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Name:	**5G NR (DFT-s-OFDM, 50% RB, 5 MHz, QPSK, 15 kHz)**
Group:	5G NR FR1 FDD
UID:	10936-AAA
PAR: [1]	**5.90 dB**
MIF: [2]	**-17.91 dB**
Standard Reference:	SPEAG
Category:	Random amplitude modulation
Modulation:	QPSK
Frequency Band:	Band n2 (1850 - 1910 MHz) Band n2 (824 - 849 MHz) Band n25 (1850 - 1915 MHz) Band n71 (1710 - 1780 MHz) Band n71 (617 - 652 MHz) Validation band (0.0 - 6000.0 MHz)
Detailed Specification:	Multiplexing Scheme: DFT-s-OFDM Modulation Scheme: QPSK Subcarrier Spacing: 15 kHz Number RBs: 1 Data Type: PN9
Bandwidth:	5.0 MHz
Integration Time:	10.0 ms

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

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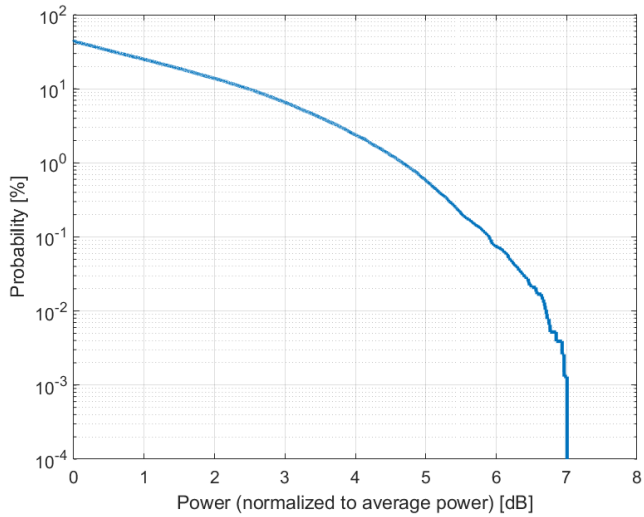
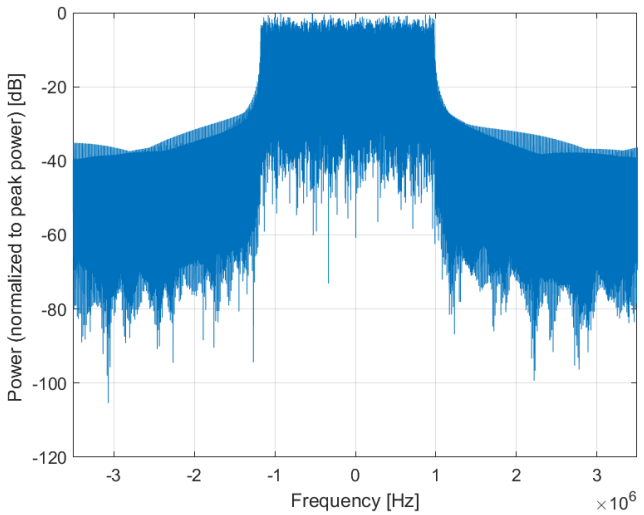
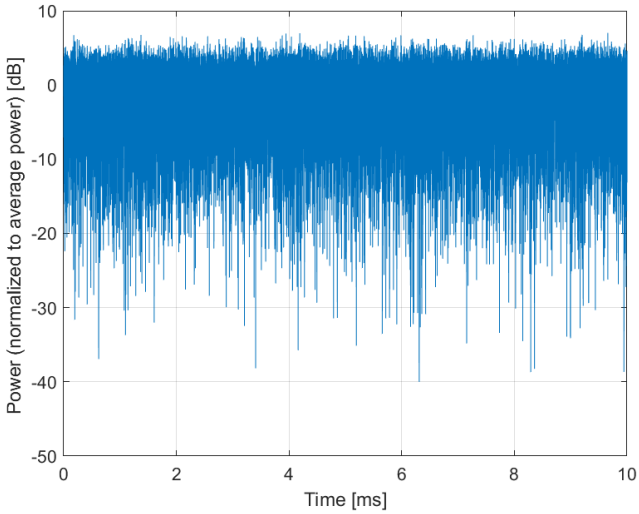


Complementary Cumulative Distribution Function (CCDF)



Frequency Domain



Time Domain

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Name:	**5G NR (DFT-s-OFDM, 50% RB, 10 MHz, QPSK, 15 kHz)**
Group:	5G NR FR1 FDD
UID:	10937-AAA
PAR: [1]	**5.77 dB**
MIF: [2]	**-18.38 dB**
Standard Reference:	SPEAG
Category:	Random amplitude modulation
Modulation:	QPSK
Frequency Band:	Band n2 (1850 - 1910 MHz) Band n2 (824 - 849 MHz) Band n25 (1850 - 1915 MHz) Band n71 (1710 - 1780 MHz) Band n71 (617 - 652 MHz) Validation band (0.0 - 6000.0 MHz)
Detailed Specification:	Multiplexing Scheme: DFT-s-OFDM Modulation Scheme: QPSK Subcarrier Spacing: 15 kHz Number RBs: 1 Data Type: PN9
Bandwidth:	10.0 MHz
Integration Time:	10.0 ms

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

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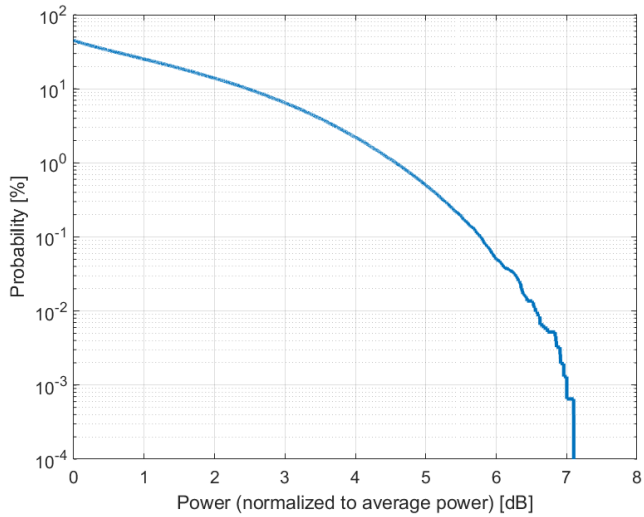
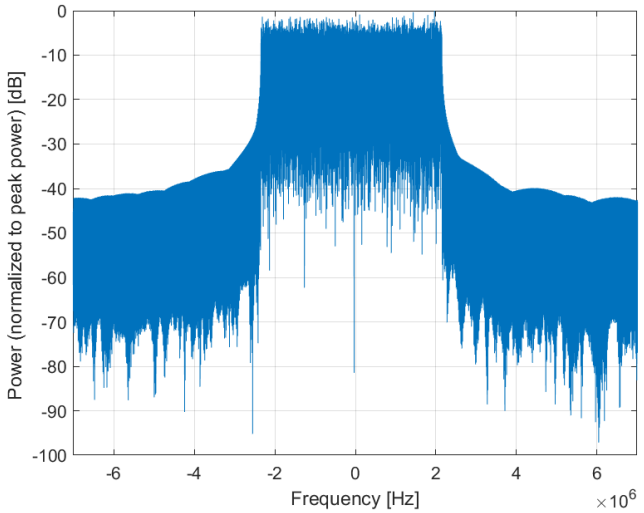
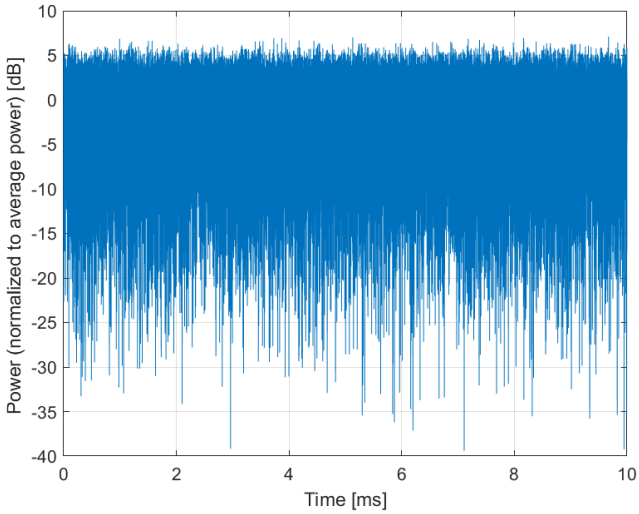


Complementary Cumulative Distribution Function (CCDF)



Frequency Domain



Time Domain

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Name:	**5G NR (DFT-s-OFDM, 50% RB, 15 MHz, QPSK, 15 kHz)**
Group:	5G NR FR1 FDD
UID:	10938-AAA
PAR: [1]	**5.90 dB**
MIF: [2]	**-18.58 dB**
Standard Reference:	SPEAG
Category:	Random amplitude modulation
Modulation:	QPSK
Frequency Band:	Band n2 (1850 - 1910 MHz) Band n2 (824 - 849 MHz) Band n25 (1850 - 1915 MHz) Band n71 (1710 - 1780 MHz) Band n71 (617 - 652 MHz) Validation band (0.0 - 6000.0 MHz)
Detailed Specification:	Multiplexing Scheme: DFT-s-OFDM Modulation Scheme: QPSK Subcarrier Spacing: 15 kHz Number RBs: 1 Data Type: PN9
Bandwidth:	15.0 MHz
Integration Time:	10.0 ms

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

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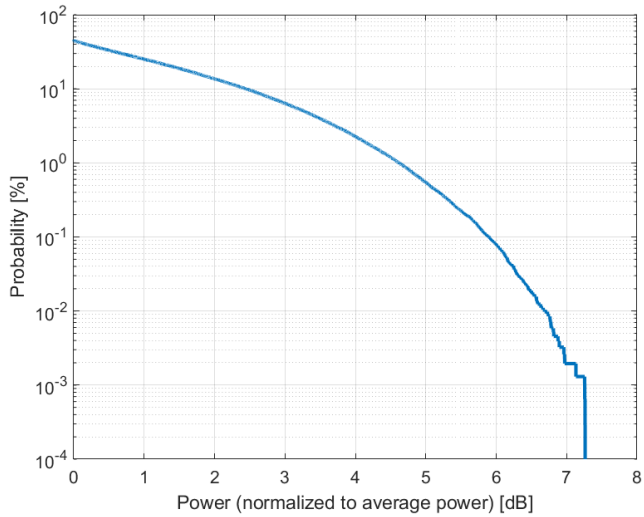
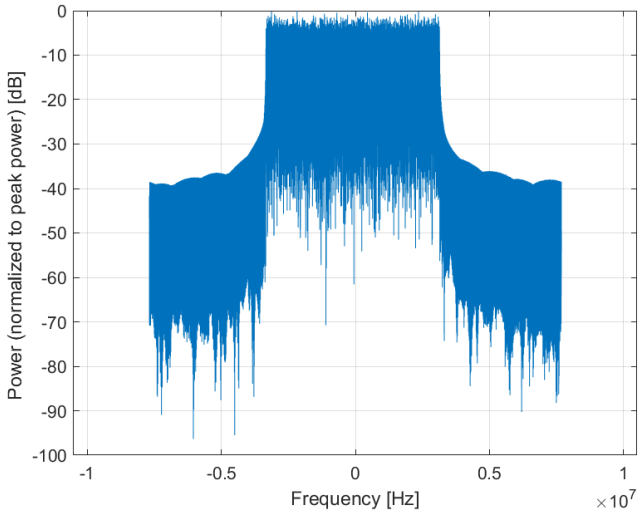
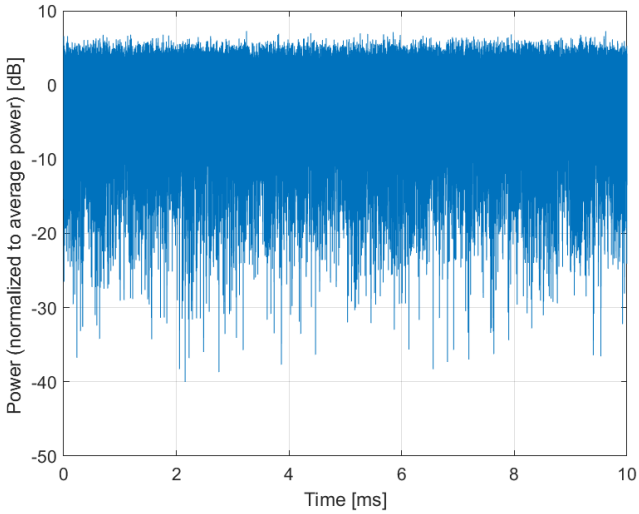


Complementary Cumulative Distribution Function (CCDF)



Frequency Domain



Time Domain

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Name:	**5G NR (DFT-s-OFDM, 50% RB, 20 MHz, QPSK, 15 kHz)**
Group:	5G NR FR1 FDD
UID:	10939-AAA
PAR: [1]	**5.82 dB**
MIF: [2]	**-18.65 dB**
Standard Reference:	SPEAG
Category:	Random amplitude modulation
Modulation:	QPSK
Frequency Band:	Band n2 (1850 - 1910 MHz) Band n2 (824 - 849 MHz) Band n25 (1850 - 1915 MHz) Band n71 (1710 - 1780 MHz) Band n71 (617 - 652 MHz) Validation band (0.0 - 6000.0 MHz)
Detailed Specification:	Multiplexing Scheme: DFT-s-OFDM Modulation Scheme: QPSK Subcarrier Spacing: 15 kHz Number RBs: 1 Data Type: PN9
Bandwidth:	20.0 MHz
Integration Time:	10.0 ms

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

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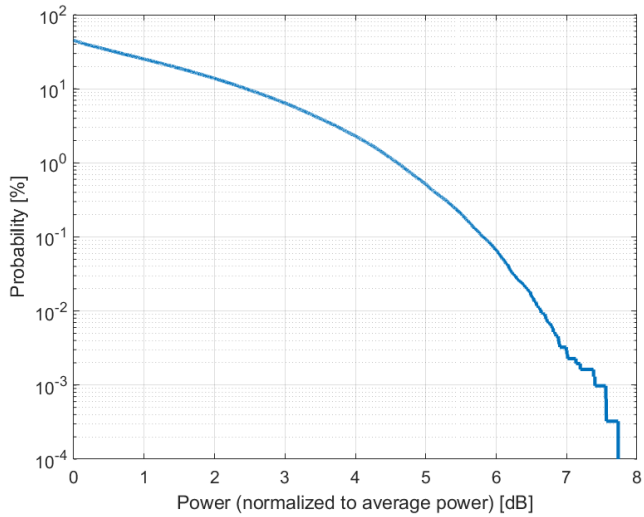
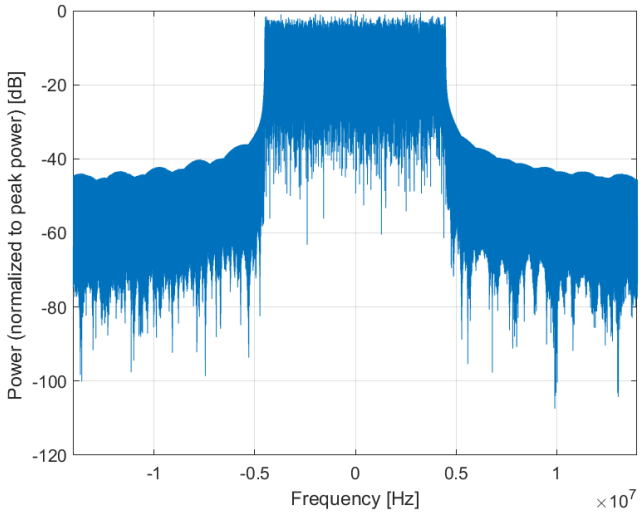
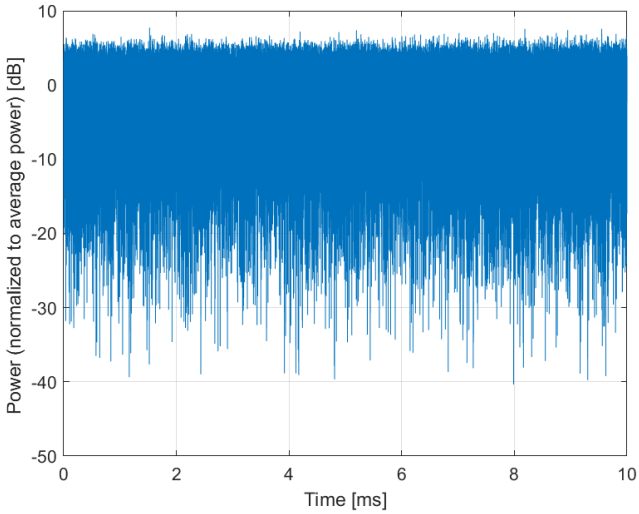


Complementary Cumulative Distribution Function (CCDF)



Frequency Domain



Time Domain

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Name:	**5G NR (DFT-s-OFDM, 50% RB, 25 MHz, QPSK, 15 kHz)**
Group:	5G NR FR1 FDD
UID:	10940-AAA
PAR: [1]	**5.89 dB**
MIF: [2]	**-18.65 dB**
Standard Reference:	SPEAG
Category:	Random amplitude modulation
Modulation:	QPSK
Frequency Band:	Band n25 (1850 - 1915 MHz) Validation band (0.0 - 6000.0 MHz)
Detailed Specification:	Multiplexing Scheme: DFT-s-OFDM Modulation Scheme: QPSK Subcarrier Spacing: 15 kHz Number RBs: 1 Data Type: PN9
Bandwidth:	25.0 MHz
Integration Time:	10.0 ms

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

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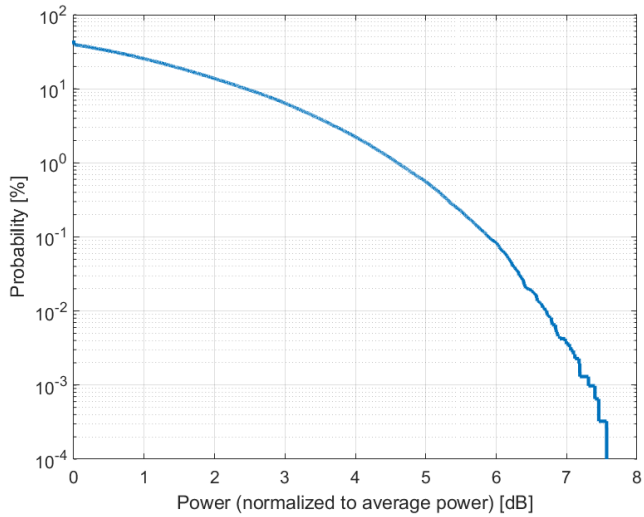
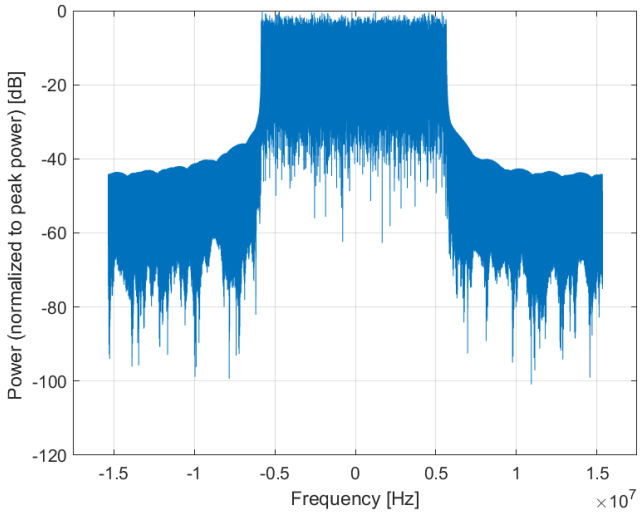
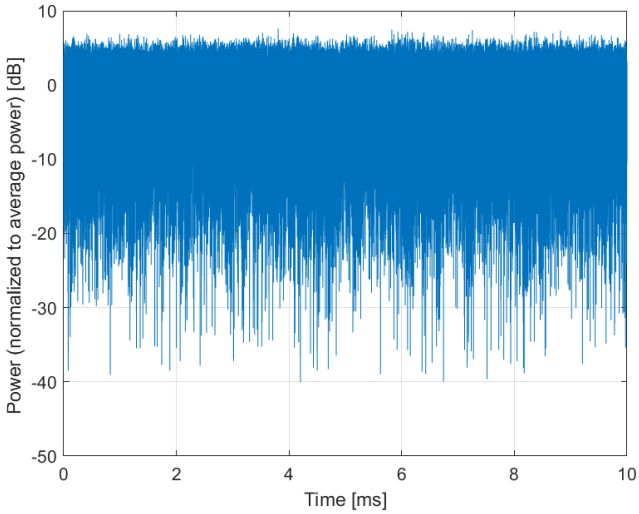


Complementary Cumulative Distribution Function (CCDF)



Frequency Domain



Time Domain

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Name:	**5G NR (DFT-s-OFDM, 50% RB, 30 MHz, QPSK, 15 kHz)**
Group:	5G NR FR1 FDD
UID:	10941-AAA
PAR: [1]	**5.83 dB**
MIF: [2]	**-18.66 dB**
Standard Reference:	SPEAG
Category:	Random amplitude modulation
Modulation:	QPSK
Frequency Band:	Band n25 (1850 - 1915 MHz) Validation band (0.0 - 6000.0 MHz)
Detailed Specification:	Multiplexing Scheme: DFT-s-OFDM Modulation Scheme: QPSK Subcarrier Spacing: 15 kHz Number RBs: 1 Data Type: PN9
Bandwidth:	30.0 MHz
Integration Time:	10.0 ms

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

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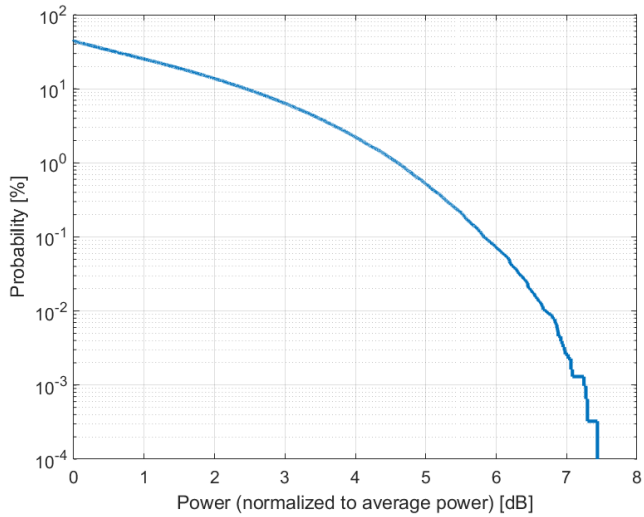
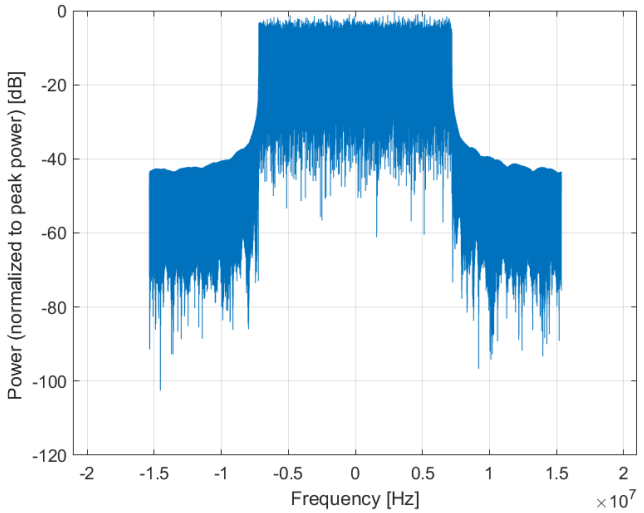
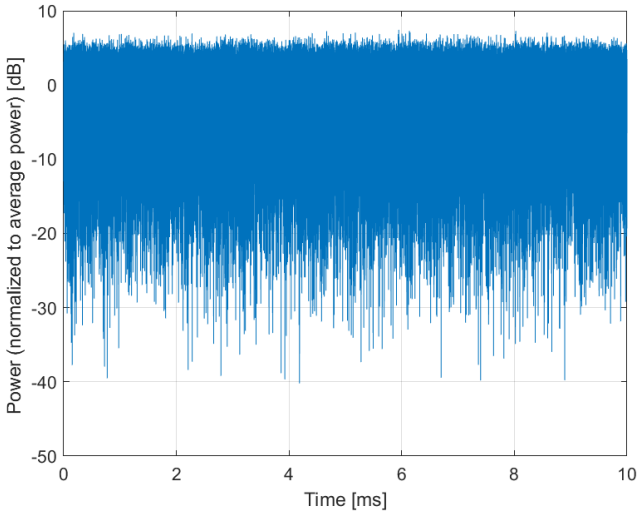


Complementary Cumulative Distribution Function (CCDF)



Frequency Domain



Time Domain

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Name:	**5G NR (DFT-s-OFDM, 50% RB, 40 MHz, QPSK, 15 kHz)**
Group:	5G NR FR1 FDD
UID:	10942-AAA
PAR: [1]	**5.85 dB**
MIF: [2]	**-18.71 dB**
Standard Reference:	SPEAG
Category:	Random amplitude modulation
Modulation:	QPSK
Frequency Band:	Band n25 (1850 - 1915 MHz) Band n71 (1710 - 1780 MHz) Validation band (0.0 - 6000.0 MHz)
Detailed Specification:	Multiplexing Scheme: DFT-s-OFDM Modulation Scheme: QPSK Subcarrier Spacing: 15 kHz Number RBs: 1 Data Type: PN9
Bandwidth:	40.0 MHz
Integration Time:	10.0 ms

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

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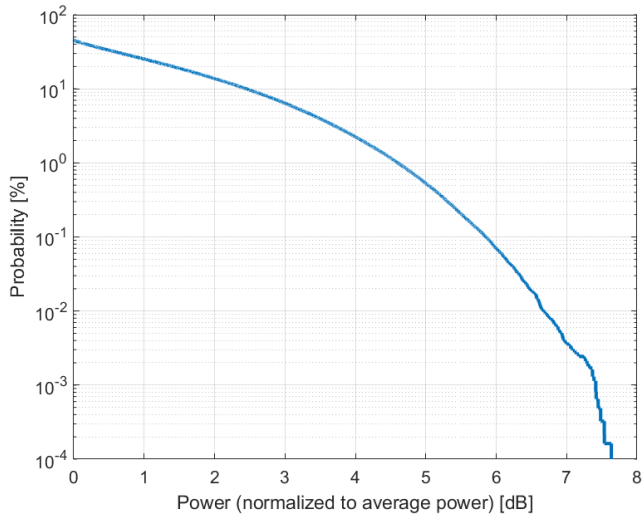
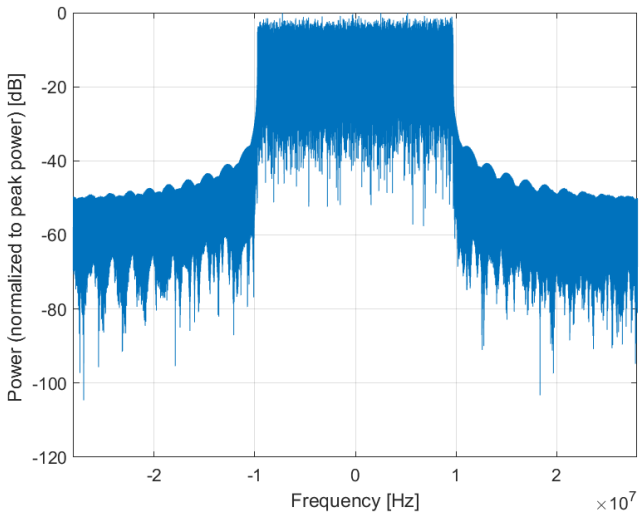
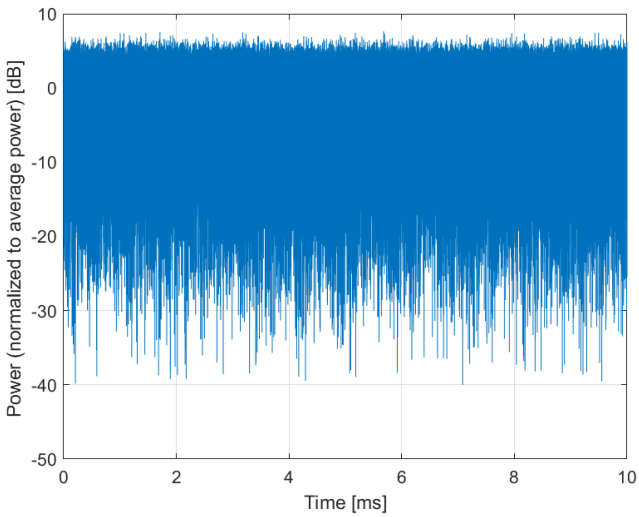


Complementary Cumulative Distribution Function (CCDF)



Frequency Domain



Time Domain

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Name:	**5G NR (DFT-s-OFDM, 50% RB, 50 MHz, QPSK, 15 kHz)**
Group:	5G NR FR1 FDD
UID:	10943-AAA
PAR: [1]	**5.95 dB**
MIF: [2]	**-18.52 dB**
Standard Reference:	SPEAG
Category:	Random amplitude modulation
Modulation:	QPSK
Frequency Band:	Validation band (0.0 - 6000.0 MHz)
Detailed Specification:	Multiplexing Scheme: DFT-s-OFDM Modulation Scheme: QPSK Subcarrier Spacing: 15 kHz Number RBs: 1 Data Type: PN9
Bandwidth:	50.0 MHz
Integration Time:	10.0 ms

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

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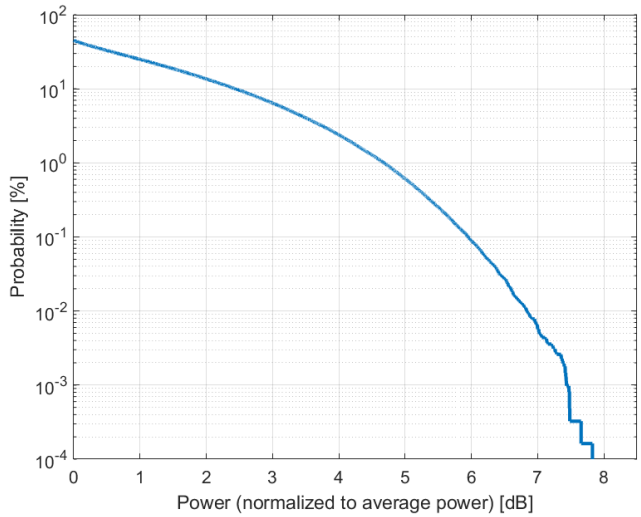
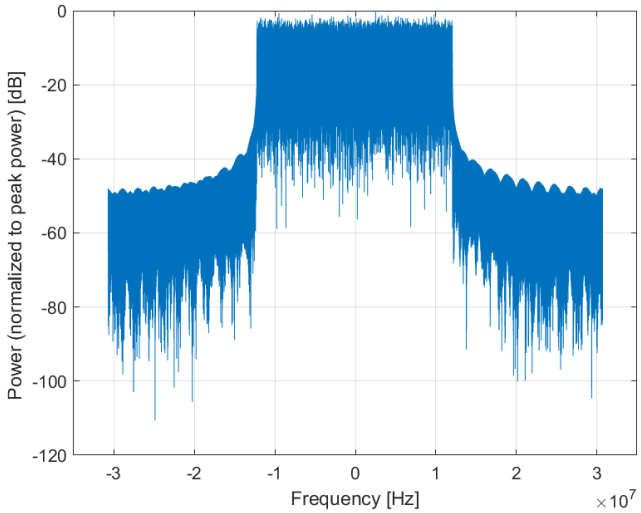
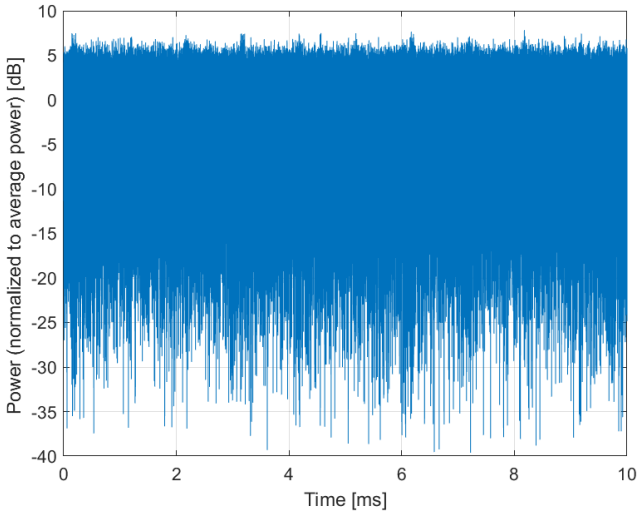


Complementary Cumulative Distribution Function (CCDF)



Frequency Domain



Time Domain

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Name:	**5G NR (DFT-s-OFDM, 100% RB, 5 MHz, QPSK, 15 kHz)**
Group:	5G NR FR1 FDD
UID:	10944-AAA
PAR: [1]	**5.81 dB**
MIF: [2]	**-18.38 dB**
Standard Reference:	SPEAG
Category:	Random amplitude modulation
Modulation:	QPSK
Frequency Band:	Band n2 (1850 - 1910 MHz) Band n2 (824 - 849 MHz) Band n25 (1850 - 1915 MHz) Band n71 (1710 - 1780 MHz) Band n71 (617 - 652 MHz) Validation band (0.0 - 6000.0 MHz)
Detailed Specification:	Multiplexing Scheme: DFT-s-OFDM Modulation Scheme: QPSK Subcarrier Spacing: 15 kHz Number RBs: 1 Data Type: PN9
Bandwidth:	5.0 MHz
Integration Time:	10.0 ms

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

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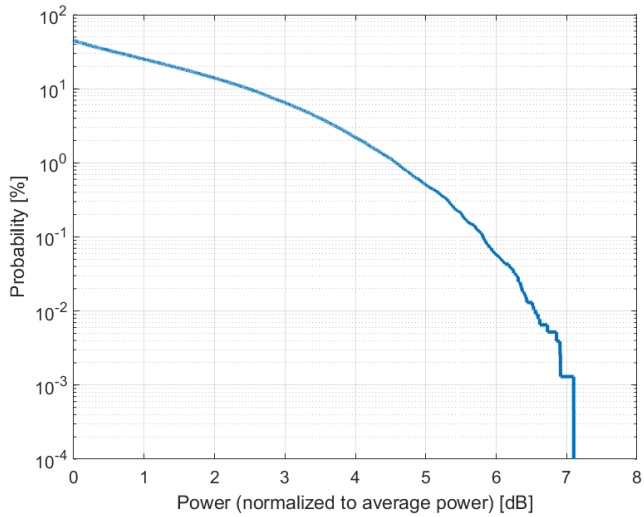
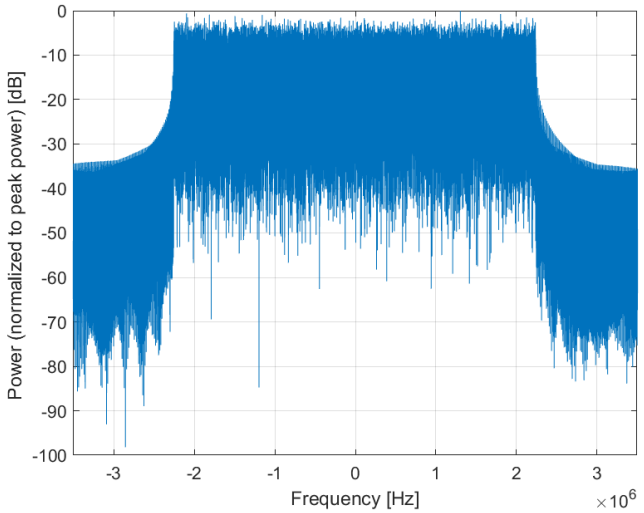
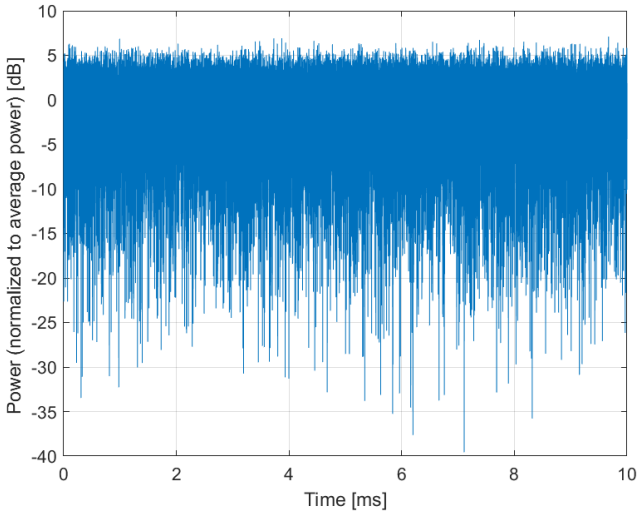


Complementary Cumulative Distribution Function (CCDF)



Frequency Domain



Time Domain

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Name:	**5G NR (DFT-s-OFDM, 100% RB, 10 MHz, QPSK, 15 kHz)**
Group:	5G NR FR1 FDD
UID:	10945-AAA
PAR: [1]	**5.85 dB**
MIF: [2]	**-18.65 dB**
Standard Reference:	SPEAG
Category:	Random amplitude modulation
Modulation:	QPSK
Frequency Band:	Band n2 (1850 - 1910 MHz) Band n2 (824 - 849 MHz) Band n25 (1850 - 1915 MHz) Band n71 (1710 - 1780 MHz) Band n71 (617 - 652 MHz) Validation band (0.0 - 6000.0 MHz)
Detailed Specification:	Multiplexing Scheme: DFT-s-OFDM Modulation Scheme: QPSK Subcarrier Spacing: 15 kHz Number RBs: 1 Data Type: PN9
Bandwidth:	10.0 MHz
Integration Time:	10.0 ms

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

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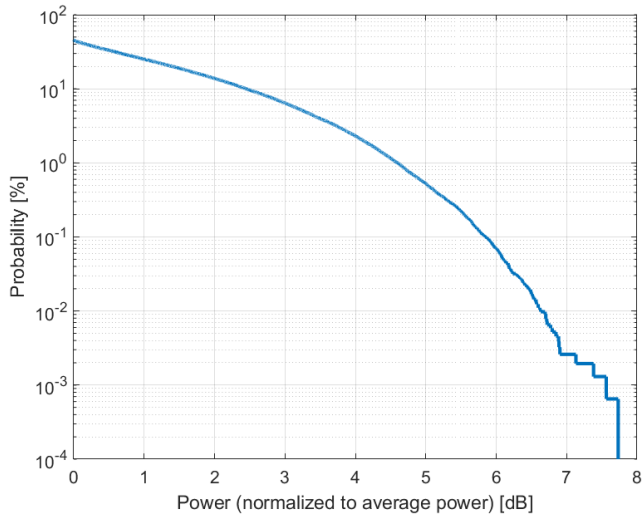
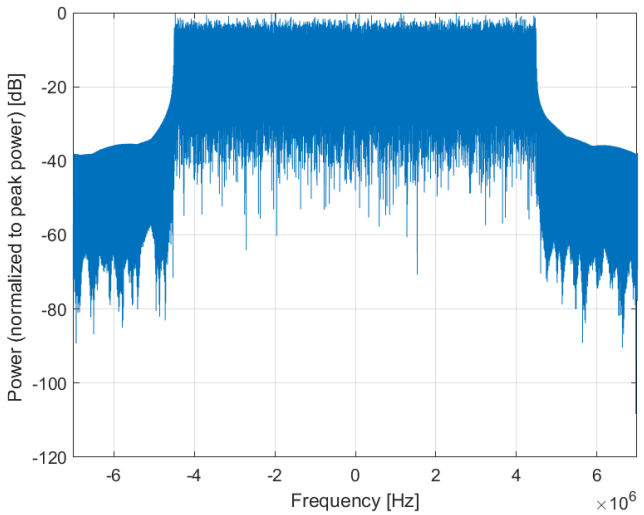


Complementary Cumulative Distribution Function (CCDF)



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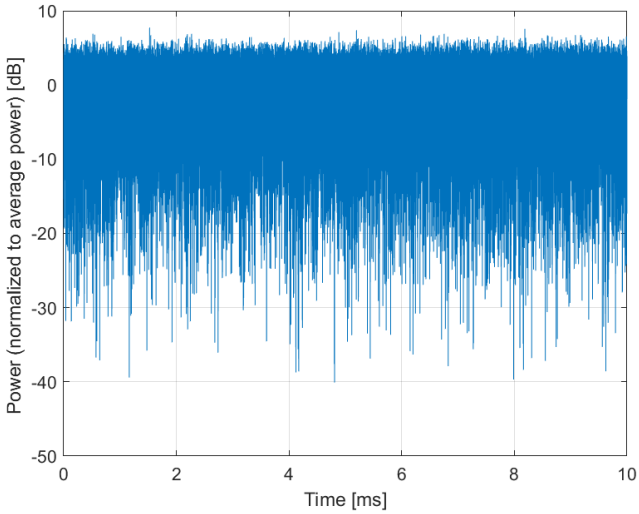

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Name:	**5G NR (DFT-s-OFDM, 100% RB, 15 MHz, QPSK, 15 kHz)**
Group:	5G NR FR1 FDD
UID:	10946-AAA
PAR: [1]	**5.83 dB**
MIF: [2]	**-18.70 dB**
Standard Reference:	SPEAG
Category:	Random amplitude modulation
Modulation:	QPSK
Frequency Band:	Band n2 (1850 - 1910 MHz) Band n2 (824 - 849 MHz) Band n25 (1850 - 1915 MHz) Band n71 (1710 - 1780 MHz) Band n71 (617 - 652 MHz) Validation band (0.0 - 6000.0 MHz)
Detailed Specification:	Multiplexing Scheme: DFT-s-OFDM Modulation Scheme: QPSK Subcarrier Spacing: 15 kHz Number RBs: 1 Data Type: PN9
Bandwidth:	15.0 MHz
Integration Time:	10.0 ms

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

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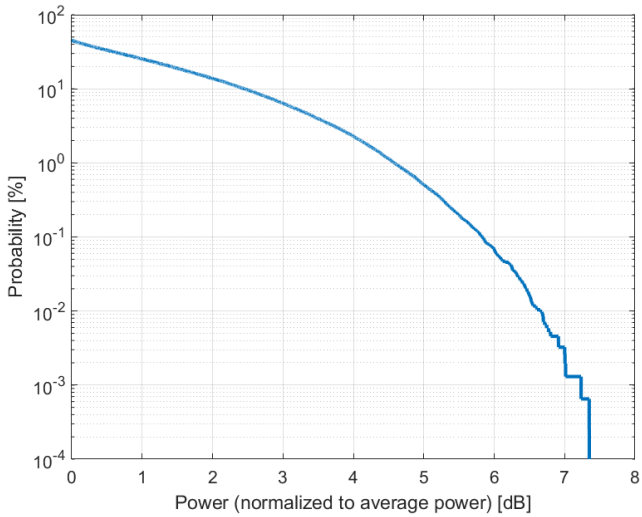
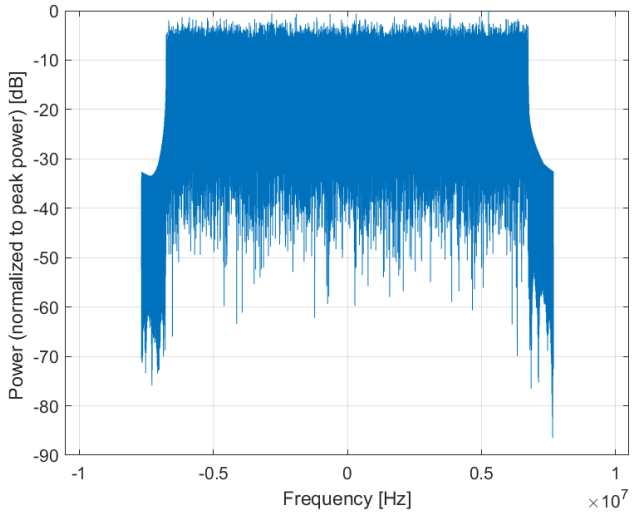
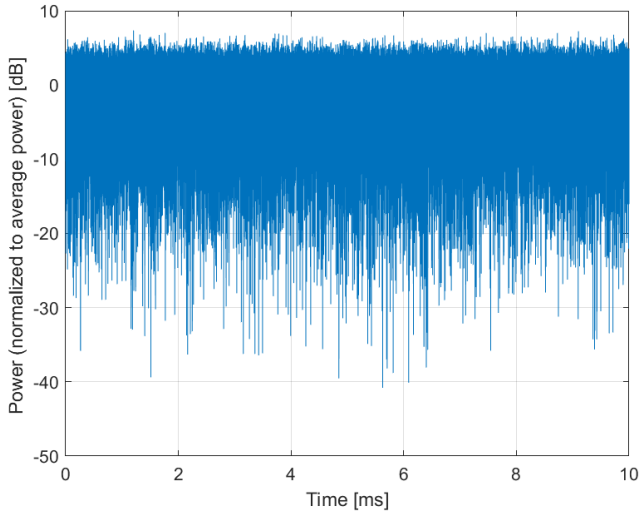


Complementary Cumulative Distribution Function (CCDF)



Frequency Domain



Time Domain

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Name:	**5G NR (DFT-s-OFDM, 100% RB, 20 MHz, QPSK, 15 kHz)**
Group:	5G NR FR1 FDD
UID:	10947-AAA
PAR: [1]	**5.87 dB**
MIF: [2]	**-18.60 dB**
Standard Reference:	SPEAG
Category:	Random amplitude modulation
Modulation:	QPSK
Frequency Band:	Band n2 (1850 - 1910 MHz) Band n2 (824 - 849 MHz) Band n25 (1850 - 1915 MHz) Band n71 (1710 - 1780 MHz) Band n71 (617 - 652 MHz) Validation band (0.0 - 6000.0 MHz)
Detailed Specification:	Multiplexing Scheme: DFT-s-OFDM Modulation Scheme: QPSK Subcarrier Spacing: 15 kHz Number RBs: 1 Data Type: PN9
Bandwidth:	20.0 MHz
Integration Time:	10.0 ms

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

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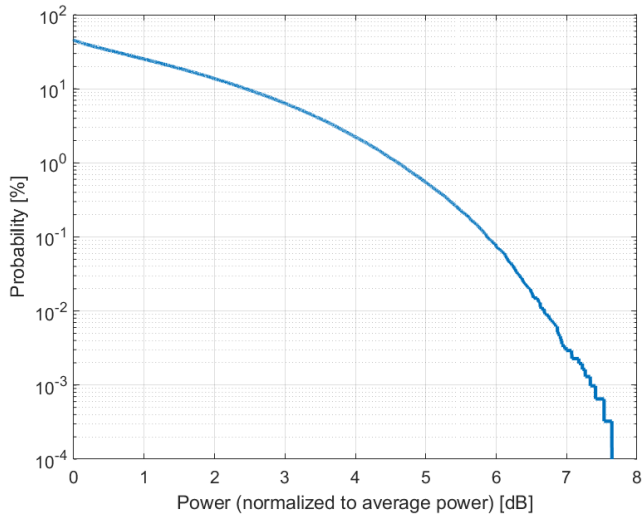
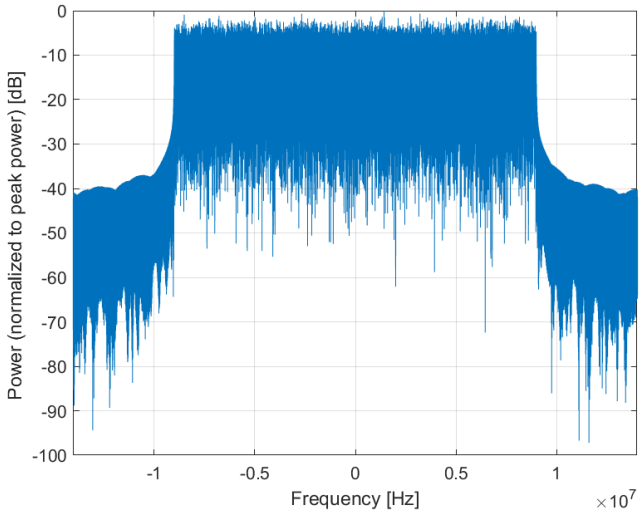
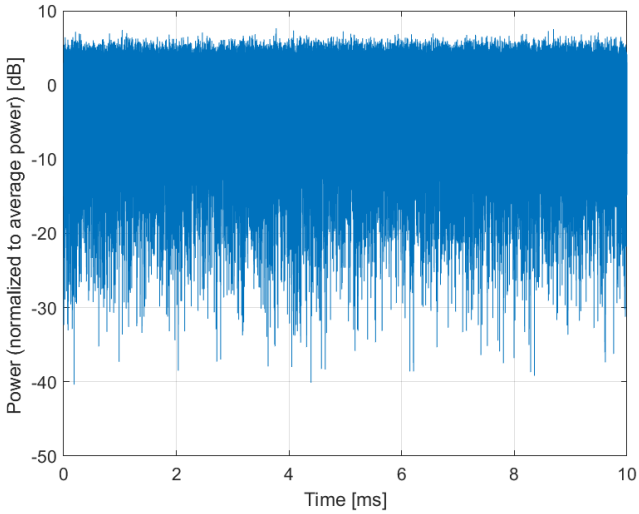


Complementary Cumulative Distribution Function (CCDF)



Frequency Domain



Time Domain

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Name:	**5G NR (DFT-s-OFDM, 100% RB, 25 MHz, QPSK, 15 kHz)**
Group:	5G NR FR1 FDD
UID:	10948-AAA
PAR: [1]	**5.94 dB**
MIF: [2]	**-18.50 dB**
Standard Reference:	SPEAG
Category:	Random amplitude modulation
Modulation:	QPSK
Frequency Band:	Band n25 (1850 - 1915 MHz) Validation band (0.0 - 6000.0 MHz)
Detailed Specification:	Multiplexing Scheme: DFT-s-OFDM Modulation Scheme: QPSK Subcarrier Spacing: 15 kHz Number RBs: 1 Data Type: PN9
Bandwidth:	25.0 MHz
Integration Time:	10.0 ms

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

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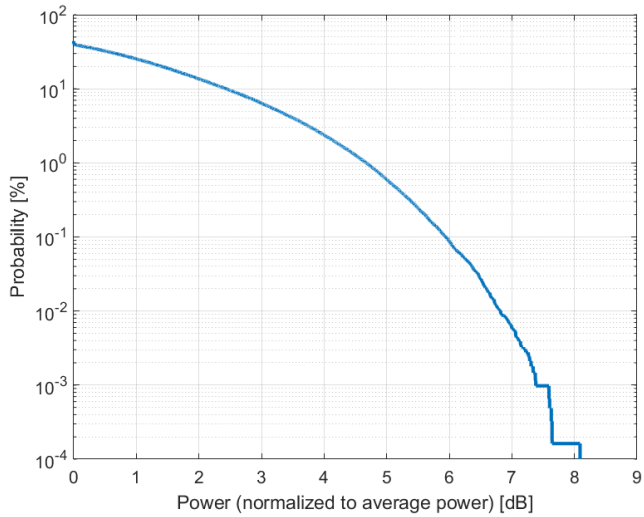
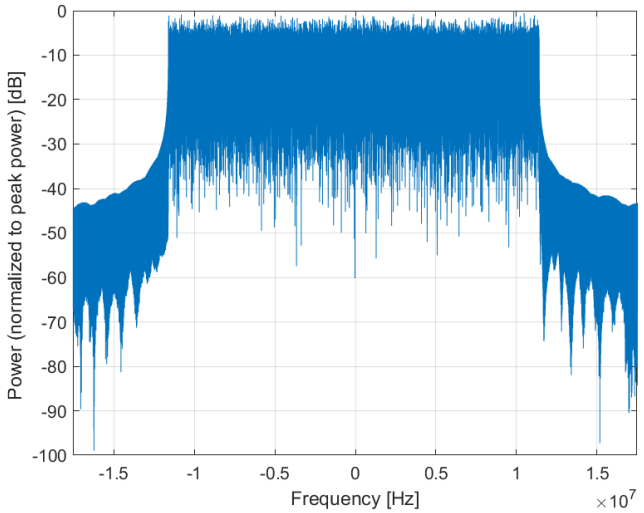
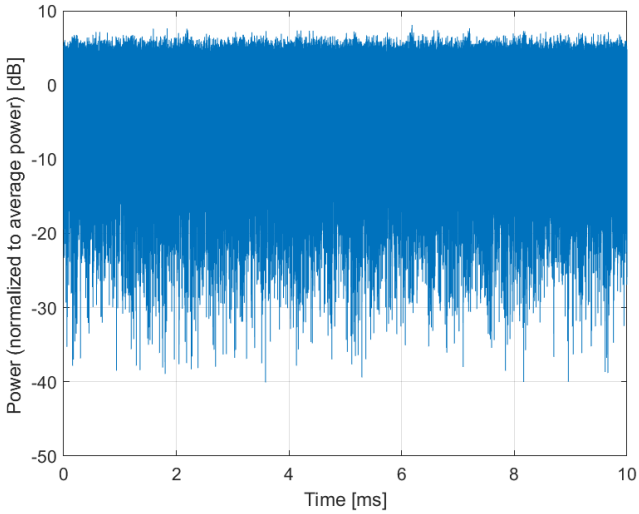


Complementary Cumulative Distribution Function (CCDF)



Frequency Domain



Time Domain

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Name:	**5G NR (DFT-s-OFDM, 100% RB, 30 MHz, QPSK, 15 kHz)**
Group:	5G NR FR1 FDD
UID:	10949-AAA
PAR: [1]	**5.87 dB**
MIF: [2]	**-18.85 dB**
Standard Reference:	SPEAG
Category:	Random amplitude modulation
Modulation:	QPSK
Frequency Band:	Band n25 (1850 - 1915 MHz) Validation band (0.0 - 6000.0 MHz)
Detailed Specification:	Multiplexing Scheme: DFT-s-OFDM Modulation Scheme: QPSK Subcarrier Spacing: 15 kHz Number RBs: 1 Data Type: PN9
Bandwidth:	30.0 MHz
Integration Time:	10.0 ms

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

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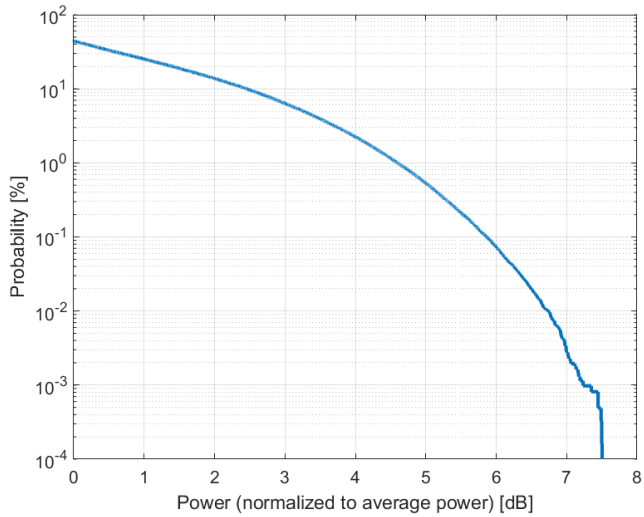
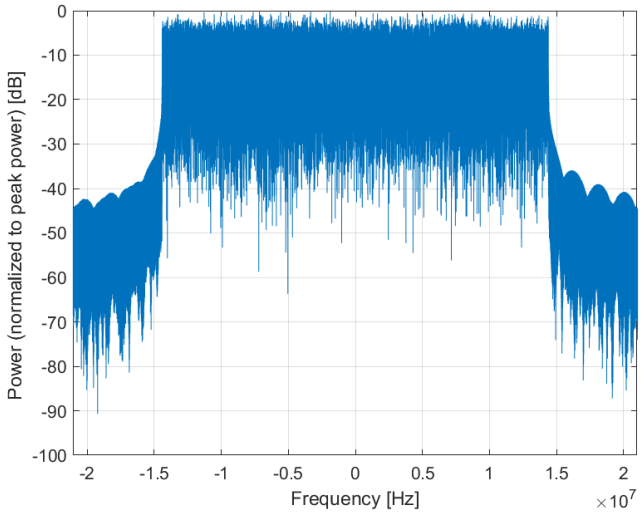
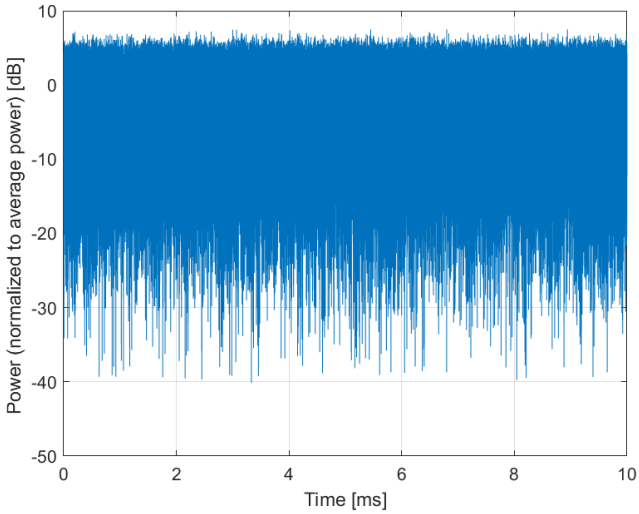


Complementary Cumulative Distribution Function (CCDF)



Frequency Domain



Time Domain

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Name:	**5G NR (DFT-s-OFDM, 100% RB, 40 MHz, QPSK, 15 kHz)**
Group:	5G NR FR1 FDD
UID:	10950-AAA
PAR: [1]	**5.94 dB**
MIF: [2]	**-18.50 dB**
Standard Reference:	SPEAG
Category:	Random amplitude modulation
Modulation:	QPSK
Frequency Band:	Band n25 (1850 - 1915 MHz) Band n71 (1710 - 1780 MHz) Validation band (0.0 - 6000.0 MHz)
Detailed Specification:	Multiplexing Scheme: DFT-s-OFDM Modulation Scheme: QPSK Subcarrier Spacing: 15 kHz Number RBs: 1 Data Type: PN9
Bandwidth:	40.0 MHz
Integration Time:	10.0 ms

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

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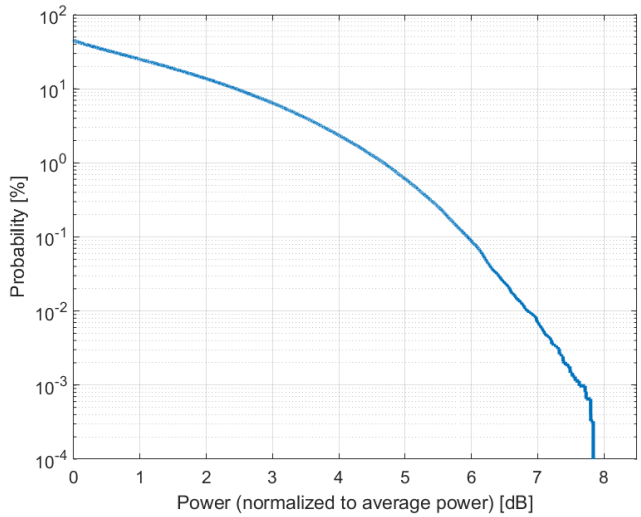
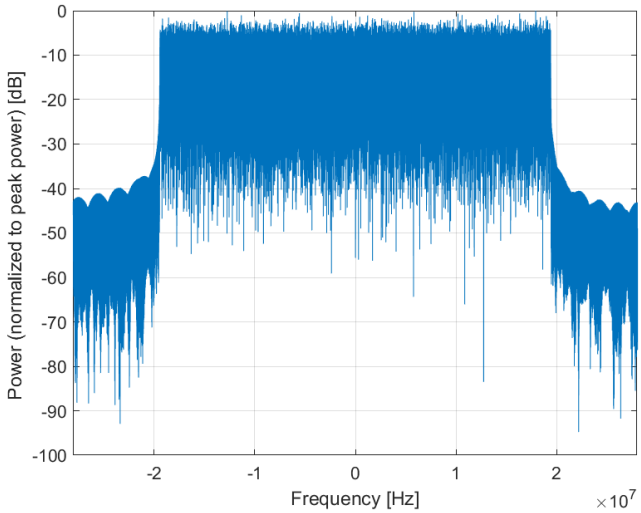
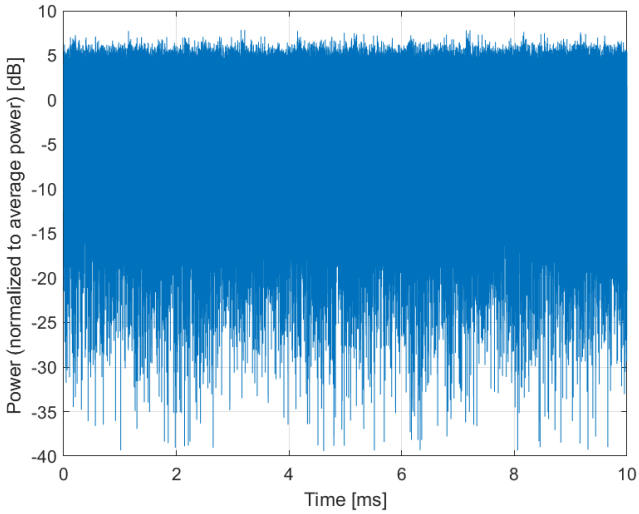


Complementary Cumulative Distribution Function (CCDF)



Frequency Domain



Time Domain

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Name:	**5G NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 15 kHz)**
Group:	5G NR FR1 FDD
UID:	10951-AAA
PAR: [1]	**5.92 dB**
MIF: [2]	**-18.56 dB**
Standard Reference:	SPEAG
Category:	Random amplitude modulation
Modulation:	QPSK
Frequency Band:	Validation band (0.0 - 6000.0 MHz)
Detailed Specification:	Multiplexing Scheme: DFT-s-OFDM Modulation Scheme: QPSK Subcarrier Spacing: 15 kHz Number RBs: 1 Data Type: PN9
Bandwidth:	50.0 MHz
Integration Time:	10.0 ms

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

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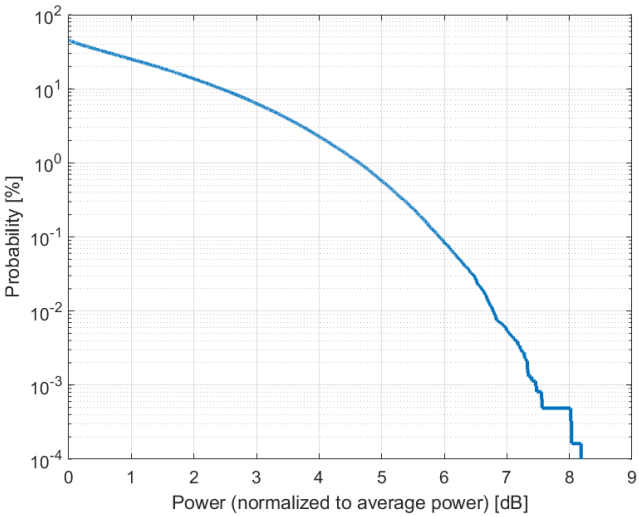
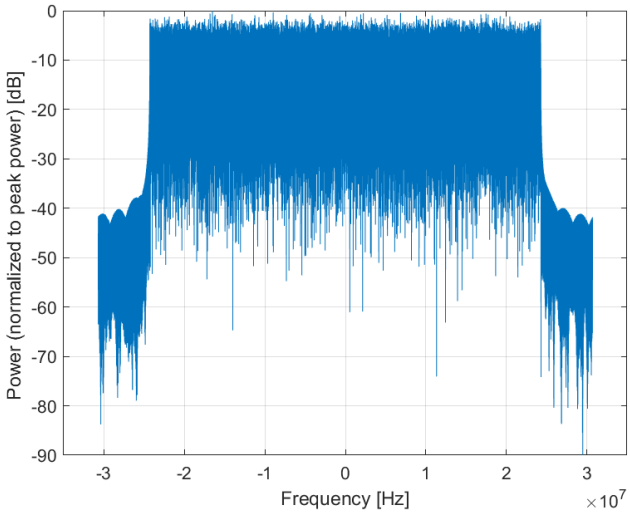
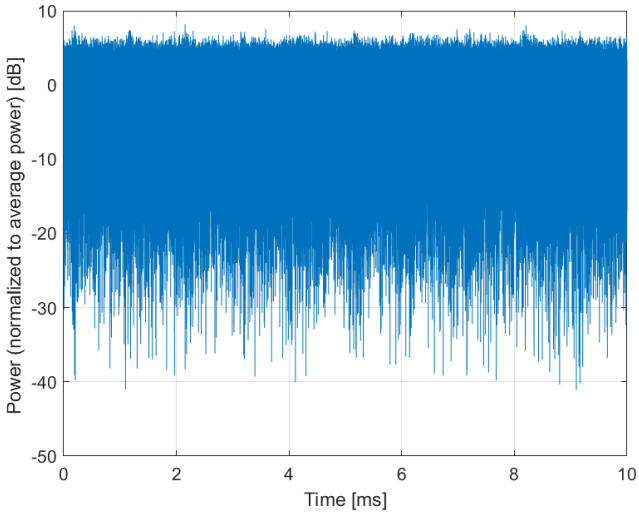


Complementary Cumulative Distribution Function (CCDF)



Frequency Domain



Time Domain

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Name:	**5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 15 kHz)**
Group:	5G NR FR1 FDD
UID:	10952-AAA
PAR: [1]	**8.25 dB**
MIF: [2]	**-16.10 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 Modulation Scheme: 64-QAM Subcarrier Spacing: 15 kHz Model: TM 3.1 Data Type: PN9
Bandwidth:	5.0 MHz
Integration Time:	10.0 ms

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

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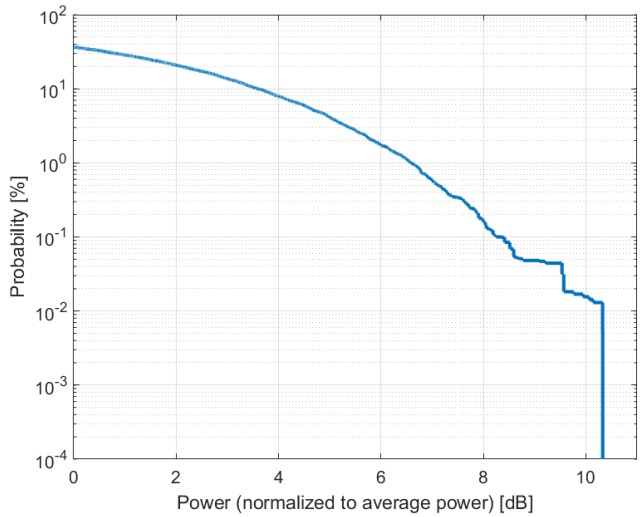
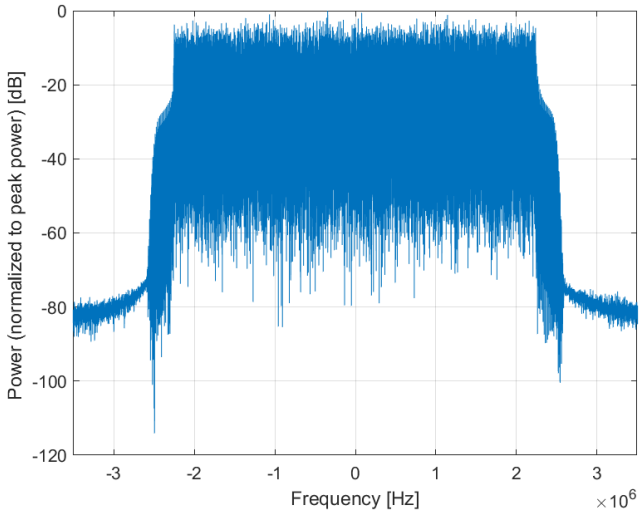
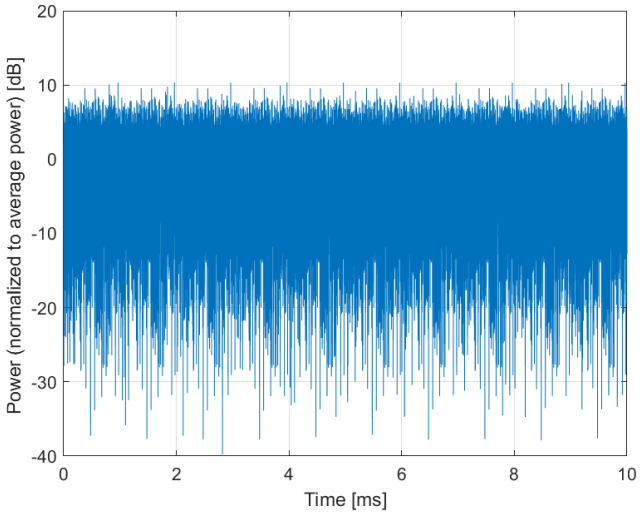


Complementary Cumulative Distribution Function (CCDF)



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: [1]	**8.15 dB**
MIF: [2]	**-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 Modulation Scheme: 64-QAM Subcarrier Spacing: 15 kHz Model: TM 3.1 Data Type: PN9
Bandwidth:	10.0 MHz
Integration Time:	10.0 ms

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

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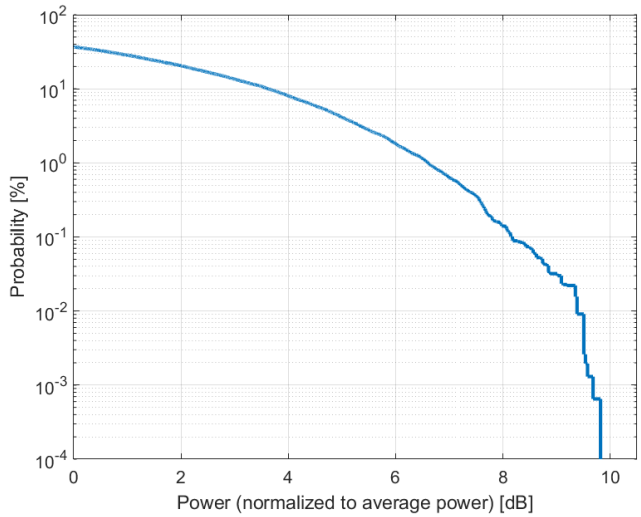
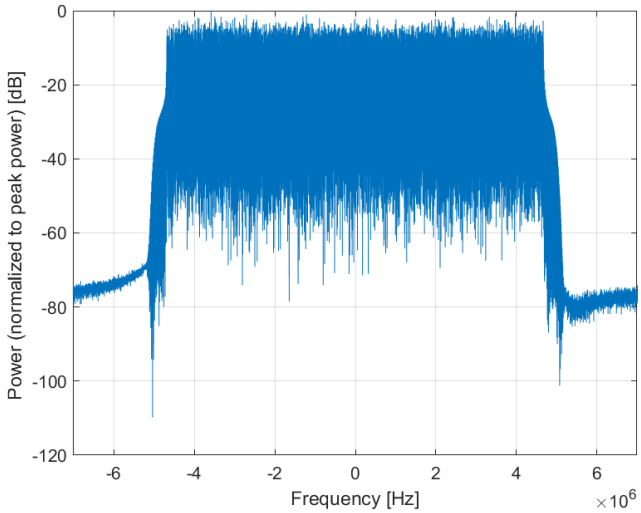
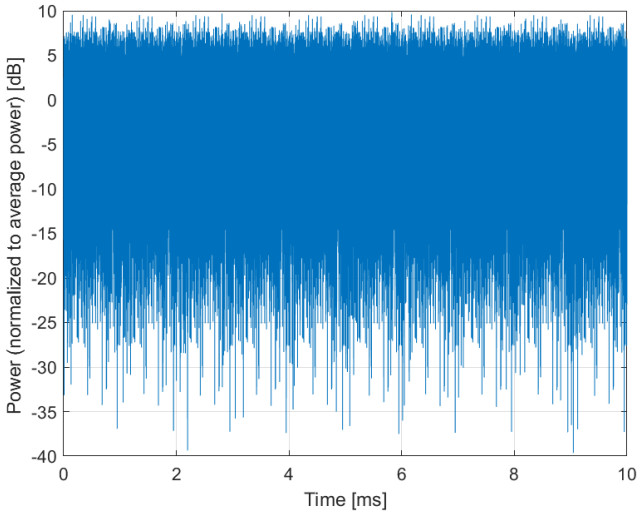


Complementary Cumulative Distribution Function (CCDF)



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: [1]	**8.23 dB**
MIF: [2]	**-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 Modulation Scheme: 64-QAM Subcarrier Spacing: 15 kHz Model: TM 3.1 Data Type: PN9
Bandwidth:	15.0 MHz
Integration Time:	10.0 ms

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

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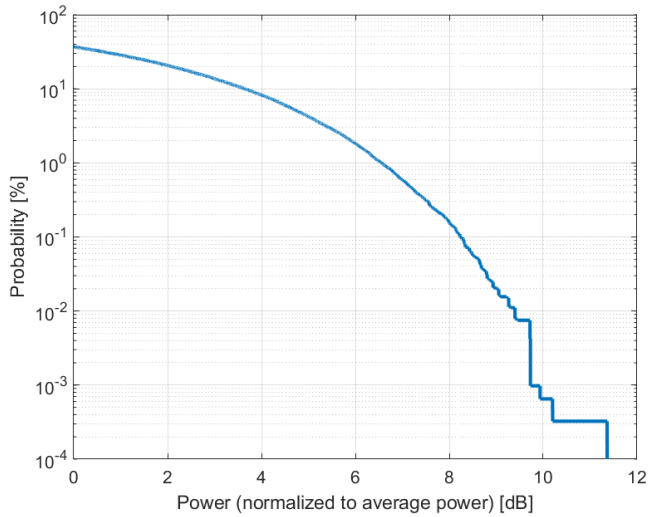
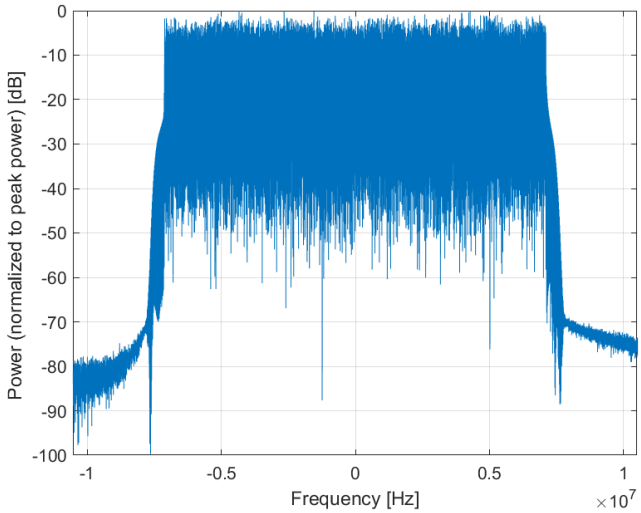
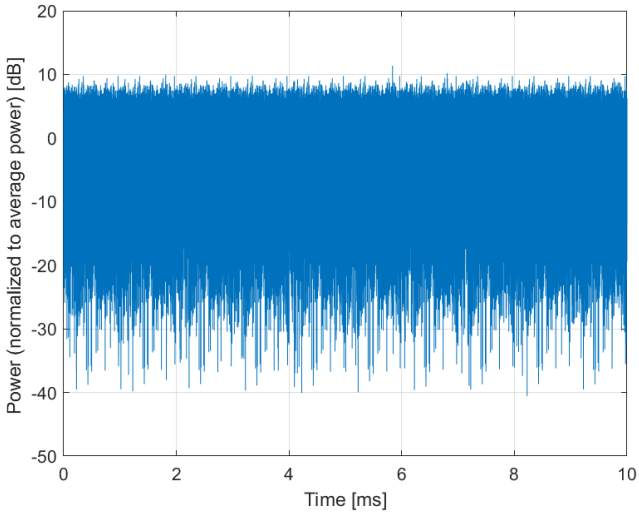


Complementary Cumulative Distribution Function (CCDF)



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: [1]	**8.42 dB**
MIF: [2]	**-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 Modulation Scheme: 64-QAM Subcarrier Spacing: 15 kHz Model: TM 3.1 Data Type: PN9
Bandwidth:	20.0 MHz
Integration Time:	10.0 ms

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

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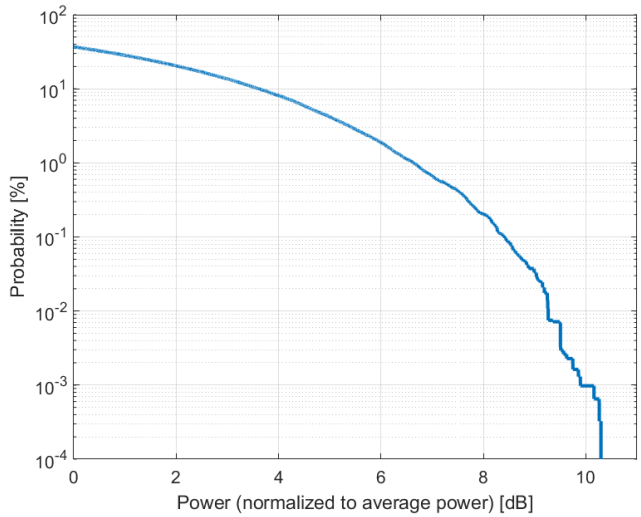
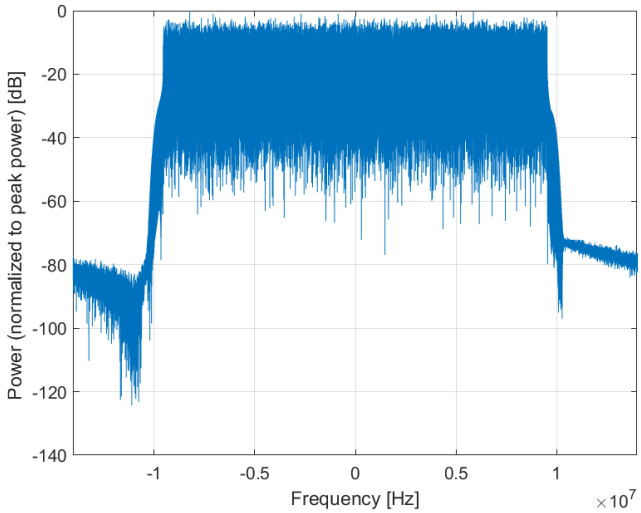
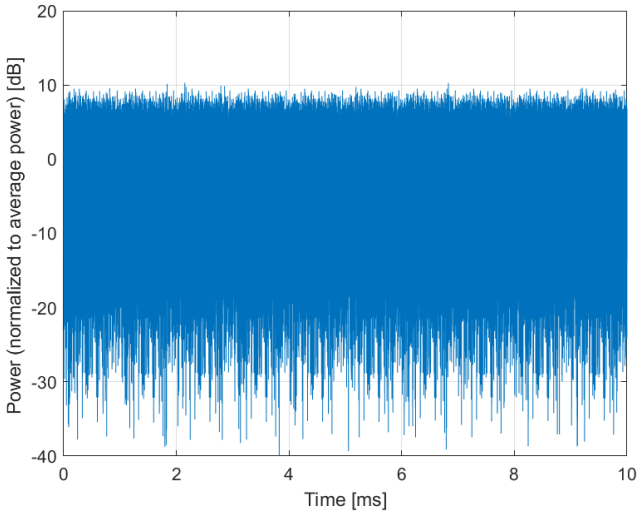


Complementary Cumulative Distribution Function (CCDF)



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: [1]	**8.14 dB**
MIF: [2]	**-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 Modulation Scheme: 64-QAM Subcarrier Spacing: 30 kHz Model: TM 3.1 Data Type: PN9
Bandwidth:	5.0 MHz
Integration Time:	10.0 ms

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

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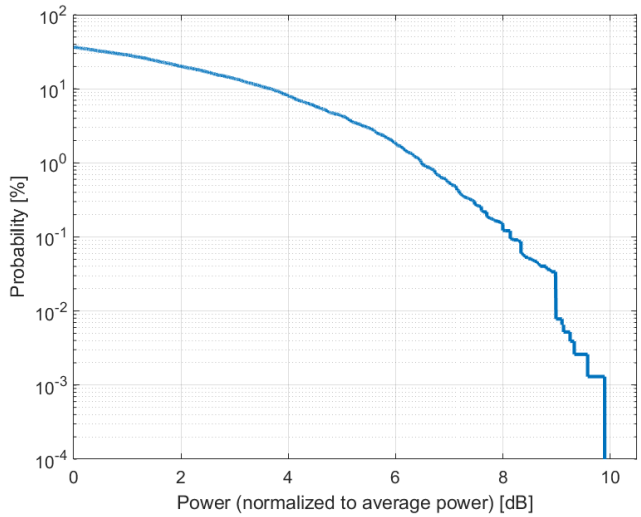
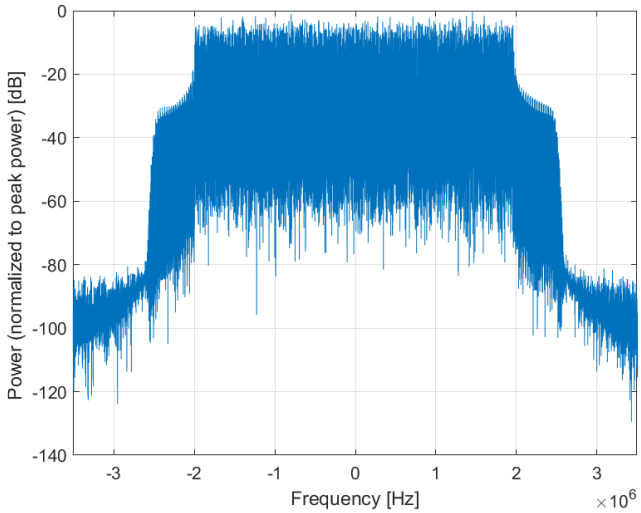
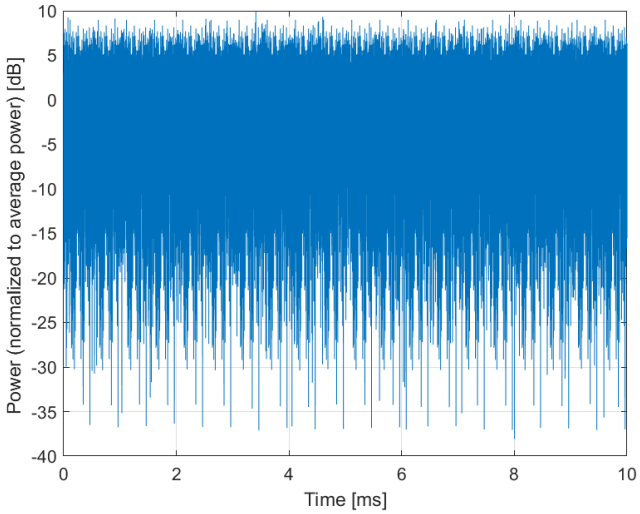


Complementary Cumulative Distribution Function (CCDF)



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: [1]	**8.31 dB**
MIF: [2]	**-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 Modulation Scheme: 64-QAM Subcarrier Spacing: 30 kHz Model: TM 3.1 Data Type: PN9
Bandwidth:	10.0 MHz
Integration Time:	10.0 ms

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

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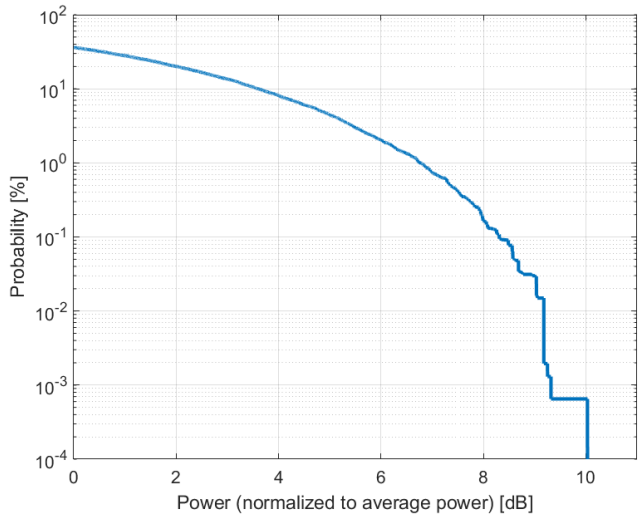
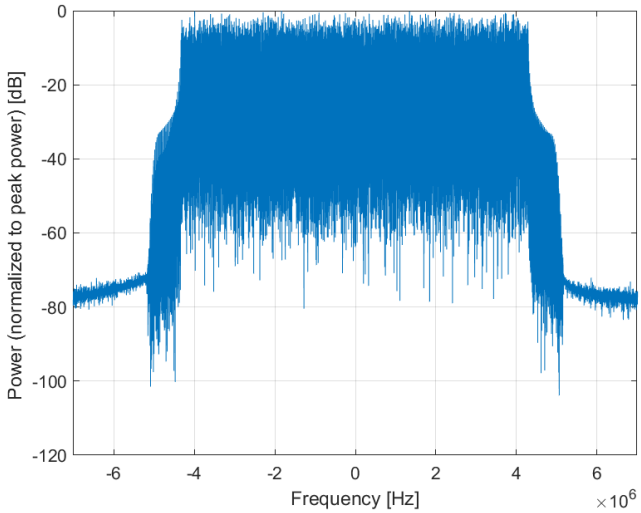
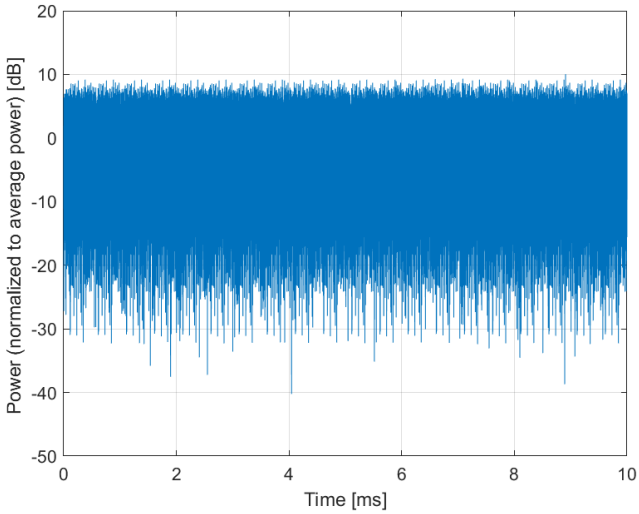


Complementary Cumulative Distribution Function (CCDF)



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: [1]	**8.61 dB**
MIF: [2]	**-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 Modulation Scheme: 64-QAM Subcarrier Spacing: 30 kHz Model: TM 3.1 Data Type: PN9
Bandwidth:	15.0 MHz
Integration Time:	10.0 ms

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

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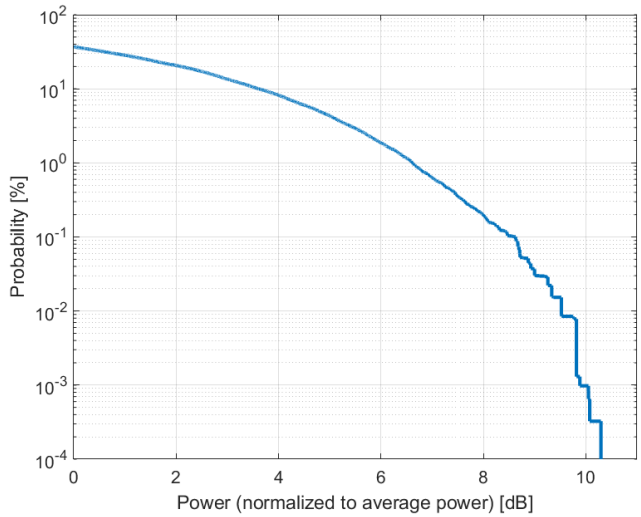
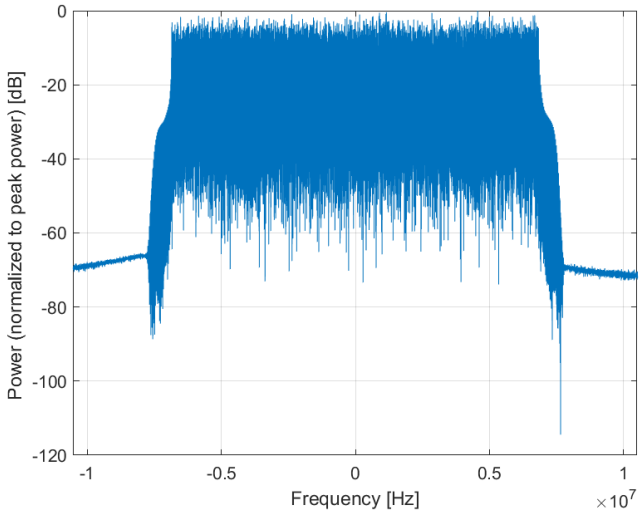
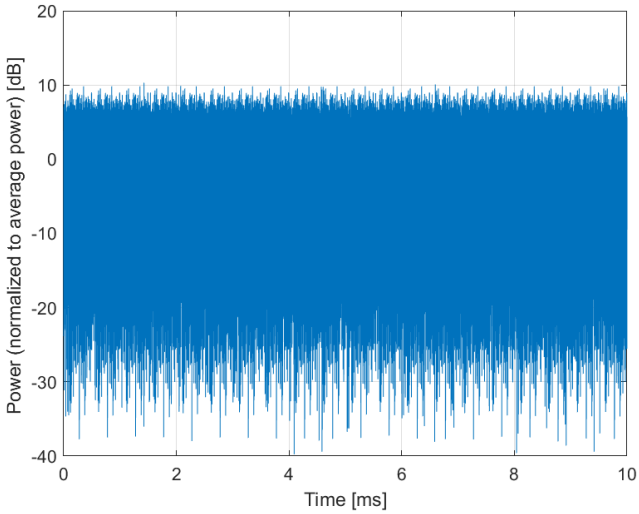


Complementary Cumulative Distribution Function (CCDF)



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: [1]	**8.33 dB**
MIF: [2]	**-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 Modulation Scheme: 64-QAM Subcarrier Spacing: 30 kHz Model: TM 3.1 Data Type: PN9
Bandwidth:	20.0 MHz
Integration Time:	10.0 ms

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

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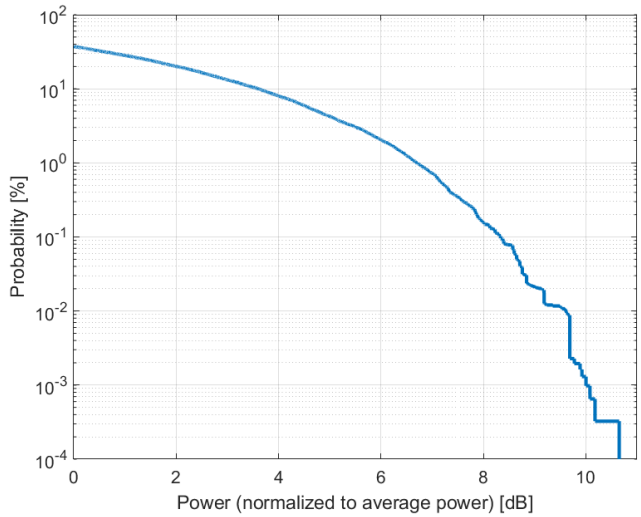
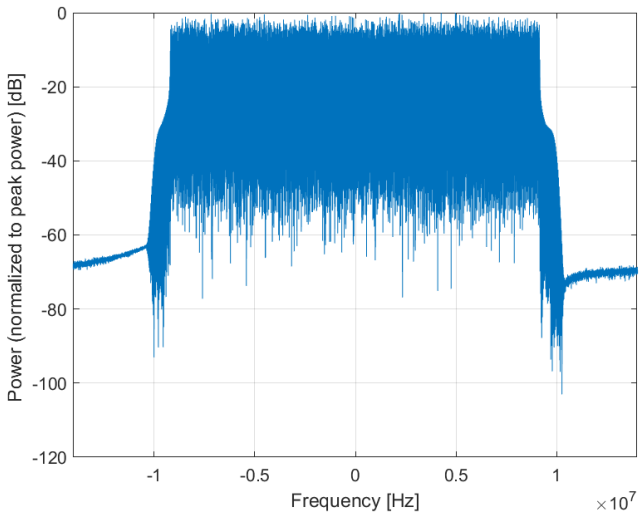
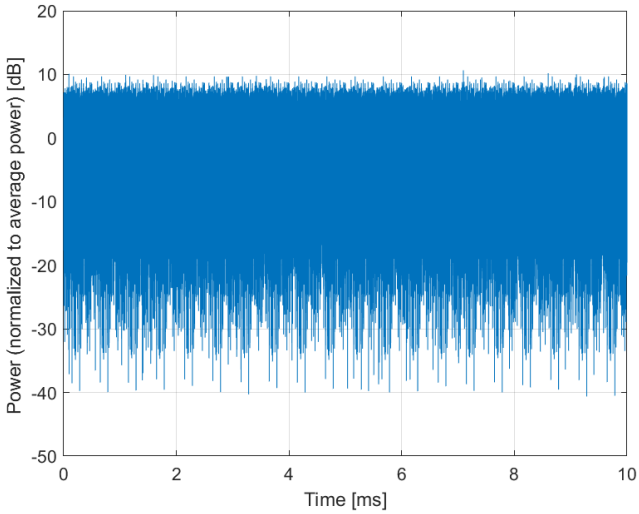


Complementary Cumulative Distribution Function (CCDF)



Frequency Domain



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Name:	**5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 15 kHz)**
Group:	5G NR FR1 TDD
UID:	10960-AAA
PAR: [1]	**9.32 dB**
MIF: [2]	**-4.24 dB**
Standard Reference:	SPEAG
Category:	Random amplitude modulation
Modulation:	64-QAM
Frequency Band:	Band n34 (2010 - 2025 MHz) Band n38 (2570 - 2620 MHz) Band n39 (1880 - 1920 MHz) Band n40 (2300 - 2400 MHz) Band n41 (2496 - 2690 MHz) Band n48 (3550 - 3700 MHz) Band n50 (1432 - 1517 MHz) Band n51 (1427 - 1432 MHz) Validation band (0.0 - 6000.0 MHz)
Detailed Specification:	Multiplexing Scheme: CP-OFDM Modulation Scheme: 64-QAM Subcarrier Spacing: 15 kHz Model: TM 3.1 Data Type: PN9
Bandwidth:	5.0 MHz
Integration Time:	10.0 ms

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

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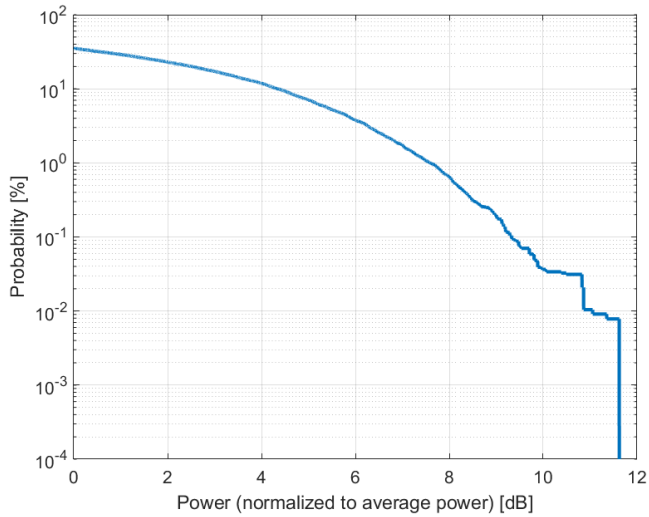
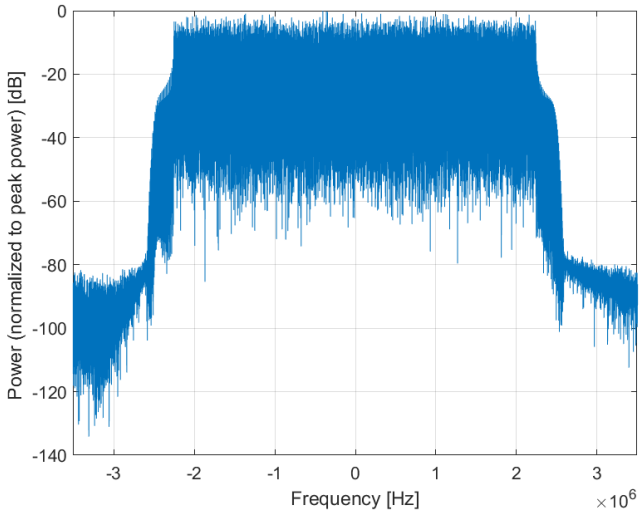
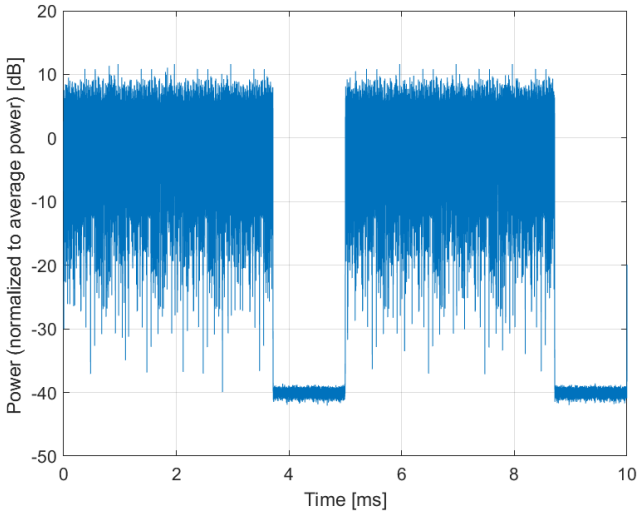


Complementary Cumulative Distribution Function (CCDF)



Frequency Domain



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Name:	**5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 15 kHz)**
Group:	5G NR FR1 TDD
UID:	10961-AAA
PAR: [1]	**9.36 dB**
MIF: [2]	**-4.22 dB**
Standard Reference:	SPEAG
Category:	Random amplitude modulation
Modulation:	64-QAM
Frequency Band:	Band n34 (2010 - 2025 MHz) Band n38 (2570 - 2620 MHz) Band n39 (1880 - 1920 MHz) Band n40 (2300 - 2400 MHz) Band n41 (2496 - 2690 MHz) Band n48 (3550 - 3700 MHz) Band n50 (1432 - 1517 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: 64-QAM Subcarrier Spacing: 15 kHz Model: TM 3.1 Data Type: PN9
Bandwidth:	10.0 MHz
Integration Time:	10.0 ms

[1] PAR (0.1%) in accordance with FCC KDB 971168, Section 6.0 "'Measurement of the Peak-to-Average Power Ratio (PAPR)"'

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

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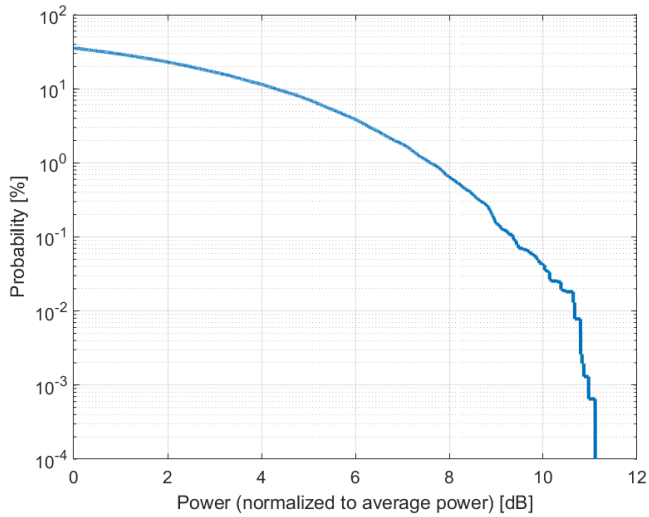
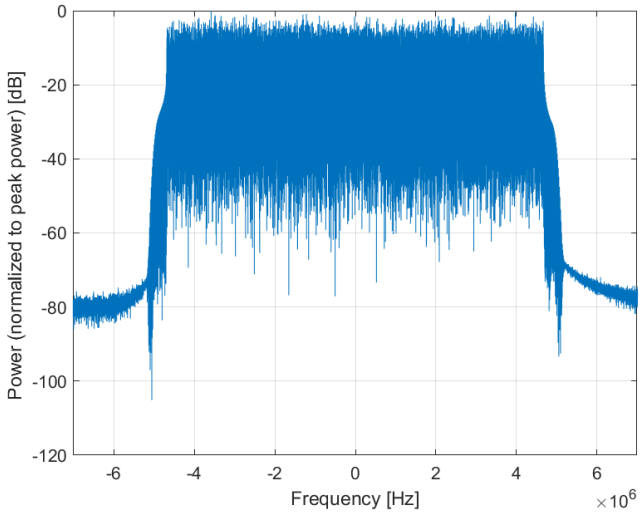
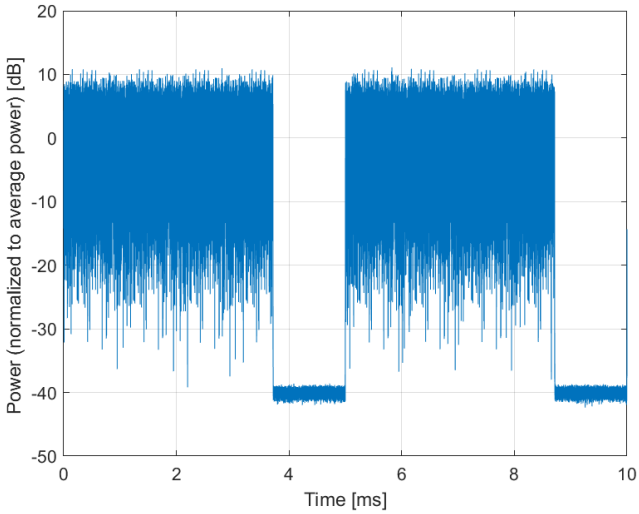


Complementary Cumulative Distribution Function (CCDF)



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 TDD
UID:	10962-AAA
PAR: [1]	**9.40 dB**
MIF: [2]	**-4.22 dB**
Standard Reference:	SPEAG
Category:	Random amplitude modulation
Modulation:	64-QAM
Frequency Band:	Band n34 (2010 - 2025 MHz) Band n38 (2570 - 2620 MHz) Band n39 (1880 - 1920 MHz) Band n40 (2300 - 2400 MHz) Band n41 (2496 - 2690 MHz) Band n48 (3550 - 3700 MHz) Band n50 (1432 - 1517 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: 64-QAM Subcarrier Spacing: 15 kHz Model: TM 3.1 Data Type: PN9
Bandwidth:	15.0 MHz
Integration Time:	10.0 ms

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

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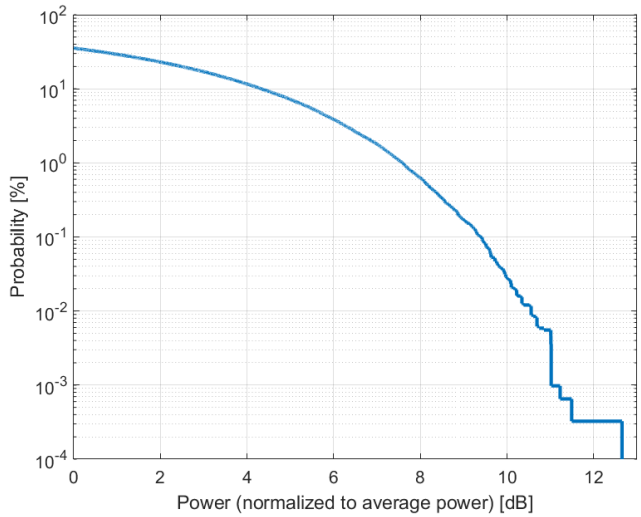
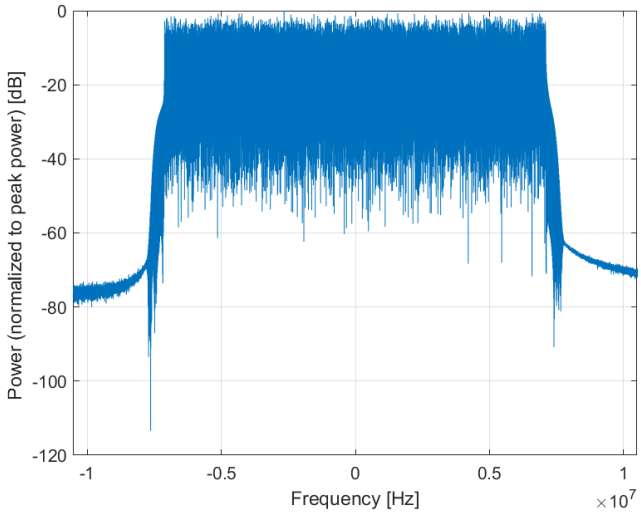
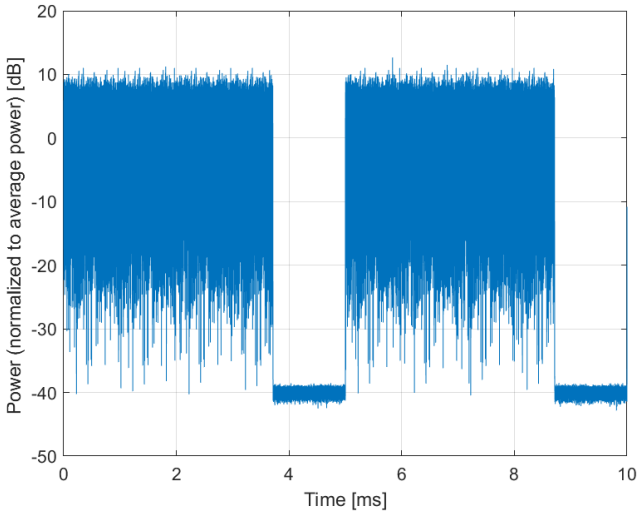


Complementary Cumulative Distribution Function (CCDF)



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 TDD
UID:	10963-AAA
PAR: [1]	**9.55 dB**
MIF: [2]	**-4.23 dB**
Standard Reference:	SPEAG
Category:	Random amplitude modulation
Modulation:	64-QAM
Frequency Band:	Band n38 (2570 - 2620 MHz) Band n39 (1880 - 1920 MHz) Band n40 (2300 - 2400 MHz) Band n41 (2496 - 2690 MHz) Band n48 (3550 - 3700 MHz) Band n50 (1432 - 1517 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: 64-QAM Subcarrier Spacing: 15 kHz Model: TM 3.1 Data Type: PN9
Bandwidth:	20.0 MHz
Integration Time:	10.0 ms

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

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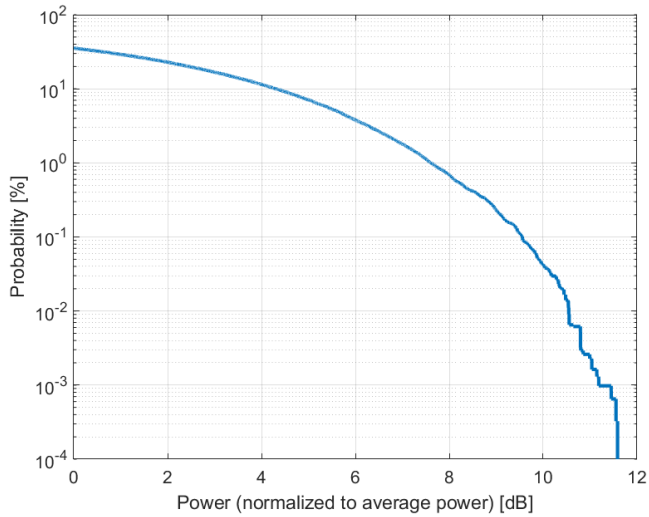
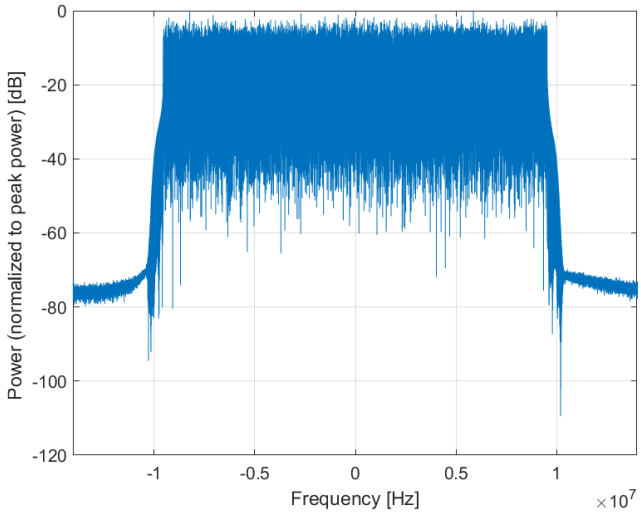
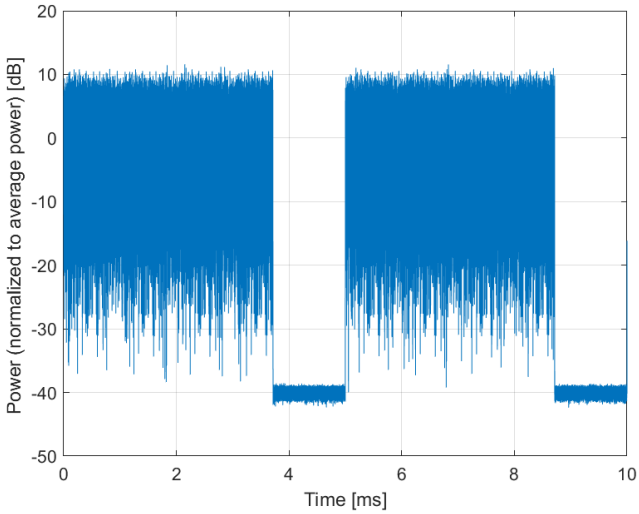


Complementary Cumulative Distribution Function (CCDF)



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-AAA
PAR: [1]	**9.29 dB**
MIF: [2]	**-4.24 dB**
Standard Reference:	SPEAG
Category:	Random amplitude modulation
Modulation:	64-QAM
Frequency Band:	Band n34 (2010 - 2025 MHz) Band n38 (2570 - 2620 MHz) Band n39 (1880 - 1920 MHz) Band n40 (2300 - 2400 MHz) Band n41 (2496 - 2690 MHz) Band n48 (3550 - 3700 MHz) Band n50 (1432 - 1517 MHz) Band n51 (1427 - 1432 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:	5.0 MHz
Integration Time:	10.0 ms

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

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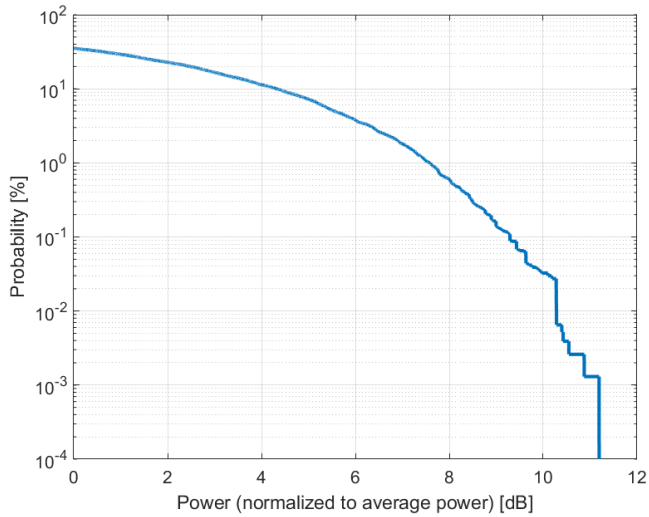
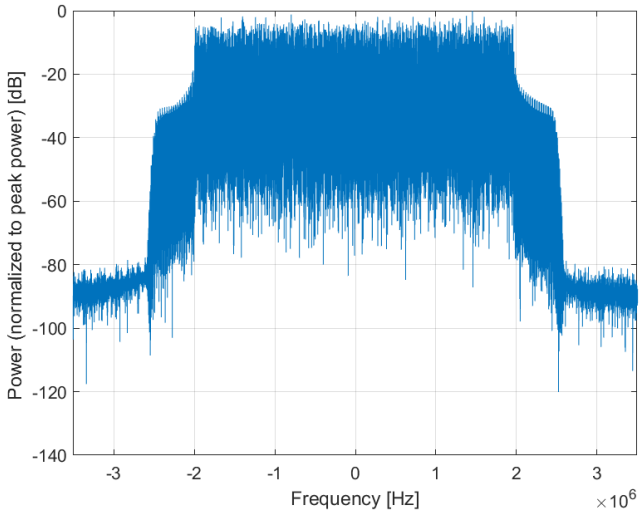
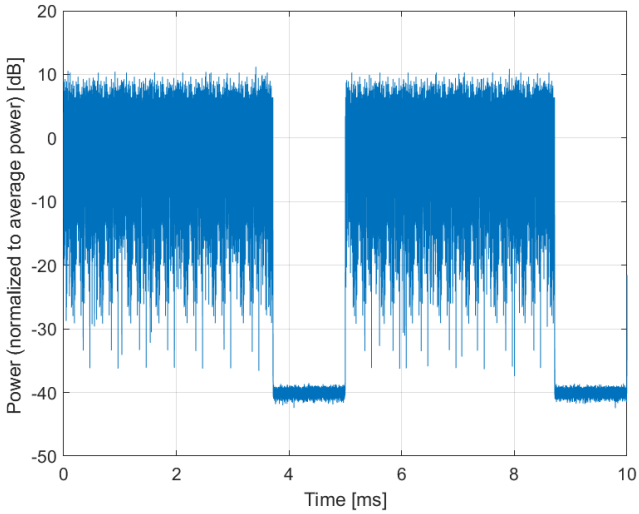


Complementary Cumulative Distribution Function (CCDF)



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-AAA
PAR: [1]	**9.37 dB**
MIF: [2]	**-4.23 dB**
Standard Reference:	SPEAG
Category:	Random amplitude modulation
Modulation:	64-QAM
Frequency Band:	Band n34 (2010 - 2025 MHz) Band n38 (2570 - 2620 MHz) Band n39 (1880 - 1920 MHz) Band n40 (2300 - 2400 MHz) Band n41 (2496 - 2690 MHz) Band n48 (3550 - 3700 MHz) Band n50 (1432 - 1517 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: 64-QAM Subcarrier Spacing: 30 kHz Model: TM 3.1 Data Type: PN9
Bandwidth:	10.0 MHz
Integration Time:	10.0 ms

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

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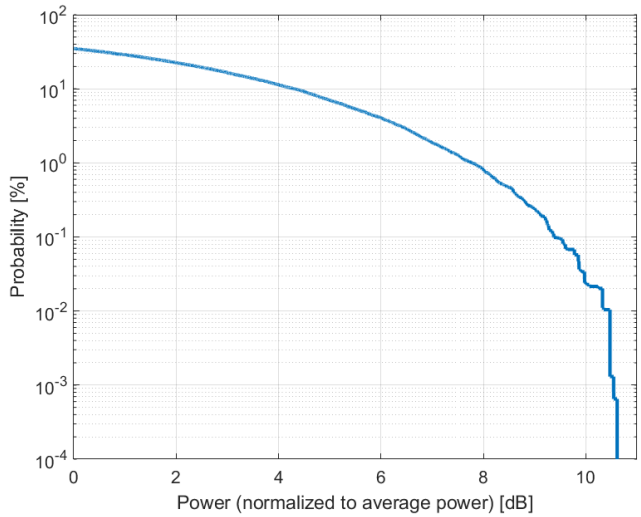
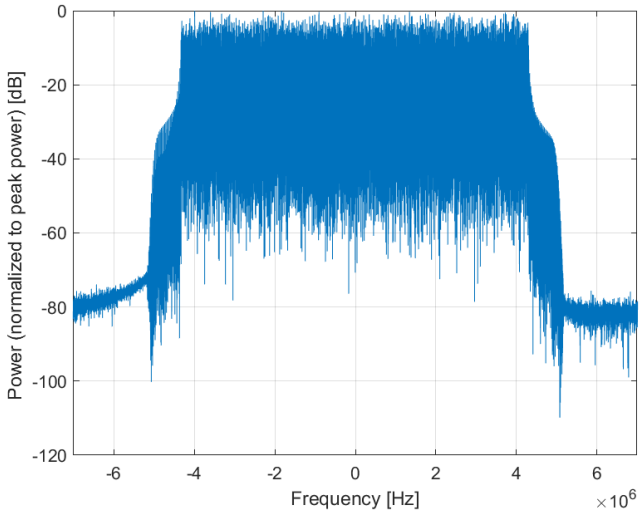
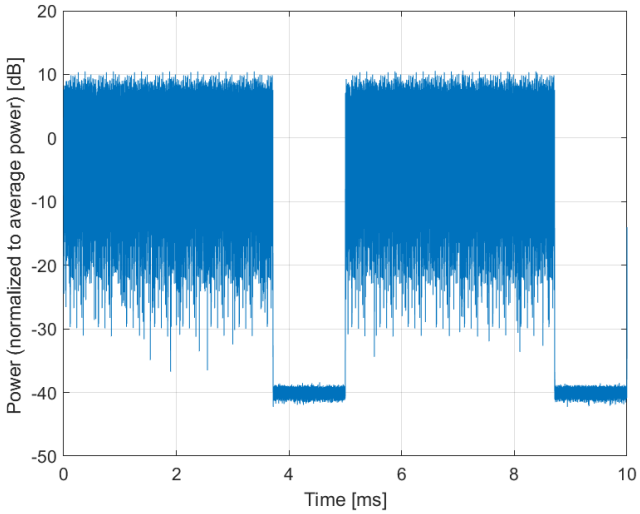


Complementary Cumulative Distribution Function (CCDF)



Frequency Domain



Time Domain

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Engineering AG
Zeughausstrasse 43, 8004 Zurich, Switzerland

Name:	**5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 30 kHz)**
Group:	5G NR FR1 TDD
UID:	10966-AAA
PAR: [1]	**9.55 dB**
MIF: [2]	**-4.22 dB**
Standard Reference:	SPEAG
Category:	Random amplitude modulation
Modulation:	64-QAM
Frequency Band:	Band n34 (2010 - 2025 MHz) Band n38 (2570 - 2620 MHz) Band n39 (1880 - 1920 MHz) Band n40 (2300 - 2400 MHz) Band n41 (2496 - 2690 MHz) Band n48 (3550 - 3700 MHz) Band n50 (1432 - 1517 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: 64-QAM Subcarrier Spacing: 30 kHz Model: TM 3.1 Data Type: PN9
Bandwidth:	15.0 MHz
Integration Time:	10.0 ms

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

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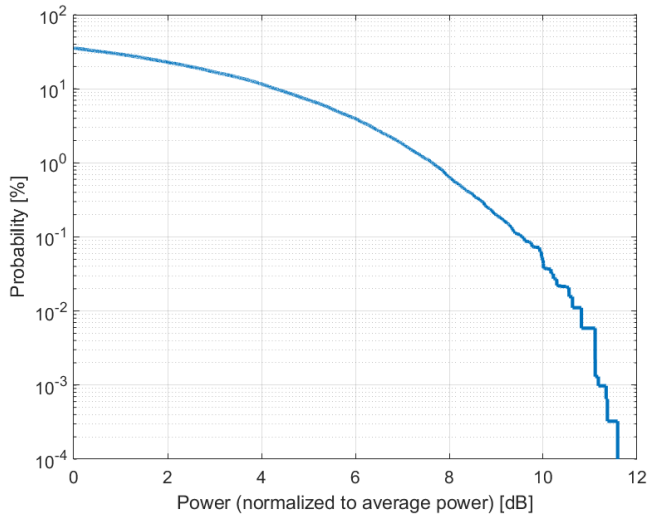
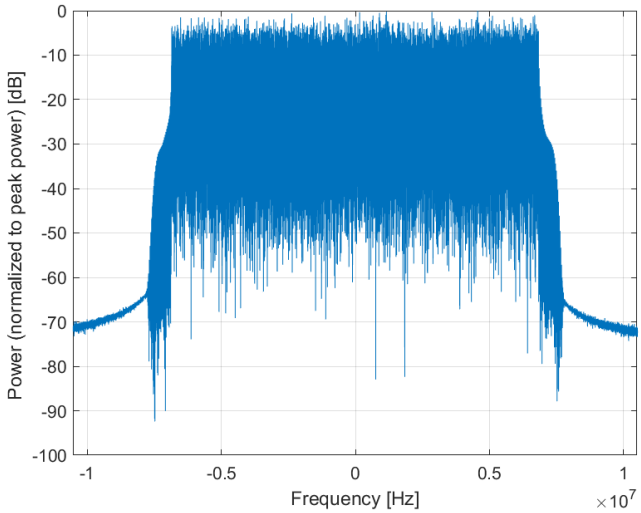
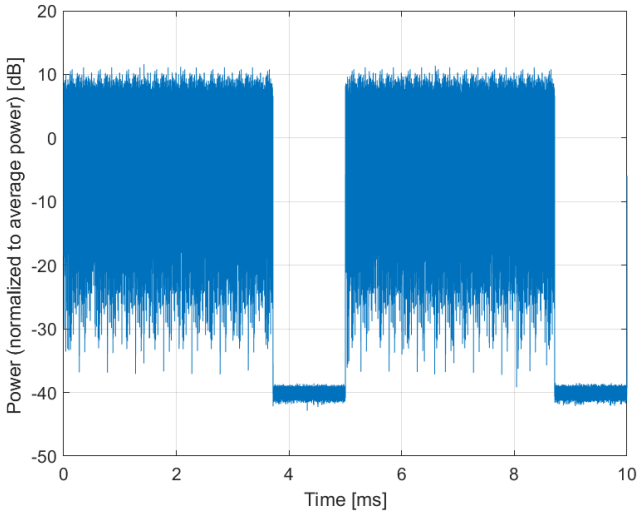


Complementary Cumulative Distribution Function (CCDF)



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 TDD
UID:	10967-AAA
PAR: [1]	**9.42 dB**
MIF: [2]	**-4.23 dB**
Standard Reference:	SPEAG
Category:	Random amplitude modulation
Modulation:	64-QAM
Frequency Band:	Band n38 (2570 - 2620 MHz) Band n39 (1880 - 1920 MHz) Band n40 (2300 - 2400 MHz) Band n41 (2496 - 2690 MHz) Band n48 (3550 - 3700 MHz) Band n50 (1432 - 1517 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: 64-QAM Subcarrier Spacing: 30 kHz Model: TM 3.1 Data Type: PN9
Bandwidth:	20.0 MHz
Integration Time:	10.0 ms

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

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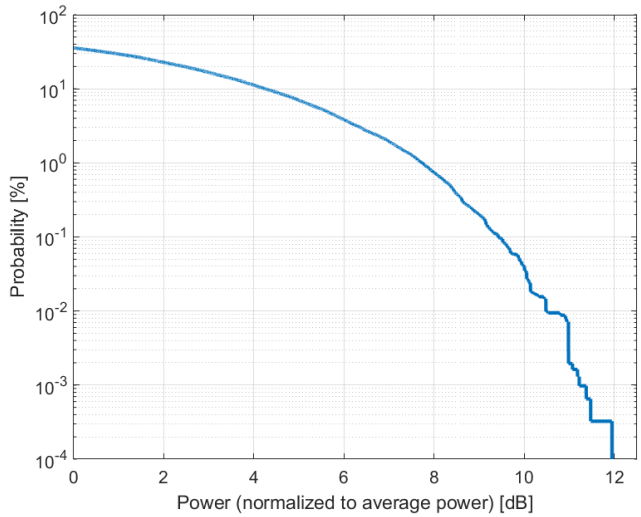
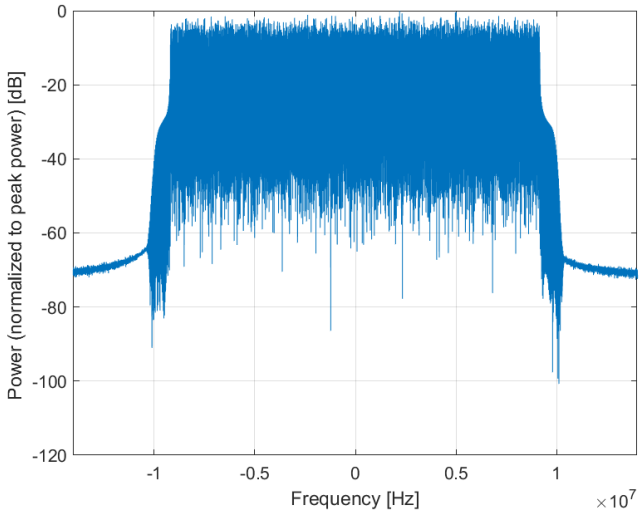
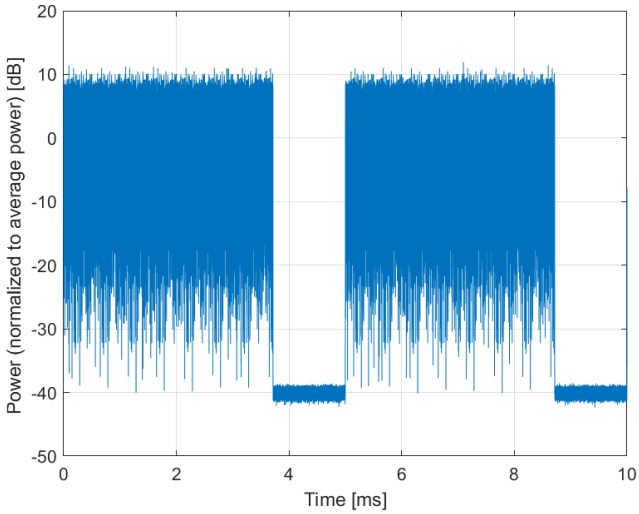


Complementary Cumulative Distribution Function (CCDF)



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-AAA
PAR: [1]	**9.49 dB**
MIF: [2]	**-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) 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

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

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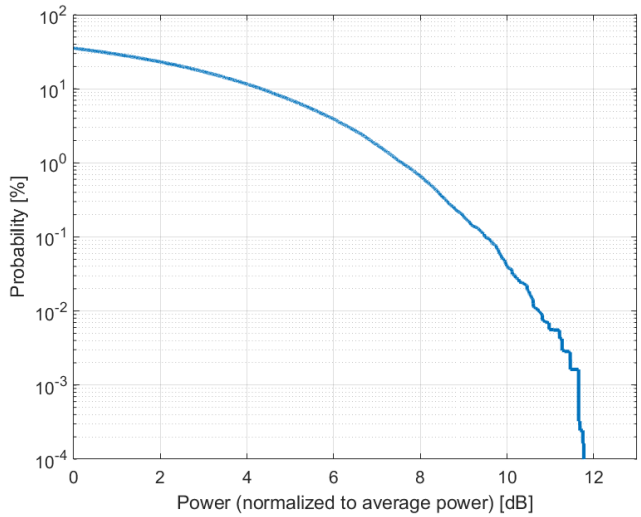
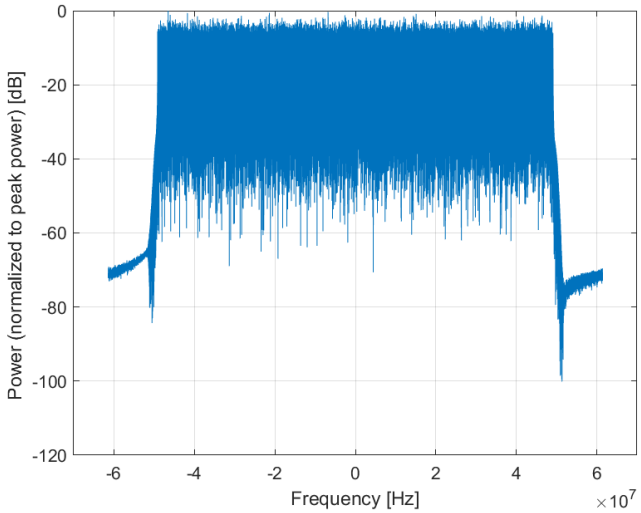
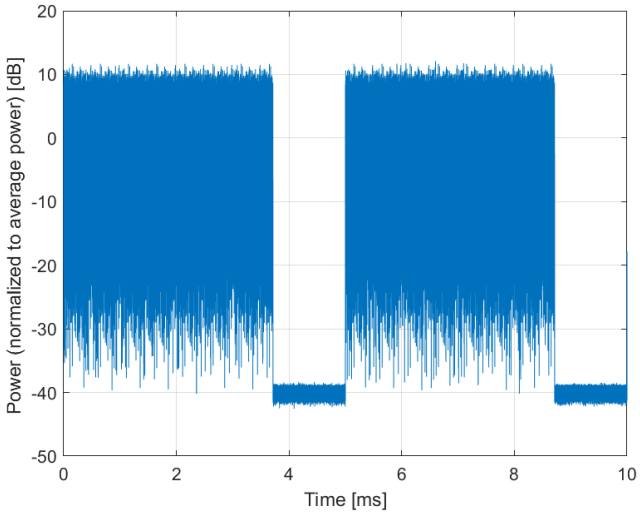


Complementary Cumulative Distribution Function (CCDF)



Frequency Domain



Time Domain