Section 8   Testing data
Test name   Occupied bandwidth (Band 66)
Specification   FCC Part 2, RSS-Gen, Issue 5
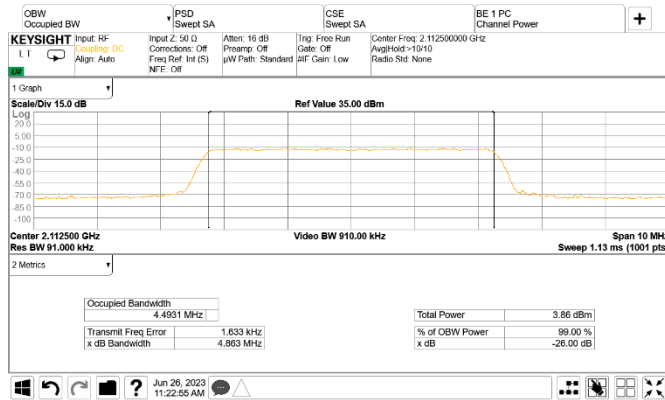
Test data, continued

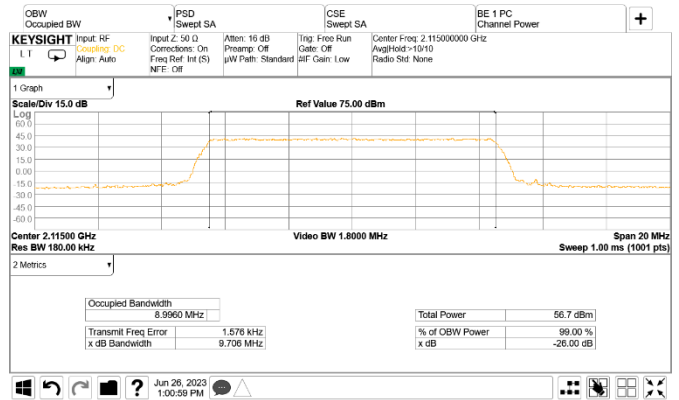*Figure 8.9-1: Sample plot for LTE 5 MHz channel*

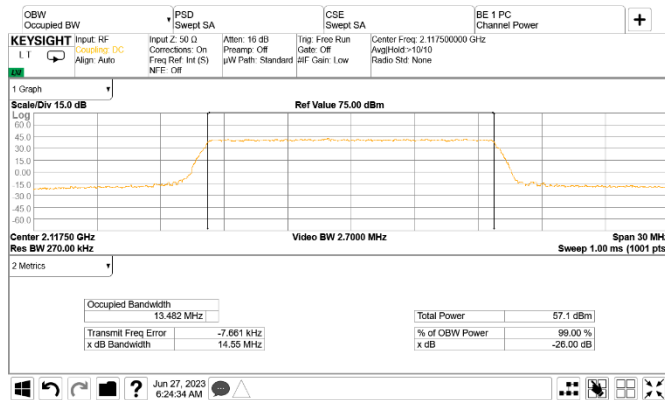*Figure 8.9-2: Sample plot for LTE 10 MHz channel*

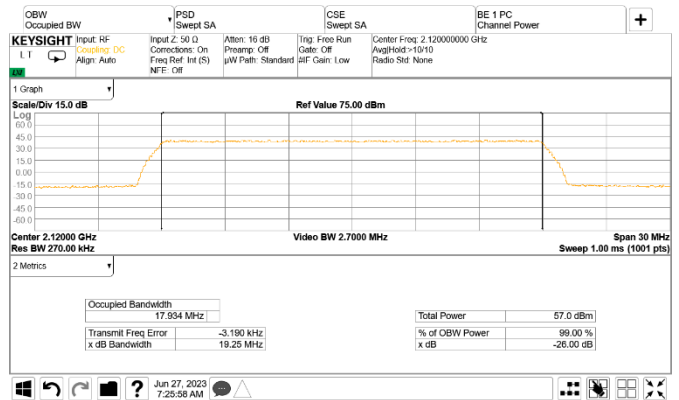*Figure 8.9-3: Sample plot for LTE 15 MHz channel*

Figure 8.9-4: Sample plot for LTE 20 MHz channel
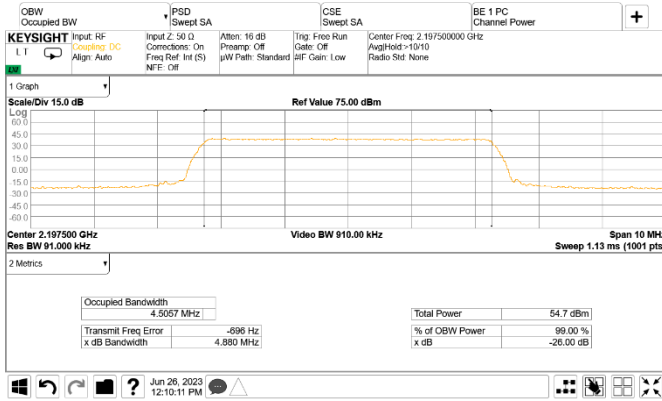
Test data, continued

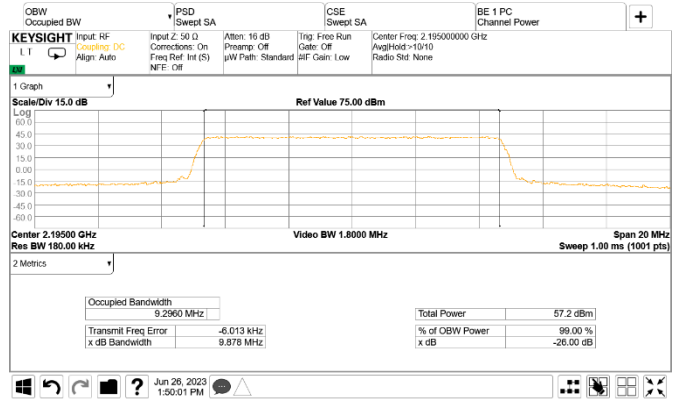*Figure 8.9-5: Sample plot for NR 5 MHz channel*

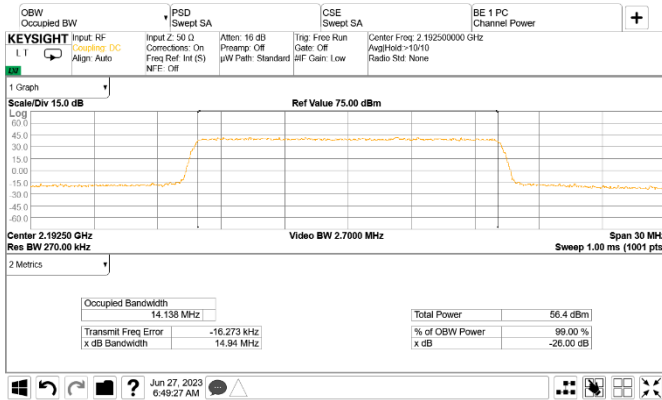*Figure 8.9-6: Sample plot for NR 10 MHz channel*

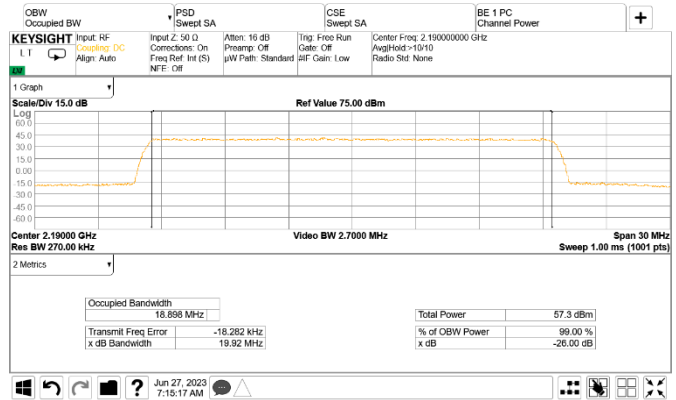*Figure 8.9-7: Sample plot for NR 15 MHz channel*

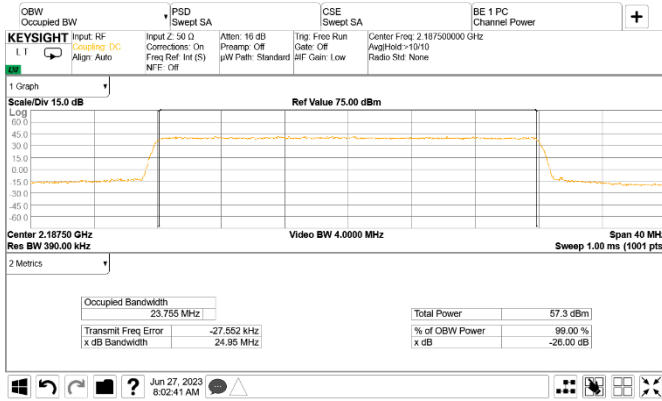*Figure 8.9-8: Sample plot for NR 20 MHz channel*

Test data, continued

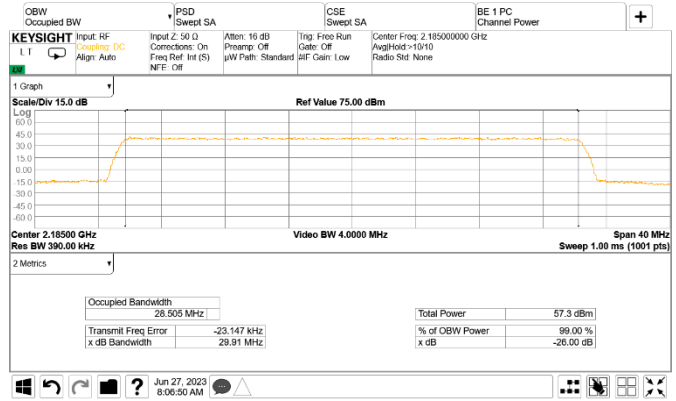*Figure 8.9-9: Sample plot for NR 25 MHz channel*

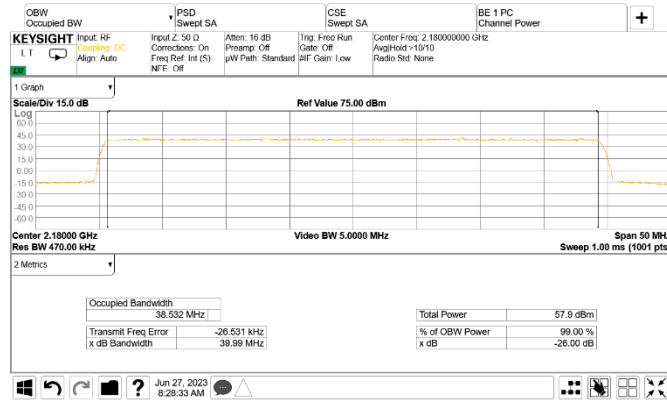*Figure 8.9-10: Sample plot for NR 30 MHz channel*

Figure 8.9-11: Sample plot for NR 40 MHz channel

Section 8   Testing data
Test name   Occupied bandwidth (Band 2/25)
Specification   FCC Part 2, RSS-Gen, Issue 5

8.10   Occupied bandwidth (Band 2/25)

8.10.1   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.

8.10.2   Test summary

Test date	June 28, 2023
Test engineer	Nimish Kapoor

8.10.3   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	≥1 % of EBW
Video bandwidth	RBW × 3
Trace mode	Max Hold

8.10.4   Test data

Table 8.10-1: Occupied bandwidth results for LTE 5 MHz channel

Remarks	Frequency, MHz	26 dB BW, MHz	99% OBW, MHz
5 MHz, Low channel	1932.5	4.872	4.488
5 MHz, Mid channel	1962.5	4.869	4.499
5 MHz, Top channel	1992.5	4.853	4.495
5 MHz with IoT1, Low channel	1932.5	4.805	4.489
5 MHz with IoT1, Mid channel	1962.5	4.792	4.484
5 MHz with IoT1, Top channel	1992.5	4.796	4.488
5 MHz with IoT2, Low channel	1932.5	4.822	4.4935
5 MHz with IoT2, Mid channel	1962.5	4.821	4.494
5 MHz with IoT2, Top channel	1992.5	4.812	4.487

Table 8.10-2: Occupied bandwidth results for LTE 10 MHz channel

Remarks	Frequency, MHz	26 dB BW, MHz	99% OBW, MHz
10 MHz, Low channel	1935.0	9.693	8.989
10 MHz, Mid channel	1962.5	9.729	8.977
10 MHz, Top channel	1990.0	9.735	9.017
10 MHz with IoT, Low channel	1935.0	9.778	9.232
10 MHz with IoT, Mid channel	1962.5	9.799	9.235
10 MHz with IoT, Top channel	1990.0	9.808	9.241

Section 8   Testing data
Test name   Occupied bandwidth (Band 2/25)
Specification   FCC Part 2, RSS-Gen, Issue 5

Test data, continued

Table 8.10-3: Occupied bandwidth results for LTE 15 MHz channel

Remarks	Frequency, MHz	26 dB BW, MHz	99% OBW, MHz
15 MHz, Low channel	1937.5	14.550	13.493
15 MHz, Mid channel	1962.5	14.490	13.492
15 MHz, Top channel	1987.5	14.510	13.496
15 MHz with IoT, Low channel	1937.5	14.720	13.794
15 MHz with IoT, Mid channel	1962.5	14.650	13.783
15 MHz with IoT, Top channel	1987.5	14.700	13.806

Table 8.10-4: Occupied bandwidth results for LTE 20 MHz channel

Remarks	Frequency, MHz	26 dB BW, MHz	99% OBW, MHz
20 MHz, Low channel	1940.0	19.260	17.904
20 MHz, Mid channel	1962.5	19.250	17.923
20 MHz, Top channel	1985.0	19.240	17.899
20 MHz with IoT, Low channel	1940.0	19.350	18.175
20 MHz with IoT, Mid channel	1962.5	19.350	18.187
20 MHz with IoT, Top channel	1985.0	19.370	18.200

Table 8.10-5: Occupied bandwidth results for NR 5 MHz channel

Remarks	Frequency, MHz	26 dB BW, MHz	99% OBW, MHz
5 MHz, Low channel	1932.5	4.869	4.490
5 MHz, Mid channel	1962.5	4.860	4.485
5 MHz, Top channel	1992.5	4.884	4.481

Table 8.10-6: Occupied bandwidth results for NR 10 MHz channel

Remarks	Frequency, MHz	26 dB BW, MHz	99% OBW, MHz
10 MHz, Low channel	1935.0	9.861	9.317
10 MHz, Mid channel	1962.5	9.873	9.290
10 MHz, Top channel	1990.0	9.856	9.282

Table 8.10-7: Occupied bandwidth results for NR 15 MHz channel

Remarks	Frequency, MHz	26 dB BW, MHz	99% OBW, MHz
15 MHz, Low channel	1937.5	14.980	14.149
15 MHz, Mid channel	1962.5	14.960	14.134
15 MHz, Top channel	1987.5	14.950	14.132

Table 8.10-8: Occupied bandwidth results for NR 20 MHz channel

Remarks	Frequency, MHz	26 dB BW, MHz	99% OBW, MHz
20 MHz, Low channel	1940.0	19.930	18.907
20 MHz, Mid channel	1962.5	19.94	18.963
20 MHz, Top channel	1985.0	19.850	18.934

Section 8   Testing data
Test name   Occupied bandwidth (Band 2/25)
Specification   FCC Part 2, RSS-Gen, Issue 5

Test data, continued

Table 8.10-9: Occupied bandwidth results for NR 25 MHz channel

Remarks	Frequency, MHz	26 dB BW, MHz	99% OBW, MHz
25 MHz, Low channel	1942.5	24.880	23.759
25 MHz, Mid channel	1962.5	24.870	23.744
25 MHz, Top channel	1982.5	24.850	23.731

Table 8.10-10: Occupied bandwidth results for NR 30 MHz channel

Remarks	Frequency, MHz	26 dB BW, MHz	99% OBW, MHz
30 MHz, Low channel	1945.0	29.900	28.545
30 MHz, Mid channel	1962.5	29.860	28.569
30 MHz, Top channel	1980.0	29.920	28.573

Table 8.10-11: Occupied bandwidth results for NR 40 MHz channel

Remarks	Frequency, MHz	26 dB BW, MHz	99% OBW, MHz
40 MHz, Low channel	1950.0	39.990	38.526
40 MHz, Mid channel	1962.5	39.990	38.522
40 MHz, Top channel	1975.0	39.970	38.552
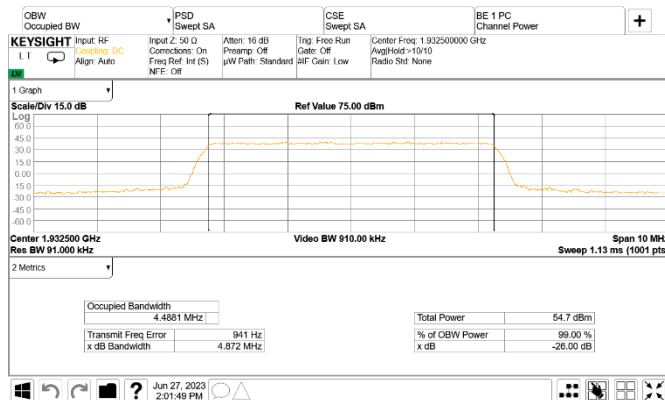
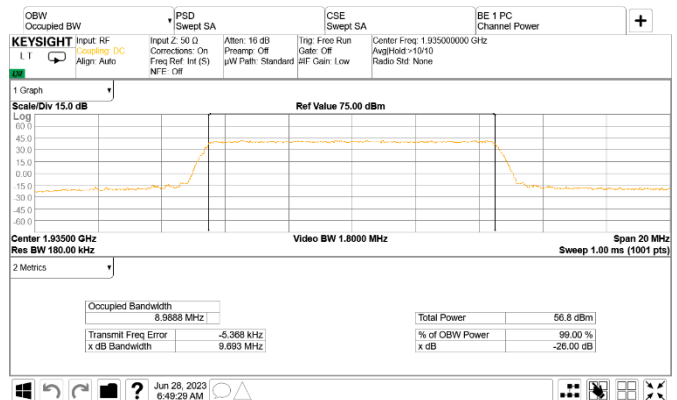*Figure 8.10-1: Sample plot for LTE 5 MHz channel*

Figure 8.10-2: Sample plot for LTE 10 MHz channel
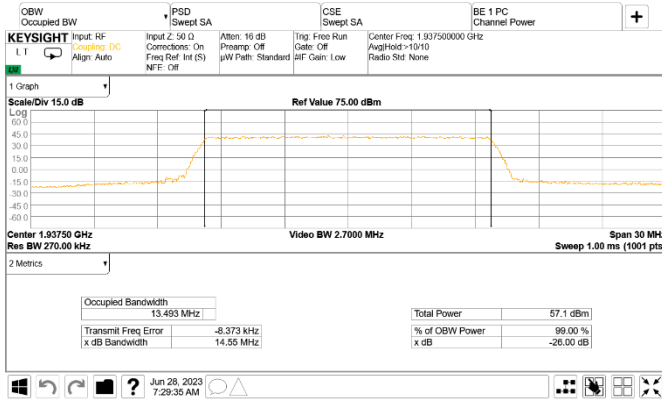
Test data, continued

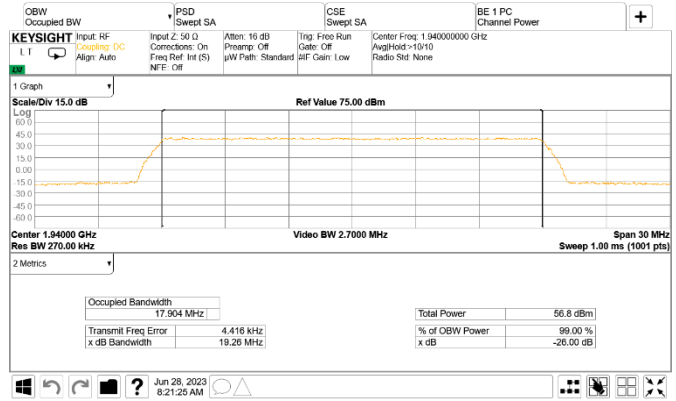*Figure 8.10-3: Sample plot for LTE 15 MHz channel*

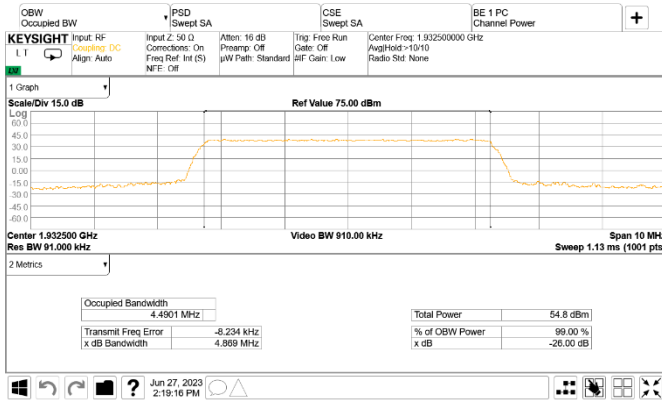*Figure 8.10-4: Sample plot for LTE 20 MHz channel*

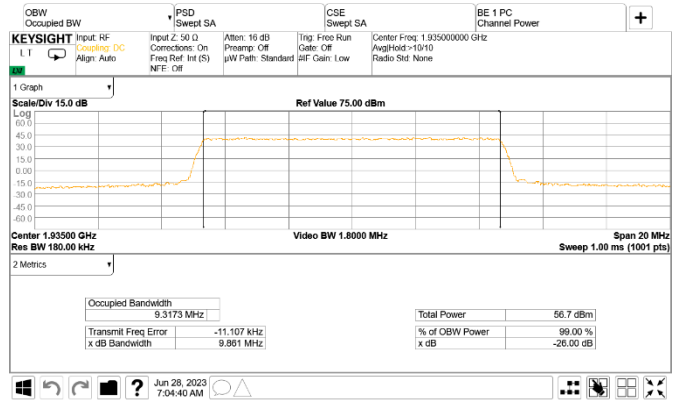*Figure 8.10-5: Sample plot for NR 5 MHz channel*

Figure 8.10-6: Sample plot for NR 10 MHz channel

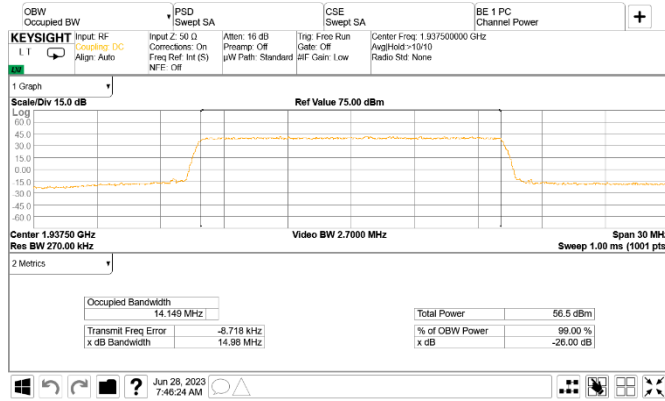Test data, continued

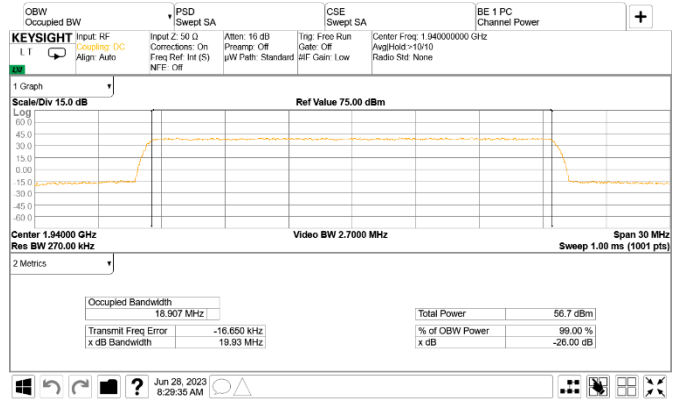*Figure 8.10-7: Sample plot for NR 15 MHz channel*

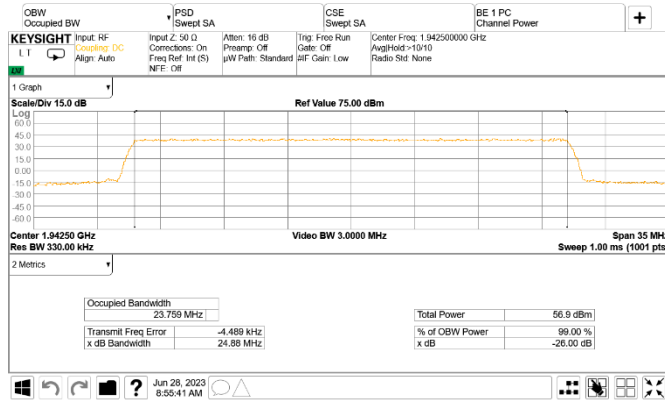*Figure 8.10-8: Sample plot for NR 20 MHz channel*

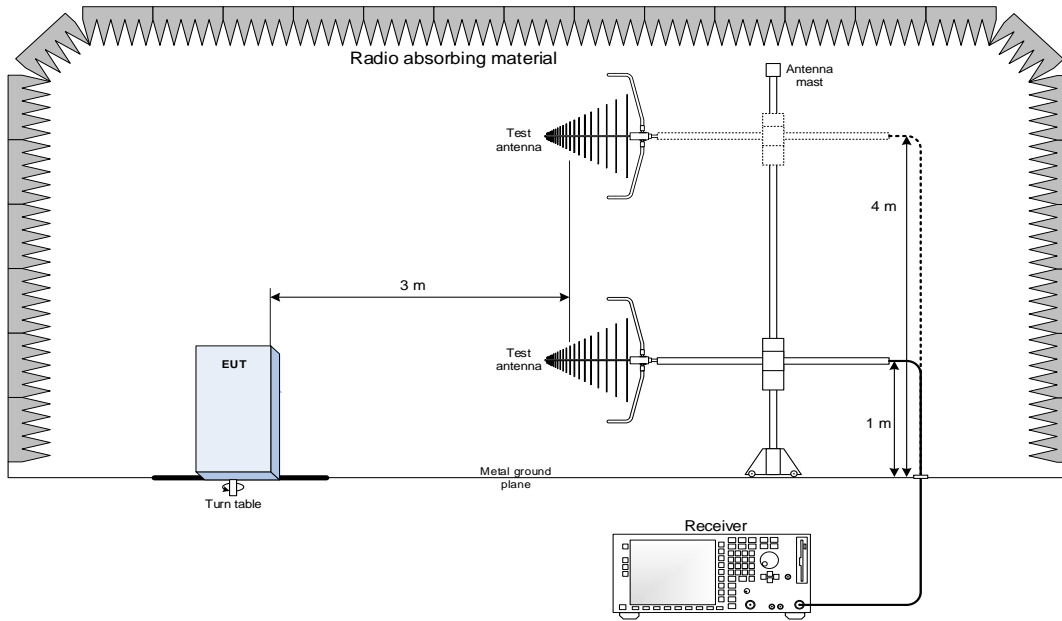*Figure 8.10-9: Sample plot for NR 25 MHz channel*

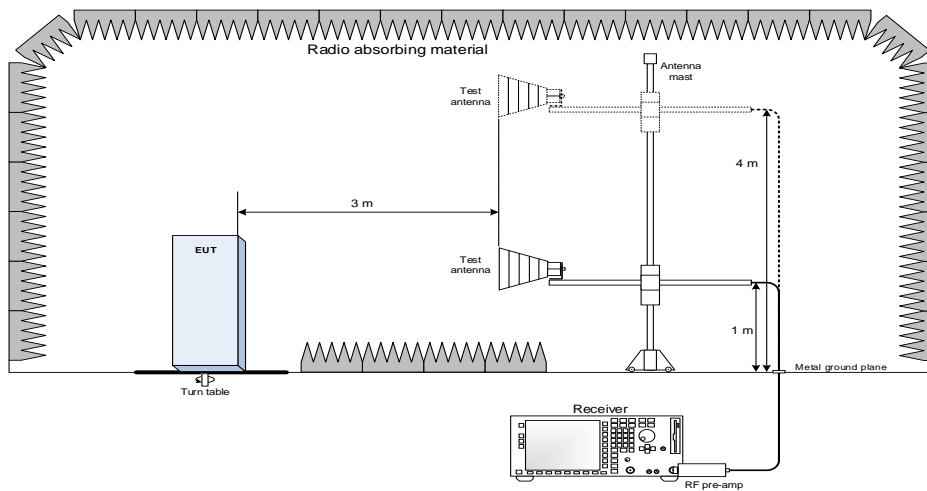*Figure 8.10-10: Sample plot for NR 30 MHz channel*

Figure 8.10-11: Sample plot for NR 40 MHz channel

Section 9.   Block diagrams of test setups

9.1   Radiated emissions set-up for frequencies below 1 GHz

9.2   Radiated emissions set-up for frequencies above 1 GHz

End of report