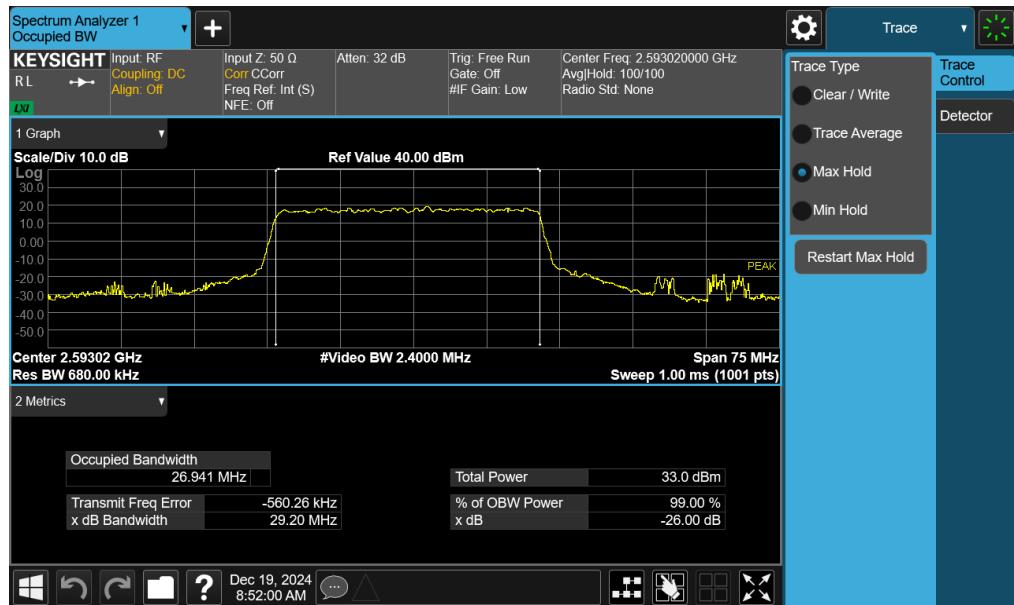


FCC ID: C3K2114	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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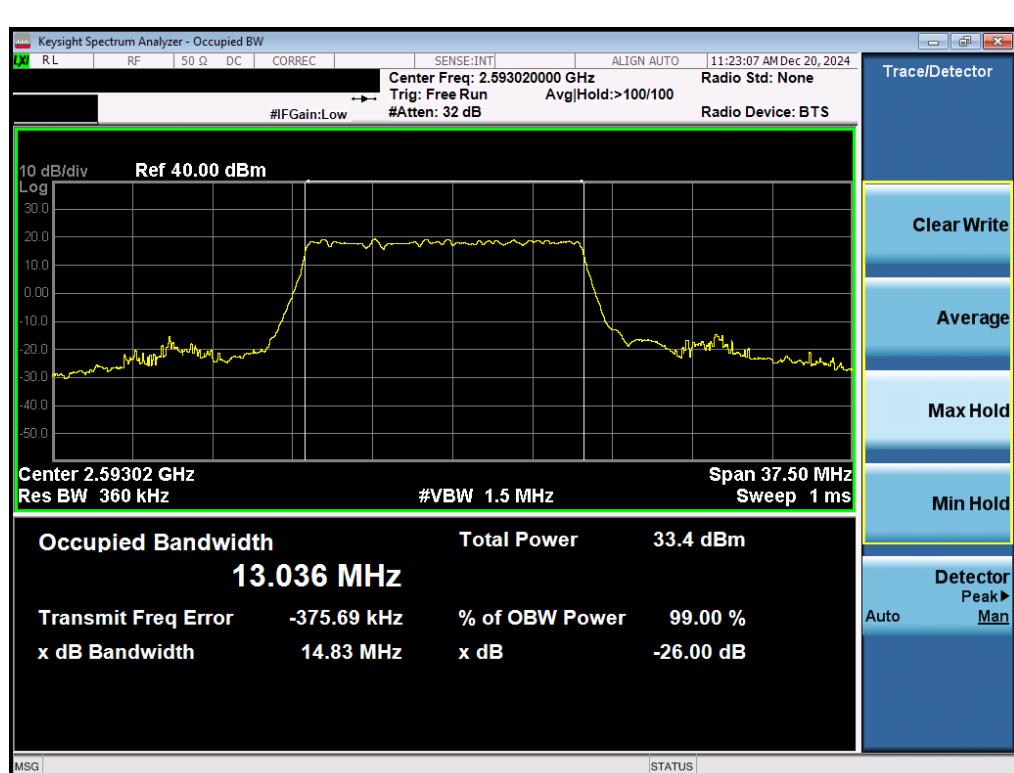
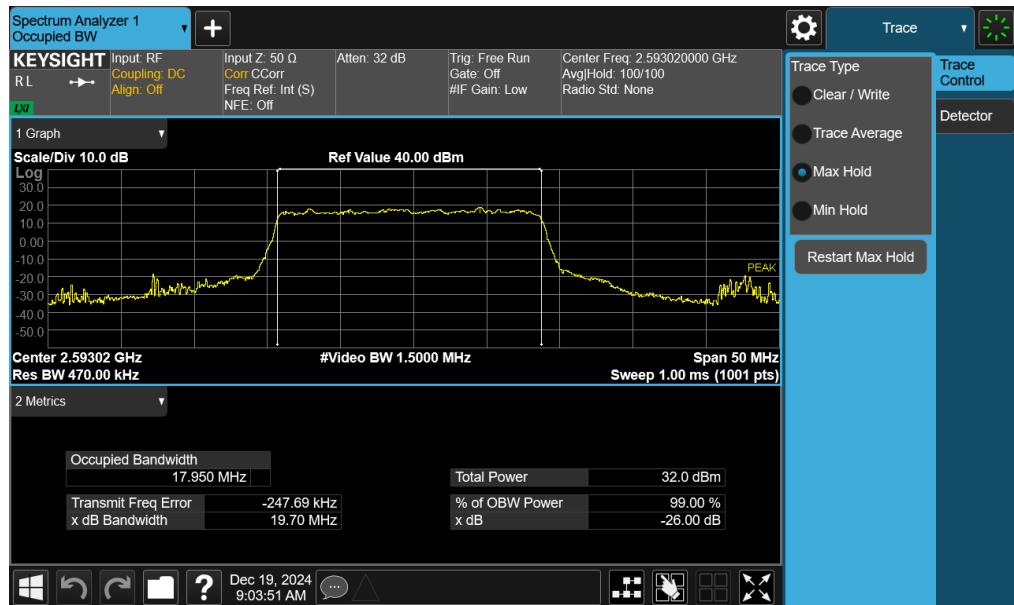


Plot 7-100. Occupied Bandwidth Plot (NR Band n41 - 20MHz π/2 BPSK - Full RB - Ant6)

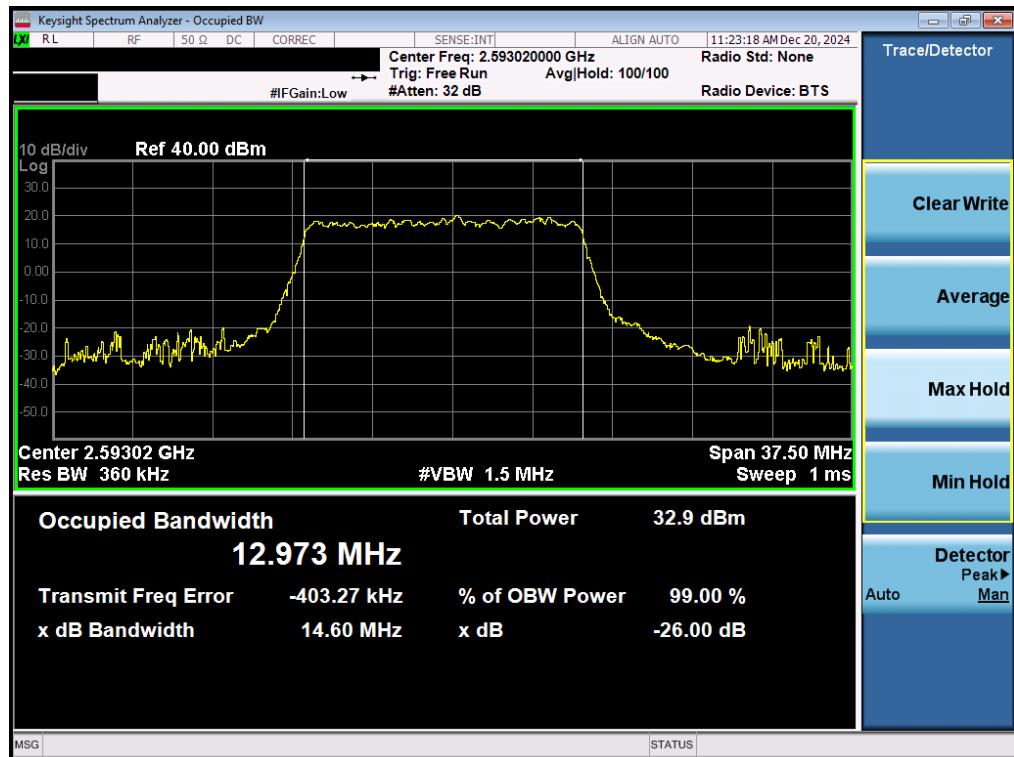


Plot 7-101. Occupied Bandwidth Plot (NR Band n41 - 20MHz QPSK - Full RB - Ant6)

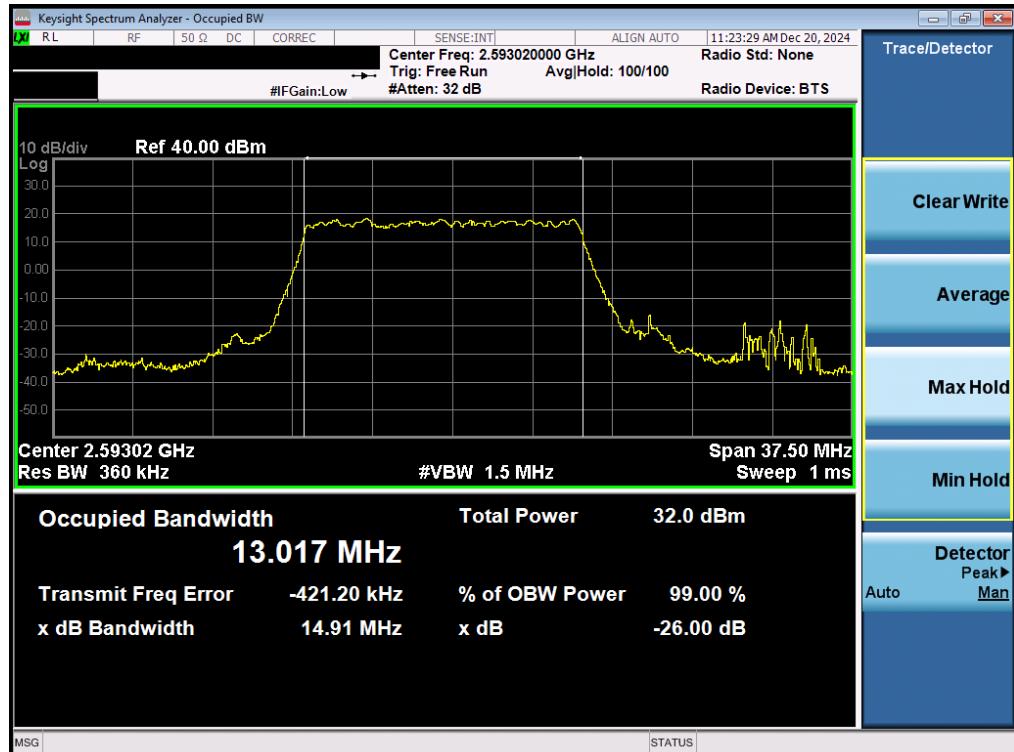
FCC ID: C3K2114	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2411190103-04-R3.C3K	Test Dates: 12/3/2024 - 2/14/2025	EUT Type: Full Modular	Page 78 of 178



FCC ID: C3K2114	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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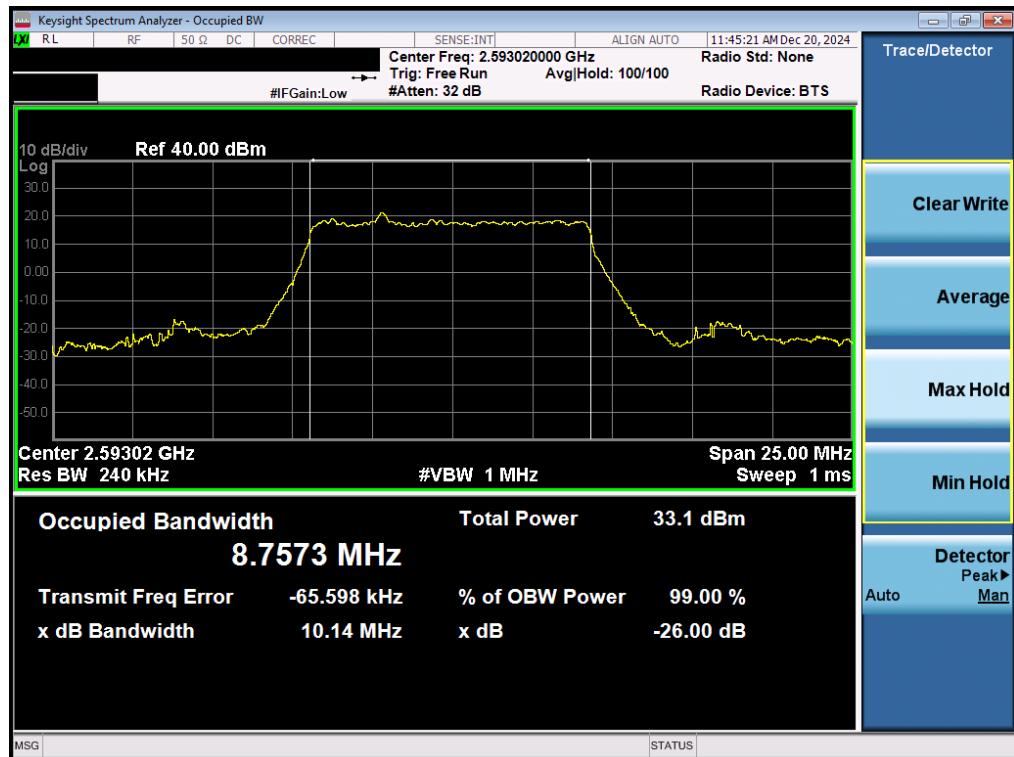


Plot 7-104. Occupied Bandwidth Plot (NR Band n41 - 15MHz QPSK - Full RB - Ant6)

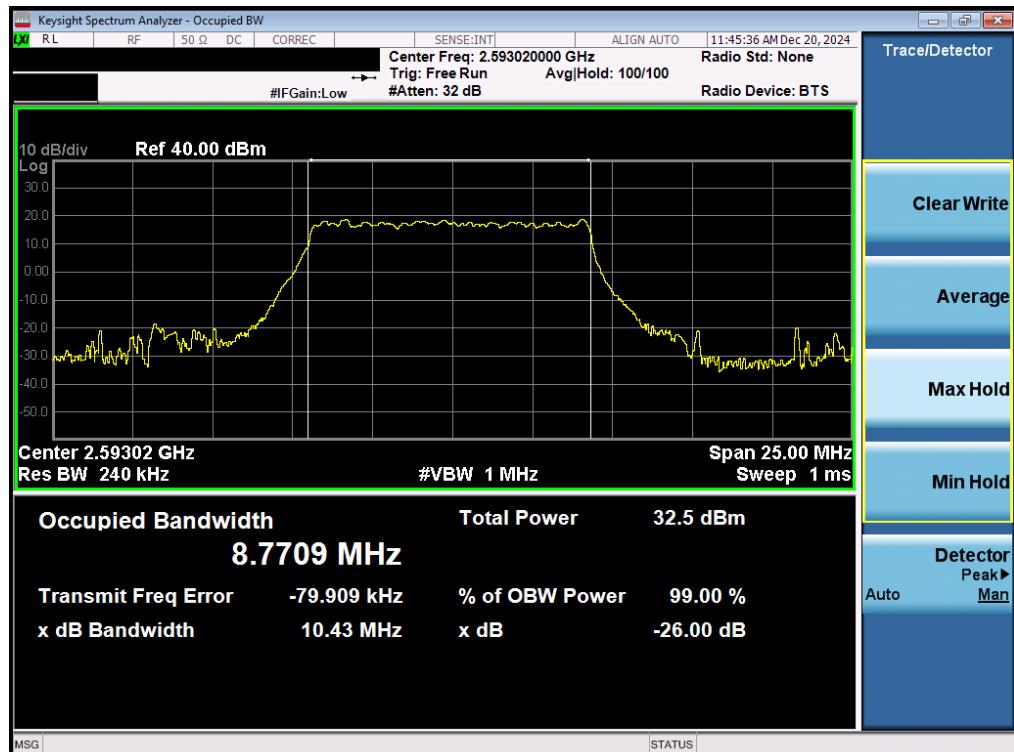


Plot 7-105. Occupied Bandwidth Plot (NR Band n41 - 15MHz 16-QAM - Full RB - Ant6)

FCC ID: C3K2114	PART 27 MEASUREMENT REPORT			Approved by: Technical Manager
Test Report S/N: 1M2411190103-04-R3.C3K	Test Dates: 12/3/2024 - 2/14/2025	EUT Type: Full Modular		

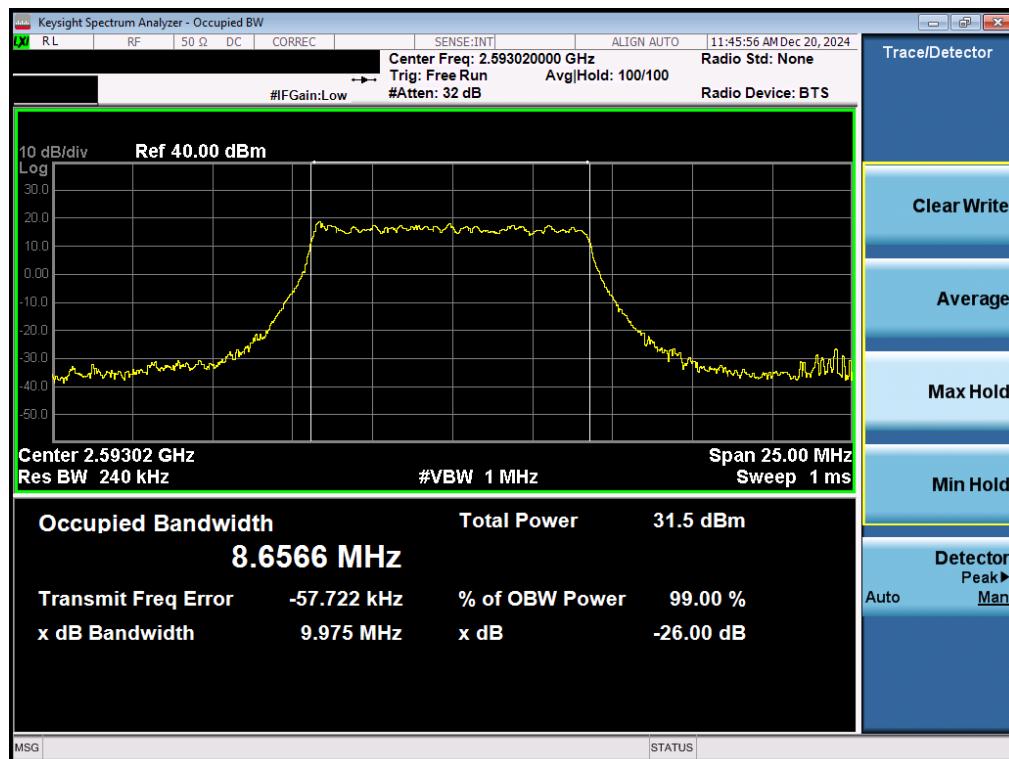


Plot 7-106. Occupied Bandwidth Plot (NR Band n41 - 10MHz $\pi/2$ BPSK - Full RB - Ant6)



Plot 7-107. Occupied Bandwidth Plot (NR Band n41 - 10MHz QPSK - Full RB - Ant6)

FCC ID: C3K2114	PART 27 MEASUREMENT REPORT			Approved by: Technical Manager
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Plot 7-108. Occupied Bandwidth Plot (NR Band n41 - 10MHz 16-QAM - Full RB - Ant6)

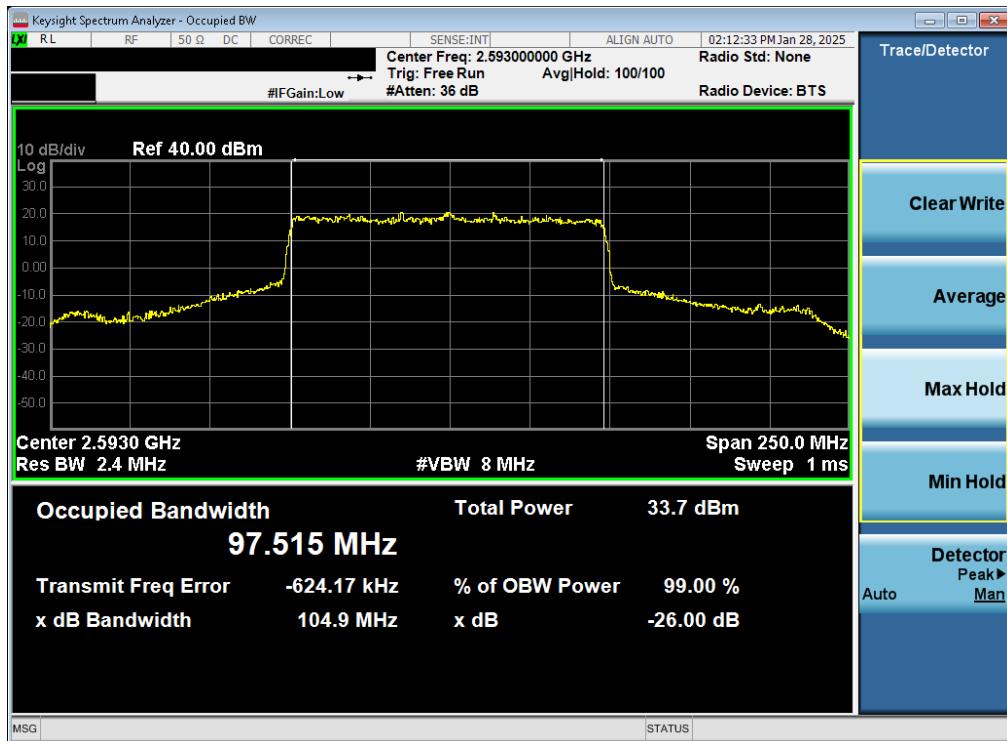
FCC ID: C3K2114	PART 27 MEASUREMENT REPORT			Approved by: Technical Manager
Test Report S/N: 1M2411190103-04-R3.C3K	Test Dates: 12/3/2024 - 2/14/2025	EUT Type: Full Modular		Page 82 of 178

Mode	Bandwidth	Modulation	OBW [MHz]
NR-n41PC1.5	100MHz	$\pi/2$ BPSK	97.52
		QPSK	98.09
		16QAM	98.17
	90MHz	$\pi/2$ BPSK	87.57
		QPSK	87.81
		16QAM	88.27
	80MHz	$\pi/2$ BPSK	78.26
		QPSK	77.84
		16QAM	77.80
	70MHz	$\pi/2$ BPSK	64.94
		QPSK	67.76
		16QAM	67.70
	60MHz	$\pi/2$ BPSK	58.28
		QPSK	58.14
		16QAM	58.04
	50MHz	$\pi/2$ BPSK	45.94
		QPSK	47.73
		16QAM	47.75
	40MHz	$\pi/2$ BPSK	35.93
		QPSK	37.99
		16QAM	37.94
	30MHz	$\pi/2$ BPSK	26.97
		QPSK	28.03
		16QAM	27.92
	20MHz	$\pi/2$ BPSK	18.03
		QPSK	18.32
		16QAM	18.32
	15MHz	$\pi/2$ BPSK	13.02
		QPSK	13.68
		16QAM	13.73
	10MHz	$\pi/2$ BPSK	8.68
		QPSK	8.66
		16QAM	8.67

Table 7-20. Occupied Bandwidth Test Results – UL MIMO Ant1

FCC ID: C3K2114	PART 27 MEASUREMENT REPORT			Approved by: Technical Manager
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NR Band n41 – UL MIMO Ant1



Plot 7-109. Occupied Bandwidth Plot (NR Band n41 - 100MHz π/2 BPSK - Full RB – Ant1)



Plot 7-110. Occupied Bandwidth Plot (NR Band n41 - 100MHz QPSK - Full RB - Ant1)

FCC ID: C3K2114	PART 27 MEASUREMENT REPORT			Approved by: Technical Manager
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Plot 7-111. Occupied Bandwidth Plot (NR Band n41 - 100MHz 16-QAM - Full RB - Ant1)

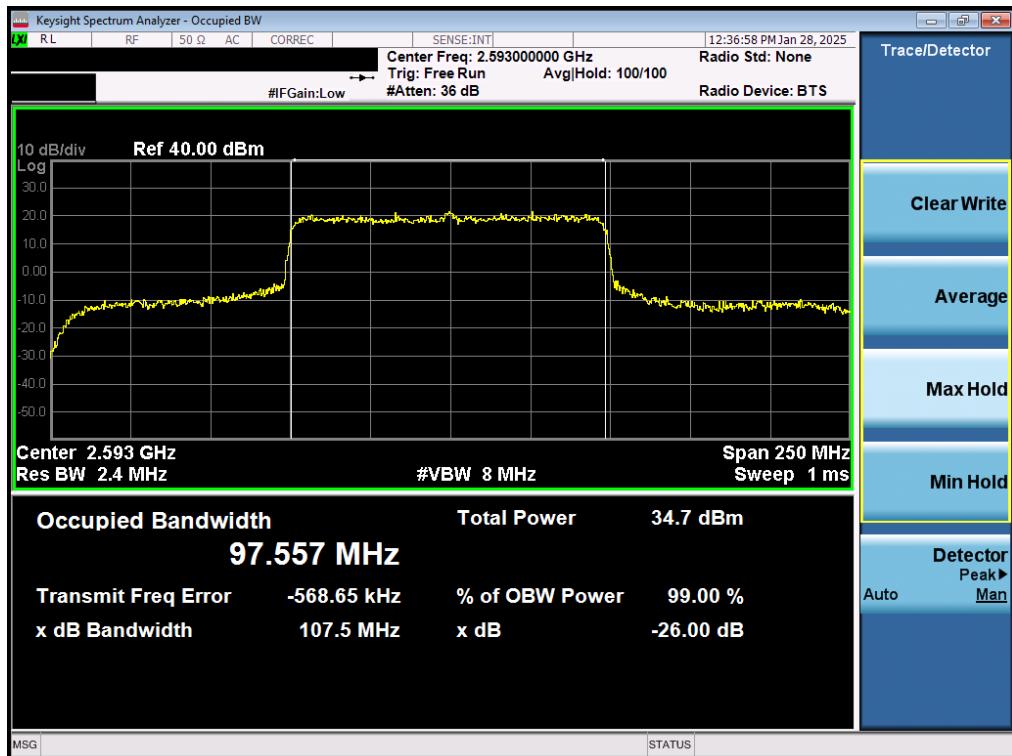
FCC ID: C3K2114	PART 27 MEASUREMENT REPORT			Approved by: Technical Manager
Test Report S/N: 1M2411190103-04-R3.C3K	Test Dates: 12/3/2024 - 2/14/2025	EUT Type: Full Modular		Page 85 of 178

Mode	Bandwidth	Modulation	OBW [MHz]
NR-n41PC2	100MHz	$\pi/2$ BPSK	97.56
		QPSK	98.17
		16QAM	98.00
	90MHz	$\pi/2$ BPSK	87.57
		QPSK	88.01
		16QAM	88.07
	80MHz	$\pi/2$ BPSK	77.71
		QPSK	77.91
		16QAM	77.88
	70MHz	$\pi/2$ BPSK	64.95
		QPSK	67.81
		16QAM	67.71
	60MHz	$\pi/2$ BPSK	58.41
		QPSK	58.19
		16QAM	58.04
	50MHz	$\pi/2$ BPSK	45.93
		QPSK	47.61
		16QAM	47.68
	40MHz	$\pi/2$ BPSK	36.05
		QPSK	38.02
		16QAM	37.99
	30MHz	$\pi/2$ BPSK	27.05
		QPSK	27.92
		16QAM	28.01
	20MHz	$\pi/2$ BPSK	17.96
		QPSK	18.39
		16QAM	18.41
	15MHz	$\pi/2$ BPSK	13.06
		QPSK	13.69
		16QAM	13.68
	10MHz	$\pi/2$ BPSK	8.67
		QPSK	8.66
		16QAM	8.67

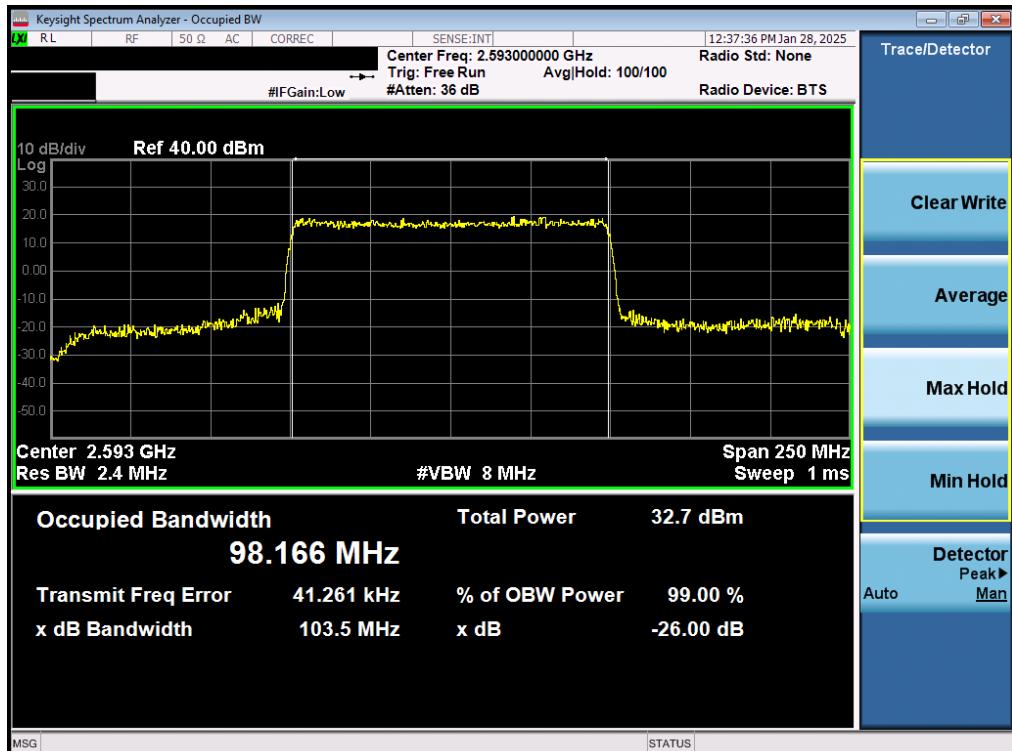
Table 7-21. Occupied Bandwidth Test Results – UL MIMO Ant6

FCC ID: C3K2114	PART 27 MEASUREMENT REPORT			Approved by: Technical Manager
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NR Band n41 – UL MIMO Ant6

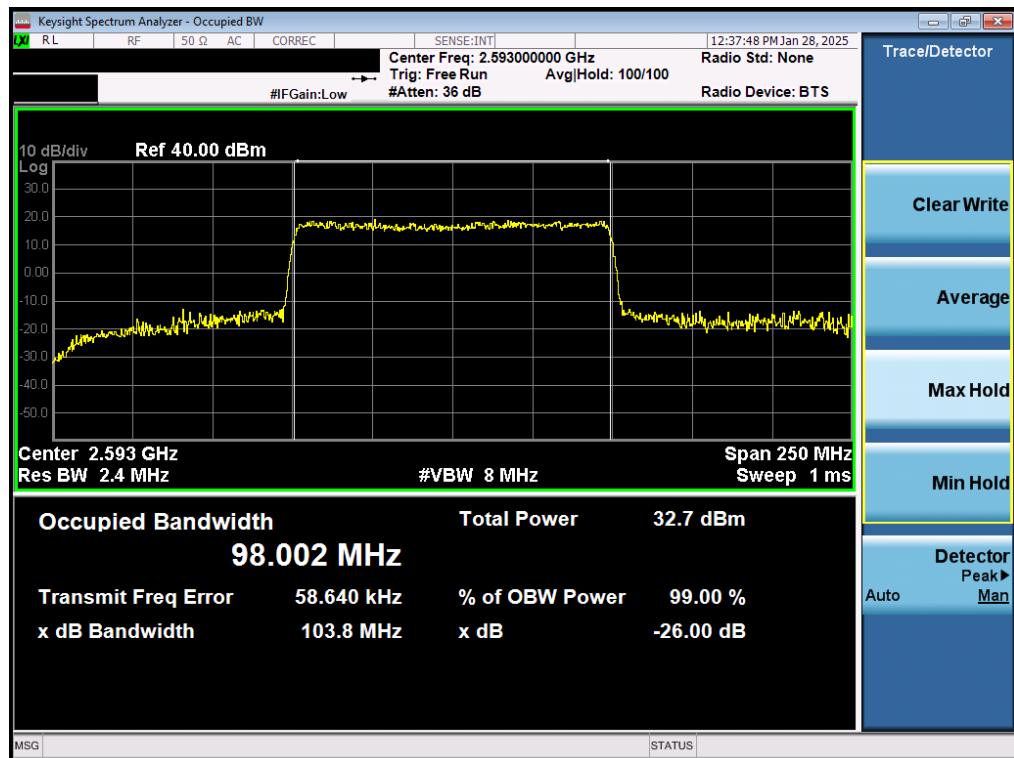


Plot 7-112. Occupied Bandwidth Plot (NR Band n41 - 100MHz π/2 BPSK - Full RB – Ant6)



Plot 7-113. Occupied Bandwidth Plot (NR Band n41 - 100MHz QPSK - Full RB – Ant6)

FCC ID: C3K2114	PART 27 MEASUREMENT REPORT			Approved by: Technical Manager
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Plot 7-114. Occupied Bandwidth Plot (NR Band n41 - 100MHz 16-QAM - Full RB – Ant6)

FCC ID: C3K2114	PART 27 MEASUREMENT REPORT			Approved by: Technical Manager
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7.4 Spurious and Harmonic Emissions at Antenna Terminal

Test Overview

The level of the carrier and the various conducted spurious and harmonic frequencies is measured by means of a calibrated spectrum analyzer. The spectrum is scanned from the lowest frequency generated in the equipment up to a frequency including its 10th harmonic. All out of band emissions are measured with a spectrum analyzer connected to the antenna terminal of the EUT while the EUT is operating at maximum power, and at the appropriate frequencies. All data rates were investigated to determine the worst-case configuration. All modes of operation were investigated and the worst-case configuration results are reported in this section.

The minimum permissible attenuation level of any spurious emission is $43 + 10 \log_{10}(P_{[Watts]})$, where P is the transmitter power in Watts.

For Band 30, the minimum permissible attenuation level of any spurious emission <2288MHz and >2365MHz is $70 + 10 \log_{10}(P_{[Watts]})$.

For Band 41, the minimum permissible attenuation level of any spurious emission is $55 + 10 \log_{10}(P_{[Watts]})$.

Test Procedure Used

ANSI C63.26-2015 – Section 5.7.4

Test Settings

1. Start frequency was set to 30MHz and stop frequency was set to 10GHz (separated into at least two plots per channel)
2. Detector = RMS
3. Trace mode = trace average for continuous emissions, max hold for pulse emissions
4. Sweep time = auto couple
5. The trace was allowed to stabilize
6. Please see test notes below for RBW and VBW settings

Test Setup

The EUT and measurement equipment were set up as shown in the diagram below.

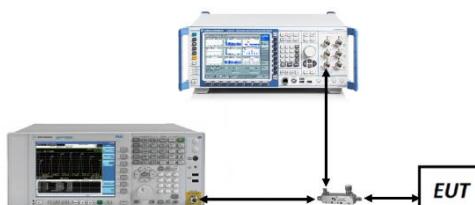


Figure 7-3. Test Instrument & Measurement Setup

FCC ID: C3K2114	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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Test Notes

1. Per Part 27, compliance with the applicable limits is based on the use of measurement instrumentation employing a resolution bandwidth of 1 MHz.
2. For NR operation, all subcarrier spacings (SCS) and transmission schemes (e.g. CP-OFDM and DFT-s-OFDM) were investigated to determine the worst-case configuration. All modes of operation were investigated and the worst-case configuration results are reported in this section.
3. Per ANSI C63.26-2015, MIMO compliance was addressed by adding $10\log(2) = 3\text{dB}$ to the output of each antenna. A visual inspection of the plots for each antenna shows that the emissions are still compliant even after adding 3dB.

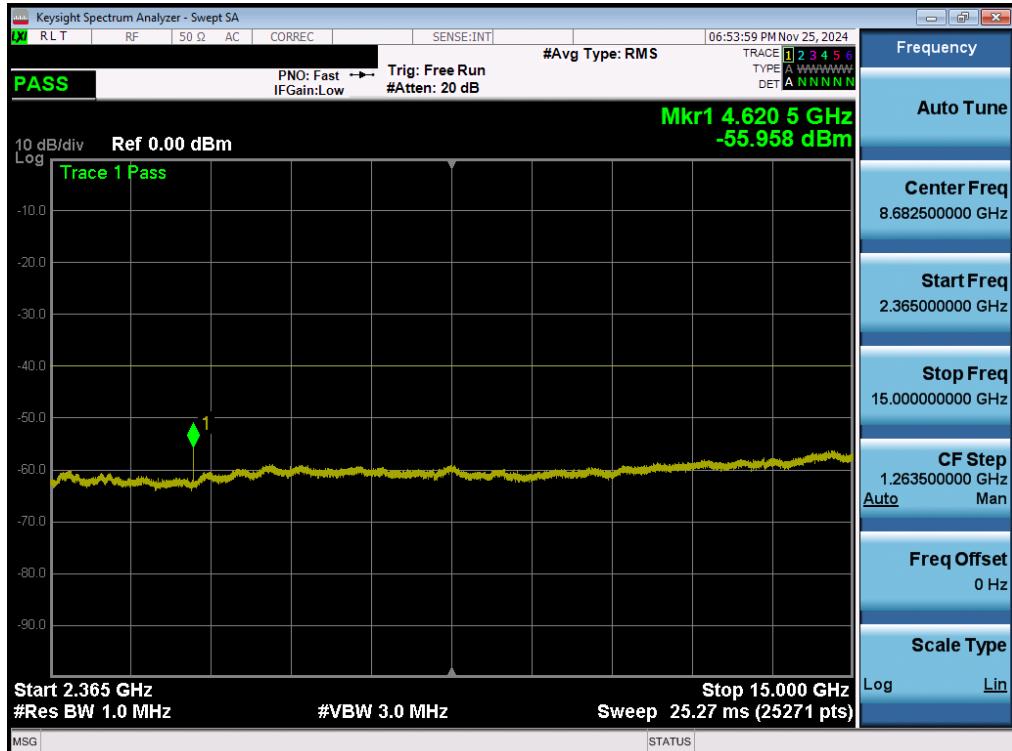
FCC ID: C3K2114	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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Mode	Bandwidth	Channel	Range [MHz]	Level [dBm]	Limit [dBm]	Margin [dB]
LTE-B30	10MHz	Mid	30.0 - 2288.0	-60.14	-40	-20.13
		Mid	2365.0 - 15000.0	-55.96	-40	-15.96
		Mid	15000.0 - 27000.0	-54.02	-40	-14.01
LTE-B41PC2	20MHz	Low	30.0 - 2475.0	-39.26	-25	-14.26
		Low	2690.0 - 15000.0	-32.62	-25	-7.62
		Low	15000.0 - 27000.0	-41.35	-25	-16.35
		Mid	30.0 - 2496.0	-38.97	-25	-13.97
		Mid	2690.0 - 15000.0	-33.10	-25	-8.10
		Mid	15000.0 - 27000.0	-41.37	-25	-16.37
		High	30.0 - 2496.0	-37.63	-25	-12.63
		High	2715.0 - 15000.0	-32.42	-25	-7.42
		High	15000.0 - 27000.0	-41.23	-25	-16.23
LTE-B41/38 PC3	20MHz	Low	30.0 - 2475.0	-43.37	-25	-18.37
		Low	2690.0 - 15000.0	-36.71	-25	-11.71
		Low	15000.0 - 27000.0	-49.80	-25	-24.80
		Mid	30.0 - 2288.0	-43.39	-25	-18.39
		Mid	2570.0 - 15000.0	-37.08	-25	-12.08
		Mid	15000.0 - 27000.0	-50.53	-25	-25.53
		High	30.0 - 2288.0	-43.89	-25	-18.89
		High	2570.0 - 15000.0	-37.21	-25	-12.21
		High	15000.0 - 27000.0	-51.06	-25	-26.06

Table 7-22. Conducted Spurious Emission Test Results – Ant1

FCC ID: C3K2114	PART 27 MEASUREMENT REPORT			Approved by: Technical Manager
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LTE Band 30 – Ant1

Plot 7-115. Conducted Spurious Plot (LTE Band 30 - 10MHz QPSK - RB Size 1, RB Offset 25 - Ant1)

Plot 7-116. Conducted Spurious Plot (LTE Band 30 - 10MHz QPSK - RB Size 1, RB Offset 25 - Ant1)

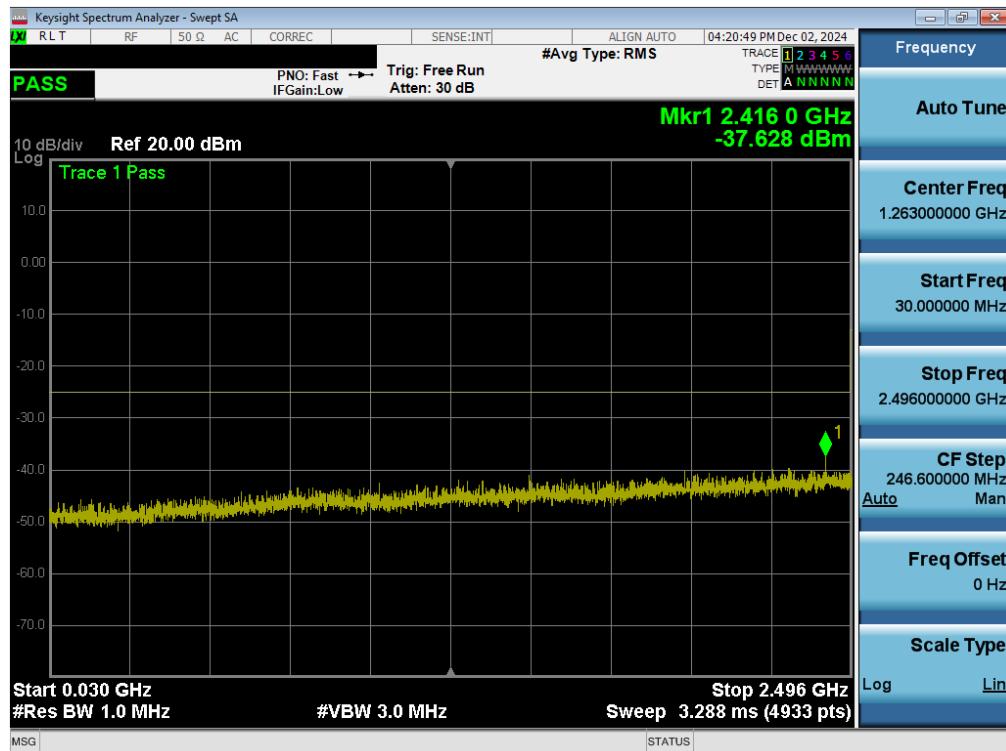
FCC ID: C3K2114	PART 27 MEASUREMENT REPORT			Approved by: Technical Manager
Test Report S/N: 1M2411190103-04-R3.C3K	Test Dates: 12/3/2024 - 2/14/2025	EUT Type: Full Modular		Page 92 of 178



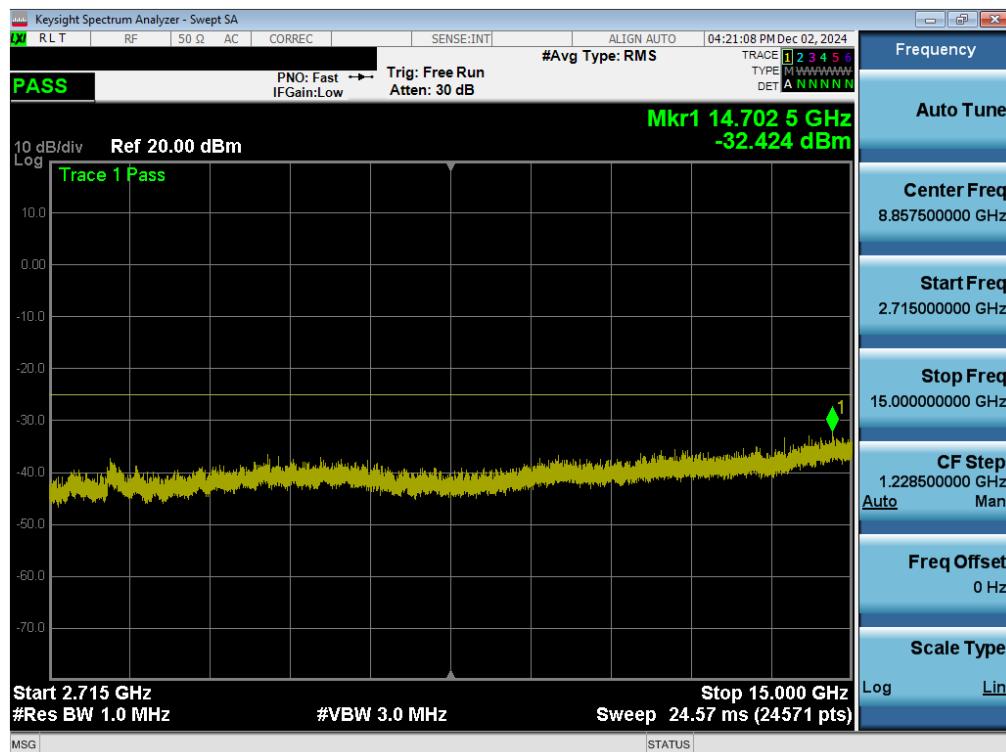
Plot 7-117. Conducted Spurious Plot (LTE Band 30 - 10MHz QPSK - RB Size 1, RB Offset 25 - Ant1)

FCC ID: C3K2114	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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LTE Band 41(PC2) – Ant1

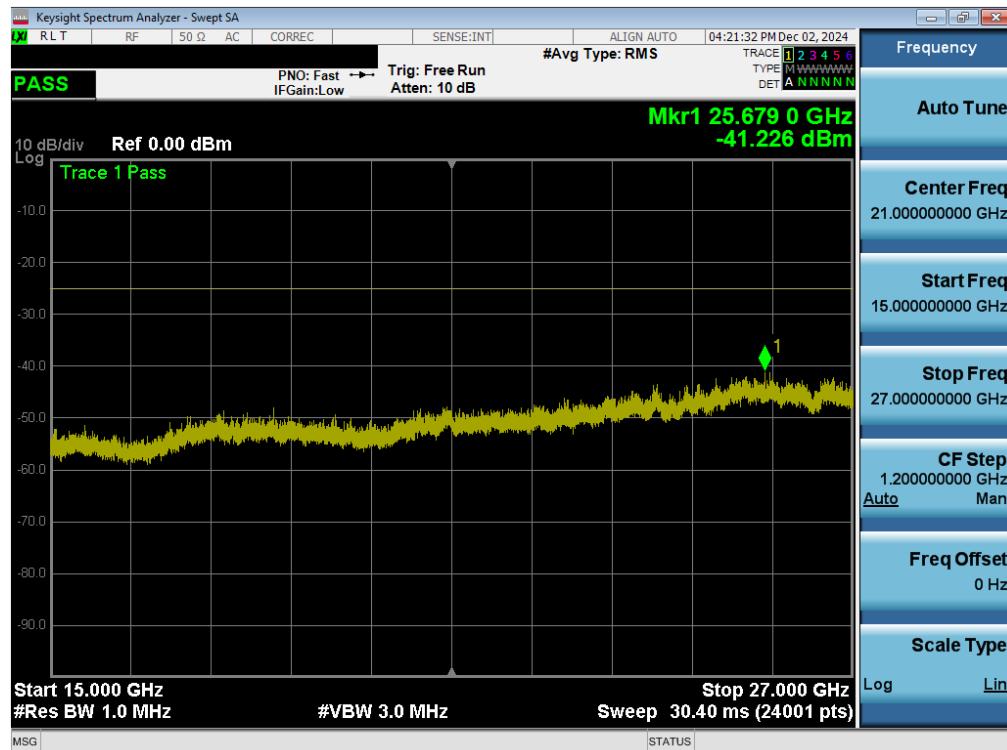


Plot 7-118. Conducted Spurious Plot (LTE Band 41(PC2) - 20MHz QPSK - RB Size 1, RB Offset 50 - High Channel - Ant1)



Plot 7-119. Conducted Spurious Plot (LTE Band 41(PC2) - 20MHz QPSK - RB Size 1, RB Offset 50 - High Channel - Ant1)

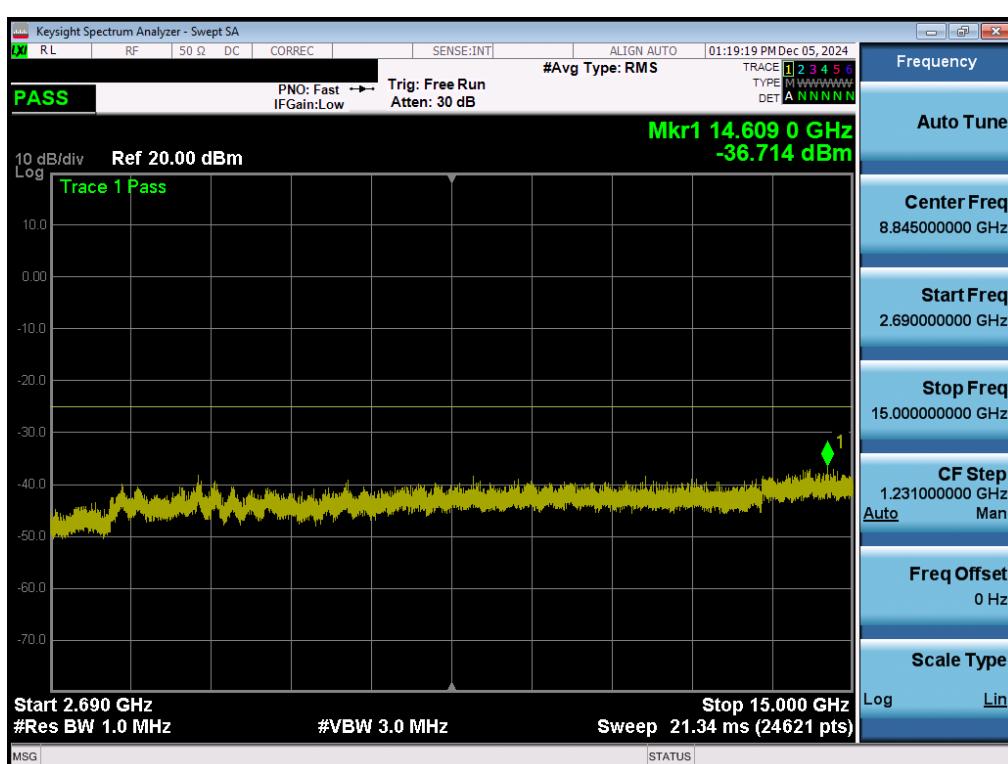
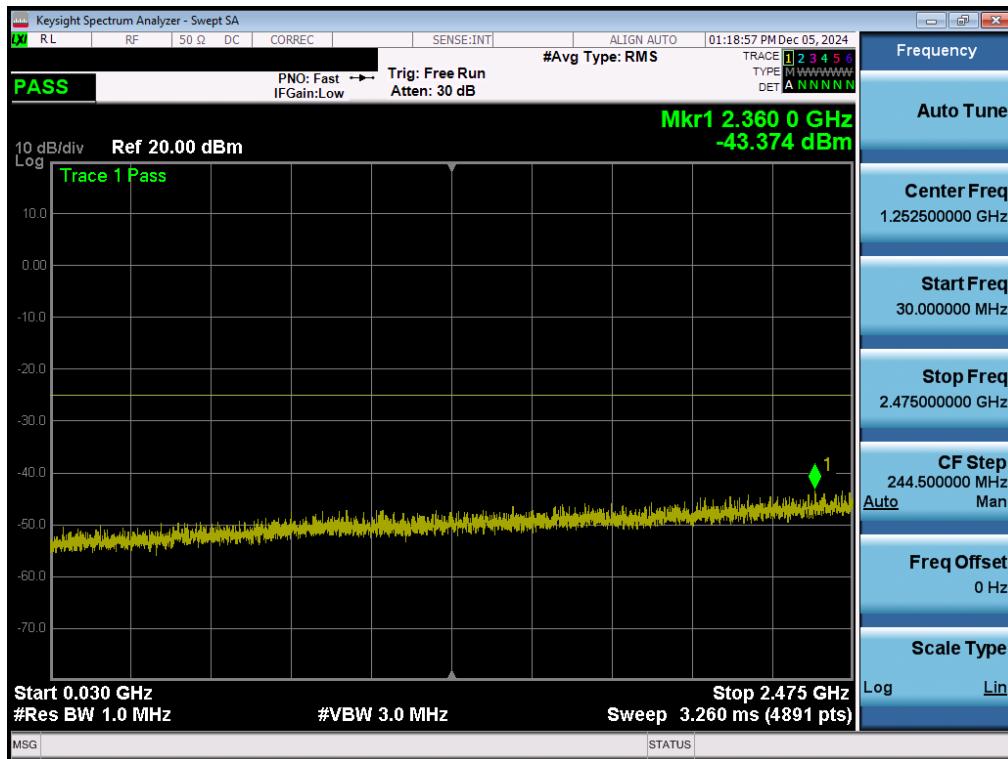
FCC ID: C3K2114	PART 27 MEASUREMENT REPORT			Approved by: Technical Manager
Test Report S/N: 1M2411190103-04-R3.C3K	Test Dates: 12/3/2024 - 2/14/2025	EUT Type: Full Modular		Page 94 of 178



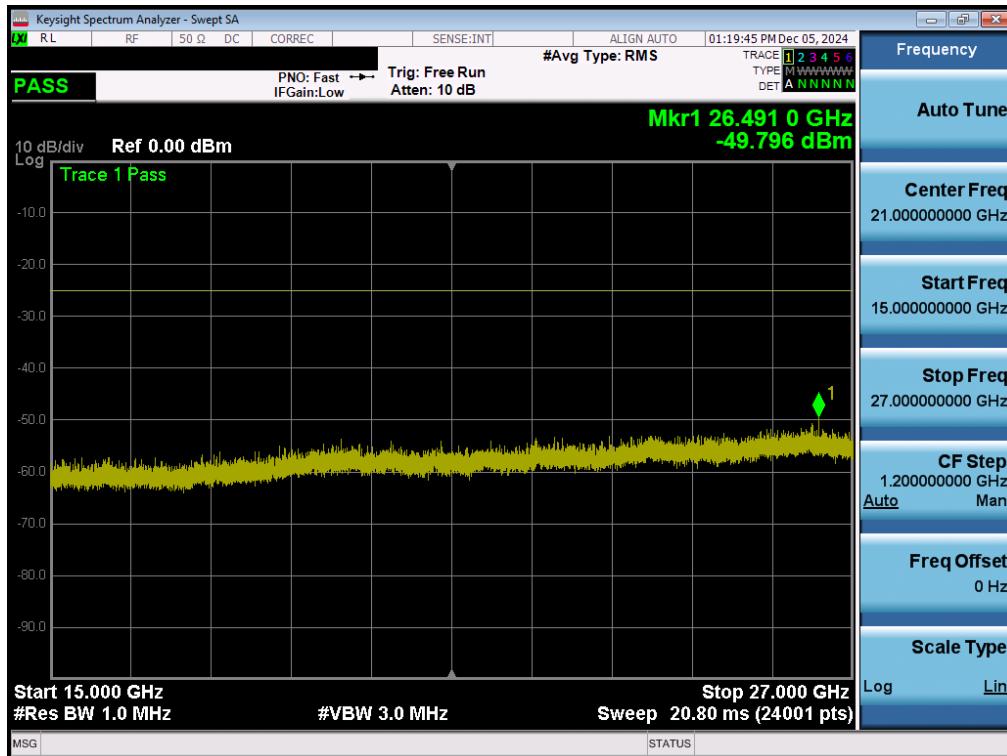
Plot 7-120. Conducted Spurious Plot (LTE Band 41(PC2) - 20MHz QPSK - RB Size 1, RB Offset 50 - High Channel - Ant1)

FCC ID: C3K2114	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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LTE Band 41(PC3)/38 – Ant1



FCC ID: C3K2114	PART 27 MEASUREMENT REPORT			Approved by: Technical Manager
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Plot 7-123. Conducted Spurious Plot (LTE Band 41(PC3)/38 - 20MHz QPSK - RB Size 1, RB Offset 50 - Low Channel - Ant1)

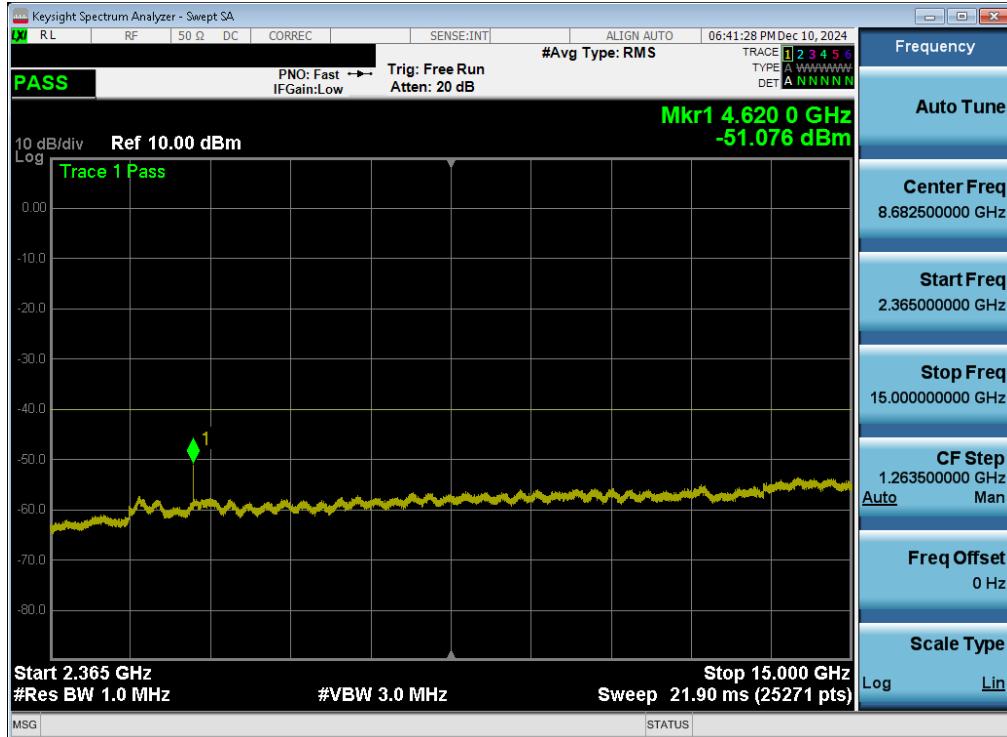
FCC ID: C3K2114	PART 27 MEASUREMENT REPORT			Approved by: Technical Manager
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Mode	Bandwidth	Channel	Range [MHz]	Level [dBm]	Limit [dBm]	Margin [dB]
NR-n30	10MHz	Mid	30.0 - 2288.0	-52.20	-40	-12.20
		Mid	2365.0 - 15000.0	-51.08	-40	-11.08
		Mid	15000.0 - 27000.0	-56.69	-40	-16.69
NR-n41PC2	100MHz	Low	30.0 - 2470.0	-37.43	-25	-12.43
		Low	2690.0 - 15000.0	-32.44	-25	-7.44
		Low	15000.0 - 27000.0	-46.35	-25	-21.35
		Mid	30.0 - 2470.0	-34.73	-25	-9.73
		Mid	2690.0 - 15000.0	-33.11	-25	-8.11
		Mid	15000.0 - 27000.0	-46.52	-25	-21.52
		High	30.0 - 2470.0	-37.02	-25	-12.02
		High	2690.0 - 15000.0	-32.60	-25	-7.60
		High	15000.0 - 27000.0	-45.97	-25	-20.97
NR-n41PC3	100MHz	Low	30.0 - 2288.0	-39.70	-25	-14.70
		Low	2365.0 - 15000.0	-34.19	-25	-9.19
		Low	15000.0 - 27000.0	-48.43	-25	-23.43
		Mid	30.0 - 2288.0	-39.60	-25	-14.60
		Mid	2570.0 - 15000.0	-34.50	-25	-9.50
		Mid	15000.0 - 27000.0	-48.17	-25	-23.17
		High	30.0 - 2496.0	-40.20	-25	-15.20
		High	2715.0 - 15000.0	-33.62	-25	-8.62
		High	15000.0 - 27000.0	-48.05	-25	-23.05

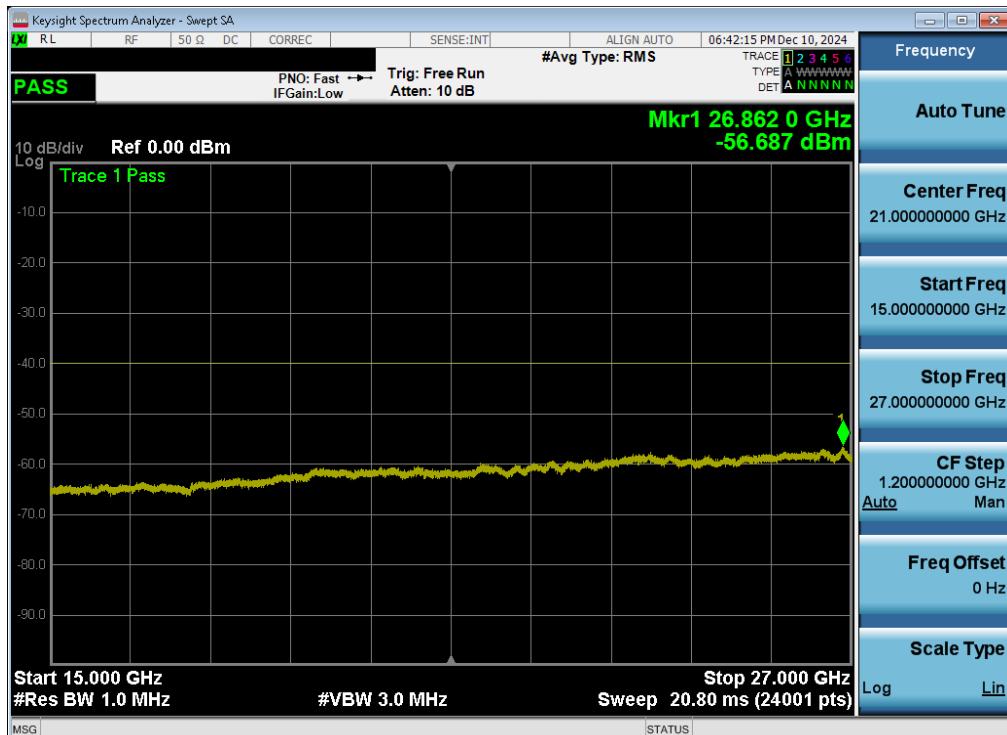
Table 7-23. Conducted Spurious Emission Test Results – Ant1

FCC ID: C3K2114	PART 27 MEASUREMENT REPORT			Approved by: Technical Manager
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NR Band n30 – Ant1

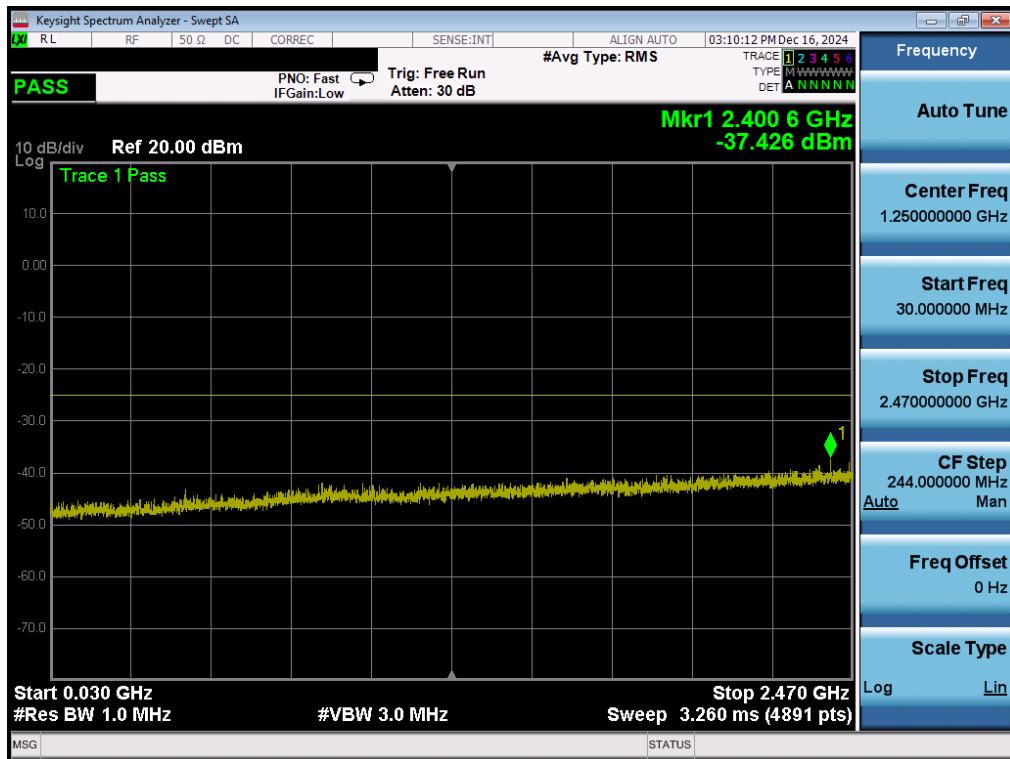
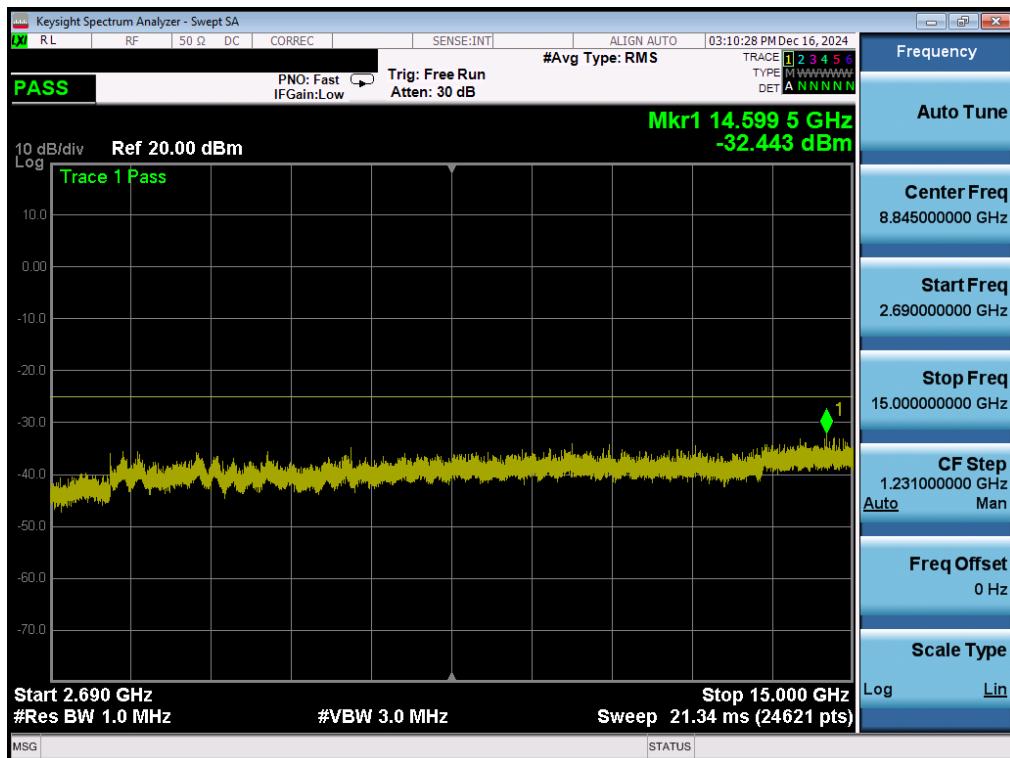
Plot 7-124. Conducted Spurious Plot (NR Band n30 - 10MHz QPSK - RB Size 1, RB Offset 25 – Ant1)

Plot 7-125. Conducted Spurious Plot (NR Band n30 - 10MHz QPSK - RB Size 1, RB Offset 25 – Ant1)

FCC ID: C3K2114	PART 27 MEASUREMENT REPORT			Approved by: Technical Manager
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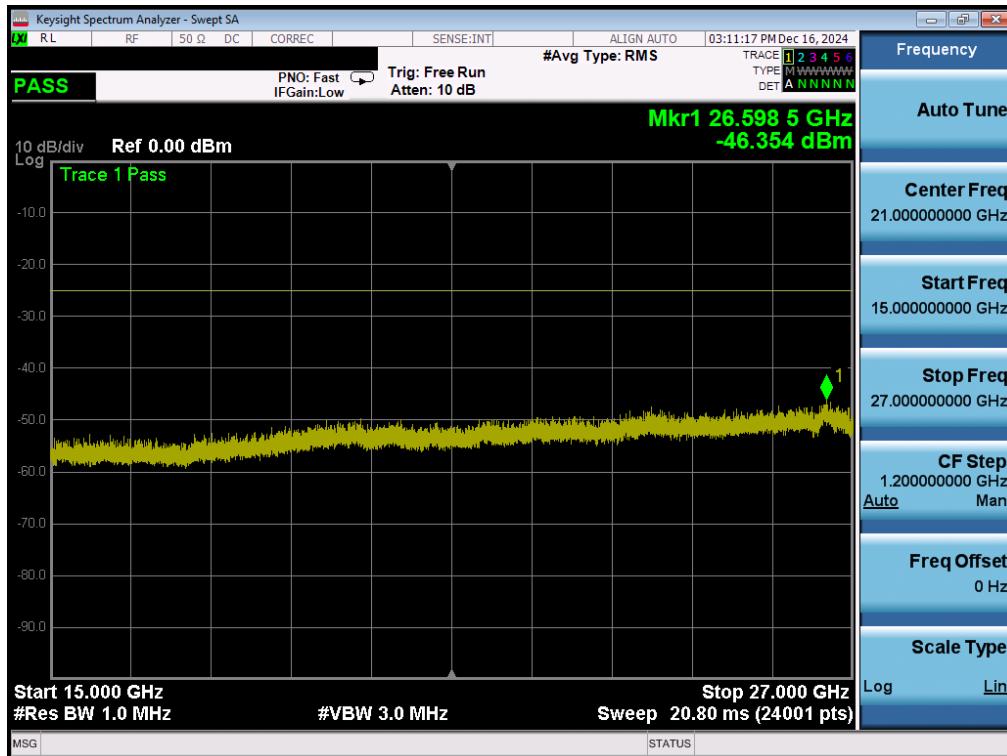


Plot 7-126. Conducted Spurious Plot (NR Band n30 - 10MHz QPSK - RB Size 1, RB Offset 25 – Ant1)

FCC ID: C3K2114	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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NR Band n41(PC2) – Ant1

Plot 7-127. Conducted Spurious Plot (NR Band n41(PC2) - 100MHz QPSK - RB Size 1, RB Offset 136 - Low Channel - Ant1)

Plot 7-128. Conducted Spurious Plot (NR Band n41(PC2) - 100MHz QPSK - RB Size 1, RB Offset 136 - Low Channel - Ant1)

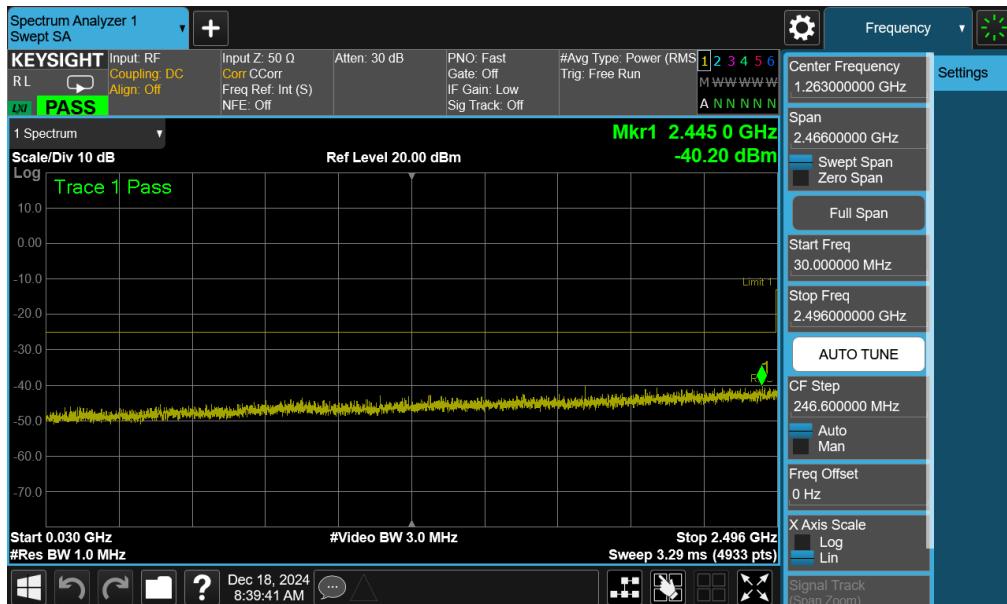
FCC ID: C3K2114	PART 27 MEASUREMENT REPORT			Approved by: Technical Manager
Test Report S/N: 1M2411190103-04-R3.C3K	Test Dates: 12/3/2024 - 2/14/2025	EUT Type: Full Modular		Page 101 of 178



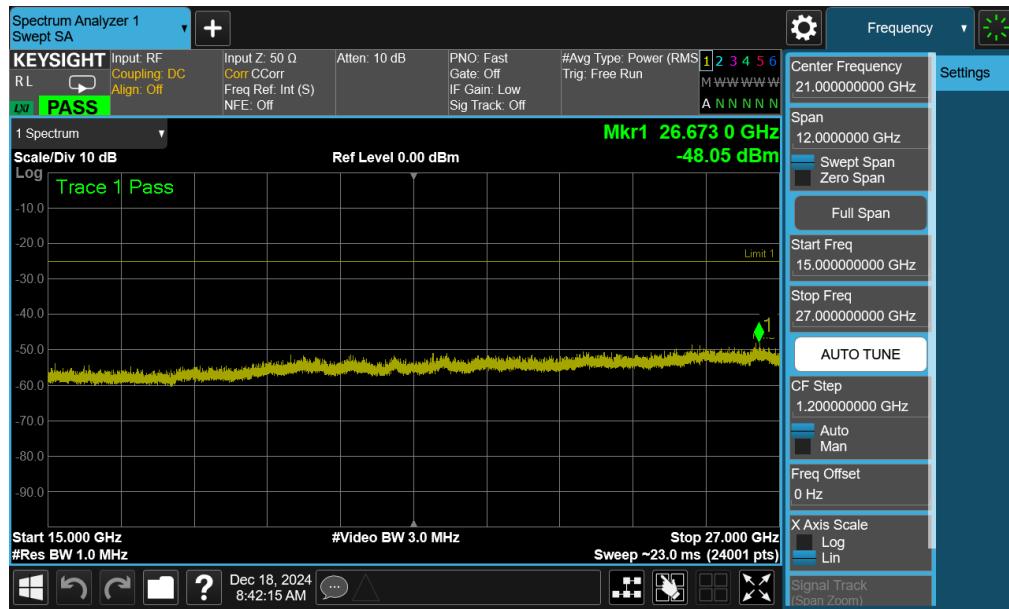
Plot 7-129. Conducted Spurious Plot (NR Band n41(PC2) - 100MHz QPSK - RB Size 1, RB Offset 136 - Low Channel - Ant1)

FCC ID: C3K2114	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2411190103-04-R3.C3K	Test Dates: 12/3/2024 - 2/14/2025	EUT Type: Full Modular	Page 102 of 178

NR Band n41(PC3) – Ant1



FCC ID: C3K2114	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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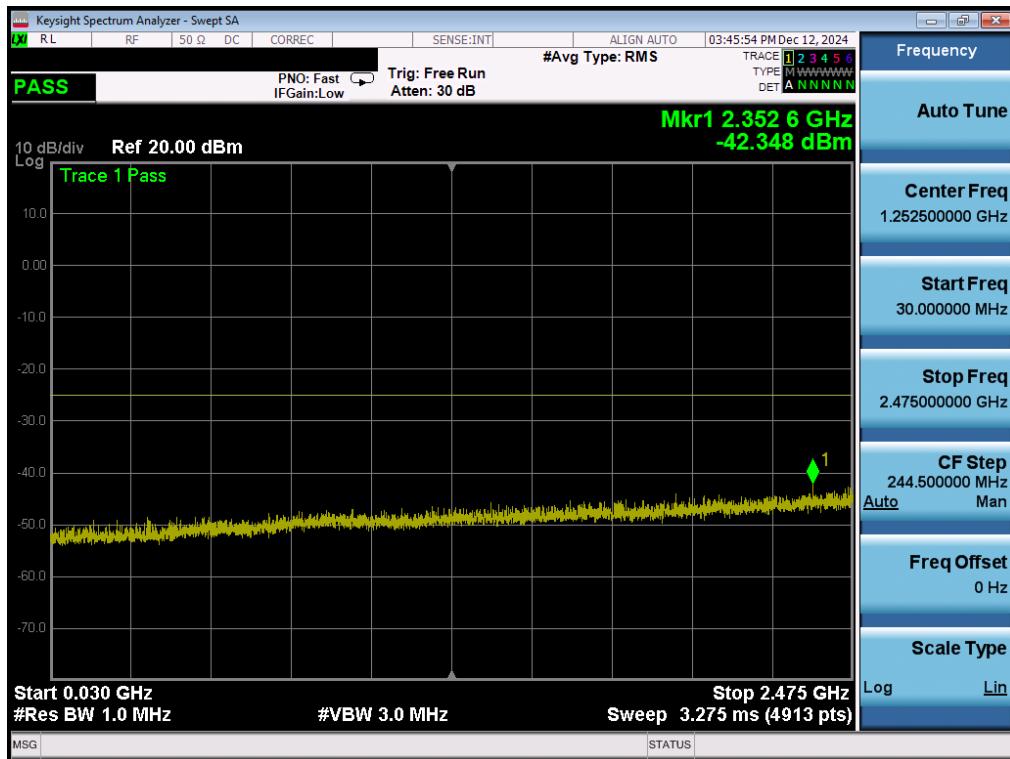
FCC ID: C3K2114	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2411190103-04-R3.C3K	Test Dates: 12/3/2024 - 2/14/2025	EUT Type: Full Modular	Page 104 of 178

Mode	Bandwidth	Channel	Range [MHz]	Level [dBm]	Limit [dBm]	Margin [dB]
LTE-B41PC3	20+20MHz	Low	30.0 - 2475.0	-42.35	-25	-17.35
		Low	2496.0 - 2690.0	16.49	-	-
		Low	2690.0 - 15000.0	-36.28	-25	-11.28
		Low	15000.0 - 27000.0	-50.99	-25	-25.99
		Mid	30.0 - 2496.0	-43.36	-25	-18.36
		Mid	2496.0 - 2690.0	16.60	-	-
		Mid	2690.0 - 15000.0	-36.46	-25	-11.46
		Mid	15000.0 - 27000.0	-50.88	-25	-25.88
		High	30.0 - 2496.0	-42.81	-25	-17.81
		High	2496.0 - 2690.0	15.84	-	-
		High	2690.0 - 15000.0	-37.33	-25	-12.33
		High	15000.0 - 27000.0	-50.41	-25	-25.41

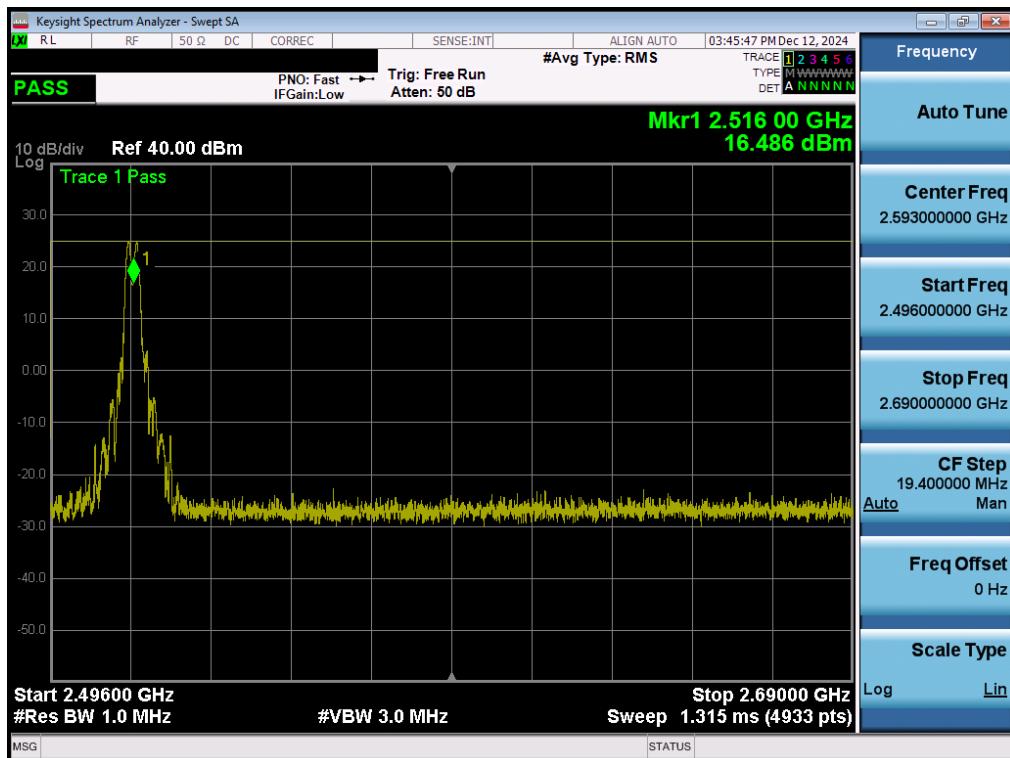
Table 7-24. Conducted Spurious Emission Test Results – Ant1

FCC ID: C3K2114	PART 27 MEASUREMENT REPORT			Approved by: Technical Manager
Test Report S/N: 1M2411190103-04-R3.C3K	Test Dates: 12/3/2024 - 2/14/2025	EUT Type: Full Modular		Page 105 of 178

ULCA - LTE B41(PC3) – Ant1

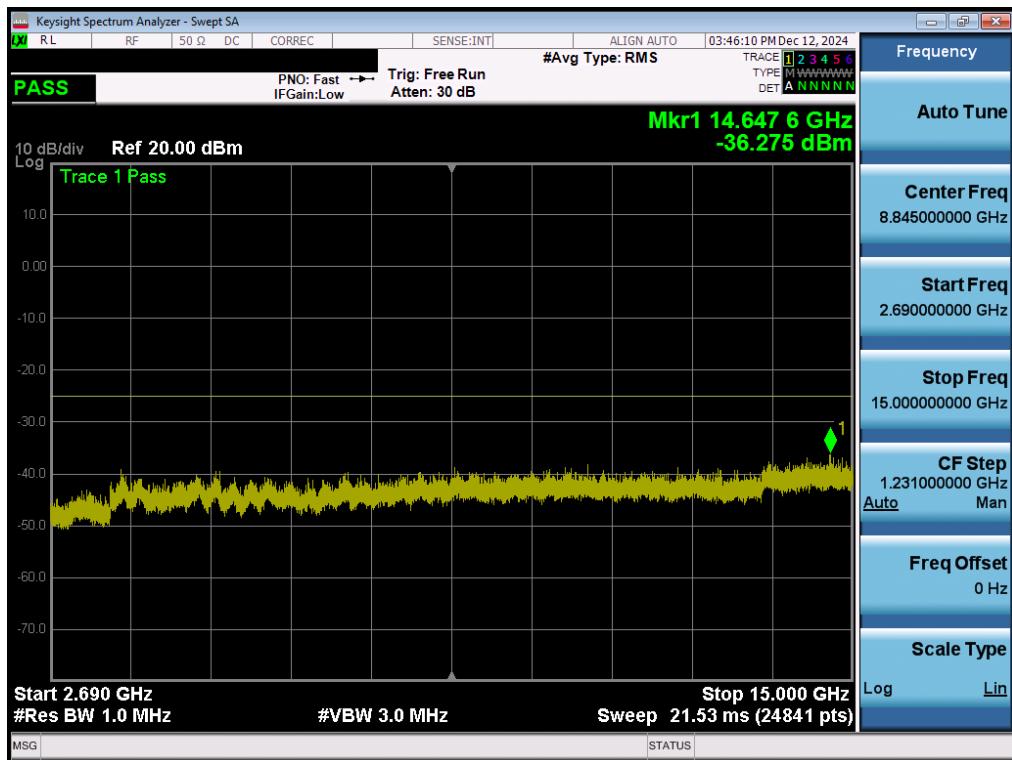


Plot 7-133. Conducted Spurious Plot (ULCA LTE B41(PC3) - 20MHz QPSK - RB Size 1, RB Offset 0 - Low Channel Ant1)

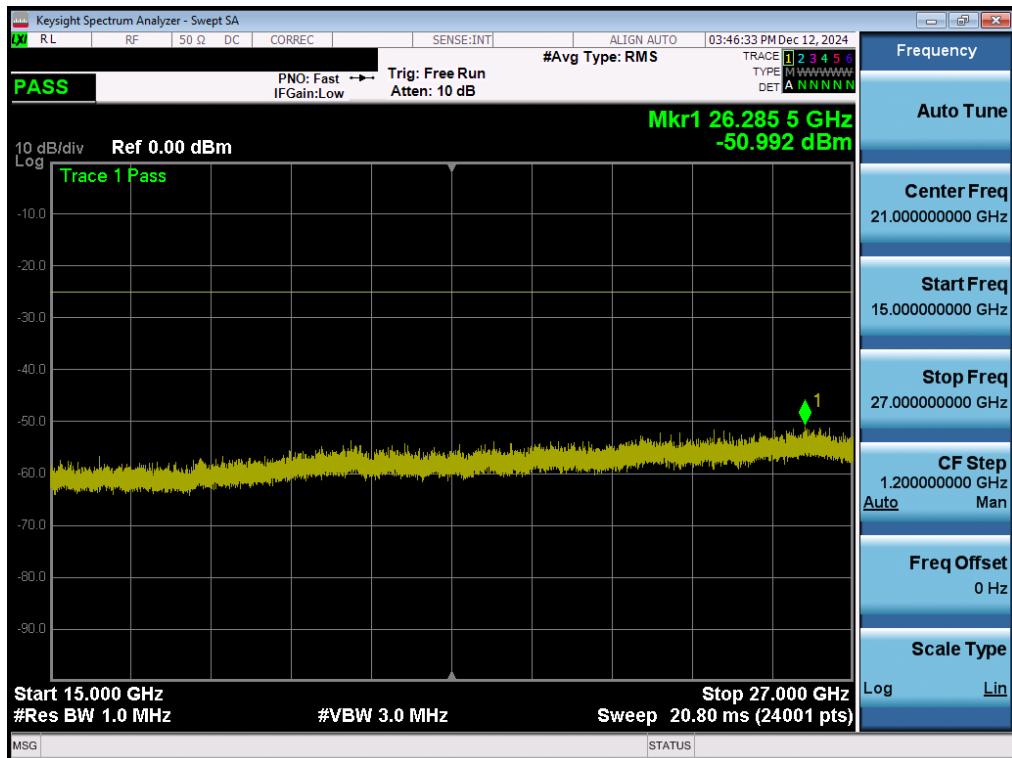


Plot 7-134. Conducted Spurious Plot (ULCA LTE B41(PC3) - 20MHz QPSK - RB Size 1, RB Offset 0 - Low Channel Ant1)

FCC ID: C3K2114	PART 27 MEASUREMENT REPORT			Approved by: Technical Manager
Test Report S/N: 1M2411190103-04-R3.C3K	Test Dates: 12/3/2024 - 2/14/2025	EUT Type: Full Modular		Page 106 of 178



Plot 7-135. Conducted Spurious Plot (ULCA LTE B41(PC3) - 20MHz QPSK - RB Size 1, RB Offset 0 - Low Channel Ant1)



Plot 7-136. Conducted Spurious Plot (ULCA LTE B41(PC3) - 20MHz QPSK - RB Size 1, RB Offset 0 - Low Channel Ant1)

FCC ID: C3K2114	PART 27 MEASUREMENT REPORT			Approved by: Technical Manager
Test Report S/N: 1M2411190103-04-R3.C3K	Test Dates: 12/3/2024 - 2/14/2025	EUT Type: Full Modular		Page 107 of 178

Mode	Bandwidth	Channel	Range [MHz]	Level [dBm]	Limit [dBm]	Margin [dB]
LTE-B41PC2	20MHz	Low	30.0 - 2475.0	-42.42	-25.0	-17.42
		Low	2690.0 - 15000.0	-34.18	-25.0	-9.18
		Low	15000.0 - 27000.0	-44.22	-25	-19.22
		Mid	30.0 - 2500.0	-42.49	-25	-17.49
		Mid	2690.0 - 15000.0	-34.00	-25	-9.00
		Mid	15000.0 - 27000.0	-43.66	-25	-18.66
		High	30.0 - 2496.0	-42.38	-25	-17.38
		High	2715.0 - 15000.0	-33.85	-25	-8.85
		High	15000.0 - 27000.0	-44.10	-25	-19.10
LTE-B41/38 PC3	20MHz	Low	30.0 - 2288.0	-42.67	-25	-17.67
		Low	2365.0 - 15000.0	-33.85	-25	-8.85
		Low	15000.0 - 27000.0	-43.36	-25	-18.36
		Mid	30.0 - 2288.0	-42.38	-25	-17.38
		Mid	2570.0 - 15000.0	-34.47	-25	-9.47
		Mid	15000.0 - 27000.0	-43.59	-25	-18.58
		High	30.0 - 2496.0	-42.61	-25	-17.60
		High	2715.0 - 15000.0	-33.45	-25	-8.44
		High	15000.0 - 27000.0	-43.11	-25	-18.11

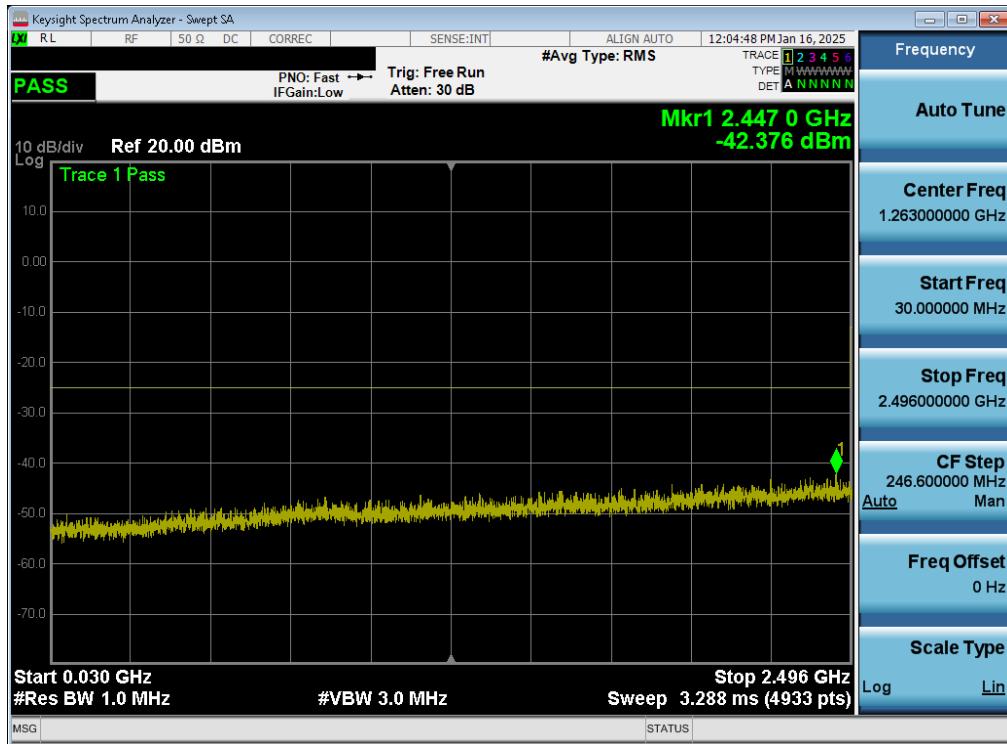
Table 7-25. Conducted Spurious Emission Test Results – Ant6

Mode	Bandwidth	Channel	Range [MHz]	Level [dBm]	Limit [dBm]	Margin [dB]
NR-n41PC2	100MHz	Low	30.0 - 2470.0	-39.59	-25	-14.6
		Low	2690.0 - 15000.0	-34.68	-25	-9.7
		Low	15000.0 - 27000.0	-48.94	-25	-23.9
		Mid	30.0 - 2470.0	-39.16	-25	-14.2
		Mid	2690.0 - 15000.0	-34.82	-25	-9.8
		Mid	15000.0 - 27000.0	-49.17	-25	-24.2
		High	30.0 - 2470.0	-39.86	-25	-14.9
		High	2715.0 - 15000.0	-34.57	-25	-9.6
		High	15000.0 - 27000.0	-49.21	-25	-24.2
NR-n41PC3	100MHz	Low	30.0 - 2470.0	-39.62	-25	-14.6
		Low	2690.0 - 15000.0	-32.64	-25	-7.6
		Low	15000.0 - 27000.0	-45.61	-25	-20.6
		Mid	30.0 - 2288.0	-39.83	-25	-14.8
		Mid	2570.0 - 15000.0	-33.26	-25	-8.3
		Mid	15000.0 - 27000.0	-46.04	-25	-21.0
		High	30.0 - 2288.0	-38.43	-25	-13.4
		High	2570.0 - 15000.0	-32.69	-25	-7.7
		High	15000.0 - 27000.0	-43.98	-25	-19.0

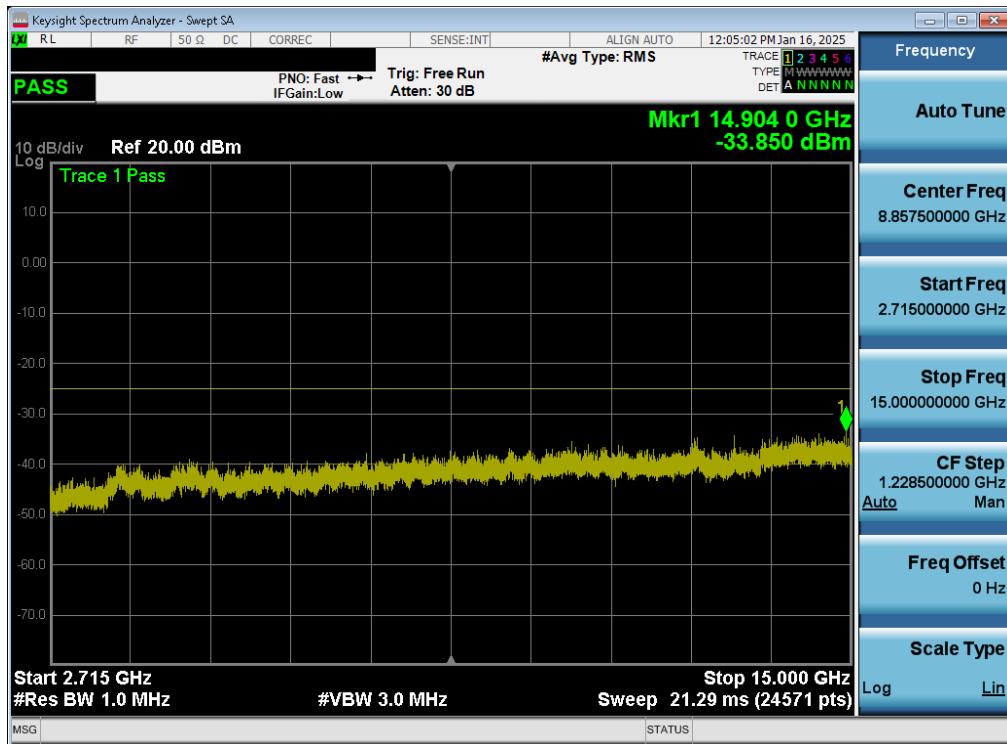
Table 7-26. Conducted Spurious Emission Test Results – Ant6

FCC ID: C3K2114	PART 27 MEASUREMENT REPORT				Approved by: Technical Manager
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LTE Band 41(PC2) – Ant6

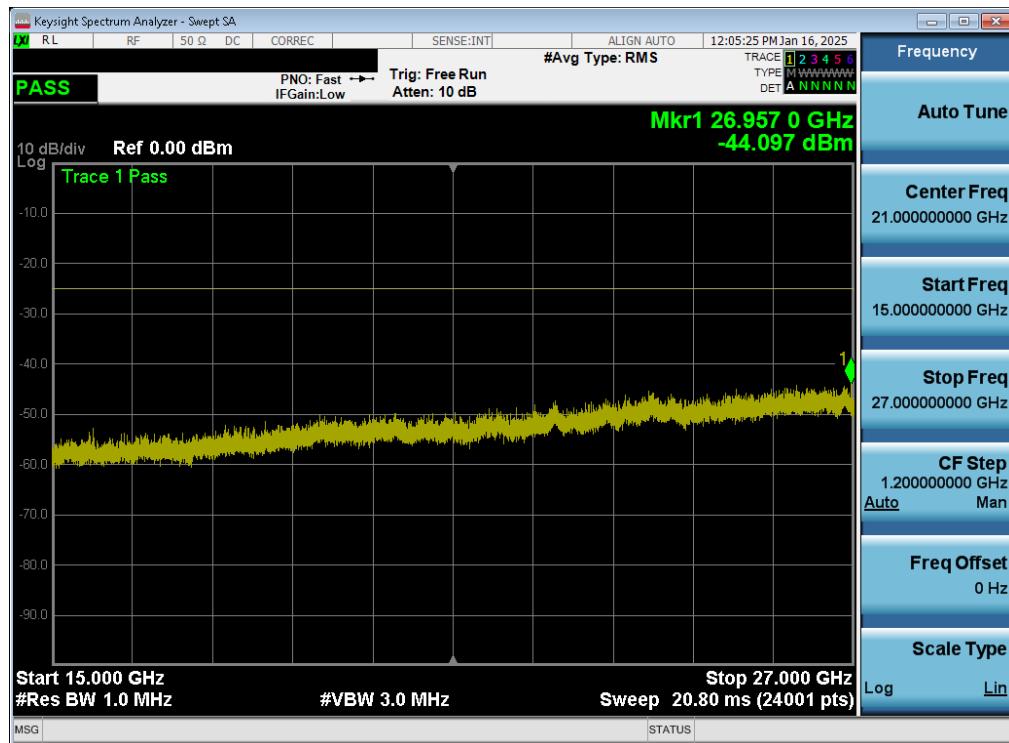


Plot 7-137. Conducted Spurious Plot (LTE Band 41(PC2) - 20MHz QPSK - RB Size 1, RB Offset 50 - High Channel - Ant6)



Plot 7-138. Conducted Spurious Plot (LTE Band 41(PC2) - 20MHz QPSK - RB Size 1, RB Offset 50 - High Channel - Ant6)

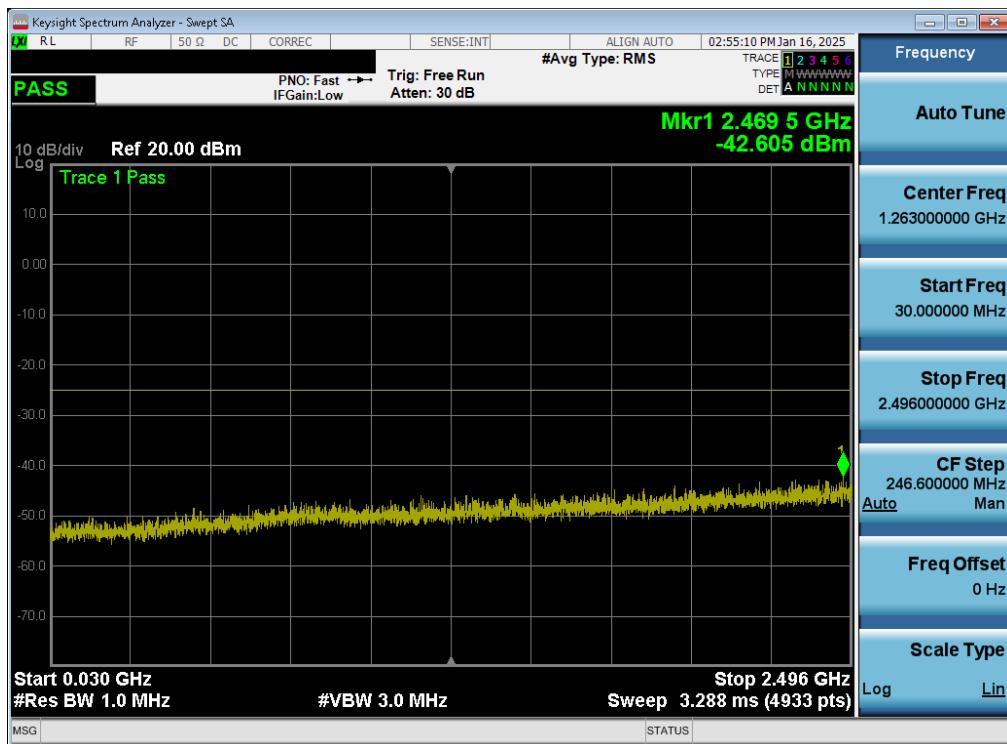
FCC ID: C3K2114	PART 27 MEASUREMENT REPORT			Approved by: Technical Manager
Test Report S/N: 1M2411190103-04-R3.C3K	Test Dates: 12/3/2024 - 2/14/2025	EUT Type: Full Modular		Page 109 of 178



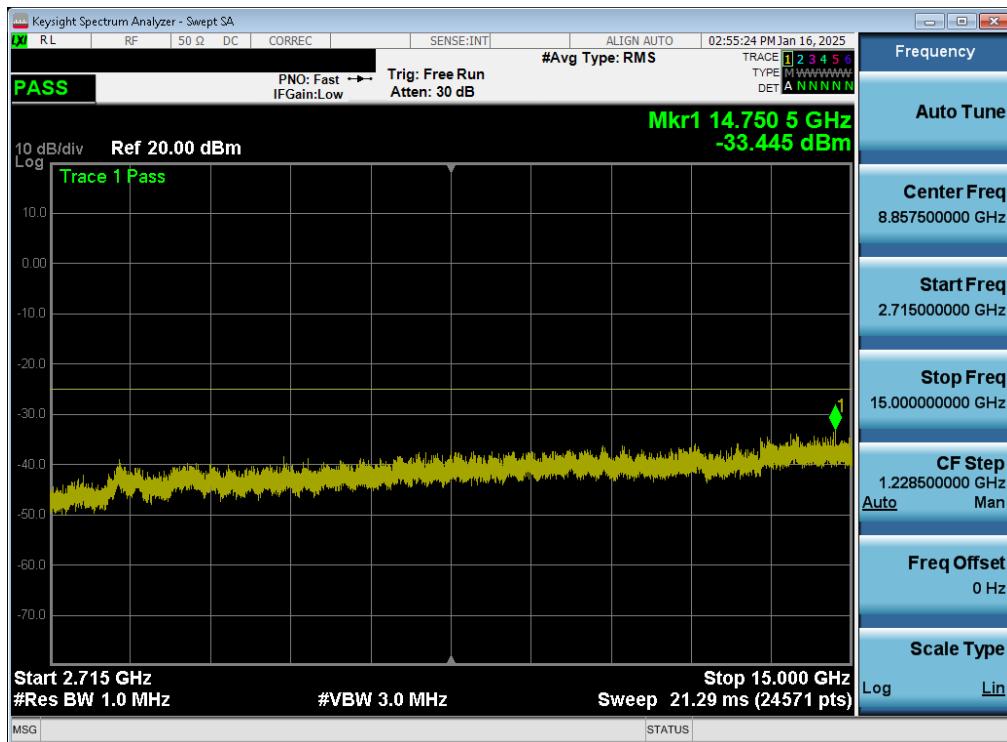
Plot 7-139. Conducted Spurious Plot (LTE Band 41(PC2) - 20MHz QPSK - RB Size 1, RB Offset 50 - High Channel - Ant6)

FCC ID: C3K2114	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2411190103-04-R3.C3K	Test Dates: 12/3/2024 - 2/14/2025	EUT Type: Full Modular	Page 110 of 178

LTE Band 41(PC3)/38 – Ant6

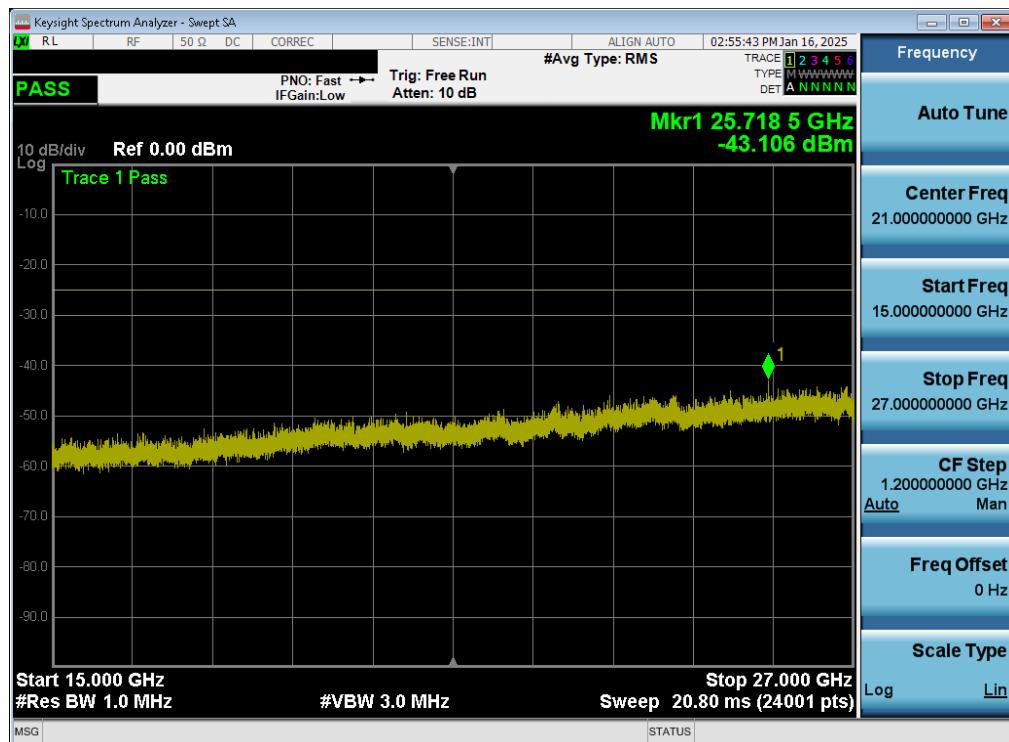


Plot 7-140. Conducted Spurious Plot (LTE Band 41(PC3)/38 - 20MHz QPSK - RB Size 1, RB Offset 50 - High Channel - Ant6)



Plot 7-141. Conducted Spurious Plot (LTE Band 41(PC3)/38 - 20MHz QPSK - RB Size 1, RB Offset 50 - High Channel - Ant6)

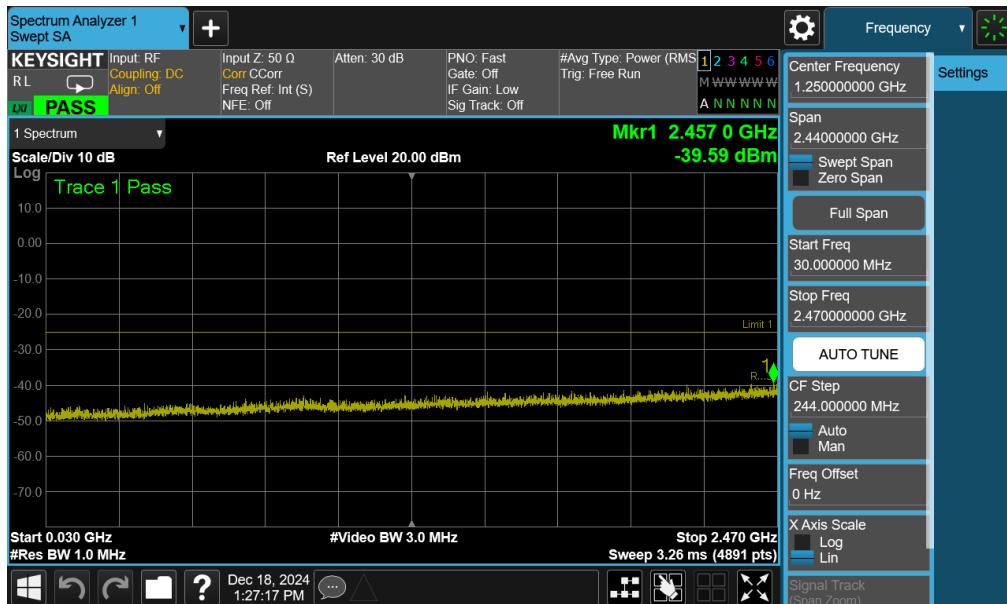
FCC ID: C3K2114	PART 27 MEASUREMENT REPORT			Approved by: Technical Manager
Test Report S/N: 1M2411190103-04-R3.C3K	Test Dates: 12/3/2024 - 2/14/2025	EUT Type: Full Modular		Page 111 of 178



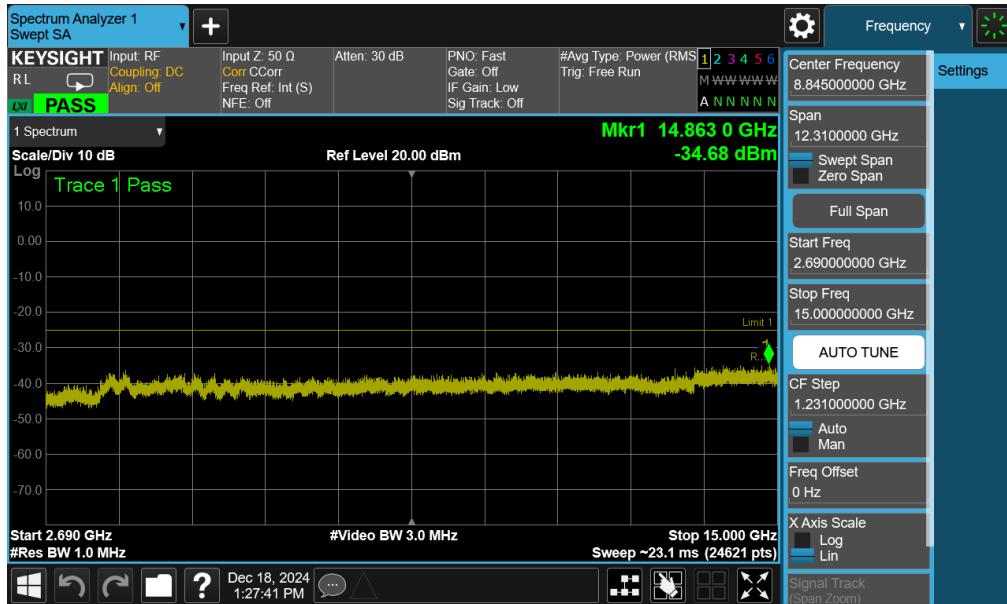
Plot 7-142. Conducted Spurious Plot (LTE Band 41(PC3)/38 - 20MHz QPSK - RB Size 1, RB Offset 50 - High Channel - Ant6)

FCC ID: C3K2114	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2411190103-04-R3.C3K	Test Dates: 12/3/2024 - 2/14/2025	EUT Type: Full Modular	Page 112 of 178

NR Band n41(PC2) – Ant6

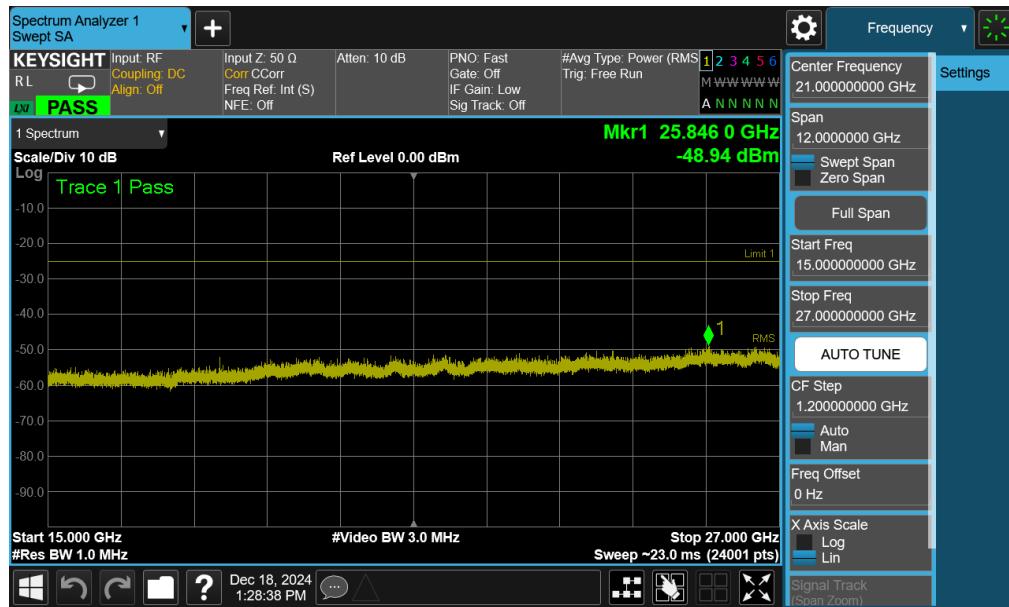


Plot 7-143. Conducted Spurious Plot (NR Band n41(PC3) - 100MHz QPSK - RB Size 1, RB Offset 136 - Low Channel - Ant6)



Plot 7-144. Conducted Spurious Plot (NR Band n41(PC3) - 100MHz QPSK - RB Size 1, RB Offset 136 - Low Channel - Ant6)

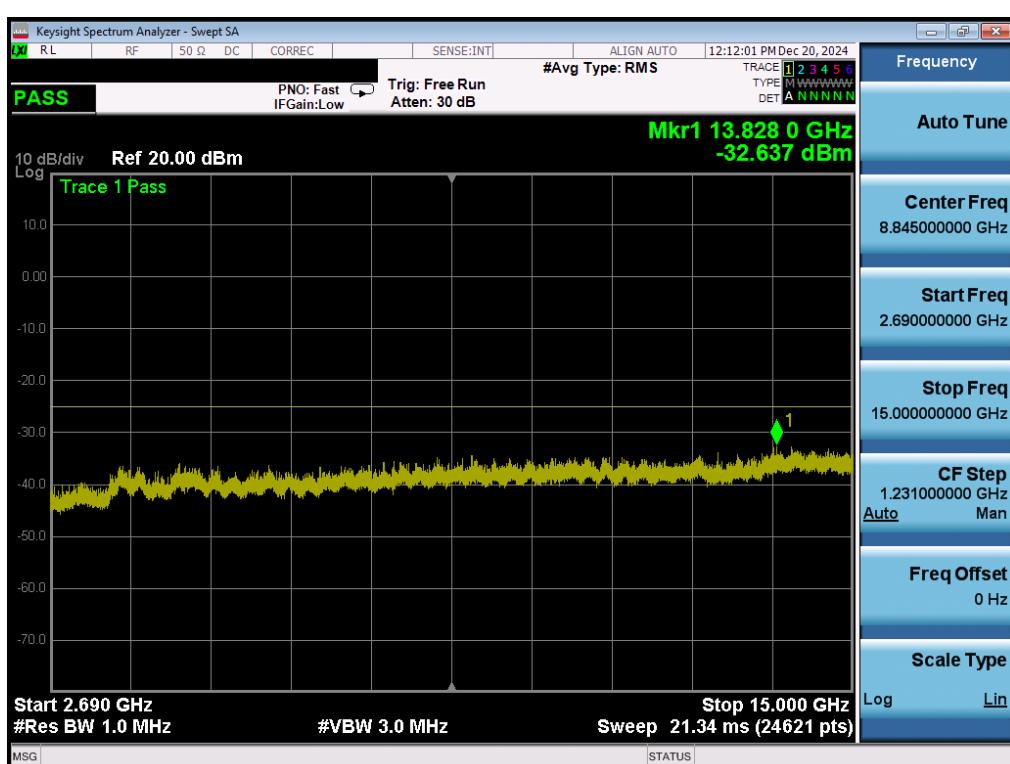
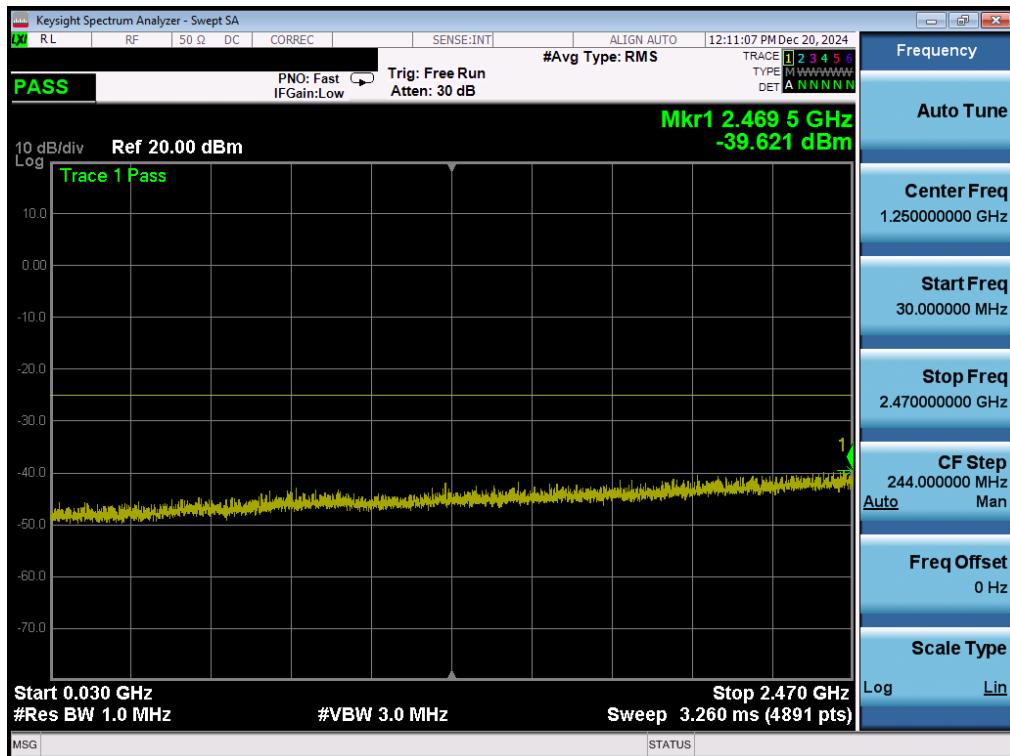
FCC ID: C3K2114	PART 27 MEASUREMENT REPORT			Approved by: Technical Manager
Test Report S/N: 1M2411190103-04-R3.C3K	Test Dates: 12/3/2024 - 2/14/2025	EUT Type: Full Modular		Page 113 of 178



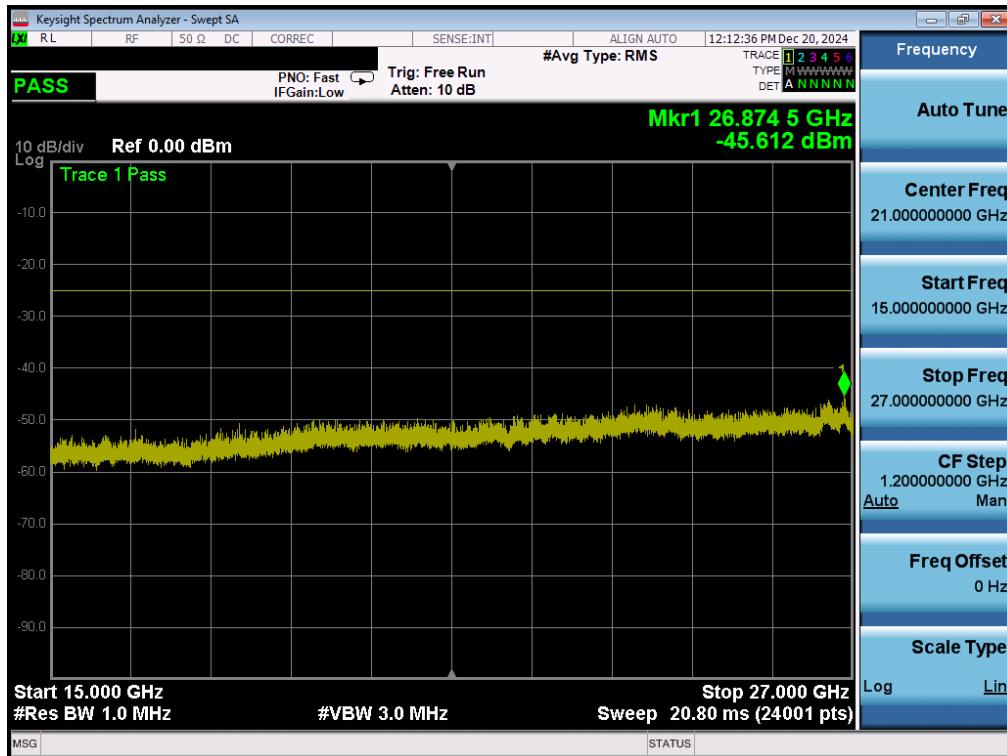
Plot 7-145. Conducted Spurious Plot (NR Band n41(PC3) - 100MHz QPSK - RB Size 1, RB Offset 136 - Low Channel - Ant6)

FCC ID: C3K2114	PART 27 MEASUREMENT REPORT			Approved by: Technical Manager
Test Report S/N: 1M2411190103-04-R3.C3K	Test Dates: 12/3/2024 - 2/14/2025	EUT Type: Full Modular		Page 114 of 178

NR Band n41(PC3) – Ant6



FCC ID: C3K2114	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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Plot 7-148. Conducted Spurious Plot (NR Band n41(PC3) - 100MHz QPSK - RB Size 1, RB Offset 136 - Low Channel - Ant6)

FCC ID: C3K2114	PART 27 MEASUREMENT REPORT			Approved by: Technical Manager
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Mode	Bandwidth	Channel	Range [MHz]	Level [dBm]	Limit [dBm]	Margin [dB]
NR-n41PC1.5	100MHz	Low	30.0 - 2470.0	-42.48	-25	-17.48
		Low	2690.0 - 15000.0	-36.18	-25	-11.18
		Low	15000.0 - 27000.0	-49.61	-25	-24.61
		Mid	30.0 - 2470.0	-42.11	-25	-17.11
		Mid	2690.0 - 15000.0	-36.23	-25	-11.23
		Mid	15000.0 - 27000.0	-49.2	-25	-24.20
		High	30.0 - 2470.0	-39.21	-25	-14.21
		High	2715.0 - 15000.0	-36.47	-25	-11.46
		High	15000.0 - 27000.0	-50.42	-25	-25.42

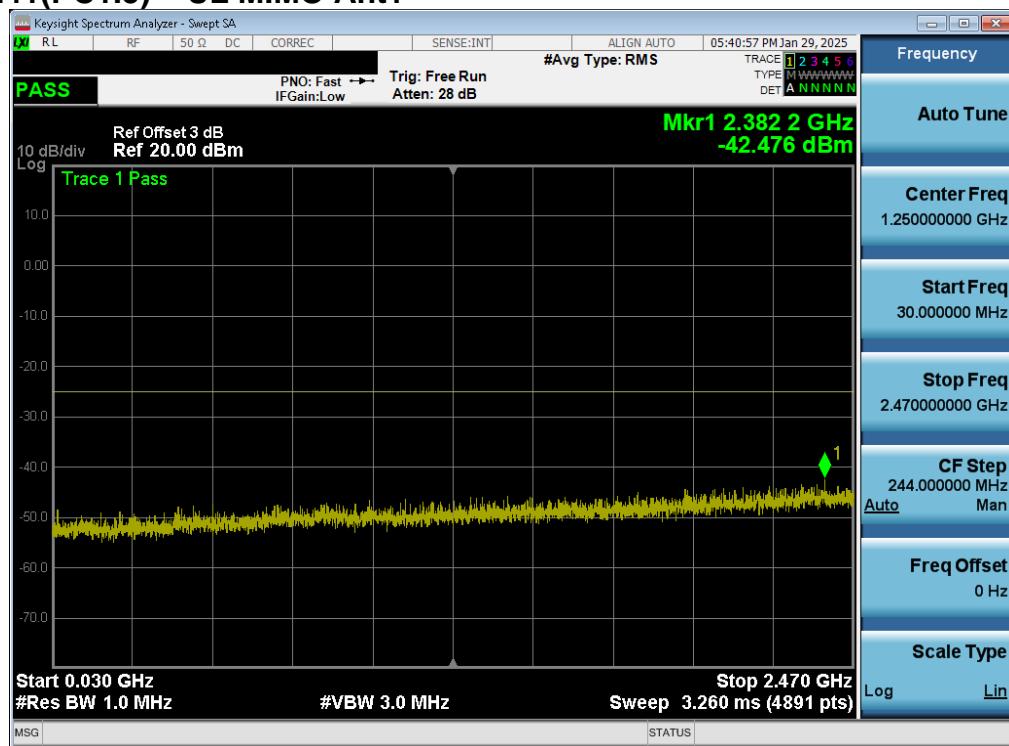
Table 7-27. Conducted Spurious Emission Test Results – UL MIMO Ant1

Mode	Bandwidth	Channel	Range [MHz]	Level [dBm]	Limit [dBm]	Margin [dB]
NR-n41PC1.5	100MHz	Low	30.0 - 2470.0	-37.14	-25	-12.14
		Low	2690.0 - 15000.0	-34.26	-25	-9.26
		Low	15000.0 - 27000.0	-42.10	-25	-17.10
		Mid	30.0 - 2496.0	-35.54	-25	-10.54
		Mid	2690.0 - 15000.0	-28.81	-25	-3.81
		Mid	15000.0 - 27000.0	-42.15	-25	-17.15
		High	30.0 - 2470.0	-36.86	-25	-11.86
		High	2715.0 - 15000.0	-29.56	-25	-4.56
		High	15000.0 - 27000.0	-42.69	-25	-17.69

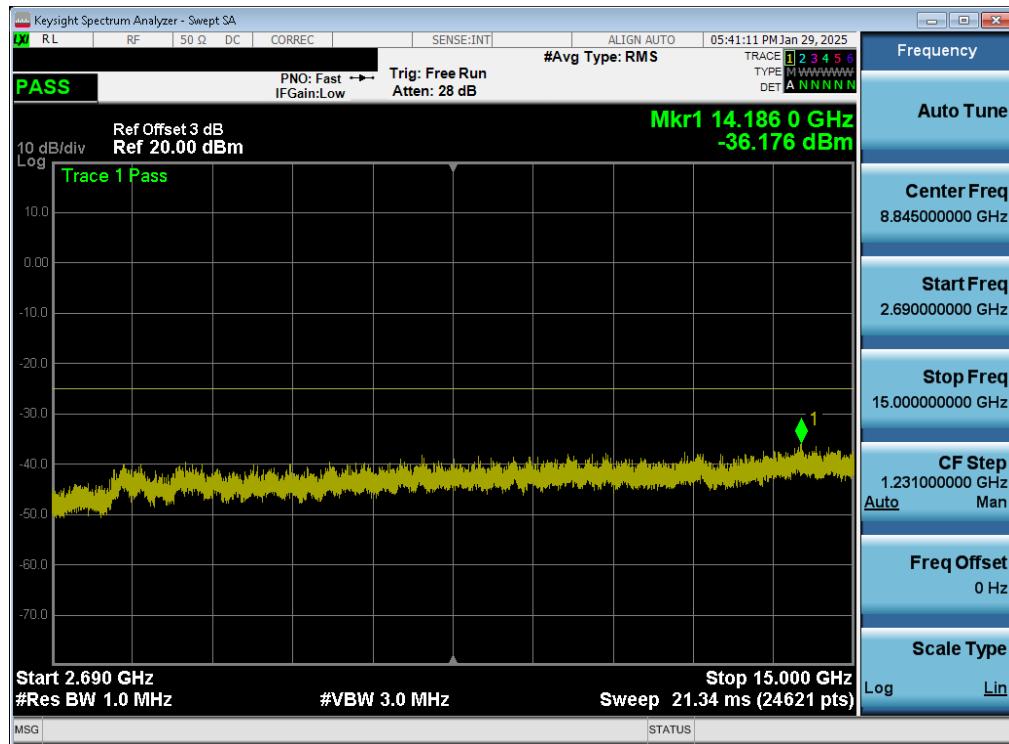
Table 7-28. Conducted Spurious Emission Test Results – UL MIMO Ant6

FCC ID: C3K2114	PART 27 MEASUREMENT REPORT			Approved by: Technical Manager
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NR Band n41(PC1.5) – UL MIMO Ant1

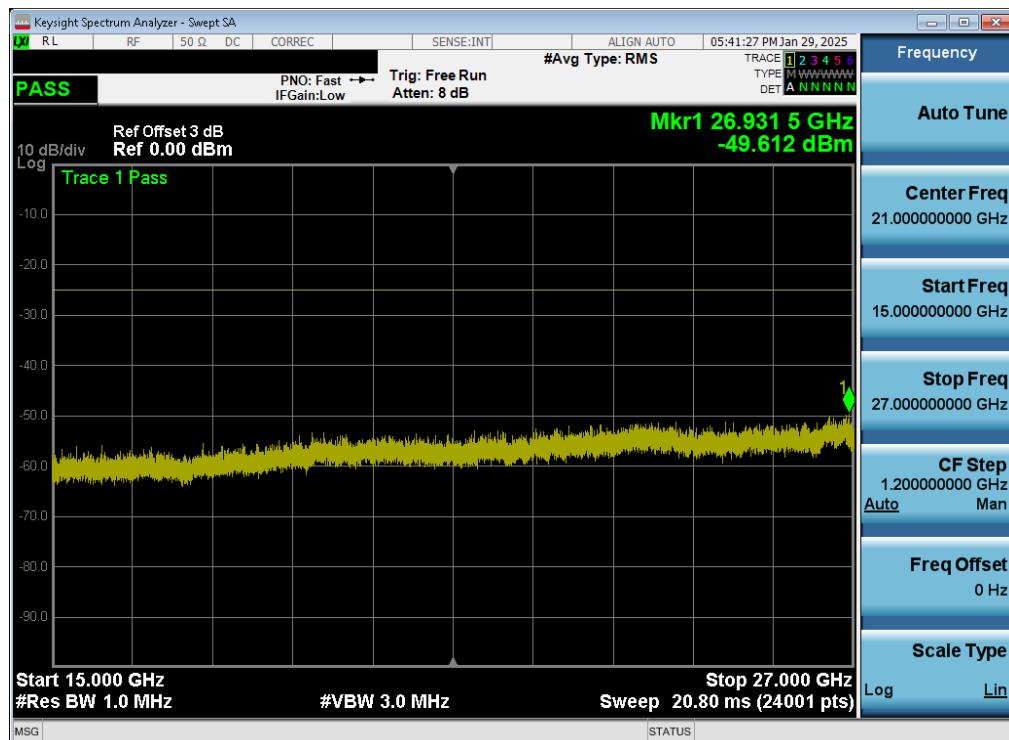


Plot 7-149. Conducted Spurious Plot (NR Band n41(PC1.5) - 100MHz QPSK - RB Size 1, RB Offset 136 - Low Channel – UL MIMO Ant1)



Plot 7-150. Conducted Spurious Plot (NR Band n41(PC1.5) - 100MHz QPSK - RB Size 1, RB Offset 136 - Low Channel – UL MIMO Ant1)

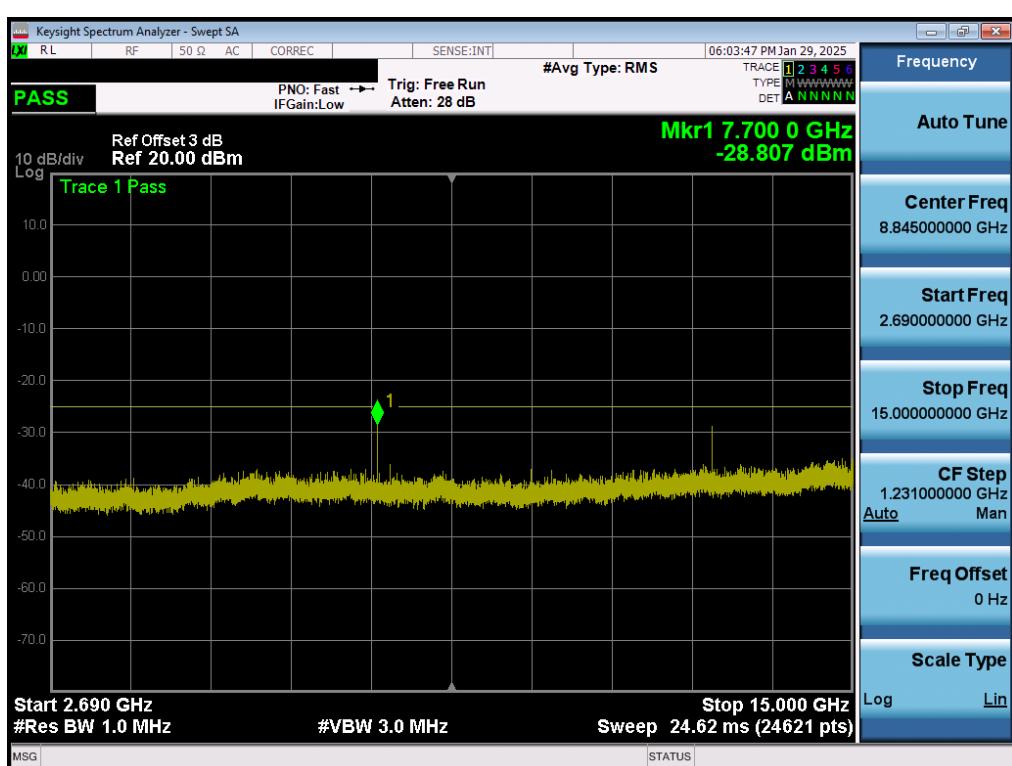
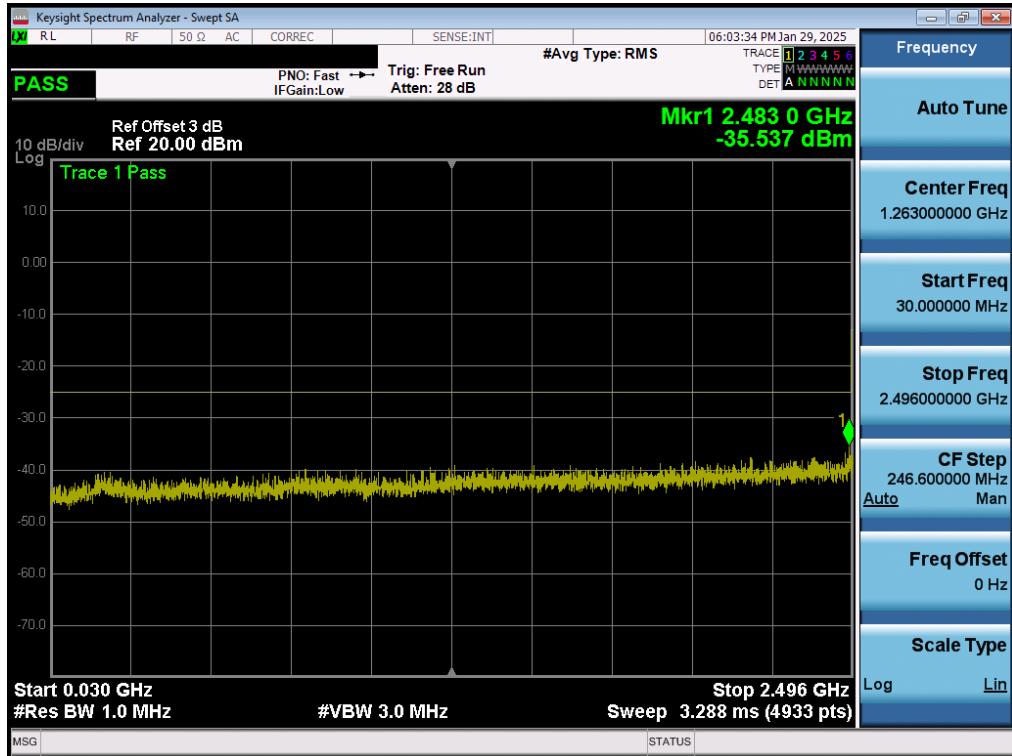
FCC ID: C3K2114	PART 27 MEASUREMENT REPORT			Approved by: Technical Manager
Test Report S/N: 1M2411190103-04-R3.C3K	Test Dates: 12/3/2024 - 2/14/2025	EUT Type: Full Modular		Page 118 of 178



Plot 7-151. Conducted Spurious Plot (NR Band n41(PC1.5) - 100MHz QPSK - RB Size 1, RB Offset 136 - Low Channel – UL MIMO Ant1)

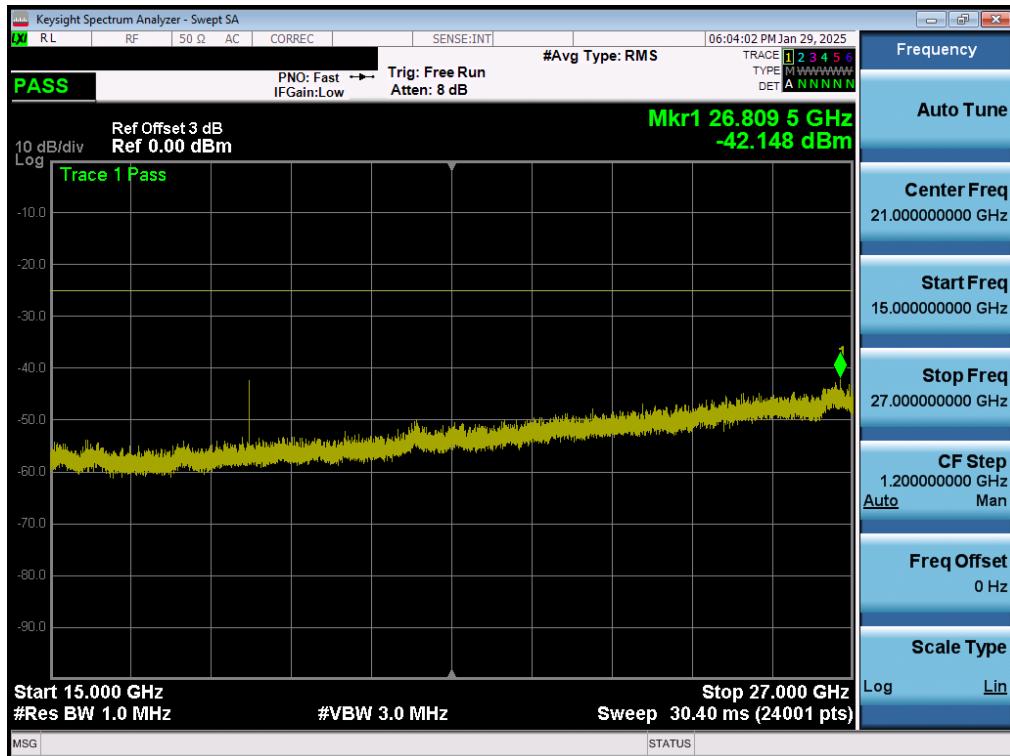
FCC ID: C3K2114	PART 27 MEASUREMENT REPORT			Approved by: Technical Manager
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NR Band n41(PC1.5) – UL MIMO Ant6



Plot 7-153. Conducted Spurious Plot (NR Band n41(PC1.5) - 100MHz QPSK - RB Size 1, RB Offset 136 - Mid Channel – UL MIMO Ant6)

FCC ID: C3K2114	PART 27 MEASUREMENT REPORT			Approved by: Technical Manager
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Plot 7-154. Conducted Spurious Plot (NR Band n41(PC1.5) - 100MHz QPSK - RB Size 1, RB Offset 136 - Mid Channel – UL MIMO Ant6)

FCC ID: C3K2114	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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7.5 Band Edge Emissions at Antenna Terminal

Test Overview

All out of band emissions are measured with a spectrum analyzer connected to the antenna terminal of the EUT while the EUT is operating at maximum power, and at the appropriate frequencies. All data rates were investigated to determine the worst-case configuration. All modes of operation were investigated and the worst-case configuration results are reported in this section.

The minimum permissible attenuation level for Band 30 is $> 43 + 10 \log_{10} (P[\text{Watts}])$ at 2300-2305MHz & 2345-2360MHz, $> 55 + 10 \log_{10} (P[\text{Watts}])$ at 2320-2324MHz & 2341-2345MHz, $> 61 + 10 \log_{10} (P[\text{Watts}])$ at 2324-2328MHz & 2337-2341MHz, $> 67 + 10 \log_{10} (P[\text{Watts}])$ at 2288-2292MHz & 2328-2337MHz, and $> 70 + 10 \log_{10} (P[\text{Watts}])$ at frequencies $< 2288\text{MHz}$ & $> 2365\text{MHz}$.

The minimum permissible attenuation level for Band 7 and 41 is as noted in the Test Notes on the following page.

Test Procedure Used

ANSI C63.26-2015 – Section 5.7.3

Test Settings

1. Start and stop frequency were set such that the band edge would be placed in the center of the plot
2. Span was set large enough so as to capture all out of band emissions near the band edge
3. RBW $\geq 1\%$ of the emission bandwidth
4. VBW $\geq 3 \times \text{RBW}$
5. Detector = RMS
6. Number of sweep points $\geq 2 \times \text{Span/RBW}$
7. Trace mode = trace average for continuous emissions, max hold for pulse emissions
8. Sweep time = auto couple
9. The trace was allowed to stabilize

Test Setup

The EUT and measurement equipment were set up as shown in the diagram below.

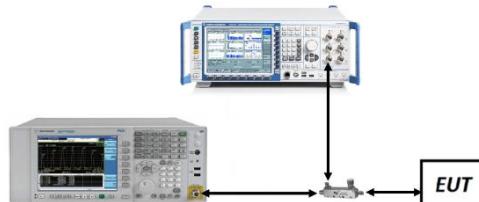


Figure 7-4. Test Instrument & Measurement Setup

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Test Notes

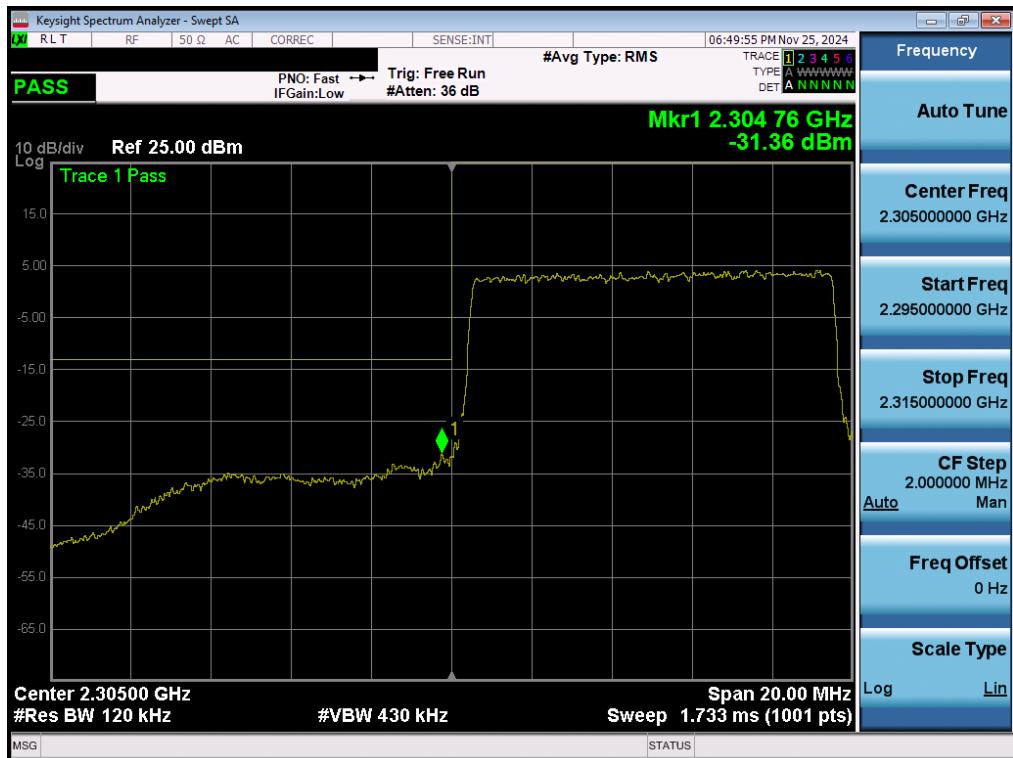
1. Per 27.53(a)(5) in the 1 MHz bands immediately outside and adjacent to the channel blocks at 2305, 2310, 2315, 2320, 2345, 2350, 2355, and 2360 MHz, a resolution bandwidth of at least 1 percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. A narrower resolution 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). The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.
2. Per 27.53(m) for operations in the BRS/EBS bands, the attenuation factor shall be not less than $40 + 10 \log (P)$ dB on all frequencies between the channel edge and 5 megahertz from the channel edge, $43 + 10 \log (P)$ dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and $55 + 10 \log (P)$ dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth. In addition, the attenuation factor shall not be less than $43 + 10 \log (P)$ dB on all frequencies between 2490.5 MHz and 2496 MHz and $55 + 10 \log (P)$ dB at or below 2490.5 MHz.
3. For NR operation, all subcarrier spacings (SCS) and transmission schemes (e.g. CP-OFDM and DFT-s-OFDM) were investigated to determine the worst-case configuration. All modes of operation were investigated and the worst-case configuration results are reported in this section.
4. Per ANSI C63.26-2015, MIMO compliance was addressed by adding $10\log(2) = 3$ dB to the output of each antenna. A visual inspection of the plots for each antenna shows that the emissions are still compliant even after adding 3dB.

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Mode	Bandwidth	Channel	Test Case	Level [dBm]	Limit [dBm]	Margin [dB]
LTE-B30	10MHz	Low	Band Edge	-31.36	-13	-18.36
		Low	Extended	-26.21	-25	-1.21
		High	Band Edge	-28.30	-13	-15.30
		High	Extended	-37.93	-37	-0.93
	5MHz	Low	Band Edge	-26.92	-13	-13.92
		Low	Extended	-14.10	-13	-1.10
		High	Band Edge	-26.50	-13	-13.50
		High	Extended	-37.35	-31	-6.35
LTE-B41PC2	20MHz	Low	Band Edge	-29.26	-25	-4.26
		High	Band Edge	-24.43	-10	-14.43
	15MHz	Low	Band Edge	-30.38	-25	-5.38
		High	Band Edge	-39.00	-25	-14.00
	10MHz	Low	Band Edge	-30.07	-25	-5.07
		High	Band Edge	-36.48	-25	-11.48
	5MHz	Low	Band Edge	-21.83	-13	-8.83
		High	Band Edge	-36.95	-25	-11.95
LTE-B41PC3	20MHz	Low	Band Edge	-30.95	-25	-5.95
		High	Band Edge	-40.46	-25	-15.46
	15MHz	Low	Band Edge	-28.86	-25	-3.86
		High	Band Edge	-40.50	-25	-15.50
	10MHz	Low	Band Edge	-32.01	-25	-7.01
		High	Band Edge	-38.76	-25	-13.76
	5MHz	Low	Band Edge	-20.23	-13	-7.23
		High	Band Edge	-38.62	-25	-13.62
LTE-B38	20MHz	Low	Band Edge	-41.20	-25	-16.20
		High	Band Edge	-41.08	-25	-16.08
	15MHz	Low	Band Edge	-40.74	-25	-15.74
		High	Band Edge	-39.40	-25	-14.40
	10MHz	Low	Band Edge	-38.85	-25	-13.85
		High	Band Edge	-37.86	-25	-12.86
	5MHz	Low	Band Edge	-38.77	-25	-13.77
		High	Band Edge	-37.09	-25	-12.09
LTE-B41 PC3 ULCA	20+20MHz	Low	Band Edge	-35.93	-25	-9.43
		High	Band Edge	-20.74	-13	-7.74

Table 7-29. Conducted Band Edge Test Results – Ant1

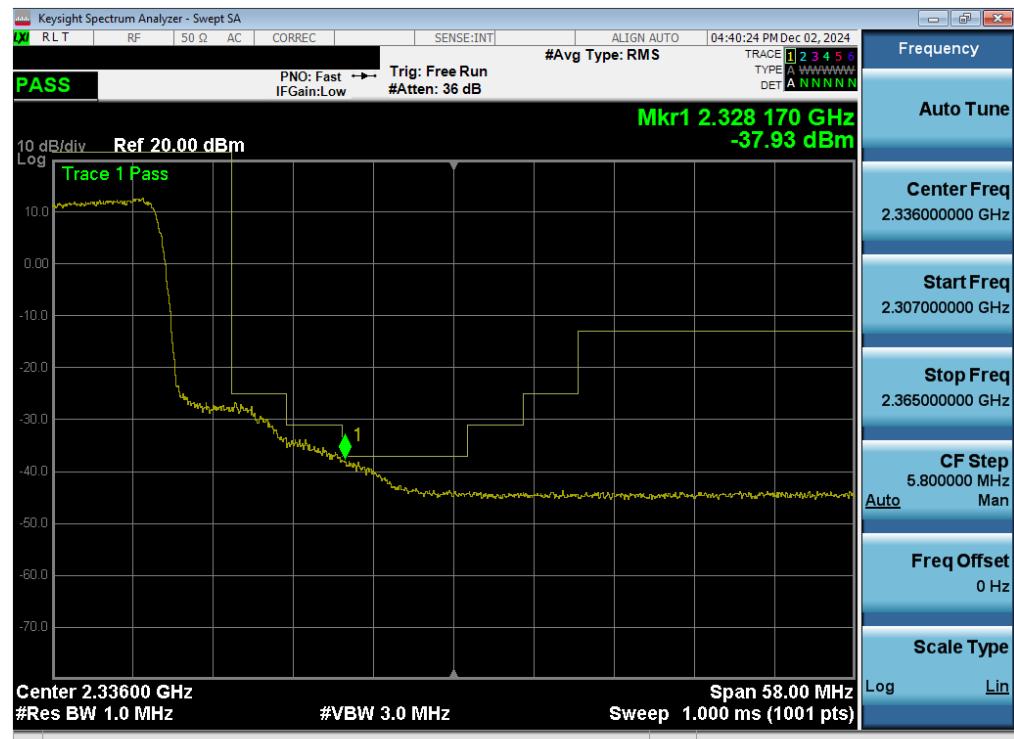
FCC ID: C3K2114	PART 27 MEASUREMENT REPORT			Approved by: Technical Manager
Test Report S/N: 1M2411190103-04-R3.C3K	Test Dates: 12/3/2024 - 2/14/2025	EUT Type: Full Modular		Page 124 of 178

LTE Band 30 – Ant1


FCC ID: C3K2114	PART 27 MEASUREMENT REPORT			Approved by: Technical Manager
Test Report S/N: 1M2411190103-04-R3.C3K	Test Dates: 12/3/2024 - 2/14/2025	EUT Type: Full Modular		Page 125 of 178



Plot 7-157. Upper Band Edge Plot (LTE Band 30 - 10MHz QPSK – Full RB - Ant1)



Plot 7-158. Extended Upper Band Edge Plot (LTE Band 30 A-MPR - 10MHz QPSK – Full RB - Ant1)

FCC ID: C3K2114	PART 27 MEASUREMENT REPORT			Approved by: Technical Manager
Test Report S/N: 1M2411190103-04-R3.C3K	Test Dates: 12/3/2024 - 2/14/2025	EUT Type: Full Modular		Page 126 of 178

LTE Band 41(PC2) – Ant1

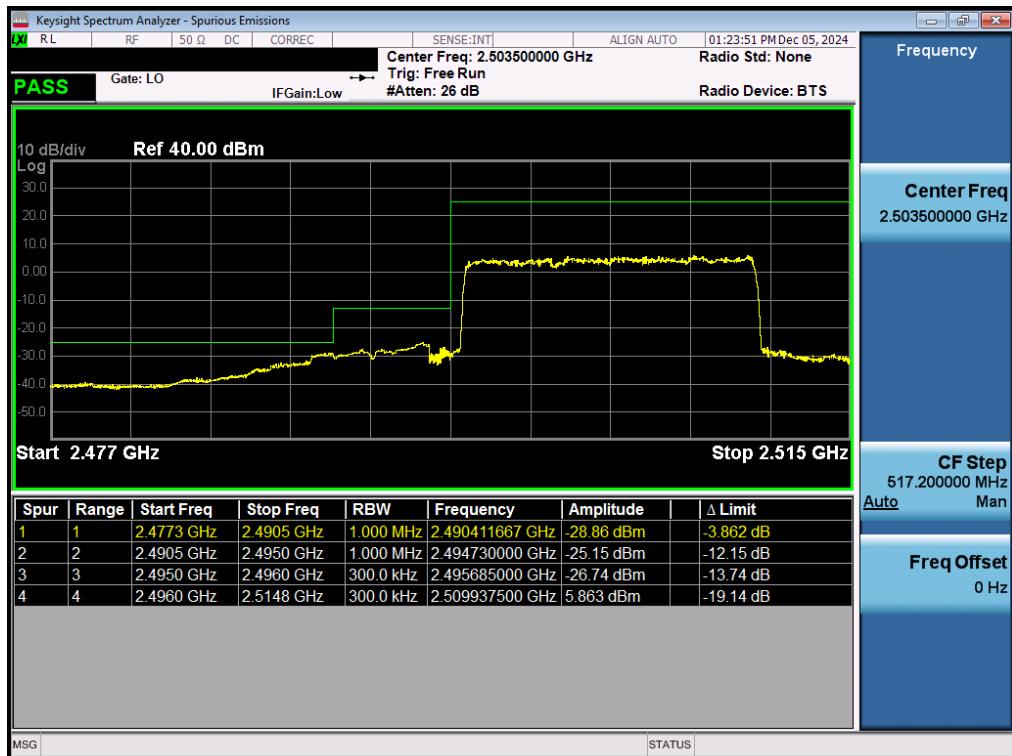


Plot 7-159. Lower ACP Plot (LTE Band 41(PC2) - 20MHz QPSK – Full RB - Ant1)



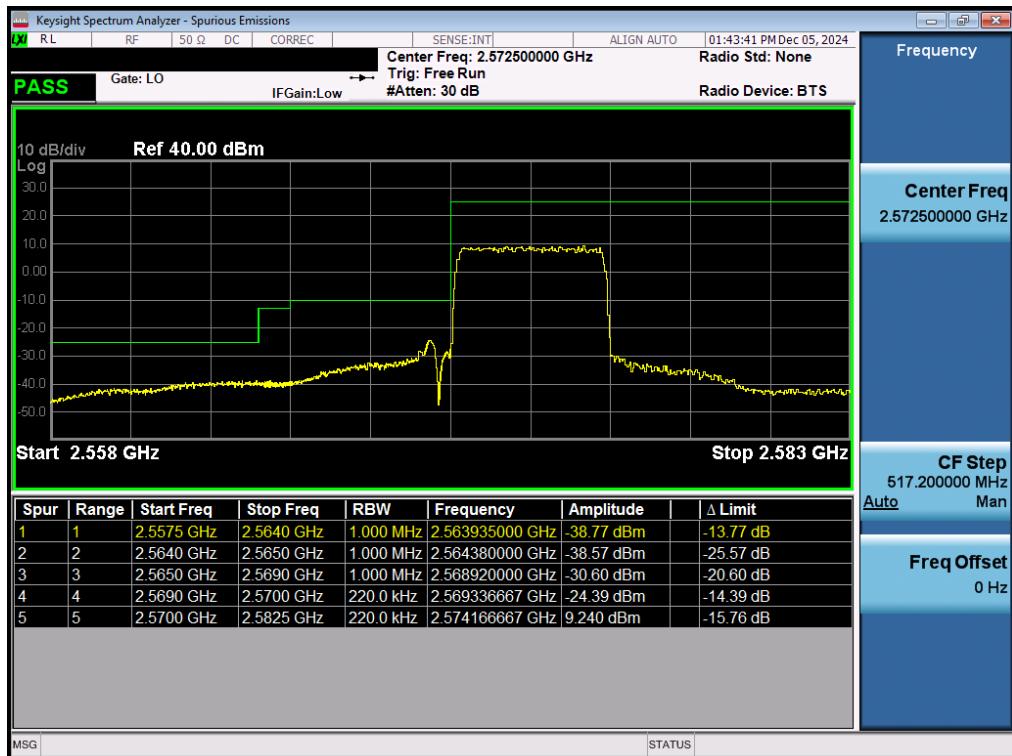
Plot 7-160. Upper ACP Plot (LTE Band 41(PC2) - 20MHz QPSK – Full RB - Ant1)

FCC ID: C3K2114	PART 27 MEASUREMENT REPORT			Approved by: Technical Manager
Test Report S/N: 1M2411190103-04-R3.C3K	Test Dates: 12/3/2024 - 2/14/2025	EUT Type: Full Modular		Page 127 of 178

LTE Band 41(PC3) – Ant1

Plot 7-161. Lower ACP Plot (LTE Band 41(PC3) - 15MHz QPSK – Full RB - Ant1)

Plot 7-162. Upper ACP Plot (LTE Band 41(PC3) - 15MHz QPSK – Full RB - Ant1)

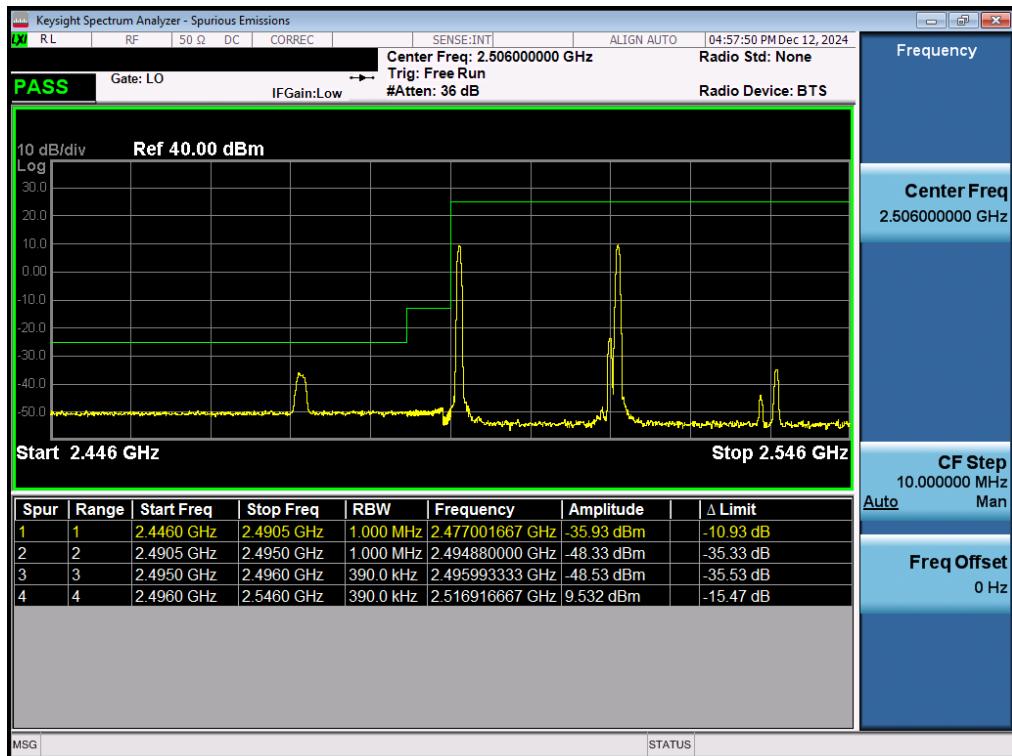
FCC ID: C3K2114	PART 27 MEASUREMENT REPORT			Approved by: Technical Manager
Test Report S/N: 1M2411190103-04-R3.C3K	Test Dates: 12/3/2024 - 2/14/2025	EUT Type: Full Modular		Page 128 of 178

LTE Band 38 – Ant1

Plot 7-163. Lower ACP Plot (LTE Band 38 - 5MHz QPSK – Full RB - Ant1)

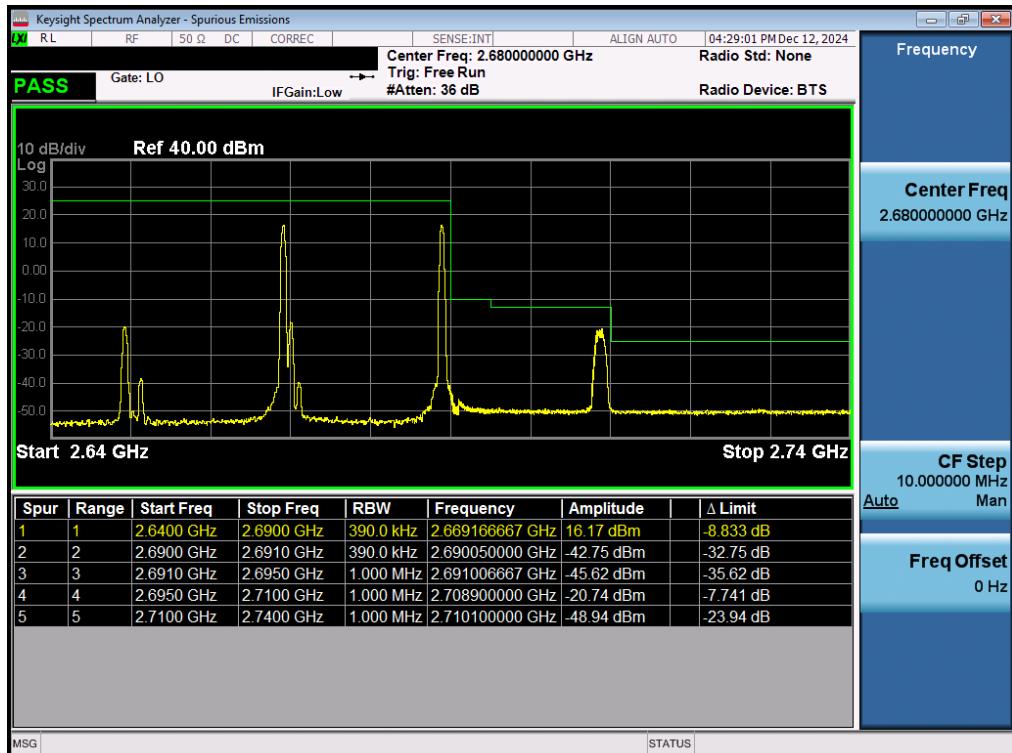
Plot 7-164. Upper ACP Plot (LTE Band 38 - 5MHz QPSK – Full RB - Ant1)

FCC ID: C3K2114	PART 27 MEASUREMENT REPORT			Approved by: Technical Manager
Test Report S/N: 1M2411190103-04-R3.C3K	Test Dates: 12/3/2024 - 2/14/2025	EUT Type: Full Modular		Page 129 of 178

ULCA - LTE Band 41(PC3) – Ant1



Plot 7-165. Lower ACP Plot (ULCA LTE B41(PC3) – 20+20MHz QPSK – 1 RB - Ant1)



Plot 7-166. Upper ACP Plot (ULCA LTE B41(PC3) – 20+20MHz QPSK – 1 RB - Ant1)

FCC ID: C3K2114	PART 27 MEASUREMENT REPORT			Approved by: Technical Manager
Test Report S/N: 1M2411190103-04-R3.C3K	Test Dates: 12/3/2024 - 2/14/2025	EUT Type: Full Modular		Page 130 of 178

Mode	Bandwidth	Channel	Test Case	Level [dBm]	Limit [dBm]	Margin [dB]
NR-n30	10MHz	Low	Band Edge	-27.75	-13	-14.75
		Low	Extended	-19.89	-13	-6.89
		High	Band Edge	-28.77	-13	-15.77
		High	Extended	-45.42	-37	-8.42
	5MHz	Low	Band Edge	-25.23	-13	-12.23
		Low	Extended	-14.03	-13	-1.03
		High	Band Edge	-23.51	-13	-10.51
		High	Extended	-53.85	-37	-16.85
NR-n41PC2	100MHz	Low	Band Edge	-30.81	-25	-5.81
		High	Band Edge	-23.40	-10	-13.40
	90MHz	Low	Band Edge	-28.37	-13	-12.84
		High	Band Edge	-28.37	-13	-20.28
	80MHz	Low	Band Edge	-33.03	-25	-8.03
		High	Band Edge	-27.28	-13	-14.28
	70MHz	Low	Band Edge	-21.27	-10	-11.27
		High	Band Edge	-21.27	-10	-21.62
	60MHz	Low	Band Edge	-28.48	-25	-3.48
		High	Band Edge	-24.31	-10	-14.31
	50MHz	Low	Band Edge	-34.20	-13	-21.20
		High	Band Edge	-34.20	-13	-19.75
	40MHz	Low	Band Edge	-36.50	-25	-11.50
		High	Band Edge	-33.57	-10	-23.57
	30MHz	Low	Band Edge	-29.74	-10	-19.74
		High	Band Edge	-29.74	-10	-17.67
	20MHz	Low	Band Edge	-44.95	-25	-19.95
		High	Band Edge	-44.95	-25	-15.74
	15MHz	Low	Band Edge	-33.11	-25	-8.11
		High	Band Edge	-29.19	-10	-19.19
	10MHz	Low	Band Edge	-36.60	-25	-11.60
		High	Band Edge	-29.14	-10	-19.14
NR-n41PC3	100MHz	Low	Band Edge	-34.68	-25	-9.68
		High	Band Edge	-28.55	-10	-18.55
	90MHz	Low	Band Edge	-35.70	-25	-10.70
		High	Band Edge	-31.69	-13	-18.69
	80MHz	Low	Band Edge	-35.50	-25	-10.50
		High	Band Edge	-30.22	-13	-17.22
	70MHz	Low	Band Edge	-34.10	-25	-9.10
		High	Band Edge	-29.73	-13	-16.73
	60MHz	Low	Band Edge	-34.59	-25	-9.59
		High	Band Edge	-26.88	-10	-16.88
	50MHz	Low	Band Edge	-33.89	-25	-8.89
		High	Band Edge	-34.08	-13	-21.08
	40MHz	Low	Band Edge	-36.33	-25	-11.33
		High	Band Edge	-35.63	-10	-25.63
	30MHz	Low	Band Edge	-30.45	-25	-5.45
		High	Band Edge	-33.61	-10	-23.61
	20MHz	Low	Band Edge	-30.06	-25	-5.06
		High	Band Edge	-31.32	-10	-21.32
	15MHz	Low	Band Edge	-35.50	-25	-10.50
		High	Band Edge	-30.76	-10	-20.76
	10MHz	Low	Band Edge	-37.29	-25	-12.29
		High	Band Edge	-31.79	-10	-21.79

Table 7-30. Conducted Band Edge Test Results – Ant1

FCC ID: C3K2114	PART 27 MEASUREMENT REPORT				Approved by: Technical Manager
Test Report S/N: 1M2411190103-04-R3.C3K	Test Dates: 12/3/2024 - 2/14/2025	EUT Type: Full Modular			Page 131 of 178

NR Band n30 – Ant1

Plot 7-167. Lower Band Edge Plot (NR Band n30 - 5MHz DFTS-QPSK – Full RB - Ant1)

Plot 7-168. Extended Lower Band Edge Plot (NR Band n30 - 5MHz DFTS-QPSK – Full RB - Ant1)

FCC ID: C3K2114	PART 27 MEASUREMENT REPORT			Approved by: Technical Manager
Test Report S/N: 1M2411190103-04-R3.C3K	Test Dates: 12/3/2024 - 2/14/2025	EUT Type: Full Modular		Page 132 of 178

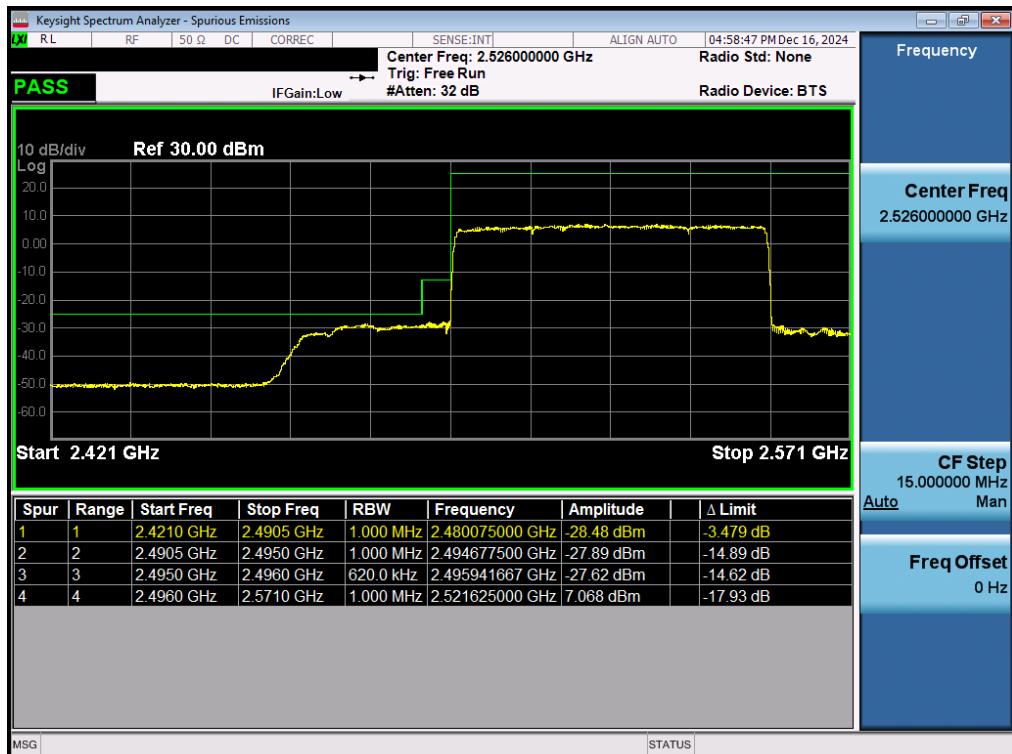
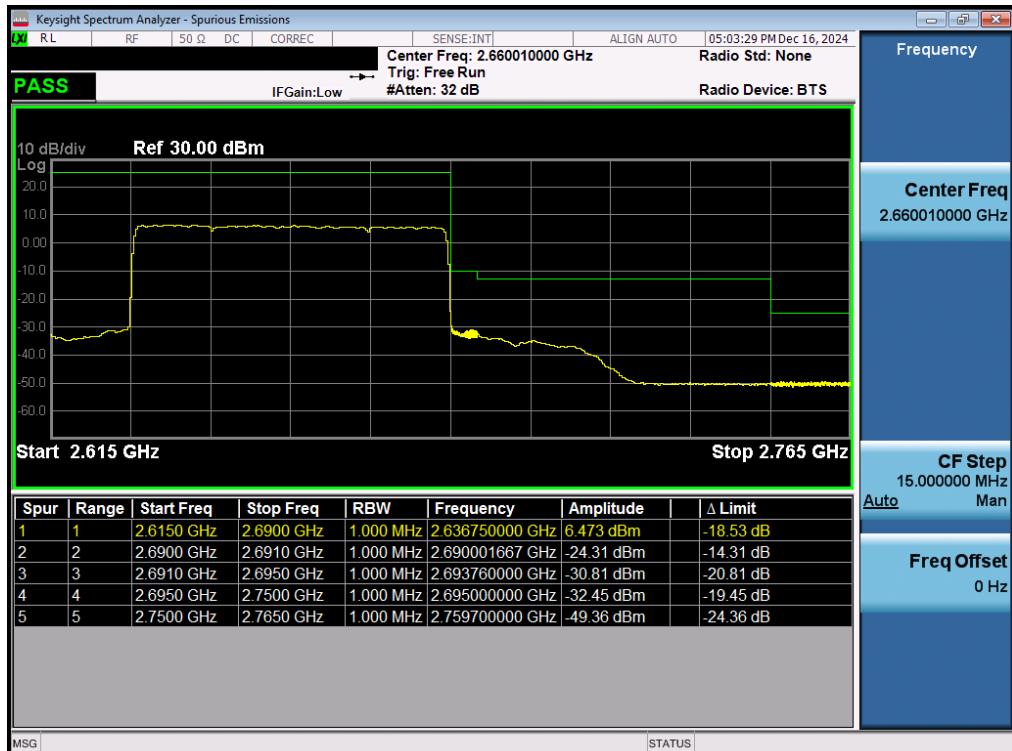


Plot 7-169. Upper Band Edge Plot (NR Band n30 - 5MHz DFTS-QPSK – Full RB - Ant1)

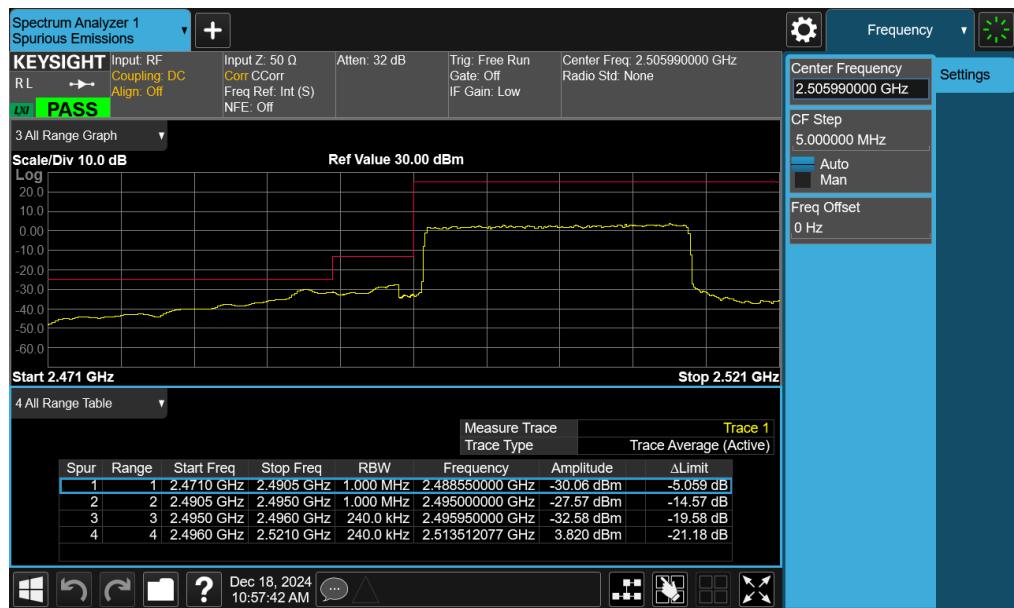


Plot 7-170. Extended Upper Band Edge Plot (NR Band n30 - 5MHz DFTS-QPSK – Full RB - Ant1)

FCC ID: C3K2114	PART 27 MEASUREMENT REPORT			Approved by: Technical Manager
Test Report S/N: 1M2411190103-04-R3.C3K	Test Dates: 12/3/2024 - 2/14/2025	EUT Type: Full Modular		Page 133 of 178

NR Band n41(PC2) – Ant1

Plot 7-171. Lower ACP Plot (NR Band n41(PC2) - 60MHz DFTS-QPSK – Full RB - Ant1)

Plot 7-172. Upper ACP Plot (NR Band n41(PC2) - 60MHz DFTS-QPSK – Full RB - Ant1)

FCC ID: C3K2114	PART 27 MEASUREMENT REPORT			Approved by: Technical Manager
Test Report S/N: 1M2411190103-04-R3.C3K	Test Dates: 12/3/2024 - 2/14/2025	EUT Type: Full Modular		Page 134 of 178

NR Band n41(PC3) – Ant1

Plot 7-173. Lower ACP Plot (NR Band n41(PC3) - 20MHz DFTS-QPSK – Full RB - Ant1)

Plot 7-174. Upper ACP Plot (NR Band n41(PC3) - 20MHz DFTS-QPSK – Full RB - Ant1)

FCC ID: C3K2114	PART 27 MEASUREMENT REPORT			Approved by: Technical Manager
Test Report S/N: 1M2411190103-04-R3.C3K	Test Dates: 12/3/2024 - 2/14/2025	EUT Type: Full Modular	Page 135 of 178	

Mode	Bandwidth	Channel	Test Case	Level [dBm]	Limit [dBm]	Margin [dB]
LTE-B41PC2	20MHz	Low	Band Edge	-26.15	-25	-1.15
		High	Band Edge	-22.94	-10	-12.94
	15MHz	Low	Band Edge	-26.79	-25	-1.79
		High	Band Edge	-39.96	-25	-14.96
	10MHz	Low	Band Edge	-26.15	-25	-1.15
		High	Band Edge	-37.66	-25	-12.66
	5MHz	Low	Band Edge	-23.68	-13	-10.68
		High	Band Edge	-37.99	-25	-12.99
LTE-B41PC3	20MHz	Low	Band Edge	-28.13	-25	-3.13
		High	Band Edge	-41.90	-25	-16.90
	15MHz	Low	Band Edge	-29.68	-25	-4.68
		High	Band Edge	-42.25	-25	-17.25
	10MHz	Low	Band Edge	-28.42	-25	-3.42
		High	Band Edge	-38.49	-25	-13.49
	5MHz	Low	Band Edge	-23.55	-13	-10.55
		High	Band Edge	-39.12	-25	-14.12

Table 7-31. Conducted Band Edge Test Results – Ant6

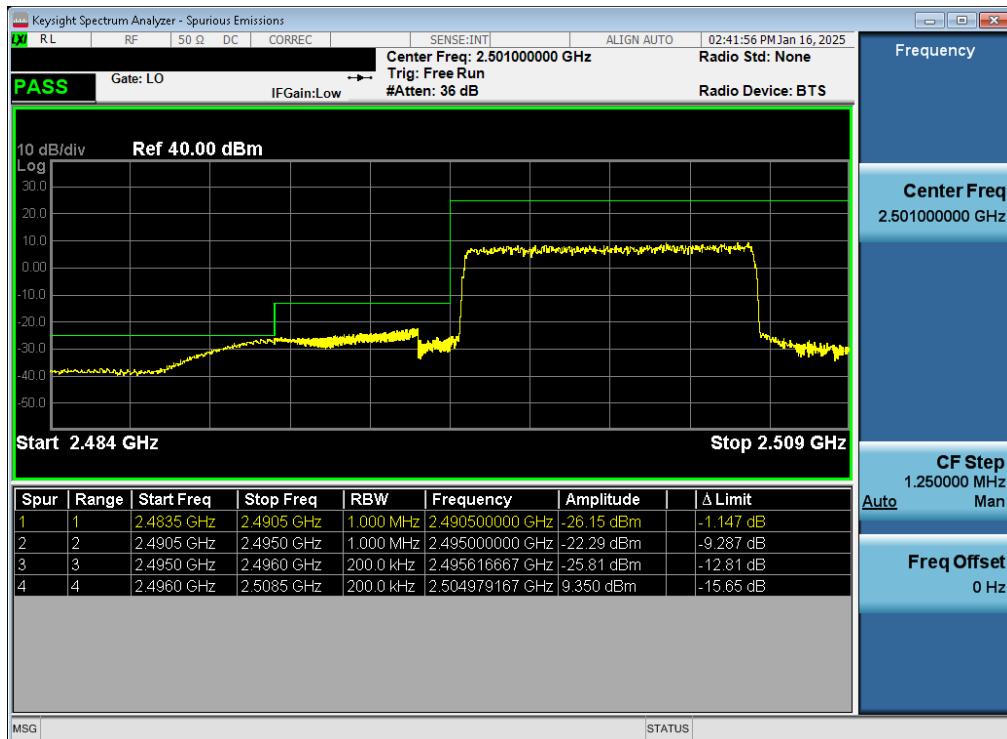
FCC ID: C3K2114	PART 27 MEASUREMENT REPORT			Approved by: Technical Manager
Test Report S/N: 1M2411190103-04-R3.C3K	Test Dates: 12/3/2024 - 2/14/2025	EUT Type: Full Modular		

Mode	Bandwidth	Channel	Test Case	Level [dBm]	Limit [dBm]	Margin [dB]
NR-n41PC2	100MHz	Low	Band Edge	-31.22	-25	-6.22
		High	Band Edge	-27.57	-10	-17.57
	90MHz	Low	Band Edge	-38.19	-25	-13.19
		High	Band Edge	-30.06	-10	-20.06
	80MHz	Low	Band Edge	-38.36	-25	-13.36
		High	Band Edge	-33.82	-13	-20.82
	70MHz	Low	Band Edge	-35.62	-25	-10.62
		High	Band Edge	-31.35	-13	-18.35
	60MHz	Low	Band Edge	-36.95	-25	-11.95
		High	Band Edge	-23.77	-10	-13.77
	50MHz	Low	Band Edge	-30.48	-25	-5.48
		High	Band Edge	-27.48	-13	-14.48
	40MHz	Low	Band Edge	-37.67	-25	-12.67
		High	Band Edge	-47.56	-25	-22.56
	30MHz	Low	Band Edge	-36.08	-25	-11.08
		High	Band Edge	-30.53	-10	-20.53
	20MHz	Low	Band Edge	-38.01	-25	-13.01
		High	Band Edge	-42.93	-25	-17.93
	15MHz	Low	Band Edge	-39.05	-25	-14.05
		High	Band Edge	-30.21	-10	-20.21
	10MHz	Low	Band Edge	-40.22	-25	-15.22
		High	Band Edge	-29.22	-10	-19.22
NR-n41PC3	100MHz	Low	Band Edge	-37.55	-25	-12.55
		Low	Band Edge	-31.23	-10	-21.23
	90MHz	Low	Band Edge	-37.40	-25	-12.40
		Low	Band Edge	-30.82	-10	-20.82
	80MHz	Low	Band Edge	-39.12	-25	-14.12
		Low	Band Edge	-33.32	-10	-23.32
	70MHz	Low	Band Edge	-33.72	-25	-8.72
		Low	Band Edge	-49.20	-25	-24.20
	60MHz	Low	Band Edge	-37.53	-25	-12.53
		Low	Band Edge	-24.71	-10	-14.71
	50MHz	Low	Band Edge	-31.62	-25	-6.62
		Low	Band Edge	-29.32	-13	-16.32
	40MHz	Low	Band Edge	-41.24	-25	-16.24
		Low	Band Edge	-32.48	-13	-19.48
	30MHz	Low	Band Edge	-40.31	-25	-15.31
		Low	Band Edge	-29.16	-13	-16.16
	20MHz	Low	Band Edge	-38.07	-25	-13.07
		Low	Band Edge	-44.98	-25	-19.98
	15MHz	Low	Band Edge	-41.04	-25	-16.04
		Low	Band Edge	-26.50	-13	-13.50
	10MHz	Low	Band Edge	-39.44	-25	-14.44
		Low	Band Edge	-28.59	-10	-18.59

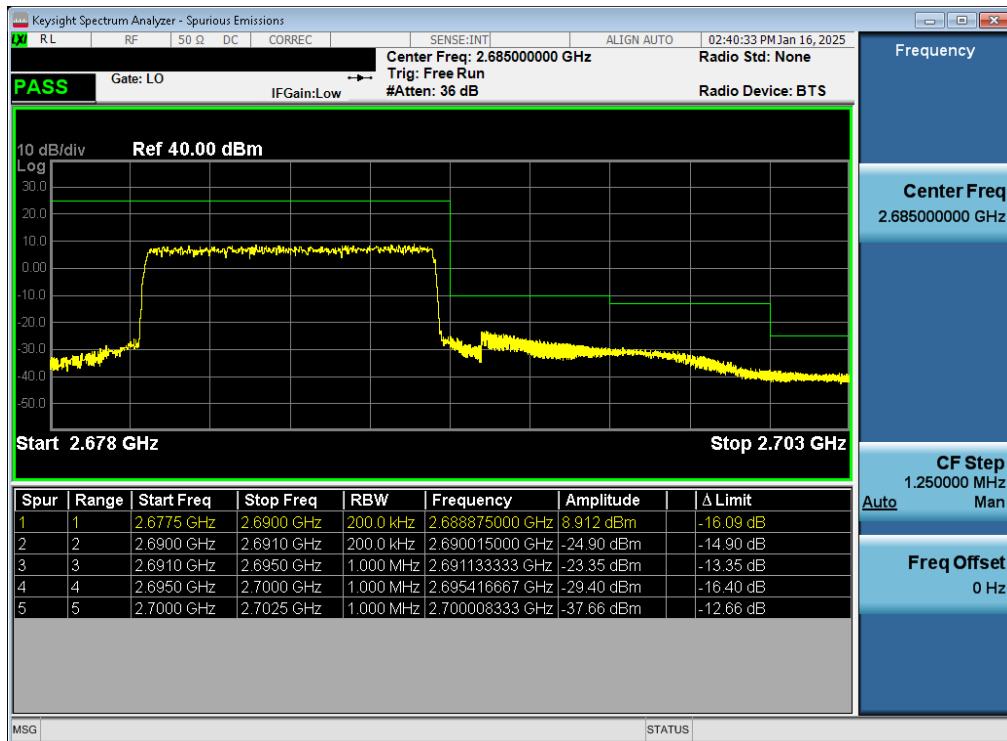
Table 7-32. Conducted Band Edge Test Results – Ant6

FCC ID: C3K2114	PART 27 MEASUREMENT REPORT			Approved by: Technical Manager
Test Report S/N: 1M2411190103-04-R3.C3K	Test Dates: 12/3/2024 - 2/14/2025	EUT Type: Full Modular		Page 137 of 178

LTE Band 41(PC2) – Ant6



Plot 7-175. Lower ACP Plot (LTE Band 41(PC2) - 10MHz QPSK – Full RB - Ant6)



Plot 7-176. Upper ACP Plot (LTE Band 41(PC2) - 10MHz QPSK – Full RB - Ant6)

FCC ID: C3K2114	PART 27 MEASUREMENT REPORT			Approved by: Technical Manager
Test Report S/N: 1M2411190103-04-R3.C3K	Test Dates: 12/3/2024 - 2/14/2025	EUT Type: Full Modular		Page 138 of 178

LTE Band 41(PC3) – Ant6



Plot 7-177. Lower ACP Plot (LTE Band 41(PC3) - 20MHz QPSK – Full RB - Ant6)



Plot 7-178. Upper ACP Plot (LTE Band 41(PC3) - 20MHz QPSK – Full RB - Ant6)

FCC ID: C3K2114	PART 27 MEASUREMENT REPORT			Approved by: Technical Manager
Test Report S/N: 1M2411190103-04-R3.C3K	Test Dates: 12/3/2024 - 2/14/2025	EUT Type: Full Modular		Page 139 of 178

NR Band n41(PC2) – Ant6



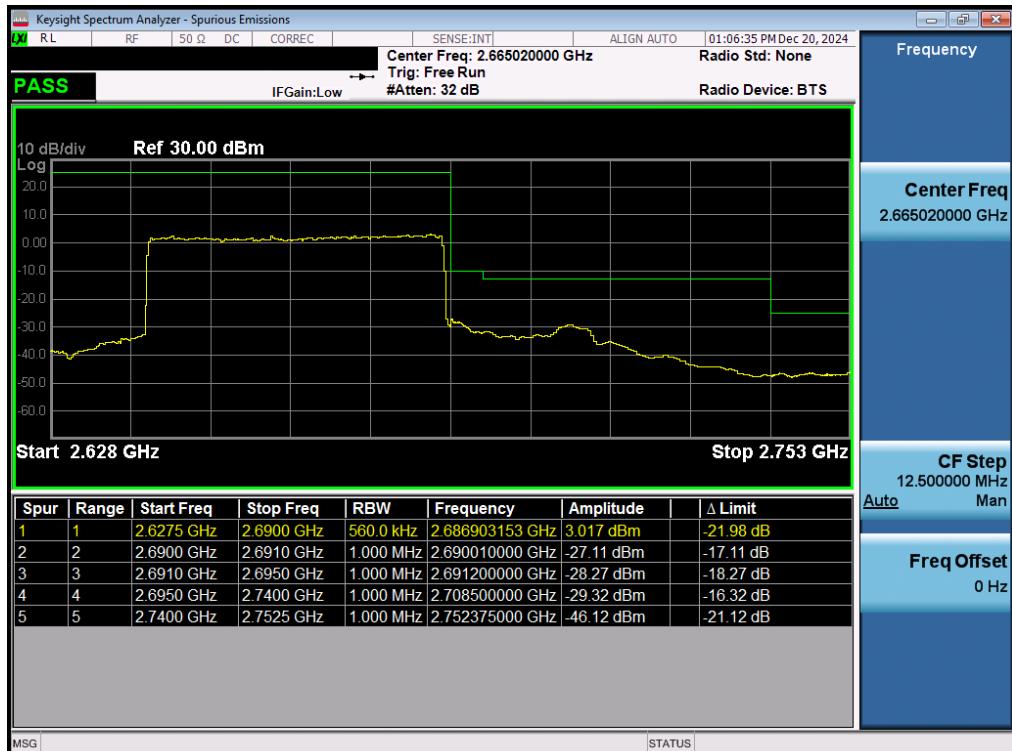
Plot 7-179. Lower ACP Plot (NR Band n41(PC2) - 50MHz DFTs-BPSK – Full RB – Ant6)



Plot 7-180. Upper ACP Plot (NR Band n41(PC2) - 50MHz DFTs-BPSK – Full RB – Ant6)

FCC ID: C3K2114	PART 27 MEASUREMENT REPORT			Approved by: Technical Manager
Test Report S/N: 1M2411190103-04-R3.C3K	Test Dates: 12/3/2024 - 2/14/2025	EUT Type: Full Modular		Page 140 of 178

NR Band n41(PC3) – Ant1

Plot 7-181. Lower ACP Plot (NR Band n41(PC3) - 50MHz DFTS-QPSK – Full RB – Ant6)

Plot 7-182. Upper ACP Plot (NR Band n41(PC3) - 50MHz DFTS-QPSK – Full RB – Ant6)

FCC ID: C3K2114	PART 27 MEASUREMENT REPORT			Approved by: Technical Manager
Test Report S/N: 1M2411190103-04-R3.C3K	Test Dates: 12/3/2024 - 2/14/2025	EUT Type: Full Modular		Page 141 of 178

Mode	Bandwidth	Channel	Test Case	Level [dBm]	Limit [dBm]	Margin [dB]
NR-n41PC1.5	100MHz	Low	Band Edge	-25.79	-25	-0.79
		High	Band Edge	-20.41	-13	-7.41
	90MHz	Low	Band Edge	-25.81	-25	-0.81
		High	Band Edge	-19.34	-13	-6.34
	80MHz	Low	Band Edge	-25.80	-25	-0.80
		High	Band Edge	-19.22	-13	-6.22
	70MHz	Low	Band Edge	-25.70	-25	-0.70
		High	Band Edge	-17.18	-13	-4.18
	60MHz	Low	Band Edge	-25.53	-25	-0.53
		High	Band Edge	-18.29	-10	-8.29
	50MHz	Low	Band Edge	-31.74	-25	-6.74
		High	Band Edge	-24.69	-10	-14.69
	40MHz	Low	Band Edge	-30.82	-25	-5.82
		High	Band Edge	-25.64	-10	-15.64
	30MHz	Low	Band Edge	-27.94	-25	-2.94
		High	Band Edge	-19.59	-10	-9.59
	20MHz	Low	Band Edge	-27.85	-25	-2.85
		High	Band Edge	-19.37	-10	-9.37
	15MHz	Low	Band Edge	-28.08	-25	-3.08
		High	Band Edge	-17.54	-10	-7.54
	10MHz	Low	Band Edge	-30.29	-25	-5.29
		High	Band Edge	-29.10	-10	-19.10

Table 7-33. Conducted Band Edge Test Results – UL MIMO Ant1

Mode	Bandwidth	Channel	Test Case	Level [dBm]	Limit [dBm]	Margin [dB]
NR-n41PC1.5	100MHz	Low	Band Edge	-27.04	-25	-2.04
		High	Band Edge	-19.04	-10	-9.04
	90MHz	High	Band Edge	-28.18	-25	-3.18
		High	Band Edge	-26.81	-13	-13.81
	80MHz	Low	Band Edge	-29.14	-25	-4.14
		Low	Band Edge	-21.51	-13	-8.51
	70MHz	High	Band Edge	-27.74	-25	-2.74
		High	Band Edge	-25.53	-13	-12.53
	60MHz	Low	Band Edge	-26.90	-25	-1.90
		Low	Band Edge	-20.88	-10	-10.88
	50MHz	High	Band Edge	-28.27	-25	-3.27
		High	Band Edge	-20.36	-10	-10.36
	40MHz	Low	Band Edge	-32.51	-25	-7.51
		Low	Band Edge	-22.14	-10	-12.14
	30MHz	High	Band Edge	-27.10	-25	-2.10
		High	Band Edge	-19.23	-10	-9.23
	20MHz	High	Band Edge	-29.68	-25	-4.68
		High	Band Edge	-16.31	-10	-6.31
	15MHz	High	Band Edge	-16.67	-13	-3.67
		High	Band Edge	-14.94	-10	-4.94
	10MHz	High	Band Edge	-17.44	-13	-4.44
		High	Band Edge	-15.53	-10	-5.53

Table 7-34. Conducted Band Edge Test Results – UL MIMO Ant6

FCC ID: C3K2114	PART 27 MEASUREMENT REPORT			Approved by: Technical Manager
Test Report S/N: 1M2411190103-04-R3.C3K	Test Dates: 12/3/2024 - 2/14/2025	EUT Type: Full Modular	Page 142 of 178	

NR Band n41(PC1.5) – UL MIMO Ant1



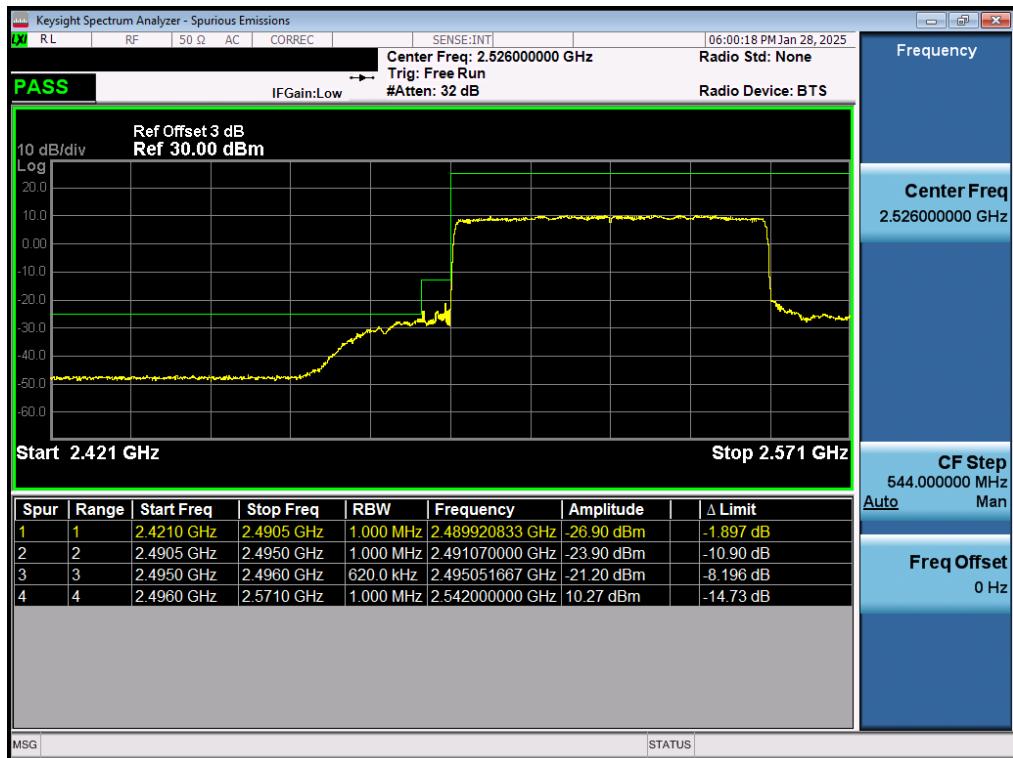
Plot 7-183. Lower ACP Plot (NR Band n41(PC1.5) - 60MHz DFTs-BPSK – Full RB – UL MIMO Ant1)



Plot 7-184. Upper ACP Plot (NR Band n41(PC1.5) - 60MHz DFTs-BPSK – Full RB – UL MIMO Ant1)

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NR Band n41(PC1.5) – UL MIMO Ant6



Plot 7-185. Lower ACP Plot (NR Band n41(PC1.5) - 60MHz DFTs-BPSK – Full RB – UL MIMO Ant6)



Plot 7-186. Upper ACP Plot (NR Band n41(PC1.5) - 60MHz DFTs-BPSK – Full RB – UL MIMO Ant6)

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7.6 Radiated Spurious Emissions Measurements

Test Overview

Radiated spurious emissions measurements are performed using the field strength conversion method described in ANSI C63.26-2015 with the EUT transmitting into an integral antenna. Measurements on signals operating below 1GHz are performed using hybrid (biconical/log) antennas. Measurements on signals operating above 1GHz are performed using vertically and horizontally polarized broadband horn antennas. All measurements are performed as RMS measurements while the EUT is operating at maximum power, and at the appropriate frequencies.

Test Procedures Used

ANSI C63.26-2015 – Section 5.5.4

Test Settings

1. RBW = 100kHz for emissions below 1GHz and 1MHz for emissions above 1GHz
2. VBW \geq 3 x RBW
3. Span = 1.5 times the OBW
4. No. of sweep points \geq 2 x span / RBW
5. Detector = RMS
6. Trace mode = Average (Max Hold for pulsed emissions)
7. The trace was allowed to stabilize

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Test Setup

The EUT and measurement equipment were set up as shown in the diagram below.

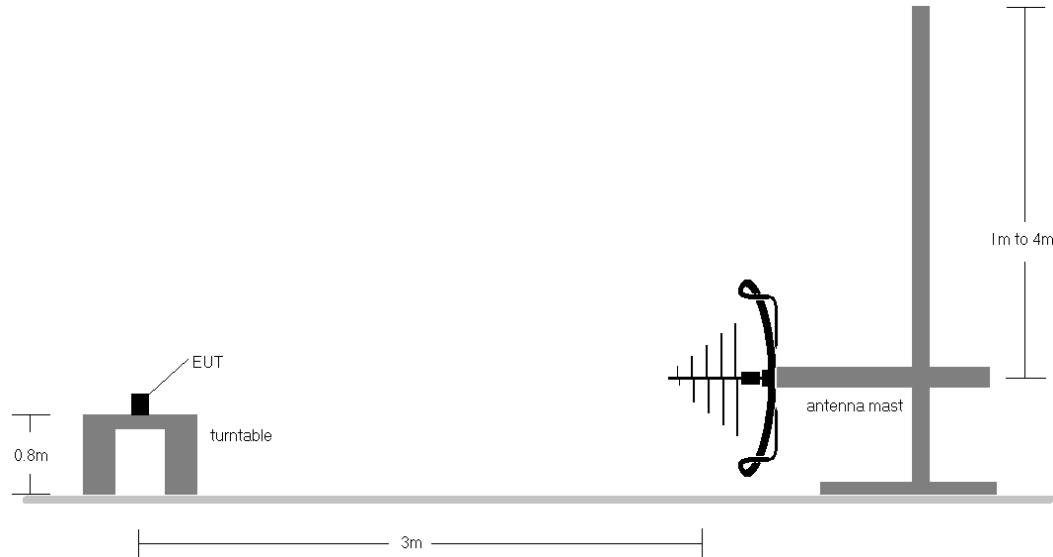


Figure 7-5. Test Instrument & Measurement Setup < 1GHz

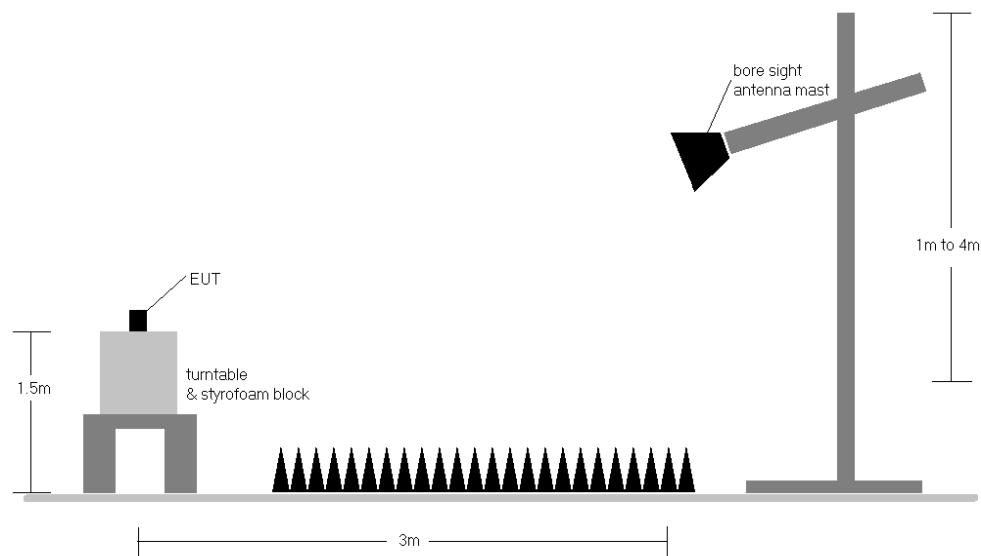


Figure 7-6. Test Instrument & Measurement Setup >1 GHz

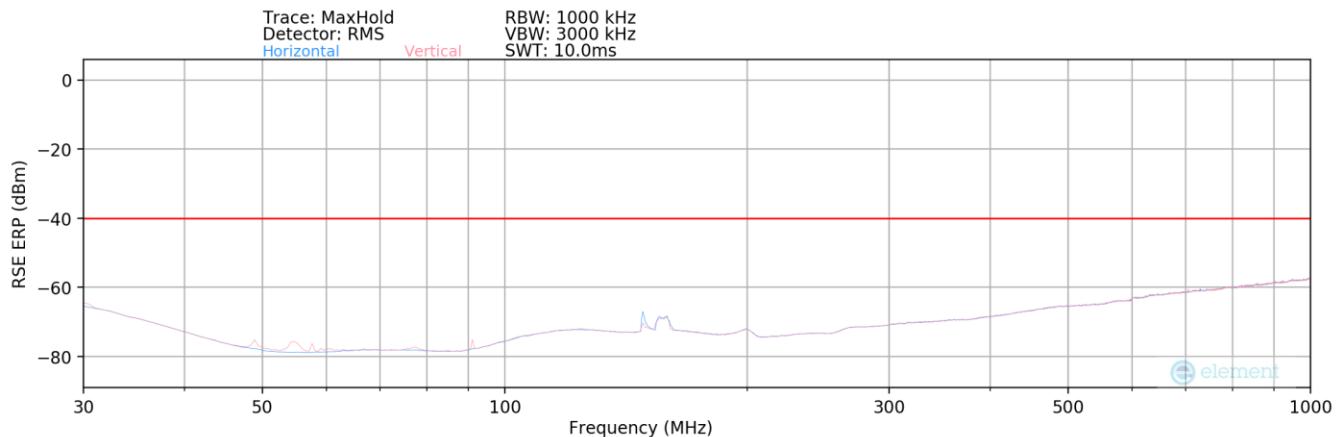
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Test Notes

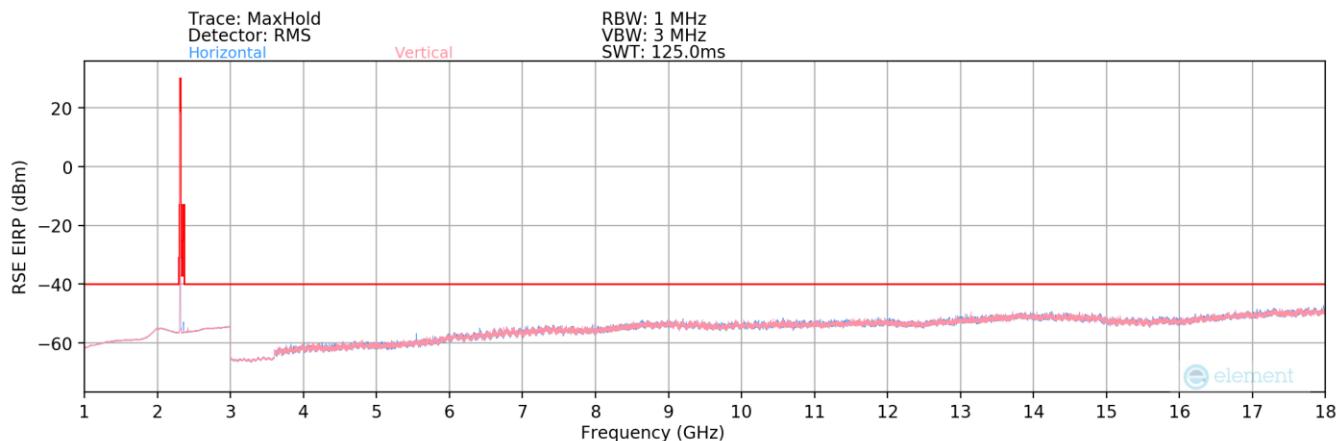
- 1) Field strengths are calculated using the Measurement quantity conversions in ANSI C63.26-2015 Section 5.2.7:
 - a) $E(\text{dB}\mu\text{V}/\text{m}) = \text{Measured amplitude level (dBm)} + 107 + \text{Cable Loss (dB)} + \text{Antenna Factor (dB/m)}$
 - b) $\text{EIRP (dBm)} = E(\text{dB}\mu\text{V}/\text{m}) + 20\log D - 104.8$; where D is the measurement distance in meters.
- 2) The EUT was tested in three orthogonal planes and in all possible test configurations and positioning. The worst-case emissions are reported with the EUT positioning, modulations, RB sizes and offsets, and channel bandwidth configurations shown in the tables below.
- 3) This unit was tested using a power supply.
- 4) The spectrum is measured from 9kHz to the 10th harmonic of the fundamental frequency of the transmitter. The worst-case emissions are reported.
- 5) Emissions below 18GHz were measured at a 3-meter test distance while emissions above 18GHz were measured at a 1 meter test distance with the application of a distance correction factor.
- 6) The "-" shown in the following RSE tables are used to denote a noise floor measurement.
- 7) ULCA spurious emissions measurements were evaluated for the two contiguous channels using various combinations of RB size, RB offset, modulation, and channel bandwidth. Channel bandwidth data is shown in the tables below based only on the channel bandwidths that were supported in this device.
- 8) For NR operation, all subcarrier spacings (SCS) and transmission schemes (e.g. CP-OFDM and DFT-s-OFDM) were investigated to determine the worst case configuration. All modes of operation were investigated and the worst case configuration results are reported in this section.
- 9) Spurious emission in EN-DC Operating mode with Sub 6GHz NR carrier as well as an LTE carrier (anchor) has been checked and was found to not to be the worst case. Spurious emissions from the NR carrier device are subject to the rules under which the NR carrier operates. Spurious emissions caused by the LTE carrier must meet the requirements of the rules under which the LTE carrier operates.

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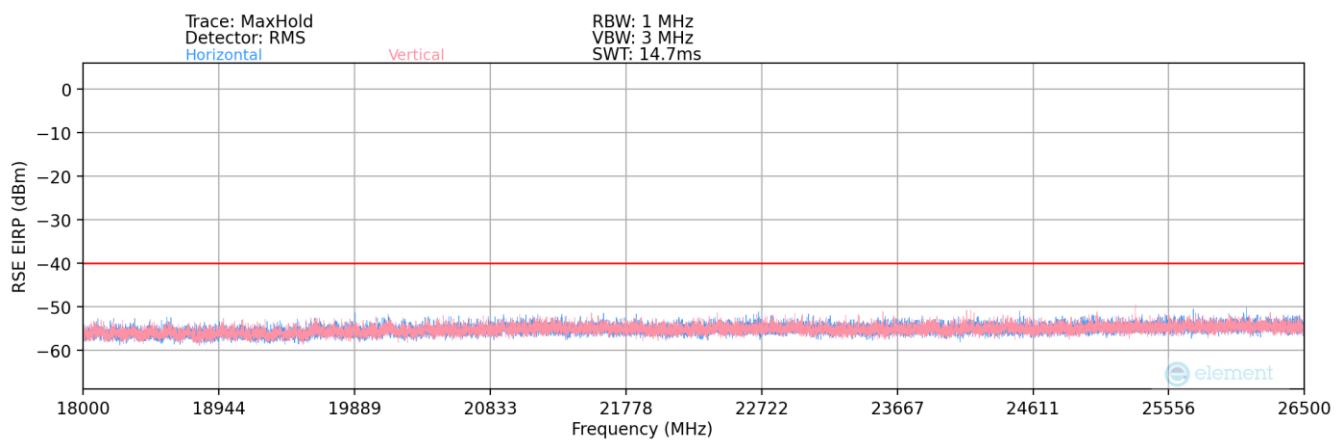
LTE Band 30 – Ant1



Plot 7-187. Radiated Spurious Plot Below 1GHz (LTE Band 30 – Ant1)



Plot 7-188. Radiated Spurious Plot 1GHz-18GHz (LTE Band 30 – Ant1)



Plot 7-189. Radiated Spurious Plot 18GHz-26.5GHz (LTE Band 30 – Ant1)

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Bandwidth (MHz):	10
Frequency (MHz):	2310.0
RB / Offset:	1 / 25

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dB μ V/m]	ERP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
48.00	V	-	-	-91.99	15.44	30.45	-66.96	-40.00	-26.96
55.00	V	-	-	-91.75	14.07	29.32	-68.08	-40.00	-28.08
92.00	V	-	-	-91.89	15.17	30.28	-67.13	-40.00	-27.13
175.00	V	-	-	-91.83	18.91	34.08	-63.32	-40.00	-23.32

Table 7-35. Radiated Spurious Data (LTE Band 30 – Mid Channel – Ant1)

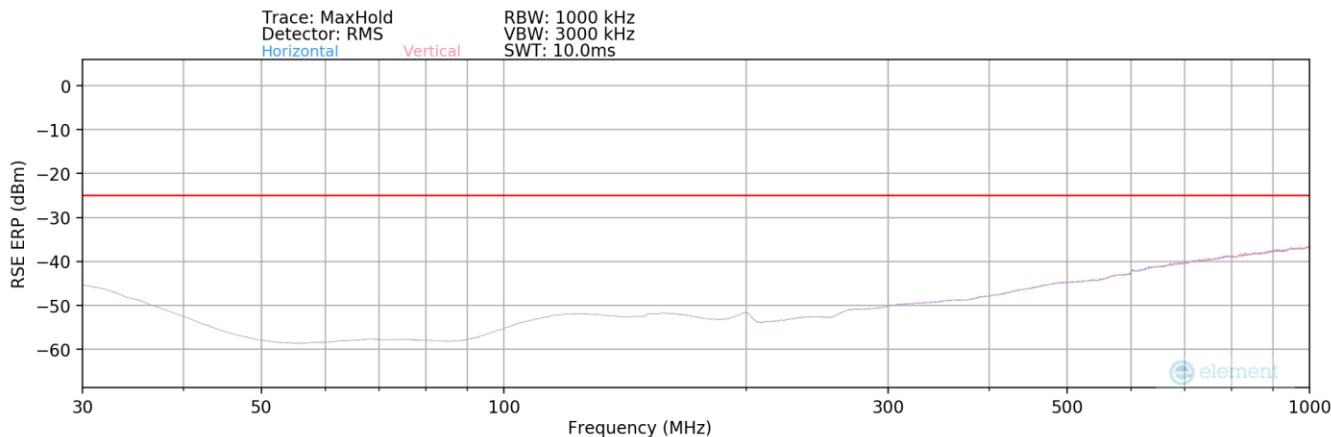
Bandwidth (MHz):	10
Frequency (MHz):	2310.0
RB / Offset:	1 / 25

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dB μ V/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
4620.00	V	149	279	-76.38	2.76	33.38	-61.87	-40.00	-21.87
6930.00	V	-	-	-80.14	8.37	35.23	-60.02	-40.00	-20.02
9240.00	V	-	-	-80.60	11.10	37.50	-57.76	-40.00	-17.76
11550.00	V	-	-	-81.82	13.21	38.39	-56.87	-40.00	-16.87

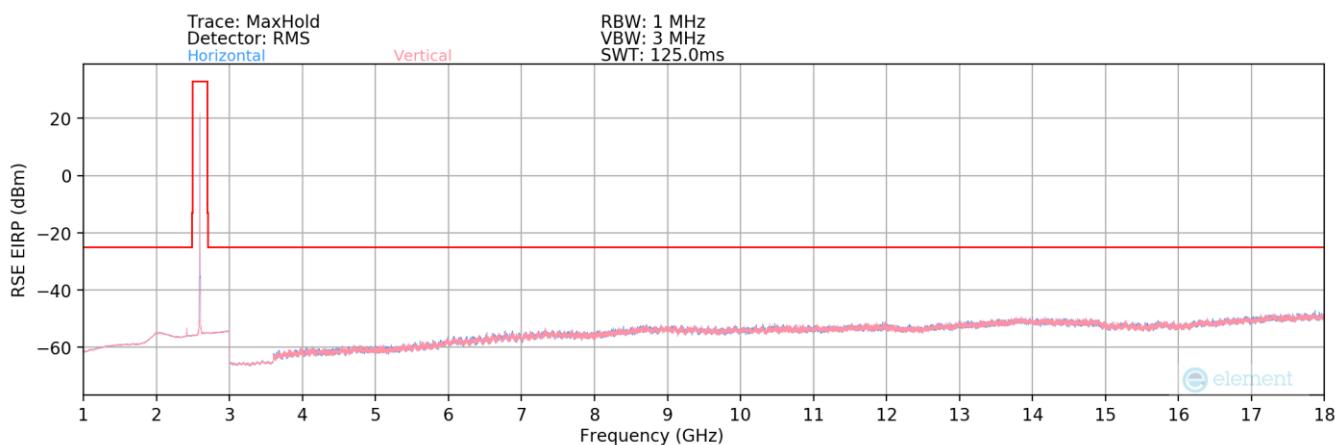
Table 7-36. Radiated Spurious Data (LTE Band 30 – Mid Channel – Ant1)

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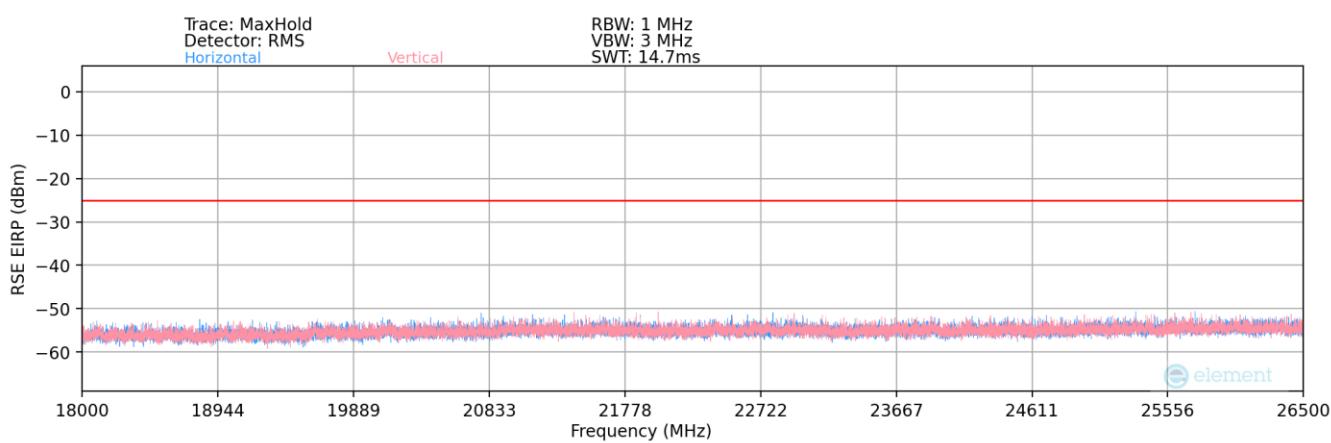
LTE Band 41(PC2) – Ant1



Plot 7-190. Radiated Spurious Plot Below 1GHz (LTE Band 41(PC2) – Ant1)



Plot 7-191. Radiated Spurious Plot 1GHz-18GHz (LTE Band 41(PC2) – Ant1)



Plot 7-192. Radiated Spurious Plot 18GHz-26.5GHz (LTE Band 41(PC2) – Ant1)

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