Calibration Laboratory of

Schmid & Partner
Engineering AG
Zeughausstrasse 43, 8004 Zurich, Switzerland





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

Accreditation No.: SCS 0108

Certificate No: D835V2-499_Mar16

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

Sporton-TW (Auden)

CALIBRATION CERTIFICATE

Object D835V2 - SN: 499

Calibration procedure(s) QA CAL-05.v9

Calibration procedure for dipole validation kits above 700 MHz

Calibration date: March 21, 2016

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)°C and humidity < 70%.

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID#	Cal Date (Certificate No.)	Scheduled Calibration
Power meter EPM-442A	GB37480704	07-Oct-15 (No. 217-02222)	Oct-16
Power sensor HP 8481A	US37292783	07-Oct-15 (No. 217-02222)	Oct-16
Power sensor HP 8481A	MY41092317	07-Oct-15 (No. 217-02223)	Oct-16
Reference 20 dB Attenuator	SN: 5058 (20k)	01-Apr-15 (No. 217-02131)	Mar-16
Type-N mismatch combination	SN: 5047.2 / 06327	01-Apr-15 (No. 217-02134)	Mar-16
Reference Probe EX3DV4	SN: 7349	31-Dec-15 (No. EX3-7349_Dec15)	Dec-16
DAE4	SN: 601	30-Dec-15 (No. DAE4-601_Dec15)	Dec-16
Secondary Standards	ID#	Check Date (in house)	Scheduled Check
RF generator R&S SMT-06	100972	15-Jun-15 (in house check Jun-15)	In house check: Jun-18
Network Analyzer HP 8753E	US37390585 S4206	18-Oct-01 (in house check Oct-15)	In house check: Oct-16
	Name	Function	Signature

Calibrated by:

Name Michael Weber Function

Laboratory Technician

Approved by:

Katja Pokovic

Technical Manager

Issued: March 21, 2016

This calibration certificate shall not be reproduced except in full without written approval of the laboratory.

Certificate No: D835V2-499_Mar16

Page 1 of 8

Calibration Laboratory of

Schmid & Partner
Engineering AG
Zeughausstrasse 43, 8004 Zurich, Switzerland





Schweizerischer Kalibrierdienst 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

Glossary:

TSL

tissue simulating liquid

ConvF N/A sensitivity in TSL / NORM x,y,z not applicable or not measured

Calibration is Performed According to the Following Standards:

- a) IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013
- b) IEC 62209-1, "Procedure to measure the Specific Absorption Rate (SAR) for hand-held devices used in close proximity to the ear (frequency range of 300 MHz to 3 GHz)", February 2005
- c) IEC 62209-2, "Procedure to determine the Specific Absorption Rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)", March 2010
- d) KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

Additional Documentation:

e) DASY4/5 System Handbook

Methods Applied and Interpretation of Parameters:

- Measurement Conditions: Further details are available from the Validation Report at the end of the certificate. All figures stated in the certificate are valid at the frequency indicated.
- Antenna Parameters with TSL: The dipole is mounted with the spacer to position its feed point exactly below the center marking of the flat phantom section, with the arms oriented parallel to the body axis.
- Feed Point Impedance and Return Loss: These parameters are measured with the dipole positioned under the liquid filled phantom. The impedance stated is transformed from the measurement at the SMA connector to the feed point. The Return Loss ensures low reflected power. No uncertainty required.
- Electrical Delay: One-way delay between the SMA connector and the antenna feed point.
 No uncertainty required.
- SAR measured: SAR measured at the stated antenna input power.
- SAR normalized: SAR as measured, normalized to an input power of 1 W at the antenna connector
- SAR for nominal TSL parameters: The measured TSL parameters are used to calculate the nominal SAR result.

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%.

Measurement Conditions

DASY system configuration, as far as not given on page 1.

DASY Version	DASY5	V52.8.8
Extrapolation	Advanced Extrapolation	
Phantom	Modular Flat Phantom	
Distance Dipole Center - TSL	15 mm	with Spacer
Zoom Scan Resolution	dx, dy , $dz = 5 mm$	
Frequency	835 MHz ± 1 MHz	

Head TSL parameters

The following parameters and calculations were applied.

<u> </u>	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	41.5	0.90 mho/m
Measured Head TSL parameters	(22.0 ± 0.2) °C	41.7 ± 6 %	0.93 mho/m ± 6 %
Head TSL temperature change during test	< 0.5 °C		

SAR result with Head TSL

SAR averaged over 1 cm³ (1 g) of Head TSL	Condition	
SAR measured	250 mW input power	2.34 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	9.14 W/kg ± 17.0 % (k=2)

SAR averaged over 10 cm³ (10 g) of Head TSL	condition	
SAR measured	250 mW input power	1.52 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	5.97 W/kg ± 16.5 % (k=2)

Body TSL parameters

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Body TSL parameters	22.0 °C	55.2	0.97 mho/m
Measured Body TSL parameters	(22.0 ± 0.2) °C	54.5 ± 6 %	1.01 mho/m ± 6 %
Body TSL temperature change during test	< 0.5 °C		

SAR result with Body TSL

SAR averaged over 1 cm³ (1 g) of Body TSL	Condition	
SAR measured	250 mW input power	2.46 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	9.52 W/kg ± 17.0 % (k=2)

SAR averaged over 10 cm³ (10 g) of Body TSL	condition	
SAR measured	250 mW input power	1.61 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	6.28 W/kg ± 16.5 % (k=2)

Page 3 of 8 Certificate No: D835V2-499_Mar16

Appendix (Additional assessments outside the scope of SCS 0108)

Antenna Parameters with Head TSL

Impedance, transformed to feed point	53.1 Ω - 3.2 jΩ
Return Loss	- 27.3 dB

Antenna Parameters with Body TSL

Impedance, transformed to feed point	49.0 Ω - 5.3 jΩ	
Return Loss	- 25.3 dB	

General Antenna Parameters and Design

Electrical Delay (one direction)	1.390 ns

After long term use with 100W radiated power, only a slight warming of the dipole near the feedpoint can be measured.

The dipole is made of standard semirigid coaxial cable. The center conductor of the feeding line is directly connected to the second arm of the dipole. The antenna is therefore short-circuited for DC-signals. On some of the dipoles, small end caps are added to the dipole arms in order to improve matching when loaded according to the position as explained in the "Measurement Conditions" paragraph. The SAR data are not affected by this change. The overall dipole length is still according to the Standard.

No excessive force must be applied to the dipole arms, because they might bend or the soldered connections near the feedpoint may be damaged.

Additional EUT Data

Manufactured by	SPEAG
Manufactured on	July 10, 2003

Certificate No: D835V2-499_Mar16 Page 4 of 8

DASY5 Validation Report for Head TSL

Date: 21.03.2016

Test Laboratory: SPEAG, Zurich, Switzerland

DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN: 499

Communication System: UID 0 - CW; Frequency: 835 MHz

Medium parameters used: f = 835 MHz; $\sigma = 0.93$ S/m; $\varepsilon_r = 41.7$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

• Probe: EX3DV4 - SN7349; ConvF(9.83, 9.83, 9.83); Calibrated: 31.12.2015;

• Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn601; Calibrated: 30.12.2015

Phantom: Flat Phantom 4.9L; Type: QD000P49AA; Serial: 1001

• DASY52 52.8.8(1258); SEMCAD X 14.6.10(7372)

Dipole Calibration for Head Tissue EX-Probe/Pin=250 mW, d=15mm/Zoom Scan

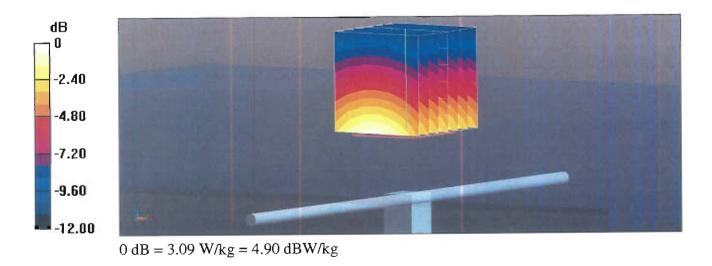
(7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 60.98 V/m; Power Drift = 0.01 dB

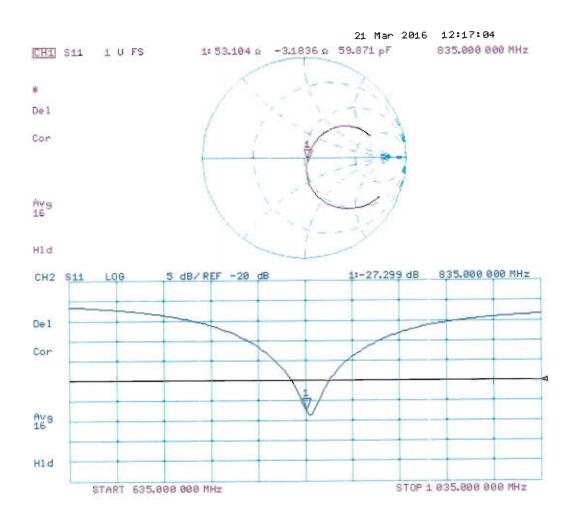
Peak SAR (extrapolated) = 3.47 W/kg

SAR(1 g) = 2.34 W/kg; SAR(10 g) = 1.52 W/kg

Maximum value of SAR (measured) = 3.09 W/kg



Impedance Measurement Plot for Head TSL



DASY5 Validation Report for Body TSL

Date: 21.03.2016

Test Laboratory: SPEAG, Zurich, Switzerland

DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN: 499

Communication System: UID 0 - CW; Frequency: 835 MHz

Medium parameters used: f = 835 MHz; $\sigma = 1.01$ S/m; $\varepsilon_r = 54.5$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

Probe: EX3DV4 - SN7349; ConvF(9.73, 9.73, 9.73); Calibrated: 31.12.2015;

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn601; Calibrated: 30.12.2015

Phantom: Flat Phantom 4.9L; Type: QD000P49AA; Serial: 1001

DASY52 52.8.8(1258); SEMCAD X 14.6.10(7372)

Dipole Calibration for Body Tissue EX-Probe/Pin=250 mW, d=15mm/Zoom Scan

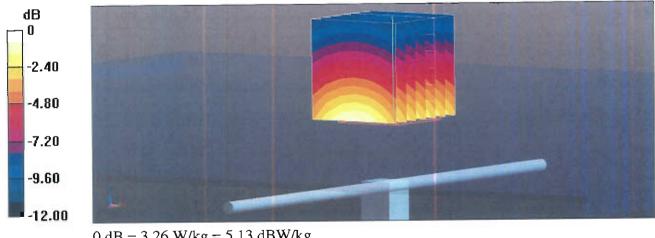
(7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 60.24 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 3.63 W/kg

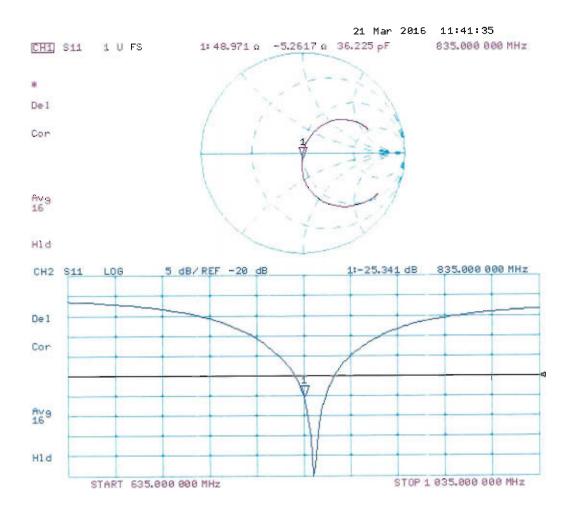
SAR(1 g) = 2.46 W/kg; SAR(10 g) = 1.61 W/kg

Maximum value of SAR (measured) = 3.26 W/kg



0 dB = 3.26 W/kg = 5.13 dBW/kg

Impedance Measurement Plot for Body TSL



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





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

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

Sporton - TW (Auden)

Accreditation No.: SCS 0108

C

Certificate No: DAE3-577_Sep16

CALIBRATION CERTIFICATE

Object

DAE3 - SD 000 D03 AA - SN: 577

Calibration procedure(s)

QA CAL-06.v29

Calibration procedure for the data acquisition electronics (DAE)

Calibration date:

September 28, 2016

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)°C and humidity < 70%.

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID#	Cal Date (Certificate No.)	Scheduled Calibration
Keithley Multimeter Type 2001	SN: 0810278	09-Sep-16 (No:19065)	Sep-17
			Ostradulad Charle
Secondary Standards	ID#	Check Date (in house)	Scheduled Check
Secondary Standards Auto DAE Calibration Unit	ID # SE UWS 053 AA 1001		In house check: Jan-17

Calibrated by:

Name

Function

Eric Hainfeld

Technician

Approved by:

Fin Bomholt

Deputy Technical Manager

Issued: September 28, 2016

This calibration certificate shall not be reproduced except in full without written approval of the laboratory.

Certificate No: DAE3-577_Sep16

Page 1 of 5

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

Certificate No: DAE3-577 Sep16





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

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

Accreditation No.: SCS 0108

Glossary

DAE data acquisition electronics

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

coordinate system.

Methods Applied and Interpretation of Parameters

- DC Voltage Measurement: Calibration Factor assessed for use in DASY system by comparison with a calibrated instrument traceable to national standards. The figure given corresponds to the full scale range of the voltmeter in the respective range.
- Connector angle: The angle of the connector is assessed measuring the angle mechanically by a tool inserted. Uncertainty is not required.
- The following parameters as documented in the Appendix contain technical information as a result from the performance test and require no uncertainty.
 - DC Voltage Measurement Linearity: Verification of the Linearity at +10% and -10% of the nominal calibration voltage. Influence of offset voltage is included in this measurement.
 - Common mode sensitivity: Influence of a positive or negative common mode voltage on the differential measurement.
 - Channel separation: Influence of a voltage on the neighbor channels not subject to an input voltage.
 - AD Converter Values with inputs shorted: Values on the internal AD converter corresponding to zero input voltage
 - Input Offset Measurement. Output voltage and statistical results over a large number of zero voltage measurements.
 - Input Offset Current: Typical value for information; Maximum channel input offset current, not considering the input resistance.
 - Input resistance: Typical value for information: DAE input resistance at the connector, during internal auto-zeroing and during measurement.
 - Low Battery Alarm Voltage: Typical value for information. Below this voltage, a battery alarm signal is generated.
 - Power consumption: Typical value for information. Supply currents in various operating modes.

DC Voltage Measurement

A/D - Converter Resolution nominal

High Range: 1LSB =

6.1μV ,

full range = -100...+300 mV

Low Range:

1LSB =

61nV ,

full range = -1.....+3mV

DASY measurement parameters: Auto Zero Time: 3 sec; Measuring time: 3 sec

Calibration Factors	X	Υ	Z
High Range	403.533 ± 0.02% (k=2)	403.512 ± 0.02% (k=2)	403.819 ± 0.02% (k=2)
Low Range	3.92648 ± 1.50% (k=2)	3.94206 ± 1.50% (k=2)	3.96074 ± 1.50% (k=2)

Connector Angle

Connector Angle to be used in DASY system	190.0 ° ± 1 °

Certificate No: DAE3-577_Sep16

Appendix (Additional assessments outside the scope of SCS0108)

1. DC Voltage Linearity

High Range	Reading (μV)	Difference (μV)	Error (%)
Channel X + Input	200038.14	2.56	0.00
Channel X + Input	20010.51	5.45	0.03
Channel X - Input	-20002.01	3.17	-0.02
Channel Y + Input	200032.33	-3.18	-0.00
Channel Y + Input	20006.38	1.35	0.01
Channel Y - Input	-20004.73	0.65	-0.00
Channel Z + Input	200031.49	-4.11	-0.00
Channel Z + Input	20005.92	0.98	0.00
Channel Z - Input	-20007.03	-1.64	0.01

Low Range		Reading (μV)	Difference (μV)	Error (%)
Channel X	+ Input	2001.00	-0.10	-0.01
Channel X	+ Input	201.47	0.40	0.20
Channel X	- Input	-198.57	0.28	-0.14
Channel Y	+ Input	2001.38	0.31	0.02
Channel Y	+ Input	200.40	-0.54	-0.27
Channel Y	- Input	-199.63	-0.73	0.37
Channel Z	+ Input	2000.35	-0.56	-0.03
Channel Z	+ Input	199.97	-0.93	-0.46
Channel Z	- Input	-200.50	-1.56	0.79

2. Common mode sensitivity

DASY measurement parameters: Auto Zero Time: 3 sec; Measuring time: 3 sec

	Common mode Input Voltage (mV)	High Range Average Reading (μV)	Low Range Average Reading (μV)
Channel X	200	-2.76	-4.30
	- 200	6.04	3.73
Channel Y	200	-14.29	-14.35
	- 200	12.74	12.77
Channel Z	200	3.10	2.81
	- 200	-5.90	-5.65

3. Channel separation

DASY measurement parameters: Auto Zero Time: 3 sec; Measuring time: 3 sec

	Input Voltage (mV)	Channel X (μV)	Channel Y (μV)	Channel Z (μV)
Channel X	200	-	-1.07	-3.44
Channel Y	200	8.43	Y	0.12
Channel Z	200	5.44	4.83	-

4. AD-Converter Values with inputs shorted

DASY measurement parameters: Auto Zero Time: 3 sec; Measuring time: 3 sec

	High Range (LSB)	Low Range (LSB)
Channel X	16132	16062
Channel Y	16099	16321
Channel Z	16116	15372

5. Input Offset Measurement

DASY measurement parameters: Auto Zero Time: 3 sec; Measuring time: 3 sec

Input 10MΩ

	Average (μV)	min. Offset (μV)	max. Offset (μV)	Std. Deviation (µV)
Channel X	0.37	-1.07	1.49	0.43
Channel Y	1.21	-0.41	3.21	0.59
Channel Z	-1.38	-2.63	-0.30	0.45

6. Input Offset Current

Certificate No: DAE3-577_Sep16

Nominal Input circuitry offset current on all channels: <25fA

7. Input Resistance (Typical values for information)

	Zeroing (kOhm)	Measuring (MOhm)
Channel X	200	200
Channel Y	200	200
Channel Z	200	200

8. Low Battery Alarm Voltage (Typical values for information)

Typical values	Alarm Level (VDC)	
Supply (+ Vcc)	+7.9	
Supply (- Vcc)	-7.6	

9. Power Consumption (Typical values for information)

Typical values	Switched off (mA)	Stand by (mA)	Transmitting (mA)
Supply (+ Vcc)	+0.01	+6	+14
Supply (- Vcc)	-0.01	-8	-9

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





Schweizerischer Kalibrierdienst 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

Sporton-TW (Auden)

Certificate No: EX3-3931_Oct16

CALIBRATION CERTIFICATE

Object

EX3DV4 - SN:3931

Calibration procedure(s)

QA CAL-01.v9, QA CAL-14.v4, QA CAL-23.v5, QA CAL-25.v6

Calibration procedure for dosimetric E-field probes

Calibration date:

October 3, 2016

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)°C and humidity < 70%.

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID	Cal Date (Certificate No.)	Scheduled Calibration
Power meter NRP	SN: 104778	06-Apr-16 (No. 217-02288/02289)	Apr-17
Power sensor NRP-Z91	SN: 103244	06-Apr-16 (No. 217-02288)	Apr-17
Power sensor NRP-Z91	SN: 103245	06-Apr-16 (No. 217-02289)	Apr-17
Reference 20 dB Attenuator	SN: S5277 (20x)	05-Apr-16 (No. 217-02293)	Apr-17
Reference Probe ES3DV2	SN: 3013	31-Dec-15 (No. ES3-3013_Dec15)	Dec-16
DAE4	SN: 660	23-Dec-15 (No. DAE4-660_Dec15)	Dec-16
Secondary Standards	ID	Check Date (in house)	Scheduled Check
Power meter E4419B	SN: GB41293874	06-Apr-16 (in house check Jun-16)	In house check: Jun-18
Power sensor E4412A	SN: MY41498087	06-Apr-16 (in house check Jun-16)	In house check: Jun-18
Power sensor E4412A	SN: 000110210	06-Apr-16 (in house check Jun-16)	In house check; Jun-18
RF generator HP 8648C	SN: US3642U01700	04-Aug-99 (in house check Jun-16)	In house check: Jun-18
Network Analyzer HP 8753E	SN: US37390585	18-Oct-01 (in house check Oct-15)	In house check: Oct-16
tormount mentage in or over	Control At Anna Property Control Contr		

Name

Function

Laboratory Technician

Approved by:

Calibrated by:

Katja Pokovic

Michael Weber

Technical Manager

Issued: October 4, 2016

This calibration certificate shall not be reproduced except in full without written approval of the laboratory

Certificate No: EX3-3931_Oct16

Page 1 of 38

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





S 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

Glossary:

TSL NORMx,y,z tissue simulating liquid sensitivity in free space

ConvF

sensitivity in TSL / NORMx,y,z diode compression point

CF A, B, C, D crest factor (1/duty_cycle) of the RF signal modulation dependent linearization parameters

Polarization o

φ rotation around probe axis

Polarization 9

9 rotation around an axis that is in the plane normal to probe axis (at measurement center),

i.e., 9 = 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:

 IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013

b) IEC 62209-1, "Procedure to measure the Specific Absorption Rate (SAR) for hand-held devices used in close

proximity to the ear (frequency range of 300 MHz to 3 GHz)", February 2005

c) IEC 62209-2, "Procedure to determine the Specific Absorption Rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)", March 2010

d) KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

Methods Applied and Interpretation of Parameters:

 NORMx,y,z: Assessed for E-field polarization 3 = 0 (f ≤ 900 MHz in TEM-cell; f > 1800 MHz: R22 waveguide). NORMx,y,z are only intermediate values, i.e., the uncertainties of NORMx,y,z does not affect the E²-field uncertainty inside TSL (see below ConvF).

 NORM(f)x,y,z = NORMx,y,z * frequency_response (see Frequency Response Chart). This linearization is implemented in DASY4 software versions later than 4.2. The uncertainty of the frequency response is included

in the stated uncertainty of ConvF.

DCPx,y,z: DCP are numerical linearization parameters assessed based on the data of power sweep with CW signal (no uncertainty required). 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

Certificate No: EX3-3931_Oct16

 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.

• ConvF and Boundary Effect Parameters: Assessed in flat phantom using E-field (or Temperature Transfer Standard for f ≤ 800 MHz) and inside waveguide using analytical field distributions based on power measurements for f > 800 MHz. The same setups are used for assessment of the parameters applied for boundary compensation (alpha, depth) of which typical uncertainty values are given. These parameters are used in DASY4 software to improve probe accuracy close to the boundary. The sensitivity in TSL corresponds to NORMx,y,z * ConvF whereby the uncertainty corresponds to that given for ConvF. A frequency dependent ConvF is used in DASY version 4.4 and higher which allows extending the validity from ± 50 MHz to ± 100 MHz.

 Spherical isotropy (3D deviation from isotropy): in a field of low gradients realized using a flat phantom exposed by a patch antenna.

- 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).

Probe EX3DV4

SN:3931

Manufactured:

July 24, 2013

Repaired:

September 27, 2016

Calibrated:

October 3, 2016

Calibrated for DASY/EASY Systems

(Note: non-compatible with DASY2 system!)

DASY/EASY - Parameters of Probe: EX3DV4 - SN:3931

Basic Calibration Parameters

	Sensor X	Sensor Y	Sensor Z	Unc (k=2)
Norm $(\mu V/(V/m)^2)^A$	0.50	0.56	0.47	± 10.1 %
DCP (mV) ^B	99.3	102.3	99.2	

Modulation Calibration Parameters

CiD	Communication System Name		A dB	B dB√μV	C	D dB	VR mV	Unc ² (k=2)
0	CW	X	0.0	0.0	1.0	0.00	165.2	±2.2 %
_		Y	0.0	0.0	1,0		169.6	
		Z	0.0	0.0	1.0		158.4	

Note: For details on UID parameters see Appendix.

Sensor Model Parameters

	C1 fF	C2 fF	α V ⁻¹	T1 ms.V ⁻²	T2 ms.V ⁻¹	T3 ms	T4 V-2	T5 V ⁻¹	Т6
X	39.73	299.4	36.38	13.81	1.099	5.004	0.119	0.351	1.005
Y	59.82	447.7	35.85	21.83	1.546	5.045	0.719	0.472	1.007
Z	54.23	405.8	35.74	19.34	1.491	5.007	0.433	0.514	1.005

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%.

³ Numerical linearization parameter: uncertainty not required.

A The uncertainties of Norm X,Y,Z do not affect the E2-field uncertainty inside TSL (see Pages 5 and 6).

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

October 3, 2016

DASY/EASY - Parameters of Probe: EX3DV4 - SN:3931

Calibration Parameter Determined in Head Tissue Simulating Media

f (MHz) ^C	Relative Permittivity ^F	Conductivity (S/m) ^F	ConvF X	GonvF Y	ConvF Z	Alpha ^G	Depth ^G (mm)	Unc (k=2)
75 0	41.9	0.89	10.68	10.68	10.68	0.47	0.86	± 12.0 %
835_	41.5	0.90	10.35	10.35	10.35	0.43	0.80	± 12.0 %
900	41.5	0.97	10.09	10.09	10.09	0.44	0.86	± 12.0 %
1450	40.5	1.20	8.73	8.73	8.73	0.45	0.80	± 12.0 %
1750	40.1	1.37	8.68	8.68	8.68	0.37	08.0	± 12.0 %
1900	40.0	1.40	8.42	8.42	8.42	0.34_	0.80	± 12.0 %
2000	40.0	1.40	8.43	8.43	8.43	0.37	0.80	± 12.0 %
2300	39. <u>5</u>	1.67	7.94	7.94	7.94	0.28	0.86	± 12.0 %
2450 _	39.2	1.80	7.60	7.60	7.60	0.36	0.84	± 12.0 %
2600	39.0	1.96	7.37	7.37	7.37	0.31	0.97	± 12.0 %
5250	35.9	4.71	5.38	5.38	5.38_	0.35	1.80	± 13.1 %
5600	35. <u>5</u>	5.07	4.68	4.68	4.68	0.40	1.80	± 13.1 %
5750	35.4	5.22	4.84	4.84	4.84	0.40	1.80	<u>+ 13.1 %</u>

Frequency validity above 300 MHz of \pm 100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to \pm 50 MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is \pm 10, 25, 40, 50 and 70 MHz for ConvF assessments at 30, 64, 128, 150 and 220 MHz respectively. Above 5 GHz frequency validity can be extended to \pm 110 MHz.

^a At frequencies below 3 GHz, the validity of tissue parameters (ϵ and σ) can be relaxed to \pm 10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters (ϵ and σ) is restricted to \pm 5%. The uncertainty is the RSS of the ConvE uncertainty for indicated target tissue parameters.

the ConvF uncertainty for Indicated target tissue parameters.

Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than ± 1% for frequencies below 3 GHz and below ± 2% for frequencies between 3-6 GHz at any distance larger than half the probe tip diameter from the boundary.

DASY/EASY - Parameters of Probe: EX3DV4 - SN:3931

Calibration Parameter Determined in Body Tissue Simulating Media

f (MHz) ^G	Relative Permittivity ^F	Conductivity (S/m) F	ConvF X	ConvF Y	ConvF Z	Alpha ^G	Depth ^G (mm)	Unc (k=2)
750	55.5	0.96	10.37	10.37	10.37	0.38	0.97	± 12.0 %
835	55.2	0.97	10.14	10.14	10.14	0.36	0.99	± 12.0 %
1450	54.0	1.30	8.53	8.53	8.53	0.31	0.80	± 12.0 %
1750	53.4	1.49	ı _J 8.45	8.45	8.45	0.37	0.80	± 12.0 %
1900	53.3	1.52	8.14	8.14	8.14	0.33	0.90	± 12.0 %
2300	52.9	1.81	7.96	7.96	7.96	0.39	0.80	± 12.0 %
2450	52.7	1.95	7.73	7.73	7.73	0.38	0.85	± 12.0 %
2600	52.5	2.16	7.46	7.46	7.46	0.25_	0.95	± 12.0 %
5250	48.9	5.36	4.57	4.57	4.57	0.50	1.90	± 13.1 %
5600	48.5	5.77	3.71	3.71	3.71	0.60	1.90	± 13.1 %
5750	48.3	5.94	4.01	4.01	4.01	0.60	1.90	± 13.1 %

^c Frequency validity above 300 MHz of \pm 100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to \pm 50 MHz. The uncertainty is the RSS of the CorivF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is \pm 10, 25, 40, 50 and 70 MHz for ConvF assessments at 30, 64, 128, 150 and 220 MHz respectively. Above 5 GHz frequency validity can be extended to \pm 110 MHz.

validity can be extended to \pm 110 MHz.

F At frequencies below 3 GHz, the validity of tissue parameters (ϵ and σ) can be relaxed to \pm 10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters (ϵ and σ) is restricted to \pm 5%. The uncertainty is the RSS of the Copy for parameters (ϵ indicated target tissue parameters.

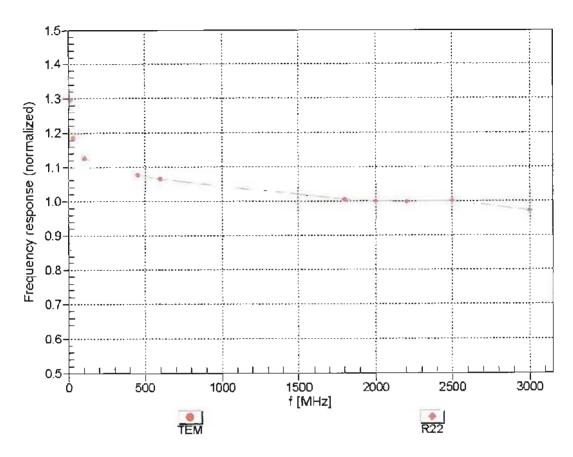
the ConvF uncertainty for indicated target tissue parameters.

Galpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than ± 1% for frequencies below 3 GHz and below ± 2% for frequencies between 3-6 GHz at any distance larger than half the probe tip diameter from the boundary.

October 3, 2016

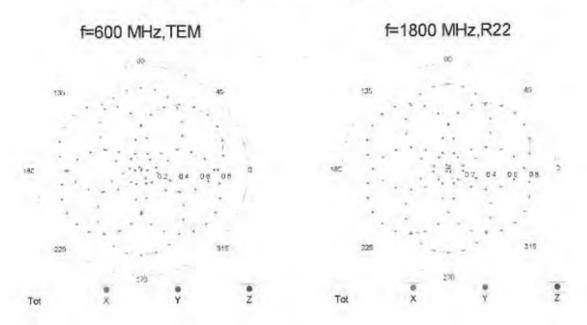
Frequency Response of E-Field (TEM-Cell:ifi110 EXX, Waveguide: R22)

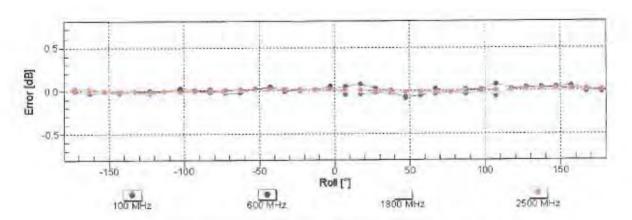
EX3DV4-SN:3931



Uncertainty of Frequency Response of E-field: ± 6.3% (k=2)

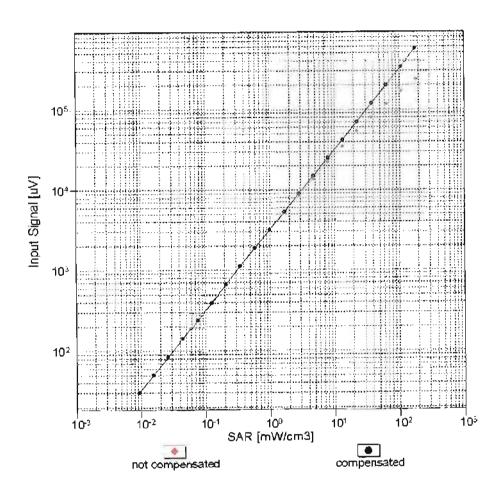
Receiving Pattern (ϕ), $\vartheta = 0^{\circ}$

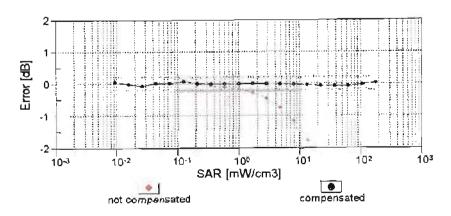




Uncertainty of Axial Isotropy Assessment: ± 0.5% (k=2)

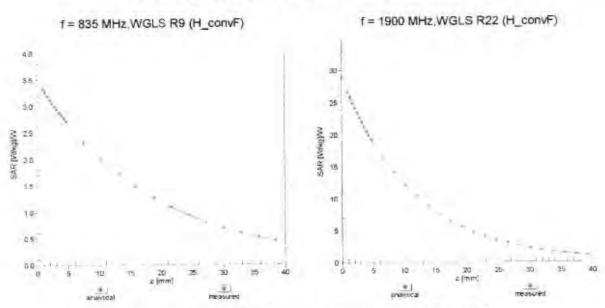
Dynamic Range f(SAR_{head}) (TEM cell , f_{eval}= 1900 MHz)





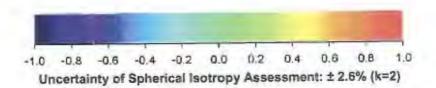
Uncertainty of Linearity Assessment: ± 0.6% (k=2)

Conversion Factor Assessment



Deviation from Isotropy in Liquid Error (6, 8), f = 900 MHz

1.0 8.0 0.6 0.4 0.2 0.0 -0.2 -0.4 -0.6 -0.8 -1.0 0 45 90 135 180 225 60 270 40 30 4 [deg] 315 10



0

October 3, 2016

DASY/EASY - Parameters of Probe: EX3DV4 - SN:3931

Other Probe Parameters

Sensor Arrangement	Triangular
Connector Angle (°)	127.3
Mechanical Surface Detection Mode	enabled
Optical Surface Detection Mode	disabled
Probe Overall Length	337 mm
Probe Body Diameter	10 mm
Tip Length	9 mm
Tip Diameter	2.5 mm
Probe Tip to Sensor X Calibration Point	1 mm
Probe Tip to Sensor Y Calibration Point	1 mm
Probe Tip to Sensor Z Calibration Point	1 mm
Recommended Measurement Distance from Surface	1.4 mm

Appendix: Modulation Calibration Parameters

ÛIĎ	ix: Modulation Calibration Paral Communication System Name		A dB	B dBõV	С	D dB	VR mV	Max Unc ^E (k=2)
0	CW	X	0.00	0.00	1.00	0.00	165.2	± 2.2 %
		Y	0.00	0.00	1.00		169.6	
		Z	0.00	0.00	1.00		158.4	
10010- CAA	SAR Validation (Square, 100ms, 10ms)	Х	3.48	69.31	12.63	10.00	20.0	± 9.6 %
		Υ	5.87	75.87	16.27		20.0	
		Z	4.02	70.66	13.78		20.0	
10011- CAB	UMTS-FDD (WCDMA)	X	1.30	72.39	18.20	0.00	150.0	± 9.6 %
		Υ	1.19	69.63	16.77		150.0	<u> </u>
		Z	1.01	66.38	14.76	0.44	150.0	
10012- CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps)	X	1.24	65.29	16.42	0.41	150.0	± 9.6 %
		Y	1.26	64.91	16.05		150.0	
10015		Z	1.20	63.67	14.96	4 40	150.0	+000
10013- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps)	X	4.82	66.95	17.27	1.46	150.0	± 9.6 %
		Y	5.04	66.77	17.23		150.0	
10001	COLLEGE (TOLLA CLICK)	Z	4.95	66.50	16.90	0.20	150.0	1069/
10021- DAB	GSM-FDD (TDMA, GMSK)	X	100.00	114.09	27.93	9.39	50.0	± 9.6 %
		Υ	100.00	118.26	30.54		50.0	
		Z	25.45	96.76	24.27	5.57	50.0	. 0.0 %
10023- DAB	GPRS-FDD (TDMA, GMSK, TN 0)	X	83.93	111.52	27.32	9.57	50.0	± 9.6 %
		Y	99.99	118.26	30.60		50.0	
10024-	GPRS-FDD (TDMA, GMSK, TN 0-1)	Z X	19.40 100.00	92.86 112.26	23.18 25.94	6.56	50.0 60.0	± 9.6 %
DAB		Y	100.00	115.42	28.11		60.0	
		Z	100.00	112.41	26.50		60.0	
10025- DAB	EDGE-FDD (TDMA, 8PSK, TN 0)	X	5.67	76.70	28.63	12.57	50.0	± 9.6 %
DAD		Y	15.06	105.00	40.92		50.0	
		Z	5.92	75.84	27.63		50.0	
10026- DAB	EDGE-FDD (TDMA, 8PSK, TN 0-1)	Х	9.71	91.87	32.18	9.56	60.0	±9.6 %
D, (C		Υ	18.06	104.69	36.55		60.0	
		Z	11.21	92.21	31.55		60.0	
10027- DAB	GPRS-FDD (TDMA, GMSK, TN 0-1-2)	Х	100.00	112.68	25.31	4.80	80.0	±9.6 %
	-	Υ	100.00	114.88	27.06		80.0	
		Z	100.00	111.26	25.19		80.0	
10028- DAB	GPRS-FDD (TDMA, GMSK, TN 0-1-2-3)	Х	100.00	114.77	25.52	3.55	100.0	± 9.6 %
		Υ	100.00	115.72	26.71		100.0	
		Z	100.00	111.32	24.54		100.0	
10029- DAB	EDGE-FDD (TDMA, 8PSK, TN 0-1-2)	Х	6.19	82.03	27.36	7.80	80.0	± 9.6 %
		Υ	10.55	92.05	31.00		80.0	
		Z	7.5 <u>3</u>	83.82	27.35		80.0	
10030- CAA	IEEE 802.15.1 Bluetooth (GFSK, DH1)	Х	100.00	110.56	24.66	5.30	70.0	± 9.6 %
		Υ	100.00	113.96	26.95		70.0	
		Z	100.00	110.53	25.16	4	70.0	. 5 2 2/
10031- CAA	IEEE 802.15.1 Bluetooth (GFSK, DH3)	Х	100.00	116.75	24.95	1.88	100.0	± 9.6 %
		Y	100.00	117.62	26.11	- 51	100.0	
		Z	100.00	110.75	23.01		100.0	

10032-	IEEE 802.15.1 Bluetooth (GFSK, DH5)	Х	100.00	131.18	29.75	1.17	100.0	± 9.6 %
CAA		$\overline{}$	400.00	125.29	28.26		100.0	
		Y	100.00	125.29	23.87		100.0	
	The state of the s	Z	100.00	90.53	23.32	5.30	70.0	± 9.6 %
10033- CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH1)	X	10.93	90.55	23.32	5.50		
<u> </u>		Υ	20.55	101.44	27.99		70.0	
		Z	7.67	84.45	21.88		70.0	
10034-	IEEE 802.15.1 Bluetooth (PI/4-DQPSK,	$\frac{\overline{x}}{x}$	5.70	84.58	20.06	1.88	100.0	± 9.6 %
CAA	DH3)	^`	0					
<u> </u>	D113)	Υ	5.85	85.75	22.03		100.0	
		Z	2.95	74.86	17.34		100.0	
10035- CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH5)	X	3,92	81.20	18.80	1.17	100.0	± 9.6 %
<u> </u>	0.107	Υ	3.48	79.72	19.80_		100.0	
		Z	2.10	71.76	15.97		100.0	
10036- CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH1)	Х	15.13	95.54	24.90	5.30	70.0	± 9.6 %
<u> </u>		Υ	28.86	107.18	29.66		70.0	
		Z	9.07	87.21	22.88		70.0	
10037- CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH3)	X	4.82	82.50	19.36	1.88	100.0	± 9.6 %
		Y	5.58	85.13	21.78		100.0	
		Z	2.82	74.36	17.11		100.0	
10038- CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH5)	X	4.08	82.09	19.24	1.17	100.0	± 9.6 %
0,01		Y	3.57	80.38	20.14		100.0	
		Z	2.12	72.10	16.20		100.0	
10039- CAB	CDMA2000 (1xRTT, RC1)	Х	5.80	88.31	21.06	0.00	150.0	± 9.6 %
CND		Y	2.44	75.65	18.16		150. <u>0</u>	
		Z	1.80	71.10	15.73		150.0	
10042- CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4- DQPSK, Halfrate)	X	100.00	110.27	25.32	7.78	50.0	± 9.6 %
CAD	DQF3K, Hailfate)	Y	100.00	114.03	27.70		50.0	
		Ž	32.06	97.64	22.93		50.0	
10044- CAA	IS-91/EIA/TIA-553 FDD (FDMA, FM)	X	0.00	105.67	0.52	0.00	150.0	± 9.6 %
<u> </u>		Υ	0.00	101.10	0.34		150.0	
		Z	0.00	94.56	3.16		150.0	
10048- CAA	DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24)	X	11.94	82.95	20.71	13.80	25.0	± 9.6 %
<u> </u>	0.00, 2.1/	Y	15.06	89.64	24.59		25.0	
_		Z	9.78	81.31	21.11		25.0	
10049- CAA	DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12)	X	15.54	88.48	21.39	10.79	40.0	± 9.6 %
		Y	23.79	97.14	25.51		40.0	<u> </u>
		Z	11.46	84.91	21.03		40.0	<u> </u>
10056- CAA	UMTS-TDD (TD-SCDMA, 1.28 Mcps)	X	13.32	89.14	23.36	9.03	50.0	± 9.6 %
<u> </u>		Y	16.34	93.59	26.16		50.0	
		Z	10.18	84.57	22.45		50.0	
10058- DAB	EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)	Х	4.78	77.20	24.69	6.55	100.0	± 9.6 %
		Y	7.46	84.92	27.60		100.0	<u> </u>
		Z	5.76	78.94	24.73		100.0	
10059- CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps)	Х	1,30	66.67	17.10	0.61	110.0	± 9.6 %
<u></u>		Y	1.37	66.65	16.91		110.0	<u> </u>
		Z	1.27	64.87	15.53		110.0	
10060- CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps)	X	100.00	139.37	36.42	1.30	110.0	± 9.6 %
		Y	100.00	134.75	34.85		110.0	
		Y	100.00	134.10	04.00			

10061- CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps)	X	4.16	86.26	24.31	2.04	110.0	± 9.6 %
₩	- I to the proof	Υ	6.78	92.08	26.03		110.0	
		Ż	3.18	78.55	20.67		110.0	
10062- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps)	X	4.62	66.99	16.77	0.49	100.0	± 9.6 %
<u> </u>		Υ	4.83	66.75	16.66		100.0	
		Z	4.75	66.51	16.38		100.0	
10063- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps)	X	4.64	67.08	16.86	0.72	100.0	± 9.6 %
		Υ	4.86	66.87	16.78		100.0	
		Z	4.77	66.60	16.47	_	100.0	
10064- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps)	Х	4.89	67.27	17.04	0.86	100.0	± 9.6 %
		Υ	5.19	67.18	17.02		100.0	
		Z	5.08	66.89	16.71		100.0	
10065- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps)	Х	4.77	67.14	17.11	1.21	100.0	± 9.6 %
		Y	5.06	67.12	17.13		100.0	
		Z	4.94	66.80	16.79		100.0	
10066- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps)	X	4.78	67.15	17.25	1.46	100.0	± 9.6 %
		Y	5.09	67.18	17.31		100.0	
		Z	4.97	66.83	16.94		100.0	. =
10067- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps)	X	5.07	67.35	17.68	2.04	100.0	± 9.6 %
		Υ	5.38	67.26	17.72		100.0	
		Z	5.26	66.92	17.34		100.0	
10068- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps)	X	5.11	67.30	17.84	2.55	100.0	± 9.6 %
		Υ	5.48	67.51	18.02		100.0	
		Z	5.3 <u>4</u>	67.10	17.60		100.0	
10069- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps)	Х	5.18	67.33	18.03	2.67	100.0	± 9.6 %
		Υ	5.55	67.43	18.19		100.0	
		Z	5.42	67.05	17.77		100.0	
10071- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps)	X	4.92	67.02	17.54	1.99	100.0	± 9.6 %
		Υ	5.1 <u>5</u>	66.91	17. <u>5</u> 5		100.0	
		Z	5.0 <u>5</u>	66.61	17.20		100.0	
10072- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps)	X	4.89	67.32	17.73	2.30	100.0	± 9.6 %
		Υ	5.18	67.36	17.81		100.0	
		Z	5.06	66.97	17.41		100.0	
100 7 3- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps)	Х	4.97	67.51	18.05	2.83	100.0	± 9.6 %
		Υ	5.26	67.57	18.16		100.0	
		Z	5.13	67.15	17.71		100.0	
10074- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps)	X	4.97	67.45	1 8.19	3.30	100.0	± 9.6 %
		Υ	5.25	67.52	18.35		100.0	
		Z	5.12	67.08	17.88	<u> </u>	100.0	
100 7 5- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps)	Х	5.01	67.53	18.46	3.82	90.0	± 9.6 %
		Υ	5.35	67.85	18.77		90.0	
		Z	5.20	67.32	18.23		90.0	
10076- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps)	Х	5.05	67.39	18.61	4.15	90.0	± 9.6 %
		Y	5.33	67.57	18.84		90.0	
		Z	5.20	67.09	18.32		90.0	
10077- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps)	Х	5.08	67.49	18.72	4.30	90.0	± 9.6 %
	•	Υ	5.35	67.63	18.93		90.0	
		Z	5.23	67.15	18.41		90.0	

		7/ 1	4 04	70.00	15.39	0.00	150.0	± 9.6 %
10081- CAB	CDMA2000 (1xRTT, RC3)	×	1.31	72.98		0.00		
0		Υ	1.11	69.20	15.13		150.0	
		Z	0.87	65.58	12.79		150.0	100
10082- CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4- DQPSK, Fullrate)	Х	0.85	60.00	5.02	4.77	80.0	± 9.6 %
JAD	DQI SIX, I diliate)	Y	1,21	60.81	6.24		80.0	
		Z	1.05	60.00	5.50		80.0	
10090-	GPRS-FDD (TDMA, GMSK, TN 0-4)	X	100.00	112.28	25.96	6.56	60.0	± 9.6 %
DAB		Υ	100.00	115.46	28.15		60.0	
		Z	100.00	112.45	26.54		60.0	
10097- CAB	UMTS-FDD (HSDPA)	X	2.10	70.95	17.43	0.00	150.0	± 9.6 %
<u> </u>	===7	Y	1.95	68.39	16.42		150.0	
		Z	1.81	67.01	15.42		150.0	
10098- CAB	UMTS-FDD (HSUPA, Subtest 2)	Х	2.06	70.93	17.43	0.00	150.0	± 9.6 %
<u> </u>		Y	1.91	68.38	16.41		150.0	
		Z	1.77	66.95	15.38		150.0	
10099- DAB	EDGE-FDD (TDMA, 8PSK, TN 0-4)	x	9.76	91.94	32.20	9.56	60.0	± 9.6 %
<u> </u>		Υ	18.08	104.66	36.54		60.0	
_		Z	11.25	92.22	31.54		60.0	
10100- CAB	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	X	3.35	72.13	17.90	0.00	150.0	± 9.6 %
CAB	WILIZ, GILORY	Y	3.43	71.55	17.33		150.0	
		Z	3.14	69.99	16.48		150.0	
10101-	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	X	3.28	68.30	16.59	0.00	150.0	± 9.6 %
CAB_	IVIFIZ, TO-QAIVI)	Y	3.42	68.10	16.32		150.0	
		Z	3.28	67.37	15.82		150.0	
10102-	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	X	3.39	68.25	16.67	0.00	150.0	± 9.6 %
CAB	MHZ, 64-QAM)	Y	3.51	67.99	16.38		150.0	
		Z	3.39	67.35	15.92		150.0	
10103- CAB	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	X	6.41	75.89	20.51	3.98	65.0	± 9.6 %
CAD	IVIFIZ, QF3R)	Y	7.77	77.49	21.00		65.0	
		Z	6.54	74.47	19.52		65.0	
10104- CAB	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	X	6.38	73.95	20.45	3.98	65.0	± 9.6 %
CAB	MINZ, 10-QAMI)	Υ	7.62	75.73	21.18		65.0	
		Z	6.97	74.03	20.17		65.0	
10105- CAB	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	X	5.88	72.23	19.98	3.98	65.0	± 9.6 %
٠, ١٠	The same of the sa	Υ	7.31	74.91	21.13		65.0	
		Z	6.85	73.64	20.32		65.0	
10108- CAC	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	Х	2.91	71.53	17.82	0.00	150.0	± 9.6 %
UAU	WITE, OF OTY	Υ	3.02	70.68	17.15		150.0	
		Z	2.76	69.18	16.29		150.0	
10109- CAC	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	X	2.95	68.44	16.61	0.00	150.0	± 9.6 %
J/ 10	The same of the sa	Υ	3.08	67.93	16.28		150.0	
		Z	2.95	67.17	15.72		150.0	
10110- CAC	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	X	2.39	71.08	17.59	0.00	150.0	± 9.6 %
		Y	2.47	69.75	16.86		150.0	
		Z	2.25	68.18	15.88		150.0	
10111-	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	X	2.79	70.36	17.30	0.00	150.0	± 9.6 %
CAC	THE STREET	1						
CAC	10 40/	Y	2.80	68.64	16.65		150.0	

10112- CAC	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	Х	3.07	68.42	16.64	0.00	150.0	± 9.6 %
J, (Q	Triting O'T SQ MYI	Υ	3.20	67.83	16.29		150.0	
		Z	3.07	67.16	15.79		150.0	
40442	LTE EDD (CC EDMA 4000/ DD E MILE					0.00		+0.69/
10113- CAC	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	X	2.94	70.45	17.39	0.00	150.0	± 9.6 %
		Y	2.95	68.67	16.72		150.0	
		Ζ	2.81	67.97	16.15		150.0	
10114- CAB	IEEE 802.11n (HT Greenfield, 13.5 Mbps, BPSK)	Х	5.09	67.47	16.77	0.00	150.0	±9.6 %
		Υ	5.23	67.24	16.53		150.0	
		Z	5.18	67.08	16.35		150.0	
10115- CAB	IEEE 802.11n (HT Greenfield, 81 Mbps, 16-QAM)	X	5.34	67.51	16.78	0.00	150.0	± 9.6 %
	<u> </u>	Υ	5.60	67.53	16.67		150.0	
		Z	5.52	67.36	16.50		150.0	
10116- CAB	IEEE 802.11n (HT Greenfield, 135 Mbps, 64-QAM)	X	5.18	67.67	16.79	0.00	150.0	± 9.6 %
CAB	04-QAWI)	Υ	5.36	67.51	16.58		150.0	
		Z	5.29	67.32	16.39		150.0	
40447	1555 000 44- (UTA4) 1 40 5 M					0.00		1069
10117- CAB	IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK)	X	5.07	67.38	16.74	0.00	150.0	± 9.6 %
		Υ	5.24	67.25	16.55		150.0	
		Z	5.16	67.03	16.34		150.0	
10118- CAB	IEEE 802.11n (HT Mixed, 81 Mbps, 16-QAM)	X	5.42	67.71	16.89	0.00	150.0	± 9.6 %
		Y	5.67	67.69	16.76		150.0	
		Z	5.59	67.53	16.59		150.0	
10119- CAB	IEEE 802.11n (HT Mixed, 135 Mbps, 64-QAM)	X	5.17	67.64	16.79	0.00	150.0	± 9.6 %
OAD	QAIVI)	Υ	5.33	67.45	16.57		150.0	
		Z	5.26	67.25	16.37		150.0	
10140-	LTE-FDD (SC-FDMA, 100% RB, 15	X	3.41	68.25	16.57	0.00	150.0	± 9.6 %
CAB	MHz, 16-QAM)	\ \ \ \ \	0.50	07.00	40.00		450.0	
		Y	3.56	67.99	16.30		150.0	
		Z	3.43	67.35	15.84		150.0	
10141- CAB	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	X	3.54	68.37	16.75	0.00	150.0	±9.6 %
		Υ	3.68	68.01	16.43		150.0	
		Z	3.56	67.45	16.01		150.0	
10142- CAC	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	Х	2.25	71.96	17.48	0.00	150.0	± 9.6 %
0/10		Y	2.26	69.83	16.74		150.0	
		Z	2.02	68.09	15.61		150.0	
10143- CAC	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	X	2.82	72.22	17.26	0.00	150.0	± 9.6 %
•	<u> </u>	Υ	2.71	69.55	16.65		150.0	
		Z	2.52	68.51	15.83		150.0	
10144- CAC	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	X	2.29	68.06	14.75	0.00	150.0	± 9.6 %
ψ, i.O	U . 40 mm/	Y	2.50	67.47	15.19		150.0	
		Ž	2.32	66.44	14.34	t	150.0	
10145-	LTE-FDD (SC-FDMA, 100% RB, 1.4	X	1.16	65.56	11.35	0.00	150.0	± 9.6 %
CAC	MHz, QPSK)	Υ	1.65	68.53	14.65		150.0	1
					12.76		150.0	
10146-	LTE-FDD (SC-FDMA, 100% RB, 1.4	X	1.36 1.35	65.83 63.40	9.39	0.00	150.0	± 9.6 %
CAC	MHz, 16-QAM)	 	0.40	70.00	15.50	-	150.0	
		Y	3.12	72.00	15.52			-
		Z	2.16	67.04	12.61	0.00	150.0	1000
10117	LTE-FDD (SC-FDMA, 100% RB, 1.4	X	1.53	64.72	10.19	0.00	150.0	± 9.6 %
10147- CAC	MHz, 64-QAM)							
	MHz, 64-QAM)	Y	4.03	75.63 69.13	17.18 13.74		150.0 150.0	

40440	LITE FOR YOU FRIMA FOR THE 20 MILE	хТ	2.96	68.52	16.66	0.00	150.0	± 9.6 %
10149- CAB	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)					0.00		2 0.0 %
		Υ	3.09	67 <u>.99</u>	16.32		150.0	
		Z	2.96	67.23	15.77		150.0	
10150- CAB	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	Х	3.08	68.50	16.69	0.00	150.0	± 9.6 %
97 12		Y	3.21	67.88	16.33		150.0	
		Z	3.08	67.21	15.83		150.0	
10151-	LTE-TDD (SC-FDMA, 50% RB, 20 MHz,	X	7.03	79.10	21.82	3.98	65.0	± 9.6 %
CAB	QPSK)	Y	8.21	79.75	22.00		65.0	
		ż	7.10	77.15	20.67		65.0	
10152- CAB	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	X	5.92	73.94	20.06	3.98	65.0	± 9.6 %
OAB	10 00 1117	Υ	7.21	75.88	21.03		65.0	-
		Z	6.48	73.87	19.84		65.0	
10153- CAB	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	X	6.35	75.11	20.94	3.98	65.0	± 9.6 %
CAB	04-Q(A(VI)	Y	7.55	76.62	21.69		65.0	
	-	Z	6.87	74.79	20.60		65.0	
404E4	LTE-FDD (SC-FDMA, 50% RB, 10 MHz,	X	2.46	71.67	17.92	0.00	150.0	± 9.6 %
10154- CAC	QPSK)			70.24	17.15		150.0	
		Y	2.54		16.17		150.0	+
		Z	2.30	68.63	16.17	0.00	150.0	± 9.6 %
10155- CAC	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	Х	2.79	70.40		0.00		± 9.0 %
		Υ	2.80	68.64	16.65		150.0	
		Z	2.66	67.83	16.02	2.00	150.0	1000
10156- CAC	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	X	2.17	72.73	17.45	0.00	150.0	± 9.6 %
		Υ	2.14	70.24	16.79		150.0	
		Z	1.88	68.21	15.48		150.0	
10157- CAC	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	Х	2.21	69.24	14.98	0.00	150.0	± 9.6 %
CAC	10-Q/W/	Υ	2.36	68.31	15.46		150.0	
		Z	2.15	66.99	14.43		150.0	
10158- CAC	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	X	2.95	70.56	17.46	0.00	150.0	± 9.6 %
CAC	04-QAM)	Υ	2.95	68.72	16.76		150.0	
		Z	2.82	68.03	16.20		150.0	
10159- CAC	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	X	2.36	69.87	15.32	0.00	150.0	± 9.6 %
CAC	04-QA(VI)	Υ	2.49	68.78	15.76		150.0	
	<u> </u>	Z	2.27	67.50	14.75		150.0	
10160- CAB	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	X	2.90	70.47	17.47	0.00	150.0	± 9.6 %
J, 10		Y	2.94	69.28	16.77		150.0	
		Ż	2.76	68.21	16.07		150.0	
10161- CAB	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	×	2.98	68.55	16.64	0.00	150.0	± 9.6 %
	10 30 101	Υ	3.10	67.79	16.29		150.0	
		Ż	2.98	67.13	15.77		150.0	
10162- CAB	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	X	3.10	68.74	16.76	0.00	150.0	± 9.6 %
CAD	UT-WAIVI)	Υ	3.21	67.84	16.35	†	150.0	
		Ż	3.09	67.25	15.86		150.0	
10166-	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz,	X	3.31	69.42	19.40	3.01	150.0	± 9.6 %
CAC	QPSK)	Y	3.85	69.94	19.41	1	150.0	
		Z	3.63	68.92	18.65	 	150.0	
40407	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz,	X	3.89	72.11	19.78	3.01	150.0	± 9.6 %
10167- CAC	16-QAM)					-		
		Y	4.89	73.20	20.04	-	150.0	
_		Ζ	4.45	71.60	19.05	1	150.0	

10168- CAC	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	X	4.43	75.02	21.48	3.01	150.0	± 9.6 %
07.10		Y	5.37	75.20	21.21		150.0	<u> </u>
		Z	4.92	73.76	20.36		150.0	
10169- CAB	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	X	2.61	67.65	18.68	3.01	150.0	± 9.6 %
		Υ	3.41	71.01	19.90		150.0	
		Z	3.09	68.90	18.61		150.0	
10170- CAB	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	X	3.32	73.16	21.10	3.01	150.0	± 9.6 %
		Υ	5.09	78.14	22.55		150.0	
		Z	4.27	74.69	20.88		150.0	
10171- AAB	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	X	2.74	69.02	18.13	3.01	150.0	± 9.6 %
		Υ	4.10	73.53	19.72		150.0	
		Z	3.48	70.44	18.07		150.0	
10172- CAB	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	X	5.53	83.56	25.72	6.02	65.0	± 9.6 %
		Υ	21.34	105.31	32.41		65.0	
		Z	7.30	84.26	24.94		65.0	
10173- CAB	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	X	10.58	92.60	26.95	6.02	65.0	± 9.6 %
		Υ	29.30	105.74	30.57		65.0	<u> </u>
		Z	12.37	90.08	25.23		65.0	
10174- CAB	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	X	7.41	85.53	24.05	6.02	65.0	± 9.6 %
		Y	21.20	98.69	27.99		65.0	
		Z	10.53	86.42	23.55		65.0	
10175- CAC	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	X	2.58	67.36	18.42	3.01	150.0	± 9.6 %
		Υ	3.37	70.66	19.64		150.0	
		Z	3.05	68.56	18.35		150.0	
10176- CAC	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	X	3.33	73.19	21.11	3.01	150.0	± 9.6 %
		Υ	5.10	78.16	22.56		150.0	
		Z	4.27	74.71	20.89		150.0	
10177- CAE	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	Х	2.60	67.50	18.51	3.01	150.0	± 9.6 %
	-	Υ	3.40	70.83	19.75		150.0	
		Z	3.07	68.74	18.46		150.0	
10178- CAC	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)	X	3.30	73.00	21.00	3.01	150.0	± 9.6 %
		Υ	5.02	77.85	22.40		150.0	
		Z	4.22	74.44	20.74		150.0	
10179- CAC	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	Х	3.00	71.00	19.50	3.01	150.0	± 9.6 %
		Υ	4.55	75.67	20.98		150.0	
		Z	3.82	72.37	19.31		150.0	
10180- CAC	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)	Х	2.73	68.97	18.09	3.01	150.0	± 9.6 %
		Υ	4.08	73.43_	19.65		150.0	
		Z	3.47	70.35	18.01		150.0	
10181- CAB	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	X	2.59	67.48	18.51	3.01	150.0	± 9.6 %
		Υ	3.39	70.81	19.74		150.0	
		Z	3.07	68.71	18.45		150.0	
10182- CAB	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	X	3.30	72.98	20.99	3.01	150.0	± 9.6 %
		Y	5.01	77.82	22.39		150.0	
		Z	4.21	74.41	20.73		150.0	
10183- AAA	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	Х	2.73	68.94	18.08	3.01	150.0	± 9.6 %
	, , , , , , , , , , , , , , , , , , , ,	Y	4.07	73.40	19.64		150.0	
	 	Z	3.46	70.33	18.00		150.0	

10184-	LTE-FDD (SC-FDMA, 1 RB, 3 MHz,	×	2.60	67.52	18.53	3.01	150.0	± 9.6 %
CAC	QPSK)	Y	3,40	70.86	19.76		150.0	
		Ż	3.08	68.76	18.47		150.0	
10185-	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16-	X	3.31	73.05	21.03	3.01	150.0	± 9.6 %
CAC	QAM)	Y	5.04	77.90	22.43		150.0	
_		Z	4.23	74.49	20.77		150.0	•
10186-	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64-	X	2.74	69.01	18.12	3.01	150.0	± 9.6 %
AAC	QAM)	Y	4.10	73.47	19.68		150.0	
-		Z	3.48	70.39	18.03		150.0	
10187- CAC	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	X	2.61	67.58	18.60	3.01	150.0	± 9.6 %
CAC	Qi oity	Υ	3.41	70.90	19.81		150.0	
		Z	3.09	68.80	18.52		150.0	
10188- CAC	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	X	3.41	73.70	21.42	3.01	150.0	± 9.6 %
CAC	10-QAW)	Υ	5.24	78.69	22.84		150.0	
		Z	4.38	75.22	21.18		150.0	
10189- AAC	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	X	2.80	69.41	18.40	3.01	150.0	± 9.6 %
, 17.0	V - 50 1111/	Υ	4.20	73.97	19.98		150.0	
		Z	3.56	70.83	18.32		150.0	
10193- CAB	IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK)	X	4.49	67.07	16.51	0.00	150.0	± 9.6 %
<u> </u>	Bi dit)	Υ	4.67	66.69	16.32		150.0	
		Z	4.59	66.49	16.09		150.0	
10194- CAB	IEEE 802.11n (HT Greenfield, 39 Mbps, 16-QAM)	X	4.64	67.34	16.63	0.00	150.0	± 9.6 %
CAD	TO-GAIVI)	Υ	4.86	67.05	16.43		150.0	
		Ż	4.77	66.83	16.21		150.0	
10195- CAB	IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM)	X	4.68	67.36	16.65	0.00	150.0	±9.6 %
ÇAD	04-QAIVI)	Y	4.90	67.06	16.44		150.0	
		Ż	4.82	66.86	16.22		150.0	
10196- CAB	IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK)	X	4.48	67.10	16.51	0.00	150.0	± 9.6 %
CAD	Br orty	Y	4.68	66.78	16.36		150.0	
		Z	4.60	66.57	16.12		150.0	
10197- CAB	IEEE 802.11n (HT Mixed, 39 Mbps, 16-QAM)	X	4.66	67.35	16.64	0.00	150.0	± 9.6 %
OVD	Set stati)	Υ	4.88	67.07	16.45		150.0	
		Z	4.79	66.86	16.22		150.0	
10198- CAB	IEEE 802.11n (HT Mixed, 65 Mbps, 64-QAM)	x	4.68	67.37	16.65	0.00	150.0	± 9.6 %
JAD.		Υ	4.91	67.08	16.45		150.0	
		Z	4.82	66.87	16.23		150.0	
10219- CAB	IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK)	Х	4.44	67.14	16.49	0.00	150.0	± 9.6 %
UND	1. 0.0	Υ	4.63	66.80	16.32		150.0	
		Ż	4.55	66.58	16.08		150.0	
10220- CAB	IEEE 802.11n (HT Mixed, 43.3 Mbps, 16-QAM)	X	4.65	67.31	16.63	0.00	150.0	± 9.6 %
Ç, (L)		Υ	4.87	67.06	16.44		150.0	
		Z	4.79	66.83	16.21		150.0	
10221- CAB	IEEE 802.11n (HT Mixed, 72.2 Mbps, 64-QAM)	X	4.69	67.30	16.64	0.00	150.0	± 9.6 %
JAD.	SSC 3171/	Υ	4.91	67.01	16.44		150.0	
		Z	4.83	66.81	16.22		150.0	
10222-	IEEE 802.11n (HT Mixed, 15 Mbps,	X	5.04	67.37	16.73	0.00	150.0	± 9.6 %
	I BDSK1							
CAB	BPSK)	Y	5.22	67.27	16.55		150.0	

10223-	IEEE 802.11n (HT Mixed, 90 Mbps, 16-	X	5.33	67.57	16.84	0.00	150.0	± 9.6 %
CAB	QAM)		E 50	67.57	46.70		450.0	
		Y	5.58 5.46	67.57 67.24	16.72 16.46		150.0 150.0	
10224-	IEEE 802.11n (HT Mixed, 150 Mbps, 64-	X	5.46	67.48	16.71	0.00	150.0	± 9.6 %
CAB	QAM)					0.00		1. 9.0 %
		Υ	5.27	67.38	16.53		150.0	
		Z	5.19	67.14	16.31		150.0	2 2 2 4
10225- CAB	UMTS-FDD (HSPA+)	X	2.82	67.14	15.84	0.00	150.0	± 9.6 %
		Υ	2.95	66.38	15.78		150.0	
			2.86	65.91	15.30		150.0	
10226- CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	X	11.41	94.07	27.52	6.02	65.0	± 9.6 %
		Y	31.67	107.27	31.09		65.0	
			13.11	91.16	25.67		65.0	
10227- CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	X	11.04	92.14	26.24	6.02	65.0	± 9.6 %
		Y	24.12	100.92	28.72		65.0	
		Z	11.71	88.12	24.16		65.0	
10228- CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	Х	7.63	90.07	28.10	6.02	65.0	± 9.6 %
		Υ	23.55	107.62	33.18		65.0	
		Z	10.51	91.21	27.39		65.0	
10229- CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)	Х	10.66	92.71	26.99	6.02	65.0	± 9.6 %
	,	Υ	29.42	105.79	30.60		65.0	
		Z	12.45	90.17	25.27		65.0	
10230- CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64- QAM)	Х	10.25	90.80	25.74	6.02	65.0	±9.6 %
0,10		Y	22.68	99.76	28.30		65.0	
			11.15	87.26	23.80		65.0	
10231- CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, OPSK)	Х	7.27	89.04	27.66	6.02	65.0	± 9.6 %
O/ ND	Q. O. O.	Υ	22.20	106.36	32.73		65.0	
		_	10.05	90.30	27.01		65.0	
10232- CAB	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-	X	10.64	92.69	26.99	6.02	65.0	± 9.6 %
OND	G unj	Y	29.42	105.80	30.60		65.0	
312			12.43	90.15	25.26		65.0	
10233- CAB	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-	X	10.23	90.76	25.73	6.02	65.0	±9.6 %
CAD	Q(A(W))	Υ	22.67	99.78	28.30		65.0	
			11.14	87.24	23.80		65.0	
10234- CAB	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM) LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM) LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM) LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM) LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM) LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM) LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM) LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM) Y LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM) Y LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM) Y LTE-TDD (SC-FDMA, 1 RB, 10 MHz, X16-QAM) Y LTE-TDD (SC-FDMA, 1 RB, 10 MHz, X16-QAM) Y LTE-TDD (SC-FDMA, 1 RB, 10 MHz, X16-QAM)	6.99	88.15	27.23	6.02	65.0	± 9.6 %	
UND		Y	20.93	105.02	32.23		65.0	
			9.64	89.40	26.60		65.0	
10235- CAB			10.65	92.73	27.00	6.02	65.0	± 9.6 %
	The said MITH	Y	29.50	105.86	30.62		65.0	
			12.44	90.18	25.27		65.0	
10236- CAB			10.34	90.92	25.77	6.02	65.0	±9.6 %
UND	0-1	Y	22.93	99.94	28.35		65.0	
-	-	Z	11.22	87.34	23.83		65.0	
10237- CAB	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	X	7.28	89.10	27.69	6.02	65.0	± 9.6 %
- 1 1 L	Q. 01.y	Y	22.38	106.55	32.79		65.0	
				90.36	27.03		65.0	
			10.07					
10238-	LTE-TDD (SC-FDMA, 1 RB, 15 MHz,	X	10.07	92.67	26.98	6.02	65.0	± 9.6 %
	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	_				6.02	65.0 65.0	±9.6 %

10239-	LTE-TDD (SC-FDMA, 1 RB, 15 MHz,	Х	10.19	90.73	25.72	6.02	65.0	± 9.6 %
CAB	64-QAM)	-	20.05	99.78	28.31		65.0	
		Υ	22.65				65.0	
		Z	11.11	87.22	23.79	0.00		± 9.6 %
10240- CAB	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	X	7.26	89.06	27.67	6.02	65.0	±9.0%
		Y	22.30	106.48	32.77		65.0	
		Z	10.04	90.32	27.01		65.0	
10241- CAA	LTE-TDD (\$C-FDMA, 50% RB, 1.4 MHz, 16-QAM)	X	7.75	81.08	25.21	6.98	65.0	±9.6%
CAA	10-G/AIVI)	Υ	10.21	83.82	26.43		65.0	
		ż	8.73	80.32	24.52		65.0	
10242- CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	X	6.80	78.38	24.02	6.98	65.0	± 9.6 %
<u> </u>	04-0271VI)	Y	9.63	82.52	25.83		65.0	
		Z	8.38	79.47	24.10		65.0	
10243- CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	X	5.61	75.06	23.46	6.98	65.0	± 9.6 %
<u></u>		Y	7.74	79.46	25.50		65.0	
		ż	6.88	76.70	23.79		65.0	
10244-	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	X	4.85	72.20	16.09	3.98	65.0	± 9.6 %
CAB	10-Q/AIVI)	Υ	8.02	78.99	20.43		65.0	
		Z	6.19	74.48	17.94		65.0	
10015	LTE-TDD (SC-FDMA, 50% RB, 3 MHz,	X	4.70	71.53	15.74	3.98	65.0	± 9.6 %
10245- CAB	64-QAM)	Y	7.89	78.48	20.19		65.0	
		Ż	6.13	74.10	17.74		65.0	
					18.28	3.98	65.0	± 9.6 %
10246- CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	X	5.22	76.54		3.90		2 9.0 %
		Y	8.14	82.43	21.79		65.0	
		Z	5.87	76.86	19.08		65.0	170
10247- CAB	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	Х	4.92	73.01	17.55	3.98	65.0	± 9.6 %
	<u> </u>	Y	6.62	76.59	20.16		65.0	
		Z	5.63	73.71	18.45		65.0	
10248- CAB	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	Х	4.84	72.32	17.23	3.98	65.0	± 9.6 %
OAD .	01 30 111)	İΥ	6.62	76.08	19.95		65.0	
		Z	5.66	73.31	18.26		65.0	
10249- CAB	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	X	7.10	81.85	21.45	3.98	65.0	± 9.6 %
OAD	Qi Oit)	Υ	9.09	84.35	23.13		65.0	
		Z	6.82	79.25	20.73		65.0	
10250- CAB	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	X	6.14	76.72	21.07	3.98	65.0	± 9.6 %
ψ, (D	10 30 1171)	Y	7.40	78.29	22.09		65.0	
		Z	6.54	75.95	20.75		65.0	
10251- CAB	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	X	5.70	74.17	19.61	3.98	65.0	± 9.6 %
J, (L)		Y	7.04	76.19	20.94		65.0	
		Z	6.27	74.04	19.64		65.0	
10252- CAB	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	X	7.47	82.32	22.88	3.98	65.0	± 9.6 %
OUD		Y	8.82	83.02	23.29		65.0	
		Z	7.18	79.27	21.49		65.0	
10253- CAB	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	X	5.82	73.49	19.80	3.98	65.0	± 9.6 %
UND	TOTOCATIVITY	Y	6.99	75.20	20.79		65.0	
		Z	6.34	73.34	19.64	—	65.0	
400= 1	LTE TOD (OO FDMA 500/ DD 45 50)			74.53	20.56	3.98	65.0	± 9.6 %
10254- CAB	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	X	6.20		<u> </u>	3.90		2 3.0 76
		Υ	7.35	75.96	21.41		65.0	
		Z	6.71	74.22	_20.33		65.0	- 1

	_							
10255- CAB	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	X	6.71	78.47	21.74	3.98	65.0	± 9.6 %
		Υ	7_84	79.18	22.03		65.0	
		Z	6.83	76.67	20.70		65.0	
10256- CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	Х	3.47	67.38	12.72	3.98	65.0	±9.6 %
		Y	6.90	76.38	18.57		65.0	
		Z	5.11	71.48	15.77		65.0	
10257- CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	Х	3.38	66.76	12.32	3.98	65.0	±9.6 %
		Υ	6.74	75.67	18.20		65.0	
	_	Z	5.05	70.99	15.48		65.0	
10258- CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	Х	3.49	70.18	14.59	3.98	65.0	± 9.6 %
		Y	6.78	79.22	19.98		65.0	
		Z	4.80	73.56	17.06		65.0	
10259- CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	X	5.42	74.50	18.87	3.98	65.0	± 9.6 %
		Y	6.93	77.16	20.83		65.0	
		Z	5.98	74.51	19.26		65.0	
10260- CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	X	5.41	74.15	18.72	3.98	65.0	± 9.6 %
		Υ	6.95	76.90	20.74		65.0	
		Z	6.03	74.34	19.21		65.0	
10261- CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	Х	6.87	81.15	21.70	3.98	65.0	± 9.6 %
		Υ	8.53	83.00	22.95		65.0	
		Z	6.70	78.62	20.83		65.0	
10262- CAB	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	X	6.12	76.64	21.02	3.98	65.0	± 9.6 %
		Y	7.39	78.26	22.06		65.0	
		Z	6.53	75.90	20.71		65.0	
10263- CAB	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	Х	5.69	74.15	19.60	3.98	65.0	± 9.6 %
	,	Y	7.03	76.18	20.94		65.0	
		Ζ	6.26	74.03	19.63		65.0	
10264- CAB	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	Х	7.38	82.08	22.77	3.98	65.0	± 9.6 %
		Y	8.75	82.86	23.22		65.0	
		Z	7.12	79.11	21.41		65.0	
10265- CAB	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	X	5.92	73.94	20.06	3.98	65.0	± 9.6 %
0, 12	10012, 10 30 007	Υ	7.20	75.88	21.03		65.0	
		Z	6.48	73.87	19.85		65.0	
10266- CAB	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	Х	6.35	75.09	20.93	3.98	65.0	±9.6 %
	<u> </u>	Y	7.55	76.61	21.68		65.0	
		Z	6.86	74.78	20.59		65.0	
10267- CAB	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	Х	7.01	79.05	21.80	3.98	65.0	± 9.6 %
		Y	8.19	79.71	21.98		65.0	
	_	Z	7.09	77.11	20.65		65.0	
10268- CAB	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	Х	6.54	73.87	20.51	3.98	65.0	± 9.6 %
_		Υ	7.70	75.41	21.18		65.0	
		Z	7.12	73.89	20.25		65.0	
10269- CAB	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	Х	6.52	73.47	20.39	3.98	65.0	± 9.6 %
		Y	7.63	74.96	21.06		65.0	
		Z	7.08	73.52	20.16		65.0	
10270- CAB	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	Х	6.72	76.10	20.81	3.98	65.0	± 9.6 %
57.15		Y	7.77	76.91	21.02		65.0	

10274- CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.10)	X	2.68	67.93	16.00	0.00	150.0	± 9.6 %
OND	Trail. 101	Υ	2.70	66.71	15.69		150.0	
		Z	2.60	66.12	15.13			
	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.4)	Х	1.86	71.35	17.51	0.00	150.0	± 9.6 %
<u> </u>	1(0.4)	Υ	1.79	69.27	16.54		150.0	
							150.0	
	PHS (QPSK)	X	2.51	62.07	7.69	9.03	50.0	± 9.6 %
CAA		$\overline{\vee}$	3.60	65 47	10.92		50.0	
	PHS (QPSK, BW 884MHz, Rolloff 0.5)	X	4.14	68.90	13.57	9.03	50.0	± 9.6 %
		Υ	8.03	79.56				
		Z	5.72	73.56				
	PHS (QPSK, BW 884MHz, Rolloff 0.38)	X	4.23	69.12		9.03		± 9.6 %
<u> </u>		Υ	8.23	79.82				
		Z	5.85	73.80	16.95			
	CDMA2000, RC1, SO55, Full Rate	Х	2.16	75.12	16.21	0.00	150.0	± 9.6 %
22		Υ	1.91	71.91				
N 20		Z	1.49	68.32				
	CDMA2000, RC3, SO55, Full Rate	Х	1,24	72.30		0.00		± 9.6 %
		Υ		68.86				
		Z	0.85	65.38				
	CDMA2000, RC3, SO32, Full Rate	X	13.33	104.67		0.00		± 9.6 %
, , ,		Υ	1.50	74.81	18.02			
		Z	1,03	68.79	14.75		150.0	
	CDMA2000, RC3, SO3, Full Rate	Х	100.00	135.60	33.89	0.00	150.0	± 9.6 %
7010		Υ	2.41	82.36	21.43		150.0	
			1.44	73.75	17.42		150.0	
10295-	CDMA2000, RC1, SO3, 1/8th Rate 25 fr.	Х	11.05	85.41	22.93	9.03	50.0	± 9.6 %
7010		Υ	8.87	82.92	23.80		50.0	
							50.0	
10297-	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	X	2.93	71.67	17.91	0.00	150.0	± 9.6 %
/V-V-1	<u> </u>	Υ	3.03	70.79	17.22		150,0	
10275- CAB I 10277- CAA I 10278- CAA I 10279- CAA I 10290- AAB I 10291- AAB I 10292- AAB I 10293- AAB I 10295- AAB I 10297- AAA I 10298- AAB I 10298- AAB I				69.28	16.35		150.0	
	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	Table Tabl	± 9.6 %					
			1.94					
			1.64	67.53				
	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	X	2.25			0.00		± 9.6 %
<u> </u>			3.57		16.90			
				69.23	14.47			
	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	Х				0.00		± 9.6 %
			2.60					
			2.12	65.38				
-	IEEE 802.16e WIMAX (29:18, 5ms, 10MHz, QPSK, PUSC)					4.17		± 9.6 %
	,	Υ	5.14	66.14	17.98		50.0	
		Ζ	4.87	65.30	17.38		50.0	
10302- AAA	IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC, 3 CTRL symbols)	Х	5.19	66.64	18.43	4.96	50.0	± 9.6 %
		Υ	5.69	67.11	18.91		50.0	
		Z	5.42	66.20	18.24	1	50.0	

10303-	IEEE 802.16e WiMAX (31:15, 5ms,	Х	4.96	66.34	18.27	4.96	50.0	± 9.6 %
AAA	10MHz, 64QAM, PUSC)					4.50		± 9.0 %
		Υ	5.48	66.96	18.88		50.0	
		Z	5.20	65.95	18.14		50.0	
10304- AAA	IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, 64QAM, PUSC)	X	4.76	66.23	17.80	4.17	50.0	±9.6 %
		Υ	5.21	66.54	18.19		50.0	
		Z	4.96	65.68	17.56		50.0	
10305-	IEEE 802.16e WiMAX (31:15, 10ms,	$\frac{1}{X}$	4.83	70.07	20.50	6.02	35.0	±9.6 %
AAA	10MHz, 64QAM, PUSC, 15 symbols)			71.60	22.16		35.0	
		Y	5.51				35.0	
10306-	IEEE 802.16e WiMAX (29:18, 10ms,	X	4.98 4.91	69.23 68.09	20.55 19.77	6.02	35.0	± 9.6 %
AAA	10MHz, 64QAM, PUSC, 18 symbols)	\perp						
		ΙΥ	5.42	68.18	20.25		35.0	
		Z	5.11	67.47	19.73		35.0	
10307- AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, PUSC, 18 symbols)	X	4.83	68.37	19.78	6.02	35.0	±9.6 %
	, , , , , , , , , , , , , , , , , , , ,	Y	5.47	69.61	21.06		35.0	
		Ż	5.07	67.89	19.81		35.0	
10308-	IEEE 802.16e WiMAX (29:18, 10ms,	X	4.84	68.69	19.98	6.02	35.0	± 9.6 %
10308- AAA	10MHz, 16QAM, PUSC)						35.0	
		Y	5.46	69.92	21.24			
		Z	5.05	68.12	19.96	0.00	35.0	. 0 0 0′
10309- AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, AMC 2x3, 18 symbols)	X	4.94	68.23	19.88	6.02	35.0	±9.6 %
		Υ	5.52	68.51	20.43		35.0	
		Z	5.19	67.72	19.88		35.0	
10310- AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, AMC 2x3, 18 symbols)	Х	4.88	68.25	19.79	6.02	35.0	± 9.6 %
	Town 12, Qr Brt, 7th 2xo, 10 symbols	Y	5.44	69.18	20.91		35.0	_
		Z	5.08	67.61	19.74		35.0	
10311-	LTE-FDD (SC-FDMA, 100% RB, 15	X	3.31	70.70	17.41	0.00	150.0	±9.6 %
AAA	MHz, QPSK)	 , 	2 12	70.05	40.00		450.0	
		Y	3.40	70.05	16.83		150.0	
		Z	3.1 <u>3</u>	68.65	16.04		150.0	
10313- AAA	iDEN 1:3	X	4.31	74.90	16.96	6.99	70.0	± 9.6 %
		Υ	5.76	76.90	17.84		70.0	
		Z	4.08	72.13	15.67		70.0	
10314- AAA	iDEN 1:6	X	7.33	84.94	23.33	10.00	30.0	± 9.6 %
7001		Y	7.31	83.11	22.80		30.0	
		Z	4.98	76.71	20.14		30.0	_
10315-	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1	X	1.15	65.39	16.53	0.17	150.0	± 9.6 %
AAB	Mbps, 96pc duty cycle)	Y	1.15	64.64	15.92		150.0	
			1.10	63.46	14.86		150.0	
10316-	IEEE 802.11g WiFi 2.4 GHz (ERP-	Z X	4.52	67.01	16.57	0.17	150.0	± 9.6 %
AAB	OFDM, 6 Mbps, 96pc duty cycle)	+	. 70		40.44		150.0	
		Y	4.73_	66.76	16.44		150.0	
		Z	4.65	66.51	16.17	0.4-	150.0	1000
10317- AAB	IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle)	Х	4.52	67.01	16.57	0.17	150.0	± 9.6 %
_		Y	4.73	66.76	16.44		150.0	
		Z	4.65	66.51	16.17		150.0	
10400- AAC	IEEE 802.11ac WiFi (20MHz, 64-QAM, 99pc duty cycle)	X	4.62	67.36	16.62	0.00	150.0	± 9.6 %
, ,,,,		Y	4.87	67.12	16.43		150.0	
		Ż	4.77	66.88	16.19		150.0	
40404	IEEE 902 44co MBE: /40MU- 64 CAM	X	5.32	67.33	16.68	0.00	150.0	± 9.6 %
10401- AAC	IEEE 802.11ac WiFi (40MHz, 64-QAM, 99pc duty cycle)			_		0.00		2 0.0 70
		Υ	5.49	67.16	16.50	I	150.0	L
		Z	5.43	67.01	16.32		150.0	

10402- AAC	IEEE 802.11ac WiFi (80MHz, 64-QAM, 99pc duty cycle)	Х	5.60	67.66	16.72	0.00	150.0	± 9.6 %
		Υ	5.79	67.68	16.60		150.0	
		Ζ	5.72	67.47	16.40		150.0	
10403- AAB	CDMA2000 (1xEV-DO, Rev. 0)	Х	2.16	75.12	16.21	0.00	115.0	± 9.6 %
		Y	1.91	71.91	16.34		115.0	
•		Ż	1.49	68.32	14.21		11 <u>5</u> .0	
10404- AAB	CDMA2000 (1xEV-DO, Rev. A)	Х	2.16	75.12	16.21	0.00	115.0	± 9.6 %
		Υ	1.91	71.91	16.34		115.0	
		Z	1.49	68.32	14.21		115.0	
10406- AAB	CDMA2000, RC3, SO32, SCH0, Full Rate	X	100.00	127.59	32.37	0.00	100.0	± 9.6 %
		Y_	100.00	123.98	31.83		100.0	
		Z	14.26	95.15	24.05		100.0	
10410- AAA	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	124.06	30.89	3.23	80.0	± 9.6 %
		Υ	100.00	119.95	30.07		80.0	
		Z	11.66	89.63	21.52		80.0	
10415- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle)	X	1.06	64.51	16.01	0.00	150.0	± 9.6 %
		Υ	1.04	63.51	15.25	_	150.0	
		Z	1.01	62.60	14.33		150.0	
10416- AAA	IEEE 802.11g WiFi 2.4 GHz (ERP- OFDM, 6 Mbps, 99pc duty cycle)	Х	4.49	67.08	16.58	0.00	150.0	± 9.6 %
7001		Υ	4.67	66.72	16.37		1 <u>50.0</u>	_
		Z	4.59	66.53	16.14		150.0	
10417- AAA	JEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 99pc duty cycle)	X	4.49	67.08	16.58	0.00	150.0	± 9.6 %
	(Mops, 3500 daily 5) 5.57	Υ	4.67	66.72	16.37		150.0	
		Z	4.59	66.53	16.14		150.0	
10418- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 99pc duty cycle, Long preambule)	X	4.49	67.30	16.63	0.00	150.0	±9.6%
	prodriibaloy	Υ	4.65	66.87	16.37		150.0	
		Z	4.58	66.67	16.15		150.0	
104 1 9- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 99pc duty cycle, Short preambule)	X	4.50	67.22	16.62	0.00	150.0	± 9.6 %
		Υ	4.68	66.82	16.38		150.0	
		Z	4.60	66.63	16.16		150.0	
10422- AAA	IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK)	X	4.61	67.18	16.61	0.00	150.0	± 9.6 %
2	<u> </u>	Υ	4.80	66.83	16.39		150.0	
_		Z	4.73	66.64	16.18		1 50.0	
10423- AAA	IEEE 802.11n (HT Greenfield, 43.3 Mbps, 16-QAM)	X	4.75	67.46	16.71	0.00	150.0	± 9.6 %
_, , , , ,		Y	5.00	67.20	16.53		150.0	
_		Z	4.91	66.98	16.30		150.0	1
10424- AAA	IEEE 802.11n (HT Greenfield, 72.2 Mbps, 64-QAM)	X	4.68	67.42	16.69	0.00	150.0	± 9.6 %
	, , ,	Y	4.91	67.14	16.49		150.0	
		Z	4.82	66.93	16.27		150.0_	
10425- AAA	IEEE 802.11n (HT Greenfield, 15 Mbps, BPSK)	×	5.29	67.59	16.82	0.00	150.0	± 9.6 %
		Y	5.47	67.41	16.61		150.0	
		Z	5.41	67.25	16.44		150.0	
10426- AAA	IEEE 802.11n (HT Greenfield, 90 Mbps, 16-QAM)	X	5.31	67.68	16.86	0.00	150.0	± 9.6 %
7001	10 30 111)	Y	5.48	67.44	16.63		150.0	
	 	Z	5.41	67.26	16.44		150.0	

10427- AAA	IEEE 802.11n (HT Greenfield, 150 Mbps, 64-QAM)	Х	5.29	67.52	16.78	0.00	150.0	± 9.6 %
	S. Serviny	Υ	5.50	67.46	16.63		150.0	
		Z	5.43	67.26	16.43		150.0	
10430- AAA	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1)	X	4.63	73.67	19.48	0.00	150.0	± 9.6 %
		Y	4.38	70.39	18.28		150.0	
		Z	4.34	70.59	18.21		150.0	
10431- AAA	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1)	X	4.15	67.84	16.60	0.00	150.0	± 9.6 %
		Y	4.40	67.31	16.45		150.0	
		Z	4.29	67.04	16.16		150.0	
10432- AAA	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1)	Х	4.45	67.57	16.66	0.00	150.0	± 9.6 %
		Υ	4.69	67.19	16.47		150.0	
		Z	4.59	66.95	16.22		150.0	_
10433- AAA	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1)	X	4.70	67.46	16.71	0.00	150.0	± 9.6 %
_		Υ	4.93	67.18	16.52		150.0	
		Z	4.84	66.96	16.29		150.0	
10434- AAA	W-CDMA (BS Test Model 1, 64 DPCH)	Х	4.94	75.22	19.61	0.00	150.0	± 9.6 %
		Υ	4.49	71.19	18.31		150.0	
		Z	4.45	71.43	18.22		150.0	
10435- AAA	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	123.75	30.75	3.23	80.0	± 9.6 %
		Y	100.00	119.75	29.98		80.0	
	_	Z	11.13	88.92	21.27		80.0	
104 4 7- AAA	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	X	3.46	68.09	15.85	0.00	150.0	± 9.6 %
		Υ	3.73	67.44	16.02		150.0	
		Z	3.59	67.02	15.56		150.0	
10448- AAA	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, Clippin 44%)	Х	4.01	67.64	16.48	0.00	150.0	± 9.6 %
		Y	4.23	67.09	16.31		150.0	
		Z	4.12	66.82	16.01		150.0	
10449- AAA	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1, Cliping 44%)	Х	4.28	67.42	16.58	0.00	150.0	± 9.6 %
		Y	4.48	67.02	16.38		150.0	
		Z	4.39	66.78	16.12		150.0	
10450- AAA	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	Х	4.48	67.25	16.58	0.00	150.0	± 9.6 %
		Υ	4.66	66.95	16.38		150.0	
		Z	4.58	66.72	16.14		150.0	
10451- AAA	W-CDMA (BS Test Model 1, 64 DPCH, Clipping 44%)	X	3.33	68.18	15.32	0.00	150.0	± 9.6 %
		Ϋ́	3,67	67.76	15.79		150.0	
		Z	3.50	67.23	15.24		150.0	
10456- AAA	IEEE 802.11ac WiFi (160MHz, 64-QAM, 99pc duty cycle)	X	6.23	68.21	17.00	0.00	150.0	± 9.6 %
		Y	6.33	68.03	16.78		150.0	
		Z	6.26	67.85	16.61		150.0	
10457- AAA	UMTS-FDD (DC-HSDPA)	Х	3.79	65.76	16.30	0.00	150.0	± 9.6 %
		Υ	3.86	65.36	16.10		150.0	
		Z	3.82	65.17	15.85		150.0	
10458- AAA	CDMA2000 (1xEV-DO, Rev. B, 2 carriers)	Х	3.05	67.01	14.29	0.00	150.0	± 9.6 %
		Y	3.48	67.05	15.31		150.0	
		Z	3.32	66.56	14.71		150.0	
10459- AAA	CDMA2000 (1xEV-DO, Rev. B, 3 carriers)	Х	4.19	65.60	15.56	0.00	150.0	± 9.6 %
		Y	4.63	65.36	16.07		150.0	
							150.0	

10460-	UMTS-FDD (WCDMA, AMR)	X	1.27	75.41	20.14	0.00	150.0	± 9.6 %
AAA		Υ	1.05	70.71	17.81		150.0	<u>_</u>
		Z	0.86	66.76	15.37		150.0	
40404	LITE TOD (CC FDMA 1 DD 1 1 MHz	X	100.00	127.84	32.72	3.29	80.0	± 9.6 %
10461- AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)						- "	
		Υ	100.00	123.27	31.69		80.0	
		Z	6.47	83.77	20.46		80.0	. 0.0.0/
10462- AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	1.26	63.91	10.22	3.23	80.0	± 9.6 %
		Υ	14.90	86.82	19.02		80.0	
		Ζ	1.81	64.45	10.77		80.0	
10463- AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	Х	0.85	60.00	7.76	3.23	80.0	± 9.6 %
		Υ	4.74	73.69	14.47		80.0	
		Z	1.46	62.00	9.21		80.0	
10464- AAA	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	Х	100.00	124.65	31.09	3.23	80.0	±9.6 %
AAA	QFSK, OL Subital tie=2,5,4,1,5,5)	Υ	100.00	121.04	30.50	_	80.0	
	-	Z	5.02	79.91	18.70		80.0	
10465	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-	X	1.13	62.86	9.67	3.23	80.0	± 9.6 %
10465- AAA	QAM, UL Subframe=2,3,4,7,8,9)	^ Y	9.25	81.62	17.45		80.0	
				63.74	10.38		80.0	
		Z	1.69	60.00	7.71	3.23	80.0	± 9.6 %
10466- AAA	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	X	0.85			J.23		1 9.0 %
		Υ	3.78	71.31	13.57		80.0	
		Z	1.40	61.59	8.96		80.0	. 0 0 0/
10467- AAA	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	Х	100.00	125.03	31.26	3.23	80.0	± 9.6 %
		Y	100.00	121.26	30.60		80.0	
		Z	5.32	80.71	18.99		80.0	
10468- AAA	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	Х	1.17	63.15	9.83	3.23	80.0	± 9.6 %
	QAM, GE GUBITATIO 2,0,1,1,0,0)	Υ	10.30	82.81	17.81		80.0	
		Z	1.71	63.90	10.47		80.0	
10469- AAA	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	X	0.85	60.00	7.71	3.23	80.0	± 9.6 %
AAA	QAM, OL Subhame=2,5,4,7,0,5)	Y	3.80	71.39	13.60		80.0	
		Ż	1,40	61.60	8.96		80.0	
10470-	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	125.05	31.26	3.23	80.0	± 9.6 %
AAA	QPSK, UL Subitatile-2,3,4,7,0,9	Y	100.00	121.29	30.60		80.0	
		T Z	5.31	80.70	18.98		80.0	
10471-	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	1.16	63.09	9.79	3.23	80.0	± 9.6 %
AAA	WAWI, OL OUDITAINE-2,0,4,1,0,0)	Y	10.21	82.69	17.77	† ·	80.0	
	 	z	1.70	63.86	10.44	<u> </u>	80.0	1
10472-	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	0.85	60.00	7.70	3.23	80.0	± 9.6 %
AAA	QAIVI, UL SUDITATITE-Z,3,4,7,0,3)	Y	3.77	71.31	13.56	-	80.0	
		ż	1.40	61.57	8.94		80.0	
10473-	LTE-TDD (SC-FDMA, 1 RB, 15 MHz,	X	100.00	125.02	31.24	3.23	80.0	± 9.6 %
AAA	QPSK, UL Subframe=2,3,4,7,8,9)		100.00	121.25	30.59		80.0	
		Y	100.00 5.30		18.96	_	80.0	
10474-	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-	X	1.15	80.66 63.05	9.77	3.23	80.0	± 9.6 %
AAA	QAM, UL Subframe=2,3,4,7,8,9)	-	40.00	00.57	17.70	_	80.0	+
_		Y	10.08	82.57	17.73	1		
_		Z	1.70	63.84	10.43	H-0.00	80.0	1.069/
10475- AAA	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	0.85	60.00	7.70	3.23	80.0	± 9.6 %
		Υ	3.75	71.2 <u>5</u>	13.54	<u> </u>	80.0	
		Z	1.39	61.55	8.93		80.0	1

10477- AAA	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	Х	1.12	62.81	9.63	3.23	80.0	± 9.6 %
•		Υ	9.29	81.66	17.43		80.0	1
		ż	1.68	63.69	10.35		80.0	
10478- AAA	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	X	0.85	60.00	7.69	3.23	80.0	± 9.6 %
		Y	3.71	71.13	13.49		80.0	
	22	Ζ	1.39	61.52	8.91		80.0	_
10479- AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	Х	16.34	98.15	26.22	3.23	80.0	± 9.6 %
		Υ	8.05	85.58	23.31		80.0	
		Z	4.44	75.80	19.08		80.0	
10480- AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	×	8.15	82.28	19.17	3.23	80.0	± 9.6 %
		Υ	9.14	82.89	20.82		80.0	
		Ζ	4.48	72.61	16.42		80.0	
10481- AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	4.98	75.50	16.46	3.23	80.0	±9.6 %
		Y	7.94	80.29	19.62		80.0	
		Z	4.00	70.70	15.36		80.0	
10482- AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	Х	3.11	72.47	16.27	2.23	80.0	± 9.6 %
		Υ	4.49	76.30	19.03		80.0	
		Ζ	2.84	69.51	15.71		80.0	
10483- AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	Х	3.23	69.48	14.33	2.23	80.0	± 9.6 %
		Y	6.12	77.20	19.06		80.0	
		Z	3.70	69.78	15.41		80.0	
10484- AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	Х	2.99	68.30	13.84	2.23	80.0	± 9.6 %
		Υ	5.80	76.19	18.70		80.0	
		Z	3.62	69.26	15.20		80.0	
10485- AAA	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	Х	3.90	76.03	18.96	2.23	80.0	± 9.6 %
		Υ	4.65	76.77	19.89		80.0	
		Z	3.19	70.88	17.04		80.0	
10486- AAA	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	Х	3.22	69.78	15.73	2.23	80.0	± 9.6 %
		Ý	4.07	71.59	17.54		80.0	
		Z	3.24	68.15	15.55		80.0	
10487- AAA	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	Х	3.17	69.19	15.46	2.23	80.0	± 9.6 %
		Υ	4.05	71.16	17.36		80.0	
		Z	3.26	67.91	15.45		80.0	
10488- AAA	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	Х	3.89	74.31	19.36	2.23	80.0	± 9.6 %
		Υ	4.74	75.31	19.78		80.0	
		Z	3.62	70.94	17.62		80.0	
10489- AAA	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	Х	3.61	70.11	17.53	2.23	80.0	±9.6 %
		Y	4.17	70.61	18.0 <u>5</u>		80.0	
		Z	3.61	68.29	16 <u>.66</u>	16	80.0	
10490- AAA	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	Х	3.68	69.86	17.43	2.23	80.0	± 9.6 %
		Υ	4.25	70.34	17.96		80.0	
		Z	3.72	68.19	16.64		80.0	
10491- AAA	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	Х	3.96	72.11	18.69	2.23	80.0	± 9.6 %
		Υ	4.7 <u>4</u>	73.16	19.02		80.0	
		Z	3.92	70.03	17.39		80.0	
10492- AAA	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	Х	3.88	69.01	17.48	2.23	80.0	± 9.6 %
		Y	4.46	69.66	17.87		80.0	

_			1	22.04	47.44	2 22	90.0	±06%
10493-	LTE-TDD (SC-FDMA, 50% RB, 15 MHz,	X	3.93	68.84	17.41	2.23	80.0	± 9.6 %
AAA	64-QAM, UL Subframe=2,3,4,7,8,9)	Y	4.52	69.48	17.82		80.0	
			4.08	67.81	16.77		80.0	
	1	Z	4.32	73.69	19.20	2.23	80.0	± 9.6 %
10494-	LTE-TDD (SC-FDMA, 50% RB, 20 MHz,	^	4.32	13.08	13.20	2.20	00.0	_ 0.0 /0
AAA	QPSK, UL Subframe=2,3,4,7,8,9)	Y	5.29	75.06	19.58		80.0	
		Z	4.18	71.25	17.73		80.0	
	LITE TOP (OO EDMA FOR DR 20 MHz	$\frac{1}{x}$	3.92	69.34	17.70	2.23	80.0	± 9.6 %
10495-	LTE-TDD (SC-FDMA, 50% RB, 20 MHz,	^	3.32	00.04	17.75	_,_		
AAA	16-QAM, UL Subframe=2,3,4,7,8,9)	Y	4.53	70.19	18.09		80.0	
		Z	4.04	68.27	16.95		80.0	
10100	LTE-TDD (SC-FDMA, 50% RB, 20 MHz,	X	3.98	69.05	17.60	2.23	80.0	±9.6%
10496-	64-QAM, UL Subframe=2,3,4,7,8,9)	^	0.50	00.00				
AAA	04-QAIVI, OE Subitatile-2,5,4,7,0,0)	Y	4.58	69.81	17.97		80.0	
		Z	4.12	68.07	16.91		80.0	
40407	LTE-TDD (SC-FDMA, 100% RB, 1.4	X	1.72	64.88	1 1.75	2.23	80.0	± 9.6 %
10497- AAA	MHz, QPSK, UL Subframe=2,3,4,7,8,9)	^	–					
////	19(112, Q1 OK, 02 Odditatio 2)0(1),19(9)	Y	3.58	73.16	17.12		80.0	
		Z	2.20	66.42	13.58		80.0	
10498-	LTE-TDD (SC-FDMA, 100% RB, 1.4	+ - -	1.30	60.00	8.13	2.23	80.0	± 9.6 %
AAA	MHz, 16-QAM, UL							
777	Subframe=2,3,4,7,8,9)							
	0001101110 2,5,11,15,5,7	Y	2.81	67.13	13.70		80.0	
		Z	1.98	62.85	11.00		80.0	
10499-	LTE-TDD (SC-FDMA, 100% RB, 1.4	Х	1.32	60.00	7.98	2.23	0.08	± 9.6 %
AAA	MHz, 64-QAM, UL							
700	Subframe=2,3,4,7,8,9)							
		Υ	2.75	66.54	13.31		80.0	
		Z	1.95	62.46	10.68		80.0	
10500-	LTE-TDD (\$C-FDMA, 100% RB, 3 MHz,	X	3.82	75.04	19.03	2.23	80.0	± 9.6 %
AAA	QPSK, UL Subframe=2,3,4,7,8,9)							
		Υ	4.55	75.62	19.66		80.0	
		Ζ	3.32	70.66	17.20		80.0	
10501-	LTE-TDD (SC-FDMA, 100% RB, 3 MHz,	X	3.45	70.22	16.55	2.23	80.0	± 9.6 %
AAA	16-QAM, UL Subframe=2,3,4,7,8,9)							
		Υ	4.10	71.10	17.69		80.0	
		Z	3.41	68.23	15.99		80.0	
10502-	LTE-TDD (SC-FDMA, 100% RB, 3 MHz,	×	3.48	69.95	16.36	2.23	80.0	± 9.6 %
AAA	64-QAM, UL Subframe=2,3,4,7,8,9)						20.0	_
		Y	4.15	70.89_	17.57		80.0	
		Z	3.47	68.14	15.91		80.0	. 0 0 0/
10503-	LTE-TDD (SC-FDMA, 100% RB, 5 MHz,	X	3.83	74.06	19.24	2.23	0.08	± 9.6 %
AAA	QPSK, UL Subframe=2,3,4,7,8,9)				15.50		00.0	
	6	Υ	4.68	75.11	19.69		80.0	
		Z	3.58	70.77	17.54	0.00	80.0	. 0.0.0/
10504-	LTE-TDD (SC-FDMA, 100% RB, 5 MHz,	Х	3.59	69.99	17.46	2.23	80.0	± 9.6 %
AAA	16-QAM, UL Subframe=2,3,4,7,8,9)		4.45	70.50	40.00		90.0	-
		Y	4.16	70.53	18.00		80.0	
		Z	3.60	68.21	16.61	0.00	80.0	. 0 6 0/
10505-	LTE-TDD (SC-FDMA, 100% RB, 5 MHz,	X	3.66	69.75	17.36	2.23	80.0	± 9.6 %
AAA	64-QAM, UL Subframe=2,3,4,7,8,9)	1,	4.00	70.05	17.91		80.0	+
		Y	4.23	70.25			80.0	+
		Z	3.70	68.11	16.59	2.23	80.0	± 9.6 %
10506-	LTE-TDD (SC-FDMA, 100% RB, 10	Х	4.28	73.52	19.12	2.23	00.0	± 3.0 %
AAA	MHz, QPSK, UL Subframe=2,3,4,7,8,9)		F 04	74.00	10.54		80.0	
		Y	5.24	74.92	19.51			+
		Z	4.15	71.12	17.66	0.00	80.0	+060
10507-	LTE-TDD (SC-FDMA, 100% RB, 10	X	3.90	69.27	17.66	2.23	80.0	± 9.6 %
AAA	MHz, 16-QAM, UL							
	Subframe=2,3,4,7,8,9)	-	4.54	70.4#	10.00	+	80.0	+ -
	<u> </u>	Y	4.51	70.14	18.06	-	80.0	+
		Z	4.02	68.21	16.91	1	00.0	

10508- AAA	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM, UL	Х	3.97	68.96	17.55	2.23	80.0	± 9.6 %
	Subframe=2,3,4,7,8,9)						<u> </u>	
		Y	4.57	69.75	17.93		80.0	
		Z	4 ₋ 11	68.00	16.87		80.0	
10509- AAA	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	4.54	71.87	18.48	2.23	80.0	± 9.6 %
		Υ	5.35	73.05	18.77		80.0	
		Z	4.54	70.32	17.38		80.0	
10510- AAA	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	4.34	68.76	17.59	2.23	80.0	±9.6 %
		Ϋ́	4.97	69.73	17.95		80.0	
		Z	4.53	68.16	17.00		80.0	
10511- AAA	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	4.39	68.51	17.51	2.23	80.0	± 9.6 %
_		Y	5.00	69.40	17.85		80.0	
		Z	4.59	67.95	16.96		80.0	
10512- AAA	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	4.78	73.48	18.98	2.23	80.0	±9.6 %
		Υ	5.80	75.09	19.41		80.0	
		Z	4.67	71.54	17.71		80.0	
10513- AAA	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	4.24	69.00	17.69	2.23	80.0	± 9.6 %
		Y	4.89	70.17	18.11		80.0	
		Z	4.41	68.40	17.07		80.0	
10514- AAA	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	4.26	68.58	17.56	2.23	80.0	± 9.6 %
		Y	4.87	69.63	17.95		80.0	
		Z	4_44	68.04	16.99		80.0	
10515- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 99pc duty cycle)	Х	1.03	64.84	16.18	0.00	150.0	± 9.6 %
		Υ	1.01	63.76	15.35		150.0	
		Z	0.97	62.74	14.37		150.0	
10516- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc duty cycle)	Х	1.37	87.37	25.57	0.00	150.0	± 9.6 %
		Υ	0.82	76.24	20.55		150.0	
		Z	0.54	67.46	15.73		150.0	
10517- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 99pc duty cycle)	X	0.93	68.34	17.75	0.00	150.0	± 9.6 %
		Υ	0.89	66.40	16.42		150.0	
		Z	0.81	64.28	14.78		150.0	. 0.00
10518- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc duty cycle)	X	4.48	67.19	16.57	0.00	150.0	± 9.6 %
		Υ	4.66	66.80	16.35		150.0	
		Z	4.59	66.60	16.12	0.00	150.0	+ O & O/
10519- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 99pc duty cycle)	X	4.64	67.36	16.66	0.00	150.0	± 9.6 %
		Y	4.88	67.08	16.48		150.0	
		Z	4.79	66.86	16.25	0.00	150.0	+000
10520- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 99pc duty cycle)	X	4.50	67.33	16.59	0.00	150.0	± 9.6 %
		Y	4.73	67.07	16.42		150.0	
10521-	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24	Z	4.43	66.83 67.32	16.17 16.58	0.00	150.0 150.0	±9.6 %
AAA	Mbps, 99pc duty cycle)	1	4.00	07.00	10 44		150.0	-
		Y	4.66	67.08	16.41		150.0 150.0	
40500	TEER OOD 44 AT MITTER OUT OF DAY OO	Z	4.57	66.82 67.45	16.16 16.68	0.00	150.0	± 9.6 %
10522- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc duty cycle)	X	4.49			0.00		2 0.0 /0
		Y	4.71	67.07	16.44	-	150.0 150.0	
		Z	4.62	66.87	16.22		150.0	

							450.0	. 0.0.0/
10523- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 99pc duty cycle)	X	4.40	67.41	16.59	0.00	150.0	± 9.6 %
		Υ	4.58	66.97	16.31		150.0	
		Z	4.50	66.74	16.07		150.0	
10524- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc duty cycle)	Х	4.44	67.39	16.66	0.00	150.0	± 9.6 %
rv-v-1	(Niopo, cope daty systs)	Y	4.66	67.02	16.43		150.0	
		Z	4.57	66.80	16.19		150.0	
10525-	IEEE 802.11ac WiFi (20MHz, MCS0, 99pc duty cycle)	X	4.46	66.48	16.28	0.00	150.0	± 9.6 %
AAA	99pc duty cycle)	Y	4.62	66.06	16.02		150.0	
		Ż	4.54	65.85	15.79		150.0	
10526- AAA	IEEE 802.11ac WiFi (20MHz, MCS1, 99pc duty cycle)	X	4.60	66.79	16.40	0.00	150.0	± 9.6 %
	55po daty systey	Υ	4.82	66.46	16.16		150.0	
		Z	4.72	66.22	15.93		150.0	
10527- AAA	IEEE 802.11ac WiFi (20MHz, MCS2, 99pc duty cycle)	X	4.53	66.77	16.35	0.00	150.0	± 9.6 %
	99pc daty cycle)	Y	4.74	66.44	16.12		150.0	_
	 	ż	4.64	66.19	15.88		150.0	
10528- AAA	IEEE 802.11ac WiFi (20MHz, MCS3, 99pc duty cycle)	X	4.54	66.78	16.38	0.00	150.0	± 9.6 %
<i>1</i> √√1		Y	4.75	66.46	16.15		150.0	
		Ż	4.66	66.21	15.91		150.0	
10529- AAA	IEEE 802.11ac WiFi (20MHz, MCS4, 99pc duty cycle)	X	4.54	66.78	16.38	0.00	150.0	± 9.6 %
AAA	99bc daty cycle)	Y	4.75	66.46	16.15		150.0	
		Ż	4.66	66.21	15.91		150.0	
10531-	IEEE 802.11ac WiFi (20MHz, MCS6, 99pc duty cycle)	X	4.52	66.84	16.38	0.00	150.0	± 9.6 %
AAA	99pc duty cycle)	Y	4.76	66.60	16.18		150.0	
		Z	4.66	66.32	15.93		150.0	
10532-	IEEE 802.11ac WiFi (20MHz, MCS7,	X	4.39	66.72	16.32	0.00	150.0	± 9.6 %
AAA	99pc duty cycle)	Y	4.61	66.47	16.13		150.0	
		Ż	4.51	66.18	15.86		150.0	
10533- AAA	IEEE 802.11ac WiFi (20MHz, MCS8, 99pc duty cycle)	X	4.55	66.87	16.39	0.00	150.0	±9.6 %
AAA	99pc duty cycle)	Y	4.77	66.48	16.13		150.0	
		Z	4.67	66.24	15.89		150.0	
10534- AAA	IEEE 802.11ac WiFi (40MHz, MCS0, 99pc duty cycle)	X	5.09	66.73	16.38	0.00	150.0	± 9.6 %
		Y	5.26	66.58	16.18		150.0	
		Z	5.19	66.36	15.98		150.0	
10535- AAA	IEEE 802.11ac WiFi (40MHz, MCS1, 99pc duty cycle)	X	5.14	66.89	16.46	0.00	150.0	± 9.6 %
		Υ	5.33	66.72	16.24		150.0	
		Z	5.25	66.50	16.04		150.0	
10536- AAA	IEEE 802.11ac WiFi (40MHz, MCS2, 99pc duty cycle)	X	5.03	66.89	16.44	0.00	150.0	± 9.6 %
,,,,,		Y	5.20	66.71	16.22		150.0	
		Z	5.12	66.47	16.01		150.0	
10537- AAA	1EEE 802.11ac WiFi (40MHz, MCS3, 99pc duty cycle)	X	5.08	66.84	16.42	0.00	150.0	±9.6%
	<u> </u>	Y	5.27	66.68	16.21		150.0	
		Z	5.18_	66.44	16.00		150.0	
10538- AAA	IEEE 802.11ac WiFi (40MHz, MCS4, 99pc duty cycle)	Х	5.15	66.81	16.44	0.00	150.0	± 9.6 %
		Y	5.37	66.74	16.28		150.0	
				66.49	16.06		150.0	
		Z	5.28	00.49	10.00			
10540-	IEEE 802.11ac WiFi (40MHz, MCS6,	Z X	5.28 5.09	66.80	16.45	0.00	150.0	± 9.6 %
10540- AAA	IEEE 802.11ac WiFi (40MHz, MCS6, 99pc duty cycle)			_		0.00		± 9.6 %

10511		T v T	- AA	00.00	40.00	0.00	450.0	1000
10541- AAA	IEEE 802.11ac WiFi (40MHz, MCS7,	X	5.06	66.68	16.38	0.00	150.0	± 9.6 %
AAA	99pc duty cycle)	Y	5.26	66.60	16.22		150.0	
		Z	5.18	66.36	16.00		150.0	
10542-	IEEE 802.11ac WiFi (40MHz, MCS8,	X	5.22	66.77	16.43	0.00	150.0	± 9.6 %
AAA	99pc duty cycle)					0.00		2 3.0 %
		Y	5.41	66.64	16.25		150.0	
		Z	5.33	66.43	16.05		150.0	2.2.2
10543- AAA	IEEE 802.11ac WiFi (40MHz, MCS9, 99pc duty cycle)	Х	5.28	66.79	16.47	0.00	150.0	±9.6 %
		Y	5.50	66.65	16.27		150.0	
		Z.	5.41	66.46	16.08		150.0	
10544- AAA	IEEE 802.11ac WiFi (80MHz, MCS0, 99pc duty cycle)	X	5.42	66.77	16.34	0.00	150.0	±9.6 %
		Y	5.55	66.69	16.17		150.0	
		Z	5.48	66.48	15.98		150.0	
10545- AAA	IEEE 802.11ac WiFi (80MHz, MCS1, 99pc duty cycle)	X	5.61	67.23	16.53	0.00	150.0	± 9.6 %
		Y	5.75	67.07	16.30		150.0	
		Z	5.67	66.87	16.11		150.0	
10546- AAA	IEEE 802.11ac WiFi (80MHz, MCS2, 99pc duty cycle)	X	5.46	66.92	16.38	0.00	150.0	±9.6 %
		Y	5.64	66.96	16.27		150.0	
		Z	5.56	66.72	16.06		150.0	
10547- AAA	IEEE 802.11ac WiFi (80MHz, MCS3, 99pc duty cycle)	Х	5.54	67.00	16.42	0.00	150.0	± 9.6 %
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		Υ	5.73	67.04	16.29		150.0	
		Z	5.64	66.77	16.07		150.0	
10548- AAA	IEEE 802.11ac WiFi (80MHz, MCS4, 99pc duty cycle)	X	5.73	67.79	16.78	0.00	150.0	± 9.6 %
,,,,,		Y	5.99	67.96	16.73		150.0	
		Z	5.87	67.64	16.48		150.0	
10550- AAA	IEEE 802.11ac WiFi (80MHz, MCS6, 99pc duty cycle)	X	5.52	67.07	16.47	0.00	150.0	± 9.6 %
7070	93pc daty cyclej	Y	5.66	66.92	16.25		150.0	
		ż	5.58	66.70	16.06		150.0	
10551- AAA	IEEE 802.11ac WiFi (80MHz, MCS7, 99pc duty cycle)	X	5.47	66.93	16.36	0.00	150.0	± 9.6 %
7001	cops daty cycle/	Y	5.67	66.99	16.25		150.0	
		Z	5.59	66.76	16.05		150.0	
10552- AAA	IEEE 802.11ac WiFi (80MHz, MCS8, 99pc duty cycle)	X	5.43	66.87	16.34	0.00	150.0	± 9.6 %
, , , , ,	copo dati ojatoj	Y	5.58	66.77	16.15		150.0	
	 	Z	5.50	66.55	15.96		150.0	
10553- AAA	IEEE 802.11ac WiFi (80MHz, MCS9, 99pc duty cycle)	X	5.49	66.84	16.35	0.00	150.0	± 9.6 %
<u> </u>		Y	5.67	66.82	16.21		150.0	
		Z	5.59	66.61	16.01		150.0	
10554- AAA	IEEE 1602.11ac WiFi (160MHz, MCS0, 99pc duty cycle)	Х	5.84	67.09	16.40	0.00	150.0	± 9.6 %
- w w 1		Y	5.94	67.05	16.25		150.0	
		Z	5.88	66.85	16.07		150.0	
10555- AAA	IEEE 1602.11ac WiFi (160MHz, MCS1, 99pc duty cycle)	X	5.95	67.36	16.52	0.00	150.0	± 9.6 %
•		Y	6.09	67.37	16.39		150.0	
		Z	6.01	67.14	16.19		150.0	
10556- AAA	IEEE 1602.11ac WiFi (160MHz, MCS2, 99pc duty cycle)	X	5.98	67.45	16.56	0.00	150.0	± 9.6 %
		Y	6.10	67.39	16.39		150.0	
		Z	6.03	67.18	16.21		150.0	
10557-	IEEE 1602.11ac WiFi (160MHz, MCS3,	X	5.93	67.31	16.50	0.00	150.0	±9.6 %
	L 99nc duty cycle)							
AAA	99pc duty cycle)	Υ	6.09	67.35	16.39		150.0	

October 3, 2016

10558-	IEEE 1602.11ac WiFi (160MHz, MCS4,	X	5.96	67.43	16.58	0.00	150.0	± 9.6 %
AAA	99pc duty cycle)						450.0	
		Y	6.14	67.53	16.50		150.0	
		Z	6.06	67.28	16.29		150.0	. 2.2.21
10560- AAA	IEEE 1602.11ac WiFi (160MHz, MCS6, 99pc duty cycle)	X	5.96	67.30	16.55	0.00	150.0	± 9.6 %
~~~	99pc daty cycle/	Y	6.14	67.38	16.46		150.0	
		Z	6.06	67.14	16.26		150.0	
10561-	IEEE 1602.11ac WiFi (160MHz, MCS7,	X	5.90	67.30	16.59	0.00	150.0	±9.6 %
AAA	99pc duty cycle)	Y	6.05	67.33	16.47		150.0	
		Z	5.97	67.09	16.27		150.0	
10562-	IEEE 1602.11ac WiFi (160MHz, MCS8,	X	5.97	67.52	16.70	0.00	150.0	± 9.6 %
AAA	99pc duty cycle)	Y	6.20	67.78	16.70		150.0	
		Z	6.10	67.49	16.47		150.0	
	MCE: (400MUL MCCO	X	6.05	67.43	16.61	0.00	150.0	± 9.6 %
10563- AAA	IEEE 1602.11ac WiFi (160MHz, MCS9, 99pc duty cycle)					0.00	150.0	
		Υ	6.51	68.26	16.88			
		Z_	6.42	68.01	16.67	0.40	150.0	± 9.6 %
10564- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 9 Mbps, 99pc duty cycle)	X	4.79	67.15	16.65	0.46	150.0	I 9.0 %
		Υ	4.99	66.89	16.50		150.0	
		Z	4.91	66.68	16.27		150.0	
10565- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 12 Mbps, 99pc duty cycle)	Х	5.00	67.58	16.97	0.46	150.0	± 9.6 %
rv-v-	Of Diff, 12 findpe, 35 pe 421, 3) 112,	Y	5.25	67.37	16.83		150.0	
		Z	5.16	67.16	16.61		150.0	
10566-	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 18 Mbps, 99pc duty cycle)	X	4.83	67.41	16.78	0.46	150.0	±9.6 %
AAA	OPDIM, 16 IMBPS, 99pc daty cycle/	Y	5.08	67.24	16.66		150.0	
	2	Z	4.99	67.00	16.41		150.0	
10567-	IEEE 802.11g WiFi 2.4 GHz (DSSS-	X	4.88	67.87	17.20	0.46	150.0	± 9.6 %
AAA	OFDM, 24 Mbps, 99pc duty cycle)	Y	5.11	67.62	16.99		150.0	
					16.78		150.0	
		Z	5.02	67.41	16.76	0.46	150.0	± 9.6 %
10568- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 36 Mbps, 99pc duty cycle)	X	4.73	67.14		0.40		2 3.0 70
		Y	4.99	66.97	16.41		150.0	
		Z	4.89	66.73	16.15		150.0	
10569- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 48 Mbps, 99pc duty cycle)	X	4.86	68.08	17.32	0.46	150.0	±9.6 %
		Υ	5.05	67.63	17.01		150.0	
		Z	4.97	67.46	16.82		150.0	
10570- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 54 Mbps, 99pc duty cycle)	X	4.87	67.85	17.21	0.46	150.0	± 9.6 %
		Υ	5.09	67.48	16.95	ļ	150.0	
		Z	5.01	67.31	16. <u>75</u>		150.0	
10571- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90pc duty cycle)	Х	1.23	65.85	16.68	0.46	130.0	± 9.6 %
~~~	wippa, sope daty cycle)	Y	1.28	65.62	16.38		130.0	
		Z	1.20	64.12	15.14		130.0	
10572-	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 90pc duty cycle)	X	1.26	66.61	17.14	0.46	130.0	± 9.6 %
AAA	wipps, sope duty cycle)	Y	1.30	66.27	16.76		130.0	
		 ż	1.21	64.64	15.46		130.0	
10573-	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5	X	15.61	122.59	34.86	0.46	130.0	± 9.6 %
AAA	Mbps, 90pc duty cycle)	Υ	7.32	105.62	29.57		130.0	
		Z	1.41	77.28	19.61	+	130.0	
	TEEE 000 445 MEE: 0.4.015 (D000, 44	X	1.59	75.46	21.51	0.46	130.0	±9.6 %
10574- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 90pc duty cycle)					0.40		2 3.0 70
		Y	1.56	73.46	20.23	1	130.0	
		Z	1.30	69.51	17.90		130.0	

		1		00.00	40.05	0.40	420.0	1000
10575-	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 90pc duty cycle)	X	4.57	66.90	16.65	0.46	130.0	± 9.6 %
AAA	OFDIVI, 6 IVIDPS, 90PC duty cycle)	Υ	4.78	66.67	16.55		130.0	
		Z	4.70	66.43	16.27		130.0	
10576-	IEEE 802.11g WiFi 2.4 GHz (DSSS-	X	4.60	67.11	16.74	0.46	130.0	± 9.6 %
AAA	OFDM, 9 Mbps, 90pc duty cycle)	^	1.00	0,,,,	,	•	'	
7001	O BW, O Mapo, Copo daty Oyeley	Y	4.81	66.83	16.61		130.0	
		Z	4.72	66.59	16.34		130.0	
10577-	IEEE 802.11g WiFi 2.4 GHz (DSSS-	X	4.78	67.36	16.89	0.46	130.0	± 9.6 %
AAA	OFDM, 12 Mbps, 90pc duty cycle)	^	1	01.00	10.00			
AAA	Of Divi, 12 wisps, sope daty cycle)	Y	5.04	67.16	16.78		130.0	
		Z	4.94	66.91	16.52		130.0	
10578-	IEEE 802.11g WiFi 2.4 GHz (DSSS-	X	4.68	67.55	17.03	0.46	130.0	± 9.6 %
AAA	OFDM, 18 Mbps, 90pc duty cycle)	^	7.00	000				
7001	Of BM, 10 Mbps, 3550 daty cyclo)	Y	4.93	67.32	16.88		130.0	
		Z	4.83	67.07	16.62		130.0	
10579-	IEEE 802.11g WiFi 2.4 GHz (DSSS-	-	4.43	66.68	16.24	0.46	130.0	± 9.6 %
AAA	OFDM, 24 Mbps, 90pc duty cycle)	^	12.10	00.00				
~~~	Of Bivi, 24 Misps, 30pc daty cycle)	Y	4.71	66.69	16.25		130.0	
		Ż	4.59	66.34	15.91		130.0	
10580-	IEEE 802.11g WiFi 2.4 GHz (DSSS-	X	4.47	66.74	16.26	0.46	130.0	± 9.6 %
AAA	OFDM, 36 Mbps, 90pc duty cycle)	^	r 1	30.13		31.5		
/V/V	Of Divi, 30 Mbps, 30pc duty cycle)	Y	4.75	66.68	16.26		130.0	
		Z	4.64	66.35	15.93		130.0	
40504	IEEE 802.11g WiFi 2.4 GHz (DSSS-	X	4.59	67.62	16.99	0.46	130.0	± 9.6 %
10581-	OFDM, 48 Mbps, 90pc duty cycle)	^	4.55	07.02	10.55	0.40	100.0	20.0 %
AAA	OPDIVI, 46 IVIOPS, 90PC duty cycle)	Y	4.83	67.38	16.83		130.0	
		Z	4.73	67.09	16.54		130.0	
40500	IEEE 802.11g WiFi 2.4 GHz (DSSS-	X	4.35	66.42	16.00	0.46	130.0	± 9.6 %
10582-		^	4.00	00.72	10.00	0.40	100.0	
AAA	OFDM, 54 Mbps, 90pc duty cycle)	Y	4.66	66.46	16.06		130.0	
		Z	4.54	66.09	15.70		130.0	
40500	LETE DOG 44 - /- MUCLE OLI- (OFDM 6	X	4.57	66.90	16.65	0.46	130.0	± 9.6 %
10583-	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6	^	4.57	00.90	10.05	0.40	130.0	2 3.0 %
AAA	Mbps, 90pc duty cycle)	Y	4.78	66.67	16.55		130.0	
		Z	4.70	66.43	16.27		130.0	
	LEGE COO 44 A MUSIC COLL (CEDM O	X	4.60	67.11	16.74	0.46	130.0	± 9.6 %
10584-	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9	^	4.60	07.11	10.74	0.40	130.0	2 3.0 %
AAA	Mbps, 90pc duty cycle)	Y	4.81	66.83	16.61		130.0	
		Z	4.72	66.59	16.34		130.0	
	1555 000 44 % NUST 5 OUT (OFFINA 40	X	4.72	67.36	16.89	0.46	130.0	±9.6 %
10585-	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12	^	4./0	07.30	10.09	0.40	130.0	2 3.0 %
AAA	Mbps, 90pc duty cycle)	Υ	5.04	67.16	16.78		130.0	
		_			16.52		130.0	
	A STATE OF THE STATE OF THE ACT O	Z	4.94	66.91	17.03	0.46	130.0	±9.6%
10586-	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18	X	4.68	67.55	17.03	0.40	130.0	2 3.0 /0
AAA	Mbps, 90pc duty cycle)	+	4 00	67.32	16.88		130.0	
		Y	4.93	67.07	16.62		130.0	-
	1555 000 44 - 1 1475 5 O. 1 (05514 C)	Z	4.83		16.02	0.46	130.0	± 9.6 %
10587-	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24	X	4.43	66.68	10.24	0.40	130.0	- 3.0 /
AAA	Mbps, 90pc duty cycle)	1	4 74	66.60	16.25	-	130.0	-
		Y	4.71	66.69		-	130.0	
		Z	4.59	66.34	15.91	0.46	130.0	±9.6 %
10588-	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36	X	4.47	66.74	16.26	0.46	130.0	E 3.0 %
AAA	Mbps, 90pc duty cycle)	+	4 77	60.00	16.00		130.0	-
		Y	4.75	66.68	16.26		130.0	
		Z	4.64	66.35	15.93	0.46	130.0	± 9.6 %
10589-	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48	X	4.59	67.62	16.99	0.46	130.0	1 7.0 %
AAA	Mbps, 90pc duty cycle)	1	4.00	07.00	46.00		130.0	
		Y	4.83	67.38	16.83			
		Z	4.73	67.09	16.54	0.46	130.0	± 9.6 %
10590-	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54	X	4.35	66.42	16.00	0.46	130.0	± 9.0 %
AAA	Mbps, 90pc duty cycle)	1			40.00	<del></del>	120.0	725
		Υ	4.66	66.46	16.06	<del>                                     </del>	130.0	-55
		Z	4.54	66.09	15.70	1	130.0	5300

10591- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS0, 90pc duty cycle)	X	4.72	66.97	16.76	0.46	130.0	± 9.6 %
V-V-1	200,00000000000000000000000000000000000	Υ	4.93	66.73	16.63		130.0	
		Z	4.85	66.51	16.38		130.0	
10592-	IEEE 802.11n (HT Mixed, 20MHz, MCS1, 90pc duty cycle)	Х	4.85	67.28	16.89	0.46	130.0	± 9.6 %
\AA	MCS1, 90pc duty cycle)	Y	5.10	67.07	16.76		130.0	
		Z	5.01	66.85	16.51	_	130.0	
	UEEE 002 445 /UT Mixed 20MHz	X	4.77	67.16	16.75	0.46	130.0	± 9.6 %
10593- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS2, 90pc duty cycle)	- Y	5.03	67.02	16.67		130.0	
				66.76	16.39		130.0	-
10594-	IEEE 802.11n (HT Mixed, 20MHz,	Z X	4.93 4.83	67.35	16.92	0.46	130.0	± 9.6 %
AAA	MCS3, 90pc duty cycle)			<u> </u>	40.00		130.0	
		Y	5.08	67.17	16.80			
		Z	4.99	66.92	16.54		130.0	1 O C 0/
10595- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS4, 90pc duty cycle)	X	4.79	67.31	16.82	0.46	130.0	± 9.6 %
		Υ	5.06	67.14	16.71		130.0	
		Ż	4.95	66.87	16.44		130.0	
10596-	IEEE 802.11n (HT Mixed, 20MHz, MCS5, 90pc duty cycle)	Х	4.73	67.29	16.82	0.46	130.0	±9.6 %
<u> </u>	WOSO, SOPE daily Gydie/	Y	4.99	67.14	16.71		130.0	
=		z	4.89	66.86	16.43		130.0	
10597-	IEEE 802.11n (HT Mixed, 20MHz,	X	4.68	67.16	16.68	0.46	130.0	± 9.6 %
<u> </u>	MCS6, 90pc duty cycle)	Y	4.95	67.07	16.62	_	130.0	
	<u> </u>			66.78	16.32		130.0	
		Z	4.84			0.46	130.0	± 9.6 %
10598- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS7, 90pc duty cycle)	X	4.67	67.44	16.97			1 9.0 /6
		Y	4.93	67.31	16. <u>88</u>		130.0	
		Z	4.82	67.03	16.60		130.0	
10599- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS0, 90pc duty cycle)	Х	5.39	67.39	16.95	0.46	130.0	± 9.6 %
~~	Micee, cope daty of o.e.	_ Y	5.60	67.32	16.82		130.0	
		Z	5.51	67.07	16.58	_	130.0	
10600- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS1, 90pc duty cycle)	X	5.51	67.80	17.12	0.46	130.0	± 9.6 %
AAA	Wics 1, sope daty dydio/	Y	5.77	67.81	17.04		130.0	
		Z	5.65	67.49	16.76		130.0	
10601-	IEEE 802.11n (HT Mixed, 40MHz,	X	5.41	67.56	17.02	0.46	130.0	± 9.6 %
AAA	MCS2, 90pc duty cycle)		5.64	67.51	16.91		130.0	
				67.24	16.65		130.0	
10602-	IEEE 802.11n (HT Mixed, 40MHz,	Z X	5.54 5.54	67.73	17.02	0.46	130.0	± 9.6 %
AAA	MCS3, 90pc duty cycle)	Y-	5.72	67.51	16.82		130.0	1
			5.62	67.22	16.56	<del> </del>	130.0	
10603-	IEEE 802.11n (HT Mixed, 40MHz,	Z X	5.62	68.07	17.33	0.46	130.0	± 9.6 %
AAA	MCS4, 90pc duty cycle)		5.82	67.83	17.11		130.0	-
	<u> </u>	Y					130.0	+
		Z	5.72	67.58	16.87	0.40		± 9.6 %
10604- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS5, 90pc duty cycle)	X	5.49	67.68	17.12	0.46	130.0	± 9.6 %
		Y	5.60	67.27	16.82		130.0	
		Z	5.51	67.03	16.58		130.0	
10605- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS6, 90pc duty cycle)	X	5.51	67.70	17.12	0.46	130.0	± 9.6 %
, <u>, , , , , , , , , , , , , , , , , , </u>		Y	5.70	67.55	16.96		130.0	
		Z	5,61	67.31	16.72		130.0	
10606-	IEEE 802.11n (HT Mixed, 40MHz,	X	5.26	67.01	16.63	0.46	130.0	± 9.6 %
AAA	MCS7, 90pc duty cycle)	Y	5.49	67.08	16.60	+	130.0	<del>                                     </del>
					16.33	<del></del>	130.0	<del>                                     </del>
	I I	Z	5.39	66.79	10.55		130.0	

10607-	IEEE 802.11ac WiFi (20MHz, MCS0,	X	4.58	66.35	16.43	0.46	130.0	± 9.6 %
AAA	90pc duty cycle)				4		400 -	
		Y	4.76	66.03	16.25		130.0	
		Z	4.68	65.79	15.98	0.40	130.0	1000
10608- AAA	IEEE 802.11ac WiFi (20MHz, MCS1, 90pc duty cycle)	X	4.73	66.71	16.58	0.46	130.0	± 9.6 %
		Y	4.98	66.46	16.42		130.0	
		Z	4.87	66.20	16.15		130.0	
10609- AAA	IEEE 802.11ac WiFi (20MHz, MCS2, 90pc duty cycle)	X	4.62	66.54	16.40	0.46	130.0	± 9.6 %
		Y	4.87	66.34	16.28		130.0	
		Z	4.76	66.05	15.99		130.0	
10610- AAA	IEEE 802.11ac WiFi (20MHz, MCS3, 90pc duty cycle)	Х	4.68	66.72	16.58	0.46	130.0	±9.6%
		Y	4.92	66.49	16. <u>43</u>		130.0	
		Z	4.81	66.21	16.15		130.0	
10611- AAA	IEEE 802.11ac WiFi (20MHz, MCS4, 90pc duty cycle)	X	4.59	66.51	16.42	0.46	130.0	± 9.6 %
		Y	4.84	66.32	16.29		130.0	
		Z	4.73	66.02	16.00		130.0	
10612- AAA	IEEE 802.11ac WiFi (20MHz, MCS5, 90pc duty cycle)	×	4.59	66.66	16.46	0.46	130.0	± 9.6 %
		Y	4.85	66.48	16.33		130.0	
		Z	4.74	66.16	16.03		130.0	
10613- AAA	IEEE 802.11ac WiFi (20MHz, MCS6, 90pc duty cycle)	X	4.58	66.47	16.30	0.46	130.0	± 9.6 %
		Y	4.87	66.40	16.24		130.0	
		Z	4.75	66.06	15.92		130.0	0.004
10614- AAA	IEEE 802.11ac WiFi (20MHz, MCS7, 90pc duty cycle)	X	4.55	66.74	16.59	0.46	130.0	± 9.6 %
		Υ	4.80	66.57	16.46		130.0	
		Z	4.69	66.26	16.16		130.0	
10615- AAA	IEEE 802.11ac WiFi (20MHz, MCS8, 90pc duty cycle)	X	4.58	66.31	16.16	0.46	130.0	± 9.6 %
		Y	4.84	66.15	16.08		130.0	
		Z	4.73	65.83	15. <u>77</u>		130.0	
10616- AAA	IEEE 802.11ac WiFi (40MHz, MCS0, 90pc duty cycle)	X	5.21	66.65	16.56	0.46	130.0	± 9.6 %
		Y	5-41	66.58	16.44		130.0	
		Z	5.33	66.33	16.20		130.0	
10617- AAA	IEEE 802.11ac WiFi (40MHz, MCS1, 90pc duty cycle)	Х	5.28	66.84	16.63	0.46	130.0	± 9.6 %
		Y	5.47	66.68	16.45		130.0	
		Z	5.38	66.45	16.22		130.0	
10618- AAA	IEEE 802.11ac WiFi (40MHz, MCS2, 90pc duty cycle)	X	5.18	66.90	16.68	0.46	130.0	± 9.6 %
<u> </u>		Y	5.37	66.76	16.51		130.0	
		Z	5.28	66.49	16.27		130.0	
10619- AAA	IEEE 802.11ac WiFi (40MHz, MCS3, 90pc duty cycle)	X	5.18	66.65	16.49	0.46	130.0	± 9.6 %
707		Y	5.39	66.59	16.37		130.0	
		Z	5.30	66.32	16.11		130.0	
10620- AAA	IEEE 802.11ac WiFi (40MHz, MCS4, 90pc duty cycle)	X	5.26	66.66	16.54	0.46	130.0	± 9.6 %
		Υ	5.51	66.68	16.46		130.0	
		Z	5.40	66.39	16.19		130.0	1000
10621- AAA	IEEE 802.11ac WiFi (40MHz, MCS5, 90pc duty cycle)	X	5.27	66.82	16.75	0.46	130.0	± 9.6 %
		Υ	5.48	66.74	16.60		130.0	
		Z	5.39	66.50	16.37		130.0	
10622- AAA	IEEE 802.11ac WiFi (40MHz, MCS6, 90pc duty cycle)	Х	5.27	66.93	16.80	0.46	130.0	± 9.6 %
AAA		V	5.48	66.86	16.65		130.0	
		Υ	3.40	00.00	10.00		130.0	

10623- AAA	IEEE 802.11ac WiFi (40MHz, MCS7, 90pc duty cycle)	X	5.14	66.42	16.40	0.46	130.0	± 9.6 %
	Sope daty systey	Y	5.37	66.46	16.34		130.0	
		Z	5.27	66.17	16.07		130.0	
10624- AAA	IEEE 802.11ac WiFi (40MHz, MCS8, 90pc duty cycle)	Х	5.34	66.68	16.59	0.46	130.0	± 9.6 %
AVAVA	gope duty cycle)	Υ	5.56	66.62	16.48		130.0	
		Ż	5.47	66.37	16.24	_	130.0	
	IEEE 802.11ac WiFi (40MHz, MCS9,	X	5.51	67.05	16.84	0.46	130.0	± 9.6 %
10625- AAA	90pc duty cycle)				17.02		130.0	
		Y	5.94	67.60			130.0	
		Z	5.85	67.36	16.78	0.46	130.0	± 9.6 %
10626- AAA	IEEE 802.11ac WiFi (80MHz, MCS0, 90pc duty cycle)	Х	5.53	66.66	16.50	0.46	_	<u> </u>
		Y	5.68	66.62	16.38		130.0	
		Z	5.60	66.40	16.16		130.0	
10627- AAA	IEEE 802.11ac WiFi (80MHz, MCS1, 90pc duty cycle)	Х	5.78	67.30	16.79	0.46	130.0	± 9.6 %
<u> </u>	Sope daily Gyste/	Υ	5.92	67.14	16.59		130.0	
		Ż	5.84	66.92	16.37	_	130.0	
10628-	IEEE 802.11ac WiFi (80MHz, MCS2,	X	5.53	66.65	16.39	0.46	130.0	± 9.6 %
AAA	90pc duty cycle)	Y	5.74	66.79	16.36		130.0	
			5.65	66.51	16.11		130.0	
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Z	5.63	66.79	16.45	0.46	130.0	± 9.6 %
10629- AA <u>A</u>	IEEE 802.11ac WiFI (80MHz, MCS3, 90pc duty cycle)					0.40	130.0	
_		Υ	5.82	66.85	16.38			
		Z	5.74	66.60	16.14		130.0	. 0.0.0/
10630- AAA	IEEE 802.11ac WiFi (80MHz, MCS4, 90pc duty cycle)	Х	5.95	67.97	17.05	0.46	130.0	± 9.6 %
		Y	6.32	68.49	17.20		13 <u>0.0</u>	
		Z	6.17	68.05	16.86		130.0	
10631-	IEEE 802.11ac WiFi (80MHz, MCS5,	X	5.89	67.93	17.23	0.46	130.0	± 9.6 %
AAA	90pc duty cycle)	Υ	6.21	68.27	17.26		130.0	
		Z	6.09	67.93	17.00		130.0	
	THE COUNTY OF THE MICH	X	5.77	67.44	17.00	0.46	130.0	± 9.6 %
10632- AAA	IEEE 802.11ac WiFi (80MHz, MCS6, 90pc duty cycle)					0.40	130.0	2010 /0
		Y	5.90	67.22	16.76			
		Z	5.82	67.00	16.55		130.0	
10633- AAA	IEEE 802.11ac WiFi (80MHz, MCS7, 90pc duty cycle)	Х	5.60	66.87	16.54	0.46	130.0	± 9.6 %
, , , ,		Υ	5.83	67.02	16.49		130.0	
_		Z	5.72	66.69	16.23		130.0	
10634- AAA	IEEE 802.11ac WiFi (80MHz, MCS8, 90pc duty cycle)	X	5.59	66.92	16.62	0.46	130.0	± 9.6 %
	Jopo daty Gyoroj	Υ	5.81	67.01	16.55		130.0	
		z	5.71	66.73	16.31		130.0	
10635- AAA	IEEE 802.11ac WiFi (80MHz, MCS9,	X	5.44	66.12	15.93	0.46	130.0	± 9.6 %
	90pc duty cycle)	Y	5.70	66.39	15.99		130.0	
		$\frac{1}{Z}$	5.59	66.05	15.69	<del>                                     </del>	130.0	† ·
		X	5.96	67.00	16.57	0.46	130.0	± 9.6 %
10636- AAA	IEEE 1602.11ac WiFi (160MHz, MCS0, 90pc duty cycle)					0.40	130.0	25.570
		Y	6.08	67.01	16.47	<del></del>		<del>                                     </del>
		Z	6.01	66.78	16.25	<u> </u>	130.0	1.000
	IEEE 1602.11ac WiFi (160MHz, MCS1,	X	6.10	67.36	16.74	0.46	130.0	± 9.6 %
10637- AAA	· ·				40.00	1	130.0	1
10637- AAA	90pc duty cycle)	Y	6.25	67.39	16.63			
	· ·			67.39 67.14	16.63		130.0	
10638-	90pc duty cycle)  IEEE 1602.11ac WiFi (160MHz, MCS2,	Y Z X	6.25 6.17 6.11			0.46		± 9.6 %
AAA	90pc duty cycle)	Z	6.17	67.14	16.41	0.46	130.0	± 9.6 %

10639- AAA	IEEE 1602.11ac WiFi (160MHz, MCS3, 90pc duty cycle)	X	6.07	67.26	16.71	0.46	130.0	± 9.6 %
10640-	Sopo daty oyolo/	Y	6.25	67.37	16.65		130.0	
		Z	6.16	67.11	16.42		130.0	
	IEEE 1602.11ac WiFi (160MHz, MCS4,	X	6.05	67.22	16.62	0.46	130.0	± 9.6 %
AAA	90pc duty cycle)	^	0.00	OT.EL	10.02	30		- 3/3 /3
^^^	- Cope daty Cycle)	Y	6.27	67.44	16.63		130.0	
	*	Z	6.17	67.12	16.37		130.0	
10641- AAA	IEEE 1602.11ac WiFi (160MHz, MCS5, 90pc duty cycle)	X	6.13	67.23	16.65	0.46	130.0	± 9.6 %
7001		Y	6.27	67.20	16.53		130.0	
		Ż	6.19	66.96	16.31		130.0	
10642-	IEEE 1602.11ac WiFi (160MHz, MCS6,	Х	6.16	67.45	16.94	0.46	130.0	± 9.6 %
AAA	90pc duty cycle)	Y	6.34	67.53	16.85		130.0	
		Z	6.25	67.29	16.64		130.0	
10010	NEET 4000 44 NATE: /400NH 14007				16.67	0.46	130.0	± 9.6 %
10643- AAA	IEEE 1602.11ac WiFi (160MHz, MCS7, 90pc duty cycle)	Х	6.00	67.14		0.46		19.0 %
		Y	6.17	67.21	16.60		130.0	
		Z	6.08	66.93	16.36		130.0	
10644- AAA	IEEE 1602.11ac WiFi (160MHz, MCS8, 90pc duty cycle)	X	6.08	67.39	16.82	0.46	130.0	± 9.6 %
		Υ	6.38	67.85	16.95		130.0	
		Z	6.26	67.49	16.66		130.0	
10645- AAA	IEEE 1602.11ac WiFi (160MHz, MCS9, 90pc duty cycle)	Х	6.23	67.50	16.83	0.46	130.0	± 9.6 %
7001		Y	6.74	68.44	17.18		130.0	
		Ż	6.68	68.29	17.00		130.0	
10646- AAB	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,7)	X	13.71	101.95	34.43	9.30	60.0	± 9.6 %
	Crord of additional 2,17	Y	31.42	116.20	38.46		60.0	
		Ż	15.59	99.47	32.52		60.0	
10647- AAA	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,7)	Х	12.18	100.02	33.95	9.30	60.0	± 9.6 %
	Qi Ort, OE Odolitanio - 2,17	Y	30.06	116.00	38.55		60.0	
		Ż	14.66	98.82	32.42		60.0	
10648-	CDMA2000 (1x Advanced)	X	0.74	65.73	11.50	0.00	150.0	± 9.6 %
AAA		Y	0.86	65.73	12.88		150.0	
		Ż	0.73	63.45	11.13		150.0	1

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