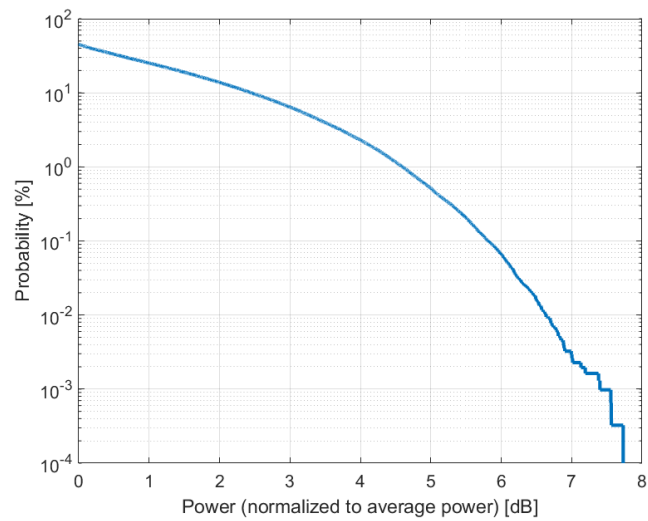


# Calibration Laboratory of Schmid & Partner Engineering AG

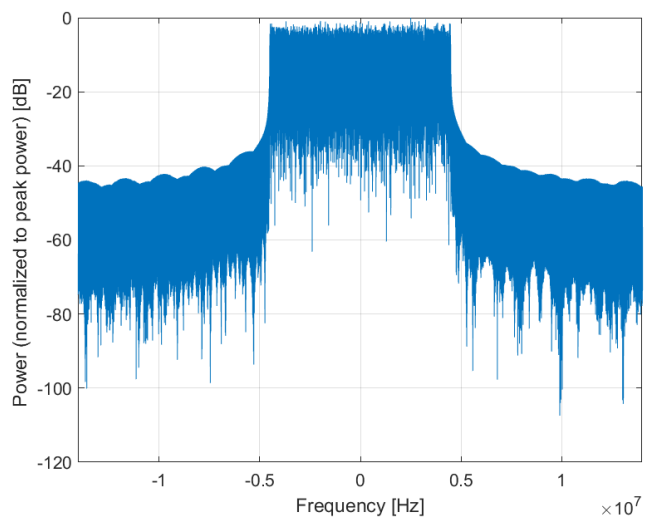
Zeughausstrasse 43, 8004 Zurich, Switzerland

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Name:                   | <b>5G NR (DFT-s-OFDM, 50% RB, 20 MHz, QPSK, 15 kHz)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Group:                  | 5G NR FR1 FDD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| UID:                    | 10939-AAB                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| PAR: <sup>1</sup>       | <b>5.82 dB</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| MIF: <sup>2</sup>       | <b>-18.65 dB</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Standard Reference:     | SPEAG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Category:               | Random amplitude modulation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Modulation:             | QPSK                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Frequency Band:         | Band n2 (1850 - 1910 MHz)<br>Band n5 (824 - 849 MHz)<br>Band n25 (1850 - 1915 MHz)<br>Band n66 (1710 - 1780 MHz)<br>Band n71 (663 - 698 MHz)<br>Band n1 (1920 - 1980 MHz)<br>Band n3 (1710 - 1785 MHz)<br>Band n7 (2500 - 2570 MHz)<br>Band n8 (880 - 915 MHz)<br>Band n20 (832 - 862 MHz)<br>Band n26 (814 - 849 MHz)<br>Band n28 (703 - 748 MHz)<br>Band n65 (1920 - 2010 MHz)<br>Band n74 (1427 - 1470 MHz)<br>Band n92 (832 - 862 MHz)<br>Band n94 (880 - 915 MHz)<br>Band n80 (1710 - 1785 MHz)<br>Band n81 (880 - 915 MHz)<br>Band n82 (832 - 862 MHz)<br>Band n83 (703 - 748 MHz)<br>Band n84 (1920 - 1980 MHz)<br>Band n86 (1710 - 1780 MHz)<br>Band n89 (824 - 849 MHz)<br>Validation band (0.0 - 6000.0 MHz) |
| Detailed Specification: | Multiplexing Scheme: DFT-s-OFDM<br>Modulation Scheme: QPSK<br>Subcarrier Spacing: 15 kHz<br>Number RBs: 1<br>Data Type: PN9                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Bandwidth:              | 20.0 MHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Integration Time:       | 10.0 ms                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

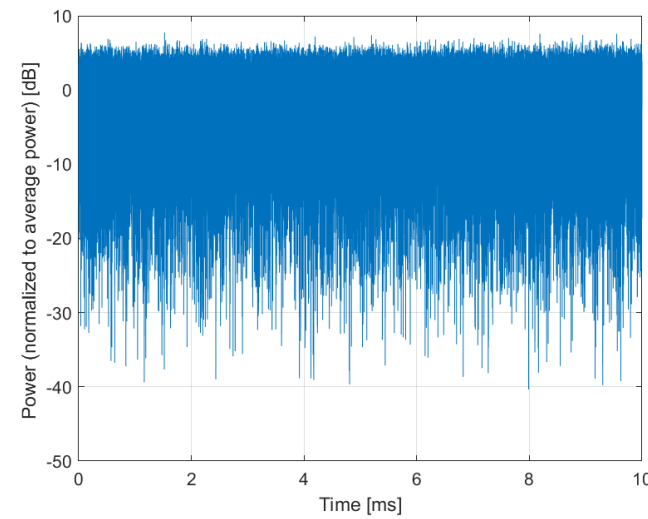
<sup>1</sup> PAR (0.1%) in accordance with FCC KDB 971168, Section 6.0 "Measurement of the Peak-to-Average Power Ratio (PAPR)"  
<sup>2</sup> Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).



Complementary Cumulative Distribution Function (CCDF)



Frequency Domain

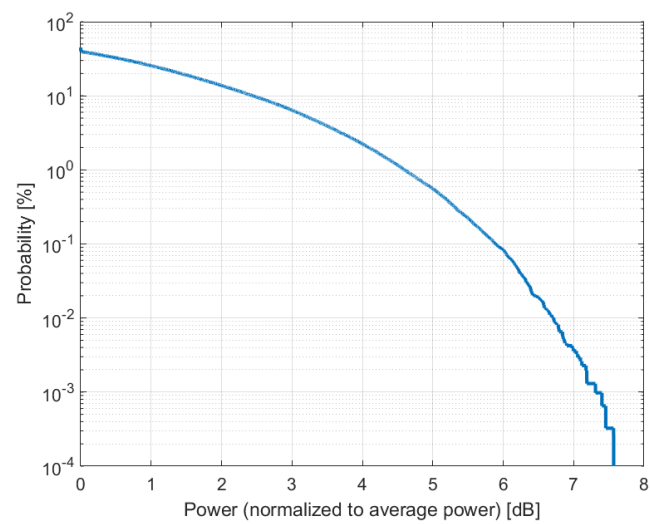


Time Domain

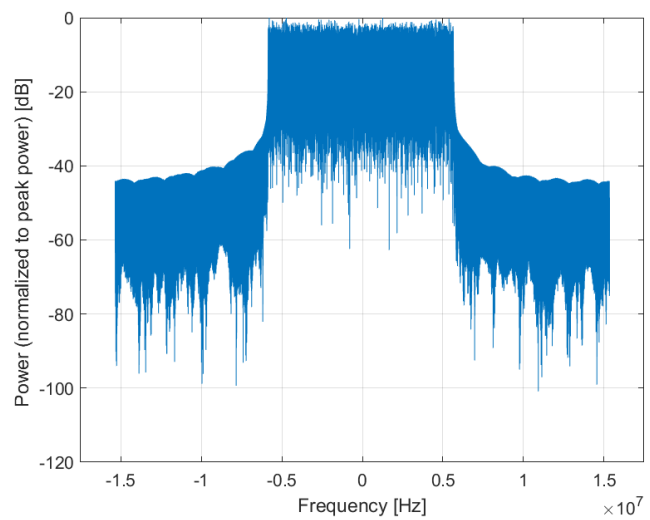
**Calibration Laboratory of**  
**Schmid & Partner**  
**Engineering AG**  
**Zeughausstrasse 43, 8004 Zurich, Switzerland**

|                         |                                                                                                                                                                                                                     |
|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Name:                   | <b>5G NR (DFT-s-OFDM, 50% RB, 25 MHz, QPSK, 15 kHz)</b>                                                                                                                                                             |
| Group:                  | 5G NR FR1 FDD                                                                                                                                                                                                       |
| UID:                    | 10940-AAB                                                                                                                                                                                                           |
| PAR: <sup>1</sup>       | <b>5.89 dB</b>                                                                                                                                                                                                      |
| MIF: <sup>2</sup>       | <b>-18.65 dB</b>                                                                                                                                                                                                    |
| Standard Reference:     | SPEAG                                                                                                                                                                                                               |
| Category:               | Random amplitude modulation                                                                                                                                                                                         |
| Modulation:             | QPSK                                                                                                                                                                                                                |
| Frequency Band:         | Band n25 (1850 - 1915 MHz)<br>Band n66 (1710 - 1780 MHz)<br>Band n1 (1920 - 1980 MHz)<br>Band n3 (1710 - 1785 MHz)<br>Band n7 (2500 - 2570 MHz)<br>Band n80 (1710 - 1785 MHz)<br>Validation band (0.0 - 6000.0 MHz) |
| Detailed Specification: | Multiplexing Scheme: DFT-s-OFDM<br>Modulation Scheme: QPSK<br>Subcarrier Spacing: 15 kHz<br>Number RBs: 1<br>Data Type: PN9                                                                                         |
| Bandwidth:              | 25.0 MHz                                                                                                                                                                                                            |
| Integration Time:       | 10.0 ms                                                                                                                                                                                                             |

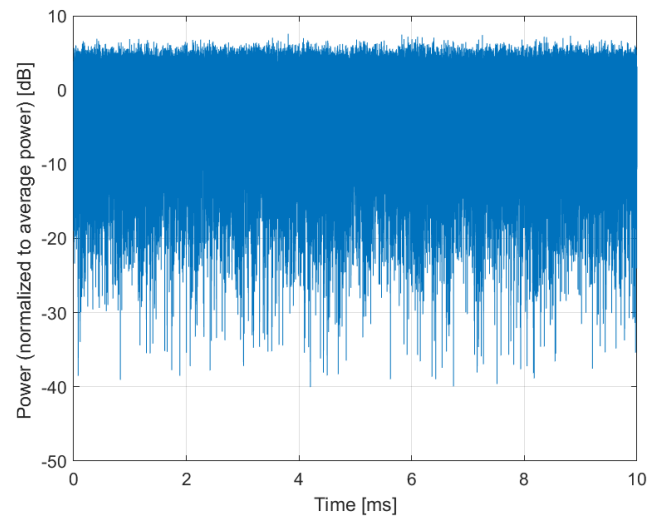
<sup>1</sup> PAR (0.1%) in accordance with FCC KDB 971168, Section 6.0 "Measurement of the Peak-to-Average Power Ratio (PAPR)"  
<sup>2</sup> Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).



**Complementary Cumulative Distribution Function (CCDF)**



**Frequency Domain**

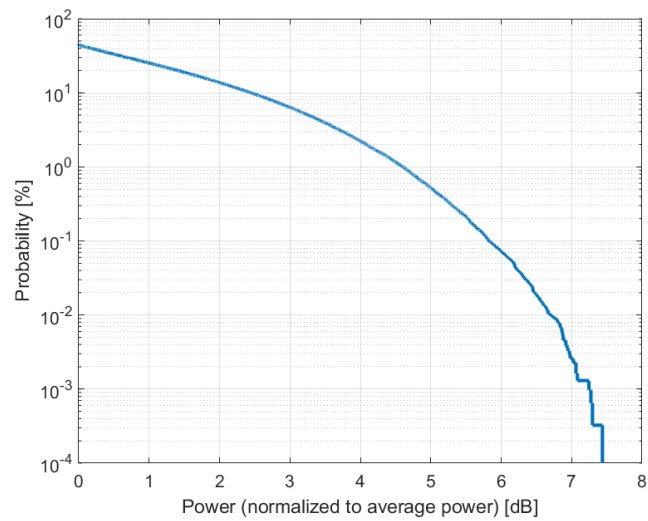


**Time Domain**

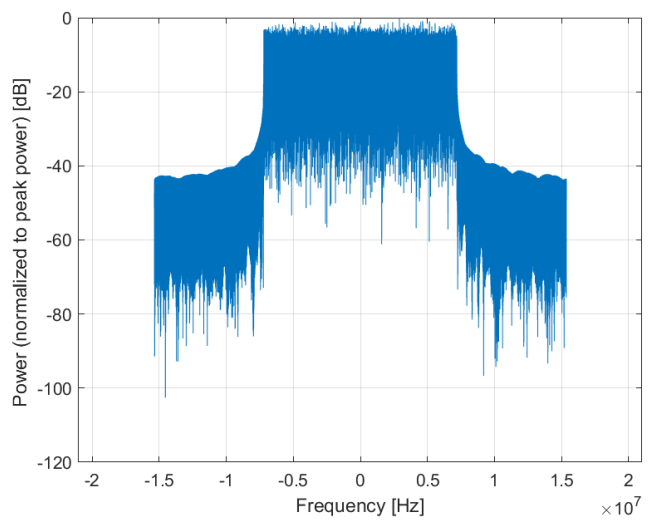
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**Engineering AG**  
**Zeughausstrasse 43, 8004 Zurich, Switzerland**

|                         |                                                                                                                                                                                                                                                 |
|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Name:                   | <b>5G NR (DFT-s-OFDM, 50% RB, 30 MHz, QPSK, 15 kHz)</b>                                                                                                                                                                                         |
| Group:                  | 5G NR FR1 FDD                                                                                                                                                                                                                                   |
| UID:                    | 10941-AAB                                                                                                                                                                                                                                       |
| PAR: <sup>1</sup>       | <b>5.83 dB</b>                                                                                                                                                                                                                                  |
| MIF: <sup>2</sup>       | <b>-18.66 dB</b>                                                                                                                                                                                                                                |
| Standard Reference:     | SPEAG                                                                                                                                                                                                                                           |
| Category:               | Random amplitude modulation                                                                                                                                                                                                                     |
| Modulation:             | QPSK                                                                                                                                                                                                                                            |
| Frequency Band:         | Band n25 (1850 - 1915 MHz)<br>Band n66 (1710 - 1780 MHz)<br>Band n1 (1920 - 1980 MHz)<br>Band n3 (1710 - 1785 MHz)<br>Band n7 (2500 - 2570 MHz)<br>Band n28 (703 - 748 MHz)<br>Band n80 (1710 - 1785 MHz)<br>Validation band (0.0 - 6000.0 MHz) |
| Detailed Specification: | Multiplexing Scheme: DFT-s-OFDM<br>Modulation Scheme: QPSK<br>Subcarrier Spacing: 15 kHz<br>Number RBs: 1<br>Data Type: PN9                                                                                                                     |
| Bandwidth:              | 30.0 MHz                                                                                                                                                                                                                                        |
| Integration Time:       | 10.0 ms                                                                                                                                                                                                                                         |

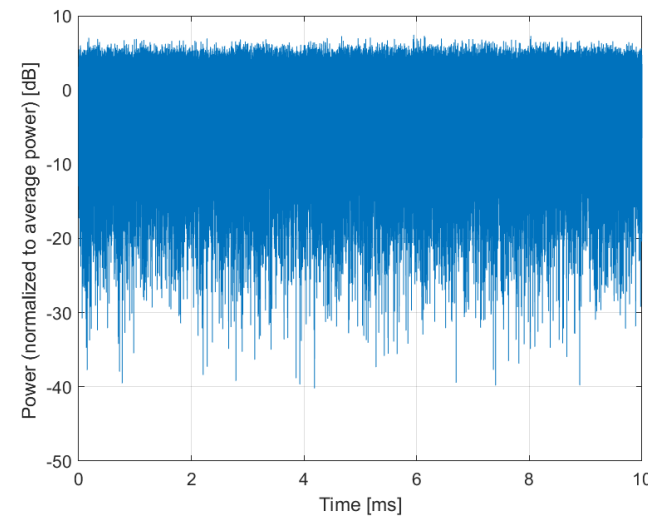
<sup>1</sup> PAR (0.1%) in accordance with FCC KDB 971168, Section 6.0 "Measurement of the Peak-to-Average Power Ratio (PAPR)"  
<sup>2</sup> Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).



Complementary Cumulative Distribution Function (CCDF)



Frequency Domain



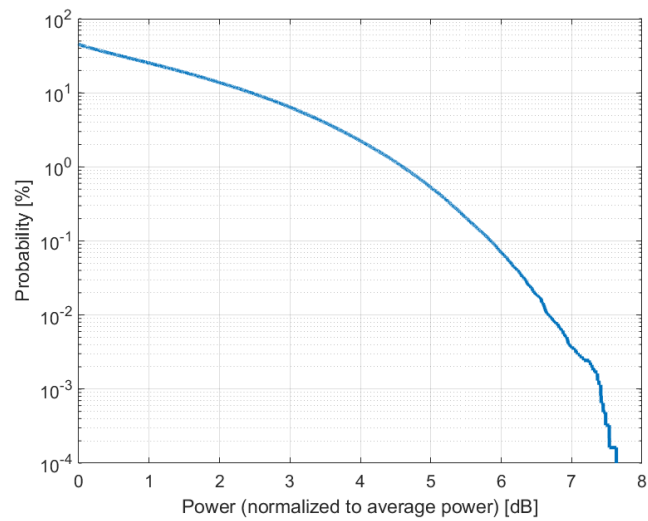
Time Domain

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Engineering AG**  
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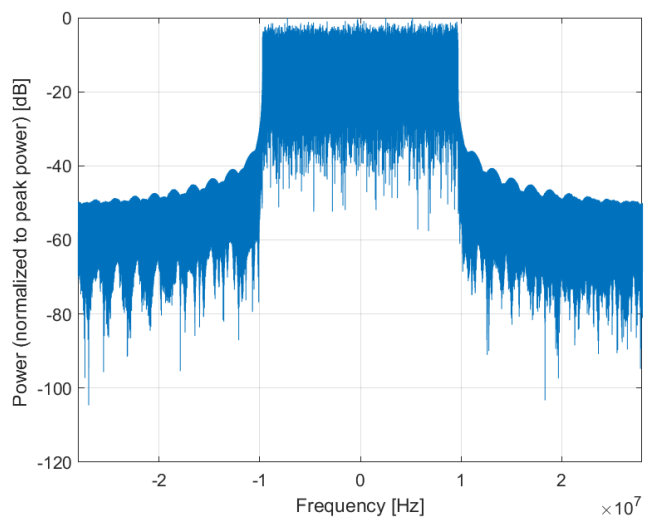
|                         |                                                                                                                                                                                                                     |
|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Name:                   | <b>5G NR (DFT-s-OFDM, 50% RB, 40 MHz, QPSK, 15 kHz)</b>                                                                                                                                                             |
| Group:                  | 5G NR FR1 FDD                                                                                                                                                                                                       |
| UID:                    | 10942-AAB                                                                                                                                                                                                           |
| PAR: <sup>1</sup>       | <b>5.85 dB</b>                                                                                                                                                                                                      |
| MIF: <sup>2</sup>       | <b>-18.71 dB</b>                                                                                                                                                                                                    |
| Standard Reference:     | SPEAG                                                                                                                                                                                                               |
| Category:               | Random amplitude modulation                                                                                                                                                                                         |
| Modulation:             | QPSK                                                                                                                                                                                                                |
| Frequency Band:         | Band n25 (1850 - 1915 MHz)<br>Band n66 (1710 - 1780 MHz)<br>Band n1 (1920 - 1980 MHz)<br>Band n3 (1710 - 1785 MHz)<br>Band n7 (2500 - 2570 MHz)<br>Band n86 (1710 - 1780 MHz)<br>Validation band (0.0 - 6000.0 MHz) |
| Detailed Specification: | Multiplexing Scheme: DFT-s-OFDM<br>Modulation Scheme: QPSK<br>Subcarrier Spacing: 15 kHz<br>Number RBs: 1<br>Data Type: PN9                                                                                         |
| Bandwidth:              | 40.0 MHz                                                                                                                                                                                                            |
| Integration Time:       | 10.0 ms                                                                                                                                                                                                             |

<sup>1</sup> PAR (0.1%) in accordance with FCC KDB 971168, Section 6.0 "Measurement of the Peak-to-Average Power Ratio (PAPR)"

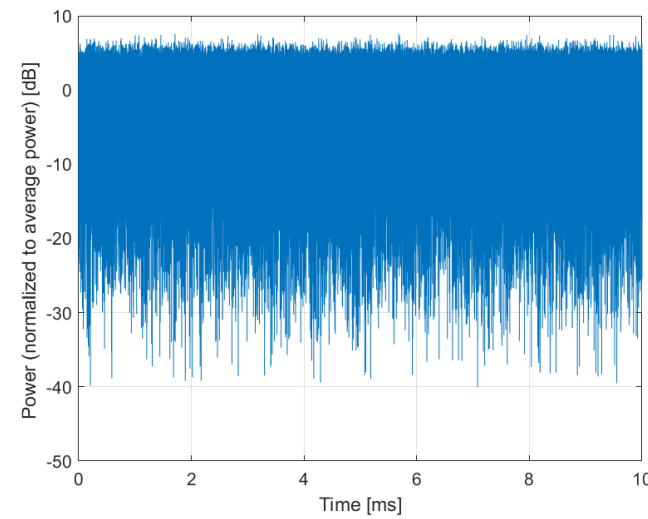
<sup>2</sup> Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).



Complementary Cumulative Distribution Function (CCDF)



Frequency Domain



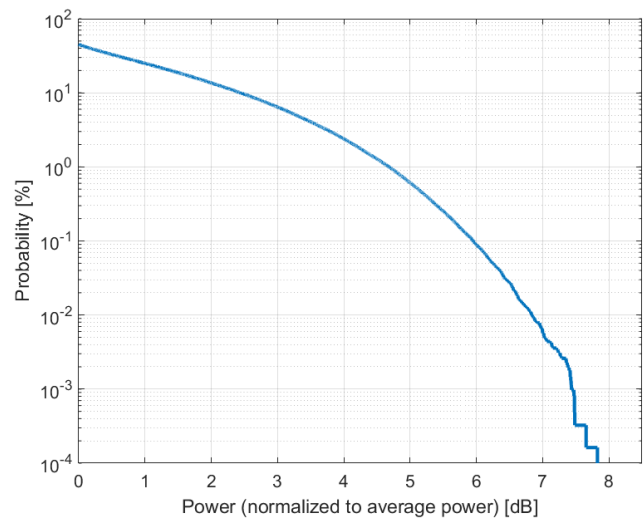
Time Domain

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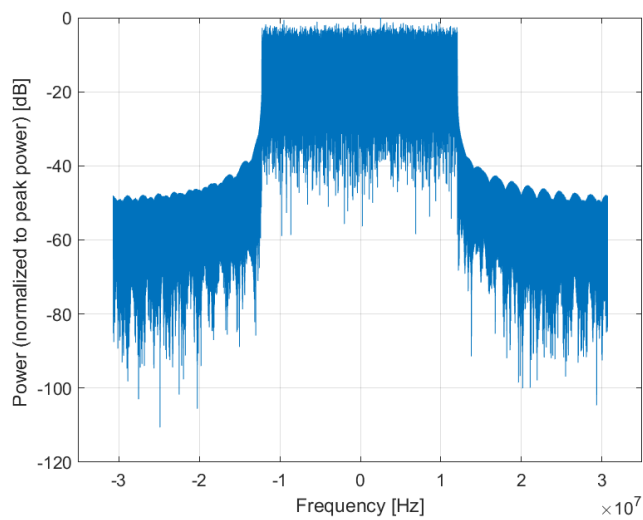
|                         |                                                                                                                             |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| Name:                   | <b>5G NR (DFT-s-OFDM, 50% RB, 50 MHz, QPSK, 15 kHz)</b>                                                                     |
| Group:                  | 5G NR FR1 FDD                                                                                                               |
| UID:                    | 10943-AAB                                                                                                                   |
| PAR: <sup>1</sup>       | <b>5.95 dB</b>                                                                                                              |
| MIF: <sup>2</sup>       | <b>-18.52 dB</b>                                                                                                            |
| Standard Reference:     | SPEAG                                                                                                                       |
| Category:               | Random amplitude modulation                                                                                                 |
| Modulation:             | QPSK                                                                                                                        |
| Frequency Band:         | Band n1 (1920 - 1980 MHz)<br>Band n7 (2500 - 2570 MHz)<br>Band n65 (1920 - 2010 MHz)<br>Validation band (0.0 - 6000.0 MHz)  |
| Detailed Specification: | Multiplexing Scheme: DFT-s-OFDM<br>Modulation Scheme: QPSK<br>Subcarrier Spacing: 15 kHz<br>Number RBs: 1<br>Data Type: PN9 |
| Bandwidth:              | 50.0 MHz                                                                                                                    |
| Integration Time:       | 10.0 ms                                                                                                                     |

<sup>1</sup> PAR (0.1%) in accordance with FCC KDB 971168, Section 6.0 "Measurement of the Peak-to-Average Power Ratio (PAPR)"

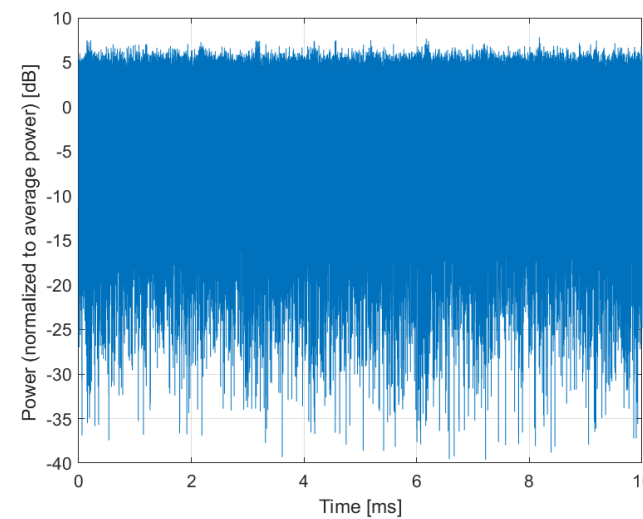
<sup>2</sup> Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).



Complementary Cumulative Distribution Function (CCDF)



Frequency Domain



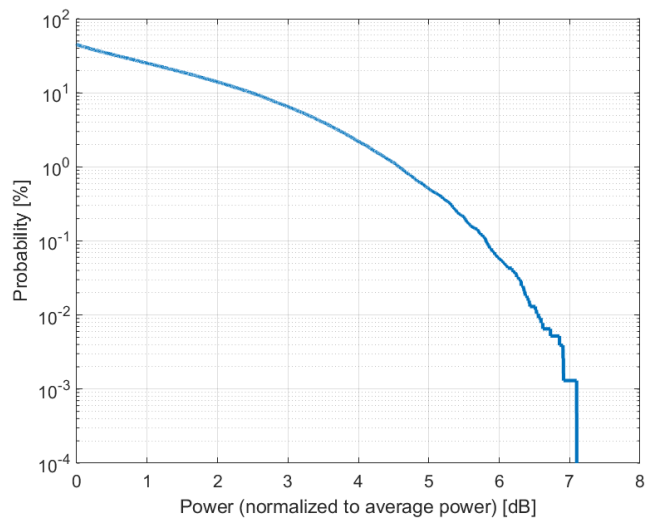
Time Domain

# Calibration Laboratory of Schmid & Partner Engineering AG

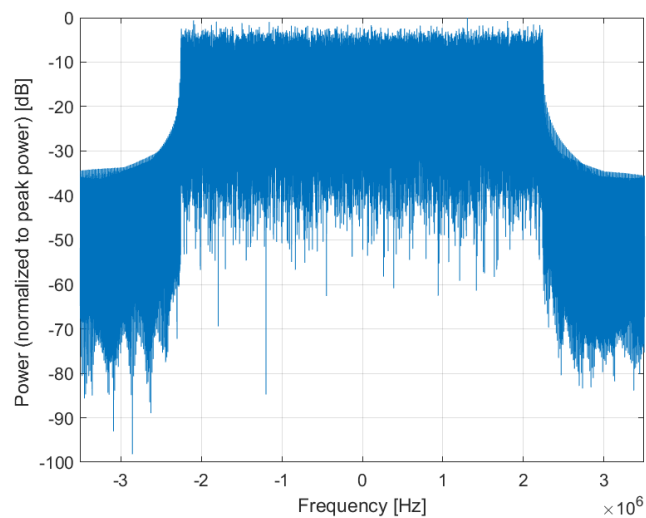
Zeughausstrasse 43, 8004 Zurich, Switzerland

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Name:                   | <b>5G NR (DFT-s-OFDM, 100% RB, 5 MHz, QPSK, 15 kHz)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Group:                  | 5G NR FR1 FDD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| UID:                    | 10944-AAB                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| PAR: <sup>1</sup>       | <b>5.81 dB</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| MIF: <sup>2</sup>       | <b>-18.38 dB</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Standard Reference:     | SPEAG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Category:               | Random amplitude modulation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Modulation:             | QPSK                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Frequency Band:         | Band n2 (1850 - 1910 MHz)<br>Band n5 (824 - 849 MHz)<br>Band n25 (1850 - 1915 MHz)<br>Band n66 (1710 - 1780 MHz)<br>Band n71 (663 - 698 MHz)<br>Band n1 (1920 - 1980 MHz)<br>Band n3 (1710 - 1785 MHz)<br>Band n7 (2500 - 2570 MHz)<br>Band n8 (880 - 915 MHz)<br>Band n12 (699 - 716 MHz)<br>Band n14 (788 - 798 MHz)<br>Band n18 (815 - 830 MHz)<br>Band n20 (832 - 862 MHz)<br>Band n26 (814 - 849 MHz)<br>Band n28 (703 - 748 MHz)<br>Band n30 (2305 - 2315 MHz)<br>Band n65 (1920 - 2010 MHz)<br>Band n70 (1695 - 1710 MHz)<br>Band n74 (1427 - 1470 MHz)<br>Band n91 (832 - 862 MHz)<br>Band n92 (832 - 862 MHz)<br>Band n93 (880 - 915 MHz)<br>Band n94 (880 - 915 MHz)<br>Band n80 (1710 - 1785 MHz)<br>Band n81 (880 - 915 MHz)<br>Band n82 (832 - 862 MHz)<br>Band n83 (703 - 748 MHz)<br>Band n84 (1920 - 1980 MHz)<br>Band n86 (1710 - 1780 MHz)<br>Band n89 (824 - 849 MHz)<br>Band n95 (2010 - 2025 MHz)<br>Validation band (0.0 - 6000.0 MHz) |
| Detailed Specification: | Multiplexing Scheme: DFT-s-OFDM<br>Modulation Scheme: QPSK<br>Subcarrier Spacing: 15 kHz<br>Number RBs: 1<br>Data Type: PN9                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Bandwidth:              | 5.0 MHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Integration Time:       | 10.0 ms                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |

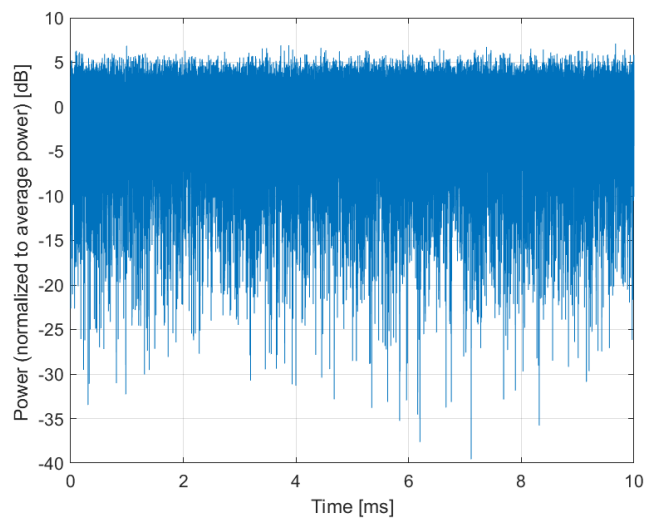
<sup>1</sup> PAR (0.1%) in accordance with FCC KDB 971168, Section 6.0 "Measurement of the Peak-to-Average Power Ratio (PAPR)"  
<sup>2</sup> Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).



**Complementary Cumulative Distribution Function (CCDF)**



**Frequency Domain**



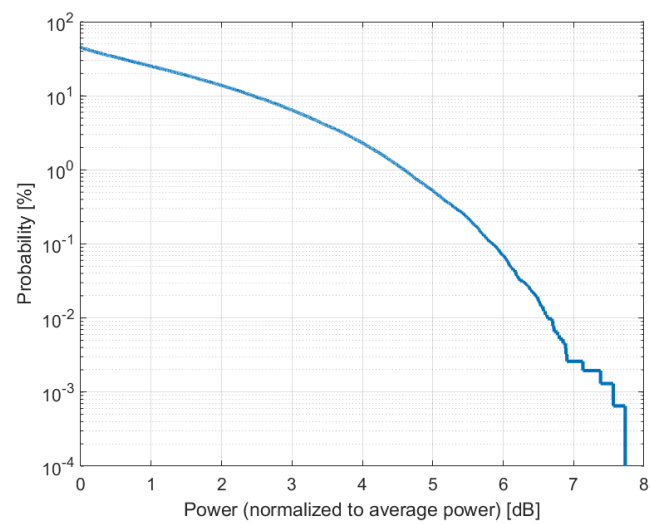
**Time Domain**

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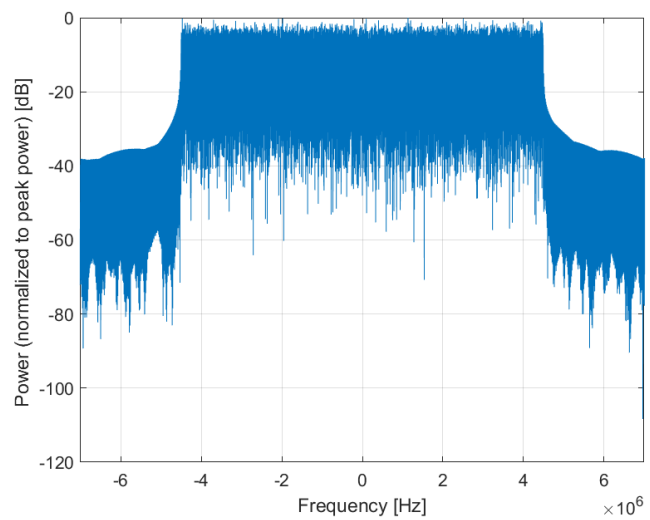
Zeughausstrasse 43, 8004 Zurich, Switzerland

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Name:                   | <b>5G NR (DFT-s-OFDM, 100% RB, 10 MHz, QPSK, 15 kHz)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Group:                  | 5G NR FR1 FDD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| UID:                    | 10945-AAB                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| PAR: <sup>1</sup>       | <b>5.85 dB</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| MIF: <sup>2</sup>       | <b>-18.65 dB</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Standard Reference:     | SPEAG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Category:               | Random amplitude modulation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Modulation:             | QPSK                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Frequency Band:         | Band n2 (1850 - 1910 MHz)<br>Band n5 (824 - 849 MHz)<br>Band n25 (1850 - 1915 MHz)<br>Band n66 (1710 - 1780 MHz)<br>Band n71 (663 - 698 MHz)<br>Band n1 (1920 - 1980 MHz)<br>Band n3 (1710 - 1785 MHz)<br>Band n7 (2500 - 2570 MHz)<br>Band n8 (880 - 915 MHz)<br>Band n12 (699 - 716 MHz)<br>Band n14 (788 - 798 MHz)<br>Band n18 (815 - 830 MHz)<br>Band n20 (832 - 862 MHz)<br>Band n26 (814 - 849 MHz)<br>Band n28 (703 - 748 MHz)<br>Band n30 (2305 - 2315 MHz)<br>Band n65 (1920 - 2010 MHz)<br>Band n70 (1695 - 1710 MHz)<br>Band n74 (1427 - 1470 MHz)<br>Band n91 (832 - 862 MHz)<br>Band n92 (832 - 862 MHz)<br>Band n93 (880 - 915 MHz)<br>Band n94 (880 - 915 MHz)<br>Band n80 (1710 - 1785 MHz)<br>Band n81 (880 - 915 MHz)<br>Band n82 (832 - 862 MHz)<br>Band n83 (703 - 748 MHz)<br>Band n84 (1920 - 1980 MHz)<br>Band n86 (1710 - 1780 MHz)<br>Band n89 (824 - 849 MHz)<br>Band n95 (2010 - 2025 MHz)<br>Validation band (0.0 - 6000.0 MHz) |
| Detailed Specification: | Multiplexing Scheme: DFT-s-OFDM<br>Modulation Scheme: QPSK<br>Subcarrier Spacing: 15 kHz<br>Number RBs: 1<br>Data Type: PN9                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Bandwidth:              | 10.0 MHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Integration Time:       | 10.0 ms                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |

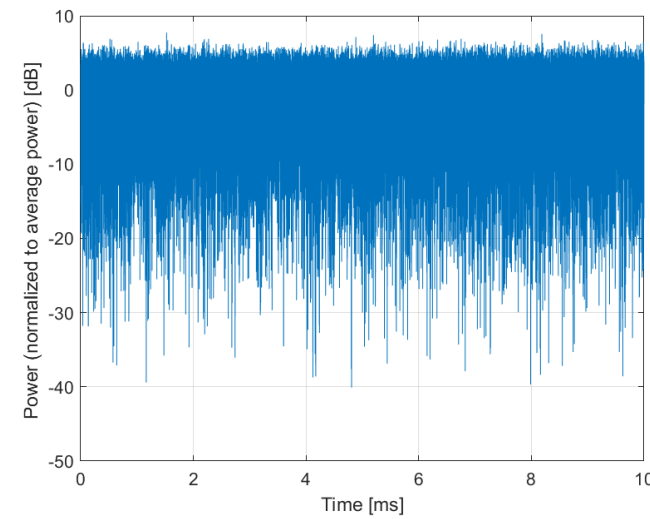
<sup>1</sup> PAR (0.1%) in accordance with FCC KDB 971168, Section 6.0 "Measurement of the Peak-to-Average Power Ratio (PAPR)"  
<sup>2</sup> Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).



Complementary Cumulative Distribution Function (CCDF)



Frequency Domain



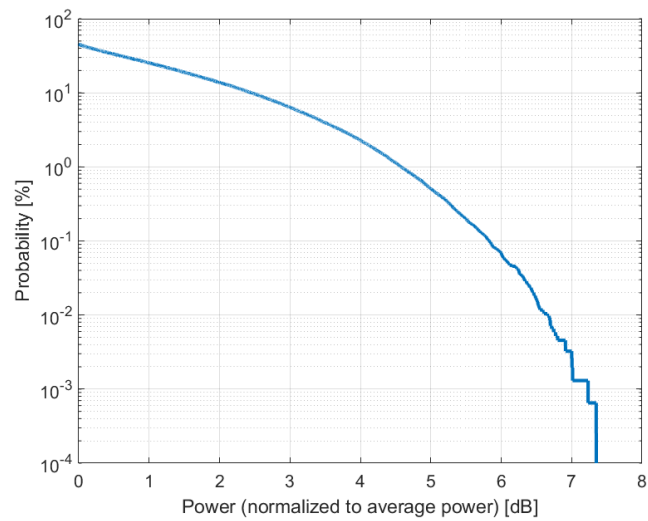
Time Domain

# Calibration Laboratory of Schmid & Partner Engineering AG

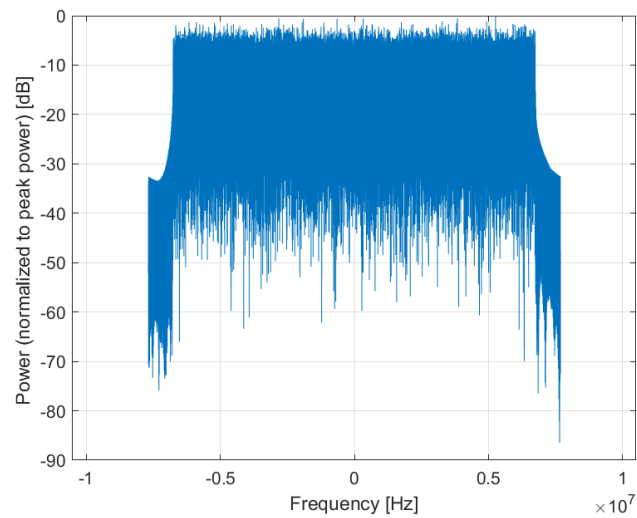
Zeughausstrasse 43, 8004 Zurich, Switzerland

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Name:                   | <b>5G NR (DFT-s-OFDM, 100% RB, 15 MHz, QPSK, 15 kHz)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Group:                  | 5G NR FR1 FDD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| UID:                    | 10946-AAB                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| PAR: <sup>1</sup>       | <b>5.83 dB</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| MIF: <sup>2</sup>       | <b>-18.70 dB</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Standard Reference:     | SPEAG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Category:               | Random amplitude modulation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Modulation:             | QPSK                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Frequency Band:         | Band n2 (1850 - 1910 MHz)<br>Band n5 (824 - 849 MHz)<br>Band n25 (1850 - 1915 MHz)<br>Band n66 (1710 - 1780 MHz)<br>Band n71 (663 - 698 MHz)<br>Band n1 (1920 - 1980 MHz)<br>Band n3 (1710 - 1785 MHz)<br>Band n7 (2500 - 2570 MHz)<br>Band n8 (880 - 915 MHz)<br>Band n12 (699 - 716 MHz)<br>Band n18 (815 - 830 MHz)<br>Band n20 (832 - 862 MHz)<br>Band n26 (814 - 849 MHz)<br>Band n28 (703 - 748 MHz)<br>Band n65 (1920 - 2010 MHz)<br>Band n70 (1695 - 1710 MHz)<br>Band n74 (1427 - 1470 MHz)<br>Band n92 (832 - 862 MHz)<br>Band n94 (880 - 915 MHz)<br>Band n80 (1710 - 1785 MHz)<br>Band n81 (880 - 915 MHz)<br>Band n82 (832 - 862 MHz)<br>Band n83 (703 - 748 MHz)<br>Band n84 (1920 - 1980 MHz)<br>Band n86 (1710 - 1780 MHz)<br>Band n89 (824 - 849 MHz)<br>Band n95 (2010 - 2025 MHz)<br>Validation band (0.0 - 6000.0 MHz) |
| Detailed Specification: | Multiplexing Scheme: DFT-s-OFDM<br>Modulation Scheme: QPSK<br>Subcarrier Spacing: 15 kHz<br>Number RBs: 1<br>Data Type: PN9                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Bandwidth:              | 15.0 MHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Integration Time:       | 10.0 ms                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

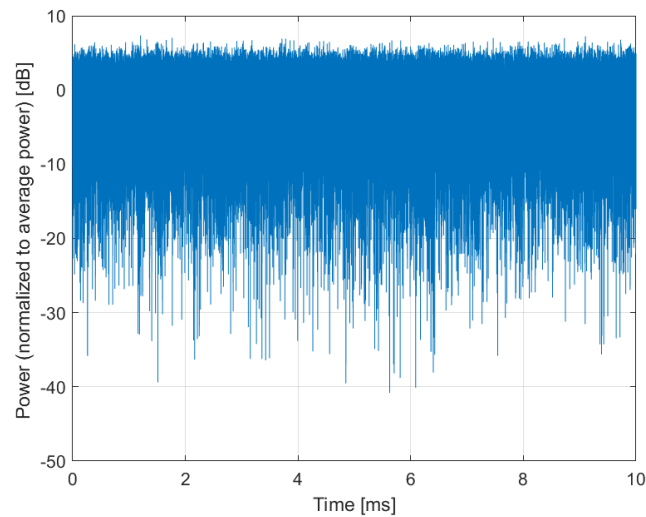
<sup>1</sup> PAR (0.1%) in accordance with FCC KDB 971168, Section 6.0 "Measurement of the Peak-to-Average Power Ratio (PAPR)"  
<sup>2</sup> Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).



**Complementary Cumulative Distribution Function (CCDF)**



**Frequency Domain**



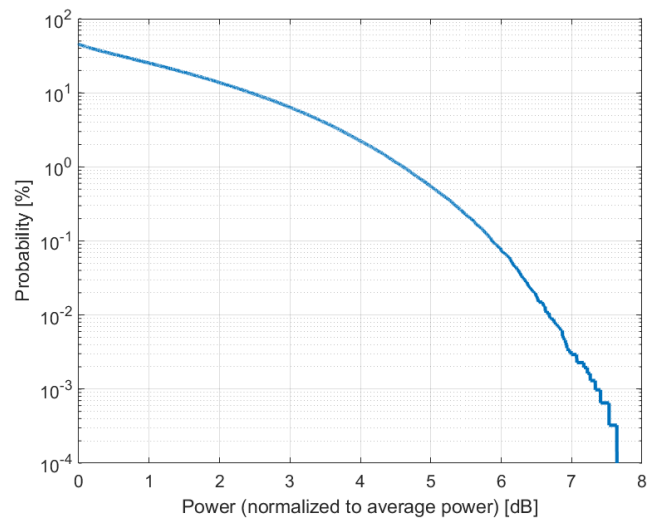
**Time Domain**

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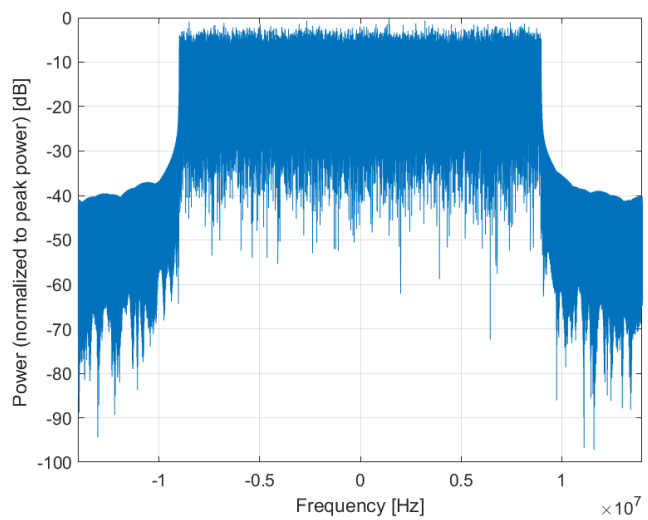
|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Name:                   | <b>5G NR (DFT-s-OFDM, 100% RB, 20 MHz, QPSK, 15 kHz)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Group:                  | 5G NR FR1 FDD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| UID:                    | 10947-AAB                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| PAR: <sup>1</sup>       | <b>5.87 dB</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| MIF: <sup>2</sup>       | <b>-18.60 dB</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Standard Reference:     | SPEAG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Category:               | Random amplitude modulation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Modulation:             | QPSK                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Frequency Band:         | Band n2 (1850 - 1910 MHz)<br>Band n5 (824 - 849 MHz)<br>Band n25 (1850 - 1915 MHz)<br>Band n66 (1710 - 1780 MHz)<br>Band n71 (663 - 698 MHz)<br>Band n1 (1920 - 1980 MHz)<br>Band n3 (1710 - 1785 MHz)<br>Band n7 (2500 - 2570 MHz)<br>Band n8 (880 - 915 MHz)<br>Band n20 (832 - 862 MHz)<br>Band n26 (814 - 849 MHz)<br>Band n28 (703 - 748 MHz)<br>Band n65 (1920 - 2010 MHz)<br>Band n74 (1427 - 1470 MHz)<br>Band n92 (832 - 862 MHz)<br>Band n94 (880 - 915 MHz)<br>Band n80 (1710 - 1785 MHz)<br>Band n81 (880 - 915 MHz)<br>Band n82 (832 - 862 MHz)<br>Band n83 (703 - 748 MHz)<br>Band n84 (1920 - 1980 MHz)<br>Band n86 (1710 - 1780 MHz)<br>Band n89 (824 - 849 MHz)<br>Validation band (0.0 - 6000.0 MHz) |
| Detailed Specification: | Multiplexing Scheme: DFT-s-OFDM<br>Modulation Scheme: QPSK<br>Subcarrier Spacing: 15 kHz<br>Number RBs: 1<br>Data Type: PN9                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Bandwidth:              | 20.0 MHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Integration Time:       | 10.0 ms                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

<sup>1</sup> PAR (0.1%) in accordance with FCC KDB 971168, Section 6.0 "Measurement of the Peak-to-Average Power Ratio (PAPR)"

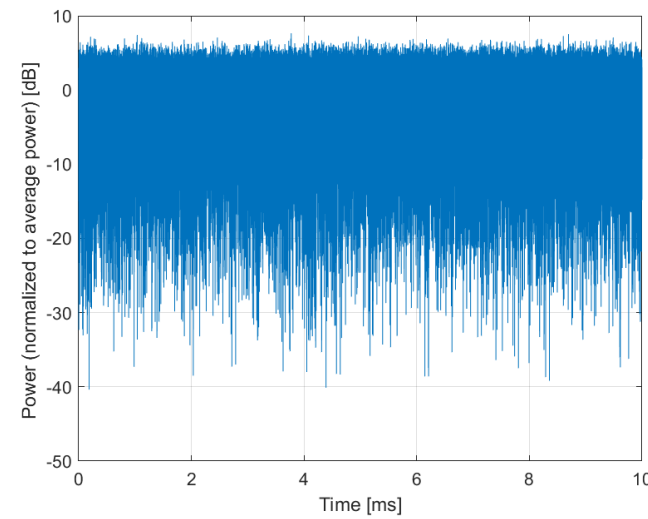
<sup>2</sup> Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).



**Complementary Cumulative Distribution Function (CCDF)**



**Frequency Domain**

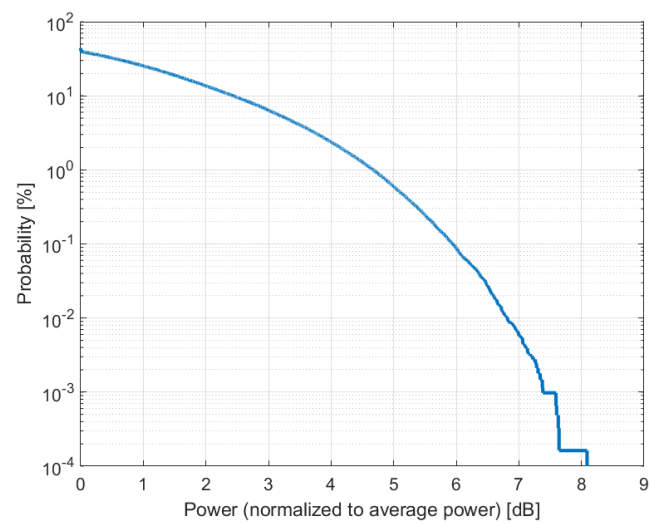


**Time Domain**

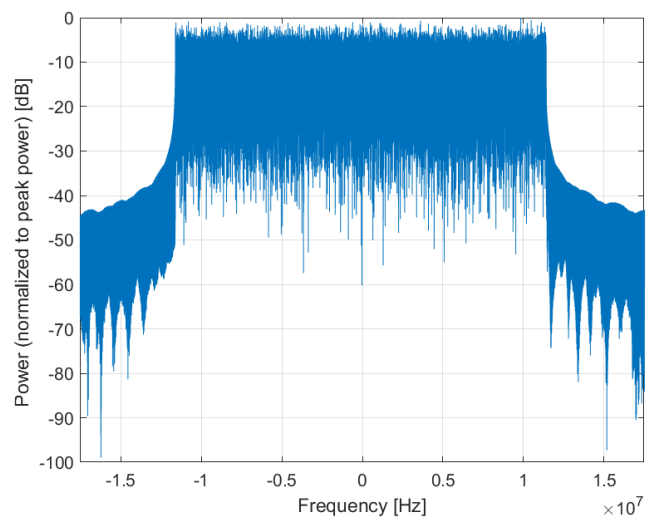
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|                         |                                                                                                                                                                                                                     |
|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Name:                   | <b>5G NR (DFT-s-OFDM, 100% RB, 25 MHz, QPSK, 15 kHz)</b>                                                                                                                                                            |
| Group:                  | 5G NR FR1 FDD                                                                                                                                                                                                       |
| UID:                    | 10948-AAB                                                                                                                                                                                                           |
| PAR: <sup>1</sup>       | <b>5.94 dB</b>                                                                                                                                                                                                      |
| MIF: <sup>2</sup>       | <b>-18.50 dB</b>                                                                                                                                                                                                    |
| Standard Reference:     | SPEAG                                                                                                                                                                                                               |
| Category:               | Random amplitude modulation                                                                                                                                                                                         |
| Modulation:             | QPSK                                                                                                                                                                                                                |
| Frequency Band:         | Band n25 (1850 - 1915 MHz)<br>Band n66 (1710 - 1780 MHz)<br>Band n1 (1920 - 1980 MHz)<br>Band n3 (1710 - 1785 MHz)<br>Band n7 (2500 - 2570 MHz)<br>Band n80 (1710 - 1785 MHz)<br>Validation band (0.0 - 6000.0 MHz) |
| Detailed Specification: | Multiplexing Scheme: DFT-s-OFDM<br>Modulation Scheme: QPSK<br>Subcarrier Spacing: 15 kHz<br>Number RBs: 1<br>Data Type: PN9                                                                                         |
| Bandwidth:              | 25.0 MHz                                                                                                                                                                                                            |
| Integration Time:       | 10.0 ms                                                                                                                                                                                                             |

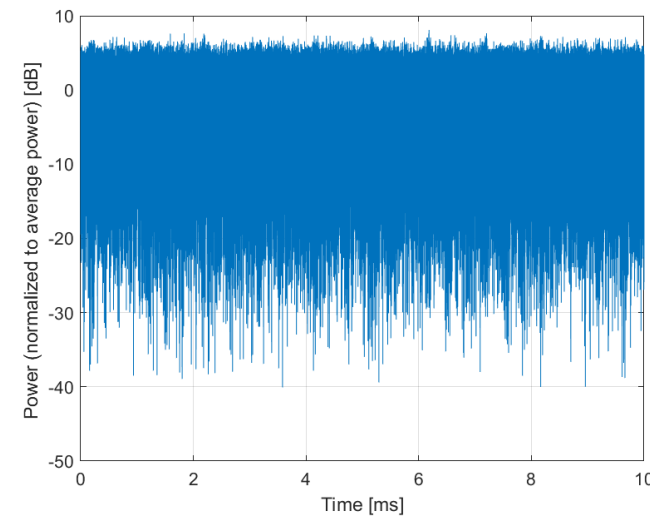
<sup>1</sup> PAR (0.1%) in accordance with FCC KDB 971168, Section 6.0 "Measurement of the Peak-to-Average Power Ratio (PAPR)"  
<sup>2</sup> Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).



Complementary Cumulative Distribution Function (CCDF)



Frequency Domain

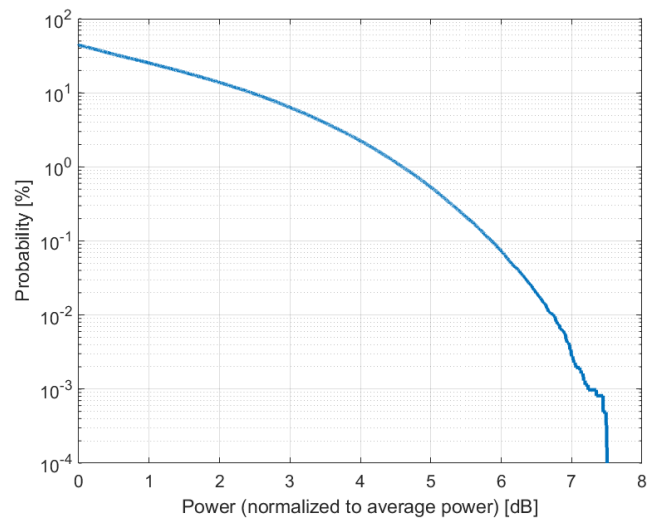


Time Domain

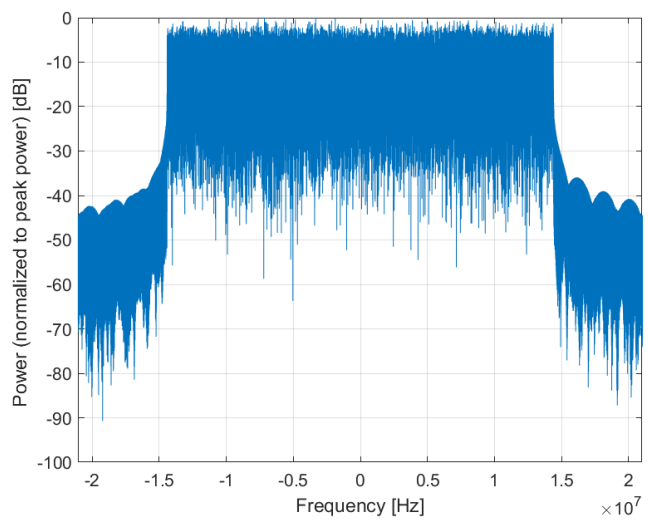
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|                         |                                                                                                                                                                                                                                                 |
|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Name:                   | <b>5G NR (DFT-s-OFDM, 100% RB, 30 MHz, QPSK, 15 kHz)</b>                                                                                                                                                                                        |
| Group:                  | 5G NR FR1 FDD                                                                                                                                                                                                                                   |
| UID:                    | 10949-AAB                                                                                                                                                                                                                                       |
| PAR: <sup>1</sup>       | <b>5.87 dB</b>                                                                                                                                                                                                                                  |
| MIF: <sup>2</sup>       | <b>-18.85 dB</b>                                                                                                                                                                                                                                |
| Standard Reference:     | SPEAG                                                                                                                                                                                                                                           |
| Category:               | Random amplitude modulation                                                                                                                                                                                                                     |
| Modulation:             | QPSK                                                                                                                                                                                                                                            |
| Frequency Band:         | Band n25 (1850 - 1915 MHz)<br>Band n66 (1710 - 1780 MHz)<br>Band n1 (1920 - 1980 MHz)<br>Band n3 (1710 - 1785 MHz)<br>Band n7 (2500 - 2570 MHz)<br>Band n28 (703 - 748 MHz)<br>Band n80 (1710 - 1785 MHz)<br>Validation band (0.0 - 6000.0 MHz) |
| Detailed Specification: | Multiplexing Scheme: DFT-s-OFDM<br>Modulation Scheme: QPSK<br>Subcarrier Spacing: 15 kHz<br>Number RBs: 1<br>Data Type: PN9                                                                                                                     |
| Bandwidth:              | 30.0 MHz                                                                                                                                                                                                                                        |
| Integration Time:       | 10.0 ms                                                                                                                                                                                                                                         |

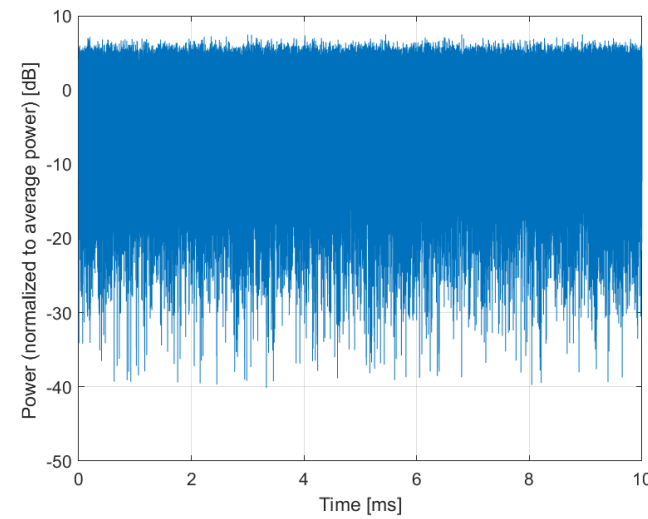
<sup>1</sup> PAR (0.1%) in accordance with FCC KDB 971168, Section 6.0 "Measurement of the Peak-to-Average Power Ratio (PAPR)"  
<sup>2</sup> Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).



Complementary Cumulative Distribution Function (CCDF)



Frequency Domain

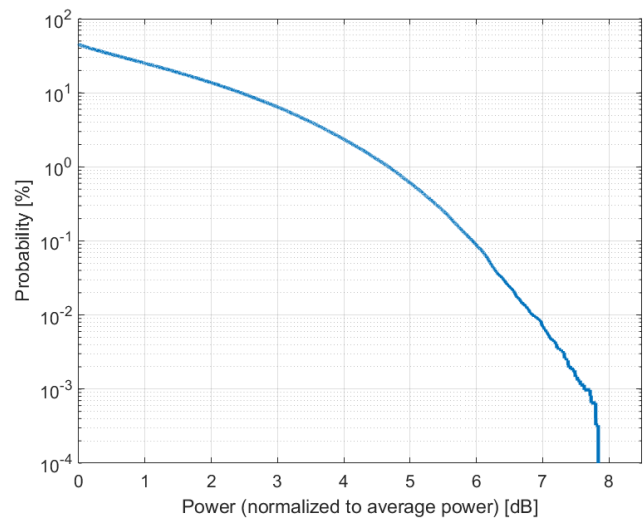


Time Domain

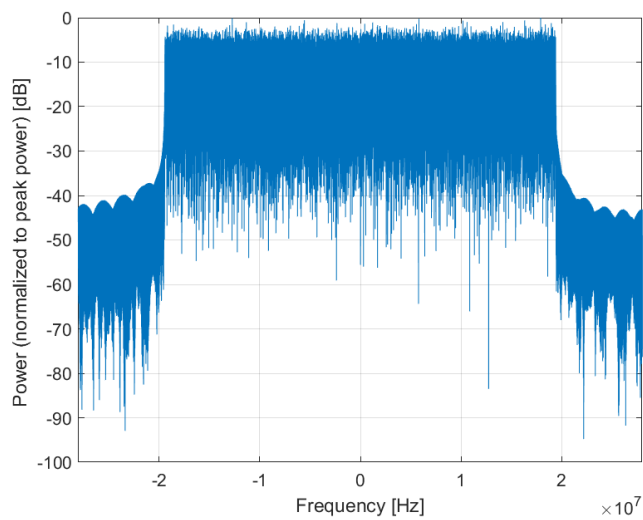
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**Engineering AG**  
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|                         |                                                                                                                                                                                                                     |
|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Name:                   | <b>5G NR (DFT-s-OFDM, 100% RB, 40 MHz, QPSK, 15 kHz)</b>                                                                                                                                                            |
| Group:                  | 5G NR FR1 FDD                                                                                                                                                                                                       |
| UID:                    | 10950-AAB                                                                                                                                                                                                           |
| PAR: <sup>1</sup>       | <b>5.94 dB</b>                                                                                                                                                                                                      |
| MIF: <sup>2</sup>       | <b>-18.50 dB</b>                                                                                                                                                                                                    |
| Standard Reference:     | SPEAG                                                                                                                                                                                                               |
| Category:               | Random amplitude modulation                                                                                                                                                                                         |
| Modulation:             | QPSK                                                                                                                                                                                                                |
| Frequency Band:         | Band n25 (1850 - 1915 MHz)<br>Band n66 (1710 - 1780 MHz)<br>Band n1 (1920 - 1980 MHz)<br>Band n3 (1710 - 1785 MHz)<br>Band n7 (2500 - 2570 MHz)<br>Band n86 (1710 - 1780 MHz)<br>Validation band (0.0 - 6000.0 MHz) |
| Detailed Specification: | Multiplexing Scheme: DFT-s-OFDM<br>Modulation Scheme: QPSK<br>Subcarrier Spacing: 15 kHz<br>Number RBs: 1<br>Data Type: PN9                                                                                         |
| Bandwidth:              | 40.0 MHz                                                                                                                                                                                                            |
| Integration Time:       | 10.0 ms                                                                                                                                                                                                             |

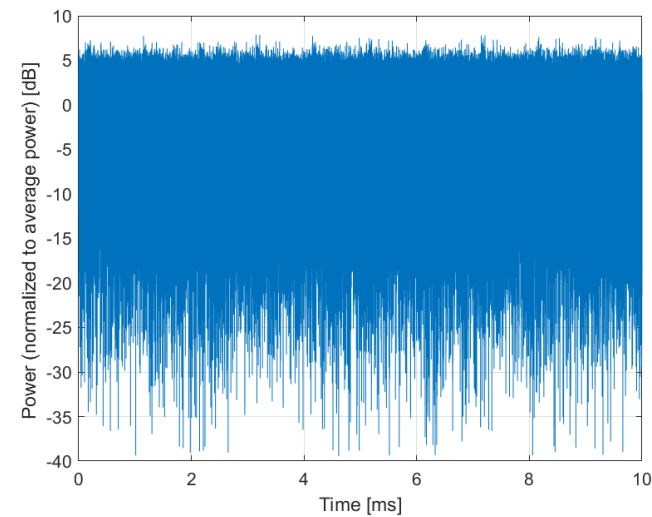
<sup>1</sup> PAR (0.1%) in accordance with FCC KDB 971168, Section 6.0 "Measurement of the Peak-to-Average Power Ratio (PAPR)"  
<sup>2</sup> Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).



Complementary Cumulative Distribution Function (CCDF)



Frequency Domain

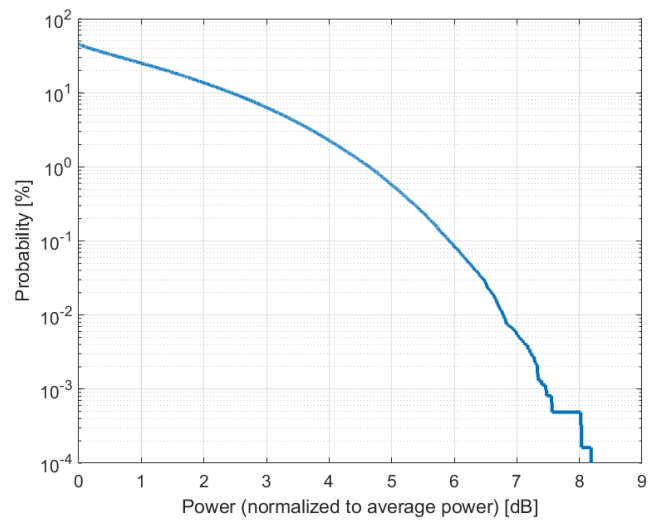


Time Domain

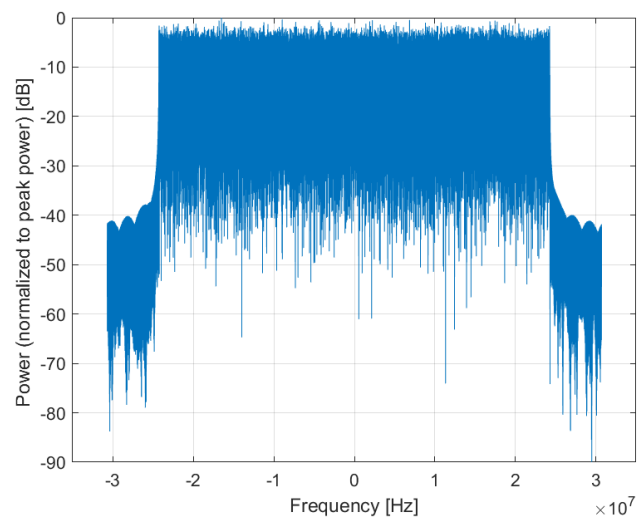
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|                         |                                                                                                                             |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| Name:                   | <b>5G NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 15 kHz)</b>                                                                    |
| Group:                  | 5G NR FR1 FDD                                                                                                               |
| UID:                    | 10951-AAB                                                                                                                   |
| PAR: <sup>1</sup>       | <b>5.92 dB</b>                                                                                                              |
| MIF: <sup>2</sup>       | <b>-18.56 dB</b>                                                                                                            |
| Standard Reference:     | SPEAG                                                                                                                       |
| Category:               | Random amplitude modulation                                                                                                 |
| Modulation:             | QPSK                                                                                                                        |
| Frequency Band:         | Band n1 (1920 - 1980 MHz)<br>Band n7 (2500 - 2570 MHz)<br>Band n65 (1920 - 2010 MHz)<br>Validation band (0.0 - 6000.0 MHz)  |
| Detailed Specification: | Multiplexing Scheme: DFT-s-OFDM<br>Modulation Scheme: QPSK<br>Subcarrier Spacing: 15 kHz<br>Number RBs: 1<br>Data Type: PN9 |
| Bandwidth:              | 50.0 MHz                                                                                                                    |
| Integration Time:       | 10.0 ms                                                                                                                     |

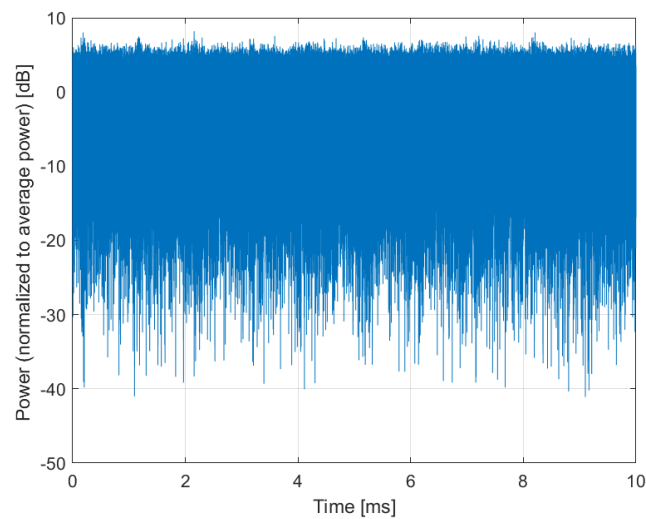
<sup>1</sup> PAR (0.1%) in accordance with FCC KDB 971168, Section 6.0 "Measurement of the Peak-to-Average Power Ratio (PAPR)"  
<sup>2</sup> Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).



Complementary Cumulative Distribution Function (CCDF)



Frequency Domain



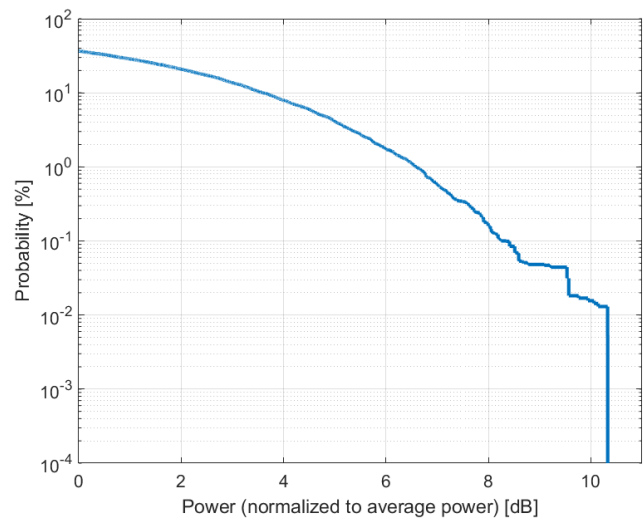
Time Domain

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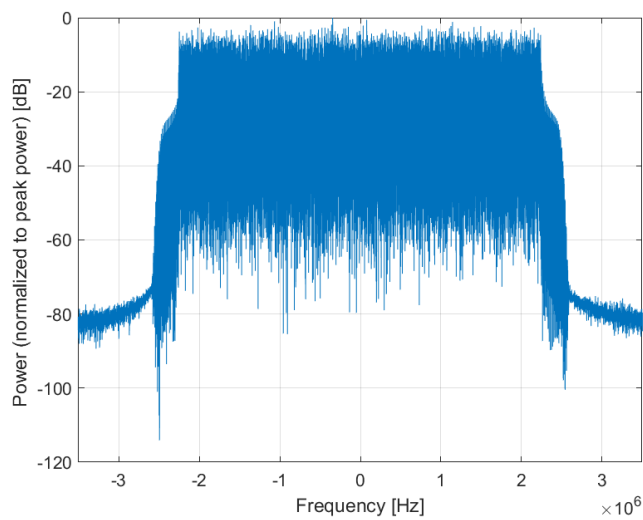
|                         |                                                                                                                            |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------|
| Name:                   | <b>5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 15 kHz)</b>                                                                   |
| Group:                  | 5G NR FR1 FDD                                                                                                              |
| UID:                    | 10952-AAA                                                                                                                  |
| PAR: <sup>1</sup>       | <b>8.25 dB</b>                                                                                                             |
| MIF: <sup>2</sup>       | <b>-16.10 dB</b>                                                                                                           |
| Standard Reference:     | SPEAG                                                                                                                      |
| Category:               | Random amplitude modulation                                                                                                |
| Modulation:             | 64-QAM                                                                                                                     |
| Frequency Band:         | Validation band (0.0 - 6000.0 MHz)                                                                                         |
| Detailed Specification: | Multiplexing Scheme: CP-OFDM<br>Modulation Scheme: 64-QAM<br>Subcarrier Spacing: 15 kHz<br>Model: TM 3.1<br>Data Type: PN9 |
| Bandwidth:              | 5.0 MHz                                                                                                                    |
| Integration Time:       | 10.0 ms                                                                                                                    |

<sup>1</sup> PAR (0.1%) in accordance with FCC KDB 971168, Section 6.0 "Measurement of the Peak-to-Average Power Ratio (PAPR)"

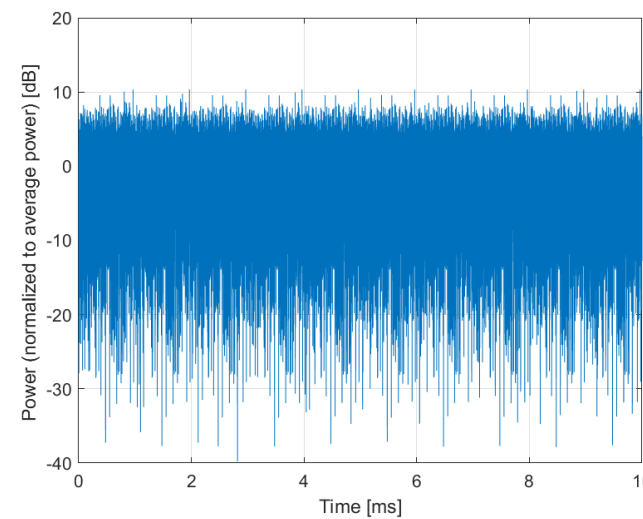
<sup>2</sup> Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).



Complementary Cumulative Distribution Function (CCDF)



Frequency Domain



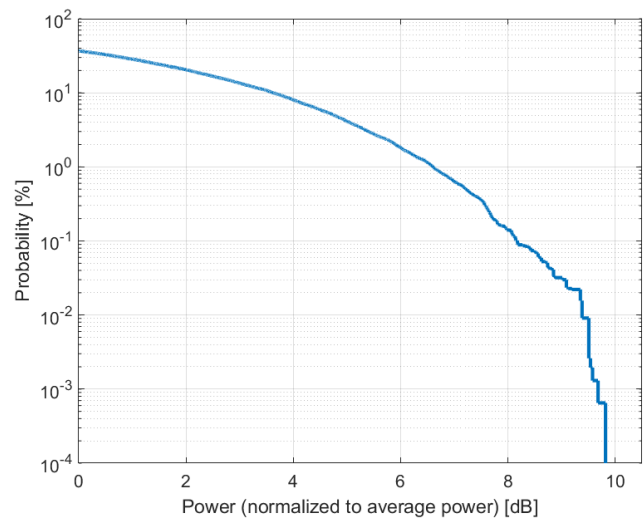
Time Domain

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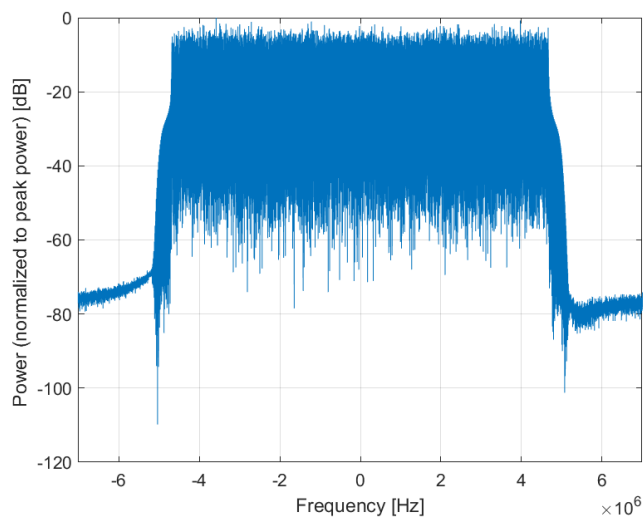
|                         |                                                                                                                            |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------|
| Name:                   | 5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 15 kHz)                                                                         |
| Group:                  | 5G NR FR1 FDD                                                                                                              |
| UID:                    | 10953-AAA                                                                                                                  |
| PAR: <sup>1</sup>       | 8.15 dB                                                                                                                    |
| MIF: <sup>2</sup>       | -18.27 dB                                                                                                                  |
| Standard Reference:     | SPEAG                                                                                                                      |
| Category:               | Random amplitude modulation                                                                                                |
| Modulation:             | 64-QAM                                                                                                                     |
| Frequency Band:         | Validation band (0.0 - 6000.0 MHz)                                                                                         |
| Detailed Specification: | Multiplexing Scheme: CP-OFDM<br>Modulation Scheme: 64-QAM<br>Subcarrier Spacing: 15 kHz<br>Model: TM 3.1<br>Data Type: PN9 |
| Bandwidth:              | 10.0 MHz                                                                                                                   |
| Integration Time:       | 10.0 ms                                                                                                                    |

<sup>1</sup> PAR (0.1%) in accordance with FCC KDB 971168, Section 6.0 "Measurement of the Peak-to-Average Power Ratio (PAPR)"

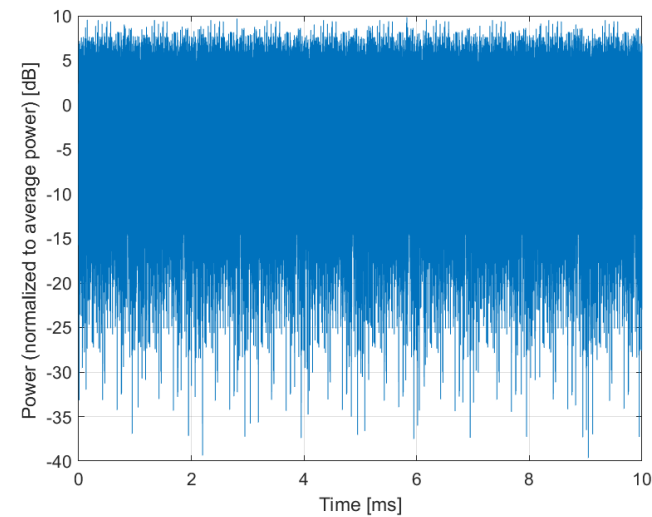
<sup>2</sup> Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).



**Complementary Cumulative Distribution Function (CCDF)**



**Frequency Domain**



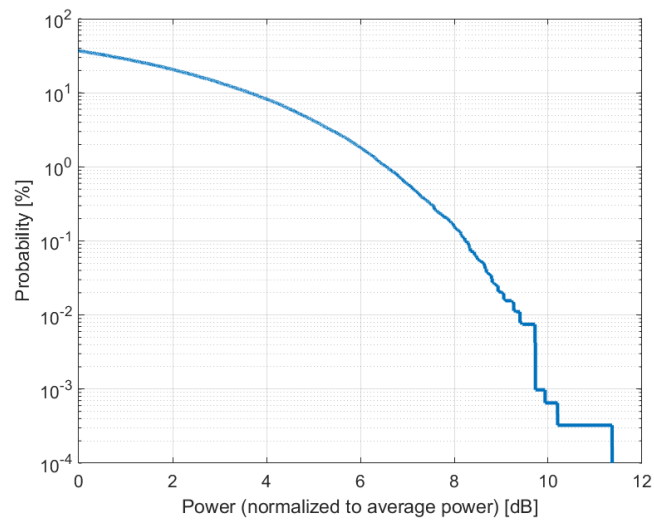
**Time Domain**

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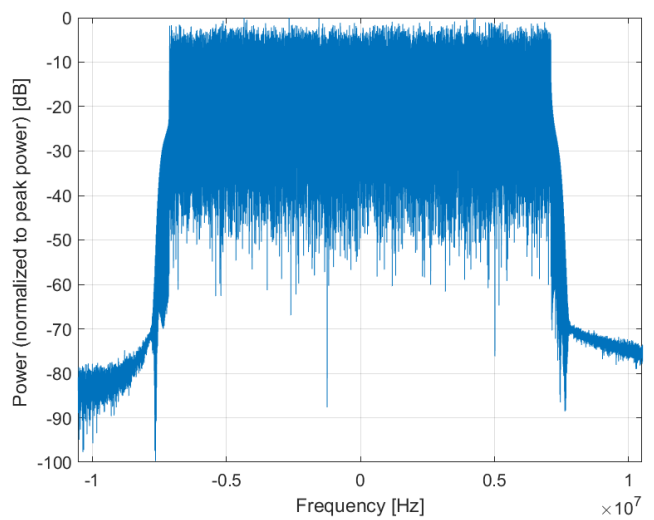
|                         |                                                                                                                            |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------|
| Name:                   | 5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 15 kHz)                                                                         |
| Group:                  | 5G NR FR1 FDD                                                                                                              |
| UID:                    | 10954-AAA                                                                                                                  |
| PAR: <sup>1</sup>       | 8.23 dB                                                                                                                    |
| MIF: <sup>2</sup>       | -20.40 dB                                                                                                                  |
| Standard Reference:     | SPEAG                                                                                                                      |
| Category:               | Random amplitude modulation                                                                                                |
| Modulation:             | 64-QAM                                                                                                                     |
| Frequency Band:         | Validation band (0.0 - 6000.0 MHz)                                                                                         |
| Detailed Specification: | Multiplexing Scheme: CP-OFDM<br>Modulation Scheme: 64-QAM<br>Subcarrier Spacing: 15 kHz<br>Model: TM 3.1<br>Data Type: PN9 |
| Bandwidth:              | 15.0 MHz                                                                                                                   |
| Integration Time:       | 10.0 ms                                                                                                                    |

<sup>1</sup> PAR (0.1%) in accordance with FCC KDB 971168, Section 6.0 "Measurement of the Peak-to-Average Power Ratio (PAPR)"

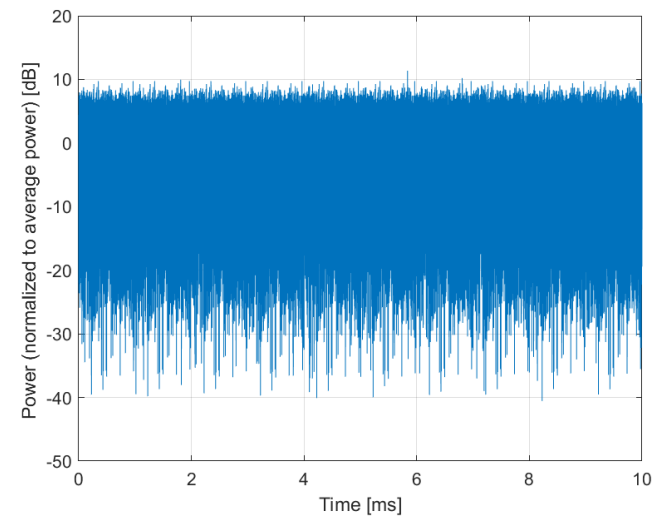
<sup>2</sup> Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).



**Complementary Cumulative Distribution Function (CCDF)**



**Frequency Domain**



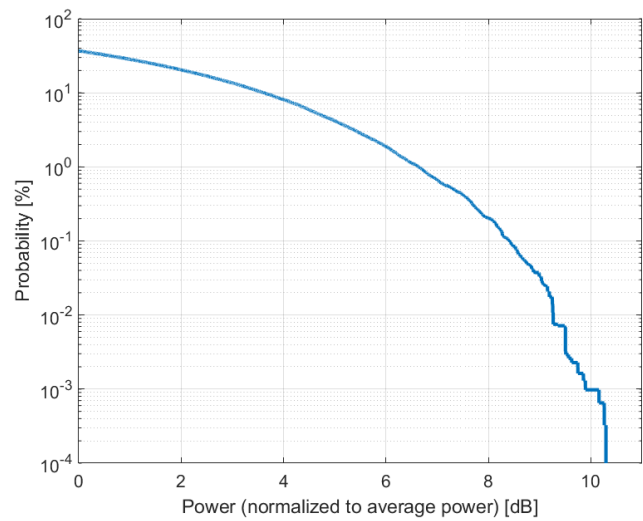
**Time Domain**

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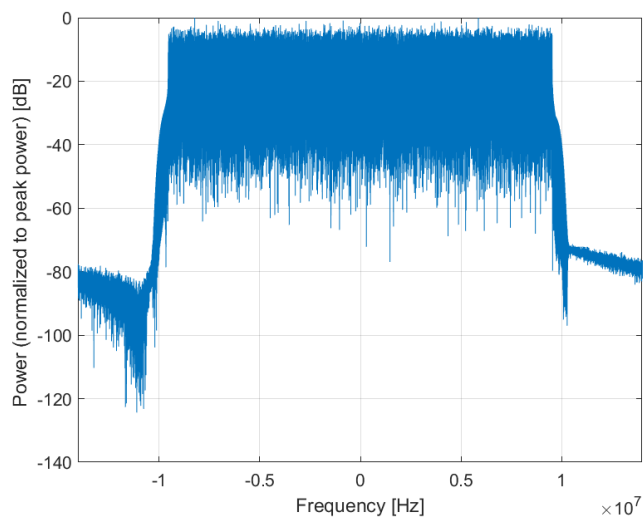
|                         |                                                                                                                            |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------|
| Name:                   | 5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 15 kHz)                                                                         |
| Group:                  | 5G NR FR1 FDD                                                                                                              |
| UID:                    | 10955-AAA                                                                                                                  |
| PAR: <sup>1</sup>       | 8.42 dB                                                                                                                    |
| MIF: <sup>2</sup>       | -22.55 dB                                                                                                                  |
| Standard Reference:     | SPEAG                                                                                                                      |
| Category:               | Random amplitude modulation                                                                                                |
| Modulation:             | 64-QAM                                                                                                                     |
| Frequency Band:         | Validation band (0.0 - 6000.0 MHz)                                                                                         |
| Detailed Specification: | Multiplexing Scheme: CP-OFDM<br>Modulation Scheme: 64-QAM<br>Subcarrier Spacing: 15 kHz<br>Model: TM 3.1<br>Data Type: PN9 |
| Bandwidth:              | 20.0 MHz                                                                                                                   |
| Integration Time:       | 10.0 ms                                                                                                                    |

<sup>1</sup> PAR (0.1%) in accordance with FCC KDB 971168, Section 6.0 "Measurement of the Peak-to-Average Power Ratio (PAPR)"

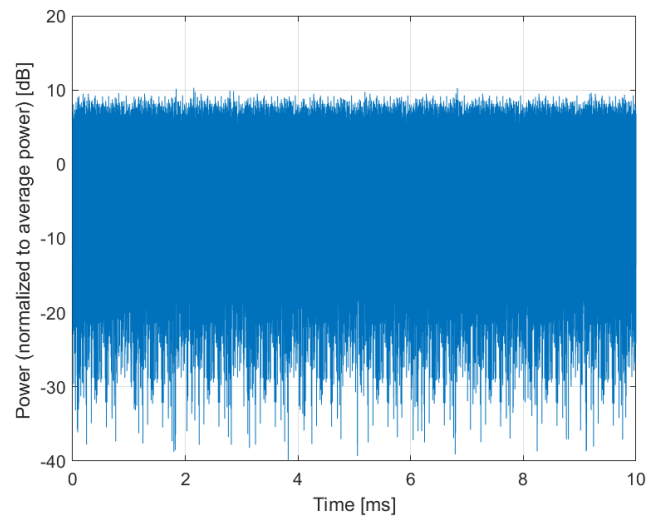
<sup>2</sup> Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).



Complementary Cumulative Distribution Function (CCDF)



Frequency Domain



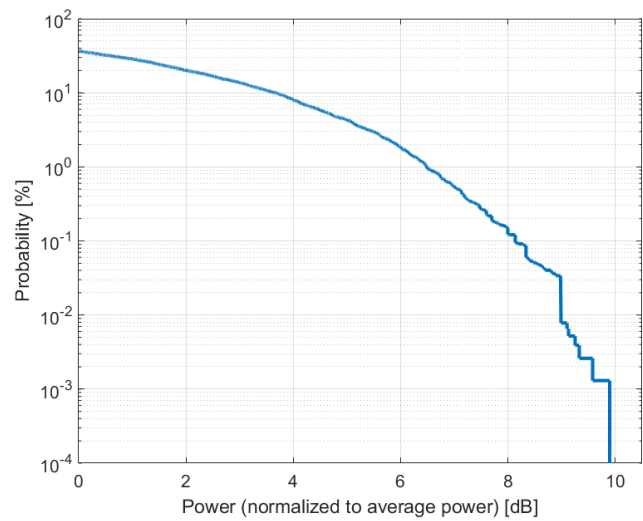
Time Domain

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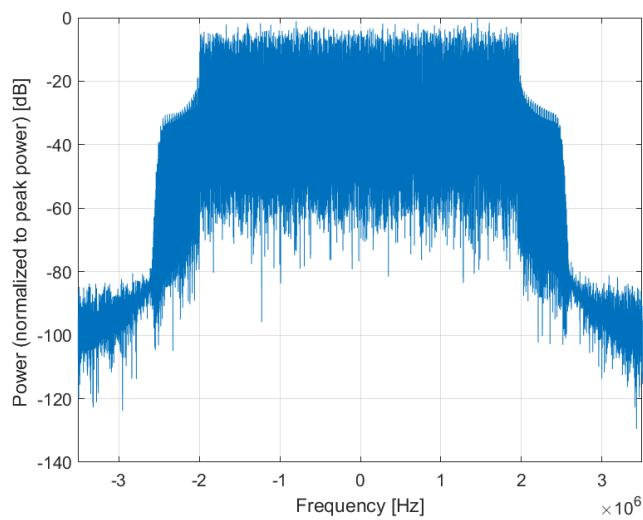
|                         |                                                                                                                            |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------|
| Name:                   | 5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 30 kHz)                                                                          |
| Group:                  | 5G NR FR1 FDD                                                                                                              |
| UID:                    | 10956-AAA                                                                                                                  |
| PAR: <sup>1</sup>       | 8.14 dB                                                                                                                    |
| MIF: <sup>2</sup>       | -16.37 dB                                                                                                                  |
| Standard Reference:     | SPEAG                                                                                                                      |
| Category:               | Random amplitude modulation                                                                                                |
| Modulation:             | 64-QAM                                                                                                                     |
| Frequency Band:         | Validation band (0.0 - 6000.0 MHz)                                                                                         |
| Detailed Specification: | Multiplexing Scheme: CP-OFDM<br>Modulation Scheme: 64-QAM<br>Subcarrier Spacing: 30 kHz<br>Model: TM 3.1<br>Data Type: PN9 |
| Bandwidth:              | 5.0 MHz                                                                                                                    |
| Integration Time:       | 10.0 ms                                                                                                                    |

<sup>1</sup> PAR (0.1%) in accordance with FCC KDB 971168, Section 6.0 "Measurement of the Peak-to-Average Power Ratio (PAPR)"

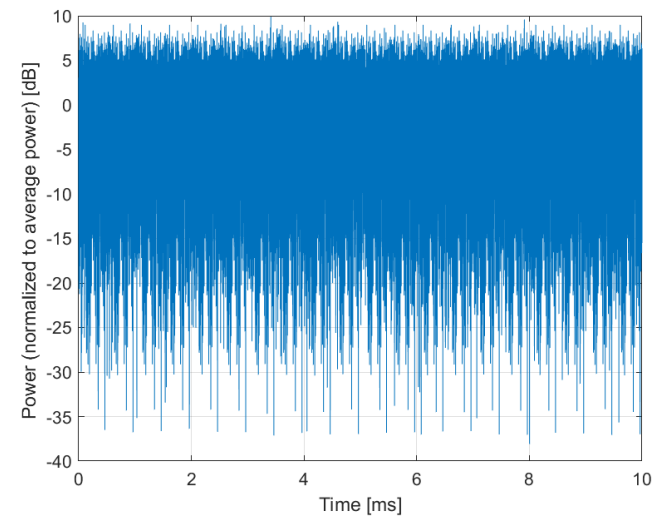
<sup>2</sup> Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).



Complementary Cumulative Distribution Function (CCDF)



Frequency Domain



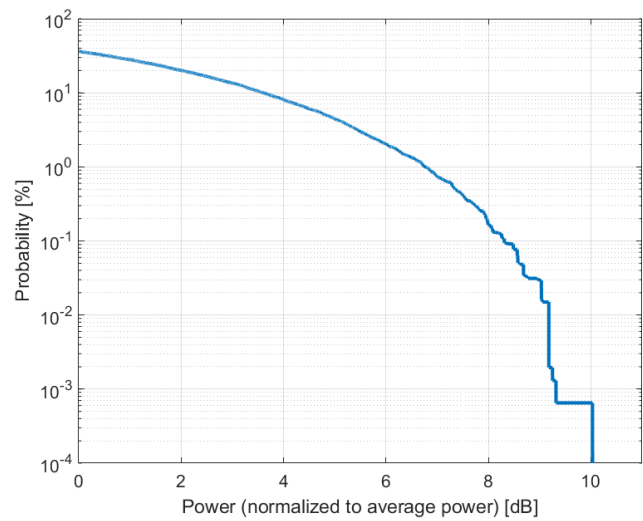
Time Domain

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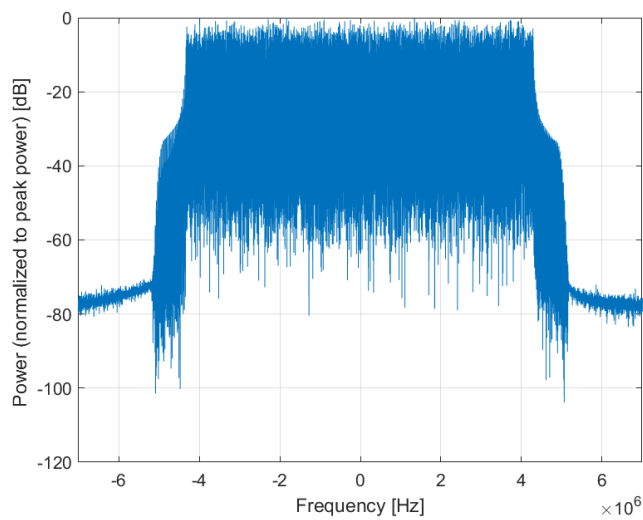
|                         |                                                                                                                            |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------|
| Name:                   | 5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 30 kHz)                                                                         |
| Group:                  | 5G NR FR1 FDD                                                                                                              |
| UID:                    | 10957-AAA                                                                                                                  |
| PAR: <sup>1</sup>       | 8.31 dB                                                                                                                    |
| MIF: <sup>2</sup>       | -18.08 dB                                                                                                                  |
| Standard Reference:     | SPEAG                                                                                                                      |
| Category:               | Random amplitude modulation                                                                                                |
| Modulation:             | 64-QAM                                                                                                                     |
| Frequency Band:         | Validation band (0.0 - 6000.0 MHz)                                                                                         |
| Detailed Specification: | Multiplexing Scheme: CP-OFDM<br>Modulation Scheme: 64-QAM<br>Subcarrier Spacing: 30 kHz<br>Model: TM 3.1<br>Data Type: PN9 |
| Bandwidth:              | 10.0 MHz                                                                                                                   |
| Integration Time:       | 10.0 ms                                                                                                                    |

<sup>1</sup> PAR (0.1%) in accordance with FCC KDB 971168, Section 6.0 "Measurement of the Peak-to-Average Power Ratio (PAPR)"

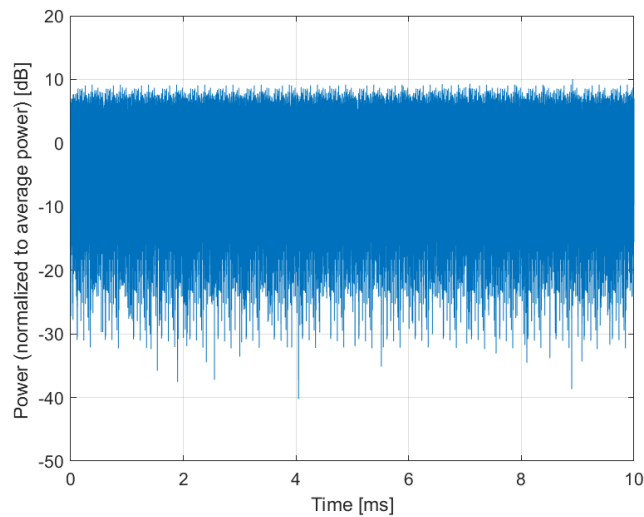
<sup>2</sup> Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).



**Complementary Cumulative Distribution Function (CCDF)**



**Frequency Domain**

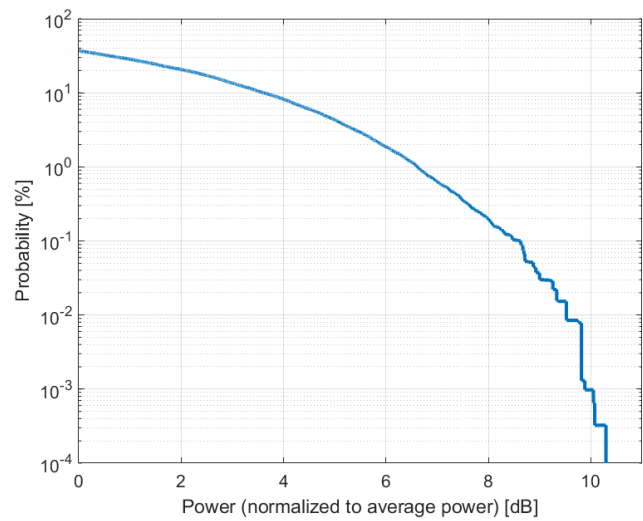


**Time Domain**

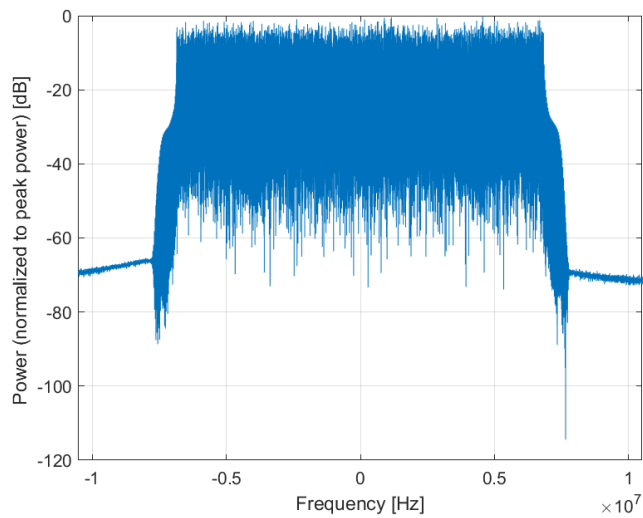
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|                         |                                                                                                                            |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------|
| Name:                   | 5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 30 kHz)                                                                         |
| Group:                  | 5G NR FR1 FDD                                                                                                              |
| UID:                    | 10958-AAA                                                                                                                  |
| PAR: <sup>1</sup>       | 8.61 dB                                                                                                                    |
| MIF: <sup>2</sup>       | -20.42 dB                                                                                                                  |
| Standard Reference:     | SPEAG                                                                                                                      |
| Category:               | Random amplitude modulation                                                                                                |
| Modulation:             | 64-QAM                                                                                                                     |
| Frequency Band:         | Validation band (0.0 - 6000.0 MHz)                                                                                         |
| Detailed Specification: | Multiplexing Scheme: CP-OFDM<br>Modulation Scheme: 64-QAM<br>Subcarrier Spacing: 30 kHz<br>Model: TM 3.1<br>Data Type: PN9 |
| Bandwidth:              | 15.0 MHz                                                                                                                   |
| Integration Time:       | 10.0 ms                                                                                                                    |

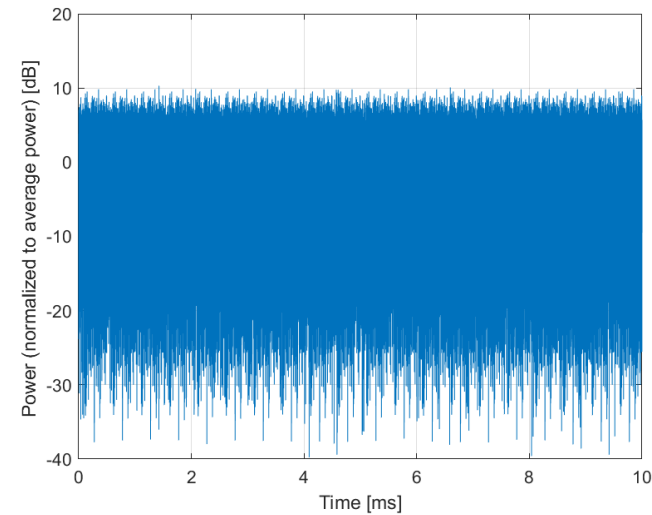
<sup>1</sup> PAR (0.1%) in accordance with FCC KDB 971168, Section 6.0 "Measurement of the Peak-to-Average Power Ratio (PAPR)"  
<sup>2</sup> Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).



Complementary Cumulative Distribution Function (CCDF)



Frequency Domain



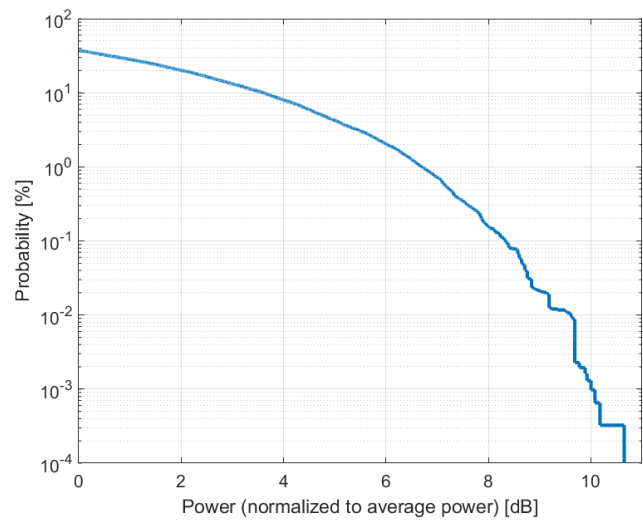
Time Domain

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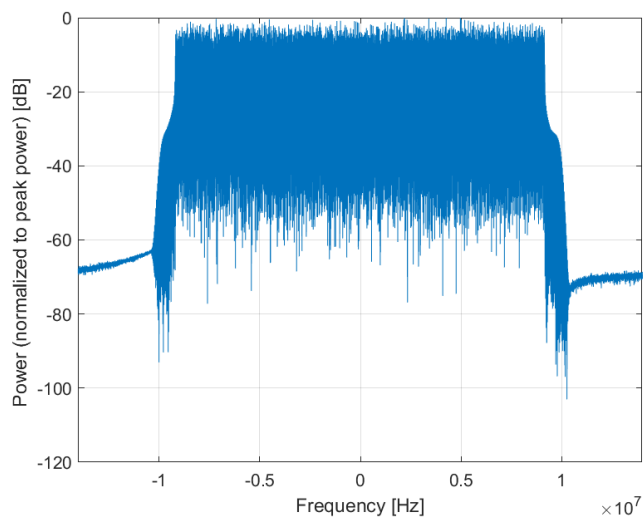
|                         |                                                                                                                            |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------|
| Name:                   | 5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 30 kHz)                                                                         |
| Group:                  | 5G NR FR1 FDD                                                                                                              |
| UID:                    | 10959-AAA                                                                                                                  |
| PAR: <sup>1</sup>       | 8.33 dB                                                                                                                    |
| MIF: <sup>2</sup>       | -22.82 dB                                                                                                                  |
| Standard Reference:     | SPEAG                                                                                                                      |
| Category:               | Random amplitude modulation                                                                                                |
| Modulation:             | 64-QAM                                                                                                                     |
| Frequency Band:         | Validation band (0.0 - 6000.0 MHz)                                                                                         |
| Detailed Specification: | Multiplexing Scheme: CP-OFDM<br>Modulation Scheme: 64-QAM<br>Subcarrier Spacing: 30 kHz<br>Model: TM 3.1<br>Data Type: PN9 |
| Bandwidth:              | 20.0 MHz                                                                                                                   |
| Integration Time:       | 10.0 ms                                                                                                                    |

<sup>1</sup> PAR (0.1%) in accordance with FCC KDB 971168, Section 6.0 "Measurement of the Peak-to-Average Power Ratio (PAPR)"

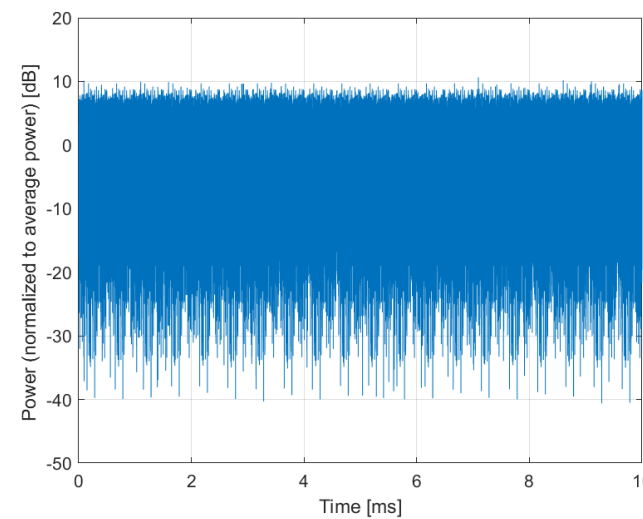
<sup>2</sup> Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).



Complementary Cumulative Distribution Function (CCDF)



Frequency Domain



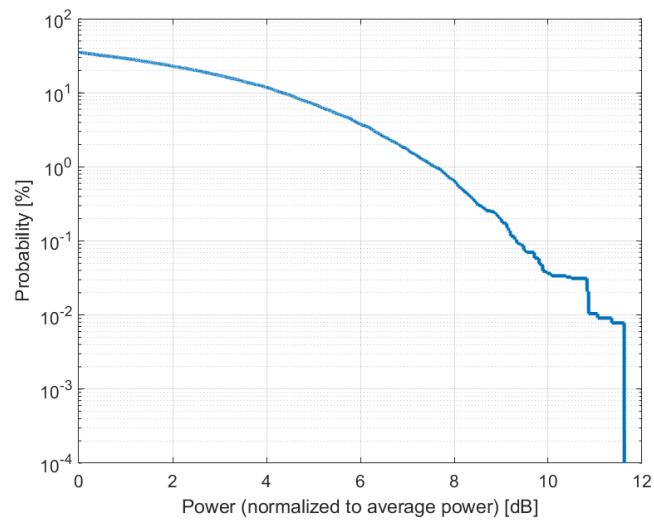
Time Domain

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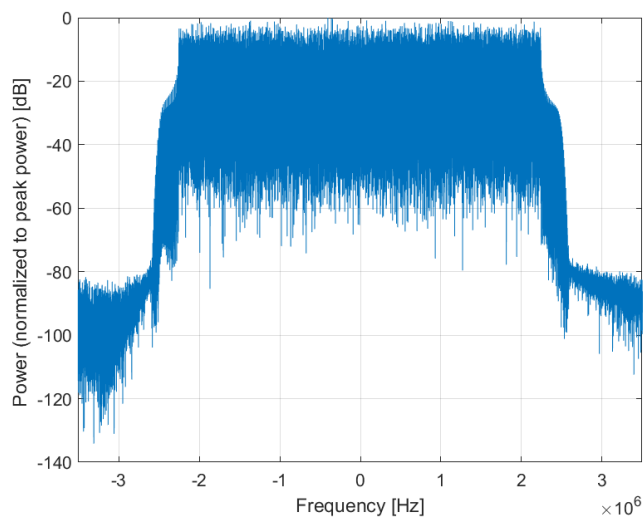
|                         |                                                                                                                                                                                                                                                                                      |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Name:                   | <b>5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 15 kHz)</b>                                                                                                                                                                                                                             |
| Group:                  | 5G NR FR1 TDD                                                                                                                                                                                                                                                                        |
| UID:                    | 10960-AAC                                                                                                                                                                                                                                                                            |
| PAR: <sup>1</sup>       | <b>9.32 dB</b>                                                                                                                                                                                                                                                                       |
| MIF: <sup>2</sup>       | <b>-4.24 dB</b>                                                                                                                                                                                                                                                                      |
| Standard Reference:     | SPEAG                                                                                                                                                                                                                                                                                |
| Category:               | Random amplitude modulation                                                                                                                                                                                                                                                          |
| Modulation:             | 64-QAM                                                                                                                                                                                                                                                                               |
| Frequency Band:         | Band n34 (2010 - 2025 MHz)<br>Band n38 (2570 - 2620 MHz)<br>Band n39 (1880 - 1920 MHz)<br>Band n40 (2300 - 2400 MHz)<br>Band n48 (3550 - 3700 MHz)<br>Band n50 (1432 - 1517 MHz)<br>Band n51 (1427 - 1432 MHz)<br>Band n53 (2483.5 - 2495 MHz)<br>Validation band (0.0 - 6000.0 MHz) |
| Detailed Specification: | Multiplexing Scheme: CP-OFDM<br>Modulation Scheme: 64-QAM<br>Subcarrier Spacing: 15 kHz<br>Model: TM 3.1<br>Data Type: PN9                                                                                                                                                           |
| Bandwidth:              | 5.0 MHz                                                                                                                                                                                                                                                                              |
| Integration Time:       | 10.0 ms                                                                                                                                                                                                                                                                              |

<sup>1</sup> PAR (0.1%) in accordance with FCC KDB 971168, Section 6.0 "Measurement of the Peak-to-Average Power Ratio (PAPR)"

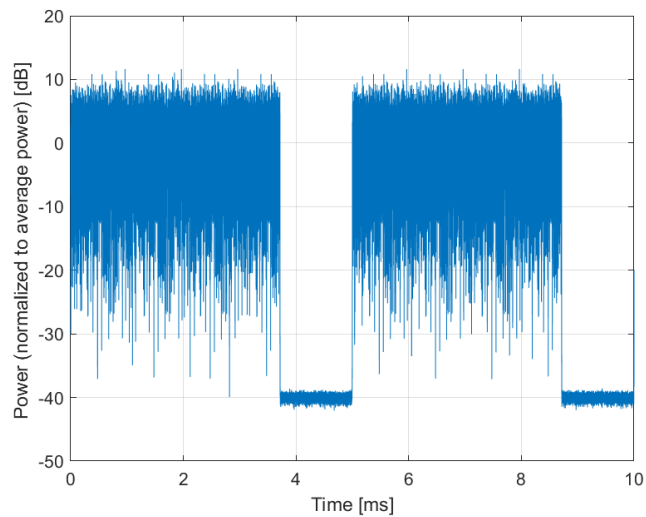
<sup>2</sup> Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).



Complementary Cumulative Distribution Function (CCDF)



Frequency Domain



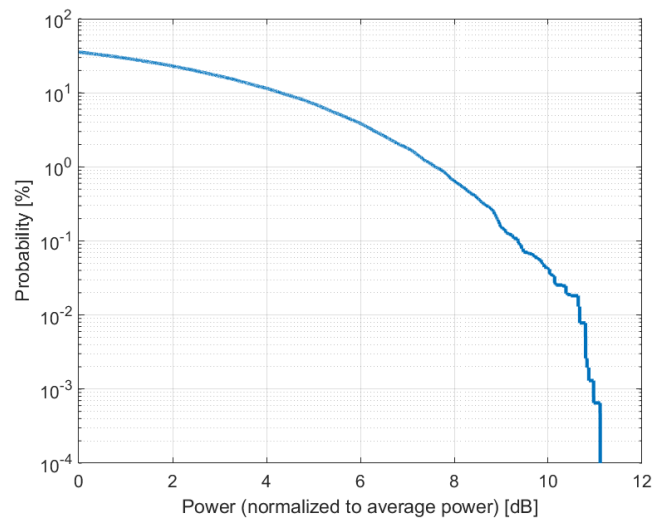
Time Domain

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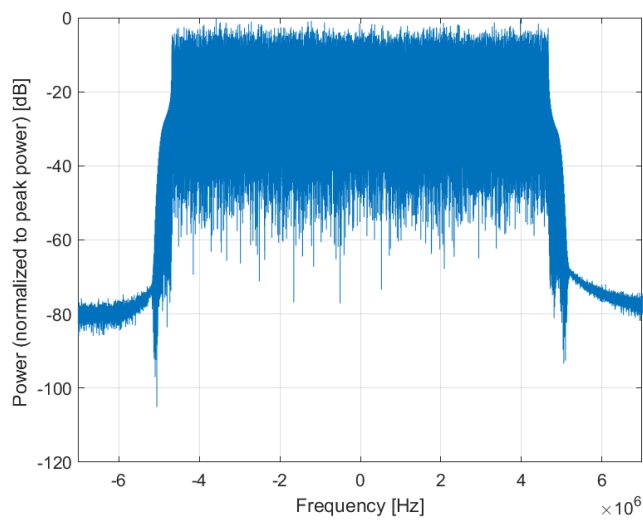
|                         |                                                                                                                                                                                                                                                                                                                                                                                                              |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Name:                   | <b>5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 15 kHz)</b>                                                                                                                                                                                                                                                                                                                                                    |
| Group:                  | 5G NR FR1 TDD                                                                                                                                                                                                                                                                                                                                                                                                |
| UID:                    | 10961-AAB                                                                                                                                                                                                                                                                                                                                                                                                    |
| PAR: <sup>1</sup>       | <b>9.36 dB</b>                                                                                                                                                                                                                                                                                                                                                                                               |
| MIF: <sup>2</sup>       | <b>-4.22 dB</b>                                                                                                                                                                                                                                                                                                                                                                                              |
| Standard Reference:     | SPEAG                                                                                                                                                                                                                                                                                                                                                                                                        |
| Category:               | Random amplitude modulation                                                                                                                                                                                                                                                                                                                                                                                  |
| Modulation:             | 64-QAM                                                                                                                                                                                                                                                                                                                                                                                                       |
| Frequency Band:         | Band n34 (2010 - 2025 MHz)<br>Band n38 (2570 - 2620 MHz)<br>Band n39 (1880 - 1920 MHz)<br>Band n40 (2300 - 2400 MHz)<br>Band n41 (2496 - 2690 MHz)<br>Band n48 (3550 - 3700 MHz)<br>Band n50 (1432 - 1517 MHz)<br>Band n77 (3300 - 4200 MHz)<br>Band n78 (3300 - 3800 MHz)<br>Band n53 (2483.5 - 2495 MHz)<br>Band n90 (2496 - 2690 MHz)<br>Band n47 (5855 - 5925 MHz)<br>Validation band (0.0 - 6000.0 MHz) |
| Detailed Specification: | Multiplexing Scheme: CP-OFDM<br>Modulation Scheme: 64-QAM<br>Subcarrier Spacing: 15 kHz<br>Model: TM 3.1<br>Data Type: PN9                                                                                                                                                                                                                                                                                   |
| Bandwidth:              | 10.0 MHz                                                                                                                                                                                                                                                                                                                                                                                                     |
| Integration Time:       | 10.0 ms                                                                                                                                                                                                                                                                                                                                                                                                      |

<sup>1</sup> PAR (0.1%) in accordance with FCC KDB 971168, Section 6.0 "Measurement of the Peak-to-Average Power Ratio (PAPR)"

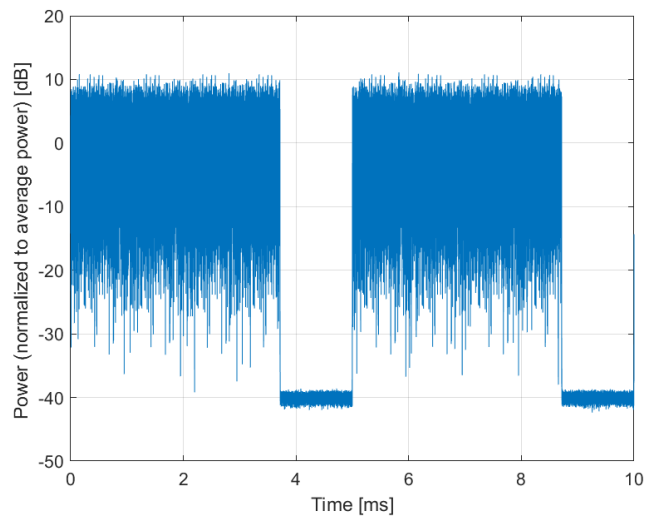
<sup>2</sup> Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).



Complementary Cumulative Distribution Function (CCDF)



Frequency Domain



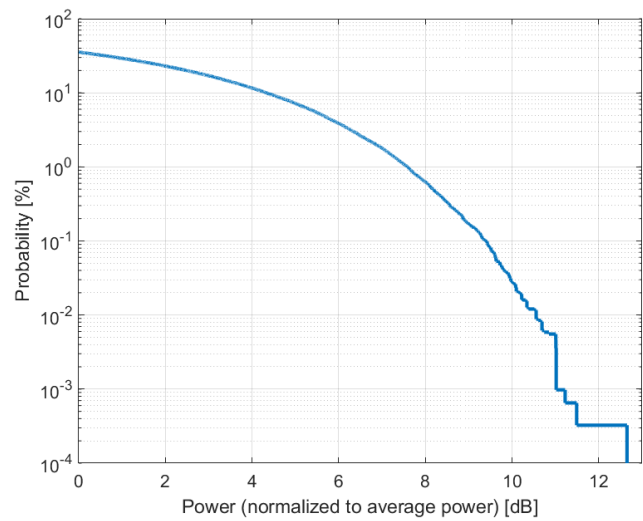
Time Domain

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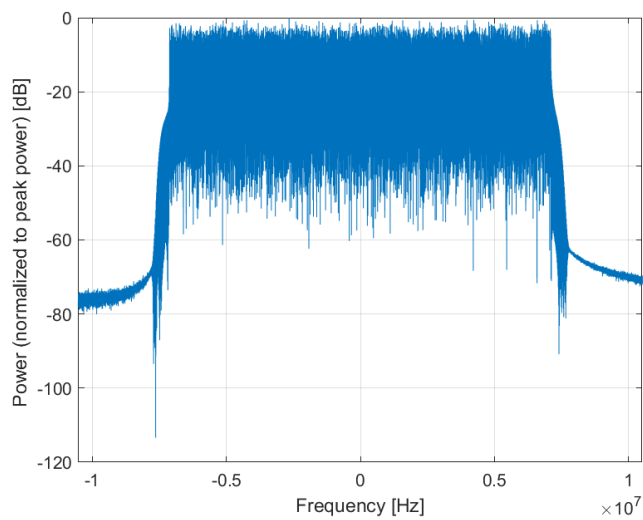
|                         |                                                                                                                                                                                                                                                                                                                                                |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Name:                   | <b>5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 15 kHz)</b>                                                                                                                                                                                                                                                                                      |
| Group:                  | 5G NR FR1 TDD                                                                                                                                                                                                                                                                                                                                  |
| UID:                    | 10962-AAB                                                                                                                                                                                                                                                                                                                                      |
| PAR: <sup>1</sup>       | <b>9.40 dB</b>                                                                                                                                                                                                                                                                                                                                 |
| MIF: <sup>2</sup>       | <b>-4.22 dB</b>                                                                                                                                                                                                                                                                                                                                |
| Standard Reference:     | SPEAG                                                                                                                                                                                                                                                                                                                                          |
| Category:               | Random amplitude modulation                                                                                                                                                                                                                                                                                                                    |
| Modulation:             | 64-QAM                                                                                                                                                                                                                                                                                                                                         |
| Frequency Band:         | Band n34 (2010 - 2025 MHz)<br>Band n38 (2570 - 2620 MHz)<br>Band n39 (1880 - 1920 MHz)<br>Band n40 (2300 - 2400 MHz)<br>Band n41 (2496 - 2690 MHz)<br>Band n48 (3550 - 3700 MHz)<br>Band n50 (1432 - 1517 MHz)<br>Band n77 (3300 - 4200 MHz)<br>Band n78 (3300 - 3800 MHz)<br>Band n90 (2496 - 2690 MHz)<br>Validation band (0.0 - 6000.0 MHz) |
| Detailed Specification: | Multiplexing Scheme: CP-OFDM<br>Modulation Scheme: 64-QAM<br>Subcarrier Spacing: 15 kHz<br>Model: TM 3.1<br>Data Type: PN9                                                                                                                                                                                                                     |
| Bandwidth:              | 15.0 MHz                                                                                                                                                                                                                                                                                                                                       |
| Integration Time:       | 10.0 ms                                                                                                                                                                                                                                                                                                                                        |

<sup>1</sup> PAR (0.1%) in accordance with FCC KDB 971168, Section 6.0 "Measurement of the Peak-to-Average Power Ratio (PAPR)"

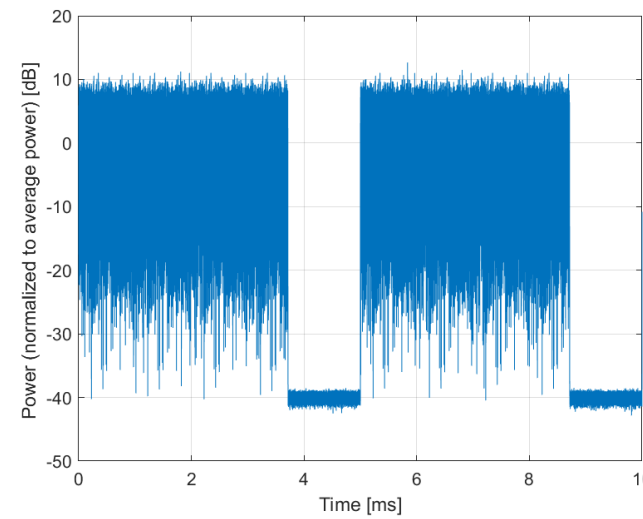
<sup>2</sup> Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).



Complementary Cumulative Distribution Function (CCDF)



Frequency Domain



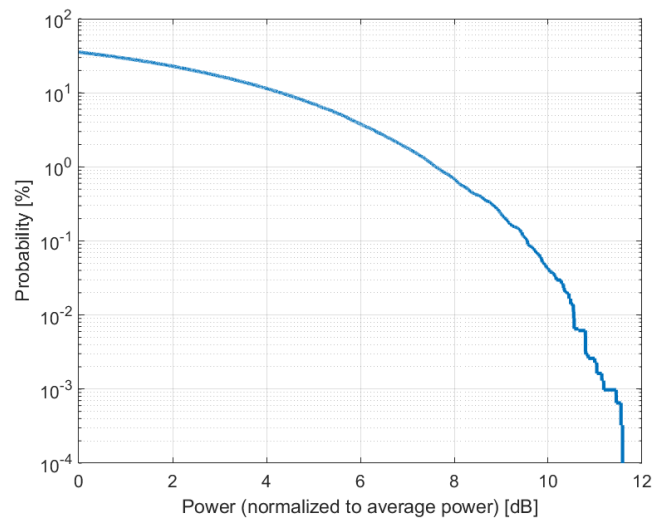
Time Domain

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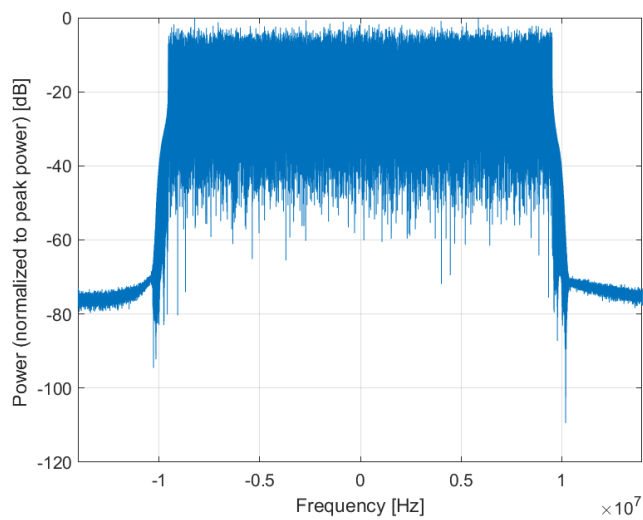
|                         |                                                                                                                                                                                                                                                                                                                                                |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Name:                   | <b>5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 15 kHz)</b>                                                                                                                                                                                                                                                                                      |
| Group:                  | 5G NR FR1 TDD                                                                                                                                                                                                                                                                                                                                  |
| UID:                    | 10963-AAB                                                                                                                                                                                                                                                                                                                                      |
| PAR: <sup>1</sup>       | <b>9.55 dB</b>                                                                                                                                                                                                                                                                                                                                 |
| MIF: <sup>2</sup>       | <b>-4.23 dB</b>                                                                                                                                                                                                                                                                                                                                |
| Standard Reference:     | SPEAG                                                                                                                                                                                                                                                                                                                                          |
| Category:               | Random amplitude modulation                                                                                                                                                                                                                                                                                                                    |
| Modulation:             | 64-QAM                                                                                                                                                                                                                                                                                                                                         |
| Frequency Band:         | Band n38 (2570 - 2620 MHz)<br>Band n39 (1880 - 1920 MHz)<br>Band n40 (2300 - 2400 MHz)<br>Band n41 (2496 - 2690 MHz)<br>Band n48 (3550 - 3700 MHz)<br>Band n50 (1432 - 1517 MHz)<br>Band n77 (3300 - 4200 MHz)<br>Band n78 (3300 - 3800 MHz)<br>Band n90 (2496 - 2690 MHz)<br>Band n47 (5855 - 5925 MHz)<br>Validation band (0.0 - 6000.0 MHz) |
| Detailed Specification: | Multiplexing Scheme: CP-OFDM<br>Modulation Scheme: 64-QAM<br>Subcarrier Spacing: 15 kHz<br>Model: TM 3.1<br>Data Type: PN9                                                                                                                                                                                                                     |
| Bandwidth:              | 20.0 MHz                                                                                                                                                                                                                                                                                                                                       |
| Integration Time:       | 10.0 ms                                                                                                                                                                                                                                                                                                                                        |

<sup>1</sup> PAR (0.1%) in accordance with FCC KDB 971168, Section 6.0 "Measurement of the Peak-to-Average Power Ratio (PAPR)"

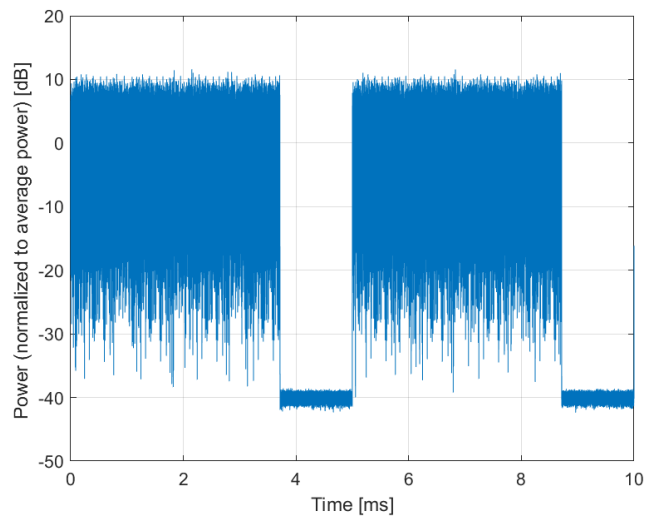
<sup>2</sup> Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).



Complementary Cumulative Distribution Function (CCDF)



Frequency Domain



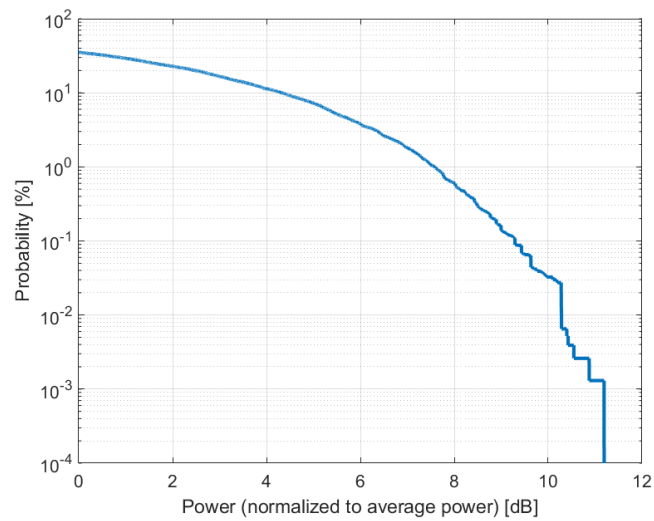
Time Domain

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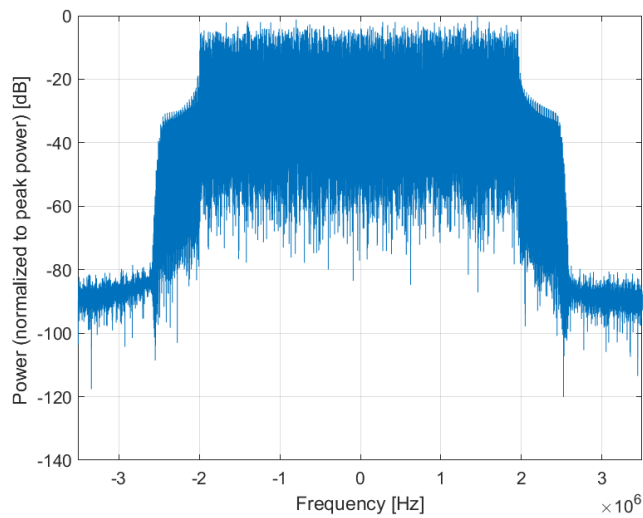
|                         |                                                                                                                                                                                                                                                                                      |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Name:                   | 5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 30 kHz)                                                                                                                                                                                                                                    |
| Group:                  | 5G NR FR1 TDD                                                                                                                                                                                                                                                                        |
| UID:                    | 10964-AAC                                                                                                                                                                                                                                                                            |
| PAR: <sup>1</sup>       | 9.29 dB                                                                                                                                                                                                                                                                              |
| MIF: <sup>2</sup>       | -4.24 dB                                                                                                                                                                                                                                                                             |
| Standard Reference:     | SPEAG                                                                                                                                                                                                                                                                                |
| Category:               | Random amplitude modulation                                                                                                                                                                                                                                                          |
| Modulation:             | 64-QAM                                                                                                                                                                                                                                                                               |
| Frequency Band:         | Band n34 (2010 - 2025 MHz)<br>Band n38 (2570 - 2620 MHz)<br>Band n39 (1880 - 1920 MHz)<br>Band n40 (2300 - 2400 MHz)<br>Band n48 (3550 - 3700 MHz)<br>Band n50 (1432 - 1517 MHz)<br>Band n51 (1427 - 1432 MHz)<br>Band n53 (2483.5 - 2495 MHz)<br>Validation band (0.0 - 6000.0 MHz) |
| Detailed Specification: | Multiplexing Scheme: CP-OFDM<br>Modulation Scheme: 64-QAM<br>Subcarrier Spacing: 30 kHz<br>Model: TM 3.1<br>Data Type: PN9                                                                                                                                                           |
| Bandwidth:              | 5.0 MHz                                                                                                                                                                                                                                                                              |
| Integration Time:       | 10.0 ms                                                                                                                                                                                                                                                                              |

<sup>1</sup> PAR (0.1%) in accordance with FCC KDB 971168, Section 6.0 "Measurement of the Peak-to-Average Power Ratio (PAPR)"

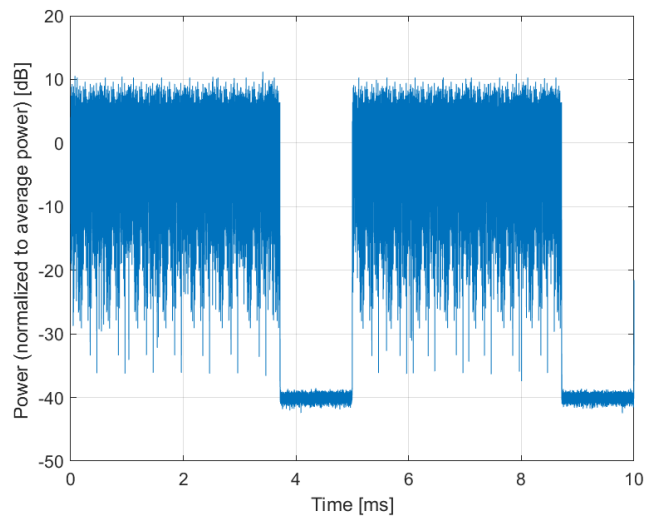
<sup>2</sup> Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).



Complementary Cumulative Distribution Function (CCDF)



Frequency Domain



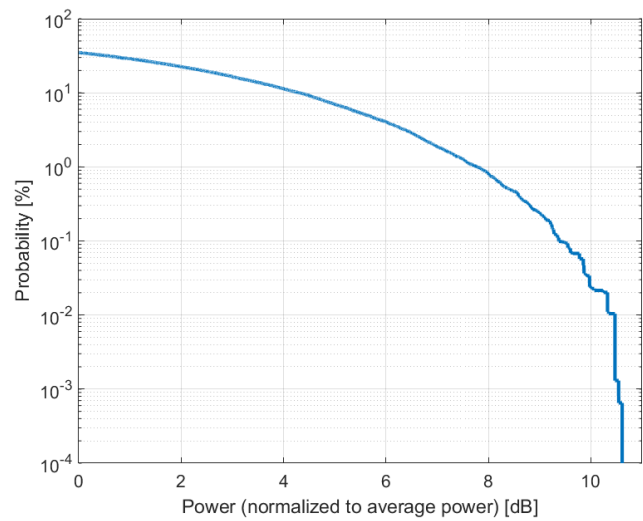
Time Domain

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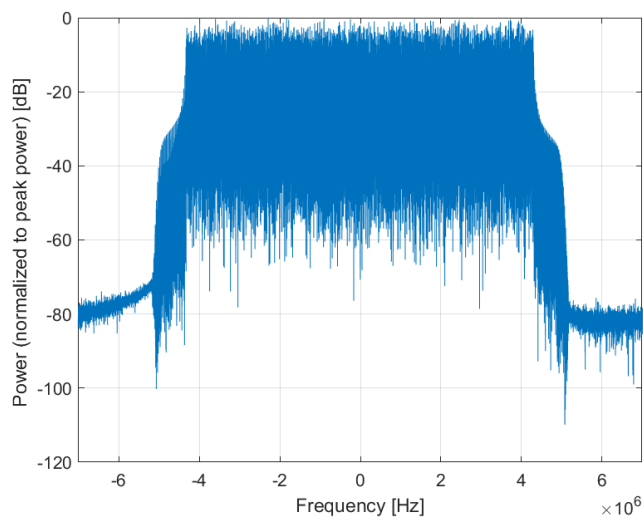
|                         |                                                                                                                                                                                                                                                                                                                                                                                                              |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Name:                   | 5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 30 kHz)                                                                                                                                                                                                                                                                                                                                                           |
| Group:                  | 5G NR FR1 TDD                                                                                                                                                                                                                                                                                                                                                                                                |
| UID:                    | 10965-AAB                                                                                                                                                                                                                                                                                                                                                                                                    |
| PAR: <sup>1</sup>       | 9.37 dB                                                                                                                                                                                                                                                                                                                                                                                                      |
| MIF: <sup>2</sup>       | -4.23 dB                                                                                                                                                                                                                                                                                                                                                                                                     |
| Standard Reference:     | SPEAG                                                                                                                                                                                                                                                                                                                                                                                                        |
| Category:               | Random amplitude modulation                                                                                                                                                                                                                                                                                                                                                                                  |
| Modulation:             | 64-QAM                                                                                                                                                                                                                                                                                                                                                                                                       |
| Frequency Band:         | Band n34 (2010 - 2025 MHz)<br>Band n38 (2570 - 2620 MHz)<br>Band n39 (1880 - 1920 MHz)<br>Band n40 (2300 - 2400 MHz)<br>Band n41 (2496 - 2690 MHz)<br>Band n48 (3550 - 3700 MHz)<br>Band n50 (1432 - 1517 MHz)<br>Band n77 (3300 - 4200 MHz)<br>Band n78 (3300 - 3800 MHz)<br>Band n53 (2483.5 - 2495 MHz)<br>Band n90 (2496 - 2690 MHz)<br>Band n47 (5855 - 5925 MHz)<br>Validation band (0.0 - 6000.0 MHz) |
| Detailed Specification: | Multiplexing Scheme: CP-OFDM<br>Modulation Scheme: 64-QAM<br>Subcarrier Spacing: 30 kHz<br>Model: TM 3.1<br>Data Type: PN9                                                                                                                                                                                                                                                                                   |
| Bandwidth:              | 10.0 MHz                                                                                                                                                                                                                                                                                                                                                                                                     |
| Integration Time:       | 10.0 ms                                                                                                                                                                                                                                                                                                                                                                                                      |

<sup>1</sup> PAR (0.1%) in accordance with FCC KDB 971168, Section 6.0 "Measurement of the Peak-to-Average Power Ratio (PAPR)"

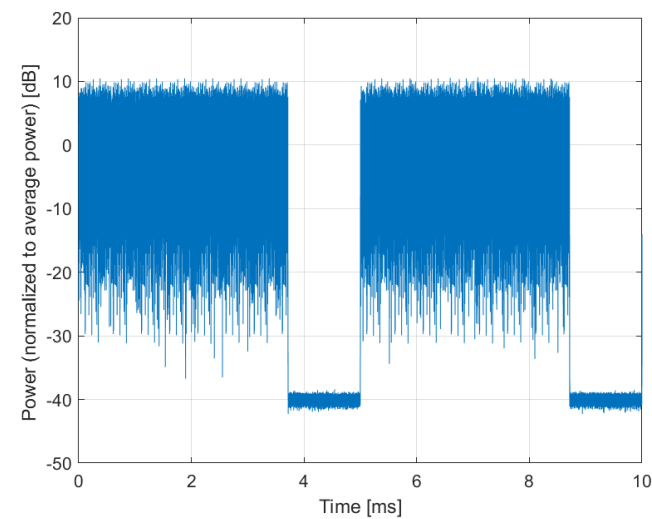
<sup>2</sup> Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).



Complementary Cumulative Distribution Function (CCDF)



Frequency Domain



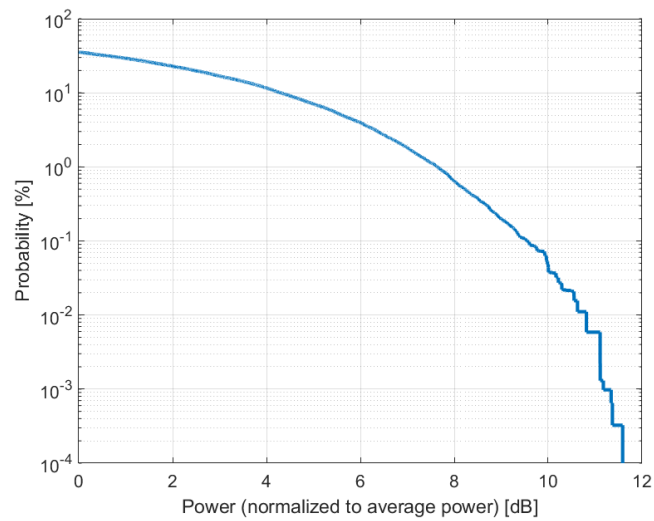
Time Domain

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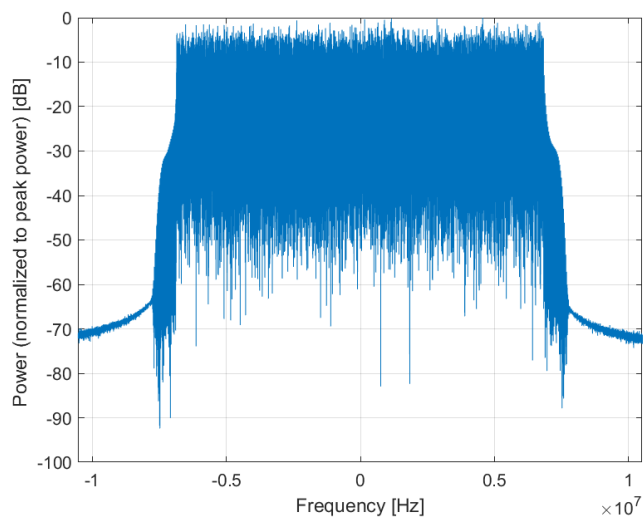
|                         |                                                                                                                                                                                                                                                                                                                                                |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Name:                   | <b>5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 30 kHz)</b>                                                                                                                                                                                                                                                                                      |
| Group:                  | 5G NR FR1 TDD                                                                                                                                                                                                                                                                                                                                  |
| UID:                    | 10966-AAB                                                                                                                                                                                                                                                                                                                                      |
| PAR: <sup>1</sup>       | <b>9.55 dB</b>                                                                                                                                                                                                                                                                                                                                 |
| MIF: <sup>2</sup>       | <b>-4.22 dB</b>                                                                                                                                                                                                                                                                                                                                |
| Standard Reference:     | SPEAG                                                                                                                                                                                                                                                                                                                                          |
| Category:               | Random amplitude modulation                                                                                                                                                                                                                                                                                                                    |
| Modulation:             | 64-QAM                                                                                                                                                                                                                                                                                                                                         |
| Frequency Band:         | Band n34 (2010 - 2025 MHz)<br>Band n38 (2570 - 2620 MHz)<br>Band n39 (1880 - 1920 MHz)<br>Band n40 (2300 - 2400 MHz)<br>Band n41 (2496 - 2690 MHz)<br>Band n48 (3550 - 3700 MHz)<br>Band n50 (1432 - 1517 MHz)<br>Band n77 (3300 - 4200 MHz)<br>Band n78 (3300 - 3800 MHz)<br>Band n90 (2496 - 2690 MHz)<br>Validation band (0.0 - 6000.0 MHz) |
| Detailed Specification: | Multiplexing Scheme: CP-OFDM<br>Modulation Scheme: 64-QAM<br>Subcarrier Spacing: 30 kHz<br>Model: TM 3.1<br>Data Type: PN9                                                                                                                                                                                                                     |
| Bandwidth:              | 15.0 MHz                                                                                                                                                                                                                                                                                                                                       |
| Integration Time:       | 10.0 ms                                                                                                                                                                                                                                                                                                                                        |

<sup>1</sup> PAR (0.1%) in accordance with FCC KDB 971168, Section 6.0 "Measurement of the Peak-to-Average Power Ratio (PAPR)"

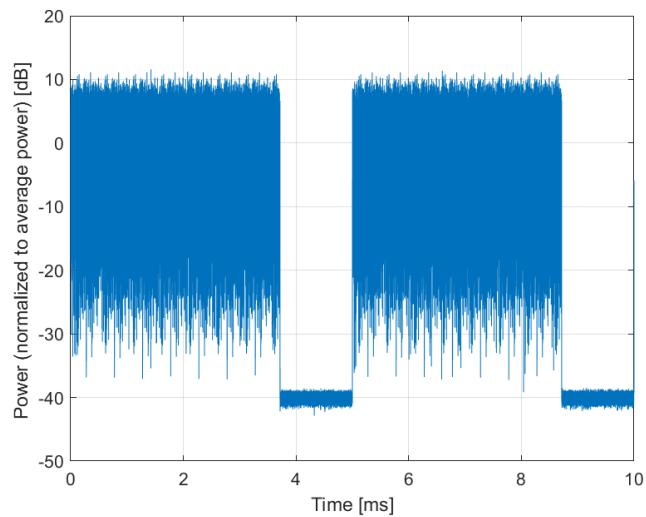
<sup>2</sup> Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).



Complementary Cumulative Distribution Function (CCDF)



Frequency Domain

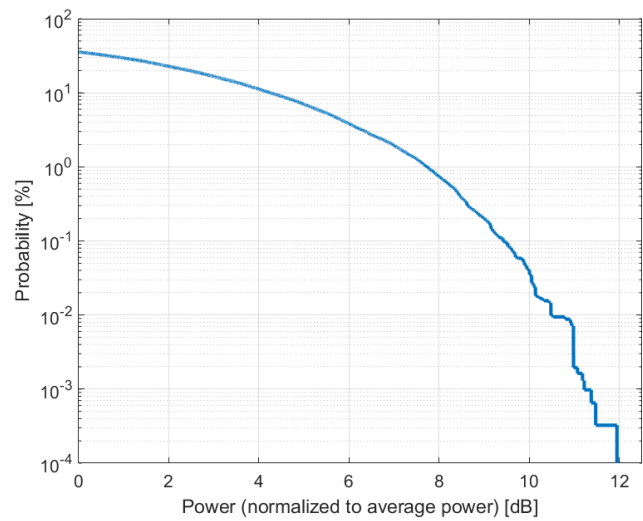


Time Domain

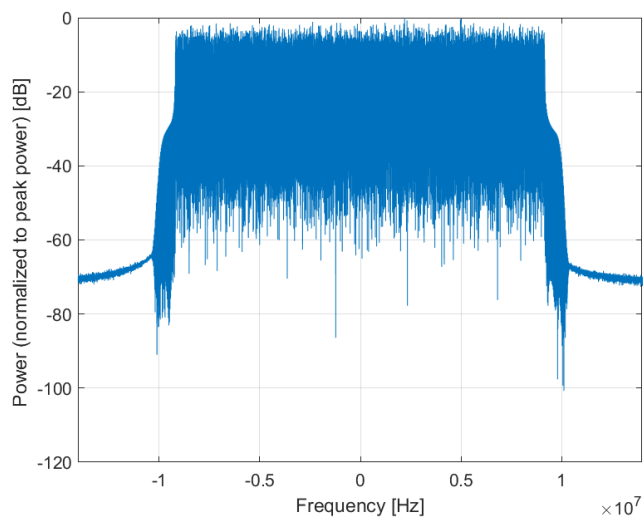
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|                         |                                                                                                                                                                                                                                                                                                                                                |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Name:                   | <b>5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 30 kHz)</b>                                                                                                                                                                                                                                                                                      |
| Group:                  | 5G NR FR1 TDD                                                                                                                                                                                                                                                                                                                                  |
| UID:                    | 10967-AAB                                                                                                                                                                                                                                                                                                                                      |
| PAR: <sup>1</sup>       | <b>9.42 dB</b>                                                                                                                                                                                                                                                                                                                                 |
| MIF: <sup>2</sup>       | <b>-4.23 dB</b>                                                                                                                                                                                                                                                                                                                                |
| Standard Reference:     | SPEAG                                                                                                                                                                                                                                                                                                                                          |
| Category:               | Random amplitude modulation                                                                                                                                                                                                                                                                                                                    |
| Modulation:             | 64-QAM                                                                                                                                                                                                                                                                                                                                         |
| Frequency Band:         | Band n38 (2570 - 2620 MHz)<br>Band n39 (1880 - 1920 MHz)<br>Band n40 (2300 - 2400 MHz)<br>Band n41 (2496 - 2690 MHz)<br>Band n48 (3550 - 3700 MHz)<br>Band n50 (1432 - 1517 MHz)<br>Band n77 (3300 - 4200 MHz)<br>Band n78 (3300 - 3800 MHz)<br>Band n90 (2496 - 2690 MHz)<br>Band n47 (5855 - 5925 MHz)<br>Validation band (0.0 - 6000.0 MHz) |
| Detailed Specification: | Multiplexing Scheme: CP-OFDM<br>Modulation Scheme: 64-QAM<br>Subcarrier Spacing: 30 kHz<br>Model: TM 3.1<br>Data Type: PN9                                                                                                                                                                                                                     |
| Bandwidth:              | 20.0 MHz                                                                                                                                                                                                                                                                                                                                       |
| Integration Time:       | 10.0 ms                                                                                                                                                                                                                                                                                                                                        |

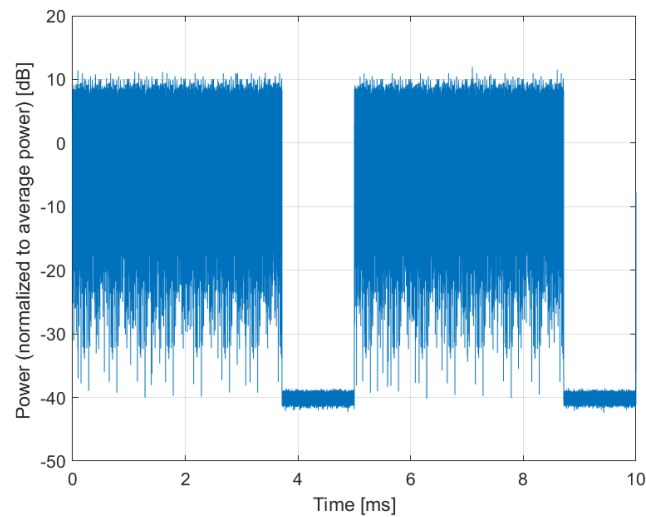
<sup>1</sup> PAR (0.1%) in accordance with FCC KDB 971168, Section 6.0 "Measurement of the Peak-to-Average Power Ratio (PAPR)"  
<sup>2</sup> Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).



Complementary Cumulative Distribution Function (CCDF)



Frequency Domain



Time Domain

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Name: **5G NR DL (CP-OFDM, TM 3.1, 100 MHz, 64-QAM, 30 kHz)**

Group: 5G NR FR1 TDD

UID: 10968-AAB

PAR: <sup>1</sup> **9.49 dB**

MIF: <sup>2</sup> **-4.23 dB**

Standard Reference: SPEAG

Category: Random amplitude modulation

Modulation: 64-QAM

Frequency Band: Band n41 (2496 - 2690 MHz)  
Band n48 (3550 - 3700 MHz)  
Band n77 (3300 - 4200 MHz)  
Band n78 (3300 - 3800 MHz)  
Band n79 (4400 - 5000 MHz)  
Band n90 (2496 - 2690 MHz)  
Validation band (0.0 - 6000.0 MHz)

Detailed Specification: Multiplexing Scheme: CP-OFDM

Modulation Scheme: 64-QAM

Subcarrier Spacing: 30 kHz

Model: TM 3.1

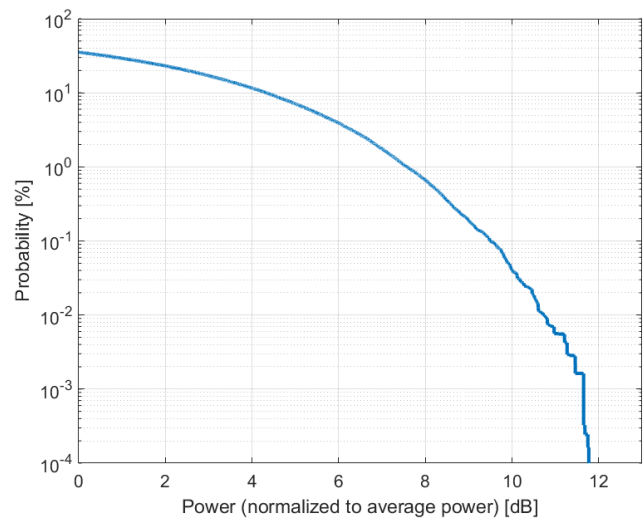
Data Type: PN9

Bandwidth: 100.0 MHz

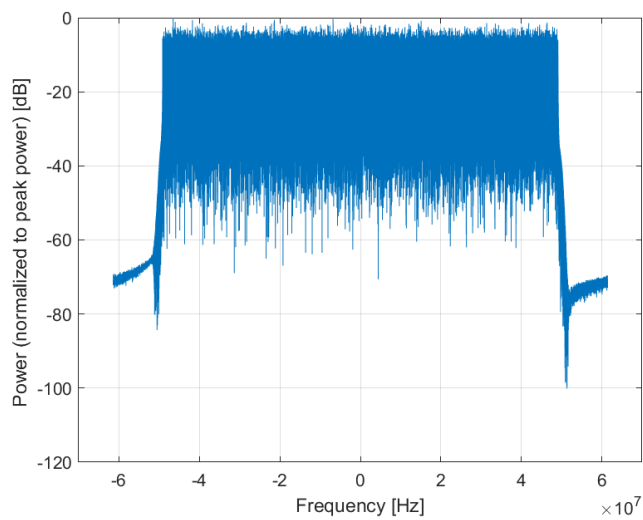
Integration Time: 10.0 ms

<sup>1</sup> PAR (0.1%) in accordance with FCC KDB 971168, Section 6.0 "Measurement of the Peak-to-Average Power Ratio (PAPR)"

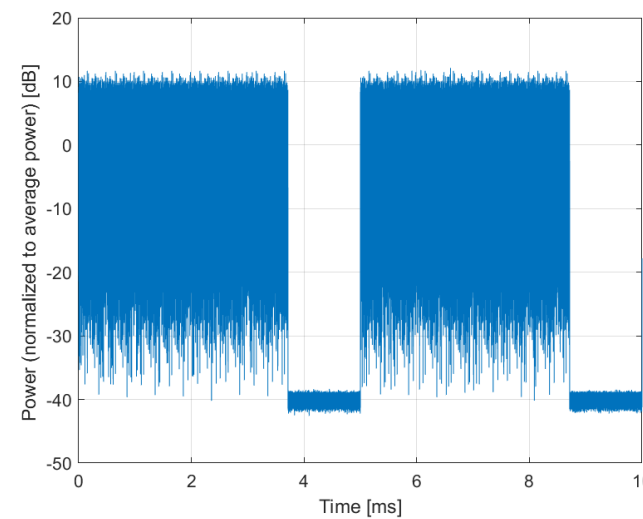
<sup>2</sup> Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).



Complementary Cumulative Distribution Function (CCDF)



Frequency Domain

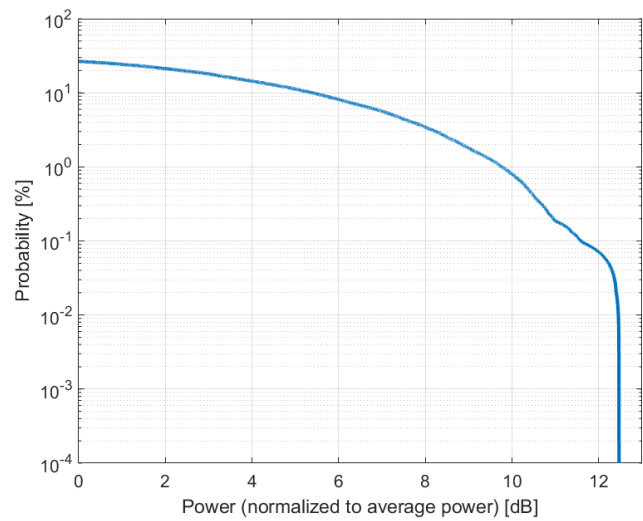


Time Domain

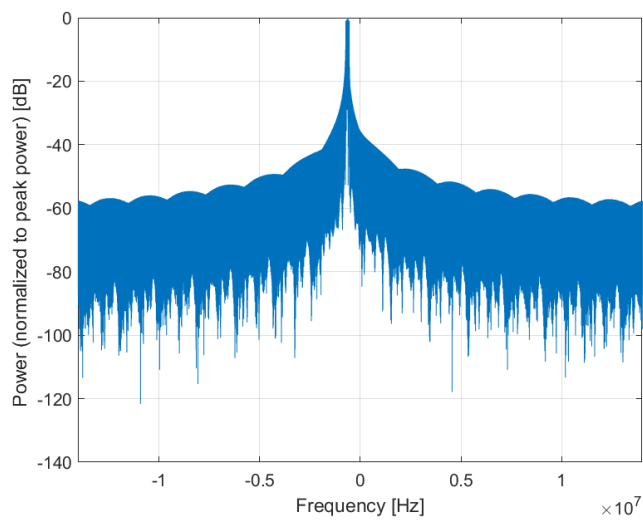
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|                         |                                                                                                                                                                                                                                                                                                                  |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Name:                   | <b>5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz)</b>                                                                                                                                                                                                                                                               |
| Group:                  | 5G NR FR1 TDD                                                                                                                                                                                                                                                                                                    |
| UID:                    | 10972-AAA                                                                                                                                                                                                                                                                                                        |
| PAR: <sup>1</sup>       | <b>11.59 dB</b>                                                                                                                                                                                                                                                                                                  |
| MIF: <sup>2</sup>       | <b>-1.65 dB</b>                                                                                                                                                                                                                                                                                                  |
| Standard Reference:     | SPEAG                                                                                                                                                                                                                                                                                                            |
| Category:               | Random amplitude modulation                                                                                                                                                                                                                                                                                      |
| Modulation:             | QPSK                                                                                                                                                                                                                                                                                                             |
| Frequency Band:         | Band n38 (2570 - 2620 MHz)<br>Band n39 (1880 - 1920 MHz)<br>Band n40 (2300 - 2400 MHz)<br>Band n41 (2496 - 2690 MHz)<br>Band n48 (3550 - 3700 MHz)<br>Band n50 (1432 - 1517 MHz)<br>Band n77 (3300 - 4200 MHz)<br>Band n78 (3300 - 3800 MHz)<br>Band n79 (4400 - 5000 MHz)<br>Validation band (0.0 - 6000.0 MHz) |
| Detailed Specification: | Multiplexing Scheme: CP-OFDM<br>Modulation Scheme: QPSK<br>Subcarrier Spacing: 15 kHz<br>Number RBs: 1<br>Slot Format Index: -<br>Data Type: PN9                                                                                                                                                                 |
| Bandwidth:              | 20.0 MHz                                                                                                                                                                                                                                                                                                         |
| Integration Time:       | 10.0 ms                                                                                                                                                                                                                                                                                                          |

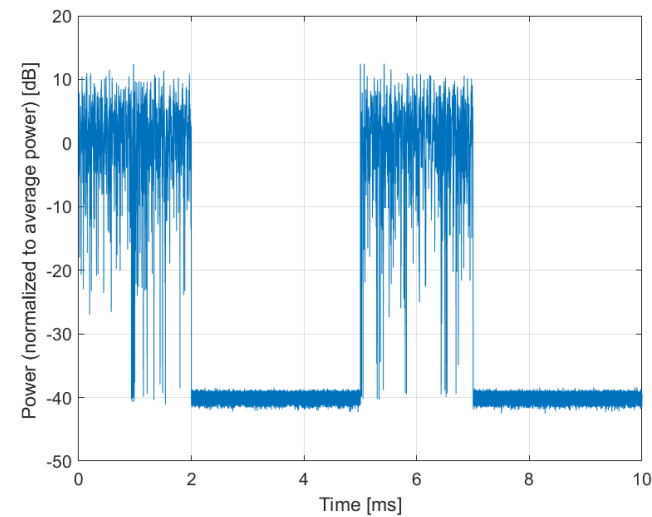
<sup>1</sup> PAR (0.1%) in accordance with FCC KDB 971168, Section 6.0 "Measurement of the Peak-to-Average Power Ratio (PAPR)"  
<sup>2</sup> Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).



**Complementary Cumulative Distribution Function (CCDF)**



**Frequency Domain**

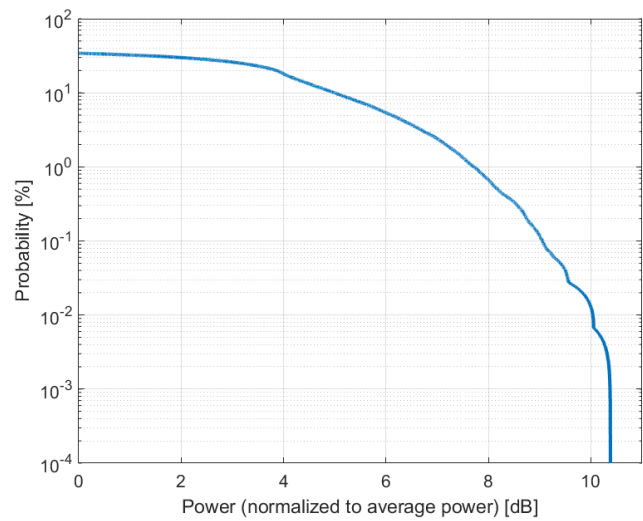


**Time Domain**

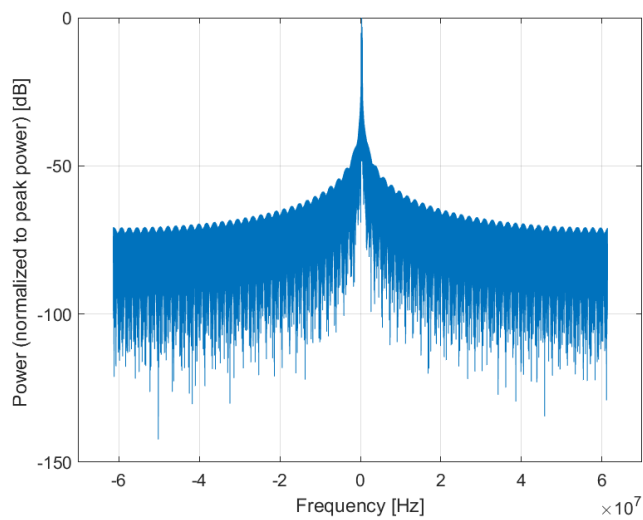
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|                         |                                                                                                                                                                                          |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Name:                   | <b>5G NR (DFT-s-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz)</b>                                                                                                                                   |
| Group:                  | 5G NR FR1 TDD                                                                                                                                                                            |
| UID:                    | 10973-AAA                                                                                                                                                                                |
| PAR: <sup>1</sup>       | <b>9.06 dB</b>                                                                                                                                                                           |
| MIF: <sup>2</sup>       | <b>-1.64 dB</b>                                                                                                                                                                          |
| Standard Reference:     | SPEAG                                                                                                                                                                                    |
| Category:               | Random amplitude modulation                                                                                                                                                              |
| Modulation:             | QPSK                                                                                                                                                                                     |
| Frequency Band:         | Band n41 (2496 - 2690 MHz)<br>Band n48 (3550 - 3700 MHz)<br>Band n77 (3300 - 4200 MHz)<br>Band n78 (3300 - 3800 MHz)<br>Band n79 (4400 - 5000 MHz)<br>Validation band (0.0 - 6000.0 MHz) |
| Detailed Specification: | Multiplexing Scheme: DFT-s-OFDM<br>Modulation Scheme: QPSK<br>Subcarrier Spacing: 30 kHz<br>Number RBs: 1<br>Slot Format Index: -<br>Data Type: PN9                                      |
| Bandwidth:              | 100.0 MHz                                                                                                                                                                                |
| Integration Time:       | 10.0 ms                                                                                                                                                                                  |

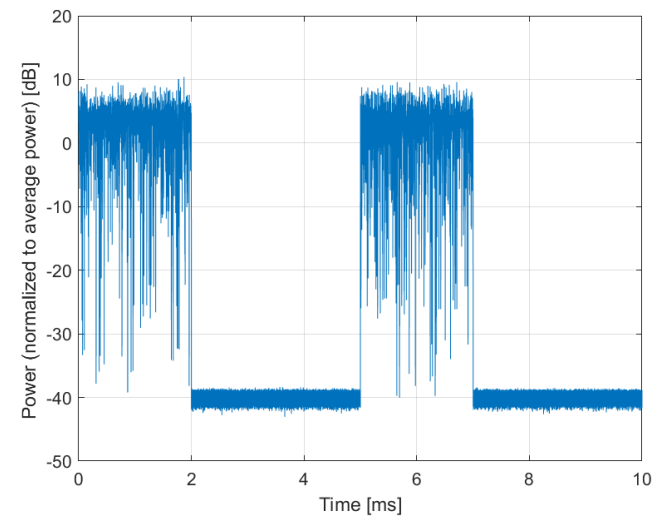
<sup>1</sup> PAR (0.1%) in accordance with FCC KDB 971168, Section 6.0 "Measurement of the Peak-to-Average Power Ratio (PAPR)"  
<sup>2</sup> Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).



Complementary Cumulative Distribution Function (CCDF)



Frequency Domain



Time Domain

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Name: **5G NR (CP-OFDM, 100% RB, 100 MHz, 256-QAM, 30 kHz)**

Group: 5G NR FR1 TDD

UID: 10974-AAA

PAR: <sup>1</sup> **10.28 dB**

MIF: <sup>2</sup> **-3.48 dB**

Standard Reference: SPEAG

Category: Random amplitude modulation

Modulation: 256-QAM

Frequency Band: Band n41 (2496 - 2690 MHz)  
Band n48 (3550 - 3700 MHz)  
Band n77 (3300 - 4200 MHz)  
Band n78 (3300 - 3800 MHz)  
Band n79 (4400 - 5000 MHz)  
Validation band (0.0 - 6000.0 MHz)

Detailed Specification: Multiplexing Scheme: CP-OFDM

Modulation Scheme: 256-QAM

Subcarrier Spacing: 30 kHz

Number RBs: 273

Slot Format Index: -

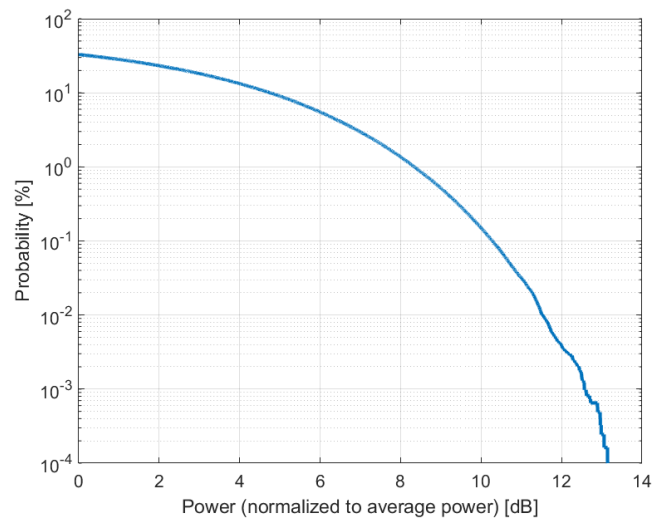
Data Type: PN9

Bandwidth: 100.0 MHz

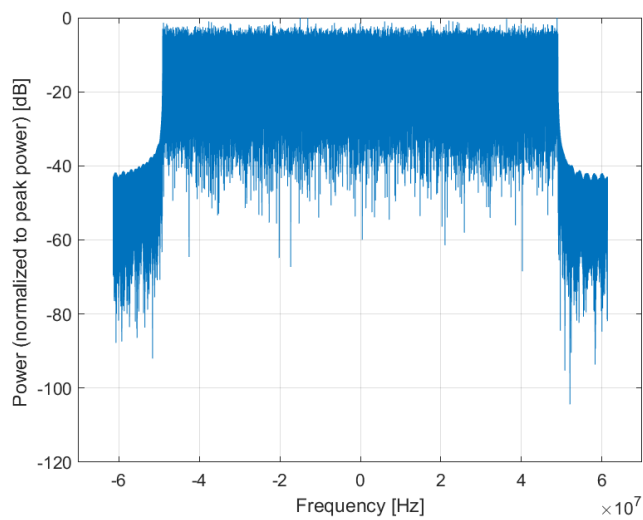
Integration Time: 10.0 ms

<sup>1</sup> PAR (0.1%) in accordance with FCC KDB 971168, Section 6.0 "Measurement of the Peak-to-Average Power Ratio (PAPR)"

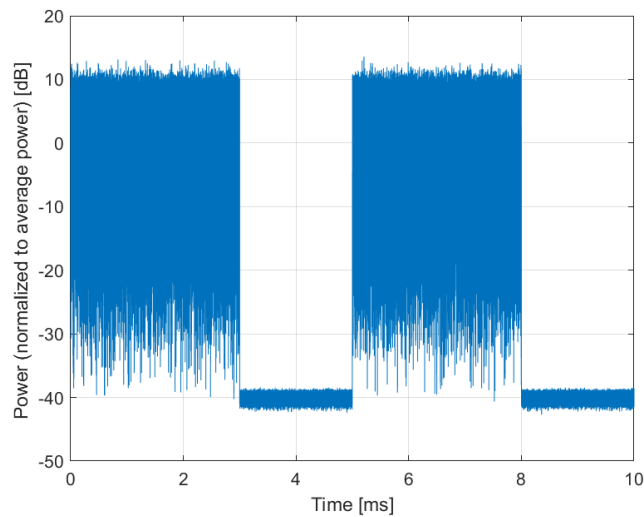
<sup>2</sup> Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).



Complementary Cumulative Distribution Function (CCDF)



Frequency Domain



Time Domain