

Test data, continued

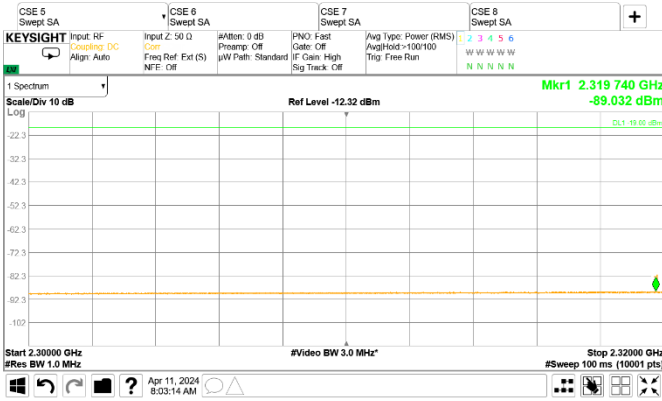


Figure 8.2-65: Conducted spurious emissions of NR 5 MHz low channel, single carrier operation [2.30 GHz to 2.32 GHz]

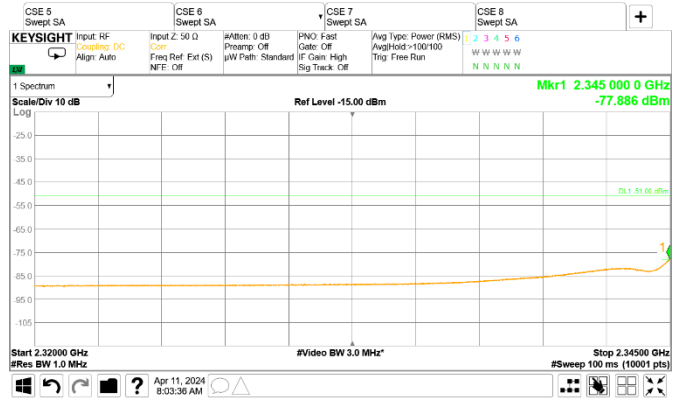


Figure 8.2-66: Conducted spurious emissions of NR 5 MHz low channel, single carrier operation [2.32 GHz to 2.345 GHz]

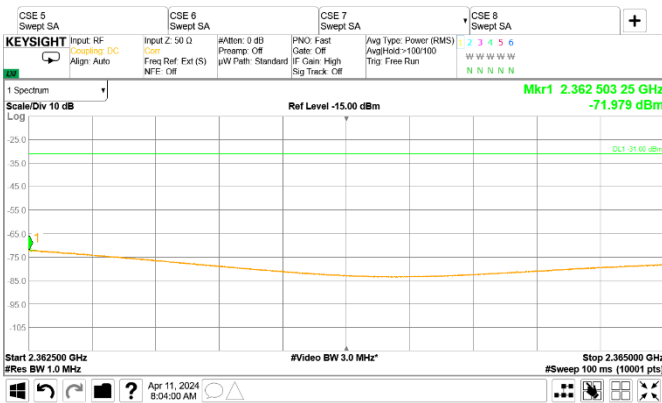


Figure 8.2-67: Conducted spurious emissions of NR 5 MHz low channel, single carrier operation [2.3625 GHz to 2.365 GHz]



Figure 8.2-68: Conducted spurious emissions of NR 5 MHz low channel, single carrier operation [2.365 GHz to 2.3675 GHz]

Test data, continued

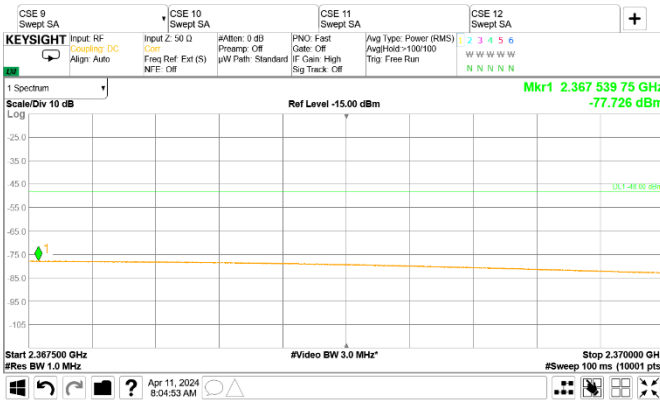


Figure 8.2-69: Conducted spurious emissions of NR 5 MHz low channel, single carrier operation [2.3675 GHz to 2.70 GHz]

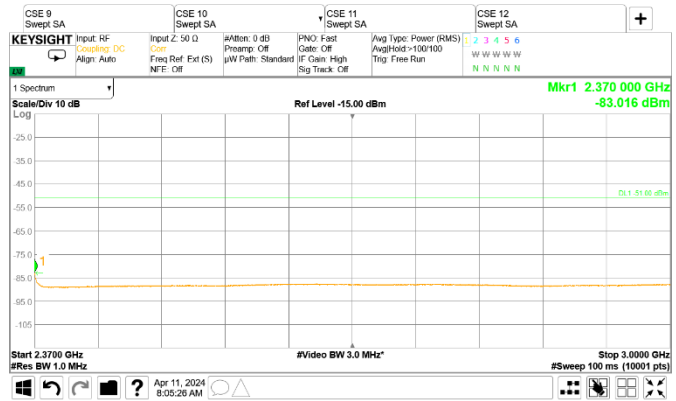


Figure 8.2-70: Conducted spurious emissions of NR 5 MHz low channel, single carrier operation [2.70 GHz to 3 GHz]

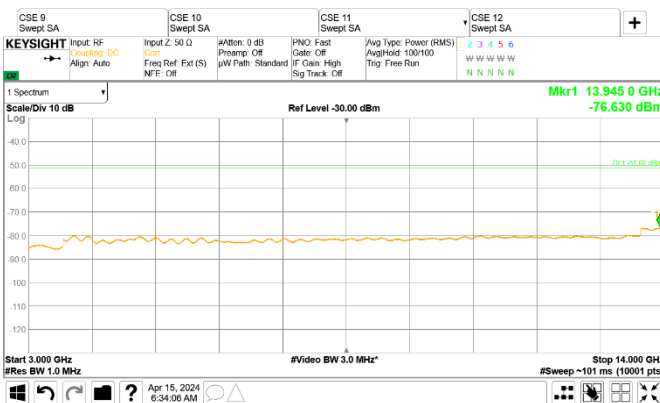


Figure 8.2-71: Conducted spurious emissions of NR 5 MHz low channel, single carrier operation [3 GHz to 14 GHz]

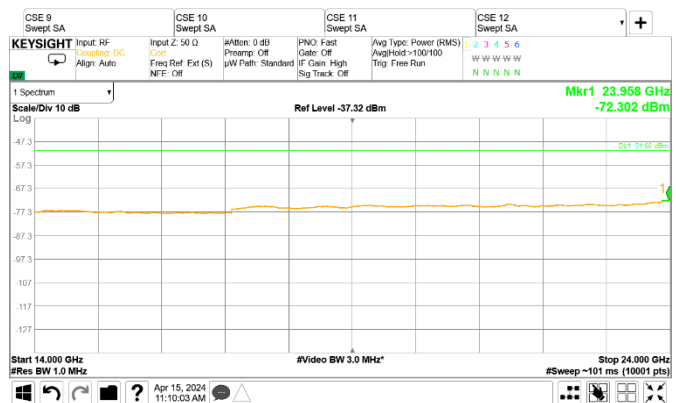


Figure 8.2-72: Conducted spurious emissions of NR 5 MHz low channel, single carrier operation [14 GHz to 24 GHz]

Test data, continued

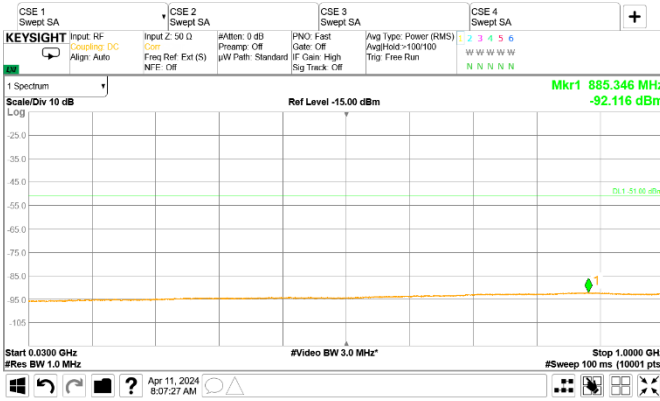


Figure 8.2-73: Conducted spurious emissions of NR 5 MHz mid channel, single carrier operation [30 MHz to 1 GHz]



Figure 8.2-74: Conducted spurious emissions of NR 5 MHz mid channel, single carrier operation [1 GHz to 2.285 GHz]

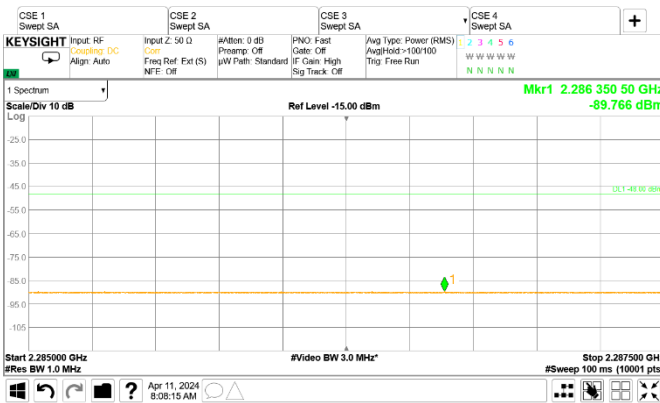


Figure 8.2-75: Conducted spurious emissions of NR 5 MHz mid channel, single carrier operation [2.285 GHz to 2.2875 GHz]



Figure 8.2-76: Conducted spurious emissions of NR 5 MHz mid channel, single carrier operation [2.2875 GHz to 2.30 GHz]

Test data, continued

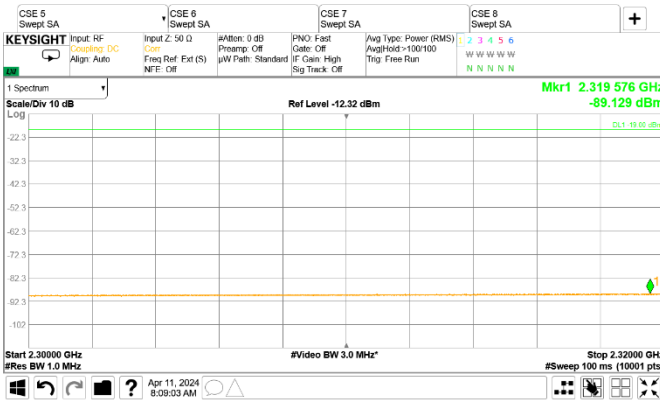


Figure 8.2-77: Conducted spurious emissions of NR 5 MHz mid channel, single carrier operation [2.30 GHz to 2.32 GHz]

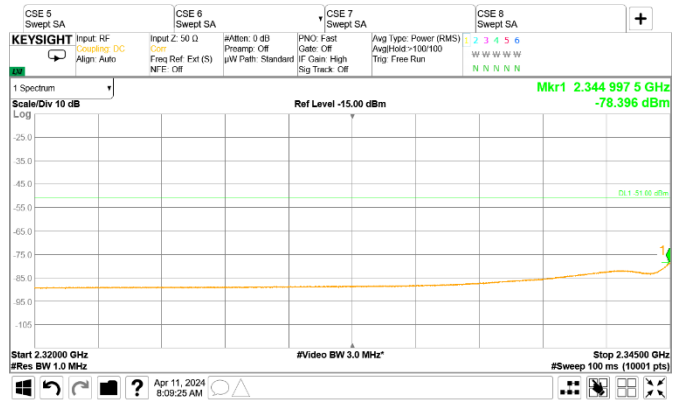


Figure 8.2-78: Conducted spurious emissions of NR 5 MHz mid channel, single carrier operation [2.32 GHz to 2.345 GHz]

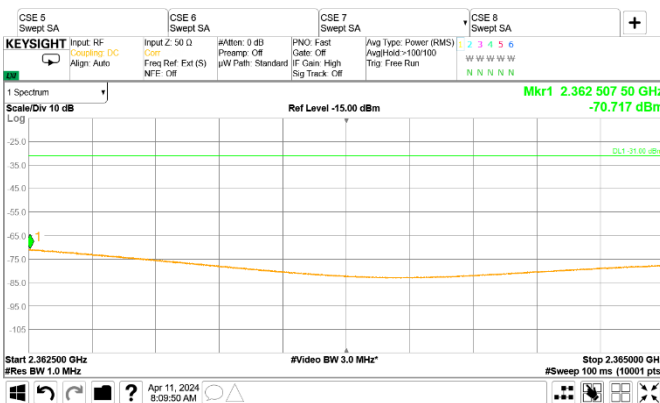


Figure 8.2-79: Conducted spurious emissions of NR 5 MHz mid channel, single carrier operation [2.3625 GHz to 2.365 GHz]

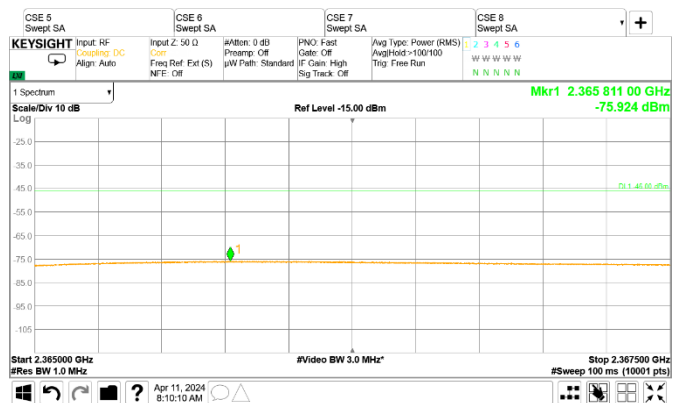


Figure 8.2-80: Conducted spurious emissions of NR 5 MHz mid channel, single carrier operation [2.365 GHz to 2.3675 GHz]

Test data, continued

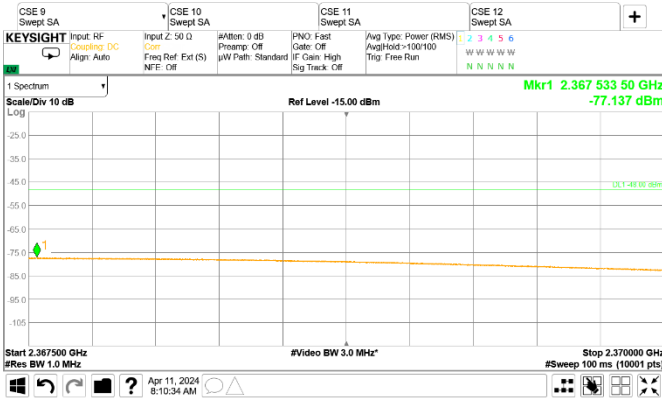


Figure 8.2-81: Conducted spurious emissions of NR 5 MHz mid channel, single carrier operation [2.3675 GHz to 2.70 GHz]



Figure 8.2-82: Conducted spurious emissions of NR 5 MHz mid channel, single carrier operation [2.70 GHz to 3 GHz]

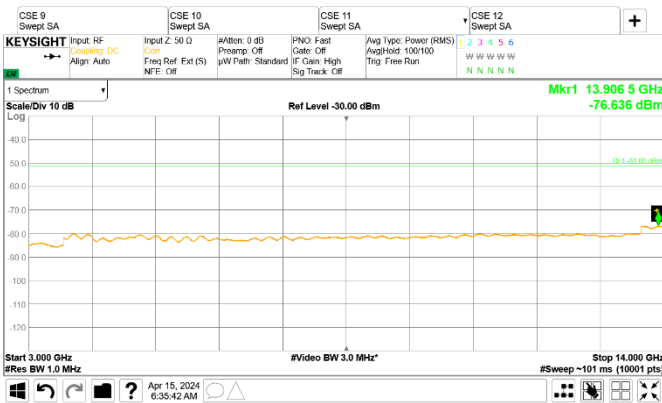


Figure 8.2-83: Conducted spurious emissions of NR 5 MHz mid channel, single carrier operation [3 GHz to 14 GHz]

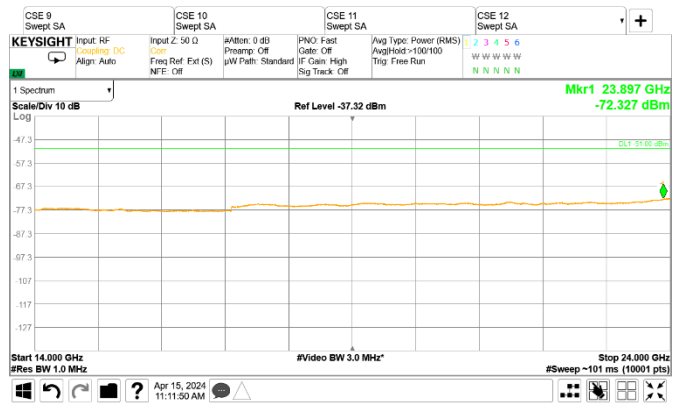


Figure 8.2-84: Conducted spurious emissions of NR 5 MHz mid channel, single carrier operation [14 GHz to 24 GHz]

Test data, continued

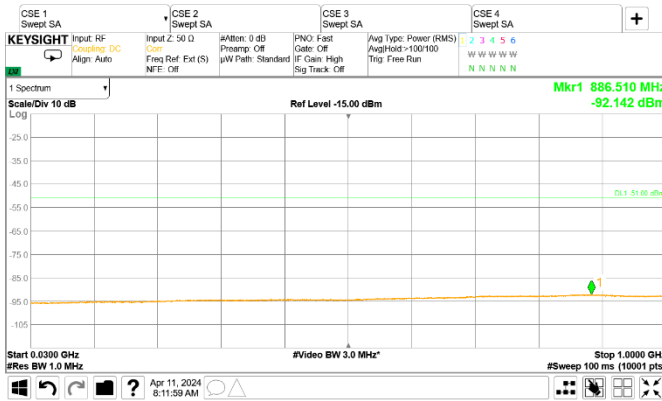


Figure 8.2-85: Conducted spurious emissions of NR 5 MHz top channel, single carrier operation [30 MHz to 1 GHz]

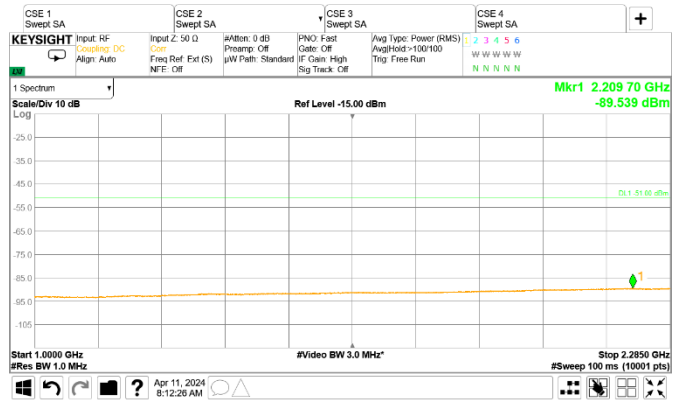


Figure 8.2-86: Conducted spurious emissions of NR 5 MHz top channel, single carrier operation [1 GHz to 2.285 GHz]

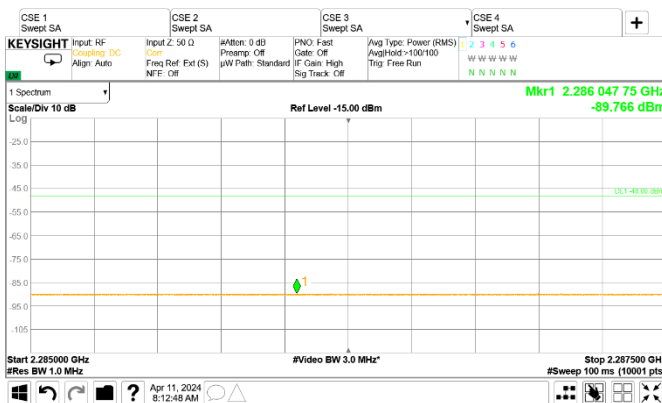


Figure 8.2-87: Conducted spurious emissions of NR 5 MHz top channel, single carrier operation [2.285 GHz to 2.2875 GHz]



Figure 8.2-88: Conducted spurious emissions of NR 5 MHz top channel, single carrier operation [2.2875 GHz to 2.30 GHz]

Test data, continued

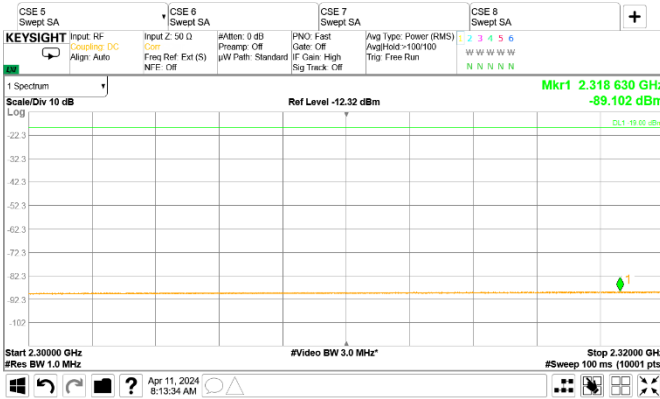


Figure 8.2-89: Conducted spurious emissions of NR 5 MHz top channel, single carrier operation [2.30 GHz to 2.32 GHz]

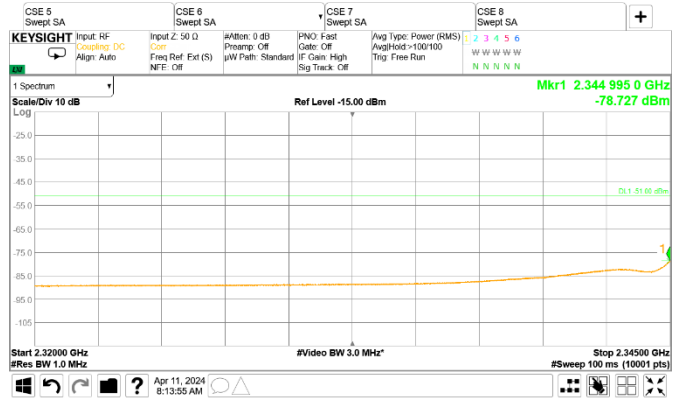


Figure 8.2-90: Conducted spurious emissions of NR 5 MHz top channel, single carrier operation [2.32 GHz to 2.345 GHz]

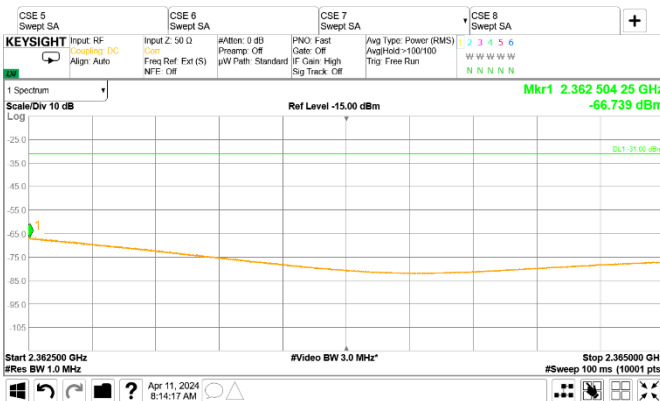


Figure 8.2-91: Conducted spurious emissions of NR 5 MHz top channel, single carrier operation [2.3625 GHz to 2.365 GHz]



Figure 8.2-92: Conducted spurious emissions of NR 5 MHz top channel, single carrier operation [2.365 GHz to 2.3675 GHz]

Test data, continued

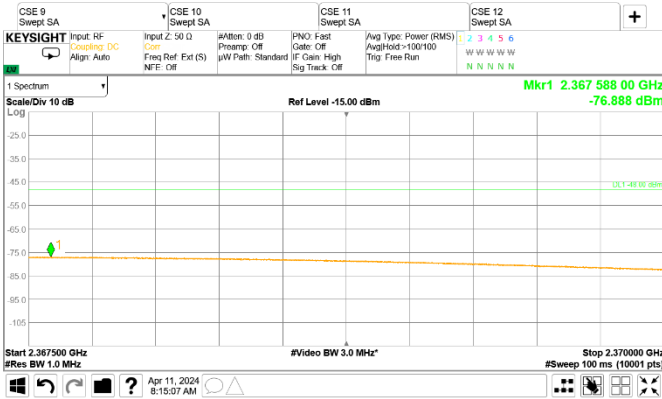


Figure 8.2-93: Conducted spurious emissions of NR 5 MHz top channel, single carrier operation [2.3675 GHz to 2.70 GHz]



Figure 8.2-94: Conducted spurious emissions of NR 5 MHz top channel, single carrier operation [2.70 GHz to 3 GHz]

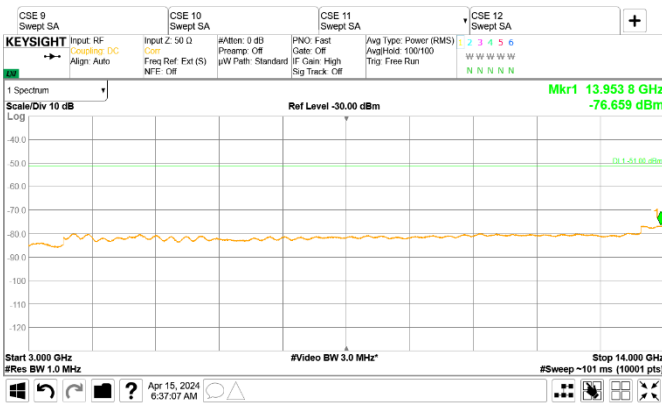


Figure 8.2-95: Conducted spurious emissions of NR 5 MHz top channel, single carrier operation [3 GHz to 14 GHz]

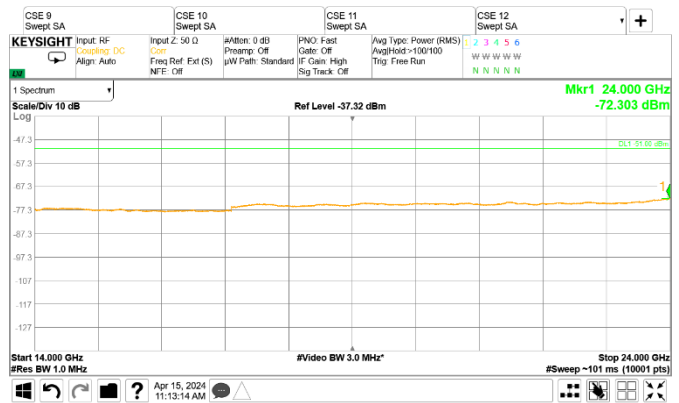


Figure 8.2-96: Conducted spurious emissions of NR 5 MHz top channel, single carrier operation [14 GHz to 24 GHz]

Test data, continued

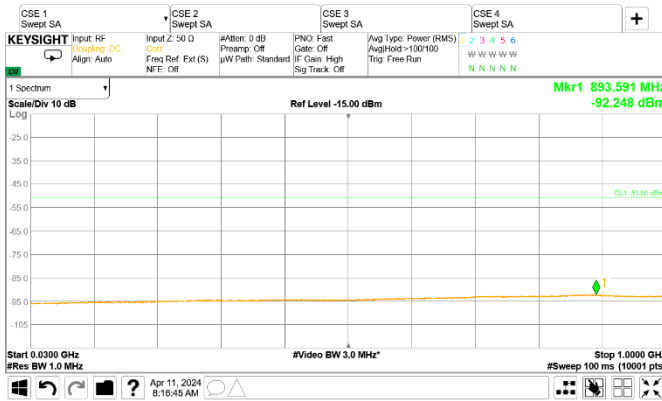


Figure 8.2-97: Conducted spurious emissions of NR 10 MHz, single carrier operation [30 MHz to 1 GHz]

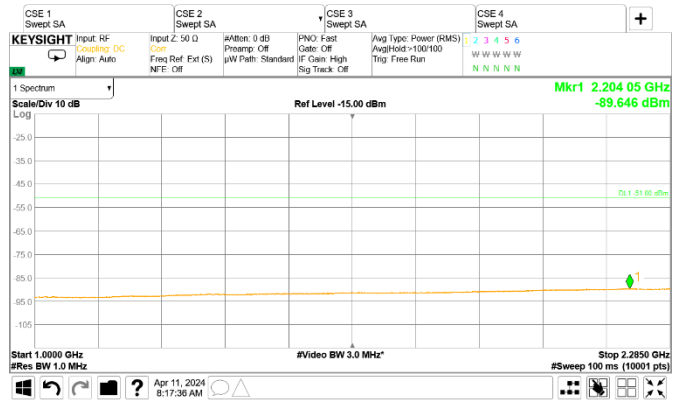


Figure 8.2-98: Conducted spurious emissions of NR 10 MHz, single carrier operation [1 GHz to 2.285 GHz]

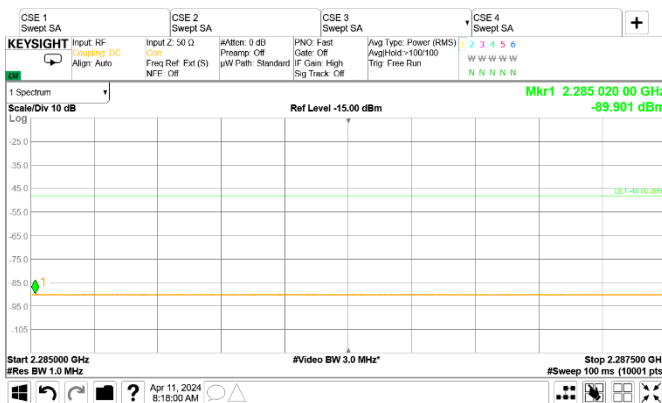


Figure 8.2-99: Conducted spurious emissions of NR 10 MHz, single carrier operation [2.285 GHz to 2.2875 GHz]

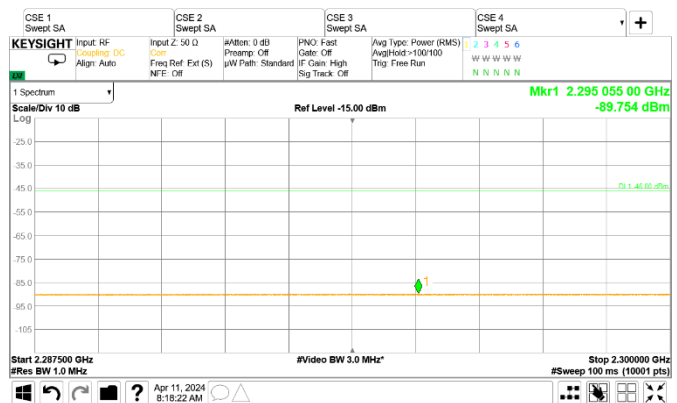


Figure 8.2-100: Conducted spurious emissions of NR 10 MHz, single carrier operation [2.2875 GHz to 2.30 GHz]

Test data, continued

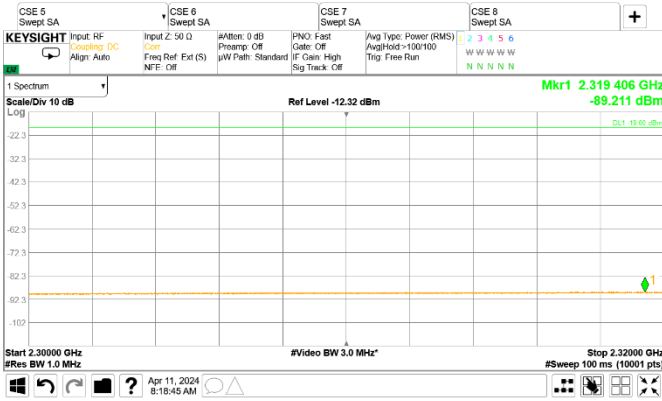


Figure 8.2-101: Conducted spurious emissions of NR 10 MHz, single carrier operation [2.30 GHz to 2.32 GHz]

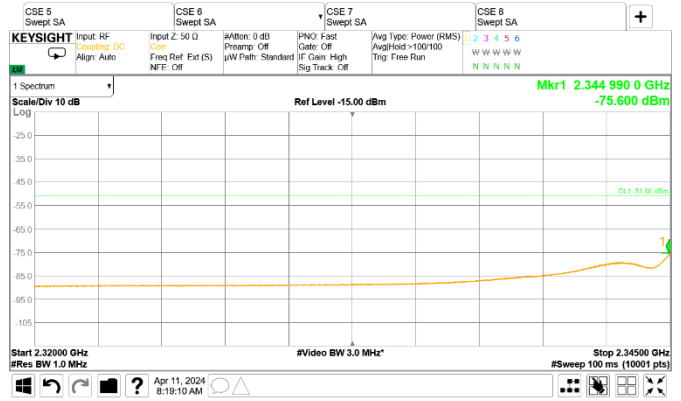


Figure 8.2-102: Conducted spurious emissions of NR 10 MHz, single carrier operation [2.32 GHz to 2.345 GHz]

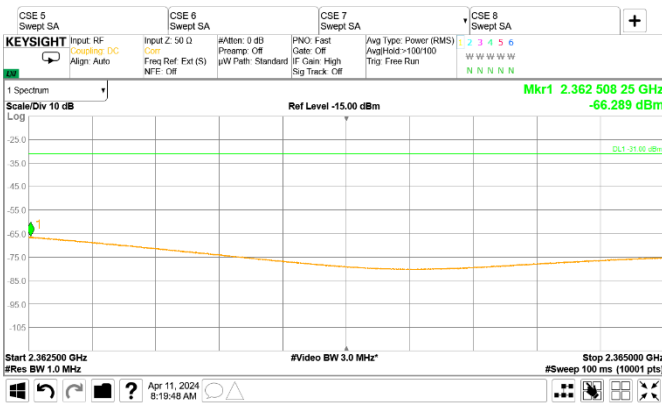


Figure 8.2-103: Conducted spurious emissions of NR 10 MHz, single carrier operation [2.3625 GHz to 2.365 GHz]

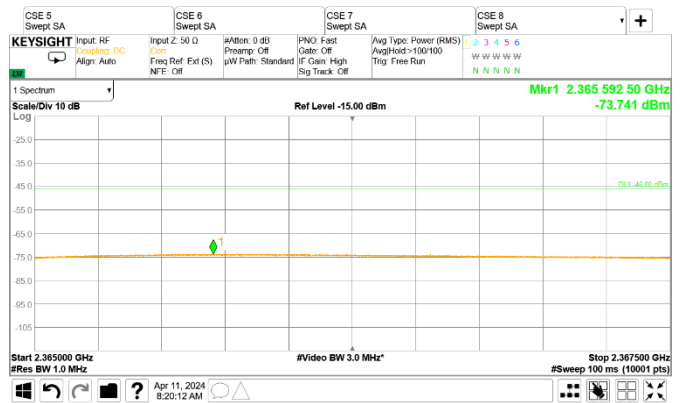


Figure 8.2-104: Conducted spurious emissions of NR 10 MHz, single carrier operation [2.365 GHz to 2.3675 GHz]

Test data, continued

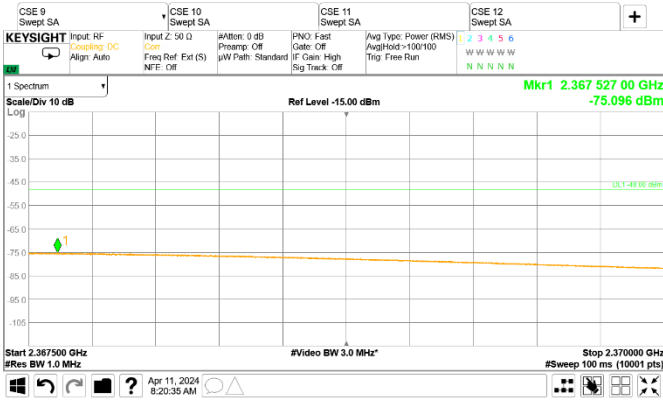


Figure 8.2-105: Conducted spurious emissions of NR 10 MHz, single carrier operation [2.3675 GHz to 2.70 GHz]



Figure 8.2-106: Conducted spurious emissions of NR 10 MHz, single carrier operation [2.70 GHz to 3 GHz]

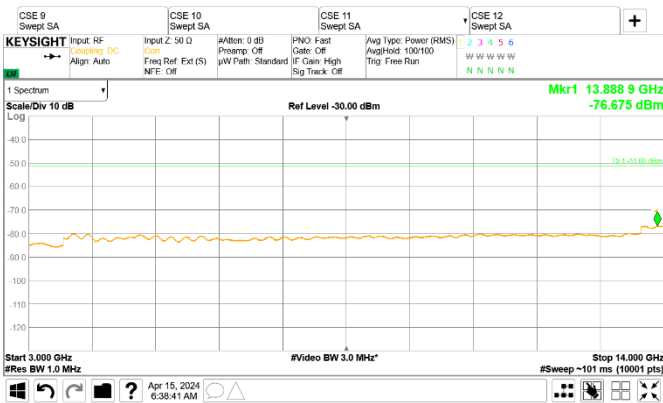


Figure 8.2-107: Conducted spurious emissions of NR 10 MHz, single carrier operation [3 GHz to 14 GHz]

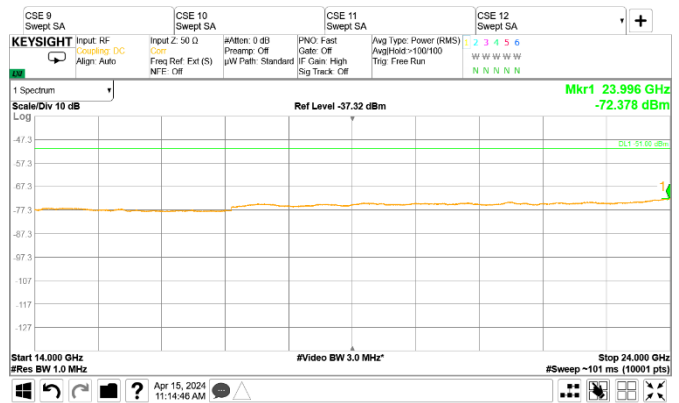


Figure 8.2-108: Conducted spurious emissions of NR 10 MHz, single carrier operation [14 GHz to 24 GHz]

Test data, continued

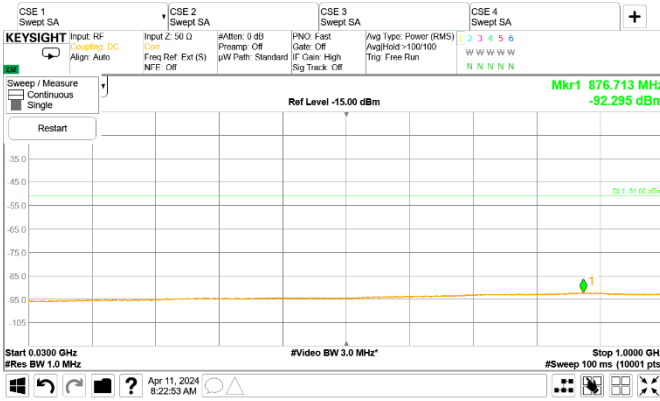


Figure 8.2-109: Conducted spurious emissions of NR 5 MHz, Contiguous Channels, two carrier operation [30 MHz to 1 GHz]



Figure 8.2-110: Conducted spurious emissions of NR 5 MHz, Contiguous Channels, two carrier operation [1 GHz to 2.285 GHz]

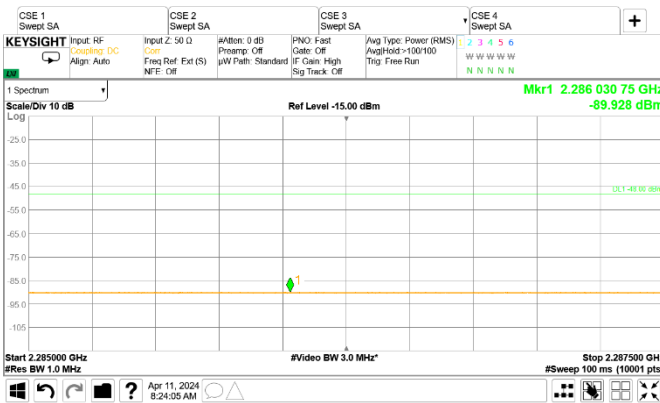


Figure 8.2-111: Conducted spurious emissions of NR 5 MHz, Contiguous Channels, two carrier operation [2.285 GHz to 2.2875 GHz]



Figure 8.2-112: Conducted spurious emissions of NR 5 MHz, Contiguous Channels, two carrier operation [2.2875 GHz to 2.30 GHz]

Test data, continued

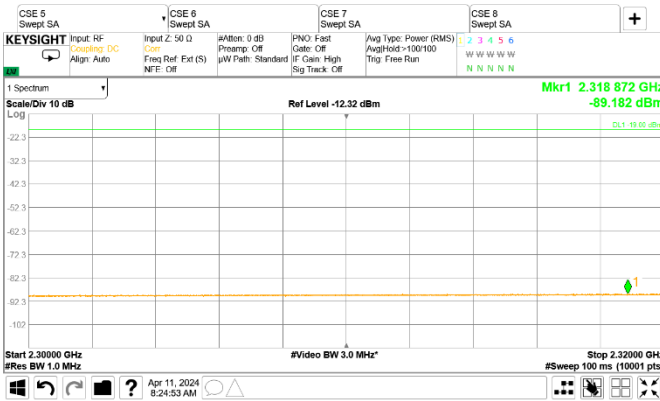


Figure 8.2-113: Conducted spurious emissions of NR 5 MHz, Contiguous Channels, two carrier operation [2.30 GHz to 2.32 GHz]

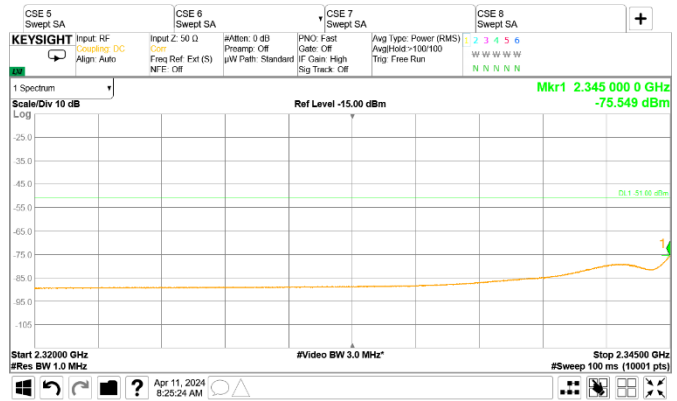


Figure 8.2-114: Conducted spurious emissions of NR 5 MHz, Contiguous Channels, two carrier operation [2.32 GHz to 2.345 GHz]

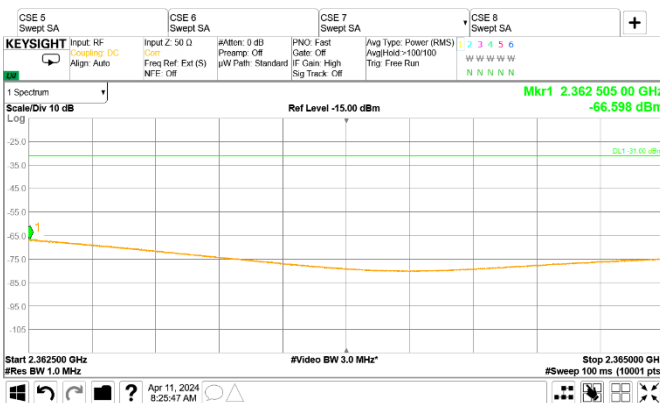


Figure 8.2-115: Conducted spurious emissions of NR 5 MHz, Contiguous Channels, two carrier operation [2.3625 GHz to 2.365 GHz]

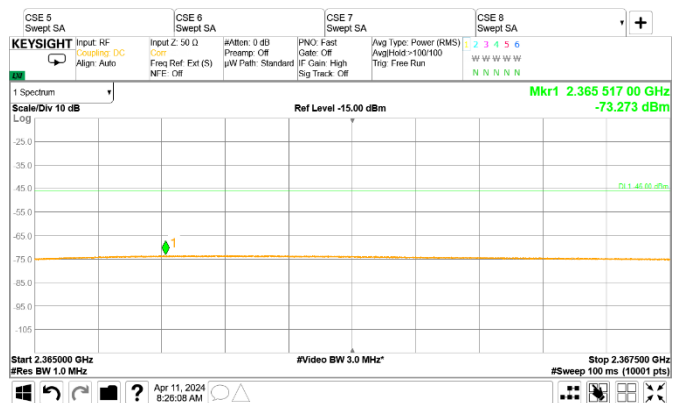


Figure 8.2-116: Conducted spurious emissions of NR 5 MHz, Contiguous Channels, two carrier operation [2.365 GHz to 2.3675 GHz]

Test data, continued

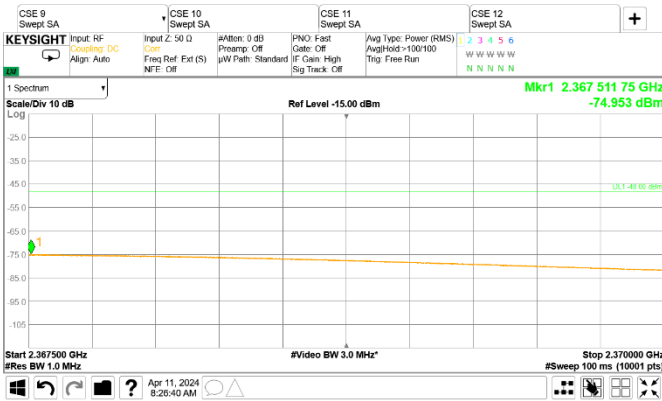


Figure 8.2-117: Conducted spurious emissions of NR 5 MHz, Contiguous Channels, two carrier operation [2.3675 GHz to 2.70 GHz]

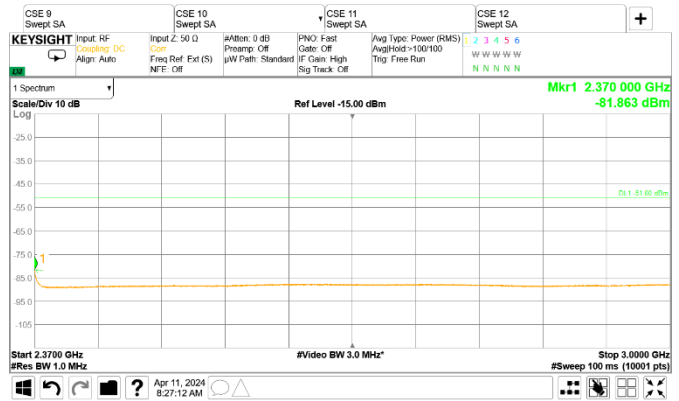


Figure 8.2-118: Conducted spurious emissions of NR 5 MHz, Contiguous Channels, two carrier operation [2.70 GHz to 3 GHz]

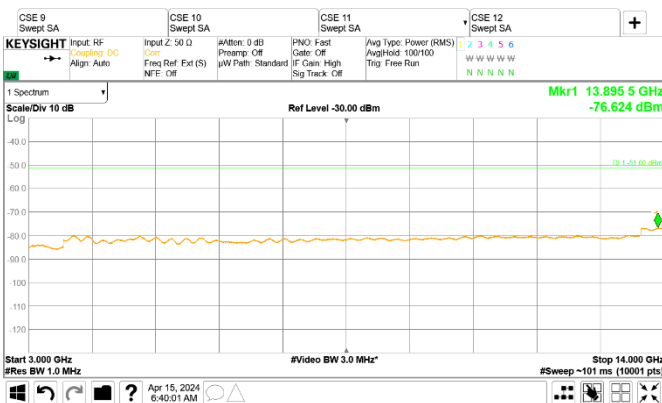


Figure 8.2-119: Conducted spurious emissions of NR 5 MHz, Contiguous Channels, two carrier operation [3 GHz to 14 GHz]

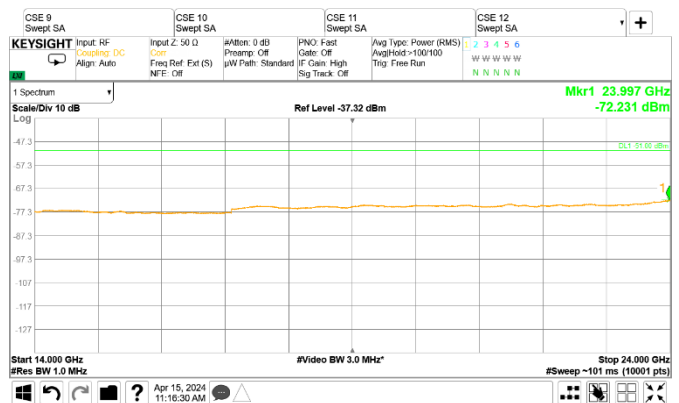


Figure 8.2-120: Conducted spurious emissions of NR 5 MHz, Contiguous Channels, two carrier operation [14 GHz to 24 GHz]

Test data, continued

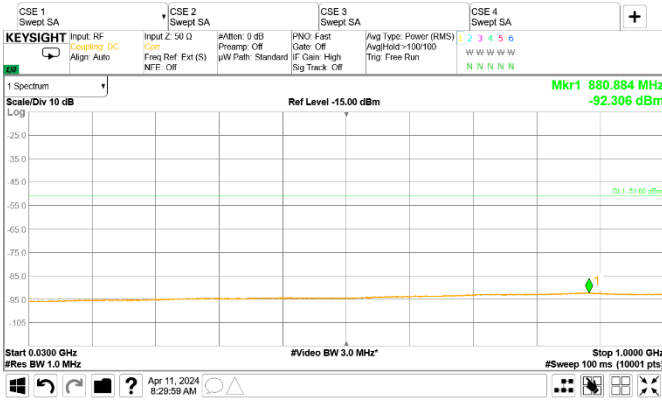


Figure 8.2-121: Conducted spurious emissions of Multi RAT operation, NR 5 MHz + LTE 5 MHz [30 MHz to 1 GHz]



Figure 8.2-122: Conducted spurious emissions of Multi RAT operation, NR 5 MHz + LTE 5 MHz [1 GHz to 2.285 GHz]

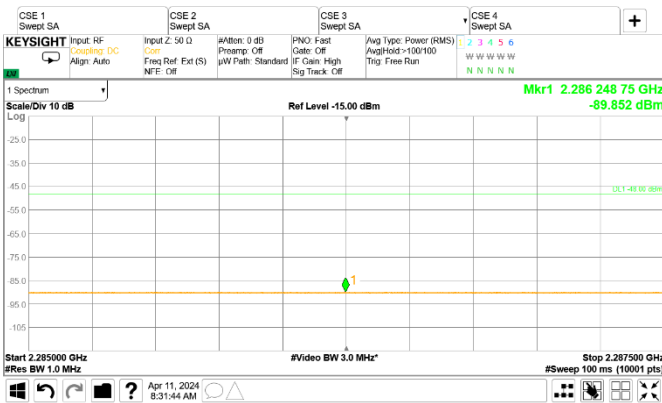


Figure 8.2-123: Conducted spurious emissions of Multi RAT operation, NR 5 MHz + LTE 5 MHz [2.285 GHz to 2.2875 GHz]



Figure 8.2-124: Conducted spurious emissions of Multi RAT operation, NR 5 MHz + LTE 5 MHz [2.2875 GHz to 2.30 GHz]

Note: “and”: non-contiguous channels; “+”: contiguous channels

Test data, continued

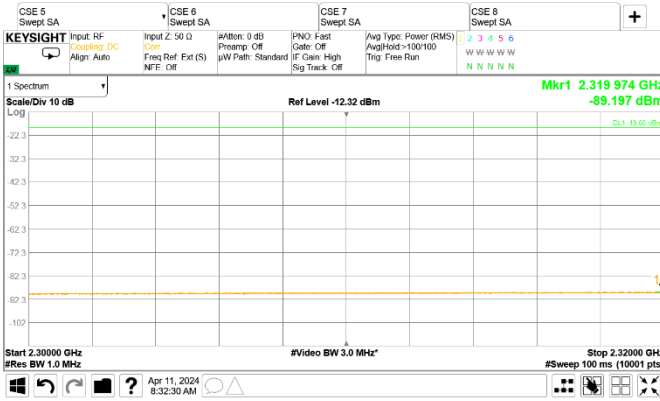


Figure 8.2-125: Conducted spurious emissions of Multi RAT operation, NR 5 MHz + LTE 5 MHz [2.30 GHz to 2.32 GHz]

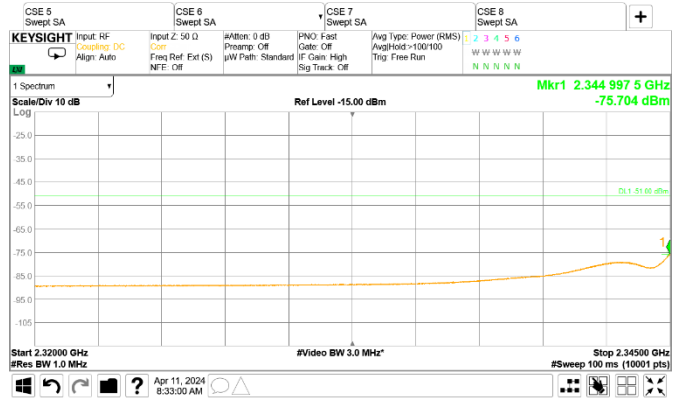


Figure 8.2-126: Conducted spurious emissions of Multi RAT operation, NR 5 MHz + LTE 5 MHz [2.32 GHz to 2.345 GHz]

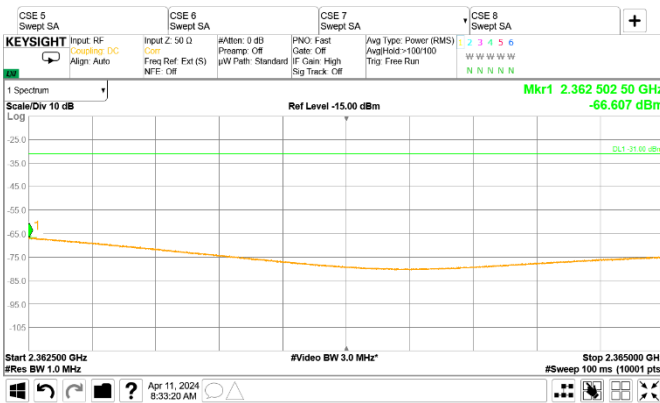


Figure 8.2-127: Conducted spurious emissions of Multi RAT operation, NR 5 MHz + LTE 5 MHz [2.3625 GHz to 2.365 GHz]

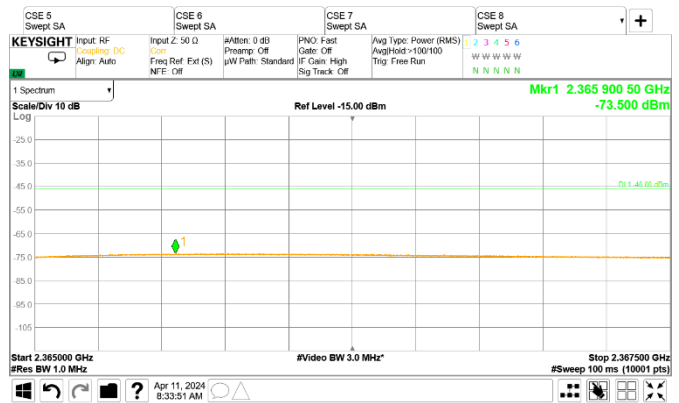


Figure 8.2-128: Conducted spurious emissions of Multi RAT operation, NR 5 MHz + LTE 5 MHz [2.365 GHz to 2.3675 GHz]

Note: “and”: non-contiguous channels; “+”: contiguous channels

Test data, continued

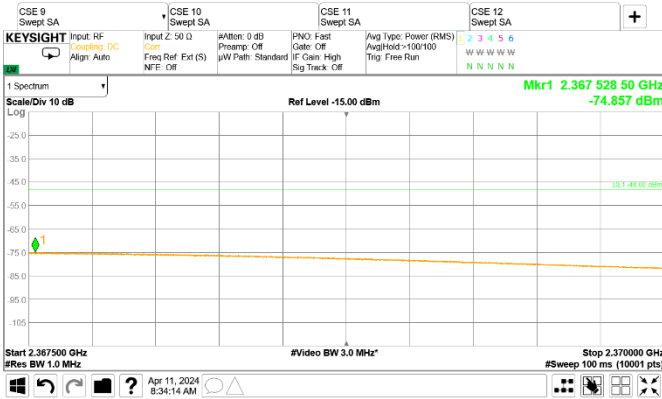


Figure 8.2-129: Conducted spurious emissions of Multi RAT operation, NR 5 MHz + LTE 5 MHz [2.3675 GHz to 2.70 GHz]



Figure 8.2-130: Conducted spurious emissions of Multi RAT operation, NR 5 MHz + LTE 5 MHz [2.70 GHz to 3 GHz]

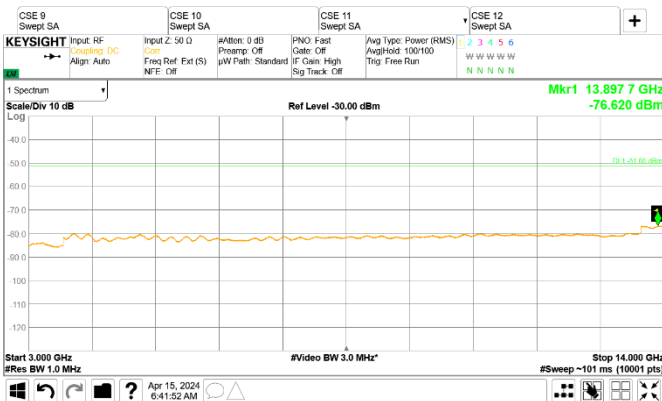


Figure 8.2-131: Conducted spurious emissions of Multi RAT operation, NR 5 MHz + LTE 5 MHz [3 GHz to 14 GHz]

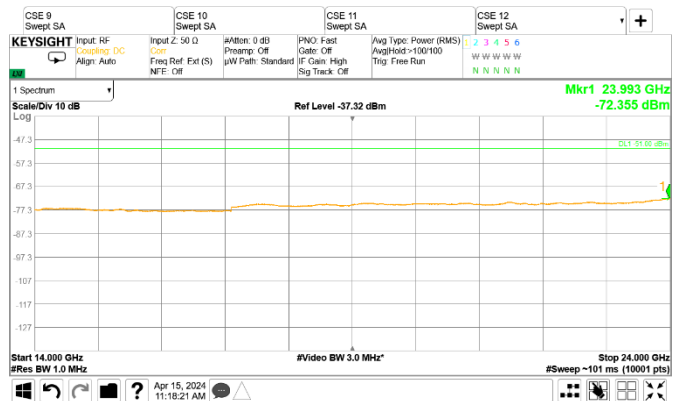


Figure 8.2-132: Conducted spurious emissions of Multi RAT operation, NR 5 MHz + LTE 5 MHz [14 GHz to 24 GHz]

Note: "and": non-contiguous channels; "+": contiguous channels

Test data, continued

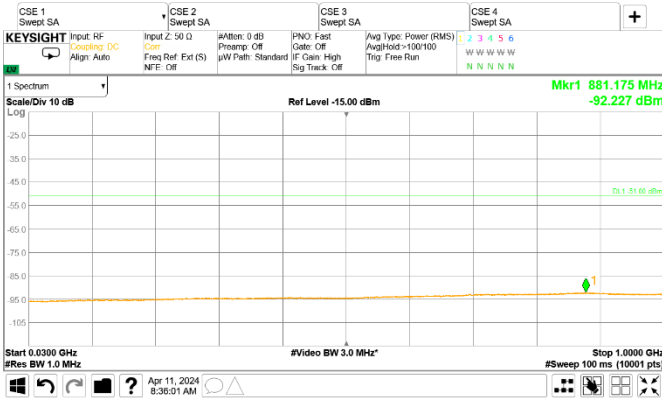


Figure 8.2-133: Conducted spurious emissions of Multi RAT operation, LTE 5 MHz + NR 5 MHz [30 MHz to 1 GHz]

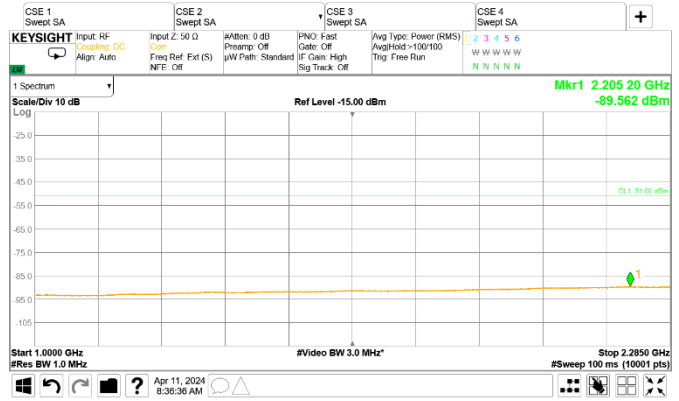


Figure 8.2-134: Conducted spurious emissions of Multi RAT operation, LTE 5 MHz + NR 5 MHz [1 GHz to 2.285 GHz]

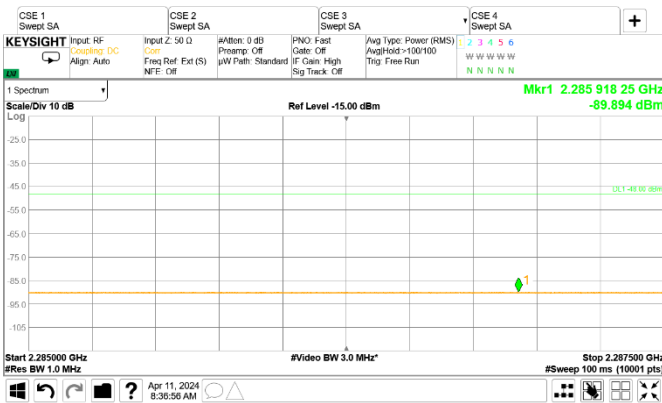


Figure 8.2-135: Conducted spurious emissions of Multi RAT operation, LTE 5 MHz + NR 5 MHz [2.285 GHz to 2.2875 GHz]



Figure 8.2-136: Conducted spurious emissions of Multi RAT operation, LTE 5 MHz + NR 5 MHz [2.2875 GHz to 2.30 GHz]

Note: “and”: non-contiguous channels; “+”: contiguous channels

Test data, continued

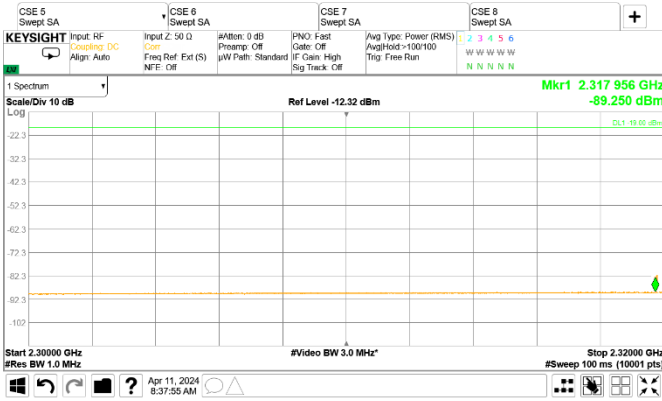


Figure 8.2-137: Conducted spurious emissions of Multi RAT operation, LTE 5 MHz + NR 5 MHz [2.30 GHz to 2.32 GHz]

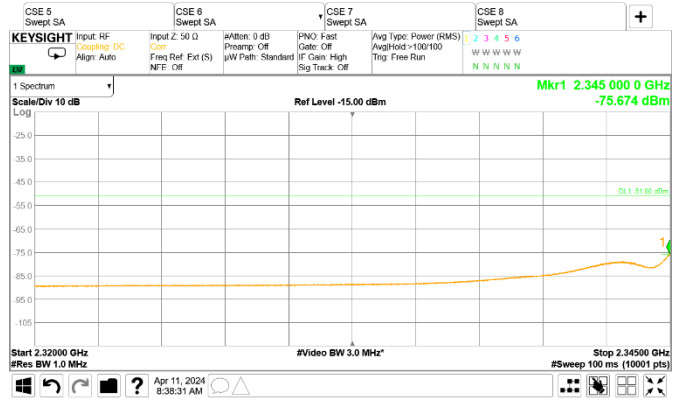


Figure 8.2-138: Conducted spurious emissions of Multi RAT operation, LTE 5 MHz + NR 5 MHz [2.32 GHz to 2.345 GHz]

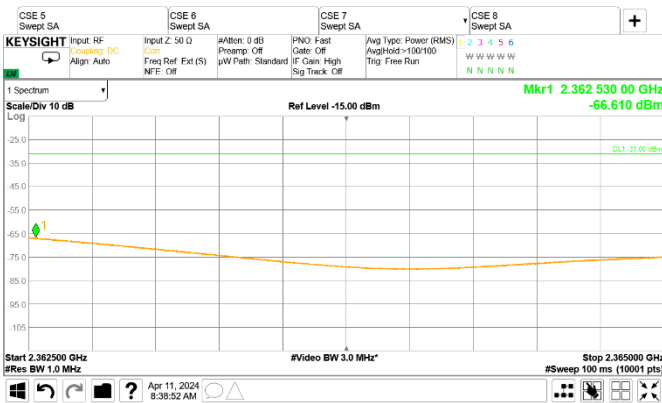


Figure 8.2-139: Conducted spurious emissions of Multi RAT operation, LTE 5 MHz + NR 5 MHz [2.3625 GHz to 2.365 GHz]

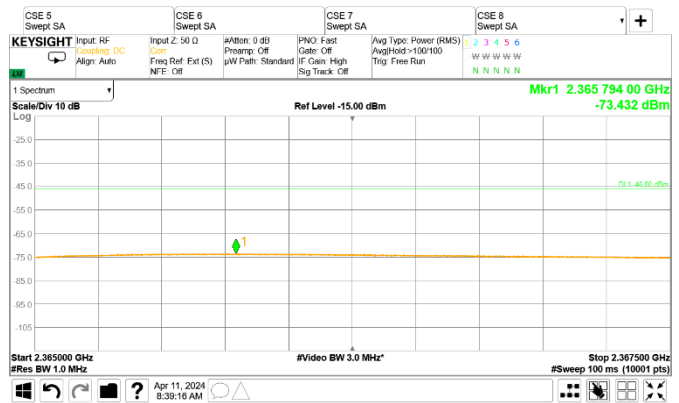


Figure 8.2-140: Conducted spurious emissions of Multi RAT operation, LTE 5 MHz + NR 5 MHz [2.365 GHz to 2.3675 GHz]

Note: “and”: non-contiguous channels; “+”: contiguous channels

Test data, continued

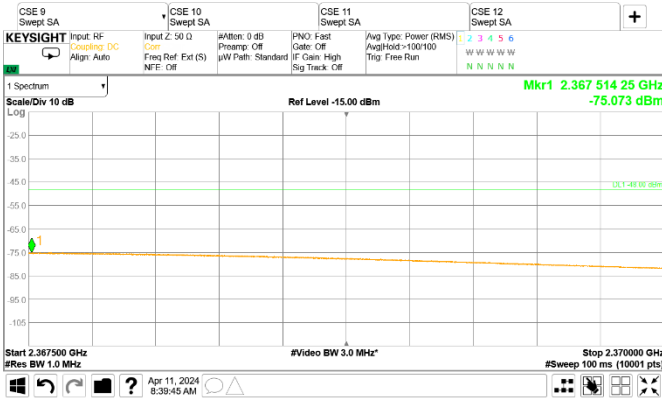


Figure 8.2-141: Conducted spurious emissions of Multi RAT operation, LTE 5 MHz + NR 5 MHz [2.3675 GHz to 2.70 GHz]



Figure 8.2-142: Conducted spurious emissions of Multi RAT operation, LTE 5 MHz + NR 5 MHz [2.70 GHz to 3 GHz]

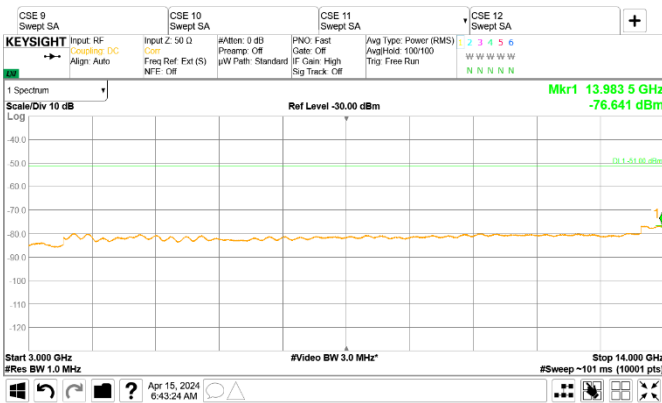


Figure 8.2-143: Conducted spurious emissions of Multi RAT operation, LTE 5 MHz + NR 5 MHz [3 GHz to 14 GHz]

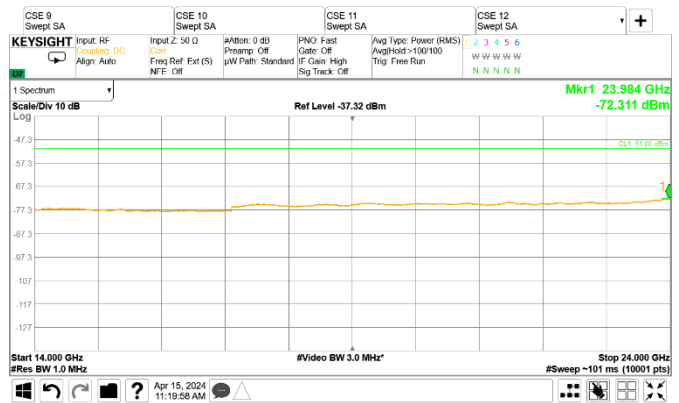


Figure 8.2-144: Conducted spurious emissions of Multi RAT operation, LTE 5 MHz + NR 5 MHz [14 GHz to 24 GHz]

Note: "and": non-contiguous channels; "+": contiguous channels

Test data, continued

On the plots below the measured *Channel Power* value in the “*Total Channel Power*” column must be -19 dBm and lower.



Figure 8.2-145: Conducted emission from the lower band edge

Frequency: 2350 MHz Mode: Single-carrier operation
 Meas. BW: 1 MHz Tech.: LTE 5 MHz
 Limit: -19 dBm/MHz Notes: None

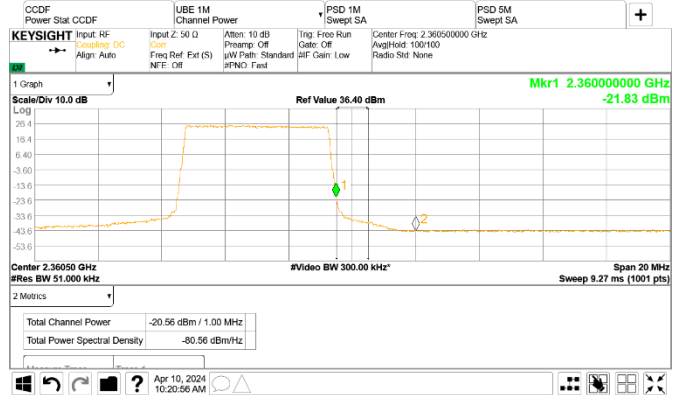


Figure 8.2-146: Conducted emission from the upper band edge

Frequency: 2360 MHz Mode: Single-carrier operation
 Meas. BW: 1 MHz Tech.: LTE 5 MHz
 Limit: -19 dBm/MHz Notes: None

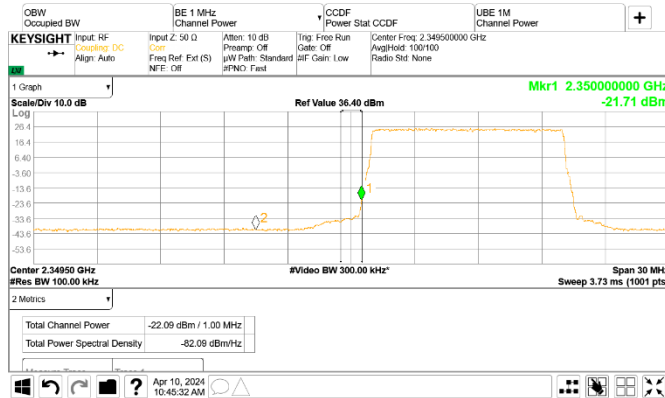


Figure 8.2-147: Conducted emission from the lower band edge

Frequency: 2350 MHz Mode: Single-carrier operation
 Meas. BW: 1 MHz Tech.: LTE 10 MHz
 Limit: -19 dBm/MHz Notes: None



Figure 8.2-148: Conducted emission from the upper band edge

Frequency: 2360 MHz Mode: Single-carrier operation
 Meas. BW: 1 MHz Tech.: LTE 10 MHz
 Limit: -19 dBm/MHz Notes: None

Test data, continued

On the plots below the measured *Channel Power* value in the “*Total Channel Power*” column must be -19 dBm and lower.



Figure 8.2-149: Conducted emission from the lower band edge

Frequency: 2350 MHz Mode: Single-carrier operation
 Meas. BW: 1 MHz Tech.: NR 5 MHz
 Limit: -19 dBm/MHz Notes: None

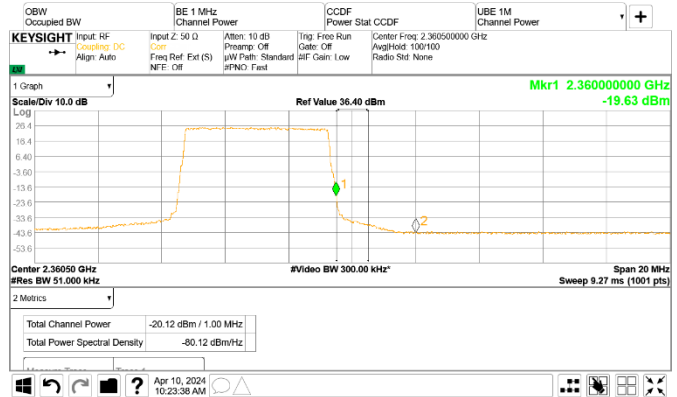


Figure 8.2-150: Conducted emission from the upper band edge

Frequency: 2360 MHz Mode: Single-carrier operation
 Meas. BW: 1 MHz Tech.: NR 5 MHz
 Limit: -19 dBm/MHz Notes: None



Figure 8.2-151: Conducted emission from the lower band edge

Frequency: 2350 MHz Mode: Single-carrier operation
 Meas. BW: 1 MHz Tech.: NR 10 MHz
 Limit: -19 dBm/MHz Notes: None

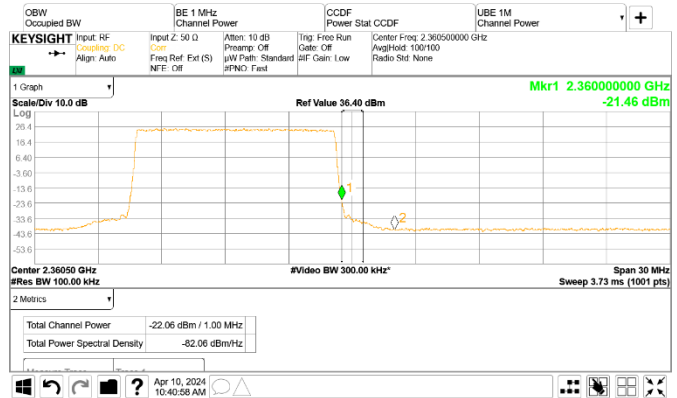


Figure 8.2-152: Conducted emission from the upper band edge

Frequency: 2360 MHz Mode: Single-carrier operation
 Meas. BW: 1 MHz Tech.: NR 10 MHz
 Limit: -19 dBm/MHz Notes: None

Test data, continued

On the plots below the measured *Channel Power* value in the “*Total Channel Power*” column must be -19 dBm and lower.

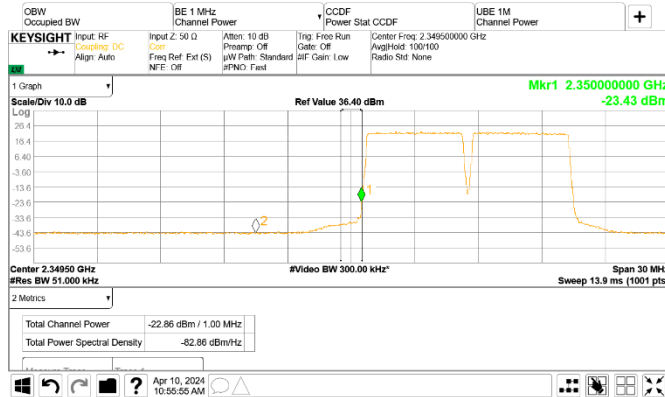


Figure 8.2-153: Conducted emission from the lower band edge

Frequency: 2350 MHz Mode: Multi-carrier operation
 Meas. BW: 1 MHz Tech.: $2 \times$ LTE 5 MHz
 Limit: -19 dBm/MHz Notes: None

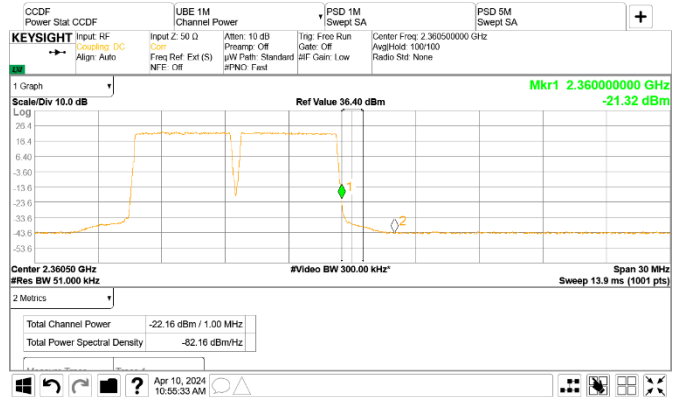


Figure 8.2-154: Conducted emission from the upper band edge

Frequency: 2360 MHz Mode: Multi-carrier operation
 Meas. BW: 1 MHz Tech.: $2 \times$ LTE 5 MHz
 Limit: -19 dBm/MHz Notes: None

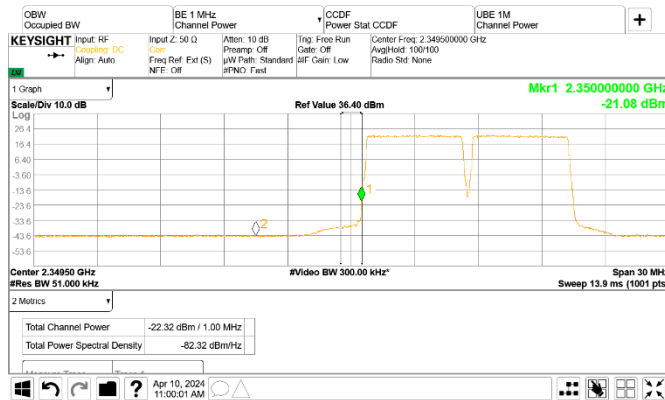


Figure 8.2-155: Conducted emission from the lower band edge

Frequency: 2350 MHz Mode: Multi-carrier operation
 Meas. BW: 1 MHz Tech.: $2 \times$ NR 5 MHz
 Limit: -19 dBm/MHz Notes: None



Figure 8.2-156: Conducted emission from the upper band edge

Frequency: 2360 MHz Mode: Multi-carrier operation
 Meas. BW: 1 MHz Tech.: $2 \times$ NR 5 MHz
 Limit: -19 dBm/MHz Notes: None

Test data, continued

On the plots below the measured *Channel Power* value in the “*Total Channel Power*” column must be -19 dBm and lower.

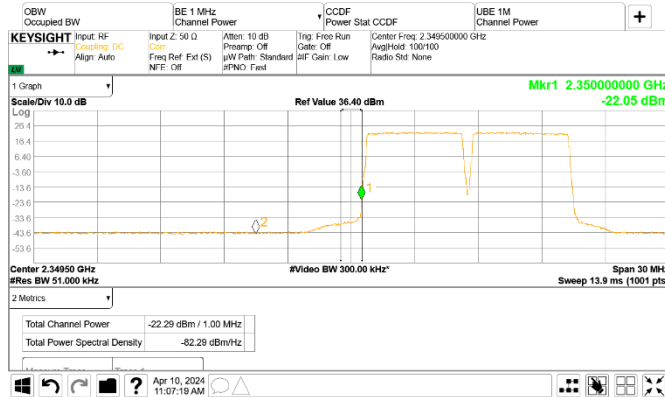


Figure 8.2-157: Conducted emission from the lower band edge

Frequency: 2350 MHz Mode: Multi-RAT operation
 Meas. BW: 1 MHz Tech.: NR 5 MHz + LTE 5 MHz
 Limit: -19 dBm/MHz Notes: None

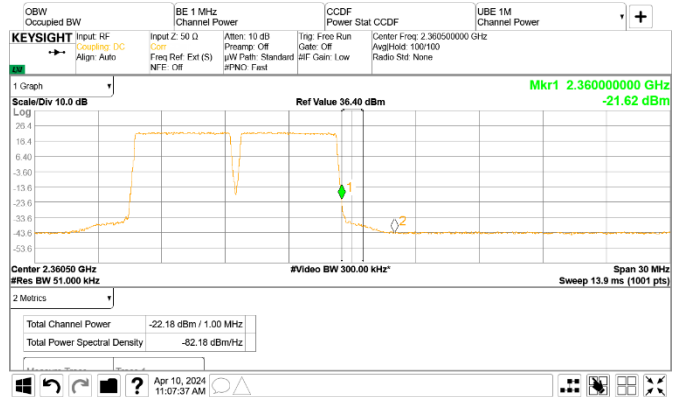


Figure 8.2-158: Conducted emission from the upper band edge

Frequency: 2360 MHz Mode: Multi-RAT operation
 Meas. BW: 1 MHz Tech.: NR 5 MHz + LTE 5 MHz
 Limit: -19 dBm/MHz Notes: None

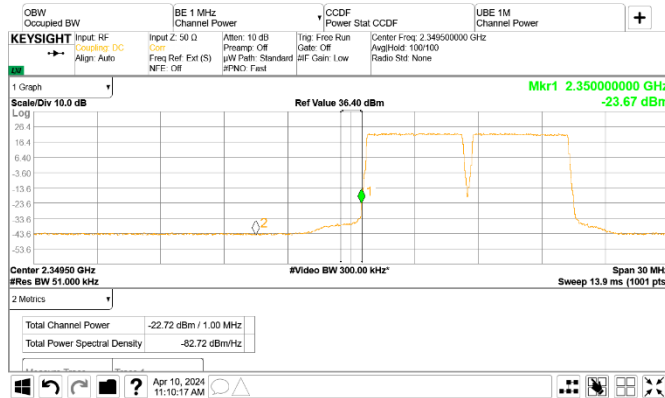


Figure 8.2-159: Conducted emission from the lower band edge

Frequency: 2350 MHz Mode: Multi-RAT operation
 Meas. BW: 1 MHz Tech.: LTE 5 MHz + NR 5 MHz
 Limit: -19 dBm/MHz Notes: None

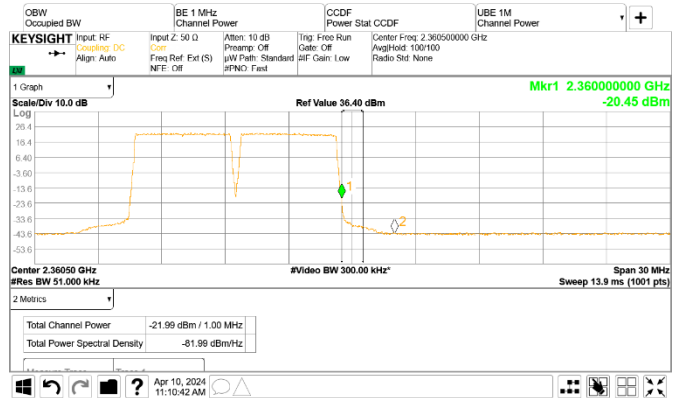


Figure 8.2-160: Conducted emission from the upper band edge

Frequency: 2360 MHz Mode: Multi-RAT operation
 Meas. BW: 1 MHz Tech.: LTE 5 MHz + NR 5 MHz
 Limit: -19 dBm/MHz Notes: None

Note: “and”: non-contiguous channels; “+”: contiguous channels

8.3 Radiated spurious emissions (Band 30)

8.3.1 Definitions and limits

FCC §27.53: Emission limits

(a) For operations in the 2305-2320 MHz band and the 2345-2360 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power P (with averaging performed only during periods of transmission) within the licensed band(s) of operation, in watts, by the following amounts:

(1) For base and fixed stations' operations in the 2305-2320 MHz band and the 2345-2360 MHz band:

- (i) By a factor of not less than $43 + 10 \log_{10}(P)$ dB on all frequencies between 2305 and 2320 MHz and on all frequencies between 2345 and 2360 MHz that are outside the licensed band(s) of operation, and not less than $75 + 10 \log_{10}(P)$ dB on all frequencies between 2320 and 2345 MHz;
- (ii) By a factor of not less than $43 + 10 \log_{10}(P)$ dB on all frequencies between 2300 and 2305 MHz, $70 + 10 \log_{10}(P)$ dB on all frequencies between 2287.5 and 2300 MHz, $72 + 10 \log_{10}(P)$ dB on all frequencies between 2285 and 2287.5 MHz, and $75 + 10 \log_{10}(P)$ dB below 2285 MHz;
- (iii) By a factor of not less than $43 + 10 \log_{10}(P)$ dB on all frequencies between 2360 and 2362.5 MHz, $55 + 10 \log_{10}(P)$ dB on all frequencies between 2362.5 and 2365 MHz, $70 + 10 \log_{10}(P)$ dB on all frequencies between 2365 and 2367.5 MHz, $72 + 10 \log_{10}(P)$ dB on all frequencies between 2367.5 and 2370 MHz, and $75 + 10 \log_{10}(P)$ dB above 2370 MHz.

(5) Measurement procedure.

Compliance with these rules is based on the use of measurement instrumentation employing a resolution bandwidth of 1 MHz or greater. However, 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.

Definitions and limits, continued

RSS-195, Section 5.6: Transmitter Unwanted Emissions

The transmitter unwanted emissions shall be measured with a resolution bandwidth of 1 MHz. A smaller resolution bandwidth is permitted provided that the measured power is integrated over the full required measurement bandwidth of 1 MHz. However, in the 1 MHz bands immediately adjacent to the edges of the frequency range(s) in which the equipment is allowed to operate, a resolution bandwidth of as close as possible to, without being less than 1% of the occupied bandwidth, shall be employed provided that the measured power is integrated over the full required measurement bandwidth of 1 MHz.

For all equipment, the TRP or total conducted power (sum of conducted power across all antenna connectors) of the unwanted emissions outside the frequency block or frequency block group shall not exceed the limits shown in table below:

Table 8.3-1: Unwanted emissions limits for Based Station, Fixed Station and High-Power Fixed Subscriber Equipment

Frequency (MHz)	Attenuation (dB)
< 2200	43 + 10 log ₁₀ (P)
2200 – 2285	75 + 10 log ₁₀ (P)
2285 – 2287.5	72 + 10 log ₁₀ (P)
2287.5 – 2300	70 + 10 log ₁₀ (P)
2300 – 2305	43 + 10 log ₁₀ (P)
2305 – 2320	43 + 10 log ₁₀ (P) *
2320 – 2345	75 + 10 log ₁₀ (P)
2345 – 2360	43 + 10 log ₁₀ (P) *
2360 – 2362.5	43 + 10 log ₁₀ (P)
2362.5 – 2365	55 + 10 log ₁₀ (P)
2365 – 2367.5	70 + 10 log ₁₀ (P)
2367.5 – 2370	72 + 10 log ₁₀ (P)
2370 – 2395	75 + 10 log ₁₀ (P)
> 2395	43 + 10 log ₁₀ (P)

Notes: * Measured at the edges of the highest and lowest frequency range(s) in which the equipment is designed to operate. See Section 5.2 for the permitted frequency ranges for the various equipment types.

8.3.2 Test summary

Test date	April 11 and 12, 2024
Test engineer	Sarveshkumar Patel

8.3.3 Observations, settings and special notes

- The spectrum was searched from 30 MHz to the 10th harmonic per ANSI C63.26 Paragraph 5.5.3.2 method.
- RBW within 30–1000 MHz was 100 kHz and 1 MHz above 1 GHz. VBW was wider than RBW.
- Testing was performed with RF ports terminated with 50 Ohm load.
- The limit line for FCC Part 27 is more stringent than RSS-195, therefore, in the plots, the worst-case limit of FCC Part 27 is shown.
- **Testing was performed with simultaneous transmission with 1 carrier each from LTE and NR (Bottom channel for LTE and Top Channel for NR).**

8.3.4 Test data

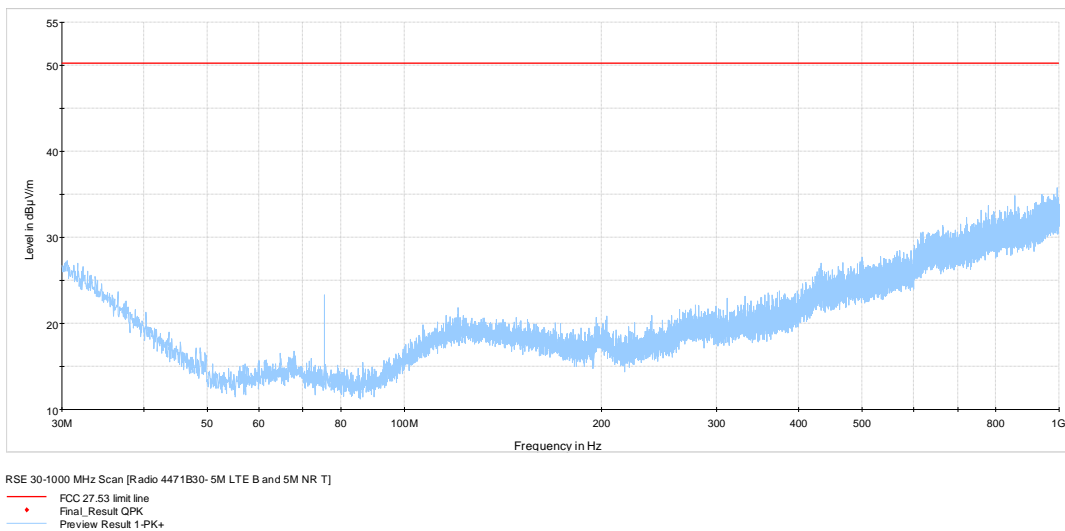
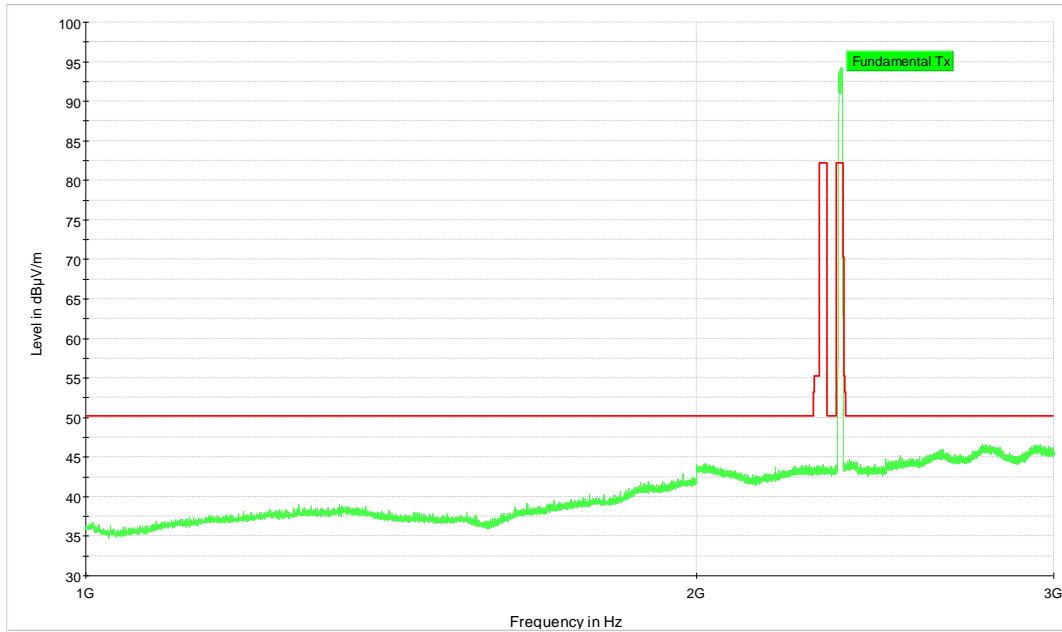


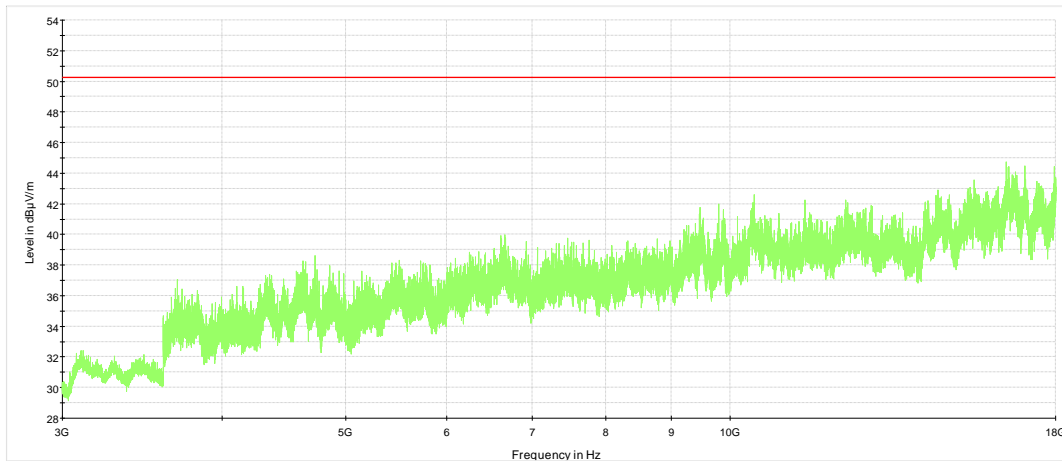
Figure 8.3-1: Radiated spurious emissions within 30–1000 MHz, multi-RAT operation (limit at 50.23 dBµV/m)

Test data, continued



RE 1-3 GHz Scan [Radio 4471B30- 5M LTE B and 5M NR T]
Preview_Result-1 RMS
FCC 27.53 Limit line

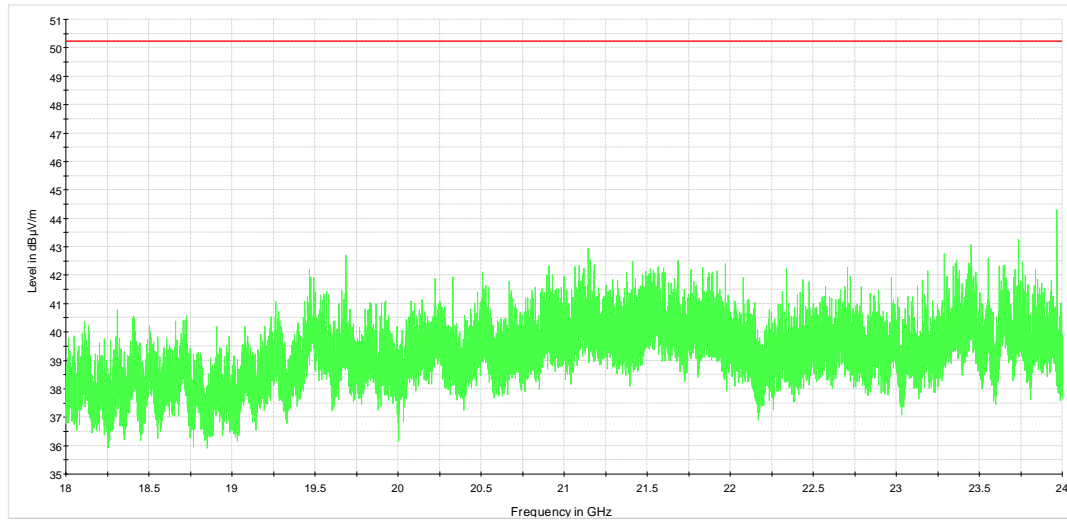
Figure 8.3-2: Radiated spurious emissions within 1–3 GHz, multi-RAT operation (limit at 50.23 dBµV/m)



RE 3-18 GHz Scan [Radio 4471B30- 5M LTE B and 5M NR T]
Preview Result 1-RMS
FCC 27.53 Limit line

Figure 8.3-3: Radiated spurious emissions within 3–18 GHz, multi-RAT operation (limit at 50.23 dBµV/m)

Test data, continued



RSE 18-24 GHz Scan [Radio 4471B30-5M LTE B and 5M NR T]
Preview_Result-1 RMS
FCC 27.53 Limit line

Figure 8.3-4: Radiated spurious emissions within 18–40 GHz, multi-RAT operation (limit at 50.23 dBµV/m)

8.4 Receiver conducted spurious emissions (Band 30)

8.4.1 Definitions and limits

RSS-Gen, 7.4

If the receiver has a detachable antenna of known impedance, an antenna-conducted spurious emissions measurement is permitted as an alternative to radiated measurement. However, the radiated method of section 7.3 is preferred.

The antenna-conducted test shall be performed with the antenna disconnected and with the receiver antenna port connected to a measuring instrument having equal input impedance to that specified for the antenna. The RF cable connecting the receiver under test to the measuring instrument shall also have the same impedance to that specified for the receiver’s antenna.

The spurious emissions from the receiver at any discrete frequency, measured at the antenna port by the antenna-conducted method, shall not exceed 2 nW in the frequency range 30–1000 MHz and 5 nW above 1 GHz.

8.4.2 Test summary

Test date	April 15, 2024
Test engineer	Nimish Kapoor

8.4.3 Observations, settings and special notes

The actual limit lines are 2 nW (-56.98 dBm) for 30-1000 MHz range and 5 nW (-53.01 dBm) for above 1 GHz range. The 6 dB compensation to compensate for 4 ports will make the limits lines -63.98 dBm for 30-1000 MHz and -59.01 dBm for above 1 GHz and the scan is below these limits as well.

Spectrum analyzer settings:

Detector mode	RMS
Resolution bandwidth	1 MHz
Video bandwidth	RBW × 3
Trace mode	Averaging

8.4.4 Test data

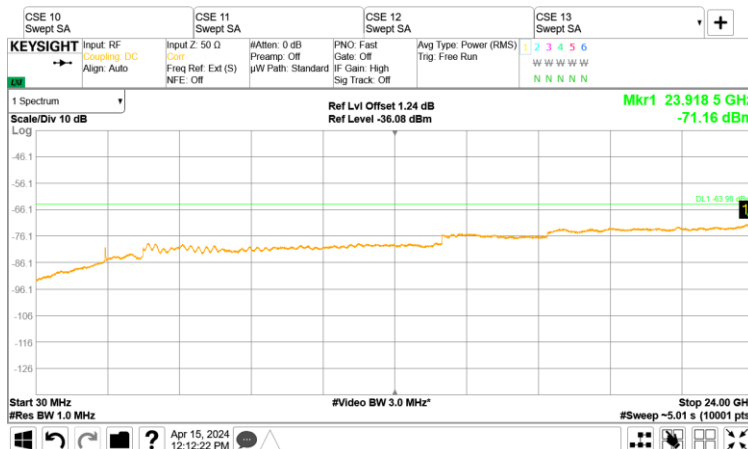


Figure 8.4-1: Receiver conducted spurious emissions for Band 30

8.5 Frequency stability (Band 30)

8.5.1 Definitions and limits

FCC 27.54:

The frequency stability shall be sufficient to ensure that the fundamental emissions stay within the authorized bands of operation.

RSS-195, Section 5.4:

The applicant shall ensure frequency stability by showing that the occupied bandwidth is maintained within the range of the operating frequency blocks when testing under the temperature and supply voltage variations specified for the frequency stability measurement in RSS-Gen.

8.5.2 Test summary

Test date	April 15, 2024
Test engineer	Nimish Kapoor

8.5.3 Observations, settings and special notes

Testing was performed per ANSI C63.26 Paragraphs 5.6.3, 5.6.4 and 5.6.5 methods.
 26 dBc points including frequency tolerance were assessed to remain within assigned band.

8.5.4 Test data

Table 8.5-1: Frequency error results

Temperature, °C	Voltage, V _{DC}	Frequency error, Hz
-40	48.0	10.312
-30	48.0	-7.738
-20	48.0	-11.272
-10	48.0	5.638
0	48.0	-3.923
+10	48.0	-5.500
+20	40.8	-8.773
+20	48.0	11.905
+20	55.2	7.312
+30	48.0	10.550
+40	48.0	8.993
+50	48.0	-10.073
+55	48.0	10.585

Max negative drift: -11.272 Hz, Max positive drift: +11.905 Hz.

8.6 Occupied bandwidth (Band 30)

8.6.1 Definitions and limits

FCC §2.1049:

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.

RSS-Gen, 6.7

The occupied bandwidth or the “99% emission bandwidth” is defined as the frequency range between two points, one above and the other below the carrier frequency, within which 99% of the total transmitted power of the fundamental transmitted emission is contained. The occupied bandwidth shall be reported for all equipment in addition to the specified bandwidth required in the applicable RSSs.

8.6.2 Test summary

Test date	April 10, 2024
Test engineer	Nimish Kapoor

8.6.3 Observations, settings and special notes

Testing was performed per ANSI C63.26 Paragraphs 5.4.3 and 5.4.4 methods.

Spectrum analyzer settings:

Detector mode	Peak
Resolution bandwidth	$\geq 1\%$ of EBW
Video bandwidth	RBW $\times 3$
Trace mode	Max Hold

8.6.4 Test data

Table 8.6-1: Occupied bandwidth results for LTE 5 MHz channel

Remarks	Frequency, MHz	26 dB BW, MHz	99% OBW, MHz
5 MHz, Low channel	2352.50	4.778	4.4833
5 MHz, Mid channel	2355.00	4.734	4.4943
5 MHz, Top channel	2357.50	4.781	4.4806

Table 8.6-2: Occupied bandwidth results for LTE 10 MHz channel

Remarks	Frequency, MHz	26 dB BW, MHz	99% OBW, MHz
10 MHz, Mid channel	2355.00	9.453	8.9633

Table 8.6-3: Occupied bandwidth results for NR 5 MHz channel

Remarks	Frequency, MHz	26 dB BW, MHz	99% OBW, MHz
5 MHz, Low channel	2352.50	4.770	4.4753
5 MHz, Mid channel	2355.00	4.736	4.4942
5 MHz, Top channel	2357.50	4.771	4.4705

Table 8.6-4: Occupied bandwidth results for NR 10 MHz channel

Remarks	Frequency, MHz	26 dB BW, MHz	99% OBW, MHz
10 MHz, Mid channel	2355.00	9.780	9.2883