	1	94
	7 965.00	-60.50	11.07	-52.68	4.80	H	-46.41	-25.00		
	10 620.00	-63.82	11.58	-51.78	5.65	H	-45.85	-25.00		

▣ NR Band: n41

▣ Bandwidth: 80 MHz

▣ Modulation: PI/2 BPSK

▣ Distance: 1 meter

▣ 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
507204 (2536.020)	5 072.04	-59.89	11.25	-61.05	3.80	H	-53.60	-25.00	1	108
	7 608.06	-56.45	11.60	-49.57	4.64	H	-42.61	-25.00		
	10 144.08	-59.70	11.36	-50.09	5.48	H	-44.21	-25.00		
518598 (2592.990)	5 185.98	-55.75	11.61	-56.92	3.80	H	-49.11	-25.00	1	1
	7 778.97	-59.20	11.26	-52.13	4.70	H	-45.57	-25.00		
	10 371.96	-65.19	11.68	-54.10	5.55	H	-47.97	-25.00		
529998 (2649.990)	5 299.98	-51.86	11.90	-53.36	3.83	H	-45.29	-25.00	1	108
	7 949.97	-58.70	11.03	-51.05	4.78	H	-44.80	-25.00		
	10 599.96	-64.03	11.58	-52.74	5.67	H	-46.83	-25.00		

▣ NR Band: n41

▣ Bandwidth: 90 MHz

▣ Modulation: PI/2 BPSK

▣ Distance: 1 meter

▣ 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
508200 (2541.000)	5 082.00	-57.98	11.27	-58.78	3.81	H	-51.32	-25.00	1	122
	7 623.00	-58.58	11.57	-51.64	4.65	H	-44.72	-25.00		
	10 164.00	-60.39	11.34	-50.53	5.50	H	-44.69	-25.00		
518598 (2592.990)	5 185.98	-55.39	11.61	-56.56	3.80	H	-48.75	-25.00	1	1
	7 778.97	-64.37	11.26	-57.30	4.70	H	-50.74	-25.00		
	10 371.96	-64.17	11.68	-53.08	5.55	H	-46.95	-25.00		
528996 (2644.980)	5 289.96	-52.65	11.89	-54.23	3.83	H	-46.17	-25.00	1	122
	7 934.94	-59.27	11.01	-51.89	4.77	H	-45.65	-25.00		
	10 579.92	-62.93	11.62	-51.78	5.65	H	-45.81	-25.00		

▣ NR Band: n41

▣ Bandwidth: 100 MHz

▣ Modulation: PI/2 BPSK

▣ Distance: 1 meter

▣ 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
509202 (2546.010)	5 092.02	-56.78	11.29	-57.66	3.78	H	-50.15	-25.00	1	136
	7 638.03	-60.64	11.54	-53.67	4.68	H	-46.81	-25.00		
	10 184.04	-60.24	11.35	-50.20	5.52	H	-44.37	-25.00		
518598 (2592.990)	5 185.98	-57.17	11.61	-58.34	3.80	H	-50.53	-25.00	1	1
	7 778.97	-59.12	11.26	-52.05	4.70	H	-45.49	-25.00		
	10 371.96	-59.39	11.68	-48.30	5.55	H	-42.17	-25.00		
528000 (2640.000)	5 280.00	-51.13	11.88	-53.15	3.80	H	-45.07	-25.00	1	1
	7 920.00	-64.66	11.02	-57.24	4.77	H	-50.99	-25.00		
	10 560.00	-64.33	11.65	-53.39	5.63	H	-47.37	-25.00		

8.3 PEAK-TO-AVERAGE RATIO

Band / BandWidth	Frequency (MHz)	Modulation	Resource Block Size	Resource Block Offset	Data (dB)
Sub6 n41 / 10 MHz	2592.990	BPSK	24	0	4.48
		QPSK			5.72
		16-QAM			6.37
		64-QAM			6.59
		256-QAM			6.51
Sub6 n41 / 15 MHz		BPSK	36		4.37
		QPSK			5.64
		16-QAM			6.36
		64-QAM			6.44
		256-QAM			6.56
Sub6 n41 / 20 MHz		BPSK	50		4.77
		QPSK			5.66
		16-QAM			6.31
		64-QAM			6.46
		256-QAM			6.52
Sub6 n41 / 30 MHz		BPSK	75		4.53
		QPSK			5.74
		16-QAM			6.42
		64-QAM			6.44
		256-QAM			6.61
Sub6 n41 / 40 MHz		BPSK	100		5.00
		QPSK			5.82
		16-QAM			6.38
		64-QAM			6.52
		256-QAM			6.55

Sub6 n41 / 50 MHz		BPSK	128		4.82
		QPSK			5.71
		16-QAM			6.31
		64-QAM			6.40
		256-QAM			6.57
Sub6 n41 / 60 MHz		BPSK	162		4.66
		QPSK			5.71
		16-QAM			6.40
		64-QAM			6.49
		256-QAM			6.54
Sub6 n41 / 70 MHz		BPSK	180		4.67
		QPSK			5.71
		16-QAM			6.38
		64-QAM			6.50
		256-QAM			6.58
Sub6 n41 / 80 MHz		BPSK	216		4.85
		QPSK			5.75
		16-QAM			6.41
		64-QAM			6.47
		256-QAM			6.66
Sub6 n41 / 90 MHz		BPSK	243		4.88
		QPSK			5.74
		16-QAM			6.40
		64-QAM			6.58
		256-QAM			6.53
Sub6 n41 / 100 MHz		BPSK	270		5.15
		QPSK			5.70
		16-QAM			6.38
		64-QAM			6.49
		256-QAM			6.63

Note:

1. Plots of the EUT's Peak- to- Average Ratio are shown Page 70 ~ 124.

8.4 OCCUPIED BANDWIDTH

Band / BandWidth	Frequency (MHz)	Modulation	Resource Block Size	Resource Block Offset	Data (MHz)
Sub6 n41 / 10 MHz	2592.990	BPSK	24	0	8.6828
		QPSK			8.7195
		16-QAM			8.6694
		64-QAM			8.7535
		256-QAM			8.6316
Sub6 n41 / 15 MHz		BPSK	36		12.983
		QPSK			12.967
		16-QAM			13.037
		64-QAM			12.968
		256-QAM			13.057
Sub6 n41 / 20 MHz		BPSK	50		17.980
		QPSK			17.988
		16-QAM			17.955
		64-QAM			17.926
		256-QAM			17.926
Sub6 n41 / 30 MHz		BPSK	75		27.082
		QPSK			26.999
		16-QAM			26.937
		64-QAM			26.992
		256-QAM			26.887
Sub6 n41 / 40 MHz		BPSK	100		35.966
		QPSK			35.980
		16-QAM			35.870
		64-QAM			35.953
		256-QAM			35.858

Sub6 n41 / 50 MHz		BPSK	128		45.913
		QPSK			46.037
		16-QAM			45.893
		64-QAM			45.976
		256-QAM			45.812
Sub6 n41 / 60 MHz		BPSK	162		58.240
		QPSK			58.204
		16-QAM			58.147
		64-QAM			58.153
		256-QAM			58.115
Sub6 n41 / 70 MHz		BPSK	180		64.990
		QPSK			64.867
		16-QAM			64.605
		64-QAM			64.670
		256-QAM			64.448
Sub6 n41 / 80 MHz		BPSK	216		77.571
		QPSK			77.387
		16-QAM			77.775
		64-QAM			77.609
		256-QAM			77.733
Sub6 n41 / 90 MHz		BPSK	243		87.352
		QPSK			87.289
		16-QAM			87.327
		64-QAM			87.044
		256-QAM			87.101
Sub6 n41 / 100 MHz		BPSK	270		97.051
		QPSK			96.865
		16-QAM			96.895
		64-QAM			97.082
		256-QAM			96.969

Note:

1. Plots of the EUT's Occupied Bandwidth are shown Page 125 ~ 179.

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)
Sub 6 n41 / 10	2501.010	6.0319	30.815	-62.715	-31.900	-25.00
	2592.990	8.9133	30.815	-63.086	-32.271	
	2685.000	4.6062	30.200	-61.987	-31.787	
Sub 6 n41 / 15	2503.500	3.9682	30.200	-62.395	-32.195	
	2592.990	3.7688	30.200	-61.734	-31.534	
	2682.480	9.9402	30.815	-62.740	-31.925	
Sub 6 n41 / 20	2506.020	8.9432	30.815	-63.054	-32.239	
	2592.990	8.7538	30.815	-63.442	-32.627	
	2679.990	5.5434	30.815	-63.536	-32.721	
Sub 6 n41 / 30	2511.000	7.4477	30.815	-62.565	-31.750	
	2592.990	3.7987	30.200	-63.137	-32.937	
	2674.980	3.8186	30.200	-62.274	-32.074	
Sub 6 n41 / 40	2516.010	5.2144	30.815	-62.924	-32.109	
	2592.990	8.8136	30.815	-62.300	-31.485	
	2670.000	5.2044	30.815	-63.795	-32.980	
Sub 6 n41 / 50	2521.020	3.7887	30.200	-62.728	-32.528	
	2592.990	10.0000	30.815	-62.925	-32.110	
	2664.990	4.0679	30.200	-63.753	-33.553	
Sub 6 n41 / 60	2526.000	4.0379	30.200	-62.867	-32.667	
	2592.990	7.1087	30.815	-61.739	-30.924	
	2659.980	9.9402	30.815	-62.116	-31.301	
Sub 6 n41 / 70	2531.010	5.7129	30.815	-62.946	-32.131	
	2592.990	9.7009	30.815	-63.105	-32.290	
	2655.000	9.6909	30.815	-63.464	-32.649	
Sub 6 n41 / 80	2536.020	7.4477	30.815	-62.370	-31.555	
	2592.990	5.2443	30.815	-63.555	-32.740	
	2649.990	2.7219	30.200	-61.324	-31.124	
Sub 6 n41 / 90	2541.000	4.0379	30.200	-63.270	-33.070	
	2592.990	5.4637	30.815	-63.712	-32.897	
	2644.980	2.7219	30.200	-61.538	-31.338	
Sub 6 n41 / 100	2546.010	8.2951	30.815	-62.945	-32.130	
	2592.990	9.1127	30.815	-63.633	-32.818	
	2640.000	9.0828	30.815	-62.991	-32.176	

Note:

1. Plots of the EUT's Conducted Spurious Emissions are shown Page 180 ~ 245.
2. Factor(dB)
   - Factor(dB) = Cable Loss + Ext. Attenuator + Power Splitter
   - Result(dBm) = Reading + Factor

Frequency Range (GHz)	Factor [dB]
0.03 – 1	27.494
1 – 5	30.200
5 – 10	30.815
10 – 15	31.340
15 – 20	31.713
Above 20	32.355

8.6 CHANNEL EDGE

BW (MHz)	Frequency (MHz)	Mod	RB (Size/ Offset)	2 495 MHz ~ 2 496 MHz	C.E ~ (C.E +1MHz)	2 490.5 MHz ~ 2 495 MHz	(C.E + 1 MHz) ~ (C.E + 5 MHz)	Below 2 490.5 MHz	(C.E + 5 MHz) ~ (C.E + X MHz)	Above (C.E + X MHz)
				Lower	Upper	Lower	Upper	Lower	Upper	Upper
10	2501.010	BPSK	Full RB	-24.73	-24.11	-28.91	-28.15	-39.30	-37.41	-41.44
15	2503.500	BPSK	Full RB	-25.39	-32.48	-30.86	-37.50	-38.60	-37.65	-43.86
20	2506.020	BPSK	Full RB	-27.21	-30.36	-33.65	-36.22	-39.04	-37.42	-45.96
30	2511.000	BPSK	Full RB	-28.73	-37.88	-36.61	-38.53	-40.03	-36.86	-42.28
40	2516.010	BPSK	Full RB	-27.12	-36.00	-35.77	-35.43	-36.55	-34.73	-42.06
50	2521.020	BPSK	Full RB	-25.06	-34.87	-31.86	-37.56	-42.34	-37.17	-42.00
60	2526.000	BPSK	Full RB	-19.91	-19.67	-28.87	-27.24	-37.96	-34.00	-39.91
70	2531.010	BPSK	Full RB	-24.68	-32.82	-29.83	-34.08	-39.07	-35.00	-43.23
80	2536.020	BPSK	Full RB	-26.08	-27.97	-31.47	-30.95	-36.96	-32.90	-44.90
90	2541.000	BPSK	Full RB	-24.49	-27.60	-30.75	-30.60	-35.92	-34.76	-46.96
100	2546.010	BPSK	Full RB	-22.76	-28.74	-30.03	-31.48	-36.76	-35.70	-49.23
Limit (dBm)				-13.0	-10.0	-13.0	-10.0	-25.0	-13.0	-25.0

Band Width	Frequency (MHz)	Modulation	Resource Block Size	Resoure Block Offset	C.E ~ (C.E ± 1 MHz)		(C.E ± 1 MHz) ~ (C.E ± 5 MHz)	
					Lower	Upper	Lower	Upper
10 MHz	2592.990	BPSK	Full RB	0	-24.08	-23.62	-28.07	-28.21
	2685.000	BPSK	Full RB	0	-23.29	-24.88	-27.04	-28.90
15 MHz	2592.990	BPSK	Full RB	0	-23.71	-34.28	-30.02	-37.02
	2682.480	BPSK	Full RB	0	-23.58	-34.38	-28.93	-33.39
20 MHz	2592.990	BPSK	Full RB	0	-25.05	-30.89	-31.32	-34.86
	2679.990	BPSK	Full RB	0	-24.42	-29.83	-30.86	-36.00
30 MHz	2592.990	BPSK	Full RB	0	-26.61	-37.28	-34.65	-37.64
	2674.980	BPSK	Full RB	0	-26.29	-38.91	-33.08	-36.13
40 MHz	2592.990	BPSK	Full RB	0	-26.14	-37.09	-34.08	-36.13
	2670.000	BPSK	Full RB	0	-25.49	-35.13	-33.96	-35.14
50 MHz	2592.990	BPSK	Full RB	0	-24.80	-33.23	-31.34	-34.70
	2664.990	BPSK	Full RB	0	-22.01	-33.42	-29.35	-33.32
60 MHz	2592.990	BPSK	Full RB	0	-18.24	-20.68	-26.22	-27.90
	2659.980	BPSK	Full RB	0	-18.15	-21.07	-26.64	-28.06
70 MHz	2592.990	BPSK	Full RB	0	-22.34	-32.96	-27.41	-33.78
	2655.000	BPSK	Full RB	0	-22.85	-33.66	-28.20	-34.73
80 MHz	2592.990	BPSK	Full RB	0	-22.54	-26.84	-28.25	-30.01
	2649.990	BPSK	Full RB	0	-22.08	-26.95	-27.82	-30.02
90 MHz	2592.990	BPSK	Full RB	0	-21.96	-27.40	-28.47	-30.14
	2644.980	BPSK	Full RB	0	-22.15	-28.30	-28.42	-31.71
100 MHz	2592.990	BPSK	Full RB	0	-21.70	-29.97	-29.68	-31.92
	2640.000	BPSK	Full RB	0	-20.75	-31.77	-28.98	-32.97
Limit (dBm)					-10.0		-10.0	

Band Width	Frequency (MHz)	Modulation	Resource Block Size	Resoure Block Offset	(C.E ± 5 MHz) ~ (C.E ± X MHz)		Above (C.E ± X MHz)	
					Lower	Upper	Lower	Upper
10 MHz	2592.990	BPSK	Full RB	0	-37.15	-36.78	-44.47	-44.18
	2685.000	BPSK	Full RB	0	-35.04	-36.77	-40.45	-41.97
15 MHz	2592.990	BPSK	Full RB	0	-36.59	-37.03	-44.12	-45.02
	2682.480	BPSK	Full RB	0	-31.84	-34.82	-38.06	-41.97
20 MHz	2592.990	BPSK	Full RB	0	-36.67	-37.08	-44.58	-45.65
	2679.990	BPSK	Full RB	0	-35.43	-36.76	-43.01	-45.03
30 MHz	2592.990	BPSK	Full RB	0	-35.37	-36.20	-41.38	-43.11
	2674.980	BPSK	Full RB	0	-32.91	-35.29	-39.10	-41.46
40 MHz	2592.990	BPSK	Full RB	0	-34.74	-34.86	-45.32	-45.52
	2670.000	BPSK	Full RB	0	-34.81	-34.94	-43.92	-49.29
50 MHz	2592.990	BPSK	Full RB	0	-35.61	-35.02	-41.97	-42.68
	2664.990	BPSK	Full RB	0	-34.34	-34.40	-40.11	-46.24
60 MHz	2592.990	BPSK	Full RB	0	-34.18	-32.58	-42.54	-43.62
	2659.980	BPSK	Full RB	0	-33.08	-33.04	-37.97	-48.56
70 MHz	2592.990	BPSK	Full RB	0	-35.57	-34.40	-45.41	-45.08
	2655.000	BPSK	Full RB	0	-35.10	-34.43	-42.29	-54.92
80 MHz	2592.990	BPSK	Full RB	0	-35.38	-33.58	-54.03	-46.00
	2649.990	BPSK	Full RB	0	-34.83	-32.82	-42.99	-55.08
90 MHz	2592.990	BPSK	Full RB	0	-35.04	-32.38	-55.37	-50.61
	2644.980	BPSK	Full RB	0	-35.65	-36.62	-46.02	-55.07
100 MHz	2592.990	BPSK	Full RB	0	-35.25	-32.55	-55.04	-52.14
	2640.000	BPSK	Full RB	0	-35.40	-35.39	-48.57	-54.94
Limit (dBm)					-13.0		-25.0	

Note:

1. C.E = Channel Edge
2. X = X is the greater of 6 MHz or the actual emission bandwidth
3. 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) = 6.99
4. Plots of the EUT's Channel Edge are shown Page 246 ~ 322. (1RB & Full RB)

8.7 FREQUENCY STABILITY / VARIATION OF AMBIENT TEMPERATURE

▣ BandWidth: 10 MHz
▣ Voltage(100 %): 4.200 VDC
▣ Batt. Endpoint: 3.300 VDC
▣ LIMIT: Emission must remain in band

Test. Frequncy	Voltage	Temp.	Frequency	Frequency Error	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	(Hz)	(%)	
2501.010	100 %	+20(Ref)	2501 009 998	0.0	0.000 000	0.000
	100 %	-30	2501 010 002	4.8	0.000 000	0.002
	100 %	-20	2501 010 000	1.8	0.000 000	0.001
	100 %	-10	2501 009 995	-2.9	0.000 000	-0.001
	100 %	0	2501 009 996	-1.9	0.000 000	-0.001
	100 %	+10	2501 009 992	-5.5	0.000 000	-0.002
	100 %	+30	2501 009 999	1.2	0.000 000	0.000
	100 %	+40	2501 009 993	-4.2	0.000 000	-0.002
	100 %	+50	2501 009 994	-3.9	0.000 000	-0.002
	Batt. Endpoint	+20	2501 009 998	0.1	0.000 000	0.000
2685.000	100 %	+20(Ref)	2685 000 005	0.0	0.000 000	0.000
	100 %	-30	2685 000 008	2.1	0.000 000	0.001
	100 %	-20	2685 000 007	2.0	0.000 000	0.001
	100 %	-10	2685 000 001	-4.3	0.000 000	-0.002
	100 %	0	2685 000 007	1.7	0.000 000	0.001
	100 %	+10	2685 000 002	-3.3	0.000 000	-0.001
	100 %	+30	2685 000 005	-0.8	0.000 000	0.000
	100 %	+40	2685 000 000	-5.7	0.000 000	-0.002
	100 %	+50	2685 000 005	-0.1	0.000 000	0.000
	Batt. Endpoint	+20	2684 999 997	-8.3	0.000 000	-0.003

▣ BandWidth: 15 MHz

▣ Voltage(100 %): 4.200 VDC

▣ Batt. Endpoint: 3.300 VDC

▣ LIMIT: Emission must remain in band

Test. Frequncy	Voltage	Temp.	Frequency	Frequency Error	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	(Hz)	(%)	
2503.500	100 %	+20(Ref)	2503 499 998	0.0	0.000 000	0.000
	100 %	-30	2503 500 002	3.6	0.000 000	0.001
	100 %	-20	2503 499 996	-2.1	0.000 000	-0.001
	100 %	-10	2503 499 998	-0.7	0.000 000	0.000
	100 %	0	2503 499 992	-6.0	0.000 000	-0.002
	100 %	+10	2503 499 998	-0.5	0.000 000	0.000
	100 %	+30	2503 500 001	2.9	0.000 000	0.001
	100 %	+40	2503 500 000	1.5	0.000 000	0.001
	100 %	+50	2503 499 995	-3.4	0.000 000	-0.001
	Batt. Endpoint	+20	2503 499 998	-0.9	0.000 000	0.000
2682.480	100 %	+20(Ref)	2682 480 004	0.0	0.000 000	0.000
	100 %	-30	2682 480 002	-2.4	0.000 000	-0.001
	100 %	-20	2682 480 006	1.9	0.000 000	0.001
	100 %	-10	2682 479 999	-5.3	0.000 000	-0.002
	100 %	0	2682 480 001	-2.9	0.000 000	-0.001
	100 %	+10	2682 480 003	-0.8	0.000 000	0.000
	100 %	+30	2682 480 000	-3.8	0.000 000	-0.001
	100 %	+40	2682 479 997	-7.1	0.000 000	-0.003
	100 %	+50	2682 480 004	-0.2	0.000 000	0.000
	Batt. Endpoint	+20	2682 479 997	-6.6	0.000 000	-0.002

▣ BandWidth: 20 MHz

▣ Voltage(100 %): 4.200 VDC

▣ Batt. Endpoint: 3.300 VDC

▣ LIMIT: Emission must remain in band

Test. Frequncy	Voltage	Temp.	Frequency	Frequency Error	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	(Hz)	(%)	
2506.020	100 %	+20(Ref)	2506 020 001	0.0	0.000 000	0.000
	100 %	-30	2506 019 997	-3.6	0.000 000	-0.001
	100 %	-20	2506 019 999	-2.2	0.000 000	-0.001
	100 %	-10	2506 019 997	-4.1	0.000 000	-0.002
	100 %	0	2506 019 995	-5.8	0.000 000	-0.002
	100 %	+10	2506 019 996	-4.7	0.000 000	-0.002
	100 %	+30	2506 020 001	-0.3	0.000 000	0.000
	100 %	+40	2506 019 996	-5.0	0.000 000	-0.002
	100 %	+50	2506 020 004	2.4	0.000 000	0.001
	Batt. Endpoint	+20	2506 019 994	-6.6	0.000 000	-0.003
2679.990	100 %	+20(Ref)	2679 990 004	0.0	0.000 000	0.000
	100 %	-30	2679 990 003	-1.6	0.000 000	-0.001
	100 %	-20	2679 990 005	0.8	0.000 000	0.000
	100 %	-10	2679 990 010	5.5	0.000 000	0.002
	100 %	0	2679 990 006	1.7	0.000 000	0.001
	100 %	+10	2679 990 004	-0.1	0.000 000	0.000
	100 %	+30	2679 990 002	-2.6	0.000 000	-0.001
	100 %	+40	2679 990 008	3.5	0.000 000	0.001
	100 %	+50	2679 990 000	-3.9	0.000 000	-0.001
	Batt. Endpoint	+20	2679 990 001	-3.6	0.000 000	-0.001

▣ BandWidth: 30 MHz

▣ Voltage(100 %): 4.200 VDC

▣ Batt. Endpoint: 3.300 VDC

▣ LIMIT: Emission must remain in band

Test. Frequncy	Voltage	Temp.	Frequency	Frequency Error	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	(Hz)	(%)	
2511.000	100 %	+20(Ref)	2510 999 996	0.0	0.000 000	0.000
	100 %	-30	2510 999 992	-3.8	0.000 000	-0.002
	100 %	-20	2510 999 991	-5.1	0.000 000	-0.002
	100 %	-10	2510 999 990	-5.7	0.000 000	-0.002
	100 %	0	2510 999 995	-1.5	0.000 000	-0.001
	100 %	+10	2510 999 993	-3.1	0.000 000	-0.001
	100 %	+30	2510 999 992	-3.6	0.000 000	-0.001
	100 %	+40	2510 999 995	-0.6	0.000 000	0.000
	100 %	+50	2510 999 992	-4.0	0.000 000	-0.002
	Batt. Endpoint	+20	2510 999 994	-2.2	0.000 000	-0.001
2674.980	100 %	+20(Ref)	2674 979 999	0.0	0.000 000	0.000
	100 %	-30	2674 980 000	0.5	0.000 000	0.000
	100 %	-20	2674 980 002	3.1	0.000 000	0.001
	100 %	-10	2674 980 001	2.0	0.000 000	0.001
	100 %	0	2674 979 996	-3.0	0.000 000	-0.001
	100 %	+10	2674 980 000	1.3	0.000 000	0.000
	100 %	+30	2674 980 002	2.7	0.000 000	0.001
	100 %	+40	2674 979 993	-5.9	0.000 000	-0.002
	100 %	+50	2674 979 996	-2.9	0.000 000	-0.001
	Batt. Endpoint	+20	2674 979 994	-5.1	0.000 000	-0.002

▣ BandWidth: 40 MHz

▣ Voltage(100 %): 4.200 VDC

▣ Batt. Endpoint: 3.300 VDC

▣ LIMIT: Emission must remain in band

Test. Frequncy	Voltage	Temp.	Frequency	Frequency Error	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	(Hz)	(%)	
2516.010	100 %	+20(Ref)	2516 009 991	0.0	0.000 000	0.000
	100 %	-30	2516 009 990	-0.6	0.000 000	0.000
	100 %	-20	2516 009 984	-7.1	0.000 000	-0.003
	100 %	-10	2516 009 992	0.8	0.000 000	0.000
	100 %	0	2516 009 988	-2.5	0.000 000	-0.001
	100 %	+10	2516 009 990	-1.3	0.000 000	-0.001
	100 %	+30	2516 009 989	-2.3	0.000 000	-0.001
	100 %	+40	2516 009 983	-8.0	0.000 000	-0.003
	100 %	+50	2516 009 989	-1.9	0.000 000	-0.001
	Batt. Endpoint	+20	2516 009 992	0.8	0.000 000	0.000
2670.000	100 %	+20(Ref)	2670 000 000	0.0	0.000 000	0.000
	100 %	-30	2670 000 000	0.1	0.000 000	0.000
	100 %	-20	2669 999 995	-4.8	0.000 000	-0.002
	100 %	-10	2670 000 004	3.5	0.000 000	0.001
	100 %	0	2669 999 995	-4.8	0.000 000	-0.002
	100 %	+10	2669 999 999	-1.3	0.000 000	-0.001
	100 %	+30	2669 999 992	-8.3	0.000 000	-0.003
	100 %	+40	2670 000 001	1.2	0.000 000	0.000
	100 %	+50	2670 000 007	6.6	0.000 000	0.002
	Batt. Endpoint	+20	2669 999 999	-1.0	0.000 000	0.000

▣ BandWidth: 50 MHz

▣ Voltage(100 %): 4.200 VDC

▣ Batt. Endpoint: 3.300 VDC

▣ LIMIT: Emission must remain in band

Test. Frequncy	Voltage	Temp.	Frequency	Frequency Error	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	(Hz)	(%)	
2521.020	100 %	+20(Ref)	2521 019 998	0.0	0.000 000	0.000
	100 %	-30	2521 020 000	2.1	0.000 000	0.001
	100 %	-20	2521 019 995	-2.4	0.000 000	-0.001
	100 %	-10	2521 020 000	2.6	0.000 000	0.001
	100 %	0	2521 019 997	-0.7	0.000 000	0.000
	100 %	+10	2521 020 002	4.7	0.000 000	0.002
	100 %	+30	2521 019 992	-5.5	0.000 000	-0.002
	100 %	+40	2521 020 000	2.5	0.000 000	0.001
	100 %	+50	2521 019 996	-1.6	0.000 000	-0.001
	Batt. Endpoint	+20	2521 019 993	-4.1	0.000 000	-0.002
2664.990	100 %	+20(Ref)	2664 989 998	0.0	0.000 000	0.000
	100 %	-30	2664 989 994	-4.4	0.000 000	-0.002
	100 %	-20	2664 990 002	3.4	0.000 000	0.001
	100 %	-10	2664 990 001	2.5	0.000 000	0.001
	100 %	0	2664 989 998	-0.3	0.000 000	0.000
	100 %	+10	2664 989 995	-3.0	0.000 000	-0.001
	100 %	+30	2664 989 998	-0.2	0.000 000	0.000
	100 %	+40	2664 990 002	3.2	0.000 000	0.001
	100 %	+50	2664 989 996	-2.0	0.000 000	-0.001
	Batt. Endpoint	+20	2664 989 998	-0.8	0.000 000	0.000

▣ BandWidth: 60 MHz

▣ Voltage(100 %): 4.200 VDC

▣ Batt. Endpoint: 3.300 VDC

▣ LIMIT: Emission must remain in band

Test. Frequncy	Voltage	Temp.	Frequency	Frequency Error	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	(Hz)	(%)	
2526.000	100 %	+20(Ref)	2526 000 002	0.0	0.000 000	0.000
	100 %	-30	2525 999 997	-5.0	0.000 000	-0.002
	100 %	-20	2526 000 005	2.7	0.000 000	0.001
	100 %	-10	2526 000 005	2.7	0.000 000	0.001
	100 %	0	2526 000 007	4.4	0.000 000	0.002
	100 %	+10	2526 000 003	0.9	0.000 000	0.000
	100 %	+30	2526 000 000	-2.1	0.000 000	-0.001
	100 %	+40	2526 000 000	-2.4	0.000 000	-0.001
	100 %	+50	2525 999 998	-4.3	0.000 000	-0.002
	Batt. Endpoint	+20	2525 999 996	-6.8	0.000 000	-0.003
2659.980	100 %	+20(Ref)	2659 979 998	0.0	0.000 000	0.000
	100 %	-30	2659 979 994	-4.2	0.000 000	-0.002
	100 %	-20	2659 980 000	1.5	0.000 000	0.001
	100 %	-10	2659 979 989	-8.8	0.000 000	-0.003
	100 %	0	2659 979 995	-3.3	0.000 000	-0.001
	100 %	+10	2659 979 997	-1.6	0.000 000	-0.001
	100 %	+30	2659 979 998	-0.2	0.000 000	0.000
	100 %	+40	2659 980 000	1.7	0.000 000	0.001
	100 %	+50	2659 979 997	-1.3	0.000 000	0.000
	Batt. Endpoint	+20	2659 979 991	-7.6	0.000 000	-0.003

▣ BandWidth: 70 MHz

▣ Voltage(100 %): 4.200 VDC

▣ Batt. Endpoint: 3.300 VDC

▣ LIMIT: Emission must remain in band

Test. Frequncy	Voltage	Temp.	Frequency	Frequency Error	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	(Hz)	(%)	
2531.010	100 %	+20(Ref)	2531 009 993	0.0	0.000 000	0.000
	100 %	-30	2531 009 992	-1.3	0.000 000	-0.001
	100 %	-20	2531 009 992	-0.8	0.000 000	0.000
	100 %	-10	2531 009 989	-4.1	0.000 000	-0.002
	100 %	0	2531 009 986	-6.8	0.000 000	-0.003
	100 %	+10	2531 009 990	-3.1	0.000 000	-0.001
	100 %	+30	2531 009 995	1.9	0.000 000	0.001
	100 %	+40	2531 009 988	-4.8	0.000 000	-0.002
	100 %	+50	2531 009 993	0.0	0.000 000	0.000
	Batt. Endpoint	+20	2531 009 987	-5.6	0.000 000	-0.002
2655.000	100 %	+20(Ref)	2655 000 000	0.0	0.000 000	0.000
	100 %	-30	2654 999 999	-1.0	0.000 000	0.000
	100 %	-20	2654 999 999	-1.3	0.000 000	0.000
	100 %	-10	2654 999 999	-1.2	0.000 000	0.000
	100 %	0	2655 000 003	2.5	0.000 000	0.001
	100 %	+10	2654 999 989	-11.2	0.000 000	-0.004
	100 %	+30	2654 999 989	-11.2	0.000 000	-0.004
	100 %	+40	2655 000 004	4.2	0.000 000	0.002
	100 %	+50	2655 000 004	4.2	0.000 000	0.002
	Batt. Endpoint	+20	2654 999 995	-4.9	0.000 000	-0.002

▣ BandWidth: 80 MHz

▣ Voltage(100 %): 4.200 VDC

▣ Batt. Endpoint: 3.300 VDC

▣ LIMIT: Emission must remain in band

Test. Frequncy	Voltage	Temp.	Frequency	Frequency Error	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	(Hz)	(%)	
2536.020	100 %	+20(Ref)	2536 019 994	0.0	0.000 000	0.000
	100 %	-30	2536 019 989	-4.7	0.000 000	-0.002
	100 %	-20	2536 019 995	0.7	0.000 000	0.000
	100 %	-10	2536 019 993	-1.3	0.000 000	-0.001
	100 %	0	2536 019 990	-3.8	0.000 000	-0.002
	100 %	+10	2536 019 990	-4.2	0.000 000	-0.002
	100 %	+30	2536 019 989	-4.8	0.000 000	-0.002
	100 %	+40	2536 019 989	-4.8	0.000 000	-0.002
	100 %	+50	2536 019 986	-7.7	0.000 000	-0.003
	Batt. Endpoint	+20	2536 019 992	-2.1	0.000 000	-0.001
2649.990	100 %	+20(Ref)	2649 989 998	0.0	0.000 000	0.000
	100 %	-30	2649 989 992	-6.2	0.000 000	-0.002
	100 %	-20	2649 989 999	0.6	0.000 000	0.000
	100 %	-10	2649 989 992	-6.4	0.000 000	-0.002
	100 %	0	2649 989 994	-4.0	0.000 000	-0.002
	100 %	+10	2649 989 996	-1.7	0.000 000	-0.001
	100 %	+30	2649 989 998	-0.6	0.000 000	0.000
	100 %	+40	2649 989 997	-0.8	0.000 000	0.000
	100 %	+50	2649 989 997	-1.4	0.000 000	-0.001
	Batt. Endpoint	+20	2649 989 997	-0.8	0.000 000	0.000

▣ BandWidth: 90 MHz

▣ Voltage(100 %): 4.200 VDC

▣ Batt. Endpoint: 3.300 VDC

▣ LIMIT: Emission must remain in band

Test. Frequncy	Voltage	Temp.	Frequency	Frequency Error	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	(Hz)	(%)	
2541.000	100 %	+20(Ref)	2540 999 994	0.0	0.000 000	0.000
	100 %	-30	2540 999 988	-6.0	0.000 000	-0.002
	100 %	-20	2540 999 991	-2.9	0.000 000	-0.001
	100 %	-10	2540 999 988	-6.6	0.000 000	-0.003
	100 %	0	2540 999 987	-7.1	0.000 000	-0.003
	100 %	+10	2540 999 991	-3.2	0.000 000	-0.001
	100 %	+30	2540 999 999	5.2	0.000 000	0.002
	100 %	+40	2540 999 999	5.2	0.000 000	0.002
	100 %	+50	2540 999 991	-3.3	0.000 000	-0.001
	Batt. Endpoint	+20	2540 999 996	1.9	0.000 000	0.001
2644.980	100 %	+20(Ref)	2644 979 999	0.0	0.000 000	0.000
	100 %	-30	2644 979 997	-1.9	0.000 000	-0.001
	100 %	-20	2644 980 001	2.1	0.000 000	0.001
	100 %	-10	2644 979 999	0.6	0.000 000	0.000
	100 %	0	2644 979 997	-2.3	0.000 000	-0.001
	100 %	+10	2644 979 997	-2.2	0.000 000	-0.001
	100 %	+30	2644 979 999	0.3	0.000 000	0.000
	100 %	+40	2644 979 994	-5.0	0.000 000	-0.002
	100 %	+50	2644 979 994	-5.0	0.000 000	-0.002
	Batt. Endpoint	+20	2644 979 999	0.6	0.000 000	0.000

▣ BandWidth: 100 MHz

▣ Voltage(100 %): 4.200 VDC

▣ Batt. Endpoint: 3.300 VDC

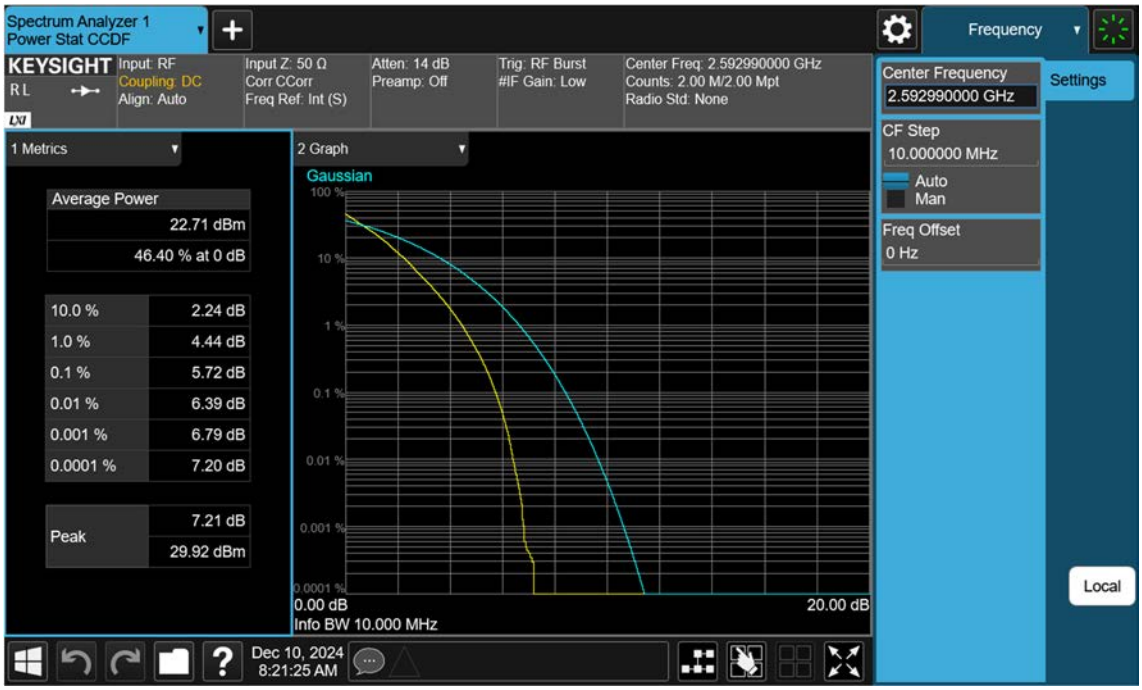
▣ LIMIT: Emission must remain in band

Test. Frequncy	Voltage	Temp.	Frequency	Frequency Error	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	(Hz)	(%)	
2546.010	100 %	+20(Ref)	2546 010 004	0.0	0.000 000	0.000
	100 %	-30	2546 009 998	-5.4	0.000 000	-0.002
	100 %	-20	2546 010 004	0.7	0.000 000	0.000
	100 %	-10	2546 010 005	1.6	0.000 000	0.001
	100 %	0	2546 010 001	-2.8	0.000 000	-0.001
	100 %	+10	2546 010 004	0.7	0.000 000	0.000
	100 %	+30	2546 010 001	-2.7	0.000 000	-0.001
	100 %	+40	2546 010 002	-1.6	0.000 000	-0.001
	100 %	+50	2546 010 007	3.3	0.000 000	0.001
	Batt. Endpoint	+20	2546 010 004	0.0	0.000 000	0.000
2640.000	100 %	+20(Ref)	2639 999 997	0.0	0.000 000	0.000
	100 %	-30	2639 999 993	-3.8	0.000 000	-0.001
	100 %	-20	2639 999 995	-1.8	0.000 000	-0.001
	100 %	-10	2639 999 991	-6.3	0.000 000	-0.002
	100 %	0	2639 999 994	-3.3	0.000 000	-0.001
	100 %	+10	2639 999 992	-5.0	0.000 000	-0.002
	100 %	+30	2639 999 996	-1.3	0.000 000	-0.001
	100 %	+40	2639 999 996	-1.3	0.000 000	-0.001
	100 %	+50	2639 999 998	1.6	0.000 000	0.001
	Batt. Endpoint	+20	2639 999 996	-0.8	0.000 000	0.000

9. TEST PLOTS

NR41_10 M_PAR_Mid_BPSK_FullRB

NR41_10 M_PAR_Mid_QPSK_FullRB



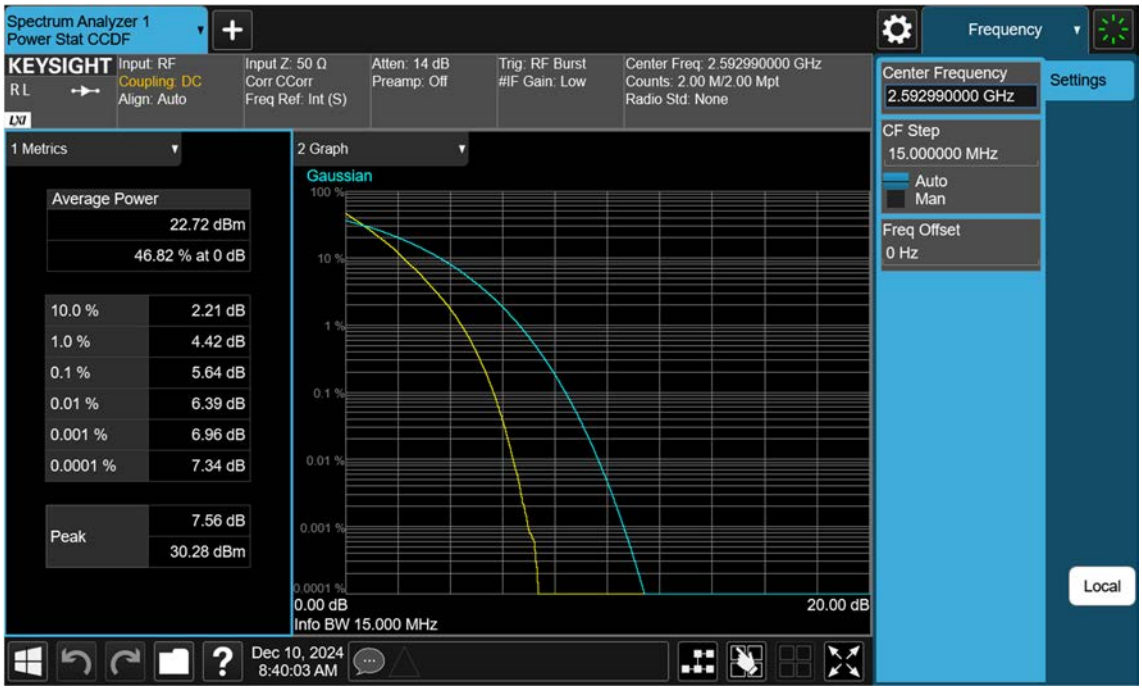
NR41_10 M_PAR_Mid_16QAM_FullRB

NR41_10 M_PAR_Mid_64QAM_FullRB

NR41_10 M_PAR_Mid_256QAM_FullRB

NR41_15 M_PAR_Mid_BPSK_FullRB

NR41_15 M_PAR_Mid_QPSK_FullRB



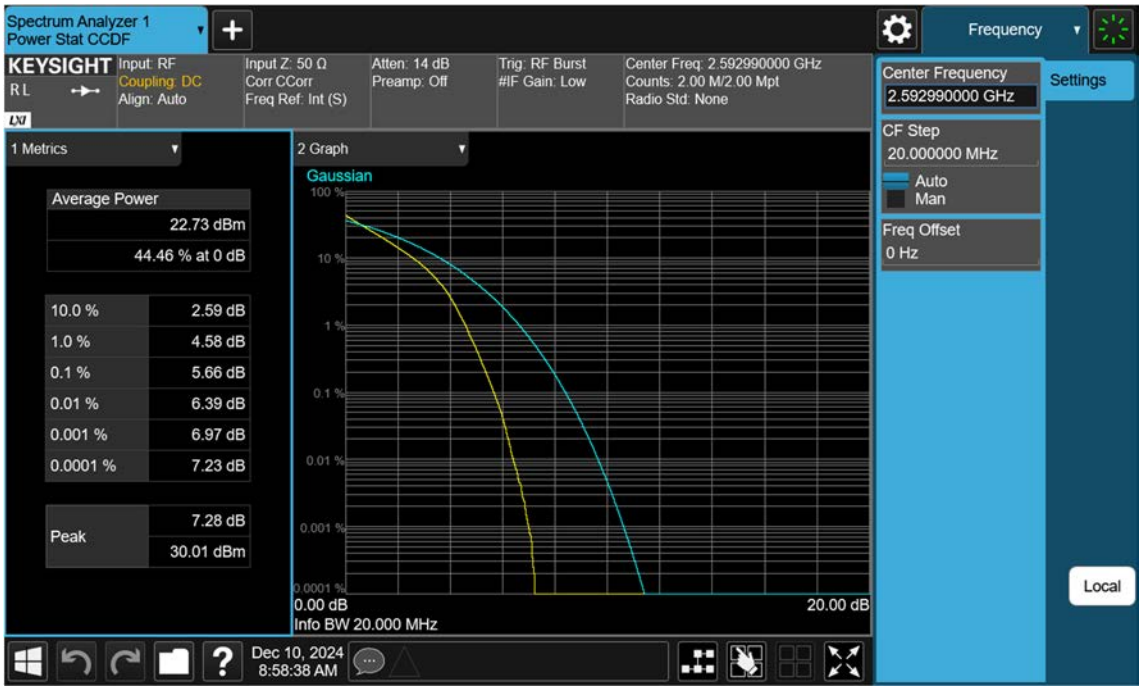
NR41_15 M_PAR_Mid_16QAM_FullRB

NR41_15 M_PAR_Mid_64QAM_FullRB

NR41_15 M_PAR_Mid_256QAM_FullRB

NR41_20 M_PAR_Mid_BPSK_FullRB

NR41_20 M_PAR_Mid_QPSK_FullRB



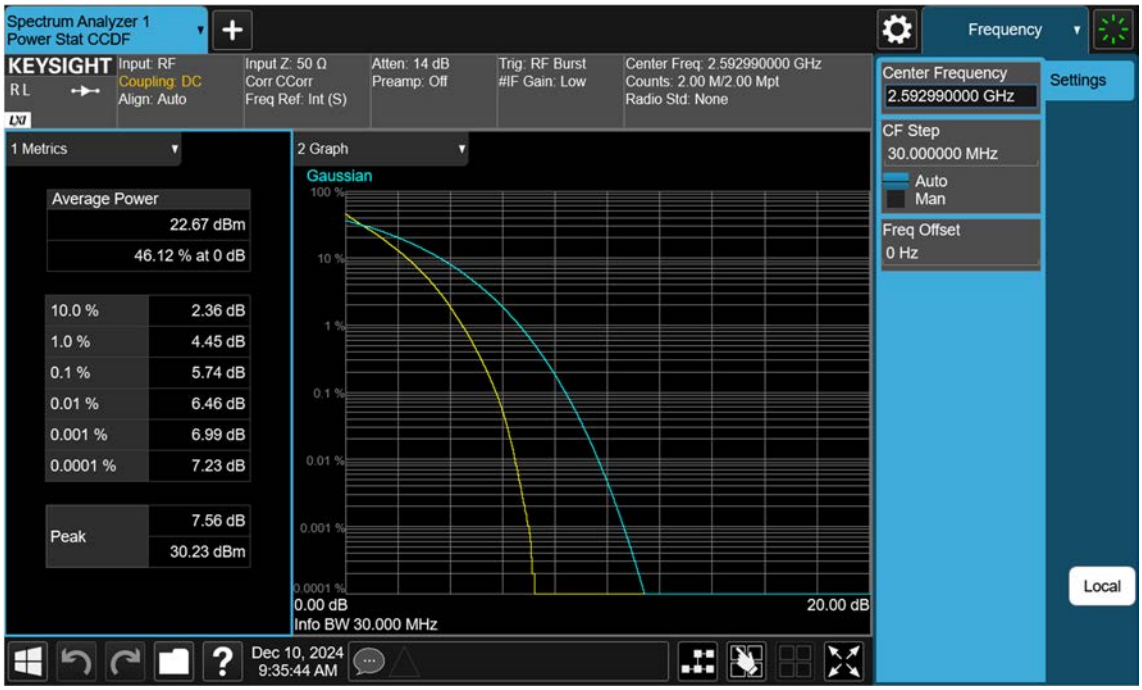
NR41_20 M_PAR_Mid_16QAM_FullRB

NR41_20 M_PAR_Mid_64QAM_FullRB

NR41_20 M_PAR_Mid_256QAM_FullRB

NR41_30 M_PAR_Mid_BPSK_FullRB

NR41_30 M_PAR_Mid_QPSK_FullRB



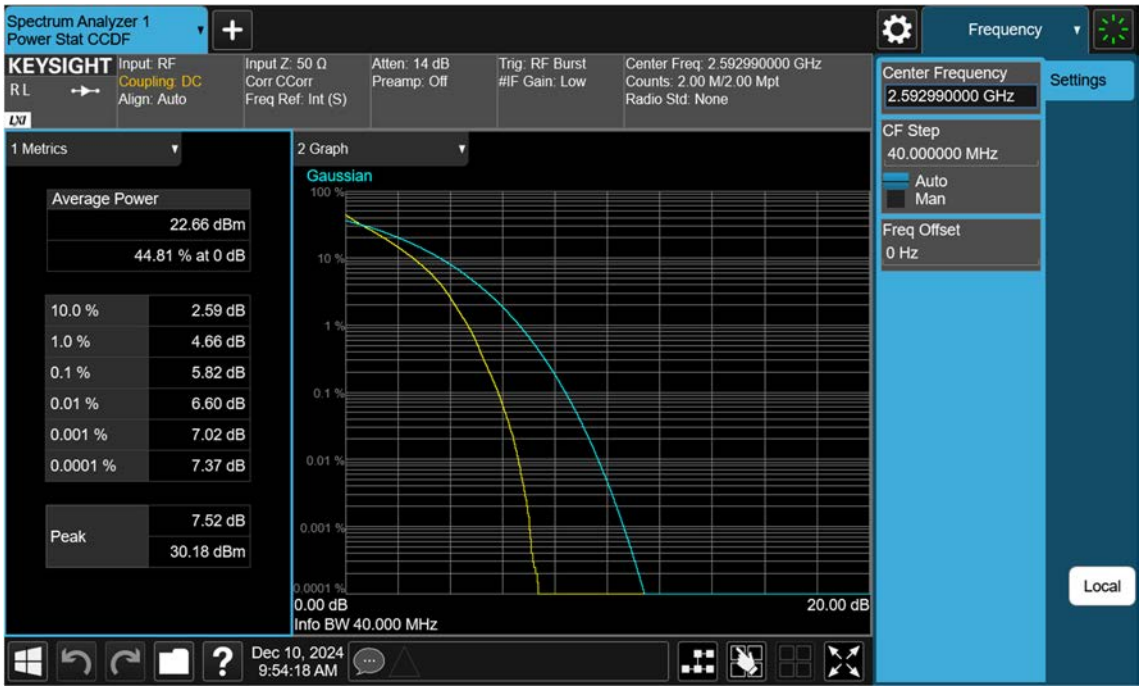
NR41_30 M_PAR_Mid_16QAM_FullRB

NR41_30 M_PAR_Mid_64QAM_FullRB

NR41_30 M_PAR_Mid_256QAM_FullRB

NR41_40 M_PAR_Mid_BPSK_FullRB

NR41_40 M_PAR_Mid_QPSK_FullRB

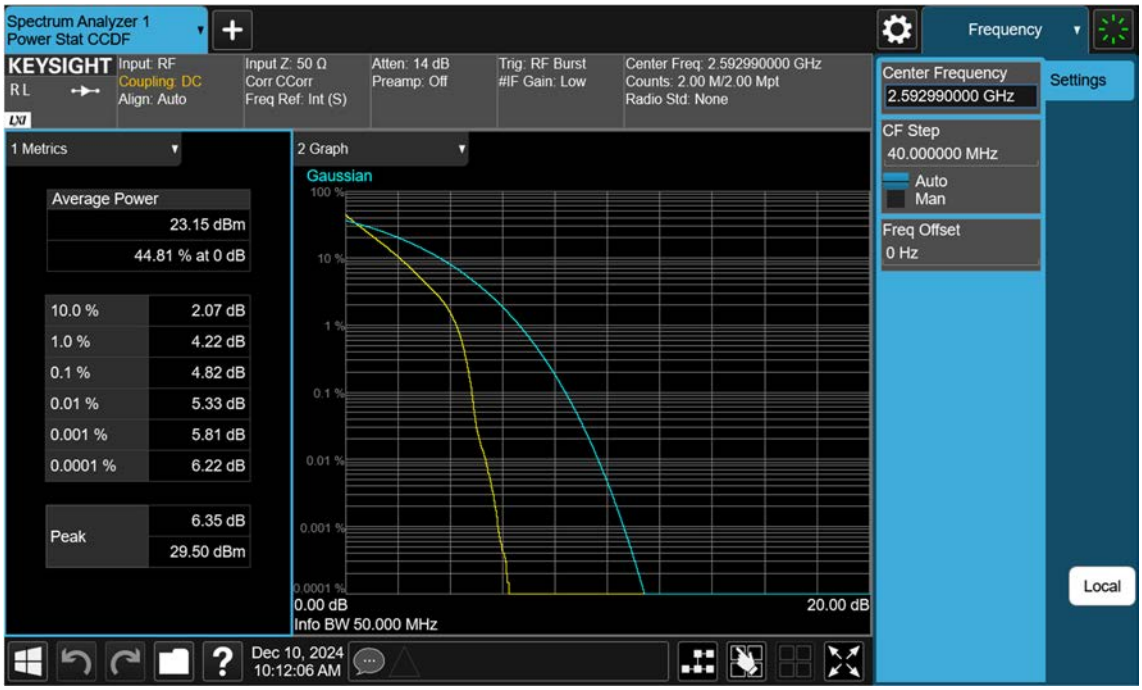


NR41_40 M_PAR_Mid_16QAM_FullRB

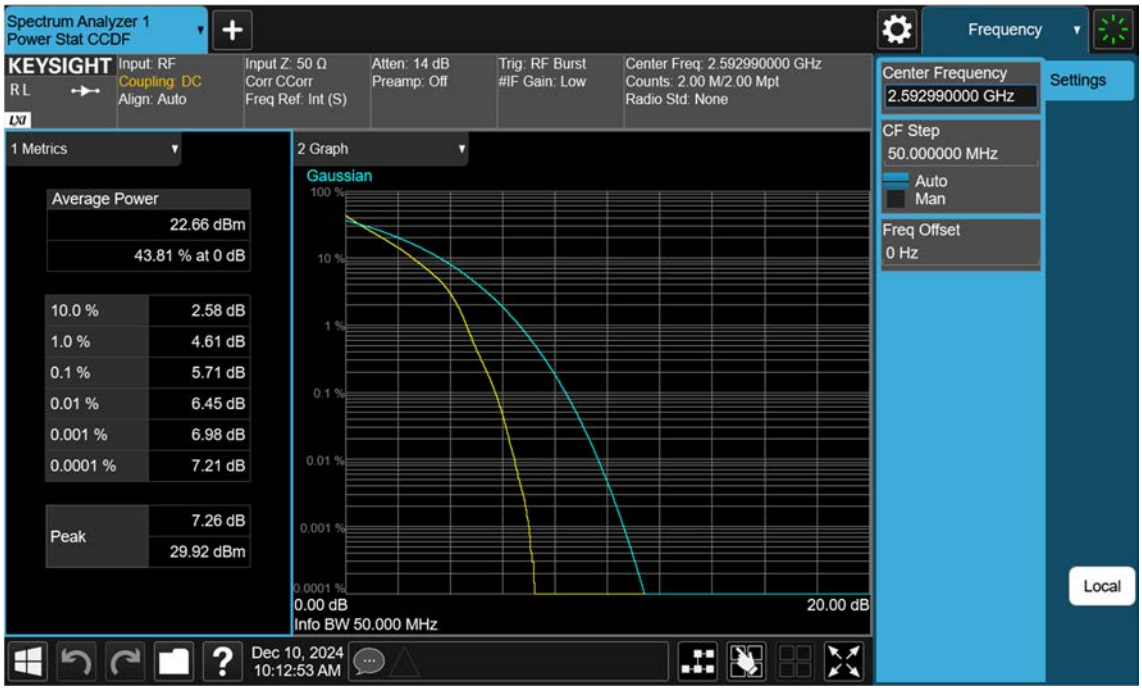
NR41_40 M_PAR_Mid_64QAM_FullRB

NR41_40 M_PAR_Mid_256QAM_FullRB

NR41_50 M_PAR_Mid_BPSK_FullRB



NR41_50 M_PAR_Mid_QPSK_FullRB



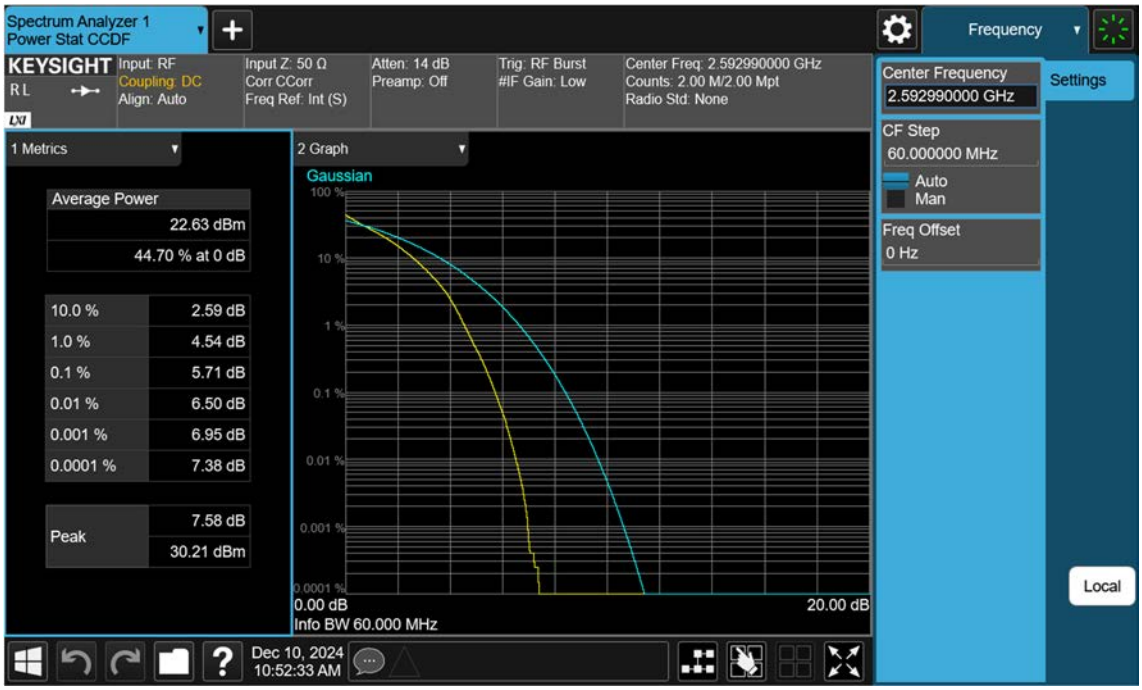
NR41_50 M_PAR_Mid_16QAM_FullRB

NR41_50 M_PAR_Mid_64QAM_FullRB

NR41_50 M_PAR_Mid_256QAM_FullRB

NR41_60 M_PAR_Mid_BPSK_FullRB

NR41_60 M_PAR_Mid_QPSK_FullRB



NR41_60 M_PAR_Mid_16QAM_FullRB

NR41_60 M_PAR_Mid_64QAM_FullRB

NR41_60 M_PAR_Mid_256QAM_FullRB

NR41_70 M_PAR_Mid_BPSK_FullRB

NR41_70 M_PAR_Mid_QPSK_FullRB

NR41_70 M_PAR_Mid_16QAM_FullRB

NR41_70 M_PAR_Mid_64QAM_FullRB

NR41_70 M_PAR_Mid_256QAM_FullRB

NR41_80 M_PAR_Mid_BPSK_FullRB

NR41_80 M_PAR_Mid_QPSK_FullRB

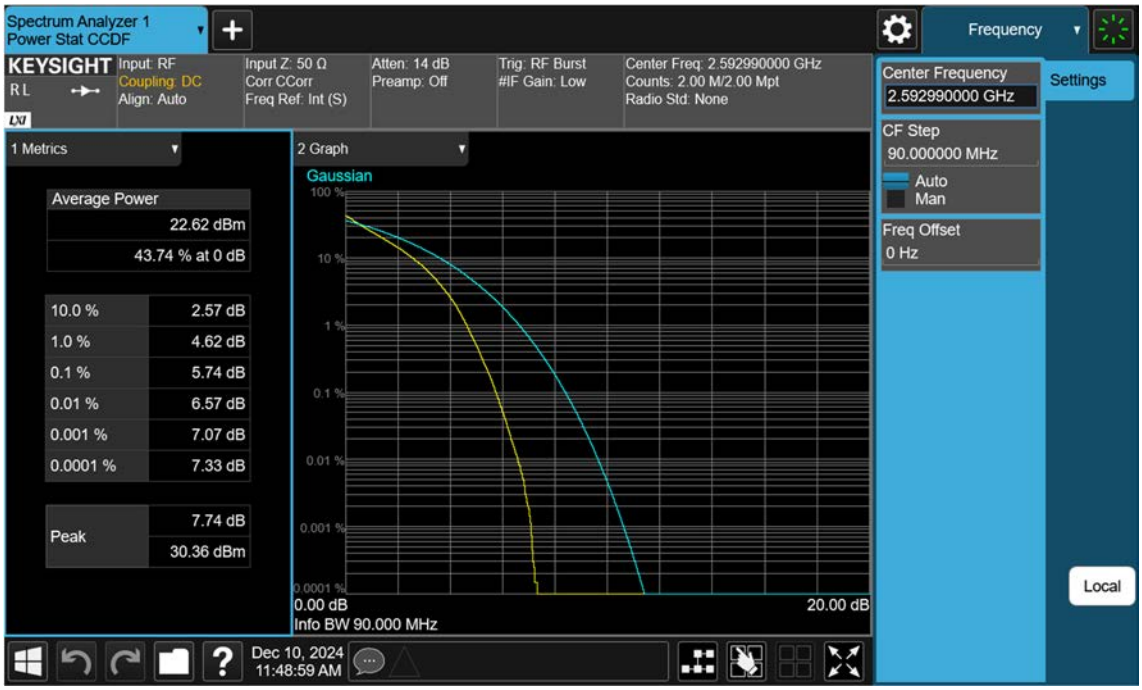
NR41_80 M_PAR_Mid_16QAM_FullRB

NR41_80 M_PAR_Mid_64QAM_FullRB

NR41_80 M_PAR_Mid_256QAM_FullRB

NR41_90 M_PAR_Mid_BPSK_FullRB

NR41_90 M_PAR_Mid_QPSK_FullRB

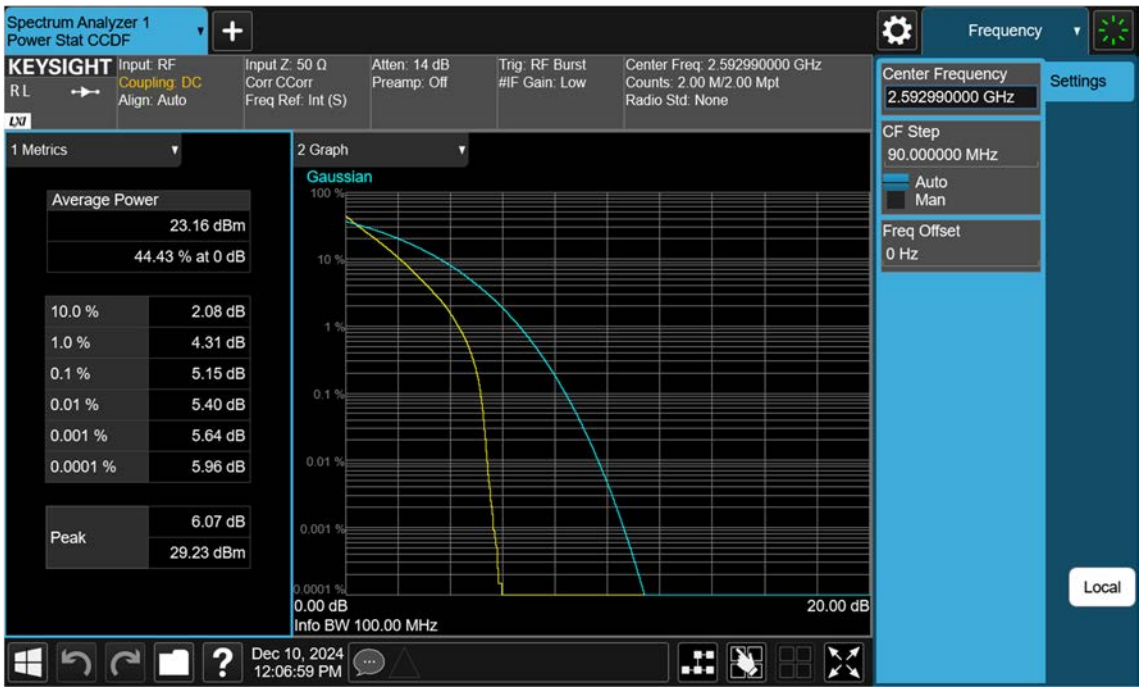


NR41_90 M_PAR_Mid_16QAM_FullRB

NR41_90 M_PAR_Mid_64QAM_FullRB

NR41_90 M_PAR_Mid_256QAM_FullRB

NR41_100 M_PAR_Mid_BPSK_FullRB

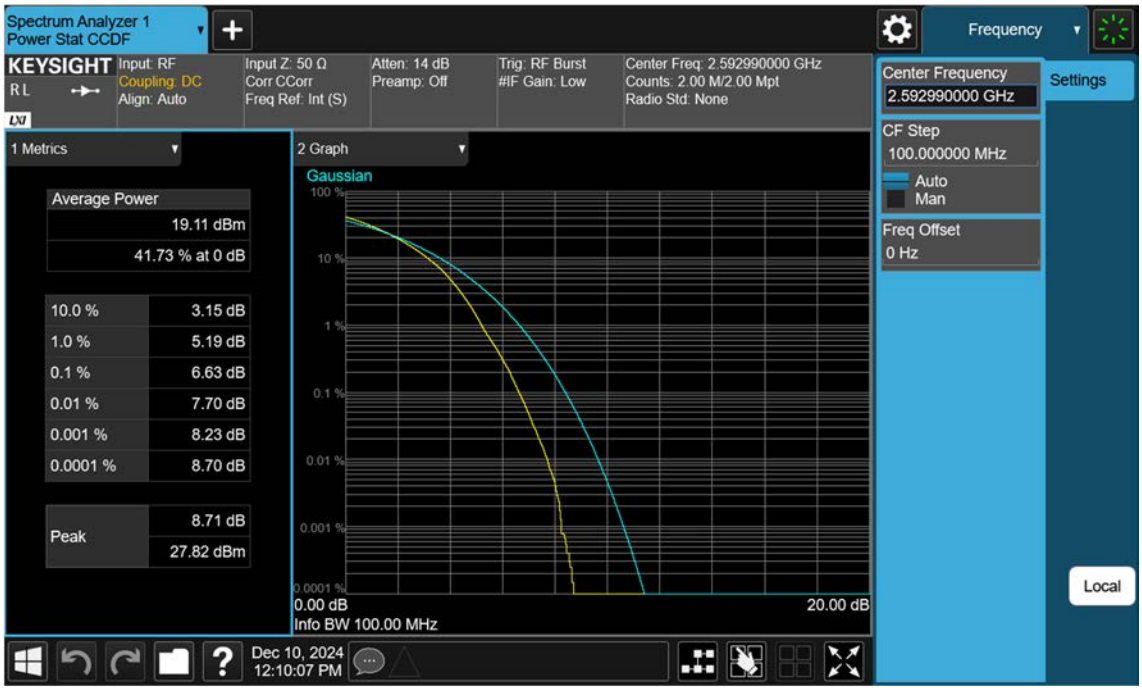


NR41_100 M_PAR_Mid_QPSK_FullRB

NR41_100 M_PAR_Mid_16QAM_FullRB

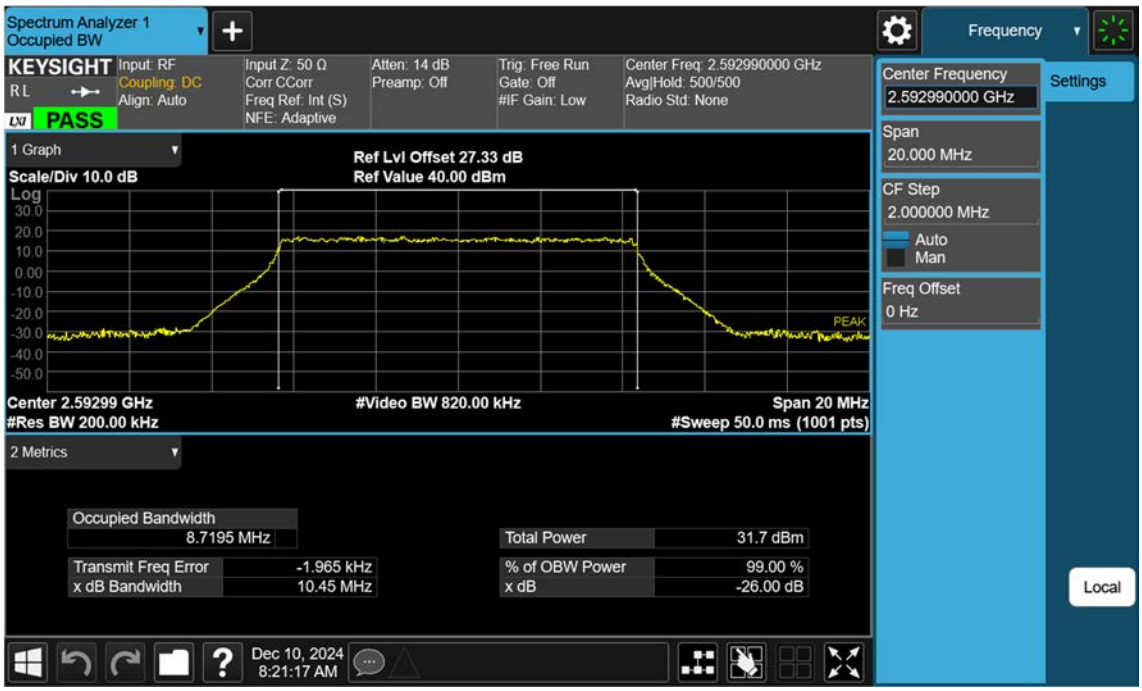
NR41_100 M_PAR_Mid_64QAM_FullRB

NR41_100 M_PAR_Mid_256QAM_FullRB

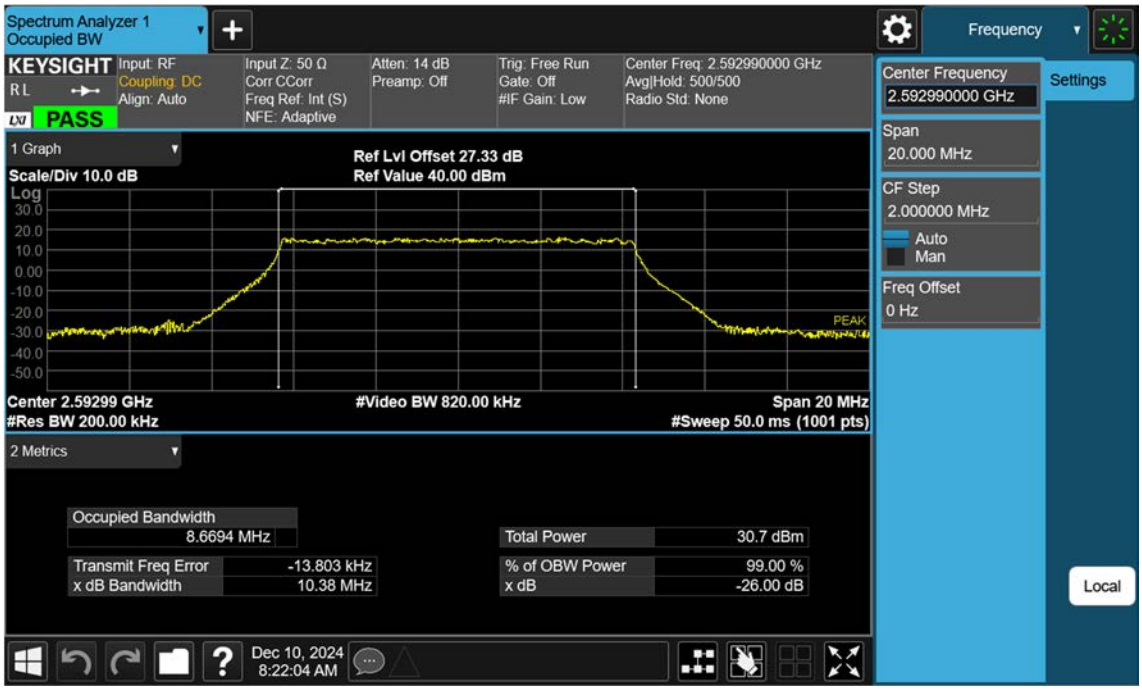


NR41_10 M_OBW_Mid_BPSK_FullRB

NR41_10 M_OBW_Mid_QPSK_FullRB



NR41_10 M_OBW_Mid_16QAM_FullRB



NR41_10 M_OBW_Mid_64QAM_FullRB

NR41_10 M_OBW_Mid_256QAM_FullRB

NR41_15 M_OBW_Mid_BPSK_FullRB

NR41_15 M_OBW_Mid_QPSK_FullRB

NR41_15 M_OBW_Mid_16QAM_FullRB

NR41_15 M_OBW_Mid_64QAM_FullRB