

TEST REPORT

Report Number: 15605535-E4V2

Applicant : SAMSUNG ELECTRONICS CO., LTD.
129 SAMSUNG-RO, YEONGTONG-GU
SUWON-SI, GYEONGGI-DO, 16677, KOREA

Model : SM-X626B

FCC ID : A3LSMX626B

EUT Description : GSM/WCDMA/LTE/5G NR TABLET + BT/BLE, DTS/UNII
A/B/G/N/AC/AX AND DIGITIZER

Test Standard(s) : FCC 47 CFR PART 2, PART 27

Date Of Issue:
2025-02-13

Prepared by:
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Revision History

Rev.	Issue Date	Revisions	Revised By
V1	2025-02-11	Initial Review	Dan Coronia
V2	2025-02-13	Updated Section 6.3	Kiya Kedida

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1. ATTESTATION OF TEST RESULTS

Applicant Name and Address	SAMSUNG ELECTRONICS CO., LTD. 129 SAMSUNG-RO, YEONGTONG-GU SUWON-SI, GYEONGGI-DO, 16677, KOREA	
Model	SM-X626B	
FCC ID	A3LSMX626B	
EUT Description	GSM/WCDMA/LTE/5G NR TABLET + BT/BLE, DTS/UNII A/B/G/N/AC/AX AND DIGITIZER	
Serial Number	Conducted: R32XC0005VL and R32XC0005YP Radiated: R32XC000V3J and R32XC000PKY	
Sample Receipt Date	2024-12-13	
Date Tested	2024-12-17 to 2025-02-06	
Applicable Standards	FCC 47 CFR PART 2, PART 27	
Test Results	COMPLIES	
UL Verification Services Inc. tested the above equipment in accordance with the requirements set forth in the above standards. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report. The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. It is the manufacturer's responsibility to assure that additional production units of this model are manufactured with identical electrical and mechanical components. All samples tested were in good operating condition throughout the entire test program. Measurement Uncertainties are published for informational purposes only and were not taken into account unless noted otherwise. This document may not be altered or revised in any way unless done so by UL Verification Services Inc. and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by UL Verification Services Inc. will constitute fraud and shall nullify the document.		
Approved & Released By:	Reviewed By:	Prepared By:
		
Dan Corona Operations Leader UL Verification Services Inc.	Kiya Kedida Lead Project Engineer UL Verification Services Inc.	Glenn Escano Senior Test Engineer UL Verification Services Inc.

2. SUMMARY OF TEST RESULTS

This report contains data provided by the customer which can impact the validity of results. UL Verification Services Inc. is only responsible for correctly integrating customer-provided data with measurements performed by UL Verification Services Inc.

Below is a list of the data provided by the customer:

1. Antenna gain and type (see section 6.3)

Requirement Description	Requirement Clause Number (FCC)	Result	Remarks
Equivalent Isotropic Radiated Power	27.50 (d) (4)	Compiles	
Occupied Bandwidth	2.1049	Compiles	
Band Edge and Emission Mask	2.1051, 27.53 (h)	Compiles	
Out of Band Emissions	2.1051, 27.53 (h)	Compiles	
Frequency Stability	2.1055, 27.54	Compiles	
Peak-to-Average Ratio	27.50 (d) (5)	Compiles	
Field Strength of Spurious Radiation	2.1051, 27.53 (h)	Compiles	

3. TEST METHODOLOGY

The tests documented in this report were performed in accordance with the following:

- ANSI C63.26:2015
- FCC 47 CFR Part 2, Part 27
- [FCC KDB 971168 D01](#): Power Meas License Digital Systems
- [FCC KDB 971168 D02](#): Misc Rev Approv License Devices
- [FCC KDB 412172 D01](#): Determining ERP and EIRP

4. FACILITIES AND ACCREDITATION

UL Verification Services Inc. is accredited by A2LA, certification #0751.05, for all testing performed within the scope of this report. Testing was performed at the locations noted below.

	Address	ISED CABID	ISED Company Number	FCC Registration
☒	Building 1: 47173 Benicia Street, Fremont, CA 94538, USA	US0104	2324A	550739
☐	Building 2: 47266 Benicia Street, Fremont, CA 94538, USA			
☐	Building 3: 843 Auburn Court, Fremont, CA 94538 USA			
☒	Building 4: 47658 Kato Rd, Fremont, CA 94538, USA			
☐	Building 5: 47670 Kato Rd, Fremont, CA 94538 USA			

5. DECISION RULES AND MEASUREMENT UNCERTAINTY

5.1. METROLOGICAL TRACEABILITY

All test and measuring equipment utilized to perform the tests documented in this report are calibrated on a regular basis, with a maximum time between calibrations of one year or the manufacturers' recommendation, whichever is less, and where applicable is traceable to recognized national standards.

5.2. DECISION RULES

The Decision Rule is based on Simple Acceptance in accordance with ISO Guide 98-4:2012 Clause 8.2. (Measurement uncertainty is not taken into account when stating conformity with a specified requirement.)

5.3. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

PARAMETER	U _{Lab}
Conducted Antenna Port Emission Measurement	1.940 db
Power Spectral Density	2.466 db
Time Domain Measurements Using SA	3.39 %
RF Power Measurement Direct Method Using Power Meter	0.450 db Ave. 1.300 db Peak
Radio Frequency (Spectrum Analyzer)	141.16 Hz
Occupied Bandwidth	1.22%
Worst Case Conducted Disturbance, 9KHz to 0.15 MHz	3.78 db
Worst Case Conducted Disturbance, 0.15 to 30 MHz	3.40 db
Worst Case Radiated Disturbance, 9KHz to 30 MHz	2.87 db
Worst Case Radiated Disturbance, 30 to 1000 MHz	6.01 db
Worst Case Radiated Disturbance, 1000 to 18000 MHz	4.73 db
Worst Case Radiated Disturbance, 18000 to 26000 MHz	4.51 db
Worst Case Radiated Disturbance, 26000 to 40000 MHz	5.29 db

Uncertainty figures are valid to a confidence level of 95%.

5.4. SAMPLE CALCULATION

RADIATED EMISSIONS

Where relevant, the following sample calculation is provided:

Field Strength (dBuV/m) = Measured Voltage (dBuV) + Antenna Factor (dB/m) + Cable Loss (dB) – Preamp Gain (dB)
36.5 dBuV + 18.7 dB/m + 0.6 dB – 26.9 dB = 28.9 dBuV/m

6. EQUIPMENT UNDER TEST

6.1. DESCRIPTION OF EUT

The EUT is a GSM/WCDMA/LTE/5G NR Tablet + BT/BLE, DTS/UNII a/b/g/n/ac/ax and Digitizer.

6.2. MAXIMUM OUTPUT POWER

EIRP/ERP TEST PROCEDURE

ANSI C63.26:2015
KDB 971168 D01 Section 5.6

$$\text{ERP/EIRP} = \text{PMeas} + \text{GT} - \text{LC}$$

where: ERP/EIRP = effective or equivalent radiated power, respectively (expressed in the same units as PMeas, typically dBW or dBm);

PMeas = measured transmitter output power or PSD, in dBm or dBW;

GT = gain of the transmitting antenna, in dBd (ERP) or dBi (EIRP);

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

For devices utilizing multiple antennas, KDB 662911 provides guidance for determining the effective array transmit antenna gain term to be used in the above equation.

The transmitter has a maximum average conducted and ERP / EIRP output powers as follows:

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LTE BAND 4

Part 27 /							
EIRP Limit (W)			1.00				
Bandwidth (MHz)	Modulation	Low Frequency (MHz)	Upper Frequency (MHz)	EIRP Average (dBm)	EIRP Average (W)	99% BW (kHz)	Emission Designator
1.4	QPSK	1710.7	1754.3	23.39	0.218	1100	1M10G7W
	16QAM			23.15	0.207	1086	1M09D7W
3.0	QPSK	1711.5	1753.5	23.65	0.232	2702	2M70G7W
	16QAM			23.19	0.208	2700	2M70D7W
5.0	QPSK	1712.5	1752.5	23.71	0.235	4550	4M55G7W
	16QAM			23.15	0.207	4509	4M51D7W
10.0	QPSK	1715.0	1750.0	23.73	0.236	9027	9M03G7W
	16QAM			23.22	0.210	9000	9M00D7W
15.0	QPSK	1717.5	1747.5	23.66	0.232	13441	13M4G7W
	16QAM			23.30	0.214	1445	1M45D7W
20.0	QPSK	1720.0	1745.0	23.70	0.234	17908	17M9G7W
	16QAM			23.28	0.213	17928	17M9D7W

LTE BAND 66

Part 27							
EIRP Limit (W)			1.00				
Bandwidth (MHz)	Modulation	Low Frequency (MHz)	Upper Frequency (MHz)	EIRP Average (dBm)	EIRP Average (W)	99% BW (kHz)	Emission Designator
1.4	QPSK	1710.7	1779.3	23.57	0.228	1092	1M09G7W
	16QAM			23.17	0.207	1096	1M10D7W
3.0	QPSK	1711.5	1778.5	23.59	0.229	2702	2M70G7W
	16QAM			23.21	0.209	2703	2M70D7W
5.0	QPSK	1712.5	1777.5	23.94	0.248	4503	4M50G7W
	16QAM			23.55	0.226	4496	4M50D7W
10.0	QPSK	1715.0	1775.0	23.87	0.244	9014	9M01G7W
	16QAM			23.45	0.221	8995	9M00D7W
15.0	QPSK	1717.5	1772.5	23.72	0.236	13413	13M4G7W
	16QAM			23.46	0.222	13427	13M4D7W
20.0	QPSK	1720.0	1770.0	24.00	0.251	17898	17M9G7W
	16QAM			23.76	0.238	17873	17M9D7W

5G NR n66

Part 27							
EIRP Limit (W)		1.00					
Bandwidth (MHz)	Modulation	Low Frequency (MHz)	Upper Frequency (MHz)	EIRP Average (dBm)	EIRP Average (W)	99% BW (kHz)	Emission Designator
5.0	BPSK	1712.5	1777.5	22.59	0.182	4495	4M50G7W
	16QAM			22.24	0.167	4490	4M49D7W
10.0	BPSK	1715.0	1775.0	22.77	0.189	8972	8M97G7W
	16QAM			22.39	0.173	8973	8M97D7W
15.0	BPSK	1717.5	1772.5	22.80	0.191	13437	13M4G7W
	16QAM			22.34	0.171	13416	13M4D7W
20.0	BPSK	1720.0	1770.0	23.82	0.241	17897	17M9G7W
	16QAM			23.63	0.231	17862	17M9D7W
25.0	BPSK	1722.5	1767.5	22.60	0.182	22914	22M9G7W
	16QAM			22.04	0.160	22912	22M9D7W
30.0	BPSK	1725.0	1765.0	23.80	0.240	28714	28M7G7W
	16QAM			23.31	0.214	28733	28M7D7W
40.0	QPSK	1730.0	1760.0	23.83	0.242	38724	38M7G7W
	16QAM			23.33	0.215	38681	38M7D7W

6.3. MAXIMUM ANTENNA GAIN

The radio utilizes a Metal antenna, with a maximum gain provided by the manufacturer are as follows:

LTE AND 5G NR Bands	Frequency Range (MHz)	Main ANT 1 Gain (dBi)	SUB ANT 1 Gain (dBi)
LTE Band 4	1710 – 1755	-0.73	-2.15
LTE Band 66	1710 – 1780	-0.73	-2.15
5G NR n66	1710 – 1780	-0.73	N/A

6.4. WORST-CASE CONFIGURATION AND MODE

This report covers the following technologies:

- LTE Band 4
- LTE Band 66, 5G NR n66

For LTE and 5G NR, conducted spurious emission tests were conducted on wider bandwidth with inner 1RB since this is the worst bandwidth and the highest output power.

BPSK modulation applied only for 5G NR frequencies and has the same tune up power as QPSK modulations.

The DFT-s-OFDM and CP-OFDM waveforms were investigated, and DFT-s-OFDM was found to be the worst case.

The worst-case scenario for all measurements is based on an engineering evaluation made on different modulations. Then, QPSK and BPSK were observed as the worst mode to LTE bands and 5G NR bands respectively and set for all conducted and radiated. Output power measurements were measured on BPSK, QPSK, 16QAM, 64QAM, and 256QAM modulations. For testing purposes emissions on sections 8 and 9 were measured while QPSK/BPSK was set at or above target power for all bands. Conducted tests were performed on the worst-case antenna port because it has the highest conducted power. The worst-case antenna port is shown in the table below.

LTE Band 4 Sub Antenna 1 is covered by LTE Band 4 Main Antenna 1 because Sub Antenna 1 have same or lower output power, and lower peak antenna gain than that of Main Antenna 1.

LTE Band 66 Sub Antenna 1 is covered by LTE Band 66 Main Antenna 1 because Sub Antenna 1 have same or lower output power, and lower peak antenna gain than that of Main Antenna 1.

LTE and 5G NR Bands	Worst case Antenna Port for Conducted Power
LTE Band 66 and 5G NR n66	Main Ant 1

The EUT was investigated in three orthogonal orientations X/Y/Z on all antenna to determine the worst-case orientation. The full tests of the EUT have made upon the orientations that shown in the table below.

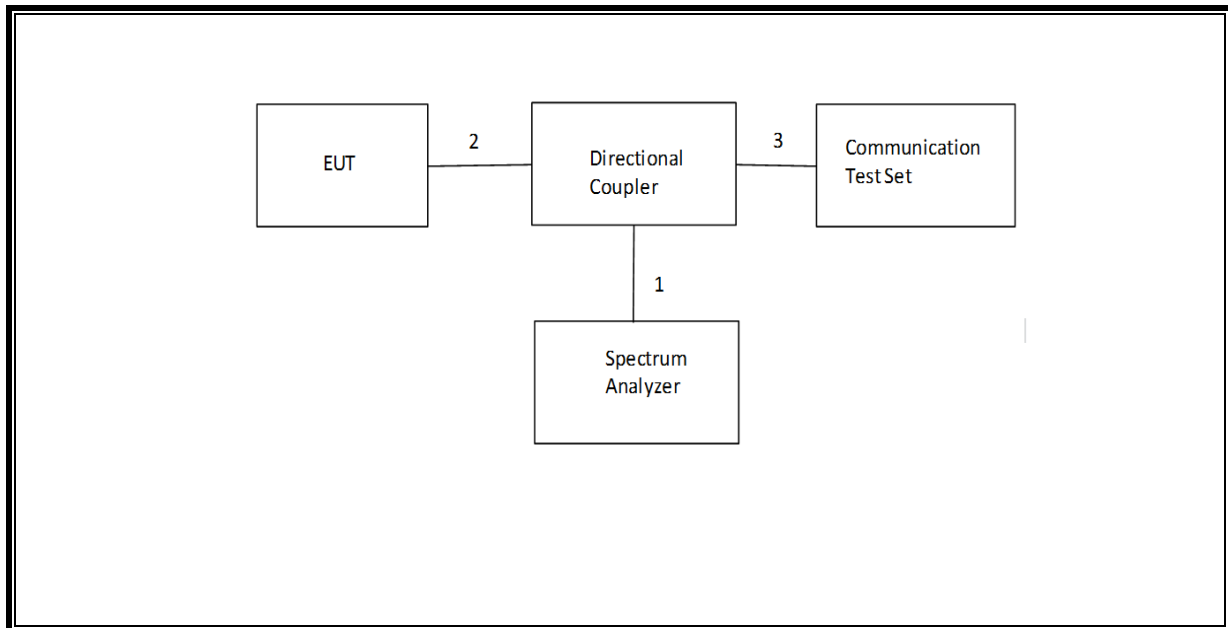
Frequency Range	Main ANT 1	Sub ANT 1
1710 – 1915 MHz	Y	Y

Radiated spurious emissions were investigated from 9kHz to 30MHz, 30MHz-1GHz and above 1GHz. There were no emissions found with less than 20dB of margin from 9kHz to 30MHz, 30MHz-1GHz.

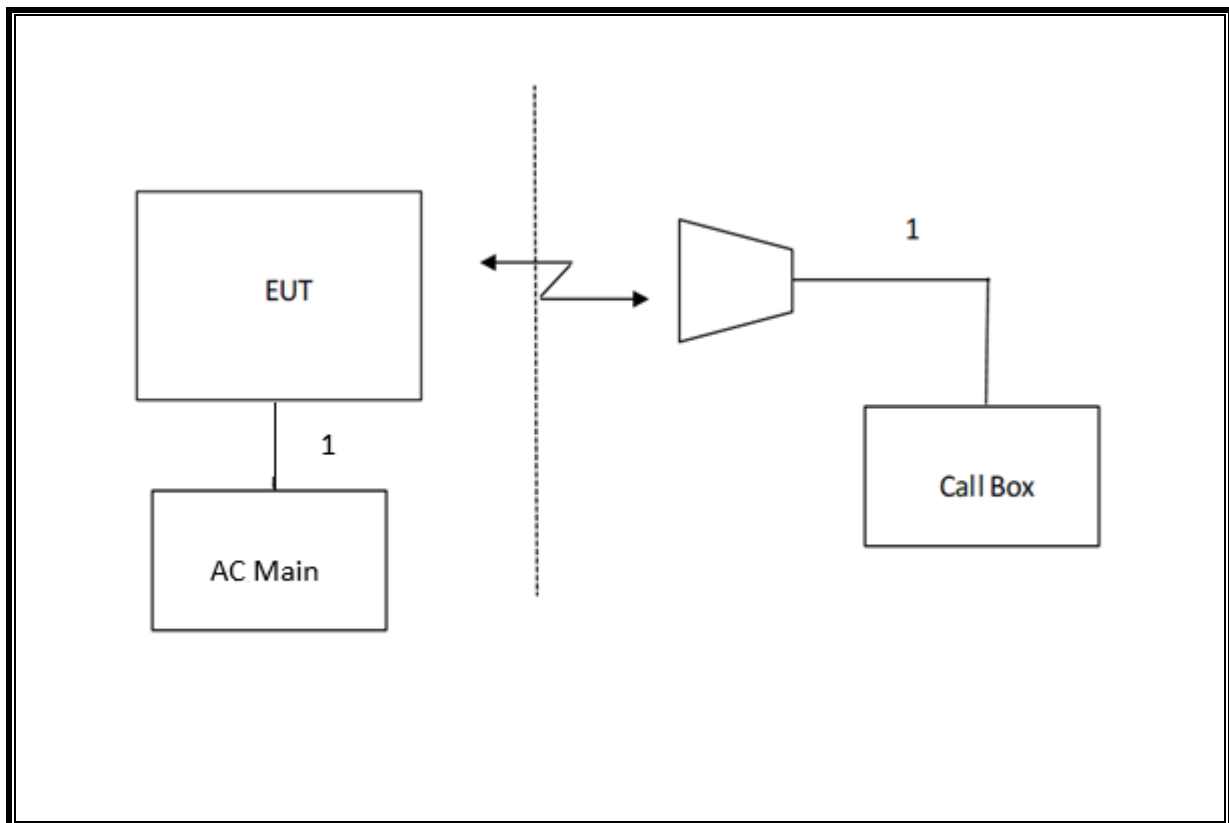
6.5. DESCRIPTION OF TEST SETUP

SUPPORT TEST EQUIPMENT						
Description		Manufacturer	Model	Serial Number		FCC ID/ DoC
AC/DC adapter		Samsung	EP-TA800	R37WBAA004BDKA		N/A
I/O CABLES (RF CONDUCTED TEST)						
Cable No.	Port	# of Identical Ports	Connector Type	Cable Type	Cable Length (m)	Remarks
1	RF Out	1	Spectrum Analyzer	Shielded	None	N/A
2	Antenna Port	1	EUT	Shielded	0.1m	N/A
3	RF In/Out	1	Communication Test Set	Shielded	1m	N/A
I/O CABLES (RF RADIATED TEST)						
Cable No.	Port	# of Identical Ports	Connector Type	Cable Type	Cable Length (m)	Remarks
1	USB	1	USB	Shielded	1	N/A

CONDUCTED SETUP



RADIATED SETUP



7. TEST AND MEASUREMENT EQUIPMENT

The following test and measurement equipment was utilized for the tests documented in this report:

TEST EQUIPMENT LIST				
Description	Manufacturer	Model	Asset	Cal Due
Antenna, Horn 1-18GHz	ETS Lindgren	3117	206808	2026-04-30
Antenna, Horn 1-18GHz	ETS Lindgren	3117	79834	2025-07-31
Antenna, Broadband Hybrid, 30MHz to 3GHz	SunAR RF Motion	JB3	203089	2025-04-30
Antenna, Horn 1-18GHz	ETS-Lindgren	3117	223083	2025-08-01
RF Filter Box, 1-18GHz	UL-FR1	SAC 8 port rf box 1	197920	2025-03-31
Amplifier, 10KHz to 1GHz, 32dB	Sonoma	310N	175953	2025-05-17
EMI Test Receiver, 1Hz to 44GHz	Rohde & Schwarz	ESW	225688	2025-02-28
EMI Test Receiver, 2Hz to 44GHz	Rohde & Schwarz	ESW	169935	2025-02-28
Spectrum Analyzer, PSA 3Hz to 44GHz	Keysight	N9030A	87738	2026-01-31
Directional Coupler	KRYTAR	152610	254457	2025-10-31
Directional Coupler	KRYTAR	152610	246234	2025-04-30
Power Meter, P-series single channel	Keysight	N1911A	90719	2026-01-31
Power Sensor, P - series, 50MHz to 18GHz, Wideband	Keysight	N1921A	90389	2026-01-31
Frankenstein 2A	UL Solutions	F2A	237597	2025-10-31
Spectrum Analyzer, PXA, 3Hz to 44GHz	Keysight	N9030A	85214	2026-01-31
Wideband Communication Test Set, Call Box	R&S GmbH & Co. KG	CMW500	230295	2025-02-28
Wideband Communication Test Set, Call Box	R&S GmbH & Co. KG	CMW500	85727	2025-06-26
UXM 5G Wireless Test Platform	Keysight	E7515B	245172	2025-02-28
Chamber, Environmental	Thermotron Corporation	SM-16C Mini-Max	179936	2025-01-31
UL AUTOMATION SOFTWARE				
CLT Software	UL	UL RF	V2023.11.21.0	
Power Measurement Software	UL	UL RF	V2023.08.14.0	
Radiated test software	UL	UL RF	Ver 9.5 2023-05-01	

NOTES:

- * Testing is completed before equipment expiration date.

8. RF OUTPUT POWER VERIFICATION

CONDUCTED OUTPUT POWER MEASUREMENT PROCEDURE

All bands conducted average power is obtained from the base station simulator.

The following tests were conducted according to the test requirements outlined in ANSI C63.26 Section 5.2.

RESULTS

EUT includes different power levels for head use configuration and body use configuration and the below tables contain the highest of all configurations average conducted output powers as follows:

8.1. LTE BAND 4

Test Engineer ID:	27996	Test Date:	2024-12-17
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OUTPUT POWER FOR LTE BAND 4 (1.4 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)		
				19957	20175	20393
				1710.7 MHz	1732.5 MHz	1754.3 MHz
1.4	QPSK	1	0	24.30	24.10	24.20
		1	2	24.30	24.10	24.10
		1	5	24.50	24.10	24.20
		3	0	24.50	24.10	24.20
		3	1	24.50	24.00	24.20
		3	2	24.60	24.10	24.10
	16QAM	6	0	23.60	23.10	23.20
		1	0	23.60	23.10	23.50
		1	2	23.60	23.20	23.40
		1	5	23.60	23.20	23.50
		3	0	23.70	23.10	23.30
		3	1	23.70	23.10	23.30
	64QAM	3	2	23.60	23.00	23.20
		6	0	22.60	22.20	22.00
		1	0	22.70	22.10	22.20
		1	2	22.80	22.10	22.20
		1	5	22.70	22.10	22.20
		3	0	22.60	22.10	22.20
	256QAM	3	1	22.60	22.10	22.20
		3	2	22.60	22.10	22.20
		6	0	21.40	21.20	21.30
		1	0	19.50	19.10	19.20
		1	2	19.60	19.10	19.30
		1	5	19.50	19.10	19.20

OUTPUT POWER FOR LTE BAND 4 (3.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)		
				19965	20175	20385
				1711.5 MHz	1732.5 MHz	1753.5 MHz
3.0	QPSK	1	0	24.40	24.10	24.20
		1	7	24.30	23.90	24.20
		1	14	24.40	24.20	24.20
		8	0	23.50	23.10	23.30
		8	4	23.40	23.10	23.20
		8	7	23.50	23.10	23.20
	16QAM	15	0	23.50	23.10	23.20
		1	0	23.50	23.10	23.50
		1	7	23.30	22.90	23.30
		1	14	23.40	23.10	23.50
		8	0	22.50	22.20	22.20
		8	4	22.50	22.10	22.30
	64QAM	8	7	22.40	22.20	22.20
		15	0	22.30	22.10	22.20
		1	0	22.60	22.40	22.20
		1	7	22.50	22.10	22.10
		1	14	22.60	22.20	22.20
		8	0	21.40	21.10	21.30
	256QAM	8	4	21.40	21.10	21.20
		8	7	21.40	21.10	21.10
		15	0	21.40	21.00	21.20
		1	0	19.40	19.50	19.00
		1	7	19.30	19.30	18.90
		1	14	19.40	19.40	19.60

OUTPUT POWER FOR LTE BAND 4 (5.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)		
				19975	20175	20375
				1712.5 MHz	1732.5 MHz	1752.5 MHz
5.0	QPSK	1	0	24.50	24.20	24.40
		1	12	24.50	24.10	24.30
		1	24	24.50	24.20	24.30
		12	0	23.50	23.10	23.30
		12	6	23.40	23.10	23.30
		12	11	23.40	23.10	23.20
		25	0	23.50	23.10	23.30
	16QAM	1	0	23.70	23.70	23.30
		1	12	23.50	23.50	23.00
		1	24	23.60	23.60	23.30
		12	0	22.50	22.20	22.30
		12	6	22.50	22.20	22.30
		12	11	22.50	22.20	22.20
		25	0	22.40	22.10	22.20
	64QAM	1	0	22.30	22.40	22.40
		1	12	22.30	22.10	22.40
		1	24	22.30	22.30	22.40
		12	0	21.40	21.00	21.20
		12	6	21.40	21.00	21.20
		12	11	21.40	21.00	21.20
		25	0	21.40	21.00	21.20
	256QAM	1	0	19.20	19.20	19.30
		1	12	19.10	19.00	19.20
		1	24	19.20	19.20	19.20
		12	0	19.40	19.10	19.20
		12	6	19.40	19.00	19.20
		12	11	19.40	19.10	19.10
		25	0	19.50	19.00	19.20

OUTPUT POWER FOR LTE BAND 4 (10.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)		
				20000	20175	20350
				1715.0 MHz	1732.5 MHz	1750.0 MHz
10.0	QPSK	1	0	24.40	24.20	24.30
		1	24	24.20	24.10	24.20
		1	49	24.30	24.10	24.30
		25	0	23.50	23.20	23.30
		25	12	23.40	23.10	23.30
		25	24	23.40	23.10	23.30
		50	0	23.40	23.10	23.30
	16QAM	1	0	23.50	23.10	23.60
		1	24	23.40	23.10	23.50
		1	49	23.30	23.10	23.50
		25	0	22.50	22.20	22.30
		25	12	22.50	22.10	22.30
		25	24	22.40	22.10	22.30
		50	0	22.40	22.10	22.20
	64QAM	1	0	22.50	22.50	22.30
		1	24	22.30	22.20	22.20
		1	49	22.40	22.30	22.20
		25	0	21.50	21.10	21.20
		25	12	21.40	21.10	21.20
		25	24	21.40	21.10	21.20
		50	0	21.40	21.10	21.20
	256QAM	1	0	19.40	19.50	19.00
		1	24	19.30	19.30	19.00
		1	49	19.40	19.50	19.00
		25	0	19.50	19.10	19.20
		25	12	19.50	19.10	19.20
		25	24	19.40	19.10	19.30
		50	0	19.40	19.10	19.20

OUTPUT POWER FOR LTE BAND 4 (15.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)		
				20025	20175	20325
				1717.5 MHz	1732.5 MHz	1747.5 MHz
15.0	QPSK	1	0	24.50	24.30	24.20
		1	37	24.40	23.90	24.30
		1	74	24.40	24.20	24.30
		36	0	23.50	23.30	23.30
		36	16	23.50	23.20	23.30
		36	35	23.40	23.20	23.30
		75	0	23.50	23.20	23.30
	16QAM	1	0	23.90	23.30	23.60
		1	37	23.70	22.90	23.40
		1	74	23.70	23.10	23.60
		36	0	22.50	22.20	22.30
		36	16	22.40	22.10	22.30
		36	35	22.30	22.10	22.30
		75	0	22.40	22.10	22.30
	64QAM	1	0	22.50	22.80	22.40
		1	37	22.30	22.50	22.30
		1	74	22.30	22.60	22.40
		36	0	21.50	21.10	21.20
		36	16	21.50	21.00	21.20
		36	35	21.40	21.10	21.20
		75	0	21.40	21.10	21.20
	256QAM	1	0	19.30	19.40	19.50
		1	37	19.10	19.10	19.50
		1	74	19.10	19.30	19.50
		36	0	19.40	19.20	19.20
		36	16	19.40	19.00	19.20
		36	35	19.30	19.10	19.20
		75	0	19.40	19.00	19.20

OUTPUT POWER FOR LTE BAND 4 (20.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)		
				20050	20175	20300
				1720.0 MHz	1732.5 MHz	1745.0 MHz
20.0	QPSK	1	0	24.50	24.40	24.10
		1	49	24.30	24.20	24.20
		1	99	24.20	24.30	24.30
		50	0	23.50	23.30	23.30
		50	24	23.40	23.20	23.30
		50	49	23.30	23.20	23.30
		100	0	23.40	23.20	23.30
	16QAM	1	0	23.80	23.80	23.60
		1	49	23.60	23.60	23.70
		1	99	23.50	23.80	23.70
		50	0	22.40	22.30	22.20
		50	24	22.40	22.10	22.30
		50	49	22.30	22.20	22.30
		100	0	22.40	22.10	22.20
	64QAM	1	0	22.90	22.50	22.40
		1	49	22.80	22.20	22.50
		1	99	22.70	22.40	22.50
		50	0	21.40	21.20	21.20
		50	24	21.40	21.10	21.30
		50	49	21.30	21.10	21.30
		100	0	21.30	21.10	21.20
	256QAM	1	0	19.60	19.30	19.30
		1	49	19.40	18.90	19.30
		1	99	19.30	19.10	19.30
		50	0	19.40	19.20	19.20
		50	24	19.40	19.10	19.20
		50	49	19.30	19.10	19.20
		100	0	19.40	19.10	19.20

8.2. LTE BAND 66

Test Engineer ID:	27966	Test Date:	2024-12-17
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OUTPUT POWER FOR LTE BAND 66 (1.4 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)		
				131979	132322	132665
				1710.7 MHz	1745.0 MHz	1779.3 MHz
1.4	QPSK	1	0	24.70	24.50	24.70
		1	2	24.70	24.50	24.60
		1	5	24.70	24.50	24.80
		3	0	24.70	24.50	24.70
		3	1	24.70	24.60	24.80
		3	2	24.70	24.40	24.70
		6	0	23.80	23.60	23.90
	16QAM	1	0	23.80	23.80	23.60
		1	2	23.80	23.60	23.80
		1	5	23.80	23.80	23.70
		3	0	23.80	23.60	23.80
		3	1	23.70	23.60	23.80
		3	2	23.60	23.50	23.80
	64QAM	6	0	22.90	22.40	22.90
		1	0	22.90	22.50	22.70
		1	2	23.00	22.50	22.60
		1	5	23.00	22.50	22.60
		3	0	22.90	22.50	22.70
		3	1	22.90	22.40	22.60
		3	2	22.90	22.40	22.60
	256QAM	6	0	21.70	21.60	21.70
		1	0	19.80	19.50	19.50
		1	2	19.90	19.60	19.40
		1	5	19.80	19.50	19.50
		3	0	19.70	19.40	19.50
		3	1	19.60	19.30	19.40
		3	2	19.60	19.30	19.40
		6	0	19.70	19.40	19.70

OUTPUT POWER FOR LTE BAND 66 (3.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)		
				131987	132322	132657
				1711.5 MHz	1745.0 MHz	1778.5 MHz
3.0	QPSK	1	0	24.80	24.50	24.70
		1	7	24.70	24.30	24.70
		1	14	24.70	24.60	24.70
		8	0	23.90	23.60	23.80
		8	4	23.80	23.50	23.80
		8	7	23.90	23.60	23.80
		15	0	23.90	23.50	23.70
	16QAM	1	0	23.90	23.40	24.00
		1	7	23.60	23.30	23.70
		1	14	23.70	23.50	23.90
		8	0	22.90	22.60	22.70
		8	4	22.80	22.50	22.70
		8	7	22.80	22.60	22.70
		15	0	22.70	22.50	22.70
	64QAM	1	0	22.70	22.40	22.60
		1	7	22.50	22.30	22.50
		1	14	22.60	22.40	22.60
		8	0	21.70	21.50	21.70
		8	4	21.70	21.40	21.70
		8	7	21.60	21.30	21.60
		15	0	21.70	21.40	21.60
	256QAM	1	0	19.60	19.20	19.50
		1	7	19.40	19.10	19.40
		1	14	19.90	19.80	20.00
		8	0	19.70	19.50	19.70
		8	4	19.70	19.50	19.70
		8	7	19.80	19.50	19.80
		15	0	19.60	19.40	19.70

OUTPUT POWER FOR LTE BAND 66 (5.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)		
				131997	132322	132647
				1712.5 MHz	1745.0 MHz	1777.5 MHz
5.0	QPSK	1	0	24.63	24.46	24.80
		1	12	24.58	24.37	24.75
		1	24	24.62	24.48	24.84
		12	0	23.62	23.43	23.79
		12	6	23.60	23.42	23.77
		12	11	23.59	23.43	23.74
		25	0	23.64	23.47	23.75
	16QAM	1	0	23.87	23.94	23.79
		1	12	23.68	23.80	23.52
		1	24	23.79	23.92	23.80
		12	0	22.69	22.52	22.76
		12	6	22.66	22.55	22.71
		12	11	22.68	22.53	22.70
		25	0	22.63	22.44	22.63
	64QAM	1	0	22.58	22.61	22.97
		1	12	22.47	22.51	22.88
		1	24	22.52	22.65	22.90
		12	0	21.69	21.36	21.73
		12	6	21.68	21.34	21.72
		12	11	21.66	21.36	21.71
		25	0	21.61	21.33	21.66
	256QAM	1	0	19.43	19.53	19.81
		1	12	19.37	19.46	19.75
		1	24	19.41	19.54	19.78
		12	0	19.67	19.42	19.73
		12	6	19.66	19.44	19.71
		12	11	19.62	19.46	19.74
		25	0	19.71	19.40	19.76

OUTPUT POWER FOR LTE BAND 66 (10.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)		
				132022	132322	132622
				1715.0 MHz	1745.0 MHz	1775.0 MHz
10.0	QPSK	1	0	24.70	24.36	24.81
		1	24	24.49	24.43	24.73
		1	49	24.60	24.49	24.83
		25	0	23.72	23.48	23.79
		25	12	23.68	23.48	23.76
		25	24	23.65	23.47	23.76
		50	0	23.66	23.49	23.76
	16QAM	1	0	23.74	23.33	24.11
		1	24	23.65	23.44	23.99
		1	49	23.58	23.37	24.03
		25	0	22.75	22.46	22.79
		25	12	22.72	22.45	22.76
		25	24	22.67	22.42	22.74
		50	0	22.64	22.40	22.73
	64QAM	1	0	22.74	22.67	22.85
		1	24	22.53	22.63	22.76
		1	49	22.68	22.70	22.79
		25	0	21.72	21.44	21.80
		25	12	21.69	21.46	21.79
		25	24	21.65	21.45	21.77
		50	0	21.61	21.41	21.76
	256QAM	1	0	19.71	19.79	19.54
		1	24	19.59	19.75	19.57
		1	49	19.63	19.83	19.58
		25	0	19.77	19.45	19.80
		25	12	19.72	19.49	19.81
		25	24	19.69	19.49	19.82
		50	0	19.68	19.45	19.77

OUTPUT POWER FOR LTE BAND 66 (15.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)		
				132047	132322	132597
				1717.5 MHz	1745.0 MHz	1772.5 MHz
15.0	QPSK	1	0	24.78	24.45	24.67
		1	37	24.67	24.48	24.58
		1	74	24.62	24.60	24.86
		36	0	23.79	23.60	23.84
		36	16	23.74	23.59	23.91
		36	35	23.71	23.59	23.95
		75	0	23.74	23.60	23.93
	16QAM	1	0	24.09	23.84	23.63
		1	37	23.76	23.75	23.58
		1	74	23.92	23.89	23.66
		36	0	22.83	22.51	22.79
		36	16	22.74	22.50	22.83
		36	35	22.71	22.50	22.83
		75	0	22.74	22.52	22.85
	64QAM	1	0	22.79	22.95	22.92
		1	37	22.57	22.94	22.90
		1	74	22.61	23.01	23.00
		36	0	21.77	21.49	21.78
		36	16	21.72	21.47	21.83
		36	35	21.69	21.49	21.83
		75	0	21.69	21.52	21.81
	256QAM	1	0	19.55	19.64	20.04
		1	37	19.37	19.63	20.11
		1	74	19.34	19.72	20.21
		36	0	19.73	19.47	19.77
		36	16	19.68	19.49	19.83
		36	35	19.66	19.51	19.86
		75	0	19.65	19.51	19.83

OUTPUT POWER FOR LTE BAND 66 (20.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)		
				132072	132322	132572
				1720.0 MHz	1745.0 MHz	1770.0 MHz
20.0	QPSK	1	0	24.76	24.42	24.52
		1	49	24.61	24.57	24.75
		1	99	24.46	24.54	24.85
		50	0	23.74	23.53	23.70
		50	24	23.70	23.56	23.84
		50	49	23.58	23.56	23.84
		100	0	23.70	23.54	23.81
	16QAM	1	0	24.13	23.97	24.01
		1	49	23.83	23.96	24.26
		1	99	23.79	23.95	24.11
		50	0	22.68	22.48	22.66
		50	24	22.65	22.51	22.79
		50	49	22.52	22.51	22.77
		100	0	22.64	22.51	22.75
	64QAM	1	0	22.87	22.65	23.08
		1	49	22.72	22.74	23.17
		1	99	22.59	22.72	23.20
		50	0	21.68	21.49	21.64
		50	24	21.65	21.53	21.77
		50	49	21.53	21.52	21.76
		100	0	21.63	21.48	21.71
	256QAM	1	0	19.68	19.52	19.65
		1	49	19.56	19.57	19.92
		1	99	19.34	19.59	19.96
		50	0	19.70	19.44	19.62
		50	24	19.66	19.50	19.76
		50	49	19.53	19.49	19.80
		100	0	19.64	19.46	19.74

8.3. 5G NR n66

Test Engineer ID:	27966	Test Date:	2025-01-10
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OUTPUT POWER FOR 5G NR n66 (5.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)		
				342500	349000	355500
				1712.5 MHz	1745.0 MHz	1777.5 MHz
5.0	BPSK	1	0	24.10	23.79	24.34
		1	1	24.61	24.27	24.84
		1	23	24.46	24.34	24.82
		1	24	24.23	23.87	24.34
		12	6	24.46	24.40	24.66
		25	0	24.00	23.91	24.17
	QPSK	1	0	23.70	23.22	23.76
		1	1	24.70	24.22	24.72
		1	23	24.68	24.24	24.71
		1	24	23.56	23.36	23.75
		12	6	24.54	24.43	24.67
		25	0	23.56	23.43	23.67
	16QAM	1	0	22.74	22.33	22.80
		1	1	23.77	23.52	23.79
		1	23	23.73	23.45	23.79
		1	24	22.75	22.49	22.72
		12	6	23.57	23.44	23.66
		25	0	22.57	22.46	22.66
	64QAM	1	0	22.15	21.92	22.37
		1	1	22.13	21.74	22.41
		1	23	22.08	21.89	22.19
		1	24	22.03	21.75	22.20
		12	6	22.02	21.94	22.12
		25	0	22.04	21.94	22.15
	256QAM	1	0	20.20	19.88	20.21
		1	1	20.13	19.80	20.20
		1	23	20.10	19.79	20.14
		1	24	20.14	19.79	20.24
		12	6	20.01	19.98	20.15
		25	0	20.05	19.91	20.16

OUTPUT POWER FOR 5G NR n66 (10.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)		
				343000	349000	355000
				1715.0 MHz	1745.0 MHz	1775.0 MHz
10.0	BPSK	1	0	24.15	24.06	24.15
		1	1	24.67	24.55	24.69
		1	50	24.52	24.67	24.70
		1	51	24.08	24.13	24.21
		25	12	24.58	24.46	24.71
		50	0	24.08	24.00	24.20
	QPSK	1	0	23.64	23.40	23.59
		1	1	24.68	24.42	24.54
		1	50	24.52	24.52	24.57
		1	51	23.52	23.51	23.59
		25	12	24.59	24.49	24.72
		50	0	23.61	23.47	23.73
	16QAM	1	0	22.78	22.27	22.31
		1	1	23.40	23.46	23.20
		1	50	23.80	23.57	23.49
		1	51	22.85	22.56	22.56
		25	12	23.66	23.51	23.72
		50	0	22.60	22.49	22.74
	64QAM	1	0	22.33	22.04	22.20
		1	1	22.12	21.90	22.18
		1	50	22.01	22.05	22.15
		1	51	22.29	22.03	22.15
		25	12	22.04	22.02	22.31
		50	0	22.02	21.97	22.17
	256QAM	1	0	19.87	19.94	19.95
		1	1	20.07	19.95	19.99
		1	50	20.09	20.20	19.87
		1	51	20.03	19.96	20.15
		25	12	19.99	20.00	20.12
		50	0	20.08	19.91	20.19

OUTPUT POWER FOR 5G NR n66 (15.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)		
				343500	349000	354500
				1717.5 MHz	1745.0 MHz	1772.5 MHz
15.0	BPSK	1	0	24.34	23.96	23.90
		1	1	24.84	24.48	24.43
		1	77	24.56	24.58	24.63
		1	78	24.08	24.11	24.13
		36	18	24.60	24.50	24.73
		75	0	24.09	23.99	24.23
	QPSK	1	0	23.86	23.23	23.52
		1	1	24.84	24.27	24.52
		1	77	24.67	24.40	24.71
		1	78	23.67	23.39	23.68
		36	18	24.60	24.51	24.72
		75	0	23.58	23.51	23.72
	16QAM	1	0	22.97	22.39	22.55
		1	1	23.94	23.43	23.58
		1	77	23.77	23.59	23.75
		1	78	22.77	22.67	22.74
		36	18	23.62	23.53	23.68
		75	0	22.61	22.49	22.75
	64QAM	1	0	22.43	22.01	22.13
		1	1	22.45	21.88	22.13
		1	77	22.30	21.93	22.29
		1	78	22.29	21.91	22.28
		36	18	22.02	21.99	22.21
		75	0	22.09	21.95	22.24
	256QAM	1	0	20.41	19.70	19.91
		1	1	20.48	19.71	19.92
		1	77	20.33	19.85	20.10
		1	78	20.18	19.83	20.05
		36	18	20.08	19.93	20.17
		75	0	20.07	20.02	20.21

OUTPUT POWER FOR 5G NR n66 (20.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)		
				344000	349000	354000
				1720.0 MHz	1745.0 MHz	1770.0 MHz
20.0	BPSK	1	0	23.96	23.85	23.91
		1	1	24.46	24.33	24.46
		1	104	24.23	24.47	24.72
		1	105	23.71	23.95	24.19
		50	25	24.54	24.47	24.70
		100	0	24.04	23.99	24.19
	QPSK	1	0	23.59	23.34	23.58
		1	1	24.66	24.35	24.56
		1	104	24.36	24.44	24.72
		1	105	23.32	23.48	23.67
		50	25	24.57	24.52	24.70
		100	0	23.57	23.47	23.69
	16QAM	1	0	22.80	22.11	22.23
		1	1	23.59	23.08	23.34
		1	104	23.26	23.30	23.40
		1	105	22.49	22.26	22.70
		50	25	23.61	23.48	23.69
		100	0	22.61	22.52	22.72
	64QAM	1	0	22.22	21.62	21.95
		1	1	22.20	22.00	22.32
		1	104	21.95	21.95	21.98
		1	105	21.95	22.19	22.25
		50	25	22.03	21.95	22.19
		100	0	21.98	22.00	22.21
	256QAM	1	0	19.98	19.74	19.98
		1	1	20.12	19.79	19.98
		1	104	19.81	19.87	20.18
		1	105	19.86	19.88	20.21
		50	25	20.03	19.97	20.15
		100	0	20.07	19.94	20.15

OUTPUT POWER FOR 5G NR n66 (25.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)		
				344500	349000	353500
				1722.5	1745.0 MHz	1767.5
25.0	BPSK	1	0	24.13	23.76	23.92
		1	1	24.65	24.32	24.44
		1	131	24.35	24.46	24.74
		1	132	23.86	23.99	24.22
		64	32	24.54	24.48	24.62
		128	0	24.01	23.97	24.14
	QPSK	1	0	23.69	23.28	23.46
		1	1	24.69	24.32	24.47
		1	131	24.39	24.43	24.73
		1	132	23.39	23.44	23.77
		64	32	24.54	24.51	24.66
		128	0	23.53	23.47	23.66
	16QAM	1	0	22.58	22.24	22.47
		1	1	23.62	23.35	23.60
		1	131	23.23	23.45	23.89
		1	132	22.38	22.53	22.72
		64	32	23.56	23.50	23.72
		128	0	22.55	22.50	22.66
	64QAM	1	0	22.28	21.75	22.22
		1	1	22.20	21.84	22.04
		1	131	21.98	21.98	22.11
		1	132	21.74	21.94	22.27
		64	32	22.00	21.95	22.12
		128	0	22.00	21.93	22.13
	256QAM	1	0	20.11	19.86	19.96
		1	1	20.05	19.62	19.99
		1	131	19.87	20.10	20.22
		1	132	19.84	20.03	20.17
		64	32	20.00	19.98	20.08
		128	0	19.98	19.95	20.09

OUTPUT POWER FOR 5G NR n66 (30.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)		
				345000	349000	353000
				1725.0 MHz	1745.0 MHz	1765.0 MHz
30.0	BPSK	1	0	24.10	23.82	23.94
		1	1	24.62	24.32	24.43
		1	158	24.38	24.49	24.66
		1	159	23.90	23.99	24.15
		80	40	24.48	24.56	24.60
		160	0	23.97	24.03	24.10
	QPSK	1	0	23.59	23.32	23.46
		1	1	24.61	24.31	24.45
		1	158	24.39	24.48	24.69
		1	159	23.39	23.49	23.65
		80	40	24.49	24.53	24.62
		160	0	23.51	23.53	23.60
	16QAM	1	0	22.61	22.30	22.50
		1	1	23.62	23.29	23.56
		1	158	23.38	23.44	23.66
		1	159	22.40	22.39	22.70
		80	40	23.53	23.58	23.61
		160	0	22.49	22.51	22.58
	64QAM	1	0	22.08	21.79	21.97
		1	1	21.96	21.94	21.96
		1	158	21.87	21.98	22.20
		1	159	21.88	22.09	22.14
		80	40	21.98	22.03	22.09
		160	0	21.99	21.99	22.04
	256QAM	1	0	20.04	19.62	19.95
		1	1	20.04	19.88	19.84
		1	158	19.85	20.12	20.00
		1	159	19.85	19.80	20.10
		80	40	19.97	20.01	20.23
		160	0	19.96	19.95	20.00

OUTPUT POWER FOR 5G NR n66 (40.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)		
				346000	349000	352000
				1730.0 MHz	1745.0 MHz	1760.0 MHz
40.0	BPSK	1	0	24.07	23.85	23.87
		1	1	24.63	24.39	24.39
		1	214	24.50	24.50	24.69
		1	215	23.96	23.99	24.19
		108	54	24.39	24.54	24.54
		216	0	23.84	24.00	24.05
	QPSK	1	0	23.59	23.37	23.35
		1	1	24.59	24.39	24.42
		1	214	24.50	24.51	24.72
		1	215	23.49	23.47	23.66
		108	54	24.40	24.57	24.57
		216	0	23.38	23.57	23.55
	16QAM	1	0	22.45	22.58	22.41
		1	1	23.52	23.20	23.46
		1	214	23.44	23.50	23.77
		1	215	22.40	22.47	22.76
		108	54	23.44	23.57	23.59
		216	0	22.35	22.51	22.55
	64QAM	1	0	22.03	21.91	21.83
		1	1	21.99	21.98	21.82
		1	214	21.93	22.07	22.15
		1	215	21.95	22.04	22.05
		108	54	21.87	22.05	22.07
		216	0	21.86	22.03	22.01
	256QAM	1	0	20.14	19.84	19.77
		1	1	20.11	19.89	19.80
		1	214	20.07	19.94	20.12
		1	215	19.97	19.86	20.14
		108	54	19.90	20.01	20.02
		216	0	19.85	19.97	20.01

9. CONDUCTED TEST RESULTS

9.1. OCCUPIED BANDWIDTH

RULE PART(S)

FCC: §2.1049

LIMITS

For reporting purposes only.

TEST PROCEDURE

The transmitter output was connected to a calibrated coaxial cable and coupler, the other end of which was connected to a spectrum analyzer. The occupied bandwidth was measured with the spectrum analyzer at the middle channel in each band. The 99% and -26dB bandwidths was also measured and recorded.

RESULTS

There is no limit required and power is the same for low, middle and high channel; therefore, only middle channel was tested.

LTE BAND 4

Band	Mode	RB Allocation/RB Offset	f(MHz)	99% BW (MHz)	-26dB BW (MHz)
LTE BAND 4	1.4MHz, QPSK	6/0	1732.5	1.1000	1.322
	1.4MHz,16QAM			1.0862	1.313
	3MHz, QPSK	15/0		2.7017	3.047
	3MHz, 16QAM			2.7002	3.120
	5MHz, QPSK	25/0		4.5500	5.414
	5MHz, 16QAM			4.5086	5.348
	10MHz, QPSK	50/0		9.0268	10.42
	10MHz, 16QAM			9.0000	10.33
	15MHz, QPSK	75/0		13.441	15.15
	15MHz, 16QAM			13.445	15.00
	20MHz, QPSK	100/0		17.908	19.65
	20MHz, 16QAM			17.928	19.94
	20MHz. QPSK	1/0		0.2619	0.4631

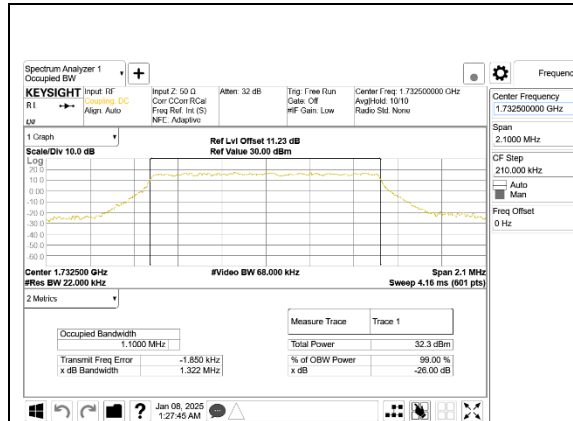
LTE BAND 66

Band	Mode	RB Allocation/RB Offset	f(MHz)	99% BW (MHz)	-26dB BW (MHz)
LTE BAND 66	1.4MHz, QPSK	6/0	1745.0	1.0924	1.312
	1.4MHz,16QAM			1.0964	1.343
	3MHz, QPSK	15/0		2.7017	3.079
	3MHz, 16QAM			2.7029	3.098
	5MHz, QPSK	25/0		4.5031	5.181
	5MHz, 16QAM			4.4961	5.200
	10MHz, QPSK	50/0		9.0136	10.41
	10MHz, 16QAM			8.9953	10.29
	15MHz, QPSK	75/0		13.413	15.13
	15MHz, 16QAM			13.427	15.07
	20MHz, QPSK	100/0		17.898	19.70
	20MHz, 16QAM			17.873	19.60
	20MHz, QPSK	1/0		0.2662	0.4648

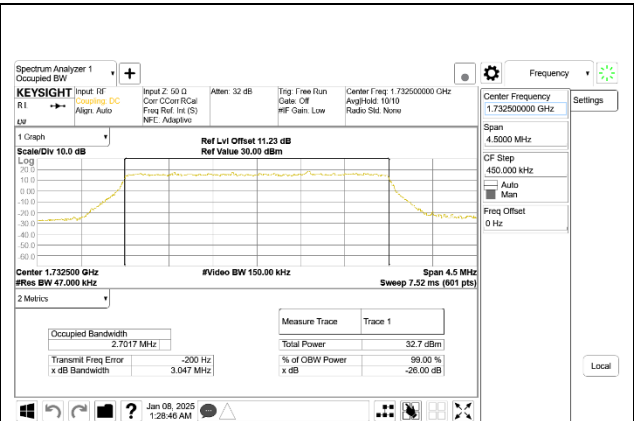
5G NR n66

Band	Mode	RB Allocation/RB Offset	f(MHz)	99% BW (MHz)	-26dB BW (MHz)
5G NR n66	5MHz, BPSK	25/0	1745.0	4.4954	5.244
	5MHz, QPSK			4.4989	5.255
	5MHz, 16QAM			4.4901	5.170
	10MHz, BPSK	50/0		8.9720	9.889
	10MHz, QPSK			9.0135	9.985
	10MHz, 16QAM			8.9726	9.949
	15MHz, BPSK	75/0		13.437	14.42
	15MHz, QPSK			13.437	14.62
	15MHz, 16QAM			13.416	14.66
	20MHz, BPSK	100/0		17.897	19.24
	20MHz, QPSK			17.920	19.16
	20MHz, 16QAM			17.862	19.12
	25MHz, BPSK	128/0		22.914	25.03
	25MHz, QPSK			22.925	24.81
	25MHz, 16QAM			22.912	25.12
	30MHz, BPSK	160/0		28.714	32.22
	30MHz, QPSK			28.680	32.51
	30MHz, 16QAM			28.733	31.87
	40MHz, BPSK	216/0		38.724	42.10
	40MHz, QPSK			38.738	42.65
	40MHz, 16QAM			38.681	42.60
	45MHz, BPSK	1/0		0.2849	0.4453

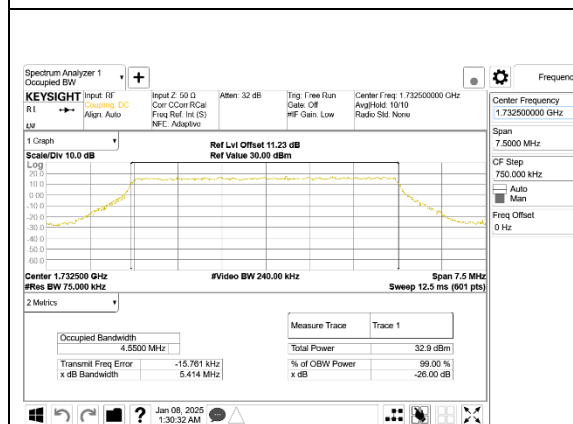
9.1.1. LTE BAND 4



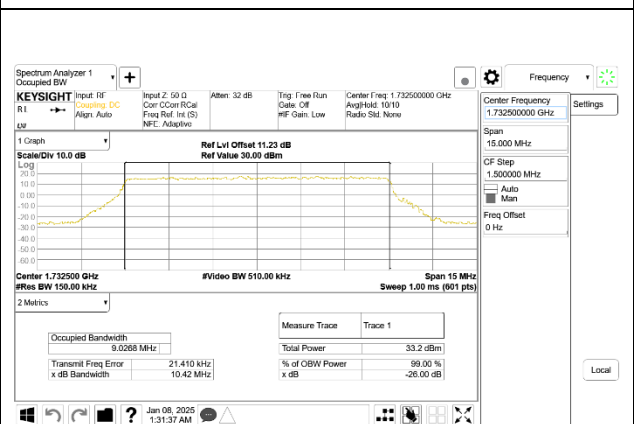
LTE B4 1.4MHz QPSK Middle Channel RB6-0



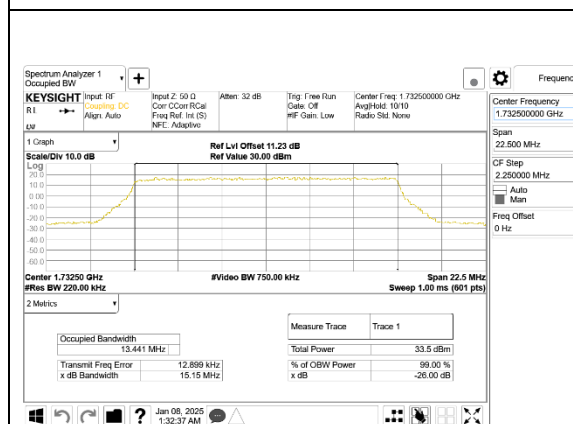
LTE B4 3MHz QPSK Middle Channel RB15-0



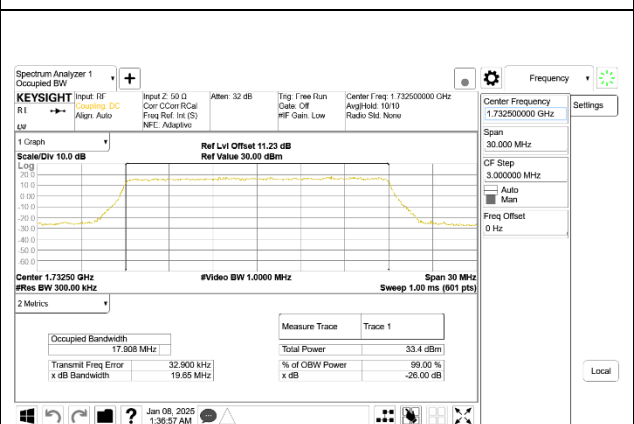
LTE B4 5MHz QPSK Middle Channel RB25-0



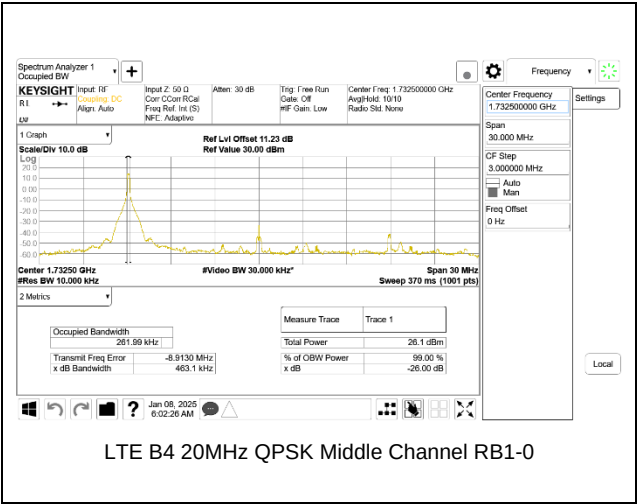
LTE B4 10MHz QPSK Middle Channel RB50-0



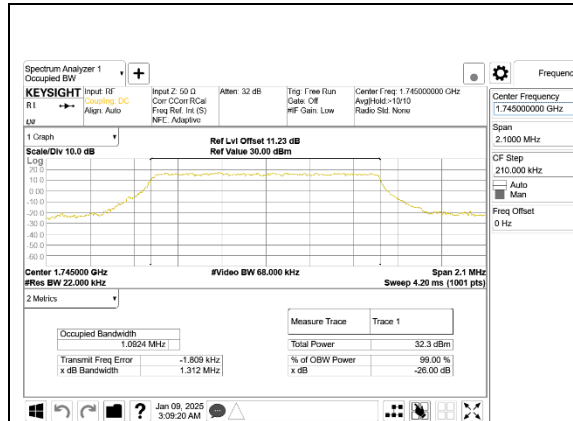
LTE B4 15MHz QPSK Middle Channel RB75-0



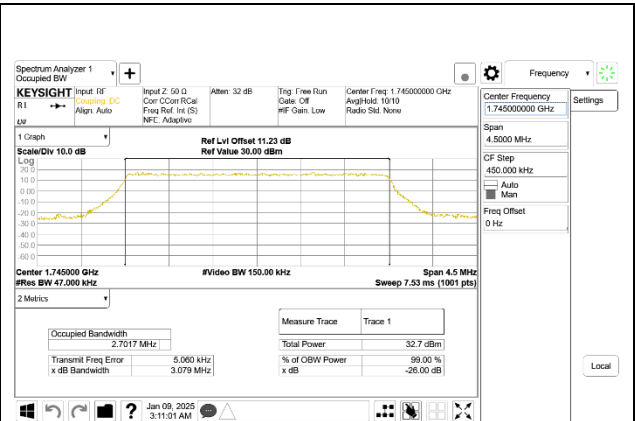
LTE B4 20MHz QPSK Middle Channel RB100-0



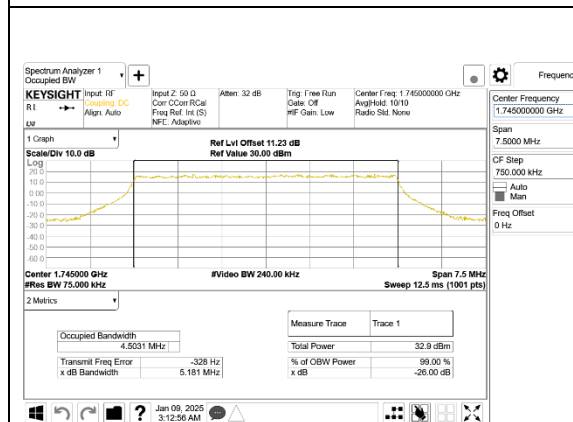
9.1.2. LTE BAND 66



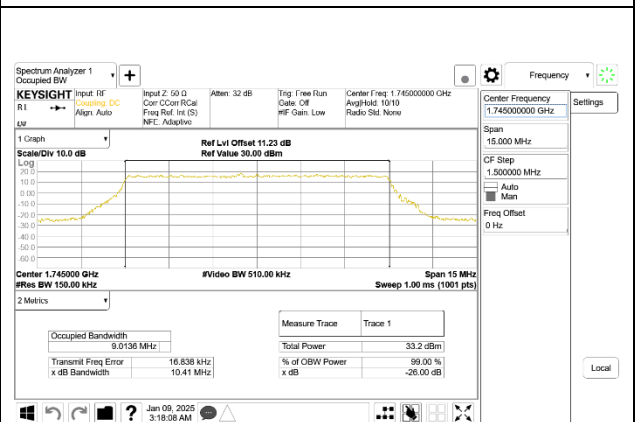
LTE B66 1.4MHz QPSK Middle Channel RB6-0



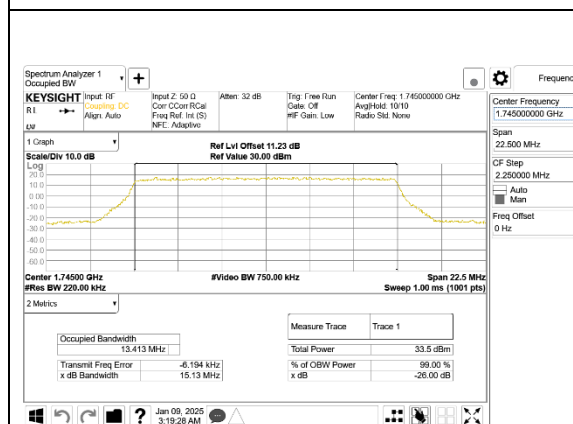
LTE B66 3MHz QPSK Middle Channel RB15-0



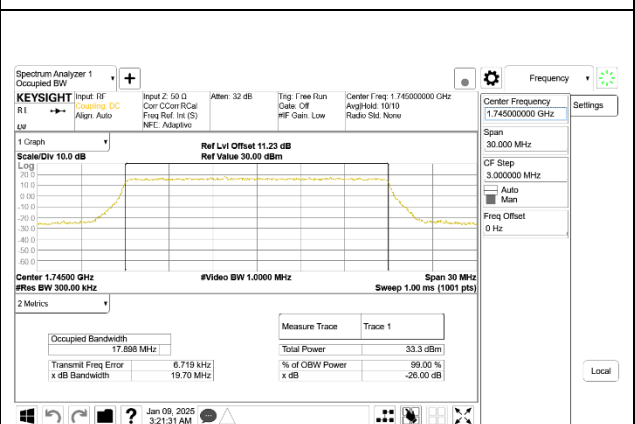
LTE B66 5MHz QPSK Middle Channel RB25-0



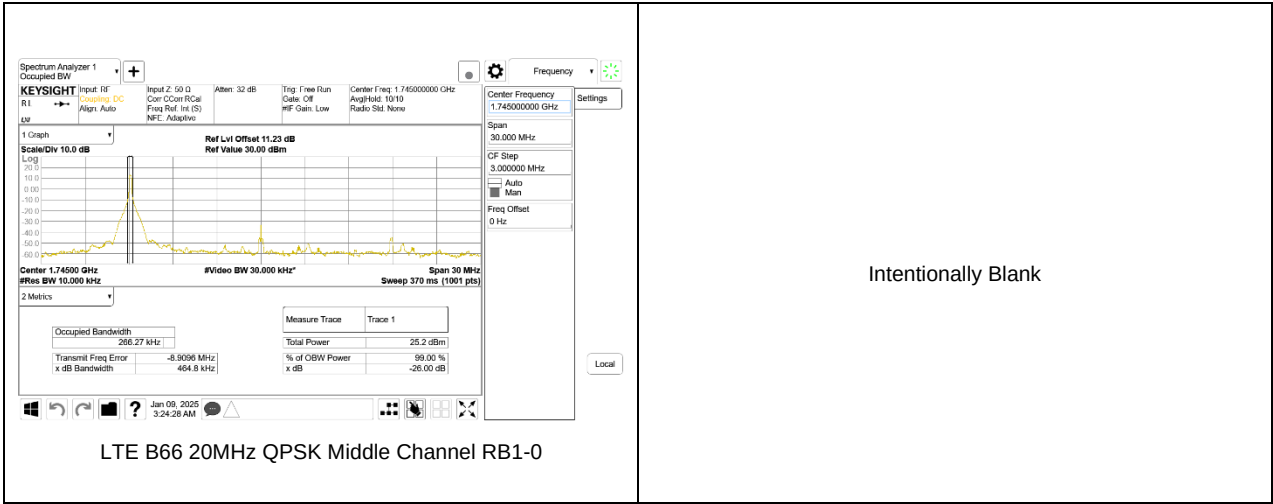
LTE B66 10MHz QPSK Middle Channel RB50-0



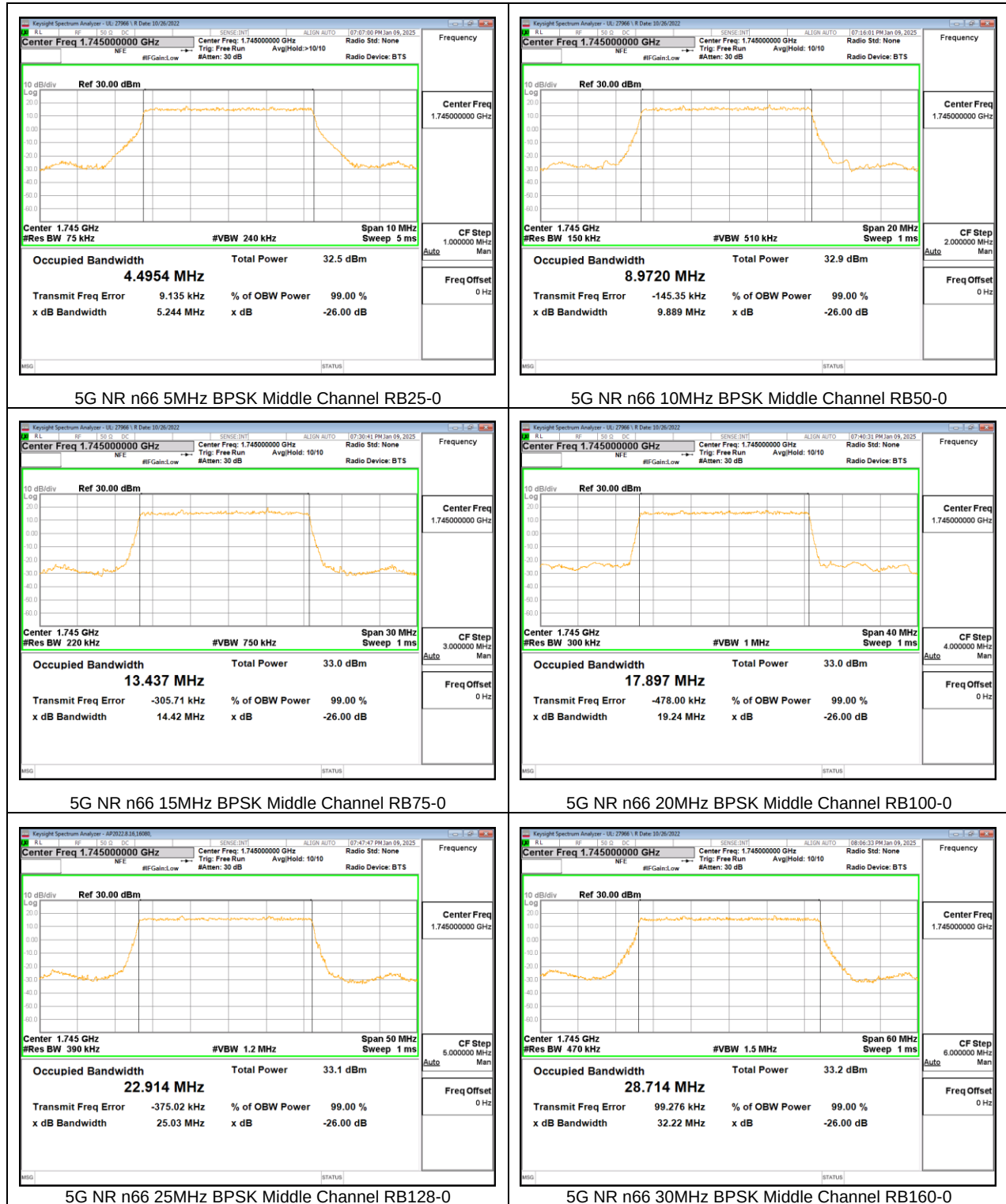
LTE B66 15MHz QPSK Middle Channel RB75-0

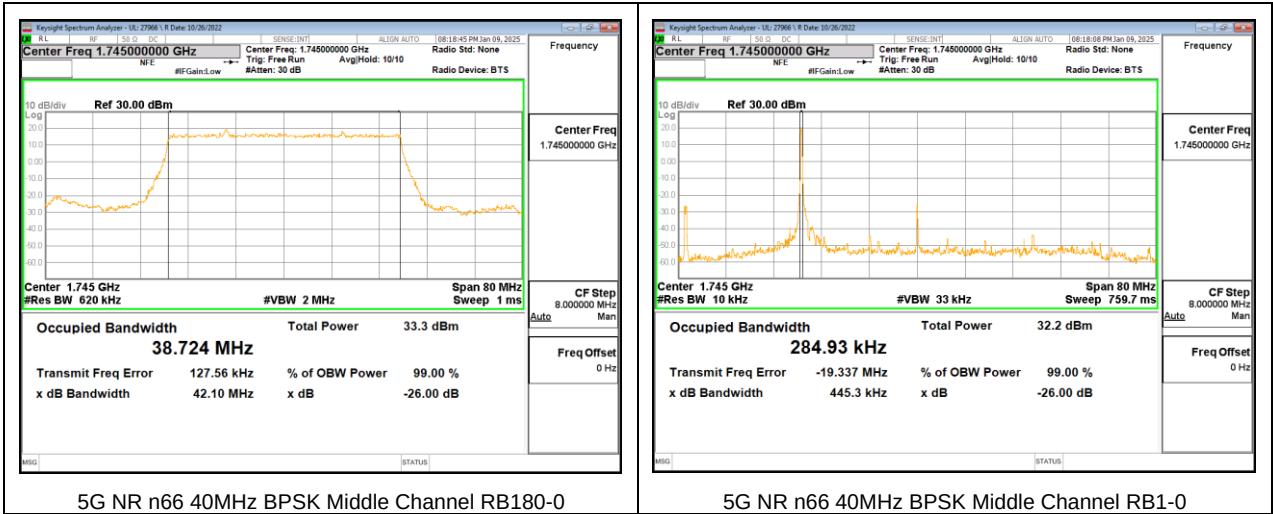


LTE B66 20MHz QPSK Middle Channel RB100-0



9.1.3. 5G NR n66





9.2. EMISSION MASK AND ADJACENT CHANNEL POWER

LIMITS

FCC: §27.53(h)

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.

TEST PROCEDURE

For Spectrum Emission Mask plots, the spectrum analyzer is configured to sweep with a moving integration window, the width of which can be adjusted to different sizes across the sweep. The window width is configured to be greater than or equal to the required reference bandwidth. The center frequencies of the integration window for the different integration windows was set such that the upper and lower edges of the windows are aligned with the transition points in the reference bandwidths. This is achieved by setting the start / stop frequencies of the window with an offset equal to the reference bandwidth / 2 from the transition point.

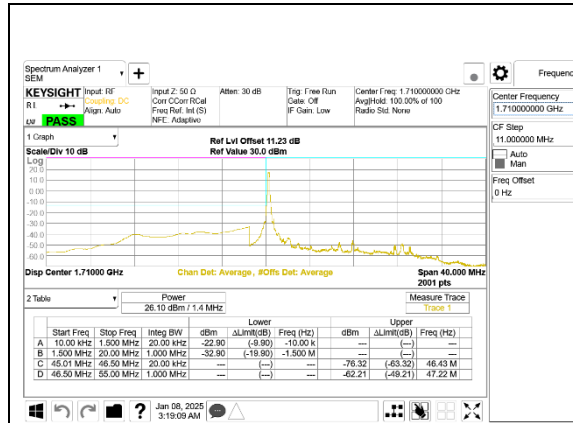
The transmitter output was connected to a base station simulator and configured to operate at maximum power. The band edge emissions were measured at the required operating frequencies in each band on the Spectrum Analyzer.

For each band edge measurement:

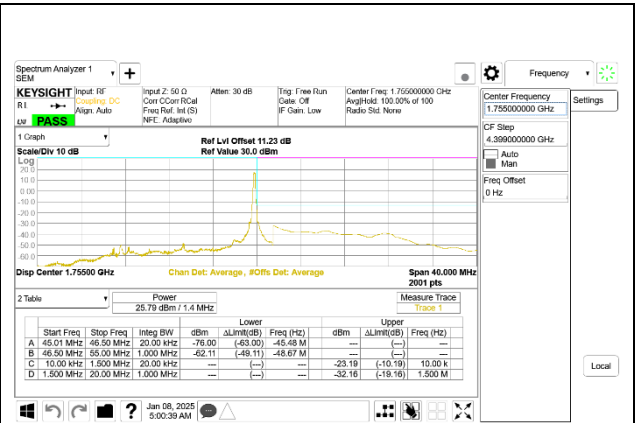
1. Set the spectrum analyzer span to include the block edge frequency.
2. Set a marker to point the corresponding band edge frequency in each test case.
3. Set display line at -13 dBm
4. Set resolution bandwidth to at least 1% of emission bandwidth.

RESULTS

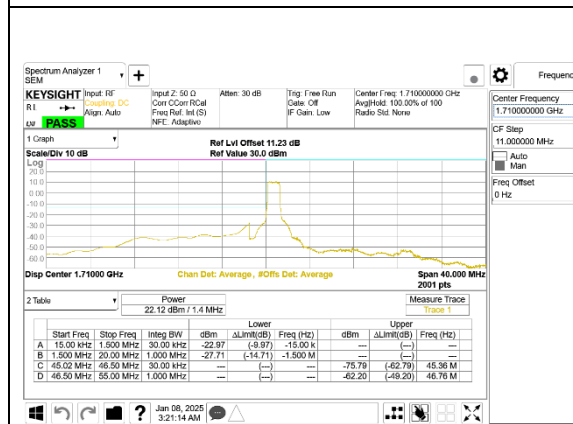
9.2.1. LTE BAND 4



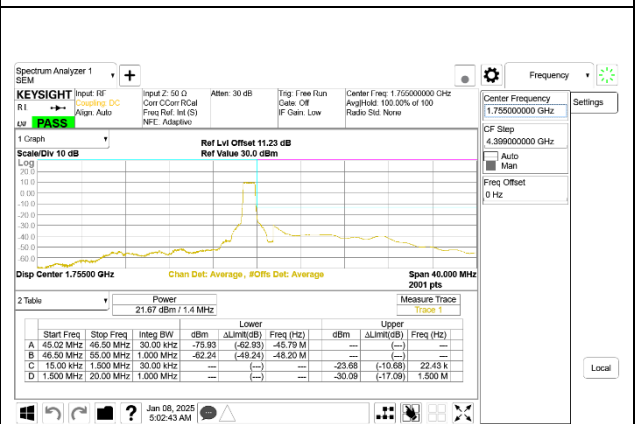
LTE B4 1.4MHz QPSK Low Channel RB1-0



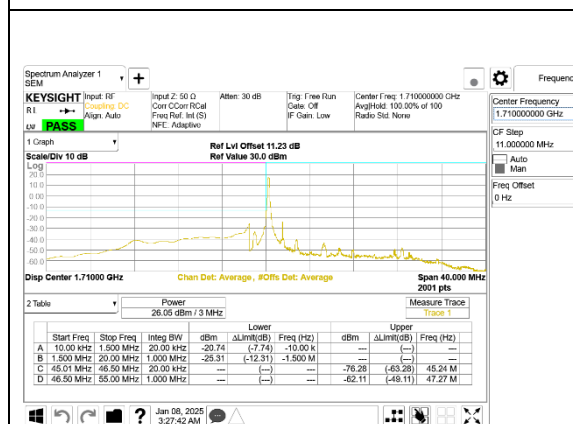
LTE B4 1.4MHz QPSK High Channel RB1-5



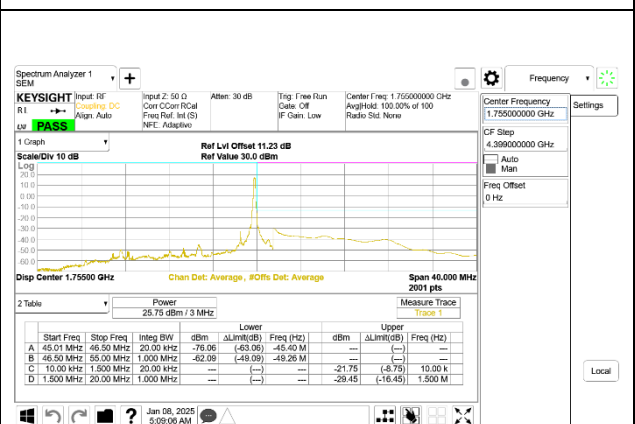
LTE B4 1.4MHz QPSK Low Channel RB6-0



LTE B4 1.4MHz QPSK High Channel RB6-0



LTE B4 3MHz QPSK Low Channel RB1-0



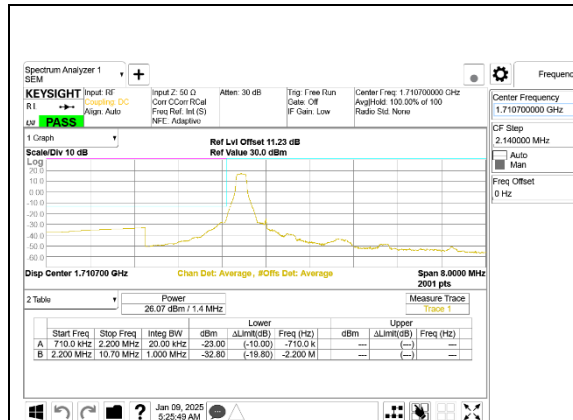
LTE B4 3MHz QPSK Low Channel RB1-14



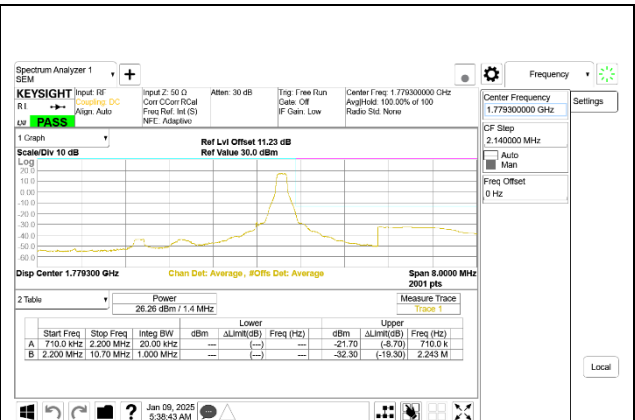




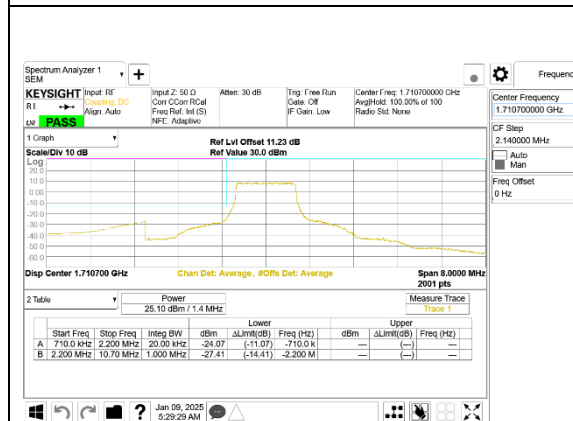
9.2.2. LTE BAND 66



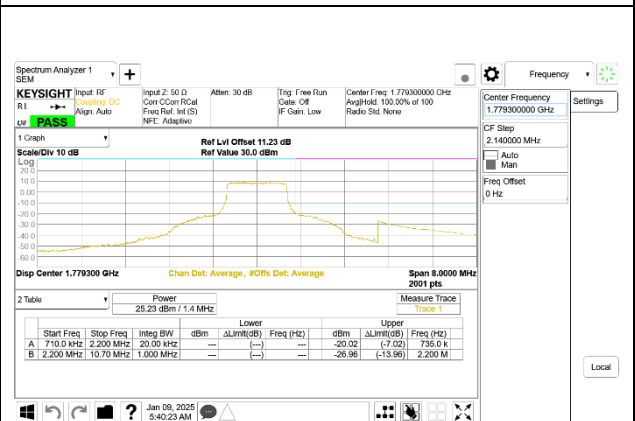
LTE B66 1.4MHz QPSK Low Channel RB1-0



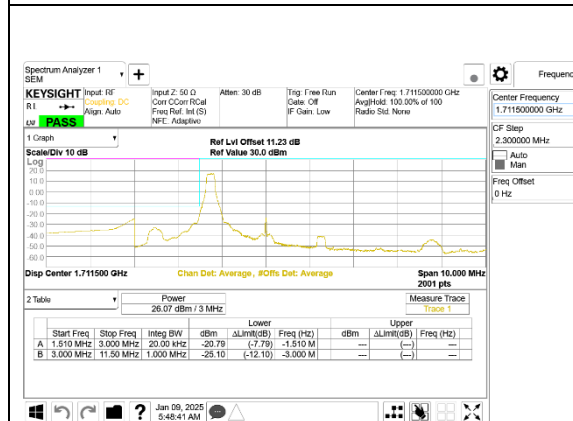
LTE B66 1.4MHz QPSK High Channel RB1-5



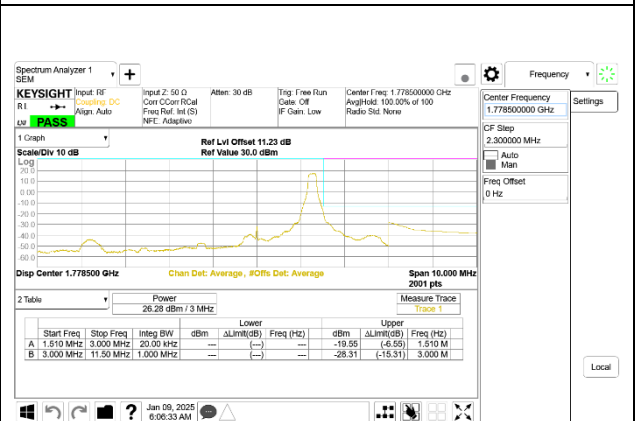
LTE B66 1.4MHz QPSK Low Channel RB6-0



LTE B66 1.4MHz QPSK High Channel RB6-0



LTE B66 3MHz QPSK Low Channel RB1-0



LTE B66 3MHz QPSK High Channel RB1-14





