TEST REPORT

FCC Sub6 n41 Test for TFGMEIBBCD4
Class II Permissive Change

APPLICANT
LG Electronics Inc.

REPORT NO.
HCT-RF-2409-FC012-R1

DATE OF ISSUE
October 7, 2024

Tested by
Jung Ki Lim

Technical Manager
Jong Seok Lee

HCT CO., LTD.
BongJai Huh / CEO

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HCT CO., LTD. 2-6, 73, 74, Seoicheon-ro 578beon-gil, Majang-myeon, Icheon-si, Gyeonggi-do, Republic of Korea Tel. +82 31 645 6300 Fax. +82 31 645 6401

HCT CO.,LTD.
2-6, 73, 74, Seoicheon-ro 578beon-gil, Majang-myeon, Icheon-si, Gyeonggi-do, Republic of Korea
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Additional Model
TFGMEIBBCD5, TFGMEIBBCD6, TFGMEIBBCD7, TFGMEIBBCD8, TFGMEIBBCD9, TFGMEIBBCDA, TFGMEIBBCDB, TFGMEIBBCDC

Applicant	**LG Electronics Inc.** 10, MagokJungang-ro, Gangseo-gu, Seoul 07796, Republic of Korea
Product Name Model Name	GM Onstar Gen41 ROW TFGMEIBBCD4
Date of Test	May 07, 2024 ~ September 26, 2024
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 ID	BEJTFGMEIBBCD4
FCC Classification	PCS Licensed Transmitter (PCB)
Test Standard Used	FCC Rule Part(s) : § 27
Test Results	PASS

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REVISION HISTORY

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

Revision No.	Date of Issue	Description
0	September 26, 2024	Initial Release
1	October 07, 2024	Added the Note (Page 21.)

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:	LG Electronics Inc.
Address:	10, Magok Jungang-ro, Gangseo-gu, Seoul 07796, Republic of Korea
FCC ID:	BEJTFGMEIBBCD4
Application Type:	Class II Permissive Change
FCC Classification:	PCS Licensed Transmitter (PCB)
FCC Rule Part(s):	§ 27
EUT Type:	GM Onstar Gen41 ROW
Model(s):	TFGMEIBBCD4
Additional Model(s)	TFGMEIBBCD5,TFGMEIBBCD6,TFGMEIBBCD7,TFGMEIBBCD8, TFGMEIBBCD9, TFGMEIBBCDA, TFGMEIBBCDB, TFGMEIBBCDC
SCS(kHz):	30
Bandwidth(MHz):	20,30,40,50,60,80,90,100
Waveform:	CP-OFDM, DFT-S-OFDM
Modulation:	DFT-S-OFDM: PI/2 BPSK, QPSK, 16 QAM, 64 QAM, 256 QAM CP-OFDM: QPSK, 16 QAM, 64 QAM, 256 QAM
Tx Frequency:	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) 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 07, 2024 ~ September 26, 2024
Serial number:	Radiated : EBR36018942k_#108 Conducted : EBR42280003K_#104
External Antenna Information	ANT5 : 86531607 ANT4 : 86575530 DUT4 : 85608774

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1.1. MAXIMUM OUTPUT POWER

Mode (MHz)	Tx Frequency (MHz)	Emission Designator	Modulation	EIRP External Antenna SISO		EIRP Internal Antenna SISO	
				Max. Power (W)	Max. Power (dBm)	Max. Power (W)	Max. Power (dBm)
Sub6 n41 (20)	2506.020 – 2679.990	18M0G7D	PI/2 BPSK	0.575	27.60	1.007	30.03
Sub6 n41 (30)	2511.000 – 2674.980	26M9G7D	PI/2 BPSK	0.564	27.51	0.931	29.69
Sub6 n41 (40)	2516.010 – 2670.000	35M8G7D	PI/2 BPSK	0.536	27.29	0.867	29.38
Sub6 n41 (50)	2521.020 – 2664.990	45M9G7D	PI/2 BPSK	0.454	26.57	0.843	29.26
Sub6 n41 (60)	2526.000 – 2659.980	58M1G7D	PI/2 BPSK	0.365	25.62	0.695	28.42
Sub6 n41 (80)	2536.020 – 2649.990	77M3G7D	PI/2 BPSK	0.448	26.51	0.877	29.43
Sub6 n41 (90)	2541.000 – 2644.980	87M0G7D	PI/2 BPSK	0.444	26.47	0.946	29.76
Sub6 n41 (100)	2546.010 – 2640.000	96M6G7D	PI/2 BPSK	0.378	25.78	0.753	28.77

Mode (MHz)	Tx Frequency (MHz)	Emission Designator	Modulation	EIRP External Antenna UL MIMO		EIRP Internal Antenna UL MIMO	
				Max. Power (W)	Max. Power (dBm)	Max. Power (W)	Max. Power (dBm)
Sub6 n41 (20)	2506.020 – 2679.990	18M0G7D	QPSK	0.290	24.63	0.457	26.60
Sub6 n41 (30)	2511.000 – 2674.980	26M9G7D	QPSK	0.281	24.48	0.436	26.39
Sub6 n41 (40)	2516.010 – 2670.000	35M8G7D	QPSK	0.301	24.79	0.470	26.72
Sub6 n41 (50)	2521.020 – 2664.990	45M9G7D	QPSK	0.364	25.61	0.452	26.55
Sub6 n41 (60)	2526.000 – 2659.980	58M1G7D	QPSK	0.355	25.50	0.436	26.39
Sub6 n41 (80)	2536.020 – 2649.990	77M3G7D	QPSK	0.386	25.87	0.514	27.11
Sub6 n41 (90)	2541.000 – 2644.980	86M9G7D	QPSK	0.353	25.48	0.604	27.81
Sub6 n41 (100)	2546.010 – 2640.000	96M5G7D	QPSK	0.330	25.18	0.474	26.76

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2. INTRODUCTION

2.1. DESCRIPTION OF EUT

The EUT was a GM Onstar Gen41 ROW with GSM/GPRS/EGPRS/UMTS and LTE, Sub6.

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**

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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	- KDB 971168 D01 v03r01 – Section 5.2
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/ Equivalent 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

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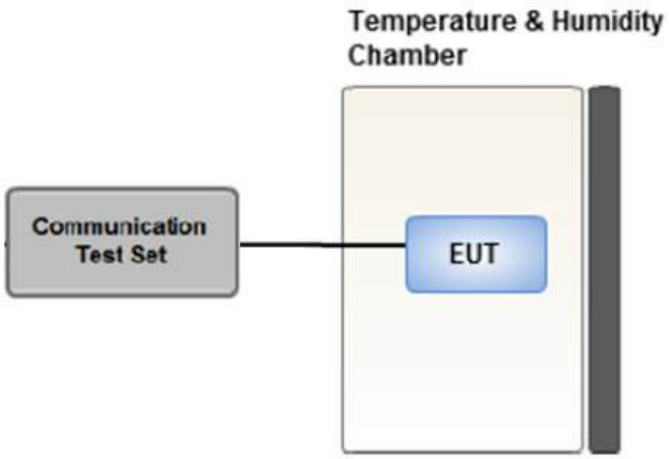
3.2 CONDUCTED OUTPUT POWER



Test setup

Test Overview

When an average power meter is used to perform RF output power measurements, the fundamental condition that measurements be performed only over durations of active transmissions at maximum output power level applies.

Conducted Output Power was tested in accordance with KDB971168 D01 Power Meas License Digital Systems v03r01, Section 5.2.

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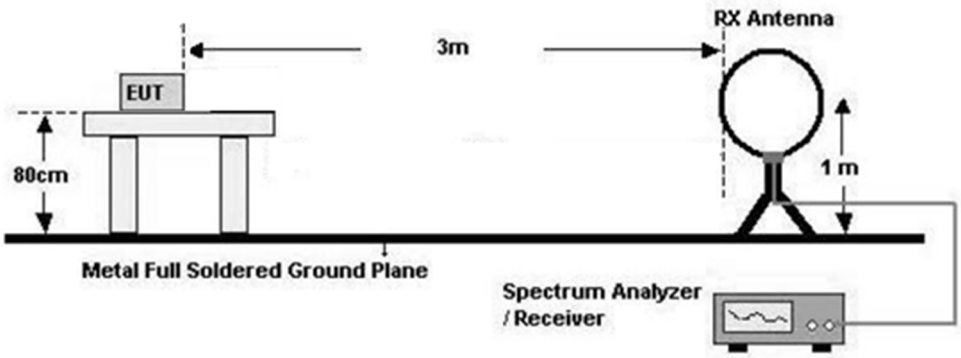
3.3 RADIATED TEST

Test Overview

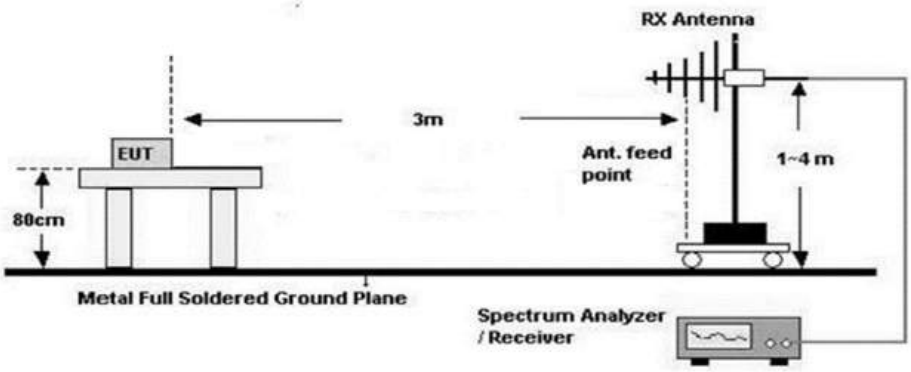
Radiated tests are performed in the semi-anechoic chamber. The equipment under test is placed on a non-conductive table on semi-anechoic chamber.

Test Configuration

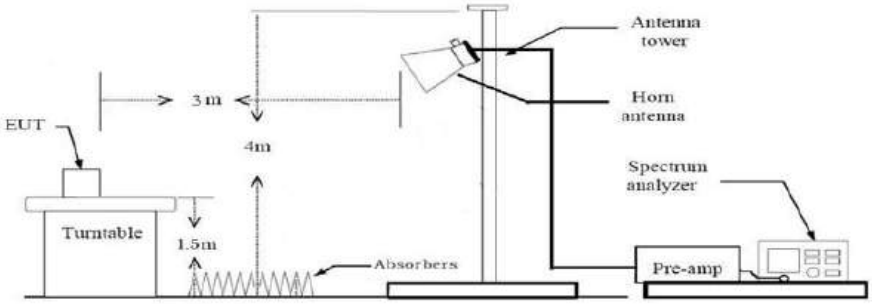
Below 30 MHz



30 MHz - 1 GHz



Above 1 GHz



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3.3.1 RADIATED POWER

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 EUT is placed on a turntable, which is 0.8 m above ground plane. (Below 1 GHz)
2. The EUT is placed on a turntable, which is 1.5 m above ground plane. (Above 1 GHz)
3. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
4. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.
5. EUT is set 3 m away from the receiving antenna, which is varied from 1 m to 4 m to find out the highest emissions.
6. 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.
7. Total(dBμV/m) = Measured Value(dBμV) + Cable Loss(dB) + Antenna Factor(dB/m) + Distance Factor(D.F)
8. EIRP (dBm)
   = Total (dBμV/m) + 20 log D − 104.8 (where D is the measurement distance in meters. D=3)
   = Total (dBμV/m) - 95.2(dB)
9. EIRP(dBm) = EIRP(dBm) - 2.15(dB)

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3.3.2 RADIATED SPURIOUS EMISSIONS

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. 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
2. 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.

Below 30 MHz

1. The loop antenna was placed at a location 3 m from the EUT
2. The EUT is placed on a turntable, which is 0.8 m above ground plane.
3. We have done x, y, z planes in EUT and horizontal and vertical polarization and Parallel to the ground plane in detecting antenna.
4. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.
5. Distance Correction Factor(0.009 MHz – 0.490 MHz) = 40log(3 m/300 m) = - 80 dB
   Measurement Distance : 3 m
6. Distance Correction Factor(0.490 MHz – 30 MHz) = 40log(3 m/30 m) = - 40 dB
   Measurement Distance : 3 m
7. Total = Measured Value + Antenna Factor(A.F) + Cable Loss(C.L) + Distance Factor(D.F)
8. EIRP (dBm)
   = Total (dBμV/m) + 20 log D − 104.8 (where D is the measurement distance in meters. D=3)
   = Total (dBμV/m) - 95.2(dB)
9. EIRP(dBm) = EIRP(dBm) - 2.15(dB)

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KDB 414788 OFS and Chamber Correlation Justification

Base on FCC 15.31 (f) (2): measurements may be performed at a distance closer than that specified in the regulations; however, an attempt should be made to avoid making measurements in the near field.

OFS and chamber correlation testing had been performed and chamber measured test result is the worst case test result.

Below 1 GHz

1. The EUT is placed on a turntable, which is 0.8 m above ground plane.
2. The Hybrid antenna was placed at a location 3 m from the EUT, which is varied from 1 m to 4 m to find out the highest emissions.
3. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
4. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.
5. Total = Measured Value + Antenna Factor(A.F) + Cable Loss(C.L)
7. Total(dBμV/m) = Measured Value(dBμV) + Cable Loss(dB) + Antenna Factor(dB/m) + Distance Factor(D.F)
8. EIRP (dBm)
   = Total (dBμV/m) + 20 log D − 104.8 (where D is the measurement distance in meters. D=3)
   = Total (dBμV/m) - 95.2(dB)
9. EIRP(dBm) = EIRP(dBm) - 2.15(dB)

Above 1 GHz

1. The EUT is placed on a turntable, which is 1.5 m above ground plane.
2. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
3. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.
4. EUT is set 3 m away from the receiving antenna, which is varied from 1 m to 4 m to find out the highest emissions.
5. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
6. Each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
7. Total(dBμV/m) = Measured Value(dBμV) + Cable Loss(dB) + Antenna Factor(dB/m) + Distance Factor(D.F)
   + H.P.F(dB) - Amp Gain(dB)
8. EIRP (dBm)
   = Total (dBμV/m) + 20 log D − 104.8 (where D is the measurement distance in meters. D=3)
   = Total (dBμV/m) - 95.2(dB)

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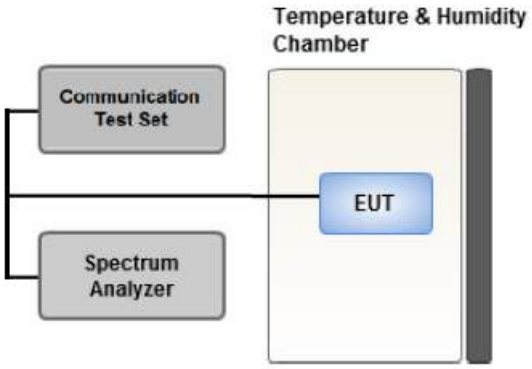
3.4 PEAK- TO- AVERAGE RATIO



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:

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

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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 %.

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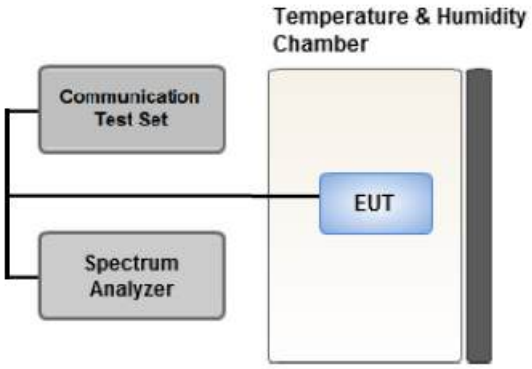
3.5 OCCUPIED BANDWIDTH.



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

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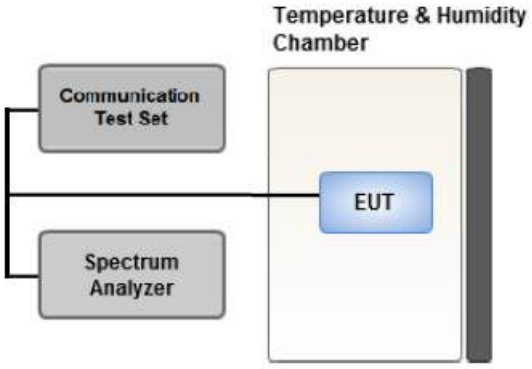
3.6 SPURIOUS AND HARMONIC EMISSIONS AT ANTENNA TERMINAL



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

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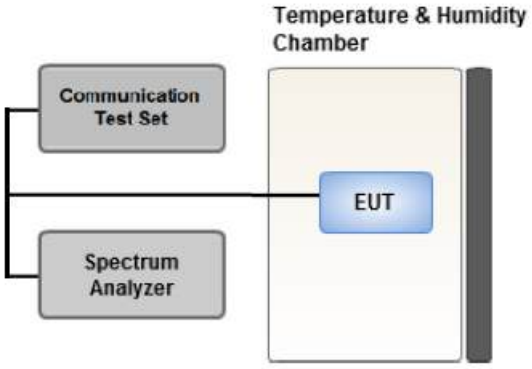
3.7 BAND EDGE



Test setup

Test Overview

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

Test Settings

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

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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.

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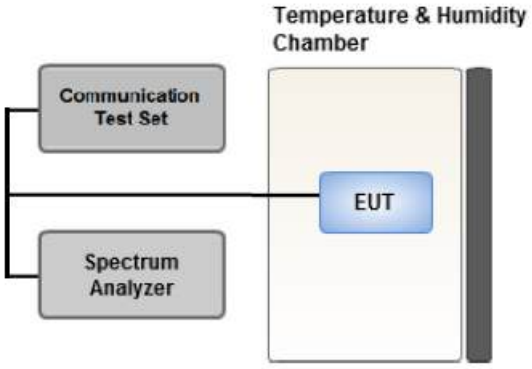
3.8 FREQUENCY STABILITY / VARIATION OF AMBIENT TEMPERATURE



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.

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3.9 WORST CASE(RADIATED TEST)

- 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 : SA(PC2), NSA(PC3), UL MIMO
  Worst case : SA(PC2), UL MIMO
  Mode : Internal Antenna, External Antenna (ANT 5, ANT 4, DUT 4)
  Worst case : Internal Antenna, External Antenna (ANT 5)
- The worst case is reported with the EUT positioning, modulations, and paging service configurations shown in the test data.
- Please refer to the table below.
- In the case of radiated spurious emissions, all bandwidth of operation were investigated and the worst case bandwidth results are reported.
  (External Antenna SISO Worst case : 20 MHz)
  (External Antenna UL MIMO Worst case : 80 MHz)
  (Internal Antenna SISO Worst case : 20 MHz)
  (Internal Antenna SISO Worst case : 90 MHz)
- TFGMEIBBCD4 & additional models were tested and the worst case results are reported.
  (Worst case : TFGMEIBBCD4)
- 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.

[External Antenna Worst case_SISO]

Test Description	Modulation	RB size	RB offset	Axis
Equivalent Isotropic Radiated Power	PI/2 BPSK,	See Section 8.2.1		Only X
Radiated Spurious and Harmonic Emissions	PI/2 BPSK	See Section 8.3.1		Only X

[External Antenna Worst case_MIMO]

Test Description	Modulation	RB size	RB offset	Axis
Equivalent Isotropic Radiated Power	QPSK	See Section 8.2.2		Only X
Radiated Spurious and Harmonic Emissions	QPSK	See Section 8.3.2		Only X

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[Internal Antenna Worst case_SISO]

Test Description	Modulation	RB size	RB offset	Axis
Equivalent Isotropic Radiated Power	PI/2 BPSK,	See Section 8.2.3		Z
Radiated Spurious and Harmonic Emissions	PI/2 BPSK	See Section 8.3.3		X

[Internal Antenna Worst case_MIMO]

Test Description	Modulation	RB size	RB offset	Axis
Equivalent Isotropic Radiated Power	QPSK	See Section 8.2.4		Z
Radiated Spurious and Harmonic Emissions	QPSK	See Section 8.3.4		Y

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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 : SA(PC2), NSA(PC3), UL MIMO
  Worst case : SA(PC2)
- All RB sizes, offsets of operation were investigated and the worst case configuration results are reported.
  Please refer to the table below.
- TFGMEIBBCD4 & additional models were tested and the worst case results are reported.
  (Worst case : TFGMEIBBCD4)

[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	20, 30, 40, 50, 60, 80, 90, 100	Mid	Full RB	0
Channel Edge	PI/2 BPSK	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
		80	Low	1	0
			High	1	216
		90	Low	1	0
			High	1	244
		100	Low	1	0
			High	1	272
		20, 30, 40, 50, 60, 80, 90, 100	Low, Mid High	Full RB	0
Spurious and Harmonic Emissions at Antenna Terminal	PI/2 BPSK	20, 30, 40, 50, 60, 80, 90, 100	Low, Mid, High	1	1

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4. LIST OF TEST EQUIPMENT

Equipment	Model	Manufacturer	Serial No.	Due to Calibration	Calibration Interval
Antenna Position Tower	MA4640/800-XP-ET	Innco systems	N/A	N/A	N/A
Turn Table	DS2000-S	Innco systems	N/A	N/A	N/A
Turn Table	Turn Table	Ets	N/A	N/A	N/A
Controller (Antenna mast & Turn Table)	CO3000	Innco systems	CO3000/1251/48920320/P	N/A	N/A
Amp & Filter Bank Switch Controller	FBSM-01B	TNM system	TM20090002	N/A	N/A
RF Switch System	TMX0132C	TNM System	TM21100002	N/A	N/A
RF Switch System	FBSR-04C(3G HPF+LNA)	TNM System	S4L1	04/11/2025	Annual
RF Switch System	FBSR-04C(LNA)	TNM System	S4L4	04/11/2025	Annual
RF Switch System	FBSR-04C(Thru)	TNM System	S4L6	04/11/2025	Annual
HIGHPASS FILTER	WHKX10-900-1000-15000-40SS	WAINWRIGHT INSTRUMENTS	16	07/24/2025	Annual
HIGHPASS FILTER	WHNX6.0/26.5G-6SS	WAINWRIGHT INSTRUMENTS	1	12/11/2024	Annual
Power Amplifier	CBL18265035	CERNEX	22966	11/17/2024	Annual
Power Amplifier	CBL26405040	CERNEX	25956	02/26/2025	Annual
Loop Antenna(9 kHz ~ 30 MHz)	FMZB1513	Schwarzbeck	1513-333	03/07/2026	Biennial
Horn Antenna(1 ~ 18 GHz)	BBHA 9120	Schwarzbeck	937	02/13/2025	Biennial
Horn Antenna(15 ~ 40 GHz)	BBHA 9170	Schwarzbeck	BBHA9170342	09/20/2026	Biennial
Bilog Antenna	VULB9160	Schwarzbeck	3150	03/09/2025	Biennial
Hybrid Antenna	VULB9160	Schwarzbeck	760	02/24/2025	Biennial
Trilog Broadband Antenna	VULB 9168	Schwarzbeck	895	08/28/2026	Biennial
Chamber	SU-642	ESPEC	93008124	02/19/2025	Annual
Power Splitter(DC~26.5 GHz)	11667B	Hewlett Packard	11275	02/19/2025	Annual
DC Power Supply	E3632A	Agilent	MY40010147	08/06/2025	Annual
4-Way Divider	ZC4PD-K1844+	Mini-Circuits	942907	09/10/2025	Annual
ATTENUATOR(20 dB)	8493C	Hewlett Packard	17280	04/17/2025	Annual
Spectrum Analyzer (10 Hz ~ 40 GHz)	FSV40	REOHDE & SCHWARZ	101733	09/19/2025	Annual
Base Station	8960 (E5515C)	Agilent	MY48360800	08/05/2025	Annual
Wideband Radio Communication Tester	MT8821C	Anritsu Corp.	6262287701	05/16/2025	Annual

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Wideband Radio Communication Tester	MT8000A	Anritsu Corp.	6262302511	05/14/2025	Annual
SIGNAL GENERATOR (100 kHz ~ 40 GHz)	SMB100A	REOHDE & SCHWARZ	177633	07/26/2025	Annual
Signal Analyzer(10 Hz ~ 26.5 GHz)	N9020A	Agilent	MY52090906	04/19/2025	Annual
Signal Analyzer(5 Hz ~ 40.0 GHz)	N9030B	KEYSIGHT	MY55480167	05/17/2025	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).

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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)

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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	PASS
Frequency stability / variation of ambient temperature	§2.1055, §27.54	Emission must remain in band	PASS

Note:
1. Conducted test 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. Radiateded tests were tested using 5G Wireless Tester.

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7. 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

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8. TEST DATA

8.1 Conducted Output Power

8.1.1 SISO (SA, PC2)

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max.Average Power (dBm)		
						501204	518598	535998
						2506.02 MHz	2592.99 MHz	2679.99 MHz
20MHz	30	DFT-s	pi/2 BPSK	1	1	20.78	24.93	24.79
				1	26	26.22	25.22	24.25
				1	49	26.18	25.18	24.20
				25	0	22.90	24.75	24.24
				25	13	22.85	25.32	24.34
				25	26	25.69	24.87	23.53
				50	0	22.87	24.98	23.98
			QPSK	1	1	20.39	24.95	24.77
				1	26	26.20	25.22	24.29
				1	49	25.96	25.24	24.22
				25	0	21.89	24.69	24.13
				25	13	21.85	25.14	24.23
				25	26	25.36	24.77	23.56
				50	0	21.86	24.48	23.46
			16QAM	1	26	25.25	24.25	23.53
			64QAM	1	26	23.76	23.47	22.35
			256QAM	1	26	21.80	21.92	20.97
		CP	QPSK	1	26	24.77	23.60	22.92

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Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max.Average Power (dBm)		
						502200	518598	534996
						2511 MHz	2592.99 MHz	2674.98 MHz
30MHz	30	DFT-s	pi/2 BPSK	1	1	20.82	24.97	25.47
				1	39	26.42	25.13	24.85
				1	76	25.94	25.30	24.28
				36	0	23.02	24.67	24.59
				36	21	22.92	25.17	24.53
				36	42	25.57	24.94	23.72
				75	0	23.00	24.95	24.21
			QPSK	1	1	20.38	25.10	24.86
				1	39	26.11	25.14	24.82
				1	76	25.88	25.27	24.08
				36	0	22.01	24.66	24.59
				36	21	21.91	25.15	24.59
				36	42	25.43	24.81	23.68
				75	0	21.99	24.33	23.76
			16QAM	1	39	25.45	24.22	23.91
			64QAM	1	39	23.85	23.31	22.81
			256QAM	1	39	21.75	21.85	21.57
		CP	QPSK	1	39	25.13	23.82	23.17

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Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max.Average Power (dBm)		
						503202	518598	534000
						2516.01 MHz	2592.99 MHz	2670 MHz
40MHz	30	DFT-s	pi/2 BPSK	1	1	20.92	25.23	25.49
				1	53	26.20	25.13	24.99
				1	104	25.59	25.19	24.19
				50	0	22.97	24.66	24.72
				50	28	22.88	24.92	24.62
				50	56	25.31	24.87	23.79
				100	0	22.93	25.02	24.51
			QPSK	1	1	20.40	25.08	25.55
				1	53	26.00	25.11	24.96
				1	104	25.48	25.07	24.14
				50	0	21.99	24.61	24.79
				50	28	21.87	25.05	24.76
				50	56	25.16	24.76	23.72
				100	0	21.94	24.40	24.06
			16QAM	1	53	25.18	24.05	24.12
			64QAM	1	53	23.87	23.35	23.23
			256QAM	1	53	21.89	21.68	21.47
		CP	QPSK	1	53	24.65	23.77	23.41

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Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max.Average Power (dBm)		
						504204	518598	532998
						2521.02 MHz	2592.99 MHz	2664.99 MHz
50MHz	30	DFT-s	pi/2 BPSK	1	1	20.83	25.01	25.19
				1	67	25.62	24.80	24.87
				1	131	25.41	25.13	24.16
				64	0	22.88	24.43	24.75
				64	35	22.79	24.90	24.66
				64	69	24.81	24.62	23.53
				128	0	22.80	24.72	24.38
			QPSK	1	1	20.35	24.88	25.34
				1	67	25.42	24.71	24.75
				1	131	25.39	25.04	24.05
				64	0	21.86	23.91	24.29
				64	35	21.82	24.73	24.74
				64	69	24.19	24.22	23.15
				128	0	21.87	24.24	24.11
			16QAM	1	67	24.74	23.91	23.85
			64QAM	1	67	23.68	23.29	23.51
			256QAM	1	67	21.81	21.74	21.59
		CP	QPSK	1	67	23.83	23.17	23.27

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Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max.Average Power (dBm)		
						505200	518598	531996
						2526 MHz	2592.99 MHz	2659.98 MHz
60MHz	30	DFT-s	pi/2 BPSK	1	1	20.61	24.93	25.38
				1	81	25.36	24.94	25.07
				1	160	25.34	24.88	24.25
				81	0	22.75	24.39	24.83
				81	41	22.71	24.87	24.67
				81	81	24.75	24.71	23.74
				162	0	22.70	24.74	24.37
			QPSK	1	1	20.11	24.87	25.40
				1	81	25.18	24.68	24.97
				1	160	25.20	24.73	24.10
				81	0	21.77	24.32	24.68
				81	41	21.71	24.87	24.83
				81	81	24.67	24.65	23.83
				162	0	21.70	24.39	24.18
			16QAM	1	81	24.63	23.92	24.23
			64QAM	1	81	23.54	23.13	23.43
			256QAM	1	81	21.62	20.86	21.31
		CP	QPSK	1	81	24.02	22.61	23.55

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Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max.Average Power (dBm)		
						507204	518598	529998
						2536.02 MHz	2592.99 MHz	2649.99 MHz
80MHz	30	DFT-s	pi/2 BPSK	1	1	20.86	20.84	25.18
				1	109	25.30	24.87	25.16
				1	215	25.24	25.03	24.12
				108	0	22.75	24.40	24.81
				108	55	22.72	24.94	25.08
				108	109	24.92	24.92	23.95
				216	0	22.74	24.87	24.75
			QPSK	1	1	20.30	20.33	25.21
				1	109	25.30	24.74	25.29
				1	215	25.38	24.97	24.10
				108	0	21.86	24.52	24.89
				108	55	21.72	25.00	25.24
				108	109	25.03	24.93	24.19
				216	0	21.72	24.75	24.45
			16QAM	1	109	24.22	24.02	24.35
			64QAM	1	109	23.32	22.90	23.48
			256QAM	1	109	21.34	20.75	21.64
		CP	QPSK	1	109	23.88	23.30	23.65

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Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max.Average Power (dBm)		
						508200	518598	528996
						2541 MHz	2592.99 MHz	2644.98 MHz
90MHz	30	DFT-s	pi/2 BPSK	1	1	20.88	20.82	24.97
				1	123	25.46	24.85	25.56
				1	243	25.43	25.02	24.21
				120	0	22.88	24.42	24.87
				120	63	22.69	24.73	25.23
				120	125	24.99	24.96	24.04
				243	0	22.75	25.22	24.94
			QPSK	1	1	20.39	20.28	24.93
				1	123	25.37	24.78	25.31
				1	243	25.24	24.88	24.09
				120	0	21.86	24.10	24.52
				120	63	21.70	25.10	25.32
				120	125	24.65	24.50	23.77
				243	0	21.77	24.95	24.65
			16QAM	1	123	24.37	23.88	24.55
			64QAM	1	123	23.06	22.65	23.15
			256QAM	1	123	21.56	20.66	21.68
		CP	QPSK	1	123	23.78	23.23	23.73

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Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max.Average Power (dBm)		
						509202	518598	528000
						2546.01 MHz	2592.99 MHz	2640.0 MHz
100MHz	30	DFT-s	pi/2 BPSK	1	1	20.63	20.69	24.87
				1	137	25.51	24.78	25.46
				1	271	25.01	24.86	24.43
				135	0	22.86	24.32	24.76
				135	69	22.64	25.05	25.24
				135	138	25.04	24.93	24.09
				270	0	22.70	24.83	24.90
			QPSK	1	1	20.22	20.20	24.85
				1	137	25.43	24.73	25.43
				1	271	25.06	24.77	24.25
				135	0	21.86	24.57	24.81
				135	69	21.66	25.14	25.45
				135	138	24.98	25.03	24.39
				270	0	21.70	24.94	24.68
			16QAM	1	137	24.50	23.96	24.37
			64QAM	1	137	23.01	22.22	22.92
			256QAM	1	137	21.50	20.61	21.50
		CP	QPSK	1	137	23.92	22.99	23.87

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8.1.2 MIMO

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max.Average Power (dBm)		
						501204	518598	535998
						2506.02 MHz	2592.99 MHz	2679.99 MHz
20MHz	30	CP	QPSK	1	1	19.04	24.86	24.37
				1	26	24.93	24.73	24.35
				1	49	24.83	24.78	24.31
				25	0	20.00	23.28	22.79
				25	13	20.02	24.75	24.29
				25	26	23.46	23.27	22.81
				51	0	19.98	23.28	22.76
			16QAM	1	26	24.50	24.20	23.78
			64QAM	1	26	22.99	22.76	22.21
			256QAM	1	26	19.81	19.74	19.31

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Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max.Average Power (dBm)		
						502200	518598	534996
						2511 MHz	2592.99 MHz	2674.98 MHz
30MHz	30	CP	QPSK	1	1	19.13	24.80	24.64
				1	39	24.92	24.59	24.66
				1	76	24.99	24.93	24.72
				36	0	20.02	23.31	23.00
				36	21	19.99	24.77	24.36
				36	42	23.55	23.38	22.88
				78	0	20.10	23.28	22.96
			16QAM	1	76	24.63	24.19	23.96
			64QAM	1	76	22.95	22.86	22.52
			256QAM	1	76	19.97	19.93	19.28

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Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max.Average Power (dBm)		
						503202	518598	534000
						2516.01 MHz	2592.99 MHz	2670 MHz
40MHz	30	CP	QPSK	1	1	19.06	24.90	24.74
				1	53	25.02	24.67	24.34
				1	104	25.08	24.83	24.50
				50	0	19.89	23.17	22.82
				50	28	19.85	24.64	24.29
				50	56	23.40	23.23	22.87
				106	0	19.95	23.24	22.90
			16QAM	1	104	24.43	24.37	23.91
			64QAM	1	104	22.89	22.78	22.45
			256QAM	1	104	19.91	19.84	19.31

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Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max.Average Power (dBm)		
						504204	518598	532998
						2521.02 MHz	2592.99 MHz	2664.99 MHz
50MHz	30	CP	QPSK	1	1	18.93	24.63	24.35
				1	67	24.79	24.44	24.06
				1	131	24.64	24.53	24.32
				64	0	19.77	23.08	22.69
				64	35	19.78	24.60	24.12
				64	69	23.18	23.16	22.68
				133	0	19.75	23.09	22.67
			16QAM	1	67	24.22	24.03	23.47
			64QAM	1	67	22.70	22.58	22.01
			256QAM	1	1	19.71	19.48	19.01

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Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max.Average Power (dBm)		
						505200	518598	531996
						2526 MHz	2592.99 MHz	2659.98 MHz
60MHz	30	CP	QPSK	1	1	18.69	24.36	24.30
				1	81	24.40	24.61	24.22
				1	160	24.47	24.48	24.18
				81	0	19.83	23.13	22.79
				81	41	19.73	24.60	24.21
				81	81	23.18	23.16	22.74
				162	0	19.73	23.08	22.75
			16QAM	1	81	24.10	24.07	23.63
			64QAM	1	81	22.72	22.50	22.18
			256QAM	1	81	19.61	19.57	19.12

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Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max.Average Power (dBm)		
						507204	518598	529998
						2536.02 MHz	2592.99 MHz	2649.99 MHz
80MHz	30	CP	QPSK	1	1	18.82	18.63	24.61
				1	109	24.61	24.65	24.32
				1	215	24.58	24.59	24.20
				108	0	19.82	23.13	23.02
				108	55	19.69	24.61	24.37
				108	109	23.08	23.13	22.88
				217	0	19.74	23.13	22.92
			16QAM	1	109	24.09	24.12	23.77
			64QAM	1	109	22.55	22.70	22.43
			256QAM	1	109	19.61	19.58	19.43

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Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max.Average Power (dBm)		
						508200	518598	528996
						2541 MHz	2592.99 MHz	2644.98 MHz
90MHz	30	CP	QPSK	1	1	18.94	18.58	24.67
				1	123	24.59	24.73	24.41
				1	243	24.53	24.54	23.55
				120	0	19.79	23.18	23.09
				120	63	19.69	24.48	24.49
				120	125	23.10	23.20	22.85
				245	0	19.75	23.16	23.00
			16QAM	1	123	24.19	24.15	24.04
			64QAM	1	123	22.73	22.66	22.48
			256QAM	1	123	19.61	19.61	19.53

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Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max.Average Power (dBm)		
						509202	518598	528000
						2546.01 MHz	2592.99 MHz	2640.0 MHz
100MHz	30	CP	QPSK	1	1	18.77	18.63	24.52
				1	137	24.55	24.56	24.49
				1	271	24.25	24.17	23.47
				135	0	19.88	23.16	23.14
				135	69	19.67	24.54	24.52
				135	138	23.06	23.19	22.91
				273	0	19.74	23.17	23.10
			16QAM	1	137	24.10	24.16	23.99
			64QAM	1	137	22.75	22.70	22.52
			256QAM	1	137	19.71	19.75	19.50

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8.1.3 SISO (NSA, PC3)

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max.Average Power (dBm)		
						501204	518598	535998
						2506.02 MHz	2592.99 MHz	2679.99 MHz
20MHz	30	DFT-s	pi/2 BPSK	1	1	20.75	24.23	24.17
				1	26	24.40	24.27	24.21
				1	49	24.46	24.48	24.08
				25	0	22.94	24.35	24.11
				25	13	23.02	24.38	24.26
				25	26	24.51	24.50	23.73
				50	0	22.92	24.36	24.05

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max.Average Power (dBm)		
						502200	518598	534996
						2511 MHz	2592.99 MHz	2674.98 MHz
30 MHz	30	DFT-s	pi/2 BPSK	1	1	20.92	24.24	24.31
				1	39	24.46	24.35	24.27
				1	76	24.47	24.70	24.12
				36	0	23.08	24.30	24.29
				36	21	23.06	24.42	24.34
				36	42	24.57	24.59	23.70
				75	0	23.08	24.46	24.32

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max.Average Power (dBm)		
						503202	518598	534000
						2516.01 MHz	2592.99 MHz	2670 MHz
40MHz	30	DFT-s	pi/2 BPSK	1	1	19.54	23.94	24.14
				1	53	23.02	24.16	24.08
				1	104	22.94	24.56	23.83
				50	0	21.66	24.12	24.24
				50	28	21.62	24.26	24.19
				50	56	23.07	24.51	23.75
				100	0	21.63	24.34	24.20

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Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max.Average Power (dBm)		
						504204	518598	532998
						2521.02 MHz	2592.99 MHz	2664.99 MHz
50MHz	30	DFT-s	pi/2 BPSK	1	1	20.67	23.81	24.05
				1	67	24.17	24.18	24.01
				1	131	23.92	24.52	23.69
				64	0	22.83	24.05	24.08
				64	35	22.79	24.25	24.12
				64	69	24.12	24.49	23.69
				128	0	22.79	24.25	24.15

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max.Average Power (dBm)		
						505200	518598	531996
						2526 MHz	2592.99 MHz	2659.98 MHz
60MHz	30	DFT-s	pi/2 BPSK	1	1	20.69	23.78	24.17
				1	81	24.12	24.16	24.11
				1	160	23.74	24.51	23.71
				81	0	22.90	23.96	24.15
				81	41	22.78	24.27	24.23
				81	81	24.03	24.53	23.79
				162	0	22.80	24.29	24.28

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max.Average Power (dBm)		
						507204	518598	529998
						2536.02 MHz	2592.99 MHz	2649.99 MHz
80MHz	30	DFT-s	pi/2 BPSK	1	1	19.51	19.11	23.01
				1	109	22.79	22.98	23.04
				1	215	22.33	23.40	22.50
				108	0	21.61	22.77	23.03
				108	55	21.40	23.07	23.16
				108	109	22.59	23.26	22.79
				216	0	21.40	23.10	23.17

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Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max.Average Power (dBm)		
						508200	518598	528996
						2541 MHz	2592.99 MHz	2644.98 MHz
90MHz	30	DFT-s	pi/2 BPSK	1	1	19.58	19.26	22.92
				1	123	22.76	22.99	23.11
				1	243	22.39	23.35	22.59
				120	0	21.62	22.76	23.11
				120	63	21.32	23.06	23.17
				120	125	22.54	23.29	22.78
				243	0	21.37	23.06	23.18

Bandwidth	SCS(kHz)	OFDM	Modulation	RB Size	RB Offset	Max.Average Power (dBm)		
						509202	518598	528000
						2546.01 MHz	2592.99 MHz	2640.0 MHz
100MHz	30	DFT-s	pi/2 BPSK	1	1	19.61	19.29	22.71
				1	137	22.65	22.98	23.09
				1	271	22.52	23.33	22.54
				135	0	21.59	22.65	23.05
				135	69	21.26	23.06	23.17
				135	138	22.55	23.40	22.77
				270	0	21.33	23.08	23.17

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8.2 EQUIVALENT ISOTROPIC RADIATED POWER

8.2.1 External Antenna SISO

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBµV)	A.F+C.L+D.F (dB/m)	Total (dBµV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	W	dBm
2506.020	Sub6 n41	PI/2 BPSK	89.38	33.42	122.80	V	< 2.00	0.575	27.60	1	25
2592.990	/ 20 MHz	PI/2 BPSK	86.59	32.98	119.57	V		0.274	24.37	1	25
2679.990	[30 kHz]	PI/2 BPSK	83.16	33.15	116.31	V		0.129	21.11	1	25

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBµV)	A.F+C.L+D.F (dB/m)	Total (dBµV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	W	dBm
2511.000	Sub6 n41	PI/2 BPSK	89.39	33.32	122.71	V	< 2.00	0.564	27.51	1	39
2592.990	/ 30 MHz	PI/2 BPSK	86.09	32.98	119.07	V		0.244	23.87	1	39
2674.980	[30 kHz]	PI/2 BPSK	83.97	33.14	117.11	V		0.155	21.91	1	39

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBµV)	A.F+C.L+D.F (dB/m)	Total (dBµV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	W	dBm
2516.010	Sub6 n41	PI/2 BPSK	88.97	33.52	122.49	V	< 2.00	0.536	27.29	1	53
2592.990	/ 40 MHz	PI/2 BPSK	86.22	32.98	119.20	V		0.251	24.00	1	53
2670.000	[30 kHz]	PI/2 BPSK	83.66	33.80	117.46	V		0.168	22.26	1	53

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Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBμV)	A.F+C.L+D.F (dB/m)	Total (dBμV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	W	dBm
2521.020	Sub6 n41 / 50 MHz [30 kHz]	PI/2 BPSK	87.79	33.98	121.77	V	< 2.00	0.454	26.57	1	66
2592.990		PI/2 BPSK	85.99	32.98	118.97	V		0.238	23.77	1	66
2664.990		PI/2 BPSK	83.66	33.69	117.35	V		0.164	22.15	1	1

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBμV)	A.F+C.L+D.F (dB/m)	Total (dBμV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	W	dBm
2526.000	Sub6 41/ 60 MHz [30 kHz]	PI/2 BPSK	87.29	33.53	120.82	V	< 2.00	0.365	25.62	1	81
2592.990		PI/2 BPSK	86.26	32.98	119.24	V		0.254	24.04	1	81
2659.980		PI/2 BPSK	82.59	33.06	115.65	V		0.111	20.45	1	1

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBμV)	A.F+C.L+D.F (dB/m)	Total (dBμV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	W	dBm
2536.020	Sub6 41/ 80 MHz [30 kHz]	PI/2 BPSK	87.23	34.48	121.71	V	< 2.00	0.448	26.51	1	108
2592.990		PI/2 BPSK	86.09	32.98	119.07	V		0.244	23.87	1	108
2649.990		PI/2 BPSK	83.54	33.47	117.01	V		0.152	21.81	1	108

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Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBµV)	A.F+C.L+D.F (dB/m)	Total (dBµV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	W	dBm
2541.000	Sub6 41/ 90 MHz [30 kHz]	PI/2 BPSK	87.60	34.07	121.67	V	< 2.00	0.444	26.47	1	122
2592.990		PI/2 BPSK	86.37	32.98	119.35	V		0.260	24.15	1	122
2644.980		PI/2 BPSK	83.06	34.64	117.70	V		0.178	22.50	1	122

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBµV)	A.F+C.L+D.F (dB/m)	Total (dBµV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	W	dBm
2546.010	Sub6 41/ 100 MHz [30 kHz]	PI/2 BPSK	87.49	33.49	120.98	V	< 2.00	0.378	25.78	1	136
2592.990		PI/2 BPSK	86.29	32.98	119.27	V		0.255	24.07	1	136
2640.000		PI/2 BPSK	83.34	34.10	117.44	V		0.168	22.24	1	136

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8.2.2 External Antenna UL MIMO

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBµV)	A.F+C.L+D.F (dB/m)	Total (dBµV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	W	dBm
2506.020	Sub6 n41 / 20 MHz [30 kHz]	QPSK	86.41	33.42	119.83	V	< 2.00	0.290	24.63	1	49
2592.990		QPSK	86.74	32.98	119.72	V		0.283	24.52	1	1
2679.990		QPSK	84.82	33.15	117.97	V		0.189	22.77	1	49

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBµV)	A.F+C.L+D.F (dB/m)	Total (dBµV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	W	dBm
2511.000	Sub6 n41 / 30 MHz [30 kHz]	QPSK	86.36	33.32	119.68	V	< 2.00	0.281	24.48	1	76
2592.990		QPSK	86.64	32.98	119.62	V		0.277	24.42	1	1
2674.980		QPSK	85.15	33.14	118.29	V		0.204	23.09	1	76

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBµV)	A.F+C.L+D.F (dB/m)	Total (dBµV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	W	dBm
2516.010	Sub6 n41 / 40 MHz [30 kHz]	QPSK	86.47	33.52	119.99	V	< 2.00	0.301	24.79	1	104
2592.990		QPSK	86.73	32.98	119.71	V		0.283	24.51	1	1
2670.000		QPSK	85.18	33.80	118.98	V		0.239	23.78	1	104

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Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBµV)	A.F+C.L+D.F (dB/m)	Total (dBµV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	W	dBm
2521.020	Sub6 n41 / 50 MHz [30 kHz]	QPSK	86.83	33.98	120.81	V	< 2.00	0.364	25.61	1	131
2592.990		QPSK	86.35	32.98	119.33	V		0.259	24.13	1	66
2664.990		QPSK	85.04	33.69	118.73	V		0.225	23.53	1	131

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBµV)	A.F+C.L+D.F (dB/m)	Total (dBµV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	W	dBm
2526.000	Sub6 41/ 60 MHz [30 kHz]	QPSK	87.17	33.53	120.70	V	< 2.00	0.355	25.50	1	160
2592.990		QPSK	86.44	32.98	119.42	V		0.264	24.22	1	81
2659.980		QPSK	85.16	33.06	118.22	V		0.200	23.02	1	1

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBµV)	A.F+C.L+D.F (dB/m)	Total (dBµV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	W	dBm
2536.020	Sub6 41/ 80 MHz [30 kHz]	QPSK	86.59	34.48	121.07	V	< 2.00	0.386	25.87	1	215
2592.990		QPSK	86.31	32.98	119.29	V		0.256	24.09	1	108
2649.990		QPSK	86.25	33.47	119.72	V		0.283	24.52	1	1

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Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBµV)	A.F+C.L+D.F (dB/m)	Total (dBµV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	W	dBm
2541.000	Sub6 41/ 90 MHz [30 kHz]	QPSK	86.61	34.07	120.68	V	< 2.00	0.353	25.48	1	122
2592.990		QPSK	86.17	32.98	119.15	V		0.248	23.95	1	122
2644.980		QPSK	85.84	34.64	120.48	V		0.337	25.28	1	1

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBµV)	A.F+C.L+D.F (dB/m)	Total (dBµV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	W	dBm
2546.010	Sub6 41/ 100 MHz [30 kHz]	QPSK	86.89	33.49	120.38	V	< 2.00	0.330	25.18	1	136
2592.990		QPSK	86.37	32.98	119.35	V		0.260	24.15	1	136
2640.000		QPSK	85.22	34.10	119.32	V		0.258	24.12	1	1

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8.2.3 Internal Antenna SISO

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBµV)	A.F+C.L+D.F (dB/m)	Total (dBµV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	W	dBm
2506.020	Sub6 n41 / 20 MHz [30 kHz]	PI/2 BPSK	91.81	33.42	125.23	H	< 2.00	1.007	30.03	1	25
2592.990		PI/2 BPSK	90.43	32.98	123.41	H		0.662	28.21	1	25
2679.990		PI/2 BPSK	87.47	33.15	120.62	H		0.348	25.42	1	1

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBµV)	A.F+C.L+D.F (dB/m)	Total (dBµV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	W	dBm
2511.000	Sub6 n41 / 30 MHz [30 kHz]	PI/2 BPSK	91.57	33.32	124.89	H	< 2.00	0.931	29.69	1	39
2592.990		PI/2 BPSK	90.19	32.98	123.17	H		0.627	27.97	1	39
2674.980		PI/2 BPSK	87.56	33.14	120.70	H		0.355	25.50	1	39

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBµV)	A.F+C.L+D.F (dB/m)	Total (dBµV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	W	dBm
2516.010	Sub6 n41 / 40 MHz [30 kHz]	PI/2 BPSK	91.06	33.52	124.58	H	< 2.00	0.867	29.38	1	53
2592.990		PI/2 BPSK	90.09	32.98	123.07	H		0.612	27.87	1	53
2670.000		PI/2 BPSK	87.43	33.80	121.23	H		0.401	26.03	1	53

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Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBµV)	A.F+C.L+D.F (dB/m)	Total (dBµV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	W	dBm
2521.020	Sub6 n41 / 50 MHz [30 kHz]	PI/2 BPSK	90.48	33.98	124.46	H	< 2.00	0.843	29.26	1	66
2592.990		PI/2 BPSK	89.67	32.98	122.65	H		0.556	27.45	1	66
2664.990		PI/2 BPSK	87.21	33.69	120.90	H		0.372	25.70	1	66

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBµV)	A.F+C.L+D.F (dB/m)	Total (dBµV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	W	dBm
2526.000	Sub6 41/ 60 MHz [30 kHz]	PI/2 BPSK	90.09	33.53	123.62	H	< 2.00	0.695	28.42	1	81
2592.990		PI/2 BPSK	89.61	32.98	122.59	H		0.548	27.39	1	81
2659.980		PI/2 BPSK	87.19	33.06	120.25	H		0.320	25.05	1	81

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBµV)	A.F+C.L+D.F (dB/m)	Total (dBµV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	W	dBm
2536.020	Sub6 41/ 80 MHz [30 kHz]	PI/2 BPSK	90.15	34.48	124.63	H	< 2.00	0.877	29.43	1	215
2592.990		PI/2 BPSK	89.72	32.98	122.70	H		0.562	27.50	1	108
2649.990		PI/2 BPSK	88.89	33.47	122.36	H		0.520	27.16	1	1

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Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBμV)	A.F+C.L+D.F (dB/m)	Total (dBμV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	W	dBm
2541.000	Sub6 41/ 90 MHz [30 kHz]	PI/2 BPSK	90.89	34.07	124.96	H	< 2.00	0.946	29.76	1	243
2592.990		PI/2 BPSK	90.04	32.98	123.02	H		0.605	27.82	1	122
2644.980		PI/2 BPSK	89.33	34.64	123.97	H		0.753	28.77	1	1

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBμV)	A.F+C.L+D.F (dB/m)	Total (dBμV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	W	dBm
2546.010	Sub6 41/ 100 MHz [30 kHz]	PI/2 BPSK	90.56	33.49	124.05	H	< 2.00	0.767	28.85	1	271
2592.990		PI/2 BPSK	89.95	32.98	122.93	H		0.593	27.73	1	136
2640.000		PI/2 BPSK	89.87	34.10	123.97	H		0.753	28.77	1	1

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8.2.4 Internal Antenna MIMO

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBµV)	A.F+C.L+D.F (dB/m)	Total (dBµV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	W	dBm
2506.020	Sub6 n41	QPSK	87.96	33.42	121.38	H	< 2.00	0.415	26.18	1	49
2592.990	/ 20 MHz	QPSK	88.82	32.98	121.80	V		0.457	26.60	1	49
2679.990	[30 kHz]	QPSK	86.99	33.15	120.14	V		0.312	24.94	1	49

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBµV)	A.F+C.L+D.F (dB/m)	Total (dBµV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	W	dBm
2511.000	Sub6 n41	QPSK	87.39	33.32	120.71	H	< 2.00	0.356	25.51	1	76
2592.990	/ 30 MHz	QPSK	88.61	32.98	121.59	V		0.436	26.39	1	76
2674.980	[30 kHz]	QPSK	87.41	33.14	120.55	V		0.343	25.35	1	76

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBµV)	A.F+C.L+D.F (dB/m)	Total (dBµV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	W	dBm
2516.010	Sub6 n41	QPSK	87.79	33.52	121.31	H	< 2.00	0.408	26.11	1	53
2592.990	/ 40 MHz	QPSK	88.94	32.98	121.92	V		0.470	26.72	1	104
2670.000	[30 kHz]	QPSK	87.40	33.80	121.20	V		0.398	26.00	1	104

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Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBμV)	A.F+C.L+D.F (dB/m)	Total (dBμV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	W	dBm
2521.020	Sub6 n41 / 50 MHz [30 kHz]	QPSK	87.77	33.98	121.75	H	< 2.00	0.452	26.55	1	66
2592.990		QPSK	88.44	32.98	121.42	V		0.419	26.22	1	131
2664.990		QPSK	87.24	33.69	120.93	V		0.374	25.73	1	131

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBμV)	A.F+C.L+D.F (dB/m)	Total (dBμV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	W	dBm
2526.000	Sub6 41/ 60 MHz [30 kHz]	QPSK	87.81	33.53	121.34	H	< 2.00	0.411	26.14	1	81
2592.990		QPSK	88.61	32.98	121.59	V		0.436	26.39	1	81
2659.980		QPSK	87.49	33.06	120.55	V		0.343	25.35	1	1

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBμV)	A.F+C.L+D.F (dB/m)	Total (dBμV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	W	dBm
2536.020	Sub6 41/ 80 MHz [30 kHz]	QPSK	87.83	34.48	122.31	H	< 2.00	0.514	27.11	1	108
2592.990		QPSK	88.22	32.98	121.20	V		0.398	26.00	1	108
2649.990		QPSK	88.07	33.47	121.54	V		0.431	26.34	1	1

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Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBμV)	A.F+C.L+D.F (dB/m)	Total (dBμV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	W	dBm
2541.000	Sub6 41/ 90 MHz [30 kHz]	QPSK	87.73	34.07	121.80	H	< 2.00	0.457	26.60	1	122
2592.990		QPSK	88.22	32.98	121.20	V		0.398	26.00	1	122
2644.980		QPSK	88.37	34.64	123.01	V		0.604	27.81	1	1

Freq (MHz)	Mod/ Bandwidth [SCS (kHz)]	Modulation	Measured Level (dBμV)	A.F+C.L+D.F (dB/m)	Total (dBμV/m)	Pol	Limit	EIRP		RB	
							W	W	dBm	W	dBm
2546.010	Sub6 41/ 100 MHz [30 kHz]	QPSK	87.69	33.49	121.18	H	< 2.00	0.396	25.98	1	136
2592.990		QPSK	88.12	32.98	121.10	V		0.389	25.90	1	136
2640.000		QPSK	87.86	34.10	121.96	V		0.474	26.76	1	1

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8.3 RADIATED SPURIOUS EMISSIONS

8.3.1 External Antenna SISO

- ▣ NR Band: N41
- ▣ Bandwidth: 20 MHz
- ▣ Modulation: PI/2 BPSK
- ▣ Distance: 3 meters
- ▣ SCS: 30 kHz

Ch	Freq.(MHz)	Measured Level (dBμV)	A.F+C.L+D.F+ H.P.F-A.G (dB/m)	Total (dBμV/m)	Pol.	Result (dBm)	Limit (dBm)	RB	
								Size	Offset
501204 (2506.02)	5 012.04	49.43	-3.32	46.11	V	-49.09	-25.00	1	25
	7 518.06	46.85	5.00	51.85	V	-43.35	-25.00		
	10 024.08	44.88	9.38	54.26	V	-40.94	-25.00		
518598 (2592.99)	5 185.98	47.79	-0.71	47.08	V	-48.12	-25.00	1	25
	7 778.97	47.69	4.97	52.66	V	-42.54	-25.00		
	10 371.96	44.99	10.41	55.40	V	-39.80	-25.00		
535998 (2679.99)	5 359.98	48.79	-1.95	46.84	V	-48.36	-25.00	1	25
	8 039.97	46.36	6.80	53.16	V	-42.04	-25.00		
	10 719.96	44.93	11.94	56.87	V	-38.33	-25.00		

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8.3.2 External Antenna UL MIMO

▣ NR Band: N41

▣ Bandwidth: 80 MHz

▣ Modulation: QPSK

▣ Distance: 3 meters

▣ SCS: 30 kHz

Ch	Freq.(MHz)	Measured Level (dBμV)	A.F+C.L+D.F+ H.P.F-A.G (dB/m)	Total (dBμV/m)	Pol.	Result (dBm)	Limit (dBm)	RB	
								Size	Offset
507204 (2536.02)	5 072.04	53.46	-1.87	51.59	V	-43.61	-25.00	1	215
	7 608.06	48.50	4.58	53.08	V	-42.12	-25.00		
	10 144.08	46.85	9.26	56.11	V	-39.09	-25.00		
518598 (2592.99)	5 185.98	56.97	-0.71	56.26	V	-38.94	-25.00	1	108
	7 778.97	47.74	4.97	52.71	V	-42.49	-25.00		
	10 371.96	45.75	10.41	56.16	V	-39.04	-25.00		
529998 (2649.99)	5 299.98	55.17	-2.79	52.38	V	-42.82	-25.00	1	1
	7 949.97	47.61	5.28	52.89	V	-42.31	-25.00		
	10 599.96	45.93	11.38	57.31	V	-37.89	-25.00		

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8.3.3 Internal Antenna SISO

- ▣ NR Band: N41
- ▣ Bandwidth: 20 MHz
- ▣ Modulation: PI/2 BPSK
- ▣ Distance: 3 meters
- ▣ SCS: 30 kHz

Ch	Freq.(MHz)	Measured Level (dBμV)	A.F+C.L+D.F+ H.P.F-A.G (dB/m)	Total (dBμV/m)	Pol.	Result (dBm)	Limit (dBm)	RB	
								Size	Offset
501204 (2506.02)	5 012.04	52.95	-3.32	49.63	V	-45.57	-25.00	1	25
	7 518.06	59.97	5.00	64.97	V	-30.23	-25.00		
	10 024.08	46.48	9.38	55.86	H	-39.34	-25.00		
518598 (2592.99)	5 185.98	50.56	-0.71	49.85	H	-45.35	-25.00	1	25
	7 778.97	53.33	4.97	58.30	V	-36.90	-25.00		
	10 371.96	46.66	10.41	57.07	H	-38.13	-25.00		
535998 (2679.99)	5 359.98	53.17	-1.95	51.22	H	-43.98	-25.00	1	1
	8 039.97	47.20	6.80	54.00	V	-41.20	-25.00		
	10 719.96	45.74	11.94	57.68	H	-37.52	-25.00		

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8.3.4 Internal Antenna UL MIMO

▣ NR Band: N41

▣ Bandwidth: 90 MHz

▣ Modulation: QPSK

▣ Distance: 3 meters

▣ SCS: 30 kHz

Ch	Freq.(MHz)	Measured Level (dBμV)	A.F+C.L+D.F+ H.P.F-A.G (dB/m)	Total (dBμV/m)	Pol.	Result (dBm)	Limit (dBm)	RB	
								Size	Offset
508200 (2541.00)	5 082.00	58.36	-2.23	56.13	H	-39.07	-25.00	1	122
	7 623.00	50.57	4.67	55.24	V	-39.96	-25.00		
	10 164.00	47.00	8.99	55.99	H	-39.21	-25.00		
518598 (2592.99)	5 185.98	63.49	-0.71	62.78	H	-32.42	-25.00	1	122
	7 778.97	51.50	4.97	56.47	V	-38.73	-25.00		
	10 371.96	46.05	10.41	56.46	H	-38.74	-25.00		
528996 (2644.98)	5 289.96	65.94	-2.74	63.20	H	-32.00	-25.00	1	1
	7 934.94	50.51	5.71	56.22	V	-38.98	-25.00		
	10 579.92	46.67	12.22	58.89	H	-36.31	-25.00		

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8.4 PEAK-TO-AVERAGE RATIO

Band	Band Width	Frequency (MHz)	Modulation	Resource Block Size	Resource Block Offset	Data (dB)
Sub6 n41	20 MHz	2592.99	BPSK	50	0	4.03
			QPSK			4.61
			16-QAM			5.55
			64-QAM			6.02
			256-QAM			6.56
	30 MHz		BPSK	75		3.83
			QPSK			4.50
			16-QAM			5.59
			64-QAM			6.13
			256-QAM			6.58
	40 MHz		BPSK	100		3.99
			QPSK			4.63
			16-QAM			5.68
			64-QAM			6.08
			256-QAM			6.52
	50 MHz		BPSK	128		3.92
			QPSK			4.52
			16-QAM			5.42
			64-QAM			5.91
			256-QAM			6.61
	60 MHz		BPSK	162		4.05
			QPSK			4.71
			16-QAM			5.72
			64-QAM			6.19
			256-QAM			6.62
	80 MHz		BPSK	216		4.03
			QPSK			4.67
			16-QAM			5.68
			64-QAM			6.13
			256-QAM			6.54

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	90 MHz		BPSK	243		4.03
			QPSK			4.67
			16-QAM			5.66
			64-QAM			6.10
			256-QAM			6.42
	100 MHz		BPSK	270		4.05
			QPSK			4.65
			16-QAM			5.70
			64-QAM			6.08
			256-QAM			6.52

Note:

1. Plots of the EUT's Peak- to- Average Ratio are shown Page 79 ~ 118.

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8.5 OCCUPIED BANDWIDTH

Band	Band Width	Frequency (MHz)	Modulation	Resource Block Size	Resource Block Offset	Data (MHz)
Sub6 n41	20 MHz	2592.99	BPSK	50	0	17.973
			QPSK			17.972
			16-QAM			17.946
			64-QAM			17.940
			256-QAM			17.922
	30 MHz		BPSK	75		26.896
			QPSK			26.906
			16-QAM			26.868
			64-QAM			26.876
			256-QAM			26.895
	40 MHz		BPSK	100		35.802
			QPSK			35.768
			16-QAM			35.824
			64-QAM			35.803
			256-QAM			35.815
	50 MHz		BPSK	128		45.851
			QPSK			45.870
			16-QAM			45.855
			64-QAM			45.909
			256-QAM			45.880
	60 MHz		BPSK	162		58.105
			QPSK			58.057
			16-QAM			57.991
			64-QAM			57.966
			256-QAM			57.967
	80 MHz		BPSK	216		77.266
			QPSK			77.263
			16-QAM			77.230
			64-QAM			77.253
			256-QAM			77.276

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	90 MHz		BPSK	243		86.981
			QPSK			86.941
			16-QAM			86.899
			64-QAM			86.880
			256-QAM			86.931
	100 MHz		BPSK	270		96.598
			QPSK			96.535
			16-QAM			96.554
			64-QAM			96.608
			256-QAM			96.538

Note:

1. Plots of the EUT's Occupied Bandwidth are shown Page 119 ~ 158.

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8.6 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	20	2506.020	8.8475	37.805	-74.716	-36.911	-25.00
		2592.990	7.1301	37.805	-74.342	-36.537	
		2679.990	4.6107	37.190	-74.973	-37.783	
	30	2511.000	4.0145	37.190	-74.702	-37.512	
		2592.990	3.7663	37.190	-74.131	-36.941	
		2674.980	3.7373	37.190	-73.716	-36.526	
	40	2516.010	9.7174	37.805	-74.159	-36.354	
		2592.990	4.0345	37.190	-74.087	-36.897	
		2670.000	5.1895	37.805	-74.523	-36.718	
	50	2521.020	5.1690	37.805	-74.821	-37.016	
		2592.990	3.8026	37.190	-73.134	-35.944	
		2664.990	4.0564	37.190	-74.674	-37.484	
	60	2526.000	9.1221	37.805	-74.470	-36.665	
		2592.990	9.1226	37.805	-74.378	-36.573	
		2659.980	3.7628	37.190	-74.520	-37.330	
	80	2536.020	3.7628	37.190	-74.064	-36.874	
		2592.990	8.8330	37.805	-74.803	-36.998	
		2649.990	3.7608	37.190	-75.021	-37.831	
	90	2541.000	8.2493	37.805	-74.609	-36.804	
		2592.990	3.7927	37.190	-75.335	-38.145	
		2644.980	9.4442	37.805	-74.729	-36.924	
	100	2546.010	5.4567	37.805	-75.363	-37.558	
		2592.990	3.7658	37.190	-74.902	-37.712	
		2640.000	8.2727	37.805	-74.514	-36.709	

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Note:

1. Plots of the EUT's Conducted Spurious Emissions are shown Page 159 ~ 206.

2. Duty Cycle factor already applied on the factor.

- Duty Cycle Factor(dB) = 6.990

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

- Result(dBm) = Reading + Factor

3. Factor(dB)

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

8.7 CHANNEL EDGE

- Plots of the EUT's CHANNEL EDGE are shown Page 207 ~ 262.

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8.8 FREQUENCY STABILITY / VARIATION OF AMBIENT TEMPERATURE

▣ BandWidth: 20 MHz

▣ Voltage(100 %): 13.500 VDC

▣Deviation Limit: Emission must remain in band

Test. Frequncy (MHz)	Voltage (%)	Temp. (°C)	Frequency (Hz)	Frequency Error (Hz)	Deviation (%)	ppm
2506.020	100%	+20(Ref)	2506 019 969	0.0	0.000 000	0.000
	100%	-30	2506 019 941	-28.6	-0.000 001	-0.011
	100%	-20	2506 019 943	-25.8	-0.000 001	-0.010
	100%	-10	2506 019 947	-22.3	-0.000 001	-0.009
	100%	0	2506 019 947	-22.0	-0.000 001	-0.009
	100%	+10	2506 019 951	-17.8	-0.000 001	-0.007
	100%	+30	2506 019 933	-36.4	-0.000 001	-0.015
	100%	+40	2506 019 956	-13.7	-0.000 001	-0.005
	100%	+50	2506 019 956	-13.3	-0.000 001	-0.005
	85%	+20	2506 019 958	-11.2	0.000 000	-0.004
	115%	+20	2506 019 954	-14.8	-0.000 001	-0.006
2679.990	100%	+20(Ref)	2679 989 982	0.0	0.000 000	0.000
	100%	-30	2679 989 960	-21.2	-0.000 001	-0.008
	100%	-20	2679 989 956	-25.6	-0.000 001	-0.010
	100%	-10	2679 989 957	-24.5	-0.000 001	-0.009
	100%	0	2679 989 973	-8.1	0.000 000	-0.003
	100%	+10	2679 989 973	-8.5	0.000 000	-0.003
	100%	+30	2679 989 967	-14.8	-0.000 001	-0.006
	100%	+40	2679 989 966	-15.7	-0.000 001	-0.006
	100%	+50	2679 989 966	-15.5	-0.000 001	-0.006
	85%	+20	2679 989 969	-12.9	0.000 000	-0.005
	115%	+20	2679 989 965	-16.1	-0.000 001	-0.006

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▣ BandWidth: 30 MHz

▣ Voltage(100 %): 13.500 VDC

▣Deviation Limit: Emission must remain in band

Test. Frequncy (MHz)	Voltage (%)	Temp. (°C)	Frequency (Hz)	Frequency Error (Hz)	Deviation (%)	ppm
2511.000	100%	+20(Ref)	2510 999 983	0.0	0.000 000	0.000
	100%	-30	2510 999 968	-14.6	-0.000 001	-0.006
	100%	-20	2510 999 964	-19.1	-0.000 001	-0.008
	100%	-10	2510 999 969	-14.2	-0.000 001	-0.006
	100%	0	2510 999 967	-15.8	-0.000 001	-0.006
	100%	+10	2510 999 964	-19.3	-0.000 001	-0.008
	100%	+30	2510 999 967	-16.1	-0.000 001	-0.006
	100%	+40	2510 999 965	-17.9	-0.000 001	-0.007
	100%	+50	2510 999 965	-17.8	-0.000 001	-0.007
	85%	+20	2510 999 972	-10.5	0.000 000	-0.004
	115%	+20	2510 999 977	-5.5	0.000 000	-0.002
2674.980	100%	+20(Ref)	2674 979 999	0.0	0.000 000	0.000
	100%	-30	2674 979 994	-5.8	0.000 000	-0.002
	100%	-20	2674 979 993	-5.9	0.000 000	-0.002
	100%	-10	2674 979 978	-21.2	-0.000 001	-0.008
	100%	0	2674 979 994	-5.1	0.000 000	-0.002
	100%	+10	2674 979 993	-6.2	0.000 000	-0.002
	100%	+30	2674 979 990	-9.5	0.000 000	-0.004
	100%	+40	2674 979 995	-4.6	0.000 000	-0.002
	100%	+50	2674 979 994	-5.4	0.000 000	-0.002
	85%	+20	2674 979 987	-12.4	0.000 000	-0.005
	115%	+20	2674 979 993	-6.6	0.000 000	-0.002

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▣ BandWidth: 40 MHz

▣ Voltage(100 %): 13.500 VDC

▣Deviation Limit: Emission must remain in band

Test. Frequncy (MHz)	Voltage (%)	Temp. (°C)	Frequency (Hz)	Frequency Error (Hz)	Deviation (%)	ppm
2516.010	100%	+20(Ref)	2516 009 996	0.0	0.000 000	0.000
	100%	-30	2516 009 974	-22.7	-0.000 001	-0.009
	100%	-20	2516 009 977	-18.8	-0.000 001	-0.007
	100%	-10	2516 009 980	-16.0	-0.000 001	-0.006
	100%	0	2516 009 983	-13.1	-0.000 001	-0.005
	100%	+10	2516 009 982	-14.7	-0.000 001	-0.006
	100%	+30	2516 009 963	-32.9	-0.000 001	-0.013
	100%	+40	2516 009 965	-31.0	-0.000 001	-0.012
	100%	+50	2516 009 968	-27.8	-0.000 001	-0.011
	85%	+20	2516 009 981	-15.2	-0.000 001	-0.006
	115%	+20	2516 009 979	-17.0	-0.000 001	-0.007
2670.000	100%	+20(Ref)	2669 999 970	0.0	0.000 000	0.000
	100%	-30	2669 999 961	-8.5	0.000 000	-0.003
	100%	-20	2669 999 958	-11.9	0.000 000	-0.004
	100%	-10	2669 999 952	-17.8	-0.000 001	-0.007
	100%	0	2669 999 956	-13.8	-0.000 001	-0.005
	100%	+10	2669 999 952	-17.6	-0.000 001	-0.007
	100%	+30	2669 999 949	-20.9	-0.000 001	-0.008
	100%	+40	2669 999 949	-20.9	-0.000 001	-0.008
	100%	+50	2669 999 950	-19.4	-0.000 001	-0.007
	85%	+20	2669 999 952	-18.4	-0.000 001	-0.007
	115%	+20	2669 999 953	-16.6	-0.000 001	-0.006

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▣ BandWidth: 50 MHz

▣ Voltage(100 %): 13.500 VDC

▣Deviation Limit: Emission must remain in band

Test. Frequncy (MHz)	Voltage (%)	Temp. (°C)	Frequency (Hz)	Frequency Error (Hz)	Deviation (%)	ppm
2521.020	100%	+20(Ref)	2521 019 971	0.0	0.000 000	0.000
	100%	-30	2521 019 941	-29.4	-0.000 001	-0.012
	100%	-20	2521 019 945	-26.3	-0.000 001	-0.010
	100%	-10	2521 019 941	-29.3	-0.000 001	-0.012
	100%	0	2521 019 946	-25.1	-0.000 001	-0.010
	100%	+10	2521 019 947	-23.6	-0.000 001	-0.009
	100%	+30	2521 019 944	-26.8	-0.000 001	-0.011
	100%	+40	2521 019 945	-26.0	-0.000 001	-0.010
	100%	+50	2521 019 946	-25.0	-0.000 001	-0.010
	85%	+20	2521 019 946	-25.2	-0.000 001	-0.010
	115%	+20	2521 019 955	-15.5	-0.000 001	-0.006
2664.990	100%	+20(Ref)	2664 989 979	0.0	0.000 000	0.000
	100%	-30	2664 989 958	-21.5	-0.000 001	-0.008
	100%	-20	2664 989 953	-26.5	-0.000 001	-0.010
	100%	-10	2664 989 953	-26.0	-0.000 001	-0.010
	100%	0	2664 989 972	-7.5	0.000 000	-0.003
	100%	+10	2664 989 969	-10.7	0.000 000	-0.004
	100%	+30	2664 989 967	-12.2	0.000 000	-0.005
	100%	+40	2664 989 968	-11.1	0.000 000	-0.004
	100%	+50	2664 989 965	-14.6	-0.000 001	-0.005
	85%	+20	2664 989 964	-14.9	-0.000 001	-0.006
	115%	+20	2664 989 968	-11.1	0.000 000	-0.004

The report shall not be (partly) reproduced except in full without approval of the laboratory.

▣ BandWidth: 60 MHz

▣ Voltage(100 %): 13.500 VDC

▣Deviation Limit: Emission must remain in band

Test. Frequncy (MHz)	Voltage (%)	Temp. (°C)	Frequency (Hz)	Frequency Error (Hz)	Deviation (%)	ppm
2526.000	100%	+20(Ref)	2525 999 987	0.0	0.000 000	0.000
	100%	-30	2525 999 954	-33.5	-0.000 001	-0.013
	100%	-20	2525 999 955	-32.0	-0.000 001	-0.013
	100%	-10	2525 999 977	-9.9	0.000 000	-0.004
	100%	0	2525 999 978	-9.1	0.000 000	-0.004
	100%	+10	2525 999 975	-12.5	0.000 000	-0.005
	100%	+30	2525 999 955	-31.8	-0.000 001	-0.013
	100%	+40	2525 999 978	-9.3	0.000 000	-0.004
	100%	+50	2525 999 979	-8.4	0.000 000	-0.003
	85%	+20	2525 999 976	-11.4	0.000 000	-0.005
	115%	+20	2525 999 981	-5.9	0.000 000	-0.002
2659.980	100%	+20(Ref)	2659 979 989	0.0	0.000 000	0.000
	100%	-30	2659 979 977	-11.6	0.000 000	-0.004
	100%	-20	2659 979 978	-11.3	0.000 000	-0.004
	100%	-10	2659 979 975	-14.2	-0.000 001	-0.005
	100%	0	2659 979 977	-11.6	0.000 000	-0.004
	100%	+10	2659 979 977	-11.8	0.000 000	-0.004
	100%	+30	2659 979 975	-13.8	-0.000 001	-0.005
	100%	+40	2659 979 979	-9.8	0.000 000	-0.004
	100%	+50	2659 979 977	-11.8	0.000 000	-0.004
	85%	+20	2659 979 979	-9.9	0.000 000	-0.004
	115%	+20	2659 979 979	-10.2	0.000 000	-0.004

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▣ BandWidth: 80 MHz

▣ Voltage(100 %): 13.500 VDC

▣Deviation Limit: Emission must remain in band

Test. Frequncy (MHz)	Voltage (%)	Temp. (°C)	Frequency (Hz)	Frequency Error (Hz)	Deviation (%)	ppm
2536.020	100%	+20(Ref)	2536 019 979	0.0	0.000 000	0.000
	100%	-30	2536 019 959	-19.2	-0.000 001	-0.008
	100%	-20	2536 019 959	-19.6	-0.000 001	-0.008
	100%	-10	2536 019 962	-16.6	-0.000 001	-0.007
	100%	0	2536 019 945	-33.8	-0.000 001	-0.013
	100%	+10	2536 019 967	-11.8	0.000 000	-0.005
	100%	+30	2536 019 964	-14.4	-0.000 001	-0.006
	100%	+40	2536 019 967	-11.6	0.000 000	-0.005
	100%	+50	2536 019 948	-30.7	-0.000 001	-0.012
	85%	+20	2536 019 967	-11.9	0.000 000	-0.005
	115%	+20	2536 019 965	-13.2	-0.000 001	-0.005
2649.990	100%	+20(Ref)	2649 989 994	0.0	0.000 000	0.000
	100%	-30	2649 989 984	-9.9	0.000 000	-0.004
	100%	-20	2649 989 984	-9.9	0.000 000	-0.004
	100%	-10	2649 989 983	-10.5	0.000 000	-0.004
	100%	0	2649 989 978	-15.9	-0.000 001	-0.006
	100%	+10	2649 989 980	-14.1	-0.000 001	-0.005
	100%	+30	2649 989 977	-16.9	-0.000 001	-0.006
	100%	+40	2649 989 972	-21.8	-0.000 001	-0.008
	100%	+50	2649 989 974	-19.9	-0.000 001	-0.008
	85%	+20	2649 989 984	-10.2	0.000 000	-0.004
	115%	+20	2649 989 984	-10.1	0.000 000	-0.004

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▣ BandWidth: 90 MHz

▣ Voltage(100 %): 13.500 VDC

▣Deviation Limit: Emission must remain in band

Test. Frequncy (MHz)	Voltage (%)	Temp. (°C)	Frequency (Hz)	Frequency Error (Hz)	Deviation (%)	ppm
2541.000	100%	+20(Ref)	2540 999 999	0.0	0.000 000	0.000
	100%	-30	2540 999 976	-22.6	-0.000 001	-0.009
	100%	-20	2540 999 976	-22.6	-0.000 001	-0.009
	100%	-10	2540 999 975	-24.3	-0.000 001	-0.010
	100%	0	2540 999 974	-25.1	-0.000 001	-0.010
	100%	+10	2540 999 974	-24.4	-0.000 001	-0.010
	100%	+30	2540 999 996	-3.1	0.000 000	-0.001
	100%	+40	2540 999 998	-1.1	0.000 000	0.000
	100%	+50	2540 999 971	-27.7	-0.000 001	-0.011
	85%	+20	2540 999 980	-19.2	-0.000 001	-0.008
	115%	+20	2540 999 983	-15.4	-0.000 001	-0.006
2644.980	100%	+20(Ref)	2644 979 995	0.0	0.000 000	0.000
	100%	-30	2644 979 987	-8.0	0.000 000	-0.003
	100%	-20	2644 979 984	-10.7	0.000 000	-0.004
	100%	-10	2644 979 984	-10.9	0.000 000	-0.004
	100%	0	2644 979 981	-14.1	-0.000 001	-0.005
	100%	+10	2644 979 978	-16.2	-0.000 001	-0.006
	100%	+30	2644 979 980	-15.1	-0.000 001	-0.006
	100%	+40	2644 979 980	-15.1	-0.000 001	-0.006
	100%	+50	2644 979 971	-23.6	-0.000 001	-0.009
	85%	+20	2644 979 978	-16.6	-0.000 001	-0.006
	115%	+20	2644 979 975	-19.8	-0.000 001	-0.007

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▣ BandWidth: 100 MHz

▣ Voltage(100 %): 13.500 VDC

▣Deviation Limit: Emission must remain in band

Test. Frequncy (MHz)	Voltage (%)	Temp. (°C)	Frequency (Hz)	Frequency Error (Hz)	Deviation (%)	ppm
2546.010	100%	+20(Ref)	2546 009 978	0.0	0.000 000	0.000
	100%	-30	2546 009 958	-20.4	-0.000 001	-0.008
	100%	-20	2546 009 959	-19.2	-0.000 001	-0.008
	100%	-10	2546 009 958	-20.2	-0.000 001	-0.008
	100%	0	2546 009 940	-38.8	-0.000 002	-0.015
	100%	+10	2546 009 955	-23.2	-0.000 001	-0.009
	100%	+30	2546 009 959	-19.5	-0.000 001	-0.008
	100%	+40	2546 009 959	-19.5	-0.000 001	-0.008
	100%	+50	2546 009 959	-19.9	-0.000 001	-0.008
	85%	+20	2546 009 967	-11.1	0.000 000	-0.004
	115%	+20	2546 009 970	-8.5	0.000 000	-0.003
2640.000	100%	+20(Ref)	2639 999 978	0.0	0.000 000	0.000
	100%	-30	2639 999 954	-23.6	-0.000 001	-0.009
	100%	-20	2639 999 975	-2.2	0.000 000	-0.001
	100%	-10	2639 999 958	-19.5	-0.000 001	-0.007
	100%	0	2639 999 962	-15.2	-0.000 001	-0.006
	100%	+10	2639 999 960	-17.4	-0.000 001	-0.007
	100%	+30	2639 999 983	5.3	0.000 000	0.002
	100%	+40	2639 999 948	-29.4	-0.000 001	-0.011
	100%	+50	2639 999 950	-27.8	-0.000 001	-0.011
	85%	+20	2639 999 952	-25.2	-0.000 001	-0.010
	115%	+20	2639 999 962	-16.1	-0.000 001	-0.006

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9. TEST PLOTS

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NR41_20 M_PAR_Mid_BPSK_FullRB

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NR41_20 M_PAR_Mid_QPSK_FullRB

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NR41_20 M_PAR_Mid_16QAM_FullRB

The report shall not be (partly) reproduced except in full without approval of the laboratory.

NR41_20 M_PAR_Mid_64QAM_FullRB

The report shall not be (partly) reproduced except in full without approval of the laboratory.

NR41_20 M_PAR_Mid_256QAM_FullRB

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NR41_30 M_PAR_Mid_BPSK_FullRB

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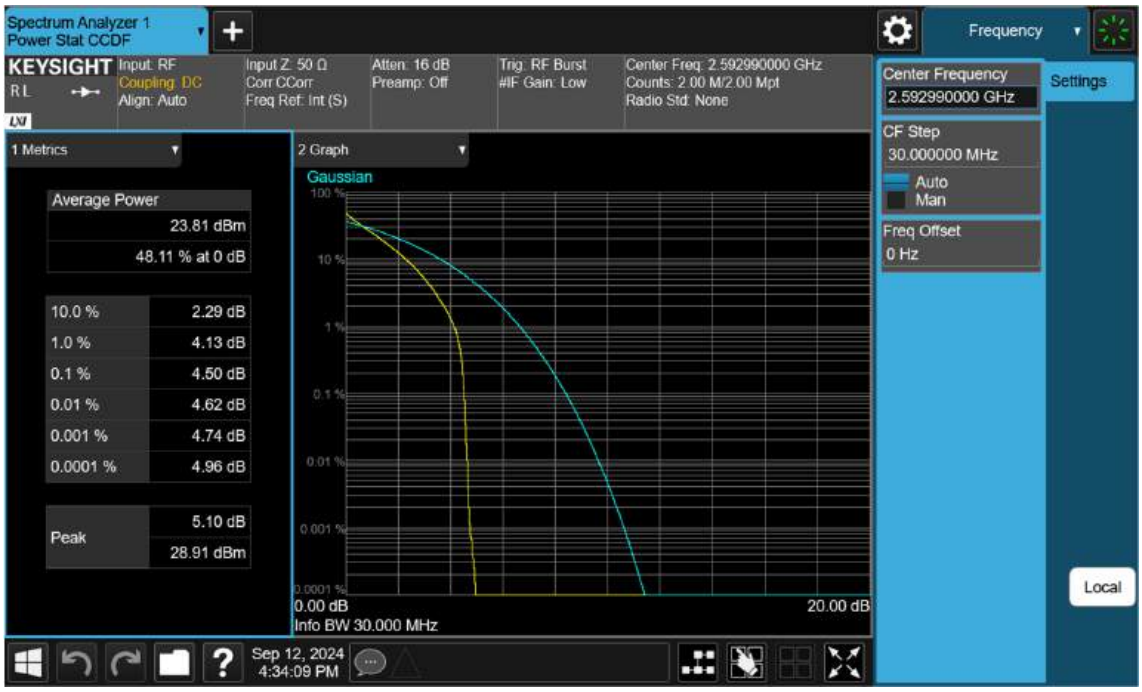
NR41_30 M_PAR_Mid_QPSK_FullRB



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NR41_30 M_PAR_Mid_16QAM_FullRB

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NR41_30 M_PAR_Mid_64QAM_FullRB

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NR41_30 M_PAR_Mid_256QAM_FullRB

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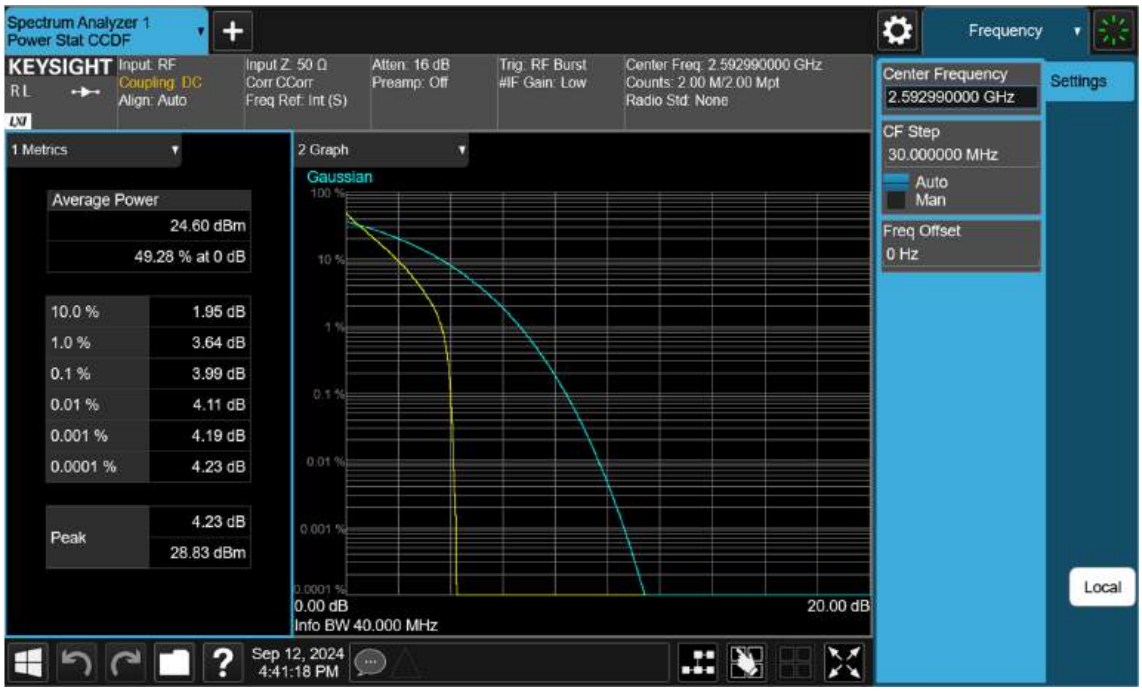
NR41_40 M_PAR_Mid_BPSK_FullRB



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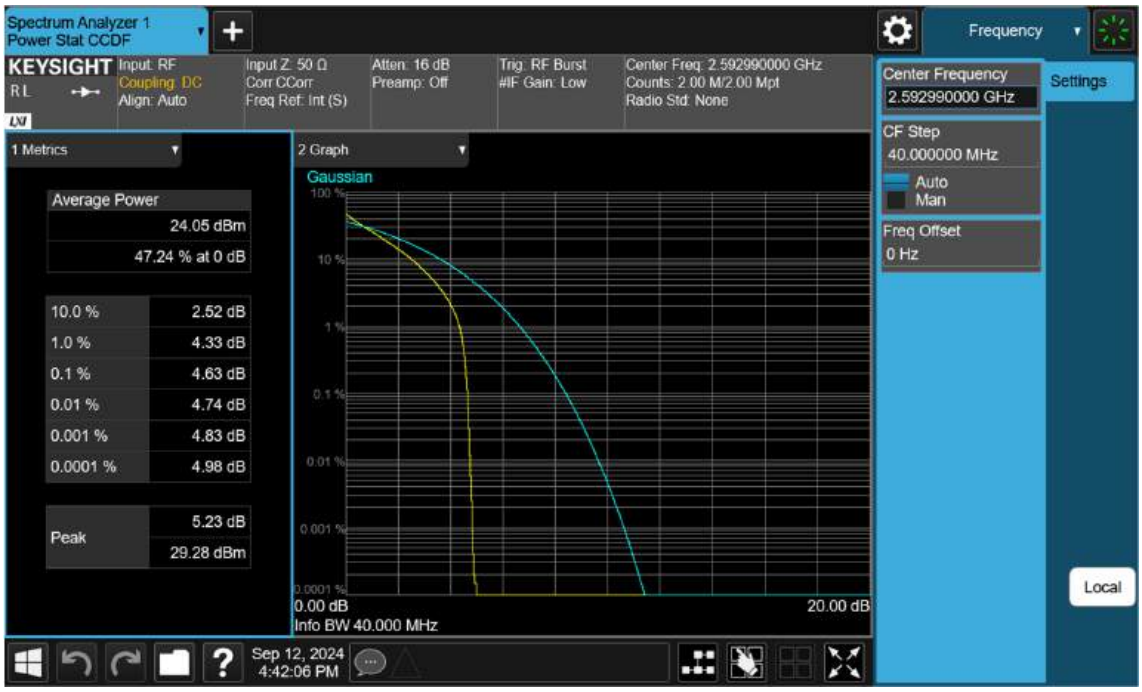
NR41_40 M_PAR_Mid_QPSK_FullRB



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NR41_40 M_PAR_Mid_16QAM_FullRB

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NR41_40 M_PAR_Mid_64QAM_FullRB

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NR41_40 M_PAR_Mid_256QAM_FullRB

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NR41_50 M_PAR_Mid_BPSK_FullRB

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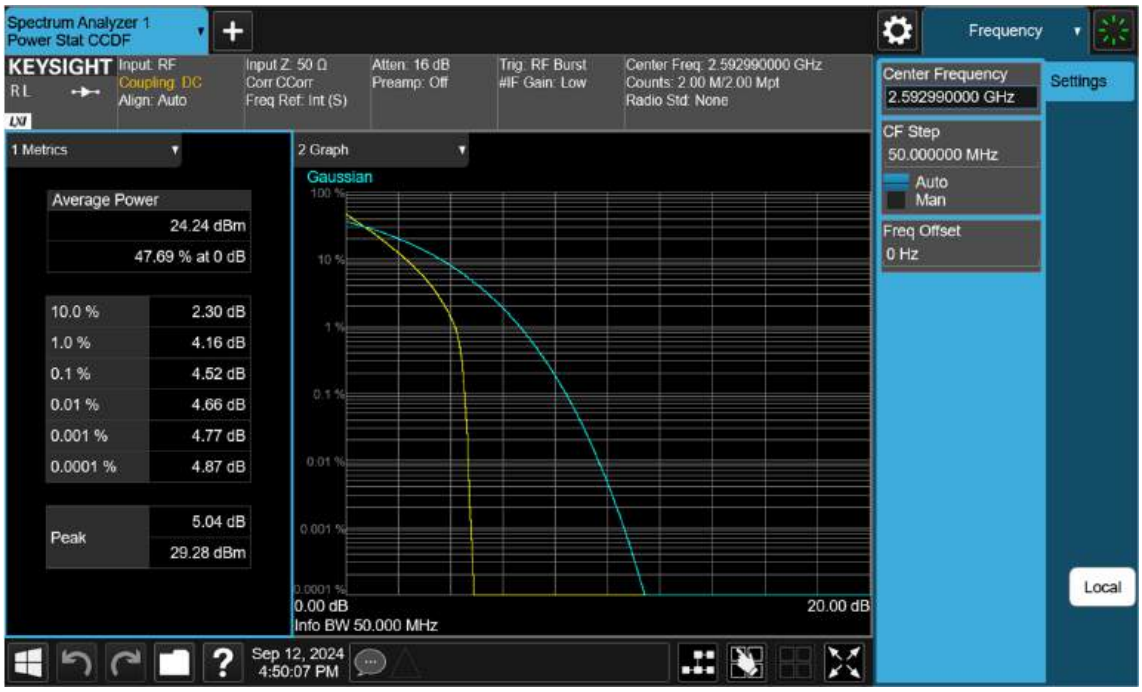
NR41_50 M_PAR_Mid_QPSK_FullRB



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NR41_50 M_PAR_Mid_16QAM_FullRB

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NR41_50 M_PAR_Mid_64QAM_FullRB

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NR41_60 M_PAR_Mid_BPSK_FullRB

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NR41_60 M_PAR_Mid_16QAM_FullRB

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NR41_60 M_PAR_Mid_64QAM_FullRB

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NR41_60 M_PAR_Mid_256QAM_FullRB

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NR41_80 M_PAR_Mid_BPSK_FullRB

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NR41_80 M_PAR_Mid_QPSK_FullRB

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NR41_80 M_PAR_Mid_16QAM_FullRB

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NR41_80 M_PAR_Mid_64QAM_FullRB

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NR41_80 M_PAR_Mid_256QAM_FullRB

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NR41_90 M_PAR_Mid_BPSK_FullRB

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NR41_90 M_PAR_Mid_QPSK_FullRB

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NR41_90 M_PAR_Mid_16QAM_FullRB

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NR41_90 M_PAR_Mid_64QAM_FullRB

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NR41_90 M_PAR_Mid_256QAM_FullRB

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NR41_100 M_PAR_Mid_BPSK_FullRB

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NR41_100 M_PAR_Mid_QPSK_FullRB

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NR41_100 M_PAR_Mid_16QAM_FullRB

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NR41_100 M_PAR_Mid_64QAM_FullRB

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NR41_100 M_PAR_Mid_256QAM_FullRB

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NR41_20 M_OBW_Mid_BPSK_FullRB

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NR41_20 M_OBW_Mid_QPSK_FullRB

The report shall not be (partly) reproduced except in full without approval of the laboratory.

NR41_20 M_OBW_Mid_16QAM_FullRB

The report shall not be (partly) reproduced except in full without approval of the laboratory.

NR41_20 M_OBW_Mid_64QAM_FullRB

The report shall not be (partly) reproduced except in full without approval of the laboratory.

NR41_20 M_OBW_Mid_256QAM_FullRB

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NR41_30 M_OBW_Mid_BPSK_FullRB

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NR41_30 M_OBW_Mid_QPSK_FullRB

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NR41_30 M_OBW_Mid_16QAM_FullRB

The report shall not be (partly) reproduced except in full without approval of the laboratory.

NR41_30 M_OBW_Mid_64QAM_FullRB

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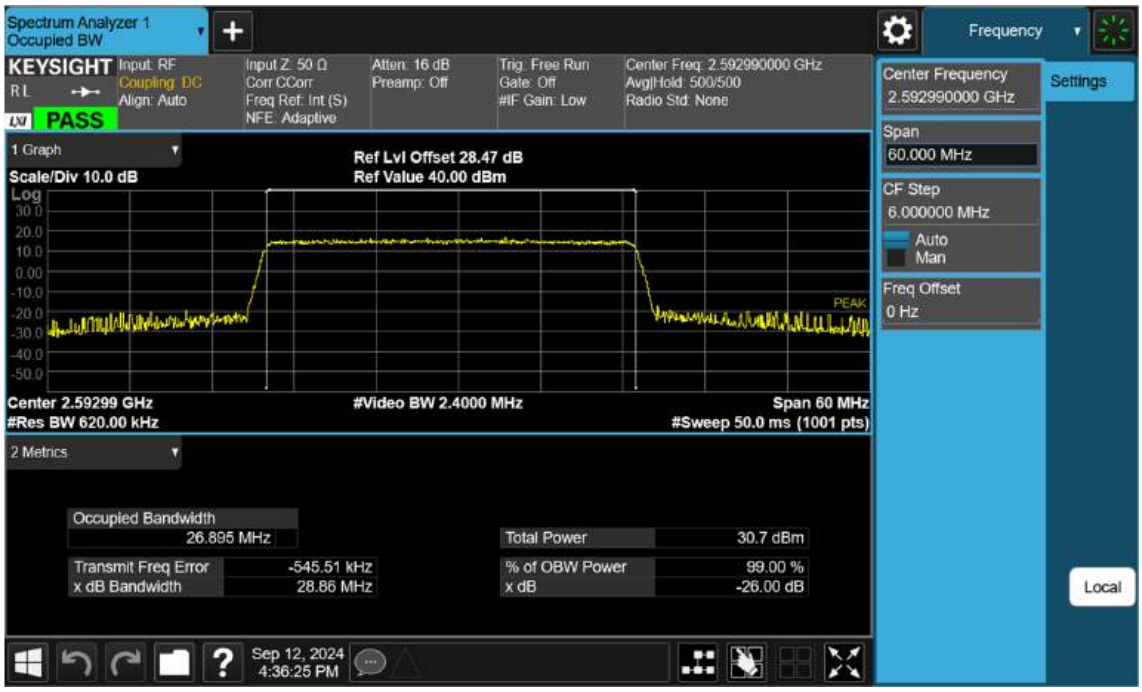
NR41_30 M_OBW_Mid_256QAM_FullRB



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NR41_40 M_OBW_Mid_BPSK_FullRB

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NR41_40 M_OBW_Mid_QPSK_FullRB

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NR41_40 M_OBW_Mid_16QAM_FullRB

The report shall not be (partly) reproduced except in full without approval of the laboratory.

NR41_40 M_OBW_Mid_64QAM_FullRB

The report shall not be (partly) reproduced except in full without approval of the laboratory.

NR41_40 M_OBW_Mid_256QAM_FullRB

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NR41_50 M_OBW_Mid_BPSK_FullRB

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NR41_50 M_OBW_Mid_QPSK_FullRB

The report shall not be (partly) reproduced except in full without approval of the laboratory.

NR41_50 M_OBW_Mid_16QAM_FullRB

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NR41_50 M_OBW_Mid_64QAM_FullRB

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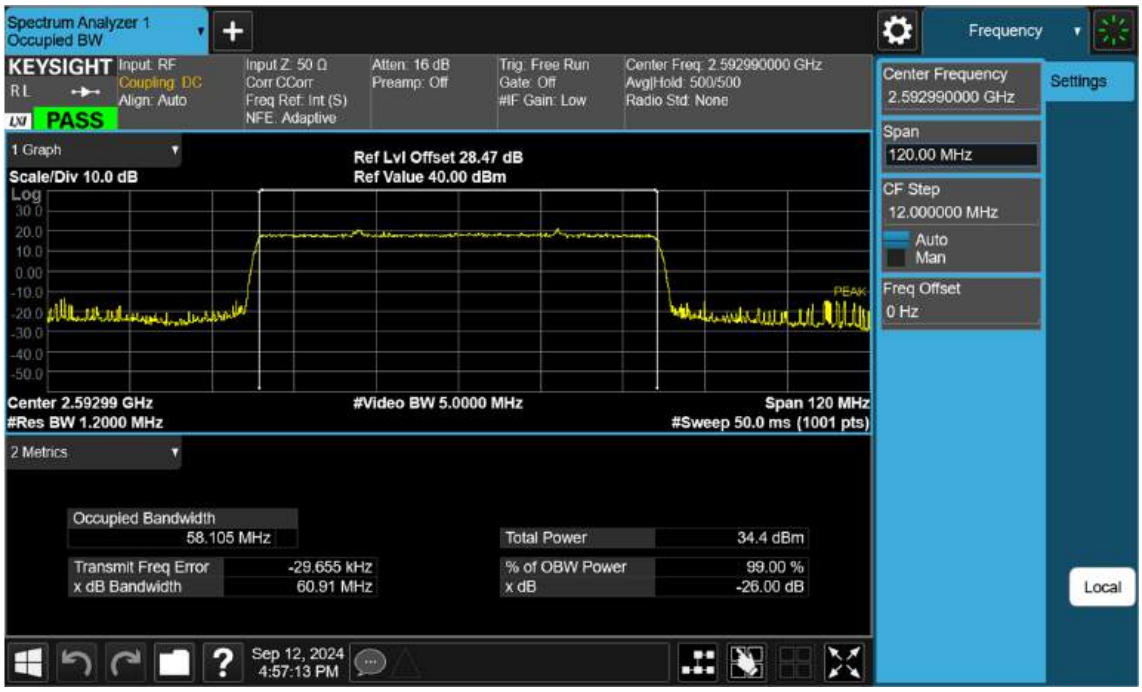
NR41_50 M_OBW_Mid_256QAM_FullRB

The report shall not be (partly) reproduced except in full without approval of the laboratory.

NR41_60 M_OBW_Mid_BPSK_FullRB



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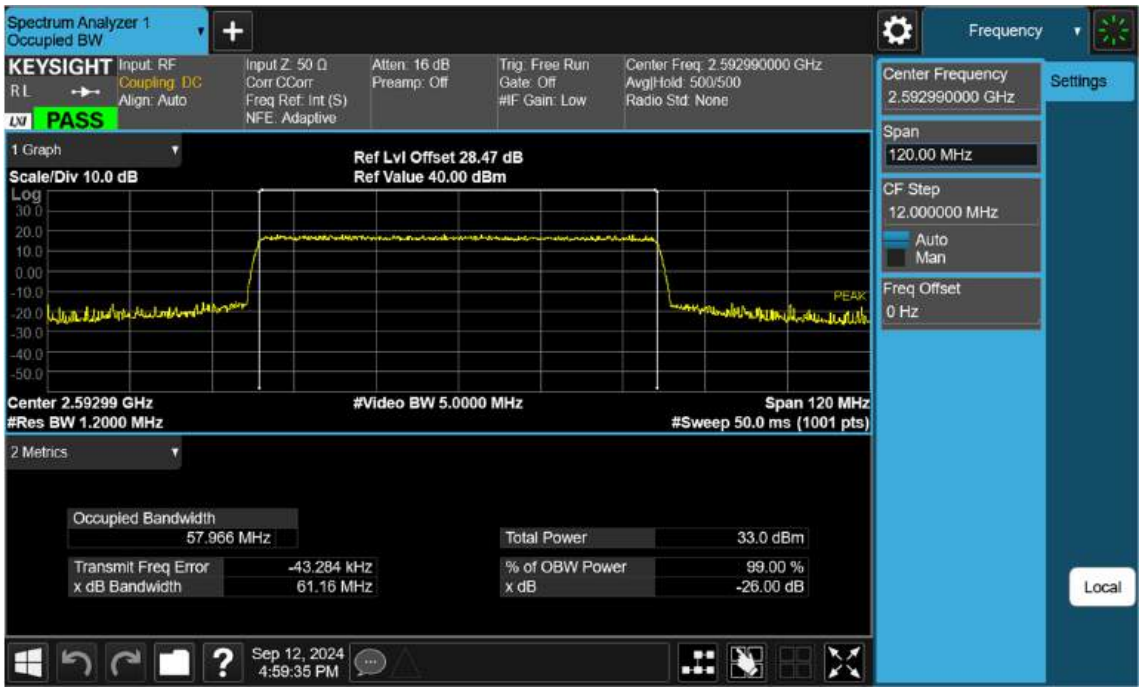
NR41_60 M_OBW_Mid_QPSK_FullRB

The report shall not be (partly) reproduced except in full without approval of the laboratory.

NR41_60 M_OBW_Mid_16QAM_FullRB

The report shall not be (partly) reproduced except in full without approval of the laboratory.

NR41_60 M_OBW_Mid_64QAM_FullRB



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NR41_60 M_OBW_Mid_256QAM_FullRB

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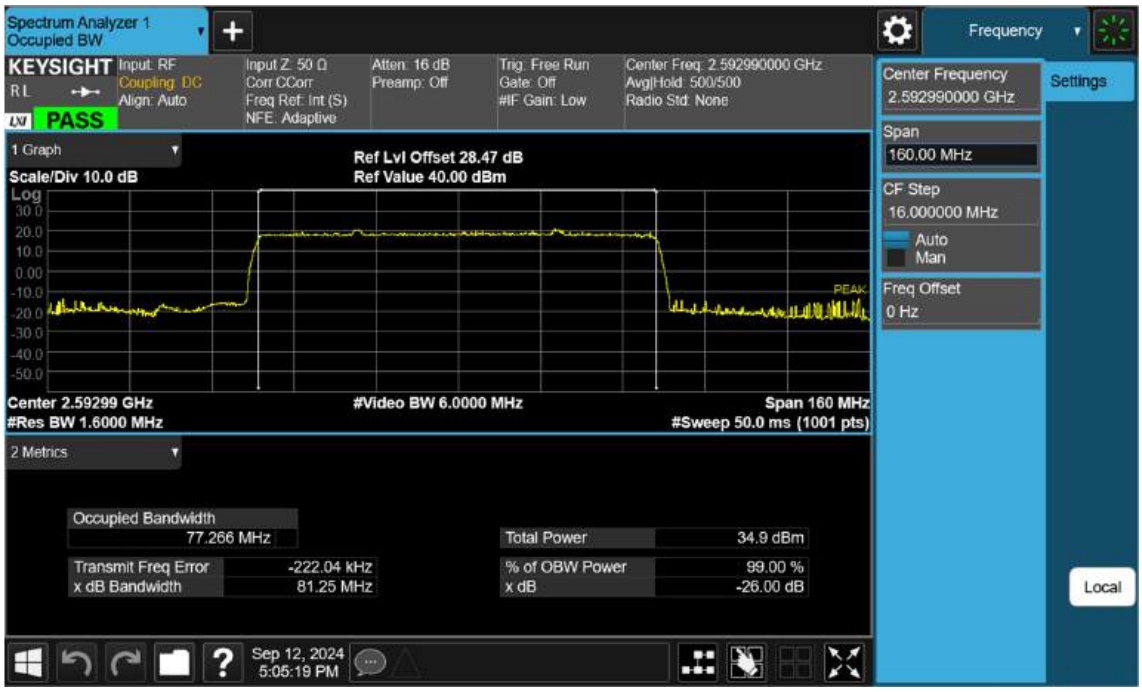
NR41_80 M_OBW_Mid_BPSK_FullRB



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NR41_80 M_OBW_Mid_QPSK_FullRB

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NR41_80 M_OBW_Mid_16QAM_FullRB

The report shall not be (partly) reproduced except in full without approval of the laboratory.

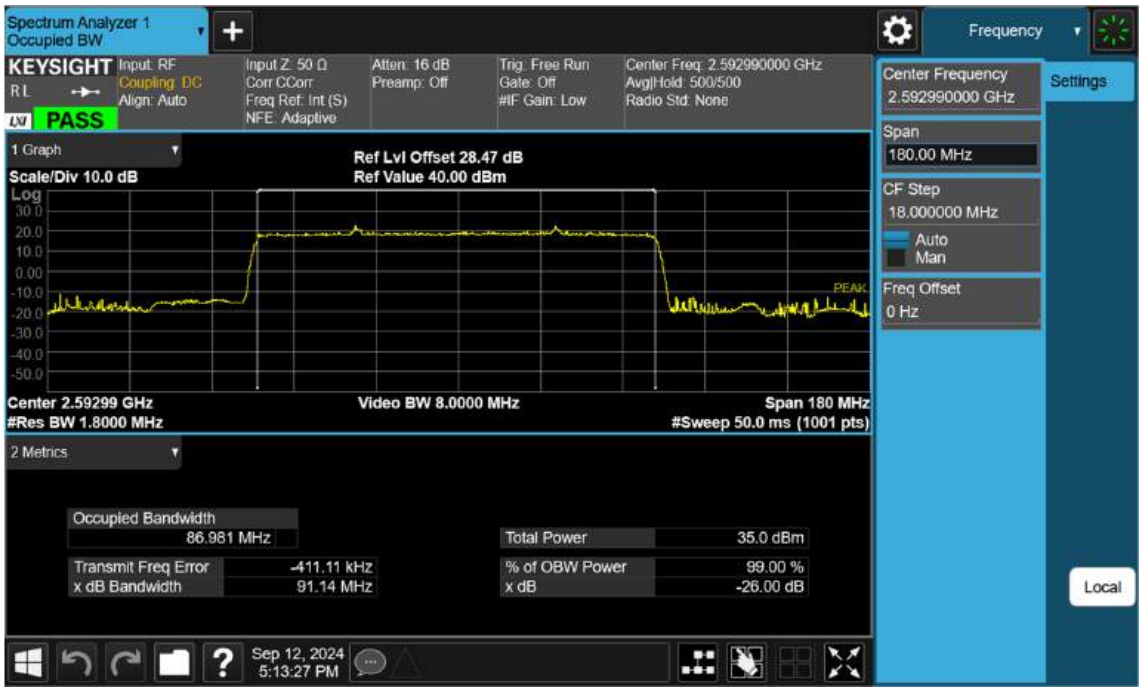
NR41_80 M_OBW_Mid_64QAM_FullRB

The report shall not be (partly) reproduced except in full without approval of the laboratory.

NR41_80 M_OBW_Mid_256QAM_FullRB

The report shall not be (partly) reproduced except in full without approval of the laboratory.

NR41_90 M_OBW_Mid_BPSK_FullRB



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NR41_90 M_OBW_Mid_QPSK_FullRB

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NR41_90 M_OBW_Mid_16QAM_FullRB

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NR41_90 M_OBW_Mid_64QAM_FullRB

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NR41_90 M_OBW_Mid_256QAM_FullRB

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NR41_100 M_OBW_Mid_BPSK_FullRB

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NR41_100 M_OBW_Mid_QPSK_FullRB

The report shall not be (partly) reproduced except in full without approval of the laboratory.

NR41_100 M_OBW_Mid_16QAM_FullRB

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NR41_100 M_OBW_Mid_64QAM_FullRB

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NR41_100 M_OBW_Mid_256QAM_FullRB

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NR41_20 M_Conducted Spurious(30 M-10 G)_Low_BPSK_1RB

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NR41_20 M_Conducted Spurious(30 M-10 G)_Mid_BPSK_1RB

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NR41_20 M_Conducted Spurious(30 M-10 G)_High_BPSK_1RB

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NR41_30 M_Conducted Spurious(30 M-10 G)_Low_BPSK_1RB

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NR41_30 M_Conducted Spurious(30 M-10 G)_Mid_BPSK_1RB

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NR41_40 M_Conducted Spurious(30 M-10 G)_Low_BPSK_1RB

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NR41_40 M_Conducted Spurious(30 M-10 G)_Mid_BPSK_1RB

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NR41_40 M_Conducted Spurious(30 M-10 G)_High_BPSK_1RB

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NR41_50 M_Conducted Spurious(30 M-10 G)_Low_BPSK_1RB

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NR41_50 M_Conducted Spurious(30 M-10 G)_Mid_BPSK_1RB

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NR41_50 M_Conducted Spurious(30 M-10 G)_High_BPSK_1RB

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NR41_60 M_Conducted Spurious(30 M-10 G)_Low_BPSK_1RB

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NR41_60 M_Conducted Spurious(30 M-10 G)_Mid_BPSK_1RB

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NR41_60 M_Conducted Spurious(30 M-10 G)_High_BPSK_1RB

The report shall not be (partly) reproduced except in full without approval of the laboratory.

NR41_80 M_Conducted Spurious(30 M-10 G)_Low_BPSK_1RB

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NR41_80 M_Conducted Spurious(30 M-10 G)_Mid_BPSK_1RB

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NR41_80 M_Conducted Spurious(30 M-10 G)_High_BPSK_1RB

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NR41_90 M_Conducted Spurious(30 M-10 G)_Low_BPSK_1RB

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NR41_90 M_Conducted Spurious(30 M-10 G)_Mid_BPSK_1RB

The report shall not be (partly) reproduced except in full without approval of the laboratory.

NR41_90 M_Conducted Spurious(30 M-10 G)_High_BPSK_1RB

The report shall not be (partly) reproduced except in full without approval of the laboratory.

NR41_100 M_Conducted Spurious(30 M-10 G)_Low_BPSK_1RB

The report shall not be (partly) reproduced except in full without approval of the laboratory.

NR41_100 M_Conducted Spurious(30 M-10 G)_Mid_BPSK_1RB

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NR41_100 M_Conducted Spurious(30 M-10 G)_High_BPSK_1RB

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