Attachment 1. - Probe Calibration Data

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





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

Accreditation No.: SCS 0108

Accredited by the Swiss Accreditation Service (SAS)

The Swiss Accreditation Service is one of the signatories to the EA

Multilateral Agreement for the recognition of calibration certificates

Client DT&C (Dymstec)

Certificate No: ES3-3328_Mar17

CALIBRATION CERTIFICATE

Object ES3DV3 - SN:3328

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 21, 2017

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-16 (No. ES3-3013_Dec16)	Dec-17
DAE4	SN: 660	7-Dec-16 (No. DAE4-660_Dec16)	Dec-17
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-16)	In house check: Oct-17

Calibrated by:

Leif Klysner

Laboratory Technician

Approved by:

Katja Pokovic

Technical Manager

Issued: March 21, 2017

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

Certificate No: ES3-3328_Mar17

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





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

Accreditation No.: SCS 0108

Accredited by the Swiss Accreditation Service (SAS)

The Swiss Accreditation Service is one of the signatories to the EA

Multilateral Agreement for the recognition of calibration certificates

Glossary:

TSL 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 RF signal A, B, C, D modulation dependent linearization parameters

Polarization 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

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

Certificate No: ES3-3328_Mar17 Page 2 of 11

ES3DV3 - SN:3328 March 21, 2017

Probe ES3DV3

SN:3328

Manufactured: January 24, 2012 Calibrated: March 21, 2017

Calibrated for DASY/EASY Systems (Note: non-compatible with DASY2 system!)

Certificate No: ES3-3328_Mar17

Page 3 of 11

March 21, 2017 ES3DV3-SN:3328

DASY/EASY - Parameters of Probe: ES3DV3 - SN:3328

Basic Calibration Parameters

	Sensor X	Sensor Y	Sensor Z	Unc (k=2)
Norm (µV/(V/m) ²) ^A	1.02	1.04	1.07	±10.1 %
DCP (mV) ^B	105.3	104.3	103.6	

Modulation Calibration Parameters

UID	Communication System Name		A dB	B dB√μV	С	D dB	VR mV	Unc ² (k=2)
0	CW	X	0.0	0.0	1.0	0.00	199.5	±3.5 %
		Y	0.0	0.0	1.0	-	190.4	
-		Z	0,0	0.0	1.0		193.5	

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 5 and 6).

Numerical linearization parameter: uncertainty not required.

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:3328 March 21, 2017

DASY/EASY - Parameters of Probe: ES3DV3 - SN:3328

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	6.76	6.76	6.76	0.73	1.17	± 12.0 %
835	41.5	0.90	6.50	6.50	6.50	0.62	1.30	± 12.0 %
900	41.5	0.97	6.43	6.43	6.43	0.52	1.46	± 12.0 %
1750	40.1	1,37	5.50	5.50	5.50	0.32	1.88	± 12.0 %
1900	40.0	1.40	5.27	5.27	5.27	0.51	1,48	± 12.0 %
2450	39.2	1.80	4.72	4.72	4.72	0.66	1.35	± 12.0 %
2600	39.0	1.96	4.57	4.57	4.57	0.72	1.23	± 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.

Certificate No: ES3-3328_Mar17

below 3rd MHz is ± 10, 20, 40, 00 and 10 MHz.

Fat 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 ConvF uncertainty for indicated target fissue 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.

ES3DV3- SN:3328 March 21, 2017

DASY/EASY - Parameters of Probe: ES3DV3 - SN:3328

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	0.80	1.18	± 12.0 %
835	55.2	0.97	6.35	6.35	6.35	0.80	1.15	± 12.0 %
900	55.0	1.05	6.44	6.44	6.44	0.80	1.15	± 12.0 %
1750	53.4	1.49	5.08	5.08	5.08	0.44	1.70	± 12.0 %
1900	53.3	1.52	4.91	4.91	4.91	0.50	1.62	± 12.0 %
2450	52.7	1.95	4.53	4.53	4.53	0.80	1.15	± 12.0 %
2600	52.5	2.16	4.28	4.28	4.28	0.80	1.12	± 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: ES3-3328_Mar17

validity can be extended to ± 110 MHz.

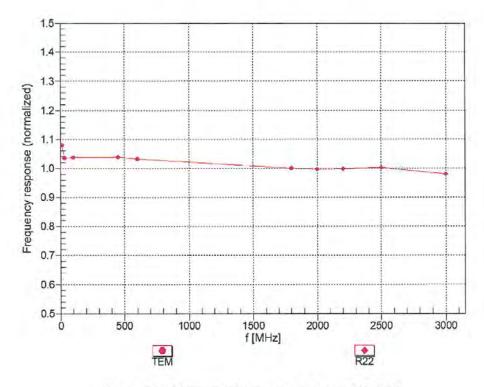
At frequencies below 3 GHz, the validity of tissue parameters (ε and σ) can be relaxed to ± 10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters (ε and σ) is restricted to ± 5%. The uncertainty is the RSS of the ConvF uncertainty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

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.

ES3DV3- SN:3328 March 21, 2017

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

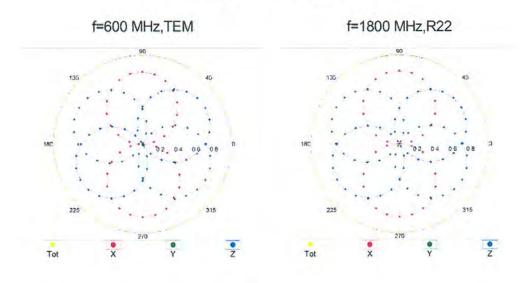


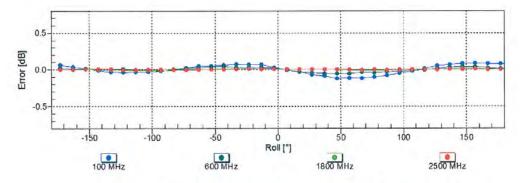
Uncertainty of Frequency Response of E-field: ± 6.3% (k=2)



ES3DV3- SN:3328 March 21, 2017

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



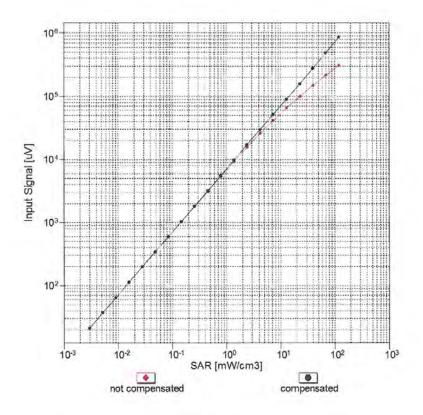


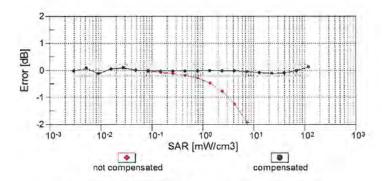
Uncertainty of Axial Isotropy Assessment: ± 0.5% (k=2)



ES3DV3- SN:3328 March 21, 2017

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





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

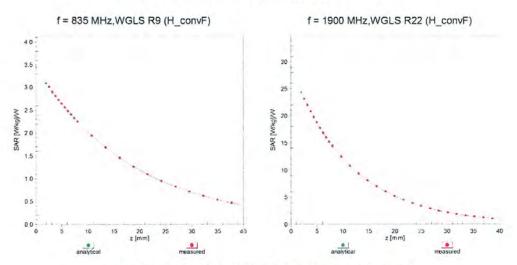
Certificate No: ES3-3328_Mar17

Page 9 of 11

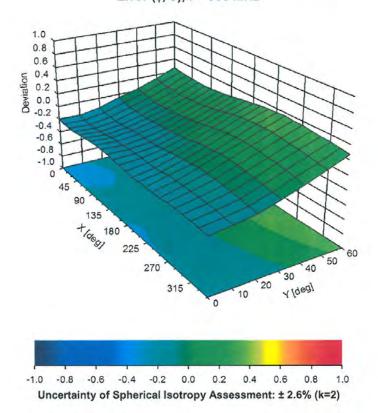


ES3DV3- SN:3328 March 21, 2017

Conversion Factor Assessment



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



Certificate No: ES3-3328_Mar17

Page 10 of 11

ES3DV3- SN:3328 March 21, 2017

DASY/EASY - Parameters of Probe: ES3DV3 - SN:3328

Other Probe Parameters

Sensor Arrangement	Triangular
Connector Angle (°)	-23
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

Certificate No: ES3-3328_Mar17



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





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

Accreditation No.: SCS 0108

Accredited by the Swiss Accreditation Service (SAS)

The Swiss Accreditation Service is one of the signatories to the EA

Multilateral Agreement for the recognition of calibration certificates

Client

DT&C (Dymstec)

Certificate No: EX3-3930_Jul17

CALIBRATION CERTIFICATE

Object EX3DV4 - SN:3930

Calibration procedure(s) A CAL-01.v9, QA CAL-14.v4, QA CAL-23.v5, QA CAL-25.v6

Calibration procedure for dosimetric E-field probes

Calibration date: July 26, 2017

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)

Delever - Otron Londo	T.D	A CHARLES AND THE STATE OF	Transported of the American
Primary Standards	ID	Cal Date (Certificate No.)	Scheduled Calibration
Power meter NRP	SN: 104778	04-Apr-17 (No. 217-02521/02522)	Apr-18
Power sensor NRP-Z91	SN: 103244	04-Apr-17 (No. 217-02521)	Apr-18
Power sensor NRP-Z91	SN: 103245	04-Apr-17 (No. 217-02525)	Apr-18
Reference 20 dB Attenuator	SN: S5277 (20x)	07-Apr-17 (No. 217-02528)	Apr-18
Reference Probe ES3DV2	SN: 3013	31-Dec-16 (No. ES3-3013_Dec16)	Dec-17
DAE4	SN: 660	7-Dec-16 (No. DAE4-660_Dec16)	Dec-17
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-16)	In house check: Oct-17

Name Function Signature

Calibrated by: Michael Weber Laboratory Technician

Approved by: Katja Pokovic Technical Manager

Issued: July 26, 2017

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

Certificate No: EX3-3930_Jul17

Page 1 of 38



Calibration Laboratory of Schmid & Partner

Engineering AG Zeughausstrasse 43, 8004 Zurich, Switzerland





S Schweizerischer Kalibrierdienst C Service suisse d'étalonnage

Servizio svizzero di taratura Swiss Calibration Service

Accreditation No.: SCS 0108

Accredited by the Swiss Accreditation Service (SAS)

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

Glossary:

TSL 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 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:

- 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, ", "Measurement procedure for the assessment of Specific Absorption Rate (SAR) from handheld and body-mounted devices used next to the ear (frequency range of 300 MHz to 6 GHz)", July 2016
- 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).

EX3DV4 - SN:3930

July 26, 2017

Probe EX3DV4

SN:3930

Manufactured: July 24, 2013 Calibrated: July 26, 2017

Calibrated for DASY/EASY Systems (Note: non-compatible with DASY2 system!)

Certificate No: EX3-3930_Jul17

Page 3 of 38

EX3DV4-SN:3930 July 26, 2017

DASY/EASY - Parameters of Probe: EX3DV4 - SN:3930

Basic Calibration Parameters

	Sensor X	Sensor Y	Sensor Z	Unc (k=2)
Norm (µV/(V/m) ²) ^A	0.41	0.48	0.41	± 10.1 %
Norm (μV/(V/m) ²) ^A DCP (mV) ^B	102.3	100.5	102.3	

Modulation Calibration Parameters

DID	Communication System Name		A dB	B dB√μV	С	D dB	VR mV	Unc ^b (k=2)
0 CW	CW	X	0.0	0.0	1.0	0.00	156.8	±3.3 %
		Y	0.0	0.0	1.0		166.7	
		Z	0.0	0.0	1.0	-	161.8	11 7

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	42,59	309.7	34.17	18.79	0.314	5.099	0.610	0.364	1.003
Y	37.98	282.6	35.37	16.16	0.628	5.077	0.521	0.401	1,005
Z	42.19	308.3	34.31	21.95	0.506	5.100	1,499	0.287	1.006

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 5 and 6).

B Numerical linearization parameter: uncertainty not required,

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

EX3DV4-SN:3930

July 26, 2017

DASY/EASY - Parameters of Probe: EX3DV4 - SN:3930

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)
2450	39.2	1.80	7.87	7.87	7.87	0.37	0.90	± 12.0 %
2600	39.0	1.96	7.73	7.73	7.73	0.38	0.92	± 12.0 %
5200	36.0	4.66	5.46	5.46	5.46	0.35	1.80	± 13.1 %
5300	35.9	4.76	5.24	5.24	5.24	0.35	1.80	± 13.1 %
5500	35.6	4.96	4.97	4.97	4.97	0.40	1.80	± 13.1 %
5600	35.5	5.07	4.86	4.86	4.86	0.40	1.80	± 13.1 %
5800	35.3	5.27	4.83	4.83	4.83	0.40	1.80	± 13.1 %

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

Althrequencies 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

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.

EX3DV4- SN:3930 July 26, 2017

DASY/EASY - Parameters of Probe: EX3DV4 - SN:3930

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)
2450	52.7	1.95	7.90	7,90	7.90	0.35	0.95	± 12.0 %
2600	52.5	2.16	7.60	7.60	7.60	0.35	0.95	± 12.0 %
5200	49.0	5.30	4.87	4.87	4.87	0.40	1.90	± 13.1 %
5300	48.9	5.42	4.70	4.70	4.70	0.40	1.90	± 13.1 %
5500	48.6	5.65	4.41	4,41	4.41	0.40	1.90	± 13.1 %
5600	48.5	5.77	4.22	4,22	4.22	0.45	1.90	± 13.1 %
5800	48.2	6.00	4.33	4.33	4.33	0.45	1.90	± 13.1 %

^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 ± 1.10 MHz.

Validity can be extended to ± 110 MHz.

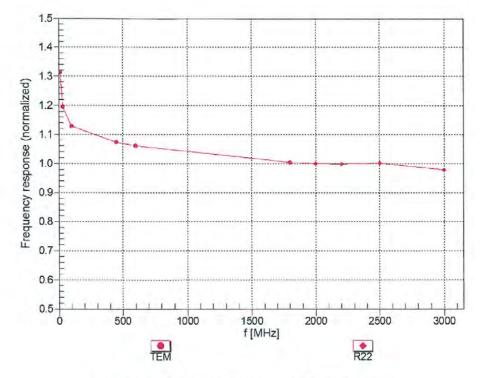
At frequencies below 3 GHz, the validity of tissue parameters (ε and σ) can be relaxed to ± 10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters (ε and σ) is restricted to ± 5%. The uncertainty is the RSS of the Convey uncertainty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

EX3DV4- SN:3930 July 26, 2017

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



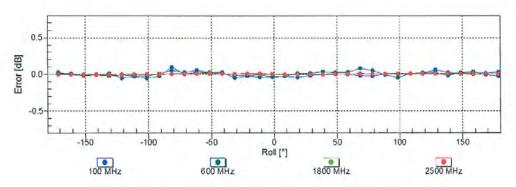
Uncertainty of Frequency Response of E-field: ± 6.3% (k=2)



EX3DV4- SN:3930 July 26, 2017

Receiving Pattern (\$\phi\$), \$\partial = 0°



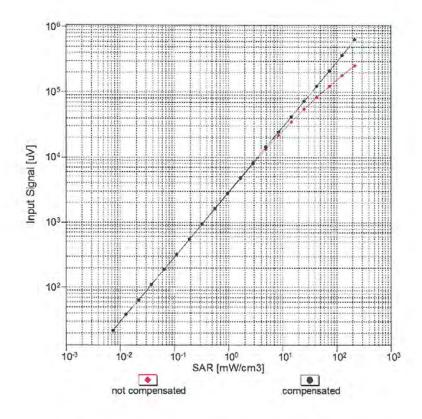


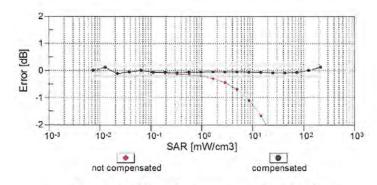
Uncertainty of Axial Isotropy Assessment: ± 0.5% (k=2)



EX3DV4- SN:3930 July 26, 2017

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



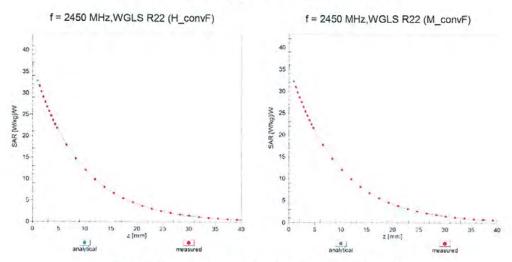


Uncertainty of Linearity Assessment: ± 0.6% (k=2)

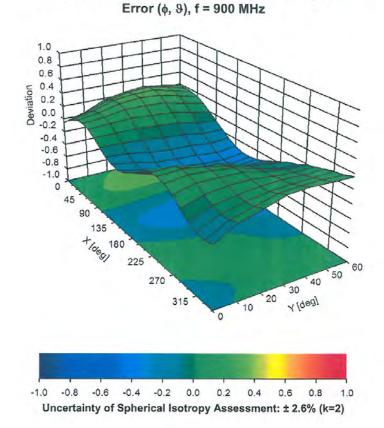


EX3DV4- SN:3930 July 26, 2017

Conversion Factor Assessment



Deviation from Isotropy in Liquid



EX3DV4-SN:3930

July 26, 2017

DASY/EASY - Parameters of Probe: EX3DV4 - SN:3930

Other Probe Parameters

Sensor Arrangement	Triangular
Connector Angle (°)	118.7
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



EX3DV4- SN:3930 July 26, 2017

Append	ix: Mo	odulation	Calibration	Parameters	

מוט	Communication System Name		A dB	B dB√μV	С	D dB	VR mV	Max Unc ^E (k=2)
0	CW	X	0.00	0.00	1.00	0.00	156.8	± 3.3 %
		Y	0.00	0.00	1.00		166.7	1
		Z	0.00	0.00	1.00	1 -4 6	161.8	
10010- CAA	SAR Validation (Square, 100ms, 10ms)	X	33.98	95.02	20.39	10.00	20.0	± 9.6 %
		Y	12.31	85.76	18.73		20.0	+
		Z	36.97	97.49	21.78		20.0	-
10011- CAB	UMTS-FDD (WCDMA)	X	1,32	72.73	18.36	0.00	150.0	±9.6 %
		Y	0.95	66.04	14.44		150.0	
152147		Z	1.05	67.88	15.60		150.0	100
10012- CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps)	Х	1.27	66,02	16.87	0.41	150.0	± 9.6 %
		Y	1.19	63.75	15.02		150.0	
10010	TEER OOG 44 THEFE S TO SEE	Z	1.24	64.77	15.76		150.0	
10013- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps)	X	4.89	67.27	17.48	1.46	150.0	±9.6 %
		Υ	4.81	66.88	17.12		150.0	
10004	OCH EDD (TDHA CHOIC	Z	4.88	67.08	17.28	10.55	150.0	
10021- DAC	GSM-FDD (TDMA, GMSK)	X	100.00	118.50	29.46	9.39	50.0	± 9.6 %
		Y	100.00	120.04	30.47		50.0	
40000	CORRESPONDE CONTRACTOR	Z	100.00	119.12	30.12		50.0	
10023- DAC	GPRS-FDD (TDMA, GMSK, TN 0)	X	100.00	117.91	29.22	9.57	50.0	±9.6 %
		Υ	100.00	119.43	30.24		50.0	
10024- DAC	GPRS-FDD (TDMA, GMSK, TN 0-1)	Z	100.00	118.72 118.87	29.96 28.78	6.56	50.0 60.0	± 9.6 %
DAC		Y	100.00	119.40	29.15		60.0	-
		Z	100.00	117,69	28.60		60.0	
10025- DAC	EDGE-FDD (TDMA, 8PSK, TN 0)	X	6.09	83,18	33.46	12.57	50.0	± 9.6 %
		Y	4.16	69.03	25.44		50.0	
		Z	7.41	87.92	35.28		50.0	
10026- DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1)	х	16.43	108.30	39.06	9.56	60.0	± 9.6 %
		Y	8.80	90.83	32.45		60.0	
	A LESS TO THE TAX TO T	Z	17.86	108.64	38.77	1	60.0	H.S.
10027- DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2)	X	100.00	121.78	29.37	4.80	80.0	± 9.6 %
		Y	100.00	120.90	29.04		80.0	
nicke with the		Z	100.00	118,68	28.36		80.0	
10028- DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2-3)	×	100.00	126.85	30.88	3.55	100.0	± 9.6 %
		Y	100.00	123.74	29.56		100.0	
		Z	100.00	121.16	28.77	18.44	100.0	2822
10029- DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2)	X	8.49	91.15	31.68	7.80	80.0	± 9.6 %
		Y	5.92	81.55	27.56		80.0	
10030-	IEEE 802,15.1 Bluetooth (GFSK, DH1)	Z	9.27	91.80	31.56 27.99	5.30	70.0	± 9.6 %
CAA		Y	100.00	117.70	27.90		70.0	-
		Z	100.00	116.25	27.53		70.0	
10031- CAA	IEEE 802.15.1 Bluetooth (GFSK, DH3)	X	100.00	135.43	32.90	1.88	100.0	± 9.6 %
O/M	-	Y	100.00	124.47	28.40		100.0	
		Z	100.00	123.75	28.45	-	100.0	

EX3DV4- SN:3930 July 26, 2017

10032- CAA	IEEE 802.15.1 Bluetooth (GFSK, DH5)	Х	100.00	158.27	40.81	1.17	100.0	± 9.6 %
		Υ	100.00	132.40	30.62		100.0	
		Z	100.00	133.39	31.35		100.0	
10033- CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH1)	Х	100.00	130.12	35.27	5.30	70.0	± 9.6 %
		Y	47.92	115.56	31.04		70.0	
		Z	100.00	127.31	34.17		70.0	
10034- CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH3)	X	100.00	127.72	32.57	1.88	100.0	± 9.6 %
		Y	5.40	84.00	20.03		100.0	
		Z	26.50	106.08	26.87		100.0	
10035- CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH5)	Х	98.14	127.45	32.05	1.17	100.0	±9.6 %
27		Y	2.68	75.86	16.83		100.0	
- T -		Z	6.47	87.81	21.42		100.0	
10036- CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH1)	X	100.00	130.64	35,51	5.30	70.0	± 9.6 %
		Υ	100.00	127.36	33.94	10	70.0	
		Z	100.00	127.74	34.37		70.0	
10037- CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH3)	Х	100.00	127.73	32.53	1.88	100.0	± 9.6 %
		Y	4.58	81.94	19.33		100.0	
	C	Z	19.79	102.15	25.82		100.0	
10038- CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH5)	Х	100.00	128.63	32.52	1.17	100.0	± 9.6 %
4-1-		Y	2.70	76.24	17.10		100.0	-
		Z	6.68	88.65	21.82		100.0	
10039- CAB	CDMA2000 (1xRTT, RC1)	X	6,20	89.91	22.06	0.00	150.0	± 9.6 %
		Y	1.39	69.12	13.61		150.0	
	The second secon	Z	1.97	73.64	16.08		150.0	
10042- CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4- DQPSK, Halfrate)	Х	100.00	114.51	26.96	7.78	50.0	± 9.6 %
		Y	100.00	115.91	27.79		50.0	
		Z	100.00	114.70	27.39		50.0	
10044- CAA	IS-91/EIA/TIA-553 FDD (FDMA, FM)	X	0.00	104.05	0.58	0.00	150.0	± 9.6 %
-		Y	0.01	90.05	0.67		150.0	
		Z	0.00	93.86	0.01		150.0	77.7
10048- CAA	DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24)	х	100.00	118.84	30.69	13.80	25.0	± 9.6 %
-		Y	100.00	118.92	31.37		25.0	
		Z	100.00	121.71	32.37		25.0	
10049- CAA	DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12)	×	100.00	116.35	28.73	10.79	40.0	±9.6 %
		Y	100.00	118.18	29.97		40.0	
		Z	100.00	118.06	29.88		40.0	2,577.7
10056- CAA	UMTS-TDD (TD-SCDMA, 1.28 Mcps)	×	100.00	126.32	34.62	9.03	50.0	±9.6 %
		Y	100.00	125.02	34.10		50.0	
		Z	100.00	125.44	34.44		50.0	
10058- DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)	X	6.05	83.52	27.88	6.55	100.0	± 9.6 %
		Y	4.69	76.91	24.81		100.0	
	Land and the second of the	Z	6.52	83.98	27.72		100.0	
10059- CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps)	X	1.39	68.10	18.00	0.61	110.0	± 9.6 %
		Y	1,25	64.97	15.72	-	110.0	
Large Bar		Z	1.34	66.55	16.72	1 . 3	110.0	
10060- CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps)	×	100.00	145.37	39.14	1.30	110.0	± 9.6 %
		Y	14.08	108.54	29.23		110.0	
		Z	100.00	138.14	36.18		110.0	-



EX3DV4- SN:3930 July 26, 2017

10061- CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps)	X	25.81	121.10	35.51	2.04	110.0	± 9.6 %
		Y	3.44	82.74	23.20		110.0	
		Z	9.74	100.38	29.02		110.0	
10062- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps)	X	4.68	67.22	16.86	0.49	100.0	± 9.6 %
		Y	4.58	66.75	16.46		100.0	
		Z	4.65	66.95	16.61		100.0	
10063-	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9	X	4.70	67.34	16.99	0.72	100.0	±9.6 %
CAB	Mbps)	Y	4.60	66.87	16.58	0.72	100.0	2-0.0 /0
		Z	4.68	67.08	16.74	-	100.0	
10064- CAB	IEEE 802.11a/h WIFI 5 GHz (OFDM, 12 Mbps)	X	4.97	67.56	17.19	0.86	100.0	± 9.6 %
		Y	4.86	67.09	16.80		100.0	
		Z	4.95	67.31	16.96		100.0	
10065- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps)	Х	4.85	67.50	17.34	1.21	100.0	± 9.6 %
		Y	4.74	67.00	16.91	-	100.0	
		Z	4.84	67.27	17.11		100.0	
10066- CAB	IEEE 802,11a/h WiFi 5 GHz (OFDM, 24 Mbps)	X	4.87	67,54	17.52	1.46	100.0	± 9.6 %
		Y	4.77	67.05	17.10		100.0	
		Z	4.87	67.32	17.30		100.0	14
10067- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps)	Х	5.17	67.72	17.97	2.04	100.0	± 9.6 %
		Y	5.07	67.34	17.60	-	100.0	
		Z	5.17	67.57	17.79		100.0	
10068- CAB	IEEE 802,11a/h WiFi 5 GHz (OFDM, 48 Mbps)	X	5.21	67.74	18.19	2.55	100.0	± 9.6 %
		Y	5.11	67.31	17.81		100.0	
		Z	5.22	67.61	18.02		100.0	
10069- CAB	IEEE 802,11a/h WiFi 5 GHz (OFDM, 54 Mbps)	X	5.29	67.72	18.37	2.67	100.0	±9.6 %
		Y	5.19	67.34	17.99		100.0	
		Z	5.30	67.62	18.21		100.0	
10071- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps)	X	4.99	67.37	17.81	1.99	100.0	± 9.6 %
	A YOUR STREET	Y	4.92	67.00	17.45		100.0	
		Z	5.00	67.22	17.62		100.0	
10072- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps)	Х	4.98	67.76	18.08	2.30	100.0	± 9.6 %
		Y	4.90	67.32	17.68		100.0	
		Z	4.99	67.61	17.89		100.0	
10073- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps)	X	5.06	67.98	18.45	2.83	100.0	± 9.6 %
M. A. T. T.		Υ	4.98	67.55	18.06		100.0	
		Z	5.08	67.86	18.29		100.0	
10074- CAB	(DSSS/OFDM, 24 Mbps)	X	5.05	67.92	18.63	3.30	100.0	± 9.6 %
		Y	4.99	67.53	18.25		100.0	
	Liver and the second second	Z	5.09	67.84	18.48	1	100.0	11.00
10075- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps)	X	5.09	68.03	18.96	3.82	90.0	±9.6 %
2 1		Y	5.03	67.61	18.55		90.0	
	No. And the reserve of	Z	5.14	68.00	18.83		90.0	11
10076- CAB	IEEE 802.11g WIFI 2.4 GHz (DSSS/OFDM, 48 Mbps)	X	5.11	67.82	19.08	4.15	90.0	±9.6 %
		Y	5.07	67.47	18.71		90.0	
A	Library Co. Strategier and Strategier	Z	5.17	67.83	18.99	Lessy e	90.0	14.0.0
10077- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps)	Х	5.14	67.90	19.19	4.30	90.0	± 9.6 %
		Y	5.10	67.57	18.83	-	90.0	
			5.20					

EX3DV4- SN:3930 July 26, 2017

10081-	CDMA2000 (1xRTT, RC3)	X	1.47	74.80	16.59	0,00	150.0	± 9.6 %
CAB								
		Y	0.71	64.40	10.98		150.0	
10000	IC EA LIC 426 FDD /TDMA/FDM DVA	Z	0.85	66.68	12.68	177	150.0	1000
10082- CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4- DQPSK, Fullrate)	Х	0.84	60.00	4.97	4.77	80.0	± 9.6 %
		Y	0.83	60.00	5.19		80.0	
		Z	0.96	60.05	5.34		80.0	
10090- DAC	GPRS-FDD (TDMA, GMSK, TN 0-4)	X	100.00	118.89	28.81	6.56	60.0	± 9.6 %
		Y	100.00	119,41	29.18		60.0	
		Z	100.00	117.72	28.64		60.0	-
10097- CAB	UMTS-FDD (HSDPA)	X	2.10	70.90	17.44	0.00	150.0	±9.6 %
		Y	1.77	67.39	15.22		150.0	
		Z	1.86	68.35	15.93		150.0	
10098- CAB	UMTS-FDD (HSUPA, Subtest 2)	X	2.06	70.89	17.44	0.00	150.0	± 9.6 %
		Y	1.73	67.32	15.18		150.0	
1555		Z	1.82	68.30	15.90		150.0	
10099- DAC	EDGE-FDD (TDMA, 8PSK, TN 0-4)	X	16.64	108.59	39.15	9.56	60.0	± 9.6 %
		Y	8.86	90.97	32.50		60.0	
70100		Z	18.05	108.86	38.84	1	60.0	1000
10100- CAC	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	X	3.43	72.59	17.97	0.00	150.0	± 9.6 %
		Y	2.93	69.49	16.35		150.0	
		Z	3.12	70.62	16.88		150.0	-
10101- CAC	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	X	3.32	68.53	16.59	0,00	150.0	± 9.6 %
		Y	3.12	67.11	15.68		150.0	
12.122		Z	3.21	67.66	15.99		150.0	17.7.0
10102- CAC	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	X	3.41	68.45	16.65	0.00	150.0	± 9.6 %
		Υ	3.23	67_14	15.80		150.0	
100		Z	3.31	67.64	16.08		150.0	
10103- CAC	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	X	8,48	81.63	23.12	3.98	65.0	± 9.6 %
		Υ	6.79	77.32	21.30		65.0	
		Z	8.35	80.51	22.48		65.0	
10104- CAC	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	X	7.32	77.12	22.10	3.98	65.0	± 9.6 %
		Y	6.47	74.49	20.81		65.0	
14:11		Z	7.50	76.91	21.82		65.0	
10105- CAC	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	Х	6.60	74.99	21.49	3.98	65.0	± 9.6 %
		Y	6.13	73.28	20.58		65.0	
10107		Z	6.95	75.36	21.46	-5.D.	65.0	
10108- CAD	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	X	2.97	71.84	17.84	0.00	150.0	± 9.6 %
		Y	2.54	68.77	16,15		150.0	
18185		Z	2.71	69.84	16.70		150.0	
10109- CAD	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	X	2.98	68.61	16.61	0.00	150.0	±9.6 %
		Y	2.76	66.99	15.53	-	150.0	
10777		Z	2.86	67.57	15.90		150.0	
10110- CAD	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	X	2.44	71.26	17.61	0.00	150.0	±9.6 %
		Y	2.04	67.88	15.62		150.0	200
18117		Z	2.19	69.00	16.29		150.0	
10111- CAD	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	X	2.81	70,37	17.31	0.00	150.0	± 9.6 %
		Y	2.49	68.01	15.76	1 -	150.0	1
		Z	2.61	68.69	16.27		150.0	



EX3DV4- SN:3930 July 26, 2017

10112- CAD	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	X	3.10	68.56	16.63	0.00	150.0	± 9.6 %
		Y	2.89	67.08	15.63		150.0	
		Z	2.99	67.59	15.96		150.0	-
10113- CAD	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	Х	2.96	70.43	17.38	0.00	150.0	± 9.6 %
		Y	2.64	68.23	15.92	7	150.0	
		Z	2.76	68.84	16.40		150.0	
10114- CAB	IEEE 802.11n (HT Greenfield, 13.5 Mbps, BPSK)	X	5.10	67.56	16.67	0.00	150.0	± 9.6 %
		Y	5.00	67.06	16.33		150.0	
		Z	5.06	67.28	16.42		150.0	
10115- CAB	IEEE 802.11n (HT Greenfield, 81 Mbps, 16-QAM)	X	5.35	67.59	16.69	0.00	150.0	± 9.6 %
		Y	5.25	67.14	16.38		150.0	
		Z	5.32	67.33	16.46		150.0	
10116- CAB	IEEE 802.11n (HT Greenfield, 135 Mbps, 64-QAM)	X	5.19	67.74	16,69	0.00	150.0	± 9.6 %
		Υ	5.09	67.25	16.36	-	150.0	
		Z	5.15	67.45	16.44		150.0	
10117-	IEEE 802.11n (HT Mixed, 13.5 Mbps,	X	5.07	67.43	16.63	0.00	150.0	±9.6 %
CAB	BPSK)	5		15.25		0.00	200	1.5.0 %
		Y	4,99	67.01	16.32	-	150.0	
40445	IEEE OOO 11 WIE	Z	5.03	67.16	16.38		150.0	
10118- CAB	IEEE 802:11n (HT Mixed, 81 Mbps, 16- QAM)	Х	5.43	67.76	16.78	0.00	150.0	± 9.6 %
		Y	5.32	67.31	16.47		150.0	
		Z	5.39	67.50	16.55	ATTENTO	150.0	
10119- CAB	IEEE 802.11n (HT Mixed, 135 Mbps, 64- QAM)	X	5.17	67.69	16.68	0.00	150.0	± 9.6 %
		Y	5.08	67.23	16.36		150.0	
		Z	5.13	67.40	16.43	-	150.0	V
10140- CAC	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	Х	3,45	68.45	16.56	0.00	150.0	± 9.6 %
		Y	3.25	67.15	15.72		150.0	
		Z	3.34	67.65	16.00		150.0	
10141- CAC	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	X	3,57	68.54	16.72	0.00	150.0	± 9.6 %
		Y	3.38	67.32	15.92		150.0	
		Z	3.47	67.77	16.17		150.0	
10142- CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	X	2,30	72.11	17.60	0.00	150.0	± 9.6 %
		Y	1.80	67.79	15.04		150.0	
		Z	1.97	69.14	15.94		150.0	
10143- CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	X	2.87	72.31	17.44	0.00	150.0	± 9.6 %
		Y	2.30	68.51	15.11		150.0	
		Z	2.49	69.65	15.97		150.0	
10144- CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	X	2.38	68.49	15.12	0.00	150.0	± 9.6 %
		Y	2.02	65.87	13.27		150.0	
	1	Z	2.19	66.86	14.10		150.0	
10145- CAD	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	Х	1.44	68.19	13.11	0.00	150.0	± 9.6 %
		Y	0.93	62.67	9.45		150.0	
		Z	1.13	64.81	11.22		150.0	
10146- CAD	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	Х	1.65	65.01	10.48	0.00	150.0	± 9.6 %
		Y	1.27	62.22	8.43		150.0	
			1.79	65.38	10.60		150.0	
		1	1,79					
10147-	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz. 64-QAM)	X	1.96	66.95	11.55	0.00	150.0	± 9.6 %
	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)					0.00		± 9.6 %

EX3DV4- SN:3930 July 26, 2017

10149-	LTE-FDD (SC-FDMA, 50% RB, 20 MHz,	Х	2.99	68.69	16.66	0.00	150.0	± 9.6 %
CAC	16-QAM)	7.	0.60	0500	0.156	3,77	11.53	34464
		Υ	2.77	67.06	15.58		150.0	
12022		Z	2.87	67.64	15.95		150.0	
10150- CAC	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	X	3.11	68.63	16.68	0.00	150.0	± 9.6 %
		Υ	2.90	67.14	15.67		150.0	
		Z	2.99	67.65	16.00		150.0	
10151- CAC	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	X	10.17	86.64	25.07	3.98	65.0	±9.6 %
		Y	7,45	80.64	22.65		65.0	L
		Z	9.66	84.69	24.12		65.0	
10152- CAC	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	X	6.99	77,66	22.02	3,98	65.0	± 9.6 %
		Y	6.03	74.58	20.48		65.0	
		Z	7.14	77.28	21.65		65.0	
10153- CAC	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	X	7.50	78.88	22.89	3.98	65.0	±9.6 %
		Y	6.49	75.82	21.38		65.0	
		Z	7.64	78.46	22.50		65.0	
10154- CAD	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	X	2.51	71.85	17.95	0.00	150.0	± 9.6 %
		Υ	2.08	68.26	15.86		150.0	
1000		Z	2.24	69.43	16.55	4.71.5	150.0	32.22
10155- CAD	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	X	2.82	70.39	17.33	0.00	150.0	±9.6 %
		Y	2.49	68.04	15.78		150.0	
-	and the second second second second	Z	2.61	68.71	16.29		150.0	
10156- CAD	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	X	2.23	73.00	17.70	0.00	150.0	± 9.6 %
		Υ	1.62	67.61	14.59		150.0	
		Z	1.83	69.27	15.71		150.0	LAAA.
10157- CAD	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	X	2,33	69.89	15.51	0.00	150.0	± 9.6 %
		Y	1.83	66.15	13.07		150.0	-
		Z	2.04	67.51	14.15		150.0	
10158- CAD	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	X	2.97	70.52	17.44	0.00	150.0	± 9.6 %
		Y	2,64	68.31	15.98		150.0	
		Z	2.77	68.92	16.45		150.0	
10159- CAD	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	Х	2.49	70.59	15.88	0.00	150.0	± 9.6 %
		Y	1,92	66.54	13.31		150.0	
		Z	2.15	68.02	14.44		150.0	
10160- CAC	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	X	2.90	70.43	17.37	0.00	150.0	±9.6 %
		Y	2.59	68.16	15.99		150.0	
		Z	2.70	68.88	16.41	70	150.0	
10161- CAC	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	X	3.02	68.67	16.64	0.00	150.0	± 9.6 %
		Υ	2.79	67.10	15.56		150.0	
Villa e		Z	2.89	67.63	15.93		150.0	-
10162- CAC	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	X	3.13	68.82	16.75	0.00	150.0	± 9.6 %
		Υ	2.90	67.31	15.71		150.0	
		Z	3.00	67.80	16.05		150.0	
10166- CAD	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	Х	3.47	69.86	19.28	3.01	150.0	± 9.6 %
		Y	3.31	68.79	18.69		150.0	
		Z	3.64	70.40	19.47		150.0	
10167- CAD	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	X	4.28	73.01	19.82	3.01	150.0	±9.6 %
		Y	3.94	71.46	19.05		150.0	
		Z	4.73	74.34	20.28		150.0	-

EX3DV4—SN:3930 July 26, 2017

10168- CAD	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	X	4.88	75.83	21.41	3.01	150,0	± 9.6 %
		Y	4.44	74.13	20.63		150.0	
		Z	5.44	77.36	21.91		150.0	
10169- CAC	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	X	2.85	69.01	18.94	3.01	150.0	± 9.6 %
		Y	2.74	67.56	18.10		150.0	
		Z	3.13	70.29	19.43		150.0	
10170- CAC	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	X	4.01	75.69	21.63	3.01	150.0	± 9.6 %
		Y	3.58	72.93	20.34	-	150.0	
	vertex excess excess	Z	4.93	78.73	22.65		150.0	
10171- AAC	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	Х	3.21	70.97	18.56	3.01	150.0	± 9.6 %
		Y	2.96	68.95	17.54		150.0	
		Z	3.78	73.14	19.33		150.0	
10172- CAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	X	11.64	99.70	31.90	6.02	65.0	± 9.6 %
		Y	6.31	86.23	27.05		65.0	
		Z	19.09	108.21	34.23		65.0	
10173- CAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	X	81.65	130.61	37.97	6.02	65.0	± 9.6 %
		Y	14.18	98.21	29.17		65.0	
77-1	THE THE RESERVE AND THE PROPERTY OF	Z	100.00	132.05	37.94		65.0	
10174- CAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	X	35.41	113.54	33.00	6.02	65.0	± 9.6 %
		Y	10.88	92.45	26.81		65.0	
	The second secon	Z	73.87	124.65	35.53	100	65.0	
10175- CAD	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	X	2.82	68.68	18.68	3.01	150.0	± 9.6 9
		Y	2.71	67.27	17.86		150.0	
		Z	3.09	69.93	19.16		150.0	
10176- CAD	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	×	4.02	75.71	21.64	3.01	150.0	± 9.6 %
		Y	3.59	72.95	20.35		150.0	
		Z	4.94	78.76	22.66	DE TOTAL	150.0	
10177- CAF	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	X	2.84	68.84	18.77	3.01	150.0	± 9.6 %
		Y	2.72	67.40	17.94		150.0	
	The second secon	Z	3.12	70.10	19.25		150.0	
10178- CAD	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16- QAM)	×	3.98	75.49	21.52	3.01	150.0	± 9.6 %
		Y	3,56	72.79	20.26		150.0	-
		Z	4.88	78.50	22.53	100	150.0	
10179- CAD	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	×	3.57	73.19	19.96	3.01	150.0	± 9.6 %
		Y	3.23	70.79	18.80		150.0	
		Z	4.29	75.74	20.83		150.0	
10180- CAD	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 64- QAM)	X	3.20	70.90	18.51	3.01	150.0	± 9.6 %
	1	Y	2.95	68.90	17.50		150.0	T
12.71		Z	3.76	73.06	19.28		150.0	Hara to
10181- CAC	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	X	2.84	68.82	18.77	3.01	150.0	± 9.6 %
		Y	2.72	67.38	17.94		150.0	1
		Z	3.11	70.08	19.25		150.0	1
10182- CAC	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	X	3,97	75.46	21.51	3.01	150.0	± 9.6 %
		Y	3.55	72.76	20.24	1	150.0	
	disease district and the second	Z	4.87	78.47	22.52		150.0	11.7
10183- AAB	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	Х	3.19	70.87	18.50	3.01	150.0	± 9.6 %
		Y	2.95	68.88	17.49		150.0	
		1	2.90	00.00	17.49		150.0	

EX3DV4- SN:3930 July 26, 2017

10185- CAD 10186- AAD 10187- CAD 10188- CAD 10189- AAD 10193- CAB	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM) LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM) LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK) LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM) LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM) LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	Y Z X Y Z X Y Z X Y Z X X Y Z X X Y Z X X Y Z X X Y Z X X Y Z X X Y Z X X Y Z X X X Y Z X X X Y Z X X X X	2.73 3.12 3.99 3.57 4.90 3.21 2.96 3.78 2.86 2.74 3.13 4.13 3.67 5.10 3.29	67.42 70.12 75.54 72.83 78.56 70.94 68.94 73.11 68.93 67.49 70.20 76.28 73.44 79.43 71.41	17.96 19.27 21.55 20.28 22.56 18.54 17.52 19.31 18.86 18.03 19.34 21.96	3.01	150.0 150.0 150.0 150.0 150.0 150.0 150.0 150.0 150.0 150.0	±9.6 % ±9.6 %
10186- AAD 10187- CAD 10188- CAD 10188- CAD 10189- AAD 10193- CAB 10194- CAB 10196- CAB 10197- CAB 10198- CAB	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM) LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK) LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM) LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM) LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	Z X Y Z X Y Z X Y Z X Y Z X Y Z X	3.12 3.99 3.57 4.90 3.21 2.96 3.78 2.86 2.74 3.13 4.13 3.67 5.10 3.29	70.12 75.54 72.83 78.56 70.94 68.94 73.11 68.93 67.49 70.20 76.28 73.44 79.43	19.27 21.55 20.28 22.56 18.54 17.52 19.31 18.86 18.03 19.34 21.96	3.01	150.0 150.0 150.0 150.0 150.0 150.0 150.0 150.0 150.0 150.0	±9,6 % ±9.6 %
10186- AAD 10187- CAD 10188- CAD 10188- CAD 10193- CAB 10194- CAB 10196- CAB 10197- CAB 10198- CAB	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM) LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK) LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM) LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM) LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	X Y Z X Y Z X Y Z X Y Z X Y Z X	3.99 3.57 4.90 3.21 2.96 3.78 2.86 2.74 3.13 4.13 3.67 5.10 3.29	75.54 72.83 78.56 70.94 68.94 73.11 68.93 67.49 70.20 76.28 73.44 79.43	21.55 20.28 22.56 18.54 17.52 19.31 18.86 18.03 19.34 21.96	3.01	150.0 150.0 150.0 150.0 150.0 150.0 150.0 150.0 150.0	±9,6 % ±9.6 %
10186- AAD 10187- CAD 10188- CAD 10189- AAD 10193- CAB 10194- CAB 10196- CAB 10197- CAB 10198- CAB	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM) LTE-FDD (SC-FDMA, 1 RB, 1,4 MHz, QPSK) LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM) LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	Z X Y Z X Y Z X Y Z X Y Z X	4.90 3,21 2.96 3.78 2.86 2.74 3.13 4.13 3.67 5.10 3.29	78.56 70.94 68.94 73.11 68.93 67.49 70.20 76.28 73.44 79.43	22.56 18.54 17.52 19.31 18.86 18.03 19.34 21.96	3.01	150.0 150.0 150.0 150.0 150.0 150.0 150.0	±9.6 %
10187- CAD 10188- CAD 10189- AAD 10193- CAB 10194- CAB 10195- CAB 10196- CAB 10197- CAB 10198- CAB	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK) LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM) LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	X Y Z X Y Z X Y Z X Y Z X	3,21 2,96 3,78 2,86 2,74 3,13 4,13 3,67 5,10 3,29	70.94 68.94 73.11 68.93 67.49 70.20 76.28 73.44 79.43	18.54 17.52 19.31 18.86 18.03 19.34 21.96	3.01	150.0 150.0 150.0 150.0 150.0	± 9.6 %
10187- CAD 10188- CAD 10189- AAD 10193- CAB 10194- CAB 10195- CAB 10196- CAB 10197- CAB 10198- CAB	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK) LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM) LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	X Y Z X Y Z X Y Z X Y Z X	3,21 2,96 3,78 2,86 2,74 3,13 4,13 3,67 5,10 3,29	70.94 68.94 73.11 68.93 67.49 70.20 76.28 73.44 79.43	17.52 19.31 18.86 18.03 19.34 21.96	3.01	150.0 150.0 150.0 150.0	± 9.6 %
10187- CAD 10188- CAD 10188- CAD 10193- CAB 10194- CAB 10195- CAB 10196- CAB 10197- CAB 10198- CAB	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK) LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM) LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	Z X Y Z X Y Z X	3.78 2.86 2.74 3.13 4.13 3.67 5.10 3.29	73.11 68.93 67.49 70.20 76.28 73.44 79.43	19.31 18.86 18.03 19.34 21.96	04	150.0 150.0 150.0 150.0	
10188- CAD 10189- AAD 10193- CAB 10194- CAB 10195- CAB 10196- CAB 10197- CAB 10198- CAB	QPSK) LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM) LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM) IEEE 802.11n (HT Greenfield, 6.5 Mbps,	Z X Y Z X Y Z X	3.78 2.86 2.74 3.13 4.13 3.67 5.10 3.29	73.11 68.93 67.49 70.20 76.28 73.44 79.43	19.31 18.86 18.03 19.34 21.96	04	150.0 150.0 150.0 150.0	
10188- CAD 10189- AAD 10193- CAB 10194- CAB 10195- CAB 10196- CAB 10197- CAB 10198- CAB	QPSK) LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM) LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM) IEEE 802.11n (HT Greenfield, 6.5 Mbps,	X Y Z X Y Z X Y Z X	2.86 2.74 3.13 4.13 3.67 5.10 3.29	68.93 67.49 70.20 76.28 73.44 79.43	18.86 18.03 19.34 21.96	04	150.0 150.0 150.0	
10188- CAD 10189- AAD 10193- CAB 10194- CAB 10195- CAB 10196- CAB 10197- CAB 10198- CAB	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM) LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM) IEEE 802.11n (HT Greenfield, 6.5 Mbps,	Z X Y Z X	3.13 4.13 3.67 5.10 3.29	70.20 76.28 73.44 79.43	19.34 21.96 20.65	3.01	150.0	
10189- AAD 10193- CAB 10194- CAB 10195- CAB 10196- CAB 10197- CAB 10198- CAB	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM) IEEE 802.11n (HT Greenfield, 6.5 Mbps,	X Y Z X Y Z	4.13 3.67 5.10 3.29	76.28 73.44 79.43	21.96 20.65	3.01		
10189- AAD 10193- CAB 10194- CAB 10195- CAB 10196- CAB 10197- CAB 10198- CAB	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM) IEEE 802.11n (HT Greenfield, 6.5 Mbps,	X Y Z X Y Z	4.13 3.67 5.10 3.29	76.28 73.44 79.43	21.96 20.65	3.01		10.4 4 4 4 4
10189- AAD 10193- CAB 10194- CAB 10195- CAB 10196- CAB 10197- CAB 10198- CAB	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM) IEEE 802.11n (HT Greenfield, 6.5 Mbps,	X X Y Z	5.10 3.29	79.43			150.0	± 9.6 %
10193- CAB 10194- CAB 10195- CAB 10196- CAB 10197- CAB 10198- CAB	IEEE 802.11n (HT Greenfield, 6.5 Mbps,	X X Y Z	5.10 3.29	79.43		-	150.0	
10193- CAB 10194- CAB 10195- CAB 10196- CAB 10197- CAB 10198- CAB	IEEE 802.11n (HT Greenfield, 6.5 Mbps,	X Y Z	3.29		23.01		150.0	
10193- CAB 10194- CAB 10195- CAB 10196- CAB 10197- CAB 10198- CAB	IEEE 802.11n (HT Greenfield, 6.5 Mbps,	Y	G.EO		18.84	3.01	150.0	± 9.6 %
10194- CAB 10195- CAB 10196- CAB 10197- CAB 10198- CAB		Z	4 (11.7)	69.31	17.78	0.01	150.0	2 0.0 70
10194- CAB 10195- CAB 10196- CAB 10197- CAB 10198- CAB			3.02	73.65	19.63		150.0	
10194- CAB 10195- CAB 10196- CAB 10197- CAB 10198- CAB	Bron)		4.51	67.12	16.43	0.00	150.0	± 9.6 %
10195- CAB 10196- CAB 10197- CAB 10198- CAB		Y	4.41	66.65	16.03		150.0	
10195- CAB 10196- CAB 10197- CAB 10198- CAB		Z	4.47	66.79	16.14		150.0	
10195- CAB 10196- CAB 10197- CAB 10198- CAB	IEEE 802.11n (HT Greenfield, 39 Mbps, 16-QAM)	X	4.67	67.40	16.55	0.00	150.0	± 9.6 %
10196- CAB 10197- CAB 10198- CAB	10 02 111	Y	4.56	66.90	16.16		150.0	
10196- CAB 10197- CAB 10198- CAB		Z	4.63	67.07	16.27		150.0	
10196- CAB 10197- CAB 10198- CAB	IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM)	X	4.71	67.43	16.57	0.00	150.0	± 9.6 %
10197- CAB 10198- CAB 10219-	S-1 St 111/	Y	4.59	66.92	16.18		150.0	
10197- CAB 10198- CAB 10219-		Z	4.66	67.10	16.29		150.0	
10197- CAB 10198- CAB	IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK)	X	4.51	67.16	16.44	0.00	150.0	±9.6 %
10198- CAB		Y	4.40	66.66	16.02		150.0	
10198- CAB		Z	4.46	66.83	16.15		150.0	
10198- CAB	IEEE 802.11n (HT Mixed, 39 Mbps, 16- QAM)	X	4.68	67.42	16.56	0.00	150.0	±9.6 %
10219-		Y	4.56	66.91	16.17		150.0	
10219-		Z	4.64	67.09	16.28		150.0	
10219-	IEEE 802.11n (HT Mixed, 65 Mbps, 64- QAM)	X	4.71	67.44	16.58	0.00	150.0	±9.6 %
		Y	4.59	66.93	16.18		150.0	
		Z	4.66	67.11	16.30		150.0	
	IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK)	X	4.46	67.20	16.42	0.00	150.0	± 9.6 %
		Y	4.35	66.68	15.99		150.0	
		Z	4.41	66.85	16.12	1	150.0	
10220- CAB	IEEE 802.11n (HT Mixed, 43.3 Mbps, 16- QAM)	X	4.67	67.38	16.55	0.00	150.0	± 9.6 %
		Y	4.56	66.87	16.15		150.0	
		Z	4.63	67.05	16.27	4.5	150.0	
10221- CAB			4.72	67.36	16.56	0.00	150.0	±9.6 %
	IEEE 802.11n (HT Mixed, 72.2 Mbps, 64-QAM)	Y	4.60	66.87	16.17		150.0	
-		Z	4.67	67.04	16.28		150.0	
10222- CAB		4	5.04	67.44	16.62	0.00	150.0	±9,6 %
		X					150.0	
	IEEE 802.11n (HT Mixed, 15 Mbps,		4.96	66.99	16.30		150.0	

EX3DV4- SN:3930 July 26, 2017

10223- CAB	IEEE 802.11n (HT Mixed, 90 Mbps, 16- QAM)	X	5.33	67.63	16.73	0.00	150.0	± 9.6 %
		Y	5.24	67.19	16.42		150.0	
		Z	5.30	67.37	16.50		150.0	
10224- CAB	IEEE 802.11n (HT Mixed, 150 Mbps, 64- QAM)	X	5.09	67.56	16.61	0.00	150.0	± 9.6 %
		Y	5.00	67.10	16.29		150.0	
		Z	5.05	67.27	16.36		150.0	
10225- CAB	UMTS-FDD (HSPA+)	X	2.85	67.23	15.91	0.00	150.0	± 9.6 %
		Y	2.68	65.99	14.87		150.0	_
		Z	2.76	66.40	15.30		150.0	-
10226- CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	X	100.00	134.64	39.04	6.02	65.0	± 9.6 %
		Y	15.50	99.99	29.80		65.0	
		Z	100.00	132.31	38.10		65.0	
10227- CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	X	89.98	129.81	37.07	6.02	65.0	± 9.6 %
		Y	15.57	98.63	28.75		65.0	
		Z	100.00	129.61	36.69		65.0	
10228-	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz,	X	22.76	113.67	36.12	6.02	65.0	±9.69
CAA	QPSK)	Ŷ		91.55		0.02	Gire?	± 8.0 7
			8.10		29.00		65.0	-
10229-	LITE TOD (SC FOMA 4 DR 24M) 40	Z	34.50	120.43	37.70	0.00	65.0	1000
CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16- QAM)	×	82.62	130.81	38.03	6.02	65.0	±9.6 9
_		Υ	14.30	98.35	29.21		65.0	
10000	175 700 (00 501)	Z	100.00	132.04	37.95	1	65.0	
10230- CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64- QAM)	X	73.67	126.07	36.09	6.02	65.0	± 9.6 %
		Y	14.23	96,95	28.16		65.0	
		Z	100.00	129.44	36.58		65.0	100
10231- CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	Х	20.71	111.58	35.44	6.02	65.0	±9.6 %
		Y	7.71	90.47	28.55		65.0	
		Z	30.95	118.05	36.97		65.0	Commercial
10232- CAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16- QAM)	X	82.54	130.81	38.03	6.02	65.0	± 9.6 %
		Y	14.28	98.32	29.21		65.0	
		Z	100.00	132.06	37.95		65.0	
10233- CAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64- QAM)	Х	73.30	126.00	36,07	6.02	65.0	±9.6 %
		Y	14.18	96.90	28.15		65.0	
		Z	100.00	129.45	36.58		65.0	1
10234- CAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	X	19.21	109.78	34.79	6.02	65,0	± 9.6 %
		Y	7.42	89.56	28.12		65.0	
		Z	28.31	115.96	36.27		65.0	
10235- CAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	Х	83.09	130.95	38.07	6.02	65,0	± 9.6 %
		Y	14.29	98.36	29.22		65.0	
		Z	100.00	132.07	37.96		65.0	
10236- CAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	Х	75.41	126.45	36.17	6.02	65.0	± 9.6 %
		Y	14.36	97.08	28.20		65.0	
		Z	100.00	129.40	36.56		65.0	
10237- CAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	Х	20.84	111.74	35.49	6.02	65.0	± 9.6 %
		Y	7.71	90.51	28.56		65.0	
		Z	31.21	118.26	37.03		65.0	
10238- CAC	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	X	82.49	130.82	38.03	6.02	65.0	± 9.6 %
	3. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2.	Y	14.24	98.30	29.20		65.0	
			1 1 4 100 1	4-100	- www.			

EX3DV4- SN:3930 July 26, 2017

10239-	LTE-TDD (SC-FDMA, 1 RB, 15 MHz,	Х	72.98	125.95	36.06	6.02	65.0	± 9.6 %
CAC	64-QAM)		44.40	00.05	20.44		65.0	
		Z	14.12	96.85 129.48	28.14 36.59		65.0	
10240- CAC	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	X	20.77	111.69	35.47	6,02	65.0	± 9.6 %
0/10	a siy	Y	7.70	90.48	28.55		65.0	
		Z	31.11	118.21	37.01		65.0	1.00
10241- CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	Х	9.67	86.02	27.48	6.98	65.0	± 9.6 %
		Y	8.34	82.75	26.06		65.0	
		Z	11.45	88.99	28.49		65.0	
10242- CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	Х	8.24	82.61	26.07	6.98	65.0	± 9.6 %
	1-21	Y	7.55	80.70	25.17		65.0	
		Z	9.88	85.88	27.26	100	65.0	
10243- CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	X	6.30	77.89	25.05	6.98	65.0	±9.6 %
		Υ	5.98	76.58	24.31	-	65.0	
		Z	7.19	80.31	26.01	70.00	65.0	
10244- CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	×	8.63	81.55	20.39	3.98	65.0	± 9.6 %
		Y	5.64	74.67	17.26		65.0	
		Z	9.19	81.68	20.37		65.0	
10245- CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	X	8.00	80.12	19.81	3.98	65.0	± 9.6 %
		Υ	5.39	73.76	16.82		65.0	-
		Z	8.56	80.34	19.82	0.00	65.0	. 0 0 0/
10246- CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	X	18.63	97.78	26.34	3.98	65.0	± 9.6 %
		Υ	6.44	80.36	20.03		65.0	
		Z	11.95	89.50	23.51		65.0	
10247- CAC	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	X	7.43	80.73	21.39	3.98	65.0	± 9.6 %
		Y	5.32	74.70	18.44		65.0	
10248- CAC	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	X	7.01 6.95	78.79 79.12	20.41	3.98	65.0 65.0	± 9.6 %
CAC	04-QAIVI)	Υ	5.15	73.72	18.00		65.0	
		Z	6.69	77.57	19.90		65.0	
10249- CAC	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	X	21.73	102.12	28.84	3.98	65.0	± 9.6 %
	2.310	Y	8.49	85.50	23.07		65.0	
	Carata and Laborator In	Z	14.93	94.32	26.17		65.0	
10250- CAC	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	X	8.08	82.63	23.96	3.98	65.0	± 9.6 %
		Y	6.42	77.94	21.75		65.0	
		Z	7.98	81.42	23.23		65.0	
10251- CAC	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	Х	7.09	78.80	22.04	3.98	65.0	± 9.6 %
		Y	5.86	75.03	20.13	4	65.0	
		Z	7.14	78.09	21,53		65.0	
10252- CAC	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	X	13.90	94.66	27.76	3.98	65.0	± 9.6 %
		Y	8.17	84.54	23.98		65.0	
		Z	12.05	90.77	26.17		65.0	
10253- CAC	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	×	6.81	77.00	21.71	3.98	65.0	± 9.6 %
-		Y	5.93	74.14	20.21		65.0	
		Z	6.96	76.68	21.36		85.0	
10254- CAC	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	×	7.26	78.10	22.47	3.98	65.0	± 9.6 %
		Y	6.33	75.23	21.00		65.0	
		Z	7.41	77.74	22.11		65.0	

EX3DV4- SN:3930 July 26, 2017

10255- CAC	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	х	9.31	85.32	24.81	3.98	65.0	± 9.6 %
		Y	7.05	79.83	22,50		65.0	
		Z	9.02	83.71	23.96	1	65.0	
10256- CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	Х	5.69	74.67	16.55	3.98	65.0	± 9.6 %
		Y	3.89	69.11	13.66		65.0	
	The second secon	Z	6.22	75.16	16.73		65.0	
10257- CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	Х	5.22	73.12	15.81	3.98	65.0	± 9.6 %
		Y	3.72	68.22	13.13		65.0	
		Z	5.73	73.68	16.03		65.0	
10258- CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	X	9.96	86.48	21.68	3.98	65.0	± 9.6 %
		Y	4.13	73.03	16.06		65.0	-
	The second secon	Z	7.28	80.82	19.52	The state of	65.0	
10259- CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	X	7.71	81.48	22,33	3.98	65.0	± 9.6 %
		Y	5.78	76.03	19.69		65.0	-
		Z	7.42	79.83	21.44		65.0	
10260- CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	Х	7.53	80.71	22.02	3.98	65.0	±9.6 %
	A Table	Y	5.75	75.59	19.50		65.0	
		Z	7.30	79.22	21.20		65.0	
10261- CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	Х	15.17	96.18	27.57	3.98	65.0	± 9.6 %
		Y	7.78	83.92	23.01		65.0	
		Z	12.21	91.04	25.60		65.0	
10262- CAC	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	X	8.05	82.54	23.90	3.98	65.0	± 9.6 %
		Y	6.39	77.84	21.69		65.0	
		Z	7.96	81.33	23.17		65.0	
10263- CAC	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	Х	7.07	78.77	22.03	3.98	65.0	± 9.6 %
		Y	5.85	75.01	20.12		65.0	
		Z	7.12	78.06	21.52		65.0	
10264- CAC	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	Х	13.62	94.25	27.60	3.98	65.0	± 9.6 %
		Y	8.06	84.25	23.85		65.0	
		Z	11.85	90.44	26.03		65.0	
10265- CAC	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	X	6.99	77.67	22.02	3.98	65.0	± 9.6 %
		Y	6.03	74.58	20.48		65.0	
		Z	7.14	77.28	21.66	4	65.0	
10266- CAC	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	X	7.49	78.85	22.87	3.98	65.0	± 9.6 %
		Y	6.48	75.81	21.37		65.0	
		Z	7.63	78.44	22.49		65.0	7.7.
10267- CAC	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	X	10.13	86.55	25.04	3.98	65.0	± 9.6 %
C. V. C.		Y	7.43	80.58	22.63		65.0	
		Z	9.63	84.62	24.09		65.0	
10268- CAC	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	X	7.40	76.77	22.05	3.98	65.0	± 9.6 %
		Y	6.63	74.41	20.87		65.0	
		Z	7.60	76.62	21.80		65.0	177
10269- CAC	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	X	7.30	76.16	21.84	3.98	65.0	± 9.6 %
		Y	6.61	73.98	20.72	[65.0	
		Z	7.51	76.08	21.62		65.0	
10270- CAC	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	Х	8.33	80.69	22.98	3.98	65.0	± 9.6 %
		Y	6.98	77.17	21.43		65.0	
		Z	8.31	79.84				

EX3DV4- SN:3930 July 26, 2017

10274- CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.10)	X	2.69	67.96	16.04	0.00	150.0	± 9.6 %
		Υ	2.50	66.44	14.86		150.0	
		Z	2.58	66.90	15.30		150.0	
10275- CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.4)	X	1.89	71.54	17.59	0.00	150.0	± 9.6 %
		Υ	1.50	67.06	14.93	-	150.0	
		Z	1.62	68.41	15.79	1	150.0	
10277-	PHS (QPSK)	X	2.20	61.99	7.39	9.03	50.0	±9.6 %
CAA	(3.7.3)	Υ	2.25	62.04	7.58		50.0	
		Z	2.54	62.86	8.21		50.0	
10278-	PHS (QPSK, BW 884MHz, Rolloff 0.5)	X	11.72	85.68	20.59	9.03	50.0	± 9.6 %
CAA	1 710 (Q1 SIX, BVV 004IVII 12, IXSIISII 0.0)	Y	5.21		15.97	5,00	50.0	2 5.0 70
		Z		73.63 81.76	19.46		50.0	_
10070	DUC (ODCK DW 99414) - D-11-# 9 391		9.14			0.02		+000
10279- CAA	PHS (QPSK, BW 884MHz, Rolloff 0.38)	X	11.89	85.89	20.73	9.03	50.0	±9.6 %
		Υ	5.30	73.84	16.11		50.0	
		Z	9.28	81.96	19.59		50.0	
10290- AAB	CDMA2000, RC1, SO55, Full Rate	×	2.55	77.51	17.57	0.00	150.0	±9.6 %
		Y	1.11	66.19	11.94		150.0	
		Z	1.43	69.23	13.91		150.0	
10291- AAB	CDMA2000, RC3, SO55, Full Rate	Х	1.39	74.07	16.28	0.00	150.0	±9.6 %
		Υ	0.70	64.23	10.87		150.0	
		Z	0.83	66.42	12.53		150.0	
10292- AAB	CDMA2000, RC3, SO32, Full Rate	Х	9.82	102.29	25.87	0.00	150.0	±9.6 %
		Y	0.89	68.01	13.15		150.0	
		Z	1.24	72.67	15.80		150.0	
10293- AAB	CDMA2000, RC3, SO3, Full Rate	Х	100.00	138.23	35.17	0.00	150.0	±9.6 %
		Y	1.51	75.03	16.60		150.0	
		Z	2.84	84.41	20.67		150.0	
10295- AAB	CDMA2000, RC1, SO3, 1/8th Rate 25 fr.	Х	27.33	105.84	30.81	9.03	50.0	± 9.6 %
14.54		Y	18.18	96.31	27.25		50.0	
		Z	19.90	99.06	28.68		50.0	
10297- AAB	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	X	2.99	71.99	17.93	0.00	150.0	± 9.6 %
-		Y	2.55	68.87	16.22		150.0	
		Z	2.72	69.95	16.77		150.0	
10298- AAC	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	X	2.01	72.44	16.26	0.00	150.0	± 9.6 %
	2 1	Y	1,27	65.63	12.31		150.0	
		Z	1,51	67.87	13.91		150.0	
10299- AAC	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	X	2.57	69.98	13.97	0.00	150.0	± 9.6 %
		Y	1.86	65.75	11.46		150.0	
		Z	2.76	70.20	13.95		150.0	
					1 .0.00	-		
10300- AAC	LTE-FDD (SC-FDMA, 50% RB, 3 MHz,	X	1.73	64.40	10.56	0.00	150.0	± 9.6 %
10300- AAC	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	X	1.73		9.11	0.00	150.0	±9.6 %
AAC		X	1.73	64.40	7/3/7/	0.00		±9.6 %
		X	1.73	64.40	9.11	4.17	150.0	
10301-	64-QAM) IEEE 802.16e WIMAX (29:18, 5ms,	X Y Z	1.73 1.47 1.87	62.59 64.77 66.72	9.11 10.68 18.02		150.0 150.0 50.0	
10301-	64-QAM) IEEE 802.16e WIMAX (29:18, 5ms,	X Y Z X	1.73 1.47 1.87 4.92 4.65	64.40 62.59 64.77 66.72 65.76	9.11 10.68 18.02		150.0 150.0 50.0	± 9.6 %
10301- AAA 10302-	IEEE 802.16e WIMAX (29:18, 5ms, 10MHz, QPSK, PUSC)	X Y Z X	1.73 1.47 1.87 4.92	62.59 64.77 66.72	9.11 10.68 18.02		150.0 150.0 50.0	
10301- AAA	64-QAM) IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC)	X Y Z X	1.73 1.47 1.87 4.92 4.65 5.01	64.40 62.59 64.77 66.72 65.76 66.93	9.11 10.68 18.02 17.35 18.03	4.17	150.0 150.0 50.0 50.0 50.0	± 9.6 %



EX3DV4- SN:3930 July 26, 2017

10303- AAA	IEEE 802.16e WIMAX (31:15, 5ms, 10MHz, 64QAM, PUSC)	X	5.06	66.56	18.33	4.96	50.0	±9.6 %
		Υ	4.93	66.03	17.83		50.0	
		Z	5.12	66.63	18.26		50.0	
10304- AAA	IEEE 802.16e WIMAX (29:18, 5ms, 10MHz, 64QAM, PUSC)	X	4,88	66.48	17,86	4.17	50.0	± 9.6 %
		Υ	4.73	65.90	17.33		50.0	-
		Z	4.92	66.45	17.72		50.0	
10305- AAA	IEEE 802.16e WIMAX (31:15, 10ms, 10MHz, 64QAM, PUSC, 15 symbols)	X	4.68	69.38	20.33	6.02	35.0	± 9.6 %
		Y	4.66	69.11	19.71	-	35.0	
		Z	4.92	70.15	20.56		35.0	
10306- AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 64QAM, PUSC, 18 symbols)	×	4.88	67.84	19.71	6.02	35.0	± 9.6 %
		Y	4.84	67.64	19.25		35.0	
		Z	5.02	68.29	19.83		35.0	
10307- AAA	IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, QPSK, PUSC, 18 symbols)	×	4.79	68,06	19.71	6.02	35.0	±9.6 %
		Y	4.74	67.80	19.21		35.0	
		Z	4.95	68.57	19.84		35.0	
10308- AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, PUSC)	X	4.79	68.35	19.89	6.02	35.0	±9.6 %
		Y	4.74	68.07	19.38		35.0	-
		Z	4.96	68.89	20.04		35.0	
10309- AAA	IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, 16QAM, AMC 2x3, 18 symbols)	X	4.92	68.02	19.84	6.02	35.0	± 9.6 9
		Y	4.86	67.74	19.35		35.0	
		Z	5.07	68.47	19.96		35.0	
10310- AAA	IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, QPSK, AMC 2x3, 18 symbols)	X	4.84	67.95	19,71	6.02	35.0	± 9.6 %
		Y	4.80	67.75	19.26		35.0	
		Z	4.99	68.43	19.84		35.0	
10311- AAB	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	X	3.38	71.09	17.45	0.00	150.0	± 9.6 %
		Y	2.91	68.21	15.92		150.0	
		Z	3.09	69.24	16.41		150.0	
10313- AAA	IDEN 1:3	×	29.79	102.17	25.80	6.99	70.0	± 9,6 %
		Y	6.70	82.11	20.08		70.0	
		Z	13.51	90.09	22.33		70.0	
10314- AAA	IDEN 1:6	Х	100.00	132.14	37.01	10.00	30.0	± 9.6 %
		Y	12.30	96.44	27.92		30.0	
		Z	39.07	114.28	32.48		30.0	
10315- AAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 96pc duty cycle)	Х	1.17	65.90	16.81	0.17	150.0	± 9.6 9
		Y	1.10	63.55	14.86		150.0	
		Z	1.13	64.47	15.57		150.0	-
10316- AAB	IEEE 802.11g WiFi 2.4 GHz (ERP- OFDM, 6 Mbps, 96pc duty cycle)	X	4.57	67.20	16.62	0.17	150.0	±9.6 %
1,5.75		Υ	4.46	66.69	16.19		150.0	
		Z	4.54	66.90	16.34		150.0	
10317- AAB	IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle)	X	4.57	67.20	16.62	0.17	150.0	± 9.6 %
		Y	4.46	66.69	16.19		150.0	
		Z	4.54	66.90	16.34		150.0	
10400- AAC	IEEE 802.11ac WiFi (20MHz, 64-QAM, 99pc duty cycle)	X	4.65	67.44	16.54	0.00	150.0	± 9.6 %
		Y	4.52	66.90	16.13		150.0	
		Z	4.60	67.10	16.26		150.0	
10401- AAC	IEEE 802.11ac WiFi (40MHz, 64-QAM, 99pc duty cycle)	X	5.31	67.36	16.56	0.00	150.0	± 9.6 9
7 2 10		1 32	5.00	00.00	40.04		450.0	
		Y	5.20	66.85	16.21		150.0	

EX3DV4- SN:3930 July 26, 2017

10402-	IEEE 802.11ac WiFi (80MHz, 64-QAM,	X	5.60	67.77	16.63	0.00	150.0	±9.6 %
AAC	99pc duty cycle)	1	1,555	1 21 C. C.	77.57.5	00000	355,195 10	
		Y	5.52	67.35	16.35		150.0	
		Z	5.57	67.52	16.41		150.0	
10403- AAB	CDMA2000 (1xEV-DO, Rev. 0)	X	2.55	77.51	17.57	0.00	115.0	± 9.6 %
		Y	1.11	66.19	11.94		115.0	
1000		Z	1.43	69.23	13.91		115.0	
10404- AAB	CDMA2000 (1xEV-DO, Rev. A)	X	2.55	77.51	17.57	0.00	115.0	± 9.6 %
		Y	1.11	66.19	11.94		115.0	
41 4 7		Z	1.43	69.23	13.91		115.0	
10406- AAB	CDMA2000, RC3, SO32, SCH0, Full Rate	х	100.00	121.94	30.15	0.00	100.0	± 9.6 %
	The second secon	Y	54.91	111.96	27.35		100.0	
		Z	100.00	117.01	28,11		100.0	
10410- AAB	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	125.45	31.76	3.23	80.0	±9.6 %
		Y	100.00	125.36	31.73		80.0	
		Z	100.00	123.08	30.95		80.0	
10415- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle)	X	1.06	64.63	16.00	0.00	150.0	±9.6 %
		Y	1.02	62.69	14.25		150.0	
-	A A TOTAL OF THE PARTY OF THE P	Z	1.03	63.30	14.80		150.0	
10416- AAA	IEEE 802.11g WiFi 2.4 GHz (ERP- OFDM, 6 Mbps, 99pc duty cycle)	X	4.51	67.14	16.50	0.00	150.0	± 9.6 %
		Y	4.40	66.65	16.10		150.0	
		Z	4.47	66.81	16.21		150.0	
10417- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 99pc duty cycle)	X	4.51	67.14	16.50	0.00	150.0	± 9.6 %
		Y	4.40	66.65	16.10		150.0	
		Z	4.47	66.81	16.21		150.0	
10418- AAA	IEEE 802.11g WIFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 99pc duty cycle, Long preambule)	X	4.51	67.34	16.55	0.00	150.0	±9.6 %
	p. according to	Y	4.40	66.84	16.14		150.0	
		Z	4.46	67.00	16.25		150.0	
10419- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 99pc duty cycle, Short preambule)	×	4.52	67.27	16.54	0.00	150.0	± 9.6 %
	P. San	Y	4.42	66.77	16.13		150.0	
		Z	4.48	66.94	16.24		150.0	1
10422- AAA	IEEE 802.11n (HT Greenfield, 7.2 Mbps. BPSK)	X	4.63	67.24	16.53	0.00	150.0	± 9.6 %
-		Y	4.52	66.76	16.15		150.0	-
		Z	4.59	66.92	16.25	-	150.0	
10423- AAA	IEEE 802.11n (HT Greenfield, 43.3 Mbps, 16-QAM)	X	4.78	67.53	16.63	0.00	150.0	± 9.6 %
		Y	4.66	67.02	16.24		150.0	
_		Z	4.74	67.20	16.35		150.0	
10424-	IEEE 802.11n (HT Greenfield, 72.2	X	4.71	67.49	16.61	0.00	150.0	± 9.6 %
AAA	Mbps, 64-QAM)	Y	4.59	66.98	16.22	2.00	150.0	- 2.0 /4
		Z	4.66	67.16	16.33		150.0	
10425- AAA	IEEE 802.11n (HT Greenfield, 15 Mbps, BPSK)	X	5.29	67.61	16.70	0.00	150.0	±9.6 %
	1-:-14	Y	5.20	67.21	16.41		150.0	
-		Z	5.25	67.35	16.46		150.0	
		-	0.20					
10426- AAA	IEEE 802.11n (HT Greenfield, 90 Mbps,	X	5.30	67.67	16,72	0.00	150.0	± 9.6 %
10426- AAA	IEEE 802.11n (HT Greenfield, 90 Mbps, 16-QAM)	X	5.30	67.67	16.72	0.00	150.0	±9.6 %



EX3DV4- SN:3930 July 26, 2017

10427- AAA	IEEE 802.11n (HT Greenfield, 150 Mbps, 64-QAM)	X	5.30	67.61	16.69	0.00	150.0	±9.6 %
		Υ	5.20	67.12	16.36		150.0	
4 77		Z	5,27	67.34	16.45		150.0	
10430- AAA	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1)	X	4.57	73.13	19.26	0.00	150.0	± 9.6 %
		Y	4.25	71.86	18.29		150.0	
		Z	4.30	71.73	18.42		150.0	-
10431- AAA	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1)	X	4.19	67.88	16.57	0.00	150.0	± 9.6 %
-		Y	4.02	67.17	15.98		150.0	
		Z	4.13	67.40	16.19		150.0	
10432- AAA	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1)	X	4.48	67.62	16.60	0.00	150.0	± 9.6 %
		Y	4.35	67.04	16.14		150.0	
		Z	4.43	67.24	16.28		150.0	
10433- AAA	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1)	×	4.72	67.53	16.63	0.00	150.0	± 9.6 %
		Y	4.60	67.01	16.24		150.0	
		Z	4.68	67.19	16.35		150.0	
10434- W-6 AAA	W-CDMA (BS Test Model 1, 64 DPCH)	Х	4.85	74.62	19.43	0.00	150.0	± 9.6 %
		Y	4.36	72.77	18.16		150.0	
		Z	4.45	72.79	18.42		150.0	L. Territori
10435- AAB	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	×	100.00	125.20	31.64	3,23	80.0	± 9.6 %
		Y	100.00	125.11	31.61		80.0	
		Z	100.00	122.85	30.84		80.0	
10447- AAA	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	X	3.53	68.22	15.98	0.00	150.0	± 9.6 %
		Y	3.27	66.98	14.95		150.0	
		Z	3.41	67.43	15.42		150.0	+
10448- AAA	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, Clippin 44%)	X	4.04	67.68	16.45	0.00	150.0	± 9,6 %
1		Y	3.89	66.96	15.85		150.0	
		Z	3.98	67.19	16.06	-	150.0	
10449- AAA	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1, Cliping 44%)	X	4.31	67.48	16.52	0.00	150.0	±9.6 %
	1.5.	Y	4.18	66.87	16.04		150.0	
		Z	4.26	67.08	16.19		150.0	
10450- AAA	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	X	4.50	67.33	16.51	0.00	150.0	± 9.6 %
		Y	4.39	66.79	16.09		150.0	
		Z	4.46	66.98	16.21		150.0	1
10451- AAA	W-CDMA (BS Test Model 1, 64 DPCH, Clipping 44%)	X	3.42	68.46	15.57	0.00	150.0	±9.6 %
		Y	3.09	66.85	14.32		150.0	
Tarini. I	A TOTAL OF THE PARTY OF THE PAR	Z	3.28	67.52	14.94		150.0	
10456- AAA	IEEE 802.11ac WiFi (160MHz, 64-QAM, 99pc duty cycle)	X	6.17	68.15	16.83	0.00	150.0	± 9.6 %
		Y	6.14	67.85	16.62		150.0	
		Z	6.15	67.95	16.64		150.0	1127
10457- AAA	UMTS-FDD (DC-HSDPA)	Х	3.79	65.80	16.22	0.00	150.0	± 9.6 %
		Y	3.74	65.37	15.81		150.0	
		Z	3.77	65.49	15.93		150.0	110000
10458- AAA	CDMA2000 (1xEV-DO, Rev. B, 2 carriers)	Х	3.19	67.53	14.76	0.00	150.0	± 9.6 %
-		Y	2.84	65.80	13.33		150.0	1
		Z	3.06	66,68	14.17		150.0	172.7
10459- AAA	CDMA2000 (1xEV-DO, Rev. B, 3 carriers)	×	4.34	66.03	15.88	0.00	150.0	± 9.6 %
		Y	3.91	64,46	14.68		150.0	
		Z	4.11	64.97	15.22		150.0	

EX3DV4-SN:3930 July 26, 2017

10460- AAA	UMTS-FDD (WCDMA, AMR)	X	1.27	75.54	20.22	0.00	150.0	±9.6 %
		Υ	0.83	66.56	15:11		150.0	
		Z	0.92	68.82	16.54		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	132.60	35.03	3.29	80.0	±9.6 %
		Y	100.00	129.12	33.55		80.0	
		Z	100.00	129.87	34.06	Line of the	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	23.65	3.23	80.0	± 9.6 %
7		Y	3.50	73.92	14.70		80.0	
		Z	100.00	107.06	23.42	i nyelvo di l	80.0	
10463- AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	23.45	89.85	18.33	3.23	80.0	±9.6 %
		Υ	1.43	64.41	10.45		80.0	
5.00		Z	23.26	89.31	18,29		80.0	CHARLES AND ADDRESS OF THE PARTY.
10464- AAA	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	129.90	33,60	3.23	80.0	± 9.6 %
		Υ	96.78	125.96	32.03		80.0	
-		Z	100.00	127.32	32.71		80.0	
10465- AAA	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	107.18	23,25	3.23	80.0	± 9.6 %
		Υ	2.49	70.38	13.38		80.0	
		Z	100.00	106.32	23.07		80.0	
10466- AAA	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	×	5.37	76.40	14.60	3.23	80.0	± 9.6 %
	6 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	Y	1.29	63.36	9.93		80.0	
-0780		Z	7.20	78.43	15.29		80.0	
10467- AAB	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	Х	100.00	130.27	33.76	3.23	80.0	± 9.6 %
		Y	100.00	126.74	32.27		0.08	
		Z	100.00	127.65	32.86		80.0	
10468- AAB	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	Х	100.00	107.46	23.37	3.23	80.0	± 9.6 %
		Y	2.71	71.30	13,74		80.0	
		Z	100.00	106.56	23.18		80.0	
10469- AAB	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	×	5.59	76.77	14.71	3.23	80.0	± 9.6 %
		Y	1.30	63.41	9.95		80.0	
		Z	7.47	78.79	15.40		80.0	
10470- AAB	LTE-TOD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	130.32	33.77	3.23	80.0	±9.6 %
		Y	100.00	126.77	32,28		80.0	
		Z	100.00	127.69	32.87		80.0	
10471- AAB	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	107.37	23.33	3.23	80.0	± 9.6 %
		Y	2.68	71.19	13.69	500	80.0	
		Z	100.00	106.49	23.14		80.0	
10472- AAB	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	×	5.39	76.42	14.59	3.23	80.0	± 9.6 %
		Y	1.29	63.36	9,92		80.0	
		Z	7,28	78.52	15.30		80.0	
10473- AAB	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	×	100.00	130.28	33.76	3.23	80.0	± 9.6 %
		Y	100.00	126.74	32.26		80.0	
75.10		Z	100.00	127.65	32.85		80.0	0.000
10474- AAB	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	107.38	23.33	3.23	80.0	± 9.6 %
		Y	2.66	71.11	13.66		80.0	
		Z	100.00	106.49	23.14	100	80.0	
10475- AAB	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	×	5.28	76.25	14.54	3.23	80.0	± 9.6 %
		Y	1.28	63.34	9.91		80.0	
		Z	7.14	78.36	15.25		80.0	



EX3DV4- SN:3930 July 26, 2017

10477- AAB	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	107,11	23.21	3.23	80.0	± 9.6 %
		Y	2.49	70.42	13.38		80.0	
		Z	100.00	106.26	23.03		80.0	
10478- AAB	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	X	5.06	75.82	14.39	3.23	80.0	± 9.6 %
		Y	1.28	63.28	9.87		80.0	
		Z	6.87	77.99	15.13		80.0	
10479- AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	126.93	34.02	3.23	80.0	± 9.6 %
		Y	13.38	95.37	25.60		80.0	
		Z	94.85	124.77	33.35		80.0	-
10480- AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	115,10	28.45	3.23	80.0	± 9.6 %
		Y	10.61	85.67	20.42		80.0	
		Z	100.00	114.05	28.08	-	80.0	-
10481- AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	72.99	108.90	26.41	3.23	80.0	± 9.6 %
		Y	6.63	78.99	17.85		80.0	
		Z	50.22	103.51	25.05		80.0	
10482-	LTE-TDD (SC-FDMA, 50% RB, 3 MHz,	X	22.45	101.11	26.27	2,23	80.0	± 9.6 %
AAA	QPSK, UL Subframe=2,3,4,7,8,9)		-					1434
		Y	3.07	72.50	16.40		80.0	
40400	1	Z	6.67	82.90	20.59		80.0	100
10483- AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	×	11.24	85.83	20.71	2.23	80.0	± 9.6 %
_		Y	3.41	70.08	14.59		80.0	1
		Z	9.47	83.02	19.78		80.0	-5
10484- AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	8.51	82.05	19.52	2,23	80.0	± 9.6 %
		Y	3.13	68.80	14.05		80.0	
		Z	7.60	80.01	18.80		80.0	
10485- AAB	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	11.52	93.72	25.67	2.23	80.0	± 9.6 %
		Y	3.68	75.26	18.76		80.0	
		Z	6.26	82.99	21.85		80.0	
10486- AAB	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	Х	6.05	79.59	20.24	2.23	80.0	± 9.6 %
		Y	3.22	69.88	15.80		80.0	
		Z	4.55	74.57	18.10		80.0	
10487- AAB	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	5.65	78.19	19.70	2.23	80.0	± 9.6 %
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Y	3.17	69.31	15,53		80.0	
		Z	4.40	73.72	17.74		80.0	
10488- AAB	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	6.27	82.82	23.06	2.23	80.0	± 9.6 %
7		Y	3.70	73.56	19.11		80.0	
		Z	5.09	78.35	21.09	1	80.0	
10489- AAB	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	4.60	74.50	19.82	2.23	80.0	± 9.6 %
		Y	3.57	69.95	17,46		80.0	
		Z	4.26	72.50	18.73		80.0	
10490- AAB	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	Х	4.60	73.92	19.58	2.23	80.0	± 9.6 %
		Y	3.64	69.73	17.37		80.0	
		Z	4.31	72.12	18.57		80.0	
10491- AAB	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	5.31	77.49	21.21	2.23	80.0	± 9.6 %
		Y	3.85	71.68	18.53		80.0	
		Z	4.80	74.99	19.94		80.0	
10492- AAB	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	4.52	71.91	19.07	2,23	80.0	± 9.6 %
	The state of the s				-			-
		Y	3.85	68.89	17.42		80.0	

EX3DV4- SN:3930 July 26, 2017

10493- AAB	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	4.54	71.58	18.93	2.23	80.0	±9.6 %
		Y	3.90	68.74	17.35		80.0	
		Z	4.42	70.55	18.25		80.0	
10494- AAB	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	6.30	80.44	22.16	2.23	80.0	±9,6 %
		Y	4.17	73.15	19,03		80.0	
		Z	5.43	77.14	20.64		80.0	
10495- AAB	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	Х	4.59	72.41	19.33	2.23	80.0	± 9.6 %
		Y	3.88	69.19	17.62		80.0	
	the state of the second	Z	4.44	71.21	18.58		80.0	
10496- AAB	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8.9)	X	4.60	71.83	19.11	2.23	80.0	± 9.6 %
		Y	3.95	68.92	17.54		80.0	
	A the standard of the standard	Z	4.48	70.78	18.43		80.0	
10497- AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	Х	16.04	93.03	22.43	2.23	80.0	± 9.6 %
		Y	1.83	65.71	12.24		80.0	
		Z	4.14	75.38	16.71		80.0	
10498- AAA		Х	2.09	65.14	11.49	2.23	80.0	± 9.6 %
		Y	1.29	60.00	8.18		80.0	
		Z	1.80	62.99	10.35		80.0	
10499- AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	1.86	63.61	10.61	2.23	0.08	± 9.6 %
		Y	1.30	60.00	8.02		80.0	
		Z	1.68	62.07	9.73		80.0	
10500- AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	7.85	87.28	24.05	2.23	80.0	± 9.6 %
	10 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	Y	3.62	74.30	18.81		80.0	
		Z	5.46	80.32	21.30	-	80.0	
10501- AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	5.28	77.27	19.98	2.23	80.0	± 9.6 %
		Y	3.43	70.19	16.55		80.0	
		Z	4.44	73.78	18.35		80.0	
10502- AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	Х	5.26	76.75	19.70	2.23	80.0	± 9.6 %
		Y	3.46	69.95	16.37		80.0	
		Z	4.45	73.43	18.14		80.0	
10503- AAB	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	6.13	82.44	22.90	2.23	80,0	± 9.6 %
		Y	3.65	73.33	19.00	1	80.0	
		Z	5.01	78.06	20.96		80.0	1-2
10504- AAB	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	4.56	74.35	19.74	2.23	80.0	± 9.6 %
		Y	3.55	69.83	17.39		80.0	
		Z	4.23	72.37	18.66		80.0	
10505- AAB	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	Х	4.57	73.78	19.51	2.23	80.0	± 9.6 %
		Y	3.62	69.62	17.30	1	80.0	/
		Z	4.28	72.00	18.50		80.0	
10506- AAB	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	Х	6,21	80.19	22.05	2.23	80.0	± 9.6 %
		Y	4.13	72.99	18.95		80.0	
		Z	5.37	76.94	20.55		80.0	
10507- AAB	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	4.57	72.33	19.29	2.23	80.0	± 9.6 %
				A. Contraction of the Contractio	4		4	4
	Serialis Springer	Y	3.86	69.12	17.58		80.0	



EX3DV4- SN:3930 July 26, 2017

10508- AAB	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	4.58	71.73	19.06	2.23	80.0	± 9.6 %
		Y	3.94	68.84	17.49		80.0	
		Z	4.46	70.69	18.38		80.0	
10509- AAB	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	Х	5.83	76.49	20.61	2.23	80.0	± 9.6 %
		Y	4.46	71.62	18.40		80.0	
Tree Co.		Z	5.37	74.46	19.57		80.0	-
10510- AAB	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	4.89	71.13	18.85	2.23	80.0	±9.6 %
		Y	4.31	68.67	17.53		80.0	7
		Z	4.81	70.33	18.30		80.0	
10511- AAB	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	4.90	70.69	18.70	2.23	80.0	±9.6 %
		Y	4.37	68.45	17.47		80.0	
		Z	4.84	69.99	18.19		80.0	
10512- AAB	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	Х	6.75	79.67	21.67	2.23	80.0	± 9.6 %
		Y	4.65	73.10	18.88		80.0	
		Z	5.92	76.77	20.32		80.0	
10513- AAB	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	Х	4.83	71.62	19.07	2.23	80.0	±9.6 %
		Y	4.21	68.87	17.63		80.0	
		Z	4.73	70.71	18.47		80.0	
10514- AAB	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	4.78	70.93	18.82	2.23	80.0	±9.6 %
		Y	4.23	68.48	17.50		80.0	
		Z	4.71	70.15	18.28		80.0	
10515- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 99pc duty cycle)	Х	1.03	64.96	16.17	0.00	150.0	± 9.6 %
		Y	0.98	62.82	14.28		150.0	
	Laboratory and the same of the	Z	0.99	63.49	14.87		150.0	
10516- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc duty cycle)	X	1,36	87.70	25.78	0.00	150.0	±9.6 %
		Y	0.53	66.95	15.48		150.0	
		Z	0.62	70.94	17.85		150.0	
10517- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 99pc duty cycle)	X	0.94	68.49	17.78	0.00	150.0	±9.6 %
		Y	0.80	64.15	14.62		150.0	
		Z	0.84	65.42	15.57	3000	150.0	
10518- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc duty cycle)	X	4.50	67,24	16.49	0.00	150.0	± 9.6 %
		Y	4.40	66.74	16.08		150.0	
12-17-1		Z	4.46	66.90	16.20		150.0	
10519- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 99pc duty cycle)	X	4.67	67.42	16.58	0.00	150.0	± 9.6 %
		Y	4.55	66.92	16.18		150.0	
		Z	4.62	67.09	16.30		150.0	
10520- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 99pc duty cycle)	×	4.53	67.40	16.52	0.00	150.0	± 9.6 %
		Y	4.40	66.85	16.09		150.0	
	AFFE DOD AT IN VALUE OF THE COLUMN TO THE CO	Z	4.48	67.05	16.22		150.0	11.615.00
10521- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc duty cycle)	X	4.46	67.40	16.52	0.00	150.0	±9.6 %
		Y	4.34	66.82	16.07		150.0	
40505	THE PART AT A TABLE TO SEE TO SEE TO SEE	Z	4.41	67.04	16.21	0.00	150.0	1555
10522- AAA	IEEE 802.11a/h WIFi 5 GHz (OFDM, 36 Mbps, 99pc duty cycle)	X	4.52	67.52	16.61	0.00	150.0	±9.6 %
		Y	4.39	66.94	16.17		150.0	
		Z	4.47	67.15	16.31		150.0	

EX3DV4- SN:3930 July 26, 2017

10523- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 99pc duty cycle)	X	4.42	67.45	16.50	0.00	150.0	±9.6 %
2.4.1		Y	4.31	66.91	16.07		150.0	
		Z	4.37	67.08	16.18		150.0	
10524- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc duty cycle)	X	4.46	67.44	16.58	0.00	150.0	±9.6 %
		Y	4.34	66.89	16.15		150.0	
		Z	4.42	67.08	16.27	0.00	150.0	
10525-	IEEE 802.11ac WiFi (20MHz, MCS0,	X	4.48	66.54	16.20	0.00	150.0	±9.6 %
AAA	99pc duty cycle)	Y	4.36	66.00	15.77		150.0	
		Z	4.43	66.17	15.89		150.0	
10526- AAA	IEEE 802.11ac WiFi (20MHz, MCS1, 99pc duty cycle)	X	4.63	66.87	16.33	0.00	150.0	±9.6 %
	and and of the	Y	4.49	66.28	15.89		150.0	
		Z	4.57	66.49	16.02		150.0	
10527- AAA	IEEE 802.11ac WiFi (20MHz, MCS2, 99pc duty cycle)	X	4.56	66.85	16.28	0.00	150.0	± 9.6 %
	5575 557, 575.57	Y	4.42	66.24	15.83		150.0	
		Z	4.50	66.46	15.96		150.0	
10528- AAA	IEEE 802.11ac WiFi (20MHz, MCS3, 99pc duty cycle)	X	4.57	66.86	16.31	0.00	150.0	± 9.6 %
		Y	4.43	66.26	15.86		150,0	
	7 7 90	Z	4.51	66.47	15.99		150.0	
10529- AAA	IEEE 802.11ac WiFi (20MHz, MCS4, 99pc duty cycle)	X	4.57	66.86	16.31	0.00	150.0	± 9.6 %
		Y	4.43	66.26	15.86		150.0	
Addin		Z	4.51	66.47	15.99		150.0	
10531- AAA	IEEE 802.11ac WiFi (20MHz, MCS6, 99pc duty cycle)	Х	4.55	66.94	16.31	0.00	150.0	± 9.6 %
		Y	4.40	66.29	15.84		150.0	
		Z	4.49	66.54	15.99		150.0	
10532- AAA	IEEE 802.11ac WiFi (20MHz, MCS7, 99pc duty cycle)	X	4.42	66.82	16.26	0.00	150.0	± 9.6 %
	7,57	Y	4.28	66.15	15.77		150.0	
		Z	4.36	66.40	15.93		150.0	
10533- AAA	IEEE 802.11ac WiFi (20MHz, MCS8, 99pc duty cycle)	X	4.58	66.94	16.31	0.00	150.0	± 9.6 %
-		Y	4.44	66.33	15.86		150.0	
		Z	4.52	66.54	15.99		150.0	-
10534- AAA	IEEE 802.11ac WiFi (40MHz, MCS0, 99pc duty cycle)	X	5.10	66.82	16.29	0.00	150.0	±9.6 %
		Y	4.99	66.31	15.94		150.0	
		Z	5.05	66.51	16.03		150.0	
10535- AAA	IEEE 802.11ac WiFi (40MHz, MCS1, 99pc duty cycle)	X	5.15	66.98	16.37	0.00	150.0	± 9.6 %
		Y	5.04	66.45	16.01		150.0	
		Z	5.11	66.67	16.10	10000	150.0	
10536- AAA	IEEE 802.11ac WiFi (40MHz, MCS2, 99pc duty cycle)	X	5.04	66.97	16.35	0.00	150.0	± 9.6 %
		Y	4.93	66.44	15.98		150.0	
		Z	4.99	66.65	16.08	4-	150.0	
10537- AAA	IEEE 802.11ac WiFi (40MHz, MCS3, 99pc duty cycle)	X	5.09	66.92	16.32	0.00	150.0	± 9.6 %
		Y	4.98	66.42	15.97		150.0	
	till the same of t	Z	5.04	66.60	16.06		150.0	1
10538- AAA	IEEE 802.11ac WiFI (40MHz, MCS4, 99pc duty cycle)	X	5.16	66.90	16.35	0.00	150.0	± 9.6 %
		Y	5.05	66.40	16.00		150,0	
3.5	the second secon	Z	5.12	66.59	16.09	-	150.0	11
10540- AAA	IEEE 802.11ac WiFi (40MHz, MCS6, 99pc duty cycle)	X	5.10	66.89	16.36	0.00	150.0	± 9.6 %
		Y	4.98	66.36	16.00		150.0	



EX3DV4- SN:3930 July 26, 2017

10541- AAA	IEEE 802.11ac WiFi (40MHz, MCS7, 99pc duty cycle)	X	5.08	66.80	16.30	0.00	150.0	± 9.6 %
		Y	4.97	66.28	15.94	,	150.0	-
		Z	5.03	66.49	16.04		150.0	
10542- AAA	IEEE 802.11ac WiFi (40MHz, MCS8, 99pc duty cycle)	X	5.23	66,86	16.34	0.00	150.0	± 9.6 %
		Y	5.12	66.38	16.01		150.0	
		Z	5.19	66.57	16.10		150.0	
10543- AAA	IEEE 802.11ac WiFi (40MHz, MCS9, 99pc duty cycle)	X	5,29	66,86	16.37	0.00	150.0	± 9.6 %
	IN VIOLENTIA	Y	5.19	66.42	16.06		150.0	
		Z	5.25	66.58	16.12		150.0	
10544- AAA	IEEE 802.11ac WiFi (80MHz, MCS0, 99pc duty cycle)	X	5.42	66.89	16.26	0.00	150.0	± 9.6 %
		Y	5.33	66.42	15.95		150.0	11.
200	the same of the sa	Z	5.38	66.62	16.03		150.0	-
10545- AAA	IEEE 802.11ac WiFi (80MHz, MCS1, 99pc duty cycle)	X	5.59	67.26	16.39	0.00	150.0	± 9.6 %
		Y	5.50	66.82	16.11		150.0	
	TA	Z	5.54	66.98	16.16		150.0	
	JEEE 802.11ac WiFi (80MHz, MCS2, 99pc duty cycle)	X	5.46	67.05	16.31	0.00	150.0	±9.6 %
		Y	5.37	66.54	15.98		150.0	
		Z	5.42	66.77	16.07		150.0	-
10547- AAA	IEEE 802.11ac WiFi (80MHz, MCS3, 99pc duty cycle)	X	5.53	67.10	16.32	0.00	150.0	± 9,6 %
		Y	5.44	66.63	16.02		150.0	
		Z	5.49	66.82	16.09		150.0	
10548- AAA	IEEE 802.11ac WiFi (80MHz, MCS4, 99pc duty cycle)	Х	5.70	67.79	16.64	0.00	150.0	±9,69
		Y	5.59	67.25	16.30		150.0	
		Z	5.64	67.47	16.39		150.0	
10550- AAA	IEEE 802.11ac WiFi (80MHz, MCS6, 99pc duty cycle)	Х	5.49	67.10	16.35	0.00	150.0	± 9.6 %
		Y	5.42	66.68	16.06		150.0	
-		Z	5.45	66.82	16.11		150.0	11 1
10551- AAA	IEEE 802.11ac WiFi (80MHz, MCS7, 99pc duty cycle)	X	5.49	67.10	16.30	0.00	150.0	± 9.6 9
		Y	5.37	66.52	15.95		150.0	
		Z	5.44	66.81	16.06		150.0	
10552- AAA	IEEE 802.11ac WiFi (80MHz, MCS8, 99pc duty cycle)	X	5.43	66.99	16.26	0.00	150.0	± 9.6 %
		Y	5.34	66.52	15.94		150.0	
		Z	5.39	66.71	16.02		150.0	
10553- AAA	IEEE 802.11ac WiFi (80MHz, MCS9, 99pc duty cycle)	X	5.50	66.97	16.28	0.00	150.0	±9.6 %
		Y	5.40	66.49	15.96		150.0	
		Z	5.46	66,70	16.05		150.0	
10554- AAA	IEEE 1602.11ac WiFi (160MHz, MCS0, 99pc duty cycle)	Х	5.82	67,21	16.32	0.00	150.0	± 9.6 %
		Y	5.75	66.76	16.03		150.0	
		Z	5.78	66.95	16.10		150.0	Ni i e ye
10555- AAA	IEEE 1602.11ac WiFi (160MHz, MCS1, 99pc duty cycle)	Х	5.93	67.46	16.43	0.00	150.0	±9.6 %
	J 777	Y	5.85	66.99	16.13		150.0	1
		Z	5.89	67.20	16.21	1	150.0	11
10556- AAA	IEEE 1602.11ac WiFi (160MHz, MCS2, 99pc duty cycle)	Х	5.96	67.52	16.45	0.00	150.0	±9.6 %
		Y	5.88	67.08	16.16		150.0	1
		Z	5.91	67.26	16.23		150.0	15.00
10557- AAA	IEEE 1602.11ac WiFi (160MHz, MCS3, 99pc duty cycle)	Х	5.92	67.43	16.42	0.00	150.0	± 9.6 %
		Y	5.84	66.96	16.13		150.0	1
		Z	5.88	67.17	16.20		150.0	

Certificate No: EX3-3930_Jul17

Page 32 of 38

EX3DV4- SN:3930 July 26, 2017

10558- AAA	IEEE 1602.11ac WiFi (160MHz, MCS4, 99pc duty cycle)	×	5.96	67.57	16.51	0.00	150.0	±9.6 %
	2010 223 0 0 0 0	Y	5.86	67.06	16.19		150.0	
		Z	5.92	67.31	16.29		150.0	
10560- AAA	IEEE 1602.11ac WiFi (160MHz, MCS6, 99pc duty cycle)	X	5.96	67.44	16.48	0.00	150.0	± 9.6 %
	X X X X	Y	5.87	66.96	16.18		150.0	
111		Z	5.92	67.18	16.26		150.0	
10561- AAA	IEEE 1602.11ac WiFi (160MHz, MCS7, 99pc duty cycle)	X	5.89	67.40	16.50	0,00	150.0	± 9.6 %
		Υ	5.80	66.94	16.20		150.0	
		Z	5.84	67.14	16.28		150.0	
10562- AAA	IEEE 1602.11ac WiFi (160MHz, MCS8, 99pc duty cycle)	X	5.98	67.69	16.64	0.00	150.0	±9.6 %
		Y	5.86	67.13	16.30		150.0	
		Z	5.93	67.41	16.41		150.0	
10563- AAA	IEEE 1602.11ac WiFi (160MHz, MCS9, 99pc duty cycle)	Х	6.05	67.54	16.52	0.00	150.0	± 9.6 %
		Y	5.95	67.06	16.22		150.0	
		Z	6.00	67.28	16.30		150.0	
10564- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 9 Mbps, 99pc duty cycle)	Х	4.82	67.24	16.60	0.46	150.0	± 9.6 %
7 7 7 7		Υ	4.72	66.79	16.24		150.0	
		Z	4.78	66.96	16.35		150.0	
10565- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 12 Mbps, 99pc duty cycle)	X	5.03	67.66	16.91	0.46	150.0	± 9.6 %
		Y	4.92	67.21	16.56		150.0	
		Z	4.99	67.37	16.66		150.0	
10566- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 18 Mbps, 99pc duty cycle)	×	4.87	67.51	16.74	0.46	150.0	± 9.6 %
		Y	4.75	67.02	16.36		150.0	
		Z	4.83	67.21	16.48	100	150.0	
10567- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 24 Mbps, 99pc duty cycle)	X	4.91	67.97	17.14	0.46	150.0	± 9.6 %
		Y	4.79	67.45	16.75		150.0	
		Z	4.87	67.63	16.85		150.0	
10568- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 36 Mbps, 99pc duty cycle)	X	4.77	67.27	16.50	0.46	150.0	±9.6 %
		Y	4.65	66.75	16.09		150.0	
		Z	4.74	66.99	16.25		150.0	
10569- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 48 Mbps, 99pc duty cycle)	X	4.89	68.16	17.26	0.46	150.0	± 9.6 %
		Y	4.78	67.67	16.89		150.0	
		Z	4.84	67.81	16.97		150.0	
10570- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 54 Mbps, 99pc duty cycle)	X	4.90	67.92	17.14	0.46	150.0	± 9.6 %
		Y	4.78	67.44	16.76		150.0	
	No. of the second second	Z	4.86	67.60	16.86		150.0	
10571- AAA	IEEE 802,11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90pc duty cycle)	X	1.29	66.90	17.34	0.46	130.0	± 9.6 %
1-9-		Y	1.18	64.21	15.26		130.0	
		Z	1.25	65.49	16.13		130.0	
10572- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 90pc duty cycle)	X	1.32	67.77	17.86	0.46	130.0	± 9.6 %
		Y	1.20	64.74	15.60		130.0	
	La J. Carlotte and the Company of th	Z	1.27	66.15	16.53		130.0	
10573- AAA	IEEE 802,11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 90pc duty cycle)	X	100.00	157.80	43.41	0.46	130.0	± 9.6 %
		Y	1.35	77.92	20.42		130.0	
		Z	4.07	96.53	27.00		130.0	
10574- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 90pc duty cycle)	х	1.82	78.36	22.91	0.46	130.0	± 9.6 %
	7,500	Y	1.27	69.71 72.97	18.21 19.91		130.0 130.0	
			1.40	(2.3)	10.01		100.0	



EX3DV4- SN:3930 July 26, 2017

10575- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 90pc duty cycle)	X	4.61	67.09	16.70	0.46	130.0	± 9.6 %
		Υ	4.51	66.61	16.30		130.0	
and the second		Z	4.59	66.81	16.44	100	130.0	
10576- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 9 Mbps, 90pc duty cycle)	Х	4.65	67.29	16.79	0.46	130.0	± 9.6 %
		Y	4.54	66.81	16.39		130.0	-
		Z	4.61	67.00	16.52		130.0	
10577- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 12 Mbps, 90pc duty cycle)	X	4.83	67.53	16.93	0.46	130.0	± 9.6 %
		Y	4.71	67.05	16.53		130.0	
		Z	4.79	67.24	16.67		130.0	
10578- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 18 Mbps, 90pc duty cycle)	X	4.74	67.74	17.07	0.46	130.0	± 9.6 %
	A-7-2-2-2-2-2-2-2-2-2-2-2-2-2-2-2-2-2-2-	Y	4.62	67.21	16.65		130.0	
20.00		Z	4.70	67.42	16.79		130.0	10.00
10579- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 24 Mbps, 90pc duty cycle)	X	4.49	66.93	16.32	0.46	130.0	±9.6 %
		Y	4.37	66.37	15.88		130.0	
		Z	4.46	66.65	16.07	-	130.0	
10580- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 36 Mbps, 90pc duty cycle)	X	4.53	66.98	16.35	0.46	130.0	±9.6 %
		Y	4.41	66.43	15.90		130.0	
		Z	4.50	66.70	16.09		130.0	in the same
10581- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 48 Mbps, 90pc duty cycle)	X	4.65	67,83	17.05	0.46	130.0	±9.6 %
17		Y	4.53	67.28	16.62		130.0	
		Z	4.61	67.49	16.76		130.0	
10582- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 54 Mbps, 90pc duty cycle)	Х	4.42	66.66	16,09	0.46	130.0	± 9.6 %
		Y	4.29	66.11	15.64		130.0	
		Z	4.39	66.39	15.84		130.0	
10583- AAA	IEEE 802,11a/h WiFi 5 GHz (OFDM, 6 Mbps, 90pc duty cycle)	Х	4.61	67.09	16.70	0.46	130.0	± 9.6 %
		Y	4.51	66.61	16.30		130.0	
		Z	4.59	66.81	16.44		130.0	
10584- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 90pc duty cycle)	X	4.65	67.29	16.79	0.46	130.0	± 9.6 %
	173 30 22 3 2 2	Y	4.54	66.81	16.39		130.0	
		Z	4.61	67.00	16.52		130.0	
10585- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90pc duty cycle)	Х	4.83	67.53	16.93	0.46	130.0	± 9.6 %
		Y	4.71	67.05	16.53		130.0	
		Z	4.79	67.24	16.67		130.0	
10586- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 90pc duty cycle)	X	4.74	67.74	17.07	0.46	130.0	± 9.6 %
	\$ -=	Y	4.62	67.21	16.65		130.0	
		Z	4.70	67.42	16.79		130.0	1-4-
10587- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 90pc duty cycle)	Х	4.49	66.93	16.32	0.46	130.0	± 9.6 %
1111		Υ	4.37	66.37	15.88		130.0	
		Z	4.46	66,65	16.07		130.0	1
10588- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 90pc duty cycle)	X	4.53	66,98	16.35	0.46	130.0	±9.6 %
	E THE STATE OF THE	Y	4.41	66.43	15.90		130.0	
		Z	4.50	66.70	16.09		130.0	
10589- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 90pc duty cycle)	X	4.65	67.83	17.05	0.46	130.0	±9.6 %
	13 A TO 10 TO 40 TO 10 T	Y	4.53	67.28	16.62		130.0	
		Z	4.61	67.49	16.76		130.0	11.2
10590- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 90pc duty cycle)	X	4.42	86.66	16.09	0.46	130.0	± 9.6 %
	L AT AV. CO.	Y	4.29	66.11	15.64		130.0	
		Z	4.39	66.39	15.84		130.0	

EX3DV4— SN:3930 July 26, 2017

10591- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS0, 90pc duty cycle)	X	4.76	67.13	16.79	0.46	130.0	±9.6 %
		Y	4.67	66.70	16.42		130.0	
		Z	4.74	66.87	16.55		130.0	
10592- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS1, 90pc duty cycle)	X	4.91	67.46	16.92	0.46	130.0	± 9.6 %
		Y	4.79	67.00	16.55		130.0	
		Z	4.87	67.19	16.67		130.0	
10593- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS2, 90pc duty cycle)	X	4.82	67.35	16.79	0.46	130.0	± 9.6 %
		Y	4.71	66.87	16.40		130.0	
	H. S. R. P. C. C. Y. T. T. T. T.	Z	4.79	67.08	16.54		130.0	Dog A
10594- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS3, 90pc duty cycle)	X	4.88	67.54	16.96	0.46	130.0	± 9.6 %
		Y	4.77	67.06	16.58		130.0	
		Z	4.85	67.26	16.71	1.75	130.0	
10595- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS4, 90pc duty cycle)	×	4.85	67.50	16.87	0.46	130.0	±9.6 %
772		Y	4.73	67.02	16.48		130.0	1-
		Z	4.82	67.23	16.61		130.0	
10596- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS5, 90pc duty cycle)	X	4.78	67,50	16.87	0.46	130.0	± 9.6 %
177		Y	4.66	66.99	16.47		130.0	
	Liver Land Colored	Z	4.75	67.21	16.61		130.0	
10597- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS6, 90pc duty cycle)	X	4.73	67.38	16.74	0.46	130.0	±9.6 %
		Y	4.61	66.86	16.32	-	130.0	
-		Z	4.70	67.09	16.48		130.0	
10598- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS7, 90pc duty cycle)	X	4.73	67.65	17.03	0.46	130.0	±9.6 %
		Y	4.61	67.11	16.61		130.0	
		Z	4.69	67.34	16.75		130.0	
10599- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS0, 90pc duty cycle)	X	5.40	67.48	16.91	0.46	130.0	± 9.6 %
-		Y	5.34	67.15	16.64		130.0	
		Z	5.38	67.26	16.70		130.0	
10600- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS1, 90pc duty cycle)	X	5.50	67.81	17.04	0.46	130.0	± 9.6 %
		Υ	5.43	67.47	16.78		130.0	
		Z	5.48	67.58	16.83		130.0	
10601- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS2, 90pc duty cycle)	X	5.42	67.65	16.98	0.46	130.0	± 9.6 %
		Y	5.34	67.28	16.70		130.0	
		Z	5.39	67.42	16.77		130.0	
10602- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS3, 90pc duty cycle)	х	5.54	67.77	16.95	0.46	130.0	± 9.6 %
		Y	5.45	67.37	16.66		130.0	
		Z	5.51	67.54	16.75		130.0	
10603- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS4, 90pc duty cycle)	X	5.61	68.05	17.23	0,46	130.0	± 9.6 %
		Y	5,52	67.67	16.95		130.0	-
		Z	5.58	67.82	17.02		130.0	
10604- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS5, 90pc duty cycle)	Х	5.47	67.68	17.03	0.46	130.0	± 9.6 %
		Y	5.41	67,35	16.77		130.0	
	L.C 1	Z	5.45	67.46	16.82		130.0	
10605- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS6, 90pc duty cycle)	X	5.51	67.76	17.07	0.46	130.0	±9.6 %
		Y	5.43	67.38	16.78		130.0	
		Z	5.48	67.54	16.86		130.0	
10606- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS7, 90pc duty cycle)	X	5.26	67.11	16.60	0.46	130.0	± 9.6 %
		Y	5.21	66.79	16.34		130.0	
		Z	5.24	66.90	16.40		130.0	



EX3DV4- SN:3930 July 26, 2017

10607- AAA	IEEE 802,11ac WiFI (20MHz, MCS0, 90pc duty cycle)	X	4.62	66.55	16.47	0.46	130.0	± 9.6 %
		Y	4.51	66.04	16.06		130.0	-
		Z	4.58	66.23	16.20		130.0	
10608- AAA	IEEE 802 11ac WiFi (20MHz, MCS1, 90pc duty cycle)	X	4.79	66.93	16.63	0.46	130.0	± 9.6 %
		Y	4.66	66.37	16.21		130.0	
		Z	4.75	66.59	16.35		130.0	
10609- AAA	IEEE 802.11ac WiFi (20MHz, MCS2, 90pc duty cycle)	X	4.68	66.77	16.47	0.46	130.0	± 9.6 %
		Y	4.55	66.20	16.03		130.0	+.
	The second secon	Z	4.64	66.44	16.18		130.0	
10610- AAA	IEEE 802.11ac WiFi (20MHz, MCS3, 90pc duty cycle)	X	4.74	66.95	16.64	0.46	130.0	± 9.6 %
		Y	4.60	66.38	16.20		130.0	
		Z	4.69	66.60	16.35		130.0	
10611- AAA	IEEE 802.11ac WiFi (20MHz, MCS4, 90pc duty cycle)	X	4,65	66,74	16.48	0.46	130,0	± 9.6 %
		Y	4.52	66.17	16.04		130.0	
	h	Z	4.60	66.41	16.20	7	130.0	
10612- AAA	IEEE 802.11ac WiFi (20MHz, MCS5, 90pc duty cycle)	X	4.65	66.90	16.53	0.46	130.0	± 9.6 %
		Y	4.51	66.29	16.07		130.0	
		Z	4.61	66.55	16.24		130.0	
10613- AAA	IEEE 802.11ac WiFi (20MHz, MCS6, 90pc duty cycle)	×	4.65	66.73	16.38	0.46	130.0	± 9.6 %
		Y	4.50	66.11	15.92		130.0	
		Z	4.60	66.39	16.10		130.0	
10614- AAA	IEEE 802.11ac WiFi (20MHz, MCS7, 90pc duty cycle)	×	4.61	66.99	16.66	0.46	130.0	± 9.6 %
		Y	4.47	66.36	16.19		130.0	
		Z	4:56	66.62	16.35		130.0	
10615- AAA	IEEE 802.11ac WiFi (20MHz, MCS8, 90pc duty cycle)	×	4.64	66,55	16.24	0.46	130.0	± 9.6 %
		Y	4.51	65.98	15.80		130.0	
		Z	4.60	66.23	15.97		130.0	
10616- AAA	IEEE 802.11ac WiFi (40MHz, MCS0, 90pc duty cycle)	X	5.25	66.84	16,58	0.46	130.0	± 9.6 %
		Y	5.15	66.38	16.25		130.0	
	P	Z	5.21	66.57	16.34		130.0	
10617- AAA	IEEE 802.11ac WiFi (40MHz, MCS1, 90pc duty cycle)	х	5.31	67.01	16.64	0.46	130.0	± 9.6 %
		Y	5.20	66.52	16.29		130.0	
		Z	5.27	66.74	16.40		130.0	
10618- AAA	IEEE 802.11ac WiFi (40MHz, MCS2, 90pc duty cycle)	X	5,21	67.08	16.69	0.46	130.0	± 9.6 %
4.50		Y	5.11	66.58	16.34		130.0	
		Z	5.17	66.79	16.44		130.0	
10619- AAA	IEEE 802.11ac WiFi (40MHz, MCS3, 90pc duty cycle)	X	5.21	66.83	16,50	0.46	130.0	± 9.6 %
		Y	5.12	66.36	16.16		130.0	ji .
		Z	5.18	66.56	16.26		130.0	
10620- AAA	IEEE 802.11ac WiFi (40MHz, MCS4, 90pc duty cycle)	X	5.29	66.84	16.55	0.46	130.0	± 9.6 %
		Y	5.19	66.38	16.22		130.0	
		Z	5.26	66.58	16.32		130.0	
10621- AAA	IEEE 802.11ac WiFi (40MHz, MCS5, 90pc duty cycle)	Х	5.31	67.02	16.76	0.46	130.0	± 9.6 %
15		Y	5.21	66.53	16.42		130.0	
		Z	5.27	66.74	16.52	I I	130.0	
10622- AAA	IEEE 802.11ac WiFi (40MHz, MCS6, 90pc duty cycle)	Х	5.31	67.15	16.82	0.46	130.0	± 9.6 %
		Y	5.20	66.63	16.46		130.0	
		Z	5.27	66.85	16.57		130.0	

July 26, 2017



Report No.: DRRFCC1710-0119

EX3DV4~ SN:3930

10639- AAA	IEEE 1602.11ac WiFi (160MHz, MCS3, 90pc duty cycle)	X	6.09	67.47	16.71	0.46	130.0	±9,6 %
		Y	6.01	67.02	16.42	-	130.0	-
		Z	6.05	67.24	16.51		130.0	
10640- AAA	IEEE 1602.11ac WiFi (160MHz, MCS4, 90pc duty cycle)	X	6.08	67.45	16.64	0.46	130.0	± 9,6 %
		Y	5.98	66.95	16.33		130.0	
		Z	6,04	67.22	16.45		130.0	
10641- AAA	IEEE 1602.11ac WiFi (160MHz, MCS5, 90pc duty cycle)	X	6.13	67.37	16.62	0.46	130.0	± 9.6 %
	The same of the sa	Y	6.06	66.97	16.36		130.0	
		Z	6.10	67.16	16.43		130.0	
10642- AAA	IEEE 1602.11ac WiFi (160MHz, MCS6, 90pc duty cycle)	X	6.18	67.65	16.93	0.46	130.0	± 9.6 %
		Y	6.09	67.21	16.65		130.0	
		Z	6.14	67.42	16.73		130.0	
10643- AAA	IEEE 1602.11ac WiFi (160MHz, MCS7, 90pc duty cycle)	X	6.01	67.31	16.66	0.46	130.0	± 9.6 %
	The second secon	Y	5.93	66.88	16.37		130.0	
		Z	5.98	67.09	16.46		130.0	
10644- AAA	IEEE 1602.11ac WiFi (160MHz, MCS8, 90pc duty cycle)	X	6.12	67,67	16.86	0.46	130.0	± 9.6 %
		Y	6.01	67.11	16.51		130.0	
		Z	6.08	67.43	16.65		130.0	
10645- AAA	IEEE 1602.11ac WiFi (160MHz, MCS9, 90pc duty cycle)	X	6.23	67.62	16.79	0.46	130.0	± 9.6 %
		Y	6.13	67.13	16.48		130.0	
		Z	6.19	67.38	16.59		130.0	
10646- AAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,7)	X	44.06	133.17	44.84	9.30	60.0	± 9.6 %
		Y	12.39	101.54	35.15		60.0	
		Z	58.66	138.52	46.07		60.0	
10647- AAB	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,7)	X	33.76	127.67	43.54	9.30	60.0	±9.6 %
		Y	10.83	99.05	34.46	1	60.0	
		Z	44.69	133.00	44.82	10.00	60.0	
10648- AAA	CDMA2000 (1x Advanced)	X	0.82	66.98	12.55	0.00	150.0	±9.6 %
		Υ	0.58	62,24	9.25		150.0	
		Z	0.65	63.58	10.51		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.