

Test data, continued

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

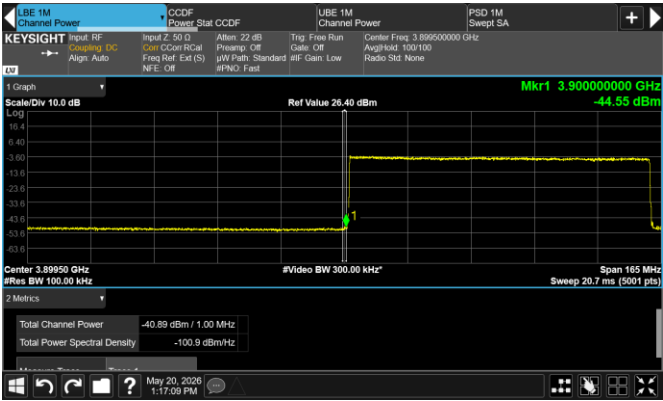


Figure 8.6-128: Conducted emission at the lower band edge

Frequency:	3900 MHz	Mode:	Single-carrier operation
Meas. BW:	1 MHz	Tech.:	NR 80 MHz
Limit:	-19 dBm/MHz	Notes:	None



Figure 8.6-129: Conducted emission at the upper band edge

Frequency:	3980 MHz	Mode:	Single-carrier operation
Meas. BW:	1 MHz	Tech.:	NR 80 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 8.6-130: Conducted emission at the lower band edge

Frequency: 3900 MHz Mode: 2-carrier operation
Meas. BW: 1 MHz Tech.: NR 10 MHz
Limit: -19 dBm/MHz Notes: None

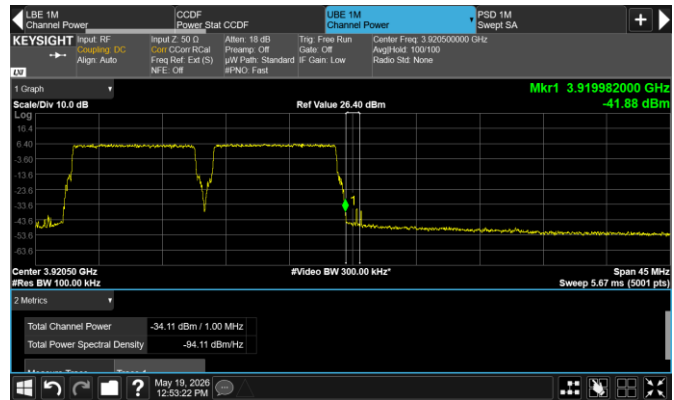


Figure 8.6-131: Conducted emission at the upper frequency block edge of the lower channel

Frequency: 3920 MHz Mode: 2-carrier operation
Meas. BW: 1 MHz Tech.: NR 10 MHz
Limit: -19 dBm/MHz Notes: None

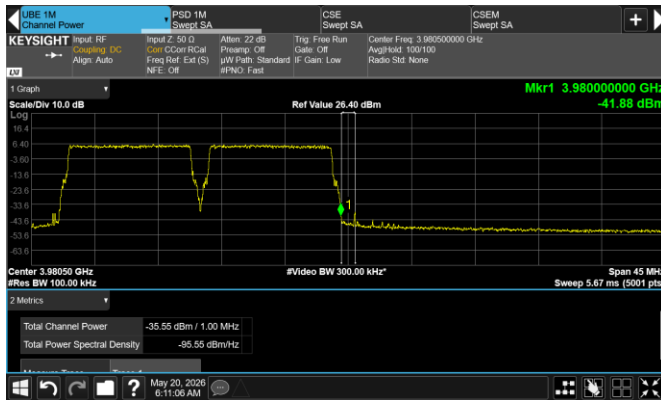


Figure 8.6-132: Conducted emission at the upper band edge

Frequency: 3980 MHz Mode: 2-carrier operation
Meas. BW: 1 MHz Tech.: NR 10 MHz
Limit: -19 dBm/MHz Notes: None

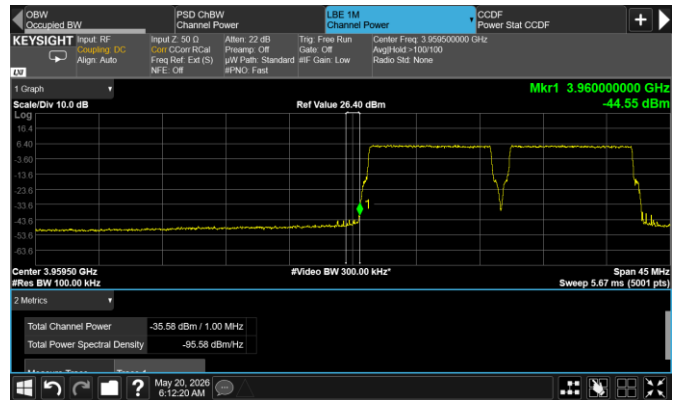


Figure 8.6-133: Conducted emission at the lower frequency block edge of the upper channel

Frequency: 3960 MHz Mode: 2-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.

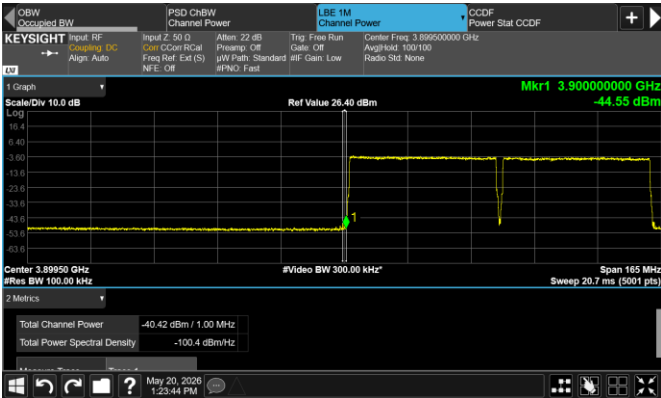


Figure 8.6-134: Conducted emission at the lower band edge

Frequency:	3900 MHz	Mode:	2-carrier operation
Meas. BW:	1 MHz	Tech.:	NR 40 MHz
Limit:	-19 dBm/MHz	Notes:	None

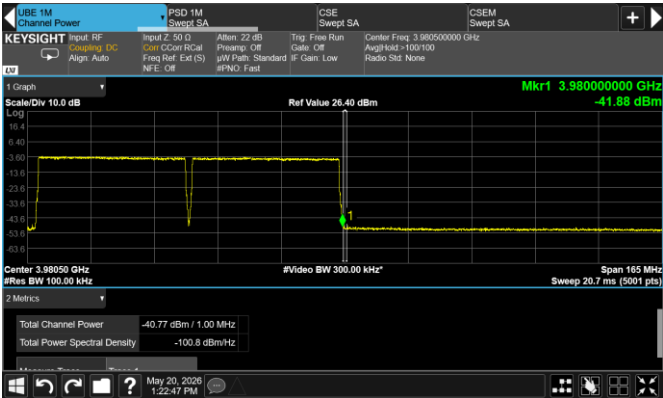


Figure 8.6-135: Conducted emission at the upper band edge

Frequency:	3980 MHz	Mode:	2-carrier operation
Meas. BW:	1 MHz	Tech.:	NR 40 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.

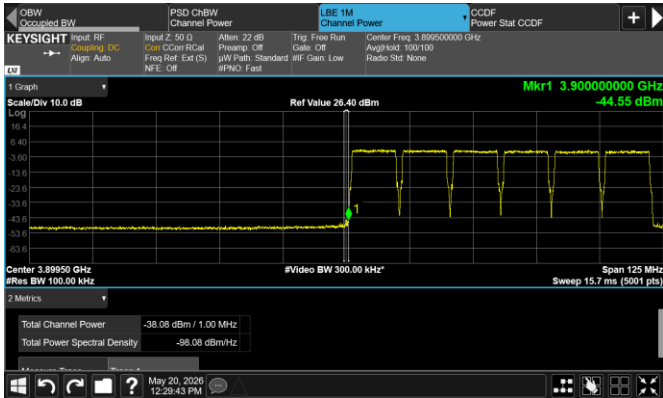


Figure 8.6-136: Conducted emission at the lower band edge

Frequency: 3900 MHz
Meas. BW: 1 MHz
Limit: -19 dBm/MHz

Mode: 6-carrier operation
Tech.: NR 10 MHz
Notes: None

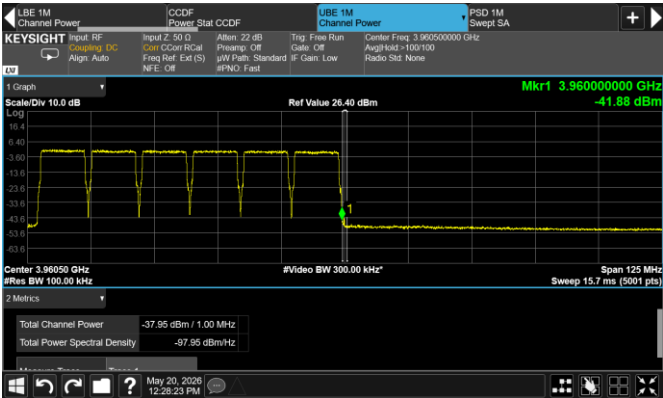


Figure 8.6-137: Conducted emission at the upper frequency block edge of the lower channel

Frequency: 3960 MHz
Meas. BW: 1 MHz
Limit: -19 dBm/MHz

Mode: 6-carrier operation
Tech.: NR 10 MHz
Notes: None

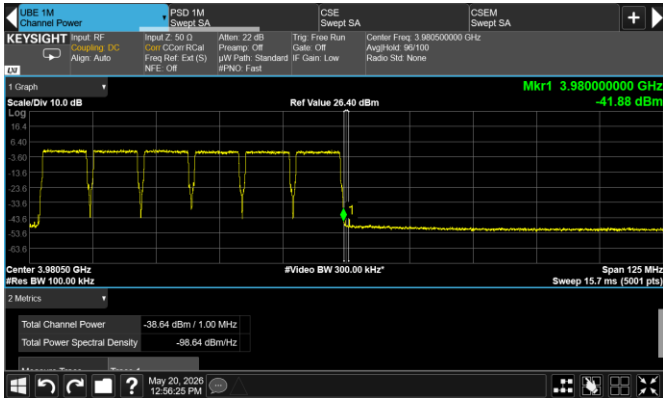


Figure 8.6-138: Conducted emission at the upper band edge

Frequency: 3980 MHz
Meas. BW: 1 MHz
Limit: -19 dBm/MHz

Mode: 6-carrier operation
Tech.: NR 10 MHz
Notes: None

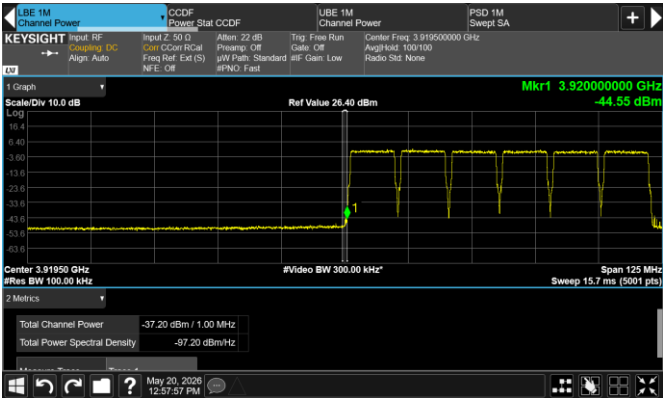


Figure 8.6-139: Conducted emission at the lower frequency block edge of the top channel

Frequency: 3920 MHz
Meas. BW: 1 MHz
Limit: -19 dBm/MHz

Mode: 6-carrier operation
Tech.: NR 10 MHz
Notes: None

Test data, continued

On the plots below the measured *Channel Power* value in the “*Total Channel Power*” column must be -16 dBm and lower.

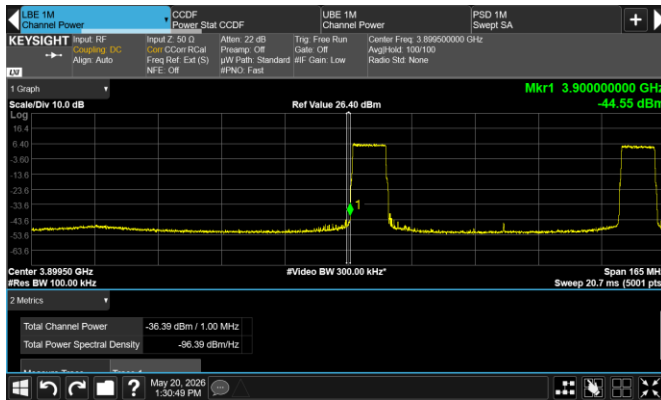


Figure 8.6-140: Conducted emission at the lower band edge

Frequency: 3900 MHz
Meas. BW: 1 MHz
Limit: -19 dBm/MHz

Mode: 2-carrier operation
Tech.: NR 10 MHz
Notes: Non-contiguous

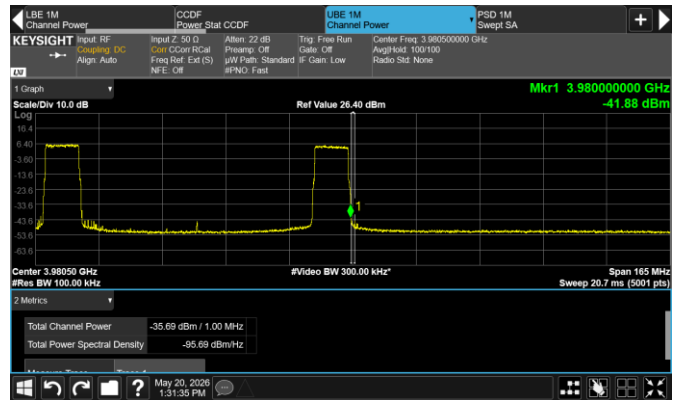


Figure 8.6-141: Conducted emission at the upper band edge

Frequency: 3980 MHz
Meas. BW: 1 MHz
Limit: -19 dBm/MHz

Mode: 2-carrier operation
Tech.: NR 10 MHz
Notes: Non-contiguous



Figure 8.6-142: Conducted emission at the lower band edge [spur zoom in]

Frequency: 3900 MHz
RBW: 1 MHz
Limit: -19 dBm/MHz

Mode: 2-carrier operation
Tech.: NR 10 MHz
Notes: Non-contiguous



Figure 8.6-143: Conducted emission at the upper band edge [spur zoom in]

Frequency: 3980 MHz
RBW: 1 MHz
Limit: -19 dBm/MHz

Mode: 2-carrier operation
Tech.: NR 10 MHz
Notes: Non-contiguous

Test data, continued

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

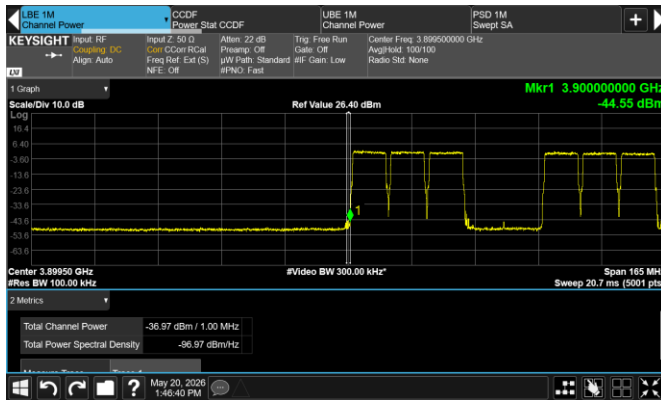


Figure 8.6-144: Conducted emission at the lower band edge

Frequency: 3900 MHz
Meas. BW: 1 MHz
Limit: -19 dBm/MHz

Mode: 6-carrier operation
Tech.: NR 10 MHz
Notes: Non-contiguous

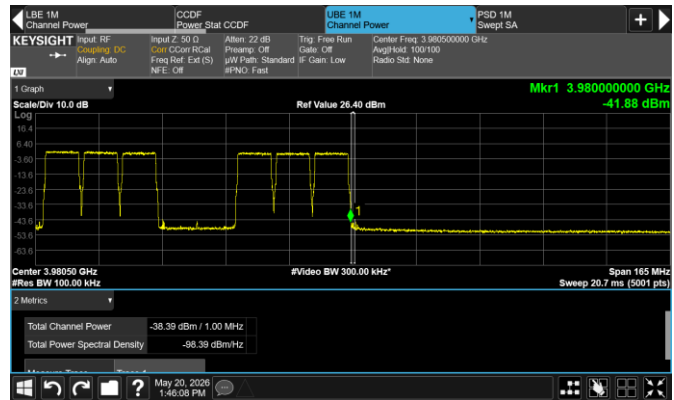


Figure 8.6-145: Conducted emission at the upper band edge

Frequency: 3980 MHz
Meas. BW: 1 MHz
Limit: -19 dBm/MHz

Mode: 6-carrier operation
Tech.: NR 10 MHz
Notes: Non-contiguous

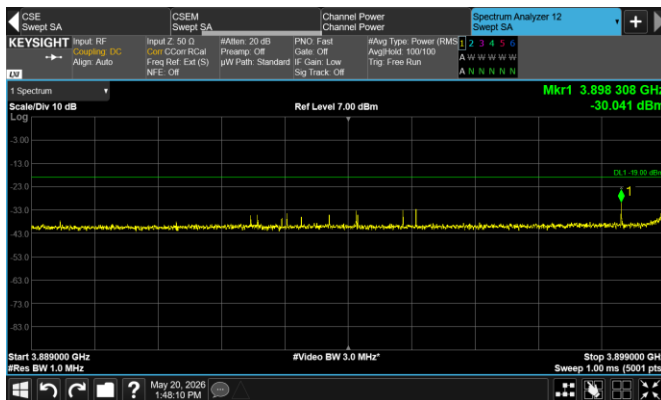


Figure 8.6-146: Conducted emission at the lower band edge [spur zoom in]

Frequency: 3900 MHz
RBW: 1 MHz
Limit: -19 dBm/MHz

Mode: 6-carrier operation
Tech.: NR 10 MHz
Notes: Non-contiguous

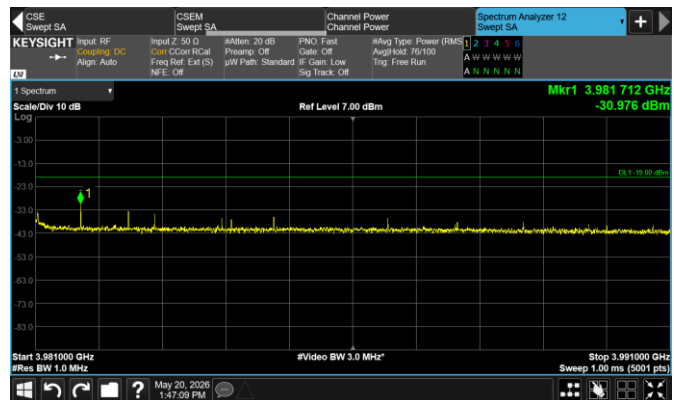


Figure 8.6-147: Conducted emission at the upper band edge [spur zoom in]

Frequency: 3980 MHz
RBW: 1 MHz
Limit: -19 dBm/MHz

Mode: 6-carrier operation
Tech.: NR 10 MHz
Notes: Non-contiguous

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 8.6-148: Conducted emission at the lower band edge [Dot 4469 B77D – spot check evaluation]

Frequency: 3900 MHz Mode: Single-carrier operation
Meas. BW: 1 MHz Tech.: NR 10 MHz
Limit: -19 dBm/MHz Notes: None



Figure 8.6-149: Conducted emission at the upper frequency block edge of the lower channel [Dot 4469 B77D – spot check evaluation]

Frequency: 3910 MHz Mode: Single-carrier operation
Meas. BW: 1 MHz Tech.: NR 10 MHz
Limit: -19 dBm/MHz Notes: None



Figure 8.6-150: Conducted emission at the upper band edge [Dot 4469 B77D – spot check evaluation]

Frequency: 3980 MHz Mode: Single-carrier operation
Meas. BW: 1 MHz Tech.: NR 10 MHz
Limit: -19 dBm/MHz Notes: None

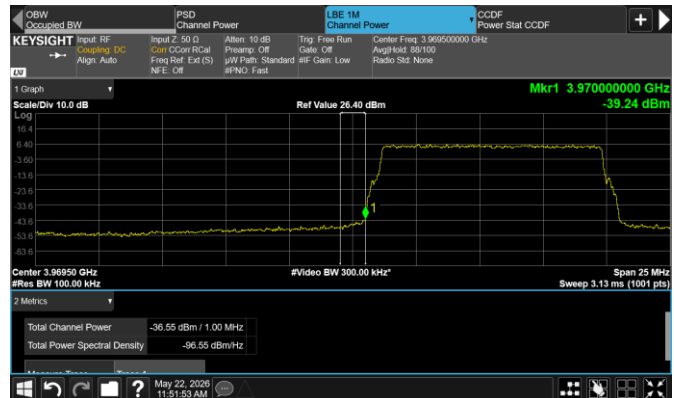


Figure 8.6-151: Conducted emission at the lower frequency block edge of the upper channel [Dot 4469 B77D – spot check evaluation]

Frequency: 3970 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.

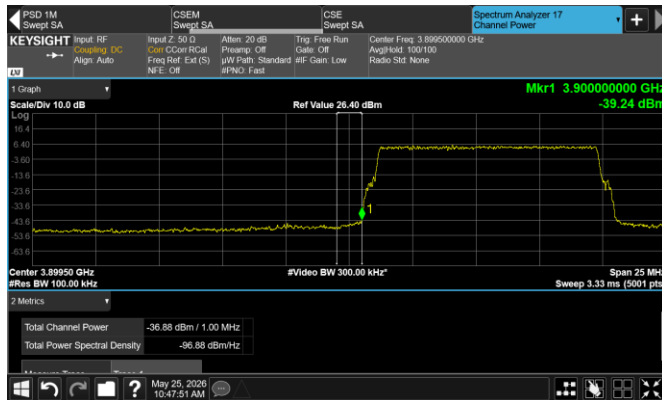


Figure 8.6-152: Conducted emission at the lower band edge [Dot 4459 B77D – spot check evaluation]

Frequency: 3900 MHz Mode: Single-carrier operation
Meas. BW: 1 MHz Tech.: NR 10 MHz
Limit: -19 dBm/MHz Notes: None



Figure 8.6-153: Conducted emission at the upper frequency block edge of the lower channel [Dot 4459 B77D – spot check evaluation]

Frequency: 3910 MHz Mode: Single-carrier operation
Meas. BW: 1 MHz Tech.: NR 10 MHz
Limit: -19 dBm/MHz Notes: None



Figure 8.6-154: Conducted emission at the upper band edge [Dot 4459 B77D – spot check evaluation]

Frequency: 3980 MHz Mode: Single-carrier operation
Meas. BW: 1 MHz Tech.: NR 10 MHz
Limit: -19 dBm/MHz Notes: None

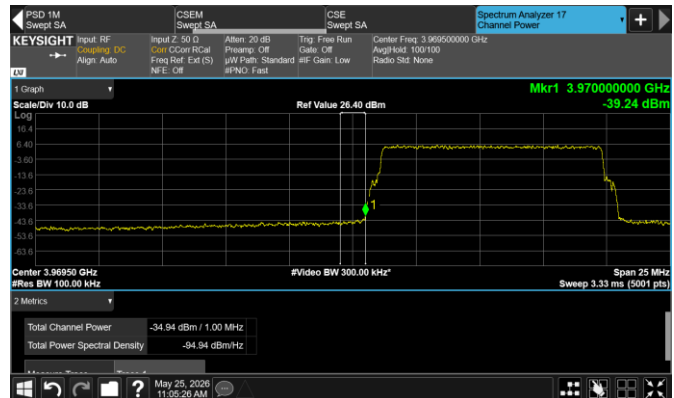


Figure 8.6-155: Conducted emission at the lower frequency block edge of the upper channel [Dot 4459 B77D – spot check evaluation]

Frequency: 3970 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.

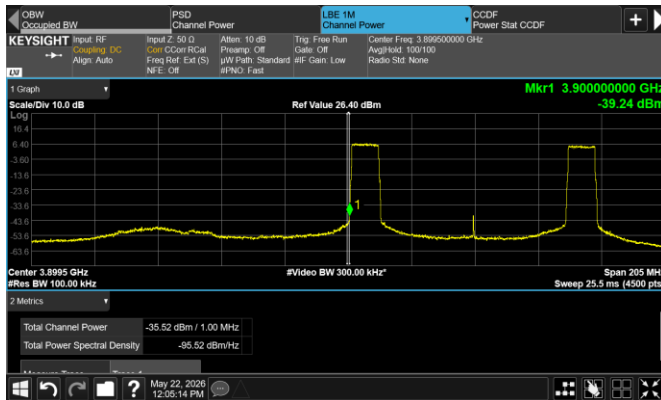


Figure 8.6-156: Conducted emission at the lower band edge [Dot 4469 B77D – spot check evaluation]

Frequency: 3900 MHz Mode: 2-carrier operation
Meas. BW: 1 MHz Tech.: NR 10 MHz
Limit: -19 dBm/MHz Notes: Non-contiguous

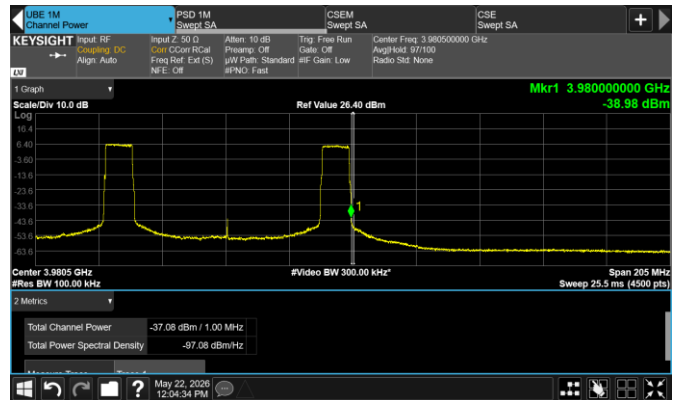


Figure 8.6-157: Conducted emission at the upper band edge [Dot 4469 B77D – spot check evaluation]

Frequency: 3980 MHz Mode: 2-carrier operation
Meas. BW: 1 MHz Tech.: NR 10 MHz
Limit: -19 dBm/MHz Notes: Non-contiguous

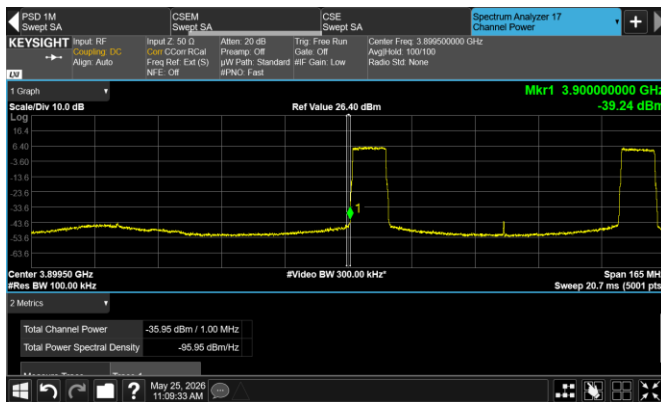


Figure 8.6-158: Conducted emission at the lower band edge [Dot 4459 B77D – spot check evaluation]

Frequency: 3900 MHz Mode: 2-carrier operation
Meas. BW: 1 MHz Tech.: NR 10 MHz
Limit: -19 dBm/MHz Notes: Non-contiguous

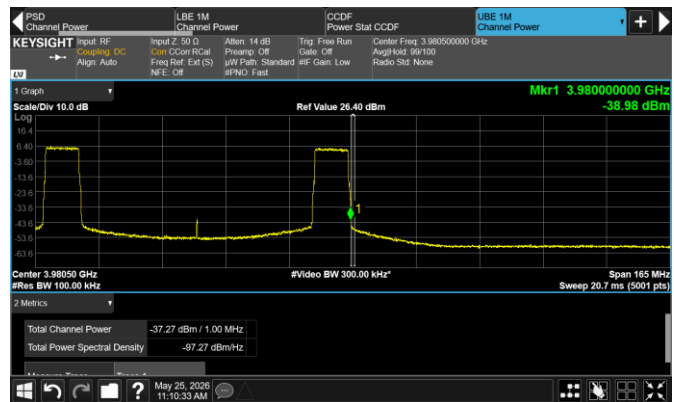


Figure 8.6-159: Conducted emission at the upper band edge [Dot 4459 B77D – spot check evaluation]

Frequency: 3980 MHz Mode: 2-carrier operation
Meas. BW: 1 MHz Tech.: NR 10 MHz
Limit: -19 dBm/MHz Notes: Non-contiguous

8.7 Transmitter unwanted emissions (1930-1995 MHz)-B25

8.7.1 Definitions and limits

FCC §24.238(a) Out of band emissions:

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB.

RSS-133, Section 5.6 Unwanted emission limits:

Unwanted emissions shall be measured in terms of average values while the transmitter is operating at the manufacturer's rated power and modulated as specified in RSS-Gen.

Equipment shall meet the unwanted emission limits, specified in the table below, outside each frequency block group. For each channel bandwidth supported by the equipment under test, the unwanted emissions shall be measured and reported for two channel frequencies: one located as close as possible to the low end and one located as close as possible to the high end of the equipment's operating frequency range.

For the unwanted emission limits, in the 1 MHz bands immediately outside and adjacent to the frequency block group, the power shall be measured with a resolution bandwidth of at least 1% of the occupied bandwidth (OBW). Beyond these 1 MHz bands, a resolution bandwidth of 1 MHz shall be used. A narrower resolution bandwidth may be used, provided that the measured power is integrated over the full required measurement bandwidth of 1 MHz, or 1% of the OBW, as applicable.

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

Table 8.7-1: Unwanted emissions limits for all equipment

Offset frequency from the edge of the frequency block group (MHz)	Unwanted emission limits
≤ 1	-13 dBm/(1% of OBW)
>1	-13 dBm/MHz

Notes: None

8.7.2 Test summary

Verdict	Pass		
Test date	May 13, 2026 - May 25, 2026	Temperature	19-21 °C
Tested by	Dhara Patel	Air pressure	995-1005 mbar
Test location	Ottawa	Relative humidity	35-38 %

8.7.3 Observations, settings and special notes

- The spectrum was searched from 30 MHz to the 10th harmonic.
- Measurements were performed using a peak detector per ANSI C63.26 Paragraph 5.7.4 method.
- RBW 1 MHz, VBW was wider than RBW.
- All modulation configurations were pretested to identify the representative modulation yielding the worst-case power level. The modulations that resulted in the worst-case scenarios were 16QAM with NB IoT where it applies.
- At 0 MHz offset from the band edge or frequency block edge, the -13 dBm limit applies over 1% of the OBW, while at 1 MHz offset the same -13 dBm limit applies over a 1 MHz bandwidth. Measurements at 0 MHz offset were initially performed using a 1 MHz RBW, and if the results were compliant, the reduced bandwidth measurement was not repeated.

8.7.4 Test data

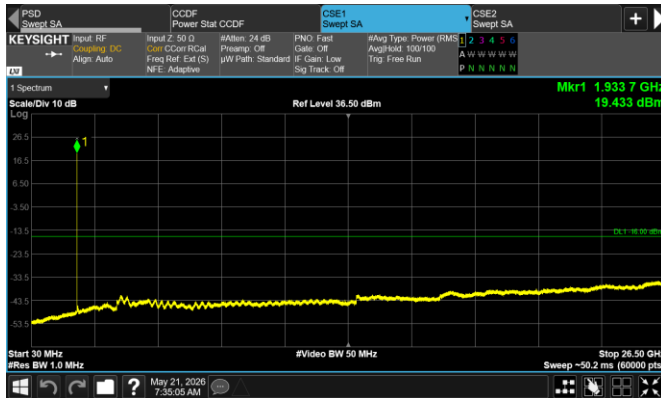


Figure 8.7-1: Conducted spurious emissions of LTE 5 MHz low channel, single carrier operation

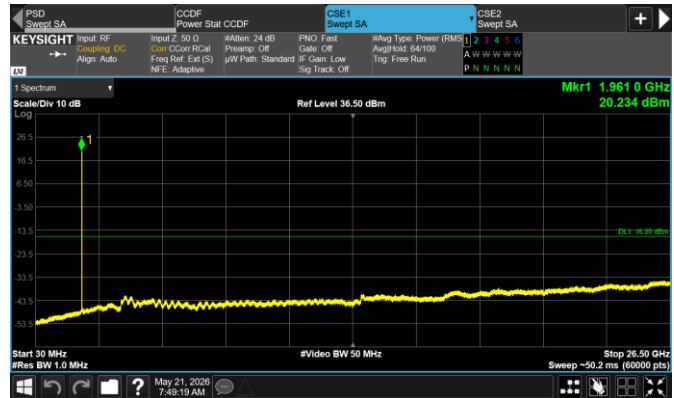


Figure 8.7-2: Conducted spurious emissions of LTE 5 MHz mid channel, single carrier operation

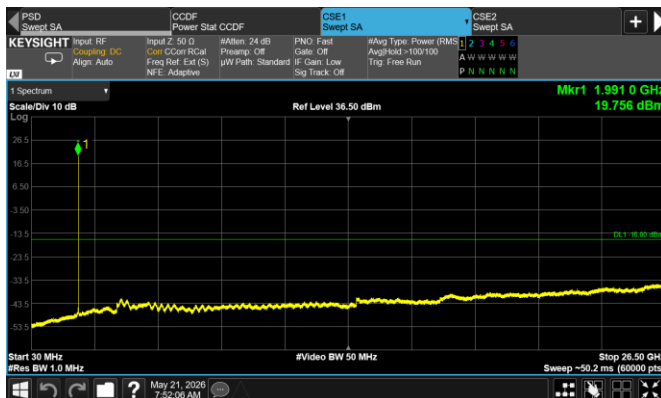


Figure 8.7-3: Conducted spurious emissions of LTE 5 MHz top channel, single carrier operation

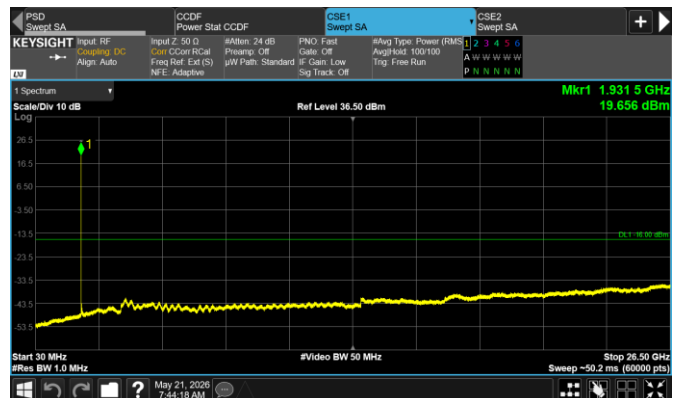


Figure 8.7-4: Conducted spurious emissions of NR 5 MHz low channel, single carrier operation

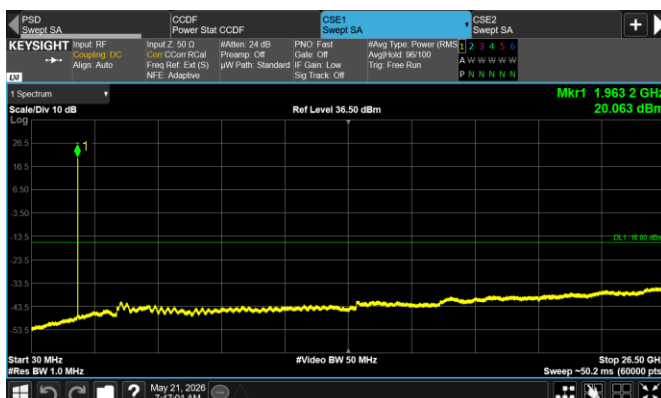


Figure 8.7-5: Conducted spurious emissions of NR 5 MHz mid channel, single carrier operation

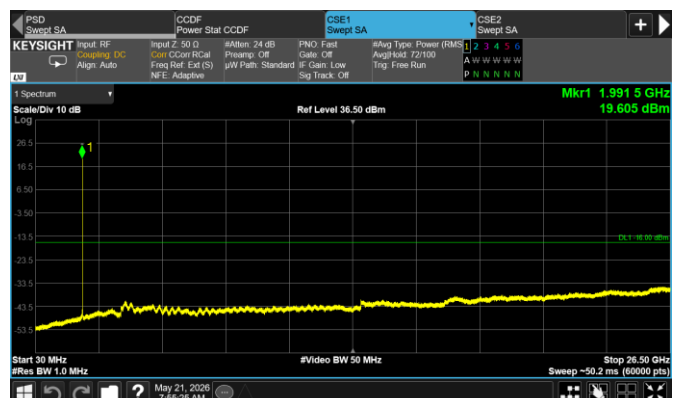


Figure 8.7-6: Conducted spurious emissions of NR 5 MHz top, single carrier operation

Test data, continued

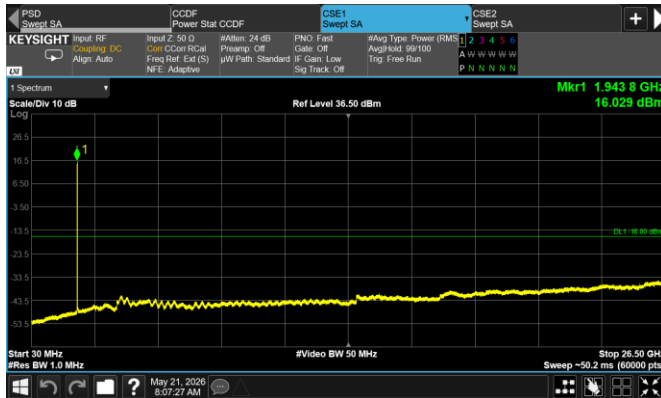


Figure 8.7-7: Conducted spurious emissions of NR 15 MHz low, single carrier operation

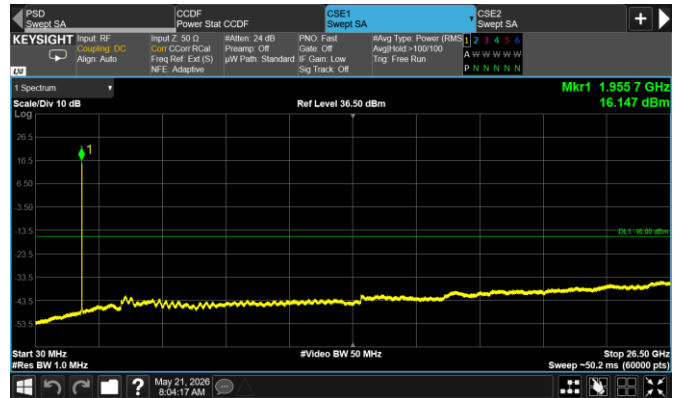


Figure 8.7-8: Conducted spurious emissions of NR 15 MHz mid channel, single carrier operation

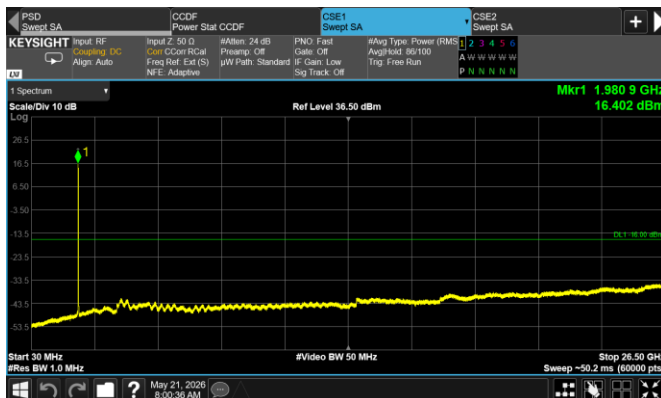


Figure 8.7-9: Conducted spurious emissions of NR 15 MHz top, single carrier operation

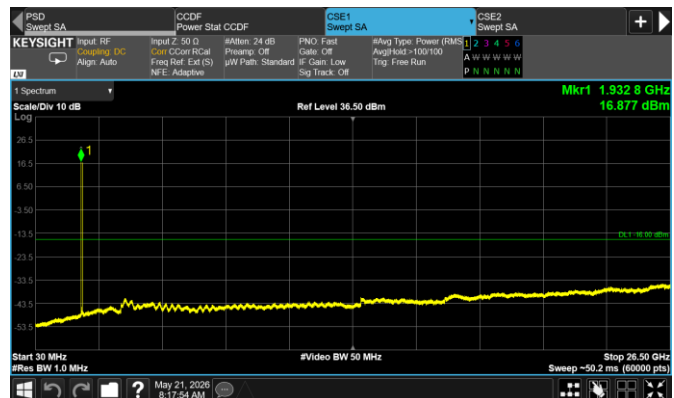


Figure 8.7-10: Conducted spurious emissions of NR 5 MHz + LTE 5 MHz channel, non-contiguous operation

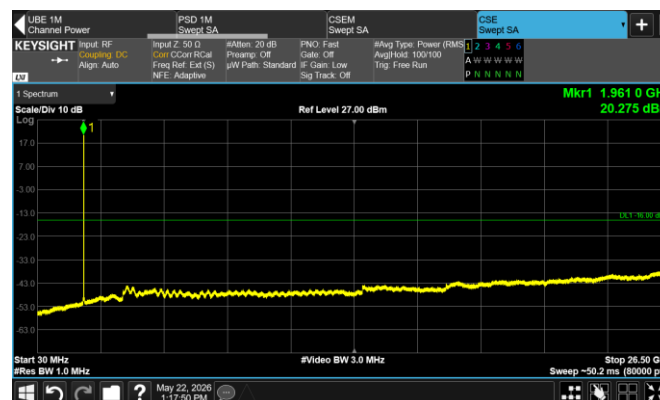


Figure 8.7-11: Conducted spurious emissions of NR 5 MHz mid channel, single carrier operation - Worst case comparison plot for model variant according to KDB 484596 Do1 Referencing Test Data

Test data, continued

On the plots below the measured *Channel Power* value in the “*Total Channel Power*” column must be -16 dBm and lower.

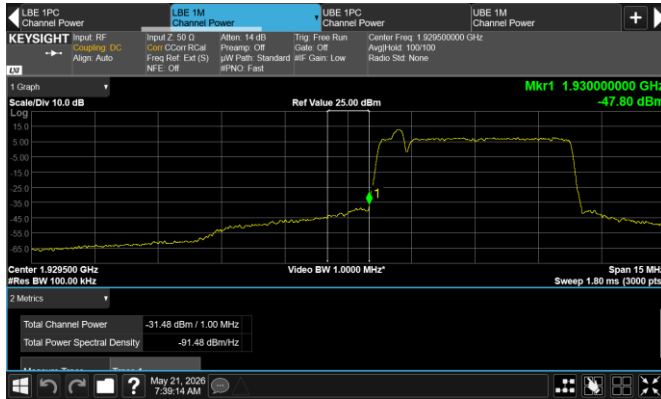


Figure 8.7-12: Conducted emission at the lower band edge

Frequency: 1930 MHz
Meas. BW: 1 MHz
Limit: -16 dBm/MHz

Mode: Single-carrier operation
Tech.: LTE 5 MHz
Notes: None

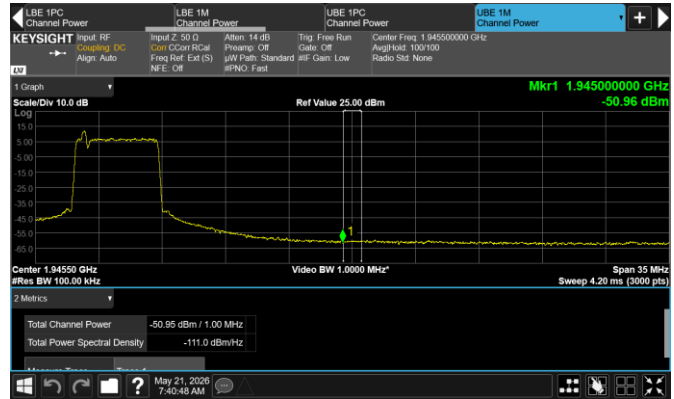


Figure 8.7-13: Conducted emission at the upper frequency block edge of the lower channel

Frequency: 1945 MHz
Meas. BW: 1 MHz
Limit: -16 dBm/MHz

Mode: Single-carrier operation
Tech.: LTE 5 MHz
Notes: None



Figure 8.7-14: Conducted emission at the upper band edge

Frequency: 1995 MHz
Meas. BW: 1 MHz
Limit: -16 dBm/MHz

Mode: Single-carrier operation
Tech.: LTE 5 MHz
Notes: None

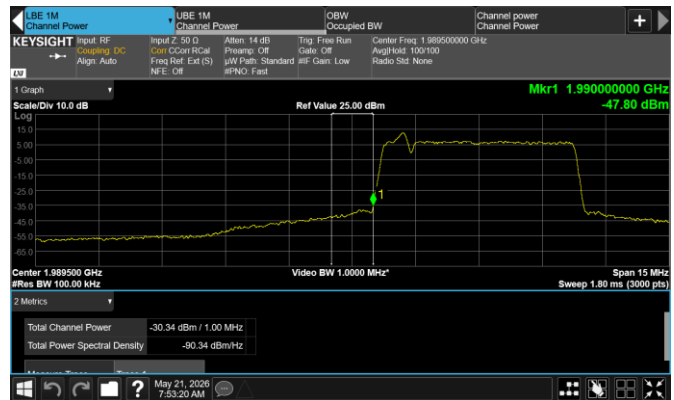


Figure 8.7-15: Conducted emission at the lower frequency block edge of the upper channel

Frequency: 1990 MHz
Meas. BW: 1 MHz
Limit: -16 dBm/MHz

Mode: Single-carrier operation
Tech.: LTE 5 MHz
Notes: None

Test data, continued



Figure 8.7-16: Conducted emission at the upper band edge for LTE 5 MHz top channel - Worst case comparison plot for model variant according to KDB 484596 Do1 Referencing Test Data

Frequency:	1995 MHz	Mode:	Single-carrier operation
Meas. BW:	1 MHz	Tech.:	LTE 5 MHz
Limit:	-16 dBm/MHz	Notes:	None

Test data, continued

On the plots below the measured *Channel Power* value in the “*Total Channel Power*” column must be -16 dBm and lower.

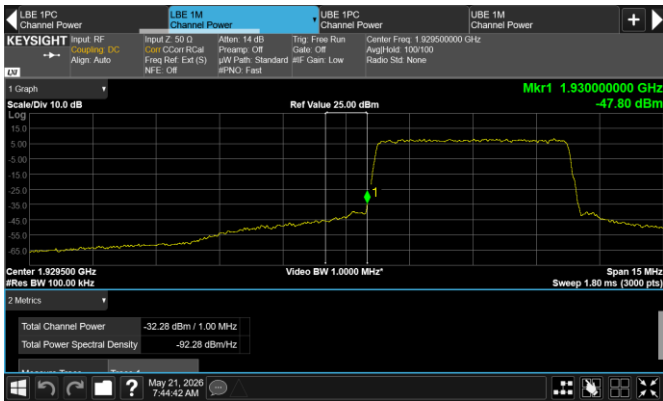


Figure 8.7-17: Conducted emission at the lower band edge

Frequency:	1930 MHz	Mode:	Single-carrier operation
Meas. BW:	1 MHz	Tech.:	NR 5 MHz
Limit:	-16 dBm/MHz	Notes:	None

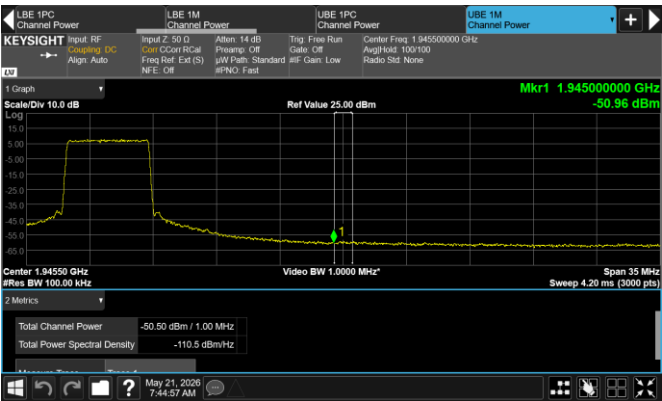


Figure 8.7-18: Conducted emission at the upper frequency block edge of the lower channel

Frequency:	1945 MHz	Mode:	Single-carrier operation
Meas. BW:	1 MHz	Tech.:	NR 5 MHz
Limit:	-16 dBm/MHz	Notes:	None



Figure 8.7-19: Conducted emission at the upper band edge

Frequency:	1995 MHz	Mode:	Single-carrier operation
Meas. BW:	1 MHz	Tech.:	NR 5 MHz
Limit:	-16 dBm/MHz	Notes:	None

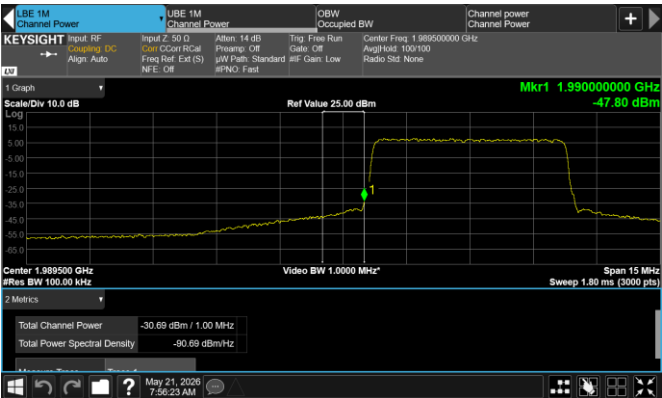


Figure 8.7-20: Conducted emission at the lower frequency block edge of the upper channel

Frequency:	1990 MHz	Mode:	Single-carrier operation
Meas. BW:	1 MHz	Tech.:	NR 5 MHz
Limit:	-16 dBm/MHz	Notes:	None

Test data, continued

On the plots below the measured *Channel Power* value in the “*Total Channel Power*” column must be -16 dBm and lower.

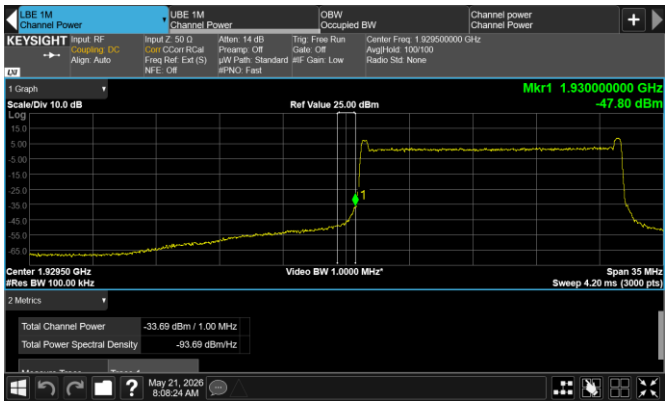


Figure 8.7-21: Conducted emission at the lower band edge

Frequency: 1930 MHz Mode: Single-carrier operation
Meas. BW: 1 MHz Tech.: NR 15 MHz
Limit: -16 dBm/MHz Notes: None



Figure 8.7-22: Conducted emission at the upper frequency block edge of the lower channel

Frequency: 1945 MHz Mode: Single-carrier operation
Meas. BW: 1 MHz Tech.: NR 15 MHz
Limit: -16 dBm/MHz Notes: None



Figure 8.7-23: Conducted emission at the upper band edge

Frequency: 1995 MHz Mode: Single-carrier operation
Meas. BW: 1 MHz Tech.: NR 15 MHz
Limit: -16 dBm/MHz Notes: None



Figure 8.7-24: Conducted emission at the lower frequency block edge of the upper channel

Frequency: 1980 MHz Mode: Single-carrier operation
Meas. BW: 1 MHz Tech.: NR 15 MHz
Limit: -16 dBm/MHz Notes: None

Test data, continued

On the plots below the measured *Channel Power* value in the “*Total Channel Power*” column must be –16 dBm and lower.

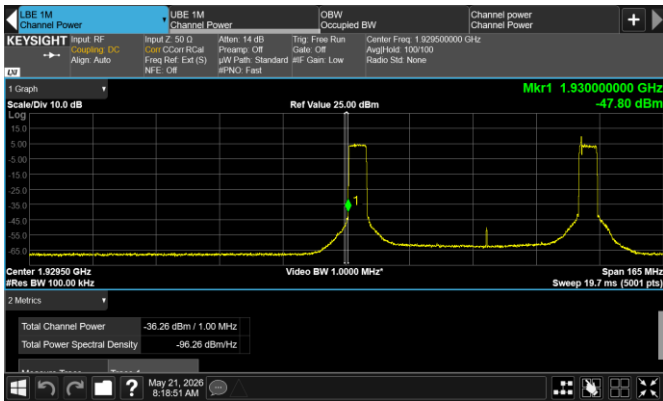


Figure 8.7-25: Conducted emission at the lower band edge

Frequency:	1930 MHz	Mode:	2-carrier operation
Meas. BW:	1 MHz	Tech.:	NR 5 MHz + LTE 5 MHz
Limit:	-16 dBm/MHz	Notes:	Non-contiguous

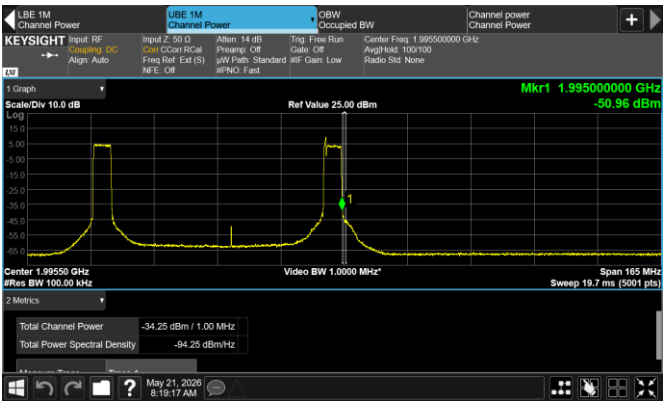


Figure 8.7-26: Conducted emission at the upper band edge

Frequency:	1995 MHz	Mode:	2-carrier operation
Meas. BW:	1 MHz	Tech.:	NR 5 MHz + LTE 5 MHz
Limit:	-16 dBm/MHz	Notes:	Non-contiguous

8.8 Spurious emissions at RF antenna connector (Band 66)

8.8.1 Definitions and limits

FCC §27.53:

(h) AWS emission limits

(1) General protection levels. Except as otherwise specified below, for operations in the 1695–1710 MHz, 1710–1755 MHz, 1755–1780 MHz, 1915–1920 MHz, 1995–2000 MHz, 2000–2020 MHz, 2110–2155 MHz, 2155–2180 MHz, and 2180–2200 bands, the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least $43 + 10 \log_{10}(P)$ dB.

(3) Measurement procedure.

(i) Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 1 megahertz or greater. However, in the 1-megahertz bands immediately outside and adjacent to the licensee's frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. 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.

(ii) When measuring the emission limits, the nominal carrier frequency shall be adjusted as close to the licensee's frequency block edges, both upper and lower, as the design permits.

(iii) The measurements of emission power can be expressed in peak or average values, provided they are expressed in the same parameters as the transmitter power.

RSS-139, Section 5.6:

Unwanted emissions shall be measured in terms of average values.

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 8.8-1: Unwanted emissions limits

Offset from the edge of the frequency block or frequency group	Unwanted emission limits
1 MHz	-13 dBm/(1% of OB*)
> 1 MHz	-13 dBm/MHz

Notes: *OB is the occupied bandwidth

8.8.2 Test summary

Test date	May 13, 2026 - May 25, 2026
Test engineer	Dhara Patel

8.8.3 Observations, settings and special notes

- The spectrum was searched from 30 MHz to the 10th harmonic.
- All measurements were performed using an average (RMS) detector per ANSI C63.26 Paragraph 5.7.2 method.
- Limit line ($43 + 10 \log_{10}(P)$ or -13 dBm) was adjusted for MIMO operation by 3 dB*: -13 dBm – 3 dB = -16 dBm
*MIMO correction factor for 4 antenna ports: $10 \times \log_{10}(2) = 3$ dB
- RBW 1 MHz, VBW was wider than RBW.
- At 0 MHz offset from the band edge or frequency block edge, the -13 dBm limit applies over 1% of the OBW, while at 1 MHz offset the same -13 dBm limit applies over a 1 MHz bandwidth. Measurements at 0 MHz offset were initially performed using a 1 MHz RBW, and if the results were compliant, the reduced bandwidth measurement was not repeated.

8.8.4 Test data

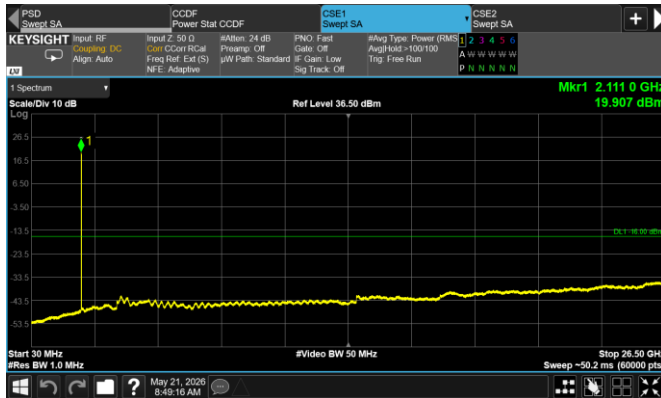


Figure 8.8-1: Conducted spurious emissions of LTE 5 MHz low channel, single carrier operation

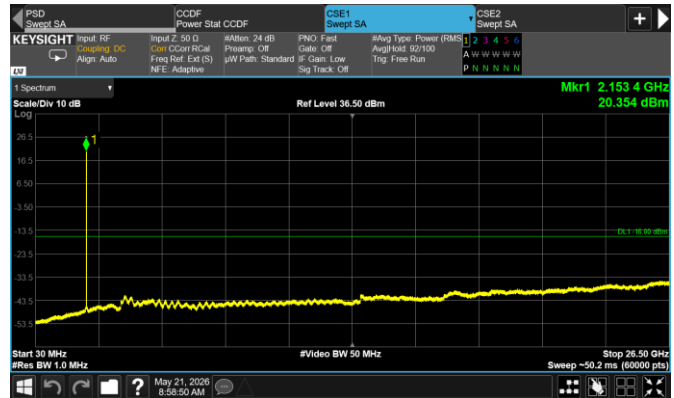


Figure 8.8-2: Conducted spurious emissions of LTE 5 MHz mid channel, single carrier operation

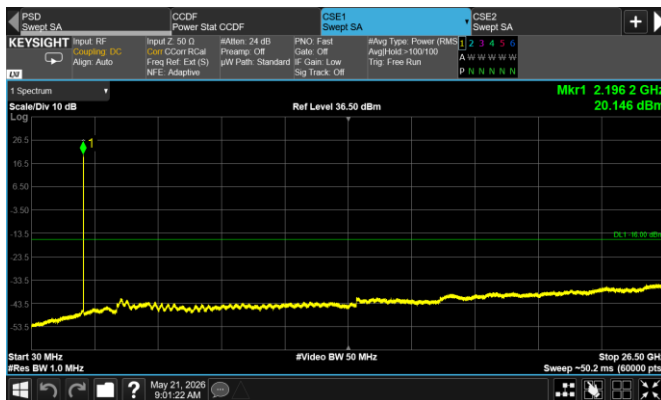


Figure 8.8-3: Conducted spurious emissions of LTE 5 MHz top channel, single carrier operation

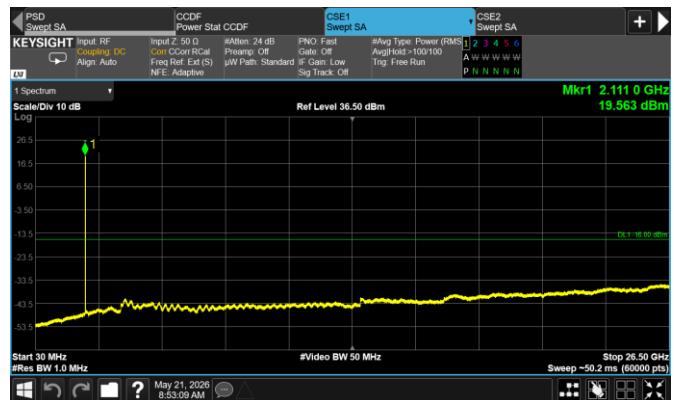


Figure 8.8-4: Conducted spurious emissions of NR 5 MHz low channel, single carrier operation

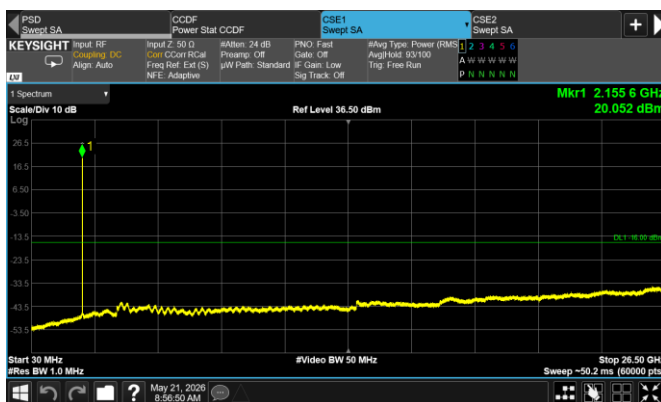


Figure 8.8-5: Conducted spurious emissions of NR 5 MHz mid channel, single carrier operation

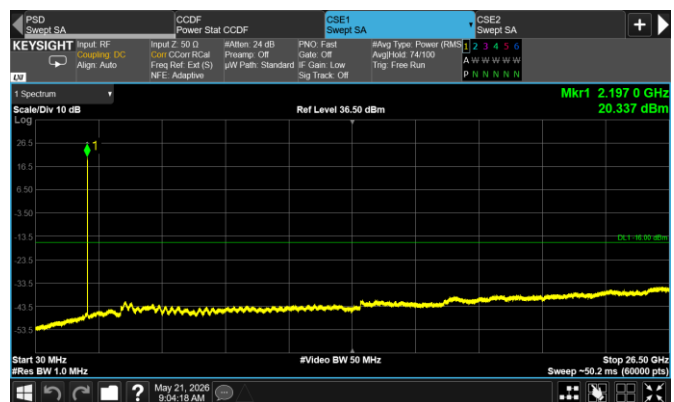


Figure 8.8-6: Conducted spurious emissions of NR 5 MHz top channel, single carrier operation

Test data, continued

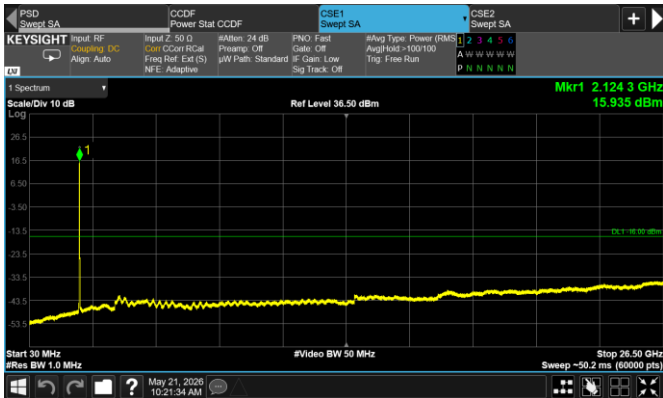


Figure 8.8-7: Conducted spurious emissions of NR 15 MHz low, single carrier operation

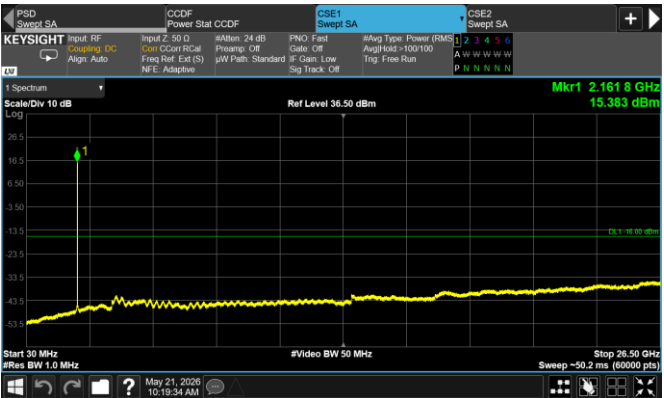


Figure 8.8-8: Conducted spurious emissions of NR 15 MHz mid channel, single carrier operation

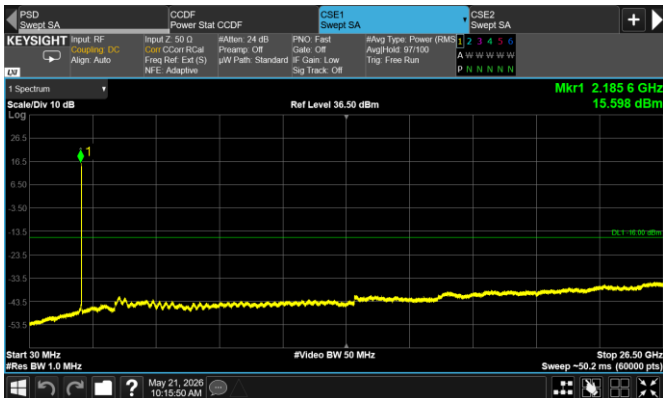


Figure 8.8-9: Conducted spurious emissions of NR 15 MHz top, single carrier operation

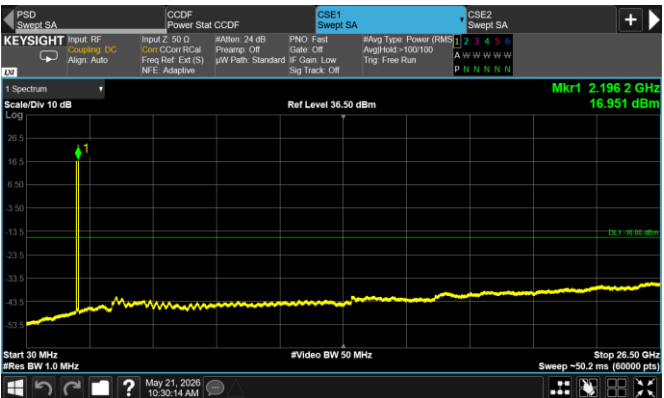


Figure 8.8-10: Conducted spurious emissions of NR 5 MHz +LTE 5 MHz channel, non-contiguous operation

Test data, continued

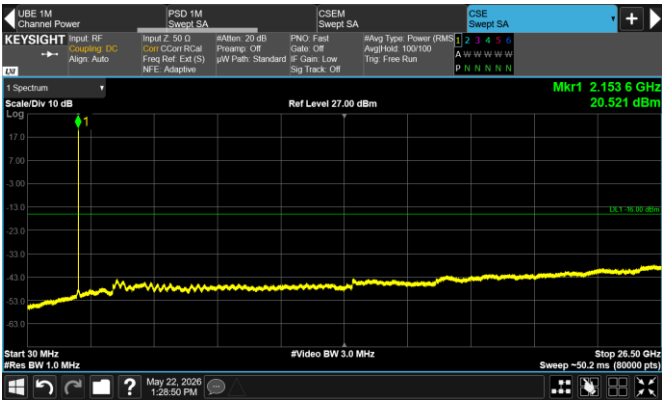


Figure 8.8-11: Conducted spurious emissions of LTE 5 MHz mid channel, single carrier operation - Worst case comparison plot for model variant according to KDB 484596 Do1 Referencing Test Data

Test data, continued

On the plots below the measured *Channel Power* value in the “*Total Channel Power*” column must be -16 dBm and lower.



Figure 8.8-12: Conducted emission at the lower band edge

Frequency: 2110 MHz Mode: Single-carrier operation
Meas. BW: 1 MHz Tech.: LTE 5 MHz
Limit: -16 dBm/MHz Notes: None



Figure 8.8-13: Conducted emission at the upper frequency block edge of the lower channel

Frequency: 2120 MHz Mode: Single-carrier operation
Meas. BW: 1 MHz Tech.: LTE 5 MHz
Limit: -16 dBm/MHz Notes: None



Figure 8.8-14: Conducted emission at the upper band edge

Frequency: 2200 MHz Mode: Single-carrier operation
Meas. BW: 1 MHz Tech.: LTE 5 MHz
Limit: -16 dBm/MHz Notes: None

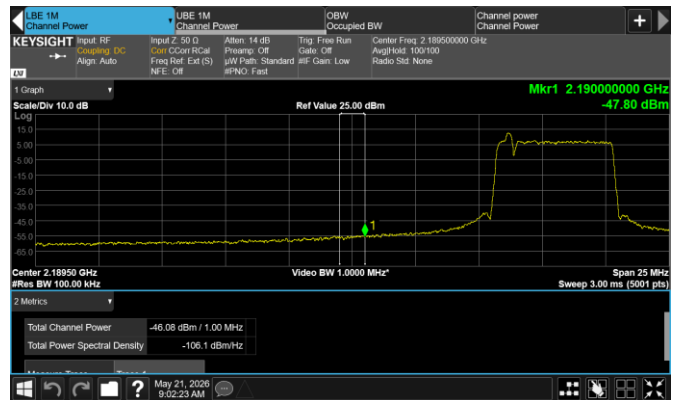


Figure 8.8-15: Conducted emission at the lower frequency block edge of the upper channel

Frequency: 2190 MHz Mode: Single-carrier operation
Meas. BW: 1 MHz Tech.: LTE 5 MHz
Limit: -16 dBm/MHz Notes: None

Test data, continued

On the plots below the measured *Channel Power* value in the “*Total Channel Power*” column must be -16 dBm and lower.

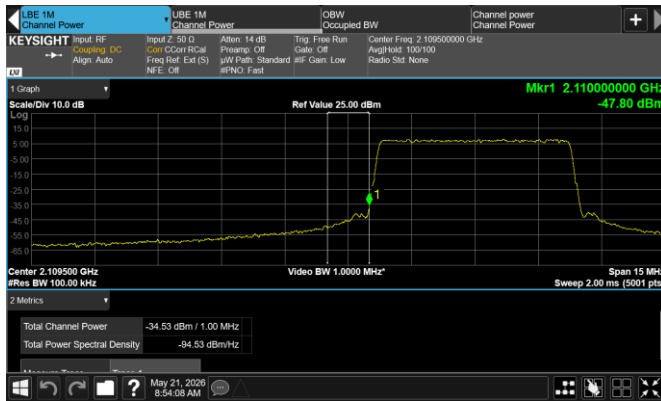


Figure 8.8-16: Conducted emission at the lower band edge

Frequency: 2110 MHz Mode: Single-carrier operation
Meas. BW: 1 MHz Tech.: NR 5 MHz
Limit: -16 dBm/MHz Notes: None



Figure 8.8-17: Conducted emission at the upper frequency block edge of the lower channel

Frequency: 2120 MHz Mode: Single-carrier operation
Meas. BW: 1 MHz Tech.: NR 5 MHz
Limit: -16 dBm/MHz Notes: None



Figure 8.8-18: Conducted emission at the upper band edge

Frequency: 2200 MHz Mode: Single-carrier operation
Meas. BW: 1 MHz Tech.: NR 5 MHz
Limit: -16 dBm/MHz Notes: None

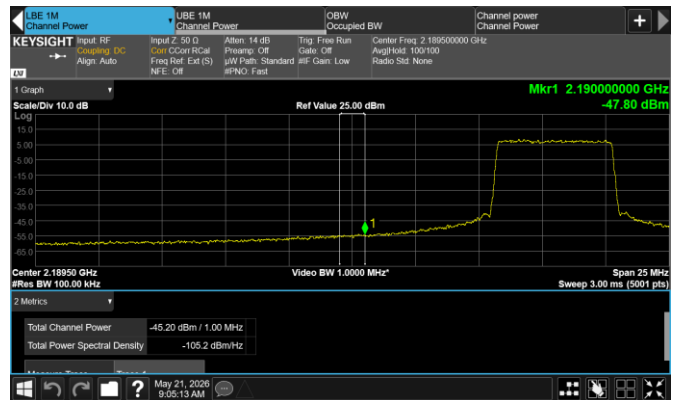


Figure 8.8-19: Conducted emission at the lower frequency block edge of the upper channel

Frequency: 2190 MHz Mode: Single-carrier operation
Meas. BW: 1 MHz Tech.: NR 5 MHz
Limit: -16 dBm/MHz Notes: None

Test data, continued

On the plots below the measured *Channel Power* value in the “*Total Channel Power*” column must be -16 dBm and lower.



Figure 8.8-20: Conducted emission at the lower band edge

Frequency: 2110 MHz
Meas. BW: 1 MHz
Limit: -16 dBm/MHz

Mode: Single-carrier operation
Tech.: NR 15 MHz
Notes: None



Figure 8.8-21: Conducted emission at the upper frequency block edge of the lower channel

Frequency: 2130 MHz
Meas. BW: 1 MHz
Limit: -16 dBm/MHz

Mode: Single-carrier operation
Tech.: NR 15 MHz
Notes: None



Figure 8.8-22: Conducted emission at the upper band edge

Frequency: 2200 MHz
Meas. BW: 1 MHz
Limit: -16 dBm/MHz

Mode: Single-carrier operation
Tech.: NR 15 MHz
Notes: None

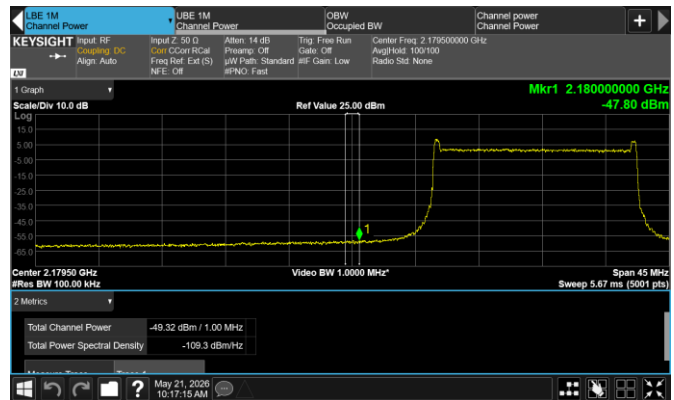


Figure 8.8-23: Conducted emission at the lower frequency block edge of the upper channel

Frequency: 2180 MHz
Meas. BW: 1 MHz
Limit: -16 dBm/MHz

Mode: Single-carrier operation
Tech.: NR 15 MHz
Notes: None

Test data, continued

On the plots below the measured *Channel Power* value in the “*Total Channel Power*” column must be -16 dBm and lower.

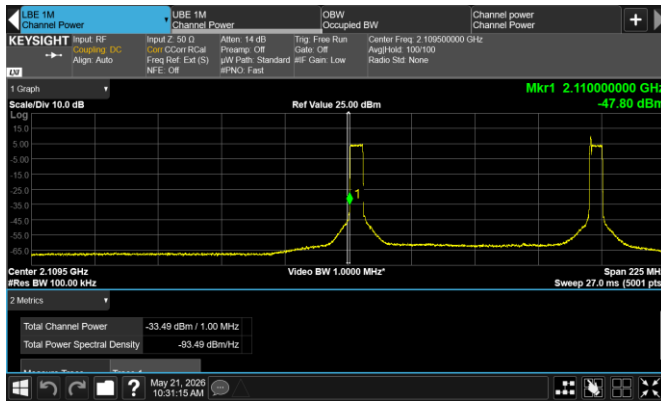


Figure 8.8-24: Conducted emission at the lower band edge

Frequency: 2110 MHz Mode: 2-carrier operation
Meas. BW: 1 MHz Tech.: NR 5 MHz + LTE 5 MHz
Limit: -16 dBm/MHz Notes: Non-contiguous

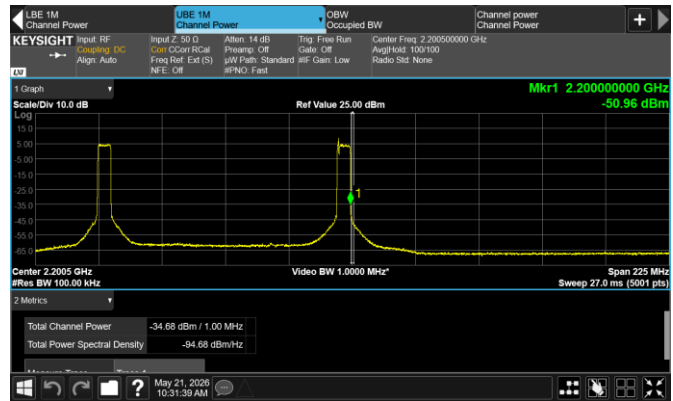


Figure 8.8-25: Conducted emission at the upper band edge

Frequency: 2200 MHz Mode: 2-carrier operation
Meas. BW: 1 MHz Tech.: NR 5 MHz + LTE 5 MHz
Limit: -16 dBm/MHz Notes: Non-contiguous

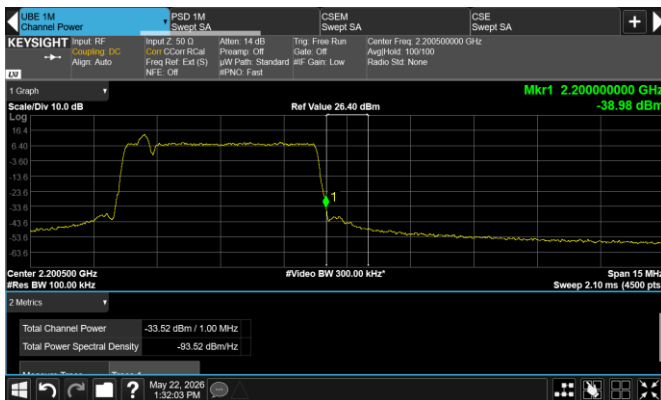


Figure 8.8-26: Conducted emission at the upper band edge for NR 5 MHz top channel. Worst case comparison plot for model variant according to KDB 484596 Do1 Referencing Test Data

Frequency: 2200 MHz Mode: Single-carrier operation
Meas. BW: 1 MHz Tech.: NR 5 MHz
Limit: -16 dBm/MHz Notes: None

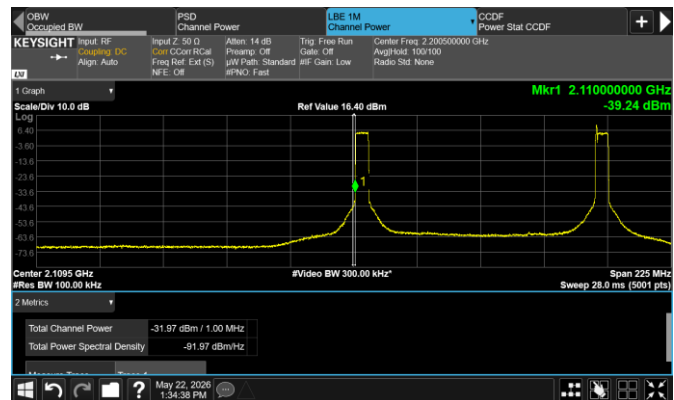


Figure 8.8-27: Conducted emission at the lower band edge for NR 5 MHz + LTE 5 MHz, non-contiguous channel. Worst case comparison plot for model variant according to KDB 484596 Do1 Referencing Test Data

Frequency: 2110 MHz Mode: 2-carrier operation
Meas. BW: 1 MHz Tech.: NR 5 MHz + LTE 5 MHz
Limit: -16 dBm/MHz Notes: Non-contiguous

8.9 Radiated spurious emissions

8.9.1 Definitions and limits

FCC §27.53(l)(1):

The following emission limits apply to stations transmitting in the 3700-3980 MHz band:

For base station operations in the 3700-3980 MHz band, the conducted power of any emission outside the licensee's authorized bandwidth shall not exceed -13 dBm/MHz. Compliance with this paragraph (l)(1) is based on the use of measurement instrumentation employing a resolution bandwidth of 1 megahertz or greater. However, in the 1 megahertz bands immediately outside and adjacent to the licensee's frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. 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.

FCC §24.238(a) Out of band emissions:

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB.

RSS-192, Section 5.6:

Unwanted emissions shall be measured in terms of average values when the transmitter is operating at the manufacturer's rated power and modulated as specified in RSS-Gen.

Equipment shall meet the unwanted emission limits, specified below, outside each frequency block group. For each channel bandwidth supported by the equipment under test, the unwanted emissions shall be measured and reported for two channel frequencies: one located as close as possible to the low end and one located as close as possible to the high end of the equipment's operating frequency range.

If the transmitter is designed for multi-carrier operation, the tests shall be carried out using both the maximum and minimum number of carriers intended for the equipment.

5.6.2 Unwanted emission limits for indoor base station equipment

Indoor base station equipment shall have the TRP or conducted power (per antenna), where applicable, of unwanted emission not exceeding:

- the limits in the table below
- a limit of -30 dBm/MHz for all frequencies below 3440 MHz and above 3980 MHz

Table 8.9-1: Unwanted emissions limits for indoor base station equipment

Offset from the edge of the frequency block group (MHz)	Unwanted emission limits (dBm/MHz)
0-5	-20 - (1.4) *(Offset frequency)
>5	-27

Notes: None

Definitions and limits, continued

RSS-198, Section 5.6:

Unwanted emissions shall be measured in term of average value when the transmitter is operating at the manufacturer's rated power and modulated as specified in RSS-Gen.

Equipment shall meet the unwanted emission limits, specified below, outside each frequency block group. For each channel bandwidth supported by the equipment under test, the unwanted emissions shall be measured and reported for two channel frequencies: one located as close as possible to the low end and one located as close as possible to the high end of the equipment's operating frequency range.

5.6.1 Unwanted emission limits for all equipment

The unwanted emission outside the frequency block group shall not exceed the TRP or total conducted power (sum of conducted power across all antenna connectors) limits as specified in the table below.

Table 8.9-2: Unwanted emissions limits for all equipment

Offset frequency from the edge of the frequency block group (MHz)	Unwanted emission limits
≤1	-13 dBm/1% OB*
>1	-13 dBm/MHz

Notes: *OB is the occupied bandwidth

RSS-133, Section 5.6 Unwanted emission limits:

Unwanted emissions shall be measured in terms of average values while the transmitter is operating at the manufacturer's rated power and modulated as specified in RSS-Gen.

Equipment shall meet the unwanted emission limits, specified in the table below, outside each frequency block group. For each channel bandwidth supported by the equipment under test, the unwanted emissions shall be measured and reported for two channel frequencies: one located as close as possible to the low end and one located as close as possible to the high end of the equipment's operating frequency range.

For the unwanted emission limits, in the 1 MHz bands immediately outside and adjacent to the frequency block group, the power shall be measured with a resolution bandwidth of at least 1% of the occupied bandwidth (OBW). Beyond these 1 MHz bands, a resolution bandwidth of 1 MHz shall be used. A narrower resolution bandwidth may be used, provided that the measured power is integrated over the full required measurement bandwidth of 1 MHz, or 1% of the OBW, as applicable.

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

Table 8.9-3: Unwanted emissions limits for all equipment

Offset frequency from the edge of the frequency block group (MHz)	Unwanted emission limits
≤ 1	-13 dBm/(1% of OBW)
>1	-13 dBm/MHz

Notes: None

RSS-139, Section 5.6:

Unwanted emissions shall be measured in terms of average values.

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 8.9-4: Unwanted emissions limits

Offset from the edge of the frequency block or frequency group	Unwanted emission limits
1 MHz	-13 dBm/(1% of OB*)
> 1 MHz	-13 dBm/MHz

Notes: *OB is the occupied bandwidth

8.9.2 Test summary

Verdict	Pass		
Test date	May 29, 2026	Temperature	22.5 °C
Tested by	Dhara Patel	Air pressure	985 mbar
Test location	Ottawa	Relative humidity	37 %

8.9.3 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.
- Limit line was calculated using Limit line in dBμV/m = Limit Line in dBm + 95.23 dB
- Using the conversion above, 82.23 dBμV/m limit line was used.
- All modulation configurations were pretested to identify the representative modulation yielding the worst-case power level. The modulations that resulted in the worst-case scenarios were 16QAM or 64QAM with NB IoT where it applies.
- **Testing was performed on multiple Configurations with transmitter operating on all the 4 bands (refer to Section 3.3).**

8.9.4 Test data

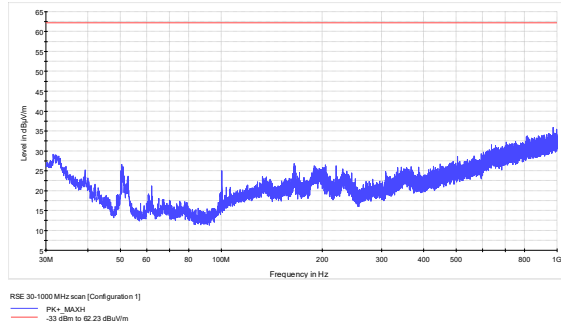


Figure 8.9-1: Radiated spurious emissions within 30–1000 MHz, [B77D_Single carrier operation]

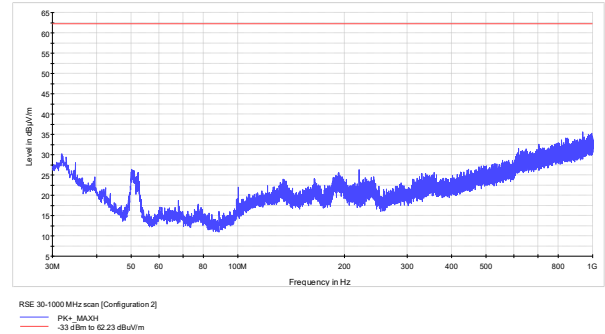


Figure 8.9-2: Radiated spurious emissions within 30–1000 MHz, [B77D_Multi carrier, Non-contiguous operation]

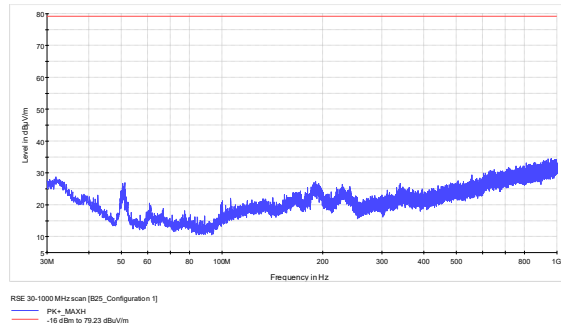


Figure 8.9-3: Radiated spurious emissions within 30–1000 MHz, B25_Single carrier operation]

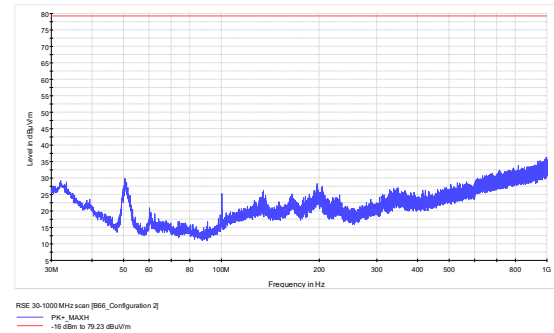


Figure 8.9-4: Radiated spurious emissions within 30–1000 MHz, [B66_Multi carrier, Non-contiguous operation]

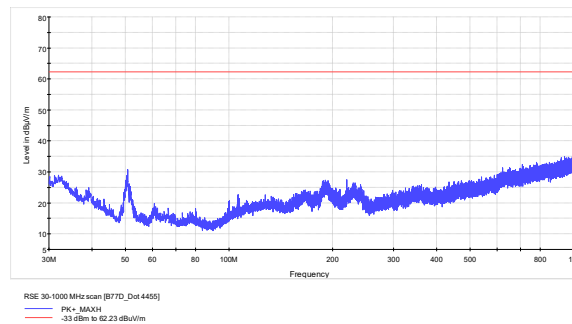


Figure 8.9-5: Radiated spurious emissions within 30–1000 MHz, [Multi carrier, Non-Contiguous Channel] - Worst case comparison plot for model variant according to KDB 484596 D01 Referencing Test Data