



FCC RF Test Report

APPLICANT : Sonim Technologies, Inc.
EQUIPMENT : Smartphone
BRAND NAME : Sonim
MODEL NAME : X802
FCC ID : WYPS3111
STANDARD : 47 CFR Part 27(M)
CLASSIFICATION : PCS Licensed Transmitter Held to Ear (PCE)
TEST DATE(S) : Nov. 07, 2024 ~ Apr. 17, 2025

We, Sporton International Inc. (Kunshan), 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.

This report contains data that were produced under subcontract by Sporton International Inc. (Shenzhen).

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

Jason Jia

Approved by: Jason Jia



Sporton International Inc. (Kunshan)

**No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300
People's Republic of China**



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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FG4O2403D	Rev. 01	Initial issue of report	May 22, 2025

SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.4	§2.1046	Conducted Output Power	-	Report Only	-
	§27.50(h)(2)	Equivalent Isotropic Radiated Power (Band 7) (Band 38) (Band 41)	EIRP < 2Watt	PASS	-
3.5	N/A	Peak-to-Average Ratio	<13 dB	PASS	-
3.6	§2.1049	Occupied Bandwidth	-	Report Only	-
3.7	§27.53(m)(4)	Conducted Band Edge Measurement (Band 7) (Band 38) (Band 41)	§27.53(m)(4)	PASS	-
3.8	§2.1051 §27.53(m)(4)	Conducted Spurious Emission (Band 7) (Band 38) (Band 41)	< 55+10log ₁₀ (P[Watts])	PASS	-
3.9	§2.1055 §27.54	Frequency Stability Temperature & Voltage	Within Authorized Band	PASS	-
4.4	§2.1053 §27.53(m)(4)	Radiated Spurious Emission (Band 7) (Band 38) (Band 41)	< 55+10log ₁₀ (P[Watts])	PASS	Under limit 23.88 dB at 10684.00 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/manufacture 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:

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

Sonim Technologies, Inc.

4445 Eastgate Mall,Suite200,San Diego,CA92121,USA

1.2 Manufacturer

Sonim Technologies, Inc.

4445 Eastgate Mall,Suite200,San Diego,CA92121,USA

1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	Smartphone
Brand Name	Sonim
Model Name	X802
FCC ID	WYPS3111
HW Version	V1.0
SW Version	X80.0-01-14.0-42.18.00
EUT Stage	Identical Prototype

Remark: The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.

1.4 Product Specification of Equipment Under Test

Standards-related Product Specification	
Tx Frequency	LTE Band 7 : 2500 MHz ~ 2570 MHz LTE Band 38 : 2570 MHz ~ 2620 MHz LTE Band 41 : 2496 MHz ~ 2690 MHz
Rx Frequency	LTE Band 7 : 2620 MHz ~ 2690 MHz LTE Band 38 : 2570 MHz ~ 2620 MHz LTE Band 41 : 2496 MHz ~ 2690 MHz
Bandwidth	LTE Band 7 : 5MHz/ 10MHz / 15MHz / 20MHz LTE Band 38 : 5MHz / 10MHz / 15MHz / 20MHz LTE Band 41 : 5MHz / 10MHz / 15MHz / 20MHz
Maximum Output Power to Antenna	<Ant 2> : LTE Band 7 : 22.89 dBm LTE CA_7C : 22.67 dBm LTE Band 38 : 23.74 dBm LTE CA_38C : 23.45 dBm LTE Band 41 : 25.94 dBm <Ant 5> : LTE Band 7 : 24.24 dBm <Ant 6> : LTE Band 7 : 21.62 dBm LTE Band 38 : 24.74 dBm LTE Band 41 : 26.73 dBm <Ant 8> : LTE Band 7 : 24.82 dBm
Antenna Gain	<Ant 2> : LTE Band 7 : -1.77 dBi LTE Band 38 : -1.77 dBi LTE Band 41 : -1.52 dBi <Ant 5> : LTE Band 7 : 1.51 dBi <Ant 6> : LTE Band 7 : -8.88 dBi LTE Band 38 : -9.24 dBi LTE Band 41 : -8.88 dBi <Ant 8> : LTE Band 7 : -1.88 dBi
Type of Modulation	QPSK / 16QAM / 64QAM / 256QAM

Note:

1. The maximum EIRP is calculated from max output power and max antenna gain, so only the maximum EIRP of Antenna 5 for LTE Band7 and Antenna 2 for LTE Band7C/38/38C/41 are shown in the report. All conducted items are tested at maximum conducted power.
2. The device supports two PAs for LTE Band 7 (main PA and other PA, other PA for NSA mode only), both the PAs are full tested, only the worst EIRP are shown in the report.
3. LTE Band 41 Single Carrier supports PC2.

1.5 Modification of EUT

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

1.6 Maximum EIRP Power and Emission Designator

LTE Band 7		QPSK		16QAM/64QAM/256QAM	
BW (MHz)	Frequency Range (MHz)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)
5	2502.5 ~ 2567.5	0.3750	4M51G7D	0.2924	4M51W7D
10	2505.0 ~ 2565.0	0.3715	9M09G7D	0.2884	9M05W7D
15	2507.5 ~ 2562.5	0.3724	13M5G7D	0.2897	13M6W7D
20	2510.0 ~ 2560.0	0.3758	17M9G7D	0.2938	17M9W7D
LTE Band 38		QPSK		16QAM/64QAM/256QAM	
BW (MHz)	Frequency Range (MHz)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)
5	2572.5 ~ 2617.5	0.1538	4M47G7D	0.1199	4M49W7D
10	2575.0 ~ 2615.0	0.1545	9M03G7D	0.1191	9M01W7D
15	2577.5 ~ 2612.5	0.1549	13M5G7D	0.1191	13M5W7D
20	2580.0 ~ 2610.0	0.1574	17M9G7D	0.1227	17M9W7D
LTE Band 41		QPSK		16QAM/64QAM/256QAM	
BW (MHz)	Frequency Range (MHz)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)
5	2498.5 ~ 2687.5	0.2704	4M47G7D	0.2198	4M49W7D
10	2501.0 ~ 2685.0	0.2692	9M03G7D	0.2198	9M01W7D
15	2503.5 ~ 2682.5	0.2723	13M5G7D	0.2208	13M5W7D
20	2506.0 ~ 2680.0	0.2767	17M9G7D	0.2249	17M9W7D



LTE Band 7 CA	QPSK		16QAM/64QAM/256QAM	
BW (MHz)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)
10MHz+20MHz	0.1199	28M3G7D	0.0948	27M9W7D
15MHz+15MHz	0.1202	28M8G7D	0.0944	28M5W7D
15MHz+20MHz	0.1154	32M9G7D	0.0948	32M7W7D
15MHz+10MHz	0.1211	23M5G7D	0.0955	23M3W7D
20MHz+10MHz	0.1211	28M1G7D	0.0948	28M2W7D
20MHz+15MHz	0.1208	32M5G7D	0.0951	32M8W7D
20MHz+20MHz	0.1230	37M7G7D	0.0964	37M6W7D
LTE Band 38 CA	QPSK		16QAM/64QAM/256QAM	
BW (MHz)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)
15MHz+15MHz	0.1466	28M5G7D	0.1146	28M8W7D
20MHz+20MHz	0.1472	37M8G7D	0.1156	38M0W7D

Note:

1. LTE Band 41 overlaps the entire frequency range of LTE Band 38. Therefore, the test results provided in this report covers Band 41 as well as Band 38.
2. All modulations have been tested, and only the worst test results of PSK & QAM are shown in the report.

1.7 Testing Location

Sporton International Inc. (Kunshan) is accredited to ISO/IEC 17025:2017 by American Association for Laboratory Accreditation with Certificate Number 5145.02.

Test Firm	Sporton International Inc. (Kunshan)		
Test Site Location	No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300 People's Republic of China TEL : +86-512-57900158		
Test Site No.	Sporton Site No.	FCC Designation No.	FCC Test Firm Registration No.
	TH01-KS	CN1257	314309



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		
Test Site No.	Sporton Site No.	FCC Designation No.	FCC Test Firm Registration No.
	03CH01-SZ	CN1256	421272

Test data subcontracted: Radiated Spurious Emission test case in section 4.4 of this report.

1.8 Test Software

Item	Site	Manufacturer	Name	Version
1.	TH01-KS	SPORTON	Part2224_Ver5.0 200330	5.0
2.	03CH01-SZ	AUDIX	E3	6.2009-8-24

1.9 Applicable Standards

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

- 47 CFR Part 27(M)
- ANSI C63.26-2015
- FCC KDB 971168 D01 Power Meas License Digital Systems v03r01
- 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.

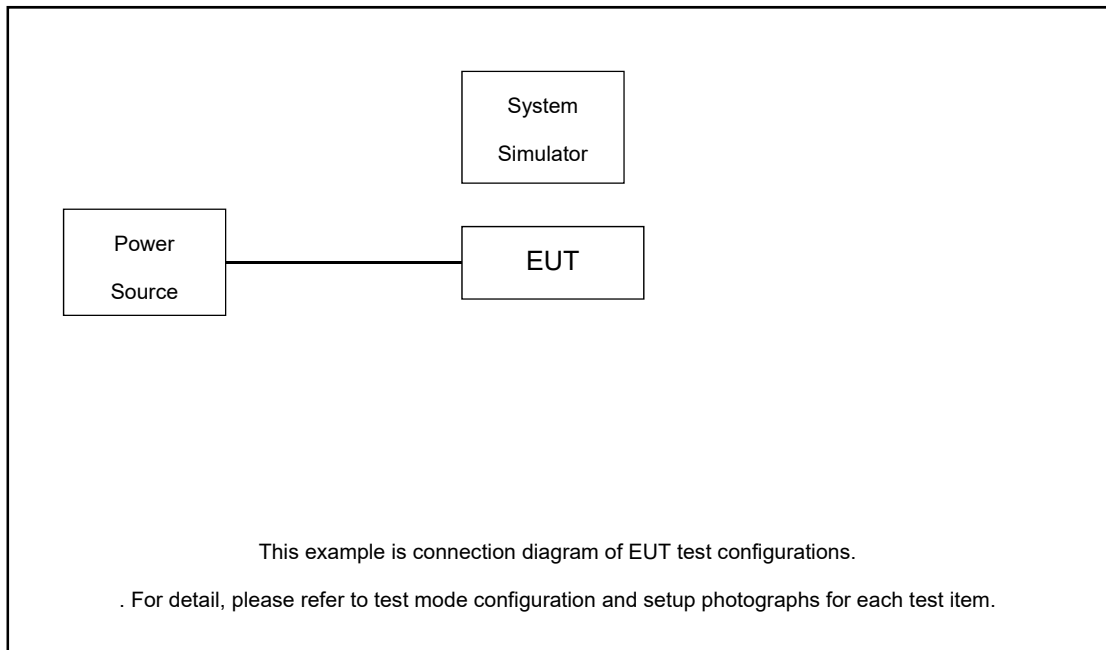
Radiated measurements are performed by rotating the EUT in three different orthogonal test planes to find the maximum emission. (X Plane)

Test Items	Band	Bandwidth (MHz)						Modulation				RB #			Test Channel		
		1.4	3	5	10	15	20	QPSK	16 QAM	64 QAM	256 QAM	1	Half	Full	L	M	H
Max. Output Power	7	-	-	v	v	v	v	v	v	v	v	v	v	v	v	v	v
	38	-	-	v	v	v	v	v	v	v	v	v	v	v	v	v	v
	41	-	-	v	v	v	v	v	v	v	v	v	v	v	v	v	v
Peak-to-Average Ratio	7	-	-				v	v	v	v	v			v		v	
	38						v	v	v	v	v			v		v	
	41	-	-				v	v	v	v	v			v		v	
26dB and 99% Bandwidth	7	-	-	v	v	v	v	v	v					v		v	
	41	-	-	v	v	v	v	v	v					v		v	
Conducted Band Edge	7	-	-	v	v	v	v	v	v	v	v	v		v	v		v
	41	-	-	v	v	v	v	v	v	v	v	v		v	v		v
Conducted Spurious Emission	7	-	-	v	v	v	v	v				v			v	v	v
	41	-	-	v	v	v	v	v				v			v	v	v
Frequency Stability	7	-	-		v			v						v		v	
	41	-	-		v			v						v		v	
E.I.R.P	7	-	-	v	v	v	v	v	v	v	v	v	v	v	v	v	v
	38	-	-	v	v	v	v	v	v	v	v	v	v	v	v	v	v
	41	-	-	v	v	v	v	v	v	v	v	v	v	v	v	v	v
Radiated Spurious Emission	7	Worst Case													v	v	v
	41	Worst Case													v	v	v
Note	1. The mark "v " means that this configuration is chosen for testing 2. The mark "- " means that this bandwidth is not supported. 3. 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.																



Test Items	Band	Bandwidth (MHz)										Modulation				RB #			Test Channel		
		20+20	20+15	15+20	20+10	10+20	20+5	5+20	15+15	15+10	10+15	QPSK	16 QAM	64 QAM	256 QAM	1	Half	Full	L	M	H
Max. Output Power	7C_CA	v	v	v	v	v	-	-	v	v	-	v	v	v	v	v		v	v	v	v
	38C_CA	v	-	-	-	-	-	-	v	-	-	v	v	v	v	v		v	v	v	v
26dB and 99% Bandwidth	7C_CA	v	v	v	v	v	-	-	v	v	-	v	v					v		v	
	38C_CA	v	-	-	-	-	-	-	v	-	-	v	v					v		v	
Conducted Band Edge	7C_CA	v	v	v	v	v	-	-	v	v	-	v	v	v	v	v		v	v		v
	38C_CA	v	-	-	-	-	-	-	v	-	-	v	v	v	v	v		v	v		v
Conducted Spurious Emission	7C_CA	v	v	v	v	v	-	-	v	v	-	v				v			v	v	v
	38C_CA	v	-	-	-	-	-	-	v	-	-	v				v			v	v	v
E.I.R.P.	7C_CA	v	v	v	v	v	-	-	v	v	-	v	v	v	v	v		v	v	v	v
	38C_CA	v	-	-	-	-	-	-	v	-	-	v	v	v	v	v		v	v	v	v
Frequency Stability	7C_CA	v						-			-	v						v		v	
	38C_CA	v	-	-	-	-	-	-		-	-	v						v		v	
Radiated Spurious Emission	7C_CA	Worst Case																	v	v	v
	38C_CA	Worst Case																	v	v	v
Note	1. The mark “v ” means that this configuration is chosen for testing 2. The mark “-” means that this bandwidth is not supported. 3. 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.																				

2.2 Connection Diagram of Test System



2.3 Support Unit used in test configuration and system

Item	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	MT8820C	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 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.

Offset = RF cable loss.

Following shows an offset computation example with cable loss 6.0 dB.

Example :

$$\begin{aligned} \text{Offset(dB)} &= \text{RF cable loss(dB)}. \\ &= 6.0 \text{ (dB)} \end{aligned}$$

2.5 Frequency List of Low/Middle/High Channels

LTE Band 7 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
20	Channel	20850	21100	21350
	Frequency	2510	2535	2560
15	Channel	20825	21100	21375
	Frequency	2507.5	2535	2562.5
10	Channel	20800	21100	21400
	Frequency	2505	2535	2565
5	Channel	20775	21100	21425
	Frequency	2502.5	2535	2567.5

LTE Band 38 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
20	Channel	37850	38000	38150
	Frequency	2580	2595	2610
15	Channel	37825	38000	38175
	Frequency	2577.5	2595	2612.5
10	Channel	37800	38000	38200
	Frequency	2575	2595	2615
5	Channel	37775	38000	38225
	Frequency	2572.5	2595	2617.5

LTE Band 41 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
20	Channel	39750	40620	41490
	Frequency	2506	2593	2680
15	Channel	39725	40620	41515
	Frequency	2503.5	2593	2682.5
10	Channel	39700	40620	41540
	Frequency	2501	2593	2685
5	Channel	39675	40620	41565
	Frequency	2498.5	2593	2687.5



LTE Band 7C_CA Channel and Frequency List					
BW [MHz]	Channel/Frequency(MHz)		Lowest	Middle	Highest
20 + 20	PCC	Channel	20850	21001	21152
		Frequency	2510.0	2525.1	2540.2
	SCC	Channel	21048	21199	21350
		Frequency	2529.8	2544.9	2560.0
20 + 15	PCC	Channel	20850	21026	21201
		Frequency	2510.0	2527.6	2545.1
	SCC	Channel	21021	21197	21372
		Frequency	2527.1	2544.7	2562.2
15 + 20	PCC	Channel	20828	21003	21179
		Frequency	2507.8	2525.3	2542.9
	SCC	Channel	20999	21174	21350
		Frequency	2524.9	2542.4	2560.0
20 + 10	PCC	Channel	20850	21051	21251
		Frequency	2510.0	2530.1	2550.1
	SCC	Channel	20994	21195	21395
		Frequency	2524.4	2544.5	2564.5
10 + 20	PCC	Channel	20805	21006	21206
		Frequency	2505.5	2525.6	2545.6
	SCC	Channel	20949	21150	21350
		Frequency	2519.9	2540.0	2560.0
15 + 15	PCC	Channel	20825	21025	21225
		Frequency	2507.5	2527.5	2547.5
	SCC	Channel	20975	21175	21375
		Frequency	2522.5	2542.5	2562.5
15 + 10	PCC	Channel	20825	21051	21277
		Frequency	2507.5	2530.1	2552.7
	SCC	Channel	20945	21171	21397
		Frequency	2519.5	2542.1	2564.7



LTE Band 38C_CA Channel and Frequency List					
BW [MHz]	Channel/Frequency(MHz)		Lowest	Middle	Highest
20 + 20	PCC	Channel	37850	37901	37952
		Frequency	2580.0	2585.1	2590.2
	SCC	Channel	38048	38099	38150
		Frequency	2599.8	2604.9	2610.0
15+ 15	PCC	Channel	37825	37925	38025
		Frequency	2577.5	2587.5	2597.5
	SCC	Channel	37975	38075	38175
		Frequency	2592.5	2602.5	2612.5

3 Conducted Test Items

3.1 Measuring Instruments

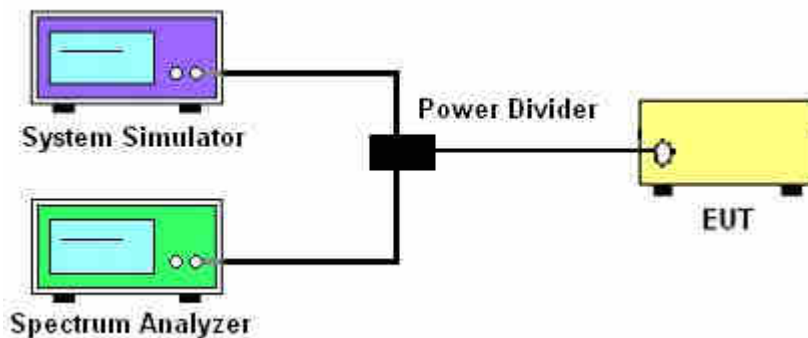
See list of measuring instruments of this test report.

3.2 Test Setup

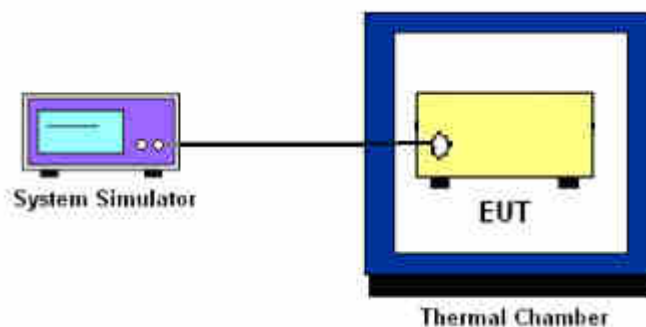
3.2.1 Conducted Output Power



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



3.2.3 Frequency Stability



3.3 Test Result of Conducted Test

Please refer to Appendix A.

3.4 Conducted Output Power and EIRP

3.4.1 Description of the Conducted Output Power Measurement and EIRP 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.

The EIRP of mobile transmitters must not exceed 2 Watts for LTE Band 7 and Band 38 and Band 41.

According to KDB 412172 D01 Power Approach,

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

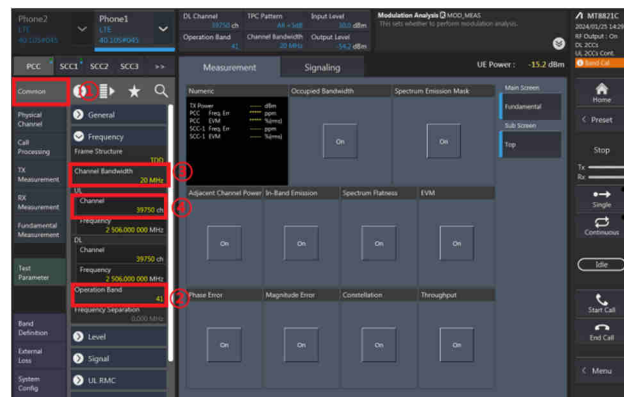
3.4.2 Test Procedures

1. The testing follows ANSI C63.26 Section 5.2
2. The transmitter output port was connected to the system simulator.
3. Set EUT at maximum power through the system simulator.
4. Select lowest, middle, and highest channels for each band and different modulation.
5. Measure and record the power level from the system simulator.

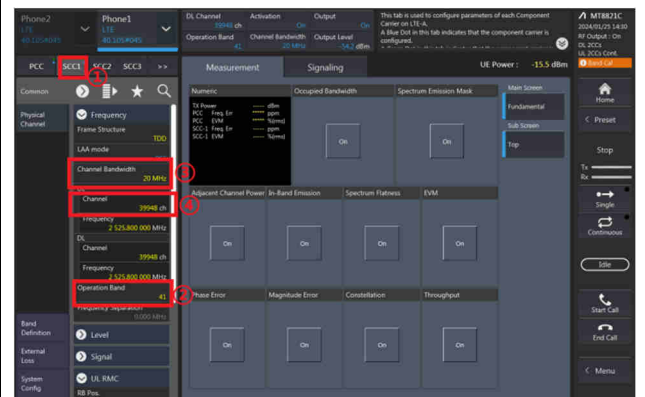
3.4.3 Test Procedures for LTE ULCA

1. The testing follows ANSI C63.26 Section 5.2
2. The transmitter PCC & SCC output ports were connected to the system simulator.
3. Set EUT at maximum power, set the PCC/SCC CA band, channel, bandwidth and RB config.

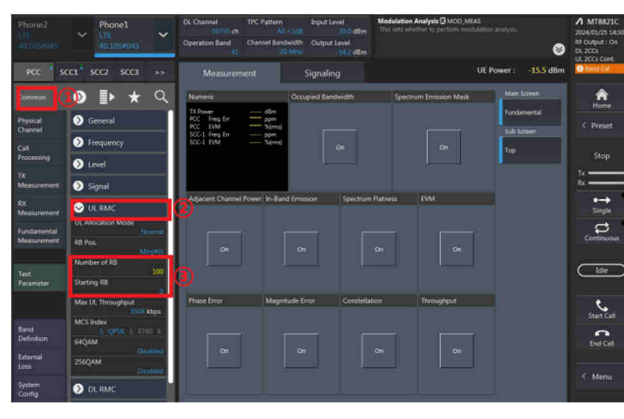
PCC config_ (Channel Bandwidth / Channel / Band)



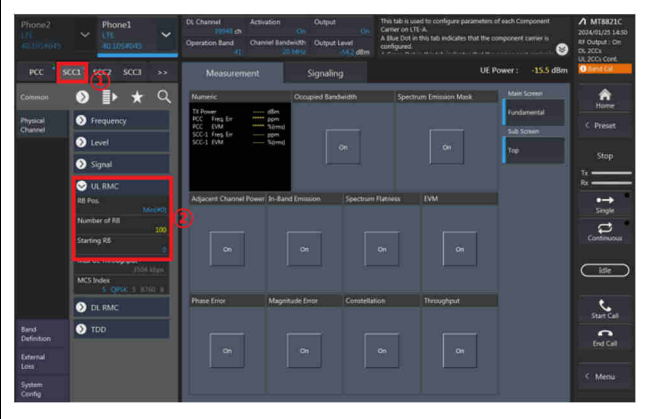
SCC config_ (Channel Bandwidth / Channel / Band)



PCC config_ (Number of RB / Starting RB)

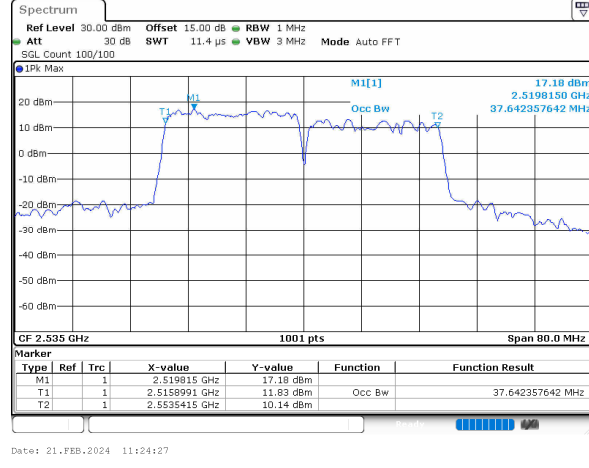


SCC config_ (Number of RB / Starting RB)

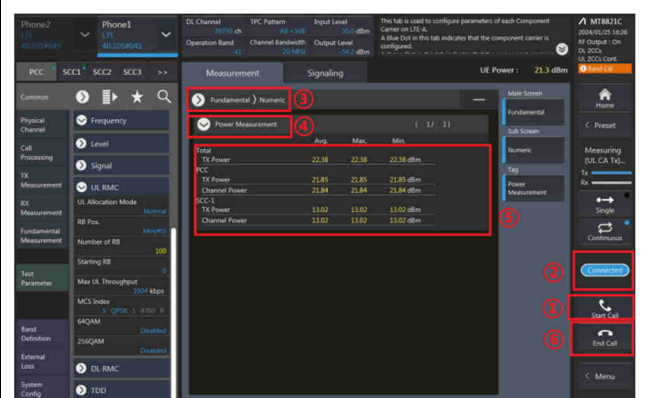


4. Select lowest, middle, and highest channels for each ULCA band and different modulation.
5. Check the ULCA spectrum and record the total power from the system simulator.

Check the ULCA spectrum (eg. 20M+20M)



Read the Total UL CA output power (PCC+SCC)



3.5 Peak-to-Average Ratio

3.5.1 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.

3.5.2 Test Procedures

1. The testing follows ANSI C63.26 Section 5.2.3.4 (CCDF).
2. The EUT was connected to spectrum and system simulator via a power divider.
3. Set the CCDF (Complementary Cumulative Distribution Function) option in spectrum analyzer.
4. The highest RF powers were measured and recorded the maximum PAPR level associated with a probability of 0.1 %.
5. Record the deviation as Peak to Average Ratio.

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

1. The testing follows ANSI C63.26 Section 5.4
2. The EUT was connected to spectrum analyzer and system simulator via a power divider.
3. 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.
4. 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.
5. Set the detection mode to peak, and the trace mode to max hold.
6. 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)
7. Determine the “-26 dB down amplitude” as equal to (Reference Value – X).
8. 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.
9. 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

27.53(m)(4)

For mobile digital stations, the attenuation factor shall be not less than $40 + 10 \log (P)$ dB on all frequencies between the channel edge and 5 megahertz from the channel edge, $43 + 10 \log (P)$ dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and $55 + 10 \log (P)$ dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less than $43 + 10 \log (P)$ dB on all frequencies between 2490.5 MHz and 2496 MHz and $55 + 10 \log (P)$ dB at or below 2490.5 MHz. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees.

3.7.2 Test Procedures

1. The testing follows ANSI C63.26 section 5.7
2. The EUT was connected to spectrum analyzer and system simulator via a power divider.
3. The band edges of low and high channels for the highest RF powers were measured.
4. Set RBW $\geq 1\%/2\%$ EBW in the 1MHz band immediately outside and adjacent to the band edge.
5. Beyond the 1 MHz band from the band edge, RBW=1MHz was used or a narrower RBW was used and the measured power was integrated over the full required measurement bandwidth of 1 MHz.
6. Set spectrum analyzer with RMS detector.
7. Offset has included the duty factor for LTE Band 41. Duty factor $= 10 \log (1/x)$, where x is the measured duty cycle
8. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
9. Checked that all the results comply with the emission limit line.
10. For LTE Band 7, 38, 41, the other 40 dB, and 55 dB have additionally applied same calculation above.
11. When using the integration method, the starting frequency of the integration shall be centered at one-half of the RBW away from the band edge.

3.8 Conducted Spurious Emission

3.8.1 Description of Conducted Spurious Emission Measurement

For Band 7,38,41:

The power of any emission outside of the authorized operating frequency ranges must be lower than the transmitter power (P) by a factor of at least $55 + 10 \log (P)$ dB.

It is measured by means of a calibrated spectrum analyzer and scanned from 30 MHz up to a frequency including its 10th harmonic.

3.8.2 Test Procedures

1. The testing follows ANSI C63.26 section 5.7
2. The EUT was connected to spectrum analyzer and system simulator via a power divider.
3. 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.
4. The middle channel for the highest RF power within the transmitting frequency was measured.
5. The conducted spurious emission for the whole frequency range was taken.
6. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz.
7. Set spectrum analyzer with RMS detector.
8. Offset has included the duty factor for LTE Band 41. Duty factor = $10 \log (1/x)$, where x is the measured duty cycle
9. Taking the record of maximum spurious emission.
10. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
11. For Band 7, 38, 41

The limit line is derived from $55 + 10 \log(P)$ dB below the transmitter power P(Watts)

= $P(W) - [55 + 10 \log(P)]$ (dB)

= $[30 + 10 \log(P)]$ (dBm) - $[55 + 10 \log(P)]$ (dB)

= -25dBm.

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

1. The testing follows ANSI C63.26 section 5.6.4
2. The EUT was set up in the thermal chamber and connected with the system simulator.
3. 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.
4. 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

1. The testing follows ANSI C63.26 section 5.6.5
2. The EUT was placed in a temperature chamber at 20±5°C and connected with the system simulator.
3. The power supply voltage to the EUT was varied from 85% to 115% of the nominal value for other than hand carried battery equipment.
4. For hand carried, battery powered equipment, reduce the primary ac or dc supply voltage to the battery operating end point, which shall be specified by the manufacturer.
5. The variation in frequency was measured for the worst case.

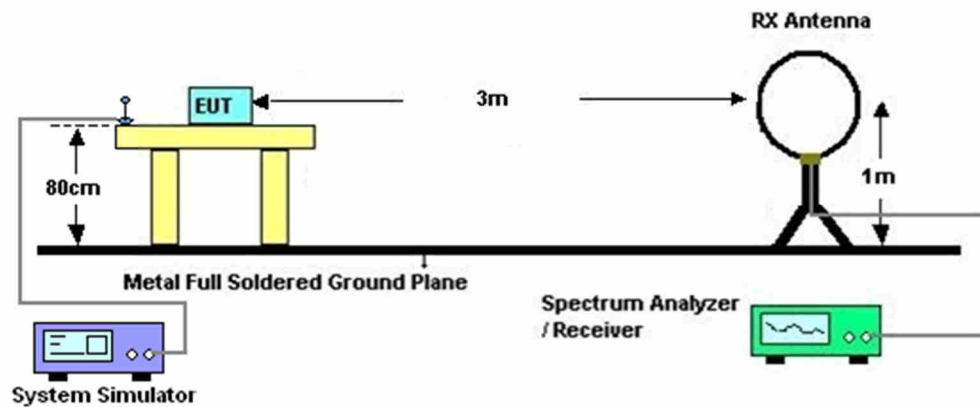
4 Radiated Test Items

4.1 Measuring Instruments

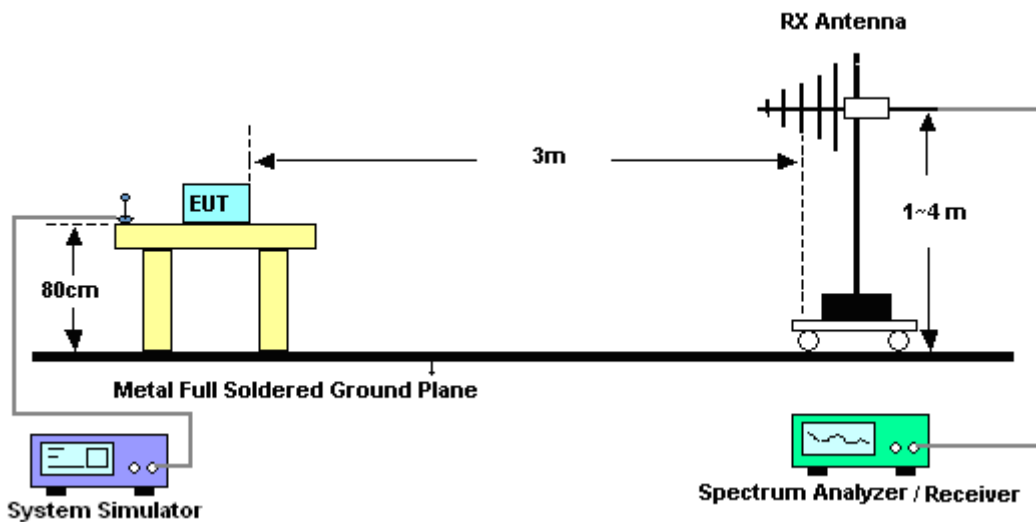
See list of measuring instruments of this test report.

4.2 Test Setup

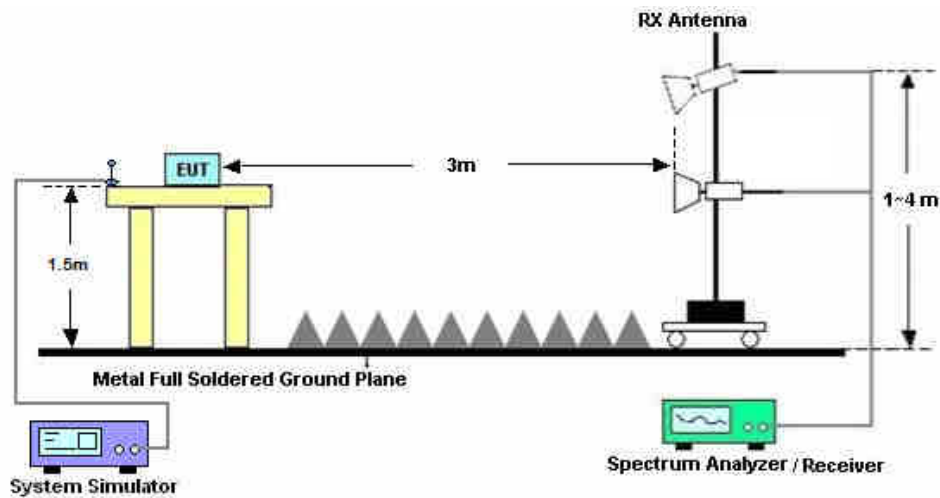
4.2.1 For radiated test below 30MHz



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

The radiated spurious emission was measured by substitution method according to ANSI C63.26.

For Band 7, 38, 41

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 $55 + 10 \log (P)$ dB.

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

4.4.2 Test Procedures

1. The testing follows ANSI C63.26 Section 5.5
2. 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.
3. The EUT was set 3 meters from the receiving antenna mounted on the antenna tower.
4. The table was rotated 360 degrees to determine the position of the highest spurious emission.
5. The height of the receiving antenna is varied between 1m to 4m to search the maximum spurious emission for both horizontal and vertical polarizations.
6. During the measurement, the system simulator parameters were set to force the EUT transmitting at maximum output power.
7. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking the record of maximum spurious emission.
8. A horn antenna was substituted in place of the EUT and was driven by a signal generator.
9. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
10. $EIRP \text{ (dBm)} = S.G. \text{ Power} - Tx \text{ Cable Loss} + Tx \text{ Antenna Gain}$
11. $ERP \text{ (dBm)} = EIRP - 2.15$
12. For Band 7, 38, 41:

The limit line is derived from $55 + 10\log(P)$ dB below the transmitter power P(Watts)



5 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	R&S	FSV40	101040	10Hz~40GHz	Oct. 10, 2024	Nov. 07, 2024~ Apr. 17, 2025	Oct. 09, 2025	Conducted (TH01-KS)
Power divider	STI	STI08-0055	-	0.5~40GHz	NCR	Nov. 07, 2024~ Apr. 17, 2025	NCR	Conducted (TH01-KS)
Temperature & humidity chamber	Hongzhan	LP-150U	H2014011440	-40~+150°C 20%~95%RH	Jul. 04, 2024	Nov. 07, 2024~ Apr. 17, 2025	Jul. 03, 2025	Conducted (TH01-KS)
EXA Spectrum Analyzer	KEYSIGHT	N9010A	MY55150213	10Hz~44GHz	Jul. 03, 2024	Jan. 24, 2025	Jul. 02, 2025	Radiation (03CH01-SZ)
Loop Antenna	R&S	HFH2-Z2E	101141	9kHz~30MHz	Dec. 28, 2024	Jan. 24, 2025	Dec. 27, 2025	Radiation (03CH01-SZ)
HF Amplifier	KEYSIGHT	83017A	MY53270105	0.5GHz~26.5Ghz	Oct. 14, 2024	Jan. 24, 2025	Oct. 13, 2025	Radiation (03CH01-SZ)
Bilog Antenna	TeseQ	CBL6112D	35407	30MHz-2GHz	Oct. 24, 2023	Jan. 24, 2025	Oct. 23, 2025	Radiation (03CH01-SZ)
Double Ridge Horn Antenna	ETS-Lindgren	3117	00119436	1GHz~18GHz	Jul. 04, 2024	Jan. 24, 2025	Jul. 03, 2025	Radiation (03CH01-SZ)
SHF-EHF Horn	com-power	AH-840	101071	18Ghz-40GHz	Apr. 09, 2024	Jan. 24, 2025	Apr. 08, 2025	Radiation (03CH01-SZ)
LF Amplifier	EM Electronics	EM330	060788	20MHz-3GHz	Dec. 25, 2024	Jan. 24, 2025	Dec. 24, 2025	Radiation (03CH01-SZ)
HF Amplifier	MITEQ	AMF-7D-00 101800-30-1 0P-R	1943528	1GHz~18GHz	Oct. 14, 2024	Jan. 24, 2025	Oct. 13, 2025	Radiation (03CH01-SZ)
HF Amplifier	MITEQ	TTA1840-35 -HG	1871923	18GHz~40GHz	Jul. 03, 2024	Jan. 24, 2025	Jul. 02, 2025	Radiation (03CH01-SZ)
AC Power Source	Chroma	61601	61601000198 5	N/A	Oct. 14, 2024	Jan. 24, 2025	Oct. 13, 2025	Radiation (03CH01-SZ)
Turn Table	EM	EM1000	N/A	0~360 degree	NCR	Jan. 24, 2025	NCR	Radiation (03CH01-SZ)
Antenna Mast	EM	EM1000	N/A	1 m~4 m	NCR	Jan. 24, 2025	NCR	Radiation (03CH01-SZ)

NCR: No Calibration Required

6 Measurement Uncertainty

The measurement uncertainties shown below were calculated in accordance with the requirements of ANSI 63.26-2015. All the measurement uncertainty value were shown with a coverage K=2 to indicate 95% level of confidence. The measurement data show herein meets or exceeds the CISPR measurement uncertainty values specified in CISPR 16-4-2 and can be compared directly to specified limit to determine compliance.

Uncertainty of Conducted Measurement

Test Item	Uncertainty
Conducted Spurious Emission & Bandedge	± 2.22 dB
Occupied Channel Bandwidth	$\pm 0.1\%$
Conducted Power	± 0.50 dB
Peak to Average Ratio	± 0.50 dB
Frequency Stability	± 0.04 ppm

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	2.48 dB
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Uncertainty of Radiated Emission Measurement (1 GHz ~ 18 GHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	3.53 dB
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Uncertainty of Radiated Emission Measurement (18 GHz ~ 40 GHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	4.02 dB
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----- THE END -----



Appendix A. Test Results of Conducted Test

Test Engineer :	Smile Wang	Temperature :	22~23℃
		Relative Humidity :	40~42%

Conducted Output Power(Average power) and EIRP

LTE Band7_Ant 5:

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	EIRP	EIRP	EIRP
Channel				20850	21100	21350	20850	21100	21350
Frequency (MHz)				2510	2535	2560	2510	2535	2560
20	QPSK	1	0	24.13	24.24	24.00	0.3664	0.3758	0.3556
20	QPSK	1	49	24.21	24.07	23.93	0.3733	0.3614	0.3499
20	QPSK	1	99	24.00	24.09	23.84	0.3556	0.3631	0.3428
20	QPSK	50	0	23.15	23.24	22.96	0.2924	0.2985	0.2799
20	QPSK	50	24	23.12	23.17	22.99	0.2904	0.2938	0.2818
20	QPSK	50	50	23.12	23.22	23.00	0.2904	0.2972	0.2825
20	QPSK	100	0	23.15	23.16	22.93	0.2924	0.2931	0.2780
20	16QAM	1	0	22.99	23.16	23.04	0.2818	0.2931	0.2851
20	16QAM	1	49	23.10	23.17	22.93	0.2891	0.2938	0.2780
20	16QAM	1	99	23.16	23.05	23.10	0.2931	0.2858	0.2891
20	16QAM	50	0	21.85	21.73	21.63	0.2168	0.2109	0.2061
20	16QAM	50	24	21.74	21.93	21.61	0.2113	0.2208	0.2051
20	16QAM	50	50	21.87	21.73	21.61	0.2178	0.2109	0.2051
20	16QAM	100	0	21.94	21.74	21.82	0.2213	0.2113	0.2153
20	64QAM	1	0	21.72	21.82	21.63	0.2104	0.2153	0.2061
20	64QAM	1	49	21.91	21.90	21.68	0.2198	0.2193	0.2084
20	64QAM	1	99	21.76	21.89	21.67	0.2123	0.2188	0.2080
20	64QAM	50	0	20.96	20.97	20.76	0.1766	0.1770	0.1687
20	64QAM	50	24	20.93	20.93	20.75	0.1754	0.1754	0.1683
20	64QAM	50	50	21.01	20.97	20.86	0.1786	0.1770	0.1726
20	64QAM	100	0	21.00	21.00	20.80	0.1782	0.1782	0.1702
20	256QAM	1	0	18.80	19.12	18.82	0.1074	0.1156	0.1079
20	256QAM	1	49	18.99	18.98	18.72	0.1122	0.1119	0.1054
20	256QAM	1	99	18.83	19.05	18.84	0.1081	0.1138	0.1084
20	256QAM	50	0	18.87	18.99	18.88	0.1091	0.1122	0.1094
20	256QAM	50	24	18.96	19.04	18.85	0.1114	0.1135	0.1086
20	256QAM	50	50	18.80	19.04	18.91	0.1074	0.1135	0.1102
20	256QAM	100	0	18.77	18.95	18.90	0.1067	0.1112	0.1099
Channel				20825	21100	21375	20825	21100	21375
Frequency (MHz)				2507.5	2535	2562.5	2507.5	2535	2562.5



15	QPSK	1	0	24.12	24.20	23.81	0.3656	0.3724	0.3404
15	QPSK	1	37	24.00	23.92	23.93	0.3556	0.3491	0.3499
15	QPSK	1	74	23.85	23.92	23.72	0.3436	0.3491	0.3334
15	QPSK	36	0	23.11	23.15	22.90	0.2897	0.2924	0.2761
15	QPSK	36	20	22.97	23.01	22.98	0.2805	0.2831	0.2812
15	QPSK	36	39	22.95	23.11	22.80	0.2793	0.2897	0.2698
15	QPSK	75	0	23.14	23.00	22.72	0.2917	0.2825	0.2649
15	16QAM	1	0	22.89	23.04	22.91	0.2754	0.2851	0.2767
15	16QAM	1	37	22.91	23.00	22.95	0.2767	0.2825	0.2793
15	16QAM	1	74	23.11	22.99	23.02	0.2897	0.2818	0.2838
15	16QAM	36	0	21.68	21.60	21.60	0.2084	0.2046	0.2046
15	16QAM	36	20	21.75	21.72	21.40	0.2118	0.2104	0.1954
15	16QAM	36	39	21.73	21.59	21.61	0.2109	0.2042	0.2051
15	16QAM	75	0	21.96	21.58	21.78	0.2223	0.2037	0.2133
15	64QAM	1	0	21.70	21.79	21.58	0.2094	0.2138	0.2037
15	64QAM	1	37	21.71	21.83	21.54	0.2099	0.2158	0.2018
15	64QAM	1	74	21.68	21.83	21.67	0.2084	0.2158	0.2080
15	64QAM	36	0	20.97	20.87	20.66	0.1770	0.1730	0.1648
15	64QAM	36	20	20.89	20.91	20.74	0.1738	0.1746	0.1679
15	64QAM	36	39	20.96	20.96	20.69	0.1766	0.1766	0.1660
15	64QAM	75	0	20.86	20.96	20.70	0.1726	0.1766	0.1663
15	256QAM	1	0	18.77	19.10	18.75	0.1067	0.1151	0.1062
15	256QAM	1	37	18.96	18.86	18.63	0.1114	0.1089	0.1033
15	256QAM	1	74	18.71	18.98	18.81	0.1052	0.1119	0.1076
15	256QAM	36	0	18.82	18.88	18.75	0.1079	0.1094	0.1062
15	256QAM	36	20	18.96	18.85	18.74	0.1114	0.1086	0.1059
15	256QAM	36	39	18.76	19.04	18.79	0.1064	0.1135	0.1072
15	256QAM	75	0	18.71	18.95	18.77	0.1052	0.1112	0.1067
Channel				20800	21100	21400	20800	21100	21400
Frequency (MHz)				2505	2535	2565	2505	2535	2565
10	QPSK	1	0	24.00	24.04	23.92	0.3556	0.3589	0.3491
10	QPSK	1	25	24.19	23.91	23.87	0.3715	0.3483	0.3451
10	QPSK	1	49	24.00	23.93	23.81	0.3556	0.3499	0.3404
10	QPSK	25	0	22.93	23.15	22.74	0.2780	0.2924	0.2661
10	QPSK	25	12	22.95	23.05	22.94	0.2793	0.2858	0.2786
10	QPSK	25	25	23.02	23.05	22.88	0.2838	0.2858	0.2748
10	QPSK	50	0	23.10	23.07	22.77	0.2891	0.2871	0.2679
10	16QAM	1	0	22.80	23.05	23.03	0.2698	0.2858	0.2844
10	16QAM	1	25	23.05	23.04	22.94	0.2858	0.2851	0.2786
10	16QAM	1	49	23.01	22.98	23.09	0.2831	0.2812	0.2884
10	16QAM	25	0	21.73	21.65	21.53	0.2109	0.2070	0.2014
10	16QAM	25	12	21.53	21.88	21.46	0.2014	0.2183	0.1982
10	16QAM	25	25	21.86	21.72	21.61	0.2173	0.2104	0.2051
10	16QAM	50	0	21.91	21.53	21.73	0.2198	0.2014	0.2109
10	64QAM	1	0	21.59	21.75	21.59	0.2042	0.2118	0.2042



10	64QAM	1	25	21.81	21.85	21.66	0.2148	0.2168	0.2075
10	64QAM	1	49	21.58	21.82	21.62	0.2037	0.2153	0.2056
10	64QAM	25	0	20.89	20.94	20.66	0.1738	0.1758	0.1648
10	64QAM	25	12	20.78	20.71	20.53	0.1694	0.1667	0.1600
10	64QAM	25	25	20.86	20.76	20.73	0.1726	0.1687	0.1675
10	64QAM	50	0	20.91	20.88	20.59	0.1746	0.1734	0.1622
10	256QAM	1	0	18.73	19.02	18.83	0.1057	0.1130	0.1081
10	256QAM	1	25	18.94	18.86	18.71	0.1109	0.1089	0.1052
10	256QAM	1	49	18.73	18.95	18.76	0.1057	0.1112	0.1064
10	256QAM	25	0	18.67	18.93	18.88	0.1042	0.1107	0.1094
10	256QAM	25	12	18.87	18.87	18.65	0.1091	0.1091	0.1038
10	256QAM	25	25	18.66	18.82	18.91	0.1040	0.1079	0.1102
10	256QAM	50	0	18.71	18.88	18.77	0.1052	0.1094	0.1067
Channel				20775	21100	21425	20775	21100	21425
Frequency (MHz)				2502.5	2535	2567.5	2502.5	2535	2567.5
5	QPSK	1	0	24.05	24.20	23.83	0.3597	0.3724	0.3420
5	QPSK	1	12	24.23	23.86	23.81	0.3750	0.3443	0.3404
5	QPSK	1	24	23.99	23.92	23.67	0.3548	0.3491	0.3296
5	QPSK	12	0	22.95	23.09	22.80	0.2793	0.2884	0.2698
5	QPSK	12	7	22.96	23.14	22.88	0.2799	0.2917	0.2748
5	QPSK	12	13	22.95	23.15	22.78	0.2793	0.2924	0.2685
5	QPSK	25	0	23.12	22.98	22.94	0.2904	0.2812	0.2786
5	16QAM	1	0	22.88	23.15	22.98	0.2748	0.2924	0.2812
5	16QAM	1	12	22.91	23.06	22.82	0.2767	0.2864	0.2710
5	16QAM	1	24	23.08	22.89	23.05	0.2877	0.2754	0.2858
5	16QAM	12	0	21.68	21.51	21.58	0.2084	0.2004	0.2037
5	16QAM	12	7	21.67	21.86	21.53	0.2080	0.2173	0.2014
5	16QAM	12	13	21.74	21.59	21.41	0.2113	0.2042	0.1959
5	16QAM	25	0	21.93	21.63	21.63	0.2208	0.2061	0.2061
5	64QAM	1	0	21.70	21.73	21.61	0.2094	0.2109	0.2051
5	64QAM	1	12	21.82	21.81	21.53	0.2153	0.2148	0.2014
5	64QAM	1	24	21.60	21.91	21.51	0.2046	0.2198	0.2004
5	64QAM	12	0	20.84	20.97	20.78	0.1718	0.1770	0.1694
5	64QAM	12	7	20.72	20.88	20.57	0.1671	0.1734	0.1614
5	64QAM	12	13	20.99	20.98	20.70	0.1778	0.1774	0.1663
5	64QAM	25	0	20.99	21.01	20.60	0.1778	0.1786	0.1626
5	256QAM	1	0	18.62	18.95	18.81	0.1030	0.1112	0.1076
5	256QAM	1	12	18.86	18.84	18.52	0.1089	0.1084	0.1007
5	256QAM	1	24	18.67	18.89	18.79	0.1042	0.1096	0.1072
5	256QAM	12	0	18.87	18.79	18.90	0.1091	0.1072	0.1099
5	256QAM	12	7	18.79	18.86	18.81	0.1072	0.1089	0.1076
5	256QAM	12	13	18.81	18.97	18.90	0.1076	0.1117	0.1099
5	256QAM	25	0	18.68	18.94	18.72	0.1045	0.1109	0.1054



LTE Band38_Ant 2:

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	EIRP	EIRP	EIRP
Channel				37850	38000	38150	37850	38000	38150
Frequency (MHz)				2580	2595	2610	2580	2595	2610
20	QPSK	1	0	23.67	23.74	23.63	0.1549	0.1574	0.1535
20	QPSK	1	49	23.67	23.68	23.63	0.1549	0.1552	0.1535
20	QPSK	1	99	23.70	23.72	23.63	0.1560	0.1567	0.1535
20	QPSK	50	0	22.63	22.71	22.63	0.1219	0.1242	0.1219
20	QPSK	50	24	22.61	22.59	22.61	0.1213	0.1208	0.1213
20	QPSK	50	50	22.60	22.59	22.64	0.1211	0.1208	0.1222
20	QPSK	100	0	22.51	22.59	22.54	0.1186	0.1208	0.1194
20	16QAM	1	0	22.56	22.66	22.59	0.1199	0.1227	0.1208
20	16QAM	1	49	22.59	22.54	22.56	0.1208	0.1194	0.1199
20	16QAM	1	99	22.58	22.56	22.57	0.1205	0.1199	0.1202
20	16QAM	50	0	21.65	21.74	21.62	0.0973	0.0993	0.0966
20	16QAM	50	24	21.65	21.63	21.66	0.0973	0.0968	0.0975
20	16QAM	50	50	21.64	21.61	21.67	0.0971	0.0964	0.0977
20	16QAM	100	0	21.64	21.77	21.64	0.0971	0.1000	0.0971
20	64QAM	1	0	21.68	21.81	21.70	0.0979	0.1009	0.0984
20	64QAM	1	49	21.73	21.72	21.68	0.0991	0.0989	0.0979
20	64QAM	1	99	21.70	21.72	21.71	0.0984	0.0989	0.0986
20	64QAM	50	0	20.58	20.69	20.61	0.0760	0.0780	0.0766
20	64QAM	50	24	20.61	20.61	20.60	0.0766	0.0766	0.0764
20	64QAM	50	50	20.59	20.56	20.60	0.0762	0.0757	0.0764
20	64QAM	100	0	20.57	20.75	20.56	0.0759	0.0791	0.0757
20	256QAM	1	0	18.57	18.56	18.57	0.0479	0.0478	0.0479
20	256QAM	1	49	18.54	18.54	18.54	0.0475	0.0475	0.0475
20	256QAM	1	99	18.53	18.56	18.57	0.0474	0.0478	0.0479
20	256QAM	50	0	18.57	18.55	18.54	0.0479	0.0476	0.0475
20	256QAM	50	24	18.57	18.54	18.57	0.0479	0.0475	0.0479
20	256QAM	50	50	18.56	18.56	18.55	0.0478	0.0478	0.0476
20	256QAM	100	0	18.53	18.55	18.57	0.0474	0.0476	0.0479
Channel				37825	38000	38175	37825	38000	38175
Frequency (MHz)				2577.5	2595	2612.5	2577.5	2595	2612.5
15	QPSK	1	0	23.57	23.67	23.55	0.1514	0.1549	0.1507
15	QPSK	1	37	23.58	23.58	23.53	0.1517	0.1517	0.1500
15	QPSK	1	74	23.60	23.61	23.55	0.1524	0.1528	0.1507
15	QPSK	36	0	22.51	22.60	22.50	0.1186	0.1211	0.1183
15	QPSK	36	20	22.49	22.50	22.50	0.1180	0.1183	0.1183
15	QPSK	36	39	22.51	22.47	22.53	0.1186	0.1175	0.1191
15	QPSK	75	0	22.42	22.48	22.45	0.1161	0.1178	0.1169
15	16QAM	1	0	22.44	22.53	22.46	0.1167	0.1191	0.1172
15	16QAM	1	37	22.48	22.42	22.47	0.1178	0.1161	0.1175



15	16QAM	1	74	22.46	22.47	22.47	0.1172	0.1175	0.1175
15	16QAM	36	0	21.56	21.66	21.54	0.0953	0.0975	0.0948
15	16QAM	36	20	21.54	21.52	21.57	0.0948	0.0944	0.0955
15	16QAM	36	39	21.56	21.49	21.57	0.0953	0.0938	0.0955
15	16QAM	75	0	21.55	21.66	21.52	0.0951	0.0975	0.0944
15	64QAM	1	0	21.60	21.72	21.62	0.0962	0.0989	0.0966
15	64QAM	1	37	21.61	21.62	21.57	0.0964	0.0966	0.0955
15	64QAM	1	74	21.63	21.61	21.61	0.0968	0.0964	0.0964
15	64QAM	36	0	20.48	20.61	20.53	0.0743	0.0766	0.0752
15	64QAM	36	20	20.53	20.54	20.52	0.0752	0.0753	0.0750
15	64QAM	36	39	20.47	20.45	20.47	0.0741	0.0738	0.0741
15	64QAM	75	0	20.48	20.63	20.46	0.0743	0.0769	0.0740
15	256QAM	1	0	18.48	18.45	18.47	0.0469	0.0466	0.0468
15	256QAM	1	37	18.44	18.43	18.46	0.0465	0.0463	0.0467
15	256QAM	1	74	18.45	18.49	18.47	0.0466	0.0470	0.0468
15	256QAM	36	0	18.48	18.46	18.45	0.0469	0.0467	0.0466
15	256QAM	36	20	18.46	18.44	18.50	0.0467	0.0465	0.0471
15	256QAM	36	39	18.47	18.45	18.44	0.0468	0.0466	0.0465
15	256QAM	75	0	18.45	18.46	18.44	0.0466	0.0467	0.0465
Channel				37800	38000	38200	37800	38000	38200
Frequency (MHz)				2575	2595	2615	2575	2595	2615
10	QPSK	1	0	23.59	23.66	23.50	0.1521	0.1545	0.1489
10	QPSK	1	25	23.54	23.58	23.54	0.1503	0.1517	0.1503
10	QPSK	1	49	23.63	23.62	23.52	0.1535	0.1531	0.1496
10	QPSK	25	0	22.54	22.60	22.50	0.1194	0.1211	0.1183
10	QPSK	25	12	22.52	22.49	22.50	0.1189	0.1180	0.1183
10	QPSK	25	25	22.48	22.48	22.55	0.1178	0.1178	0.1197
10	QPSK	50	0	22.41	22.50	22.42	0.1159	0.1183	0.1161
10	16QAM	1	0	22.46	22.53	22.49	0.1172	0.1191	0.1180
10	16QAM	1	25	22.47	22.45	22.48	0.1175	0.1169	0.1178
10	16QAM	1	49	22.50	22.45	22.48	0.1183	0.1169	0.1178
10	16QAM	25	0	21.53	21.61	21.51	0.0946	0.0964	0.0942
10	16QAM	25	12	21.55	21.55	21.56	0.0951	0.0951	0.0953
10	16QAM	25	25	21.53	21.54	21.59	0.0946	0.0948	0.0959
10	16QAM	50	0	21.53	21.65	21.55	0.0946	0.0973	0.0951
10	64QAM	1	0	21.57	21.73	21.62	0.0955	0.0991	0.0966
10	64QAM	1	25	21.66	21.65	21.57	0.0975	0.0973	0.0955
10	64QAM	1	49	21.62	21.62	21.62	0.0966	0.0966	0.0966
10	64QAM	25	0	20.48	20.60	20.51	0.0743	0.0764	0.0748
10	64QAM	25	12	20.48	20.50	20.49	0.0743	0.0746	0.0745
10	64QAM	25	25	20.46	20.46	20.52	0.0740	0.0740	0.0750
10	64QAM	50	0	20.45	20.62	20.45	0.0738	0.0767	0.0738
10	256QAM	1	0	18.49	18.46	18.47	0.0470	0.0467	0.0468
10	256QAM	1	25	18.44	18.45	18.45	0.0465	0.0466	0.0466
10	256QAM	1	49	18.44	18.45	18.48	0.0465	0.0466	0.0469



10	256QAM	25	0	18.49	18.43	18.42	0.0470	0.0463	0.0462
10	256QAM	25	12	18.48	18.44	18.44	0.0469	0.0465	0.0465
10	256QAM	25	25	18.49	18.44	18.42	0.0470	0.0465	0.0462
10	256QAM	50	0	18.46	18.46	18.49	0.0467	0.0467	0.0470
Channel				37775	38000	38225	37775	38000	38225
Frequency (MHz)				2572.5	2595	2617.5	2572.5	2595	2617.5
5	QPSK	1	0	23.59	23.63	23.53	0.1521	0.1535	0.1500
5	QPSK	1	12	23.57	23.56	23.51	0.1514	0.1510	0.1493
5	QPSK	1	24	23.62	23.64	23.53	0.1531	0.1538	0.1500
5	QPSK	12	0	22.52	22.62	22.53	0.1189	0.1216	0.1191
5	QPSK	12	7	22.51	22.51	22.52	0.1186	0.1186	0.1189
5	QPSK	12	13	22.51	22.49	22.55	0.1186	0.1180	0.1197
5	QPSK	25	0	22.42	22.46	22.44	0.1161	0.1172	0.1167
5	16QAM	1	0	22.44	22.56	22.51	0.1167	0.1199	0.1186
5	16QAM	1	12	22.51	22.47	22.44	0.1186	0.1175	0.1167
5	16QAM	1	24	22.45	22.45	22.46	0.1169	0.1169	0.1172
5	16QAM	12	0	21.53	21.67	21.51	0.0946	0.0977	0.0942
5	16QAM	12	7	21.56	21.56	21.57	0.0953	0.0953	0.0955
5	16QAM	12	13	21.56	21.49	21.56	0.0953	0.0938	0.0953
5	16QAM	25	0	21.51	21.68	21.56	0.0942	0.0979	0.0953
5	64QAM	1	0	21.56	21.69	21.61	0.0953	0.0982	0.0964
5	64QAM	1	12	21.61	21.62	21.58	0.0964	0.0966	0.0957
5	64QAM	1	24	21.61	21.63	21.60	0.0964	0.0968	0.0962
5	64QAM	12	0	20.50	20.60	20.49	0.0746	0.0764	0.0745
5	64QAM	12	7	20.50	20.52	20.47	0.0746	0.0750	0.0741
5	64QAM	12	13	20.49	20.43	20.48	0.0745	0.0735	0.0743
5	64QAM	25	0	20.48	20.66	20.47	0.0743	0.0774	0.0741
5	256QAM	1	0	18.49	18.46	18.45	0.0470	0.0467	0.0466
5	256QAM	1	12	18.44	18.45	18.46	0.0465	0.0466	0.0467
5	256QAM	1	24	18.41	18.47	18.48	0.0461	0.0468	0.0469
5	256QAM	12	0	18.49	18.48	18.43	0.0470	0.0469	0.0463
5	256QAM	12	7	18.45	18.44	18.48	0.0466	0.0465	0.0469
5	256QAM	12	13	18.44	18.47	18.42	0.0465	0.0468	0.0462
5	256QAM	25	0	18.43	18.44	18.48	0.0463	0.0465	0.0469



LTE Band41_Ant 2:

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	EIRP	EIRP	EIRP
Channel				39750	40620	41490	39750	40620	41490
Frequency (MHz)				2506	2593	2680	2506	2593	2680
20	QPSK	1	0	25.79	25.94	25.73	0.2636	0.2767	0.2636
20	QPSK	1	49	25.67	25.86	25.60	0.2559	0.2716	0.2559
20	QPSK	1	99	25.68	25.86	25.66	0.2594	0.2716	0.2594
20	QPSK	50	0	24.67	24.74	24.66	0.2061	0.2099	0.2061
20	QPSK	50	24	24.67	24.63	24.65	0.2056	0.2046	0.2056
20	QPSK	50	50	24.61	24.66	24.67	0.2065	0.2061	0.2065
20	QPSK	100	0	24.65	24.81	24.66	0.2061	0.2133	0.2061
20	16QAM	1	0	24.94	25.04	24.93	0.2193	0.2249	0.2193
20	16QAM	1	49	24.94	24.97	24.96	0.2208	0.2213	0.2208
20	16QAM	1	99	24.93	24.95	24.93	0.2193	0.2203	0.2193
20	16QAM	50	0	23.66	23.79	23.66	0.1637	0.1687	0.1637
20	16QAM	50	24	23.70	23.68	23.71	0.1656	0.1644	0.1656
20	16QAM	50	50	23.68	23.71	23.68	0.1644	0.1656	0.1644
20	16QAM	100	0	23.71	23.85	23.70	0.1652	0.1710	0.1652
20	64QAM	1	0	24.01	24.12	24.01	0.1774	0.1820	0.1774
20	64QAM	1	49	24.00	24.03	24.03	0.1782	0.1782	0.1782
20	64QAM	1	99	23.99	24.04	24.02	0.1778	0.1786	0.1778
20	64QAM	50	0	22.66	22.78	22.66	0.1300	0.1337	0.1300
20	64QAM	50	24	22.70	22.68	22.66	0.1300	0.1306	0.1300
20	64QAM	50	50	22.70	22.65	22.67	0.1303	0.1297	0.1303
20	64QAM	100	0	22.66	22.84	22.70	0.1312	0.1355	0.1312
20	256QAM	1	0	20.79	20.77	20.78	0.0843	0.0841	0.0843
20	256QAM	1	49	20.76	20.79	20.78	0.0843	0.0845	0.0843
20	256QAM	1	99	20.76	20.76	20.77	0.0841	0.0839	0.0841
20	256QAM	50	0	20.79	20.78	20.80	0.0847	0.0843	0.0847
20	256QAM	50	24	20.75	20.80	20.79	0.0845	0.0847	0.0845
20	256QAM	50	50	20.79	20.80	20.75	0.0838	0.0847	0.0838
20	256QAM	100	0	20.75	20.79	20.78	0.0843	0.0845	0.0843
Channel				39725	40620	41515	39725	40620	41515
Frequency (MHz)				2503.5	2593	2682.5	2503.5	2593	2682.5
15	QPSK	1	0	25.70	25.87	25.61	0.2564	0.2723	0.2564
15	QPSK	1	37	25.57	25.75	25.52	0.2512	0.2649	0.2512
15	QPSK	1	74	25.60	25.77	25.55	0.2529	0.2661	0.2529
15	QPSK	36	0	24.60	24.65	24.54	0.2004	0.2056	0.2004
15	QPSK	36	20	24.56	24.50	24.54	0.2004	0.1986	0.2004
15	QPSK	36	39	24.54	24.57	24.54	0.2004	0.2018	0.2004
15	QPSK	75	0	24.53	24.72	24.56	0.2014	0.2089	0.2014
15	16QAM	1	0	24.84	24.96	24.80	0.2128	0.2208	0.2128
15	16QAM	1	37	24.85	24.89	24.87	0.2163	0.2173	0.2163
15	16QAM	1	74	24.86	24.87	24.85	0.2153	0.2163	0.2153



15	16QAM	36	0	23.58	23.67	23.56	0.1600	0.1641	0.1600
15	16QAM	36	20	23.61	23.57	23.61	0.1618	0.1603	0.1618
15	16QAM	36	39	23.60	23.62	23.57	0.1603	0.1622	0.1603
15	16QAM	75	0	23.63	23.72	23.61	0.1618	0.1660	0.1618
15	64QAM	1	0	23.92	24.04	23.88	0.1722	0.1786	0.1722
15	64QAM	1	37	23.93	23.94	23.91	0.1734	0.1746	0.1734
15	64QAM	1	74	23.88	23.91	23.91	0.1734	0.1734	0.1734
15	64QAM	36	0	22.53	22.70	22.59	0.1279	0.1312	0.1279
15	64QAM	36	20	22.61	22.58	22.53	0.1262	0.1276	0.1262
15	64QAM	36	39	22.61	22.57	22.55	0.1268	0.1274	0.1268
15	64QAM	75	0	22.54	22.75	22.63	0.1291	0.1327	0.1291
15	256QAM	1	0	20.70	20.65	20.69	0.0826	0.0818	0.0826
15	256QAM	1	37	20.64	20.67	20.70	0.0828	0.0822	0.0828
15	256QAM	1	74	20.65	20.66	20.69	0.0826	0.0820	0.0826
15	256QAM	36	0	20.67	20.68	20.72	0.0832	0.0824	0.0832
15	256QAM	36	20	20.64	20.69	20.70	0.0828	0.0826	0.0828
15	256QAM	36	39	20.71	20.72	20.67	0.0822	0.0832	0.0822
15	256QAM	75	0	20.67	20.70	20.67	0.0822	0.0828	0.0822
Channel				39700	40620	41540	39700	40620	41540
Frequency (MHz)				2501	2593	2685	2501	2593	2685
10	QPSK	1	0	25.70	25.82	25.61	0.2564	0.2692	0.2564
10	QPSK	1	25	25.58	25.73	25.48	0.2489	0.2636	0.2489
10	QPSK	1	49	25.58	25.79	25.53	0.2518	0.2673	0.2518
10	QPSK	25	0	24.56	24.63	24.57	0.2018	0.2046	0.2018
10	QPSK	25	12	24.57	24.50	24.54	0.2004	0.1986	0.2004
10	QPSK	25	25	24.50	24.56	24.56	0.2014	0.2014	0.2014
10	QPSK	50	0	24.52	24.68	24.54	0.2004	0.2070	0.2004
10	16QAM	1	0	24.82	24.94	24.84	0.2148	0.2198	0.2148
10	16QAM	1	25	24.87	24.84	24.84	0.2148	0.2148	0.2148
10	16QAM	1	49	24.83	24.87	24.86	0.2158	0.2163	0.2158
10	16QAM	25	0	23.56	23.67	23.58	0.1607	0.1641	0.1607
10	16QAM	25	12	23.62	23.58	23.60	0.1614	0.1607	0.1614
10	16QAM	25	25	23.55	23.61	23.59	0.1611	0.1618	0.1611
10	16QAM	50	0	23.59	23.78	23.59	0.1611	0.1683	0.1611
10	64QAM	1	0	23.90	24.02	23.88	0.1722	0.1778	0.1722
10	64QAM	1	25	23.91	23.94	23.92	0.1738	0.1746	0.1738
10	64QAM	1	49	23.90	23.92	23.89	0.1726	0.1738	0.1726
10	64QAM	25	0	22.54	22.70	22.59	0.1279	0.1312	0.1279
10	64QAM	25	12	22.62	22.58	22.59	0.1279	0.1276	0.1279
10	64QAM	25	25	22.62	22.55	22.57	0.1274	0.1268	0.1274
10	64QAM	50	0	22.57	22.75	22.58	0.1276	0.1327	0.1276
10	256QAM	1	0	20.71	20.67	20.71	0.0830	0.0822	0.0830
10	256QAM	1	25	20.67	20.70	20.67	0.0822	0.0828	0.0822
10	256QAM	1	49	20.67	20.67	20.68	0.0824	0.0822	0.0824
10	256QAM	25	0	20.67	20.67	20.72	0.0832	0.0822	0.0832



10	256QAM	25	12	20.63	20.70	20.70	0.0828	0.0828	0.0828
10	256QAM	25	25	20.67	20.73	20.67	0.0822	0.0834	0.0822
10	256QAM	50	0	20.67	20.67	20.66	0.0820	0.0822	0.0820
Channel				39675	40620	41565	39675	40620	41565
Frequency (MHz)				2498.5	2593	2687.5	2498.5	2593	2687.5
5	QPSK	1	0	25.69	25.84	25.62	0.2570	0.2704	0.2570
5	QPSK	1	12	25.58	25.78	25.50	0.2500	0.2667	0.2500
5	QPSK	1	24	25.61	25.75	25.54	0.2523	0.2649	0.2523
5	QPSK	12	0	24.57	24.65	24.54	0.2004	0.2056	0.2004
5	QPSK	12	7	24.56	24.54	24.57	0.2018	0.2004	0.2018
5	QPSK	12	13	24.48	24.53	24.55	0.2009	0.2000	0.2009
5	QPSK	25	0	24.55	24.72	24.54	0.2004	0.2089	0.2004
5	16QAM	1	0	24.83	24.94	24.85	0.2153	0.2198	0.2153
5	16QAM	1	12	24.82	24.89	24.88	0.2168	0.2173	0.2168
5	16QAM	1	24	24.82	24.84	24.85	0.2153	0.2148	0.2153
5	16QAM	12	0	23.58	23.72	23.55	0.1596	0.1660	0.1596
5	16QAM	12	7	23.62	23.57	23.63	0.1626	0.1603	0.1626
5	16QAM	12	13	23.56	23.61	23.59	0.1611	0.1618	0.1611
5	16QAM	25	0	23.60	23.72	23.59	0.1611	0.1660	0.1611
5	64QAM	1	0	23.91	24.03	23.92	0.1738	0.1782	0.1738
5	64QAM	1	12	23.89	23.93	23.91	0.1734	0.1742	0.1734
5	64QAM	1	24	23.90	23.95	23.93	0.1742	0.1750	0.1742
5	64QAM	12	0	22.56	22.68	22.54	0.1265	0.1306	0.1265
5	64QAM	12	7	22.59	22.58	22.54	0.1265	0.1276	0.1265
5	64QAM	12	13	22.60	22.53	22.54	0.1265	0.1262	0.1265
5	64QAM	25	0	22.55	22.77	22.58	0.1276	0.1334	0.1276
5	256QAM	1	0	20.66	20.66	20.69	0.0826	0.0820	0.0826
5	256QAM	1	12	20.67	20.68	20.66	0.0820	0.0824	0.0820
5	256QAM	1	24	20.65	20.68	20.67	0.0822	0.0824	0.0822
5	256QAM	12	0	20.72	20.68	20.67	0.0822	0.0824	0.0822
5	256QAM	12	7	20.63	20.68	20.67	0.0822	0.0824	0.0822
5	256QAM	12	13	20.68	20.69	20.68	0.0824	0.0826	0.0824
5	256QAM	25	0	20.63	20.71	20.66	0.0820	0.0830	0.0820



LTE CA_7C_Ant 2:

Combination 20MHz+20MHz (100RB+100RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
L	QPSK	1	Max	1	0	22.54	0.1194
L	QPSK	1	0	1	Max	22.64	0.1222
L	QPSK	100	0	100	0	22.58	0.1205
M	QPSK	1	Max	1	0	22.67	0.1230
M	QPSK	1	0	1	Max	22.62	0.1216
M	QPSK	100	0	100	0	22.57	0.1202
H	QPSK	1	Max	1	0	22.62	0.1216
H	QPSK	1	0	1	Max	22.48	0.1178
H	QPSK	100	0	100	0	22.43	0.1164
L	16QAM	1	Max	1	0	21.45	0.0929
L	16QAM	1	0	1	Max	21.58	0.0957
L	16QAM	100	0	100	0	21.55	0.0951
M	16QAM	1	Max	1	0	21.45	0.0929
M	16QAM	1	0	1	Max	21.49	0.0938
M	16QAM	100	0	100	0	21.57	0.0955
H	16QAM	1	Max	1	0	21.61	0.0964
H	16QAM	1	0	1	Max	21.47	0.0933
H	16QAM	100	0	100	0	21.54	0.0948
L	64QAM	1	Max	1	0	20.43	0.0735
L	64QAM	1	0	1	Max	20.62	0.0767
L	64QAM	100	0	100	0	20.61	0.0766
M	64QAM	1	Max	1	0	20.48	0.0743
M	64QAM	1	0	1	Max	20.58	0.0760
M	64QAM	100	0	100	0	20.53	0.0752
H	64QAM	1	Max	1	0	20.56	0.0757
H	64QAM	1	0	1	Max	20.47	0.0741
H	64QAM	100	0	100	0	20.46	0.0740
L	256QAM	1	Max	1	0	17.45	0.0370
L	256QAM	1	0	1	Max	17.60	0.0383
L	256QAM	100	0	100	0	17.48	0.0372
M	256QAM	1	Max	1	0	17.47	0.0372
M	256QAM	1	0	1	Max	17.42	0.0367
M	256QAM	100	0	100	0	17.33	0.0360
H	256QAM	1	Max	1	0	17.55	0.0378
H	256QAM	1	0	1	Max	17.35	0.0361
H	256QAM	100	0	100	0	17.38	0.0364
Combination 20MHz+15MHz (100RB+75RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
L	QPSK	1	Max	1	0	22.41	0.1159
L	QPSK	1	0	1	Max	22.59	0.1208
L	QPSK	100	0	75	0	22.53	0.1191



M	QPSK	1	Max	1	0	22.43	0.1164
M	QPSK	1	0	1	Max	22.52	0.1189
M	QPSK	100	0	75	0	22.52	0.1189
H	QPSK	1	Max	1	0	22.51	0.1186
H	QPSK	1	0	1	Max	22.46	0.1172
H	QPSK	100	0	75	0	22.41	0.1159
L	16QAM	1	Max	1	0	21.36	0.0910
L	16QAM	1	0	1	Max	21.55	0.0951
L	16QAM	100	0	75	0	21.50	0.0940
H	16QAM	1	Max	1	0	21.40	0.0918
M	16QAM	1	0	1	Max	21.41	0.0920
M	16QAM	100	0	75	0	21.53	0.0946
H	16QAM	1	Max	1	0	21.49	0.0938
H	16QAM	1	0	1	Max	21.42	0.0923
H	16QAM	100	0	75	0	21.45	0.0929
L	64QAM	1	Max	1	0	20.35	0.0721
L	64QAM	1	0	1	Max	20.53	0.0752
L	64QAM	100	0	75	0	20.47	0.0741
M	64QAM	1	Max	1	0	20.40	0.0729
M	64QAM	1	0	1	Max	20.55	0.0755
M	64QAM	100	0	75	0	20.44	0.0736
H	64QAM	1	Max	1	0	20.54	0.0753
H	64QAM	1	0	1	Max	20.43	0.0735
H	64QAM	100	0	75	0	20.36	0.0723
L	256QAM	1	Max	1	0	17.32	0.0359
L	256QAM	1	0	1	Max	17.58	0.0381
L	256QAM	100	0	75	0	17.35	0.0361
M	256QAM	1	Max	1	0	17.38	0.0364
M	256QAM	1	0	1	Max	17.36	0.0362
M	256QAM	100	0	75	0	17.36	0.0362
H	256QAM	1	Max	1	0	17.49	0.0373
H	256QAM	1	0	1	Max	17.41	0.0366
H	256QAM	100	0	75	0	17.40	0.0366

Combination 15MHz+20MHz (75RB+100RB)

Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
L	QPSK	1	Max	1	0	22.48	0.1178
L	QPSK	1	0	1	Max	22.54	0.1194
L	QPSK	75	0	100	0	22.53	0.1191
M	QPSK	1	Max	1	0	22.35	0.1143
M	QPSK	1	0	1	Max	22.49	0.1180
M	QPSK	75	0	100	0	22.53	0.1191
H	QPSK	1	Max	1	0	22.51	0.1186
H	QPSK	1	0	1	Max	22.41	0.1159
H	QPSK	75	0	100	0	22.40	0.1156
L	16QAM	1	Max	1	0	21.32	0.0902



L	16QAM	1	0	1	Max	21.54	0.0948
L	16QAM	75	0	100	0	21.49	0.0938
H	16QAM	1	Max	1	0	21.32	0.0902
M	16QAM	1	0	1	Max	21.42	0.0923
M	16QAM	75	0	100	0	21.43	0.0925
H	16QAM	1	Max	1	0	21.50	0.0940
H	16QAM	1	0	1	Max	21.36	0.0910
H	16QAM	75	0	100	0	21.43	0.0925
L	64QAM	1	Max	1	0	20.41	0.0731
L	64QAM	1	0	1	Max	20.56	0.0757
L	64QAM	75	0	100	0	20.55	0.0755
M	64QAM	1	Max	1	0	20.38	0.0726
M	64QAM	1	0	1	Max	20.55	0.0755
M	64QAM	75	0	100	0	20.43	0.0735
H	64QAM	1	Max	1	0	20.48	0.0743
H	64QAM	1	0	1	Max	20.39	0.0728
H	64QAM	75	0	100	0	20.36	0.0723
L	256QAM	1	Max	1	0	17.42	0.0367
L	256QAM	1	0	1	Max	17.53	0.0377
L	256QAM	75	0	100	0	17.42	0.0367
M	256QAM	1	Max	1	0	17.34	0.0361
M	256QAM	1	0	1	Max	17.40	0.0366
M	256QAM	75	0	100	0	17.41	0.0366
H	256QAM	1	Max	1	0	17.55	0.0378
H	256QAM	1	0	1	Max	17.39	0.0365
H	256QAM	75	0	100	0	17.38	0.0364
Combination 15MHz+15MHz (75RB+75RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
L	QPSK	1	Max	1	0	22.43	0.1164
L	QPSK	1	0	1	Max	22.52	0.1189
L	QPSK	75	0	75	0	22.54	0.1194
M	QPSK	1	Max	1	0	22.39	0.1153
M	QPSK	1	0	1	Max	22.57	0.1202
M	QPSK	75	0	75	0	22.53	0.1191
H	QPSK	1	Max	1	0	22.52	0.1189
H	QPSK	1	0	1	Max	22.40	0.1156
H	QPSK	75	0	75	0	22.36	0.1146
L	16QAM	1	Max	1	0	21.36	0.0910
L	16QAM	1	0	1	Max	21.45	0.0929
L	16QAM	75	0	75	0	21.41	0.0920
H	16QAM	1	Max	1	0	21.35	0.0908
M	16QAM	1	0	1	Max	21.45	0.0929
M	16QAM	75	0	75	0	21.45	0.0929
H	16QAM	1	Max	1	0	21.52	0.0944
H	16QAM	1	0	1	Max	21.37	0.0912



H	16QAM	75	0	75	0	21.45	0.0929
L	64QAM	1	Max	1	0	20.32	0.0716
L	64QAM	1	0	1	Max	20.59	0.0762
L	64QAM	75	0	75	0	20.52	0.0750
M	64QAM	1	Max	1	0	20.44	0.0736
M	64QAM	1	0	1	Max	20.45	0.0738
M	64QAM	75	0	75	0	20.49	0.0745
H	64QAM	1	Max	1	0	20.42	0.0733
H	64QAM	1	0	1	Max	20.39	0.0728
H	64QAM	75	0	75	0	20.32	0.0716
L	256QAM	1	Max	1	0	17.39	0.0365
L	256QAM	1	0	1	Max	17.52	0.0376
L	256QAM	75	0	75	0	17.43	0.0368
M	256QAM	1	Max	1	0	17.41	0.0366
M	256QAM	1	0	1	Max	17.40	0.0366
M	256QAM	75	0	75	0	17.39	0.0365
H	256QAM	1	Max	1	0	17.58	0.0381
H	256QAM	1	0	1	Max	17.40	0.0366
H	256QAM	75	0	75	0	17.38	0.0364

Combination 20MHz+10MHz (100RB+50RB)

Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
L	QPSK	1	Max	1	0	22.48	0.1178
L	QPSK	1	0	1	Max	22.52	0.1189
L	QPSK	100	0	50	0	22.50	0.1183
M	QPSK	1	Max	1	0	22.33	0.1138
M	QPSK	1	0	1	Max	22.60	0.1211
M	QPSK	100	0	50	0	22.55	0.1197
H	QPSK	1	Max	1	0	22.55	0.1197
H	QPSK	1	0	1	Max	22.46	0.1172
H	QPSK	100	0	50	0	22.33	0.1138
L	16QAM	1	Max	1	0	21.33	0.0904
L	16QAM	1	0	1	Max	21.54	0.0948
L	16QAM	100	0	50	0	21.45	0.0929
H	16QAM	1	Max	1	0	21.38	0.0914
M	16QAM	1	0	1	Max	21.47	0.0933
M	16QAM	100	0	50	0	21.44	0.0927
H	16QAM	1	Max	1	0	21.52	0.0944
H	16QAM	1	0	1	Max	21.39	0.0916
H	16QAM	100	0	50	0	21.43	0.0925
L	64QAM	1	Max	1	0	20.32	0.0716
L	64QAM	1	0	1	Max	20.57	0.0759
L	64QAM	100	0	50	0	20.52	0.0750
M	64QAM	1	Max	1	0	20.39	0.0728
M	64QAM	1	0	1	Max	20.55	0.0755
M	64QAM	100	0	50	0	20.41	0.0731



H	64QAM	1	Max	1	0	20.48	0.0743
H	64QAM	1	0	1	Max	20.38	0.0726
H	64QAM	100	0	50	0	20.43	0.0735
L	256QAM	1	Max	1	0	17.33	0.0360
L	256QAM	1	0	1	Max	17.57	0.0380
L	256QAM	100	0	50	0	17.38	0.0364
M	256QAM	1	Max	1	0	17.44	0.0369
M	256QAM	1	0	1	Max	17.31	0.0358
M	256QAM	100	0	50	0	17.35	0.0361
H	256QAM	1	Max	1	0	17.52	0.0376
H	256QAM	1	0	1	Max	17.39	0.0365
H	256QAM	100	0	50	0	17.36	0.0362
Combination 10MHz+20MHz (50RB+100RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
L	QPSK	1	Max	1	0	22.40	0.1156
L	QPSK	1	0	1	Max	22.56	0.1199
L	QPSK	50	0	100	0	22.55	0.1197
M	QPSK	1	Max	1	0	22.38	0.1151
M	QPSK	1	0	1	Max	22.54	0.1194
M	QPSK	50	0	100	0	22.54	0.1194
H	QPSK	1	Max	1	0	22.56	0.1199
H	QPSK	1	0	1	Max	22.40	0.1156
H	QPSK	50	0	100	0	22.37	0.1148
L	16QAM	1	Max	1	0	21.35	0.0908
L	16QAM	1	0	1	Max	21.49	0.0938
L	16QAM	50	0	100	0	21.44	0.0927
H	16QAM	1	Max	1	0	21.37	0.0912
M	16QAM	1	0	1	Max	21.42	0.0923
M	16QAM	50	0	100	0	21.46	0.0931
H	16QAM	1	Max	1	0	21.54	0.0948
H	16QAM	1	0	1	Max	21.35	0.0908
H	16QAM	50	0	100	0	21.42	0.0923
L	64QAM	1	Max	1	0	20.31	0.0714
L	64QAM	1	0	1	Max	20.50	0.0746
L	64QAM	50	0	100	0	20.48	0.0743
M	64QAM	1	Max	1	0	20.42	0.0733
M	64QAM	1	0	1	Max	20.46	0.0740
M	64QAM	50	0	100	0	20.47	0.0741
H	64QAM	1	Max	1	0	20.50	0.0746
H	64QAM	1	0	1	Max	20.35	0.0721
H	64QAM	50	0	100	0	20.41	0.0731
L	256QAM	1	Max	1	0	17.42	0.0367
L	256QAM	1	0	1	Max	17.53	0.0377
L	256QAM	50	0	100	0	17.38	0.0364
M	256QAM	1	Max	1	0	17.35	0.0361



M	256QAM	1	0	1	Max	17.42	0.0367
M	256QAM	50	0	100	0	17.35	0.0361
H	256QAM	1	Max	1	0	17.55	0.0378
H	256QAM	1	0	1	Max	17.41	0.0366
H	256QAM	50	0	100	0	17.35	0.0361
Combination 15MHz+10MHz (75RB+50RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
L	QPSK	1	Max	1	0	22.52	0.1189
L	QPSK	1	0	1	Max	22.54	0.1194
L	QPSK	75	0	50	0	22.55	0.1197
M	QPSK	1	Max	1	0	22.34	0.1140
M	QPSK	1	0	1	Max	22.60	0.1211
M	QPSK	75	0	50	0	22.44	0.1167
H	QPSK	1	Max	1	0	22.59	0.1208
H	QPSK	1	0	1	Max	22.36	0.1146
H	QPSK	75	0	50	0	22.38	0.1151
L	16QAM	1	Max	1	0	21.43	0.0925
L	16QAM	1	0	1	Max	21.45	0.0929
L	16QAM	75	0	50	0	21.46	0.0931
H	16QAM	1	Max	1	0	21.32	0.0902
M	16QAM	1	0	1	Max	21.38	0.0914
M	16QAM	75	0	50	0	21.51	0.0942
H	16QAM	1	Max	1	0	21.57	0.0955
H	16QAM	1	0	1	Max	21.39	0.0916
H	16QAM	75	0	50	0	21.43	0.0925
L	64QAM	1	Max	1	0	20.37	0.0724
L	64QAM	1	0	1	Max	20.52	0.0750
L	64QAM	75	0	50	0	20.55	0.0755
M	64QAM	1	Max	1	0	20.41	0.0731
M	64QAM	1	0	1	Max	20.48	0.0743
M	64QAM	75	0	50	0	20.40	0.0729
H	64QAM	1	Max	1	0	20.49	0.0745
H	64QAM	1	0	1	Max	20.43	0.0735
H	64QAM	75	0	50	0	20.42	0.0733
L	256QAM	1	Max	1	0	17.41	0.0366
L	256QAM	1	0	1	Max	17.53	0.0377
L	256QAM	75	0	50	0	17.39	0.0365
M	256QAM	1	Max	1	0	17.35	0.0361
M	256QAM	1	0	1	Max	17.37	0.0363
M	256QAM	75	0	50	0	17.41	0.0366
H	256QAM	1	Max	1	0	17.58	0.0381
H	256QAM	1	0	1	Max	17.45	0.0370
H	256QAM	75	0	50	0	17.38	0.0364



LTE CA_38C_Ant 2:

Combination 20MHz+20MHz (100RB+100RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
L	QPSK	1	Max	1	0	23.29	0.1419
L	QPSK	1	0	1	Max	23.42	0.1462
L	QPSK	100	0	100	0	23.36	0.1442
M	QPSK	1	Max	1	0	23.45	0.1472
M	QPSK	1	0	1	Max	23.43	0.1466
M	QPSK	100	0	100	0	23.34	0.1435
H	QPSK	1	Max	1	0	23.33	0.1432
H	QPSK	1	0	1	Max	23.28	0.1416
H	QPSK	100	0	100	0	23.27	0.1413
L	16QAM	1	Max	1	0	22.29	0.1127
L	16QAM	1	0	1	Max	22.36	0.1146
L	16QAM	100	0	100	0	22.36	0.1146
M	16QAM	1	Max	1	0	22.24	0.1114
M	16QAM	1	0	1	Max	22.27	0.1122
M	16QAM	100	0	100	0	22.33	0.1138
H	16QAM	1	Max	1	0	22.40	0.1156
H	16QAM	1	0	1	Max	22.25	0.1117
H	16QAM	100	0	100	0	22.39	0.1153
L	64QAM	1	Max	1	0	21.23	0.0883
L	64QAM	1	0	1	Max	21.43	0.0925
L	64QAM	100	0	100	0	21.44	0.0927
M	64QAM	1	Max	1	0	21.27	0.0891
M	64QAM	1	0	1	Max	21.33	0.0904
M	64QAM	100	0	100	0	21.32	0.0902
H	64QAM	1	Max	1	0	21.33	0.0904
H	64QAM	1	0	1	Max	21.29	0.0895
H	64QAM	100	0	100	0	21.29	0.0895
L	256QAM	1	Max	1	0	18.21	0.0441
L	256QAM	1	0	1	Max	18.41	0.0461
L	256QAM	100	0	100	0	18.29	0.0449
M	256QAM	1	Max	1	0	18.29	0.0449
M	256QAM	1	0	1	Max	18.10	0.0430
M	256QAM	100	0	100	0	18.12	0.0432
H	256QAM	1	Max	1	0	18.36	0.0456
H	256QAM	1	0	1	Max	18.20	0.0440
H	256QAM	100	0	100	0	18.21	0.0441
Combination 15MHz+15MHz (75RB+75RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
L	QPSK	1	Max	1	0	23.33	0.1432
L	QPSK	1	0	1	Max	23.43	0.1466



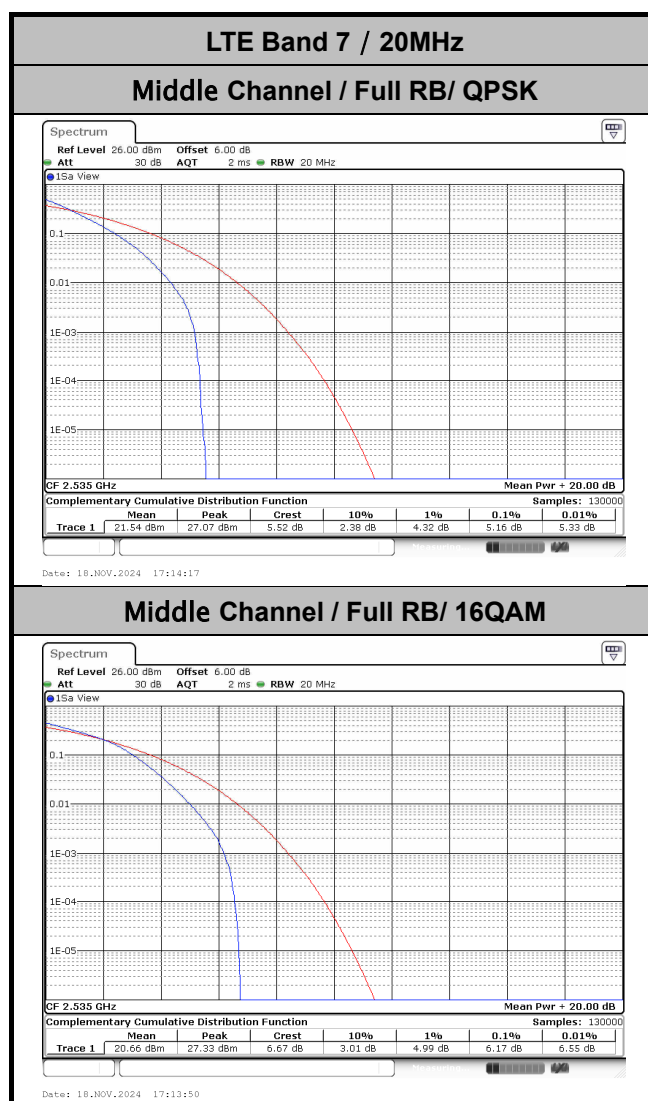
L	QPSK	75	0	75	0	23.27	0.1413
M	QPSK	1	Max	1	0	23.23	0.1400
M	QPSK	1	0	1	Max	23.35	0.1439
M	QPSK	75	0	75	0	23.26	0.1409
H	QPSK	1	Max	1	0	23.29	0.1419
H	QPSK	1	0	1	Max	23.17	0.1380
H	QPSK	75	0	75	0	23.22	0.1396
L	16QAM	1	Max	1	0	22.24	0.1114
L	16QAM	1	0	1	Max	22.30	0.1130
L	16QAM	75	0	75	0	22.32	0.1135
H	16QAM	1	Max	1	0	22.19	0.1102
M	16QAM	1	0	1	Max	22.20	0.1104
M	16QAM	75	0	75	0	22.25	0.1117
H	16QAM	1	Max	1	0	22.36	0.1146
H	16QAM	1	0	1	Max	22.18	0.1099
H	16QAM	75	0	75	0	22.34	0.1140
L	64QAM	1	Max	1	0	21.13	0.0863
L	64QAM	1	0	1	Max	21.39	0.0916
L	64QAM	75	0	75	0	21.31	0.0899
M	64QAM	1	Max	1	0	21.16	0.0869
M	64QAM	1	0	1	Max	21.25	0.0887
M	64QAM	75	0	75	0	21.29	0.0895
H	64QAM	1	Max	1	0	21.26	0.0889
H	64QAM	1	0	1	Max	21.16	0.0869
H	64QAM	75	0	75	0	21.17	0.0871
L	256QAM	1	Max	1	0	18.17	0.0437
L	256QAM	1	0	1	Max	18.31	0.0451
L	256QAM	75	0	75	0	18.21	0.0441
M	256QAM	1	Max	1	0	18.21	0.0441
M	256QAM	1	0	1	Max	18.08	0.0428
M	256QAM	75	0	75	0	18.09	0.0429
H	256QAM	1	Max	1	0	18.34	0.0454
H	256QAM	1	0	1	Max	18.18	0.0438
H	256QAM	75	0	75	0	18.16	0.0436

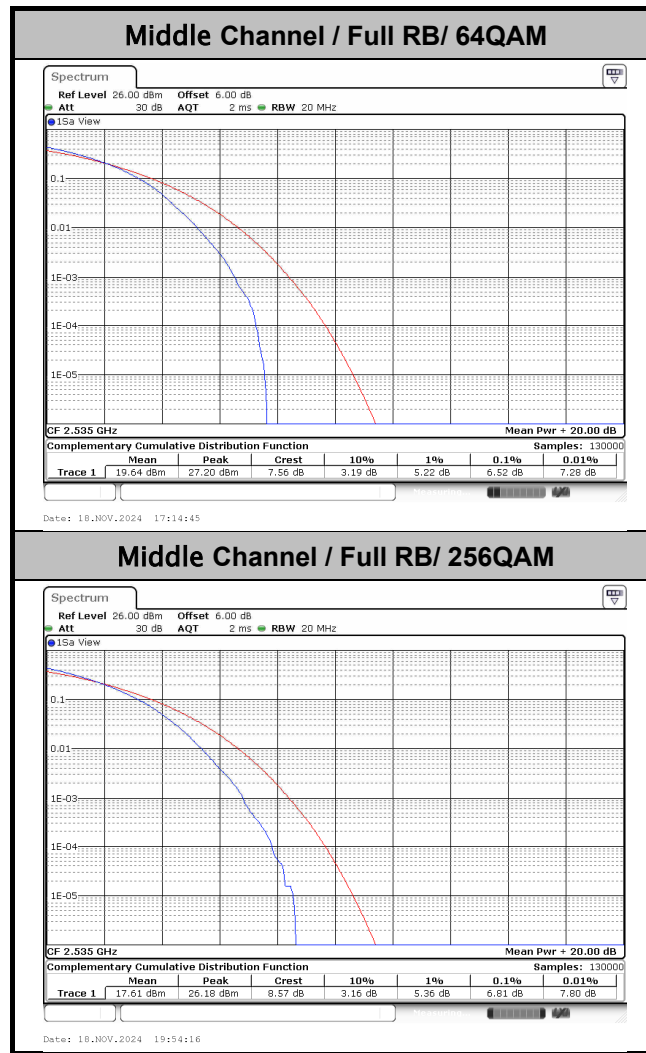


LTE Band 7

Peak-to-Average Ratio

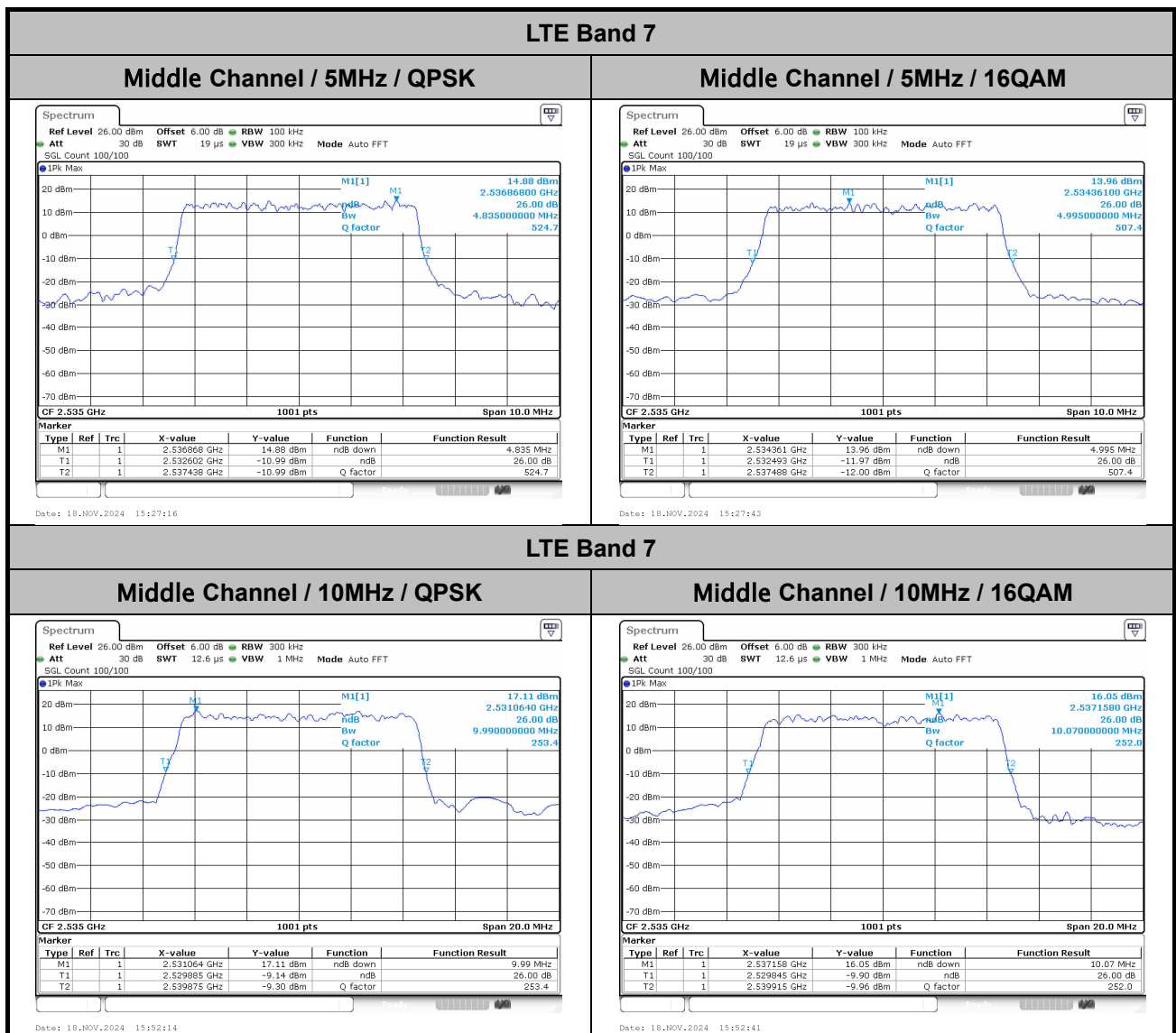
Mode	LTE Band 7 / 20MHz				
Mod.	QPSK	16QAM	64QAM	256QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	5.16	6.17	6.52	6.81	PASS





**26dB Bandwidth**

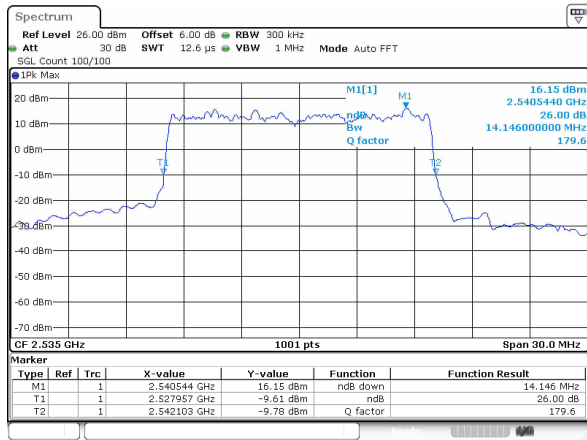
Mode	LTE Band 7 : 26dB BW(MHz)							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	4.84	5.00	9.99	10.07	14.15	14.60	18.86	19.14



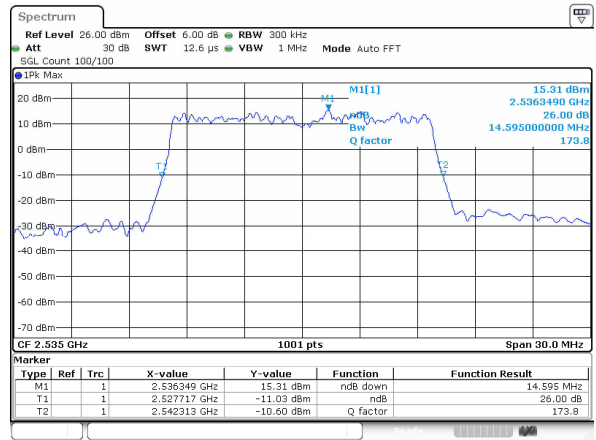


LTE Band 7

Middle Channel / 15MHz / QPSK

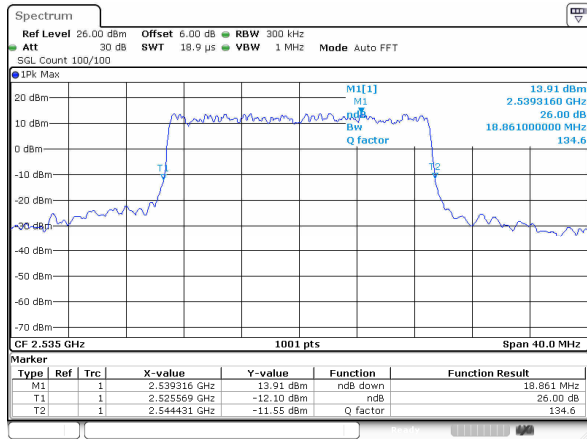


Middle Channel / 15MHz / 16QAM

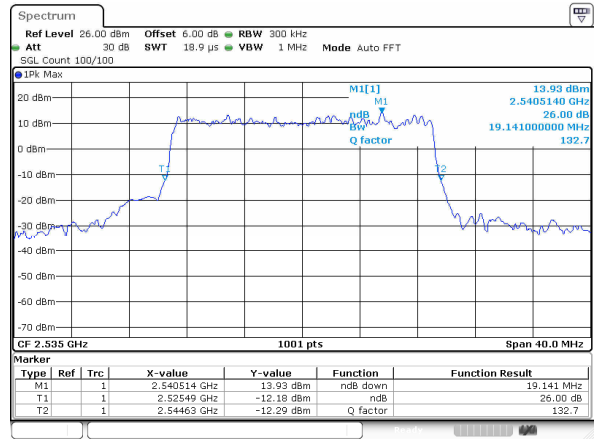


LTE Band 7

Middle Channel / 20MHz / QPSK



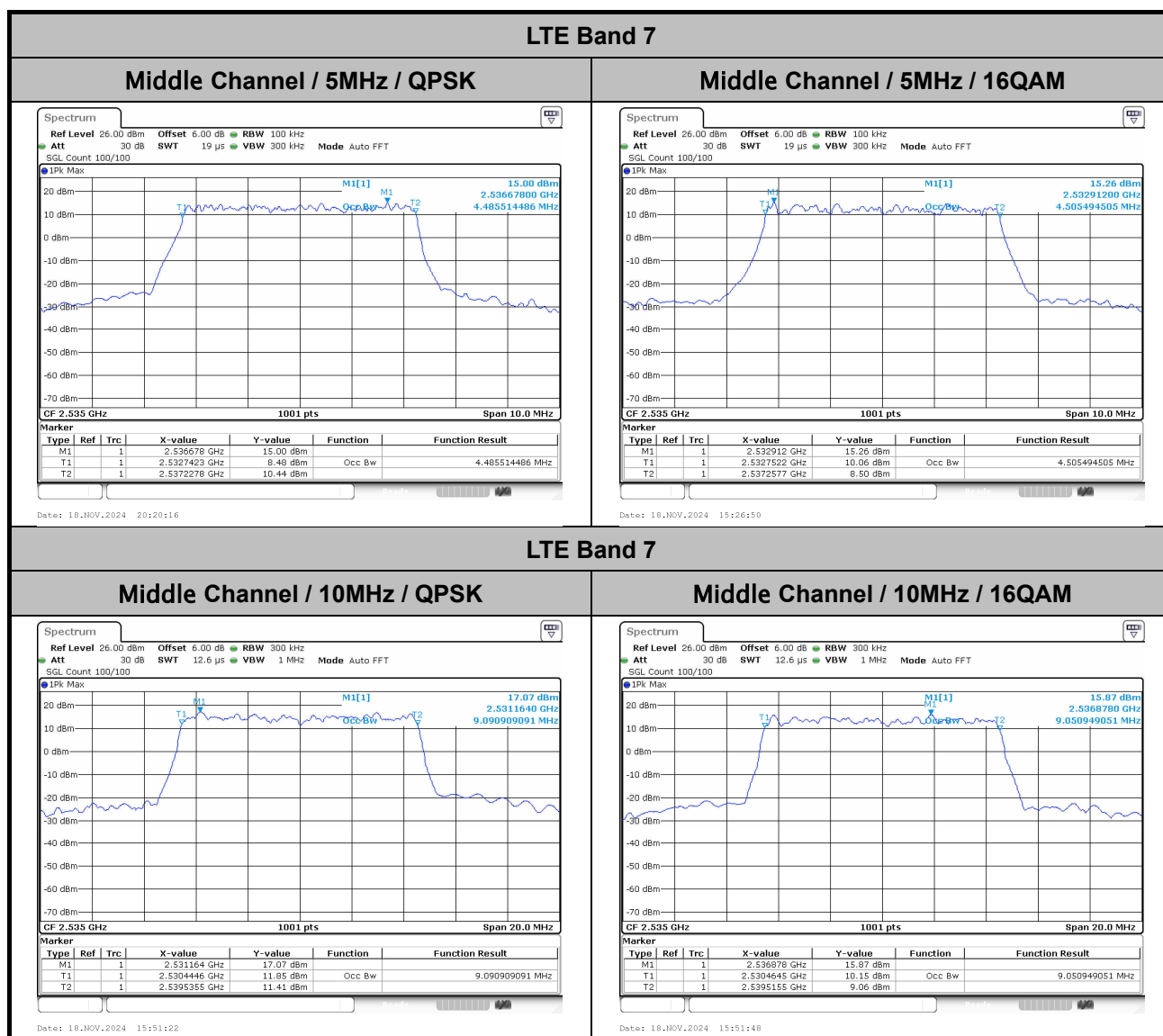
Middle Channel / 20MHz / 16QAM





Occupied Bandwidth

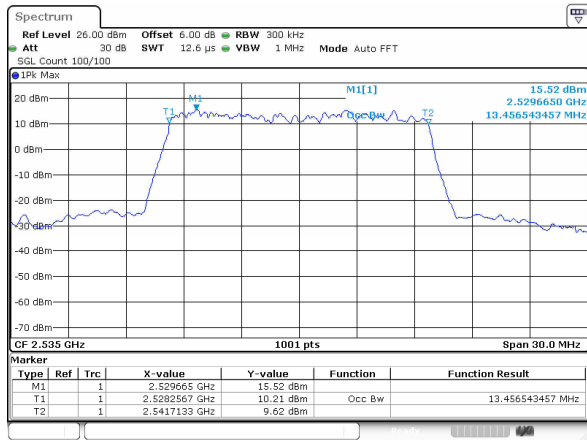
Mode	LTE Band 7 : 99%OBW(MHz)							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	4.49	4.51	9.09	9.05	13.46	13.46	17.90	17.90



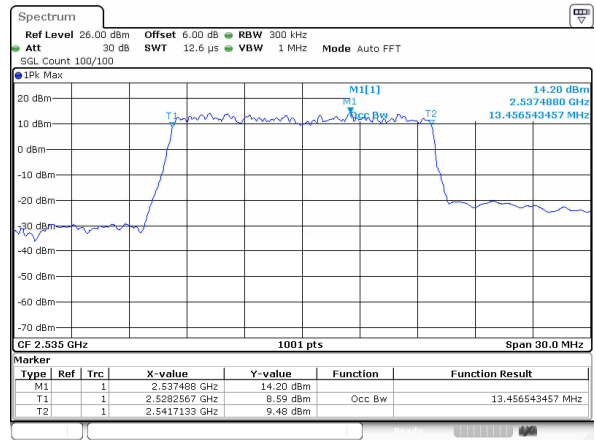


LTE Band 7

Middle Channel / 15MHz / QPSK

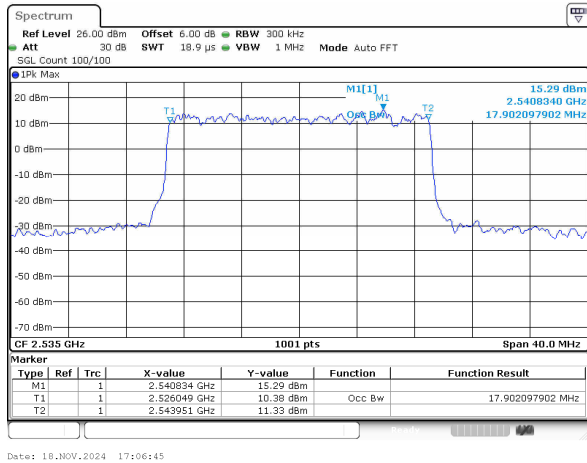


Middle Channel / 15MHz / 16QAM

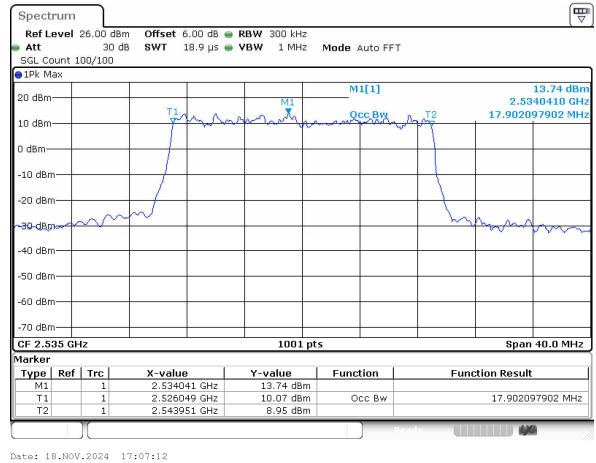


LTE Band 7

Middle Channel / 20MHz / QPSK



Middle Channel / 20MHz / 16QAM

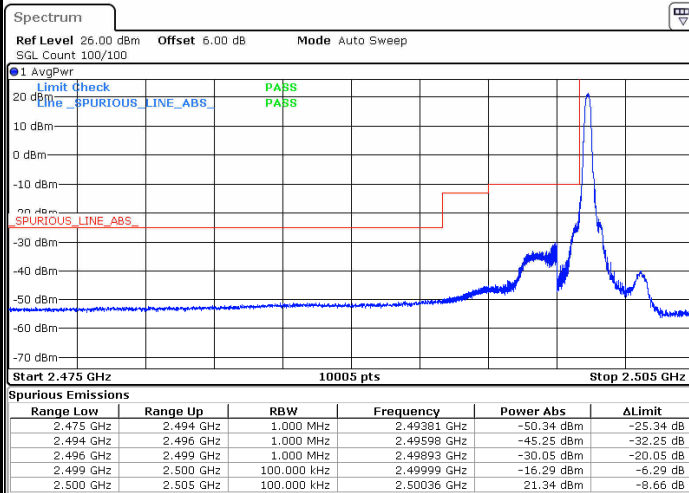




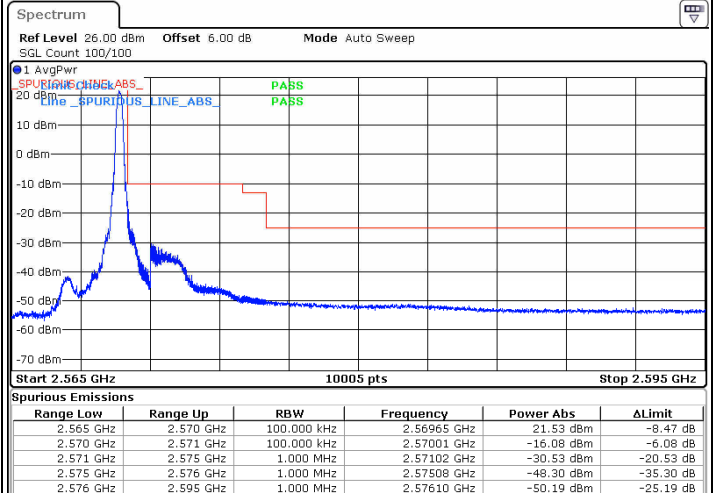
Conducted Band Edge

LTE Band 7 / 5MHz / QPSK

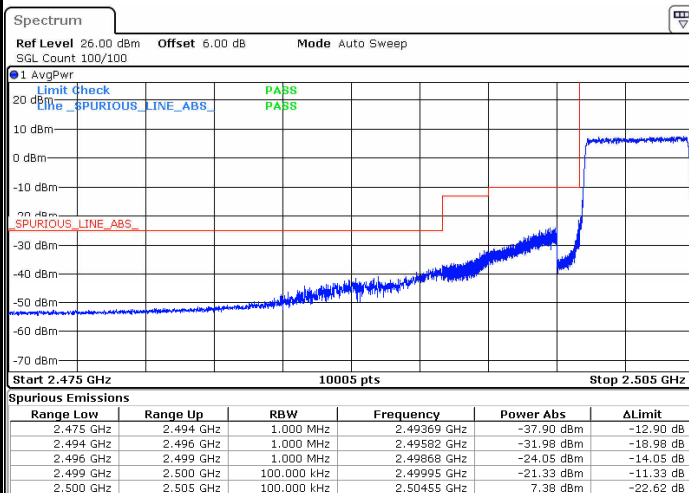
Lowest Band Edge / 1 RB



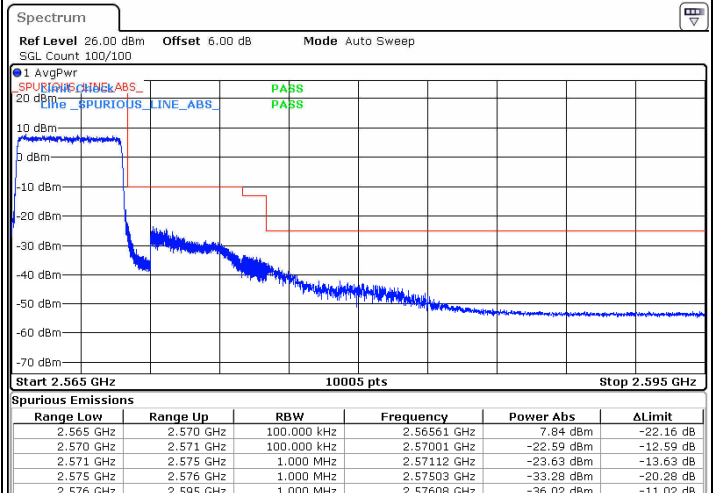
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



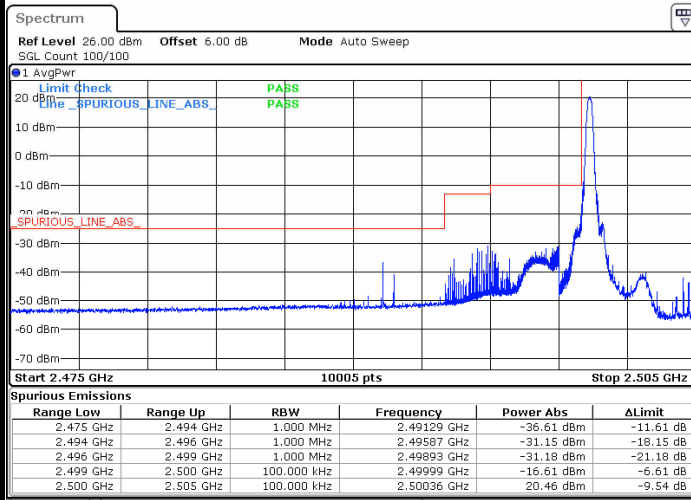
Highest Band Edge / Full RB





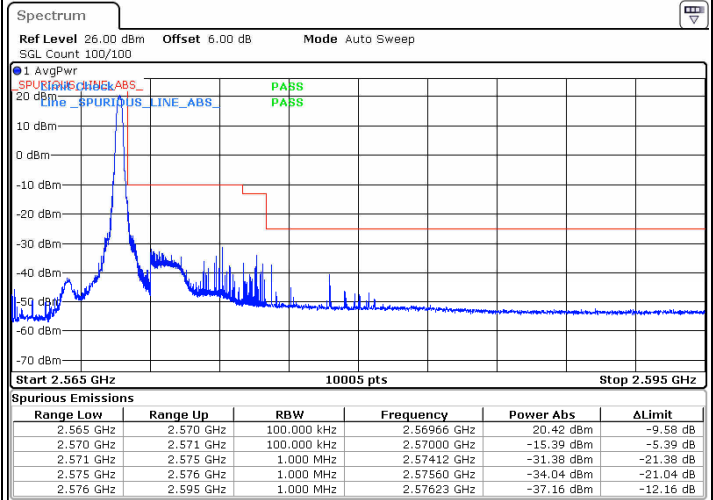
LTE Band 7 / 5MHz / 16QAM

Lowest Band Edge / 1RB



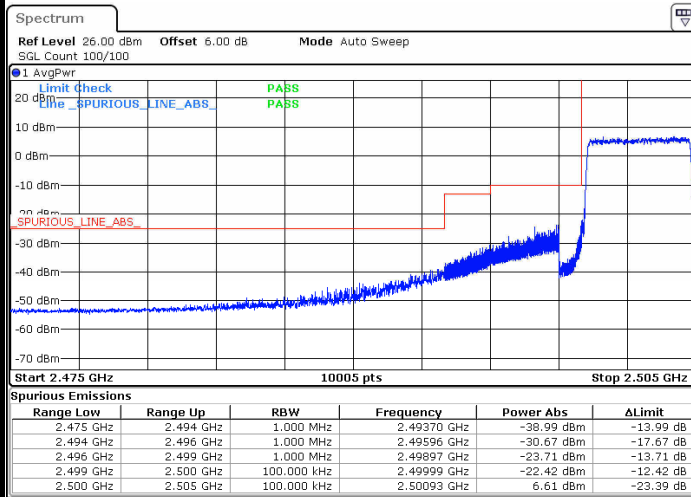
Date: 18.NOV.2024 15:21:42

Highest Band Edge / 1 RB



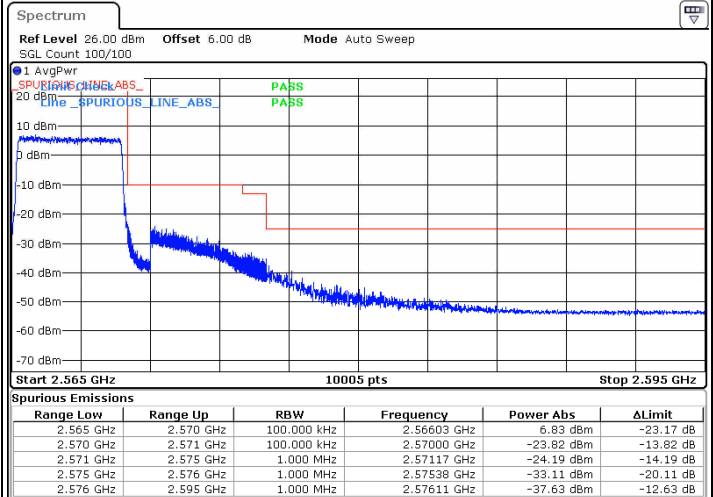
Date: 18.NOV.2024 15:31:24

Lowest Band Edge / Full RB



Date: 18.NOV.2024 15:24:00

Highest Band Edge / Full RB

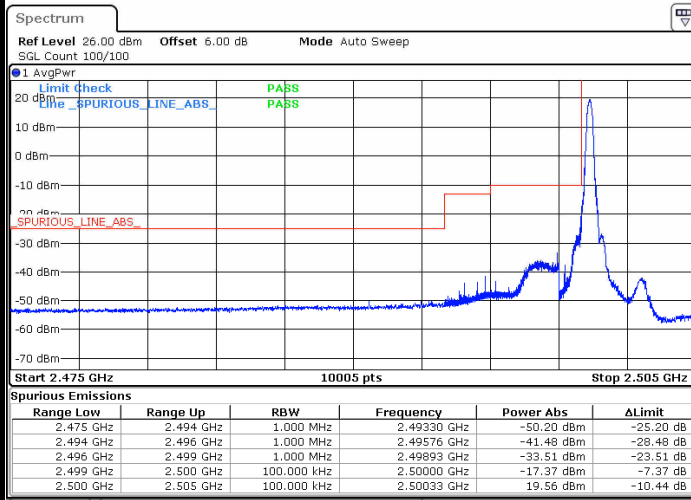


Date: 18.NOV.2024 15:33:42



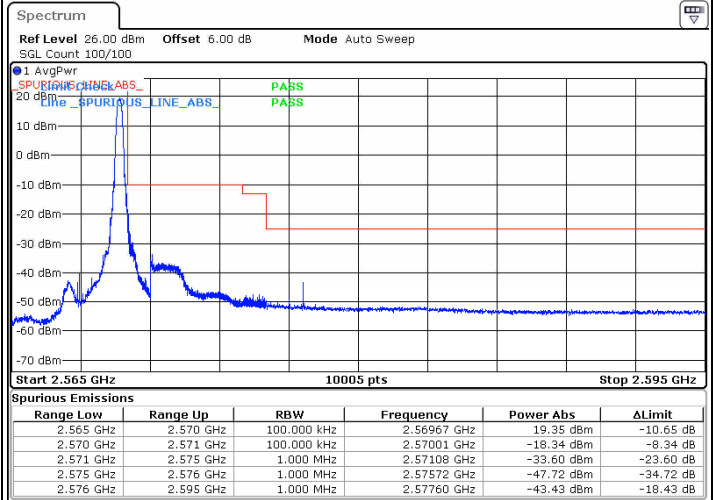
LTE Band 7 / 5MHz / 64QAM

Lowest Band Edge / 1RB



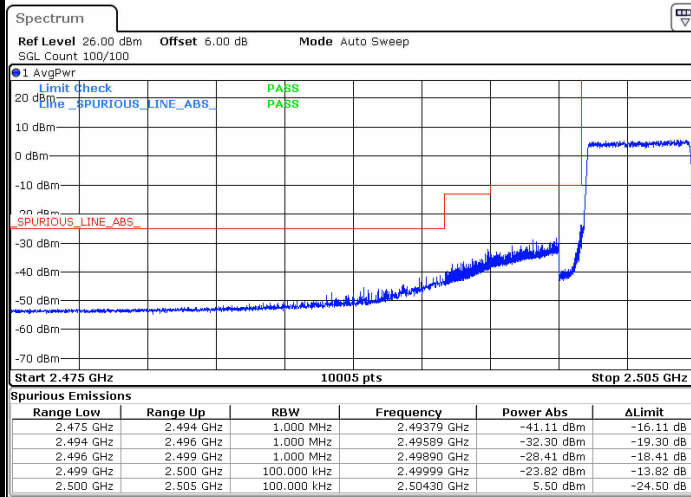
Date: 18.NOV.2024 15:36:18

Highest Band Edge / 1 RB



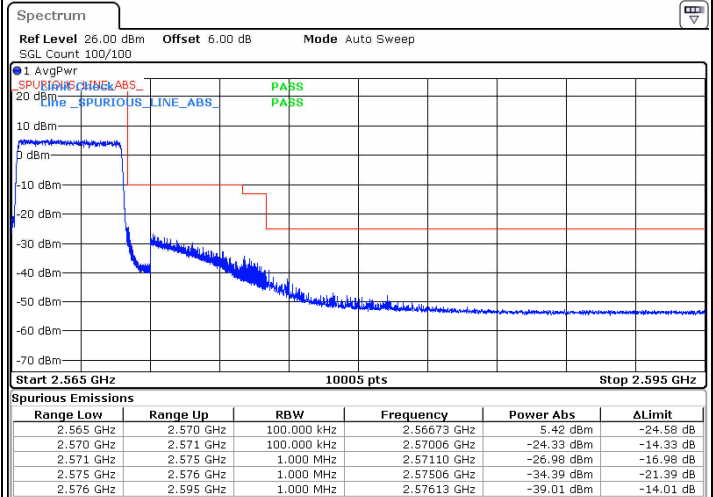
Date: 18.NOV.2024 15:39:17

Lowest Band Edge / Full RB



Date: 18.NOV.2024 15:37:27

Highest Band Edge / Full RB

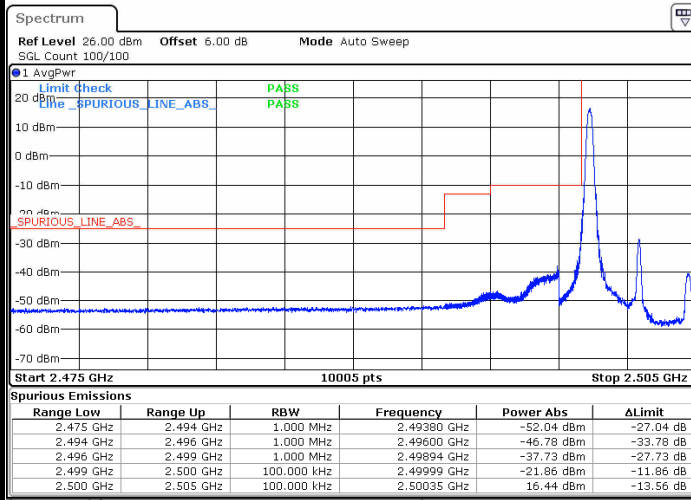


Date: 18.NOV.2024 15:40:26

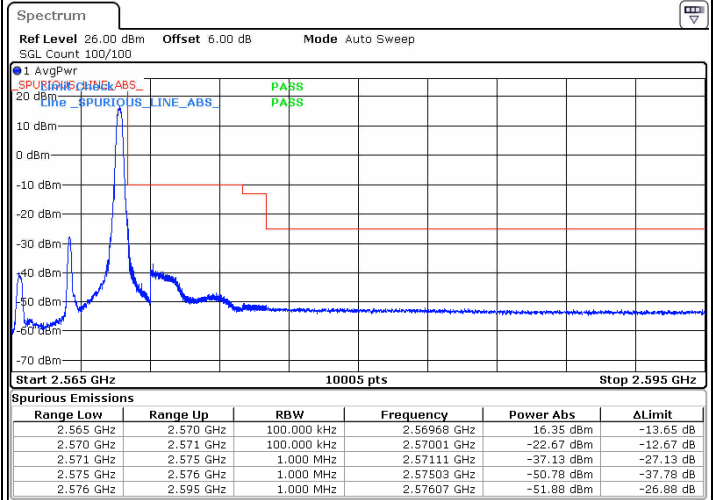


LTE Band 7 / 5MHz / 256QAM

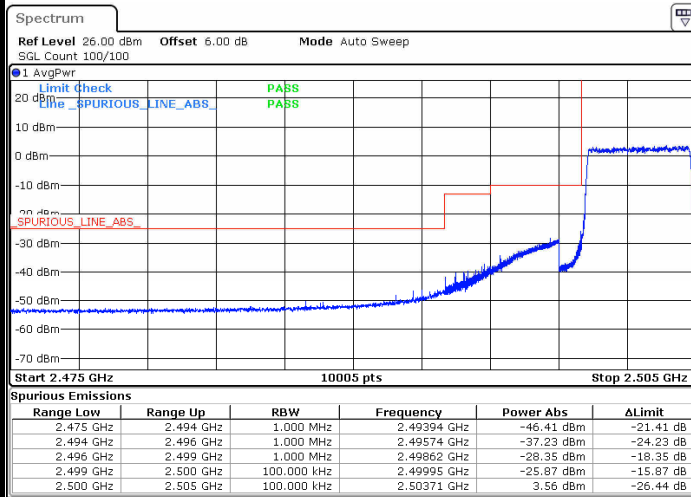
Lowest Band Edge / 1RB



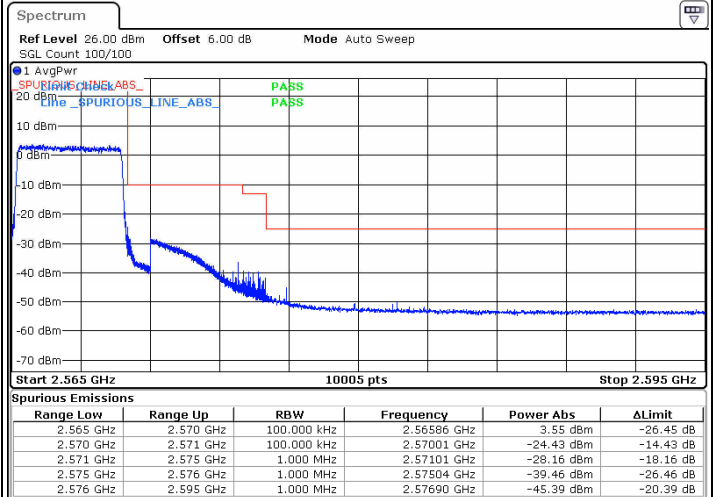
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



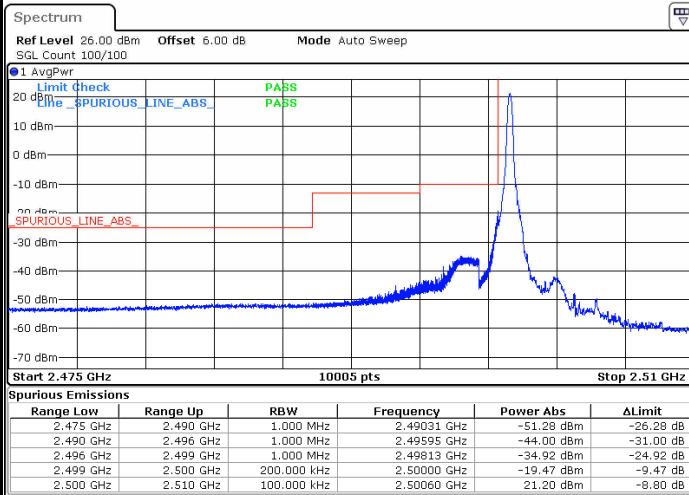
Highest Band Edge / Full RB



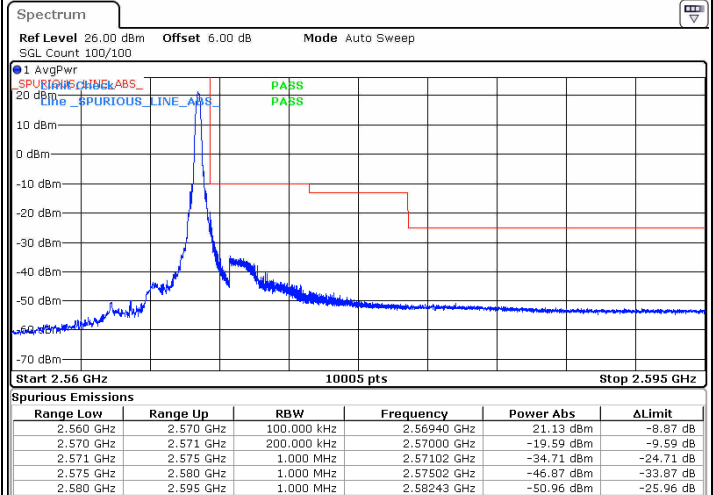


LTE Band 7 / 10MHz / QPSK

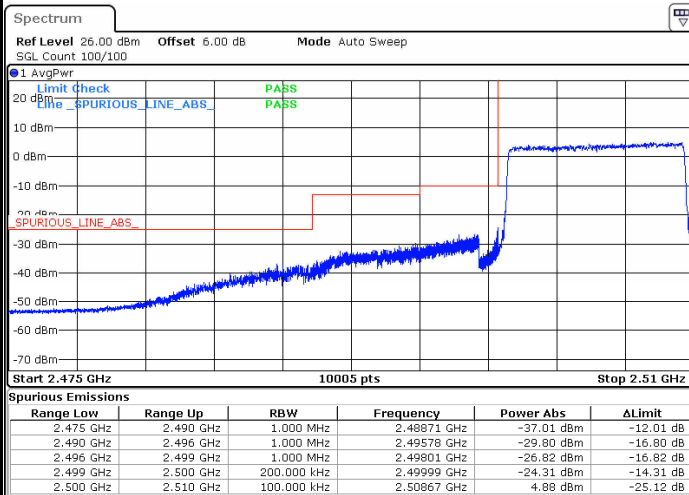
Lowest Band Edge / 1 RB



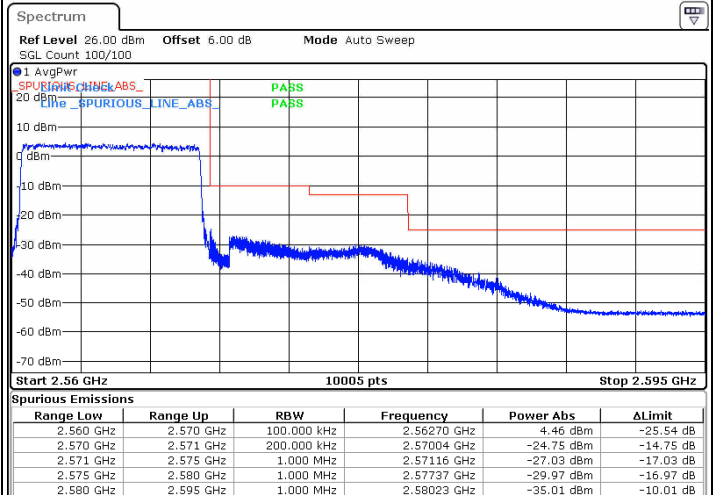
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



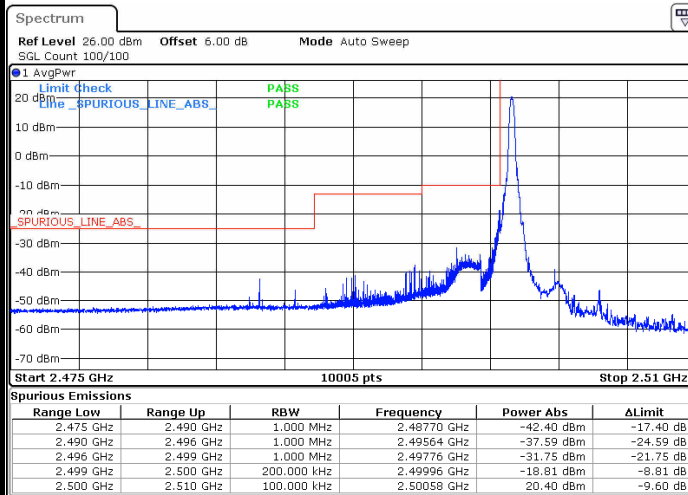
Highest Band Edge / Full RB



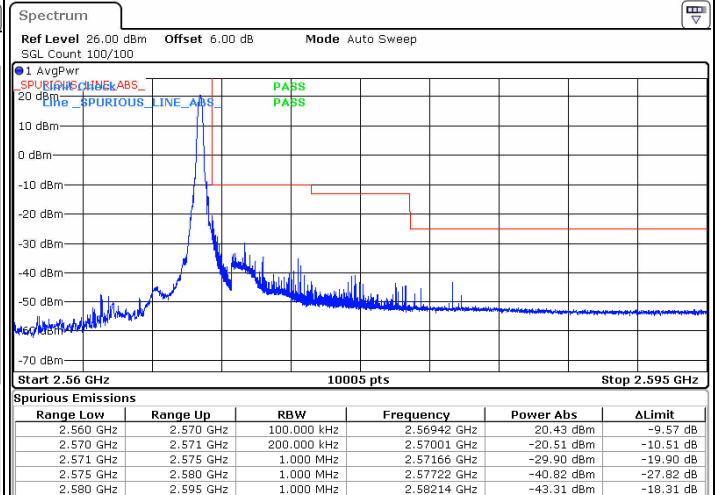


LTE Band 7 / 10MHz / 16QAM

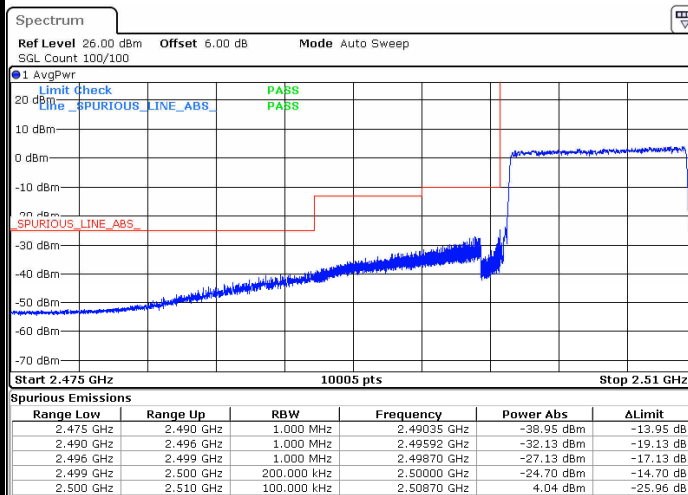
Lowest Band Edge / 1 RB



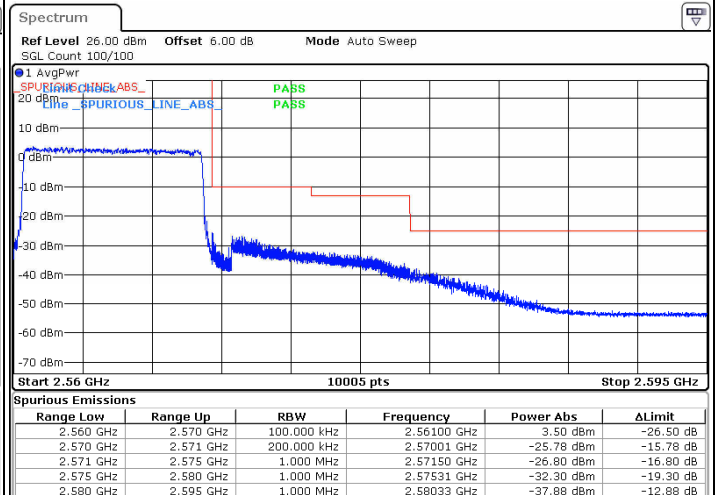
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



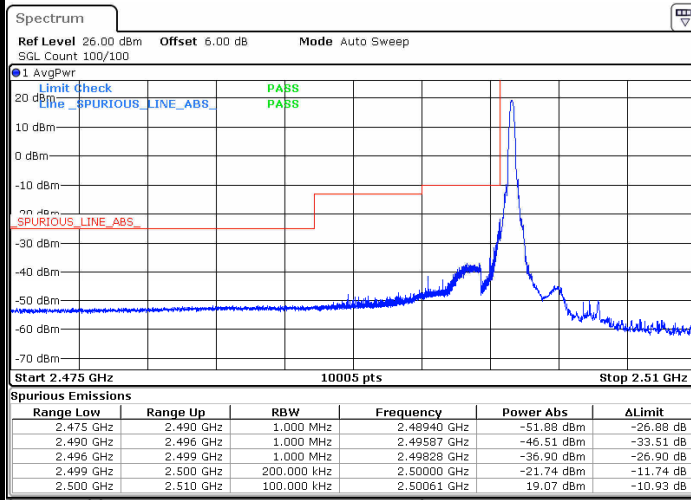
Highest Band Edge / Full RB





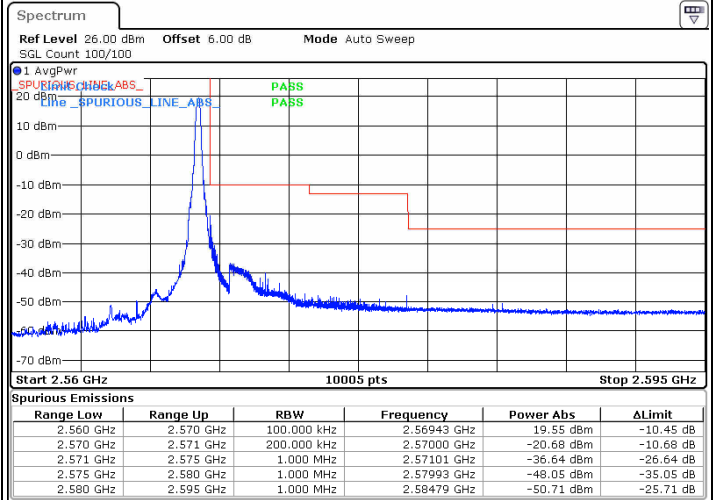
LTE Band 7 / 10MHz / 64QAM

Lowest Band Edge / 1 RB



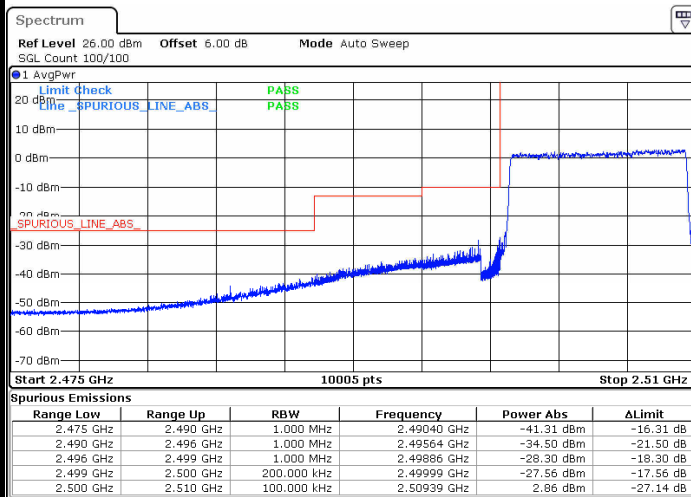
Date: 18.NOV.2024 20:25:23

Highest Band Edge / 1 RB



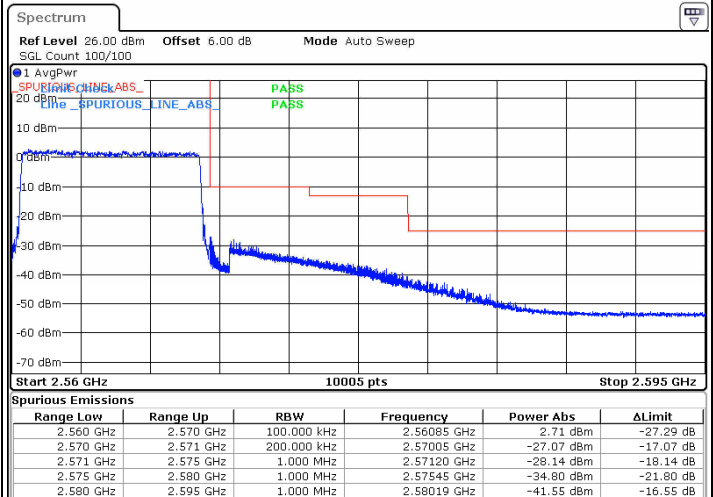
Date: 18.NOV.2024 20:28:58

Lowest Band Edge / Full RB



Date: 18.NOV.2024 15:56:06

Highest Band Edge / Full RB



Date: 18.NOV.2024 15:57:55