

TEST REPORT

Report Number: R15872942-E1

Applicant : Samsung Electronics Co., Ltd.
129, Samsung-ro, Yeongtong-gu, Suwon-si,
Gyeonggi-do, 16677, Republic of Korea

FCC ID : A3LSMA175F

MODELS : SM-A175F
SM-A175F/DS

EUT Description : SMARTPHONE

Test Standard(s) : FCC CFR 47 Part 2, Part 22, Part 24, Part 27, Part 90S.

Date Of Issue:
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Revision History

Rev.	Issue Date	Revisions	Revised By
V1	2025-07-21	Initial Review	Noah Bennett
V2	2025-07-24	TCB Feedback 1: -Added Model information -Added B4, B17 Band Edge Data -Added B26 Straddle Emissions Data -Various Typos resolved.	Noah Bennett
V3	2025-08-08	Added B26 Straddle ERP Data	Noah Bennett

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1. ATTESTATION OF TEST RESULTS

COMPANY NAME: Samsung Electronics Co., Ltd.
129, Samsung-ro, Yeongtong-gu, Suwon-si,
Gyeonggi-do, 16677, Republic of Korea

EUT DESCRIPTION: SMARTPHONE

SERIAL NUMBERS: R38Y5000MDP, R38Y500BA5H

SAMPLE RECEIPT DATE: 2025-06-20

DATE TESTED: 2025-06-20 to 2025-08-08

APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
FCC CFR 47 Part 2, Part 22, Part 24, Part 27, Part 90S	Complies

UL LLC 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.

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2. SUMMARY OF TEST RESULTS

This report contains data provided by the customer which can impact the validity of results. UL LLC. is only responsible for the validity of results after the integration of the data provided by the customer.

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

1. Antenna gain and type (see section 6.4)
2. EUT Cable loss (see section 8)
3. Supported bands, bandwidths, modulations, power settings, and MPR configurations. (section 6.5)

Requirement Description	Band	Requirement Clause Number (FCC)	Result	Remarks
Effective Radiated Power	5, 26	22.913 (a)(5), 90.35(b)	Complies	N/A
	12	27.50 (c) (10)	Complies	N/A
	13	27.50 (b) (10)	Complies	N/A
	17	27.50 (c) (10)	Complies	N/A
Equivalent Isotropic Radiated Power	2, 25	24.232 (c)	Complies	N/A
	4, 66	27.50 (d) (4)	Complies	N/A
	41	27.50 (h) (2)	Complies	N/A

Requirement Description	Requirement Clause Number (FCC)	Result	Remarks
Occupied Bandwidth	2.1049	Complies	N/A
Band Edge and Emission Mask	2.1051, 22.917 (a), 24.238 (a), 27.53 (h), 27.53 (m)(4) & (m)(6), 27.53 (g), 27.53 (c) (f), 90.691	Complies	N/A
Out of Band Emissions		Complies	N/A
Frequency Stability	2.1055, 22.355, 24.235, 27.54	Complies	N/A
Peak-to-Average Ratio	22.913 (d), 24.232(d), 27.50(d)(5),	Complies	N/A
Field Strength of Spurious Radiation	2.1051, 22.917 (a), 24.238 (a), 27.53 (h), 27.53 (m)(4) & (m)(6), 27.53 (g), 27.53 (c) (f), 90.691	Complies	N/A

3. TEST METHODOLOGY

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

- ANSI C63.26:2015
- FCC CFR 47 Part 2, Part 22, Part 24, Part 27, Part 90
- [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 LLC is accredited by A2LA, Certificate Number 0751.06, 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 2800 Suite Perimeter Park Dr. Suite B Morrisville, NC 27560, U.S.A.	US0067	27265	825374

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}
Radio Frequency (Spectrum Analyzer)	141.2 Hz
Occupied Channel Bandwidth	1.22%
RF output power, conducted	1.3 dB (PK) 0.45 dB (AV)
Power Spectral Density, conducted	2.47 dB
Unwanted Emissions, conducted	1.94 dB
All emissions, radiated	6.01 dB
Conducted Emissions (0.150-30MHz) - LISN	3.40 dB
Temperature	0.57°C
Humidity	3.39%
DC Supply voltages	1.70%

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

5.4. SAMPLE CALCULATION

RADIATED EMISSIONS

Where relevant, the following sample calculation is provided:

$$\begin{aligned} \text{EIRP (dBm)} &= \text{Measured Power (dBm)} + \text{Antenna Factor (dB/m)} + \text{Cable Loss (dB)} - \text{Preamp Gain (dB)} + \text{Correction Factor (dB)} \\ \text{EIRP (dBm)} &= -56.5 \text{ dBm} + 40.4 \text{ dB/m} + 0.5 \text{ dB} - 36 \text{ dB} + 11.8 \text{ dB} = -39.8 \text{ dBm} \end{aligned}$$

6. EQUIPMENT UNDER TEST

6.1. DESCRIPTION OF EUT

The EUT is a SMARTPHONE.

The EUT supports the following Technologies:

Wireless technologies	Frequency bands	Operating mode	UE Category
LTE	LTE Band 2 LTE Band 4/66 LTE Band 5/26 LTE Band 12/17 LTE Band 13 LTE Band 41	QPSK 16QAM 64QAM	Cat 13
UMTS	Band II Band IV Band V	Rel. 99 HSPA HSPA+ DC-HSPA+	Cat 6
GSM	850 1900	GPRS EGPRS	

Notes:

- A) The EUT operated in a 1x1 SISO configuration.
- B) LTE Band 12, 26 and 66 can cover Band 17, 5 and 4 respectively, as they operate in the same frequency block and have the same output power.

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.

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 and ERP/EIRP output powers as follows:

GSM MODES

Part 22 850MHz								
Frequency range (MHz)	Modulation	Conducted (Average) (dBm)	Antenna Gain (dBi)	Limit (W)	ERP		99% BW (kHz)	Emission Designator
					(dBm)	(W)		
824.2-848.8	GPRS	32.30	-3.35	7.0	26.80	0.479	243.8	244KGXW
	EGPRS	26.10			20.60	0.115	244.5	245KG7W
Part 24 1900MHz								
Frequency range (MHz)	Modulation	Conducted (Average) (dBm)	Antenna Gain (dBi)	Limit (W)	EIRP		99% BW (kHz)	Emission Designator
					(dBm)	(W)		
1850.2-1909.8	GPRS	29.10	2.75	2.0	31.85	1.531	249.5	250KGXW
	EGPRS	24.80			27.55	0.569	243	243KG7W

WCDMA MODE

Part 22 Band 5								
Frequency range (MHz)	Modulation	Conducted (Average) (dBm)	Antenna Gain (dBi)	Limit (W)	ERP		99% BW (kHz)	Emission Designator
					(dBm)	(W)		
826.4-846.6	REL 99	24.00	-3.35	7.0	18.50	0.071	4133	4M13F9W
	HSDPA	23.80			18.30	0.068	4167	4M17F9W
Part 24 Band 2								
Frequency range (MHz)	Modulation	Conducted (Average) (dBm)	Antenna Gain (dBi)	Limit (W)	EIRP		99% BW (kHz)	Emission Designator
					(dBm)	(W)		
1852.4-1907.6	REL 99	23.60	2.75	2.0	26.35	0.432	4152	4M15F9W
	HSDPA	22.70			25.45	0.351	4172	4M17F9W
Part 27 Band 4								
Frequency range (MHz)	Modulation	Conducted (Average) (dBm)	Antenna Gain (dBi)	Limit (W)	EIRP		99% BW (kHz)	Emission Designator
					(dBm)	(W)		
1712.4-1752.6	REL 99	23.50	-1.36	1.0	22.14	0.164	4164	4M16F9W
	HSDPA	22.50			21.14	0.130	4178	4M18F9W

LTE BAND 2

Part 24								
EIRP Limit (W)			2.00					
Antenna Gain (dBi)			2.75					
Bandwidth (MHz)	Modulation	Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Average (W)	99% BW (kHz)	Emission Designator
1.4	QPSK	1850.7	1909.3	23.20	25.95	0.394	1100	1M10G7W
	16QAM			22.40	25.15	0.327	1080	1M08D7W
3.0	QPSK	1851.5	1908.5	23.00	25.75	0.376	2690	2M69G7W
	16QAM			22.30	25.05	0.320	2690	2M69D7W
5.0	QPSK	1852.5	1907.5	23.40	26.15	0.412	4490	4M49G7W
	16QAM			22.70	25.45	0.351	4490	4M49D7W
10.0	QPSK	1855.0	1905.0	23.30	26.05	0.403	8960	8M96G7W
	16QAM			22.50	25.25	0.335	8930	8M93D7W
15.0	QPSK	1857.5	1902.5	23.30	26.05	0.403	13410	13M4G7W
	16QAM			22.70	25.45	0.351	13420	13M4D7W
20.0	QPSK	1860.0	1900.0	23.30	26.05	0.403	17850	17M9G7W
	16QAM			22.80	25.55	0.359	17830	17M8D7W

LTE BAND 12 (17)

Part 27								
ERP Limit (W)		3.00						
Antenna Gain (dBi)		-4.25						
Bandwidth (MHz)	Modulation	Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Average (dBm)	ERP Average (dBm)	ERP Average (W)	99% BW (kHz)	Emission Designator
1.4	QPSK	699.7	715.3	23.60	17.20	0.052	1080	1M08G7W
	16QAM			22.80	16.40	0.044	1090	1M09D7W
3.0	QPSK	700.5	714.5	23.60	17.20	0.052	2690	2M69G7W
	16QAM			23.10	16.70	0.047	2680	2M68D7W
5.0	QPSK	701.5	713.5	23.80	17.40	0.055	4490	4M49G7W
	16QAM			23.10	16.70	0.047	4490	4M49D7W
10.0	QPSK	704.0	711.0	23.80	17.40	0.055	8990	8M99G7W
	16QAM			23.30	16.90	0.049	8970	8M97D7W

LTE BAND 13

Part 27								
ERP Limit (W)		3.00						
Antenna Gain (dBi)		-2.93						
Bandwidth (MHz)	Modulation	Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Average (dBm)	ERP Average (dBm)	ERP Average (W)	99% BW (kHz)	Emission Designator
5.0	QPSK	779.5	784.5	23.80	18.72	0.074	4540	4M54G7W
	16QAM			23.80	18.72	0.074	4610	4M61D7W
10.0	QPSK	782.0	782.0	23.60	18.52	0.071	8880	8M88G7W
	16QAM			22.80	17.72	0.059	8910	8M91D7W

LTE BAND 26 (5)

Part 22H								
ERP Limit (W)		7.00						
Antenna Gain (dBi)		-3.22						
Bandwidth (MHz)	Modulation	Low Frequency	Upper Frequency	Conducted Average	ERP Average	ERP Average	99% BW (kHz)	Emission Designator
1.4	QPSK	824.7	848.3	24.50	19.13	0.082	1090	1M09G7W
	16QAM			23.70	18.33	0.068	1100	1M10D7W
3.0	QPSK	825.5	847.5	24.40	19.03	0.080	2690	2M69G7W
	16QAM			24.00	18.63	0.073	2690	2M69D7W
5.0	QPSK	826.5	846.5	24.70	19.33	0.086	4490	4M49G7W
	16QAM			23.70	18.33	0.068	4480	4M48D7W
10.0	QPSK	829.0	844.0	24.70	19.33	0.086	8960	8M96G7W
	16QAM			24.30	18.93	0.078	8940	8M94D7W
15.0	QPSK	831.5	841.5	24.60	19.23	0.084	13397	13M4G7W
	16QAM			24.20	18.83	0.076	13411	13M4D7W

LTE BAND 26 (Part 90S)

Part 22H								
ERP Limit (W)		100.00						
Antenna Gain (dBi)		-3.22						
Bandwidth (MHz)	Modulation	Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Average (dBm)	ERP Average (dBm)	ERP Average (W)	99% BW (kHz)	Emission Designator
1.4	QPSK	814.7	848.3	24.50	19.13	0.082	1082.6	1M08G7W
	16QAM			23.50	18.13	0.065	1085.7	1M09D7W
3.0	QPSK	815.5	847.5	24.30	18.93	0.078	2687.4	2M69G7W
	16QAM			23.90	18.53	0.071	2686.5	2M69D7W
5.0	QPSK	816.5	846.5	24.60	19.23	0.084	4492	4M49G7W
	16QAM			23.90	18.53	0.071	4482.4	4M48D7W
10.0	QPSK	819.0	844.0	24.60	19.23	0.084	8957.3	8M96G7W
	16QAM			23.60	18.23	0.067	8942.1	8M94D7W

LTE BAND 26 (Straddle)

Part 22H								
ERP Limit (W)		100.00						
Antenna Gain (dBi)		-3.22						
Bandwidth (MHz)	Modulation	Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Average (dBm)	ERP Average (dBm)	ERP Average (W)	99% BW (kHz)	Emission Designator
1.4	QPSK	824.0	824.0	24.70	19.33	0.086	1083.3	1M08G7W
	16QAM			23.80	18.43	0.070	1079.6	1M08D7W
3.0	QPSK	824.0	824.0	24.70	19.33	0.086	2668	2M67G7W
	16QAM			23.70	18.33	0.068	2667.3	2M67D7W
5.0	QPSK	824.0	824.0	25.00	19.63	0.092	4464.7	4M46G7W
	16QAM			24.00	18.63	0.073	4455.5	4M46D7W
10.0	QPSK	824.0	824.0	24.80	19.43	0.088	8902.5	8M90G7W
	16QAM			23.80	18.43	0.070	8922	8M92D7W
15.0	QPSK	824.0	824.0	25.00	19.63	0.092	13379	13M4G7W
	16QAM			24.40	19.03	0.080	13357	13M4D7W

LTE BAND 41

Part 27								
EIRP Limit (W)		2.00						
Antenna Gain (dBi)		0.48						
Bandwidth (MHz)	Modulation	Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Average (W)	99% BW (kHz)	Emission Designator
5.0	QPSK	2498.5	2687.5	22.90	23.38	0.218	4500	4M50G7W
	16QAM			22.00	22.48	0.177	4490	4M49D7W
10.0	QPSK	2501.0	2685.0	23.10	23.58	0.228	8960	8M96G7W
	16QAM			22.00	22.48	0.177	8970	8M97D7W
15.0	QPSK	2503.5	2682.5	23.20	23.68	0.233	13440	13M4G7W
	16QAM			22.20	22.68	0.185	13450	13M5D7W
20.0	QPSK	2506.0	2680.0	23.30	23.78	0.239	17880	17M9G7W
	16QAM			22.20	22.68	0.185	17880	17M9D7W

LTE BAND 66 (4)

Part 27								
EIRP Limit (W)		1.00						
Antenna Gain (dBi)		-1.20						
Bandwidth (MHz)	Modulation	Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Average (W)	99% BW (kHz)	Emission Designator
1.4	QPSK	1710.7	1779.3	23.70	22.50	0.178	1080	1M08G7W
	16QAM			22.80	21.60	0.145	1090	1M09D7W
3.0	QPSK	1711.5	1778.5	23.60	22.40	0.174	2680	2M68G7W
	16QAM			23.00	21.80	0.151	2680	2M68D7W
5.0	QPSK	1712.5	1777.5	23.90	22.70	0.186	4490	4M49G7W
	16QAM			23.10	21.90	0.155	4480	4M48D7W
10.0	QPSK	1715.0	1775.0	23.80	22.60	0.182	8970	8M97G7W
	16QAM			23.40	22.20	0.166	8970	8M97D7W
15.0	QPSK	1717.5	1772.5	23.80	22.60	0.182	13420	13M4G7W
	16QAM			23.40	22.20	0.166	13410	13M4D7W
20.0	QPSK	1720.0	1770.0	23.90	22.70	0.186	17870	17M9G7W
	16QAM			23.20	22.00	0.158	17870	17M9D7W

6.3. SOFTWARE AND FIRMWARE

Manufacturer to disclose upon request.

6.4. MAXIMUM ANTENNA GAIN

The antenna(s) gain and type, as provided by the manufacturer' are as follows:

WWAN Bands	Antenna Average Gain (dBi)	Antenna Peak Gain (dBi)
LTE B12	-7.55	-4.25
LTE B17	-7.55	-4.25
LTE B13	-6.19	-2.93
LTE B26	-6.57	-3.22
LTE B5	-6.73	-3.35
LTE B4	-7.45	-1.36
LTE B66	-7.41	-1.2
LTE B2	-3.30	+2.75
LTE B41	-6.06	+0.48

6.5. WORST-CASE CONFIGURATION AND MODE

The EUT was investigated in three orthogonal orientations X/Y/Z on both Low Band (Fundamental Below 1GHz) and Mid Band (Fundamental between 1-3GHz) over all antennas to find the worst-case orientation. For Simultaneous Tx scans in which there are two or more F_c ranges with different worst-case orientations, scans were performed in the orientation with the highest output power, and sufficient margin was added to cover other orientations.

LTE Band 4 (1710-1755MHz, 5/10/15/20MHz bandwidth) is covered by LTE Band 66 because it is a subset of LTE band 66 and they have same output power.

LTE Band 5 (824-849MHz, 1.4/3/5/10MHz) is covered by LTE Band 26 because it is a subset of LTE band 26 and they have same output power.

Per KDB 634817, Part 22H and Part 90S were tested with the following frequency block(s). Both are reported.

Rulepart	BW	Channel
22H (B26)	1.4/3/5/10/15	824MHz – 849MHz
90S	1.4/3/5/10	814MHz – 824MHz
-	1.4/3/5/10/15	824MHz STRADDLE

LTE Band 17 (704-716MHz, 5/10MHz bandwidth) is covered by LTE Band 12 because it is a subset of LTE band 12 and they have the same output power.

The worst-case scenario for all measurements is based on an engineering evaluation made on conducted average power on different modulations found during pretesting. Output power measurements were measured on GPRS and EGPRS for GSM, Rel.99, HSDPA, HSUPA, and DC-HSDPA for WCDMA, and QPSK, 16QAM, and 64QAM modulations for LTE. The modulations with the highest output power were selected as worst-case, outlined below:

Mode	Worst-Case Modulation
GSM	GPRS
WCDMA	Rel. 99
LTE	QPSK

The EUT was tested while connected to AC Lines via charging cable and brick to represent worst case emissions.

Radiated Emission tests were performed on the lowest order modulation, at the highest BW configuration, at the lowest RB configuration to maximize emissions.

Worst Case emissions from 9kHz-30Mhz, 30-1000MHz, 18-26.5GHz, and 26.5GHz-40GHz were done on the modes with the highest conducted average power.

6.6. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

Support Equipment List				
Description	Manufacturer	Model	Serial Number	FCC ID
Power Adapter	Samsung	EP-T2510	R3738S0231SEA	--
Power Adapter	Motorola	SSW-268OUS	NA	--

I/O CABLES

I/O Cable List						
Cable No.	Port	# of Identical Ports	Connector Type	Cable Type	Cable Length (m)	Remarks
1	USB-C	1	USB-C	Shielded	<3m	Phone to power adapter

Test Setup

The EUT was connected to a base station simulator and set to transmit at max power for GSM/WCDMA/LTE testing

Setup Diagram

See R15872942-EP1 for Setup Photos and Setup Diagrams

7. TEST AND MEASUREMENT EQUIPMENT

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

Test Equipment Used - Wireless Conducted Measurement Equipment

Equipment ID	Description	Manufacturer	Model Number	Last Cal.	Next Cal.
	Conducted Room 1				
CBL036	N-Male to SMA-Male, 6Ft	Times Microwave	LMR-240 Coax Cable	2025-01-04	2026-01-04
CBL034	N-Male to SMA-Male, 6Ft	Times Microwave	LMR-240 Coax Cable	2025-01-04	2026-01-04
90416	Spectrum Analyzer	Keysight Technologies	N9030A	2024-09-23	2025-09-23
90411	Spectrum Analyzer	Keysight Technologies	N9030A	2024-08-01	2025-08-01
206459	Spectrum Analyzer	Rohde & Schwarz	FSW50	2024-12-23	2025-12-23
208721	Wideband Radio Communications Tester	Rohde and Schwarz	CMW500	2024-08-14	2025-08-14
213025	Wideband Radio Communications Tester	Rohde and Schwarz	CMW500	2025-01-04	2026-01-04
207726	Temp/Humid Chamber	Thermotron	SM-32-8200	2025-01-15	2026-01-15
179892	Environmental Meter	Fisher Scientific	15-077-963	2024-08-12	2025-08-12
262469	Environmental Meter	Fisher Scientific	15-077-963	2025-04-28	2026-04-28

Test Equipment Used – Radiated Disturbance Emissions

Morrisville – Chamber 1

Equip. ID	Description	Manufacturer	Model Number	Last Cal.	Next Cal.
0.009-30MHz					
8939	Passive Loop Antenna	EMCO	EM-6872	2024-11-18	2026-11-18
8940	Passive Loop Antenna	EMCO	EM-6871	2024-11-18	2026-11-18
	30-1000 MHz				
90629	Hybrid Broadband Antenna	Sunol Sciences Corp.	JB3	2024-01-30	2026-01-30
	1-18 GHz				
135143	Double-Ridged Waveguide Horn Antenna, 1 to 18 GHz	ETS Lindgren	3117	2024-02-07	2026-02-07
	Gain-Loss Chains				
91974	Gain-loss string: 0.009-30MHz	Various	Various	2025-05-31	2026-05-31
91976	Gain-loss string: 25-1000MHz	Various	Various	2025-05-31	2026-05-31
91979	Gain-loss string: 1-18GHz	Various	Various	2025-05-31	2026-05-31
	Receiver & Software				
197955	Spectrum Analyzer	Rohde & Schwarz	ESW44	2025-05-12	2026-05-12
SOFTEMI	EMI Software	UL	Version 9.5 (18 Oct 2021)		
	Additional Equipment used				
241205	Environmental Meter	Fisher Scientific	15-077-963	2023-09-05	2025-09-05
212967	Wideband Radio Communications Tester	Rohde and Schwarz	CMW500	2025-02-07	2026-02-07
211003 (BPF001)	12-18GHz bandpass filter, 2W, Fhigh =18GHz	Micro-Tronics	BRM50706	2025-03-13	2026-03-13
169106 (BRF008)	1710-1785MHz notch filter, 2W, Fhigh = 9GHz	Micro-Tronics	BRM50713-01	2025-03-13	2026-03-13
169108 (BRF010)	1.85-1.97GHz notch filter, 2W, Fhigh = 9GHz	Micro-Tronics	BRM50714-01	2025-03-13	2026-03-13
231408 (BRF011)	2.495-2.690GHz notch filter, 2W, Fhigh = 18GHz	Micro-Tronics	BRM50709-01	2025-03-13	2026-03-13
82635 (HPF009)	1GHz high-pass filter, 2W, Fhigh =10GHz	Micro-Tronics	HPM17672	2025-03-13	2026-03-13

Morrisville – Chamber 4

Equip. ID	Description	Manufacturer/Brand	Model Number	Last Cal.	Next Cal.
	1-18 GHz				
206211	Double-Ridged Waveguide Horn Antenna, 1 to 18 GHz	ETS Lindgren	3117	2024-04-09	2026-04-09
	18-40 GHz				
91186	Horn Antenna, 18-26.5GHz	ARA	MWH-1826/B	2024-05-16	2026-05-16
204705	Horn Antenna, 26-40GHz	Com-Power	AH-640	2023-07-20	2025-07-20
	Gain-Loss Chains				
207640	Gain-loss string: 1-18GHz	Various	Various	2025-06-13	2026-06-13
225795	Gain-loss string: 18-40GHz	Various	Various	2025-06-13	2026-06-13
	Receiver & Software				
197954	Spectrum Analyzer	Rohde & Schwarz	ESW44	2025-04-21	2026-04-21
81018	Spectrum Analyzer	Agilent	E4446A	2024-07-31	2025-07-31
SOFTEMI	EMI Software	UL	Version 9.5 (18 Oct 2021)		
	Additional Equipment used				
241204	Environmental Meter	Fisher Scientific	15-077-963	2023-09-05	2025-09-05
212967	Wideband Radio Communications Tester	Rohde and Schwarz	CMW500	2025-02-07	2026-02-07

NOTES:

- Equipment listed above has a calibration due date during the testing period, the testing is completed before equipment expiration date.

8. RF OUTPUT POWER VERIFICATION

8.1. GSM

Using CMW500 Communication Test Set

Function: Menu select > GSM Mobile Station > GSM 850/900/1800/1900

Press **Connection control** to choose the different menus

Press **RESET** > choose all to reset all settings

Connection	Press Signal Off to turn off the signal and change settings Network Support > GSM+GPRS or GSM+EGPRS Main Service > Packet Data Service selection > Test Mode A – Auto Slot Config. Off
MS Signal	Press Slot Config bottom on the right twice to select and change the number of time slots and power setting > Slot configuration > Uplink/Gamma > 33 dBm for GPRS 850/900 > 27 dBm for EGPRS 850/900 > 30 dBm for GPRS1800/1900 > 26 dBm for EGPRS1800/1900
BS Signal	Enter the same channel number for TCH channel (test channel) and BCCH channel Frequency Offset > + 0 Hz Mode > BCCH and TCH BCCH Level > -85 dBm (May need to adjust if link is not stable) BCCH Channel > choose desire test channel [Enter the same channel number for TCH channel (test channel) and BCCH channel] Channel Type > Off P0 > 4 dB Slot Config > Unchanged (if already set under MS Signal) TCH > Choose desired test channel Hopping > Off Main Timeslot > 3 (Default)
Network	Coding Scheme > CS 1 (GPRS) and MCS5 (EGPRS) Bit Stream > 2E9-1PSR Bit Pattern
AF/RF	Enter appropriate offsets for Ext. Att. Output and Ext. Att. Input
Connection	Press Signal On to turn on the signal and change settings

RESULT

8.1.1. GSM850

Test Engineer ID:	22797	Test Date:	2025-06-20, 2025-07-08
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Mode	Coding Scheme	Time Slots	Ch No.	Freq. (MHz)	Maximum Average Power (dBm)	
					Measured	
					Burst Pwr	Frame Pwr
GPRS/EDGE (GMSK)	CS1	1	128	824.2	31.3	22.2
			190	836.6	32.3	23.2
			251	848.8	31.1	22.0
		2	128	824.2	29.8	23.7
			190	836.6	29.8	23.8
			251	848.8	29.8	23.7
		3	128	824.2	29.8	25.5
			190	836.6	29.7	25.5
			251	848.8	29.8	25.5
		4	128	824.2	27.6	24.6
			190	836.6	27.5	24.5
			251	848.8	27.5	24.4
EDGE (8PSK)	MCS5	1	128	824.2	26.1	17.0
			190	836.6	26.1	17.1
			251	848.8	26.1	17.1
		2	128	824.2	26.0	20.0
			190	836.6	26.0	20.0
			251	848.8	25.8	19.8
		3	128	824.2	23.9	19.7
			190	836.6	23.9	19.6
			251	848.8	23.9	19.6
		4	128	824.2	22.7	19.7
			190	836.6	22.6	19.5
			251	848.8	22.7	19.6

8.1.2. GSM1900

Test Engineer ID:	22797	Test Date:	2025-06-20
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Mode	Coding Scheme	Time Slots	Ch No.	Freq. (MHz)	Maximum Average Power (dBm)	
					Measured	
					Burst Pwr	Frame Pwr
GPRS/EDGE (GMSK)	CS1	1	512	1850.2	29.0	20.0
			661	1880.0	29.1	20.1
			810	1909.8	29.0	19.9
		2	512	1850.2	27.6	21.6
			661	1880.0	27.7	21.7
			810	1909.8	27.6	21.5
		3	512	1850.2	25.2	20.9
			661	1880.0	25.2	20.9
			810	1909.8	25.1	20.8
		4	512	1850.2	24.0	21.0
			661	1880.0	24.0	21.0
			810	1909.8	23.9	20.8
EDGE (8PSK)	MCS5	1	512	1850.2	24.7	15.6
			661	1880.0	24.8	15.8
			810	1909.8	24.8	15.8
		2	512	1850.2	23.4	17.4
			661	1880.0	23.6	17.6
			810	1909.8	23.6	17.6
		3	512	1850.2	21.3	17.0
			661	1880.0	21.4	17.2
			810	1909.8	20.2	15.9
		4	512	1850.2	19.9	16.9
			661	1880.0	20.1	17.1
			810	1909.8	20.2	17.2

8.2. WCDMA

TEST PROCEDURE

The transmitter output was connected to the input terminal of Directional Coupler via calibrated coaxial cable. The output coupling terminal of the Directional Coupler was directly connected to a spectrum analyzer while the output through terminal connected to the communication test set via calibrated coaxial cable.

The output power was measured with the spectrum analyzer at the low, middle and high channel in each band.

- Set the spectrum analyzer span wide enough or greater than the modulated signal BW.
- Set a spectrum analyzer at peak detection mode with VBW $\geq$ RBW $\geq$ 26dB BW, typically 5MHz.
- Set a marker to point the corresponding peak value.

REL 99

The following tests were completed according to the test requirements outlined in section 5.2 of the 3GPP TS34.121-1 specification. The DUT supports power Class 3, which has a nominal maximum output power of 24 dBm (+1.7/-3.7).

Mode	Subtest	Rel99
WCDMA General Settings	Loopback Mode	Test Mode 2
	Rel99 RMC	12.2kbps RMC
	Power Control Algorithm	Algorithm2
	β_c/β_d	8/15

HSDPA REL 5

The following 4 Sub-tests were completed according to Release 5 procedures in table C.10.1.4 of 3GPP TS 34.121-1 A summary of these settings are illustrated below:

Table C.10.1.4: β values for transmitter characteristics tests with HS-DPCCH

Sub-test	β_c	β_d	β_d (SF)	β_c/β_d	β_{hs} (Note 1, Note 2)	CM (dB) (Note 3)	MPR (dB) (Note 3)
1	2/15	15/15	64	2/15	4/15	0.0	0.0
2	12/15 (Note 4)	15/15 (Note 4)	64	12/15 (Note 4)	24/15	1.0	0.0
3	15/15	8/15	64	15/8	30/15	1.5	0.5
4	15/15	4/15	64	15/4	30/15	1.5	0.5

Note 1: Δ_{ACK} , Δ_{NACK} and $\Delta_{CQI} = 30/15$ with $\beta_{hs} = 30/15 * \beta_c$.

Note 2: For the HS-DPCCH power mask requirement test in clause 5.2C, 5.7A, and the Error Vector Magnitude (EVM) with HS-DPCCH test in clause 5.13.1A, and HSDPA EVM with phase discontinuity in clause 5.13.1AA, Δ_{ACK} and $\Delta_{NACK} = 30/15$ with $\beta_{hs} = 30/15 * \beta_c$, and $\Delta_{CQI} = 24/15$ with $\beta_{hs} = 24/15 * \beta_c$.

Note 3: CM = 1 for $\beta_c/\beta_d = 12/15$, $\beta_{hs}/\beta_c = 24/15$. For all other combinations of DPDCCH, DPCCH and HS-DPCCH the MPR is based on the relative CM difference. This is applicable for only UEs that support HSDPA in release 6 and later releases.

Note 4: For subtest 2 the β_c/β_d ratio of 12/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signalled gain factors for the reference TFC (TF1, TF1) to $\beta_c = 11/15$ and $\beta_d = 15/15$.

HSPA REL 6 (HSDPA & HSUPA)

The following 5 Sub-tests were completed according to Release 6 procedures in table C.11.1.3 of 3GPP TS 34.121-1. A summary of these settings are illustrated below:

Table C.11.1.3: β values for transmitter characteristics tests with HS-DPCCH and E-DCH

Sub-test	β_c	β_d	β_d (SF)	β_c/β_d	β_{HS} (Note 1)	β_{ec}	β_{ed} (Note 4) (Note 5)	β_{ed} (SF)	β_{ed} (Codes)	CM (dB) (Note 2)	MPR (dB) (Note 2) (Note 6)	AG Index (Note 5)	E-TFCI
1	11/15 (Note 3)	15/15 (Note 3)	64	11/15 (Note 3)	22/15	209/25	1309/225	4	1	1.0	0.0	20	75
2	6/15	15/15	64	6/15	12/15	12/15	94/75	4	1	3.0	2.0	12	67
3	15/15	9/15	64	15/9	30/15	30/15	β_{ed1} : 47/15 β_{ed2} : 47/15	4	2	2.0	1.0	15	92
4	2/15	15/15	64	2/15	4/15	2/15	56/75	4	1	3.0	2.0	17	71
5	15/15	0	-	-	5/15	5/15	47/15	4	1	1.0	0.0	12	67

Note 1: For sub-test 1 to 4, Δ_{ACK} , Δ_{NACK} and $\Delta_{CQI} = 30/15$ with $\beta_{hs} = 30/15 * \beta_c$. For sub-test 5, Δ_{ACK} , Δ_{NACK} and $\Delta_{CQI} = 5/15$ with $\beta_{hs} = 5/15 * \beta_c$.

Note 2: CM = 1 for $\beta_c/\beta_d = 12/15$, $\beta_{hs}/\beta_c = 24/15$. For all other combinations of DPDCH, DPCCH, HS-DPCCH, E-DPDCH and E-DPCCH the MPR is based on the relative CM difference.

Note 3: For subtest 1 the β_c/β_d ratio of 11/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signalled gain factors for the reference TFC (TF1, TF1) to $\beta_c = 10/15$ and $\beta_d = 15/15$.

Note 4: In case of testing by UE using E-DPDCH Physical Layer category 1, Sub-test 3 is omitted according to TS25.306 Table 5.1g.

Note 5: β_{ed} can not be set directly; it is set by Absolute Grant Value.

Note 6: For subtests 2, 3 and 4, UE may perform E-DPDCH power scaling at max power which could results in slightly smaller MPR values.

DUAL CARRIER HSDPA (DC-HSDPA (REL 8, CAT 24)

The following 4 Sub-tests were for DC-HSDPA were completed according to Release 8 procedures in table C08.1.12 of 3GPP TS 34.121-1. A summary of these settings are illustrated below:

Table C.8.1.12: Fixed Reference Channel H-Set 12

Parameter	Unit	Value
Nominal Avg. Inf. Bit Rate	kbps	60
Inter-TTI Distance	TTI's	1
Number of HARQ Processes	Processes	6
Information Bit Payload (N_{INF})	Bits	120
Number Code Blocks	Blocks	1
Binary Channel Bits Per TTI	Bits	960
Total Available SML's in UE	SML's	19200
Number of SML's per HARQ Proc.	SML's	3200
Coding Rate		0.15
Number of Physical Channel Codes	Codes	1
Modulation		QPSK

Note 1: The RMC is intended to be used for DC-HSDPA mode and both cells shall transmit with identical parameters as listed in the table.

Note 2: Maximum number of transmission is limited to 1, i.e., retransmission is not allowed. The redundancy and constellation version 0 shall be used.

RESULT

8.2.1. WCDMA BAND 2

Test Engineer ID:	33499/84740, 22797	Test Date:	2025-06-30, 2025-07-09
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Mode		UL Ch No.	Freq. (MHz)	Maximum Average Power (dBm)	
				Measured Pwr	MPR
Release 99	Rel 99 (RMC, 12.2 kbps)	9262	1852.4	23.4	N/A
		9400	1880.0	23.6	
		9538	1907.6	23.5	
HSDPA	Subtest 1	9262	1852.4	22.5	0
		9400	1880.0	22.7	
		9538	1907.6	22.6	
	Subtest 2	9262	1852.4	22.4	0
		9400	1880.0	22.6	
		9538	1907.6	22.5	
	Subtest 3	9262	1852.4	21.9	0.5
		9400	1880.0	22.1	
		9538	1907.6	22.0	
	Subtest 4	9262	1852.4	21.9	0.5
		9400	1880.0	22.1	
		9538	1907.6	22.0	
HSUPA	Subtest 1	9262	1852.4	21.8	0
		9400	1880.0	22.3	
		9538	1907.6	22.1	
	Subtest 2	9262	1852.4	22.4	0
		9400	1880.0	22.4	
		9538	1907.6	22.2	
	Subtest 3	9262	1852.4	21.4	1
		9400	1880.0	21.7	
		9538	1907.6	21.5	
	Subtest 4	9262	1852.4	21.6	1
		9400	1880.0	21.8	
		9538	1907.6	21.7	
	Subtest 5	9262	1852.4	20.8	2
		9400	1880.0	20.8	
		9538	1907.6	21.4	
DC-HSDPA	Subtest 1	9262	1852.4	22.6	0
		9400	1880.0	22.9	
		9538	1907.6	22.6	
	Subtest 2	9262	1852.4	22.6	0
		9400	1880.0	22.9	
		9538	1907.6	22.6	
	Subtest 3	9262	1852.4	22.1	0.5
		9400	1880.0	22.4	
		9538	1907.6	22.1	
	Subtest 4	9262	1852.4	22.1	0.5
		9400	1880.0	22.4	
		9538	1907.6	22.1	

8.2.2. WCDMA BAND 4

Test Engineer ID:	33499/84740, 22797	Test Date:	2025-06-30, 2025-07-09
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Mode		UL Ch No.	Freq. (MHz)	Maximum Average Power (dBm)	
				Measured Pwr	MPR
Release 99	Rel 99 (RMC, 12.2 kbps)	1312	1712.4	23.4	N/A
		1413	1732.6	23.4	
		1513	1752.6	23.5	
HSDPA	Subtest 1	1312	1712.4	22.4	0
		1413	1732.6	22.5	
		1513	1752.6	22.5	
	Subtest 2	1312	1712.4	22.4	0
		1413	1732.6	22.4	
		1513	1752.6	22.4	
	Subtest 3	1312	1712.4	21.9	0.5
		1413	1732.6	21.9	
		1513	1752.6	21.9	
	Subtest 4	1312	1712.4	21.9	0.5
		1413	1732.6	21.9	
		1513	1752.6	21.9	
HSUPA	Subtest 1	1312	1712.4	21.8	0
		1413	1732.6	22.3	
		1513	1752.6	22.3	
	Subtest 2	1312	1712.4	22.1	0
		1413	1732.6	22.2	
		1513	1752.6	22.3	
	Subtest 3	1312	1712.4	21.2	1
		1413	1732.6	21.2	
		1513	1752.6	21.8	
	Subtest 4	1312	1712.4	22.0	1
		1413	1732.6	22.3	
		1513	1752.6	22.4	
	Subtest 5	1312	1712.4	21.2	2
		1413	1732.6	21.3	
		1513	1752.6	21.4	
DC-HSDPA	Subtest 1	1312	1712.4	22.7	0
		1413	1732.6	22.7	
		1513	1752.6	22.3	
	Subtest 2	1312	1712.4	22.7	0
		1413	1732.6	22.7	
		1513	1752.6	22.3	
	Subtest 3	1312	1712.4	22.1	0.5
		1413	1732.6	22.2	
		1513	1752.6	21.8	
	Subtest 4	1312	1712.4	22.1	0.5
		1413	1732.6	22.2	
		1513	1752.6	21.8	

8.2.3. WCDMA BAND 5

Test Engineer ID:	33499/84740, 22797	Test Date:	2025-06-30, 2025-07-09
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Mode		UL Ch No.	Freq. (MHz)	Maximum Average Power (dBm)	
				Measured Pwr	MPR
Release 99	Rel 99 (RMC, 12.2 kbps)	4132	826.4	24.0	N/A
		4183	836.6	23.9	
		4233	846.6	24.0	
HSDPA	Subtest 1	4132	826.4	23.7	0
		4183	836.6	23.6	
		4233	846.6	22.7	
	Subtest 2	4132	826.4	23.5	0
		4183	836.6	23.7	
		4233	846.6	23.8	
	Subtest 3	4132	826.4	23.1	0.5
		4183	836.6	23.0	
		4233	846.6	23.3	
	Subtest 4	4132	826.4	23.2	0.5
		4183	836.6	23.3	
		4233	846.6	23.3	
HSUPA	Subtest 1	4132	826.4	23.0	0
		4183	836.6	22.6	
		4233	846.6	22.6	
	Subtest 2	4132	826.4	23.6	0
		4183	836.6	23.5	
		4233	846.6	23.7	
	Subtest 3	4132	826.4	22.4	1
		4183	836.6	23.2	
		4233	846.6	22.7	
	Subtest 4	4132	826.4	22.5	1
		4183	836.6	23.2	
		4233	846.6	23.2	
	Subtest 5	4132	826.4	22.4	2
		4183	836.6	22.3	
		4233	846.6	22.0	
DC-HSDPA	Subtest 1	4132	826.4	23.9	0
		4183	836.6	23.9	
		4233	846.6	23.8	
	Subtest 2	4132	826.4	23.9	0
		4183	836.6	23.9	
		4233	846.6	23.8	
	Subtest 3	4132	826.4	23.4	0.5
		4183	836.6	23.4	
		4233	846.6	23.3	
	Subtest 4	4132	826.4	23.4	0.5
		4183	836.6	23.4	
		4233	846.6	23.3	

8.3. LTE

CONDUCTED OUTPUT POWER MEASUREMENT PROCEDURE

All LTE bands conducted average power is obtained from the CMW500 telecommunication test set.

The following tests were conducted according to the test requirements outlined in section 6.2 of the 3GPP TS 36.101 specification.

UE Power Class: 3 (23 +/- 2dBm). The allowed Maximum Power Reduction (MPR) for the maximum output power due to higher order modulation and transmit bandwidth configuration (resource blocks) is specified in Table 6.2.3-1 of the 3GPP TS 36.101.

Table 6.2.3-1: Maximum Power Reduction (MPR) for Power Class 1, 2 and 3

Modulation	Channel bandwidth / Transmission bandwidth (N _{RB})						MPR (dB)
	1.4 MHz	3.0 MHz	5 MHz	10 MHz	15 MHz	20 MHz	
QPSK	> 5	> 4	> 8	> 12	> 16	> 18	≤ 1
16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 1
16 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 2
64 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 2
64 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 3
256 QAM	≥ 1						≤ 5

The following tests were conducted according to the test requirements outlined in section 6.2 of the 3GPP TS 38.521-1 specification.

The allowed MPR for SRS, PUCCH formats 0, 1, 3 and 4, and PRACH shall be as specified for QPSK modulated DFTs-OFDM of equivalent RB allocation. The allowed MPR for PUCCH format 2 shall be as specified for QPSK modulated CP-OFDM of equivalent RB allocation.

Table 6.2.2.3-1: Maximum power reduction (MPR) for power class 3

Modulation		MPR (dB)		
		Edge RB allocations	Outer RB allocations	Inner RB allocations
DFT-s-OFDM	Pi/2 BPSK	$\leq 3.5^1$	$\leq 1.2^1$	$\leq 0.2^1$
		$\leq 0.5^2$		0^2
	Pi/2 BPSK w Pi/2 DMRS	$\leq 0.5^2$		
	QPSK	≤ 1		0
	16 QAM	≤ 2		≤ 1
	64 QAM	≤ 2.5		
	256 QAM	≤ 4.5		
CP-OFDM	QPSK	≤ 3		≤ 1.5
	16 QAM	≤ 3		≤ 2
	64 QAM	≤ 3.5		
	256 QAM	≤ 6.5		
NOTE 1: Applicable for UE operating in TDD mode with Pi/2 BPSK modulation and UE indicates support for UE capability <i>powerBoosting-pi2BPSK</i> and if the IE <i>powerBoostPi2BPSK</i> is set to 1 and 40 % or less slots in radio frame are used for UL transmission for bands n40, n41, n77, n78 and n79. The reference power of 0dB MPR is 26dBm.				
NOTE 2: Applicable for UE operating in FDD mode, or in TDD mode in bands other than n40, n41, n77, n78 and n79 with Pi/2 BPSK modulation and if the IE <i>powerBoostPi2BPSK</i> is set to 0 and if more than 40% of slots in radio frame are used for UL transmission for bands n40, n41, n77, n78 and n79.				

AVERAGE OUTPUT POWER TEST PROCEDURE

The transmitter output is connected to a power meter.

The power output was measured on the EUT antenna port using SMA cable with directional coupler connected to a power meter via wideband average power sensor. Gated average output power was read directly from power meter.

PEAK OUTPUT POWER TEST PROCEDURE

The transmitter output is connected to a power meter.

The power output was measured on the EUT antenna port using SMA cable with directional coupler connected to a power meter via wideband peak power sensor. Peak output power was read directly from power meter.

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:

8.3.1. LTE BAND 2

Test Engineer ID:	22797	Test Date:	2025-06-19 to 2025-06-20
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BW (MHz)	Mode	RB Allocation	RB Offset	Maximum Average Power (dBm)			
				18700	18900	19100	MPR
				1860 MHz	1880 MHz	1900 MHz	
20	QPSK	1	0	22.9	22.9	23.2	0
		1	49	23.1	23.3	23.3	0
		1	99	23.0	23.2	23.0	0
		50	0	22.1	22.0	22.4	1
		50	24	22.1	22.3	22.3	1
		50	50	22.1	22.2	22.3	1
		100	0	22.1	22.1	22.3	1
	16QAM	1	0	22.5	22.4	22.7	1
		1	49	22.6	22.7	22.8	1
		1	99	22.5	22.6	22.5	1
		50	0	21.1	21.0	21.4	2
		50	24	21.2	21.2	21.3	2
		50	50	21.2	21.2	21.3	2
		100	0	21.1	21.1	21.4	2
	64QAM	1	0	20.8	20.4	20.5	2
		1	49	21.0	20.7	20.6	2
		1	99	21.0	20.5	20.5	2
		50	0	19.4	19.3	19.4	3
		50	24	19.4	19.6	19.4	3
		50	50	19.4	19.5	19.4	3
		100	0	19.3	19.4	19.4	3

BW (MHz)	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)			
				18675	18900	19125	MPR
				1857.5 MHz	1880 MHz	1902.5 MHz	
15	QPSK	1	0	23.1	23.1	23.1	0
		1	37	23.2	23.3	23.2	0
		1	74	23.1	23.3	22.9	0
		36	0	22.0	22.1	22.2	1
		36	20	22.1	22.2	22.2	1
		36	39	22.0	22.3	22.1	1
		75	0	22.1	22.2	22.1	1
	16QAM	1	0	22.5	22.5	22.1	1
		1	37	22.5	22.7	22.1	1
		1	74	22.4	22.7	21.9	1
		36	0	21.1	21.1	21.2	2
		36	20	21.1	21.2	21.2	2
		36	39	21.1	21.2	21.1	2
		75	0	21.1	21.2	21.1	2
	64QAM	1	0	20.9	20.7	20.3	2
		1	37	20.9	20.8	20.4	2
		1	74	20.9	20.6	20.3	2
		36	0	19.3	19.4	19.3	3
		36	20	19.3	19.5	19.3	3
		36	39	19.3	19.5	19.3	3
		75	0	19.3	19.4	19.3	3

BW (MHz)	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)			
				18650	18900	19150	MPR
				1855 MHz	1880 MHz	1905 MHz	
10	QPSK	1	0	23.1	23.1	23.1	0
		1	25	23.2	23.3	23.1	0
		1	49	23.1	23.2	23.0	0
		25	0	22.1	22.1	22.0	1
		25	12	22.1	22.2	22.1	1
		25	25	22.0	22.2	22.1	1
		50	0	22.1	22.2	22.0	1
	16QAM	1	0	22.5	22.1	22.1	1
		1	25	22.5	22.3	22.1	1
		1	49	22.4	22.3	21.9	1
		25	0	21.1	21.2	21.1	2
		25	12	21.2	21.4	21.2	2
		25	25	21.1	21.4	21.1	2
		50	0	21.1	21.2	21.0	2
	64QAM	1	0	20.4	20.6	20.5	2
		1	25	20.4	20.7	20.6	2
		1	49	20.4	20.6	20.6	2
		25	0	19.4	19.5	19.3	3
		25	12	19.4	19.6	19.4	3
		25	25	19.4	19.6	19.4	3
		50	0	19.4	19.5	19.3	3

BW (MHz)	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)			
				18625	18900	19175	MPR
				1852.5 MHz	1880 MHz	1907.5 MHz	
5	QPSK	1	0	23.0	23.1	23.0	0
		1	12	23.2	23.4	23.2	0
		1	24	23.0	23.2	23.0	0
		12	0	22.0	22.1	21.9	1
		12	7	22.1	22.2	22.0	1
		12	13	22.1	22.3	22.0	1
		25	0	22.1	22.2	21.9	1
	16QAM	1	0	22.5	22.2	22.1	1
		1	12	22.7	22.4	22.3	1
		1	24	22.5	22.3	22.1	1
		12	0	21.2	21.1	21.0	2
		12	7	21.2	21.3	21.1	2
		12	13	21.2	21.3	21.1	2
		25	0	21.2	21.2	21.0	2
	64QAM	1	0	20.4	20.3	20.4	2
		1	12	20.6	20.5	20.6	2
		1	24	20.4	20.3	20.4	2
		12	0	19.3	19.4	19.1	3
		12	7	19.4	19.6	19.2	3
		12	13	19.3	19.6	19.2	3
		25	0	19.3	19.5	19.2	3

BW (MHz)	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)			
				18615	18900	19185	MPR
				1851.5 MHz	1880 MHz	1908.5 MHz	
3	QPSK	1	0	22.9	22.8	22.6	0
		1	8	23.0	23.0	22.8	0
		1	14	22.7	22.9	22.6	0
		8	0	22.0	22.1	21.9	1
		8	4	22.0	22.2	21.9	1
		8	7	22.0	22.2	21.9	1
		15	0	22.0	22.1	21.9	1
	16QAM	1	0	22.2	21.9	21.6	1
		1	8	22.3	22.1	21.7	1
		1	14	22.2	21.9	21.6	1
		8	0	21.1	21.1	21.0	2
		8	4	21.2	21.2	21.1	2
		8	7	21.1	21.2	21.0	2
		15	0	21.0	21.1	20.9	2
	64QAM	1	0	20.2	20.5	20.0	2
		1	8	20.4	20.7	20.2	2
		1	14	20.2	20.5	20.1	2
		8	0	19.2	19.5	19.1	3
		8	4	19.2	19.5	19.2	3
		8	7	19.2	19.5	19.2	3
		15	0	19.2	19.3	19.2	3

BW (MHz)	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)			
				18607	18900	19193	MPR
				1850.7 MHz	1880 MHz	1909.3 MHz	
1.4	QPSK	1	0	22.9	22.9	22.8	0
		1	3	23.0	23.0	22.9	0
		1	5	22.9	23.0	22.8	0
		3	0	23.0	23.1	22.9	0
		3	1	23.1	23.1	22.9	0
		3	3	23.1	23.2	22.9	0
		6	0	22.1	22.2	22.0	1
	16QAM	1	0	22.4	22.0	21.9	1
		1	3	22.4	22.1	22.0	1
		1	5	22.4	22.1	21.9	1
		3	0	22.3	22.3	21.9	1
		3	1	22.3	22.3	21.9	1
		3	3	22.2	22.3	21.9	1
		6	0	21.0	21.4	21.1	2
	64QAM	1	0	20.3	20.7	20.2	2
		1	3	20.4	20.8	20.3	2
		1	5	20.4	20.7	20.2	2
		3	0	20.2	20.8	20.3	2
		3	1	20.3	20.8	20.4	2
		3	3	20.2	20.8	20.4	2
		6	0	19.4	19.5	19.6	3

8.3.2. LTE BAND 12

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BW (MHz)	Mode	RB Allocation	RB Offset	Maximum Average Power (dBm)			
				23060	23095	23130	MPR
				704 MHz	707.5 MHz	711 MHz	
10	QPSK	1	0	23.7	23.7	23.7	0
		1	25	23.7	23.7	23.8	0
		1	49	23.6	23.6	23.7	0
		25	0	22.6	22.7	22.7	1
		25	12	22.8	22.8	22.7	1
		25	25	22.7	22.7	22.7	1
		50	0	22.7	22.7	22.8	1
	16QAM	1	0	22.8	23.3	22.9	1
		1	25	22.8	23.3	22.9	1
		1	49	22.7	23.2	22.8	1
		25	0	21.7	21.7	21.8	2
		25	12	21.8	21.8	21.8	2
		25	25	21.7	21.8	21.8	2
		50	0	21.7	21.7	21.7	2
	64QAM	1	0	22.0	22.1	22.2	2
		1	25	22.1	22.1	22.2	2
		1	49	22.0	21.9	22.1	2
		25	0	20.8	20.9	20.9	3
		25	12	21.0	21.0	20.9	3
		25	25	20.9	20.9	20.9	3
		50	0	20.9	20.8	20.8	3

BW (MHz)	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)			
				23035	23095	23155	MPR
				701.5 MHz	707.5 MHz	713.5 MHz	
5	QPSK	1	0	23.7	23.7	23.6	0
		1	12	23.8	23.8	23.7	0
		1	24	23.7	23.6	23.6	0
		12	0	22.7	22.7	22.7	1
		12	7	22.8	22.7	22.7	1
		12	13	22.8	22.7	22.7	1
		25	0	22.7	22.7	22.7	1
	16QAM	1	0	22.8	22.5	22.9	1
		1	12	22.9	22.7	23.1	1
		1	24	22.7	22.5	22.9	1
		12	0	21.6	21.7	21.7	2
		12	7	21.7	21.7	21.7	2
		12	13	21.7	21.7	21.7	2
		25	0	21.8	21.8	21.7	2
	64QAM	1	0	22.0	21.7	22.0	2
		1	12	22.2	21.8	22.2	2
		1	24	22.0	21.7	22.0	2
		12	0	20.9	20.8	20.7	3
		12	7	21.0	20.8	20.8	3
		12	13	21.0	20.9	20.8	3
		25	0	20.9	20.8	20.8	3

BW (MHz)	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)			
				23025	23095	23165	MPR
				700.5 MHz	707.5 MHz	714.5 MHz	
3	QPSK	1	0	23.4	23.3	23.4	0
		1	8	23.5	23.5	23.6	0
		1	14	23.3	23.3	23.4	0
		8	0	22.6	22.6	22.7	1
		8	4	22.7	22.7	22.7	1
		8	7	22.7	22.6	22.6	1
		15	0	22.6	22.6	22.6	1
	16QAM	1	0	22.5	23.0	22.5	1
		1	8	22.6	23.1	22.6	1
		1	14	22.4	22.9	22.5	1
		8	0	21.7	21.8	21.6	2
		8	4	21.8	21.8	21.7	2
		8	7	21.7	21.8	21.6	2
		15	0	21.6	21.6	21.6	2
	64QAM	1	0	21.9	21.9	21.7	2
		1	8	22.0	22.1	21.9	2
		1	14	21.8	21.9	21.7	2
		8	0	20.8	20.8	20.8	3
		8	4	20.8	20.9	20.8	3
		8	7	20.7	20.8	20.8	3
		15	0	20.8	20.7	20.8	3

BW (MHz)	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)			
				23017	23095	23173	MPR
				699.7 MHz	707.5 MHz	715.3 MHz	
1.4	QPSK	1	0	23.4	23.5	23.5	0
		1	3	23.5	23.6	23.6	0
		1	5	23.4	23.4	23.5	0
		3	0	23.6	23.6	23.6	0
		3	1	23.6	23.6	23.6	0
		3	3	23.6	23.6	23.6	0
		6	0	22.7	22.7	22.7	1
	16QAM	1	0	22.5	22.5	22.6	1
		1	3	22.6	22.6	22.7	1
		1	5	22.5	22.5	22.6	1
		3	0	22.7	22.8	22.6	1
		3	1	22.7	22.8	22.6	1
		3	3	22.7	22.8	22.6	1
		6	0	21.7	21.7	21.7	2
	64QAM	1	0	22.1	21.9	21.8	2
		1	3	22.2	22.0	21.9	2
		1	5	22.1	21.8	21.9	2
		3	0	22.2	21.9	21.8	2
		3	1	22.3	22.0	21.8	2
		3	3	22.2	22.0	21.8	2
		6	0	20.8	21.1	20.9	3

8.3.3. LTE BAND 13

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BW (MHz)	Mode	RB Allocation	RB Offset	Maximum Average Power (dBm)			
					23230 782 MHz		MPR
10	QPSK	1	0		23.6		0
		1	25		23.6		0
		1	49		23.6		0
		25	0		22.6		1
		25	12		22.7		1
		25	25		22.7		1
		50	0		22.6		1
	16QAM	1	0		22.6		1
		1	25		22.8		1
		1	49		22.7		1
		25	0		21.6		2
		25	12		21.7		2
		25	25		21.7		2
		50	0		21.6		2
	64QAM	1	0		22.1		2
		1	25		22.2		2
		1	49		22.2		2
		25	0		20.6		3
		25	12		20.8		3
		25	25		20.8		3
		50	0		20.6		3

BW (MHz)	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)			
				23205	23230	23255	MPR
				779.5 MHz	782 MHz	784.5 MHz	
5	QPSK	1	0	23.6	23.5	23.5	0
		1	12	23.7	23.7	23.8	0
		1	24	23.6	23.6	23.6	0
		12	0	22.4	22.5	22.7	1
		12	7	22.6	22.6	22.6	1
		12	13	22.6	22.7	22.7	1
		25	0	22.5	22.6	22.6	1
	16QAM	1	0	23.1	22.7	23.6	1
		1	12	23.2	22.9	23.8	1
		1	24	23.1	22.8	23.6	1
		12	0	21.7	21.7	22.6	2
		12	7	21.8	21.8	22.7	2
		12	13	21.7	21.7	22.6	2
		25	0	21.6	21.7	21.7	2
	64QAM	1	0	22.0	21.9	22.1	2
		1	12	22.1	22.1	22.2	2
		1	24	22.0	21.9	22.1	2
		12	0	20.5	20.7	20.7	3
		12	7	20.5	20.8	20.9	3
		12	13	20.6	20.8	20.7	3
		25	0	20.5	20.6	20.7	3

8.3.4. LTE BAND 26 (Part 22H)

Test Engineer ID:	22797	Test Date:	2025-06-21 – 2025-07-16
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BW (MHz)	Mode	RB Allocation	RB Offset	Maximum Average Power (dBm)				
				26865	26915	26965	MPR	Tune-up Limit
				831.5 MHz	836.5 MHz	841.5 MHz		
15	QPSK	1	0	24.3	24.6	24.3	0	25.5
		1	37	24.4	24.6	24.4	0	25.5
		1	74	24.3	24.6	24.3	0	25.5
		36	0	23.3	23.6	23.3	1	24.5
		36	20	23.4	23.7	23.4	1	24.5
		36	39	23.4	23.7	23.4	1	24.5
		75	0	23.4	23.6	23.3	1	24.5
	16QAM	1	0	23.3	24.1	23.4	1	24.5
		1	37	23.5	24.2	23.5	1	24.5
		1	74	23.4	24.2	23.4	1	24.5
		36	0	22.3	22.6	22.3	2	23.5
		36	20	22.4	22.6	22.4	2	23.5
		36	39	22.4	22.7	22.4	2	23.5
		75	0	22.4	22.7	22.3	2	23.5
	64QAM	1	0	22.3	22.9	22.8	2	23.5
		1	37	22.5	23.0	23.3	2	23.5
		1	74	22.4	22.9	23.0	2	23.5
		36	0	21.3	21.7	21.3	3	22.5
		36	20	21.4	21.7	21.5	3	22.5
		36	39	21.4	21.8	21.5	3	22.5
		75	0	21.3	21.7	21.4	3	22.5
BW (MHz)	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)				
				26840	26915	26990	MPR	Tune-up Limit
				829 MHz	836.5 MHz	844 MHz		
10	QPSK	1	0	24.6	24.6	24.3	0	25.5
		1	25	24.6	24.7	24.4	0	25.5
		1	49	24.6	24.6	24.3	0	25.5
		25	0	23.5	23.6	23.3	1	24.5
		25	12	23.6	23.6	23.4	1	24.5
		25	25	23.6	23.6	23.3	1	24.5
		50	0	23.5	23.6	23.3	1	24.5
	16QAM	1	0	23.6	24.2	23.9	1	24.5
		1	25	23.7	24.3	24.0	1	24.5
		1	49	23.6	24.2	23.8	1	24.5
		25	0	22.6	22.6	22.4	2	23.5
		25	12	22.7	22.7	22.4	2	23.5
		25	25	22.7	22.6	22.4	2	23.5
		50	0	22.6	22.6	22.3	2	23.5
	64QAM	1	0	22.8	23.0	22.6	2	23.5
		1	25	22.9	23.0	22.7	2	23.5
		1	49	22.8	23.0	22.7	2	23.5
		25	0	21.7	21.7	21.4	3	22.5
		25	12	21.8	21.8	21.5	3	22.5
		25	25	21.8	21.7	21.4	3	22.5
		50	0	21.7	21.7	21.4	3	22.5

BW (MHz)	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)				
				26815	26915	27015	MPR	Tune-up Limit
				826.5 MHz	836.5 MHz	846.5 MHz		
5	QPSK	1	0	24.5	24.5	24.3	0	25.5
		1	12	24.7	24.7	24.5	0	25.5
		1	24	24.6	24.6	24.3	0	25.5
		12	0	23.5	23.5	23.3	1	24.5
		12	7	23.6	23.6	23.3	1	24.5
		12	13	23.6	23.6	23.3	1	24.5
		25	0	23.5	23.5	23.3	1	24.5
	16QAM	1	0	23.6	23.6	23.1	1	24.5
		1	12	23.7	23.7	23.3	1	24.5
		1	24	23.6	23.6	23.1	1	24.5
		12	0	22.5	22.5	22.3	2	23.5
		12	7	22.6	22.6	22.3	2	23.5
		12	13	22.5	22.5	22.3	2	23.5
		25	0	22.6	22.6	22.3	2	23.5
	64QAM	1	0	22.5	22.5	22.6	2	23.5
		1	12	22.7	22.7	22.7	2	23.5
		1	24	22.5	22.5	22.6	2	23.5
		12	0	21.7	21.7	21.5	3	22.5
		12	7	21.7	21.7	21.5	3	22.5
		12	13	21.7	21.7	21.4	3	22.5
		25	0	21.7	21.7	21.4	3	22.5
BW (MHz)	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)				
				26805	26915	27025	MPR	Tune-up Limit
				825.5 MHz	836.5 MHz	847.5 MHz		
3	QPSK	1	0	24.2	24.3	24.0	0	25.5
		1	8	24.3	24.4	24.1	0	25.5
		1	14	24.2	24.3	23.9	0	25.5
		8	0	23.5	23.5	23.2	1	24.5
		8	4	23.5	23.5	23.3	1	24.5
		8	7	23.5	23.5	23.2	1	24.5
		15	0	23.4	23.5	23.2	1	24.5
	16QAM	1	0	23.3	23.8	23.2	1	24.5
		1	8	23.4	24.0	23.0	1	24.5
		1	14	23.3	23.8	23.5	1	24.5
		8	0	22.6	22.6	22.4	2	23.5
		8	4	22.6	22.7	22.4	2	23.5
		8	7	22.6	22.7	22.4	2	23.5
		15	0	22.4	22.5	22.1	2	23.5
	64QAM	1	0	22.6	22.8	22.5	2	23.5
		1	8	22.7	22.9	22.5	2	23.5
		1	14	22.6	22.8	22.5	2	23.5
		8	0	21.6	21.7	21.5	3	22.5
		8	4	21.7	21.7	21.4	3	22.5
		8	7	21.6	21.7	21.3	3	22.5
		15	0	21.6	21.5	21.3	3	22.5

BW (MHz)	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)				
				26797	26915	27033	MPR	Tune-up Limit
				824.7 MHz	836.5 MHz	848.3 MHz		
1.4	QPSK	1	0	24.3	24.4	24.1	0	25.5
		1	3	24.4	24.5	24.2	0	25.5
		1	5	24.3	24.4	24.1	0	25.5
		3	0	24.5	24.5	24.2	0	25.5
		3	1	24.5	24.5	24.2	0	25.5
		3	3	24.5	24.4	24.2	0	25.5
		6	0	23.5	23.5	23.3	1	24.5
	16QAM	1	0	23.4	23.3	23.2	1	24.5
		1	3	23.4	23.4	23.2	1	24.5
		1	5	23.4	23.4	23.2	1	24.5
		3	0	23.6	23.7	23.2	1	24.5
		3	1	23.6	23.7	23.1	1	24.5
		3	3	23.6	23.7	23.2	1	24.5
		6	0	22.5	22.6	22.3	2	23.5
	64QAM	1	0	22.7	22.9	22.7	2	23.5
		1	3	22.8	23.0	22.8	2	23.5
		1	5	22.7	22.9	22.7	2	23.5
		3	0	22.8	23.0	22.8	2	23.5
		3	1	22.8	23.0	22.7	2	23.5
		3	3	22.8	23.0	22.8	2	23.5
		6	0	22.0	21.6	21.4	3	22.5

8.3.5. LTE BAND 26 (Part 90S)

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BW (MHz)	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)			
				26740	26740	26740	MPR
				819 MHz	819 MHz	819 MHz	
10	QPSK	1	0		24.5		0
		1	25		24.6		0
		1	49		24.6		0
		25	0		23.5		1
		25	12		23.6		1
		25	25		23.6		1
		50	0		23.5		1
	16QAM	1	0		23.5		1
		1	25		23.6		1
		1	49		23.6		1
		25	0		22.5		2
		25	12		22.7		2
		25	25		22.6		2
		50	0		22.6		2
	64QAM	1	0		22.4		2
		1	25		22.5		2
		1	49		22.4		2
		25	0		21.3		3
		25	12		21.4		3
		25	25		21.4		3
		50	0		21.3		3
BW (MHz)	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)			
				26715	26740	26765	MPR
				816.5 MHz	819 MHz	821.5 MHz	
5	QPSK	1	0	24.3	24.5	24.4	0
		1	12	24.5	24.6	24.6	0
		1	24	24.3	24.5	24.5	0
		12	0	23.3	23.4	23.4	1
		12	7	23.4	23.5	23.5	1
		12	13	23.3	23.5	23.5	1
		25	0	23.3	23.5	23.5	1
	16QAM	1	0	23.4	23.3	23.7	1
		1	12	23.5	23.5	23.9	1
		1	24	23.4	23.4	23.8	1
		12	0	22.3	22.5	22.5	2
		12	7	22.4	22.6	22.5	2
		12	13	22.4	22.5	22.5	2
		25	0	22.4	22.6	22.5	2
	64QAM	1	0	22.2	22.6	22.6	2
		1	12	22.3	22.6	22.6	2
		1	24	22.2	22.6	22.6	2
		12	0	21.4	21.5	21.5	3
		12	7	21.4	21.7	21.7	3
		12	13	21.4	21.6	21.6	3
		25	0	21.3	21.6	21.6	3

BW (MHz)	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)			
				26705	26740	26775	MPR
				815.5 MHz	819 MHz	822.5 MHz	
3	QPSK	1	0	24.1	24.1	24.2	0
		1	8	24.2	24.3	24.3	0
		1	14	24.1	24.2	24.2	0
		8	0	23.3	23.4	23.4	1
		8	4	23.4	23.5	23.5	1
		8	7	23.3	23.4	23.5	1
		15	0	23.2	23.3	23.4	1
	16QAM	1	0	23.2	23.2	23.7	1
		1	8	23.3	23.3	23.9	1
		1	14	23.2	23.2	23.7	1
		8	0	22.3	22.5	22.5	2
		8	4	22.4	22.6	22.6	2
		8	7	22.3	22.5	22.6	2
		15	0	22.3	22.4	22.3	2
	64QAM	1	0	22.2	22.5	22.5	2
		1	8	22.4	22.6	22.6	2
		1	14	22.2	22.6	22.5	2
		8	0	21.3	22.4	22.4	3
		8	4	21.3	21.6	21.6	3
		8	7	21.3	21.6	21.6	3
		15	0	21.3	21.5	21.7	3
BW (MHz)	Mode	RB Allocation	RB offset				
				26697	26740	26783	MPR
				814.7 MHz	819 MHz	823.3 MHz	
1.4	QPSK	1	0	24.2	24.3	24.2	0
		1	3	24.2	24.4	24.4	0
		1	5	24.1	24.3	24.3	0
		3	0	24.3	24.5	24.4	0
		3	1	24.3	24.5	24.4	0
		3	3	24.3	24.4	24.5	0
		6	0	23.3	23.5	23.5	1
	16QAM	1	0	23.2	23.4	23.3	1
		1	3	23.2	23.5	23.4	1
		1	5	23.2	23.4	23.3	1
		3	0	23.4	23.4	23.5	1
		3	1	23.4	23.4	23.5	1
		3	3	23.3	23.4	23.5	1
		6	0	22.3	22.6	22.4	2
	64QAM	1	0	22.5	22.5	23.3	2
		1	3	22.4	22.8	23.5	2
		1	5	22.5	22.7	23.4	2
		3	0	22.5	22.2	22.5	2
		3	1	22.5	22.8	22.6	2
		3	3	22.5	22.5	22.5	2
		6	0	21.6	21.5	21.6	3

8.3.6. LTE Band 26 (STRADDLE)

Test Engineer ID:	22797	Test Date:	2025-08-08
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BW (MHz)	Mode	RB Allocation	RB Offset	Maximum Average Power (dBm)		
				26790	MPR	Tune-up Limit
				824 MHz		
15	QPSK	1	0	24.9	0	25.5
		1	37	25.0	0	25.5
		1	74	24.9	0	25.5
		36	0	23.9	1	24.5
		36	20	23.9	1	24.5
		36	39	23.9	1	24.5
		75	0	23.9	1	24.5
	16QAM	1	0	24.2	1	24.5
		1	37	24.4	1	24.5
		1	74	24.3	1	24.5
		36	0	22.9	2	23.5
		36	20	22.9	2	23.5
		36	39	22.9	2	23.5
		75	0	22.9	2	23.5
	64QAM	1	0	23.3	2	23.5
		1	37	23.4	2	23.5
		1	74	23.4	2	23.5
		36	0	21.9	3	22.5
		36	20	22.0	3	22.5
		36	39	22.0	3	22.5
		75	0	22.0	3	22.5
BW (MHz)	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)		
				26790	MPR	Tune-up Limit
				824 MHz		
10	QPSK	1	0	24.7	0	25.5
		1	25	24.8	0	25.5
		1	49	24.8	0	25.5
		25	0	23.7	1	24.5
		25	12	23.8	1	24.5
		25	25	23.7	1	24.5
		50	0	23.7	1	24.5
	16QAM	1	0	23.8	1	24.5
		1	25	23.8	1	24.5
		1	49	23.8	1	24.5
		25	0	22.8	2	23.5
		25	12	22.8	2	23.5
		25	25	22.8	2	23.5
		50	0	22.8	2	23.5
	64QAM	1	0	23.0	2	23.5
		1	25	23.1	2	23.5
		1	49	23.0	2	23.5
		25	0	21.9	3	22.5
		25	12	22.0	3	22.5
		25	25	21.9	3	22.5
		50	0	21.8	3	22.5

8.3.7. LTE BAND 41

Test Engineer ID:	22797	Test Date:	2025-06-21
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BW (MHz)	Mode	RB Allocation	RB Offset	Maximum Average Power (dBm)			
				39750	40620	41490	MPR
				2506 MHz	2593 MHz	2680 MHz	
20	QPSK	1	0	22.8	22.7	22.5	0
		1	49	23.3	23.1	22.7	0
		1	99	23.1	22.7	22.4	0
		50	0	22.0	21.9	21.7	1
		50	24	22.2	22.0	21.7	1
		50	50	22.2	21.9	21.5	1
		100	0	22.1	21.9	21.6	1
	16QAM	1	0	21.6	21.8	21.4	1
		1	49	22.0	22.2	21.6	1
		1	99	21.8	21.8	21.3	1
		50	0	21.0	20.9	20.7	2
		50	24	21.2	21.0	20.7	2
		50	50	21.2	20.9	20.5	2
		100	0	21.1	20.9	20.6	2
	64QAM	1	0	20.7	20.6	20.9	2
		1	49	21.1	21.1	21.1	2
		1	99	21.0	20.7	20.7	2
		50	0	20.0	19.9	19.7	3
		50	24	20.2	20.0	19.7	3
		50	50	20.2	19.9	19.5	3
		100	0	20.1	19.9	19.6	3

BW (MHz)	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)			
				39725	40620	41515	MPR
				2503.5 MHz	2593 MHz	2682.5 MHz	
15	QPSK	1	0	22.8	22.7	22.6	0
		1	37	23.1	23.0	22.7	0
		1	74	23.2	22.7	22.4	0
		36	0	21.9	21.8	21.6	1
		36	20	22.1	21.9	21.6	1
		36	39	22.1	21.9	21.5	1
		75	0	22.1	21.9	21.5	1
	16QAM	1	0	21.9	21.8	21.3	1
		1	37	22.2	22.0	21.4	1
		1	74	22.2	21.8	21.2	1
		36	0	21.0	20.8	20.6	2
		36	20	21.1	20.9	20.5	2
		36	39	21.2	20.9	20.4	2
		75	0	21.0	20.9	20.5	2
	64QAM	1	0	20.6	20.3	20.9	2
		1	37	21.0	20.5	20.9	2
		1	74	21.0	20.3	20.7	2
		36	0	19.9	19.9	19.7	3
		36	20	20.0	20.0	19.7	3
		36	39	20.1	20.0	19.6	3
		75	0	20.0	19.9	19.6	3

BW (MHz)	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)			
				39700	40620	41540	MPR
				2501 MHz	2593 MHz	2685 MHz	
10	QPSK	1	0	22.8	22.8	22.6	0
		1	25	23.0	23.0	22.6	0
		1	49	23.1	22.8	22.4	0
		25	0	21.9	21.9	21.5	1
		25	12	22.0	21.9	21.5	1
		25	25	22.0	21.9	21.4	1
		50	0	22.0	21.9	21.5	1
	16QAM	1	0	21.7	21.9	21.3	1
		1	25	21.9	22.0	21.3	1
		1	49	21.9	21.9	21.2	1
		25	0	21.0	20.9	20.5	2
		25	12	21.0	21.0	20.5	2
		25	25	21.1	20.9	20.4	2
		50	0	21.0	20.9	20.5	2
	64QAM	1	0	21.1	20.9	20.2	2
		1	25	21.3	21.1	20.1	2
		1	49	21.4	20.9	20.0	2
		25	0	19.9	19.8	19.6	3
		25	12	20.0	19.9	19.6	3
		25	25	20.1	19.9	19.5	3
		50	0	20.0	19.9	19.5	3

BW (MHz)	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)			
				39675	40620	41565	MPR
				2498.5 MHz	2593 MHz	2687.5 MHz	
5	QPSK	1	0	22.7	22.7	22.4	0
		1	12	22.9	22.9	22.5	0
		1	24	22.8	22.7	22.3	0
		12	0	21.8	21.9	21.4	1
		12	7	21.9	21.9	21.4	1
		12	13	21.9	21.9	21.4	1
		25	0	21.8	21.9	21.4	1
	16QAM	1	0	21.8	21.8	21.3	1
		1	12	22.0	22.0	21.4	1
		1	24	21.9	21.8	21.2	1
		12	0	20.8	20.8	20.4	2
		12	7	20.9	20.9	20.4	2
		12	13	20.9	20.9	20.4	2
		25	0	20.9	21.0	20.4	2
	64QAM	1	0	20.9	20.6	20.8	2
		1	12	21.1	20.7	20.9	2
		1	24	21.0	20.5	20.8	2
		12	0	19.8	19.9	19.5	3
		12	7	19.9	19.9	19.6	3
		12	13	19.8	19.9	19.6	3
		25	0	19.8	20.0	19.5	3

8.3.8. LTE BAND 66

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BW (MHz)	Mode	RB Allocation	RB Offset	Maximum Average Power (dBm)			
				132072	132322	132572	MPR
				1720 MHz	1745 MHz	1770 MHz	
20	QPSK	1	0	23.6	23.4	23.7	0
		1	49	23.7	23.6	23.9	0
		1	99	23.4	23.6	23.6	0
		50	0	22.6	22.5	22.8	1
		50	24	22.7	22.7	22.9	1
		50	50	22.6	22.7	22.8	1
		100	0	22.6	22.5	22.8	1
	16QAM	1	0	22.8	22.9	22.9	1
		1	49	22.9	23.2	23.2	1
		1	99	22.6	23.1	22.9	1
		50	0	21.6	21.4	21.8	2
		50	24	21.7	21.6	21.9	2
		50	50	21.6	21.6	21.8	2
		100	0	21.6	21.5	21.8	2
	64QAM	1	0	21.6	21.1	21.0	2
		1	49	21.8	21.2	21.4	2
		1	99	21.4	21.0	21.3	2
		50	0	20.1	20.0	20.0	3
		50	24	20.2	20.0	20.2	3
		50	50	20.1	20.0	20.3	3
		100	0	20.1	20.0	20.1	3

BW (MHz)	Mode	RB Allocation	RB Offset	Maximum Average Power (dBm)			
				132047	132322	132597	MPR
				1717.5 MHz	1745 MHz	1772.5 MHz	
15	QPSK	1	0	23.8	23.5	23.8	0
		1	37	23.8	23.7	23.8	0
		1	74	23.6	23.7	23.7	0
		36	0	22.7	22.5	22.8	1
		36	20	22.7	22.6	22.9	1
		36	39	22.7	22.6	22.8	1
		75	0	22.7	22.6	22.9	1
	16QAM	1	0	22.8	22.8	23.3	1
		1	37	22.9	23.0	23.4	1
		1	74	22.6	23.0	23.2	1
		36	0	21.7	21.5	21.8	2
		36	20	21.7	21.6	21.9	2
		36	39	21.7	21.6	21.8	2
		75	0	21.7	21.5	21.8	2
	64QAM	1	0	21.2	21.5	21.1	2
		1	37	21.3	21.5	21.4	2
		1	74	21.0	21.4	21.4	2
		36	0	20.2	19.9	20.0	3
		36	20	20.3	20.0	20.2	3
		36	39	20.2	19.9	20.2	3
		75	0	20.1	20.0	20.1	3

BW (MHz)	Mode	RB Allocation	RB Offset	Maximum Average Power (dBm)			
				132022	132322	132622	MPR
				1715 MHz	1745 MHz	1775 MHz	
10	QPSK	1	0	23.8	23.5	23.8	0
		1	25	23.8	23.6	23.8	0
		1	49	23.7	23.7	23.7	0
		25	0	22.7	22.4	22.8	1
		25	12	22.7	22.6	22.8	1
		25	25	22.6	22.6	22.7	1
		50	0	22.7	22.5	22.8	1
	16QAM	1	0	22.9	22.5	23.3	1
		1	25	22.9	22.6	23.4	1
		1	49	22.8	22.7	23.2	1
		25	0	21.7	21.5	21.8	2
		25	12	21.8	21.6	21.9	2
		25	25	21.7	21.7	21.8	2
		50	0	21.6	21.6	21.8	2
	64QAM	1	0	21.2	21.1	21.3	2
		1	25	21.3	21.1	21.4	2
		1	49	21.2	21.1	21.4	2
		25	0	20.2	20.0	20.1	3
		25	12	20.3	20.1	20.2	3
		25	25	20.2	20.0	20.2	3
		50	0	20.2	19.9	20.1	3

BW (MHz)	Mode	RB Allocation	RB Offset	Maximum Average Power (dBm)			
				131997	132322	132647	MPR
				1712.5 MHz	1745 MHz	1777.5 MHz	
5	QPSK	1	0	23.8	23.5	23.8	0
		1	12	23.9	23.7	23.9	0
		1	24	23.7	23.5	23.7	0
		12	0	22.8	22.5	22.7	1
		12	7	22.8	22.6	22.8	1
		12	13	22.8	22.6	22.7	1
		25	0	22.8	22.5	22.7	1
	16QAM	1	0	23.0	22.5	22.6	1
		1	12	23.1	22.7	22.7	1
		1	24	22.9	22.6	22.5	1
		12	0	21.7	21.5	21.7	2
		12	7	21.8	21.5	21.7	2
		12	13	21.8	21.5	21.7	2
		25	0	21.7	21.6	21.7	2
	64QAM	1	0	21.3	21.0	20.9	2
		1	12	21.5	21.2	21.1	2
		1	24	21.4	21.0	21.0	2
		12	0	20.0	19.9	20.1	3
		12	7	20.1	20.0	20.2	3
		12	13	20.1	20.0	20.2	3
		25	0	20.1	19.9	20.1	3

BW (MHz)	Mode	RB Allocation	RB Offset	Maximum Average Power (dBm)			
				131987	132322	132657	MPR
				1711.5 MHz	1745 MHz	1778.5 MHz	
3	QPSK	1	0	23.5	23.2	23.5	0
		1	8	23.6	23.4	23.6	0
		1	14	23.5	23.3	23.4	0
		8	0	22.7	22.5	22.7	1
		8	4	22.8	22.6	22.8	1
		8	7	22.7	22.5	22.7	1
		15	0	22.7	22.5	22.6	1
	16QAM	1	0	22.5	22.8	22.5	1
		1	8	22.6	23.0	22.7	1
		1	14	22.5	22.7	22.5	1
		8	0	21.8	21.6	21.6	2
		8	4	21.8	21.7	21.7	2
		8	7	21.8	21.7	21.7	2
		15	0	21.6	21.4	21.6	2
	64QAM	1	0	21.0	20.8	21.2	2
		1	8	21.1	21.0	21.3	2
		1	14	21.0	20.8	21.1	2
		8	0	20.1	19.8	20.1	3
		8	4	20.2	19.8	20.2	3
		8	7	20.1	19.8	20.1	3
		15	0	20.1	19.8	20.0	3

BW (MHz)	Mode	RB Allocation	RB Offset	Maximum Average Power (dBm)			
				131979	132322	132665	MPR
				1710.7 MHz	1745 MHz	1779.3 MHz	
1.4	QPSK	1	0	23.6	23.4	23.6	0
		1	3	23.7	23.5	23.6	0
		1	5	23.6	23.4	23.6	0
		3	0	23.7	23.5	23.6	0
		3	1	23.7	23.5	23.7	0
		3	3	23.7	23.5	23.7	0
		6	0	22.8	22.6	22.7	1
	16QAM	1	0	22.6	22.3	22.6	1
		1	3	22.6	22.4	22.7	1
		1	5	22.6	22.4	22.6	1
		3	0	22.8	22.6	22.6	1
		3	1	22.8	22.7	22.6	1
		3	3	22.8	22.7	22.6	1
		6	0	21.7	21.6	21.7	2
	64QAM	1	0	21.1	20.9	21.4	2
		1	3	21.2	20.9	21.5	2
		1	5	21.1	20.9	21.3	2
		3	0	21.2	20.7	21.4	2
		3	1	21.2	20.7	21.4	2
		3	3	21.2	20.8	21.4	2
		6	0	20.4	19.9	20.0	3

9. CONDUCTED TEST RESULTS

9.1. OCCUPIED BANDWIDTH

RULE PART(S)

FCC: §2.1049

LIMITS

For reporting purposes only.

TEST PROCEDURE

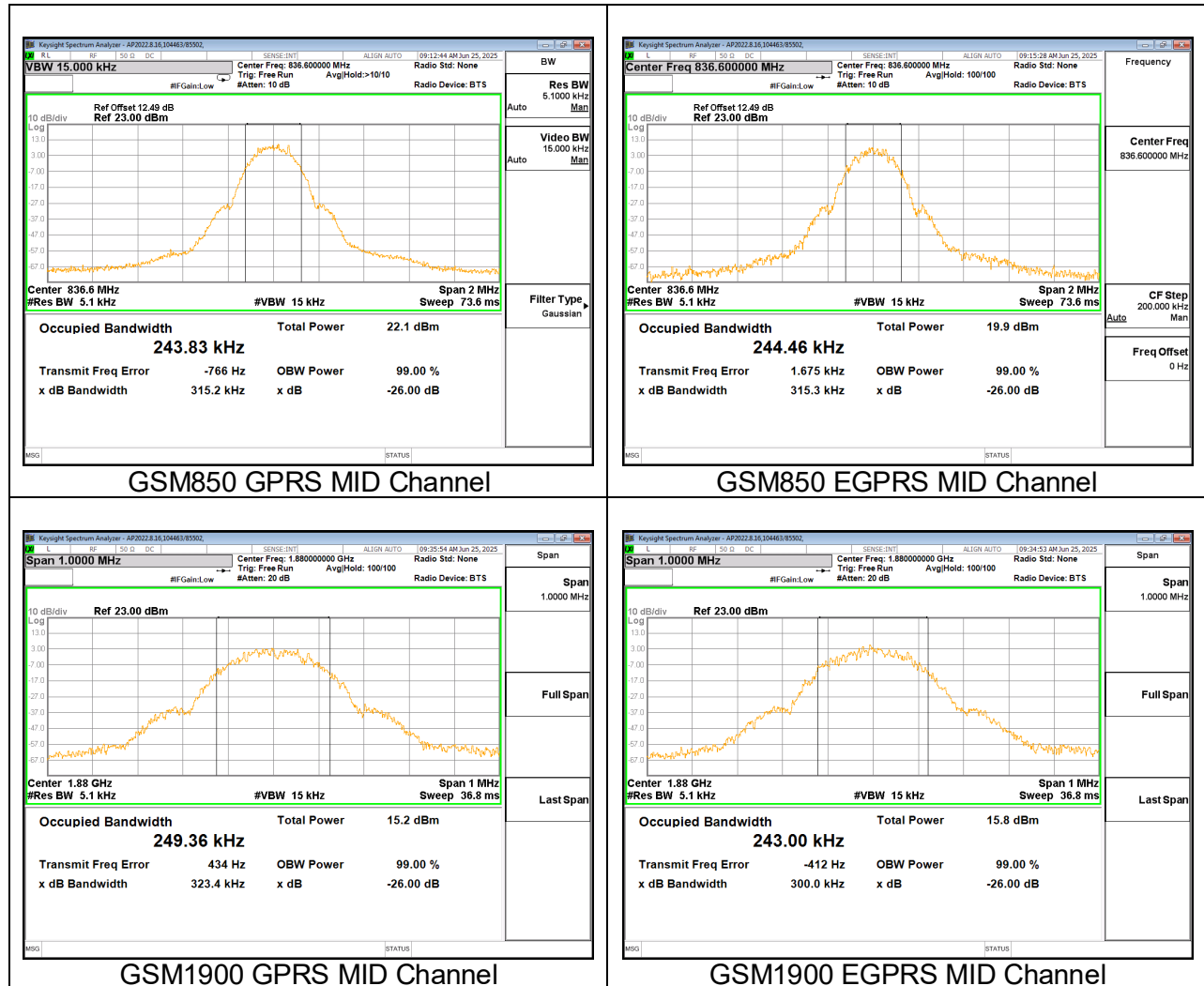
The transmitter output was connected to a calibrated coaxial cable and coupler, the other end of which was connected to a spectrum analyzer. The occupied bandwidth was measured with the spectrum analyzer at the middle channel in each band. The 99% and -26dB bandwidths was also measured and recorded.

RESULTS

There is no limit required and power is the same for low, middle and high channel; therefore, only middle channel was tested. Worst-case plots (highest bandwidth) are reported only.

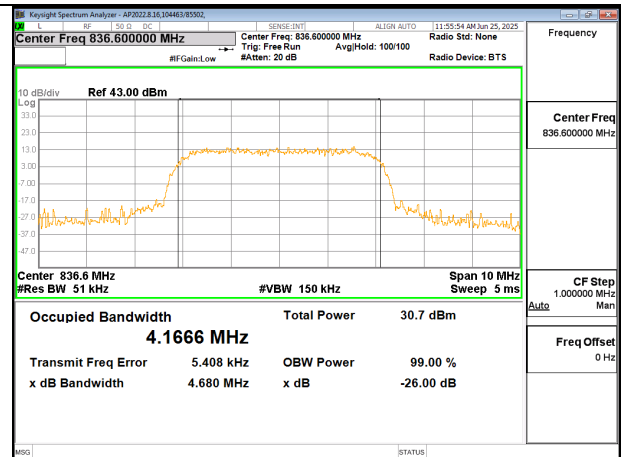
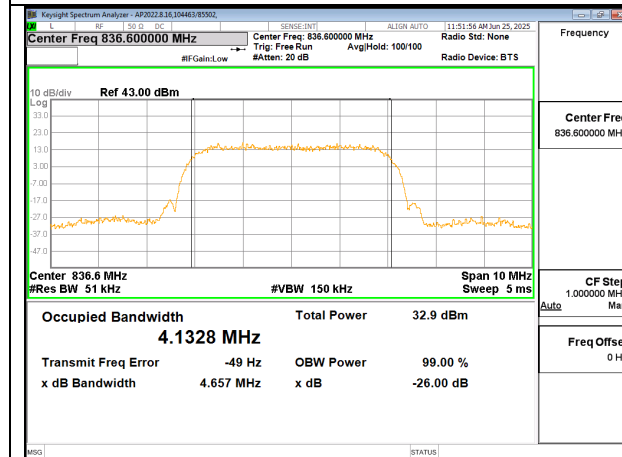
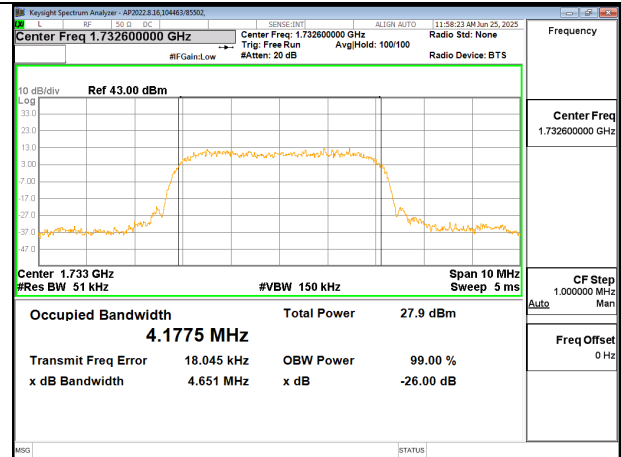
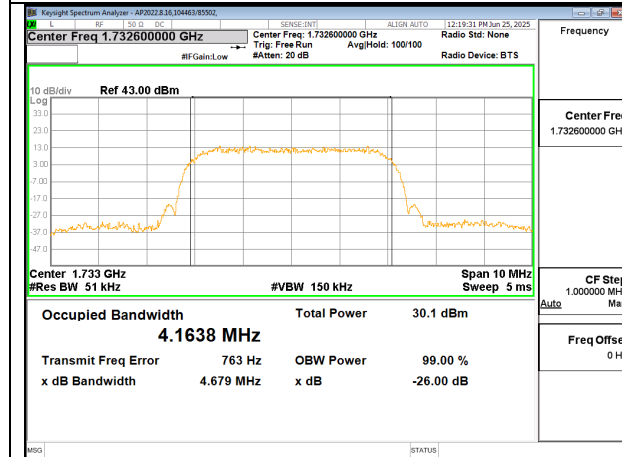
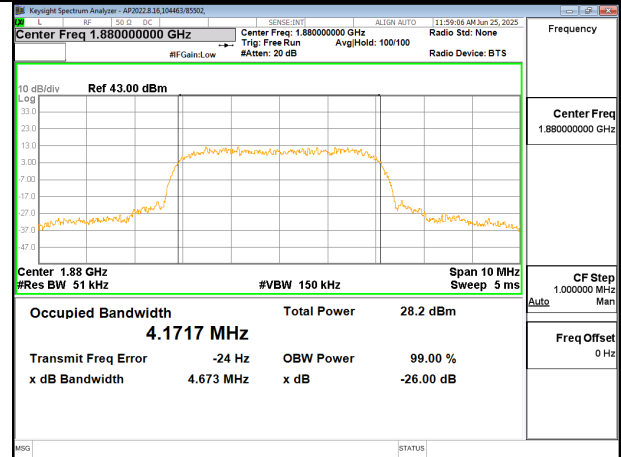
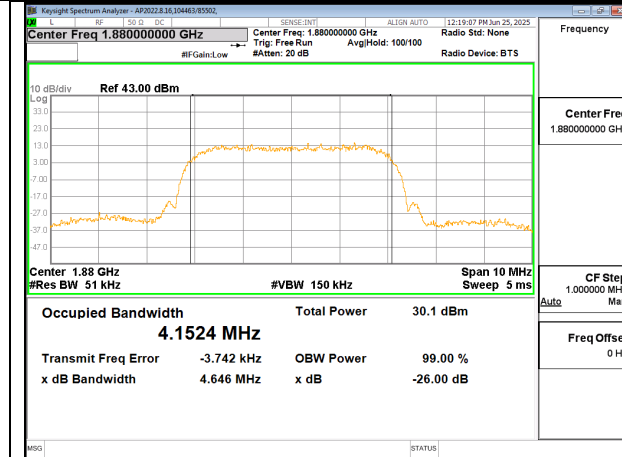
9.1.1. GSM

Band	Modulation	Channel	f(MHz)	99% BW (KHz)	-26dB BW (KHz)
GSM850	GPRS	190	836.6	243.8	315.2
	EGPRS			244.5	315.3
GSM1900	GPRS	661	1880.0	249.4	323.4
	EGPRS			243.0	300.0



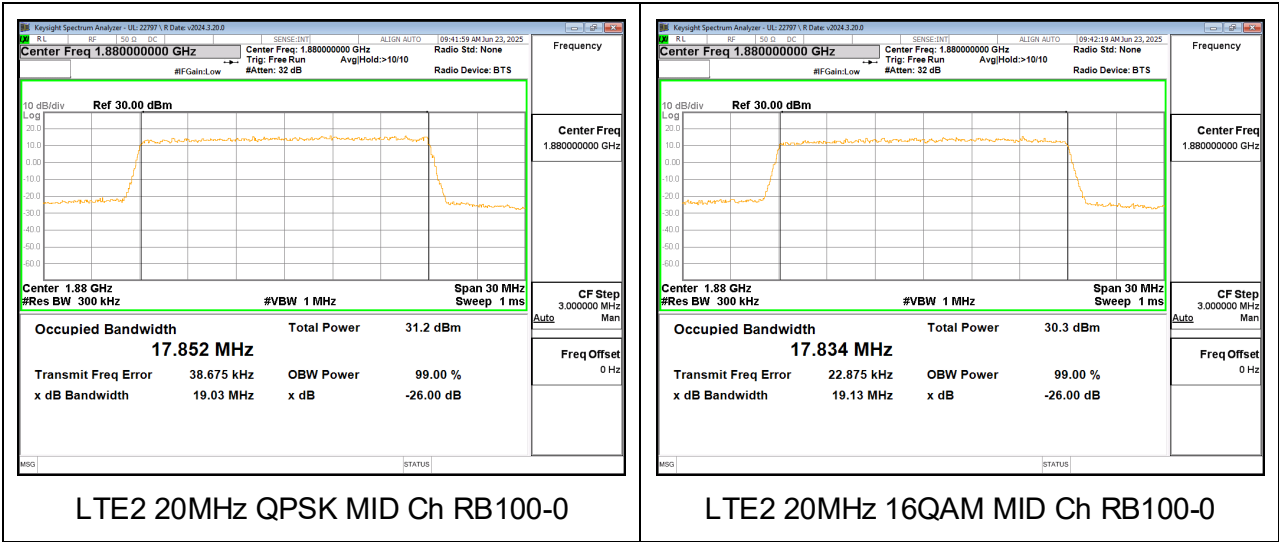
9.1.2. WCDMA

Band	Modulation	Channel	f(MHz)	99% BW (MHz)	-26dB BW (MHz)
BAND2	REL 99	9800	1880.0	4.152	4.646
	HSDPA			4.172	4.673
BAND4	REL 99	1638	1732.6	4.164	4.679
	HSDPA			4.178	4.651
BAND5	REL 99	4408	836.6	4.133	4.657
	HSDPA			4.167	4.680



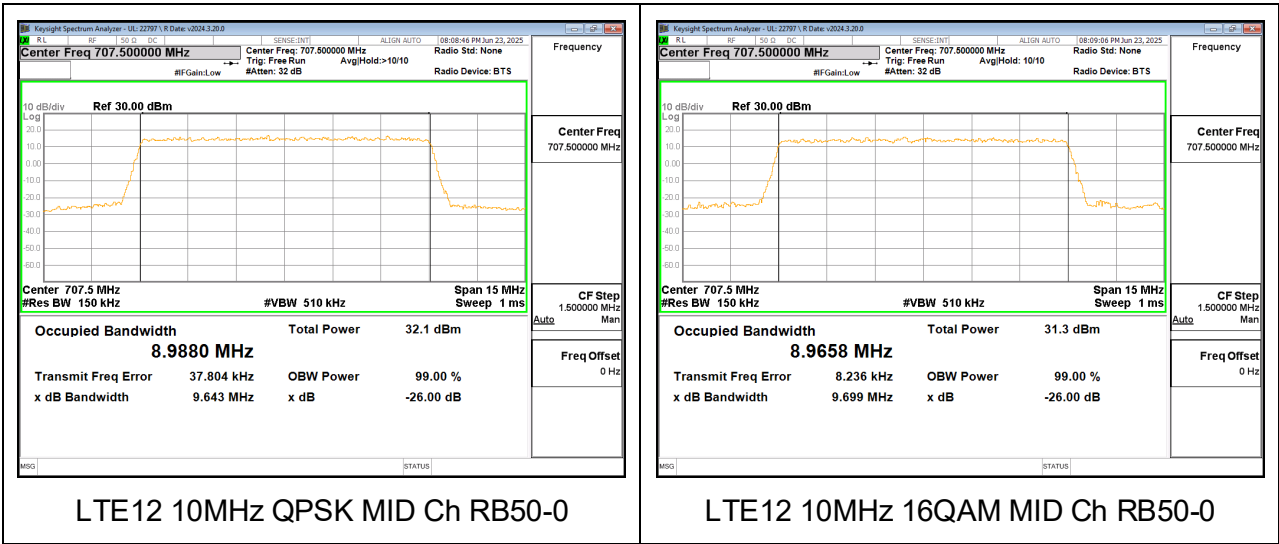
9.1.3. LTE2

Band	Mode	RB Allocation/RB Offset	f(MHz)	99% BW (MHz)	-26dB BW (MHz)
LTE BAND 2	1.4MHz, QPSK	6/0	1880.0	1.10	1.29
	1.4MHz, 16QAM			1.08	1.27
	3MHz, QPSK	15/0		2.69	2.97
	3MHz, 16QAM			2.69	2.97
	5MHz, QPSK	25/0		4.49	4.88
	5MHz, 16QAM			4.49	4.87
	10MHz, QPSK	50/0		8.96	9.67
	10MHz, 16QAM			8.93	9.67
	15MHz, QPSK	75/0		13.41	14.44
	15MHz, 16QAM			13.42	14.46
	20MHz, QPSK	100/0		17.85	19.03
	20MHz, 16QAM			17.83	19.13



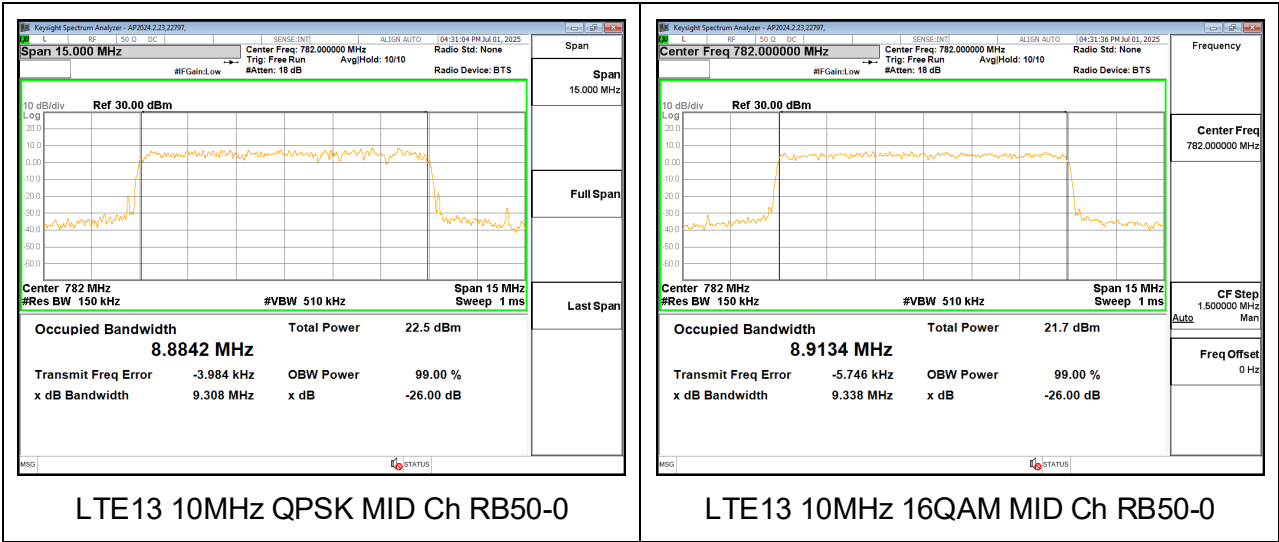
9.1.4. LTE12

Band	Mode	RB Allocation/RB Offset	f(MHz)	99% BW (MHz)	-26dB BW (MHz)
LTE BAND 12	1.4MHz, QPSK	6/0	707.5	1.08	1.26
	1.4MHz, 16QAM			1.09	1.27
	3MHz, QPSK	15/0		2.69	2.94
	3MHz, 16QAM			2.68	2.98
	5MHz, QPSK	25/0		4.49	4.88
	5MHz, 16QAM			4.49	4.9
	10MHz, QPSK	50/0		8.99	9.64
	10MHz, 16QAM			8.97	9.70



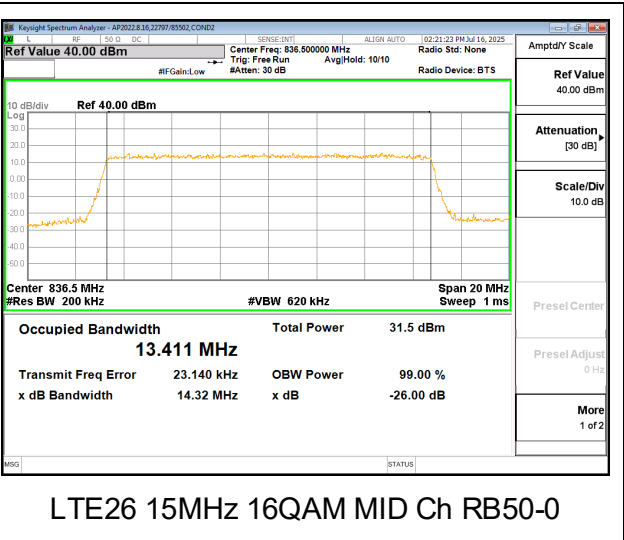
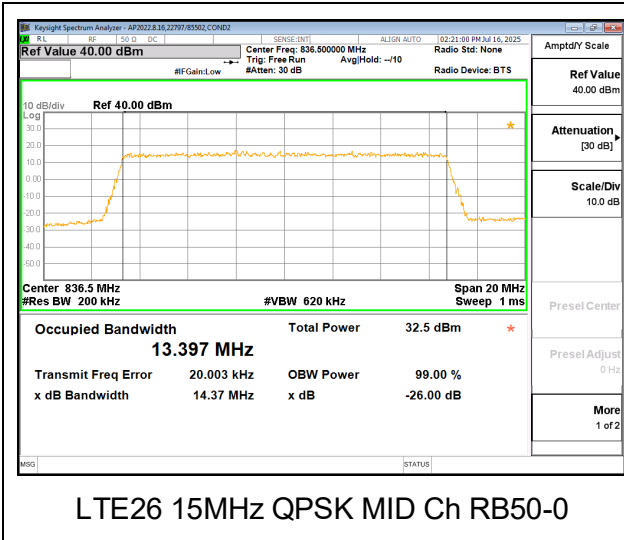
9.1.5. LTE13

Band	Mode	RB Allocation/RB Offset	f(MHz)	99% BW (MHz)	-26dB BW (MHz)
LTE BAND 13	5MHz, QPSK	25/0	782	4.54	4.92
	5MHz, 16QAM			4.61	4.89
	10MHz, QPSK	50/0		8.88	9.31
	10MHz, 16QAM			8.91	9.34



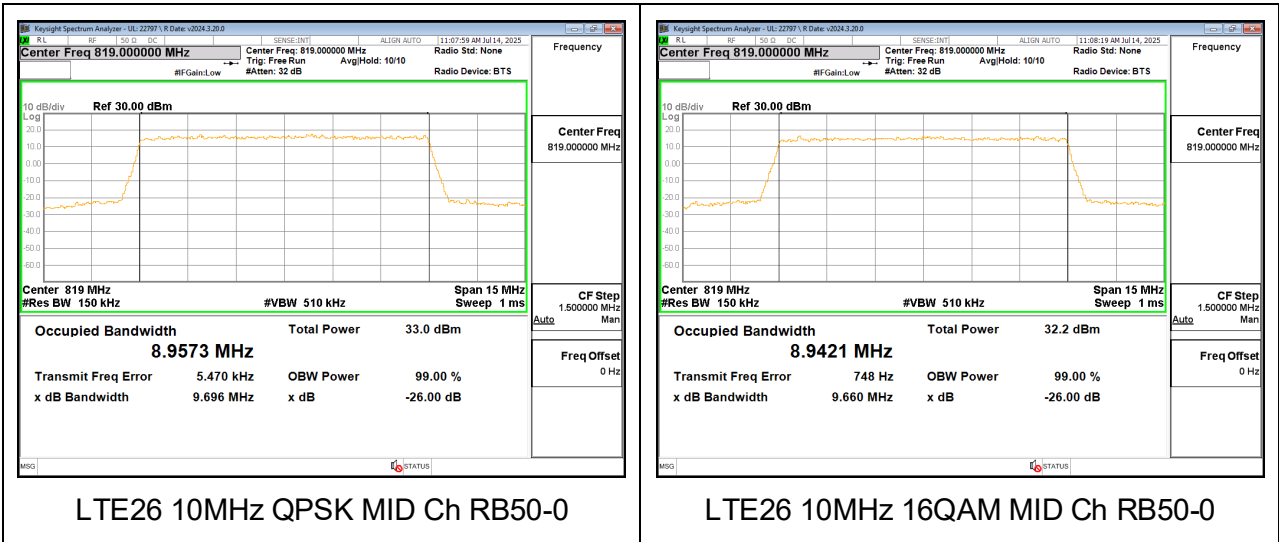
9.1.1. LTE26(Part 22H)

Band	Mode	RB Allocation/RB Offset	f(MHz)	99% BW (MHz)	-26dB BW (MHz)
LTE BAND 26	1.4MHz, QPSK	6/0	836.5	1.09	1.27
	1.4MHz, 16QAM			1.10	1.29
	3MHz, QPSK	15/0		2.69	2.95
	3MHz, 16QAM			2.69	2.97
	5MHz, QPSK	25/0		4.49	4.88
	5MHz, 16QAM			4.48	4.88
	10MHz, QPSK	50/0		8.96	9.69
	10MHz, 16QAM			8.94	9.64
	15MHz, QPSK	75/0		13.397	14.37
	15MHz, 16QAM			13.411	14.32



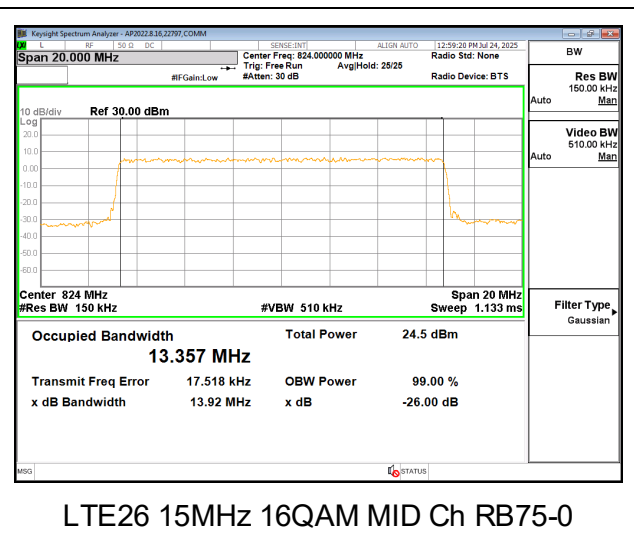
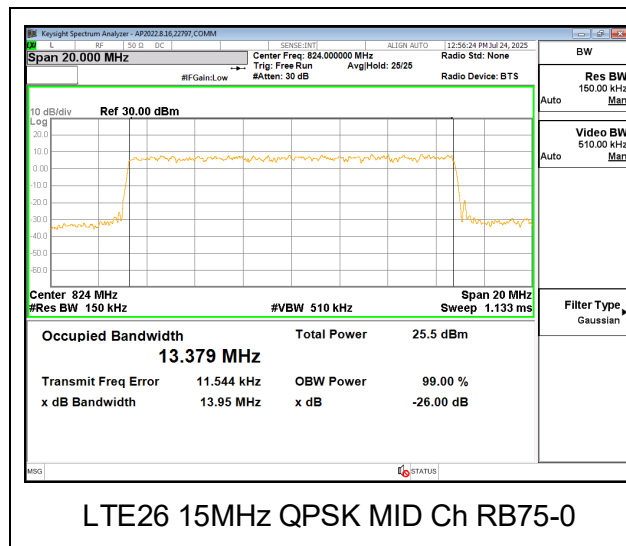
9.1.1. LTE26 (Part 90S)

Band	Mode	RB Allocation/RB Offset	f(MHz)	99% BW (MHz)	-26dB BW (MHz)
LTE BAND 26 (Part 90S)	1.4MHz, QPSK	6/0	819	1.0826	1.270
	1.4MHz, 16QAM			1.0857	1.267
	3MHz, QPSK	15/0		2.6874	2.969
	3MHz, 16QAM			2.6865	2.971
	5MHz, QPSK	25/0		4.4920	4.872
	5MHz, 16QAM			4.4824	4.867
	10MHz, QPSK	50/0		8.9573	9.696
	10MHz, 16QAM			8.9421	9.660



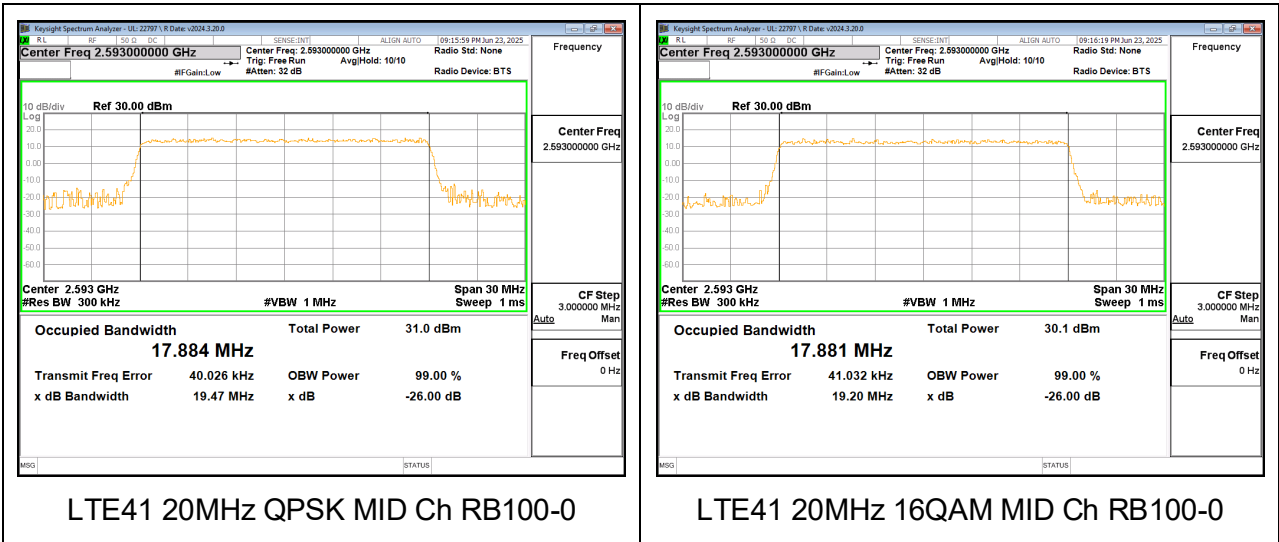
9.1.2. LTE 26 (STRADDLE)

Band	Mode	RB Allocation/RB Offset	f(MHz)	99% BW (MHz)	-26dB BW (MHz)
LTE BAND 26 (Straddle)	1.4MHz, QPSK	6/0	824	1.0833	1.238
	1.4MHz, 16QAM			1.0796	1.234
	3MHz, QPSK	15/0		2.6680	2.868
	3MHz, 16QAM			2.6673	2.835
	5MHz, QPSK	25/0		4.4647	4.727
	5MHz, 16QAM			4.4555	4.725
	10MHz, QPSK	50/0		8.9025	9.339
	10MHz, 16QAM			8.9220	9.362
	15MHz, QPSK	75/0		13.379	13.95
	15MHz, 16QAM			13.357	13.92



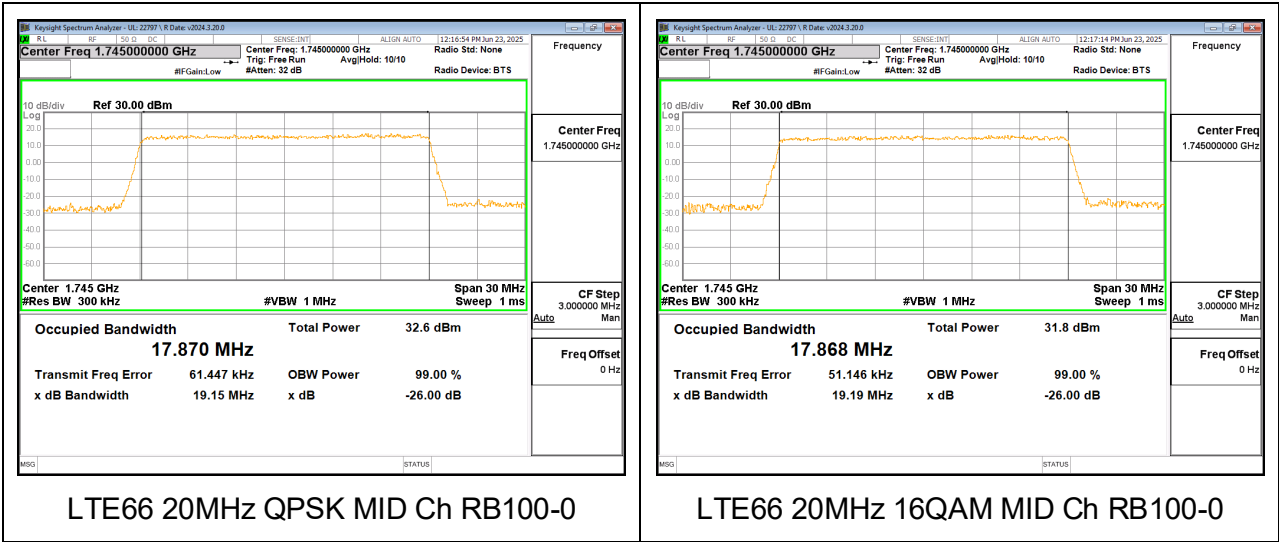
9.1.3. LTE41

Band	Mode	RB Allocation/RB Offset	f(MHz)	99% BW (MHz)	-26dB BW (MHz)
LTE BAND 41	5MHz, QPSK	25/0	2593.0	4.5	5.09
	5MHz, 16QAM			4.49	4.9
	10MHz, QPSK	50/0		8.96	9.93
	10MHz, 16QAM			8.97	9.67
	15MHz, QPSK	75/0		13.44	14.48
	15MHz, 16QAM			13.45	14.5
	20MHz, QPSK	100/0		17.88	19.47
	20MHz, 16QAM			17.88	19.20



9.1.4. LTE66

Band	Mode	RB Allocation/RB Offset	f(MHz)	99% BW (MHz)	-26dB BW (MHz)
LTE BAND 66	1.4MHz, QPSK	6/0	1745.0	1.08	1.27
	1.4MHz, 16QAM			1.09	1.27
	3MHz, QPSK	15/0		2.68	2.94
	3MHz, 16QAM			2.68	2.98
	5MHz, QPSK	25/0		4.49	4.85
	5MHz, 16QAM			4.48	4.85
	10MHz, QPSK	50/0		8.97	9.68
	10MHz, 16QAM			8.97	9.64
	15MHz, QPSK	75/0		13.42	14.44
	15MHz, 16QAM			13.41	14.39
	20MHz, QPSK	100/0		17.87	19.15
	20MHz, 16QAM			17.87	19.19



9.2. OUT OF BAND EMISSIONS

LIMITS

FCC: §22.917 (a), 24.238 (a), 27.53 (h), 27.53 (m)(4) & (m)(6), 27.53 (g)

The minimum permissible attenuation level of any spurious emissions is $43 + 10 \log (P)$ dB where transmitting power (P) in Watts.

FCC: §27.53 (c), (f)

The minimum permissible attenuation level of any spurious emissions is $43 + 10 \log (P)$ dB where transmitting power (P) in Watts. The band 1559-1610 MHz shall be limited to -70 dBW/MHz equivalent isotopically radiated power (EIRP) for wideband signals, and -80 dBW EIRP for discrete emissions of less than 700 Hz bandwidth.

Note: Radiated data in section 9.1.6 confirms a compliance for the emissions in GPS 1559 - 1610 MHz band were wideband emissions therefore the -40 dBm / MHz limit was used.

FCC: § 90.691 Emission mask requirements for EA-based systems.

(a) Out-of-band emission requirement shall apply only to the “outer” channels included in an EA license and to spectrum adjacent to interior channels used by incumbent licensees. The emission limits are as follows:

(1) For any frequency removed from the EA licensee's frequency block by up to and including 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least $116 \log_{10}(f/6.1)$ decibels or $50 + 10 \log_{10}(P)$ decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency removed from the center of the outer channel in the block in kilohertz and where f is greater than 12.5 kHz.

(2) For any frequency removed from the EA licensee's frequency block greater than 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least $43 + 10 \log_{10}(P)$ decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency removed from the center of the outer channel in the block in kilohertz and where f is greater than 37.5 kHz

TEST PROCEDURE

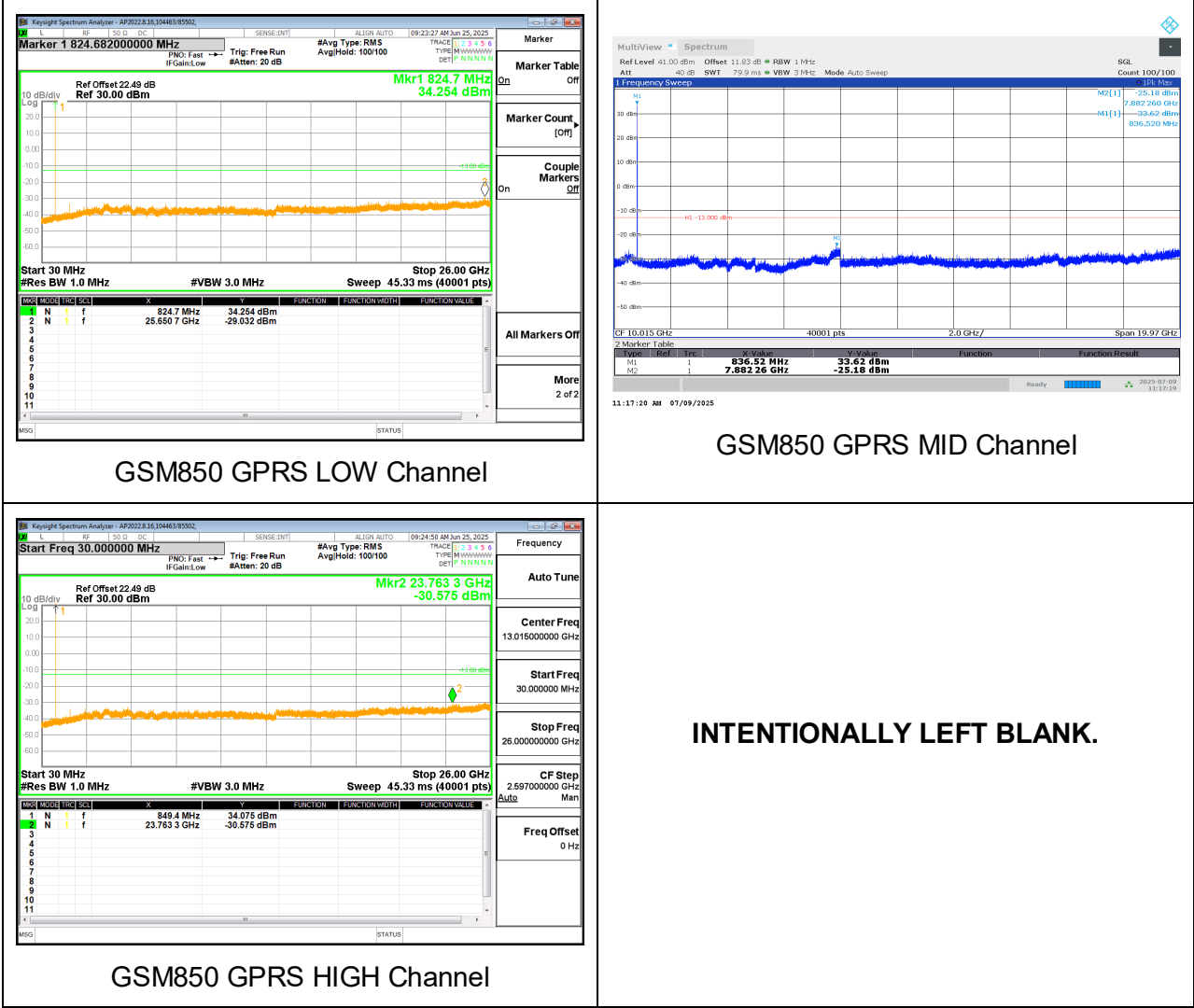
The RF output of the transmitter was connected to a spectrum analyzer through a calibrated coaxial cable. Sufficient scans were taken to show the out-of-band Emissions, if any, up to 10th harmonic. Multiple sweeps were recorded in maximum hold mode using a peak detector to ensure that the worst-case emissions were caught.

For each out of band emissions measurement:

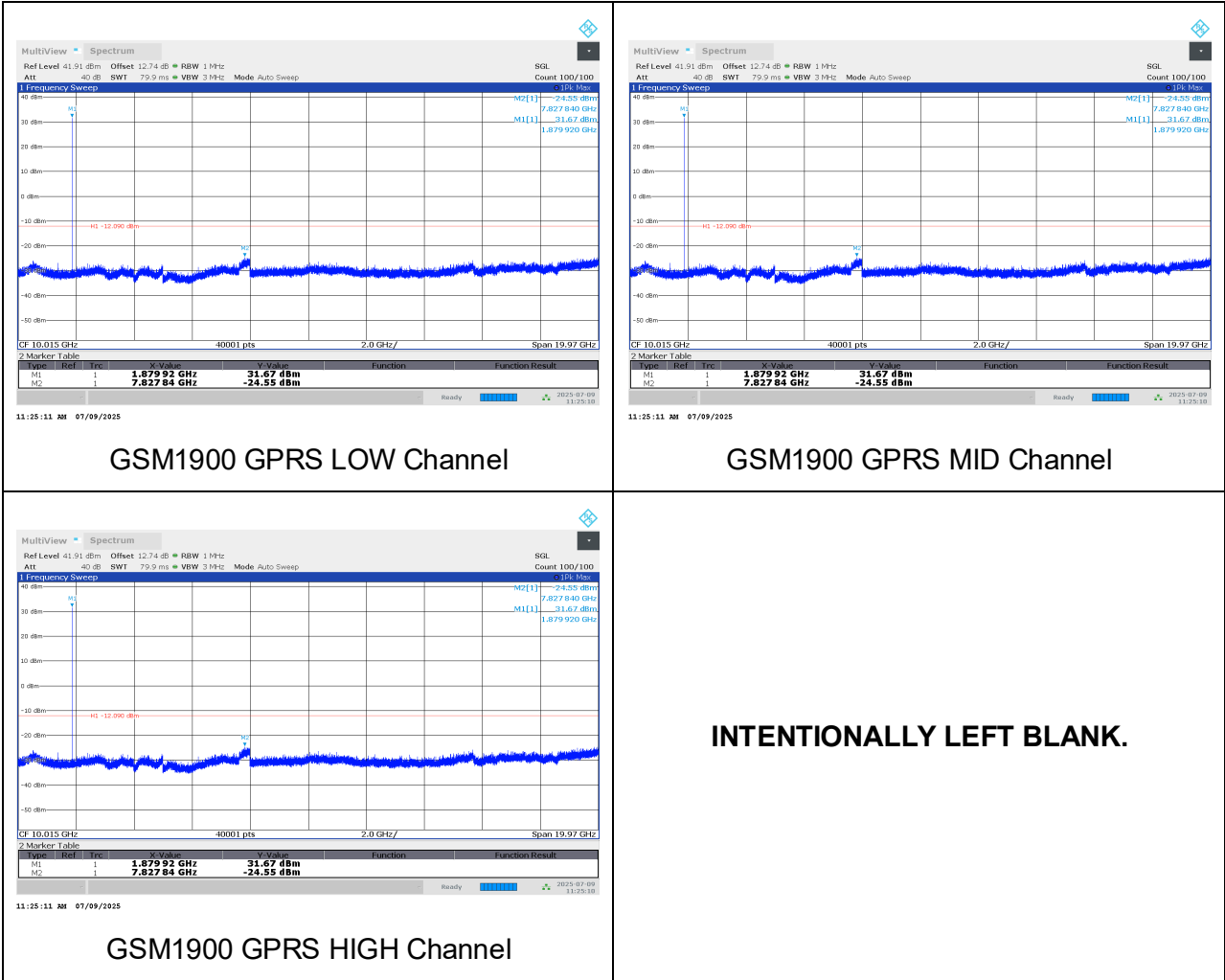
- (i) Set display line at -13 dBm, -25dBm according to the band Limit
- (ii) Set RBW & VBW to 100 kHz for the measurement below 1 GHz, and 1 MHz for the measurement above 1 GHz. (NOTE: Worst case set RBW/VBW to 1MHz/3MHz)

RESULTS

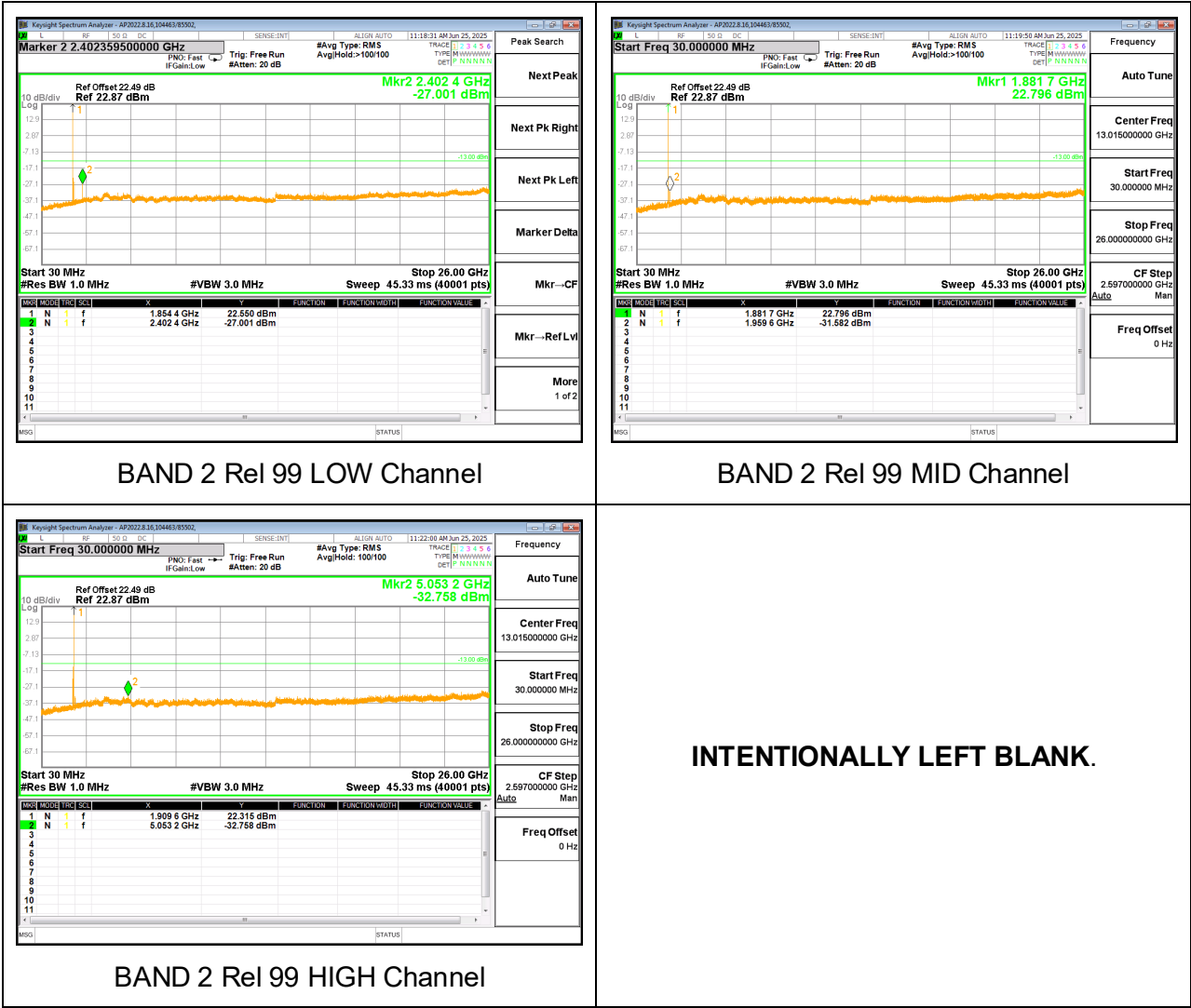
9.2.1. GSM GSM850



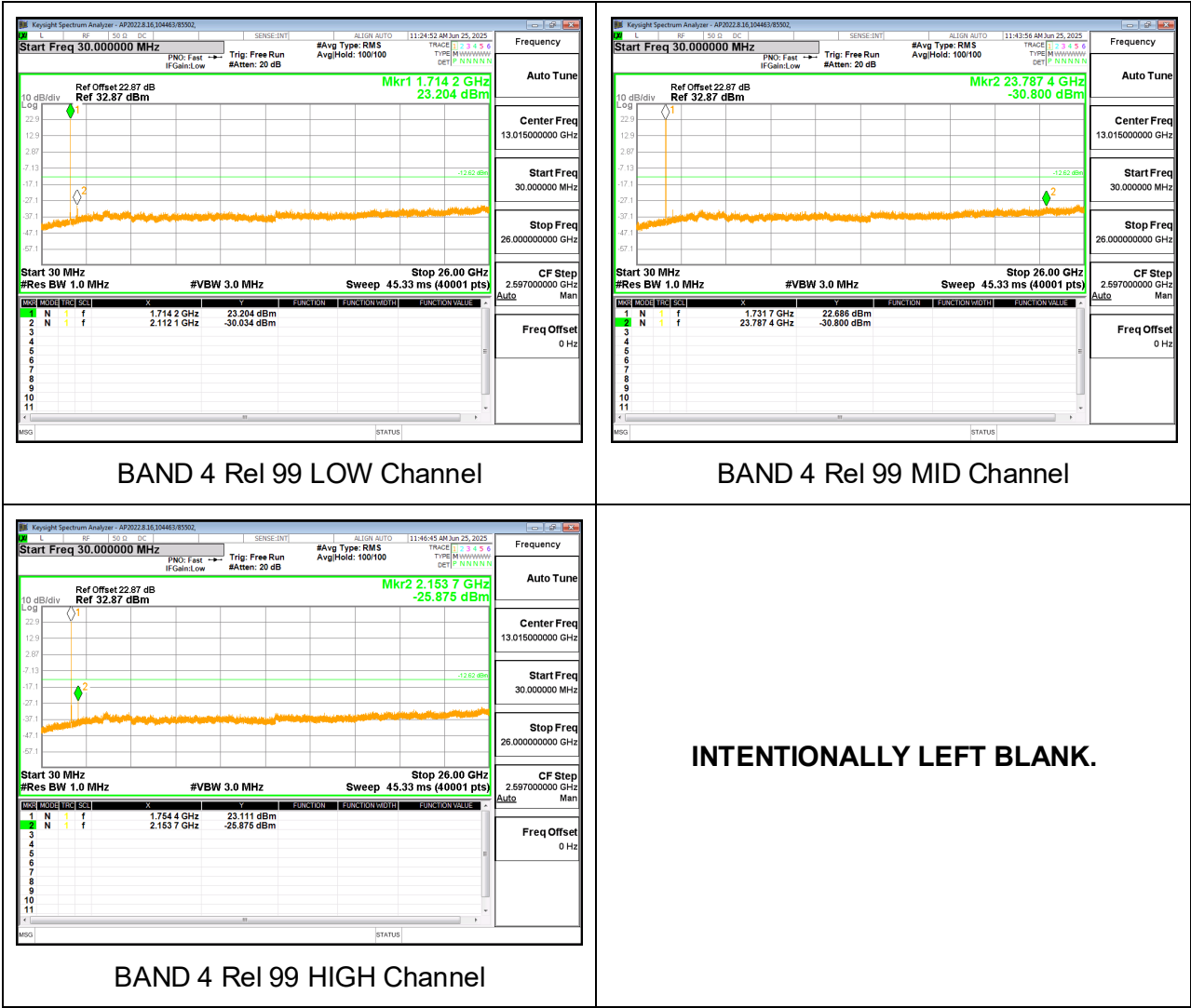
9.2.2. GSM GSM1900



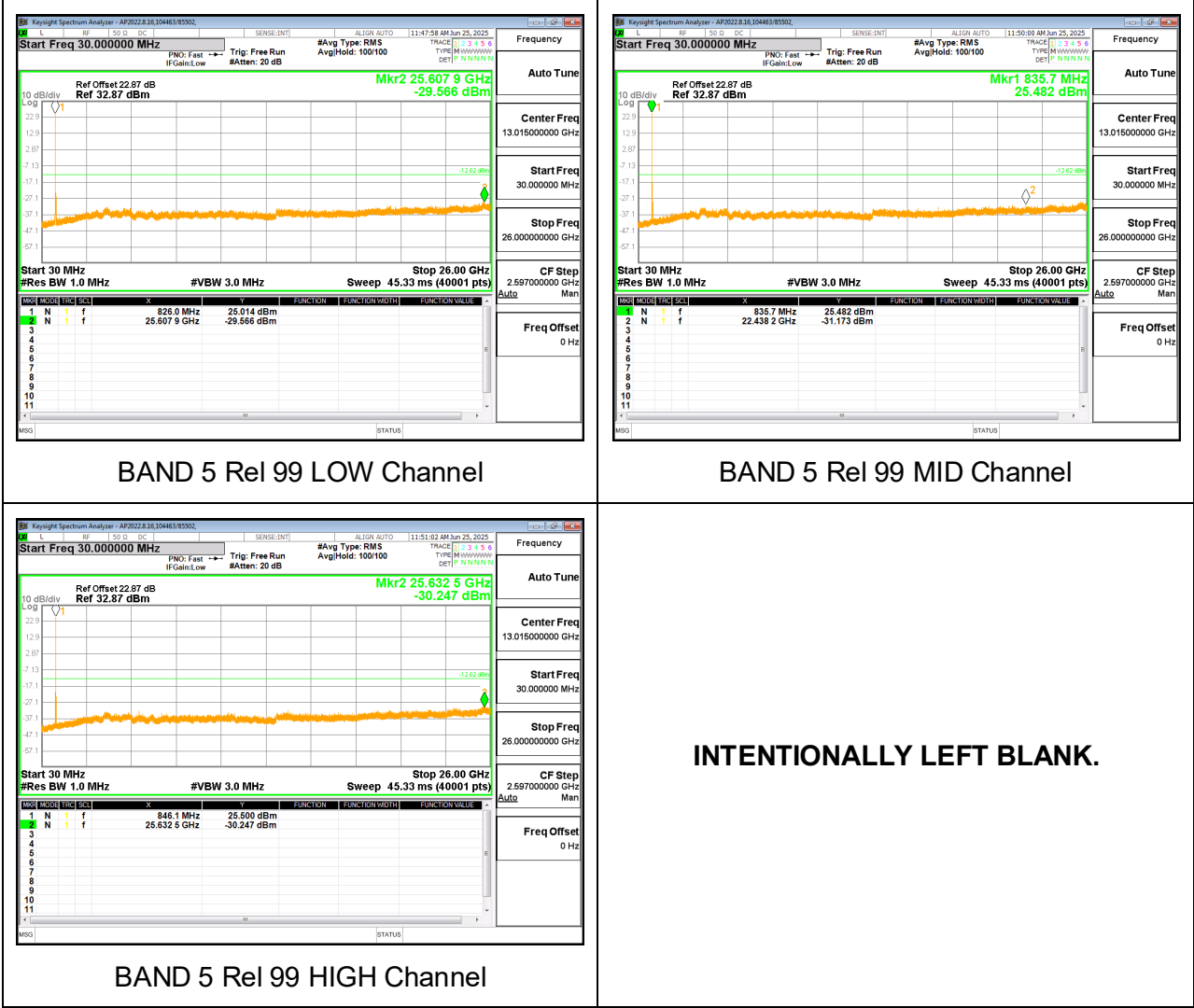
9.2.3. WCDMA BAND 2



9.2.4. WCDMA BAND 4



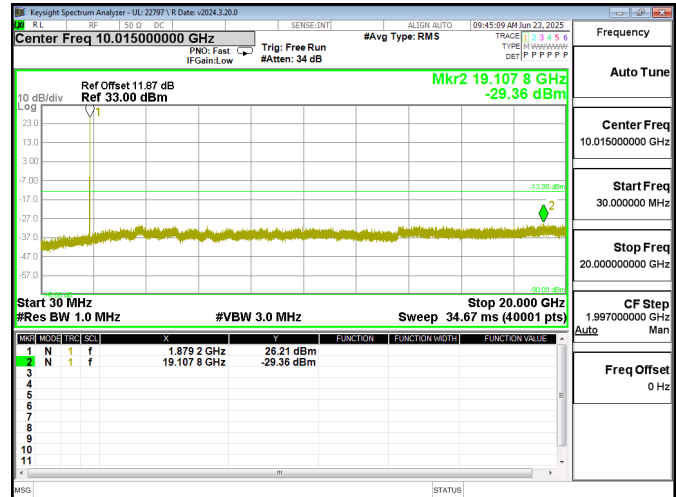
9.2.5. WCDMA BAND 5



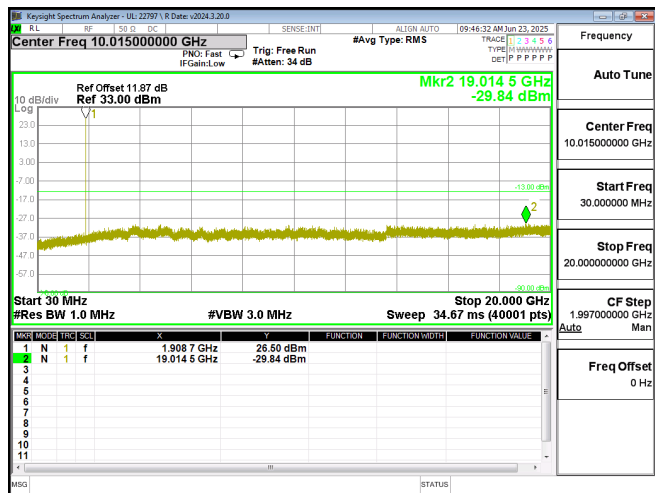
9.2.6. LTE2



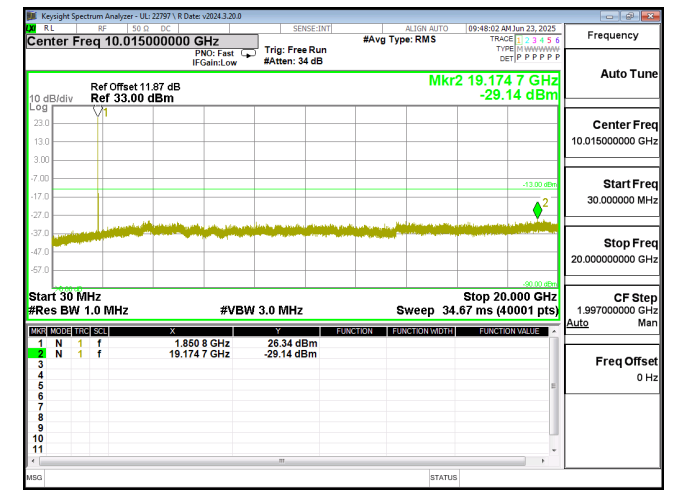
LTE2 1.4MHz QPSK LOW Ch RB1-0



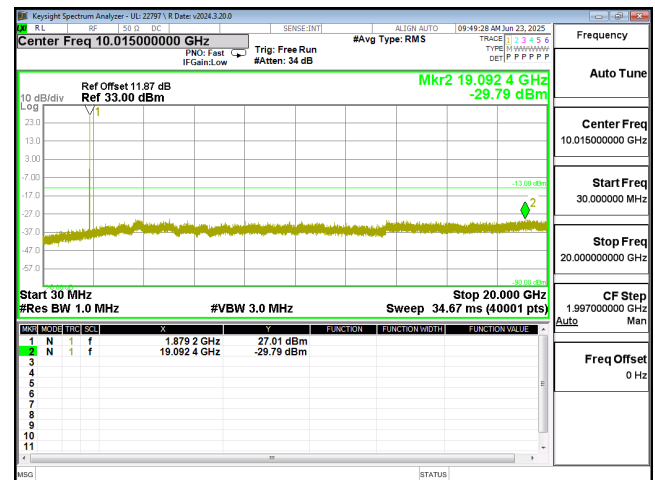
LTE2 1.4MHz QPSK MID Ch RB1-0



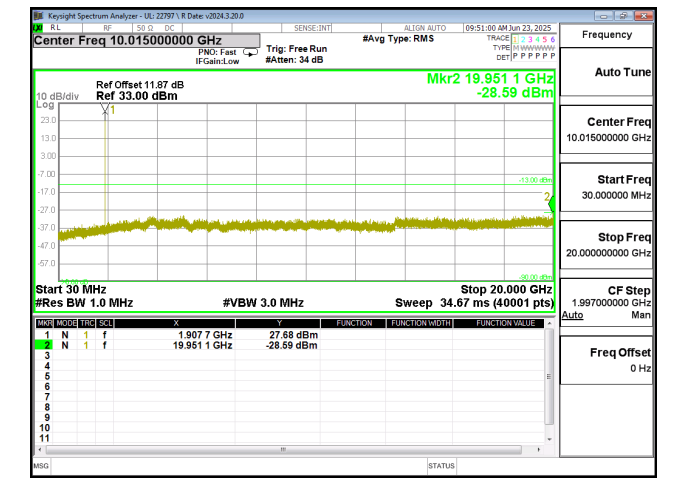
LTE2 1.4MHz QPSK HIGH Ch RB1-0



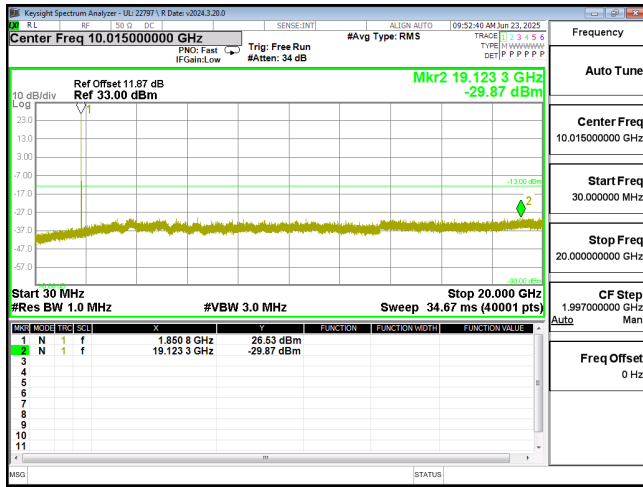
LTE2 3MHz QPSK LOW Ch RB1-0



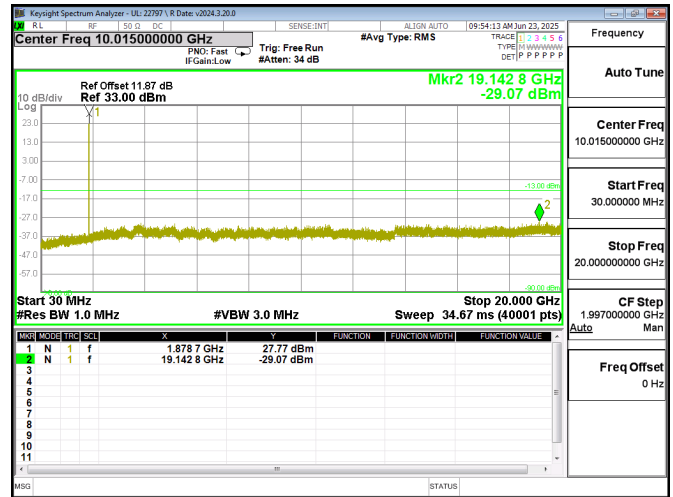
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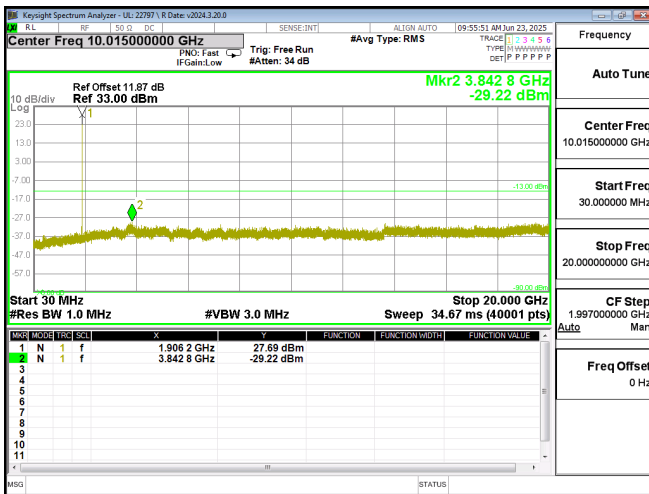
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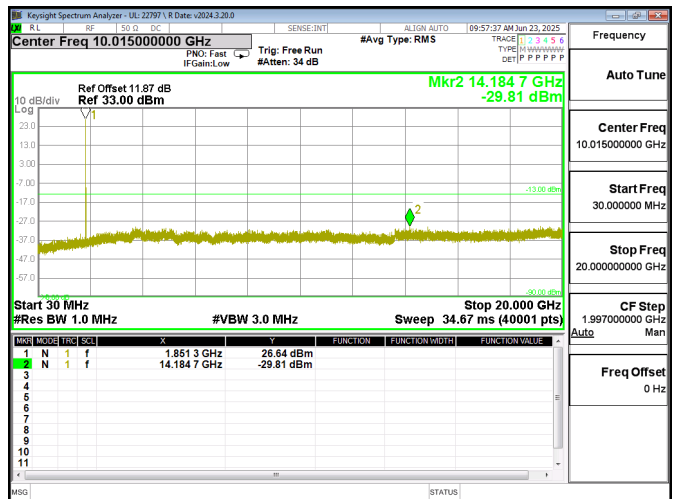
LTE2 5MHz QPSK LOW Ch RB1-0



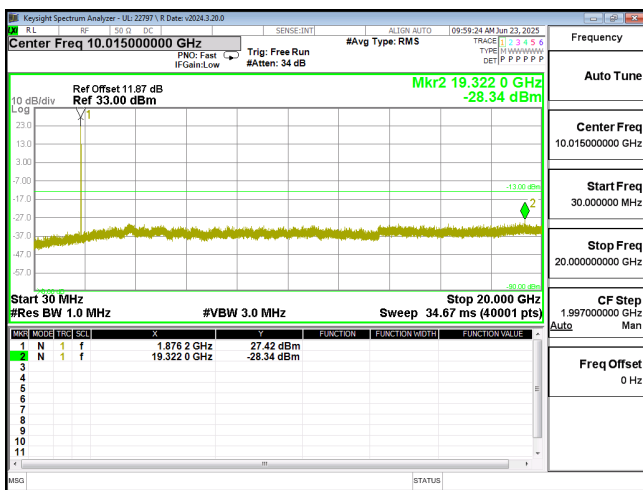
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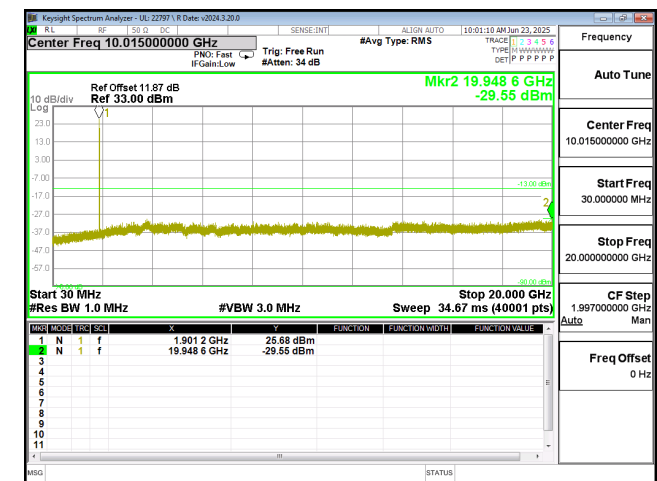
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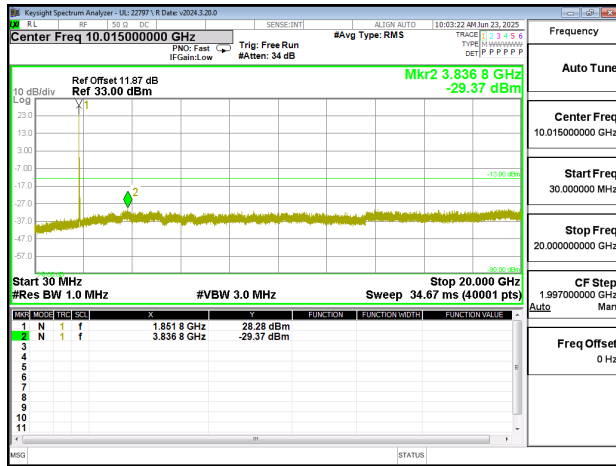
LTE2 10MHz QPSK LOW Ch RB1-0



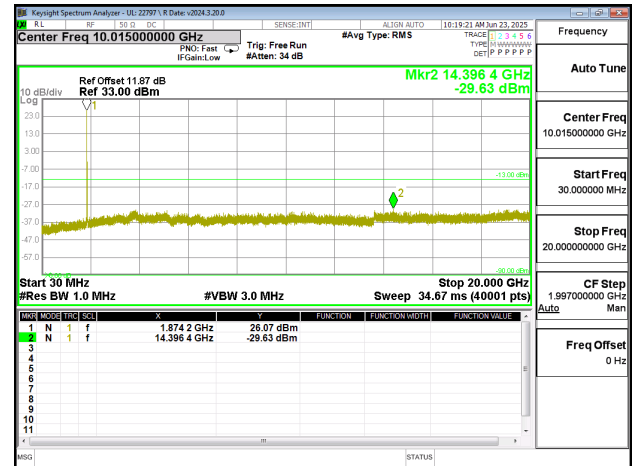
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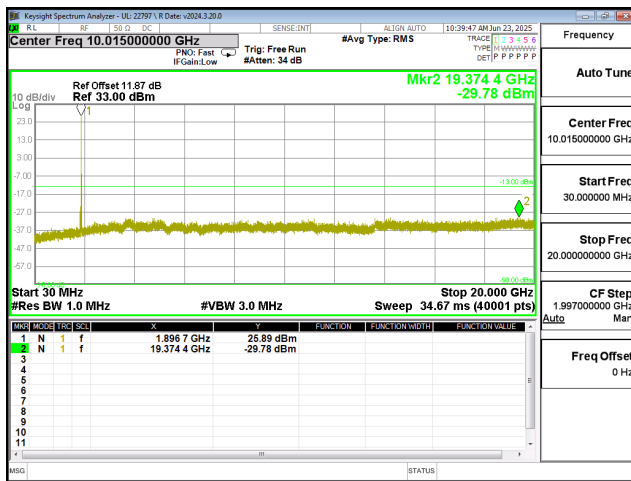
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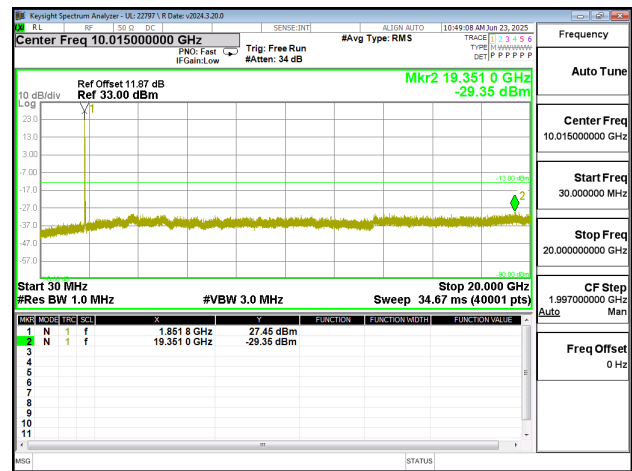
LTE2 15MHz QPSK LOW Ch RB1-0



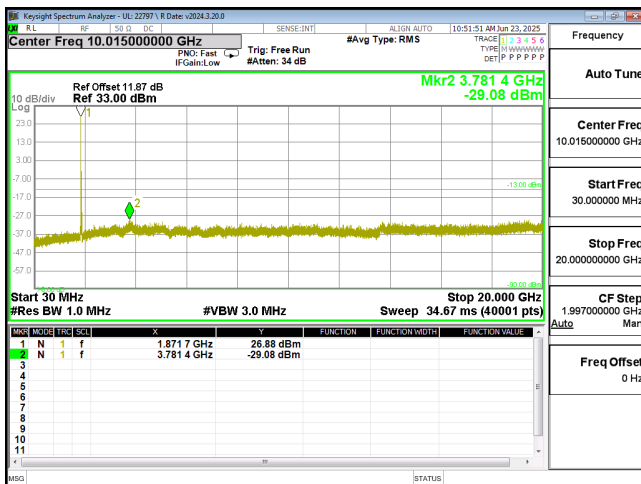
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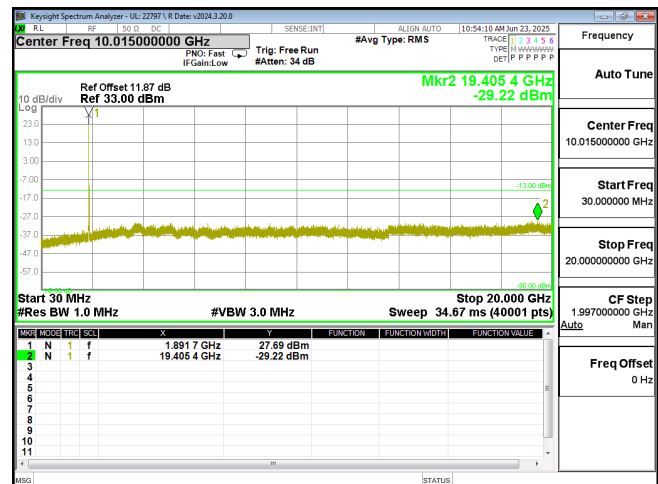
LTE2 15MHz QPSK HIGH Ch RB1-0



LTE2 20MHz QPSK LOW Ch RB1-0



LTE2 20MHz QPSK MID Ch RB1-0



LTE2 20MHz QPSK HIGH Ch RB1-0