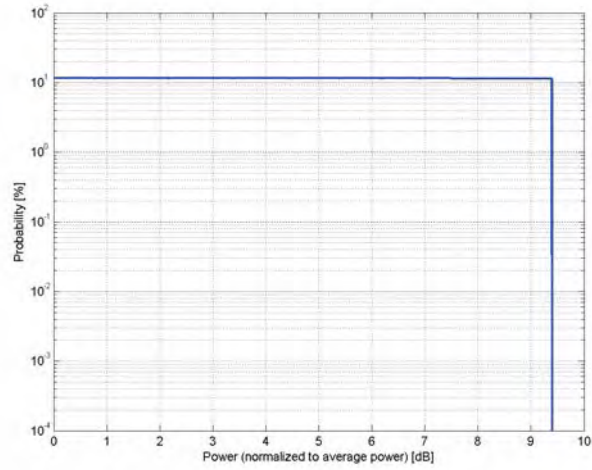


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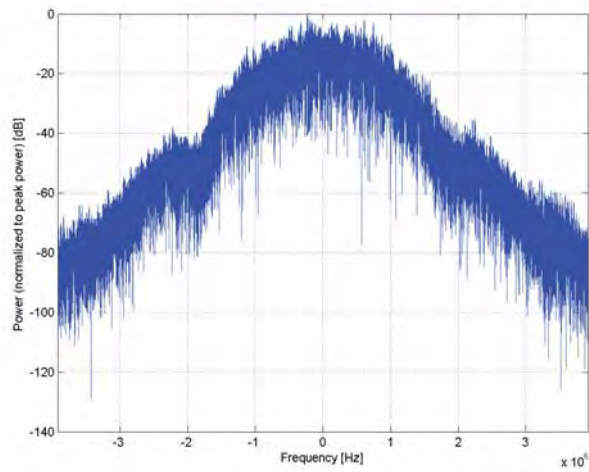
Name:	<b>GSM-FDD (TDMA, GMSK)</b>
Group:	GSM
UID:	10021-DAC
PAR: <sup>1</sup>	<b>9.39 dB</b>
MIF: <sup>2</sup>	<b>3.63 dB</b>
Standard Reference:	ETSI TS 100 909 V8.9.0 (2005-01) FCC OET KDB 941225, D03 and D04
Category:	Periodic pulsed modulation
Modulation:	GMSK
Frequency Band:	GSM 450 (450.4 - 457.6 MHz) GSM 480 (478.8 - 486.0 MHz) GSM 710 (698.0 - 716.0 MHz) GSM 750 (747.0 - 763.0 MHz) GSM 850 (824.0 - 849.0 MHz) P-GSM 900 (890.0 - 915.0 MHz) E-GSM 900 (880.0 - 915.0 MHz) R-GSM 900 (876.0 - 915.0 MHz) DCS 1800 (1710.0 - 1785.0 MHz) PCS 1900 (1850.0 - 1910.0 MHz) ER-GSM 900 (873.0 - 915.0 MHz) Validation band (0.0 - 6000.0 MHz)
Detailed Specification:	Active Slot: TNO Data: PN9 continuous Frame: composed out of 8 Slots Multiframe: 26th (IDLE) Frame set blank Slottype & -timing: Normal burst for GMSK
Bandwidth:	0.2 MHz
Integration Time:	120.0 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)"

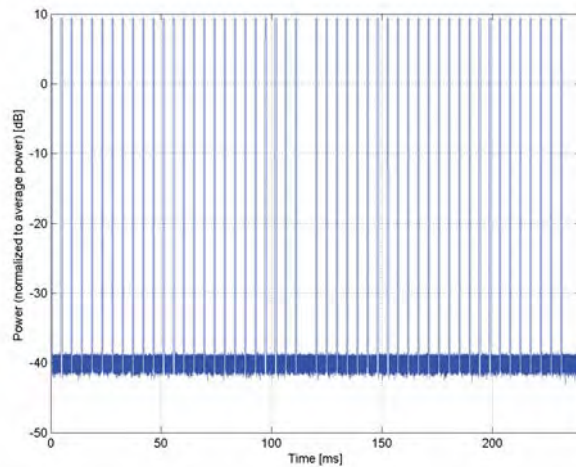
<sup>2</sup> Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).



**Complementary Cumulative Distribution Function (CCDF)**



**Frequency Domain**



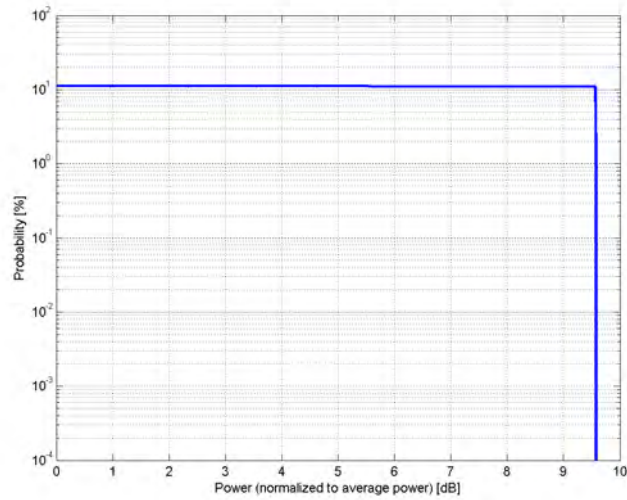
**Time Domain**

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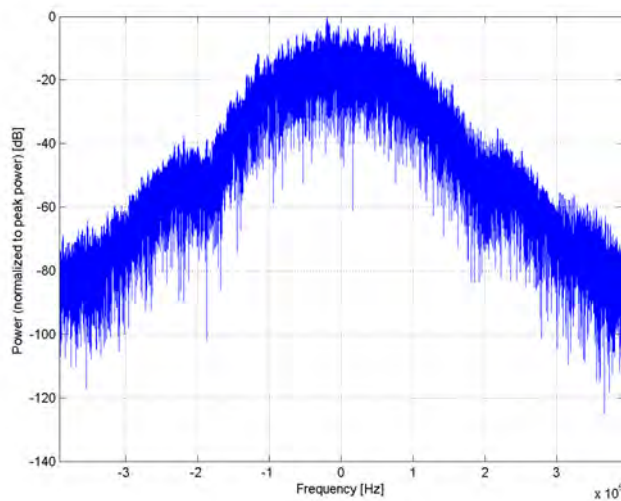
Name:	<b>GPRS-FDD (TDMA, GMSK, TN 0)</b>
Group:	GSM
UID:	10023-DAC
PAR: <sup>1</sup>	<b>9.57 dB</b>
MIF: <sup>2</sup>	<b>3.80 dB</b>
Standard Reference:	ETSI TS 100 909 V8.9.0 (2005-01) FCC OET KDB 941225, D03 and D04
Category:	Periodic pulsed modulation
Modulation:	GMSK
Frequency Band:	GSM 450 (450.4 - 457.6 MHz) GSM 480 (478.8 - 486.0 MHz) GSM 710 (698.0 - 716.0 MHz) GSM 750 (747.0 - 763.0 MHz) GSM 850 (824.0 - 849.0 MHz) P-GSM 900 (890.0 - 915.0 MHz) E-GSM 900 (880.0 - 915.0 MHz) R-GSM 900 (876.0 - 915.0 MHz) DCS 1800 (1710.0 - 1785.0 MHz) PCS 1900 (1850.0 - 1910.0 MHz) ER-GSM 900 (873.0 - 915.0 MHz) Validation band (0.0 - 6000.0 MHz)
Detailed Specification:	Active Slot: TN0 Data: PN9 continuous Frame: composed out of 8 Slots Multiframe: 13th (PTCCH) and 26th (IDLE) Frame set blank Slottype & -timing: Normal burst for GMSK
Bandwidth:	0.2 MHz
Integration Time:	60.0 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)"

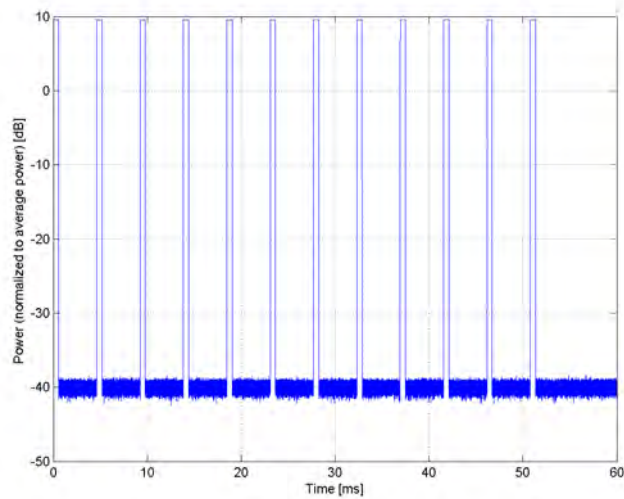
<sup>2</sup> Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).



### Complementary Cumulative Distribution Function (CCDF)



### Frequency Domain



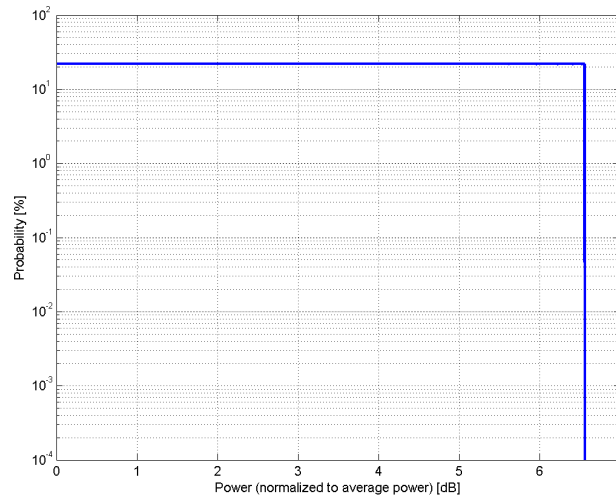
### Time Domain

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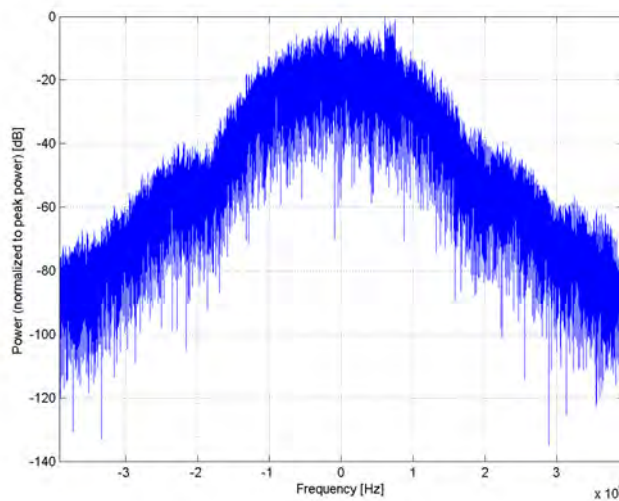
Name:	<b>GPRS-FDD (TDMA, GMSK, TN 0-1)</b>
Group:	GSM
UID:	10024-DAC
PAR: <sup>1</sup>	<b>6.56 dB</b>
MIF: <sup>2</sup>	<b>1.15 dB</b>
Standard Reference:	ETSI TS 100 909 V8.9.0 (2005-01) FCC OET KDB 941225, D03 and D04
Category:	Periodic pulsed modulation
Modulation:	GMSK
Frequency Band:	GSM 450 (450.4 - 457.6 MHz) GSM 480 (478.8 - 486.0 MHz) GSM 710 (698.0 - 716.0 MHz) GSM 750 (747.0 - 763.0 MHz) GSM 850 (824.0 - 849.0 MHz) P-GSM 900 (890.0 - 915.0 MHz) E-GSM 900 (880.0 - 915.0 MHz) R-GSM 900 (876.0 - 915.0 MHz) DCS 1800 (1710.0 - 1785.0 MHz) PCS 1900 (1850.0 - 1910.0 MHz) ER-GSM 900 (873.0 - 915.0 MHz) Validation band (0.0 - 6000.0 MHz)
Detailed Specification:	Active Slots: TN0, TN1 Data: PN9 continuous Frame: composed out of 8 Slots Multiframe: 13th (PTCCH) and 26th (IDLE) Frame set blank Slottype & -timing: Normal burst for GMSK
Bandwidth:	0.2 MHz
Integration Time:	60.0 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)"

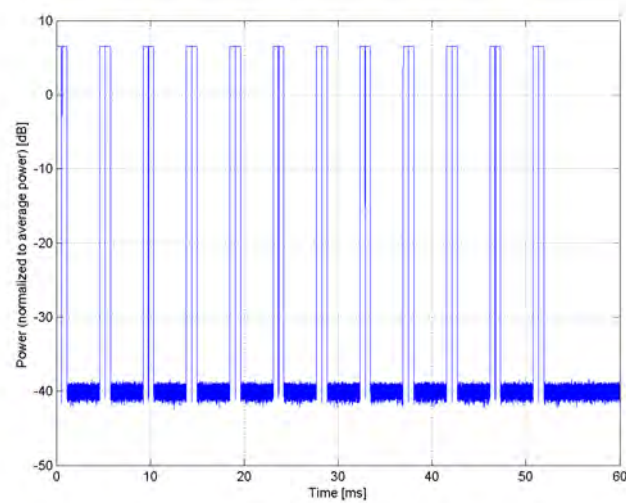
<sup>2</sup> Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).



### Complementary Cumulative Distribution Function (CCDF)



### Frequency Domain



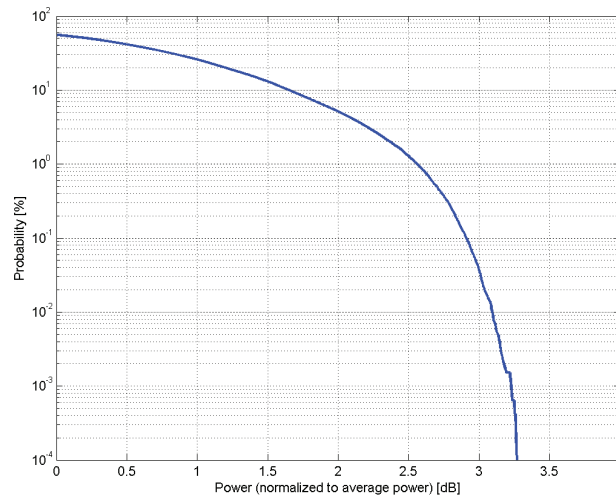
### Time Domain

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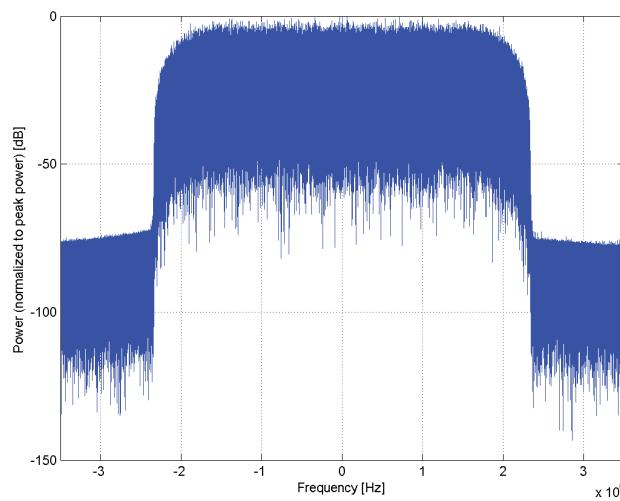
Name:	<b>UMTS-FDD (WCDMA)</b>
Group:	WCDMA
UID:	10011-CAC
PAR: <sup>1</sup>	<b>2.91 dB</b>
MIF: <sup>2</sup>	<b>-27.23 dB</b>
Standard Reference:	3GPP TS 25.141 Annex A FCC OET KDB 941225 D01 SAR test for 3G devices v02
Category:	Random amplitude modulation
Modulation:	QPSK
Frequency Band:	Band 1 (1920.0 - 1980.0 MHz) Band 2 (1850.0 - 1910.0 MHz) Band 3 (1710.0 - 1785.0 MHz) Band 4 (1710.0 - 1755.0 MHz) Band 5 (824.0 - 849.0 MHz) Band 6 (830.0 - 840.0 MHz) Band 7 (2500.0 - 2570.0 MHz) Band 8 (880.0 - 915.0 MHz) Band 9 (1749.9 - 1784.9 MHz) Band 10 (1710.0 - 1770.0 MHz) Band 11 (1427.9 - 1452.9 MHz) Band 12 (698.0 - 716.0 MHz) Band 13 (777.0 - 787.0 MHz) Band 14 (788.0 - 798.0 MHz) Band 19 (830.0 - 845.0 MHz) Band 20 (832.0 - 862.0 MHz) Band 21 (1447.9 - 1462.9 MHz) Band 22 (3410.0 - 3490.0 MHz) Band 25 (1850.0 - 1915.0 MHz) Band 26 (814.0 - 849.0 MHz) Validation band (0.0 - 6000.0 MHz)
Detailed Specification:	Dedicated Channel Type: RMC Bitrate: 12.2 kbps DPDCH: 60 kbps DPCCH: 15 kbps DPCCH/DPDCH power ratio: -5.46 dB
Bandwidth:	5.0 MHz
Integration Time:	100.0 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)"

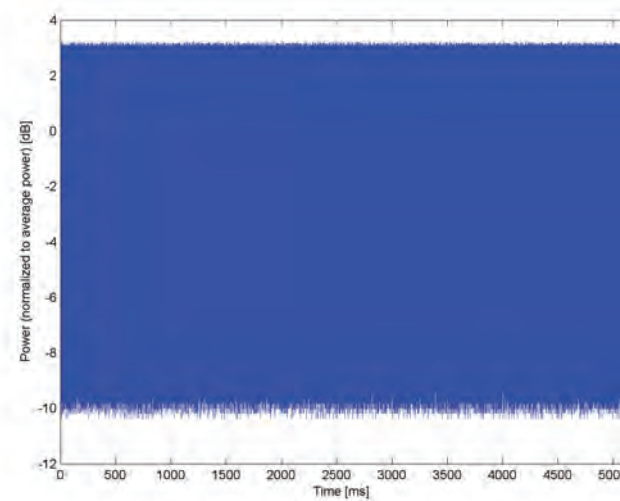
<sup>2</sup> Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).



### Complementary Cumulative Distribution Function (CCDF)



### Frequency Domain



### Time Domain



**Calibration Laboratory of  
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Zeughausstrasse 43, 8004 Zurich, Switzerland

Name: **UMTS-FDD (HSPA+)**

Group: WCDMA  
UID: 10225-CAC

PAR: <sup>1</sup> **5.97 dB**  
MIF: <sup>2</sup> **-20.39 dB**

Standard Reference: 3GPP Rel 7 TS 34.121  
FCC OET KDB 941225 D01 SAR test for 3G devices v02  
FCC OET KDB 941225 D02 Guidance for 3GPP R6 and R7 HSPA v02v01

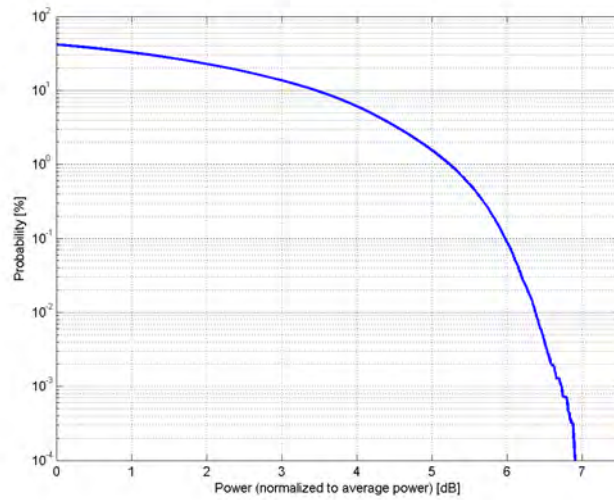
Category: Random amplitude modulation  
Modulation: 16QAM  
Frequency Band: Band 1 (1920.0 - 1980.0 MHz)  
Band 2 (1850.0 - 1910.0 MHz)  
Band 3 (1710.0 - 1785.0 MHz)  
Band 4 (1710.0 - 1755.0 MHz)  
Band 5 (824.0 - 849.0 MHz)  
Band 6 (830.0 - 840.0 MHz)  
Band 7 (2500.0 - 2570.0 MHz)  
Band 8 (880.0 - 915.0 MHz)  
Band 9 (1749.9 - 1784.9 MHz)  
Band 10 (1710.0 - 1770.0 MHz)  
Band 11 (1427.9 - 1452.9 MHz)  
Band 12 (698.0 - 716.0 MHz)  
Band 13 (777.0 - 787.0 MHz)  
Band 14 (788.0 - 798.0 MHz)  
Band 19 (830.0 - 845.0 MHz)  
Band 20 (832.0 - 862.0 MHz)  
Band 21 (1447.9 - 1462.9 MHz)  
Band 22 (3410.0 - 3490.0 MHz)  
Band 25 (1850.0 - 1915.0 MHz)  
Band 26 (814.0 - 849.0 MHz)  
Validation band (0.0 - 6000.0 MHz)

Detailed Specification: 12.2 kbps RMC, FRC H-Set 2  
CQI value: 2  
Sub-test 2 Conditions:  
DPCCH gain factor (Beta.c) = 6/15  
DPDCH gain factor (Beta.d): 15/15  
E-DPDCH Settings:  
Symbol Rate: 2x1960 Mbps  
Modulation 4PAM  
Data Type: PN9

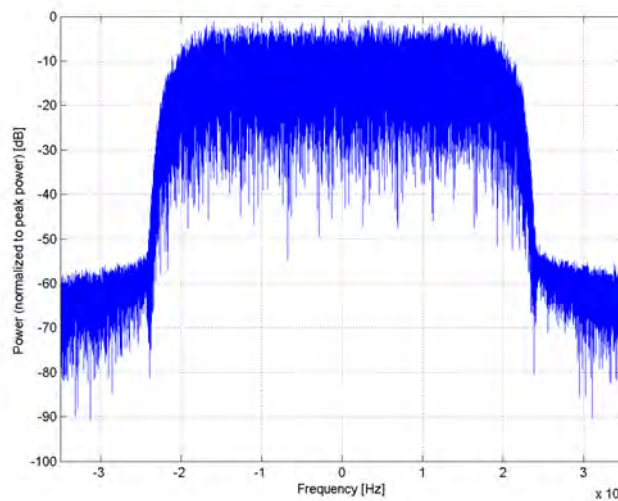
Bandwidth: 5.0 MHz  
Integration Time: 100.0 ms

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

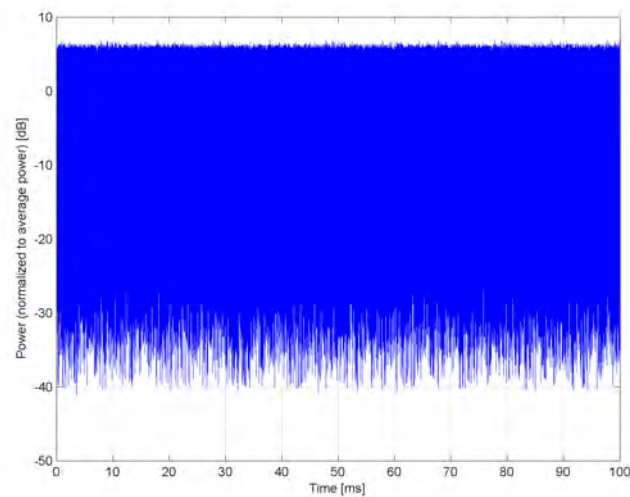
<sup>2</sup> Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).



**Complementary Cumulative Distribution Function (CCDF)**



**Frequency Domain**



**Time Domain**

**Calibration Laboratory of  
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Zeughausstrasse 43, 8004 Zurich, Switzerland

Name: **LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)**

Group: LTE-FDD  
UID: 10170-CAF

PAR: <sup>1</sup> **6.52 dB**  
MIF: <sup>2</sup> **-9.76 dB**

Standard Reference: 3GPP / ETSI TS 136.101 V8.4.0  
3GPP / ETSI TS 136.213 V8.4.0  
FCC OET KDB 941225 D05 SAR for LTE Devices v01

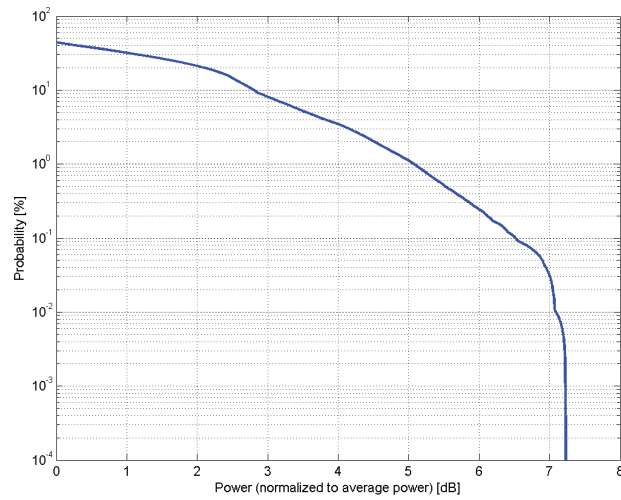
Category: Random amplitude modulation  
Modulation: 16-QAM  
Frequency Band: Band 1 (1920.0 - 1980.0 MHz)  
Band 2 (1850.0 - 1910.0 MHz)  
Band 3 (1710.0 - 1785.0 MHz)  
Band 4 (1710.0 - 1755.0 MHz)  
Band 7 (2500.0 - 2570.0 MHz)  
Band 9 (1749.9 - 1784.9 MHz)  
Band 10 (1710.0 - 1770.0 MHz)  
Band 20 (832.0 - 862.0 MHz)  
Band 22 (3410.0 - 3490.0 MHz)  
Band 23 (2000.0 - 2020.0 MHz)  
Band 25 (1850.0 - 1915.0 MHz)  
Band 28 (703.0 - 748.0 MHz)  
Band 65 (1920.0 - 2010.0 MHz)  
Band 66 (1710.0 - 1780.0 MHz)  
Band 70 (1695.0 - 1710.0 MHz)  
Band 71 (663.0 - 698.0 MHz)  
Band 74 (1427.0 - 1470.0 MHz)  
Validation band (0.0 - 6000.0 MHz)

Detailed Specification: Modulation Scheme: SC-FDMA  
Number of PUSCHs: 1  
Settings for Subframe #0 to #9:  
Modulation Scheme: 16QAM  
Data Type: UL-SCH  
Number RB: 1  
Transport Block Size: 256  
TBS Index: 14  
MCS Index: 15  
Data Type: PN9

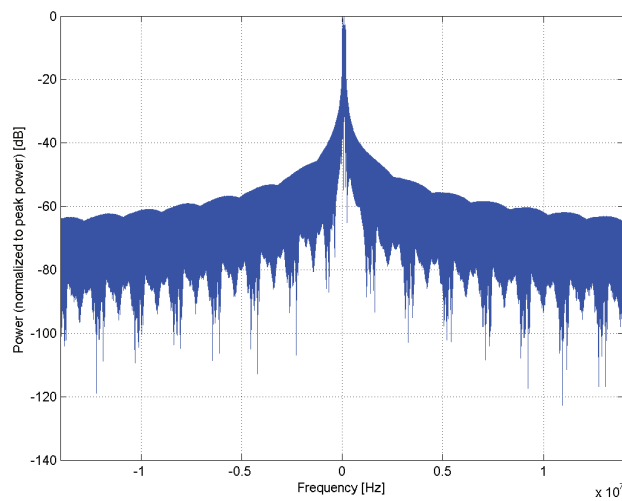
Bandwidth: 20.0 MHz  
Integration Time: 10.0 ms

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

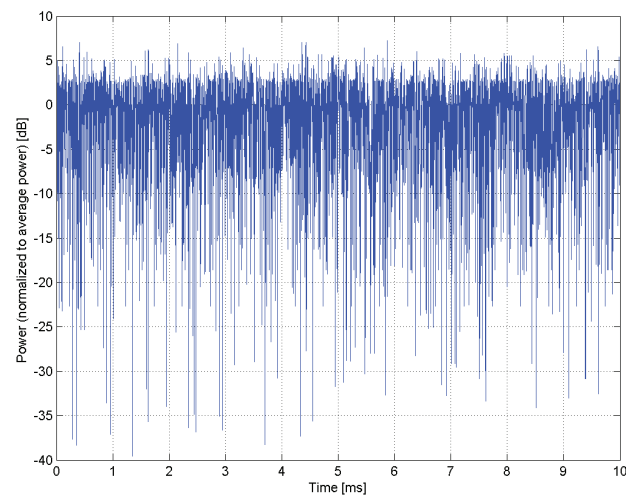
<sup>2</sup> Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).



### Complementary Cumulative Distribution Function (CCDF)



### Frequency Domain



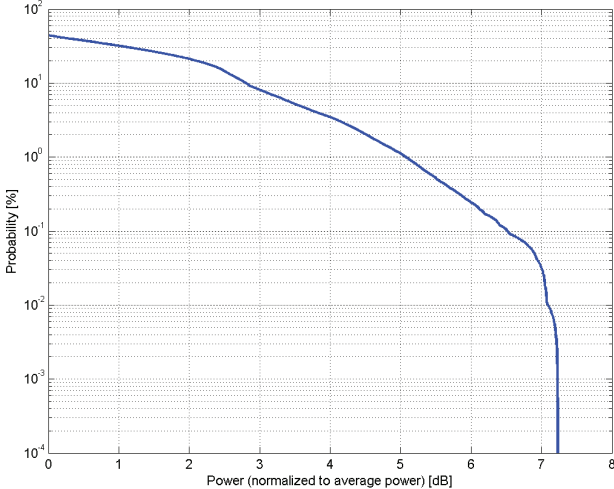
### Time Domain

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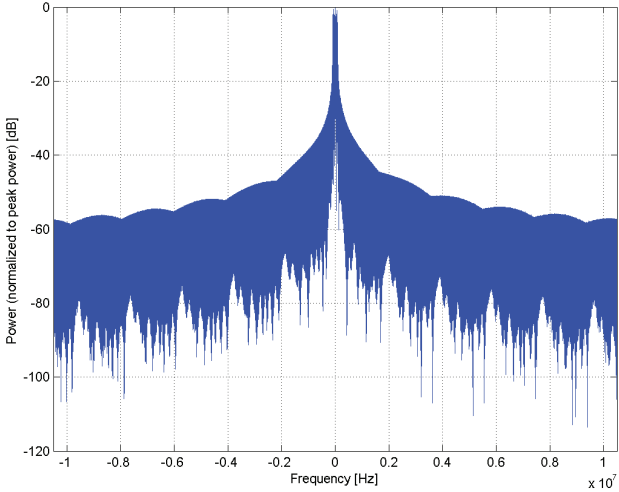
Name:	<b>LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)</b>
Group:	LTE-FDD
UID:	10182-CAF
PAR: <sup>1</sup>	<b>6.52 dB</b>
MIF: <sup>2</sup>	<b>-9.76 dB</b>
Standard Reference:	3GPP / ETSI TS 136.101 V8.4.0 3GPP / ETSI TS 136.213 V8.4.0 FCC OET KDB 941225 D05 SAR for LTE Devices v01
Category:	Random amplitude modulation
Modulation:	16-QAM
Frequency Band:	Band 1 (1920.0 - 1980.0 MHz) Band 2 (1850.0 - 1910.0 MHz) Band 3 (1710.0 - 1785.0 MHz) Band 4 (1710.0 - 1755.0 MHz) Band 7 (2500.0 - 2570.0 MHz) Band 9 (1749.9 - 1784.9 MHz) Band 10 (1710.0 - 1770.0 MHz) Band 18 (815.0 - 830.0 MHz) Band 19 (830.0 - 845.0 MHz) Band 20 (832.0 - 862.0 MHz) Band 21 (1447.9 - 1462.9 MHz) Band 22 (3410.0 - 3490.0 MHz) Band 23 (2000.0 - 2020.0 MHz) Band 25 (1850.0 - 1915.0 MHz) Band 26 (814.0 - 849.0 MHz) Band 28 (703.0 - 748.0 MHz) Band 65 (1920.0 - 2010.0 MHz) Band 66 (1710.0 - 1780.0 MHz) Band 68 (698.0 - 728.0 MHz) Band 70 (1695.0 - 1710.0 MHz) Band 71 (663.0 - 698.0 MHz) Band 74 (1427.0 - 1470.0 MHz) Validation band (0.0 - 6000.0 MHz)
Detailed Specification:	Modulation Scheme: SC-FDMA Number of PUSCHs: 1 Settings for Subframe #0 to #9: Modulation Scheme: 16QAM Data Type: UL-SCH Number RB: 1 Transport Block Size: 256 TBS Index: 14 MCS Index: 15 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)"

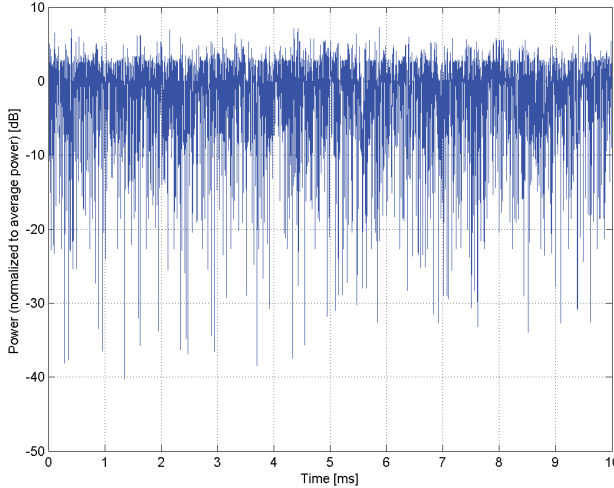
<sup>2</sup> Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).



**Complementary Cumulative Distribution Function (CCDF)**



**Frequency Domain**



**Time Domain**

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

Name: **LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)**

Group: LTE-FDD  
UID: 10176-CAH

PAR: <sup>1</sup> **6.52 dB**  
MIF: <sup>2</sup> **-9.76 dB**

Standard Reference: 3GPP / ETSI TS 136.101 V8.4.0  
3GPP / ETSI TS 136.213 V8.4.0  
FCC OET KDB 941225 D05 SAR for LTE Devices v01

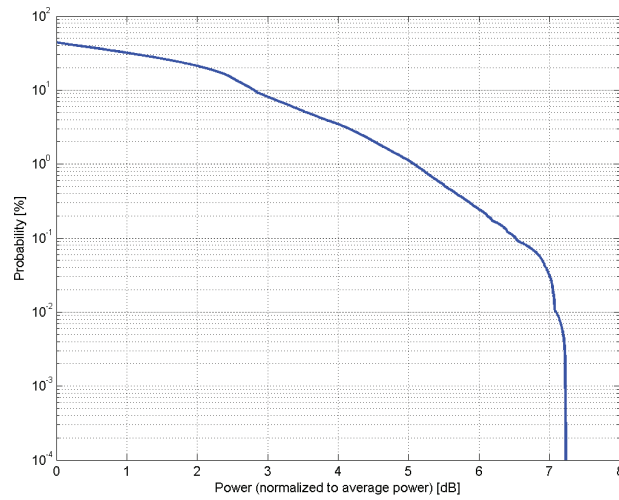
Category: Random amplitude modulation  
Modulation: 16-QAM  
Frequency Band: Band 1 (1920.0 - 1980.0 MHz)  
Band 2 (1850.0 - 1910.0 MHz)  
Band 3 (1710.0 - 1785.0 MHz)  
Band 4 (1710.0 - 1755.0 MHz)  
Band 5 (824.0 - 849.0 MHz)  
Band 6 (830.0 - 840.0 MHz)  
Band 7 (2500.0 - 2570.0 MHz)  
Band 8 (880.0 - 915.0 MHz)  
Band 9 (1749.9 - 1784.9 MHz)  
Band 10 (1710.0 - 1770.0 MHz)  
Band 11 (1427.9 - 1447.9 MHz)  
Band 12 (699.0 - 716.0 MHz)  
Band 13 (777.0 - 787.0 MHz)  
Band 14 (788.0 - 798.0 MHz)  
Band 17 (704.0 - 716.0 MHz)  
Band 18 (815.0 - 830.0 MHz)  
Band 19 (830.0 - 845.0 MHz)  
Band 20 (832.0 - 862.0 MHz)  
Band 21 (1447.9 - 1462.9 MHz)  
Band 22 (3410.0 - 3490.0 MHz)  
Band 23 (2000.0 - 2020.0 MHz)  
Band 24 (1626.5 - 1660.5 MHz)  
Band 25 (1850.0 - 1915.0 MHz)  
Band 26 (814.0 - 849.0 MHz)  
Band 27 (807.0 - 824.0 MHz)  
Band 28 (703.0 - 748.0 MHz)  
Band 30 (2305.0 - 2315.0 MHz)  
Band 65 (1920.0 - 2010.0 MHz)  
Band 66 (1710.0 - 1780.0 MHz)  
Band 68 (698.0 - 728.0 MHz)  
Band 70 (1695.0 - 1710.0 MHz)  
Band 71 (663.0 - 698.0 MHz)  
Band 74 (1427.0 - 1470.0 MHz)  
Band 85 (698.0 - 716.0 MHz)  
Validation band (0.0 - 6000.0 MHz)

Detailed Specification: Modulation Scheme: SC-FDMA  
Number of PUSCHs: 1  
Settings for Subframe #0 to #9:  
Modulation Scheme: QPSK  
Data Type: UL-SCH  
Number RB: 1  
Transport Block Size: 256  
TBS Index: 14  
MCS Index: 15  
Data Type: PN9

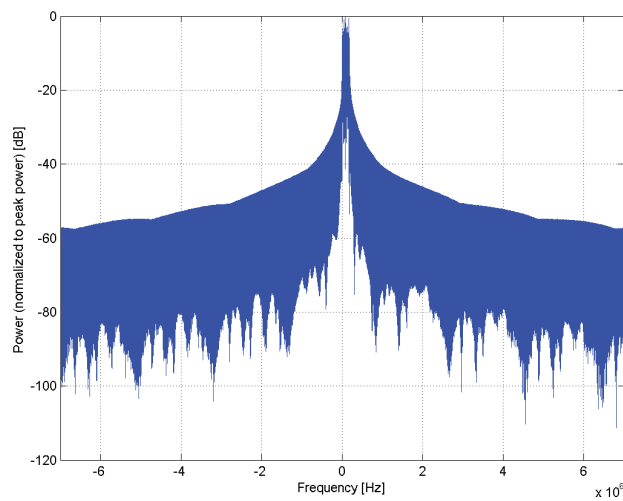
Bandwidth: 10.0 MHz  
Integration Time: 10.0 ms

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

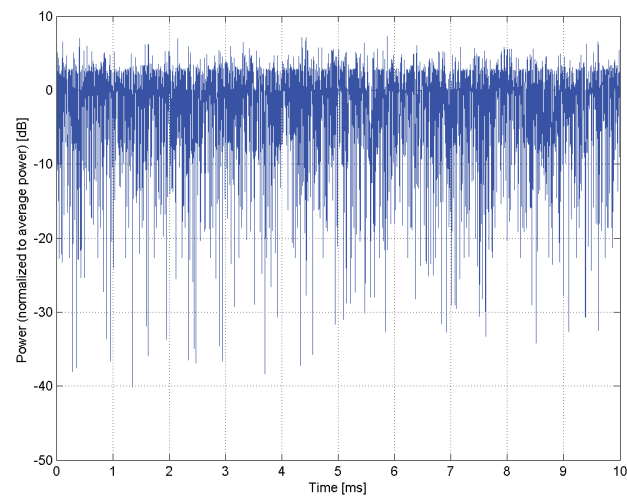
<sup>2</sup> Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).



### Complementary Cumulative Distribution Function (CCDF)



### Frequency Domain



### Time Domain



**Calibration Laboratory of  
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Zeughausstrasse 43, 8004 Zurich, Switzerland

Name: **LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)**

Group: LTE-TDD  
UID: 10173-CAH

PAR: <sup>1</sup> **9.48 dB**  
MIF: <sup>2</sup> **-1.44 dB**

Standard Reference: 3GPP / ETSI TS 136.101 V8.4.0  
3GPP / ETSI TS 136.213 V8.4.0  
FCC OET KDB 941225 D05 SAR for LTE Devices v02

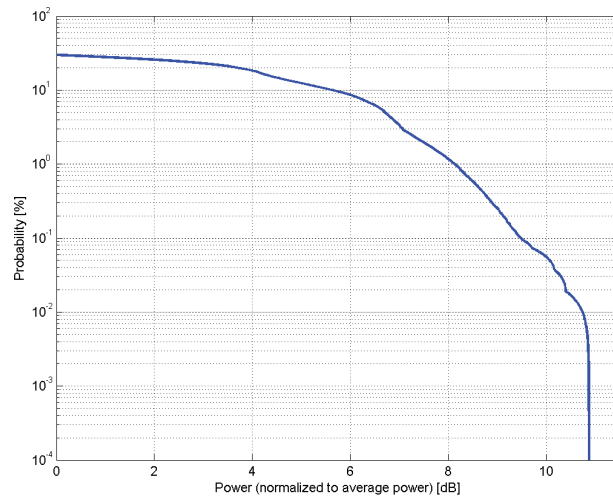
Category: Random amplitude modulation  
Modulation: 16-QAM  
Frequency Band: Band 33 (1900.0 - 1920.0 MHz)  
Band 35 (1850.0 - 1910.0 MHz)  
Band 36 (1930.0 - 1990.0 MHz)  
Band 37 (1910.0 - 1930.0 MHz)  
Band 38 (2570.0 - 2620.0 MHz)  
Band 39 (1880.0 - 1920.0 MHz)  
Band 40 (2300.0 - 2400.0 MHz)  
Band 41 (2496.0 - 2690.0 MHz)  
Band 42 (3400.0 - 3600.0 MHz)  
Band 43 (3600.0 - 3800.0 MHz)  
Band 44 (703.0 - 803.0 MHz)  
Band 45 (1447.0 - 1467.0 MHz)  
Band 46 (5150.0 - 5925.0 MHz)  
Band 47 (5855.0 - 5925.0 MHz)  
Band 48 (3550.0 - 3700.0 MHz)  
Band 49 (3550.0 - 3700.0 MHz)  
Band 50 (1432.0 - 1517.0 MHz)  
Band 52 (3300.0 - 3400.0 MHz)  
Validation band (0.0 - 6000.0 MHz)

Detailed Specification: Modulation Scheme: SC-FDMA  
Uplink-downlink configuration: 1  
Special Subframe configuration: 4  
Number of Frames: 1  
Settings for UL Subframe 2,3,7,8:  
Number of PUSCHs: 1  
Modulation Scheme: 16QAM  
Allocated RB: 1  
Start Number of RB: 50  
Data Type: PN9fix

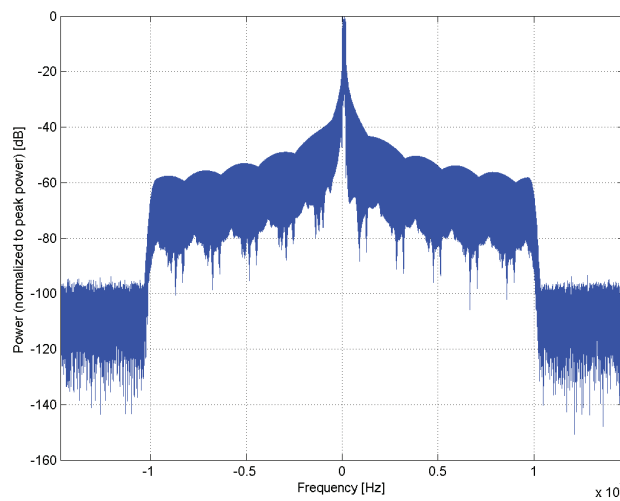
Bandwidth: 20.0 MHz  
Integration Time: 6.0 ms

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

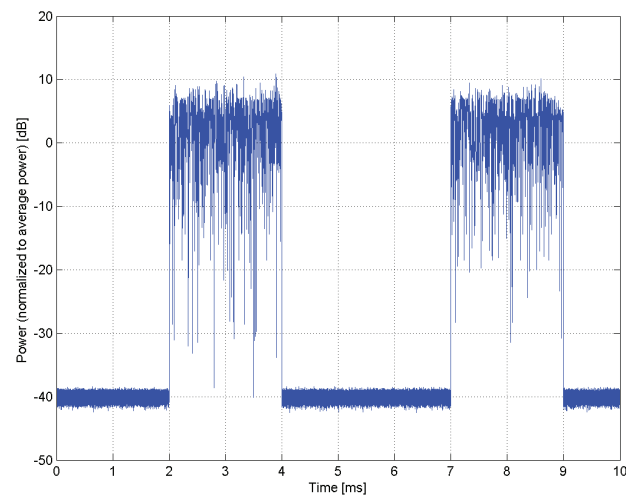
<sup>2</sup> Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).



### Complementary Cumulative Distribution Function (CCDF)



### Frequency Domain



### Time Domain

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Zeughausstrasse 43, 8004 Zurich, Switzerland

Name: **LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)**

Group: LTE-TDD  
UID: 10235-CAH

PAR: <sup>1</sup> **9.48 dB**  
MIF: <sup>2</sup> **-1.44 dB**

Standard Reference: 3GPP / ETSI TS 136.101 V8.4.0  
3GPP / ETSI TS 136.213 V8.4.0  
FCC OET KDB 941225 D05 SAR for LTE Devices v01

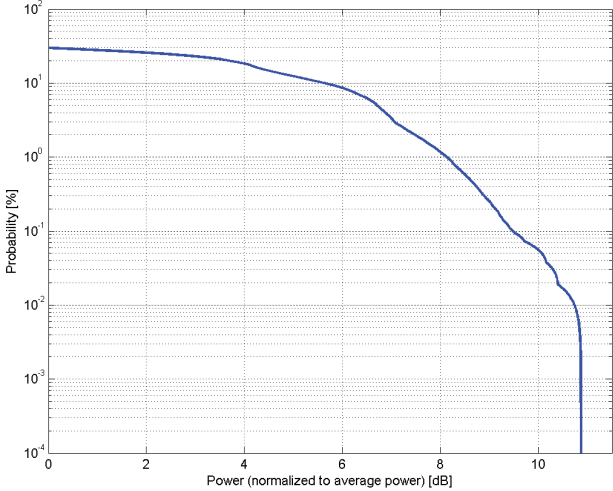
Category: Random amplitude modulation  
Modulation: 16-QAM  
Frequency Band: Band 33 (1900.0 - 1920.0 MHz)  
Band 34 (2010.0 - 2025.0 MHz)  
Band 35 (1850.0 - 1910.0 MHz)  
Band 36 (1930.0 - 1990.0 MHz)  
Band 37 (1910.0 - 1930.0 MHz)  
Band 38 (2570.0 - 2620.0 MHz)  
Band 39 (1880.0 - 1920.0 MHz)  
Band 40 (2300.0 - 2400.0 MHz)  
Band 41 (2496.0 - 2690.0 MHz)  
Band 42 (3400.0 - 3600.0 MHz)  
Band 43 (3600.0 - 3800.0 MHz)  
Band 44 (703.0 - 803.0 MHz)  
Band 45 (1447.0 - 1467.0 MHz)  
Band 46 (5150.0 - 5925.0 MHz)  
Band 47 (5855.0 - 5925.0 MHz)  
Band 48 (3550.0 - 3700.0 MHz)  
Band 49 (3550.0 - 3700.0 MHz)  
Band 50 (1432.0 - 1517.0 MHz)  
Band 52 (3300.0 - 3400.0 MHz)  
Band 53 (2483.5 - 2495.0 MHz)  
Validation band (0.0 - 6000.0 MHz)

Detailed Specification: Modulation Scheme: SC-FDMA  
Uplink-downlink configuration: 1  
Special Subframe configuration: 4  
Number of Frames: 1  
Settings for UL Subframe 2,3,7,8:  
Number of PUSCHs: 1  
Modulation Scheme: 16QAM  
Allocated RB: 1  
Start Number of RB: 25  
Data Type: PN9fix

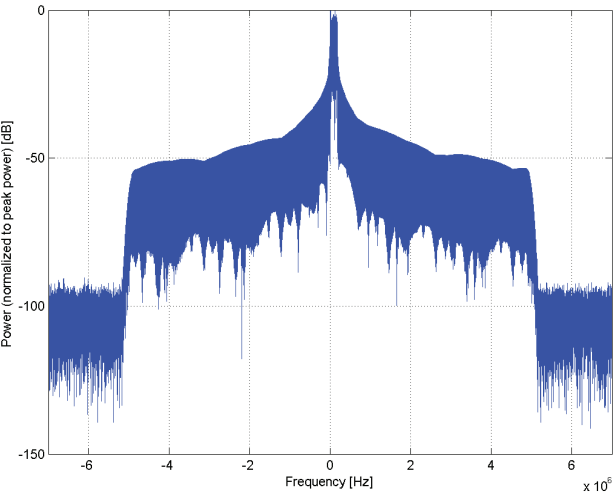
Bandwidth: 10.0 MHz  
Integration Time: 10.0 ms

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

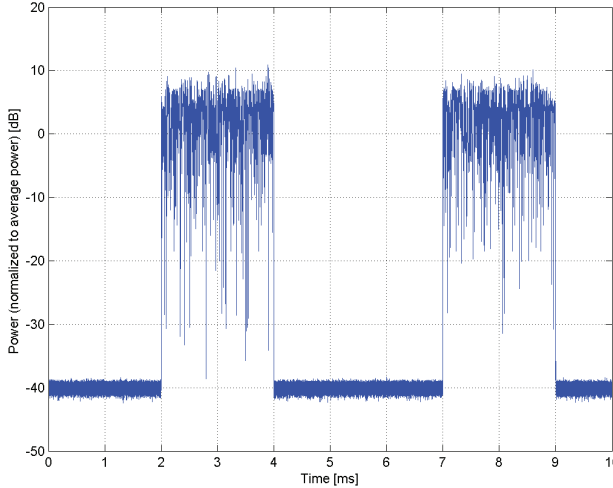
<sup>2</sup> Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).



**Complementary Cumulative Distribution Function (CCDF)**



**Frequency Domain**

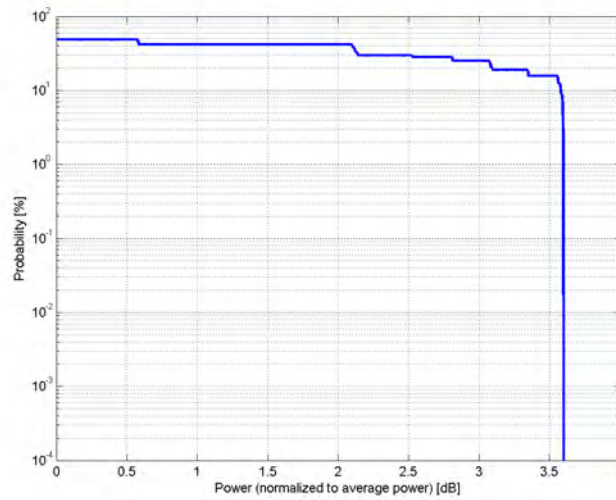


**Time Domain**

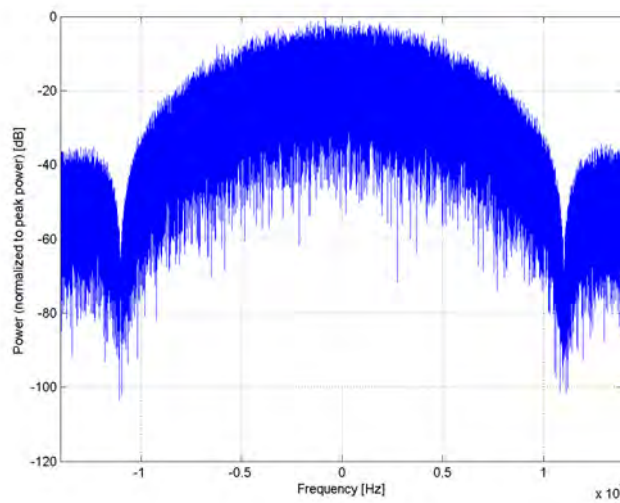
Name:	<b>IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps)</b>
Group:	WLAN
UID:	10061-CAB
PAR: <sup>1</sup>	<b>3.60 dB</b>
MIF: <sup>2</sup>	<b>-2.02 dB</b>
Standard Reference:	IEEE 802.11b-1999 , Part 11, FCC SAR meas for 802 11 a b g v01r02 (248227 D01)
Category:	Random amplitude modulation
Modulation:	DQPSK
Frequency Band:	WLAN 2.4GHz (2412.0-2484.0 MHz, 20230)
Detailed Specification:	Data Rate: 11 Mbps Spreading, Coding: CCK PPDU format: Long Preamble & Heading PSDU Length: 1024 PSDU Data: PN9
Bandwidth:	20.0 MHz
Integration Time:	1.5 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)"

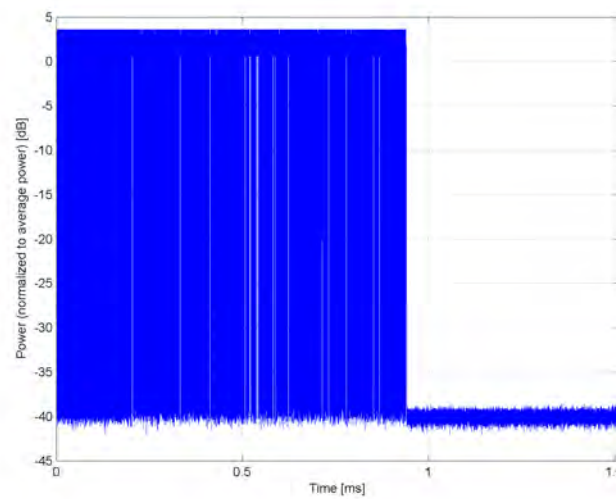
<sup>2</sup> Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).



### Complementary Cumulative Distribution Function (CCDF)



### Frequency Domain

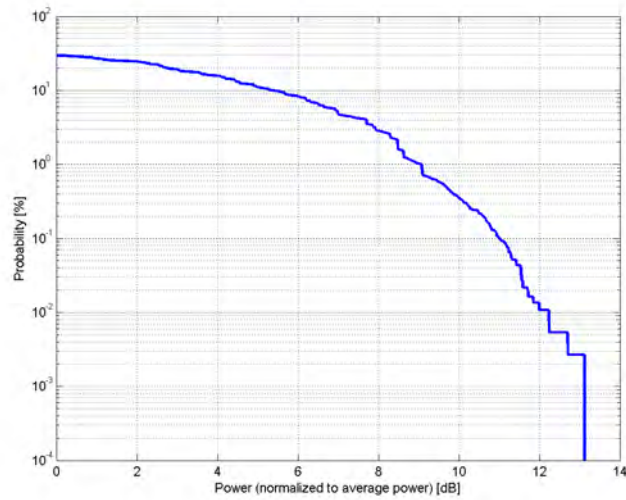


### Time Domain

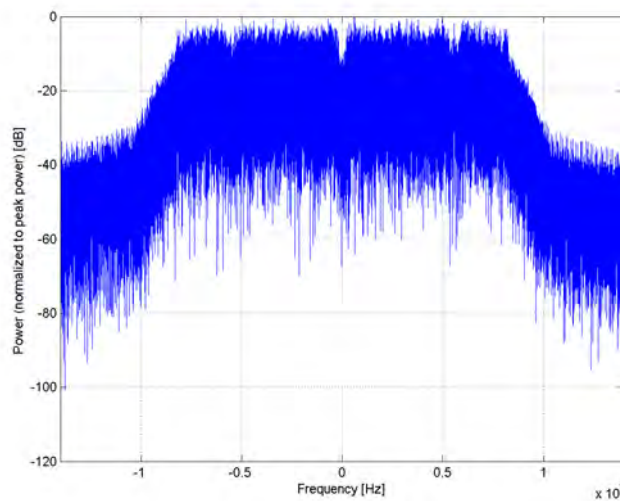
Name:	<b>IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps)</b>
Group:	WLAN
UID:	10077-CAB
PAR: <sup>1</sup>	<b>11.00 dB</b>
MIF: <sup>2</sup>	<b>0.12 dB</b>
Standard Reference:	IEEE 802.11g-2003 , Part 11 FCC SAR meas for 802 11 a b g v01r02 (248227 D01)
Category:	Random amplitude modulation
Modulation:	64-QAM
Frequency Band:	WLAN 2.4GHz (2412.0-2484.0 MHz, 20230)
Detailed Specification:	Data Rate: 54 Mbps Coding Rate: 3/4 Coded bits per subcarrier: 6 Coded bits per OFDM symbol: 288 Data bits per OFDM symbol: 216 PSDU Length: 1000 Bytes PSDU Data: PN9
Bandwidth:	20.0 MHz
Integration Time:	0.9 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)"

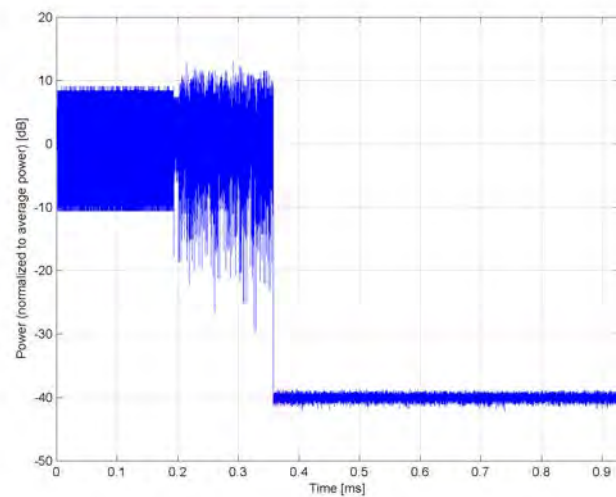
<sup>2</sup> Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).



### Complementary Cumulative Distribution Function (CCDF)



### Frequency Domain



### Time Domain

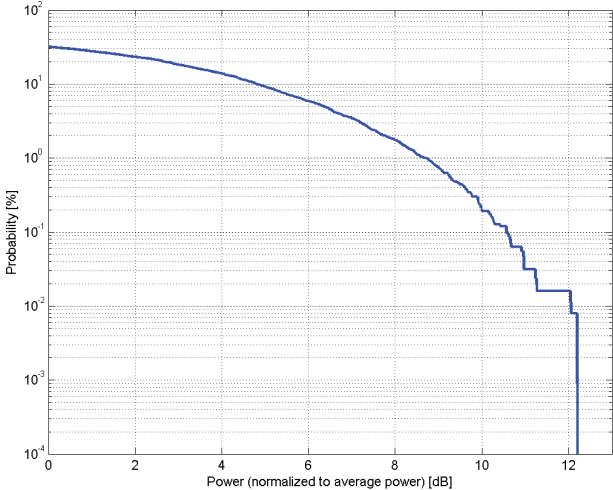


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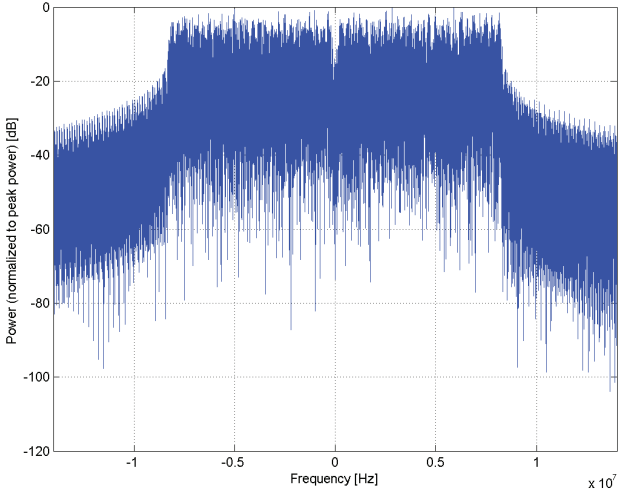
Name:	<b>IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps)</b>
Group:	WLAN
UID:	10069-CAD
PAR: <sup>1</sup>	<b>10.56 dB</b>
MIF: <sup>2</sup>	<b>-3.15 dB</b>
Standard Reference:	IEEE 802.11a-1999 (R2003) , Part 11 IEEE 802.11h-2003 , Part 11 FCC SAR meas for 802 11 a b g v01r02 (248227 D01)
Category:	Random amplitude modulation
Modulation:	64-QAM
Frequency Band:	WLAN 5GHz (4915.0 - 5825.0 MHz) U-NII-1, U-NII-2A (5170 - 5330 MHz) U-NII-2C Standalone (5490 - 5710 MHz) U-NII-2C <5.65 GHz (5490 - 5650 MHz) U-NII-3 Standalone (5735 - 5835 MHz) U-NII-2C, U-NII-3 (5650 - 5835 MHz) U-NII-4 (5.825 - 5.925 MHz) Validation band (0.0 - 6000.0 MHz)
Detailed Specification:	Data Rate: 54 Mbps Coding Rate: 3/4 Coded bits per subcarrier: 6 Coded bits per OFDM symbol: 288 Data bits per OFDM symbol: 216 PSDU Length: 1000 Bytes PSDU Data: PN9
Bandwidth:	20.0 MHz
Integration Time:	0.3 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)"

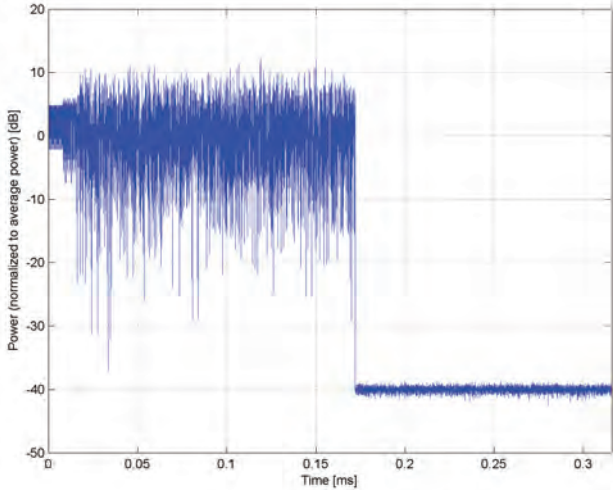
<sup>2</sup> Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).



**Complementary Cumulative Distribution Function (CCDF)**



**Frequency Domain**



**Time Domain**

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Name: **IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle)**

Group: WLAN  
UID: 10317-AAE

PAR: <sup>1</sup> **8.36 dB**  
MIF: <sup>2</sup> **-9.82 dB**

Standard Reference: IEEE 802.11a-1999 (R2003) , Part 11  
FCC SAR meas for 802 11 a b g v01r02 (248227 D01)

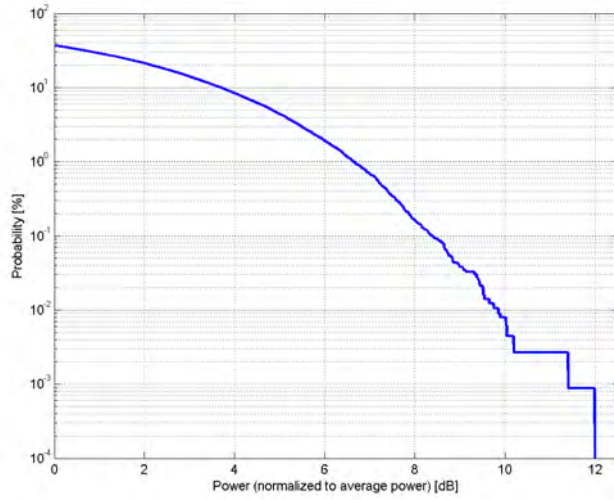
Category: Random amplitude modulation  
Modulation: BPSK  
Frequency Band: WLAN 5GHz (4915.0 - 5825.0 MHz)  
U-NII-1, U-NII-2A (5170 - 5330 MHz)  
U-NII-2C Standalone (5490 - 5710 MHz)  
U-NII-2C <5.65 GHz (5490 - 5650 MHz)  
U-NII-3 Standalone (5735 - 5835 MHz)  
U-NII-2C, U-NII-3 (5650 - 5835 MHz)  
U-NII-5 (5925 - 6425 MHz)  
U-NII-6 (6425 - 6525 MHz)  
U-NII-7 (6525 - 6875 MHz)  
U-NII-8 (6875 - 7125 MHz)  
U-NII-4 (5825 - 5925 MHz)  
Validation band (0.0 - 6000.0 MHz)

Detailed Specification: Duty cycle: 96%  
PSDU length: 1000 bytes  
Data Rate: 6Mbps  
Burst on time: 1360us

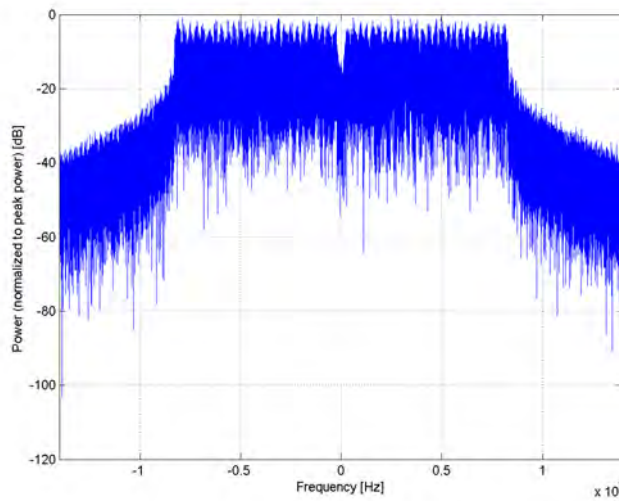
Bandwidth: 20.0 MHz  
Integration Time: 1.4 ms

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

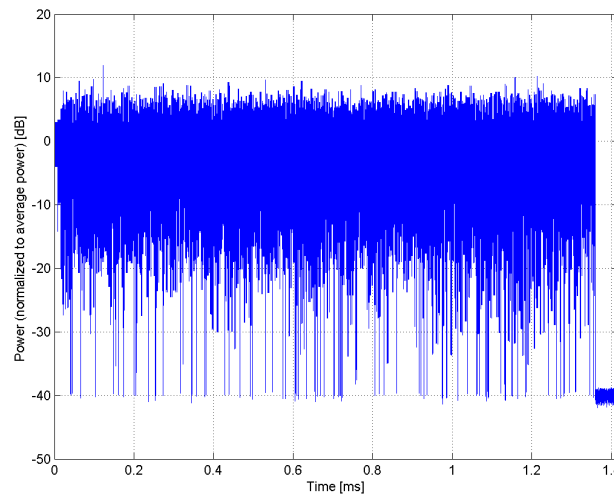
<sup>2</sup> Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).



**Complementary Cumulative Distribution Function (CCDF)**



**Frequency Domain**



**Time Domain**

**Calibration Laboratory of  
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Name: **IEEE 802.11n (HT Mixed, 20MHz, MCS0, 90pc duty cycle)**

Group: WLAN  
UID: 10591-AAD

PAR: <sup>1</sup> **8.63 dB**  
MIF: <sup>2</sup> **-5.59 dB**

Standard Reference: IEEE 802.11-2012  
FCC OET KDB 248227 D01 802.11 Wi-Fi SAR v02r01

Category: Random amplitude modulation

Modulation: BPSK

Frequency Band: WLAN 2.4GHz (2412.0 - 2484.0 MHz)  
WLAN 5GHz (4915.0 - 5825.0 MHz)  
U-NII-1, U-NII-2A (5170 - 5330 MHz)  
U-NII-2C Standalone (5490 - 5710 MHz)  
U-NII-2C <5.65 GHz (5490 - 5650 MHz)  
U-NII-3 Standalone (5735 - 5835 MHz)  
U-NII-2C, U-NII-3 (5650 - 5835 MHz)  
U-NII-5 (5925 - 6425 MHz)  
U-NII-6 (6425 - 6525 MHz)  
U-NII-7 (6525 - 6875 MHz)  
U-NII-8 (6875 - 7125 MHz)  
U-NII-4 (5825 - 5925 MHz)  
Validation band (0.0 - 6000.0 MHz)

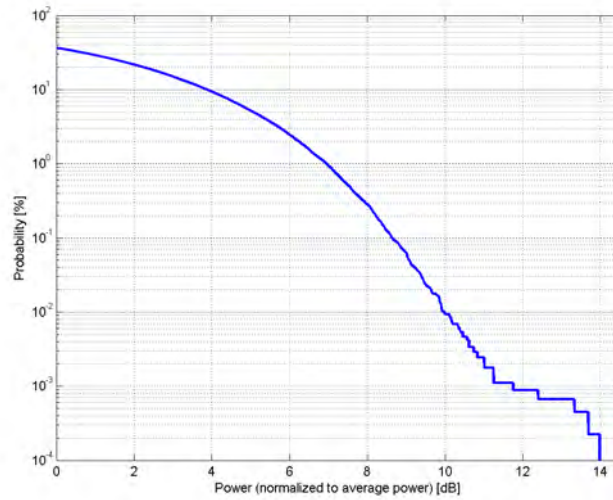
Detailed Specification: Duty cycle: 90%  
MPDU length: 4096 bytes  
MCS: 0  
Guard interval: long

Bandwidth: 20.0 MHz

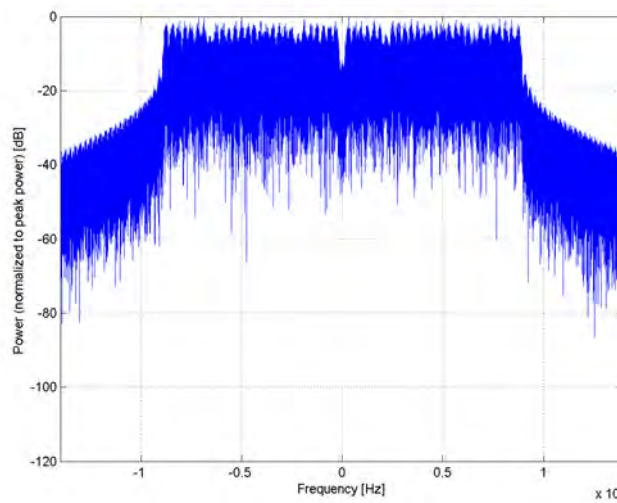
Integration Time: 5.6 ms

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

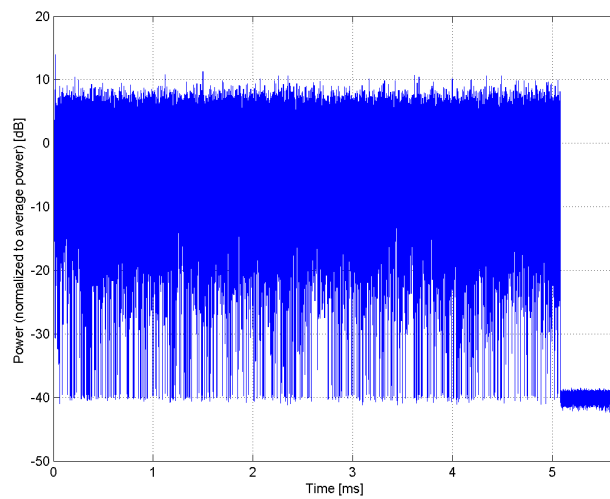
<sup>2</sup> Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).



### Complementary Cumulative Distribution Function (CCDF)



### Frequency Domain



### Time Domain

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Name: **IEEE 802.11ac WiFi (160MHz, MCS0, 90pc duty cycle)**

Group: WLAN  
UID: 10636-AAE

PAR: <sup>1</sup> **8.83 dB**  
MIF: <sup>2</sup> **-5.56 dB**

Standard Reference: IEEE 802.11-2013  
FCC OET KDB 248227 D01 802.11 Wi-Fi SAR v02r01

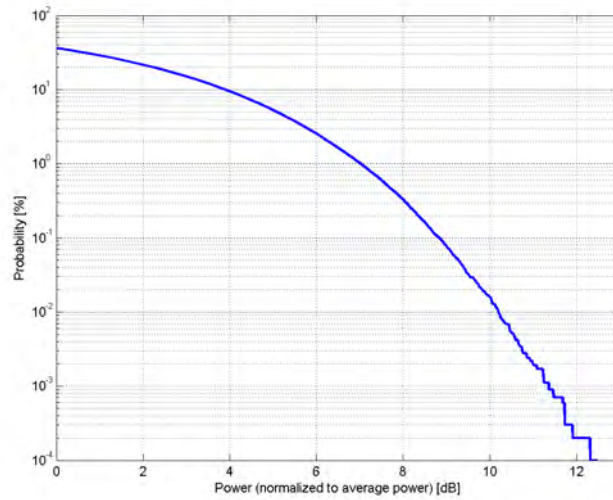
Category: Random amplitude modulation  
Modulation: BPSK  
Frequency Band: WLAN 2.4GHz (2412.0 - 2484.0 MHz)  
WLAN 5GHz (4915.0 - 5825.0 MHz)  
U-NII-1, U-NII-2A (5170 - 5330 MHz)  
U-NII-2C Standalone (5490 - 5710 MHz)  
U-NII-2C <5.65 GHz (5490 - 5650 MHz)  
U-NII-3 Standalone (5735 - 5835 MHz)  
U-NII-2C, U-NII-3 (5650 - 5835 MHz)  
U-NII-5 (5925 - 6425 MHz)  
U-NII-6 (6425 - 6525 MHz)  
U-NII-7 (6525 - 6875 MHz)  
U-NII-8 (6875 - 7125 MHz)  
U-NII-4 (5825 - 5925 MHz)  
Validation band (0.0 - 6000.0 MHz)

Detailed Specification: Bandwidth: 160MHz  
Duty cycle: 90%  
MCS: 0  
Number of spatial streams: 1  
MPDU length: 32768

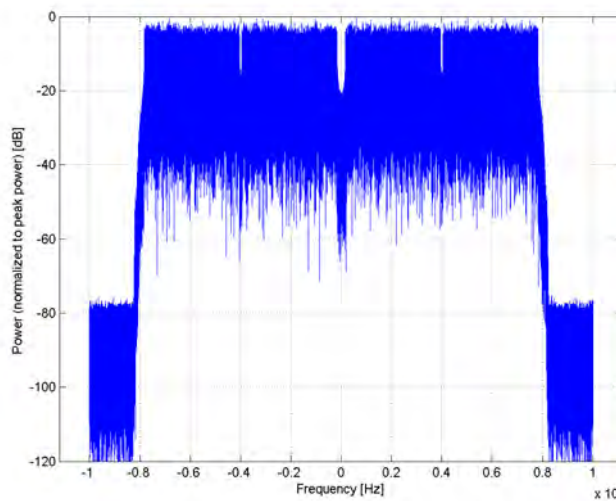
Bandwidth: 160.0 MHz  
Integration Time: 5.0 ms

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

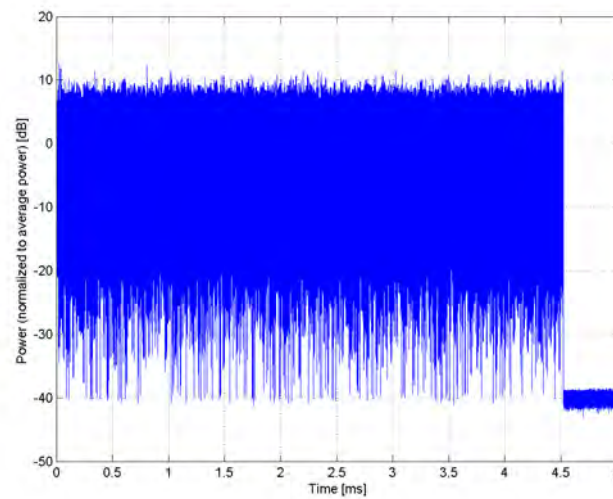
<sup>2</sup> Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).



**Complementary Cumulative Distribution Function (CCDF)**



**Frequency Domain**



**Time Domain**



**Calibration Laboratory of  
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Name: **IEEE 802.11ax (20MHz, MCS0, 90pc duty cycle)**

Group: WLAN  
UID: 10671-AAC

PAR:<sup>1</sup> **9.09 dB**  
MIF:<sup>2</sup> **-5.58 dB**

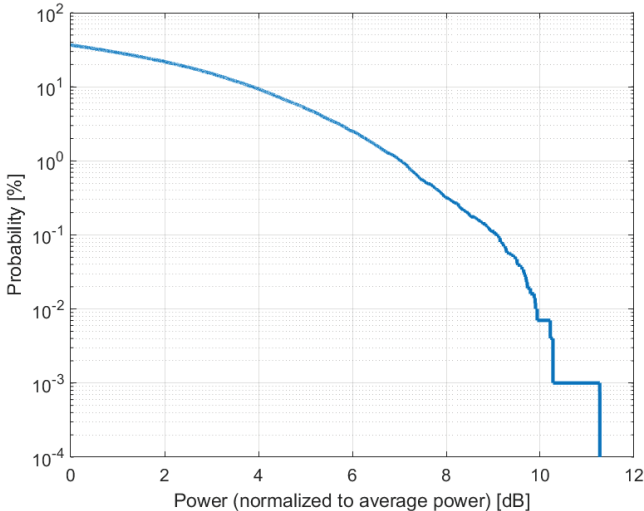
Standard Reference: SPEAG  
Category: Random amplitude modulation  
Modulation: BPSK  
Frequency Band: WLAN 2.4GHz (2412.0 - 2484.0 MHz)  
WLAN 5GHz (4915.0 - 5825.0 MHz)  
U-NII-1, U-NII-2A (5170 - 5330 MHz)  
U-NII-2C Standalone (5490 - 5710 MHz)  
U-NII-2C <5.65 GHz (5490 - 5650 MHz)  
U-NII-3 Standalone (5735 - 5835 MHz)  
U-NII-2C, U-NII-3 (5650 - 5835 MHz)  
U-NII-5 (5925 - 6425 MHz)  
U-NII-6 (6425 - 6525 MHz)  
U-NII-7 (6525 - 6875 MHz)  
U-NII-8 (6875 - 7125 MHz)  
U-NII-4 (5.825 - 5.925 MHz)  
Validation band (0.0 - 6000.0 MHz)

Detailed Specification: Bandwidth: 20MHz  
Duty Cycle: 90%  
Number of spatial stream: 1

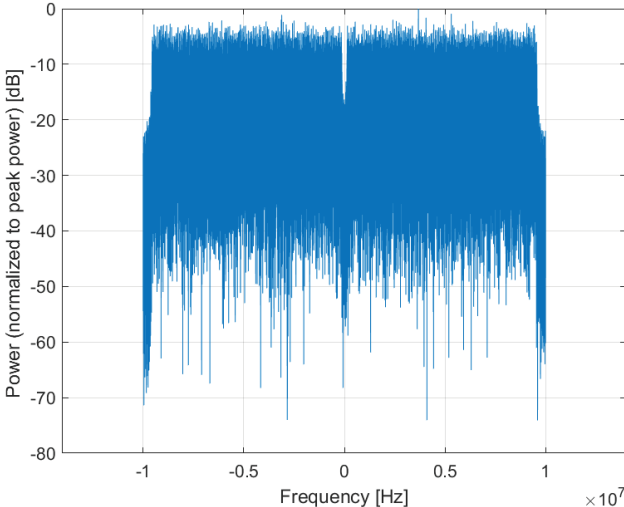
Bandwidth: 20.0 MHz  
Integration Time: 5.0 ms

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

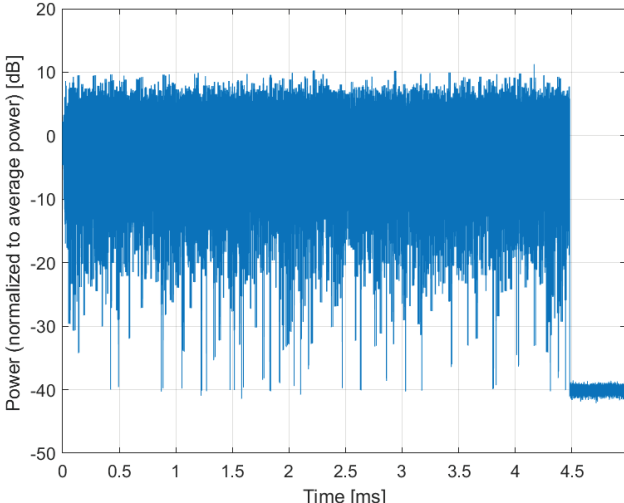
<sup>2</sup> Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).



**Complementary Cumulative Distribution Function (CCDF)**



**Frequency Domain**



**Time Domain**

**Calibration Laboratory of  
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Engineering AG**  
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Name: **5G NR (CP-OFDM, 1 RB, 40 MHz, QPSK, 30 kHz)**

Group: 5G NR FR1 TDD  
UID: 10797-AAF

PAR: <sup>1</sup> **8.01 dB**  
MIF: <sup>2</sup> **-14.32 dB**

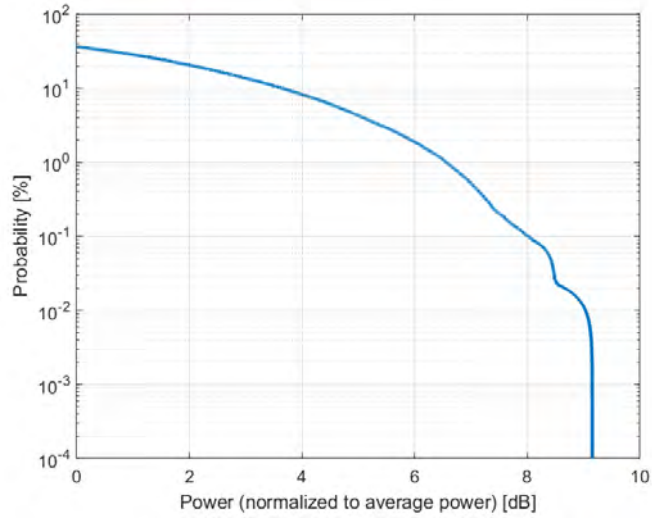
Standard Reference: SPEAG  
Category: Random amplitude modulation  
Modulation: QPSK  
Frequency Band: Band n38 (2570 - 2620 MHz)  
Band n39 (1880 - 1920 MHz)  
Band n40 (2300 - 2400 MHz)  
Band n41 (2496 - 2690 MHz)  
Band n48 (3550 - 3700 MHz)  
Band n50 (1432 - 1517 MHz)  
Band n77 (3300 - 4200 MHz)  
Band n78 (3300 - 3800 MHz)  
Band n79 (4400 - 5000 MHz)  
Band n90 (2496 - 2690 MHz)  
Band n47 (5855 - 5925 MHz)  
Band n46 (5150 - 5925 MHz)  
Band n96 (5925 - 7125 MHz)  
Band n102 (5925 - 6425 MHz)  
Band n104 (6425 - 7125 MHz)  
Validation band (0.0 - 6000.0 MHz)

Detailed Specification: Multiplexing Scheme: CP-OFDM  
Modulation Scheme: QPSK  
Subcarrier Spacing: 30 kHz  
Number RBs: 1  
Slot Format Index: 1  
Data Type: PN9

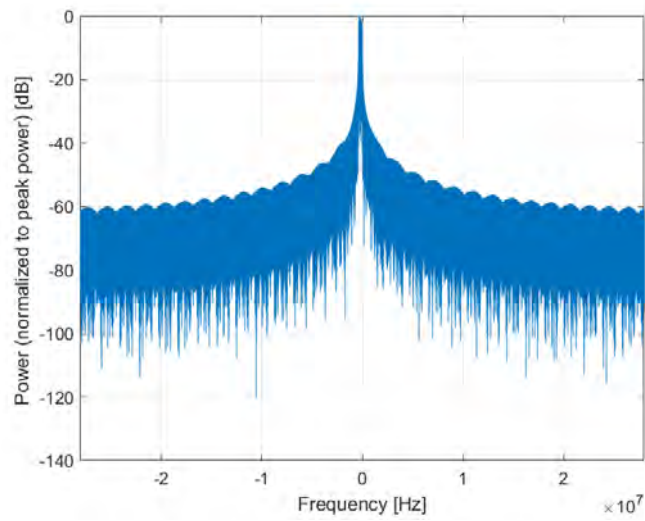
Bandwidth: 40.0 MHz  
Integration Time: 10.0 ms

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

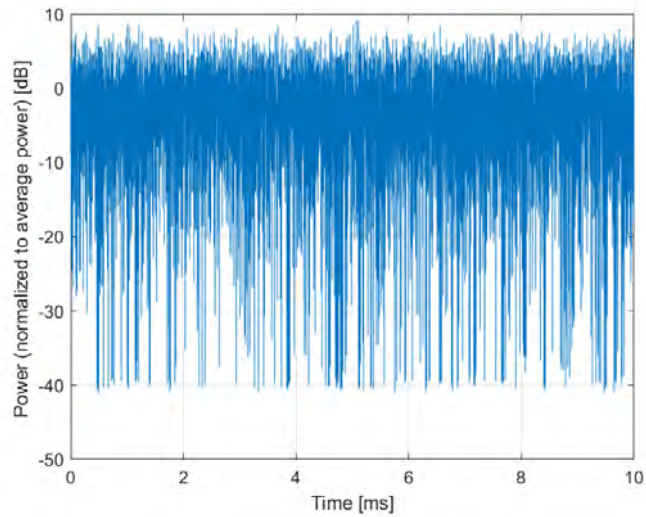
<sup>2</sup> Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).



**Complementary Cumulative Distribution Function (CCDF)**



**Frequency Domain**



**Time Domain**

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

Name: **5G NR (CP-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz)**

Group: 5G NR FR1 TDD  
UID: 10803-AAF

PAR: <sup>1</sup> **7.93 dB**  
MIF: <sup>2</sup> **-14.38 dB**

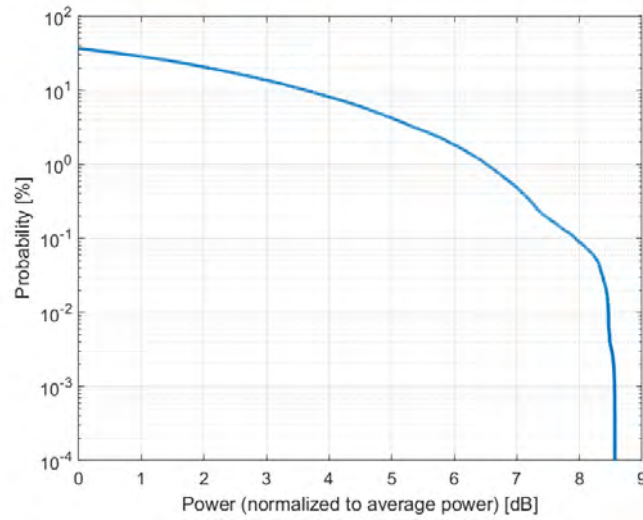
Standard Reference: SPEAG  
Category: Random amplitude modulation  
Modulation: QPSK  
Frequency Band: Band n41 (2496 - 2690 MHz)  
Band n48 (3550 - 3700 MHz)  
Band n77 (3300 - 4200 MHz)  
Band n78 (3300 - 3800 MHz)  
Band n79 (4400 - 5000 MHz)  
Band n90 (2496 - 2690 MHz)  
Band n46 (5150 - 5925 MHz)  
Band n96 (5925 - 7125 MHz)  
Band n102 (5925 - 6425 MHz)  
Band n104 (6425 - 7125 MHz)  
Validation band (0.0 - 6000.0 MHz)

Detailed Specification: Multiplexing Scheme: CP-OFDM  
Modulation Scheme: QPSK  
Subcarrier Spacing: 30 kHz  
Number RBs: 1  
Slot Format Index: 1  
Data Type: PN9

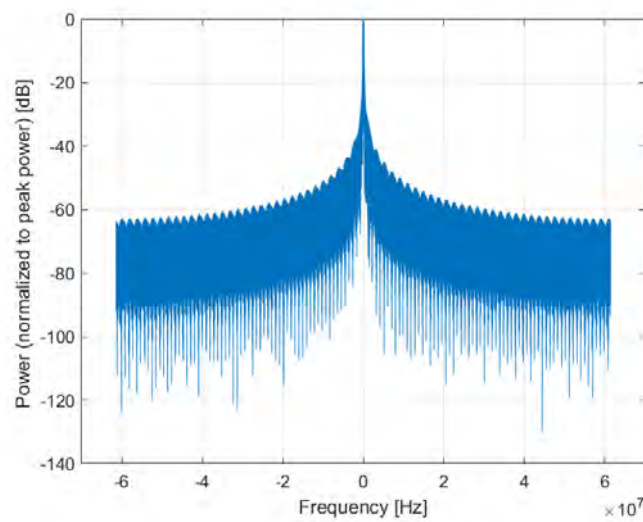
Bandwidth: 100.0 MHz  
Integration Time: 10.0 ms

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

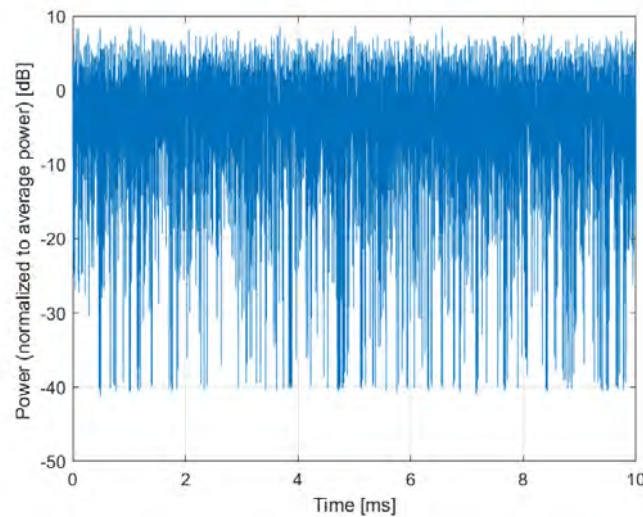
<sup>2</sup> Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).



**Complementary Cumulative Distribution Function (CCDF)**



**Frequency Domain**



**Time Domain**

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

Name: **5G NR (DFT-s-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz)**

Group: 5G NR FR1 TDD  
UID: 10866-AAD

PAR: <sup>1</sup> **5.68 dB**  
MIF: <sup>2</sup> **-16.69 dB**

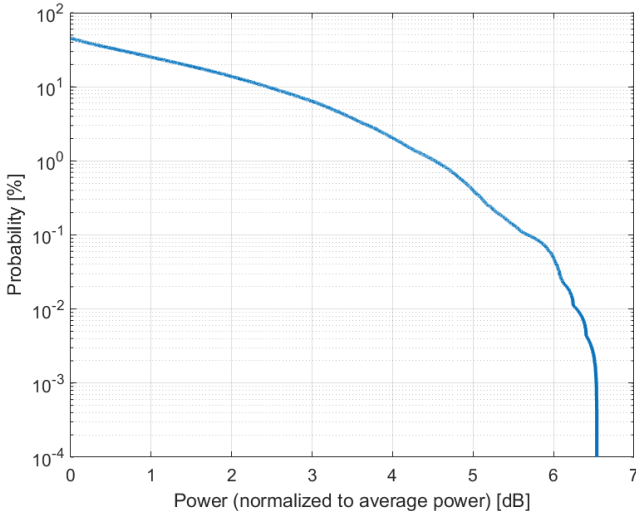
Standard Reference: SPEAG  
Category: Random amplitude modulation  
Modulation: QPSK  
Frequency Band: Band n41 (2496 - 2690 MHz)  
Band n48 (3550 - 3700 MHz)  
Band n77 (3300 - 4200 MHz)  
Band n78 (3300 - 3800 MHz)  
Band n79 (4400 - 5000 MHz)  
Band n90 (2496 - 2690 MHz)  
Validation band (0.0 - 6000.0 MHz)

Detailed Specification: Multiplexing Scheme: DFT-s-OFDM  
Modulation Scheme: QPSK  
Subcarrier Spacing: 30 kHz  
Number RBs: 1  
Slot Format Index: 1  
Data Type: PN9

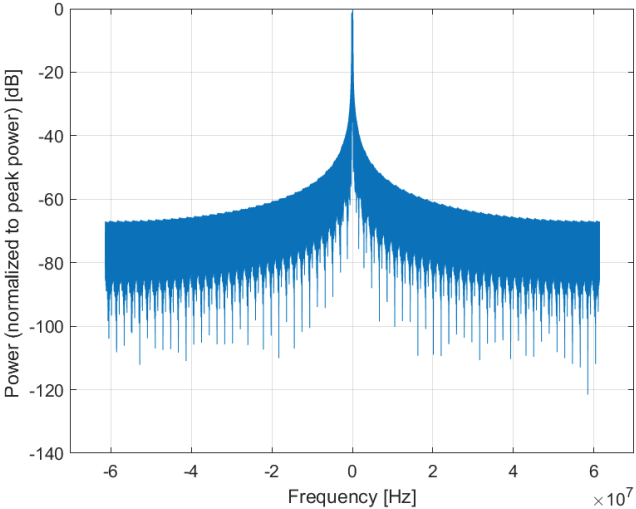
Bandwidth: 100.0 MHz  
Integration Time: 10.0 ms

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

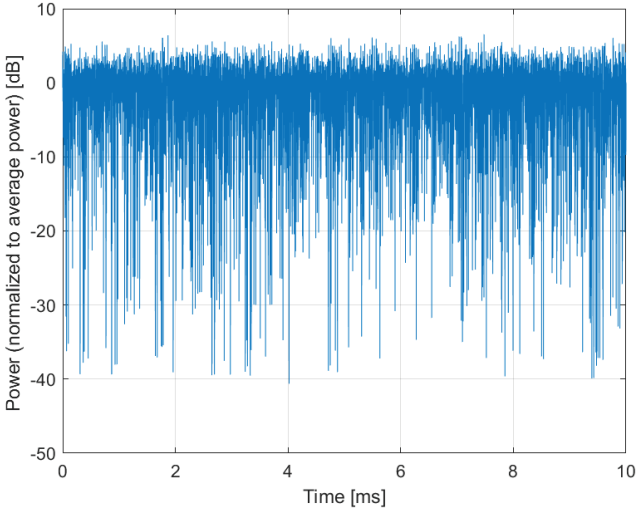
<sup>2</sup> Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).



**Complementary Cumulative Distribution Function (CCDF)**



**Frequency Domain**



**Time Domain**

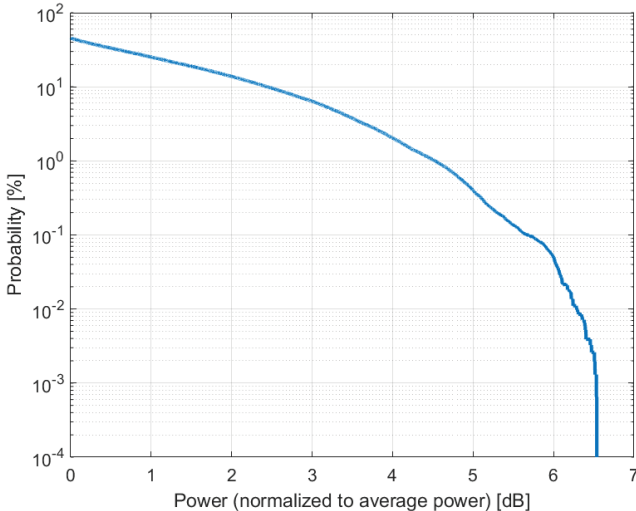


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Engineering AG**  
Zeughausstrasse 43, 8004 Zurich, Switzerland

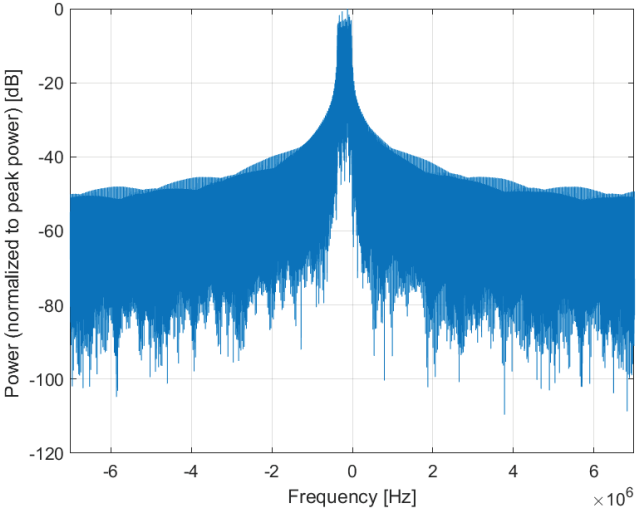
Name:	<b>5G NR (DFT-s-OFDM, 1 RB, 10 MHz, QPSK, 30 kHz)</b>
Group:	5G NR FR1 TDD
UID:	10898-AAB
PAR: <sup>1</sup>	<b>5.67 dB</b>
MIF: <sup>2</sup>	<b>-16.68 dB</b>
Standard Reference:	SPEAG
Category:	Random amplitude modulation
Modulation:	QPSK
Frequency Band:	Band n34 (2010 - 2025 MHz) Band n38 (2570 - 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 n53 (2483.5 - 2495 MHz) Band n90 (2496 - 2690 MHz) Band n47 (5855 - 5925 MHz) Validation band (0.0 - 6000.0 MHz)
Detailed Specification:	Multiplexing Scheme: DFT-s-OFDM Modulation Scheme: QPSK Subcarrier Spacing: 30 kHz Number RBs: 1 Slot Format Index: 1 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)"

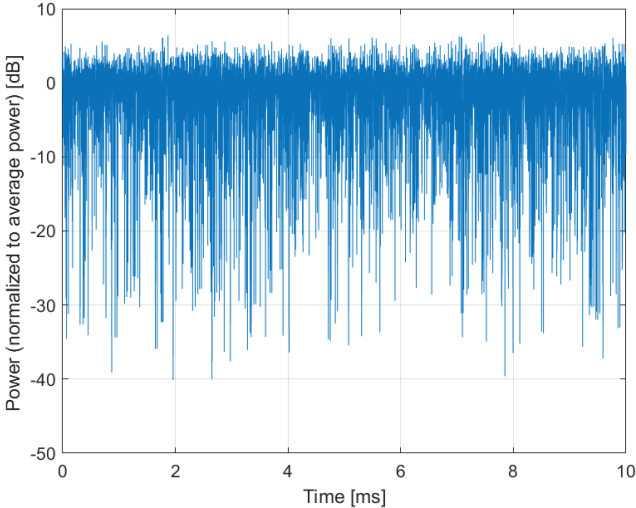
<sup>2</sup> Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).



**Complementary Cumulative Distribution Function (CCDF)**



**Frequency Domain**



**Time Domain**

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

Name: **5G NR (DFT-s-OFDM, 1 RB, 40 MHz, QPSK, 30 kHz)**

Group: 5G NR FR1 TDD  
UID: 10903-AAB

PAR: <sup>1</sup> **5.68 dB**  
MIF: <sup>2</sup> **-16.68 dB**

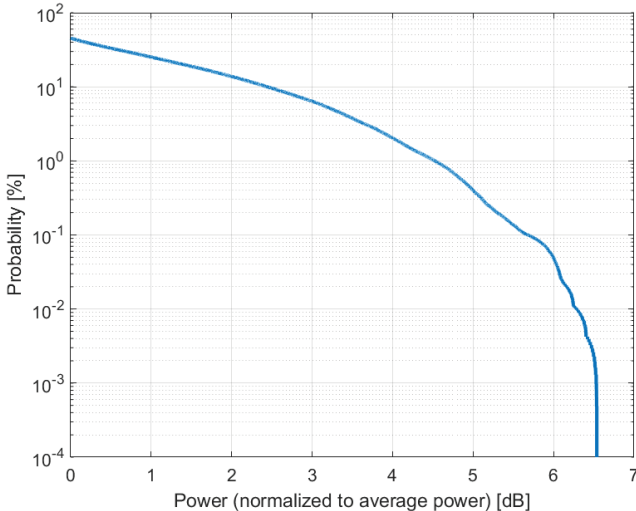
Standard Reference: SPEAG  
Category: Random amplitude modulation  
Modulation: QPSK  
Frequency Band: Band n38 (2570 - 2620 MHz)  
Band n39 (1880 - 1920 MHz)  
Band n40 (2300 - 2400 MHz)  
Band n41 (2496 - 2690 MHz)  
Band n48 (3550 - 3700 MHz)  
Band n50 (1432 - 1517 MHz)  
Band n77 (3300 - 4200 MHz)  
Band n78 (3300 - 3800 MHz)  
Band n79 (4400 - 5000 MHz)  
Band n90 (2496 - 2690 MHz)  
Band n47 (5855 - 5925 MHz)  
Validation band (0.0 - 6000.0 MHz)

Detailed Specification: Multiplexing Scheme: DFT-s-OFDM  
Modulation Scheme: QPSK  
Subcarrier Spacing: 30 kHz  
Number RBs: 1  
Slot Format Index: 1  
Data Type: PN9

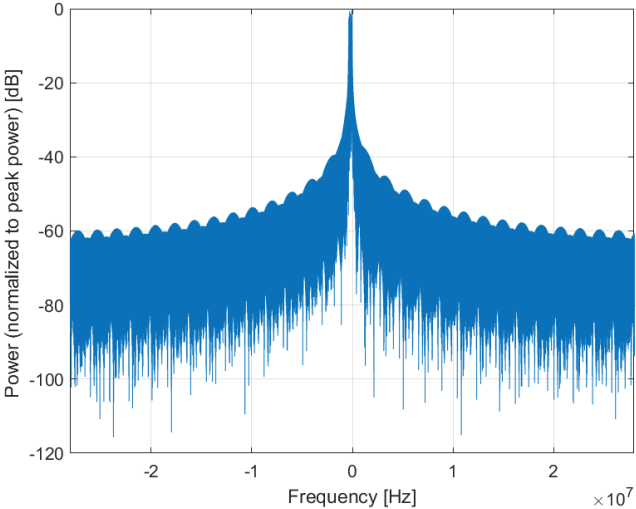
Bandwidth: 40.0 MHz  
Integration Time: 10.0 ms

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

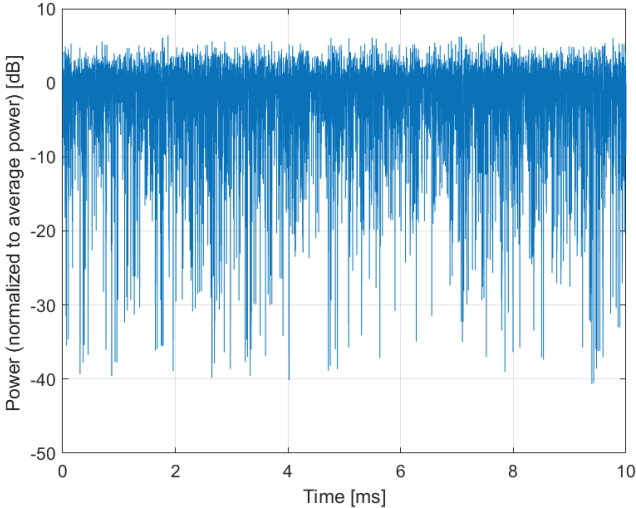
<sup>2</sup> Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).



**Complementary Cumulative Distribution Function (CCDF)**



**Frequency Domain**



**Time Domain**

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

Name: **5G NR (DFT-s-OFDM, 1 RB, 10 MHz, QPSK, 15 kHz)**

Group: 5G NR FR1 FDD  
UID: 10929-AAC

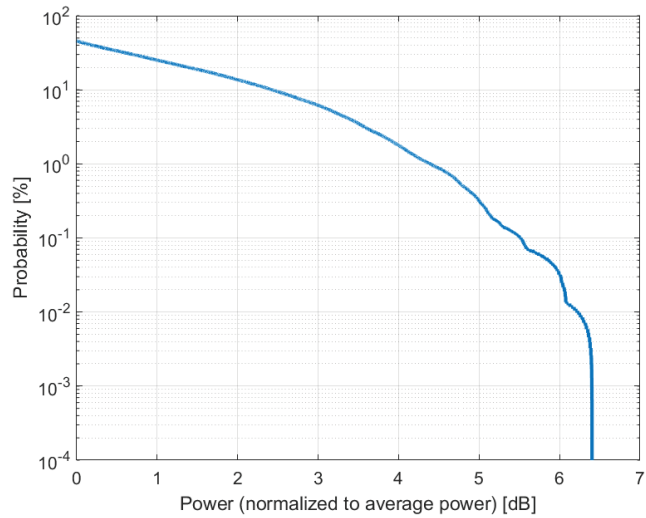
PAR: <sup>1</sup> **5.52 dB**  
MIF: <sup>2</sup> **-15.06 dB**

Standard Reference: SPEAG  
Category: Random amplitude modulation  
Modulation: QPSK  
Frequency Band:  
Band n2 (1850 - 1910 MHz)  
Band n5 (824 - 849 MHz)  
Band n25 (1850 - 1915 MHz)  
Band n66 (1710 - 1780 MHz)  
Band n71 (663 - 698 MHz)  
Band n1 (1920 - 1980 MHz)  
Band n3 (1710 - 1785 MHz)  
Band n7 (2500 - 2570 MHz)  
Band n8 (880 - 915 MHz)  
Band n12 (699 - 716 MHz)  
Band n14 (788 - 798 MHz)  
Band n18 (815 - 830 MHz)  
Band n20 (832 - 862 MHz)  
Band n26 (814 - 849 MHz)  
Band n28 (703 - 748 MHz)  
Band n30 (2305 - 2315 MHz)  
Band n65 (1920 - 2010 MHz)  
Band n70 (1695 - 1710 MHz)  
Band n74 (1427 - 1470 MHz)  
Band n91 (832 - 862 MHz)  
Band n92 (832 - 862 MHz)  
Band n93 (880 - 915 MHz)  
Band n94 (880 - 915 MHz)  
Band n80 (1710 - 1785 MHz)  
Band n81 (880 - 915 MHz)  
Band n82 (832 - 862 MHz)  
Band n83 (703 - 748 MHz)  
Band n84 (1920 - 1980 MHz)  
Band n86 (1710 - 1780 MHz)  
Band n89 (824 - 849 MHz)  
Band n95 (2010 - 2025 MHz)  
Band n24 (1626.5 - 1660.5 MHz)  
Band n97 (2300 - 2400 MHz)  
Band n98 (1880 - 1920 MHz)  
Band n99 (1626.5 - 1660.5 MHz)  
Validation band (0.0 - 6000.0 MHz)

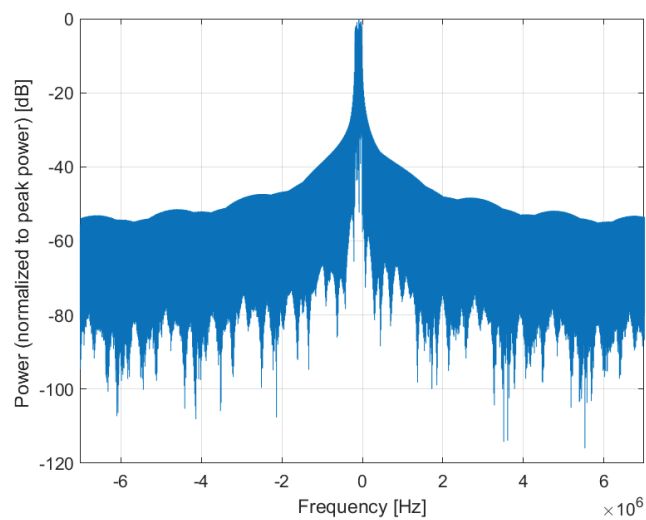
Detailed Specification: Multiplexing Scheme: DFT-s-OFDM  
Modulation Scheme: QPSK  
Subcarrier Spacing: 15 kHz  
Number RBs: 1  
Data Type: PN9  
Bandwidth: 10.0 MHz  
Integration Time: 10.0 ms

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

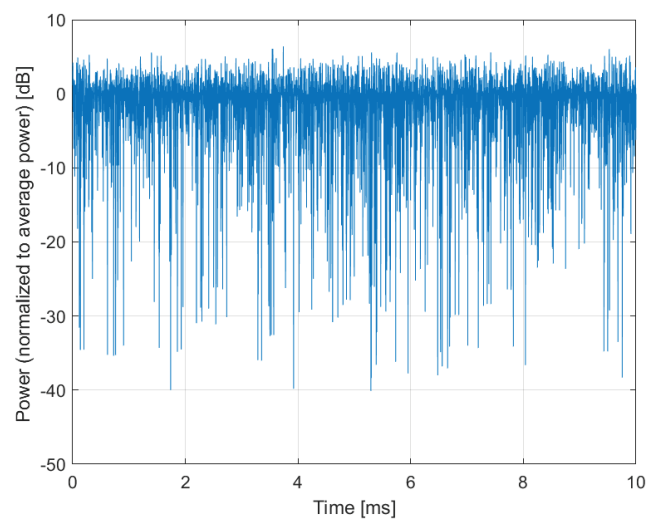
<sup>2</sup> Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).



### Complementary Cumulative Distribution Function (CCDF)



### Frequency Domain



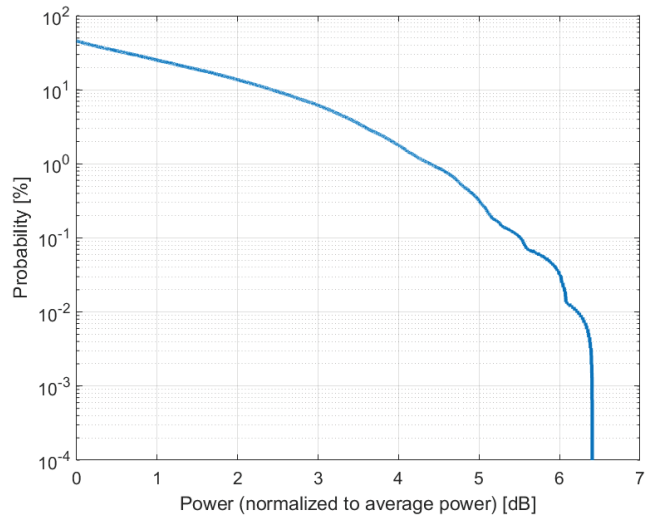
### Time Domain

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

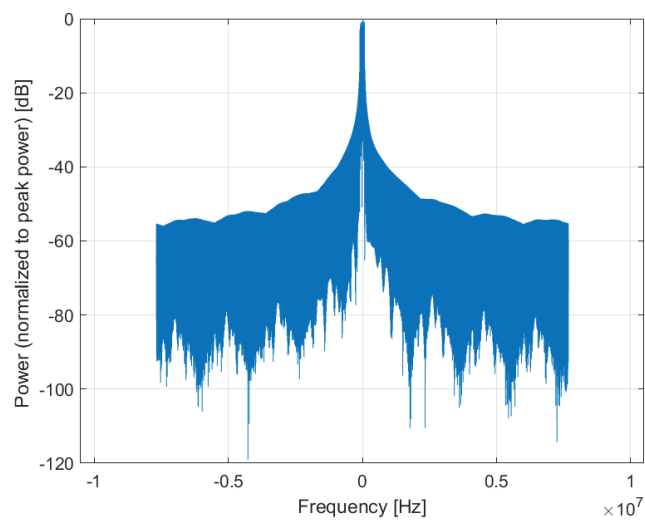
Name:	<b>5G NR (DFT-s-OFDM, 1 RB, 15 MHz, QPSK, 15 kHz)</b>
Group:	5G NR FR1 FDD
UID:	10930-AAC
PAR: <sup>1</sup>	<b>5.52 dB</b>
MIF: <sup>2</sup>	<b>-15.06 dB</b>
Standard Reference:	SPEAG
Category:	Random amplitude modulation
Modulation:	QPSK
Frequency Band:	Band n2 (1850 - 1910 MHz) Band n5 (824 - 849 MHz) Band n25 (1850 - 1915 MHz) Band n66 (1710 - 1780 MHz) Band n71 (663 - 698 MHz) Band n1 (1920 - 1980 MHz) Band n3 (1710 - 1785 MHz) Band n7 (2500 - 2570 MHz) Band n8 (880 - 915 MHz) Band n12 (699 - 716 MHz) Band n18 (815 - 830 MHz) Band n20 (832 - 862 MHz) Band n26 (814 - 849 MHz) Band n28 (703 - 748 MHz) Band n65 (1920 - 2010 MHz) Band n70 (1695 - 1710 MHz) Band n74 (1427 - 1470 MHz) Band n92 (832 - 862 MHz) Band n94 (880 - 915 MHz) Band n80 (1710 - 1785 MHz) Band n81 (880 - 915 MHz) Band n82 (832 - 862 MHz) Band n83 (703 - 748 MHz) Band n84 (1920 - 1980 MHz) Band n86 (1710 - 1780 MHz) Band n89 (824 - 849 MHz) Band n95 (2010 - 2025 MHz) Band n97 (2300 - 2400 MHz) Band n98 (1880 - 1920 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

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

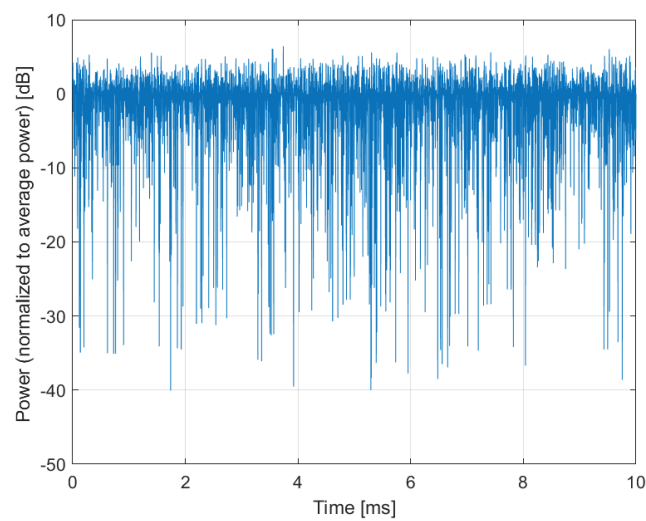
<sup>2</sup> Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).



### Complementary Cumulative Distribution Function (CCDF)



### Frequency Domain



### Time Domain



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

Name: **5G NR (DFT-s-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz)**

Group: 5G NR FR1 FDD  
UID: 10931-AAC

PAR: <sup>1</sup> **5.51 dB**  
MIF: <sup>2</sup> **-15.06 dB**

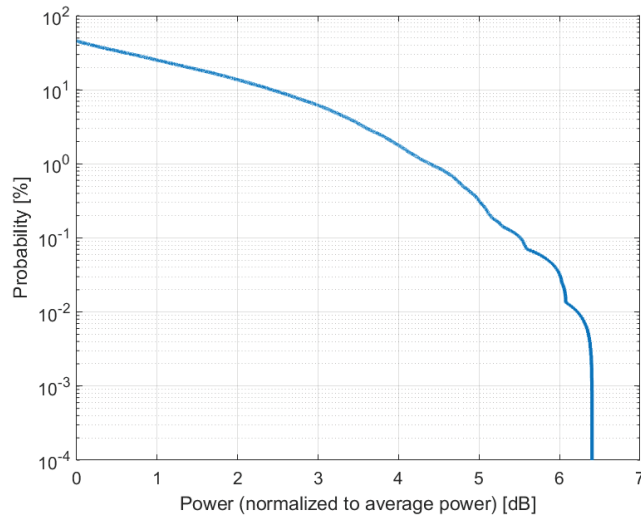
Standard Reference: SPEAG  
Category: Random amplitude modulation  
Modulation: QPSK  
Frequency Band:  
Band n2 (1850 - 1910 MHz)  
Band n5 (824 - 849 MHz)  
Band n25 (1850 - 1915 MHz)  
Band n66 (1710 - 1780 MHz)  
Band n71 (663 - 698 MHz)  
Band n1 (1920 - 1980 MHz)  
Band n3 (1710 - 1785 MHz)  
Band n7 (2500 - 2570 MHz)  
Band n8 (880 - 915 MHz)  
Band n20 (832 - 862 MHz)  
Band n26 (814 - 849 MHz)  
Band n28 (703 - 748 MHz)  
Band n65 (1920 - 2010 MHz)  
Band n74 (1427 - 1470 MHz)  
Band n92 (832 - 862 MHz)  
Band n94 (880 - 915 MHz)  
Band n80 (1710 - 1785 MHz)  
Band n81 (880 - 915 MHz)  
Band n82 (832 - 862 MHz)  
Band n83 (703 - 748 MHz)  
Band n84 (1920 - 1980 MHz)  
Band n86 (1710 - 1780 MHz)  
Band n89 (824 - 849 MHz)  
Band n97 (2300 - 2400 MHz)  
Band n98 (1880 - 1920 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

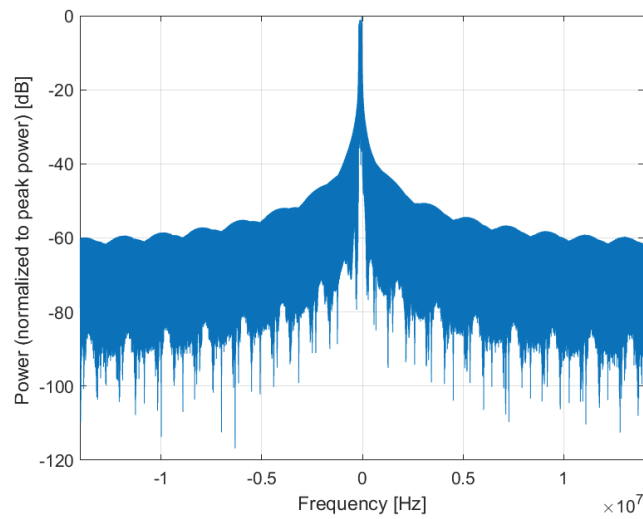
Bandwidth: 20.0 MHz  
Integration Time: 10.0 ms

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

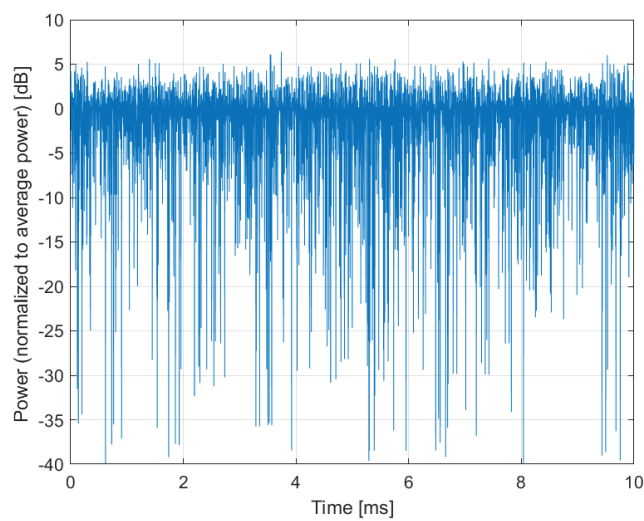
<sup>2</sup> Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).



### Complementary Cumulative Distribution Function (CCDF)



### Frequency Domain



### Time Domain

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

Name: **5G NR (DFT-s-OFDM, 1 RB, 25 MHz, QPSK, 15 kHz)**

Group: 5G NR FR1 FDD  
UID: 10932-AAC

PAR: <sup>1</sup> **5.51 dB**  
MIF: <sup>2</sup> **-15.06 dB**

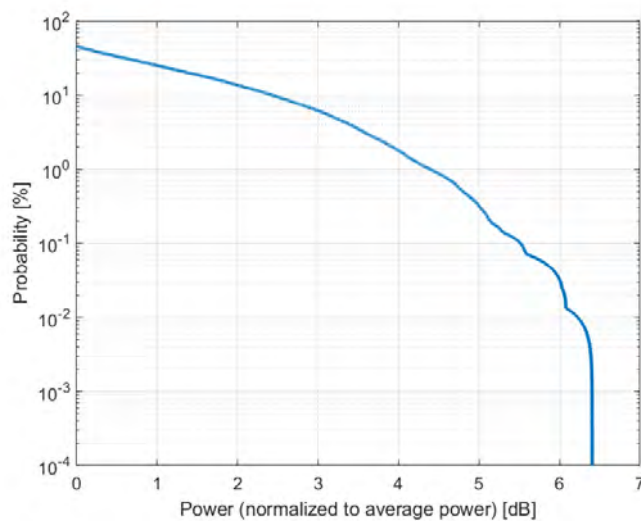
Standard Reference: SPEAG  
Category: Random amplitude modulation  
Modulation: QPSK  
Frequency Band: Band n25 (1850 - 1915 MHz)  
Band n66 (1710 - 1780 MHz)  
Band n1 (1920 - 1980 MHz)  
Band n3 (1710 - 1785 MHz)  
Band n7 (2500 - 2570 MHz)  
Band n80 (1710 - 1785 MHz)  
Band n97 (2300 - 2400 MHz)  
Band n98 (1880 - 1920 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

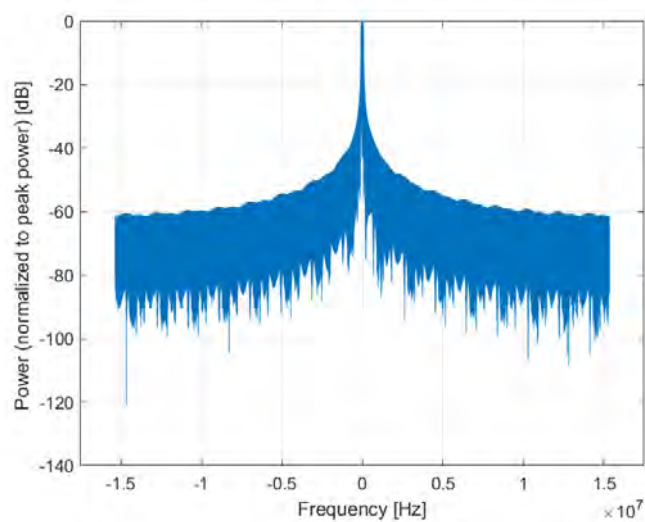
Bandwidth: 25.0 MHz  
Integration Time: 10.0 ms

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

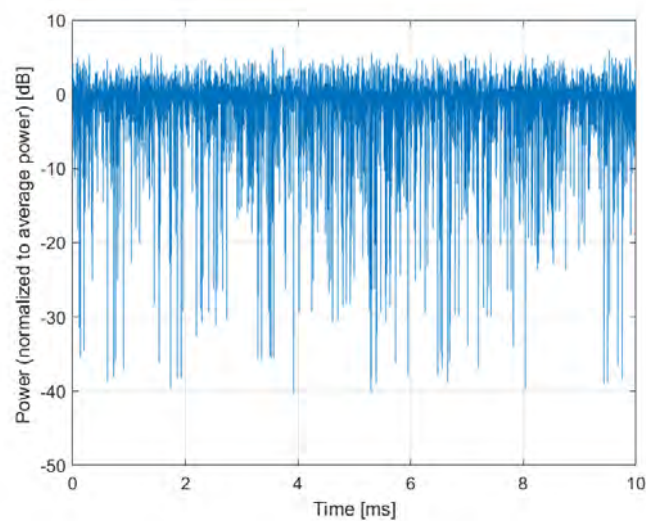
<sup>2</sup> Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).



**Complementary Cumulative Distribution Function (CCDF)**



**Frequency Domain**



**Time Domain**

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

Name: **5G NR (DFT-s-OFDM, 1 RB, 30 MHz, QPSK, 15 kHz)**

Group: 5G NR FR1 FDD  
UID: 10933-AAC

PAR: <sup>1</sup> **5.51 dB**  
MIF: <sup>2</sup> **-15.06 dB**

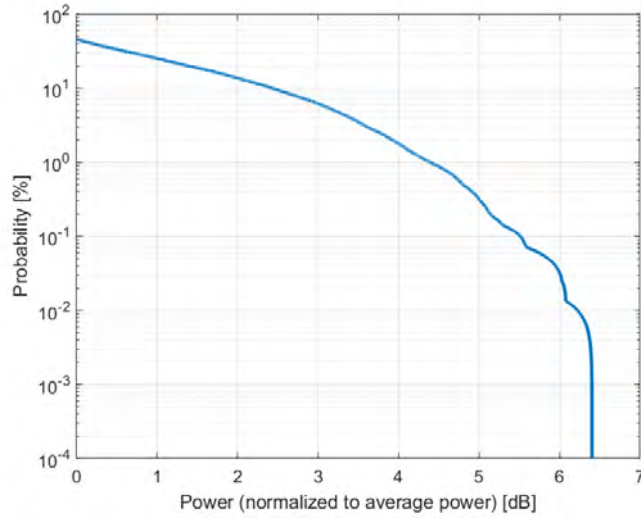
Standard Reference: SPEAG  
Category: Random amplitude modulation  
Modulation: QPSK  
Frequency Band: Band n25 (1850 - 1915 MHz)  
Band n66 (1710 - 1780 MHz)  
Band n1 (1920 - 1980 MHz)  
Band n3 (1710 - 1785 MHz)  
Band n7 (2500 - 2570 MHz)  
Band n28 (703 - 748 MHz)  
Band n80 (1710 - 1785 MHz)  
Band n97 (2300 - 2400 MHz)  
Band n98 (1880 - 1920 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

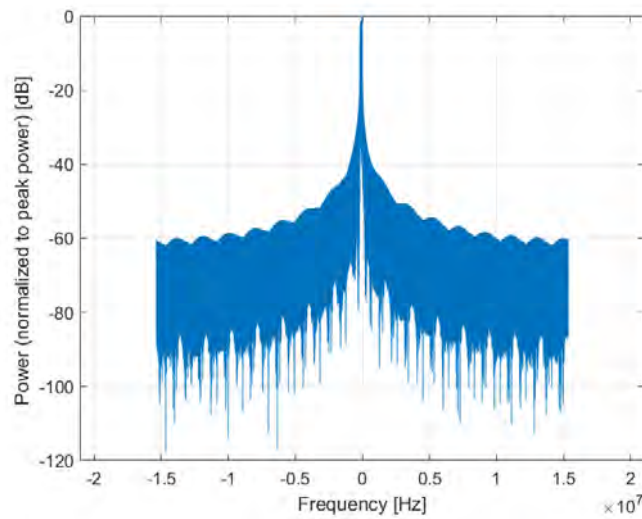
Bandwidth: 30.0 MHz  
Integration Time: 10.0 ms

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

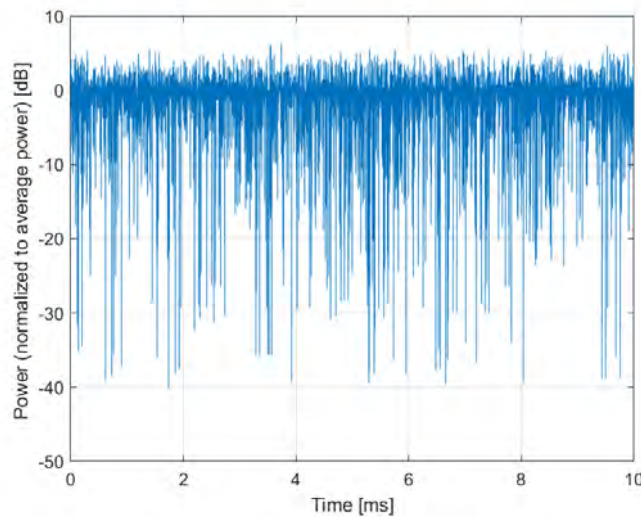
<sup>2</sup> Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).



**Complementary Cumulative Distribution Function (CCDF)**



**Frequency Domain**



**Time Domain**

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

Name: **5G NR (DFT-s-OFDM, 1 RB, 40 MHz, QPSK, 15 kHz)**

Group: 5G NR FR1 FDD  
UID: 10934-AAC

PAR: <sup>1</sup> **5.51 dB**  
MIF: <sup>2</sup> **-15.07 dB**

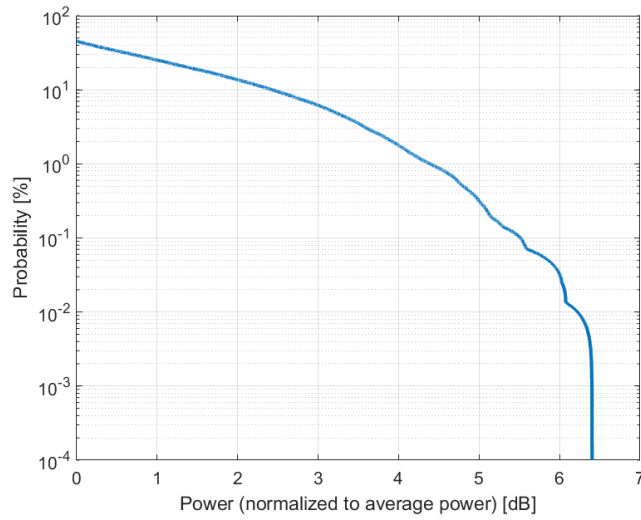
Standard Reference: SPEAG  
Category: Random amplitude modulation  
Modulation: QPSK  
Frequency Band: Band n25 (1850 - 1915 MHz)  
Band n66 (1710 - 1780 MHz)  
Band n1 (1920 - 1980 MHz)  
Band n3 (1710 - 1785 MHz)  
Band n7 (2500 - 2570 MHz)  
Band n86 (1710 - 1780 MHz)  
Band n97 (2300 - 2400 MHz)  
Band n98 (1880 - 1920 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

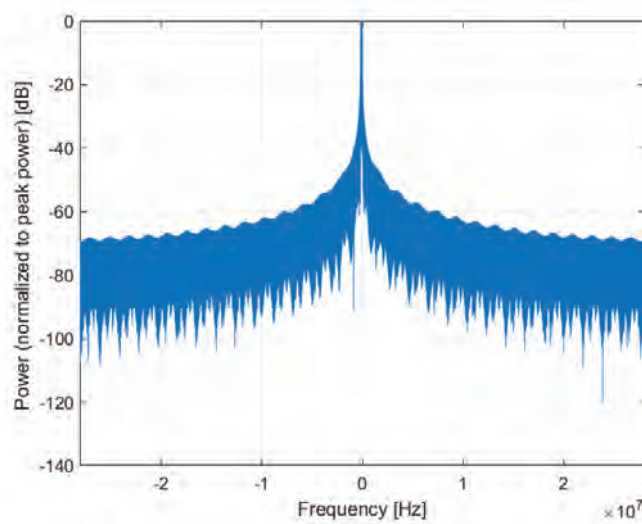
Bandwidth: 40.0 MHz  
Integration Time: 10.0 ms

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

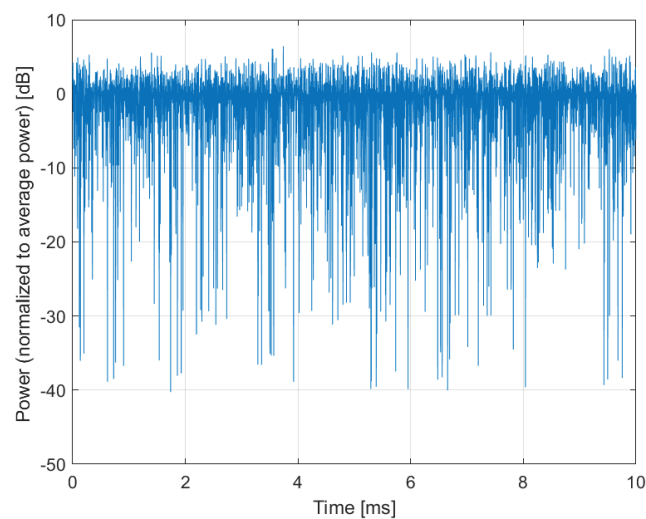
<sup>2</sup> Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).



**Complementary Cumulative Distribution Function (CCDF)**



**Frequency Domain**



**Time Domain**



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

Name: **5G NR (DFT-s-OFDM, 1 RB, 50 MHz, QPSK, 15 kHz)**

Group: 5G NR FR1 FDD  
UID: 10935-AAD

PAR: <sup>1</sup> **5.51 dB**  
MIF: <sup>2</sup> **-15.07 dB**

Standard Reference: SPEAG  
Category: Random amplitude modulation  
Modulation: QPSK  
Frequency Band: Band n1 (1920 - 1980 MHz)  
Band n7 (2500 - 2570 MHz)  
Band n65 (1920 - 2010 MHz)  
Band n97 (2300 - 2400 MHz)  
Validation band (0.0 - 6000.0 MHz)

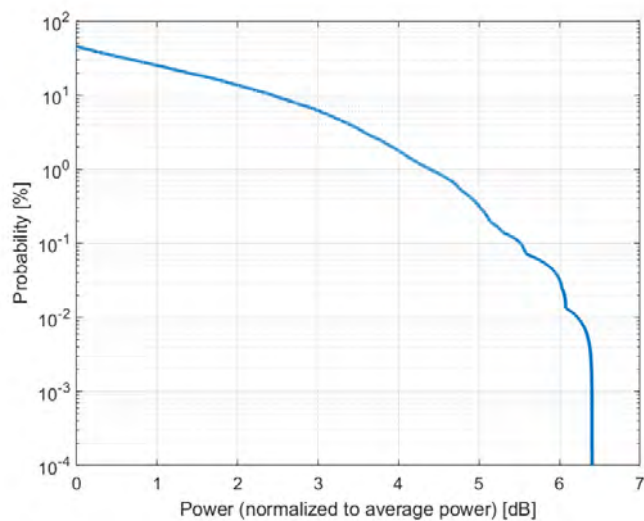
Detailed Specification: Multiplexing Scheme: DFT-s-OFDM  
Modulation Scheme: QPSK  
Subcarrier Spacing: 15 kHz  
Number RBs: 1  
Data Type: PN9

Bandwidth: 50.0 MHz  
Integration Time: 10.0 ms

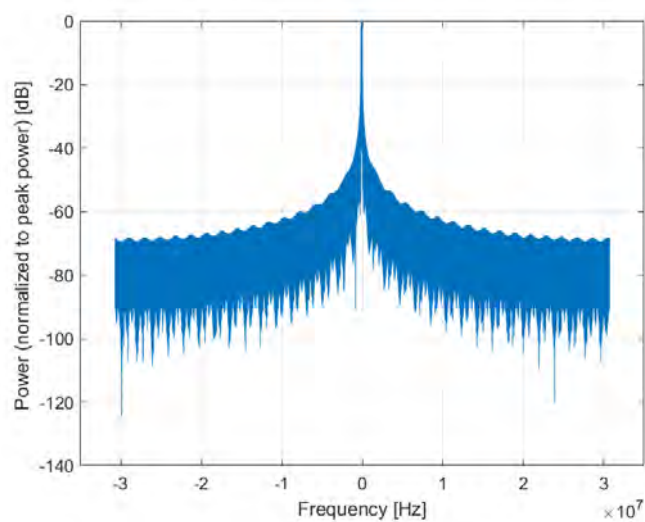
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<sup>1</sup> PAR (0.1%) in accordance with FCC KDB 971168, Section 6.0 "Measurement of the Peak-to-Average Power Ratio (PAPR)"

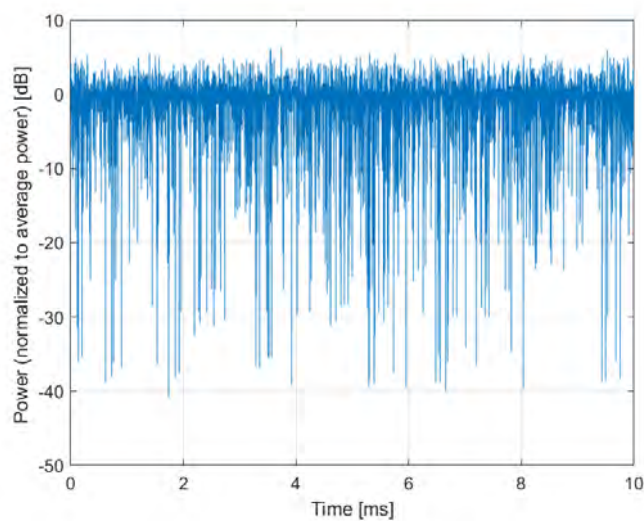
<sup>2</sup> Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).



### Complementary Cumulative Distribution Function (CCDF)



### Frequency Domain



### Time Domain