TEST REPORT

FCC Sub6 n41 Test for SM-S721B/DS
Certification

APPLICANT
SAMSUNG Electronics Co., Ltd.

REPORT NO.
HCT-RF-2407-FC063

DATE OF ISSUE
July 24, 2024

Tested by
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TEST REPORT

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Additional Model
SM-S721B

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-S721B/DS
Date of Test	May 21, 2024 ~ July 23, 2024
FCC ID	A3LSMS721B
Location of Test	■ Permanent Testing Lab ☐ 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)
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	July 24, 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 is 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).

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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:	A3LSMS721B
Application Type:	Certification
FCC Classification:	PCS Licensed Transmitter Held to Ear (PCE)
FCC Rule Part(s):	§ 27
EUT Type:	Mobile phone
Model(s):	SM-S721B/DS
Additional Model(s)	SM-S721B
SCS(kHz):	30
Bandwidth(MHz):	5, 10, 15, 20, 30, 35, 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:	May 21, 2024 ~ July 23, 2024
Serial number:	Radiated : R3CX40LGCGM Conducted : R3CX503EC4V

1.1. MAXIMUM OUTPUT POWER

	Mode (MHz)	Tx Frequency (MHz)	Emission Designator	Modulation	EIRP	
					Max. Power (W)	Max. Power (dBm)
Power Class 3	Sub6 n41 (10)	2501.010 – 2685.000	8M71G7D	PI/2 BPSK	0.140	21.46
			8M71G7D	QPSK	0.135	21.31
			8M71W7D	16QAM	0.110	20.42
			8M72W7D	64QAM	0.076	18.79
			8M70W7D	256QAM	0.049	16.89
	Sub6 n41 (15)	2503.500 – 2682.480	13M0G7D	PI/2 BPSK	0.140	21.46
			13M0G7D	QPSK	0.137	21.38
			13M0W7D	16QAM	0.105	20.23
			13M0W7D	64QAM	0.078	18.92
			13M0W7D	256QAM	0.048	16.80
	Sub6 n41 (20)	2506.020 – 2679.990	18M0G7D	PI/2 BPSK	0.137	21.36
			18M0G7D	QPSK	0.136	21.32
			18M0W7D	16QAM	0.109	20.38
			18M0W7D	64QAM	0.079	19.00
			17M9W7D	256QAM	0.050	16.95
	Sub6 n41 (30)	2511.000 – 2674.980	27M0G7D	PI/2 BPSK	0.133	21.23
			26M9G7D	QPSK	0.132	21.21
			27M0W7D	16QAM	0.104	20.19
			27M1W7D	64QAM	0.072	18.56
			26M9W7D	256QAM	0.046	16.60
	Sub6 n41 (40)	2516.010 – 2670.000	36M0G7D	PI/2 BPSK	0.130	21.15
			35M9G7D	QPSK	0.129	21.12
			35M8W7D	16QAM	0.102	20.08
			35M9W7D	64QAM	0.073	18.64
			35M8W7D	256QAM	0.047	16.75
	Sub6 n41 (50)	2521.020 – 2664.990	45M9G7D	PI/2 BPSK	0.130	21.14
			45M9G7D	QPSK	0.130	21.13
			46M0W7D	16QAM	0.103	20.12
			45M7W7D	64QAM	0.074	18.67
			46M1W7D	256QAM	0.047	16.69
	Sub6 n41 (60)	2526.000 – 2659.980	58M1G7D	PI/2 BPSK	0.137	21.37
			58M2G7D	QPSK	0.137	21.36
			58M1W7D	16QAM	0.107	20.31
			57M8W7D	64QAM	0.074	18.68
			58M0W7D	256QAM	0.047	16.74
	Sub6 n41 (70)	2531.010 – 2655.000	64M5G7D	PI/2 BPSK	0.142	21.51
			64M6G7D	QPSK	0.137	21.36
			64M5W7D	16QAM	0.111	20.47
			64M4W7D	64QAM	0.075	18.74
			64M5W7D	256QAM	0.050	17.00
	Sub6 n41 (80)	2536.020 – 2649.990	77M4G7D	PI/2 BPSK	0.126	21.00
			77M2G7D	QPSK	0.126	20.99
			77M4W7D	16QAM	0.102	20.10
			77M4W7D	64QAM	0.071	18.50
			77M2W7D	256QAM	0.046	16.64
	Sub6 n41 (90)	2541.000 – 2644.980	86M8G7D	PI/2 BPSK	0.127	21.05
			87M0G7D	QPSK	0.127	21.04
			86M7W7D	16QAM	0.102	20.10
			86M7W7D	64QAM	0.070	18.43
			86M9W7D	256QAM	0.046	16.62
	Sub6 n41 (100)	2546.010 – 2640.000	96M6G7D	PI/2 BPSK	0.135	21.30
			96M4G7D	QPSK	0.136	21.34
			96M2W7D	16QAM	0.106	20.27
			96M4W7D	64QAM	0.076	18.79
			96M7W7D	256QAM	0.046	16.67

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 (20/40/80/160 MHz), Bluetooth(ePA), BT LE(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
Channel 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 ≥ 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 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 ≥ 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;

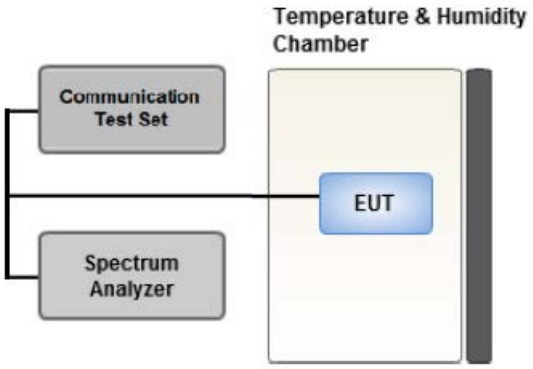
$$\text{Result}_{(dBm)} = \text{Pg}_{(dBm)} - \text{cable loss}_{(dB)} + \text{antenna gain}_{(dBi)}$$

   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)

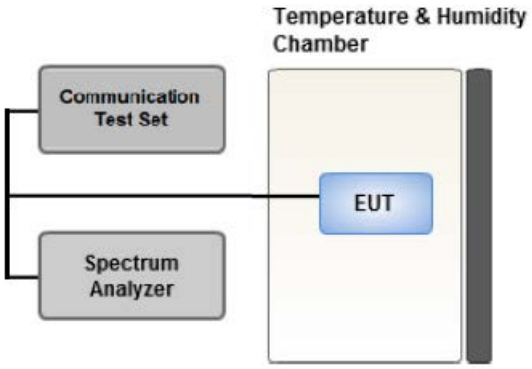
The measurement instrument must have a RBW that is greater than or equal to the OBW of the signal to be measured and a VBW ≥ 3 × RBW.

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.



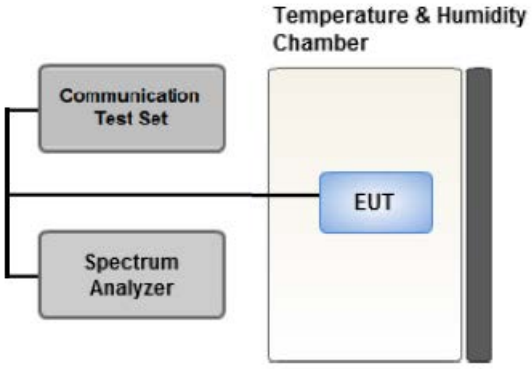
Test setup

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

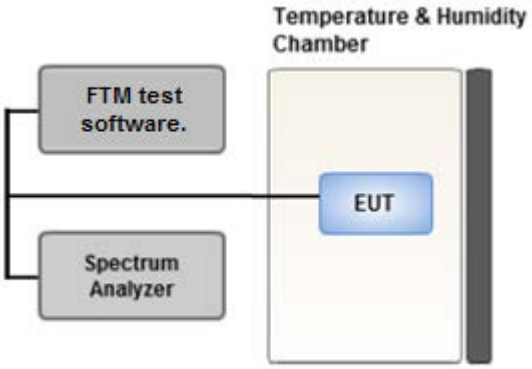
Test Overview

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 = RMS
4. Trace Mode = trace average
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

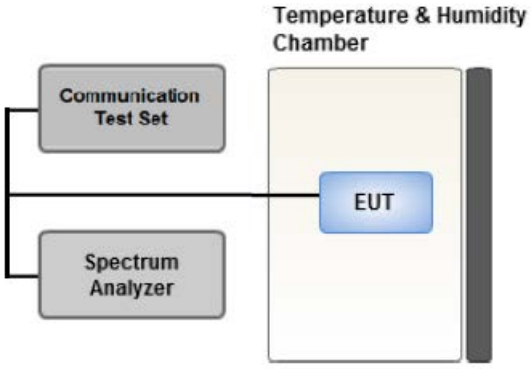
1. Start and stop frequency were set such that the band edge would be placed in the center of the plot
2. Span was set large enough so as to capture all out of band emissions near the band edge
3. Within 1 MHz of the channel edge the RBW should be 2 % of EBW, then 1 MHz after that.
4. VBW > 3 x RBW
5. 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: PC3 Only (SA, NSA)
  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.
- All power classes were tested, and the results were reported for the worst case PC3. (PC3 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.
- SM-S721B/DS & additional models were tested and the worst case results are reported.
  (Worst case : SM-S721B/DS)

[Worst case]

Test Description	Modulation	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		Z

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: PC3 Only (SA, NSA)
  Worst case: SA
- All power classes were tested, and the results were reported for the worst case PC3. (PC3 Only)
- All RB sizes, offsets of operation were investigated and the worst case configuration results are reported.
  Please refer to the table below.
- SM-S721B/DS & additional models were tested and the worst case results are reported.
  (Worst case : SM-S721B/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, 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, 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, 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	05/14/2025	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	11/17/2024	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	05/16/2025	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	09/19/2024	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 (±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(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	-24.95	11.69	10.30	2.47	H	< 2.00	0.090	19.52	1	12
		QPSK	-24.99	11.65	10.30	2.47	H		0.089	19.48		
		16-QAM	-26.16	10.48	10.30	2.47	H		0.068	18.31		
		64-QAM	-27.45	9.19	10.30	2.47	H		0.050	17.02		
		256-QAM	-29.62	7.02	10.30	2.47	H		0.031	14.85		
2592.990		PI/2 BPSK	-22.68	13.62	10.05	2.50	H		0.131	21.17	1	1
		QPSK	-22.69	13.61	10.05	2.50	H		0.131	21.16		
		16-QAM	-23.43	12.87	10.05	2.50	H		0.110	20.42		
		64-QAM	-25.28	11.02	10.05	2.50	H		0.072	18.57		
		256-QAM	-27.02	9.28	10.05	2.50	H		0.048	16.83		
2685.000		PI/2 BPSK	-23.52	13.94	10.10	2.58	H		0.140	21.46	1	12
		QPSK	-23.67	13.79	10.10	2.58	H		0.135	21.31		
		16-QAM	-24.56	12.90	10.10	2.58	H		0.110	20.42		
		64-QAM	-26.19	11.27	10.10	2.58	H		0.076	18.79		
		256-QAM	-28.09	9.37	10.10	2.58	H		0.049	16.89		

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	-24.52	12.11	10.30	2.48	H	< 2.00	0.098	19.93	1	36
		QPSK	-24.57	12.06	10.30	2.48	H		0.097	19.88		
		16-QAM	-25.43	11.20	10.30	2.48	H		0.080	19.02		
		64-QAM	-26.94	9.69	10.30	2.48	H		0.056	17.51		
		256-QAM	-28.86	7.77	10.30	2.48	H		0.036	15.59		
2592.990		PI/2 BPSK	-22.62	13.68	10.05	2.50	H		0.133	21.23	1	1
		QPSK	-22.69	13.61	10.05	2.50	H		0.131	21.16		
		16-QAM	-23.76	12.54	10.05	2.50	H		0.102	20.09		
		64-QAM	-25.06	11.24	10.05	2.50	H		0.076	18.79		
		256-QAM	-27.16	9.14	10.05	2.50	H		0.047	16.69		
2682.480		PI/2 BPSK	-23.77	13.94	10.10	2.58	H		0.140	21.46	1	19
		QPSK	-23.85	13.86	10.10	2.58	H		0.137	21.38		
		16-QAM	-25.00	12.71	10.10	2.58	H		0.105	20.23		
		64-QAM	-26.31	11.40	10.10	2.58	H		0.078	18.92		
		256-QAM	-28.43	9.28	10.10	2.58	H		0.048	16.80		

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	-24.20	12.43	10.30	2.48	H	< 2.00	0.106	20.25	1	49
		QPSK	-24.23	12.40	10.30	2.48	H		0.105	20.22		
		16-QAM	-25.18	11.45	10.30	2.48	H		0.085	19.27		
		64-QAM	-26.73	9.90	10.30	2.48	H		0.059	17.72		
		256-QAM	-28.69	7.94	10.30	2.48	H		0.038	15.76		
2592.990		PI/2 BPSK	-22.98	13.32	10.05	2.50	H		0.122	20.87	1	49
		QPSK	-23.03	13.27	10.05	2.50	H		0.121	20.82		
		16-QAM	-23.94	12.36	10.05	2.50	H		0.098	19.91		
		64-QAM	-25.60	10.70	10.05	2.50	H		0.067	18.25		
		256-QAM	-27.52	8.78	10.05	2.50	H		0.043	16.33		
2679.990		PI/2 BPSK	-23.87	13.84	10.10	2.58	H		0.137	21.36	1	49
		QPSK	-23.91	13.80	10.10	2.58	H		0.136	21.32		
		16-QAM	-24.85	12.86	10.10	2.58	H		0.109	20.38		
		64-QAM	-26.23	11.48	10.10	2.58	H		0.079	19.00		
		256-QAM	-28.28	9.43	10.10	2.58	H		0.050	16.95		

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	-23.81	12.81	10.30	2.50	H	< 2.00	0.115	20.61	1	76
		QPSK	-23.90	12.72	10.30	2.50	H		0.113	20.52		
		16-QAM	-25.03	11.59	10.30	2.50	H		0.087	19.39		
		64-QAM	-26.24	10.38	10.30	2.50	H		0.066	18.18		
		256-QAM	-28.46	8.16	10.30	2.50	H		0.040	15.96		
2592.990		PI/2 BPSK	-22.81	13.49	10.05	2.50	H		0.127	21.04	1	39
		QPSK	-22.92	13.38	10.05	2.50	H		0.124	20.93		
		16-QAM	-23.84	12.46	10.05	2.50	H		0.100	20.01		
		64-QAM	-25.29	11.01	10.05	2.50	H		0.072	18.56		
		256-QAM	-27.31	8.99	10.05	2.50	H		0.045	16.54		
2674.980		PI/2 BPSK	-23.70	13.71	10.10	2.58	H		0.133	21.23	1	1
		QPSK	-23.72	13.69	10.10	2.58	H		0.132	21.21		
		16-QAM	-24.74	12.67	10.10	2.58	H		0.104	20.19		
		64-QAM	-26.39	11.02	10.10	2.58	H		0.071	18.54		
		256-QAM	-28.33	9.08	10.10	2.58	H		0.046	16.60		

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	-23.51	12.98	10.30	2.51	H	< 2.00	0.119	20.77	1	104
		QPSK	-23.55	12.94	10.30	2.51	H		0.118	20.73		
		16-QAM	-24.63	11.86	10.30	2.51	H		0.092	19.65		
		64-QAM	-26.12	10.37	10.30	2.51	H		0.066	18.16		
		256-QAM	-27.90	8.59	10.30	2.51	H		0.044	16.38		
2592.990		PI/2 BPSK	-22.85	13.45	10.05	2.50	H		0.126	21.00	1	53
		QPSK	-22.95	13.35	10.05	2.50	H		0.123	20.90		
		16-QAM	-23.86	12.44	10.05	2.50	H		0.100	19.99		
		64-QAM	-25.46	10.84	10.05	2.50	H		0.069	18.39		
		256-QAM	-27.39	8.91	10.05	2.50	H		0.044	16.46		
2670.000		PI/2 BPSK	-23.49	13.63	10.10	2.58	H		0.130	21.15	1	1
		QPSK	-23.52	13.60	10.10	2.58	H		0.129	21.12		
		16-QAM	-24.56	12.56	10.10	2.58	H		0.102	20.08		
		64-QAM	-26.00	11.12	10.10	2.58	H		0.073	18.64		
		256-QAM	-27.89	9.23	10.10	2.58	H		0.047	16.75		

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	-23.50	13.17	10.00	2.53	H	< 2.00	0.116	20.64	1	131
		QPSK	-23.51	13.16	10.00	2.53	H		0.116	20.63		
		16-QAM	-24.54	12.13	10.00	2.53	H		0.091	19.60		
		64-QAM	-26.03	10.64	10.00	2.53	H		0.065	18.11		
		256-QAM	-27.92	8.75	10.00	2.53	H		0.042	16.22		
2592.990		PI/2 BPSK	-22.84	13.46	10.05	2.50	H		0.126	21.01	1	66
		QPSK	-22.96	13.34	10.05	2.50	H		0.123	20.89		
		16-QAM	-23.93	12.37	10.05	2.50	H		0.098	19.92		
		64-QAM	-25.44	10.86	10.05	2.50	H		0.069	18.41		
		256-QAM	-27.38	8.92	10.05	2.50	H		0.044	16.47		
2664.990		PI/2 BPSK	-23.45	13.64	10.10	2.60	H		0.130	21.14	1	1
		QPSK	-23.46	13.63	10.10	2.60	H		0.130	21.13		
		16-QAM	-24.47	12.62	10.10	2.60	H		0.103	20.12		
		64-QAM	-25.92	11.17	10.10	2.60	H		0.074	18.67		
		256-QAM	-27.90	9.19	10.10	2.60	H		0.047	16.69		

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
2526.000	Sub6 41/ 60 MHz [30 kHz]	PI/2 BPSK	-23.43	12.83	10.30	2.53	H	< 2.00	0.115	20.60	1	160
		QPSK	-23.45	12.81	10.30	2.53	H		0.114	20.58		
		16-QAM	-24.42	11.84	10.30	2.53	H		0.091	19.61		
		64-QAM	-26.13	10.13	10.30	2.53	H		0.062	17.90		
		256-QAM	-27.89	8.37	10.30	2.53	H		0.041	16.14		
2592.990		PI/2 BPSK	-22.88	13.42	10.05	2.50	H		0.125	20.97	1	81
		QPSK	-22.89	13.41	10.05	2.50	H		0.125	20.96		
		16-QAM	-23.77	12.53	10.05	2.50	H		0.102	20.08		
		64-QAM	-25.31	10.99	10.05	2.50	H		0.071	18.54		
		256-QAM	-27.34	8.96	10.05	2.50	H		0.045	16.51		
2659.980		PI/2 BPSK	-22.97	13.88	10.10	2.61	H		0.137	21.37	1	1
		QPSK	-22.98	13.87	10.10	2.61	H		0.137	21.36		
		16-QAM	-24.03	12.82	10.10	2.61	H		0.107	20.31		
		64-QAM	-25.66	11.19	10.10	2.61	H		0.074	18.68		
		256-QAM	-27.60	9.25	10.10	2.61	H		0.047	16.74		

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	-22.95	13.17	10.30	2.52	H	< 2.00	0.125	20.95	1	187
		QPSK	-22.99	13.13	10.30	2.52	H		0.123	20.91		
		16-QAM	-23.90	12.22	10.30	2.52	H		0.100	20.00		
		64-QAM	-25.67	10.45	10.30	2.52	H		0.067	18.23		
		256-QAM	-27.45	8.67	10.30	2.52	H		0.044	16.45		
2592.990		PI/2 BPSK	-22.83	13.47	10.05	2.50	H		0.127	21.02	1	94
		QPSK	-22.84	13.46	10.05	2.50	H		0.126	21.01		
		16-QAM	-23.94	12.36	10.05	2.50	H		0.098	19.91		
		64-QAM	-25.35	10.95	10.05	2.50	H		0.071	18.50		
		256-QAM	-27.41	8.89	10.05	2.50	H		0.044	16.44		
2655.000		PI/2 BPSK	-22.72	14.04	10.10	2.63	H		0.142	21.51	1	1
		QPSK	-22.87	13.89	10.10	2.63	H		0.137	21.36		
		16-QAM	-23.76	13.00	10.10	2.63	H		0.111	20.47		
		64-QAM	-25.49	11.27	10.10	2.63	H		0.075	18.74		
		256-QAM	-27.23	9.53	10.10	2.63	H		0.050	17.00		

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	-23.46	12.78	10.30	2.52	H	< 2.00	0.114	20.56	1	215
		QPSK	-23.55	12.69	10.30	2.52	H		0.111	20.47		
		16-QAM	-24.53	11.71	10.30	2.52	H		0.089	19.49		
		64-QAM	-25.93	10.31	10.30	2.52	H		0.064	18.09		
		256-QAM	-27.98	8.26	10.30	2.52	H		0.040	16.04		
2592.990		PI/2 BPSK	-22.85	13.45	10.05	2.50	H		0.126	21.00	1	108
		QPSK	-22.86	13.44	10.05	2.50	H		0.126	20.99		
		16-QAM	-23.75	12.55	10.05	2.50	H		0.102	20.10		
		64-QAM	-25.35	10.95	10.05	2.50	H		0.071	18.50		
		256-QAM	-27.21	9.09	10.05	2.50	H		0.046	16.64		
2649.990		PI/2 BPSK	-23.14	13.53	10.10	2.65	H		0.125	20.98	1	1
		QPSK	-23.22	13.45	10.10	2.65	H		0.123	20.90		
		16-QAM	-24.17	12.50	10.10	2.65	H		0.099	19.95		
		64-QAM	-25.73	10.94	10.10	2.65	H		0.069	18.39		
		256-QAM	-27.65	9.02	10.10	2.65	H		0.044	16.47		

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	-23.31	13.05	10.30	2.52	H	< 2.00	0.121	20.83	1	122
		QPSK	-23.46	12.90	10.30	2.52	H		0.117	20.68		
		16-QAM	-24.28	12.08	10.30	2.52	H		0.097	19.86		
		64-QAM	-25.76	10.60	10.30	2.52	H		0.069	18.38		
		256-QAM	-27.96	8.40	10.30	2.52	H		0.042	16.18		
2592.990		PI/2 BPSK	-22.80	13.50	10.05	2.50	H		0.127	21.05	1	243
		QPSK	-22.81	13.49	10.05	2.50	H		0.127	21.04		
		16-QAM	-23.75	12.55	10.05	2.50	H		0.102	20.10		
		64-QAM	-25.49	10.81	10.05	2.50	H		0.069	18.36		
		256-QAM	-27.23	9.07	10.05	2.50	H		0.046	16.62		
2644.980		PI/2 BPSK	-23.14	13.67	10.00	2.66	H		0.126	21.01	1	1
		QPSK	-23.18	13.63	10.00	2.66	H		0.125	20.97		
		16-QAM	-24.25	12.56	10.00	2.66	H		0.098	19.90		
		64-QAM	-25.72	11.09	10.00	2.66	H		0.070	18.43		
		256-QAM	-27.54	9.27	10.00	2.66	H		0.046	16.61		

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
2546.010	Sub6 41/ 100 MHz [30 kHz]	PI/2 BPSK	-23.08	13.29	10.25	2.54	H	< 2.00	0.126	21.00	1	271
		QPSK	-23.27	13.10	10.25	2.54	H		0.121	20.81		
		16-QAM	-24.14	12.23	10.25	2.54	H		0.099	19.94		
		64-QAM	-25.29	11.08	10.25	2.54	H		0.076	18.79		
		256-QAM	-27.64	8.73	10.25	2.54	H		0.044	16.44		
2592.990		PI/2 BPSK	-22.75	13.55	10.05	2.50	H		0.129	21.10	1	136
		QPSK	-22.76	13.54	10.05	2.50	H		0.129	21.09		
		16-QAM	-23.93	12.37	10.05	2.50	H		0.098	19.92		
		64-QAM	-25.25	11.05	10.05	2.50	H		0.072	18.60		
		256-QAM	-27.21	9.09	10.05	2.50	H		0.046	16.64		
2640.000		PI/2 BPSK	-22.88	14.07	9.90	2.67	H		0.135	21.30	1	1
		QPSK	-22.84	14.11	9.90	2.67	H		0.136	21.34		
		16-QAM	-23.91	13.04	9.90	2.67	H		0.106	20.27		
		64-QAM	-25.55	11.40	9.90	2.67	H		0.073	18.63		
		256-QAM	-27.51	9.44	9.90	2.67	H		0.046	16.67		

8.2 RADIATED SPURIOUS EMISSIONS

- ▣ NR Band: n41
- ▣ Bandwidth: 10 MHz
- ▣ Modulation: PI/2 BPSK
- ▣ Distance: 1 meter
- ▣ SCS: 30kHz

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	-62.54	10.70	-63.89	3.63	V	-56.82	-25.00	1	12
	7,503.03	-63.47	11.10	-56.46	4.50	V	-49.86	-25.00		
	10,004.04	-62.11	11.20	-53.65	5.26	V	-47.71	-25.00		
518598 (2592.990)	5,185.98	-51.58	11.00	-53.08	3.70	H	-45.78	-25.00	1	1
	7,778.97	-62.54	10.90	-55.16	4.61	V	-48.87	-25.00		
	10,371.96	-62.33	11.20	-51.63	5.41	V	-45.84	-25.00		
537000 (2685.000)	5,370.00	-37.52	11.50	-40.04	3.74	H	-32.28	-25.00	1	12
	8,055.00	-55.19	10.90	-47.98	4.71	H	-41.79	-25.00		
	10,740.00	-63.13	11.10	-52.53	5.50	V	-46.93	-25.00		

▣ NR Band: n41

▣ Bandwidth: 15 MHz

▣ Modulation: PI/2 BPSK

▣ Distance: 1 meter

▣ SCS: 30kHz

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	-62.83	10.70	-64.11	3.61	V	-57.02	-25.00	1	36
	7,510.50	-63.94	11.10	-56.87	4.50	V	-50.27	-25.00		
	10,014.00	-62.13	11.20	-53.52	5.27	V	-47.59	-25.00		
518598 (2592.990)	5,185.98	-52.55	11.00	-54.05	3.70	H	-46.75	-25.00	1	1
	7,778.97	-62.82	10.90	-55.44	4.61	V	-49.15	-25.00		
	10,371.96	-62.55	11.20	-51.85	5.41	V	-46.06	-25.00		
536496 (2682.480)	5,364.96	-36.06	11.50	-38.35	3.75	H	-30.60	-25.00	1	19
	8,047.44	-56.96	10.85	-49.78	4.69	H	-43.62	-25.00		
	10,729.92	-62.28	11.10	-51.05	5.47	H	-45.42	-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	-60.36	10.70	-61.57	3.59	V	-54.46	-25.00	1	49
	7,518.06	-63.31	11.10	-56.20	4.51	V	-49.61	-25.00		
	10,024.08	-62.09	11.20	-53.27	5.27	V	-47.34	-25.00		
518598 (2592.990)	5,185.98	-50.00	11.00	-51.50	3.70	H	-44.20	-25.00	1	49
	7,778.97	-60.98	10.90	-53.60	4.61	V	-47.31	-25.00		
	10,371.96	-64.35	11.20	-53.65	5.41	H	-47.86	-25.00		
535998 (2679.990)	5,359.98	-36.84	11.50	-38.90	3.76	H	-31.16	-25.00	1	49
	8,039.97	-55.60	10.80	-48.43	4.68	H	-42.31	-25.00		
	10,719.96	-63.31	11.10	-51.68	5.46	V	-46.04	-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	-58.24	10.70	-59.77	3.55	H	-52.62	-25.00	1	76
	7,533.00	-63.28	11.10	-55.80	4.50	V	-49.20	-25.00		
	10,044.00	-61.45	11.15	-52.60	5.27	V	-46.72	-25.00		
518598 (2592.990)	5,185.98	-51.98	11.00	-53.48	3.70	V	-46.18	-25.00	1	39
	7,778.97	-61.34	10.90	-53.96	4.61	H	-47.67	-25.00		
	10,371.96	-63.20	11.20	-52.50	5.41	H	-46.71	-25.00		
534996 (2674.980)	5,349.96	-41.13	11.50	-42.78	3.75	H	-35.03	-25.00	1	1
	8,024.94	-51.88	10.80	-45.17	4.62	H	-38.99	-25.00		
	10,699.92	-64.53	11.10	-52.85	5.48	V	-47.23	-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	-59.27	10.70	-61.37	3.56	H	-54.23	-25.00	1	104
	7,548.03	-61.44	11.10	-54.10	4.50	H	-47.50	-25.00		
	10,064.04	-62.81	11.10	-54.00	5.28	H	-48.18	-25.00		
518598 (2592.990)	5,185.98	-50.57	11.00	-52.07	3.70	H	-44.77	-25.00	1	53
	7,778.97	-62.14	10.90	-54.76	4.61	V	-48.47	-25.00		
	10,371.96	-62.92	11.20	-52.22	5.41	V	-46.43	-25.00		
534000 (2670.000)	5,340.00	-40.91	11.40	-42.61	3.75	H	-34.96	-25.00	1	1
	8,010.00	-54.40	10.80	-47.33	4.62	H	-41.15	-25.00		
	10,680.00	-64.37	11.10	-52.91	5.46	H	-47.27	-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	-59.07	10.70	-61.04	3.60	H	-53.94	-25.00	1	131
	7,563.06	64.75	11.10	71.57	4.52	V	78.15	-25.00		
	10,084.08	-63.04	11.10	-53.82	5.30	V	-48.02	-25.00		
518598 (2592.990)	5,185.98	-49.66	11.00	-51.16	3.70	H	-43.86	-25.00	1	66
	7,778.97	-60.20	10.90	-52.82	4.61	H	-46.53	-25.00		
	10,371.96	-63.89	11.20	-53.19	5.41	H	-47.40	-25.00		
532998 (2664.990)	5,329.98	-44.20	11.40	-46.17	3.71	H	-38.48	-25.00	1	1
	7,994.97	-58.91	10.75	-51.50	4.66	V	-45.41	-25.00		
	10,659.96	-60.45	11.10	-48.29	5.49	H	-42.68	-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	-56.19	10.70	-57.84	3.63	H	-50.77	-25.00	1	160
	7,578.00	-60.46	11.10	-53.67	4.54	H	-47.11	-25.00		
	10,104.00	-63.97	11.10	-55.13	5.29	H	-49.32	-25.00		
518598 (2592.990)	5,185.98	-50.80	11.00	-52.30	3.70	H	-45.00	-25.00	1	81
	7,778.97	-58.65	10.90	-51.27	4.61	H	-44.98	-25.00		
	10,371.96	-63.60	11.20	-52.90	5.41	V	-47.11	-25.00		
531996 (2659.980)	5,319.96	-42.75	11.40	-45.49	3.66	V	-37.75	-25.00	1	1
	7,979.94	-58.12	10.70	-50.87	4.67	H	-44.84	-25.00		
	10,639.92	-63.36	11.20	-51.93	5.49	H	-46.22	-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	-55.47	10.70	-56.45	3.65	V	-49.40	-25.00	1	187
	7,593.03	-64.10	11.15	-57.06	4.53	V	-50.44	-25.00		
	10,124.04	-64.56	11.10	-55.68	5.30	V	-49.88	-25.00		
518598 (2592.990)	5,185.98	-50.74	11.00	-52.24	3.70	H	-44.94	-25.00	1	94
	7,778.97	-56.94	10.90	-49.56	4.61	H	-43.27	-25.00		
	10,371.96	-64.00	11.20	-53.30	5.41	H	-47.51	-25.00		
531000 (2655.000)	5,310.00	-46.80	11.40	-49.04	3.65	H	-41.29	-25.00	1	1
	7,965.00	-56.73	10.70	-49.56	4.65	H	-43.51	-25.00		
	10,620.00	-62.93	11.20	-52.24	5.41	H	-46.45	-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	-52.57	10.70	-53.85	3.62	H	-46.77	-25.00	1	215
	7,608.06	-61.19	11.20	-54.18	4.52	H	-47.50	-25.00		
	10,144.08	-63.46	11.05	-53.99	5.32	H	-48.26	-25.00		
518598 (2592.990)	5,185.98	-52.86	11.00	-54.36	3.70	H	-47.06	-25.00	1	108
	7,778.97	-63.47	10.90	-56.09	4.61	V	-49.80	-25.00		
	10,371.96	-63.66	11.20	-52.96	5.41	V	-47.17	-25.00		
529998 (2649.990)	5,299.98	-49.91	11.40	-52.02	3.69	H	-44.31	-25.00	1	1
	7,949.97	-58.06	10.70	-50.75	4.64	H	-44.69	-25.00		
	10,599.96	-64.19	11.20	-53.00	5.41	H	-47.21	-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	-57.80	10.70	-59.44	3.61	V	-52.35	-25.00	1	122
	7,623.00	-63.80	11.20	-57.40	4.52	V	-50.72	-25.00		
	10,164.00	-61.29	11.00	-52.21	5.33	V	-46.54	-25.00		
518598 (2592.990)	5,185.98	-42.98	11.00	-44.48	3.70	H	-37.18	-25.00	1	243
	7,778.97	-59.79	10.90	-52.41	4.61	H	-46.12	-25.00		
	10,371.96	-63.64	11.20	-52.94	5.41	H	-47.15	-25.00		
528996 (2644.980)	5,289.96	-48.75	11.30	-50.22	3.73	H	-42.65	-25.00	1	1
	7,934.94	-59.47	10.70	-52.12	4.64	V	-46.06	-25.00		
	10,579.92	-63.98	11.20	-53.53	5.46	V	-47.79	-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	-52.07	10.70	-54.22	3.64	H	-47.16	-25.00	1	271
	7,638.03	-58.62	11.20	-52.23	4.53	V	-45.56	-25.00		
	10,184.04	-63.54	11.00	-54.08	5.33	H	-48.41	-25.00		
518598 (2592.990)	5,185.98	-49.22	11.00	-50.72	3.70	H	-43.42	-25.00	1	136
	7,778.97	-63.13	10.90	-55.75	4.61	H	-49.46	-25.00		
	10,371.96	-64.28	11.20	-53.58	5.41	H	-47.79	-25.00		
528000 (2640.000)	5,280.00	-53.21	11.30	-55.12	3.75	V	-47.57	-25.00	1	1
	7,920.00	-63.66	10.70	-56.48	4.63	V	-50.41	-25.00		
	10,560.00	-63.82	11.20	-53.91	5.45	V	-48.16	-25.00		

8.3 PEAK-TO-AVERAGE RATIO

Band	Band Width	Frequency (MHz)	Modulation	Resource Block Size	Resource Block Offset	Data (dB)
Sub6 n41	10 MHz	2592.990	BPSK	24	0	4.51
			QPSK			5.70
			16-QAM			6.32
			64-QAM			6.49
			256-QAM			6.31
	15 MHz		BPSK	36		4.45
			QPSK			5.58
			16-QAM			6.18
			64-QAM			6.58
			256-QAM			6.43
	20 MHz		BPSK	50		4.81
			QPSK			5.64
			16-QAM			6.14
			64-QAM			6.30
			256-QAM			6.42
	30 MHz		BPSK	75		5.08
			QPSK			5.66
			16-QAM			6.22
			64-QAM			6.47
			256-QAM			6.38
	40 MHz		BPSK	100		4.58
			QPSK			5.69
			16-QAM			6.26
			64-QAM			6.38
			256-QAM			6.44
	50 MHz		BPSK	128		4.44
			QPSK			5.60
			16-QAM			6.22
			64-QAM			6.37
			256-QAM			6.35

Band	Band Width	Frequency (MHz)	Modulation	Resource Block Size	Resource Block Offset	Data (dB)
Sub6 n41	60 MHz	2592.990	BPSK	162	0	5.45
			QPSK			5.68
			16-QAM			6.17
			64-QAM			6.47
			256-QAM			6.41
	70 MHz		BPSK	180		4.47
			QPSK			5.53
			16-QAM			6.12
			64-QAM			6.35
			256-QAM			6.37
	80 MHz		BPSK	216		4.44
			QPSK			5.45
			16-QAM			6.20
			64-QAM			6.40
			256-QAM			6.44
	90 MHz		BPSK	243		4.46
			QPSK			5.50
			16-QAM			6.26
			64-QAM			6.38
			256-QAM			6.42
	100 MHz		BPSK	270		4.46
			QPSK			5.42
			16-QAM			6.16
			64-QAM			6.35
			256-QAM			6.47

Note:

1. Plots of the EUT's Peak- to- Average Ratio are shown Page 69 ~ 123.

8.4 OCCUPIED BANDWIDTH

Band	Band Width	Frequency (MHz)	Modulation	Resource Block Size	Resource Block Offset	Data (MHz)
Sub6 n41	10 MHz	2592.990	BPSK	24	0	8.7088
			QPSK			8.7060
			16-QAM			8.7059
			64-QAM			8.7156
			256-QAM			8.6976
	15 MHz		BPSK	36		13.005
			QPSK			12.976
			16-QAM			12.987
			64-QAM			12.980
			256-QAM			12.955
	20 MHz		BPSK	50		17.966
			QPSK			17.960
			16-QAM			17.947
			64-QAM			17.963
			256-QAM			17.917
	30 MHz		BPSK	75		26.962
			QPSK			26.944
			16-QAM			26.978
			64-QAM			27.048
			256-QAM			26.878
	40 MHz		BPSK	100		35.954
			QPSK			35.907
			16-QAM			35.812
			64-QAM			35.902
			256-QAM			35.842
	50 MHz		BPSK	128		45.859
			QPSK			45.887
			16-QAM			45.990
			64-QAM			45.707
			256-QAM			46.140

Band	Band Width	Frequency (MHz)	Modulation	Resource Block Size	Resource Block Offset	Data (MHz)
Sub6 n41	60 MHz	2592.990	BPSK	162	0	58.102
			QPSK			58.152
			16-QAM			58.049
			64-QAM			57.837
			256-QAM			58.013
	70 MHz		BPSK	180		64.538
			QPSK			64.576
			16-QAM			64.482
			64-QAM			64.372
			256-QAM			64.525
	80 MHz		BPSK	216		77.388
			QPSK			77.166
			16-QAM			77.410
			64-QAM			77.377
			256-QAM			77.205
	90 MHz		BPSK	243		86.834
			QPSK			86.981
			16-QAM			86.687
			64-QAM			86.693
			256-QAM			86.908
	100 MHz		BPSK	270		96.627
			QPSK			96.384
			16-QAM			96.164
			64-QAM			96.442
			256-QAM			96.707

Note:

1. Plots of the EUT's Occupied Bandwidth are shown Page 124~ 178.

8.5 CONDUCTED SPURIOUS EMISSIONS

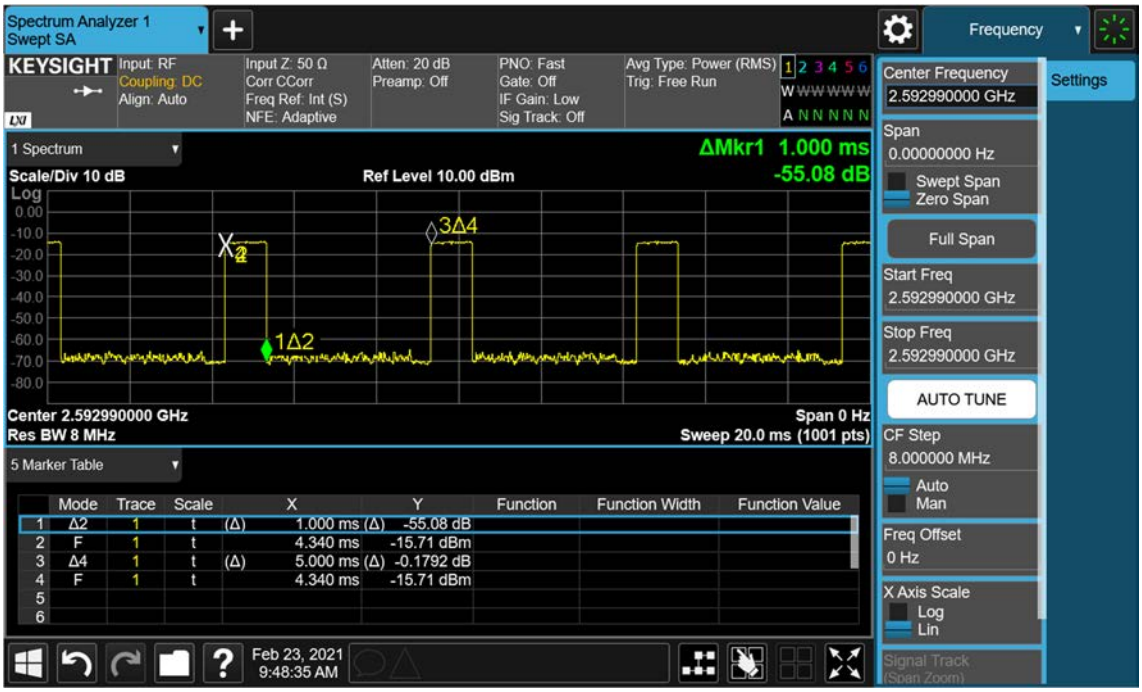
Band	Band Width (MHz)	Frequency (MHz)	Frequency of Maximum Harmonic (GHz)	Factor (dB)	Measurement Maximum Data (dBm)	Result (dBm)	Limit (dBm)
Sub6 n41	10	2501.010	4.0290	37.190	-65.503	-28.313	-25.00
		2592.990	3.8181	37.190	-65.721	-28.531	
		2685.000	4.0270	37.190	-65.485	-28.295	
	15	2503.500	4.0514	37.190	-65.262	-28.072	
		2592.990	4.0539	37.190	-65.431	-28.241	
		2682.480	4.0369	37.190	-65.533	-28.343	
	20	2506.020	4.0325	37.190	-65.705	-28.515	
		2592.990	3.9906	37.190	-65.457	-28.267	
		2679.990	3.8066	37.190	-65.502	-28.312	
	30	2511.000	4.0439	37.190	-65.676	-28.486	
		2592.990	3.7339	37.190	-65.644	-28.454	
		2674.980	3.7882	37.190	-65.711	-28.521	
	40	2516.010	4.0265	37.190	-65.464	-28.274	
		2592.990	9.9601	37.805	-65.653	-27.848	
		2670.000	3.8106	37.190	-65.734	-28.544	
	50	2521.020	3.7802	37.190	-65.634	-28.444	
		2592.990	3.8066	37.190	-65.623	-28.433	
		2664.990	3.7648	37.190	-65.373	-28.183	
	60	2526.000	3.7852	37.190	-65.770	-28.580	
		2592.990	3.7683	37.190	-65.333	-28.143	
		2659.980	3.8051	37.190	-65.487	-28.297	
	70	2531.010	4.0250	37.190	-65.504	-28.314	
		2592.990	3.7857	37.190	-65.287	-28.097	
		2655.000	3.7952	37.190	-65.703	-28.513	
	80	2536.020	3.7837	37.190	-65.490	-28.300	
		2592.990	3.7842	37.190	-65.572	-28.382	
		2649.990	4.0220	37.190	-65.528	-28.338	
	90	2541.000	3.8046	37.190	-65.379	-28.189	
		2592.990	4.0354	37.190	-65.462	-28.272	
		2644.980	3.7832	37.190	-65.607	-28.417	
	100	2546.010	4.0320	37.190	-65.596	-28.406	
		2592.990	3.8031	37.190	-65.403	-28.213	
		2640.000	3.7952	37.190	-65.717	-28.527	

Note:

1. Plots of the EUT's Conducted Spurious Emissions are shown Page 179 ~ 244.

2. Duty Cycle factor already applied on the factor.

- Duty Cycle Factor(dB) = 6.99



- 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 CHANNEL EDGE

BW	Test. Frequncy (MHz)	Modulation	Resource Block Size	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 MHz	2501.010	BPSK	Full RB	-24.37	-23.97	-27.71	-26.63	-34.09	-29.79	-35.56
15 MHz	2503.500	BPSK	Full RB	-24.97	-30.39	-29.68	-30.27	-32.39	-29.15	-36.04
20 MHz	2506.020	BPSK	Full RB	-27.01	-28.47	-30.84	-29.55	-33.46	-29.08	-35.03
30 MHz	2511.000	BPSK	Full RB	-27.46	-32.99	-32.82	-32.26	-34.74	-31.11	-35.76
40 MHz	2516.010	BPSK	Full RB	-26.20	-31.34	-32.64	-31.07	-33.33	-30.49	-35.89
50 MHz	2521.020	BPSK	Full RB	-25.57	-28.87	-31.14	-31.09	-35.30	-31.45	-34.79
60 MHz	2526.000	BPSK	Full RB	-19.92	-17.77	-27.53	-25.49	-34.67	-26.98	-35.46
70 MHz	2531.010	BPSK	Full RB	-22.55	-29.41	-29.22	-30.99	-35.58	-31.53	-35.75
80 MHz	2536.020	BPSK	Full RB	-25.05	-23.24	-30.60	-27.15	-35.51	-30.58	-35.89
90 MHz	2541.000	BPSK	Full RB	-24.71	-25.21	-30.96	-28.10	-35.97	-31.23	-35.97
100 MHz	2546.010	BPSK	Full RB	-23.14	-28.05	-27.49	-30.72	-36.32	-33.14	-36.46
Limit				-13.00	-10.00	-13.00	-10.00	-25.00	-13.0 0	-25.00

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	-23.63	-24.47	-27.70	-28.35
	2685.000	BPSK	Full RB	0	-23.18	-25.00	-26.41	-27.70
15 MHz	2592.990	BPSK	Full RB	0	-23.60	-31.15	-28.29	-31.01
	2682.480	BPSK	Full RB	0	-22.54	-31.50	-27.89	-31.99
20 MHz	2592.990	BPSK	Full RB	0	-24.74	-30.00	-29.22	-31.31
	2679.990	BPSK	Full RB	0	-24.59	-30.47	-29.44	-32.32
30 MHz	2592.990	BPSK	Full RB	0	-26.36	-31.22	-31.06	-31.98
	2679.990	BPSK	Full RB	0	-24.85	-32.48	-30.68	-32.86
40 MHz	2592.990	BPSK	Full RB	0	-25.40	-32.69	-31.38	-33.72
	2670.000	BPSK	Full RB	0	-25.16	-31.89	-31.76	-31.96
50 MHz	2592.990	BPSK	Full RB	0	-23.12	-32.05	-29.47	-33.77
	2664.990	BPSK	Full RB	0	-23.07	-29.94	-29.63	-32.12
60 MHz	2592.990	BPSK	Full RB	0	-17.34	-21.73	-26.17	-28.45
	2659.980	BPSK	Full RB	0	-18.13	-19.68	-27.77	-26.55
70 MHz	2592.990	BPSK	Full RB	0	-21.60	-32.42	-27.48	-34.18
	2655.000	BPSK	Full RB	0	-22.48	-30.80	-28.00	-32.19
80 MHz	2592.990	BPSK	Full RB	0	-21.55	-27.77	-27.61	-30.77
	2649.990	BPSK	Full RB	0	-22.44	-25.96	-28.68	-29.48
90 MHz	2592.990	BPSK	Full RB	0	-22.67	-28.65	-28.08	-30.52
	2644.980	BPSK	Full RB	0	-20.36	-28.02	-27.46	-30.81
100 MHz	2592.990	BPSK	Full RB	0	-21.89	-30.66	-29.65	-31.26
	2640.000	BPSK	Full RB	0	-19.80	-29.86	-27.82	-31.81
Limit (dBm)					-10.00		-10.00	

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	-31.13	-30.71	-36.10	-36.05
	2685.000	BPSK	Full RB	0	-30.47	-32.15	-35.03	-36.10
15 MHz	2592.990	BPSK	Full RB	0	-30.34	-29.34	-36.10	-36.10
	2682.480	BPSK	Full RB	0	-30.62	-31.97	-35.64	-36.34
20 MHz	2592.990	BPSK	Full RB	0	-31.66	-31.41	-36.17	-36.16
	2679.990	BPSK	Full RB	0	-31.77	-32.14	-35.76	-36.35
30 MHz	2592.990	BPSK	Full RB	0	-32.77	-32.58	-35.83	-35.83
	2679.990	BPSK	Full RB	0	-32.77	-32.99	-35.45	-36.80
40 MHz	2592.990	BPSK	Full RB	0	-33.57	-33.22	-36.80	-36.38
	2670.000	BPSK	Full RB	0	-33.34	-33.01	-36.06	-36.94
50 MHz	2592.990	BPSK	Full RB	0	-33.87	-34.06	-36.17	-36.00
	2664.990	BPSK	Full RB	0	-33.89	-33.45	-34.85	-36.99
60 MHz	2592.990	BPSK	Full RB	0	-31.22	-31.46	-36.10	-35.95
	2659.980	BPSK	Full RB	0	-31.97	-32.15	-34.71	-36.97
70 MHz	2592.990	BPSK	Full RB	0	-34.00	-34.02	-36.64	-36.52
	2655.000	BPSK	Full RB	0	-33.72	-32.57	-34.95	-36.98
80 MHz	2592.990	BPSK	Full RB	0	-32.95	-32.99	-36.99	-36.64
	2649.990	BPSK	Full RB	0	-34.12	-33.02	-35.53	-37.03
90 MHz	2592.990	BPSK	Full RB	0	-34.59	-34.02	-37.07	-37.03
	2644.980	BPSK	Full RB	0	-32.36	-33.05	-35.98	-37.06
100 MHz	2592.990	BPSK	Full RB	0	-34.09	-34.27	-37.14	-37.00
	2640.000	BPSK	Full RB	0	-33.40	-33.73	-36.73	-37.07
Limit (dBm)					-13.00		-25.00	

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 245 ~ 321. (1RB & Full RB)

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. Frequncy	Voltage	Temp.	Frequency	Frequency Error	Deviation	ppm
(MHz)	(%)	(°C)	(Hz)	(Hz)	(%)	
2501.010	100 %	+20(Ref)	2501 009 999	0.0	0.000 000	0.000
	100 %	-30	2501 010 000	0.9	0.000 000	0.000
	100 %	-20	2501 009 997	-1.3	0.000 000	-0.001
	100 %	-10	2501 009 998	-0.6	0.000 000	0.000
	100 %	0	2501 009 998	-0.9	0.000 000	0.000
	100 %	+10	2501 009 997	-1.8	0.000 000	-0.001
	100 %	+30	2501 009 999	0.6	0.000 000	0.000
	100 %	+40	2501 009 997	-1.5	0.000 000	-0.001
	100 %	+50	2501 009 998	-0.6	0.000 000	0.000
	Batt. Endpoint	+20	2501 009 998	-0.4	0.000 000	0.000
2685.000	100 %	+20(Ref)	2684 999 998	0.0	0.000 000	0.000
	100 %	-30	2684 999 998	-0.4	0.000 000	0.000
	100 %	-20	2684 999 996	-2.1	0.000 000	-0.001
	100 %	-10	2684 999 997	-1.1	0.000 000	0.000
	100 %	0	2684 999 998	-0.6	0.000 000	0.000
	100 %	+10	2684 999 998	0.0	0.000 000	0.000
	100 %	+30	2684 999 995	-3.1	0.000 000	-0.001
	100 %	+40	2684 999 996	-2.6	0.000 000	-0.001
	100 %	+50	2684 999 997	-1.2	0.000 000	0.000
	Batt. Endpoint	+20	2684 999 997	-1.3	0.000 000	0.000

▣ BandWidth: 15 MHz

▣ Voltage(100 %): 3.880 VDC

▣ Batt. Endpoint: 3.300 VDC

▣ LIMIT: Emission must remain in band

Test. Frequncy	Voltage	Temp.	Frequency	Frequency Error	Deviation	ppm
(MHz)	(%)	(℃)	(Hz)	(Hz)	(%)	
2503.500	100 %	+20(Ref)	2503 499 998	0.0	0.000 000	0.000
	100 %	-30	2503 499 998	-0.3	0.000 000	0.000
	100 %	-20	2503 499 999	0.6	0.000 000	0.000
	100 %	-10	2503 499 997	-1.0	0.000 000	0.000
	100 %	0	2503 500 001	2.5	0.000 000	0.001
	100 %	+10	2503 499 999	0.4	0.000 000	0.000
	100 %	+30	2503 499 999	0.1	0.000 000	0.000
	100 %	+40	2503 499 999	0.4	0.000 000	0.000
	100 %	+50	2503 499 996	-2.7	0.000 000	-0.001
	Batt. Endpoint	+20	2503 499 997	-1.0	0.000 000	0.000
2682.480	100 %	+20(Ref)	2682 479 999	0.0	0.000 000	0.000
	100 %	-30	2682 479 998	-1.0	0.000 000	0.000
	100 %	-20	2682 480 000	0.4	0.000 000	0.000
	100 %	-10	2682 479 997	-2.3	0.000 000	-0.001
	100 %	0	2682 479 996	-3.3	0.000 000	-0.001
	100 %	+10	2682 479 998	-1.0	0.000 000	0.000
	100 %	+30	2682 479 998	-1.2	0.000 000	0.000
	100 %	+40	2682 479 996	-3.1	0.000 000	-0.001
	100 %	+50	2682 479 997	-2.7	0.000 000	-0.001
	Batt. Endpoint	+20	2682 479 998	-1.1	0.000 000	0.000

▣ BandWidth: 20 MHz

▣ Voltage(100 %): 3.880 VDC

▣ Batt. Endpoint: 3.300 VDC

▣ LIMIT: Emission must remain in band

Test. Frequncy	Voltage	Temp.	Frequency	Frequency Error	Deviation	ppm
(MHz)	(%)	(℃)	(Hz)	(Hz)	(%)	
2506.020	100 %	+20(Ref)	2506 019 997	0.0	0.000 000	0.000
	100 %	-30	2506 019 998	0.7	0.000 000	0.000
	100 %	-20	2506 019 998	0.5	0.000 000	0.000
	100 %	-10	2506 019 998	0.6	0.000 000	0.000
	100 %	0	2506 019 996	-1.0	0.000 000	0.000
	100 %	+10	2506 019 999	1.9	0.000 000	0.001
	100 %	+30	2506 019 996	-1.6	0.000 000	-0.001
	100 %	+40	2506 019 998	0.2	0.000 000	0.000
	100 %	+50	2506 019 999	1.5	0.000 000	0.001
	Batt. Endpoint	+20	2506 019 998	0.3	0.000 000	0.000
2679.990	100 %	+20(Ref)	2679 989 998	0.0	0.000 000	0.000
	100 %	-30	2679 989 998	-0.2	0.000 000	0.000
	100 %	-20	2679 989 995	-2.5	0.000 000	-0.001
	100 %	-10	2679 989 996	-1.5	0.000 000	-0.001
	100 %	0	2679 989 994	-4.0	0.000 000	-0.001
	100 %	+10	2679 989 996	-1.5	0.000 000	-0.001
	100 %	+30	2679 989 996	-1.5	0.000 000	-0.001
	100 %	+40	2679 989 996	-1.4	0.000 000	-0.001
	100 %	+50	2679 989 997	-0.7	0.000 000	0.000
	Batt. Endpoint	+20	2679 989 996	-1.7	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. Frequncy	Voltage	Temp.	Frequency	Frequency Error	Deviation	ppm
(MHz)	(%)	(℃)	(Hz)	(Hz)	(%)	
2511.000	100 %	+20(Ref)	2511 000 000	0.0	0.000 000	0.000
	100 %	-30	2510 999 998	-2.5	0.000 000	-0.001
	100 %	-20	2511 000 001	1.1	0.000 000	0.000
	100 %	-10	2510 999 999	-1.7	0.000 000	-0.001
	100 %	0	2511 000 001	1.0	0.000 000	0.000
	100 %	+10	2511 000 000	-0.6	0.000 000	0.000
	100 %	+30	2510 999 999	-1.6	0.000 000	-0.001
	100 %	+40	2510 999 996	-3.9	0.000 000	-0.002
	100 %	+50	2510 999 997	-2.8	0.000 000	-0.001
	Batt. Endpoint	+20	2510 999 998	-2.5	0.000 000	-0.001
2674.980	100 %	+20(Ref)	2674 979 998	0.0	0.000 000	0.000
	100 %	-30	2674 979 999	0.6	0.000 000	0.000
	100 %	-20	2674 979 998	-0.3	0.000 000	0.000
	100 %	-10	2674 979 998	-0.2	0.000 000	0.000
	100 %	0	2674 979 996	-1.8	0.000 000	-0.001
	100 %	+10	2674 979 999	0.4	0.000 000	0.000
	100 %	+30	2674 980 000	1.7	0.000 000	0.001
	100 %	+40	2674 979 997	-1.6	0.000 000	-0.001
	100 %	+50	2674 979 996	-2.2	0.000 000	-0.001
	Batt. Endpoint	+20	2674 979 997	-1.4	0.000 000	-0.001

▣ BandWidth: 40MHz

▣ Voltage(100 %): 3.880 VDC

▣ Batt. Endpoint: 3.300 VDC

▣ LIMIT: Emission must remain in band

Test. Frequncy	Voltage	Temp.	Frequency	Frequency Error	Deviation	ppm
(MHz)	(%)	(℃)	(Hz)	(Hz)	(%)	
2516.010	100 %	+20(Ref)	2516 009 997	0.0	0.000 000	0.000
	100 %	-30	2516 009 993	-3.9	0.000 000	-0.002
	100 %	-20	2516 009 994	-2.3	0.000 000	-0.001
	100 %	-10	2516 009 994	-2.7	0.000 000	-0.001
	100 %	0	2516 009 993	-3.9	0.000 000	-0.002
	100 %	+10	2516 009 994	-2.9	0.000 000	-0.001
	100 %	+30	2516 009 994	-2.8	0.000 000	-0.001
	100 %	+40	2516 009 992	-5.0	0.000 000	-0.002
	100 %	+50	2516 009 992	-4.5	0.000 000	-0.002
	Batt. Endpoint	+20	2516 009 992	-4.4	0.000 000	-0.002
2670.000	100 %	+20(Ref)	2669 999 997	0.0	0.000 000	0.000
	100 %	-30	2669 999 997	-0.1	0.000 000	0.000
	100 %	-20	2669 999 995	-2.0	0.000 000	-0.001
	100 %	-10	2669 999 998	0.3	0.000 000	0.000
	100 %	0	2669 999 996	-1.4	0.000 000	-0.001
	100 %	+10	2669 999 994	-3.1	0.000 000	-0.001
	100 %	+30	2669 999 995	-1.8	0.000 000	-0.001
	100 %	+40	2669 999 996	-1.6	0.000 000	-0.001
	100 %	+50	2669 999 998	0.6	0.000 000	0.000
	Batt. Endpoint	+20	2669 999 997	-0.6	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. Frequncy	Voltage	Temp.	Frequency	Frequency Error	Deviation	ppm
(MHz)	(%)	(℃)	(Hz)	(Hz)	(%)	
2521.020	100 %	+20(Ref)	2521 019 998	0.0	0.000 000	0.000
	100 %	-30	2521 019 996	-2.4	0.000 000	-0.001
	100 %	-20	2521 019 995	-3.2	0.000 000	-0.001
	100 %	-10	2521 019 998	-0.2	0.000 000	0.000
	100 %	0	2521 019 996	-2.6	0.000 000	-0.001
	100 %	+10	2521 019 995	-3.0	0.000 000	-0.001
	100 %	+30	2521 019 999	1.0	0.000 000	0.000
	100 %	+40	2521 019 996	-1.8	0.000 000	-0.001
	100 %	+50	2521 019 994	-4.4	0.000 000	-0.002
	Batt. Endpoint	+20	2521 019 995	-3.4	0.000 000	-0.001
2664.990	100 %	+20(Ref)	2664 989 996	0.0	0.000 000	0.000
	100 %	-30	2664 989 993	-2.9	0.000 000	-0.001
	100 %	-20	2664 989 994	-2.4	0.000 000	-0.001
	100 %	-10	2664 989 992	-4.0	0.000 000	-0.001
	100 %	0	2664 989 995	-1.5	0.000 000	-0.001
	100 %	+10	2664 989 994	-2.7	0.000 000	-0.001
	100 %	+30	2664 989 995	-1.7	0.000 000	-0.001
	100 %	+40	2664 989 993	-3.6	0.000 000	-0.001
	100 %	+50	2664 989 991	-5.5	0.000 000	-0.002
	Batt. Endpoint	+20	2664 989 994	-2.0	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. Frequncy	Voltage	Temp.	Frequency	Frequency Error	Deviation	ppm
(MHz)	(%)	(℃)	(Hz)	(Hz)	(%)	
2526.000	100 %	+20(Ref)	2526 000 002	0.0	0.000 000	0.000
	100 %	-30	2526 000 000	-1.5	0.000 000	-0.001
	100 %	-20	2526 000 001	-0.5	0.000 000	0.000
	100 %	-10	2526 000 001	-1.1	0.000 000	0.000
	100 %	0	2526 000 001	-0.7	0.000 000	0.000
	100 %	+10	2525 999 998	-3.6	0.000 000	-0.001
	100 %	+30	2526 000 004	1.9	0.000 000	0.001
	100 %	+40	2526 000 001	-0.5	0.000 000	0.000
	100 %	+50	2526 000 000	-1.7	0.000 000	-0.001
	Batt. Endpoint	+20	2526 000 001	-0.3	0.000 000	0.000
2659.980	100 %	+20(Ref)	2659 979 997	0.0	0.000 000	0.000
	100 %	-30	2659 979 997	-0.3	0.000 000	0.000
	100 %	-20	2659 979 994	-2.8	0.000 000	-0.001
	100 %	-10	2659 979 996	-1.0	0.000 000	0.000
	100 %	0	2659 979 994	-3.7	0.000 000	-0.001
	100 %	+10	2659 979 997	-0.3	0.000 000	0.000
	100 %	+30	2659 979 995	-2.5	0.000 000	-0.001
	100 %	+40	2659 979 998	0.9	0.000 000	0.000
	100 %	+50	2659 979 997	-0.7	0.000 000	0.000
	Batt. Endpoint	+20	2659 979 995	-2.0	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. Frequncy	Voltage	Temp.	Frequency	Frequency Error	Deviation	ppm
(MHz)	(%)	(℃)	(Hz)	(Hz)	(%)	
2531.010	100 %	+20(Ref)	2531 009 989	0.0	0.000 000	0.000
	100 %	-30	2531 009 980	-9.5	0.000 000	-0.004
	100 %	-20	2531 009 981	-8.6	0.000 000	-0.003
	100 %	-10	2531 009 980	-9.2	0.000 000	-0.004
	100 %	0	2531 009 980	-9.2	0.000 000	-0.004
	100 %	+10	2531 009 981	-8.2	0.000 000	-0.003
	100 %	+30	2531 009 980	-8.9	0.000 000	-0.004
	100 %	+40	2531 009 981	-8.2	0.000 000	-0.003
	100 %	+50	2531 009 979	-10.3	0.000 000	-0.004
	Batt. Endpoint	+20	2531 009 978	-11.3	0.000 000	-0.004
2655.000	100 %	+20(Ref)	2654 999 997	0.0	0.000 000	0.000
	100 %	-30	2654 999 993	-3.7	0.000 000	-0.001
	100 %	-20	2654 999 994	-3.1	0.000 000	-0.001
	100 %	-10	2654 999 993	-4.1	0.000 000	-0.002
	100 %	0	2654 999 996	-0.8	0.000 000	0.000
	100 %	+10	2654 999 994	-2.6	0.000 000	-0.001
	100 %	+30	2654 999 993	-4.1	0.000 000	-0.002
	100 %	+40	2654 999 993	-4.1	0.000 000	-0.002
	100 %	+50	2654 999 994	-2.5	0.000 000	-0.001
	Batt. Endpoint	+20	2654 999 992	-4.7	0.000 000	-0.002

▣ BandWidth: 80 MHz

▣ Voltage(100 %): 3.880 VDC

▣ Batt. Endpoint: 3.300 VDC

▣ LIMIT: Emission must remain in band

Test. Frequncy	Voltage	Temp.	Frequency	Frequency Error	Deviation	ppm
(MHz)	(%)	(℃)	(Hz)	(Hz)	(%)	
2536.020	100 %	+20(Ref)	2536 019 996	0.0	0.000 000	0.000
	100 %	-30	2536 019 998	1.1	0.000 000	0.000
	100 %	-20	2536 019 998	1.1	0.000 000	0.000
	100 %	-10	2536 019 994	-2.1	0.000 000	-0.001
	100 %	0	2536 019 995	-1.2	0.000 000	0.000
	100 %	+10	2536 019 994	-2.8	0.000 000	-0.001
	100 %	+30	2536 019 993	-3.5	0.000 000	-0.001
	100 %	+40	2536 019 996	-0.4	0.000 000	0.000
	100 %	+50	2536 019 996	-0.7	0.000 000	0.000
	Batt. Endpoint	+20	2536 019 994	-2.7	0.000 000	-0.001
2649.990	100 %	+20(Ref)	2649 989 998	0.0	0.000 000	0.000
	100 %	-30	2649 989 995	-2.9	0.000 000	-0.001
	100 %	-20	2649 989 998	-0.6	0.000 000	0.000
	100 %	-10	2649 989 996	-2.1	0.000 000	-0.001
	100 %	0	2649 989 997	-1.7	0.000 000	-0.001
	100 %	+10	2649 989 998	-0.5	0.000 000	0.000
	100 %	+30	2649 989 996	-1.9	0.000 000	-0.001
	100 %	+40	2649 989 997	-1.5	0.000 000	-0.001
	100 %	+50	2649 989 997	-1.5	0.000 000	-0.001
	Batt. Endpoint	+20	2649 989 995	-3.5	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. Frequncy	Voltage	Temp.	Frequency	Frequency Error	Deviation	ppm
(MHz)	(%)	(℃)	(Hz)	(Hz)	(%)	
2541.000	100 %	+20(Ref)	2540 999 996	0.0	0.000 000	0.000
	100 %	-30	2540 999 994	-1.7	0.000 000	-0.001
	100 %	-20	2540 999 994	-1.1	0.000 000	0.000
	100 %	-10	2540 999 995	-0.3	0.000 000	0.000
	100 %	0	2540 999 995	-0.9	0.000 000	0.000
	100 %	+10	2540 999 994	-1.6	0.000 000	-0.001
	100 %	+30	2540 999 994	-1.2	0.000 000	0.000
	100 %	+40	2540 999 994	-1.9	0.000 000	-0.001
	100 %	+50	2540 999 996	0.0	0.000 000	0.000
	Batt. Endpoint	+20	2540 999 994	-1.6	0.000 000	-0.001
2644.980	100 %	+20(Ref)	2644 979 998	0.0	0.000 000	0.000
	100 %	-30	2644 979 994	-4.1	0.000 000	-0.002
	100 %	-20	2644 979 997	-0.6	0.000 000	0.000
	100 %	-10	2644 979 995	-3.2	0.000 000	-0.001
	100 %	0	2644 979 992	-6.4	0.000 000	-0.002
	100 %	+10	2644 979 997	-0.5	0.000 000	0.000
	100 %	+30	2644 979 995	-2.5	0.000 000	-0.001
	100 %	+40	2644 979 995	-2.5	0.000 000	-0.001
	100 %	+50	2644 979 998	-0.3	0.000 000	0.000
	Batt. Endpoint	+20	2644 979 997	-0.5	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. Frequncy	Voltage	Temp.	Frequency	Frequency Error	Deviation	ppm
(MHz)	(%)	(℃)	(Hz)	(Hz)	(%)	
2546.010	100 %	+20(Ref)	2546 010 002	0.0	0.000 000	0.000
	100 %	-30	2546 010 003	0.7	0.000 000	0.000
	100 %	-20	2546 010 004	1.9	0.000 000	0.001
	100 %	-10	2546 010 002	-0.6	0.000 000	0.000
	100 %	0	2546 010 003	0.6	0.000 000	0.000
	100 %	+10	2546 010 003	1.1	0.000 000	0.000
	100 %	+30	2546 010 003	1.3	0.000 000	0.000
	100 %	+40	2546 010 005	2.5	0.000 000	0.001
	100 %	+50	2546 010 003	0.6	0.000 000	0.000
	Batt. Endpoint	+20	2546 010 000	-2.2	0.000 000	-0.001
2640.000	100 %	+20(Ref)	2639 999 999	0.0	0.000 000	0.000
	100 %	-30	2639 999 999	-0.6	0.000 000	0.000
	100 %	-20	2639 999 999	-0.5	0.000 000	0.000
	100 %	-10	2639 999 999	-0.9	0.000 000	0.000
	100 %	0	2639 999 999	-0.6	0.000 000	0.000
	100 %	+10	2639 999 997	-2.2	0.000 000	-0.001
	100 %	+30	2640 000 000	0.3	0.000 000	0.000
	100 %	+40	2639 999 997	-2.5	0.000 000	-0.001
	100 %	+50	2639 999 996	-3.1	0.000 000	-0.001
	Batt. Endpoint	+20	2639 999 998	-1.2	0.000 000	0.000

9. TEST PLOTS

Sub6 n41_10 M_PAR_Mid_BPSK_FullRB

Sub6 n41_10 M_PAR_Mid_QPSK_FullRB

Sub6 n41_10 M_PAR_Mid_16QAM_FullRB

Sub6 n41_10 M_PAR_Mid_64QAM_FullRB

Sub6 n41_10 M_PAR_Mid_256QAM_FullRB

Sub6 n41_15 M_PAR_Mid_BPSK_FullRB

Sub6 n41_15 M_PAR_Mid_QPSK_FullRB

Sub6 n41_15 M_PAR_Mid_16QAM_FullRB

Sub6 n41_15 M_PAR_Mid_64QAM_FullRB

Sub6 n41_15 M_PAR_Mid_256QAM_FullRB

Sub6 n41_20 M_PAR_Mid_BPSK_FullRB

Sub6 n41_20 M_PAR_Mid_QPSK_FullRB

Sub6 n41_20 M_PAR_Mid_16QAM_FullRB

Sub6 n41_20 M_PAR_Mid_64QAM_FullRB

Sub6 n41_20 M_PAR_Mid_256QAM_FullRB

Sub6 n41_30 M_PAR_Mid_BPSK_FullRB

Sub6 n41_30 M_PAR_Mid_QPSK_FullRB

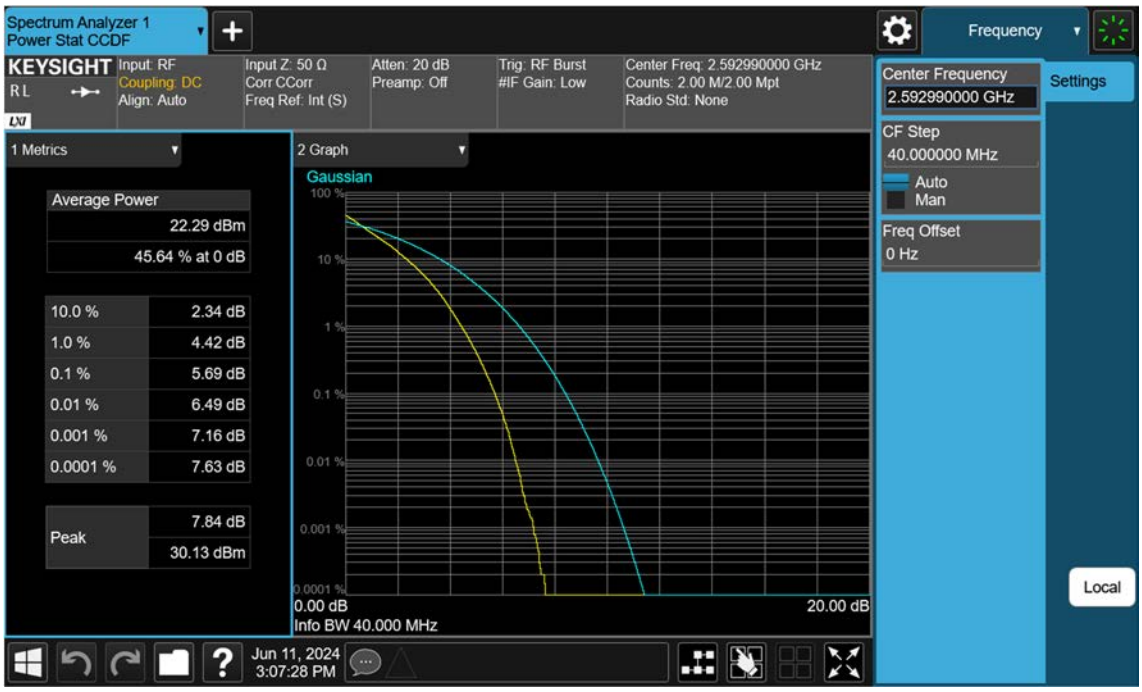
Sub6 n41_30 M_PAR_Mid_16QAM_FullRB

Sub6 n41_30 M_PAR_Mid_64QAM_FullRB

Sub6 n41_30 M_PAR_Mid_256QAM_FullRB

Sub6 n41_40 M_PAR_Mid_BPSK_FullRB

Sub6 n41_40 M_PAR_Mid_QPSK_FullRB



Sub6 n41_40 M_PAR_Mid_16QAM_FullRB

Sub6 n41_40 M_PAR_Mid_64QAM_FullRB

Sub6 n41_40 M_PAR_Mid_256QAM_FullRB

Sub6 n41_50 M_PAR_Mid_BPSK_FullRB

Sub6 n41_50 M_PAR_Mid_QPSK_FullRB

Sub6 n41_50 M_PAR_Mid_16QAM_FullRB

Sub6 n41_50 M_PAR_Mid_64QAM_FullRB

Sub6 n41_50 M_PAR_Mid_256QAM_FullRB

Sub6 n41_60 M_PAR_Mid_BPSK_FullRB

Sub6 n41_60 M_PAR_Mid_QPSK_FullRB

Sub6 n41_60 M_PAR_Mid_16QAM_FullRB

Sub6 n41_60 M_PAR_Mid_64QAM_FullRB

Sub6 n41_60 M_PAR_Mid_256QAM_FullRB

Sub6 n41_70 M_PAR_Mid_BPSK_FullRB

Sub6 n41_70 M_PAR_Mid_QPSK_FullRB

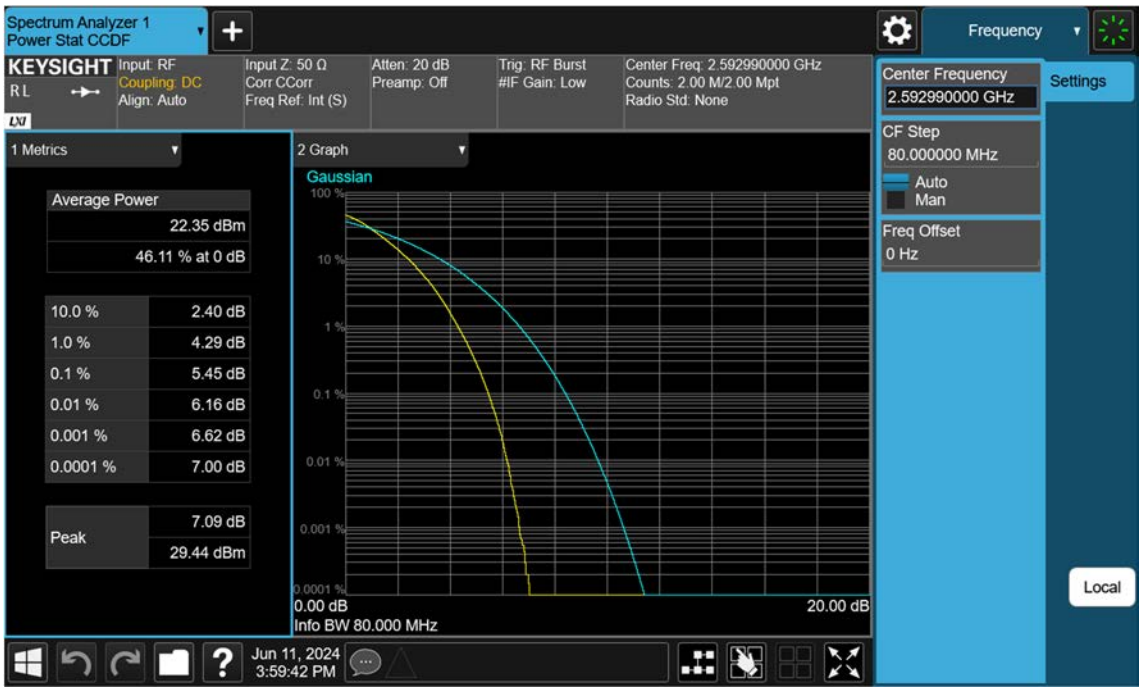
Sub6 n41_70 M_PAR_Mid_16QAM_FullRB

Sub6 n41_70 M_PAR_Mid_64QAM_FullRB

Sub6 n41_70 M_PAR_Mid_256QAM_FullRB

Sub6 n41_80 M_PAR_Mid_BPSK_FullRB

Sub6 n41_80 M_PAR_Mid_QPSK_FullRB



Sub6 n41_80 M_PAR_Mid_16QAM_FullRB

Sub6 n41_80 M_PAR_Mid_64QAM_FullRB

Sub6 n41_80 M_PAR_Mid_256QAM_FullRB

Sub6 n41_90 M_PAR_Mid_BPSK_FullRB

Sub6 n41_90 M_PAR_Mid_QPSK_FullRB

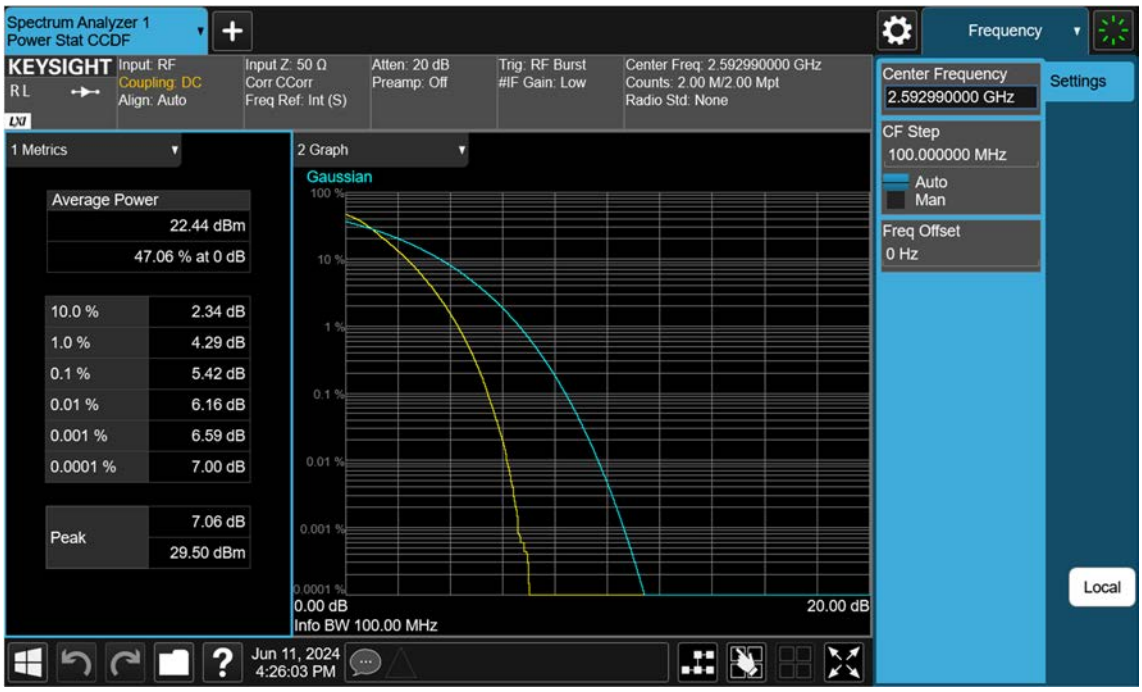
Sub6 n41_90 M_PAR_Mid_16QAM_FullRB

Sub6 n41_90 M_PAR_Mid_64QAM_FullRB

Sub6 n41_90 M_PAR_Mid_256QAM_FullRB

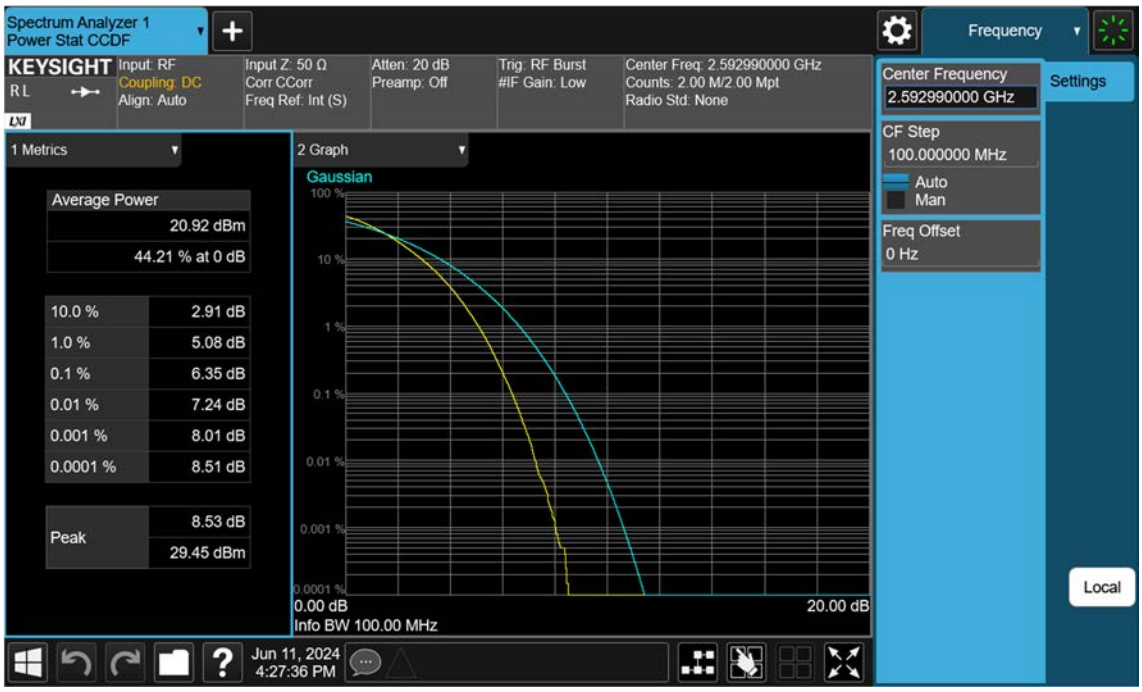
Sub6 n41_100 M_PAR_Mid_BPSK_FullRB

Sub6 n41_100 M_PAR_Mid_QPSK_FullRB



Sub6 n41_100 M_PAR_Mid_16QAM_FullRB

Sub6 n41_100 M_PAR_Mid_64QAM_FullRB



Sub6 n41_100 M_PAR_Mid_256QAM_FullRB

Sub6 n41_10 M_OBW_Mid_BPSK_FullRB

Sub6 n41_10 M_OBW_Mid_QPSK_FullRB

Sub6 n41_10 M_OBW_Mid_16QAM_FullRB

Sub6 n41_10 M_OBW_Mid_64QAM_FullRB

Sub6 n41_10 M_OBW_Mid_256QAM_FullRB

Sub6 n41_15 M_OBW_Mid_BPSK_FullRB