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





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

Accreditation No.: SCS 0108

Accredited by the Swiss Accreditation Service (SAS) The Swiss Accreditation Service is one of the signatories to the EA

Multilateral Agreement for the recognition of calibration certificates

Client

PC Test

Certificate No: ES3-3318_Feb16

CALIBRATION CERTIFICATE

Object ES3DV3 - SN:3318

Calibration procedure(s) QA CAL-01.v9, QA CAL-23.v5, QA CAL-25.v6

Calibration procedure for dosimetric E-field probes

Calibration date:

February 19, 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 E4419B	GB41293874	01-Apr-15 (No. 217-02128)	Mar-16
Power sensor E4412A	MY41498087	01-Apr-15 (No. 217-02128)	Mar-16
Reference 3 dB Attenuator	SN: S5054 (3c)	01-Apr-15 (No. 217-02129)	Mar-16
Reference 20 dB Attenuator	SN: S5277 (20x)	01-Apr-15 (No. 217-02132)	Mar-16
Reference 30 dB Attenuator	SN: S5129 (30b)	01-Apr-15 (No. 217-02133)	Mar-16
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
RF generator HP 8648C	US3642U01700	4-Aug-99 (in house check Apr-13)	In house check: Apr-16
Network Analyzer HP 8753E	US37390585	18-Oct-01 (in house check Oct-15)	In house check: Oct-16

Name Function Signature Calibrated by: Jeton Kastrati Laboratory Technician Approved by: Katja Pokovic **Technical Manager**

Issued: February 20, 2016

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

Calibration Laboratory of

Schmid & Partner
Engineering AG
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Glossarv:

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

ConvF DCP 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 φ

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:

- 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"

Methods Applied and Interpretation of Parameters:

- NORMx,y,z: Assessed for E-field polarization θ = 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
- 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.

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 Connector Angle: The angle is assessed using the information gained by determining the NORMx (no uncertainty required).

Certificate No: ES3-3318_Feb16

Probe ES3DV3

SN:3318

Manufactured: Calibrated:

January 10, 2012 February 19, 2016

Calibrated for DASY/EASY Systems

(Note: non-compatible with DASY2 system!)

ES3DV3-SN:3318

DASY/EASY - Parameters of Probe: ES3DV3 - SN:3318

Basic Calibration Parameters

	Sensor X	Sensor Y	Sensor Z	Unc (k=2)
Norm (μV/(V/m) ²) ^A	1.16	0.93	1.29	± 10.1 %
DCP (mV) ^B	102.2	104.2	103.7	

Modulation Calibration Parameters

UID	Communication System Name		A dB	B dB√μV	С	D dB	VR mV	Unc ^b (k=2)
0	CW	Х	0.0	0.0	1.0	0.00	199.2	±3.5 %
		Υ	0.0	0.0	1.0		176.5	
		Z	0.0	0.0	1.0		194.6	
10010- CAA	SAR Validation (Square, 100ms, 10ms)	Х	3.19	63.2	12.6	10.00	42.3	±1.4 %
		Υ	19.74	82.9	18.6		35.5	
		Z	4.87	67.6	14.6		43.3	
10012- CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps)	Х	2.99	68.6	18.5	1.87	141.3	±0.9 %
		Υ	3.46	71.1	19.6		145.1	
		Z	3.19	70.2	19.5		144.7	
10100- CAB	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	Х	6.30	67.0	19.4	5.67	128.2	±1.4 %
		Y	6.32	67.0	19.2		129.9	
		Z	6.36	67.5	19.8		131.3	
10103- CAB	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	X	11.31	78.0	27.3	9.29	146.7	±3.5 %
		Y	9.35	72.8	24.3		141.3	
		Z	11.02	76.9	26.7		131.7	
	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	X	6.22	66.7	19.4	5.80	126.2	±1.4 %
		Υ	6.20	66.5	19.1		128.1	
		Z	6.27	67.1	19.7		131.1	
10151- CAB	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	Х	10.46	76.6	26.8	9.28	138.8	±3.3 %
		Υ	8.80	72.0	24.0		134.3	
40454	1.75 500 600 500 600 600 600 600 600 600 60	Z	10.01	75.0	25.9		122.1	
10154- CAC	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	X	6.12	67.0	19.6	5.75	146.0	±1.7 %
		Υ	6.15	67.1	19.5		148.7	
10100	1.TE EDD (0.0 ED) 11 E0)	Z	5.95	66.5	19.4	5.00	127.4	. 4 4 0/
10160- CAB	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	Х	6.33	66.7	19.4	5.82	127.2	±1.4 %
		Y	6.33	66.6	19.2		128.2	-
40400	1.75 FDD (00 FDLM 4 DD 00 M)	Z	6.38	67.1	19.7	F 70	133.6	14.0.0/
10169- CAB	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	X	5.10	67.2	20.0	5.73	147.9	±1.2 %
		Y	4.85	66.3	19.3		127.1	
40470	LTC TOD (OC TONA 4 DD OCAUL	Z	4.97	66.7	19.8	0.04	133.9	13 0 0/
10172- CAB	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	X	8.71	78.3	27.8	9.21	127.5	±3.0 %
		Y	7.52	74.8	25.7		144.7	
40475	LITE EDD (OO EDWA 4 DD 40 ML)	Z	10.09	81.9	29.5	F 70	136.4	14.0.07
10175- CAC	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	X	5.09	67.2	20.0	5.72	146.9	±1.2 %
		Υ	4.97	66.9	19.6		140.9	
		Z	4.95	66.6	19.7		133.1	

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10181- CAB	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	Х	5.11	67.3	20.0	5.72	146.8	±1.2 %
		Υ	5.03	67.2	19.8		147.0	
		Z	5.00	66.8	19.8		135.0	
10237- CAB	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	Х	8.73	78.3	27.8	9.21	126.7	±3.0 %
		Υ	7.60	75.1	25.9		146.1	
		Z	10.76	83.8	30.4		143.4	
10252- CAB	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	Х	9.61	75.3	26.2	9.24	129.4	±3.3 %
		Υ	8.55	72.3	24.3		143.1	
		Z	11.05	79.1	28.1		146.1	
10267- CAB	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	Х	10.44	76.5	26.8	9.30	137.7	±3.3 %
		Y	8.62	71.3	23.6		125.8	
		Z	10.24	75.6	26.2		125.3	
10297- AAA	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	Х	6.51	67.8	20.0	5.81	148.5	±1.7 %
		Υ	6.42	67.3	19.6		144.3	
		Z	6.31	67.3	19.8		134.7	
10311- AAA	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	Х	6.80	67.4	19.9	6.06	128.6	±1.4 %
		Υ	6.69	66.9	19.4		125.3	
		Z	6.91	68.0	20.3		140.1	

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

A The uncertainties of Norm X,Y,Z do not affect the E²-field uncertainty inside TSL (see Pages 6 and 7).

B Numerical linearization parameter: uncertainty not required.

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

DASY/EASY - Parameters of Probe: ES3DV3 - SN:3318

Calibration Parameter Determined in Head Tissue Simulating Media

f (MHz) ^C	Relative Permittivity ^F	Conductivity (S/m) F	ConvF X	ConvF Y	ConvF Z	Alpha ^G	Depth ^G (mm)	Unc (k=2)
750	41.9	0.89	6.48	6.48	6.48	0.54	1.35	± 12.0 %
835	41.5	0.90	6.23	6.23	6.23	0.70	1.21	± 12.0 %
1750	40.1	1.37	5.34	5.34	5.34	0.72	1.27	± 12.0 %
1900	40.0	1.40	5.13	5.13	5.13	0.80	1.18	± 12.0 %
2300	39.5	1.67	4.78	4.78	4.78	0.76	1.29	± 12.0 %
2450	39.2	1.80	4.57	4.57	4.57	0.59	1.49	± 12.0 %
2600	39.0	1.96	4.40	4.40	4.40	0.80	1.31	± 12.0 %

^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 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.

validity can be extended to ± 110 MHz.

F At frequencies below 3 GHz, the validity of tissue parameters (ε and σ) can be relaxed to ± 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 ± 5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters

The stated SAR values. At frequencies above 3 GHz, the values of itssue parameters (£ and 6) is restricted to £ 5%. The uncertainty is the ROS of the ConvF uncertainty for indicated target tissue parameters.

^a 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: ES3DV3 - SN:3318

Calibration Parameter Determined in Body Tissue Simulating Media

f (MHz) ^C	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	6.19	6.19	6.19	0.50	1.51	± 12.0 %
835	55.2	0.97	6.11	6.11	6.11	0.47	1.56	± 12.0 %
1750	53.4	1.49	5.02	5.02	5.02	0.49	1.55	± 12.0 %
1900	53.3	1.52	4.81	4.81	4.81	0.80	1.24	± 12.0 %
2300	52.9	1.81	4.55	4.55	4.55	0.80	1.27	± 12.0 %
2450	52.7	1.95	4.45	4.45	4.45	0.80	1.16	± 12.0 %
2600	52.5	2.16	4.18	4.18	4.18	0.80	1.13	± 12.0 %

 $^{^{\}rm C}$ 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 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.

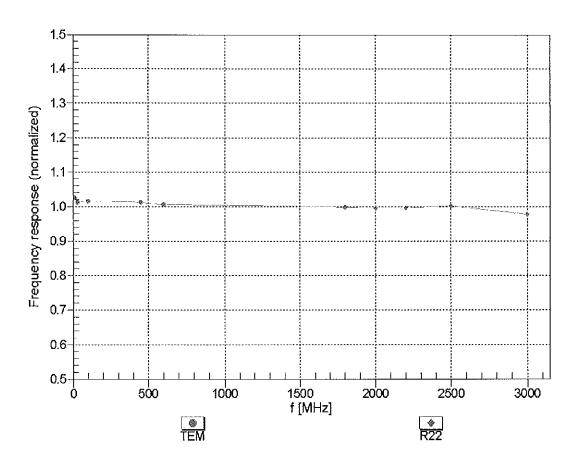
validity can be extended to ± 110 MHz.

F At frequencies below 3 GHz, the validity of tissue parameters (ε and σ) can be relaxed to ± 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 ± 5%. The uncertainty is the RSS of the ConvE uncertainty for indicated target tissue parameters.

the ConvF uncertainty for indicated target tissue parameters.

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

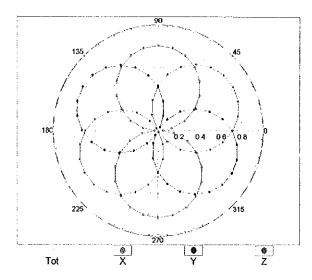


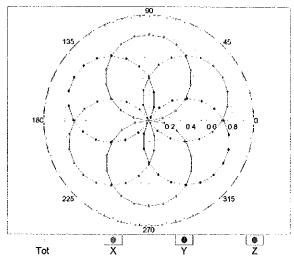
Uncertainty of Frequency Response of E-field: ± 6.3% (k=2)

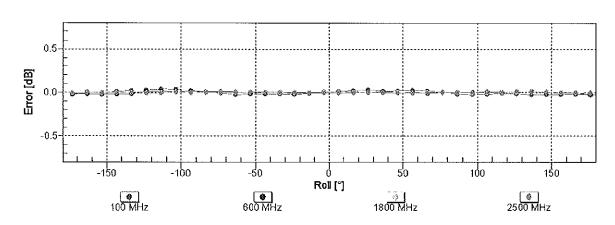
Receiving Pattern (ϕ), $\vartheta = 0^{\circ}$

f=600 MHz,TEM

f=1800 MHz,R22

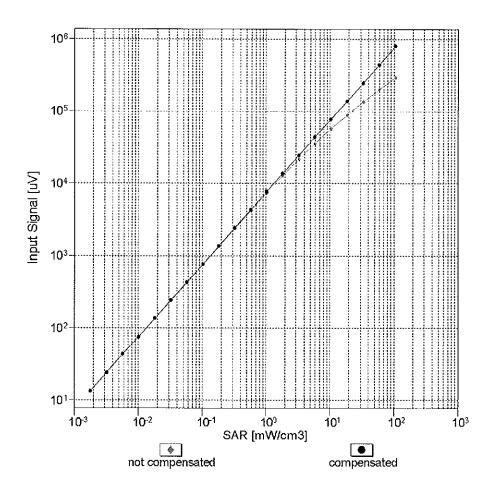


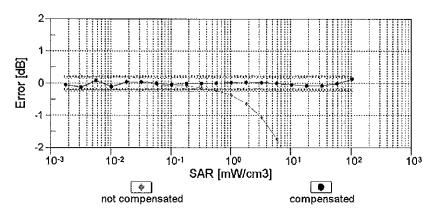




Uncertainty of Axial Isotropy Assessment: ± 0.5% (k=2)

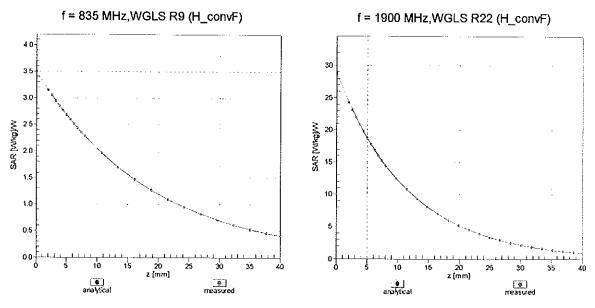
Dynamic Range f(SAR_{head}) (TEM cell , f_{eval}= 1900 MHz)





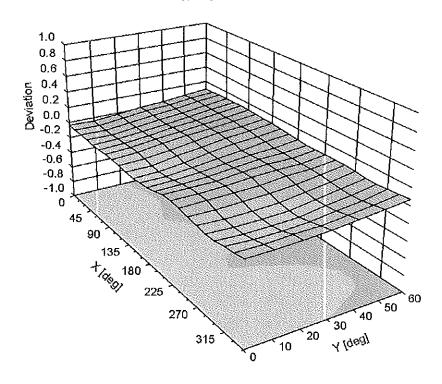
Uncertainty of Linearity Assessment: ± 0.6% (k=2)

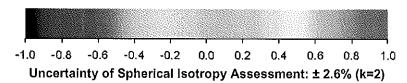
Conversion Factor Assessment



Deviation from Isotropy in Liquid

Error (ϕ, ϑ) , f = 900 MHz





DASY/EASY - Parameters of Probe: ES3DV3 - SN:3318

Other Probe Parameters

Sensor Arrangement	Triangular
Connector Angle (°)	76.5
Mechanical Surface Detection Mode	enabled
Optical Surface Detection Mode	disabled
Probe Overall Length	337 mm
Probe Body Diameter	10 mm
Tip Length	10 mm
Tip Diameter	4 mm
Probe Tip to Sensor X Calibration Point	2 mm
Probe Tip to Sensor Y Calibration Point	2 mm
Probe Tip to Sensor Z Calibration Point	2 mm
Recommended Measurement Distance from Surface	3 mm

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Client

PC Test

Certificate No: ES3-3288_Aug16

CALIBRATION CERTIFICATE

Object

ES3DV3 - SN:3288

Calibration procedure(s)

QA CAL-01.v9, QA CAL-23.v5, QA CAL-25.v6 Calibration procedure for dosimetric E-field probes

Calibration date:

August 24, 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.

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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 Altenuator	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

Page 1 of 38

Name Function Leif Klysner Calibrated by:

Laboratory Technician

Approved by:

Katja Pokovic

Technical Manager

Issued: August 25, 2016

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

Certificate No: ES3-3288_Aug16

Calibration Laboratory of

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Glossary:

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

ConvF

sensitivity in TSL / NORMx,y,z

DCP

diode compression point

CF

crest factor (1/duty_cycle) of the RF signal

A, B, C, D

modulation dependent linearization parameters

Polarization φ

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., $\vartheta = 0$ is normal to probe axis

Connector Angle

Certificate No: ES3-3288_Aug16

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

Calibration is Performed According to the Following Standards:

- a) IEEE Std 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
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- PAR: PAR is the Peak to Average Ratio that is not calibrated but determined based on the signal characteristics
- Ax,y,z; Bx,y,z; Cx,y,z; Dx,y,z; VRx,y,z: A, B, C, D are numerical linearization parameters assessed based on the data of power sweep for specific modulation signal. The parameters do not depend on frequency nor media. VR is the maximum calibration range expressed in RMS voltage across the diode.
- 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).

August 24, 2016 ES3DV3 - SN:3288

Probe ES3DV3

SN:3288

Manufactured: July 6, 2010

Calibrated: August 24, 2016

Calibrated for DASY/EASY Systems

(Note: non-compatible with DASY2 system!)

DASY/EASY - Parameters of Probe: ES3DV3 - SN:3288

Basic Calibration Parameters

	Sensor X	Sensor Y	Sensor Z	Unc (k=2)
Norm (µV/(V/m) ²) ^A	1.02	1.13	0.90	± 10.1 %
DCP (mV) ^B	105.9	103.0	105.5	

Modulation Calibration Parameters

UID	Communication System Name		A dB	B dB√μV	C	D dB	∨R mV	Unc ^E (k=2)
0	CW	X	0.0	0.0	1.0	0.00	188.3	±3.5 %
		Y	0.0	0.0	1.0		175.6	
	"	Z	0.0	0.0	1.0		175.8	

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	57.6	411.4	35.2	29.47	2.833	5.1	1.309	0.44	1.011
Υ	64.05	456	34.96	29.68	3.206	5.1	0.771	0.517	1.008
Z	59.03	414.9	34.23	28.58	2.455	5.1	1.321	0.341	1.009

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%.

B 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).

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

DASY/EASY - Parameters of Probe: ES3DV3 - SN:3288

Calibration Parameter Determined in Head Tissue Simulating Media

f (MHz) ^c	Relative Permittivity ^F	Conductivity (S/m) F	ConvF X	ConvF Y	ConvF Z	Alpha ^G	Depth ^G (mm)	Unc (k=2)
750	41.9	0.89	7.00	7.00	7.00	0.47	1.56	± 12.0 %
835	41.5	0.90	6.71	6.71	6.71	0.49	1.48	± 12.0 %
1750	40.1	1.37	5.68	5.68	5.68	0.56	1.36	± 12.0 %
1900	40.0	1.40	5.44	5.44	5.44	0.68	1.24	± 12.0 %
2300	39.5	1.67	5.05	5.05	5.05	0.71	1.28	± 12.0 %
2450	39.2	1.80	4.76	4.76	4.76	0.58	1.45	± 12.0 %
2600	39.0	1.96	4.57	4.57	4.57	0.80	1.26	± 12.0 %

^c Frequency validity above 300 MHz of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to ± 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 ± 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 ± 110 MHz.

validity can be extended to ± 110 MHz.

F At frequencies below 3 GHz, the validity of tissue parameters (ε and σ) can be relaxed to ± 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 ± 5%. The uncertainty is the RSS of the CopyE 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: ES3DV3 - SN:3288

Calibration Parameter Determined in Body Tissue Simulating Media

f (MHz) ^C	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	6.46	6.46	6.46	0.57	1.40	± 12.0 %
835	55.2	0.97	6.47	6.47	6.47	0.59	1.35	± 12.0 %
1750	53.4	1.49	5.22	5.22	5.22	0.38	1.84	± 12.0 %
1900	53.3	1.52	4.99	4.99	4.99	0.64	1.38	± 12.0 %
2300	52.9	1.81	4.75	4.75	4.75	0.80	1.28	± 12.0 %
2450	52.7	1.95	4.54	4.54	4.54	0.76	1.18	± 12.0 %
2600	52.5	2.16	4.40	4.40	4.40	0.80	1.13	± 12.0 %

^c Frequency validity above 300 MHz of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to ± 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 ± 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 ± 110 MHz.

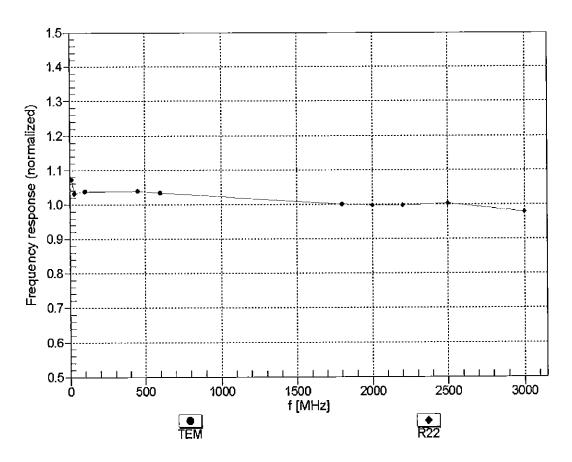
validity can be extended to \pm 110 MHz.

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 CopyE uncertainty for indicated target lissue 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.

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

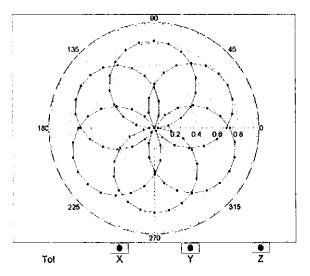


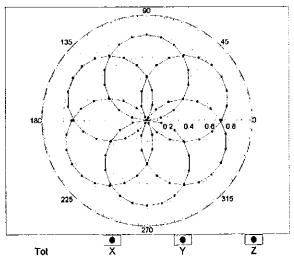
Uncertainty of Frequency Response of E-field: ± 6.3% (k=2)

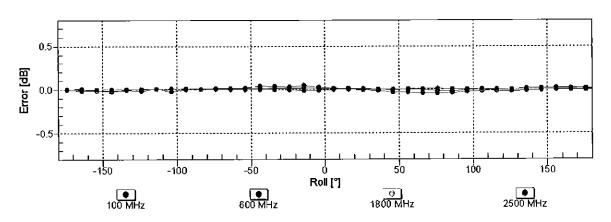
Receiving Pattern (ϕ), $\vartheta = 0^{\circ}$



f=1800 MHz,R22

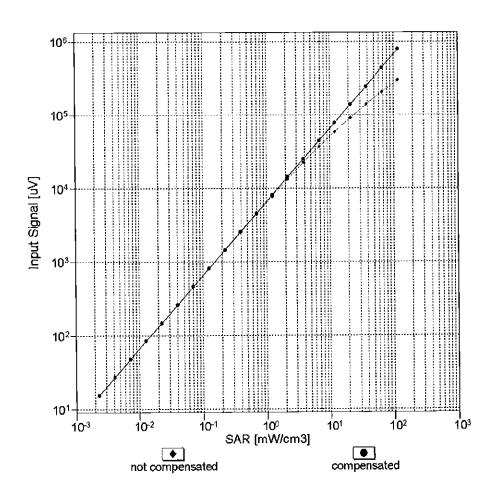


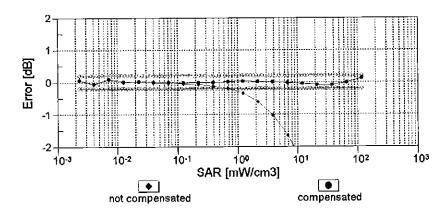




Uncertainty of Axial Isotropy Assessment: $\pm 0.5\%$ (k=2)

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

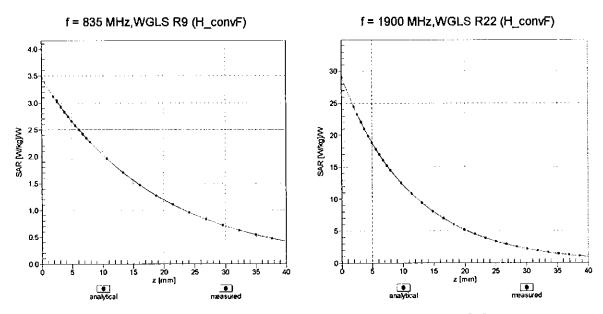




Uncertainty of Linearity Assessment: ± 0.6% (k=2)

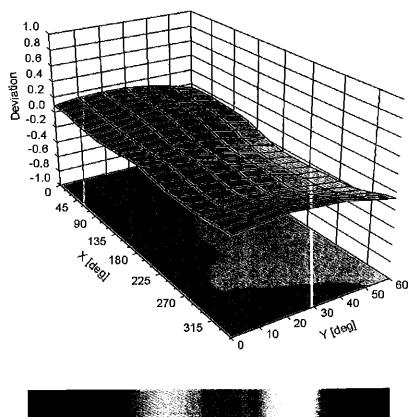
August 24, 2016

Conversion Factor Assessment



Deviation from Isotropy in Liquid

Error (ϕ , ϑ), f = 900 MHz



August 24, 2016

DASY/EASY - Parameters of Probe: ES3DV3 - SN:3288

Other Probe Parameters

Sensor Arrangement	Triangular
Connector Angle (°)	76.1
Mechanical Surface Detection Mode	enabled
Optical Surface Detection Mode	disabled
Probe Overall Length	337 mm
Probe Body Diameter	10 mm
Tip Length	10 mm
Tip Diameter	4 mm
Probe Tip to Sensor X Calibration Point	2 mm
Probe Tip to Sensor Y Calibration Point	2 mm
Probe Tip to Sensor Z Calibration Point	2 mm
Recommended Measurement Distance from Surface	3 mm

Appendix: Modulation Calibration Parameters

UID	Communication System Name		A dB	B dBõV	С	D dB	VR mV	Max Unc ^E (k=2)
0	CW	Х	0.00	0.00	1.00_	0.00	188.3	± 3.5 %
		Υ	0.00	0.00	1.00		175.6	
		Z	0.00	0.00	1.00	10.00	175.8	
10010- CAA	SAR Validation (Square, 100ms, 10ms)	Х	9.37	81.05	19.74	10.00	25.0	± 9.6 %
		Y	10.00	82.18	20.61	-	25.0	
10011	LIVITO EDD AVODAM	Z	10.80	83.49	20.45	0.00	25.0	1000
10011- CAB	UMTS-FDD (WCDMA)	Х	1.15	69.50	16.43	0.00	150.0	± 9.6 %
		Y	1.11	68.18	15.78		150.0	
40040	1555 000 441 W/5: 0 4 OH- (D000 4	Z	1.14	69.00	16.22	0.44	150.0 150.0	± 9.6 %
10012- CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps)	Х	1.32	65.77	16.33	0.41		±9.0%
		_Y	1.34	65.34	16.02		150.0	
		Z	1.33	65.62	16.20		150.0	1000
10013- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps)	Х	5.15	67.37	17.53	1.46	150.0	± 9.6 %
		Υ	5.22	67.28	17.45		150.0	
		Ζ	5.15	67.33	17.45	2.00	150.0	. 0 0 0/
10021- DAB	GSM-FDD (TDMA, GMSK)	Х	22.72	97.36	27.00	9.39	50.0	± 9.6 %
		Υ	20.61	96,11	27.09		50.0	
		Z	39.70	106.89	29.59		50.0	. 0.0 %
10023- DAB	GPRS-FDD (TDMA, GMSK, TN 0)	X	20.04	95.12	26.35	9.57	50.0	± 9.6 %
		Y	18.59	94.18	26.52		50.0	
		Z	32.13	103.29	28.63	0.50	50.0	
10024- DAB	GPRS-FDD (TDMA, GMSK, TN 0-1)	X	100.00	119.11	30.99	6.56	60.0	± 9.6 %
		Υ	100.00	120. <u>52</u>	31.89		60.0	
		Z	100.00	119.06	30.82		60.0	
10025- DAB	EDGE-FDD (TDMA, 8PSK, TN 0)	Х	17,25	102.74	39.05	12.57	50.0	± 9.6 %
	<u> </u>	Y	14.30	95.56	35.91		50.0	
		Z	18.54	105.67	40.18		50.0	
10026- DAB	EDGE-FDD (TDMA, 8PSK, TN 0-1)	X	20.66	104.23	35.93	9.56	60.0	± 9.6 %
		Y	16.75	97.96	33.59_		60.0	
		Z	20.96	105.02	36.21		60.0	
10027- DAB	GPRS-FDD (TDMA, GMSK, TN 0-1-2)	X	100.00	117.90	29.47	4.80	80.0	± 9.6 %
		Υ	100.00	119.31	30.34		80.0	
10028-	GPRS-FDD (TDMA, GMSK, TN 0-1-2-3)	Z X	100.00 100.00	118.11 118.00	29.46 28.68	3.55	80.0 100.0	± 9.6 %
DAB		<u> </u>	400	410.11	00.50		400.0	
		Y	100.00	119.44	29.53		100.0	
1000-	FROE FRE /TRUE ORON THE 4 C	Z	100.00	118.50	28.82	7.80	100.0 80.0	± 9.6 %
10029- DAB	EDGE-FDD (TDMA, 8PSK, TN 0-1-2)	X	14.12	95.78	31.96	7.00		1 3.0 /0
		Y	12.30	91.62	30.30	1	80.0	<u> </u>
10030-	IEEE 802.15.1 Bluetooth (GFSK, DH1)	Z X	13.87 100.00	95.68 117.53	31.93 29.65	5.30	70.0	± 9.6 %
CAA		 	100.00	118.98	30.55		70.0	
<u></u>		Y Z	100.00	117.60	29.56	 	70.0	1
10031-	IEEE 802.15.1 Bluetooth (GFSK, DH3)	X	100.00	119.01	27.51	1.88	100.0	± 9.6 %
CAA		Y	100.00	120.92	28.55	 	100.0	
I		Z	100.00	120.92	28.01	+	100.0	

10033-	oth (GFSK, DH5)	X	100.00	123.38	28.20	1.17	100.0	± 9.6 %
CAA		TY	100.00	125.65	29.39	 	100.0	
CAA		Z	100.00	125.73	29.19	 	100.0	
10035- CAA IEEE 802.15.1 Bluetooth (DH5) 10036- CAA IEEE 802.15.1 Bluetooth (CAA 10037- CAA IEEE 802.15.1 Bluetooth (CAA 10038- CAA IEEE 802.15.1 Bluetooth (CAA 10048- CAB IS-54 / IS-136 FDD (TDM/DQPSK, Halfrate) 10044- CAA IS-91/EIA/TIA-553 FDD (FOAA 10048- CAA DECT (TDD, TDMA/FDM, Slot, 24) 10049- CAA DECT (TDD, TDMA/FDM, Slot, 12) 10056- CAA 10058- DAB EDGE-FDD (TDMA, 8PSK) 10059- CAB IEEE 802.11b WiFi 2.4 GH Mbps)	oth (PI/4-DQPSK,	X	19.09	97.83	27.11	5.30	70.0	± 9.6 %
10035- CAA 10036- CAA 10037- CAA 10038- CAA 10039- CAB 10042- CAB 10042- CAB 10044- CAA 10044- CAA 10044- CAA 10048- CAA 10048- CAA 10048- CAA 10049- CAA 10049- CAA 10056- CAA 10056- CAA 10056- CAA 10058- DAB 10059- CAB IEEE 802.15.1 Bluetooth (1007-SCDMA, 1008- 1008- CAA 1009- CAB 1009- CAB 10056- CAA 10058- CAA 10059- CAB IEEE 802.11b WiFi 2.4 GH Mbps)		Υ	15.95	95.07	26.63	1	70.0	
10035- CAA IEEE 802.15.1 Bluetooth (DH5) 10036- CAA IEEE 802.15.1 Bluetooth (CAA 10037- CAA IEEE 802.15.1 Bluetooth (CAA 10038- CAA IEEE 802.15.1 Bluetooth (CAA 10048- CAB IS-54 / IS-136 FDD (TDM/DQPSK, Halfrate) 10044- CAA IS-91/EIA/TIA-553 FDD (FOAA 10048- CAA DECT (TDD, TDMA/FDM, Slot, 24) 10049- CAA DECT (TDD, TDMA/FDM, Slot, 12) 10056- CAA 10058- DAB EDGE-FDD (TDMA, 8PSK) 10059- CAB IEEE 802.11b WiFi 2.4 GH Mbps)		Z	24.53	102.63	28.61		70.0	
10036- CAA IEEE 802.15.1 Bluetooth (CAA 10037- CAA IEEE 802.15.1 Bluetooth (CAA 10038- CAA 10039- CAB CAB CAB CAB 10042- CAB 10044- CAA IS-91/EIA/TIA-553 FDD (F CAA 10048- CAA 10048- CAA DECT (TDD, TDMA/FDM, Slot, 24) 10049- CAA 10049- CAA DECT (TDD, TDMA/FDM, Slot, 24) 10056- CAA 10056- CAA 10058- DAB 10059- CAB IEEE 802.11b WiFi 2.4 GH Mbps)	oth (PI/4-DQPSK,	X	10.02	91.61	23.64	1.88	100.0	± 9.6 %
10036- CAA IEEE 802.15.1 Bluetooth (CAA 10037- CAA IEEE 802.15.1 Bluetooth (CAA 10038- CAA 10039- CAB CAB CAB CAB 10042- CAB 10044- CAA IS-91/EIA/TIA-553 FDD (F CAA 10048- CAA 10048- CAA DECT (TDD, TDMA/FDM, Slot, 24) 10049- CAA 10049- CAA DECT (TDD, TDMA/FDM, Slot, 12) 10056- CAA 10058- CAA 10058- CAA IO059- CAB IEEE 802.11b WiFi 2.4 GH Mbps)		Y	7.61	87.84	22.87		100.0	
10036- CAA IEEE 802.15.1 Bluetooth (CAA 10037- CAA IEEE 802.15.1 Bluetooth (CAA 10038- CAA 10039- CAB CAB CAB CAB 10042- CAB 10044- CAA IS-91/EIA/TIA-553 FDD (F CAA 10048- CAA 10048- CAA DECT (TDD, TDMA/FDM, Slot, 24) 10049- CAA 10049- CAA DECT (TDD, TDMA/FDM, Slot, 24) 10056- CAA 10056- CAA 10058- DAB 10059- CAB IEEE 802.11b WiFi 2.4 GH Mbps)		Z	10.27	92.54	24.11		100.0	
10037- CAA IEEE 802.15.1 Bluetooth (CAA 10038- CAA 10039- CAB 10042- CAB 10044- CAA 10044- CAA 10048- CAA DECT (TDD, TDMA/FDM, Slot, 24) 10049- CAA DECT (TDD, TDMA/FDM, Slot, 12) 10056- CAA 10058- DAB EDGE-FDD (TDMA, 8PSK DAB 10059- CAB IEEE 802.11b WiFi 2.4 GH Mbps)	oth (PI/4-DQPSK,	X	5.46	84.57	21.13	1.17	100.0	± 9.6 %
10037- CAA IEEE 802.15.1 Bluetooth (10038- CAA 10039- CAB 10042- CAB 10044- CAA 10044- CAA 10048- CAA DECT (TDD, TDMA/FDM, Slot, 24) 10049- CAA DECT (TDD, TDMA/FDM, Slot, 12) 10056- CAA 10058- DAB EDGE-FDD (TDMA, 8PSK DAB 10059- CAB IEEE 802.11b WiFi 2.4 GH Mbps)		Y	4.38	81.41	20.43		100.0	
10037- CAA IEEE 802.15.1 Bluetooth (CAA 10038- CAA 10039- CAB 10042- CAB 10044- CAA 10044- CAA 10048- CAA DECT (TDD, TDMA/FDM, Slot, 24) 10049- CAA DECT (TDD, TDMA/FDM, Slot, 12) 10056- CAA 10058- DAB EDGE-FDD (TDMA, 8PSK DAB 10059- CAB IEEE 802.11b WiFi 2.4 GH Mbps)		Z	5.26	84.44	21.27		100.0	
10038- CAA 10039- CAB 10042- CAB 10044- CAA 10048- CAA 10048- CAA 10049- CAA DECT (TDD, TDMA/FDM, Slot, 24) 10056- CAA 10056- CAA 10058- DAB 10059- CAB IEEE 802.11b WiFi 2.4 GH Mbps) 10060- IEEE 802.11b WiFi 2.4 GH	oth (8-DPSK, DH1)	X	23.37	101.36	28.22	5.30	70.0	± 9.6 %
10038- CAA 10039- CAB 10042- CAB 10044- CAA 10048- CAA 10048- CAA 10049- CAA 10049- CAA 10056- CAA 10056- CAA 10058- DAB 10058- DAB 10059- CAB IEEE 802.11b WiFi 2.4 GH Mbps) 10060- IEEE 802.11b WiFi 2.4 GH		Y	18.87	98.11	27.62		70.0	
10038- CAA 10039- CAB 10042- CAB 10044- CAA 10048- CAA 10049- CAA 10049- CAA 10056- CAA 10058- DAB 10058- DAB 10059- CAB IEEE 802.11b WiFi 2.4 GH Mbps) IEEE 802.11b WiFi 2.4 GH		Z	31.86	107.19	29.96	<u> </u>	70.0	
10039- CAB 10042- CAB 10042- CAB 10044- CAA 10048- CAA 10048- CAA DECT (TDD, TDMA/FDM, Slot, 24) 10049- CAA 10056- CAA 10058- DAB 10058- DAB 10059- CAB IEEE 802.11b WiFi 2.4 GH Mbps)	oth (8-DPSK, DH3)	X	9.51	90.89	23.38	1.88	100.0	± 9.6 %
10039- CAB 10042- CAB 10042- CAB 10044- CAA 10048- CAA 10048- CAA DECT (TDD, TDMA/FDM, Slot, 24) 10049- CAA 10056- CAA 10058- DAB 10058- DAB 10059- CAB IEEE 802.11b WiFi 2.4 GH Mbps)		Y	7.33	87.31	22.65		100.0	
10039- CAB 10042- CAB 10042- CAB 10044- CAA 10048- CAA 10048- CAA DECT (TDD, TDMA/FDM, Slot, 24) 10049- CAA DECT (TDD, TDMA/FDM, Slot, 12) 10056- CAA 10058- DAB 10059- CAB LEEE 802.11b WiFi 2.4 GH Mbps)		LZ_	9.74	91.78	23.84		100.0	
CAB IS-54 / IS-136 FDD (TDM/DQPSK, Halfrate) 10042-CAB IS-54 / IS-136 FDD (TDM/DQPSK, Halfrate) 10044-CAA IS-91/EIA/TIA-553 FDD (FOAA 10048-CAA DECT (TDD, TDMA/FDM, Slot, 24) 10049-CAA DECT (TDD, TDMA/FDM, Slot, 12) 10056-CAA UMTS-TDD (TD-SCDMA, CAA 10058-DAB EDGE-FDD (TDMA, 8PSK DAB 10059-CAB IEEE 802.11b WiFi 2.4 GH Mbps) 10060- IEEE 802.11b WiFi 2.4 GH	th (8-DPSK, DH5) 	X	5.72	85.51	21.53	1.17	100.0	± 9.6 %
10042- CAB 10042- CAB 10044- CAA 10048- CAA 10048- CAA DECT (TDD, TDMA/FDM, Slot, 24) 10049- CAA 10056- CAA 10058- DAB 10059- CAB IEEE 802.11b WiFi 2.4 GH Mbps)		Υ	4.53	82.15	20.77		100.0	
10042- CAB IS-54 / IS-136 FDD (TDM/DQPSK, Halfrate) 10044- CAA IS-91/EIA/TIA-553 FDD (FOAA 10048- CAA DECT (TDD, TDMA/FDM, Slot, 24) 10049- CAA DECT (TDD, TDMA/FDM, Slot, 12) 10056- CAA UMTS-TDD (TD-SCDMA, SPSK DAB 10059- CAB IEEE 802.11b WiFi 2.4 GH Mbps) 10060- IEEE 802.11b WiFi 2.4 GH		Z	5.48	85.30	21.66		100.0	
CAB DQPSK, Halfrate) 10044- CAA IS-91/EIA/TIA-553 FDD (F 10048- CAA DECT (TDD, TDMA/FDM, Slot, 24) 10049- CAA DECT (TDD, TDMA/FDM, Slot, 12) 10056- CAA UMTS-TDD (TD-SCDMA, CAA 10058- DAB EDGE-FDD (TDMA, 8PSK DAB 10059- CAB IEEE 802.11b WiFi 2.4 GH 10060- IEEE 802.11b WiFi 2.4 GH	C1) —————	Х	2.26	74.79	17.38	0.00	150.0	± 9.6 %
CAB DQPSK, Halfrate) 10044- CAA IS-91/EIA/TIA-553 FDD (F 10048- CAA DECT (TDD, TDMA/FDM, Slot, 24) 10049- CAA DECT (TDD, TDMA/FDM, Slot, 12) 10056- CAA UMTS-TDD (TD-SCDMA, CAA 10058- DAB EDGE-FDD (TDMA, 8PSK DAB 10059- CAB IEEE 802.11b WiFi 2.4 GH 10060- IEEE 802.11b WiFi 2.4 GH		Y	2.10	73.08	17.02		150.0	
CAB DQPSK, Halfrate) 10044- CAA IS-91/EIA/TIA-553 FDD (F 10048- CAA DECT (TDD, TDMA/FDM, Slot, 24) 10049- CAA DECT (TDD, TDMA/FDM, Slot, 12) 10056- CAA UMTS-TDD (TD-SCDMA, CAA 10058- DAB EDGE-FDD (TDMA, 8PSK DAB 10059- CAB IEEE 802.11b WiFi 2.4 GH 10060- IEEE 802.11b WiFi 2.4 GH		Z	2.23	74.47	17.43		150.0	
CAA DECT (TDD, TDMA/FDM, Slot, 24) 10048- CAA DECT (TDD, TDMA/FDM, Slot, 24) 10049- CAA DECT (TDD, TDMA/FDM, Slot, 12) 10056- CAA UMTS-TDD (TD-SCDMA, CAA 10058- DAB EDGE-FDD (TDMA, 8PSK DAB 10059- CAB IEEE 802.11b WiFi 2.4 GH Mbps) 10060- IEEE 802.11b WiFi 2.4 GH)MA/FDM, PI/4- 	Х	61.54	110.76	28.95	7.78	50.0	± 9.6 %
CAA DECT (TDD, TDMA/FDM, Slot, 24) DECT (TDD, TDMA/FDM, Slot, 24) DECT (TDD, TDMA/FDM, Slot, 12) DECT (TDD, TDMA/FDM, Slot, 12) UMTS-TDD (TD-SCDMA, CAA DOSS-DAB EDGE-FDD (TDMA, 8PSK DAB 10059-CAB IEEE 802.11b WiFi 2.4 GH Mbps)		Y	50.64	108.97	29.04		50.0	
CAA DECT (TDD, TDMA/FDM, Slot, 24) 10048- CAA DECT (TDD, TDMA/FDM, Slot, 24) 10049- CAA DECT (TDD, TDMA/FDM, Slot, 12) 10056- CAA UMTS-TDD (TD-SCDMA, CAA 10058- DAB EDGE-FDD (TDMA, 8PSK DAB 10059- CAB IEEE 802.11b WiFi 2.4 GH Mbps) 10060- IEEE 802.11b WiFi 2.4 GH		Z	100.00	117.89	30.53		50.0	
CAA Slot, 24) 10049- DECT (TDD, TDMA/FDM, Slot, 12) 10056- CAA UMTS-TDD (TD-SCDMA, CAA 10058- DAB EDGE-FDD (TDMA, 8PSK DAB 10059- CAB Mbps) 10060- IEEE 802.11b WiFi 2.4 GH	D (FDMA, FM) 	X	0.00	109.65	2.84	0.00	150.0	± 9.6 %
CAA Slot, 24) 10049- DECT (TDD, TDMA/FDM, Slot, 12) 10056- CAA 10058- DAB 10059- CAB IEEE 802.11b WiFi 2.4 GH Mbps)		Υ	0.00	97.22	0.26		150.0	
CAA Slot, 24) 10049- DECT (TDD, TDMA/FDM, Slot, 12) 10056- CAA UMTS-TDD (TD-SCDMA, CAA 10058- DAB EDGE-FDD (TDMA, 8PSK DAB 10059- CAB Mbps) 10060- IEEE 802.11b WiFi 2.4 GH		Z	0.00	100.19	0.00		150.0	
CAA Slot, 12) 10056- CAA 10058- DAB 10059- CAB IEEE 802.11b WiFi 2.4 GH Mbps)	OM, GFSK, Full ———————————————————————————————————	X	11.79	84.00	24.40	13.80	25.0	± 9.6 %
CAA Slot, 12) 10056- CAA 10058- DAB 10059- CAB IEEE 802.11b WiFi 2.4 GH Mbps)		Y	11.77	83.73	24.74		25.0	_
CAA Slot, 12) 10056- CAA 10058- DAB 10059- CAB IEEE 802.11b WiFi 2.4 GH Mbps)		Z	14.15	87.97	25.65		25.0	
CAA 10058- DAB 10059- CAB IEEE 802.11b WiFi 2.4 GH Mbps) 10060- IEEE 802.11b WiFi 2.4 GH	M, GFSK, Double	X	14.05	88.49	24.59	10.79	40.0	±9.6 %
CAA 10058- DAB 10059- CAB IEEE 802.11b WiFi 2.4 GH Mbps) 10060- IEEE 802.11b WiFi 2.4 GH		Y	13.75	88.22	24.96		40.0	
CAA 10058- DAB 10059- CAB IEEE 802.11b WiFi 2.4 GH Mbps) 10060- IEEE 802.11b WiFi 2.4 GH	1A 4 00 N	Z	17.95	93.15	25.98		40.0	
10059- IEEE 802.11b WiFi 2.4 GH Mbps) 10060- IEEE 802.11b WiFi 2.4 GH		X	13.46	88.18	24.97	9.03	50.0	± 9.6 %
10059- IEEE 802.11b WiFi 2.4 GH Mbps) 10060- IEEE 802.11b WiFi 2.4 GH		Y	12.65	86.94	24.85		50.0	
10059- IEEE 802.11b WiFi 2.4 GH Mbps) 10060- IEEE 802.11b WiFi 2.4 GH	CK TNO 4 C C)	Z	15.45	91.20	26.00		50.0	
10060- IEEE 802.11b WiFi 2.4 GH	on, IN 0-1-2-3)	X	10.37	89.77	29.11	6.55	100.0	± 9.6 %
10060- IEEE 802.11b WiFi 2.4 GH		Y	9.50	86.96	27.90		100.0	
10060- IEEE 802.11b WiFi 2.4 GH	GHz (DSSS, 2	X	10.07 1.53	89.34 68.23	28.94 17.51	0.61	100.0 110.0	± 9.6 %
		Y	1.53	67.59	17.11		4400	
		Ż	1.52	67.95			110.0	
	GHz (DSSS. 5.5	X	100.00	131.49	17.34 33.82	1.30	110.0	1000
CAB Mbps)		Ŷ	100.00	131.49	33.99	1.30	110.0	± 9.6 %
		ż	100.00	132.33	34.18		110.0 110.0	

10061-	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11	1 v 1	44.76	102.46	20.00	204	1100	+069/
CAB	Mbps)	X	14.76	102.46	28.88	2.04	110.0	± 9.6 %
		Υ	9.73	95.00	26.69		110.0	
		Z	13.81	101.74	28.75		110.0	
10062- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps)	X	4.86	67.12	16.81	0.49	100.0	± 9.6 %
	T • •	Y	4.93	67.04	16.75		100.0	
		Z	4.88	67.12	16.75		100.0	
10063- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps)	X	4.90	67.29	16.95	0.72	100.0	± 9.6 %
		Y	4.98	67.21	16.89		100.0	
		Z	4.92	67.28	16.90		100.0	
10064- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps)	Х	5.23	67.62	17.21	0.86	100.0	± 9.6 %
_		Y	5.32	67.56	17.16		100.0	
		Z	5.25	67.61	17.16		100.0	
10065- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps)	X	5.14	67.67	17.39	1.21	100.0	± 9.6 %
		Υ	5.23	67.61	17.34		100.0	
		Z	5.15	67.64	17.33		100.0	
10066- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps)	X	5.20	67.81	17.63	1.46	100.0	± 9.6 %
		Υ	5.29	67.75	17.57		100.0	
		Z	5.21	67.78	17.56		100.0	
10067- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps)	Х	5.53	67.99	18.09	2.04	100.0	± 9.6 %
		Y	5.61	67.89	18.01		100.0	
		Z	5.52	67.92	18.00		100.0	
10068- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps)	Х	5.67	68.36	18.47	2.55	100.0	± 9.6 %
		Y	5.77	68.30	18.40		100.0	
		Z	5.66	68.28	18.37		100.0	
10069- CAB	1EEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps)	Х	5.75	68.31	18.66	2.67	100.0	± 9.6 %
		Υ	5.84	68.20	18.56		100.0	
		Z	5.74	68.20	18.55		100.0	_
10071- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps)	Х	5.30	67.63	17.92	1.99	100.0	± 9.6 %
		Υ	5.37	67.53	17.84		100.0	_
		Z	5.29	67.57	17.83		100.0	
10072- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps)	Х	5.37	68.22	18.26	2.30	100.0	± 9.6 %
		Y	5.45	68.12	18.18		100.0	
		Z	5.36	68.14	18.17		100.0	
10073- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps)	X	5.52	68.60	18.70	2.83	100.0	± 9.6 %
		Y	5.59	68.49	18.61		100.0	
		Z	5.49	68.48	18.59	<u> </u>	100.0	<u> </u>
10074- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps)	X	5.56	68.70	18.96	3.30	100.0	± 9.6 %
		Y	5.64	68.59	18.88		100.0	
		Z	5.53	68.56	18.85		100.0	ļ
10075- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps)	Х	5.73	69.22	19.48	3.82	90.0	± 9.6 %
		Υ	5.82	69.14	19.40	<u> </u>	90.0	ļ
		<u> Z</u>	5.68	69.05	19.35	<u> </u>	90.0	
10076- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps)	X	5.75	69.03	19.61	4.15	90.0	± 9.6 %
		Y_	5.82	68.92	19.51	<u> </u>	90.0	
		Z	5.69	68.84	19.47		90.0	
10077- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps)	Х	5.79	69.13	19.72	4.30	90.0	± 9.6 %
_ 	,	Υ	5.86	69.01	19.61		90.0	
		Z	5.73	68.93	19.57	1	90.0	

10081- CAB	CDMA2000 (1xRTT, RC3)	X	1.01	68.38	14.23	0.00	150.0	± 9.6 %
- O/ (B		TY	1.01	67.47	14.16	 	450.0	
_		Z	1.03	68.27	14.16		150.0	
10082- CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4- DQPSK, Fullrate)	X	2.25	64.30	9.14	4.77	150.0 80.0	± 9.6 %
		_ Y	2.46	65.03	9.83		80.0	
		Z	2.17	64.23	9.01	1	80.0	1
10090- DAB	GPRS-FDD (TDMA, GMSK, TN 0-4)	X	100.00	119.20	31.05	6.56	60.0	± 9.6 %
		Y	100.00	120.60	31.96		60.0	
10097-	LIMTO FOR (LIONA)	Z	100.00	119.14	30.88		60.0	
CAB	UMTS-FDD (HSDPA)	X	1.90	68.39	16.22	0.00	150.0	± 9.6 %
		Y	1.89	67.77	15.95	<u> </u>	150.0	
10098-	UMTS-FDD (HSUPA, Subtest 2)	Z	1.91	68.25	16.16	<u> </u>	150.0	
CAB	OMTO-FDD (HSOFA, Sublest 2)	X	1.87	68.38	16.20	0.00	150.0	± 9.6 %
	 		1.85	67.73	15.92	<u> </u>	150.0	
10099-	EDGE-FDD (TDMA, 8PSK, TN 0-4)	Z	1.87	68.23	16.13	+ <u>,</u>	150.0	
DAB	LUCET DD (TDINK, OFOR, TIV 0-4)	X	20.55	104.05	35.87	9.56	60.0	± 9.6 %
		Y	16.69	97.84	33.55		60.0	
10100-	LTE-FDD (SC-FDMA, 100% RB, 20	Z X	20.87	104.86	36.16		60.0	
CAB	MHz, QPSK)	^ 	3.34	71.37	17.14	0.00	150.0	± 9.6 %
		 		71.02	16.93		150.0	
10101-	LTE-FDD (SC-FDMA, 100% RB, 20	 	3.36	71.36	17.10		150.0	
CAB	MHz, 16-QAM)			68.13	16.24	0.00	150.0	± 9.6 %
<u>-</u>		Y	3.41	68.01	16.14		150.0	
10102-	LTE-FDD (SC-FDMA, 100% RB, 20	Z	3.39	68.16	16.20		150.0	
CAB	MHz, 64-QAM)	X	3.46	68.03	16.30	0.00	150.0	± 9.6 %
		Y	3.51	67.93	16.21		150.0	
10103-	LTE-TDD (SC-FDMA, 100% RB, 20	Z	3.48	68.06	16.27		150.0	
CAB	MHz, QPSK)	X	8.70	78.35	21.34	3.98	65.0	± 9.6 %
		Y	8.72	77.95	21.17		65.0	
10104-	LTE TOD (SC FDMA 4000/ DD 00	Z	8.91	78.92	21.54		65.0	
CAB	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	X	8.68	77.16	21.73	3.98	65.0	± 9.6 %
	 	Y	8.69	76.67	21.48		65.0	
10105-	LTE-TDD (SC-FDMA, 100% RB, 20	1 😓	8.69	77.28	21.74		65.0	
CAB	MHz, 64-QAM)	Х	7.95	75.40	21.25	3.98	65.0	± 9.6 %
		Y	7.69	74.24	20.70		65.0	
10108-	LTE-FDD (SC-FDMA, 100% RB, 10	L Z X	7.63	74.73	20.92		65.0	
CAC	MHz, QPSK)		2.94	70.58	16.98	0.00	150.0	± 9.6 %
		Y	2.96	70.20	16.75		150.0	
10109-	LTE-FDD (SC-FDMA, 100% RB, 10	Z	2.95	70.53	16.93	• • •	150.0	
CAC	MHz, 16-QAM)	Y	3.03	67.97	16.18	0.00	150.0	± 9.6 %
	 	$\frac{1}{z}$	3.08	67.81	16.08		150.0	
10110- CAC	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	X	3.05 2.41	67.98 69.72	16.15 16.70	0.00	150.0 150.0	± 9.6 %
		TY	2.43	69.22	16.43		150.0	
		Ż	2.42	69.59	16.61		150.0	
10111- CAC	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	X	2.74	68.66	16.50	0.00	150.0 150.0	± 9.6 %
		Y	2.78	68.37	16.39		150.0	
		Tż T	2.76	68.65	16.48		150.0	
				00.00	10.40		150.0	

10112- CAC	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	X	3.15	67.89	16.21	0.00	150.0	± 9.6 %
57.15		Y	3.20	67.73	16.11		150.0	
	-	ż	3.17	67.90	16.17		150.0	
10113- CAC	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	×	2.89	68.72	16.59	0.00	150.0	± 9.6 %
	,	Υ	2.94	68.43	16.49		150.0	
		Z	2.91	68.70	16.57		150.0	
10114- CAB	IEEE 802,11n (HT Greenfield, 13.5 Mbps, BPSK)	X	5.22	67.44	16.56	0.00	150.0	± 9.6 %
		Y	5.27	67.37	16.49		150.0	
		Z	5.23	67.45	16.50		150.0	
10115- CAB	IEEE 802.11n (HT Greenfield, 81 Mbps, 16-QAM)	Х	5.59	67.78	16.74	0.00	150.0	± 9.6 %
		Ŷ	5.65	67.69	16.65		150.0	
		Z	5.59	67.76	16.66		150.0	
10116- CAB	IEEE 802.11n (HT Greenfield, 135 Mbps, 64-QAM)	X	5.35	67.71	16.62	0.00	150.0	± 9.6 %
		Y	5.40	67.65	16.54		150.0	
		Z	5.35	67.72	16.56		150.0	
10117- CAB	IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK)	X	5.21	67.41	16.57	0.00	150.0	± 9.6 %
	,	Υ	5.28	67.40	16.52		150.0	
		Z	5.23	67.45	16.52		150.0	
10118- CAB	1EEE 802.11n (HT Mixed, 81 Mbps, 16-QAM)	Х	5.67	67.97	16.85	0.00	150.0	± 9.6 %
		Y	5.71	67.82	16.72		150.0	
		Z	5.67	67.93	16.76		150.0	
10119- CAB	IEEE 802.11n (HT Mixed, 135 Mbps, 64-QAM)	X	5.32	67.66	16.61	0.00	150.0	± 9.6 %
		Υ	5.38	67.60	16.54		150.0	
		Z	5.33	67.66	16.55		150.0	
10140- CAB	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	X	3.51	68.03	16.22	0.00	150.0	± 9.6 %
0710	10 00 1117	TY	3.56	67.93	16.14		150.0	
		Z	3.53	68.07	16.19		150.0	
10141- CAB	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	X	3.63	68.07	16.36	0.00	150.0	± 9.6 %
OAB	14112, 01 00 1117	Y	3.68	67.97	16.28		150.0	
		Z	3.65	68.10	16.33		150.0	
10142- CAC	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	X	2.19	69.78	16.51	0.00	150.0	± 9.6 %
<u> </u>		Y	2.21	69.16	16.26		150.0	
		Z	2.20	69.62	16.45		150.0	
10143- CAC	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	X	2.63	69.49	16.39	0.00	150.0	± 9.6 %
		Y	2.66	69.08	16.33		150.0	
		Z	2.65	69.47	16.42		150.0_	
10144- CAC	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	X	2.42	67.43	14.93	0.00	150.0	± 9.6 %
		Y	2.48	67.17	14.96		150.0	
-		Z	2.45	67.43	14.98		150.0	
10145- CAC	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	X	1.50	67.58	13.73	0.00	150.0	± 9.6 %
<u> </u>		Y	1.59	67.73	14.25		150.0	
		Z	1.56	67.92	14.09		150.0	<u> </u>
10146- CAC	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	X	3.75	74.32	16.15	0.00	150.0	± 9.6 %
		Y	3.28	72.47	15.86		150.0	
		Z	3.39	73.08	15.68		150.0	<u> </u>
10147- CAC	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	X	5.24	78.94	18.09	0.00	150.0	± 9.6 %
<u> </u>		TY	4.17	75.97	17.48		150.0	
1	<u> </u>	Z	4.56	77.18	17.48		150.0	

10149- CAB	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	X	3.04	68.03	16.23	0.00	150.0	± 9.6 %
		Y	3.09	67.87	16.12	 	150.0	-
		Z	3.06	68.04	16.19	 	150.0	-
10150- CAB	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	Х	3.16	67.94	16.24	0.00	150.0	± 9.6 %
		Y	3.21	67.78	16.15		150.0	
40454	LTE TOP (OC FOLK)	Z	3.18	67.95	16.21		150.0	
10151- CAB	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	X	9.40	80.95	22.46	3.98	65.0	± 9.6 %
		<u> Y</u>	9.15	79.93	22.06		65.0	
10152-	LITE TOD (OO FOMA FOR DO COM	Z	9.53	81.33	22.58		65.0	
CAB	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	X	8.34	77.44	21.61	3.98	65.0	± 9.6 %
		Y	8.31	76.83	21.36	ļ	65.0	
10153-	LTE TOD (SC EDMA FOR DD COAN)	Z	8.34	77.55	21.63	<u> </u>	65.0	
CAB	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	X	8.70	78.15	22.23	3.98	65.0	± 9.6 %
		Y	8.66	77.53	21.98		65.0	
10154-	LTE EDD (OG EDMA FOOT DD. 10.11)	Z	8.71	78.29	22.27		65.0	
CAC	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	X	2.46	70.17	16.97	0.00	150.0	± 9.6 %
	 	Y	2.49	69.71	16.73		150.0	
101EE	LTC EDD (OO ED)	Z	2.48	70.06	16.90		150.0	
10155- CAC	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	X	2.74	68.67	16.51	0.00	150.0	± 9.6 %
		Υ	2.78	68.36	16.39		150.0	
40450	175 500 400 5000	Z	2.76	68.65	16.49		150.0	
10156- CAC	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	X	2.06	70.10	16.48	0.00	150.0	± 9.6 %
		Y	2.08	69.44	16.27		150.0	
40457		Z	2.07	69.94	16.45		150.0	
10157- CAC	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	X	2.28	68.17	15.11	0.00	150.0	± 9.6 %
		Υ	2.33	67.84	15.16		150.0	
10150	· 	Ζ	2.31	68.18	15.19		150.0	
10158- CAC	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	Х	2.89	68.77	16.63	0.00	150.0	± 9.6 %
		Υ	2.94	68.48	16.53		150.0	
 _		Z	2.92	68.76	16.61		150.0	
10159- CAC	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	X	2.39	68.61	15.39	0.00	150.0	± 9.6 %
		Υ	2.45	68.30	15.46		150.0	
40400	1.77.55	Z	2.43	68.65	15.48		150.0	
10160- CAB	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	_ x	2.91	69.42	16.71	0.00	150.0	± 9.6 %
	 	Υ	2.92	69.01	16.48		150.0	
10161-	LTE EDD (00 EDL)	_ Z	2.90	69.28	16.61		150.0	
CAB	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	X	3.05	67.85	16.19	0.00	150.0	± 9.6 %
		Y	3.10	67.67	16.10		150.0	
10160	LTE FOR (OC TOWN	Z	3.07	67.86	16.16		150.0	
10162- CAB	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	Х	3.16	67.93	16.26	0.00	150.0	± 9.6 %
	<u> </u>	Y	3.21	67.72	16.16		150.0	
10100	LTC FDD (00 TTM)	Ζ	3.18	67.92	16.23		150.0	
10166- CAC	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	X	4.07	71.45	20.14	3.01	150.0	± 9.6 %
		Υ	3.97	70.22	19.43		150.0	
10167	LTE EDD (00 == 1)	Z	3.95	70.80	19.71		150.0	
10167- CAC	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	Х	5.49	75.62	21.04	3.01	150.0	± 9.6 %
		Y	5.11	73.56	20.08		150.0	
	· · · · · · · · · · · · · · · · · · ·	Z	5.22	74.75	20.57		,00.0	

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10168- CAC	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	Х	6.13	77.98	22.33	3.01	150.0	± 9.6 %
		Υ	5.62	75.59	21.27		150.0	
		Z	5.82	77.05	21.86		150.0	
10169- CAB	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	X	3.81	73.33	20.96	3.01	150.0	± 9.6 %
		Y	3.65	71.83	20.10		150.0	
		Z	3.62	72.48	20.46	_	150.0	
10170- CAB	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	X	6.50	82.68	24.25	3.01	150.0	± 9.6 %
		Υ	5.61	79.24	22.79		150.0	
		Z	6.05	81.70	23.79	·	150.0	
10171- AAB	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	X	4.97	76.89	21.05	3.01	150.0	± 9.6 %
		Υ	4.45	74.28	19.85		150.0	
-		Z	4.61	75.89	20.53		150.0	
10172- CAB	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	Х	52.94	121.29	36.90	6.02	65.0	± 9.6 %
		Υ	23.36	103.87_	31.78		65.0	
_		Z	40.33	116.26	35.48_		65.0	
10173- CAB	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	Х	58.52	116.94	33.83	6.02	65.0	± 9.6 %
		Y	29.01	103.53	30.11		65.0	
		Z	69.19	120.09	34.52		65.0	
10174- CAB	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	X	40.96	109.01	31.18	6.02	65.0	± 9.6 %
		Υ	22.71	97.99	28.00		65.0	
		Z	43.66	110.32	31.42		65.0	_
10175- CAC	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	X	3.75	72.93	20.69	3.01	150.0	± 9.6 %
		Υ	3.59	71.44	19.82		150.0	
		Z	3.56	72.08	20.18		150.0	
10176- CAC	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	Х	6.51	82.71	24.26	3.01	150.0	± 9.6 %
		Y	5.62	79.27	22.81		150.0	
		Z	6.06	81.74	23.81		150.0	
10177- CAE	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	Х	3.79	73.12	20.79	3.01	150.0	± 9.6 %
		Υ	3.63	71.64	19.94		150.0	
		Z	3.60	72.28	20.29		150.0	
10178- CAC	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)	X	6.40	82.34	24.10	3.01	150.0	± 9.6 %
<u> </u>		Y	5.52	78.90	22.63		150.0	
		Z	5.95	81.34	23.63		150.0	
10179- CAC	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	X	5.65	79.57	22.48	3.01	150.0	± 9.6 %
-		Y	4.96	76.53	21.14		150.0	<u> </u>
		Z	5.25	78.56	21.99	Ļ	150.0	
10180- CAC	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)	X	4.95	76.77	20.98	3.01	150.0	± 9.6 %
		Υ	4.43	74.16	19.77		150.0	
		Z	4.58	75.77	20.46	<u> </u>	150.0	
10181- CAB	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	Х	3.78	73.10	20.79	3.01	150.0	± 9.6 %
		Υ	3.62	71.62	19.93	ļ	150.0	
10182-	LTE-FDD (SC-FDMA, 1 RB, 15 MHz,	Z	3.59 6.39	72.26 82.31	20.28	3.01	150.0 150.0	± 9.6 %
CAB	16-QAM)			_	<u> </u>		1500	
		Y	5.51	78.88	22.62		150.0	
		Z	5.94	81.31	23.62	 	150.0	1 . 0 0 00
10183- AAA	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	X	4.93	76.74	20.97	3.01	150.0	± 9.6 %
 		Y	4.42	74.13	19.76		150.0	<u> </u>
		Z	4.57	75.74	20.45		150.0	i

10184- CAC	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	Tx	3.80	73.15	20.81	3.01	150.0	± 9.6 %
		Y	3.64	71.67	19.95	 	150.0	
1010-		Z	3.60	72.31	20.31	<u> </u>	150.0	+
10185- CAC	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)	X	6.42	82.40	24.13	3.01	150.0	± 9.6 %
		Y	5.54	78.96	22.66		150.0	
40400		Z	5.97	81.41	23.66		150.0	
10186- AAC	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)	X	4.96	76.83	21.01	3.01	150.0	± 9.6 %
		Y	4.44	74.21	19.80		150.0	
10187-	LTC FDD (00 FDM)	Z	4.60	75.82	20.49		150.0	
CAC	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	X	3.81	73.21	20.87	3.01	150.0	± 9.6 %
 -		<u> </u>	3.65	71.70	20.00		150.0	
40400	LTE EDD (00 ED)	Z	3.61	72.36	20.36		150.0	
10188- CAC	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	Х	6.73	83.38	24.59	3.01	150.0	± 9.6 %
		Υ	5.78	79.84	23.11		150.0	
40400	LTE FOR /OC	Z	6.27	82.41	24.14		150.0	
10189- AAC	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	X	5.12	77.43	21.34	3.01	150.0	± 9.6 %
		Υ	4.56	74.74	20.11		150.0	
10193-	IFFE OOD 44 (UT O	Z	4.75	76.43	20.82		150.0	
CAB	IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK)	X	4.63	66.85	16.32	0.00	150.0	± 9.6 %
		Υ	4.70	66.78	16.27		150.0	<u> </u>
10194-	IEEE OOO AA AUST O	Z	4.65	66.88	16.28	1	150.0	
CAB	IEEE 802.11n (HT Greenfield, 39 Mbps, 16-QAM)	X	4.82	67.21	16.44	0.00	150.0	± 9.6 %
		Y	4.90	67.16	16.38		150.0	
40405		Z	4.85	67.24	16.40		150.0	
10195- CAB	IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM)	Х	4.86	67.23	16.45	0.00	150.0	± 9.6 %
		Υ	4.94	67.16	16.39		150.0	
40400		Z	4.89	67.26	16.41		150.0	
10196- CAB	IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK)	Х	4.64	66.94	16.35	0.00	150.0	± 9.6 %
			4.72	66.89	16.31		150.0	 -
40407		Z	4.67	66.98	16.32		150.0	
10197- CAB	IEEE 802.11n (HT Mixed, 39 Mbps, 16-QAM)	X	4.84	67.23	16.45	0.00	150.0	± 9.6 %
		Υ	4.92	67.18	16.39		150.0	
10100	JEEG 000 44 WITH	_ <u>Z</u>	4.86	67.26	16.41		150.0	
10198- CAB	IEEE 802.11n (HT Mixed, 65 Mbps, 64-QAM)	X	4.87	67.24	16.46	0.00	150.0	± 9.6 %
	 	Υ	4.95	67.18	16.40		150.0	
10010	IEEE 000 44 (UT 1)	Z	4.89	67.27	16.42		150.0	
10219- CAB	IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK)	X	4.59	66.96	16.32	0.00	150.0	± 9.6 %
		Y	4.67	66.90	16.27		150.0	
10220-	IEEE 000 44 - 0 IT 10	Z	4.62	66.99	16.28		150.0	
CAB	IEEE 802.11n (HT Mixed, 43.3 Mbps, 16-QAM)	X	4.83	67.21	16.45	0.00	150.0	± 9.6 %
		Y	4.92	67.17	16.39		150.0	
10221	ICCC DOD 44 / ICCC	Ζ	4.86	67.25	16.41		150.0	
10221- CAB	IEEE 802.11n (HT Mixed, 72.2 Mbps, 64-QAM)	X	4.87	67.17	16.45	0.00	150.0	± 9.6 %
		Υ	4.95	67.12	16.39		150.0	
10000		Z	4.90	67.20	16.41		150.0	
10222- CAB	IEEE 802.11n (HT Mixed, 15 Mbps, BPSK)	Х	5.19	67.43	16.57	0.00	150.0	± 9.6 %
		Y	5.26	67.42	16.52		450.0	
		ż	5.21	67.47		——-	150.0	
		=	U.4.	01.41	16.52		150.0	

10223- CAB	IEEE 802.11n (HT Mixed, 90 Mbps, 16-QAM)	Х	5.54	67.71	16.73	0.00	150.0	± 9.6 %
OVR	(CAIVI)	Y	5.65	67.79	16.73		150.0	
	-	Z	5.56	67.76	16.69		150.0	
10224- CAB	IEEE 802.11n (HT Mixed, 150 Mbps, 64-QAM)	X	5.23	67.52	16.54	0.00	150.0	± 9.6 %
0, (2		Υ	5.31	67.53	16.50		150.0	
		Z	5.25	67.57	16.50		150.0	
10225- CAB	UMTS-FDD (HSPA+)	X	2.90	66.49	15.69	0.00	150.0	± 9.6 %
		Y	2.96	66.31	15.65		150.0	
		Z	2.93	66.49	15.67		150.0	
10226- CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	Х	63.52	118.60	34.35	6.02	65.0	± 9.6 %
		Υ	30.69	104.68	30.52		65.0	
		Z	76.61	122.12	35.13		65.0	
10227- CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	Х	44,55	110.64	31.71	6.02	65.0	± 9.6 %
		Υ	24.78	99.62	28.58		65.0	
		Z	50.71	113.05	32.23		65.0	
10228- CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	Х	54.07	122.28	37.29	6.02	65.0	± 9.6 %
		Υ	26.75	106.96	32.81		65.0	
		Z	50.70	121.15	36.89		65.0	
10229- CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)	X	58.47	116.91	33.84	6.02	65.0	± 9.6 %
		Υ	29.07	103.55	30.12		65.0	
		Z	69.21	120.09	34.53		65.0	
10230- CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)	X	41.83	109.42	31.31	6.02	65.0	± 9.6 %
		Υ	23.67	98.73	28.24		65.0	
		Z	46.98	111.59	31.77		65.0	
10231- CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	Х	50.27	120.69	36.80	6.02	65.0	± 9.6 %
		Y	25.47	105.89	32.42		65.0	
		Z	46.95	119.49	36.37		65.0	
10232- CAB	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)	X	58.50	116.93	33.84	6.02	65.0	± 9.6 %
		Υ	29.04	103.55	30.12		65.0	
		Z	69.25	120.11	34.53		65.0	
10233- CAB	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)	X	41.89	109.45	31.32	6.02	65.0	± 9.6 %
		Y	23.68	98.75	28.25		65.0	
		Z	47.04	111.62	31.78		65.0	
10234- CAB	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	X	46.62	118.97	36.23	6.02	65.0	± 9.6 %
		Υ	24.21	104.73	31.99	 	65.0	
		Z	43.35	117.68	35.78		65.0	1.5.5.5
10235- CAB	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	×	58.83	117.05	33.87	6.02	65.0	± 9.6 %
		Y	29.12	103.60	30.14	 	65.0	<u> </u>
		Z	69.67	120.23	34.57		65.0	1
10236- CAB	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	Х	42.33	109.61	31.36	6.02	65.0	± 9.6 %
		Y	23.86	98.86	28.28	<u> </u>	65.0	<u> </u>
		Z	47.61	111.80	31.82	1	65.0	
10237- CAB	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	Х	51.00	121.00	36.88	6.02	65.0	± 9.6 %
		Y_	25.65	106.05	32.47	<u> </u>	65.0	1
		Z	47.51	119.75	36.44	<u> </u>	65.0	1
10238- CAB	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	X	58.59	116.97	33.85	6.02	65.0	± 9.6 %
		Y	29.05	103.56	30.12		65.0	
		Z	69.38	120.15	34.54	1	65.0	1

10239- CAB	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	X	41.95	109.49	31.33	6.02	65.0	± 9.6 %
		Y	23.68	98.76	28.25	 	65.0	
		Z	47.10	111.66	31.79	†	65.0	
10240- CAB	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	X	50.80	120.93	36.86	6.02	65.0	± 9.6 %
		Υ	25.57	106.00	32.45		65.0	
		Z	47.32	119.68	36.42		65.0	1
10241- CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	X	13.90	89.43	28.51	6.98	65.0	± 9.6 %
		Υ	12.38	86.00	27.15		65.0	
		Z	13.25	88.63	28.18		65.0	
10242- CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	X 	13.24	88.30	28.01	6.98	65.0	± 9.6 %
		Υ	11.20	83.77	26.19		65.0	
40040		Z	11.70	85.89	27.05		65.0	i
10243- CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	X	10.45	85.15	27.77	6.98	65.0	± 9.6 %
		Y	9.15	81.09	25.96		65.0	
40244	LTE TOD (OO FDM)		9.27	82.54	26.64		65.0	
10244- CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	X	10.27	81.79	21.54	3.98	65.0	± 9.6 %
		Y	9.75	80.72	21.42		65.0	
40045	LTE TOD (OR ED) (_ Z_	10.26	82.03	21.62		65.0	
10245- CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	X	10.06	81.22	21.27	3.98	65.0	± 9.6 %
	- 	Υ	9.64	80.30	21.22		65.0	
40040	LTC TOO (OO EDIVIDED TO THE OUT OF THE OUT OUT OF THE OUT OUT OF THE OUT OF THE OUT OF THE OUT OF THE OUT OUT OUT OF THE OUT	Z	10.06	81.45	21.36		65.0	12
10246- CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	_ X	9.67	83.63	22.18	3.98	65.0	± 9.6 %
		Υ	9.36	82.86	22.20		65.0	
40047	1.75 TDD (0.0 FB) (1.0 FB)	Z	10.19	84.79	22.67		65.0	
10247- CAB	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	Х	7.85	78.08	20.65	3.98	65.0	± 9.6 %
		Y	7.90	77.83	20.80		65.0	T -
40040	LTE TOD (OC TOUR)	Z	7.98	78.59	20.92		65.0	
10248- CAB	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	X	7.82	77.58	20.44	3.98	65.0	± 9.6 %
		Υ	7.90	77.37	20.60		65.0	
40040		_Z_	7.93	78.02	20.68		65.0	
10249- CAB	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	X	10.64	85.48	23.48	3.98	65.0	± 9.6 %
		Υ	9.96	83.94	23.12	<u> </u>	65.0	
40050		Z	<u>1</u> 1.07	86.38	23.84		65.0	
10250- CAB	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	Х	8.70	79.92	22.62	3.98	65.0	± 9.6 %
		Y	8.59	7 9.17	22.40		65.0	
10054	LTC TDD (OO FDL)	Z	8.76	80.21	22.75		65.0	
10251- CAB	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	X	8.24	77.84	21.52	3.98	65.0	± 9.6 %
		Y	8.18	77.17	21.33		65.0	Γ – –
10050	LTC TDD (00 FD) (Z	8.25	77.99	21.59		65.0	
10252- CAB	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	X	10.28	84.31	23.72	3.98	65.0	± 9.6 %
	<u> </u>	Y	9.71	82.72	23.19		65.0	
10052	LTE TOP (00 FOLK)	Z	10.49	84.84	23.92		65.0	
10253- CAB	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	Х	8.12	76.85	21.40	3.98	65.0	± 9.6 %
		Υ	8.10	76.27	21.18	_	65.0	
10254	LTE TOD (OO POLL)	Z	8.11	76.94	21.42		65.0	
10254- CAB	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	X 	8.49	77.57	21.98	3.98	65.0	± 9.6 %
		Y	8.46	76.97	21.75		65.0	
		Z	8.49	77.68	22.01		65.0	

10255- CAB	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	X	9.10	80.60	22.55	3.98	65.0	± 9.6 %
		Υ	8.85	79.55	22.14		65.0	
		Z	9.17	80.89	22.64		65.0	
10256- CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	X	9.01	79.25	19.78	3.98	65.0	± 9.6 %
		Y	8.94	79.06	20.09		65.0	
		Z	9.07	79.62	19.93		65.0	
10257- CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	Х	8.74	78.43	19.38	3.98	65.0	± 9.6 %
		Y _	8.79	78.45	19.78		65.0	
		Z	8.79	78.79	19.53		65.0	
10258- CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	Х	8.21	80.54	20.44	3.98	65.0	± 9.6 %
		Υ	8.47	80.95	21.00		65.0	
		Ζ	8.77	81.91	21.05		65.0	
10259- CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	Х	8.18	78.72	21.34	3.98	65.0	± 9.6 %
	T	Υ	8.16	78.25	21.33		65.0	
		Z	8.28	79.12	21.54		65.0	
10260- CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	Х	8.18	78.43	21.24	3.98	65.0	± 9.6 %
		Υ	8.19	78.02	21.26		65.0	
		Z	8.28	78.82	21.44		65.0	
10261- CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	Х	10.07	84.33	23.38	3.98	65.0	± 9.6 %
		Υ	9.51	82.86	22.97		65.0	
		Z	10.34	85.00	23.65		65.0	
10262- CAB	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	Х	8.69	79.88	22.59	3.98	65.0	±9.6 %
CAB		Y	8.59	79.14	22.37		65.0_	
		Z	8.75	80.17	22.72		65.0	
10263- CAB	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	Х	8.23	77.83	21.52	3.98	65.0	± 9.6 %
		Υ	8.17	77.17	21.33		65.0	
		Z	8.24	77.99	21.59		65.0	
10264- CAB	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	Х	10.21	84.16	23.65	3.98	65.0	± 9.6 %
		Υ	9.65	82.60	23.12		65.0	
		Z	10.42	84.68	23.85		65.0	
10265- CAB	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	X	8.34	77.44	21.62	3.98	65.0	± 9.6 %
		Y	8.31	76.84	21.36		65.0	
		T Z	8.34	77.56	21.64		65.0	
10266- CAB	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	Х	8.70	78.15	22.23	3.98	65.0	± 9.6 %
		Υ	8.66	77.53	21.97		65.0	<u> </u>
		Z	8.71	78.28	22.26		65.0	<u> </u>
10267- CAB	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	X	9.39	80.92	22.44	3.98	65.0	± 9.6 %
		Υ	9.13	79.90	22.05		65.0	<u> </u>
		Z_	9.51	81.29	22.56		65.0	
10268- CAB	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	X	8.76	76.86	21.73	3.98	65.0	± 9.6 %
		Y	8.77	76.38	21.50		65.0	↓
		Z_	8.75	76.95	21.73	<u> </u>	65.0	
10269- CAB	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	X	8.68	76.45	21.63	3.98	65.0	± 9.6 %
0.10		Y	8.70	75.99	21.41_	<u> </u>	65.0	↓
		Z	8.66	76.51	21.62		65.0	
10270- CAB	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	Х	8.83	78.14	21.51	3.98	65.0	± 9.6 %
<u> </u>		Y	8.76	77.53	21.24		65.0	
	 	Ż	8.89	78.39	21.57	Ī	65.0	

10274- CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.10)	X	2.66	66.82	15.58	0.00	150.0	± 9.6 %
		Y	2.68	66.51	15.47		150.0	
		Z	2.67	66.79	15.55		150.0	
10275- CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.4)	X	1.74	69.18	16.29	0.00	150.0	± 9.6 %
		Y	1.72	68.41	15.92		150.0	
		Z	1.74	68.96	16.19		150.0	
10277- CAA	PHS (QPSK)	X	5.74	69.88	14.27	9.03	50.0	± 9.6 %
		Y	6.29	71.20	15.39		50.0	
10278-	PHS (QPSK, BW 884MHz, Rolloff 0.5)	Z	5.61	69.90	14.15	 	50.0	
CAA	T TIS (QF SN, BW 604MHZ, ROHOH 0.5)	X	9.18	79.65	20.70	9.03	50.0	± 9.6 %
		Y Z	9.86	81.02	21.73	 	50.0	
10279-	PHS (QPSK, BW 884MHz, Rolloff 0.38)	X	9.98	81.62	21.46	 	50.0	-
CAA	1110 (Q1 3A, D47 60419112, R011011 0.36)	Y	9.34	79.85	20.79	9.03	50.0	± 9.6 %
				81.20	21.81		50.0	
10290-	CDMA2000, RC1, SO55, Full Rate	Z	10.15 1.76	81.81	21.54	0.00	50.0	
AAB	ODMAZ000, NOT, 3033, Full Rate	Y		71.14	15.57	0.00	150.0	± 9.6 %
		Z	1.74	70.15	15.48	<u> </u>	150.0	
10291-	CDMA2000, RC3, SO55, Full Rate	X	1.78	71.05	15.70	L	150.0	
AAB	ODM/ (2000, 1100, 3000, 1 uli 11ate	^ Y	0.98	68.06	14.07	0.00	150.0	± 9.6 %
		<u> </u>				<u> </u>	150.0	
10292-	CDMA2000, RC3, SO32, Full Rate	X	1.00 1.37	67.97	14.23	0.00	150.0	
AAB	55 m 2000, 100, 0002, 1 uli Nate			73.74	17.04	0.00	150.0	± 9.6 %
		Y	1.23	71.32	16.37		150.0	
10293-	CDMA2000, RC3, SO3, Full Rate	Z X	1.33	73.08	16.99		150.0	
AAB	ODMAZOOO, NOS, SOS, Full Rate	^ Y	2.26	81.44	20.55	0.00	150.0	± 9.6 %
			1.72	76.60	19.08		150.0	
10295- AAB	CDMA2000, RC1, SO3, 1/8th Rate 25 fr.	X	2.04 11.19	79.77 84.64	20.16 24.50	9.03	150.0 50.0	± 9.6 %
		Y	10.41	83.08	24.22		50.0	
		ż	11,16	85.25	24.81		+	
10297- AAA	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	X	2.95	70.68	17.05	0.00	50.0 150.0	± 9.6 %
		Υ	2.97	70.30	16.82	-	150.0	
		Ζ	2.96	70.63	16.99	-	150.0	
10298- AAB	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	X	1.82	69.54	15.45	0.00	150.0	± 9.6 %
		Υ	1.86	69.05	15.49		150.0	
1000-		Z	1.85	69.53	15.56		150.0	
10299- AAB	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	X	4.42	76.45	17.86	0.00	150.0	± 9.6 %
		Υ	3.67	73.55	17.01		150.0	_
40200	LTE EDD (OO ED) (A TOO ED)	Z	3.95	74.91	17.24		150.0	
10300- AAB	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	X	2.89	69.50	14.20	0.00	150.0	± 9.6 %
	 	Y	2.75	68.47	14.04		150.0	
10201	IEEE 000 40- MENANY (00 10 -	Z	2.74	68.79	13.87		150.0	
10301- AAA	IEEE 802.16e WIMAX (29:18, 5ms, 10MHz, QPSK, PUSC)	X	5.86	68.82	19.11	4.17	80.0	± 9.6 %
		Y	5.80	67.98	18.66		80.0	
10302-	IEEE 902 460 W/MANY (20 40 7	Z	5.64	67.88	18.59		80.0	
10302- AAA	IEEE 802.16e WIMAX (29:18, 5ms, 10MHz, QPSK, PUSC, 3 CTRL symbols)	X	6.35	69.48	19.90	4.96	80.0	± 9.6 %
		7	6.33	68.83	19.54		80.0	
		Z	6.19	68.85	19.54		80.0	

10303- AAA	IEEE 802.16e WiMAX (31:15, 5ms, 10MHz, 64QAM, PUSC)	Х	6.22	69.65	20.00	4.96	80.0	± 9.6 %
	<u> </u>	Υ	6.20	68.97	19.63		80.0	
		Z	6.04	68.93	19.61		80.0	
10304- AAA	IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, 64QAM, PUSC)	X	5.81	68.77	19.09	4.17	80.0	± 9.6 %
		Υ	5.81	68.18	18.78		80.0	-
		Z	5.67	68.20	18.78		80.0	
10305- AAA	IEEE 802.16e WiMAX (31:15, 10ms, 10MHz, 64QAM, PUSC, 15 symbols)	X	10.92	86.64	28.18	6.02	50.0	± 9.6 %
		Υ	9.49	82.76	26.69		50.0	
		Z	8.57	81.17	26.04		50.0	
10306- AAA	IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, 64QAM, PUSC, 18 symbols)	X	6.87	73.20	22.32	6.02	50.0	± 9.6 %
		Υ	6.66	71.77	21.64		50.0	
		Z	6.43	71.63	21.58		50.0	
10307- AAA	IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, QPSK, PUSC, 18 symbols)	Х	7.03	74.07	22.52	6.02	50.0	± 9.6 %
		Υ	6.77	72.51	21.79		50.0	
		Z	6.52	72.35	21.74		50.0	
10308- AAA	IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, 16QAM, PUSC)	X	7.13	74.63	22.78	6.02	50.0	± 9.6 %
		Υ	6.82	72.91	21.99		50.0	
		Z	6.57	72.78	21.95		50.0	
10309- AAA	IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, 16QAM, AMC 2x3, 18 symbols)	Х	7.00	73.57	22.52	6.02	50.0	± 9.6 %
		Υ	6.78	72.09	21.80		50.0	
		Z	6.54	71.97	21.77		50.0	
10310- AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, AMC 2x3, 18 symbols)	Х	6.92	73.51	22.37	6.02	50.0	± 9.6 %
		Y	6.68	72.00	21.65		50.0	
		Z	6.44	71.88	21.60		50.0	
10311- AAA	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	Х	3.31	69.89	16.65	0.00	150.0	± 9.6 %
,,,,	<u></u>	TY	3.33	69.61	16.47		150.0	
	 	Z	3.33	69.90	16.62		150.0	
10313- AAA	iDEN 1:3	X	7.87	79.08	19.05	6.99	70.0	± 9.6 %
,,,,,		Υ	7.77	78.82	19.17		70.0	
		Z	8.36	80.29	19.46		70.0	
10314- AAA	iDEN 1:6	X	10.09	84.89	23.50	10.00	30.0	±9.6%
,,,,,		Y	9.69	83.97	23.40		30.0	
		Z	11.44	87.59	24.44		30.0	
10315- AAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 96pc duty cycle)	X	1.17	65.22	16.05	0.17	150.0	± 9.6 %
		Υ	1.19	64.80	15.74		150.0	
		Z	1.18	65.09	15.93		150.0	
10316- AAB	IEEE 802.11g WiFi 2.4 GHz (ERP- OFDM, 6 Mbps, 96pc duty cycle)	X	4.74	67.06	16.54	0.17	150.0	± 9.6 %
		Y	4.81	66.98	16.48		150.0	
		Z	4.76	67.07	16.49		150.0	
10317- AAB	IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle)	X	4.74	67.06	16.54	0.17	150.0	± 9.6 %
	<u> </u>	Υ	4.81	66.98	16.48		150.0	
		Z	4.76	67.07	16.49		150.0	
10400- AAC	IEEE 802.11ac WiFi (20MHz, 64-QAM, 99pc duty cycle)	Х	4.83	67.29	16.44	0.00	150.0	± 9.6 %
		İΥ	4.91	67.21	16.38		150.0	
	 	Ż	4.85	67.31	16.40	1	150.0	
						+		1
10401-	IEEE 802.11ac WiFi (40MHz, 64-QAM,	X	5.49	67.41	16.57	0.00	150.0	± 9.6 %
	IEEE 802.11ac WiFi (40MHz, 64-QAM, 99pc duty cycle)			67.41 67.28	16.57 16.45	0.00	150.0	± 9.6 %

10402- AAC	IEEE 802.11ac WiFi (80MHz, 64-QAM, 99pc duty cycle)	X	5.77	67.85	16.62	0.00	150.0	± 9.6 %
		Y	5.84	67.84	16.57	 	150.0	
		Z	5.79	67.89	16.58	 	150.0	
10403- AAB	CDMA2000 (1xEV-DO, Rev. 0)	Х	1.76	71.14	15.57	0.00	115.0	± 9.6 %
		<u> Y</u>	1.74	70.15	15.48		115.0	
		Z	1.78	71.05	15.70		115.0	
10404- AAB	CDMA2000 (1xEV-DO, Rev. A)	Х	1.76	71.14	15.57	0.00	115.0	± 9.6 %
		Y	1.74	70.15	15.48		115.0	
		Z	1.78	71.05	15.70		115.0	
10406- AAB	CDMA2000, RC3, SO32, SCH0, Full Rate	X	100.00	121.30	30.65	0.00	100.0	± 9.6 %
		Υ	98.54	123.04	31.60		100.0	
		Z	100.00	121.24	30.44		100.0	
10410- AAA	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	1.57	62.34	6.89	2.23	80.0	± 9.6 %
		Υ	1.83	63.33	7.78		80.0	
		LZ.	1.40	61.66	6.34		80.0	
10415- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle)	Х	1.01	63.55	15.10	0.00	150.0	± 9.6 %
		Υ	1.03	63.22	14.83		150.0	
		Z	1.03	63.51	15.02		150.0	_
10416- AAA	IEEE 802.11g WiFi 2.4 GHz (ERP- OFDM, 6 Mbps, 99pc duty cycle)	X	4.63	66.89	16.37	0.00	150.0	± 9.6 %
		Y	4.70	66.81	16.31		150.0	_
		LZ	4.66	66.92	16.33		150.0	
10417- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 99pc duty cycle)	X	4.63	66.89	16.37	0.00	150.0	± 9.6 %
		Y	4.70	66.81	16.31		150.0	
		Z	4.66	66.92	16.33		150.0	
10418- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 99pc duty cycle, Long preambule)	X	4.62	67.04	16.38	0.00	150.0	± 9.6 %
		Y	4.68	66.95	16.31	_	150.0	
		Z	4.64	67.06	16.34		150.0	
10419- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 99pc duty cycle, Short preambule)	Х	4.64	66.99	16.39	0.00	150.0	± 9.6 %
		Y	4.71	66.91	16.32		150.0	
		Z	4.67	67.02	16.34		150.0	
10422- AAA	IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK)	X	4.77	67.00	16.40	0.00	150.0	± 9.6 %
		Υ	4.84	66.92	16.34		150.0	
		Ζ	4.79	67.02	16.36		150.0	
10423- AAA	IEEE 802.11n (HT Greenfield, 43.3 Mbps, 16-QAM)	Х	4.96	67.36	16.54	0.00	150.0	± 9.6 %
		Υ	5.05	67.31	16.48		150.0	
1015:		Ζ	4.99	67.39	16.49		150.0	
10424- AAA	IEEE 802.11n (HT Greenfield, 72.2 Mbps, 64-QAM)	X	4.87	67.30	16.50	0.00	150.0	± 9.6 %
		Υ	4.95	67.24	16.44		150.0	
		Z	4.90	67.33	16.46		150.0	
10425- AAA	IEEE 802.11n (HT Greenfield, 15 Mbps, BPSK)	X	5.47	67.66	16.68	0.00	150.0	± 9.6 %
		Υ	5.53	67.59	16.60		150.0	
		Z	5.47	67.64	16.60		150.0	
		'					100.0 1	
10426- AAA	IEEE 802.11n (HT Greenfield, 90 Mbps, 16-QAM)	×	5.47	67.68	16.68	0.00	150.0	± 9.6 %
						0.00		± 9.6 %

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10427- AAA	IEEE 802.11n (HT Greenfield, 150 Mbps, 64-QAM)	X	5.48	67.65	16.67	0.00	150.0	± 9.6 %
<i></i>	OT-GAM)	Y	5.56	67.64	16.62		150.0	
		Z	5.50	67.67	16.61		150.0	
10430- AAA	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1)	X	4.31	70.51	18.18	0.00	150.0	± 9.6 %
	-	Υ	4.41	70.35	18.21		150.0	
		Ż	4.36	70.57	18.21		150.0	-
10431- AAA	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1)	Х	4.35	67.48	16.43	0.00	150.0	± 9.6 %
		Υ	4.44	67.36	16.38		150.0	
		Ζ	4.38	67.49	16.40		150.0	
10432- AAA	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1)	X	4.65	67.35	16.47	0.00	150.0	± 9.6 %
		Y	4.73	67.27	16.41	<u> </u>	150.0	
		Z	4.67	67.38	16.43		150.0	2 2 2 2
10433- AAA	LTE-FDD (ÖFDMA, 20 MHz, E-TM 3.1)	X	4.89	67.34	16.53	0.00	150.0	± 9.6 %
		Ϋ́	4.97	67.29	16.47		150.0	
10.10	NA ODIA (DO T. AL)	Z	4.91	67.38	16.48	0.00	150.0	1000
10434- AAA	W-CDMA (BS Test Model 1, 64 DPCH)	X	4.40	71.29	18.17	0.00	150.0	± 9.6 %
		Y	4.50	71.07	18.22		150.0 150.0	
40.40=	LITE TOD (OO POLIA A CO COLUI	Z	4.45	71.35	18.23	0.00		± 9.6 %
10435- AAA	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	1.57	62.31	6.87 7.76	2.23	80.0	± 9.6 %
		Υ	1.83	63.29			80.0	
10447- AAA	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	X	1.40 3.67	61.64 67.56	6.32 15.91	0.00	150.0	± 9.6 %
/V/V\	Chipping 4470)	Υ	3.76	67.40	15.93		150.0	
	-	Z	3.70	67.57	15.92		150.0	
10448- AAA	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, Clippin 44%)	X	4.18	67.25	16.29	0.00	150.0	± 9.6 %
		Y	4.26	67.13	16.24		150.0	
		Z	4.21	67.27	16.26		150.0	
10449- AAA	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1, Cliping 44%)	Х	4.44	67.18	16.37	0.00	150.0	± 9.6 %
		Y	4.51	67.09	16.31		150.0	
		Z	4.46	67.20	16.33		150.0	
10450- AAA	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	X	4.62	67.10	16.38	0.00	150.0	± 9.6 %
		Υ	4.69	67.04	16.32		150.0	
		Z	4.65	67.13	16.34		150.0	
10451- AAA	W-CDMA (BS Test Model 1, 64 DPCH, Clipping 44%)	X	3.59	67.84	15.63	0.00	150.0	± 9.6 %
		Y	3.69	67.70	15.70	<u> </u>	150.0	<u> </u>
		Z	3.63	67.87	15.67		150.0	
10456- AAA	IEEE 802.11ac WiFi (160MHz, 64-QAM, 99pc duty cycle)	X	6.33	68.23	16.83	0.00	150.0	± 9.6 %
		Y	6.38	68.23	16.78	 	150.0	
		Z	6.33	68.25	16.77	0.00	150.0	1069
10457- AAA	UMTS-FDD (DC-HSDPA)	X	3.84	65.52 65.45	16.10	0.00	150.0	± 9.6 %
		Y	3.87			 	150.0	
10458-	CDMA2000 (1xEV-DO, Rev. B, 2	X	3.85 3.42	65.55 67.18	16.06 15.14	0.00	150.0	± 9.6 %
AAA	carriers)	T	3.50	66.91	15.21	† —	150.0	
		T Z	3.45	67.17	15.18	1	150.0	
10450	CDMA2000 (1xEV-DO, Rev. B, 3	X	4.41	64.94	15.71	0.00	150.0	± 9.6 %
10459- AAA	carriers)	^ Y	4.60	65.07	15.86	- 0.00	150.0	
		Z	4.55	65.34	15.90	+	150.0	
			4.55	1 00.04	10.50		100.0	

10460- AAA	UMTS-FDD (WCDMA, AMR)	Tx	1.01	70.61	17.46	0.00	150.0	± 9.6 %
		Y	0.95	68.81	16.56	T	150.0	<u>† </u>
ļ		Z	0.99	69.88	17.14		150.0	-
10461- AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	124.09	32.48	3.29	80.0	± 9.6 %
		Y	100.00	122.40	31.91		80.0	
10100		Z	100.00	123.78	32.21		80.0	
10462- AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	109.33	25.42	3.23	80.0	± 9.6 %
		<u> </u>	100.00	109.52	25.72	ļ	80.0	
10463-	LTE TOD (OO FOLK) A DR. A LIVE	<u> Z</u>	100.00	108.56	24.91		80.0	
AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	106.46	24.04	3.23	80.0	± 9.6 %
		Y	72.76	103.48	23.69		80.0	
10464	LIE IDD (CC FOMA 4 DD CAN)	Z	100.00	105.54	23.47		80.0	
10464- AAA	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100,00	122.25	31.47	3.23	80.0	± 9.6 %
	_	Y	100.00	120.68	30.96		80.0	
10465	LTE TOD (CO FOLIA 4 FO	Z	100.00	121.86	31.16	<u> </u>	80.0	
10465- <u>A</u> AA	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	108.86	25.18	3.23	80.0	± 9.6 %
<u> </u>		Y	100.00	109.08	25.49	<u> </u>	80.0	
10466-	LTE TOD (CC FDMA 4 DD O MILL O4	<u> Z</u>	100.00	108.05	24.66		80.0	
AAA	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	106.02	23.82	3.23	80.0	± 9.6 %
		Y	34.01	94.84	21.52		80.0	
10467-	LTE TOD (OC FOLIA 4 DD 5 LILL	Z	86.63	103.61	22.92		80.0	
AAA	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	122.46	31.56	3.23	80.0	± 9.6 %
	_	_Y_	100.00	120.86	31.05		80.0	
40460	LTE TOD (OO EDIM A DE LA LICE	Z	100.00	122.07	31.26		80.0	
10468- AAA	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	109.01	25.25	3.23	80.0	± 9.6 %
		Υ	100.00	109.21	25.56		80.0	
10469-	LTC TOD (OO EDIM 4 DD ELW)	Z	100.00	108.21	24.73		80.0	
AAA	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	106.03	23.82	3.23	80.0	± 9.6 %
		Υ	35.12	95.19	21.61		80.0	
40470	LIE TOD (OO ED) (O	Z	92.33	104.26	23.06		80.0	
10470- AAA	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	122.49	31.57	3.23	80.0	± 9.6 %
		Y	100.00	120.89	31.05		80.0	_
10471-	LTC TDD (00 ED) (1	Z	100.00	122.09	31.26		80.0	
AAA	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	108.96	25.23	3.23	80.0	± 9.6 %
	 	Y	100.00	109.17	25.53		80.0	
10472-	LTE TOD (OC EDIAL 4 DD 1011)	Z	100.00	108.15	24.70		80.0	
AAA	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	Х	100.00	105.98	23.80	3.23	80.0	± 9.6 %
		Y	35.19	95.19	21.59		80.0	
10473-	LITE TOD (SO FOLIA 4 ED. 45.11)	Z	92.17	104.19	23.03		80.0	
AAA 	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	122.46	31.56	3.23	80.0	± 9.6 %
	 	_ <u>Y</u>	100.00	120.86	31.04		80.0	
10474-	LTE TDD (CC EDIA) 1 DD 17 17	Z	100.00	122.06	31.25		80.0	
AAA 	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	108.97	25.23	3.23	80.0	± 9.6 %
	 	Υ	100.00	109.18	25.53		80.0	_
10475	LTE TOP (OO EDIA)	Z	100.00	108.16	24.70		80.0	
10475- AAA	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	105.99	23.80	3.23	80.0	± 9.6 %
		Υ	34.55	94.99	21.54		80.0	
		Z	89.20	103.87	22.96		80.0	

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10477- AAA	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	Х	100.00	108.82	25.15	3.23	80.0	± 9.6 %
		Υ	100.00	109.03	25.46		80.0	_
		Z	100.00	108.00	24.62		80.0	
10478- AAA	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	Х	100.00	105.94	23.78	3.23	80.0	± 9.6 %
		Υ	33.78	94.72	21.47		80.0	
		Z	85.25	103.36	22.84		80.0	
10479- AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	Х	29.72	90.65	18.88	1.99	80.0	± 9.6 %
		Υ	26.20	91.38	19.91		80.0	
		Ζ	14.60	84.06	17.13		80.0	
10480- AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	×	1.73	61.06	7.92	1.99	80.0	± 9.6 %
_		Υ	2.26	63.23	9.54		80.0	
		Z	1.62	60.75	7.71		80.0	
10481- AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	Х	1.56	60.00	7.16	1.99	80.0	± 9.6 %
		Υ	1.95	61.61	8.52		80.0	
		Z	1.52	60.00	7.10		80.0	
10482- AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	Х	7.98	83.05	20.48	1.99	80.0	± 9.6 %
		Y	7.13	81.44	20.33		80.0	<u> </u>
		Z	8.29	83.90	20.90		80.0	
10483- AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	Х	12.94	86.61	21.61	1.99	80.0	± 9.6 %
		Y	9.60	82.54	20.66	_	80.0	
		Z	11.32	84.95	21.09		80.0	
10484- AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	11.11	84.37	20.93	1.99	80.0	± 9.6 %
-		Υ	8.80	81.13	20.21		80.0	
		Z	9.93	82.99	20.49		80.0	
10485- AAA	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	Х	8.68	85.12	22.07	1.99	80.0	± 9.6 %
		Υ	7.46	82.52	21.41		80.0	
		Z	8.62_	85.24	22.20		80.0	
10486- AAA	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	Х	5.21	74.83	18.22	1.99	80.0	± 9.6 %
		Υ	5.15	74.31	18.29		80.0	
		Z	5.28	75.16	18.44		80.0	
10487- AAA	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	Х	5.08	74.13	17.96	1.99	80.0	± 9.6 %
		Υ_	5.07	73.74	18.09		80.0]
		Z	5.15	74.46	18.19		80.0	
10488- AAA	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	7.29	81.58	21.58	1.99	80.0	± 9.6 %
		Y	6.74	79.79	20.98	<u> </u>	80.0	
		Z	7.22	81.52	21.58		80.0	
10489- AAA	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	5.12	73.83	18.99	1.99	80.0	± 9.6 %
		Ý	5.08	73.19	18.80		80.0	
		Z	5.10	73.84	19.01		80.0	1000
10490- AAA	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	Х	5.13	73.33	18.83	1.99	80.0	± 9.6 %
		Y	5.11	72.73	18.66	<u> </u>	80.0	
		Z	5.11	73.32	18.85	\	80.0	
10491- AAA	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	6.21	77.24	20.23	1.99	80.0	± 9.6 %
		Y	6.03	76.24	19.84	<u> </u>	80.0	
		Z	6.19	77.25	20.23	<u> </u>	80.0	1
10492- AAA	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	5.17	72.16	18.65	1.99	80.0	± 9.6 %
		Υ	5.19	71.72	18.47		80.0	
	 	Z	5.15	72.14	18.63		80.0	1

10493-	LTE-TDD (SC-FDMA, 50% RB, 15 MHz,	X	5.20	71.86	18.55	1.99	80.0	± 9.6 %
<u> </u>	64-QAM, UL Subframe=2,3,4,7,8,9)	ـــــــ	<u> </u>					- ***
		Y	5.22	71.44	18.39		80.0	
10494-	LTE-TDD (SC-FDMA, 50% RB, 20 MHz,	Z	5.18	71.84	18.54		80.0	
AAA	QPSK, UL Subframe=2,3,4,7,8,9)	X	7.25	79.64	20.88	1.99	80.0	± 9.6 %
		Y	6.97	78.52	20.45	 	80.0	
10495-	LTE TDD (CC EDMA 50% DD co tall	<u> </u>	7.28	79.79	20.92	<u> </u>	80.0	
AAA	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	5.31	72.83	18.91	1.99	80.0	± 9.6 %
		<u>Y</u>	5.33	72.41	18.73		80.0	
10496-	LTE-TDD (SC-FDMA, 50% RB, 20 MHz,	Z	5.29	72.84	18.90		80.0	
AAA	64-QAM, UL Subframe=2,3,4,7,8,9)	X	5.29	72.25	18.73	1.99	80.0	± 9.6 %
		Y	5.33	71.87	18.57		80.0	
10/07-	LTE-TDD (SC-FDMA, 100% RB, 1.4	Z	5.28	72.25	18.72		80.0	
10497- AAA	MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	4.89	75.93	17.14	1.99	80.0	± 9.6 %
		Y	5.23	76.91	18.04		80.0	
10498-	LTE TDD /CO FDMA 4000/ FF /	Z	5.42	77.60	17.93		80.0	
10498- AAA 	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	Х	2.78	66.37	12.49	1.99	80.0	± 9.6 %
		Y	3.38	68.56	14.02		80.0	
40.00			3.02	67.55	13.19		80.0	
10499- AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	2.67	65.61	12.03	1.99	80.0	± 9.6 %
		Y	3.28	67.89	13.61		80.0	
		Z	2.90	66.75	12.72		80.0	
10500- AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	7.58	82.75	21.61	1.99	80.0	± 9.6 %
		Υ	6.76	80.53	20.97		80.0	
10501		Z	7.48	82.71	21.66		80.0	
10501- AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	5.16	74.34	18.49	1.99	80.0	± 9.6 %
		Y	5.09	73.70	18.43		80.0	
40500		Z	<u>5.1</u> 8	74.49	18.62		80.0	
10502- AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	Х	5.14	73.91	18.29	1.99	80.0	± 9.6 %
		Υ	<u>5.</u> 10	73.33	18.26		80.0	
40500		Z	<u>5.16</u>	74.07	18.42		80.0	
10503- AAA	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	×	7.15 	81.28	21.46	1.99	80.0	± 9.6 %
	 	Y	6.63	79.51	20.86		80.0	
10504-	LITE TOD (SO FOUR 1992) FOR THE	Z	7.08	81.21	21.46		80.0	
AAA	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	5.09	73.72	18.93	1.99	80.0	± 9.6 %
		Υ	5.06	73.09	18.74		80.0	
10505-	LTE TOD (OO EDW)	Z	5.07	73.73	18.95		80.0	
AAA	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	5.10	73.22	18.77	1.99	80.0	± 9.6 %
		Y	5.07	72.62	18.60		80.0	
10506-	LTE TOD (CC EDMA 4000) DD 40	Z	5.07	73.21	18.79		80.0	
4AA	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	7.16	79.44	20.80	1.99	80.0	± 9.6 %
		Y	6.89	78.33	20.37		80.0	
10507	LITE TOD (SC FOMA 4000) FD (S	Z	7.19	79.58	20.84		80.0	
0507- AA	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	×	5.29	72.76	18.87	1.99	80.0	± 9.6 %
	210, 1,7,0,0)							
	2,0,1,1,0,0)	Y	5.31	72.33	18.69		80.0	

10508- AAA	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	5.27	72.17	18.69	1.99	80.0	± 9.6 %
		Υ	5.31	71.79	18.52		80.0	
		Z	5.26	72.17	18.67		80.0	
10509- AAA	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	Х	6.51	75.94	19.59	1.99	80.0	± 9.6 %
		Υ	6.46	75.38	19.34		80.0	
		Z	6.55	76.13	19.64		80.0	
10510- AAA	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	5.60	71.76	18.58	1.99	80.0	± 9.6 %
		Y	5.66	71.51	18.44		80.0	
		Z	5.60	71.81	18.57		80.0	
10511- AAA	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	5.59	71.32	18.46	1.99	80.0	± 9.6 %
		Ϋ́	5.65	71.09	18.33		80.0	
		Z	5.58	71.35	18.44		80.0	
10512- AAA	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	×	7.46	78.63	20.37	1.99	80.0	± 9.6 %
		Y	7.30	77.88	20.07		80.0	
		Z	7.56	78.94	20.47	100	80.0	. 0 0 0/
10513- AAA	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	5.60	72.40	18.80	1.99	80.0	± 9.6 %
		Υ	5.65	72.15	18.66		80.0	
		Z	5.59	72.46	18.80	4.00	80.0	. 0 0 0′
10514- AAA	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	5.50	71.71	18.60	1.99	0.08	± 9.6 %
		Y	5.56	71.48	18.47		80.0	
		Z	5.49	71.75	18.59		80.0	
10515- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 99pc duty cycle)	X	0.98	63.79	15.19	0.00	150.0	± 9.6 %
		Υ	0.99	63.42	14.89		150.0	
		Z	0.99	63.73	15.10		150.0	
10516- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc duty cycle)	X	0.82	76.78	20.27	0.00	150.0	± 9.6 %
		Υ	0.65	71.47	17.88		150.0 150.0	
10515	1555 000 441 MIS 0 4 OU - (D000 44	Z	0.72_	73.93	19.16	0.00	150.0	± 9.6 %
10517- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 99pc duty cycle)	X	0.85	66.39 65.54	16.18 15.63	0.00	150.0	19.0 %
		Z	0.85 0.86	66.10	15.99		150.0	
10518- AAA	IEEE 802.11a/n WiFi 5 GHz (OFDM, 9 Mbps, 99pc duty cycle)	X	4.63	66.97	16.35	0.00	150.0	± 9.6 %
		Υ	4.70	66.89	16.29		150.0	
		Z	4.65	67.0 <u>0</u>	16.31		150.0	
10519- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 99pc duty cycle)	Х	4.84	67.25	16.49	0.00	150.0	± 9.6 %
		Y	4.92	67.19	16.44		150.0	
		Z.	4.86	67.28	16.45	0.00	150.0	± 9.6 %
10520- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 99pc duty cycle)	X	4.69	67.22 67.17	16.42 16.36	0.00	150.0 150.0	I 9.0 %
		Z	4.77 4.71	67.26	16.38	 	150.0	
10521- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc duty cycle)	X	4.62	67.23	16.40	0.00	150.0	± 9.6 %
T		Y	4.70_	67.18	16.35		150.0	
		Z	4.65	67.26	16.37		150.0	<u></u>
10522- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc duty cycle)	Х	4.67	67.25	16.46	0.00	150.0	± 9.6 %
		Y	4.74	67.14	16.37		150.0	<u> </u>
		Z	4.70	67.26	1 <u>6.41</u>		150.0	<u> </u>

10523- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 99pc duly cycle)	X	4.54	67.12	16.30	0.00	150.0	± 9.6 %
		Y	4.62	67.05	16.24		150.0	
		Z	4.57	67.15	16.26		150.0	
10524- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc duly cycle)	X	4.62	67.19	16.44	0.00	150.0	± 9.6 %
		Y	4.70	67.11	16.37		150.0	
40505		Z	4.65	67.21	16.39		150.0	
10525- _AAA	IEEE 802.11ac WiFi (20MHz, MCS0, 99pc duty cycle)	X	4.59	66.21	16.02	0.00	150.0	± 9.6 %
		Y	4.65	66.13	15.95	ļ	150.0	
10526-	IEEE 802.11ac WiFi (20MHz, MCS1,	Z	4.61	66.24	15.98	<u> </u>	150.0	
AAA	99pc duty cycle)	X	4.78	66.62	16.17	0.00	150.0	± 9.6 %
		Y	4.86	66.54	16.10	ļ	150.0	
10527-	IEEE 802.11ac WiFi (20MHz, MCS2,	Z	4.80	66.64	16.12		150.0	_
AAA	99pc duty cycle)		4.70	66.58	16.12	0.00	150.0	± 9.6 %
		Y	4.77	66.52	16.05		150.0	
10528-	IEEE 802.11ac WiFi (20MHz, MCS3,	Z	4.72	66.62	16.08		150.0	L
AAA	99pc duty cycle)	X	4.71	66.60	16.15	0.00	150.0	± 9.6 %
		T Z	4.79	66.54	16.09	<u> </u>	150.0	
10529-	IEEE 802.11ac WiFi (20MHz, MCS4,		4.74	66.64	16.11	<u> </u>	150.0	
AAA	99pc duly cycle)	X	4.71	66.60	16.15	0.00	150.0	± 9.6 %
		Y	4.79	66.54	16.09		150.0	
10531-	IEEE 802.11ac WiFi (20MHz, MCS6,	Z	4.74	66.64	16.11		150.0	
_AAA	99pc duty cycle)		4.72	66.74	16.18	0.00	150.0	± 9.6 %
		Y	4.80	66.69	16.12	<u> </u>	150.0	
10532-	1EEE 802.11ac WiFi (20MHz, MCS7,	Z	4.75	66.78	16.14		150.0	
AAA	99pc duty cycle)	X	4.57	66.60	16.11	0.00	150.0	± 9.6 %
		Y	4.65	66.56	16.06		150.0	
10533-	IEEE 802.11ac WiFi (20MHz, MCS8,	Z	4.60	66.64	16.08		150.0	
AAA	99pc duty cycle)	X	4.73	66.63	16.13	0.00	150.0	± 9.6 %
		Y	4.80	66.56	16.06		150.0	
10534-	IEEE 000 44 WEEL (40) HILL TARREST	Z	4.75	66.66	16.09		150.0	
AAA	IEEE 802.11ac WiFi (40MHz, MCS0, 99pc duty cycle)	X	5.24	66.73	16.20	0.00	150.0	± 9.6 %
	-	Y	5.30	66.71	16.14		150.0	
10535-	IEEE 902 44 co Militi (40M) III 14004	<u>Z</u>	5.25	66.77	16.15		150.0	
AAA	IEEE 802.11ac WiFi (40MHz, MCS1, 99pc duty cycle)	X	5.30	66.88	16.26	0.00	150.0	± 9.6 %
		Y	5.37	66.85	16.20		150.0	
10536-	IEEE 802.11ac WiFi (40MHz, MCS2,	Z	5.32	66.91	16.21		150.0	
AAA	99pc duty cycle)	X	5.17	66.86	16.23	0.00	150.0	± 9.6 %
	 	Y	5.24	66.84	16.18		150.0	
10537-	IEEE 802.11ac WiFi (40MHz, MCS3,	Z	5.19	66.90	16.19		150.0	
AAA	99pc duly cycle)	Х	5.24	66.83	16.22	0.00	150.0	± 9.6 %
	 	Y	5.31	66.82	16.17		150.0	
10538- AAA	IEEE 802.11ac WiFi (40MHz, MCS4, 99pc duty cycle)	Z X	5.25 5.34	66.87 66.89	16.18 16.29	0.00	150.0 150.0	± 9.6 %
		Y	5.42	66.00	10.05		450.0	
<u> </u>		Z	5.36	66.89	16.25		150.0	
10540-	IEEE 802.11ac WiFi (40MHz, MCS6,	X		66.93	16.25	0.00	150.0	1000
AAA	99pc duty cycle)		5.25	66.86	16.29	0.00	150.0	± 9.6 %
		Y	5.32	66.83	16.23		150.0	
	<u> </u>	Z	5.27	66.89	16.24		150.0	

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10541-	IEEE 802.11ac WiFi (40MHz, MCS7,	X	5.23	66.74	16.22	0.00	150.0	± 9.6 %
AAA	99pc duty cycle)	\sqcup			10.11			
		Y	5.31	66.75	16.19		150.0	
		Z	5.25	66.79	16.19		150.0	
10542- AAA	IEEE 802.11ac WiFi (40MHz, MCS8, 99pc duty cycle)	Х	5.39	66.80	16.27	0.00	150.0	± 9.6 %
		Υ	5.45	66.78	16.22		150.0	
		Z	5.40	66.84	16.22		150.0	
10543- AAA	IEEE 802.11ac WiFi (40MHz, MCS9, 99pc duty cycle)	Х	5.47	66.82	16.30	0.00	150.0	± 9.6 %
		Y	5.54	66.79	16.24		150.0	
		Z	5.48	66.85	16.25		150.0	
10544- AAA	IEEE 802.11ac WiFi (80MHz, MCS0, 99pc duty cycle)	×	5.53	66.83	16.18	0.00	150.0	± 9.6 %
_		Y	5.58	66.82	16.13		150.0	-
		Z	5.54	66.88	16.14		150.0	
10545- AAA	IEEE 802.11ac WiFi (80MHz, MCS1, 99pc duty cycle)	X	5.74	67.27	16.34	0.00	150.0	± 9.6 %
7001	cope daty dydio)	Y	5.79	67.23	16.27		150.0	
		ż	5.75	67.28	16.28		150.0	
10546-	IEEE 802.11ac WiFi (80MHz, MCS2,	X	5.62	67.10	16.28	0.00	150.0	± 9.6 %
AAA	99pc duty cycle)	Ŷ			16.24	0.00	150.0	
	 		5.68	67.11 67.15			150.0	
10517	JEEF 000 44 - MIE! (0014) - MOCO	Z	5.63		16.24 16.31	0.00	150.0	± 9.6 %
10547- AAA	IEEE 802.11ac WiFi (80MHz, MCS3, 99pc duty cycle)	X	5.71	67.19		0.00		± 9.5 %
		Υ	5.77	67.18	16.26		150.0	
		Z	5.72	67.23	16.27		150.0	_ :
10548- AAA	IEEE 802.11ac WiFi (80MHz, MCS4, 99pc duty cycle)	X	6.04	68.37	16.87	0.00	150.0	± 9.6 %
		Y	6.10	68.30	16.79		150.0	
		Z	6.01	68.25	16.74		150.0	
10550- AAA	IEEE 802.11ac WiFi (80MHz, MCS6, 99pc duty cycle)	Х	5.63	67.06	16.26	0.00	150.0	± 9.6 %
7001	Sopo dag oyelo)	TY	5.70	67.05	16.21		150.0	
		Ż	5.65	67.11	16.22		150.0	
10551- AAA	IEEE 802.11ac WiFi (80MHz, MCS7, 99pc duly cycle)	X	5.65	67.13	16.26	0.00	150.0	± 9.6 %
7001	oope daty dyele/	TY	5.72	67.16	16.23		150.0	
		Ż	5.66	67.18	16.22		150.0	
10552- AAA	IEEE 802.11ac WiFi (80MHz, MCS8, 99pc duty cycle)	X	5.55	66.90	16.16	0.00	150.0	± 9.6 %
///	sope duty cycle)	Y	5.62	66.92	16.12		150.0	
	-	Z	5.57	66.96	16.12		150.0	
10553-	IEEE 802.11ac WiFi (80MHz, MCS9, 99pc duty cycle)	X	5.64	66.95	16.21	0.00	150.0	± 9.6 %
AAA	σορο duty cycle)	Y	5.71	66.96	16.17		150.0	
	<u> </u>	Z	5.66	67.01	16.18		150.0	
10554- AAA	IEEE 1602.11ac WiFi (160MHz, MCS0, 99pc duty cycle)	X .	5.93	67.21	16.27	0.00	150.0	± 9.6 %
744	Jopo daty of olo	+ _Y -	5.98	67.20	16.23	 	150.0	
	 	Z	5.94	67.25	16.23		150.0	
10555	IEEE 1602.11ac WiFi (160MHz, MCS1,	X	6.08	67.54	16.41	0.00	150.0	± 9.6 %
10555- AAA	99pc duty cycle)						150.0	
		Y	6.14	67.56	16.37 16.36	-	150.0	
10556-	IEEE 1602.11ac WiFi (160MHz, MCS2,	Z X	6.08 6.09	67.57 67.57	16.42	0.00	150.0	± 9.6 %
_AAA	99pc duty cycle)	+	644	67.55	16 27	 -	150.0	-
		Y	6.14	67.55	16.37	 	150.0	
	1555 4000 44 - 1455 (4001 H) 11000	Z	6.10	67.60	16.37	0.00	150.0	± 9.6 %
10557- AAA_	IEEE 1602.11ac WiFi (160MHz, MCS3, 99pc duty cycle)	Х	6.07	67.50	16.41	0.00		± 3.0 %
		Y	6.13 6.08	67.53 67.55	16.38 16.37	ļ	150.0 150.0	<u> </u>
	•							

10558- AAA	IEEE 1602.11ac WiFi (160MHz, MCS4, 99pc duty cycle)	X	6.13	67.70	16.52	0.00	150.0	± 9.6 %
		Υ	6.20	67.73	16.49		150.0	
		Z	6.14	67.73	16.47	<u> </u>	150.0	
10560- AAA	IEEE 1602.11ac WiFi (160MHz, MCS6, 99pc duty cycle)	Х	6.12	67.51	16.47	0.00	150.0	± 9.6 %
		Y	6.19	67.55	16.44		150.0	
		Z	6.13	67.57	16.43		150.0	
10561- AAA	IEEE 1602.11ac WiFi (160MHz, MCS7, 99pc duty cycle)	X	6.03	67.48	16.49	0.00	150.0	±9.6 %
		Y	6.10	67.50	16.45		150.0	
40000		Z	6.04	67.53	16.45		150.0	
10562- AAA	IEEE 1602.11ac WiFi (160MHz, MCS8, 99pc duty cycle)	X	6.20	67.98	16.74	0.00	150.0	± 9.6 %
		Y	6.26	68.01	16.71		150.0	
40500	IEEE 4000 44 NEEL 4000 H	Z	6.20	67.99	16.68		150.0	
10563- AAA	IEEE 1602.11ac WiFi (160MHz, MCS9, 99pc duty cycle)	X	6.57	68.64	17.02	0.00	150.0	± 9.6 %
		Y	6.56	68.43	16.86		150.0	
40504	IEEE 000 44. WEEL O. C.	Z	6.53	68.53	16.90		150.0	
10564- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 9 Mbps, 99pc duty cycle)	X	4.97	67.10	16.54	0.46	150.0	± 9.6 %
		<u> Y</u>	5.04	67.03	16.48		150.0	
40505	IFFE 000 44 MIFE 0 1 CV 1 CF CF	$\perp \overline{z}$	4.99	67.12	16.50		150.0	
10565- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 12 Mbps, 99pc duty cycle)	X	5.22	67.56	16.86	0.46	150.0	± 9.6 %
		Υ	5.31	67.52	16.81		150.0	
40500	IFFE COO // WIFE C / CI / CT	Z	5.24	67.59	16.81		150.0	
10566- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 18 Mbps, 99pc duty cycle)	X	5.05	67.44	16.69	0.46	150.0	± 9.6 %
		Y	5.14	67.40	16.64		150.0	
10=0=		Z	5.08	67.46	16.65		150.0	
10567- <u>AAA</u>	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 24 Mbps, 99pc duty cycle)	X	5.08	67.80	17.02	0.46	150.0	± 9.6 %
		Y	5.16	67.78	16.98		150.0	
		Z	5.10	67.83	16.98		150.0	
10568- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 36 Mbps, 99pc duty cycle)	Х	4.97	67.22	16.48	0.46	150.0	± 9.6 %
		Υ	5.05	67.11	16.39		150.0	
		Z	4.99	67.23	16.42		150.0	
10569- _AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 48 Mbps, 99pc duty cycle)	Х	5.02	67.83	17.04	0.46	150.0	± 9.6 %
		Υ	5.10	67.80	17.00	_	150.0	
		Z	5.05	<u>6</u> 7.87	17.01		150.0	
10570- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 54 Mbps, 99pc duty cycle)	X	5.07	67.70	16.99	0.46	150.0	± 9.6 %
		Y	5.15	67.63	16.93		150.0	
10571-	IEEE 000 441 MIEE 0 4 OU (DOOS	Z	5.09	67.72	16.95		150.0	
AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90pc duty cycle)	X	1.37	66.80	16.80	0.46	130.0	± 9.6 %
	 	Y	1.38	66.27	16.45		130.0	
40570	IFIE 000 441 MED 0 1 TO 1	<u>Z</u>	1.37	66.59	16.66		130.0	
10572- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 90pc duly cycle)	X	1.41	67.53	17.21	0.46	130.0	± 9.6 %
		Y	1.41	66.94	16.83		130.0	
40070	IEEE OOG AND MANIEUR CO.	Z	1.40	67.30	17.06		130.0	
10573- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 90pc duty cycle)	Х	26.23	123.25	33.36	0.46	130.0	± 9.6 %
	 	Υ	5.19	96.91	26.48		130.0	
40581		Z	10.84	109.65	30.17		130.0	
10574- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 90pc duty cycle)	Х	1.81	75.77	20.95	0.46	130.0	± 9.6 %
		Υ	1.72	74.00	20.11		400 0	
		ż	1.76	7 4 .00 I	20.11		130.0	

10575-	IEEE 802.11g WiFi 2.4 GHz (DSSS-	T v T	4.70	7 00 00	40.05	0.40	1 4 5 0 5	
AAA	OFDM, 6 Mbps, 90pc duty cycle)	X	4.79	66.99	16.65	0.46	130.0	± 9.6 %
, , , , , , , , , , , , , , , , , , , ,	Of Birt, o Wibbs, bobb duty cycle)	Y	4.86	66.91	16.59		130.0	ļ
		Ż	4.81	67.00	16.60		130.0	<u> </u>
10576-	IEEE 802.11g WiFi 2.4 GHz (DSSS-	 x 	4.82	67.14	16.71	0.46	130.0	± 9.6 %
AAA	OFDM, 9 Mbps, 90pc duty cycle)	'			,	00	100.0	2 3.0 %
		TY	4.89	67.07	16.65		130.0	
		Z	4.83	67.15	16.66		130.0	
10577-	IEEE 802.11g WiFi 2.4 GHz (DSSS-	X	5.04	67.46	16.88	0.46	130.0	± 9.6 %
_ <u>AAA</u>	OFDM, 12 Mbps, 90pc duty cycle)							
		Y	5.13	67.40	16.83		130.0	
40,000		Z	5.06	67.47	16.83		130.0	
10578-	IEEE 802.11g WiFi 2.4 GHz (DSSS-	X	4.94	67.62	16.98	0.46	130.0	± 9.6 %
AAA	OFDM, 18 Mbps, 90pc duly cycle)	 , 	5.00	07.50	40.00		1000	<u> </u>
		Y Z	5.02	67.58	16.93		130.0	
10579-	IEEE 802.11g WiFi 2.4 GHz (DSSS-	$\frac{2}{X}$	4.96 4.72	67.64 67.02	16.93	0.46	130.0	1000
AAA	OFDM, 24 Mbps, 90pc duty cycle)	^	4.72	67.02	16.37	0.46	130.0	± 9.6 %
7001	Of Bin, 24 Mops, sope daty cycle)	Y	4.80	66.96	16.30		130.0	
		ż	4.74	67.02	16.31		130.0	
10580-	IEEE 802.11g WiFi 2.4 GHz (DSSS-	x	4.76	67.01	16.37	0.46	130.0	± 9.6 %
AAA	OFDM, 36 Mbps, 90pc duty cycle)	^		*,,	,	3.10	.00.0	0.0 /0
		Y	4.84	66.91	16.29		130.0	
		Z	4.78	67.00	16.31		130.0	
10581-	IEEE 802.11g WiFi 2.4 GHz (DSSS-	X	4.84	67.70	16.94	0.46	130.0	± 9.6 %
AAA	OFDM, 48 Mbps, 90pc duty cycle)							
		<u> </u>	4.93	67.67	16.89		130.0	
		Z	4.86	67.72	16.89		130.0	
10582- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 54 Mbps, 90pc duty cycle)	×	4.67	66.79	16.17	0.46	130.0	± 9.6 %
		Y	4.75	66.70	16.10		130.0	
	<u> </u>	Z	4.69	66.78	16.11		130.0	
10583- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 90pc duty cycle)	Х	4.79	66.99	16.65	0.46	130.0	± 9.6 %
		Y	4.86	66.91	16.59		130.0	
•		Ż	4.81	67.00	16.60		130.0	
10584- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 90pc duty cycle)	X	4.82	67.14	16.71	0.46	130.0	± 9.6 %
		Y	4.89	67.07	16.65		130.0	
		Z	4.83	67.15	16.66		130.0	
10585- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90pc duly cycle)	Х	5.04	67.46	16.88	0.46	130.0	± 9.6 %
		Y	5.13	67.40	16.83	-	130.0	
		Z	5.06	67.47	16.83		130.0	-
10586- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 90pc duly cycle)	×	4.94	67.62	16.98	0.46	130.0	±9.6%
		Y	5.02	67.58	16.93		130.0	
		Z	4.96	67.64	16.93		130.0	
10587- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 90pc duty cycle)	Х	4.72	67.02	16.37	0.46	130.0	± 9.6 %
	, , , , , , , , , , , , , , , , , , , ,	Y	4.80	66.96	16.30		130.0	
		Z	4.74	67.02	16.31		130.0	
10588- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 90pc duty cycle)	Х	4.76	67.01	16.37	0.46	130.0	± 9.6 %
		Y	4.84	66.91	16.29		130.0	
		Z	4.78	67.00	16.31		130.0	
10589- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 90pc duty cycle)	Х	4.84	67.70	16.94	0.46	130.0	± 9.6 %
		Y	4.93	67.67	16.89		130.0	
		Z	4.86	67.72	16.89		130.0	
10590- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 90pc duty cycle)	X	4.67	66.79	16.17	0.46	130.0	± 9.6 %
		Y	4.75	66.70	16.10		130.0	
		Z	4.69	66.78	16.11		130.0	

10591- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS0, 90pc duty cycle)	X	4.94	67.03	16.74	0.46	130.0	± 9.6 %
		Y	5.01	66.97	16.68		130.0	
		Z	4.96	67.04	16.69		130.0	
10592- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS1, 90pc duty cycle)	Х	5.11	67.37	16.86	0.46	130.0	± 9.6 %
		Y	5.19	67.31	16.80		130.0	
		Z	5.13	67.39	16.81		130.0	
10593- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS2, 90pc duty cycle)	X	5.04	67.32	16.77	0.46	130.0	± 9.6 %
		Y	5.12	67.27	16.72		130.0	
		Z	5.06	67.34	16.72		130.0	
10594- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS3, 90pc duty cycle)	X	5.09	67.47	16.91	0.46	130.0	± 9.6 %
		Y	<u>5.1</u> 7	67.41	16.85		130.0	
		Z	5.11	67.48	16.86		130.0	
10595- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS4, 90pc duty cycle)	X	5.06	67.43	16.81	0.46	130.0	± 9.6 %
		Υ	5.15	67.39	16.76		130.0	
		Z	5.08	67.45	16.77		130.0	
10596- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS5, 90pc duty cycle)	Х	5.00	67.45	16.82	0.46	130.0	± 9.6 %
		Υ	5.09	67.38	16.76		130.0	
		Z	5.02	67.46	16.77		130.0	
10597- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS6, 90pc duly cycle)	Х	4.95	67.38	16.73	0.46	130.0	± 9.6 %
		Y	5.04	67.33	16.67		130.0	
		Z	4.97	67.39	16.67		130.0	
10598- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS7, 90pc duty cycle)	X	4.93	67.61	16.97	0.46	130.0	± 9.6 %
		Y	5.02	67.58	16.94		130.0	
		Z	4.95	67.63	16.93		130.0	
10599- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS0, 90pc duty cycle)	Х	5.61	67.60	16.93	0.46	130.0	± 9.6 %
		Y	5.68	67.58	16.88		130.0	
		Z	5.62	67.62	16.88		130.0	
10600- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS1, 90pc duty cycle)	Х	5.80	68.21	17.21	0.46	130.0	± 9.6 %
		Y	5.90	68.24	17.18		130.0	
		Z	5.80	68.15	17.11		130.0	
10601- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS2, 90pc duty cycle)	X	5.66	67.85	17.04	0.46	130.0	± 9.6 %
		Y	5.74	67.84	16.99		130.0	
		Z	5.66	67.83	16.97		130.0	
10602- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS3, 90pc duty cycle)	X	5.74	67.84	16.96	0.46	130.0	± 9.6 %
		Y	5.84	67.85	16.92		130.0	
-:		Z	5.75	67.83	16.89		130.0	
10603- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS4, 90pc duty cycle)	X	5.82	68.11	17.22	0.46	130.0	± 9.6 %
		Υ	5.94	68.22	17.22		130.0	
		Z	5.84	68.12	17.16		130.0	
10604- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS5, 90pc duty cycle)	X	5.61	67.56	16.93	0.46	130.0	± 9.6 %
		Y	5.69	67.55	16.89		130.0	
		Z	5.62	67.57	16.87		130.0	
10605- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS6, 90pc duty cycle)	X	5.73	67.91	17.12	0.46	130.0	± 9.6 %
		Y	5.79	67.84	17.03		130.0	
		Z	5.73	67.87	17.03		130.0	
10606- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS7, 90pc duty cycle)	X	5.49	67.34	16.70	0.46	130.0	± 9.6 %
		Y	5.57	67.34	16.65		130.0	
		Z	5.51	67.36	16.64		130.0	1

10607-	IEEE 802.11ac WiFi (20MHz, MCS0,	Х	4.77	66.33	16.35	0.46	130.0	± 9.6 %
AAA	90pc duty cycle)	^	4.11	00.55	10.33	0.40	130.0	19.0%
		Ϋ́	4.84	66.25	16.28		130.0	
		Z	4.79	66.34	16.30		130.0	
10608- AAA	IEEE 802.11ac WiFi (20MHz, MCS1, 90pc duty cycle)	X	4.98	66,75	16.51	0.46	130.0	± 9.6 %
		Υ	5.06	66.68	16.45		130.0	
		Z	5.00	66.77	16.46		130.0	
10609- AAA	IEEE 802.11ac WiFi (20MHz, MCS2, 90pc duty cycle)	X	4.87	66.63	16.37	0.46	130.0	± 9.6 %
	<u> </u>	Y	4.94	66.56	16.31		130.0	
10610- AAA	IEEE 802.11ac WiFi (20MHz, MCS3, 90pc duty cycle)	Z	4.89 4.92	66.65 66.78	16.33 16.53	0.46	130.0 130.0	± 9.6 %
7/74	1 sope duty cycle)	Y	5.00	66.72	16.47		130.0	_
	 	Z	4.94	66.80	16.48		130.0	·
10611- AAA	IEEE 802.11ac WiFi (20MHz, MCS4, 90pc duty cycle)	X	4.84	66.61	16.39	0.46	130.0	± 9.6 %
	, , , , , , , , , , , , , , , , , , , ,	Y	4.92	66.56	16.33		130.0	-
		Z	4.86	66.63	16.34		130.0	
10612- AAA	IEEE 802.11ac WiFi (20MHz, MCS5, 90pc duty cycle)	Х	4.86	66.78	16.44	0.46	130.0	± 9.6 %
		Y	4.94	66.70	16.37		130.0	
10010	UEEE OOG 44 MUEE 400 W. 140 C	Z	4.88	66.79	16.39		130.0	
10613- AAA	IEEE 802.11ac WiFi (20MHz, MCS6, 90pc duty cycle)	X	4.87	66.70	16.34	0.46	130.0	± 9.6 %
		Y	4.95	66.63	16.28		130.0	
10614- AAA	IEEE 802.11ac WiFi (20MHz, MCS7, 90pc duty cycle)	Z X	4.89 4.80	66.71 66.85	16.29 16.55	0.46	130.0 130.0	± 9.6 %
7/7/	Jope daty cycle)	 	4.88	66.82	16.51		130.0	
		Ż	4.82	66.88	16.51		130.0	
10615- AAA	IEEE 802.11ac WiFi (20MHz, MCS8, 90pc duty cycle)	X	4.84	66.45	16.18	0.46	130.0	± 9.6 %
		Y	4.92	66.37	16.11		130.0	
•		Z	4.86	66.46	16.13		130.0	
10616- AAA	IEEE 802.11ac WiFi (40MHz, MCS0, 90pc duty cycle)	X	5.42	66.85	16.53	0.46	130.0	± 9.6 %
		Υ	5.49	66.83	16.48		130.0	
		Z	5.43	66.87	16.48		130.0	
10617- AAA	IEEE 802.11ac WiFi (40MHz, MCS1, 90pc duty cycle)	Х	5.48	66.96	16.56	0.46	130.0	± 9.6 %
		Y	5.55	66.93	16.50		130.0	
10618- AAA	IEEE 802.11ac WiFi (40MHz, MCS2, 90pc duty cycle)	X	5.49 5.38	66.97 67.03	16.50 16.61	0.46	130.0	± 9.6 %
, , , , ,	oopo daty oyoloy	Y	5.45	67.01	16.56		130.0	
		Z	5.39	67.05	16.56		130.0	
10619- AAA	IEEE 802.11ac WiFi (40MHz, MCS3, 90pc duty cycle)	Х	5.40	66.87	16.47	0.46	130.0	± 9.6 %
		Υ	5.47	66.82	16.40		130.0	
	<u> </u>	Z	5.41	66.89	16.41		130.0	
10620- AAA	IEEE 802.11ac WiFi (40MHz, MCS4, 90pc duty cycle)	X	5.51	66.95	16.56	0.46	130.0	± 9.6 %
	 	Y	5.59	66.95	16.51	-	130.0	
10621- AAA	IEEE 802.11ac WiFi (40MHz, MCS5, 90pc duty cycle)	X	5.52 5.48	66.97 66.99	16.51 16.69	0.46	130.0	± 9.6 %
<i>\range</i>	Jopo duty Gyole)	Y	5.56	67.00	16.65		130.0	
		Ż	5.50	67.03	16.64	 	130.0	
10622- AAA	IEEE 802.11ac WiFi (40MHz, MCS6, 90pc duty cycle)	X	5.49	67.13	16.75	0.46	130.0	± 9.6 %
<u> </u>	1	Υ	5.56	67.10	16.70		130.0	
		Z	5.50	67.14	16.69		130.0	

10623- AAA	IEEE 802.11ac WiFi (40MHz, MCS7, 90pc duty cycle)	X	5.37	66.70	16.43	0.46	130.0	± 9.6 %
		TY	5.45	66.72	16.39	<u> </u>	130.0	
	_	Z	5.39	66.74	16.38	 	130.0	
10624- AAA	IEEE 802.11ac WiFi (40MHz, MCS8, 90pc duty cycle)	Х	5.57	66.90	16.58	0.46	130.0	± 9.6 %
_		Y	5.64	66.86	16.52		130.0	
		Z	5.58	66.91	16.52		130.0	
10625- AAA	IEEE 802.11ac WiFi (40MHz, MCS9, 90pc duty cycle)	X	6.01	68.08	17.22	0.46	130.0	± 9.6 %
		Y	6.04	67.89	17.08		130.0	
40000	IEEE 000 44 MEET (00141 ALCO	Z	5.98	67.96	17.10		130.0	
10626- AAA	IEEE 802.11ac WiFi (80MHz, MCS0, 90pc duly cycle)	X	5.69	66.86	16.46	0.46	130.0	± 9.6 %
		Y	5.74	66.85	16.41		130.0	
10627-	IEEE 902 44aa MIEE (90MI In MCC4	Z	5.70	66.90	16.42		130.0	
AAA	IEEE 802.11ac WiFi (80MHz, MCS1, 90pc duty cycle)	X	5.96	67.48	16.72	0.46	130.0	± 9.6 %
	<u> </u>	Y	6.00	67.40	16.64		130.0	
10628-	IEEE 900 44cc MEE: (90M) - MOOC	Z	5.95	67.45	16.64		130.0	
AAA	IEEE 802.11ac WiFi (80MHz, MCS2, 90pc duty cycle)	X	5.75	67.05	16.45	0.46	130.0	± 9.6 %
	 	Y Z	5.82	67.05	16.40	ļ	130.0	
10629-	IEEE 902 11aa MiiEi (90MHz, MCC2		5.76	67.08	16.40		130.0	
AAA	IEEE 802.11ac WiFi (80MHz, MCS3, 90pc duty cycle)	X	5.83	67.10	16.47	0.46	130.0	± 9.6 %
		Y	5.91	67.12	16.43		130.0	
10630-	IEEE 802.11ac WiFi (80MHz, MCS4,	Z	5.84	67.13	16.42	0.40	130.0	
AAA	90pc duty cycle)	X	6.44	69.09	17.46	0.46	130.0	± 9.6 %
		Υ_	6.50	69.01	17.37		130.0	
10621	IEEE 000 44 14/55/ (0014) 14005	Z	6.38	68.90	17.30		130.0	
10631- AAA	IEEE 802.11ac WiFi (80MHz, MCS5, 90pc duty cycle)	X	6.25	68.60	17.40	0.46	130.0	± 9.6 %
		Y	6.34	68.66	17.38		130.0	
10632-	IEEE 000 44 MEE' (00M) - MOOO	Z	6.25	68.59	17.33		130.0	
AAA	IEEE 802.11ac WiFi (80MHz, MCS6, 90pc duty cycle)	X	5.91	67.48	16.85	0.46	130.0	± 9.6 %
		Y	5.98	67.49	16.81		130.0	
40000	IEEE 000 44 . MIE: (00 HIL 140 OF	<u>Z</u>	5.92	67.51	16.80		130.0	
10633- AAA	IEEE 802.11ac WiFi (80MHz, MCS7, 90pc duty cycle)	X	5.83	67.22	16.56	0.46	130.0	± 9.6 %
		<u> </u>	5.93	67.33	16.57		130.0	
10634-	IFFE 902 44 cs W/F: (90MH- MOOD	Z	5.84	67.28	16.53		130.0	
AAA	IEEE 802.11ac WiFi (80MHz, MCS8, 90pc duty cycle)	X	5.80	67.20	16.61	0.46	130.0	± 9.6 %
		Y	5.89	67.29	16.61		130.0	
10635- AAA	IEEE 802.11ac WiFi (80MHz, MCS9, 90pc duty cycle)	Z	5.82 5.70	67.27 66.62	16.58 16.07	0.46	130.0 130.0	± 9.6 %
		TY	5.78	66.63	16.03		120.0	
		z	5.71	66.66	16.03	<u> </u>	130.0	
10636-	IEEE 1602.11ac WiFi (160MHz, MCS0,	X	6.10	67.26	16.02	0.46	130.0	+060/
AAA	90pc duty cycle)	^ Y	6.15	67.25		U.40 ———	130.0	± 9.6 %
		$\frac{1}{Z}$	6.11	67.29	16.51 16.51		130.0	
10637- AAA	IEEE 1602.11ac WiFi (160MHz, MCS1, 90pc duty cycle)	X	6.27	67.66	16.74	0.46	130.0 130.0	± 9.6 %
		TY	6.33	67.66	16.70		130.0	
		Z	6.27	67.67	16.68		130.0	-
10638- AAA	IEEE 1602.11ac WiFi (160MHz, MCS2, 90pc duty cycle)	X	6.27	67.64	16.71	0.46	130.0	± 9.6 %
		Y	6.32	67.61	16.65		130.0	
		Ż	6.27	67.64	16.65		130.0	
			0.21	07.04	10.00		130.0	

10639- AAA	IEEE 1602.11ac WiFi (160MHz, MCS3,	Х	6.26	67.61	16.74	0.46	130.0	± 9.6 %
AAA	90pc duty cycle)	Y	6.33	67.65	16 71		120.0	
		Z	6,27	67.65 67.65	16.71 16.69	<u></u>	130.0	
10640-	IEEE 1602.11ac WiFi (160MHz, MCS4,	X	6.29	67.70		0.40	130.0	1000
AAA	90pc duty cycle)				16.73	0.46	130.0	± 9.6 %
		Υ	6.36	67.74	16.70		130.0	
		Z	6.29	67.72	16.68		130.0	
10641- AAA	IEEE 1602.11ac WiFi (160MHz, MCS5, 90pc duty cycle)	Х	6.29	67.46	16.63	0.46	130.0	± 9.6 %
		Υ	6.35	67.45	16.57		130.0	
_		Z	6.29	67.48	16.57		130.0	
10642- AAA	IEEE 1602.11ac WiFi (160MHz, MCS6, 90pc duty cycle)	Х	6.34	67.74	16.93	0.46	130.0	± 9.6 %
		Y	6.42	67.78	16.91		130.0	
		Z	6.36	67.79	16.89		130.0	
10643- AAA	IEEE 1602.11ac WiFi (160MHz, MCS7, 90pc duty cycle)	Х	6.18	67.46	16.70	0.46	130.0	± 9.6 %
-		Υ	6.25	67.47	16.66		130.0	
		Z	6.19	67.48	16.64		130.0	
10644- AAA	IEEE 1602.11ac WiFi (160MHz, MCS8, 90pc duty cycle)	Х	6.41	68.15	17.06	0.46	130.0	± 9.6 %
		Y	6.49	68.20	17.04		130.0	
-		Z	6.41	68.15	17.00		130.0	
10645- AAA	IEEE 1602.11ac WiFi (160MHz, MCS9, 90pc duty cycle)	Х	6.87	69.04	17.45	0.46	130.0	± 9.6 %
		Y	6.80	68.65	17.21		130.0	
		Z	6.79	68.83	17.28		130.0	
10646- AAB	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,7)	Х	45.26	122.11	40.13	9.30	60.0	± 9.6 %
		Υ	25.14	106.90	35.30		60.0	
		Z	43.20	121.25	39.81		60.0	
10647- AAA	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,7)	Х	48.34	124.53	40.96	9.30	60.0	± 9.6 %
		Y	25.79	108.23	35.83		60.0	
		Z	44.73	122.92	40.42		60.0	
10648- AAA	CDMA2000 (1x Advanced)	Х	0.79	65.12	12.04	0.00	150.0	± 9.6 %
		Y	0.83	64.89	12.31		150.0	
		Z	0.82	65.22	12,31		150.0	

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

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





S Schweizerischer Kalibrierdienst
C Service suisse d'étalonnage
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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

PC Test

Certificate No: ES3-3213_Feb16

CALIBRATION CERTIFICATE

Object

ES3DV3 - SN:3213

Calibration procedure(s)

QA CAL-01.v9, QA CAL-23.v5, QA CAL-25.v6
Calibration procedure for dosimetric E-field probes

03/01/2016

Calibration date:

February 19, 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 E4419B	GB41293874	01-Apr-15 (No. 217-02128)	Mar-16
Power sensor E4412A	MY41498087	01-Apr-15 (No. 217-02128)	Mar-16
Reference 3 dB Attenuator	SN: S5054 (3c)	01-Apr-15 (No. 217-02129)	Mar-16
Reference 20 dB Attenuator	SN: S5277 (20x)	01-Apr-15 (No. 217-02132)	Mar-16
Reference 30 dB Attenuator	SN: S5129 (30b)	01-Apr-15 (No. 217-02133)	Mar-16
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
RF generator HP 8648C	US3642U01700	4-Aug-99 (in house check Apr-13)	In house check: Apr-16
Network Analyzer HP 8753E	US37390585	18-Oct-01 (in house check Oct-15)	In house check: Oct-16

Calibrated by:

Name
Function
Signature

Laboratory Technician

Approved by:

Katja Pokovic
Technical Manager

Issued: February 20, 2016

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

Certificate No: ES3-3213_Feb16

Page 1 of 12

Calibration Laboratory of Schmid & Partner

Engineering AG Zeughausstrasse 43, 8004 Zurich, Switzerland





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

Accreditation No.: SCS 0108

Accredited by the Swiss Accreditation Service (SAS)

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

Glossarv:

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

ConvF DCP

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

CF

crest factor (1/duty cycle) of the RF signal modulation dependent linearization parameters

A, B, C, D Polarization o

o 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:

- 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
 IEC 62209-1, "Procedure to measure the Specific Absorption Rate (SAR) for hand-held devices used in close
- b) proximity to the ear (frequency range of 300 MHz to 3 GHz)", February 2005
- 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 $\theta = 0$ ($f \le 900$ MHz in TEM-cell; f > 1800 MHz; R22 wavequide). NORMx,y,z are only intermediate values, i.e., the uncertainties of NORMx,y,z does not affect the E^2 -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.v.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
- 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
- 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 ES3DV3

SN:3213

Calibrated:

Manufactured: October 14, 2008
Calibrated: February 19, 2016 February 19, 2016

Calibrated for DASY/EASY Systems

(Note: non-compatible with DASY2 system!)

ES3DV3-SN:3213

DASY/EASY - Parameters of Probe: ES3DV3 - SN:3213

Basic Calibration Parameters

	Sensor X	Sensor Y	Sensor Z	Unc (k=2)
Norm (μV/(V/m) ²) ^A	1.50	1.38	1.34	± 10.1 %
DCP (mV) ⁸	99.8	101.9	99.8	

Modulation Calibration Parameters

UID	Communication System Name		A dB	B dB√μV	С	D dB	VR mV	Unc [±] (k=2)
0	CW	Х	0.0	0.0	1.0	0.00	195.2	±3.5 %
		Υ	0.0	0.0	1.0		214.0	
		Z	0.0	0.0	1.0		215.1	
10010- CAA	SAR Validation (Square, 100ms, 10ms)	Х	5.06	68.1	14.5	10.00	42.1	±0.9 %
		Υ	11.23	76.3	17.0		39.8	
		Z	6.02	70.0	14.9		39.7	
10012- CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps)	Х	3.09	69.2	18.8	1.87	137.2	±0.7 %
		Y	3.15	70.3	19.6		133.1	
		Z	2.82	67.6	18.0		132.3	
10100- CAB	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	Х	6.22	66.6	19.2	5.67	125.7	±1.7 %
		Υ	6.51	68.0	20.1		146.0	
10100	LITE TOD (CO EDNA 1000/ DD 00	Z	6.41	67.3	19.6	0.00	143.7	.0.0.01
10103- CAB	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	Х	10.84	76.7	26.6	9.29	143.8	±3.3 %
		Y	10.81	77.3	27.2		137.5	
10100	1.75 500 (00 50) (00 60)	Z	10.28	75.3	25.8		136.3	
10108- CAC	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	X	6.44	67.4	19.8	5.80	148.4	±1.7 %
		Y	6.38	67.6	20.0		142.8	
		Z	6.32	67.1	19.5		141.5	
10151- CAB	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	X	10.08	75.4	26.1	9.28	137.0	±3.3 %
	-	Υ	10.08	76.2	26.8		131.6	
10151	1.55 500 (00 501)	Z	9.63	74.3	25.4		130.7	
10154- CAC	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	X	6.09	66.7	19.5	5.75	144.2	±1.4 %
		Υ	6.07	67.1	19.8		139.5	
		Z	5.98	66.4	19.3		137.4	
10160- CAB	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	X	6.59	67.5	19.8	5.82	149.8	±1.7 %
		Υ	6.51	67.6	20.1		146.2	
10100		Z	6.44	67.0	19.5		145.3	
10169- CAB	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	X	5.13	67.0	19.8	5.73	146.8	±1.4 %
		Y	5.10	67.4	20.2		144.4	
40470	LTT TOD (OO EDW) 4 DD COAN	Z	4.99	66.5	19.5	0.04	141.2	.0.0.01
10172- CAB	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	X	8.31	76.6	26.9	9.21	125.5	±3.3 %
		Y	10.61	84.9	31.4	1	149.4	
40475	LTF FDD (OO FDWA 4 DD 40 LU)	Z	8.76	78.4	27.8	F 70	143.6	.4.4.07
10175- CAC	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	Х	5.05	66.6	19.6	5.72	144.9	±1.4 %
		Υ	5.06	67.2	20.1		142.1	
		Z	4.99	66.5	19.5		140.5	:

ES3DV3-SN:3213 February 19, 2016

10181- CAB	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	Х	5.12	66.9	19.8	5.72	145.1	±1.4 %
		Y	5.09	67.3	20.2		143.7	
		Z	5.00	66.6	19.5		140.2	
10237- CAB	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	X	8.18	76.1	26.7	9.21	124.8	±3.3 %
		Υ	10.45	84.4	31.2		148.6	
		Z	8.75	78.3	27.7		143.4	
10252- CAB	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	Х	9.24	74.1	25.5	9.24	126.6	±2.7 %
		Υ	9.21	74.8	26.2		122.2	
		Z	9.78	76.0	26.5		147.7	
10267- CAB	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	Х	9.92	75.0	25.9	9.30	133.4	±3.3 %
		Υ	9.95	75.8	26.6		128.8	
		Z	9.55	74.0	25.3		127.2	
10297- AAA	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	Х	6.43	67.3	19.8	5.81	146.2	±1.4 %
		Y	6.42	67.7	20.1		141.6	
		Z	6.28	66.9	19.5		140.2	
10311- AAA	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	Х	6.70	66.9	19.5	6.06	128.1	±1.7 %
		Υ	6.97	68.2	20.4		147.3	
		Z	6.91	67.7	20.0		146.2	

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%.

A The uncertainties of Norm X,Y,Z do not affect the E²-field uncertainty inside TSL (see Pages 6 and 7).

B Numerical linearization parameter: uncertainty not required.

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

ES3DV3-SN:3213

Certificate No: ES3-3213_Feb16

DASY/EASY - Parameters of Probe: ES3DV3 - SN:3213

Calibration Parameter Determined in Head Tissue Simulating Media

f (MHz) ^c	Relative Permittivity ^F	Conductivity (S/m) F	ConvF X	ConvF Y	ConvF Z	Alpha ^G	Depth ^G (mm)	Unc (k=2)
750	41.9	0.89	6.43	6.43	6.43	0.55	1.36	± 12.0 %
835	41.5	0.90	6.18	6.18	6.18	0.58	1.33	± 12.0 %
1750	40.1	1.37	5.23	5.23	5.23	0.80	1.14	± 12.0 %
1900	40.0	1.40	5.05	5.05	5.05	0.60	1.30	± 12.0 %
2300	39.5	1.67	4.78	4.78	4.78	0.59	1.41	± 12.0 %
2450	39.2	1.80	4.58	4.58	4.58	0.75	1.30	± 12.0 %
2600	39.0	1.96	4.38	4.38	4.38	0.71	1.38	± 12.0 %

 $^{^{\}rm C}$ 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 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.

validity can be extended to ± 110 MHz.

F At frequencies below 3 GHz, the validity of tissue parameters (ε and σ) can be relaxed to ± 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 ± 5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.

^G 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.

Certificate No: ES3-3213_Feb16

DASY/EASY - Parameters of Probe: ES3DV3 - SN:3213

Calibration Parameter Determined in Body Tissue Simulating Media

f (MHz) ^c	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	5.98	5.98	5.98	0.60	1.31	± 12.0 %
835	55.2	0.97	6.00	6.00	6.00	0.36	1.70	± 12.0 %
1750	53.4	1.49	4.94	4.94	4.94	0.48	1.57	± 12.0 %
1900	53.3	1.52	4.78	4.78	4.78	0.52	1.55	± 12.0 %
2300	52.9	1.81	4.50	4.50	4.50	0.74	1.34	± 12.0 %
2450	52.7	1.95	4.41	4.41	4.41	0.80	1.20	± 12.0 %
2600	52.5	2.16	4.21	4.21	4.21	0.90	1.05	± 12.0 %

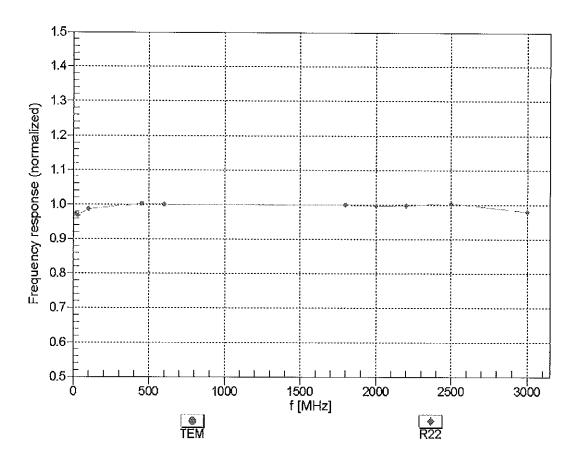
^c Frequency validity above 300 MHz of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to ± 50 MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is ± 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 ± 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 ConvF uncertainty for indicated target tissue parameters.

G Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is

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.

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

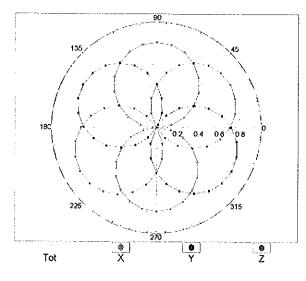


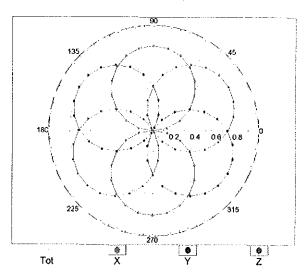
Uncertainty of Frequency Response of E-field: ± 6.3% (k=2)

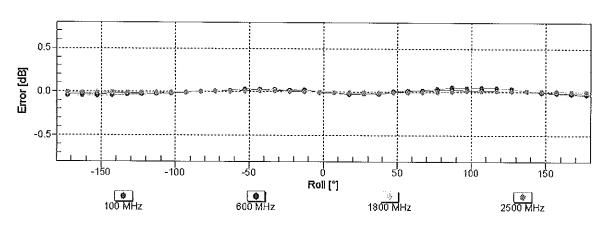
Receiving Pattern (ϕ), $\vartheta = 0^{\circ}$

f=600 MHz,TEM

f=1800 MHz,R22

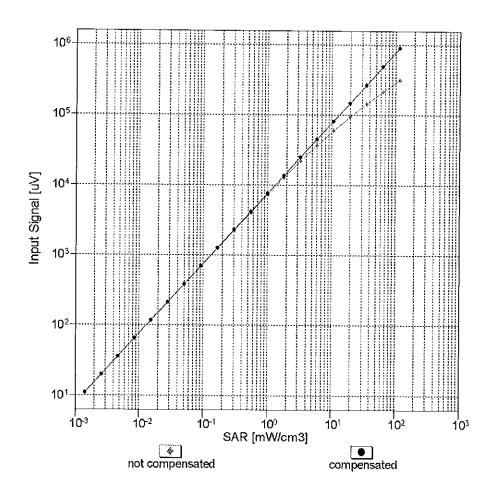


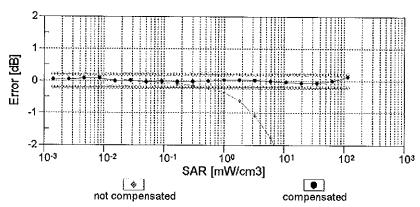




Uncertainty of Axial Isotropy Assessment: \pm 0.5% (k=2)

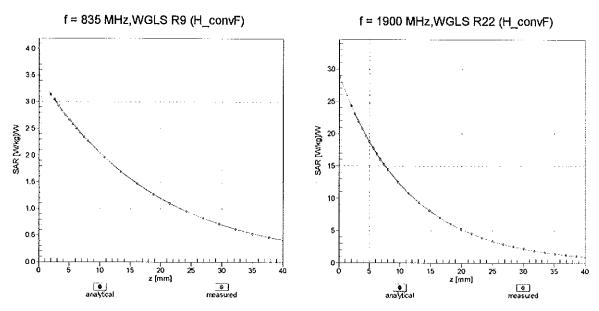
Dynamic Range f(SAR_{head}) (TEM cell , f_{eval}= 1900 MHz)





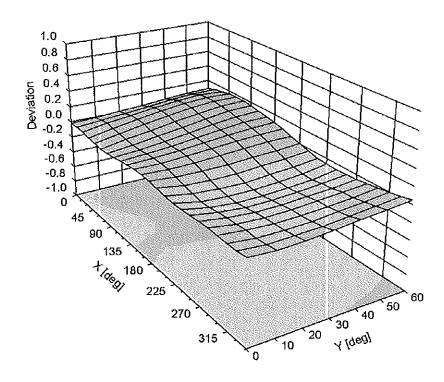
Uncertainty of Linearity Assessment: ± 0.6% (k=2)

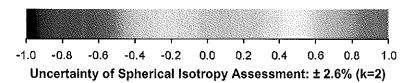
Conversion Factor Assessment



Deviation from Isotropy in Liquid

Error (ϕ, ϑ) , f = 900 MHz





DASY/EASY - Parameters of Probe: ES3DV3 - SN:3213

Other Probe Parameters

Sensor Arrangement	Triangular
Connector Angle (°)	97.2
Mechanical Surface Detection Mode	enabled
Optical Surface Detection Mode	disabled
Probe Overali Length	337 mm
Probe Body Diameter	10 mm
Tip Length	10 mm
Tip Diameter	4 mm
Probe Tip to Sensor X Calibration Point	2 mm
Probe Tip to Sensor Y Calibration Point	2 mm
Probe Tip to Sensor Z Calibration Point	2 mm
Recommended Measurement Distance from Surface	3 mm

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





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Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: SCS 0108

Client

PC Test

Certificate No: EX3-7409_May16

C

CALIBRATION CERTIFICATE

Object

EX3DV4 - SN:7409

Calibration procedure(s)

QA CAL-01.v9, QA CAL-23.v5, QA CAL-25.v6 Calibration procedure for dosimetric E-field probes

BN 05/23/16

Calibration date:

May 17, 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	מו	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 (No. 217-02285/02284)	In house check: Jun-16
Power sensor E4412A	SN: MY41498087	06-Apr-16 (No. 217-02285)	In house check: Jun-16
Power sensor E4412A	SN: 000110210	06-Apr-16 (No. 217-02284)	In house check: Jun-16
RF generator HP 8648C	SN: US3642U01700	04-Aug-99 (in house check Apr-13)	In house check: Jun-16
Network Analyzer HP 8753E	SN: US37390585	18-Oct-01 (in house check Oct-15)	In house check: Oct-16

Name

Function

Michael Weber

Laboratory Technician

Approved by:

Calibrated by:

Katja Pokovic

Technical Manager

Issued: May 18, 2016

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

Certificate No: EX3-7409_May16

Page 1 of 12

Calibration Laboratory of

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





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Accreditation No.: SCS 0108

Accredited by the Swiss Accreditation Service (SAS)

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Glossary:

TSL. tissue simulatina liquid

NORMx,y,z

sensitivity in free space

ConvF

sensitivity in TSL / NORMx, v, z

DCP CF

diode compression point crest factor (1/duty cycle) of the RF signal

A, B, C, D

modulation dependent linearization parameters

Polarization φ

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:

- 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
 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
- 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.v.z; Assessed for E-field polarization 9 = 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.v.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
- 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
- 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).

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Probe EX3DV4

SN:7409

Manufactured: November 24, 2015

Calibrated:

May 17, 2016

Calibrated for DASY/EASY Systems

(Note: non-compatible with DASY2 system!)

EX3DV4-- SN:7409

DASY/EASY - Parameters of Probe: EX3DV4 - SN:7409

Basic Calibration Parameters

	Sensor X	Sensor Y	Sensor Z	Unc (k=2)
Norm (μV/(V/m) ²) ^A	0.39	0.34	0.39	± 10.1 %
DCP (mV) ^B	106.3	102.2	99.4	

Modulation Calibration Parameters

UID	Communication System Name		A dB	B dB√μV	С	D dB	VR mV	Unc ^t (k=2)
0	CW	х	0.0	0.0	1.0	0.00	141.2	±3.3 %
		Y	0.0	0.0	1.0		127.3	
		Z	0.0	0.0	1.0		131.8	
10010- CAA	SAR Validation (Square, 100ms, 10ms)	X	0.39	53.8	5.5	10.00	42.5	±1.2 %
		Y	0.55	54.7	5.9		41.8	
		Z	0.85	58.7	9.1		41.6	
10012- CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps)	Х	3.55	75.3	22.2	1.87	149.7	±0.7 %
		Υ	3.32	72.6	21.0		139.7	
		Z	2.84	68.8	19.0	_	144.7	
10100- CAB	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	Х	5.98	66.6	19.3	5.67	113.6	±0.9 %
		Υ	6.17	66.7	19.4		107.1	
		Z	6.13	66.1	18.8	ļ <u>.</u>	110.9	
10103- CAB	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	X	6.59	66.2	21.1	9.29	123.5	±1.4 %
		Y	7.27	67.9	22.1		121.1	
		Z	7.01	66.4	21.1		119.9	
10108- CAC	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	Х	5.72	66.1	19.2	5.80	111.4	±1.2 %
		Υ	6.34	67.6	20.0		149.2	
		Z	6.02	65.9	19.0		109.0	
10151- CAB	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	X	6.27	66.1	21.2	9.28	116.8	±1.4 %
		Υ	6.89	67.6	22.1		114.7	
		Z	6.69	66.0	21.0		116.4	4.0.04
10154- CAC	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	X	5.37	65.9	19.1	5.75	107.3	±1.2 %
_		Υ	5.98	67.2	19.9	ļ	143.3	
		Z	6.01	66.7	19.4		149.2	- 1 0 01
10160- CAB	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	X	5.76	66.2	19.2	5.82	109.5	±1.2 %
		Υ	6.43	67.6	20.0		148.3	
		Z	6.05	65.6	18.7	5.70	107.5	.000
10169- CAB	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	Х	4.24	65.6	19.3	5.73	127.4	±0.9 %
		Y	4.54	66.4	19.8		120.4	
	175 700 (00 5044 4 00 0044)	Z	4.62	65.9	19.3	0.04	123.8	.4.4.04
10172- CAB	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	X	4.91	68.0	22.7	9.21	126.7	±1.4 %
	-:	Y	5.24	68.8	23.3		124.0	
40475	1.TE EDD (00 PDM 4.00 40 M)	Z	5.35	68.1	22.5	E 70	125.0	1000
10175- CAC	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	X	4.27	65.8	19.4	5.72	128.9	±0.9 %
		Y	4.52	66.2	19.7		121.2	
		Z	4.63	65.9	19.3		125.2	

EX3DV4-SN:7409 May 17, 2016

10181- CAB	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	Х	4.26	65.7	19.4	5.72	125.9	±0.9 %
		Υ	4.47	66.0	19.5		120.6	
		Z	4.60	65.7	19.2		123.0	
10237- CAB	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	Х	4.89	67.9	22.6	9.21	125.9	±1.7 %
		Y	5.26	69.0	23.4		123.8	
		Ζ	5.32	67.8	22.3		124.3	
10252- CAB	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	Х	6.04	66.8	21.7	9.24	149.2	±1.4 %
		Y	6.64	68.1	22.6		148.9	
•		Z	6.48	66.5	21.4		147.5	
10267- CAB	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	Х	6.27	66.1	21.2	9.30	119.1	±1.4 %
		Υ	6.88	67.4	22.0		115.9	
		Z	6.73	66.1	21.1		117.6	
10297- AAA	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	Х	5.71	66.0	19.2	5.81	110.7	±0.9 %
		Y	6.41	67.8	20.2		149.8	
		Z	5.98	65.7	18.9		107.9	
10311- AAA	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	Х	6.23	66.3	19.4	6.06	112.8	±0.9 %
		Υ	6.51	66.6	19.5		107.4	
		Z	6.49	66.1	19.0		109.4	

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%.

A The uncertainties of Norm X,Y,Z do not affect the E²-field uncertainty inside TSL (see Pages 6 and 7).

B Numerical linearization parameter: uncertainty not required.

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

DASY/EASY - Parameters of Probe: EX3DV4 - SN:7409

Calibration Parameter Determined in Head Tissue Simulating Media

	5								
f (MHz) ^C	Relative Permittivity ^F	Conductivity (S/m) F	ConvF X	ConvF Y	ConvF Z	Alpha ^G	Depth ^G (mm)	Unc (k=2)	
750	41.9	0.89	10.73	10.73	10.73	0.62	0.83	± 12.0 %	
835	41.5	0.90	10.04	10.04	10.04	0.45	0.93	± 12.0 %	
1750	40.1	1.37	8.05	8.05	8.05	0.38	0.80	± 12.0 %	
1900	40.0	1.40	7.69	7.69	7.69	0.41	0.80	± 12.0 %	
2300	39.5	1.67	7.22	7.22	7.22	0.25	0.92	± 12.0 %	
2450	39.2	1.80	6.90	6.90	6.90	0.30	0.93	± 12.0 %	
2600	39.0	1.96	6.77	6.77	6.77	0.32	0.83	± 12.0 %	

^c Frequency validity above 300 MHz of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to ± 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 ± 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 ± 110 MHz.

validity can be extended to ± 110 MHz.

F At frequencies below 3 GHz, the validity of tissue parameters (ε and σ) can be relaxed to ± 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 ± 5%. The uncertainty is the RSS of the ConyF uncertainty for 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.

Certificate No: EX3-7409_May16

DASY/EASY - Parameters of Probe: EX3DV4 - SN:7409

Calibration Parameter Determined in Body Tissue Simulating Media

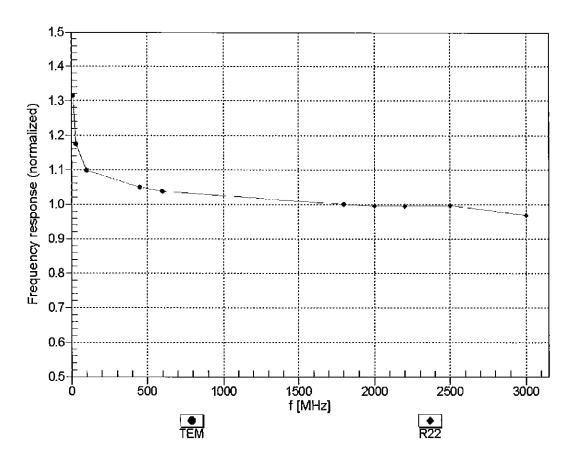
f (MHz) ^C	Relative Permittivity ^F	Conductivity (S/m) F	ConvF X	ConvF Y	ConvF Z	Alpha ^G	Depth ^G (mm)	Unc (k=2)
750	55.5	0.96	9.46	9.46	9.46	0.52	0.80	± 12.0 %
835	55.2	0.97	9.33	9.33	9.33	0.34	1.04	± 12.0 %
1750	53.4	1.49	7.72	7.72	7.72	0.44	0.80	± 12.0 %
1900	53.3	1.52	7.47	7.47	7.47	0.43	0.80	± 12.0 %
2300	52.9	1.81	7.22	7,22	7.22	0.36	0.85	± 12.0 %
2450	52.7	1.95	7.10	7.10	7.10	0.39	0.80	± 12.0 %
2600	52.5	2.16	6.83	6.83	6.83	0.39	0.86	± 12.0 %

 $^{^{\}rm C}$ 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 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.

F At frequencies below 3 GHz, the validity of tissue parameters (ε and σ) can be relaxed to ± 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 ± 5%. The uncertainty is the RSS of 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.

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

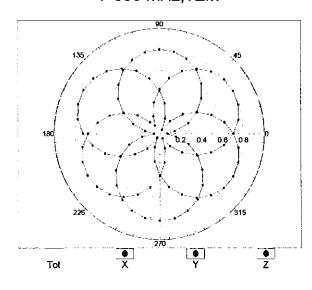


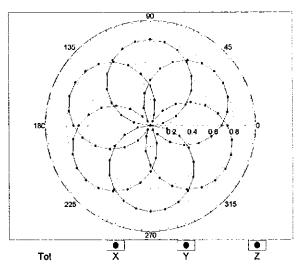
Uncertainty of Frequency Response of E-field: ± 6.3% (k=2)

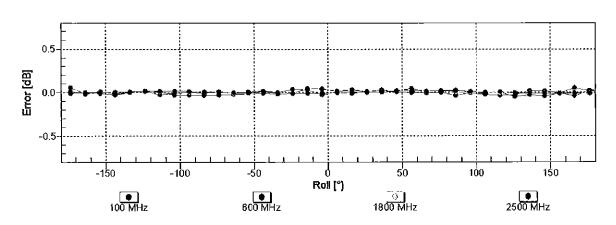
Receiving Pattern (ϕ), $\vartheta = 0^{\circ}$

f=600 MHz,TEM

f=1800 MHz,R22



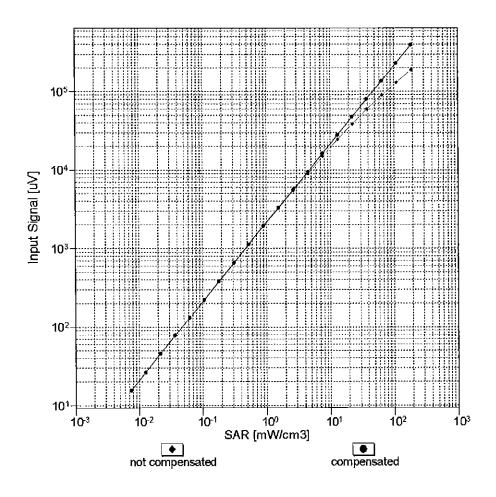


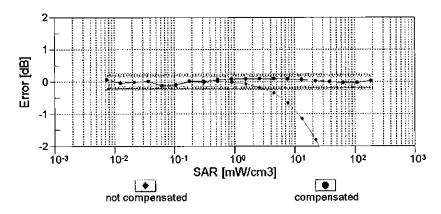


Uncertainty of Axial Isotropy Assessment: ± 0.5% (k=2)

Dynamic Range f(SAR_{head})

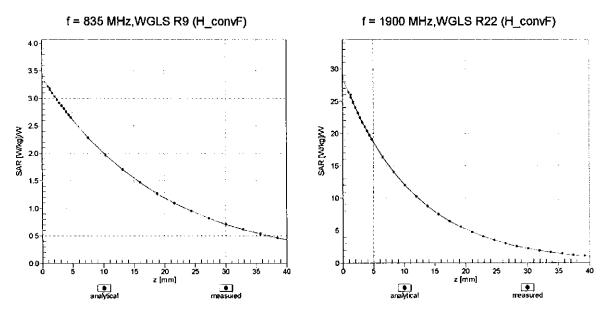
(TEM cell, f_{eval}= 1900 MHz)





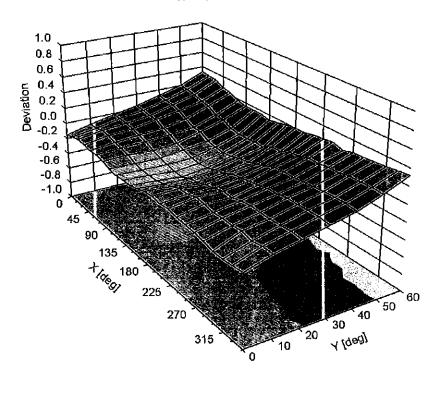
Uncertainty of Linearity Assessment: ± 0.6% (k=2)

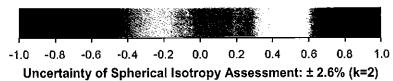
Conversion Factor Assessment



Deviation from Isotropy in Liquid

Error (ϕ, ϑ) , f = 900 MHz





EX3DV4- SN:7409

DASY/EASY - Parameters of Probe: EX3DV4 - SN:7409

Other Probe Parameters

Sensor Arrangement	Triangular
Connector Angle (°)	36.2
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

Calibration Laboratory of

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





Schweizerischer Kalibrierdienst Service suisse d'étalonnage C 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

PC Test

Certificate No: ES3-3319 Mar16

CALIBRATION CERTIFICATE

Object

ES3DV3 - SN:3319

Calibration procedure(s)

QA CAL-01.v9, QA CAL-23.v5, QA CAL-25.v6 Calibration procedure for dosimetric E-field probes

Calibration date:

March 18, 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 E4419B	GB41293874	01-Apr-15 (No. 217-02128)	Mar-16
Power sensor E4412A MY41498087 01-Apr-15 (No.		01-Apr-15 (No. 217-02128)	Mar-16
Reference 3 dB Attenuator	SN: S5054 (3c)	01-Apr-15 (No. 217-02129)	Mar-16
Reference 20 dB Attenuator	SN: S5277 (20x)	01-Apr-15 (No. 217-02132)	Mar-16
Reference 30 dB Attenuator	SN: S5129 (30b)	01-Apr-15 (No. 217-02133)	Mar-16
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	1D	Check Date (in house)	Scheduled Check
RF generator HP 8648C	US3642U01700	4-Aug-99 (in house check Apr-13)	In house check: Apr-16
Network Analyzer HP 8753E	US37390585	18-Oct-01 (in house check Oct-15)	In house check: Oct-16

Name Function Signature Calibrated by: Leif Klysner 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: ES3-3319_Mar16

Calibration Laboratory of

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





S 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 NORMx,y,z sensitivity in free space

sensitivity in free space sensitivity in TSL / NORMx,v,z

ConvF sensitivity in TSL / NORM DCP diode compression point

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

Polarization ϕ 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:

- 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"

Methods Applied and Interpretation of Parameters:

- NORMx,y,z: Assessed for E-field polarization 9 = 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
- 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).

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ES3DV3 - SN:3319 March 18, 2016

Probe ES3DV3

SN:3319

Manufactured: Calibrated:

January 10, 2012 March 18, 2016

Calibrated for DASY/EASY Systems

(Note: non-compatible with DASY2 system!)

ES3DV3- SN:3319 March 18, 2016

DASY/EASY - Parameters of Probe: ES3DV3 - SN:3319

Basic Calibration Parameters

	Sensor X	Sensor Y	Sensor Z	Unc (k=2)
Norm $(\mu V/(V/m)^2)^A$	1.12	1.08	1.16	± 10.1 %
DCP (mV) ^B	104.1	104.5	103.7	

Modulation Calibration Parameters

UID	Communication System Name		A dB	B dB√μV	С	D dB	VR mV	Unc [⊨] (k=2)
0	CW	Х	0.0	0.0	1.0	0.00	203.1	±3.5 %
		Υ	0.0	0.0	1.0		203.8	***************************************
		Z	0.0	0.0	1.0		200.4	
10010- CAA	SAR Validation (Square, 100ms, 10ms)	Х	2.29	60.1	11.2	10.00	42.0	±1.2 %
		Υ	1.95	58.7	10.4		42.0	
		Z	3.15	62.5	12.1		42.9	
10012- CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps)	X	3.45	71.5	19.9	1.87	122.0	±0.5 %
		Υ	2.88	68.4	18.6		122.8	
		Z	3.35	70.8	19.5		120.5	
10100- CAB	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	X	6.39	67.3	19.5	5.67	132.3	±1.2 %
		Υ	6.54	68.2	20.1		134.5	
		Z	6.40	67.4	19.6		130.2	
10103- CAB	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	Х	10.41	75.3	25.6	9.29	124.2	±2.2 %
		Υ	10.45	76.3	26.6		122.6	
		Z	10.82	75.9	25.8		124.8	
10108- CAC	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	Х	6.30	67.1	19.5	5.80	130.7	±1.2 %
		Υ	6.35	67.5	19.9		131.5	
		Z	6.33	67.1	19.6		128.5	
10151- CAB	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	X	9.70	74.1	25.2	9.28	118.8	±2.2 %
***************************************		Y	9.65	74.9	26.0		117.1	
		Z	10.15	75.0	25.5		119.2	
10154- CAC	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	X	6.00	66.6	19.3	5.75	127.4	±1.2 %
		Υ	6.01	66.9	19.6		128.9	
		Z	6.02	66.6	19.3		125.6	
10160- CAB	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	X	6.45	67.2	19.6	5.82	132.2	±1.2 %
		Y	6.47	67.5	19.9		133.5	
		Z	6.45	67.1	19.5		130.0	
10169- CAB	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	X	4.76	65.7	19.0	5.73	110.8	±0.9 %
		Y	4.80	66.3	19.5	 	112.0	
40470	1 TE TOD (00 EDIA) 1 DD 00 MH	Z	4.84	65.9	19.1	<u> </u>	109.2	1 .0 5 67
10172- CAB	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	X	8.98	78.7	27.7	9.21	132.0	±2.5 %
		Y	9.71	82.4	30.0		132.2	
10175	LTF FDD (OC FDMA 4 DD 40 M)-	Z	9.79	80.4	28.4	<u> </u>	133.4	1000
10175- CAC	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	X	4.76	65.6	19.0	5.72	109.8	±0.9 %
		Y	4.76	66.1	19.4		111.4	
		Z	4.83	65.8	19.1		108.9	

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10181- CAB	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	Х	4.77	65.7	19.1	5.72	109.2	±0.9 %
		Υ	4.78	66.2	19.4		111.9	
		Z	5.24	67.7	20.2		149.0	
10237- CAB	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	Х	8.93	78.5	27.6	9.21	131.4	±2.5 %
		Υ	9.48	81.7	29.7		131.7	
		Z	9.69	80.3	28.3		131.6	
10252- CAB	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	Х	8.94	73.0	24.7	9.24	111.2	±2.2 %
		Υ	9.05	74.3	25.9		111.8	
		Z	9.29	73.6	24.9		111.3	
10267- CAB	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	Х	9.62	73.9	25.1	9.30	117.4	±2.2 %
		Υ	9.73	75.1	26.1		118.2	
		Z	10.08	74.8	25.5		118.2	
10297- AAA	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	X	6.31	67.1	19.6	5.81	128.6	±1.2 %
		Υ	6.39	67.6	20.0		132.2	
		Z	6.33	67.1	19.6	***************************************	127.2	
10311- AAA	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	Х	6.87	67.6	19.9	6.06	132.8	±1.4 %
		Υ	6.96	68.2	20.3		137.0	
		Z	6.88	67.6	19.9		131.3	

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%.

A The uncertainties of Norm X,Y,Z do not affect the E²-field uncertainty inside TSL (see Pages 6 and 7).

B Numerical linearization parameter: uncertainty not required.

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

ES3DV3-- SN:3319 March 18, 2016

DASY/EASY - Parameters of Probe: ES3DV3 - SN:3319

Calibration Parameter Determined in Head Tissue Simulating Media

f (MHz) ^C	Relative Permittivity ^F	Conductivity (S/m) ^F	ConvF X	ConvF Y	ConvF Z	Alpha ^G	Depth ^G (mm)	Unc (k=2)
750	41.9	0.89	6.44	6.44	6.44	0.49	1.80	± 12.0 %
835	41.5	0.90	6.16	6.16	6.16	0.46	1.80	± 12.0 %
1750	40.1	1.37	5.20	5.20	5.20	0.51	1.45	± 12.0 %
1900	40.0	1.40	5.03	5.03	5.03	0.58	1.40	± 12.0 %
2300	39.5	1.67	4.69	4.69	4.69	0.80	1.21	± 12.0 %
2450	39.2	1.80	4.47	4.47	4.47	0.75	1.32	± 12.0 %
2600	39.0	1.96	4.33	4.33	4.33	0.80	1.31	± 12.0 %

 $^{^{\}rm C}$ 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 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.

Certificate No: ES3-3319_Mar16 Page 6 of 12

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 ConvF uncertainty for indicated target tissue parameters.

G Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is

⁶ 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.

ES3DV3- SN:3319 March 18, 2016

DASY/EASY - Parameters of Probe: ES3DV3 - SN:3319

Calibration Parameter Determined in Body Tissue Simulating Media

f (MHz) ^C	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	6.06	6.06	6.06	0.47	1.45	± 12.0 %
835	55.2	0.97	6.04	6.04	6.04	0.63	1.27	± 12.0 %
1750	53.4	1.49	4.91	4.91	4.91	0.46	1.66	± 12.0 %
1900	53.3	1.52	4.70	4.70	4.70	0.80	1.24	± 12.0 %
2300	52.9	1.81	4.36	4.36	4.36	0.74	1.33	± 12.0 %
2450	52.7	1.95	4.20	4.20	4.20	0.80	1.25	± 12.0 %
2600	52.5	2.16	3.99	3.99	3.99	0.80	1.20	± 12.0 %

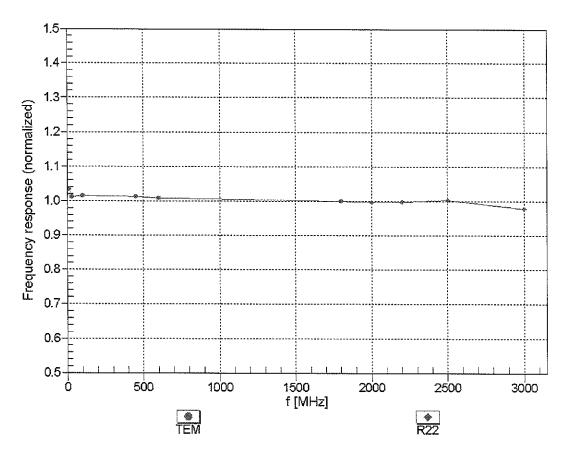
 $^{^{\}rm C}$ Frequency validity above 300 MHz of \pm 100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to \pm 50 MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity 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.

Certificate No: ES3-3319_Mar16 Page 7 of 12

F At frequencies below 3 GHz, the validity of tissue parameters (ε and σ) can be relaxed to ± 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 ± 5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.

^G 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.

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

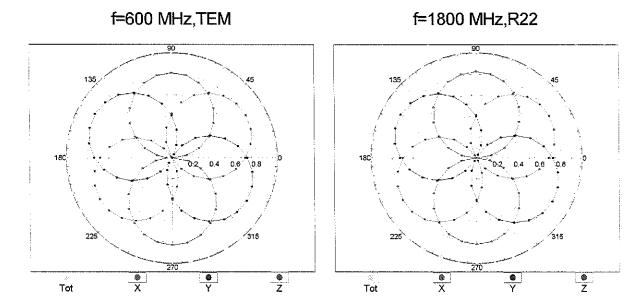


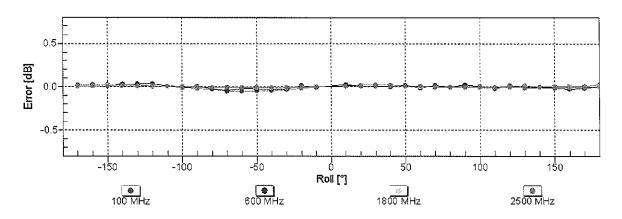
Uncertainty of Frequency Response of E-field: ± 6.3% (k=2)

ES3DV3-SN:3319 March 18, 2016

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



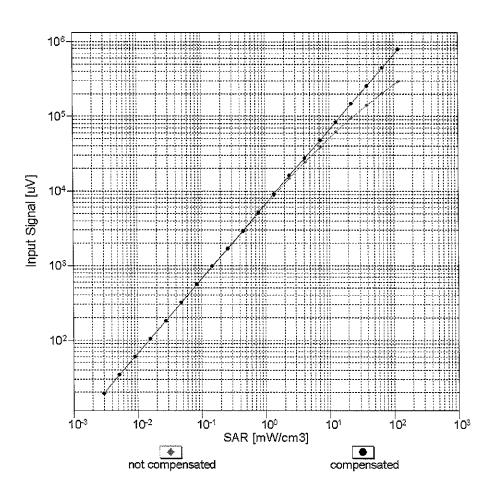


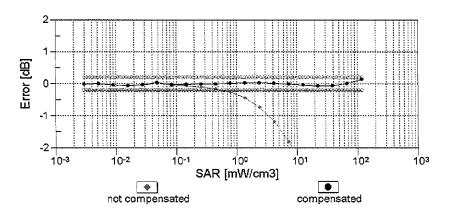


Uncertainty of Axial Isotropy Assessment: ± 0.5% (k=2)

ES3DV3- SN:3319 March 18, 2016

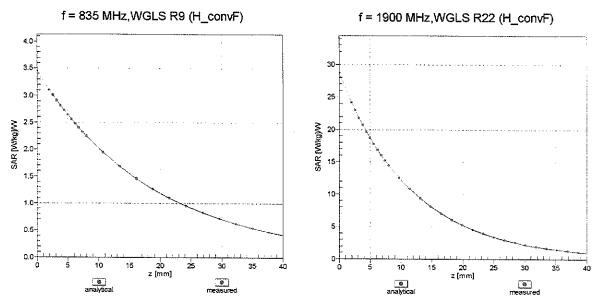
Dynamic Range f(SAR_{head}) (TEM cell , f_{eval}= 1900 MHz)





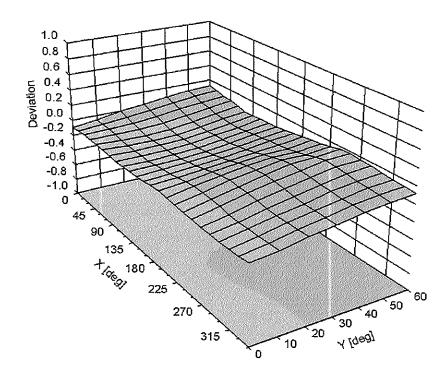
Uncertainty of Linearity Assessment: ± 0.6% (k=2)

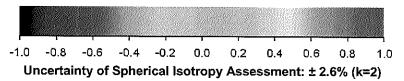
Conversion Factor Assessment



Deviation from Isotropy in Liquid

Error (ϕ , ϑ), f = 900 MHz





DASY/EASY - Parameters of Probe: ES3DV3 - SN:3319

Other Probe Parameters

Sensor Arrangement	Triangular
Connector Angle (°)	60
Mechanical Surface Detection Mode	enabled
Optical Surface Detection Mode	disabled
Probe Overall Length	337 mm
Probe Body Diameter	10 mm
Tip Length	10 mm
Tip Diameter	4 mm
Probe Tip to Sensor X Calibration Point	2 mm
Probe Tip to Sensor Y Calibration Point	2 mm
Probe Tip to Sensor Z Calibration Point	2 mm
Recommended Measurement Distance from Surface	3 mm

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

Certificate No: EX3-7410_Jul16

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

PC Test

CALIBRATION CERTIFICATE

Object

EX3DV4 - SN:7410

Calibration procedure(s)

QA CAL-01.v9, QA CAL-23.v5, QA CAL-25.v6
Calibration procedure for dosimetric E-field probes

Calibration date:

July 25, 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 generalor 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

Calibrated by:

Name
Function
Signature
Laboratory Technician

Approved by:

Katja Pokovic
Technical Manager

Issued: July 27, 2016

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

Certificate No: EX3-7410_Jul16

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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)

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Glossary:

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

ConvF

sensitivity in TSL / NORMx,y,z

DCP

diode compression point

CF

crest factor (1/duty_cycle) of the RF signal modulation dependent linearization parameters

A, B, C, D Polarization φ

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:

- 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
- i) 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 9 = 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
- 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).

July 25, 2016 EX3DV4 - SN:7410

Probe EX3DV4

SN:7410

Calibrated:

Manufactured: November 24, 2015

July 25, 2016

Calibrated for DASY/EASY Systems

(Note: non-compatible with DASY2 system!)

DASY/EASY - Parameters of Probe: EX3DV4 - SN:7410

Basic Calibration Parameters

	Sensor X	Sensor Y	Sensor Z	Unc (k=2)
Norm (µV/(V/m) ²) ^A	0.42	0.48	0.44	± 10.1 %
DCP (mV) ^B	97.4	99.9	97.1	

Modulation Calibration Parameters

UID	Communication System Name		A dB	B dB√μV	С	D dB	VR mV	Unc ^E (k=2)
0	CW	Х	0.0	0.0	1.0	0.00	148.7	±2.5 %
		Y	0.0	0.0	1.0		155.2	
		Z	0.0	0.0	1.0		152.3	

Note: For details on UID parameters see Appendix.

Sensor Model Parameters

	C1	C2	α	T1	T2	T3	T4 V-2	T5 V-1	T6
	fF	fF	V-1	ms.V⁻²	ms.V⁻¹	ms	V ⁻²	V.,	
X	48.41	366.5	36.58	12.47	0.954	4.961	0	0.406	1.003
Y	51.56	389.6	36.52	11.42	0.862	4.986	0.508	0.351	1.004
Z	61.39	470.2	37.3	11.14	1.039	4.997	0	0.506	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%.

B 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).

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

DASY/EASY - Parameters of Probe: EX3DV4 - SN:7410

Calibration Parameter Determined in Head Tissue Simulating Media

f (MHz) ^C	Relative Permittivity ^F	Conductivity (S/m) F	ConvF X	ConvF Y	ConvF Z	Alpha ^G	Depth ^G (mm)	Unc (k=2)
750	41.9	0.89	10.05	10.05	10.05	0.58	0.80	± 12.0 %
835	41.5	0.90	9.68	9.68	9.68	0.54	0.81	± 12.0 %
1750	40.1	1.37	8.41	8.41	8.41	0.39	0.80	± 12.0 %
1900	40.0	1.40	8.05	8.05	8.05	0.37	0.80	± 12.0 %
2300	39.5	1.67	7.73	7.73	7.73	0.33	0.88	± 12.0 %
2450	39.2	1.80	7.37	7.37	7.37	0.31	0.92	± 12.0 %
2600	39.0	1.96	7.11	7.11	7.11	0.36	0.84	± 12.0 %

^c Frequency validity above 300 MHz of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to ± 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 ± 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 ± 110 MHz.

validity can be extended to ± 110 MHz.

At frequencies below 3 GHz, the validity of tissue parameters (ε and σ) can be relaxed to ± 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 ± 5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.

^G 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.

July 25, 2016

DASY/EASY - Parameters of Probe: EX3DV4 - SN:7410

Calibration Parameter Determined in Body Tissue Simulating Media

			•		_			
f (MHz) ^C	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	9.93	9.93	9.93	0.35	1.05	± 12.0 %
835	55.2	0.97	9.72	9.72	9.72	0.47	0.80	± 12.0 %
1750	53.4	1.49	7.95	7.95	7.95	0.43	0.80	± 12.0 %
1900	53.3	1.52	7.64	7.64	7.64	0.39	0.80	± 12.0 %
2300	52.9	1.81	7.46	7.46	7.46	0.45	0.80	± 12.0 %
2450	52.7	1.95	7.40	7.40	7.40	0.35	0.80	± 12.0 %
2600	52.5	2.16	7.03	7.03	7.03	0.30	0.80	± 12.0 %

^c Frequency validity above 300 MHz of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to ± 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 ± 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 ± 110 MHz.

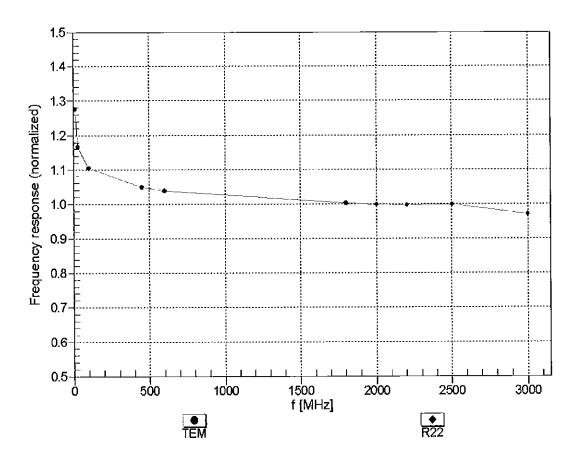
At frequencies below 3 GHz, the validity of tissue parameters (ε and σ) can be relaxed to ± 10% if liquid compensation formula is applied to

measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters (ε and σ) is restricted to ± 5%. The uncertainty is the RSS of

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.

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

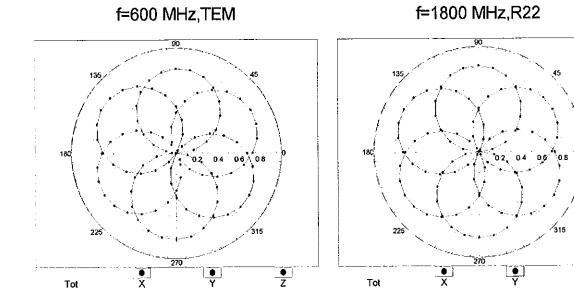


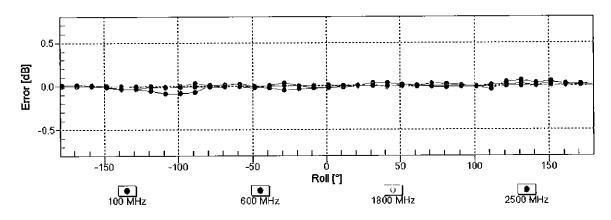
Uncertainty of Frequency Response of E-field: ± 6.3% (k=2)

July 25, 2016 EX3DV4-SN:7410

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

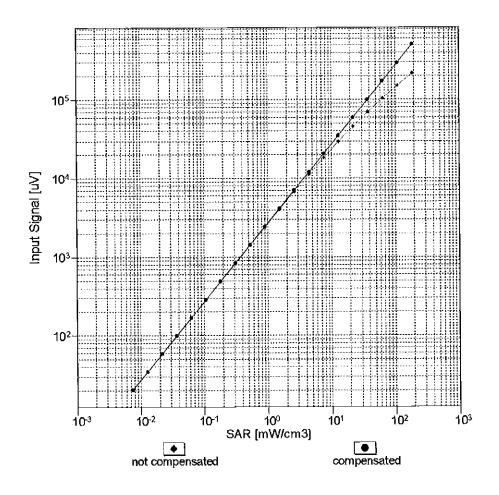


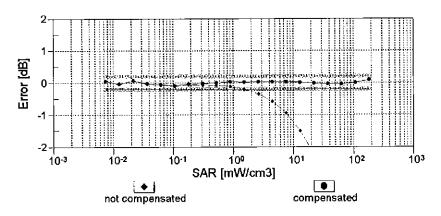




Uncertainty of Axial Isotropy Assessment: ± 0.5% (k=2)

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

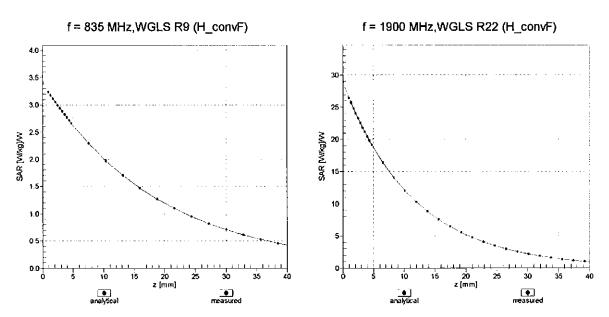




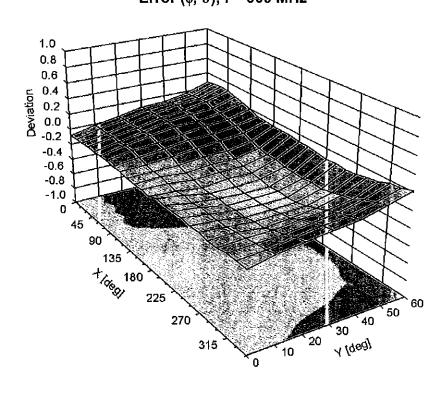
Uncertainty of Linearity Assessment: ± 0.6% (k=2)

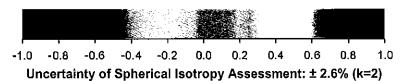
EX3DV4- SN:7410 July 25, 2016

Conversion Factor Assessment



Deviation from Isotropy in Liquid Error (ϕ , ϑ), f = 900 MHz





July 25, 2016

DASY/EASY - Parameters of Probe: EX3DV4 - SN:7410

Other Probe Parameters

Sensor Arrangement	Triangular
Connector Angle (°)	1.5
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

UID	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	148.7	± 2.5 %
		Υ	0.00	0.00	1.00		155.2	
		Z	0.00	0.00	1.00		152.3	
10010- CAA	SAR Validation (Square, 100ms, 10ms)	X	2.43	65.21	10.17	10.00	20.0	± 9.6 %
		Y	2.50	65.70	10.39		20.0	
		Z	2.85	67.36	11.61		20.0	
10011- CAB	UMTS-FDD (WCDMA)	Х	1.09	68.25	15.97	0.00	150.0	± 9.6 %
	 	Y	1.24	70.76	17.39		150.0	
10010	3FFF 000 44h Wift 0 4 011- /D000 4	Z	1.10	67.70	15.71		150.0	
10012- CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps)	X	1.18	63.82	15.30	0.41	150.0	± 9.6 %
		Y	1.19	64.46	15.91	<u> </u>	150.0	
10013-	IEEE 802.11g WiFi 2.4 GHz (DSSS-	Z	1.18 4.85	63.56 66.42	15.24	1.40	150.0	+000
CAB	OFDM, 6 Mbps)				16.89	1.46	150.0	± 9.6 %
	-	Y	4.89	66.57	17.08		150.0	
10021-	GSM-FDD (TDMA, GMSK)	Z	4.98 7.58	66.33 78.77	16.97 16.90	0.20	150.0	+0.00
DAB	GOWH DD (TDWA, GWGK)					9.39	50.0	± 9.6 %
	-	Z	17.86 41.06	89.55 101.79	20.42		50.0	
10023- DAB	GPRS-FDD (TDMA, GMSK, TN 0)	X	6.69	77.05	24.54 16.32	9.57	50.0 50.0	± 9.6 %
		Υ	13.04	85.58	19.26		50.0	
		Z	25.47	95.55	22.91		50.0	
10024- DAB	GPRS-FDD (TDMA, GMSK, TN 0-1)	X	8.74	81.57	16.60	6.56	60.0	± 9.6 %
		Y	100.00	108.03	23.63		60.0	
		Z	100.00	111.32	25.30		60.0	
10025- DAB	EDGE-FDD (TDMA, 8PSK, TN 0)	Х	4.47	70.15	24.88	12.57	50.0	± 9.6 %
		Υ	10.89	98.18	38.43		50.0	
		Z	4.49	70.03	25.10		50.0	
10026- DAB	EDGE-FDD (TDMA, 8PSK, TN 0-1)	Х	8.34	87.45	29.94	9.56	60.0	± 9.6 %
		Y	10.91	95.48	33.60		60.0	
10027-	GPRS-FDD (TDMA, GMSK, TN 0-1-2)	X	8.51 41.47	87.76 97.27	30.38 19.98	4.80	60.0 80.0	± 9.6 %
DAB		V	100.00	107.00	20 77		00.0	
	 	Z	100.00 100.00	107.82 111.23	22.77 24.44		80.0 80.0	
10028- DAB	GPRS-FDD (TDMA, GMSK, TN 0-1-2-3)	X	100.00	105.76	21.32	3.55	100.0	± 9.6 %
-		Y	100.00	108.92	22.59		100.0	
		Z	100.00	112.30	24.21		100.0	
10029- DAB	EDGE-FDD (TDMA, 8PSK, TN 0-1-2)	Х	5.53	79.01	25.60	7.80	80.0	± 9.6 %
-		Υ	6.25	82.85	27.73		80.0	
10030-	IEEE 802.15.1 Bluetooth (GFSK, DH1)	Z X	5.71 6.23	79.47 78.34	26.07 14.97	5.30	80.0 70.0	± 9.6 %
CAA	+	Υ	100.00	106.49	22.48		70.0	
	 	Ż	100.00	100.49	24.20		70.0	
10031- CAA	IEEE 802.15.1 Bluetooth (GFSK, DH3)	X	100.00	104.45	19.64	1.88	100.0	± 9.6 %
1		Υ	100.00	108.59	21.21		100.0	
		Z	100.00	112.40	22.95		100.0	

10032- CAA	IEEE 802.15.1 Bluetooth (GFSK, DH5)	Х	100.00	110.63	21.37	1.17	100.0	± 9.6 %
		Υ	100.00	118.45	24.27		100.0	
		Ż	100.00	119.90	25.08		100.0	
10033- CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH1)	X	4.68	78.17	18.99	5.30	70.0	± 9.6 %
		Y	7.85	87.36	22.81		70.0	_
		Z	6.11	84.09	22.37		70.0	
10034- CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH3)	X	2.20	72.10	15.84	1.88	100.0	± 9.6 %
		Y	3.02	77.54	18.56		100.0	
40005	IEEE 000 45 4 DL . L II. (DUA DODO)/	Z	2.34	73.73	17.65		100.0	
10035- CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH5)	X	1.76	70.56	15.16	1.17	100.0	± 9.6 %
		Y	2.26	74.85	17.46	<u> </u>	100.0	
10036-	IEEE 002 45 4 Division to (0 DDCK DUA)		1.79	71.09	16.41	<u> </u>	100.0	
CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH1)	X	5.38	80.36	19.85	5.30	70.0	± 9.6 %
	-	Y	10.10	91.41	24.17	-	70.0	
10027	IEEE 900 15 1 Division (0 DDCV DVO)	Z	7.37	87.30	23.55	4.00	70.0	
10037- CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH3)	X	2.10	71.54	15.58	1.88	100.0	± 9.6 %
		Y	2.84	76.78	18.24		100.0	
10038-	IEEE 200 45 4 Physicals (0 DDCK DUE)	Z	2.25	73.29	17.43	4 4 7 7	100.0	
CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH5)	X	1.77	70.87	15.40	1.17	100.0	± 9.6 %
		Y	2.29	75.33	17.77		100.0	
40000	ODMA 0000 (4-DTT DO4)	Z	1.81	71,42	16.65		100.0	
10039- CAB	CDMA2000 (1xRTT, RC1)	Х	2.26	75.07	17.20	0.00	150.0	± 9.6 %
		Y	2.99	79.22	19.11		150.0	
		Z	2.13	73.17	17.12		150.0	
10042- CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4- DQPSK, Halfrate)	×	4.99	74.55	14.33	7.78	50.0	± 9.6 %
		Ϋ́	13.44	85.55	17.97		50.0	
		Z	42.42	100.06	22.60		50.0	
10044- CAA	IS-91/EIA/TIA-553 FDD (FDMA, FM)	X	0.00	97.63	0.45	0.00	150.0	± 9.6 %
_		Y	0.00	105.63	0.06		_150.0	
_		Z	0.00	96.62	1.01		150.0	
10048- CAA	DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24)	×	5.59	71.38	15.61	13.80	25.0	± 9.6 %
	-	Υ	7.04	74.56	16.88		25.0	
		Z	9.46	79.38	19.30		25.0	
10049- CAA	DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12)	Х	5.69	73.97	15.42	10.79	40.0	± 9.6 %
		Υ	7.55	77.84	16.94		40.0	
10050	LULTO TOD (TO CODILLA COOL)	Z	10.67	83.35	19.52		40.0	
10056- CAA	UMTS-TDD (TD-SCDMA, 1.28 Mcps)	Х	7.92	80.69	20.07	9.03	50.0	± 9.6 %
		Y	12.20	88.23	23.05	<u> </u>	50.0	
40050	FROE FRE (TRIM ARRIVE TO A TRIANGE TO A TRIA	Z	10.66	86.87	23.26		50.0	
10058- DAB	EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)	Х	4.35	74.75	23.16	6.55	100.0	± 9.6 %
		Y	4.67	77.08	24.63	ļ	100.0	
10059- CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps)	X	4.50 1.21	75.20 64.69	23.59 15.68	0.61	100.0 110.0	± 9.6 %
ψ, (L)	торој	Y	1.23	65.53	16.44	-	110.0	
		Z	1,23	64.46	15.69	 -	110.0	
10060- CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps)	X	4.17	88.85	22.71	1.30	110.0	± 9.6 %
_0/10	Mispa)	Y	67.79	132.65	34.60	ļ	1100	
	· · · · · · · · · · · · · · · · · · ·	$\frac{1}{Z}$	4.39				110.0	
			4.39	90.74	23.85	l	110.0	

40004	Tiere ood (4) Miero (Oll (Book ()	1 1		т				
10061- CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps)	X	2.24	74.92	19.41	2.04	110.0	± 9.6 %
CAB	Midps)	Y	2.89	80.48	22.46		440.0	
		$\frac{1}{z}$	2.09	75.62	22.16 20.19		110.0 110.0	
10062-	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6	X	4.68	66.56	16.48	0.49	100.0	± 9.6 %
CAB	Mbps)	``	1,00	00.00	10.40	0.40	100.0	1 2.0 %
		Y	4.72	66.69	16.64		100.0	
		Z	4.82	66.46	16.52		100.0	
10063-	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9	X	4.69	66.60	16.53	0.72	100.0	± 9.6 %
CAB	Mbps)							
		Y	4.73	66.75	16.71		100.0	
40004	IEEE OOO 44 % INVESTIGATION OF THE COLUMN TO SERVICE OF THE SERVICE OF THE COLUMN TO SERVICE OF THE COLUMN TO SERVICE OF THE SERVICE OF THE SERVIC	Z	4.83	66.52	16.60		100.0	
10064- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12	X	4.97	66.86	16.74	0.86	100.0	± 9.6 %
CAB	Mbps)	Y	5.03	67.04	46.00		400.0	_
		Z	5.16	67.01 66.85	16.92		100.0	
10065-	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18	TX	4.83	66.69	16.84 16.78	1,21	100.0	± 9.6 %
CAB	Mbps)	^	4.00	00.03	10.76	1,21	100.0	1 19.0 %
		Y	4.88	66.88	16.98		100.0	
		Z	5.00	66.71	16.90		100.0	-
10066-	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24	X	4.83	66.66	16.89	1.46	100.0	± 9.6 %
CAB	Mbps)							<u> </u>
		Y	4.89	66.87	17.11		100.0	
		Z	5.02	66.70	17.03		100.0	
10067-	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36	Х	5.11	66.77	17.26	2.04	100.0	± 9.6 %
CAB	Mbps)	,_	F 47	00.05	47.40		100.0	
		Y	5.17	66.95	17.49		100.0	
10068-	JEEE 900 41 alb Willi E OUR (OFDM 40		5.29	66.72	17.39	0.55	100.0	1000
CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps)	X	5.15	66.79	17.44	2.55	100.0	± 9.6 %
<u> </u>		Y	5.22	67.02	17.70		100.0	
		Z	5.36	66.88	17.63		100.0	
10069-	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54	X	5.23	66.78	17.61	2.67	100.0	± 9.6 %
CAB	Mbps)	<u> </u>						
		Y	5.30	67.00	17.88		100.0	
		Z	5.43	66.80	17.79		100.0	
10071- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps)	X	4.93	66.44	17.12	1.99	100.0	± 9.6 %
		Ÿ	4.97	66.61	17.34		100.0	
		Z	5.06	66.38	17.23		100.0	
10072- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps)	Х	4.90	66.71	17.28	2.30	100.0	± 9.6 %
		Y	4.95	66.92	17.53		100.0	
		Z	5.05	66.71	17.42		100.0	
10073- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps)	X	4.94	66.81	17.53	2.83	100.0	± 9.6 %
		Y	5.00	67.03	17.80		100.0	
		Z	5.09	66.79	17.68		100.0	
10074- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps)	Х	4.92	66.68	17.64	3.30	100.0	± 9.6 %
	, , , , , , , , , , , , , , , , , , , ,	T	4.97	66.89	17.92		100.0	
	-	Z	5.05	66.64	17.81		100.0	
10075- CAB	IEEE 802,11g WiFi 2,4 GHz (DSSS/OFDM, 36 Mbps)	X	4.96	66.78	17.91	3.82	90.0	± 9.6 %
		Y	5.01	67.04	18.23		90.0	
		Z	5.11	66.84	18.14		90.0	
10076- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps)	Х	4.97	66.56	18.00	4.15	90.0	± 9.6 %
		Y	5.01	66.78	18.31		90.0	
		Z	5.08	66.50	18.18		90.0	
10077- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps)	X	4.99	66.62	18.09	4.30	90.0	± 9.6 %
	(+ +		 	 	.	 	
		Y	5.03	66.84	18.39		90.0	

10081- CAB	CDMA2000 (1xRTT, RC3)	X	0.95	67.59	13.64	0.00	150.0	± 9.6 %
<u> </u>		Y	1.16	70.64	15.38		150.0	
		Z	1.00	67.16	14.09	<u> </u>	150.0	
10082- CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4- DQPSK, Fullrate)	Х	0.60	57.37	2.77	4.77	80.0	± 9.6 %
·		Y	0.75	60.00	4.53		80.0	
		Z	0.77	60.00	4.83		80.0	
10090- DAB	GPRS-FDD (TDMA, GMSK, TN 0-4)	X	8.51	81.27	16.52	6.56	60.0	± 9.6 %
		Y	100.00	108.05	23.66		60.0	
10097-	LINTO EDD (LIODDA)	Z	100.00	111.34	25.32	0.00	60.0	
CAB	UMTS-FDD (HSDPA)	X	1.90	68.28 69.20	16.17	0.00	150.0	± 9.6 %
		Z	1.89	67.54	15.97		150.0 150.0	
10098-	UMTS-FDD (HSUPA, Subtest 2)	x	1.86	68.23	16.14	0.00	150.0	± 9.6 %
CAB	ONTO-FDD (NOOFA, Sublest 2)	^ Y	1.86	69.19	16.78	0.00	150.0	I 9.0 %
		Z	1.85	67.50	15.94		150.0	
10099-	EDGE-FDD (TDMA, 8PSK, TN 0-4)	Z	8.38	87.52	29.95	9.56	60.0	± 9.6 %
DAB	LUGET DD (TDIVIA, OF SIX, TIV 0°4)	^ Y	10.98	95.58	33.62	9.50	60.0	T 9.0 %
	-	Z	8.55	87.83	30.39	 	60.0	
10100-	LTE-FDD (SC-FDMA, 100% RB, 20	X	3.23	70.79	17.06	0.00	150.0	± 9.6 %
CAB	MHz, QPSK)	Y	3.41	71.78	17.57	0.00	150.0	19.0 %
		Z	3.32	70.68	16.93		150.0	
10101-	LTE-FDD (SC-FDMA, 100% RB, 20	T X	3.30	67.71	16.16	0.00	150.0	± 9.6 %
CAB	MHz, 16-QAM)	^ Y	3.37	68.16	16.45	0.00	150.0	1 5.0 %
	-	Z	3.40	67.70	16.43		150.0	
10102- CAB	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	X	3.40	67.69	16.13	0.00	150.0	± 9.6 %
		Y	3.47	68.06	16.51		150.0	
	-	Z	3.50	67.64	16.22		150.0	-
10103- CAB	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	Х	5.69	73.19	19.02	3.98	65.0	± 9.6 %
		Υ	6.17	74.96	19.98		65.0	
		Z	5.81	73.32	19.29		65.0	
10104- CAB	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	X	6.05	72.46	19.54	3.98	65.0	± 9.6 %
		Y	6.18	73.22	20.12		65.0	
		<u>Z</u>	6.17	72.56	19.81		65.0	
10105- CAB	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	X	5.63	70.95	19.16	3.98	65.0	± 9.6 %
		Y	5.99	72.46	20.09		65.0	
10108-	LTE-FDD (SC-FDMA, 100% RB, 10	Z X	5.69 2.83	70.87 70.04	19.35 16.91	0.00	65.0 150.0	± 9.6 %
CAC	MHz, QPSK)	Y	2.98	71.00	17.43		150.0	2 0.0 %
		Z	2.93	69.87	16.76	 	150.0	
10109- CAC	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	X	2.96	67.63	16.10	0.00	150.0	± 9.6 %
		Y	3.03	68.09	16.42		150.0	
		Ż	3.07	67.52	16.08		150.0	
10110- CAC	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	X	2.30	69.18	16.55	0.00	150.0	± 9.6 %
		Y	2.44	70.23	17.16		150.0	
		Z	2.41	68.88	16.42		150.0	
10111- CAC	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	Х	2.70	68.70	16.54	0.00	150.0	± 9.6 %
		Υ	2.78	69.16	16.89		150.0	
		Z	2.78	68.21	16.45		150.0	

Y 3.15 68.01 16.44 150.0	10112- CAC	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	Х	3.08	67.62	16.16	0.00	150.0	± 9.6 %
TIE-FDD (SC-FDMA, 100% RB, 5 MHz,			Y	3.15	68.01	16 44		150.0	
10113- LTE-FDD (SC-FDMA, 100% RB, 5 MHz, CAC									
Total							0.00		± 9.6 %
10114- IEEE 802.11n (HT Greenfield, 13.5 X 5.18 67.28 16.58 0.00 150.0 ± 9.6 9				2.93		16.97		150.0	
CAB				2.94	68.29	16.56		150.0	
Total							0.00		± 9.6 %
D116- IEEE 802-11n (HT Greenfield, 81 Mbps, CAB F. S.									
CAB	1211=	N=====================================							
10116-							0.00		± 9.6 %
10116- REEE 802.11n (HT Greenfield, 135 Mbps, X 5.28 67.48 16.61 0.00 150.0 ±9.6 9									
CAB 64-QAM	40440	NEED OOD 44 - CUT-O							
Total							0.00		± 9.6 %
10117- IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK)									
CAB BPSK) Y 5.17 67.25 16.63 150.0 10118- CAB CAB OAM) EEEE 802.11n (HT Mixed, 81 Mbps, 16- QAM) X 5.56 67.64 16.77 0.00 150.0 ±9.6 % 10119- CAB QAM) Y 5.61 67.77 16.88 150.0 ±9.6 % 10119- CAB QAM) Y 5.61 67.77 16.88 150.0 ±9.6 % 10119- CAB QAM) Y 5.61 67.77 16.88 150.0 ±9.6 % 10119- CAB QAM) Y 5.26 67.53 16.69 150.0 ±9.6 % CAB QAM Y 5.28 67.53 16.69 150.0 ±9.6 % CAB MHz, 16-QAM) Y 5.28 67.53 16.69 150.0 ±9.6 % CAB MHz, 16-QAM) Y 3.51 68.06 16.42 ±150.0 ±9.6 % CAB MHz, 64-QAM) Y 3.63 68.11 16.56 150.0 ±9.6 % 10142- CAB QPSK) TE-FDD (SC-FDMA, 100% RB, 3 MHz, X X	10447	IEEE 000 44m /UT Mine 4 40 5 MI							
10118-							0.00		± 9.6 %
Old Cab									
CAB QAM) Y 5.61 67.77 16.88 150.0 10119- CAB IEEE 802.11n (HT Mixed, 135 Mbps, 64- QAM) X 5.25 67.43 16.59 0.00 150.0 ± 9.6 9 CAB QAM) Y 5.28 67.53 16.69 150.0 ± 9.6 9 10140- CAB LTE-FDD (SC-FDMA, 100% RB, 15 X 3.44 67.68 16.16 0.00 150.0 ± 9.6 9 CAB MHz, 16-QAM) Y 3.51 68.06 16.42 150.0 ± 9.6 9 CAB MHz, 16-QAM) Y 3.51 68.06 16.42 150.0 ± 9.6 9 CAB MHz, 64-QAM) Y 3.56 67.79 16.34 0.00 150.0 ± 9.6 9 CAB MHz, 64-QAM) Y 3.63 69.11 16.56 150.0 ± 9.6 9 CAC QPSK) Y 2.25 70.57 17.05 150.0 ± 9.6 9 CAC QPSK) Y 2.25 70.57	40440	IEEE 000 44 - UITAD 104 AU							
Total							0.00		± 9.6 %
CAB			-						
CAB QAM) Y 5.28 67.53 16.69 150.0 10140-CAB LTE-FDD (SC-FDMA, 100% RB, 15 X 3.44 67.68 16.16 0.00 150.0 ±9.6 % 10140-CAB LTE-FDD (SC-FDMA, 100% RB, 15 X 3.44 67.68 16.16 0.00 150.0 ±9.6 % 10141-CAB LTE-FDD (SC-FDMA, 100% RB, 15 X 3.51 68.06 16.42 150.0	40440	IEEE 000 444 (UT Mine) 405 Mine of					0.00		
Teffor (SC-FDMA, 100% RB, 15 X 3.44 67.68 16.16 0.00 150.0 ± 9.6 %							0.00		± 9.6 %
T0140- CAB									
CAB MHz, 16-QAM) Y 3.51 68.06 16.42 150.0 10141-CAB LTE-FDD (SC-FDMA, 100% RB, 15 CAB X 3.55 67.64 16.14 150.0 10141-CAB LTE-FDD (SC-FDMA, 100% RB, 15 CAB X 3.56 67.79 16.34 0.00 150.0 ±9.6 % 10142-CAC LTE-FDD (SC-FDMA, 100% RB, 3 MHz, CABC) X 2.09 69.36 16.32 0.00 150.0 ±9.6 % 10143-CAC LTE-FDD (SC-FDMA, 100% RB, 3 MHz, CABC) X 2.09 69.36 16.32 0.00 150.0 ±9.6 % 10143-CAC LTE-FDD (SC-FDMA, 100% RB, 3 MHz, CABC) X 2.61 69.75 16.40 0.00 150.0 ±9.6 % 10144-CAC LTE-FDD (SC-FDMA, 100% RB, 3 MHz, CABC) X 2.267 69.00 16.41 150.0 ±9.6 % 10144-CAC LTE-FDD (SC-FDMA, 100% RB, 3 MHz, CABC) X 2.22 67.05 14.58 0.00 150.0 ±9.6 % 10145-CAC LTE-FDD (SC-FDMA, 100% RB, 1.4 X 1.34		1 100							
CAB		LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)					0.00		± 9.6 %
10141-CAB		<u> </u>							
CAB MHz, 64-QAM) Y 3.63 68.11 16.56 150.0 10142- CAC LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK) X 2.09 69.36 16.32 0.00 150.0 ± 9.6 9 10143- CAC LTE-FDD (SC-FDMA, 100% RB, 3 MHz, CAC X 2.09 68.88 16.26 150.0 150.0 ± 9.6 9 10143- CAC LTE-FDD (SC-FDMA, 100% RB, 3 MHz, CAC X 2.61 69.75 16.40 0.00 150.0 ± 9.6 9 10144- CAC LTE-FDD (SC-FDMA, 100% RB, 3 MHz, CAC X 2.67 69.00 16.41 150.0 ± 9.6 9 10145- CAC LTE-FDD (SC-FDMA, 100% RB, 3 MHz, CAC X 2.32 67.05 14.58 0.00 150.0 ± 9.6 9 10145- CAC LTE-FDD (SC-FDMA, 100% RB, 1.4 X 1.34 66.28 12.62 0.00 150.0 ± 9.6 9 10146- CAC LTE-FDD (SC-FDMA, 100% RB, 1.4 X 1.54 68.26 13.94 150.0 ± 9.6 9 10147- CAC LTE-FDD (SC-FDMA, 100% RB, 1.4 X									
Tensor T							0.00		± 9.6 %
10142- CAC QPSK CAC Q									
CAC QPSK) Y 2.25 70.57 17.05 150.0 IO143- CAC 16-QAM) Y 2.72 70.39 16.89 150.0 Z 2.67 69.00 16.41 150.0 IO144- CAC 64-QAM) Y 2.72 70.39 16.89 150.0 Z 2.67 69.00 16.41 150.0 IO144- CAC 64-QAM) Y 2.43 67.76 15.14 150.0 Y 2.43 67.76 15.14 150.0 IO145- CAC MHz, QPSK) Y 1.54 68.26 13.94 150.0 IO146- CAC MHz, 16-QAM) Y 2.05 67.15 12.43 150.0 IO147- CAC MHz, 64-QAM) Y 2.05 67.15 12.43 150.0 IO147- CAC MHz, 64-QAM) Y 2.05 68.27 13.85 150.0 IO1047- CAC MHz, 64-QAM) Y 2.50 69.63 13.73 150.0									
Te-fdd T							0.00		± 9.6 %
10143- LTE-FDD (SC-FDMA, 100% RB, 3 MHz, X 2.61 69.75 16.40 0.00 150.0 ± 9.6 % 16-QAM) Y 2.72 70.39 16.89 150.0 150.0			-						
CAC 16-QAM) Y 2.72 70.39 16.89 150.0 Z 2.67 69.00 16.41 150.0 10144- CAC 64-QAM) Y 2.43 67.76 15.14 150.0 Z 2.46 66.90 14.91 150.0 10145- CAC MHz, 16-QAM) Y 1.54 68.26 13.94 150.0 Z 1.57 67.41 14.13 150.0 LTE-FDD (SC-FDMA, 100% RB, 1.4 X 1.64 64.60 10.83 0.00 150.0 ± 9.6 % Y 2.05 67.15 12.43 150.0 Y 2.06 68.27 13.85 150.0 LTE-FDD (SC-FDMA, 100% RB, 1.4 X 1.86 66.07 11.71 0.00 150.0 ± 9.6 % LTE-FDD (SC-FDMA, 100% RB, 1.4 X 1.86 66.07 11.71 0.00 150.0 ± 9.6 % LTE-FDD (SC-FDMA, 100% RB, 1.4 X 1.86 66.07 11.71 0.00 150.0 ± 9.6 % LTE-FDD (SC-FDMA, 100% RB, 1.4 X 1.86 66.07 11.71 0.00 150.0 ± 9.6 % LTE-FDD (SC-FDMA, 100% RB, 1.4 X 1.86 66.07 11.71 0.00 150.0 ± 9.6 % LTE-FDD (SC-FDMA, 100% RB, 1.4 X 1.86 66.07 11.71 0.00 150.0 ± 9.6 % LTE-FDD (SC-FDMA, 100% RB, 1.4 X 1.86 66.07 11.71 0.00 150.0 ± 9.6 % LTE-FDD (SC-FDMA, 100% RB, 1.4 X 1.86 66.07 11.71 0.00 150.0 ± 9.6 %	10110								
Temperature						,	0.00		± 9.6 %
10144- CAC 64-QAM) Y 2.43 67.76 15.14 150.0 Z 2.46 66.90 14.91 150.0 10145- CAC MHz, QPSK) Y 1.54 68.26 13.94 150.0 Z 1.57 67.41 14.13 150.0 LTE-FDD (SC-FDMA, 100% RB, 1.4 X 1.64 64.60 10.83 0.00 150.0 ± 9.6 % CAC MHz, 16-QAM) Y 2.05 67.15 12.43 150.0 LTE-FDD (SC-FDMA, 100% RB, 1.4 X 1.86 66.07 11.71 0.00 150.0 ± 9.6 % CAC MHz, 64-QAM) Y 2.50 69.63 13.73 150.0									
Y 2.43 67.76 15.14 150.0 Z 2.46 66.90 14.91 150.0 10145- LTE-FDD (SC-FDMA, 100% RB, 1.4 X 1.34 66.28 12.62 0.00 150.0 ±9.6 9 MHz, QPSK) Y 1.54 68.26 13.94 150.0 Z 1.57 67.41 14.13 150.0 10146- LTE-FDD (SC-FDMA, 100% RB, 1.4 X 1.64 64.60 10.83 0.00 150.0 ±9.6 9 CAC MHz, 16-QAM) Y 2.05 67.15 12.43 150.0 Z 2.36 68.27 13.85 150.0 10147- LTE-FDD (SC-FDMA, 100% RB, 1.4 X 1.86 66.07 11.71 0.00 150.0 ±9.6 9 MHz, 64-QAM) Y 2.50 69.63 13.73 150.0							0.00		± 9.6 %
Z 2.46 66.90 14.91 150.0 10145- LTE-FDD (SC-FDMA, 100% RB, 1.4 X 1.34 66.28 12.62 0.00 150.0 ±9.6 % MHz, QPSK) Y 1.54 68.26 13.94 150.0 Z 1.57 67.41 14.13 150.0 10146- LTE-FDD (SC-FDMA, 100% RB, 1.4 X 1.64 64.60 10.83 0.00 150.0 ±9.6 % CAC MHz, 16-QAM) Y 2.05 67.15 12.43 150.0 Z 2.36 68.27 13.85 150.0 10147- LTE-FDD (SC-FDMA, 100% RB, 1.4 X 1.86 66.07 11.71 0.00 150.0 ±9.6 % CAC MHz, 64-QAM) Y 2.50 69.63 13.73 150.0	CAC	04-QAM)	,	0.40	07.70	15 44		450.0	
10145- CAC MHz, QPSK) Y 1.54 68.26 13.94 150.0 Z 1.57 67.41 14.13 150.0 10146- LTE-FDD (SC-FDMA, 100% RB, 1.4 X 1.64 64.60 10.83 0.00 150.0 ± 9.6 % CAC MHz, 16-QAM) Y 2.05 67.15 12.43 150.0 Z 2.36 68.27 13.85 150.0 10147- LTE-FDD (SC-FDMA, 100% RB, 1.4 X 1.86 66.07 11.71 0.00 150.0 ± 9.6 % CAC MHz, 64-QAM) Y 2.50 69.63 13.73 150.0									
CAC MHz, QPSk) Y 1.54 68.26 13.94 150.0 Z 1.57 67.41 14.13 150.0 10146- LTE-FDD (SC-FDMA, 100% RB, 1.4 X 1.64 64.60 10.83 0.00 150.0 ±9.6 % CAC MHz, 16-QAM) Y 2.05 67.15 12.43 150.0 Z 2.36 68.27 13.85 150.0 10147- LTE-FDD (SC-FDMA, 100% RB, 1.4 X 1.86 66.07 11.71 0.00 150.0 ±9.6 % CAC MHz, 64-QAM) Y 2.50 69.63 13.73 150.0	10145	LITE EDD (SC EDMA 4000 DD 4.4					0.00		TU60/
Z 1.57 67.41 14.13 150.0							0.00		I 9.0 %
10146- CAC MHz, 16-QAM) Y 2.05 67.15 12.43 150.0 Y 2.36 68.27 13.85 150.0 10147- LTE-FDD (SC-FDMA, 100% RB, 1.4 X 1.86 66.07 11.71 0.00 150.0 ± 9.6 % MHz, 64-QAM) Y 2.50 69.63 13.73 150.0									
Y 2.05 67.15 12.43 150.0 Z 2.36 68.27 13.85 150.0 10147- LTE-FDD (SC-FDMA, 100% RB, 1.4 X 1.86 66.07 11.71 0.00 150.0 ±9.6 % CAC MHz, 64-QAM) Y 2.50 69.63 13.73 150.0							0.00		± 9.6 %
Z 2.36 68.27 13.85 150.0 10147- LTE-FDD (SC-FDMA, 100% RB, 1.4 X 1.86 66.07 11.71 0.00 150.0 ± 9.6 % CAC MHz, 64-QAM) Y 2.50 69.63 13.73 150.0	<u> </u>	MILL, 10-QENT)	╁	2.05	67 15	12.43		150.0	
10147- LTE-FDD (SC-FDMA, 100% RB, 1.4 X 1.86 66.07 11.71 0.00 150.0 ± 9.6 % CAC MHz, 64-QAM) Y 2.50 69.63 13.73 150.0									
Y 2.50 69.63 13.73 150.0							0.00		± 9.6 %
	OAO	IVII IZ, UT-G(AIVI)	 	2.50	60 63	13 73		150.0	
		+	Z	2.82	70.78	15.73		150.0	

10149- CAB	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	Х	2.97	67.70	16.15	0.00	150.0	± 9.6 %
		Y	3.04	68.16	16.47		150.0	
		Z	3.08	67.58	16.13	<u> </u>	150.0	
10150- CAB	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	Х	3.09	67.68	16.20	0.00	150.0	± 9.6 %
		Υ	3.16	68.07	16.48		150.0	
4		Z	3.20	67.52	16.17		150.0	
10151- CAB	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	Х	5.99	75.51	20.02	3.98	65.0	± 9.6 %
		Y	6.36	76.99	20.90		65.0	
10150		Z	6.09	75.53	20.32		65.0	
10152- CAB	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	X	5.54	72.18	19.10	3.98	65.0	±9.6%
<u> </u>		Υ	5.71	73.12	19.80		65.0	
10170	122 222 (00 22) (12 22)	Z	5.69	72.36	19.51		65.0	
10153- CAB	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	X	5.91	73.18	19.92	3.98	65.0	± 9.6 %
		Y	6.05	73.98	20.54		65.0	1
10151	LITE EDD (OO ED) II - COV - CO	Z	6.01	73.15	20.24		65.0	
10154- CAC	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	X	2.36	69.70	16.86	0.00	150.0	± 9.6 %
		Υ	2.51	70.74	17.47		150.0	
404==	LITE EDD (OO ED) (OO ED)	Z	2.47	69.42	16.75		150.0	
10155- CAC	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	Х	2.70	68.72	16.55	0.00	150.0	± 9.6 %
		Υ	2.78	69.17	16.90		150.0	
40450	1.75 FDD (0.0 FD) (4. F0) (FD F1) (FD F1)	Z	2.78	68.20	16.45		150.0	
10156- CAC	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	X	1.96	69.66	16.22	0.00	150.0	± 9.6 %
		Υ	2.14	71.11	17.09		150.0	
		Z	2.06	69.17	16.26		150.0	
10157- CAC	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	X	2.18	67.85	14.74	0.00	150.0	± 9.6 %
		Υ	2.32	68.78	15.42		150.0	
		Z	2.31	67.60	15.12		150.0	
10158- CAC	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	X	2.87	68.91	16.71	0.00	150.0	± 9.6 %
		Υ	2.94	69.28	17.02		150.0	
		Z	2,94	68.35	16.60		150.0	
10159- CAC	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	Х	2,31	68.41	15.07	0.00	150.0	± 9.6 %
		Υ	2.45	69.32	15.74		150.0	
40400	LITE EDD (OO EDAN) EAST EE TE	Z	2.44	68.13	15.45		150.0	
10160- CAB	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	X	2.82	69.05	16.65	0.00	150.0	± 9.6 %
		Y	2.93	69.73	17.07		150.0	
40404	LITE FOR (OO FRAME FOR THE STATE OF THE STAT	Z	2.91	68.73	16.50		150.0	
10161- CAB	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	Х	2.99	67.64	16.15	0.00	150.0	± 9.6 %
		Y	3.06	68.03	16.44		150.0	
10155	LITE FOR (OR EDA)	Z	3.09	67.43	16.12	ļ	150.0	
10162- CAB	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	X	3.10	67.78	16.25	0.00	150.0	± 9.6 %
_		Υ	3.17	68.13	16.52		150.0	
1010-		Z	3.20	67.48	16.19	<u> </u>	150.0	
10166- CAC	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	×	3.36	68.36	18.51	3.01	150.0	± 9.6 %
		Y	3.53	69.30	19.09		150.0	
40407	LITE EDD (OO EDLIA FOO DE LA COM	Z	3.62	68.52	18.65		150.0	
10167- CAC	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	X	3.90	70.55	18.73	3.01	150.0	± 9.6 %
		Y	4.29	72.16	19.56		150.0	
	<u> </u>	Z	4.34	70.90	18.97		150.0	

Times	72.84 20.1	14 3.01	150.0	± 9.6 %
D10169- LTE-FDD (SC-FDMA, 1 RB, 20 MHz, X 2.65 CAB	74.39 20.8	38	150.0	
10169- CAB	72.87 20.2		150.0	
Total	67.13 17.9		150.0	± 9.6 %
10170-	68.82 18.9		150.0	
CAB 16-QAM) Y 3.91 10171- AAB 64-QAM) Z 4.03 10172- CAB QPSK) Y 3.20 10172- CAB QPSK) Y 7.76 10173- CAB 16-QAM) Y 3.20 10173- CAB 16-QAM) Y 7.76 10173- CAB 16-QAM) Y 11.56 10174- CAB 16-QAM) Y 11.56 10174- CAB 16-QAM) Y 9.30 10175- CAC QPSK) Y 9.30 10175- CAC QPSK) Y 9.30 10176- CAC QPSK) Y 2.84 10177- CAC QPSK) Y 3.91 10177- CAE QPSK) Y 3.91 10177- CAE QPSK) Y 3.91 10178- CAC QAM) Y 3.91 10178- CAC QAM) Y 3.91 10179- CAC QAM) Y 3.87 2 3.01 10179- CAC QAM) Y 3.52 10180- CAC QAM) Y 2.86 10180- CAC QAM) Y 3.87 2 3.63 10180- CAC QAM) Y 3.52 2 3.63 10180- CAC QAM) Y 2.85 10181- CAB QPSK) Y 2.85 10181- CAB QPSK) Y 2.85 10181- CAB QPSK) Y 2.85 10182- CAB QPSK) Y 2.85 10182- CAB QPSK) Y 2.85 10182- CAB LTE-FDD (SC-FDMA, 1 RB, 15 MHz, X 2.64 10181- CAB QPSK) Y 2.85 10182- CAB LTE-FDD (SC-FDMA, 1 RB, 15 MHz, X 2.64 10182- CAB LTE-FDD (SC-FDMA, 1 RB, 15 MHz, X 3.30 10182- CAB LTE-FDD (SC-FDMA, 1 RB, 15 MHz, X 3.30 10182- CAB LTE-FDD (SC-FDMA, 1 RB, 15 MHz, X 3.30 10182- CAB LTE-FDD (SC-FDMA, 1 RB, 15 MHz, X 3.30 10182- CAB LTE-FDD (SC-FDMA, 1 RB, 15 MHz, X 3.30 10182- CAB LTE-FDD (SC-FDMA, 1 RB, 15 MHz, X 3.30 10182- CAB LTE-FDD (SC-FDMA, 1 RB, 15 MHz, X 3.30 10182- CAB LTE-FDD (SC-FDMA, 1 RB, 15 MHz, X 3.30 10182- CAB LTE-FDD (SC-FDMA, 1 RB, 15 MHz, X 3.30 10182- CAB LTE-FDD (SC-FDMA, 1 RB, 15 MHz, X 3.30 10182- CAB LTE-FDD (SC-FDMA, 1 RB, 15 MHz, X 3.30 10182- CAB LTE-FDD (SC-FDMA, 1 RB, 15 MHz, X 3.30 10182- CAB LTE-FDD (SC-FDMA, 1 RB, 15 MHz, X 3.30 10182- CAB LTE-FDD (SC-FDMA, 1 RB, 15 MHz, X 3.30 10182- CAB LTE-FDD (SC-FDMA, 1 RB, 15 MHz, X 3.30 10183- CAB LTE-FDD (SC-FDMA, 1 RB, 15 MHz, X 3.30 10183- CAB LTE-FDD (SC-FDMA, 1 RB, 15 MHz, X 3.30 10184- CAB LTE-FDD (SC-FDMA, 1 RB, 15 MHz, X 3.30 10184- CAB LTE-FDD (SC-FDMA, 1 RB, 15 MHz, X 3.30 10184- CAB LTE-FDD (SC-FDMA, 1 RB	68.58 18.6	38	150.0	
Total	71.93 20.0		150.0	± 9.6 %
10171- AAB 64-QAM) LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 7 3.20 7 3.20 7 3.32	74.96 21.4		150.0	
AAB 64-QAM) Y 3.20	74.00 20.8		150.0	
10172-	68.15 17.2		150.0	± 9.6 %
10172- LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	70.75 18.5		150.0	
CAB QPSK) 10173- LTE-TDD (SC-FDMA, 1 RB, 20 MHz,	69.91 18.0		150.0	
10173-	78.31 22.7		65.0	± 9.6 %
10173- LTE-TDD (SC-FDMA, 1 RB, 20 MHz, X 6.69 8 16-QAM)	88.95 27.1		65.0	
CAB 16-QAM) Y 11.56 S Z 9.46 8 10174- CAB 64-QAM) Y 9.30 S Z 7.14 S 10175- CAC QPSK) LTE-FDD (SC-FDMA, 1 RB, 10 MHz, X 2.62 G QPSK) Y 2.84 G Z 2.98 G Z 2.98 G S 2.98 G S 2.98 G S 3.91 S S	81.91 24.4		65.0	1000
10174- CAB 64-QAM)	82.24 22.4		65.0	± 9.6 %
10174- CAB 64-QAM) Y 9.30 Z 7.14 10175- CAC QPSK) LTE-FDD (SC-FDMA, 1 RB, 10 MHz, X 2.62 QPSK) Y 2.84 CAC QPSK) Y 2.84 CAC 16-QAM) Y 3.91 CAC 16-QAM) Y 3.91 Z 4.04 10177- CAE QPSK) Y 2.86 CAE QPSK) Y 2.86 CAE QPSK) Y 3.91 Z 4.04 10177- CAE QPSK) Y 2.86 CAE QPSK) Y 2.86 CAE QPSK) Y 3.91 Z 4.04 10177- CAE QPSK) Y 3.91 Z 4.04 10177- CAE QPSK) Y 3.87 Z 3.01 CAC 16-QAM) Y 3.87 CAC QAM) Y 3.87 CAC QAM) Y 3.52 CAC GA-QAM) Y 3.52 CAC QAM) Y 3.64 CAC QAM) Y 3.64 CAC QAM) Y 3.19 CAC QAM) Y 3.19 CAC QAB QPSK) Y 2.85 CAC QAB QPSK) Y 2.85 CAC QAB QPSK) Y 3.86	92.23 26.2		65.0	
CAB 64-QAM) CAB CAB	87.18 24.6		65.0	
10175- CAC QPSK) LTE-FDD (SC-FDMA, 1 RB, 10 MHz, Z 2.62 (QPSK) Y 2.84 (Z 2.98 (Z 2.9	77.25 20.1		65.0	± 9.6 %
10175- CAC QPSK) Y 2.84 Z 2.98 (10176- CAC 16-QAM) 10177- CAE QPSK) Y 3.91 Z 4.04 (10177- CAE QPSK) Y 2.86 (10177- CAE QPSK) Y 2.86 (10178- CAC QAM) Y 3.87 Z 3.01 (10178- CAC QAM) Y 3.87 Z 3.01 (10179- CAC GA-QAM) Y 3.87 Z 3.98 (10179- CAC GA-QAM) Y 3.52 (10180- CAC QAM) Y 3.52 (10180- CAC QAM) Y 3.52 (10181- CAC QAM) Y 3.19 (10181- CAB QPSK) Y 2.86 (10181- CAB QPSK) Y 3.87 (10182- CAB QPSK) Y 2.85 (10182- CAB QPSK) Y 2.85 (10182- CAB QAM) Y 3.86	87.37 24.0		65.0	
CAC QPSK) Y 2.84 6	81.53 22.1		65.0	. 0 0 0/
Terpo (SC-FDMA, 1 RB, 10 MHz, 10 MHz, 16-QAM) Terpo (SC-FDMA, 1 RB, 10 MHz, 10 MHz	66.84 17.7		150.0	± 9.6 %
10176-	68.52 18.7		150.0	
CAC 16-QAM) Y 3.91 Z 4.04 10177- CAE QPSK) Y 2.86 QPSK) Y 2.86 Z 3.01 6 10178- CAC QAM) Y 3.87 Z 3.98 10179- CAC G4-QAM) LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16- CAC G4-QAM) Y 3.52 Z 3.63 10180- CAC QAM) Y 3.52 Z 3.63 10181- CAC QAM) Y 3.19 Z 3.31 10181- CAB QPSK) Y 2.85 Z 3.00 Y 3.19 Z 3.31 CAB QPSK) Y 3.86	68.24 18.4		150.0	
TE-FDD (SC-FDMA, 1 RB, 5 MHz,	71.95 20.0		150.0	± 9.6 %
10177-	74.99 21.4		150.0	
CAE QPSK) Y 2.86 (2 3.01 (3.01) 10178- LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16- X 3.30 (3.02) QAM) Y 3.87 (2 3.98 (3.02) LTE-FDD (SC-FDMA, 1 RB, 10 MHz, X 3.02 (3.02) CAC 64-QAM) Y 3.52 (3.63 (3.02) Z 3.63 (3.02) T0180- LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 64- X 2.77 (3.02) CAC QAM) Y 3.19 (3.02) T0181- LTE-FDD (SC-FDMA, 1 RB, 15 MHz, X 2.64 (3.02) QPSK) Y 2.85 (3.00) T0182- LTE-FDD (SC-FDMA, 1 RB, 15 MHz, X 3.30 (3.02) LTE-FDD (SC-FDMA, 1 RB, 15 MHz, X 3.30 (3.02) T0182- LTE-FDD (SC-FDMA, 1 RB, 15 MHz, X 3.30 (3.02) T0182- LTE-FDD (SC-FDMA, 1 RB, 15 MHz, X 3.30 (3.02) T0182- LTE-FDD (SC-FDMA, 1 RB, 15 MHz, X 3.30 (3.02) T0182- LTE-FDD (SC-FDMA, 1 RB, 15 MHz, X 3.30 (3.02) T0182- LTE-FDD (SC-FDMA, 1 RB, 15 MHz, X 3.30 (3.02) T0183- LTE-FDD (SC-FDMA, 1 RB, 15 MHz, X 3.30 (3.02) T0184- LTE-FDD (SC-FDMA, 1 RB, 15 MHz, X 3.30 (3.02) T0185- LTE-FDD (SC-FDMA, 1 RB, 15 MHz, X 3.30 (3.02) T0186- LTE-FDD (SC-FDMA, 1 RB, 15 MHz, X 3.30 (3.02) T0187- LTE-FDD (SC-FDMA, 1 RB, 15 MHz, X 3.30 (3.02) T0188- LTE-FDD (SC-FDMA, 1 RB, 15 MHz, X 3.30 (3.02) T0188- LTE-FDD (SC-FDMA, 1 RB, 15 MHz, X 3.30 (3.02) T0188- LTE-FDD (SC-FDMA, 1 RB, 15 MHz, X 3.30 (3.02) T0188- LTE-FDD (SC-FDMA, 1 RB, 15 MHz, X 3.30 (3.02)	74.03 20.8		150.0	
Te-fdd (SC-fdma, 1 RB, 5 MHz, 16-	66.99 17.8		150.0	± 9.6 %
10178-	68.68 18.8		150.0	
CAC QAM) Y 3.87 10179- CAC 64-QAM) Y 3.52 CAC 64-QAM) Y 3.52 Z 3.63 10180- CAC QAM) LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 64- CAC QAM) Y 3.19 Z 3.31 10181- CAB QPSK) Y 2.85 Z 3.00 CAB LTE-FDD (SC-FDMA, 1 RB, 15 MHz, X 2.64 CAB QPSK) Y 3.86 Y 3.86	68.43 18.5		150.0	
TE-FDD (SC-FDMA, 1 RB, 10 MHz,	71.73 19.9		150.0	± 9.6 %
10179-	74.74 21.3		150.0	
CAC 64-QAM) Y 3.52 Z 3.63 10180- CAC QAM) Y 3.19 Y 3.19 Z 3.31 10181- CAB QPSK) Y 2.85 CAB LTE-FDD (SC-FDMA, 1 RB, 15 MHz, X 2.64 CAB QPSK) Y 2.85 Z 3.00 CAB LTE-FDD (SC-FDMA, 1 RB, 15 MHz, X 3.30 TO182- CAB 16-QAM) Y 3.86	73.72 20.7		150.0	
Telephone Tele	69.89 18.5		150.0	± 9.6 %
10180- CAC QAM) Y 3.19 Z 3.31 10181- CAB QPSK) Y 2.85 Y 2.85 Z 3.00 10182- CAB 16-QAM) Y 3.19 Z 3.31 C 3.31 C 3.31 C 3.31 C 4.31 C 5.31 C 6.31 C 7.31 C 7.31 C 7.31 C 7.31 C 8.31 C 8.31 C 8.31 C 9.31 C 9.31 C 9.31 C 9.31 C 9.31 C 10182- CAB 16-QAM) Y 3.86	72.74 19.8		150.0	
CAC QAM) Y 3.19 Z 3.31 10181- CAB QPSK) Y 2.85 Y 2.85 Z 3.00 10182- CAB LTE-FDD (SC-FDMA, 1 RB, 15 MHz, X 3.30 LTE-FDD (SC-FDMA, 1 RB, 15 MHz, X 3.30 Y 3.86	71.76 19.3		150.0	1000
Z 3.31 0 10181- LTE-FDD (SC-FDMA, 1 RB, 15 MHz, X 2.64 0 0 0 0 0 0 0 0 0	68.08 17.2		150.0	± 9.6 %
10181- LTE-FDD (SC-FDMA, 1 RB, 15 MHz,	70.67 18.5		150.0	
CAB QPSK) Y 2.85 0 10182- CAB LTE-FDD (SC-FDMA, 1 RB, 15 MHz, CAB) X 3.30 X 16-QAM) Y 3.86 X	69.81 18.0		150.0	1000
Z 3.00 0 10182- CAB 16-QAM) X 3.30 3 Y 3.86 3	66.97 17.8		150.0	± 9.6 %
10182- LTE-FDD (SC-FDMA, 1 RB, 15 MHz, X 3.30 16-QAM) Y 3.86	68.66 18.7		150.0	
Y 3.86	68.41 18.5 71.71 19.9		150.0 150.0	± 9.6 %
	74.72 21.2	20	150.0	
	73.69 20.7		150.0	
	68.06 17.2		150.0	± 9.6 %
	70.65 18.5	52	150.0	
	69.79 18.0		150.0	

10184- CAC	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	Х	2.65	67.01	17.86	3.01	150.0	± 9.6 %
		Υ	2.87	68.70	18.82		150.0	
		Ż	3.01	68.45	18.54		150.0	
10185- CAC	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)	Х	3.31	71.78	19.96	3.01	150.0	± 9.6 %
		Υ	3.88	74.79	21.33		150.0	
		Z	3.99	73.77	20.74		150.0	
10186- AAC	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)	×	2.78	68.12	17.26	3.01	150.0	± 9.6 %
		_	3.20	70.72	18.55		150.0	
	<u> </u>	Z	3.32	69.86	18.04		150.0	
10187- CAC	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	X	2.65	67.06	17.91	3.01	150.0	± 9.6 %
		Υ	2.87	68.75	18.88		150.0	
10100	1 TT FOR (00 FOLIA 4 FOR 4 4 A W	Z	3.02	68.48	18.58		150.0	
10188- CAC	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	X	3.41	72.42	20.36	3.01	150.0	± 9.6 %
		Ý	4.01	75.49	21.72		150.0	
40400	LIFE FDD (OO FDLIA 4 FD 4 4 FD	Z	4.14	74.52	21,17		150.0	
10189- AAC	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	Х	2.83	68.50	17.53	3.01	150.0	± 9.6 %
		Y	3.27	71.16	18.84		150.0	
10100	1555 000 (4 (UT))	Z	3.39	70.29	18.33		150.0	
10193- CAB	IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK)	X	4.57	66.69	16.29	0.00	150.0	± 9.6 %
		Y	4.60	66.79	16.40		150.0	
40404	JEEE 000 445 (UT O 5 5 5 11 00 14)	Z	4.69	66.53	16.28		150.0	
10194- CAB	IEEE 802.11n (HT Greenfield, 39 Mbps, 16-QAM)	Х	4.74	67.01	16.41	0.00	150.0	± 9.6 %
	<u> </u>	Υ	4.78	67.12	16.52		150.0	
		Z	4.88	66.90	16.40		150.0	
10195- CAB	IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM)	Х	4.78 	67.04	16.43	0.00	150.0	± 9.6 %
		Y	4.82	67.14	16.54		150.0	
		Z	4.93	66.91	16.40		150.0	
10196- CAB	IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK)	Х	4.57	66.76	16.31	0.00	150.0	± 9.6 %
		Υ	4.61	66.86	16.43		150.0	
_		Z	4.71	66.63	16.32		150.0	
10197- CAB	IEEE 802.11n (HT Mixed, 39 Mbps, 16-QAM)	X	4.75	67.03	16.42	0.00	150.0	± 9.6 %
		Υ	4.80	67.14	16.54		150.0	_
		Z	4.90	66.92	16.41		150.0	
10198- CAB	IEEE 802.11n (HT Mixed, 65 Mbps, 64-QAM)	×	4.78	67.05	16.44	0.00	150.0	± 9.6 %
		Y	4.83	67.16	16.55		150.0	<u> </u>
40040	IEEE 000 44- (UT) 1 - 0 - 1	Z	4.93	66.92	16.41		150.0	
10219- CAB	IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK)	×	4.52 	66.77	16.27	0.00	150.0	± 9.6 %
	<u> </u>	Y	4.56	66.88	16.40		150.0	<u> </u>
40000	1555 000 44- 71744 1 10 0 1 11	Z	4.66	66.64	16.28		150.0	
10220- CAB	IEEE 802.11n (HT Mixed, 43.3 Mbps, 16-QAM)	X	4.75	67.00	16.41	0.00	150.0	± 9.6 %
	 	Y	4.79	67.11	16.53		150.0	
10221-	IEEE 802.11n (HT Mixed, 72.2 Mbps, 64-	Z	4.90 4.79	66.91 66.98	16.40 16.42	0.00	150.0 150.0	± 9.6 %
CAB	QAM)	,	4.00	07.00	40.50		4500	
		Y	4.83	67.08	16.53		150.0	
10222	JEEE 902 11n /UT Missay 45 Mb	Z	4.94	66.86	16.40	0.00	150.0	
10222- CAB	IEEE 802.11n (HT Mixed, 15 Mbps, BPSK)	X	5.12	67.14	16.52	0.00	150.0	± 9.6 %
	-	Y	5.15	67.26	16.62		150.0	
	<u> </u>	Z	5.25	67.15	16.53		150.0	<u></u>

10223- CAB	IEEE 802.11n (HT Mixed, 90 Mbps, 16-QAM)	Х	5.42	67.35	16.64	0.00	150.0	± 9.6 %
		Υ	5.46	67.44	16.73		150.0	<u> </u>
		Ż	5.63	67.50	16.73		150.0	
10224- CAB	IEEE 802.11n (HT Mixed, 150 Mbps, 64-QAM)	X	5.16	67.26	16.73	0.00	150.0	± 9.6 %
		Y	5.20	67.37	16.61		150.0	
		Z	5.30	67.25	16.51		150.0	
10225- CAB	UMTS-FDD (HSPA+)	Х	2.85	66.34	15.56	0.00	150.0	± 9.6 %
		Υ	2.90	66.62	15.85		150.0	
		Z	2.95	66.07	15.65		150.0	
10226- CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	X	7.03	83.16	22.84	6.02	65.0	± 9.6 %
		Υ	12.37	93.52	26.70		65.0	
		Z	9.98	88.21	25.07		65.0	
10227- CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	Х	6.67	81.24	21.58	6.02	65.0	± 9.6 %
		Υ	10.92	89.92	24.91		65.0	
		Ζ	9.08	85.42	23.57		65.0	
10228- CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	Х	5.82	82.70	24,42	6.02	65.0	± 9.6 %
		Υ	8.66	91.29	28.01		65.0	
		Z	7.51	86.59	26.22		65.0	
10229- CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)	Х	6.74	82.34	22.46	6.02	65.0	± 9.6 %
		Y	11.64	92.33	26.24		65.0	
		Z	9.52	87.27	24.66	_	65.0	
10230- CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)	Х	6.38	80.48	21.23	6.02	65.0	± 9.6 %
		Y	10.29	88.87	24.49		65.0	_
		Z	8.67	84.58	23.21		65.0	
10231- CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	Х	5.61	81.97	24.07	6.02	65.0	± 9.6 %
-	,	Y	8.28	90.36	27.61		65.0	
		Z	7.23	85.81	25.86		65.0	
10232- CAB	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)	X	6.73	82.32	22.45	6.02	65.0	± 9.6 %
		Υ	11.62	92.32	26.23		65.0	
<u> </u>		Z	9.51	87.25	24.65		65.0	
10233- CAB	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)	Х	6.37	80.46	21.22	6.02	65.0	± 9.6 %
		Y	10.27	88.86	24.48		65.0	
		Z	8.66	84.57	23.20		65.0	
10234- CAB	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	Х	5.44	81.28	23.70	6.02	65.0	± 9.6 %
		Υ	7.95	89.46	27.19		65.0	
		Ζ	6.99	85.05	25.48		65.0	
10235- CAB	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	Х	6.73	82.33	22.46	6.02	65.0	± 9.6 %
		Υ	11.64	92.36	26.25		65.0	
		Ζ	9.51	87.27	24.66		65.0	
10236- CAB	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	Х	6.42	80.55	21.25	6.02	65.0	± 9.6 %
		Υ	10.39	89.01	24.53		65.0	
		Ζ	8.73	84.68	23.23		65.0	
10237- CAB	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	Х	5.61	82.00	24.08	6.02	65.0	± 9.6 %
		Υ	8.30	90.45	27.64		65.0	
		Ζ	7.24	85.86	25.88		65.0	
10238- CAB	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	Х	6.71	82.29	22.44	6.02	65.0	± 9.6 %
		Υ	11.60	92.30	26.22		65.0	
	1	_ ' '	<u> </u>	2.00	20.22	<u> </u>	00.0	

10239- CAB	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	Х	6.35	80.43	21.21	6.02	65.0	± 9.6 %
<u> </u>	V 30 mm	Y	10.24	88.83	24.48	· · · · · ·	65.0	
	-	Z	8.64	84.54	23.19	 	65.0	
10240- CAB	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	X	5.60	81.96	24.07	6.02	65.0	± 9.6 %
		Υ	8.27	90.39	27.62		65.0	
		Ż	7.22	85.81	25.86		65.0	
10241- CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	X	6.85	77.04	23.11	6.98	65.0	± 9.6 %
	10 30 111)	Y	7.49	79.26	24.40		65.0	
		ż	7.25	77.10	23.54		65.0	
10242- CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	X	6.14	74.82	22.06	6.98	65.0	± 9.6 %
		Υ	7.20	78.43	23.97		65.0	<u> </u>
		Ż	6.54	74.89	22.49		65.0	
10243- CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	X	5.23	72.34	21.79	6.98	65.0	± 9.6 %
		Y	5.93	75.45	23.61		65.0	· · · ·
		Z	5.51	72.34	22.13	<u> </u>	65.0	
10244- CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	Х	4.40	70.43	15.58	3.98	65.0	± 9.6 %
		Υ	5.04	72.95	17.16		65.0	
		Z	5.35	73.61	18.17		65.0	
10245- CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	X	4.37	70.09	15.38	3.98	65.0	± 9.6 %
		Y	4.97	72.51	16.92		65.0	
		Z	5.33	73.32	18.00		65.0	
10246- CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	Х	4.30	73.38	17.22	3.98	65.0	± 9.6 %
		Υ	5.07	76.58	19.00		65.0	_
		Z	5.01	76.04	19.34		65.0	
10247- CAB	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	X	4.52	71.33	17.06	3.98	65.0	± 9.6 %
		Υ	4.81	72.85	18.15		65.0	
		Z	4.88	72.58	18.50		65.0	
10248- CAB	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	×	4.56	70.99	16.90	3.98	65.0	± 9.6 %
	<u> </u>	Y	4.85	72.43	17.96		65.0	
		Z	4.96	72.25	18.34		65.0	
10249- CAB	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	Х	5.28	76.52	19.41	3.98	65.0	± 9.6 %
		Υ	6.13	79.64	21.06		65.0	
		Z	5.67	77.77	20.67		65.0	
10250- CAB	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	X	5.47	74.06	19.88	3.98	65.0	± 9.6 %
		Y	5.68	75.16	20.68		65.0	
	LTE TOP (OO EDIA) 500 DD (OO EDIA)	Z	5.59	74.19	20.44		65.0	
10251- CAB	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	X	5.28	72.27	18.76	3.98	65.0	± 9.6 %
	 	Y	5.49	73.33	19.56		65.0	
40050		Z	5.45	72.47	19.36		65.0	
10252- CAB	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	X	5.85	77.24	20.65	3.98	65.0	± 9.6 %
		Y	6.43	79.46	21.88		65.0	
10253- CAB	LTE-TDD (SC-FDMA, 50% RB, 15 MHz,	Z X	5.97 5.44	77.37 71.73	21.15 18.89	3.98	65.0 65.0	± 9.6 %
	16-QAM)	Υ	E EO	70.50	40.50		05.0	
	 	Z	5.58	72.56	19.56		65.0	
10254-	LTE-TDD (SC-FDMA, 50% RB, 15 MHz,		5.55	71.76	19.29	2 00	65.0	1.000
CAB	64-QAM)	X	5.78	72.64	19.62	3.98	65.0	± 9.6 %
		Y	5.90	73.38	20.24	'	65.0	
		_ Z	5.86	72.55	19.96		65.0	

10055	LITE TOD (CC EDNA FOO) DD 45 MIL	1 1/2	E 70	75.04	T :00 00			
10255- CAB	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	X	5.76	75.01	20.03	3.98	65.0	± 9.6 %
		Υ	6.07	76.37	20.89		65.0	
		Z	5.82	74.90	20.31		65.0	
10256- CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	X	3.47	67.17	13.03	3.98	65.0	± 9.6 %
		Y	3.94	69.35	14.53		65.0	
] Z	4.53	71.23	16.27		65.0	
10257- CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	Х	3.45	66.80	12.77	3.98	65.0	± 9.6 %
		Y	3.89	68.84	14.21		65.0	
		Z	4.52	70.83	16.01		65.0	
10258- CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	X	3.34	69.51	14.70	3.98	65.0	± 9.6 %
		Y	3.87	72.27	16.41		65.0	
		Z	4.23	73.43	17.64		65.0	
10259- CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	Х	4.89	72.37	18.09	3.98	65.0	± 9.6 %
		Y	5.16	73.74	19.08		65.0	
1====	ļ	Z	5.16	73.13	19.18		65.0	
10260- CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	X	4.94	72.20	18.03	3.98	65.0	± 9.6 %
		Y	5.20	73.52	18.99		65.0	
		Z	5.23	73.01	19.14		65.0	
10261- CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	X	5.30	76.20	19.69	3.98	65.0	± 9.6 %
		Y	5.96	78.79	21.13		65.0	
		Z	5.56	76.94	20.65		65.0	ļ <u>-</u>
10262- CAB	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	X	5.46	74.01	19.83	3.98	65.0	± 9.6 %
		Y	5.67	75.12	20.64		65.0	
		Z	5.58	74.15	20.41		65.0	
10263- CAB	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	Х	5.28	72.25	18.75	3.98	65.0	± 9.6 %
		Y	5.48	73.31	19.56		65.0	
		Z	5.44	72.46	19.36		65.0	
10264- CAB	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	X	5.80	77.07	20.56	3.98	65.0	± 9.6 %
		Y	6.38	79.29	21.79		65.0	
		Z	5.93	77.23	21.07		65.0	
10265- CAB	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	Х	5.54	72.19	19.11	3.98	65.0	± 9.6 %
		Y	5.71	73.12	19.81		65.0	
		Z	5.69	72.36	19.52		65.0	
10266- CAB	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	X	5.90	73.17	19.91	3.98	65.0	± 9.6 %
		Υ	6.05	73.96	20.53		65.0	
		Z	6.01	73.14	20.23		65.0	
10267- CAB	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	Х	5.98	75.47	20.01	3.98	65.0	± 9.6 %
		Υ	6.35	76.95	20.89		65.0	1
		Z	6.08	75.49	20.30		65.0	
10268- CAB	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	X	6.21	72.40	19.64	3.98	65.0	± 9.6 %
		Υ	6.32	73.04	20.16		65.0	
		Z	6.32	72.39	19.87		65.0	
10269- CAB	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	X	6.21	72.06	19.55	3.98	65.0	± 9.6 %
		Υ	6.30	72.64	20.05		65.0	<u> </u>
		Z	6.29	72.00	19.77		65.0	
10270- CAB	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	X	6.09	73.71	19.47	3.98	65.0	± 9.6 %
		Υ	6.28	74.60	20.08		65.0	
		Z	6.17	73.66	19.67		65.0	

10274- CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.10)	X	2.64	66.74	15.50	0.00	150.0	± 9.6 %
<u> </u>		ΙΥ	2.69	67.10	15.83		150.0	
	· · ·	Ż	2.68	66.27	15.47		150.0	
10275- CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.4)	X	1.68	68.56	16.07	0.00	150.0	± 9.6 %
		Υ	1.82	70.02	16.93		150.0	
		Z	1.71	68.06	15.90		150.0	
10277- CAA	PHS (QPSK)	Х	2,36	61.61	7.31	9.03	50.0	± 9.6 %
		Y	2.39	61.94	7.61		50.0	
 .		Z	2.65	62.95	8.78		50.0	
10278- CAA	PHS (QPSK, BW 884MHz, Rolloff 0.5)	X	3.91	68.51	13.42	9.03	50.0	± 9.6 %
		Y	4.49	70.95	14.83		50.0	<u> </u>
40070	DUO (OBO)(DIV OO (A ()) DIV (O OO)	Z	5.58	74.75	17.31		50.0	
10279- CAA	PHS (QPSK, BW 884MHz, Rolloff 0.38)	X	4.01	68.77	13.58	9.03	50.0	± 9.6 %
		ļΥ	4.63	71.27	15.02		50.0	
10000	ODLIAGOS DOL CORE E II D.	Z	5.76	75.05	17.47		50.0	
10290- AAB	CDMA2000, RC1, SO55, Full Rate	Х	1.64	70.48	14.99	0.00	150.0	± 9.6 %
	-	Υ	2.03	73.52	16.59		150.0	
40004	001440000 000 0055 5 110 1	Z	1.73	69.96	15.45		150.0	
10291- AAB	CDMA2000, RC3, SO55, Full Rate	Х	0.93	67.30	13.49	0.00	150.0	± 9.6 %
		Ϋ́	1.12	70.21	15.17		150.0	
40000	ODITIONS DOS COST II II I	Z	0.98	66.89	13.94		150.0	
10292- AAB	CDMA2000, RC3, SO32, Full Rate	Х	1.38	73.80	16.83	0.00	150.0	± 9.6 %
		Y	2.07	80.16	19.66		150.0	
		Z	1.24	71.27	16.43		150.0	
10293- AAB	CDMA2000, RC3, SO3, Full Rate	X	3.07	85.81	21.79	0.00	150.0	± 9.6 %
		Υ	6.07	96.86	25.67		150.0	
		Z	1.83	77.45	19.50		150.0	
10295- AAB	CDMA2000, RC1, SO3, 1/8th Rate 25 fr.	Х	6.96	78.18	20.42	9.03	50.0	± 9.6 %
		Y	7.83	81.11	22.06		50.0	
		Z	6.78	78.87	21.87		50.0	
10297- <u>A</u> AA	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	X	2.84	70.16	16.98	0.00	150.0	± 9.6 %
		Y	3.00	71.12	17.50		150.0	
10000		Z	2.95	69.98	16.83		150.0	
10298- AAB	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	X	1.69	68.82	14.85	0.00	150.0	± 9.6 %
		Y	1.92	70.71	16.01		150.0	
10299-	LTE-FDD (SC-FDMA, 50% RB, 3 MHz,	Z	1.84 2.19	68.81 67.55	15.45 13.30	0.00	150.0 150.0	± 9.6 %
AAB	16-QAM)	 , 	2.72	70.07	44.00		450.0	
_	-	Y	2.73	70.37	14.89	-	150.0	
10300-	LTE-FDD (SC-FDMA, 50% RB, 3 MHz,	X	2.77 1.74	69.78	15.28	0.00	150.0	+000
AAB	64-QAM)			63.95	10.77	0.00	150.0	± 9.6 %
	 	Y	2.00	65.46	11.83		150.0	
10301- AAA	IEEE 802.16e WIMAX (29:18, 5ms, 10MHz, QPSK, PUSC)	X	4.62	65.89 64.90	12.71 17.27	4.17	150.0 50.0	± 9.6 %
• •	12	Y	4.66	64.93	17.38		50.0	_
		z	4.85	64.86	17.39		50.0	
10302- AAA	IEEE 802.16e WIMAX (29:18, 5ms, 10MHz, QPSK, PUSC, 3 CTRL symbols)	X	5.11	65.59	18.02	4.96	50.0	± 9.6 %
<u></u> ,		Y	5.22	65.96	18.33		50.0	
		ż	5.33	65.52	18.12		50.0	-
	<u> </u>			00.04	10.12		0.00	

10303- AAA	IEEE 802.16e WiMAX (31:15, 5ms, 10MHz, 64QAM, PUSC)	X	4.86	65.21	17.85	4.96	50.0	± 9.6 %
	, , , , , , , , , , , , , , , , , , , ,	Υ	4.96	65.60	18.18		50.0	
		Z	5.09	65.21	18.01		50.0	
10304- AAA	IEEE 802.16e WIMAX (29:18, 5ms, 10MHz, 64QAM, PUSC)	X	4.67	65.13	17.38	4.17	50.0	± 9.6 %
		Y	4.77	65.45	17.65		50.0	
		Z	4.88	65.05	17.48		50.0	
10305- AAA	IEEE 802.16e WiMAX (31:15, 10ms, 10MHz, 64QAM, PUSC, 15 symbols)	X	4.29	66.71	19.24	6.02	35.0	± 9.6 %
		Y	4.41	67.36	19.84		35.0	
		Z	4.48	66.53	19.55		35.0	
10306- AAA	IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, 64QAM, PUSC, 18 symbols)	X	4.61	65.80	18.84	6.02	35.0	± 9.6 %
		Y	4.71	66.29	19.31		35.0	
10207		Z	4.82	65.72	19.10		35.0	
10307- AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, PUSC, 18 symbols)	X	4.52	65.99	18.83	6.02	35.0	± 9.6 %
40200	<u> </u>	Υ	4.62	66.53	19.33		35.0	
		Z	4.74	65.99	19.12		35.0	
10308- AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, PUSC)	X	4.49	66.16	18.95	6.02	35.0	± 9.6 %
		Y	4.60	66.71	19.46		35.0	
10000	1555 000 to 10 10 to 10	Z	4.69	66.08	19.21		35.0	
10309- AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, AMC 2x3, 18 symbols)	X	4.66	66.00	18.97	6.02	35.0	± 9.6 %
		Y	4.78	66.55	19.48		35.0	
10010	NEET 000 10 11111111111111111111111111111	Z	4.90	66.00	19.26		35.0	
10310- AAA	IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, QPSK, AMC 2x3, 18 symbols)	X	4.56 	65.87	18.82	6.02	35.0	± 9.6 %
		Υ	4.66	66.36	19.30		35.0	
		Z	4.77	65.77	19.06		35.0	
10311- AAA	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	X	3.21	69.42	16.61	0.00	150.0	± 9.6 %
		Υ	3.37	70.28	17.06		150.0	
		Z	3.31	69.30	16.49		150.0	
10313- AAA	iDEN 1:3	X	2.81	69.11	14.09	6.99	70.0	± 9.6 %
		Υ	3.08	70.97	15.07		70.0	
		Z	2.93	70.30	15.05		70.0	
10314- AAA	iDEN 1:6	X	3.62	73.54	18.63	10.00	30.0	± 9.6 %
		Y	4.32	76.97	20.16		30.0	
		<u> Z </u>	3.95	75.50	19.89		30.0	
10315- AAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 96pc duty cycle)	X	1.10	63.87	15.37	0.17	150.0	± 9.6 %
		Υ	1.11	64.51	15.98		150.0	
		Z	1.10	63.55	15.25		150.0	
10316- AAB	IEEE 802.11g WiFi 2.4 GHz (ERP- OFDM, 6 Mbps, 96pc duty cycle)	Х	4.59 	66.60	16.30	0.17	150.0	± 9.6 %
		Y	4.63	66.74	16.45		150.0	
10015		Z	4.73	66.50	16.32		150.0	
10317- AAB	IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle)	X	4.59	66.60	16.30	0.17	150.0	± 9.6 %
		Y	4.63	66.74	16.45		150.0	ļ
10400-	IEEE 802.11ac WiFi (20MHz, 64-QAM,	Z X	4.73 4.73	66.50 67.05	16.32 16.39	0.00	150.0 150.0	± 9.6 %
AAC	99pc duty cycle)	 	4 70	07.10	40.50		450.0	ļ
		Y	4.78	67.18	16.53		150.0	<u> </u>
40404		Z	4.89	66.94	16.38	0.00	150.0	1000
10401- AAC	IEEE 802.11ac WiFi (40MHz, 64-QAM, 99pc duty cycle)	X	5.44	67.25	16.56	0.00	150.0	± 9.6 %
	<u> </u>	Y	5.46	67.32	16.65		150.0	
	<u> </u>] <u>Z</u>	5.53	67.04	16.47		150.0	<u> </u>

Y 5.72 67.85 16.66 150.0	10402- AAC	IEEE 802.11ac WiFi (80MHz, 64-QAM, 99pc duty cycle)	X	5.69	67.53	16.56	0.00	150.0	± 9.6 %
CDMA2000 (1xEV-DO, Rev. 0)			T	5.72	67 65	16.66		150.0	
10403- CDMA2000 (1xEV-DO, Rev. 0)									
10404-		CDMA2000 (1xEV-DO, Rev. 0)					0.00		± 9.6 %
10404- CDMA2000 (1xEV-DQ, Rev. A)				2.03	73.52	16.59		115.0	
10404- CDMA2000 (1xEV-DO, Rev. A)			Z	1.73	69.96	15.45			
10406-		CDMA2000 (1xEV-DO, Rev. A)					0.00	115.0	± 9.6 %
10406- CDMA2000, RC3, SO32, SCH0, Full X 13.26 97.32 24.83 0.00 100.0 ± 9.6 AAB Rale Y 100.00 124.36 31.36 100.0 100									
AAB Rate	10100	0.5144.0000 500							
10410-	•						0.00		± 9.6 %
10410- AAA			-						
AAA	40/40	1 TE TEE (0.0 EP) (1.0 EP)							
Dig	QPSK, UL Subframe=2,3,4,7,8,9)					2.23		± 9.6 %	
10415- IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 X 1.03 63.28 15.02 0.00 150.0 ± 9.6									
AAA Mbps, 99pc duly cycle)	40465	LIEFE CON ALL INVENTOR IN TRACE							
Total							0.00		± 9.6 %
10416- IEEE 802.11q WiFi 2.4 GHz (ERP- OFDM, 6 Mbps, 99pc duty cycle)									
AAA OFDM, 6 Mbps, 99pc duty cycle) Y 4.60 66.83 16.47 150.0 10417- IEEE 802.11a/n WiFi 5 GHz (OFDM, 6 Mbps, 99pc duty cycle) Y 4.60 66.83 16.47 150.0 Y 4.60 66.83 16.47 150.0 Y 4.60 66.83 16.47 150.0 IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Long preambule) Y 4.60 66.99 16.49 150.0 Y 4.60 66.99 16.49 150.0 IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Long preambule) Y 4.60 66.99 16.49 150.0 IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Long preambule) Y 4.60 66.99 16.49 150.0 IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Short preambule) Y 4.60 66.99 16.49 150.0 IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Short preambule) Y 4.62 66.94 16.49 150.0 IEEE 802.11n (HT Greenfield, 7.2 Mbps, X 4.70 66.66 16.34 150.0 Y 4.63 66.93 16.50 150.0 IEEE 802.11n (HT Greenfield, 7.2 Mbps, X 4.70 66.66 16.34 150.0 IEEE 802.11n (HT Greenfield, 43.3 X 4.86 67.15 16.50 0.00 150.0 ± 9.6 Mbps, 16-QAM) Y 4.91 67.26 16.61 150.0 IEEE 802.11n (HT Greenfield, 72.2 X 4.78 67.10 16.47 0.00 150.0 ± 9.6 Mbps, 16-QAM) Y 4.83 67.22 16.59 150.0 IEEE 802.11n (HT Greenfield, 72.2 X 4.78 67.10 16.47 0.00 150.0 ± 9.6 Mbps, 4-QAM) Y 4.83 67.25 16.59 150.0 IEEE 802.11n (HT Greenfield, 72.2 X 4.78 67.10 16.47 0.00 150.0 ± 9.6 Mbps, 4-QAM) Y 4.84 66.98 16.45 150.0 IEEE 802.11n (HT Greenfield, 15 Mbps, X 5.39 67.41 16.65 0.00 150.0 ± 9.6 Mbps, 4-QAM) Y 5.43 67.52 16.75 16.67 0.00 150.0 ± 9.6 MAA 16-QAM) Y 5.43 67.52 16.75 16.67 0.00 150.0 ± 9.6 MAA 16-QAM) Y 5.43 67.53 16.75 150.0	101/2						L		
Total							0.00		± 9.6 %
10417- IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 X 4.57 66.73 16.35 0.00 150.0 ± 9.6		<u> </u>							
AAA Mbps, 99pc duty cycle) Y 4.60 66.83 16.47 150.0									
Total							0.00	150.0	± 9.6 %
10418-									
AAA OFDM, 6 Mbps, 99pc duty cycle, Long preambule) Y 4.60 66.99 16.49 150.0 Z 4.67 66.70 16.33 150.0 10419- AAA PEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Short preambule) Y 4.62 66.94 16.49 150.0 Z 4.70 66.66 16.34 150.0 10422- AAA BPSK) Y 4.70 66.63 16.39 0.00 150.0 ±9.6 AAA BPSK) Y 4.73 66.93 16.50 150.0 Z 4.83 66.67 16.35 150.0 IEEE 802.11n (HT Greenfield, 43.3 X 4.86 67.15 16.50 0.00 150.0 ±9.6 Mbps, 16-QAM) Y 4.91 67.26 16.61 150.0 IEEE 802.11n (HT Greenfield, 72.2 X 4.78 67.10 16.47 0.00 150.0 ±9.6 Mbps, 64-QAM) Y 4.83 67.22 16.59 150.0 IEEE 802.11n (HT Greenfield, 15 Mbps, AAA BPSK) Y 4.83 67.22 16.59 150.0 IEEE 802.11n (HT Greenfield, 15 Mbps, AAA BPSK) Y 4.83 67.22 16.59 150.0 IEEE 802.11n (HT Greenfield, 15 Mbps, AAAA BPSK) Y 5.43 67.52 16.75 150.0 IEEE 802.11n (HT Greenfield, 90 Mbps, AAAA 67.45 16.67 0.00 150.0 ±9.6 IEEE 802.11n (HT Greenfield, 90 Mbps, AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA									
Total Tota		OFDM, 6 Mbps, 99pc duty cycle, Long			66.90		0.00	150.0	± 9.6 %
10419- AAA								150.0	
AAA OFDM, 6 Mbps, 99pc duty cycle, Short preambule) Y 4.62 66.94 16.49 150.0 Z 4.70 66.66 16.34 150.0 10422- BPSK) Y 4.73 66.93 16.39 0.00 150.0 ±9.6 Z 4.83 66.67 16.35 150.0 10423- AAA Mbps, 16-QAM) Y 4.91 67.26 16.61 150.0 Z 5.03 67.05 16.49 150.0 Y 4.83 67.10 16.47 0.00 150.0 ±9.6 10424- AAA BPSK) Y 4.83 67.22 16.59 150.0 10424- AAA BPSK) Y 4.83 67.22 16.59 150.0 10425- AAA BPSK) Y 4.83 67.22 16.59 150.0 10425- AAA BPSK) Y 5.43 67.52 16.75 150.0 10426- AAA BPSK) Y 5.43 67.52 16.75 150.0 10426- AAA IEEE 802.11n (HT Greenfield, 15 Mbps, X 5.39 67.41 16.65 0.00 150.0 ±9.6				4.67	66.70	16.33		150.0	
Total Tota		OFDM, 6 Mbps, 99pc duty cycle, Short	X	4.58	66.84	16.38	0.00	150.0	± 9.6 %
10422- AAA BPSK Y 4.73 66.83 16.39 0.00 150.0 ± 9.6			Υ	4.62	66.94	16.49		150.0	
10422- AAA BPSK			Z			16.34			
Total Tota					66.83	16.39	0.00		± 9.6 %
10423- IEEE 802.11n (HT Greenfield, 43.3 X 4.86 67.15 16.50 0.00 150.0 ± 9.6			Y		66.93	16.50		150.0	
10423- AAA Mbps, 16-QAM Y 4.91 67.26 16.61 150.0 150.0 ± 9.6								150.0	
Tell Research Tell Researc						16.50	0.00	150.0	± 9.6 %
10424- AAA IEEE 802.11n (HT Greenfield, 72.2 X 4.78 67.10 16.47 0.00 150.0 ± 9.6						16.61		150.0	
10424- AAA IEEE 802.11n (HT Greenfield, 72.2 Mbps, 64-QAM) X 4.78 67.10 16.47 0.00 150.0 ± 9.6 AAA Mbps, 64-QAM) Y 4.83 67.22 16.59 150.0 1						16.49		150.0	
Total Control Contro					67.10	16.47	0.00	150.0	± 9.6 %
10425- AAA BPSK) Y 5.43 67.52 16.65 0.00 150.0 ± 9.6			Υ		67.22	16.59		150.0	_
10425- AAA BPSK) IEEE 802.11n (HT Greenfield, 15 Mbps, X 5.39 67.41 16.65 0.00 150.0 ± 9.6 Y 5.43 67.52 16.75 150.0 Z 5.52 67.33 16.61 150.0 10426- AAA 16-QAM) X 5.40 67.45 16.67 0.00 150.0 ± 9.6 X 5.40 67.45 16.67 150.0									
Z 5.52 67.33 16.61 150.0							0.00		± 9.6 %
Total Tota			Υ	5.43	67.52	16.75		150.0	
10426- AAA 16-QAM) IEEE 802.11n (HT Greenfield, 90 Mbps, X 5.40 67.45 16.67 0.00 150.0 ± 9.6			Ž						
Y 5.43 67.53 16.75 150.0							0.00		± 9.6 %
			Y	5.43	67.53	16.75		150.0	
			Z	5.53	67.36	16.63		150.0	

10427- AAA	IEEE 802.11n (HT Greenfield, 150 Mbps, 64-QAM)	Х	5.41	67.42	16.64	0.00	150.0	± 9.6 %
		Υ	5.44	67.51	16.73		150.0	
		Ż	5.55	67.37	16.63		150.0	
10430- AAA	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1)	X	4.45	71.73	18.77	0.00	150.0	± 9.6 %
		Y	4.40	71.27	18.63		150.0	
		Z	4.47	70.59	18.48		150.0	
10431- AAA	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1)	Х	4.25	67.32	16.37	0.00	150.0	± 9.6 %
		Y	4.31	67.47	16.53		150.0	
		Z	4.42	67.11	16.39		150.0	
10432- AAA	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1)	Х	4.55	67.17	16.43	0.00	150.0	± 9.6 %
		Υ	4.60	67.29	16.56		150.0	
		Z	4.71	67.02	16.42		150.0	
10433- AAA	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1)	Х	4.80	67.14	16.50	0.00	150.0	± 9.6 %
		Υ	4.84	67.25	16.61		150.0	
40404		Z	4.95	67.03	16.48		150.0	
10434- AAA	W-CDMA (BS Test Model 1, 64 DPCH)	Х	4.61	72.82	18.83	0.00	150.0	± 9.6 %
		Υ	4.55	72.29	18.69		150.0	
		Z	4.58	71.41	18.52		150.0	
10435- AAA	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	Х	0.73	60.00	3.01	2.23	80.0	± 9.6 %
		Y	0.68	60.00	3.36		80.0	
		Z	0.75	60.00	4.36		80.0	
10447- AAA	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	Х	3.55	67.41	15.73	0.00	150.0	± 9.6 %
		Y	3.63	67.67	16.01		150.0	
		Z	3.73	67.17	15.91		150.0	
10448- AAA	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, Clippin 44%)	Х	4.09	67.11	16.23	0.00	150.0	±9.6 %
		Y	4.15	67.25	16.40		150.0	
-		Z	4.24	66.89	16.24		150.0	
10449- AAA	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1, Cliping 44%)	X	4.36	67.00	16.34	0.00	150.0	± 9.6 %
		Υ	4.41	67.13	16.47		150.0	
		Z	4.50	66.84	16.32		150.0	
10450- AAA	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	Х	4.56	66.91	16.35	0.00	150.0	± 9.6 %
		Y	4.60	67.03	16.48		150.0	
		Z	4.68	66.78	16.33		150.0	
10451- AAA	W-CDMA (BS Test Model 1, 64 DPCH, Clipping 44%)	Х	3.45	67.62	15.36	0.00	150.0	± 9.6 %
		Υ	3.55	67.96	15.70		150.0	
		Z	3.66	67.46	15.67		150.0	
10456- AAA	IEEE 802.11ac WiFi (160MHz, 64-QAM, 99pc duty cycle)	Х	6.26	67.94	16.78	0.00	150.0	± 9.6 %
		Υ	6.28	68.03	16.86		150.0	
		Z	6.38	67.96	16.79		150.0	
10457- AAA	UMTS-FDD (DC-HSDPA)	X	3.82	65.36	16.06	0.00	150.0	± 9.6 %
		Υ	3.83	65.45	16.19		150.0	
		Z	3.87	65.19	16.05		150.0	
10458- AAA	CDMA2000 (1xEV-DO, Rev. B, 2 carriers)	Х	3.25	66.87	14.70	0.00	150.0	± 9.6 %
		Υ	3.37	67.28	15.13		150.0	
		Z	3.47	66.67	15,15		150.0	
10459- AAA	CDMA2000 (1xEV-DO, Rev. B, 3 carriers)	Х	4.42	65.45	15.79	0.00	150.0	± 9.6 %
		Υ	4.47	65.46	15.97		150.0	
		Z	4.68	65.26	16.05		150.0	

10460- AAA	UMTS-FDD (WCDMA, AMR)	Х	0.97	69.30	16.98	0.00	150.0	± 9.6 %
		Y	1.12	72.49	18.75		150.0	
		ż	0.95	68.36	16.51		150.0	
10461- AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	2.00	70.76	15.49	3.29	80.0	± 9.6 %
		Υ	8.58	90.35	22.50		80.0	
		Z	5.73	83.80	20.83		80.0	
10462- AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	0.92	60.00	7.79	3.23	80.0	± 9.6 %
	<u>.</u>	Y	1.03	61.08	8.56		80.0	
40400	LITE TOD (OO EDILA (DD 4 4 M)	Z	1.56	63.86	10.58		80.0	
10463- AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	0.94	60.00	7.31	3.23	80.0	± 9.6 %
		Y	0.94	60.00	7.51		80.0	
10464-	LITE TOD (OO EDIA) A DD OAN	Z	1.28	61.47	8.99		80.0	
10464- AAA	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	1.64	68.18	13.89	3.23	80.0	± 9.6 %
	<u> </u>	Y	5.92	84.53	20.09		80.0	
10465	LITE TOD (OO EDIA (DD O) ()	Z	4.51	80.04	19.05		80.0	
10465- AAA	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	Х	0.92	60.00	7.73	3.23	80.0	± 9.6 %
		Y	0.98	60.61	8.25		80.0	
10100	1 TE TOD (00 ED) (4 DD 0 1/1/1 04	Z	1.45	63.13	10.17		80.0	
10466- _AAA	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	X	0.94	60.00	7.26	3.23	80.0	± 9.6 %
		Y	0.94	60.00	7.46		80.0	
40407	LTE TOD (OO EDIMA A DD E HILL	Z	1.23	61.06	8.73		80.0	
10467- _AAA	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	Х	1.68	68.56	14.08	3.23	80.0	± 9.6 %
		Υ	6.58	85.94	20.55		80.0	
		Z	4.80	80.91	19.37		80.0	
10468- AAA	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	×	0.91	60.00	7.74	3.23	80.0	± 9.6 %
		Υ	0.99	60.72	8.32		80.0	
		Z	1.47	63.29	10.26		80.0	
10469- AAA	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	X	0.94	60.00	7.26	3.23	80.0	± 9.6 %
		Y	0.94	60.00	7.45		80.0	
		Z	1.22	61.07	8.73		80.0	
10470- AAA	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	1.67	68.54	14.07	3.23	80.0	± 9.6 %
		Υ	6.57	85.96	20.55		80.0	
101=1		Z	4.78	80.90	19.36		80.0	
10471- AAA	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	×	0.91	60.00	7.73	3.23	80.0	± 9.6 %
		Y	0.98	60.68	8.29		80.0	
10470	LTE TOD (CC EDMA 4 DD 40 ML)	Z	1.46	63.25	10.23	0.00	80.0	
10472- AAA	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	X	0.94	60.00	7.25	3.23	80.0	± 9.6 %
	 	Y	0.94	60.00	7.44		80.0	
40470	LITE TOD (OO FOLIA 4 ST. 45 AV.)	Z	1.22	61.03	8.70		80.0	
10473- AAA	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	1.67	68.52	14.05	3.23	80.0	± 9.6 %
	-	Ϋ́	6.55	85.90	20.53		80.0	
10474-	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-	Z	4.77 0.91	80.86 60.00	19.34 7.73	3.23	80.0 80.0	± 9.6 %
	QAM, UL Subframe=2,3,4,7,8,9)	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	0.00	60.00			00.0	ļ
		Y	0.98	60.66	8.27	<u> </u>	80.0	
10475-	TE TOD (SO EDMA 4 DD 45 MU- 04	Z	1.46	63.22	10.22	0.00	80.0	
AAA	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	X	0.94	60.00	7.25	3.23	80.0	± 9.6 %
		Y	0.94	60.00	7.44		80.0	
		_ Z _	1.22	61.02	8.70		80.0	<u> </u>

10477- AAA	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	Х	0.91	60.00	7.71	3.23	80.0	± 9.6 %
		Υ	0.97	60.55	8.20		80.0	
		Z	1.44	63.08	10.13		80.0	
10478- AAA	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	Х	0.94	60.00	7.24	3.23	80.0	± 9.6 %
		Υ	0.94	60.00	7.43		80.0	
		Z	1.21	60.99	8.67		80.0	
10479- AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	0.95	60.00	5.82	1.99	80.0	± 9.6 %
	<u> </u>	Y	0.92	60.00	6.29		80.0	
40400	LTE TOD (OO FDIAL FOX DD 4 4 4 1 1 1	Z	0.98	60.00	7.60		80.0	
10480- AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	1.29	60.00	5.13	1.99	80.0	± 9.6 %
		Y	1.24	60.00	5.53		80.0	
40404	LTE TOD (OO FOLM FOOT DD 4 ALUE	Z	1.27	60.00	6.83		80.0	
10481- AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	1.38	60.00	4.87	1.99	80.0	± 9.6 %
		Υ	1.30	60.00	5.29		80.0	
40400	LITE TOD (OO ED) A 50% DD O 100	Z	1.30	60.00	6.60		80.0	
10482- AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	1.80	65.32	12.67	1.99	80.0	± 9.6 %
		Υ	2.45	69.59	15.01		80.0	
40400	LIE TOD (OC COMA CON DO CAN)	Z	2.44	68.90	15.30	. ^^	80.0	1000
10483- AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	Х	2.00	63.35	11.20	1.99	80.0	± 9.6 %
		Y	2.66	66.99	13.38		80.0	
40404	LITE TOD (OO FDMA SON ED ON!)	Z	3.12	68.57	14.87		80.0	
10484- <u>A</u> AA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	2.01	63.13	11.12	1.99	80.0	± 9.6 %
		<u>Y</u>	2.60	66.51	13.20		80.0	
40405	1.55 500 500 500 500 500 500	Z	3.09	68.18	14.73		80.0	
10485- AAA	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	2.39	68.72	15.30	1.99	80.0	± 9.6 %
		Υ	3.15	73.04	17.51		80.0	
		Z	2.83	70.70	16.85		80.0	
10486- AAA	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	2.42	65.67	13.59	1.99	80.0	± 9.6 %
	<u> </u>	Υ	2.81	68.02	15.07		80.0	
		Z	2.84	67.42	15.25		80.0	
10487- AAA	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	2.44	65.45	13.49	1.99	80.0	± 9.6 %
		Υ	2.81	67.66	14.91		80.0	
		Z	2.87	67.19	15.16		80.0	
10488- AAA	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	2.96	69.84	16.73	1.99	80.0	± 9.6 %
		Y	3.52	72.86	18.30		80.0	
40400	LITE TOD (OO EDNA 500) DD (O.S.	Z	3.28	70.80	17.48	4.00	80.0	
10489- AAA	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	3.01	67.19	15.77	1.99	80.0	± 9.6 %
		Y	3.26	68.65	16.74		80.0	
10165		Z	3.22	67.65	16.42	4.00	80.0	
10490- AAA	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	Х	3.11	67.12	15.78	1.99	80.0	± 9.6 %
		Y	3.35	68.47	16.70		80.0	
10:5:		Z	3.33	67.53	16.40		80.0	
10491- AAA	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	Х	3.29	69.03	16.67	1.99	80.0	± 9.6 %
		Υ	3.67	71.05	17.79		80.0	ļ. —
10:00		Z	3.54	69.64	17.16	,	80.0	L
10492- AAA	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	3.43	66.97	16.12	1.99	80.0	± 9.6 %
		Υ	3.61	67.99	16.83		80.0	
		Z	3.61	67.22	16.52		80.0	I

10493- AAA	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	Х	3.50	66.90	16.11	1.99	80.0	± 9.6 %
-	7.1.1.17	Y	3.67	67.85	16.79		80.0	
<u>-</u>		Ż	3.69	67.13	16.51		80.0	
10494- AAA	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	3.51	70.19	16.96	1.99	80.0	± 9.6 %
		Υ	4.05	72.69	18.25		80.0	1
		Z	3.84	71.09	17.53		80.0	
10495- AAA	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	Х	3.46	67.32	16.29	1.99	80.0	± 9.6 %
		Υ	3.65	68.43	17.04		80.0	
		Z	3.64	67.68	16.71		80.0	i
10496- AAA	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	3.55	67.15	16.28	1.99	80.0	± 9.6 %
-		Υ	3.72	68.14	16.96		80.0	
		Z	3.73	67.44	16.66		80.0	
10497- AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	1.19	60.95	9.43	1.99	80.0	±9.6%
		Y	1.47	63.55	11.23		80.0	
40100	LITE TOD (OO TOUR)	Z	1.77	65.18	12.83	ļ ,	80.0	
10498- AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	Х	1.30	60.00	8.07	1.99	80.0	± 9.6 %
		Y	1.31	60.00	8.51		80.0	
		Z	1.65	61.76	10.34		80.0	
10499- AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	1.33	60.00	7.95	1.99	80.0	± 9.6 %
	_	Υ	1.33	60.00	8.38		80.0	
		Z	1.65	61.45	10.06		80.0	
10500- AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	Х	2.61	69.10	15.88	1.99	80.0	± 9.6 %
		Y	3.24	72.69	17.76		80.0	
		Z	2.96	70.41	17.01		80.0	
10501- AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	2.69	66.46	14.53	1.99	80.0	± 9.6 %
		Y	3.03	68.43	15.80		80.0	
		Z	3.01	67.53	15.72		80.0	
10502- AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	Х	2.75	66.36	14.44	1.99	80.0	± 9.6 %
		Υ	3.08	68.25	15.67		80.0	1
		Z	3.08	67.43	15.64		80.0	
10503- AAA	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	×	2.92	69.64	16.62	1.99	80.0	± 9.6 %
		Υ	3.47	72.63	18.19		80.0	
10-5:		Z	3.23	70.60	17.38		0.08	
10504- AAA	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	2.99	67.09	15.71	1.99	80.0	± 9.6 %
		Y	3.24	68.56	16.68		0.08	
40.55		Z	3.21	67.57	16.36		80.0	
10505- AAA	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	3.10	67.03	15.72	1.99	80.0	± 9.6 %
		Y	3.33	68.38	16.64		80.0	
10=5-	1	Z	3.31	67.44	16.35		80.0	
10506- AAA	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	Х	3.48	70.04	16.88	1.99	80.0	± 9.6 %
		Y	4.01	72.53	18.17		80.0	
40505	1.55 500 (00 500)	Z	3.80	70.94	17.46		80.0	
10507- AAA	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	3.44	67.26	16.25	1.99	80.0	± 9.6 %
		Υ	3.63	68.37	17.00		80.0	
		Ž					00.0	

10508- AAA	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	3.54	67.08	16.23	1.99	80.0	± 9.6 %
		Y	3.71	68.07	16.92		80.0	
		Z	3.72	67.37	16.62		80.0	
10509- AAA	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	3.89	69.27	16.68	1.99	80.0	± 9.6 %
		Υ	4.25	70.96	17.61		80.0	
		Z	4.15	69.90	17.10		80.0	
10510- AAA	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	3.95	67.24	16.43	1.99	80.0	± 9.6 %
		Y	4.11	68.10	17.01		80.0	
		Z	4.14	67.56	16.74		80.0	
10511- AAA	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	4.02	67.05	16.41	1.99	80.0	± 9.6 %
		Υ	<u>4</u> .16	67.82	16.95		80.0	
		Z	4.19	67.31	16.70		80.0	
10512- AAA	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	3.97	70.39	16.94	1.99	80.0	± 9.6 %
		Y	4.51	72.66	18.09		80.0	
10513- AAA	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	4.31 3.83	71.32 67.43	17.48 16.48	1.99	80.0 80.0	± 9.6 %
	000110110-2,0,4,1,0,0)	Y	4.01	68.42	17.12		80.0	
		Ż	4.02	67.86	16.84		80.0	
10514- AAA	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	3.87	67.11	16.42	1.99	80.0	± 9.6 %
	1	Y	4.02	67.96	17.01		80.0	
		Z	4.04	67.44	16.74		80.0	
10515- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 99pc duty cycle)	Х	1.00	63.49	15.10	0.00	150.0	± 9.6 %
		Υ	1.01	64.14	15.70		150.0	
	<u> </u>	Z	1.00	63.14	14.91		150.0	
10516- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc duty cycle)	X	0.67	72.17	18.58	0.00	150.0	± 9.6 %
		Y	1.03	81.20	22.83		150.0	
		Z	0.63	70.53	17.66		150.0	
10517- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 99pc duty cycle)	X	0.86	65.66	15.91	0.00	150.0	± 9.6 %
		Y	0.90	67.17	16.99		150.0	<u> </u>
10518- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc duty cycle)	Z	0.86 4.56	65.18 66.81	15.61 16.33	0.00	150.0 150.0	± 9.6 %
	makel eaks and olses	Y	4.60	66.91	16.45		150.0	
		Z	4.69	66.64	16.31		150.0	
10519- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 99pc duty cycle)	Х	4.75	67.04	16.45	0.00	150.0	± 9.6 %
		Y	4.79	67.15	16.57		150.0	
		Z	4.90	66.93	16.45		150.0	
10520- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 99pc duty cycle)	X	4.60	67.00	16.38	0.00	150.0	± 9.6 %
		Y	4.64	67.13	16.50		150.0	
10521- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc duty cycle)	X	4.75 4.53	66.91 67.00	16.37 16.36	0.00	150.0 150.0	± 9.6 %
,		Y	4.58	67.13	16.49		150.0	
		Z	4.69	66.92	16.36		150.0	<u> </u>
10522- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc duty cycle)	X	4.59	67.10	16.45	0.00	150.0	± 9.6 %
		Y	4.64	67.21	16.57		150.0	
		Z	4.73	66.89	16.39		150.0	

10523- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48	X	4.47	66.97	16.30	0.00	150.0	± 9.6 %
AAA	Mbps, 99pc duty cycle)							
		Y	4.51	67.08	16.42		150.0	
		Z	4.60	66.79	16.26		150.0	ļ
10524- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc duty cycle)	X	4.53	67.01	16.42	0.00	150.0	± 9.6 %
		Υ	4.58	67.13	16.54		150.0	
		Z	4.68	66.85	16.38		150.0	
10525- _AAA	IEEE 802.11ac WiFi (20MHz, MCS0, 99pc duty cycle)	X	4.53	66.07	16.01	0.00	150.0	± 9.6 %
_		Α	4.56	66.17	16.13		150.0	
40500) TEE 000 44 - 1455 (0014) - 14004	Z	4.64	65.88	15.97		150.0	<u> </u>
10526- AAA	IEEE 802.11ac WiFi (20MHz, MCS1, 99pc duty cycle)	X	4.69	66.43	16.15	0.00	150.0	± 9.6 %
	 	Y	4.74	66.55	16.27	<u> </u>	150.0	
10527-	IEEE 900 44 Miei (20MHz MCC)	Z	4.84	66.29	16.12	2.00	150.0	- 0.00/
AAA	IEEE 802.11ac WiFi (20MHz, MCS2, 99pc duty cycle)	X	4.61	66.39	16.10	0.00	150.0	± 9.6 %
-	 	Y	4.66	66.53	16.22		150.0	
10528-	IEEE 802.11ac WiFi (20MHz, MCS3,	Z	4.76	66.26	16.07	0.00	150.0	1000
AAA	99pc duly cycle)	X	4.63	66.41	16.13	0.00	150.0	± 9.6 %
		Y	4.68	66.54	16.25		150.0	
10529-	IEEE 902 44 co WiEi /20MUr. MCC4	Z	4.77	66.28	16.10	0.00	150.0	1000
AAA	IEEE 802.11ac WiFi (20MHz, MCS4, 99pc duty cycle)	X	4.63	66.41	16.13	0.00	150.0	± 9.6 %
		Ϋ́	4.68	66.54	16.25		150.0	
10531-	IEEE 900 44 co WIEI (20ML) - MOOC	Z	4.77	66.28	16.10	0.00	150.0	
AAA	IEEE 802.11ac WiFi (20MHz, MCS6, 99pc duty cycle)	X	4.62	66.51	16.14	0.00	150.0	± 9.6 %
		<u> </u>	4.68	66.66	16.28		150.0	
40500	NEET 000 44 NUMBER (0014) 4400	Z	4.79	66.43	16.13		150.0	
10532- <u>AAA</u>	IEEE 802.11ac WiFi (20MHz, MCS7, 99pc duty cycle)	X	4.48	66.37	16.08	0.00	150.0	± 9.6 %
		Y	4.53	66.52	16.22		150.0	
40500	1555 000 44 1005 (00) 41 14000	Z	4.63	66.29	16.07		150.0	<u></u>
10533- AAA	IEEE 802.11ac WiFi (20MHz, MCS8, 99pc duty cycle)	X	4.64	66.46	16.12	0.00	150.0	± 9.6 %
_		Y	4.69	66.59	16.24		150.0	
10-01		Z	4.79	66.30	16.08		150.0	
10534- AAA	IEEE 802.11ac WiFi (40MHz, MCS0, 99pc duty cycle)	X	5.17	66.49	16.17	0.00	150.0	± 9.6 %
		Υ	5.20	66.61	16.28		150.0	
		Z	5.29	66.44	16.16		150.0	
10535- AAA	IEEE 802.11ac WiFi (40MHz, MCS1, 99pc duty cycle)	X	5.24	66.68	16.26	0.00	150.0	± 9.6 %
		Y	5.27	66.78	16.35		150.0	
10500	IEEE 000 44 a MEET (40 MT) - 54000	Z	5.36	66.58	16.21		150.0	
10536- <u>A</u> AA	IEEE 802.11ac WiFi (40MHz, MCS2, 99pc duty cycle)	X	5.10	66.63	16.22	0.00	150.0	± 9.6 %
		Ϋ́	5.14	66.75	16.32		150.0	
40507		Z	5.23	66.57	16.19		150.0	
10537- AAA	IEEE 802.11ac WiFi (40MHz, MCS3, 99pc duty cycle)	X	5.16	66.59	16.20	0.00	150.0	± 9.6 %
		Y	5.20	66.71	16.30		150.0	
40000	TEEE 000 44 DUE: (10) W	Z	5.30	66.55	16.18		150.0	
10538- AAA	IEEE 802.11ac WiFi (40MHz, MCS4, 99pc duty cycle)	X	5.25	66.60	16.25	0.00	150.0	± 9.6 %
		Y	5.29	66.73	16.35		150.0	
40572	IEEE 000 44	Z	5.41	66.62	16.26		150.0	
10540- AAA	IEEE 802.11ac WiFi (40MHz, MCS6, 99pc duty cycle)	X	5.19	66.63	16.28	0.00	150.0	± 9.6 %
		Υ	5.22	66.75	16.38		150.0	
		Z	5.31	66.56	16.24		150.0	

10541-	IEEE 802.11ac WiFi (40MHz, MCS7,	TXT	5.15	66.49	16.20	0.00	150.0	± 9.6 %
AAA	99pc duly cycle)				10.20	0.00	100.0	2 0.0 70
		Y	5.19	66.61	16.30		150.0	
40540	IFFE 800 44 IMFE (4014) IAGOS		5.29	66.47	16.19		150.0	
10542- AAA	IEEE 802.11ac WIFi (40MHz, MCS8, 99pc duty cycle)	X	5.31	66.56	16.24	0.00	150.0	± 9.6 %
		<u> </u>	5.35	66.67	16.34		150.0	
40540	IEEE 000 44 - MEET (2011) - NOOO	Z	5.44	66.51	16.23		150.0	
10543- AAA	IEEE 802.11ac WiFi (40MHz, MCS9, 99pc duty cycle)	Х	5.38	66.59	16.28	0.00	150.0	± 9.6 %
	·	Y	5.43	66.70	16.38		150.0	
10544-	IEEE 802.11ac WiFi (80MHz, MCS0,	Z	5.53	66.52	16.25	0.00	150.0	
_AAA	99pc duty cycle)	1	5.48	66.59	16.16	0.00	150.0	± 9.6 %
	-	Y	5.51 5.57	66.70 66.55	16.25		150.0	
10545-	IEEE 802.11ac WiFi (80MHz, MCS1,	 	5.68	67.02	16.14 16.33	0.00	150.0 150.0	+069/
AAA	99pc duty cycle)	Y				0.00		± 9.6 %
		Z	5.71 5.79	67.13	16.41		150.0	
10546-	IEEE 802.11ac WiFi (80MHz, MCS2,	X	5.79 5.54	66.97 66.80	16.29 16.23	0.00	150.0 150.0	+060/
AAA	99pc duty cycle)	Ŷ				0.00		± 9.6 %
	 	Z	5.58 5.67	66.93 66.84	16.33 16.25		150.0 150.0	
10547-	IEEE 802.11ac WiFi (80MHz, MCS3,	 	5.61	66.84	16.24	0.00	150.0	± 9.6 %
AAA	99pc duly cycle)	Y	5.65	66.96	16.34	0.00		1 9.0 %
		$\frac{1}{Z}$	5.76	66.91	16.34		150.0 150.0	
10548-	IEEE 802.11ac WiFi (80MHz, MCS4,	TX I	5.87	67.78	16.68	0.00	150.0	± 9.6 %
AAA	99pc duly cycle)	Y	5.93			0.00		1 9.0 %
	-	$\frac{1}{z}$	6.09	67.99 68.03	16.82 16.80		150.0 150.0	
10550- AAA	IEEE 802.11ac WiFi (80MHz, MCS6, 99pc duly cycle)	X	5.57	66.83	16.25	0.00	150.0	± 9.6 %
7001	Sopo daty cycle)	Y	5.60	66.93	16.34		150.0	
		ż	5.69	66.78	16.23		150.0	
10551- AAA	IEEE 802.11ac WiFi (80MHz, MCS7, 99pc duty cycle)	X	5.58	66.87	16.23	0.00	150.0	± 9.6 %
		Y	5.61	66.98	16.33		150.0	
		Z	5.71	66.88	16.24		150.0	
10552- AAA	IEEE 802.11ac WiFi (80MHz, MCS8, 99pc duty cycle)	X	5.49	66.66	16.14	0.00	150.0	± 9.6 %
		Ý	5.52	66.77	16.23		150.0	
		<u> Z </u>	<u>5.6</u> 1	66.64	16.13		150.0	
10553- AAA	IEEE 802.11ac WiFi (80MHz, MCS9, 99pc duty cycle)	X	5.57	66.69	16.19	0.00	150.0	± 9.6 %
		Υ	5.61	66.81	16.28		150.0	
40224	IEEE 4000 44 - 14855 (400) (1) 14000	Z	5.70	66.69	16.18	0.00	150.0	1000
10554- AAA	IEEE 1602.11ac WiFi (160MHz, MCS0, 99pc duty cycle)	X	5.89	66.95	16.25	0.00	150.0	± 9.6 %
		Y	5.91	67.05	16.33		150.0	
40555	IPPE 4000 44 MEE! (400M)- MOO4	Z	5.98	66.93	16.24	0.00	150.0	1000
10555- AAA	IEEE 1602.11ac WiFi (160MHz, MCS1, 99pc duty cycle)	X	6.02	67.25	16.37	0.00	150.0	± 9.6 %
	ļ	Y	6.05	67.36	16.46		150.0	
10550	TEEE 4600 4400 MEE: /460MU = MOCC	Z	6.13	67.27	16.38	0.00	150.0	1000
10556- AAA	IEEE 1602.11ac WiFi (160MHz, MCS2, 99pc duty cycle)	X	6.04	67.30	16.39	0.00	150.0	± 9.6 %
		Y	6.07	67.41	16.48		150.0	
10557-	IEEE 1602.11ac WiFi (160MHz, MCS3,	Z	6.14 6.00	67.28 67.20	16.38 16.36	0.00	150.0 150.0	± 9.6 %
AAA	99pc duty cycle)					0.00		I 9.0 %
	 	Y	6.03	67.32	16.45		150.0	
		Z	6.12	67.24	16.38		150.0	

10558- AAA	IEEE 1602.11ac WiFi (160MHz, MCS4, 99pc duty cycle)	X	6.05	67.36	16.45	0.00	150.0	± 9.6 %
, , , ,	- Spouldly Gyoloj	TY	6.09	67.49	16.55		150.0	·
		l ż	6.19	67.44	16.49		150.0	
10560- AAA	IEEE 1602.11ac WiFi (160MHz, MCS6, 99pc duty cycle)	X	6.04	67.20	16.41	0.00	150.0	± 9.6 %
		Y	6.08	67.33	16.51		150.0	
		Z	6.17	67.26	16.44		150.0	
10561- AAA	IEEE 1602.11ac WiFi (160MHz, MCS7, 99pc duty cycle)	X	5.97	67.18	16.44	0.00	150.0	± 9.6 %
		Υ	6.00	67.30	16.54		150.0	
		Z	6.09	67.21	16.46		150.0	
10562- AAA	IEEE 1602.11ac WiFi (160MHz, MCS8, 99pc duty cycle)	Х	6.09	67.54	16.62	0.00	150.0	± 9.6 %
	-	Υ	6.13	67.71	16.74		150.0	
		Z	6.25	67.71	16.71		150.0	
10563- AAA	IEEE 1602.11ac WiFi (160MHz, MCS9, 99pc duty cycle)	X	6.28	67.73	16.67	0.00	150.0	± 9.6 %
	<u>'</u>	Y	6.42	68.15	16.91		150.0	
10564-	IEEE 000 44 - 14/E1 0 4 011 / 2000	Z	6.58	68.23	16.91	<u> </u>	150.0	
10564- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 9 Mbps, 99pc duly cycle)	X	4.88	66.82	16.44	0.46	150.0	± 9.6 %
	<u> </u>	Y	4.92	66.94	16.57		150.0	
40505	1555 000 44 JASS 0 4 OU 45000	Z	5.01	66.71	16.44		150.0	
10565- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 12 Mbps, 99pc duty cycle)	X	5.11	67.29	16.78	0.46	150.0	± 9.6 %
		Y	5.15	67.40	16.89		150.0	
10566- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 18 Mbps, 99pc duty cycle)	X	5.28 4.94	67.22 67.12	16.79 16.58	0.46	150.0 150.0	± 9.6 %
AAA	OFDIM, 18 IMOPS, 9900 duty cycle)	Y	4.99	67.26	16,71		150.0	
		Z	5.10	67.06	16.60		150.0	
10567- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 24 Mbps, 99pc duty cycle)	X	4.97	67.55	16.96	0.46	150.0	± 9.6 %
		TY	5.01	67.64	17.06		150.0	
		Z	5.13	67.47	16.96		150.0	
10568- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 36 Mbps, 99pc duty cycle)	Х	4.84	66.85	16.31	0.46	150.0	± 9.6 %
		Y	4.89	67.01	16.47		150.0	
		Z	5.00	66.75	16.32		150.0	
10569- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 48 Mbps, 99pc duty cycle)	X	4.93	67.64	17.02	0.46	150.0	± 9.6 %
		Y	4.96	67.70	17.10		150.0	
		z	5.06	67.47	16.97		150.0	
10570- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 54 Mbps, 99pc duty cycle)	X	4.97	67.50	16.96	0.46	150.0	± 9.6 %
		Ϋ́	5.01	67.58	17.05		150.0	1
40574	LEEF COO 441 DEFE C 4 CO 4 CO COCC 1	Z	5.12	67.34	16.93		150.0	
10571- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90pc duty cycle)	Х	1.16	64.12	15.40	0.46	130.0	± 9.6 %
	 	Y	1.18	64.87	16.09		130.0	
40570	LEEE 000 441 MIEI 0 4 011 4000 0	Z	1.16	63.87	15.37		130.0	
10572- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 90pc duty cycle)	X	1.17	64.68	15.75	0.46	130.0	± 9.6 %
		Y	1.19	65.49	16.47		130.0	
10573-	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5	X	1.17 1.55	64.40 80.94	15.71 21.57	0.46	130.0 130.0	± 9.6 %
AAA	Mbps, 90pc duty cycle)	Y	4.00	00.00	20.44		4000	
	+		4.30	99.88	28.41		130.0	
10574-	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11	Z	1.40 1.27	79.23 70.25	21.07 18.64	0.46	130.0 130.0	1060/
AAA	Mbps, 90pc duly cycle)					0.46		± 9.6 %
	 	Y	1.37	72.33	19.95		130.0	
	<u> </u>	Z	1.25	69.67	18.44		130.0	L

10575- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 90pc duty cycle)	X	4.64	66.50	16.38	0.46	130.0	± 9.6 %
		Y	4.68	66.64	16.54		130.0	
		Z	4.77	66.40	16.42		130.0	
10576- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 9 Mbps, 90pc duty cycle)	X	4.66	66.68	16.46	0.46	130.0	± 9.6 %
		Υ	4.71	66.81	16.61		130.0	
		Ζ	4.80	66.57	16.49		130.0	
10577- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 12 Mbps, 90pc duty cycle)	Х	4.86	66.97	16.63	0.46	130.0	± 9.6 %
		Υ	4.92	67.11	16.78		130.0	
10==0		Z	5.04	66.92	16.68		130.0	
10578- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 18 Mbps, 90pc duty cycle)	X	4.77	67.15	16.75	0.46	130.0	± 9.6 %
		Y	4.81	67.28	16.88		130.0	
40570	IEEE 000 44 - INIE' 0 4 OU (DOOG	Z	4.93	67.09	16.78		130.0	
10579- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 24 Mbps, 90pc duty cycle)	X	4.52	66.35	15.99	0.46	130.0	±9.6 %
		Y	4.58	66.57	16.20		130.0	
10580	IEEE 000 44 WELD 4 CO. CO.	Z	4.69	66.37	16.09	ļ.,	130.0	
10580- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 36 Mbps, 90pc duty cycle)	X	4.56	66.39	16.01	0.46	130.0	± 9.6 %
		Y	4.62	66.60	16.22		130.0	
10501	IEEE COO // MUSICA COO / COO CO	Z	4.73	66.35	16.08		130.0	
10581- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 48 Mbps, 90pc duty cycle)	Х	4.66	67.17	16.68	0.46	130.0	± 9.6 %
		Y	4.71	67.31	16.82		130.0	
40500	IEEE 000 44, WEE 0 4 OU (DOOD	Z	4.82	67.12	16.71		130.0	
10582- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 54 Mbps, 90pc duty cycle)	Х	4.46	66.10	15.77	0.46	130.0	± 9.6 %
	· .	<u> </u>	4.52	66.34	16.00		130.0	
10500		Z	4.64	66.12	15.87		130.0	
10583- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 90pc duty cycle)	Х	4.64	66.50	16.38	0.46	130.0	± 9.6 %
		Y	4.68	66.64	16.54		130.0	
		Z	4.77	66.40	16.42		130.0	
10584- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 90pc duty cycle)	X	4.66	66.68	16.46	0.46	130.0	± 9.6 %
		Υ	4.71	66.81	16.61		_130.0	
		Z	4.80	66.57	16.49		130.0	
10585- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90pc duty cycle)	X	4.86	66.97	16.63	0.46	130.0	± 9.6 %
		Υ	4.92	67.11	16.78		130.0	
		Z	5.04	66.92	16.68		130.0	
10586- AAA	IEEE 802.11a/n WiFi 5 GHz (OFDM, 18 Mbps, 90pc duty cycle)	X	4.77	67.15	16.75	0.46	130.0	±9.6 %
		Y	4.81	67.28	16.88		130.0	
40507	IEEE 000 44 - # WIELE OLL (OED): 01	Z	4.93	67.09	16.78	0.10	130.0	
10587- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 90pc duty cycle)	Х	4.52	66.35	15.99	0.46	130.0	± 9.6 %
		Y	4.58	66.57	16.20		130.0	
40500	LEEE 000 44 # MUEL B OLL (OFFICE	Z	4.69	66.37	16.09		130.0	
10588- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 90pc duty cycle)	Х	4.56	66.39	16.01	0.46	130.0	± 9.6 %
		Y	4.62	66.60	16.22		130.0	
40500	LIEFE COO 44 - 7 VIIII II COO 10 - 10 - 10 - 10	Z	4.73	66.35	16.08		130.0	
10589- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 90pc duty cycle)	X	4.66	67.17	16.68	0.46	130.0	± 9.6 %
		Ϋ́	4.71	67.31	16.82		130.0	
40500		Z	4.82	67.12	16.71	0.10	130.0	1000
10590- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 90pc duty cycle)	Х	4.46	66.10	15.77	0.46	130.0	± 9.6 %
		Υ	4.52	66.34	16.00		130.0	
		Z	4.64	66.12	15.87		130.0	

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10591- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS0, 90pc duty cycle)	X	4.79	66.58	16.49	0.46	130.0	± 9.6 %
		Y	4.83	66.70	16.64		130.0	
		Ż	4.93	66.49	16.53		130.0	
10592- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS1, 90pc duty cycle)	Х	4.94	66.91	16.63	0.46	130.0	± 9.6 %
		Υ	4.99	67.04	16.77		130.0	
		Z	5.10	66.84	16.66		130.0	
10593- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS2, 90pc duty cycle)	X	4.86	66.81	16.50	0.46	130.0	± 9.6 %
		Y	4.91	66.96	16.65		130.0	
		Z	5.03	66.77	16.55		130.0	
10594- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS3, 90pc duty cycle)	X	4.92	66.99	16.66	0.46	130.0	± 9.6 %
		Y	4.97	67.12	16.80		130.0	
		Z	5.08	66.92	16.70		130.0	
10595- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS4, 90pc duty cycle)	X	4.88	66.93	16.55	0.46	130.0	± 9.6 %
		Y	4.93	67.07	16.70		130.0	
	ļ <u>.</u>	_ Z	5.05	66.89	16.60		130.0	
10596- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS5, 90pc duty cycle)	X	4.82	66.92	16.54	0.46	130.0	± 9.6 %
		Υ	4.87	67.07	16.71		130.0	
		Z	4.99	66.87	16.59		130.0	
10597- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS6, 90pc duty cycle)	Х	4.77	66.81	16.42	0.46	130.0	± 9.6 %
		Y	4.82	66.99	16.59		130.0	
		Z	4.94	66.80	16.49		130.0	ļ
10598- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS7, 90pc duty cycle)	X	4.75	67.07	16.71	0.46	130.0	± 9.6 %
		Y	4.80	67.22	16.86		130.0	
		Z	4.92	67.06	16.77		130.0	
10599- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS0, 90pc duly cycle)	X	5.47	67.15	16.72	0.46	130.0	± 9.6 %
		Y	5.50	67.24	16.83		130.0	
		Z	5.61	67.15	16.76		130.0	
10600- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS1, 90pc duty cycle)	X	5.60	67.56	16.89	0.46	130.0	± 9.6 %
		Υ	5.65	67.71	17.03		130.0	
		Z	5.81	67.73	17.02		130.0	
10601- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS2, 90pc duly cycle)	X	5.49	67.30	16.78	0.46	130.0	± 9.6 %
		` Y	5.53	67.44	16.92		130.0	
		Z	5.66	67.37	16.85		130.0	
10602- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS3, 90pc duty cycle)	Х	5.59	67.33	16.71	0.46	130.0	± 9.6 %
		Y	5.62	67.44	16.84		130.0	
		Z	5.75	67.36	16.76		130.0	
10603- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS4, 90pc duty cycle)	X	5.67	67.64	17.01	0.46	130.0	± 9.6 %
		Υ	5.71	67.76	17.13		130.0	
		Z	5.85	67.70	17.06		130.0	
10604- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS5, 90pc duty cycle)	X	5.48	67.14	16.74	0.46	130.0	± 9.6 %
		Y	5.50	67.20	16.84		130.0	
		Z	5.62	67.10	16.76		130.0	
10605- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS6, 90pc duty cycle)	X	5.59	67.44	16.88	0.46	130.0	± 9.6 %
		Y	5.62	67.56	17.01		130.0	
		Z	5.72	67.39	16.90		130.0	
10606- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS7, 90pc duty cycle)	Х	5.32	66.74	16.39	0.46	130.0	± 9.6 %
		Y	5.38	66.94	16.57	1	130.0	
		Z	5.49	66.84	16.49	 	130.0	

10607- AAA	IEEE 802.11ac WiFi (20MHz, MCS0, 90pc duty cycle)	X	4.63	65.90	16.12	0.46	130.0	± 9.6 %
,,,,,	oope daty cycle)	Y	4.67	66.03	16.27		420.0	
		Z	4.76	65.78	16.13		130.0 130.0	-
10608- AAA	IEEE 802.11ac WiFi (20MHz, MCS1, 90pc duty cycle)	X	4.81	66.29	16.28	0.46	130.0	± 9.6 %
		Y	4.87	66.45	16.44		130.0	<u> </u>
		Z	4.97	66.21	16.30		130.0	-
10609- AAA	IEEE 802.11ac WiFi (20MHz, MCS2, 90pc duty cycle)	Х	4.70	66.13	16.11	0.46	130.0	± 9.6 %
		Υ	4.75	66.30	16.28		130.0	
	<u> </u>	Z	4.86	66.07	16.15		130.0	
10610- AAA	IEEE 802.11ac WiFi (20MHz, MCS3, 90pc duty cycle)	X	4.75	66.30	16.28	0.46	130.0	± 9.6 %
		Y	4.80	66.46	16.44		130.0	
40044	IEEE 000 (4) MEE (00) III MOO (Z	4.91	66.23	16.31		130.0	
10611- AAA	IEEE 802.11ac WiFi (20MHz, MCS4, 90pc duty cycle)	Х	4.66	66.09	16.12	0.46	130.0	± 9.6 %
		Y	4.72	66.26	16.29		130.0	_
40040	IPPE 000 44 - WIPP (001 III - 1/2 - 1/2	Z	4.83	66.05	16.17		130.0	
10612- AAA	IEEE 802.11ac WiFi (20MHz, MCS5, 90pc duty cycle)	X	4.67	66.22	16.15	0.46	130.0	± 9.6 %
		Y	4.73	66.43	16.33		130.0	
10010		Z	4.84	66.19	16.19		130.0	
10613- AAA	IEEE 802.11ac WiFi (20MHz, MCS6, 90pc duty cycle)	X	4.67	66.11	16.03	0.46	130.0	± 9.6 %
		Y	4.74	66.32	16.22		130.0	
40044	(CEE 000 44 . 18/5* (00) (1 . 14007	Z	4.86	66.11	16.10		130.0	
10614- AAA	IEEE 802.11ac WiFi (20MHz, MCS7, 90pc duty cycle)	Х	4.62	66.33	16.29	0.46	130.0	± 9.6 %
		. Y	4.68	66.50	16.45		130.0	
		Z	4.79	66.30	16.34		130.0	
10615- AAA	IEEE 802.11ac WiFi (20MHz, MCS8, 90pc duty cycle)	Х	4.66	65.90	15.87	0.46	130.0	± 9.6 %
		Y	4.72	66.09	16.06		130.0	
		Z	4.83	65.85	15.93		130.0	
10616- AAA	IEEE 802.11ac WiFi (40MHz, MCS0, 90pc duty cycle)	X	5.28	66.38	16.32	0.46	130.0	± 9.6 %
		Υ	5.33	66.52	16.45		130.0	
		Z	5.43	66.39	16.36		130.0	
10617- AAA	IEEE 802.11ac WiFi (40MHz, MCS1, 90pc duty cycle)	×	5.35	66.56	16.38	0.46	130.0	± 9.6 %
	 	Y	5.39	66.69	16.51		130.0	
100/-		Z	5.48	66.48	16.37		130.0	
10618- AAA	IEEE 802.11ac WiFi (40MHz, MCS2, 90pc duty cycle)	X	5.24	66.57	16.40	0.46	130.0	± 9.6 %
	-	Y	5.28	66.70	16.53		130.0	
10010		Z	5.38	66.55	16.43		130.0	
10619- AAA	IEEE 802.11ac WiFi (40MHz, MCS3, 90pc duty cycle)	X	5.25	66.36	16.23	0.46	130.0	± 9.6 %
		Y	5.30	66.53	16.38		130.0	
40000	IEEE 000 44 - MEE (40MH - MOC)	Z	5.40	66.37	16.27	0.10	130.0	
10620- AAA	IEEE 802.11ac WiFi (40MHz, MCS4, 90pc duty cycle)	X	5.34	66.40	16.30	0.46	130.0	± 9.6 %
	 	Y	5.39	66.57	16.45		130.0	
10621- AAA	IEEE 802.11ac WiFi (40MHz, MCS5, 90pc duty cycle)	Z X	5.52 5.35	66.49 66.56	16.38 16.51	0.46	130.0 130.0	± 9.6 %
77/71	aopo duty cycle)	Y	5.38	66.67	16.62		130.0	
		Z	5.49	66.56	16.54		130.0	
10622- AAA	IEEE 802.11ac WiFi (40MHz, MCS6,	X	5.36	66.72	16.58	0.46	130.0	± 9.6 %
лин	90pc duty cycle)	Y	5.40	66.85	16.70		130.0	
	 	Z	5.49		16.70		130.0	
	1	141	J.43	66.68	10.00	L	130.0	

10623- AAA	IEEE 802.11ac WiFi (40MHz, MCS7, 90pc duly cycle)	X	5.23	66.22	16.20	0.46	130.0	± 9.6 %
		Y	5.27	66.37	16.34		130.0	
		Z	5.38	66.24	16.24		130.0	
10624- AAA	IEEE 802.11ac WiFi (40MHz, MCS8, 90pc duty cycle)	Х	5.42	66.43	16.37	0.46	130.0	± 9.6 %
		Y	5.47	66.57	16.50		130.0	
		Z	5.57	66.43	16.41		130.0	
10625- AAA	IEEE 802.11ac WiFi (40MHz, MCS9, 90pc duty cycle)	Х	5.78	67.38	16.89	0.46	130.0	± 9.6 %
		Y	5.86	67.62	17.07		130.0	
10000		Z	5.99	67.53	16.99		130.0	
10626- AAA	IEEE 802.11ac WiFi (80MHz, MCS0, 90pc duty cycle)	X	5.58	66.44	16.28	0.46	130.0	± 9.6 %
	 	Y	5.61	66.57	16.40		130.0	<u> </u>
10627-	IEEE 000 44 co WiEi (00M) - MOO4	Z	5.69	66.43	16.30	0.40	130.0	
AAA	IEEE 802.11ac WiFi (80MHz, MCS1, 90pc duty cycle)	X	5.83	67.02	16.53	0.46	130.0	± 9.6 %
	 	Y	5.86	67.15	16.65		130.0	
10600		Z	5.95	67.00	16.54	0.10	130.0	
10628- AAA	IEEE 802.11ac WiFi (80MHz, MCS2, 90pc duty cycle)	X	5.61	66.51	16.21	0.46	130.0	± 9.6 %
		Y	5.66	66.69	16.36		130.0	
10629-	IEEE 000 44 INSEL (OOM II - MOOO	Z	5.75	66.60	16.27		130.0	
AAA	IEEE 802.11ac WiFi (80MHz, MCS3, 90pc duty cycle)	X	5.68	66.56	16.23	0.46	130.0	± 9.6 %
		Y	5.75	66.79	16.40		130.0	
40620	IEEE 900 44 co M/E! /90M I - MOO4	Z	5.84	66.66	16.30	0.40	130.0	
10630- AAA	IEEE 802.11ac WiFi (80MHz, MCS4, 90pc duty cycle)	X	6.13	68.08	16.98	0.46	130.0	± 9.6 %
		Y	6.22	68.39	17.20		130.0	
10001		Z	6.43	68.55	17.23		130.0	
10631- AAA	IEEE 802.11ac WiFi (80MHz, MCS5, 90pc duty cycle)	X	6.03	67.90	17.10	0.46	130.0	± 9.6 %
		Y	6.09	68.10	17.24		130.0	
		Z	6.28	68.23	17.28		130.0	
10632- AAA	IEEE 802.11ac WiFi (80MHz, MCS6, 90pc duty cycle)	X	5.80	67.10	16.72	0.46	130.0	± 9.6 %
		Y	5.83	67.19	16.81		130.0	
		<u>Z</u>	5.93	67.09	16.72		130.0	
10633- AAA	IEEE 802.11ac WiFi (80MHz, MCS7, 90pc duly cycle)	X	5.67 ———	66.68	16.33	0.46	130.0	± 9.6 %
		Y	5.72	66.84	16.46		130.0	
		Z	5.85	66.86	16.43		130.0	
10634- AAA	IEEE 802.11ac WiFi (80MHz, MCS8, 90pc duty cycle)	X	5.66	66.72	16.41	0.46	130.0	± 9.6 %
		Y	5.70	66.87	16.53		130.0	
4000=		Z	5.82	66.84	16.49		130.0	
10635- AAA	IEEE 802.11ac WiFi (80MHz, MCS9, 90pc duty cycle)	X	5.53 	66.00	15.77	0.46	130.0	± 9.6 %
		Y	5.59	66.22	15.94		130.0	
40000		Z	5.70	66.15	15.87		130.0	
10636- AAA	IEEE 1602.11ac WiFi (160MHz, MCS0, 90pc duty cycle)	X	6.00	66.81	16.37	0.46	130.0	± 9.6 %
		Y	6.03	66.94	16.49		130.0	
40007	1555 4000 44 M/55 (100) 11 (100)	Z	6.10	66.84	16.41		130.0	
10637- AAA	IEEE 1602.11ac WiFi (160MHz, MCS1, 90pc duty cycle)	X	6.16	67.20	16.55	0.46	130.0	± 9.6 %
	 	Y	6.19	67.33	16.66		130.0	
40000		Z	6.27	67.24	16.58		130.0	
10638- AAA	IEEE 1602.11ac WiFi (160MHz, MCS2, 90pc duty cycle)	X	6.15	67.16	16.50	0.46	130.0	± 9.6 %
		Y	6.19	67.30	16.62		130.0	
		Z	6.27	67.20	16.54		130.0	

10639- AAA	IEEE 1602.11ac WiFi (160MHz, MCS3, 90pc duty cycle)	X	6.13	67.11	16.52	0.46	130.0	± 9.6 %
	0000 day 0/0/0/	Y	6.17	67.26	16.65		130.0	<u> </u>
<u> </u>		Z	6.27	67.22	16.60		130.0	
10640- AAA	IEEE 1602.11ac WiFi (160MHz, MCS4, 90pc duty cycle)	Х	6.13	67.11	16.46	0.46	130.0	± 9.6 %
		Y	6.18	67.29	16.61		130.0	
		Z	6.30	67.29	16.57		130.0	
10641- AAA	IEEE 1602.11ac WiFi (160MHz, MCS5, 90pc duty cycle)	X	6.18	67.03	16.44	0.46	130.0	± 9.6 %
		Υ	6,21	67.15	16.56		130.0	
		Z	6.29	67.03	16.46		130.0	
10642- AAA	IEEE 1602.11ac WiFi (160MHz, MCS6, 90pc duty cycle)	X	6.22	67.29	16.75	0.46	130.0	± 9.6 %
		Ÿ	6.26	67.42	16.86		130.0	
		Z	6.36	67.38	16.81		130.0	
10643- AAA	IEEE 1602.11ac WiFi (160MHz, MCS7, 90pc duty cycle)	Х	6.06	66.96	16.47	0.46	130.0	± 9.6 %
-		Y	6.09	67.11	16.60		130.0	
		Z	6.19	67.03	16.53		130.0	
10644- AAA	IEEE 1602.11ac WiFi (160MHz, MCS8, 90pc duty cycle)	X	6.21	67.43	16.73	0.46	130.0	± 9.6 %
		Y	6.27	67.66	16.90		130.0	
		Z	6.42	67.74	16.91		130.0	
10645- AAA	IEEE 1602.11ac WiFi (160MHz, MCS9, 90pc duty cycle)	Х	6.50	67.90	16.92	0.46	130.0	± 9.6 %
		Υ	6.70	68.50	17.27		130.0	
		Z	6.78	68.33	17.14		130.0	

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

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





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

Accredited by the Swiss Accreditation Service (SAS)

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Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: SCS 0108

Client

PC Test

Certificate No: ES3-3287_Sep16

S

CALIBRATION CERTIFICATE

Object

ES3DV3 - SN:3287

Calibration procedure(s)

QA CAL-01.v9, QA CAL-23.v5, QA CAL-25.v6
Calibration procedure for dosimetric E-field probes

19-28-2016

Calibration date:

September 19, 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

Calibrated by:

Name

Function

Laboratory Technician

Cianatura

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Leif Klysner

.

Approved by:

Katja Pokovic

Technical Manager

Issued: September 20, 2016

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

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





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

Accreditation No.: SCS 0108

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Glossary:

TSL

NORMx,y,z

ConvF DCP

CF

A, B, C, D

Polarization o

Polarization 9

Connector Angle

Certificate No: ES3-3287_Sep16

φ rotation around probe axis

tissue simulating liquid

sensitivity in free space sensitivity in TSL / NORMx,y,z

diode compression point

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

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

Calibration is Performed According to the Following Standards:

crest factor (1/duty cycle) of the RF signal

modulation dependent linearization parameters

- 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
 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
- 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 9 = 0 ($f \le 900$ 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.v.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
- 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, v, 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
- 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 ES3DV3

SN:3287

Manufactured: June 7, 2010 Calibrated: September 19

September 19, 2016

Calibrated for DASY/EASY Systems

(Note: non-compatible with DASY2 system!)

DASY/EASY - Parameters of Probe: ES3DV3 - SN:3287

Basic Calibration Parameters

	Sensor X	Sensor Y	Sensor Z	Unc (k=2)
Norm (μV/(V/m) ²) ^A	0.87	0.98	1.00	± 10.1 %
DCP (mV) ^B	101.9	101.4	106.1	

Modulation Calibration Parameters

UID	Communication System Name		A dB	B dB√μV	С	D dB	VR mV	Unc [±] (k=2)
0	CW	X	0.0	0.0	1.0	0.00	198.4	±3.5 %
		Y	0.0	0.0	1.0		189.6	
		Z	0.0	0.0	1.0		184.8	

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	T6
X	65.67	459.4	34.07	29.08	2.68	5.077	2	0.308	1.009
_ Y	71.46	511.8	35.31	29.86	3.707	5.1	0.748	0.607	1.009
Z	50.48	357.3	34.55	27.84	2.262	5.1	1.583	0.279	1.01

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%.

^a 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).

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

DASY/EASY - Parameters of Probe: ES3DV3 - SN:3287

Calibration Parameter Determined in Head Tissue Simulating Media

f (MHz) ^C	Relative Permittivity ^F	Conductivity (S/m) ^F	ConvF X	ConvF Y	ConvF Z	Alpha ^G	Depth ^G (mm)	Unc (k=2)
750	41.9	0.89	6.96	6.96	6.96	0.44	1.36	± 12.0 %
835	41.5	0.90	6.67	6.67	6.67	0.29	1.69	± 12.0 %
1750	40.1	1.37	5.49	5.49	5.49	0.43	1.42	± 12.0 %
1900	40.0	1.40	5.27	5.27	5.27	0.41	1.45	± 12.0 %
2300	39.5	1.67	4.86	4.86	4.86	0.61	1.28	± 12.0 %
2450	39.2	1.80	4.54	4.54	4.54	0.47	1.51	± 12.0 %
2600	39.0	1.96	4.41	4.41	4.41	0.77	1.18	± 12.0 %

 $^{^{\}rm C}$ 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 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.

validity can be extended to \pm 110 MHz.

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 CopyE uncertainty for indicated target lissue parameters.

the ConvF uncertainty for indicated target lissue 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: ES3DV3 - SN:3287

Calibration Parameter Determined in Body Tissue Simulating Media

			•		_			
f (MHz) ^C	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	6.64	6.64	6.64	0.27	1.86	_ ± 12.0 %
835	55.2	0.97	6.55	6.55	6.55	0.50	1.37	± 12.0 %
1750	53.4	1.49	5.11	5.11	5.11	0.33	1.85	± 12.0 %
1900	53.3	1.52	4.94	4.94	4.94	0.42	1.59	± 12.0 %
2300	52.9	1.81	4.55	4.55	4.55	0.55	1.42	± 12.0 %
2450	52.7	1.95	4.35	4.35	4.35	0.80	1.09	± 12.0 %
2600	52.5	2.16	4.12	4.12	4.12	0.80	1.10	± 12.0 %

 $^{^{\}rm C}$ 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 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.

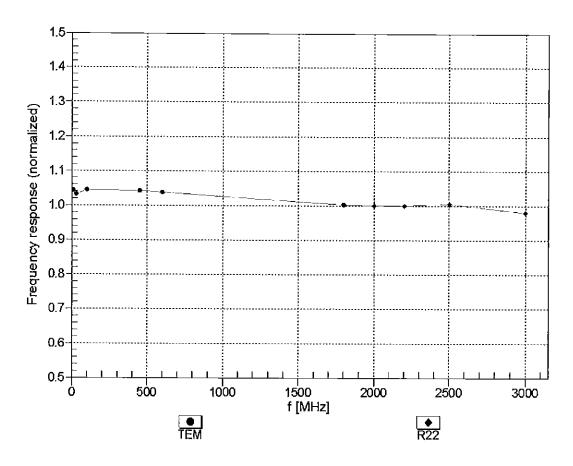
validity can be extended to ± 110 MHz.

F At frequencies below 3 GHz, the validity of tissue parameters (ε and σ) can be relaxed to ± 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 ± 5%. The uncertainty is the RSS of the ConyF uncertainty for 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.

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

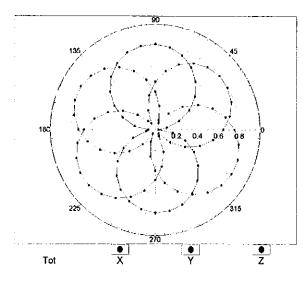


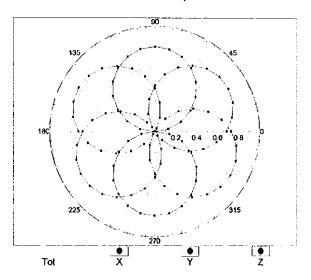
Uncertainty of Frequency Response of E-field: ± 6.3% (k=2)

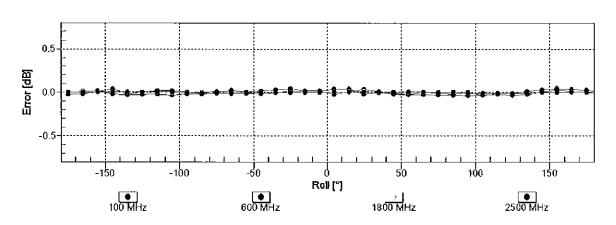
Receiving Pattern (ϕ), $\vartheta = 0^{\circ}$



f=1800 MHz,R22

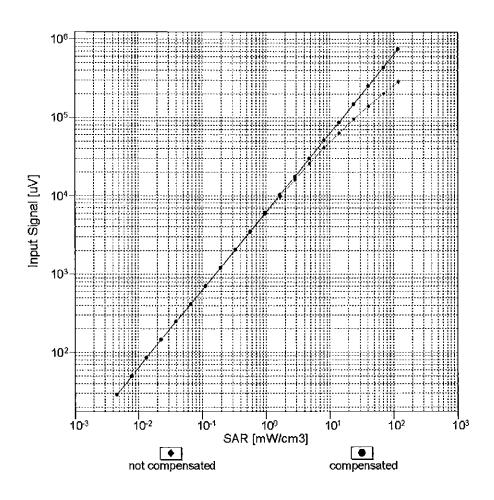


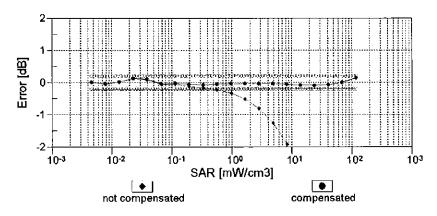




Uncertainty of Axial Isotropy Assessment: ± 0.5% (k=2)

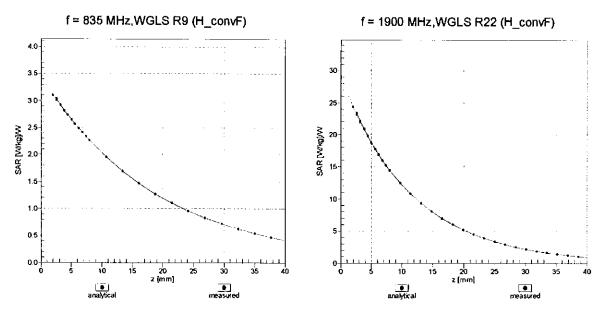
Dynamic Range f(SAR_{head}) (TEM cell , f_{eval}= 1900 MHz)





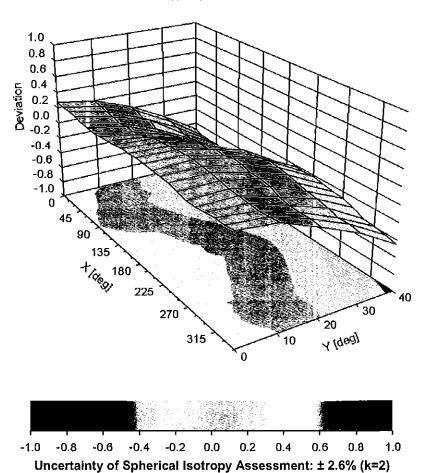
Uncertainty of Linearity Assessment: ± 0.6% (k=2)

Conversion Factor Assessment



Deviation from Isotropy in Liquid

Error (ϕ , ϑ), f = 900 MHz



ES3DV3-SN:3287

DASY/EASY - Parameters of Probe: ES3DV3 - SN:3287

Other Probe Parameters

Sensor Arrangement	Triangular
Connector Angle (°)	84.9
Mechanical Surface Detection Mode	enabled
Optical Surface Detection Mode	disabled
Probe Overall Length	337 mm
Probe Body Diameter	10 mm
Tip Length	10 mm
Tip Diameter	4 mm
Probe Tip to Sensor X Calibration Point	2 mm
Probe Tip to Sensor Y Calibration Point	2 mm
Probe Tip to Sensor Z Calibration Point	2 mm
Recommended Measurement Distance from Surface	3 mm

ES3DV3-SN:3287

Appendix: Modulation Calibration Parameters

UID	ix: Modulation Calibration Parar Communication System Name		A dB	B dBõV	С	D dB	VR mV	Max Unc ^E (k=2)
0	CW	Х	0.00	0.00	1.00	0.00	198.4	± 3.5 %
		Υ	0.00	0.00	1.00		189.6	
10010	0.000	Z	0.00	0.00	1.00		184.8	
10010- CAA	SAR Validation (Square, 100ms, 10ms)	X	9.57	81.27	19.66	10.00	25.0	± 9.6 %
		Υ	9.48	81.17	20.59		25.0	
		Z	11.44	84.72	20.81		25.0	
10011- CAB	UMTS-FDD (WCDMA)	×	1.41	73.12	18.60	0.00	150.0	± 9.6 %
		Υ	1.09	67.36	15.29		150.0	
40040	1555 000 441 NEST 0 4 011 (D000 4	Z	1.04	67.24	15.12	0.44	150.0	
10012- CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps)	Х	1.39	66.79	17.15	0.41	150.0	± 9.6 %
		Y	1.33	64.98	15.75		150.0	
40040	IEEE 000 44* WIE: 0 4 OU- (D000	Z	1.31	64.97	15.66	4.40	150.0	1000
10013- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps)	X	5.20	67.40	17.54	1.46	150.0	± 9.6 %
		Y	5.27	67.18	17.41		150.0	
10021- DAB	GSM-FDD (TDMA, GMSK)	X	5.09 25.12	67 <u>.33</u> 98.64	17.40 27.15	9.39	150.0 50.0	± 9.6 %
חעח		Υ	16.05	91.61	25.96		50.0	
	-	ż	54.58	112.47	31.02		50.0	
10023- DAB	GPRS-FDD (TDMA, GMSK, TN 0)	X	21.90	96.28	26.48	9.57	50.0	± 9.6 %
	-	Υ	15.04	90.31	25.57		50.0	
		Z	40.95	107.64	29.77		50.0	·
10024- DAB	GPRS-FDD (TDMA, GMSK, TN 0-1)	Х	100.00	118.44	30.60	6.56	60.0	± 9.6 %
		Υ	56.85	112.42	30.28		60.0	
		Z	100.00	119.26	30.80		60.0	
10025- DAB	EDGE-FDD (TDMA, 8PSK, TN 0)	Х	15.98	100.03	37.68	12.57	50.0	± 9.6 %
		Υ	12.36	89.89	33.32	ļ	50.0	
		Z	14.92	100.13	38.33		50.0	. 0 0 0/
10026- DAB	EDGE-FDD (TDMA, 8PSK, TN 0-1)	Х	19.89	102.72	35.15	9.56	60.0	± 9.6 %
		Y	15.11	94.49	32.22		60.0	
10027-	GPRS-FDD (TDMA, GMSK, TN 0-1-2)	Z X	21.16 100.00	106.39 117.46	36.94 29.21	4.80	60.0 80.0	± 9.6 %
DAB		Υ	100.00	119.97	30.83	 	80.0	
	-	Z	100.00	118.35	29.47	 	80.0	-
10028- DAB	GPRS-FDD (TDMA, GMSK, TN 0-1-2-3)	X	100.00	117.97	28.63	3.55	100.0	± 9.6 %
J. 10		Y	100.00	119.91	29.91		100.0	
		Z	100.00	118.74	28.84		100.0	
10029- DAB	EDGE-FDD (TDMA, 8PSK, TN 0-1-2)	Х	14.03	95.19	31.54	7.80	80.0	± 9.6 %
		Υ	11.54	89.32	29.33		80.0	
		Z	13.09	95.17	31.96		80.0	
10030- CAA	IEEE 802.15.1 Bluetooth (GFSK, DH1)	Х	100.00	117.04	29.36	5.30	70.0	± 9.6 %
		Y	100.00	119.78	31.12		70.0	
		Z	100.00	117.69	29.49	100	70.0	1000
10031- CAA	IEEE 802.15.1 Bluetooth (GFSK, DH3)	X	100.00	120.90	28.34	1.88	100.0	± 9.6 %
		Y	100.00	121.14	28.78	 	100.0	
		Z	100.00	119.84	27.78	<u> </u>	100.0	

10032- CAA	IEEE 802.15.1 Bluetooth (GFSK, DH5)	Х	100.00	128.75	30.50	1.17	100.0	± 9.6 %
1		TY	100.00	125.19	29.33	╁	400.0	
		 ż	100.00	124.54	28.68	 	100.0	
10033- CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH1)	X	24.47	102.44	28.62	5.30	70.0	± 9.6 %
		Y	12.93	91.34	25.64		70.0	
		<u> Z</u>	20.22	99.06	27.27		70.0	
10034- CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH3)	X	15.75	99.73	26.60	1.88	100.0	± 9.6 %
		<u> </u>	6.06	84.29	21.90	<u> </u>	100.0	
10035-	IEEE 000 45 (D) 1 (C) (D) 4 D D D O	Z	7.41	86.87	21.79		100.0	
CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH5)	X	8.06	91.60	24.06	1.17	100.0	± 9.6 %
<u> </u>		Y	3.71	78.74	19.66	<u> </u>	100.0	
10036-	JEEE 000 45 4 Ph. 1 . II (0 PPO)(PVI)	Z	4.06	80.00	19.16	<u> </u>	100.0	
CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH1)	X	31.59	106.91	29.95	5.30	70.0	± 9.6 %
		Y	14.71	93.73	26.48		70.0	
10037-	IEEE 902 15 1 Physicals (0 DDOLC DUO)	Z	25.49	103.04	28.49		70.0	<u> </u>
CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH3)	X	15.02	99.00	26.34	1.88	100.0	± 9.6 %
<u> </u>	-	Y	5.91	83.93	21.74		100.0	
10038-	IEEE 802.15.1 Bluetooth (8-DPSK, DH5)	Z	6.95	86.01	21.48	 	100.0	
CAA	1EEE 602.15.1 Bluetooth (8-DPSK, DH5)	X	8.64	92.97	24.58	1.17	100.0	± 9.6 %
	· · · · · · · · · · · · · · · · · · ·	Y	3.82	79.37	19.97		100.0	
10039-	CDMA2000 (1xRTT, RC1)	Z	4.16	80.58	19.47		100.0	
CAB	CDMA2000 (TXRTT, RCT)	X	3.32	80.83	20.52	0.00	150.0	± 9.6 %
		Y	1.99	71.59	16.56		150.0	
40040	10.54.40.400.500.400.400.400.400.400.400.	Z	1.78	71.38	15.53		150.0	
10042- CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4- DQPSK, Halfrate)	X	93.96	116.51	30.17	7.78	50.0	± 9.6 %
		Y	28.36	100.31	27.04		50.0	
40044	10.04(5)4(5)4(5)	Z_	100.00	118.01	30.46		50.0	
10044- CAA	IS-91/EIA/TIA-553 FDD (FDMA, FM)	Х	0.00	110.81	0.68	0.00	150.0	± 9.6 %
		Υ	0.00	94.68	0.92		150.0	
10010		Z	0.01	95.27	0.89		150.0	
10048- CAA	DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24)	X	12.13	84.40	24.33	13.80	25.0	± 9.6 %
		Υ	11.03	81.88	24.36		25.0	
10010		Z	<u> 15.47</u>	90.17	26.32		25.0	
10049- CAA	DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12)	X	14.56	88.92	24.53	10.79	40.0	± 9.6 %
		Υ	12.34	85.94	24.48		40.0	
10056-	UMTS-TDD (TD-SCDMA, 1.28 Mcps)	Z X	20.46 13.90	95.78 88.80	26.73 25.15	9.03	40.0 50.0	± 9.6 %
CAA		L						
	 	Y	11.60	84.93	24.34		50.0	
10058-	FDCF FDD /TDMA CDC// TN C / C T	Z	15.96	92.01	26.12		50.0	
DAB	EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)	X	10.54	89.79	28.95	6.55	100,0	± 9.6 %
	 	Ÿ	9.17	85.43	27.21		100.0	
10059-	IEEE 000 44h MEE: 0 4 OU 10000 5	Z	9.28	88.15	28.66		100.0	
CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps)	Х	1.62	69.54	18.42	0.61	110.0	± 9.6 %
	 	Y	1.52	67.09	16.78		110.0	
10060	IEEE 000 44h WEELO 4 OLL (DOOR	Z	1.47	67.00	16.67		110.0	
10060- CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps)	Х	100.00	133.57	34.76	1.30	110.0	± 9.6 %
	 							
		Y	47.37 100.00	119.92	31.34		110.0	

10061- CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps)	Х	24.29	111.37	31.49	2.04	110.0	± 9.6 %
		Y	7.57	90.21	25.12		110.0	
		Ż	8.96	94.42	26.47		110.0	
10062- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps)	X	4.94	67.26	16.92	0.49	100.0	± 9.6 %
		Y	4.99	66.94	16.70		100.0	
		Z	4.80	67.06	16.67		100.0	
10063- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps)	X	4.98	67.42	17.05	0.72	100.0	± 9.6 %
		Y	5.03	67.12	16.85		100.0	
		Z	4.84	67.22	16.80		100.0	
10064- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps)	Х	5.33 —_	67.75	17.30	0.86	100.0	± 9.6 %
		Υ	5.40	67.50	17.13		100.0	
		Z	5.14	67.52	17.06		100.0	
10065- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps)	X	5.22	67.77	17.45	1.21	100.0	± 9.6 %
		Y	5.30	67.55	17.30		100.0	
		Z	5.05	67.55	17.23		100.0	
10066- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps)	Х	5.28	67.89	17.67	1.46	100.0	± 9.6 %
		Y	5.37	67.69	17.54		100.0	
		Z	5.11	67.69	17.47		100.0	
10067- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps)	Х	5.58	67.96	18.07	2.04	100.0	± 9.6 %
		Y	5.70	67.83	17.99		100.0	
	·	Z	5.44	67.94	17.97		100.0	
10068- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps)	Х	5.73	68.36	18.44	2.55	100.0	± 9.6 %
		Y	5.86	68.26	18.38		100.0	
		Ż	5.56	68.20	18.31		100.0	
10069- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps)	X	5.80	68.22	18.58	2.67	100.0	± 9.6 %
		Υ	5.93	68.12	18.53		100.0	-
<u> </u>		Z	5.64	68.21	18.51		100.0	
10071- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps)	X	5.34	67.61	17.91	1.99	100.0	± 9.6 %
		Y	5.43	67.44	17.80		100.0	
		Z	5.23	67.57	17.79		100.0	
10072- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps)	Х	5.41	68.20	18.23	2.30	100.0	± 9.6 %
		Υ	5.52	68.04	18.13		100.0	
		Z	5.28	68.10	18.11		100.0	
10073- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps)	Х	5.54	68.52	18.63	2.83	100.0	± 9.6 %
		Υ	5.67	68.41	18.56		100.0	
		Z	5.42	68.46	18.55		100.0	
10074- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps)	X	5.57	68.60	18.89	3.30	100.0	± 9.6 %
		Υ	5.71	68.53	18.84		100.0	
		Z	5.46	68.55	18.80		100.0	
10075- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps)	Х	5.74	69.13	19.40	3.82	90.0	± 9.6 %
		Υ	5.91	69.12	19.39		90.0	
		Z	5.60	68.97	19.28		90.0	
10076- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps)	Х	5.73	68.87	19.48	4.15	90.0	± 9.6 %
		Y	5.91	68.89	19.48		90.0	
		Z	5.64	68.84	19.44		90.0	
10077- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps)	X	5.76	68.96	19.58	4.30	90.0	± 9.6 %
CAB	1	1		00.00	40.50		00.0	1
		Υ	5.95	68.98	19.59		90.0	

10081- CAB	CDMA2000 (1xRTT, RC3)	X	1.45	73.74	17.54	0.00	150.0	± 9.6 %
		Y	1.01	66.70	13.93	 	150.0	+
		Z	0.86	65.95	12.65	 	150.0	<u> </u>
10082- CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4- DQPSK, Fullrate)	Х	2.22	64.23	9.03	4.77	80.0	± 9.6 %
		Y	2.60	65.39	10.25		80.0	
10000		Z	2.07	64.06	8.86		80.0	
10090- DAB	GPRS-FDD (TDMA, GMSK, TN 0-4)	X	100.00	118.52	30.65	6.56	60.0	± 9.6 %
		<u> </u>	54.54	111.83	30.17	ļ	60.0	
10097-	UMTS-FDD (HSDPA)	Z	100.00	119.33	30.85	 	60.0	
CAB	OWITO-FDD (HODFA)	X	2.07	69.87	17.29	0.00	150.0	± 9.6 %
		$\frac{1}{Z}$	1.87 1.83	67.25	15.70	 -	150.0	<u> </u>
10098-	UMTS-FDD (HSUPA, Subtest 2)	+ ×		67.53	15.55	0.00	150.0	
CAB	OWTO-1 DD (1100) A, Sublest 2)	^ Y	1.83	69.88 67.20	17.28	0.00	150.0	± 9.6 %
		Z	1.80	67.49	15.65	 	150.0	
10099- DAB	EDGE-FDD (TDMA, 8PSK, TN 0-4)	X	19.79	102.55	15.52 35.10	9.56	150.0 60.0	± 9.6 %
		TY	15.06	94.38	32.19	 	60.0	
		Z	21.07	106.24	36.89		60.0	
10100- CAB	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	Х	3.71	73.15	18.05	0.00	150.0	± 9.6 %
		Y	3.34	70.68	16.71		150.0	
		Z	3.15	70.31	16.60		150.0	
10101- CAB	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	X	3.53	68.94	16.73	0.00	150.0	± 9.6 %
		Y	3.44	67.88	16.03		150.0	
		Z	3.28	67.66	15.91		150.0	
10102- CAB	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	X	3.62	68.78	16.77	0.00	150.0	± 9.6 %
		Υ	3.55	67.81	16.12		150.0	
10100	<u> </u>	Z	3.38	67.61	16.00		150.0	
10103- CAB	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	Х	9.03	78.84	21.45	3.98	65.0	± 9.6 %
		Υ	8.52	77.08	20.81		65.0	
40404		Z	8.79	79.04	21.64		65.0	
10104- CAB	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	X	8.83	77.31	21.70	3.98	65.0	± 9.6 %
		ΙÝ	8.68	76.21	21.28		65.0	
10105-	LTE-TDD (SC-FDMA, 100% RB, 20	Z	8.45	77.10	21.68		65.0	
CAB	MHz, 64-QAM)	X	8.12	75.63	21.27	3.98	65.0	± 9.6 %
		Y	7.58	73.53	20.37		65.0	
10108- CAC	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	X	7.68 3.26	75.16 72.24	21.11 17.88	0.00	65.0 150.0	± 9.6 %
		TY	2.97	69.86	16.52	-	150.0	<u> </u>
		Ż	2.76	69.54	16.43		150.0	
10109- CAC	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	X	3.21	68.83	16.74	0.00	150.0	± 9.6 %
		Y	3.12	67.65	15.97		150.0	_
		Z	2.93	67.47	15.80		150.0	
10110- <u>CAC</u>	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	X	2.68	71.31	17.65	0.00	150.0	± 9.6 %
		Y	2.45	68.82	16.19	_	150.0	
10111	LITE EDD (OO ED)	Z	2.25	68.65	16.05		150.0	
10111- CAC	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	X	2.94	69.70	17.25	0.00	150.0	± 9.6 %
		Y	2.81	68.04	16.25		150.0	
		<u> Z </u>	2.63	68.09	16.01		150.0	

10114- IEEE 802.11n (CAB Mbps, BPSK) 10115- IEEE 802.11n (16-QAM) 10116- IEEE 802.11n (64-QAM) 10117- IEEE 802.11n (64-QAM) 10118- IEEE 802.11n (BPSK) 10118- IEEE 802.11n (QAM) 10119- IEEE 802.11n (QAM) 10140- LTE-FDD (SC-FMHz, 16-QAM) 10141- LTE-FDD (SC-FMHz, 64-QAM) 10142- LTE-FDD (SC-FMHz, 64-QAM) 10143- LTE-FDD (SC-FMHz, 64-QAM) 10143- LTE-FDD (SC-FMHz, 64-QAM) 10143- LTE-FDD (SC-FMHz, 64-QAM) 10143- LTE-FDD (SC-FMHz, 64-QAM)	-FDMA, 100% RB, 10	×	3.32	68.66	16.72	0.00	150.0	± 9.6 %
10114- IEEE 802.11n (CAB Mbps, BPSK) 10115- IEEE 802.11n (16-QAM) 10116- IEEE 802.11n (16-QAM) 10117- IEEE 802.11n (1014- IEEE 802.11n (10140- IEEE 802.11n (10141- IEEE 802.11n (IEEE 8		Y	3.24	67.56	16.01		150.0	
CAC 64-QAM) 10114- IEEE 802.11n (Mbps, BPSK) 10115- IEEE 802.11n (16-QAM) 10116- IEEE 802.11n (64-QAM) 10117- IEEE 802.11n (64-QAM) 10118- IEEE 802.11n (BPSK) 10118- IEEE 802.11n (QAM) 10119- IEEE 802.11n (QAM) 10140- LTE-FDD (SC-FCAB MHz, 16-QAM) 10141- LTE-FDD (SC-FCAB MHz, 64-QAM) 10142- LTE-FDD (SC-FCAC QPSK) 10143- LTE-FDD (SC-FCAC QPSK)	-	Ż	3.06	67.45	15.85		150.0	
CAB Mbps, BPSK) 10115- IEEE 802.11n (16-QAM) 10116- IEEE 802.11n (64-QAM) 10117- IEEE 802.11n (64-QAM) 10118- IEEE 802.11n (BPSK) 10118- IEEE 802.11n (QAM) 10119- IEEE 802.11n (QAM) 10140- LTE-FDD (SC-FCAB MHz, 16-QAM) 10141- LTE-FDD (SC-FCAB MHz, 64-QAM) 10142- LTE-FDD (SC-FCAC QPSK) 10143- LTE-FDD (SC-FCAC I6-QAM) 10144- LTE-FDD (SC-FCAC I6-QAM)	FDMA, 100% RB, 5 MHz,	X	3.09	69.65	17.28	0.00	150.0	± 9.6 %
CAB Mbps, BPSK) 10115- IEEE 802.11n (16-QAM) 10116- IEEE 802.11n (64-QAM) 10117- IEEE 802.11n (64-QAM) 10118- IEEE 802.11n (BPSK) 10118- IEEE 802.11n (QAM) 10119- IEEE 802.11n (QAM) 10140- LTE-FDD (SC-FCAB MHz, 16-QAM) 10141- LTE-FDD (SC-FCAB MHz, 64-QAM) 10142- LTE-FDD (SC-FCAC QPSK) 10143- LTE-FDD (SC-FCAC I6-QAM) 10144- LTE-FDD (SC-FCAC I6-QAM)	·	Υ	2.97	68.11	16.35		150.0	
CAB Mbps, BPSK) 10115- IEEE 802.11n (16-QAM) 10116- IEEE 802.11n (64-QAM) 10117- IEEE 802.11n (64-QAM) 10118- IEEE 802.11n (BPSK) 10118- IEEE 802.11n (QAM) 10119- IEEE 802.11n (QAM) 10140- LTE-FDD (SC-FCAB MHz, 16-QAM) 10141- LTE-FDD (SC-FCAB MHz, 64-QAM) 10142- LTE-FDD (SC-FCAC QPSK) 10143- LTE-FDD (SC-FCAC I6-QAM) 10144- LTE-FDD (SC-FCAC I6-QAM)		Z	2.78	68.22	16.13		150.0	
10116- IEEE 802.11n (CAB 64-QAM) 10117- IEEE 802.11n (BPSK) 10118- IEEE 802.11n (QAM) 10119- IEEE 802.11n (QAM) 10140- LTE-FDD (SC-FCAB MHz, 16-QAM) 10141- LTE-FDD (SC-FCAB MHz, 64-QAM) 10142- LTE-FDD (SC-FCAC QPSK) 10143- LTE-FDD (SC-FCAC QPSK)	(HT Greenfield, 13.5	×	5.30	67.67	16.69	0.00	150.0	± 9.6 %
10116- IEEE 802.11n (64-QAM) 10117- IEEE 802.11n (BPSK) 10118- IEEE 802.11n (QAM) 10119- IEEE 802.11n (QAM) 10140- LTE-FDD (SC-FCAB MHz, 16-QAM) 10141- LTE-FDD (SC-FCAB MHz, 64-QAM) 10142- LTE-FDD (SC-FCAC QPSK) 10143- LTE-FDD (SC-FCAC QPSK)		Υ	5.32	67.34	16.45		150.0	
10116- IEEE 802.11n (64-QAM) 10117- IEEE 802.11n (BPSK) 10118- IEEE 802.11n (QAM) 10119- IEEE 802.11n (QAM) 10140- LTE-FDD (SC-FCAB MHz, 16-QAM) 10141- LTE-FDD (SC-FCAB MHz, 64-QAM) 10142- LTE-FDD (SC-FCAC QPSK) 10143- LTE-FDD (SC-FCAC QPSK)		Z	5.18	67.41	16.46	<u>_</u>	150.0	
10117- IEEE 802.11n (BPSK) 10118- IEEE 802.11n (QAM) 10119- IEEE 802.11n (QAM) 10140- LTE-FDD (SC-FAB MHz, 16-QAM) 10141- LTE-FDD (SC-FAB MHz, 64-QAM) 10142- LTE-FDD (SC-FAB MHz, 64-QAM) 10143- LTE-FDD (SC-FAB MHz, 64-QAM) 10144- LTE-FDD (SC-FAB MHz, 64-QAM)	(HT Greenfield, 81 Mbps,	Х	5.68	67.95	16.83	0.00	150.0	± 9.6 %
10117- IEEE 802.11n (BPSK) 10118- IEEE 802.11n (QAM) 10119- IEEE 802.11n (QAM) 10140- LTE-FDD (SC-FAB MHz, 16-QAM) 10141- LTE-FDD (SC-FAB MHz, 64-QAM) 10142- LTE-FDD (SC-FAB MHz, 64-QAM) 10143- LTE-FDD (SC-FAB MHz, 64-QAM) 10144- LTE-FDD (SC-FAB MHz, 64-QAM)		Y	5.74	67.75	16.66		150.0	
10117- IEEE 802.11n (BPSK) 10118- IEEE 802.11n (QAM) 10119- IEEE 802.11n (QAM) 10140- LTE-FDD (SC-FAB MHz, 16-QAM) 10141- LTE-FDD (SC-FAB MHz, 64-QAM) 10142- LTE-FDD (SC-FAB MHz, 64-QAM) 10143- LTE-FDD (SC-FAB MHz, 64-QAM) 10144- LTE-FDD (SC-FAB MHz, 64-QAM)		Z	5.49	67.60	16.57		150.0	
10118- IEEE 802.11n (QAM) 10119- IEEE 802.11n (QAM) 10140- LTE-FDD (SC-FCAB MHz, 16-QAM) 10141- LTE-FDD (SC-FCAB MHz, 64-QAM) 10142- LTE-FDD (SC-FCAC QPSK) 10143- LTE-FDD (SC-FCAC QPSK)	(HT Greenfield, 135 Mbps,	X	5.43	67.93	16.74	0.00	150.0	± 9.6 %
10118- IEEE 802.11n (QAM) 10119- IEEE 802.11n (QAM) 10140- LTE-FDD (SC-FCAB MHz, 16-QAM) 10141- LTE-FDD (SC-FCAB MHz, 64-QAM) 10142- LTE-FDD (SC-FCAC QPSK) 10143- LTE-FDD (SC-FCAC QPSK)		Y	5.45	67.58	16.50		150.0	
10118- IEEE 802.11n (QAM) 10119- IEEE 802.11n (QAM) 10140- LTE-FDD (SC-FCAB MHz, 16-QAM) 10141- LTE-FDD (SC-FCAB MHz, 64-QAM) 10142- LTE-FDD (SC-FCAC QPSK) 10143- LTE-FDD (SC-FCAC QPSK)	/IIT & P	Z	5.29	67.63	16.50		150.0	
10119- IEEE 802.11n (CAB QAM) 10140- LTE-FDD (SC-FCAB MHz, 16-QAM) 10141- LTE-FDD (SC-FCAB MHz, 64-QAM) 10142- LTE-FDD (SC-FCAC QPSK) 10143- LTE-FDD (SC-FCAC 16-QAM) 10144- LTE-FDD (SC-FCAC 16-QAM)	(HT Mixed, 13.5 Mbps,	X	5.31	67.69	16.73	0.00	150.0	± 9.6 %
10119- IEEE 802.11n (CAB QAM) 10140- LTE-FDD (SC-FCAB MHz, 16-QAM) 10141- LTE-FDD (SC-FCAB MHz, 64-QAM) 10142- LTE-FDD (SC-FCAC QPSK) 10143- LTE-FDD (SC-FCAC 16-QAM) 10144- LTE-FDD (SC-FCAC 16-QAM)		Y	5.33	67.35	16.48		150.0	
10119- IEEE 802.11n (CAB QAM) 10140- LTE-FDD (SC-FCAB MHz, 16-QAM) 10141- LTE-FDD (SC-FCAB MHz, 64-QAM) 10142- LTE-FDD (SC-FCAC QPSK) 10143- LTE-FDD (SC-FCAC 16-QAM) 10144- LTE-FDD (SC-FCAC 16-QAM)		Z	5.15	67.28	16.42		150.0	
10140- LTE-FDD (SC-FCAB MHz, 16-QAM) 10141- LTE-FDD (SC-FCAB MHz, 64-QAM) 10142- LTE-FDD (SC-FCAC QPSK) 10143- LTE-FDD (SC-FCAC LTE-FD (SC-FCAC LTE-FD (SC-FCAC LTE-FD (SC-FCAC LTE-FD (SC-FCAC LTE-FD (SC-FCAC	(HT Mixed, 81 Mbps, 16-	X	5.73	68.05	16.89	0.00	150.0	± 9.6 %
10140- LTE-FDD (SC-FCAB MHz, 16-QAM) 10141- LTE-FDD (SC-FCAB MHz, 64-QAM) 10142- LTE-FDD (SC-FCAC QPSK) 10143- LTE-FDD (SC-FCAC LTE-FD (SC-FCAC LTE-FD (SC-FCAC LTE-FD (SC-FCAC LTE-FD (SC-FCAC LTE-FD (SC-FCAC		Y	5.76	67.71	16.65		150.0	
10140- LTE-FDD (SC-FCAB MHz, 16-QAM) 10141- LTE-FDD (SC-FCAB MHz, 64-QAM) 10142- LTE-FDD (SC-FCAC QPSK) 10143- LTE-FDD (SC-FCAC LTE-FD (SC-FCAC LTE-FD (SC-FCAC LTE-FD (SC-FCAC LTE-FD (SC-FCAC LTE-FD (SC-FCAC		Z	5.58	67.82	16.69		150.0	
10141- LTE-FDD (SC-I CAB MHz, 64-QAM) 10142- LTE-FDD (SC-I QPSK) 10143- LTE-FDD (SC-I 16-QAM) 10144- LTE-FDD (SC-I	(HT Mixed, 135 Mbps, 64-	X	5.40	67.88	16.73	0.00	150.0	±9.6 %
10141- LTE-FDD (SC-I CAB MHz, 64-QAM) 10142- LTE-FDD (SC-I QPSK) 10143- LTE-FDD (SC-I 10-QAM) 10144- LTE-FDD (SC-I		Υ	5.42	67.54	16.49		150.0	
10141- LTE-FDD (SC-I CAB MHz, 64-QAM) 10142- LTE-FDD (SC-I QPSK) 10143- LTE-FDD (SC-I 16-QAM) 10144- LTE-FDD (SC-I		Z	5.26	67.56	16.48		150.0	
10142- LTE-FDD (SC-I CAC QPSK) 10143- LTE-FDD (SC-I 16-QAM) 10144- LTE-FDD (SC-I	-FDMA, 100% RB, 15 //)	X	3.67	68.77	16.68	0.00	150.0	± 9.6 %
10142- LTE-FDD (SC-I CAC QPSK) 10143- LTE-FDD (SC-I 16-QAM) 10144- LTE-FDD (SC-I		Y	3.60	67.81	16.05		150.0	
10142- LTE-FDD (SC-I CAC QPSK) 10143- LTE-FDD (SC-I 16-QAM) 10144- LTE-FDD (SC-I		Z	3.42	67.62	15.92		150.0	
10143- LTE-FDD (SC-I CAC 16-QAM)	-FDMA, 100% RB, 15 4)	X	3.79	68.75	16.79	0.00	150.0	±9.6 %
10143- CAC		Υ	3.72	67.84	16.19		150.0	
10143- LTE-FDD (SC-I CAC 16-QAM)		Z	3.54	67.70	16.08		150.0	_
CAC 16-QAM) 10144- LTE-FDD (SC-I	-FDMA, 100% RB, 3 MHz,	Х	2.48	71.58	17.67	0.00	150.0	± 9.6 %
CAC 16-QAM) 10144- LTE-FDD (SC-I		Υ	2.22	68.66	16.03		150.0	
CAC 16-QAM) 10144- LTE-FDD (SC-I		Z	2.02	68.57	15.71		150.0	
	-FDMA, 100% RB, 3 MHz,	Х	2.90	70.86	17.43	0.00	150.0	± 9.6 %
		Υ	2.68	68.61	16.20	ļ	150.0	
CAC 64-QAM)	-FDMA, 100% RB, 3 MHz,	X	2.48 2.65	68.71 68.53	15.71 15.87	0.00	150.0 150.0	± 9.6 %
		<u> </u>	0.50	00.00	44.54		450.0	
		Y	2.53	66.90	14.94		150.0	
40445	EDMA 4000/ DD 4 4	Z	2.29	66.75	14.27	0.00	150.0	1000
10145- LTE-FDD (SC-I CAC MHz, QPSK)	-FDMA, 100% RB, 1.4	X	2.00	71.65	16.48	0.00	150.0	± 9.6 %
		Y	1.64	67.49	14.42	 	150.0	
	-FDMA, 100% RB, 1.4	Z X	1.28 6.65	65.53 82.42	12.17 19.81	0.00	150.0 150.0	± 9.6 %
CAC MHz, 16-QAM	n)	Υ	3.51	73.00	16.51	 	150.0	
		Z	2.73	70.16	13.72	 	150.0	 · · · · · · · · · · · · · · · · · · ·
10147- LTE-FDD (SC-I CAC MHz, 64-QAM	-FDMA, 100% RB, 1.4	X	11.62	90.60	22.70	0.00	150.0	± 9.6 %
UNITE, U4-QAIVI	"У	Y	4.34	76.22	18.03	1	150.0	
		Z	3.53	73.44	15.25	 	150.0	

10149- CAB	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	X	3.22	68.90	16.79	0.00	150.0	± 9.6 %
		TY	3.13	67.70	16.01		150.0	
		Z	2.94	67.52	15.84		150.0	
10150- CAB	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	X	3.33	68.71	16.76	0.00	150.0	± 9.6 %
		Y	3.25	67.61	16.05		150.0	
		Z	3.06	67.50	15.89		150.0	
10151- CAB	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	Х	9.59	81.08	22.43	3.98	65.0	± 9.6 %
		Y_	8.87	78.87	21.64		65.0	
		Z	9.33	81.38	22.62		65.0	
10152- CAB	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	Х	8.50	77.58	21.63	3.98	65.0	± 9.6 %
		Y	8.30	76.31	21.16		65.0	
40450	LTG TDD (0.0 GD)	Z	8.08	77.33	21.50		65.0	
10153- CAB	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	×	8.85	78.28	22.25	3.98	65.0	± 9.6 %
		Y	8.62	76.95	21.75		65.0	
40451	LTE EDD (OC TO)	Z	8.48	78.15	22.17		65.0	
10154- CAC	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	Х	2.77	71.95	18.01	0.00	150.0	± 9.6 %
		<u>Y</u>	2.51	69.32	16.50		150.0	
40455	LTE FOR (OC FRA)	Z	2,29	69.01	16.28		150.0	
10155- CAC	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	X	2.94	69.69	17.25	0.00	150.0	± 9.6 %
		Υ	2.80	68.03	16.25		150.0	1
40450	LTC FDD (OC FD) (LZ_	2.63	68.10	16.02		150.0	
10156- CAC	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	X	2.40	72.31	17.91	0.00	150.0	± 9.6 %
		Y	2.09	68.89	16.05		150.0	
40455		<u>Z</u>	1.86	68.62	15.51		150.0	
10157- CAC	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	X	2.55	69.65	16.30	0.00	150.0	± 9.6 %
		Υ	<u>2.36</u>	67.46	15.11		150.0	
		Z	2.12	67.25	14.30		150.0	<u> </u>
10158- CAC	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	Х	3.10	69.70	17.32	0.00	150.0	± 9.6 %
		Y	2.97	68.15	16.39		150.0	
		LZ.	2.78	68.27	16.17		150.0	
10159- CAC	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	×	2.69	70.18	16.62	0.00	150.0	± 9.6 %
		Υ	2.48	67.89	15.40		150.0	
10100		Z	2.22	67.66	14.56		150.0	
10160- CAB	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	Х	3.10	70.43	17.35	0.00	150.0	± 9.6 %
		Υ	2.94	68.69	16.29		150.0	
40404	LTC Pho (00 =	Z	2.78	68.69	16.25		150.0	-
10161- CAB	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	X	3.22	68.62	16.74	0.00	150.0	± 9.6 %
		Υ	3.14	67.48	16.00		150.0	
40400	LTC CDD (00 To the control of the co	Z	2.96	67.42	15.82		150.0	
10162- CAB	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	Х	3.32	68.61	16.76	0.00	150.0	± 9.6 %
	 	Υ	3.24	67.49	16.04		150.0	
10100	LTE EDD (OO ED)	Z	3.07	67.56	15.92		150.0	
10166- CAC	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	X	4.32	72.20	20.50	3.01	150.0	± 9.6 %
		Y	4.09	70.13	19.37		150.0	
10167	LTE EDD (OO EDL)	Z	3.89	71.03	19.86		150.0	
10167- CAC	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	×	6.13	77.20	21.71	3.01	150.0	± 9.6 %
		Υ	5.31	73.40	20.02		150.0	
	4	Z	5.17	75.28	20.82		150.0	

10169- CAB 10170- CAB	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	Y Z X	5.79 5.82	75.28	21.14		150.0	± 9.6 %
10170- CAB		Z					1 150.0	
10170- CAB			5.82		^^ ^			
10170- CAB		X		77.80	22.20		150.0	
10171-			4.47	76.31	22.20	3.01	150.0	± 9.6 %
10171-		Y	3.93	72.42	20.26		150.0	
10171-		Z	3.45	71.87	20.27		150.0	
10171-	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	X	9.97	90.37	26.89	3.01	150.0	± 9.6 %
		Υ	6.08	79.64	22.84	_	150.0	
		Ζ	5.69	81.07	23.66		150.0	
	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	Х	6.58	81.51	22.72	3.01	150.0	± 9.6 %
		Υ	4.82	74.69	19.94		150.0	
		Z	4.39	75.54	20.48		150.0	
	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	Х	73.64	126.23	37.77	6.02	65.0	± 9.6 %
		Y	18.65	98.22	29.94		65.0	
		Ż	50.70	122.38	37.42		65.0	
10173-	LTE-TDD (SC-FDMA, 1 RB, 20 MHz,	X	94.74	123.96	35.21	6.02	65.0	± 9.6 %
CAB	16-QAM)	Y	22.61	98.04	28.47		65.0	10
\longrightarrow	· · · · · · · · · · · · · · · · · · ·	Z	96.90	127.66	36.64	-	65.0	
10174-	LTE-TDD (SC-FDMA, 1 RB, 20 MHz,	X	56.11	113.11	31.91	6.02	65.0	± 9.6 %
CAB	64-QAM)					0.02		
		Y	18.59	93.53	26.66		65.0	
		Z	65.46	118.77	33.84		65.0	
10175- CAC	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	X	4.37	75.74	21.85	3.01	150.0	± 9.6 %
		~	3.86	71.99	19.97		150.0	
		Z	3.41	71.52	20.02		150.0	
10176- CAC	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	Х	9.99	90.41	26.90	3.01	150.0	± 9.6 %
		Υ	6.09	79.66	22.85	_	150.0	
		Z	5.70	81.10	23.67		150.0	
10177- CAE	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	Х	4.43	76.02	22.00	3.01	150.0	± 9.6 %
		Υ	3.90	72.21	20.10		150.0	
-		Z	3.44	71.69	20.11		150.0	
10178- CAC	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)	Х	9.65	89.71	26.63	3.01	150.0	± 9.6 %
		Υ	5.97	79.26	22.66		150.0	
		Z	5.62	80.80	23.53		150.0	
10179- CAC	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	X	7.97	85.43	24.54	3.01	150.0	± 9.6 %
		Y	5.36	76.88	21.19		150.0	
		Ż	4.98	78.13	21.92		150.0	
10180- CAC	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 64- QAM)	X	6.51	81.29	22.61	3.01	150.0	± 9.6 %
		Y	4.79	74.55	19.86		150.0	
		Ż	4.38	75.44	20.42		150.0	
10181- CAB	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	X	4.42	75.99	21.99	3.01	150.0	± 9.6 %
	· · ·	ŤΥ	3.90	72.19	20.09		150.0	
		Ż	3.43	71.67	20.11		150.0	
10182- CAB	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	X	9.63	89.67	26.62	3.01	150.0	± 9.6 %
JAO	10 Spring	Y	5.96	79.23	22.65	<u> </u>	150.0	
		Ż	5.61	80.77	23.51		150.0	
10183-	LTE-FDD (SC-FDMA, 1 RB, 15 MHz,	X	6.50	81.25	22.60	3.01	150.0	± 9.6 %
AAA	64-QAM)	Y	4.78	74.53	19.85		150.0	
		<u> </u>	4.77	75.41	20.41	\vdash \vdash	150.0	

10185- CAC	QPSK)	TY	3.91	70.04				
					1 20 42		450.0	
		Z	3.45	72.24	20.12	 	150.0	
	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16-	1 x	9.70		20.13	204	150.0	
1	QAM)			89.80	26.67	3.01	150.0	± 9.6 %
	 	Y	5.99	79.32	22.68	<u> </u>	150.0	
40400		Z	5.64	80.86	23.56		150.0	
10186- AAC	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64- QAM)	X	6.54	81.37	22.64	3.01	150.0	± 9.6 %
		Y	4.81	74.60	19.88		150.0	
		Z	4.39	75.50	20.45		150.0	
10187- CAC	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	X	4.45	76.10	22.07	3.01	150.0	± 9.6 %
		Y	3.92	72.26	20.15		150.0	
		Z	3.46	71.78	20.19		150.0	
10188- CAC	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	Х	10.51	91.45	27.34	3.01	150.0	± 9.6 %
		Y	6.26	80.23	23.14		150.0	
		Z	5.89	81.76	24.00	 	150.0	
10189- AAC	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	X	6.85	82.27	23.07	3.01	150.0	± 9.6 %
		Υ	4.94	75.14	20.19	_	150.0	
		Z	4.52	76.06	20.77	l —	150.0	
10193- CAB	IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK)	Х	4.73	67.10	16.51	0.00	150.0	± 9.6 %
		Y	4.75	66.68	16.23		150.0	
		Z	4.57	66.79	16.16		150.0	
10194- CAB	IEEE 802.11n (HT Greenfield, 39 Mbps, 16-QAM)	Х	4.94	67.48	16.62	0.00	150.0	± 9.6 %
		Υ	4.96	67.08	16.34		150.0	
		Z	4.75	67.11	16.28		150.0	
10195- CAB	IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM)	Х	4.98	67.48	16.62	0.00	150.0	± 9.6 %
		TY	5.00	67.07	16.34		150.0	
		Z	4.79	67.14	16.30		150.0	
10196- CAB	IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK)	X	4.76	67.21	16.55	0.00	150.0	± 9.6 %
		Y	4.78	66.80	16.27		150.0	
		Z	4.58	66.86	16.18		150.0	
10197- CAB	IEEE 802.11n (HT Mixed, 39 Mbps, 16-QAM)	Х	4.96	67.50	16.63	0.00	150.0	± 9.6 %
		Y	4.98	67.09	16.35		150.0	
		Z	4.76	67.14	16.30		150.0	
10198- CAB	IEEE 802.11n (HT Mixed, 65 Mbps, 64- QAM)	X	4.99	67.50	16.63	0.00	150.0	± 9.6 %
		Y	5.01	67.09	16.35		150.0	
		Z	4.79	67.16	16.31		150.0	
10219- CAB	IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK)	X	4.71	67.23	16.53	0.00	150.0	± 9.6 %
		Υ	4.73	66.82	16.24		150.0	
		z	4.53	66.87	16.14		150.0	
10220- CAB	IEEE 802.11π (HT Mixed, 43.3 Mbps, 16-QAM)	X	4.96	67.50	16.63	0.00	150.0	± 9.6 %
		Y	4.98	67.10	16.35		150.0	
		Ż	4.76	67.11	16.29		150.0	
10221- CAB	IEEE 802.11n (HT Mixed, 72.2 Mbps, 64-QAM)	X	4.99	67.43	16.62	0.00	150.0	± 9.6 %
		Y	5.01	67.03	16.34		150.0	
		Ż	4.80	67.09	16.30		150.0	
10222-	IEEE 802.11n (HT Mixed, 15 Mbps, BPSK)	X	5.29	67.72	16.73	0.00	150.0	± 9.6 %
CAB				1	1			
CAB		Y	5.31	67.38	16.49		150.0	

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10223- CAB	IEEE 802.11n (HT Mixed, 90 Mbps, 16-QAM)	Х	5.67	68.03	16.90	0.00	150.0	± 9.6 %
		Υ	5.70	67.71	16.67		150.0	
		Ζ	5.43	67.50	16.54		150.0	
10224- CAB	IEEE 802.11n (HT Mixed, 150 Mbps, 64-QAM)	Х	5.35	67.84	16.72	0.00	150.0	± 9.6 %
		Υ	5.37	67.51	16.48		150.0	
		Z	5.17	67.40	16.39		150.0	
10225- CAB	UMTS-FDD (HSPA+)	Х	3.03	67.01	16.18	0.00	150.0	± 9.6 %
		Υ	3.00	66.12	15.59		150.0	
		Z	2.84	66.23	15.31		150.0	
10226- CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	X	100.00	125.13	35.58	6.02	65.0	± 9.6 %
		Y	23.60	98.91	28.82		65.0	
	1	Z	100.00	128.43	36.91		65.0	
10227- CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	X	61.16	114.83	32.47	6.02	65.0	± 9.6 %
		Y	19.96	94.87	27.16		65.0	
10000	LITE TER (OO FEMALE)	Z	73.77	120.96	34.46	0.55	65.0	
10228- CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	X	72.18	126.53	38.01	6.02	65.0	± 9.6 %
		Y	21.44	101.40	31.05		65.0	
10000		Z	53.16	123.89	37.96	0.00	65.0	
10229- CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)	X	94.57	123.93	35.21	6.02	65.0	± 9.6 %
		Υ	22.66	98.06	28.49		65.0	
		Z	96.87	127.65	36.65		65.0	
10230- CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)	X	56.39	113.28	31.99	6.02	65.0	± 9.6 %
		Υ	19.26	94.16	26.88		65.0	
		Z	66.99	119.13	33.93		65.0	
10231- CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	X	66.18	124.67	37.45	6.02	65.0	± 9.6 %
		Y	20.62	100.55	30.72		65.0	
		Z	48.89	122.07	37.41		65.0	
10232- CAB	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)	X	94.69	123.96	35.21	6.02	65.0	± 9.6 %
		Υ	22.64	98.05	28.48		65.0	
		Z	97.00	127.68	36.66		65.0	_
10233- CAB	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)	X	56.52	113.33	32.00	6.02	65.0	± 9.6 %
		Υ	19.26	94.17	26.88		65.0	
		Ž	67.07	119.16	33.94	<u> </u>	65.0	
10234- CAB	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	×	60.26	122.59	36.81	6.02	65.0	± 9.6 %
		Υ_	19.81	99.63	30.34		65.0	
		Z	45.11	120.21	36.81	 	65.0	
10235- CAB	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	X	95.38	124.09	35.25	6.02	65.0	± 9.6 %
		Y	22.67	98.09	28.50	<u> </u>	65.0	
		Z	97.77	127.84	36.70	0.00	65.0	1000
10236- CAB	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	X	57.18	113.50	32.04	6.02	65.0	± 9.6 %
		Υ	19.38	94.26	26.90		65.0	
10237-	LTE-TDD (SC-FDMA, 1 RB, 10 MHz,	Z X	68.10 67.28	119.39 125.01	33.99 37.54	6.02	65.0 65.0	± 9.6 %
CAB	QPSK)	 , , -	00.74	400.00	20.70	 	05.0	
		Y	20.74	100.68	30.76	ļ	65.0	ļ
10000		Z	49.59	122.38	37.49	6.02	65.0	1060/
10238- CAB	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	×	95.00	124.02	35.23	6.02	65.0	± 9.6 %
		Y	22.64	98.06	28.49	1	65.0	ļ
		Z	97.19	127.73	36.66		65.0	<u> </u>

10239-	LTE-TDD (SC-FDMA, 1 RB, 15 MHz,	X	56.67	113.39	32.01	6.02	65.0	± 9.6 %
CAB	64-QAM)	1	40.00	+	 	↓	_	<u> </u>
		Y	19.26	94.19	26.88	<u> </u>	65.0	
10240-	LTE-TDD (SC-FDMA, 1 RB, 15 MHz,	Z	67.13	119.19	33.94		65.0	
CAB	QPSK)	X	67.00	124.93	37.52	6.02	65.0	± 9.6 %
		Y	20.68	100.63	30.74	ļ	65.0	
40044	175 700 (00 504)	Z	49.37	122.30	37.47		65.0	
10241- CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	×	14.43	89.77	28.56	6.98	65.0	± 9.6 %
		Y	12.31	85.00	26.80		65.0	
40040	LTC TDD (00 EDIN TOWN DD 4 AND TOWN	Z	13.89	90.56	28.94	L	65.0	
10242- CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	X	13.70	88.57	28.03	6.98	65.0	± 9.6 %
	 	Y	10.82	82.08	25.53		65.0	
10243-	LTE TOD (CC FOMA FOR OD 4 (AM)	Z	13.16	89.30	28.37		65.0	
CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	×	10.55	84.90	27.56	6.98	65.0	± 9.6 %
		Υ_	8.88	79.49	25.25		65.0	
40044	LTC TDD (OO ED)	Z	9.99	85.03	27.70		65.0	
10244- CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	X	11.43	83.67	22.47	3.98	65.0	± 9.6 %
		Υ	9.78	80.48	21.64		65.0	
10245-	LITE TED (OO FEMALE SEE SEE	Z	9.76	81.22	20.90		65.0	
10245- CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	×	11.21	83.09	22.22	3.98	65.0	± 9.6 %
		Υ	9.71	80.13	21,47		65.0	
10010		Z	9.48	80.50	20.58		65.0	
10246- CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	Х	10.58	85.22	23.00	3.98	65.0	± 9.6 %
		Υ	8.86	81.57	21.94		65.0	
		Z	9.16	83.05	21.67		65.0	
10247- CAB	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	X	8.25	78.94	21.22	3.98	65.0	± 9.6 %
		Υ	7.85	77.32	20.79		65.0	
		Z	7.47	77.61	20.18		65.0	
10248- CAB	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	Х	8.20	78.37	20.99	3.98	65.0	± 9.6 %
		Υ	7.89	76.93	20.61		65.0	
		Ζ	7.41	77.03	19.93		65.0	_
10249- CAB	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	X	11.20	86.28	23.89	3.98	65.0	± 9.6 %
		Y	9.29	82.26	22.62		65.0	
		Z	10.48	85.66	23.36		65.0	
10250- CAB	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	Х	8.93	80.25	22.81	3.98	65.0	± 9.6 %
		Y	8.46	78.37	22.14		65.0	
40071		Z	8.46	79.88	22.48		65.0	
10251- CAB	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	_ X	8.39	77.98	21.64	3.98	65.0	± 9.6 %
		Y	8.12	76.54	21.14		65.0	
100==		Z	7.98	77.74	21.34		65.0	
10252- CAB	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	Х	10.53	84.51	23.78	3.98	65.0	± 9.6 %
		Y	9.19	81.18	22.63		65.0	
10055	1.77.75	Z	10.24	84.82	23.86		65.0	
10253- CAB	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	Х	8.25	76.95	21,44	3.98	65.0	± 9.6 %
		Y	8.10	75.77	21.00		65.0	
1007:		Z	7.89	76.78	21.28		65.0	
10254- C <u>AB</u>	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	Х	8.62	77.66	22.02	3.98	65.0	± 9.6 %
JAD		Y	8.44	70.40	04.50			
		z	0.44	76.43	21.56	ſ	_ 65.0	

10255- CAB	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	X	9.25	80.67	22.52	3.98	65.0	± 9.6 %
J, 1.D		Y	8.61	78.53	21.74		65,0	
	-	Z	9.00	80.97	22.67		65.0	
10256- CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	X	10.45	81.80	21.06	3.98	65.0	± 9.6 %
		Y	9.25	79.43	20.63		65.0	
		Z	8.10	77.76	18.69		65.0	
10257- CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	X	10.14	80.97	20.68	3.98	65.0	± 9.6 %
		Y	9.17	78.95	20.38		65.0	
		Z	7.78	76.81	18.23		65.0	
10258- CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	Х	9.51	83.16	21.76	3.98	65.0	± 9.6 %
		Y	8.34	80.46	21.12		65.0	
		Z	7.35	79.00	19.46		65.0	
10259- CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	×	8.50	79.32	21.74	3.98	65.0	± 9.6 %
		Υ	8.08	77.61	21.22		65.0	
		Z	7.86	78.44	21.00		65.0	<u> </u>
10260- CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	X	8.50	79.04	21.65	3.98	65.0	± 9.6 %
		Y	8.14	77.44	21.18		65.0	
		Z	7.85	78.11	20.87		65.0	
10261- CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	Х	10.46	84.88	23.66	3.98	65.0	± 9.6 %
		Υ	8.99	81.35	22.49		65.0	ļ
		Z	9.90	84.54	23.31		65.0	
10262- CAB	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	X	8.92	80.22	22.77	3.98	65.0	± 9.6 %
		Υ	8.45	78.35	22.11		65.0	
		Z	8.45	79.83	22.45		65.0	
10263- CAB	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	Х	8.39	77.98	21.64	3.98	65.0	± 9.6 %
		Y	8.12	76.54	21.14		65.0	
		Z	7.97	77.72	21.33		65.0	
10264- CAB	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	X	10.46	84.37	23.71	3.98	65.0	± 9.6 %
		Y	9.15	81.08	22.57		65.0	
		Z	10.16	84.65	23.78		65.0	
10265- CAB	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	Х	8.50	77.59	21.64	3.98	65.0	± 9.6 %
		Υ	8.29	76.32	21.16		65.0	
		Z	8.08	77.33	21.51		65.0	<u> </u>
10266- CAB	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	X	8.85	78.27	22.25	3.98	65.0	± 9.6 %
_		Υ	8.62	76.95	21.75	<u> </u>	65.0	1
		Z	8.48	78.14	22.17		65.0	
10267- CAB	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	X	9.58	81.04	22.42	3.98	65.0	± 9.6 %
		Υ_	8.86	78.85	21.63	<u> </u>	65.0	
		<u> Z</u>	9.31	81.34	22.60		65.0	
10268- CAB	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	X	8.89	76.95	21.70	3.98	65.0	± 9.6 %
		Υ	8.78	75.95	21.31	ļ	65.0	
10269-	LTE-TDD (SC-FDMA, 100% RB, 15	X	8.54 8.79	76.83 76.51	21.69 21.59	3.98	65.0 65.0	± 9.6 %
CAB	MHz, 64-QAM)	1		75.50	04.00	-	05.0	-
		<u> </u>	8.71	75.58	21.23	<u> </u>	65.0	1
		Z	8.47	76.42	21.58	6.00	65.0	1000
10270- CAB	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	X	8.98	78.26	21.47	3.98	65.0	± 9.6 %
		Y	8.66	76.86	20.96	<u> </u>	65.0	
- <u></u> -		Z	8.70	78.39	21.61	L	65.0	<u> </u>

10274- CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.10)	X	2.76	67.40	16.12	0.00	150.0	± 9.6 %
<u>-</u>		TY	2.68	66.20	15.35	 	150.0	
		Τż	2.61	66.55	15.21	 	150.0	
10275- CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.4)	X	1.97	71.33	17.64	0.00	150.0	± 9.6 %
		Y	1.71	67.84	15.61	† — — ·	150.0	
		Z	1.63	67.82	15.44		150.0	
10277- CAA	PHS (QPSK)	X	5.79	70.12	14.44	9.03	50.0	± 9.6 %
		Y	6.71	72.04	16.24		50.0	
10278-	DHC (ODC)/, DW 004MH; D-II-((0.5)	Z	5.20	69.01	13.39		50.0	
CAA	PHS (QPSK, BW 884MHz, Rolloff 0.5)	X	10.14	81.72	21.64	9.03	50.0	± 9.6 %
		$\frac{\mid Y}{Z}$	10.00	81.13	22.16	├ ——	50.0	
10279- CAA	PHS (QPSK, BW 884MHz, Rolloff 0.38)	X	8.80 10.33	79.36 81.92	20.19	9.03	50.0	± 9.6 %
		ŤΥ	10.19	81.33	22.24	 	50.0	
		Ż	8.92	79.53	20.27	 	50.0	
10290- AAB	CDMA2000, RC1, SO55, Full Rate	X	2.41	75.76	18.30	0.00	150.0	± 9.6 %
		Υ	1.70	69.18	15.23		150.0	
40004		Z	1.46	68.58	14.00		150.0	
10291- AAB	CDMA2000, RC3, SO55, Full Rate	X	1.39	73.22	17.31	0.00	150.0	± 9.6 %
		Y	0.98	66.45	13.79		150.0	
10292-	CDMARROOD DOO COOR THE	Z	0.85	65.74	12.53		150.0	
10292- AAB	CDMA2000, RC3, SO32, Full Rate	X	2.43	83.14	21.70	0.00	150.0	± 9.6 %
		Y	1.15	69.63	15.75		150.0	
40202	001110000 000 000 000	Z	1.04	69.40	14.71		150.0	
10293- AAB	CDMA2000, RC3, SO3, Full Rate	Х	5.22	96.14	26.57	0.00	150.0	± 9.6 %
		Y	1.48	73.58	17.97		150.0	
10295-	CDMA2000, RC1, SO3, 1/8th Rate 25 fr.	Z X	1.47 10.48	74.43 83.75	17.37 24.32	9.03	150.0 50.0	± 9.6 %
AAB		Y				J.00		1 9.0 %
		Z	9.84	81.54	23.85		50.0	
10297-	LTE-FDD (SC-FDMA, 50% RB, 20 MHz,	X	11.88 3.28	86.37 72.37	24.91	0.00	50.0	
AAA	QPSK)	Ŷ	2.98	69.95	17.95	0.00	150.0	± 9.6 %
		Z	2.77	69.63	16.59 16.49		150.0	
10298- AAB	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	x	2.26	72.62	17.48	0.00	150.0 150.0	± 9.6 %
		Υ	1.88	68.51	15.39		150.0	
40000	LTE FDD (00 FD)	Z	1.59	67.65	14.14		150.0	
10299- AAB	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	X	6.40	81.89	20.37	0.00	150.0	± 9.6 %
		Y	3.78	73.44	17.26		150.0	
10300-	TTE EDD (OC EDLA FOR ST. A.V.	Z	3.62	73.66	16.18		150.0	
AAB	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	X	3.72	72.73	16.07	0.00	150.0	± 9.6 %
	 	Y	2.96	68.88	14.55		150.0	
10301- AAA	IEEE 802.16e WIMAX (29:18, 5ms, 10MHz, QPSK, PUSC)	Z X	5.70	67.52 68.03	12.75 18.84	4.17	150.0 80.0	± 9.6 %
		Y	5.77	67.36	18.35		80.0	
		Z	5.64	68.37	18.74		80.0	
10302- AAA	IEEE 802.16e WIMAX (29:18, 5ms, 10MHz, QPSK, PUSC, 3 CTRL symbols)	X	6.21	68.72	19.60	4.96	80.0	± 9.6 %
		Y	6.41	68.65	19.47		- <u></u> -	
			0.41	UOLOD I	19.47	1	80.0	

10303- AAA	IEEE 802.16e WiMAX (31:15, 5ms, 10MHz, 64QAM, PUSC)	×	6.07	68.83	19,70	4.96	80.0	± 9.6 %
	i i i i i i i i i i i i i i i i i i i	Y	6.30	68.82	19.58		80.0	
		Z	5.97	69.08	19.56		80.0	
10304- AAA	IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, 64QAM, PUSC)	X	5.71	68.13	18.89	4.17	80.0	± 9.6 %
	<u> </u>	Y	5.89	68.01	18.73		80.0	
		Z	5.61	68.35	18.73		80.0	
10305- AAA	IEEE 802.16e WiMAX (31:15, 10ms, 10MHz, 64QAM, PUSC, 15 symbols)	Х	6.90	74.81	23.11	6.02	50.0	± 9.6 %
	<u> </u>	Υ	9.48	82.28	26.60		50.0	
		Z	9.03	82.45	26.20		50.0	
10306- AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 64QAM, PUSC, 18 symbols)	X	6.40	71.34	21.64	6.02	50.0	± 9.6 %
		Y	6.75	71.50	21.57		50.0	
		Z	6.43	72.04	21.56		50.0	
10307- AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, PUSC, 18 symbols)	Х	6.49	72.10	21.82	6.02	50.0	± 9.6 %
		Y	6.85	72.21	21.70		50.0	
		Z	6.50	72.67	21.67		50.0	
10308- AAA	IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, 16QAM, PUSC)	X	6.53	72.49	22.02	6.02	50.0	± 9.6 %
		Υ	6.89	72.58	21.88		50.0	
		Z	6.59	73.18	21.92		50.0	
10309- AAA	IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, 16QAM, AMC 2x3, 18 symbols)	Х	6.52	71.66	21.81	6.02	50.0	± 9.6 %
		Y	6.86	71.77	21.70		50.0	
		Z	6.53	72.35	21.74		50.0	
10310- AAA	IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, QPSK, AMC 2x3, 18 symbols)	Х	6.41	71.57	21.66	6.02	50.0	± 9.6 %
		Y	6.75	71.71	21.56		50.0	_
		Z	6.45	72.29	21.59		50.0	
10311- AAA	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	Х	3.66	71.55	17.51	0.00	150.0	± 9.6 %
		Y	3.33	69.32	16.27		150.0	
		Z	3.12	68.94	16.14		150.0	
10313- AAA	iDEN 1:3	X	8.19	79.62	19.16	6.99	70.0	± 9.6 %
		Y	7.35	77.72	18.90		70.0	
		Z	8.21	80.46	19.57		70.0	_
10314- AAA	iDEN 1:6	Х	11.35	86.83	24.06	10.00	30.0	± 9.6 %
		Υ	8.72	81.68	22.69		30.0	
		Z	10.81	87.34	24.49		30.0	
10315- AAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 96pc duty cycle)	X	1.24	66.34	16.99	0.17	150.0	± 9.6 %
		Y	1.18	64.44	15.46		150.0	
		Z	1.17	64.45	15.36		150.0	
10316- AAB	IEEE 802.11g WiFi 2.4 GHz (ERP- OFDM, 6 Mbps, 96pc duty cycle)	Х	4.83	67.25	16.68	0.17	150.0	± 9.6 %
		Υ	4.86	66.88	16.43		150.0	
		Z	4.68	66.99	16.39		150.0	
10317- AAB	IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle)	X	4.83	67.25	16.68	0.17	150.0	± 9.6 %
		Y	4.86	66.88	16.43	<u> </u>	150.0	
		Z	4.68	66.99	16.39		150.0	
10400- AAC	IEEE 802.11ac WiFi (20MHz, 64-QAM, 99pc duty cycle)	X	4.96	67.54	16.61	0.00	150.0	± 9.6 %
		Y	4.98	67.13	16.32		150.0	
		Z_	4.75	67.19	16.29		150.0	
		4						T
10401- AAC	IEEE 802.11ac WiFi (40MHz, 64-QAM,	x	5.54	67.49	16.61	0.00	150.0	± 9.6 %
10401- AAC	IEEE 802.11ac WiFi (40MHz, 64-QAM, 99pc duly cycle)				16.61 16.37	0.00	150.0	± 9.6 %

10402- AAC	IEEE 802.11ac WiFi (80MHz, 64-QAM, 99pc duty cycle)	X	5.87	68.11	16.75	0.00	150.0	± 9.6 %
70.0	oope daty cycle)	T	5.89	67.00	40.54	-	450.0	
		<u> </u>	5.70	67.80 67.70	16.54	 	150.0	
10403- AAB	CDMA2000 (1xEV-DO, Rev. 0)	X	2.41	75.76	16.47 18.30	0.00	150.0 115.0	± 9.6 %
		Y	1.70	69.18	15.23		115.0	
		Z	1.46	68.58	14.00	†	115.0	
10404- AAB	CDMA2000 (1xEV-DO, Rev. A)	X	2.41	75.76	18.30	0.00	115.0	± 9.6 %
		Y	1.70	69.18	15.23		115.0	
40.400		Z	1.46	68.58	14.00		115.0	
10406- AAB	CDMA2000, RC3, SO32, SCH0, Full Rate	X	100.00	120.32	30.30	0.00	100.0	± 9.6 %
		Y	37.67	108.93	28.46		100.0	
40440	LITE TOP (OR ED)	Z	100.00	119.28	29.39		100.0	
10410- AAA	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	118.51	29.90	3.23	80.0	± 9.6 %
		Y	100.00	119.74	30.88		80.0	
10415-	IEEE 000 (4) WEEE 0 (OU (DOOR)	Z	100.00	120.99	30.71		80.0	
AAA AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle)	X	1.06	64.54	16.02	0.00	150.0	± 9.6 %
		Υ	1.03	62.90	14.57		150.0	
10416-	LIEFE 000 44 - WIE O A OUL (FDB	Z	1.03	63.04	14.51		150.0	
AAA	IEEE 802.11g WiFi 2.4 GHz (ERP- OFDM, 6 Mbps, 99pc duty cycle)	X	4.73	67.12	16.55	0.00	150.0	± 9.6 %
		Y	4.75	66.70	16.25		150.0	
40447	IEEE 000 44 - B. MEE' E ON LOTTON	Z	4.58	66.83	16.23		150.0	
10417- AAA	IEEE 802.11a/n WiFi 5 GHz (OFDM, 6 Mbps, 99pc duty cycle)	X	4.73	67.12	16.55	0.00	150.0	± 9.6 %
	 	Y	4.75	66.70	16.25		150.0	
40440	1555 000 44 1455 0 4 014 45 5 0	Z	4.58	66.83	16.23	_	150.0	
10418- AAA —————	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 99pc duty cycle, Long preambule)	X	4.72	67.27	16.56	0.00	150.0	± 9.6 %
		Υ	4.73	66.83	16.25	_	150.0	
		Z	4.56	66.98	16.24		150.0	
10419- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 99pc duty cycle, Short preambule)	X	4.75	67.23	16.56	0.00	150.0	± 9.6 %
		Y	4.76	66.80	16.26		150.0	
		Z	4.59	66.94	16.24		150.0	
10422- _AAA	IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK)	Х	4.87	67.22	16.56	0.00	150.0	± 9.6 %
		Υ	4.89	66.82	16.28		150.0	
10100		Z	4.71	66.94	16.26		150.0	
10423- AAA	IEEE 802.11n (HT Greenfield, 43.3 Mbps, 16-QAM)	Х	5.09	67.62	16.71	0.00	150.0	± 9.6 %
	 	Y	5.12	67.23	16.44		150.0	
40404		Z	4.88	67.27	16.38		150.0	
10424- AAA	IEEE 802.11n (HT Greenfield, 72.2 Mbps, 64-QAM)	Х	5.00	67.56	16.68	0.00	150.0	± 9.6 %
		Υ	5.02	67.15	16.39		150.0	
10405	IEEE 000 44 . U.T. O	Z	4.80	67.22	16.35		150.0	
10425- AAA	IEEE 802.11n (HT Greenfield, 15 Mbps, BPSK)	Х	5.55	67.83	16.78	0.00	150.0	± 9.6 %
	 	Υ	5.59	67.55	16.57		150.0	
40400	1555 000 44 1955 0	Z	5.40	67.57	16.55		150.0	
10426- AAA	IEEE 802.11n (HT Greenfield, 90 Mbps, 16-QAM)	Х	5.56	67.88	16.79	0.00	150.0	± 9.6 %
		Υ	5.60	67.58	16.58	_	150.0	
		Ζ	5.41		. 0.00		100.0	

10427- AAA	IEEE 802.11n (HT Greenfield, 150 Mbps, 64-QAM)	X	5.59	67.91	16.80	0.00	150.0	± 9.6 %
		Υ	5.63	67.61	16.59		150.0	
		Z	5.42	67.56	16.54		150.0	
10430- AAA	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1)	Х	4.54	71.07	18.70	0.00	150.0	± 9.6 %
		Y	4.46	69.99	18.11		150.0	
		Ż	4.20	70.41	17.89		150.0	
10431- AAA	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1)	Х	4.50	67.77	16.69	0.00	150.0	± 9.6 %
-		Υ	4.51	67.23	16.34		150.0	
		Z.	4.26	67.36	16.21		150.0	
10432- AAA	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1)	Х	4.78	67.63	16.67	0.00	150.0	± 9.6 %
		Υ	4.80	67.18	16.37		150.0	
	<u></u>	Z	4.56	67.25_	16.29		150.0	
10433- AAA	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1)	X	5.01	67.62	16.71	0.00	150.0	± 9.6 %
		Υ	5.04	67.21	16.43		150.0	
		Z	4.81	67.25	16.37		150.0	
10434- AAA	W-CDMA (BS Test Model 1, 64 DPCH)	Х	4.66	71.93	18.79	0.00	150.0	± 9.6 %
		Υ	4.53	70.61	18.11		150.0	
		Z	4.27	71.15	17.82		150.0	
10435- AAA	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	Х	100.00	118.35	29.82	3.23	80.0	± 9.6 %
		Υ	100.00	119.61	30.82		80.0	
		Z	100.00	120.81	30.62		80.0	
10447- AAA	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	Х	3.85	68.02	16.38	0.00	150.0	± 9.6 %
		Υ	3.83	67.22	15.92		150.0	
		Z	3.54	67.32	15.53		150.0	
10448- AAA	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, Clippin 44%)	X	4.31	67.56	16.56	0.00	150.0	± 9.6 %
_;		Y	4.32	66.99	16.19		150.0	
		Z	4.10	67.13	16.07		150.0	
10449- AAA	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1, Cliping 44%)	Х	4.56	67.47	16.59	0.00	150.0	± 9.6 %
		Y	4.57	66.98	16.26		150.0	
		Z	4.37	67.07	16.19		150.0	
10450- AAA	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	X	4.73	67.38	16.58	0.00	150.0	±9.6 %
		Y	4.74	66.94	16.27		150.0	
		Z	4.56	67.01	16.22		150.0	
10451- AAA	W-CDMA (BS Test Model 1, 64 DPCH, Clipping 44%)	X	3.81	68.42	16.23	0.00	150.0	± 9.6 %
		Y	3.77	67.50	15.73		150.0	
		Z	3.44	67.49	15.16		150.0	
10456- AAA	IEEE 802.11ac WiFi (160MHz, 64-QAM, 99pc duty cycle)	X	6.40	68.45	16.93	0.00	150.0	± 9.6 %
		Y	6.44	68.23	16.77		150.0	
		Z	6.27	68.12	16.71		150.0	
10457- AAA	UMTS-FDD (DC-HSDPA)	Х	3.89	65.77	16.30	0.00	150.0	± 9.6 %
		Y	3.90	65.36	15.99		150.0	
		Z	3.82	65.47	15.93		150.0	
10458- AAA	CDMA2000 (1xEV-DO, Rev. B, 2 carriers)	X	3.60	67.53	15.71	0.00	150.0	± 9.6 %
		Υ	3.56	66.59	15.22		150.0	
		Z	3.27	66.88	14.62		150.0	
10459-	CDMA2000 (1xEV-DO, Rev. B, 3	X	4.70	65.53	16.21	0.00	150.0	± 9.6 %
AAA	carriers)	1						
AAA	carriers)	Y	4.63	64.60	15.71		150.0 150.0	

10460- AAA	UMTS-FDD (WCDMA, AMR)	X	1.28	75.29	20.20	0.00	150.0	± 9.6 %
		Y	0.92	67.71	15.91	 	150.0	
		Z	0.90	67.71	15.78		150.0	
10461- AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	122.97	32.01	3.29	80.0	± 9.6 %
		_ Y	100.00	121.34	31.70		80.0	
10100		Z	100.00	125.58	32.88		80.0	
10462- AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	108.03	24.84	3.23	80.0	± 9.6 %
		<u> Y</u>	100.00	109.86	26.18		80.0	
10463-	LTC TDD /00 EDINA 4 DD 4 4 HI	Z	100.00	108.99	24.93		80.0	
AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	105.21	23.49	3.23	80.0	± 9.6 %
 		<u> Y</u>	47.92	99.26	23.13	<u> </u>	80.0	
10464-	LTE TOD (CC FDMA 4 DD 2 MIL	Z	100.00	105.71	23.36	ļ	80.0	
AAA	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	121.12	31.00	3.23	80.0	± 9.6 %
		Y	100.00	119.76	30.82		80.0	
10465-	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-	Z	100.00	123.61	31.80		80.0	
AAA	QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	107.54	24.59	3.23	80.0	± 9.6 %
 	-	Y	92.10	108.50	25.75		80.0	
10466-	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-	Z	100.00	108.47	24.68	<u> </u>	80.0	
AAA	QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	104.76	23.28	3.23	80.0	± 9.6 %
		Y	27.79	92.79	21.40		80.0	
10467- AAA	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	53.71 100.00	98.96 121.32	21.73 31.10	3.23	80.0 80.0	± 9.6 %
	G. 5.4, 62 64514116-2,0,4,1,6,9j	Y	100.00	119.93	20.00			
		Z	100.00	123.83	30.90		80.0	
10468- AAA	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	107.68	31.91 24.66	3.23	80.0 80.0	± 9.6 %
_	, , , , , , , , , , , , , , , , , , , ,	Y	100.00	109.58	26.02		80.0	
		Z	100.00	108.64	24.75		80.0	
10469- AAA	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	104.76	23.27	3.23	80.0	± 9.6 %
		Υ	28.45	93.06	21.47		80.0	
		Z	57.15	99.60	21.88		80.0	
10470- AAA	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	121.35	31.10	3.23	80.0	± 9.6 %
		Υ	100.00	119.95	30.90		80.0	
40.5.		Z	100.00	123.86	31.91		80.0	
10471- AAA	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	Х	100.00	107.63	24.63	3.23	80.0	± 9.6 %
		Υ	100.00	109.54	26.00		80.0	
10470	LTE TOP (OO FOLL)	Ζ	100.00	108.59	24.73		80.0	_
10472- AAA	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	104.72	23.24	3.23	0.08	± 9.6 %
		Y	28.52	93.08	21.46		80.0	
10473-	TE TOD (CC FDAM 4 BB 4 - 4 BB	Z	57.07	99.54	21.85		80.0	
AAA 	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	Х	100.00	121.32	31.09	3.23	80.0	± 9.6 %
		Y	100.00	119.92	30.89		80.0	
10474-	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	123.84 107.64	31.90 24.63	3.23	80.0 80.0	± 9.6 %
		1						
AAA	So un, OE Cubitatiic—2,0,4,7,0,9]	$\overline{}$	100.00	100 55 1				
	37 INT, OE OUDITAING—2,0,4,7,0,0)	Y 7	100.00	109.55	26.00		80.0	
	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-	Y Z X	100.00 100.00 100.00	109.55 108.60 104.73	26.00 24.73 23.25	3.23	80.0 80.0 80.0	± 9.6 %
10475-		Z	100.00	108.60	24.73	3.23	80.0	± 9.6 %

10477-	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-	Х	100.00	107.49	24.56	3.23	80.0	± 9.6 %
AAA	QAM, UL Subframe=2,3,4,7,8,9)							
		Υ	96.57	109.01	25.85		80.0	
	1 = = = 100 = E 144 4 E 2 00 MIL 04	Z	100.00	108.42	24.64	0.00	80.0	1000
10478- AAA	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	Х	100.00	104.68	23.23	3.23	80.0	± 9.6 %
		Υ	27.68	92.72	21.36		80.0	
	155 500 500 500 500 500 500 500 500 500	Z	53.23	98.81	21.67	0.00	80.0	1000
10479- AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	26.63	104.01	29.13	3.23	80.0	± 9.6 %
		Y	9.63	86.48	23.96		80.0	
10100	LTE TOD (00 FOMA 50% DD 4 AM)	Z	24.30	102.59	28.22 27.02	3.23	80.0 80.0	± 9.6 %
10480- AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)		38.31	102.90		J.ZJ		19.0 %
	<u> </u>	Y Z	11.50 29.11	85.06 98.49	22.20 25.10		80.0 80.0	
40404	LTC TDD (CC EDMA EON DD 4 A MH-	X	30.40	98.59	25.52	3.23	80.0	± 9.6 %
10481- AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	^ Y			21.41	3,23	80.0	2 3.0 %
			10.74	83.47 92.98	23.18	_	80.0	
10493	LITE TOD (SC EDAM 500/ DD 2 MU-	Z X	20.94 8.51	84.82	22.25	2.23	80.0	± 9.6 %
10482- AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	Y	5.60	77.58	19.80		80.0	± 3.0 /0
		Z	5.41	78.09	19.00		80.0	
10483-	LTE-TDD (SC-FDMA, 50% RB, 3 MHz,	X	14.01	88.92	23.41	2.23	80.0	± 9.6 %
AAA	16-QAM, UL Subframe=2,3,4,7,8,9)	^ Y	8.14	80.18	20.73	2.20	80.0	20.0 %
		Z	9.32	82.50	20.44		80.0	
10484- AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	12.47	87.00	22.82	2.23	80.0	± 9.6 %
7000	04-QAW, 02 000Hame 2,0,4,7,0,0)	Y	7.81	79.33	20.43		80.0	
	<u> </u>	Ż	8.26	80.64	19.81		80.0	
10485- AAA	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	8.06	84.25	22.66	2.23	80.0	± 9.6 %
7001	Qt Ord DE Gubitatio Ejo; ift jojo)	Y	5.75	77.87	20.37		80.0	
		Z	5.68	79.10	20.42		80.0	
10486- AAA	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	Х	5.66	75.87	19.43	2.23	80.0	± 9.6 %
		Y	4.94	72.86	18.29		80.0	
		Z	4.62	73.05	17.69		80.0	
10487- AAA	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	5.56	75.25	19.19	2.23	80.0	±9.6 %
		Υ	4.94	72.51	18.16		80.0	
		Z	4.56	72.51	17.46		80.0	_
10488- AAA	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	7.10	80.82	21.84	2.23	80.0	± 9.6 %
		Υ	5.79	76.47	20.13	<u> </u>	80.0	
		Z	5.49	77.19	20.36		80.0	1.000
10489- AAA	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	5.34	73.87	19.44	2.23	80.0	± 9.6 %
		Y	5.00	71.87	18.57	<u> </u>	80.0	
		Z	4.68_	72.17	18.47	0.00	80.0	+069/
10490- AAA	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	5.35	73.36	19.26	2.23	80.0	± 9.6 %
		Y	5.06	71.53	18.46	-	80.0	+
10491-	LTE-TDD (SC-FDMA, 50% RB, 15 MHz,	Z X	4.74 6.36	71.87 77.12	18.36 20.56	2.23	80.0 80.0	± 9.6 %
AAA	QPSK, UL Subframe=2,3,4,7,8,9)	1,,	F 00	74.00	40.00	 	80.0	+
		Y	5.66	74.28	19.36	 	80.0	
10:00	LTG TDD (00 ED) A 50% DD 451%	Z	5.31	74.67	19.54	2.23	80.0	± 9.6 %
10492- AAA	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	5.41	72.24	18.98	2.23		± 3.0 %
		Y	5.23	70.84	18.33	 	80.0	1
1		Z	4.89	71.01	18.29	<u> </u>	80.0	

10494- AAA QPSK, UL Subframe 10495- AAA 16-QAM, UL Subfram 10496- AAA 64-QAM, UL Subfram 10497- AAA MHz, QPSK, UL Subfram 10498- AAA MHz, 16-QAM, UL Subframe 10499- AAA MHz, 64-QAM, UL Subframe=2,3,4,7,8,9 10500- AAA QPSK, UL Subframe= 10501- AAA 16-QAM, UL Subframe= 10502- AAA 16-QAM, UL Subframe= 10503- AAA 16-QAM, UL Subframe= 10504- AAA 16-QAM, UL Subframe= 10504- AAA 16-QAM, UL Subframe= 10505- AAA 16-QAM, UL Subframe= 10506- AAA 16-QAM, UL Subframe= 10507- LTE-TDD (SC-FDMA, AAA 16-QAM, UL Subframe=	MA, 50% RB, 15 MHz, rame=2,3,4,7,8,9)	X	5.44	71.94	18.88	2.23	80.0	± 9.6 %
AAA QPSK, UL Subframe LTE-TDD (SC-FDMA 16-QAM, UL Subfram 10496- AAA 64-QAM, UL Subfram 10497- AAA MHz, QPSK, UL Subfram 10498- AAA MHz, 16-QAM, UL Subframe=2,3,4,7,8,9 LTE-TDD (SC-FDMA MHz, 16-QAM, UL Subframe=2,3,4,7,8,9 LTE-TDD (SC-FDMA, AAA MHz, 64-QAM, UL Subframe=1,3,4,7,8,9 LTE-TDD (SC-FDMA, AAA QPSK, UL Subframe=1,3,4,7,8,9 LTE-TDD (SC-FDMA, AAA 16-QAM, UL Subframe=1,3,4,7,8,9 LTE-TDD (SC-FDMA, AAA 16-QAM, UL Subframe=1,3,4,7,8,9 LTE-TDD (SC-FDMA, AAA 16-QAM, UL Subframe=1,3,4,7,8,9 LTE-TDD (SC-FDMA, AAA 64-QAM, UL Subframe=1,3,4,7,8,9 LTE-TDD (SC-FDMA, AAA 64-QAM, UL Subframe=1,3,4,7,8,9 LTE-TDD (SC-FDMA, AAA AAA AAA AAAA AAAA AAAA AAAA AAA		Y	5.28	70.63	18.27	+	80.0	
AAA QPSK, UL Subframe LTE-TDD (SC-FDMA 16-QAM, UL Subfram 10496- AAA 64-QAM, UL Subfram 10497- AAA MHz, 16-QAM, UL Subfram 10498- AAA MHz, 64-QAM, UL Subframe=2,3,4,7,8,9 LTE-TDD (SC-FDMA MHz, 16-QAM, UL Subframe=2,3,4,7,8,9 LTE-TDD (SC-FDMA, AAA MHz, 64-QAM, UL Subframe=1,3,4,7,8,9 LTE-TDD (SC-FDMA, AAA QPSK, UL Subframe=1,3,4,7,8,9 LTE-TDD (SC-FDMA, AAA 16-QAM, UL Subframe=1,3,4,7,8,9 LTE-TDD (SC-FDMA, AAA 16-QAM, UL Subframe=1,3,4,7,8,9 LTE-TDD (SC-FDMA, AAA 16-QAM, UL Subframe=1,3,4,7,8,9 LTE-TDD (SC-FDMA, AAA 64-QAM, UL Subframe=1,3,4,7,8,9 LTE-TDD (SC-FDMA, AAA 64-QAM, UL Subframe=1,3,4,7,8,9 LTE-TDD (SC-FDMA, AAA AAA AAA AAAA AAAA AAAA AAAA AAA		l ż	4.94	70.81	18.22	 	80.0	
10495- AAA 16-QAM, UL Subfram 10496- AAA 10497- AAA 10497- AAA 10498- AAA 10498- AAA 10498- AAA 10499- AAA 10499- AAA 10499- AAA 10500- AAA 10500- AAA 10501- AAA 10501- AAA 10502- AAA 10503- AAA 10503- AAA 10503- AAA 10504- AAA 10504- AAA 10504- AAA 10505- AAA 10505- AAA 10506- AAA 10506- AAA 10506- AAA 10506- AAA 10506- AAA 10507- AAA AAA 10507- AAA AAA AAA AAA AAA AAA AAA A	MA, 50% RB, 20 MHz, me=2.3.4.7.8.9)	X	7.43	79.70	21.31	2.23	80.0	± 9.6 %
10496- AAA 16-QAM, UL Subfram 10497- AAA HZ, QPSK, UL Subfram 10498- AAA HZ, GPSK, UL Subframe=2,3,4,7,8,9 10499- LTE-TDD (SC-FDMA, MHz, 64-QAM, UL Subframe=2,3,4,7,8,9 10500- AAA QPSK, UL Subframe= 10501- AAA 16-QAM, UL Subframe= 10502- AAA 16-QAM, UL Subframe= 10503- AAA QPSK, UL Subframe= 10504- AAA QPSK, UL Subframe= 10504- AAA 16-QAM, UL Subframe= 10505- AAA 16-QAM, UL Subframe= 10506- AAA 16-QAM, UL Subframe= 10507- AAA MHz, QPSK, UL Subframe= 10507- AAA MHz, 16-QAM, UL		Y	6.30	76.13	19.88	 	80.0	-
10496- AAA 16-QAM, UL Subfram 10497- AAA LTE-TDD (SC-FDMA, MHz, QPSK, UL Subframe) 10498- AAA MHz, 16-QAM, UL Subframe=2,3,4,7,8,9 10499- LTE-TDD (SC-FDMA, MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) 10500- LTE-TDD (SC-FDMA, QPSK, UL Subframe) 10501- AAA QPSK, UL Subframe 10502- AAA 16-QAM, UL Subframe 10503- AAA QPSK, UL Subframe 10503- AAA QPSK, UL Subframe 10504- AAA 16-QAM, UL Subframe 10505- AAA 16-QAM, UL Subframe 10506- AAA 16-QAM, UL Subframe 10507- AAA MHz, QPSK, UL Subframe 10507- AAA MHz, QPSK, UL Subframe 10507- AAA MHz, QPSK, UL Subframe		Z	5.88	76.40	20.05	+		
10496- AAA LTE-TDD (SC-FDMA 64-QAM, UL Subfram 10497- AAA LTE-TDD (SC-FDMA MHz, QPSK, UL Subf 10498- AAA LTE-TDD (SC-FDMA, MHz, 16-QAM, UL Subframe=2,3,4,7,8,9 LTE-TDD (SC-FDMA, MHz, 64-QAM, UL Subframe=2,3,4,7,8,9 LTE-TDD (SC-FDMA, AAA LTE-TDD (SC-FDMA, AAA QPSK, UL Subframe 10500- AAA LTE-TDD (SC-FDMA, AAA LTE-TDD (SC-FDMA, AAA 16-QAM, UL Subframe 10503- AAA LTE-TDD (SC-FDMA, AAA QPSK, UL Subframe 10504- AAA LTE-TDD (SC-FDMA, AAA AAA LTE-TDD (SC-FDMA, AAA AAA LTE-TDD (SC-FDMA, AAA CPSK, UL Subframe 10506- AAA LTE-TDD (SC-FDMA, AAA LTE-TDD (S	MA, 50% RB, 20 MHz, rame=2.3.4.7.8.9)	X	5.56	72.97	19.25	2.23	80.0 80.0	± 9.6 %
10497- AAA		TY	5.33	71.45	18.55	 	80.0	
10497- AAA		Ż	4.97	71.48	18.50	 	80.0	
AAA MHz, QPSK, UL Subfame 10498- LTE-TDD (SC-FDMA, MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) 10499- LTE-TDD (SC-FDMA, MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) 10500- LTE-TDD (SC-FDMA, QPSK, UL Subframe=10501- LTE-TDD (SC-FDMA, AAA 16-QAM, UL Subframe=10502- LTE-TDD (SC-FDMA, QPSK, UL Subframe=10503- LTE-TDD (SC-FDMA, QPSK, UL Subframe=10504- LTE-TDD (SC-FDMA, AAA 16-QAM, UL Subframe=10506- LTE-TDD (SC-FDMA, AAA 16-QAM, UL Subframe=10507- LTE-TDD (SC-FDMA, MHz, QPSK, UL Subframe=10507- LTE-TDD (SC-FDMA, MHz, 16-QAM, UL	MA, 50% RB, 20 MHz, rame=2,3,4,7,8,9)	Х	5.54	72.39	19.06	2.23	80.0	± 9.6 %
AAA MHz, QPSK, UL Subfame 10498- LTE-TDD (SC-FDMA, MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) 10499- LTE-TDD (SC-FDMA, MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) 10500- LTE-TDD (SC-FDMA, QPSK, UL Subframe=10501- LTE-TDD (SC-FDMA, AAA 16-QAM, UL Subframe=10502- LTE-TDD (SC-FDMA, QPSK, UL Subframe=10503- LTE-TDD (SC-FDMA, QPSK, UL Subframe=10504- LTE-TDD (SC-FDMA, AAA 16-QAM, UL Subframe=10505- LTE-TDD (SC-FDMA, AAA 16-QAM, UL Subframe=10506- LTE-TDD (SC-FDMA, AAA 16-QAM, UL Subframe=10506- LTE-TDD (SC-FDMA, AAA 16-QAM, UL Subframe=10507- LTE-TDD (SC-FDMA, MHz, QPSK, UL Subframe=10507- LTE-TDD (SC-FDMA, MHz, 16-QAM, UL		Y	5.37	71.03	18.42		80.0	
AAA MHz, QPSK, UL Subfame 10498- LTE-TDD (SC-FDMA, MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) 10499- LTE-TDD (SC-FDMA, MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) 10500- LTE-TDD (SC-FDMA, QPSK, UL Subframe=10501- LTE-TDD (SC-FDMA, AAA 16-QAM, UL Subframe=10502- LTE-TDD (SC-FDMA, QPSK, UL Subframe=10503- LTE-TDD (SC-FDMA, QPSK, UL Subframe=10504- LTE-TDD (SC-FDMA, AAA 16-QAM, UL Subframe=10505- LTE-TDD (SC-FDMA, AAA 16-QAM, UL Subframe=10506- LTE-TDD (SC-FDMA, AAA 16-QAM, UL Subframe=10506- LTE-TDD (SC-FDMA, AAA 16-QAM, UL Subframe=10507- LTE-TDD (SC-FDMA, MHz, QPSK, UL Subframe=10507- LTE-TDD (SC-FDMA, MHz, 16-QAM, UL		Z	5.01	71.08	18.38	1	80.0	
AAA MHz, 16-QAM, UL Subframe=2,3,4,7,8,9 LTE-TDD (SC-FDMA, MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, QPSK, UL Subframe=10501- LTE-TDD (SC-FDMA, AAA 16-QAM, UL Subframe=10502- LTE-TDD (SC-FDMA, QPSK, UL Subframe=10503- LTE-TDD (SC-FDMA, QPSK, UL Subframe=10504- LTE-TDD (SC-FDMA, AAA 16-QAM, UL Subframe=10506- LTE-TDD (SC-FDMA, AAA 16-QAM, UL Subframe=10506- LTE-TDD (SC-FDMA, AAA 64-QAM, UL Subframe=10506- LTE-TDD (SC-FDMA, AAA 64-QAM, UL Subframe=10506- LTE-TDD (SC-FDMA, AAA MHz, QPSK, UL Subframe=10507- LTE-TDD (SC-FDMA, MHz, 16-QAM, UL	MA, 100% RB, 1.4 ubframe=2,3,4,7,8,9)	X	7.31	82.38	20.82	2.23	80.0	± 9.6 %
AAA MHz, 16-QAM, UL Subframe=2,3,4,7,8,9 LTE-TDD (SC-FDMA, MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, QPSK, UL Subframe=10501- LTE-TDD (SC-FDMA, AAA 16-QAM, UL Subframe=10502- LTE-TDD (SC-FDMA, AAA 16-QAM, UL Subframe=10503- LTE-TDD (SC-FDMA, AAA 16-QAM, UL Subframe=10504- LTE-TDD (SC-FDMA, AAA 16-QAM, UL Subframe=10505- LTE-TDD (SC-FDMA, AAA 16-QAM, UL Subframe=10506- LTE-TDD (SC-FDMA, AAA 16-QAM, UL Subframe=10507- LTE-TDD (SC-FDMA, MHz, QPSK, UL Subframe=10507- LTE-TDD (SC-FDMA, MHz, 16-QAM, UL		Y	4.87	75.75	18.64		80.0	
AAA MHz, 16-QAM, UL Subframe=2,3,4,7,8,9 LTE-TDD (SC-FDMA, MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, QPSK, UL Subframe=10501- LTE-TDD (SC-FDMA, AAA 16-QAM, UL Subframe=10502- LTE-TDD (SC-FDMA, AAA QPSK, UL Subframe=10503- LTE-TDD (SC-FDMA, QPSK, UL Subframe=10504- LTE-TDD (SC-FDMA, AAA 16-QAM, UL Subframe=10505- LTE-TDD (SC-FDMA, AAA 16-QAM, UL Subframe=10506- LTE-TDD (SC-FDMA, AAA 64-QAM, UL Subframe=10506- LTE-TDD (SC-FDMA, AAA MHz, QPSK, UL Subframe=10507- LTE-TDD (SC-FDMA, MHz, 16-QAM, UL		Z	4.03	73.68	16.68		80.0	
AAA MHz, 64-QAM, UL Subframe=2,3,4,7,8,9 10500- LTE-TDD (SC-FDMA, QPSK, UL Subframe= 10501- LTE-TDD (SC-FDMA, 16-QAM, UL Subframe= 10502- LTE-TDD (SC-FDMA, 64-QAM, UL Subframe= 10503- LTE-TDD (SC-FDMA, QPSK, UL Subframe= 10504- LTE-TDD (SC-FDMA, 16-QAM, UL Subframe= 10505- LTE-TDD (SC-FDMA, 64-QAM, UL Subframe= 10506- LTE-TDD (SC-FDMA, 64-QAM, UL Subframe= 10507- LTE-TDD (SC-FDMA, MHz, QPSK, UL Subframe=		Х	4.73	73.29	16.69	2.23	80.0	± 9.6 %
AAA MHz, 64-QAM, UL Subframe=2,3,4,7,8,9 10500- LTE-TDD (SC-FDMA, QPSK, UL Subframe= 10501- LTE-TDD (SC-FDMA, 16-QAM, UL Subframe= 10502- LTE-TDD (SC-FDMA, 64-QAM, UL Subframe= 10503- LTE-TDD (SC-FDMA, QPSK, UL Subframe= 10504- LTE-TDD (SC-FDMA, AAA 16-QAM, UL Subframe= 10505- LTE-TDD (SC-FDMA, 64-QAM, UL Subframe= 10506- LTE-TDD (SC-FDMA, AAA 64-QAM, UL Subframe= 10507- LTE-TDD (SC-FDMA, MHz, QPSK, UL Subframe=		Υ	4.12	70.77	15.97		80.0	
AAA MHz, 64-QAM, UL Subframe=2,3,4,7,8,9 10500- LTE-TDD (SC-FDMA, QPSK, UL Subframe= 10501- LTE-TDD (SC-FDMA, 16-QAM, UL Subframe= 10502- LTE-TDD (SC-FDMA, 64-QAM, UL Subframe= 10503- LTE-TDD (SC-FDMA, QPSK, UL Subframe= 10504- LTE-TDD (SC-FDMA, 16-QAM, UL Subframe= 10505- LTE-TDD (SC-FDMA, 64-QAM, UL Subframe= 10506- LTE-TDD (SC-FDMA, MAA 64-QAM, UL Subframe= 10507- LTE-TDD (SC-FDMA, MHz, QPSK, UL Subframe=		Z	2.73	66.24	12.60		80.0	
AAA QPSK, UL Subframe= 10501- LTE-TDD (SC-FDMA, 16-QAM, UL Subframe) 10502- LTE-TDD (SC-FDMA, 64-QAM, UL Subframe) 10503- LTE-TDD (SC-FDMA, QPSK, UL Subframe) 10504- LTE-TDD (SC-FDMA, 16-QAM, UL Subframe) 10505- LTE-TDD (SC-FDMA, 64-QAM, UL Subframe) 10506- LTE-TDD (SC-FDMA, MAA MHz, QPSK, UL Subframe) 10507- LTE-TDD (SC-FDMA, MHz, QPSK, UL Subframe) 10507- LTE-TDD (SC-FDMA, MHz, QPSK, UL Subframe)		X	4.59	72.54	16.27	2.23	80.0	± 9.6 %
AAA QPSK, UL Subframe= 10501- LTE-TDD (SC-FDMA, 16-QAM, UL Subframe) 10502- LTE-TDD (SC-FDMA, 64-QAM, UL Subframe) 10503- LTE-TDD (SC-FDMA, QPSK, UL Subframe) 10504- LTE-TDD (SC-FDMA, 16-QAM, UL Subframe) 10505- LTE-TDD (SC-FDMA, 64-QAM, UL Subframe) 10506- LTE-TDD (SC-FDMA, MHz, QPSK, UL Subframe) 10507- LTE-TDD (SC-FDMA, MHz, QPSK, UL Subframe) 10507- LTE-TDD (SC-FDMA, MHz, QPSK, UL Subframe)		Y	4.10	70.38	15.70		80.0	
AAA QPSK, UL Subframe= 10501- LTE-TDD (SC-FDMA, 16-QAM, UL Subframe) 10502- LTE-TDD (SC-FDMA, 64-QAM, UL Subframe) 10503- LTE-TDD (SC-FDMA, QPSK, UL Subframe) 10504- LTE-TDD (SC-FDMA, 16-QAM, UL Subframe) 10505- LTE-TDD (SC-FDMA, 64-QAM, UL Subframe) 10506- LTE-TDD (SC-FDMA, MHz, QPSK, UL Subframe) 10507- LTE-TDD (SC-FDMA, MHz, QPSK, UL Subframe) 10507- LTE-TDD (SC-FDMA, MHz, QPSK, UL Subframe)		Z	2.62	65.47	12.11		80.0	
10502- AAA 16-QAM, UL Subframe 10502- AAA 64-QAM, UL Subframe 10503- AAA QPSK, UL Subframe= 10504- AAA 16-QAM, UL Subframe 10505- AAA 64-QAM, UL Subframe 10506- AAA LTE-TDD (SC-FDMA, AAA 64-QAM, UL Subframe 10506- AAA MHz, QPSK, UL Subframe 10507- AAA MHz, 16-QAM, UL	MA, 100% RB, 3 MHz, ne=2,3,4,7,8,9)	Х	7.19	81.83	22.01	2.23	80.0	± 9.6 %
10502- AAA 16-QAM, UL Subframe 10502- AAA 64-QAM, UL Subframe 10503- AAA QPSK, UL Subframe 10504- AAA 16-QAM, UL Subframe 10505- AAA 16-QAM, UL Subframe 10506- AAA 64-QAM, UL Subframe 10506- AAA AAA MHz, QPSK, UL Subframe 10507- AAA MHz, 16-QAM, UL		Υ	5.57	76.69	20.07		80.0	<u> </u>
10502- AAA 16-QAM, UL Subframe 10502- AAA 64-QAM, UL Subframe 10503- AAA QPSK, UL Subframe= 10504- AAA 16-QAM, UL Subframe 10505- AAA 64-QAM, UL Subframe 10506- AAA LTE-TDD (SC-FDMA, AAA 64-QAM, UL Subframe 10506- AAA MHz, QPSK, UL Subframe 10507- AAA MHz, 16-QAM, UL		Z	5.44	77.85	20.24	_	80.0	
AAA 64-QAM, ÜL Subframe 10503- LTE-TDD (SC-FDMA, QPSK, UL Subframe= 10504- LTE-TDD (SC-FDMA, 16-QAM, UL Subframe) 10505- LTE-TDD (SC-FDMA, 64-QAM, UL Subframe) 10506- LTE-TDD (SC-FDMA, MHz, QPSK, UL Subframe) 10507- LTE-TDD (SC-FDMA, MHz, QPSK, UL Subframe)	MA, 100% RB, 3 MHz, ame=2,3,4,7,8,9)	Х	5.46	74.81	19.33	2.23	80.0	± 9.6 %
AAA 64-QAM, ÜL Subframe 10503- LTE-TDD (SC-FDMA, AAA QPSK, UL Subframe= 10504- LTE-TDD (SC-FDMA, AAA 16-QAM, UL Subframe 10505- LTE-TDD (SC-FDMA, 64-QAM, UL Subframe 10506- LTE-TDD (SC-FDMA, MHz, QPSK, UL Subframe) 10507- LTE-TDD (SC-FDMA, MHz, QPSK, UL Subframe)		Υ	4.94	72.30	18.33		80.0	
AAA 64-QAM, ÜL Subframe 10503- LTE-TDD (SC-FDMA, QPSK, UL Subframe= 10504- LTE-TDD (SC-FDMA, 16-QAM, UL Subframe) 10505- LTE-TDD (SC-FDMA, 64-QAM, UL Subframe) 10506- LTE-TDD (SC-FDMA, MHz, QPSK, UL Subframe) 10507- LTE-TDD (SC-FDMA, MHz, QPSK, UL Subframe)	<u> </u>	Z	4.65	72.67	17.97		80.0	
AAA QPSK, UL Subframe= 10504- LTE-TDD (SC-FDMA, 16-QAM, UL Subframe) 10505- LTE-TDD (SC-FDMA, 64-QAM, UL Subframe) 10506- LTE-TDD (SC-FDMA, MHz, QPSK, UL Subframe) 10507- LTE-TDD (SC-FDMA, MHz, 16-QAM, UL	4A, 100% RB, 3 MHz, ame=2,3,4,7,8,9)	X	5.46	74.43	19.15	2.23	80.0	± 9.6 %
AAA QPSK, UL Subframe= 10504- LTE-TDD (SC-FDMA, 16-QAM, UL Subframe) 10505- LTE-TDD (SC-FDMA, 64-QAM, UL Subframe) 10506- LTE-TDD (SC-FDMA, MHz, QPSK, UL Subframe) 10507- LTE-TDD (SC-FDMA, MHz, 16-QAM, UL		Y	4.98	72.05	18.20		80.0	
AAA QPSK, UL Subframe= 10504- LTE-TDD (SC-FDMA, 16-QAM, UL Subframe) 10505- LTE-TDD (SC-FDMA, 64-QAM, UL Subframe) 10506- LTE-TDD (SC-FDMA, MHz, QPSK, UL Subframe) 10507- LTE-TDD (SC-FDMA, MHz, 16-QAM, UL		Z	4.68	72.41	17.81		80.0	
10505- AAA 16-QAM, UL Subframe 10505- AAA 64-QAM, UL Subframe 10506- AAA MHz, QPSK, UL Subframe 10507- AAA MHz, 16-QAM, UL	MA, 100% RB, 5 MHz, ne=2,3,4,7,8,9)	Х	6.99	80.56	21.73	2.23	80.0	± 9.6 %
10505- AAA 16-QAM, UL Subframe 10505- AAA 64-QAM, UL Subframe 10506- AAA MHz, QPSK, UL Subframe 10507- AAA MHz, 16-QAM, UL		Y	5.72	76.28	20.04		80.0	
10505- AAA 16-QAM, UL Subframe 10505- AAA 64-QAM, UL Subframe 10506- AAA MHz, QPSK, UL Subframe 10507- AAA MHz, 16-QAM, UL	IA 4000/ DD ====	Z	5.42	76.98	20.27		80.0	
AAA 64-QAM, UL Subframe 10506- LTE-TDD (SC-FDMA, AAA MHz, QPSK, UL Subfr. 10507- LTE-TDD (SC-FDMA, MHz, 16-QAM, UL	nA, 100% RB, 5 MHz, ame=2,3,4,7,8,9)	Х	5.31	73.78	19.39	2.23	80.0	± 9.6 %
AAA 64-QAM, UL Subframe 10506- LTE-TDD (SC-FDMA, AAA MHz, QPSK, UL Subfr. 10507- LTE-TDD (SC-FDMA, MHz, 16-QAM, UL		Y	4.98	71.79	18.52		80.0	
10506- AAA MHz, QPSK, UL Subfr. 10507- AAA MHz, 16-QAM, UL	IA, 100% RB, 5 MHz,	Z	4.66 5.32	72.08 73.26	18.42 19.21	2.23	80.0	± 9.6 %
MHz, QPSK, UL Subfr. 10507- AAA MHz, 16-QAM, UL		Y	5.03	71 11	40 44			
MHz, QPSK, UL Subfr. 10507- AAA MHz, 16-QAM, UL		Z	4.72	71.44	18.41		80.0	
10507- LTE-TDD (SC-FDMA, AAA MHz, 16-QAM, UL	A, 100% RB, 10 bframe=2,3,4,7,8,9)	X	7.35	71.78 79.52	18.31 21.23	2.23	80.0 80.0	± 9.6 %
AAA MHz, 16-QAM, UL		Y	6.24	75.99	19.82		80.0	
AAA MHz, 16-QAM, UL		Z	5.83	76.25	19.98			
		X	5.53	72.90	19.22	2.23	80.0 80.0	± 9.6 %
		Y	5.31	71.39	18.51		90.0	
		ż	4.95	71.42	18.47		80.0 80.0	

10508- AAA	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM, UL	X	5.52	72.31	19.02	2.23	80.0	± 9.6 %
	Subframe=2,3,4,7,8,9)	,		7 0.0-	46.5-		00.0	
		Y	5.35	70.96	18.38		80.0	
10500	LTE TDD (00 EDIN 1000) DD 15	Z	4.99	71.02	18.34	0.00	80.0	. 0 0 07
10509- AAA	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	6.86	76.40	20.08	2.23	80.0	± 9.6 %
		Υ	6.23	74.05	19.09		80.0	
		Z	5.83	74.13	19.18		80.0	
10510- AAA	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	×	5.89	72.04	18.91	2.23	80.0	± 9.6 %
		Y	5.75	70.91	18.36		80.0	
		Z	5.36	70.80	18.32		80.0	
10511- AAA	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	5.86	71.58	18.77	2.23	80.0	± 9.6 %
		Y	5.75	70.55	18.27		80.0	
		Z	5.39	70.48	18.23		80.0	
10512- AAA	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	7.85	79.24	20.97	2.23	80.0	± 9.6 %
· · · · -	, 4	Y	6.75	76.04	19.69		80.0	
		z	6.30	76.05	19.77		80.0	
10513- AAA	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	Х	5.88	72.72	19.16	2.23	80.0	± 9.6 %
		Y	<u>5.70</u>	71.43	18.55		80.0	
		Z	5.29	71.21	18.47		80.0	
10514- AAA	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	5.77	72.00	18.94	2.23	80.0	±9.6 %
		Y	5.64	70.86	18.38		80.0	
<u> </u>		Ż	5.26	70.69	18.32		80.0	
10515- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 99pc duly cycle)	X	1.03	64.88	16.19	0.00	150.0	± 9.6 %
	, , , , , , , , , , , , , , , , , , ,	Υ	0.99	63.07	14.62		150.0	
		Z	0.99	63.20	14.56		150.0	
10516- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc duty cycle)	X	1.64	91.04	26.85	0.00	150.0	± 9.6 %
		Υ	0.59	69.22	16.60		150.0	
		Z	0.59	69.23	16.57		150.0	
10517- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 99pc duty cycle)	X	0.96	68.68	17.89	0.00	150.0	± 9.6 %
		Y	0.84	64.94	15.18_		150.0	
10518- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc duty cycle)	X	0.84 4.73	64.94 67.22	15.09 16.54	0.00	150.0 150.0	± 9.6 %
	kai aabai) ajaia/	Υ	4.75	66.79	16.24		150.0	
		Z	4.57	66.91	16.20		150.0	
10519- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 99pc duty cycle)	Х	4.96	67.51	16.67	0.00	150.0	± 9.6 %
		Υ	4.99	67.12	16.39		150.0	
		Z	4.76	67.15	16.33	_	150.0	L
10520- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 99pc duty cycle)	X	4.82	67.52	16.62	0.00	150.0	±9.6%
		Y	4.84	67.09	16.32		150.0	
10521- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc duty cycle)	X	4.61 4.75	67.11 67.54	16.25 16.61	0.00	150.0 150.0	± 9.6 %
AAA	wipps, sape duty cycle)	Y	4.77	67.10	16.31		150.0	
		Z	4.54	67.10	16.23	\vdash	150.0	
10522-	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36	X	4.79	67.47	16.62	0.00	150.0	± 9.6 %
	Mbps 99pc duty cycle)				I	II .	4	
10522- AAA	Mbps, 99pc duty cycle)	Y	4.80	67.00	16.30		150.0	

								
10523- AAA	IEEE 802.11a/n WiFi 5 GHz (OFDM, 48 Mbps, 99pc duty cycle)	X	4.66	67.41	16.50	0.00	150.0	± 9.6 %
		Υ	4.67	66.95	16.18		150.0	
40504	LEEE COO LA DAVISIONI DE LA COMPANIA DEL COMPANIA DEL COMPANIA DE LA COMPANIA DEL COMPANIA DEL COMPANIA DE LA COMPANIA DEL COMPANIA DE LA COMPANIA DEL COMP	Z	4.48	67.04	16.16		150.0	
10524- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc duty cycle)	Х	4.74	67.44	16.62	0.00	150.0	± 9.6 %
		<u> Y</u>	4.76	66.99	16.31		150.0	
		Z	4.54	67.10	16.28		150.0	
10525- AAA	IEEE 802.11ac WiFi (20MHz, MCS0, 99pc duty cycle)	X	4.69	66.48	16.21	0.00	150.0	± 9.6 %
		Υ	4.70	66.02	15.89		150.0	
40500	LEED OOD 14 TO THE OOD 14 TO T	Z	4.53	66.15	15.87		150.0	
10526- AAA	IEEE 802.11ac WiFi (20MHz, MCS1, 99pc duty cycle)	X	4.91	66.90	16.35	0.00	150.0	± 9.6 %
		Y	4.91	66.43	16.04		150.0	
40507		Z	4.70	66.52	16.01		150.0	
10527- AAA	IEEE 802.11ac WiFi (20MHz, MCS2, 99pc duty cycle)	X	4.82	66.89	16.32	0.00	150.0	± 9.6 %
		Υ	4.83	66.42	16.00		150.0	
		Z	4.62	66.47	15.95		150.0	
10528- <u>AAA</u>	IEEE 802.11ac WiFi (20MHz, MCS3, 99pc duty cycle)	X	4.84	66.91	16.35	0.00	150.0	± 9.6 %
		Y	4.85	66.44	16.03		150.0	\vdash
40505	1======================================	Z	4.63	66.49	15.99		150.0	
10529- AAA	IEEE 802.11ac WiFi (20MHz, MCS4, 99pc duly cycle)	Х	4.84	66.91	16.35	0.00	150.0	± 9.6 %
		Y	4.85	66.44	16.03		150.0	
		Z	4.63	66.49	15.99		150.0	
10531- AAA	IEEE 802.11ac WiFi (20MHz, MCS6, 99pc duty cycle)	Х	4.86	67.08	16.39	0.00	150.0	± 9.6 %
		Υ	4.87	66.60	16.06		150.0	
		Z	4.63	66.60	16.00		150.0	
10532- AAA	IEEE 802.11ac WiFi (20MHz, MCS7, 99pc duty cycle)	Х	4.71	66.97	16.35	0.00	150.0	± 9.6 %
		Y	4.72	66.49	16.02		150.0	
		Z	4.49	66.45	15.93		150.0	
10533- AAA	IEEE 802.11ac WiFi (20MHz, MCS8, 99pc duty cycle)	Х	4.86	66.93	16.33	0.00	150.0	± 9.6 %
		Y	4.87	66.45	16.01		150.0	
		Ζ	4.64	66.54	15.97		150.0	
10534- <u>AAA</u>	IEEE 802.11ac WiFi (40MHz, MCS0, 99pc duly cycle)	X	5.34	67.03	16.36	0.00	150.0	± 9.6 %
		Y	5.36	66.66	16.11		150.0	
 -		Z	5.17	66.62	16.06		150.0	
10535- AAA	IEEE 802.11ac WiFi (40MHz, MCS1, 99pc duty cycle)	Х	5.42	67.17	16.42	0.00	150.0	± 9.6 %
		Υ	5.43	66.80	16.16		150.0	
40000		Z	5.24	66.80	16.14		150.0	
10536- AAA	IEEE 802.11ac WiFi (40MHz, MCS2, 99pc duly cycle)	Х	5.29	67.18	16.41	0.00	150.0	± 9.6 %
		Υ]	5.30	66.78	16.13		150.0	
10505	100	Z	5.11	66.74	16.09		150.0	
10537-	IEEE 802.11ac WiFi (40MHz, MCS3, 99pc duty cycle)	Х	5.35	67.14	16.39	0.00	150.0	± 9.6 %
444	sape duty cycle)						 +	
44A	sape duty cycle)	Y	5.36	66.75	16.12		150.0	
		Z	5.36 5.16				150.0 150.0	
10538-	IEEE 802.11ac WiFi (40MHz, MCS4, 99pc duty cycle)	X		66.75 66.71 67.20	16.12 16.08 16.46	0.00	150.0 150.0 150.0	± 9.6 %
0538-	IEEE 802.11ac WiFi (40MHz, MCS4,	Z X Y	5.16	66.71	16.08 16.46	0.00	150.0 150.0	± 9.6 %
10538- \AA	IEEE 802.11ac WiFi (40MHz, MCS4, 99pc duty cycle)	X	5.16 5.47 5.49	66.71 67.20 66.85	16.08 16.46 16.21	0.00	150.0 150.0	± 9.6 %
10538- AAA 10540- AAA	IEEE 802.11ac WiFi (40MHz, MCS4,	Z X Y Z X	5.16 5.47	66.71 67.20	16.08 16.46	0.00	150.0 150.0	± 9.6 %
10538- AAA 10540-	IEEE 802.11ac WiFi (40MHz, MCS4, 99pc duty cycle)	Z X Y Z	5.16 5.47 5.49 5.26	66.71 67.20 66.85 66.74	16.08 16.46 16.21 16.13		150.0 150.0 150.0 150.0	

10541-	IEEE 802.11ac WiFi (40MHz, MCS7,	ΙχΙ	5.35	67.08	16.42	0.00	150.0	± 9.6 %
AAA	99pc duty cycle)	^	5.35	07.00	10.42	0.00	130.0	£ 9.0 %
7001	sope daty cyclo)	Y.	5.38	66.75	16.17		150.0	
		Z	5.16	66.62	16.08		150.0	
10542-	IEEE 802.11ac WiFi (40MHz, MCS8,	X	5.49	67.08	16.42	0.00	150.0	± 9.6 %
AAA	99pc duty cycle)	``				3,55		
		Y	5.51	66.73	16.18		150.0	
		Z	5.31	66.69	16.13		150.0	
10543-	IEEE 802.11ac WiFi (40MHz, MCS9,	X	5.58	67.09	16.44	0.00	150.0	± 9.6 %
AAA	99pc duly cycle)	1 1						
		Y	5.61	66.77	16.21		150.0	
		Z	5.39	66.74	16.17		150.0	
10544-	IEEE 802.11ac WiFi (80MHz, MCS0,	X	5.61	67.12	16.33	0.00	150.0	± 9.6 %
AAA	99pc duty cycle)							
		Υ	5.62	66.77	16.09		150.0	
		Z	5.48	66.74	16.05		150.0	
10545-	IEEE 802.11ac WiFi (80MHz, MCS1,	X	5.83	67.51	16.46	0.00	150.0	± 9.6 %
AAA	99pc duty cycle)	 		<u> </u>				
		Y	5.84	67.15	16.22		150.0	
10510	NEET 000 44 1975 (001 1) 1 100	Z	5.68	67.16	16.22	0.00	150.0	
10546-	IEEE 802.11ac WiFi (80MHz, MCS2,	X	5.72	67.42	16.44	0.00	150.0	± 9.6 %
AAA	99pc duty cycle)	 , 	E 70	07.00	40.00		450.0	
		Y	5.73	67.08	16.20		150.0	
40547	IEEE 000 44 WIE! (00MI) - MOOD	Z	5.55	66.95	16.13		150.0	± 9.6 %
10547-	IEEE 802.11ac WiFi (80MHz, MCS3,	X	5.81	67.48	16.46	0.00	150.0	± 9.6 %
AAA	99pc duty cycle)	Y	5.83	67.17	16.24		150.0	
		Z	5.62	66.99	16.14		150.0	
10548-	IEEE 802.11ac WiFi (80MHz, MCS4,	X	6.10	68.50	16.14	0.00	150.0	± 9.6 %
10046- AAA	99pc duty cycle)	^	0.10	66.50	10.94	0.00	150.0	19.0 %
AAA	99pc duty cycle)	Y	6.15	68.24	16.74		150.0	
		Z	5.89	67.98	16.61		150.0	
10550-	IEEE 802.11ac WiFi (80MHz, MCS6,	X	5.74	67.36	16.42	0.00	150.0	± 9.6 %
AAA	99pc duly cycle)	^	3.14	07.50	10.42	0.00	130.0	2 3.0 70
7001		Y	5.75	67.01	16.18		150.0	
		Ż	5.57	66.96	16.14		150.0	-
10551-	IEEE 802.11ac WiFi (80MHz, MCS7,	$\frac{1}{x}$	5.76	67.47	16.43	0.00	150.0	± 9.6 %
AAA	99pc duty cycle)	^	0.10	0	10110	0,00		
, , , ,		Υ	5.78	67.14	16.20		150.0	
	-	Ż	5.58	67.00	16.12		150.0	
10552-	IEEE 802.11ac WiFi (80MHz, MCS8,	X	5.66	67.23	16.33	0.00	150.0	± 9.6 %
AAA	99pc duty cycle)	'						
		Y	5.67	66.89	16.10		150.0	
		Z	5.49	66.80	16.03		150.0	
10553-	IEEE 802.11ac WiFi (80MHz, MCS9,	X	5.75	67.26	16.37	0.00	150.0	± 9.6 %
AAA	99pc duly cycle)			<u></u>				
		Υ	5.76	66.93	16.14		150.0	
		Z	5.58	66.84	16.08		150.0	
10554- AAA	IEEE 1602.11ac WiFi (160MHz, MCS0, 99pc duty cycle)	Х	6.01	67.49	16.42	0.00	150.0	± 9.6 %
, , , , ,	1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Y	6.02	67.17	16.20		150.0	
		Z	5.89	67.10	16.15		150.0	<u> </u>
10555-	IEEE 1602.11ac WiFi (160MHz, MCS1,	T X	6.17	67.85	16.56	0.00	150.0	±9.6 %
AAA	99pc duty cycle)		•		1	l		
		Y	6.20	67.56	16.36		150.0	
		Z	6.02	67.41	16.28		150.0	
10556-	IEEE 1602.11ac WiFi (160MHz, MCS2,	X	6.18	67.83	16.55	0.00	150.0	± 9.6 %
AAA	99pc duty cycle)							
		Υ	6.19	67.51	16.33		150.0	
		Z	6.04	67.46	16.30		150.0	
10557-	IEEE 1602.11ac WiFi (160MHz, MCS3,	X	6.17	67.82	16.57	0.00	150.0	± 9.6 %
					1	1	1	
10557- AAA	99pc duty cycle)	Y	6.19	67.52	16.36		150.0	

10558- AAA	IEEE 1602.11ac WiFi (160MHz, MCS4, 99pc duty cycle)	X	6.23	68.01	16.68	0.00	150.0	± 9.6 %
		Y	6.25	67.72	16.47		150.0	
		Z	6.05	67.53	16.37		150.0	
10560- AAA	IEEE 1602.11ac WiFi (160MHz, MCS6, 99pc duty cycle)	Х	6.22	67.85	16.63	0.00	150.0	± 9.6 %
		ΙY	6.25	67.56	16.43		150.0	
		Z	6.05	67.37	16.33		150.0	
10561- AAA	IEEE 1602.11ac WiFi (160MHz, MCS7, 99pc duty cycle)	X	6.13	67.79	16.64	0.00	150.0	± 9.6 %
		Y	6.15	67.49	16.43		150.0	
10562-	JEEC 4000 44 - MEC 4601 B1 - 1000	Z	5.97	67.35	16.35	ļ	150.0	
AAA	IEEE 1602.11ac WiFi (160MHz, MCS8, 99pc duty cycle)	X	6.29	68.28	16.89	0.00	150.0	± 9.6 %
		Y	6.33	68.01	16.70		150.0	
10563-	IEEE 1600 11 MEE: (100ML) MOOO	Z	6.10	67.74	16.55	<u> </u>	150.0	
AAA	IEEE 1602.11ac WiFi (160MHz, MCS9, 99pc duly cycle)	X	6.57	68.63	17.00	0.00	150.0	± 9.6 %
		Y	6.57	68.27	16.77		150.0	
10E64	IEEE 000 44 - IAEE' C 4 CT (TOO)	Z	6.35	68.10	16.68		150.0	
10564- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 9 Mbps, 99pc duty cycle)	X	5.07	67.31	16.69	0.46	150.0	± 9.6 %
	 	<u> Y</u>	5.10	66.95	16.44		150.0	
40505		Z	4.91	67.04	16.40		150.0	
10565- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 12 Mbps, 99pc duty cycle)	X	5.34	67.80	17.01	0.46	150.0	± 9.6 %
		Y	5.38	67.46	16.78		150.0	
40500	IEST 000 // HEST 0 / Dec	Z	5.14	67.47	16.71		150.0	
10566- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 18 Mbps, 99pc duty cycle)	X	5.17	67.69	16.85	0.46	150.0	± 9.6 %
		Y	5.21	67.33	16.61		150.0	
4050		Z	4.97	67.33	16.54		150.0	
10567- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 24 Mbps, 99pc duty cycle)	Х	5.20	68.09	17.20	0.46	150.0	± 9.6 %
		Υ	5.23	67.71	16.94		150.0	
10500		Z	5.00	67.68	16.86		150.0	
10568- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 36 Mbps, 99pc duty cycle)	X	5.08	67.38	16.59	0.46	150.0	± 9.6 %
		Υ	5.11	67.01	16.33		150.0	
40=00		Z	4.90	67.16	16.34		150.0	
10569- AAA	IEEE 802.11g WIFi 2.4 GHz (DSSS- OFDM, 48 Mbps, 99pc duty cycle)	X	5.14	68.11	17.22	0.46	150.0	± 9.6 %
		Υ	5.16	67.71	16.95		150.0	
40570	TEE OOD ALL DIES	Z	4.96	67.77	16.91	_	150.0	
10570- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 54 Mbps, 99pc duty cycle)	X	5.18	67.92	17.15	0.46	150.0	± 9.6 %
		Y	5.21	67.52	16.88		150.0	
10571-	IEEE 000 445 MEE 0 4 OU (DOOS	Z	4.99	67.63	16.86		150.0	
AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90pc duty cycle)	X	1.45	67.97	17.69	0.46	130.0	± 9.6 %
	 	Y	1.38	65.84	16.15		130.0	
10572-	IECT 000 445 MET 0 4 OV 12 TO 1	Z	1.34	65.80	16.05		130.0	
10572- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 90pc duly cycle)	X	1.49	68.86	18.18	0.46	130.0	± 9.6 %
		Y	1.40	66.47	16.51		130.0	-
10573-	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5	Z	1.36 100.00	66.39 149.30	16.40 40.22	0.46	130.0 130.0	± 9.6 %
AAA	Mbps, 90pc duty cycle)	├ ↓						- 0.0 /0
		Υ	3.11	88.03	23.54		130.0	
10574-	IEEE 000 444 MIRIO COMPANIE	Z	3.23	89.37	24.00		130.0	
10574- 4AA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 90pc duly cycle)	X	2.21	80.01	23.13	0.46	130.0	± 9.6 %
		Y	1 CF	72.75	70 11			
		Z	1.65	72.75	19.44	I	130.0	

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E 802.11g WiFi 2.4 GHz (DSSS-M, 6 Mbps, 90pc duty cycle) E 802.11g WiFi 2.4 GHz (DSSS-M, 9 Mbps, 90pc duty cycle) E 802.11g WiFi 2.4 GHz (DSSS-M, 12 Mbps, 90pc duty cycle) E 802.11g WiFi 2.4 GHz (DSSS-M, 18 Mbps, 90pc duty cycle) E 802.11g WiFi 2.4 GHz (DSSS-M, 24 Mbps, 90pc duty cycle)	X	4.88 4.92 4.73 4.91 4.94 4.75 5.15 5.20 4.96 5.05 5.09 4.85 4.82	67.15 66.81 66.93 67.32 66.97 67.08 67.65 67.33 67.36 67.86	16.77 16.54 16.51 16.84 16.61 16.56 17.01 16.79 16.73 17.13	0.46	130.0 130.0 130.0 130.0 130.0 130.0 130.0 130.0	± 9.6 % ± 9.6 % ± 9.6 %
E 802.11g WiFi 2.4 GHz (DSSS-M, 9 Mbps, 90pc duty cycle) E 802.11g WiFi 2.4 GHz (DSSS-M, 12 Mbps, 90pc duty cycle) E 802.11g WiFi 2.4 GHz (DSSS-M, 18 Mbps, 90pc duty cycle) E 802.11g WiFi 2.4 GHz (DSSS-M, 24 Mbps, 90pc duty cycle)	Z X Y Z X Y Z X Y Z X Y Y Z X Y Y Z X Y Y Z X Y Y Z X Y Y Z X Y Y Z X Y Y X Y Y X Y Y X X Y Y X X Y Y X X Y Y X X Y Y X X Y Y X X Y Y X X Y Y X X Y Y X X Y Y X X Y Y X X Y Y X X Y Y X X Y Y X X X Y Y X X X Y Y X X X X Y Y X X X X Y Y X X X X X Y X	4.73 4.91 4.94 4.75 5.15 5.20 4.96 5.05 5.09 4.85	66.93 67.32 66.97 67.08 67.65 67.33 67.36 67.86	16.51 16.84 16.61 16.56 17.01 16.79 16.73 17.13	0.46	130.0 130.0 130.0 130.0 130.0 130.0 130.0	± 9.6 %
E 802.11g WiFi 2.4 GHz (DSSS-M, 12 Mbps, 90pc duty cycle) E 802.11g WiFi 2.4 GHz (DSSS-M, 18 Mbps, 90pc duty cycle) E 802.11g WiFi 2.4 GHz (DSSS-M, 18 Mbps, 90pc duty cycle) E 802.11g WiFi 2.4 GHz (DSSS-M, 24 Mbps, 90pc duty cycle)	Z X Y Z X Y Z X Y Z X Y Y Z X Y Y Z X Y Y Z X Y Y Z X Y Y Z X Y Y Z X Y Y X Y Y X Y Y X X Y Y X X Y Y X X Y Y X X Y Y X X Y Y X X Y Y X X Y Y X X Y Y X X Y Y X X Y Y X X Y Y X X Y Y X X Y Y X X X Y Y X X X Y Y X X X X Y Y X X X X Y Y X X X X X Y X	4.73 4.91 4.94 4.75 5.15 5.20 4.96 5.05 5.09 4.85	66.93 67.32 66.97 67.08 67.65 67.33 67.36 67.86	16.51 16.84 16.61 16.56 17.01 16.79 16.73 17.13	0.46	130.0 130.0 130.0 130.0 130.0 130.0 130.0	± 9.6 %
E 802.11g WiFi 2.4 GHz (DSSS-M, 12 Mbps, 90pc duty cycle) E 802.11g WiFi 2.4 GHz (DSSS-M, 18 Mbps, 90pc duty cycle) E 802.11g WiFi 2.4 GHz (DSSS-M, 18 Mbps, 90pc duty cycle) E 802.11g WiFi 2.4 GHz (DSSS-M, 24 Mbps, 90pc duty cycle)	X Y Z X Y Z X Y Z X Y Z X	4.91 4.94 4.75 5.15 5.20 4.96 5.05 5.09 4.85	67.32 66.97 67.08 67.65 67.33 67.36 67.86	16.84 16.61 16.56 17.01 16.79 16.73 17.13	0.46	130.0 130.0 130.0 130.0 130.0	± 9.6 %
E 802.11g WiFi 2.4 GHz (DSSS- M, 18 Mbps, 90pc duty cycle) E 802.11g WiFi 2.4 GHz (DSSS- M, 24 Mbps, 90pc duty cycle) E 802.11g WiFi 2.4 GHz (DSSS- M, 24 Mbps, 90pc duty cycle)	Z X Y Z X Y Z X	4.75 5.15 5.20 4.96 5.05 5.09 4.85	67.08 67.65 67.33 67.36 67.86	16.56 17.01 16.79 16.73 17.13		130.0 130.0 130.0 130.0	
E 802.11g WiFi 2.4 GHz (DSSS- M, 18 Mbps, 90pc duty cycle) E 802.11g WiFi 2.4 GHz (DSSS- M, 24 Mbps, 90pc duty cycle) E 802.11g WiFi 2.4 GHz (DSSS- M, 24 Mbps, 90pc duty cycle)	X Y Z X Y Z X	5.15 5.20 4.96 5.05 5.09 4.85	67.65 67.33 67.36 67.86	17.01 16.79 16.73 17.13		130.0 130.0 130.0	
E 802.11g WiFi 2.4 GHz (DSSS- M, 18 Mbps, 90pc duty cycle) E 802.11g WiFi 2.4 GHz (DSSS- M, 24 Mbps, 90pc duty cycle) E 802.11g WiFi 2.4 GHz (DSSS- M, 24 Mbps, 90pc duty cycle)	Y Z X Y Z X Y	5.20 4.96 5.05 5.09 4.85	67.33 67.36 67.86	16.79 16.73 17.13		130.0 130.0	
E 802.11g WiFi 2.4 GHz (DSSS- M, 24 Mbps, 90pc duty cycle)	X Y Z X	4.96 5.05 5.09 4.85	67.36 67.86 67.50	16.73 17.13	0.46	130.0	-
E 802.11g WiFi 2.4 GHz (DSSS- M, 24 Mbps, 90pc duty cycle)	X Y Z X	5.05 5.09 4.85	67.86 67.50	17.13	0.46		
E 802.11g WiFi 2.4 GHz (DSSS- M, 24 Mbps, 90pc duty cycle)	Y Z X	5.09 4.85	67.50		0.46	1 1200	
M, 24 Mbps, 90pc duty cycle) E 802.11g WiFi 2.4 GHz (DSSS-	Z X Y	4.85				130.0	± 9.6 %
M, 24 Mbps, 90pc duty cycle) E 802.11g WiFi 2.4 GHz (DSSS-	X			16.89		130.0	
M, 24 Mbps, 90pc duty cycle) E 802.11g WiFi 2.4 GHz (DSSS-	Y	4.82	67.51	16.82	0.40	130.0	1000
E 802.11g WiFi 2.4 GHz (DSSS- M, 36 Mbps, 90pc duty cycle)			67.24	16.51	0.46	130.0	± 9.6 %
802.11g WiFi 2.4 GHz (DSSS- M, 36 Mbps, 90pc duty cycle)		4.87	66.90	16.27		130.0	
E 602.11g WIFT 2.4 GHZ (DSSS- M, 36 Mbps, 90pc duty cycle)	Z	4.63	66.89	16.19	0.40	130.0	1000
	X	4.86	67.17	16.48	0.46	130.0	± 9.6 %
	Y	4.91	66.83	16.25		130.0	
- 000 44 - MIE: 0 4 OU - /D000	Z	4.68	66.92	16.22	0.40	130.0	± 9.6 %
E 802.11g WiFi 2.4 GHz (DSSS- M, 48 Mbps, 90pc duty cycle)	X	4.96	67.97	17.11	0.46	130.0	± 9.6 %
	Y	5.00	67.61 67.57	16.86		130.0 130.0	
000 44a WiFi 2 4 CHa /DCCC	Z	4.76		16.77	0.46	130.0	+06%
E 802.11g WiFi 2.4 GHz (DSSS- IM, 54 Mbps, 90pc duty cycle)	X	4.78	66.97	16.29	0.46		± 9.6 %
	Υ	4.83	66.64	16.06		130.0	
	Z	4.58	66.67	16.00	0.40	130.0	
E 802.11a/h WiFi 5 GHz (OFDM, 6 s, 90pc duty cycle)	X	4.88	67.15	16.77	0.46	130.0	± 9.6 %
	Y	4.92	66.81	16.54		130.0	
	<u>Z</u>	4.73	66.93	16.51	0.40	130.0	
E 802.11a/h WiFi 5 GHz (OFDM, 9 s, 90pc duty cycle)	Х	4.91	67.32	16.84	0.46	130.0	± 9.6 %
	Y	4.94	66.97	16.61		130.0	-
	Z	4.75	67.08	16.56		130.0	
E 802.11a/h WiFi 5 GHz (OFDM, 12 s, 90pc duty cycle)	Х	5.15	67.65	17.01	0.46	130.0	± 9.6 %
	Y	5.20	67.33	16.79		130.0	
	Z	4.96	67.36	16.73	0.40	130.0	1000
E 802.11a/h WiFi 5 GHz (OFDM, 18 s, 90pc duty cycle)	X	5.05	67.86	17.13	0.46	130.0	± 9.6 %
<u> </u>	Y	5.09	67.50	16.89		130.0	
E 802.11a/h WiFi 5 GHz (OFDM, 24	Z	4.85 4.82	67.51 67.24	16.82 16.51	0.46	130.0 130.0	± 9.6 %
s, 90pc duty cycle)	Y	4.87	66.90	16.27		130.0	
	Z	4.63	66.89	16.19		130.0	
E 802 11a/h WiEi 5 CH2 (CEDM 36					0.46	130.0	± 9.6 %
es, 90pc duty cycle)					J.70		
E 802.11a/h WiFi 5 GHz (OFDM, 48	X	4.96	67.97	17.11	0.46	130.0	± 9.6 %
s 90nc duty cycle)	1	5.00	67.61	16.86		130.0	
os, 90pc duty cycle)							
os, 90pc duty cycle)	X	4.78	66.97	16.29	0.46	130.0	± 9.6 %
E 802.11a/h WiFi 5 GHz (OFDM, 54	Y	4.83	66.64	16.06	-	130.0	
						130.0	
E	802.11a/h WiFi 5 GHz (OFDM, 48 , 90pc duty cycle) 802.11a/h WiFi 5 GHz (OFDM, 54	, 90pc duty cycle) Y Z 802.11a/h WiFi 5 GHz (OFDM, 48 X, 90pc duty cycle) Y Z 802.11a/h WiFi 5 GHz (OFDM, 54 X, 90pc duly cycle) Y Y Y Y Y Y Y	, 90pc duty cycle) Y 4.91 Z 4.68 802.11a/h WiFi 5 GHz (OFDM, 48 X 4.96 , 90pc duty cycle) Y 5.00 Z 4.76 802.11a/h WiFi 5 GHz (OFDM, 54 X 4.78 , 90pc duly cycle) Y 4.83	, 90pc duty cycle) Y 4.91 66.83 Z 4.68 66.92 802.11a/h WiFi 5 GHz (OFDM, 48 X 4.96 67.97 , 90pc duty cycle) Y 5.00 67.61 Z 4.76 67.57 802.11a/h WiFi 5 GHz (OFDM, 54 X 4.78 66.97 , 90pc duty cycle) Y 4.83 66.64	, 90pc duty cycle) Y 4.91 66.83 16.25 Z 4.68 66.92 16.22 802.11a/h WiFi 5 GHz (OFDM, 48 X 4.96 67.97 17.11 , 90pc duty cycle) Y 5.00 67.61 16.86 Z 4.76 67.57 16.77 802.11a/h WiFi 5 GHz (OFDM, 54 X 4.78 66.97 16.29 , 90pc duty cycle) Y 4.83 66.64 16.06	Y 4.91 66.83 16.25 Z 4.68 66.92 16.22 802.11a/h WiFi 5 GHz (OFDM, 48 X 4.96 67.97 17.11 0.46 90pc duty cycle	Y 4.91 66.83 16.25 130.0

10591- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS0, 90pc duty cycle)	X	5.03	67.20	16.86	0.46	130.0	± 9.6 %
F	ooo, oopo duly oyole)	+ Y	5.07	66.88	16.64	+	130.0	
		Z	4.88	66.97	16.60	 	130.0	
10592- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS1, 90pc duty cycle)	X	5.21	67.55	16.98	0.46	130.0	± 9.6 %
		Y	5.26	67.23	16.76		130.0	1
		Z	5.03	67.30	16.73		130.0	
10593- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS2, 90pc duty cycle)	Х	5.14	67.52	16.89	0.46	130.0	± 9.6 %
		Y	5.19	67.20	16.68		130.0	
40504		Z	4.96	67.23	16.62		130.0	
10594- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS3, 90pc duly cycle)	Х	5.19	67.66	17.03	0.46	130.0	± 9.6 %
		Y	5.24	67.33	16.81	<u> </u>	130.0	
10595-	ICCC 900 44+ (UT Mined ORMU	Z	5.01	67.38	16.76		130.0	
AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS4, 90pc duly cycle)	X	5.17	67.65	16.95	0.46	130.0	± 9.6 %
<u> </u>	-	Y	5.23	67.33	16.73		130.0	
10596-	IEEE 000 44- (UTAK	Z	4.98	67.35	16.67		130.0	
AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS5, 90pc duty cycle)	X	5.11	67.64	16.94	0.46	130.0	± 9.6 %
<u> </u>		Y 7	5.16	67.30	16.71	<u> </u>	130.0	
10597-	IEEE 802.11n (HT Mixed, 20MHz,	Z	4.92	67.35	16.67		130.0	
AAA	MCS6, 90pc duty cycle)	X	5.06	67.59	16.86	0.46	130.0	± 9.6 %
		Y	5.11	67.26	16.64		130.0	
10598-	IEEE 900 44n (HT Missel COMILIS	Z	4.87	67.26	16.56		130.0	
AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS7, 90pc duty cycle)	X	5.05	67.87	17.14	0.46	130.0	± 9.6 %
<u> </u>	-	_ Y	5.09	67.53	16.91		130.0	
10599-	IEEE 000 44 (UE) II (O) III	_ Z	4.85	67.47	16.80		130.0	
AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS0, 90pc duty cycle)	X	5.68	67.76	17.01	0.46	130.0	± 9.6 %
		Y	5.74	67.54	16.84		130.0	
40000	IFFE 000 44 WITTH	Z	5.54	67.51	16.80		130.0	
10600- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS1, 90pc duty cycle)	Х	5.91	68.42	17.31	0.46	130.0	± 9.6 %
		Y	6.00	68.29	17.19		130.0	
10001		Z	5.69	67.96	17.01		130.0	
10601- <u>AA</u> A	IEEE 802.11n (HT Mixed, 40MHz, MCS2, 90pc duty cycle)	X	5.75	68.03	17.13	0.46	130.0	± 9.6 %
		Y	5.81	67.81	16.96		130.0	
10602-	IEEE 000 44- (UTAE) 1 400 W4	Z	5.57	67.70	16.89		130.0	
AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS3, 90pc duty cycle)	X	5.85	68.05	17.05	0.46	130.0	± 9.6 %
	 	_ <u>Y</u>	5.93	67.91	16.93		130.0	
10603-	IEEE 802.11n (HT Mixed, 40MHz,	Z	5.67	67.73	16.83		130.0	
AAA	MCS4, 90pc duty cycle)	X	5.97	68.46	17.38	0.46	130.0	± 9.6 %
_	 	Y	6.05	68.29	17.25		130.0	
10604-	IEEE 802.11n (HT Mixed, 40MHz.	Z	5.74	68.01	17.09		130.0	
AAA	MCS5, 90pc duty cycle)	X	5.70	67.75	17.03	0.46	130.0	± 9.6 %
		Y	5.76	67.53	16.86		130.0	
10605- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS6, 90pc duty cycle)	Z	5.55 5.80	67.48 68.03	16.81 17.16	0.46	130.0 130.0	± 9.6 %
		 	5.86	67.81	17.00		120 0	
		_	5.67	67.84	17.00		130.0	
10606- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS7, 90pc duty cycle)	X	5.58	67.53	16.79	0.46	130.0 130.0	± 9.6 %
		Y	5.62	67.26	16.60		400 0	
		+ ' z +	5.41	67.19			130.0	
				01.18	16.54		130.0	

10607- AAA	IEEE 802.11ac WiFi (20MHz, MCS0, 90pc duty cycle)	X	4.86	66.52	16.48	0.46	130.0	± 9.6 %
		Y	4.89	66.14	16.23		130.0	
		Ż	4.71	66.27	16.21		130.0	
10608- AAA	IEEE 802.11ac WiFi (20MHz, MCS1, 90pc duty cycle)	X	5.09	66.96	16.64	0.46	130.0	± 9.6 %
		Ϋ́	5.12	66.58	16.39		130.0	
		Z	4.90	66.67	16.37		130.0	
10609- AAA	IEEE 802.11ac WiFi (20MHz, MCS2, 90pc duty cycle)	X	4.98	66.85	16.52	0.46	130.0	± 9.6 %
		Y	5.01	66.47	16.26		130.0	
40040	IEEE 000 44 - WEE 1001 III - MOOO	Z	4.79	66.53	16.22		130.0	
10610- AAA	IEEE 802.11ac WiFi (20MHz, MCS3, 90pc duty cycle)	X	5.03	67.01	16.67	0.46	130.0	± 9.6 %
	 	Y	5.06	66.63	16.42		130.0	
10611-	IEEE 900 44aa WiFi /20MUm MCC4	Z	4.84	66.68	16.37	0.40	130.0	1000
AAA	IEEE 802.11ac WiFi (20MHz, MCS4, 90pc duty cycle)	X	4.96	66.86	16.54	0.46	130.0	± 9.6 %
_	 	Y	4.99	66.50	16.29		130.0	
10640		Z	4.76	66.50	16.23	0.40	130.0	1000
10612- AAA	IEEE 802.11ac WiFi (20MHz, MCS5, 90pc duty cycle)	X	4.97	67.00	16.58	0.46	130.0	± 9.6 %
		Y	5.01	66.61	16.31		130.0	
40040	JEEE 000 44 MEE' (000 H L. 14000	Z	4.77	66.66	16.28	0.10	130.0	
10613- AAA	IEEE 802.11ac WiFi (20MHz, MCS6, 90pc duty cycle)	X	4.99	66.94	16.49	0.46	130.0	± 9.6 %
	 	Y	5.03	66.55	16.23		130.0	<u> </u>
40044	IEEE 000 44 14/55/ (0014) - 14007	Z	4.77	66.56	16.17	0.40	130.0	1000
10614- AAA	IEEE 802.11ac WiFi (20MHz, MCS7, 90pc duty cycle)	Х	4.92	67.15	16.73	0.46	130.0	± 9.6 %
		Y	4.95	66.76	16.47		130.0	
		Z	4.71	66.71	16.38		130.0	
10615- AAA	IEEE 802.11ac WiFi (20MHz, MCS8, 90pc duty cycle)	X	4.95	66.65	16.31	0.46	130.0	± 9.6 %
		Y	4.99	66.28	16.06		130.0	
		Z	4.76	66.36	16.03		130.0	
10616- AAA	IEEE 802.11ac WiFi (40MHz, MCS0, 90pc duty cycle)	X	5.51	67.07	16.65	0.46	130.0	± 9.6 %
		Y	5.55	66.78	16.45		130.0	
		Z	5.35	66.74	16.40		130.0	
10617- AAA	IEEE 802.11ac WiFi (40MHz, MCS1, 90pc duty cycle)	X	5.58	67.18	16.67	0.46	130.0	± 9.6 %
		Υ	5.62	66.89	16.46		130.0	
		Z	5.43	66.92	16.46		130.0	
10618- AAA	IEEE 802.11ac WiFi (40MHz, MCS2, 90pc duty cycle)	X	5.47	67.27	16.74	0.46	130.0	± 9.6 %
		Y	5.50	66.95	16.52		130.0	ļ
		Z	5.31	66.92	16.47		130.0	
10619- AAA	IEEE 802.11ac WiFi (40MHz, MCS3, 90pc duty cycle)	X	5.49	67.07	16.57	0.46	130.0	± 9.6 %
		Y	5.52	66.76	16.36		130.0	
		Z	5.33	66.76	16.33		130.0	
10620- AAA	IEEE 802.11ac WiFi (40MHz, MCS4, 90pc duty cycle)	X	5.62	67.19	16.68	0.46	130.0	± 9.6 %
		Y	5.67	66.93	16.49		130.0	ļ
		Z	5.42	66.79	16.40		130.0	
10621- AAA	IEEE 802.11ac WiFi (40MHz, MCS5, 90pc duty cycle)	×	5.59	67.25	16.82	0.46	130.0	± 9.6 %
		Y	5.63	66.98	16.62		130.0	
		Z_	5.41	66.88	16.56		130.0	
10622- AAA	IEEE 802.11ac WiFi (40MHz, MCS6, 90pc duly cycle)	X	5.58	67.35	16.86	0.46	130.0	± 9.6 %
	1	Y	5.62	67.06	16.66		130.0	
		Z	5.43	67.06	16.64		130.0	

10623- AAA	IEEE 802.11ac WiFi (40MHz, MCS7, 90pc duly cycle)	X	5.48	66.99	16.57	0.46	130.0	± 9.6 %
		Y	5.54	66.75	16.40	1	130.0	
		Z	5.31	66.61	16.29		130.0	
10624- AAA	IEEE 802.11ac WiFi (40MHz, MCS8, 90pc duly cycle)	X	5.65	67.09	16.68	0.46	130.0	± 9.6 %
-		Υ	5.69	66.81	16.49		130.0	
		Z	5.50	66.79	16.45		130.0	
10625- AAA	IEEE 802.11ac WiFi (40MHz, MCS9, 90pc duty cycle)	Х	6.03	68.01	17.18	0.46	130.0	± 9.6 %
		Y	6.05	67.65	16.95		130.0	
		Z	5.88	67.81	17.01		130.0	
10626- AAA	IEEE 802.11ac WiFi (80MHz, MCS0, 90pc duty cycle)	X	5.76	67.09	16.57	0.46	130.0	± 9.6 %
		Y	5.79	66.81	16.38		130.0	
		Z	5.64	66.79	16.35		130.0	
10627- AAA	IEEE 802.11ac WiFi (80MHz, MCS1, 90pc duty cycle)	Х	6.01	67.60	16.77	0.46	130.0	± 9.6 %
		Υ	6.04	67.32	16.58		130.0	
		Z	5.89	67.37	16.60		130.0	
10628- AAA	IEEE 802.11ac WiFi (80MHz, MCS2, 90pc duty cycle)	Х	5.83	67.28	16.56	0.46	130.0	± 9.6 %
		Y	5.87	67.01	16.37		130.0	
		Z	5.69	66.92	16.32		130.0	
10629- AAA	IEEE 802.11ac WiFi (80MHz, MCS3, 90pc duty cycle)	X	5.93	67.36	16.58	0.46	130.0	± 9.6 %
		Y	5.99	67.16	16.43		130.0	
		Z	5.77	67.00	16.35		130.0	
10630- AAA	IEEE 802.11ac WiFi (80MHz, MCS4, 90pc duty cycle)	X	6.47	69.11	17.45	0.46	130.0	± 9.6 %
		Y	6.56	68.99	17.34		130.0	
		Z	6.24	68.58	17.14		130.0	
10631- AAA	IEEE 802.11ac WiFi (80MHz, MCS5, 90pc duty cycle)	X	6.36	68.89	17.53	0.46	130.0	± 9.6 %
·		Y	6.44	68.71	17.39		130.0	
		Z	6.09	68.24	17.15		130.0	
10632- AAA	IEEE 802.11ac WiFi (80MHz, MCS6, 90pc duty cycle)	Х	6.00	67.73	16.97	0.46	130.0	± 9.6 %
		Y	6.05	67.48	16.79		130.0	
		Z	5.85	67.39	16.74		130.0	
10633- AAA	IEEE 802.11ac WiFi (80MHz, MCS7, 90pc duly cycle)	Х	5.95	67.59	16.73	0.46	130.0	± 9.6 %
		Y	6.01	67.38	16.58		130.0	
		Z	5.74	67.05	16.41		130.0	
10634- AAA	IEEE 802.11ac WiFi (80MHz, MCS8, 90pc duty cycle)	X	5.92	67.56	16.78	0.46	130.0	± 9.6 %
		Y	5.98	67.34	16.62		130.0	
		Z	5.72	67.07	16.47		130.0	
10635- AAA	IEEE 802.11ac WiFi (80MHz, MCS9, 90pc duty cycle)	X	5.80	66.87	16.18	0.46	130.0	± 9.6 %
		Y	5.85	66.64	16.01		130.0	
		Z	5.62	66.48	15.93		130.0	
10636- AAA	IEEE 1602.11ac WiFi (160MHz, MCS0, 90pc duly cycle)	X	6.16	67.47	16.65	0.46	130.0	± 9.6 %
		Υ	6.19	67.22	16.49		130.0	
·		Z	6.06	67.16	16.44		130.0	· ·
			6.34	67.89	16.84	0.46	130.0	± 9.6 %
10637- AAA	IEEE 1602.11ac WiFi (160MHz, MCS1, 90pc duty cycle)	X						
		X	6.39	67.69	16.69		130.0	
AAA	90pc duty cycle)				16.69			
		Υ	6.39	67.69		0.46	130.0 130.0 130.0	± 9.6 %
10638-	90pc duty cycle) IEEE 1602.11ac WiFi (160MHz, MCS2,	Y	6.39 6.22	67.69 67.55	16.69 16.62	0.46	130.0	± 9.6 %

10639- AAA	IEEE 1602.11ac WiFi (160MHz, MCS3,	X	6.34	67.88	16.86	0.46	130.0	± 9.6 %
AAA	90pc duty cycle)	Υ	6.38	67.64	16.70		130.0	_
		Z	6.19	67.47	16.60		130.0	· · ·
10640-	IEEE 1602.11ac WiFi (160MHz, MCS4,	l x	6.37	67.96	16.84	0.46	130.0	± 9.6 %
AAA	90pc duty cycle)					0.40		± 9.0 %
		Υ	6.42	67.75	16.69		130.0	
		Z	6.20	67.51	16.57		130.0	_
10641- AAA	IEEE 1602.11ac WiFi (160MHz, MCS5, 90pc duty cycle)	X	6.36	67.66	16.71	0.46	130.0	± 9.6 %
		Υ	6.40	67.44	16.56	-	130.0	
		Z	6.24	67.40	16.53		130.0	
10642- AAA	IEEE 1602.11ac WiFi (160MHz, MCS6, 90pc duty cycle)	Х	6.44	68.03	17.05	0.46	130.0	± 9.6 %
		Y	6.49	67.81	16.91		130.0	
		Z	6.28	67.62	16.80		130.0	
10643- AAA	IEEE 1602.11ac WiFi (160MHz, MCS7, 90pc duty cycle)	Х	6.26	67.70	16.80	0.46	130.0	± 9.6 %
	1	Y	6.31	67.48	16.64		130.0	
		Z	6.12	67.34	16.57		130.0	
10644- AAA	IEEE 1602.11ac WiFi (160MHz, MCS8, 90pc duty cycle)	Х	6.50	68.41	17.18	0.46	130.0	± 9.6 %
		Y	6.57	68.25	17.05		130.0	
		Z	6.29	67.86	16.85		130.0	
10645- AAA	IEEE 1602.11ac WiFi (160MHz, MCS9, 90pc duty cycle)	Х	6.78	68.77	17.29	0.46	130.0	± 9.6 %
		Υ	6.81	68.48	17.11		130.0	
		Z	6.68	68.60	17.18		130.0	
10646- AAB	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,7)	X	37.14	116.21	38.03	9.30	60.0	± 9.6 %
		Y	19.95	100.33	33.06		60.0	
		Z	62.05	131.91	43.22		60.0	
10647- AAA	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,7)	X	38.52	117.84	38.64	9,30	60.0	± 9.6 %
		Y	20.25	101.35	33.50		60.0	
		Z	63.43	133.45	43.81		60.0	
10648- AAA	CDMA2000 (1x Advanced)	X	1.03	68.68	14.68	0.00	150.0	± 9.6 %
· · · · · · · · · · · · · · · · · · ·		Y	0.85	64.54	12.30		150.0	
		Z	0.71	63.65	10.90		150.0	

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

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





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

Accreditation No.: SCS 0108

Certificate No: EX3-7406_Apr16

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Multilateral Agreement for the recognition of calibration certificates

Client

PC Test

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CALIBRATION CERTIFICATE

Object

EX3DV4 - SN:7406

Calibration procedure(s)

QA CAL-01.v9, QA CAL-23.v5, QA CAL-25.v6 Calibration procedure for dosimetric E-field probes

BN 04/26/2016

Calibration date:

April 19, 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)

Certificate No: EX3-7406_Apr16

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 (No. 217-02285/02284)	In house check: Jun-16
Power sensor E4412A	SN: MY41498087	06-Apr-16 (No. 217-02285)	In house check: Jun-16
Power sensor E4412A	SN: 000110210	06-Apr-16 (No. 217-02284)	In house check: Jun-16
RF generator HP 8648C	SN: US3642U01700	04-Aug-99 (in house check Apr-13)	In house check: Jun-16
Network Analyzer HP 8753E	SN: US37390585	18-Oct-01 (in house check Oct-15)	In house check: Oct-16

Calibrated by:

Name
Function
Signature
Laboratory Technician

Approved by:

Katja Pokovic
Technical Manager

Issued: April 20, 2016

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

Calibration Laboratory of

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





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Swiss Calibration Service

Accreditation No.: SCS 0108

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Glossary:

TSL tissue simulating liquid

NORMx,y,z sensitivity in free space ConvF sensitivity in TSL / NORMx,y,z

DCP diode compression point
CF crest factor (1/duty, cycle) of the

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

Polarization φ 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:

 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"

Methods Applied and Interpretation of Parameters:

Certificate No: EX3-7406_Apr16

- NORMx,y,z: Assessed for E-field polarization 9 = 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
- 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).

April 19, 2016 EX3DV4 - SN:7406

Probe EX3DV4

SN:7406

Manufactured: November 24, 2015 Calibrated: April 19, 2016

Calibrated:

April 19, 2016

Calibrated for DASY/EASY Systems

(Note: non-compatible with DASY2 system!)

DASY/EASY - Parameters of Probe: EX3DV4 - SN:7406

Basic Calibration Parameters

	Sensor X	Sensor Y	Sensor Z	Unc (k=2)
Norm (μV/(V/m) ²) ^A	0.48	0.44	0.47	± 10.1 %
DCP (mV) ^B	100.7	97.9	98.6	

Modulation Calibration Parameters

UID	Communication System Name		A dB	B dB√μV	С	D dB	VR mV	Unc ^E (k=2)
0	CW	X	0.0	0.0	1.0	0.00	120.4	±3.3 %
		Y	0.0	0.0	1.0		148.3	
_		Z	0.0	0.0	1.0		146.7	
10010- CAA	SAR Validation (Square, 100ms, 10ms)	Х	0.81	54.6	7.4	10.00	50.3	±2.2 %
		Υ	0.68	55.1	7.9	-	47.9	
		Z	1.34	61.0	11.0		46.8	
10012- CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps)	Х	2.83	68.0	18.3	1.87	127.8	±0.5 %
		Υ	2.82	68.4	18.4		117.8	
		Z	3.00	69.2	19.0		115.9	
10100- CAB	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	Х	6.54	67.4	19.5	5.67	142.1	±1.2 %
		Y	6.19	66.7	19.3		127.6	
- 1015-		Z	6.37	66.7	19.2		125.7	
10103- CAB	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	X	7.58	67.9	21.8	9.29	114.4	±1.7 %
		Y	7.34	68.3	22.5		144.3	
		Z	7.53	67.7	21.8		139.5	
10108- CAC	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	X	6.34	66.9	19.4	5.80	137.5	±1.2 %
		Y	5.90	65.9	19.0		123.8	
40454		Z	6.24	66.4	19.2		123.7	
10151- CAB	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	X	7.17	67.2	21.5	9.28	109.5	±1,7 %
		Y	6.83	67.6	22.3		137.0	
40454		Z	7.23	67.4	21.7		135.1	_
10154- CAC	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	Х	5.99	66.4	19.2	5.75	132.4	±0.9 %
		Y	5.61	65.8	19.1		119.4	
		Z	5.91	65.9	19.0		120.1	
10160- CAB	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	Х	6.47	67.0	19.5	5.82	137.0	±1.2 %
		Y	5.96	66.0	19.1		123.9	
		Z	6.33	66.3	19.1		124.2	
10169- CAB	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	Х	4.71	65.5	18.9	5.73	113.2	±1.2 %
		Υ	4.60	66.2	19.6		144.2	
		Z	4.93	66.5	19.5		143.2	
10172- CAB	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	X	5.68	68.2	22.4	9.21	117.6	±1.7 %
		Y	5.56	70.1	24.1		146.1	
		Z	<u>5</u> .87	69.4	23.2		143.7	
10175- CAC	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	X	4.75	65.7	19.1	5.72	112.3	±0.9 %
		Υ	4.58	66.1	19.5		143.2	
		Z	4.95	66.7	19.6		142.0	

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10181- CAB	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	Х	4.71	65.5	18.9	5.72	110.2	±0.9 %
		Υ	4.53	65.8	19.4		141.4	
		Z	4.90	66.5	19.5		138.1	
10237- CAB	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	Х	5.69	68.3	22.5	9.21	117.3	±1.7 %
		Υ	5.47	69.5	23.8		145.1	
		Z	5.85	69.3	23.1		142.0	
10252- CAB	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	X	7.04	68.1	22.2	9.24	141.2	±1.9 %
	-	Υ	6.35	67.2	22.2		125.4	
-		Z	6.82	67.1	21.7		127.5	
10267- CAB	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	Х	7.45	68.3	22.2	9.30	148.0	±1.9 %
		Υ	6.84	67.5	22.3		132.0	
		Z	7.24	67.4	21.8		134.6	
10297- AAA	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	Х	6.35	66.9	19.4	5.81	135.3	±1.2 %
		Υ	5.92	65.9	19.0		122.9	
		Z	6.26	66.4	19.2		122.1	
10311- AAA	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	Х	6.92	67.4	19.7	6.06	139.3	±1.2 %
		Υ	6.52	66.6	19.5		127.9	
		Z	6.82	66.9	19.5		126.8	

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%.

A The uncertainties of Norm X,Y,Z do not affect the E²-field uncertainty inside TSL (see Pages 6 and 7).

B Numerical linearization parameter: uncertainty not required.

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

DASY/EASY - Parameters of Probe: EX3DV4 - SN:7406

Calibration Parameter Determined in Head Tissue Simulating Media

f (MHz) ^C	Relative Permittivity ^F	Conductivity (S/m) F	ConvF X	ConvF Y	ConvF Z	Alpha ^G	Depth ^G (mm)	Unc (k=2)
750	41.9	0.89	10.52	10.52	10.52	0.52	0.89	± 12.0 %
835	41.5	0.90	9.83	9.83	9.83	0.54	0.80	± 12.0 %
1750	40.1	1.37	8.85	8.85	8.85	0.49	0.85	± 12.0 %
1900	40.0	1.40	8.22	8.22	8.22	0.40	0.88	± 12.0 %
2300	39.5	1.67	7.67	7.67	7.67	0.36	0.89	± 12.0 %
2450	39.2	1.80	7.29	7.29	7.29	0.40	0.80	± 12.0 %
2600	39.0	1.96	7.08	7.08	7.08	0.37	0.95	± 12.0 %

Frequency validity above 300 MHz of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to ± 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 ± 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 ± 110 MHz.

At frequencies below 3 CHz, the validity of the provided to 100 MHz.

F At frequencies below 3 GHz, the validity of tissue parameters (ε and σ) can be relaxed to ± 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 ± 5%. The uncertainty is the RSS of the ConvE uncertainty for 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.

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DASY/EASY - Parameters of Probe: EX3DV4 - SN:7406

Calibration Parameter Determined in Body Tissue Simulating Media

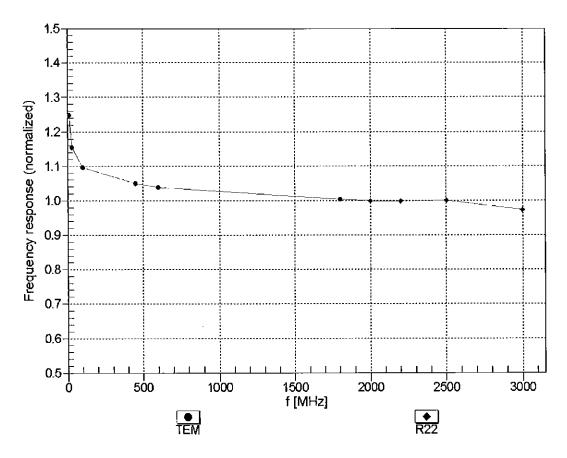
f (MHz) ^C	Relative Permittivity ^F	Conductivity (S/m) F	ConvF X	ConvF Y	ConvF Z	Alpha ^G	Depth ^G (mm)	Unc (k=2)
750	55.5	0.96	9.54	9.54	9.54	0.46	0.80	± 12.0 %
835	55.2	0.97	9.35	9.35	9.35	0.45	0.84	± 12.0 %
1750	53.4	1.49	7.78	7.78	7.78	0.37	0.85	± 12.0_%
1900	53.3	1.52	7.49	7.49	7.49	0.33	0.91	± 12.0 %
2300	52.9	1.81	7.37	7.37	7.37	0.42	0.80	± 12.0 %_
2450	52.7	1.95	7.24	7.24	7.24	0.37	0.88	± 12.0 %
2600	52.5	2.16	6.94	6.94	6.94	0.27	0.99	± 12.0 %

Frequency validity above 300 MHz of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to ± 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 ± 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 ± 110 MHz.

F At frequencies below 3 GHz, the validity of tissue parameters (ε and σ) can be relaxed to ± 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 ± 5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.

^G 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.

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



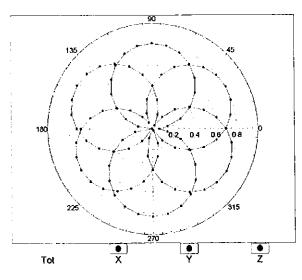
Uncertainty of Frequency Response of E-field: ± 6.3% (k=2)

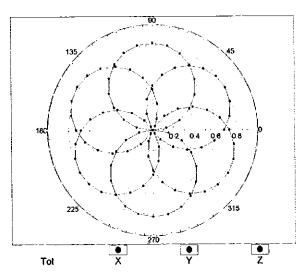
April 19, 2016

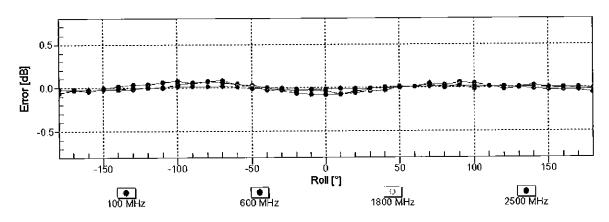
Receiving Pattern (ϕ), $\vartheta = 0^{\circ}$

f=600 MHz,TEM

f=1800 MHz,R22



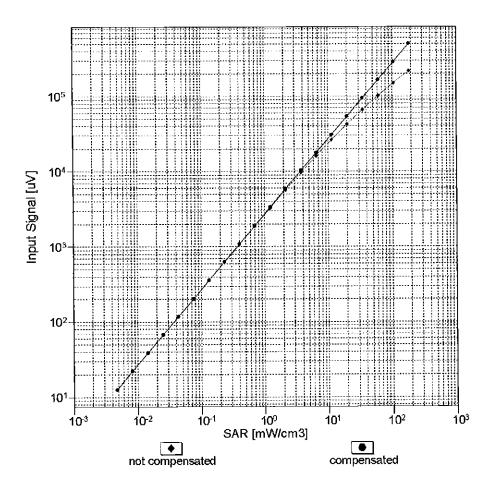


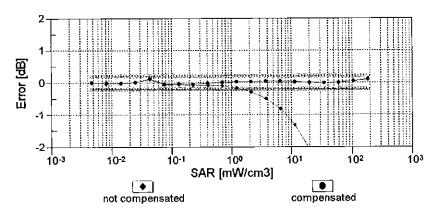


Uncertainty of Axial Isotropy Assessment: ± 0.5% (k=2)

Dynamic Range f(SAR_{head})

(TEM cell , f_{eval}= 1900 MHz)

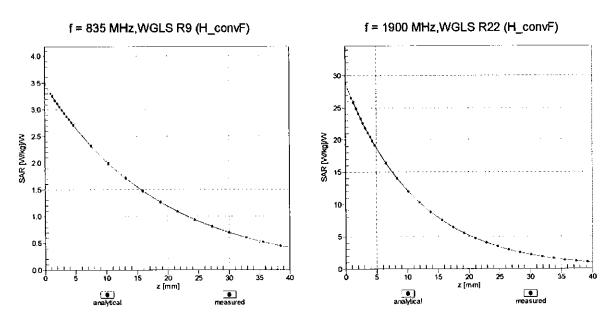




Uncertainty of Linearity Assessment: ± 0.6% (k=2)

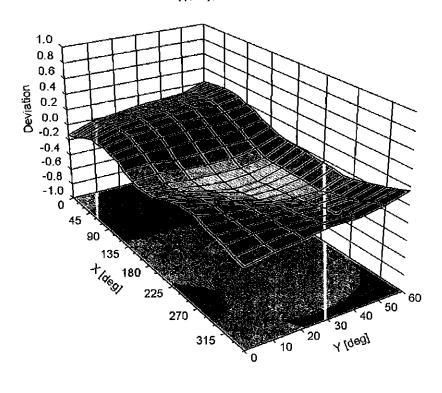
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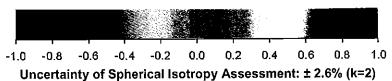
Conversion Factor Assessment



Deviation from Isotropy in Liquid

Error (ϕ, ϑ) , f = 900 MHz





April 19, 2016

DASY/EASY - Parameters of Probe: EX3DV4 - SN:7406

Other Probe Parameters

Sensor Arrangement	Triangular
Connector Angle (°)	0.4
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 D: SAR TISSUE SPECIFICATIONS

Measurement Procedure for Tissue verification:

- 1) The network analyzer and probe system was configured and calibrated.
- 2) The probe was immersed in the tissue. The tissue was placed in a nonmetallic container. Trapped air bubbles beneath the flange were minimized by placing the probe at a slight angle.
- 3) The complex admittance with respect to the probe aperture was measured
- 4) The complex relative permittivity ϵ can be calculated from the below equation (Pournaropoulos and Misra):

$$Y = \frac{j2\omega\varepsilon_{r}\varepsilon_{0}}{\left[\ln(b/a)\right]^{2}} \int_{a}^{b} \int_{a}^{b} \int_{0}^{\pi} \cos\phi' \frac{\exp\left[-j\omega r(\mu_{0}\varepsilon_{r}'\varepsilon_{0})^{1/2}\right]}{r} d\phi' d\rho' d\rho$$

where *Y* is the admittance of the probe in contact with the sample, the primed and unprimed coordinates refer to source and observation points, respectively, $r^2 = \rho^2 + \rho'^2 - 2\rho\rho'\cos\phi'$, ω is the angular frequency, and $j = \sqrt{-1}$.

Table D-I Composition of the Tissue Equivalent Matter

Frequency (MHz)	750	750	835	835	1750	1750	1900	1900	2450	2450		
Tissue	Head	Body	Head	Body	Head	Body	Head	Body	Head	Body		
Ingredients (% by weight)												
Bactericide			0.1	0.1								
DGBE					47	31	44.92	29.44	S 4	26.7		
HEC	See page	C 2	1	1								
NaCl	2-3	See page 3	See page 5	see page 3	1.45	0.94	0.4	0.2	0.18	0.39	See page 4	0.1
Sucrose			57	44.9								
Water			40.45	53.06	52.6	68.8	54.9	70.17		73.2		

FCC ID: ZNFL64VL	POTEST'	SAR EVALUATION REPORT		Reviewed by: Quality Manager
Test Dates:	DUT Type:			APPENDIX D:
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2 Composition / Information on ingredients

The Item is composed of the following ingredients:

H₂O Water, 35 – 58%

Sucrose Sugar, white, refined, 40-60% NaCl Sodium Chloride, 0-6%

Hydroxyethyl-cellulose Medium Viscosity (CAS# 9004-62-0), <0.3%

Preventol-D7 Preservative: aqueous preparation, (CAS# 55965-84-9), containing 5-chloro-2-methyl-3(2H)-isothiazolone and 2-methyyl-3(2H)-isothiazolone,

0.1 - 0.7%

Relevant for safety; Refer to the respective Safety Data Sheet*.

Figure D-1 Composition of 750 MHz Head and Body Tissue Equivalent Matter

Note: 750MHz liquid recipes are proprietary SPEAG. Since the composition is approximate to the actual liquids utilized, the manufacturer tissue-equivalent liquid data sheets are provided below.

Measurement Certificate / Material Test Item Name Body Tissue Simulating Liquid (MSL750V2) Product No. SL AAM 075 AA (Charge: 150223-3) Manufacturer SPEAG Measurement Method TSL dielectric parameters measured using calibrated OCP probe. Setup Validation Validation results were within ± 2.5% towards the target values of Methanol. **Target Parameters** Target parameters as defined in the IEEE 1528 and IEC 62209 compliance standards. **Test Condition** Environment temperatur (22 ± 3)°C and humidity < 70%. Ambient TSL Temperature 22°C Test Date 25-Feb-15 Operator IEN Additional Information TSL Density 1.212 g/cm³ TSL Heat-capacity 3.006 kJ/(kg*K) Measured Target. Diff.to Target [%] 10.0 f [MHz] HP-e' HP-e" sigma eps sigma Δ-eps Δ-sigma 7.5 600 57.3 24.76 0.83 56.1 0.95 2.2 -13.2 5.0 Permittivity 625 57.1 24.43 0.85 56.0 0.95 1.8 -11.0 2.5 650 56.8 24.09 0.87 55.9 0.96 1.5 -8.8 675 56.5 23.80 0.89 55.8 0.96 1.2 -6.7 -2.5 Dev. 700 56.2 23.51 0.92 55.7 0.96 0.9 -4.6 -5.0725 56.0 23.28 0.94 55.6 0.96 0.6 -24 -10.0 750 55.7 23.06 0.96 55.5 0.96 0.4 -0.1 600 650 700 750 800 850 900 950 1000 775 55.5 22.87 0.99 55.4 0.97 2.1 Frequency MHz 800 55.2 22.68 1.01 55.3 0.97 -0.2 4.4 825 55.0 22.52 1.03 55.2 0.98 -0.5 5.7 838 54.9 22.44 1.05 55.2 0,98 -0.6 6.3 10.0 850 54.8 22.36 1.06 55.2 0.99 -0.7 7.0 875 54.5 22.24 1.08 55.1 1.02 -1.0 6.2 7.5 Conductivity 900 54.3 22.12 1.71 55.0 1.05 -13 5.5 2.5 925 54.1 22.01 1.13 55.0 1.06 -1.6 6.5 0.0 950 53.9 21.89 1.16 54.9 1.08 -2.0 7.6 -2.5 975 53.6 21.81 1.18 54.9 1.09 -23 8,6 Dev. 53.4 21.73 1000 1.21 54.8 10.1 -7.5 -10.0 600 650 700 750 800 850 900 950 1000

Figure D-2 750MHz Body Tissue Equivalent Matter

FCC ID: ZNFL64VL	PCTEST"	SAR EVALUATION REPORT	LG LG	Reviewed by: Quality Manager
Test Dates:	DUT Type:			APPENDIX D:
11/21/16 - 11/28/16	Portable Handset			Page 2 of 4

Measurement Certificate / Material Test

Item Name Head Tissue Simulating Liquid (HSL750V2)

Product No. SL AAH 075 AA (Charge: 150213-1)

Manufacturer SPEAG

Measurement Method

TSL dielectric parameters measured using calibrated OCP probe.

Setup Validation

Validation results were within ± 2.5% towards the target values of Methanol.

Target Parameters

Target parameters as defined in the IEEE 1528 and IEC 62209 compliance standards.

Test Condition

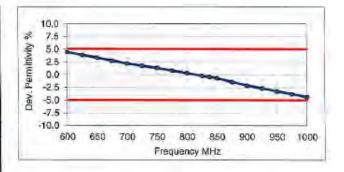
Ambient Environment temperatur (22 ± 3)°C and humidity < 70%.

TSL Temperature 22°C
Test Date 18-Feb-15
Operator IEN

Additional Information

TSL Density 1.284 g/cm³ TSL Heat-capacity 2.701 kJ/(kg*K)

	Measu	red		Targe	t	Diff.to T	arget [%]
f [MHz]	HP-e	HP-e"	sigma	eps	sigma	∆-eps	Δ-sigma
600	44.6	22.42	0.75	42,7	0.88	4.5	-15.1
625	44.3	22.20	0.77	42.6	0.88	3.9	-127
850	43.9	21,98	0.79	42.5	0.89	3.3	-10.3
675	43.5	21.75	0.82	42,3	0.89	2.8	-8.0
700	43.1	21.53	0.84	42.2	0.89	2.2	-5.7
725	42.8	21.38	0.86	42.1	0.89	1.8	-3.3
750	42.5	21,22	98.0	41.9	0.89	1.3	-0.9
775	42.2	21.06	0.91	41.8	0.90	0.8	1:4
800	41.8	20.90	0.93	41.7	0.90	0.3	3.7
825	41.5	20.77	0.95	41.6	0.91	-0.2	5.1
838	41.4	20.71	0.96	41.5	0.91	-0.4	5.8
850	41.2	20.65	0.98	41.5	0.92	-0.7	6.6
875	40.9	20.53	1,00	41.5	0.94	-1.4	6.0
900	40.6	20.42	1.02	41.5	0.97	-2.1	5.4
925	40.4	20.32	1.05	41.5	0.98	-2.5	6.5
950	40.1	20.22	1.07	41.4	0.99	-3.2	7.5
975	39.8	20.14	1.09	41.4	1.00	-3.8	8.7
1000	39.5	20.05	1.12	41.3	7,01	-4,3	9,9



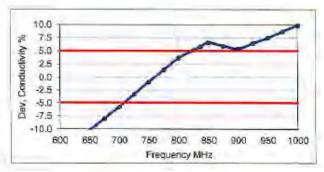


Figure D-3
750MHz Head Tissue Equivalent Matter

FCC ID: ZNFL64VL	PCTEST	SAR EVALUATION REPORT	(LG	Reviewed by: Quality Manager
Test Dates:	DUT Type:			APPENDIX D:
11/21/16 - 11/28/16	Portable Handset			Page 3 of 4

2 Composition / Information on ingredients

The Item is composed of the following ingredients:

H2O Water, 52 – 75%

C8H18O3 Diethylene glycol monobutyl ether (DGBE), 25 – 48%

(CAS-No. 112-34-5, EC-No. 203-961-6, EC-index-No. 603-096-00-8)

Relevant for safety; Refer to the respective Safety Data Sheet*.

NaCl Sodium Chloride, <1.0%

Figure D-4

Composition of 2.4 GHz Head Tissue Equivalent Matter

Note: 2.4 GHz head liquid recipes are proprietary SPEAG. Since the composition is approximate to the actual liquids utilized, the manufacturer tissue-equivalent liquid data sheets are provided below.

Measurement Certificate / Material Test Head Tissue Simulating Liquid (HSL2450V2) Product No. SL AAH 245 BA (Charge: 150206-3) Manufacturer SPEAG TSL dielectric parameters measured using calibrated OCP probe Validation results were within $\pm 2.5\%$ towards the target values of Methanol. **Target Parameters** Target parameters as defined in the IEEE 1528 and IEC 62209 compliance standards. **Test Condition** Ambient Envir TSL Temperature 23°C Environment temperatur (22 ± 3)°C and humidity < 70%. 11-Feb-15 Test Date Operator IEN Additional Information TSL Density 0.988 a/cm TSL Heat-capacity 3.680 kJ/(kg*K) Target Diff.to Target (%) f [MHz] HP-e' HP-e' sigma eps sigma Δ-eps Δ-sigma 7.5 5.0 11.89 1.40 +10.2 1925 40.3 11.98 1.28 40.0 1.40 -8.3 2.5 1950 40.2 12.07 1.31 40.0 1.40 0,4 -6.4 1975 40.1 12.15 1.34 40.0 0.2 4.6 -2.5 2000 40.0 12.23 1.36 40.0 1.40 -0.1 -2.8 Dev. -5.0 2025 39.9 12.32 1.39 40.0 1.42 -0.2 -24 39,9 -10.0 39.8 1.44 -2.0 -0.3 1900 2000 2100 2200 2300 2400 2500 2600 2700 2075 39.7 12.50 1.44 39.9 1.47 -0.4 -1.6 Frequency MHz 2100 39.6 12.59 1.47 39.8 1.49 -0.5 -1.2 39.5 12.66 1.50 39,8 1.51 -0.7 -0.9 2150 39.4 12.73 1.52 39.7 1.53 -0.7 2175 39.3 12.83 1.55 39.7 1.56 -0.9 -0.2 7.5 5.0 2200 39.2 12.92 1.58 39,6 1.58 Conductivity % -1.10.2 2225 39.1 13.00 1.61 39,6 1.60 2.5 2250 39.0 13.08 1.64 39.6 1.62 -13 0.9 2275 39.5 1,4 -2.5 2300 38.8 13.26 1.70 39.5 1.8 -5.0 -7.5 Dev. 2325 38.7 13.34 1.73 39.4 1,69 -1.8 2.2 38.6 1.75 13.42 39.4 1.71 -2.0 2.5 2375 38.5 13.50 1.78 39.3 1,73 1900 2000 2100 2200 2300 2400 2500 2600 2700 2400 38,4 13.58 1.81 39.3 1.76 -23 3.3 Frequency MHz 38.3 13.65 1.84 39.2 1.78 -24 2450 38.2 13.73 1.87 3,5 2475 38.1 13,80 1.90 39.2 1,83 -28 4.0 2500 38.0 13.87 1.93 39.1 1.85 -3.0 4.0 37.9 13.90 39,1 1,88 -3.1 3.8 2550 37.8 13.93 1.98 39.1 1.91 -32 3.5 2.01 14.05 39.0 2500 37.6 14.17 2.05 39.0 1.99 37.4 14:23 2.08 39.0 4,4 14.29 2,11 38.9 2.02 37.3 2675 37.2 14.37 2.14 38.9 2.05 -4.3 2700 37.1 14,45 38.9

Figure D-5
2.4 GHz Head Tissue Equivalent Matter

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APPENDIX E: SAR SYSTEM VALIDATION

Per FCC KDB Publication 865664 D02v01r02, SAR system validation status should be documented to confirm measurement accuracy. The SAR systems (including SAR probes, system components and software versions) used for this device were validated against its performance specifications prior to the SAR measurements. Reference dipoles were used with the required tissue- equivalent media for system validation, according to the procedures outlined in FCC KDB Publication 865664 D01v01r04 and IEEE 1528-2013. Since SAR probe calibrations are frequency dependent, each probe calibration point was validated at a frequency within the valid frequency range of the probe calibration point, using the system that normally operates with the probe for routine SAR measurements and according to the required tissue-equivalent media.

A tabulated summary of the system validation status including the validation date(s), measurement frequencies, SAR probes and tissue dielectric parameters has been included.

Table E-I SAR System Validation Summary

SAR	FREQ.		PROBE	PROBE			COND.	PERM.	C	W VALIDATIO	N	Mo	OD. VALIDATIO	N
SYSTEM	[MHz]	DATE	SN	TYPE	PROBE CA	AL. POINT	(σ)	(er)	SENSITIVITY	PROBE	PROBE	MOD.	DUTY	PAR
#	[IVII IZ]		014	1111			(0)	(61)	OLIVOITIVITI	LINEARITY	ISOTROPY	TYPE	FACTOR	IAK
Α	750	9/7/2016	3022	ES3DV2	750	Head	0.928	41.982	PASS	PASS	PASS	N/A	N/A	N/A
J	835	3/9/2016	3318	ES3DV3	835	Head	0.891	40.164	PASS	PASS	PASS	GMSK	PASS	N/A
Α	1750	9/7/2016	3022	ES3DV2	1750	Head	1.338	38.815	PASS	PASS	PASS	N/A	N/A	N/A
I	1900	9/7/2016	3288	ES3DV3	1900	Head	1.425	38.384	PASS	PASS	PASS	GMSK	PASS	N/A
D	2450	5/9/2016	3213	ES3DV3	2450	Head	1.819	40.155	PASS	PASS	PASS	OFDM/TDD	PASS	PASS
K	750	5/25/2016	7409	EX3DV4	750	Body	0.977	56.135	PASS	PASS	PASS	N/A	N/A	N/A
Н	835	4/7/2016	3319	ES3DV3	835	Body	1.000	54.246	PASS	PASS	PASS	GMSK	PASS	N/A
С	1750	9/7/2016	7410	EX3DV4	1750	Body	1.501	51.691	PASS	PASS	PASS	N/A	N/A	N/A
G	1900	9/29/2016	3287	ES3DV3	1900	Body	1.547	51.110	PASS	PASS	PASS	GMSK	PASS	N/A
E	2450	4/27/2016	7406	EX3DV4	2450	Body	2.016	51.629	PASS	PASS	PASS	OFDM/TDD	PASS	PASS

NOTE: While the probes have been calibrated for both CW and modulated signals, all measurements were performed using communication systems calibrated for CW signals only. Modulations in the table above represent test configurations for which the measurement system has been validated per FCC KDB Publication 865664 D01v01r04 for scenarios when CW probe calibrations are used with other signal types. SAR systems were validated for modulated signals with a periodic duty cycle, such as GMSK, or with a high peak to average ratio (>5 dB), such as OFDM according to FCC KDB Publication 865664 D01v01r04.

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