

# FCC RF Test Report

APPLICANT	: NOTHING TECHNOLOGY LIMITED
EQUIPMENT	: Smart Phone
BRAND NAME	: cmf by NOTHING
MODEL NAME	: A001
FCC ID	: 2AZEQ-A001
STANDARD	: 47 CFR Part 96
CLASSIFICATION	: Citizens Band End User Devices (CBE)
EQUIPMENT TYPE	: End User Equipment
TEST DATE(S)	: Jan. 03, 2025 ~ Jan. 14, 2025

We, Sporton International Inc. (Shenzhen), would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.26-2015 and shown compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of Sporton International Inc. (Shenzhen), the test report shall not be reproduced except in full.

JasonJia

Approved by: Jason Jia



### Sporton International Inc. (ShenZhen)

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Page Number : 1 of 23 Issued Date : Mar. 26, 2025 Report Version : 01 Report Template No.: BU5-FGLTE96 Version 2.4



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# History of this test report

Version	Description	Issued Date
01	Initial issue of report	Mar. 26, 2025



# **Summary of Test Result**

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3.3	§2.1046	Conducted Output Power	Reporting only	-
3.4	§96.41	Peak-to-Average Ratio	Not Applicable	Not applicable for End User Devices
	_	Maximum E.I.R.P	Pass	-
3.5 §96.41		Maximum Power Spectral Density	Not Applicable	Not applicable for End User Devices
3.6	§2.1049 §96.41	Occupied Bandwidth	Reporting only	-
3.7	§2.1051 §96.41	Conducted Band Edge Measurement Adjacent Channel Leakage Ratio	Pass	-
3.8	§2.1051 §96.41	Conducted Spurious Emission	Pass	
3.9	§2.1055	Frequency Stability for Temperature & Voltage	Pass	-
4.4	§2.1051 §96.41	Radiated Spurious Emission	Pass	Under limit 8.82 dB at 14464.00 MHz

#### **Conformity Assessment Condition:**

 The test results (PASS/FAIL) with all measurement uncertainty excluded are presented against the regulation limits or in accordance with the requirements stipulated by the applicant/manufacturer who shall bear all the risks of non-compliance that may potentially occur if measurement uncertainty is taken into account.

2. The measurement uncertainty please refer to each test result in the section "Measurement Uncertainty"

#### Disclaimer:

The product specifications of the EUT presented in the test report that may affect the test assessments are declared by the manufacturer who shall take full responsibility for the authenticity.



# **1** General Description

### 1.1 Applicant

#### NOTHING TECHNOLOGY LIMITED

Bedford House, 21A John Street, London, United Kingdom WC1N 2BF

### 1.2 Manufacturer

#### NOTHING TECHNOLOGY LIMITED

Bedford House, 21A John Street, London, United Kingdom WC1N 2BF

### **1.3 Feature of Equipment Under Test**

Product Feature						
Equipment	Smart Phone					
Brand Name	cmf by NOTHING					
Model Name	A001					
FCC ID	2AZEQ-A001					
Tx Frequency	LTE Band 48: 3550 MHz ~ 3700 MHz					
Rx Frequency	LTE Band 48: 3550 MHz ~ 3700 MHz					
Bandwidth	5MHz / 10MHz / 15MHz / 20MHz					
Antenna Gain	<ant. 1=""> LTE Band 48: -1.24 dBi <ant. 3="">: LTE Band 48: -1.45 dBi <ant. 5=""> LTE Band 48: -1.27 dBi <ant. 7="">: LTE Band 48: -0.44 dBi</ant.></ant.></ant.></ant.>					
Type of Modulation	QPSK / 16QAM / 64QAM					
IMEI Code	Conducted: 353560160031528/353560160031536 Radiation: 353560160033102/353560160033110					
HW Version	SM683_MB_T1					
SW Version	Nothing OS 3.2					
EUT Stage	Identical Prototype					

#### Remark:

- 1. The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.
- 2. The maximum EIRP is calculated from max output power and antenna gain, only the maximum EIRP of Ant. 7 is shown in the report.



### 1.4 Maximum EIRP Power and Emission Designator

Ľ	TE Band 48	QP	SK	16QAM/64QAM			
BW (MHz)	Frequency Range (MHz)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)		
5	3552.5~3697.5	0.1945	4M50G7D	0.1483	4M51W7D		
10	<b>3555~3695</b> 0.1923 9M09G7D		0.1486	8M97W7D			
15	<b>3557.5~3692.5</b> 0.1919 13M4G7D		0.1493	13M4W7D			
20	3560~3690	0.1959	17M9G7D	0.1698	17M9W7D		

Note: All modulations have been tested, only the worst test results of PSK & QAM are shown in the report.

### **1.5 Testing Site**

Sporton International Inc. (ShenZhen) is accredited to ISO/IEC 17025:2017 by American Association for Laboratory Accreditation with Certificate Number 5145.01.

Test Firm	Sporton International Inc. (ShenZhen)							
Test Site Location	101, 1st Floor, Block B, Building 1, No. 2, Tengfeng 4th Road, Fenghuang Community, Fuyong Street, Baoan District, Shenzhen City, Guangdong Province 518103 People's Republic of China TEL: +86-755-86066985							
Toot Cita No	Sporton Site No.	FCC Designation No.	FCC Test Firm Registration No.					
Test Site No.	TH01-SZ 03CH02-SZ	CN1256	421272					

### 1.6 Test Software

ltem	Site	Manufacture	Name	Version	
1.	03CH02-SZ	AUDIX	E3	6.2009-8-24a	



### 1.7 Applied Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- + ANSI C63.26-2015
- 47 CFR Part 96
- FCC KDB 971168 D01 Power Meas. License Digital Systems v03r01
- FCC KDB 940660 D01 Part 96 CBRS v03
- FCC KDB 412172 D01 Determining ERP and EIRP v01r01

#### Remark:

- **1.** All test items were verified and recorded according to the standards and without any deviation during the test.
- **2.** This EUT has also been tested and complied with the requirements of FCC Part 15, Subpart B, recorded in a separate test report.



# 2 Test Configuration of Equipment Under Test

### 2.1 Test Mode

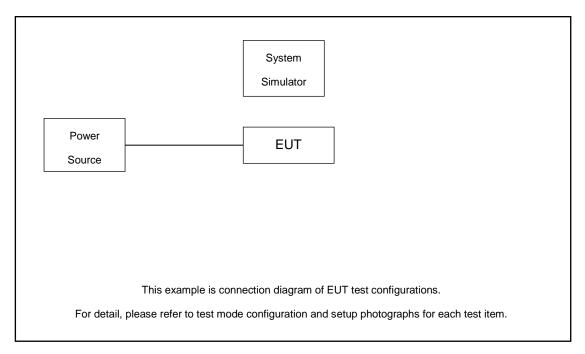
Antenna port conducted and radiated test items listed below are performed according to KDB 971168 D01 Power Meas. License Digital Systems v03r01 with maximum output power.

For radiated measurement, pre-scanned in three orthogonal panels, X, Y, Z for Adapter mode and Earphone Mode. The worst cases (Z plane-Adapter mode) were recorded in this report.

Toot Itoma	Band	Bandwidth (MHz)				Modulation			RB #			Test Channel				
lest nems	Test Items Band	1.4	3	5	10	15	20	QPSK	16QAM	64QAM	1	Half	Full	L	м	н
Max. Output Power	48	-	-	v	v	v	v	v	v	v	v	v	v	v	v	v
Adjacent Channel Leakage Ratio	48	-	-	v	v	v	v	v	v	v	v		v	v	v	v
26dB and 99% Bandwidth	48	-	-	v	v	v	v	v	v				v		v	
Conducted Band Edge	48	-	-	v	v	v	v	v	v	v	v		v	v	v	v
Conducted Spurious Emission	48	-	-	v	v	v	v	v			v		v	v	v	v
E.I.R.P	48	-	-	v	v	v	v	v	v	v	v			v	v	v
Frequency Stability	48	-	-		v			v	v	v	v			v	v	v
Radiated Spurious Emission	48		Worst Case								v					
Remark	<ol> <li>The mark "v " means that this configuration is chosen for testing</li> <li>The mark "-" means that this bandwidth is not supported.</li> <li>The device is investigated from 30MHz to 10 times of fundamental signal for radiated spurious emission test under different RB size/offset and modulations in exploratory test. Subsequently, only the worst case emissions are reported.</li> </ol>															



### 2.2 Connection Diagram of Test System



### 2.3 Support Unit used in test configuration

ltem	Equipment	Trade Name	Model No.	FCC ID	Data Cable	Power Cord
1.	Power Supply	GWINSTEK	PSS-2002	N/A	N/A	Unshielded, 1.8 m
2.	LTE Base Station	Anritsu	MT8821C	N/A	N/A	Unshielded, 1.8 m

### 2.4 Measurement Results Explanation Example

#### For all conducted test items:

The offset level is set in the spectrum analyzer to compensate the RF cable loss and attenuator factor between EUT conducted output port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level is exactly the EUT RF output level.

The spectrum analyzer offset is derived from RF cable loss and attenuator factor.

Offset = RF cable loss + attenuator factor.

Following shows an offset computation example with cable loss 5.5 dB and 10dB attenuator.

Example :

Offset(dB) = RF cable loss(dB) + attenuator factor(dB).

= 5.5 + 10 = 15.5 (dB)



### 2.5 Frequency List of Low/Middle/High Channels

LTE Band 48 Channel and Frequency List									
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest					
20	Channel	55340	55990	56640					
20	Frequency	3560.0	3625.0	3690.0					
45	Channel	55315	55990	56665					
15	Frequency	3557.5	3625.0	3692.5					
10	Channel	55290	55990	56690					
10	Frequency	3555.0	3625.0	3695.0					
5	Channel	55265	55990	56715					
	Frequency	3552.5	3625.0	3697.5					



# 3 Conducted Test Items

### 3.1 Measuring Instruments

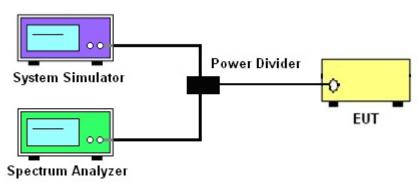
See list of measuring instruments of this test report.

### 3.2 Test Setup

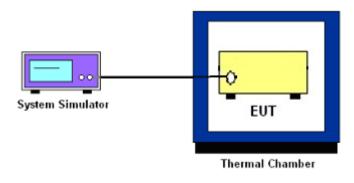
### 3.2.1 Conducted Output Power / ACLR



3.2.2 PSD, Peak-to-Average Ratio, 26dB & 99% Occupied Bandwidth, Conducted Band-Edge and Conducted Spurious Emission



3.2.3 Frequency Stability



### 3.2.4 Test Result of Conducted Test

Please refer to Appendix A.



### 3.3 Conducted Output Power

#### 3.3.1 Description of the Conducted Output Power Measurement

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

#### 3.3.2 Test Procedures

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



### 3.4 Peak-to-Average Ratio

#### 3.4.1 Description of the PAR Measurement

Power Complementary Cumulative Distribution Function (CCDF) curves provide a means for characterizing the power peaks of a digitally modulated signal on a statistical basis. A CCDF curve depicts the probability of the peak signal amplitude exceeding the average power level. Most contemporary measurement instrumentation include the capability to produce CCDF curves for an input signal provided that the instrument's resolution bandwidth can be set wide enough to accommodate the entire input signal bandwidth. In measuring transmissions in this band using an average power technique, the peak-to-average ratio (PAR) of the transmission may not exceed 13 dB.

#### 3.4.2 Test Procedures

The testing follows ANSI C63.26-2015 Section 5.2.6

- 1. The EUT was connected to spectrum and system simulator via a power divider.
- 2. Set the CCDF (Complementary Cumulative Distribution Function) option in spectrum analyzer.
- 3. The highest RF powers were measured and recorded the maximum PAPR level associated with a probability of 0.1 %.
- 4. Record the deviation as Peak to Average Ratio



### 3.5 EIRP

#### 3.5.1 Description of the EIRP Measurement

EIRP limits for CBRS equipment as below table:

De	evice	Maximum EIRP	Maximum PSD
		(dBm/10 MHz)	(dBm/MHz)
Applied	End User Device	23	n/a
	Category A CBSD	30	20
	Category B CBSD	47	37

Remark:

 The worst case EIRP shown in this section is found with LTE operating only using 1RB. As such, the EIRP/10MHz and full channel EIRP values will be identical since 1RB is fully contained within all available channel bandwidths for LTE Band 48 (i.e. 5, 10, 15, 20MHz)

#### 3.5.2 Test Procedures for EIRP

- Establishing a communications link with the call box (Base station) to measure the Maximum conducted power, the parameters were set to force the EUT transmitting at maximum output power level. Use the average power measurement function to measure total channel power of each channel bandwidth (per ANSI C63.26-2015 Section 5.2.1)
- Determining ERP and/or EIRP from conducted RF output power measurements (Per ANSI C63.26-2015 Section 5.2.5.5)

 $EIRP = P_T + G_T - L_C$ , ERP = EIRP - 2.15, where

 $P_T$  = transmitter output power in dBm

 $G_T$  = gain of the transmitting antenna in dBi

 $L_C$  = signal attenuation in the connecting cable between the transmitter and antenna in dB



### 3.6 Occupied Bandwidth

#### 3.6.1 Description of Occupied Bandwidth Measurement

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

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

#### 3.6.2 Test Procedures

The testing follows ANSI C63.26-2015 Section 5.4.3 (26dB) and Section 5.4.4 (99OB)

- 1. The EUT was connected to spectrum analyzer and system simulator via a power divider.
- The spectrum analyzer center frequency is set to the nominal EUT channel center frequency. The span range for the spectrum analyzer shall be between two and five times the anticipated OBW.
- 3. The nominal resolution bandwidth (RBW) shall be in the range of 1 to 5 % of the anticipated OBW, and the VBW shall be at least 3 times the RBW.
- 4. Set the detection mode to peak, and the trace mode to max hold.
- Determine the reference value: Set the EUT to transmit a modulated signal. Allow the trace to stabilize. Set the spectrum analyzer marker to the highest level of the displayed trace. (this is the reference value)
- 6. Determine the "-26 dB down amplitude" as equal to (Reference Value X).
- 7. Place two markers, one at the lowest and the other at the highest frequency of the envelope of the spectral display such that each marker is at or slightly below the "-X dB down amplitude" determined in step 6. If a marker is below this "-X dB down amplitude" value it shall be placed as close as possible to this value. The OBW is the positive frequency difference between the two markers.
- 8. Use the 99 % power bandwidth function of the spectrum analyzer and report the measured bandwidth.



### 3.7 Conducted Band Edge

#### 3.7.1 Description of Conducted Band Edge Measurement

#### Part 96.41 (e) (1) (i)

For CBSD the emission limits outside the fundamental are as follows: Within 0 MHz to 10 MHz above and below the assigned channel  $\leq -13$  dBm/MHz Greater than 10 MHz above and below the assigned channel  $\leq -25$  dBm/MHz

#### Part 96.41 (e) (1) (ii)

For End User Devices the emission limits outside the fundamental are as follows:

Within 0 MHz to B MHz above and below the assigned channel  $\leq$  -13 dBm/MHz

Greater than B MHz above and below the assigned channel  $\leq -25$  dBm/MHz

where B is the bandwidth in megahertz of the assigned channel or multiple contiguous channels of the End User Device.

Notwithstanding the emission limits in this paragraph, the Adjacent Channel Leakage Ratio for End User Devices shall be at least 30 dB.

#### Part 96.41 (e) (2)

For CBSDs and End User Devices, the conducted power of emissions below 3540 MHz or above 3710 MHz shall not exceed -25 dBm/MHz, and the conducted power of emissions below 3530 MHz or above 3720 MHz shall not exceed -40dBm/MHz

#### 3.7.2 Test Procedures

The testing follows FCC KDB 971168 D01 v03r01 Section 6.1.

- 1. The EUT was connected to spectrum analyzer and system simulator via a power divider.
- 2. The band edges of low and high channels for the highest RF powers were measured.
- 3. Set RBW >= 1% EBW in the 1MHz band immediately outside and adjacent to the band edge.
- 4. Beyond the 1 MHz band from the band edge, RBW=1MHz was used
- 5. Offset has included the duty factor for LTE Band 48. Duty factor =10 log (1/x), where x is the measured duty cycle.
- 6. Set spectrum analyzer with RMS detector.
- 7. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.



### 3.8 Conducted Spurious Emission

#### 3.8.1 Description of Conducted Spurious Emission Measurement

96.41 (e)(2)

The conducted power of any emissions below 3530 MHz or above 3720 MHz shall not exceed -40dBm/MHz.

#### 3.8.2 Test Procedures

The testing follows FCC KDB 971168 D01 v03r01 Section 6.1.

- 1. The EUT was connected to spectrum analyzer and system simulator via a power divider.
- The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
- 3. The middle channel for the highest RF power within the transmitting frequency was measured.
- 4. The conducted spurious emission for the whole frequency range was taken.
- 5. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz.
- 6. Set spectrum analyzer with RMS detector.
- Offset has included the duty factor for LTE Band 48. Duty factor =10 log (1/x), where x is the measured duty cycle.
- 8. Taking the record of maximum spurious emission.
- 9. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
- 10. The limit line is -40dBm/MHz.



### 3.9 Frequency Stability

#### 3.9.1 Description of Frequency Stability Measurement

The frequency stability shall be measured by variation of ambient temperature and variation of primary supply voltage to ensure that the fundamental emission stays within the authorized frequency block.

#### 3.9.2 Test Procedures for Temperature Variation

The testing follows FCC KDB 971168 D01 v03r01 Section 9.0.

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

#### 3.9.3 Test Procedures for Voltage Variation

The testing follows FCC KDB 971168 D01 v03r01 Section 9.0.

- 1. The EUT was placed in a temperature chamber at 25±5° C and connected with the system simulator.
- 2. The power supply voltage to the EUT was varied from 85% to 115% of the nominal value measured at the input to the EUT.
- 3. The variation in frequency was measured for the worst case.



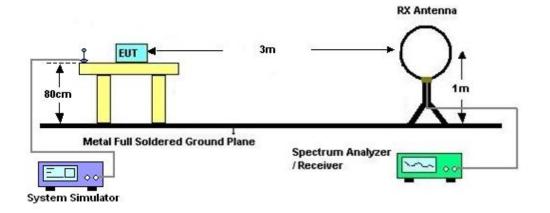
### 4 Radiated Test Items

### 4.1 Measuring Instruments

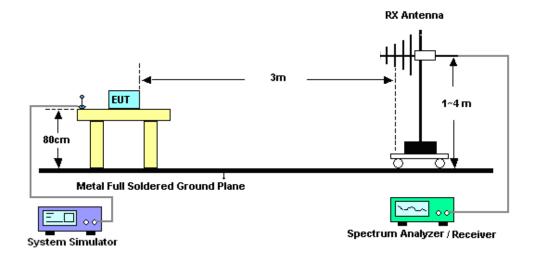
See list of measuring instruments of this test report.

### 4.2 Test Setup

#### 4.2.1 For radiated test below 30MHz

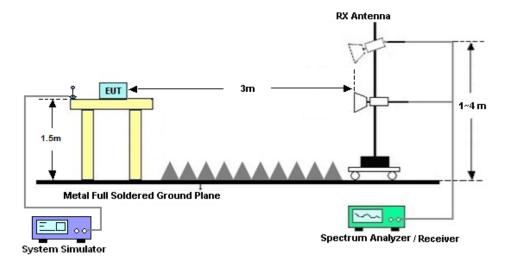


#### 4.2.2 For radiated test from 30MHz to 1GHz





#### 4.2.3 For radiated test above 1GHz



### 4.3 Test Result of Radiated Test

The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line was not reported.

Please refer to Appendix B.

### 4.4 Radiated Spurious Emission

#### 4.4.1 Description of Radiated Spurious Emission Measurement

The radiated spurious emission was measured by substitution method according to ANSI C63.26-2015. The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitter power (P) by a factor of at least -40dBm / MHz.

The spectrum is scanned from 30 MHz up to a frequency including its 10th harmonic.

#### 4.4.2 Test Procedures

- 1. The EUT was placed on a turntable with 0.8 meter height for frequency below 1GHz and 1.5 meter height for frequency above 1GHz respectively above ground.
- 2. The EUT was set 3 meters from the receiving antenna mounted on the antenna tower.
- 3. The table was rotated 360 degrees to determine the position of the highest spurious emission.
- 4. The height of the receiving antenna is varied between 1m to 4m to search the maximum spurious emission for both horizontal and vertical polarizations.
- 5. During the measurement, the system simulator parameters were set to force the EUT transmitting at maximum output power.
- 6. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking the record of maximum spurious emission.
- A horn antenna was substituted in place of the EUT and was driven by a signal generator. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission. EIRP (dBm) = S.G. Power – Tx Cable Loss + Tx Antenna Gain ERP (dBm) = EIRP - 2.15
- 8. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.

The limit line is -40dBm/MHz



# 5 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	R&S	FSV40	101078	10Hz~40GHz	Apr. 09, 2024	Jan. 03, 2025~ Jan. 14, 2025	Apr. 08, 2025	Conducted (TH01-SZ)
Power Divider	TOJOIN	PS-2SM-0426 5	60.06.020. 0077	0.4GHz~26.5G Hz	Dec. 24, 2024	Jan. 03, 2025~ Jan. 14, 2025	Dec. 23, 2025	Conducted (TH01-SZ)
Thermal Chamber	Ten Billion Hongzhangrou p	LP-150U	H2014081 803	-40~+150°C	Jul. 03, 2024	Jan. 03, 2025~ Jan. 14, 2025	Jul. 02, 2025	Conducted (TH01-SZ)
EXA Spectrum Analyzer	KEYSIGHT	N9010A	MY551502 13	10Hz~44GHz	Jul. 03, 2024	Jan. 08, 2025	Jul. 02, 2025	Radiation (03CH02-SZ)
Loop Antenna	R&S	HFH2-Z2E	101141	9kHz~30MHz	Dec. 28, 2024	Jan. 08, 2025	Dec. 27, 2025	Radiation (03CH02-SZ)
Bilog Antenna	TeseQ	CBL6112D	35407	30MHz-2GHz	Oct. 24, 2023	Jan. 08, 2025	Oct. 23, 2025	Radiation (03CH02-SZ)
Double Ridge Horn Antenna	ETS-Lindgren	3117	00119436	1GHz~18GHz	Jul. 04, 2024	Jan. 08, 2025	Jul. 03, 2025	Radiation (03CH02-SZ)
HF Amplifier	MITEQ	TTA1840-35- HG	1871923	18GHz~40GHz	Jul. 03, 2024	Jan. 08, 2025	Jul. 02, 2025	Radiation (03CH02-SZ)
SHF-EHF Horn	com-power	AH-840	101071	18Ghz-40GHz	Apr. 09, 2024	Jan. 08, 2025	Apr. 08, 2025	Radiation (03CH02-SZ)
LF Amplifier	Burgeon	BPA-530	102211	0.01~3000Mhz	Oct. 18, 2024	Jan. 08, 2025	Oct. 17, 2025	Radiation (03CH02-SZ)
HF Amplifier	KEYSIGHT	83017A	MY532701 05	0.5GHz~26.5Gh z	Oct. 14, 2024	Jan. 08, 2025	Oct. 13, 2025	Radiation (03CH02-SZ)
AC Power Source	Chroma	61601	616010003 043	N/A	Oct. 18, 2024	Jan. 08, 2025	Oct. 17, 2025	Radiation (03CH02-SZ)
Turn Table	Chaintek	T-200	N/A	0~360 degree	NCR	Jan. 08, 2025	NCR	Radiation (03CH02-SZ)
Antenna Mast	Chaintek	MBS-400	N/A	1 m~4 m	NCR	Jan. 08, 2025	NCR	Radiation (03CH02-SZ)

NCR: No Calibration Required



### 6 Measurement Uncertainty

**Uncertainty of Conducted Measurement** 

Test Item	Uncertainty
Conducted Spurious Emission & Bandedge	±1.34 dB
Occupied Channel Bandwidth	±0.012 MHz
Conducted Power	±1.34 dB
Conducted Power Density	±1.32 dB
Peak to Average Ratio	±1.34 dB
Frequency Stability	±1.3 Hz

#### Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	2.47dB
Confidence of $95\%$ (U = 2Uc(y))	

#### Uncertainty of Radiated Emission Measurement (1 GHz ~ 18 GHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	3.31dB
------------------------------------------------------------------------	--------

#### Uncertainty of Radiated Emission Measurement (18 GHz ~ 40 GHz)

Measuring Uncertainty for a Level of	3.72dB
Confidence of 95% (U = 2Uc(y))	3.720B

----- THE END ------



# Appendix A. Test Results of Conducted Test

Test Engineer :		Temperature :	22~23°C
rest Engineer .	Fly	Relative Humidity :	40~42%

# Conducted Output Power(Average power) and EIRP

#### LTE Band 48\_ANT7:

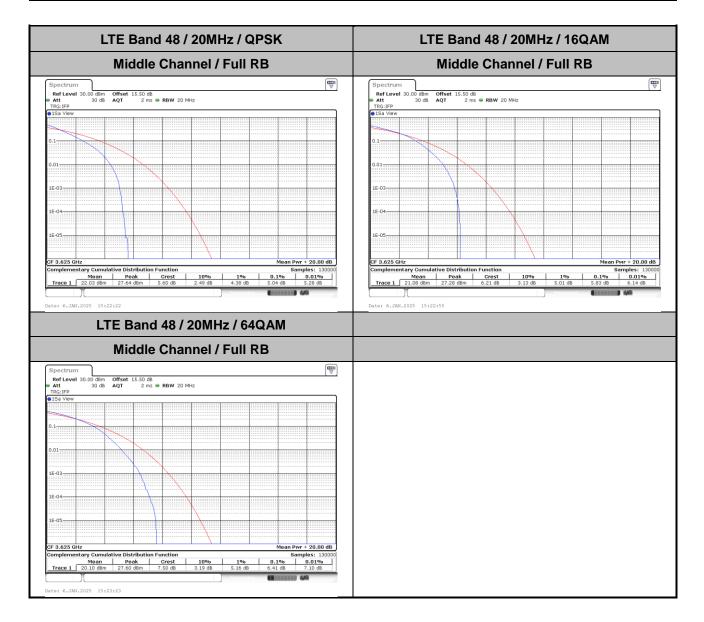
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	EIRP(W)			
	Cha	nnel		55340	55990	56640				
	Frequence	cy (MHz)		3560	3625	3690	L	М	Н	
20	QPSK	1	0	23.36	23.23	23.18	0.1959	0.1901	0.1879	
20	QPSK	1	49	23.25	23.19	23.10	0.1910	0.1884	0.1845	
20	QPSK	1	99	23.22	23.15	23.07	0.1897	0.1866	0.1832	
20	QPSK	50	0	22.35	22.25	22.22	0.1552	0.1517	0.1507	
20	QPSK	50	24	22.27	22.22	22.16	0.1524	0.1507	0.1486	
20	QPSK	50	50	22.29	22.13	22.10	0.1531	0.1476	0.1466	
20	QPSK	100	0	22.33	22.15	22.17	0.1545	0.1483	0.1489	
20	16QAM	1	0	22.74	22.70	22.62	0.1698	0.1683	0.1652	
20	64QAM	1	0	21.25	21.18	21.02	0.1205	0.1186	0.1143	
	Channel				55990	56665	EIRP(W)			
	Frequence	cy (MHz)		3557.5	3625	3692.5	L	М	Н	
15	QPSK	1	0	23.27	23.09	23.04	0.1919	0.1841	0.1820	
15	16QAM	1	0	22.17	22.18	22.08	0.1489	0.1493	0.1459	
Channel				55290	55990	56690		EIRP(W)		
Frequency (MHz)			3555	3625	3695	L	М	Н		
10	QPSK	1	0	23.28	23.10	23.12	0.1923	0.1845	0.1854	
10	16QAM	1	0	22.16	22.13	22.01	0.1486	0.1476	0.1435	
Channel			55265	55990	56715		EIRP(W)			
	Frequency (MHz)			3552.5	3625	3697.5	L	М	Н	
5	QPSK	1	0	23.33	23.12	23.08	0.1945	0.1854	0.1837	
5	16QAM	1	0	22.15	22.09	22.10	0.1483	0.1462	0.1466	



# LTE Band 48

# Peak-to-Average Ratio

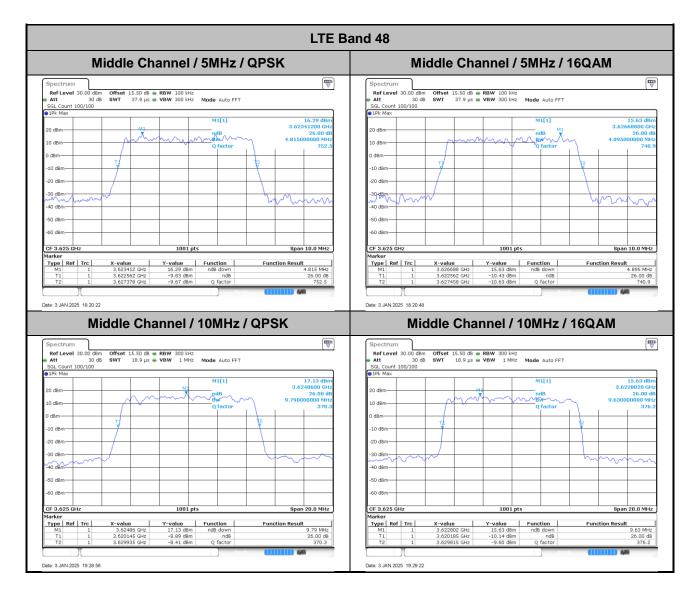
Mode				
Mod.	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Result
Middle CH	5.04	5.83	6.41	PASS



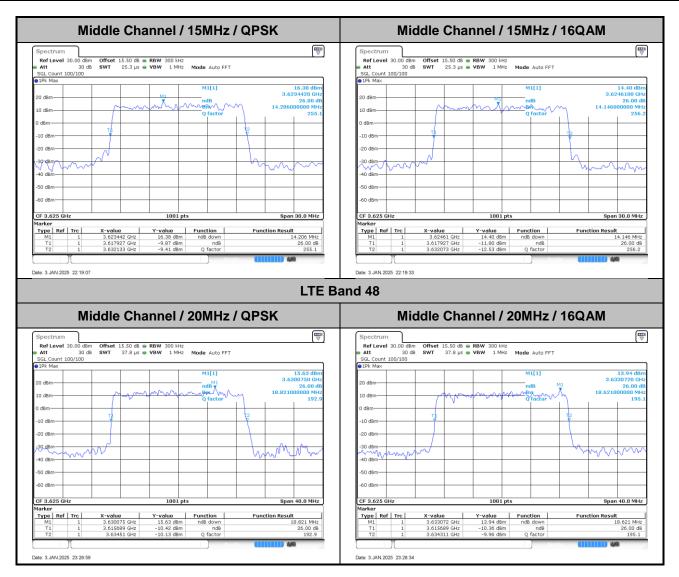


# 26dB Bandwidth

Mode		LTE Band 48 : 26dB BW(MHz)										
BW	1.4	MHz	3N	IHz	5N	IHz	101	/IHz	15N	ЛНz	201	//Hz
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	-	-	-	-	4.82	4.90	9.79	9.63	14.21	14.15	18.82	18.62



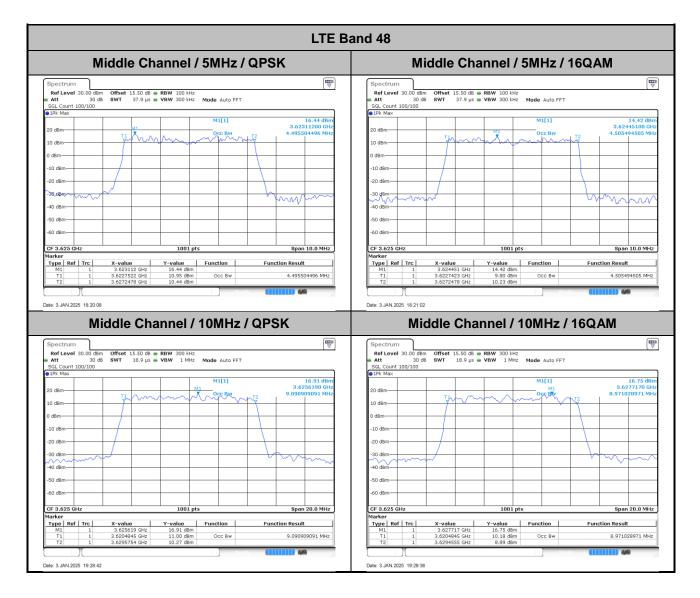




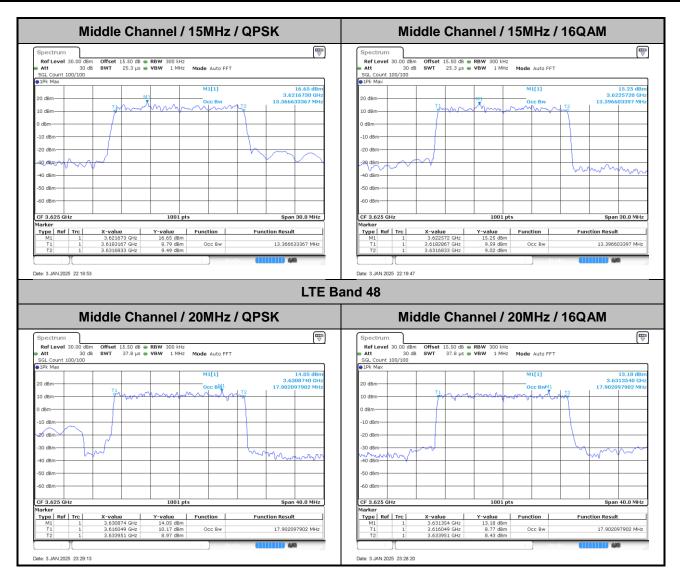


# **Occupied Bandwidth**

Mode		LTE Band 48 : 99%OBW(MHz)										
BW	1.4	MHz	3N	IHz	5N	IHz	101	//Hz	15	ИHz	201	ИHz
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	-	-	-	-	4.50	4.51	9.09	8.97	13.37	13.40	17.90	17.90

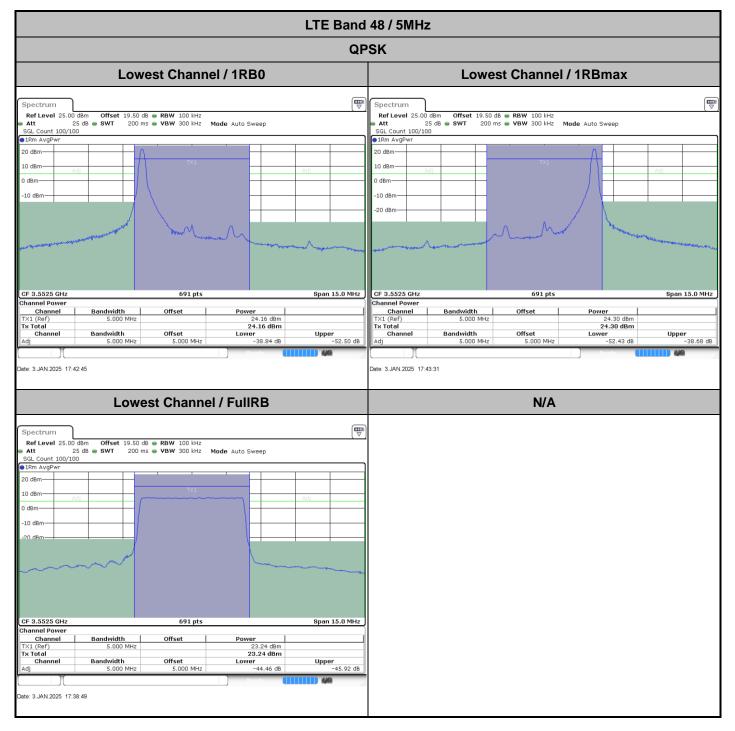


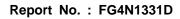






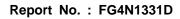
ACLR



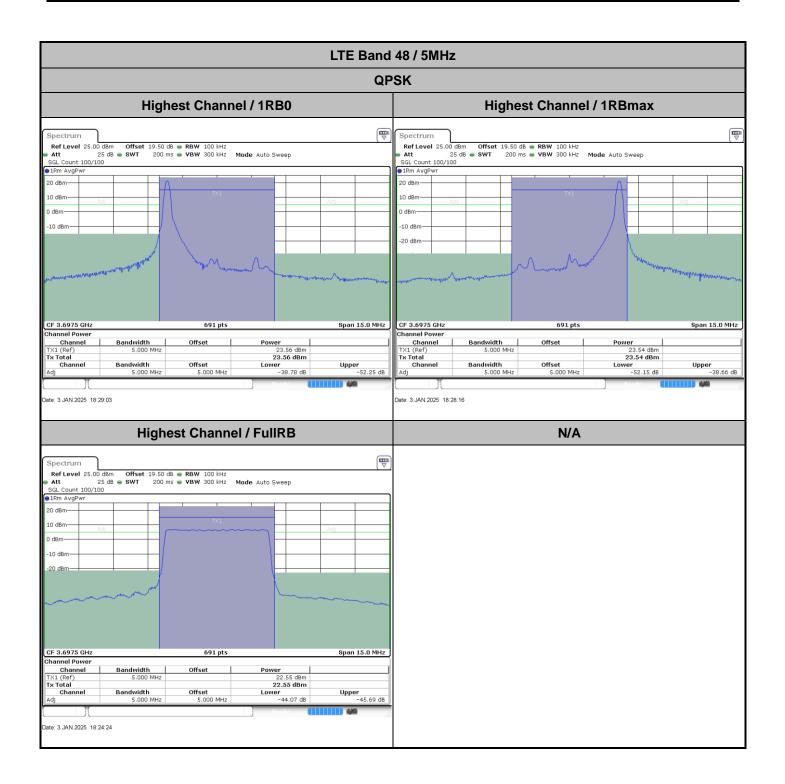




LTE Band 48 / 5MHz									
QP	SK								
Middle Channel / 1RB0	Middle Channel / 1RBmax								
Spectrum       Ref Level 25.00 dBm     Offset 19.50 dB     RBW 100 kHz       Att     25 dB     SWT     200 ms     VBW 300 kHz       SGL Count 100/100     Image: State of the second seco	Spectrum         Image: Construction of the sector of								
CF 3.625 GHz         691 pts         Span 15.0 MHz           Channel Power             TX1 (Ref)         5.000 MHz         24.06 dBm           TX1 (Ref)         5.000 MHz         24.06 dBm           Channel Bandwidth         Offset         24.06 dBm           Channel Bandwidth         Offset         Lower           Adj         5.000 MHz         5.000 MHz           Date: 3 JAN 2025 18 03.25         5	CF 3.625 GHz         691 pts         Span 15.0 MHz           Channel Power             TX1 (Ref)         5.000 MHz         23.99 dBm           TX1 Total         23.99 dBm            Channel Bandwidth         Offset         23.99 dBm           Channel Bandwidth         Offset         Lower           Upper         4dj         5.000 MHz         -52.27 dB           Dete: 3 JAN 2025 18 02 40         Dete: 3 JAN 2025 18 02 40								
Middle Channel / FullRB	N/A								
Spectrum         Image: Construction of the sector of									





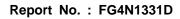




LTE Band	48 / 10MHz				
QP	SK				
Lowest Channel / 1RB0	Lowest Channel / 1RBmax				
Spectrum         Image: Constraint of the sector of th	Spectrum         Image: Constraint of the second secon				
CF 3.535 GHz         691 pts         Span 30.0 MHz           Channel Power         Channel         Bandwidth         Offset         Power           TX1 (Ref)         10.000 MHz         24.32 dBm         24.32 dBm           Channel         Bandwidth         Offset         Lower         Upper           Adj         10.000 MHz         10.000 MHz         -42.04 dB         -53.16 dB           Date: 3 JAN 2025 18 52:05         24.52 05         26.42 05         26.42 05	CF 3.555 GHz         691 pts         Span 30.0 MHz           Channel Power         Channel         Bandwidth         Offset         Power           TXX (Ref)         10.000 MHz         24.53 dBm         74.53 dBm           TX Total         24.53 dBm         74.53 dBm           Adj         10.000 MHz         10.000 MHz         -53.15 dB           Date: 3 JAN 2025 18.51:19         24.51 (19)         10.000 MHz         10.000 MHz				
Lowest Channel / FullRB	N/A				
Spectrum         W           Ref Level 25.00 dbm         Offset 19.50 db         RBW 100 kHz         Mode Auto Sweep           SGL Count 100/100         Image: SGL Count 100/100         Image: SGL Count 100/100         Image: SGL Count 100/100           Image: SGL Count 100/100         Image: SGL Count 100/100         Image: SGL Count 100/100         Image: SGL Count 100/100           Image: SGL Count 100/100         Image: SGL Count 100/100         Image: SGL Count 100/100         Image: SGL Count 100/100           Image: SGL Count 100/100         Image: SGL Count 100/100         Image: SGL Count 100/100         Image: SGL Count 100/100           Image: SGL Count 100/100         Image: SGL Count 100/100         Image: SGL Count 100/100         Image: SGL Count 100/100           Image: SGL Count 100/100         Image: SGL Count 100/100         Image: SGL Count 100/100         Image: SGL Count 100/100           Image: SGL Count 100/100         Image: SGL Count 100/100         Image: SGL Count 100/100         Image: SGL Count 100/100           Image: SGL Count 100/100         Image: SGL Count 100/100         Image: SGL Count 100/100         Image: SGL Count 100/100           Image: SGL Count 100/100         Image: SGL Count 100/100         Image: SGL Count 100/100         Image: SGL Count 100/100           Image: SGL Count 100/100         Image: SGL Count 100/1000         Image: SGL Count 100/1000         Iman					



LTE Band 48 / 10MHz										
QPSK										
Middle Channel / 1RB0						Middle Channel / 1RBmax				
SGL count 100/100 IRm AvgPwr 20 dBm 10 dBm -10 dBm -10 dBm -10 dBm -10 dBm -10 dBm	Offset 19.50	dB • RBW 100 kHz ms • VBW 300 kHz	Mode Auto Sweep		SGL Count 100/10	25 dB 🖷 SWT 🛛 200	dB RBW 100 HHz ms VBW 300 kHz 121	Mode Auto Sweep		
CF 3.625 GHz Channel Power		691 pts		Span 30.0 MHz	CF 3.625 GHz Channel Power		691 pts		Span 30.0 MHz	
T×1 (Ref) Tx Total	Bandwidth 10.000 MHz Bandwidth 10.000 MHz	Offset Offset 10.000 MHz	Power 24.33 dBm 24.33 dBm Lower -42.03 dB	Upper -53.19 dB	Channel T×1 (Ref) Tx Total Adj Date: 3.JAN.2025 19:	Bandwidth           10.000 MHz           Bandwidth           10.000 MHz           10.000 MHz           11:52	Offset Offset 10.000 MHz	Power           24.17 dBm           24.17 dBm           Lower           -52.87 dB           Peeder	Upper -41.92 dB	
	Mid	dle Channe	l / FullRB		N/A					
SGL count 100/100           • IRm AvgPwr           20 dBm           10 dBm           -10 dBm           -20 dBm           -20 dBm           -20 dBm           CF 3.625 GHz           Channel Power           Channel           Txt (Ref)           Tx Total		d6 • RBW 100 kHz ms • VBW 300 kHz 701 691 pts Offset 10.000 MHz	Made Auto Sweep	Adj           Adj           Span 30.0 MHz           Upper           -46,74 dB						





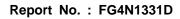
LTE Band 48 / 10MHz								
QPSK								
Highest Channel / 1RB0	Highest Channel / 1RBmax							
Spectrum         Image: Construction of the sector of	Spectrum         Image: Construction of the second sec							
CF 3.695 GHz         691 pts         Span 30.0 MHz           Channel Power         Channel         Bandwidth         Offset         Power           TX1 (Ref)         10.000 MHz         23.70 dBm         23.70 dBm           TX Total         23.70 dBm         23.70 dBm           Channel         Bandwidth         Offset         Lower         Upper           Adj         10.000 MHz         10.000 MHz         -42.20 dB         -52.76 dB	CF 3.695 GHz         691 pts         Span 30.0 MHz           Channel Power         Channel         Bandwidth         Offset         Power           TX1 (Ref)         10.000 MHz         23.38 dBm         10.000 MHz         10.000 MHz         10.000 MHz         10.000 MHz         10.000 MHz         -52.36 dB         -41.74 dB         -41.74 dB         10.000 MHz         -52.36 dB         -41.74 dB         -41.74 dB         10.000 MHz         -52.36 dB							
Highest Channel / FullRB	N/A							
Spectrum         Spectrum           Ref Level 25.00 dBm         Offset 19.50 dB         RBW 100 kHz           Att         25 dB         SWT         200 ms         VBW 300 kHz           SGL Count 100/100         Image: Count 200 ms         VBW 300 kHz         Mode Auto Sweep           Image: Count 200 ms         Image: Count 200 ms         Image: Count 200 ms         Image: Count 200 ms           Image: Count 200 ms         Image: Count 200 ms         Image: Count 200 ms         Image: Count 200 ms           Image: Count 200 ms         Image: Count 200 ms         Image: Count 200 ms         Image: Count 200 ms           Image: Count 200 ms         Image: Count 200 ms         Image: Count 200 ms         Image: Count 200 ms           Image: Count 200 ms         Image: Count 200 ms         Image: Count 200 ms         Image: Count 200 ms           Image: Count 200 ms         Image: Count 200 ms         Image: Count 200 ms         Image: Count 200 ms           Image: Count 200 ms         Image: Count 200 ms         Image: Count 200 ms         Image: Count 200 ms         Image: Count 200 ms           Count 200 ms         Image: Count 200 ms         Image: Count 200 ms         Image: Count 200 ms         Image: Count 200 ms           Count 200 ms         Image: Count 200 ms         Image: Count 200 ms         Image: Count 200 ms								



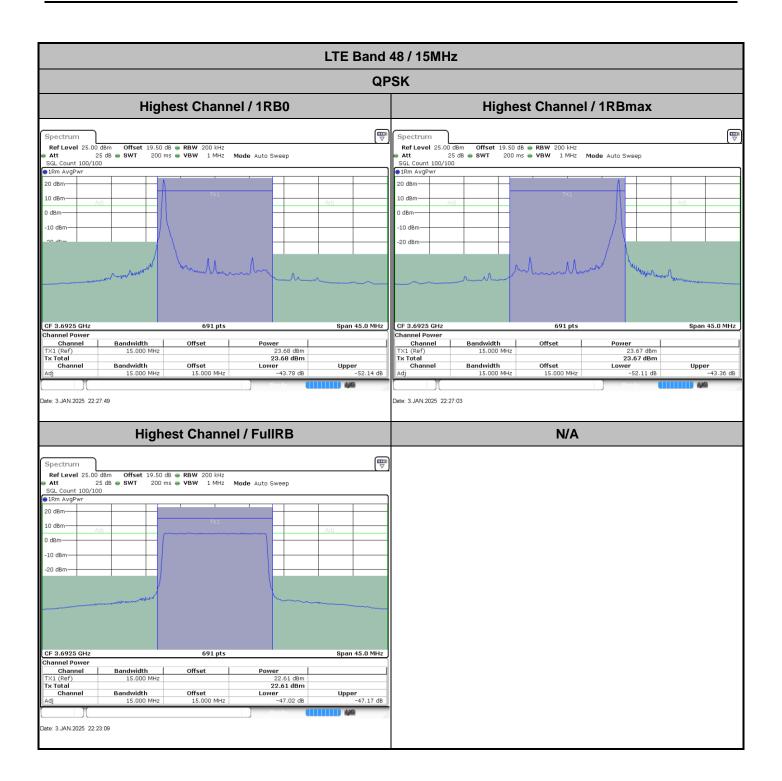
LTE Band 48 / 15MHz									
QPSK									
Lowest Channel / 1RB0	Lowest Channel / 1RBmax								
Spectrum         Image: Construction of the second sec	Ref Level 25.00 dBm         Offset 19.50 dB         RBW 200 kHz           Att         25 dB         SWT         200 ms         VBW         1 MHz         Mode Auto Sweep         SGL Count 100/100           I/Rm AvgPwr         20 dBm         10 dBm         Action         Action								
LCF 3.5575 GHz 691 pts Span 45.0 MHz Channel Power	CF 3.5575 GHz 691 pts Span 45.0 MHz Channel Power								
Channel         Bandwidth         Offset         Power           TX1 (Ref)         15.000 MHz         24.35 dBm           Tx Total         24.35 dBm           Channel         Bandwidth         Offset           Lower         Upper           Adj         15.000 MHz         15.000 MHz           Date: 3 JAN 2025 21:40.56         Upper	Channel         Bandwidth         Offset         Power           TX1 (Ref)         15.000 MHz         24.47 dBm           Tx Total         24.47 dBm           Channel         Bandwidth         Offset           Adj         15.000 MHz         15.000 MHz           Upper         -52.66 dB         -43.48 dB								
Lowest Channel / FullRB	N/A								
Spectrum         Image: Construct of the second									



LTE Band 4	48 / 15MHz
QPS	SK
Middle Channel / 1RB0	Middle Channel / 1RBmax
-10 dBm	Spectrum         Image: Construction of the state o
	CF 3.625 GHz         691 pts         Span 45.0 MHz           Channel Power         Channel         Bandwidth         Offset         Power
TX1 (Ref) 15.000 MHz 24.06 dBm	TX1 (Ref)         15.000 MHz         23.97 dBm           Tx Total         23.97 dBm           Channel         Bandwidth         Offset         Lower
Adj 15.000 MHz 15.000 MHz -43.82 dB -52.53 dB	Adj 15.000 MHz 15.000 MHz -52.38 dB -43.39 dB
Date: 3.JAN.2025 22:00:01	Date: 3.JAN 2025 22.00:46
Middle Channel / FullRB	N/A
Spectrum 🕎	
Ref Level 25.00 dBm         Offset 19.50 dB         RBW 200 kHz           Att         25 dB         SWT         200 ms         VBW         1 MHz         Mode Auto Sweep           SGL Count 100/100         IRm AvgPvr         20 dBm	
Date: 3 JAN 2025 22:04:34	





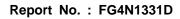




LTE Band 48 / 20MHz							
		QPS	SK				
Lowest (	Channel / 1RB0			Lowes	t Channel	/ 1RBmax	
SGL Count 100/100  IPm AvgPwr 20 dBm 10 dBm Adi 0 dBm -10 dBm -20 dBm -10 dBm	W 1 MHz Mode Auto Sweep		SGL count 100/100  IRm AvgPwr 20 dBm 10 dBm Adi 0 dBm -10 dBm -20 dBm -20 dBm -20 dBm		• VBW 1 MH2	Mode Auto Sweep	
CF 3.56 GHz Channel Power	691 pts		CF 3.56 GHz Channel Power		691 pts		Span 60.0 MHz
TX1 (Ref)         20.000 MHz           Tx Total         Channel         Bandwidth         Of	fset         Power           24.40 dBm         24.40 dBm           fset         24.40 dBm           20.000 MHz         -45.43 dB	Upper -52.00 dB	Channel           TX1 (Ref)           Tx Total           Channel           Adj           Date: 3.JAN 2025         22:48:20	Bandwidth 20.000 MHz Bandwidth 20.000 MHz	Offset Offset 20.000 MHz	Power           24.44 dBm           24.44 dBm           Lower           -52.19 dB	Upper -45,40 dB
Lowest C	hannel / FullRB				N/A		
SGL Count 100/100                • IPm AvgPwr            20 dBm            10 dBm            -0 dBm            -10 dBm            -20 dBm	W         200 kHz           W         1 MHz         Mode         Auto Sweep           7/1	Span 60.0 MHz					



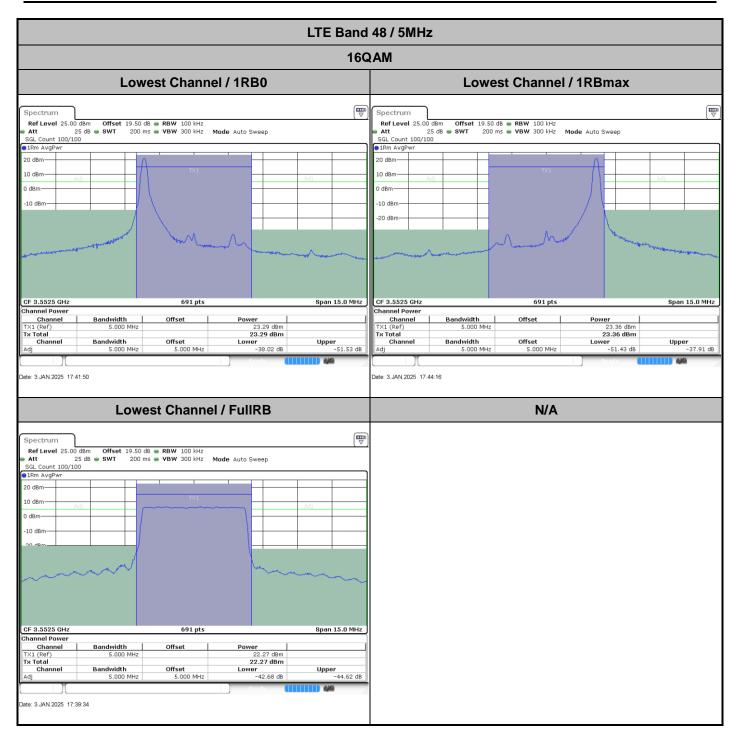
LTE Band 48 / 20MHz				
	QPSK			
Middle Channel / 1RB0		Middle	e Channel / 1R	Bmax
Spectrum           Ref Level 25.00 dbm         Offset 19.50 db         RBW 200 kHz           Att         25 db         SWT         200 ms         YBW         1 MHz         Mode Auto Sweep           SGL Count 100/000         Image: SGL Count 100/00	Adj         0 dBm           10 dBm         0 dBm           -20 dBm         -20 dBm	25.00 dBm Offset 19.50 dB 25 dB • SWT 200 ms 100/100 wr Adj	• RBW 200 kHz • VBW 1 MHz Mode A	
CF 3.625 GHz 691 pts Channel Power	Span 60.0 MHz CF 3.625 C Channel Po	wer	691 pts	Span 60.0 MHz
Channel         Bandwidth         Offset         Power           TX1 (Ref)         20.000 MHz         24.11 dBm           Channel         Bandwidth         Offset         Lower           Adj         20.000 MHz         20.000 MHz         -45.28 dB           Date: 3 JAN 2025         23.08 08	Upper -51.99 dB Date: 3.JAN 20	el Bandwidth 20.000 MHz 20.000 MHz	Offset 20.000 MHz	Dover
Middle Channel / FullRB			N/A	
Spectrum           Ref Level 25.00 dbm         Offset 19.50 db         RBW 200 kHz           Att         25 db         SWT         200 ms         YBW         1 MHz         Mode Auto Sweep           ScL count 100/100         Image: Scl count 100/100         Im	Span 60.0 MHz			

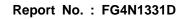




LTE Band	48 / 20MHz
QP	SK
Highest Channel / 1RB0	Highest Channel / 1RBmax
Spectrum         Image: Construction of the sector of	Spectrum         Image: Construction of the second sec
Channel Power         Offset         Power           Channel Power         20.000 MHz         23.65 dBm           TX t0e1         23.65 dBm         23.65 dBm           Channel Bandwidth         Offset         23.65 dBm           Channel Bandwidth         Offset         23.65 dBm           Channel Bandwidth         Offset         Lower           Adj         20.000 MHz         20.000 MHz           Date: 3 JAN 2025 23 39:56         Date: 3 JAN 2025 23 39:56         Date: 3 JAN 2025 23 39:56	Chranel Power         Offset         Power           Channel Power         23.76 dBm           TX1 (Ref)         20.000 MHz         23.76 dBm           Channel Dandwidth         Offset         23.76 dBm           Tx Total         23.76 dBm         23.76 dBm           Channel Dandwidth         Offset         Lower           Adj         20.000 MHz         20.000 MHz         -51.56 dB           Date: 3.JAN 2025 23.36:10         Date: 3.JAN 2025 23.36:10         Date: 3.JAN 2025 23.36:10         Date: 3.JAN 2025 23.36:10
Highest Channel / FullRB	N/A
Spectrum         Provide and the set of the s	

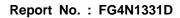




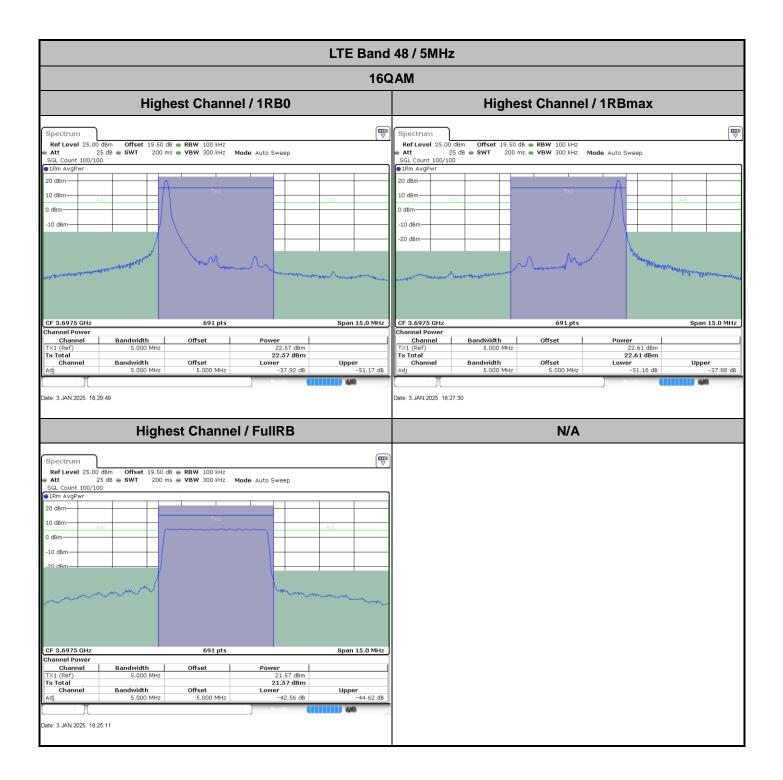




LTE Band 48 / 5MHz					
		16QAM			
Middle Ch	annel / 1RB0		Middle Channel	I / 1RBmax	
SGL Count 100/100  IPm AvgPwr 20 dBm 10 dBm Adi 0 dBm -10 dBm	10 kHz 10 kHz Mode Auto Sweep	Spectrum           Ref Level 25.00 dBi           Att         25 d           SG. Count 100/100           Image: Image of the second s	m Offset 19.50 dB RBW 100 kHz B SWT 200 ms VBW 300 kHz 101 101 101 101 101 101 101 101 101 101	Mode Auto Sweep	
Channel Power Channel Bandwidth Offset	Power	5.0 MHz CF 3.625 GHz Channel Power Channel	691 pts Bandwidth Offset	Power	Span 15.0 MHz
TX1 (Ref)         S.000 MHz           Tx Total	23.10 dBm 23.10 dBm Lower Upper 0 MHz -38.02 dB -5	TX1 (Ref) Tx Total Channel Adj	5.000 MHz Bandwidth Offset 5.000 MHz 5.000 MHz	23.06 dBm 23.06 dBm Lower -51.28 dB	Upper -37.86 dB
Date: 3. JAN 2025 18:04:09	Ready (((((())))) 4/9	Date: 3.JAN.2025 18:01:5	5	Ready	
Middle Cha	innel / FullRB		N/A		
Bandwidth         Offset           Channel         Bandwidth         Offset           TX1 (Ref)         5.000 MHz         Tr           Tx Total         Offset         Offset	Power         Power         Upper           22.01 dBm         22.01 dBm         22.01 dBm				





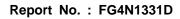




LTE Band	48 / 10MHz
160	AM
Lowest Channel / 1RB0	Lowest Channel / 1RBmax
Spectrum         Image: Constraint of the second secon	Spectrum         Image: Constraint of the second secon
CF 3.535 GHz         691 pts         Span 30.0 MHz           Channel Power         Channel         Bandwidth         Offset         Power           TX1 (Ref)         10.000 MHz         23.46 dBm         10.000 MHz         -41.64 dB         -52.29 dB         10.000 MHz         10.000 MH	OF 3.535 GHz         691 pts         Span 30.0 MHz           Channel Power         Channel         Bandwidth         Offset         Power           TX1 (Ref)         10.000 MHz         23.60 dBm         10.000 MHz         10.000 MHz         10.000 MHz         10.000 MHz         10.000 MHz         10.000 MHz         -52.22 dB         -41.25 dB         -41.25 dB         10.000 MHz         10.000 MHz         10.000 MHz         10.000 MHz         10.000 MHz         10.000 MHz         -52.22 dB         -41.25 dB         10.000 MHz         10.000 MHz         10.000 MHz         10.000 MHz         10.000 MHz         -41.25 dB         10.000 MHz
Lowest Channel / FullRB	N/A
Spectrum         Image: Construct of the second	



LTE Band	48 / 10MHz
160	AM
Middle Channel / 1RB0	Middle Channel / 1RBmax
Spectrum         Image: Constraint of the second secon	Spectrum         Image: Constraint of the second secon
CF 3.625 GHz         691 pts         Span 30.0 MHz           Channel Power         Channel         Bandwidth         Offset         Power           TX (Ref)         10.000 MHz         23.21 dBm         TX Total         23.21 dBm           Channel         Bandwidth         Offset         Lower         Upper           Adj         10.000 MHz         10.000 MHz         -41.50 dB         -52.03 dB           Date: 3 JAN 2025 19:10.21         Upper         10.000 MHz         10.000 MHz         10.000 MHz	CF 3.625 GHz         691 pts         Span 30.0 MHz           Channel Power         Channel         Bandwidth         Offset         Power           TX (Ref)         10.000 MHz         23.20 dBm         10.000 MHz         -51.92 dB         -41.16 dB         -41.16 dB         10.000 MHz         10.000 MHz         10.000 MHz         10.000 MHz         0.000 MHz         0.000 MHz         10.000 MHz         0.000 MHz         10.000 MHz         0.000 MHz         0.000 MHz         0.000 MHz         0.000 MHz         10.000 MHz         0.000 MHz
Middle Channel / FullRB	N/A
Spectrum         W           Ref Level 25.00 dbm         Offset 19.50 db         RBW 100 H/z           Att         25 db         SWT         200 ms         VBW 300 KHz         Mode Auto Sweep           SGL Count 100/100         Image: SWT         200 ms         VBW 300 KHz         Mode Auto Sweep           20 dbm         Image: SWT         200 ms         VBW 300 KHz         Mode Auto Sweep           20 dbm         Image: SWT         Image: SWT         Adj         Image: SWT         Adj           10 dbm         Adj         Image: SWT         Image: SWT         Adj         Image: SWT	





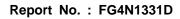
LTE Band	48 / 10MHz
16C	AM
Highest Channel / 1RB0	Highest Channel / 1RBmax
Spectrum         Image: Construction of the sector of	Spectrum         Image: Construction of the sector of
Chr.a. 50/3 GH2         691 pts         Span 30.0 MH2           Channel Power         Channel         Bandwidth         Offset         Power           TXI (Ref)         10.000 MH2         22.88 dBm	Chr. 3/93 GH2         691 pts         Span 30.0 MH2           Channel Power         Channel Power         Channel Power           TX1 (Ref)         10.000 MH2         22.82 dBm           Tx Total         22.82 dBm         Channel Power           Channel Dandwidth         Offset         22.82 dBm           Channel Bandwidth         Offset         22.82 dBm           Channel Bandwidth         Offset         Lower           Adj         10.000 MHz         10.000 MHz         -51.84 dB           Date: 3 JAN 2025 21:16:28         Power         Channel Power
Highest Channel / FullRB	N/A
Spectrum         Provide         Offset 19:50 dB • RBW 100 kHz         Mode Auto Sweep           SGL Count 100/100         SWT         200 ms • VBW 300 kHz         Mode Auto Sweep           IPM AvgPwr         IPM AvgPwr         IPM AvgPwr         IPM AvgPwr           20 dBm         IPM AvgPwr         IPM AvgPwr         IPM AvgPwr           IPM AvgPwr         IPM AvgPwr         IPM AvgPwr         IPM AvgPwr           IPM AvgPwr         IPM AvgPwr         IPM AvgPwr </td <td></td>	



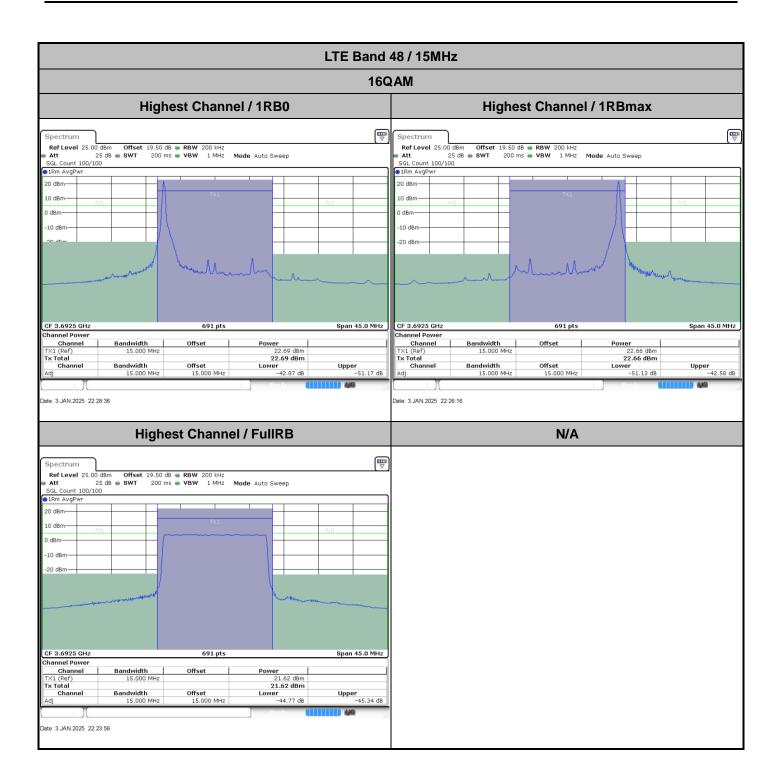
LTE Band	48 / 15MHz
160	AM
Lowest Channel / 1RB0	Lowest Channel / 1RBmax
Spectrum         Image: Constraint of the second secon	Spectrum         Image: Constraint of the second secon
Bandwidth         691 pts         Span 45.0 MHz           Channel Power         Bandwidth         Offset         Power           TX1 (Ref)         15.000 MHz         23.47 dBm         23.47 dBm           Tx Total         23.47 dBm         Upper           Adj         15.000 MHz         15.000 MHz         -43.00 dB           Date: 3 JAN 2025 21:41:42         21:41:42         -43.00 dB         -51.96 dB	CF 3.5575 GHz         691 pts         Span 45.0 MHz           Channel Power         Channel         Bandwidth         Offset         Power           TX1 (Ref)         15.000 MHz         23.53 dBm         73.53 dBm           TX Total         23.53 dBm         74.75 dB         74.75 dB           Adj         15.000 MHz         15.000 MHz         -51.76 dB         -42.75 dB           Date: 3 JAN 2025 21:39 24         21.39 24         24.35 dBm         15.000 MHz         15.000 MHz         15.000 MHz         15.000 MHz         -42.75 dB         15.000 MHz         -42.75 dB         15.000 MHz         15.000 MHz         15.000 MHz         -42.75 dB         16.000 MHz         15.000 MHz         15.000 MHz         15.000 MHz         -42.75 dB         16.000 MHz         15.000 MHz         16.000 MHz
Lowest Channel / FullRB	N/A
Spectrum         Provide         Offset         1950 dB         RBW 200 kHz           Att         25 dB         SWT         200 ms         VBW         1 MHz         Mode Auto Sweep           SGL Count 100/100         Image: SWT         200 ms         VBW         1 MHz         Mode Auto Sweep           O dBm         Adj         Image: SWT         200 ms         VBW         1 MHz         Mode Auto Sweep           10 dBm         Adj         Image: SWT         Image: SWT         Image: SWT         Adj         Image: SWT	



LTE Band 48 / 15MHz				
16Q	АМ			
Middle Channel / 1RB0	Middle Channel / 1RBmax			
Spectrum         Image: Constraint of the second secon	Spectrum         Image: Constraint of the second secon			
CF 3.625 GHz         691 pts         Span 45.0 MHz           Channel Power              TX1 (Ref)         15.000 MHz         23.10 dbm            Tx Total         23.10 dbm             Channel Bandwidth         Offset         23.10 dbm            Channel Bandwidth         Offset         23.10 dbm            Channel Bandwidth         Offset         20.10 dbm            Channel Bandwidth         Offset         20.10 dbm            Date: 3 JAN 2025 21:59 15	CF 3.625 GHz         691 pts         Span 45.0 MHz           Channel Power             TX1 (Ref)         15.000 MHz         22.96 dBm           Channel Bandwidth         Offset         22.96 dBm           Channel Bandwidth         Offset         22.96 dBm           Channel Bandwidth         Offset         Lower           Channel Bandwidth         Offset         Lower           Channel Channel Bandwidth         15.000 MHz         -51.40 dB         -42.72 dB           Date: 3 JAN 2025 22 01:32         Date         3 JAN 2025 72 01:32         Date			
Middle Channel / FullRB	N/A			
Spectrum         Image: Construction of fiset         Offset         199 private         100 km         Add         Add </th <th></th>				
Adj         15.000 MHz         15.000 MHz         -44.77 dB         -45.57 dB           Cate: 3 JAN 2025         22.03.49         Max         Max         Max				





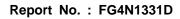




LTE Band	48 / 20MHz
160	AM
Lowest Channel / 1RB0	Lowest Channel / 1RBmax
Spectrum         Image: Constraint of the second secon	Spectrum         Image: Constraint of the second secon
CF 3.56 GHz         691 pts         Span 60.0 MHz           Channel Power         Channel         Bandwidth         Offset         Power           TX1 (Ref)         20.000 MHz         23.49 dBm         12.49 dBm         12.49 dBm           Tx1 Total         23.49 dBm         23.49 dBm         12.48 dBm           Channel         Bandwidth         Offset         Lower         Upper           Adj         20.000 MHz         -44.81 dB         -51.45 dB           Date: 3 JAN 2025 22:51:21         Date: 3 JAN 2025 22:51:21         Date: 3 JAN 2025 22:51:21	CF 3.56 GHz         691 pts         Span 60.0 MHz           Channel Power             Channel Bandwidth         Offset         Power            TX1 (Ref)         20.000 MHz         23.50 dBm            Channel Bandwidth         Offset         23.58 dBm            Channel Bandwidth         Offset         Lower         Upper           Adj         20.000 MHz         20.000 MHz         -51.41 dB         -44.60 dB           Date: 3 JAN 2025         22.49.05
Lowest Channel / FullRB	N/A
Spectrum         Spectrum           Ref Level 25.00 dbm         Offset 19.50 dB         RBW 200 H/2           SGL Count 100/100         SWT         200 ms         VBW         1 MHz         Mode Auto Sweep           SGL Count 100/100         Image: State SWT         200 ms         VBW         1 MHz         Mode Auto Sweep           20 dBm         Image: State SWT         200 ms         VBW         1 MHz         Mode Auto Sweep           20 dBm         Image: State SWT         Adj         Image: State SWT         Adj         Image: State SWT           10 dBm         Adj         Image: State SWT         Adj         Image: State SWT         Adj         Image: State SWT         <	



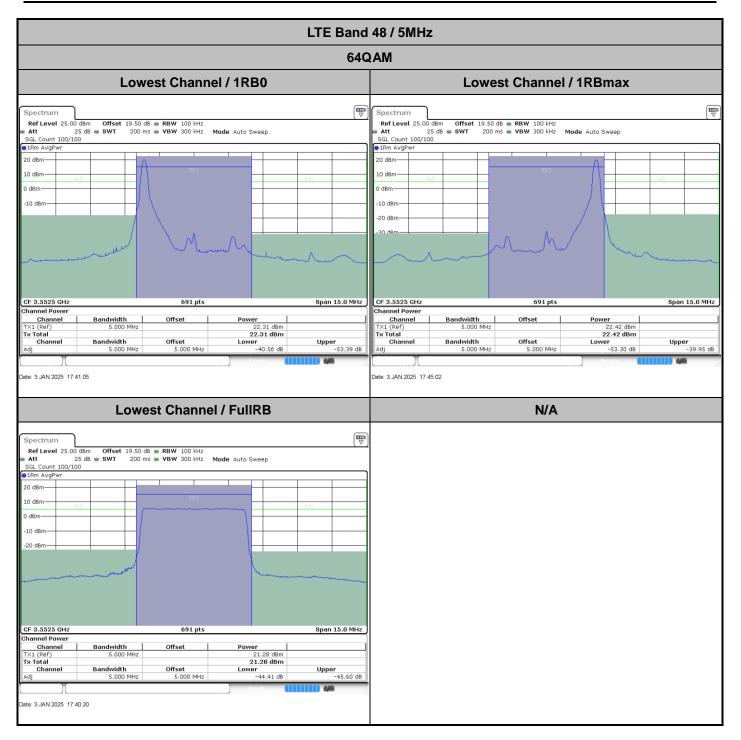
LTE Band	48 / 20MHz
160	AM
Middle Channel / 1RB0	Middle Channel / 1RBmax
Spectrum         Image: Constraint of the second secon	Spectrum         Image: Construct of the second
CF 3.625 GHz         691 pts         Span 60.0 MHz           Channel Power         Channel         Bandwidth         Offset         Power	CF 3.625 GHz         691 pts         Span 60.0 MHz           Channel Power         Channel         Bandwidth         Offset         Power
Channel         Bandwidth         Offset         Power           TX1 (Ref)         20.000 MHz         23.12 dBm           Tx Total         23.12 dBm         1000 MHz           Channel         Bandwidth         Offset         Lower           Adj         20.000 MHz         -44.59 dB         -51.10 dB           Date: 3 JAN 2025         23.08.53         Frederic         Main	Channel         Bandwidth         Offset         Power           TX1 (Ref)         20.000 MHz         23.04 dBm           Tx Total         23.04 dBm         Channel           Channel         Bandwidth         Offset         Lower           Adj         20.000 MHz         20.000 MHz         -50.99 dB           Date: 3.JAN 2025         23.11.07
Middle Channel / FullRB	N/A
Spectrum         Image: Spectrum           Ref Level 25.00 dbm         Offset 19.50 db         RBW 200 kHz           Att         25 db         SWT         200 ms         VBW         1 MHz         Mode Auto Sweep           SGL Count 100/100         Image: SWT         200 ms         VBW         1 MHz         Mode Auto Sweep           O dBm         Adj         Image: SWT         200 ms         VBW         Image: SWT         Adj           10 dBm         Adj         Image: SWT         Image: SWT         Adj         Image: SWT         Adj           10 dBm         Adj         Image: SWT         SP         SP         SP         SP           -10 dBm         Image: SWT         SP         SP <td< th=""><th></th></td<>	

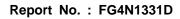




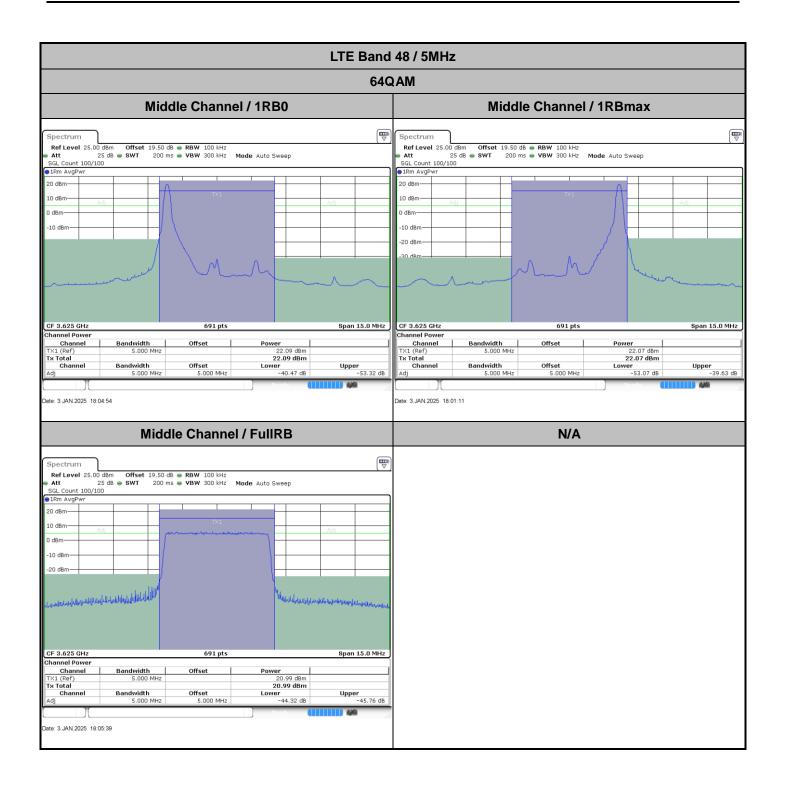
LTE Band 48 / 20MHz	
16QAM	
Highest Channel / 1RB0	Highest Channel / 1RBmax
Spectrum         Image: Constraint of the second secon	Spectrum         Image: Constraint of the second secon
CF 3.69 GHz         691 pts         Span 60.0 MHz           Channel Power             Channel Rower         22.75 dBm            TX (Ref)         20.000 MHz         22.75 dBm            Channel Bandwidth         Offset         22.75 dBm            Channel Channel         Bandwidth         Offset         Lower         Upper           Adj         20.000 MHz         20.000 MHz         -44.57 dB         -50.67 dB           Date: 3. JAN 2025 23:39:11	CF 3.69 GHz         691 pts         Span 60.0 MHz           Channel Power             Channel K(gef)         20.000 MHz         22.68 dBm            TX Total         22.68 dBm             Channel Bandwidth         Offset         Lower         Upper           Adj         20.000 MHz         20.000 MHz         -50.57 dB         -44.32 dB           Date: 3.JAN 2025 23 36 55         S5         S5         S5         S5
Highest Channel / FullRB	N/A
Spectrum         Image: Construction of the	

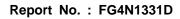


















LTE Band 48 / 10MHz		
64QAM		
Lowest Channel / 1RB0	Lowest Channel / 1RBmax	
Spectrum         Image: Constraint of the second secon	Spectrum         Image: Constraint of the second secon	
CF 3.555 GHz         691 pts         Span 30.0 MHz           Channel Power             TX1 (Ref)         10.000 MHz         22.39 dBm           Tx Total         22.39 dBm         22.39 dBm           Channel Bandwidth         Offset         22.39 dBm           Channel Bandwidth         Offset         22.39 dBm           Channel Bandwidth         Offset         Lower           Lower         Upper         43.40 dB         -52.69 dB           Obter 3.JAN 2025 18:53 36         Control 10.000 MHz         Control 10.000 MHz	CF 3.555 GHz         691 pts         Span 30.0 MHz           Channel Power             TX1 (Ref)         10.000 MHz         22.54 dBm           TX1 total         22.54 dBm         22.54 dBm           Channel Bandwidth         Offset         22.54 dBm           Channel Bandwidth         Offset         Lower           June         10.000 MHz         -52.63 dB           Channel Bandwidth         Offset         Lower           Date: 3.JAN 2025         18.49.47	
Lowest Channel / FullRB	N/A	
Spectrum         W           Ref Level 25.00 dbm         Offset 19.50 db         RBW 100 kHz           Att         25 db         SWT         200 ms         VBW 300 kHz         Mode Auto Sweep           SGL count 100/100         Image: Solid stress of the		