

### Schmid & Partner **Engineering AG**

Name:

Zeughausstrasse 43, 8004 Zurich, Switzerland

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

Group: UID: LTE-TDD 10173-CAD

PAR: 1 MIF: 2 9.48 dB -1.44 dB

Standard Reference: 3GPP / ETSI TS 136.101 V8.4.0

3GPP / ETSI TS 136.213 V8.4.0 FCC OET KDB 941225 D05 SAR for LTE Devices v02 Random amplitude modulation

Category: Modulation:

16-QAM

Frequency Band:

Handom ampirtude modulation

16-QAM

Band 33, E-UTRA/TDD (1980.0 - 1920.0 MHz)

Band 35, E-UTRA/TDD (1980.0 - 1990.0 MHz)

Band 36, E-UTRA/TDD (1930.0 - 1990.0 MHz)

Band 37, E-UTRA/TDD (1930.0 - 1990.0 MHz)

Band 38, E-UTRA/TDD (2570.0 - 2620.0 MHz)

Band 38, E-UTRA/TDD (2570.0 - 2620.0 MHz)

Band 40, E-UTRA/TDD (2800.0 - 2400.0 MHz)

Band 40, E-UTRA/TDD (2496.0 - 2690.0 MHz)

Band 41, E-UTRA/TDD (2496.0 - 2690.0 MHz)

Band 43, E-UTRA/TDD (703.0 - 803.0 MHz)

Band 44, E-UTRA/TDD (703.0 - 803.0 MHz)

Band 45, E-UTRA/TDD (5150.0 - 5925.0 MHz)

Band 47, E-UTRA/TDD (5855.0 - 5925.0 MHz)

Band 48, E-UTRA/TDD (3550.0 - 3700.0 MHz)

Validation band (0.0 - 6000.0 MHz)

Validation band (0.0 - 6000.0 MHz)

Detailed Specification: Modulation Scheme: SC-FDMA

Uplink-downlink configuration: 1
Special Subtrame configuration: 4
Number of Frames: 1
Settings for UL Subframe 2,3,7,8:
Number of PUSCHs: 1

Modulation Scheme: 16QAM Allocated RB: 1 Start Number of RB: 50 Data Type: PN9fix 20.0 MHz

Bandwidth: Integration Time: 6.0 ms

**UID Specification Sheet** 

UID 10173-CAD page 1/2

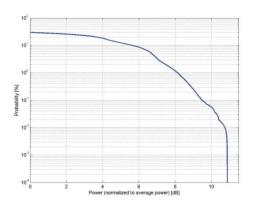
27.07.2017

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

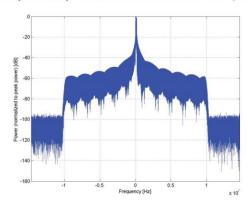
Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).



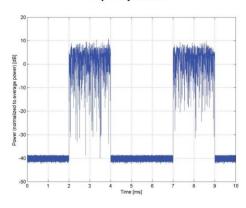
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### Complementary Cumulative Distribution Function (CCDF)



### Frequency Domain



Time Domain

**UID Specification Sheet** 

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27.07.2017



# No. 24B01N001531-001-HAC RF

#### Calibration Laboratory of

Schmid & Partner

Engineering AG Zeughausstrasse 43, 8004 Zurich, Switzerland

Name: IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps)

Group: WLAN UID: 10061-CAB

PAR: 1 **3.60 dB** MIF: 2 **-2.02 dB** 

Standard Reference: IEEE 802.11b-1999 , Part 11, FCC SAR meas for 802 11 a b g

v01r02 (248227 D01)

Category: Random amplitude modulation

Modulation: DQPSK

Frequency Band: WLAN 2.4GHz (2412.0-2484.0 MHz, 20230)

Detailed Specification: Data Rate: 11 Mbps

Spreading, Coding: CCK

PPDU format: Long Preamble & Heading

PSDU Length: 1024 PSDU Data: PN9 20.0 MHz

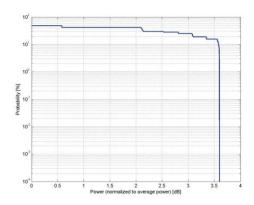
Bandwidth: 20.0 MHz Integration Time: 1.5 ms

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

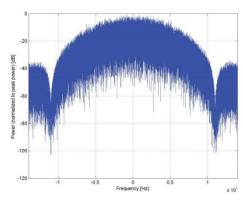
Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).



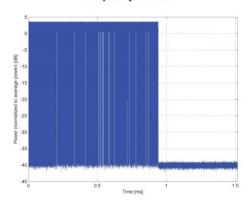
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### Complementary Cumulative Distribution Function (CCDF)



### Frequency Domain



Time Domain

UID Specification Sheet

UID 10061-CAB page 2/2

26.11.2014



## No. 24B01N001531-001-HAC RF

#### Calibration Laboratory of

Schmid & Partner

Engineering AG Zeughausstrasse 43, 8004 Zurich, Switzerland

IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps) Name:

Group: WLAN UID: 10077-CAB

PAR: 1 11.00 dB MIF: 2 0.12 dB

Standard Reference: IEEE 802.11g-2003, Part 11

FCC SAR meas for 802 11 a b g v01r02 (248227 D01)

Random amplitude modulation Category:

Modulation: 64-QAM

Frequency Band: WLAN 2.4GHz (2412.0-2484.0 MHz, 20230)

Detailed Specification: Data Rate: 54 Mbps

Coding Rate: 3/4

Coded bits per subcarrier: 6 Coded bits per OFDM symbol: 288 Data bits per OFDM symbol: 216 PSDU Length: 1000 Bytes

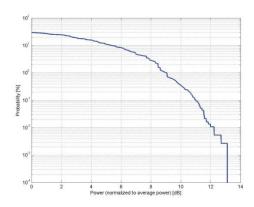
PSDU Data: PN9 20.0 MHz Bandwidth: Integration Time: 0.9 ms

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

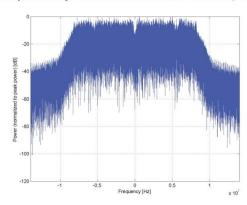
the same communication system (same UID and version).



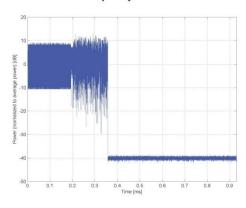
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### Complementary Cumulative Distribution Function (CCDF)



### Frequency Domain



Time Domain

UID Specification Sheet

UID 10077-CAB page 2/2

26.11.2014



Schmid & Partner

Engineering AG Zeughausstrasse 43, 8004 Zurich, Switzerland

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

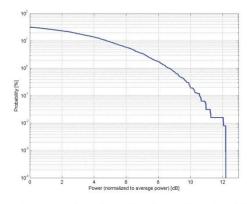
Data bits per OFDM symbol: 216 PSDU Length: 1000 Bytes PSDU Data: PN9 Bandwidth: 20.0 MHz Integration Time: 0.3 ms

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

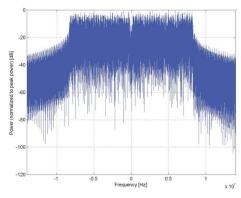
Modulation Interference Factor (MIF) value valid only in conjunction with advanced probe response linearization calibration for the same communication system (same UID and version).



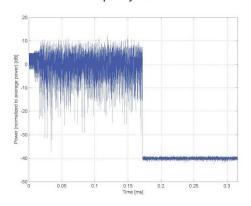
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