



LTE TEST REPORT

No.24T04Z102499-001

for

TCL Communication Ltd.

GSM/UMTS/LTE/NR Mobile phone

Model Name: T704SP

FCC ID: 2ACCJH184

with

Hardware Version: 09

Software Version: 6CS9

Issued Date: 2024-12-03

Note:

The test results in this test report relate only to the devices specified in this report. This report shall not be reproduced except in full without the written approval of CTTL.

Test Laboratory:

CTTL-Telecommunication Technology Labs, CAICT

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REPORT HISTORY

Report Number	Revision	Description	Issue Date
24T04Z102499-001	Rev.0	1 st edition	2024-12-03

Note: the latest revision of the test report supersedes all previous version.

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1. Test Laboratory

1.1. Introduction & Accreditation

Telecommunication Technology Labs, CAICT is an ISO/IEC 17025:2017 accredited test laboratory under American Association for Laboratory Accreditation (A2LA) with lab code 7049.01, and is also an FCC accredited test laboratory (CN1349), and ISED accredited test laboratory (CAB identifier:CN0066). The detail accreditation scope can be found on A2LA website.

1.2. Testing Location

Location 1: CTTL (huayuan North Road)

Address: No. 52, Huayuan North Road, Haidian District, Beijing,
P. R. China 100191

Location 2: CTTL (BDA)

Address: No.18A, Kangding Street, Beijing Economic-Technology
Development Area, Beijing, P. R. China 100176

1.3. Testing Environment

Normal Temperature: 15-35℃

Relative Humidity: 20-75%

1.4. Project Data

Testing Start Date: 2024-10-29

Testing End Date: 2024-11-29

1.5. Signature



Wang Xing

(Prepared this test report)



Zhou Yu

(Reviewed this test report)



Zhao Hui Lin

(Approved this test report)

2. Client Information

2.1. Applicant Information

Company Name: TCL Communication Ltd.
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2.2. Manufacturer Information

Company Name: TCL Communication Ltd.
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Park, Shatin, NT, Hong Kong
Contact: Ting Wang
Email: ting.wang.hz@tcl.com
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3. Equipment Under Test (EUT) and Ancillary Equipment (AE)

3.1. About EUT

Description	GSM/UMTS/LTE/NR Mobile phone
Model Name	T704SP
FCC ID	2ACCJH184
Antenna	Embedded
Output power	21.71dBm maximum EIRP measured for LTE Band 2
Extreme Voltage	3.6VDC to 4.4VDC (nominal: 3.85VDC)
Extreme Temperature	-10°C to +55°C

Note: Components list, please refer to documents of the manufacturer; it is also included in the original test record of CTTL.

3.2. Internal Identification of EUT used during the test

EUT ID*	IMEI	HW Version	SW Version	Date of receipt
UT33a	016617000011349/	09	6CS9	2024-10-29
	016617000011341			
UT34a	016617000010929/	09	6CS9	2024-10-29
	016617000010921			

UT34a was used for emission limit test and UT33a was used for other testing cases.

*EUT ID: is used to identify the test sample in the lab internally.

3.3. Internal Identification of AE used during the test

AE ID* Description

AE1 Battery

AE2 Battery

AE1

Model TLp049F7

Manufacturer VEKEN

Capacitance 4900 mAh

AE2

Model TLp049N9

Manufacturer FENGHUA

Capacitance 4900 mAh

*AE ID: is used to identify the test sample in the lab internally.

4. Reference Documents

4.1. Documents supplied by applicant

EUT parameters are supplied by the customer, which are the bases of testing. CAICT is not responsible for the accuracy of customer supplied technical information that may affect the test results (for example, antenna gain and loss of customer supplied cable).

4.2. Reference Documents for testing

The following documents listed in this section are referred for testing.

Reference	Title	Version
FCC Part 24	PERSONAL COMMUNICATIONS SERVICES	10-1-23 Edition
FCC Part 22	PUBLIC MOBILE SERVICES	10-1-23 Edition
FCC Part 27	MISCELLANEOUS WIRELESS COMMUNICATIONS SERVICES	10-1-23 Edition
FCC Part 96	CITIZENS BROADBAND RADIO SERVICE	10-1-23 Edition
ANSI/TIA-603-E	Land Mobile FM or PM Communications Equipment Measurement and Performance Standards	2016
ANSI C63.26	American National Standard for Compliance Testing of Transmitters Used in Licensed Radio Services	2015
KDB 971168 D01	MEASUREMENT GUIDANCE FOR CERTIFICATION OF LICENSED DIGITAL TRANSMITTERS	v03r01
KDB 940660 D01	CERTIFICATION AND TEST PROCEDURES FOR CITIZENS BROADBAND RADIO SERVICE DEVICES AUTHORIZED UNDER PART 96	v03

5. Summary of Test Result

LTE Band 2

Items	Test Name	Clause in FCC rules	Verdict
1	Output Power	24.232	P
2	Emission Limit	2.1051/24.238	P
6	Band Edge Compliance	24.238	BR

LTE Band 5

Items	Test Name	Clause in FCC rules	Verdict
1	Output Power	22.913	P
2	Emission Limit	2.1051/22.917	P
6	Band Edge Compliance	22.917	BR

LTE Band 7

Items	Test Name	Clause in FCC rules	Verdict
1	Output Power	27.50	BR
2	Emission Limit	2.1051/27.53	BR
3	Frequency Stability	2.1055	BR
4	Occupied Bandwidth	2.1049	BR
5	Emission Bandwidth	27.53	BR
6	Band Edge Compliance	27.53	BR
7	Conducted Spurious Emission	27.53	BR
8	Peak-to-Average Power Ratio	27.50	BR

LTE Band 12

Items	Test Name	Clause in FCC rules	Verdict
1	Output Power	27.50	BR
2	Emission Limit	2.1051/27.53	BR
3	Frequency Stability	2.1055	BR
4	Occupied Bandwidth	2.1049	BR
5	Emission Bandwidth	27.53	BR
6	Band Edge Compliance	27.53	BR
7	Conducted Spurious Emission	27.53	BR
8	Peak-to-Average Power Ratio	27.50	BR

LTE Band 13

Items	Test Name	Clause in FCC rules	Verdict
1	Output Power	27.50	BR
2	Emission Limit	2.1051/27.53	BR
3	Frequency Stability	2.1055	BR
4	Occupied Bandwidth	2.1049	BR
5	Emission Bandwidth	27.53	BR
6	Band Edge Compliance	27.53	BR
7	Conducted Spurious Emission	27.53	BR
8	Peak-to-Average Power Ratio	27.50	BR

LTE Band 48

Items	Test Name	Clause in FCC rules	Verdict
1	Output Power	96.41	P
2	Emission Limit	NA	NA
3	Frequency Stability	2.1055	P
4	Occupied Bandwidth	2.1049	P
5	Emission Bandwidth	96.41	P
6	Band Edge Compliance	96.41	P
7	Conducted Spurious Emission	96.41	P
8	Peak-to-Average Power Ratio	96.41	P

LTE Band 66 (4)

Items	Test Name	Clause in FCC rules	Verdict
1	Output Power	27.50	BR
2	Emission Limit	2.1051/27.53	BR
3	Frequency Stability	2.1055	BR
4	Occupied Bandwidth	2.1049	BR
5	Emission Bandwidth	27.53	BR
6	Band Edge Compliance	27.53	BR
7	Conducted Spurious Emission	27.53	BR
8	Peak-to-Average Power Ratio	27.50	BR

Terms used in Verdict column

P	Pass. The EUT complies with the essential requirements in the standard.
NP	Not Performed. The test was not performed by CTTL.
NA	Not Applicable. The test was not applicable.
BR	Re-use test data from basic model report.
F	Fail. The EUT does not comply with the essential requirements in the standard.

All the test results are based on normal power.

Measurement uncertainty is not taken into account when stating conformity with a specified requirement.

LTE Band 66 overlaps the entire frequency range of LTE Band 4. Therefore, test data provided in this report covers Band 4 as well as Band 66.

Band 48 is tested by power class 3.

Explanation of worst-case configuration

The worst-case scenario for all measurements is based on the conducted output power measurement investigation results. Output power was measured on QPSK, 16QAM, 64QAM and 256QAM modulations. It was found that QPSK was the worst case. All testing was performed using QPSK modulations to represent the worst case unless otherwise stated. The test results shown in the following sections represent the worst case emission.

The Equipment Under Test (EUT) model T704SP (FCC ID: 2ACCJH184) is a variant product of T702Z (FCC ID: 2ACCJH184), according to the declaration of changes provided by the applicant and FCC KDB publication 178919 D01, spot check measurements were performed on this device, Band 48 and newly added UL-CA were tested, other test results are derived from test report No. 24T04Z102259-012. Please refer Annex A for detail spot check verification data and reference data. The spot check test results are consistent with basic model.

For detail differences between two models please refer the Declaration of Changes document.

The Band 2 of this product has the same tune up as the Band 2, Band 25 of the Initial model and the spot check power measurement results consist requirements in T704SP Tune-up so that the Band 2 results are reused.

The Band 5 of this product has the same tune up as the Band 5, Band 26 of the Initial model and the spot check power measurement results consist requirements in T704SP Tune-up so that the Band 5 results are reused.

6. Test Equipment Utilized

Description	Type	Series Number	Manufacture	Cal Due Date	Calibration Interval
Wideband Radio Communication Tester	CMW500	159082	R&S	2024-12-28	1 year
Signal&Spectrum Analyzer	FSW	104038	R&S	2025-07-02	1 year
Spectrum Analyzer	FSU	200030	R&S	2025-05-08	1 year
Climate chamber	SH-241	92004642	ESPEC	2025-10-29	1 year
Test Receiver	FSV30	101576	R&S	2025-05-08	1 Year
Test Receiver	FSV30	101525	R&S	2025-01-18	1 year
EMI Antenna	VULB 9163	9163-482	Schwarzbeck	2025-05-19	1 year
EMI Antenna	9117	167	Schwarzbeck	2025-10-15	1 year
EMI Antenna	LB-7180-NF	J2030013000005	A-INFO	2025-05-16	1 year
EMI Antenna	3115	00146404	ETS-Lindgren	2025-05-16	1 year
Signal Generator	SMF100A	101295	R&S	2025-02-04	1 year

Note: Only the latest Cal Due Dates of equipments are listed above and all equipments are in valid calibration period when used.

Annex A: Measurement Results

A.1 Output Power

A.1.1 Summary

During the process of testing, the EUT was controlled via communication tester to ensure max power transmission and proper modulation.

In all cases, output power is within the specified limits.

A.1.2 Conducted

A.1.2.1 Method of Measurements

The EUT was set up for the max output power with pseudo random data modulation.

These measurements were done at 3 frequencies (bottom, middle and top of operational frequency range) for each bandwidth.

The results below include a correction factor for cable loss that is provided by the customer.

A.1.2.2 Measurement Result

Spot Check Measurement Results:

LTE band 2

Bandwidth	RB size/offset	Frequency (MHz)	Power (dBm)			
			QPSK	16QAM	64QAM	256QAM
20MHz	1 RB high	1900.0	23.23	22.86	21.15	18.24
		1880.0	23.31	22.96	21.20	18.25
		1860.0	23.20	22.84	21.11	18.21
	1 RB low	1900.0	23.22	22.84	21.45	18.23
		1880.0	23.23	22.87	21.55	18.29
		1860.0	23.24	22.87	21.44	18.13
	50% RB mid	1900.0	22.30	21.29	20.36	18.26
		1880.0	22.29	21.27	20.33	18.39
		1860.0	22.25	21.25	20.30	18.28
	100% RB	1900.0	22.34	21.30	20.35	18.27
		1880.0	22.26	21.27	20.30	18.33
		1860.0	22.30	21.30	20.31	18.30

LTE band 5

Bandwidth	RB size/offset	Frequency (MHz)	Power (dBm)			
			QPSK	16QAM	64QAM	256QAM
10MHz	1 RB high	844.0	24.06	23.07	22.01	19.41
		836.5	24.18	23.32	22.18	19.37
		829.0	24.10	23.21	22.10	19.42
	1 RB low	844.0	24.19	23.19	22.01	19.36
		836.5	24.13	23.26	21.97	19.41
		829.0	24.08	23.21	22.17	19.37
	50% RB mid	844.0	23.11	22.29	21.35	19.30
		836.5	23.21	22.36	21.38	19.34
		829.0	23.18	22.43	21.46	19.43
	100% RB	844.0	23.13	22.29	21.27	19.22
		836.5	23.15	22.34	21.31	19.28
		829.0	23.16	22.37	21.36	19.33

Measurement Results from UT33a:
LTE band 48

Bandwidth	RB size/offset	Frequency (MHz)	Power (dBm)			
			QPSK	16QAM	64QAM	256QAM
5MHz	1 RB high	3697.5	23.06	22.15	21.51	18.10
		3625.0	22.72	21.95	21.28	17.93
		3552.5	22.57	21.54	21.20	17.80
	1 RB low	3697.5	23.00	22.06	21.41	18.04
		3625.0	22.78	21.98	21.23	17.97
		3552.5	22.53	21.51	20.52	17.70
	50% RB mid	3697.5	21.84	20.94	19.93	17.84
		3625.0	21.68	20.79	19.79	17.72
		3552.5	21.50	20.59	19.51	17.51
	100% RB	3697.5	21.90	20.89	19.83	17.85
		3625.0	21.71	20.73	19.68	17.71
		3552.5	21.53	20.52	19.50	17.51
10MHz	1 RB high	3695.0	23.05	22.00	20.86	17.96
		3625.0	22.71	21.91	20.71	17.82
		3555.0	22.63	21.79	20.68	17.77
	1 RB low	3695.0	22.88	21.86	20.97	17.81
		3625.0	22.80	21.96	20.82	17.91
		3555.0	22.50	21.64	20.55	17.58
	50% RB mid	3695.0	21.80	20.81	19.75	17.76
		3625.0	21.69	20.72	19.66	17.69
		3555.0	21.63	20.59	19.55	17.60
	100% RB	3695.0	21.79	20.80	19.76	17.73
		3625.0	21.70	20.73	19.69	17.68
		3555.0	21.58	20.60	19.53	17.51
15MHz	1 RB high	3692.5	23.01	22.04	21.05	18.04
		3625.0	22.67	21.81	20.86	17.80
		3557.5	22.75	21.91	20.58	17.84
	1 RB low	3692.5	22.79	21.79	21.14	17.80
		3625.0	22.81	21.96	20.90	17.97
		3557.5	22.52	21.68	20.76	17.68
	50% RB mid	3692.5	21.72	20.72	19.71	17.63
		3625.0	21.62	20.67	19.59	17.60
		3557.5	21.60	20.56	19.55	17.51
	100% RB	3692.5	21.71	20.73	19.72	17.71
		3625.0	21.66	20.68	19.66	17.68
		3557.5	21.58	20.60	19.56	17.59
20MHz	1 RB high	3690.0	23.09	22.13	21.14	18.25

		3625.0	22.75	21.88	20.89	18.00
		3560.0	22.90	22.09	21.08	18.19
	1 RB low	3690.0	22.84	21.86	21.05	17.97
		3625.0	22.95	22.15	20.79	18.26
		3560.0	22.61	21.83	20.99	17.93
	50% RB mid	3690.0	21.75	20.71	19.73	17.65
		3625.0	21.64	20.72	19.63	17.68
		3560.0	21.70	20.69	19.73	17.64
	100% RB	3690.0	21.66	20.66	19.66	17.65
		3625.0	21.70	20.69	19.70	17.67
		3560.0	21.63	20.62	19.62	17.62

LTE CA band 48C

Bandwidth	Frequency(MHz)	Frequency(MHz)	Modulation	PCC RB		SCC RB		Conducted Power(dBm)
				Size	Offset	Size	Offset	
5MHz/20MHz	3615.8	3627.5	QPSK	1	24	1	0	22.53
			QPSK	25	0	100	0	20.42
			16QAM	1	24	1	0	21.63
			16QAM	25	0	100	0	19.44
			64QAM	1	24	1	0	19.70
			64QAM	25	0	100	0	19.42
			256QAM	1	24	1	0	17.46
			256QAM	25	0	100	0	17.41
10MHz/20MHz	3615.6	3630.0	QPSK	1	49	1	0	22.61
			QPSK	50	0	100	0	20.47
			16QAM	1	49	1	0	21.55
			16QAM	50	0	100	0	19.51
			64QAM	1	49	1	0	19.27
			64QAM	50	0	100	0	19.50
			256QAM	1	49	1	0	17.48
			256QAM	50	0	100	0	17.49
15MHz/20MHz	3615.3	3632.4	QPSK	1	74	1	0	22.57
			QPSK	75	0	100	0	20.45
			16QAM	1	74	1	0	21.23
			16QAM	75	0	100	0	19.46
			64QAM	1	74	1	0	19.48
			64QAM	75	0	100	0	19.45
			256QAM	1	74	1	0	17.43
			256QAM	75	0	100	0	17.40
20MHz/5MHz	3622.5	3634.2	QPSK	1	99	1	0	22.35
			QPSK	100	0	25	0	20.38
			16QAM	1	99	1	0	21.39
			16QAM	100	0	25	0	19.38
			64QAM	1	99	1	0	19.34
			64QAM	100	0	25	0	19.43
			256QAM	1	99	1	0	17.14
			256QAM	100	0	25	0	17.34
20MHz/10MHz	3620.1	3634.5	QPSK	1	99	1	0	22.52
			QPSK	100	0	50	0	20.42
			16QAM	1	99	1	0	21.53
			16QAM	100	0	50	0	19.47
			64QAM	1	99	1	0	19.50
			64QAM	100	0	50	0	19.46
			256QAM	1	99	1	0	17.28
			256QAM	100	0	50	0	17.42

20MHz/ 15MHz	3617.6	3634.7	QPSK	1	99	1	0	22.44
			QPSK	100	0	75	0	20.41
			16QAM	1	99	1	0	21.31
			16QAM	100	0	75	0	19.43
			64QAM	1	99	1	0	19.53
			64QAM	100	0	75	0	19.40
			256QAM	1	99	1	0	17.57
			256QAM	100	0	75	0	17.41
20MHz/ 20MHz	3615.1	3634.9	QPSK	1	99	1	0	22.55
			QPSK	100	0	100	0	20.44
			16QAM	1	99	1	0	21.59
			16QAM	100	0	100	0	19.42
			64QAM	1	99	1	0	19.54
			64QAM	100	0	100	0	19.47
			256QAM	1	99	1	0	17.36
			256QAM	100	0	100	0	17.40

Reference Measurement Results from basic model:
LTE band 7

Bandwidth	RB size/offset	Frequency (MHz)	Power (dBm)			
			QPSK	16QAM	64QAM	256QAM
5MHz	1 RB high	2567.5	21.95	20.95	20.08	16.95
		2535.0	22.21	21.21	20.37	17.20
		2502.5	21.82	20.73	19.98	16.82
	1 RB low	2567.5	21.95	20.98	20.14	16.96
		2535.0	22.19	21.19	20.41	17.21
		2502.5	21.68	20.54	20.01	16.63
	50% RB mid	2567.5	20.97	20.00	19.10	17.03
		2535.0	21.17	20.21	19.30	17.23
		2502.5	20.77	19.82	18.83	16.83
	100% RB	2567.5	21.00	19.95	19.02	16.99
		2535.0	21.19	20.13	19.22	17.18
		2502.5	20.80	19.73	18.80	16.81
10MHz	1 RB high	2565.0	21.94	21.01	19.84	17.07
		2535.0	22.27	21.24	20.11	17.32
		2505.0	21.91	20.88	19.83	17.00
	1 RB low	2565.0	21.95	20.96	19.74	17.06
		2535.0	22.22	21.18	20.00	17.25
		2505.0	21.64	20.61	19.69	16.70
	50% RB mid	2565.0	21.04	20.09	19.11	17.07
		2535.0	21.30	20.32	19.32	17.29
		2505.0	20.90	19.91	18.99	16.92
	100% RB	2565.0	21.03	20.07	19.03	17.02
		2535.0	21.26	20.28	19.22	17.22
		2505.0	20.87	19.89	18.86	16.86
15MHz	1 RB high	2562.5	21.95	21.34	20.39	17.29
		2535.0	22.28	21.64	20.65	17.54
		2507.5	21.98	21.40	20.34	17.30
	1 RB low	2562.5	22.07	21.48	20.38	17.39
		2535.0	22.16	21.52	20.64	17.47
		2507.5	21.72	21.14	20.31	17.01
	50% RB mid	2562.5	21.04	20.02	19.02	17.04
		2535.0	21.27	20.24	19.24	17.24
		2507.5	20.97	19.94	19.00	16.97
	100% RB	2562.5	21.04	20.05	19.05	17.07
		2535.0	21.25	20.30	19.27	17.28
		2507.5	20.93	19.95	18.97	16.95
20MHz	1 RB high	2560.0	22.01	21.58	19.96	16.99
		2535.0	22.31	21.97	20.24	17.28
		2510.0	21.99	21.63	19.87	16.98

	1 RB low	2560.0	22.09	21.69	20.22	17.08
		2535.0	22.11	21.78	20.53	17.07
		2510.0	21.65	21.27	20.21	16.58
	50% RB mid	2560.0	21.12	20.11	19.12	17.12
		2535.0	21.33	20.28	19.35	17.32
		2510.0	21.06	19.99	19.09	17.02
	100% RB	2560.0	21.13	20.11	19.11	17.11
		2535.0	21.30	20.30	19.30	17.29
		2510.0	21.03	20.01	19.03	17.02

LTE band 12

Bandwidth	RB size/offset	Frequency (MHz)	Power (dBm)			
			QPSK	16QAM	64QAM	256QAM
1.4MHz	1 RB high	715.3	23.44	22.48	21.30	18.41
		707.5	23.41	22.50	21.30	18.38
		699.7	23.32	22.41	21.29	18.38
	1 RB low	715.3	23.43	22.46	21.22	18.41
		707.5	23.39	22.50	21.15	18.40
		699.7	23.25	22.34	21.13	18.28
	50% RB mid	715.3	23.50	22.62	21.23	18.37
		707.5	23.50	22.61	21.23	18.37
		699.7	23.53	22.61	21.26	18.38
	100% RB	715.3	22.45	21.65	20.32	18.41
		707.5	22.42	21.63	20.35	18.40
		699.7	22.43	21.65	20.34	18.38
3MHz	1 RB high	714.5	23.42	22.49	21.26	18.43
		707.5	23.43	22.51	21.26	18.43
		700.5	23.35	22.39	21.12	18.34
	1 RB low	714.5	23.42	22.46	21.19	18.41
		707.5	23.46	22.50	21.20	18.42
		700.5	23.38	22.46	21.14	18.33
	50% RB mid	714.5	22.43	21.50	20.43	18.37
		707.5	22.42	21.51	20.43	18.40
		700.5	22.45	21.54	20.32	18.38
	100% RB	714.5	22.47	21.43	20.40	18.37
		707.5	22.48	21.43	20.45	18.40
		700.5	22.49	21.45	20.40	18.38
5MHz	1 RB high	713.5	23.57	22.56	21.71	18.58
		707.5	23.61	22.64	21.66	18.54
		701.5	23.54	22.60	21.65	18.58
	1 RB low	713.5	23.55	22.59	21.75	18.58
		707.5	23.63	22.67	21.71	18.57
		701.5	23.49	22.53	21.76	18.48
	50% RB mid	713.5	22.52	21.60	20.56	18.51
		707.5	22.51	21.62	20.61	18.54
		701.5	22.47	21.58	20.49	18.50
	100% RB	713.5	22.58	21.52	20.52	18.48
		707.5	22.58	21.50	20.58	18.53
		701.5	22.55	21.52	20.54	18.50
10MHz	1 RB high	711.0	23.58	22.57	21.36	18.59
		707.5	23.60	22.59	21.41	18.57
		704.0	23.47	22.54	21.38	18.53
	1 RB low	711.0	23.52	22.59	21.24	18.56

		707.5	23.53	22.52	21.26	18.53
		704.0	23.40	22.50	21.19	18.42
	50% RB mid	711.0	22.54	21.63	20.50	18.52
		707.5	22.56	21.65	20.53	18.54
		704.0	22.55	21.63	20.53	18.52
	100% RB	711.0	22.57	21.58	20.47	18.43
		707.5	22.59	21.62	20.53	18.49
		704.0	22.53	21.56	20.46	18.43

LTE band 13

Bandwidth	RB size/offset	Frequency (MHz)	Power (dBm)			
			QPSK	16QAM	64QAM	256QAM
5MHz	1 RB high	784.5	23.12	22.13	21.28	18.19
		782.0	23.13	22.16	21.31	18.19
		779.5	23.19	22.03	21.33	18.24
	1 RB low	784.5	23.20	22.21	21.32	18.23
		782.0	23.14	22.17	21.33	18.24
		779.5	23.20	22.15	21.40	18.18
	50% RB mid	784.5	22.04	21.17	20.21	18.18
		782.0	22.09	21.20	20.25	18.20
		779.5	22.12	21.18	20.25	18.23
	100% RB	784.5	22.11	21.07	20.17	18.15
		782.0	22.15	21.09	20.19	18.16
		779.5	22.15	21.11	20.22	18.21
10MHz	1 RB high	782.0	23.16	22.12	21.05	18.20
	1 RB low	782.0	23.10	22.22	21.19	18.18
	50% RB mid	782.0	22.16	21.29	20.20	18.24
	100% RB	782.0	22.16	21.16	20.12	18.09

LTE band 66

Bandwidth	RB size/offset	Frequency (MHz)	Power (dBm)			
			QPSK	16QAM	64QAM	256QAM
1.4MHz	1 RB high	1779.3	23.30	22.32	21.22	18.29
		1745.0	23.32	22.35	21.25	18.33
		1710.7	23.26	22.38	21.64	18.37
	1 RB low	1779.3	23.28	22.29	21.09	18.28
		1745.0	23.30	22.33	21.14	18.36
		1710.7	23.27	22.41	21.04	18.26
	50% RB mid	1779.3	23.35	22.52	21.18	18.28
		1745.0	23.32	22.50	21.12	18.27
		1710.7	23.34	22.48	21.18	18.25
	100% RB	1779.3	22.32	21.22	20.21	18.29
		1745.0	22.34	21.23	20.22	18.27
		1710.7	22.27	21.45	20.32	18.26
3MHz	1 RB high	1778.5	23.29	22.31	21.55	18.74
		1745.0	23.34	22.36	21.58	18.77
		1711.5	23.29	22.33	21.18	18.29
	1 RB low	1778.5	23.30	22.34	21.91	18.71
		1745.0	23.32	22.36	21.95	18.74
		1711.5	23.28	22.33	21.04	18.27
	50% RB mid	1778.5	22.27	21.35	20.38	18.29
		1745.0	22.27	21.34	20.34	18.27
		1711.5	22.29	21.33	20.25	18.24
	100% RB	1778.5	22.33	21.28	20.37	18.25
		1745.0	22.31	21.26	20.33	18.26
		1711.5	22.30	21.26	20.30	18.27
5MHz	1 RB high	1777.5	23.47	22.49	21.57	18.43
		1745.0	23.43	22.46	21.57	18.44
		1712.5	23.42	22.43	21.55	18.48
	1 RB low	1777.5	23.41	22.44	21.60	18.42
		1745.0	23.42	22.46	21.62	18.44
		1712.5	23.40	22.42	21.61	18.45
	50% RB mid	1777.5	22.36	21.44	20.52	18.43
		1745.0	22.35	21.45	20.51	18.43
		1712.5	22.32	21.39	20.40	18.42
	100% RB	1777.5	22.40	21.35	20.43	18.41
		1745.0	22.41	21.33	20.41	18.39
		1712.5	22.38	21.32	20.41	18.39
10MHz	1 RB high	1775.0	23.43	22.38	21.65	18.86
		1745.0	23.41	22.44	21.67	18.89
		1715.0	23.34	22.41	21.64	18.83
	1 RB low	1775.0	23.37	22.41	21.62	18.84

		1745.0	23.35	22.38	21.62	18.85
		1715.0	23.32	22.34	21.57	18.80
	50% RB mid	1775.0	22.41	21.45	20.46	18.38
		1745.0	22.37	21.42	20.42	18.35
		1715.0	22.38	21.39	20.41	18.30
	100% RB	1775.0	22.43	21.45	20.42	18.41
		1745.0	22.37	21.40	20.38	18.41
		1715.0	22.36	21.40	20.36	18.40
15MHz	1 RB high	1772.5	23.32	22.74	21.78	18.70
		1745.0	23.40	22.80	21.81	18.74
		1717.5	23.34	22.67	21.62	18.82
	1 RB low	1772.5	23.30	22.70	21.75	18.68
		1745.0	23.29	22.68	21.77	18.63
		1717.5	23.32	22.74	21.89	18.83
	50% RB mid	1772.5	22.40	21.40	20.40	18.38
		1745.0	22.38	21.37	20.37	18.37
		1717.5	22.35	21.36	20.39	18.35
	100% RB	1772.5	22.43	21.44	20.47	18.47
		1745.0	22.39	21.41	20.45	18.42
		1717.5	22.38	21.43	20.42	18.43
20MHz	1 RB high	1770.0	23.42	22.99	21.24	18.38
		1745.0	23.46	23.09	21.32	18.42
		1720.0	23.33	22.92	21.20	18.28
	1 RB low	1770.0	23.33	22.88	21.55	18.33
		1745.0	23.24	22.85	21.68	18.27
		1720.0	23.28	22.94	21.61	18.24
	50% RB mid	1770.0	22.38	21.41	20.42	18.46
		1745.0	22.46	21.42	20.45	18.45
		1720.0	22.48	21.39	20.46	18.44
	100% RB	1770.0	22.39	21.40	20.39	18.39
		1745.0	22.44	21.45	20.45	18.45
		1720.0	22.43	21.39	20.42	18.40

A.1.3 Radiated

A.1.3.1 Description

This is the test for the maximum radiated power from the EUT.

FDD Band 7: Part 27.50(h)(2) specifies "Mobile stations are limited to 2.0 watts EIRP".

FDD Band 12: Part 27.50(c)(10) specifies "Portable stations(hand-held devices) in the 600 MHz uplink band and the 698–746 MHz band, and fixed and mobile stations in the 600 MHz uplink band are limited to 3 watts ERP".

FDD Band 13: Part 27.50(b) specifies "Portable stations(hand-held devices) transmitting in the 746–757 MHz, 776–788 MHz, and 805–806 MHz bands are limited to 3 watts ERP".

FDD Band 5: Part 22.913(a) specifies "The ERP of mobile transmitters and auxiliary test transmitters must not exceed 7 watts".

FDD Band 2: Part 24.232(c) specifies "Mobile and portable stations are limited to 2 watts EIRP".

FDD Band 4/66: Part 27.50(d)(4) specifies "Fixed, mobile, and portable(handheld) stations operating in the 1710–1755 MHz band and mobile and portable stations operating in the 1695–1710 MHz and 1755–1780 MHz bands are limited to 1 watt EIRP".

LTE Band 48: Part 96.41(b) specifies the maximum effective isotropic radiated power (EIRP) and maximum Power Spectral Density (PSD) of any CBSD and End User Device are limited to 23 dBm/10MHz.

A.1.3.2 Method of Measurement

According to KDB 412172 D01 and ANSI C63.26 the relevant equation for determining the maximum ERP or EIRP from the measured RF output power is given in Equation as follows:

$$\text{ERP or EIRP} = P_T + G_T - L_C$$

where;

- **ERP or EIRP** = effective radiated power or equivalent isotropically radiated power(expressed in the same units as P_T).
- **P_T** = transmitter output power, in this report the unit express as dBm;
- **G_T** = gain of the transmitting antenna, in dBd(ERP) or dBi(EIRP);
- **L_C** = signal attenuation in the connecting cable between the transmitter and antenna, in dB.

Alternatively, the EIRP can be determined from Equation above and then converted to ERP based on the maximum antenna gain relationship by applying the following equation:

$$\text{ERP} = \text{EIRP} - 2.15\text{dB}$$

Note: The antenna gain information was provided by the client. The laboratory is not responsible for identifying its authenticity during the test.

A.1.3.3 Limits and Measurement Results

Spot Check Measurement Results:

LTE Band 2 EIRP

Limits: $\leq 33\text{dBm}(2\text{W})$

Bandwidth	RB size/offset	Frequency (MHz)	Conducted Power(dBm)				ERP(dBm)(Gt-Lc =-1.6)			
			QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM
20MHz	1 RB high	1900	23.23	22.86	21.15	18.24	21.63	21.26	19.55	16.64
		1880	23.31	22.96	21.20	18.25	21.71	21.36	19.60	16.65
		1860	23.20	22.84	21.11	18.21	21.60	21.24	19.51	16.61
	1 RB low	1900	23.22	22.84	21.45	18.23	21.62	21.24	19.85	16.63
		1880	23.23	22.87	21.55	18.29	21.63	21.27	19.95	16.69
		1860	23.24	22.87	21.44	18.13	21.64	21.27	19.84	16.53
	50% RB mid	1900	22.30	21.29	20.36	18.26	20.70	19.69	18.76	16.66
		1880	22.29	21.27	20.33	18.39	20.69	19.67	18.73	16.79
		1860	22.25	21.25	20.30	18.28	20.65	19.65	18.70	16.68
	100% RB	1900	22.34	21.30	20.35	18.27	20.74	19.70	18.75	16.67
		1880	22.26	21.27	20.30	18.33	20.66	19.67	18.70	16.73
		1860	22.30	21.30	20.31	18.30	20.70	19.70	18.71	16.70

LTE Band 5 ERP

Limits: $\leq 38.45\text{dBm}(7\text{W})$

Bandwidth	RB size/offset	Frequency (MHz)	Conducted Power(dBm)				ERP(dBm)(Gt-Lc =-3.8)			
			QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM
10MHz	1 RB high	844	24.06	23.07	22.01	19.41	18.11	17.12	16.06	13.46
		836.5	24.18	23.32	22.18	19.37	18.23	17.37	16.23	13.42
		829	24.10	23.21	22.10	19.42	18.15	17.26	16.15	13.47
	1 RB low	844	24.19	23.19	22.01	19.36	18.24	17.24	16.06	13.41
		836.5	24.13	23.26	21.97	19.41	18.18	17.31	16.02	13.46
		829	24.08	23.21	22.17	19.37	18.13	17.26	16.22	13.42
	50% RB mid	844	23.11	22.29	21.35	19.30	17.16	16.34	15.40	13.35
		836.5	23.21	22.36	21.38	19.34	17.26	16.41	15.43	13.39
		829	23.18	22.43	21.46	19.43	17.23	16.48	15.51	13.48
	100% RB	844	23.13	22.29	21.27	19.22	17.18	16.34	15.32	13.27
		836.5	23.15	22.34	21.31	19.28	17.20	16.39	15.36	13.33
		829	23.16	22.37	21.36	19.33	17.21	16.42	15.41	13.38

Measurement Results from UT33a:
LTE Band 48 EIRP
Limits: $\leq 23\text{dBm}/10\text{MHz}$

BW	Frequency (MHz)	Modulation	RB Allocation	Conducted Power (dBm/10MHz)	EIRP (dBm/10MHz) (Gt-Lc = -1.1)	Margin
5MHz	3552.5	QPSK	1 RB low	23.56	22.46	0.54
		QPSK	1 RB high	23.63	22.53	0.47
		QPSK	100% RB	22.26	21.16	1.84
		16QAM	1 RB low	22.67	21.57	1.43
		16QAM	1 RB high	22.76	21.66	1.34
		16QAM	100% RB	21.22	20.12	2.88
		64QAM	1 RB low	21.65	20.55	2.45
		64QAM	1 RB high	21.78	20.68	2.32
		64QAM	100% RB	20.19	19.09	3.91
		256QAM	1 RB low	18.96	17.86	5.14
		256QAM	1 RB high	18.64	17.54	5.46
		256QAM	100% RB	18.20	17.10	5.90
	3625	QPSK	1 RB low	24.05	22.95	0.05
		QPSK	1 RB high	23.90	22.80	0.20
		QPSK	100% RB	22.86	21.76	1.24
		16QAM	1 RB low	23.37	22.27	0.73
		16QAM	1 RB high	22.78	21.68	1.32
		16QAM	100% RB	21.13	20.03	2.97
		64QAM	1 RB low	21.64	20.54	2.46
		64QAM	1 RB high	21.57	20.47	2.53
		64QAM	100% RB	20.79	19.69	3.31
		256QAM	1 RB low	18.96	17.86	5.14
		256QAM	1 RB high	18.93	17.83	5.17
		256QAM	100% RB	18.13	17.03	5.97
	3697.5	QPSK	1 RB low	23.46	22.36	0.64
		QPSK	1 RB high	23.76	22.66	0.34
		QPSK	100% RB	22.10	21.00	2.00
		16QAM	1 RB low	22.46	21.36	1.64
		16QAM	1 RB high	22.58	21.48	1.52
		16QAM	100% RB	21.08	19.98	3.02
		64QAM	1 RB low	21.42	20.32	2.68
		64QAM	1 RB high	22.14	21.04	1.96
		64QAM	100% RB	20.13	19.03	3.97
		256QAM	1 RB low	18.37	17.27	5.73
		256QAM	1 RB high	18.70	17.60	5.40
		256QAM	100% RB	18.12	17.02	5.98
10MHz	3555	QPSK	1 RB low	23.46	22.36	0.64

		QPSK	1 RB high	23.66	22.56	0.44
		QPSK	100% RB	21.64	20.54	2.46
		16QAM	1 RB low	23.17	22.07	0.93
		16QAM	1 RB high	22.85	21.75	1.25
		16QAM	100% RB	20.53	19.43	3.57
		64QAM	1 RB low	21.42	20.32	2.68
		64QAM	1 RB high	21.64	20.54	2.46
		64QAM	100% RB	19.48	18.38	4.62
		256QAM	1 RB low	18.50	17.40	5.60
		256QAM	1 RB high	18.65	17.55	5.45
		256QAM	100% RB	17.44	16.34	6.66
	3625	QPSK	1 RB low	23.91	22.81	0.19
		QPSK	1 RB high	23.41	22.31	0.69
		QPSK	100% RB	21.48	20.38	2.62
		16QAM	1 RB low	22.54	21.44	1.56
		16QAM	1 RB high	22.53	21.43	1.57
		16QAM	100% RB	21.14	20.04	2.96
		64QAM	1 RB low	21.47	20.37	2.63
		64QAM	1 RB high	21.36	20.26	2.74
		64QAM	100% RB	19.39	18.29	4.71
		256QAM	1 RB low	18.88	17.78	5.22
		256QAM	1 RB high	18.41	17.31	5.69
		256QAM	100% RB	17.37	16.27	6.73
	3695	QPSK	1 RB low	23.31	22.21	0.79
		QPSK	1 RB high	23.58	22.48	0.52
		QPSK	100% RB	21.37	20.27	2.73
		16QAM	1 RB low	22.42	21.32	1.68
		16QAM	1 RB high	22.58	21.48	1.52
		16QAM	100% RB	20.27	19.17	3.83
		64QAM	1 RB low	21.02	19.92	3.08
		64QAM	1 RB high	21.44	20.34	2.66
		64QAM	100% RB	19.23	18.13	4.87
		256QAM	1 RB low	18.20	17.10	5.90
		256QAM	1 RB high	18.44	17.34	5.66
		256QAM	100% RB	17.21	16.11	6.89
15MHz	3557.5	QPSK	1 RB low	23.48	22.38	0.62
		QPSK	1 RB high	23.87	22.77	0.23
		QPSK	100% RB	20.32	19.22	3.78
		16QAM	1 RB low	22.71	21.61	1.39
		16QAM	1 RB high	22.92	21.82	1.18
		16QAM	100% RB	19.16	18.06	4.94
		64QAM	1 RB low	21.86	20.76	2.24
		64QAM	1 RB high	21.95	20.85	2.15

20MHz		64QAM	100% RB	18.19	17.09	5.91
		256QAM	1 RB low	18.60	17.50	5.50
		256QAM	1 RB high	18.83	17.73	5.27
		256QAM	100% RB	16.14	15.04	7.96
	3625	QPSK	1 RB low	23.48	22.38	0.62
		QPSK	1 RB high	23.26	22.16	0.84
		QPSK	100% RB	20.06	18.96	4.04
		16QAM	1 RB low	22.59	21.49	1.51
		16QAM	1 RB high	22.35	21.25	1.75
		16QAM	100% RB	18.94	17.84	5.16
		64QAM	1 RB low	21.50	20.40	2.60
		64QAM	1 RB high	21.28	20.18	2.82
		64QAM	100% RB	17.92	16.82	6.18
		256QAM	1 RB low	18.47	17.37	5.63
		256QAM	1 RB high	18.27	17.17	5.83
		256QAM	100% RB	15.91	14.81	8.19
	3692.5	QPSK	1 RB low	23.27	22.17	0.83
		QPSK	1 RB high	23.53	22.43	0.57
		QPSK	100% RB	19.93	18.83	4.17
		16QAM	1 RB low	22.19	21.09	1.91
		16QAM	1 RB high	22.51	21.41	1.59
		16QAM	100% RB	18.84	17.74	5.26
		64QAM	1 RB low	21.14	20.04	2.96
		64QAM	1 RB high	21.40	20.30	2.70
		64QAM	100% RB	17.76	16.66	6.34
		256QAM	1 RB low	18.09	16.99	6.01
		256QAM	1 RB high	18.34	17.24	5.76
		256QAM	100% RB	15.77	14.67	8.33
	3560	QPSK	1 RB low	23.54	22.44	0.56
		QPSK	1 RB high	23.82	22.72	0.28
		QPSK	100% RB	19.25	18.15	4.85
		16QAM	1 RB low	22.60	21.50	1.50
		16QAM	1 RB high	22.90	21.80	1.20
		16QAM	100% RB	18.10	17.00	6.00
		64QAM	1 RB low	21.58	20.48	2.52
		64QAM	1 RB high	21.89	20.79	2.21
		64QAM	100% RB	17.10	16.00	7.00
		256QAM	1 RB low	18.44	17.34	5.66
		256QAM	1 RB high	18.69	17.59	5.41
		256QAM	100% RB	15.06	13.96	9.04
	3625	QPSK	1 RB low	23.52	22.42	0.58
		QPSK	1 RB high	23.27	22.17	0.83
		QPSK	100% RB	19.01	17.91	5.09

		16QAM	1 RB low	22.76	21.66	1.34
		16QAM	1 RB high	22.41	21.31	1.69
		16QAM	100% RB	17.87	16.77	6.23
		64QAM	1 RB low	21.68	20.58	2.42
		64QAM	1 RB high	21.38	20.28	2.72
		64QAM	100% RB	16.82	15.72	7.28
		256QAM	1 RB low	18.70	17.60	5.40
		256QAM	1 RB high	18.36	17.26	5.74
		256QAM	100% RB	14.79	13.69	9.31
	3690	QPSK	1 RB low	23.17	22.07	0.93
		QPSK	1 RB high	23.55	22.45	0.55
		QPSK	100% RB	18.80	17.70	5.30
		16QAM	1 RB low	22.22	21.12	1.88
		16QAM	1 RB high	22.63	21.53	1.47
		16QAM	100% RB	17.68	16.58	6.42
		64QAM	1 RB low	21.17	20.07	2.93
		64QAM	1 RB high	21.59	20.49	2.51
		64QAM	100% RB	16.62	15.52	7.48
		256QAM	1 RB low	18.13	17.03	5.97
		256QAM	1 RB high	18.50	17.40	5.60
		256QAM	100% RB	14.61	13.51	9.49

LTE B48C
Limits: $\leq 23\text{dBm}/10\text{MHz}$

BW	PCC Freq (MHz)	SCC Freq (MHz)	Modulation	PCC RB	SCC RB	Conducted Power (dBm/10MHz)	EIRP (dBm/10MHz) (Max Gt-Lc =-1.1)	Margin
5MHz/20MHz	3615.8	3627.5	QPSK	1 RB high	1 RB low	23.26	22.16	0.84
			QPSK	100% RB	100% RB	18.20	17.10	5.90
			16QAM	1 RB high	1 RB low	22.14	21.04	1.96
			16QAM	100% RB	100% RB	17.16	16.06	6.94
			64QAM	1 RB high	1 RB low	20.12	19.02	3.98
			64QAM	100% RB	100% RB	17.15	16.05	6.95
			256QAM	1 RB high	1 RB low	18.11	17.01	5.99
			256QAM	100% RB	100% RB	15.14	14.04	8.96
10MHz/20MHz	3615.6	3630	QPSK	1 RB high	1 RB low	23.36	22.26	0.74
			QPSK	100% RB	100% RB	17.28	16.18	6.82
			16QAM	1 RB high	1 RB low	22.33	21.23	1.77
			16QAM	100% RB	100% RB	16.20	15.10	7.90
			64QAM	1 RB high	1 RB low	20.09	18.99	4.01
			64QAM	100% RB	100% RB	16.16	15.06	7.94
			256QAM	1 RB high	1 RB low	18.17	17.07	5.93
			256QAM	100% RB	100% RB	14.15	13.05	9.95
15MHz/20MHz	3615.3	3632.4	QPSK	1 RB high	1 RB low	23.22	22.12	0.88
			QPSK	100% RB	100% RB	15.90	14.80	8.20
			16QAM	1 RB high	1 RB low	22.18	21.08	1.92
			16QAM	100% RB	100% RB	14.78	13.68	9.32
			64QAM	1 RB high	1 RB low	20.03	18.93	4.07
			64QAM	100% RB	100% RB	14.71	13.61	9.39
			256QAM	1 RB high	1 RB low	18.09	16.99	6.01
			256QAM	100% RB	100% RB	12.73	11.63	11.37
20MHz/5MHz	3622.5	3634.2	QPSK	1 RB high	1 RB low	23.02	21.92	1.08
			QPSK	100% RB	100% RB	18.16	17.06	5.94
			16QAM	1 RB high	1 RB low	21.91	20.81	2.19
			16QAM	100% RB	100% RB	17.16	16.06	6.94
			64QAM	1 RB high	1 RB low	19.91	18.81	4.19
			64QAM	100% RB	100% RB	17.11	16.01	6.99
			256QAM	1 RB high	1 RB low	17.87	16.77	6.23
			256QAM	100% RB	100% RB	15.15	14.05	8.95
20MHz/10MHz	3620.1	3634.5	QPSK	1 RB high	1 RB low	23.14	22.04	0.96
			QPSK	100% RB	100% RB	17.13	16.03	6.97
			16QAM	1 RB high	1 RB low	22.06	20.96	2.04
			16QAM	100% RB	100% RB	16.07	14.97	8.03
			64QAM	1 RB high	1 RB low	20.05	18.95	4.05

			64QAM	100% RB	100% RB	16.00	14.90	8.10
			256QAM	1 RB high	1 RB low	18.01	16.91	6.09
			256QAM	100% RB	100% RB	14.01	12.91	10.09
20MHz/15MHz	3617.6	3634.7	QPSK	1 RB high	1 RB low	23.10	22.00	1.00
			QPSK	100% RB	100% RB	15.83	14.73	8.27
			16QAM	1 RB high	1 RB low	21.98	20.88	2.12
			16QAM	100% RB	100% RB	14.70	13.60	9.40
			64QAM	1 RB high	1 RB low	20.04	18.94	4.06
			64QAM	100% RB	100% RB	14.70	13.60	9.40
			256QAM	1 RB high	1 RB low	17.95	16.85	6.15
			256QAM	100% RB	100% RB	12.76	11.66	11.34
20MHz/20MHz	3615.1	3634.9	QPSK	1 RB high	1 RB low	23.03	21.93	1.07
			QPSK	100% RB	100% RB	14.84	13.74	9.26
			16QAM	1 RB high	1 RB low	21.94	20.84	2.16
			16QAM	100% RB	100% RB	13.71	12.61	10.39
			64QAM	1 RB high	1 RB low	19.87	18.77	4.23
			64QAM	100% RB	100% RB	13.68	12.58	10.42
			256QAM	1 RB high	1 RB low	17.89	16.79	6.21
			256QAM	100% RB	100% RB	11.69	10.59	12.41

Reference Measurement Results from basic model:
LTE Band 7-EIRP
Limits: $\leq 33\text{dBm}(2\text{W})$

Bandwidth	RB size/offset	Frequency (MHz)	Conducted Power(dBm)				ERP(dBm)(Gt-Lc =-1.5)			
			QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM
5MHz	1 RB high	2567.5	21.95	20.95	20.08	16.95	20.45	19.45	18.58	15.45
		2535	22.21	21.21	20.37	17.20	20.71	19.71	18.87	15.70
		2502.5	21.82	20.73	19.98	16.82	20.32	19.23	18.48	15.32
	1 RB low	2567.5	21.95	20.98	20.14	16.96	20.45	19.48	18.64	15.46
		2535	22.19	21.19	20.41	17.21	20.69	19.69	18.91	15.71
		2502.5	21.68	20.54	20.01	16.63	20.18	19.04	18.51	15.13
	50% RB mid	2567.5	20.97	20.00	19.10	17.03	19.47	18.50	17.60	15.53
		2535	21.17	20.21	19.30	17.23	19.67	18.71	17.80	15.73
		2502.5	20.77	19.82	18.83	16.83	19.27	18.32	17.33	15.33
	100% RB	2567.5	21.00	19.95	19.02	16.99	19.50	18.45	17.52	15.49
		2535	21.19	20.13	19.22	17.18	19.69	18.63	17.72	15.68
		2502.5	20.80	19.73	18.80	16.81	19.30	18.23	17.30	15.31
10MHz	1 RB high	2565	21.94	21.01	19.84	17.07	20.44	19.51	18.34	15.57
		2535	22.27	21.24	20.11	17.32	20.77	19.74	18.61	15.82
		2505	21.91	20.88	19.83	17.00	20.41	19.38	18.33	15.50
	1 RB low	2565	21.95	20.96	19.74	17.06	20.45	19.46	18.24	15.56
		2535	22.22	21.18	20.00	17.25	20.72	19.68	18.50	15.75
		2505	21.64	20.61	19.69	16.70	20.14	19.11	18.19	15.20
	50% RB mid	2565	21.04	20.09	19.11	17.07	19.54	18.59	17.61	15.57
		2535	21.30	20.32	19.32	17.29	19.80	18.82	17.82	15.79
		2505	20.90	19.91	18.99	16.92	19.40	18.41	17.49	15.42
	100% RB	2565	21.03	20.07	19.03	17.02	19.53	18.57	17.53	15.52
		2535	21.26	20.28	19.22	17.22	19.76	18.78	17.72	15.72
		2505	20.87	19.89	18.86	16.86	19.37	18.39	17.36	15.36
15MHz	1 RB high	2562.5	21.95	21.34	20.39	17.29	20.45	19.84	18.89	15.79
		2535	22.28	21.64	20.65	17.54	20.78	20.14	19.15	16.04
		2507.5	21.98	21.40	20.34	17.30	20.48	19.90	18.84	15.80
	1 RB low	2562.5	22.07	21.48	20.38	17.39	20.57	19.98	18.88	15.89
		2535	22.16	21.52	20.64	17.47	20.66	20.02	19.14	15.97
		2507.5	21.72	21.14	20.31	17.01	20.22	19.64	18.81	15.51
	50% RB mid	2562.5	21.04	20.02	19.02	17.04	19.54	18.52	17.52	15.54
		2535	21.27	20.24	19.24	17.24	19.77	18.74	17.74	15.74
		2507.5	20.97	19.94	19.00	16.97	19.47	18.44	17.50	15.47
	100% RB	2562.5	21.04	20.05	19.05	17.07	19.54	18.55	17.55	15.57
		2535	21.25	20.30	19.27	17.28	19.75	18.80	17.77	15.78
		2507.5	20.93	19.95	18.97	16.95	19.43	18.45	17.47	15.45
20MHz	1 RB high	2560	22.01	21.58	19.96	16.99	20.51	20.08	18.46	15.49

		2535	22.31	21.97	20.24	17.28	20.81	20.47	18.74	15.78
		2510	21.99	21.63	19.87	16.98	20.49	20.13	18.37	15.48
	1 RB low	2560	22.09	21.69	20.22	17.08	20.59	20.19	18.72	15.58
		2535	22.11	21.78	20.53	17.07	20.61	20.28	19.03	15.57
		2510	21.65	21.27	20.21	16.58	20.15	19.77	18.71	15.08
	50% RB mid	2560	21.12	20.11	19.12	17.12	19.62	18.61	17.62	15.62
		2535	21.33	20.28	19.35	17.32	19.83	18.78	17.85	15.82
		2510	21.06	19.99	19.09	17.02	19.56	18.49	17.59	15.52
	100% RB	2560	21.13	20.11	19.11	17.11	19.63	18.61	17.61	15.61
		2535	21.30	20.30	19.30	17.29	19.80	18.80	17.80	15.79
		2510	21.03	20.01	19.03	17.02	19.53	18.51	17.53	15.52

LTE Band 12-ERP
Limits: $\leq 34.77\text{dBm}(3\text{W})$

Bandwidth	RB size/offset	Frequency (MHz)	Conducted Power(dBm)				ERP(dBm)(Gt-Lc =-3.3)			
			QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM
1.4MHz	1 RB high	715.3	23.44	22.48	21.30	18.41	17.99	17.03	15.85	12.96
		707.5	23.41	22.50	21.30	18.38	17.96	17.05	15.85	12.93
		699.7	23.32	22.41	21.29	18.38	17.87	16.96	15.84	12.93
	1 RB low	715.3	23.43	22.46	21.22	18.41	17.98	17.01	15.77	12.96
		707.5	23.39	22.50	21.15	18.40	17.94	17.05	15.70	12.95
		699.7	23.25	22.34	21.13	18.28	17.80	16.89	15.68	12.83
	50% RB mid	715.3	23.50	22.62	21.23	18.37	18.05	17.17	15.78	12.92
		707.5	23.50	22.61	21.23	18.37	18.05	17.16	15.78	12.92
		699.7	23.53	22.61	21.26	18.38	18.08	17.16	15.81	12.93
	100% RB	715.3	22.45	21.65	20.32	18.41	17.00	16.20	14.87	12.96
		707.5	22.42	21.63	20.35	18.40	16.97	16.18	14.90	12.95
		699.7	22.43	21.65	20.34	18.38	16.98	16.20	14.89	12.93
3MHz	1 RB high	714.5	23.42	22.49	21.26	18.43	17.97	17.04	15.81	12.98
		707.5	23.43	22.51	21.26	18.43	17.98	17.06	15.81	12.98
		700.5	23.35	22.39	21.12	18.34	17.90	16.94	15.67	12.89
	1 RB low	714.5	23.42	22.46	21.19	18.41	17.97	17.01	15.74	12.96
		707.5	23.46	22.50	21.20	18.42	18.01	17.05	15.75	12.97
		700.5	23.38	22.46	21.14	18.33	17.93	17.01	15.69	12.88
	50% RB mid	714.5	22.43	21.50	20.43	18.37	16.98	16.05	14.98	12.92
		707.5	22.42	21.51	20.43	18.40	16.97	16.06	14.98	12.95
		700.5	22.45	21.54	20.32	18.38	17.00	16.09	14.87	12.93
	100% RB	714.5	22.47	21.43	20.40	18.37	17.02	15.98	14.95	12.92
		707.5	22.48	21.43	20.45	18.40	17.03	15.98	15.00	12.95
		700.5	22.49	21.45	20.40	18.38	17.04	16.00	14.95	12.93
5MHz	1 RB high	713.5	23.57	22.56	21.71	18.58	18.12	17.11	16.26	13.13
		707.5	23.61	22.64	21.66	18.54	18.16	17.19	16.21	13.09
		701.5	23.54	22.60	21.65	18.58	18.09	17.15	16.20	13.13
	1 RB low	713.5	23.55	22.59	21.75	18.58	18.10	17.14	16.30	13.13
		707.5	23.63	22.67	21.71	18.57	18.18	17.22	16.26	13.12
		701.5	23.49	22.53	21.76	18.48	18.04	17.08	16.31	13.03
	50% RB mid	713.5	22.52	21.60	20.56	18.51	17.07	16.15	15.11	13.06
		707.5	22.51	21.62	20.61	18.54	17.06	16.17	15.16	13.09
		701.5	22.47	21.58	20.49	18.50	17.02	16.13	15.04	13.05
	100% RB	713.5	22.58	21.52	20.52	18.48	17.13	16.07	15.07	13.03
		707.5	22.58	21.50	20.58	18.53	17.13	16.05	15.13	13.08
		701.5	22.55	21.52	20.54	18.50	17.10	16.07	15.09	13.05
10MHz	1 RB high	711	23.58	22.57	21.36	18.59	18.13	17.12	15.91	13.14
		707.5	23.60	22.59	21.41	18.57	18.15	17.14	15.96	13.12

		704	23.47	22.54	21.38	18.53	18.02	17.09	15.93	13.08
	1 RB low	711	23.52	22.59	21.24	18.56	18.07	17.14	15.79	13.11
		707.5	23.53	22.52	21.26	18.53	18.08	17.07	15.81	13.08
		704	23.40	22.50	21.19	18.42	17.95	17.05	15.74	12.97
	50% RB mid	711	22.54	21.63	20.50	18.52	17.09	16.18	15.05	13.07
		707.5	22.56	21.65	20.53	18.54	17.11	16.20	15.08	13.09
		704	22.55	21.63	20.53	18.52	17.10	16.18	15.08	13.07
	100% RB	711	22.57	21.58	20.47	18.43	17.12	16.13	15.02	12.98
		707.5	22.59	21.62	20.53	18.49	17.14	16.17	15.08	13.04
		704	22.53	21.56	20.46	18.43	17.08	16.11	15.01	12.98

LTE Band 13-ERP

Limits: $\leq 34.77\text{dBm}(3\text{W})$

Bandwidth	RB size/offset	Frequency (MHz)	Conducted Power(dBm)				ERP(dBm)(Gt-Lc =-3.1)			
			QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM
5MHz	1 RB high	784.5	23.12	22.13	21.28	18.19	17.87	16.88	16.03	12.94
		782	23.13	22.16	21.31	18.19	17.88	16.91	16.06	12.94
		779.5	23.19	22.03	21.33	18.24	17.94	16.78	16.08	12.99
	1 RB low	784.5	23.20	22.21	21.32	18.23	17.95	16.96	16.07	12.98
		782	23.14	22.17	21.33	18.24	17.89	16.92	16.08	12.99
		779.5	23.20	22.15	21.40	18.18	17.95	16.90	16.15	12.93
	50% RB mid	784.5	22.04	21.17	20.21	18.18	16.79	15.92	14.96	12.93
		782	22.09	21.20	20.25	18.20	16.84	15.95	15.00	12.95
		779.5	22.12	21.18	20.25	18.23	16.87	15.93	15.00	12.98
	100% RB	784.5	22.11	21.07	20.17	18.15	16.86	15.82	14.92	12.90
		782	22.15	21.09	20.19	18.16	16.90	15.84	14.94	12.91
		779.5	22.15	21.11	20.22	18.21	16.90	15.86	14.97	12.96
10MHz	1 RB high	782	23.16	22.12	21.05	18.20	17.91	16.87	15.80	12.95
	1 RB low	782	23.10	22.22	21.19	18.18	17.85	16.97	15.94	12.93
	50% RB mid	782	22.16	21.29	20.20	18.24	16.91	16.04	14.95	12.99
	100% RB	782	22.16	21.16	20.12	18.09	16.91	15.91	14.87	12.84

LTE Band 66-EIRP
Limits: $\leq 30\text{dBm}(1\text{W})$

Bandwidth	RB size/offset	Frequency (MHz)	Conducted Power(dBm)				ERP(dBm)(Gt-Lc =-2.6)			
			QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM
1.4MHz	1 RB high	1779.3	23.30	22.32	21.22	18.29	20.70	19.72	18.62	15.69
		1745	23.32	22.35	21.25	18.33	20.72	19.75	18.65	15.73
		1710.7	23.26	22.38	21.64	18.37	20.66	19.78	19.04	15.77
	1 RB low	1779.3	23.28	22.29	21.09	18.28	20.68	19.69	18.49	15.68
		1745	23.30	22.33	21.14	18.36	20.70	19.73	18.54	15.76
		1710.7	23.27	22.41	21.04	18.26	20.67	19.81	18.44	15.66
	50% RB mid	1779.3	23.35	22.52	21.18	18.28	20.75	19.92	18.58	15.68
		1745	23.32	22.50	21.12	18.27	20.72	19.90	18.52	15.67
		1710.7	23.34	22.48	21.18	18.25	20.74	19.88	18.58	15.65
	100% RB	1779.3	22.32	21.22	20.21	18.29	19.72	18.62	17.61	15.69
		1745	22.34	21.23	20.22	18.27	19.74	18.63	17.62	15.67
		1710.7	22.27	21.45	20.32	18.26	19.67	18.85	17.72	15.66
3MHz	1 RB high	1778.5	23.29	22.31	21.55	18.74	20.69	19.71	18.95	16.14
		1745	23.34	22.36	21.58	18.77	20.74	19.76	18.98	16.17
		1711.5	23.29	22.33	21.18	18.29	20.69	19.73	18.58	15.69
	1 RB low	1778.5	23.30	22.34	21.91	18.71	20.70	19.74	19.31	16.11
		1745	23.32	22.36	21.95	18.74	20.72	19.76	19.35	16.14
		1711.5	23.28	22.33	21.04	18.27	20.68	19.73	18.44	15.67
	50% RB mid	1778.5	22.27	21.35	20.38	18.29	19.67	18.75	17.78	15.69
		1745	22.27	21.34	20.34	18.27	19.67	18.74	17.74	15.67
		1711.5	22.29	21.33	20.25	18.24	19.69	18.73	17.65	15.64
	100% RB	1778.5	22.33	21.28	20.37	18.25	19.73	18.68	17.77	15.65
		1745	22.31	21.26	20.33	18.26	19.71	18.66	17.73	15.66
		1711.5	22.30	21.26	20.30	18.27	19.70	18.66	17.70	15.67
5MHz	1 RB high	1777.5	23.47	22.49	21.57	18.43	20.87	19.89	18.97	15.83
		1745	23.43	22.46	21.57	18.44	20.83	19.86	18.97	15.84
		1712.5	23.42	22.43	21.55	18.48	20.82	19.83	18.95	15.88
	1 RB low	1777.5	23.41	22.44	21.60	18.42	20.81	19.84	19.00	15.82
		1745	23.42	22.46	21.62	18.44	20.82	19.86	19.02	15.84
		1712.5	23.40	22.42	21.61	18.45	20.80	19.82	19.01	15.85
	50% RB mid	1777.5	22.36	21.44	20.52	18.43	19.76	18.84	17.92	15.83
		1745	22.35	21.45	20.51	18.43	19.75	18.85	17.91	15.83
		1712.5	22.32	21.39	20.40	18.42	19.72	18.79	17.80	15.82
	100% RB	1777.5	22.40	21.35	20.43	18.41	19.80	18.75	17.83	15.81
		1745	22.41	21.33	20.41	18.39	19.81	18.73	17.81	15.79
		1712.5	22.38	21.32	20.41	18.39	19.78	18.72	17.81	15.79
10MHz	1 RB high	1775	23.43	22.38	21.65	18.86	20.83	19.78	19.05	16.26
		1745	23.41	22.44	21.67	18.89	20.81	19.84	19.07	16.29

		1715	23.34	22.41	21.64	18.83	20.74	19.81	19.04	16.23
		1775	23.37	22.41	21.62	18.84	20.77	19.81	19.02	16.24
		1745	23.35	22.38	21.62	18.85	20.75	19.78	19.02	16.25
		1715	23.32	22.34	21.57	18.80	20.72	19.74	18.97	16.20
		1775	22.41	21.45	20.46	18.38	19.81	18.85	17.86	15.78
		1745	22.37	21.42	20.42	18.35	19.77	18.82	17.82	15.75
		1715	22.38	21.39	20.41	18.30	19.78	18.79	17.81	15.70
		1775	22.43	21.45	20.42	18.41	19.83	18.85	17.82	15.81
		1745	22.37	21.40	20.38	18.41	19.77	18.80	17.78	15.81
		1715	22.36	21.40	20.36	18.40	19.76	18.80	17.76	15.80
		1772.5	23.32	22.74	21.78	18.70	20.72	20.14	19.18	16.10
		1745	23.40	22.80	21.81	18.74	20.80	20.20	19.21	16.14
15MHz	1 RB high	1717.5	23.34	22.67	21.62	18.82	20.74	20.07	19.02	16.22
		1772.5	23.30	22.70	21.75	18.68	20.70	20.10	19.15	16.08
		1745	23.29	22.68	21.77	18.63	20.69	20.08	19.17	16.03
	1 RB low	1717.5	23.32	22.74	21.89	18.83	20.72	20.14	19.29	16.23
		1772.5	22.40	21.40	20.40	18.38	19.80	18.80	17.80	15.78
		1745	22.38	21.37	20.37	18.37	19.78	18.77	17.77	15.77
	50% RB mid	1717.5	22.35	21.36	20.39	18.35	19.75	18.76	17.79	15.75
		1772.5	22.43	21.44	20.47	18.47	19.83	18.84	17.87	15.87
		1745	22.39	21.41	20.45	18.42	19.79	18.81	17.85	15.82
	100% RB	1717.5	22.38	21.43	20.42	18.43	19.78	18.83	17.82	15.83
		1770	23.42	22.99	21.24	18.38	20.82	20.39	18.64	15.78
		1745	23.46	23.09	21.32	18.42	20.86	20.49	18.72	15.82
		1720	23.33	22.92	21.20	18.28	20.73	20.32	18.60	15.68
20MHz	1 RB high	1770	23.33	22.88	21.55	18.33	20.73	20.28	18.95	15.73
		1745	23.24	22.85	21.68	18.27	20.64	20.25	19.08	15.67
		1720	23.28	22.94	21.61	18.24	20.68	20.34	19.01	15.64
	1 RB low	1770	22.38	21.41	20.42	18.46	19.78	18.81	17.82	15.86
		1745	22.46	21.42	20.45	18.45	19.86	18.82	17.85	15.85
		1720	22.48	21.39	20.46	18.44	19.88	18.79	17.86	15.84
	50% RB mid	1770	22.39	21.40	20.39	18.39	19.79	18.80	17.79	15.79
		1745	22.44	21.45	20.45	18.45	19.84	18.85	17.85	15.85
		1720	22.43	21.39	20.42	18.40	19.83	18.79	17.82	15.80
	100% RB	1770	22.39	21.40	20.39	18.39	19.79	18.80	17.79	15.79
		1745	22.44	21.45	20.45	18.45	19.84	18.85	17.85	15.85
		1720	22.43	21.39	20.42	18.40	19.83	18.79	17.82	15.80

Note: Expanded measurement uncertainty is $U = 0.578 \text{ dB}$, $k = 2$.

A.2 Emission Limit

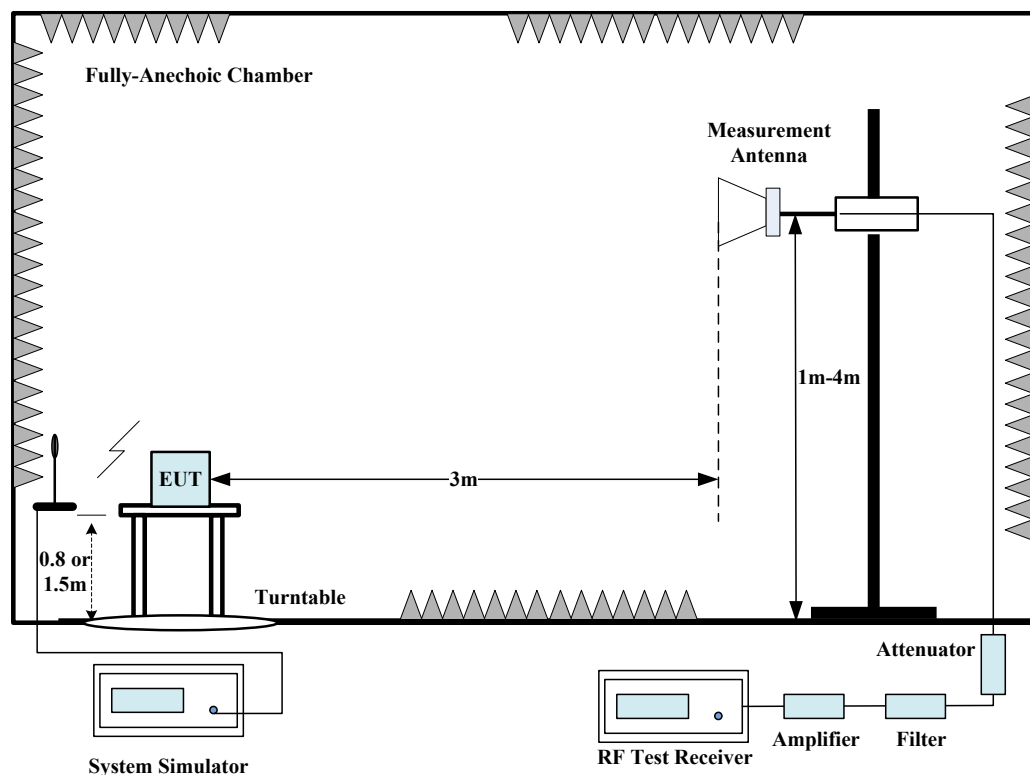
A.2.1 Measurement Method

The measurement procedures in TIA-603E-2016 are used.

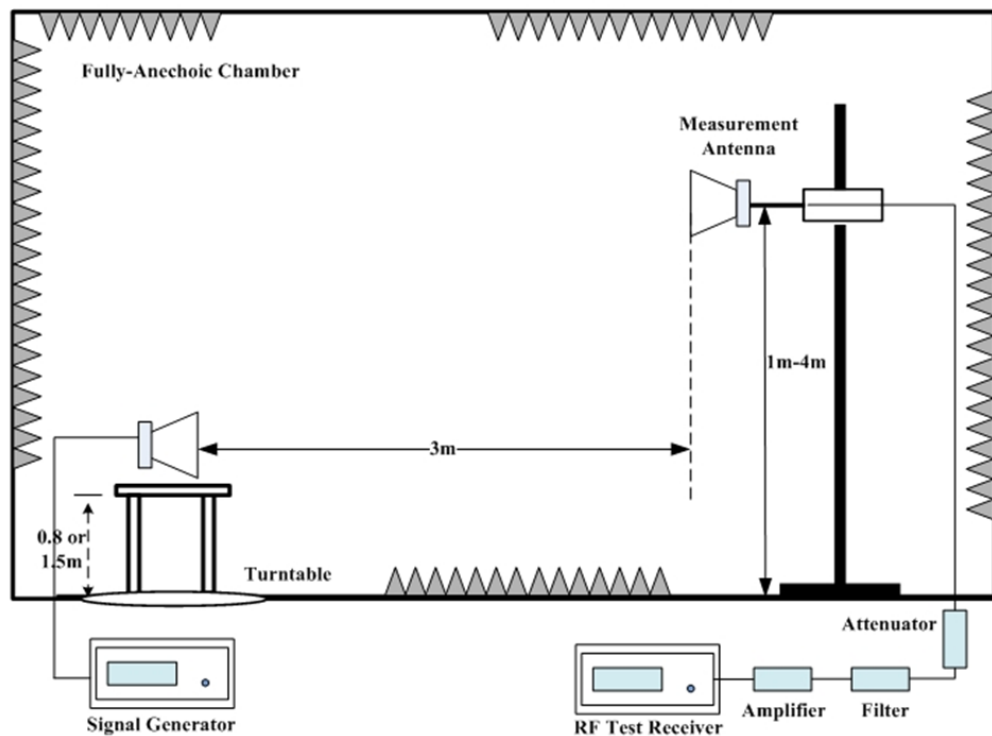
The spectrum was scanned from 30 MHz to the 10th harmonic of the highest frequency generated within the equipment, which is the transmitted carrier. The resolution bandwidth is set 1MHz. The spectrum was scanned with the mobile station transmitting at carrier frequencies that pertain to low, mid and high channels of each LTE Band.

The procedure of radiated spurious emissions is as follows:

For measurements performed at frequencies less than or equal to 1 GHz, the EUT was placed on a 80cm-high non-conductive support; For measurements performed at frequencies above 1GHz,EUT was placed on a 1.5-meter-high non-conductive support. A measurement antenna was placed on the antenna mast 3 meters from the EUT for emission measurements. In the initial test, the height of the measurement antenna was varied from 1 m to 4 m for the relative positioning that produces the maximum radiated signal level. The test setup refers to figure below. Detected emissions were maximized at each frequency by rotating the EUT through 360° and adjusting the receiving antenna polarization. The radiated emission measurements of all non-harmonic and harmonics of the transmit frequency through the 10th harmonic were measured with peak detector.



1. The EUT is then put into continuously transmitting mode at its maximum power level during the test. And the maximum value of the receiver should be recorded as (Pr).
2. The EUT shall be replaced by a substitution antenna. The test setup refers to figure below.



In the chamber, a substitution antenna for the frequency band of interest is placed at the reference point of the chamber. An RF Signal source for the frequency band of interest is connected to the substitution antenna with a cable that has been constructed to not interfere with the radiation pattern of the antenna. The height of measurement antenna varied between 1 m to 4 m to maximize the received signal amplitude for each emission that was detected and measured in the initial test. A power (P_{Mea}) is applied to the input of the substitution antenna and adjusts the level of the signal generator output until the value of the receiver reach the previously recorded (P_r). The power of signal source (P_{Mea}) is recorded. The test was performed with the measurement antenna in both vertical and horizontal polarization.

3. The Path loss (P_{pl}) between the Signal Source and the Substitution Antenna and the Substitution Antenna Gain (G_a) were recorded after test. A amplifier was connected in for the test. The Path loss (P_{pl}) is the summation of the cable loss and the gain of the amplifier.
4. The measurement results are obtained as described below:

$$\text{Power (EIRP)} = P_{Mea} - P_{pl} + G_a$$

This value is EIRP since the measurement is calibrated using an antenna of known gain (2.15 dBi) and known input power. ERP can be calculated from EIRP by subtracting the gain of the dipole, $ERP = EIRP - 2.15\text{dBi}$.

A.2.2 Measurement Limit

FDD Band 2: Part 24.238 specifies that the power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB.

FDD Band 12/13: Part 27.53(g) states for operations in the 600 MHz band and the 698–746 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in

watts, by at least $43 + 10 \log (P)$ dB. Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kilohertz or greater. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

FDD Band 5: Part 22.917 specifies that the power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log (P)$ dB.

FDD Band 7: Part 27.53(m) specifies 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.

FDD Band 4/66: Part 27.53(h) specifies that the power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log (P)$ dB.

A.2.3 Measurement Results

Radiated emissions measurements were made only at the upper, middle, and lower carrier frequencies of each LTE Band. It was decided that measurements at these three carrier frequencies would be sufficient to demonstrate compliance with emissions limits because it was seen that all the significant spurs occur well outside the band and no radiation was seen from a carrier in one block of each LTE Band into any of the other blocks. The equipment must still, however, meet emissions requirements with the carrier at all frequencies over which it is capable of operating and it is the manufacturer's responsibility to verify this. The range of evaluated frequency is from 30MHz to 26GHz.

Note 1: All CA UL combination bands have been tested, only the worst cases are reported.

Note 2: Both of Vertical and Horizontal polarizations are evaluated, but only the worst case is recorded in this report.

A.2.4 Measurement Results Table

Frequency	Channel	Frequency Range	Result
LTE Bands	Low	9kHz-26GHz	Pass
	Middle	9kHz-26GHz	Pass
	High	9kHz-26GHz	Pass

A.2.5 Sweep Table

Subrange	RBW	VBW
9~150 kHz	0.2kHz	0.6kHz
150kHz~30MHz	9kHz	27kHz
30MHz~1 GHz	100KHz	300KHz
1~20 GHz	1 MHz	3 MHz

A.2.6 Measurement Result

Spot Check Measurement Results:

LTE Band 2, 1.4MHz,CH18607,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3701.50	-59.80	3.47	10.39	-52.88	-13.00	39.88	V
5552.00	-56.62	5.32	11.20	-50.74	-13.00	37.74	H
7403.50	-47.65	8.08	10.10	-45.63	-13.00	32.63	V
9254.00	-33.21	8.85	11.70	-30.36	-13.00	17.36	V
11105.00	-38.15	9.75	12.60	-35.30	-13.00	22.30	V
12955.50	-47.89	12.50	12.74	-47.65	-13.00	34.65	H

LTE Band 2, 1.4MHz,CH18900,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3759.50	-56.71	3.82	10.16	-50.37	-13.00	37.37	V
5640.00	-38.99	5.61	11.38	-33.22	-13.00	20.22	V
7520.50	-46.22	7.71	10.24	-43.69	-13.00	30.69	V
9400.50	-33.27	9.10	11.50	-30.87	-13.00	17.87	V
11281.00	-34.22	10.63	12.62	-32.23	-13.00	19.23	V
13160.50	-45.28	13.21	12.54	-45.95	-13.00	32.95	V

LTE Band 2, 1.4MHz,CH19193,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3819.00	-58.16	3.93	9.96	-52.13	-13.00	39.13	H
5728.00	-49.23	5.89	11.34	-43.78	-13.00	30.78	V
7637.50	-44.38	6.77	10.38	-40.77	-13.00	27.77	H
9546.50	-29.97	9.11	11.89	-27.19	-13.00	14.19	H
11456.50	-27.75	12.37	12.54	-27.58	-13.00	14.58	H
13366.50	-41.30	13.10	12.43	-41.97	-13.00	28.97	H

LTE Band 5, 1.4MHz,CH20407,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
2464.50	-52.14	4.32	10.37	2.15	-48.24	-13.00	35.24	V
4949.00	-51.51	4.91	11.20	2.15	-47.37	-13.00	34.37	H
5773.50	-50.47	5.68	11.16	2.15	-47.14	-13.00	34.14	V
6598.50	-40.64	7.10	10.31	2.15	-39.58	-13.00	26.58	H
7423.00	-43.47	7.96	10.10	2.15	-43.48	-13.00	30.48	H
8249.50	-51.13	7.59	11.20	2.15	-49.67	-13.00	36.67	V

LTE Band 5, 1.4MHz,CH20525,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
2499.00	-52.75	4.45	10.30	2.15	-49.05	-13.00	36.05	H
5019.00	-48.56	5.10	11.41	2.15	-44.40	-13.00	31.40	H
5856.00	-48.48	5.60	10.98	2.15	-45.25	-13.00	32.25	H
6693.00	-44.76	6.20	10.49	2.15	-42.62	-13.00	29.62	V
7529.00	-45.30	7.71	10.26	2.15	-44.90	-13.00	31.90	H
8361.00	-50.14	8.23	11.30	2.15	-49.22	-13.00	36.22	V

LTE Band 5, 1.4MHz,CH20643,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
2554.00	-52.02	4.56	10.30	2.15	-48.43	-13.00	35.43	H
5090.50	-49.41	5.30	11.60	2.15	-45.26	-13.00	32.26	H
5939.00	-45.97	6.00	10.72	2.15	-43.40	-13.00	30.40	H
6787.00	-39.89	6.39	10.37	2.15	-38.06	-13.00	25.06	H
7631.00	-51.31	6.72	10.36	2.15	-49.82	-13.00	36.82	H
8479.50	-48.90	8.03	11.30	2.15	-47.78	-13.00	34.78	V

Measurement Results from UT34a:
CA_2A_13A, CH18625_CH23205,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3705.00	-58.16	3.48	10.38	0.00	-51.26	-13.00	38.26	H
5557.97	-45.80	5.35	11.22	0.00	-39.93	-13.00	26.93	H
7410.47	-45.51	8.04	10.10	0.00	-43.45	-13.00	30.45	H
9263.44	-31.17	8.85	11.70	0.00	-28.32	-13.00	15.32	H
11115.94	-35.78	9.84	12.62	0.00	-33.00	-13.00	20.00	H
12967.03	-47.43	12.53	12.73	0.00	-47.23	-13.00	34.23	V
2333.50	-36.14	4.44	5.60	2.15	-37.13	-13.00	24.13	V
3898.13	-48.13	6.11	8.76	2.15	-47.63	-13.00	34.63	H
4678.13	-46.23	6.49	9.58	2.15	-45.29	-13.00	32.29	V
5457.66	-44.24	6.90	10.54	2.15	-42.75	-13.00	29.75	H
6236.72	-42.02	7.42	10.74	2.15	-40.85	-13.00	27.85	H
7017.19	-42.62	8.27	11.62	2.15	-41.42	-13.00	28.42	H

CA_2A_13A, CH18900_CH23230,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3760.31	-58.46	3.81	10.16	0.00	-52.11	-13.00	39.11	H
5640.47	-42.93	5.61	11.38	0.00	-37.16	-13.00	24.16	H
7520.62	-44.54	7.71	10.24	0.00	-42.01	-13.00	29.01	H
9401.25	-30.53	9.10	11.50	0.00	-28.13	-13.00	15.13	H
11280.94	-38.13	10.63	12.62	0.00	-36.14	-13.00	23.14	H
13161.09	-45.26	13.21	12.54	0.00	-45.93	-13.00	32.93	V
2346.00	-35.79	4.45	5.64	2.15	-36.75	-13.00	23.75	V
3910.31	-48.38	6.12	8.77	2.15	-47.88	-13.00	34.88	H
4692.66	-44.35	6.50	9.59	2.15	-43.41	-13.00	30.41	V
5475.00	-41.45	6.97	10.57	2.15	-40.00	-13.00	27.00	H
6257.34	-41.91	7.45	10.76	2.15	-40.75	-13.00	27.75	H
7039.69	-40.21	8.24	11.65	2.15	-38.95	-13.00	25.95	H

CA_2A_13A, CH19175_CH23255,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3815.16	-57.60	3.94	9.97	0.00	-51.57	-13.00	38.57	H
5722.97	-48.94	5.90	11.35	0.00	-43.49	-13.00	30.49	H
7630.31	-44.44	6.72	10.36	0.00	-40.80	-13.00	27.80	H
9538.12	-30.68	9.12	11.88	0.00	-27.92	-13.00	14.92	H

11445.94	-34.28	12.40	12.55	0.00	-34.13	-13.00	21.13	H
13350.47	-44.24	13.12	12.45	0.00	-44.91	-13.00	31.91	V
2355.50	-35.88	4.46	5.67	2.15	-36.82	-13.00	23.82	H
3922.97	-50.88	6.12	8.79	2.15	-50.36	-13.00	37.36	V
4708.13	-46.05	6.51	9.61	2.15	-45.10	-13.00	32.10	V
5492.34	-45.05	7.03	10.59	2.15	-43.64	-13.00	30.64	V
6277.03	-43.97	7.48	10.78	2.15	-42.82	-13.00	29.82	V
7061.72	-41.36	8.21	11.67	2.15	-40.05	-13.00	27.05	H

CA_2A_4A, CH18625_CH19975,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3705.00	-68.86	3.48	10.38	0.00	-61.96	-13.00	48.96	V
5557.97	-62.00	5.35	11.22	0.00	-56.13	-13.00	43.13	V
7410.94	-53.20	8.03	10.10	0.00	-51.13	-13.00	38.13	H
9263.44	-57.46	8.85	11.70	0.00	-54.61	-13.00	41.61	H
11115.94	-49.25	9.84	12.62	0.00	-46.47	-13.00	33.47	H
12982.03	-58.01	12.57	12.72	0.00	-57.86	-13.00	44.86	V
5137.50	-60.70	5.54	11.60	0.00	-54.64	-13.00	41.64	H
8563.59	-53.80	8.47	11.20	0.00	-51.07	-13.00	38.07	H
10276.41	-48.26	10.71	11.90	0.00	-47.07	-13.00	34.07	H
11988.75	-49.25	12.21	13.08	0.00	-48.38	-13.00	35.38	H
13687.50	-54.15	13.01	12.20	0.00	-54.96	-13.00	41.96	H
17115.47	-47.32	18.45	13.48	0.00	-52.29	-13.00	39.29	H

CA_2A_4A, CH18900_CH20175,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3760.31	-67.34	3.81	10.16	0.00	-60.99	-13.00	47.99	V
5640.47	-62.61	5.61	11.38	0.00	-56.84	-13.00	43.84	H
7520.62	-50.14	7.71	10.24	0.00	-47.61	-13.00	34.61	H
9400.78	-53.78	9.10	11.50	0.00	-51.38	-13.00	38.38	H
11280.94	-47.81	10.63	12.62	0.00	-45.82	-13.00	32.82	H
13162.03	-55.61	13.20	12.54	0.00	-56.27	-13.00	43.27	V
8662.97	-56.22	8.56	11.17	0.00	-53.61	-13.00	40.61	H
10396.41	-49.90	10.65	12.00	0.00	-48.55	-13.00	35.55	H
12128.91	-53.21	12.23	13.33	0.00	-52.11	-13.00	39.11	H
13873.12	-54.07	13.12	12.10	0.00	-55.09	-13.00	42.09	H
15583.12	-55.59	16.56	15.60	0.00	-56.55	-13.00	43.55	H
17334.38	-45.51	19.25	13.13	0.00	-51.63	-13.00	38.63	H

CA_2A_4A, CH19175_CH20375,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3815.16	-66.78	3.94	9.97	0.00	-60.75	-13.00	47.75	H
5722.97	-61.95	5.90	11.35	0.00	-56.50	-13.00	43.50	V
7630.31	-48.96	6.72	10.36	0.00	-45.32	-13.00	32.32	H
9538.12	-53.53	9.12	11.88	0.00	-50.77	-13.00	37.77	H
11445.94	-49.70	12.40	12.55	0.00	-49.55	-13.00	36.55	H

13361.72	-53.95	13.10	12.44	0.00	-54.61	-13.00	41.61	V
8763.28	-53.85	7.94	11.13	0.00	-50.66	-13.00	37.66	H
10515.47	-47.18	10.39	11.92	0.00	-45.65	-13.00	32.65	H
12268.59	-56.70	11.56	13.40	0.00	-54.86	-13.00	41.86	H
14021.25	-52.60	14.24	12.22	0.00	-54.62	-13.00	41.62	H
15786.56	-55.45	16.47	15.59	0.00	-56.33	-13.00	43.33	V
17512.50	-44.30	19.71	13.11	0.00	-50.90	-13.00	37.90	H

CA_4A_5A, CH19975_CH20450,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
6850.31	-48.85	6.52	10.30	0.00	-45.07	-13.00	32.07	H
8563.12	-47.30	8.48	11.20	0.00	-44.58	-13.00	31.58	H
10275.94	-43.87	10.71	11.90	0.00	-42.68	-13.00	29.68	H
11988.75	-46.02	12.21	13.08	0.00	-45.15	-13.00	32.15	H
13691.25	-44.57	13.02	12.20	0.00	-45.39	-13.00	32.39	H
17115.00	-37.95	18.45	13.48	0.00	-42.92	-13.00	29.92	H
1659.00	-47.17	2.99	9.48	2.15	-42.83	-13.00	29.83	H
2467.00	-40.40	4.32	10.37	2.15	-36.50	-13.00	23.50	V
3316.41	-50.70	3.02	10.33	2.15	-45.54	-13.00	32.54	H
4145.62	-45.62	4.54	10.01	2.15	-42.30	-13.00	29.30	V
4973.91	-46.23	5.25	11.25	2.15	-42.38	-13.00	29.38	V
7446.09	-49.57	7.83	10.10	2.15	-49.45	-13.00	36.45	V

CA_4A_5A, CH20175_CH20525,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
6930.94	-49.99	6.47	10.36	0.00	-46.10	-13.00	33.10	H
8662.97	-47.33	8.56	11.17	0.00	-44.72	-13.00	31.72	H
10396.41	-43.05	10.65	12.00	0.00	-41.70	-13.00	28.70	V
12128.44	-46.77	12.23	13.33	0.00	-45.67	-13.00	32.67	H
13867.03	-44.73	13.11	12.10	0.00	-45.74	-13.00	32.74	H
17333.44	-34.46	19.25	13.13	0.00	-40.58	-13.00	27.58	H
1681.00	-41.35	2.68	9.44	2.15	-36.74	-13.00	23.74	H
2518.50	-40.01	4.30	10.30	2.15	-36.16	-13.00	23.16	V
4183.12	-42.56	4.07	10.07	2.15	-38.71	-13.00	25.71	V
5020.31	-38.32	5.51	11.42	2.15	-34.56	-13.00	21.56	V
5856.09	-41.00	5.61	10.98	2.15	-37.78	-13.00	24.78	H
6693.28	-40.37	6.20	10.49	2.15	-38.23	-13.00	25.23	H

CA_4A_5A, CH20375_CH20600,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
7010.62	-46.40	7.65	10.42	0.00	-43.63	-13.00	30.63	H
8763.28	-48.21	7.94	11.13	0.00	-45.02	-13.00	32.02	H
10515.94	-42.39	10.40	11.92	0.00	-40.87	-13.00	27.87	H
14016.56	-42.69	14.27	12.22	0.00	-44.74	-13.00	31.74	H
15764.53	-44.91	16.51	15.56	0.00	-45.86	-13.00	32.86	V

17514.38	-35.06	19.70	13.11	0.00	-41.65	-13.00	28.65	H
1700.50	-39.28	2.89	9.40	2.15	-34.92	-13.00	21.92	H
2551.50	-39.68	4.57	10.30	2.15	-36.10	-13.00	23.10	V
3376.41	-51.60	3.34	10.09	2.15	-47.00	-13.00	34.00	V
4220.62	-41.09	4.56	10.18	2.15	-37.62	-13.00	24.62	V
5064.84	-40.59	5.32	11.60	2.15	-36.46	-13.00	23.46	H
8460.94	-49.98	8.02	11.30	2.15	-48.85	-13.00	35.85	H

CA_2A_66A, CH18900_CH132322,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3705.00	-68.09	3.48	10.38	0.00	-61.19	-13.00	48.19	H
5557.97	-63.92	5.35	11.22	0.00	-58.05	-13.00	45.05	V
7410.47	-53.63	8.04	10.10	0.00	-51.57	-13.00	38.57	H
9263.44	-56.11	8.85	11.70	0.00	-53.26	-13.00	40.26	H
11116.41	-51.22	9.85	12.62	0.00	-48.45	-13.00	35.45	H
12967.03	-58.17	12.53	12.73	0.00	-57.97	-13.00	44.97	V
8571.56	-60.60	8.10	11.20	0.00	-57.50	-13.00	44.50	H
10286.72	-56.02	10.62	11.90	0.00	-54.74	-13.00	41.74	H
12007.03	-56.25	11.97	13.11	0.00	-55.11	-13.00	42.11	H
13718.91	-54.09	13.13	12.18	0.00	-55.04	-13.00	42.04	H
15425.16	-56.99	14.93	15.45	0.00	-56.47	-13.00	43.47	H
17137.03	-45.85	20.06	13.46	0.00	-52.45	-13.00	39.45	H

CA_2A_66A, CH19175_CH132622,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3760.31	-68.75	3.81	10.16	0.00	-62.40	-13.00	49.40	H
5640.47	-63.40	5.61	11.38	0.00	-57.63	-13.00	44.63	H
7520.62	-50.25	7.71	10.24	0.00	-47.72	-13.00	34.72	H
9400.78	-55.28	9.10	11.50	0.00	-52.88	-13.00	39.88	H
11280.94	-47.67	10.63	12.62	0.00	-45.68	-13.00	32.68	H
13161.09	-55.43	13.21	12.54	0.00	-56.10	-13.00	43.10	V
8729.53	-60.95	8.44	11.10	0.00	-58.29	-13.00	45.29	H
10469.06	-56.12	10.36	11.93	0.00	-54.55	-13.00	41.55	H
12195.94	-58.71	12.18	13.40	0.00	-57.49	-13.00	44.49	V
13951.41	-51.89	14.68	12.15	0.00	-54.42	-13.00	41.42	H
15701.25	-54.80	16.65	15.50	0.00	-55.95	-13.00	42.95	V
17444.06	-44.83	19.26	13.04	0.00	-51.05	-13.00	38.05	H

CA_2A_66A, CH189625_CH132022,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3815.16	-68.64	3.94	9.97	0.00	-62.61	-13.00	49.61	V
5722.97	-61.97	5.90	11.35	0.00	-56.52	-13.00	43.52	V
7630.78	-50.55	6.72	10.36	0.00	-46.91	-13.00	33.91	H
9538.12	-54.37	9.12	11.88	0.00	-51.61	-13.00	38.61	H
11445.94	-49.64	12.40	12.55	0.00	-49.49	-13.00	36.49	H

13353.75	-53.82	13.11	12.45	0.00	-54.48	-13.00	41.48	V
8871.56	-59.75	8.02	11.49	0.00	-56.28	-13.00	43.28	H
10650.47	-57.38	9.51	12.05	0.00	-54.84	-13.00	41.84	H
12406.41	-57.54	13.26	13.41	0.00	-57.39	-13.00	44.39	V
14190.00	-52.91	14.37	12.57	0.00	-54.71	-13.00	41.71	H
15974.53	-55.33	16.35	15.45	0.00	-56.23	-13.00	43.23	V
17744.06	-45.22	19.56	13.44	0.00	-51.34	-13.00	38.34	H

CA_4A_13A, CH19975_CH23205,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3425.16	-66.87	5.38	8.02	0.00	-64.23	-13.00	51.23	H
5137.97	-61.86	6.86	10.09	0.00	-58.63	-13.00	45.63	H
6850.31	-61.07	7.82	11.42	0.00	-57.47	-13.00	44.47	H
8563.13	-58.36	8.56	13.01	0.00	-53.91	-13.00	40.91	V
10275.94	-55.28	9.56	13.01	0.00	-51.83	-13.00	38.83	V
11988.75	-54.20	10.10	13.00	0.00	-51.30	-13.00	38.30	H
2339.50	-47.62	4.44	5.62	2.15	-48.59	-13.00	35.59	V
3898.13	-58.42	6.11	8.76	2.15	-57.92	-13.00	44.92	H
4678.13	-53.58	6.49	9.58	2.15	-52.64	-13.00	39.64	V
5457.66	-51.41	6.90	10.54	2.15	-49.92	-13.00	36.92	H
6237.19	-47.06	7.42	10.74	2.15	-45.89	-13.00	32.89	V
7016.72	-52.49	8.27	11.62	2.15	-51.29	-13.00	38.29	V

CA_4A_13A, CH20175_CH23230,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3465.00	-67.05	5.46	8.12	0.00	-64.39	-13.00	51.39	V
5197.50	-61.71	6.96	10.18	0.00	-58.49	-13.00	45.49	V
6930.47	-58.62	7.76	11.52	0.00	-54.86	-13.00	41.86	H
8663.44	-60.82	8.41	13.03	0.00	-56.20	-13.00	43.20	V
10396.41	-55.70	9.80	13.06	0.00	-52.44	-13.00	39.44	H
12128.91	-58.24	10.26	13.05	0.00	-55.45	-13.00	42.45	V
2345.00	-47.56	4.45	5.64	2.15	-48.52	-13.00	35.52	H
3910.78	-58.66	6.12	8.78	2.15	-58.15	-13.00	45.15	H
4692.66	-53.50	6.50	9.59	2.15	-52.56	-13.00	39.56	V
5475.47	-51.94	6.97	10.57	2.15	-50.49	-13.00	37.49	V
6256.88	-48.54	7.45	10.76	2.15	-47.38	-13.00	34.38	V
7039.22	-53.46	8.24	11.65	2.15	-52.20	-13.00	39.20	H

CA_4A_13A, CH20375_CH23255,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3465.00	-68.10	5.46	8.12	0.00	-65.44	-13.00	52.44	H
5239.22	-66.87	7.00	10.23	0.00	-63.64	-13.00	50.64	V
7061.72	-56.99	8.21	11.67	0.00	-53.53	-13.00	40.53	V
8784.38	-62.70	8.61	13.06	0.00	-58.25	-13.00	45.25	H
10530.47	-60.37	9.54	13.11	0.00	-56.80	-13.00	43.80	V

12255.00	-61.24	10.02	13.10	0.00	-58.16	-13.00	45.16	H
2355.00	-47.66	4.46	5.66	2.15	-48.61	-13.00	35.61	V
3922.97	-58.66	6.12	8.79	2.15	-58.14	-13.00	45.14	H
4707.66	-54.60	6.51	9.61	2.15	-53.65	-13.00	40.65	V
5492.34	-55.43	7.03	10.59	2.15	-54.02	-13.00	41.02	H
6277.03	-53.14	7.48	10.78	2.15	-51.99	-13.00	38.99	V
7061.72	-54.84	8.21	11.67	2.15	-53.53	-13.00	40.53	V

CA_13A_66A, CH23205_CH132022,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
2337.50	-47.63	4.44	5.61	2.15	-48.61	-13.00	35.61	H
3898.13	-60.15	6.11	8.76	2.15	-59.65	-13.00	46.65	H
4677.66	-52.55	6.49	9.58	2.15	-51.61	-13.00	38.61	H
5457.66	-53.24	6.90	10.54	2.15	-51.75	-13.00	38.75	V
6237.66	-47.79	7.42	10.74	2.15	-46.62	-13.00	33.62	H
7017.19	-52.84	8.27	11.62	2.15	-51.64	-13.00	38.64	V
3430.31	-66.70	5.39	8.03	0.00	-64.06	-13.00	51.06	H
5145.00	-65.63	6.87	10.10	0.00	-62.40	-13.00	49.40	V
6860.16	-60.86	7.81	11.43	0.00	-57.24	-13.00	44.24	V
8575.78	-58.69	8.54	13.02	0.00	-54.21	-13.00	41.21	V
10290.47	-54.28	9.61	13.02	0.00	-50.87	-13.00	37.87	H
12005.63	-55.46	10.07	13.00	0.00	-52.53	-13.00	39.53	V

CA_13A_66A, CH23230_CH132322,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
2347.00	-47.77	4.45	5.64	2.15	-48.73	-13.00	35.73	V
3910.78	-59.26	6.12	8.78	2.15	-58.75	-13.00	45.75	V
4692.66	-54.01	6.50	9.59	2.15	-53.07	-13.00	40.07	H
5475.47	-53.27	6.97	10.57	2.15	-51.82	-13.00	38.82	V
6257.34	-48.28	7.45	10.76	2.15	-47.12	-13.00	34.12	H
7039.22	-51.91	8.24	11.65	2.15	-50.65	-13.00	37.65	V
3489.84	-65.47	5.50	8.18	0.00	-62.79	-13.00	49.79	H
5235.00	-58.14	7.00	10.23	0.00	-54.91	-13.00	41.91	H
6980.16	-59.01	8.15	11.58	0.00	-55.58	-13.00	42.58	V
8725.31	-59.24	8.44	13.05	0.00	-54.63	-13.00	41.63	V
10470.47	-54.72	9.70	13.09	0.00	-51.33	-13.00	38.33	H
12170.63	-60.00	10.14	13.07	0.00	-57.07	-13.00	44.07	H

CA_13A_66A, CH23255_CH132622,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
2361.50	-47.46	4.47	5.68	2.15	-48.40	-13.00	35.40	V
3923.44	-60.58	6.12	8.79	2.15	-60.06	-13.00	47.06	V
4707.66	-55.37	6.51	9.61	2.15	-54.42	-13.00	41.42	V
5492.34	-55.44	7.03	10.59	2.15	-54.03	-13.00	41.03	H
6277.03	-50.93	7.48	10.78	2.15	-49.78	-13.00	36.78	H

7062.19	-54.14	8.21	11.67	2.15	-52.83	-13.00	39.83	V
3549.84	-66.36	5.82	8.27	0.00	-63.91	-13.00	50.91	H
5325.00	-67.06	6.99	10.36	0.00	-63.69	-13.00	50.69	V
7100.63	-59.22	8.16	11.72	0.00	-55.66	-13.00	42.66	H
8875.78	-58.05	8.80	13.08	0.00	-53.77	-13.00	40.77	V
10650.47	-51.46	9.29	13.13	0.00	-47.62	-13.00	34.62	H
12481.88	-59.65	10.22	13.19	0.00	-56.68	-13.00	43.68	V

Reference Measurement Results from basic model:
LTE Band 7, 5MHz,CH20775,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
5005.00	-56.24	5.15	11.33	-50.06	-25.00	25.06	V
7507.50	-26.67	7.70	10.22	-24.15	-25.00	-0.85	V
10010.50	-35.83	9.35	11.79	-33.39	-25.00	8.39	H
12514.00	-30.81	12.37	13.56	-29.62	-25.00	4.62	H
15016.00	-43.02	14.74	14.65	-43.11	-25.00	18.11	V
17519.00	-35.49	19.70	13.12	-42.07	-25.00	17.07	H

LTE Band 7, 5MHz,CH21100,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
5070.00	-58.65	5.30	11.60	-52.35	-25.00	27.35	V
7605.50	-41.70	7.58	10.31	-38.97	-25.00	13.97	H
10140.50	-35.78	9.74	11.78	-33.74	-25.00	8.74	H
12676.00	-35.44	11.70	13.15	-33.99	-25.00	8.99	H
15211.00	-41.56	15.10	15.02	-41.64	-25.00	16.64	V
17749.00	-36.14	19.56	13.45	-42.25	-25.00	17.25	H

LTE Band 7, 5MHz,CH21425,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
5135.00	-53.90	5.55	11.60	-47.85	-25.00	22.85	V
7702.50	-43.71	6.72	10.60	-39.83	-25.00	14.83	H
10270.50	-34.24	10.76	11.90	-33.10	-25.00	8.10	H
12838.50	-32.32	13.04	12.92	-32.44	-25.00	7.44	H
15406.50	-40.72	14.90	15.41	-40.21	-25.00	15.21	H
17974.00	-35.19	19.99	13.45	-41.73	-25.00	16.73	H

LTE Band 12, 1.4MHz,CH23017,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
2806.50	-48.68	5.23	10.41	2.15	-45.65	-13.00	32.65	V
4199.00	-52.99	4.16	10.10	2.15	-49.20	-13.00	36.20	V
4898.50	-45.28	4.86	11.00	2.15	-41.29	-13.00	28.29	V
5598.50	-40.03	5.66	11.30	2.15	-36.54	-13.00	23.54	H
6298.00	-40.19	6.07	10.80	2.15	-37.61	-13.00	24.61	H
6997.50	-47.15	7.83	10.40	2.15	-46.73	-13.00	33.73	V

LTE Band 12, 1.4MHz,CH23095,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
2822.50	-49.71	5.12	10.44	2.15	-46.54	-13.00	33.54	H
4245.00	-52.19	4.94	10.28	2.15	-49.00	-13.00	36.00	V
4953.50	-46.63	4.91	11.21	2.15	-42.48	-13.00	29.48	V
5661.00	-42.12	5.72	11.40	2.15	-38.59	-13.00	25.59	H
6368.50	-40.30	5.76	10.94	2.15	-37.27	-13.00	24.27	H
7075.50	-44.40	6.89	10.40	2.15	-43.04	-13.00	30.04	H

LTE Band 12, 1.4MHz,CH23173,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
2860.50	-48.31	5.53	10.56	2.15	-45.43	-13.00	32.43	H
4292.00	-46.60	4.65	10.55	2.15	-42.85	-13.00	29.85	H
5007.50	-46.82	5.14	11.34	2.15	-42.77	-13.00	29.77	H
5723.00	-35.30	5.90	11.35	2.15	-32.00	-13.00	19.00	H
6438.50	-35.82	6.87	10.85	2.15	-33.99	-13.00	20.99	H
7153.50	-41.55	6.70	10.18	2.15	-40.22	-13.00	27.22	H

LTE Band 13, 5MHz,CH23205,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3117.50	-53.89	5.38	7.28	2.15	-54.14	-13.00	41.14	H
3897.50	-43.14	6.11	8.76	2.15	-42.64	-13.00	29.64	V
4677.50	-42.76	6.49	9.58	2.15	-41.82	-13.00	28.82	V
5457.50	-37.42	6.90	10.54	2.15	-35.93	-13.00	22.93	H
6237.50	-39.45	7.42	10.74	2.15	-38.28	-13.00	25.28	V
7017.50	-35.16	8.27	11.62	2.15	-33.96	-13.00	20.96	H

LTE Band 13, 5MHz,CH23230,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3127.50	-52.12	5.40	7.31	2.15	-52.36	-13.00	39.36	V
3910.00	-44.57	6.12	8.77	2.15	-44.07	-13.00	31.07	H
4692.50	-42.09	6.50	9.59	2.15	-41.15	-13.00	28.15	V
5475.00	-37.86	6.97	10.57	2.15	-36.41	-13.00	23.41	H
6257.50	-38.88	7.45	10.76	2.15	-37.72	-13.00	24.72	H
7040.00	-31.97	8.24	11.65	2.15	-30.71	-13.00	17.71	V

LTE Band 13, 5MHz,CH23255,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3137.50	-53.17	5.39	7.33	2.15	-53.38	-13.00	40.38	V
3922.50	-44.30	6.12	8.79	2.15	-43.78	-13.00	30.78	H
4707.50	-44.78	6.51	9.61	2.15	-43.83	-13.00	30.83	V
5492.50	-41.88	7.03	10.59	2.15	-40.47	-13.00	27.47	V
6277.50	-41.25	7.49	10.78	2.15	-40.11	-13.00	27.11	H
7062.50	-30.99	8.21	11.68	2.15	-29.67	-13.00	16.67	V

LTE Band 66, 1.4MHz,CH131979,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
5132.50	-50.40	5.56	11.60	-44.36	-13.00	31.36	H
8554.00	-50.90	8.52	11.20	-48.22	-13.00	35.22	H
10265.00	-45.26	10.80	11.90	-44.16	-13.00	31.16	H
11975.50	-43.31	12.28	13.05	-42.54	-13.00	29.54	H
13687.00	-52.83	13.01	12.20	-53.64	-13.00	40.64	H
17108.50	-47.78	18.45	13.49	-52.74	-13.00	39.74	H

LTE Band 66, 1.4MHz,CH132322,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
5235.00	-57.39	4.70	11.70	-50.39	-13.00	37.39	H
8725.50	-52.16	8.45	11.10	-49.51	-13.00	36.51	V
10470.50	-44.37	10.36	11.93	-42.80	-13.00	29.80	H
12215.00	-47.74	12.17	13.40	-46.51	-13.00	33.51	V
15705.50	-52.93	16.64	15.51	-54.06	-13.00	41.06	H
17444.00	-45.70	19.26	13.04	-51.92	-13.00	38.92	H

LTE Band 66, 1.4MHz,CH132665,QPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
5338.50	-59.10	6.17	11.72	-53.55	-13.00	40.55	H
8897.00	-49.47	8.04	11.59	-45.92	-13.00	32.92	H
10676.00	-41.78	10.04	12.08	-39.74	-13.00	26.74	H
12455.50	-45.22	12.90	13.51	-44.61	-13.00	31.61	H
16014.50	-49.77	17.47	15.36	-51.88	-13.00	38.88	H
17793.50	-46.61	19.55	13.49	-52.67	-13.00	39.67	V

Note: Peak EIRP (dBm) = P_{Mea}(dBm) - Path Loss(dB) + Antenna Gain(dBi)

Note: Expanded measurement uncertainty is U = 3.44 dB, k = 2.

A.3 Frequency Stability

A.3.1 Method of Measurement

Frequency stability is a measure of the frequency drift due to temperature and supply voltage variations, with reference to the frequency measured at +20 °C and rated supply voltage. Two reference points are established at the applicable unwanted emissions limit using a RBW equal to the RBW required by the unwanted emissions specification of the applicable regulatory standard. These reference points measured using the lowest and highest channel of operation shall be identified as F_L and F_H respectively.

In order to measure the carrier frequency under the condition of AFC lock, it is necessary to make measurements with the EUT in a “call mode”. This is accomplished with the use of CMW500.

1. Measure the carrier frequency at room temperature.
2. Subject the EUT to overnight soak at -30°C.
3. With the EUT, powered via nominal voltage, connected to the CMW500, and in a simulated call on middle channel for each LTE band, measure the carrier frequency. These measurements should be made within 2 minutes of Powering up the EUT, to prevent significant self-warming.
4. Repeat the above measurements at 10°C increments from -30°C to +50°C. Allow at least 1.5 hours at each temperature, unpowered, before making measurements.
5. Re-measure carrier frequency at room temperature with nominal voltage. Vary supply voltage from minimum voltage to maximum voltage, in 0.1Volt increments re-measuring carrier frequency at each voltage. Pause at nominal voltage for 1.5 hours unpowered, to allow any self-heating to stabilize, before continuing.
6. Subject the EUT to overnight soak at +50°C.
7. With the EUT, powered via nominal voltage, connected to the CMW500 and in a simulated call on the center channel, measure the carrier frequency. These measurements should be made within 2 minutes of Powering up the EUT, to prevent significant self-warming.
8. Repeat the above measurements at 10 °C decrements from +50°C to -30°C. Allow at least 1.5 hours at each temperature, unpowered, before making measurements.
9. At all temperature levels hold the temperature to +/- 0.5°C during the measurement procedure.

The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block. As this transceiver is considered "Hand carried, battery powered equipment" Section 2.1055(d)(2) applies. This requires that the lower voltage for frequency stability testing be specified by the manufacturer. This transceiver is specified to operate with an input voltage of the lower, higher and nominal voltage. Operation above or below these voltage limits is prohibited by transceiver software in order to prevent improper operation as well as to protect components from overstress.

A.3.2 Measurement results

Measurement Results from UT33a:

LTE Band 48, 20MHz bandwidth QPSK (worst case of all bandwidths)

Frequency Error vs Temperature

Temperature(°C)	Voltage(V)	F _L (MHz)	F _H (MHz)	Offset(Hz)	Frequency error(ppm)
20	3.85	3550.801	3699.167		
50				-2.00	0.0006
40				2.83	0.0008
30				-1.56	0.0004
10				2.50	0.0007
0				0.31	0.0001
-10				0.40	0.0001
-20				2.16	0.0006
-30				0.30	0.0001

Frequency Error vs Voltage

Voltage(V)	Temperature(°C)	F _L (MHz)	F _H (MHz)	Offset(Hz)	Frequency error(ppm)
3.6	20	3550.801	3699.167	2.39	0.0007
4.4				-0.62	0.0002

LTE CA band 48C, 20MHz+20MHz bandwidth QPSK(worst case of all bandwidths)

Frequency Error vs Voltage

Temperature(°C)	Voltage(V)	F _L (MHz)	F _H (MHz)	Offset(Hz)	Frequency error(ppm)
20	3.85	3550.460	3699.500		
50				12.72	0.0035
40				23.30	0.0064
30				13.63	0.0038
10				-5.82	0.0016
0				15.99	0.0044
-10				12.89	0.0036
-20				-5.88	0.0016
-30				10.17	0.0028

Frequency Error vs Voltage

Voltage(V)	Temperature(°C)	F _L (MHz)	F _H (MHz)	Offset(Hz)	Frequency error(ppm)
3.6	20	3550.460	3699.500	14.05	0.0039
4.4				14.92	0.0041

Reference Measurement Results from basic model:
LTE Band 7, 20MHz bandwidth QPSK (worst case of all bandwidths)
Frequency Error vs Temperature

Temperature(°C)	Voltage(V)	F _L (MHz)	F _H (MHz)	Offset(Hz)	Frequency error(ppm)
20	3.85	2500.577	2569.359		
50				-0.90	0.0004
40				21.43	0.0085
30				-0.20	0.0001
10				-0.33	0.0001
0				0.16	0.0001
-10				1.65	0.0007
-20				21.21	0.0084
-30				16.25	0.0064

Frequency Error vs Voltage

Voltage(V)	Temperature(°C)	F _L (MHz)	F _H (MHz)	Offset(Hz)	Frequency error(ppm)
3.6	20	2500.577	2569.359	-0.93	0.0004
4.4				3.48	0.0014

LTE Band 12, 10MHz bandwidth QPSK (worst case of all bandwidths)
Frequency Error vs Temperature

Temperature(°C)	Voltage(V)	F _L (MHz)	F _H (MHz)	Offset(Hz)	Frequency error(ppm)
20	3.85	699.481	715.519		
50				2.50	0.0035
40				3.30	0.0047
30				2.95	0.0042
10				3.48	0.0049
0				3.66	0.0052
-10				2.66	0.0038
-20				2.43	0.0034
-30				3.49	0.0049

Frequency Error vs Voltage

Voltage(V)	Temperature(°C)	F _L (MHz)	F _H (MHz)	Offset(Hz)	Frequency error(ppm)
3.6	20	699.481	715.519	4.22	0.0060
4.4				2.90	0.0041

LTE Band 13, 10MHz bandwidth QPSK (worst case of all bandwidths)

Frequency Error vs Temperature

Temperature(°C)	Voltage(V)	F _L (MHz)	F _H (MHz)	Offset(Hz)	Frequency error(ppm)
20	3.85	777.465	786.535		
50				-2.09	0.0027
40				-1.39	0.0018
30				10.93	0.0140
10				2.03	0.0026
0				9.21	0.0118
-10				9.41	0.0120
-20				2.93	0.0037
-30				1.46	0.0019

Frequency Error vs Voltage

Voltage(V)	Temperature(°C)	F _L (MHz)	F _H (MHz)	Offset(Hz)	Frequency error(ppm)
3.6	20	777.465	786.535	8.04	0.0103
4.4				1.10	0.0014

LTE Band 66, 20MHz bandwidth QPSK (worst case of all bandwidths)

Frequency Error vs Temperature

Temperature(°C)	Voltage(V)	F _L (MHz)	F _H (MHz)	Offset(Hz)	Frequency error(ppm)
20	3.85	1710.833	1779.167		
50				2.27	0.0013
40				-20.30	0.0116
30				-15.18	0.0087
10				-16.52	0.0095
0				0.06	0.0000
-10				-14.08	0.0081
-20				0.70	0.0004
-30				-13.62	0.0078

Frequency Error vs Voltage

Voltage(V)	Temperature(°C)	F _L (MHz)	F _H (MHz)	Offset(Hz)	Frequency error(ppm)
3.6	20	1710.833	1779.167	-15.36	0.0088
4.4				1.13	0.0006

Note: Expanded measurement uncertainty is U = 0.01 PPM, k = 2.

A.4 Occupied Bandwidth

Occupied bandwidth measurements are only provided for selected frequencies in order to reduce the amount of submitted data. Data were taken at the mid frequencies frequency. The table below lists the measured 99% BW. Spectrum analyzer plots are included on the following pages.

The measurement method is from ANSI C63.26:

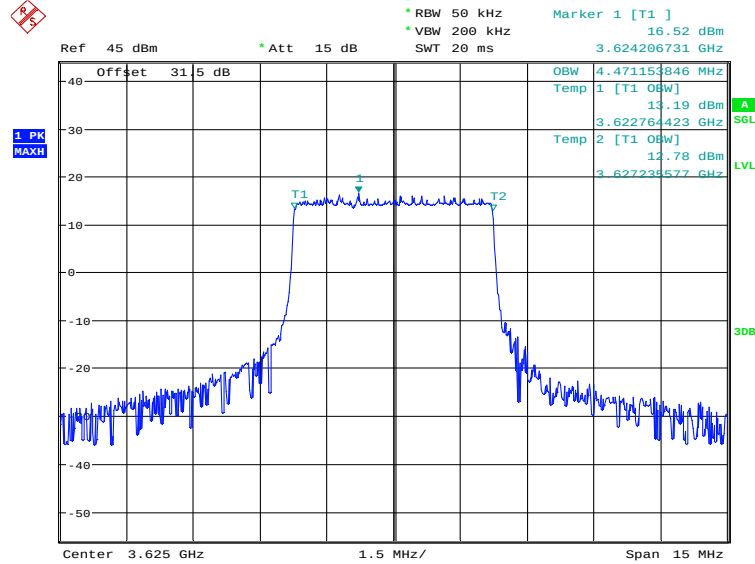
- a) The spectrum analyzer center frequency is set to the nominal EUT channel center frequency. The frequency span for the spectrum analyzer shall be set wide enough to capture all modulation products including the emission skirts.
- b) The nominal IF filter 3 dB bandwidth (RBW) shall be in the range of 1% to 5% of the anticipated OBW, and the VBW shall be set $\geq 3 \times \text{RBW}$.
- c) Set the reference level of the instrument as required to prevent the signal amplitude from exceeding the maximum spectrum analyzer input mixer level for linear operation.
- d) Set the detection mode to peak, and the trace mode to max-hold.

Measurement Results from UT33a:

LTE band 48, 5MHz (99%)

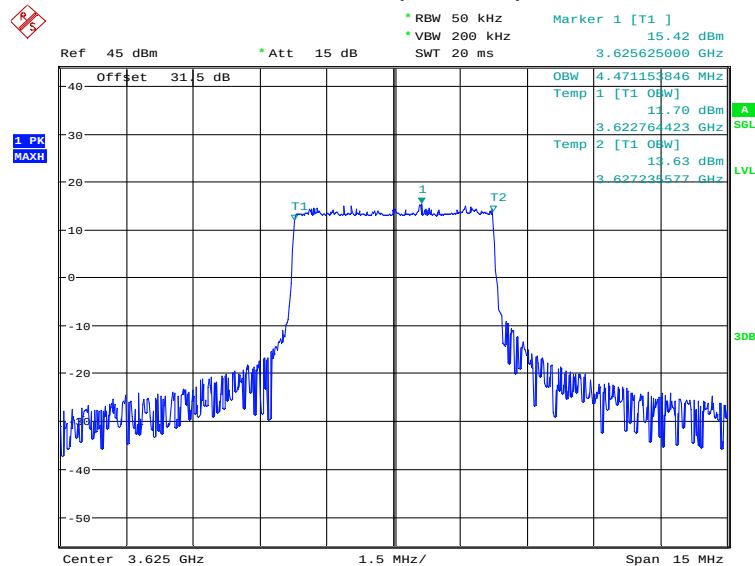
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
3625.0	QPSK	16QAM
	4471.15	4471.15

LTE band 48, 5MHz Bandwidth, QPSK (99% BW)



Date: 12.NOV.2024 15:12:16

LTE band 48, 5MHz Bandwidth, 16QAM (99% BW)

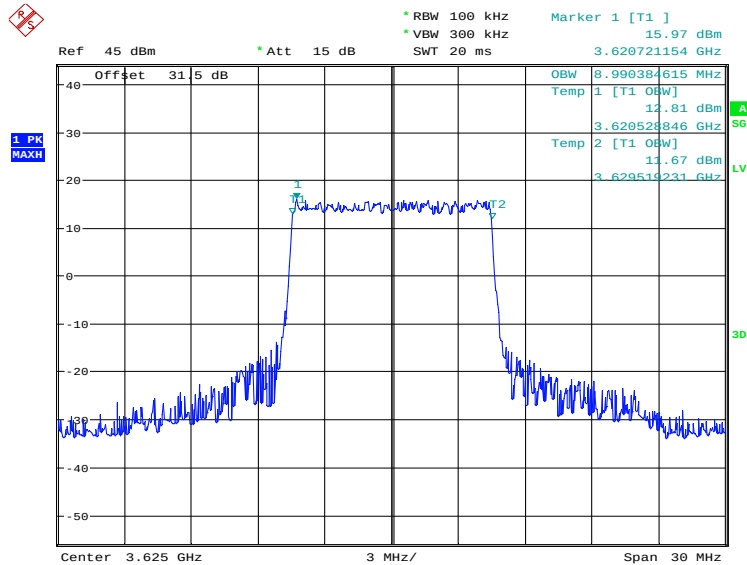


Date: 12.NOV.2024 15:12:56

LTE band 48, 10MHz (99%)

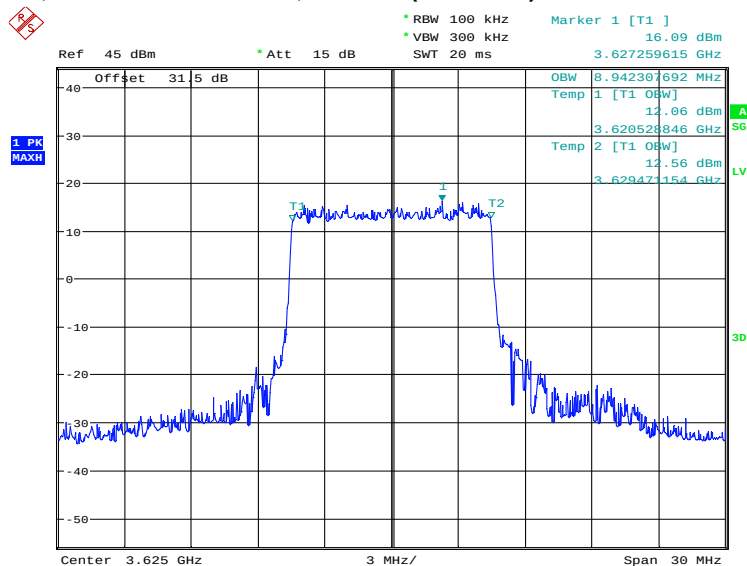
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
3625.0	QPSK	16QAM
	8990.38	8942.31

LTE band 48, 10MHz Bandwidth, QPSK (99% BW)



Date: 12.NOV.2024 15:13:38

LTE band 48, 10MHz Bandwidth,16QAM (99% BW)

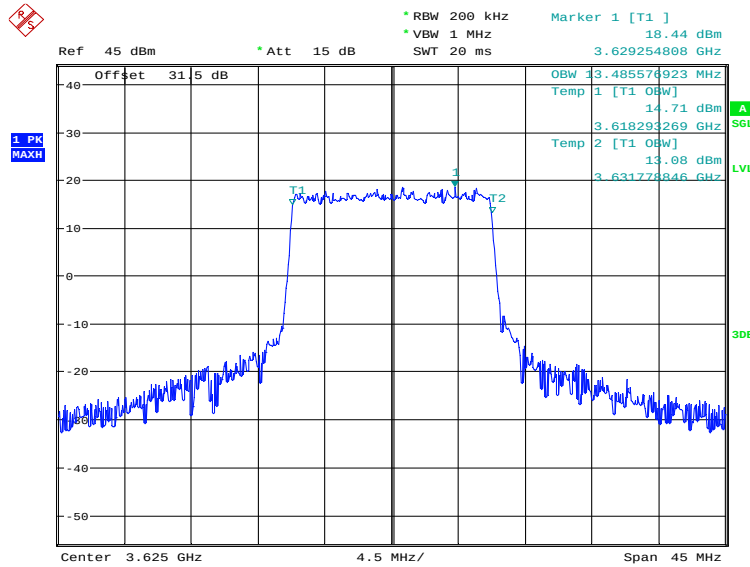


Date: 12.NOV.2024 15:14:18

LTE band 48, 15MHz (99%)

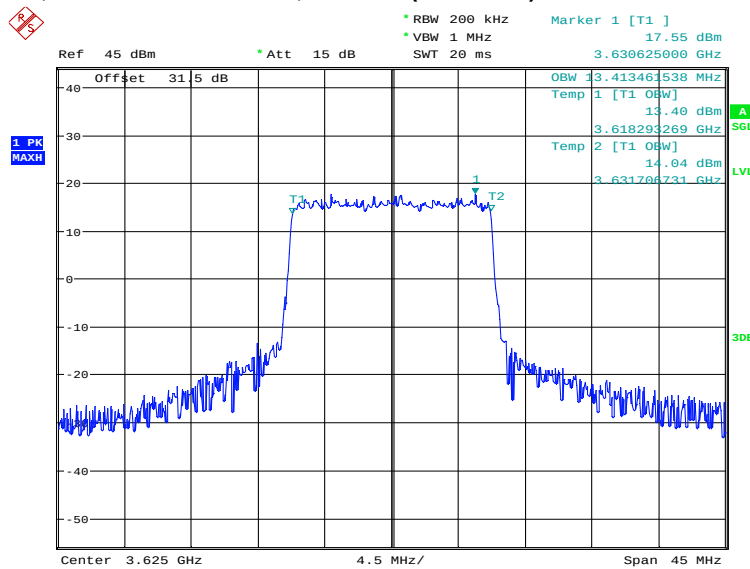
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
3625.0	QPSK	16QAM
	13485.58	13413.46

LTE band 48, 15MHz Bandwidth, QPSK (99% BW)



Date: 12.NOV.2024 15:15:00

LTE band 48, 15MHz Bandwidth,16QAM (99% BW)

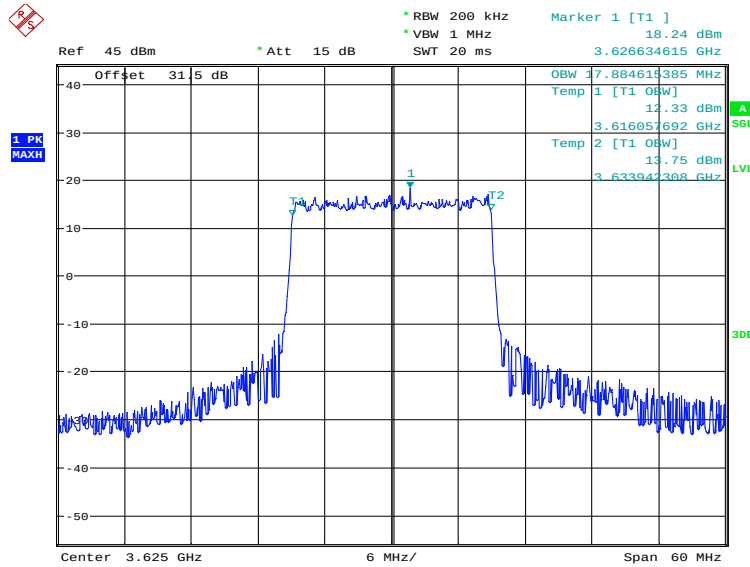


Date: 12.NOV.2024 15:15:40

LTE band 48, 20MHz (99%)

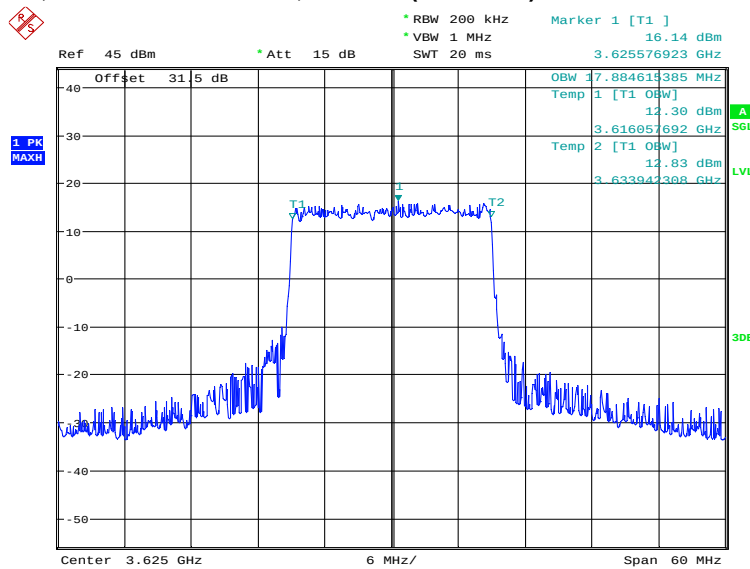
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
3625.0	QPSK	16QAM
	17884.62	17884.62

LTE band 48, 20MHz Bandwidth, QPSK (99% BW)



Date: 12.NOV.2024 15:16:21

LTE band 48, 20MHz Bandwidth, 16QAM (99% BW)

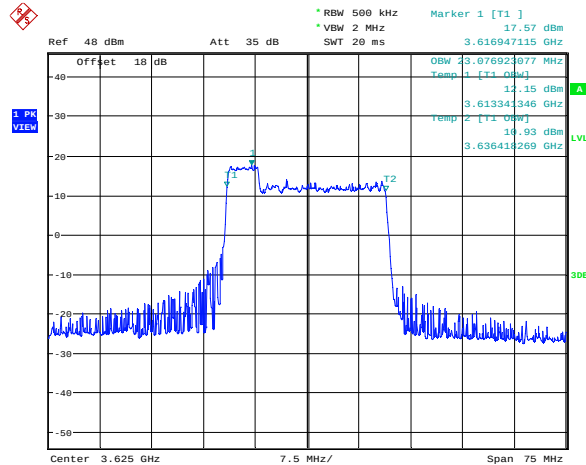


Date: 12.NOV.2024 15:17:02

LTE CA band 48C, 5MHz+20MHz(99%)

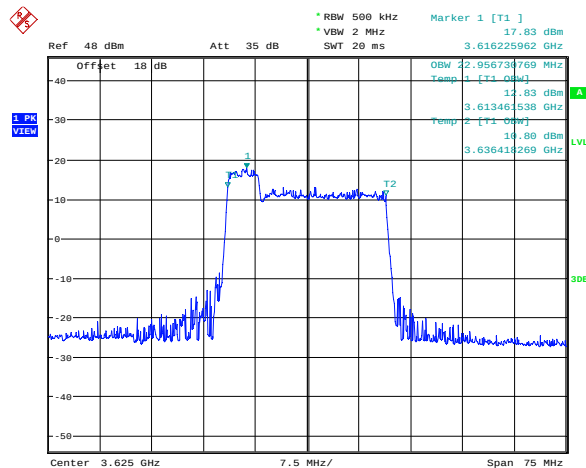
Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	QPSK	16QAM
3625.0	23.077	22.957

LTE CA band 48C , 5MHz+20MHz Bandwidth,QPSK (99% BW)



Date: 11.NOV.2024 09:12:16

LTE CA band 48C , 5MHz+20MHz Bandwidth,16QAM (99% BW)

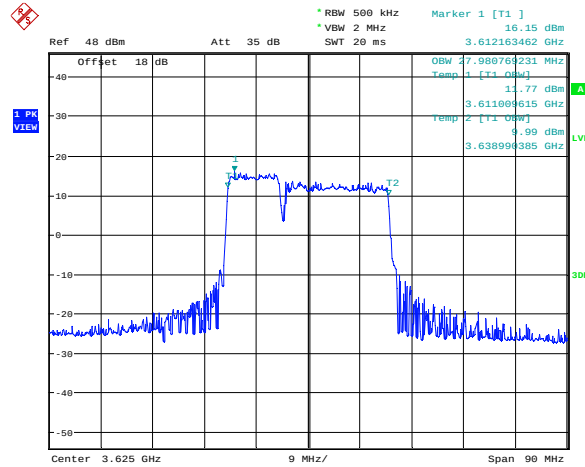


Date: 11.NOV.2024 09:12:40

LTE CA band 48C, 10MHz+20MHz(99%)

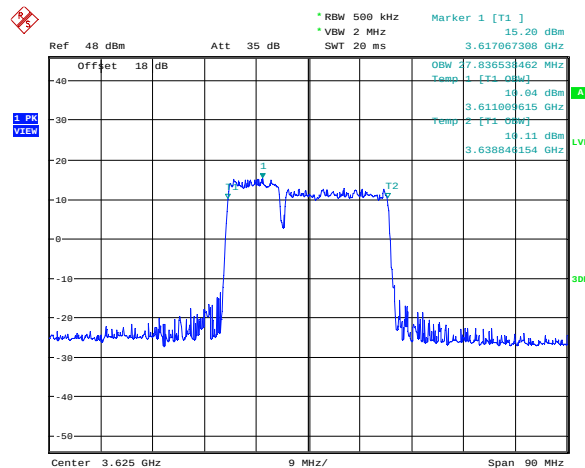
Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	QPSK	16QAM
3625.0	27.981	27.837

LTE CA band 48C , 10MHz+20MHz Bandwidth,QPSK (99% BW)



Date: 11.NOV.2024 09:13:32

LTE CA band 48C , 10MHz+20MHz Bandwidth,16QAM (99% BW)

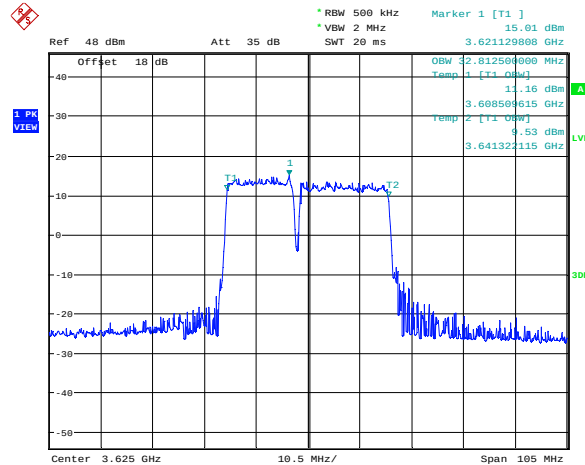


Date: 11.NOV.2024 09:13:56

LTE CA band 48C, 15MHz+20MHz(99%)

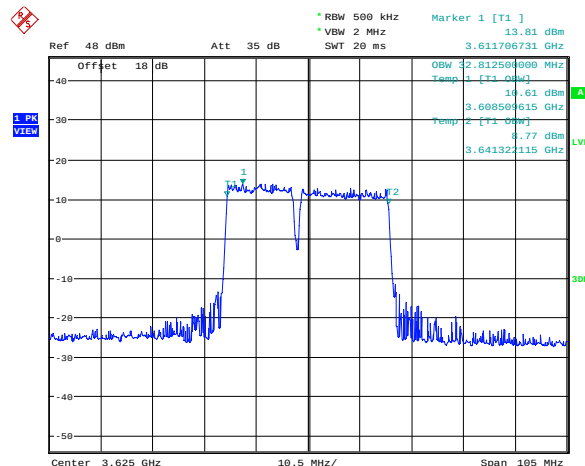
Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	QPSK	16QAM
3625.0	32.812	32.812

LTE CA band 48C , 15MHz+20MHz Bandwidth,QPSK (99% BW)



Date: 11.NOV.2024 09:14:48

LTE CA band 48C , 15MHz+20MHz Bandwidth,16QAM (99% BW)

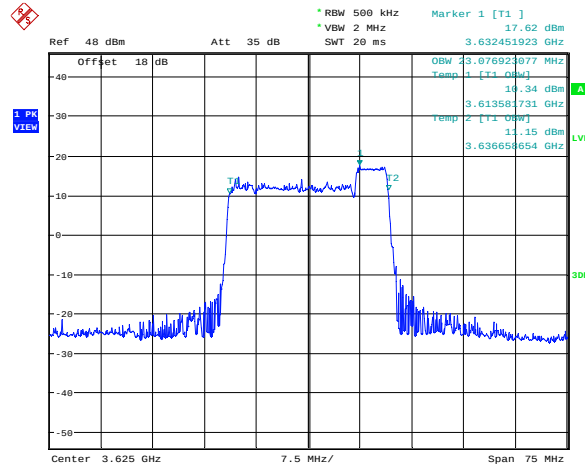


Date: 11.NOV.2024 09:15:11

LTE CA band 48C, 20MHz+5MHz(99%)

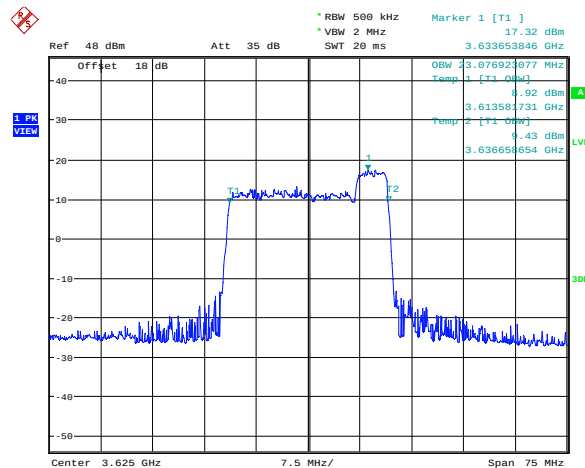
Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	QPSK	16QAM
3625.0	23.077	23.077

LTE CA band 48C , 20MHz+5MHz Bandwidth,QPSK (99% BW)



Date: 11.NOV.2024 09:16:06

LTE CA band 48C , 20MHz+5MHz Bandwidth,16QAM (99% BW)

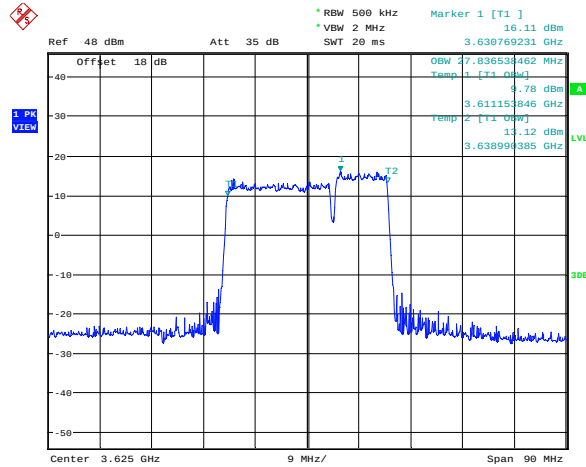


Date: 11.NOV.2024 09:16:38

LTE CA band 48C, 20MHz+10MHz(99%)

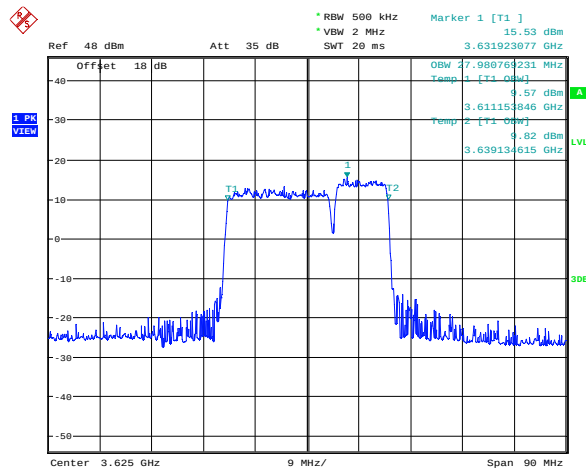
Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	QPSK	16QAM
3625.0	27.837	27.981

LTE CA band 48C , 20MHz+10MHz Bandwidth,QPSK (99% BW)



Date: 11.NOV.2024 09:17:50

LTE CA band 48C , 20MHz+10MHz Bandwidth,16QAM (99% BW)

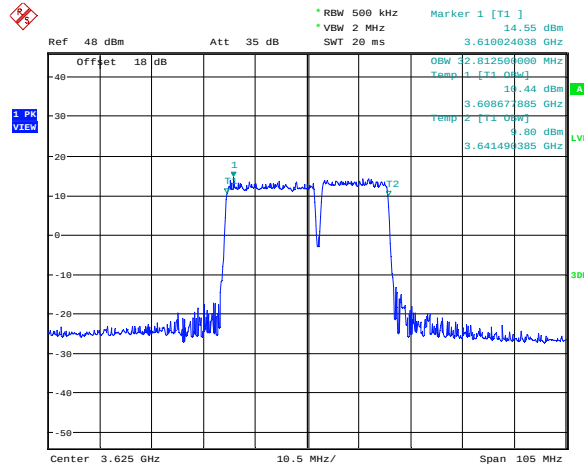


Date: 11.NOV.2024 09:18:14

LTE CA band 48C, 20MHz+15MHz(99%)

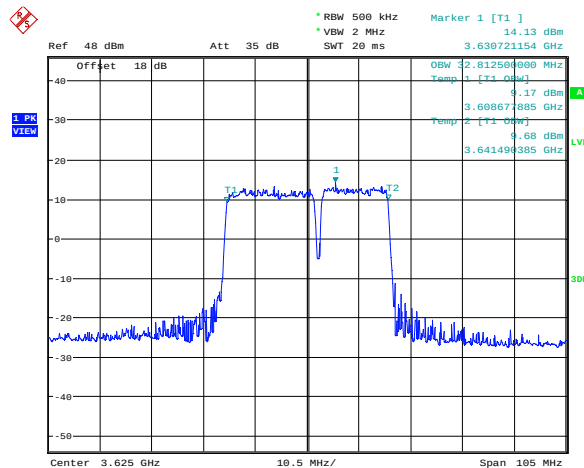
Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	QPSK	16QAM
3625.0	32.812	32.812

LTE CA band 48C , 20MHz+15MHz Bandwidth,QPSK (99% BW)



Date: 11.NOV.2024 09:19:07

LTE CA band 48C , 20MHz+15MHz Bandwidth,16QAM (99% BW)

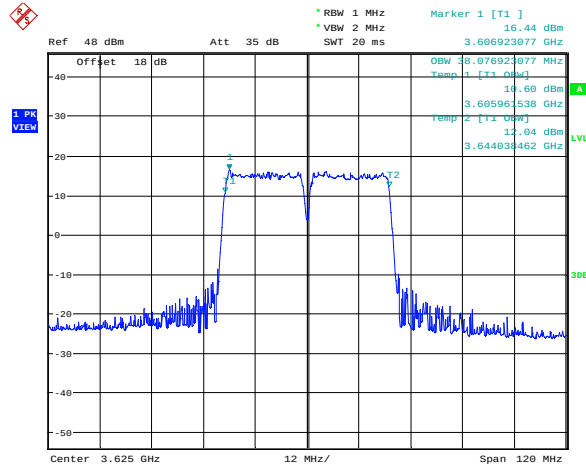


Date: 11.NOV.2024 09:19:31

LTE CA band 48C, 20MHz+20MHz(99%)

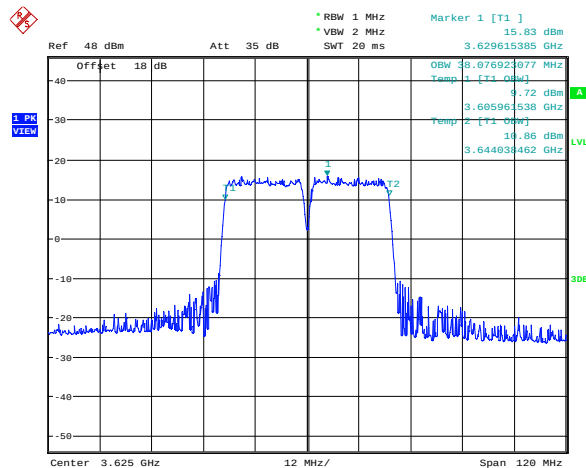
Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	QPSK	16QAM
3625.0	38.077	38.077

LTE CA band 48C , 20MHz+20MHz Bandwidth,QPSK (99% BW)



Date: 11.NOV.2024 09:20:25

LTE CA band 48C , 20MHz+20MHz Bandwidth,16QAM (99% BW)



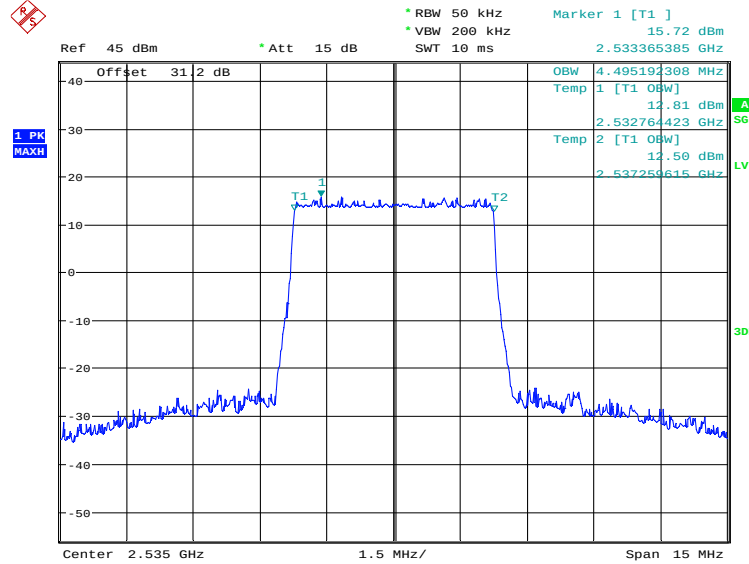
Date: 11.NOV.2024 09:20:48

Reference Measurement Results from basic model:

LTE band 7, 5MHz (99%)

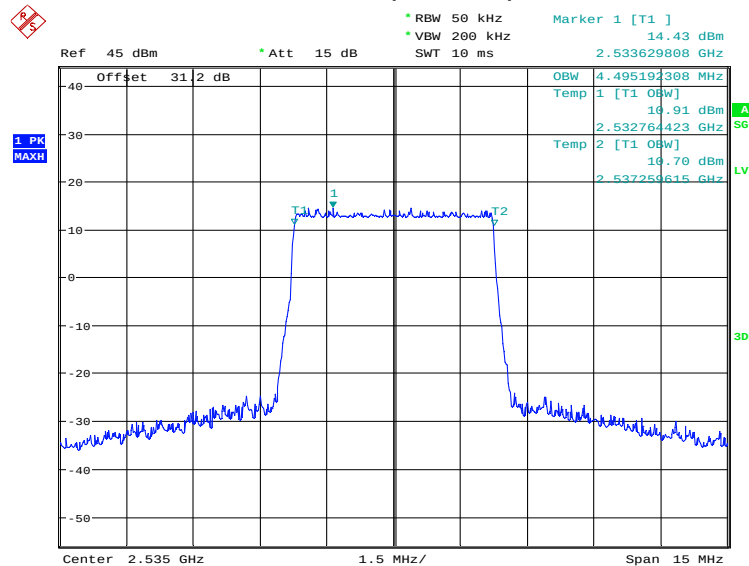
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
2535.0	QPSK	16QAM
	4495.19	4495.19

LTE band 7, 5MHz Bandwidth, QPSK (99% BW)



Date: 9.OCT.2024 14:14:27

LTE band 7, 5MHz Bandwidth, 16QAM (99% BW)

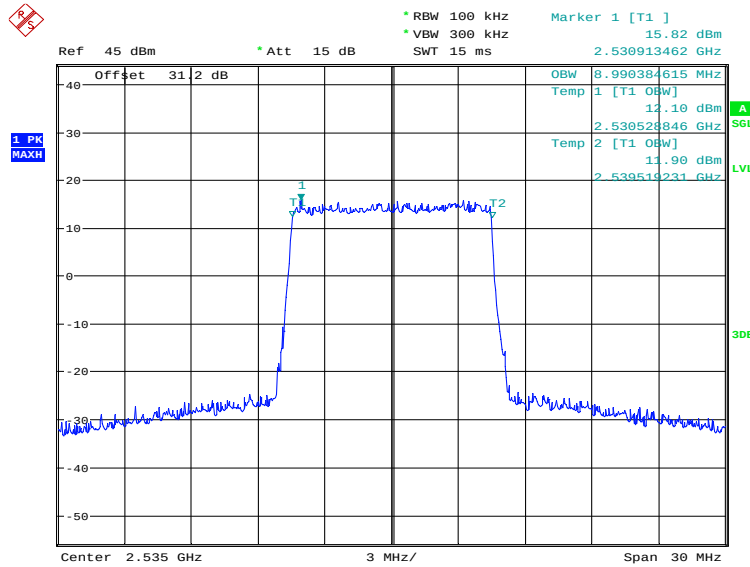


Date: 9.OCT.2024 14:15:07

LTE band 7, 10MHz (99%)

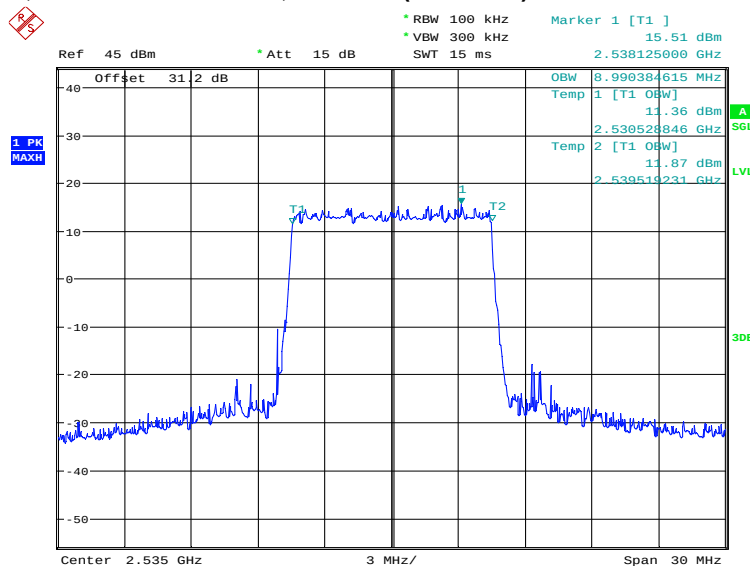
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
2535.0	QPSK	16QAM
	8990.38	8990.38

LTE band 7, 10MHz Bandwidth, QPSK (99% BW)



Date: 9.OCT.2024 14:15:49

LTE band 7, 10MHz Bandwidth, 16QAM (99% BW)

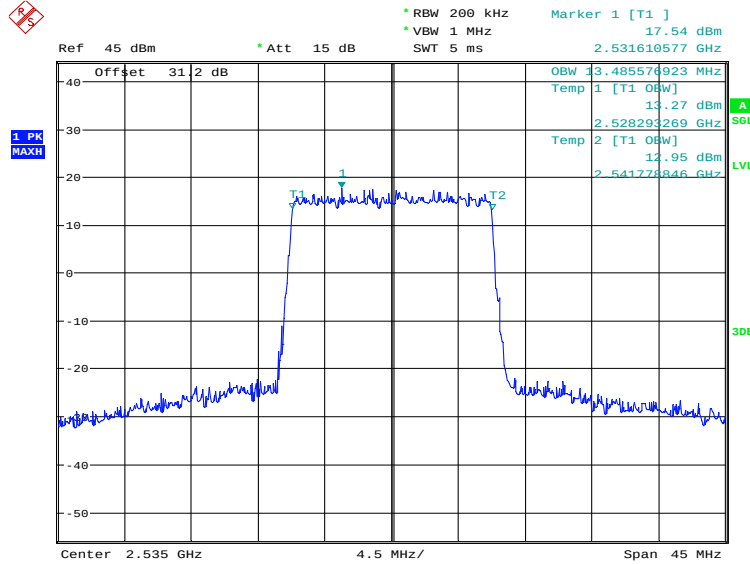


Date: 9.OCT.2024 14:16:29

LTE band 7, 15MHz (99%)

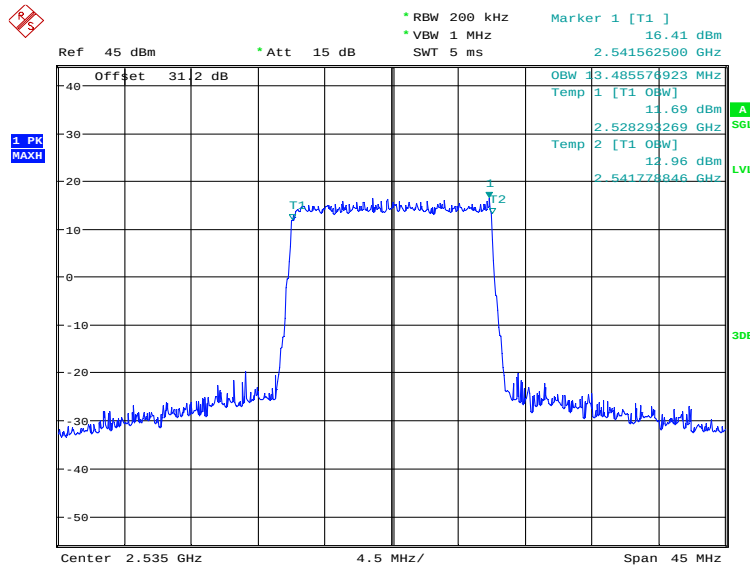
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
2535.0	QPSK	16QAM
	13485.58	13485.58

LTE band 7, 15MHz Bandwidth, QPSK (99% BW)



Date: 9.OCT.2024 14:17:11

LTE band 7, 15MHz Bandwidth, 16QAM (99% BW)

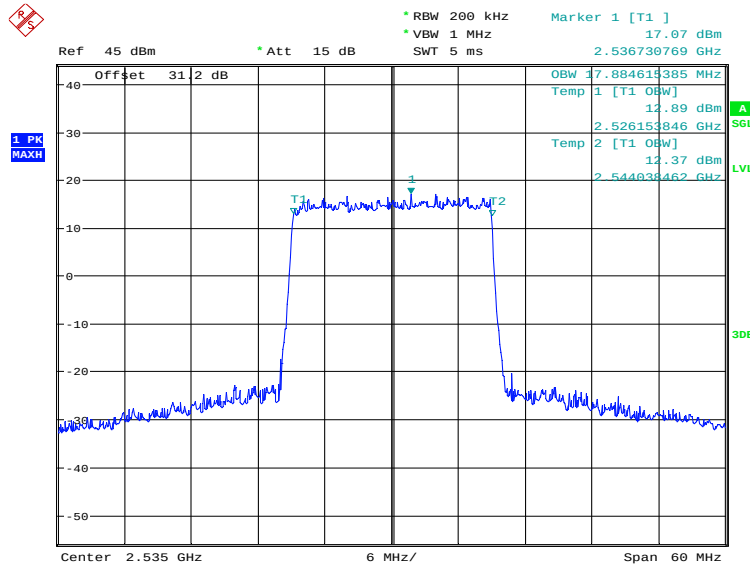


Date: 9.OCT.2024 14:17:51

LTE band 7, 20MHz (99%)

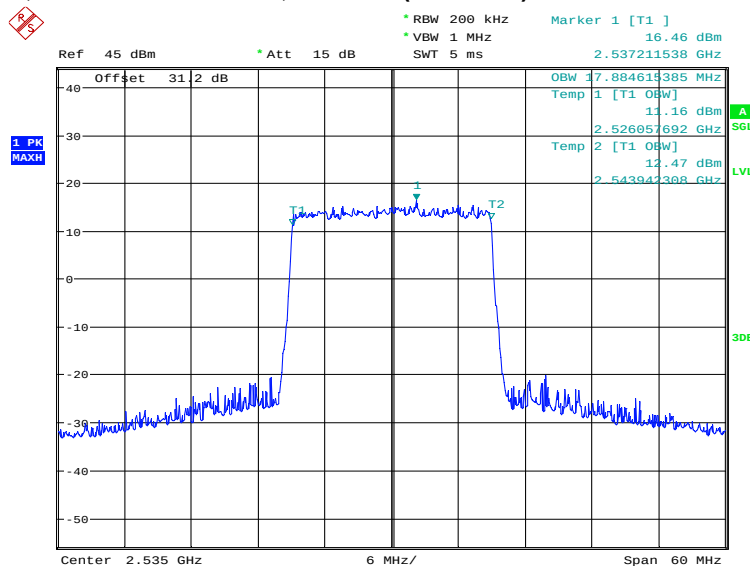
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
2535.0	QPSK	16QAM
	17884.62	17884.62

LTE band 7, 20MHz Bandwidth, QPSK (99% BW)



Date: 9.OCT.2024 14:18:33

LTE band 7, 20MHz Bandwidth, 16QAM (99% BW)

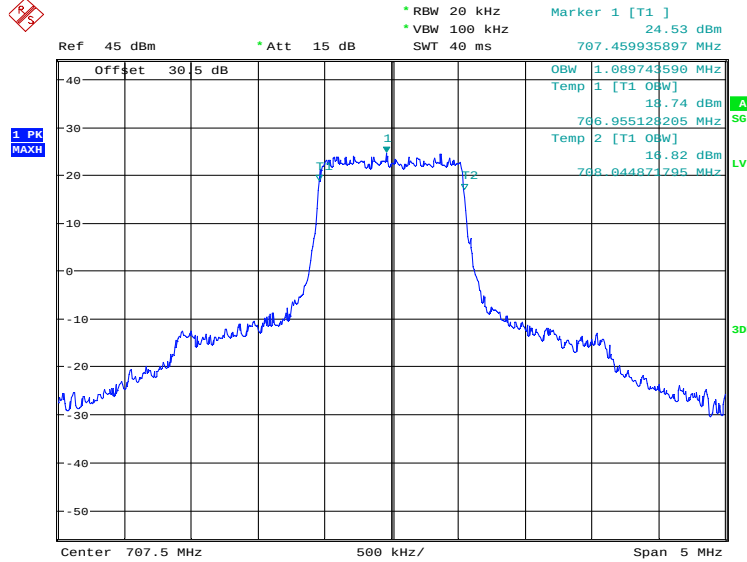


Date: 9.OCT.2024 14:19:13

LTE band 12, 1.4MHz (99%)

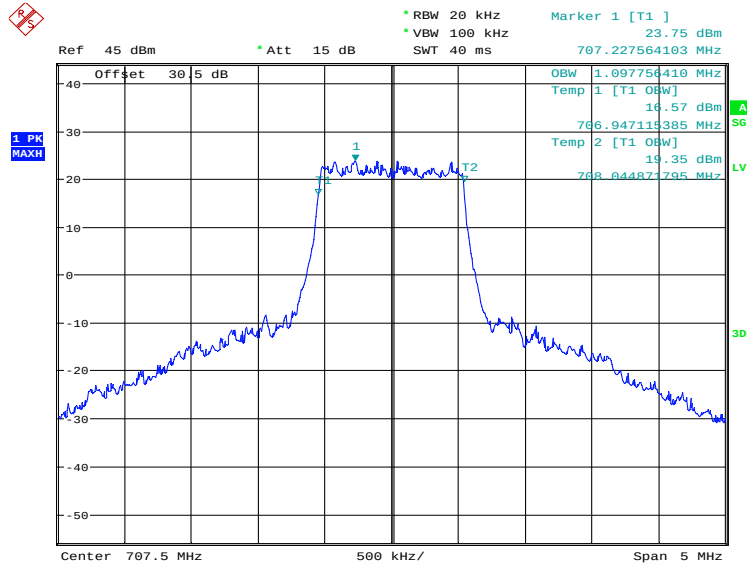
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
707.5	QPSK	16QAM
	1089.74	1097.76

LTE band 12, 1.4MHz Bandwidth, QPSK (99% BW)



Date: 9.OCT.2024 10:33:39

LTE band 12, 1.4MHz Bandwidth, 16QAM (99% BW)

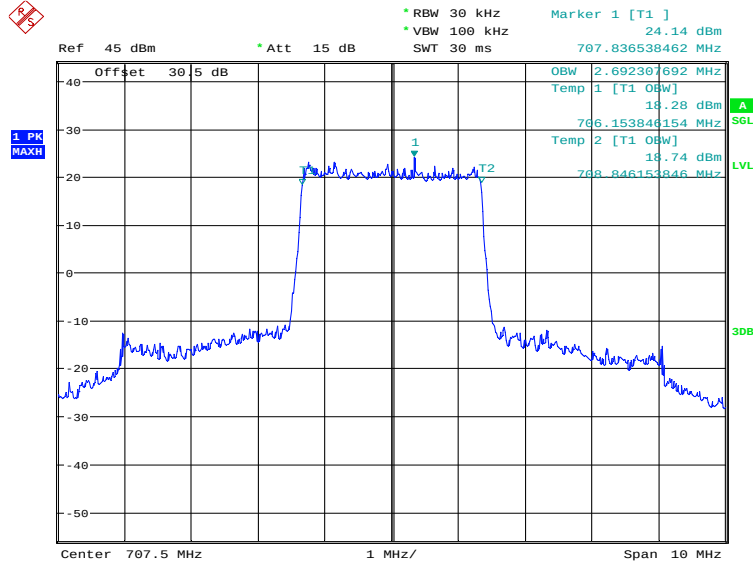


Date: 9.OCT.2024 10:34:19

LTE band 12, 3MHz (99%)

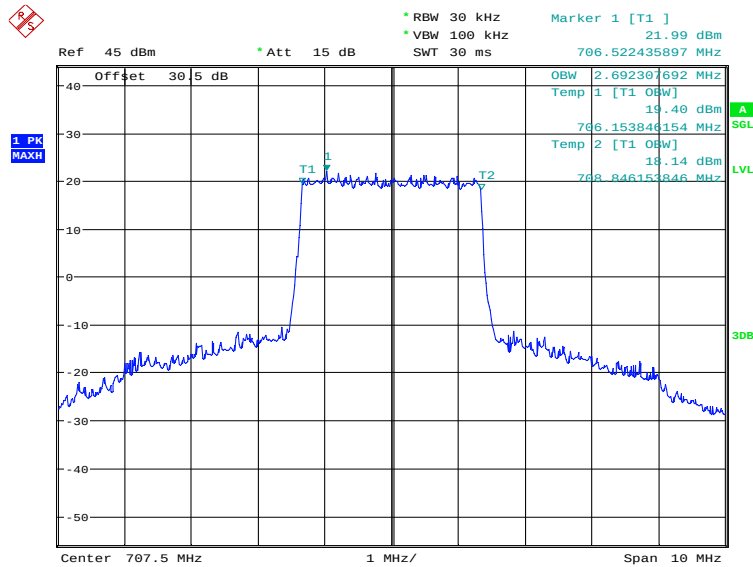
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
707.5	QPSK	16QAM
	2692.31	2692.31

LTE band 12, 3MHz Bandwidth, QPSK (99% BW)



Date: 9.OCT.2024 10:35:02

LTE band 12, 3MHz Bandwidth, 16QAM (99% BW)

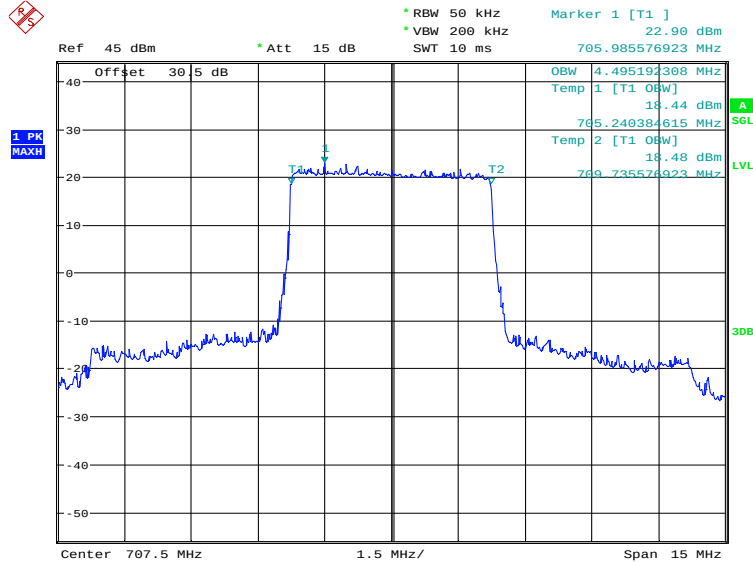


Date: 9.OCT.2024 10:35:42

LTE band 12, 5MHz (99%)

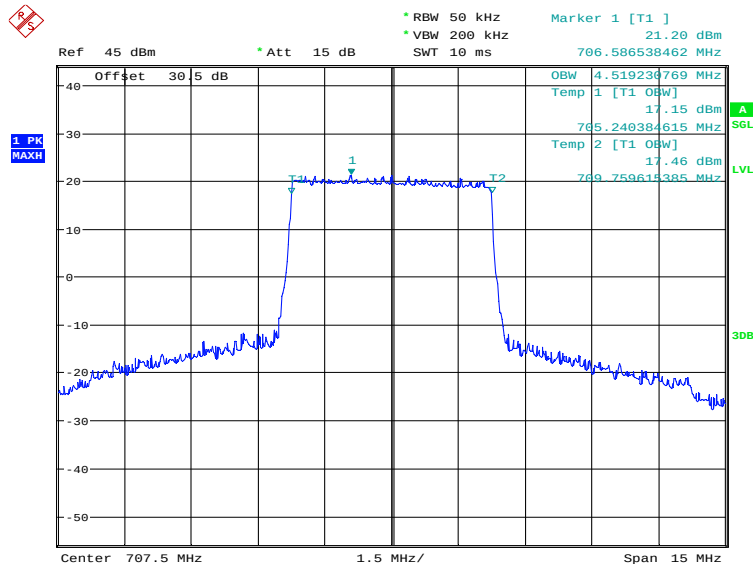
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
707.5	QPSK	16QAM
	4495.19	4519.23

LTE band 12, 5MHz Bandwidth, QPSK (99% BW)



Date: 9.OCT.2024 10:36:24

LTE band 12, 5MHz Bandwidth, 16QAM (99% BW)

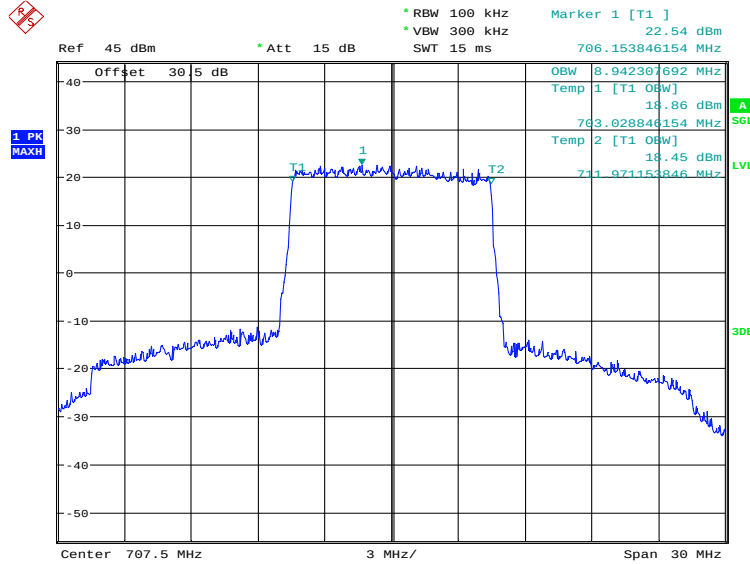


Date: 9.OCT.2024 10:37:04

LTE band 12, 10MHz (99%)

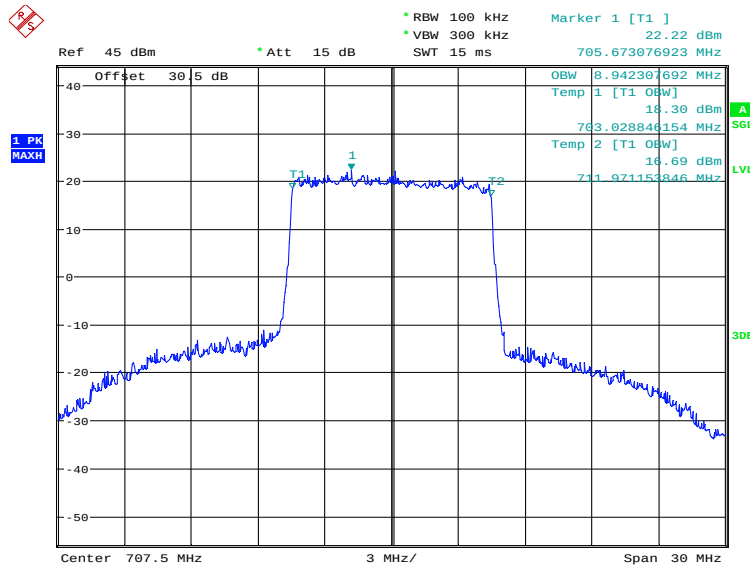
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
707.5	QPSK	16QAM
	8942.31	8942.31

LTE band 12, 10MHz Bandwidth, QPSK (99% BW)



Date: 9.OCT.2024 10:37:46

LTE band 12, 10MHz Bandwidth, 16QAM (99% BW)

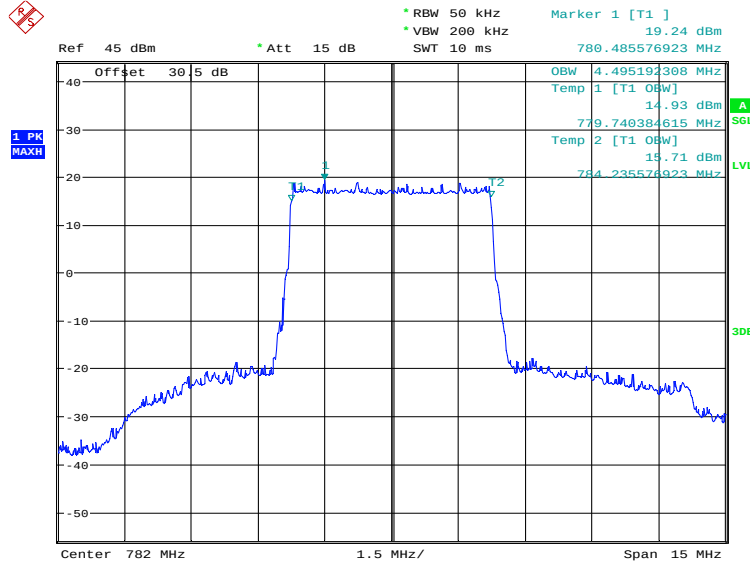


Date: 9.OCT.2024 10:38:26

LTE band 13, 5MHz (99%)

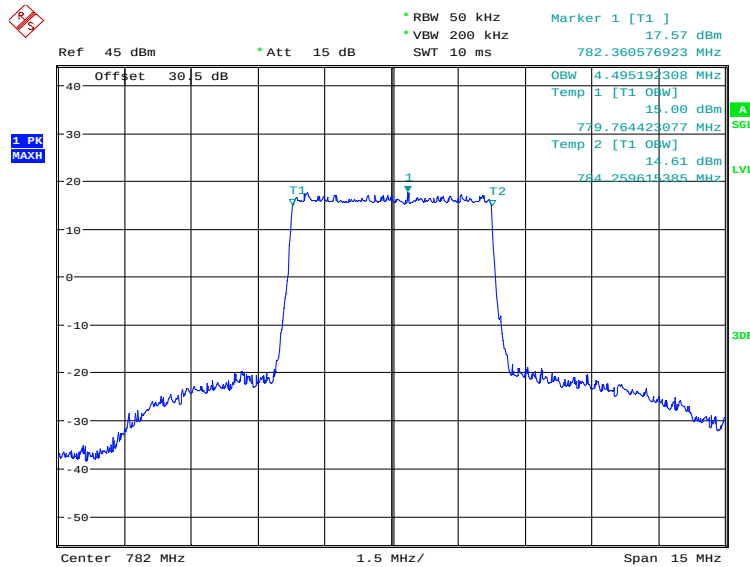
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
782.0	QPSK	16QAM
	4495.19	4495.19

LTE band 13, 5MHz Bandwidth, QPSK (99% BW)



Date: 9.OCT.2024 10:39:10

LTE band 13, 5MHz Bandwidth, 16QAM (99% BW)

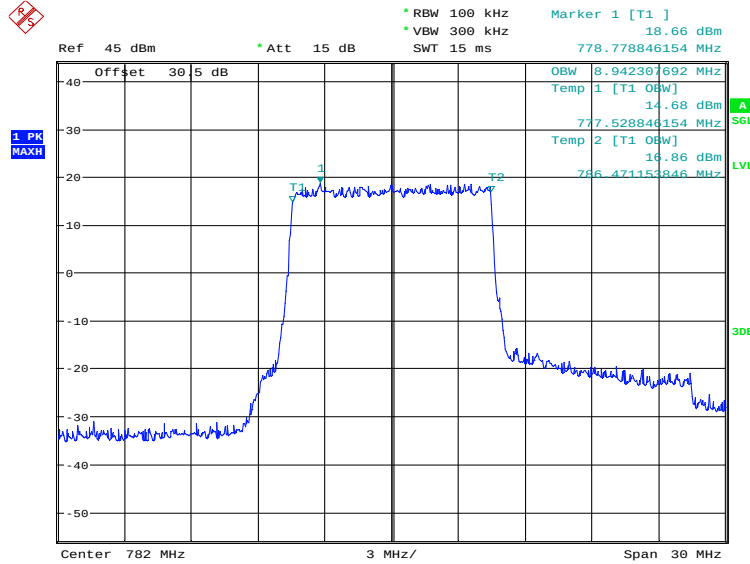


Date: 9.OCT.2024 10:39:50

LTE band 13, 10MHz (99%)

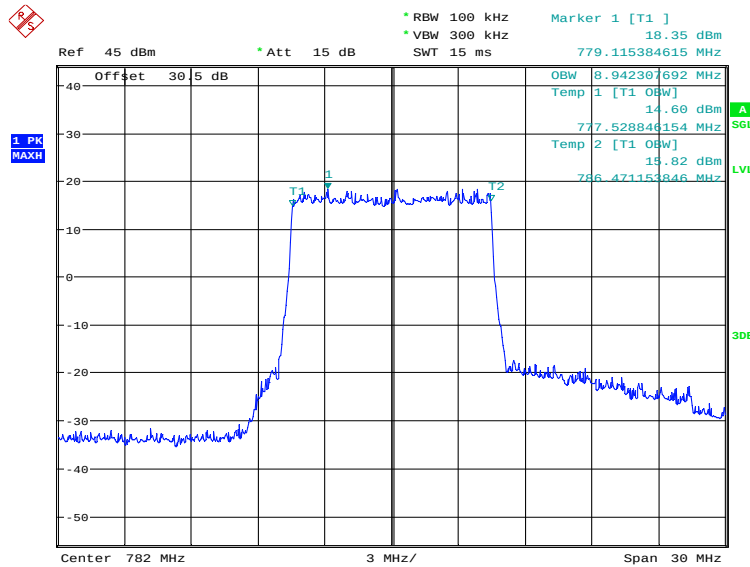
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
782.0	QPSK	16QAM
	8942.31	8942.31

LTE band 13, 10MHz Bandwidth, QPSK (99% BW)



Date: 9.OCT.2024 10:40:32

LTE band 13, 10MHz Bandwidth,16QAM (99% BW)

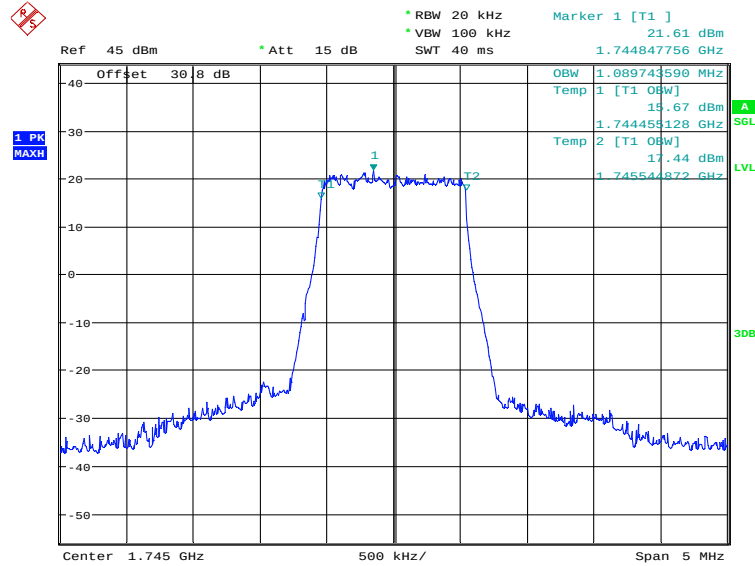


Date: 9.OCT.2024 10:41:12

LTE band 66, 1.4MHz (99%)

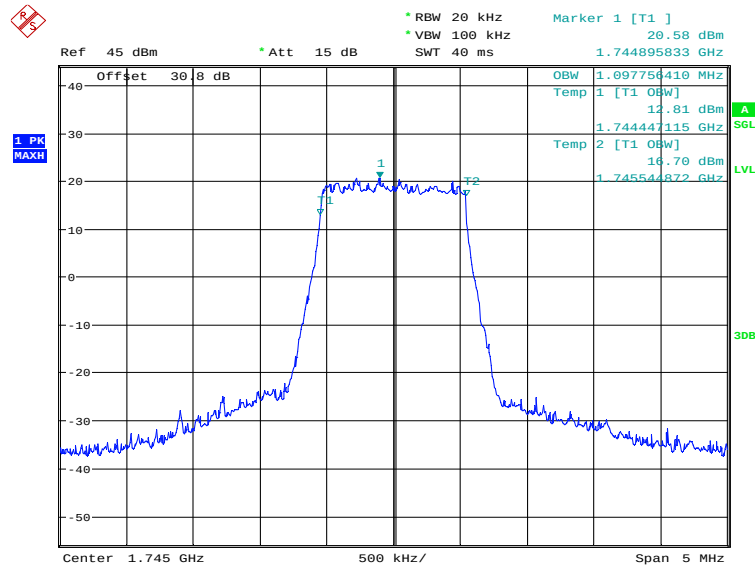
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
1745.0	QPSK	16QAM
	1089.74	1097.76

LTE band 66, 1.4MHz Bandwidth, QPSK (99% BW)



Date: 9.OCT.2024 09:16:54

LTE band 66, 1.4MHz Bandwidth, 16QAM (99% BW)

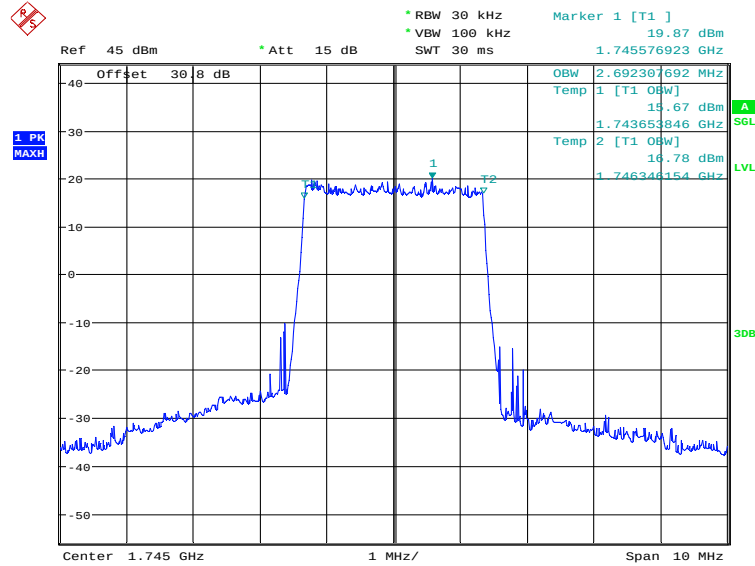


Date: 9.OCT.2024 09:17:34

LTE band 66, 3MHz (99%)

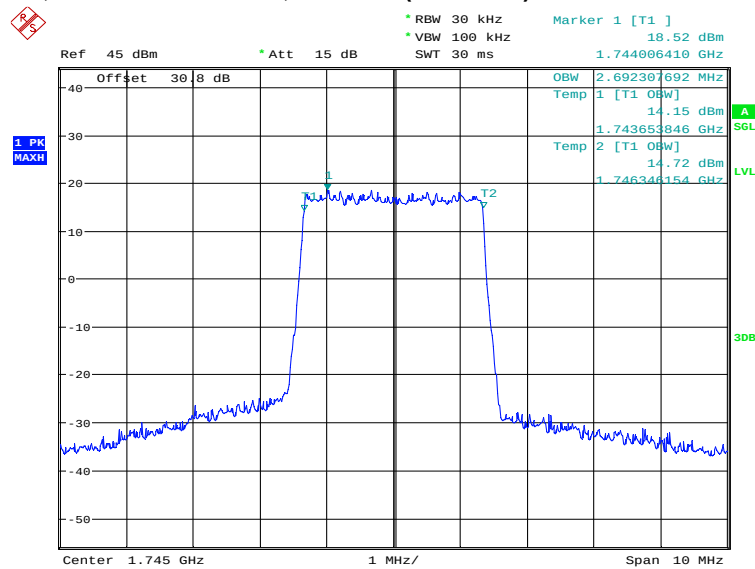
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
1745.0	QPSK	16QAM
	2692.31	2692.31

LTE band 66, 3MHz Bandwidth, QPSK (99% BW)



Date: 9.OCT.2024 09:18:16

LTE band 66, 3MHz Bandwidth, 16QAM (99% BW)

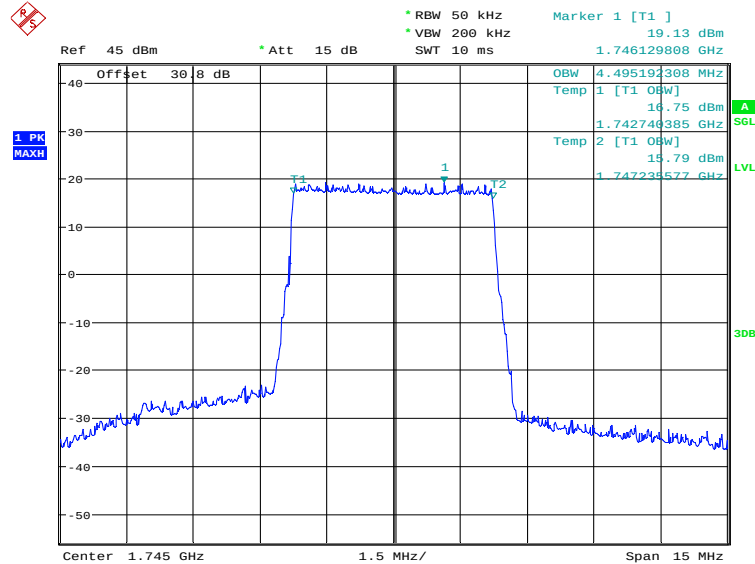


Date: 9.OCT.2024 09:18:56

LTE band 66, 5MHz (99%)

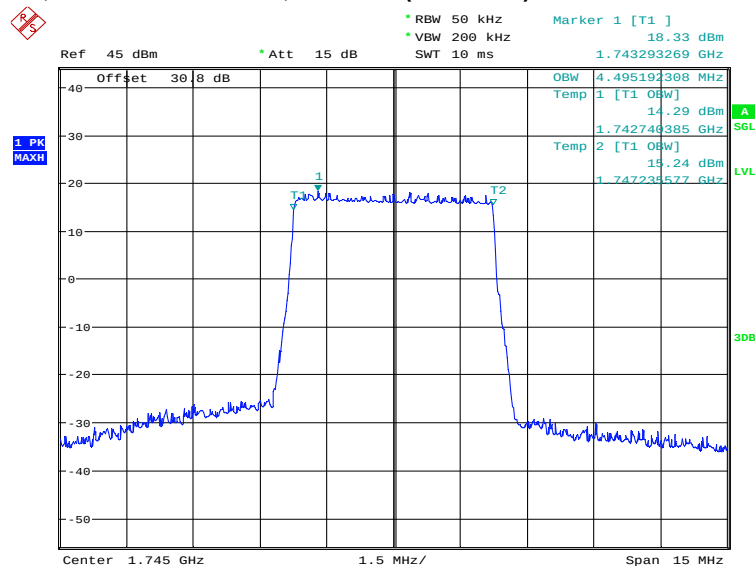
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
1745.0	QPSK	16QAM
	4495.19	4495.19

LTE band 66, 5MHz Bandwidth, QPSK (99% BW)



Date: 9.OCT.2024 09:19:39

LTE band 66, 5MHz Bandwidth, 16QAM (99% BW)

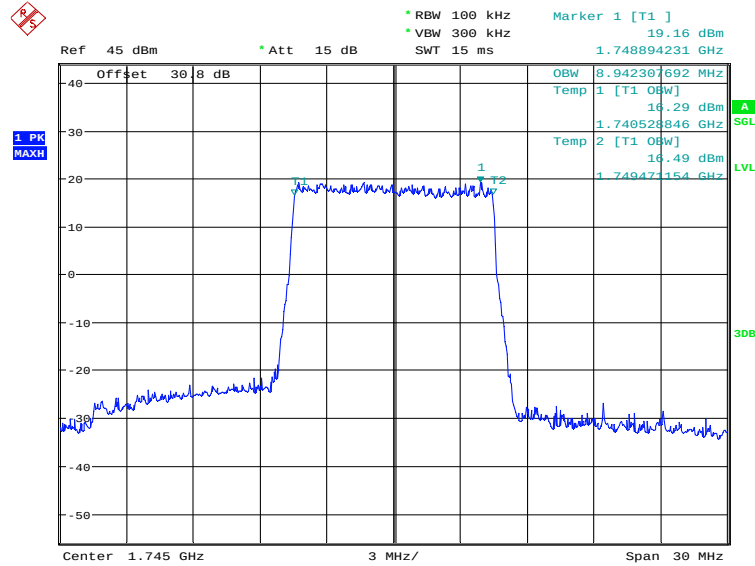


Date: 9.OCT.2024 09:20:19

LTE band 66, 10MHz (99%)

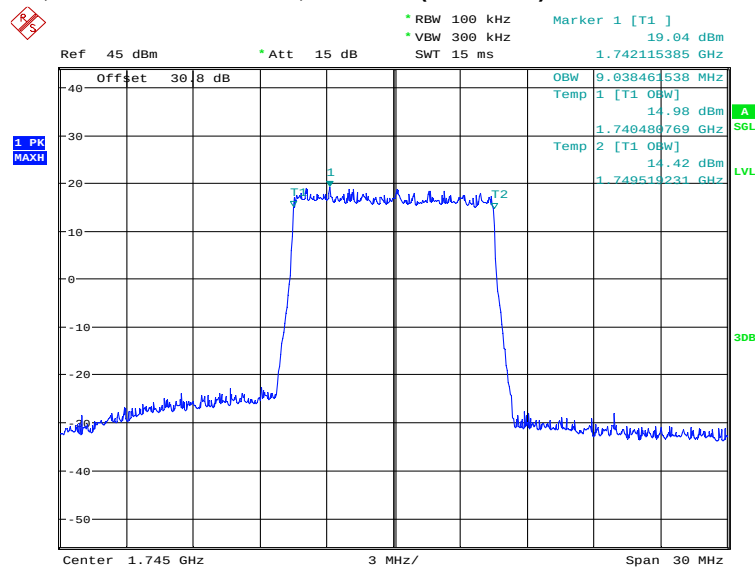
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
1745.0	QPSK	16QAM
	8942.31	9038.46

LTE band 66, 10MHz Bandwidth, QPSK (99% BW)



Date: 9.OCT.2024 09:21:01

LTE band 66, 10MHz Bandwidth, 16QAM (99% BW)

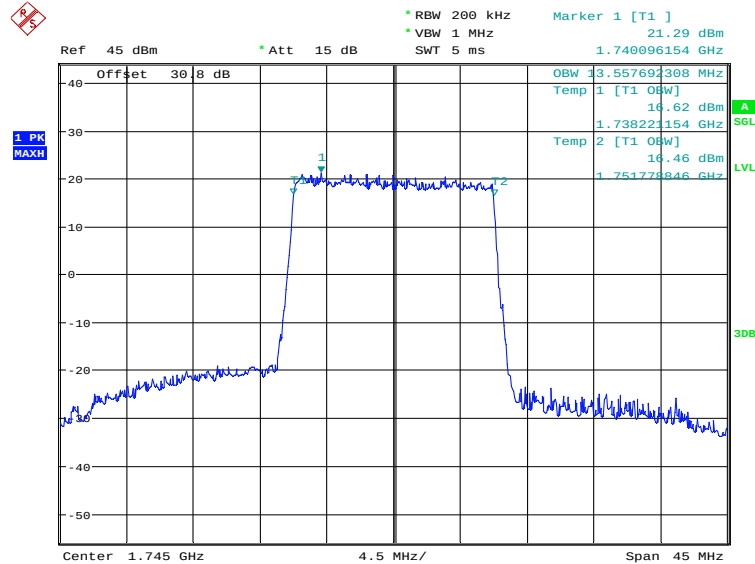


Date: 9.OCT.2024 09:21:41

LTE band 66, 15MHz (99%)

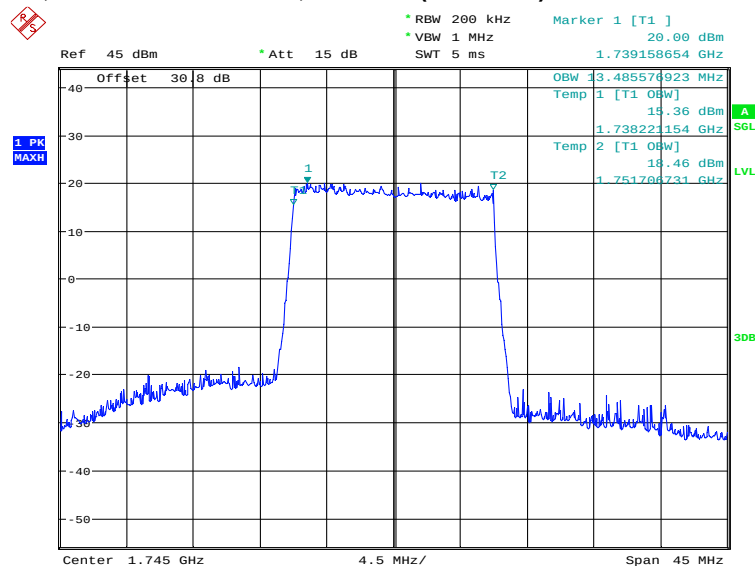
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
1745.0	QPSK	16QAM
	13557.69	13485.58

LTE band 66, 15MHz Bandwidth, QPSK (99% BW)



Date: 9.OCT.2024 09:22:23

LTE band 66, 15MHz Bandwidth, 16QAM (99% BW)

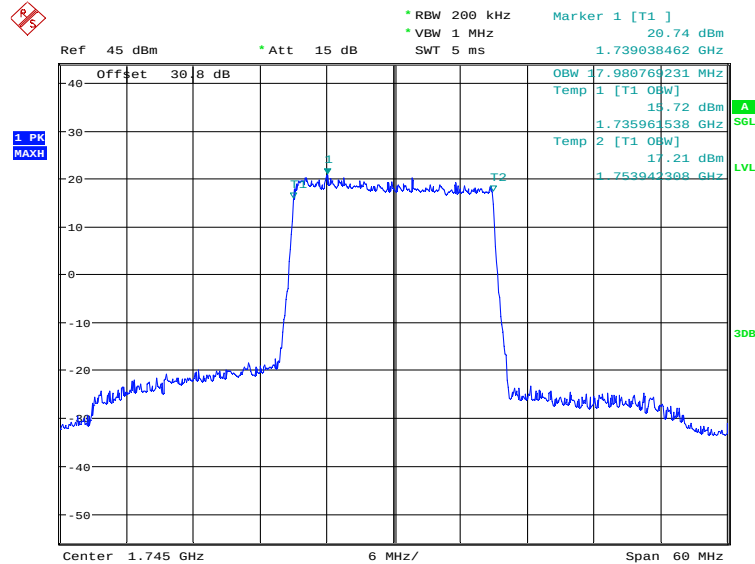


Date: 9.OCT.2024 09:23:03

LTE band 66, 20MHz (99%)

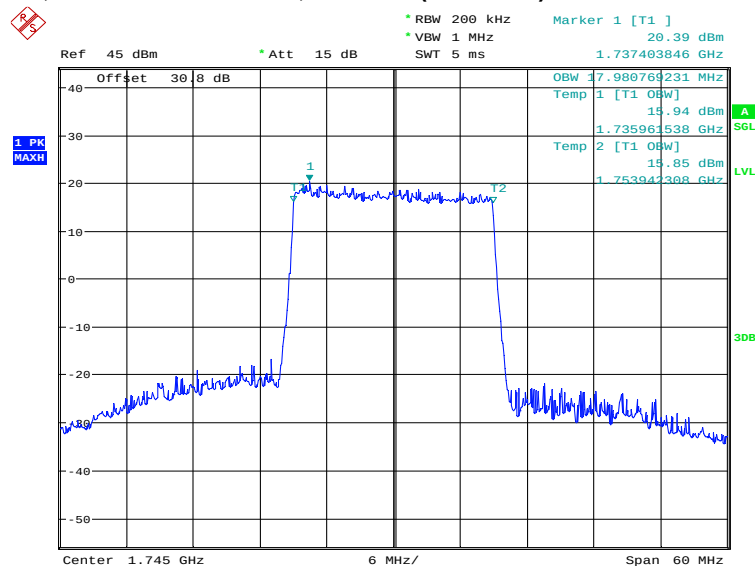
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
1745.0	QPSK	16QAM
	17980.77	17980.77

LTE band 66, 20MHz Bandwidth, QPSK (99% BW)



Date: 9.OCT.2024 09:23:45

LTE band 66, 20MHz Bandwidth, 16QAM (99% BW)



Date: 9.OCT.2024 09:24:25

Note: Expanded measurement uncertainty is $U = 3428 \text{ Hz}$, $k = 2$.

A.5 Emission Bandwidth

The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power. Table below lists the measured -26dBc BW. Spectrum analyzer plots are included on the following pages.

The measurement method is from ANSI C63.26:

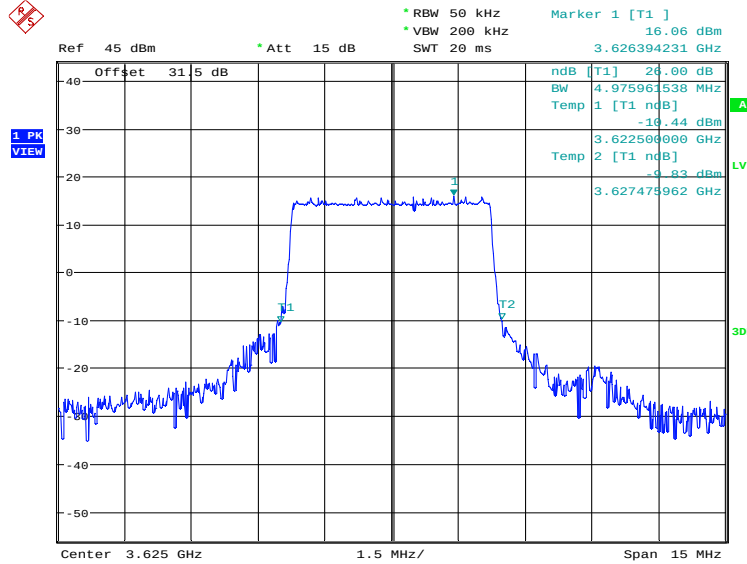
- a) The spectrum analyzer center frequency is set to the nominal EUT channel center frequency. The span range for the spectrum analyzer shall be wide enough to see sufficient roll off of the signal to make the measurement.
- b) The nominal RBW shall be in the range of 1% to 5% of the anticipated OBW, and the VBW shall be set $\geq 3 \times \text{RBW}$.
- c) Set the reference level of the instrument as required to prevent the signal amplitude from exceeding the maximum spectrum analyzer input mixer level for linear operation.
- d) The dynamic range of the spectrum analyzer at the selected RBW shall be more than 10 dB below the target “-X dB” requirement, i.e., if the requirement calls for measuring the -26 dB OBW, the spectrum analyzer noise floor at the selected RBW shall be at least 36 dB below the reference level.
- e) Set spectrum analyzer detection mode to peak, and the trace mode to max hold.

Measurement Results from UT33a:

LTE band 48, 5MHz (-26dBc)

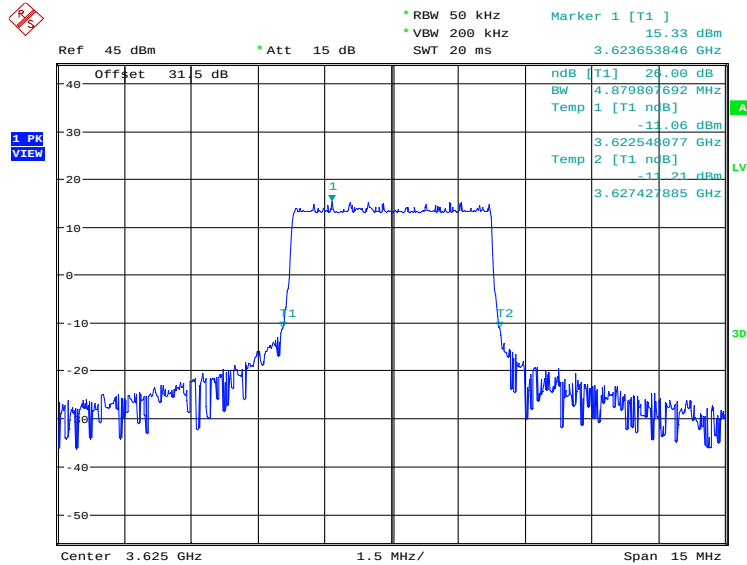
Frequency(MHz)	Emission Bandwidth (-26dBc)(kHz)	
3625.0	QPSK	16QAM
	4975.96	4879.81

LTE band 48, 5MHz Bandwidth, QPSK (-26dBc BW)



Date: 12.NOV.2024 15:27:21

LTE band 48, 5MHz Bandwidth, 16QAM (-26dBc BW)

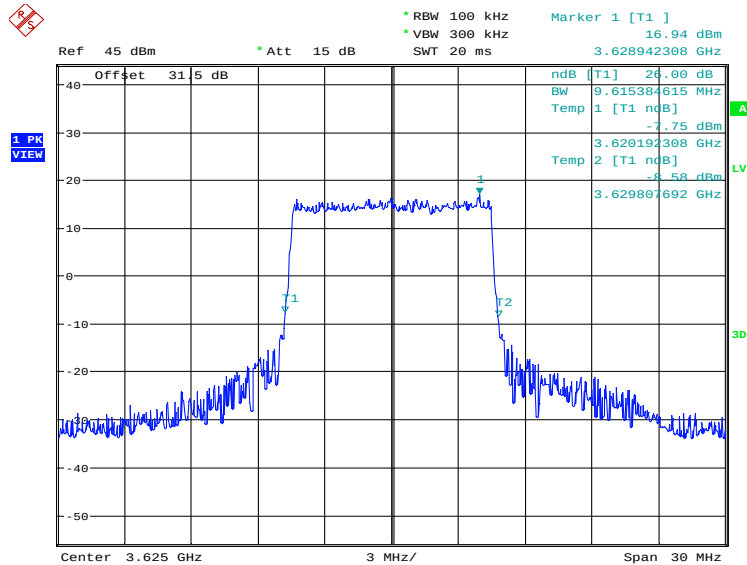


Date: 12.NOV.2024 15:28:01

LTE band 48, 10MHz (-26dBc)

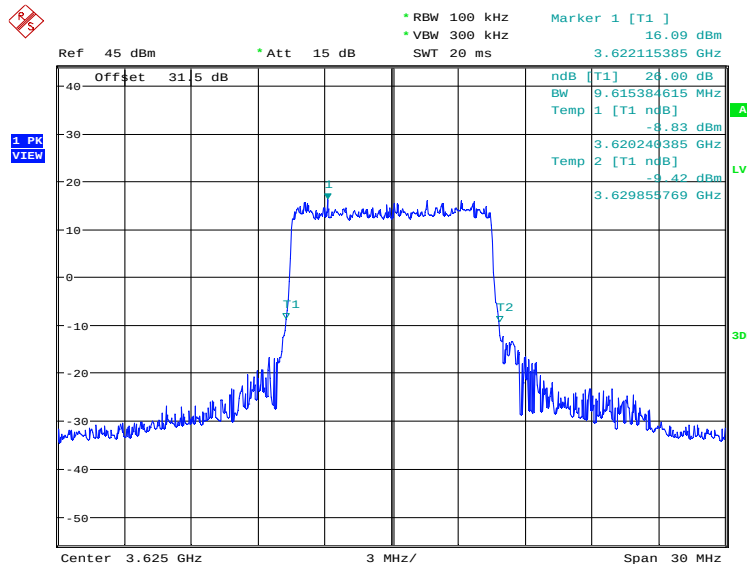
Frequency(MHz)	Emission Bandwidth (-26dBc)(kHz)	
3625.0	QPSK	16QAM
	9615.38	9615.38

LTE band 48, 10MHz Bandwidth, QPSK (-26dBc BW)



Date: 12.NOV.2024 15:28:43

LTE band 48, 10MHz Bandwidth,16QAM (-26dBc BW)

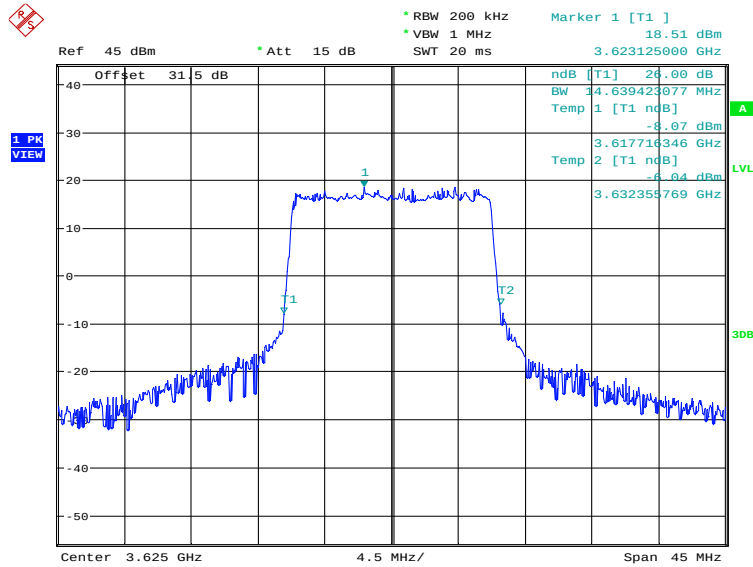


Date: 12.NOV.2024 15:29:24

LTE band 48, 15MHz (-26dBc)

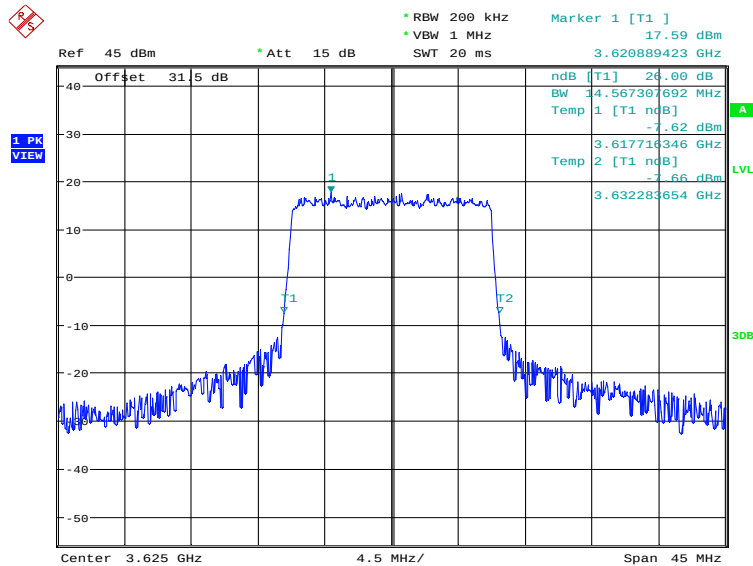
Frequency(MHz)	Emission Bandwidth (-26dBc)(kHz)	
3625.0	QPSK	16QAM
	14639.42	14567.31

LTE band 48, 15MHz Bandwidth, QPSK (-26dBc BW)



Date: 12.NOV.2024 15:30:06

LTE band 48, 15MHz Bandwidth, 16QAM (-26dBc BW)

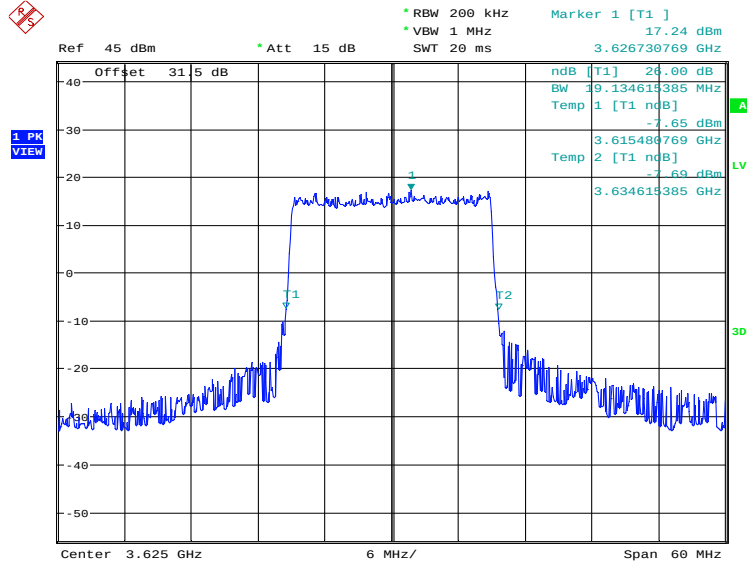


Date: 12.NOV.2024 15:30:46

LTE band 48, 20MHz (-26dBc)

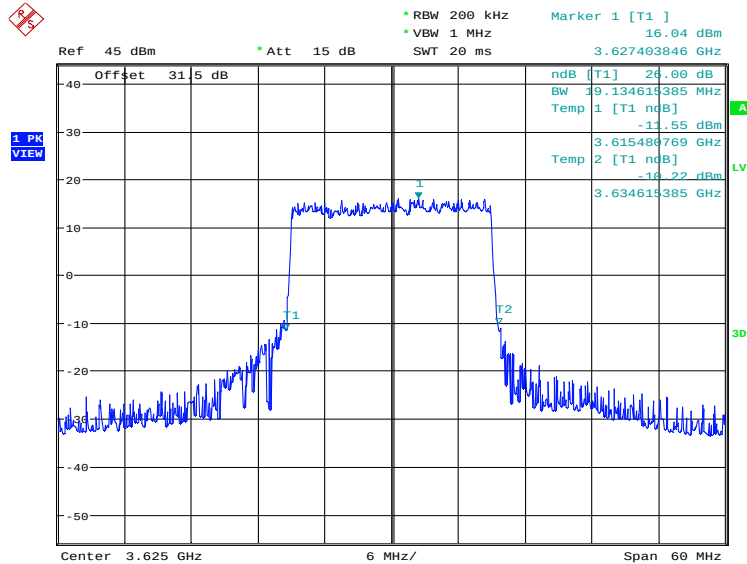
Frequency(MHz)	Emission Bandwidth (-26dBc)(kHz)	
3625.0	QPSK	16QAM
	19134.62	19134.62

LTE band 48, 20MHz Bandwidth, QPSK (-26dBc BW)



Date: 12.NOV.2024 15:31:28

LTE band 48, 20MHz Bandwidth, 16QAM (-26dBc BW)

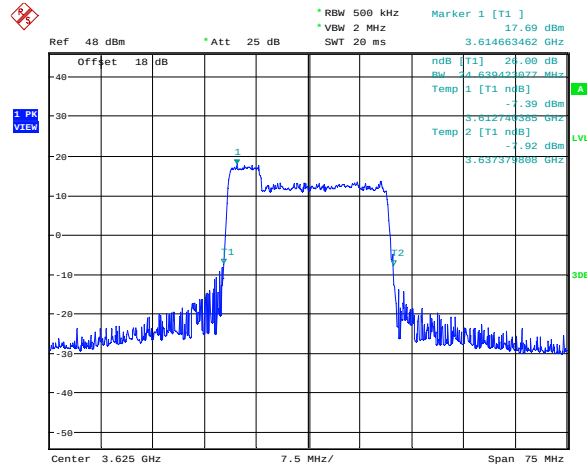


Date: 12.NOV.2024 15:32:09

LTE CA band 48C, 5MHz+20MHz(-26dBc)

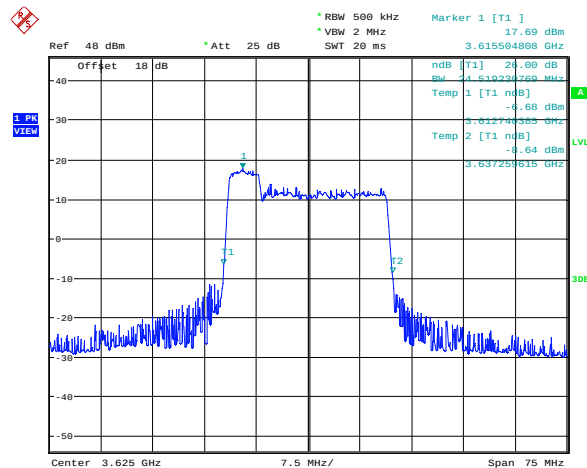
Frequency (MHz)	Emission Bandwidth (-26dBc) (MHz)	
	QPSK	16QAM
3625.0	24.639	24.519

LTE CA band 48C , 5MHz+20MHz Bandwidth,QPSK (-26dBc BW)



Date: 11.NOV.2024 11:12:21

LTE CA band 48C , 5MHz+20MHz Bandwidth,16QAM (-26dBc BW)

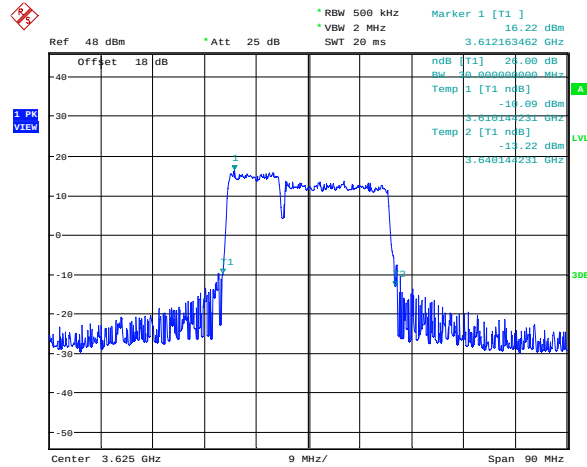


Date: 11.NOV.2024 11:12:45

LTE CA band 48C, 10MHz+20MHz(-26dBc)

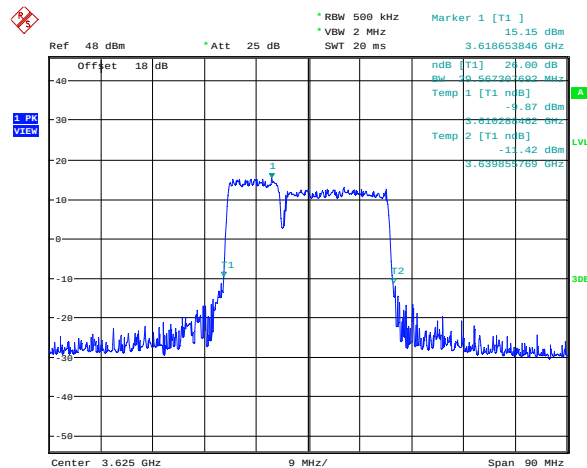
Frequency (MHz)	Emission Bandwidth (-26dBc) (MHz)	
	QPSK	16QAM
3625.0	30.000	29.567

LTE CA band 48C , 10MHz+20MHz Bandwidth,QPSK (-26dBc BW)



Date: 11.NOV.2024 11:13:36

LTE CA band 48C , 10MHz+20MHz Bandwidth,16QAM (-26dBc BW)

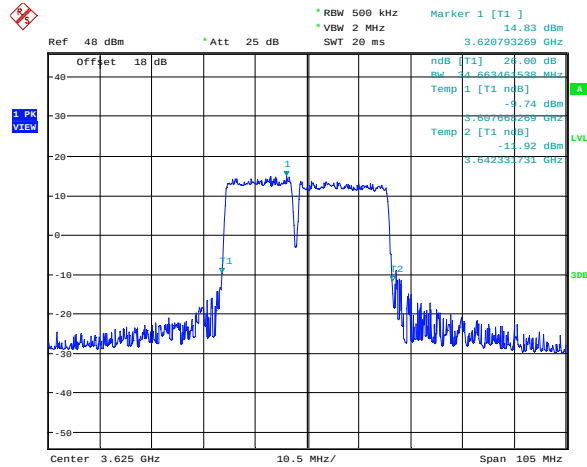


Date: 11.NOV.2024 11:14:00

LTE CA band 48C, 15MHz+20MHz(-26dBc)

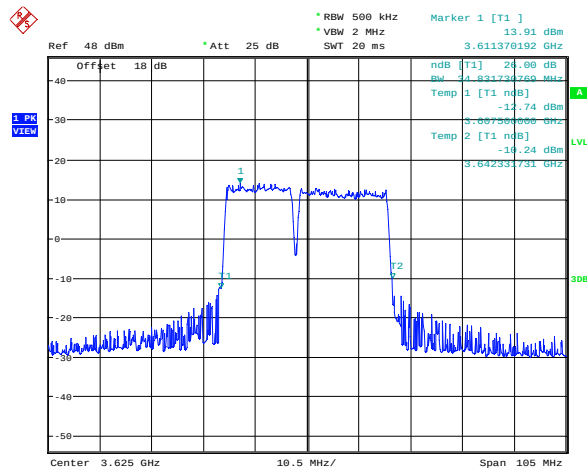
Frequency (MHz)	Emission Bandwidth (-26dBc) (MHz)	
	QPSK	16QAM
3625.0	34.663	34.832

LTE CA band 48C , 15MHz+20MHz Bandwidth,QPSK (-26dBc BW)



Date: 11.NOV.2024 11:14:52

LTE CA band 48C , 15MHz+20MHz Bandwidth,16QAM (-26dBc BW)

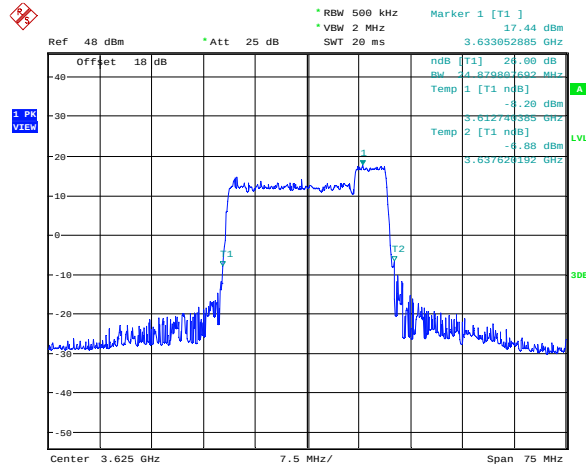


Date: 11.NOV.2024 11:15:16

LTE CA band 48C, 20MHz+5MHz(-26dBc)

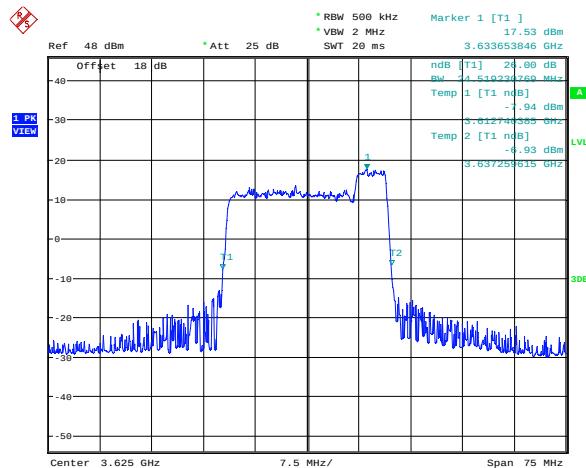
Frequency (MHz)	Emission Bandwidth (-26dBc) (MHz)	
	QPSK	16QAM
3625.0	24.880	24.519

LTE CA band 48C , 20MHz+5MHz Bandwidth,QPSK (-26dBc BW)



Date: 11.NOV.2024 11:16:37

LTE CA band 48C , 20MHz+5MHz Bandwidth,16QAM (-26dBc BW)

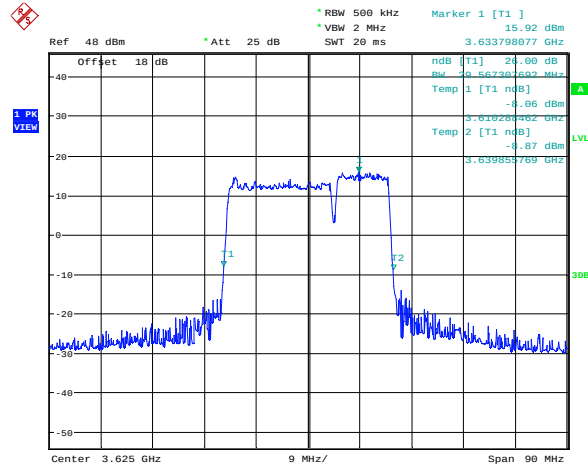


Date: 11.NOV.2024 11:17:01

LTE CA band 48C, 20MHz+10MHz(-26dBc)

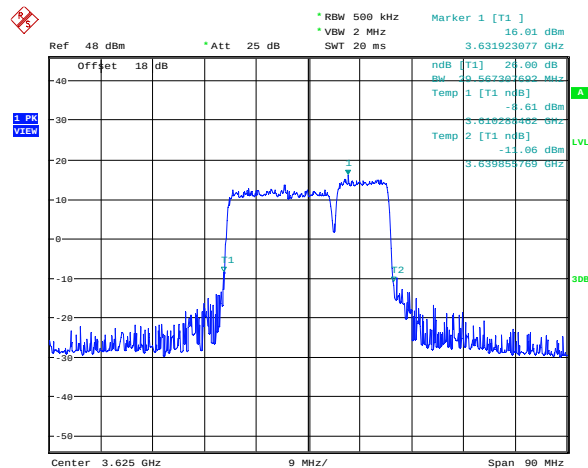
Frequency (MHz)	Emission Bandwidth (-26dBc) (MHz)	
	QPSK	16QAM
3625.0	29.567	29.567

LTE CA band 48C , 20MHz+10MHz Bandwidth,QPSK (-26dBc BW)



Date: 11.NOV.2024 11:17:54

LTE CA band 48C , 20MHz+10MHz Bandwidth,16QAM (-26dBc BW)

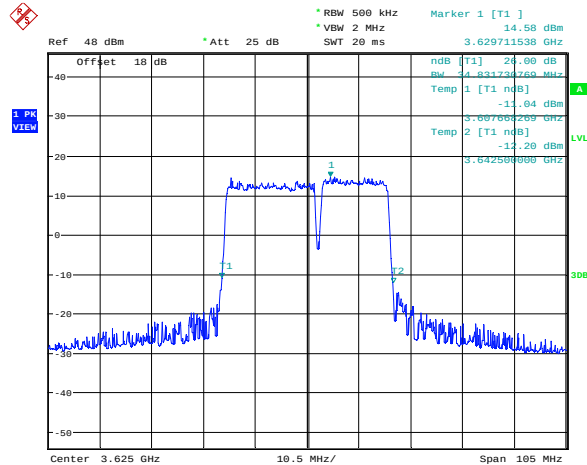


Date: 11.NOV.2024 11:18:18

LTE CA band 48C, 20MHz+15MHz(-26dBc)

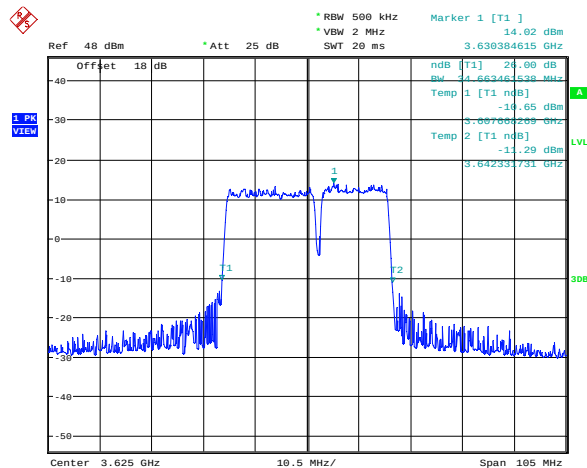
Frequency (MHz)	Emission Bandwidth (-26dBc) (MHz)	
	QPSK	16QAM
3625.0	34.832	34.663

LTE CA band 48C , 20MHz+15MHz Bandwidth,QPSK (-26dBc BW)



Date: 11.NOV.2024 11:19:11

LTE CA band 48C , 20MHz+15MHz Bandwidth,16QAM (-26dBc BW)

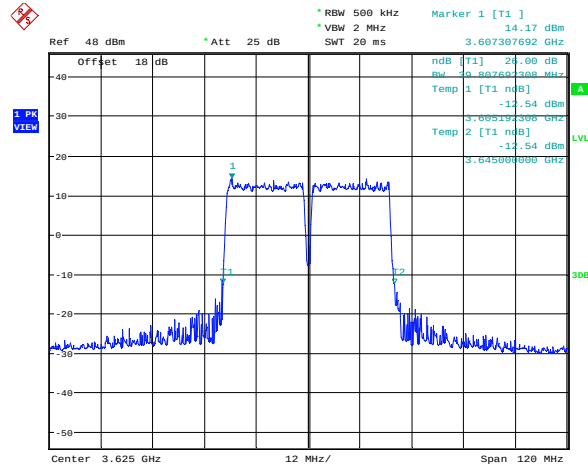


Date: 11.NOV.2024 11:19:35

LTE CA band 48C, 20MHz+20MHz(-26dBc)

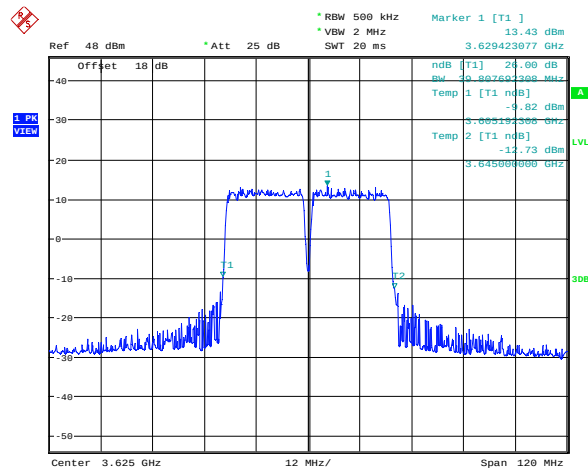
Frequency (MHz)	Emission Bandwidth (-26dBc) (MHz)	
	QPSK	16QAM
3625.0	39.808	39.808

LTE CA band 48C , 20MHz+20MHz Bandwidth,QPSK (-26dBc BW)



Date: 11.NOV.2024 11:20:27

LTE CA band 48C , 20MHz+20MHz Bandwidth,16QAM (-26dBc BW)



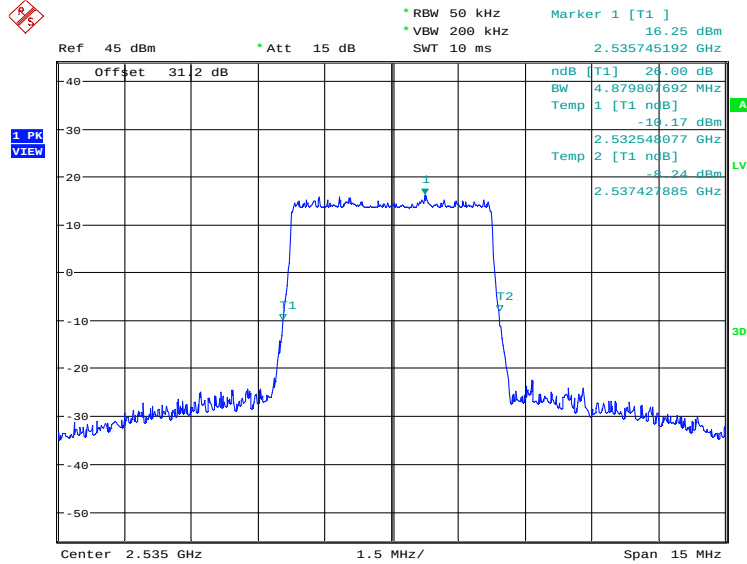
Date: 11.NOV.2024 11:20:51

Reference Measurement Results from basic model:

LTE band 7, 5MHz (-26dBc)

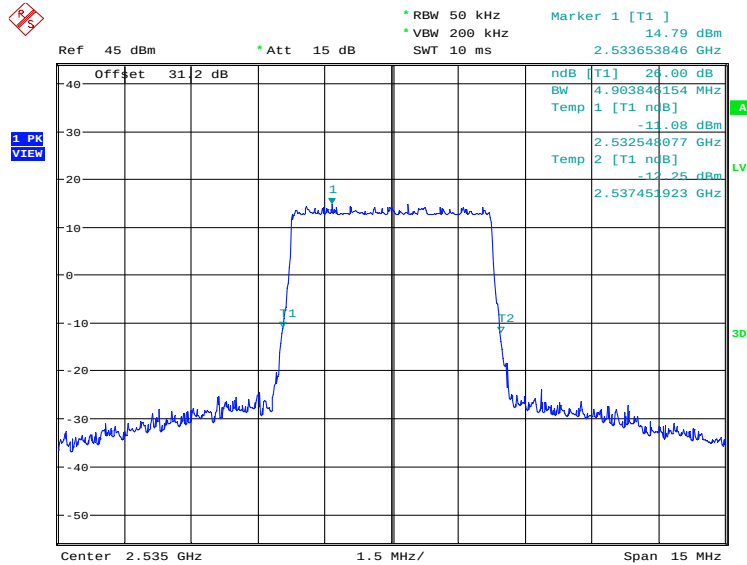
Frequency(MHz)	Emission Bandwidth (-26dBc)(kHz)	
2535.0	QPSK	16QAM
	4879.81	4903.85

LTE band 7, 5MHz Bandwidth, QPSK (-26dBc BW)



Date: 9.OCT.2024 14:26:46

LTE band 7, 5MHz Bandwidth,16QAM (-26dBc BW)

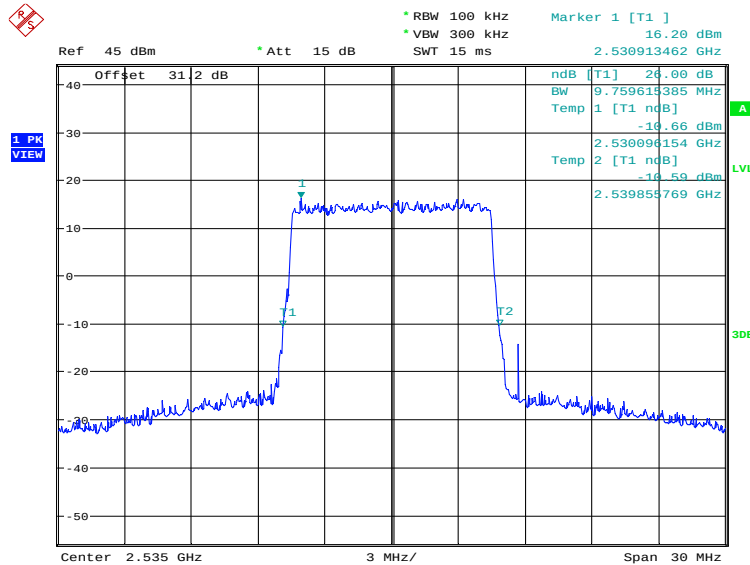


Date: 9.OCT.2024 14:27:26

LTE band 7, 10MHz (-26dBc)

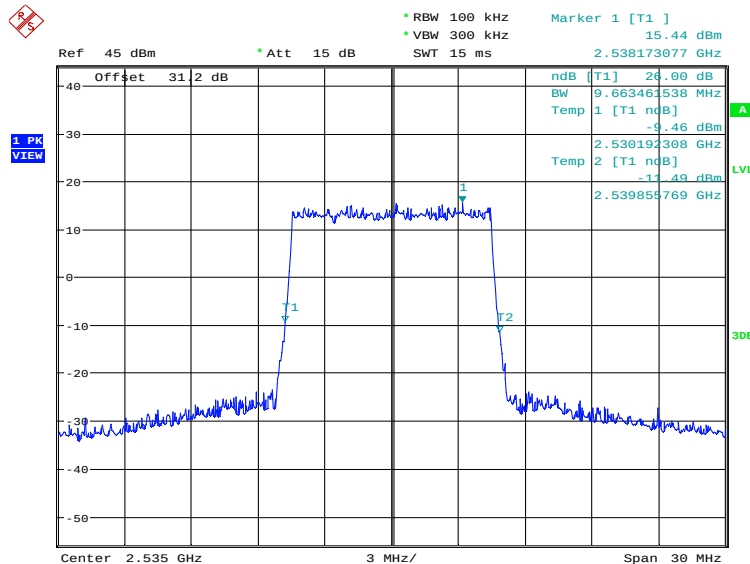
Frequency(MHz)	Emission Bandwidth (-26dBc)(kHz)	
2535.0	QPSK	16QAM
	9759.62	9663.46

LTE band 7, 10MHz Bandwidth, QPSK (-26dBc BW)



Date: 9.OCT.2024 14:28:09

LTE band 7, 10MHz Bandwidth,16QAM (-26dBc BW)

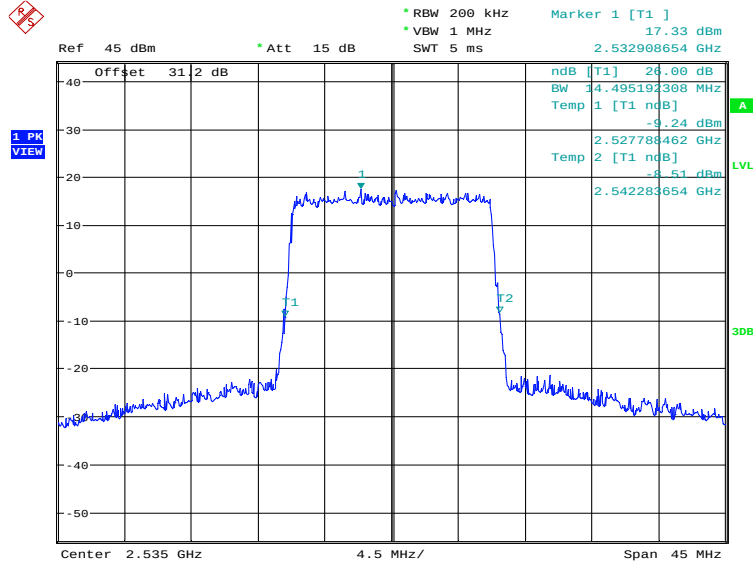


Date: 9.OCT.2024 14:28:49

LTE band 7, 15MHz (-26dBc)

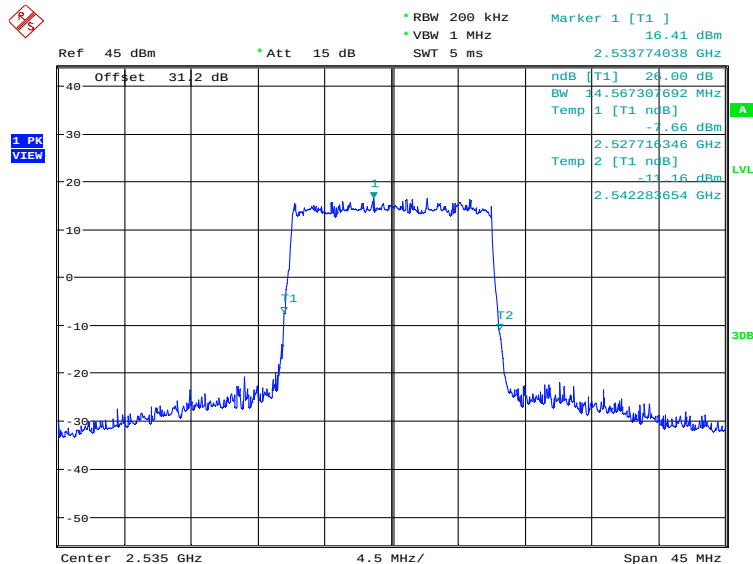
Frequency(MHz)	Emission Bandwidth (-26dBc)(kHz)	
2535.0	QPSK	16QAM
	14495.19	14567.31

LTE band 7, 15MHz Bandwidth, QPSK (-26dBc BW)



Date: 9.OCT.2024 14:29:31

LTE band 7, 15MHz Bandwidth,16QAM (-26dBc BW)

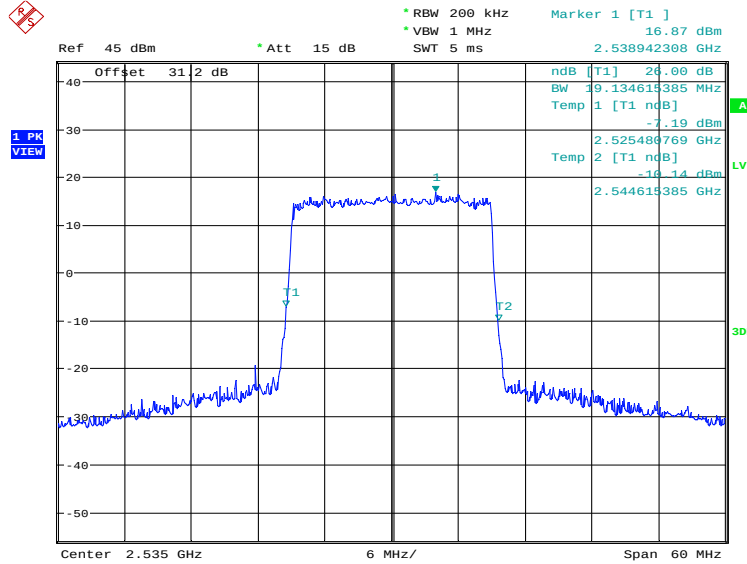


Date: 9.OCT.2024 14:30:11

LTE band 7, 20MHz (-26dBc)

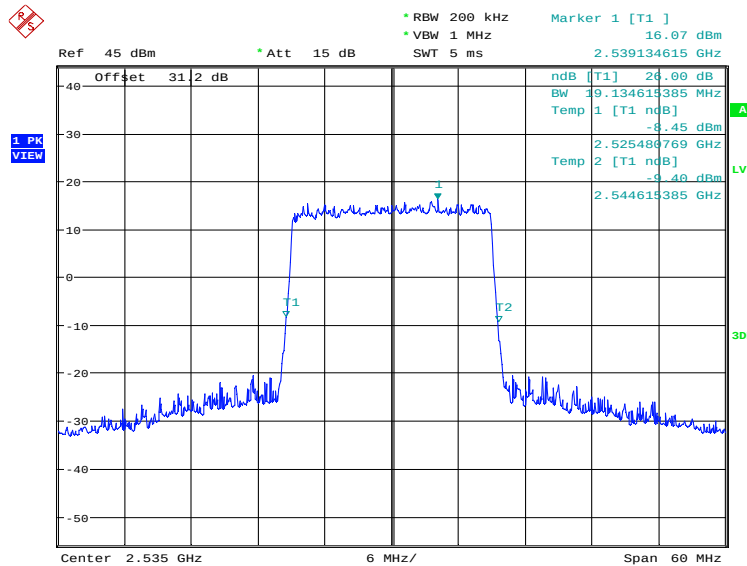
Frequency(MHz)	Emission Bandwidth (-26dBc)(kHz)	
2535.0	QPSK	16QAM
	19134.62	19134.62

LTE band 7, 20MHz Bandwidth, QPSK (-26dBc BW)



Date: 9.OCT.2024 14:30:54

LTE band 7, 20MHz Bandwidth,16QAM (-26dBc BW)

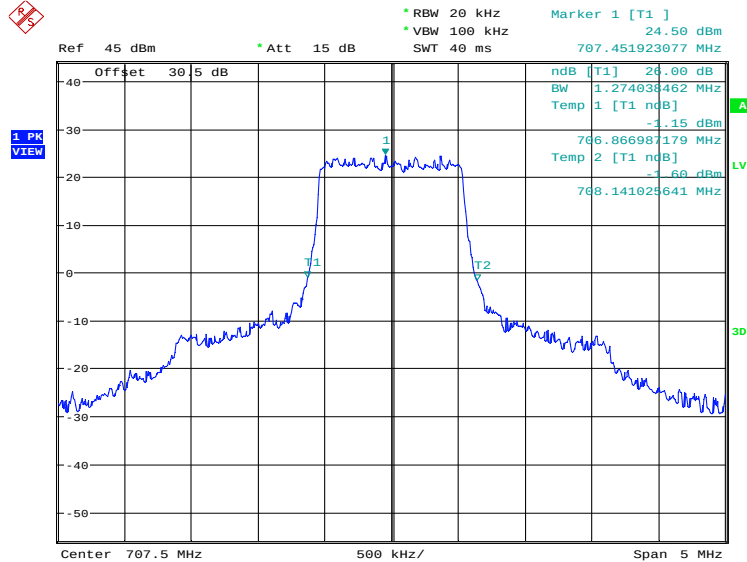


Date: 9.OCT.2024 14:31:34

LTE band 12, 1.4MHz (-26dBc)

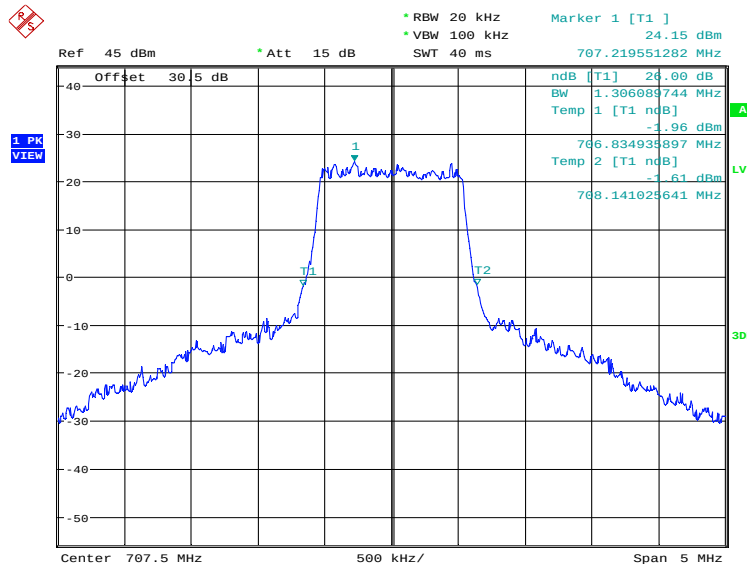
Frequency(MHz)	Emission Bandwidth (-26dBc)(kHz)	
707.5	QPSK	16QAM
	1274.04	1306.09

LTE band 12, 1.4MHz Bandwidth, QPSK (-26dBc BW)



Date: 9.OCT.2024 11:05:17

LTE band 12, 1.4MHz Bandwidth, 16QAM (-26dBc BW)

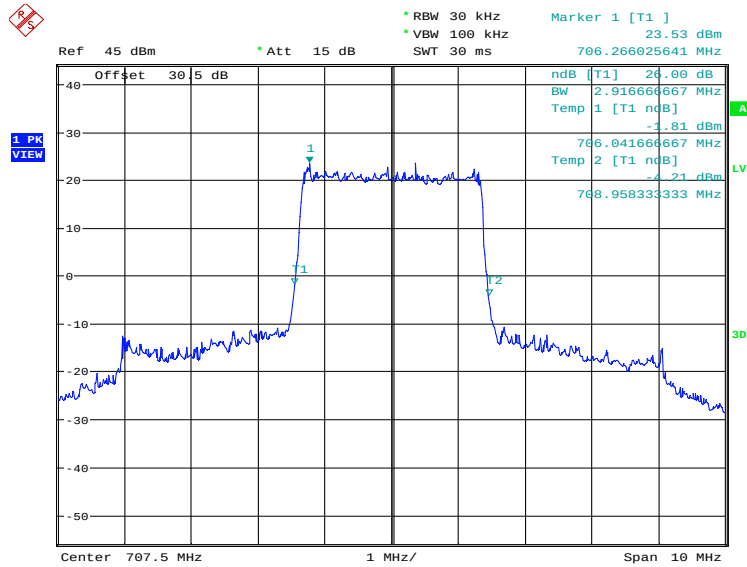


Date: 9.OCT.2024 11:05:57

LTE band 12, 3MHz (-26dBc)

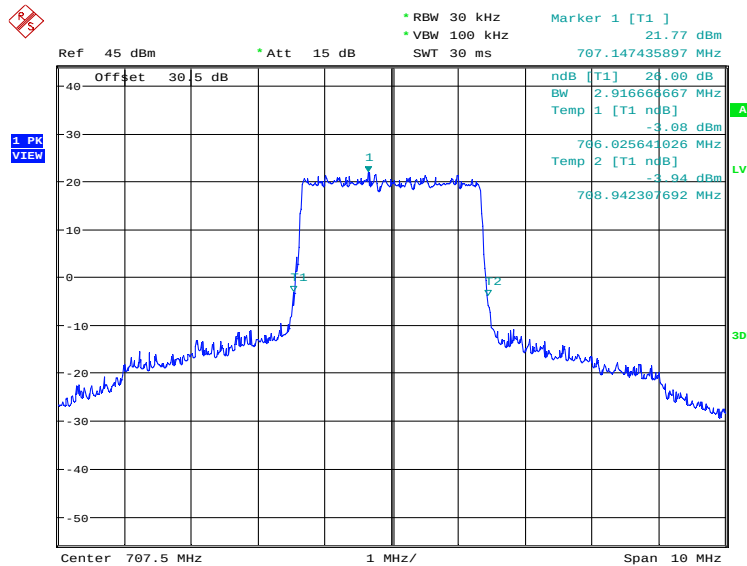
Frequency(MHz)	Emission Bandwidth (-26dBc)(kHz)	
707.5	QPSK	16QAM
	2916.67	2916.67

LTE band 12, 3MHz Bandwidth, QPSK (-26dBc BW)



Date: 9.OCT.2024 11:06:40

LTE band 12, 3MHz Bandwidth, 16QAM (-26dBc BW)

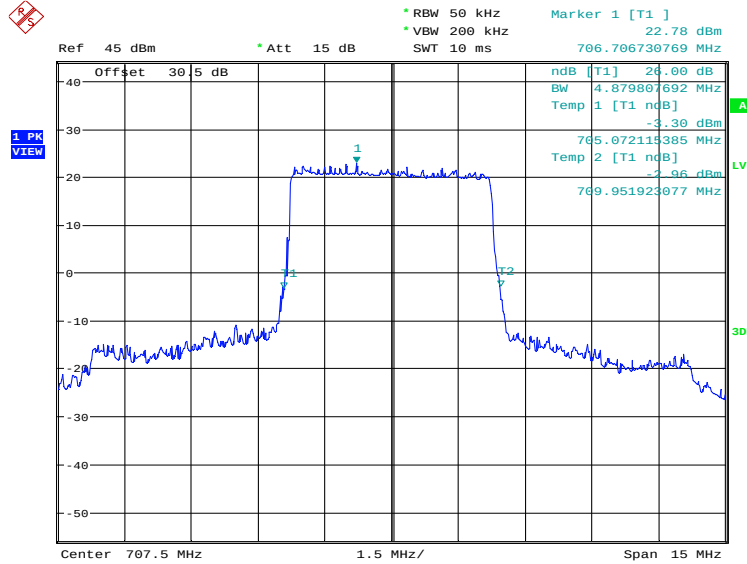


Date: 9.OCT.2024 11:07:20

LTE band 12, 5MHz (-26dBc)

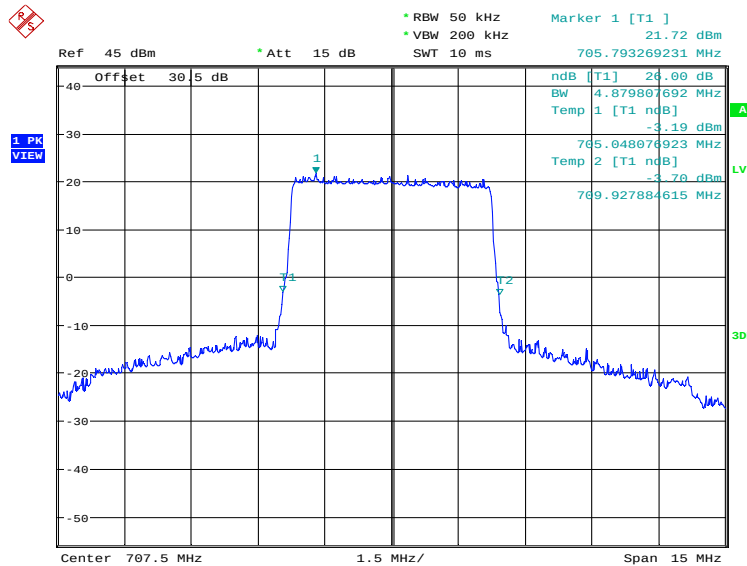
Frequency(MHz)	Emission Bandwidth (-26dBc)(kHz)	
707.5	QPSK	16QAM
	4879.81	4879.81

LTE band 12, 5MHz Bandwidth, QPSK (-26dBc BW)



Date: 9.OCT.2024 11:08:03

LTE band 12, 5MHz Bandwidth, 16QAM (-26dBc BW)

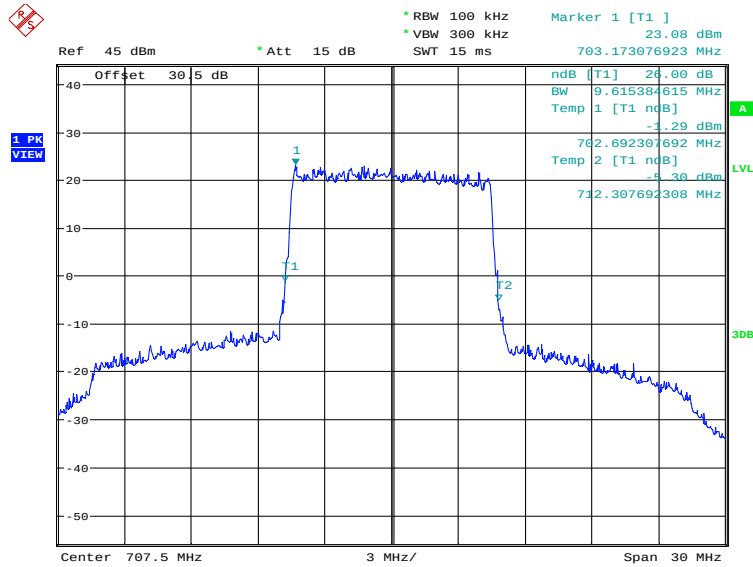


Date: 9.OCT.2024 11:08:43

LTE band 12, 10MHz (-26dBc)

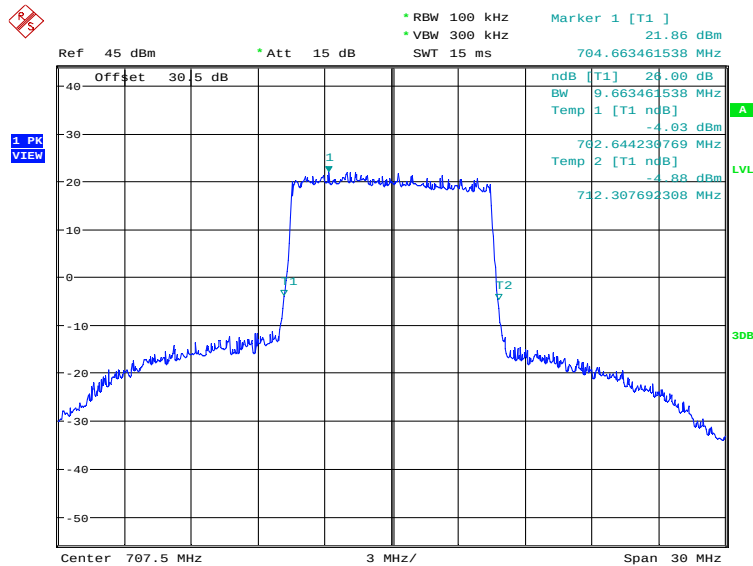
Frequency(MHz)	Emission Bandwidth (-26dBc)(kHz)	
707.5	QPSK	16QAM
	9615.38	9663.46

LTE band 12, 10MHz Bandwidth, QPSK (-26dBc BW)



Date: 9.OCT.2024 11:09:25

LTE band 12, 10MHz Bandwidth, 16QAM (-26dBc BW)

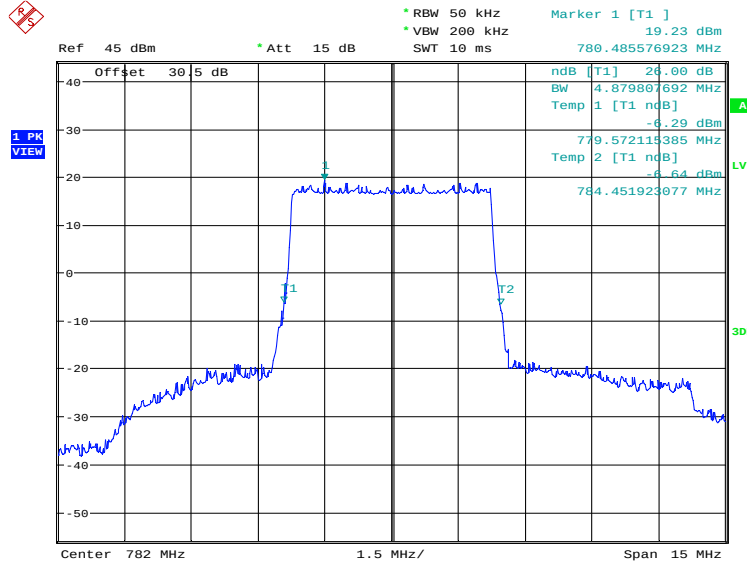


Date: 9.OCT.2024 11:10:06

LTE band 13, 5MHz (-26dBc)

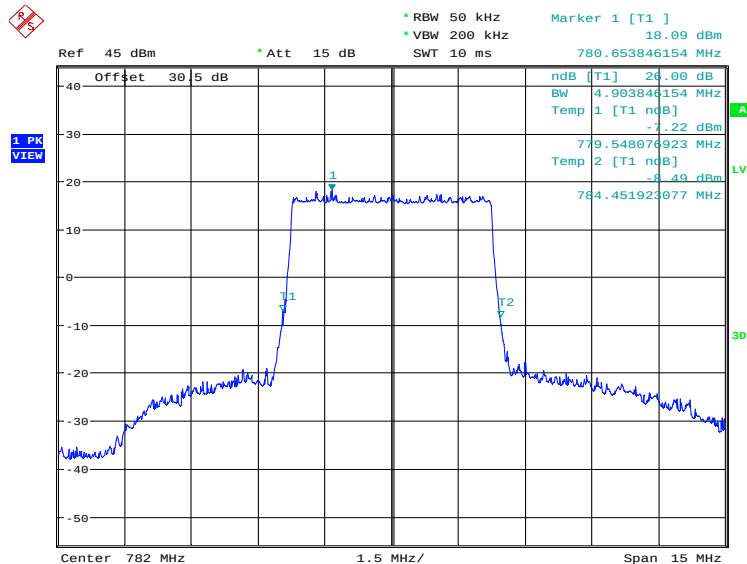
Frequency(MHz)	Emission Bandwidth (-26dBc)(kHz)	
782.0	QPSK	16QAM
	4879.81	4903.85

LTE band 13, 5MHz Bandwidth, QPSK (-26dBc BW)



Date: 9.OCT.2024 11:10:50

LTE band 13, 5MHz Bandwidth,16QAM (-26dBc BW)

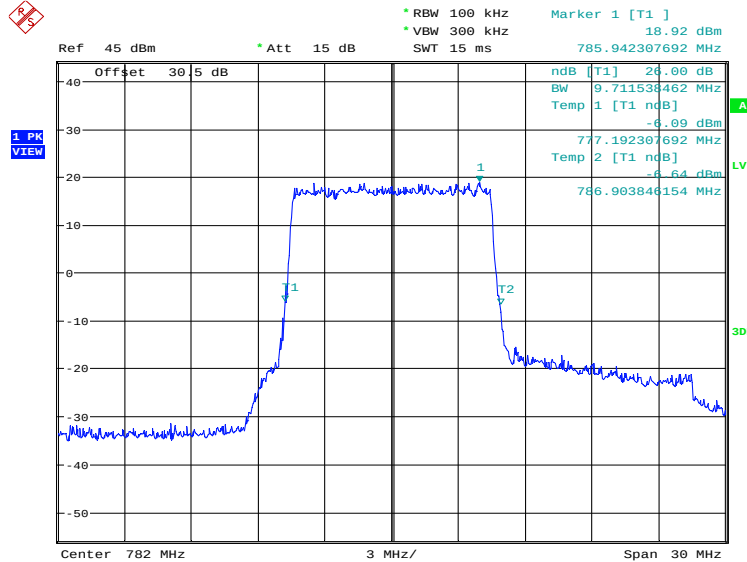


Date: 9.OCT.2024 11:11:31

LTE band 13, 10MHz (-26dBc)

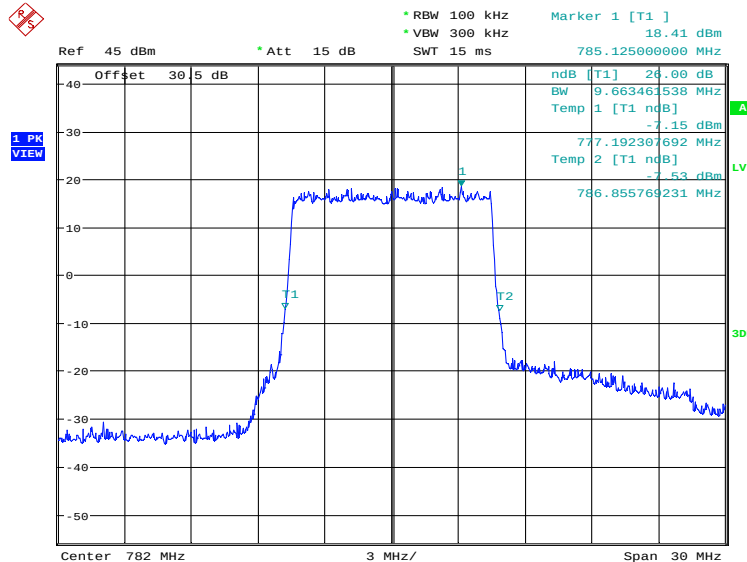
Frequency(MHz)	Emission Bandwidth (-26dBc)(kHz)	
782.0	QPSK	16QAM
	9711.54	9663.46

LTE band 13, 10MHz Bandwidth, QPSK (-26dBc BW)



Date: 9.OCT.2024 11:12:13

LTE band 13, 10MHz Bandwidth,16QAM (-26dBc BW)

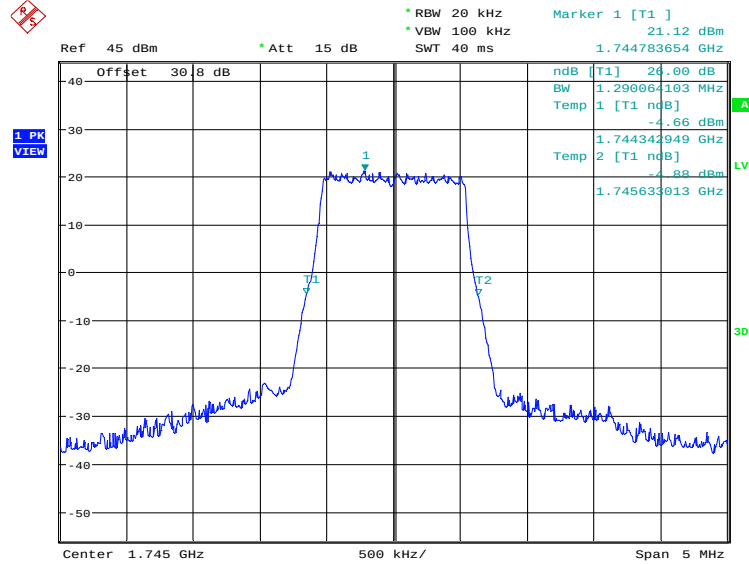


Date: 9.OCT.2024 11:12:53

LTE band 66, 1.4MHz (-26dBc)

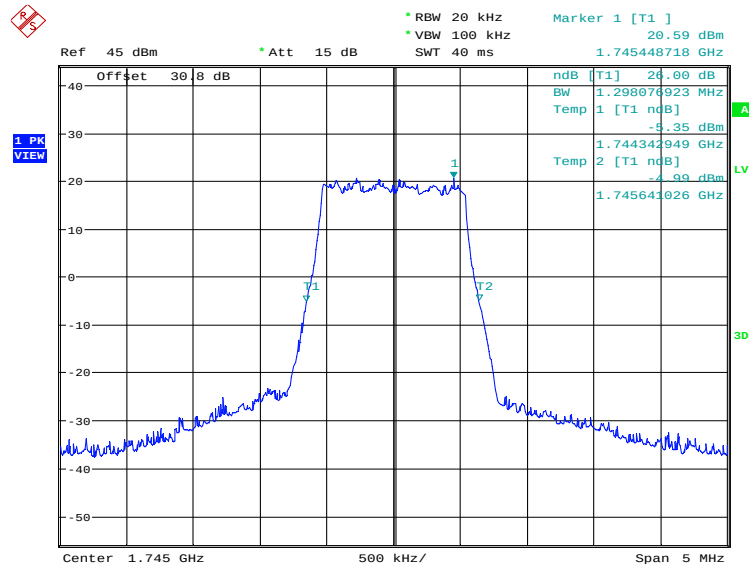
Frequency(MHz)	Emission Bandwidth (-26dBc)(kHz)	
1745.0	QPSK	16QAM
	1290.06	1298.08

LTE band 66, 1.4MHz Bandwidth, QPSK (-26dBc BW)



Date: 9.OCT.2024 09:34:01

LTE band 66, 1.4MHz Bandwidth, 16QAM (-26dBc BW)

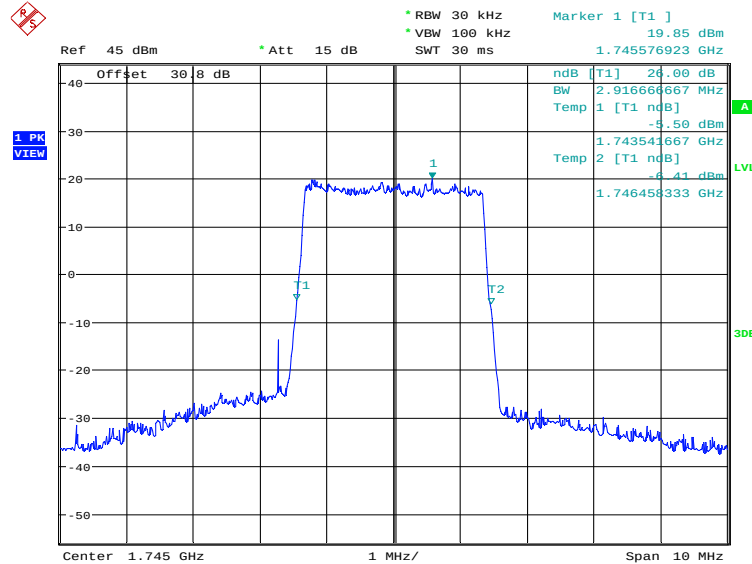


Date: 9.OCT.2024 09:34:42

LTE band 66, 3MHz (-26dBc)

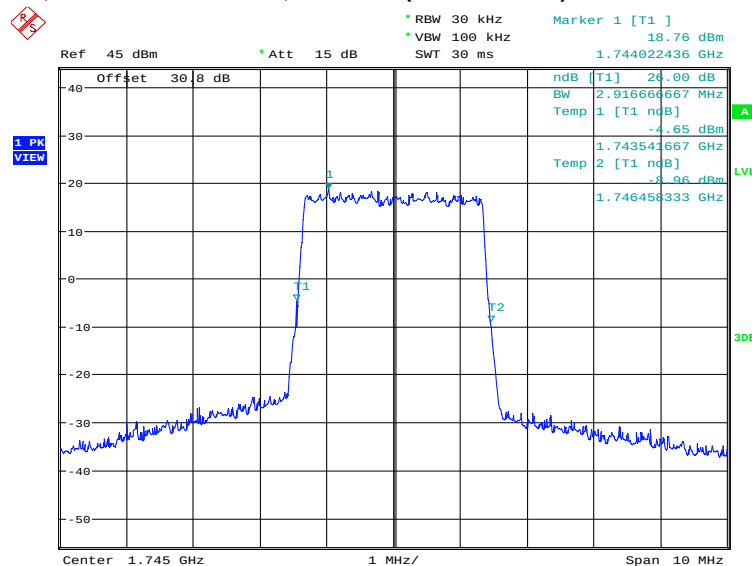
Frequency(MHz)	Emission Bandwidth (-26dBc)(kHz)	
1745.0	QPSK	16QAM
	2916.67	2916.67

LTE band 66, 3MHz Bandwidth, QPSK (-26dBc BW)



Date: 9.OCT.2024 09:35:24

LTE band 66, 3MHz Bandwidth, 16QAM (-26dBc BW)

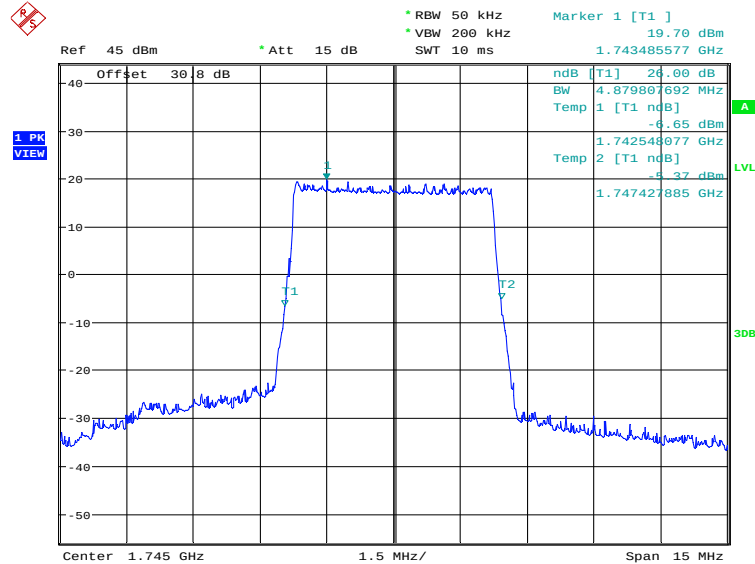


Date: 9.OCT.2024 09:36:04

LTE band 66, 5MHz (-26dBc)

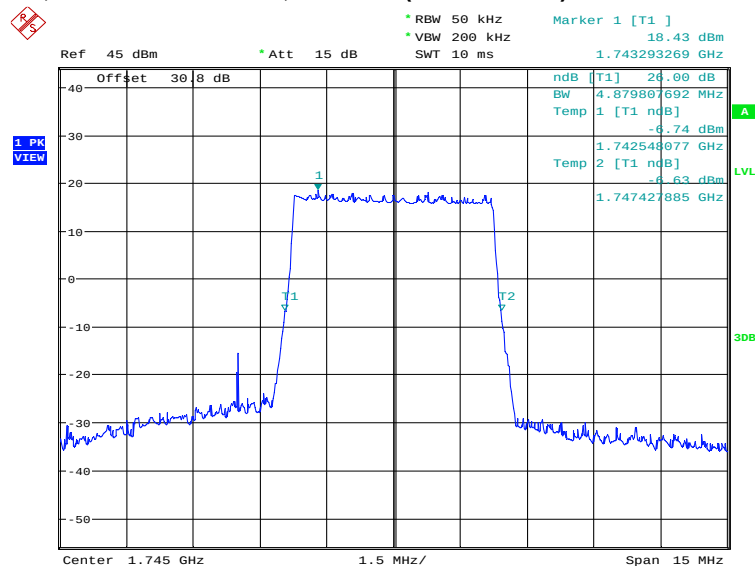
Frequency(MHz)	Emission Bandwidth (-26dBc)(kHz)	
1745.0	QPSK	16QAM
	4879.81	4879.81

LTE band 66, 5MHz Bandwidth, QPSK (-26dBc BW)



Date: 9.OCT.2024 09:36:46

LTE band 66, 5MHz Bandwidth, 16QAM (-26dBc BW)

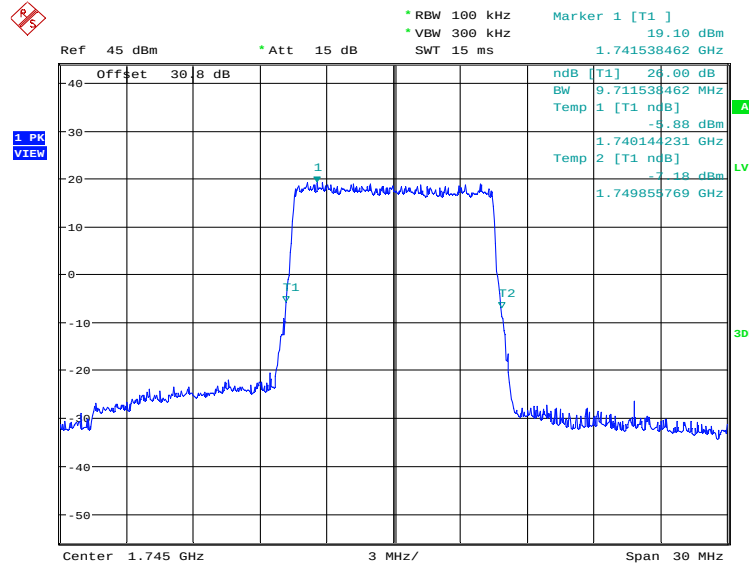


Date: 9.OCT.2024 09:37:27

LTE band 66, 10MHz (-26dBc)

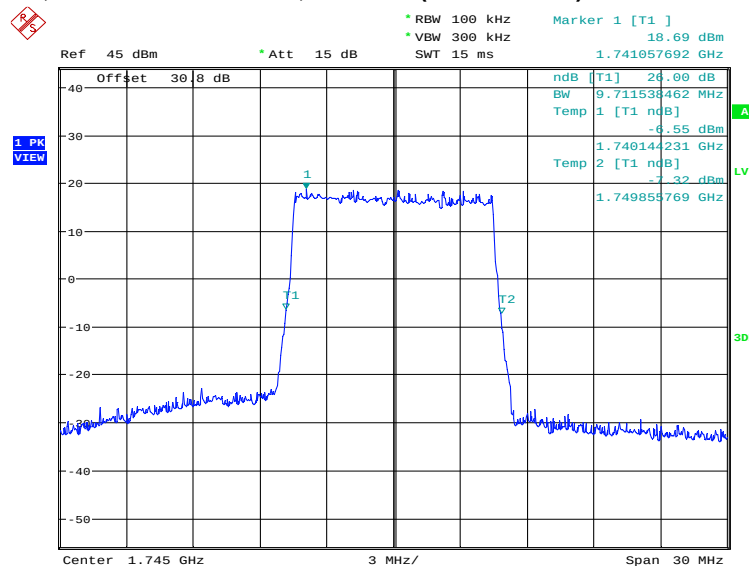
Frequency(MHz)	Emission Bandwidth (-26dBc)(kHz)	
1745.0	QPSK	16QAM
	9711.54	9711.54

LTE band 66, 10MHz Bandwidth, QPSK (-26dBc BW)



Date: 9.OCT.2024 09:38:09

LTE band 66, 10MHz Bandwidth, 16QAM (-26dBc BW)

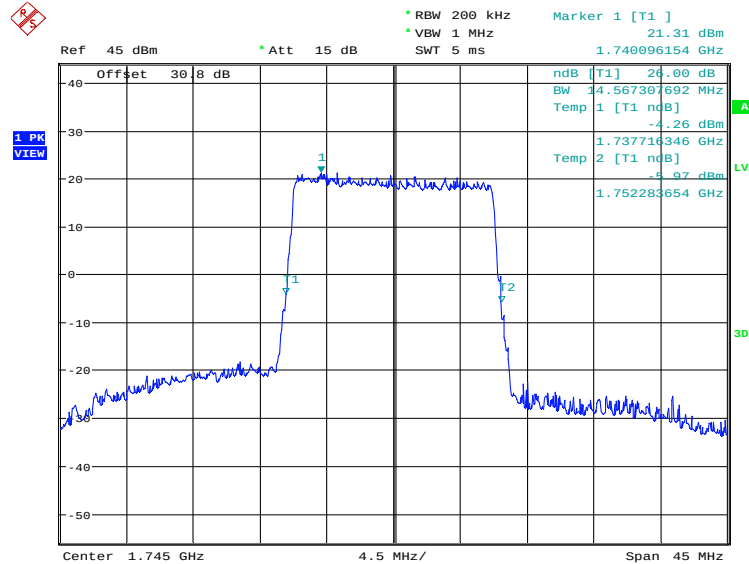


Date: 9.OCT.2024 09:38:49

LTE band 66, 15MHz (-26dBc)

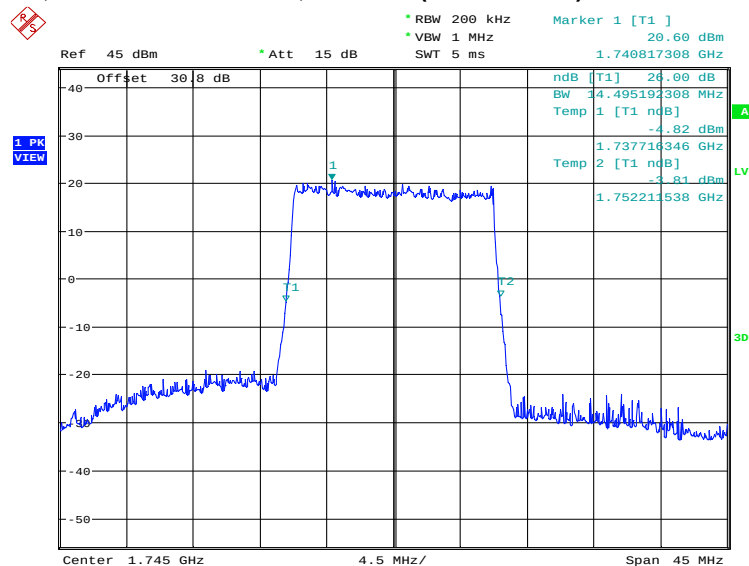
Frequency(MHz)	Emission Bandwidth (-26dBc)(kHz)	
1745.0	QPSK	16QAM
	14567.31	14495.19

LTE band 66, 15MHz Bandwidth, QPSK (-26dBc BW)



Date: 9.OCT.2024 09:39:31

LTE band 66, 15MHz Bandwidth, 16QAM (-26dBc BW)

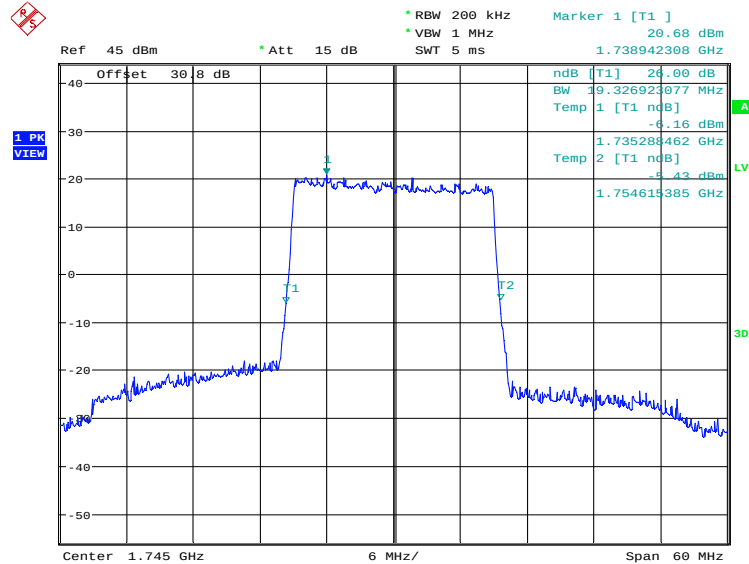


Date: 9.OCT.2024 09:40:12

LTE band 66, 20MHz (-26dBc)

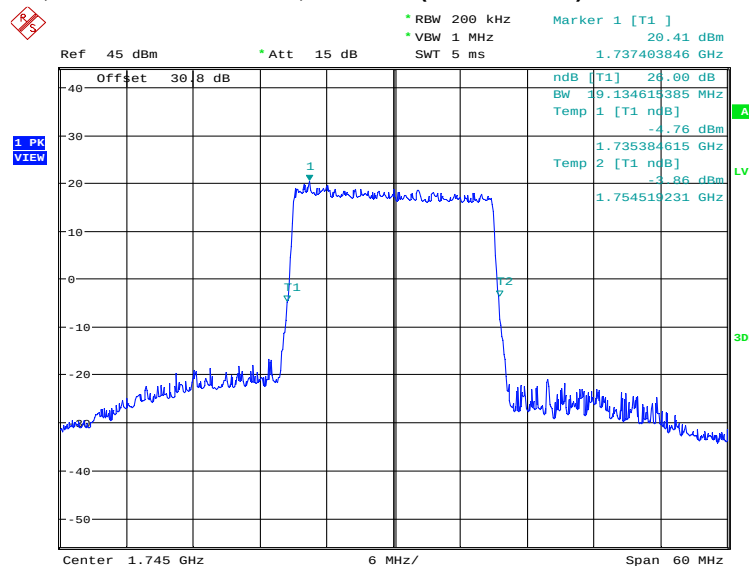
Frequency(MHz)	Emission Bandwidth (-26dBc)(kHz)	
1745.0	QPSK	16QAM
	19326.92	19134.62

LTE band 66, 20MHz Bandwidth, QPSK (-26dBc BW)



Date: 9.OCT.2024 09:40:54

LTE band 66, 20MHz Bandwidth, 16QAM (-26dBc BW)



Date: 9.OCT.2024 09:41:34

Note: Expanded measurement uncertainty is $U = 3428 \text{ Hz}$, $k = 2$.

A.6 Band Edge Compliance

A.6.1 Measurement limit

Part 22.917, Part 24.238 and Part 27.53(h) specify that the power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB.

Part 27.53(m) specifies 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.

Part 27.53(c) states for operations in the 746-758 MHz band and the 776-788 MHz band, the power of any emission outside the licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, in accordance with the following: (1) On any frequency outside the 746-758 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least $43 + 10 \log(P)$ dB; (2) On any frequency outside the 776-788 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least $43 + 10 \log(P)$ dB; (4) On all frequencies between 763-775 MHz and 793-805 MHz, by a factor not less than $65 + 10 \log(P)$ dB in a 6.25 kHz band segment, for mobile and portable stations.

Part 27.53(g) states for operations in the 600 MHz band and the 698–746 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least $43 + 10 \log(P)$ dB. Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kilohertz or greater. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

Part 96.41(e) states for channel and frequency assignments made by a CBSD to End User Devices, 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. The conducted

power of emissions below 3540 MHz or above 3710 MHz shall not exceed -25dBm/MHz, and the conducted power of emissions below 3530 MHz or above 3720 MHz shall not exceed -40dBm/MHz.

The spectrum analyzer readings are corrected by $[10 \log (1/\text{duty cycle})]$ for the non-continuous transmitting scenario.

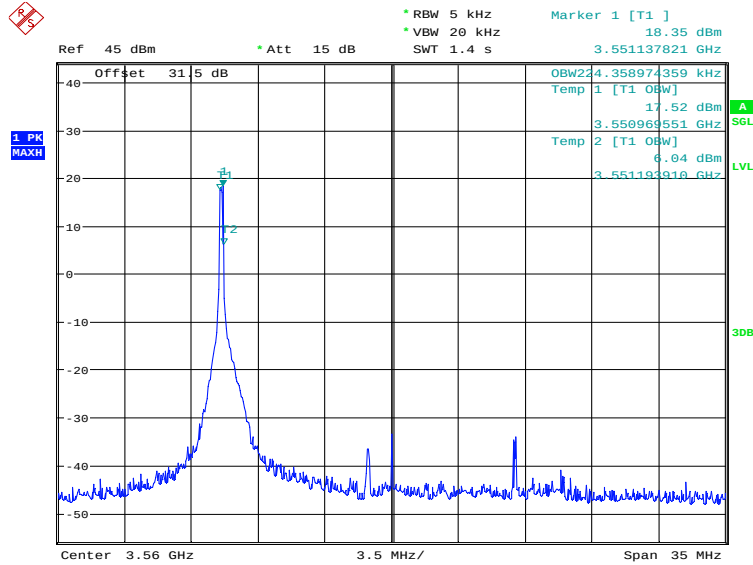
A.6.2 Measurement result

Only the worst case result is given below

Measurement Results from UT33a:

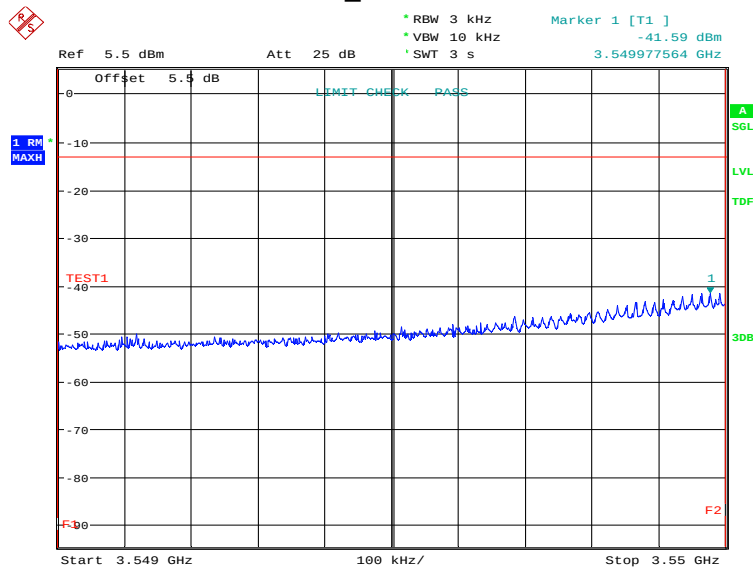
LTE band 48

OBW: 1RB-low_offset

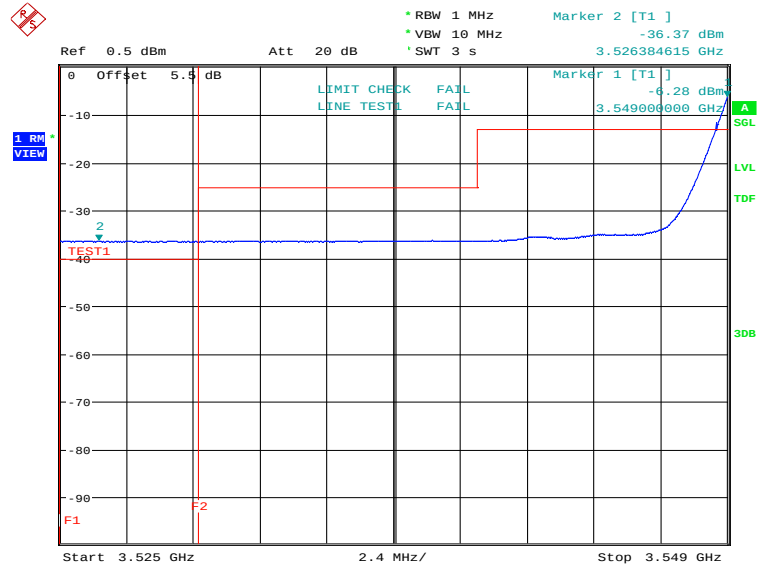


Date: 12.NOV.2024 16:13:39

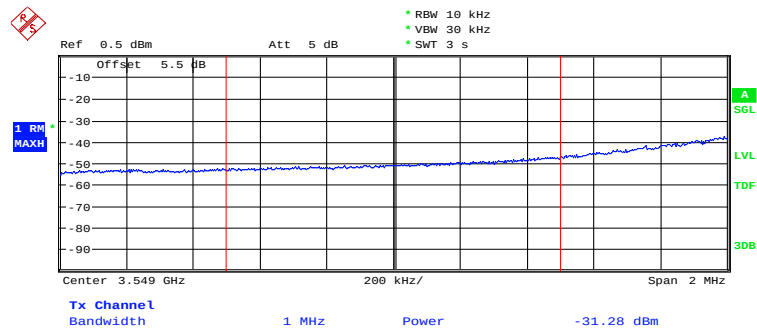
LOW BAND EDGE BLOCK-1RB-low_offset



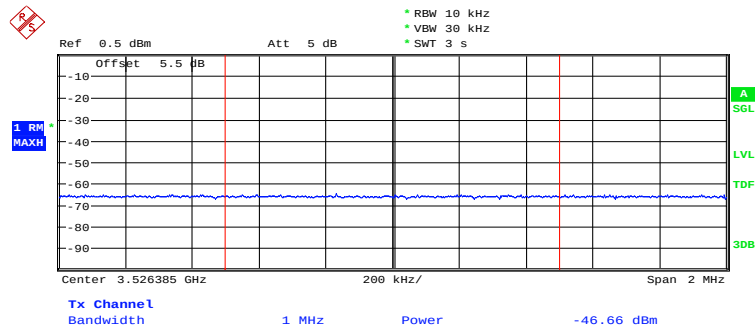
Date: 12.NOV.2024 16:14:20



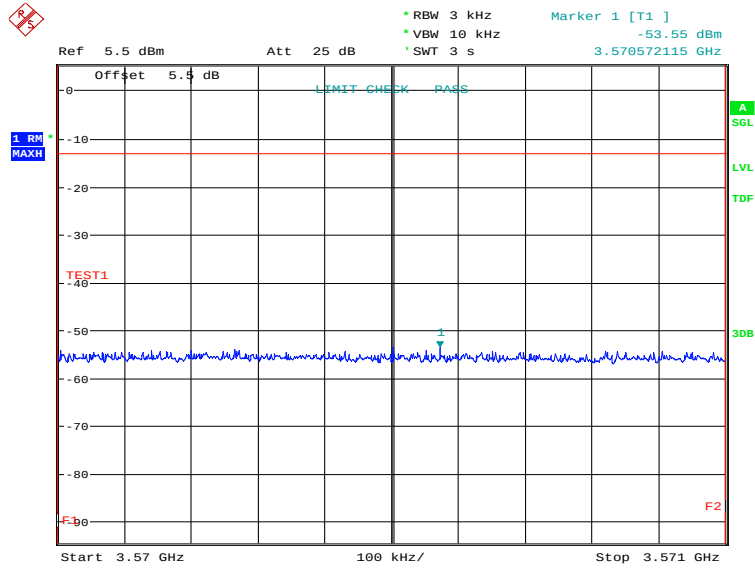
Date: 12.NOV.2024 16:15:49



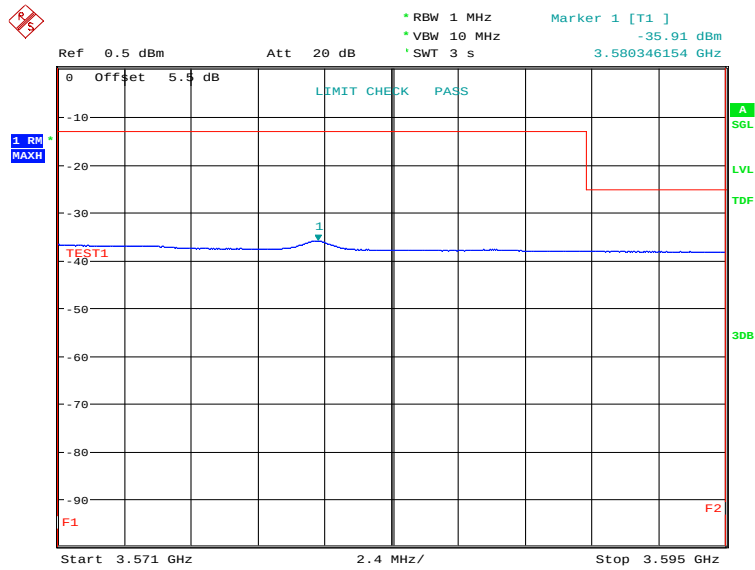
Date: 12.NOV.2024 16:16:07



Date: 12.NOV.2024 16:16:22

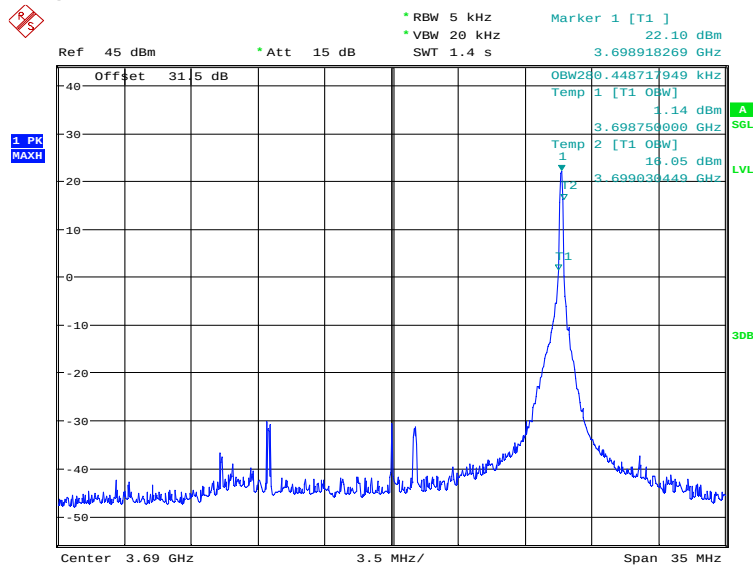


Date: 12.NOV.2024 16:15:01



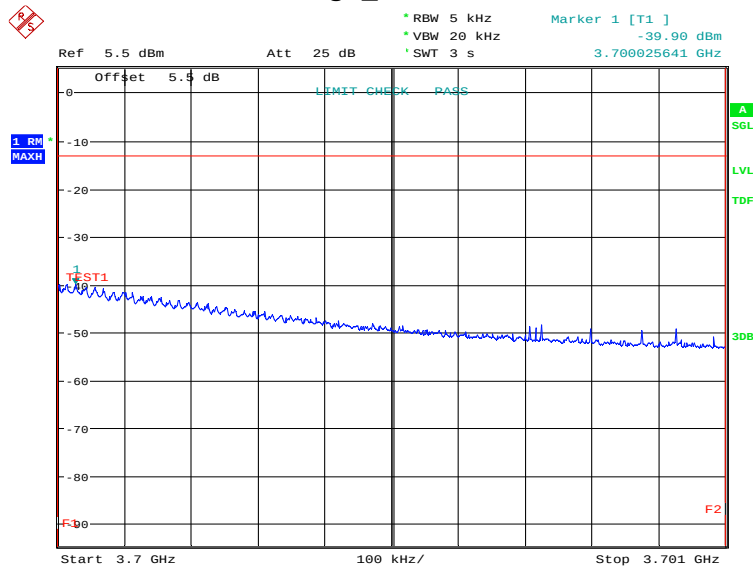
Date: 12.NOV.2024 16:17:01

OBW: 1RB-high_offset

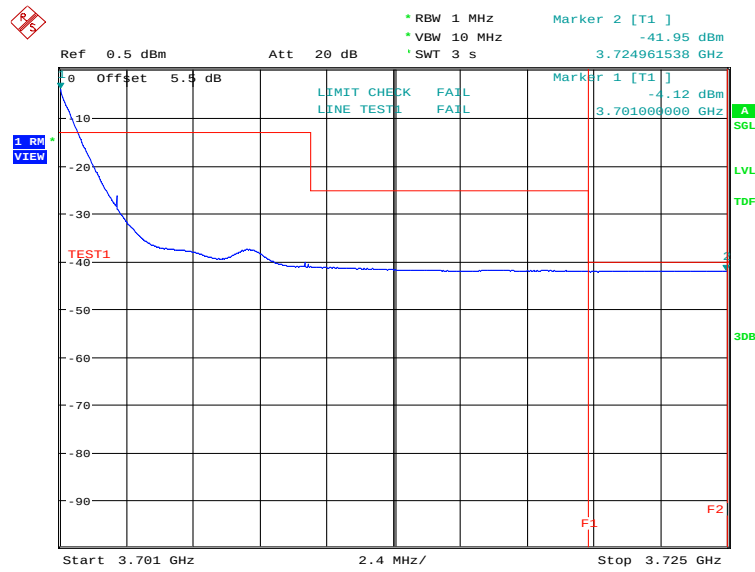


Date: 12.NOV.2024 16:17:39

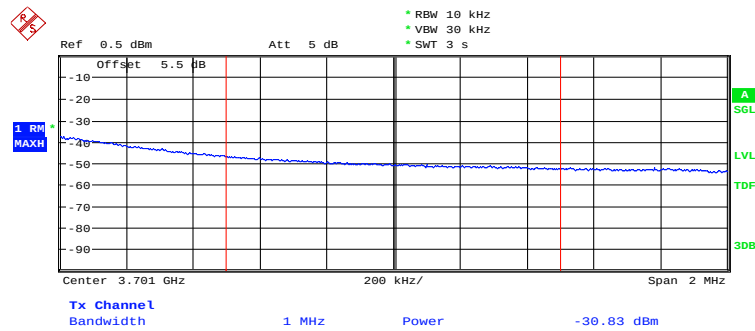
HIGH BAND EDGE BLOCK-1RB-high_offset



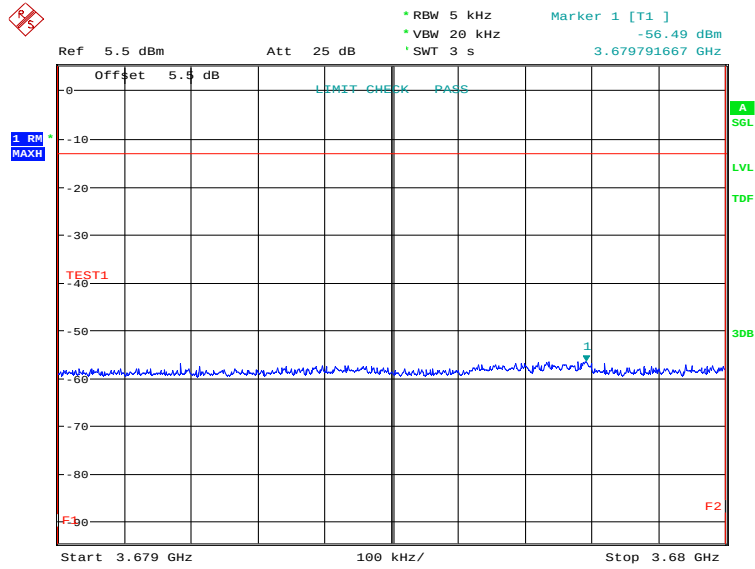
Date: 12.NOV.2024 16:18:20



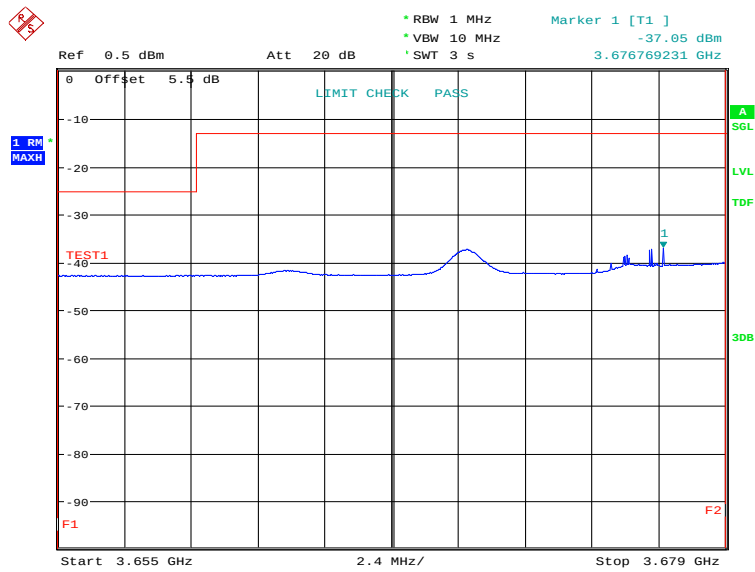
Date: 12.NOV.2024 16:19:49



Date: 12.NOV.2024 16:20:07

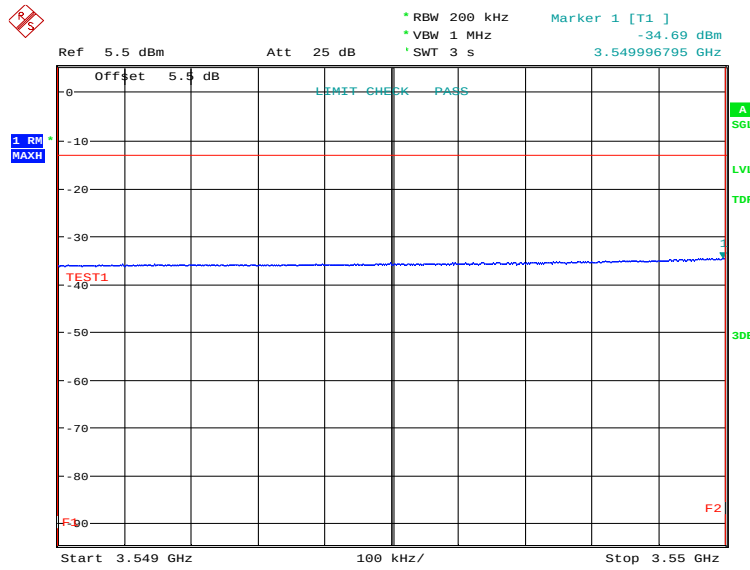


Date: 12.NOV.2024 16:19:02

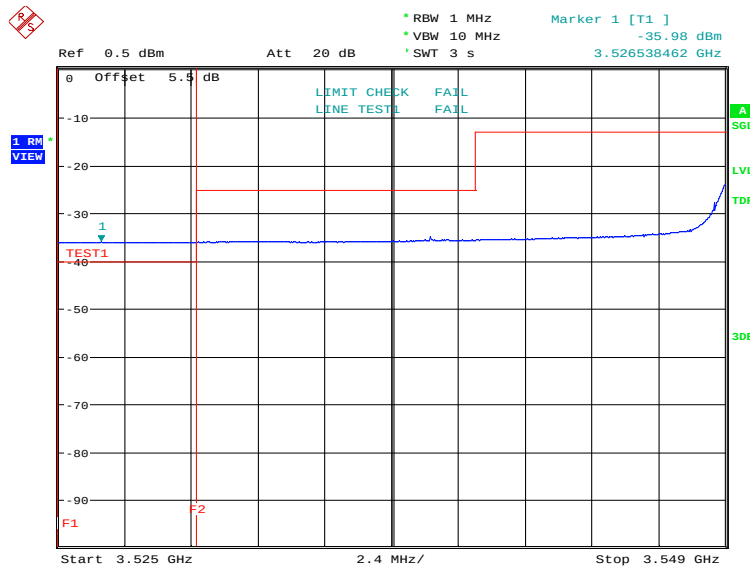


Date: 12.NOV.2024 16:20:46

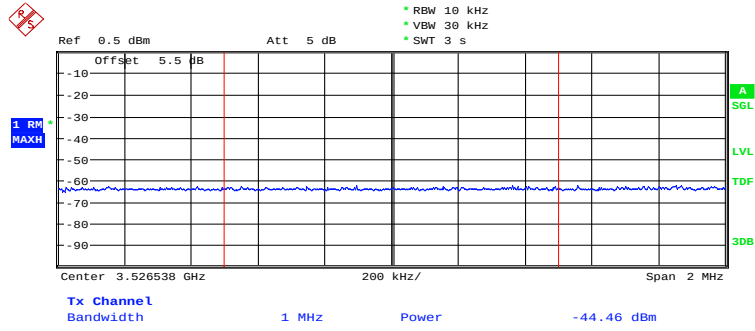
LOW BAND EDGE BLOCK-20MHz-100%RB



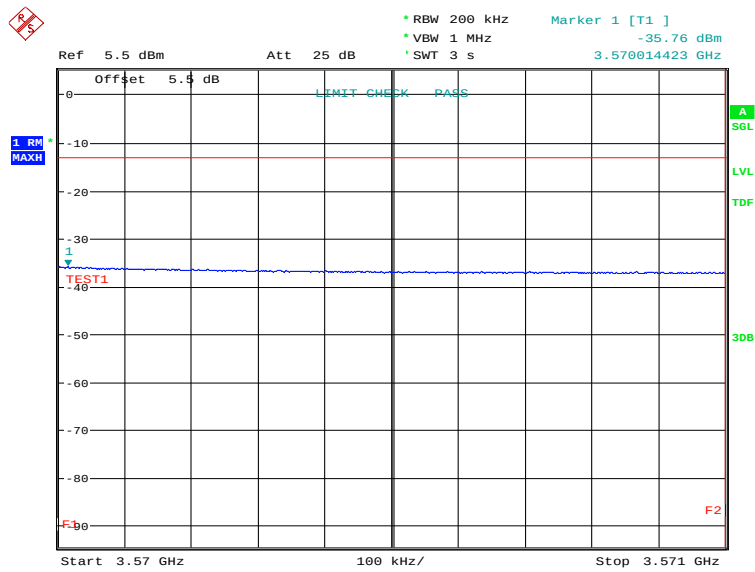
Date: 12.NOV.2024 15:38:16



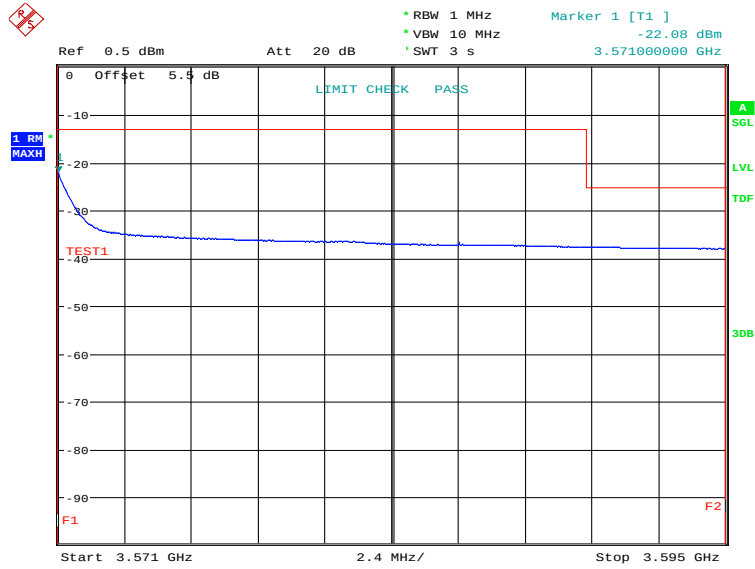
Date: 12.NOV.2024 15:39:44



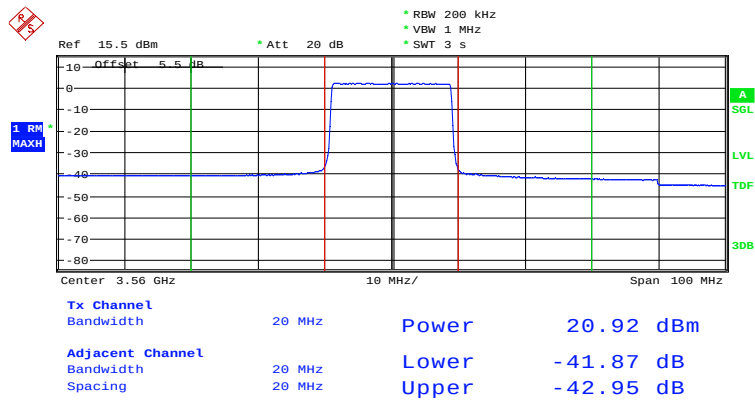
Date: 12.NOV.2024 15:40:02



Date: 12.NOV.2024 15:38:57

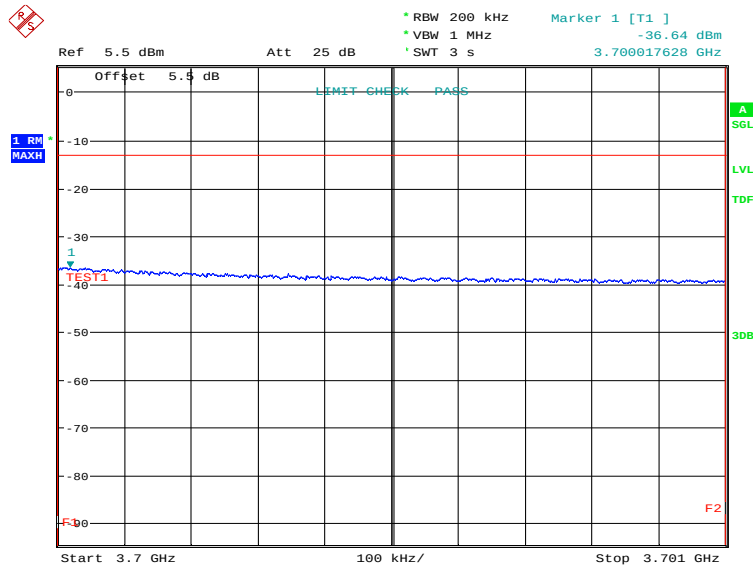


Date: 12.NOV.2024 15:40:41

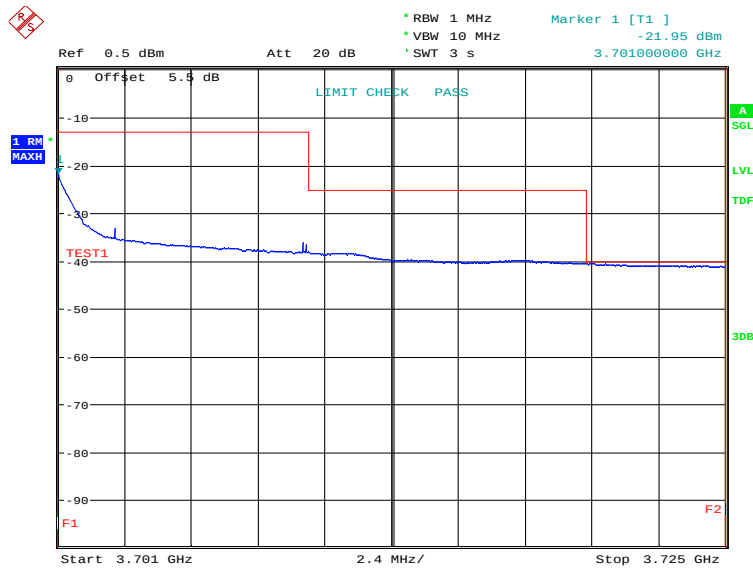


Date: 12.NOV.2024 15:42:00

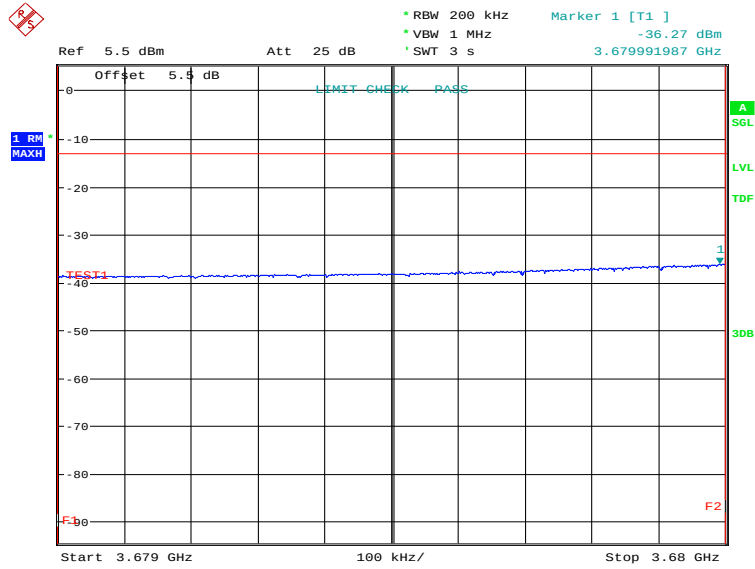
HIGH BAND EDGE BLOCK-20MHz-100%RB



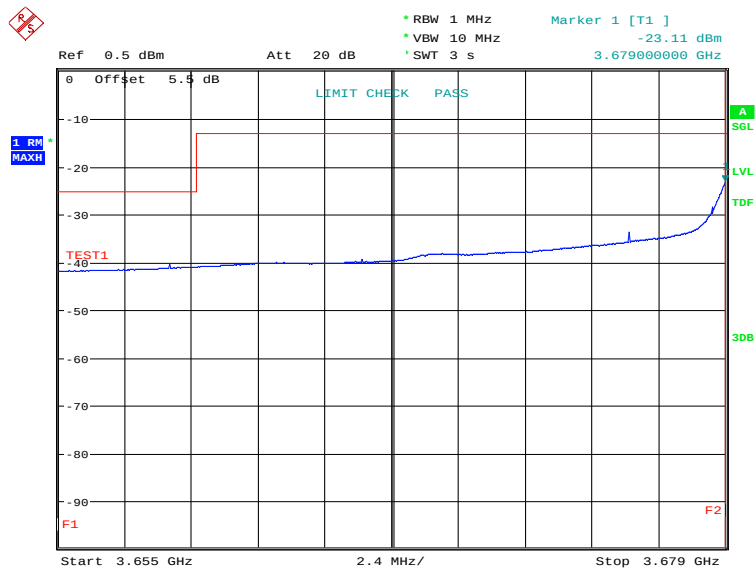
Date: 12.NOV.2024 15:42:56



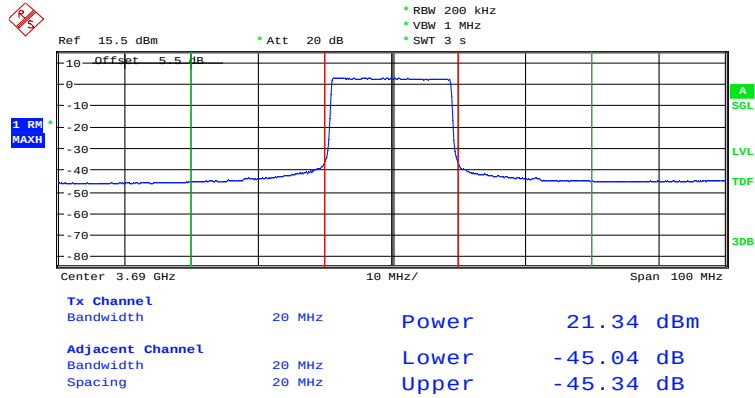
Date: 12.NOV.2024 15:44:16



Date: 12.NOV.2024 15:43:37

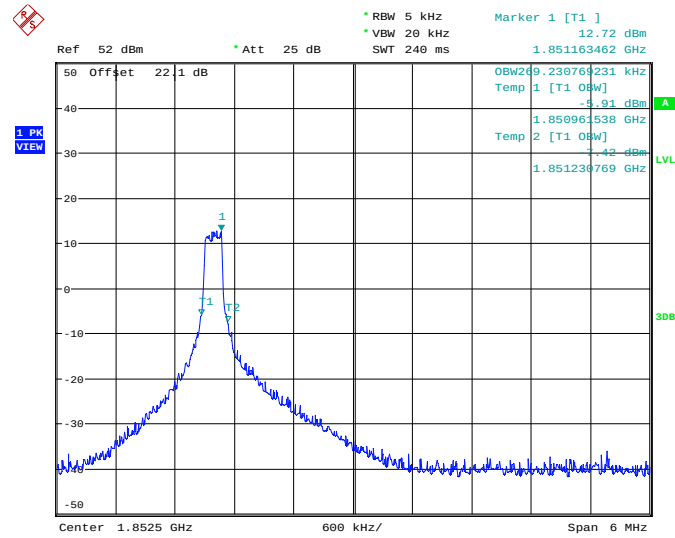


Date: 12.NOV.2024 15:44:57



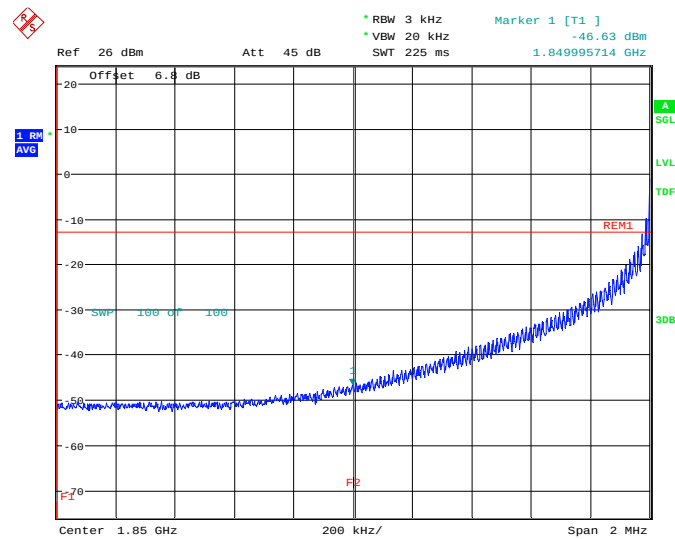
Date: 12.NOV.2024 15:46:15

LTE band 2@CA 2A-4A
OBW: 1RB-LOW_offset



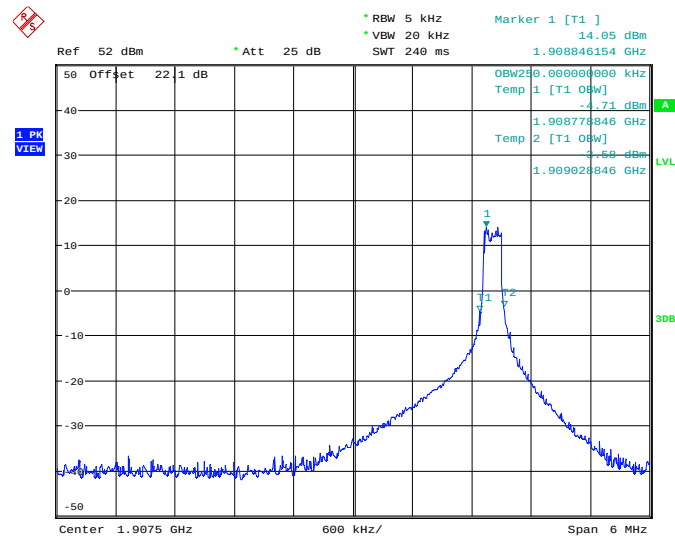
Date: 12.NOV.2024 13:45:35

LOW BAND EDGE BLOCK-1RB-LOW_offset



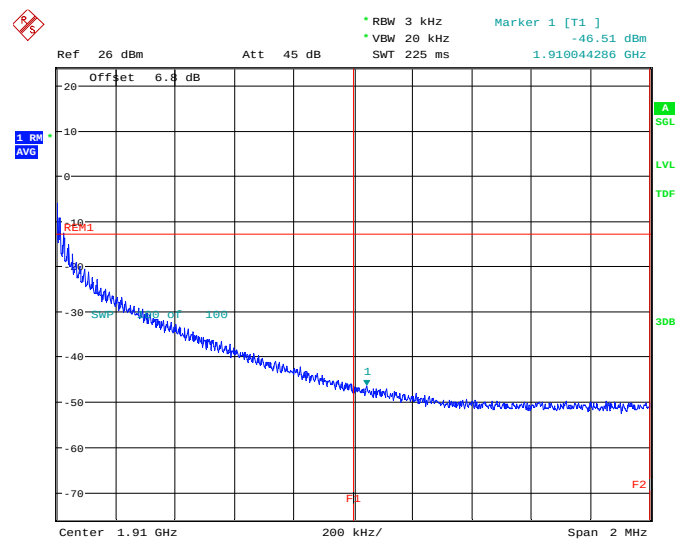
Date: 12.NOV.2024 13:46:23

OBW: 1RB-HIGH_offset



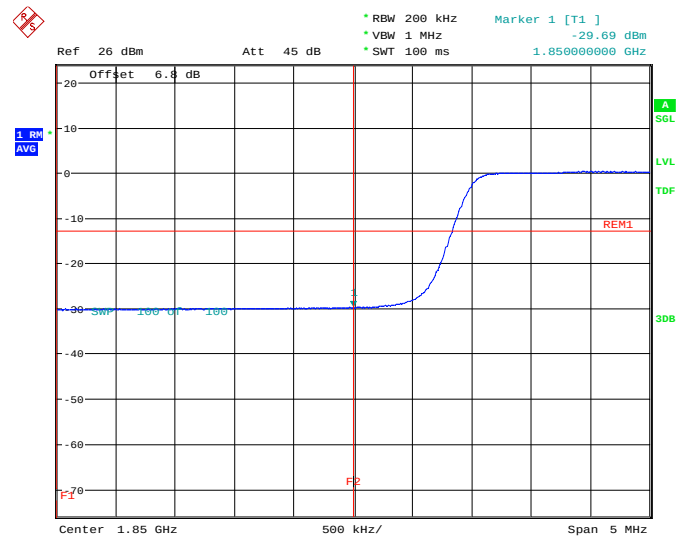
Date: 12.NOV.2024 13:48:54

HIGH BAND EDGE BLOCK-1RB-HIGH_offset



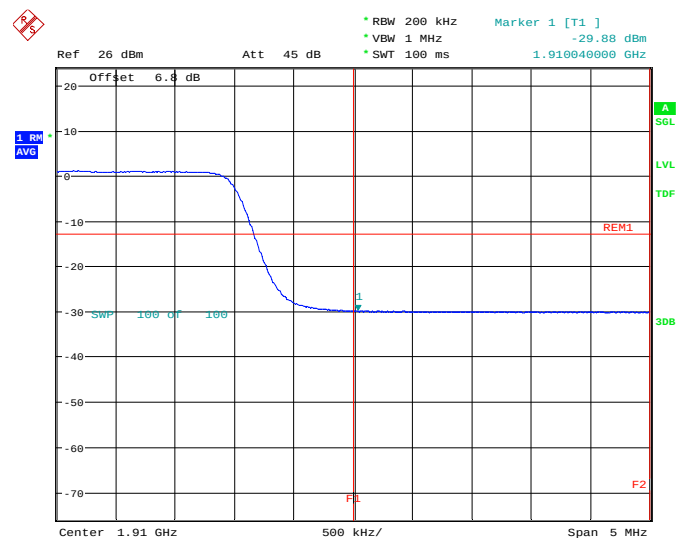
Date: 12.NOV.2024 13:49:38

LOW BAND EDGE BLOCK-20MHz+20MHz-100%RB



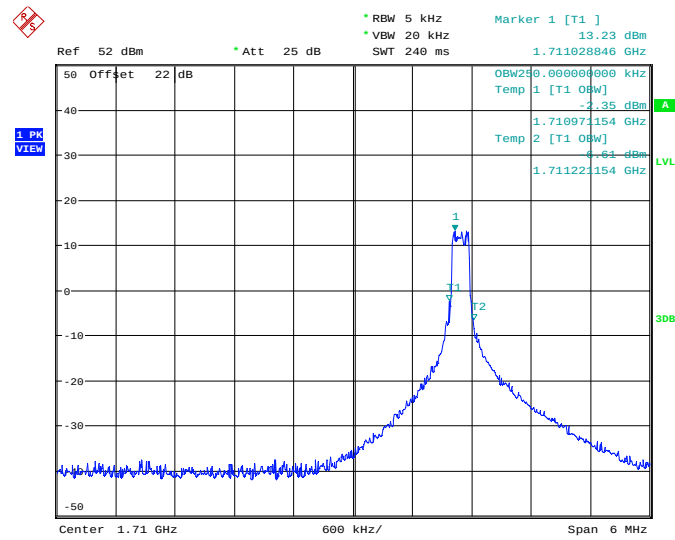
Date: 12.NOV.2024 09:16:32

HIGH BAND EDGE BLOCK-20MHz+20MHz-100%RB



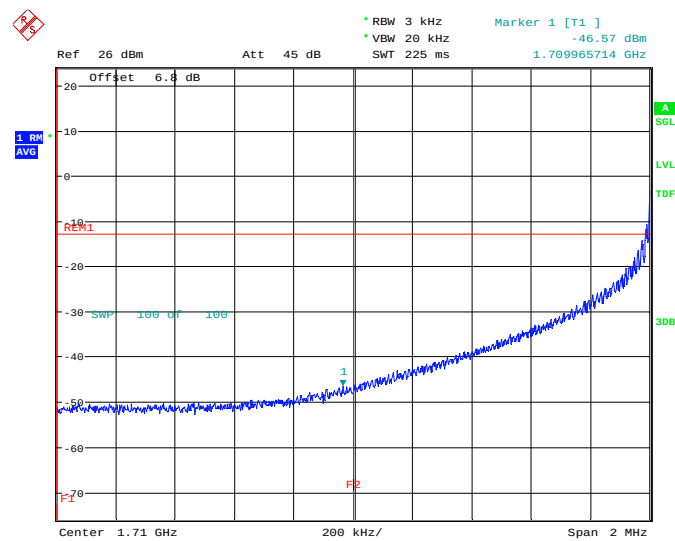
Date: 12.NOV.2024 09:18:46

LTE band 4@CA 2A-4A
OBW: 1RB-LOW_offset



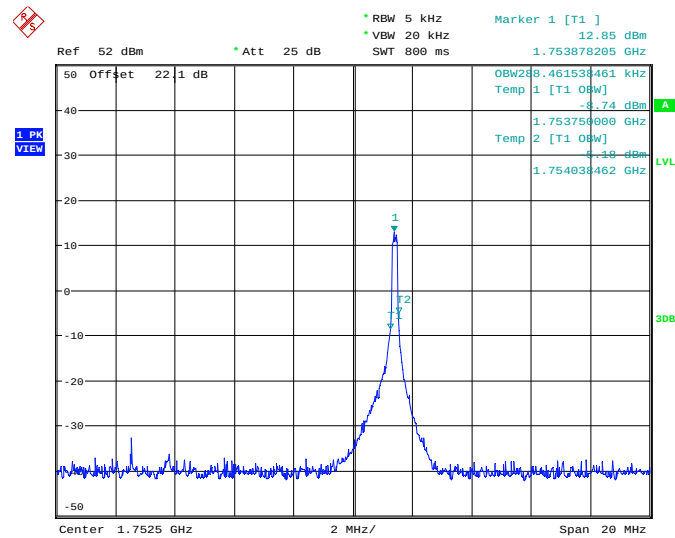
Date: 12.NOV.2024 13:46:45

LOW BAND EDGE BLOCK-1RB-LOW_offset



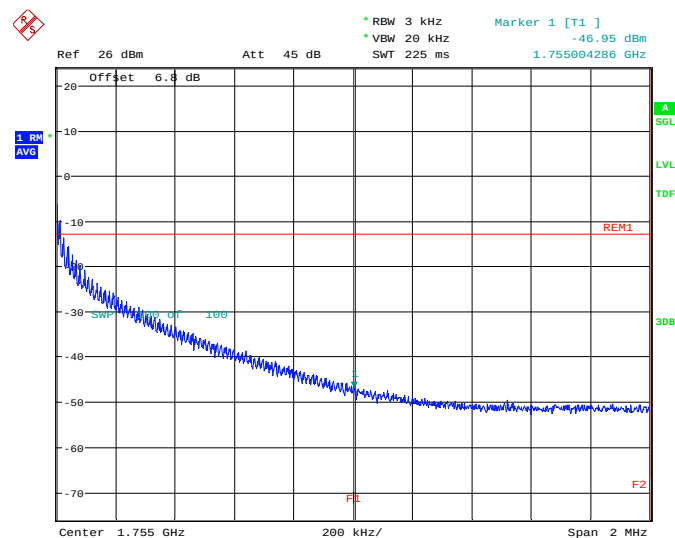
Date: 12.NOV.2024 13:47:37

OBW: 1RB-HIGH_offset



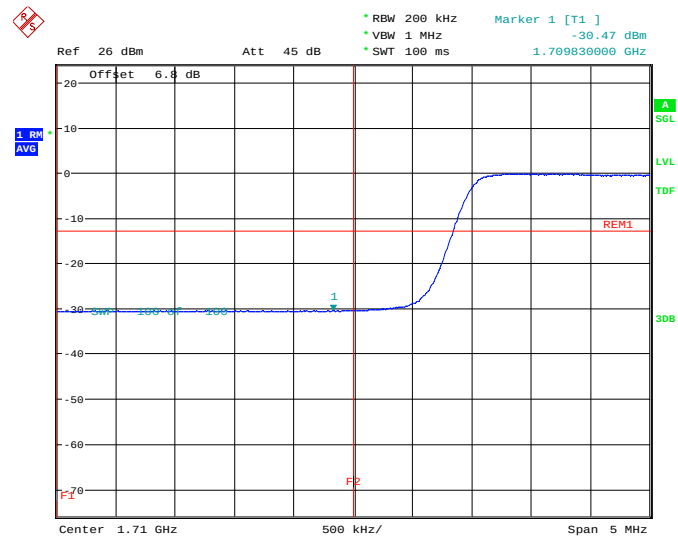
Date: 12.NOV.2024 13:49:59

HIGH BAND EDGE BLOCK-1RB-HIGH_offset



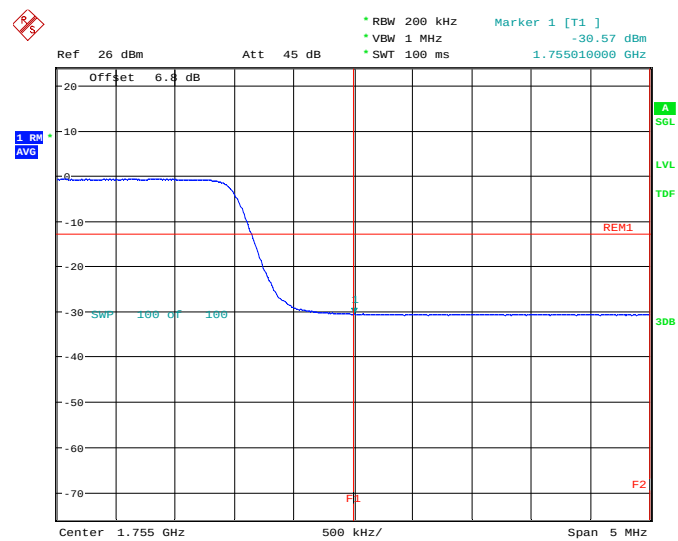
Date: 12.NOV.2024 13:50:46

LOW BAND EDGE BLOCK-20MHz+20MHz-100%RB



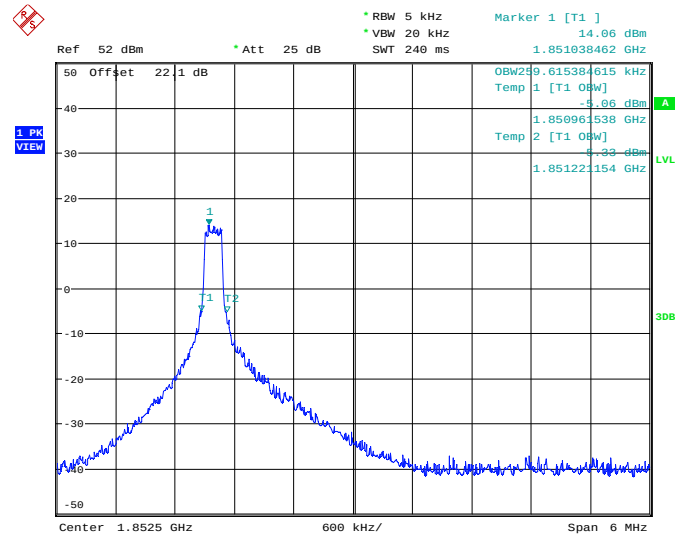
Date: 12.NOV.2024 09:17:24

HIGH BAND EDGE BLOCK-20MHz+20MHz-100%RB



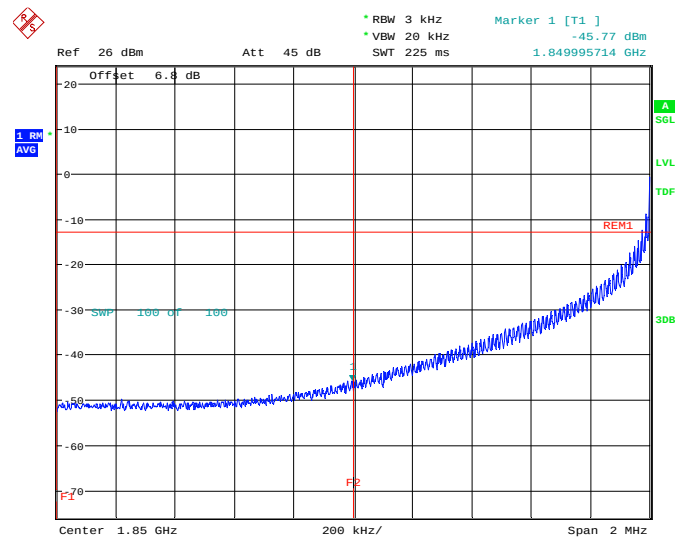
Date: 12.NOV.2024 09:19:37

LTE band 2@CA 2A-13A
OBW: 1RB-LOW_offset



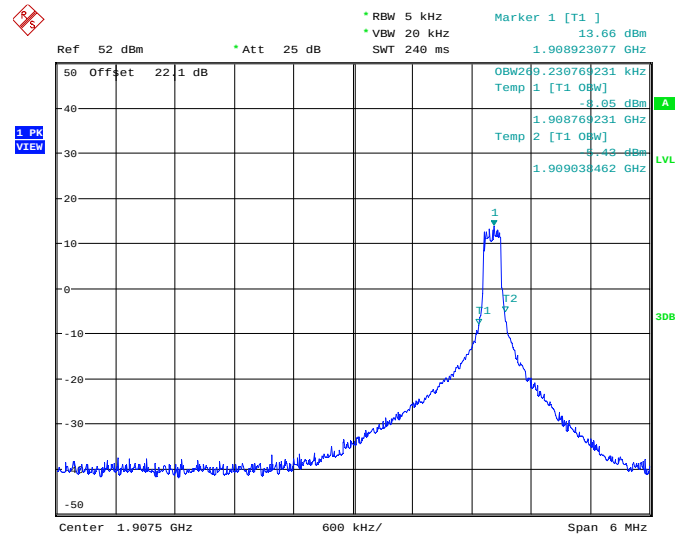
Date: 12.NOV.2024 13:58:12

LOW BAND EDGE BLOCK-1RB-LOW_offset



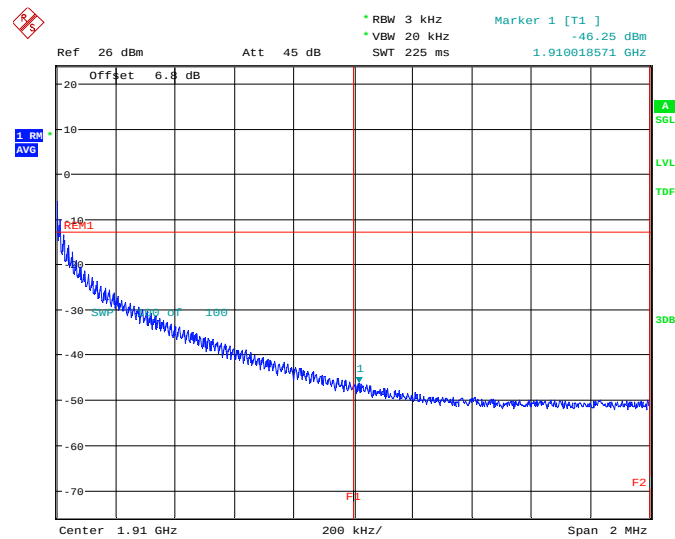
Date: 12.NOV.2024 13:59:32

OBW: 1RB-HIGH_offset



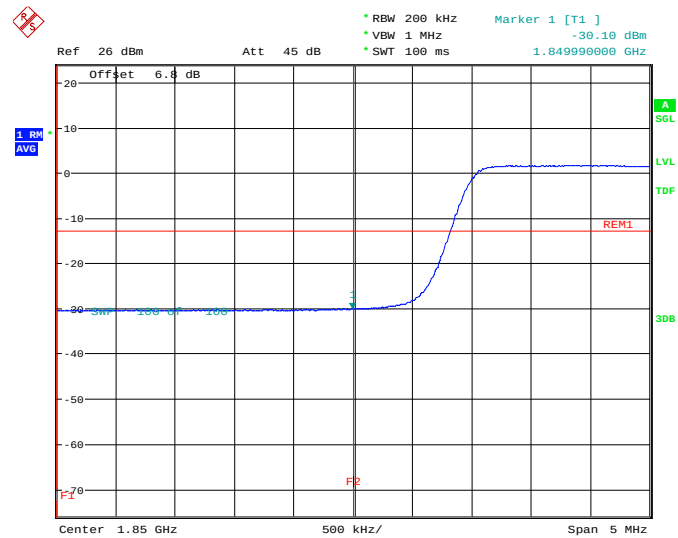
Date: 12.NOV.2024 14:03:10

HIGH BAND EDGE BLOCK-1RB-HIGH_offset



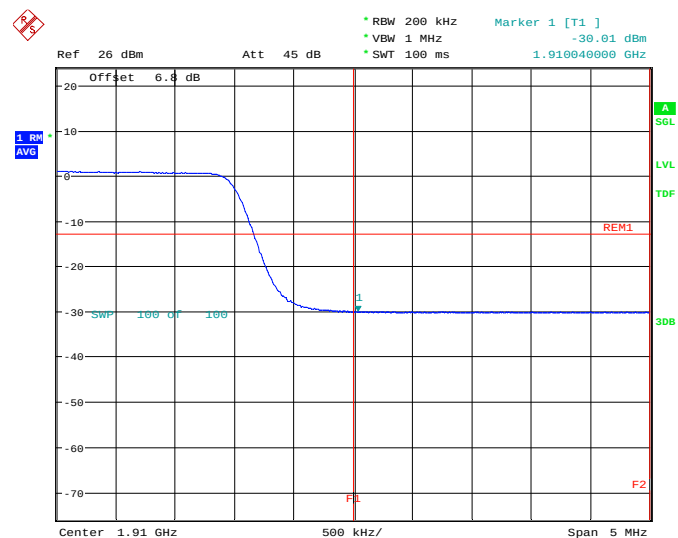
Date: 12.NOV.2024 14:05:08

LOW BAND EDGE BLOCK-20MHz+10MHz-100%RB



Date: 12.NOV.2024 09:25:29

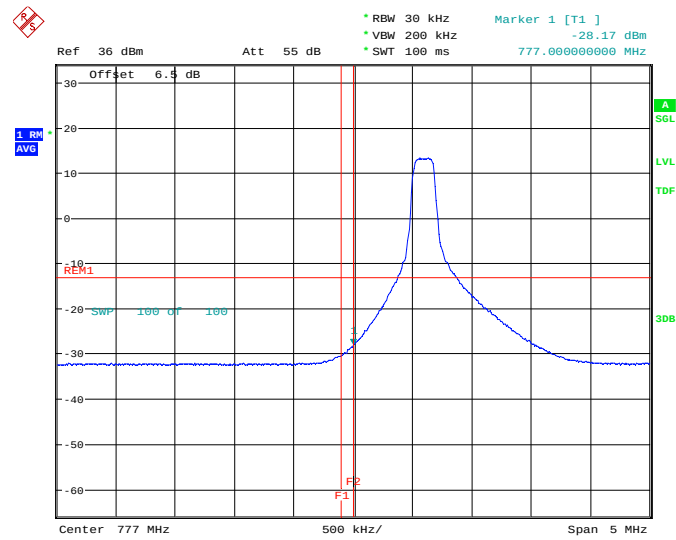
HIGH BAND EDGE BLOCK-20MHz+10MHz-100%RB



Date: 12.NOV.2024 09:28:17

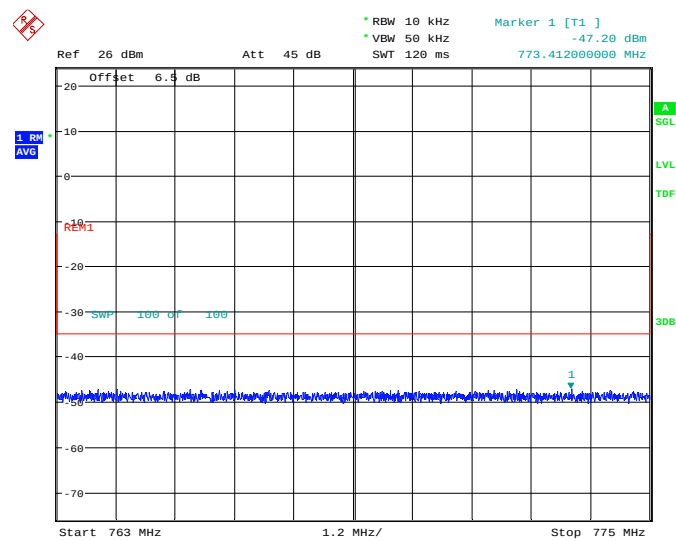
LTE band 13@CA 2A-13A

LOW BAND EDGE BLOCK-1RB-LOW_offset



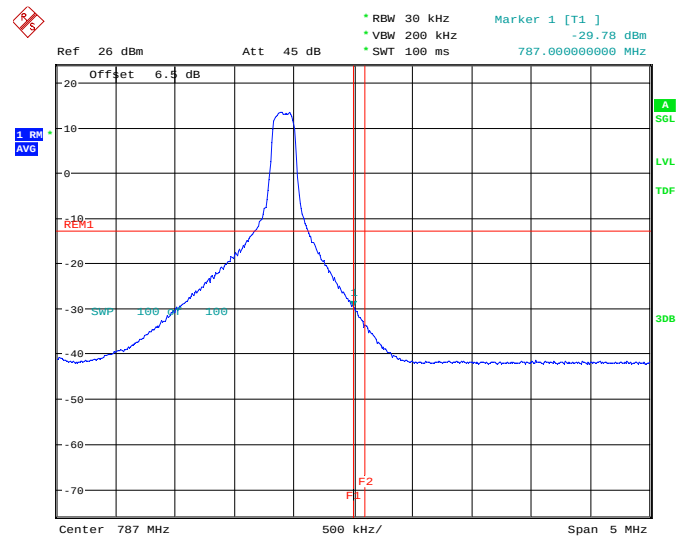
Date: 12.NOV.2024 14:01:44

LOW BAND EDGE BLOCK-1RB-LOW_offset



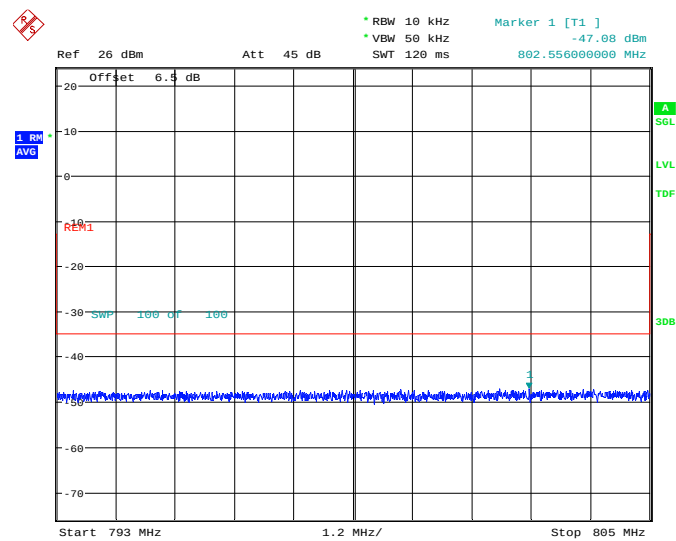
Date: 12.NOV.2024 14:02:40

HIGH BAND EDGE BLOCK-1RB-HIGH_offset



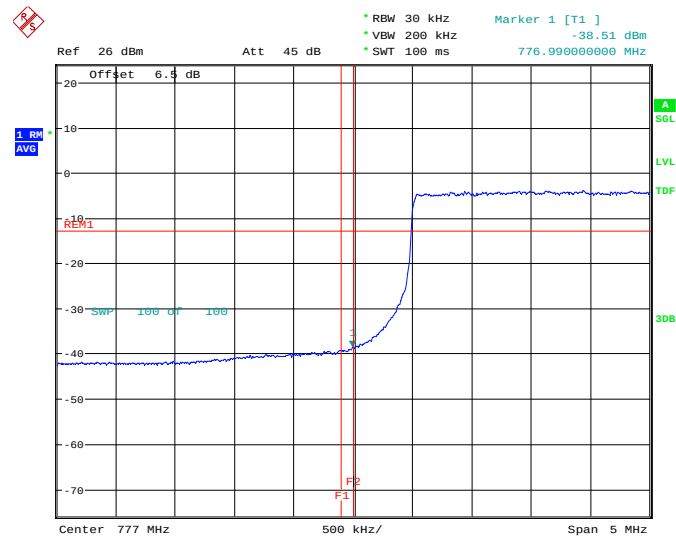
Date: 12.NOV.2024 14:06:00

HIGH BAND EDGE BLOCK-1RB-HIGH_offset



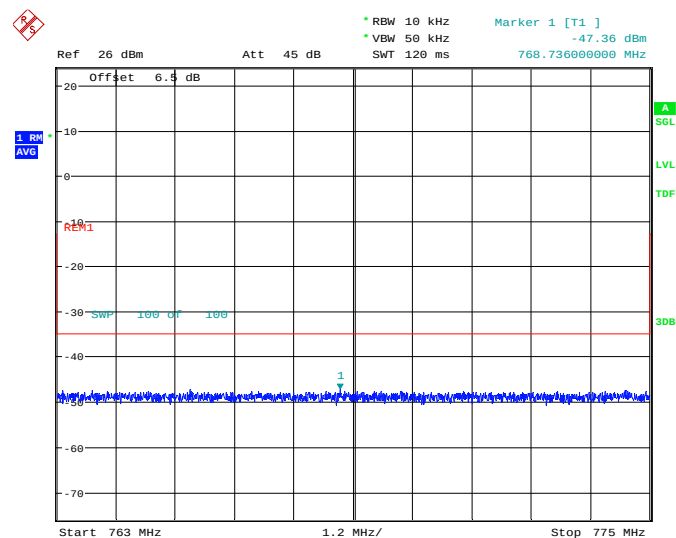
Date: 12.NOV.2024 14:06:58

LOW BAND EDGE BLOCK-20MHz+10MHz-100%RB



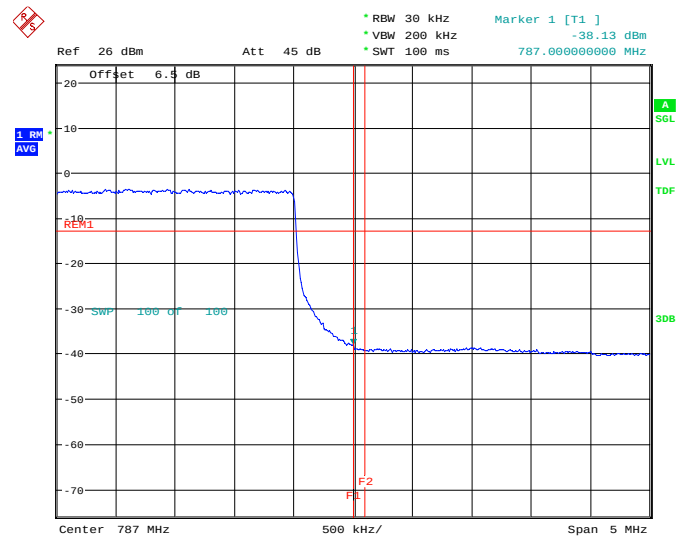
Date: 12.NOV.2024 09:26:20

LOW BAND EDGE BLOCK-20MHz+10MHz-100%RB



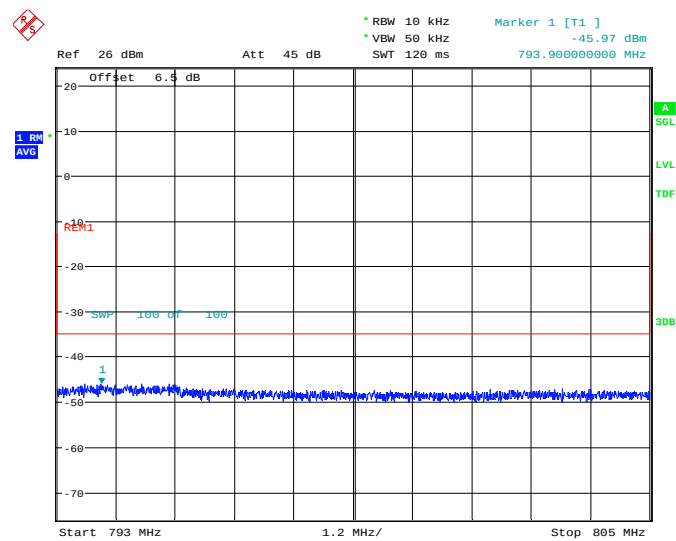
Date: 12.NOV.2024 09:27:16

HIGH BAND EDGE BLOCK-20MHz+10MHz-100%RB



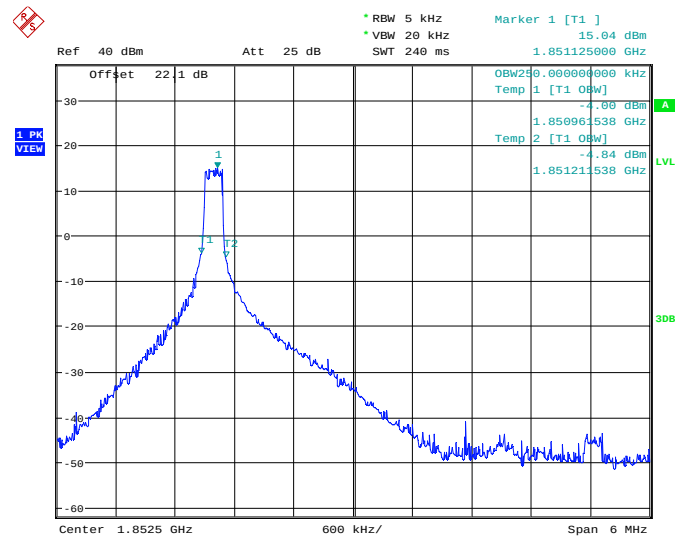
Date: 12.NOV.2024 09:29:09

HIGH BAND EDGE BLOCK-20MHz+10MHz-100%RB



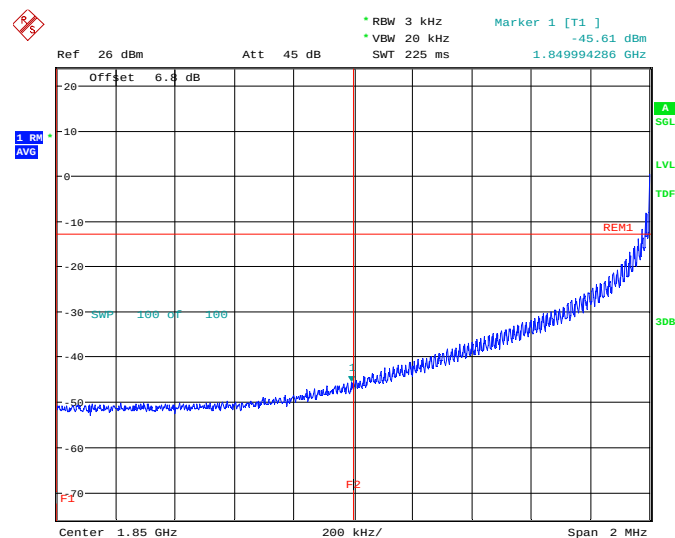
Date: 12.NOV.2024 09:30:06

LTE band 2@CA 2A-48A
OBW: 1RB-LOW_offset



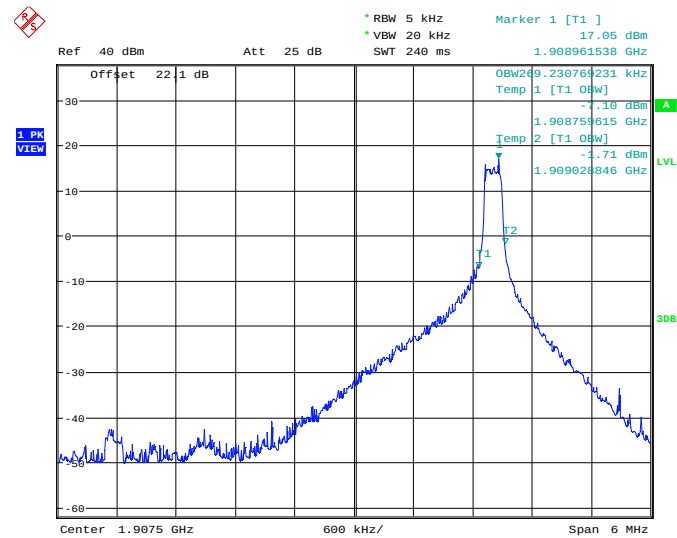
Date: 12.NOV.2024 10:36:44

LOW BAND EDGE BLOCK-1RB-LOW_offset



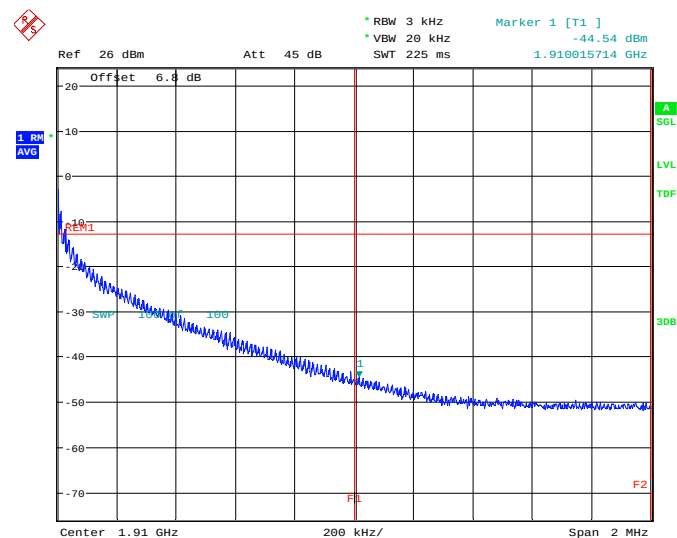
Date: 12.NOV.2024 10:39:03

OBW: 1RB-HIGH_offset



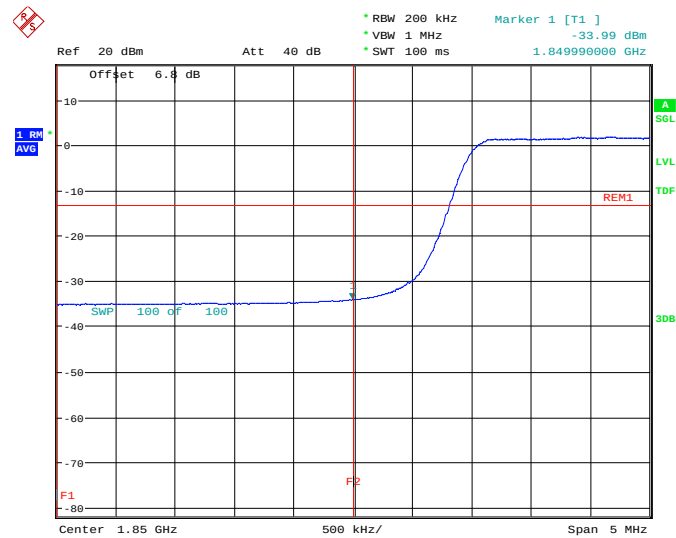
Date: 12.NOV.2024 10:43:56

HIGH BAND EDGE BLOCK-1RB-HIGH_offset



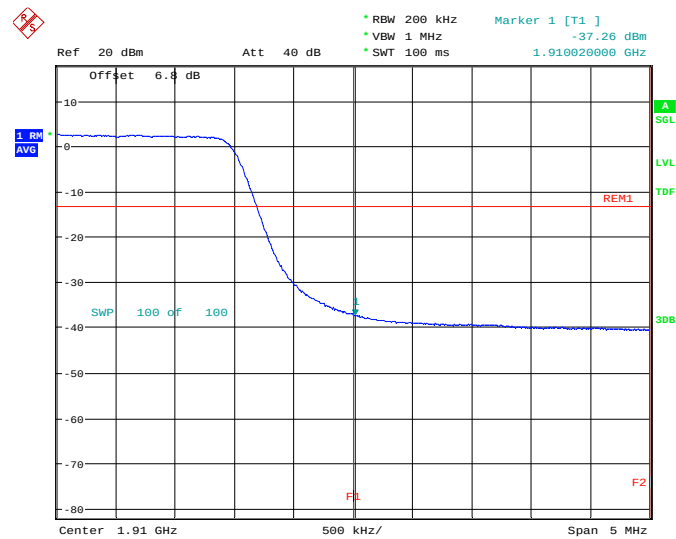
Date: 12.NOV.2024 10:46:49

LOW BAND EDGE BLOCK-20MHz+20MHz-100%RB



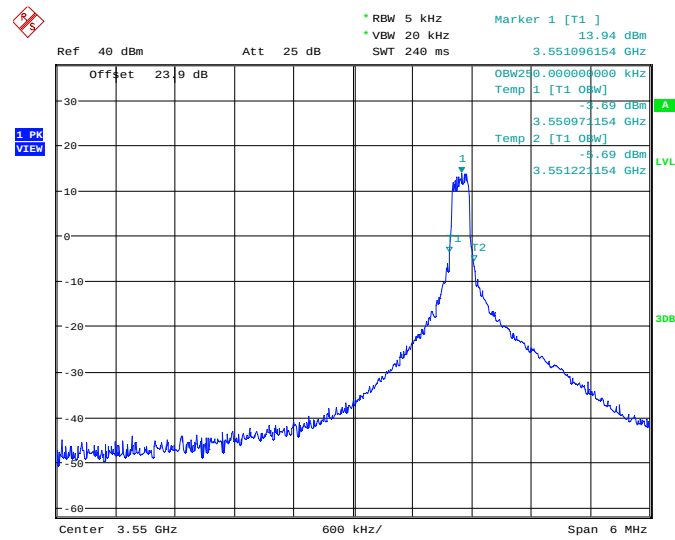
Date: 12.NOV.2024 09:43:39

HIGH BAND EDGE BLOCK-20MHz+20MHz-100%RB



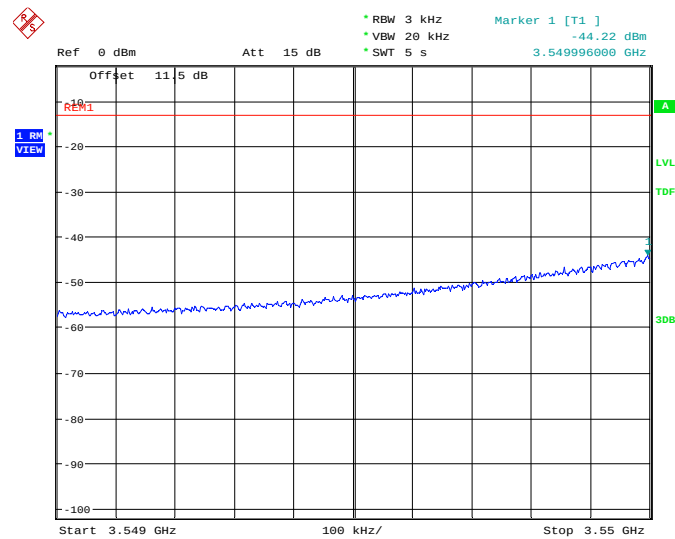
Date: 12.NOV.2024 09:48:09

LTE band 48@CA 2A-48A
OBW: 1RB-LOW_offset



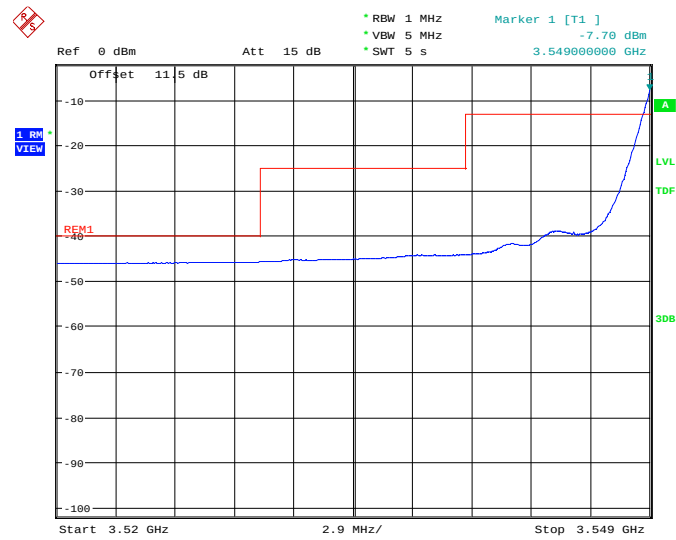
Date: 12.NOV.2024 10:39:24

LOW BAND EDGE BLOCK-1RB-LOW_offset



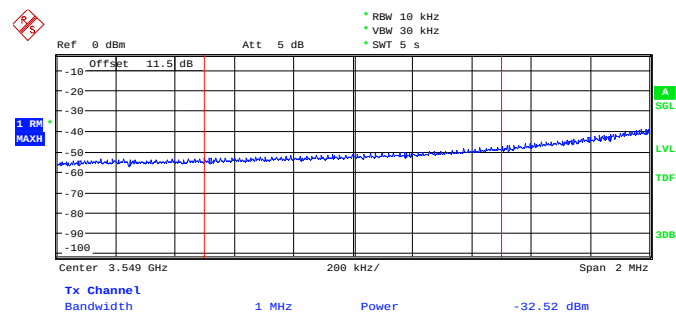
Date: 12.NOV.2024 10:40:07

LOW BAND EDGE BLOCK-1RB-LOW_offset



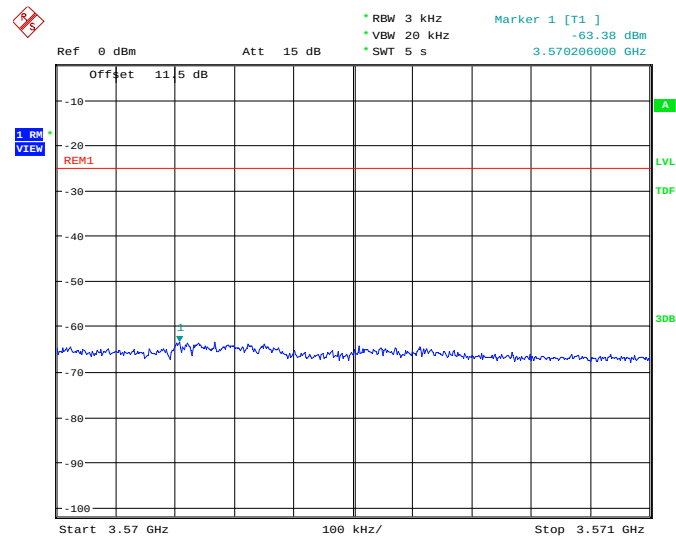
Date: 12.NOV.2024 10:40:49

Channel power



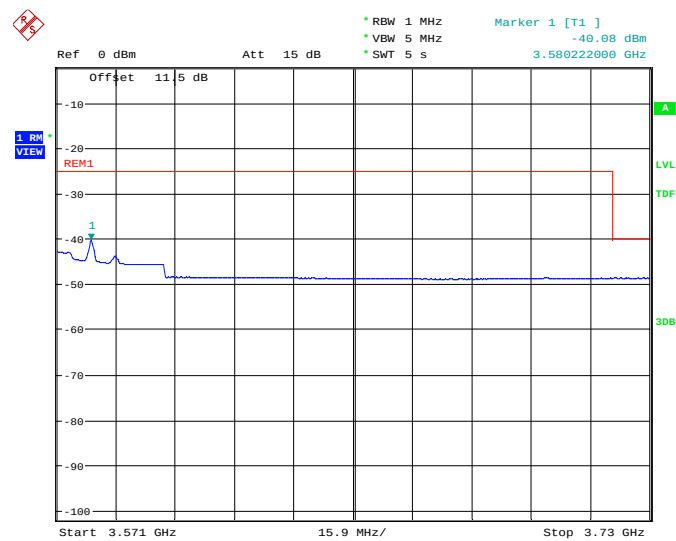
Date: 12.NOV.2024 10:41:41

LOW BAND EDGE BLOCK-1RB-LOW_offset



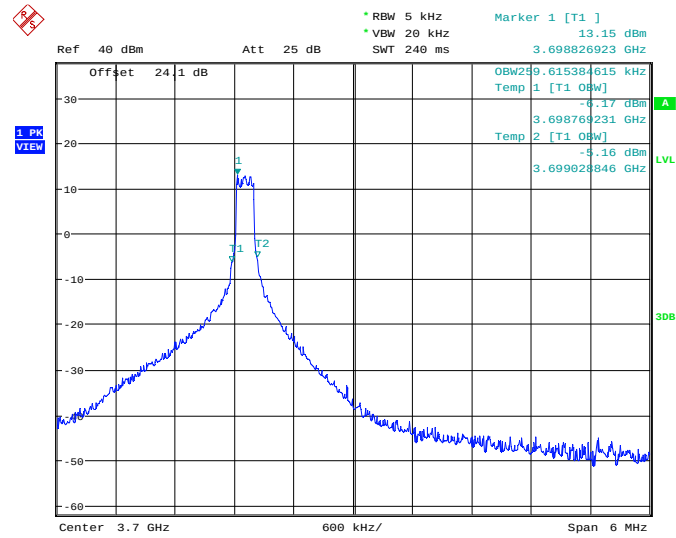
Date: 12.NOV.2024 10:42:23

LOW BAND EDGE BLOCK-1RB-LOW_offset



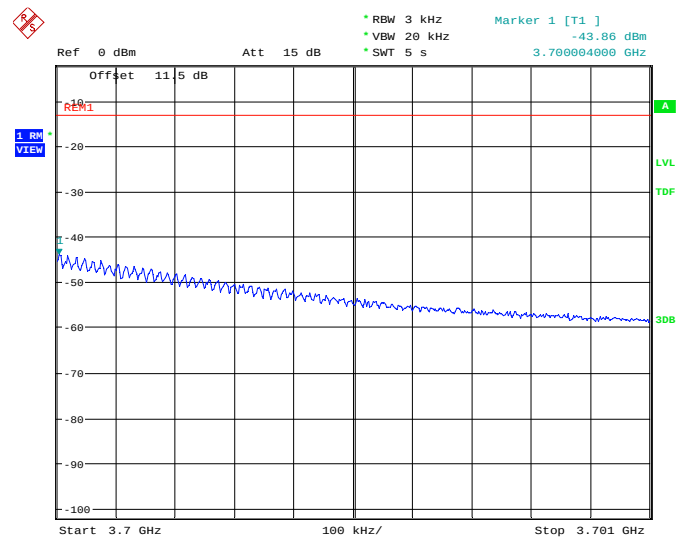
Date: 12.NOV.2024 10:43:05

OBW: 1RB-HIGH_offset



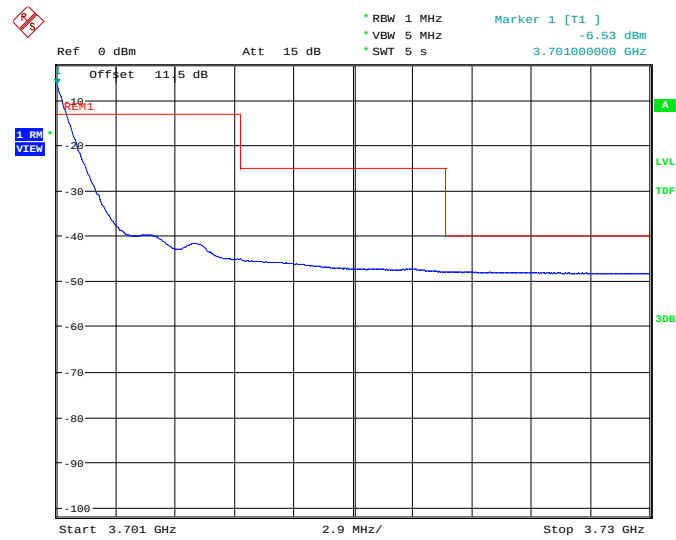
Date: 12.NOV.2024 10:47:10

HIGH BAND EDGE BLOCK-1RB-HIGH_offset



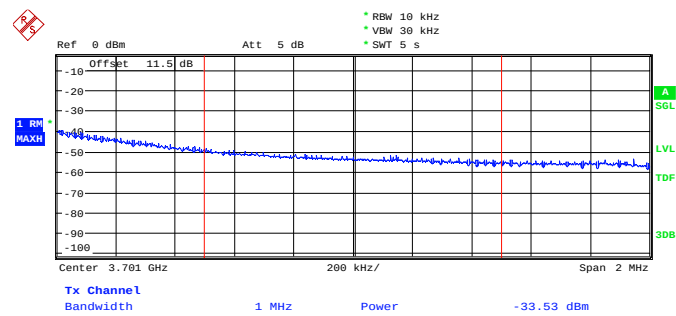
Date: 12.NOV.2024 10:47:52

HIGH BAND EDGE BLOCK-1RB-HIGH_offset



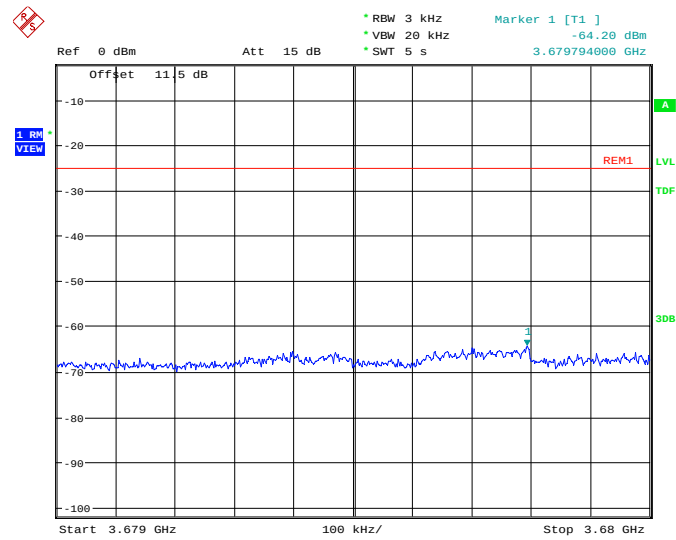
Date: 12.NOV.2024 10:48:35

Channel power



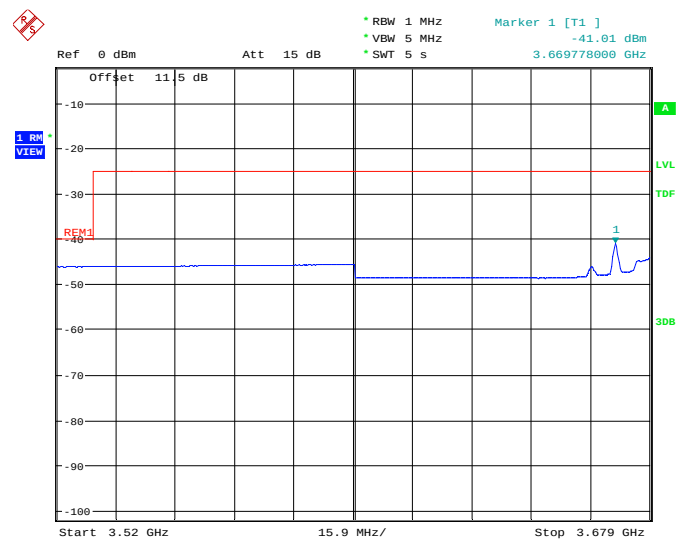
Date: 12.NOV.2024 10:49:26

HIGH BAND EDGE BLOCK-1RB-HIGH_offset



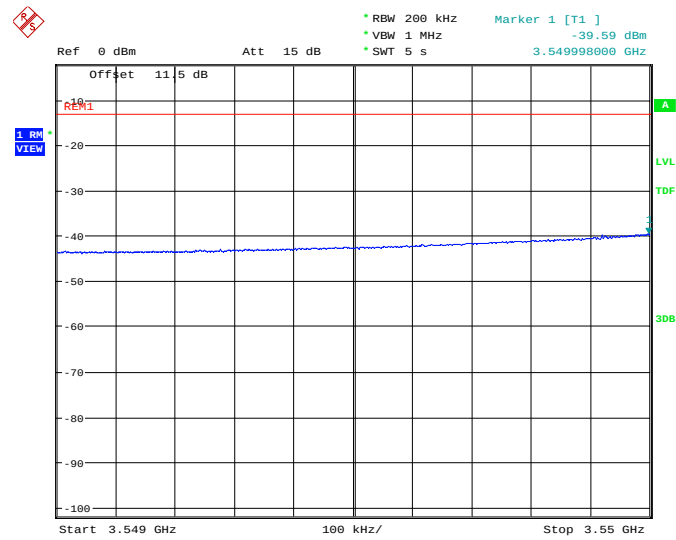
Date: 12.NOV.2024 10:50:08

HIGH BAND EDGE BLOCK-1RB-HIGH_offset



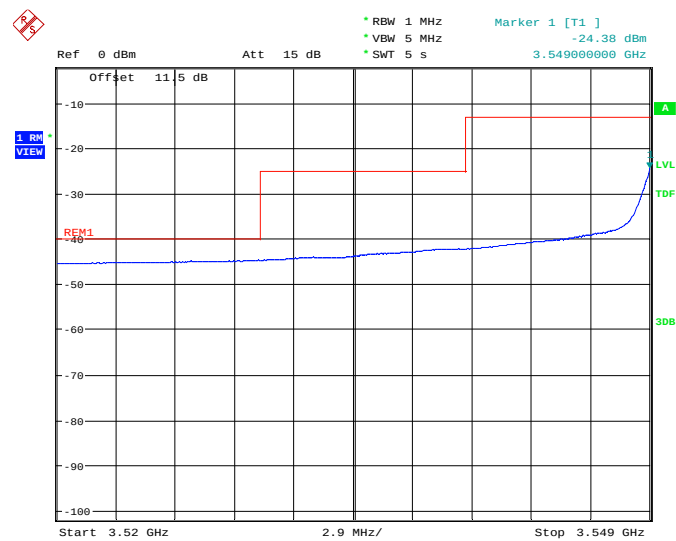
Date: 12.NOV.2024 10:50:51

LOW BAND EDGE BLOCK-20MHz+20MHz-100%RB



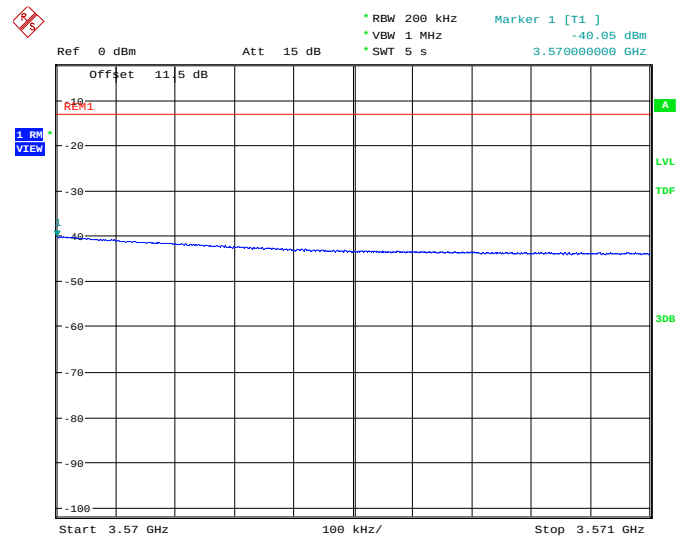
Date: 12.NOV.2024 09:44:22

LOW BAND EDGE BLOCK-20MHz+20MHz-100%RB



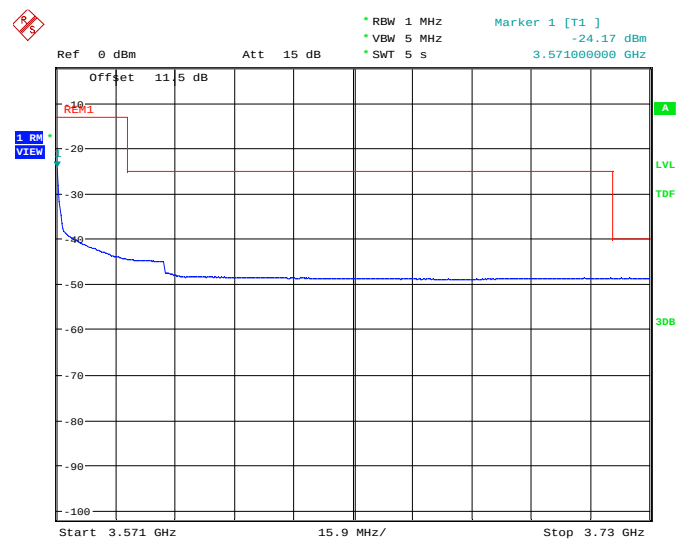
Date: 12.NOV.2024 09:45:04

LOW BAND EDGE BLOCK-20MHz+20MHz-100%RB



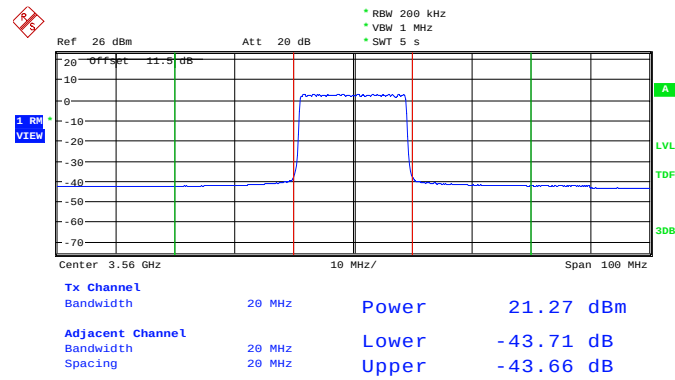
Date: 12.NOV.2024 09:45:46

LOW BAND EDGE BLOCK-20MHz+20MHz-100%RB



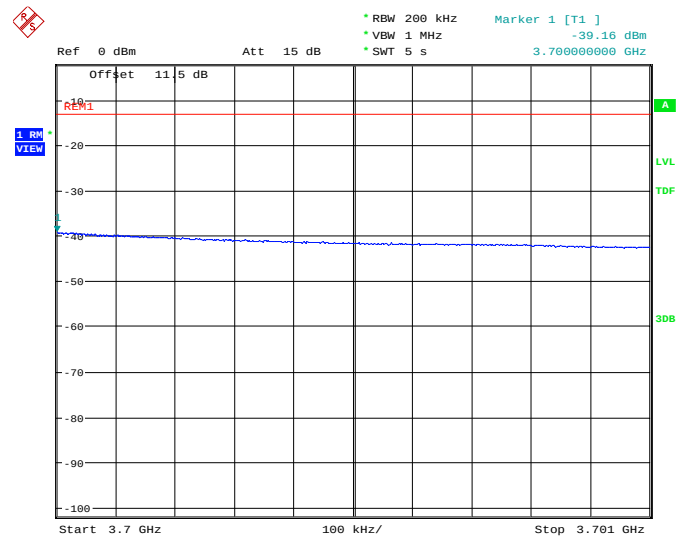
Date: 12.NOV.2024 09:46:28

ACLR



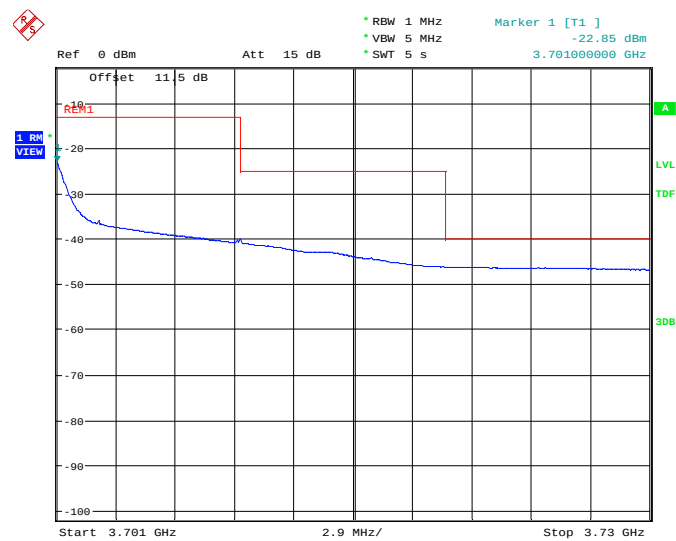
Date: 12.NOV.2024 09:46:55

HIGH BAND EDGE BLOCK-20MHz+20MHz-100%RB



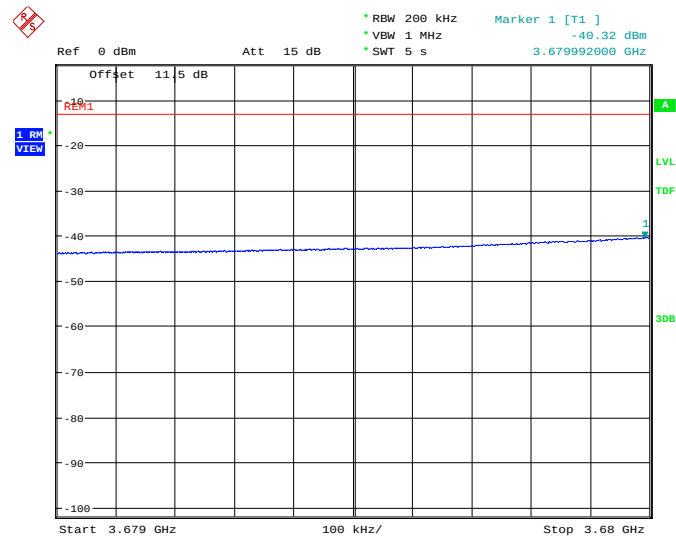
Date: 12.NOV.2024 09:48:51

HIGH BAND EDGE BLOCK-20MHz+20MHz-100%RB



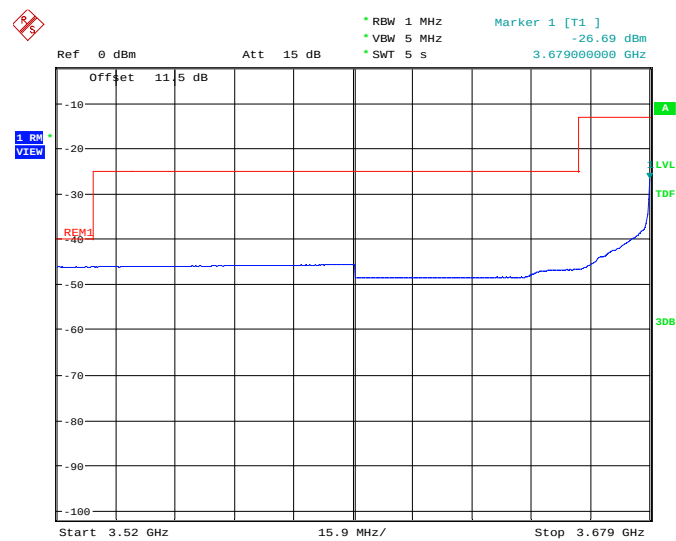
Date: 12.NOV.2024 09:49:33

HIGH BAND EDGE BLOCK-20MHz+20MHz-100%RB



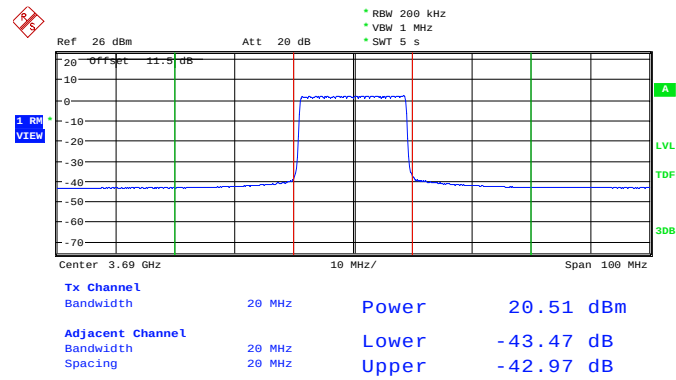
Date: 12.NOV.2024 09:50:15

HIGH BAND EDGE BLOCK-20MHz+20MHz-100%RB



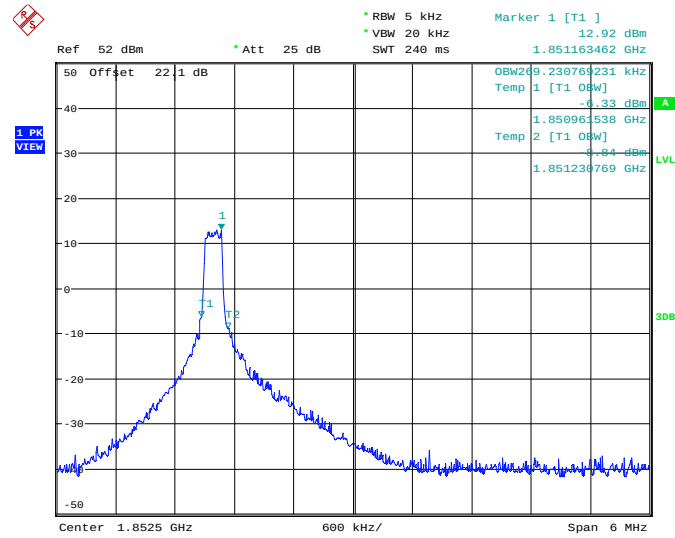
Date: 12.NOV.2024 09:50:59

ACLR



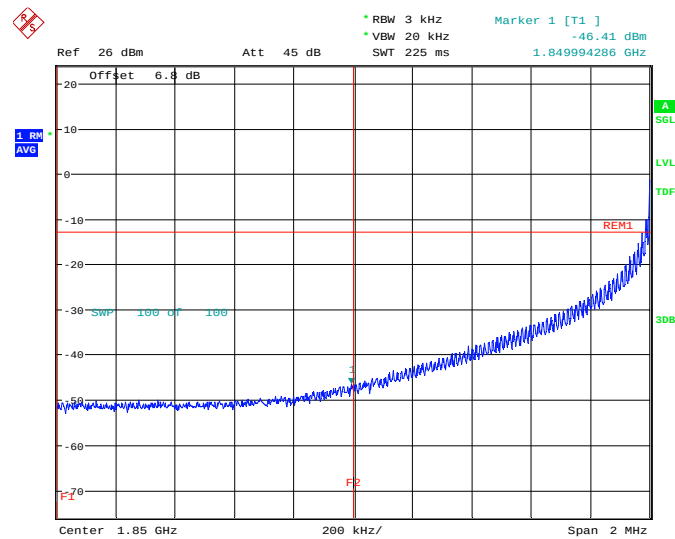
Date: 12.NOV.2024 09:51:25

LTE band 2@CA 2A-66A
OBW: 1RB-LOW_offset



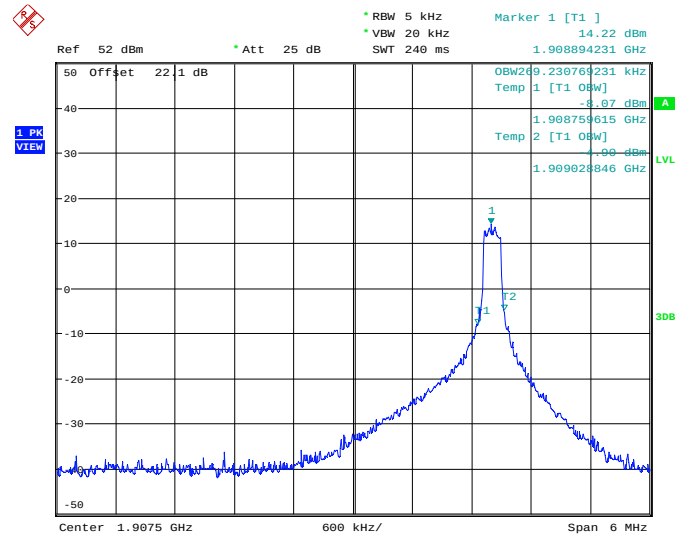
Date: 12.NOV.2024 14:15:44

LOW BAND EDGE BLOCK-1RB-LOW_offset



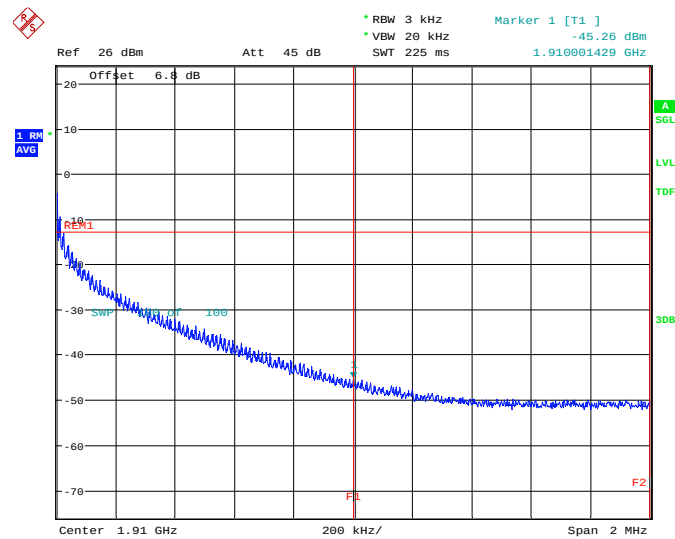
Date: 12.NOV.2024 14:16:28

OBW: 1RB-HIGH_offset



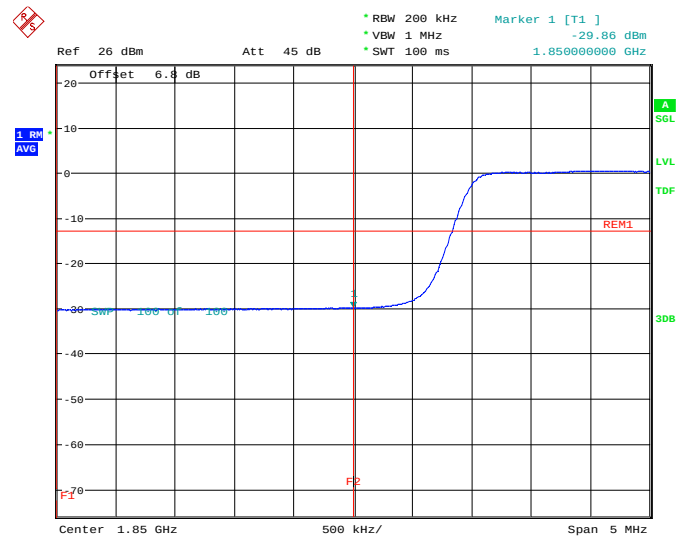
Date: 12.NOV.2024 14:19:15

HIGH BAND EDGE BLOCK-1RB-HIGH_offset



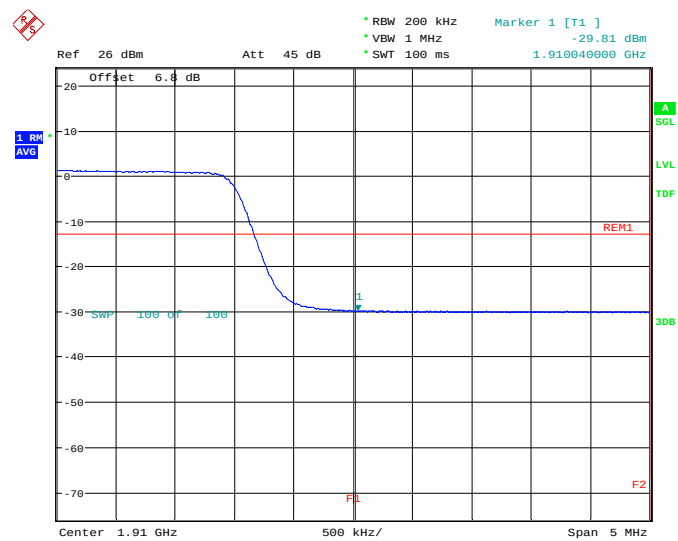
Date: 12.NOV.2024 14:20:19

LOW BAND EDGE BLOCK-20MHz+20MHz-100%RB



Date: 12.NOV.2024 09:55:18

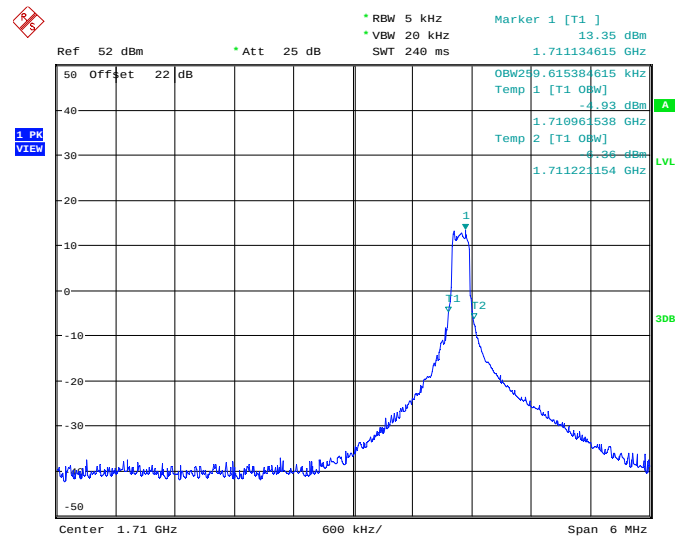
HIGH BAND EDGE BLOCK-20MHz+20MHz-100%RB



Date: 12.NOV.2024 09:57:31

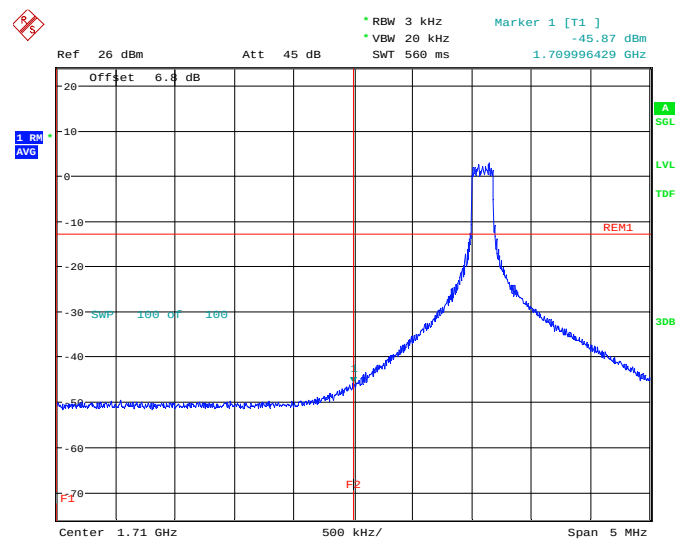
LTE band 66@CA 2A-66A

OBW: 1RB-LOW_offset



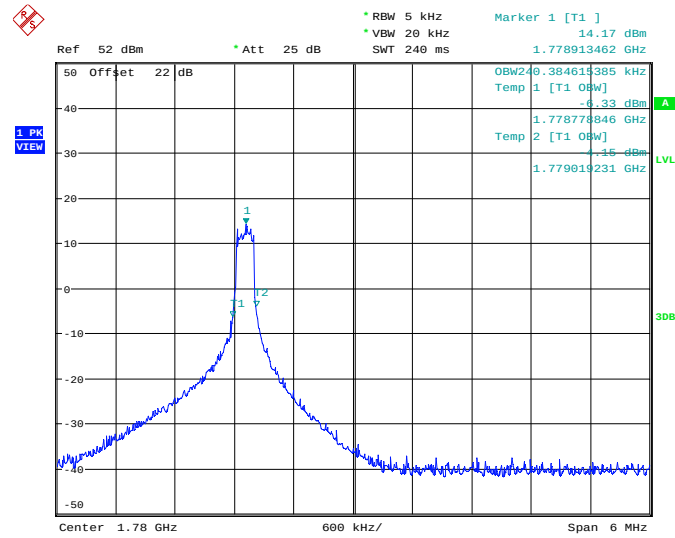
Date: 12.NOV.2024 14:16:49

LOW BAND EDGE BLOCK-1RB-LOW_offset



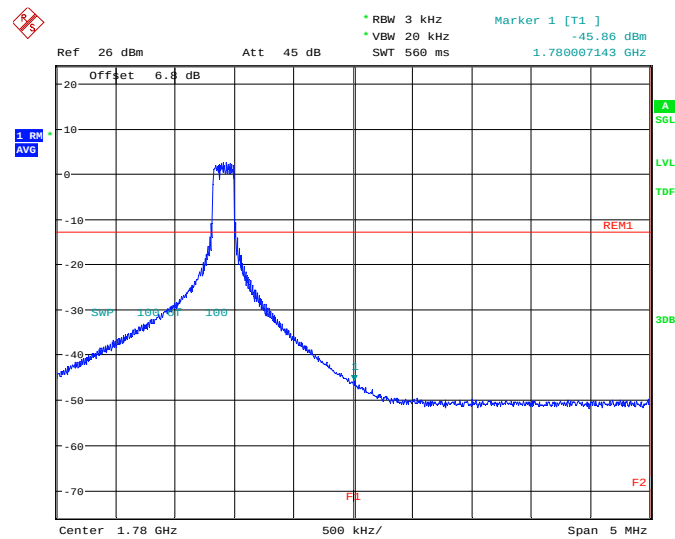
Date: 12.NOV.2024 14:18:24

OBW: 1RB-HIGH_offset



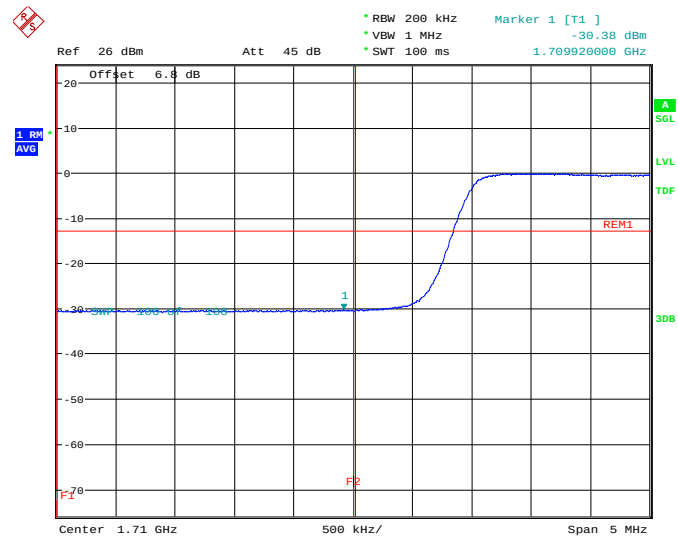
Date: 12.NOV.2024 14:20:41

HIGH BAND EDGE BLOCK-1RB-HIGH_offset



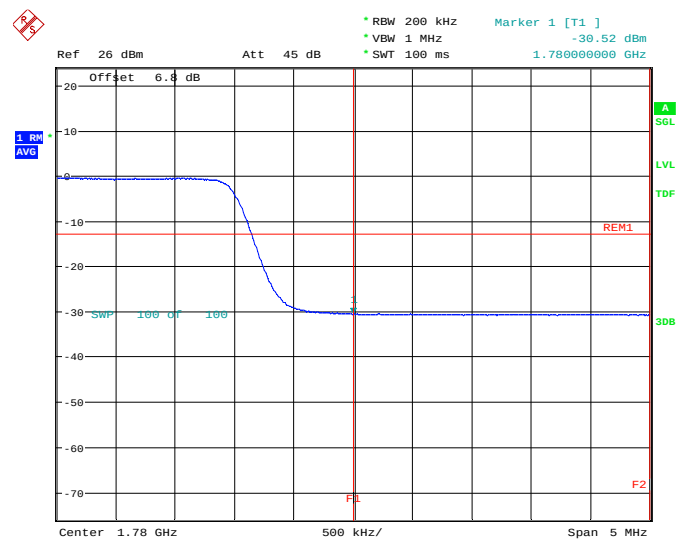
Date: 12.NOV.2024 14:22:24

LOW BAND EDGE BLOCK-20MHz+20MHz-100%RB



Date: 12.NOV.2024 09:56:10

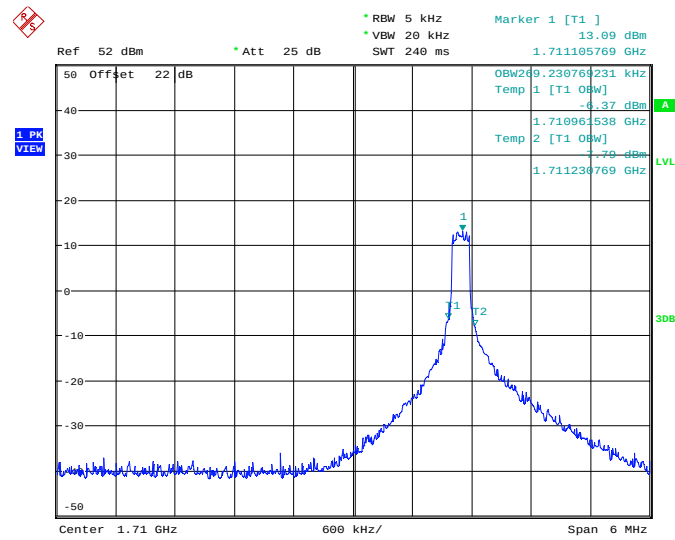
HIGH BAND EDGE BLOCK-20MHz+20MHz-100%RB



Date: 12.NOV.2024 09:58:23

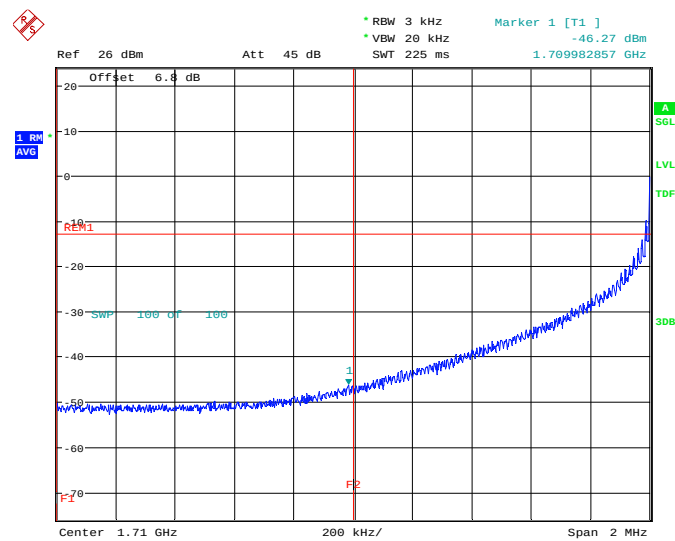
LTE band 4@CA 4A-5A

OBW: 1RB-LOW_offset



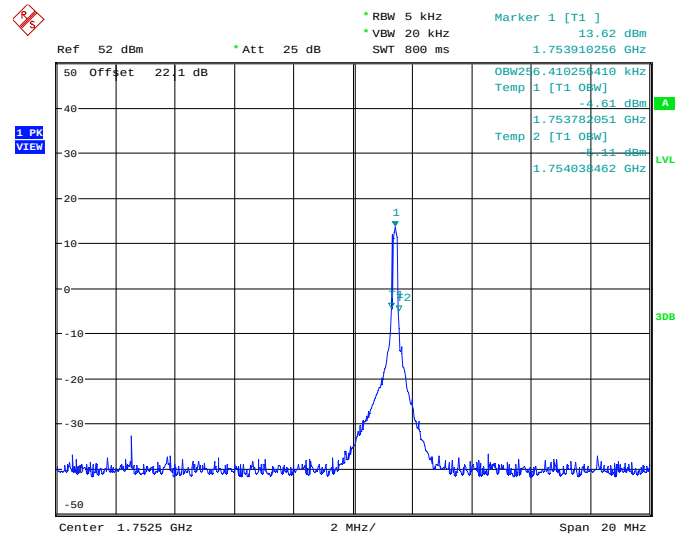
Date: 12.NOV.2024 13:51:42

LOW BAND EDGE BLOCK-1RB-LOW_offset



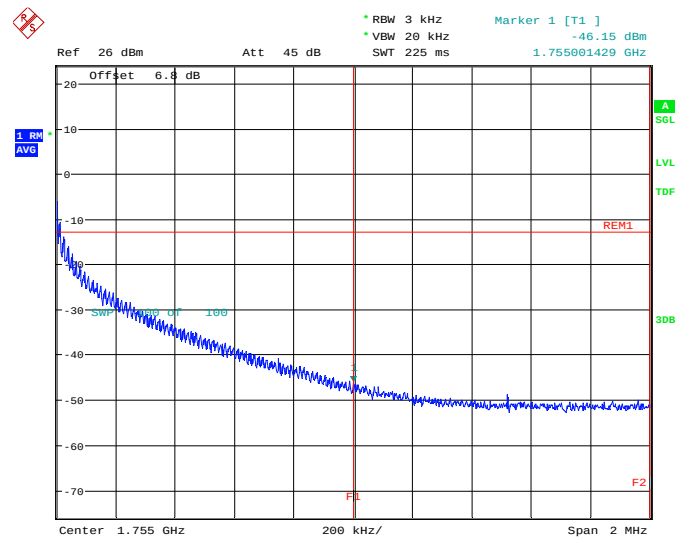
Date: 12.NOV.2024 13:52:27

OBW: 1RB-HIGH_offset



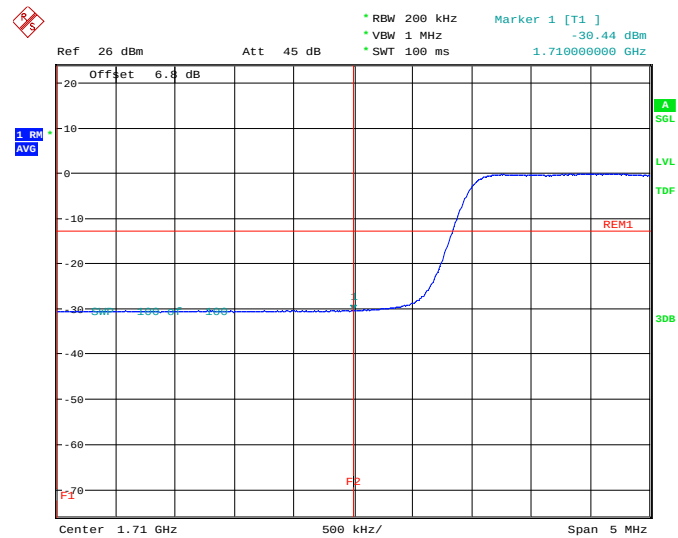
Date: 12.NOV.2024 13:54:54

HIGH BAND EDGE BLOCK-1RB-HIGH_offset



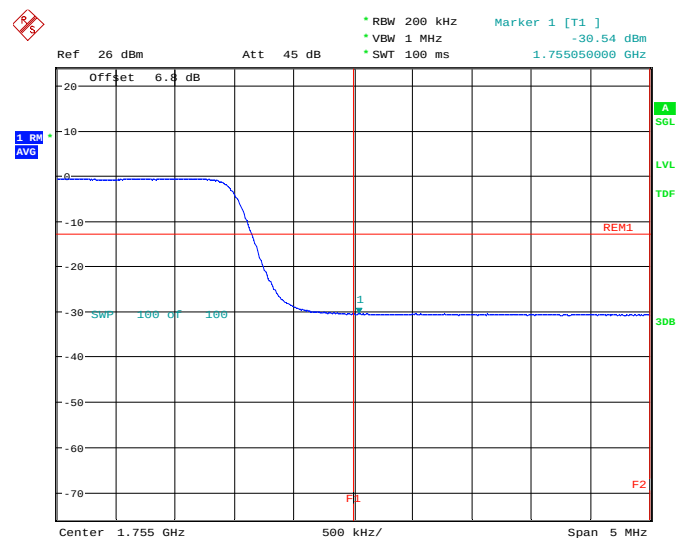
Date: 12.NOV.2024 13:55:38

LOW BAND EDGE BLOCK-20MHz+10MHz-100%RB



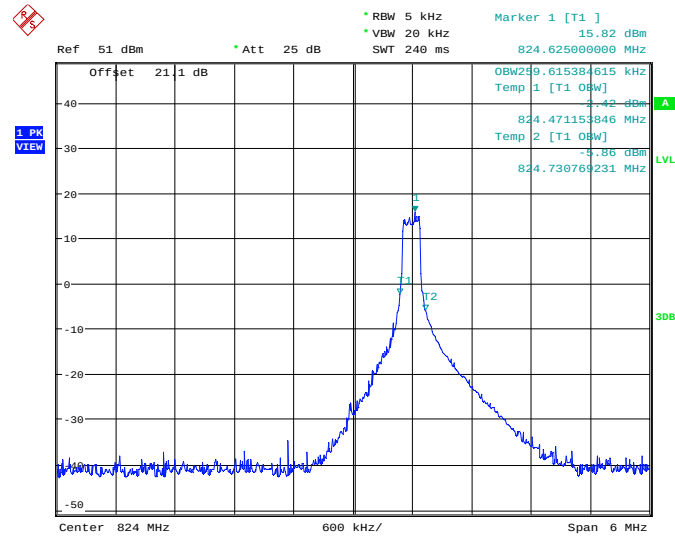
Date: 12.NOV.2024 09:21:03

HIGH BAND EDGE BLOCK-20MHz+10MHz-100%RB



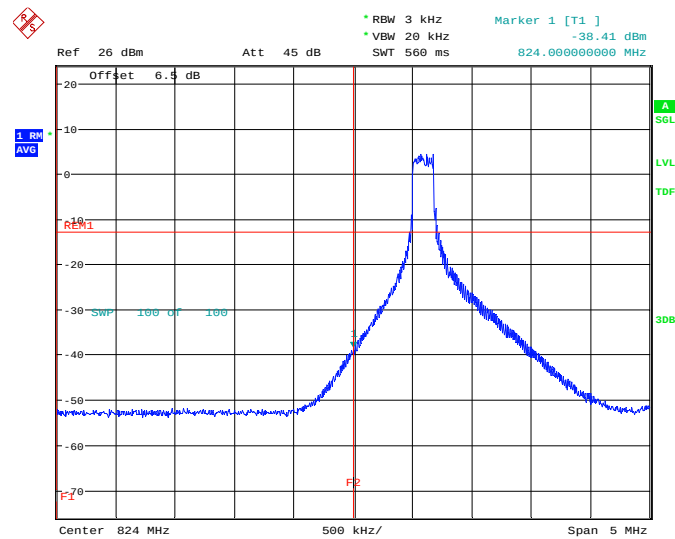
Date: 12.NOV.2024 09:23:14

LTE band 5@CA 4A-5A
OBW: 1RB-LOW_offset



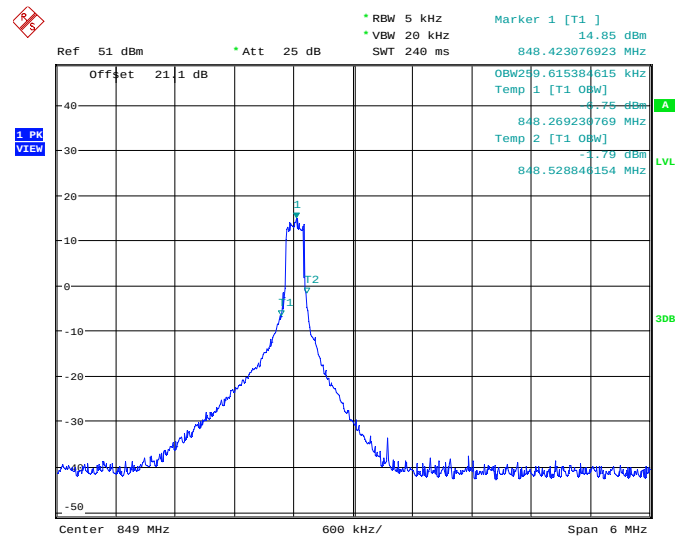
Date: 12.NOV.2024 13:52:48

LOW BAND EDGE BLOCK-1RB-LOW_offset



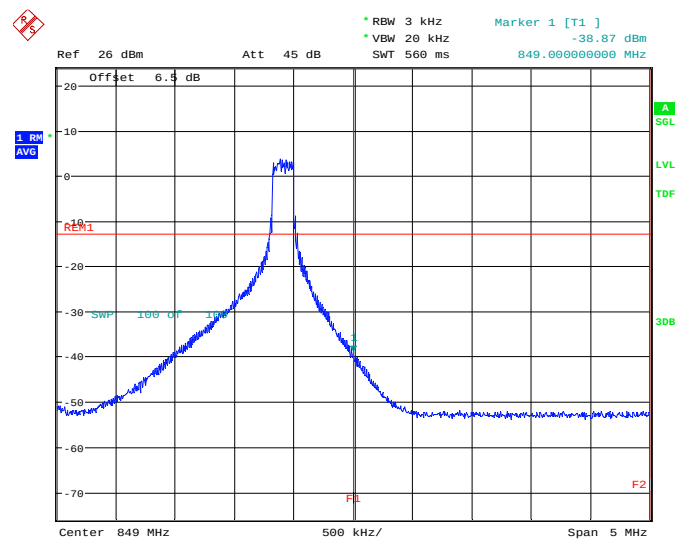
Date: 12.NOV.2024 13:54:04

OBW: 1RB-HIGH_offset



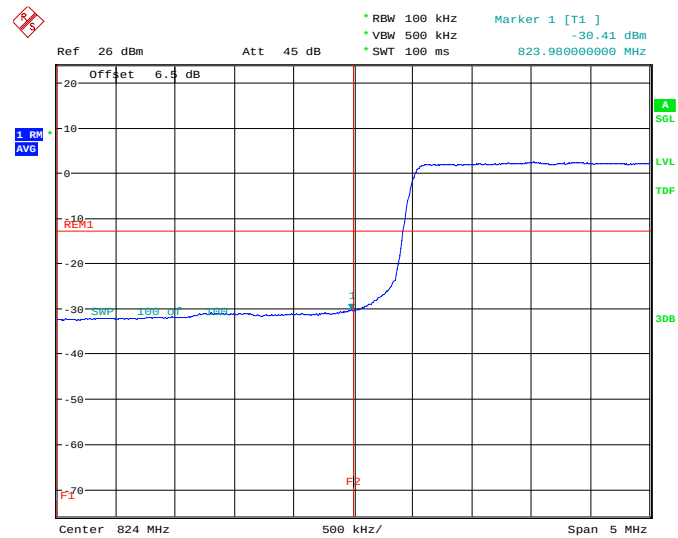
Date: 12.NOV.2024 13:55:59

HIGH BAND EDGE BLOCK-1RB-HIGH_offset



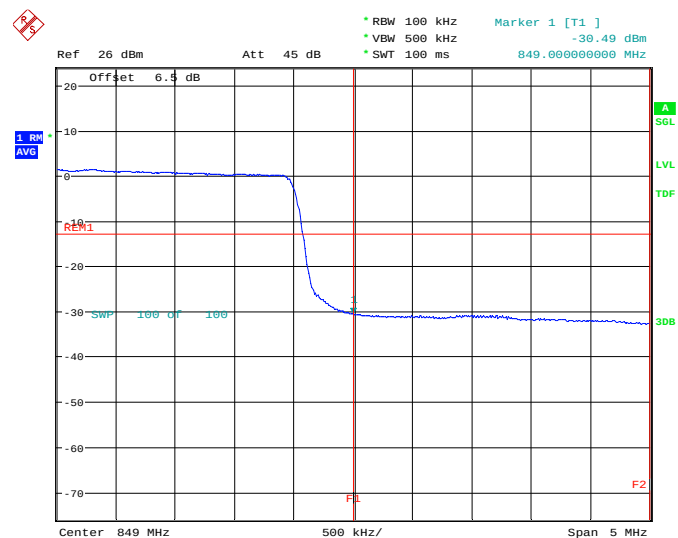
Date: 12.NOV.2024 13:57:18

LOW BAND EDGE BLOCK-20MHz+10MHz-100%RB



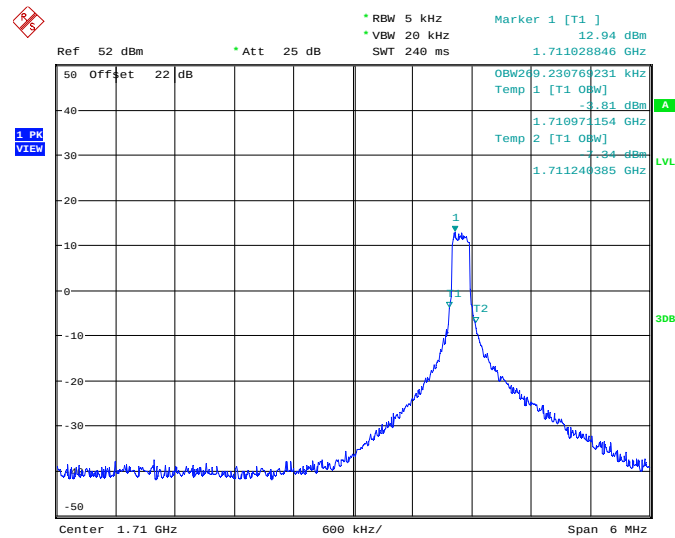
Date: 12.NOV.2024 09:21:54

HIGH BAND EDGE BLOCK-20MHz+10MHz-100%RB



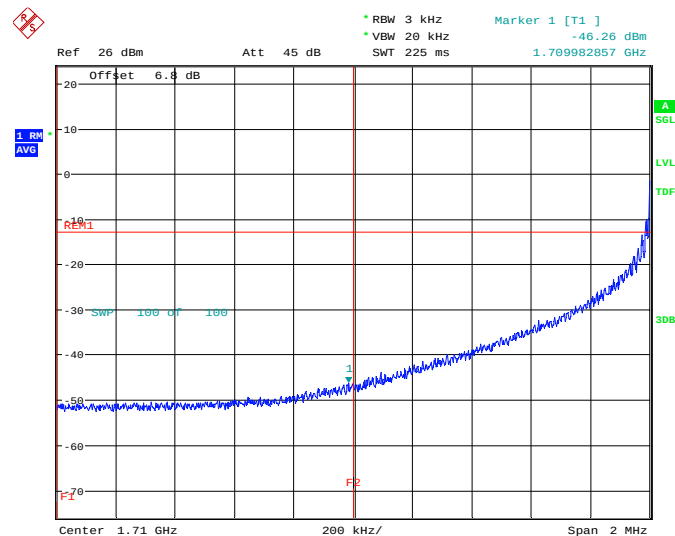
Date: 12.NOV.2024 09:24:05

LTE band 4@CA 4A-13A
OBW: 1RB-LOW_offset



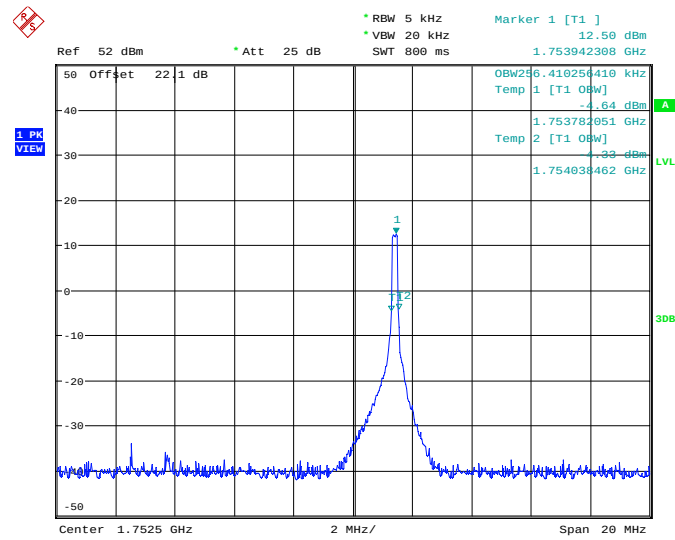
Date: 12.NOV.2024 14:07:32

LOW BAND EDGE BLOCK-1RB-LOW_offset



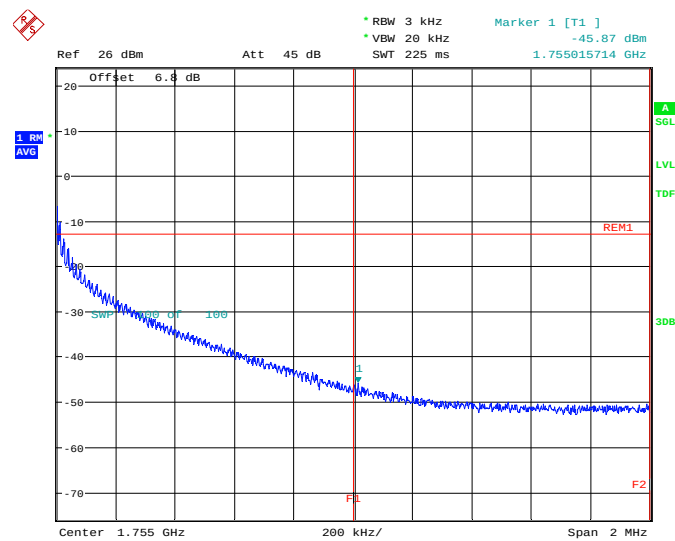
Date: 12.NOV.2024 14:09:24

OBW: 1RB-HIGH_offset



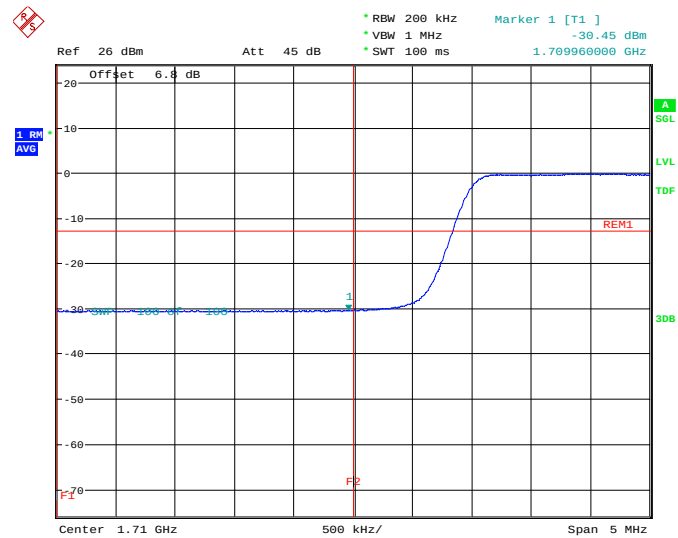
Date: 12.NOV.2024 14:11:54

HIGH BAND EDGE BLOCK-1RB-HIGH_offset



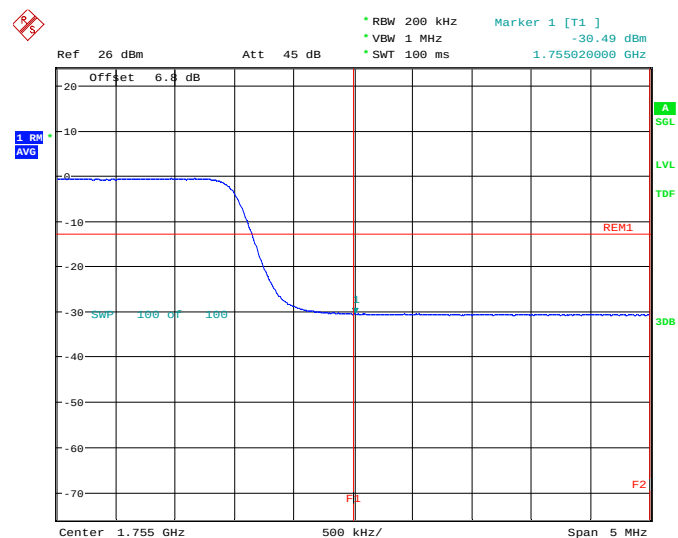
Date: 12.NOV.2024 14:12:57

LOW BAND EDGE BLOCK-20MHz+10MHz-100%RB



Date: 12.NOV.2024 09:31:09

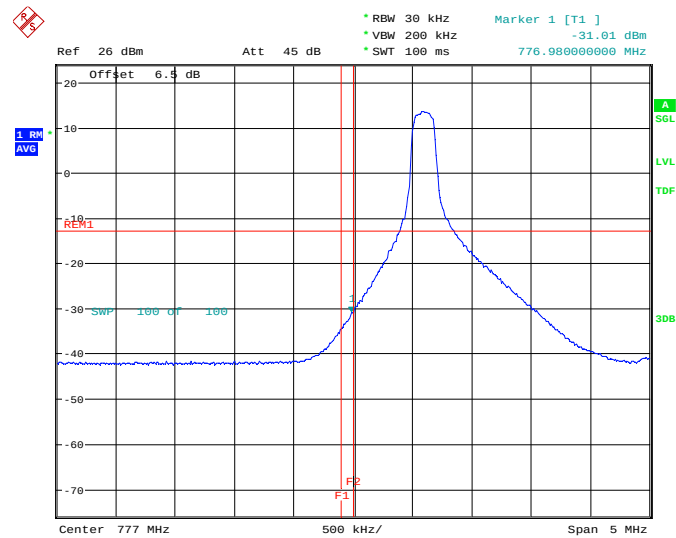
HIGH BAND EDGE BLOCK-20MHz+10MHz-100%RB



Date: 12.NOV.2024 09:33:55

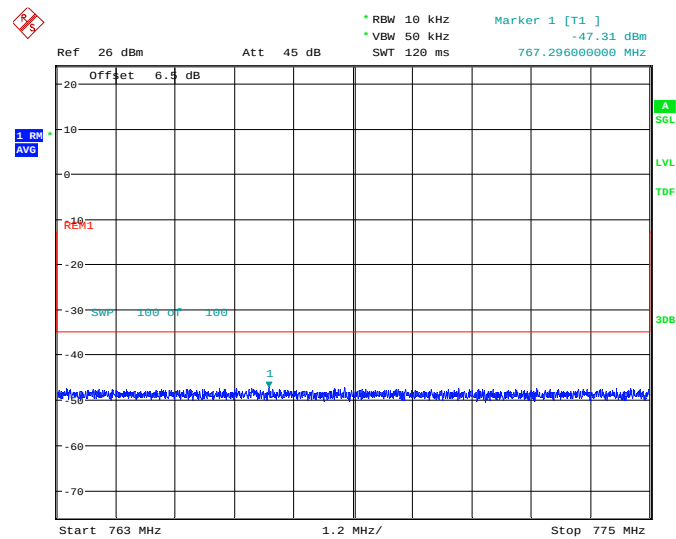
LTE band 13@CA 4A-13A

LOW BAND EDGE BLOCK-1RB-LOW_offset



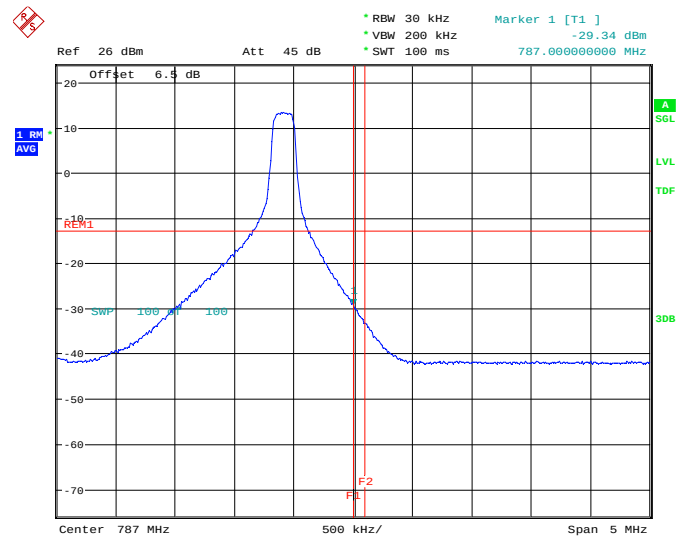
Date: 12.NOV.2024 14:10:16

LOW BAND EDGE BLOCK-1RB-LOW_offset



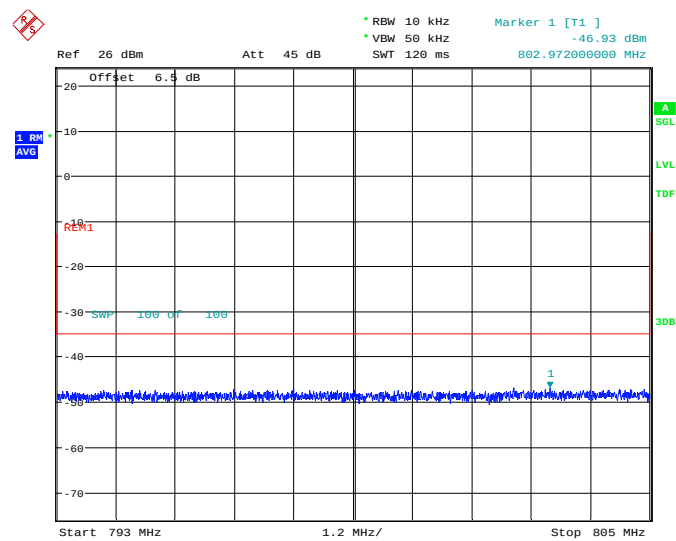
Date: 12.NOV.2024 14:11:12

HIGH BAND EDGE BLOCK-1RB-HIGH_offset



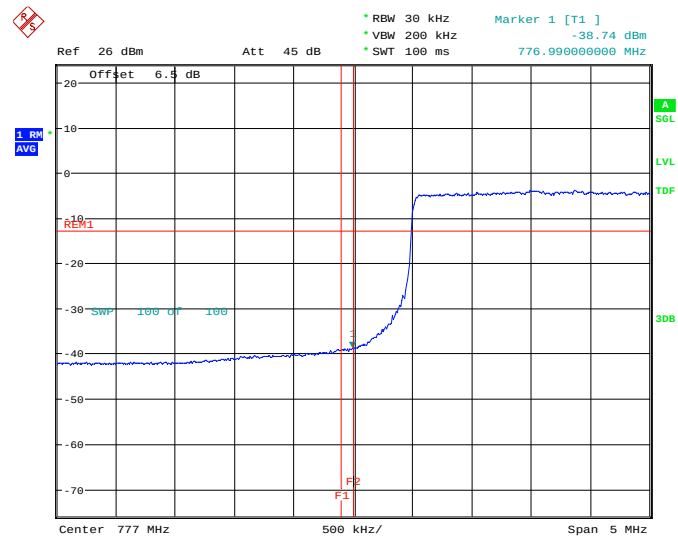
Date: 12.NOV.2024 14:13:49

HIGH BAND EDGE BLOCK-1RB-HIGH_offset



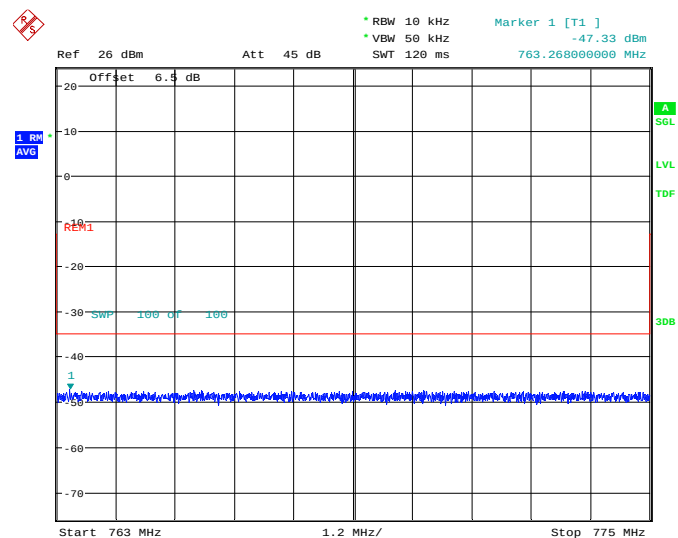
Date: 12.NOV.2024 14:14:47

LOW BAND EDGE BLOCK-20MHz+10MHz-100%RB



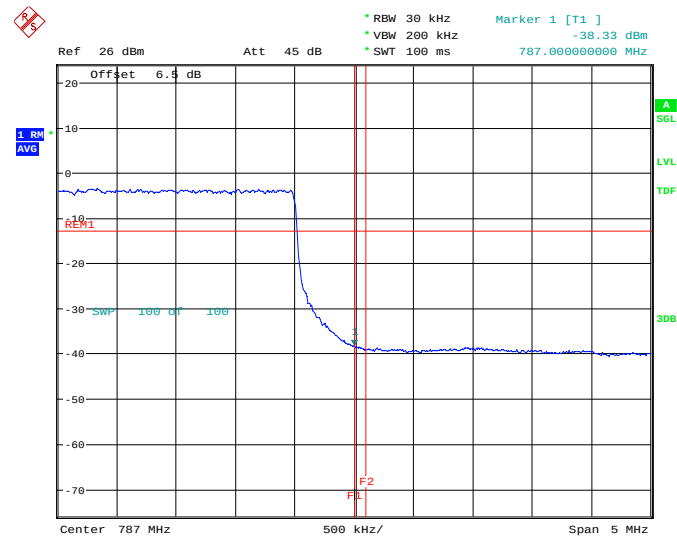
Date: 12.NOV.2024 09:32:00

LOW BAND EDGE BLOCK-20MHz+10MHz-100%RB



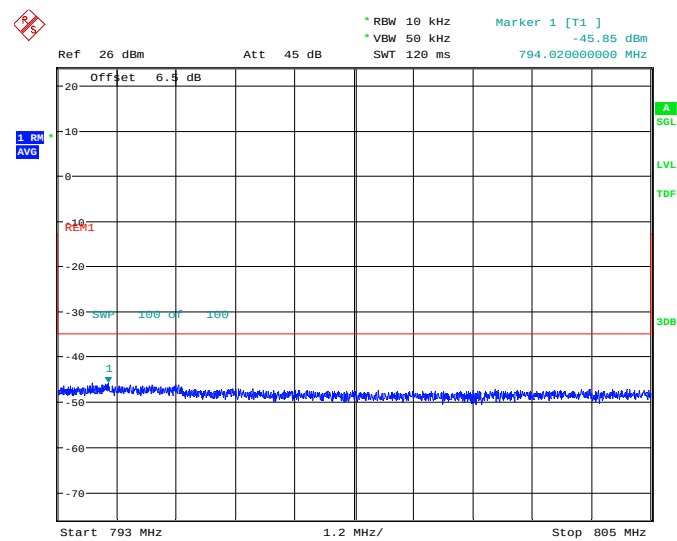
Date: 12.NOV.2024 09:32:56

HIGH BAND EDGE BLOCK-20MHz+10MHz-100%RB



Date: 12.NOV.2024 09:34:46

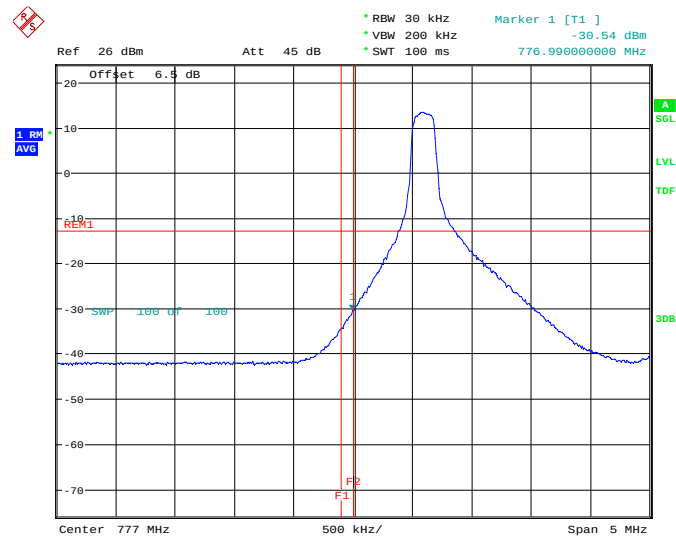
HIGH BAND EDGE BLOCK-20MHz+10MHz-100%RB



Date: 12.NOV.2024 09:35:44

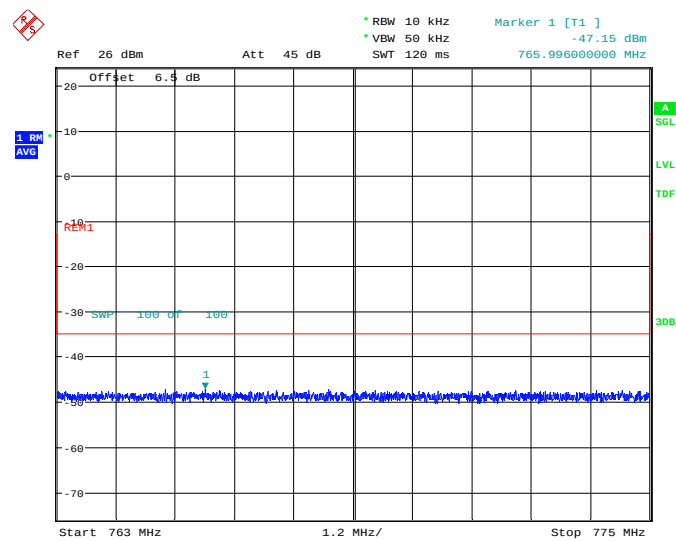
LTE band 13@CA 13A-66A

LOW BAND EDGE BLOCK-1RB-LOW_offset



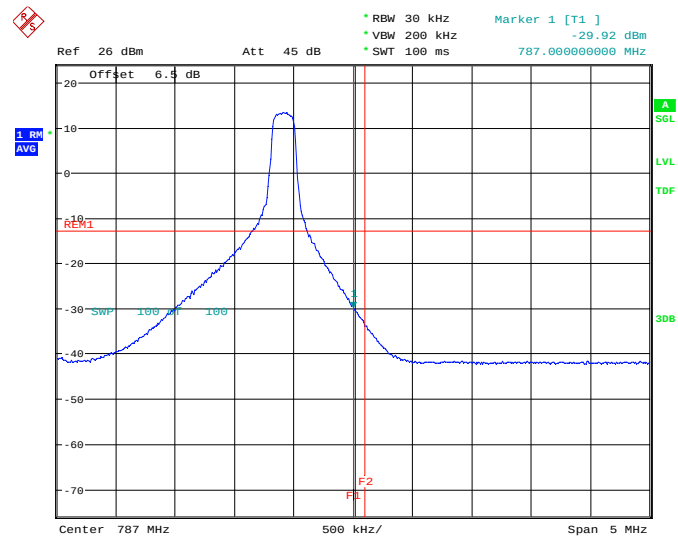
Date: 12.NOV.2024 14:24:05

LOW BAND EDGE BLOCK-1RB-LOW_offset



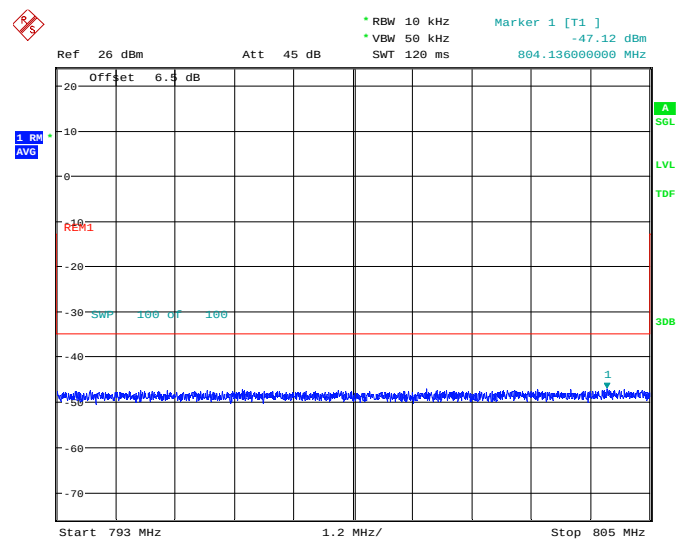
Date: 12.NOV.2024 14:25:02

HIGH BAND EDGE BLOCK-1RB-HIGH_offset



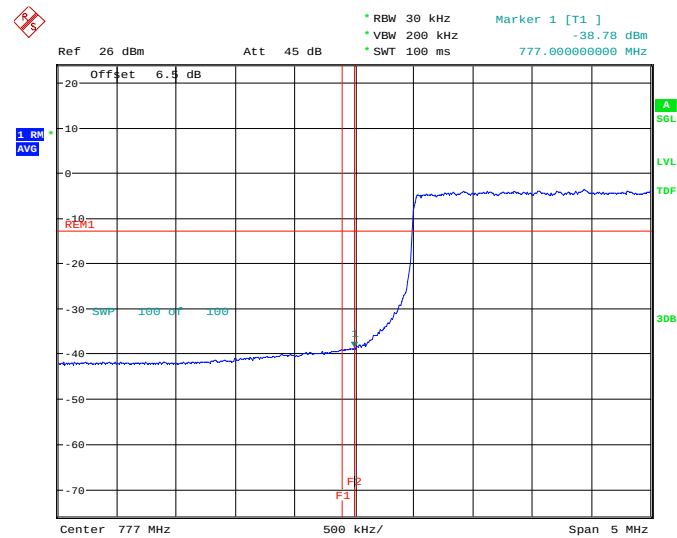
Date: 12.NOV.2024 14:27:56

HIGH BAND EDGE BLOCK-1RB-HIGH_offset



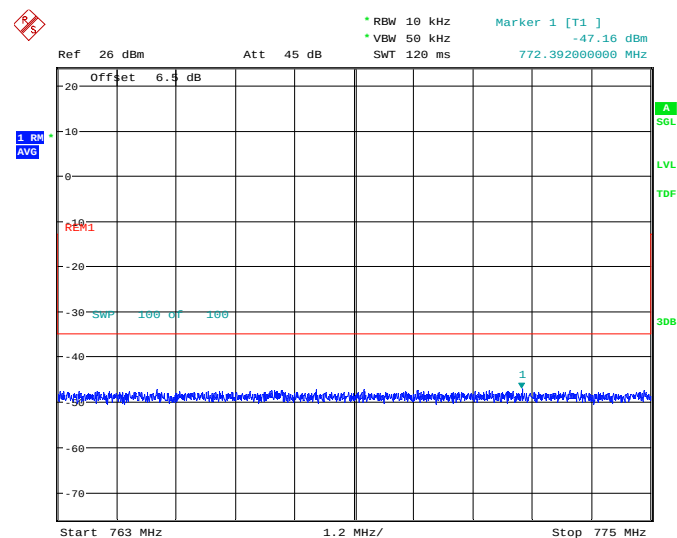
Date: 12.NOV.2024 14:28:54

LOW BAND EDGE BLOCK-10MHz+20MHz-100%RB



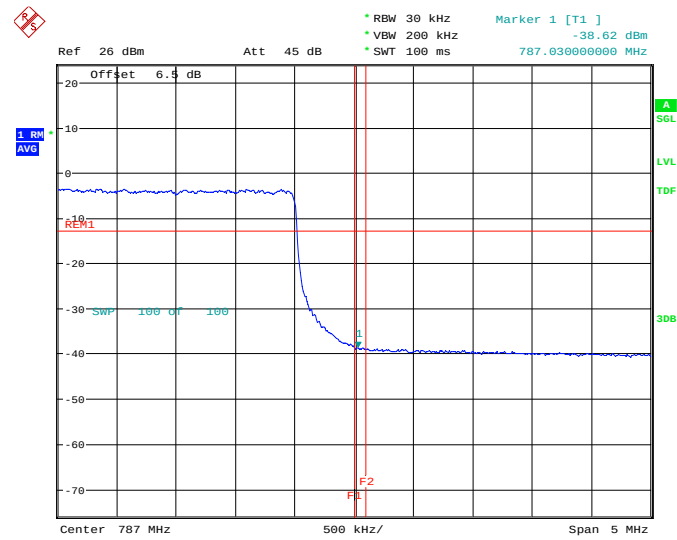
Date: 12.NOV.2024 10:00:04

LOW BAND EDGE BLOCK-10MHz+20MHz-100%RB



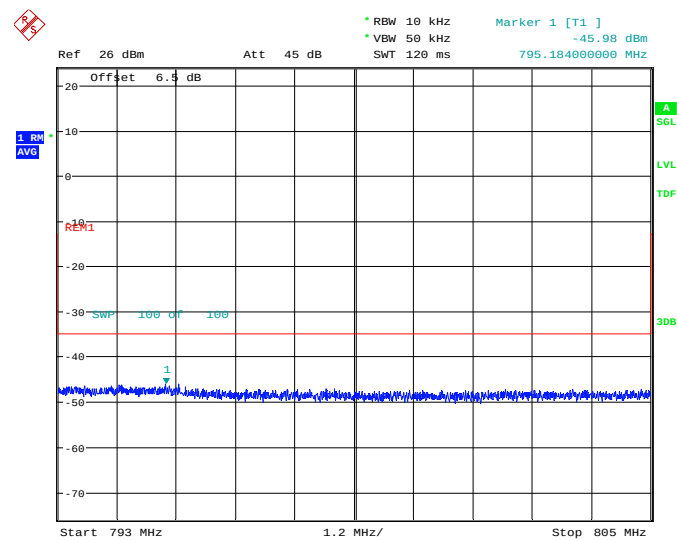
Date: 12.NOV.2024 10:01:00

HIGH BAND EDGE BLOCK-10MHz+20MHz-100%RB



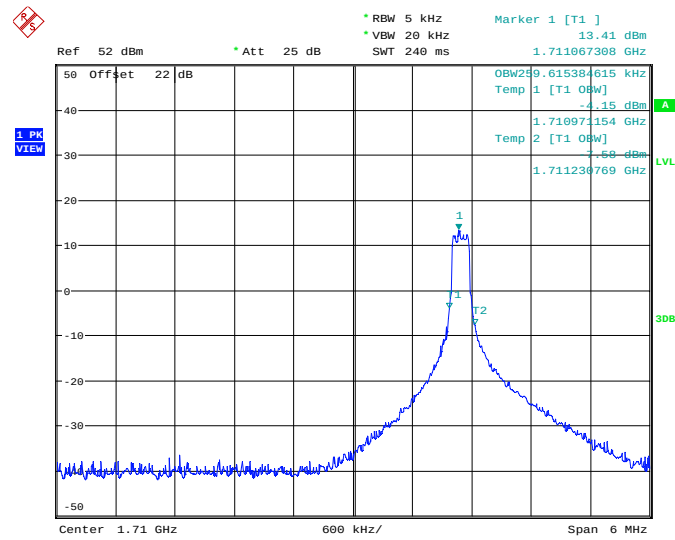
Date: 12.NOV.2024 10:03:09

HIGH BAND EDGE BLOCK-10MHz+20MHz-100%RB



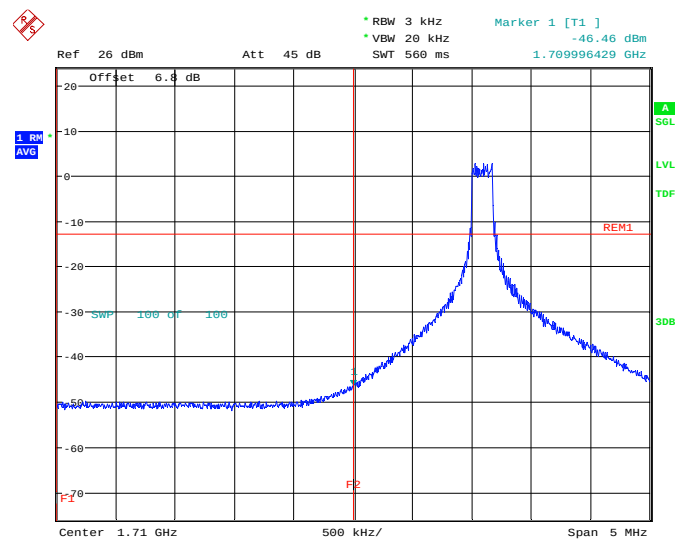
Date: 12.NOV.2024 10:04:07

LTE band 66@CA 13A-66A
OBW: 1RB-LOW_offset



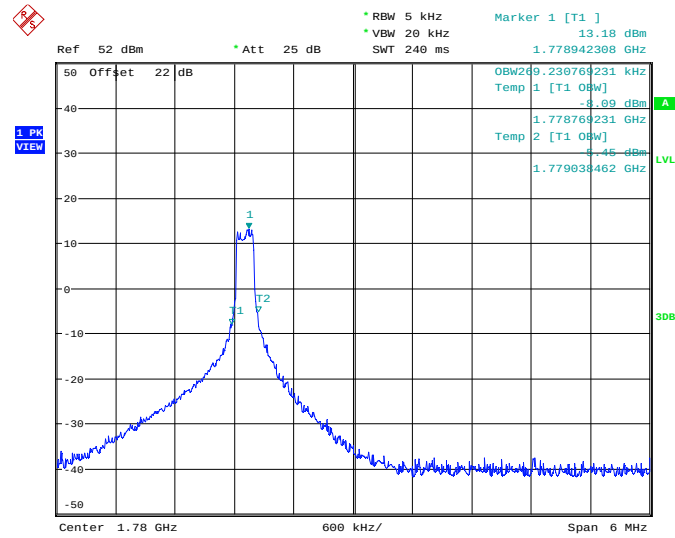
Date: 12.NOV.2024 14:25:23

LOW BAND EDGE BLOCK-1RB-LOW_offset



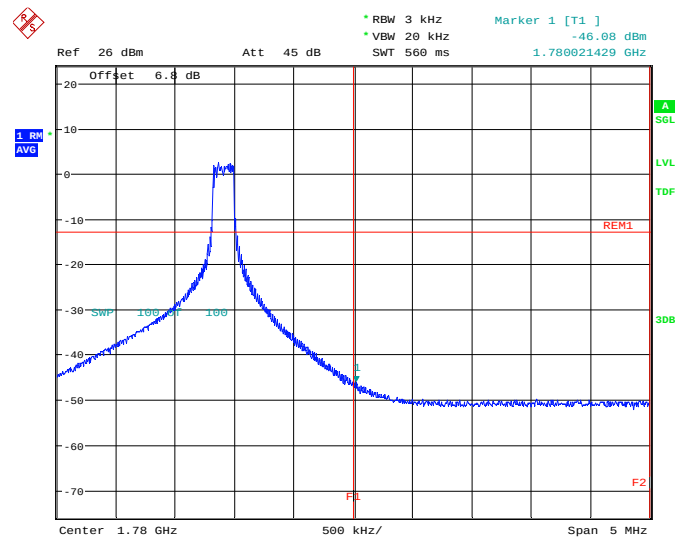
Date: 12.NOV.2024 14:26:39

OBW: 1RB-HIGH_offset



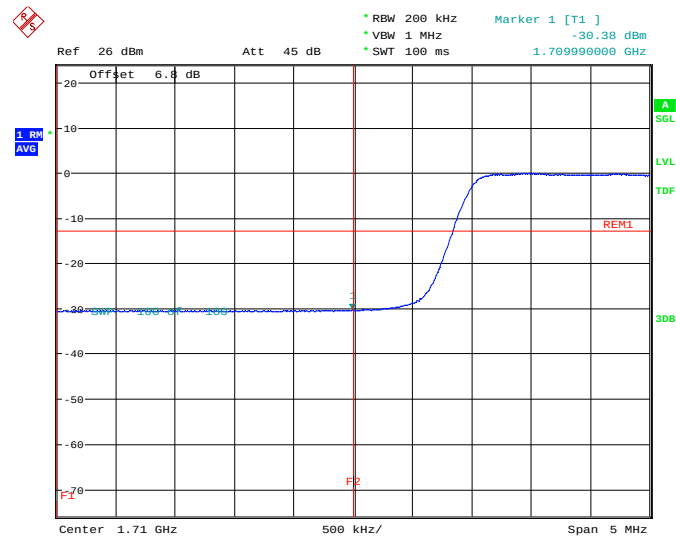
Date: 12.NOV.2024 14:29:16

HIGH BAND EDGE BLOCK-1RB-HIGH_offset



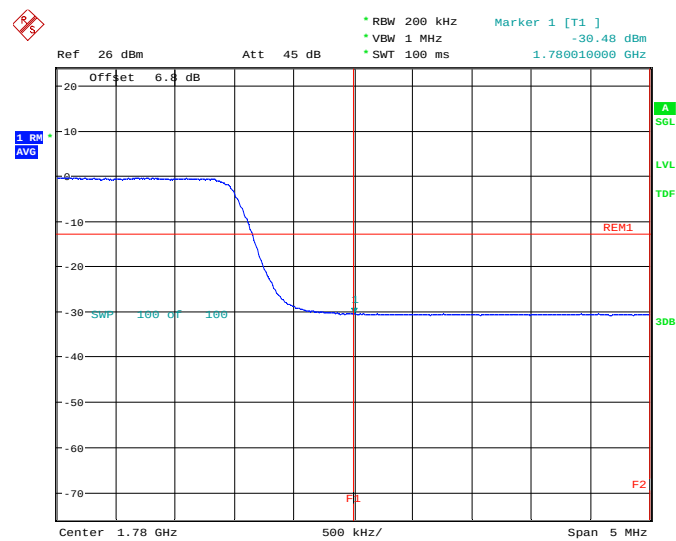
Date: 12.NOV.2024 14:30:54

LOW BAND EDGE BLOCK-10MHz+20MHz-100%RB



Date: 12.NOV.2024 10:01:53

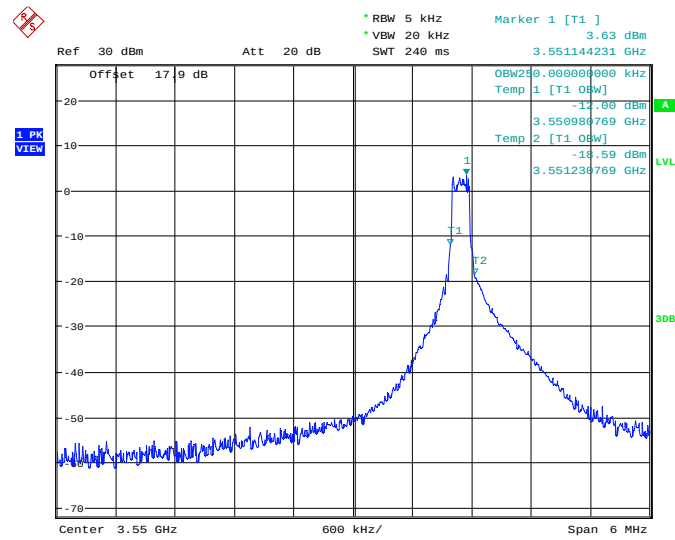
HIGH BAND EDGE BLOCK-10MHz+20MHz-100%RB



Date: 12.NOV.2024 10:04:59

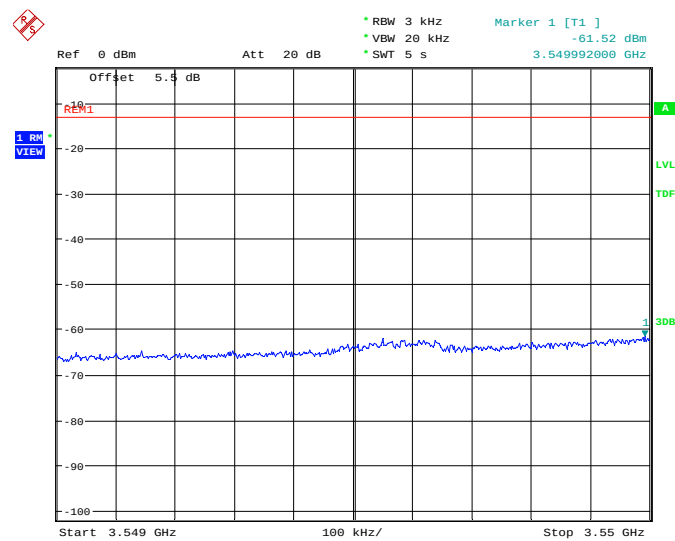
LTE CA band 48C

OBW: 1RB-low_offset



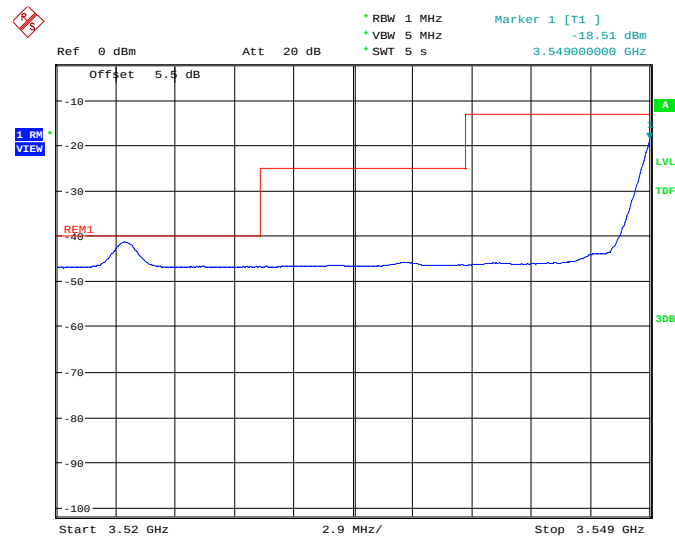
Date: 13.NOV.2024 14:05:57

LOW BAND EDGE BLOCK-1RB-low_offset



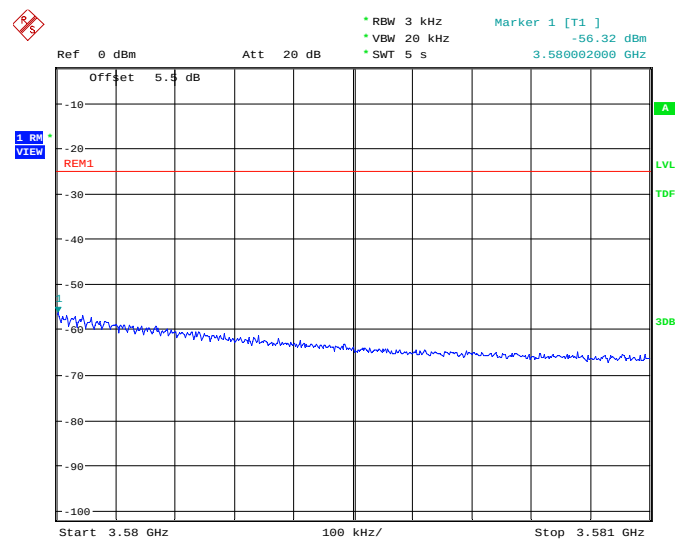
Date: 13.NOV.2024 14:06:39

LOW BAND EDGE BLOCK-1RB-low_offset



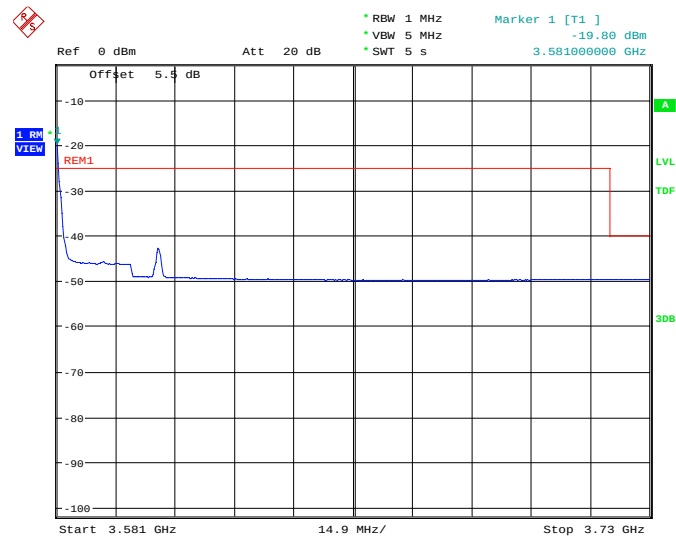
Date: 13.NOV.2024 14:07:21

LOW BAND EDGE BLOCK-1RB-low_offset



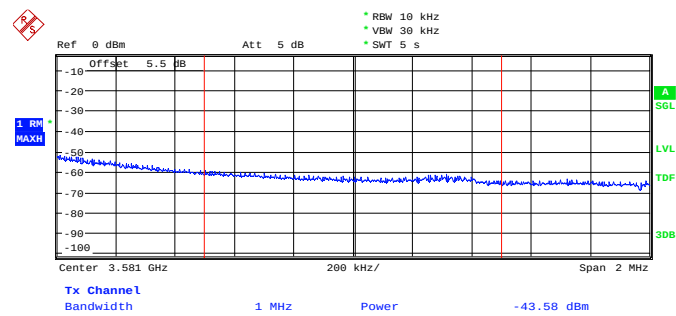
Date: 13.NOV.2024 14:08:03

LOW BAND EDGE BLOCK-1RB-low_offset



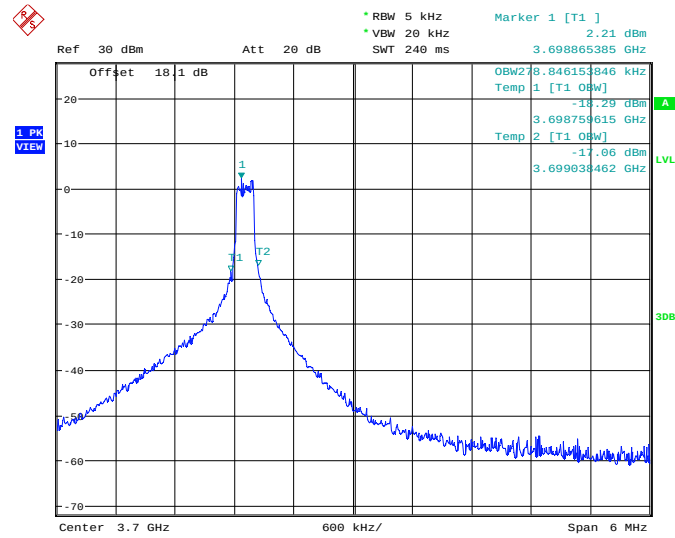
Date: 13.NOV.2024 14:08:46

Channel power



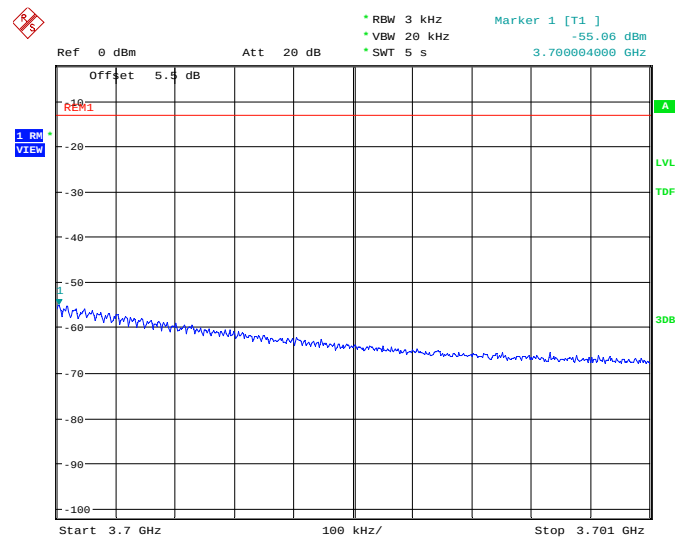
Date: 13.NOV.2024 14:09:37

OBW: 1RB-high_offset



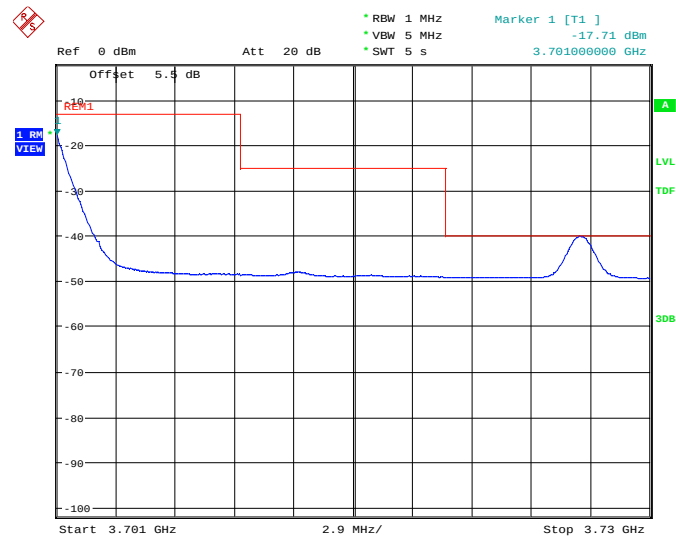
Date: 13.NOV.2024 13:59:31

HIGH BAND EDGE BLOCK-1RB-high_offset



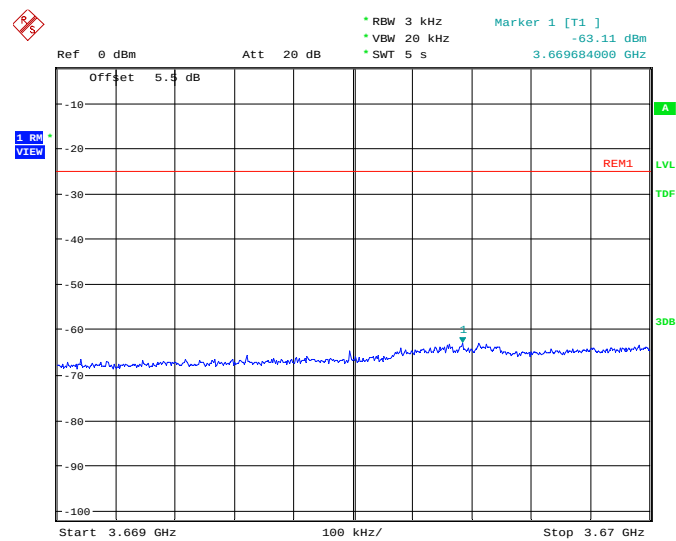
Date: 13.NOV.2024 14:00:13

HIGH BAND EDGE BLOCK-1RB-high_offset



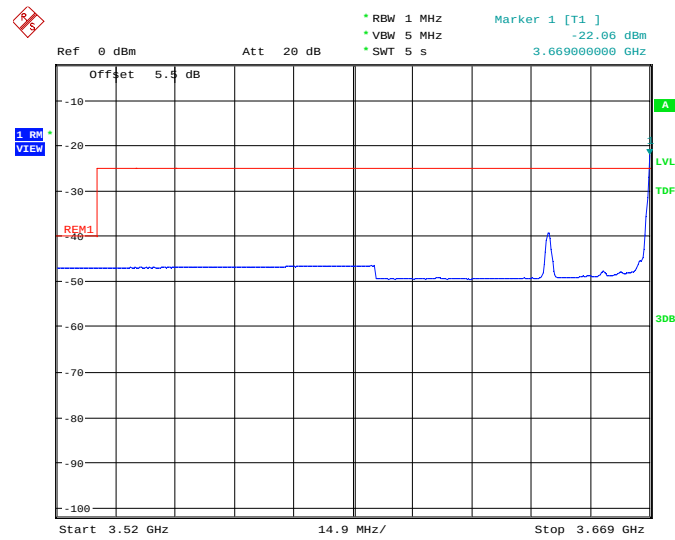
Date: 13.NOV.2024 14:00:56

HIGH BAND EDGE BLOCK-1RB-high_offset



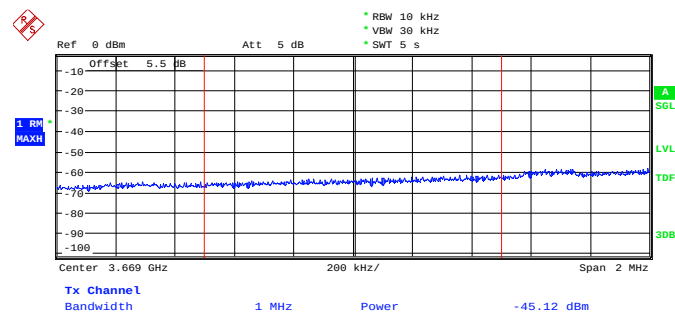
Date: 13.NOV.2024 14:01:38

HIGH BAND EDGE BLOCK-1RB-high_offset



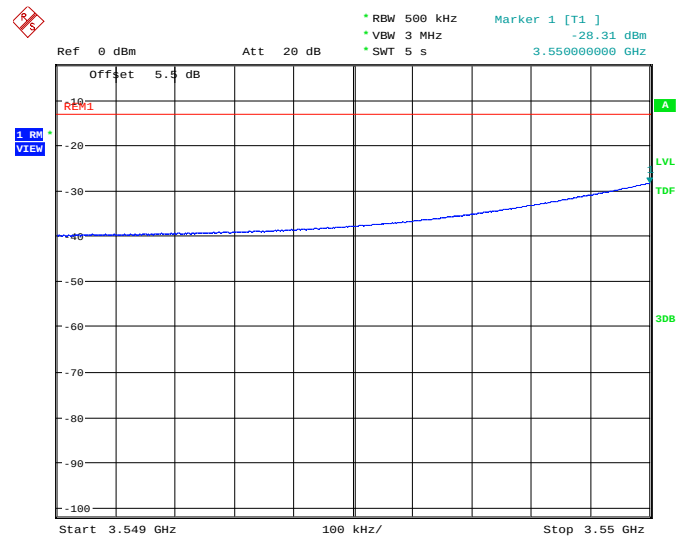
Date: 13.NOV.2024 14:02:21

Channel power



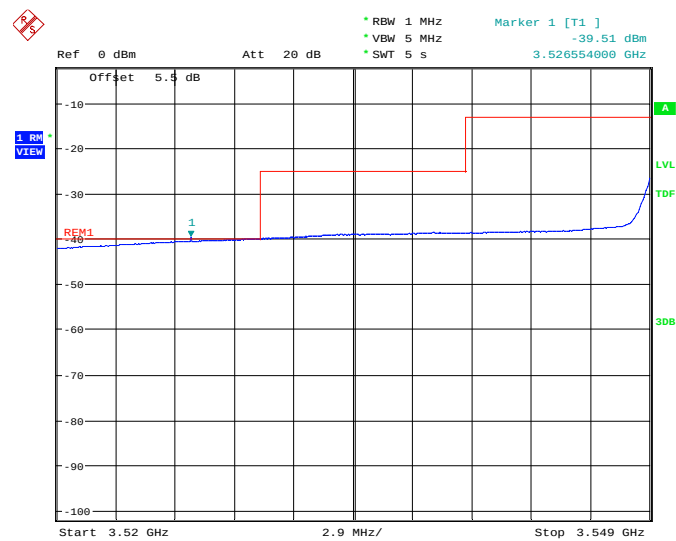
Date: 13.NOV.2024 14:03:13

LOW BAND EDGE BLOCK-20MHz+20MHz-100%RB



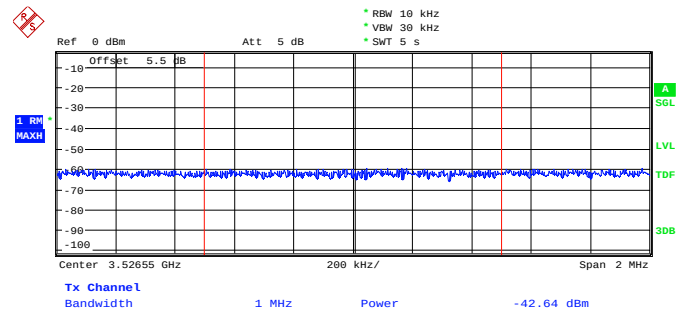
Date: 11.NOV.2024 12:01:32

LOW BAND EDGE BLOCK-20MHz+20MHz-100%RB



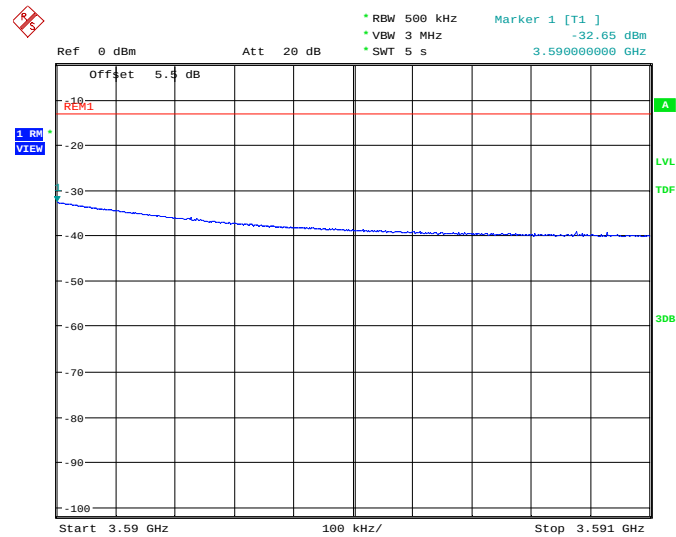
Date: 11.NOV.2024 12:02:14

Channel power



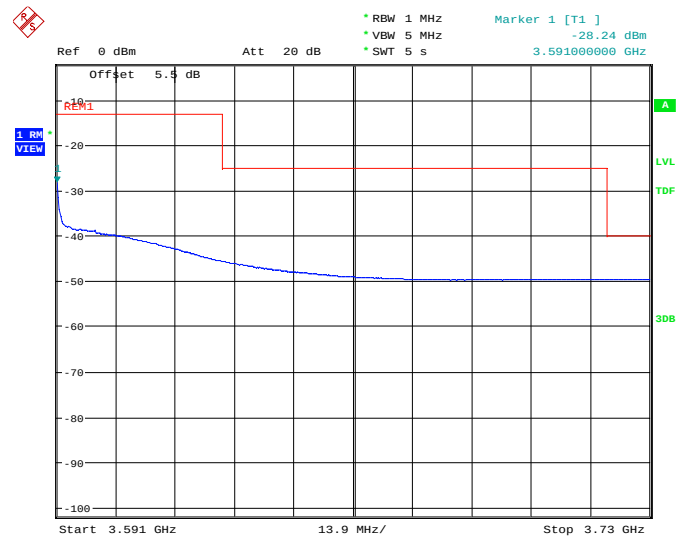
Date: 11.NOV.2024 12:03:06

LOW BAND EDGE BLOCK-20MHz+20MHz-100%RB



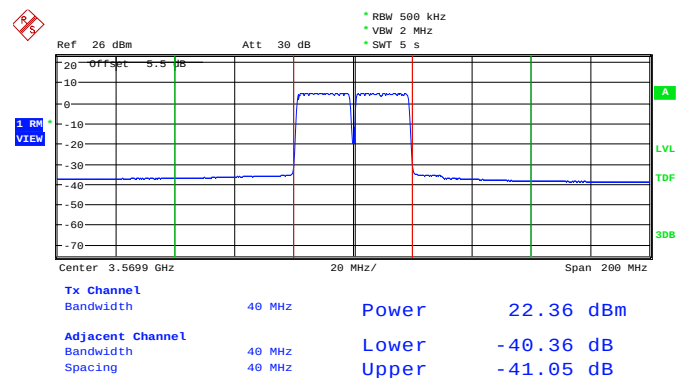
Date: 11.NOV.2024 12:03:48

LOW BAND EDGE BLOCK-20MHz+20MHz-100%RB



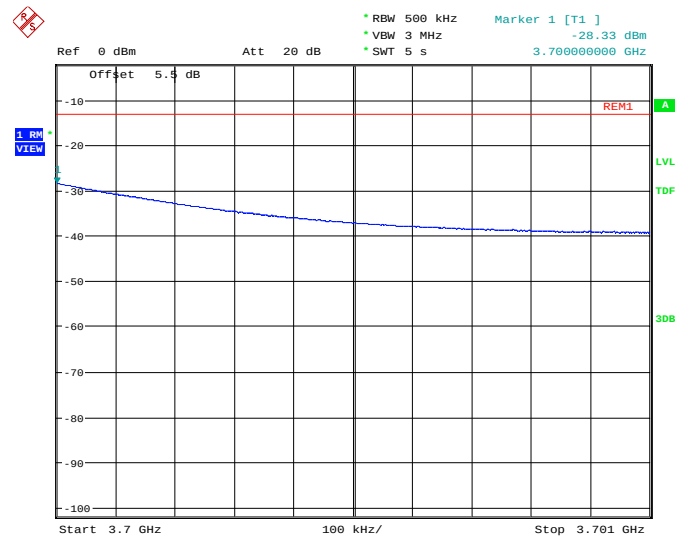
Date: 11.NOV.2024 12:04:30

ACLR



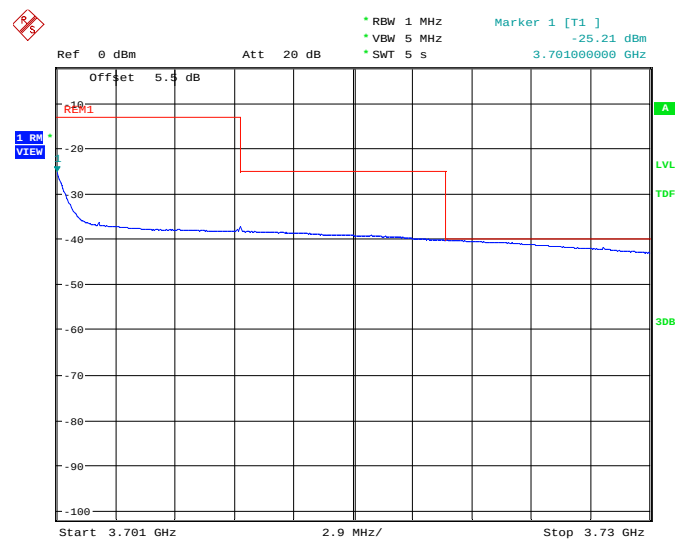
Date: 11.NOV.2024 12:04:57

HIGH BAND EDGE BLOCK-20MHz+20MHz-100%RB



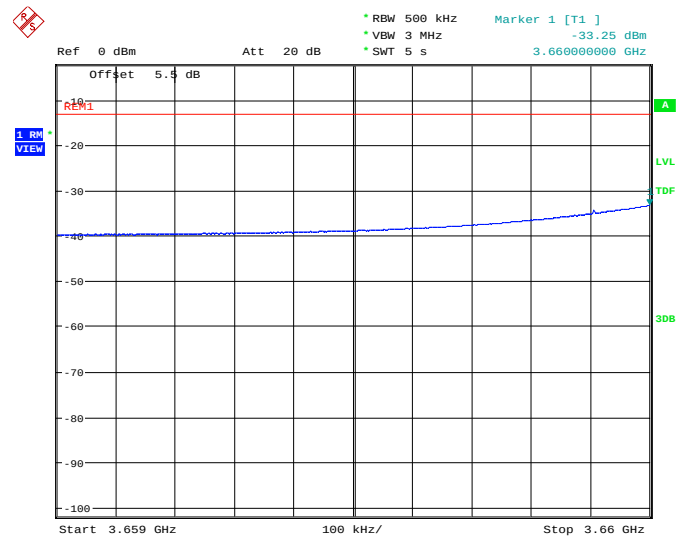
Date: 11.NOV.2024 12:06:17

HIGH BAND EDGE BLOCK-20MHz+20MHz-100%RB



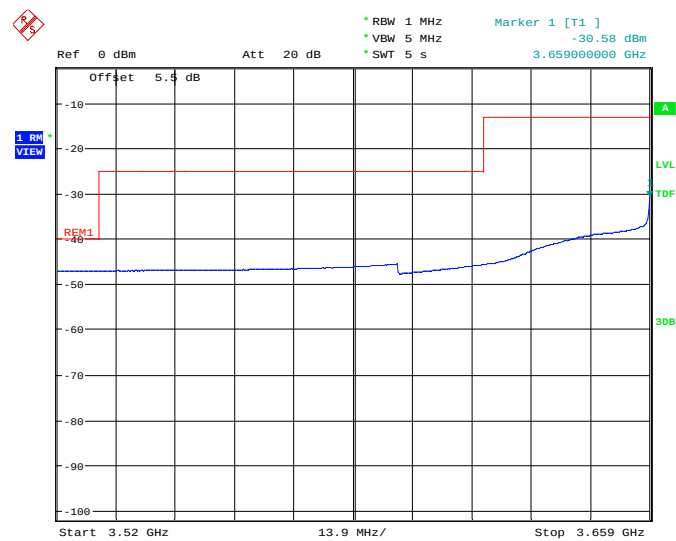
Date: 11.NOV.2024 12:06:59

HIGH BAND EDGE BLOCK-20MHz+20MHz-100%RB



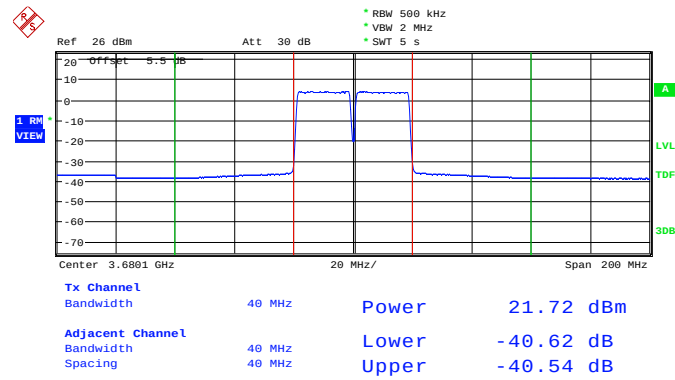
Date: 11.NOV.2024 12:07:41

HIGH BAND EDGE BLOCK-20MHz+20MHz-100%RB



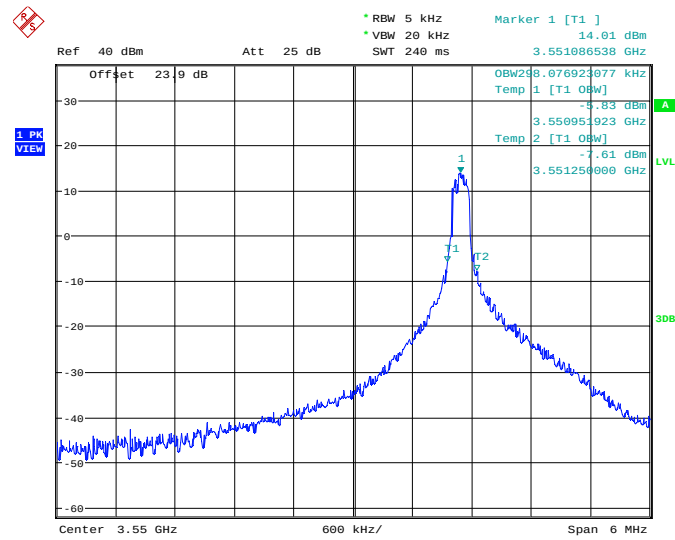
Date: 11.NOV.2024 12:08:24

ACLR



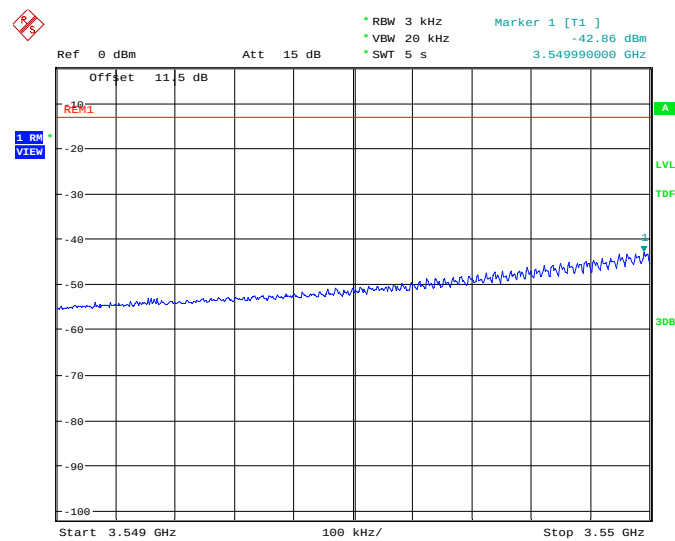
Date: 11.NOV.2024 12:08:51

LTE band 48@CA 48A-66A
OBW: 1RB-LOW_offset



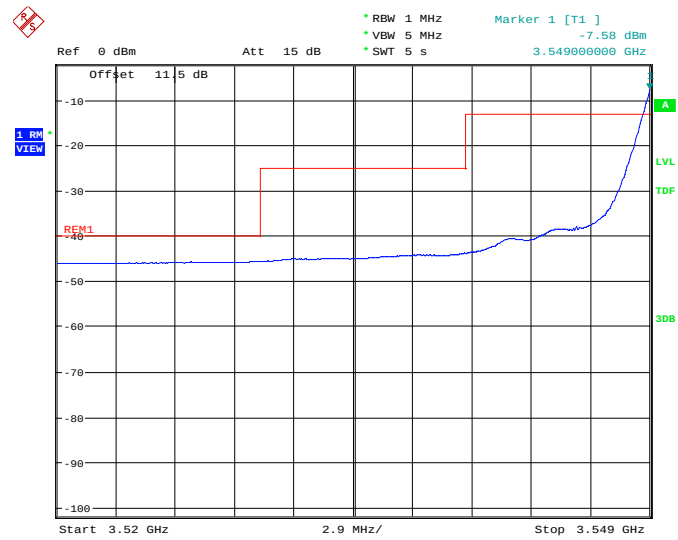
Date: 12.NOV.2024 10:51:42

LOW BAND EDGE BLOCK-1RB-LOW_offset



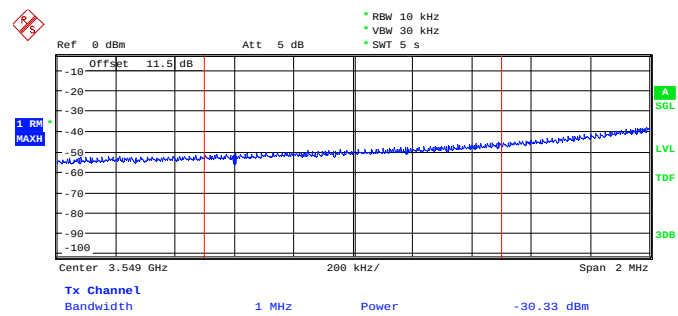
Date: 12.NOV.2024 10:52:25

LOW BAND EDGE BLOCK-1RB-LOW_offset



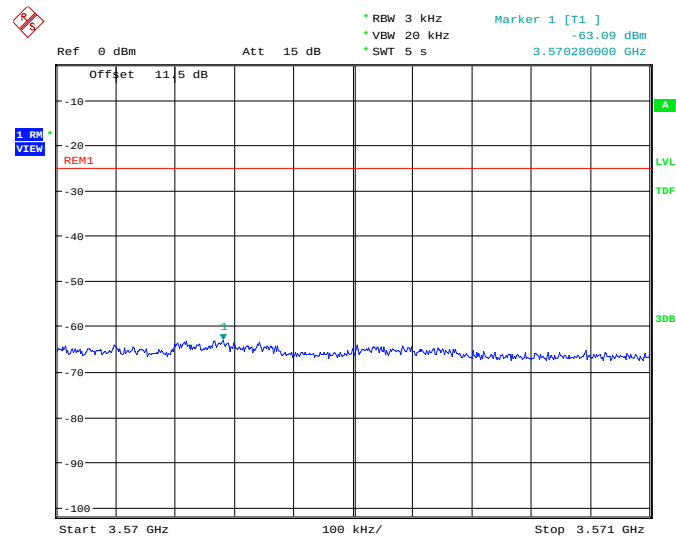
Date: 12.NOV.2024 10:53:07

Channel power



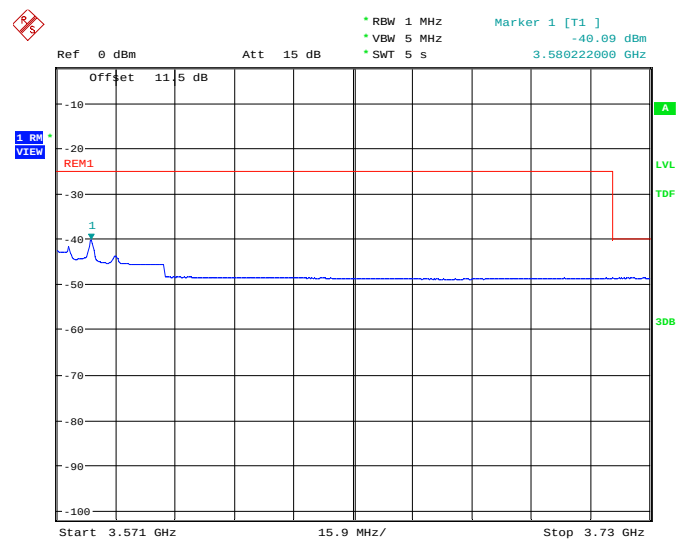
Date: 12.NOV.2024 10:53:59

LOW BAND EDGE BLOCK-1RB-LOW_offset



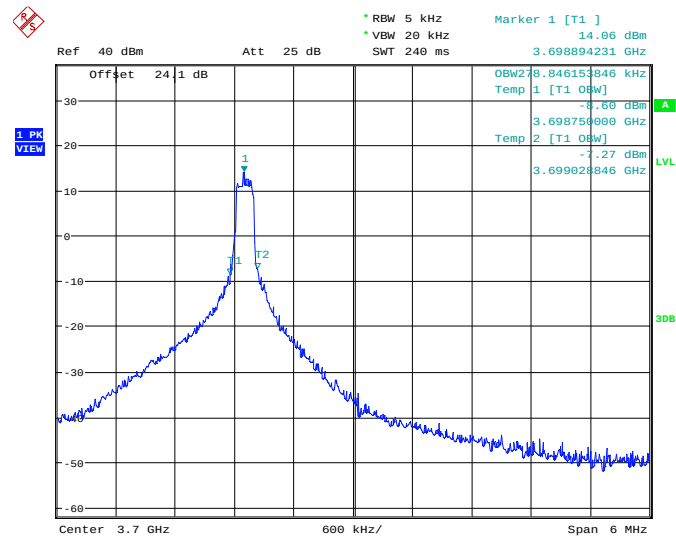
Date: 12.NOV.2024 10:54:41

LOW BAND EDGE BLOCK-1RB-LOW_offset



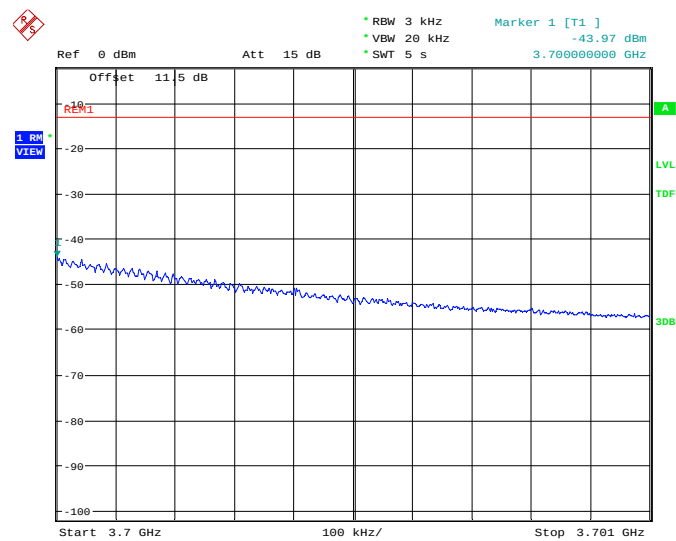
Date: 12.NOV.2024 10:55:23

OBW: 1RB-HIGH_offset



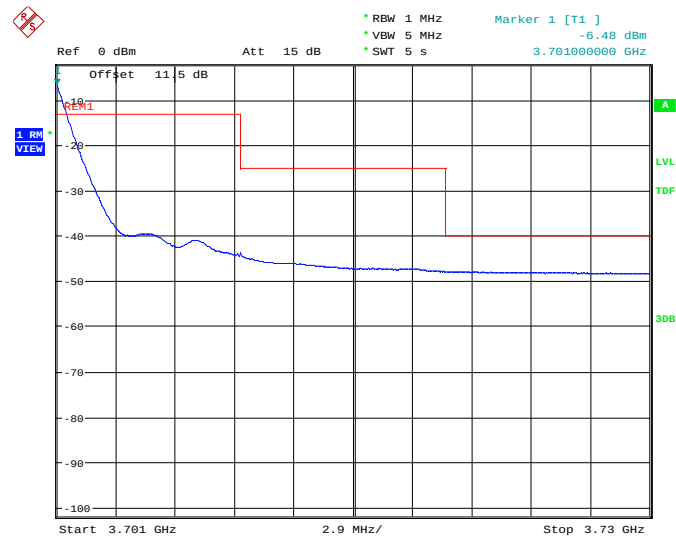
Date: 12.NOV.2024 10:58:17

HIGH BAND EDGE BLOCK-1RB-HIGH_offset



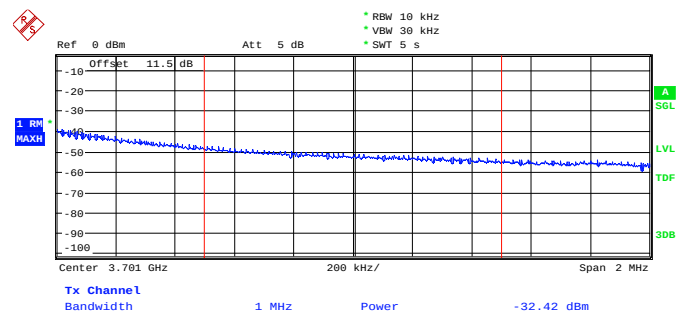
Date: 12.NOV.2024 10:58:59

HIGH BAND EDGE BLOCK-1RB-HIGH_offset



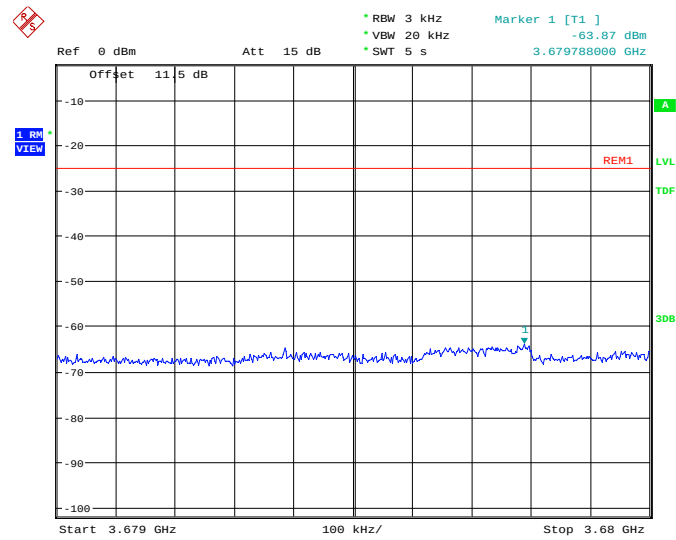
Date: 12.NOV.2024 10:59:42

Channel power



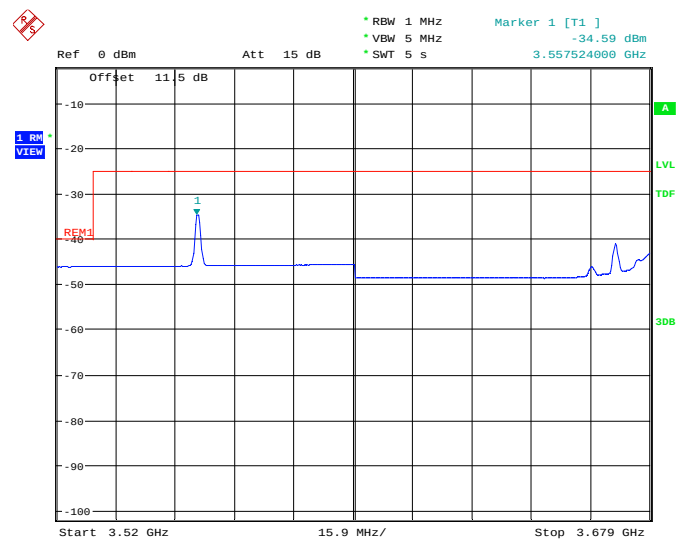
Date: 12.NOV.2024 11:00:33

HIGH BAND EDGE BLOCK-1RB-HIGH_offset



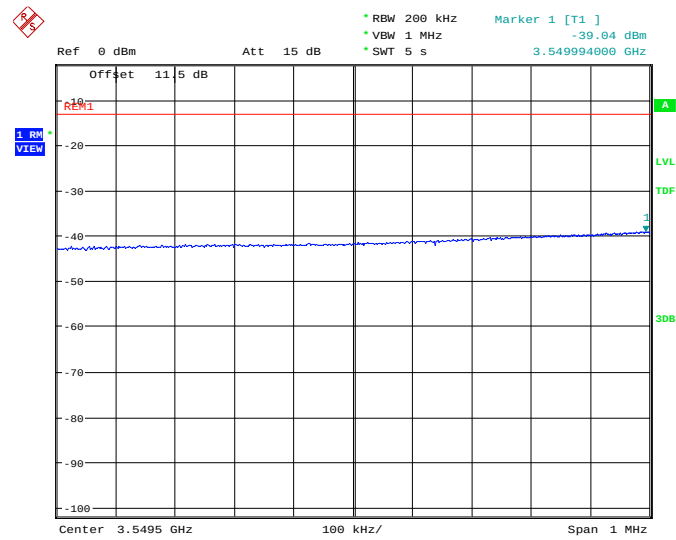
Date: 12.NOV.2024 11:01:15

HIGH BAND EDGE BLOCK-1RB-HIGH_offset



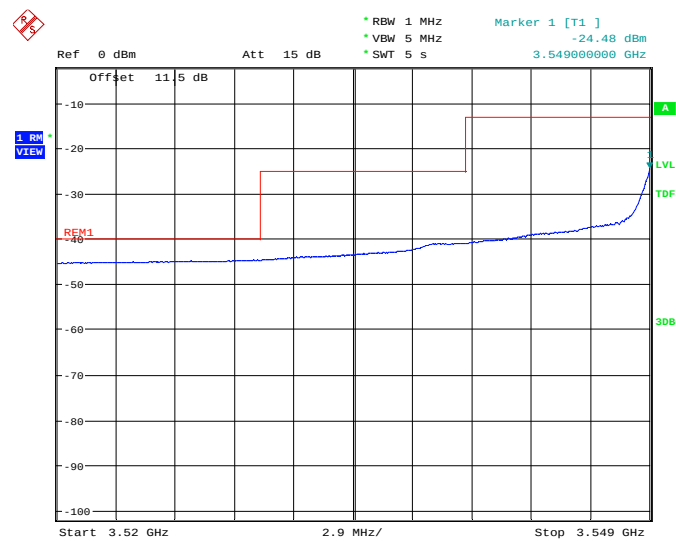
Date: 12.NOV.2024 11:02:00

LOW BAND EDGE BLOCK-20MHz+20MHz-100%RB



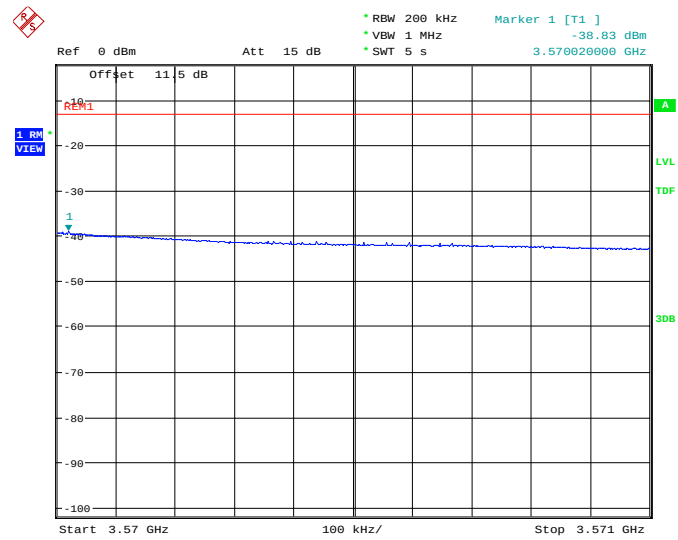
Date: 12.NOV.2024 10:18:38

LOW BAND EDGE BLOCK-20MHz+20MHz-100%RB



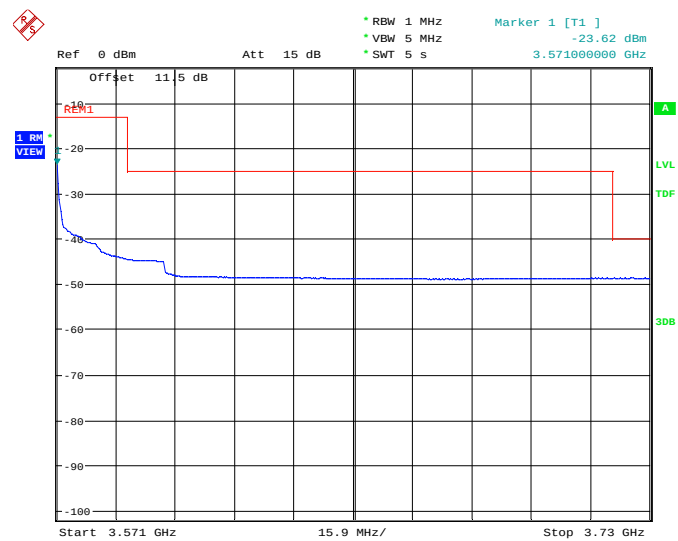
Date: 12.NOV.2024 10:19:21

LOW BAND EDGE BLOCK-20MHz+20MHz-100%RB



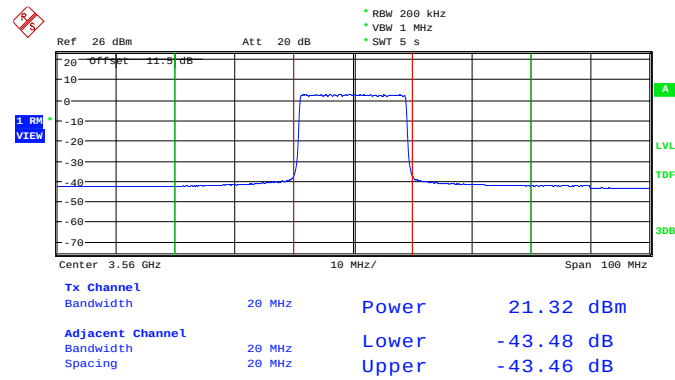
Date: 12.NOV.2024 10:20:03

LOW BAND EDGE BLOCK-20MHz+20MHz-100%RB



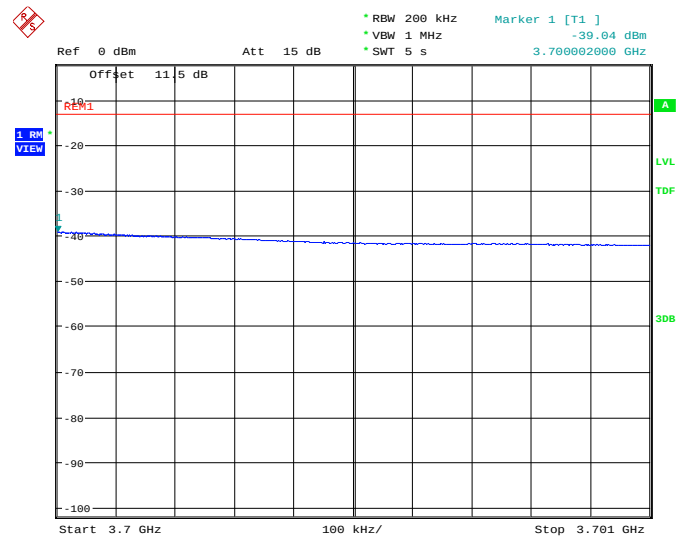
Date: 12.NOV.2024 10:20:45

ACLR



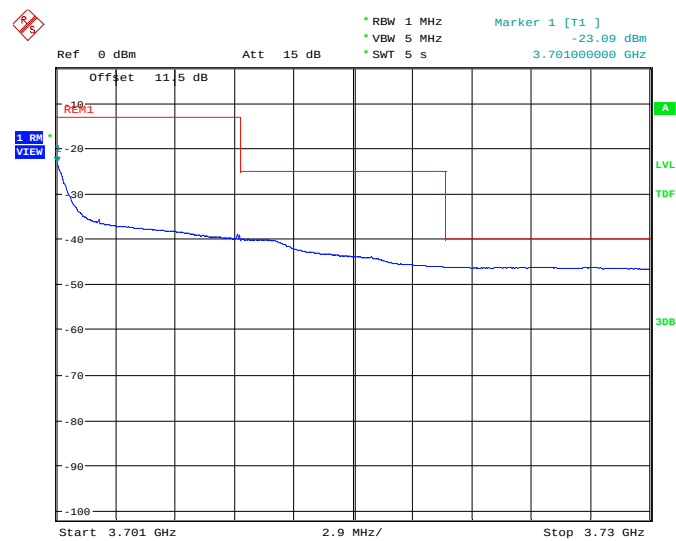
Date: 12.NOV.2024 10:21:12

HIGH BAND EDGE BLOCK-20MHz+20MHz-100%RB



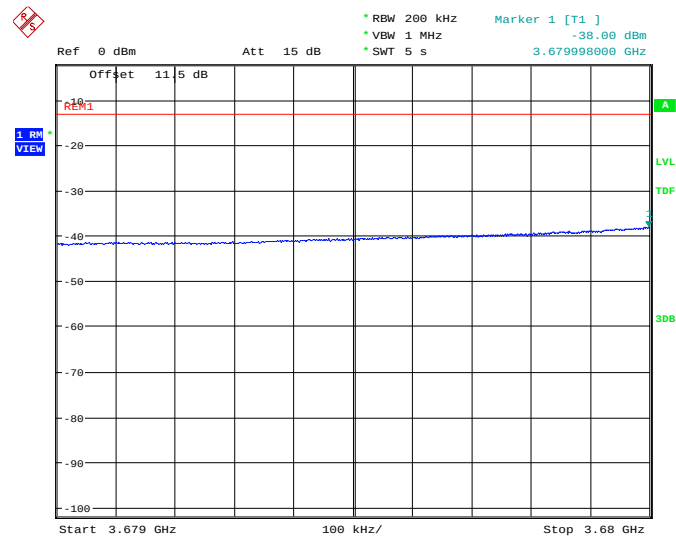
Date: 12.NOV.2024 10:23:07

HIGH BAND EDGE BLOCK-20MHz+20MHz-100%RB



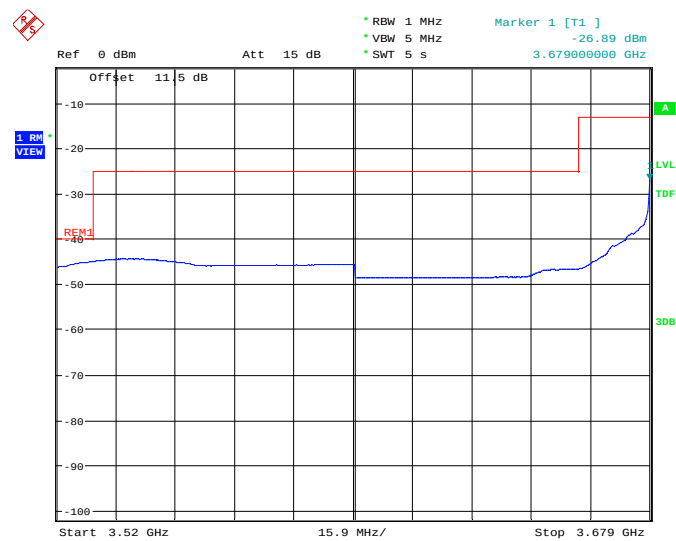
Date: 12.NOV.2024 10:23:49

HIGH BAND EDGE BLOCK-20MHz+20MHz-100%RB



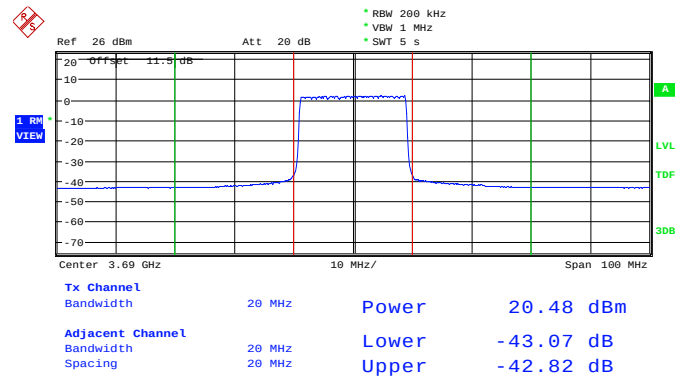
Date: 12.NOV.2024 10:24:31

HIGH BAND EDGE BLOCK-20MHz+20MHz-100%RB



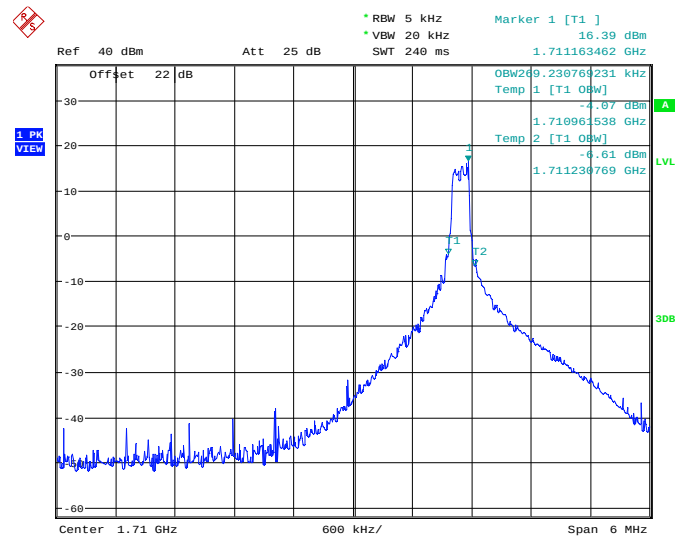
Date: 12.NOV.2024 10:25:14

ACLR



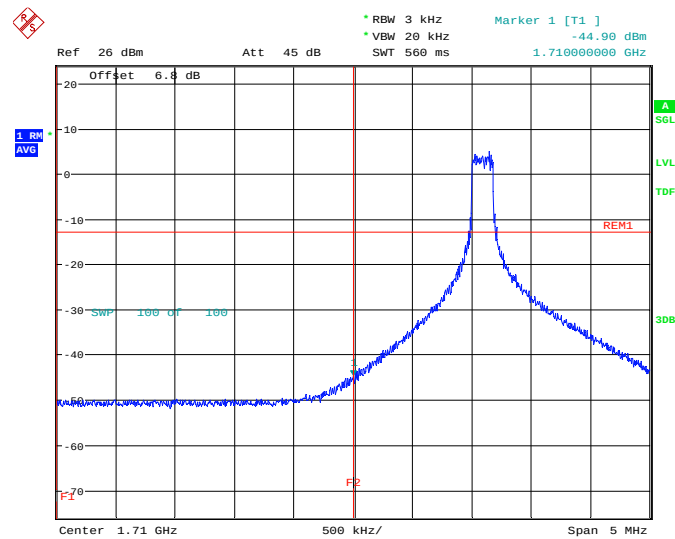
Date: 12.NOV.2024 10:25:41

LTE band 66@CA 48A-66A
OBW: 1RB-LOW_offset



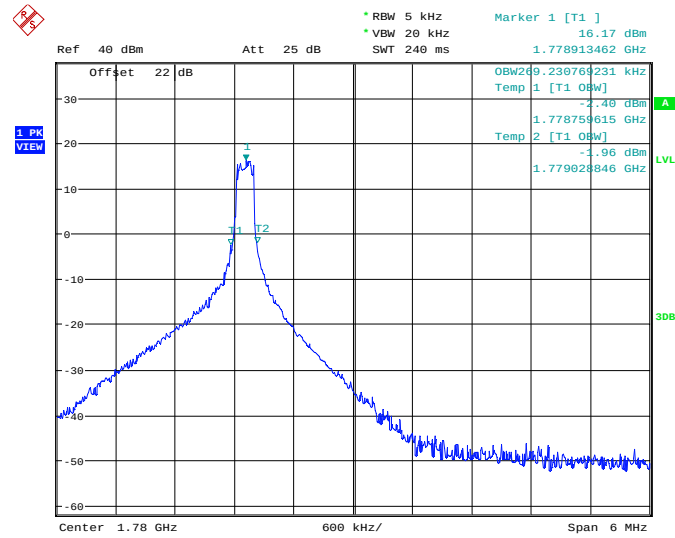
Date: 12.NOV.2024 10:55:44

LOW BAND EDGE BLOCK-1RB-LOW_offset



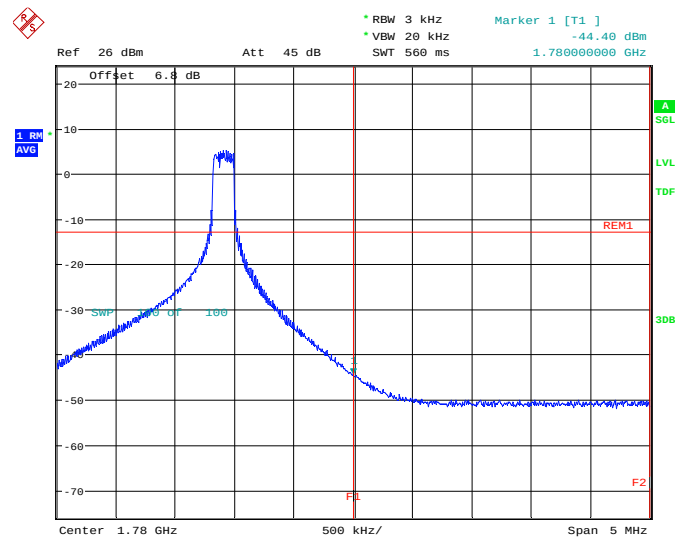
Date: 12.NOV.2024 10:57:27

OBW: 1RB-HIGH_offset



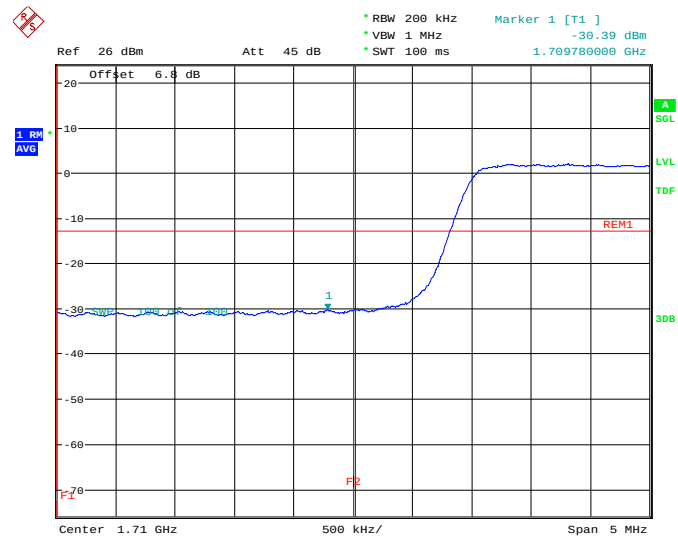
Date: 12.NOV.2024 11:02:22

HIGH BAND EDGE BLOCK-1RB-HIGH_offset



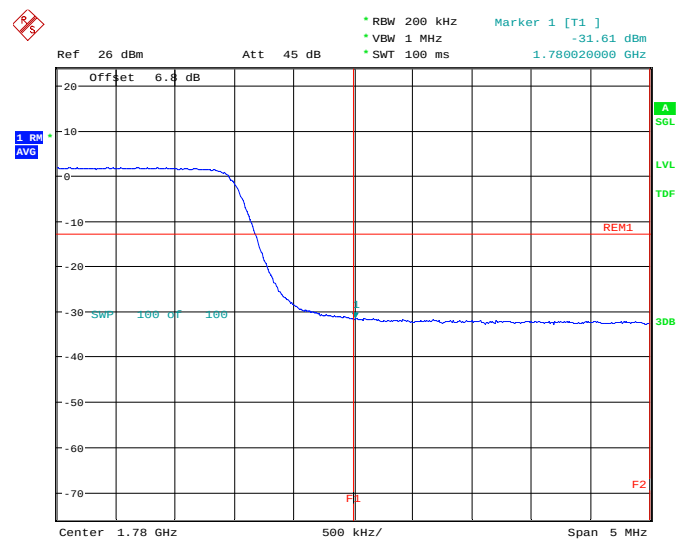
Date: 12.NOV.2024 11:04:16

LOW BAND EDGE BLOCK-20MHz+20MHz-100%RB



Date: 12.NOV.2024 10:21:56

HIGH BAND EDGE BLOCK-20MHz+20MHz-100%RB

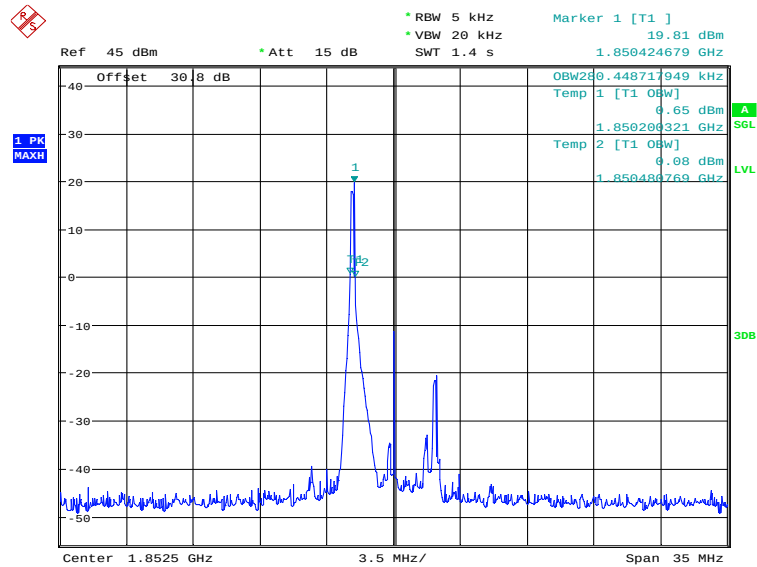


Date: 12.NOV.2024 10:26:25

Reference Measurement Results from basic model:

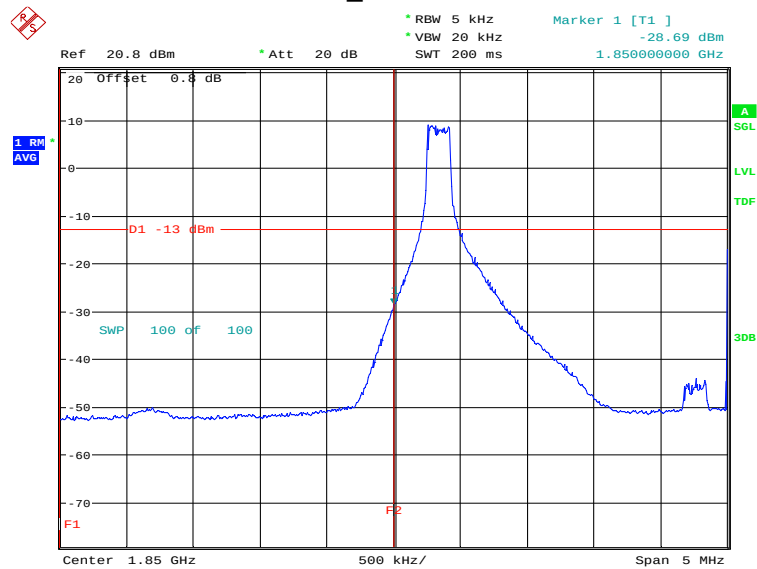
LTE band 2

OBW: 1RB-low_offset



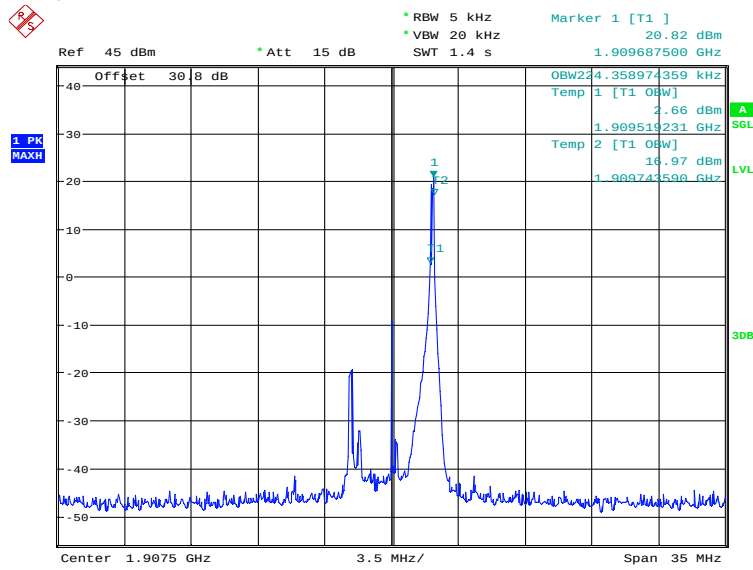
Date: 18.NOV.2024 14:54:54

LOW BAND EDGE BLOCK-1RB-low_offset



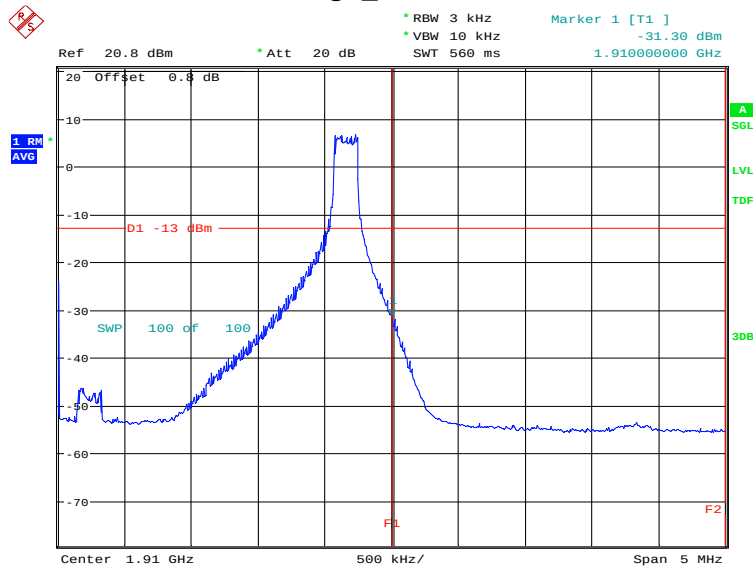
Date: 18.NOV.2024 14:56:09

OBW: 1RB-high_offset



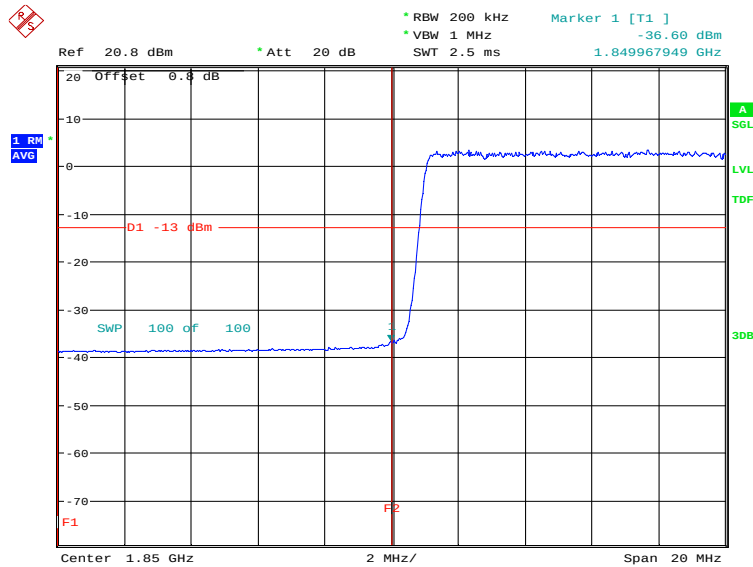
Date: 18.NOV.2024 14:59:02

HIGH BAND EDGE BLOCK-1RB-high_offset



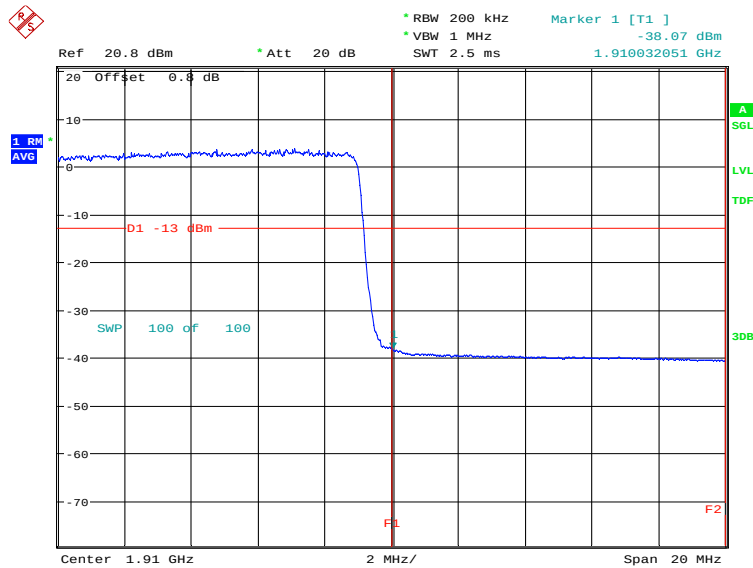
Date: 18.NOV.2024 15:00:16

LOW BAND EDGE BLOCK-20MHz-100%RB



Date: 18.NOV.2024 14:56:45

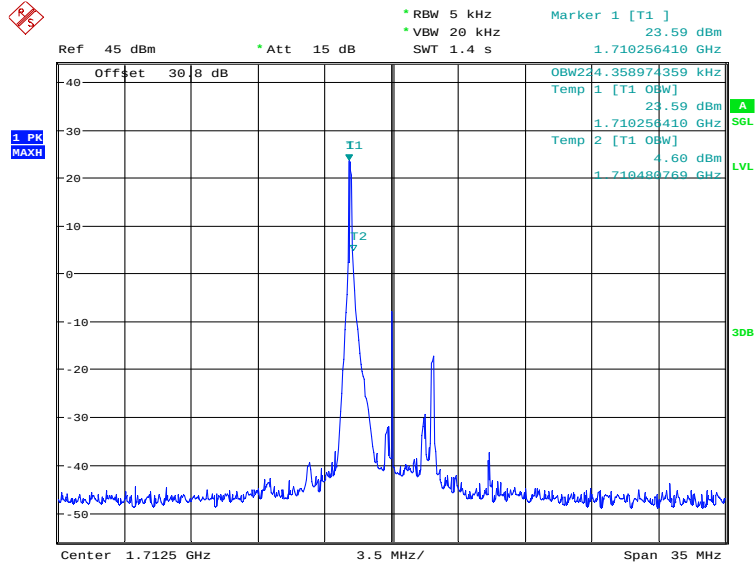
HIGH BAND EDGE BLOCK-20MHz-100%RB



Date: 18.NOV.2024 15:00:53

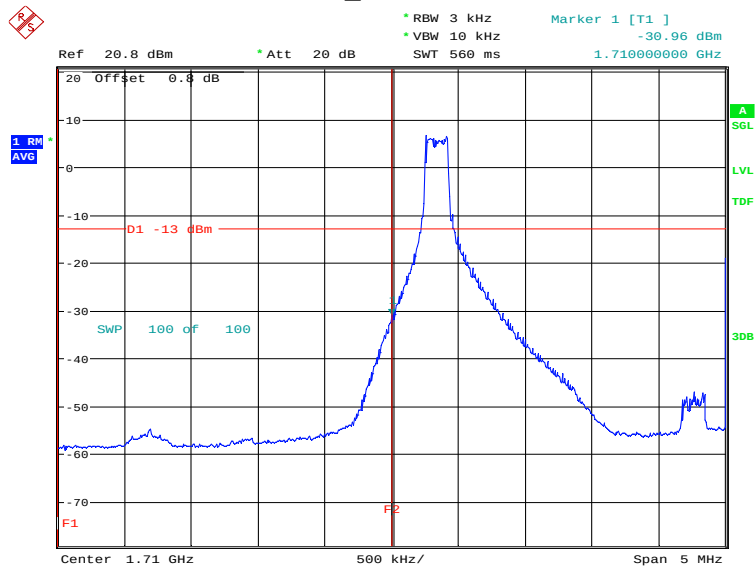
LTE band 4

OBW: 1RB-low_offset



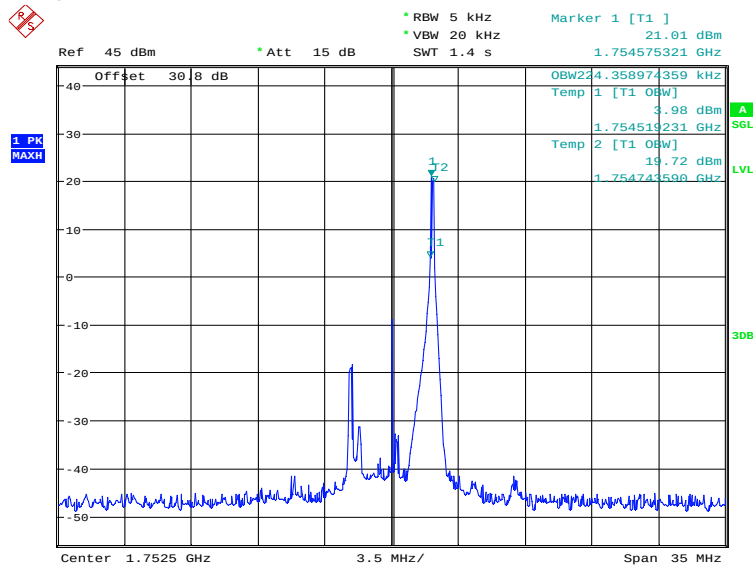
Date: 18.NOV.2024 15:03:10

LOW BAND EDGE BLOCK-1RB-low_offset



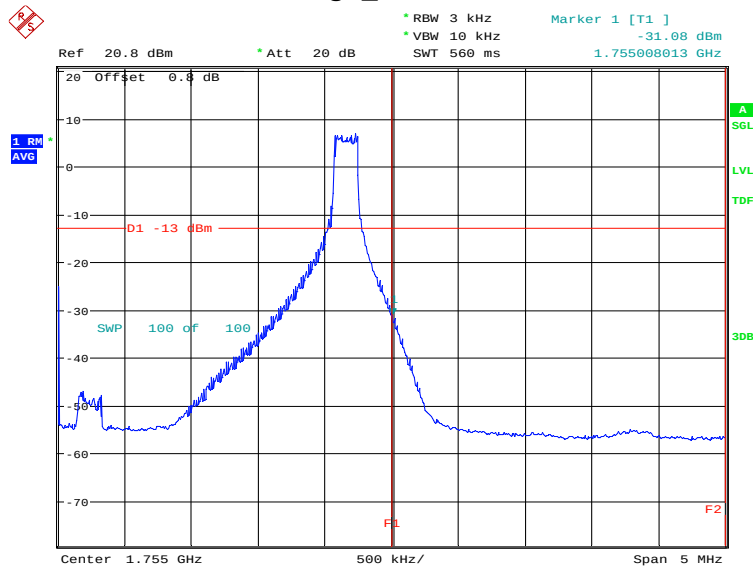
Date: 18.NOV.2024 15:04:24

OBW: 1RB-high_offset



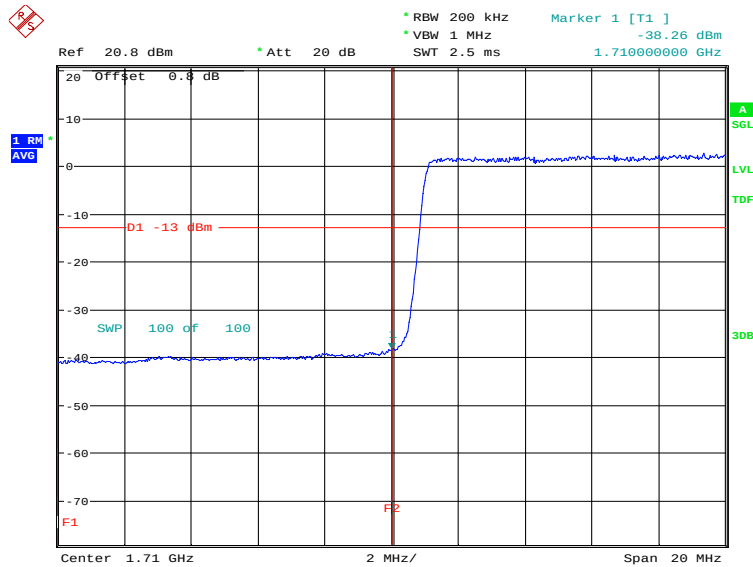
Date: 18.NOV.2024 15:07:17

HIGH BAND EDGE BLOCK-1RB-high_offset



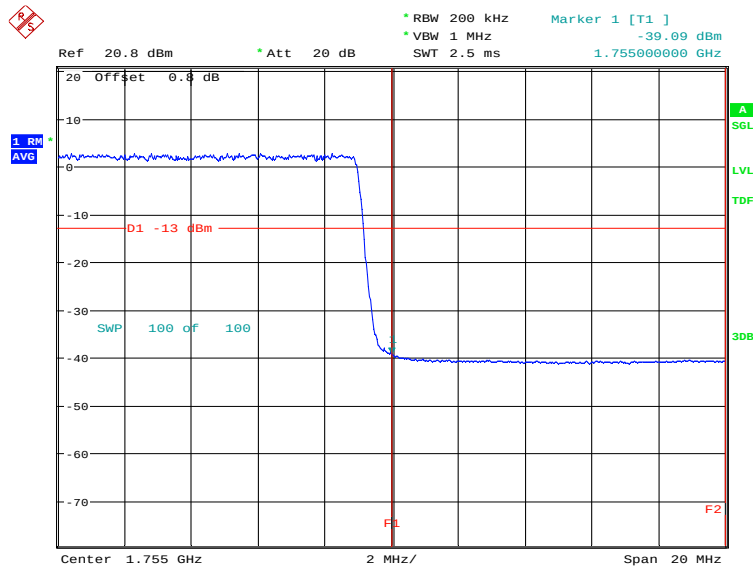
Date: 18.NOV.2024 15:08:31

LOW BAND EDGE BLOCK-20MHz-100%RB



Date: 18.NOV.2024 15:05:01

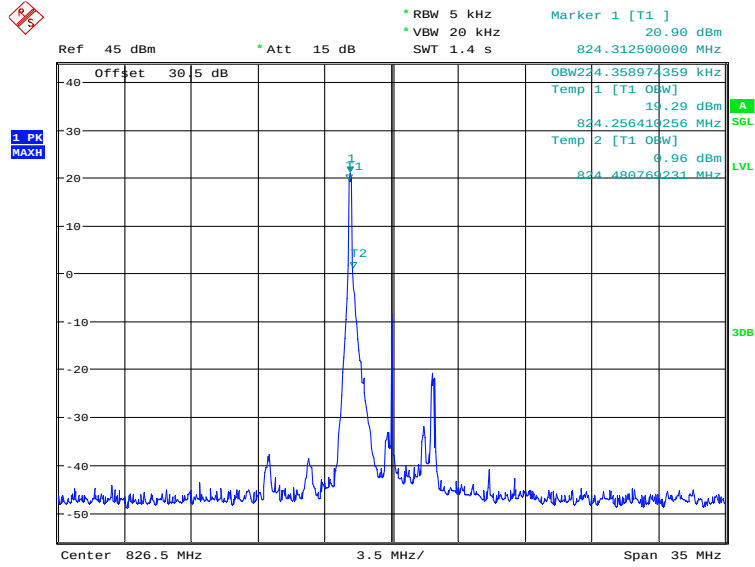
HIGH BAND EDGE BLOCK-20MHz-100%RB



Date: 18.NOV.2024 15:09:08

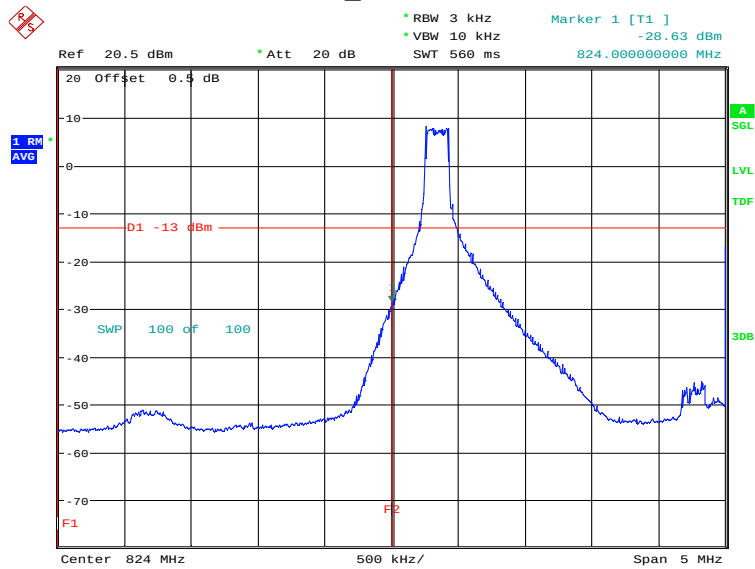
LTE band 5

OBW: 1RB-low_offset



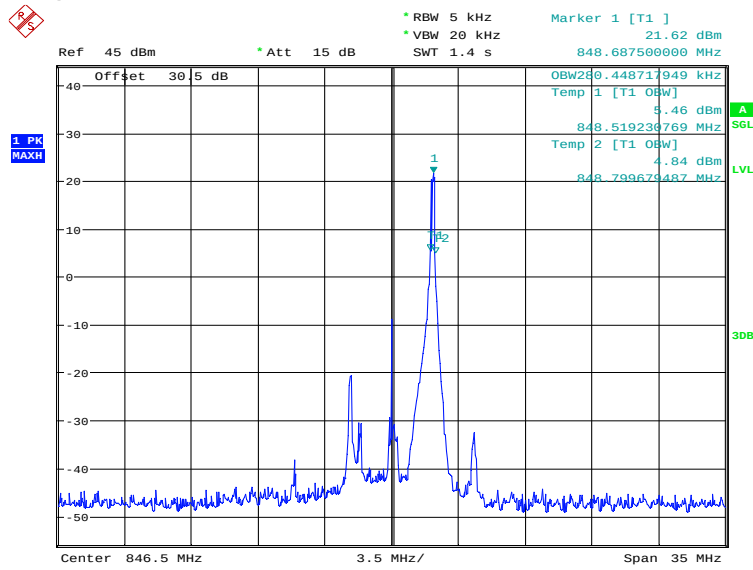
Date: 18.NOV.2024 09:48:56

LOW BAND EDGE BLOCK-1RB-low_offset



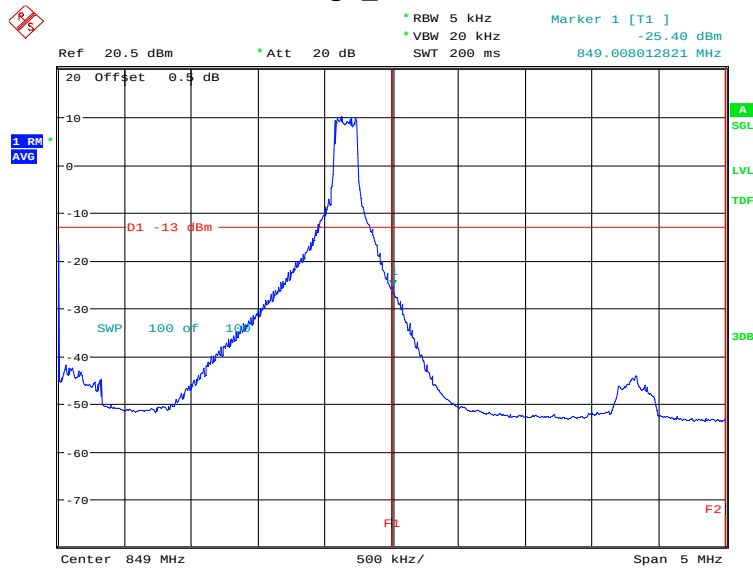
Date: 18.NOV.2024 09:50:11

OBW: 1RB-high_offset



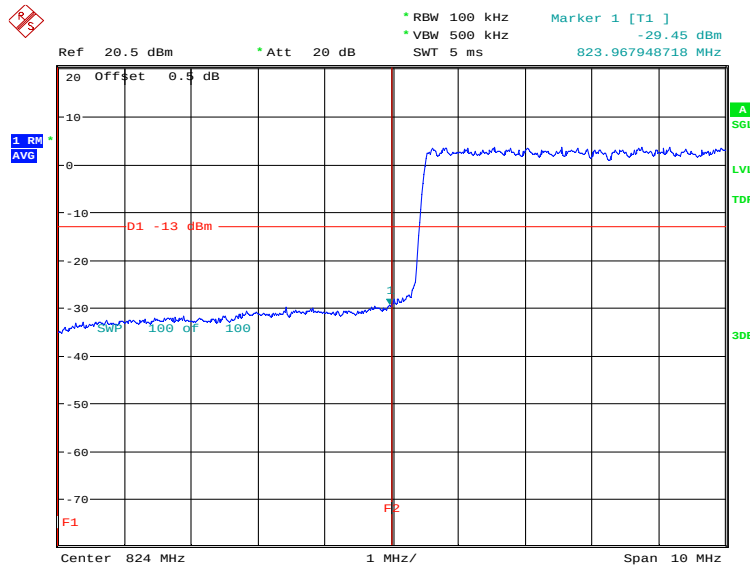
Date: 18.NOV.2024 09:53:03

HIGH BAND EDGE BLOCK-1RB-high_offset



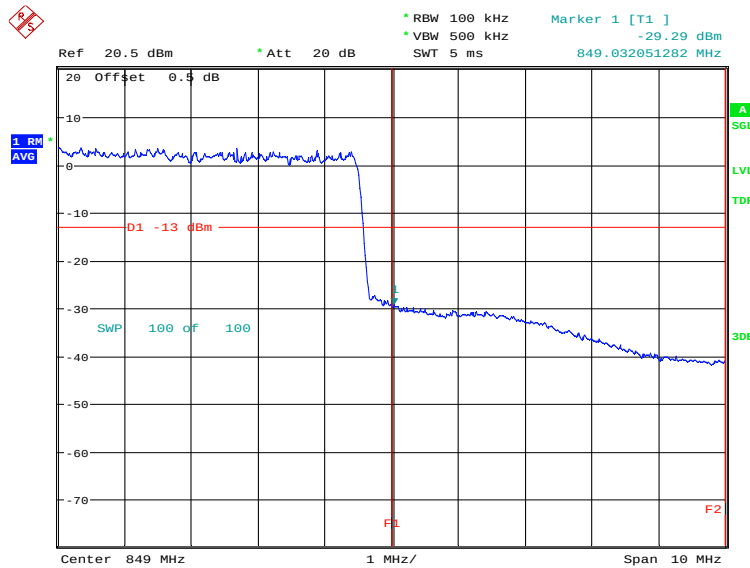
Date: 18.NOV.2024 09:54:17

LOW BAND EDGE BLOCK-10MHz-100%RB



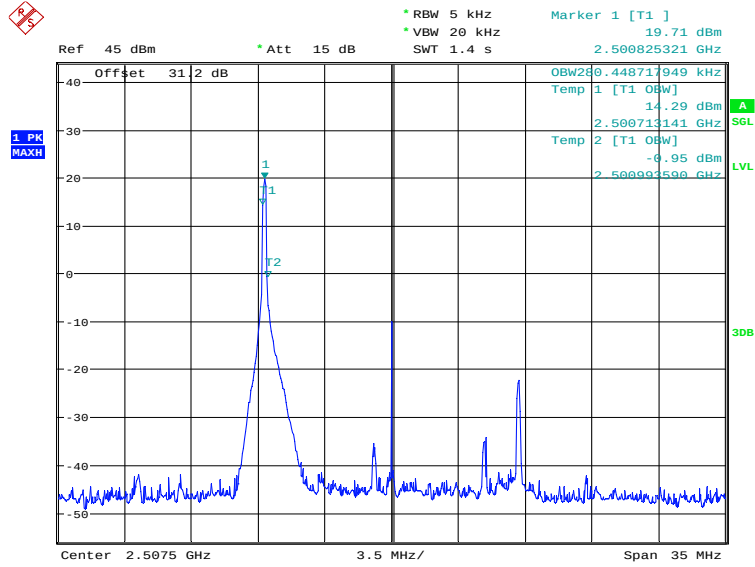
Date: 18.NOV.2024 09:50:47

HIGH BAND EDGE BLOCK-10MHz-100%RB



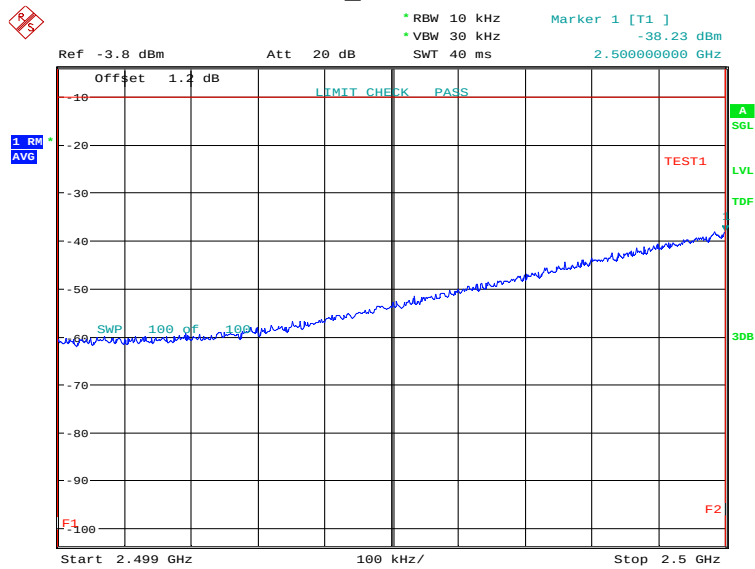
Date: 18.NOV.2024 09:54:54

LTE band 7 OBW: 1RB-low_offset

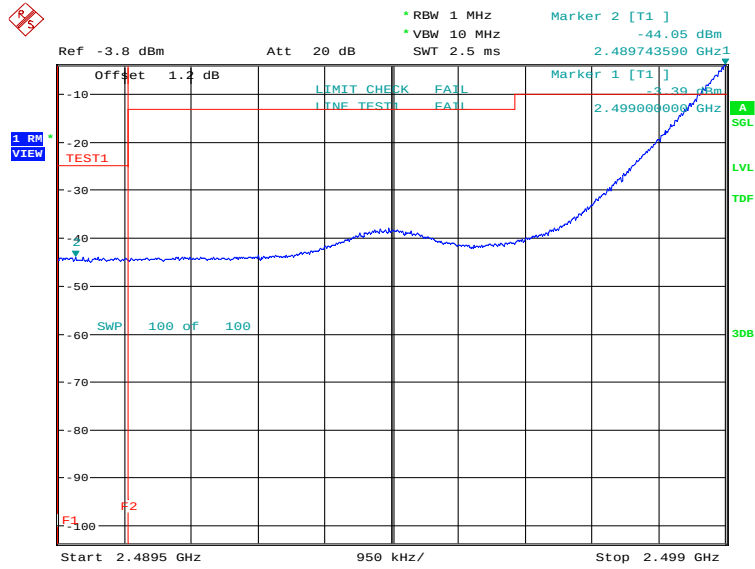


Date: 18.NOV.2024 11:54:50

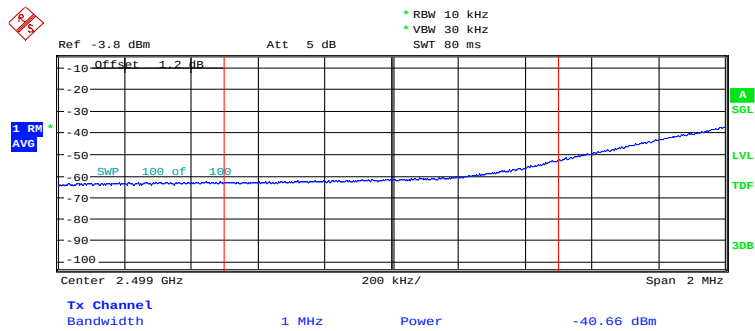
LOW BAND EDGE BLOCK-1RB-low_offset



Date: 18.NOV.2024 11:56:11

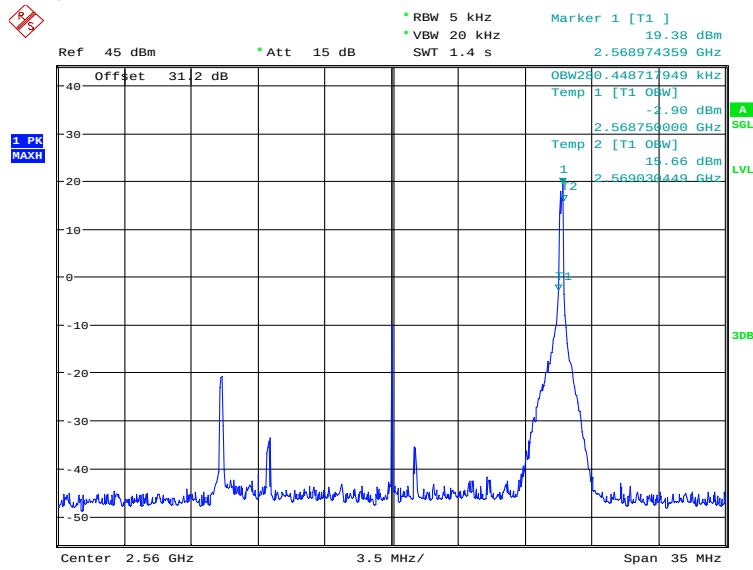


Date: 18.NOV.2024 11:58:00



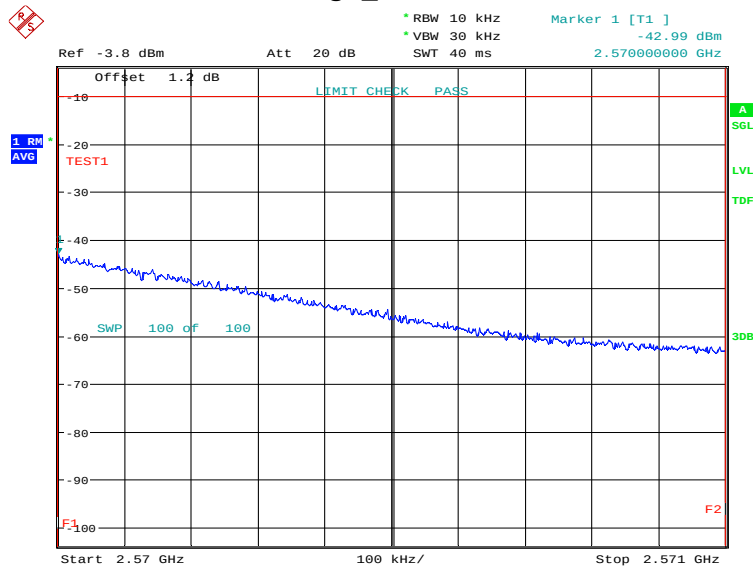
Date: 18.NOV.2024 11:58:28

OBW: 1RB-high_offset

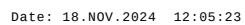
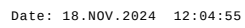


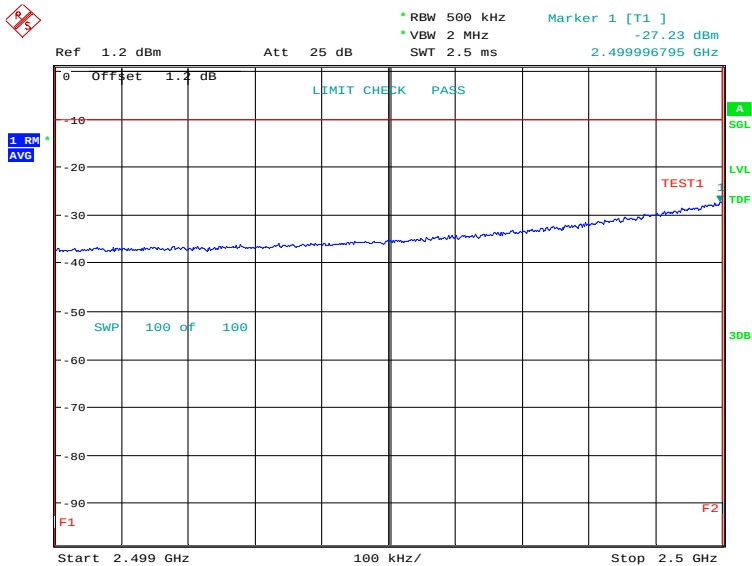
Date: 18.NOV.2024 12:01:45

HIGH BAND EDGE BLOCK-1RB-high_offset

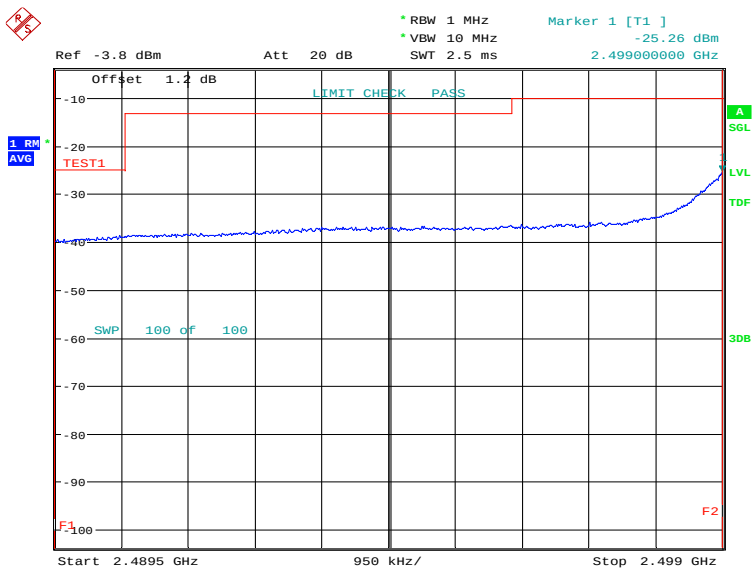


Date: 18.NOV.2024 12:03:06



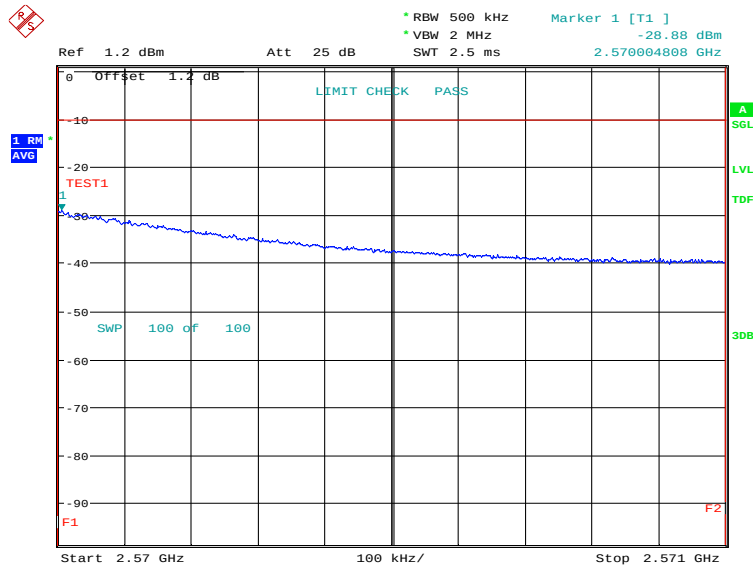


Date: 9.OCT.2024 15:10:56

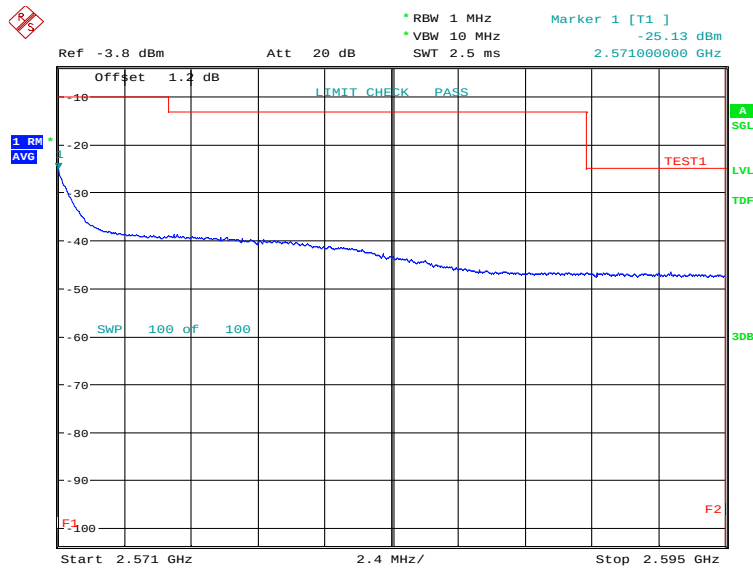


Date: 9.OCT.2024 15:12:37

HIGH BAND EDGE BLOCK-20MHz-100%RB



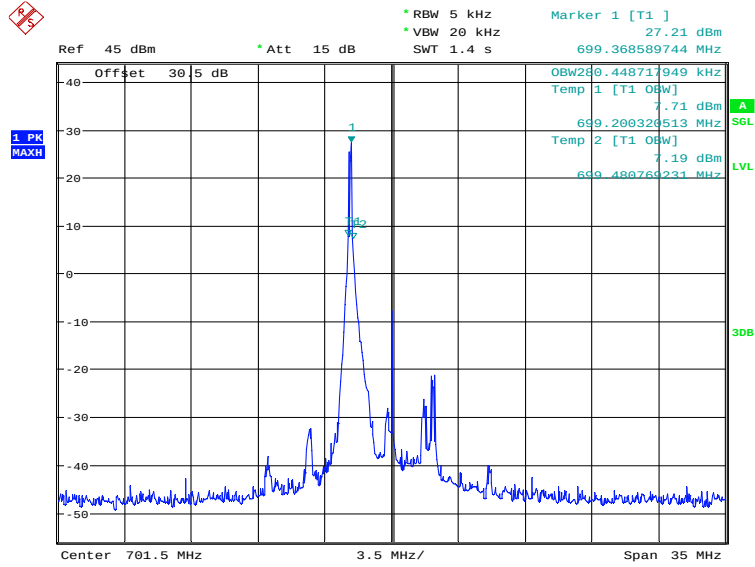
Date: 9.OCT.2024 15:15:35



Date: 9.OCT.2024 15:17:16

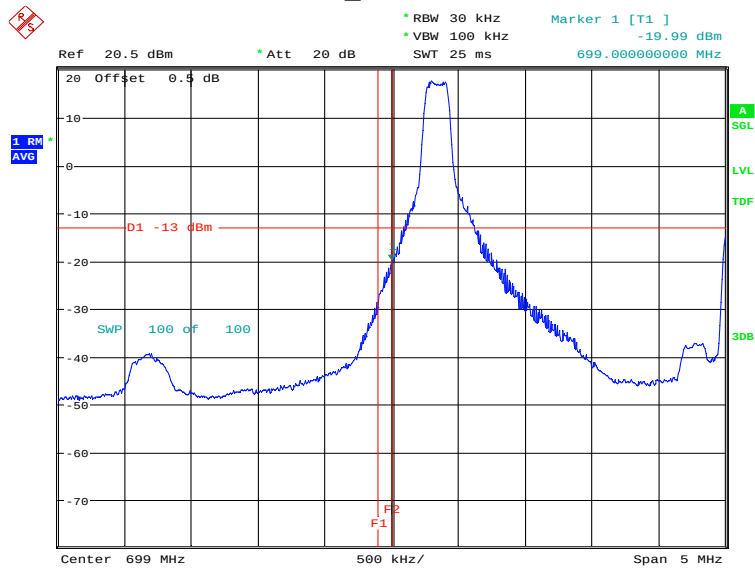
LTE band 12

OBW: 1RB-low_offset



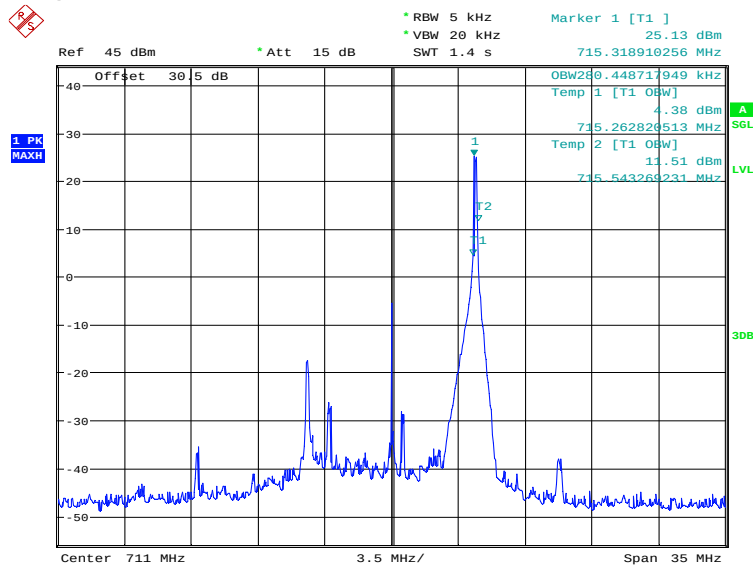
Date: 18.NOV.2024 09:57:11

LOW BAND EDGE BLOCK-1RB-low_offset



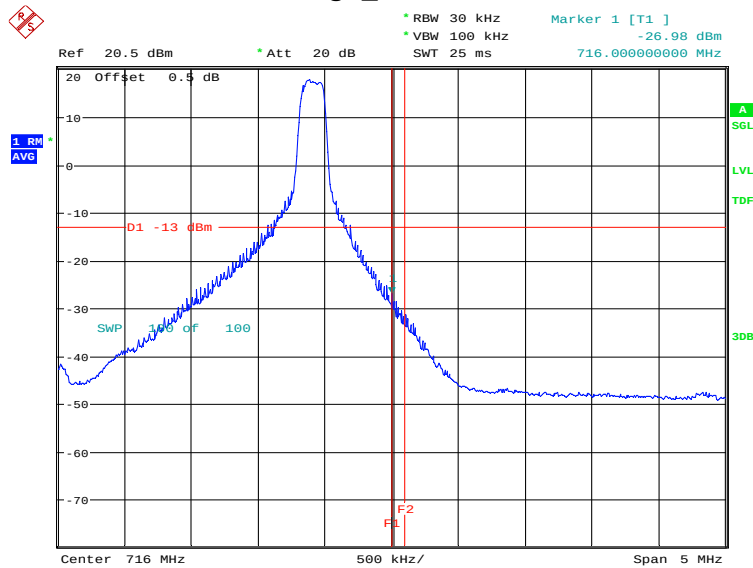
Date: 18.NOV.2024 09:57:31

OBW: 1RB-high_offset



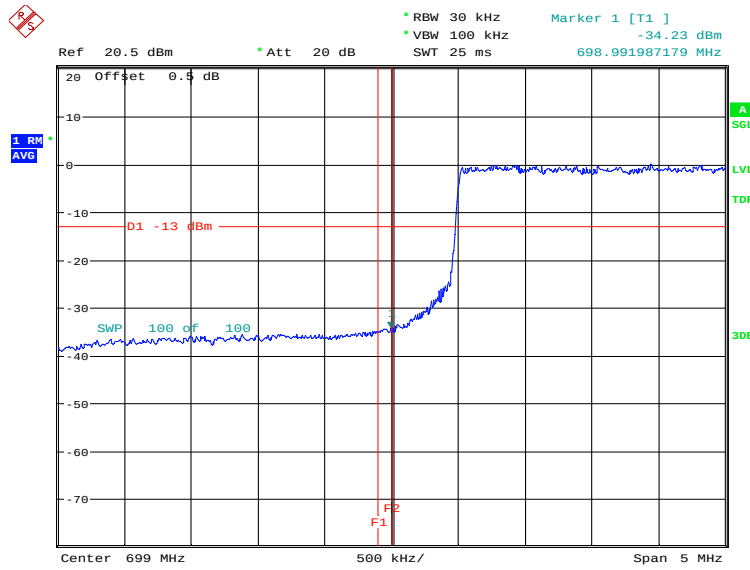
Date: 18.NOV.2024 09:58:09

HIGH BAND EDGE BLOCK-1RB-high_offset



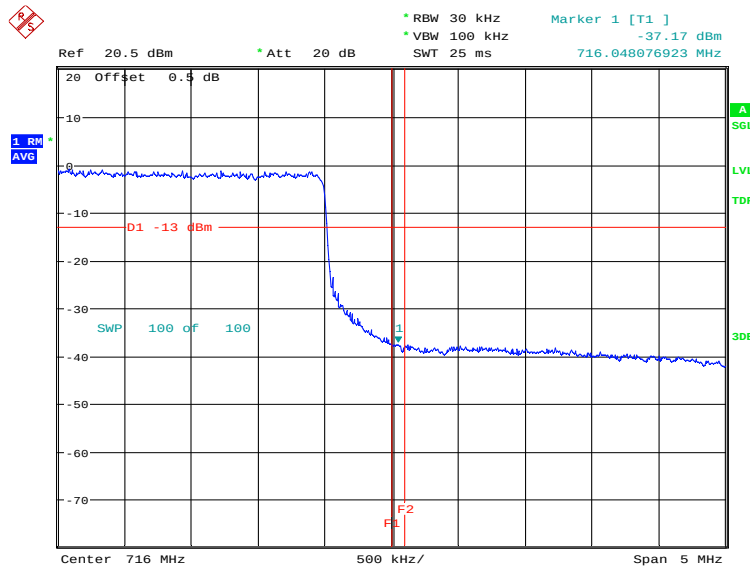
Date: 18.NOV.2024 09:58:28

LOW BAND EDGE BLOCK-10MHz-100%RB



Date: 9.OCT.2024 11:34:35

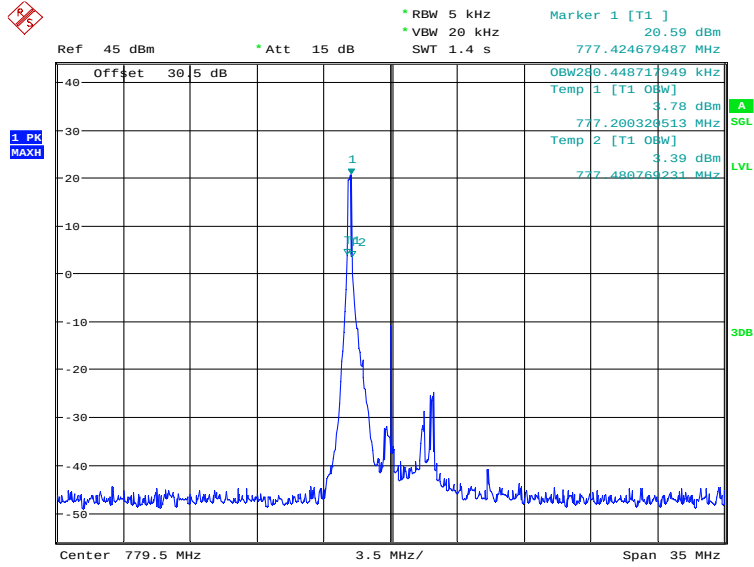
HIGH BAND EDGE BLOCK-10MHz-100%RB



Date: 9.OCT.2024 11:36:08

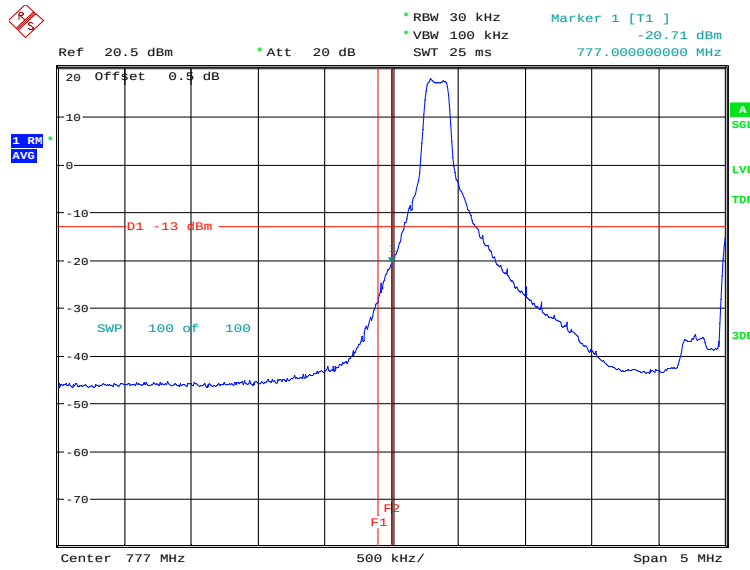
LTE band 13

OBW: 1RB-low_offset

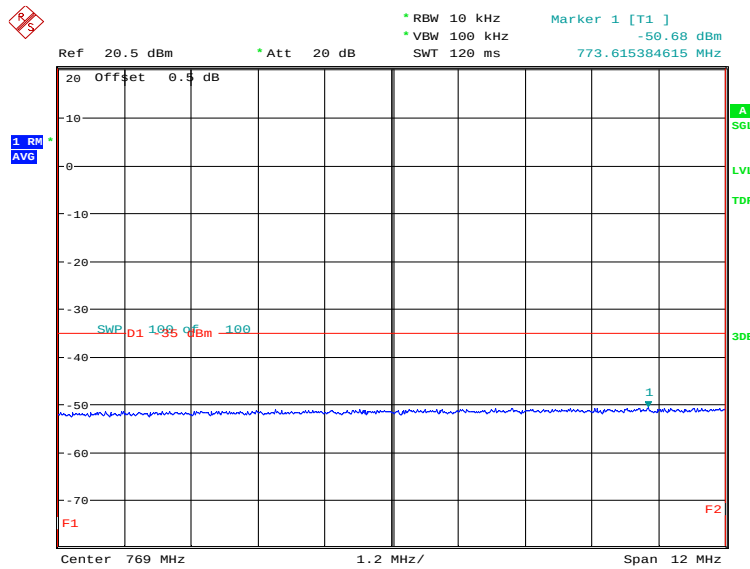


Date: 18.NOV.2024 09:59:50

LOW BAND EDGE BLOCK-1RB-low_offset

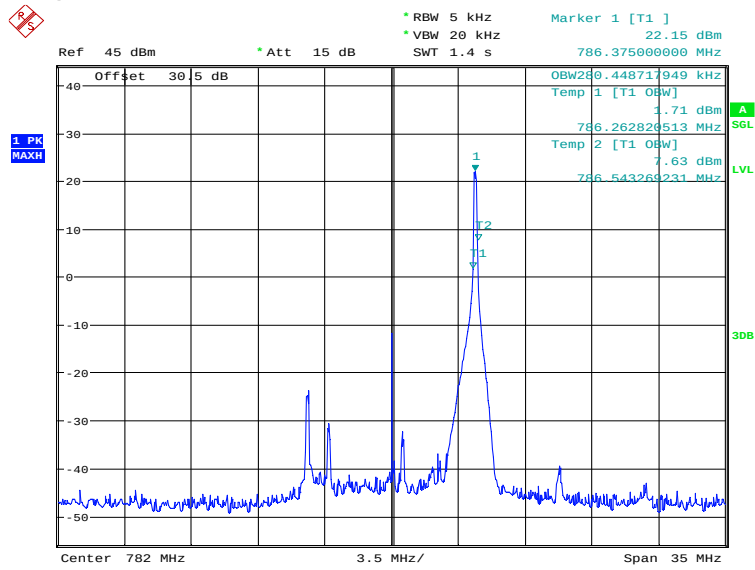


Date: 18.NOV.2024 10:00:09



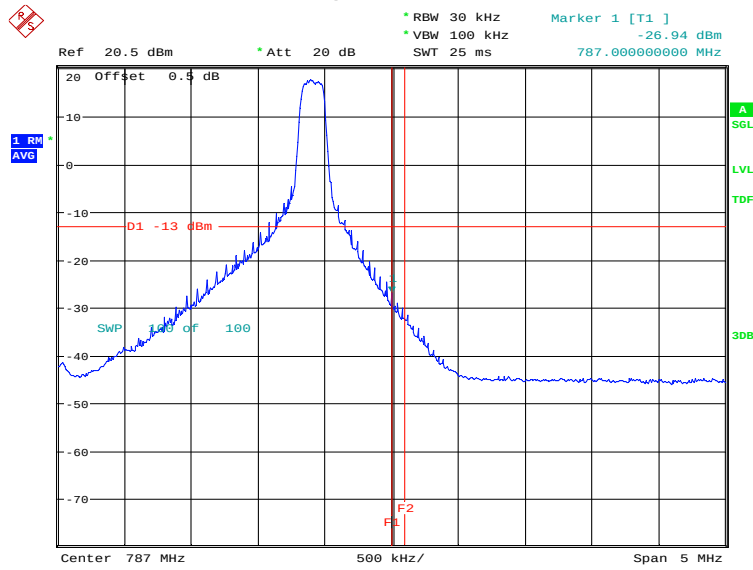
Date: 18.NOV.2024 10:00:49

OBW: 1RB-high_offset

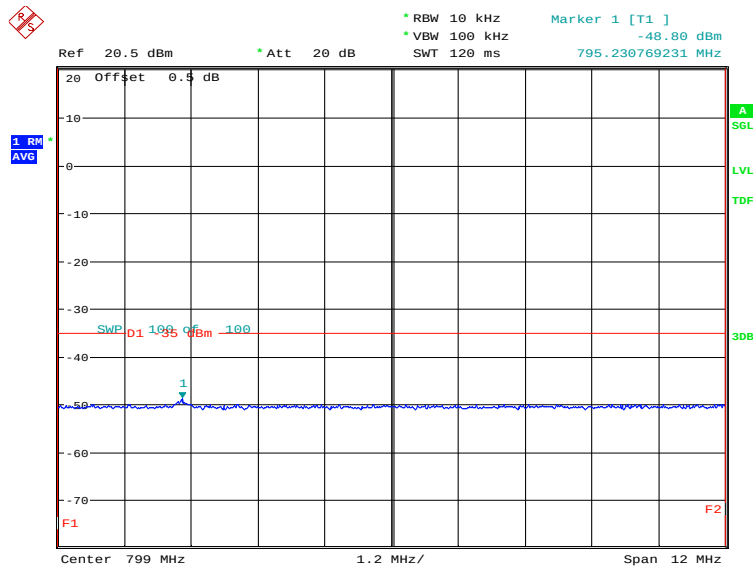


Date: 18.NOV.2024 10:01:27

HIGH BAND EDGE BLOCK-1RB-high_offset

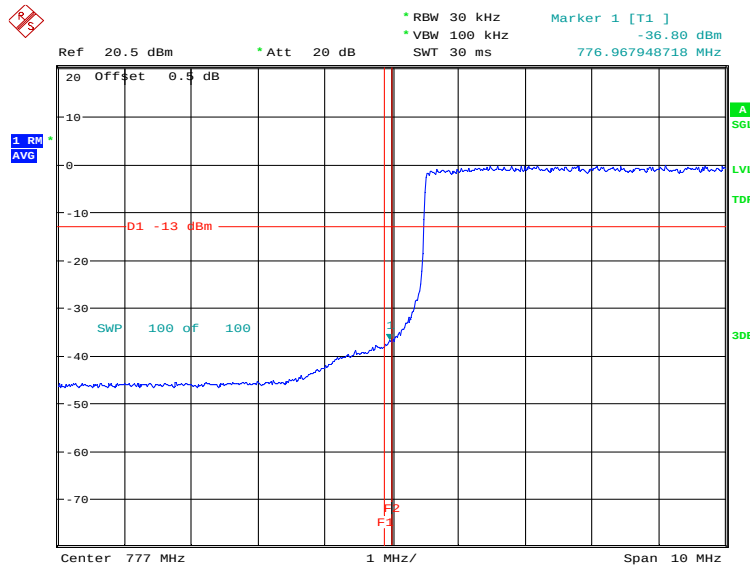


Date: 18.NOV.2024 10:01:47

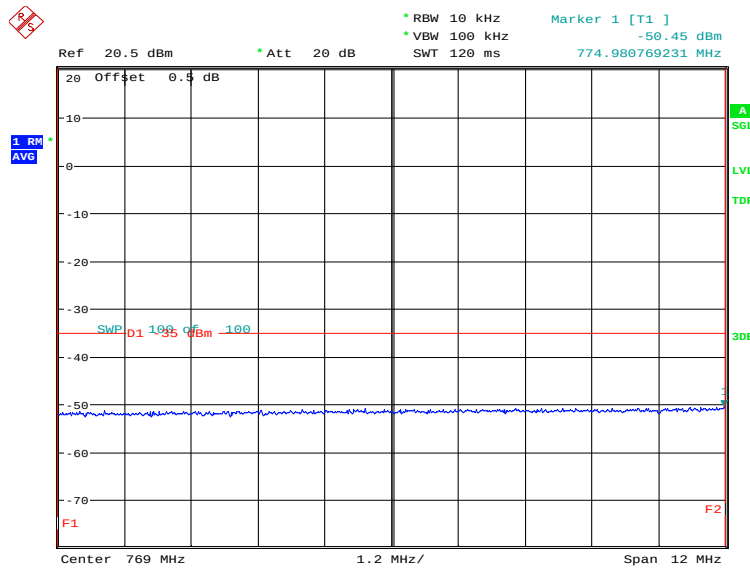


Date: 18.NOV.2024 10:02:27

LOW BAND EDGE BLOCK-10MHz-100%RB

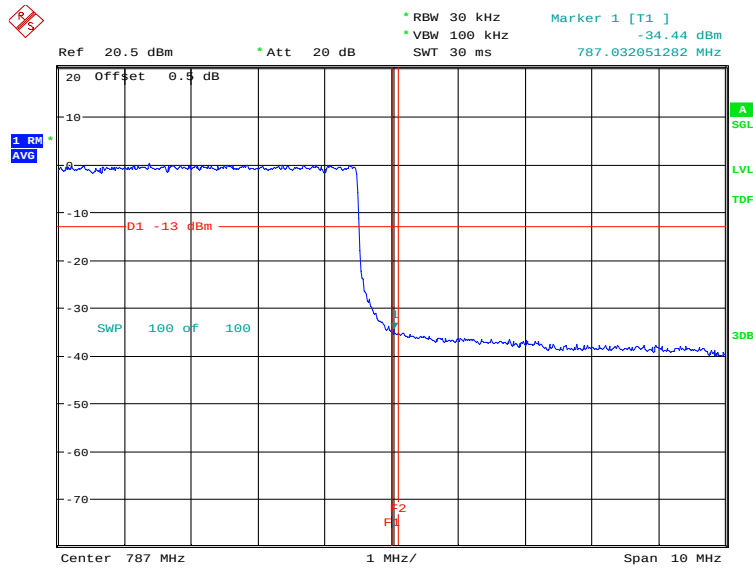


Date: 9.OCT.2024 11:37:42

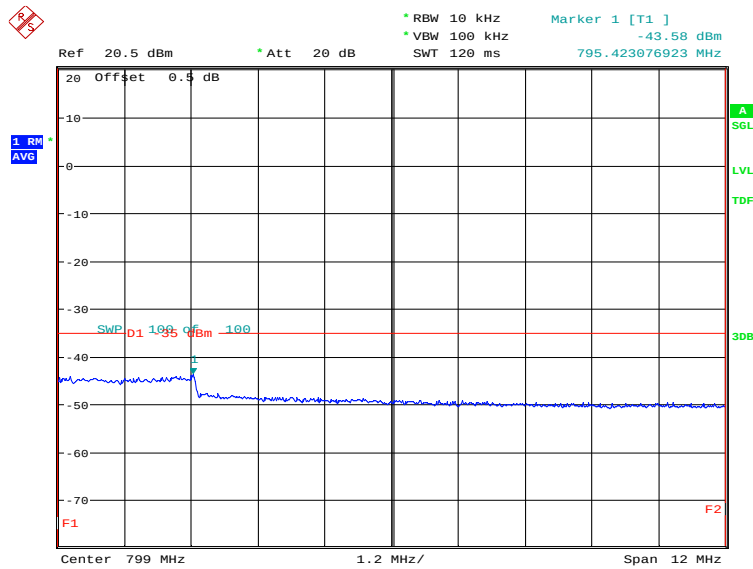


Date: 9.OCT.2024 11:38:21

HIGH BAND EDGE BLOCK-10MHz-100%RB



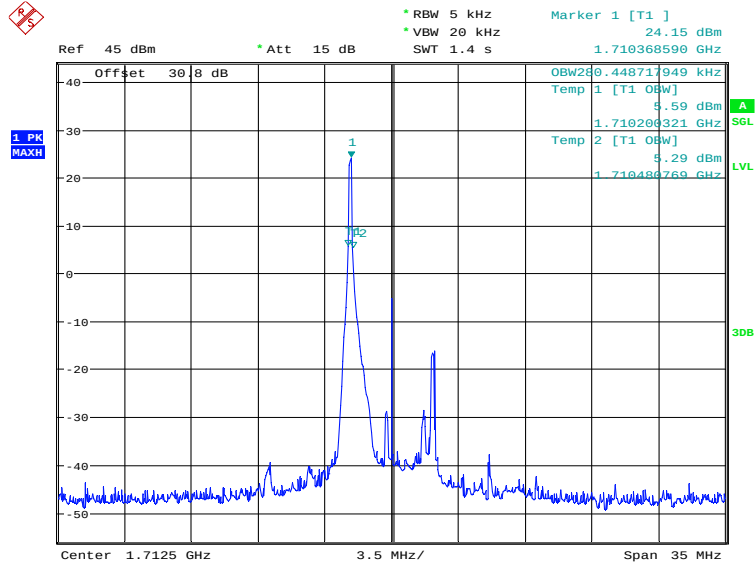
Date: 9.OCT.2024 11:39:53



Date: 9.OCT.2024 11:40:33

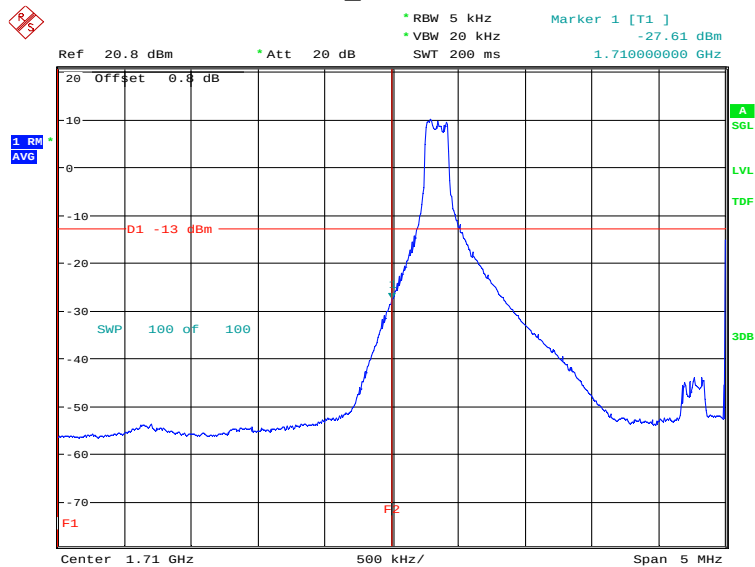
LTE band 66

OBW: 1RB-low_offset



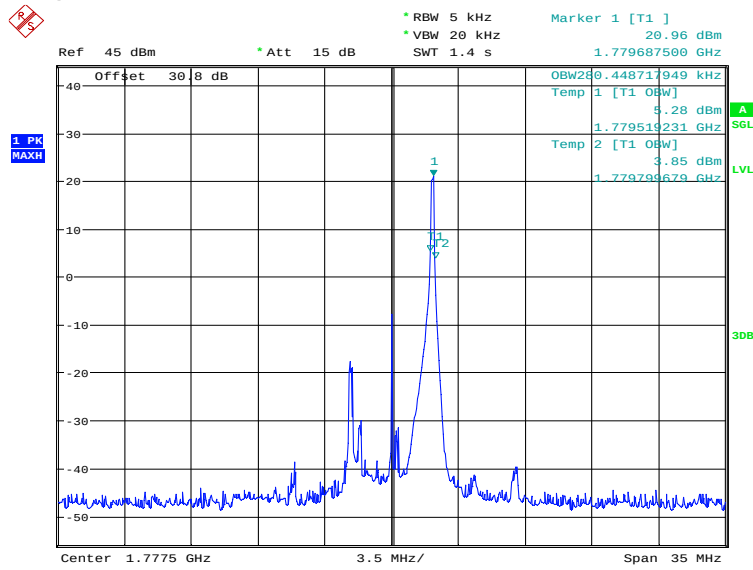
Date: 18.NOV.2024 15:17:05

LOW BAND EDGE BLOCK-1RB-low_offset



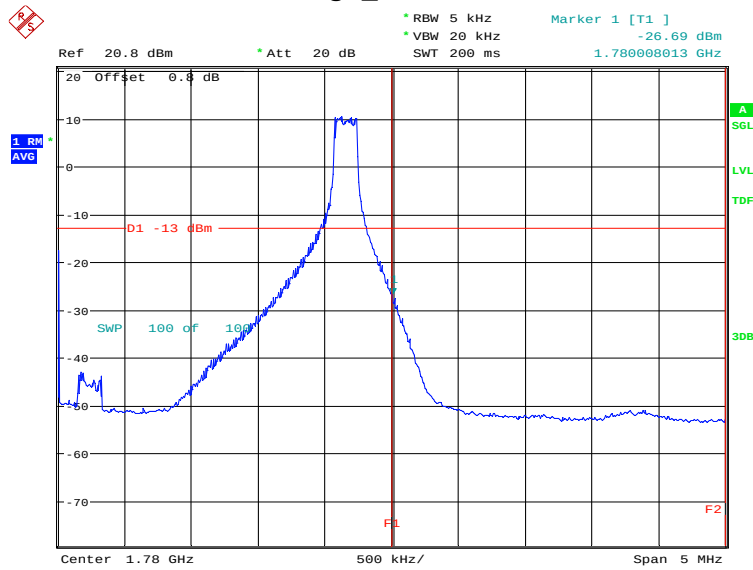
Date: 18.NOV.2024 15:18:19

OBW: 1RB-high_offset



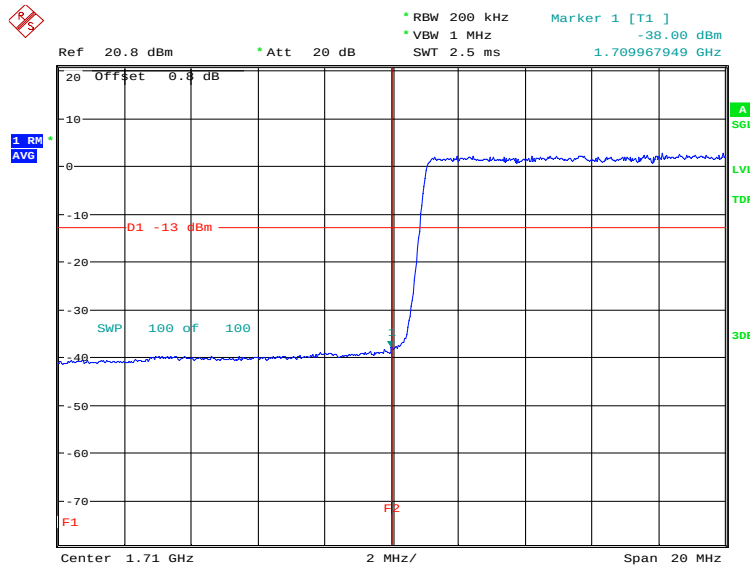
Date: 18.NOV.2024 15:18:55

HIGH BAND EDGE BLOCK-1RB-high_offset



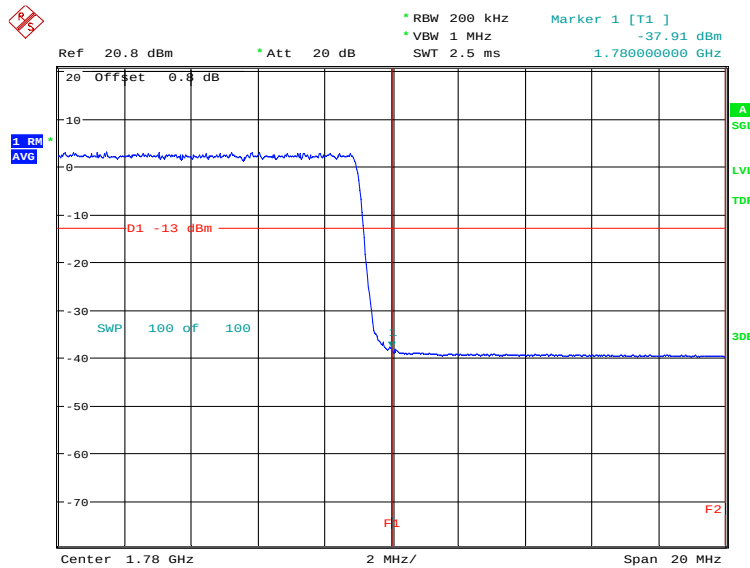
Date: 18.NOV.2024 15:20:10

LOW BAND EDGE BLOCK-20MHz-100%RB



Date: 9.OCT.2024 09:57:24

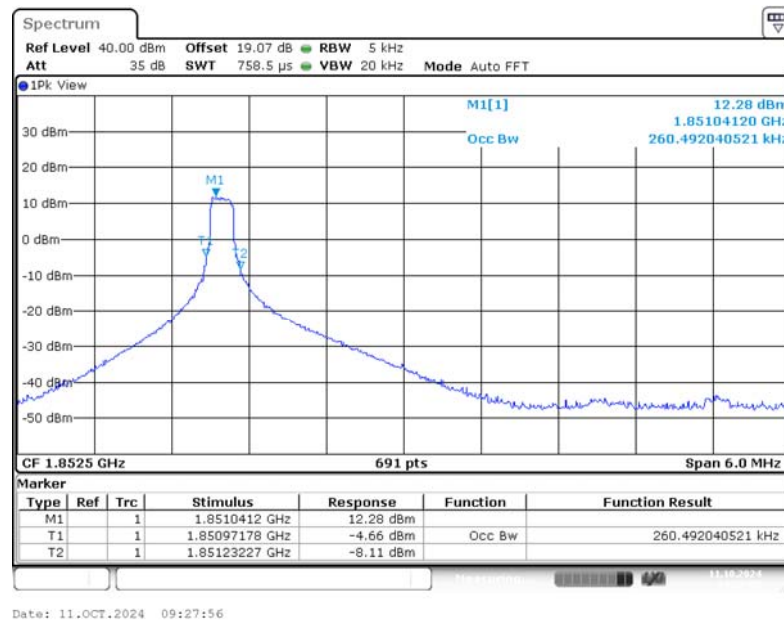
HIGH BAND EDGE BLOCK-20MHz-100%RB



Date: 9.OCT.2024 09:58:56

LTE band 2@CA 2A-5A

OBW: 1RB-LOW_offset



LOW BAND EDGE BLOCK-1RB-LOW_offset

