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PART 22 & RSS-132 RF TEST REPORT

FCC ID:	**A3LSMS741U**
Model (s):	SM-S741U, SM-S741U1
Device Type:	Portable Handset
Report Issue Date:	July 24, 2026

Samsung Electronics Co., Ltd. 129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16677, Rep. of Korea
Certification

The measurement evaluations presented in this report are based on the maximum performance of the tested device(s), which has been shown to be capable of compliance with the applicable technical requirements specified herein and has been tested in accordance with the measurement procedures outlined in 47CFR §2.947, ANSI C63.26 - 2015.

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This document has been revised and replaces all previously issued versions of this document with the same Test Report S/N.

Youngbin Song
Technical Manager

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1. DUT Specifics

1.1. Device under Test

The manufacturer has confirmed that the device is within operational tolerances expected for production units and has the same physical, mechanical, and thermal characteristics expected for production units. The serial number of the device used for each test is indicated alongside the results.

1.2. Maximum Power per Mode

Table 1-1 **Antenna A** Summary

Band	Band Width [MHz]	Modulation	Frequency Range [MHz]	Max E.R.P [dBm]	Max E.R.P [W]	OBW [MHz]	Emission Designator
LTE Band 26/5	15	QPSK	831.5 - 841.5	20.98	0.125	13.57	13M6G7D
		16QAM	831.5 - 841.5	20.53	0.113	13.58	13M6W7D
	10	QPSK	829.0 - 844.0	20.89	0.123	9.12	9M12G7D
		16QAM	829.0 - 844.0	20.34	0.108	9.13	9M13W7D
	5	QPSK	826.5 - 846.5	20.95	0.124	4.56	4M56G7D
		16QAM	826.5 - 846.5	20.51	0.112	4.54	4M54W7D
	3	QPSK	825.5 - 847.5	21.18	0.131	2.76	2M76G7D
		16QAM	825.5 - 847.5	20.62	0.115	2.75	2M75W7D
	1.4	QPSK	824.7 - 848.3	20.95	0.124	1.10	1M10G7D
		16QAM	824.7 - 848.3	20.35	0.108	1.11	1M11W7D

Table 1-2 **Antenna E** Summary

Band	Band Width [MHz]	Modulation	Frequency Range [MHz]	Max E.R.P [dBm]	Max E.R.P [W]	OBW [MHz]	Emission Designator
LTE Band 26/5	15	QPSK	831.5 - 841.5	20.44	0.111	13.55	13M6G7D
		16QAM	831.5 - 841.5	20.08	0.102	13.55	13M6W7D
	10	QPSK	829.0 - 844.0	20.43	0.110	9.12	9M12G7D
		16QAM	829.0 - 844.0	20.14	0.103	9.09	9M09W7D
	5	QPSK	826.5 - 846.5	20.50	0.112	4.60	4M60G7D
		16QAM	826.5 - 846.5	20.24	0.106	4.56	4M56W7D
	3	QPSK	825.5 - 847.5	20.44	0.111	2.76	2M76G7D
		16QAM	825.5 - 847.5	20.11	0.103	2.76	2M76W7D
	1.4	QPSK	824.7 - 848.3	20.38	0.109	1.11	1M11G7D
		16QAM	824.7 - 848.3	20.05	0.101	1.11	1M11W7D

Note - The 15 MHz channel bandwidth is supported only in LTE Band 26

1.3. Antenna Configuration and Operating Band

The table below details the antennas supporting the licensed bands, with the specific bands evaluated in this report clearly checked.

Table 1-3 Supported Frequency Band per Antenna

Antenna	LTE Band 26	LTE Band 5
Ant A	✔	✔
Ant E	✔	✔
Ant F		
Ant B		
Ant D		
Ant C		
Ant I		

The antenna names utilized throughout this report are defined as follows:

Antenna	LTE Band 26	LTE Band 5
Ant A	Ant 1	Ant 1
Ant E	Ant 2	Ant 2

2. Executive Summary

2.1. Device Description

The DUT is a portable wireless handset designed to operate across multiple communication standards and frequency bands. This report covers the complete compliance testing of LTE Band 26,5 in accordance with the applicable standards and regulatory requirements.

2.2. Summary of Test Results

The DUT has been tested according to the following specifications. The test period was from June 17, 2026 through July 04, 2026.

Test Condition	Test Item	FCC Requirement	ISED Requirement	Limit	Test Result	Reference
Conducted	Occupied & Emission bandwidth	§ 2.1049(h)	RSS-Gen(6.7)	Not Applicable	PASS	Section 4.4
	Peak-to-Average Ratio	Not Applicable	RSS-132(5.4)	PAR ≤ 13 dB	PASS	Section 4.5
	Conducted Band Edge	§ 22.917(a) § 2.1051	RSS-Gen(6.13) RSS-132(5.5)	the transmitting power (P) by a factor of at least 43 + 10 log(P) dB.	PASS	Section 4.6
	Conducted Spurious Emissions	§ 22.917(a) § 2.1051	RSS-Gen(6.13) RSS-132(5.5)	the transmitting power (P) by a factor of at least 43 + 10 log(P) dB.	PASS	Section 4.7
	Frequency Stability	§ 2.1055 § 22.355	RSS-Gen(6.11) RSS-132(5.3)	≤ 2.5PPM shall be sufficient to ensure that it stays within the operating frequency block	PASS	Section 4.8
Radiated	Effective Radiated Power	§ 22.913(a)(5)	RSS-132(5.4)	ERP ≤ 7 watts	PASS	Section 5.4
	Radiated Spurious Emissions	§ 22.917(a) § 2.1053	RSS-Gen(6.13) RSS-132(5.5)	the transmitting power (P) by a factor of at least 43 + 10 log(P) dB.	PASS	Section 5.5

*Note : Refer to Appendix A for RF output power data as per §2.1046(a).

2.3. Test Guidance Applied

Testing was performed in accordance with the following rules, standards, and guidance:

- ANSI C63.26 -2015
- ANSI C63.4 - 2014 + C63.4a - 2017
- RSS-Gen Issue 5
- RSS-132 Issue 4
- FCC 47 CFR Part 2
- FCC 47 CFR Part 22 Subpart H
- KDB 648474 D03 v01r04
- KDB 971168 D01 v03r01
- KDB 971168 D02 v02r02
- KDB 412172 D01 v01r01

2.4. NGTL Test Site Location

All measurement operations were conducted at the NGTL testing facility.

- Location: 52-7, Choha-ro, Mohyeon-eup, Cheoin-gu, Yongin-si, Gyeonggi-do, Republic of Korea.
- Site Compliance: The measurement environments strictly adhere to the site validation requirements specified in ANSI C63.4-2014+C63.4a-2017 and FCC KDB 414788 D01.
- Accreditations: Fully accredited to ISO/IEC 17026 and designated by the National Radio Research Agency (RRA) as a Conformity Assessment Body (CAB) under the MRAs, maintaining official testing recognition from the FCC and ISED.

FCC Designation Number	FCC Test Firm Registration Number
KR0179	985720

ISED CAB identifier	ISED Company Number
KR0179	35746

3. Description of Tests

- The DUT is a handheld wireless device and was tested in accordance with ANSI C63.26-2015. For details regarding the test configuration, refer to the following sections.
- Antenna Port Conducted Test : Sections 4.1
- Radiated Emissions Test : Sections 5.1

- All tests were conducted under the environmental conditions specified below
- Ambient Temperature : 21 ~ 27 ℃
- Relative Humidity : 42 ~ 51 %

4. Conducted Test Results

4.1. Test Configuration

This section presents the results of the conducted tests performed at the antenna port in accordance with ANSI C63.26-2015. Conducted emissions were captured using automated test software 'NGTL ATE' Ver. 0.00.

4.2. Conducted Measurement Setup

Figure 4-1 Conducted Power Measurement Setup

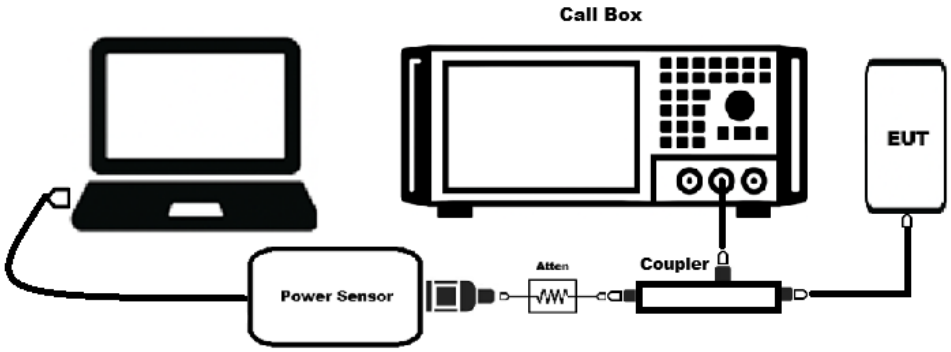
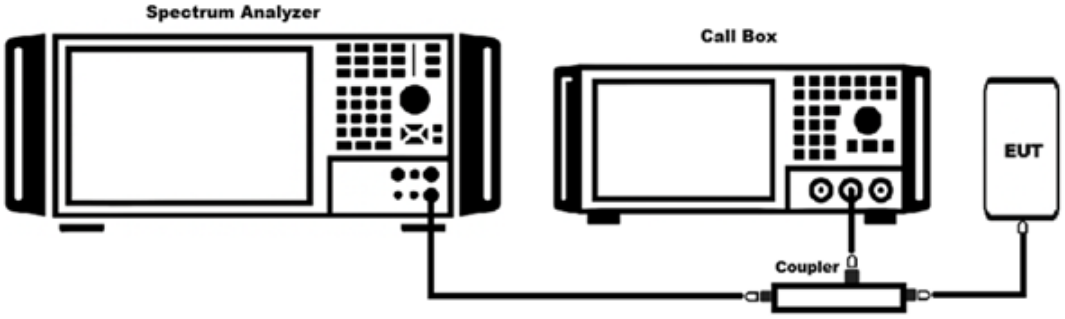


Figure 4-2 Conducted Measurement Setup



4.3. Conducted Measurement Sample

Serial Number(s) : ZDH0428M, ZEJ0893M, ZF50730M

4.4. Occupied & Emission Bandwidth

4.4.1. Regulatory Limit

The following test is for reporting purposes only.

§Part. 2.1049(h)

RSS-Gen(6.7)

4.4.2. Test Method

ANSI C63.26-2015, clause 5.4

4.4.3. Test Procedure

The automatic bandwidth measurement function of the spectrum analyzer was used.

The procedure for this method is follows:

a) Set center frequency to the nominal EUT channel center frequency.
b) Set SPAN ≥ 1.5 times the OBW
c) Set RBW = 1% to 5% of the OBW (RBW - IF 3 dB filter)
d) Set VBW ≥ 3 x RBW
e) Detector = Peak
f) Trace Mode = Max-Hold
g) Allow the trace to stabilize

Test Note

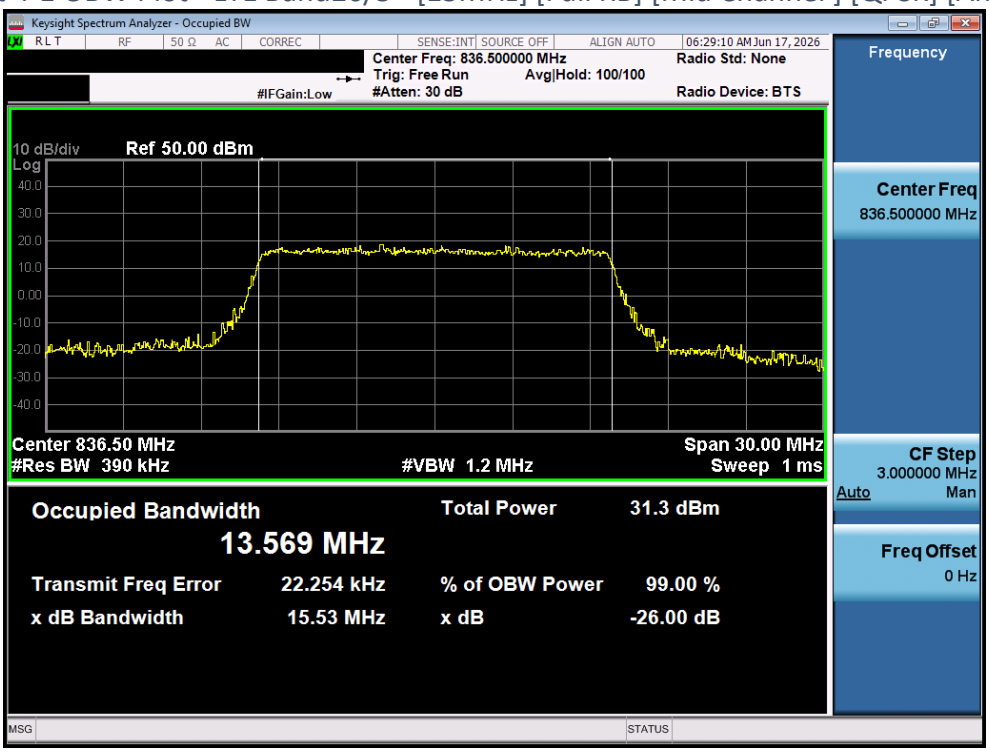
- ✓ All modulation were evaluated, and only the worst-case results are reported herein.
- ✓ The 26 dB Bandwidth data from this section were used to perform the Section 4.6 Conducted Band Edge testing.

4.4.4. Test Results

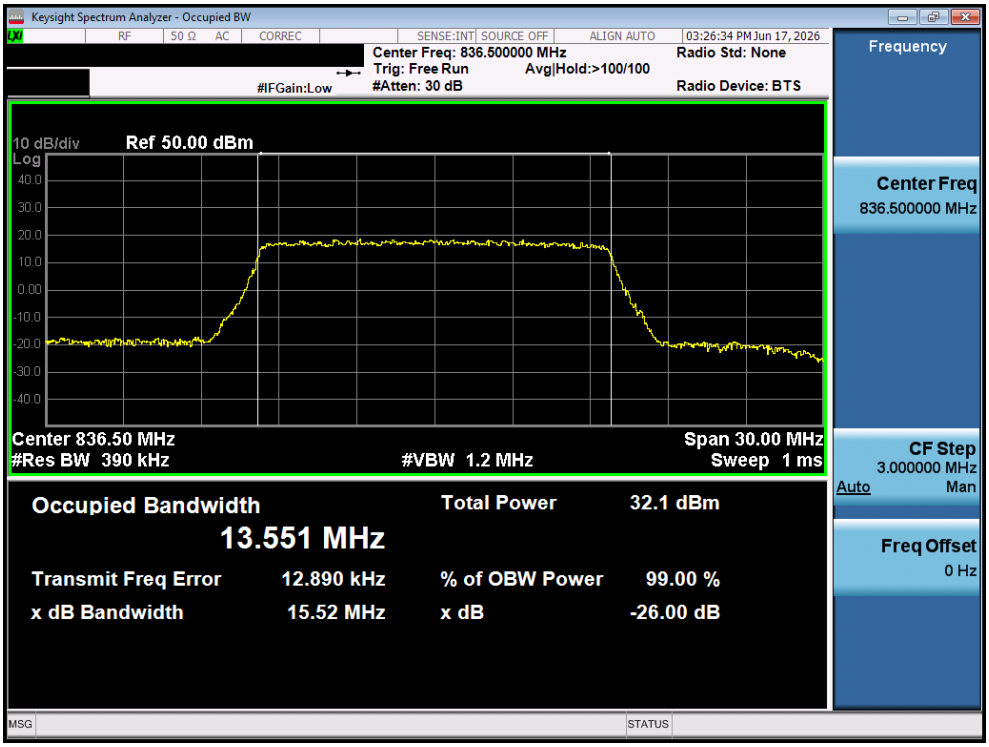
Table 4-1 OBW and 26dB Bandwidth

Band	Band Width [MHz]	Frequency [MHz]	Earfcn UL	RB Size/Offset	Modulation	Occupied Bandwidth [MHz]		26 dB Bandwidth [MHz]	
						Ant1	Ant2	Ant1	Ant2
LTE Band 26/5	15	836.5	26915	75/0	QPSK	13.57	13.55	15.53	15.52
					16QAM	13.58	13.55	15.39	15.57
	10	836.5	26915	50/0	QPSK	9.12	9.12	10.84	10.80
					16QAM	9.13	9.09	10.63	10.72
	5	836.5	26915	26/0	QPSK	4.56	4.60	5.46	5.57
					16QAM	4.54	4.56	5.44	5.46
	3	836.5	26915	15/0	QPSK	2.76	2.76	3.20	3.21
					16QAM	2.75	2.76	3.20	3.24
	1.4	836.5	26915	6/0	QPSK	1.10	1.11	1.32	1.35
					16QAM	1.11	1.11	1.34	1.36

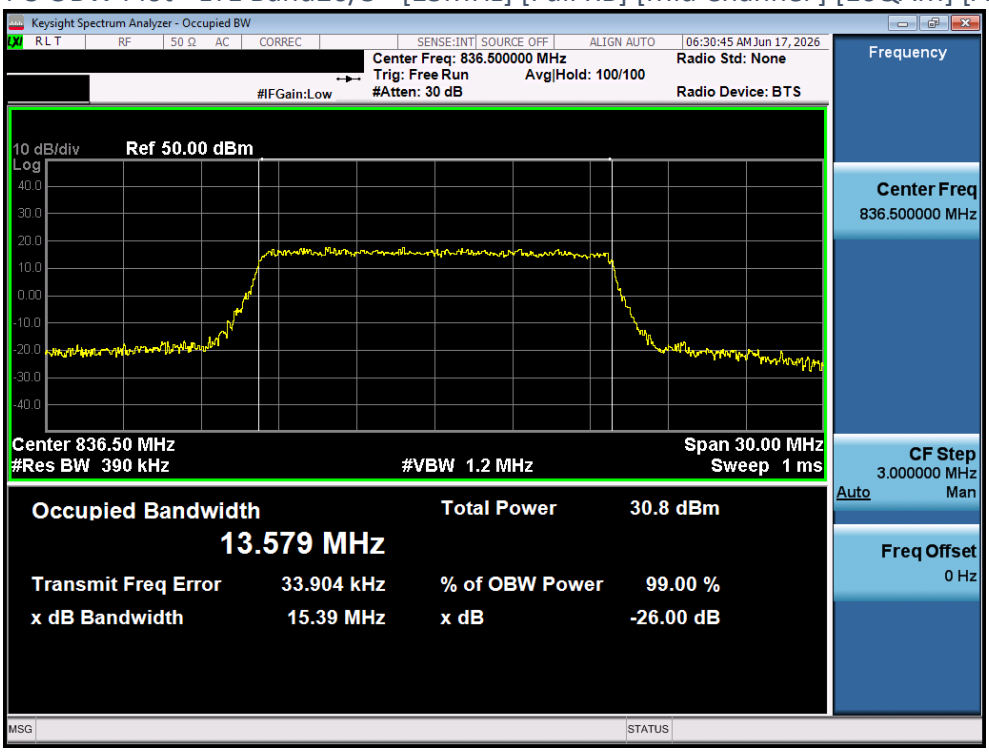
Plot 4-1 OBW Plot - LTE Band26/5 - [15MHz] [Full RB] [Mid Channel] [QPSK] [Ant 1]



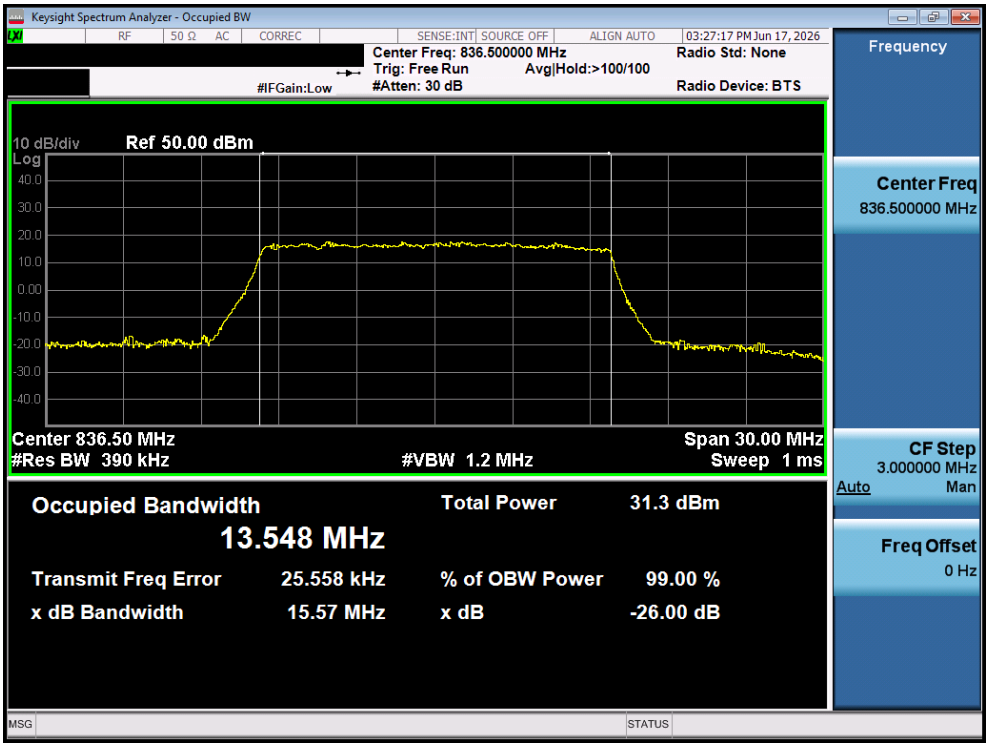
Plot 4-2 OBW Plot - LTE Band26/5 - [15MHz] [Full RB] [Mid Channel] [QPSK] [Ant 2]



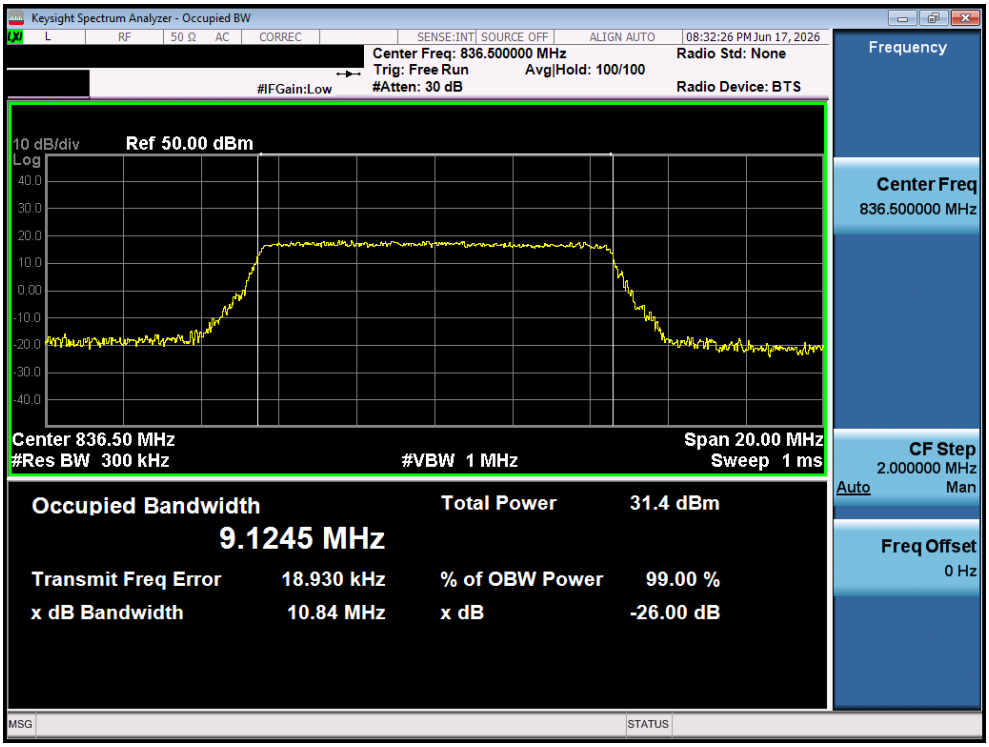
Plot 4-3 OBW Plot - LTE Band26/5 - [15MHz] [Full RB] [Mid Channel] [16QAM] [Ant 1]



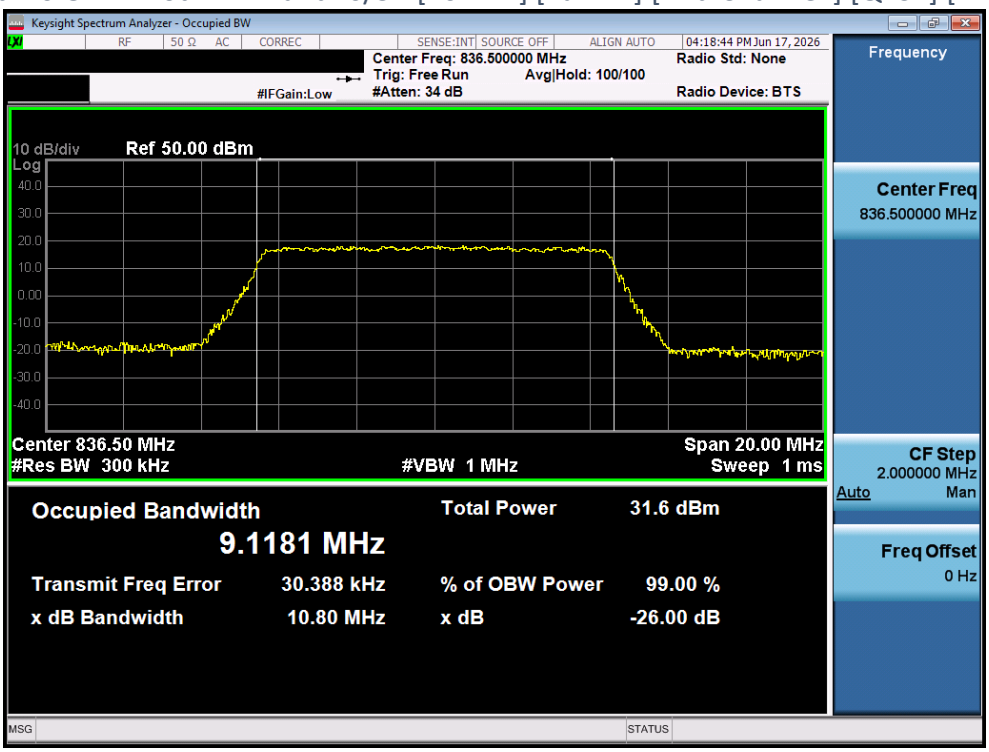
Plot 4-4 OBW Plot - LTE Band26/5 - [15MHz] [Full RB] [Mid Channel] [16QAM] [Ant 2]



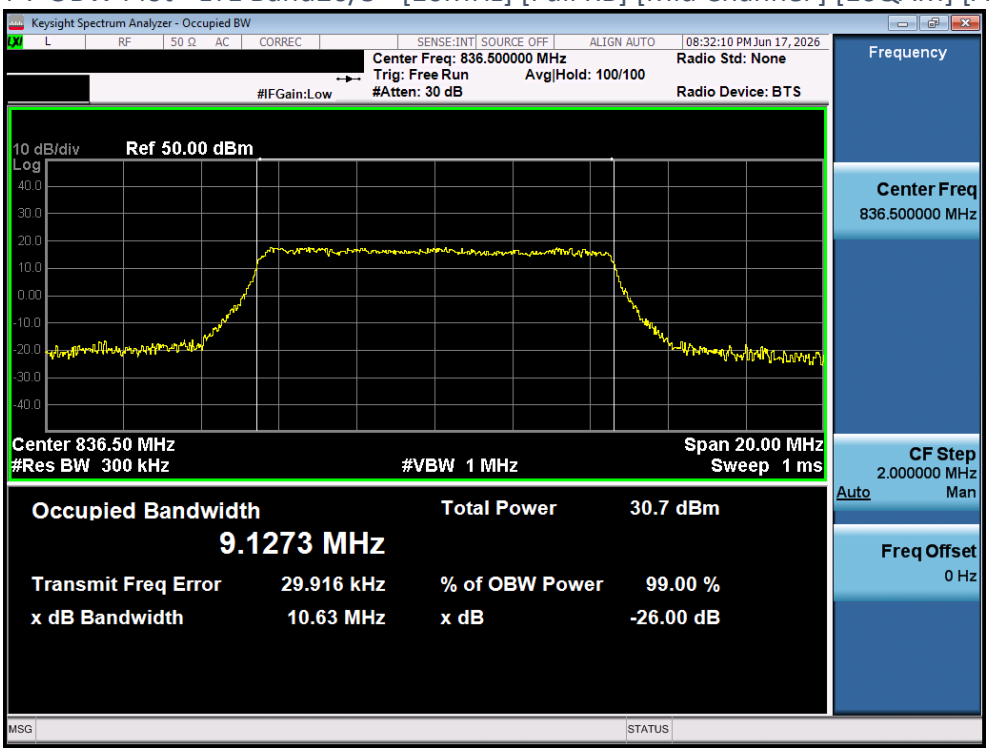
Plot 4-5 OBW Plot - LTE Band26/5 - [10MHz] [Full RB] [Mid Channel] [QPSK] [Ant 1]



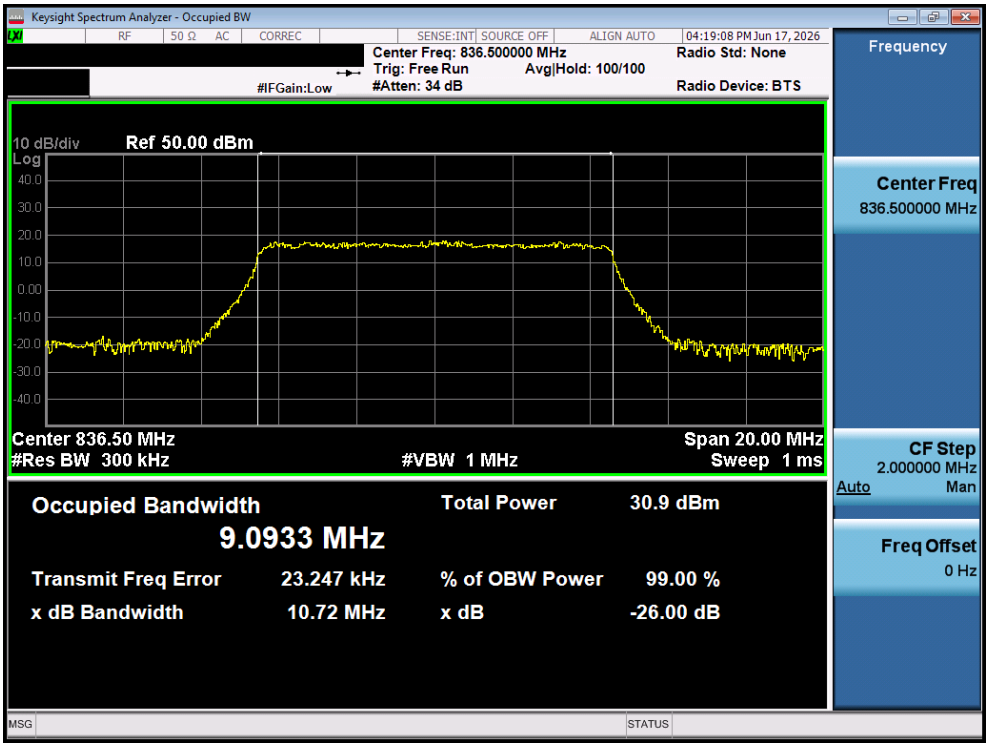
Plot 4-6 OBW Plot - LTE Band26/5 - [10MHz] [Full RB] [Mid Channel] [QPSK] [Ant 2]



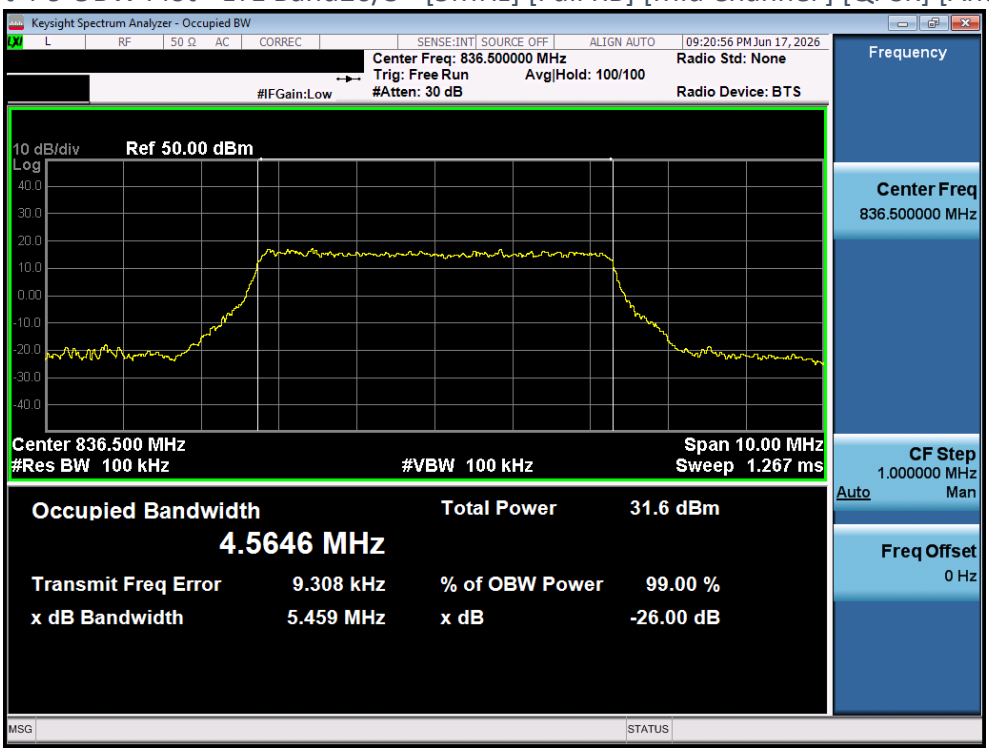
Plot 4-7 OBW Plot - LTE Band26/5 - [10MHz] [Full RB] [Mid Channel] [16QAM] [Ant 1]



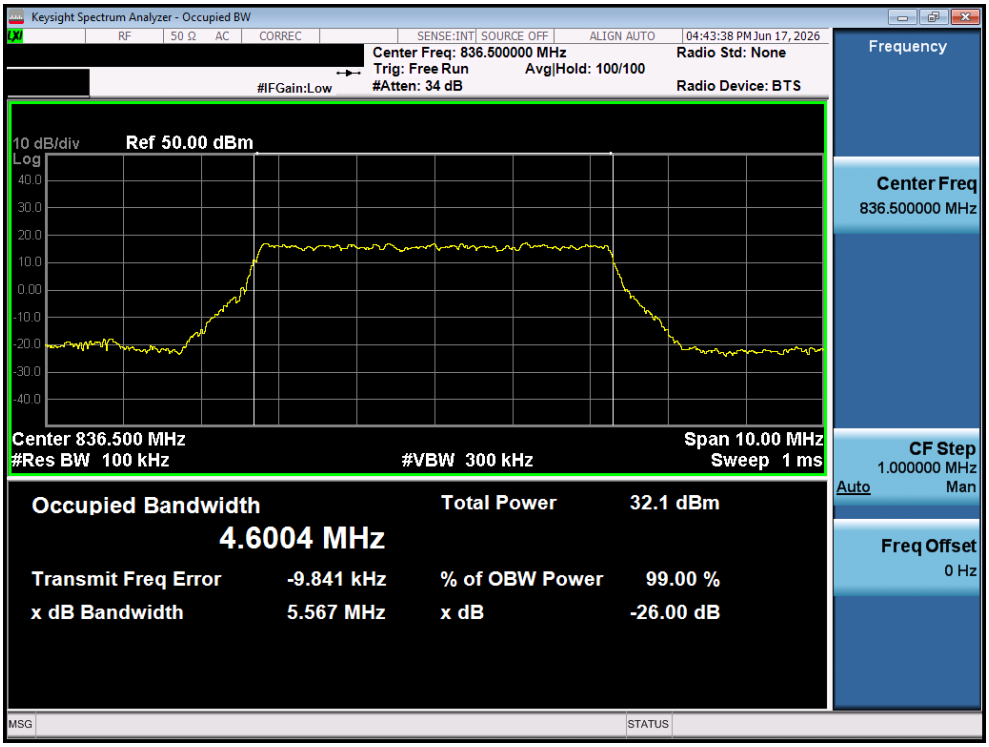
Plot 4-8 OBW Plot - LTE Band26/5 - [10MHz] [Full RB] [Mid Channel] [16QAM] [Ant 2]



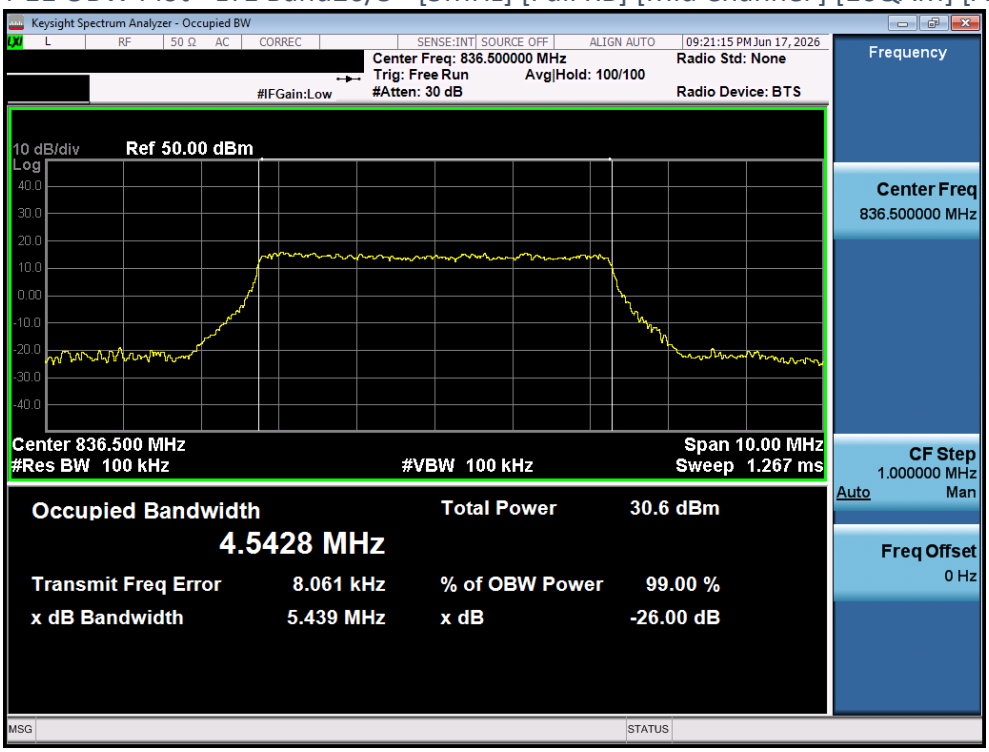
Plot 4-9 OBW Plot - LTE Band26/5 - [5MHz] [Full RB] [Mid Channel] [QPSK] [Ant 1]



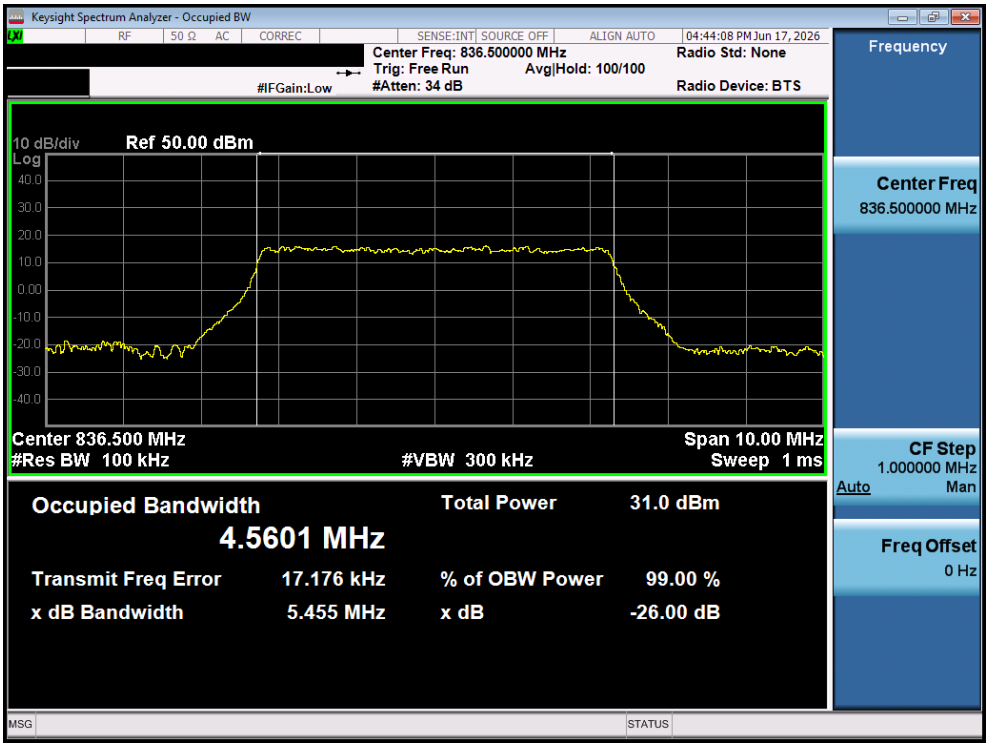
Plot 4-10 OBW Plot - LTE Band26/5 - [5MHz] [Full RB] [Mid Channel] [QPSK] [Ant 2]



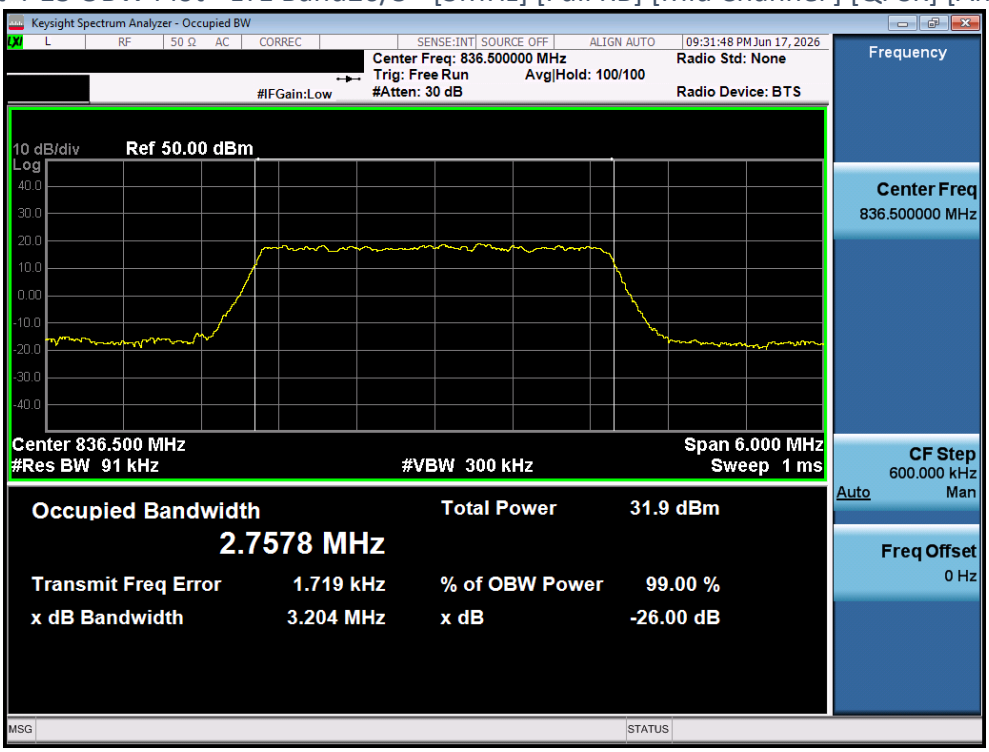
Plot 4-11 OBW Plot - LTE Band26/5 - [5MHz] [Full RB] [Mid Channel] [16QAM] [Ant 1]



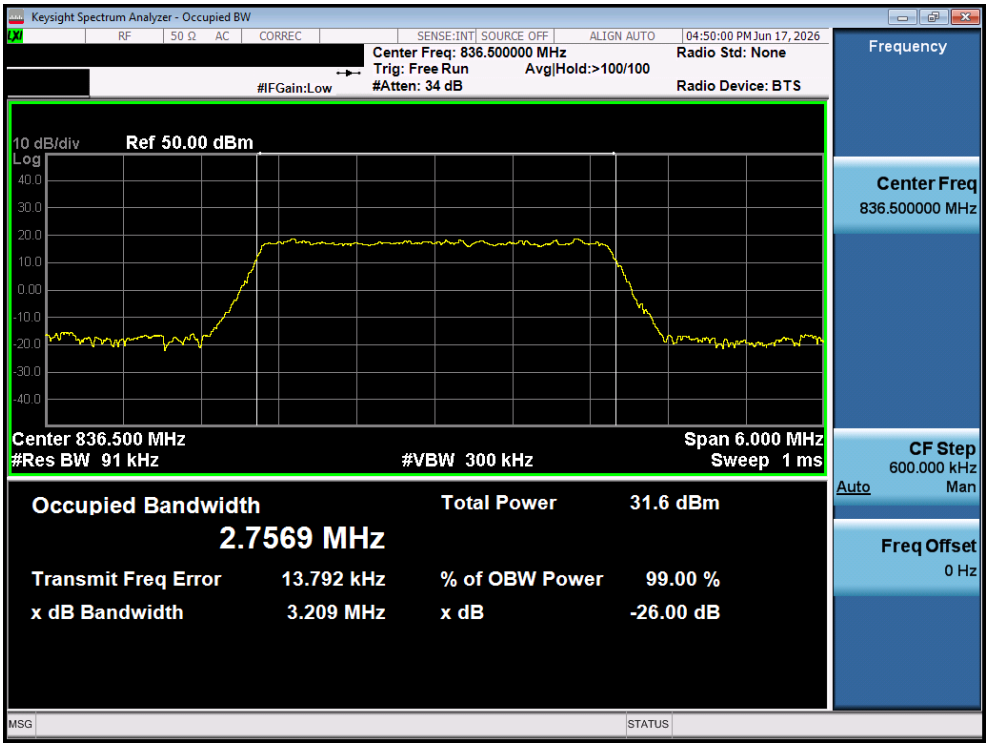
Plot 4-12 OBW Plot - LTE Band26/5 - [5MHz] [Full RB] [Mid Channel] [16QAM] [Ant 2]



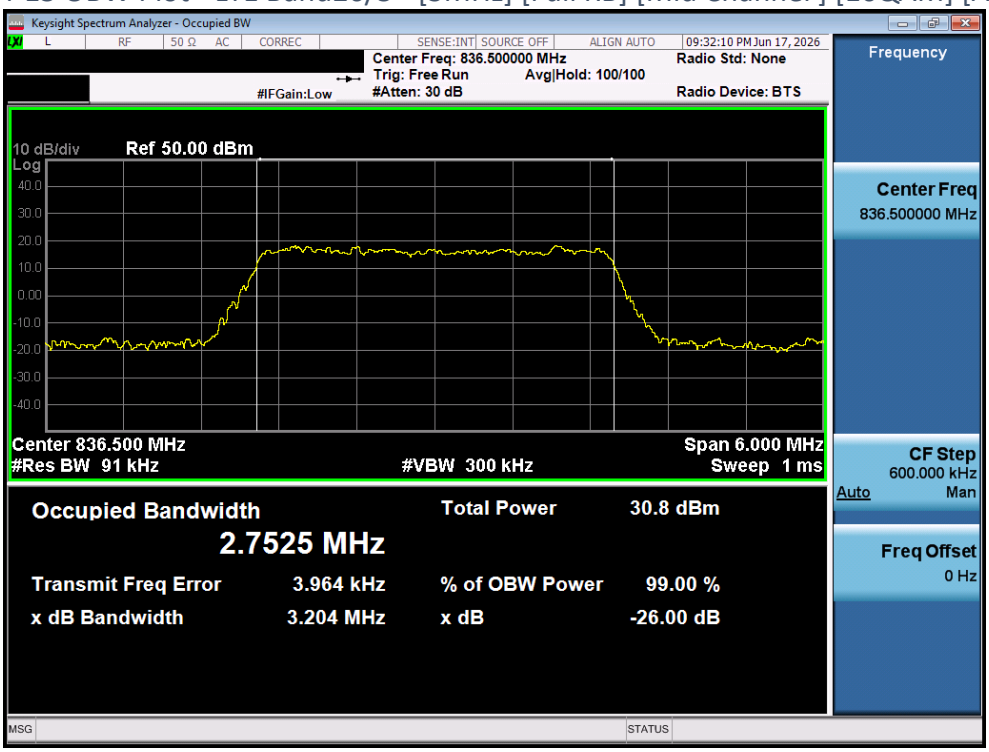
Plot 4-13 OBW Plot - LTE Band26/5 - [3MHz] [Full RB] [Mid Channel] [QPSK] [Ant 1]



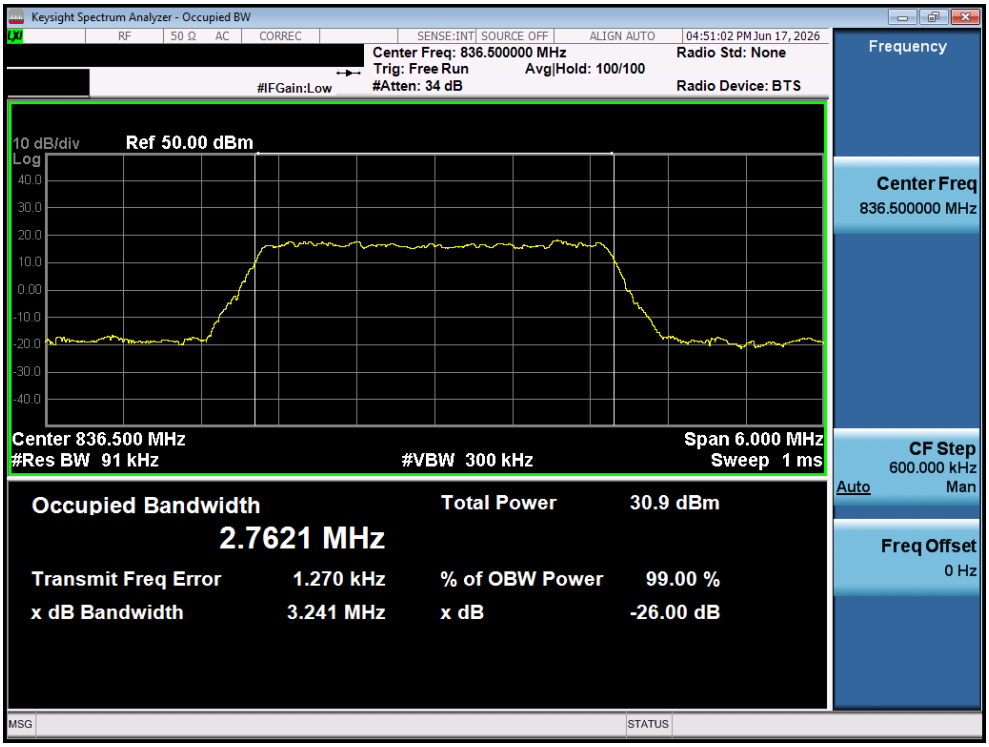
Plot 4-14 OBW Plot - LTE Band26/5 - [3MHz] [Full RB] [Mid Channel] [QPSK] [Ant 2]



Plot 4-15 OBW Plot - LTE Band26/5 - [3MHz] [Full RB] [Mid Channel] [16QAM] [Ant 1]

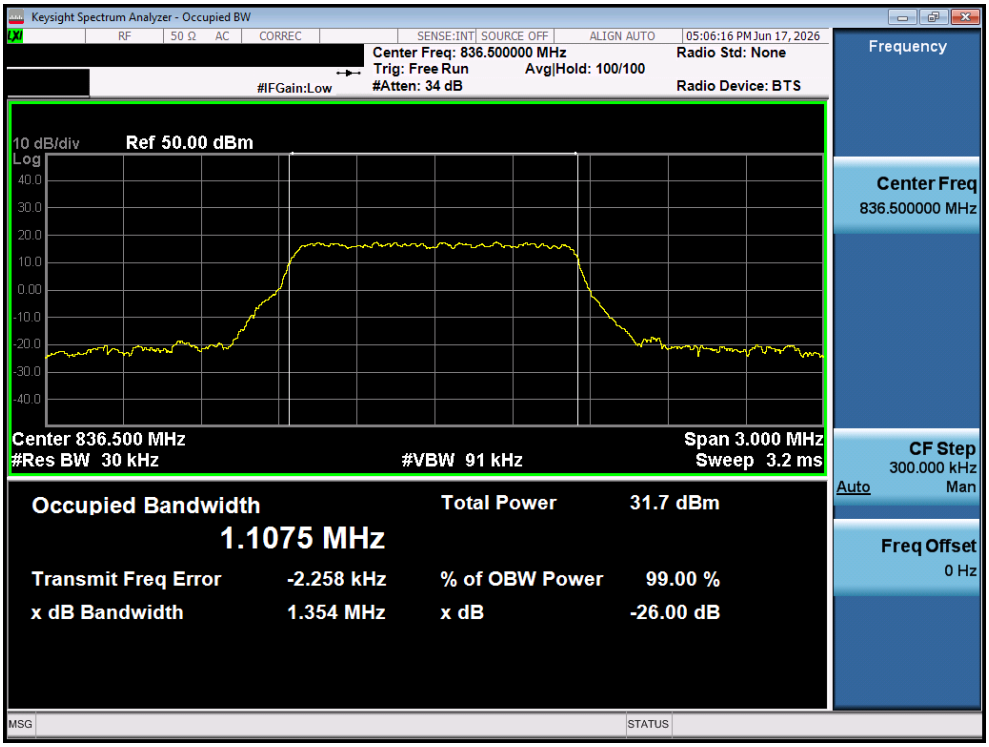


Plot 4-16 OBW Plot - LTE Band26/5 - [3MHz] [Full RB] [Mid Channel] [16QAM] [Ant 2]

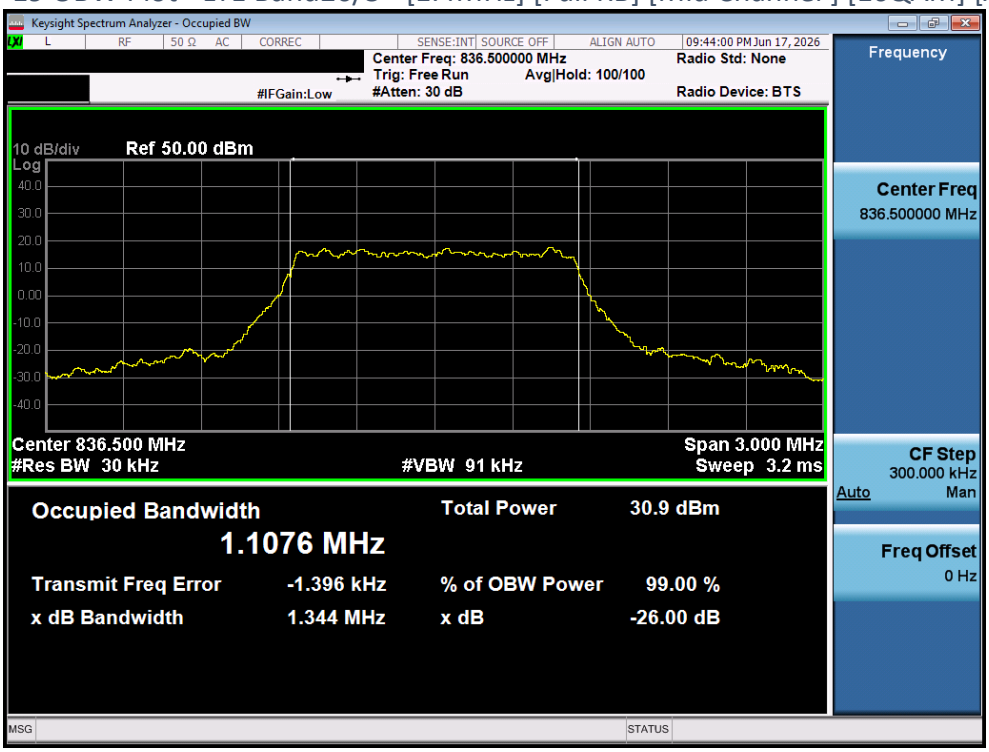


Plot 4-17 OBW Plot - LTE Band26/5 - [1.4MHz] [Full RB] [Mid Channel] [QPSK] [Ant 1]

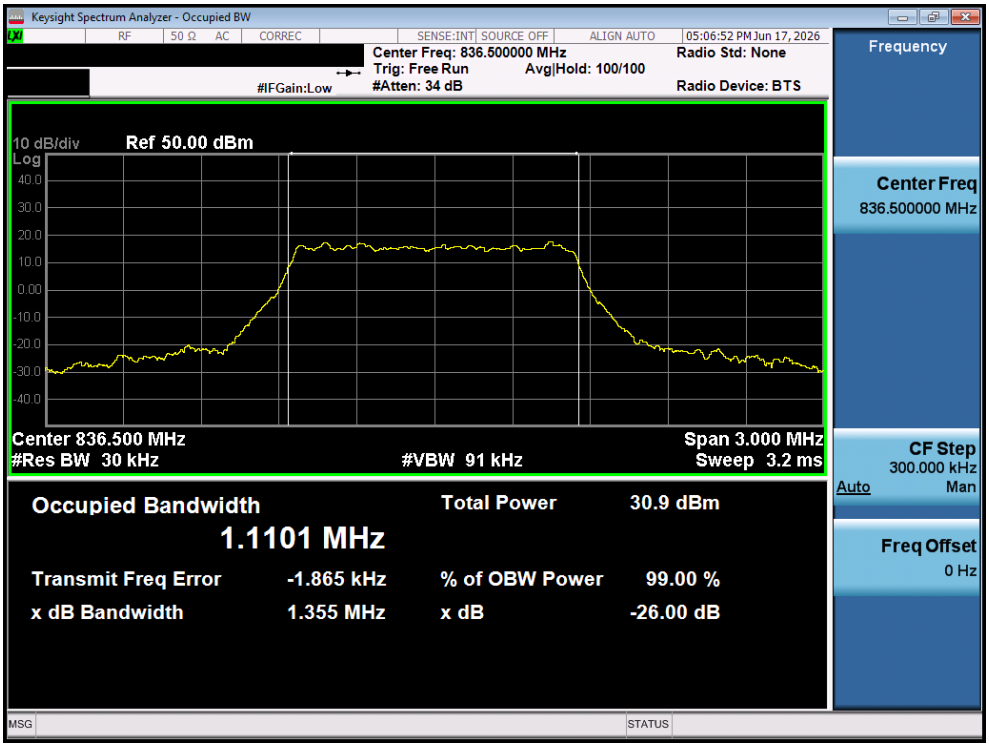
Plot 4-18 OBW Plot - LTE Band26/5 - [1.4MHz] [Full RB] [Mid Channel] [QPSK] [Ant 2]



Plot 4-19 OBW Plot - LTE Band26/5 - [1.4MHz] [Full RB] [Mid Channel] [16QAM] [Ant 1]



Plot 4-20 OBW Plot - LTE Band26/5 - [1.4MHz] [Full RB] [Mid Channel] [16QAM] [Ant 2]



4.5. Peak to Average Ratio

4.5.1. Regulatory Limit

RSS-132(5.4)

The peak-to-average power ratio (PAPR) of the equipment shall not exceed 13 dB for more than 0.1% of the time, using a signal corresponding to the highest PAPR during periods of continuous transmission.

4.5.2. Test Method

ANSI C63.26-2015, clause 5.2.3.4

4.5.3. Test Procedure

The CCDF measurement function of the spectrum analyzer was used.

The procedure for this method is follows:

a) Set center frequency to the nominal EUT channel center frequency.
b) Set analysis Bandwidth ≥ OBW or specified reference bandwidth.
c) Number of Count = stabilizes the measured CCDF curve.
d) Set the measurement interval as follows:
   For continuous transmissions, set to the greater of [10 × (number of points in sweep) × (transmission symbol period)] or 1 ms.
   For burst transmissions, employ an external trigger that is synchronized with the EUT burst timing sequence, or use the internal burst trigger with a trigger level that allows the burst to stabilize. Set the measurement interval to a time that is less than or equal to the burst duration.
e) Record the maximum PAPR level associated with a probability of 0.1%.

Test Note

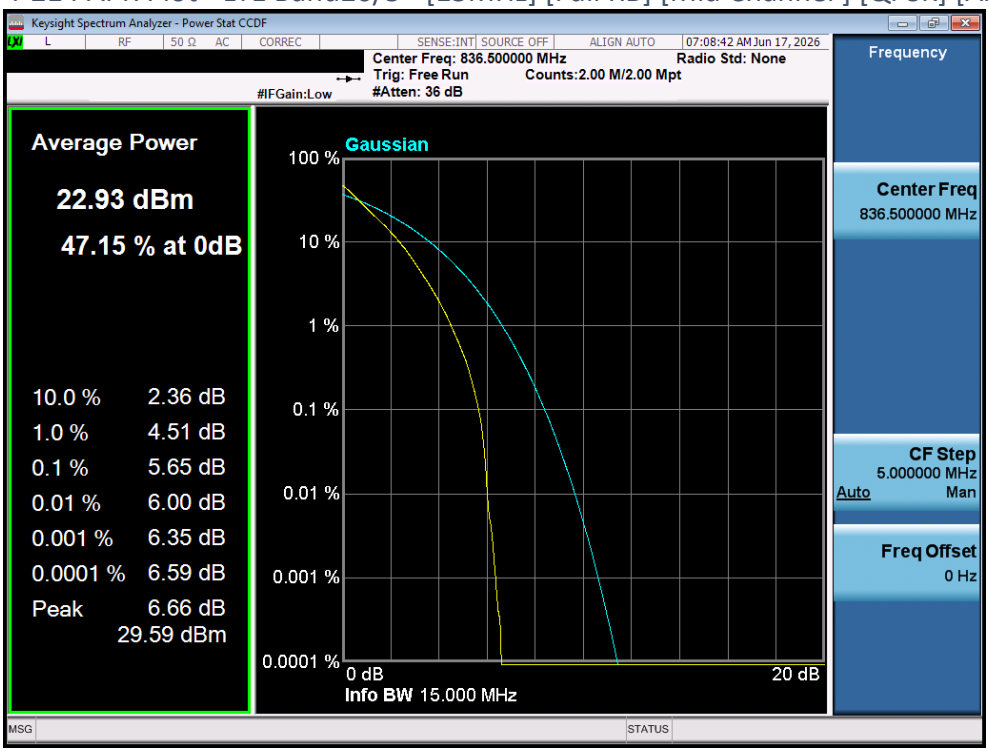
✓ All modulation were evaluated, and only the worst-case results are reported herein.

4.5.4. Test Results

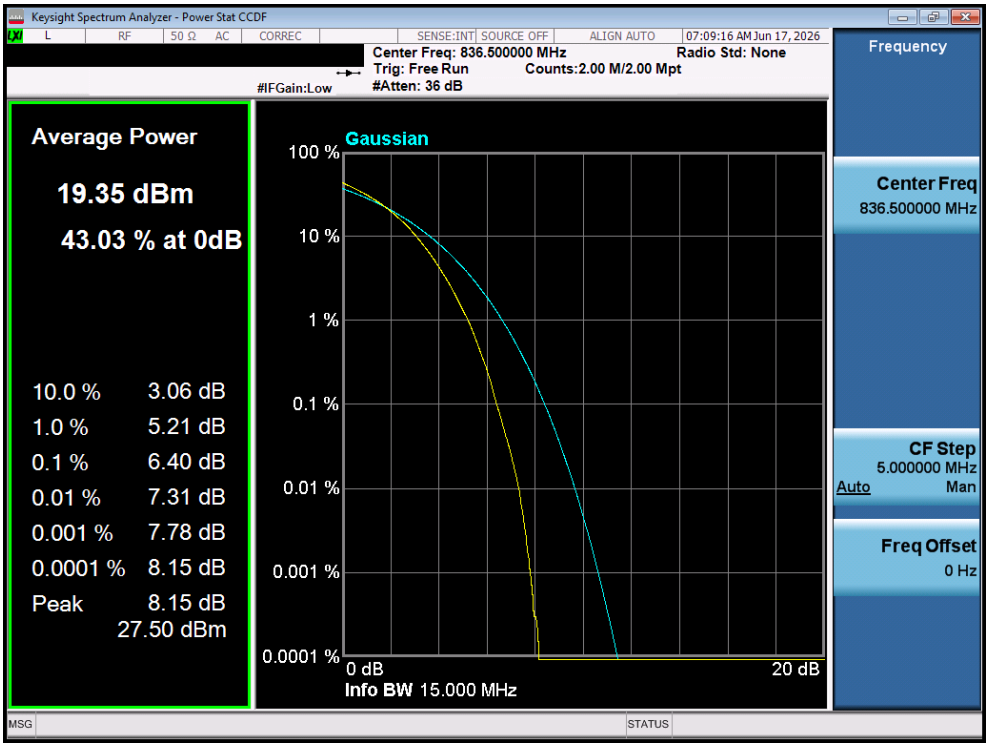
Table 4-2 PAPR Test Data Ant1

Band	Band Width [MHz]	Frequency [MHz]	Earfcn UL	RB Size/Offset	Modulation	PAR 0.1 % [dB]	Limit [dB]	Margin [dB]
LTE Band 26/5	15	836.5	26915	75/0	QPSK	5.65	13	-7.35
					16QAM	6.18	13	-6.82
					64QAM	6.50	13	-6.50
					256QAM	6.40	13	-6.60
	10	836.5	26915	50/0	QPSK	5.68	13	-7.32
					16QAM	6.40	13	-6.60
					64QAM	6.43	13	-6.57
					256QAM	6.76	13	-6.24
	5	836.5	26915	26/0	QPSK	5.71	13	-7.29
					16QAM	6.41	13	-6.59
					64QAM	6.45	13	-6.55
					256QAM	6.71	13	-6.29
	3	836.5	26915	15/0	QPSK	5.55	13	-7.45
					16QAM	6.56	13	-6.44
					64QAM	6.43	13	-6.57
					256QAM	6.70	13	-6.30
	1.4	836.5	26915	6/0	QPSK	5.62	13	-7.38
					16QAM	6.46	13	-6.54
					64QAM	6.38	13	-6.62
					256QAM	6.80	13	-6.20

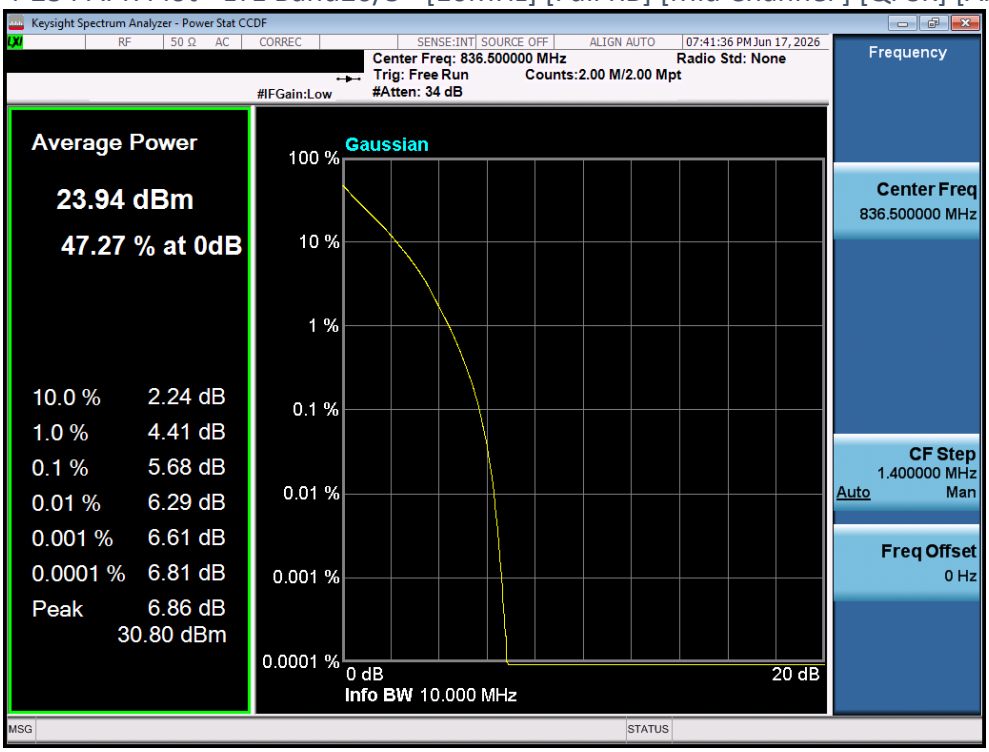
Plot 4-21 PAPR Plot - LTE Band26/5 - [15MHz] [Full RB] [Mid Channel] [QPSK] [Ant 1]



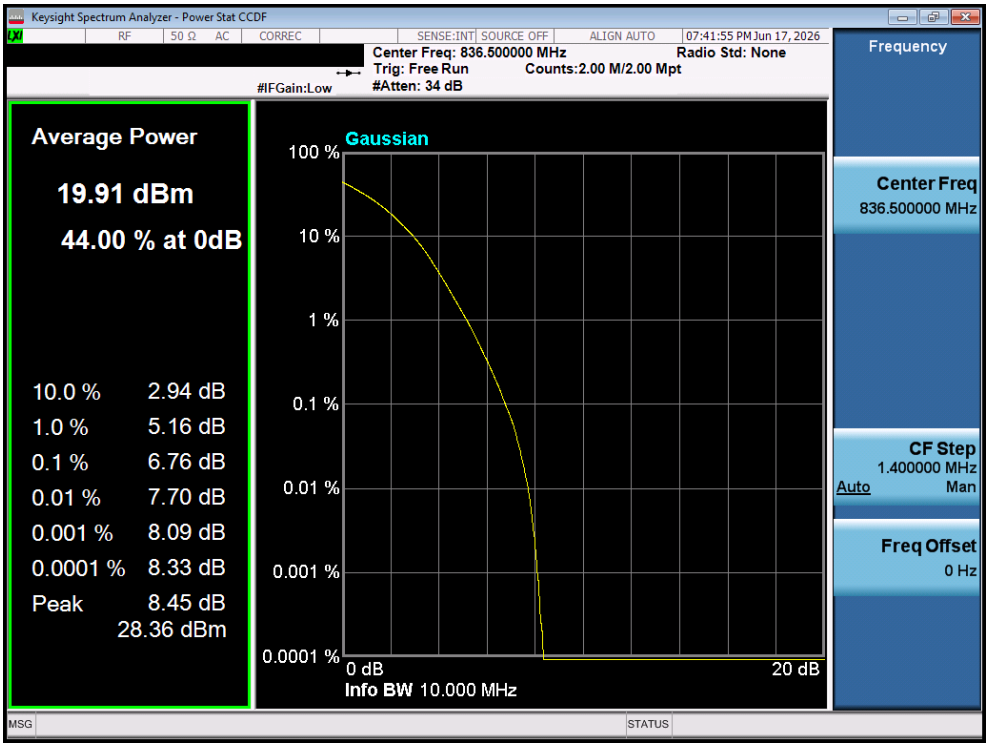
Plot 4-22 PAPR Plot - LTE Band26/5 - [15MHz] [Full RB] [Mid Channel] [256QAM] [Ant 1]



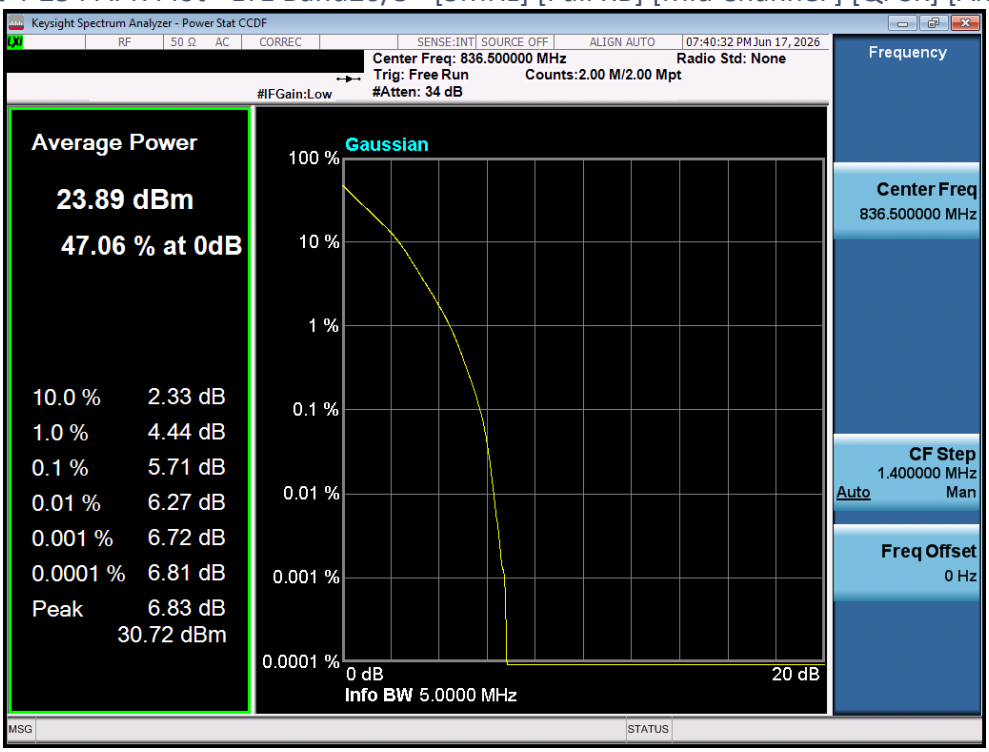
Plot 4-23 PAPR Plot - LTE Band26/5 - [10MHz] [Full RB] [Mid Channel] [QPSK] [Ant 1]



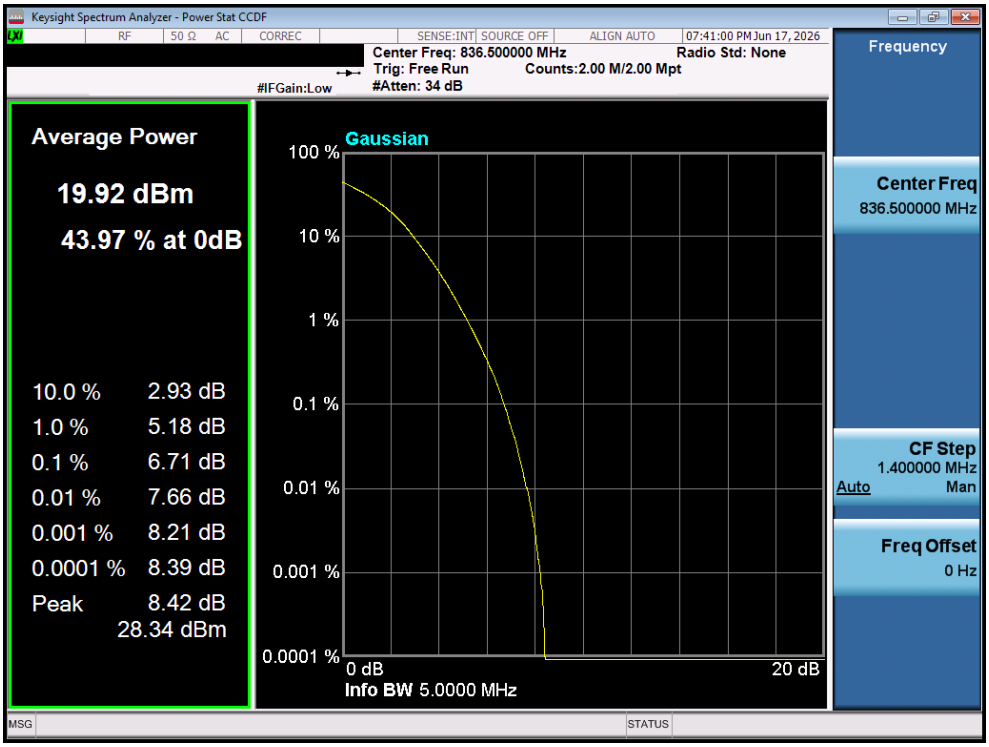
Plot 4-24 PAPR Plot - LTE Band26/5 - [10MHz] [Full RB] [Mid Channel] [256QAM] [Ant 1]



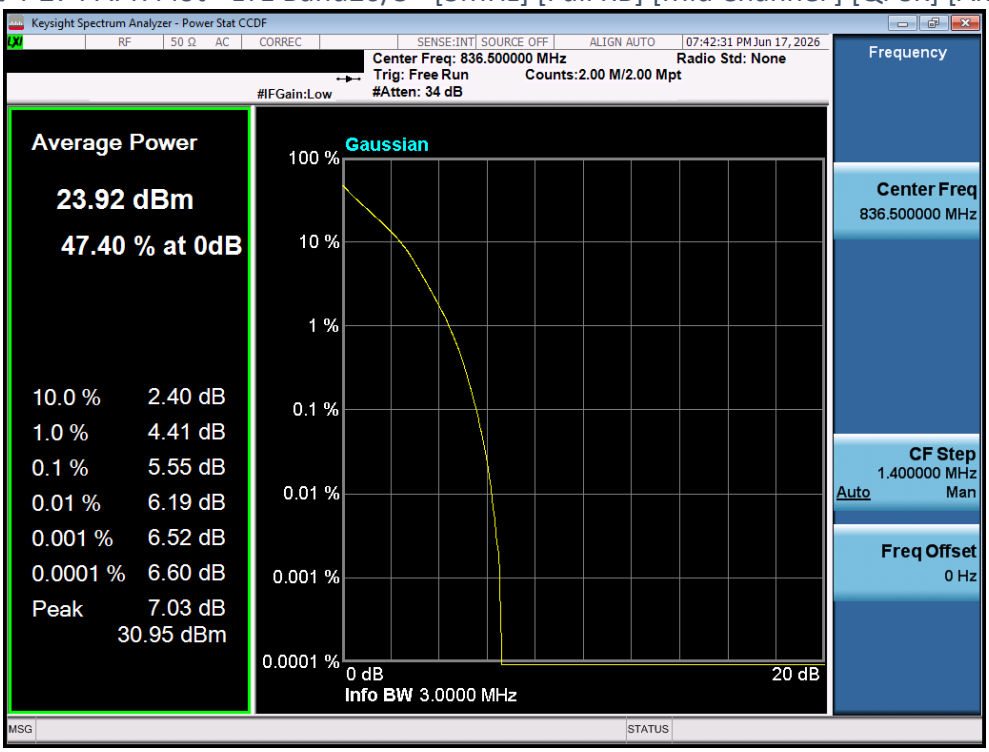
Plot 4-25 PAPR Plot - LTE Band26/5 - [5MHz] [Full RB] [Mid Channel] [QPSK] [Ant 1]



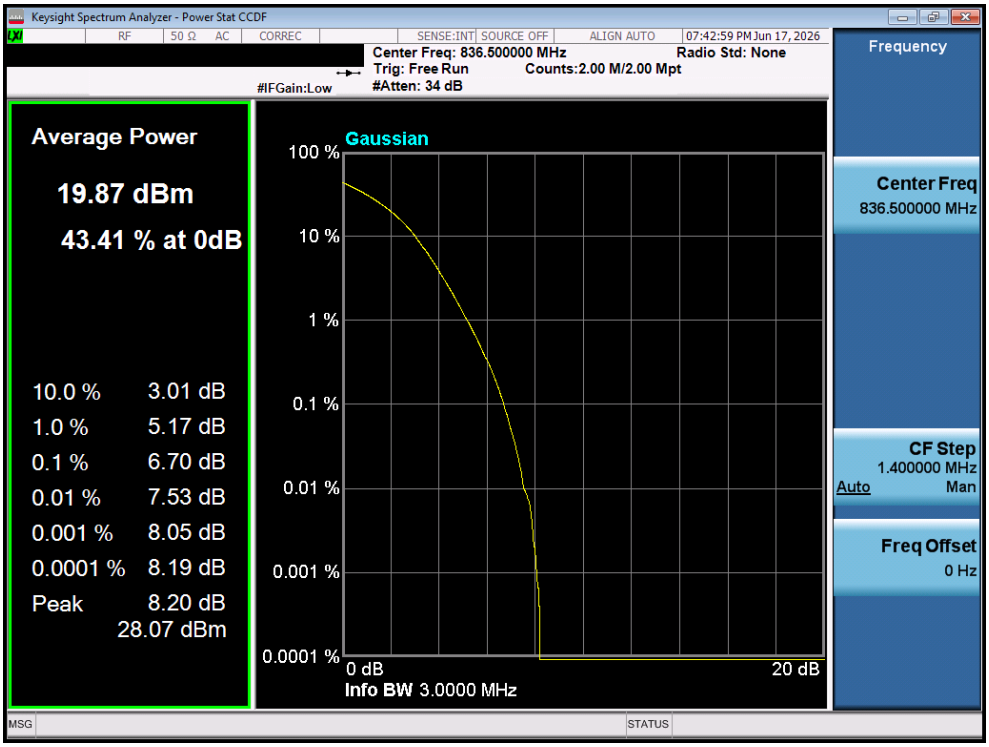
Plot 4-26 PAPR Plot - LTE Band26/5 - [5MHz] [Full RB] [Mid Channel] [256QAM] [Ant 1]



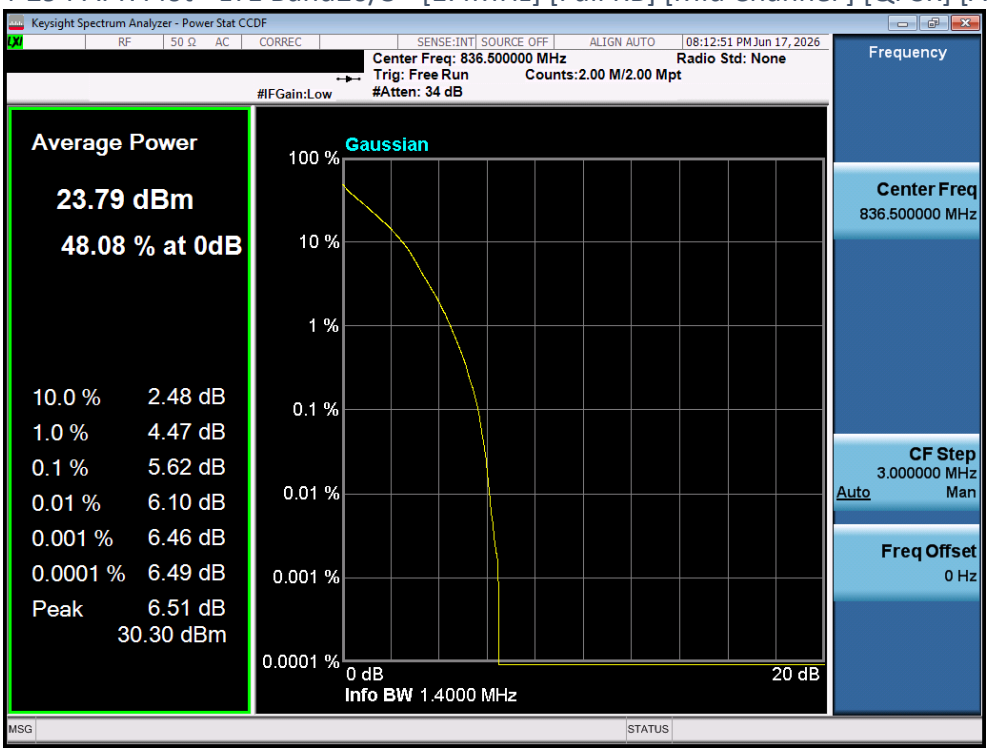
Plot 4-27 PAPR Plot - LTE Band26/5 - [3MHz] [Full RB] [Mid Channel] [QPSK] [Ant 1]



Plot 4-28 PAPR Plot - LTE Band26/5 - [3MHz] [Full RB] [Mid Channel] [256QAM] [Ant 1]



Plot 4-29 PAPR Plot - LTE Band26/5 - [1.4MHz] [Full RB] [Mid Channel] [QPSK] [Ant 1]



Plot 4-30 PAPR Plot - LTE Band26/5 - [1.4MHz] [Full RB] [Mid Channel] [256QAM] [Ant 1]

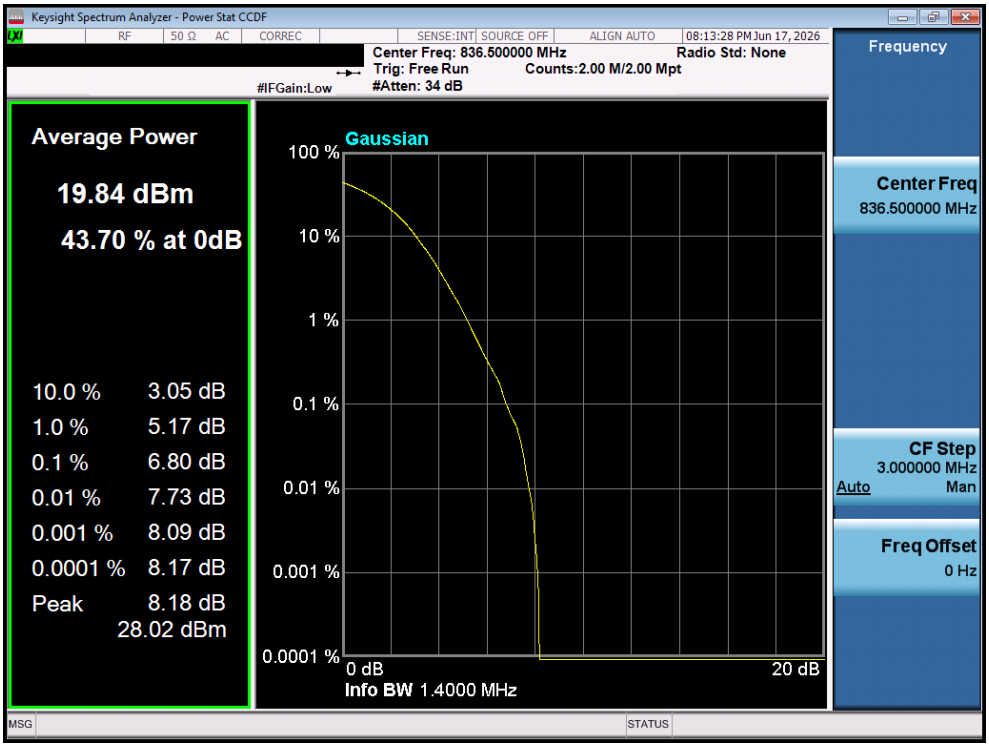
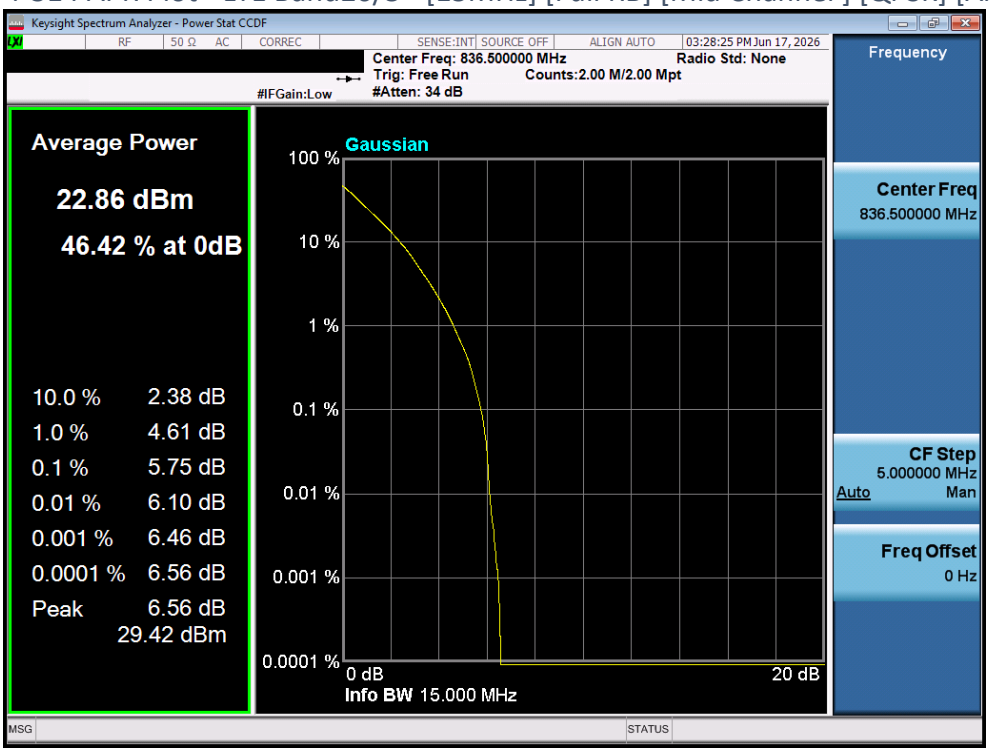


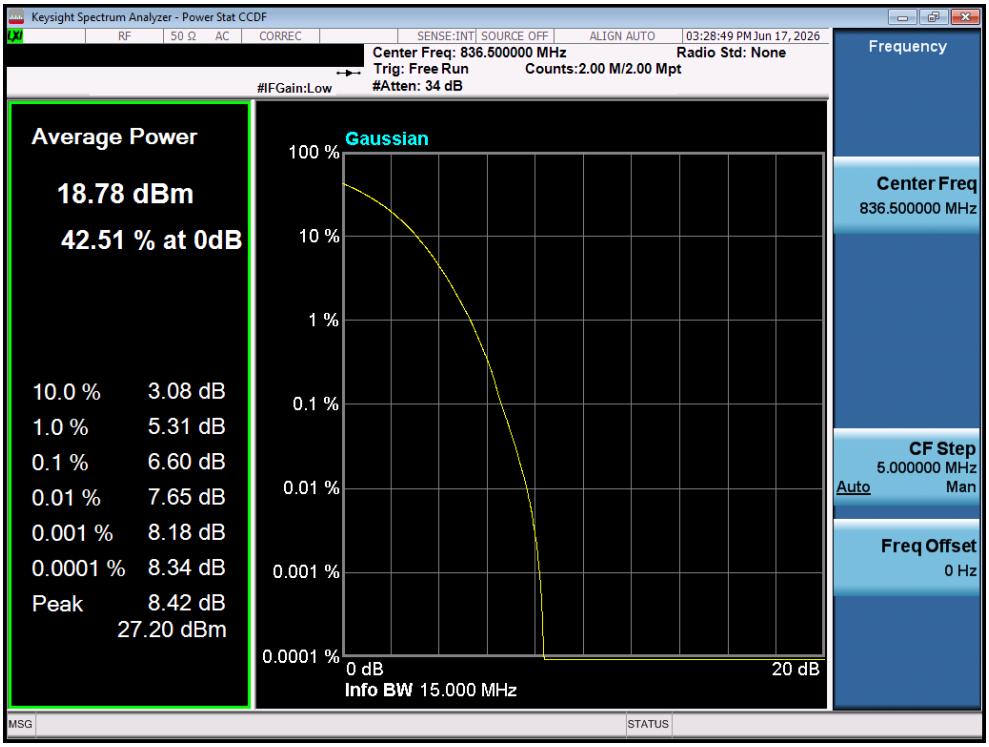
Table 4-3 PAPR Test Data Ant2

Band	Band Width [MHz]	Frequency [MHz]	Earfcn UL	RB Size/Offset	Modulation	PAR 0.1 % [dB]	Limit [dB]	Margin [dB]
LTE Band 26/5	15	836.5	26915	75/0	QPSK	5.75	13	-7.26
					16QAM	6.32	13	-6.68
					64QAM	6.22	13	-6.78
					256QAM	6.60	13	-6.40
	10	836.5	26915	50/0	QPSK	5.66	13	-7.34
					16QAM	6.34	13	-6.66
					64QAM	6.36	13	-6.64
					256QAM	6.71	13	-6.29
	5	836.5	26915	26/0	QPSK	5.68	13	-7.32
					16QAM	6.38	13	-6.62
					64QAM	6.31	13	-6.69
					256QAM	6.66	13	-6.34
	3	836.5	26915	15/0	QPSK	5.67	13	-7.33
					16QAM	6.60	13	-6.40
					64QAM	6.41	13	-6.59
					256QAM	6.66	13	-6.34
	1.4	836.5	26915	6/0	QPSK	5.76	13	-7.24
					16QAM	6.53	13	-6.47
					64QAM	6.41	13	-6.59
					256QAM	6.66	13	-6.34

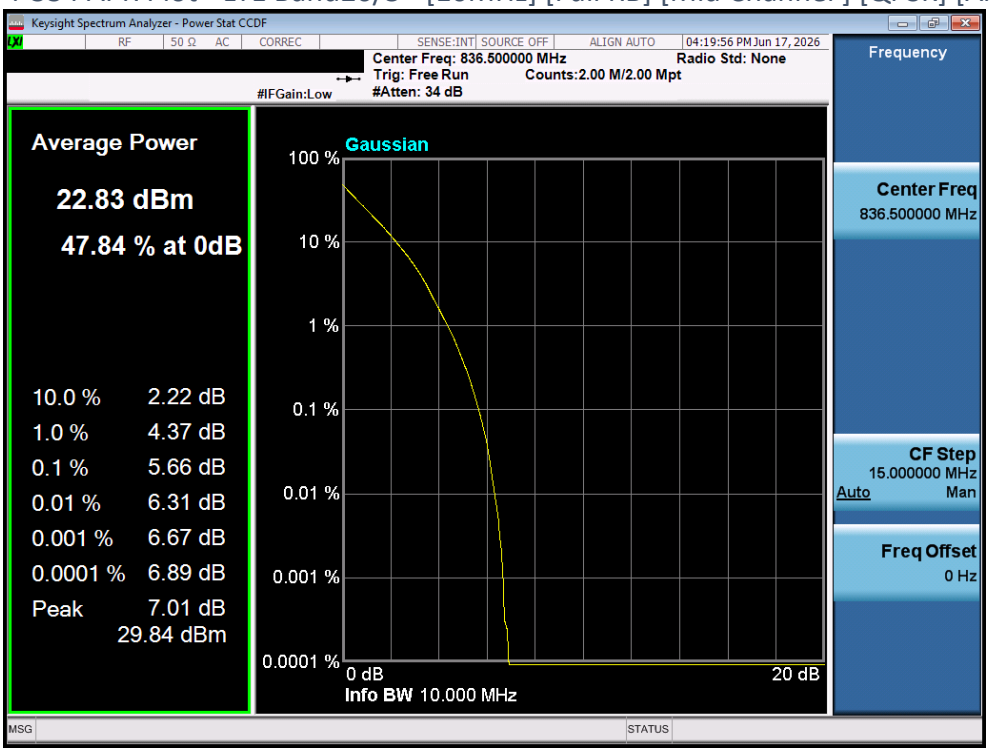
Plot 4-31 PAPR Plot - LTE Band26/5 - [15MHz] [Full RB] [Mid Channel] [QPSK] [Ant 2]



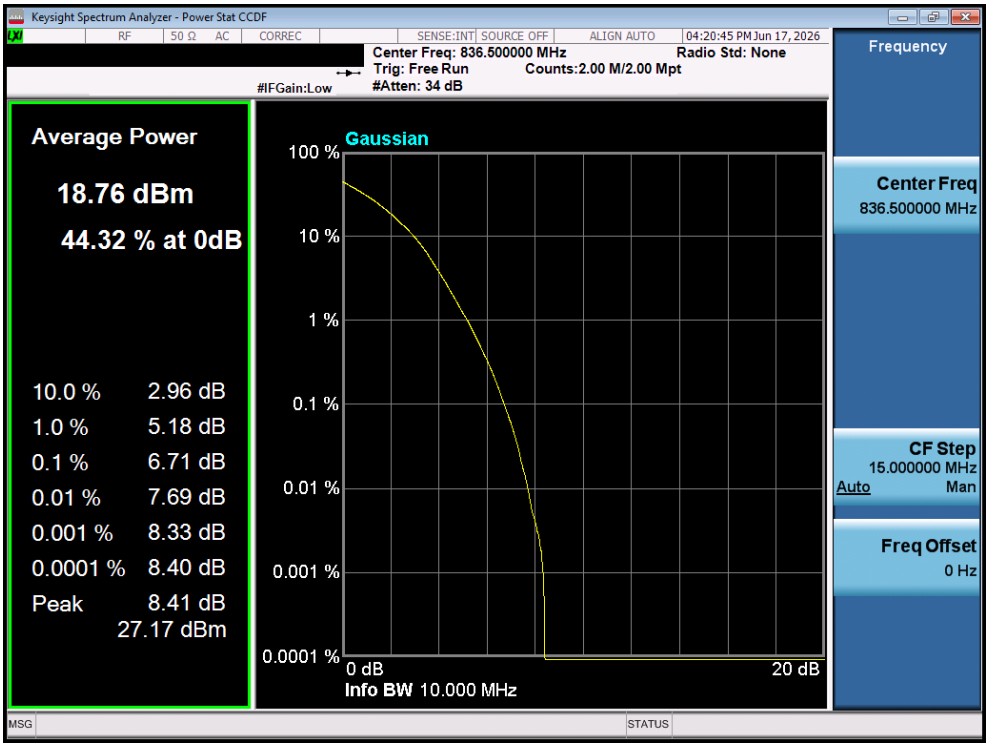
Plot 4-32 PAPR Plot - LTE Band26/5 - [15MHz] [Full RB] [Mid Channel] [256QAM] [Ant 2]



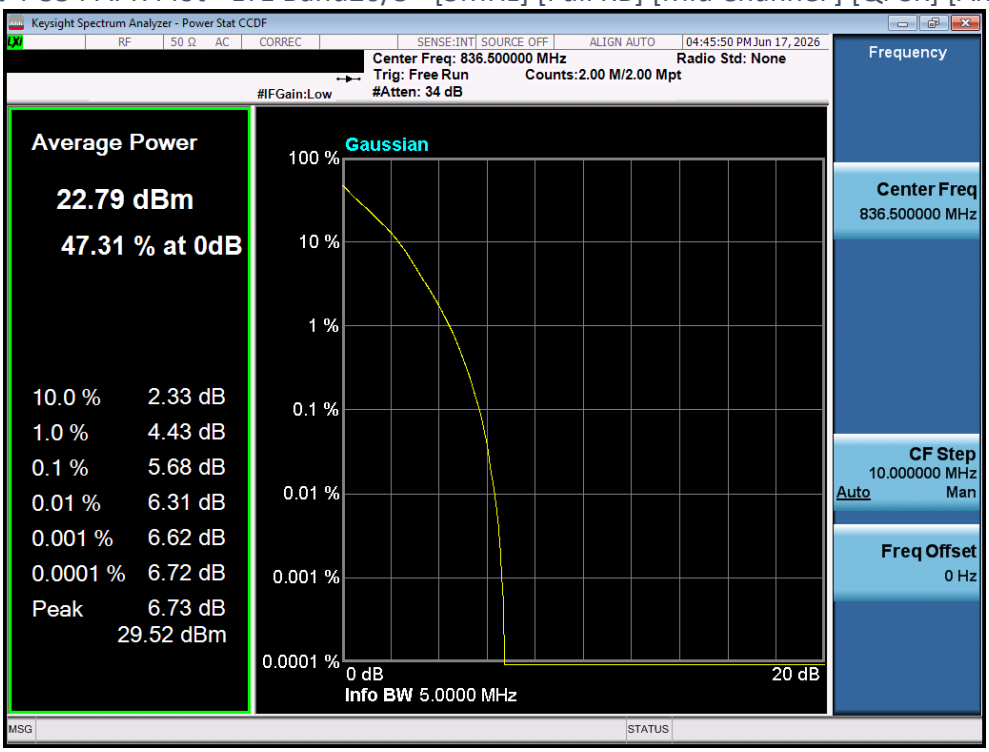
Plot 4-33 PAPR Plot - LTE Band26/5 - [10MHz] [Full RB] [Mid Channel] [QPSK] [Ant 2]



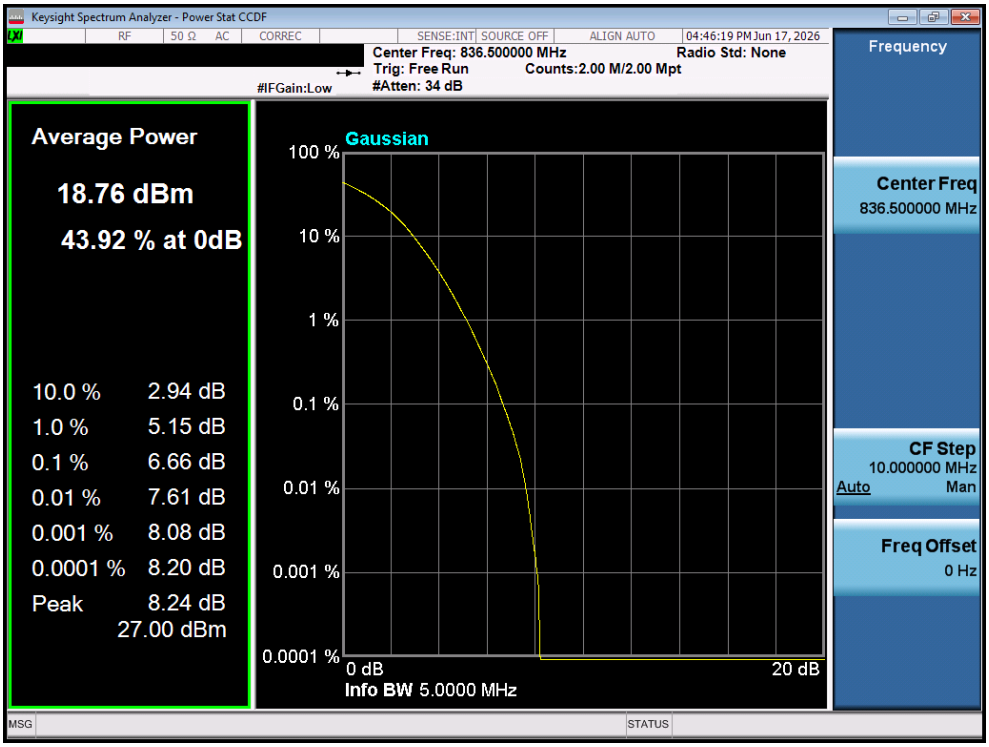
Plot 4-34 PAPR Plot - LTE Band26/5 - [10MHz] [Full RB] [Mid Channel] [256QAM] [Ant 2]



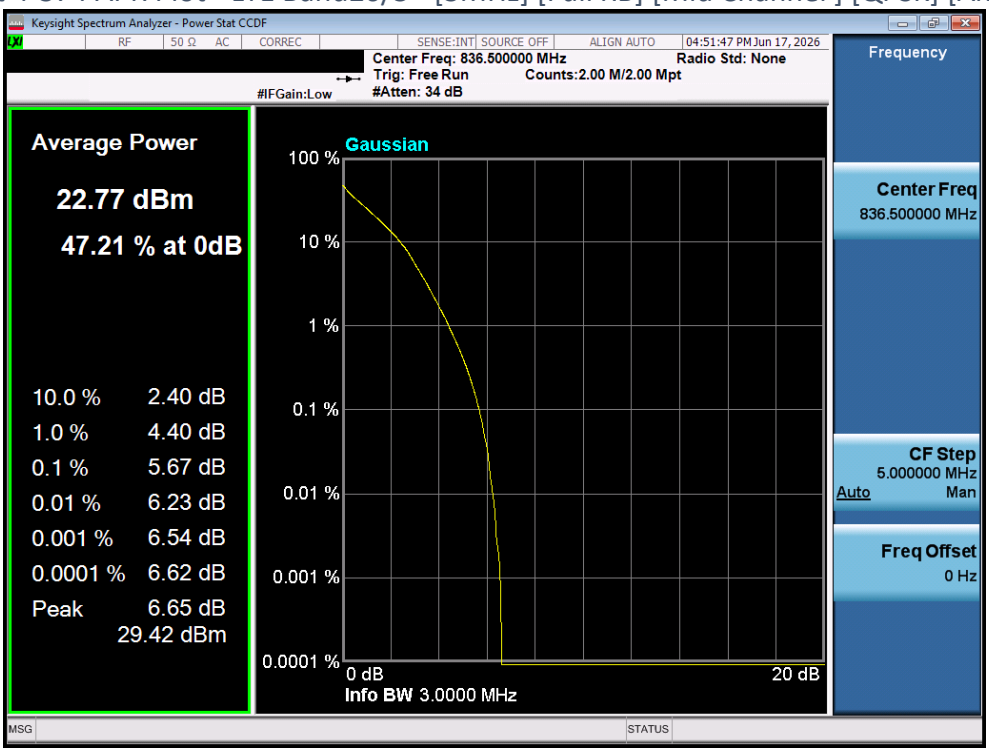
Plot 4-35 PAPR Plot - LTE Band26/5 - [5MHz] [Full RB] [Mid Channel] [QPSK] [Ant 2]



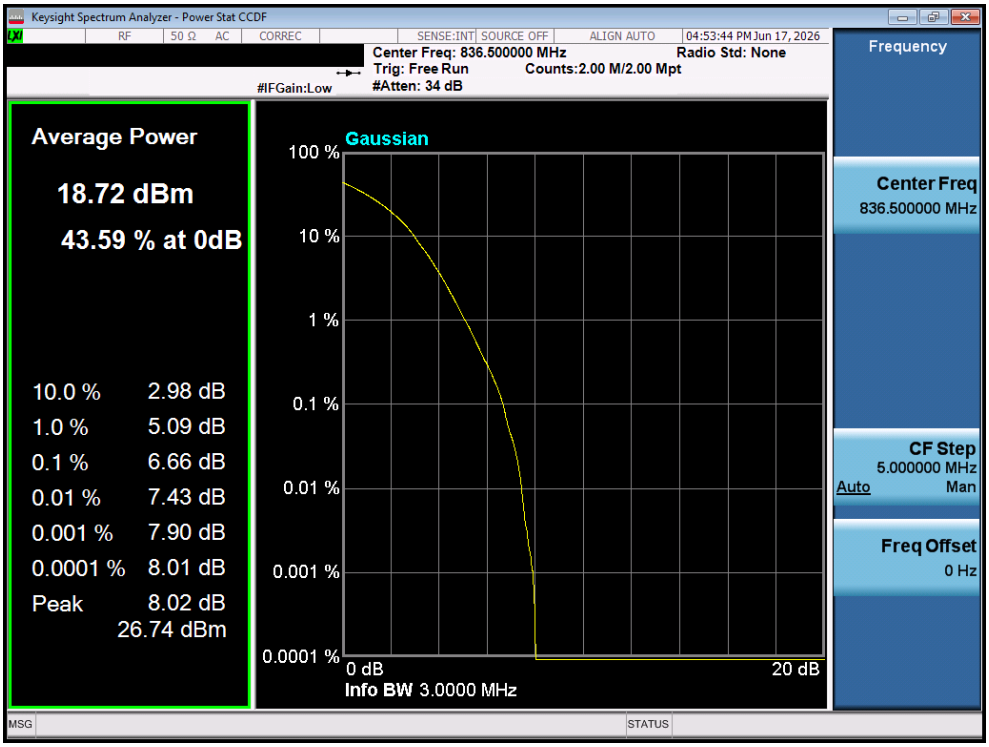
Plot 4-36 PAPR Plot - LTE Band26/5 - [5MHz] [Full RB] [Mid Channel] [256QAM] [Ant 2]



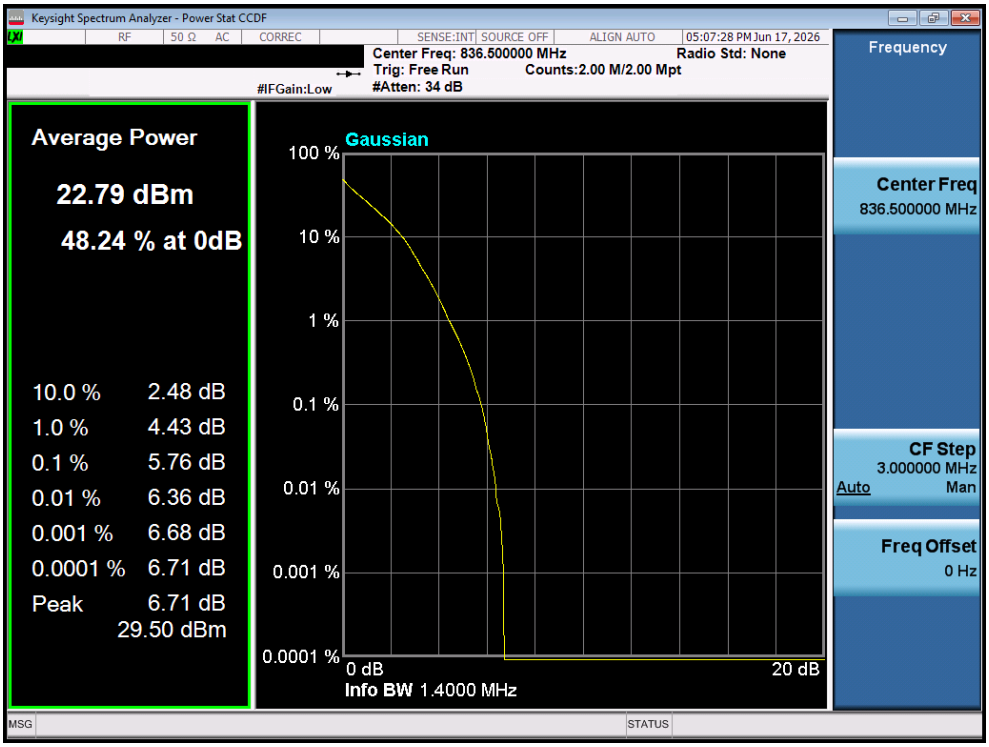
Plot 4-37 PAPR Plot - LTE Band26/5 - [3MHz] [Full RB] [Mid Channel] [QPSK] [Ant 2]



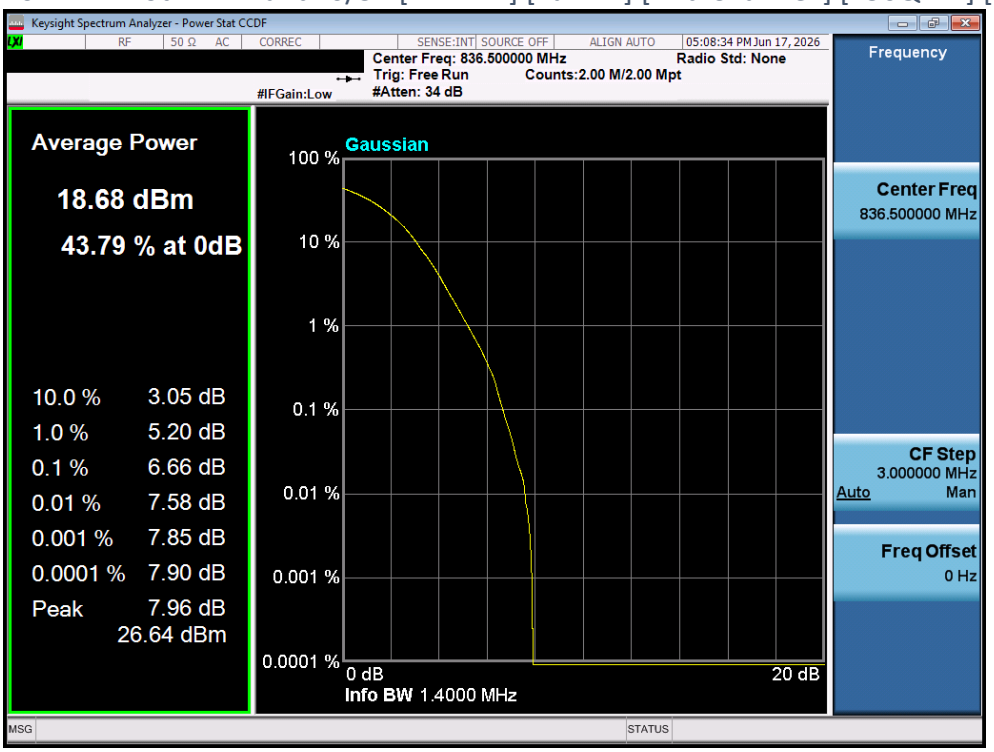
Plot 4-38 PAPR Plot - LTE Band26/5 - [3MHz] [Full RB] [Mid Channel] [256QAM] [Ant 2]



Plot 4-39 PAPR Plot - LTE Band26/5 - [1.4MHz] [Full RB] [Mid Channel] [QPSK] [Ant 2]



Plot 4-40 PAPR Plot - LTE Band26/5 - [1.4MHz] [Full RB] [Mid Channel] [256QAM] [Ant 2]



4.6. Band Edge Emissions

4.6.1. Regulatory Limit

§Part. 22.917(a)

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

RSS-132(5.5)

The power of emissions in any 100 kHz bandwidth shall be attenuated below the transmitter output power P (dBW) by at least 43 + 10 log(p) dB. “p” is the output power specified in watts.

4.6.2. Test Method

ANSI C63.26-2015, clause 5.7.3

4.6.3. Test Procedure

The procedure for this method is follows:

a) Set the spectrum analyzer center frequency to the block, band, or channel edge frequency.
b) Set the span wide enough to capture the fundamental emission closest to the authorized block.
c) Set RBW = at least 1 % of the EBW
d) Set the VBW ≥ RBW
e) Set Number of points Sweep ≥ 2 x span/RBW
f) Detector = RMS
g) Trace Mode = Average
h) Sweep time = Auto (Coupled) or sufficient to investigate

Test Note

- ✓ Per §Part. 22.917(b), in the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. A narrower resolution bandwidth is permitted in all cases to improve measurement accuracy provided the measured power is integrated over the full required measurement bandwidth (*i.e.* 1 MHz or 1 percent of emission bandwidth, as specified).
- ✓ Per RSS-132(5.5), in the 1 MHz bands immediately outside and adjacent to the frequency block group, the power shall be measured with a resolution bandwidth of at least 1% of the occupied bandwidth (OBW). Beyond these 1 MHz bands, a resolution bandwidth of 1 MHz shall be used. A narrower resolution bandwidth may be used, provided that the measured power is integrated over the full required measurement bandwidth of 1 MHz, or 1% of the OBW, as applicable.
- ✓ According to the test results in Section 4.4 of the report, 1% of EBW was applied as the EBW is wider than the OBW.
- ✓ For cases where the duty cycle was less than 98%, measurements were performed using a gated trigger.
- ✓ All modulation were evaluated, and only the worst-case results are reported herein.
- ✓ Although 1RB and Half RB allocations were evaluated along with the Full RB, only the worst-case results are reported herein.

4.6.4. Test Results

Table 4-4 Band Edge Emissions Data Ant 1

Band	Band Width [MHz]	Channel	Frequency [MHz]	Earfcn UL	RB Size/Offset	Modulation	Level [dBm]	Limit [dBm]	Margin [dB]
LTE Band26/5	15	Low	831.5	26865	75/0	QPSK	-27.5	-13	-14.5
		High	841.5	26965	75/0	QPSK	-29.27	-13	-16.27
	10	Low	829.0	26840	50/0	QPSK	-25.74	-13	-12.74
		High	844.0	26990	50/0	QPSK	-28.79	-13	-15.79
	5	Low	826.5	26815	26/0	QPSK	-19.52	-13	-6.52
		High	846.5	27015	26/0	QPSK	-20.9	-13	-7.9
	3	Low	825.5	26805	15/0	QPSK	-18.27	-13	-5.27
		High	847.5	27025	15/0	QPSK	-18.28	-13	-5.28
	1.4	Low	824.7	26797	6/0	QPSK	-15.16	-13	-2.16
		High	848.3	27033	6/0	QPSK	-15.71	-13	-2.71

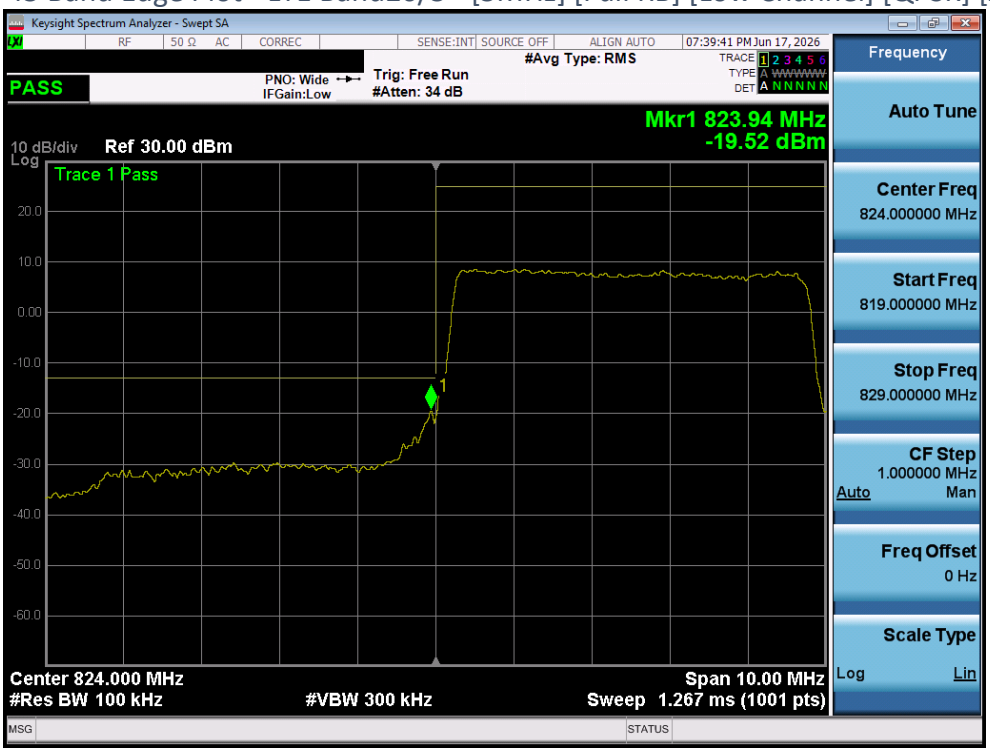
Plot 4-41 Band Edge Plot - LTE Band26/5 - [15MHz] [Full RB] [Low Channel] [QPSK] [Ant 1]

Plot 4-42 Band Edge Plot - LTE Band26/5 - [15MHz] [Full RB] [High Channel] [QPSK] [Ant 1]

Plot 4-43 Band Edge Plot - LTE Band26/5 - [10MHz] [Full RB] [Low Channel] [QPSK] [Ant 1]

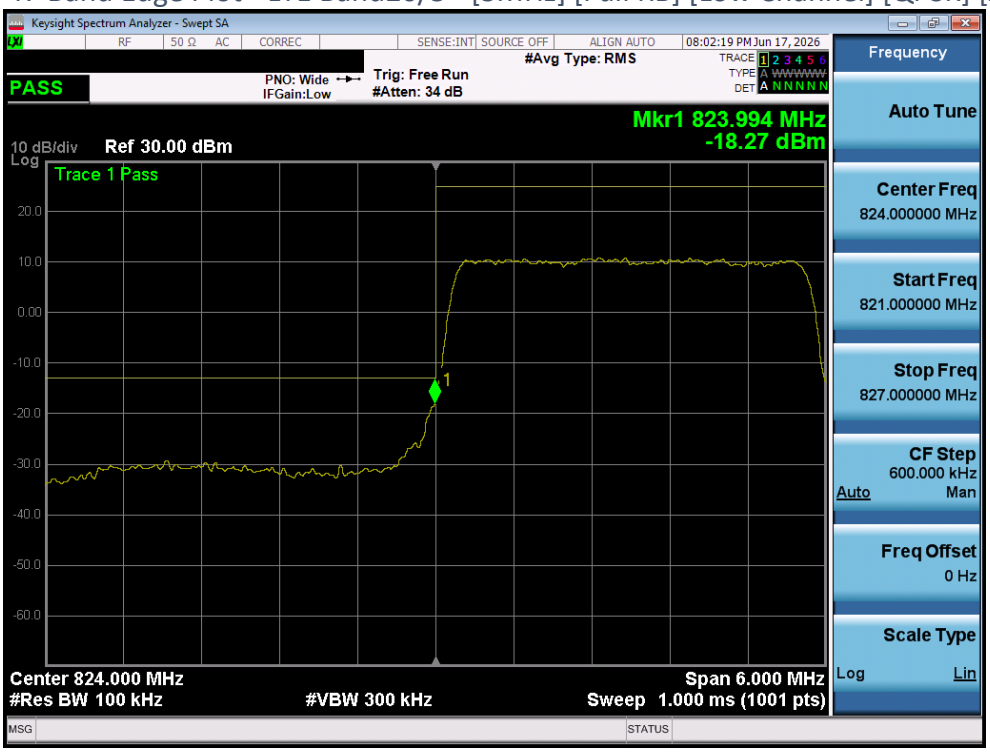
Plot 4-44 Band Edge Plot - LTE Band26/5 - [10MHz] [Full RB] [High Channel] [QPSK] [Ant 1]

Plot 4-45 Band Edge Plot - LTE Band26/5 - [5MHz] [Full RB] [Low Channel] [QPSK] [Ant 1]

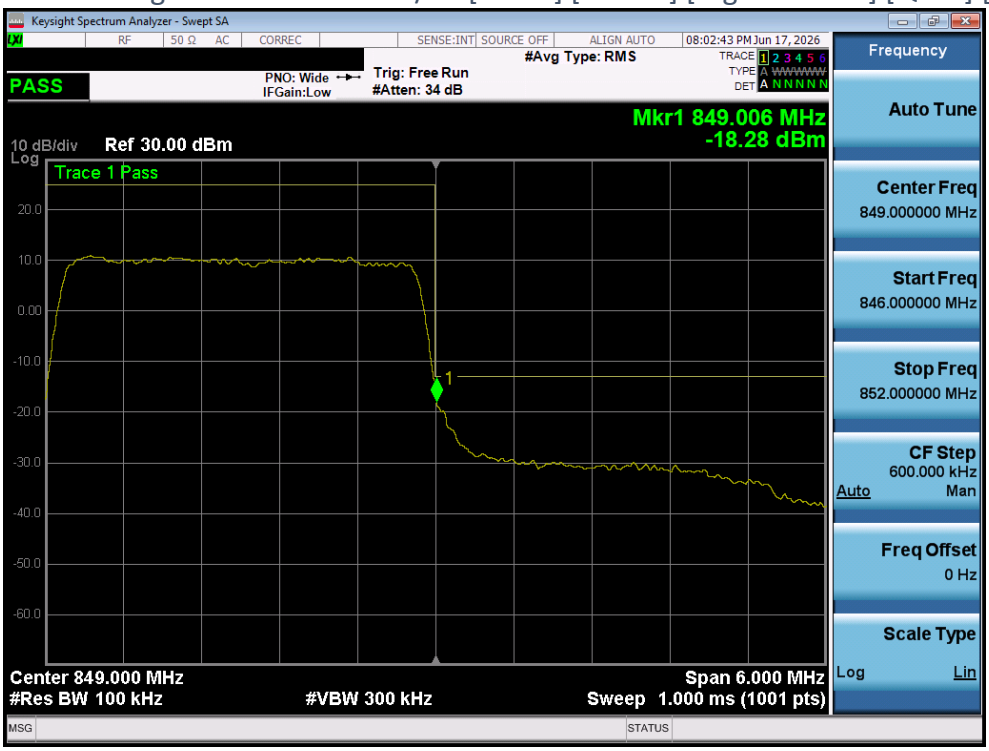


Plot 4-46 Band Edge Plot - LTE Band26/5 - [5MHz] [Full RB] [High Channel] [QPSK] [Ant 1]

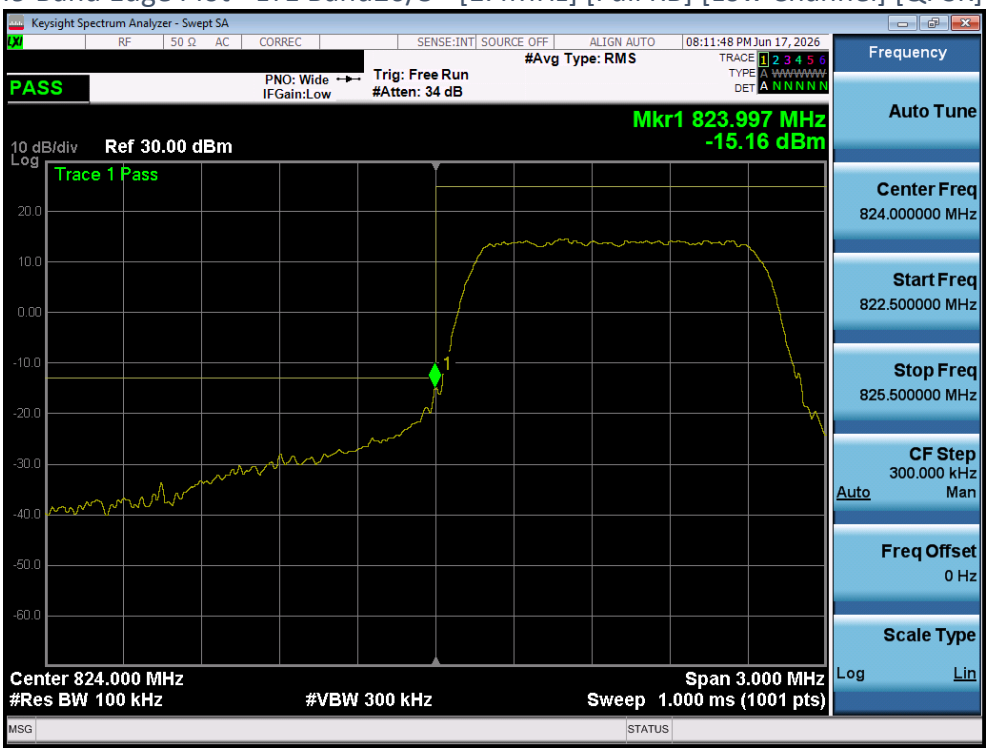
Plot 4-47 Band Edge Plot - LTE Band26/5 - [3MHz] [Full RB] [Low Channel] [QPSK] [Ant 1]



Plot 4-48 Band Edge Plot - LTE Band26/5 - [3MHz] [Full RB] [High Channel] [QPSK] [Ant 1]



Plot 4-49 Band Edge Plot - LTE Band26/5 - [1.4MHz] [Full RB] [Low Channel] [QPSK] [Ant 1]



Plot 4-50 Band Edge Plot - LTE Band26/5 - [1.4MHz] [Full RB] [High Channel] [QPSK] [Ant 1]

Table 4-5 Band Edge Emissions Data Ant 2

Band	Band Width [MHz]	Channel	Frequency [MHz]	Earfcn UL	RB Size/Offset	Modulation	Level [dBm]	Limit [dBm]	Margin [dB]
LTE Band26/5	15	Low	831.5	26865	75/0	QPSK	-26.83	-13	-13.83
		High	841.5	26965	75/0	QPSK	-31.59	-13	-18.59
	10	Low	829.0	26840	50/0	QPSK	-27.68	-13	-14.68
		High	844.0	26990	50/0	QPSK	-28.4	-13	-15.40
	5	Low	826.5	26815	26/0	QPSK	-19.77	-13	-6.77
		High	846.5	27015	26/0	QPSK	-22.34	-13	-9.34
	3	Low	825.5	26805	15/0	QPSK	-17.26	-13	-4.26
		High	847.5	27026	15/0	QPSK	-19.4	-13	-6.40
	1.4	Low	824.7	26797	6/0	QPSK	-17.63	-13	-4.63
		High	848.3	27033	6/0	QPSK	-18.26	-13	-5.26

Plot 4-51 Band Edge Plot - LTE Band26/5 - [15MHz] [Full RB] [Low Channel] [QPSK] [Ant 2]

Plot 4-52 Band Edge Plot - LTE Band26/5 - [15MHz] [Full RB] [High Channel] [QPSK] [Ant 2]

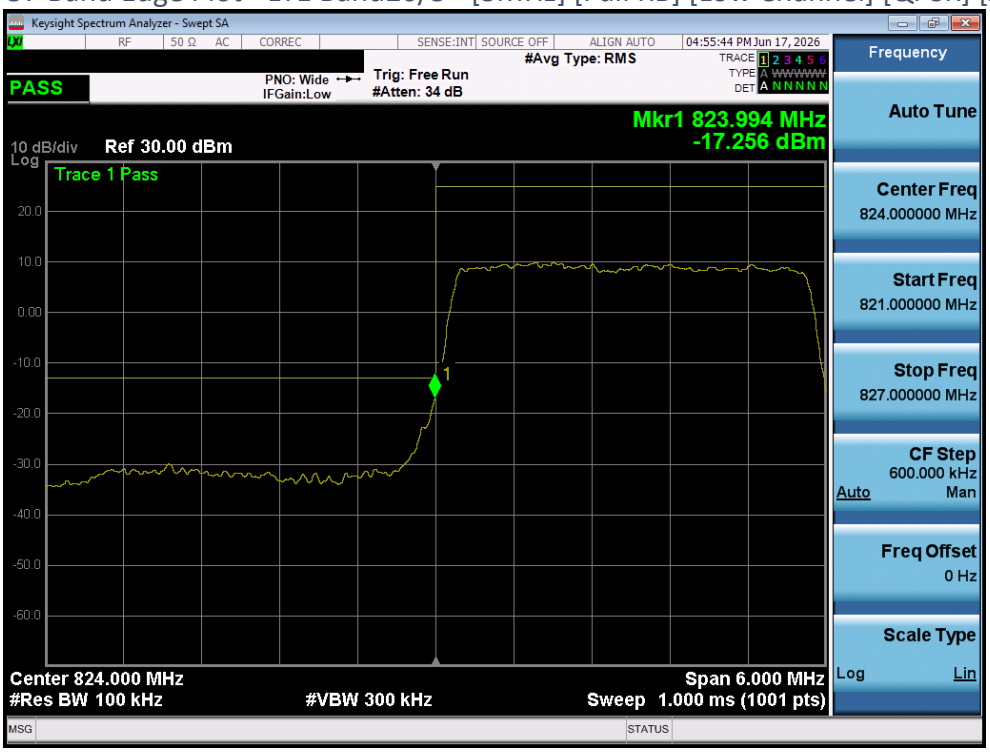
Plot 4-53 Band Edge Plot - LTE Band26/5 - [10MHz] [Full RB] [Low Channel] [QPSK] [Ant 2]

Plot 4-54 Band Edge Plot - LTE Band26/5 - [10MHz] [Full RB] [High Channel] [QPSK] [Ant 2]

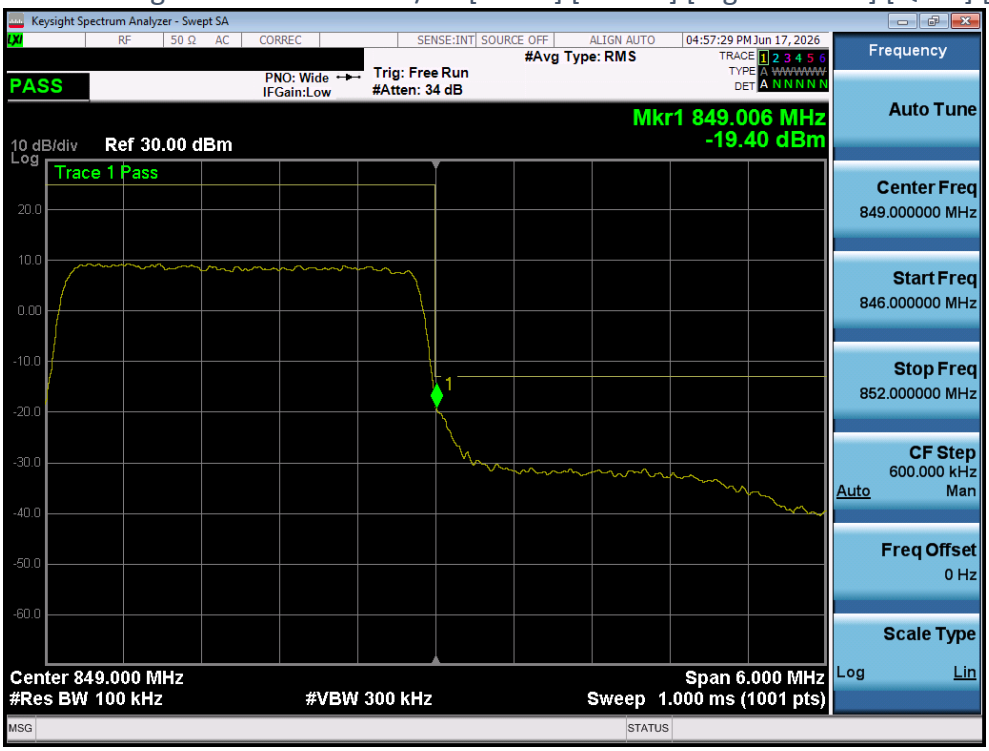
Plot 4-55 Band Edge Plot - LTE Band26/5 - [5MHz] [Full RB] [Low Channel] [QPSK] [Ant 2]

Plot 4-56 Band Edge Plot - LTE Band26/5 - [5MHz] [Full RB] [High Channel] [QPSK] [Ant 2]

Plot 4-57 Band Edge Plot - LTE Band26/5 - [3MHz] [Full RB] [Low Channel] [QPSK] [Ant 2]



Plot 4-58 Band Edge Plot - LTE Band26/5 - [3MHz] [Full RB] [High Channel] [QPSK] [Ant 2]



Plot 4-59 Band Edge Plot - LTE Band26/5 - [1.4MHz] [Full RB] [Low Channel] [QPSK] [Ant 2]

Plot 4-60 Band Edge Plot - LTE Band26/5 - [1.4MHz] [Full RB] [High Channel] [QPSK] [Ant 2]

4.7. Conducted Spurious Emissions

4.7.1. Regulatory Limit

§Part. 22.917(a)

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

RSS-132(5.5)

The power of emissions in any 100 kHz bandwidth shall be attenuated below the transmitter output power P (dBW) by at least 43 + 10 log(p) dB. “p” is the output power specified in watts.

4.7.2. Test Method

ANSI C63.26-2015, clause 5.7.4

4.7.3. Test Procedure

The measurement range defined by the start and stop frequencies was subdivided based on the frequency block requirements. The procedure for this method is follows:

a) Set RBW = 1 MHz
b) Set the VBW ≥ 3 x RBW
c) Detector = RMS
d) Trace Mode = Average
e) Set Number of points Sweep ≥ [2 x (span / RBW)]
f) When unwanted noise or emissions are detected close to the limit, the sweep time is increased to perform a detailed measurement and capture the accurate signal level. (sweep time > number of points in sweep × symbol period)

<u>Test Note</u>

- ✓ All out of band spurious emissions were measured up to more than the 10th harmonic.
- ✓ Tests were conducted under QPSK modulation, which represents the worst-case scenario with the highest power level across all bandwidths.
- ✓ Although all transmission bandwidths and RB allocations including Full RB and 1 RB were evaluated, only the worst-case results are reported herein.
- ✓ Frequency Ranges A, B, and C represent separate out-of-band emission frequency ranges for each operating band.

4.7.4. Test Results

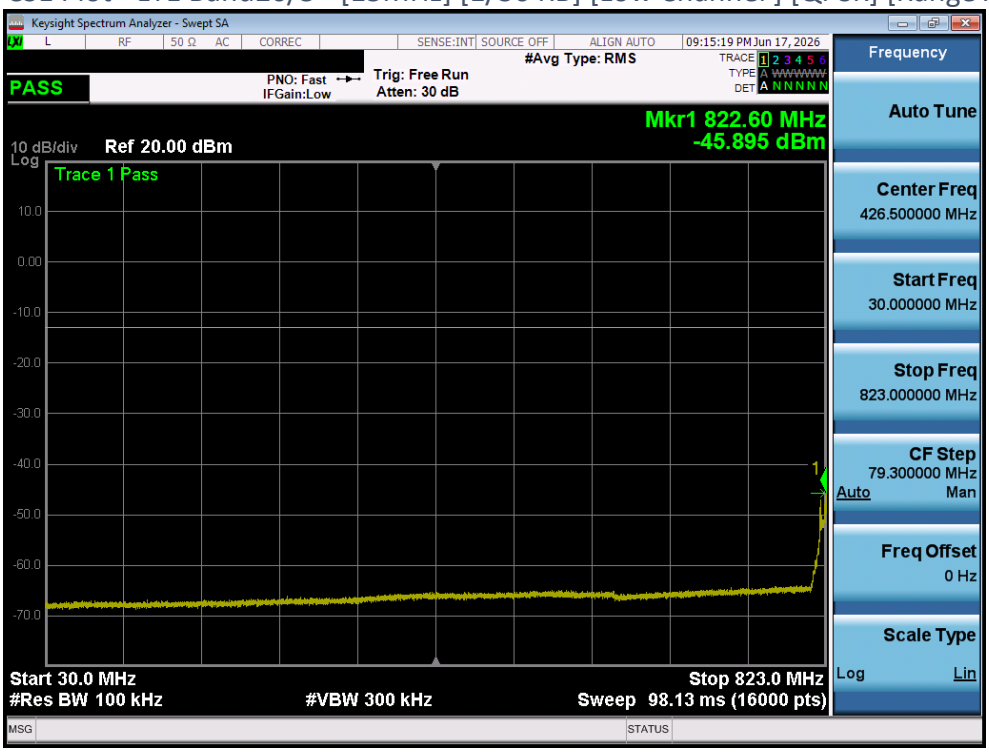
Table 4-6 Conducted Spurious Emissions Data Ant1

Band	Band Width [MHz]	Channel	Frequency [MHz]	Earfcn UL	RB Size/Offset	Modulation	Range	Level [dBm]	Limit [dBm]	Margin [dB]
LTE Band 26/5	15	Low	831.5	26865	1/36	QPSK	A	-45.90	-13	-32.90
							B	-62.18	-13	-49.18
							C	-40.74	-13	-27.74
		Mid	836.5	26915	1/36	QPSK	A	-50.42	-13	-37.42
							B	-52.79	-13	-39.79
							C	-40.96	-13	-27.96
		High	841.5	26965	1/36	QPSK	A	-61.85	-13	-48.85
							B	-48.97	-13	-35.97
							C	-41.03	-13	-28.03

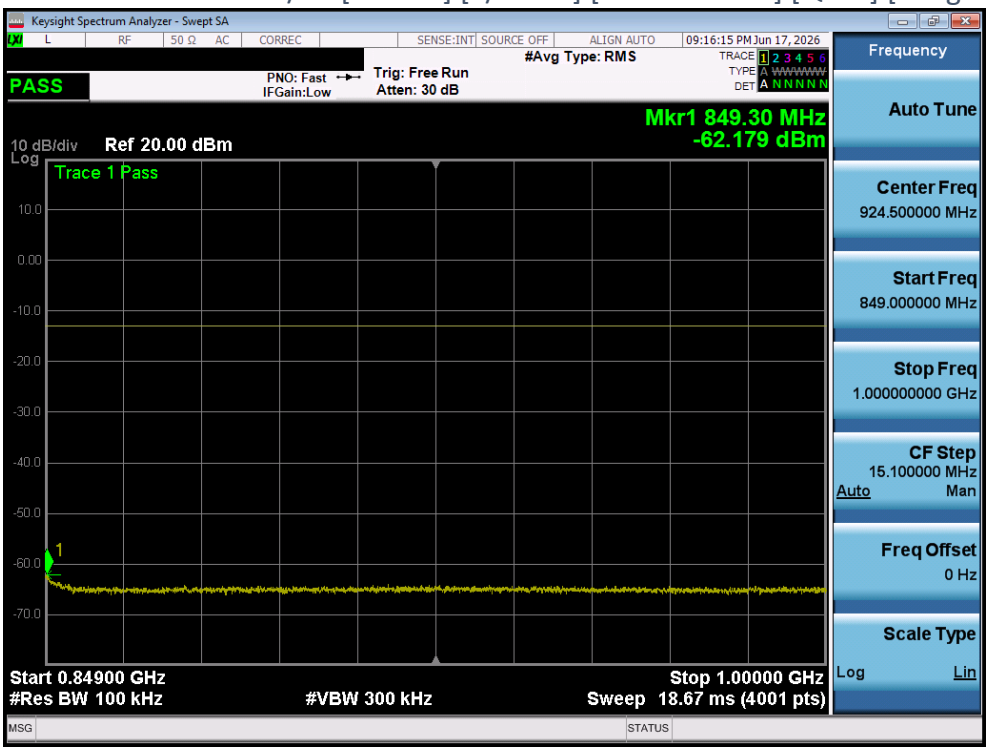
Table 4-7 Conducted Spurious Emissions Data Ant2

Band	Band Width [MHz]	Channel	Frequency [MHz]	Earfcn UL	RB Size/Offset	Modulation	Range	Level [dBm]	Limit [dBm]	Margin [dB]
LTE Band 26/5	15	Low	831.5	26865	1/36	QPSK	A	-46.42	-13	-33.42
							B	-62.89	-13	-49.89
							C	-39.11	-13	-26.11
		Mid	836.5	26915	1/36	QPSK	A	-51.40	-13	-38.40
							B	-53.69	-13	-40.69
							C	-38.65	-13	-26.65
		High	841.5	26965	1/36	QPSK	A	-60.19	-13	-47.19
							B	-48.24	-13	-35.24
							C	-41.06	-13	-28.06

Plot 4-61 CSE Plot - LTE Band26/5 - [15MHz] [1/36 RB] [Low Channel] [QPSK] [Range A] [Ant 1]

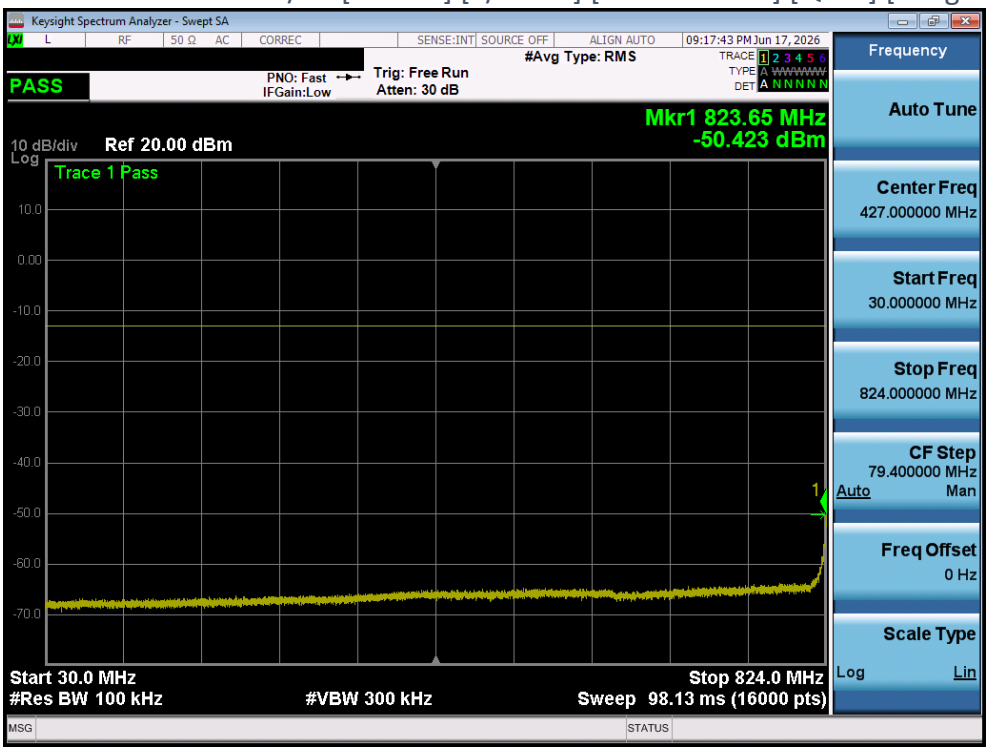


Plot 4-62 CSE Plot - LTE Band26/5 - [15MHz] [1/36 RB] [Low Channel] [QPSK] [Range B] [Ant 1]

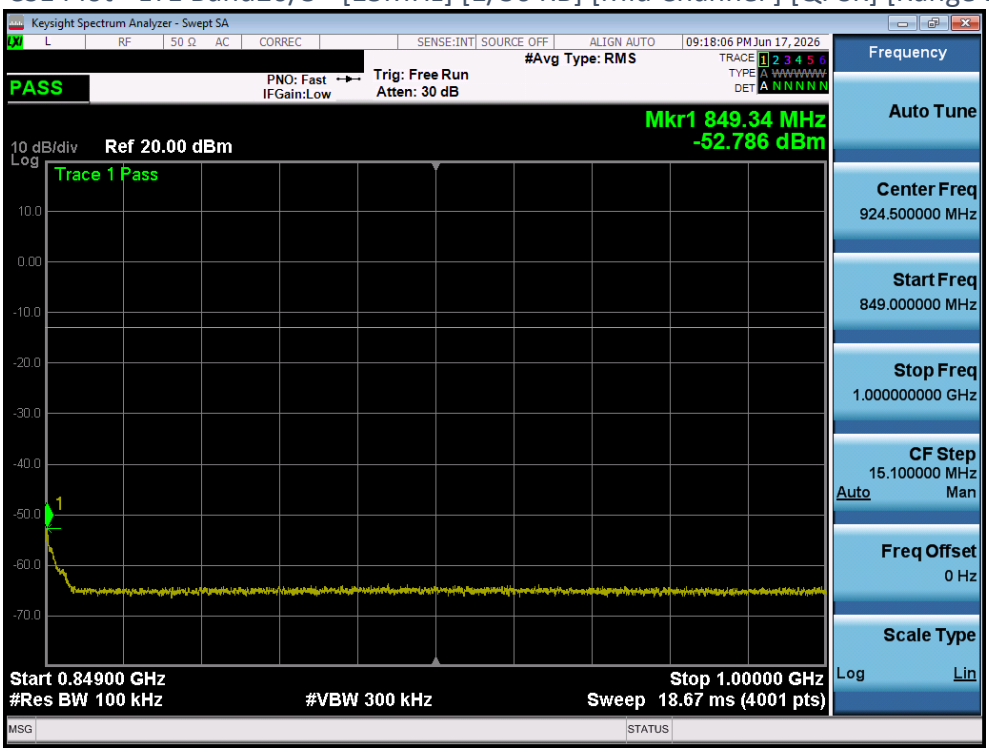


Plot 4-63 CSE Plot - LTE Band26/5 - [15MHz] [1/36 RB] [Low Channel] [QPSK] [Range C] [Ant 1]

Plot 4-64 CSE Plot - LTE Band26/5 - [15MHz] [1/36 RB] [Mid Channel] [QPSK] [Range A] [Ant 1]

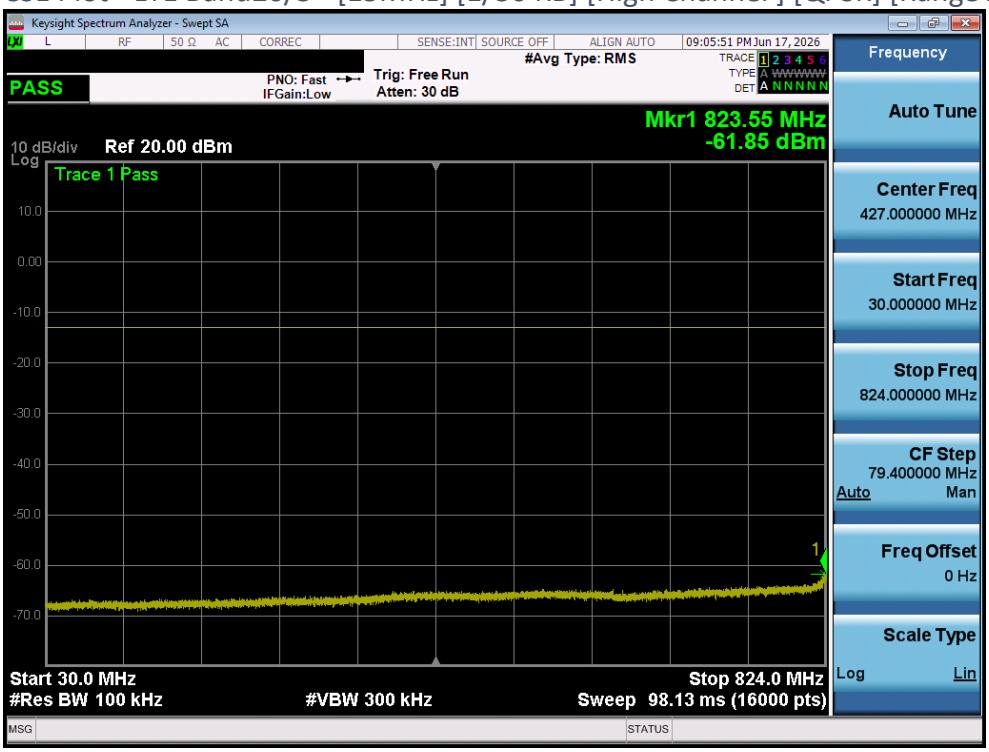


Plot 4-65 CSE Plot - LTE Band26/5 - [15MHz] [1/36 RB] [Mid Channel] [QPSK] [Range B] [Ant 1]

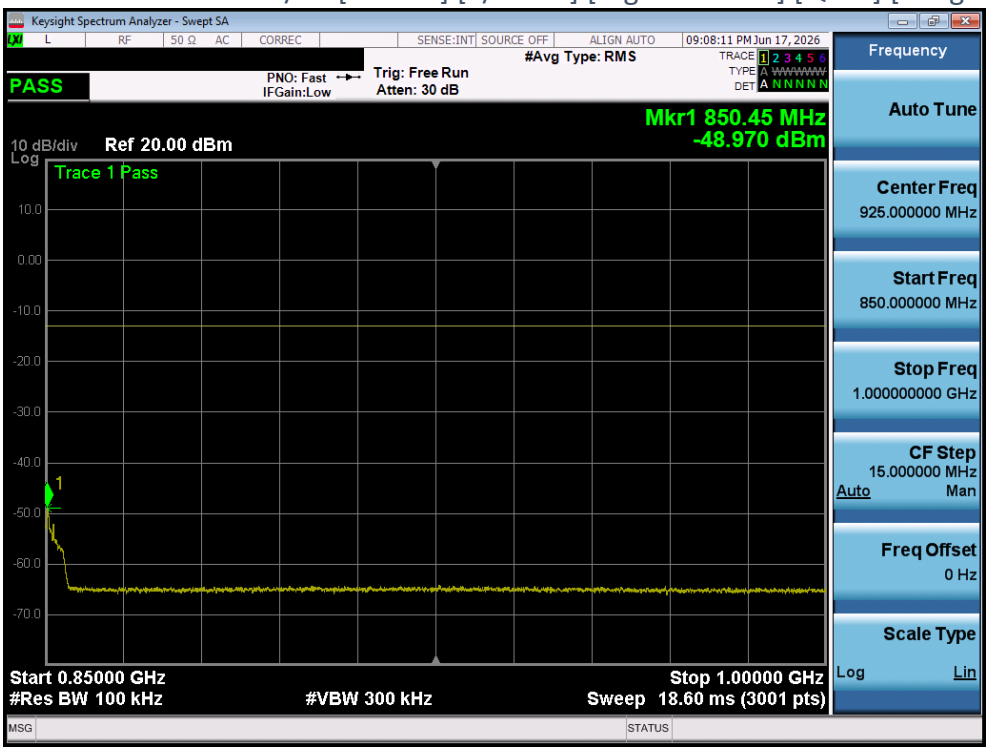


Plot 4-66 CSE Plot - LTE Band26/5 - [15MHz] [1/36 RB] [Mid Channel] [QPSK] [Range C] [Ant 1]

Plot 4-67 CSE Plot - LTE Band26/5 - [15MHz] [1/36 RB] [High Channel] [QPSK] [Range A] [Ant 1]

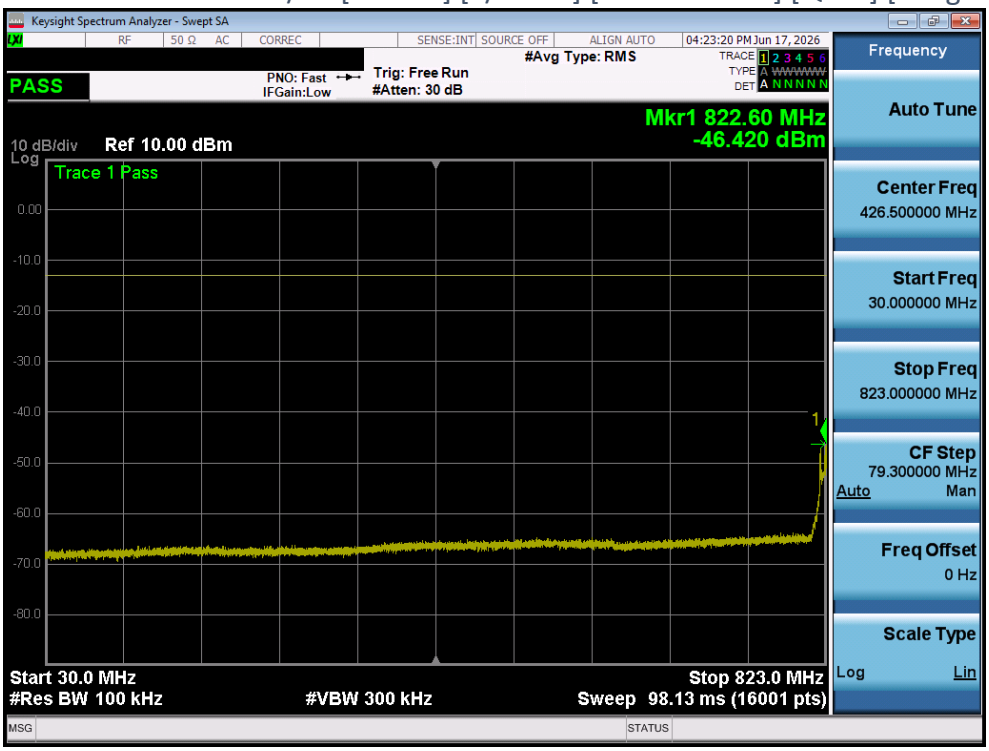


Plot 4-68 CSE Plot - LTE Band26/5 - [15MHz] [1/36 RB] [High Channel] [QPSK] [Range B] [Ant 1]

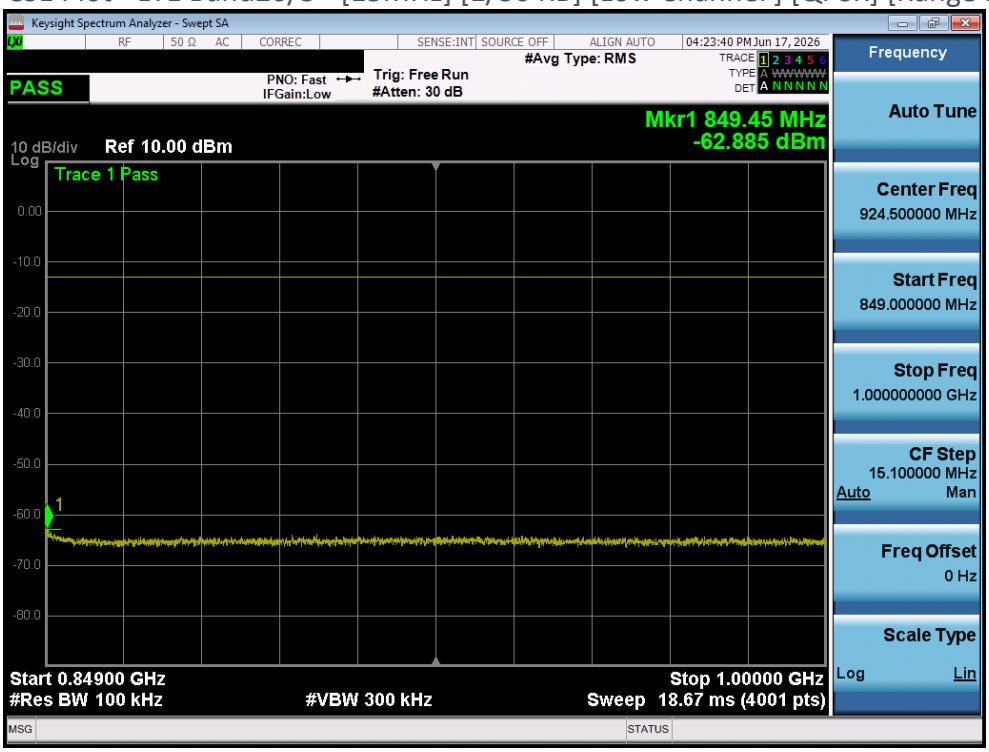


Plot 4-69 CSE Plot - LTE Band26/5 - [15MHz] [1/36 RB] [High Channel] [QPSK] [Range C] [Ant 1]

Plot 4-70 CSE Plot - LTE Band26/5 - [15MHz] [1/36 RB] [Low Channel] [QPSK] [Range A] [Ant 2]

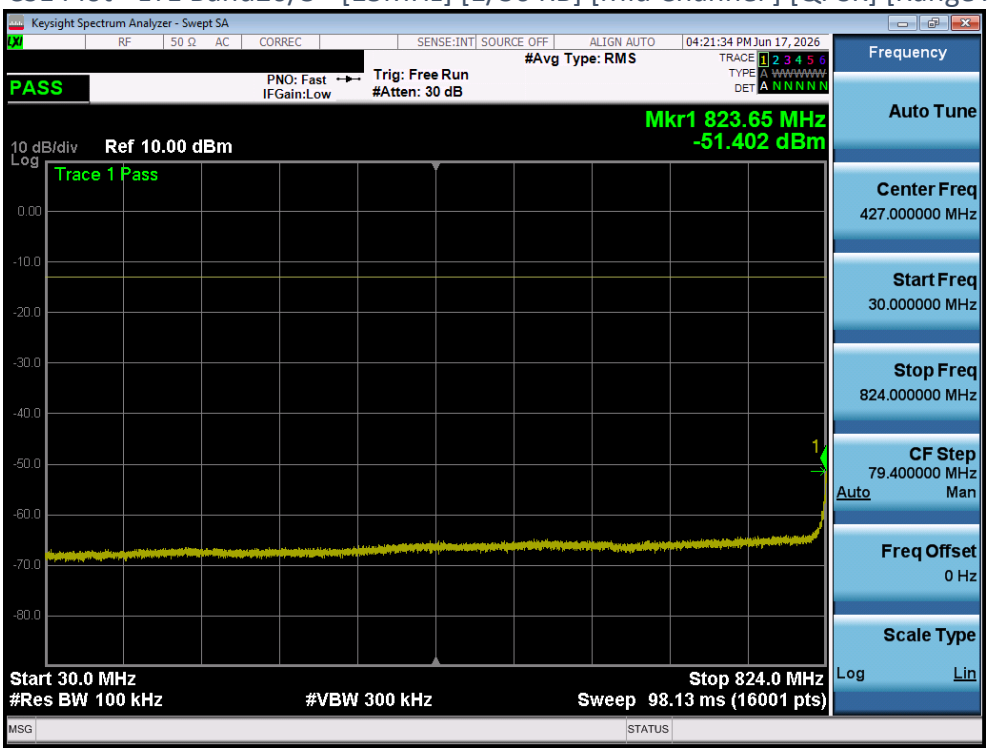


Plot 4-71 CSE Plot - LTE Band26/5 - [15MHz] [1/36 RB] [Low Channel] [QPSK] [Range B] [Ant 2]

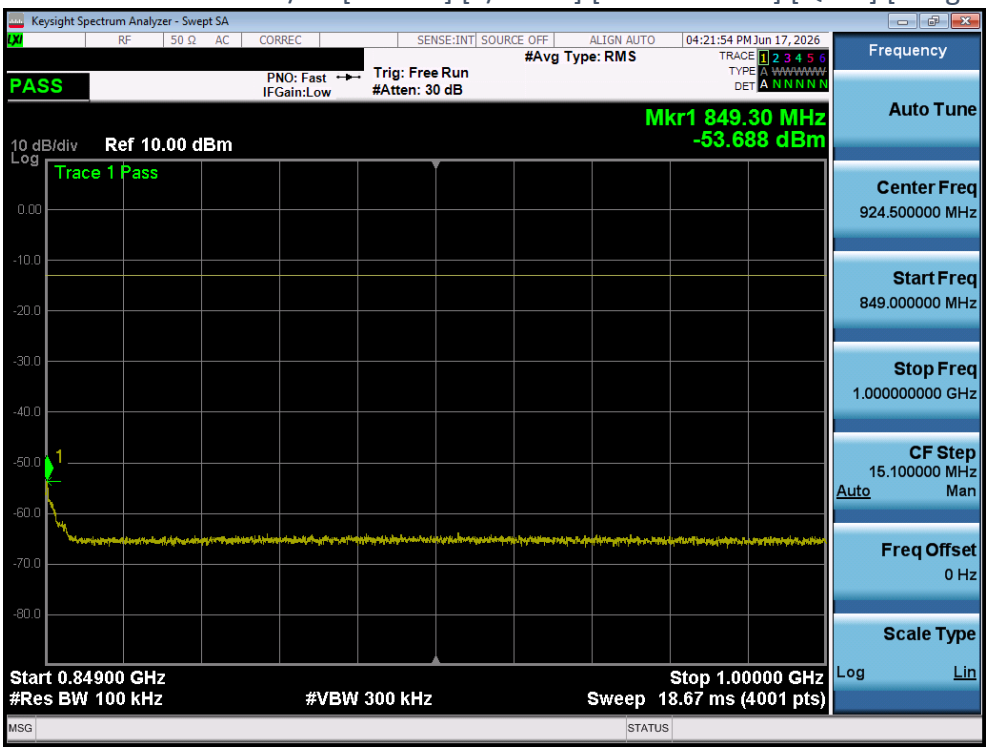


Plot 4-72 CSE Plot - LTE Band26/5 - [15MHz] [1/36 RB] [Low Channel] [QPSK] [Range C] [Ant 2]

Plot 4-73 CSE Plot - LTE Band26/5 - [15MHz] [1/36 RB] [Mid Channel] [QPSK] [Range A] [Ant 2]

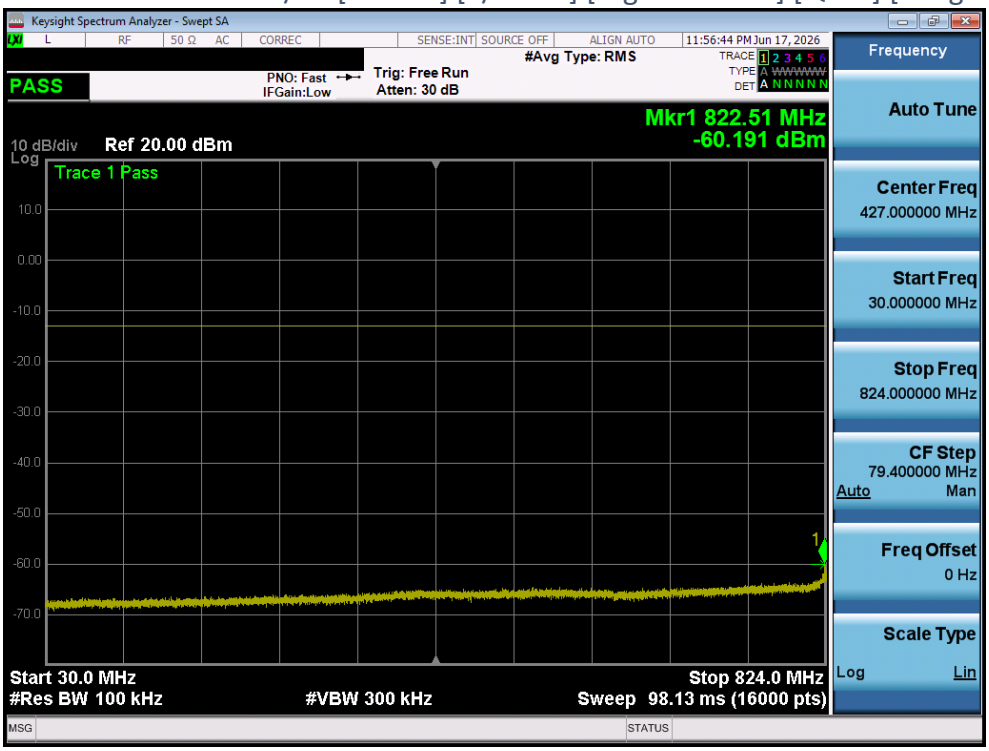


Plot 4-74 CSE Plot - LTE Band26/5 - [15MHz] [1/36 RB] [Mid Channel] [QPSK] [Range B] [Ant 2]

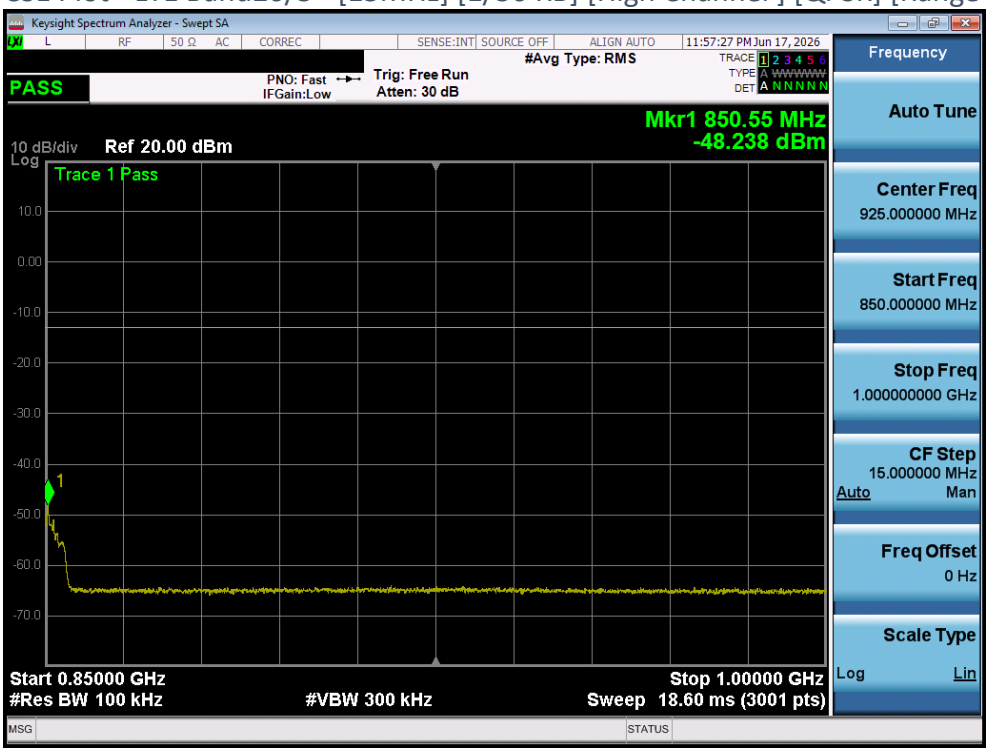


Plot 4-75 CSE Plot - LTE Band26/5 - [15MHz] [1/36 RB] [Mid Channel] [QPSK] [Range C] [Ant 2]

Plot 4-76 CSE Plot - LTE Band26/5 - [15MHz] [1/36 RB] [High Channel] [QPSK] [Range A] [Ant 2]



Plot 4-77 CSE Plot - LTE Band26/5 - [15MHz] [1/36 RB] [High Channel] [QPSK] [Range B] [Ant 2]



Plot 4-78 CSE Plot - LTE Band26/5 - [15MHz] [1/36 RB] [High Channel] [QPSK] [Range C] [Ant 2]

4.8. Frequency Stability

4.8.1. Regulatory Limits

§Part. 22.355

The carrier frequency shall not depart from the reference frequency, in excess of ±2.5 ppm for mobile stations

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The frequency stability shall be sufficient to ensure that the occupied bandwidth stays within the operating frequency block or frequency block group when tested to the temperature and supply voltage variations specified in RSS-Gen.

4.8.2. Test Method

ANSI C63.26-2015, clause 5.6

4.8.3. Test Procedure

The frequency error function of the call simulator was used.
The procedure for this method is follows:

a) Place the test sample (EUT) inside the temperature chamber
b) Reference Measurement - Set the chamber to +20℃ and wait until both the chamber and the EUT i nternal components are completely stabilized under the nominal voltage condition.
c) Connect the dummy load provided by the client and perform the measurement at the battery opera ting end point voltage.
d) High-Temperature - increase the chamber temperature to +50℃.
e) Incremental Temperature - lower the chamber temperature in 10℃（+50℃ ～ -30℃）

Test Note

- ✓ The supply voltage was varied using the dummy load provided by the customer, and the battery operating end point voltage was verified.
- ✓ Sufficient time was allowed for the EUT to stabilize under all temperature conditions.
- ✓ Frequency stability was evaluated at both the low and high operating channels to verify that the transmitter remains within the authorized frequency block across the operating frequency range.
- ✓ Nominal voltage – 3.89 VDC, Endpoint – 2.85 VDC
- ✓ For the frequency stability measurement, Also the OBW function of the spectrum analyzer was used.

4.8.4. Test Results

Table 4-8 Frequency Stability Data - ppm

Band	Channel	Voltage Condition	Temp [℃]	Frequency [Hz]	Dev [Hz]	Dev [ppm]	Limit [ppm]
LTE Band 26/5	Low	Nominal	+50	831,499,986	-5.90	-0.007	2.5
			+40	831,499,993	1.40	0.002	2.5
			+30	831,499,981	-11.00	-0.013	2.5
			+20	831,499,992	0.00	0.000	2.5
			+10	831,500,014	21.90	0.026	2.5
			0	831,500,003	11.40	0.014	2.5
			-10	831,500,009	17.20	0.021	2.5
			-20	831,499,989	-2.70	-0.003	2.5
			-30	831,499,995	2.60	0.003	2.5
		Endpoint	+20	831,500,010	18.30	0.022	2.5
	Channel	Voltage Condition	Temp [℃]	Frequency [Hz]	Dev [Hz]	Dev [ppm]	Limit [ppm]
	High	Nominal	+50	841,500,008	11.90	0.006	2.5
			+40	841,499,990	-6.20	-0.003	2.5
			+30	841,500,025	29.20	0.016	2.5
			+20	841,499,996	0.00	0.000	2.5
			+10	841,499,989	-6.60	-0.004	2.5
			0	841,500,011	15.40	0.008	2.5
			-10	841,499,990	-6.00	-0.003	2.5
			-20	841,499,986	-9.90	-0.005	2.5
			-30	841,500,000	4.30	0.002	2.5
		Endpoint	+20	841,500,021	24.70	0.013	2.5

*Note - Temp '+20°C' condition is reference

Table 4-9 Frequency Stability Data

Band	Channel	Voltage Condition	Temp [℃]	OBW T1 [Hz]	Limit	Pass/Fail
LTE Band 26/5	Low	Nominal	+50	824,468,800	824,000,000	PASS
			+40	824,454,890	824,000,000	PASS
			+30	824,478,240	824,000,000	PASS
			+20	824,466,770	824,000,000	PASS
			+10	824,469,890	824,000,000	PASS
			0	824,474,870	824,000,000	PASS
			-10	824,462,300	824,000,000	PASS
			-20	824,467,340	824,000,000	PASS
			-30	824,467,580	824,000,000	PASS
		Endpoint	+20	824,475,140	824,000,000	PASS
	Channel	Voltage Condition	Temp [℃]	OBW T2 [Hz]	Limit	Pass/Fail
	High	Nominal	+50	848,489,060	849,000,000	PASS
			+40	848,483,630	849,000,000	PASS
			+30	848,496,420	849,000,000	PASS
			+20	848,478,900	849,000,000	PASS
			+10	848,505,920	849,000,000	PASS
			0	848,503,310	849,000,000	PASS
			-10	848,499,230	849,000,000	PASS
			-20	848,481,380	849,000,000	PASS
			-30	848,498,580	849,000,000	PASS
		Endpoint	+20	848,498,250	849,000,000	PASS

*Note - Temp '+20°C' condition is reference

5. Radiated Test Results

5.1. Test Configuration

Radiated Test Facilities & Setup

Radiated emissions testing was conducted in an indoor 3-meter semi-anechoic chamber (SAC). For all frequency ranges, the turntable was rotated 360° and the receive antenna height was varied from 1 m to 4 m to maximize emissions. The specific test setups and calibrated, linearly polarized antennas utilized are as follows:

- 9 kHz to 30 MHz : DUT height at 0.8 m / Active Loop Antenna
- 30 MHz to 1 GHz : DUT height at 0.8 m / No floor absorbers / Broadband Bi-log Antenna
- 1 GHz to 18 GHz : DUT height at 1.5 m / Floor absorbers deployed / Broadband Double-Ridge Horn Antenna
- Above 18 GHz : DUT height at 1.5 m / Floor absorbers deployed / Standard Gain Horn Antenna

Test Orientations

The DUT was investigated in three orthogonal orientations (X, Y, and Z) for each band. Since the equipment transmits below 10 GHz, Radiated Spurious Emissions testing was performed from 9 kHz up to the lower of the tenth harmonic of the highest fundamental frequency or 40 GHz. Testing from 1 GHz to 18 GHz was performed on the low, mid, and high channels. Testing below 1 GHz and above 18 GHz was conducted only under the worst-case configuration. In accordance with ANSI C63.26, measurement results for the 9 kHz to 30 MHz range and frequencies above 18 GHz are included in the report only when emissions are detected within 20 dB of the applicable limit.

Figure 5-1 Three orthogonal orientations.

Radiated emissions were captured using automated test software 'NGTL ATE' Ver. 0.00.

5.2. Radiated Measurement Setup

Figure 5-2 Radiated Measurement Setup Below 30 MHz

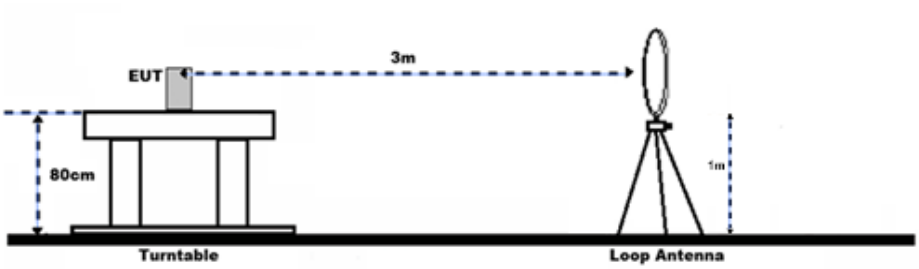


Figure 5-3 Radiated Measurement Setup Below 1 GHz

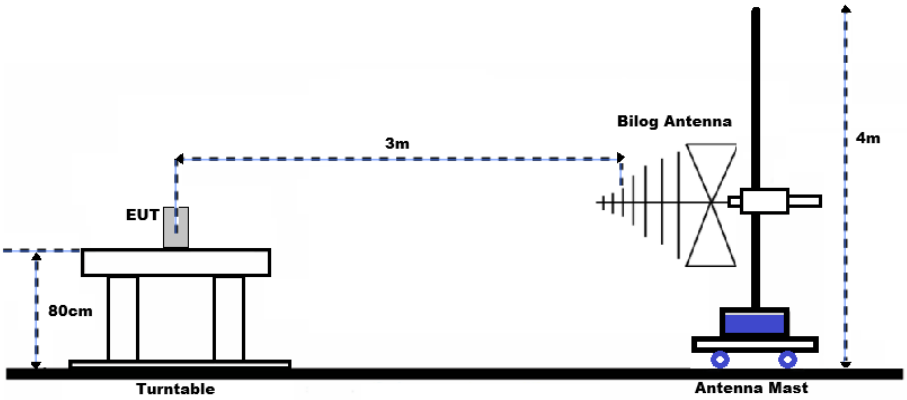
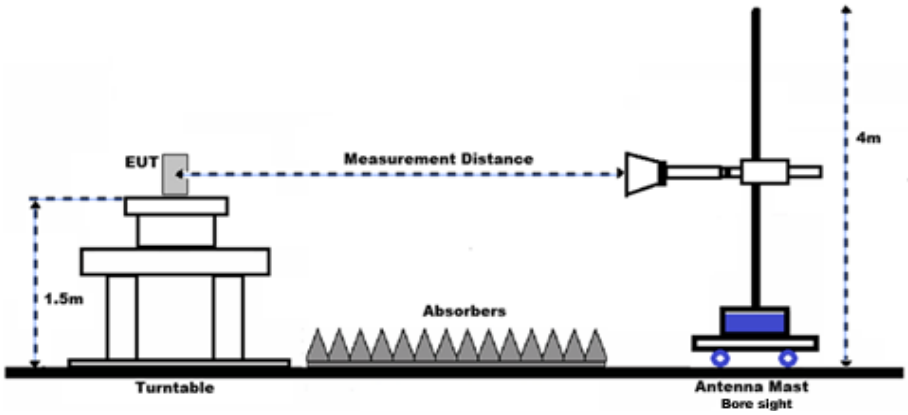


Figure 5-4 Radiated Measurement Setup Above 1 GHz



5.3. Radiated Measurement Sample

Serial Number(s) : ZF50735M, ZEE0154M, ZDR0217M

5.4. Radiated Power

5.4.1. Regulatory Limit

§ Part 22.913(a)(5)

The ERP of mobile transmitters and auxiliary test transmitters must not exceed 7 watts.

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The transmitter output power shall be measured in terms of average power. The equivalent radiated power (e.r.p.) shall not exceed 7 watts for mobile equipment.

5.4.2. Test Method

ANSI C63.26 – 2015, clause 5.2.4.2

5.4.3. Test Procedure

The procedure for Average measurement is follows:

a) Connect the power sensor to the EMI receiver and then perform zeroing and calibration.
b) Connect the DUT to a wideband gated RF power sensor.
c) Configure the DUT to transmit at its maximum power control level.
d) Record the maximum power level
e) When the burst duty cycle is below 98%, a trigger/gate is utilized to ensure power is measured only during active full-power transmission bursts.

Test Note

- ✓ For this test, substitution measurements were performed in a 3m semi-anechoic chamber that meets both normalized site attenuation (NSA) and SVWSR requirements.
- ✓ For the test in this section, a power sensor was connected to the EMI receiver. Signal maximizing was performed using the receiver, while the power measurement was conducted using the sensor. A splitter was placed at the input of the receiver to distribute the signal to both the receiver and the sensor, and the resulting loss was compensated as an offset in the power sensor.

5.4.4. Test Results

Table 5-1 Effective Radiated Power (ERP) Data LTE Band26/5 – ANT 1

BW [MHz]	Modulation	Ant. Pol.	Antenna Height [m]	Turntable Azimuth [deg °]	RB Size	RB Offset	Frequency [MHz] / Earfcn / ERP [dBm]			Limit [dBm]	Margin at Max Power [dB]
							831.5	836.5	841.5		
							26865	26915	26965		
15	QPSK	H	1.11	174	1	0	20.92	20.82	20.62	38.45	-17.53
		H	1.12	172	1	36	20.98	20.52	20.41		-17.47
		H	1.12	171	1	74	20.09	20.38	19.75		-18.07
		H	1.12	345	75	0	20.06	19.76	19.36		-18.39
	16QAM	H	1.11	174	1	0	20.30	20.11	19.77		-18.15
		H	1.12	172	1	36	20.53	19.74	19.46		-17.92
		H	1.12	171	1	74	19.22	19.55	18.90		-18.90
		H	1.12	345	75	0	19.03	18.68	18.30		-19.42
BW [MHz]	Modulation	Ant. Pol.	Antenna Height [m]	Turntable Azimuth [deg °]	RB Size	RB Offset	Frequency [MHz] / Earfcn / ERP [dBm]			Limit [dBm]	Margin at Max Power [dB]
							829	836.5	844		
							26840	26915	26990		
10	QPSK	H	1.11	174	1	0	20.89	20.72	20.65	38.45	-17.56
		H	1.12	172	1	25	20.88	20.52	19.30		-17.57
		H	1.12	171	1	49	20.02	20.39	19.70		-18.06
		H	1.12	345	50	0	19.98	19.61	19.14		-18.47
	16QAM	H	1.11	174	1	0	20.24	19.99	19.87		-18.21
		H	1.12	172	1	25	20.34	19.77	19.58		-18.11
		H	1.12	171	1	49	19.24	19.47	19.03		-18.98
		H	1.12	345	50	0	19.00	18.62	18.14		-19.45
BW [MHz]	Modulation	Ant. Pol.	Antenna Height [m]	Turntable Azimuth [deg °]	RB Size	RB Offset	Frequency [MHz] / Earfcn / ERP [dBm]			Limit [dBm]	Margin at Max Power [dB]
							826.5	836.5	846.5		
							26815	26915	27015		
5	QPSK	H	1.11	174	1	0	20.88	20.67	20.54	38.45	-17.57
		H	1.12	172	1	12	20.95	20.51	20.33		-17.50
		H	1.12	171	1	24	20.12	20.37	19.72		-18.08
		H	1.12	345	25	0	20.03	19.57	19.19		-18.42
	16QAM	H	1.11	174	1	0	20.37	19.00	19.84		-18.08
		H	1.12	172	1	12	20.51	19.76	19.34		-17.94
		H	1.12	171	1	24	19.41	19.61	19.04		-18.84
		H	1.12	345	25	0	19.10	18.55	18.17		-19.35
BW [MHz]	Modulation	Ant. Pol.	Antenna Height [m]	Turntable Azimuth [deg °]	RB Size	RB Offset	Frequency [MHz] / Earfcn / ERP [dBm]			Limit [dBm]	Margin at Max Power [dB]
							825.5	836.5	847.5		
							26805	26915	27025		
3	QPSK	H	1.11	174	1	0	20.90	20.62	20.69	38.45	-17.55
		H	1.12	172	1	7	21.18	20.40	20.41		-17.27
		H	1.12	171	1	14	20.10	20.36	19.70		-18.09
		H	1.12	345	15	0	20.11	19.57	19.18		-18.34
	16QAM	H	1.11	174	1	0	20.25	19.88	19.96		-18.20
		H	1.12	172	1	7	20.62	19.63	19.43		-17.83
		H	1.12	171	1	14	19.25	19.50	18.89		-18.95
		H	1.12	345	15	0	19.09	18.56	18.22		-19.36
BW [MHz]	Modulation	Ant. Pol.	Antenna Height [m]	Turntable Azimuth [deg °]	RB Size	RB Offset	Frequency [MHz] / Earfcn / ERP [dBm]			Limit [dBm]	Margin at Max Power [dB]
							824.7	836.5	848.3		
							26797	26915	27033		
1.4	QPSK	H	1.11	174	1	0	20.93	20.67	20.57	38.45	-17.52
		H	1.12	172	1	3	20.95	20.60	20.25		-17.50
		H	1.12	171	1	5	20.08	20.28	19.74		-18.17
		H	1.12	345	6	0	20.11	19.68	19.22		-18.34
	16QAM	H	1.11	174	1	0	20.21	19.96	19.95		-18.24
		H	1.12	172	1	3	20.35	19.88	19.37		-18.10
		H	1.12	171	1	5	19.20	19.56	18.97		-18.89
		H	1.12	345	6	0	19.19	18.70	18.24		-19.26

Table 5-2 Effective Radiated Power (ERP) Data LTE Band26/5 – ANT 2

BW [MHz]	Modulation	Ant. Pol.	Antenna Height [m]	Turntable Azimuth [deg °]	RB Size	RB Offset	Frequency [MHz] / Earfcn / ERP [dBm]			Limit [dBm]	Margin at Max Power [dB]
							831.5	836.5	841.5		
							26865	26915	26965		
15	QPSK	H	1.11	205	1	0	20.44	20.27	19.47	38.45	-18.01
		H	1.11	208	1	36	20.13	19.15	19.05		-18.32
		H	1.11	209	1	74	18.72	18.94	18.35		-19.51
		H	1.11	211	75	0	19.05	18.38	17.93		-19.40
	16QAM	H	1.11	205	1	0	20.08	19.45	18.56		-18.37
		H	1.11	208	1	36	19.50	18.19	18.13		-18.95
		H	1.11	209	1	74	17.77	18.06	17.45		-20.39
		H	1.11	211	75	0	18.03	17.37	16.93		-20.42
BW [MHz]	Modulation	Ant. Pol.	Antenna Height [m]	Turntable Azimuth [deg °]	RB Size	RB Offset	Frequency [MHz] / Earfcn / ERP [dBm]			Limit [dBm]	Margin at Max Power [dB]
							829	836.5	844		
							26840	26915	26990		
10	QPSK	H	1.11	205	1	0	20.43	20.28	19.30	38.45	-18.02
		H	1.11	208	1	25	20.08	19.24	18.95		-18.37
		H	1.11	209	1	49	18.72	18.87	18.34		-19.58
		H	1.11	211	50	0	18.95	18.37	17.77		-19.50
	16QAM	H	1.11	205	1	0	20.14	19.38	18.51		-18.31
		H	1.11	208	1	25	19.40	18.21	18.23		-19.05
		H	1.11	209	1	49	17.90	18.08	17.46		-20.37
		H	1.11	211	50	0	18.01	17.38	16.80		-20.44
BW [MHz]	Modulation	Ant. Pol.	Antenna Height [m]	Turntable Azimuth [deg °]	RB Size	RB Offset	Frequency [MHz] / Earfcn / ERP [dBm]			Limit [dBm]	Margin at Max Power [dB]
							826.5	836.5	846.5		
							26815	26915	27015		
5	QPSK	H	1.11	205	1	0	20.50	20.25	19.23	38.45	-17.95
		H	1.11	208	1	12	20.00	19.17	18.81		-18.45
		H	1.11	209	1	24	18.75	18.97	18.33		-19.48
		H	1.11	211	25	0	19.05	18.34	17.70		-19.40
	16QAM	H	1.11	205	1	0	20.24	19.47	18.43		-18.21
		H	1.11	208	1	12	19.54	18.27	17.93		-18.91
		H	1.11	209	1	24	17.99	18.18	17.49		-20.27
		H	1.11	211	25	0	18.11	17.33	16.73		-20.34
BW [MHz]	Modulation	Ant. Pol.	Antenna Height [m]	Turntable Azimuth [deg °]	RB Size	RB Offset	Frequency [MHz] / Earfcn / ERP [dBm]			Limit [dBm]	Margin at Max Power [dB]
							825.5	836.5	847.5		
							26805	26915	27025		
3	QPSK	H	1.11	205	1	0	20.44	20.19	19.20	38.45	-18.01
		H	1.11	208	1	7	20.21	19.07	18.89		-18.24
		H	1.11	209	1	14	18.67	18.88	18.27		-19.57
		H	1.11	211	15	0	18.99	18.32	17.72		-19.46
	16QAM	H	1.11	205	1	0	20.11	19.29	18.33		-18.34
		H	1.11	208	1	7	19.60	18.11	18.08		-18.85
		H	1.11	209	1	14	17.92	18.01	17.38		-20.44
		H	1.11	211	15	0	17.99	17.29	16.75		-20.46
BW [MHz]	Modulation	Ant. Pol.	Antenna Height [m]	Turntable Azimuth [deg °]	RB Size	RB Offset	Frequency [MHz] / Earfcn / ERP [dBm]			Limit [dBm]	Margin at Max Power [dB]
							824.7	836.5	848.3		
							26797	26915	27033		
1.4	QPSK	H	1.11	205	1	0	20.38	20.11	19.11	38.45	-18.07
		H	1.11	208	1	3	20.19	19.19	18.71		-18.26
		H	1.11	209	1	5	18.79	18.96	18.33		-19.49
		H	1.11	211	6	0	19.02	18.33	17.73		-19.43
	16QAM	H	1.11	205	1	0	20.05	19.31	18.35		-18.40
		H	1.11	208	1	3	19.66	18.29	17.83		-18.79
		H	1.11	209	1	5	18.01	18.04	17.35		-20.41
		H	1.11	211	6	0	18.05	17.41	16.79		-20.40

5.5. Radiated Spurious Emissions

5.5.1. Regulatory Limit

§ Part 22.917(a)

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

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The power of emissions in any 100 kHz bandwidth shall be attenuated below the transmitter output power P (dBW) by at least 43 + 10 log(p) dB. “p” is the output power specified in watts.

5.5.2. Test Method

ANSI C63.26 – 2015, clause 5.5.4

5.5.3. Test Procedure

The procedure for this method is follows:

a) Set RBW = 1 MHz
   100 kHz if the authorized frequency band/block is at or below 1 GHz
   1 MHz if the authorized frequency band/block is above 1 GHz
b) Set the VBW ≥ 3 X RBW
c) Detector = RMS
d) Trace mode = Average
e) Set Number of points Sweep ≥ 2x (span / RBW)

5.5.4. Sample Calculation

Where relevant, the following sample calculation is provided:

E (dBµV/m) = Measured amplitude level (dBm) + 107 + Cable Loss (dB) + Antenna Factor (dB/m).

EIRP (dBm) = E (dBµV/m) + 20log(D) − 104.8;

where D is the measurement distance (in the far field region) in m.

Test Note

- ✓ The DUT incorporates an integral antenna, and testing was performed in a radiated configuration
- ✓ Radiated Unwanted emissions were measured using the direct radiated field strength method on a validated test site in accordance with the requirements of ANSI C63.4.
- ✓ The EUT was oriented in three orthogonal axes (X, Y, and Z), and only the worst-case emissions are reported.
- ✓ In accordance with ANSI C63.26 Section 5.5.2.5, a pre-scan was performed, and the final compliance tests were conducted using the designated detector at the worst-case parameters.