





# HAC RF TEST REPORT

No. 25T04Z100239-027

For

**TCL Communication Ltd** 

**GSM/UMTS/LTE/NR Mobile phone** 

**Model Name: T513V** 

with

Hardware Version: 04

Software Version: 9ABJ

FCC ID: 2ACCJH187

**HAC-2019 Compliance: PASS** 

Issued Date: 2025-04-10

#### Note:

The test results in this test report relate only to the devices specified in this report. This report shall not be reproduced except in full without the written approval of CTTL.

#### **Test Laboratory:**

#### CTTL, Telecommunication Technology Labs, CAICT

No. 52, Huayuan North Road, Haidian District, Beijing, P. R. China 100191.

Tel:+86(0)10-62304633-2512, Fax:+86(0)10-62304633-2504

Email: cttl terminals@caict.ac.cn, website: www.caict.ac.cn





## **REPORT HISTORY**

Report Number	Revision	Issue Date	Description
25T04Z100239-027	Rev.0	2025-04-10	Initial creation of test report





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## 1 Test Laboratory

### 1.1 Introduction & Accreditation

**Telecommunication Technology Labs, CAICT** is an ISO/IEC 17025:2017 accredited test laboratory under American Association for Laboratory Accreditation (A2LA) with lab code 7049.01, and is also an FCC accredited test laboratory (CN1349), and ISED accredited test laboratory (CAB identifier:CN0066). The detail accreditation scope can be found on A2LA website.

### 1.2 Testing Location

CompanyName:	CTTL
Address:	No. 52, Huayuan North Road, Haidian District, Beijing, P. R. China
	100191.





### 1.3 Testing Environment

Temperature:	18°C~25°C,
Relative humidity:	30%~ 70%
Ground system resistance:	< 0.5 Ω

Ambient noise is checked and found very low and in compliance with requirement of standards. Reflection of surrounding objects is minimized and in compliance with requirement of standards

### 1.4 Project Data

Testing Start Date:	March 27, 2025
Testing End Date:	March 27, 2025

## 1.5 Signature

**Wang Tian** 

(Prepared this test report)

Lin Jun

(Reviewed this test report)

Qi Dianyuan

**Deputy Director of the laboratory** 

(Approved this test report)





## **2 Client Information**

## 2.1 Applicant Information

Company Name:	TCL Communication Ltd.	
Address/Post:	5/F, Building 22E, 22 Science Park East Avenue, Hong Kong Science	
	Park, Shatin, NT, Hong Kong	
Contact Person:	Ting Wang	
Contact Email:	ting.wang.hz@tcl.com	
Telephone:	+86 752 2639091	
Fax	\ \	

## 2.2 Manufacturer Information

Company Name:	TCL Communication Ltd.	
Address/Post:	5/F, Building 22E, 22 Science Park East Avenue, Hong Kong Science	
	Park, Shatin, NT, Hong Kong	
Contact Person:	Ting Wang	
Contact Email:	ting.wang.hz@tcl.com	
Telephone:	+86 752 2639091	
Fax	\	





## 3 Equipment Under Test (EUT) and Ancillary Equipment (AE)

This EUT is a variant product and the report of original sample is No. 25T04Z100239-014. We share all results of original sample.

### 3.1 About EUT

Description:	GSM/UMTS/LTE/NR Mobile phone
Model name:	T513V
	GSM 850/900/1800/1900
	WCDMA B1/2/5/8
Operating mode(s):	LTE Band:1/2/3/4/5/7/12/13/20/28/48/66
	5G NR N2/5/48/66/77/78
	BT, Wi-Fi(2.4G), Wi-Fi(5G)

## 3.2 Internal Identification of AE used during the test

AE ID*	Description	Model	SN	Manufacturer
AE1	Battery	TLp049F7	\	VEKEN
AE2	Battery	TLp049N9	\	FENGHUA

<sup>\*</sup>AE ID: is used to identify the test sample in the lab internally.





### 3.3 Air Interfaces / Bands Indicating Operating Modes

Air-interface	Band(MHz)	Туре	C63.19/test ed	Simultaneous Transmissions Not Tested <sup>(1)</sup>	Name of Voice Service
GSM	850	VO	Yes		CMPS Voice
GSIVI	1900	VO	res	BT, WLAN	CMRS Voice
GPRS/EDGE	850	DT	Yes		MEET
GFR3/LDGL	1900	וט	165		
VAVODAAA	850	VO	Yes		CMRS Voice
WCDMA	1900	VO	VO Yes	BT, WLAN	CIVING VOICE
(UMTS)	HSPA	DT	Yes		MEET
LTE TDD	Band48	V/D	Yes	BT, WLAN	VoLTE, MEET
LTE FDD	Band2/4/5/7/12/13/66	V/D	Yes	BT, WLAN	VoLTE, MEET
NR	n2/n5/n48/n66/n77/n7 8	V/D	Yes	BT, WLAN	VoNR, MEET
BT	2450	DT	NA	WWAN	NA
WLAN	2450	V/D	Yes	WWAN	VoWiFi, MEET
WLAN	5G	V/D	Yes	WWAN	VoWiFi, MEET

NA: Not Applicable VO: Voice Only V/D: CMRS and IP Voice Service over Digital Transport DT: Digital Transport

Note1: According to KDB285076 D01, clause 2 d), for the Interference Level, the single transmission scenario of each frequency band is higher than or equal to the simultaneous transmission scenario, so the frequency band that has evaluated the single will not evaluate the simultaneous.





## **4 Maximum Output Power**

Bands	Conducted Power (dBm)
GSM 850	32.5
GSM 1900	30
WCDMA 850	23.5
WCDMA 1900	24
LTE Band2	24.5
LTE Band4	24.5
LTE Band5	25
LTE Band7	23.5
LTE Band12	24
LTE Band13	25
LTE Band48	24.5
LTE Band66	24.5
NR n2	23.5
NR n5	24.5
NR n66	24
NR n48	24
NR n77	27
NR n78	24
WLAN 2.4GHz	18.5
WLAN 5GHz	18





## **5 Reference Documents**

## 5.1 Reference Documents for testing

The following document listed in this section is referred for testing.

Reference	Title	Version
ANSI C63.19	American National Standard for Methods of Measurement of	2019
	Compatibility Between Wireless Communication Devices and	Edition
	Hearing Aids	
FCC 47 CFR §20.19	Hearing Aid Compatible Mobile Headsets	2024
		Edition
KDB285076	Equipment Authorization Guidance for Hearing Aid Compatibility	2023
D01 v06r04.		Edition





## **6 Operational Conditions During Test**

#### 6.1 HAC MEASUREMENT SET-UP

These measurements are performed using the DASY6/8 automated dosimetric assessment system. It is made by Schmid & Partner Engineering AG (SPEAG) in Zurich, Switzerland. It consists of high precision robotics system (Stäubli), robot controller, Intel Core2 computer, near-field probe, probe alignment sensor. The robot is a six-axis industrial robot performing precise movements. A cell controller system contains the power supply, robot controller, teach pendant (Joystick),and remote control, is used to drive the robot motors. The PC consists of the HP Intel Core21.86 GHz computer with Windows 10 system and HAC Measurement Software DASY6/8, A/D interface card, monitor, mouse, and keyboard. The Stäubli Robot is connected to the cell controller to allow software manipulation of the robot. A data acquisition electronic (DAE)circuit performs the signal amplification, signal multiplexing, AD-conversion, offset measurements, mechanical surface detection, collision detection, etc. is connected to the Electro-optical coupler (EOC). The EOC performs the conversion from the optical into digital electric signal of the DAE and transfers data to the PC plug-in card.

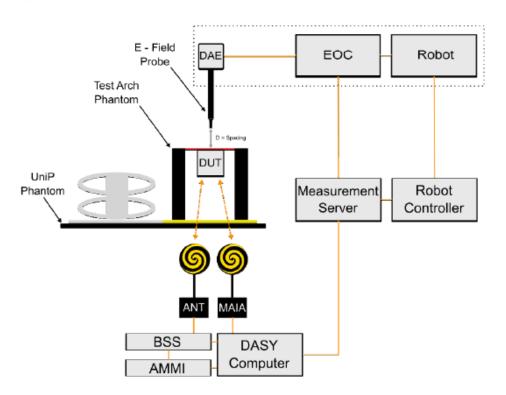


Fig. 1 HAC Test Measurement Set-up

The DAE4 consists of a highly sensitive electrometer-grade preamplifier with auto-zeroing, a channel and gain-switching multiplexer, a fast 16 bit AD-converter and a command decoder and control logic unit. Transmission to the PC-card is accomplished through an optical downlink for data and status information and an optical uplink for commands and clock lines. The mechanical probe mounting device includes two different sensor systems for frontal and sidewise probe contacts. They are also used for mechanical surface detection and probe collision detection. The robot uses its own controller with a built in VME-bus computer.





### 6.2 Probe Specification

#### E-Field Probe Description

Construction One dipole parallel, two dipoles normal to probe axis

Built-in shielding against static charges

Calibration In air from 30 MHz to 6.0 GHz (absolute accuracy ±6.0%,

k=2)

Frequency 30 MHz to 6 GHz

Linearity: ± 0.2 dB (100 MHz to 3 GHz)

Directivity  $\pm 0.2$  dB in air (rotation around probe axis)

± 0.4 dB in air (rotation normal to probe axis)

Dynamic Range 2 V/m to 1000 V/m; Linearity: ± 0.2 dB

Dimensions Overall length: 337 mm (Tip: 20 mm)

Tip diameter: 4 mm (Body: 12 mm)

Distance from probe tip to dipole centers: 1.5 mm

Application General near-field measurements up to 6 GHz

Field component measurements

Fast automatic scanning in phantoms



[EF3DV3]





#### 6.3 Test Arch Phantom & Phone Positioner

The Test Arch phantom should be positioned horizontally on a stable surface. Reference markings on the Phantom allow the complete setup of all predefined phantom positions and measurement grids by manually teaching three points in the robot. It enables easy and well defined positioning of the phone and validation dipoles as well as simple teaching of the robot (Dimensions:  $370 \times 370 \times 370 \text{ mm}$ ).



Fig. 2 HAC Phantom & Device Holder

#### 6.4 Robotic System Specifications

#### **Specifications**

Positioner: Stäubli Unimation Corp. Robot Model: RX160L

Repeatability: ±0.02 mm

No. of Axis: 6

Data Acquisition Electronic (DAE) System

**Cell Controller** 

Processor: Intel Core2 Clock Speed: 1.86GHz

Operating System: Windows 10

**Data Converter** 

Features: Signal Amplifier, multiplexer, A/D converter, and control logic

Software: DASY6/8 cD6 HAC

Connecting Lines: Optical downlink for data and status info.

Optical uplink for commands and clock



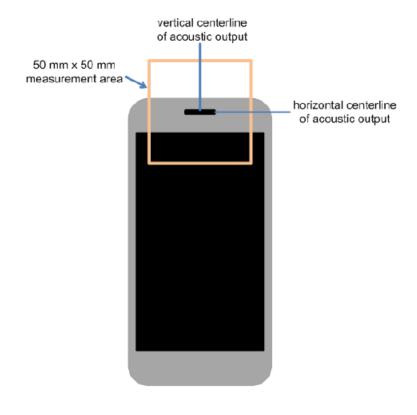


## 7 EUT Arrangement

#### 7.1 WD RF Emission Measurements Reference and Plane

Figure 3 illustrates the references and reference plane that shall be used in the WD emissions measurement.

- The measurement area is 50.0 mm by 50.0 mm.
- The measurement area is centered on the audio frequency output transducer of the WD (speaker or T-Coil signal).
- The measurement area is in a reference plane, which is defined as the planar area tangent to the highest point in the area of the phone that normally rests against the user's ear. It is parallel to the centerline of the receiver area of the phone and is defined by the points of the receiver-end of the WD handset, which, in normal handset use, rest against the ear.
- •The measurement plane is parallel to, and 15.0 mm in front of, the reference plane.



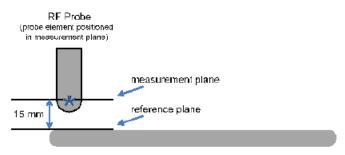


Fig. 3 WD measurement and reference planes for RF emission measurements





## 8 System Validation

#### 8.1 Validation Procedure

Place a dipole antenna meeting the requirements given in ANSI C63.19 in the position normally occupied by the WD. The dipole antenna serves as a known source for an electrical output. Position the E-field probes so that:

- •The probes and their cables are parallel to the coaxial feed of the dipole antenna
- •The probe cables and the coaxial feed of the dipole antenna approach the measurement area from opposite directions
- The center point of the probe element(s) are 15 mm from the closest surface of the dipole elements.

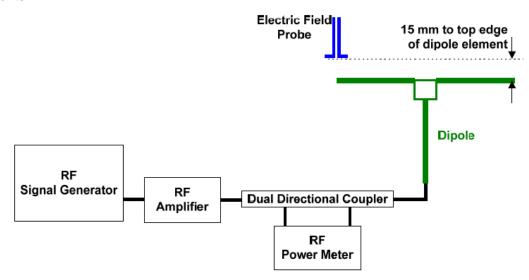


Fig. 4 Dipole Validation Setup

#### 8.2 Validation Result

	E-Field Scan							
Mode	Frequency (MHz)	Input Power (mW)	Measured <sup>1</sup> Value(V/m)	Target² Value(V/m)	Deviation <sup>3</sup> (%)	Limit⁴ (%)		
CW	835	100	112.00	112.60	-0.53	±18		
CW	1880	100	85.80	88.20	-2.72	±18		
CW	3500	100	82.80	85.70	-3.38	±18		
CW	3900	100	79.50	81.80	-2.81	±18		

#### Notes:

- 1. Please refer to the attachment for detailed measurement data and plot.
- 2. Target value is provided by SPEAG in the calibration certificate of specific dipoles.
- 3. Deviation (%) = 100 \* (Measured value minus Target value) divided by Target value.
- 4. ANSI C63.19 requires values within  $\pm$  18% are acceptable, of which 12% is deviation and 13% is measurement uncertainty. Values independently validated for the dipole actually used in the measurements should be used, when available.





### 9 Evaluation of MIF

#### 9.1 Introduction

The HAC Standard ANSI C63.19-2019 defines the MIF as a scaling factor to evaluate the Radio Frequency Audio Interference Level (RFail). It is applicable to any modulation scheme. The MIF (in dB) is added to the measured averaged E-field (in dBV /m) to obtain the RFail (also in dBV/m) which defines the audible amplitude of the measured RF signal strength. The RFail is then compared to the associated qualification level.

The MIF is defined in section D.7 of the ANSI C63.19-2019 as the interference potential of a signal to its steady state RMS signal level or average power level. This factor is a function only of the audio frequency amplitude modulation characteristics of the signal and is the same for field strength or conducted power measurements. The modulated signal is processed as described below:

- The full signal bandwidth is presented to a wideband square law detector which demodulates the signal.
- The baseband signal (after demodulation) is presented to a spectral weighting filter which is normalized to 1 kHz. The filter frequency response is shown in Section D.4 of the ANSI C63.19-2019 standard.
- The spectral weighted signal is presented to a temporal weighting filter consisting of rapid Root Mean Square (RMS) level detection followed by peak detection with a 550 ms decay time.

$$\frac{10 \cdot log 10_{10} (filtered\ signal)}{1.154 \cdot RMS\ of\ demodulated\ signal}$$
 • The MIF is calculated as

Measurements of the MIF value are conducted using the MAIA designed by SPEAG. The resulting deviations from the simulated values are within the requirements of the HAC standard.

MAIA is a hardware interface for evaluating the modulation and audio interference characteristics of RF signals in the frequency range 698–6000 MHz. It uses USB-powered active electronics to identify the modulation of the DUT. It can be operated with the over-the-air interface using the built-in ultra-broadband planar log spiral antenna (698–6000 MHz) or in the conducted mode using the coaxial SMA 50W connector (300–6000 MHz).





Fig. 5 MAIA View

### 9.2 DUT MIF results

Based on the KDB285076D01v06r02, the handset can also use the MIF values predetermined by the test equipment manufacturer. MIF values applied in this test report were provided by the HAC equipment provider of SPEAG, and the worst values for all air interface are listed below.

Typical MIF levels in ANSI C63.19-2019					
Transmission protocol	Modulation interference factor				
GSM-FDD (TDMA, GMSK)	+3.63 dB				
EDGE-FDD (TDMA, 8PSK, TN 0-1)	+1.23dB				
EDGE-FDD (TDMA, 8PSK, TN 0-1-2)	-0.52dB				
EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)	-1.82dB				
UMTS-FDD(WCDMA, AMR)	-25.43dB				
UMTS-FDD (HSPA+)	-20.39dB				
LTE-FDD (SC-FDMA, 1RB, 20MHz, QPSK)	-15.63 dB				
LTE-FDD (SC-FDMA, 1RB, 20MHz, 16QAM)	-9.76 dB				
LTE-FDD (SC-FDMA, 1RB, 20MHz, 64QAM)	-9.93 dB				
LTE-TDD (SC-FDMA, 1RB, 20MHz, QPSK)	-1.62 dB				
LTE-TDD (SC-FDMA, 1RB, 20MHz, 16QAM)	-1.44 dB				
LTE-TDD (SC-FDMA, 1RB, 20MHz, 64QAM)	-1.54 dB				
LTE-TDD(SC-FDMA,1RB,20MHz,QPSK,UL Subframe=2,3,4,7,8,9)	-3.41 dB				
LTE-TDD(SC-FDMA,1RB,20MHz,16QAM,UL Subframe=2,3,4,7,8,9)	-3.17 dB				
LTE-TDD(SC-FDMA,1RB,20MHz,64QAM,UL Subframe=2,3,4,7,8,9)	-3.31 dB				





IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps)	-5.90 dB
IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps)	-5.17 dB
IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps)	-3.37 dB
IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps)	-2.02 dB
IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps)	-0.36dB
IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK)	-15.80 dB
IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps)	-5.82 dB
IEEE 802.11ac WiFi (20MHz, MCS0, 99pc duty cycle)	-12.23dB
5G NR (DFT-s-OFDM, 1RB, 100 MHz, QPSK, 30 kHz)	-1.64dB
5G NR (CP-OFDM, 1RB, 20 MHz, QPSK, 15 kHz)	-1.65dB
5G NR (DFT-s-OFDM, 1RB, 20 MHz, QPSK, 15 kHz)	−15.06dB
5G NR (CP-OFDM, 1RB, 5 MHz, QPSK, 15 kHz)	-12.18dB
5G NR (CP-OFDM, 1RB, 10 MHz, QPSK, 15 kHz)	−12.26dB
5G NR (CP-OFDM, 1RB, 15 MHz, QPSK, 15 kHz)	-12.08dB
5G NR (CP-OFDM, 1RB, 20 MHz, QPSK, 15 kHz)	−12.20dB
5G NR (CP-OFDM, 1RB, 5 MHz, QPSK, 30 kHz)	-14.39dB
5G NR (CP-OFDM, 1RB, 10 MHz, QPSK, 30 kHz)	-14.47dB
5G NR (CP-OFDM, 1RB, 15 MHz, QPSK, 30 kHz)	-14.33dB
5G NR (CP-OFDM, 1RB, 20 MHz, QPSK, 30 kHz)	−14.46dB
5G NR (CP-OFDM, 1RB, 25 MHz, QPSK, 30 kHz)	−14.35dB
5G NR (CP-OFDM, 1RB, 30 MHz, QPSK, 30 kHz)	-14.32dB
5G NR (CP-OFDM, 1RB, 40 MHz, QPSK, 30 kHz)	-14.32dB
5G NR (CP-OFDM, 1RB, 50 MHz, QPSK, 30 kHz)	−14.55dB
5G NR (CP-OFDM, 1RB, 60 MHz, QPSK, 30 kHz)	-14.45dB
5G NR (CP-OFDM, 1RB, 80 MHz, QPSK, 30 kHz)	-14.47dB
5G NR (CP-OFDM, 1RB, 90 MHz, QPSK, 30 kHz)	-14.43dB
5G NR (CP-OFDM, 1RB, 100 MHz, QPSK, 30 kHz)	-14.38dB
5G NR (DFT-s-OFDM, 1RB, 5 MHz, QPSK, 15 kHz)	-15.06dB
5G NR (DFT-s-OFDM, 1RB, 10 MHz, QPSK, 15 kHz)	-15.06dB
5G NR (DFT-s-OFDM, 1RB, 15 MHz, QPSK, 15 kHz)	-15.06dB
5G NR (DFT-s-OFDM, 1RB, 20 MHz, QPSK, 15 kHz)	-15.06dB





### 10 Evaluation of RF Audio Interference Power Level

According to ANSIC 63.19-2019, the WD's conducted power must be at or below either the stated RFAIPL (Table 13-1) or the stated peak power level (Table 13-2), or the average near-field emissions over the measurement area must be at or below the stated RFAIL (Table 13-3), or the stated peak field strength (Table 13-4). The WD may demonstrate compliance by meeting any of these four requirements, but it must do so in each of its operating bands at its established worst-case normal speech-mode operating condition. This chapter will evaluate the RF audio interference power level of WD.

Bands	Average Power <sub>max</sub> (dBm)	MIFworst (dB)	Power + MIF	C63.19 Lowest RF <sub>AIPL</sub> (dBm)	Compliance
GSM 850	32.5	3.63	36.13	29	To be tested
GSM 1900	30	3.63	33.63	26	To be tested
WCDMA 850	23.5	-20.39	3.11	29	PASS
WCDMA 1900	24	-20.39	3.61	26	PASS
LTE Band2	24.5	-9.76	14.74	26	PASS
LTE Band4	24.5	-9.76	14.74	26	PASS
LTE Band5	25	-9.76	15.24	29	PASS
LTE Band7	23.5	-9.76	13.74	25	PASS
LTE Band12	24	-9.76	14.24	29	PASS
LTE Band13	25	-9.76	15.24	29	PASS
LTE Band48	24.5	-1.62	22.88	25	PASS
LTE Band66	24.5	-9.76	14.74	26	PASS
NR n2	23.5	-1.64	21.86	26	PASS
NR n5	24.5	-1.64	22.86	29	PASS
NR n66	24	-1.64	22.36	26	PASS
NR n48	24	-1.64	22.36	25	PASS
NR n77	27	-1.64	25.36	25	To be tested
NR n78	24	-1.64	22.36	25	PASS
WLAN 2.4GHz	18.5	-0.36	18.14	25	PASS
WLAN 5GHz	18	-5.82	12.18	25	PASS

According to the above table, the RFAIPL for WCDMA, LTE FDD, LTE TDD, WIFI and NR FDD are less than the stated RFAIPL (Table 13.1). Near field emission testing is required for the GSM, NR TDD bands.





#### 11 Near-field Emission Test Procedures

#### The evaluation was performed with the following procedure:

- 1) Confirm proper operation of the field probe, probe measurement system and other instrumentation and the positioning system.
- 2) Position the WD in its intended test position. The gauge block can simplify this positioning.
- 3) Set the WD to transmit a fixed and repeatable combination of signal power and modulation characteristic that is representative of the worst case (highest interference potential) encountered in normal use. Transiently occurring start-up, changeover, or termination conditions, or other operations likely to occur less than 1% of the time during normal operation, may be excluded from consideration.
- 4) The measurement area shall be centered on the acoustic output or the T-Coil mode measurement reference point, as appropriate. Locate the field probe at the initial test position in the 50 mm by 50 mm measurement area, which is contained in the measurement plane. If the field alignment method is used, align the probe for maximum field reception
- 5) Record the reading at the output of the measurement system.
- 6) Scan the entire 50 mm by 50 mm measurement area in equally spaced step sizes and record the reading at each measurement point.
- 7) Calculate the average of the measurements taken in Step 6)
- 8) The RF audio interference level in dB(V/m) is obtained by adding the Modulation Interference Factor (in decibels) to the average steady state rms field strength reading over the measurement area, in dB(V/m)
- 9) Compare this RF audio interference level to the limits in ANSI C63.19-2019 clause 4.7 and record the result.





## 12 Near-field Emission Test Results

Bands	Frequency (MHz)	Channel	RFail (dBV/m)	Compliance
	848.8	251	31.67	PASS
GSM 850	836.6	190	32.76	PASS
	824.2	128	33.88	PASS(see Fig B.1)
	1909.8	810	33.04	PASS
GSM 1900	1880	661	33.75	PASS
	1850.2	512	34.86	PASS(see Fig B.2)
	3460.020	630668	29.22	PASS
	3500.010	633334	28.5	PASS
ND NZZ	3540.000	636000	27.84	PASS
NR N77	3750.000	650000	27.37	PASS
	3822.000	654800	28.48	PASS
	3930.000	662000	30.16	PASS(see Fig B.3)





### 13 ANSIC 63.19-2019 Limits

### 13-1 Wireless device RF audio interference power level

Frequency range	RFAIPL
(MHz)	(dBm)
<960	29
960–2000	26
>2000	25

### 13-2 Wireless device RF peak power level

Frequency range	RFPeak Power
(MHz)	(dBm)
<960	35
960–2000	32
>2000	31

### 13-3 Wireless device RF audio interference level

Frequency range	RFAIL
(MHz)	[dB(V/m)]
<960	39
960–2000	36
>2000	35

### 13-4 Wireless device RF peak near-field level

Frequency range (MHz)	RF <sub>Peak</sub> [dB(V/m)]
<960	45
960–2000	42
>2000	41





## **14 Measurement Uncertainty**

Fuer Description	Uncert.	Prob.	Div.	(Ci)	Std. Unc.
Error Description	value	Dist.		Eav	E
Measurement System					
Probe Calibration	<i>±</i> 5.1 %	N	1	1	<i>±</i> 5.1 %
Axial Isotropy	±4.7 %	R	√3	1	<i>±</i> 2.7 %
Sensor Displacement	±7.2 %	R	√3	0.5	<i>±</i> 2.1 %
Boundary Effects	<i>±</i> 2.4 %	R	√3	1	<i>±</i> 1.4 %
Phantom Boundary Effect	±7.2 %	R	√3	1	<i>±</i> 4.2 %
Probe Linearity	±4.7 %	R	√3	1	<i>±</i> 2.7 %
Scaling to Peak Power with MIF	<i>±</i> 10.0 %	R	√3	1	<i>±</i> 5.8 %
System Detection Limit	<i>±</i> 1.0 %	R	√3	1	±0.6 %
Readout Electronics	±0.3 %	N	1	1	±0.3 %
Response Time	±0.8 %	R	√3	0	±0 %
Integration Time	<i>±</i> 2.6 %	R	√3	0	±0 %
RF Ambient Conditions	<i>±</i> 3.0 %	R	√3	1	±1.7 %
RF Reflections	<i>±</i> 12.0 %	R	√3	1	<i>±</i> 6.9 %
Probe Positioner	<i>±</i> 1.2 %	R	√3	1	±0.7 %
Probe Positioning	<i>±</i> 3.0 %	R	√3	1	±1.7 %
Extrapolation and Interpolation	<i>±</i> 1.0 %	R	√3	1	±0.6 %
Test Sample Related					
Device Positioning Vertical	<i>±</i> 4.7 %	R	√3	1	<i>±</i> 2.7 %
Device Positioning Lateral	<i>±</i> 1.0 %	R	√3	1	<i>±</i> 0.6 %
Device Holder and Phantom	<i>±</i> 2.4 %	R	√3	1	<i>±</i> 1.4 %
Power Drift	<i>±</i> 5.0 %	R	√3	1	<i>±</i> 2.9 %
Phantom and Setup Related					
Phantom Thickness	<i>±</i> 2.4 %	R	√3	1	±1.4 %
Combined Std. Uncertainty					±13.2 %
Expanded Std. Uncertainty on Por	wer				±26.4 %
Expanded Std. Uncertainty on Fie	ld				<i>±</i> 13.2 %





### 15 Main Test Instruments

**Table 1: List of Main Instruments** 

No.	Name	Туре	Serial Number	Calibration Date	Valid Period
04	Signal	E4420C	MV40074420	December 10, 2024	One Veer
01	Generator E4438C MY49071430		December 19, 2024	One Year	
02	Power meter	NRP2	106276	May 17, 2024	One year
03	Power sensor	NRP6A	101369	May 17, 2024	One year
04	Amplifier	60S1G4	0331848	No Calibration Requested	
05	E-Field Probe	EF3DV3	4060	May 23, 2024	One year
06	DAE	SPEAG DAE4	1556	January 07, 2025	One year
07	HAC Dipole	CD835V3	1023	August 16, 2024	One year
80	HAC Dipole	CD1880V3	1018	August 16, 2024	One year
09	HAC Dipole	CD3500V3	1008	August 16, 2024	One year
10	BTS	CMW500	166370	July 4, 2024	One year
11	MAIA	SE UMS 171 DB	1554	No Calibration Requested	

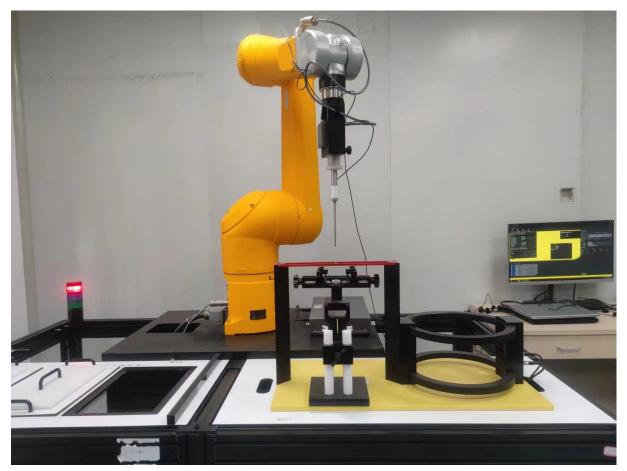
### 16 Conclusion

The HAC measurement indicates that the EUT complies with the HAC limits of the ANSI C63.19-2019. It is comprehensively determined as **PASS** 

\*\*\*END OF REPORT BODY\*\*\*



## ANNEX A TEST LAYOUT



Picture A1:HAC RF System Layout





## ANNEX B TEST PLOTS

## **Device Under Test**

Manufacturer	Model	Dimensions[mm]	Speaker Position [mm]
		146.2 x 71.8 x 7.5	144.3

## **Hardware Setup**

Probe Name	Probe Calibration Date	DAE Name	DAE Calibration Date
EF3DV3 - SN4060	May 23, 2024	DAE4 Sn1556	January 07, 2025

## **Communication Systems**

Band Name	Communication Systems Name	Channel	Frequency [MHz]
GSM 850	GSM-FDD (TDMA, GMSK)	128	824.2

## **Grid Settings**

Extent X [mm]	Extent Y [mm]	Step X [mm]	Step Y [mm]	Distance [mm]
50.0	50.0	10.0	10.0	15.0

Emax [dB(V/m)]	Eavg50x50 max [dB(V/m)]	MIF [dB]	RFail [dB(V/m)]
35.2	30.25	3.63	33.88

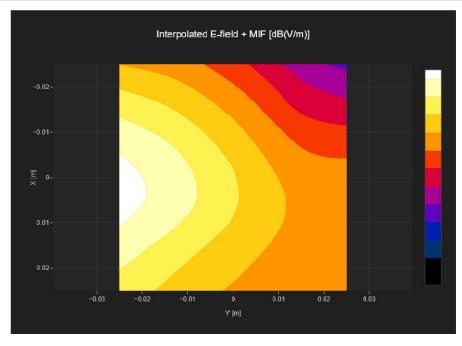


Fig B.1 GSM 850





## **Device Under Test**

Manufacturer	Model	Dimensions[mm]	Speaker Position [mm]
1	1	146.2 x 71.8 x 7.5	144.3

## **Hardware Setup**

Probe Name	Probe Calibration Date	DAE Name	DAE Calibration Date
EF3DV3 - SN4060	May 23, 2024	DAE4 Sn1556	January 07, 2025

## **Communication Systems**

Band Name	Communication Systems Name	Channel	Frequency [MHz]
PCS 1900	GSM-FDD (TDMA, GMSK)	512	1850.2

## **Grid Settings**

Extent X [mm]	Extent Y [mm]	Step X [mm]	Step Y [mm]	Distance [mm]
50.0	50.0	10.0	10.0	15.0

Emax [dB(V/m)]	Eavg50x50 max [dB(V/m)]	MIF [dB]	RFail [dB(V/m)]
34.88	31.23	3.63	34.86

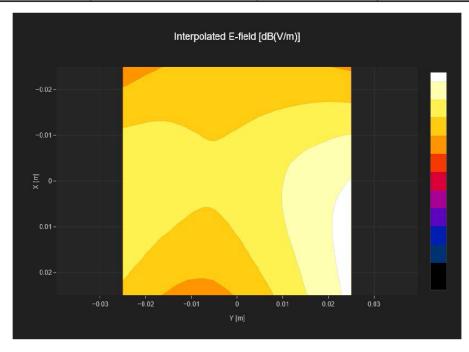


Fig B.2 GSM 1900





## **Device Under Test**

Manufacturer	Model	Dimensions[mm]	Speaker Position [mm]
1	1	146.2 x 71.8 x 7.5	144.3

## **Hardware Setup**

Probe Name	Probe Calibration Date	DAE Name	DAE Calibration Date
EF3DV3 - SN4060	May 23, 2024	DAE4 Sn1556	January 07, 2025

## **Communication Systems**

Band Name	Communication Systems Name	Channel	Frequency [MHz]
Band n77	5G NR (DFT-s-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz)	662000	3930.0

## **Grid Settings**

Extent X [mm]	Extent Y [mm]	Step X [mm]	Step Y [mm]	Distance [mm]
50.0	50.0	10.0	10.0	15.0

Emax [dB(V/m)]	Eavg50x50 max [dB(V/m)]	MIF [dB]	RFail [dB(V/m)]
34.36	31.8	-1.64	30.16

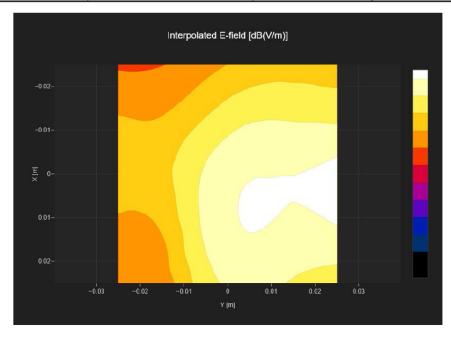


Fig B.3 NR N77





### ANNEX C SYSTEM VALIDATION RESULT

### **E SCAN of Dipole 835 MHz**

### **Device Under Test**

Manufacturer	Model	Dimensions [mm]	Speaker Position [mm]
		146.2 x 71.8 x 7.5	144.3

## **Hardware Setup**

Probe Name	Probe Calibration Date	DAE Name	DAE Calibration Date
EF3DV3 - SN4060	May 23, 2024	DAE4 Sn1556	January 07, 2025

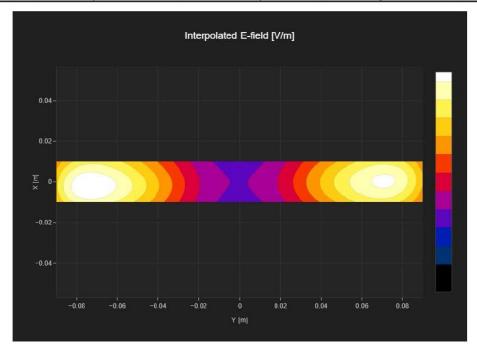
## **Communication Systems**

Band Name	Communication Systems Name	Channel	Frequency [MHz]
CD835	CW	50	835.0

## **Grid Settings**

Extent X [mm]	Extent Y [mm]	Step X [mm]	Step Y [mm]	Distance [mm]
20.0	180.0	5.0	5.0	15.0

Dipole Type	Dipole Serial Number	Emax [V/m]	Drift [dB]
CD835	1023	112	0.01







### E SCAN of Dipole 1880 MHz

## **Device Under Test**

Manufacturer	Model	Dimensions [mm]	Speaker Position [mm]
		146.2 x 71.8 x 7.5	144.3

## **Hardware Setup**

Probe Name	Probe Calibration Date	DAE Name	DAE Calibration Date
EF3DV3 - SN4060	May 23, 2024	DAE4 Sn1556	January 07, 2025

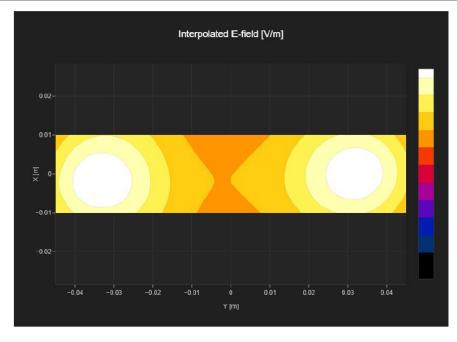
## **Communication Systems**

Band Name	Communication Systems Name	Channel	Frequency [MHz]
CD1880	CW	50	1880.0

## **Grid Settings**

Extent X [mm]	Extent Y [mm]	Step X [mm]	Step Y [mm]	Distance [mm]
20.0	90.0	5.0	5.0	15.0

Dipole Type	Dipole Serial Number	Emax [V/m]	Drift [dB]
CD1880	1018	85.8	0.03







### E SCAN of Dipole 3500 MHz

### **Device Under Test**

Manufacturer	Model	Dimensions [mm]	Speaker Position [mm]
		146.2 x 71.8 x 7.5	144.3

## **Hardware Setup**

Probe Name	Probe Calibration Date	DAE Name	DAE Calibration Date	
EF3DV3 - SN4060	May 23, 2024	DAE4 Sn1556	January 07, 2025	

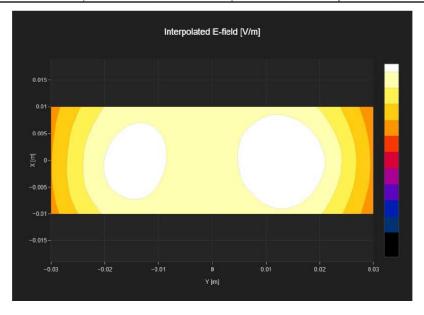
## **Communication Systems**

Band Name	Communication Systems Name	Channel	Frequency [MHz]
CD3500V3	CW	50	3500.0

## **Grid Settings**

Extent X [mm]	Extent Y [mm]	Step X [mm]	Step Y [mm]	Distance [mm]
20.0	60.0	5.0	5.0	15.0

Dipole Type	Dipole Serial Number	Emax [V/m]	Drift [dB]
CD3500	1008	82.8	0.07







### E SCAN of Dipole 3900 MHz

### **Device Under Test**

Manufacturer	Model	Dimensions [mm]	Speaker Position [mm]
		146.2 x 71.8 x 7.5	144.3

## **Hardware Setup**

Probe Name	Probe Calibration Date	DAE Name	DAE Calibration Date
EF3DV3 - SN4060	May 23, 2024	DAE4 Sn1556	January 07, 2025

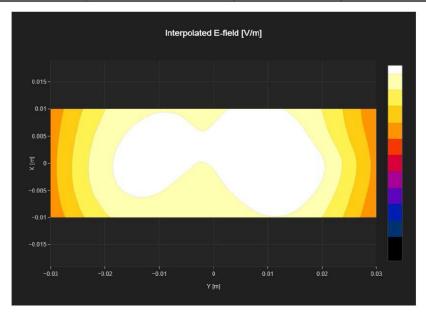
## **Communication Systems**

Band Name	Communication Systems Name	Channel	Frequency [MHz]
CD3500V3	cw	0	3900.0

## **Grid Settings**

Extent X [mm]	Extent Y [mm]	Step X [mm]	Step Y [mm]	Distance [mm]
20.0	60.0	5.0	5.0	15.0

Dipole Type	Dipole Serial Number	Emax [V/m]	Drift [dB]
CD3500	1008	79.5	0.02







### ANNEX D PROBE CALIBRATION CERTIFICATE

Calibration Laboratory of

Schmid & Partner Engineering AG

Zeughausstrasse 43, 8004 Zurich, Switzerland





- Schweizerischer Kalibrierdienst
- C Service suisse d'étalonnage
- Servizio svizzero di taratura Swiss Calibration Service

Accreditation No.: SCS 0108

Accredited by the Swiss Accreditation Service (SAS)

The Swiss Accreditation Service is one of the signatories to the EA Multilateral Agreement for the recognition of calibration certificates

Client

**CTTL** Beijing

Certificate No.

EF-4060 May24

#### **CALIBRATION CERTIFICATE**

Object

EF3DV3 - SN:4060

Calibration procedure(s)

QA CAL-02.v9, QA CAL-25.v8

Calibration procedure for E-field probes optimized for close near field

evaluations in air

Calibration date

May 23, 2024

This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI). The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature (22±3) ℃ and humidity < 70%.

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID	Cal Date (Certificate No.)	Scheduled Calibration
Power meter NRP2	SN: 104778	26-Mar-24 (No. 217-04036/04037)	Mar-25
Power sensor NRP-Z91	SN: 103244	26-Mar-24 (No. 217-04036)	Mar-25
Power sensor NRP-Z91	SN: 103245	26-Mar-24 (No. 217-04037)	Mar-25
Reference 20 dB Attenuator	SN: CC2552 (20x)	26-Mar-24 (No. 217-04046)	Mar-25
DAE4	SN: 789	18-Oct-23 (No. DAE4-789_Oct23)	Oct-24
Reference Probe ER3DV6	SN: 2328	02-Oct-23 (No. ER3-2328_Oct23)	Oct-24

Secondary Standards ID		Check Date (in house)	Scheduled Check	
Power meter E4419B	SN: GB41293874	06-Apr-16 (in house check Jun-22)	In house check: Jun-24	
Power sensor E4412A	SN: MY41498087	06-Apr-16 (in house check Jun-22)	In house check: Jun-24	
Power sensor E4412A	SN: 000110210	06-Apr-16 (in house check Jun-22)	In house check: Jun-24	
RF generator HP 8648C	SN: US3642U01700	04-Aug-99 (in house check Jun-22)	In house check: Jun-24	
Network Analyzer E8358A	SN: US41080477	31-Mar-14 (in house check Oct-22)	In house check: Oct-24	

	Name	Function	Signature
Calibrated by	Jeffrey Katzman	Laboratory Technician	16
Approved by	Sven Kühn	Technical Manager	32
	to shall not be reproduced execution		Issued: May 23, 2024

Certificate No: EF-4060\_May24

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#### Calibration Laboratory of

Schmid & Partner Engineering AG

Zeughausstrasse 43, 8004 Zurich, Switzerland

ilac-mra



S Schweizerischer Kalibrierdienst
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Servizio svizzero di taratura
S Swiss Calibration Service

Accreditation No.: SCS 0108

Accredited by the Swiss Accreditation Service (SAS)

The Swiss Accreditation Service is one of the signatories to the EA Multilateral Agreement for the recognition of calibration certificates

#### Glossary

NORMx,y,z sensitivity in free space DCP diode compression point

CF crest factor (1/duty\_cycle) of the RF signal A, B, C, D modulation dependent linearization parameters incident E-field orientation normal to probe axis probe axis incident E-field orientation parallel to probe axis

Polarization  $\varphi$   $\varphi$  rotation around probe axis

Polarization  $\theta$  or rotation around an axis that is in the plane normal to probe axis (at measurement center), i.e.,  $\theta = 0$  is

normal to probe axis

Connector Angle information used in DASY system to align probe sensor X to the robot coordinate system

#### Calibration is Performed According to the Following Standards:

- a) IEEE Std 1309-2005, "IEEE Standard for calibration of electromagnetic field sensors and probes, excluding antennas, from 9 kHz to 40 GHz", December 2005
- b) CTIA Test Plan for Hearing Aid Compatibility, Rev 3.1.1, May 2017

#### Methods Applied and Interpretation of Parameters:

- NORMx,y,z: Assessed for E-field polarization θ = 0 for XY sensors and θ = 90 for Z sensor (f ≤ 900 MHz in TEM-cell; f > 1800 MHz in R22 waveguide).
- NORM(f)x,y,z = NORMx,y,z \* frequency\_response (see Frequency Response Chart).
- DCPx,y,z: DCP are numerical linearization parameters assessed based on the data of power sweep with CW signal. DCP
  does not depend on frequency nor media.
- · PAR: PAR is the Peak to Average Ratio that is not calibrated but determined based on the signal characteristics
- Ax,y,z; Bx,y,z; Cx,y,z; Dx,y,z; VRx,y,z: A, B, C, D are numerical linearization parameters assessed based on the data of
  power sweep for specific modulation signal. The parameters do not depend on frequency nor media. VR is the maximum
  calibration range expressed in RMS voltage across the diode.
- · Spherical isotropy (3D deviation from isotropy): in a locally homogeneous field realized using an open waveguide setup
- Sensor Offset: The sensor offset corresponds to the offset of virtual measurement center from the probe tip (on probe axis).
   No tolerance required.
- Connector Angle: The angle is assessed using the information gained by determining the NORMx (no uncertainty required).

Certificate No: EF-4060\_May24

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EF3DV3 - SN:4060 May 23, 2024

Parameters of Probe: EF3DV3 - SN:4060

#### **Basic Calibration Parameters**

	Sensor X	Sensor Y	Sensor Z	Unc (k = 2)
Norm $(\mu V/(V/m)^2)$	0.79	0.74	1.29	±10.1%
DCP (mV) B	92.8	98.2	93.9	±4.7%

### Calibration Results for Frequency Response (30 MHz - 5.8 GHz)

Frequency MHz	Target E-field (En) V/m	Measured E-field (En) V/m	Deviation E-field (En)	Target E-field (Ep) V/m	Measured E-field (Ep) V/m	Deviation E-field (Ep)	Unc (k = 2)
30	77.1	77.3	0.2%	77.1	77.0	-0.2%	±5.1%
100	77.0	78.0	1.3%	77.0	78.1	1.5%	±5.1%
450	77.2	78.1	1.2%	77.1	78.2	1.3%	±5.1%
600	77.1	77.6	0.6%	77.1	77.6	0.7%	±5.1%
750	77.1	77.4	0.4%	77.1	77.4	0.3%	±5.1%
1800	143.0	139.9	-2.2%	143.2	140.3	-2.0%	±5.1%
2000	135.0	129.5	-4.1%	134.9	129.6	-4.0%	±5.1%
2200	127.6	124.6	-2.4%	127.5	125.7	-1.4%	±5.1%
2500	125.5	120.3	-4.2%	125.6	121.3	-3.4%	±5.1%
3000	79.4	76.2	-4.1%	79.4	77.2	-2.8%	±5.1%
3500	256.2	255.4	-0.3%	255.8	251.8	-1.6%	±5.1%
3700	250.4	245.4	-2.0%	250.8	243.7	-2.8%	±5.1%
5200	50.8	50.9	0.2%	50.7	51.1	0.8%	±5.1%
5500	49.7	48.9	-1.5%	49.6	49.1	-1.0%	±5.1%
5800	48.9	48.1	-1.6%	48.9	47.6	-2.6%	±5.1%

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%.

Certificate No: EF-4060\_May24

B Linearization parameter uncertainty for maximum specified field strength.

E Uncertainty is determined using the max. deviation from linear response applying rectangular distribution and is expressed for the square of the field value.





#### Parameters of Probe: EF3DV3 - SN:4060

#### **Calibration Results for Modulation Response**

UID	Communication System Name		A dB	$^{ m B}_{ m dB}\sqrt{\mu V}$	С	D dB	VR mV	Max dev.	Max Unc <sup>E</sup> k = 2
0	CW	X	0.00	0.00	1.00	0.00	126.1	±3.3%	±4.7%
	MAG 4 8 64	Y	0.00	0.00	1.00		164.6		
		Z	0.00	0.00	1.00		127.1		
10352	Pulse Waveform (200Hz, 10%)	X	2.79	66.36	9.95	10.00	60.0	±2.8%	±9.6%
		Y	2.98	67.14	10.50		60.0		
		Z	2.96	67.04	10.32		60.0		
10353	Pulse Waveform (200Hz, 20%)	X	1.54	64.47	8.15	6.99	80.0	±1.1%	±9.6%
	,	Y	1.71	65.56	8.89		80.0		
		Z	1.22	63.13	7.66		80.0		
10354	Pulse Waveform (200Hz, 40%)	X	0.83	63.89	7.11	3.98	95.0	±0.8%	±9.6%
		Y	1.01	65.47	8.04		95.0		
		Z	0.77	63.73	6.98		95.0		
10355	Pulse Waveform (200Hz, 60%)	X	20.00	85.19	12.98	2.22	120.0	±0.9%	±9.6%
10000		Y	20.00	86.18	13.45		120.0		
		Z	20.00	82.99	11.82		120.0		
10387	QPSK Waveform, 1 MHz	X	2.18	73.12	18.36	1.00	150.0	±2.1%	±9.6%
		Y	1.71	68.59	15.68	1	150.0	1	
		Z	1.96	71.52	17.24		150.0		
10388	QPSK Waveform, 10 MHz	X	2.61	71.82	18.19	0.00	150.0	±1.0%	±9.6%
10000		Y	2.23	68.76	16.25		150.0		
		Z	2.42	70.54	17.37	1	150.0		
10396	64-QAM Waveform, 100 kHz	X	2.33	69.82	19.41	3.01	150.0	±1.8%	±9.6%
.0000		Y	1.80	65.17	17.48		150.0		
		Z	2.24	68.95	18.67	1	150.0	1	
10399	64-QAM Waveform, 40 MHz	X	3.55	67.76	16.55	0.00	150.0	±1.2%	±9.6%
10000	or arm training to me	Y	3.43	66.95	15.82	1	150.0	1	
		Z	3.55	67.72	16.40	1	150.0	1	
10414	WLAN CCDF, 64-QAM, 40 MHz	X	4.72	65.81	15.97	0.00	150.0	±2.4%	±9.6%
.04.4		Y		65.74	15.68	1	150.0	1	
		Z		65.61	15.78	1	150.0	1	

Note: For details on UID parameters see Appendix

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%.

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B Linearization parameter uncertainty for maximum specified field strength.

E Uncertainty is determined using the max, deviation from linear response applying rectangular distribution and is expressed for the square of the field value.





#### Parameters of Probe: EF3DV3 - SN:4060

#### **Sensor Frequency Model Parameters**

	Sensor X	Sensor Y	Sensor Z	
Frequency Corr. (LF)	0.17	0.20	4.63	
Frequency Corr. (HF)	2.82	2.82	2.82	

#### **Sensor Model Parameters**

	C1 fF	C2 fF	α V <sup>-1</sup>	T1 ms V <sup>-2</sup>	T2 ms V <sup>-1</sup>	T3 ms	T4 V <sup>-2</sup>	T5 V <sup>-1</sup>	Т6
x	36.0	239.41	37.41	5.51	0.05	4.95	0.77	0.01	1.00
v	35.1	230.50	36.41	5.15	0.00	4.97	0.00	0.00	1.01
z	33.7	225.26	37.55	4.26	0.03	4.97	0.69	0.02	1.00

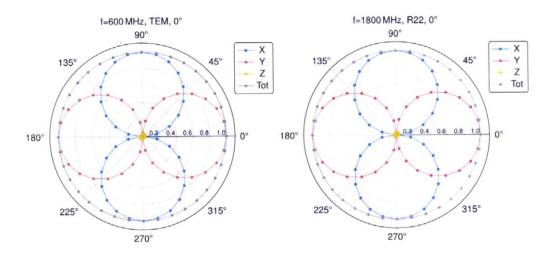
#### **Other Probe Parameters**

Sensor Arrangement	Rectangular
Connector Angle	-38.9°
Mechanical Surface Detection Mode	enabled
Optical Surface Detection Mode	disabled
Probe Overall Length	337 mm
Probe Body Diameter	12 mm
Tip Length	25 mm
Tip Diameter	4 mm
Probe Tip to Sensor X Calibration Point	1.5 mm
Probe Tip to Sensor Y Calibration Point	1.5 mm
Probe Tip to Sensor Z Calibration Point	1.5 mm

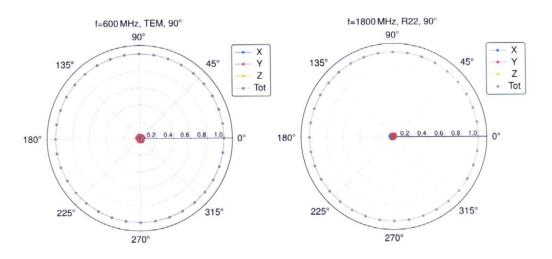
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### Receiving Pattern ( $\phi$ ), $\theta = 0^{\circ}$



#### Receiving Pattern ( $\phi$ ), $\theta = 90^{\circ}$



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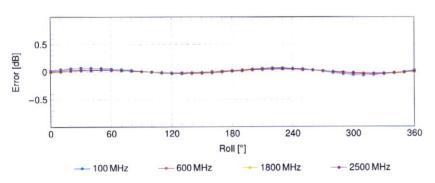
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EF3DV3 - SN:4060

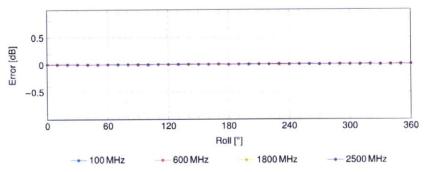
May 23, 2024

## Receiving Pattern ( $\phi$ ), $\vartheta = 0^{\circ}$



Uncertainty of Axial Isotropy Assessment: ±0.5% (k=2)

#### Receiving Pattern ( $\phi$ ), $\theta = 90^{\circ}$



Uncertainty of Axial Isotropy Assessment: ±0.5% (k=2)

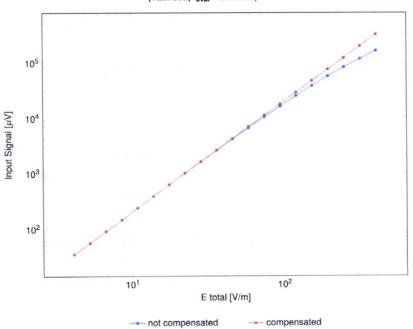
Certificate No: EF-4060\_May24

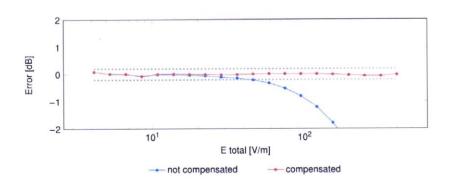
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# Dynamic Range f(E-field)

(TEM cell, f<sub>eval</sub> = 900 MHz)





Uncertainty of Linearity Assessment:  $\pm 0.6\%$  (k=2)

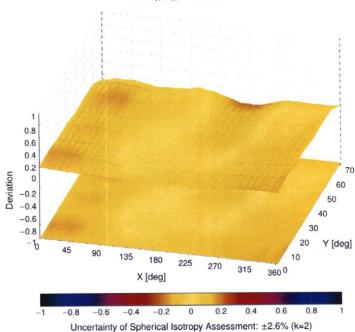
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### **Deviation from Isotropy in Air**





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# **Appendix: Modulation Calibration Parameters**

UID	Rev	Communication System Name	Group	PAR (dB)	Unc <sup>E</sup> k =
0		CW	CW	0.00	±4.7
0010	CAB	SAR Validation (Square, 100 ms, 10 ms)	Test	10.00	±9.6
0011	CAC	UMTS-FDD (WCDMA)	WCDMA	2.91	±9.6
0012	CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps)	WLAN	1.87	±9.6
0013	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps)	WLAN	9.46	±9.6
0021	DAC	GSM-FDD (TDMA, GMSK)	GSM	9.39	±9.6
0023	DAC	GPRS-FDD (TDMA, GMSK, TN 0)	GSM	9.57	±9.6
0024	DAC	GPRS-FDD (TDMA, GMSK, TN 0-1)	GSM	6.56	±9.6
0025	DAC	EDGE-FDD (TDMA, 8PSK, TN 0)	GSM	12.62	±9.6
0026	DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1)	GSM	9.55	±9.6
0027	DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2)	GSM	4.80	+9.6
0028	DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2-3)	GSM	3.55	±9.6
0029	DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2)	GSM	7.78	±9.6
0029	CAA	IEEE 802.15.1 Bluetooth (GFSK, DH1)	Bluetooth	5.30	±9.6
	CAA	IEEE 802.15.1 Bluetooth (GFSK, DH1)	Bluetooth	1.87	±9.6
0031			Bluetooth	1.16	±9.6
0032	CAA	IEEE 802.15.1 Bluetooth (GFSK, DH5)	Bluetooth	7.74	±9.6
0033	CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH1)	Bluetooth	4.53	±9.6
0034	CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH3)		3.83	±9.6
0035	CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH5)	Bluetooth Bluetooth	8.01	±9.6
0036	CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH1)		4.77	
0037	CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH3)	Bluetooth		±9.6
0038	CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH5)	Bluetooth	4.10	±9.6
0039	CAB	CDMA2000 (1xRTT, RC1)	CDMA2000	4.57	±9.6
0042	CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Halfrate)	AMPS	7.78	±9.6
10044	CAA	IS-91/EIA/TIA-553 FDD (FDMA, FM)	AMPS	0.00	±9.6
10048	CAA	DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24)	DECT	13.80	±9.6
10049	CAA	DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12)	DECT	10.79	±9.6
10056	CAA	UMTS-TDD (TD-SCDMA, 1.28 Mcps)	TD-SCDMA	11.01	±9.6
10058	DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)	GSM	6.52	±9.6
10059	CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps)	WLAN	2.12	±9.6
10060	CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps)	WLAN	2.83	±9.6
10061	CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps)	WLAN	3.60	±9.6
10062	CAE	IEEE 802,11a/h WiFi 5 GHz (OFDM, 6 Mbps)	WLAN	8.68	±9.6
10063	CAE	IEEE 802,11a/h WiFi 5 GHz (OFDM, 9 Mbps)	WLAN	8.63	±9.6
10064	CAE	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps)	WLAN	9.09	±9.6
10065	CAE	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps)	WLAN	9.00	±9.6
10066	CAE	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps)	WLAN	9.38	±9.6
10067	CAE	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps)	WLAN	10.12	±9.6
10068	CAE	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps)	WLAN	10.24	±9.6
10069	CAE	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps)	WLAN	10.56	±9.6
10003	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps)	WLAN	9.83	±9.6
10071	-	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps)	WLAN	9.62	±9.6
		IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps)	WLAN	9.94	±9.6
10073			WLAN	10.30	±9.6
10074		IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps)	WLAN	10.77	±9.6
10075	_	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps)	WLAN	10.94	±9.6
10076		IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps)	WLAN	11.00	+9.6
10077	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps)		3.97	±9.6
10081	CAB	CDMA2000 (1xRTT, RC3)	CDMA2000 AMPS	4.77	±9.6
10082		IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Fullrate)		1,000.0	
10090	_	GPRS-FDD (TDMA, GMSK, TN 0-4)	GSM	6.56	±9.6
10097	CAC	UMTS-FDD (HSDPA)	WCDMA	3.98	±9.6
10098		UMTS-FDD (HSUPA, Subtest 2)	WCDMA	3.98	±9.6
10099		EDGE-FDD (TDMA, 8PSK, TN 0-4)	GSM	9.55	±9.6
10100		LTE-FDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	LTE-FDD	5.67	±9.6
10101	CAF	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	LTE-FDD	6.42	±9.6
10102	CAF	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	LTE-FDD	6.60	±9.6
10103	CAH	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	LTE-TDD	9.29	±9.6
10104		LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	LTE-TDD	9.97	±9.6
10105	CAH	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	LTE-TDD	10.01	±9.6
10108		LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	LTE-FDD	5.80	±9.6
10109		LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	LTE-FDD	6.43	±9.6
10110		LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	LTE-FDD	5.75	±9.
10111	-		LTE-FDD	6.44	±9.

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UID	Rev	Communication System Name	Group	PAR (dB)	$Unc^{E} k = 2$
10112	CAH	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	LTE-FDD	6.59	±9.6
10113	CAH	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	LTE-FDD	6.62	±9.6
10114	CAE	IEEE 802.11n (HT Greenfield, 13.5 Mbps, BPSK)	WLAN	8.10	±9.6
10115	CAE	IEEE 802.11n (HT Greenfield, 81 Mbps, 16-QAM)	WLAN	8.46	±9.6
10116	CAE	IEEE 802.11n (HT Greenfield, 135 Mbps, 64-QAM)	WLAN	8.15	±9.6
10117	CAE	IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK)	WLAN	8.07	±9.6
10118	CAE	IEEE 802.11n (HT Mixed, 81 Mbps, 16-QAM)	WLAN	8.59	±9.6
10119	CAE	IEEE 802.11n (HT Mixed, 135 Mbps, 64-QAM)	WLAN	8.13	±9.6
10140	CAF	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	LTE-FDD	6.49	±9.6
10141	CAF	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	LTE-FDD	6.53	±9.6
10142	CAF	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	LTE-FDD	5.73	±9.6
10143	CAF	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	LTE-FDD	6.35	±9.6
10144	CAF	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	LTE-FDD	6.65	±9.6
10145	CAG	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	LTE-FDD	5.76	±9.6
10146	CAG	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	LTE-FDD	6.41	±9.6
10147	CAG	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	LTE-FDD	6.72	±9.6
10149	CAF	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	LTE-FDD	6.42	±9.6
10150	CAF	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	LTE-FDD	6.60	±9.6
10151	CAH	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	LTE-TDD	9.28	±9.6
10152	CAH	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	LTE-TDD	9.92	±9.6
10153	CAH	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	LTE-TDD	10.05	±9.6
10154	CAH	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	LTE-FDD	5.75	±9.6
10155	CAH	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	LTE-FDD	6.43	±9.6
10156	CAH	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	LTE-FDD	5.79	±9.6
10157	CAH	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	LTE-FDD	6.49	±9.6
10158	CAH	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	LTE-FDD	6.62	±9.6
10159	CAH	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	LTE-FDD	6.56	±9.6
10160	CAF	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	LTE-FDD	5.82	±9.6
10161	CAF	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	LTE-FDD	6.43	±9.6
10162	CAF	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	LTE-FDD	6.58	±9.6
10166	CAG	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	LTE-FDD	5.46	±9.6
10167	CAG	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	LTE-FDD	6.21	±9.6
10168	CAG	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	LTE-FDD	6.79	±9.6
10169	CAF	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	LTE-FDD	5.73	±9.6
10170	CAF	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	LTE-FDD	6.52	±9.6
10171	AAF	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	LTE-FDD	6.49	±9.6
10172	CAH	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	LTE-TDD	9.21	±9.6
10173	CAH	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	LTE-TDD	9.48	±9.6
10174	CAH	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	LTE-TDD	10.25	±9.6
10175	CAH	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	LTE-FDD	5.72	±9.6
10176	CAH	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	LTE-FDD	6.52	±9.6
10177	CAJ	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	LTE-FDD	5.73	±9.6
10178	CAH	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)	LTE-FDD	6.52	±9.6
10179	CAH	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	LTE-FDD	6.50	±9.6
10180	CAH	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)	LTE-FDD	6.50	±9.6
10181	CAF	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	LTE-FDD	5.72	±9.6
10182	CAF	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	LTE-FDD	6.52	±9.6
10183	AAE	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	LTE-FDD	6.50	±9.6
10184		LTE-FDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	LTE-FDD	5.73	±9.6
10185	_	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)	LTE-FDD	6.51	±9.6
10186	_	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)	LTE-FDD	6.50	±9.6
10187	CAG	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	LTE-FDD	5.73	±9.6
10188		LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	LTE-FDD	6.52	±9.6
10189	_	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	LTE-FDD	6.50	±9.6
10 193	-	IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK)	WLAN	8.09	±9.6
10194	-	IEEE 802.11n (HT Greenfield, 39 Mbps, 16-QAM)	WLAN	8.12	±9.6
10195	-	IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM)	WLAN	8.21	±9.6
10196	_	IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK)	WLAN	8.10	±9.6
10197	_	IEEE 802.11n (HT Mixed, 39 Mbps, 16-QAM)	WLAN	8.13	±9.6
10198		IEEE 802.11n (HT Mixed, 65 Mbps, 64-QAM)	WLAN	8.27	±9.6
10219	_	IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK)	WLAN	8.03	±9.6
10220		IEEE 802.11n (HT Mixed, 43.3 Mbps, 16-QAM)	WLAN	8.13	±9.6
10221	_	IEEE 802.11n (HT Mixed, 72.2 Mbps, 64-QAM)	WLAN	8.27	±9.6
10222	_	IEEE 802.11n (HT Mixed, 15 Mbps, BPSK)	WLAN	8.06	±9.6
10223	_	IEEE 802.11n (HT Mixed, 90 Mbps, 16-QAM)	WLAN	8.48	±9.6

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UID	Rev	Communication System Name	Group	PAR (dB)	$Unc^{E} k = 2$
10225	CAC	UMTS-FDD (HSPA+)	WCDMA	5.97	±9.6
10226	CAC	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	LTE-TDD	9.49	±9.6
10227	CAC	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	LTE-TDD	10.26	±9.6
10228	CAC	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	LTE-TDD	9.22	±9.6
10229	CAE	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)	LTE-TDD	9.48	±9.6
10230	CAE	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)	LTE-TDD	10.25	±9.6
10231	CAE	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	LTE-TDD	9.19	±9.6
10232	CAH	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)	LTE-TDD	9.48	±9.6
10233	CAH	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)	LTE-TDD	10.25	±9.6
10234	CAH	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	LTE-TDD	9.21	±9.6
10235	CAH	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	LTE-TDD	9.48	±9.6
10236	CAH	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	LTE-TDD	10.25	±9.6
10237	CAH	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	LTE-TDD	9.21	±9.6
10237	CAG	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	LTE-TDD	9.48	±9.6
	CAG	LTE-TDD (SC-FDMA, 1 RB, 15MHz, 64-QAM)	LTE-TDD	10.25	±9.6
10239			LTE-TDD	9.21	±9.6
10240	CAG	LTE-TDD (SC-FDMA, 1 RB, 15MHz, QPSK)	LTE-TDD	9.82	±9.6
10241	CAC	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	LTE-TDD	9.86	±9.6
10242	CAC	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)		_	-
10243	CAC	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	LTE-TDD	9.46	±9.6
10244	CAE	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	LTE-TOD	10.06	±9.6
10245	CAE	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	LTE-TDD	10.06	±9.6
10246	CAE	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	LTE-TDD	9.30	±9.6
10247	CAH	LTE-TDD (SC-FDMA, 50% RB, 5MHz, 16-QAM)	LTE-TDD	9.91	±9.6
10248	CAH	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	LTE-TDD	10.09	±9.6
10249	CAH	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	LTE-TDD	9.29	±9.6
10250	CAH	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	LTE-TDD	9.81	±9.6
10251	CAH	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	LTE-TDD	10.17	±9.6
10252	CAH	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	LTE-TDD	9.24	±9.6
10253	CAG	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	LTE-TDD	9.90	±9.6
10254	CAG	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	LTE-TDD	10.14	±9.6
10255	CAG	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	LTE-TDD	9.20	±9.6
10256	CAC	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	LTE-TDD	9.96	±9.6
10257	CAC	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	LTE-TDD	10.08	±9.6
10258	CAC	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	LTE-TDD	9.34	±9.6
10259	CAE	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	LTE-TDD	9.98	±9.6
10260	CAE	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	LTE-TDD	9.97	±9.6
10261	CAE	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	LTE-TDD	9.24	±9.6
10262	CAH	LTE-TDD (SC-FDMA, 100% RB, 5MHz, 16-QAM)	LTE-TDD	9.83	±9.6
10263	CAH	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	LTE-TDD	10.16	±9.6
10264	CAH	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	LTE-TDD	9.23	±9.6
10265	CAH	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	LTE-TDD	9.92	±9.6
10266	CAH	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	LTE-TDD	10.07	±9.6
10267	CAH	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	LTE-TDD	9.30	±9.6
10268	CAG	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	LTE-TDD	10.06	±9.6
10269	CAG	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	LTE-TDD	10.13	±9.6
10209	CAG	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	LTE-TDD	9.58	±9.6
10270		UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.10)	WCDMA	4.87	±9.6
10274	CAC	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.4)	WCDMA	3.96	±9.6
		The state of the s	PHS	11.81	±9.6
10277	CAA	PHS (QPSK)	PHS	11.81	±9.6
10278	_	PHS (QPSK, BW 884 MHz, Rolloff 0.5)	PHS	12.18	±9.6
10279	_	PHS (QPSK, BW 884 MHz, Rolloff 0.38)	CDMA2000	3.91	±9.6
10290		CDMA2000, RC1, SO55, Full Rate	CDMA2000	3.46	±9.6
10291	AAB	CDMA2000, RC3, SO55, Full Rate	CDMA2000	3.39	±9.6
10292		CDMA2000, RC3, SO32, Full Rate	CDMA2000 CDMA2000	3.50	±9.6
10293		CDMA2000, RC3, SO3, Full Rate			-
10295		CDMA2000, RC1, SO3, 1/8th Rate 25 fr.	CDMA2000 LTE-FDD	12.49	±9.6
10297	_	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)		5.81	±9.6
10298		LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	LTE-FDD	5.72	±9.6
10299		LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	LTE-FDD	6.39	±9.6
10300	-	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	LTE-FDD	6.60	±9.6
10301	AAA	IEEE 802.16e WiMAX (29:18, 5 ms, 10 MHz, QPSK, PUSC)	WiMAX	12.03	±9.6
10302	AAA	IEEE 802.16e WiMAX (29:18, 5 ms, 10 MHz, QPSK, PUSC, 3 CTRL symbols)	WiMAX	12.57	±9.6
10303	AAA	IEEE 802.16e WiMAX (31:15, 5 ms, 10 MHz, 64QAM, PUSC)	WiMAX	12.52	±9.6
10304	AAA	IEEE 802.16e WiMAX (29:18, 5 ms, 10 MHz, 64QAM, PUSC)	WiMAX	11.86	±9.6
10305		IEEE 802.16e WiMAX (31:15, 10 ms, 10 MHz, 64QAM, PUSC, 15 symbols)	WiMAX	15.24	±9.6
10306	_		WiMAX	14.67	±9.6

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UID	Rev	Communication System Name	Group	PAR (dB)	Unc <sup>E</sup> k =
0307	AAA	IEEE 802.16e WiMAX (29:18, 10 ms, 10 MHz, QPSK, PUSC, 18 symbols)	WiMAX	14.49	±9.6
0308	AAA	IEEE 802.16e WiMAX (29:18, 10 ms, 10 MHz, 16QAM, PUSC)	WiMAX	14.46	±9.6
0309	AAA	IEEE 802.16e WiMAX (29:18, 10 ms, 10 MHz, 16QAM, AMC 2x3, 18 symbols)	WiMAX	14.58	±9.6
0310	AAA	IEEE 802.16e WIMAX (29:18, 10 ms, 10 MHz, QPSK, AMC 2x3, 18 symbols)	WiMAX	14.57	±9.6
0311	AAE	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	LTE-FDD	6.06	±9.6
0313	AAA	IDEN 1:3	iDEN	10.51	±9.6
0314	AAA	IDEN 1:6	iDEN	13.48	±9.6
		IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 96pc duty cycle)	WLAN	1.71	±9.6
0315	AAB	IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 96pc duty cycle)	WLAN	8.36	±9.6
0316	AAB	IEEE 802.11g WiFi 5 GHz (CFDM, 6 Mbps, 96pc duty cycle)	WLAN	8.36	±9.6
0317	AAE		Generic	10.00	±9.6
0352	AAA	Pulse Waveform (200Hz, 10%)	Generic	6.99	±9.6
0353	AAA	Pulse Waveform (200Hz, 20%)	Generic	3.98	±9.6
0354	AAA	Pulse Waveform (200Hz, 40%)	Generic	2.22	±9.6
0355	AAA	Pulse Waveform (200Hz, 60%)	T1 T	0.97	±9.6
0356	AAA	Pulse Waveform (200Hz, 80%)	Generic	_	
0387	AAA	QPSK Waveform, 1 MHz	Generic	5.10	±9.6
0388	AAA	QPSK Waveform, 10 MHz	Generic	5,22	±9.6
0396	AAA	64-QAM Waveform, 100 kHz	Generic	6.27	±9.6
0399	AAA	64-QAM Waveform, 40 MHz	Generic	6.27	±9.6
0400	AAF	IEEE 802.11ac WiFi (20 MHz, 64-QAM, 99pc duty cycle)	WLAN	8.37	±9.6
0401	AAF	IEEE 802.11ac WiFi (40 MHz, 64-QAM, 99pc duty cycle)	WLAN	8.60	±9.6
0402	AAF	IEEE 802.11ac WiFi (80 MHz, 64-QAM, 99pc duty cycle)	WLAN	8.53	±9.6
0403	AAB	CDMA2000 (1xEV-DO, Rev. 0)	CDMA2000	3.76	±9.6
0404	AAB	CDMA2000 (1xEV-DO, Rev. A)	CDMA2000	3.77	±9.6
0404	AAB	CDMA2000, RC3, SO32, SCH0, Full Rate	CDMA2000	5.22	±9.6
	AAH	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9, Subframe Conf=4)	LTE-TDD	7.82	±9.6
10410		WLAN CCDF, 64-QAM, 40 MHz	Generic	8.54	±9.6
10414	AAA		WLAN	1.54	±9.6
10415	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle)	WLAN	8.23	±9.6
10416	AAA	IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 99pc duty cycle)	WLAN	8.23	±9.6
10417	AAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 99pc duty cycle)			±9.6
10418	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Long preambule)	WLAN	8.14	
10419	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Short preambule)	WLAN	8.19	±9.6
10422	AAD	IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK)	WLAN	8.32	±9.6
10423	AAD	IEEE 802.11n (HT Greenfield, 43.3 Mbps, 16-QAM)	WLAN	8.47	±9.6
10424	AAD	IEEE 802.11n (HT Greenfield, 72.2 Mbps, 64-QAM)	WLAN	8.40	±9.6
10425	AAD	IEEE 802.11n (HT Greenfield, 15 Mbps, BPSK)	WLAN	8.41	±9.6
10426	AAD	IEEE 802.11n (HT Greenfield, 90 Mbps, 16-QAM)	WLAN	8.45	±9.6
10427	AAD	IEEE 802.11n (HT Greenfield, 150 Mbps, 64-QAM)	WLAN	8.41	±9.6
10430	AAE	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1)	LTE-FDD	8.28	±9.6
10431	AAE	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1)	LTE-FDD	8.38	±9.6
10432		LTE-FDD (OFDMA, 15 MHz, E-TM 3.1)	LTE-FDD	8.34	±9.6
10433		LTE-FDD (OFDMA, 20 MHz, E-TM 3.1)	LTE-FDD	8.34	±9.6
10434	AAB	W-CDMA (BS Test Model 1, 64 DPCH)	WCDMA	8.60	±9.6
10434		LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.82	+9.6
		LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	LTE-FDD	7.56	±9.6
10447	_		LTE-FDD	7.53	±9.6
10448		LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, Clippin 44%)	LTE-FDD	7.51	±9.6
10449		LTE-FDD (OFDMA, 15 MHz, E-TM 3.1, Cliping 44%)		7.48	±9.
10450		LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	LTE-FDD	7.5.7.5.5.5	_
10451		W-CDMA (BS Test Model 1, 64 DPCH, Clipping 44%)	WCDMA	7.59	±9.6
10453	AAE	Validation (Square, 10 ms, 1 ms)	Test	10.00	±9.
10456	AAD	IEEE 802.11ac WiFi (160 MHz, 64-QAM, 99pc duty cycle)	WLAN	8.63	±9.
10457	AAB	UMTS-FDD (DC-HSDPA)	WCDMA	6.62	±9.
10458	AAA	CDMA2000 (1xEV-DO, Rev. B, 2 carriers)	CDMA2000	6.55	±9.
10459	AAA	CDMA2000 (1xEV-DO, Rev. B, 3 carriers)	CDMA2000	8.25	±9.
10460		UMTS-FDD (WCDMA, AMR)	WCDMA	2.39	±9.
10461		LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.82	±9.
10462		LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.30	±9.
10463		LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.56	±9.
10464		LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.82	±9.
		LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QFSR, 0L Subframe=2,3,4,7,8,9)	LTE-TDD	8.32	±9.
10465			LTE-TDD	8.57	±9.
10466			LTE-TDD	7.82	±9.
10467	_		LTE-TDD	8.32	±9.
10468	-				_
		LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.56	±9.
10469	_		LTE-TDD	7.82	±9.

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10472	AAG	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.57	±9.6
0473	AAF	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.82	±9.6
0474	AAF	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.32	±9.6
0475	AAF	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.57	±9.6
0477	AAG	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.32	±9.6
0478	AAG	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.57	±9.6
0479	AAC	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.74	±9.6
0480	AAC	LTE-TDD (SC-FDMA, 50% RB, 1,4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.18	±9.6
0481	AAC	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.45	±9.6
0482	AAD	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7,71	±9.6
0483	AAD	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.39	±9.6
0484	AAD	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.47	±9.6
0485	AAG	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.59	±9.6
0486	AAG	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.38	±9.6
0487	AAG	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.60	±9.6
	AAG	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.70	±9.6
0488	7 11 11 11	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8,31	±9.6
0489	AAG	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.54	±9.6
0490	AAG		LTE-TDD	7.74	±9.6
0491	AAF	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.41	±9.6
0492	AAF	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)			
0493	AAF	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.55	±9.6
10494	AAG	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.74	±9.6
10495	AAG	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.37	±9.6
10496	AAG	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.54	±9.6
10497	AAC	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.67	±9.6
10498	AAC	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.40	±9.6
10499	AAC	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.68	±9.6
10500	AAD	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.67	±9.6
10501	AAD	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.44	±9.6
10502	AAD	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.52	±9.6
10503	AAG	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.72	±9.6
10504	AAG	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.31	±9.6
10505	AAG	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.54	±9.6
10506	AAG	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.74	±9.6
10507	AAG	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.36	±9.6
10508	AAG	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.55	±9.6
10509	AAF	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.99	±9.6
10510	AAF	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.49	±9.6
10511	AAF	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.51	±9.6
10512	AAG	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.74	±9.6
10513	AAG	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.42	±9.6
10514	AAG	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.45	±9.6
10515	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 99pc duty cycle)	WLAN	1.58	±9.6
10516	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc duty cycle)	WLAN	1.57	±9.6
10516	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc duty cycle)	WLAN	1.58	±9.6
		IEEE 802.11b WiFi 5 GHz (OFDM, 9 Mbps, 99pc duty cycle)	WLAN	8.23	±9.6
10518	AAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 3 Mops, 39pc duty cycle)	WLAN	8.39	±9.6
10519	AAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mops, 99pc duty cycle)  IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 99pc duty cycle)	WLAN	8.12	±9.6
10520	AAD		WLAN	7.97	±9.6
10521	AAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc duty cycle)	WLAN	8.45	±9.6
10522		IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc duty cycle)	WLAN	8.08	±9.6
10523	AAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 99pc duty cycle)	WLAN	8.08	±9.6
10524	_	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc duty cycle)	WLAN	8.36	±9.6
10525		IEEE 802.11ac WiFi (20 MHz, MCS0, 99pc duty cycle)	WLAN	8.42	±9.6
10526		IEEE 802.11ac WiFi (20 MHz, MCS1, 99pc duty cycle)		8.42	
10527		IEEE 802.11ac WiFi (20 MHz, MCS2, 99pc duty cycle)	WLAN	-	±9.6
10528		IEEE 802.11ac WiFi (20 MHz, MCS3, 99pc duty cycle)	WLAN	8.36	±9.6
10529		IEEE 802.11ac WiFi (20 MHz, MCS4, 99pc duty cycle)	WLAN	8.36	±9.0
10531		IEEE 802.11ac WiFi (20 MHz, MCS6, 99pc duty cycle)	WLAN	8.43	±9.6
10532	AAD	IEEE 802.11ac WiFi (20 MHz, MCS7, 99pc duty cycle)	WLAN	8.29	±9.6
10533	AAD	IEEE 802.11ac WiFi (20 MHz, MCS8, 99pc duty cycle)	WLAN	8.38	±9.0
10534	AAD	IEEE 802.11ac WiFi (40 MHz, MCS0, 99pc duty cycle)	WLAN	8.45	±9.
10535	AAD	IEEE 802.11ac WiFi (40 MHz, MCS1, 99pc duty cycle)	WLAN	8.45	±9.
10536	_	IEEE 802.11ac WiFi (40 MHz, MCS2, 99pc duty cycle)	WLAN	8.32	±9.
10537		IEEE 802.11ac WiFi (40 MHz, MCS3, 99pc duty cycle)	WLAN	8.44	±9.
10538	_	IEEE 802.11ac WiFi (40 MHz, MCS4, 99pc duty cycle)	WLAN	8.54	±9.6
10540		IEEE 802.11ac WiFi (40 MHz, MCS6, 99pc duty cycle)	WLAN	8.39	±9.6

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10541	AAD	IEEE 802.11ac WiFi (40 MHz, MCS7, 99pc duty cycle)	WLAN	8.46	±9.6
10542	AAD	IEEE 802.11ac WiFi (40 MHz, MCS8, 99pc duty cycle)	WLAN	8.65	±9.6
10543	AAD	IEEE 802.11ac WiFi (40 MHz, MCS9, 99pc duty cycle)	WLAN	8.65	±9.6
10544	AAD	IEEE 802.11ac WiFi (80 MHz, MCS0, 99pc duty cycle)	WLAN	8.47	±9.6
10545	AAD	IEEE 802.11ac WiFi (80 MHz, MCS1, 99pc duty cycle)	WLAN	8.55	±9.6
10546	AAD	IEEE 802.11ac WiFi (80 MHz, MCS2, 99pc duty cycle)	WLAN	8.35	±9.6
10547	AAD	IEEE 802.11ac WiFi (80 MHz, MCS3, 99pc duty cycle)	WLAN	8.49	±9.6
10548	AAD	IEEE 802.11ac WiFi (80 MHz, MCS4, 99pc duty cycle)	WLAN	8.37	±9.6
10550	AAD	IEEE 802.11ac WiFi (80 MHz, MCS6, 99pc duty cycle)	WLAN	8.38	±9.6
10551	AAD	IEEE 802.11ac WiF1 (80 MHz, MCS7, 99pc duty cycle)	WLAN	8.50	±9.6
	AAD	IEEE 802.11ac WiFi (80 MHz, MCS8, 99pc duty cycle)	WLAN	8.42	±9.6
10552		IEEE 802.11ac WiFi (80 MHz, MCS9, 99pc duty cycle)	WLAN	8.45	±9.6
	AAD	IEEE 802.11ac WiFi (80 MHz, MCS9, 39pc duty cycle)	WLAN	8.48	±9.6
10554	AAE		WLAN	8.47	±9.6
10555	AAE	IEEE 802.11ac WiFi (160 MHz, MCS1, 99pc duty cycle)	WLAN	8.50	±9.6
10556	AAE	IEEE 802.11ac WiFi (160 MHz, MCS2, 99pc duty cycle)	WLAN	8.52	±9.6
10557	AAE	IEEE 802.11ac WiFi (160 MHz, MCS3, 99pc duty cycle)		1000000	±9.6
10558	AAE	IEEE 802.11ac WiFi (160 MHz, MCS4, 99pc duty cycle)	WLAN	8.61	-
10560	AAE	IEEE 802.11ac WiFi (160 MHz, MCS6, 99pc duty cycle)	WLAN	8.73	±9.6
10561	AAE	IEEE 802.11ac WiFi (160 MHz, MCS7, 99pc duty cycle)	WLAN	8.56	±9.6
10562	AAE	IEEE 802.11ac WiFi (160 MHz, MCS8, 99pc duty cycle)	WLAN	8.69	±9.6
10563	AAE	IEEE 802.11ac WiFi (160 MHz, MCS9, 99pc duty cycle)	WLAN	8.77	±9.6
10564	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 99pc duty cycle)	WLAN	8.25	±9.6
10565	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 99pc duty cycle)	WLAN	8.45	±9.6
10566	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 99pc duty cycle)	WLAN	8.13	±9.6
10567	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 99pc duty cycle)	WLAN	8.00	±9.6
10568	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 99pc duty cycle)	WLAN	8.37	±9.6
10569	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 99pc duty cycle)	WLAN	8.10	±9.6
10570	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 99pc duty cycle)	WLAN	8.30	±9.6
10571	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90pc duty cycle)	WLAN	1.99	±9.6
	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 90pc duty cycle)	WLAN	1.99	±9.6
10572		IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 90pc duty cycle)	WLAN	1.98	±9.6
10573	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 90pc duty cycle)	WLAN	1.98	±9.6
10574	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS, 11 Mbps, 90pc duty cycle)	WLAN	8.59	±9.6
10575			WLAN	8.60	±9.6
10576	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 90pc duty cycle)	WLAN	8.70	±9.6
10577		IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 90pc duty cycle)	WLAN	8.49	±9.6
10578		IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 90pc duty cycle)	WLAN	8.36	±9.6
10579		IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 90pc duty cycle)	WLAN	8.76	±9.6
10580		IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 90pc duty cycle)		8.35	±9.6
10581	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 90pc duty cycle)	WLAN		
10582	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 90pc duty cycle)	WLAN	8.67	±9.6
10583	AAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 90pc duty cycle)	WLAN	8.59	±9.6
10584	AAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 90pc duty cycle)	WLAN	8.60	±9.6
10585	AAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90pc duty cycle)	WLAN	8.70	±9.6
10586	AAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 90pc duty cycle)	WLAN	8.49	±9.6
10587	_	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 90pc duty cycle)	WLAN	8.36	±9.6
10588		IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 90pc duty cycle)	WLAN	8.76	±9.6
10589		IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 90pc duty cycle)	WLAN	8.35	±9.6
10590		IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 90pc duty cycle)	WLAN	8.67	±9.6
10591	_	IEEE 802.11n (HT Mixed, 20 MHz, MCS0, 90pc duty cycle)	WLAN	8.63	±9.6
10592		IEEE 802.11n (HT Mixed, 20 MHz, MCS1, 90pc duty cycle)	WLAN	8.79	±9.6
10592		IEEE 802.11n (HT Mixed, 20 MHz, MCS2, 90pc duty cycle)	WLAN	8.64	±9.6
10593		IEEE 802.11n (HT Mixed, 20 MHz, MCS3, 90pc duty cycle)	WLAN	8.74	±9.6
10594	_	IEEE 802.11n (HT Mixed, 20 MHz, MCS4, 90pc duty cycle)	WLAN	8.74	±9.6
		IEEE 802.11n (HT Mixed, 20 MHz, MCS5, 90pc duty cycle)	WLAN	8.71	±9.6
10596			WLAN	8.72	±9.6
10597		IEEE 802.11n (HT Mixed, 20 MHz, MCSs, 90pc duty cycle)  IEEE 802.11n (HT Mixed, 20 MHz, MCS7, 90pc duty cycle)	WLAN	8.50	±9.6
10598			WLAN	8.79	±9.6
10599		IEEE 802.11n (HT Mixed, 40 MHz, MCS0, 90pc duty cycle)	WLAN	8.88	±9.6
10600		IEEE 802.11n (HT Mixed, 40 MHz, MCS1, 90pc duty cycle)			±9.6
10601	_	IEEE 802.11n (HT Mixed, 40 MHz, MCS2, 90pc duty cycle)	WLAN	8.82	±9.6
10602		IEEE 802.11n (HT Mixed, 40 MHz, MCS3, 90pc duty cycle)	WLAN	8.94	
10603		IEEE 802.11n (HT Mixed, 40 MHz, MCS4, 90pc duty cycle)	WLAN	9.03	±9.6
10604	AAD	IEEE 802.11n (HT Mixed, 40 MHz, MCS5, 90pc duty cycle)	WLAN	8.76	±9.6
10605	5 AAD	IEEE 802.11n (HT Mixed, 40 MHz, MCS6, 90pc duty cycle)	WLAN	8.97	±9.6
10606	6 AAD	IEEE 802.11n (HT Mixed, 40 MHz, MCS7, 90pc duty cycle)	WLAN	8.82	±9.6
10607	7 AAD	IEEE 802.11ac WiFi (20 MHz, MCS0, 90pc duty cycle)	WLAN	8.64	±9.6
	B AAD	IEEE 802.11ac WiFi (20 MHz, MCS1, 90pc duty cycle)	WLAN	8.77	±9.6

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