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Zeughausstrasse 43, 8004 Zurich, Switzerland

Name: UMTS-FDD (WCDMA)

Group: WCDMA UID: 10011-CAB

PAR: ¹ **2.91 dB** MIF: ² **-27.23 dB**

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, UTRA/FDD (1920.0-1980.0 MHz, 20000)

Band 2, UTRA/FDD (1850.0-1910.0 MHz, 20001) Band 3, UTRA/FDD (1710.0-1785.0 MHz, 20002) Band 4, UTRA/FDD (1710.0-1755.0 MHz, 20003) Band 5, UTRA/FDD (824.0-849.0 MHz, 20004) Band 6, UTRA/FDD (830.0-840.0 MHz, 20005) Band 7, UTRA/FDD (2500.0-2570.0 MHz, 20006) Band 8, UTRA/FDD (880.0-915.0 MHz, 20007)

Band 9, UTRA/FDD (1749.9-1784.9 MHz, 20008) Band 10, UTRA/FDD (1710.0-1770.0 MHz, 20009) Band 11, UTRA/FDD (1427.9-1452.9 MHz, 20010) Band 12, UTRA/FDD (698.0-716.0 MHz, 20011)

Band 13, UTRA/FDD (777.0-787.0 MHz, 20012) Band 14, UTRA/FDD (788.0-798.0 MHz, 20013) Band 19, UTRA/FDD (830.0-845.0 MHz, 20130) Band 20, UTRA/FDD (832.0-862.0 MHz, 20131) Band 21, UTRA/FDD (1447.9-1462.9 MHz, 20132)

Band 22, UTRA/FDD (3410.0-3490.0 MHz, 20217) Band 25, UTRA/FDD (1850.0-1915.0 MHz, 20218) Band 26, UTRA/FDD (814.0-849.0 MHz, 20219)

Detailed Specification: Dedicated Channel Type: RMC

Bitrate: 12.2 kbps DPDCH: 60 kbps DPCCH: 15 kbps

DPCCH/DPDCH power ratio: -5.46 dB

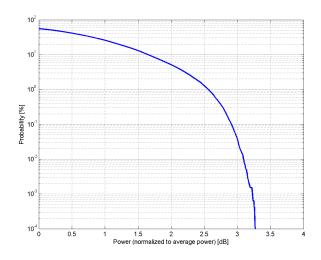
Bandwidth: 5.0 MHz Integration Time: 100.0 ms

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

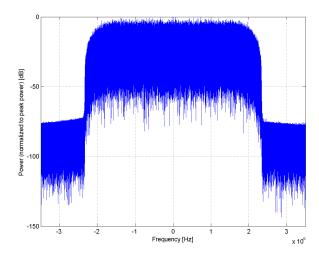
Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).

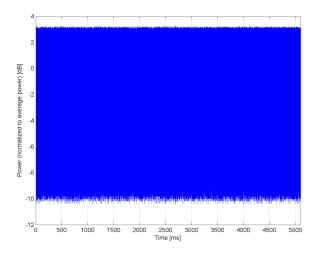
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Complementary Cumulative Distribution Function (CCDF)





Time Domain

Schmid & Partner

Engineering AG

Zeughausstrasse 43, 8004 Zurich, Switzerland

Name: GSM-FDD (TDMA, GMSK)

Group: GSM

UID: 10021-DAB

PAR: ¹ **9.39 dB** MIF: ² **3.63 dB**

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, 20016)

GSM 480 (478.8-486.0 MHz, 20017) GSM 710 (698.0-716.0 MHz, 20018) GSM 750 (747.0-763.0 MHz, 20019) GSM 850 (824.0-849.0 MHz, 20021) P-GSM 900 (890.0-915.0 MHz, 20022) E-GSM 900 (880.0-915.0 MHz, 20023) R-GSM 900 (876.0-915.0 MHz, 20024) DCS 1800 (1710.0-1785.0 MHz, 20026) PCS 1900 (1850.0-1910.0 MHz, 20027) ER-GSM 900 (873.0-915.0 MHz, 20221)

Detailed Specification: Active Slot: TN0

Data: PN9 continuous

Frame: composed out of 8 Slots

Multiframe: 26th (IDLE) Frame set blank Slottype & -timing: Normal burst for GMSK

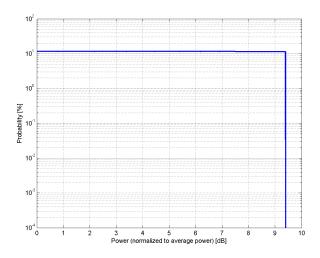
Bandwidth: 0.4 MHz Integration Time: 120.0 ms

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

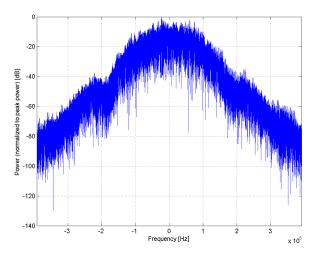
Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).

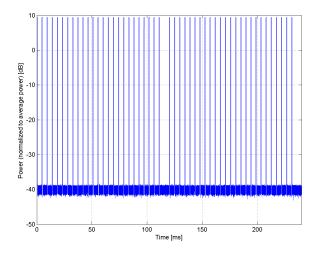
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Complementary Cumulative Distribution Function (CCDF)





Time Domain

Schmid & Partner

Engineering AG

Zeughausstrasse 43, 8004 Zurich, Switzerland

Name: LTE-FDD (SC-FDMA, 100 % RB, 20 MHz, QPSK)

Group: LTE-FDD UID: 10100-CAB

PAR: ¹ **5.67 dB** MIF: ² **-23.48 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: QPSK

Frequency Band: Band 1, E-UTRA/FDD (1920.0-1980.0 MHz, 20133)

Band 2, E-UTRA/FDD (1850.0-1910.0 MHz, 20134)
Band 3, E-UTRA/FDD (1710.0-1785.0 MHz, 20135)
Band 4, E-UTRA/FDD (1710.0-1755.0 MHz, 20136)
Band 7, E-UTRA/FDD (2500.0-2570.0 MHz, 20139)
Band 9, E-UTRA/FDD (1749.9-1784.9 MHz, 20141)
Band 10, E-UTRA/FDD (1710.0-1770.0 MHz, 20142)
Band 20, E-UTRA/FDD (832.0-862.0 MHz, 20159)
Band 22, E-UTRA/FDD (3410.0-3490.0 MHz, 20190)
Band 23, E-UTRA/FDD (2000.0-2020.0 MHz, 20164)
Band 25, E-UTRA/FDD (1850.0-1915.0 MHz, 20166)

Band 28 E-UTRA/FDD (703.0-748.0 MHz, 20213)

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: 100

Transport Block Size: 8760

TBS Index: 5 MCS Index: 5 Data Type: PN9

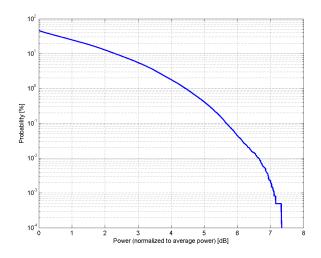
Bandwidth: 20.0 MHz Integration Time: 10.0 ms

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

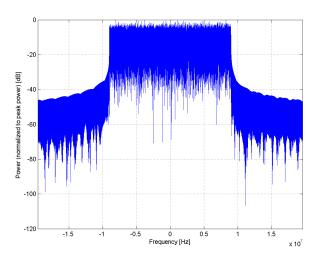
Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).

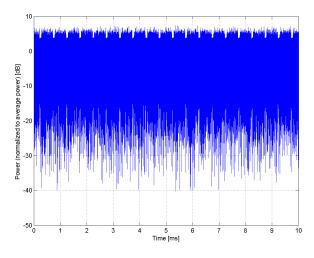
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Complementary Cumulative Distribution Function (CCDF)





Time Domain

Schmid & Partner

Engineering AG

Zeughausstrasse 43, 8004 Zurich, Switzerland

Name: LTE-FDD (SC-FDMA, 100 % RB, 20 MHz, 16-QAM)

Group: LTE-FDD UID: 10101-CAB

PAR: ¹ **6.42 dB** MIF: ² **-17.86 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, E-UTRA/FDD (1920.0-1980.0 MHz, 20133)

Band 2, E-UTRA/FDD (1850.0-1910.0 MHz, 20134)
Band 3, E-UTRA/FDD (1710.0-1785.0 MHz, 20135)
Band 4, E-UTRA/FDD (1710.0-1755.0 MHz, 20136)
Band 7, E-UTRA/FDD (2500.0-2570.0 MHz, 20139)
Band 9, E-UTRA/FDD (1749.9-1784.9 MHz, 20141)
Band 10, E-UTRA/FDD (1710.0-1770.0 MHz, 20142)
Band 20, E-UTRA/FDD (832.0-862.0 MHz, 20159)
Band 22, E-UTRA/FDD (3410.0-3490.0 MHz, 20190)
Band 23, E-UTRA/FDD (2000.0-2020.0 MHz, 20164)
Band 25, E-UTRA/FDD (1850.0-1915.0 MHz, 20166)

Band 28 E-UTRA/FDD (703.0-748.0 MHz, 20213)

Detailed Specification: Modulation Scheme: SC-FDMA

Number of PUSCHs: 1

Settings for Subframe #0 to #9: Modulation Scheme: 16-QAM

Data Type: UL-SCH Number RB: 100

Transport Block Size: 28336

TBS Index: 14 MCS Index: 15 Data Type: PN9

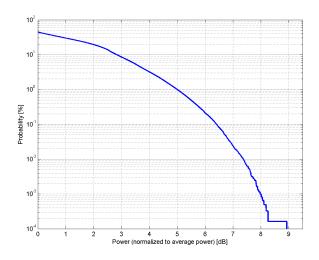
Bandwidth: 20.0 MHz Integration Time: 10.0 ms

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

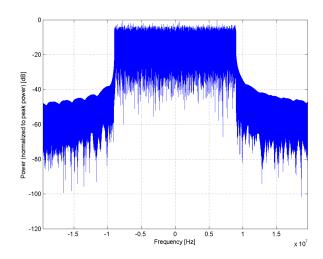
Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).

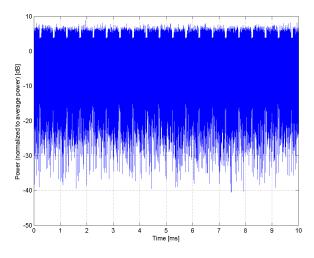
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Complementary Cumulative Distribution Function (CCDF)





Time Domain

Schmid & Partner

Engineering AG

Zeughausstrasse 43, 8004 Zurich, Switzerland

Name: LTE-FDD (SC-FDMA, 100 % RB, 10 MHz, QPSK)

Group: LTE-FDD UID: 10108-CAB

PAR: ¹ **5.80 dB** MIF: ² **-21.57 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: QPSK

Frequency Band: Band 1, E-UTRA/FDD (1920.0-1980.0 MHz, 20133)

Band 2, E-UTRA/FDD (1850.0-1910.0 MHz, 20134)
Band 3, E-UTRA/FDD (1710.0-1785.0 MHz, 20135)
Band 4, E-UTRA/FDD (1710.0-1755.0 MHz, 20136)
Band 5, E-UTRA/FDD (824.0-849.0 MHz, 20137)
Band 6, E-UTRA/FDD (830.0-840.0 MHz, 20138)
Band 7, E-UTRA/FDD (2500.0-2570.0 MHz, 20139)
Band 8, E-UTRA/FDD (880.0-915.0 MHz, 20140)
Band 9, E-UTRA/FDD (1749.9-1784.9 MHz, 20141)
Band 10, E-UTRA/FDD (1710.0-1770.0 MHz, 20142)
Band 11, E-UTRA/FDD (699.0-716.0 MHz, 20210)
Band 12, E-UTRA/FDD (699.0-716.0 MHz, 20210)

Band 12, E-UTRA/FDD (699.0-716.0 MHz, 20210)
Band 13, E-UTRA/FDD (777.0-787.0 MHz, 20145)
Band 14, E-UTRA/FDD (788.0-798.0 MHz, 20146)
Band 17, E-UTRA/FDD (704.0-716.0 MHz, 20147)
Band 18, E-UTRA/FDD (815.0-830.0 MHz, 20157)
Band 19, E-UTRA/FDD (830.0-845.0 MHz, 20158)
Band 20, E-UTRA/FDD (832.0-862.0 MHz, 20159)
Band 21, E-UTRA/FDD (1447.9-1462.9 MHz, 20160)
Band 22, E-UTRA/FDD (3410.0-3490.0 MHz, 20190)
Band 23, E-UTRA/FDD (2000.0-2020.0 MHz, 20164)
Band 24, E-UTRA/FDD (1626.5-1660.5 MHz, 20165)
Band 25, E-UTRA/FDD (1850.0-1915.0 MHz, 20166)
Band 26 E-UTRA/FDD (814.0-849.0 MHz, 20211)

Band 27 E-UTRA/FDD (807.0-824.0 MHz, 20212) Band 28 E-UTRA/FDD (703.0-748.0 MHz, 20213)

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: 50

Transport Block Size: 4392

TBS Index: 5 MCS Index: 5 Data Type: PN9

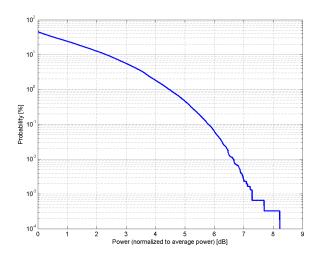
Bandwidth: 10.0 MHz
Integration Time: 10.0 ms

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

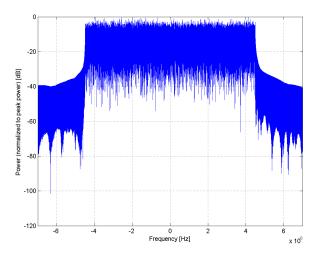
Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).

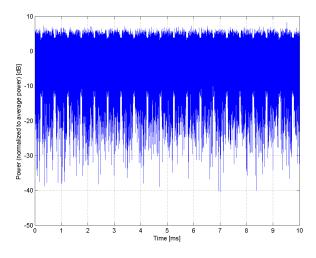
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Complementary Cumulative Distribution Function (CCDF)





Time Domain

Schmid & Partner

Engineering AG

Zeughausstrasse 43, 8004 Zurich, Switzerland

Name: LTE-FDD (SC-FDMA, 100 % RB, 10 MHz, 16-QAM)

Group: LTE-FDD UID: 10109-CAB

PAR: ¹ **6.43 dB** MIF: ² **-16.87 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, E-UTRA/FDD (1920.0-1980.0 MHz, 20133)

Band 2, E-UTRA/FDD (1850.0-1910.0 MHz, 20134)
Band 3, E-UTRA/FDD (1710.0-1785.0 MHz, 20135)
Band 4, E-UTRA/FDD (1710.0-1755.0 MHz, 20136)
Band 5, E-UTRA/FDD (824.0-849.0 MHz, 20137)
Band 6, E-UTRA/FDD (830.0-840.0 MHz, 20138)
Band 7, E-UTRA/FDD (2500.0-2570.0 MHz, 20139)
Band 8, E-UTRA/FDD (880.0-915.0 MHz, 20140)
Band 9, E-UTRA/FDD (1749.9-1784.9 MHz, 20141)
Band 10, E-UTRA/FDD (1710.0-1770.0 MHz, 20142)
Band 11, E-UTRA/FDD (1427.9-1447.9 MHz, 20209)
Band 12, E-UTRA/FDD (699.0-716.0 MHz, 20145)
Band 13, E-UTRA/FDD (777.0-787.0 MHz, 20146)
Band 14, E-UTRA/FDD (788.0-798.0 MHz, 20147)

Band 18, E-UTRA/FDD (815.0-830.0 MHz, 20157)
Band 19, E-UTRA/FDD (830.0-845.0 MHz, 20158)
Band 20, E-UTRA/FDD (832.0-862.0 MHz, 20159)
Band 21, E-UTRA/FDD (1447.9-1462.9 MHz, 20160)
Band 22, E-UTRA/FDD (3410.0-3490.0 MHz, 20190)
Band 23, E-UTRA/FDD (2000.0-2020.0 MHz, 20164)
Band 24, E-UTRA/FDD (1626.5-1660.5 MHz, 20165)
Band 25, E-UTRA/FDD (1850.0-1915.0 MHz, 20166)
Band 26 E-UTRA/FDD (814.0-849.0 MHz, 20211)

Band 27 E-UTRA/FDD (807.0-824.0 MHz, 20212) Band 28 E-UTRA/FDD (703.0-748.0 MHz, 20213)

Detailed Specification: Modulation Scheme: SC-FDMA

Number of PUSCHs: 1

Settings for Subframe #0 to #9: Modulation Scheme: 16-QAM

Data Type: UL-SCH Number RB: 50

Transport Block Size: 14112

TBS Index: 14 MCS Index: 15 Data Type: PN9

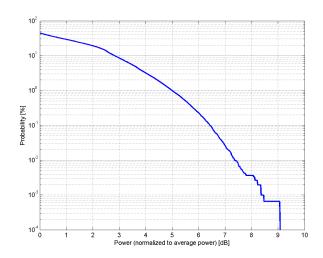
Bandwidth: 10.0 MHz
Integration Time: 10.0 ms

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

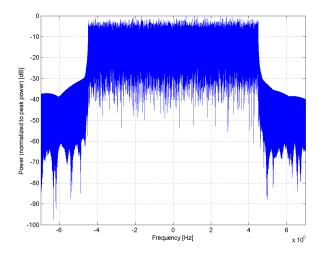
Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).

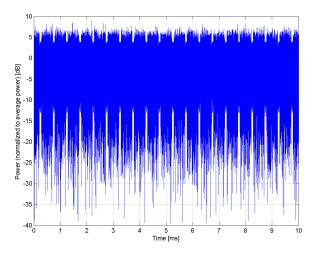
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Engineering AG Zeughausstrasse 43, 8004 Zurich, Switzerland



Complementary Cumulative Distribution Function (CCDF)





Time Domain

Schmid & Partner

Engineering AG

Zeughausstrasse 43, 8004 Zurich, Switzerland

Name: LTE-FDD (SC-FDMA, 100 % RB, 5 MHz, QPSK)

Group: LTE-FDD UID: 10110-CAB

PAR: ¹ **5.75 dB** MIF: ² **-23.39 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: QPSK

Frequency Band: Band 1, E-UTRA/FDD (1920.0-1980.0 MHz, 20133)

Band 2, E-UTRA/FDD (1850.0-1910.0 MHz, 20134)
Band 3, E-UTRA/FDD (1710.0-1785.0 MHz, 20135)
Band 4, E-UTRA/FDD (1710.0-1755.0 MHz, 20136)
Band 5, E-UTRA/FDD (824.0-849.0 MHz, 20137)
Band 6, E-UTRA/FDD (830.0-840.0 MHz, 20138)
Band 7, E-UTRA/FDD (2500.0-2570.0 MHz, 20139)
Band 8, E-UTRA/FDD (880.0-915.0 MHz, 20140)
Band 9, E-UTRA/FDD (1749.9-1784.9 MHz, 20141)
Band 10, E-UTRA/FDD (1710.0-1770.0 MHz, 20142)
Band 11, E-UTRA/FDD (1427.9-1447.9 MHz, 20209)
Band 12, E-UTRA/FDD (699.0-716.0 MHz, 20210)

Band 12, E-UTRA/FDD (699.0-716.0 MHz, 20210)
Band 13, E-UTRA/FDD (777.0-787.0 MHz, 20145)
Band 14, E-UTRA/FDD (788.0-798.0 MHz, 20146)
Band 17, E-UTRA/FDD (704.0-716.0 MHz, 20147)
Band 18, E-UTRA/FDD (815.0-830.0 MHz, 20157)
Band 19, E-UTRA/FDD (830.0-845.0 MHz, 20158)
Band 20, E-UTRA/FDD (832.0-862.0 MHz, 20159)
Band 21, E-UTRA/FDD (1447.9-1462.9 MHz, 20160)
Band 22, E-UTRA/FDD (3410.0-3490.0 MHz, 20190)
Band 23, E-UTRA/FDD (2000.0-2020.0 MHz, 20164)
Band 24, E-UTRA/FDD (1626.5-1660.5 MHz, 20165)
Band 25, E-UTRA/FDD (1850.0-1915.0 MHz, 20166)
Band 26 E-UTRA/FDD (814.0-849.0 MHz, 20211)

Band 27 E-UTRA/FDD (807.0-824.0 MHz, 20212) Band 28 E-UTRA/FDD (703.0-748.0 MHz, 20213)

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: 25

Transport Block Size: 2216

TBS Index: 5 MCS Index: 5 Data Type: PN9

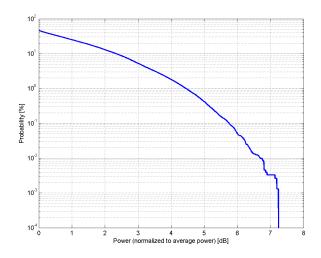
Bandwidth: 5.0 MHz
Integration Time: 10.0 ms

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

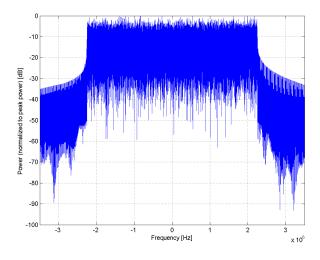
Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).

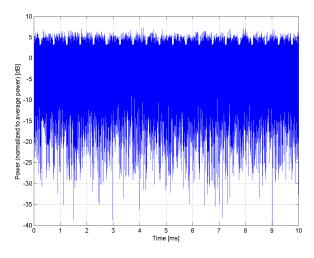
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Engineering AG Zeughausstrasse 43, 8004 Zurich, Switzerland



Complementary Cumulative Distribution Function (CCDF)





Time Domain

Schmid & Partner

Engineering AG

Zeughausstrasse 43, 8004 Zurich, Switzerland

Name: LTE-FDD (SC-FDMA, 100 % RB, 5 MHz, 16-QAM)

Group: LTE-FDD UID: 10111-CAB

PAR: ¹ **6.44 dB** MIF: ² **-16.35 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, E-UTRA/FDD (1920.0-1980.0 MHz, 20133)

Band 2, E-UTRA/FDD (1850.0-1910.0 MHz, 20134)
Band 3, E-UTRA/FDD (1710.0-1785.0 MHz, 20135)
Band 4, E-UTRA/FDD (1710.0-1755.0 MHz, 20136)
Band 5, E-UTRA/FDD (824.0-849.0 MHz, 20137)
Band 6, E-UTRA/FDD (830.0-840.0 MHz, 20138)
Band 7, E-UTRA/FDD (2500.0-2570.0 MHz, 20139)
Band 8, E-UTRA/FDD (880.0-915.0 MHz, 20140)
Band 9, E-UTRA/FDD (1749.9-1784.9 MHz, 20141)
Band 10, E-UTRA/FDD (1710.0-1770.0 MHz, 20142)
Band 11, E-UTRA/FDD (1427.9-1447.9 MHz, 20209)

Band 11, E-UTRA/FDD (1427.9-1447.9 MHz, 20209)
Band 12, E-UTRA/FDD (699.0-716.0 MHz, 20210)
Band 13, E-UTRA/FDD (699.0-716.0 MHz, 20210)
Band 13, E-UTRA/FDD (777.0-787.0 MHz, 20145)
Band 14, E-UTRA/FDD (788.0-798.0 MHz, 20146)
Band 17, E-UTRA/FDD (704.0-716.0 MHz, 20147)
Band 18, E-UTRA/FDD (815.0-830.0 MHz, 20157)
Band 19, E-UTRA/FDD (830.0-845.0 MHz, 20158)
Band 20, E-UTRA/FDD (832.0-862.0 MHz, 20159)
Band 21, E-UTRA/FDD (1447.9-1462.9 MHz, 20160)
Band 22, E-UTRA/FDD (3410.0-3490.0 MHz, 20190)
Band 23, E-UTRA/FDD (2000.0-2020.0 MHz, 20164)
Band 24, E-UTRA/FDD (1626.5-1660.5 MHz, 20165)

Band 26 E-UTRA/FDD (814.0-849.0 MHz, 20211) Band 27 E-UTRA/FDD (807.0-824.0 MHz, 20212) Band 28 E-UTRA/FDD (703.0-748.0 MHz, 20213)

Band 25, E-UTRA/FDD (1850.0-1915.0 MHz, 20166)

Detailed Specification: Modulation Scheme: SC-FDMA

Number of PUSCHs: 1

Settings for Subframe #0 to #9: Modulation Scheme: 16-QAM

Data Type: UL-SCH Number RB: 25

Transport Block Size: 7224

TBS Index: 14 MCS Index: 15 Data Type: PN9

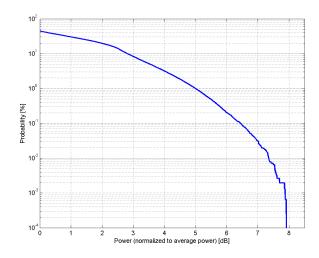
Bandwidth: 5.0 MHz
Integration Time: 10.0 ms

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

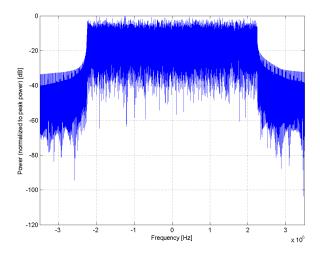
Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).

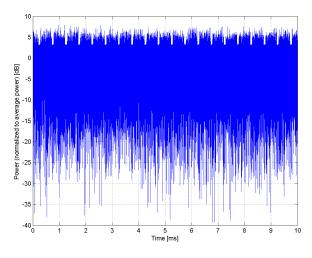
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Complementary Cumulative Distribution Function (CCDF)





Time Domain

Schmid & Partner

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Name: LTE-FDD (SC-FDMA, 100 % RB, 15 MHz, 16-QAM)

Group: LTE-FDD UID: 10140-CAB

PAR: ¹ **6.49 dB** MIF: ² **-19.37 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, E-UTRA/FDD (1920.0-1980.0 MHz, 20133)

Band 2, E-UTRA/FDD (1850.0-1910.0 MHz, 20134)
Band 3, E-UTRA/FDD (1710.0-1785.0 MHz, 20135)
Band 4, E-UTRA/FDD (1710.0-1755.0 MHz, 20136)
Band 7, E-UTRA/FDD (2500.0-2570.0 MHz, 20139)
Band 9, E-UTRA/FDD (1749.9-1784.9 MHz, 20141)
Band 10, E-UTRA/FDD (1710.0-1770.0 MHz, 20142)
Band 18, E-UTRA/FDD (815.0-830.0 MHz, 20157)
Band 19, E-UTRA/FDD (830.0-845.0 MHz, 20158)
Band 20, E-UTRA/FDD (832.0-862.0 MHz, 20159)

Band 20, E-UTRA/FDD (832.0-862.0 MHz, 20159)
Band 21, E-UTRA/FDD (1447.9-1462.9 MHz, 20160)
Band 22, E-UTRA/FDD (3410.0-3490.0 MHz, 20190)
Band 23, E-UTRA/FDD (2000.0-2020.0 MHz, 20164)
Band 25, E-UTRA/FDD (1850.0-1915.0 MHz, 20166)
Band 26 E-UTRA/FDD (814.0-849.0 MHz, 20211)
Band 28 E-UTRA/FDD (703.0-748.0 MHz, 20213)

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: 75

Transport Block Size: 21384

TBS Index: 14 MCS Index: 15 Data Type: PN9

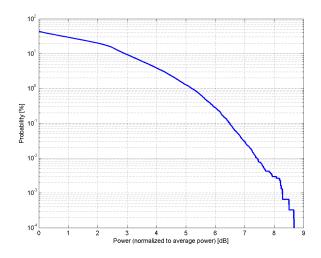
Bandwidth: 15.0 MHz Integration Time: 10.0 ms

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

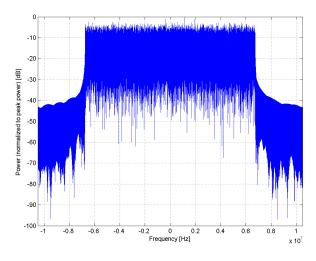
Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).

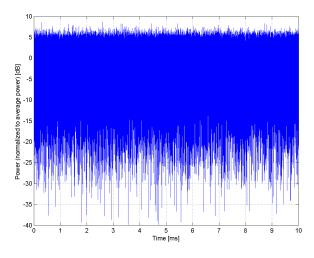
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Complementary Cumulative Distribution Function (CCDF)





Time Domain

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Name: LTE-FDD (SC-FDMA, 100 % RB, 3 MHz, QPSK)

Group: LTE-FDD UID: 10142-CAB

PAR: ¹ **5.73 dB** MIF: ² **-22.36 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: QPSK

Frequency Band: Band 2, E-UTRA/FDD (1850.0-1910.0 MHz, 20134)

Band 3, E-UTRA/FDD (1710.0-1785.0 MHz, 20135)
Band 4, E-UTRA/FDD (1710.0-1755.0 MHz, 20136)
Band 5, E-UTRA/FDD (824.0-849.0 MHz, 20137)
Band 8, E-UTRA/FDD (880.0-915.0 MHz, 20140)
Band 12, E-UTRA/FDD (699.0-716.0 MHz, 20210)
Band 23, E-UTRA/FDD (2000.0-2020.0 MHz, 20164)
Band 25, E-UTRA/FDD (1850.0-1915.0 MHz, 20166)
Band 26 E-UTRA/FDD (814.0-849.0 MHz, 20211)
Band 27 E-UTRA/FDD (807.0-824.0 MHz, 20212)
Band 28 E-UTRA/FDD (703.0-748.0 MHz, 20213)

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: 15

Transport Block Size: 1320

TBS Index: 5 MCS Index: 5 Data Type: PN9

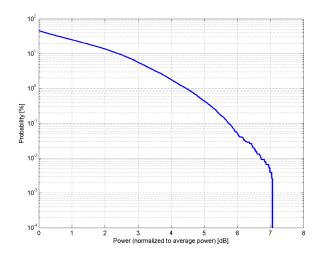
Bandwidth: 3.0 MHz
Integration Time: 10.0 ms

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

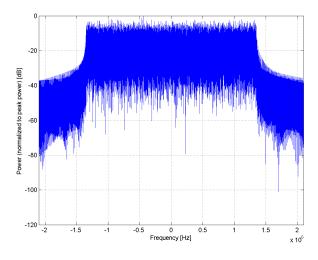
Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).

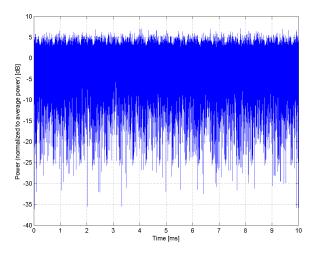
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Complementary Cumulative Distribution Function (CCDF)





Time Domain

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Name: LTE-FDD (SC-FDMA, 100 % RB, 3 MHz, 16-QAM)

Group: LTE-FDD UID: 10143-CAB

PAR: ¹ **6.35 dB** MIF: ² **-14.75 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 2, E-UTRA/FDD (1850.0-1910.0 MHz, 20134)

Band 3, E-UTRA/FDD (1710.0-1785.0 MHz, 20135)
Band 4, E-UTRA/FDD (1710.0-1755.0 MHz, 20136)
Band 5, E-UTRA/FDD (824.0-849.0 MHz, 20137)
Band 8, E-UTRA/FDD (880.0-915.0 MHz, 20140)
Band 12, E-UTRA/FDD (699.0-716.0 MHz, 20210)
Band 23, E-UTRA/FDD (2000.0-2020.0 MHz, 20164)
Band 25, E-UTRA/FDD (1850.0-1915.0 MHz, 20166)
Band 26 E-UTRA/FDD (814.0-849.0 MHz, 20211)
Band 27 E-UTRA/FDD (807.0-824.0 MHz, 20212)
Band 28 E-UTRA/FDD (703.0-748.0 MHz, 20213)

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: 15

Transport Block Size: 4264

TBS Index: 14 MCS Index: 15 Data Type: PN9

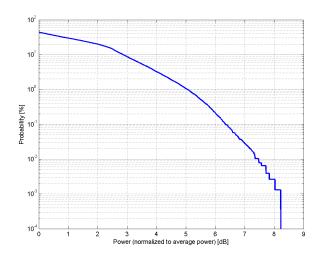
Bandwidth: 3.0 MHz
Integration Time: 10.0 ms

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

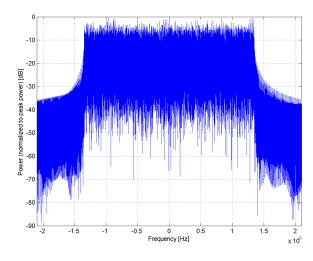
Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).

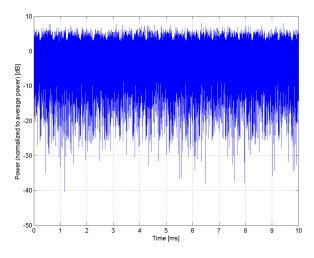
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Complementary Cumulative Distribution Function (CCDF)





Time Domain

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Name: LTE-FDD (SC-FDMA, 100 % RB, 1.4 MHz, QPSK)

Group: LTE-FDD UID: 10145-CAB

PAR: ¹ **5.76 dB** MIF: ² **-17.39 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: QPSK

Frequency Band: Band 2, E-UTRA/FDD (1850.0-1910.0 MHz, 20134)

Band 3, E-UTRA/FDD (1710.0-1785.0 MHz, 20135)
Band 4, E-UTRA/FDD (1710.0-1755.0 MHz, 20136)
Band 5, E-UTRA/FDD (824.0-849.0 MHz, 20137)
Band 8, E-UTRA/FDD (880.0-915.0 MHz, 20140)
Band 12, E-UTRA/FDD (699.0-716.0 MHz, 20210)
Band 23, E-UTRA/FDD (2000.0-2020.0 MHz, 20164)
Band 25, E-UTRA/FDD (1850.0-1915.0 MHz, 20166)
Band 26 E-UTRA/FDD (814.0-849.0 MHz, 20211)
Band 27 E-UTRA/FDD (807.0-824.0 MHz, 20212)

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: 6

Transport Block Size: 504

TBS Index: 5 MCS Index: 5 Data Type: PN9

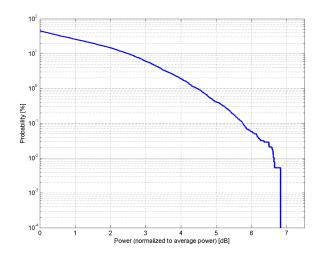
Bandwidth: 1.4 MHz Integration Time: 10.0 ms

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

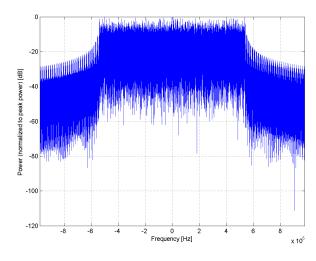
Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).

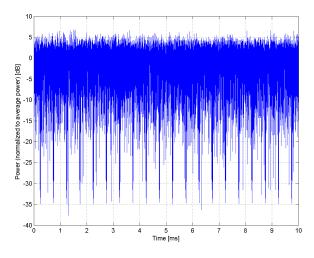
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Complementary Cumulative Distribution Function (CCDF)





Time Domain

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Name: LTE-FDD (SC-FDMA, 100 % RB, 1.4 MHz, 16-QAM)

Group: LTE-FDD UID: 10146-CAB

PAR: ¹ **6.41 dB** MIF: ² **-13.60 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 2, E-UTRA/FDD (1850.0-1910.0 MHz, 20134)

Band 3, E-UTRA/FDD (1710.0-1785.0 MHz, 20135)
Band 4, E-UTRA/FDD (1710.0-1755.0 MHz, 20136)
Band 5, E-UTRA/FDD (824.0-849.0 MHz, 20137)
Band 8, E-UTRA/FDD (880.0-915.0 MHz, 20140)
Band 12, E-UTRA/FDD (699.0-716.0 MHz, 20210)
Band 23, E-UTRA/FDD (2000.0-2020.0 MHz, 20164)
Band 25, E-UTRA/FDD (1850.0-1915.0 MHz, 20166)
Band 26 E-UTRA/FDD (814.0-849.0 MHz, 20211)
Band 27 E-UTRA/FDD (807.0-824.0 MHz, 20212)

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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: 15

Transport Block Size: 1736

TBS Index: 14 MCS Index: 15 Data Type: PN9

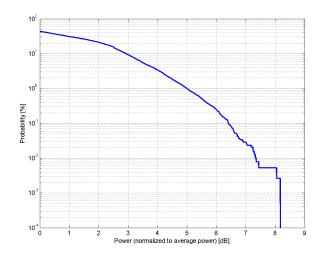
Bandwidth: 1.4 MHz Integration Time: 10.0 ms

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

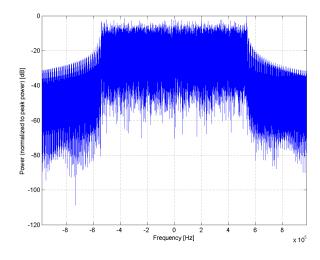
Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).

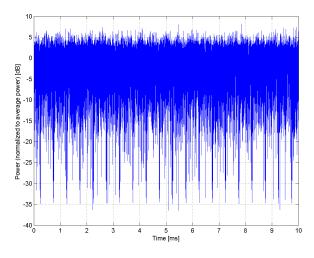
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Complementary Cumulative Distribution Function (CCDF)





Time Domain

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Name: LTE-FDD (SC-FDMA, 50 % RB, 20 MHz, 16-QAM)

Group: LTE-FDD UID: 10149-CAB

PAR: ¹ **6.42 dB** MIF: ² **-16.87 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, E-UTRA/FDD (1920.0-1980.0 MHz, 20133)

Band 2, E-UTRA/FDD (1850.0-1910.0 MHz, 20134)
Band 3, E-UTRA/FDD (1710.0-1785.0 MHz, 20135)
Band 4, E-UTRA/FDD (1710.0-1755.0 MHz, 20136)
Band 7, E-UTRA/FDD (2500.0-2570.0 MHz, 20139)
Band 9, E-UTRA/FDD (1749.9-1784.9 MHz, 20141)
Band 10, E-UTRA/FDD (1710.0-1770.0 MHz, 20142)
Band 20, E-UTRA/FDD (832.0-862.0 MHz, 20159)
Band 22, E-UTRA/FDD (3410.0-3490.0 MHz, 20190)
Band 23, E-UTRA/FDD (2000.0-2020.0 MHz, 20164)
Band 25, E-UTRA/FDD (1850.0-1915.0 MHz, 20166)

Band 28 E-UTRA/FDD (703.0-748.0 MHz, 20213)

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: 50

Transport Block Size: 14112

TBS Index: 14 MCS Index: 15 Data Type: PN9

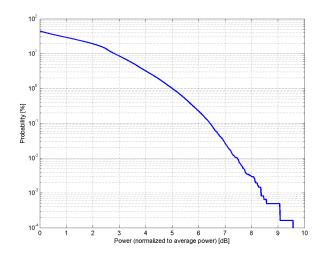
Bandwidth: 20.0 MHz Integration Time: 10.0 ms

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

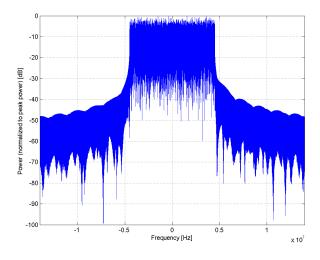
Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).

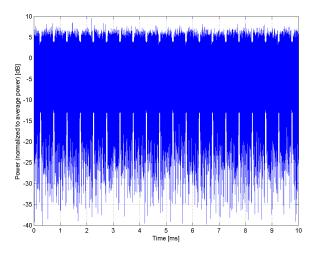
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Complementary Cumulative Distribution Function (CCDF)





Time Domain

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Engineering AG

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Name: LTE-FDD (SC-FDMA, 50 % RB, 10 MHz, QPSK)

Group: LTE-FDD UID: 10154-CAB

PAR: ¹ **5.75 dB** MIF: ² **-23.42 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: QPSK

Frequency Band: Band 1, E-UTRA/FDD (1920.0-1980.0 MHz, 20133)

Band 2, E-UTRA/FDD (1850.0-1910.0 MHz, 20134)
Band 3, E-UTRA/FDD (1710.0-1785.0 MHz, 20135)
Band 4, E-UTRA/FDD (1710.0-1755.0 MHz, 20136)
Band 5, E-UTRA/FDD (824.0-849.0 MHz, 20137)
Band 6, E-UTRA/FDD (830.0-840.0 MHz, 20138)
Band 7, E-UTRA/FDD (2500.0-2570.0 MHz, 20139)
Band 8, E-UTRA/FDD (880.0-915.0 MHz, 20140)
Band 9, E-UTRA/FDD (1749.9-1784.9 MHz, 20141)
Band 10, E-UTRA/FDD (1710.0-1770.0 MHz, 20142)
Band 11, E-UTRA/FDD (1427.9-1447.9 MHz, 20209)
Band 12, E-UTRA/FDD (699.0-716.0 MHz, 20210)
Band 13, E-UTRA/FDD (777.0-787.0 MHz, 20145)

Band 12, E-UTRA/FDD (699.0-716.0 MHz, 20210)
Band 13, E-UTRA/FDD (777.0-787.0 MHz, 20145)
Band 14, E-UTRA/FDD (788.0-798.0 MHz, 20146)
Band 17, E-UTRA/FDD (704.0-716.0 MHz, 20147)
Band 18, E-UTRA/FDD (815.0-830.0 MHz, 20157)
Band 19, E-UTRA/FDD (830.0-845.0 MHz, 20158)
Band 20, E-UTRA/FDD (832.0-862.0 MHz, 20159)
Band 21, E-UTRA/FDD (1447.9-1462.9 MHz, 20160)
Band 22, E-UTRA/FDD (3410.0-3490.0 MHz, 20190)
Band 23, E-UTRA/FDD (2000.0-2020.0 MHz, 20164)
Band 24, E-UTRA/FDD (1626.5-1660.5 MHz, 20165)
Band 25, E-UTRA/FDD (1850.0-1915.0 MHz, 20166)

Band 26 E-UTRA/FDD (814.0-849.0 MHz, 20211)

Band 27 E-UTRA/FDD (807.0-824.0 MHz, 20212) Band 28 E-UTRA/FDD (703.0-748.0 MHz, 20213)

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: 25

Transport Block Size: 2216

TBS Index: 5 MCS Index: 5 Data Type: PN9

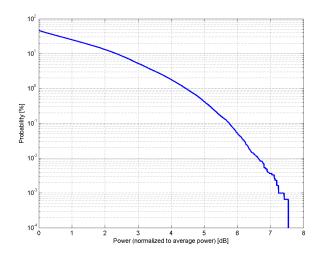
Bandwidth: 10.0 MHz
Integration Time: 10.0 ms

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

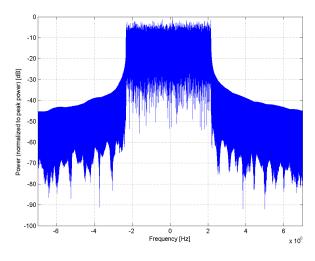
Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).

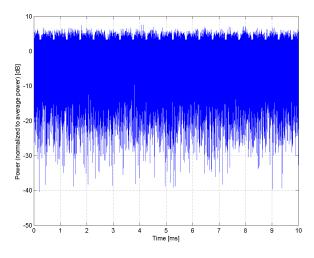
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Complementary Cumulative Distribution Function (CCDF)





Time Domain

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Name: LTE-FDD (SC-FDMA, 50 % RB, 10 MHz, 16-QAM)

Group: LTE-FDD UID: 10155-CAB

PAR: ¹ **6.43 dB** MIF: ² **-16.36 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, E-UTRA/FDD (1920.0-1980.0 MHz, 20133)

Band 2, E-UTRA/FDD (1850.0-1910.0 MHz, 20134)
Band 3, E-UTRA/FDD (1710.0-1785.0 MHz, 20135)
Band 4, E-UTRA/FDD (1710.0-1755.0 MHz, 20136)
Band 5, E-UTRA/FDD (824.0-849.0 MHz, 20137)
Band 6, E-UTRA/FDD (830.0-840.0 MHz, 20138)
Band 7, E-UTRA/FDD (2500.0-2570.0 MHz, 20139)
Band 8, E-UTRA/FDD (880.0-915.0 MHz, 20140)
Band 9, E-UTRA/FDD (1749.9-1784.9 MHz, 20141)
Band 10, E-UTRA/FDD (1710.0-1770.0 MHz, 20142)
Band 11, E-UTRA/FDD (699.0-716.0 MHz, 20210)

Band 12, E-UTRA/FDD (699.0-716.0 MHz, 20210)
Band 13, E-UTRA/FDD (777.0-787.0 MHz, 20145)
Band 14, E-UTRA/FDD (788.0-798.0 MHz, 20146)
Band 17, E-UTRA/FDD (704.0-716.0 MHz, 20147)
Band 18, E-UTRA/FDD (815.0-830.0 MHz, 20157)
Band 19, E-UTRA/FDD (830.0-845.0 MHz, 20158)
Band 20, E-UTRA/FDD (832.0-862.0 MHz, 20159)
Band 21, E-UTRA/FDD (1447.9-1462.9 MHz, 20160)
Band 22, E-UTRA/FDD (3410.0-3490.0 MHz, 20190)
Band 23, E-UTRA/FDD (2000.0-2020.0 MHz, 20164)

Band 25, E-UTRA/FDD (2000.0-2020.0 MHz, 20164) Band 24, E-UTRA/FDD (1626.5-1660.5 MHz, 20165) Band 25, E-UTRA/FDD (1850.0-1915.0 MHz, 20166) Band 26 E-UTRA/FDD (814.0-849.0 MHz, 20211) Band 27 E-UTRA/FDD (807.0-824.0 MHz, 20212) Band 28 E-UTRA/FDD (703.0-748.0 MHz, 20213)

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: 25

Transport Block Size: 7224

TBS Index: 14
MCS Index: 15

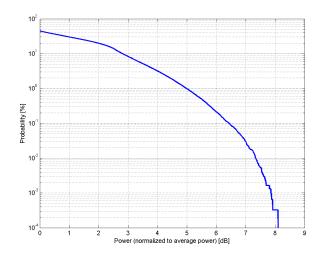
Data Type: PN9
Bandwidth: 10.0 MHz
Integration Time: 10.0 ms

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

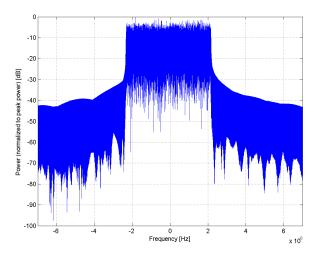
Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).

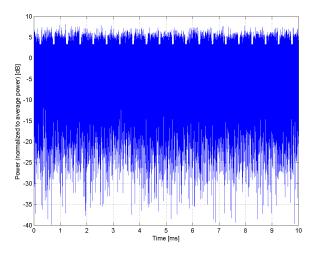
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Complementary Cumulative Distribution Function (CCDF)





Time Domain

Schmid & Partner

Engineering AG

Zeughausstrasse 43, 8004 Zurich, Switzerland

Name: LTE-FDD (SC-FDMA, 50 % RB, 5 MHz, QPSK)

Group: LTE-FDD UID: 10156-CAB

PAR: ¹ **5.79 dB** MIF: ² **-21.71 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: QPSK

Frequency Band: Band 1, E-UTRA/FDD (1920.0-1980.0 MHz, 20133)

Band 2, E-UTRA/FDD (1850.0-1910.0 MHz, 20134)
Band 3, E-UTRA/FDD (1710.0-1785.0 MHz, 20135)
Band 4, E-UTRA/FDD (1710.0-1755.0 MHz, 20136)
Band 5, E-UTRA/FDD (824.0-849.0 MHz, 20137)
Band 6, E-UTRA/FDD (830.0-840.0 MHz, 20138)
Band 7, E-UTRA/FDD (2500.0-2570.0 MHz, 20139)
Band 8, E-UTRA/FDD (880.0-915.0 MHz, 20140)
Band 9, E-UTRA/FDD (1749.9-1784.9 MHz, 20141)
Band 10, E-UTRA/FDD (1710.0-1770.0 MHz, 20142)
Band 11, E-UTRA/FDD (1427.9-1447.9 MHz, 20209)

Band 11, E-UTRA/FDD (1427.9-1447.9 MHz, 20209)
Band 12, E-UTRA/FDD (699.0-716.0 MHz, 20210)
Band 13, E-UTRA/FDD (777.0-787.0 MHz, 20145)
Band 14, E-UTRA/FDD (788.0-798.0 MHz, 20146)
Band 17, E-UTRA/FDD (704.0-716.0 MHz, 20147)
Band 18, E-UTRA/FDD (815.0-830.0 MHz, 20157)
Band 19, E-UTRA/FDD (830.0-845.0 MHz, 20158)
Band 20, E-UTRA/FDD (832.0-862.0 MHz, 20159)
Band 21, E-UTRA/FDD (1447.9-1462.9 MHz, 20160)
Band 22, E-UTRA/FDD (3410.0-3490.0 MHz, 20190)
Band 23, E-UTRA/FDD (2000.0-2020.0 MHz, 20164)
Band 24, E-UTRA/FDD (1626.5-1660.5 MHz, 20165)
Band 25, E-UTRA/FDD (1850.0-1915.0 MHz, 20166)

Band 26 E-UTRA/FDD (814.0-849.0 MHz, 20211) Band 27 E-UTRA/FDD (807.0-824.0 MHz, 20212) Band 28 E-UTRA/FDD (703.0-748.0 MHz, 20213)

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: 12

Transport Block Size: 1032

TBS Index: 5 MCS Index: 5 Data Type: PN9

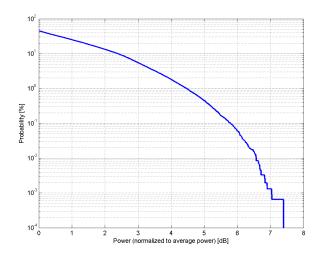
Bandwidth: 5.0 MHz
Integration Time: 10.0 ms

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

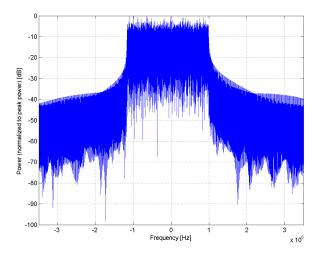
Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).

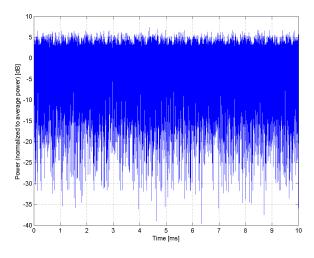
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Complementary Cumulative Distribution Function (CCDF)





Time Domain

Schmid & Partner

Engineering AG

Zeughausstrasse 43, 8004 Zurich, Switzerland

Name: LTE-FDD (SC-FDMA, 50 % RB, 5 MHz, 16-QAM)

Group: LTE-FDD UID: 10157-CAB

PAR: ¹ **6.49 dB** MIF: ² **-15.78 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, E-UTRA/FDD (1920.0-1980.0 MHz, 20133)

Band 2, E-UTRA/FDD (1850.0-1910.0 MHz, 20134)
Band 3, E-UTRA/FDD (1710.0-1785.0 MHz, 20135)
Band 4, E-UTRA/FDD (1710.0-1755.0 MHz, 20136)
Band 5, E-UTRA/FDD (824.0-849.0 MHz, 20137)
Band 6, E-UTRA/FDD (830.0-840.0 MHz, 20138)
Band 7, E-UTRA/FDD (2500.0-2570.0 MHz, 20139)
Band 8, E-UTRA/FDD (880.0-915.0 MHz, 20140)
Band 9, E-UTRA/FDD (1749.9-1784.9 MHz, 20141)
Band 10, E-UTRA/FDD (1710.0-1770.0 MHz, 20142)
Band 11, E-UTRA/FDD (1427.9-1447.9 MHz, 20209)
Band 12, E-UTRA/FDD (699.0-716.0 MHz, 20145)

Band 13, E-UTRA/FDD (699.0-710.0 MHz, 20210)
Band 13, E-UTRA/FDD (777.0-787.0 MHz, 20145)
Band 14, E-UTRA/FDD (788.0-798.0 MHz, 20146)
Band 17, E-UTRA/FDD (704.0-716.0 MHz, 20147)
Band 18, E-UTRA/FDD (815.0-830.0 MHz, 20157)
Band 19, E-UTRA/FDD (830.0-845.0 MHz, 20158)
Band 20, E-UTRA/FDD (832.0-862.0 MHz, 20159)
Band 21, E-UTRA/FDD (1447.9-1462.9 MHz, 20160)
Band 22, E-UTRA/FDD (3410.0-3490.0 MHz, 20190)
Band 23, E-UTRA/FDD (2000.0-2020.0 MHz, 20164)
Band 24, E-UTRA/FDD (1626.5-1660.5 MHz, 20165)
Band 25, E-UTRA/FDD (1850.0-1915.0 MHz, 20166)

Band 26 E-UTRA/FDD (814.0-849.0 MHz, 20211) Band 27 E-UTRA/FDD (807.0-824.0 MHz, 20212) Band 28 E-UTRA/FDD (703.0-748.0 MHz, 20213)

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: 12

Transport Block Size: 3496

TBS Index: 14 MCS Index: 15 Data Type: PN9

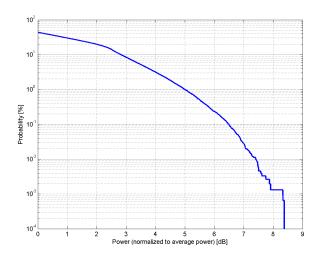
Bandwidth: 5.0 MHz
Integration Time: 10.0 ms

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

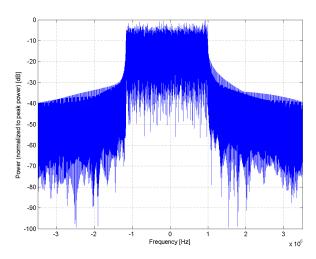
Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).

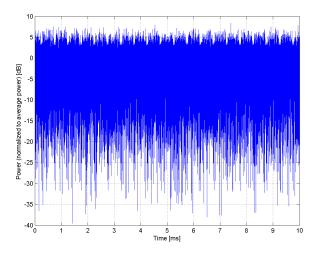
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Complementary Cumulative Distribution Function (CCDF)





Time Domain

Schmid & Partner

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Name: LTE-FDD (SC-FDMA, 50 % RB, 15 MHz, QPSK)

Group: LTE-FDD UID: 10160-CAB

PAR: ¹ **5.82 dB** MIF: ² **-17.95 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: QPSK

Frequency Band: Band 1, E-UTRA/FDD (1920.0-1980.0 MHz, 20133)

Band 2, E-UTRA/FDD (1850.0-1910.0 MHz, 20134)
Band 3, E-UTRA/FDD (1710.0-1785.0 MHz, 20135)
Band 4, E-UTRA/FDD (1710.0-1755.0 MHz, 20136)
Band 7, E-UTRA/FDD (2500.0-2570.0 MHz, 20139)
Band 9, E-UTRA/FDD (1749.9-1784.9 MHz, 20141)
Band 10, E-UTRA/FDD (1710.0-1770.0 MHz, 20142)
Band 18, E-UTRA/FDD (815.0-830.0 MHz, 20157)
Band 19, E-UTRA/FDD (830.0-845.0 MHz, 20158)
Band 20, E-UTRA/FDD (832.0-862.0 MHz, 20159)
Band 21, E-UTRA/FDD (1447.9-1462.9 MHz, 20160)

Band 22, E-UTRA/FDD (3410.0-3490.0 MHz, 20190) Band 23, E-UTRA/FDD (2000.0-2020.0 MHz, 20164) Band 25, E-UTRA/FDD (1850.0-1915.0 MHz, 20166) Band 26 E-UTRA/FDD (814.0-849.0 MHz, 20211) Band 28 E-UTRA/FDD (703.0-748.0 MHz, 20213)

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: 36

Transport Block Size: 3112

TBS Index: 5 MCS Index: 5 Data Type: PN9

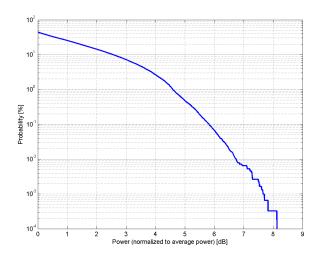
Bandwidth: 15.0 MHz
Integration Time: 10.0 ms

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

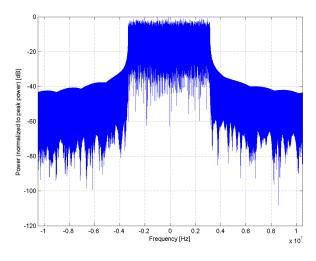
Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).

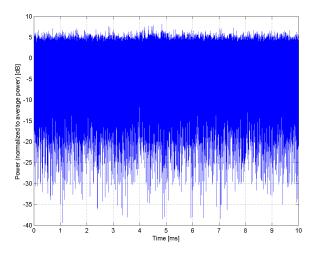
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Complementary Cumulative Distribution Function (CCDF)





Time Domain

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Name: LTE-FDD (SC-FDMA, 50 % RB, 15 MHz, 16-QAM)

Group: LTE-FDD UID: 10161-CAB

PAR: ¹ **6.43 dB** MIF: ² **-17.54 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, E-UTRA/FDD (1920.0-1980.0 MHz, 20133)

Band 2, E-UTRA/FDD (1850.0-1910.0 MHz, 20134)
Band 3, E-UTRA/FDD (1710.0-1785.0 MHz, 20135)
Band 4, E-UTRA/FDD (1710.0-1755.0 MHz, 20136)
Band 7, E-UTRA/FDD (2500.0-2570.0 MHz, 20139)
Band 9, E-UTRA/FDD (1749.9-1784.9 MHz, 20141)
Band 10, E-UTRA/FDD (1710.0-1770.0 MHz, 20142)
Band 18, E-UTRA/FDD (815.0-830.0 MHz, 20157)
Band 19, E-UTRA/FDD (830.0-845.0 MHz, 20158)
Band 20, E-UTRA/FDD (832.0-862.0 MHz, 20159)

Band 20, E-UTRA/FDD (832.0-862.0 MHz, 20159)
Band 21, E-UTRA/FDD (1447.9-1462.9 MHz, 20160)
Band 22, E-UTRA/FDD (3410.0-3490.0 MHz, 20190)
Band 23, E-UTRA/FDD (2000.0-2020.0 MHz, 20164)
Band 25, E-UTRA/FDD (1850.0-1915.0 MHz, 20166)
Band 26 E-UTRA/FDD (814.0-849.0 MHz, 20211)
Band 28 E-UTRA/FDD (703.0-748.0 MHz, 20213)

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: 36

Transport Block Size: 10296

TBS Index: 14 MCS Index: 15 Data Type: PN9

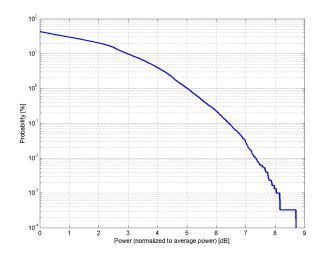
Bandwidth: 15.0 MHz Integration Time: 10.0 ms

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

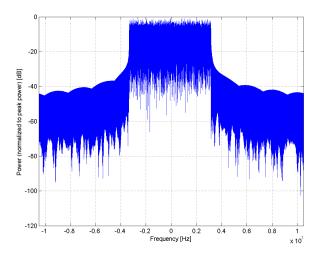
Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).

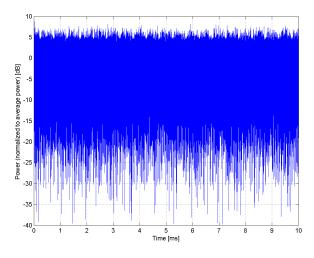
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Complementary Cumulative Distribution Function (CCDF)





Time Domain

Schmid & Partner

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Name: LTE-FDD (SC-FDMA, 50 % RB, 1.4 MHz, QPSK)

Group: LTE-FDD UID: 10166-CAB

PAR: ¹ **5.46 dB** MIF: ² **-18.10 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: QPSK

Frequency Band: Band 2, E-UTRA/FDD (1850.0-1910.0 MHz, 20134)

Band 3, E-UTRA/FDD (1710.0-1785.0 MHz, 20135)
Band 4, E-UTRA/FDD (1710.0-1755.0 MHz, 20136)
Band 5, E-UTRA/FDD (824.0-849.0 MHz, 20137)
Band 8, E-UTRA/FDD (880.0-915.0 MHz, 20140)
Band 12, E-UTRA/FDD (699.0-716.0 MHz, 20210)
Band 23, E-UTRA/FDD (2000.0-2020.0 MHz, 20164)
Band 25, E-UTRA/FDD (1850.0-1915.0 MHz, 20166)
Band 26 E-UTRA/FDD (814.0-849.0 MHz, 20211)

Band 27 E-UTRA/FDD (807.0-824.0 MHz, 20212)

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: 3

Transport Block Size: 224

TBS Index: 5 MCS Index: 5 Data Type: PN9

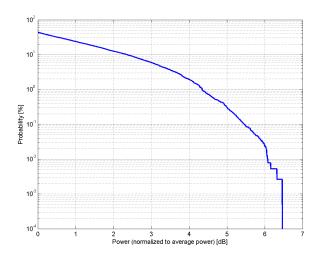
Bandwidth: 1.4 MHz Integration Time: 10.0 ms

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

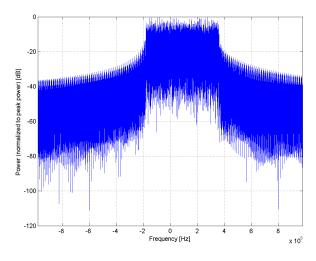
Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).

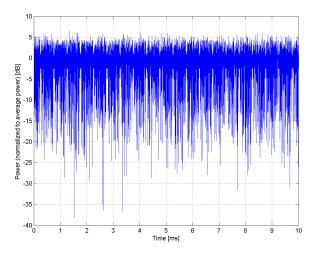
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Complementary Cumulative Distribution Function (CCDF)





Time Domain

Schmid & Partner

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Zeughausstrasse 43, 8004 Zurich, Switzerland

Name: LTE-FDD (SC-FDMA, 50 % RB, 1.4 MHz, 16-QAM)

Group: LTE-FDD UID: 10167-CAB

PAR: ¹ **6.21 dB** MIF: ² **-12.15 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 2, E-UTRA/FDD (1850.0-1910.0 MHz, 20134)

Band 3, E-UTRA/FDD (1710.0-1785.0 MHz, 20135)
Band 4, E-UTRA/FDD (1710.0-1755.0 MHz, 20136)
Band 5, E-UTRA/FDD (824.0-849.0 MHz, 20137)
Band 8, E-UTRA/FDD (880.0-915.0 MHz, 20140)
Band 12, E-UTRA/FDD (699.0-716.0 MHz, 20210)
Band 23, E-UTRA/FDD (2000.0-2020.0 MHz, 20164)
Band 25, E-UTRA/FDD (1850.0-1915.0 MHz, 20166)
Band 26 E-UTRA/FDD (814.0-849.0 MHz, 20211)

Band 27 E-UTRA/FDD (807.0-824.0 MHz, 20212)

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: 3

Transport Block Size: 840

TBS Index: 14 MCS Index: 15 Data Type: PN9

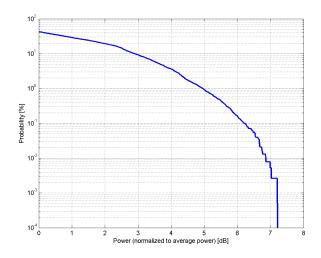
Bandwidth: 1.4 MHz Integration Time: 10.0 ms

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

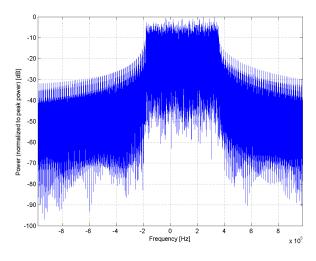
Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).

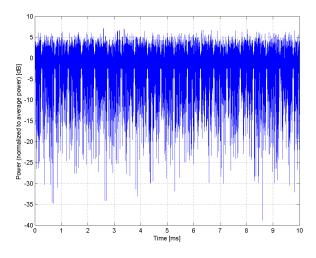
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Complementary Cumulative Distribution Function (CCDF)





Time Domain

Schmid & Partner

Engineering AG

Zeughausstrasse 43, 8004 Zurich, Switzerland

Name: LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)

Group: LTE-FDD UID: 10169-CAB

PAR: ¹ **5.73 dB** MIF: ² **-15.63 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: QPSK

Frequency Band: Band 1, E-UTRA/FDD (1920.0-1980.0 MHz, 20133)

Band 2, E-UTRA/FDD (1850.0-1910.0 MHz, 20134)
Band 3, E-UTRA/FDD (1710.0-1785.0 MHz, 20135)
Band 4, E-UTRA/FDD (1710.0-1755.0 MHz, 20136)
Band 7, E-UTRA/FDD (2500.0-2570.0 MHz, 20139)
Band 9, E-UTRA/FDD (1749.9-1784.9 MHz, 20141)
Band 10, E-UTRA/FDD (1710.0-1770.0 MHz, 20142)
Band 20, E-UTRA/FDD (832.0-862.0 MHz, 20159)
Band 22, E-UTRA/FDD (3410.0-3490.0 MHz, 20190)
Band 23, E-UTRA/FDD (2000.0-2020.0 MHz, 20164)
Band 25, E-UTRA/FDD (1850.0-1915.0 MHz, 20166)

Band 28 E-UTRA/FDD (703.0-748.0 MHz, 20213)

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: 72

TBS Index: 14 MCS Index: 15 Data Type: PN9

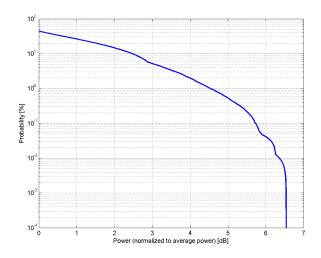
Bandwidth: 20.0 MHz Integration Time: 10.0 ms

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

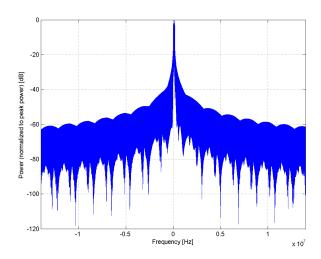
Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).

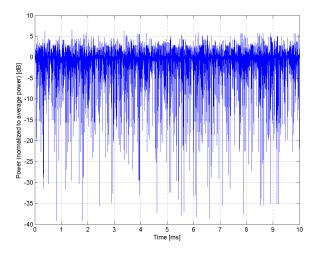
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Complementary Cumulative Distribution Function (CCDF)





Time Domain

Schmid & Partner

Engineering AG

Zeughausstrasse 43, 8004 Zurich, Switzerland

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

Group: LTE-FDD UID: 10170-CAB

PAR: ¹ **6.52 dB** MIF: ² **-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, E-UTRA/FDD (1920.0-1980.0 MHz, 20133)

Band 2, E-UTRA/FDD (1850.0-1910.0 MHz, 20134)
Band 3, E-UTRA/FDD (1710.0-1785.0 MHz, 20135)
Band 4, E-UTRA/FDD (1710.0-1755.0 MHz, 20136)
Band 7, E-UTRA/FDD (2500.0-2570.0 MHz, 20139)
Band 9, E-UTRA/FDD (1749.9-1784.9 MHz, 20141)
Band 10, E-UTRA/FDD (1710.0-1770.0 MHz, 20142)
Band 20, E-UTRA/FDD (832.0-862.0 MHz, 20159)
Band 22, E-UTRA/FDD (3410.0-3490.0 MHz, 20190)
Band 23, E-UTRA/FDD (2000.0-2020.0 MHz, 20164)
Band 25, E-UTRA/FDD (1850.0-1915.0 MHz, 20166)

Band 28 E-UTRA/FDD (703.0-748.0 MHz, 20213)

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

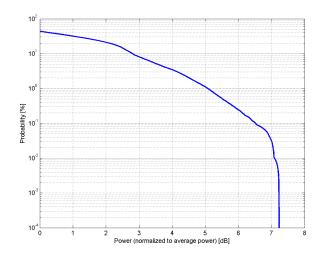
Bandwidth: 20.0 MHz Integration Time: 10.0 ms

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

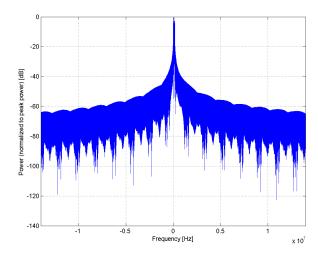
Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).

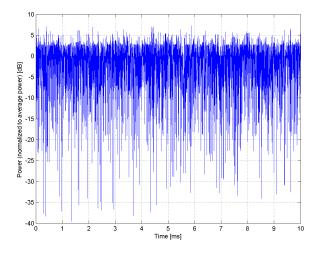
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Complementary Cumulative Distribution Function (CCDF)





Time Domain

Schmid & Partner

Engineering AG

Zeughausstrasse 43, 8004 Zurich, Switzerland

Name: LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)

Group: LTE-FDD UID: 10175-CAB

PAR: ¹ **5.72 dB** MIF: ² **-15.63 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: QPSK

Frequency Band: Band 1, E-UTRA/FDD (1920.0-1980.0 MHz, 20133)

Band 2, E-UTRA/FDD (1850.0-1910.0 MHz, 20134)
Band 3, E-UTRA/FDD (1710.0-1785.0 MHz, 20135)
Band 4, E-UTRA/FDD (1710.0-1755.0 MHz, 20136)
Band 5, E-UTRA/FDD (824.0-849.0 MHz, 20137)
Band 6, E-UTRA/FDD (830.0-840.0 MHz, 20138)
Band 7, E-UTRA/FDD (2500.0-2570.0 MHz, 20139)
Band 8, E-UTRA/FDD (880.0-915.0 MHz, 20140)
Band 9, E-UTRA/FDD (1749.9-1784.9 MHz, 20141)
Band 10, E-UTRA/FDD (1710.0-1770.0 MHz, 20142)
Band 11, E-UTRA/FDD (1427.9-1447.9 MHz, 20209)
Band 12, E-UTRA/FDD (699.0-716.0 MHz, 20145)
Band 13, E-UTRA/FDD (777.0-787.0 MHz, 20146)

Band 19, E-UTRA/FDD (830.0-845.0 MHz, 20158)
Band 20, E-UTRA/FDD (832.0-862.0 MHz, 20159)
Band 21, E-UTRA/FDD (1447.9-1462.9 MHz, 20160)
Band 22, E-UTRA/FDD (3410.0-3490.0 MHz, 20190)
Band 23, E-UTRA/FDD (2000.0-2020.0 MHz, 20164)
Band 24, E-UTRA/FDD (1626.5-1660.5 MHz, 20165)
Band 25, E-UTRA/FDD (1850.0-1915.0 MHz, 20166)
Band 26 E-UTRA/FDD (814.0-849.0 MHz, 20211)
Band 27 E-UTRA/FDD (807.0-824.0 MHz, 20212)

Band 28 E-UTRA/FDD (703.0-748.0 MHz, 20213)

Band 17, E-UTRA/FDD (704.0-716.0 MHz, 20147) Band 18, E-UTRA/FDD (815.0-830.0 MHz, 20157)

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: 72 TBS Index: 5

MCS Index: 5
Data Type: PN9
10.0 MHz

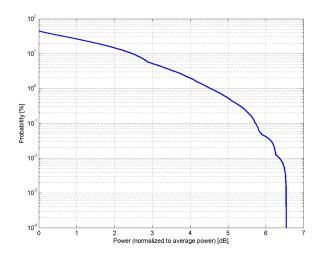
Bandwidth: 10.0 MHz
Integration Time: 10.0 ms

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

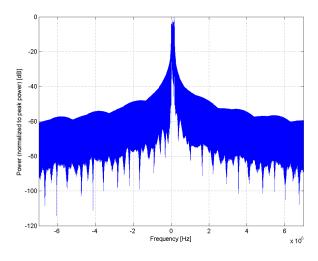
Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).

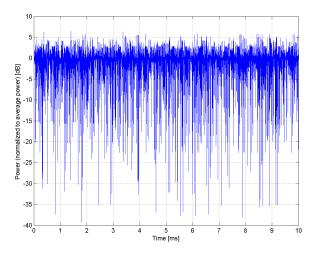
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Complementary Cumulative Distribution Function (CCDF)





Time Domain

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-CAB

PAR: ¹ **6.52 dB** MIF: ² **-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, E-UTRA/FDD (1920.0-1980.0 MHz, 20133)

Band 2, E-UTRA/FDD (1850.0-1910.0 MHz, 20134)
Band 3, E-UTRA/FDD (1710.0-1785.0 MHz, 20135)
Band 4, E-UTRA/FDD (1710.0-1755.0 MHz, 20136)
Band 5, E-UTRA/FDD (824.0-849.0 MHz, 20137)
Band 6, E-UTRA/FDD (830.0-840.0 MHz, 20138)
Band 7, E-UTRA/FDD (2500.0-2570.0 MHz, 20139)
Band 8, E-UTRA/FDD (880.0-915.0 MHz, 20140)
Band 9, E-UTRA/FDD (1749.9-1784.9 MHz, 20141)
Band 10, E-UTRA/FDD (1710.0-1770.0 MHz, 20142)
Band 11, E-UTRA/FDD (1427.9-1447.9 MHz, 20140)

Band 11, E-UTRA/FDD (1427.9-1447.9 MHz, 20209)
Band 12, E-UTRA/FDD (699.0-716.0 MHz, 20210)
Band 13, E-UTRA/FDD (777.0-787.0 MHz, 20145)
Band 14, E-UTRA/FDD (788.0-798.0 MHz, 20146)
Band 17, E-UTRA/FDD (704.0-716.0 MHz, 20147)
Band 18, E-UTRA/FDD (815.0-830.0 MHz, 20157)
Band 19, E-UTRA/FDD (830.0-845.0 MHz, 20158)
Band 20, E-UTRA/FDD (832.0-862.0 MHz, 20159)
Band 21, E-UTRA/FDD (1447.9-1462.9 MHz, 20160)
Band 22, E-UTRA/FDD (3410.0-3490.0 MHz, 20190)
Band 23, E-UTRA/FDD (2000.0-2020.0 MHz, 20164)

Band 24, E-UTRA/FDD (1626.5-1660.5 MHz, 20165) Band 25, E-UTRA/FDD (1850.0-1915.0 MHz, 20166) Band 26 E-UTRA/FDD (814.0-849.0 MHz, 20211) Band 27 E-UTRA/FDD (807.0-824.0 MHz, 20212) Band 28 E-UTRA/FDD (703.0-748.0 MHz, 20213)

Detailed Specification: Modulation Scheme: SC-FDMA

Number of PUSCHs: 1

Settings for Subframe #0 to #9: Modulation Scheme: QPSK Data Type: UL-SCH

Data Type: UL-SCH Number RB: 1

Transport Block Size: 256

TBS Index: 14 MCS Index: 15 Data Type: PN9

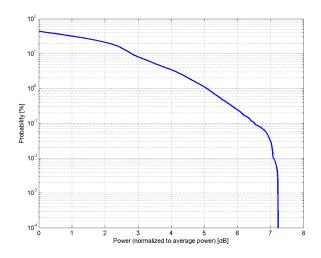
Bandwidth: 10.0 MHz
Integration Time: 10.0 ms

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

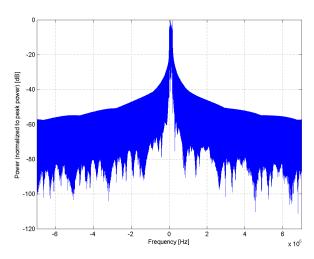
Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).

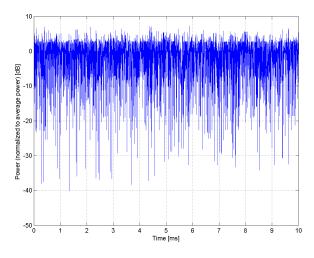
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Complementary Cumulative Distribution Function (CCDF)





Time Domain

Schmid & Partner

Engineering AG

Zeughausstrasse 43, 8004 Zurich, Switzerland

Name: LTE-FDD (SC-FDMA, 1 RB, 5 MHz, QPSK)

Group: LTE-FDD UID: 10177-CAC

PAR: ¹ **5.73 dB** MIF: ² **-15.63 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: QPSK

Frequency Band: Band 1, E-UTRA/FDD (1920.0-1980.0 MHz, 20133)

Band 2, E-UTRA/FDD (1850.0-1910.0 MHz, 2010.4)
Band 3, E-UTRA/FDD (1710.0-1785.0 MHz, 2013.5)
Band 4, E-UTRA/FDD (1710.0-1755.0 MHz, 2013.6)
Band 5, E-UTRA/FDD (824.0-849.0 MHz, 2013.7)
Band 6, E-UTRA/FDD (830.0-840.0 MHz, 2013.8)
Band 7, E-UTRA/FDD (2500.0-2570.0 MHz, 2013.9)
Band 8, E-UTRA/FDD (880.0-915.0 MHz, 2014.0)
Band 9, E-UTRA/FDD (1749.9-1784.9 MHz, 2014.1)
Band 10, E-UTRA/FDD (1710.0-1770.0 MHz, 2014.2)
Band 11, E-UTRA/FDD (1427.9-1447.9 MHz, 2020.9)
Band 12, E-UTRA/FDD (699.0-716.0 MHz, 2021.0)

Band 13, E-UTRA/FDD (777.0-787.0 MHz, 20145)
Band 14, E-UTRA/FDD (778.0-787.0 MHz, 20146)
Band 14, E-UTRA/FDD (788.0-798.0 MHz, 20147)
Band 18, E-UTRA/FDD (815.0-830.0 MHz, 20157)
Band 19, E-UTRA/FDD (830.0-845.0 MHz, 20158)
Band 20, E-UTRA/FDD (832.0-862.0 MHz, 20159)
Band 21, E-UTRA/FDD (1447.9-1462.9 MHz, 20160)
Band 22, E-UTRA/FDD (3410.0-3490.0 MHz, 20190)
Band 23, E-UTRA/FDD (2000.0-2020.0 MHz, 20164)

Band 24, E-UTRA/FDD (1626.5-1660.5 MHz, 20165) Band 25, E-UTRA/FDD (1850.0-1915.0 MHz, 20166) Band 26 E-UTRA/FDD (814.0-849.0 MHz, 20211) Band 27 E-UTRA/FDD (807.0-824.0 MHz, 20212)

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: 72

TBS Index: 5 MCS Index: 5 Data Type: PN9 5.0 MHz

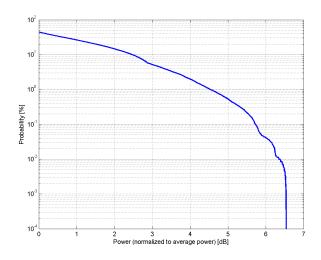
Bandwidth: 5.0 MHz Integration Time: 10.0 ms

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

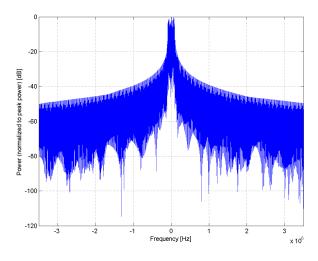
Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).

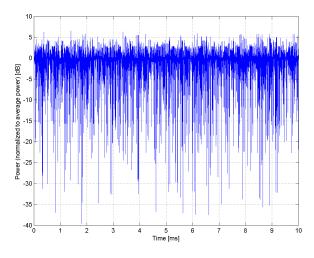
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Complementary Cumulative Distribution Function (CCDF)





Time Domain

Schmid & Partner

Engineering AG

Zeughausstrasse 43, 8004 Zurich, Switzerland

Name: LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)

Group: LTE-FDD UID: 10178-CAB

PAR: ¹ **6.52 dB** MIF: ² **-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, E-UTRA/FDD (1920.0-1980.0 MHz, 20133)

Band 2, E-UTRA/FDD (1850.0-1910.0 MHz, 20134)
Band 3, E-UTRA/FDD (1710.0-1785.0 MHz, 20135)
Band 4, E-UTRA/FDD (1710.0-1755.0 MHz, 20136)
Band 5, E-UTRA/FDD (824.0-849.0 MHz, 20137)
Band 6, E-UTRA/FDD (830.0-840.0 MHz, 20138)
Band 7, E-UTRA/FDD (2500.0-2570.0 MHz, 20139)
Band 8, E-UTRA/FDD (880.0-915.0 MHz, 20140)
Band 9, E-UTRA/FDD (1749.9-1784.9 MHz, 20141)
Band 10, E-UTRA/FDD (1710.0-1770.0 MHz, 20142)
Band 11, E-UTRA/FDD (1427.9-1447.9 MHz, 20209)
Band 12, E-UTRA/FDD (699.0-716.0 MHz, 20145)
Band 13, E-UTRA/FDD (777.0-787.0 MHz, 20145)
Band 14, E-UTRA/FDD (7788.0-798.0 MHz, 20146)

Band 17, E-UTRA/FDD (704.0-716.0 MHz, 20147)
Band 18, E-UTRA/FDD (815.0-830.0 MHz, 20157)
Band 19, E-UTRA/FDD (830.0-845.0 MHz, 20158)
Band 20, E-UTRA/FDD (832.0-862.0 MHz, 20159)
Band 21, E-UTRA/FDD (1447.9-1462.9 MHz, 20160)
Band 22, E-UTRA/FDD (3410.0-3490.0 MHz, 20190)
Band 23, E-UTRA/FDD (2000.0-2020.0 MHz, 20164)
Band 24, E-UTRA/FDD (1626.5-1660.5 MHz, 20165)
Band 25, E-UTRA/FDD (1850.0-1915.0 MHz, 20166)
Band 26 E-UTRA/FDD (814.0-849.0 MHz, 20211)

Band 27 E-UTRA/FDD (807.0-824.0 MHz, 20212) Band 28 E-UTRA/FDD (703.0-748.0 MHz, 20213)

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

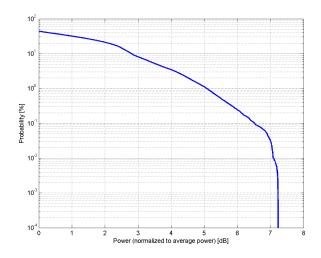
Bandwidth: 5.0 MHz
Integration Time: 10.0 ms

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

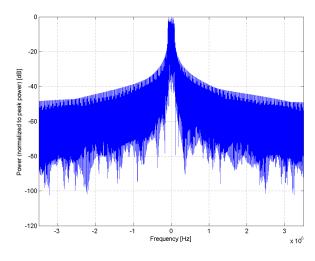
Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).

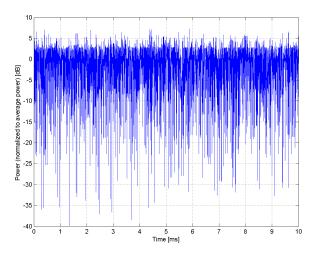
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Complementary Cumulative Distribution Function (CCDF)





Time Domain

Schmid & Partner

Engineering AG

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Name: LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)

Group: LTE-FDD UID: 10181-CAB

PAR: ¹ **5.72 dB** MIF: ² **-15.63 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: QPSK

Frequency Band: Band 1, E-UTRA/FDD (1920.0-1980.0 MHz, 20133)

Band 2, E-UTRA/FDD (1850.0-1910.0 MHz, 20134) Band 3, E-UTRA/FDD (1710.0-1785.0 MHz, 20135) Band 4, E-UTRA/FDD (1710.0-1755.0 MHz, 20136) Band 7, E-UTRA/FDD (2500.0-2570.0 MHz, 20139) Band 9, E-UTRA/FDD (1749.9-1784.9 MHz, 20141) Band 10, E-UTRA/FDD (1710.0-1770.0 MHz, 20142) Band 18, E-UTRA/FDD (815.0-830.0 MHz, 20157) Band 19, E-UTRA/FDD (830.0-845.0 MHz, 20158)

Band 20, E-UTRA/FDD (832.0-862.0 MHz, 20159)
Band 21, E-UTRA/FDD (1447.9-1462.9 MHz, 20160)
Band 22, E-UTRA/FDD (3410.0-3490.0 MHz, 20190)
Band 23, E-UTRA/FDD (2000.0-2020.0 MHz, 20164)
Band 25, E-UTRA/FDD (1850.0-1915.0 MHz, 20166)
Band 26 E-UTRA/FDD (814.0-849.0 MHz, 20211)
Band 28 E-UTRA/FDD (703.0-748.0 MHz, 20213)

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: 72

TBS Index: 14
MCS Index: 15

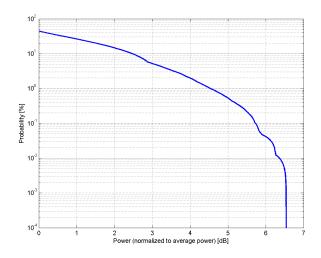
Data Type: PN9
Bandwidth: 15.0 MHz
Integration Time: 10.0 ms

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

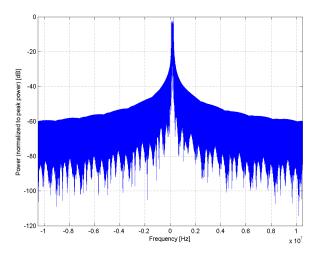
Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).

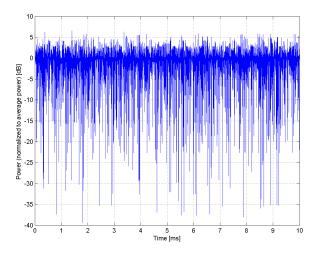
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Complementary Cumulative Distribution Function (CCDF)





Time Domain

Schmid & Partner

Engineering AG

Zeughausstrasse 43, 8004 Zurich, Switzerland

Name: LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)

Group: LTE-FDD UID: 10182-CAB

PAR: ¹ **6.52 dB** MIF: ² **-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, E-UTRA/FDD (1920.0-1980.0 MHz, 20133)

Band 2, E-UTRA/FDD (1850.0-1910.0 MHz, 20134)
Band 3, E-UTRA/FDD (1710.0-1785.0 MHz, 20135)
Band 4, E-UTRA/FDD (1710.0-1755.0 MHz, 20136)
Band 7, E-UTRA/FDD (2500.0-2570.0 MHz, 20139)
Band 9, E-UTRA/FDD (1749.9-1784.9 MHz, 20141)
Band 10, E-UTRA/FDD (1710.0-1770.0 MHz, 20142)
Band 18, E-UTRA/FDD (815.0-830.0 MHz, 20157)
Band 19, E-UTRA/FDD (830.0-845.0 MHz, 20158)
Band 20, E-UTRA/FDD (832.0-862.0 MHz, 20159)

Band 20, E-UTRA/FDD (832.0-862.0 MHz, 20159) Band 21, E-UTRA/FDD (1447.9-1462.9 MHz, 20160) Band 22, E-UTRA/FDD (3410.0-3490.0 MHz, 20190) Band 23, E-UTRA/FDD (2000.0-2020.0 MHz, 20164) Band 25, E-UTRA/FDD (1850.0-1915.0 MHz, 20166) Band 26 E-UTRA/FDD (814.0-849.0 MHz, 20211)

Band 28 E-UTRA/FDD (703.0-748.0 MHz, 20213)

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

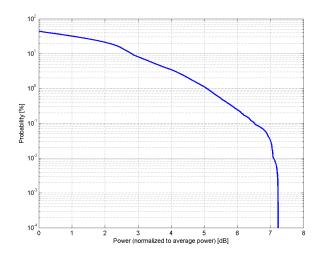
Bandwidth: 15.0 MHz
Integration Time: 10.0 ms

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

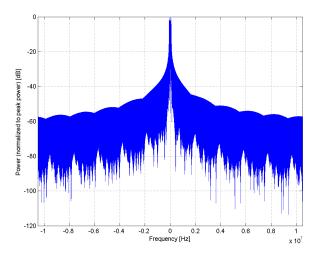
Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).

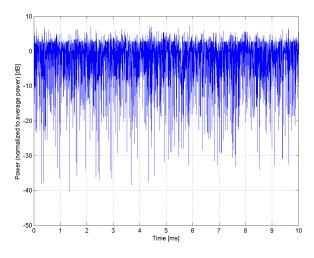
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Complementary Cumulative Distribution Function (CCDF)





Time Domain

Schmid & Partner

Engineering AG

Zeughausstrasse 43, 8004 Zurich, Switzerland

Name: LTE-FDD (SC-FDMA, 1 RB, 3 MHz, QPSK)

Group: LTE-FDD UID: 10184-CAB

PAR: ¹ **5.73 dB** MIF: ² **-15.62 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: QPSK

Frequency Band: Band 2, E-UTRA/FDD (1850.0-1910.0 MHz, 20134)

Band 3, E-UTRA/FDD (1710.0-1785.0 MHz, 20135)
Band 4, E-UTRA/FDD (1710.0-1755.0 MHz, 20136)
Band 5, E-UTRA/FDD (824.0-849.0 MHz, 20137)
Band 8, E-UTRA/FDD (880.0-915.0 MHz, 20140)
Band 12, E-UTRA/FDD (699.0-716.0 MHz, 20210)
Band 23, E-UTRA/FDD (2000.0-2020.0 MHz, 20164)
Band 25, E-UTRA/FDD (1850.0-1915.0 MHz, 20166)
Band 26 E-UTRA/FDD (814.0-849.0 MHz, 20211)
Band 27 E-UTRA/FDD (807.0-824.0 MHz, 20212)
Band 28 E-UTRA/FDD (703.0-748.0 MHz, 20213)

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: 72

TBS Index: 5 MCS Index: 5 Data Type: PN9

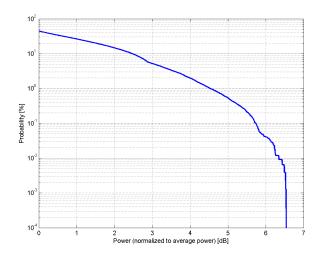
Bandwidth: 3.0 MHz
Integration Time: 10.0 ms

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

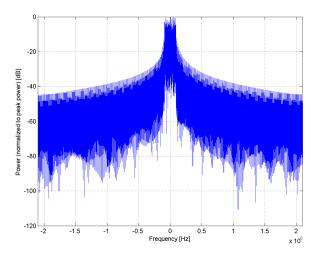
Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).

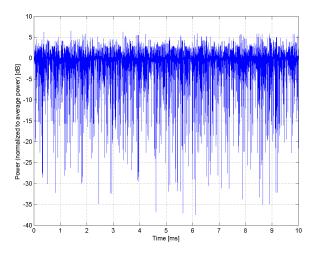
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Complementary Cumulative Distribution Function (CCDF)





Time Domain

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Name: LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)

Group: LTE-FDD UID: 10185-CAB

PAR: ¹ **6.51 dB** MIF: ² **-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 2, E-UTRA/FDD (1850.0-1910.0 MHz, 20134)

Band 3, E-UTRA/FDD (1710.0-1785.0 MHz, 20135)
Band 4, E-UTRA/FDD (1710.0-1755.0 MHz, 20136)
Band 5, E-UTRA/FDD (824.0-849.0 MHz, 20137)
Band 8, E-UTRA/FDD (880.0-915.0 MHz, 20140)
Band 12, E-UTRA/FDD (699.0-716.0 MHz, 20210)
Band 23, E-UTRA/FDD (2000.0-2020.0 MHz, 20164)
Band 25, E-UTRA/FDD (1850.0-1915.0 MHz, 20166)
Band 26 E-UTRA/FDD (814.0-849.0 MHz, 20211)
Band 27 E-UTRA/FDD (807.0-824.0 MHz, 20212)
Band 28 E-UTRA/FDD (703.0-748.0 MHz, 20213)

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

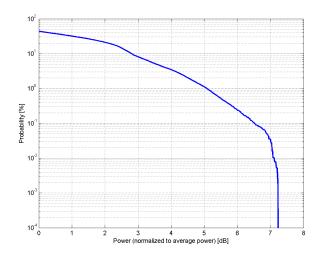
Bandwidth: 3.0 MHz
Integration Time: 10.0 ms

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

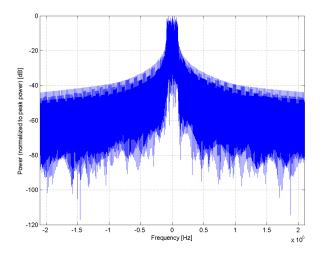
Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).

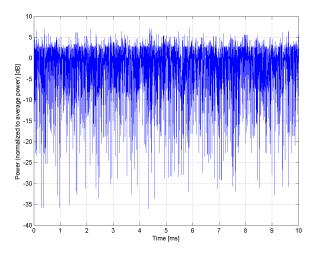
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Complementary Cumulative Distribution Function (CCDF)





Time Domain

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Name: LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)

Group: LTE-FDD UID: 10187-CAB

PAR: ¹ **5.73 dB** MIF: ² **-15.62 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: QPSK

Frequency Band: Band 2, E-UTRA/FDD (1850.0-1910.0 MHz, 20134)

Band 3, E-UTRA/FDD (1710.0-1785.0 MHz, 20135)
Band 4, E-UTRA/FDD (1710.0-1755.0 MHz, 20136)
Band 5, E-UTRA/FDD (824.0-849.0 MHz, 20137)
Band 8, E-UTRA/FDD (880.0-915.0 MHz, 20140)
Band 12, E-UTRA/FDD (699.0-716.0 MHz, 20210)
Band 23, E-UTRA/FDD (2000.0-2020.0 MHz, 20164)
Band 25, E-UTRA/FDD (1850.0-1915.0 MHz, 20166)
Band 26 E-UTRA/FDD (814.0-849.0 MHz, 20211)
Band 27 E-UTRA/FDD (807.0-824.0 MHz, 20212)

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: 72

TBS Index: 5 MCS Index: 5 Data Type: PN9

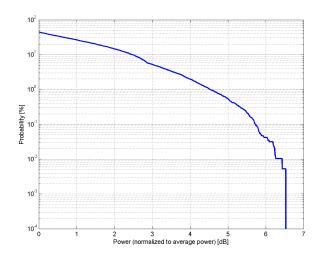
Bandwidth: 1.4 MHz Integration Time: 10.0 ms

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

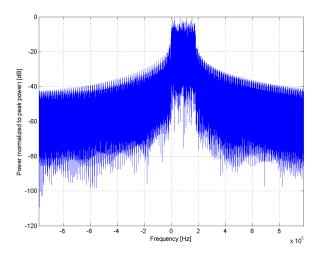
Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).

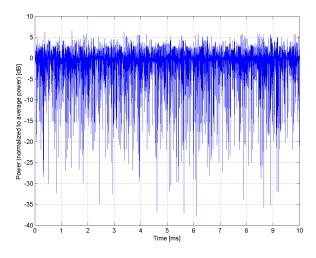
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Complementary Cumulative Distribution Function (CCDF)





Time Domain

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Name: LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)

Group: LTE-FDD UID: 10188-CAB

PAR: ¹ **6.52 dB** MIF: ² **-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 2, E-UTRA/FDD (1850.0-1910.0 MHz, 20134)

Band 3, E-UTRA/FDD (1710.0-1785.0 MHz, 20135)
Band 4, E-UTRA/FDD (1710.0-1755.0 MHz, 20136)
Band 5, E-UTRA/FDD (824.0-849.0 MHz, 20137)
Band 8, E-UTRA/FDD (880.0-915.0 MHz, 20140)
Band 12, E-UTRA/FDD (699.0-716.0 MHz, 20210)
Band 23, E-UTRA/FDD (2000.0-2020.0 MHz, 20164)
Band 25, E-UTRA/FDD (1850.0-1915.0 MHz, 20166)
Band 26 E-UTRA/FDD (814.0-849.0 MHz, 20211)

Band 27 E-UTRA/FDD (807.0-824.0 MHz, 20212)

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

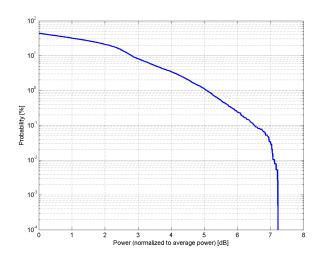
Bandwidth: 1.4 MHz Integration Time: 10.0 ms

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

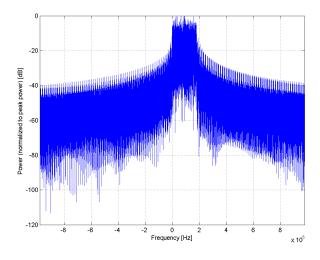
Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).

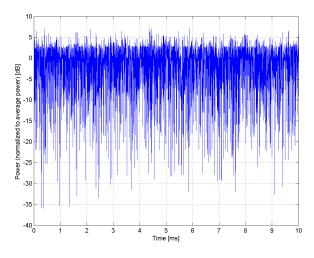
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Complementary Cumulative Distribution Function (CCDF)





Time Domain

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Name: LTE-FDD (SC-FDMA, 50 % RB, 20 MHz, QPSK)

Group: LTE-FDD UID: 10297-AAA

PAR: ¹ **5.81 dB** MIF: ² **-21.56 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: QPSK

Frequency Band: Band 1, E-UTRA/FDD (1920.0-1980.0 MHz, 20133)

Band 2, E-UTRA/FDD (1850.0-1910.0 MHz, 20134)
Band 3, E-UTRA/FDD (1710.0-1785.0 MHz, 20135)
Band 4, E-UTRA/FDD (1710.0-1755.0 MHz, 20136)
Band 7, E-UTRA/FDD (2500.0-2570.0 MHz, 20139)
Band 9, E-UTRA/FDD (1749.9-1784.9 MHz, 20141)
Band 10, E-UTRA/FDD (1710.0-1770.0 MHz, 20142)
Band 20, E-UTRA/FDD (832.0-862.0 MHz, 20159)
Band 22, E-UTRA/FDD (3410.0-3490.0 MHz, 20190)
Band 23, E-UTRA/FDD (2000.0-2020.0 MHz, 20164)
Band 25, E-UTRA/FDD (1850.0-1915.0 MHz, 20166)

Band 28 E-UTRA/FDD (703.0-748.0 MHz, 20213)

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: 50

Transport Block Size: 4392

TBS Index: 5 MCS Index: 5 Data Type: PN9

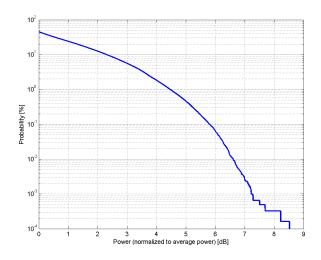
Bandwidth: 20.0 MHz Integration Time: 10.0 ms

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

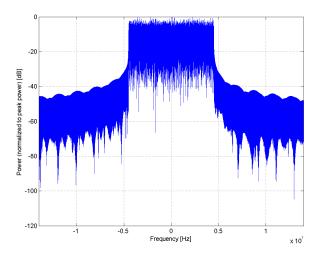
Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).

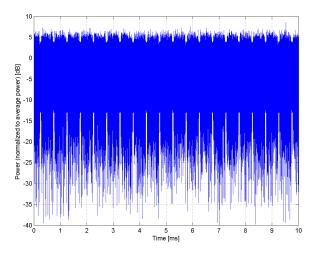
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Complementary Cumulative Distribution Function (CCDF)





Time Domain

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Name: LTE-FDD (SC-FDMA, 50 % RB, 3 MHz, QPSK)

Group: LTE-FDD UID: 10298-AAA

PAR: ¹ **5.72 dB** MIF: ² **-20.24 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: QPSK

Frequency Band: Band 2, E-UTRA/FDD (1850.0-1910.0 MHz, 20134)

Band 3, E-UTRA/FDD (1710.0-1785.0 MHz, 20135)
Band 4, E-UTRA/FDD (1710.0-1755.0 MHz, 20136)
Band 5, E-UTRA/FDD (824.0-849.0 MHz, 20137)
Band 8, E-UTRA/FDD (880.0-915.0 MHz, 20140)
Band 12, E-UTRA/FDD (699.0-716.0 MHz, 20210)
Band 23, E-UTRA/FDD (2000.0-2020.0 MHz, 20164)
Band 25, E-UTRA/FDD (1850.0-1915.0 MHz, 20166)
Band 26 E-UTRA/FDD (814.0-849.0 MHz, 20211)
Band 27 E-UTRA/FDD (807.0-824.0 MHz, 20212)

Band 28 E-UTRA/FDD (703.0-748.0 MHz, 20213)

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: 8

Transport Block Size: 680

TBS Index: 5 MCS Index: 5 Data Type: PN9

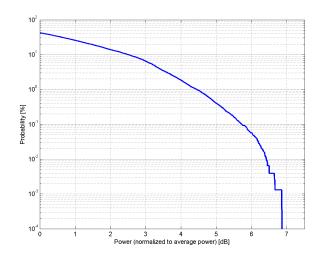
Bandwidth: 3.0 MHz
Integration Time: 10.0 ms

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

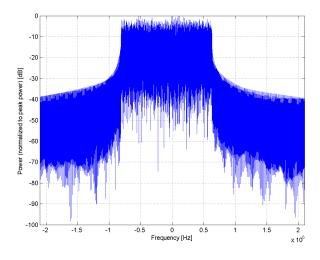
Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).

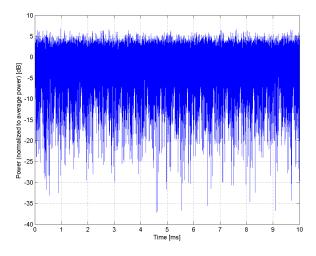
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Complementary Cumulative Distribution Function (CCDF)





Time Domain

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Name: LTE-FDD (SC-FDMA, 50 % RB, 3 MHz, 16-QAM)

Group: LTE-FDD UID: 10299-AAA

PAR: ¹ **6.39 dB** MIF: ² **-14.38 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 2, E-UTRA/FDD (1850.0-1910.0 MHz, 20134)

Band 3, E-UTRA/FDD (1710.0-1785.0 MHz, 20135)
Band 4, E-UTRA/FDD (1710.0-1755.0 MHz, 20136)
Band 5, E-UTRA/FDD (824.0-849.0 MHz, 20137)
Band 8, E-UTRA/FDD (880.0-915.0 MHz, 20140)
Band 12, E-UTRA/FDD (699.0-716.0 MHz, 20210)
Band 23, E-UTRA/FDD (2000.0-2020.0 MHz, 20164)
Band 25, E-UTRA/FDD (1850.0-1915.0 MHz, 20166)
Band 26 E-UTRA/FDD (814.0-849.0 MHz, 20211)
Band 27 E-UTRA/FDD (807.0-824.0 MHz, 20212)
Band 28 E-UTRA/FDD (703.0-748.0 MHz, 20213)

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: 8

Transport Block Size: 2280

TBS Index: 14 MCS Index: 15 Data Type: PN9

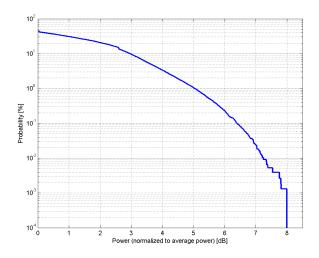
Bandwidth: 3.0 MHz
Integration Time: 10.0 ms

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

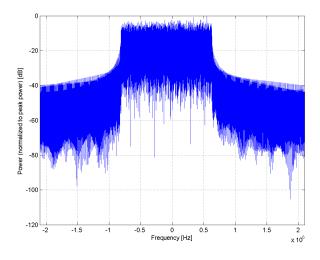
Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).

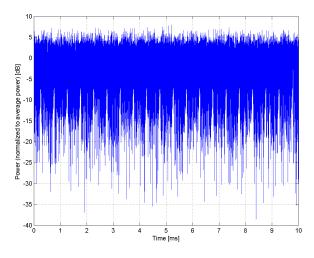
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Complementary Cumulative Distribution Function (CCDF)





Time Domain

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Name: LTE-FDD (SC-FDMA, 100 % RB, 15 MHz, QPSK)

Group: LTE-FDD UID: 10311-AAA

PAR: ¹ **6.06 dB** MIF: ² **-20.11 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: QPSK

Frequency Band: Band 1, E-UTRA/FDD (1920.0-1980.0 MHz, 20133)

Band 2, E-UTRA/FDD (1850.0-1910.0 MHz, 20134)
Band 3, E-UTRA/FDD (1710.0-1785.0 MHz, 20135)
Band 4, E-UTRA/FDD (1710.0-1755.0 MHz, 20136)
Band 7, E-UTRA/FDD (2500.0-2570.0 MHz, 20139)
Band 9, E-UTRA/FDD (1749.9-1784.9 MHz, 20141)
Band 10, E-UTRA/FDD (1710.0-1770.0 MHz, 20142)
Band 18, E-UTRA/FDD (815.0-830.0 MHz, 20157)
Band 19, E-UTRA/FDD (830.0-845.0 MHz, 20158)
Band 20, E-UTRA/FDD (832.0-862.0 MHz, 20159)

Band 21, E-UTRA/FDD (032.0-802.0 MHz, 20139) Band 21, E-UTRA/FDD (1447.9-1462.9 MHz, 20160) Band 22, E-UTRA/FDD (3410.0-3490.0 MHz, 20190) Band 23, E-UTRA/FDD (2000.0-2020.0 MHz, 20164) Band 25, E-UTRA/FDD (1850.0-1915.0 MHz, 20166) Band 26 E-UTRA/FDD (814.0-849.0 MHz, 20211)

Band 28 E-UTRA/FDD (703.0-748.0 MHz, 20213)

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: 75

Transport Block Size: 6712

TBS Index: 5 MCS Index: 5 Data Type: PN9

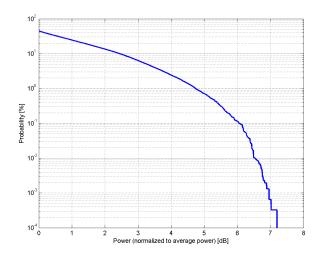
Bandwidth: 15.0 MHz Integration Time: 10.0 ms

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

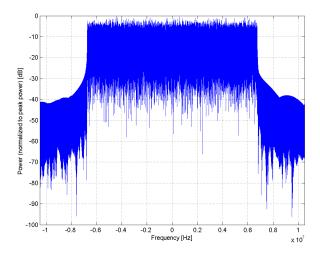
Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).

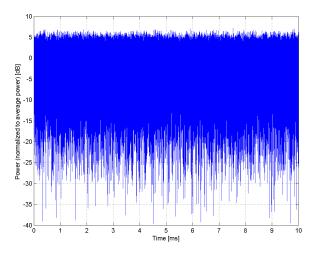
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Complementary Cumulative Distribution Function (CCDF)





Time Domain