



Report No.: FG440146D

: 1 of 22

FCC RADIO TEST REPORT

FCC ID : U4G-SGVNRNA

Equipment : Mobile Computer/Barcode Reader

Brand Name : Datalogic : SGVNRNA **Model Name Applicant** : Datalogic S.r.l.

Via San Vitalino 13, 40012 Lippo di Calderara di Reno (BO) – Italy

Manufacturer : Datalogic S.r.l.

Via San Vitalino 13, 40012 Lippo di Calderara di Reno (BO) – Italy

Standard : FCC 47 CFR Part 2, 96

The product was received on Apr. 17, 2024 and testing was performed from May 06, 2024 to Jun. 11, 2024. We, Sporton International Inc. EMC & Wireless Communications Laboratory, would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in 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. EMC & Wireless Communications Laboratory, the test report shall not be reproduced except in full.

Approved by: Louis Wu

TEL: 886-3-327-3456

Louis Win

Sporton International Inc. EMC & Wireless Communications Laboratory

No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.)

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Report Version : 02

History of this test report

Report No.: FG440146D

Report No.	Version	Description	Issue Date
FG440146D	01	Initial issue of report	Jul. 02, 2024
FG440146D	02	Revise Test Mode This report is an updated version, replacing the report issued on Jul. 02, 2024.	Jul. 11, 2024

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Summary of Test Result

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Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3.2	§2.1046	Conducted Output Power Reporting only -		-
3.3	§96.41	Peak-to-Average Ratio	Pass	-
3.4	§96.41	Effective Isotropic Radiated Power	Pass	-
3.5	§2.1049 §96.41	Occupied Bandwidth Reporting only		-
3.6	§2.1051 §96.41	Conducted Band Edge Measurement	Pass	-
3.7	§2.1051 §96.41	Conducted Spurious Emission	Pass	-
3.8	§2.1055	Frequency Stability for Temperature & Voltage	Pass	-
4.4	§2.1051 §96.41	Radiated Spurious Emission	Pass	4.27 dB under the limit at 10848.00 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.
- The measurement uncertainty please refer to each test result in the section "Measurement Uncertainty".

Disclaimer:

- 1. 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.
- 2. The purpose of different equipment name is for marketing segmentation.

Reviewed by: Wei Chen

Report Producer: Rebecca Wu

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1 General Description

1.1 Product Feature of Equipment Under Test

Product Feature

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General Specs

GSM/WCDMA/LTE/5G NR, Bluetooth, Wi-Fi 2.4GHz 802.11b/g/n/ac/ax, Wi-Fi 5GHz 802.11a/n/ac/ax, Wi-Fi 6GHz 802.11a/ax, NFC, WPC Rx, and GNSS

Antenna Type

WWAN:

<ant. 0>: Loop Antenna <ant. 1>: Loop Antenna

<ant. 2+3>: Coupling monopole Antenna

<Ant. 4>: PIFA Antenna
<Ant. 5>: PIFA Antenna
<Ant. 6>: Loop Antenna
<Ant. 7>: Monopole Antenna

WLAN:

<ant. 8>: Coupling monopole Antenna

<Ant. 9>: Loop Antenna

Bluetooth: Coupling monopole Antenna

GPS/Glonass/BDS/Galileo: Coupling monopole Antenna

NFC: Loop Antenna

WPC Rx: Single Coil Antenna

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Sample 1	scan (Argon)				
Sample 2	scan (Xenon)				
HW Version	DVT2				
SW Version	dl4490_gms-userdebug_1.04.001.20240520_a13_qfil_fastboot				
Antenna Gain	<ant. 7=""></ant.>				
Antenna Gam	LTE Band 48: -0.43 dBi				

Remark: The above EUT's information was declared by manufacturer. Please refer to Disclaimer in report summary.

	TDD band Power Class					
	PC3 PC2					
B48	V	-				

EUT Information List					
S/N	P/N	Performed Test Item			
68bc07bd	944850003	Conducted Measurement EIRP			
V24D00652	944850003	Radiated Spurious Emission			

1.2 Modification of EUT

No modifications are made to the EUT during all test items.

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1.3 Testing Location

Test Site	Sporton International Inc. EMC & Wireless Communications Laboratory		
Test Site Location	No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.) TEL: +886-3-327-3456 FAX: +886-3-328-4978		
Test Site No.	Sporton Site No.		
Test Site No.	TH03-HY		
Test Engineer	Bryant Liu		
Temperature (°C)	22.3~22.9		
Relative Humidity (%)	53.2~55.5		

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Test Site	Sporton International Inc. Wensan Laboratory
	No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist.,
Test Site Location	Taoyuan City 333010, Taiwan (R.O.C.)
rest site Location	TEL: +886-3-327-0868
	FAX: +886-3-327-0855
Test Site No.	Sporton Site No.
rest site No.	03CH15-HY (TAF Code: 3786)
Test Engineer	Daniel Lee, Quentin Liu, and Bigshow Wang
Temperature (°C)	21.0~25.7
Relative Humidity (%)	48~57
Remark	The Radiated Spurious Emission test item subcontracted to Sporton International Inc. Wensan Laboratory.

Note: The test site complies with ANSI C63.4 2014 requirement.

FCC Designation No.: TW1190 and TW3786

1.4 Applied Standards

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

- ANSI C63.26-2015
- FCC 47 CFR Part 2, 96
- FCC KDB 971168 D01 Power Meas. License Digital Systems v03r01
- FCC KDB 940660 D01 Part 96 CBRS Eqpt v03
- FCC KDB 412172 D01 Determining ERP and EIRP v01r01
- FCC KDB 414788 D01 Radiated Test Site v01r01

Remark:

- 1. All test items were verified and recorded according to the standards and without any deviation during the test.
- 2. The TAF code is not including all the FCC KDB listed without accreditation.

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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.

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For radiated measurement, the measured emission level of the EUT was maximized by rotating the EUT on a turntable, adjusting the orientation of the EUT and EUT antenna in three orthogonal axis (X: flat, Y: portrait, Z: landscape), and adjusting the measurement antenna orientation, following C63.26 exploratory test procedures and only the worst case emissions were reported in this report.

Radiated emissions were investigated as following frequency range:

Modulation Type	Modulation
Α	QPSK
В	16QAM
С	64QAM
D	256QAM

Test Item	Modulation Type	Bandwidth	RB Size	Channel
Conducted Power	A, B, C, D	All	1, Half, Full	L, M, H
EIRP	A, B, C, D	All	1, Half, Full	L, M, H
PAR	A, B, C, D	20 MHz	Full	М
Bandwidth	A, B, C, D	All	Full	M
ACLR, Mask	A, B, C, D	All	1RB Full	L, M, H
CSE	A	All	1RB	L, M, H
Frequency Stability	А	10 MHz	Full	M
RSE	А	20 MHz	1RB	L, M, H

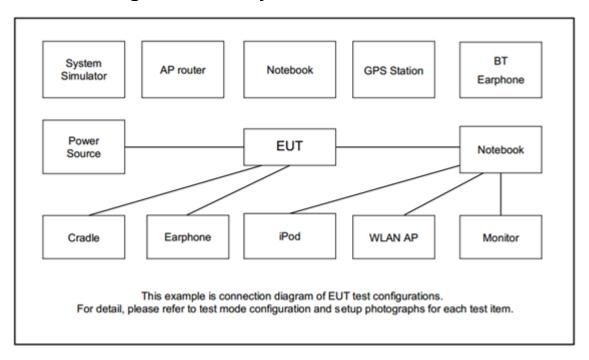
Remark:

- 1. Evaluated all the transmitter signal and reporting worst-case configuration among all modulation types.
- 2. 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.
- 3. One representative bandwidth is selected to perform PAR and frequency stability.
- 4. During the RSE preliminary test, the standalone mode and charging modes (Adapter mode and WPC Rx mode) were verified. It is determined that the adapter mode is the worst case for the official test.

5. The worst RSE mode falls on n48, so sample 2 only test n48.

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2.2 Connection Diagram of Test System



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2.3 Support Unit used in test configuration

Item	Equipment	Brand Name	Model No.	FCC ID	Data Cable	Power Cord
1.	System Simulator	Anritsu	MT8821C	N/A	N/A	Unshielded, 1.8 m
2.	System Simulator	Anritsu	MT8800	N/A	N/A	Unshielded, 1.8 m
3.	Earphone	мото	JYN1181B	N/A	unshielded, 1.2m	N/A

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 4.2 dB and 10dB attenuator.

Example:

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

= 4.2 + 10 = 14.2 (dB)

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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		
15	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		
5	Frequency	3552.5	3625.0	3697.5		

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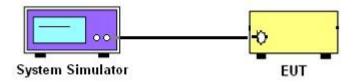
3 Conducted Test Items

3.1 Measuring Instruments

See list of measuring instruments of this test report.

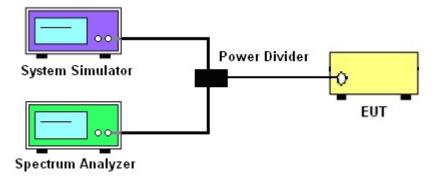
3.1.1 Test Setup

3.1.2 Conducted Output Power

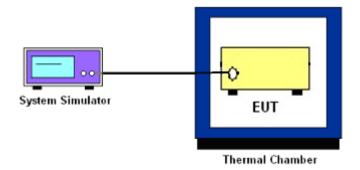


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3.1.3 Peak-to-Average Ratio, Occupied Bandwidth, Conducted Band Edge and Conducted Spurious Emission



3.1.4 Frequency Stability



3.1.5 Test Result of Conducted Test

Please refer to Appendix A.

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3.2 Conducted Output Power

3.2.1 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.

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3.2.2 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.

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3.3 Peak-to-Average Ratio

3.3.1 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.

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3.3.2 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

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3.4 EIRP

3.4.1 Description of the EIRP Measurement

The EIRP of mobile transmitters must not exceed 23 dBm /10 megahertz for LTE Band 48.

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The testing follows ANSI C63.26-2015 Section 5.2.5.5

According to KDB 412172 D01 Power Approach,

EIRP = PT + GT - LC, where

PT = transmitter output power in dBm

GT = gain of the transmitting antenna in dBi

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

Device	Maximum EIRP (dBm/10 MHz)	Maximum PSD (dBm/MHz)
End User Device	23	n/a

Remark: Total channel power is complied with EIRP limit 23dBm/10MHz.

3.4.2 Test Procedures

The testing follows procedure in Section 5.2 of ANSI C63.26-2015 and KDB 940660 D01 Part 96 CBRS Eqpt v03 Section 3.2(b)(2)

Determine the EIRP by adding the effective antenna gain to the measured average conducted power level.

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3.5 Occupied Bandwidth

3.5.1 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.

3.5.2 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.

2. 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.

The nominal resolution bandwidth (RBW) shall be in the range of 1 to 5 % of the anticipated 3.

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.

5. 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.

Use the 99 % power bandwidth function of the spectrum analyzer and report the measured 8.

bandwidth.

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3.6 Conducted Band Edge

3.6.1 Description of Conducted Band Edge Measurement

The conducted power of any End User Device emission outside the fundamental emission (whether in or outside of the authorized band) shall not exceed -13 dBm/MHz within 0 to B megahertz (where B is the bandwidth in megahertz of the assigned channel or multiple contiguous channels of the End User Device) above the upper CBSD-assigned channel edge and within 0 to B megahertz below the lower CBSD-assigned channel edge. At all frequencies greater than B megahertz above the upper CBSD assigned channel edge and less than B megahertz below the lower CBSD-assigned channel edge, the conducted power of any End User Device emission shall not exceed -25 dBm/MHz. Notwithstanding the emission limits in this paragraph, the Adjacent Channel Leakage Ratio for End User Devices shall be at least 30 dB.

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3.6.2 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. Set spectrum analyzer with RMS detector.
- The RF fundamental frequency should be excluded against the limit line in the operating frequency band.

For Adjacent Channel Leakage Ratio (ACLR) measurement,

- The Adjacent Channel Leakage Ratio (ACLR) is the ratio of the average power in the assigned aggregated channel bandwidth to the average power over the equivalent adjacent channel bandwidth.
- 2. The option ACLR of spectrum analyzer is used and measures the ACLR ratio by setting equivalent channel bandwidth.
- 3. The measured ACLR ratio shall be at least 30 dB.

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3.7 Conducted Spurious Emission

3.7.1 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.

3.7.2 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.
- 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.

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- 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.
- 7. Taking the record of maximum spurious emission.
- 8. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
- 9. The limit line is -40dBm/MHz.

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3.8 Frequency Stability

3.8.1 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.

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3.8.2 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.
- 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.

3.8.3 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.

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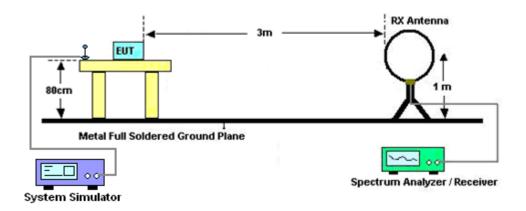
4 Radiated Test Items

4.1 Measuring Instruments

See list of measuring instruments of this test report.

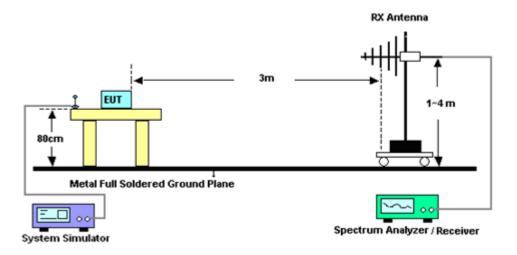
4.2 Test Setup

For radiated emissions below 30MHz



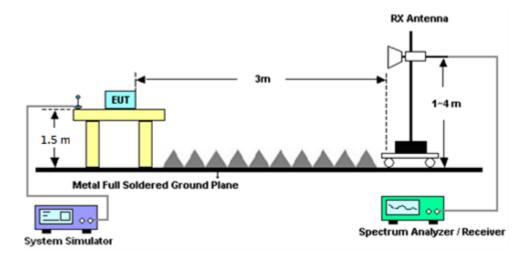
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For radiated emissions from 30MHz to 1GHz



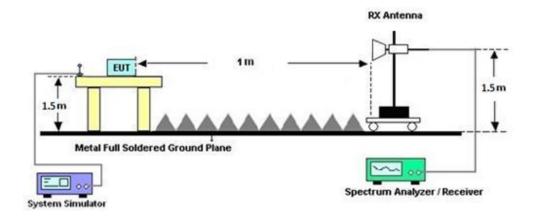
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For radiated emissions from 1GHz to 18GHz



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For radiated emissions above 18GHz



4.3 Test Result of Radiated Test

Please refer to Appendix B.

Note:

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.

There is adequate comparison measurement of both open-field test site and alternative test site - semi-Anechoic chamber according to 414788 D01 Radiated Test Site v01r01, and the result came out very similar.

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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.

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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

The testing follows FCC KDB 971168 D01 v03r01 Section 7 and ANSI C63.26-2015 section 5.5.4 Radiated measurement using the field strength method.

- 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.
- To convert spectrum reading E(dBuV/m) to EIRP(dBm)
 EIRP(dBm) = Level (dBuV/m) + 20log(d) -104.77, where d is the distance at which filed strength limit is specified in the rules.
- 7. Field Strength Level (dBm) = Spectrum Reading (dBm) + Antenna Factor + Cable Loss + Read Level Preamp Factor.
- 8. ERP (dBm) = EIRP (dBm) 2.15
- The RF fundamental frequency should be excluded against the limit line in the operating frequency band.

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5 List of Measuring Equipment

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Radio Communication Analyzer	Anritsu	MT8821C	6262025353	LTE FDD/TDD LTE-2CC DLCA/ULCA	Oct. 03, 2023	May 06, 2024~ May 21, 2024	Oct. 02, 2024	Conducted (TH03-HY)
Thermal Chamber	ESPEC	SH-641	92013720	-40°C ~90°C	Sep. 04, 2023	May 06, 2024~ May 21, 2024	Sep. 03, 2024	Conducted (TH03-HY)
DC Power Supply	GW Instek	GPP-2323	GES906037	0V~64V;0A~6A	Nov. 28, 2023	May 06, 2024~ May 21, 2024	Nov. 27, 2024	Conducted (TH03-HY)
Coupler	Warison	20dB 25W SMA Directional Coupler	#A	1-18GHz	Jan. 02, 2024	May 06, 2024~ May 21, 2024	Jan. 01, 2025	Conducted (TH03-HY)
Spectrum Analyzer	Rohde & Schwarz	FSV40	101905	10Hz~40GHz	Jul. 14, 2023	May 06, 2024~ May 21, 2024	Jul. 13, 2024	Conducted (TH03-HY)
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100488	9 kHz~30 MHz	Sep. 12, 2023	May 07 ,2024~ Jun. 11, 2024	Sep. 11, 2024	Radiation (03CH15-HY)
Bilog Antenna	TESEQ	CBL 6111D & 00800N1D01N-06	41912 & 05	30MHz~1GHz	Feb. 04, 2024	May 07 ,2024~ Jun. 11, 2024	Feb. 03, 2025	Radiation (03CH15-HY)
Horn Antenna	SCHWARZBE CK	BBHA 9120 D	9120D-02294	1GHz~18GHz	Jun. 30, 2023	May 07, 2024~ May 23, 2024	Jun. 29, 2024	Radiation (03CH15-HY)
Horn Antenna	SCHWARZBE CK	BBHA 9120 D	9120D-02038	1GHz~18GHz	Jul. 31, 2023	May 24, 2024~ Jun. 11, 2024	Jul. 30, 2024	Radiation (03CH15-HY)
SHF-EHF Horn Antenna	SCHWARZBE CK	BBHA 9170	1223	18GHz~40GHz	Jul. 10, 2023	May 07, 2024~ May 24, 2024	Jul. 09, 2024	Radiation (03CH15-HY)
SHF-EHF Horn Antenna	SCHWARZBE CK	BBHA 9170	993	18GHz~40GHz	Nov. 24, 2023	May 07 ,2024~ Jun. 11, 2024	Nov. 23, 2024	Radiation (03CH15-HY)
Amplifier	SONOMA	310N	363440	9kHz~1GHz	Dec. 25, 2023	May 07 ,2024~ Jun. 11, 2024	Dec. 24, 2024	Radiation (03CH15-HY)
Preamplifier	EMEC	EM01G18G	060837	1GHz~18GHz	Feb. 15, 2024	May 07 ,2024~ Jun. 11, 2024	Feb. 14, 2025	Radiation (03CH15-HY)
Preamplifier	EM Electronics	EM01G18G	060802	1GHz~18GHz	Feb. 29, 2024	May 07 ,2024~ Jun. 11, 2024	Feb. 28, 2025	Radiation (03CH15-HY)
Preamplifier	EMEC	EM18G40G	060715	18GHz~40GHz	Dec. 07, 2023	May 07 ,2024~ Jun. 11, 2024	Dec. 06, 2024	Radiation (03CH15-HY)
EMI Test Receiver	Keysight	N9038A(MXE)	MY53290045	20MHz~8.4GHz	Oct. 06, 2023	May 07 ,2024~ Jun. 11, 2024	Oct. 05, 2024	Radiation (03CH15-HY
Spectrum Analyzer	Keysight	N9010B	MY60241058	10Hz~44GHz	Jul. 06, 2023	May 07 ,2024~ Jun. 11, 2024	Jul. 05, 2024	Radiation (03CH15-HY)
Antenna Mast	ChainTek	MBS-520-1	N/A	1m~4m	N/A	May 07 ,2024~ Jun. 11, 2024	N/A	Radiation (03CH15-HY)
Turn Table	ChainTek	T-200-S-1	N/A	0~360 Degree	N/A	May 07 ,2024~ Jun. 11, 2024	N/A	Radiation (03CH15-HY)
Software	Audix	E3_V9_230621	RK-002394	N/A	N/A	May 07 ,2024~ Jun. 11, 2024	N/A	Radiation (03CH15-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104, 102E	MY582185/4, 519228/2,803 950/2	N/A	Jun. 13, 2023	May 07 ,2024~ Jun. 11, 2024	Jun. 12, 2024	Radiation (03CH15-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	804011/2,804 012/2	18-40G	Jan. 02, 2024	May 07 ,2024~ Jun. 11, 2024	Jan. 01, 2025	Radiation (03CH15-HY)
Filter	Wainwright	WHKX12-1080-12 00-15000-60ST	SN5	1.2GHz High Pass Filter	Jun. 14, 2023	May 07 ,2024~ Jun. 11, 2024	Jun. 13, 2024	Radiation (03CH15-HY)
Filter	Wainwright	WHKX12-2700-30 00-18000-60ST	SN4	3GHz High Pass Filter	Jun. 14, 2023	May 07 ,2024~ Jun. 11, 2024	Jun. 13, 2024	Radiation (03CH15-HY)
Filter	Wainwright	WHKX12-2700-30 00-18000-60ST	SN4	3GHz High Pass Filter	Jun. 14, 2023	May 07 ,2024~ Jun. 11, 2024	Jun. 13, 2024	Radiation (03CH15-HY)
Hygrometer	TECPEL	DTM-302	SN4	N/A	Jul. 26, 2023	May 07 ,2024~ Jun. 11, 2024	Jul. 25, 2024	Radiation (03CH15-HY)

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6 Measurement Uncertainty

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

Measuring Uncertainty for a Level of	2 00 40
Confidence of 95% (U = 2Uc(y))	3.02 dB

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

Measuring Uncertainty for a Level of	3.57 dB
Confidence of 95% (U = 2Uc(y))	3.37 UB

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

Measuring Uncertainty for a Level of	3.97 dB
Confidence of 95% (U = 2Uc(y))	3.97 dB

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Appendix A. Test Results of Conducted Test

Conducted Output Power(Average power & EIRP)

	LTE E	Band 48 M	aximum A	/erage Pov	wer [dBm]	(GT - LC =	-0.43 dB)	
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
20	1	0		21.85	22.19	22.38		
20	1	49		21.79	22.19	22.37		
20	1	99		21.71	22.05	22.23		
20	50	0	QPSK	20.78	21.24	21.37	21.95	0.1567
20	50	24		20.85	21.18	21.42		
20	50	50		20.82	21.21	21.45		
20	100	0		20.84	21.15	21.30		
20	1	0		20.82	21.21	21.46		0.1268
20	1	49		20.83	21.21	21.36		
20	1	99		20.78	21.07	21.25		
20	50	0	16-QAM	19.81	20.21	20.48	21.03	
20	50	24		19.86	20.19	20.43		
20	50	50		19.87	20.23	20.44		
20	100	0		19.85	20.19	20.39		
20	1	0		20.80	20.18	20.37		0.1089
20	1	49		20.79	20.16	20.36		
20	1	99		20.74	20.02	20.17		
20	50	0	64-QAM	19.80	19.23	19.48	20.37	
20	50	24		19.86	19.16	19.41		
20	50	50		19.85	19.23	19.41		
20	100	0		19.87	19.15	19.37		
20	1	0		16.89	17.45	17.26		
20	1	49		17.11	17.27	17.17		
20	1	99		17.13	17.41	17.44		
20	50	0	256-QAM	16.99	17.19	17.13	17.02	0.0504
20	50	24	-	17.06	17.19	16.95		
20	50	50		17.05	17.30	17.04		,
20	100	0		17.09	17.09	17.03		
Limit	EIRP	< 23dBm/1	0MHz		Result	-	Pa	ISS

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Total EIRP power is less than partial EIRP limit 23 dBm/10MHz.



PORTON LAB. FCC RADIO TEST REPORT

	LTE E	Band 48 M	aximum A	verage Pov	wer [dBm]	(GT - LC =	-0.43 dB)		
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)	
15	1	0		21.75	22.07	22.31			
15	1	37		21.65	22.04	22.22			
15	1	74		21.70	22.04	22.22			
15	36	0	QPSK	20.74	21.11	21.23	21.88	0.1542	
15	36	20		20.70	21.13	21.41			
15	36	39		20.70	21.08	21.32			
15	75	0		20.78	21.14	21.21			
15	1	0		20.77	21.09	21.42			
15	1	37		20.70	21.11	21.23		0.1256	
15	1	74		20.64	20.93	21.11			
15	36	0	16-QAM	19.66	20.06	20.43	20.99		
15	36	20		19.79	20.11	20.35			
15	36	39		19.82	20.17	20.29			
15	75	0		19.82	20.11	20.27			
15	1	0		20.71	20.17	20.33		0.1067	
15	1	37		20.67	20.10	20.33			
15	1	74		20.66	19.97	20.11			
15	36	0	64-QAM	19.68	19.19	19.36	20.28		
15	36	20		19.76	19.03	19.34			
15	36	39		19.76	19.19	19.27			
15	75	0		19.85	19.06	19.32			
15	1	0		16.83	17.35	17.23			
15	1	37		16.99	17.26	17.02			
15	1	74		17.03	17.28	17.43			
15	36	0	256-QAM	16.96	17.06	17.10	17.00	0.0501	
15	36	20		16.94	17.07	16.93			
15	36	39		16.91	17.26	16.95			
15	75	0		17.03	16.95	16.96			
Limit	EIRP	< 23dBm/1	0MHz		Result	-	Pa	iss	

Total EIRP power is less than partial EIRP limit 23 dBm/10MHz.



	LTE E	Band 48 M	aximum Av	/erage Pov	wer [dBm]	(GT - LC =	-0.43 dB)		
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)	
10	1	0		21.72	22.07	22.28			
10	1	25		21.74	22.05	22.27]		
10	1	49		21.59	22.00	22.10]		
10	25	0	QPSK	20.65	21.09	21.33	21.85	0.1531	
10	25	12		20.83	21.04	21.28			
10	25	25		20.68	21.07	21.34			
10	50	0		20.83	21.07	21.28			
10	1	0		20.69	21.19	21.33			
10	1	25		20.68	21.07	21.23		0.1230	
10	1	49		20.72	20.94	21.13			
10	25	0	16-QAM	19.73	20.17	20.37	20.90		
10	25	12		19.82	20.11	20.29			
10	25	25		19.78	20.13	20.35			
10	50	0		19.77	20.18	20.30			
10	1	0		20.72	20.15	20.31			
10	1	25		20.71	20.12	20.26			
10	1	49		20.66	19.99	20.06			
10	25	0	64-QAM	19.74	19.17	19.45	20.29	0.1069	
10	25	12		19.72	19.14	19.27			
10	25	25		19.80	19.10	19.34			
10	50	0		19.73	19.04	19.25			
10	1	0		16.83	17.37	17.18			
10	1	25		17.06	17.13	17.04			
10	1	49		17.11	17.38	17.37			
10	25	0	256-QAM	16.88	17.10	17.02	16.95	0.0495	
10	25	12		16.91	17.09	16.85			
10	25	25		16.97	17.23	16.93			
10	50	0		17.00	17.03	17.02			
Limit	EIRP	< 23dBm/1	0MHz		Result		Pa	ISS	

Total EIRP power is less than partial EIRP limit 23 dBm/10MHz.



	LTE E	Band 48 M	aximum A	verage Pov	wer [dBm]	(GT - LC =	-0.43 dB)		
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)	
5	1	0		21.83	22.08	22.26			
5	1	12		21.72	22.11	22.26]		
5	1	24		21.65	21.92	22.21]		
5	12	0	QPSK	20.71	21.09	21.27	21.83	0.1524	
5	12	7		20.80	21.05	21.40			
5	12	13		20.80	21.09	21.35			
5	25	0		20.72	21.09	21.20			
5	1	0		20.73	21.14	21.35			
5	1	12		20.82	21.19	21.21		0.1236	
5	1	24		20.70	21.00	21.13			
5	12	0	16-QAM	19.79	20.10	20.46	20.92		
5	12	7		19.76	20.17	20.36			
5	12	13		19.86	20.12	20.30			
5	25	0		19.74	20.17	20.37			
5	1	0		20.75	20.08	20.23			
5	1	12		20.65	20.06	20.29			
5	1	24		20.65	19.91	20.02			
5	12	0	64-QAM	19.71	19.13	19.44	20.32	0.1076	
5	12	7		19.82	19.03	19.35			
5	12	13		19.82	19.19	19.40			
5	25	0		19.79	19.01	19.29			
5	1	0		16.86	17.31	17.20			
5	1	12		17.02	17.14	17.07			
5	1	24		17.04	17.35	17.29			
5	12	0	256-QAM	16.93	17.12	17.01	16.92	0.0492	
5	12	7		17.00	17.18	16.83			
5	12	13		16.94	17.17	17.01			
5	25	0		17.08	16.99	16.89			
Limit	EIRP	< 23dBm/1	0MHz		Result		Pa	iss	

Total EIRP power is less than partial EIRP limit 23 dBm/10MHz.

LTE Band 48

Peak-to-Average Ratio

Mode					
Mod.	QPSK	16QAM	64QAM	256QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	5.54	6.38	6.64	6.70	PASS

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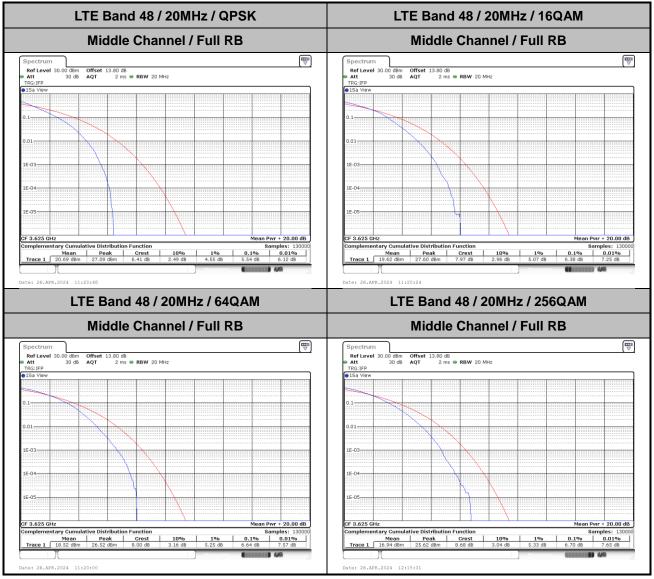
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LTE Band 48 / 20MHz / QPSK

Middle Channel / Full RB

Middle Channel / Full RB

Middle Channel / Full RB



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26dB Bandwidth

Mode		LTE Band 48 : 26dB BW(MHz)										
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	-	-	1	-	4.96	4.85	9.78	9.73	14.38	14.26	18.82	18.74
Mode					LTE Ba	and 48 :	26dB BV	V(MHz)				
BW	1.4	ИНz	3M	lHz	5N	1Hz 10MHz		ЛHz	15MHz		20MHz	
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	-	-	-	-	4.97	5.02	9.68	9.71	14.35	14.44	18.74	18.70

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Report No.: FG440146D LTE Band 48 Middle Channel / 5MHz / QPSK Middle Channel / 5MHz / 16QAM Ref Level 30.00 dBm

Att 30 dB

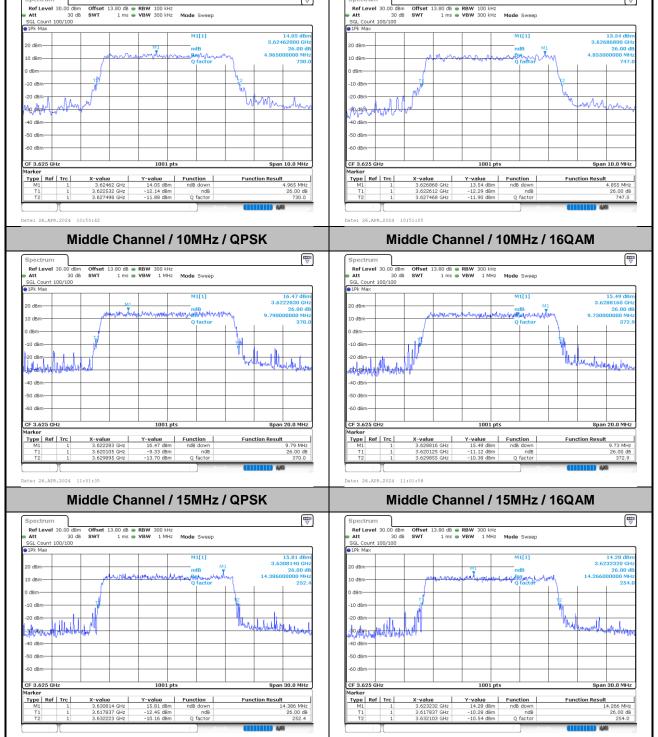
SGL Count 100/100

1Pk Max 747 -10 dBm -20 dBm-- PO COBRO - AND CORNER OF THE Span 10.0 MHz Span 10.0 MHz Type Ref Trc -12.29 dBm -11.90 dBm Middle Channel / 10MHz / QPSK Middle Channel / 10MHz / 16QAM 13.80 dB • RBW 300 kHz 1 ms • VBW 1 MHz Mode Sweep 16.47 dBr 3.6222830 GF JSD GBHANNA MANA -40 dBm-
 X-value
 Y-value
 Function

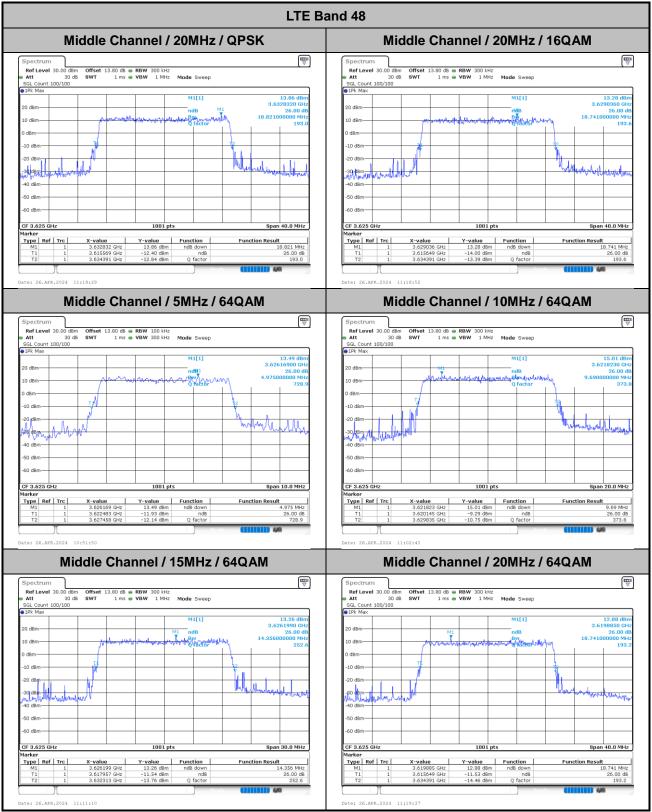
 3.622283 GHz
 16.47 dBm
 ndB down

 3.620105 GHz
 -9.33 dBm
 ndB

 3.629995 GHz
 -13.70 dBm
 Q factor
 Type Ref Trc Type Ref Trc Function Result **Function Result** Middle Channel / 15MHz / QPSK Middle Channel / 15MHz / 16QAM M1[1] 15.81 dBr 3.6308140 GH M1[1] 14.28 dBr 3.6232320 GH

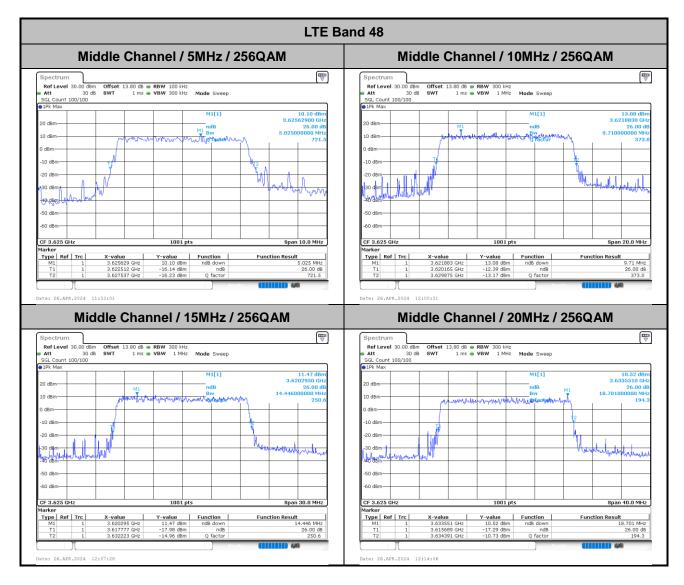


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Occupied Bandwidth

Mode		LTE Band 48 : 99%OBW(MHz)										
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	-	-	-	-	4.48	4.52	9.11	9.07	13.48	13.42	17.94	17.86
Mode					LTE Ba	and 48 :	99%OBV	V(MHz)				
BW	1.4	ИНz	3N	lHz	5N	MHz 10MHz			15N	ИHz	20MHz	
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	-	-	-	-	4.49	4.49	9.01	9.03	13.48	13.51	17.86	17.98

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Report No.: FG440146D LTE Band 48 Middle Channel / 5MHz / QPSK Middle Channel / 5MHz / 16QAM Ref Level 30.00 dBm
Att 30 dB
SGL Count 100/100 14.37 dB 3.62467000 GF 4.485514486 MF -10 dBm--20 dBm--40 dBm-CF 3.625 GHz CF 3.625 GHz 1001 pts Span 10.0 MHz
 X-value
 Y-value

 3.623372 GHz
 13.69 dBm

 3.6227323 GHz
 8.10 dBm

 3.6272577 GHz
 7.04 dBm
 Type Ref Trc Function Result Type Ref Trc Middle Channel / 10MHz / QPSK Middle Channel / 10MHz / 16QAM
 Ref Level
 30.00 dBm
 Offset
 13.80 dB
 ■ RBW
 300 kHz

 Att
 30 dB
 SWT
 1 ms
 ■ VBW
 1 MHz
 Mode
 Sweep
 SGL Count 100/100 16.49 dBi 3.6249000 GF 9.110889111 MF 15.98 dBn 3.6241810 GH 9.070929071 MH Town the house the property of reglessperither hapter great property Markey war and the -20 dBn -20 aBr harring warmen walnut by -40 dBm-CF 3.625 GHz Span 20.0 MHz
 X-value
 Y-value
 Function

 3.6249 GHz
 16.49 dBm
 Occ Bw

 3.62049 GHz
 13.03 dBm
 Occ Bw

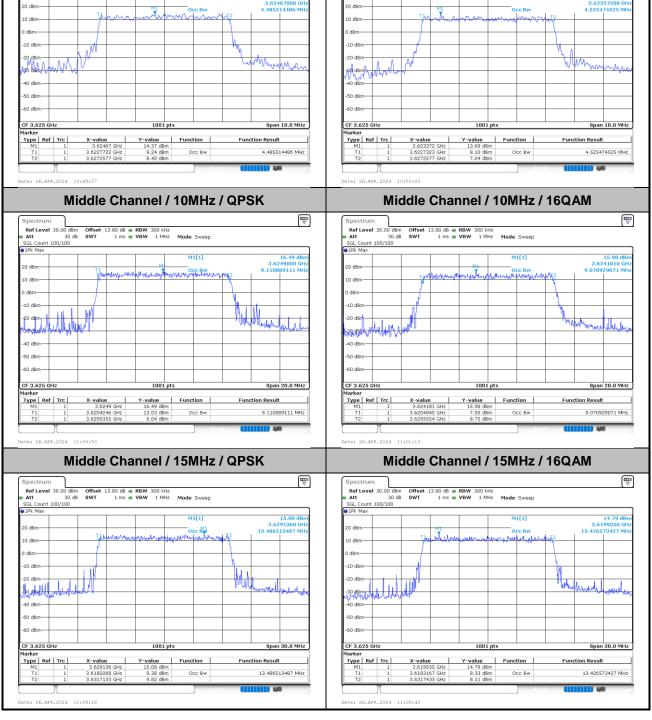
 3.6295355 GHz
 9.04 dBm

 Marker
 Trc
 X-value
 Y-value
 Function

 M1
 1
 3.624181 GHz
 15.99 d Bm
 1

 T1
 1
 3.624948 GHz
 7.50 dBm
 Occ Bw

 T2
 1
 3.6295554 GHz
 8.75 dBm
 Occ Bw
 Type Ref Trc Function Result Function Result 9.110889111 MHz 9.070929071 MHz Date: 26.APR.2024 11:01:13 Middle Channel / 15MHz / QPSK Middle Channel / 15MHz / 16QAM 15.08 dBr 3.6291360 GH 13.486513487 MH 14.79 dBn 3.6199350 GH 13.426573427 MH M1[1] M1[1] -10 dBm-



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Report No.: FG440146D LTE Band 48 Middle Channel / 20MHz / QPSK Middle Channel / 20MHz / 16QAM Ref Level 30.00 dBm
Att 30 dB
SGL Count 100/100 14.37 dB 3.6289560 GF 17.942057942 MF -10 dBm--20 dBm-Span 40.0 MHz CF 3.625 GHz CF 3.625 GHz 1001 pts Y-value Function
14.37 dBm
10.30 dBm Occ Bw
9.97 dBm Type Ref Trc Function Result Type Ref Trc 17.942057942 MHz Middle Channel / 5MHz / 64QAM Middle Channel / 10MHz / 64QAM SGL Count 100/100 1Pk Max 14.47 dBi 3.62572900 GF 4.495504496 MF 16.06 dBn 3.6247800 GH 9.010989011 MH Talyon removed but -20 dBm -10 dBm -40 dBm CF 3.625 GHz Span 10.0 MHz
 Marker
 Trc
 X-value
 Y-value
 Function

 M1
 1
 3.62478 GHz
 16.06 dBm
 T

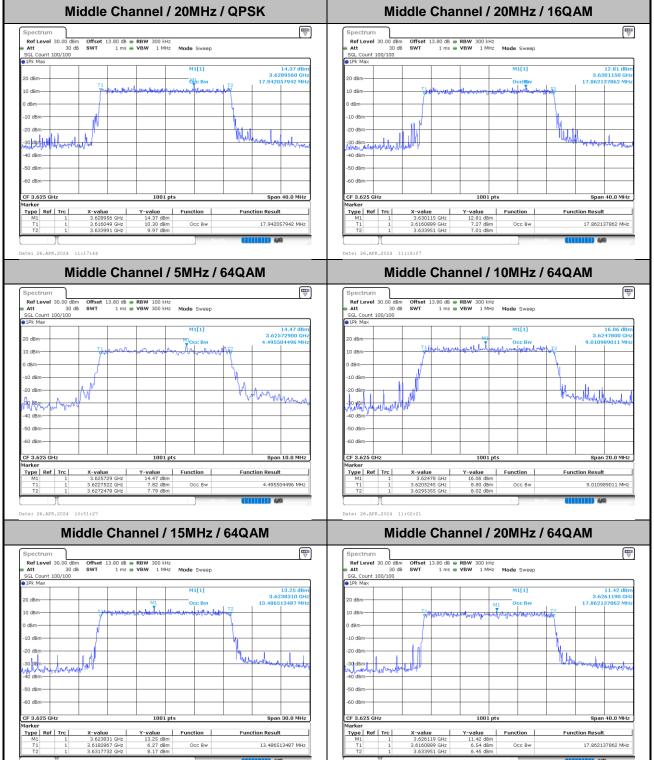
 T1
 1
 3.6295245 GHz
 8.80 dBm
 Occ Bw

 T2
 1
 3.6295355 GHz
 8.02 dBm
 0.02 dBm
 Type Ref Trc
 X-value
 Y-value
 Function

 3.625729 GHz
 14.47 dBm
 0.627522 GHz

 3.6227529 GHz
 7.82 dBm
 Occ Bw

 3.6272478 GHz
 7.79 dBm
 Function Result Function Result 4.495504496 MHz 9.010989011 MHz Date: 26.APR.2024 11:02:2 Middle Channel / 15MHz / 64QAM Middle Channel / 20MHz / 64QAM 13.25 dBr 3.6238310 GH 13.486513487 MH M1[1] M1[1] -10 dBm



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 X-value
 Y-value
 Function

 3.623801 GHz
 11.80 dBm

 3.6182867 GHz
 5.01 dBm
 Occ Bw

 3.638032 GHz
 4.06 dBm

Type Ref Trc

LTE Band 48 Middle Channel / 5MHz / 256QAM Middle Channel / 10MHz / 256QAM Ref Level 30.00 dBm
Att 30 dB
SGL Count 100/100
Pk Max 10.67 dBi 3.62458000 GF 4.495504496 MF 1001 pts Span 10.0 MHz CF 3.625 GHz Span 20.0 MHz Y-value 13.46 dBm 6.92 dBm 5.49 dBm Type Ref Trc Function Function Result Type Ref Trc 4.495504496 MHz Date: 26.APR.2024 12:00:08 Middle Channel / 15MHz / 256QAM Middle Channel / 20MHz / 256QAM Ref Level 30.00 dBm Offset 13.80 dB • RBW 300 kHz
• Att 30 dB SWT 1ms • VBW 1 MHz Mode Sweep
51SL Count 100/100
• 1Pk Max 11.80 dBi 3.6238010 GF 13.516483516 MF 9.87 dBn 3.6321930 GHz 17.982017982 MHz Moralmontal Manuscripe adapter happy has

Type Ref Trc

Date: 26.APR.2024 12:13:44

Function Result

13.516483516 MHz

 X-value
 Y-value
 Function

 3.632193 GHz
 9.87 dBm

 3.616049 GHz
 4.53 dBm
 Occ BW

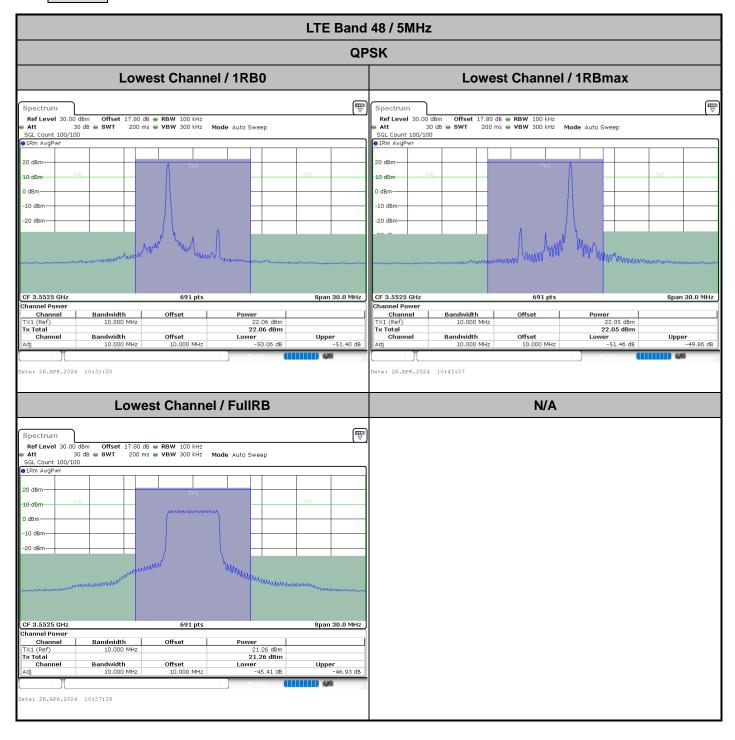
 3.634031 GHz
 4.02 dBm

Function Result

17.982017982 MHz

C RADIO TEST REPORT Report No. : FG440146D

ACLR



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LTE Band 48 / 5MHz **QPSK** Middle Channel / 1RB0 Middle Channel / 1RBmax Spectrum Mode Auto Sweep Mode Auto Sweep ●1Rm AvgPwr 20 dBm 10 dBm 0 dBn CF 3.625 GHz Channel Power CF 3.625 GHz Channel Power 691 pts Span 30.0 MHz 691 pts Span 30.0 MHz 22.72 dBm 22.72 dBm 22.72 dBm Lower -50.61 dB Power 22.79 dBm 22.79 dBm Lower -52.40 dB Channel
TX1 (Ref)
Tx Total
Channel Channel
TX1 (Ref)
Tx Total
Channel Bandwidth 10.000 MHz Offset Bandwidth 10.000 MHz Offset Upper -52.34 dB Bandwidth 10.000 MHz Upper -50.56 dB ate: 26.APR.2024 10:34:49 Date: 26.APR.2024 10:47:26 Middle Channel / FullRB N/A Spectrum Mode Auto Sweep -10 dBm -20 dBm-

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TEL: 886-3-327-3456 Page Number : A2-12 of 63

Span 30.0 MHz

Upper -45.46 dB

FAX: 886-3-328-4978

Bandwidth 10.000 MH:

Bandwidth 10.000 MH;

CF 3.625 GHz

Channel
TX1 (Ref)
Tx Total
Channel

ate: 26.APR.2024 10:41:08

691 pts

Offset

21.60 dBm 21.60 dBm 21.60 dBm Lower -46.17 dB

LTE Band 48 / 5MHz **QPSK Highest Channel / 1RB0 Highest Channel / 1RBmax** Spectrum Mode Auto Sweep Mode Auto Sweep ●1Rm AvgPwr 20 dBm CF 3.6975 GHz Channel Power CF 3.6975 GHz Channel Power 691 pts Span 30.0 MHz 691 pts Span 30.0 MHz 22.93 dBm 22.93 dBm 22.93 dBm Lower -50.60 dB Power 23.21 dBm 23.21 dBm Lower -52.69 dB Channel
TX1 (Ref)
Tx Total
Channel Channel
TX1 (Ref)
Tx Total
Channel Bandwidth 10.000 MHz Offset Bandwidth 10.000 MHz Offset Upper -52.39 dB Bandwidth 10.000 MHz Upper -50.80 dB ate: 26.APR.2024 10:35:31 Date: 26.APR.2024 10:48:08 N/A **Highest Channel / FullRB** Spectrum Mode Auto Sweep 0 dBm -10 dBm -20 dBm Span 30.0 MHz CF 3.6975 GHz 691 pts

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TEL: 886-3-327-3456 Page Number : A2-13 of 63

Upper -44.78 dB

FAX: 886-3-328-4978

Bandwidth 10.000 MH;

Bandwidth 10.000 MH; Offset

Offset 10.000 MHz 22.01 dBm 22.01 dBm 22.01 dBm Lower -45.09 dB

Channel
TX1 (Ref)
Tx Total
Channel

ate: 26.APR.2024 10:41:50

LTE Band 48 / 10MHz **QPSK Lowest Channel / FullRB** Middle Channel / FullRB Spectrum
 Ref Level
 30.00 dBm
 Offset
 17.80 dB
 RBW
 100 kHz

 Att
 30 dB
 SWT
 200 ms
 VBW
 300 kHz
 Mode
 Auto Sweep

 SGL Count 100/100
 Mode Auto Sweep ●1Rm AvgPwr 20 dBm 20 dBm 0 dBm CF 3.555 GHz Channel Power CF 3.625 GHz Channel Power 691 pts Span 30.0 MHz 691 pts Span 30.0 MHz 21.33 dBm 21.33 dBm Lower -41.92 dB Bandwidth 10.000 MHz Channel
TX1 (Ref)
Tx Total
Channel Channel
TX1 (Ref)
Tx Total
Channel 21.67 dBm 21.67 dBm Offset Bandwidth 10.000 MHz Offset Lower -43.95 dB Upper -43.14 dB Upper -40.91 dB Bandwidth 10.000 MHz ate: 26.APR.2024 10:56:14 Date: 26.APR.2024 10:56:56 **Highest Channel / FullRB** N/A Spectrum -10 dBm

Report No.: FG440146D

TEL: 886-3-327-3456 Page Number: A2-14 of 63

Span 30.0 MHz

Upper -39.80 dB

691 pts

Offset

Offset 10.000 MHz 21.98 dBm 21.98 dBm 21.98 dBm Lower -41.83 dB

FAX: 886-3-328-4978

Bandwidth 10.000 MHz

Bandwidth 10.000 MH;

CF 3.695 GHz

Channel
TX1 (Ref)
Tx Total
Channel

ate: 26.APR.2024 11:00:27

LTE Band 48 / 15MHz **QPSK Lowest Channel / FullRB** Middle Channel / FullRB Spectrum ●1Rm AvgPwr 20 dBm 20 dBm 0 dBm CF 3.5575 GHz Channel Power CF 3.625 GHz Channel Power 691 pts Span 60.0 MHz 691 pts Span 60.0 MHz 21.26 dBm 21.26 dBm Lower -44.58 dB Bandwidth 20.000 MHz Channel
TX1 (Ref)
Tx Total
Channel Channel
TX1 (Ref)
Tx Total
Channel 21.57 dBm 21.57 dBm Offset Bandwidth 20.000 MHz Offset Lower -44.84 dB Upper -44.88 dB Upper -42.96 dB Bandwidth 20.000 MHz Date: 26.APR.2024 11:03:25 Date: 26.APR.2024 11:06:50 **Highest Channel / FullRB** N/A Spectrum 0 dBm -10 dBm Span 60.0 MHz CF 3.6925 GHz 691 pts

Report No.: FG440146D

TEL: 886-3-327-3456 Page Number : A2-15 of 63

Upper -41.55 dB

21.87 dBm 21.87 dBm 21.87 dBm Lower -42.57 dB

FAX: 886-3-328-4978

Bandwidth 20.000 MH;

Bandwidth 20.000 MHz Offset

Offset 20.000 MHz

Channel
TX1 (Ref)
Tx Total
Channel

ate: 26.APR.2024 11:07:31

LTE Band 48 / 20MHz **QPSK Lowest Channel / FullRB** Middle Channel / FullRB Spectrum ●1Rm AvgPwr 20 dBm 20 dBm 0 dBm CF 3.56 GHz Channel Power CF 3.625 GHz Channel Power 691 pts Span 60.0 MHz 691 pts Span 60.0 MHz 21.29 dBm 21.29 dBm 21.29 dBm Lower -43.74 dB Bandwidth 20.000 MHz Channel
TX1 (Ref)
Tx Total
Channel Channel
TX1 (Ref)
Tx Total
Channel 21.57 dBm 21.57 dBm Offset Bandwidth 20.000 MHz Offset Lower -43.62 dB Upper -44.09 dB Upper -41.61 dB Bandwidth 20.000 MHz Bandwidth 20.000 MHz ate: 26.APR.2024 11:13:14 Date: 26.APR.2024 11:13:56 **Highest Channel / FullRB** N/A Spectrum -10 dBm Span 60.0 MHz CF 3.69 GHz 691 pts

Report No.: FG440146D

TEL: 886-3-327-3456 Page Number : A2-16 of 63

Upper -40.09 dB

21.91 dBm 21.91 dBm 21.91 dBm Lower -41.04 dB

FAX: 886-3-328-4978

Bandwidth 20.000 MH;

Bandwidth 20.000 MHz Offset

Offset 20.000 MHz

Channel
TX1 (Ref)
Tx Total
Channel

ate: 26.APR.2024 11:17:21

LTE Band 48 / 5MHz **16QAM** Lowest Channel / 1RB0 **Lowest Channel / 1RBmax** Spectrum Mode Auto Sweep Mode Auto Sweep ●1Rm AvgPwr CF 3.5525 GHz Channel Power CF 3.5525 GHz Channel Power 691 pts Span 30.0 MHz 691 pts Span 30.0 MHz 21.41 dBm 21.41 dBm 21.41 dBm Lower -49.81 dB Channel
TX1 (Ref)
Tx Total
Channel Channel
TX1 (Ref)
Tx Total
Channel 21.59 dBm 21.59 dBm Bandwidth 10.000 MHz Offset Bandwidth 10.000 MHz Offset Upper -50.95 dB Bandwidth 10.000 MHz **Upper** -49.87 dB ate: 26.APR.2024 10:32:02 ate: 26.APR.2024 10:44:39 **Lowest Channel / FullRB** N/A Spectrum Mode Auto Sweep -10 dBm -20 dBm-CF 3.5525 GHz 691 pts Span 30.0 MHz 20.31 dBm 20.31 dBm 20.31 dBm Lower -45.98 dB Channel
TX1 (Ref)
Tx Total
Channel Bandwidth 10.000 MH Offset

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Upper -46.65 dB

FAX: 886-3-328-4978

Bandwidth 10.000 MH

te: 26.APR.2024 10:38:21

LTE Band 48 / 5MHz **16QAM** Middle Channel / 1RB0 Middle Channel / 1RBmax Spectrum Mode Auto Sweep Mode Auto Sweep ●1Rm AvgPwr 0 dBn CF 3.625 GHz Channel Power CF 3.625 GHz Channel Power 691 pts Span 30.0 MHz 691 pts Span 30.0 MHz 22.16 dBm 22.16 dBm 22.16 dBm Lower -50.61 dB 21.74 dBm 21.74 dBm 21.74 dBm Lower -51.59 dB Channel
TX1 (Ref)
Tx Total
Channel Channel
TX1 (Ref)
Tx Total
Channel Bandwidth 10.000 MHz Offset Bandwidth 10.000 MHz Offset Bandwidth 10.000 MHz Upper -52.00 dB Upper -50.11 dB ate: 26.APR.2024 10:34:07 Date: 26.APR.2024 10:46:45 Middle Channel / FullRB N/A Spectrum Mode Auto Sweep -10 dBm -20 dBm-

Report No.: FG440146D

TEL: 886-3-327-3456 Page Number : A2-18 of 63

Span 30.0 MHz

Upper -46.06 dB

691 pts

Offset

20.65 dBm 20.65 dBm Lower -47.20 dB

FAX: 886-3-328-4978

Bandwidth 10.000 MH:

Bandwidth 10.000 MH;

CF 3.625 GHz

Channel
TX1 (Ref)
Tx Total
Channel

ate: 26.APR.2024 10:40:26

LTE Band 48 / 5MHz **16QAM Highest Channel / 1RB0 Highest Channel / 1RBmax** Spectrum Mode Auto Sweep Mode Auto Sweep ●1Rm AvgPwr CF 3.6975 GHz Channel Power CF 3.6975 GHz Channel Power 691 pts Span 30.0 MHz 691 pts Span 30.0 MHz 22.39 dBm 22.39 dBm 22.39 dBm Lower -50.65 dB Power 22.23 dBm 22.23 dBm Lower -51.99 dB Channel
TX1 (Ref)
Tx Total
Channel Channel
TX1 (Ref)
Tx Total
Channel Bandwidth 10.000 MHz Offset Bandwidth 10.000 MHz Offset Bandwidth 10.000 MHz Upper -50.38 dB Upper -52.09 dB ate: 26.APR.2024 10:36:14 ate: 26.APR.2024 10:48:51 N/A **Highest Channel / FullRB** Spectrum Mode Auto Sweep 0 dBm -10 dBm -20 dBm-

Report No.: FG440146D

TEL: 886-3-327-3456 Page Number : A2-19 of 63

Span 30.0 MHz

Upper -45.50 dB

FAX: 886-3-328-4978

Bandwidth 10.000 MH;

Bandwidth 10.000 MH;

CF 3.6975 GHz

Channel
TX1 (Ref)
Tx Total
Channel

ate: 26.APR.2024 10:42:32

691 pts

Offset

Offset 10.000 MHz 21.03 dBm 21.03 dBm 21.03 dBm Lower -46.49 dB

LTE Band 48 / 10MHz **16QAM Lowest Channel / FullRB** Middle Channel / FullRB Spectrum
 Ref Level
 30.00 dBm
 Offset
 17.80 dB
 RBW
 100 kHz

 Att
 30 dB
 SWT
 200 ms
 VBW
 300 kHz
 Mode
 Auto Sweep

 SGL Count 100/100
 Mode Auto Sweep ●1Rm AvgPwr 20 dBm 20 dBm 0 dBm CF 3.555 GHz Channel Power CF 3.625 GHz Channel Power 691 pts Span 30.0 MHz 691 pts Span 30.0 MHz Bandwidth 10.000 MHz 20.67 dBm 20.67 dBm 20.67 dBm Lower -44.32 dB Channel
TX1 (Ref)
Tx Total
Channel 20.31 dBm 20.31 dBm Channel
TX1 (Ref)
Tx Total
Channel Offset Bandwidth 10.000 MHz Offset Lower -42.10 dB Upper -42.27 dB Upper -40.32 dB Bandwidth 10.000 MHz Date: 26.APR.2024 10:55:32 Date: 26.APR.2024 10:57:38 **Highest Channel / FullRB** N/A Spectrum Mode Auto Sweep -10 dBm

Report No.: FG440146D

TEL: 886-3-327-3456 Page Number : A2-20 of 63

Span 30.0 MHz

Upper -39.28 dB

691 pts

Offset

Offset 10.000 MHz 20.96 dBm 20.96 dBm 20.96 dBm Lower -42.26 dB

FAX: 886-3-328-4978

Bandwidth 10.000 MH:

Bandwidth 10.000 MH;

CF 3.695 GHz

Channel
TX1 (Ref)
Tx Total
Channel

ate: 26.APR.2024 10:59:45

LTE Band 48 / 15MHz **16QAM Lowest Channel / FullRB** Middle Channel / FullRB Spectrum ●1Rm AvgPwr 20 dBm 20 dBm 0 dBm CF 3.5575 GHz Channel Power CF 3.625 GHz Channel Power 691 pts Span 60.0 MHz 691 pts Span 60.0 MHz 20.58 dBm 20.58 dBm 20.58 dBm Lower -44.73 dB Bandwidth 20.000 MHz Channel
TX1 (Ref)
Tx Total
Channel 20.28 dBm 20.28 dBm Channel
TX1 (Ref)
Tx Total
Channel Offset Bandwidth 20.000 MHz Offset Lower -44.31 dB Upper -43.94 dB Upper -42.38 dB Bandwidth 20.000 MHz Bandwidth 20.000 MHz Date: 26.APR.2024 11:04:06 Date: 26.APR.2024 11:06:10 **Highest Channel / FullRB** N/A Spectrum 0 dBm -10 dBm

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Span 60.0 MHz

Upper -41.11 dB

FAX: 886-3-328-4978

Bandwidth 20.000 MH;

Bandwidth 20.000 MHz

CF 3.6925 GHz

Channel
TX1 (Ref)
Tx Total
Channel

ate: 26.APR.2024 11:08:13

691 pts

Offset

Offset 20.000 MHz 20.84 dBm 20.84 dBm 20.84 dBm Lower -42.69 dB

LTE Band 48 / 20MHz **16QAM Lowest Channel / FullRB** Middle Channel / FullRB Spectrum ●1Rm AvgPwr 20 dBm 20 dBm 0 dBm CF 3.56 GHz Channel Power CF 3.625 GHz Channel Power 691 pts Span 60.0 MHz 691 pts Span 60.0 MHz Bandwidth 20.000 MHz 20.55 dBm 20.55 dBm 20.55 dBm Lower -43.47 dB Channel
TX1 (Ref)
Tx Total
Channel 20.30 dBm 20.30 dBm Channel
TX1 (Ref)
Tx Total
Channel Offset Bandwidth 20.000 MHz Offset Lower -43.45 dB Upper -43.01 dB Upper -40.93 dB Bandwidth 20.000 MHz ate: 26.APR.2024 11:12:33 Date: 26.APR.2024 11:14:36 **Highest Channel / FullRB** N/A Spectrum 0 dBm -10 dBm Span 60.0 MHz CF 3.69 GHz 691 pts 20.92 dBm 20.92 dBm 20.92 dBm Lower -41.11 dB Channel
TX1 (Ref)
Tx Total
Channel Bandwidth 20.000 MH; Offset

Report No.: FG440146D

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Upper -39.59 dB

FAX: 886-3-328-4978

Bandwidth 20.000 MHz

ate: 26.APR.2024 11:16:40

Offset 20.000 MHz

LTE Band 48 / 5MHz 64QAM Lowest Channel / 1RB0 **Lowest Channel / 1RBmax** Spectrum Mode Auto Sweep Mode Auto Sweep CF 3.5525 GHz Channel Power CF 3.5525 GHz Channel Power 691 pts Span 30.0 MHz 691 pts Span 30.0 MHz 21.16 dBm 21.16 dBm 21.16 dBm Lower -49.58 dB Channel
TX1 (Ref)
Tx Total
Channel Channel
TX1 (Ref)
Tx Total
Channel 21.38 dBm 21.38 dBm Bandwidth 10.000 MHz Offset Bandwidth 10.000 MHz Offset Upper -50.75 dB Bandwidth 10.000 MHz **Upper** -49.67 dB ate: 26.APR.2024 10:32:44 ate: 26.APR.2024 10:45:21 **Lowest Channel / FullRB** N/A Spectrum Mode Auto Sweep -10 dBm 20 dBm CF 3.5525 GHz 691 pts Span 30.0 MHz 20.32 dBm 20.32 dBm 20.32 dBm Lower -45.97 dB Channel
TX1 (Ref)
Tx Total
Channel Bandwidth 10.000 MH Offset

Report No.: FG440146D

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Upper -46.62 dB

FAX: 886-3-328-4978

Bandwidth 10.000 MH

te: 26.APR.2024 10:39:03

LTE Band 48 / 5MHz **64QAM** Middle Channel / 1RB0 Middle Channel / 1RBmax Spectrum Mode Auto Sweep Mode Auto Sweep ●1Rm AvgPwr 20 dBm 10 dBm CF 3.625 GHz Channel Power CF 3.625 GHz Channel Power 691 pts Span 30.0 MHz 691 pts Span 30.0 MHz 21.56 dBm 21.56 dBm Lower -50.06 dB Channel
TX1 (Ref)
Tx Total
Channel Channel
TX1 (Ref)
Tx Total
Channel 21.55 dBm 21.55 dBm Bandwidth 10.000 MHz Offset Bandwidth 10.000 MHz Offset Lower -51.45 dB **Upper** -51.44 dB Upper -49.93 dB Bandwidth 10.000 MHz ate: 26.APR.2024 10:33:26 Date: 26.APR.2024 10:46:03 Middle Channel / FullRB N/A Spectrum Mode Auto Sweep -10 dBm -20 dBm-

Report No.: FG440146D

TEL: 886-3-327-3456 Page Number : A2-24 of 63

Span 30.0 MHz

Upper -46.01 dB

691 pts

Offset

20.65 dBm 20.65 dBm Lower -47.29 dB

FAX: 886-3-328-4978

Bandwidth 10.000 MH:

Bandwidth 10.000 MH;

CF 3.625 GHz

Channel
TX1 (Ref)
Tx Total
Channel

ate: 26.APR.2024 10:39:44

CF 3.6975 GHz

Bandwidth 10.000 MH;

Bandwidth 10.000 MH;

FAX: 886-3-328-4978

Channel
TX1 (Ref)
Tx Total
Channel

ate: 26.APR.2024 10:43:15

691 pts

Offset

Offset 10.000 MHz 21.01 dBm 21.01 dBm 21.01 dBm Lower -46.49 dB

LTE Band 48 / 5MHz **64QAM Highest Channel / 1RB0 Highest Channel / 1RBmax** Spectrum Mode Auto Sweep Mode Auto Sweep ●1Rm AvgPwr CF 3.6975 GHz Channel Power CF 3.6975 GHz Channel Power 691 pts Span 30.0 MHz 691 pts Span 30.0 MHz 21.72 dBm 21.72 dBm 21.72 dBm Lower -50.00 dB Channel
TX1 (Ref)
Tx Total
Channel Channel
TX1 (Ref)
Tx Total
Channel 21.88 dBm 21.88 dBm Bandwidth 10.000 MHz Offset Bandwidth 10.000 MHz Offset Bandwidth 10.000 MHz -51.68 dB Upper -50.13 dB Upper -51.47 dB ate: 26.APR.2024 10:36:56 ate: 26.APR.2024 10:49:33 N/A **Highest Channel / FullRB** Spectrum Mode Auto Sweep 0 dBm -10 dBm -20 dBm-

Report No.: FG440146D



Span 30.0 MHz

Upper -45.52 dB

LTE Band 48 / 10MHz **64QAM** Lowest Channel / FullRB Middle Channel / FullRB Spectrum
 Ref Level
 30.00 dBm
 Offset
 17.80 dB
 RBW
 100 kHz

 Att
 30 dB
 SWT
 200 ms
 VBW
 300 kHz
 Mode
 Auto Sweep

 SGL Count 100/100
 Mode Auto Sweep ●1Rm AvgPwr 20 dBm 20 dBm 0 dBm CF 3.555 GHz Channel Power CF 3.625 GHz Channel Power 691 pts Span 30.0 MHz 691 pts Span 30.0 MHz Power 19.32 dBm 19.32 dBm Lower -42.74 dB 19.67 dBm 19.67 dBm 19.67 dBm Lower -44.70 dB Bandwidth 10.000 MHz Channel
TX1 (Ref)
Tx Total
Channel Channel
TX1 (Ref)
Tx Total
Channel Offset Bandwidth 10.000 MHz Offset Upper -42.03 dB Upper -40.28 dB Bandwidth 10.000 MHz Date: 26.APR.2024 10:54:50 Date: 26.APR.2024 10:58:19 **Highest Channel / FullRB** N/A Spectrum Mode Auto Sweep 0 dBm -10 dBm -20 dBm-Span 30.0 MHz CF 3.695 GHz 691 pts

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TEL: 886-3-327-3456 Page Number : A2-26 of 63

Upper -39.27 dB

19.96 dBm 19.96 dBm 19.96 dBm Lower -42.86 dB

FAX: 886-3-328-4978

Bandwidth 10.000 MHz

Bandwidth 10.000 MH; Offset

Offset 10.000 MHz

Channel
TX1 (Ref)
Tx Total
Channel

ate: 26.APR.2024 10:59:02

LTE Band 48 / 15MHz **64QAM** Lowest Channel / FullRB Middle Channel / FullRB Spectrum ●1Rm AvgPwr 20 dBm 20 dBm 0 dBm CF 3.5575 GHz Channel Power CF 3.625 GHz Channel Power 691 pts Span 60.0 MHz 691 pts Span 60.0 MHz Power 19.31 dBm 19.31 dBm Lower -44.02 dB Bandwidth 20.000 MHz Power 19.58 dBm 19.58 dBm Lower -44.52 dB Channel
TX1 (Ref)
Tx Total
Channel Channel
TX1 (Ref)
Tx Total
Channel Offset Bandwidth 20.000 MHz Offset Upper -43.41 dB Upper -42.21 dB Bandwidth 20.000 MHz Bandwidth 20.000 MHz Date: 26.APR.2024 11:04:48 Date: 26.APR.2024 11:05:29 **Highest Channel / FullRB** N/A Spectrum 0 dBm -10 dBm -20 dBm-Span 60.0 MHz CF 3.6925 GHz 691 pts 19.85 dBm 19.85 dBm 19.85 dBm Lower -42.80 dB Channel
TX1 (Ref)
Tx Total
Channel Bandwidth 20.000 MH; Offset

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Upper -41.06 dB

FAX: 886-3-328-4978

Bandwidth 20.000 MHz

ate: 26.APR.2024 11:08:54

Offset 20.000 MHz

LTE Band 48 / 20MHz **64QAM** Lowest Channel / FullRB Middle Channel / FullRB Spectrum ●1Rm AvgPwr 20 dBm 20 dBm 0 dBm CF 3.56 GHz Channel Power CF 3.625 GHz Channel Power 691 pts Span 60.0 MHz 691 pts Span 60.0 MHz Power 19.30 dBm 19.30 dBm Lower -43.28 dB Bandwidth 20.000 MHz Power 19.57 dBm 19.57 dBm Lower -43.32 dB Channel
TX1 (Ref)
Tx Total
Channel Channel
TX1 (Ref)
Tx Total
Channel Offset Bandwidth 20.000 MHz Offset Upper -42.47 dB Upper -40.75 dB Bandwidth 20.000 MHz Date: 26.APR.2024 11:11:52 Date: 26.APR.2024 11:15:17 **Highest Channel / FullRB** N/A Spectrum 0 dBm -10 dBm Span 60.0 MHz CF 3.69 GHz 691 pts 19.92 dBm 19.92 dBm 19.92 dBm Lower -41.26 dB Channel
TX1 (Ref)
Tx Total
Channel Bandwidth 20.000 MH; Offset **Upper** -39,49 dB

Report No.: FG440146D

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FAX: 886-3-328-4978

Bandwidth 20.000 MHz

ate: 26.APR.2024 11:15:58

Offset 20.000 MHz

LTE Band 48 / 5MHz 256QAM Lowest Channel / 1RB0 **Lowest Channel / 1RBmax** Spectrum Mode Auto Sweep Mode Auto Sweep ●1Rm AvgPwr 0 dBm 0 dBn CF 3.5525 GHz Channel Power CF 3.5525 GHz Channel Power 691 pts Span 30.0 MHz 691 pts Span 30.0 MHz 17.64 dBm 17.64 dBm Lower -47.16 dB Channel
TX1 (Ref)
Tx Total
Channel Channel
TX1 (Ref)
Tx Total
Channel 17.55 dBm 17.55 dBm Bandwidth 10.000 MHz Offset Bandwidth 10.000 MHz Offset Bandwidth 10.000 MHz Lower -47.67 dB Upper -47.82 dB Upper -47.05 dB ate: 26.APR.2024 11:21:30 Date: 26.APR.2024 11:29:21 **Lowest Channel / FullRB** N/A Spectrum Mode Auto Sweep -10 dBm -20 dBm CF 3.5525 GHz 691 pts Span 30.0 MHz

Report No.: FG440146D

TEL: 886-3-327-3456 Page Number : A2-29 of 63

Upper -45.58 dB

17.44 dBm 17.44 dBm 17.44 dBm Lower -45.80 dB

FAX: 886-3-328-4978

Bandwidth 10.000 MH

Bandwidth 10.000 MH Offset

Channel
TX1 (Ref)
Tx Total
Channel

te: 26.APR.2024 11:26:00

LTE Band 48 / 5MHz 256QAM Middle Channel / 1RB0 Middle Channel / 1RBmax Spectrum Mode Auto Sweep Mode Auto Sweep ●1Rm AvgPwr 0 dBm 0 dBn CF 3.625 GHz Channel Power CF 3.625 GHz Channel Power 691 pts Span 30.0 MHz 691 pts Span 30.0 MHz 17.82 dBm 17.82 dBm 17.82 dBm Lower -47.54 dB Channel
TX1 (Ref)
Tx Total
Channel Channel
TX1 (Ref)
Tx Total
Channel 17.86 dBm 17.86 dBm Bandwidth 10.000 MHz Offset Bandwidth 10.000 MHz Offset Bandwidth 10.000 MHz Lower -48.37 dB Upper -48.32 dB Upper -47.66 dB ate: 26.APR.2024 15:06:10 Date: 26.APR.2024 11:30:40 Middle Channel / FullRB N/A Spectrum Mode Auto Sweep -10 dBm -20 dBm Span 30.0 MHz CF 3.625 GHz 691 pts

Report No.: FG440146D

TEL: 886-3-327-3456 Page Number : A2-30 of 63

Upper -45.92 dB

FAX: 886-3-328-4978

Bandwidth 10.000 MH:

Bandwidth 10.000 MH; Offset

17.77 dBm 17.77 dBm 17.77 dBm Lower -47.22 dB

Channel
TX1 (Ref)
Tx Total
Channel

ate: 26.APR.2024 11:27:18

LTE Band 48 / 5MHz 256QAM **Highest Channel / 1RB0 Highest Channel / 1RBmax** Spectrum Mode Auto Sweep Mode Auto Sweep ●1Rm AvgPwr 0 dBn CF 3.6975 GHz Channel Power CF 3.6975 GHz Channel Power 691 pts Span 30.0 MHz 691 pts Span 30.0 MHz Power 18.21 dBm 18.21 dBm Lower -47.92 dB Power 18.02 dBm 18.02 dBm Lower -48.53 dB Channel
TX1 (Ref)
Tx Total
Channel Channel
TX1 (Ref)
Tx Total
Channel Bandwidth 10.000 MHz Offset Bandwidth 10.000 MHz Offset **Upper** -48.65 dB Bandwidth 10.000 MHz Upper -47.66 dB ate: 26.APR.2024 11:25:15 ate: 26.APR.2024 11:31:58 N/A **Highest Channel / FullRB** Spectrum Mode Auto Sweep -10 dBm -20 dBm Span 30.0 MHz CF 3.6975 GHz 691 pts 18.13 dBm 18.13 dBm Lower -47.17 dB Channel
TX1 (Ref)
Tx Total
Channel Bandwidth 10.000 MH; Offset

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Upper -45.66 dB

FAX: 886-3-328-4978

Bandwidth 10.000 MH;

ate: 26.APR.2024 11:28:37

Offset 10.000 MHz

LTE Band 48 / 10MHz 256QAM Lowest Channel / FullRB Middle Channel / FullRB Spectrum Mode Auto Sweep Mode Auto Sweep ●1Rm AvgPwr 20 dBm 20 dBm 10 dBm 0 dBm -20 dBm-CF 3.555 GHz Channel Power CF 3.625 GHz Channel Power 691 pts Span 30.0 MHz 691 pts Span 30.0 MHz Power 17.49 dBm 17.49 dBm Lower -43.34 dB Bandwidth 10.000 MHz Channel
TX1 (Ref)
Tx Total
Channel Channel
TX1 (Ref)
Tx Total
Channel Power 17.76 dBm 17.76 dBm Offset Bandwidth 10.000 MHz Offset Lower -44.49 dB Upper -42.07 dB Upper -40.65 dB Bandwidth 10.000 MHz Date: 26.APR.2024 11:40:12 Date: 26.APR.2024 11:41:30 **Highest Channel / FullRB** N/A Spectrum Mode Auto Sweep 0 dBm -10 dBm -20 dBm-Span 30.0 MHz CF 3.695 GHz 691 pts Power 17.73 dBm 17.73 dBm Lower -43.07 dB Channel
TX1 (Ref)
Tx Total
Channel Bandwidth 10.000 MHz Offset

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Upper -39.60 dB

FAX: 886-3-328-4978

Bandwidth 10.000 MH;

ate: 26.APR.2024 11:57:08

Offset 10.000 MHz

LTE Band 48 / 15MHz 256QAM Lowest Channel / FullRB Middle Channel / FullRB Spectrum ●1Rm AvgPwr 20 dBm 20 dBm 0 dBm -20 dBm-CF 3.5575 GHz Channel Power CF 3.625 GHz Channel Power 691 pts Span 60.0 MHz 691 pts Span 60.0 MHz Power 17.44 dBm 17.44 dBm Lower -43.17 dB Bandwidth 20.000 MHz Channel
TX1 (Ref)
Tx Total
Channel Channel
TX1 (Ref)
Tx Total
Channel Power 17.73 dBm 17.73 dBm Offset Bandwidth 20.000 MHz Offset Lower -43.80 dB Upper -42.68 dB Upper -42.07 dB Bandwidth 20.000 MHz Date: 26.APR.2024 12:03:51 Date: 26.APR.2024 12:05:08 **Highest Channel / FullRB** N/A Spectrum 0 dBm -10 dBm -20 dBm-Span 60.0 MHz CF 3.6925 GHz 691 pts 17.99 dBm 17.99 dBm 17.99 dBm Lower -42.93 dB Channel
TX1 (Ref)
Tx Total
Channel Bandwidth 20.000 MH; Offset

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Upper -41.32 dB

FAX: 886-3-328-4978

Bandwidth 20.000 MHz

ate: 26.APR.2024 12:06:25

Offset 20.000 MHz

LTE Band 48 / 20MHz 256QAM Lowest Channel / FullRB Middle Channel / FullRB Spectrum ●1Rm AvgPwr 20 dBm 20 dBm 10 dBm 0 dBm CF 3.56 GHz Channel Power CF 3.625 GHz Channel Power 691 pts Span 60.0 MHz 691 pts Span 60.0 MHz Power 17.49 dBm 17.49 dBm Lower -42.67 dB Bandwidth 20.000 MHz Channel
TX1 (Ref)
Tx Total
Channel Channel
TX1 (Ref)
Tx Total
Channel Power 17.77 dBm 17.77 dBm Offset Bandwidth 20.000 MHz Offset Lower -42.94 dB Upper -41.99 dB Upper -40.80 dB Bandwidth 20.000 MHz Bandwidth 20.000 MHz Date: 26.APR.2024 12:10:30 Date: 26.APR.2024 12:11:47 **Highest Channel / FullRB** N/A Spectrum 0 dBm -10 dBm -20 dBm-Span 60.0 MHz CF 3.69 GHz 691 pts 18.09 dBm 18.09 dBm 18.09 dBm Lower -41.70 dB Channel
TX1 (Ref)
Tx Total
Channel Bandwidth 20.000 MH; Offset

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Upper -39.89 dB

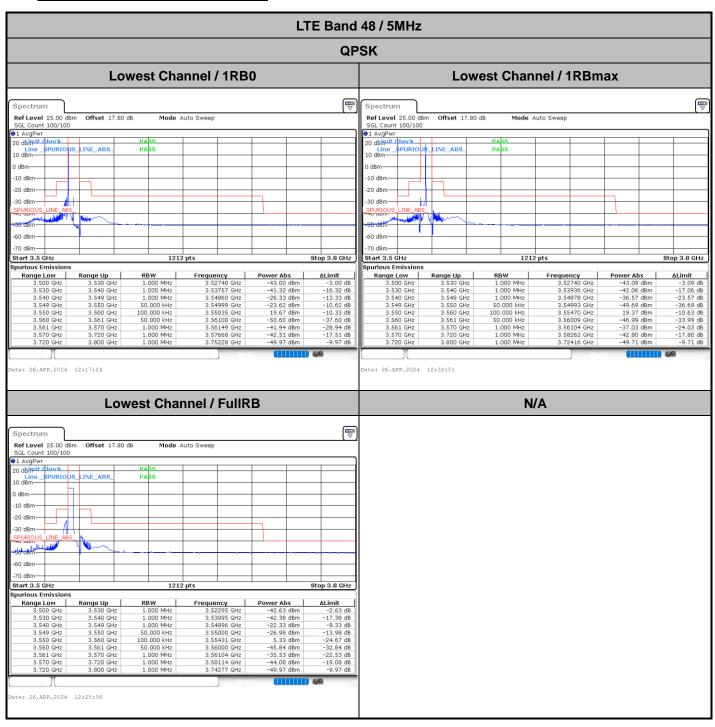
FAX: 886-3-328-4978

Bandwidth 20.000 MHz

ate: 26.APR.2024 12:13:03

Offset 20.000 MHz

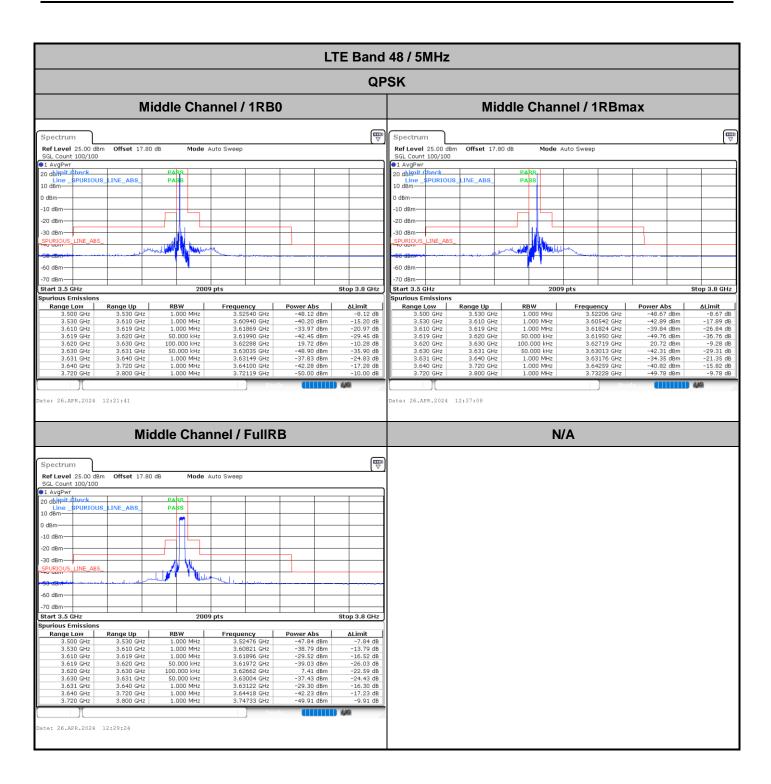
Conducted Band Edge



Report No.: FG440146D

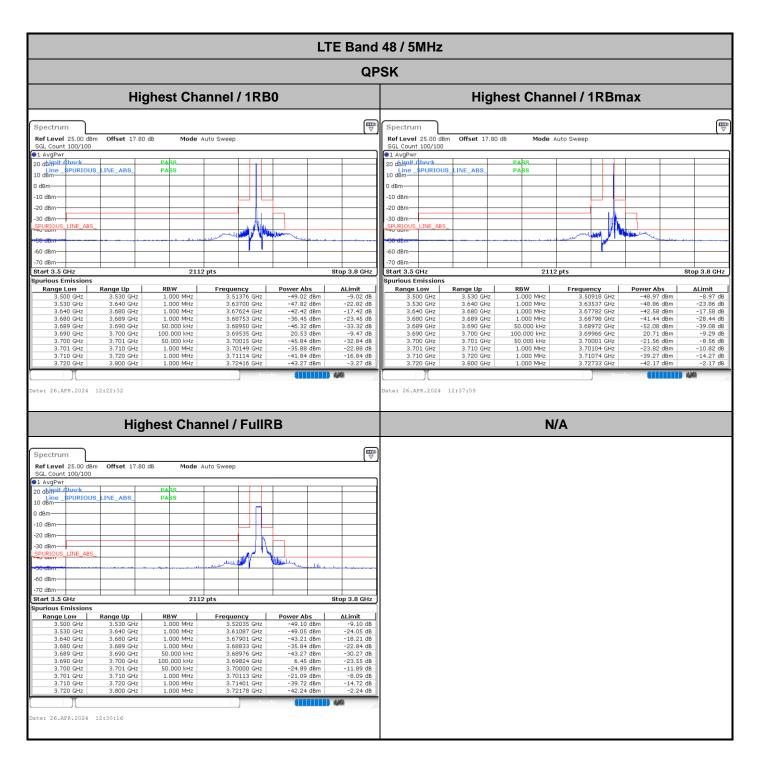
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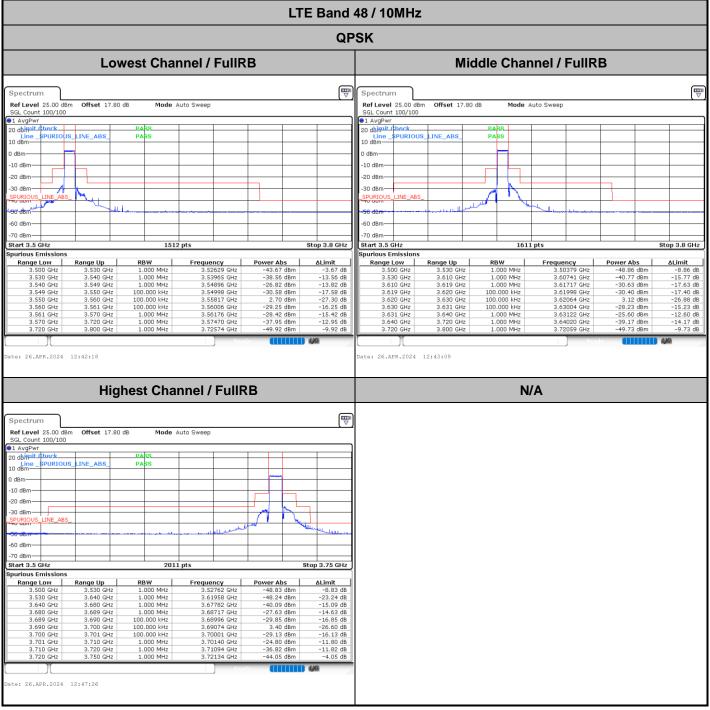
Report No. : FG440146D



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LTE Band 48 / 10MHz



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