15.4 Calibration Certificate for E-Field Probe EX3DV4 - SN 3922

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

UL Japan (Vitec)

Certificate No: EX3-3922_Nov17

CALIBBATION	I CERTIFICATE
CALIDIVATION	CERTIFICATE
Object	EX3DV4 - SN:3922
Calibration procedure(s)	QA CAL-01.v9, QA CAL-14.v4, QA CAL-23.v5, QA CAL-25.v6 Calibration procedure for dosimetric E-field probes
Calibration date:	November 15, 2017
This calibration certificate doc The measurements and the u	ruments the traceability to national standards, which realize the physical units of measurements (SI). ncertainties with confidence probability are given on the following pages and are part of the certificate.
All calibrations have been cor	aducted in the closed laboratory facility: environment temperature $(22\pm3)^{\circ}$ C and humidity < 70%.
Calibration Foundment used #	M&TE critical for calibration

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-17)	In house check: Oct-18

	Name	Function	Signature
Calibrated by:	Jeton Kastrati	Laboratory Technician	d= (C=
Approved by:	Kalja Pokovic	Technical Manager	KRUG
	e shall not be reproduced except in		Issued: November 15, 2017

Certificate No: EX3-3922_Nov17

Page 1 of 38

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





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

Accreditation No.: SCS 0108

Accredited by the Swiss Accreditation Service (SAS)

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

Glossary:

TSL NORMx,y,z ConvF

tissue simulating liquid sensitivity in free space sensitivity in TSL / NORMx,y,z diode compression point

CF A, B, C, D Polarization of

DCP

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

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

Connector Angle

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

Calibration is Performed According to the Following Standards:

- a) IEEE Std 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 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 $\vartheta = 0$ (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 not 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 ConvF whereby the uncertainty corresponds to that given for ConvF. A frequency dependent ConvF is used in DASY version 4.4 and higher which allows extending the validity from ± 50 MHz to ± 100 MHz.
- Spherical isotropy (3D deviation from isotropy): in a field of low gradients realized using a flat phantom
- exposed by a patch antenna.

 Sensor Offset: The sensor offset corresponds to the offset of virtual measurement center from the probe tip (on probe axis). No tolerance required.
- Connector Angle: The angle is assessed using the information gained by determining the NORMx (no uncertainty required).

Probe EX3DV4

SN:3922

Manufactured: Calibrated:

March 8, 2013 November 15, 2017

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

Certificate No: EX3-3922_Nov17

Page 3 of 38

DASY/EASY - Parameters of Probe: EX3DV4 - SN:3922

Basic Calibration Parameters

	Sensor X	Sensor Y	Sensor Z	Unc (k=2)
Norm (μV/(V/m) ²) ^A	0.64	0.56	0.59	± 10.1 %
DCP (mV) ^B	97.5	100.2	99.5	

Modulation Calibration Parameters

UID	Communication System Name		A dB	B dB√uV	С	D dB	VR mV	Unc ^E (k=2)
0	CW	X	0.0	0.0	1.0	0.00	138.9	±3.3 %
		Υ	0.0	0.0	1.0		156.7	
		Z	0.0	0.0	1.0		150.2	

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	52.39	393.1	35.88	23.89	0.589	5.1	0.252	0.526	1.011
Y	35.86	267.6	35.63	13.74	0.000	5.1	0.550	0.302	1.008
Z	51.43	386.8	35.82	22.06	0.49	5.1	0.521	0.493	1.011

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

DASY/EASY - Parameters of Probe: EX3DV4 - SN:3922

Calibration Parameter Determined in Head Tissue Simulating Media

f (MHz) [©]	Relative Permittivity ^F	Conductivity (S/m) F	ConvF X	ConvF Y	ConvF Z	Alpha ^G	Depth ^G (mm)	Unc (k≃2)
2300	39.5	1.67	7.97	7.97	7.97	0.32	0.86	± 12.0 %
2450	39.2	1.80	7.49	7.49	7.49	0.44	0.83	± 12.0 %
5200	36.0	4.66	5.61	5.61	5.61	0.35	1.80	± 13.1 %
5250	35.9	4.71	5.57	5.57	5.57	0.35	1.80	± 13.1 %
5300	35.9	4.76	5.46	5.46	5.46	0.35	1.80	± 13.1 %
5500	35.6	4.96	5.05	5.05	5.05	0.40	1.80	± 13.1 %
5600	35.5	5.07	4.85	4.85	4.85	0.40	1.80	± 13.1 %
5750	35.4	5.22	5.15	5,15	5.15	0.40	1.80	± 13.1 %
5800	35.3	5.27	5.10	5.10	5.10	0.40	1.80	± 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 ± 110 MHz.

*A frequencies below 3 GHz, the validity of tissue parameters (and a) 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 (and a) is restricted to ± 5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.

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

Certificate No: EX3-3922_Nov17 Page 5 of 38

DASY/EASY - Parameters of Probe: EX3DV4 - SN:3922

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 ⁶ (mm)	Unc (k=2)
835	55.2	0.97	10.27	10.27	10.27	0.50	0.84	± 12.0 %
1900	53.3	1.52	8.07	8.07	8.07	0.43	0.82	± 12.0 %
2300	52.9	1.81	7.92	7.92	7.92	0.36	0.83	± 12.0 %
2450	52.7	1.95	7.68	7.68	7.68	0.33	0.86	± 12.0 %
5250	48.9	5.36	5.05	5.05	5.05	0.35	1.90	± 13.1 %
5600	48.5	5.77	4.29	4.29	4.29	0.45	1.90	± 13.1 %
5750	48.3	5,94	4.46	4.46	4.46	0.45	1.90	± 13.1 %

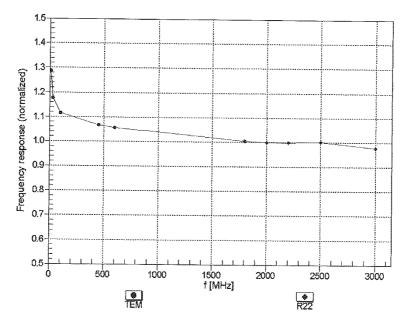
^C Frequency validity above 300 MHz of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to ± 50 MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is ± 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 ± 110 MHz.

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

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

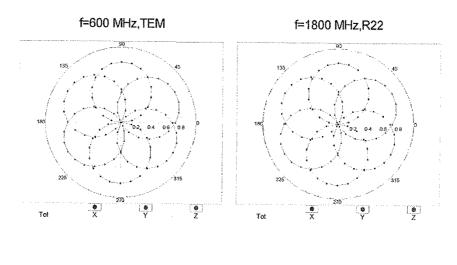
Certificate No: EX3-3922_Nov17 Page 6 of 38

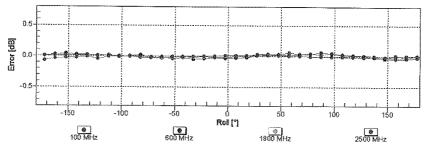
Frequency Response of E-Field (TEM-Cell:ifi110 EXX, Waveguide: R22)



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

Receiving Pattern (ϕ), ϑ = 0°





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

Certificate No: EX3-3922_Nov17

Page 8 of 38

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

105[N1] ieußy 104

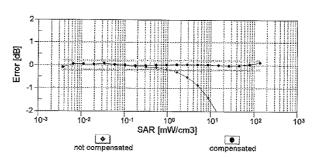
103

104

105

SAR [mW/cm3]

not compensated compensated

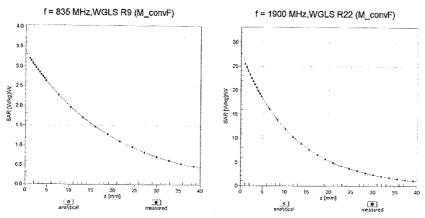


Uncertainty of Linearity Assessment: ± 0.6% (k=2)

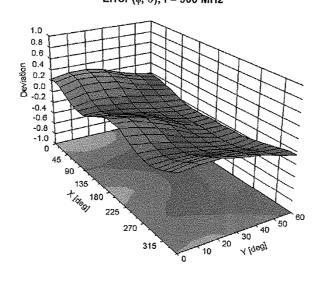
Certificate No: EX3-3922_Nov17

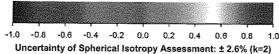
Page 9 of 38

Conversion Factor Assessment



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





Certificate No: EX3-3922_Nov17

Page 10 of 38

DASY/EASY - Parameters of Probe: EX3DV4 - SN:3922

Other Probe Parameters

Sensor Arrangement	Triangular
Connector Angle (°)	107.5
Mechanical Surface Detection Mode	enabled
Optical Surface Detection Mode	disabled
Probe Overall Length	337 mm
Probe Body Diameter	10 mm
Tip Length	9 mm
Tip Diameter	2.5 mm
Probe Tip to Sensor X Calibration Point	1 mm
Probe Tip to Sensor Y Calibration Point	1 mm
Probe Tip to Sensor Z Calibration Point	1 mm
Recommended Measurement Distance from Surface	1.4 mm

Certificate No: EX3-3922_Nov17

Page 11 of 38

0 10010- CAA 10011- CAB 10012- CAB 10013- CAB 10021- DAC 10023- DAC 10024- DAC 10025- DAC	SAR Validation (Square, 100ms, 10ms) UMTS-FDD (WCDMA) IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps) IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps) GSM-FDD (TDMA, GMSK) GPRS-FDD (TDMA, GMSK, TN 0)	X Y Z X Y Z X Y Z X Y Z X Y Z X Y Z X	0.00 0.00 0.00 10.22 2.16 4.90 1.00 1.04 0.87 1.22 1.16 1.15 4.97 4.73 4.91 100.00 100.00 100.00 100.00	0.00 0.00 0.00 82.63 66.68 74.46 66.46 68.80 63.70 64.08 64.51 62.70 66.75 67.05 66.44 117.75 114.38 116.87 117.53	1.00 1.00 1.00 17.60 17.60 14.49 14.75 12.66 15.31 15.70 14.01 17.19 17.30 16.86 29.60 26.81 28.94 29.54	0.00 10.00 0.00 0.41 1.46	138.9 156.7 150.2 20.0 20.0 150.0 150.0 150.0 150.0 150.0 150.0 150.0 50.0	±9.6 % ±9.6 % ±9.6 %
10011- CAB 10012- CAB 10013- CAB 10021- DAC 10023- DAC 10024- DAC	UMTS-FDD (WCDMA) IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps) IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 8 Mbps) GSM-FDD (TDMA, GMSK) GPRS-FDD (TDMA, GMSK, TN 0)	X	0.00 10.22 2.16 4.90 1.00 1.04 0.87 1.22 1.16 1.15 4.97 4.73 4.91 100.00 100.00 100.00 100.00	0.00 82.63 66.68 74.46 66.46 68.80 63.70 84.08 64.51 62.70 66.75 67.05 66.44 117.75 114.38 116.87 117.53	1.00 17.60 10.08 14.49 14.75 15.85 12.66 15.31 15.70 14.01 17.19 17.30 16.86 29.60 26.81 28.94 29.54	0.00	150.2 20.0 20.0 150.0 150.0 150.0 150.0 150.0 150.0 150.0 150.0 150.0 50.0	±9.6 % ±9.6 % ±9.6 %
10011- CAB 10012- CAB 10013- CAB 10021- DAC 10023- DAC 10024- DAC	UMTS-FDD (WCDMA) IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps) IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 8 Mbps) GSM-FDD (TDMA, GMSK) GPRS-FDD (TDMA, GMSK, TN 0)	X	10.22 2.16 4.90 1.00 1.04 0.87 1.22 1.16 1.15 4.97 4.73 4.91 100.00 100.00 100.00 100.00 100.00 100.00	82.63 66.68 74.46 66.46 68.80 63.70 64.08 64.51 62.70 66.75 67.05 66.44 117.75 114.38 116.87 117.53	17.60 10.08 14.49 14.75 15.85 12.66 15.31 15.70 14.01 17.19 17.30 16.86 29.60 26.81 28.94 29.54	0.00	20.0 20.0 20.0 150.0 150.0 150.0 150.0 150.0 150.0 150.0 150.0 150.0 50.0 50.0 50.0	±9.6 % ±9.6 % ±9.6 %
10011- CAB 10012- CAB 10013- CAB 10021- DAC 10023- DAC 10024- DAC	UMTS-FDD (WCDMA) IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps) IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 8 Mbps) GSM-FDD (TDMA, GMSK) GPRS-FDD (TDMA, GMSK, TN 0)	Y Z X Y Z X Y Z X Y Z X Y Z X Y Z X Y Z Z X Y Z Z X Y Z Z X Y Z Z X Y Z Z X Y Z Z X Y Z Z X Y Z Z X Y Z Z X Y Z Z X Y Z Z X Y Z Z X Y Z Z X Y Z Z X Y Z Z X Y Z Z X Y Z Z X Y Z Z X Y Z Z X X Y Z Z X X Y Z Z X X Y Z Z X X Y Z Z X X Y Z Z X X Y Z Z X X Y Z Z X X Y Z Z X X Y Z Z X X Y Z Z X X Y Z Z X X X Y Z Z X X X Y Z Z X X X X	2.16 4.90 1.00 1.04 0.87 1.22 1.16 1.15 4.97 4.73 4.91 100.00 100.00 100.00 100.00	66.68 74.46 66.46 68.80 63.70 64.08 64.51 62.70 66.75 67.05 66.44 117.75 114.38 116.87 117.53	10.08 14.49 14.75 15.85 12.66 15.31 15.70 14.01 17.19 17.30 16.86 29.60 26.81 28.94 29.54	0.00	20.0 20.0 150.0 150.0 150.0 150.0 150.0 150.0 150.0 150.0 50.0	±9.6 % ±9.6 % ±9.6 %
10012- CAB 10013- CAB 10021- DAC 10023- DAC 10024- DAC 10025-	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps) IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps) GSM-FDD (TDMA, GMSK) GPRS-FDD (TDMA, GMSK, TN 0)	Z	4.90 1.00 1.04 0.87 1.22 1.16 1.15 4.97 4.73 4.91 100.00 100.00 100.00 100.00	74.46 66.46 68.80 63.70 84.08 64.51 62.70 66.75 67.05 66.44 117.75 114.38 116.87 117.53	14.49 14.75 15.85 12.66 15.31 15.70 14.01 17.19 17.30 16.86 29.60 26.81 28.94 29.54	0.41	20.0 150.0 150.0 150.0 150.0 150.0 150.0 150.0 150.0 150.0 50.0	±9.6 % ±9.6 %
10012- CAB 10013- CAB 10021- DAC 10023- DAC 10024- DAC 10025-	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps) IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps) GSM-FDD (TDMA, GMSK) GPRS-FDD (TDMA, GMSK, TN 0)	X	1.00 1.04 0.87 1.22 1.16 1.15 4.97 4.73 4.91 100.00 100.00 100.00 100.00 100.00	66.46 68.80 63.70 84.08 64.51 62.70 66.75 67.05 66.44 117.75 114.38 116.87 117.53	14.75 15.85 12.66 15.31 15.70 14.01 17.19 17.30 16.86 29.60 26.81 28.94 29.54	0.41	150.0 150.0 150.0 150.0 150.0 150.0 150.0 150.0 150.0 50.0	±9.6 % ±9.6 %
10012- CAB 10013- CAB 10013- CAB 10021- DAC 10023- DAC 10024- DAC	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps) IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps) GSM-FDD (TDMA, GMSK) GPRS-FDD (TDMA, GMSK, TN 0)	Y Z X Y Z X Y Z X Y Z X Y Z Z X	1.04 0.87 1.22 1.16 1.15 4.97 4.73 4.91 100.00 100.00 100.00 100.00	68.80 63.70 64.08 64.51 62.70 66.75 67.05 66.44 117.75 114.38 116.87 117.53	15.85 12.66 15.31 15.70 14.01 17.19 17.30 16.86 29.60 26.81 28.94 29.54	0.41	150.0 150.0 150.0 150.0 150.0 150.0 150.0 150.0 50.0	±9.6 % ±9.6 %
10013- CAB 10021- DAC 10023- DAC 10024- DAC	Mbps) IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps) GSM-FDD (TDMA, GMSK) GPRS-FDD (TDMA, GMSK, TN 0)	Z X Y Z X Y Z X Y Z X Y Z X Y Z X Y Z X Y Z X Y Z X Y Z X Y Z X Y Z X Y Z X X Y Z X X Y Z X X X X X X X X X	0.87 1.22 1.16 1.15 4.97 4.73 4.91 100.00 100.00 100.00 100.00	63.70 64.08 64.51 62.70 66.75 67.05 66.44 117.75 114.38 116.87 117.53	12.66 15.31 15.70 14.01 17.19 17.30 16.86 29.60 26.81 28.94 29.54	9.39	150.0 150.0 150.0 150.0 150.0 150.0 150.0 50.0	±9.6 %
10013- CAB 10021- DAC 10023- DAC 10024- DAC	Mbps) IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps) GSM-FDD (TDMA, GMSK) GPRS-FDD (TDMA, GMSK, TN 0)	X Y Z X Y Z X Y Z X	1.22 1.16 1.15 4.97 4.73 4.91 100.00 100.00 100.00 100.00 100.00	64.08 64.51 62.70 66.75 67.05 66.44 117.75 114.38 116.87 117.53	15.31 15.70 14.01 17.19 17.30 16.86 29.60 26.81 28.94 29.54	9.39	150.0 150.0 150.0 150.0 150.0 150.0 50.0	±9.6 %
10013- CAB 10021- DAC 10023- DAC 10024- DAC	Mbps) IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps) GSM-FDD (TDMA, GMSK) GPRS-FDD (TDMA, GMSK, TN 0)	Y Z X Y Z X Y Z X	1.16 1.15 4.97 4.73 4.91 100.00 100.00 100.00 100.00 100.00	64.51 62.70 66.75 67.05 66.44 117.75 114.38 116.87 117.53	15.70 14.01 17.19 17.30 16.86 29.60 26.81 28.94 29.54	9.39	150.0 150.0 150.0 150.0 150.0 50.0 50.0	±9.6 %
10021- DAC 10023- DAC 10024- DAC	GSM-FDD (TDMA, GMSK) GPRS-FDD (TDMA, GMSK, TN 0)	Z X Y Z X Y Z X Y Z X Y Z X Y Z Z X Y Z Z Z X Z Z X Z Z X Z Z	1.15 4.97 4.73 4.91 100.00 100.00 100.00 100.00 100.00	62.70 66.75 67.05 66.44 117.75 114.38 116.87 117.53	14.01 17.19 17.30 16.86 29.60 26.81 28.94 29.54	9.39	150.0 150.0 150.0 150.0 50.0 50.0 50.0 5	± 9.6 %
10021- DAC 10023- DAC 10024- DAC	GSM-FDD (TDMA, GMSK) GPRS-FDD (TDMA, GMSK, TN 0)	X Y Z X Y Z X	4.97 4.73 4.91 100.00 100.00 100.00 100.00 100.00	66.75 67.05 66.44 117.75 114.38 116.87 117.53	17.19 17.30 16.86 29.60 26.81 28.94 29.54	9.39	150.0 150.0 150.0 50.0 50.0 50.0 50.0	± 9.6 %
10021- DAC 10023- DAC 10024- DAC	GSM-FDD (TDMA, GMSK) GPRS-FDD (TDMA, GMSK, TN 0)	Y Z X Y Z X Y Z Z X	4.73 4.91 100.00 100.00 100.00 100.00 100.00	67.05 66.44 117.75 114.38 116.87 117.53	17.30 16.86 29.60 26.81 28.94 29.54	9.39	150.0 150.0 50.0 50.0 50.0 50.0	± 9.6 %
10023- DAC 10024- DAC 10025-	GPRS-FDD (TDMA, GMSK, TN 0)	X Y Z X Y Z	4,91 100.00 100.00 100.00 100.00 100.00	66.44 117.75 114.38 116.87 117.53	16.86 29.60 26.81 28.94 29.54 26.41		150.0 50.0 50.0 50.0 50.0 50.0	
10023- DAC 10024- DAC 10025-	GPRS-FDD (TDMA, GMSK, TN 0)	X Y Z X Y Z	100.00 100.00 100.00 100.00 100.00	117.75 114.38 116.87 117.53	29.60 26.81 28.94 29.54 26.41		50.0 50.0 50.0 50.0	
10023- DAC 10024- DAC 10025-	GPRS-FDD (TDMA, GMSK, TN 0)	Y Z X Y Z	100.00 100.00 100.00 100.00	114.38 116.87 117.53	26.81 28.94 29.54 26.41		50.0 50.0 50.0	
10024- DAC 10025-		Z X Y	100.00 100.00 100.00 100.00	116.87 117.53 113.42	28.94 29.54 26.41	9.57	50.0 50.0	±9.6 %
10024- DAC 10025-		X Y Z	100.00 100.00 100.00	117.53 113.42	29.54 26.41	9.57	50.0	±9.6 %
10024- DAC 10025-		Y	100.00 100.00	113.42	26.41	9.57		±9.6%
DAC 10025-	GPRS-FDD (TDMA, GMSK, TN 0-1)	Z	100.00				200	
DAC 10025-	GPRS-FDD (TDMA, GMSK, TN 0-1)			446.65			50.0	
DAC 10025-	GPRS-FDD (TDMA, GMSK, TN 0-1)	Х	100	110.00	28.87		50.0	
	1		100.00	115.80	27.84	6.56	60.0	±9.6 %
		Y	100.00	116.45	26.88		60.0	
		Z	100.00	114.31	26.94		60.0	
	EDGE-FDD (TDMA, 8PSK, TN 0)	Х	6.40	82.36	32.51	12.57	50.0	±9.6%
~		Υ	12.81	114.09	48.03		50.0	
		Z	5.39	77.56	30.20		50.0	
10026- DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1)	Х	18.99	108.74	38.49	9.56	60.0	±9.6 %
		Y	11.32	102.88	38.36		60.0	
		Z	14.13	101.58	36.03		60.0	
10027- DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2)	Х	100.00	115.92	27.20	4.80	80.0	± 9.6 %
		Υ	100.00	120.51	27.95		80.0	
		Z	100.00	113.62	25.95		80.0	
10028- DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2-3)	Х	100.00	117.17	27.09	3,55	100.0	± 9.6 %
		Y	100.00	126,29	29.71		100.0	
		Z	100.00	113.65	25.34		100,0	
10029- DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2)	Х	10.01	92.59	31.63	7.80	80.0	± 9.6 %
		Y	5.95	85.21	30.10		80.0	
10030- CAA	IEEE 802.15.1 Bluetooth (GFSK, DH1)	X	8.19 100.00	88.00 114.35	29.77 26.78	5.30	80.0 70.0	± 9.6 %
U/V1		Y	100.00	115.18	25.91		70.0	
~~~		Z	100.00		25.69		70.0	
10031- CAA	IEEE 802.15.1 Bluetooth (GFSK, DH3)	X	100.00	112.41 117.60	25.99	1.88	100.0	± 9.6 %
U/V1		Y	100.00	125.73	27.92		400.0	
	1	Z	100.00	125.73	27.92		100.0	

Certificate No: EX3-3922_Nov17 Page 12 of 38

10032-	IEEE 802.15.1 Bluetooth (GFSK, DH5)	X	100.00	122.85	27,11	1.17	100.0	± 9.6 %
CAA	, , , , , , , , , , , , , , , , , , , ,	<u> </u>						//
		Y	100.00	140.20	32.41	ļ	100.0	
10033-	1555 000 45 4 DL -4 - 11 4DL DODOK	Z	100.00	110.46	21.87	ļ- <u></u>	100.0	
CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH1)	Х	100.00	128.60	34.99	5.30	70.0	± 9.6 %
		Υ	100.00	128.81	34.01		70.0	
		Z	37.13	112.00	30.59		70.0	
10034- CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH3)	Х	7.99	90.28	23.14	1.88	100.0	±9.6%
		Υ	30.82	107.13	26.05		100.0	
		Z	3.26	76.76	18.03		100.0	
10035- CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH5)	Х	3.43	79.39	19,22	1.17	100.0	±9.6 %
		Y	5.34	85.34	19.62		100.0	
		Z	1.95	70.85	15.34		100.0	
10036- CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH1)	X	100.00	128.98	35.17	5.30	70.0	± 9.6 %
		Y	100.00	129.40	34,27	T	70.0	
		Z	71.70	122,79	33.35		70.0	
10037- CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH3)	Х	7.27	88.99	22,70	1.88	100.0	± 9.6 %
~		Υ	18.21	100.58	24.40		100.0	
		Z	3.09	76.13	17.76		100.0	
10038- CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH5)	Х	3.51	80.00	19.55	1.17	100.0	±9.6 %
		Υ	5.56	86.30	20.09	-	100.0	
		Z	1.96	71.12	15.55		100.0	
10039- CAB	CDMA2000 (1xRTT, RC1)	Х	1.76	70.90	15.48	0.00	150.0	± 9.6 %
		Υ	1.46	70.33	13.57		150.0	
	The second secon	Z	1.29	66.18	12.76		150.0	***************************************
10042- CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4- DQPSK, Halfrate)	Х	100.00	113.36	26.88	7.78	50.0	±9.6%
		Y	100.00	110.28	24,34		50.0	
		Z	100.00	112.04	26.05		50.0	
10044- CAA	IS-91/EIA/TIA-553 FDD (FDMA, FM)	Х	0.00	96.52	4.05	0.00	150.0	±9.6%
		Υ	0.00	110.36	5,41		150.0	-
		Z	0.02	107.42	7.74	<u> </u>	150.0	
10048- CAA	DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24)	Х	100.00	120.47	31,99	13.80	25.0	± 9.6 %
		Υ	100.00	110.06	26.00		25.0	
		Z	100.00	119.90	31.42	İ	25.0	
10049- CAA	DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12)	х	100.00	117.30	29.67	10.79	40.0	±9.6 %
		Υ	1374.02	140.45	31.34		40.0	
		Z	100.00	116.43	29.00		40.0	
10056- CAA	UMTS-TDD (TD-SCDMA, 1.28 Mcps)	Х	100,00	125.96	34.92	9.03	50.0	± 9.6 %
		Υ	100.00	125.07	33.36		50.0	
		Ζ	100.00	125.75	34.63	110124444444	50.0	
10058- DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)	Х	6.96	84.61	27.79	6.55	100.0	±9.6 %
		Υ	4.48	78.52	26.30		100.0	
		Z	5.96	81.17	26.23		100.0	
10059- CAB	IEEE 802.11b WIFi 2.4 GHz (DSSS, 2 Mbps)	Х	1.31	65.73	16.21	0.61	110.0	± 9.6 %
		Υ	1.21	65.92	16.54		110.0	
		Z	1.21	63.90	14.69		110.0	
10060-	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5	Х	100.00	134.97	34.84	1.30	110.0	±9.6 %
CAB	Mbps)							
	Mbps)	Υ	100.00	144.62	38,35		110.0	

CAB	10061- CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps)	X	7.25	94.27	26.93	2.04	110,0	± 9.6 %
10062						27.93		110.0	
CAB									
LEEE 802.11a/h WiFi 5 GHz (OFDM, 9   X   4.78   66.78   16.66   0.72   100.0   ± 9.6							0.49		± 9.6 %
10083-   IEEE 802.11a/h WiFi 5 GHz (OFDM, 9   X   4.78   66.78   16.66   0.72   100.0   ± 9.6									
CAB         Mbps)         Y         4,53         67,06         16,76         100,0           10064- CAB         IEEE 802,11a/h WiFi 5 GHz (OFDM, 12         X         5,08         67,08         16,30         100,0         ±9,6           10085- CAB         Mbps)         Y         4,78         67,26         16,30         100,0         ±9,6           10085- CAB         Mbps)         Y         4,78         67,26         16,30         100,0         ±9,6           CAB         Mbps)         Y         4,78         67,26         16,30         100,0         ±9,6           CAB         Mbps)         Y         4,78         67,26         11,00         100,0         ±9,6           CAB         Mbps)         Y         4,66         67,16         17,09         100,0         ±9,6           CAB         Mbps)         Y         4,67         67,18         17,27         100,0         ±9,6           CAB         Mbps)         Y         4,67         67,18         17,27         100,0         ±9,6           10068- CAB         Mbps)         Y         4,67         67,18         17,27         100,0         ±9,6           10078- CAB         Mbps) <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
TO0064   LEEE 802.11a/h WiFi 5 GHz (OFDM, 12   X   5.08   67.08   16.91   0.86   100.0   ± 9.6							0.72		±9.6%
10064-   IEEE 802.11a/h WiFi 5 GHz (OFDM, 12   X   5.08   67.08   16.91   0.86   100.0   ± 9.6									
CAB Mbps)  Y 4.78 67.26 16.98 100.0  Z 5.01 66.74 16.58 100.0  LEEE 802.11a/h WiFi 5 GHz (OFDM, 18 X 4.96 67.06 17.06 1.21 100.0 ± 9.6  Mbps)  Y 4.66 67.16 17.09 100.0  10066- LEEE 802.11a/h WiFi 5 GHz (OFDM, 24 X 4.99 67.00 17.25 1.46 100.0 ± 9.6  Mbps)  Y 4.67 67.18 17.27 100.0  LEEE 802.11a/h WiFi 5 GHz (OFDM, 36 X 5.29 66.75 16.91 100.0  LEEE 802.11a/h WiFi 5 GHz (OFDM, 36 X 5.29 67.24 17.70 2.04 100.0 ± 9.6  Mbps)  Y 4.97 67.49 17.80 100.0  10068- LEEE 802.11a/h WiFi 5 GHz (OFDM, 48 X 5.37 67.42 18.00 2.55 100.0 ± 9.6  Mbps)  Y 4.97 67.49 17.80 100.0  LEEE 802.11a/h WiFi 5 GHz (OFDM, 48 X 5.37 67.42 18.00 2.55 100.0 ± 9.6  Mbps)  Y 5.00 67.43 17.99 100.0  LEEE 802.11a/h WiFi 5 GHz (OFDM, 54 X 5.44 67.37 18.17 2.67 100.0 ± 9.6  Mbps)  LEEE 802.11a/h WiFi 5 GHz (OFDM, 54 X 5.44 67.37 18.17 2.67 100.0 ± 9.6  Mbps)  Y 5.00 67.48 18.19 100.0  LEEE 802.11a/h WiFi 5 GHz (OFDM, 54 X 5.44 67.37 18.17 2.67 100.0 ± 9.6  Mbps)  Y 5.07 67.46 18.19 100.0  LEEE 802.11a/h WiFi 2.4 GHz X 5.08 66.89 17.54 1.99 100.0 ± 9.6  LEEE 802.11a/h WiFi 2.4 GHz X 5.09 67.31 17.81 2.30 100.0  LEEE 802.11a/h WiFi 2.4 GHz X 5.09 67.31 17.81 2.30 100.0 ± 9.6  LEEE 802.11a/h WiFi 2.4 GHz X 5.09 67.31 17.81 2.30 100.0 ± 9.6  LEEE 802.11a/h WiFi 2.4 GHz X 5.09 67.31 17.81 2.30 100.0 ± 9.6  LEEE 802.11a/h WiFi 2.4 GHz X 5.09 67.31 17.81 2.30 100.0 ± 9.6  LEEE 802.11a/h WiFi 2.4 GHz X 5.09 67.31 17.81 2.30 100.0 ± 9.6  LEEE 802.11a/h WiFi 2.4 GHz X 5.09 67.31 17.81 2.30 100.0 ± 9.6  LEEE 802.11a/h WiFi 2.4 GHz X 5.09 67.31 17.81 2.30 100.0 ± 9.6  LEEE 802.11a/h WiFi 2.4 GHz X 5.09 67.31 17.81 2.30 100.0 ± 9.6  LEEE 802.11a/h WiFi 2.4 GHz X 5.00 67.43 18.45 100.0 ± 9.6  LEEE 802.11a/h WiFi 2.4 GHz X 5.17 67.53 18.45 100.0 ± 9.6  LEEE 802.11a/h WiFi 2.4 GHz X 5.17 67.53 18.45 100.0 ± 9.6  LEEE 802.11a/h WiFi 2.4 GHz X 5.17 67.53 18.45 100.0 ± 9.6  LEEE 802.11a/h WiFi 2.4 GHz X 5.17 67.53 18.45 100.0 ± 9.6  LEEE 802.11a/h WiFi 2.4 GHz X 5.17 67.53 18.45 100.0 ± 9.6  LEEE 802.11a/h WiFi 2.4 GHz X 5.17 67.53 18.80 4.10 90.0 ± 9.6  LEEE 802.11a/h Wi									
TO065-CAB   IEEE 802.11a/h WiFi 5 GHz (OFDM, 18   X   4.96   67.04   17.06   1.21   100.0   ± 9.6					l		0.86		±9.6 %
10065-   REEE 802.11a/h WiFi 5 GHz (OFDM, 18   X   4.96   67.04   17.06   1.21   100.0   ± 9.6									
CAB									
TO066-   IEEE 802.11a/h WiFi 5 GHz (OFDM, 24   X   4.99							1.21		±9.6 %
10066-   REEE 802.11a/h WiFi 5 GHz (OFDM, 24   X   4.99									
CAB         Mbps)         Y         4.67         67.18         17.27         100.0           10067- CAB         IEEE 802.11a/h WiFi 5 GHz (OFDM, 36         X         5.29         66.75         16.91         100.0           CAB         Mbps)         Y         4.92         66.75         16.91         100.0         ±9.6           CAB         Mbps)         Y         4.97         67.49         17.80         100.0         ±9.6           CAB         Mbps)         Y         4.97         67.49         17.80         100.0         ±9.6           10068- CAB         IEEE 802.11a/h WiFi 5 GHz (OFDM, 48         X         5.37         67.42         18.00         2.55         100.0         ±9.6           B         Y         5.00         67.43         17.99         100.0         ±9.6           CAB         Mbps)         Y         5.00         67.43         17.99         100.0         ±9.6           CAB         Mbps)         Y         5.00         67.43         17.99         100.0         ±9.6           CAB         Mbps)         Y         5.07         67.46         18.19         100.0         ±9.6           CAB         (DSSS/OFDM, 9 Mbps)	40000	IFFE 000 44 % March = 014 (0mm; 1 = 1							. 0
10067-							1.46		± 9.6 %
TOOGS									
CAB         Mbps)         Y         4.97         67.49         17.80         100.0           10068- CAB         IEEE 802.11a/h WiFi 5 GHz (OFDM, 48         X         5.37         67.42         18.00         2.55         100.0         ±9.6           CAB         Mbps)         Y         5.00         67.43         17.99         100.0         ±9.6           10069- CAB         LEEE 802.11a/h WiFi 5 GHz (OFDM, 54         X         5.44         67.37         18.17         2.67         100.0         ±9.6           CAB         Mbps)         Y         5.07         67.46         18.19         100.0         ±9.6           CAB         Mbps)         Y         5.07         67.46         18.19         100.0         ±9.6           CAB         Mbps)         Y         5.07         67.46         18.19         100.0         ±9.6           CAB         (DSSS/OFDM, 9 Mbps)         Y         4.83         67.15         17.67         100.0         ±9.6           CAB         (DSSS/OFDM, 9 Mbps)         Y         4.83         67.15         17.64         100.0         ±9.6           CAB         (DSSS/OFDM, 12 Mbps)         Y         4.80         67.45         17.88         <	10007						<u> </u>		
Tools							2.04		±9.6 %
10068-   IEEE 802.11a/h WiFi 5 GHz (OFDM, 48   X   5.37   67.42   18.00   2.55   100.0   ± 9.6	,								
CAB         Mbps)         Y         5.00         67.43         17.99         100.0           10069-CAB         IEEE 802.11a/h WiFi 5 GHz (OFDM, 54         X         5.44         67.37         18.17         2.67         100.0         ± 9.6           CAB         Mbps)         Y         5.07         67.46         18.19         100.0         ± 9.6           CAB         CSSS/OFDM, 9 Mbps)         Y         5.07         67.46         18.19         100.0         ± 9.6           CAB         (DSSS/OFDM, 9 Mbps)         Y         5.08         66.89         17.54         1.99         100.0         ± 9.6           CAB         (DSSS/OFDM, 9 Mbps)         Y         4.83         67.15         17.64         100.0         ± 9.6           CAB         (DSSS/OFDM, 9 Mbps)         Y         4.83         67.15         17.64         100.0         ± 9.6           CAB         (DSSS/OFDM, 9 Mbps)         Y         4.80         67.45         17.88         100.0         ± 9.6           CAB         (DSSS/OFDM, 12 Mbps)         Y         4.80         67.45         17.84         100.0         ± 9.6           CAB         (DSSS/OFDM, 18 Mbps)         Y         4.87         67.68	10000								
Toolsgoon							2.55		± 9.6 %
10069-   IEEE 802.11a/h WiFi 5 GHz (OFDM, 54   X   5.44   67.37   18.17   2.67   100.0   ± 9.6									
CAB         Mbps)         Y         5.07         67.46         18.19         100.0           10071- CAB         IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps)         X         5.08         66.89         17.54         1.99         100.0         ±9.6           CAB         (DSSS/OFDM, 9 Mbps)         Y         4.83         67.15         17.64         1.09.0         ±9.6           10072- CAB         IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps)         X         5.09         67.31         17.81         2.30         100.0         ±9.6           10073- CAB         IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps)         X         5.02         66.97         17.47         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0									
Tele							2.67		±9.6%
10071-									
CAB         (DSSS/OFDM, 9 Mbps)         Y         4.83         67.15         17.64         100.0           10072- CAB         IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps)         X         5.02         66.59         17.22         100.0           10072- CAB         IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps)         X         5.09         67.31         17.81         2.30         100.0         ±9.6           10073- CAB         IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps)         X         5.17         67.53         18.18         2.83         100.0         ±9.6           10074- CAB         IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps)         X         5.16         67.47         18.37         3.30         100.0         ±9.6           10075- CAB         IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps)         X         5.16         67.47         18.03         100.0         ±9.6           10076- CAB         IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps)         X         5.22         67.70         18.74         90.0         ±9.6           10076- CAB         IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps)         X         5.22         67.45         18.92         90.0         ±9.6           10077- CAB         IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps)         X									
Tell							1.99		±9.6 %
10072-   IEEE 802.11g WiFi 2.4 GHz									
CAB         (DSSS/OFDM, 12 Mbps)         Y         4.80         67.45         17.88         100.0           10073- CAB         IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps)         X         5.17         67.53         18.18         2.83         100.0         ± 9.6           CAB         (DSSS/OFDM, 18 Mbps)         Y         4.87         67.68         18.27         100.0         ± 9.6           10074- CAB         IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps)         X         5.16         67.47         18.37         3.30         100.0         ± 9.6           10075- CAB         IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps)         X         5.22         67.70         18.76         3.82         90.0         ± 9.6           10076- CAB         IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps)         X         5.22         67.67         18.74         90.0           10076- CAB         IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps)         X         5.22         67.45         18.84         90.0           10077- CAB         IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps)         X         5.24         67.51         18.92         90.0           10077- CAB         IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps)         X         5.24         67.51         18.95									
Tele							2.30		± 9.6 %
10073-									
CAB (DSSS/OFDM, 18 Mbps)  Y 4.87 67.68 18.27 100.0  10074- IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps)  Y 4.87 67.63 18.45 100.0  Y 4.87 67.63 18.45 100.0  Y 4.87 67.63 18.45 100.0  Z 5.08 67.11 18.03 100.0  CAB (DSSS/OFDM, 36 Mbps)  Y 4.89 67.67 18.74 90.0  Z 5.14 67.33 18.42 90.0  10076- IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps)  Y 4.89 67.67 18.74 90.0  Z 5.14 67.33 18.42 90.0  10076- CAB (DSSS/OFDM, 48 Mbps)  Y 4.92 67.52 18.92 90.0  10077- IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps)  Y 4.92 67.52 18.92 90.0  10077- IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps)  Y 4.95 67.62 19.04 90.0									
CAB							2.83		±9.6%
10074-   IEEE 802.11g WiFi 2.4 GHz	***************************************								
Y   4.87   67.63   18.45   100.0			X				3.30		±9.6 %
Tell Reserve   Tell	UND	(UGGG/OFDIVI, 24 IVIDDS)	+	107	67.62	10 15		100.0	
10075- CAB (DSSS/OFDM, 36 Mbps)  Y 4.89 67.67 18.74 90.0  Z 5.14 67.33 18.42 90.0  10076- CAB (DSSS/OFDM, 48 Mbps)  Y 4.92 67.52 18.92 90.0  10077- CAB (DSSS/OFDM, 54 Mbps)  Y 4.92 67.51 18.95 4.30 90.0  10077- CAB (DSSS/OFDM, 54 Mbps)  Y 4.95 67.62 19.04 90.0		-							
CAB     (DSSS/OFDM, 36 Mbps)       Y     4.89     67.67     18.74     90.0       Z     5.14     67.33     18.42     90.0       10076- CAB     IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps)     X     5.22     67.45     18.86     4.15     90.0     ± 9.6       Y     4.92     67.52     18.92     90.0       Z     5.14     67.09     18.53     90.0       10077- IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps)     X     5.24     67.51     18.95     4.30     90.0       Y     4.95     67.62     19.04     90.0	10075	IEEE 902 110 WIEI 2 4 CH2					207		4060/
Z   5.14   67.33   18.42   90.0							3.02		д 3.0 %
10076- CAB (DSSS/OFDM, 48 Mbps)  Y 4.92 67.52 18.92 90.0  Z 5.14 67.09 18.53 90.0  10077- CAB (DSSS/OFDM, 54 Mbps)  Y 4.95 67.62 19.04 90.0									~*************************************
Y 4.92 67.52 18.92 90.0  Z 5.14 67.09 18.53 90.0  10077- IEEE 802.11g WiFi 2.4 GHz CAB (DSSS/OFDM, 54 Mbps)  Y 4.95 67.62 19.04 90.0							4.15		± 9.6 %
2   5.14   67.09   18.53   90.0   10077-   IEEE 802.11g WiFi 2.4 GHz   X   5.24   67.51   18.95   4.30   90.0   ±9.6   (DSSS/OFDM, 54 Mbps)   Y   4.95   67.62   19.04   90.0	V/10	10000101 DIVI, 40 IVIDPS)	l v	4 02	67.52	18 02		00.0	
10077- IEEE 802.11g WiFi 2.4 GHz X 5.24 67.51 18.95 4.30 90.0 ±9.6 (DSSS/OFDM, 54 Mbps) Y 4.95 67.62 19.04 90.0		<del>                                     </del>							
CAB (DSSS/OFDM, 54 Mbps) Y 4.95 67.62 19.04 90.0	10077-	IEEE 802 11a WIEI 2 4 CH2					430		4000
							4.30		1 0.0 %
1 7 1 7 40 1 40 40 1 40 40 1 40 40 1		<del> </del>	Z	4.95 5.16	67.62	19.04	ļ	90.0	

10081- CAB	CDMA2000 (1xRTT, RC3)	X	0.84	65.40	12.52	0.00	150.0	± 9.6 %
		Υ	0.65	64.57	10.44		150.0	
40000		Z	0,70	62.59	10.41		150.0	
10082- CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4- DQPSK, Fullrate)	X	1.00	60.00	5.34	4.77	80.0	±9.6%
		Y	0.65	60.00	4.11		80.0	
		Z	0.94	60.00	5.13		80.0	
10090- DAC	GPRS-FDD (TDMA, GMSK, TN 0-4)	X	100.00	115.85	27.88	6.56	60.0	± 9.6 %
		Y	100.00	116.50	26.92	<u> </u>	60.0	
10097-	111111111111111111111111111111111111111	Z	100.00	114.37	26.98		60.0	
CAB	UMTS-FDD (HSDPA)	Х	1.80	67.04	15.39	0.00	150.0	± 9.6 %
		Υ	1.85	68.99	15.97		150.0	
10098-	There are discussed as	Z	1,64	65.18	14.00		150.0	
CAB	UMTS-FDD (HSUPA, Subtest 2)	X	1.76	66.99	15.35	0.00	150.0	± 9.6 %
		Y	1.81	68.96	15.96		150.0	
10099-	EDGE-FDD (TDMA, 8PSK, TN 0-4)	Z X	1.60	65.10	13.94	1	150.0	
DAC	CDGC-FUD (TUWA, 8PSK, 1N U-4)		19.16	108.92	38.55	9.56	60.0	±9.6 %
	<u> </u>	Y	11.50	103.26	38.49		60.0	
10100-	LTE EDD (CC FONA 4000) ED CO	Z	14.26	101.76	36.08		60.0	ļ
CAD	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	Х	3.12	69.96	16.46	0.00	150.0	±9.6%
		Y	3.02	70.58	16.94		150.0	ļ
10101-	LTE-FDD (SC-FDMA, 100% RB, 20	Z	2.84	68.15	15.30		150.0	
CAD	MHz, 16-QAM)		3.26	67.34	15.80	0.00	150.0	±9.6 %
~~~~		Y	3.11	67.60	16.01		150.0	<u> </u>
10102-	1 TE 500 (00 5011) (000 50 00	Z	3.13	66.43	15.09		150.0	
CAD	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	Х	3.37	67.32	15.90	0.00	150.0	± 9.6 %
		Y	3.21	67.57	16.09		150.0	
10103-	LTE-TDD (SC-FDMA, 100% RB, 20	LZ.	3.24	66.46	15.22		150.0	
CAD	MHz, QPSK)	Х	8.33	79.69	22.08	3.98	65.0	± 9.6 %
		Υ	6.84	79.07	22.31		65.0	<u></u>
10104-	LTC TDD (OO EDIN (OO) DD	Z	7.34	77.47	21.06		65.0	
CAD	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	X	7.64	76,60	21.68	3.98	65.0	±9.6%
		Y	6.15	74.98	21.35		65.0	
10105-	LTC TOD (OO COLL) (OO) OD AO	Z	7.10	75.26	20.98		65.0	
CAD	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	Х	7.36	75.84	21.68	3.98	65.0	±9.6 %
***********		Y	5.92	74.03	21.23		65.0	
10108-	LTE-FDD (SC-FDMA, 100% RB. 10	Z	6.77	74.27	20.87		65.0	
CAE	MHz, QPSK)	×	2.74	69.16	16.27	0.00	150.0	±9.6 %
		Y	2.61	69.95	16.79		150.0	
10109-	LITE EDD (OC EDMA 4000 FOR 15	Z	2.49	67.37	15.08		150.0	
CAE	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	X	2.92	67.14	15.70	0.00	150.0	±9.6 %
******************		Y	2.76	67.60	15.89		150.0	*********
10110-	LTE FOO (OC FOLKS 1000) FO	Z	2.78	66.11	14.90		150.0	
CAE	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	Х	2.23	68.18	15.87	0.00	150.0	±9.6 %
		Y	2.10	69.29	16.34		150.0	
30444	LTC FDD (OO CDIA)	Z	2.02	66.33	14.57		150.0	
10111- CAE	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	X	2.63	67.80	15.96	0.00	150.0	± 9.6 %
		Y	2.51	68.87	16.15		150.0	*****
		Z	2.45	66.39	14.92		150.0	

10112- CAE	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	Х	3.05	67.14	15.76	0.00	150.0	± 9.6 %
		Y	2.88	67.64	15.95		150.0	
		Ż	2.91	66.18	15.00		150.0	
10113- CAE	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	X	2.78	67.94	16.10	0.00	150.0	± 9.6 %
		ÌΥ	2.65	69.02	16.27		150.0	
		Z	2.60	66.61	15.11		150.0	
10114- CAB	IEEE 802.11n (HT Greenfield, 13.5 Mbps, BPSK)	Х	5.16	67,08	16.36	0.00	150.0	±9.6 %
		Y	4.94	67.18	16.47		150.0	
		Z	5.09	66.75	16.02		150.0	
10115- CAB	IEEE 802.11n (HT Greenfield, 81 Mbps, 16-QAM)	Х	5.49	67.32	16.49	0.00	150.0	± 9.6 %
		Y	5.19	67.25	16.50		150.0	
		Z	5.41	66.99	16.16		150.0	
10116- CAB	IEEE 802.11n (HT Greenfield, 135 Mbps, 64-QAM)	Х	5.27	67.31	16.40	0.00	150.0	±9.6 %
		Υ	5.03	67.38	16.49		150.0	
		Z	5.19	66.96	16.06		150.0	
10117- CAB	IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK)	Х	5.14	67.00	16.33	0.00	150.0	±9.6 %
		Υ	4.94	67.14	16.46		150.0	
		Z	5.06	66.66	16.00		150.0	
10118- CAB	IEEE 802.11n (HT Mixed, 81 Mbps, 16- QAM)	Х	5.56	67.51	16.58	0.00	150.0	±9.6 %
		Υ	5.26	67.44	16.60		150.0	
		Z	5.49	67.17	16.26		150.0	
10119- CAB	IEEE 802.11n (HT Mixed, 135 Mbps, 64- QAM)	Х	5.24	67.24	16.37	0.00	150.0	±9.6%
		Y	5.02	67.37	16.50		150.0	
		Z	5.16	66.89	16.04		150.0	
10140- CAD	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	Х	3.41	67.32	15.83	0.00	150.0	±9.6 %
		Y	3.24	67.60	16.01		150.0	
		Z	3.28	66.48	15.15		150.0	
10141- CAD	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	Х	3.53	67.42	16.00	0.00	150.0	± 9.6 %
		Υ	3.36	67.74	16.19		150.0	
***************************************		Z	3.40	66.61	15.35		150.0	
10142- CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	Х	2.00	68.09	15.56	0.00	150.0	±9.6%
		Υ	1.87	69.35	15.72		150.0	
		Z	1.78	65.96	14,09		150.0	
10143- CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	Х	2.48	68.45	15.72	0.00	150.0	± 9.6 %
		Υ	2.33	69.45	15.38		150.0	
		Z	2.25	66.57	14.42		150.0	
10144- CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	Х	2.28	66.39	14.23	0.00	150.0	±9.6 %
		Y	1.98	66.31	13.31		150,0	
		Z	2.12	65.05	13.21		150.0	
10145- CAE	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	Х	1.30	65.44	12.36	0.00	150.0	± 9.6 %
		Y	0.79	61.72	8.33		150.0	
10146-	LTE-FDD (SC-FDMA, 100% RB, 1.4	Z X	1.12 2.64	63.18 70.08	10.71 14.27	0.00	150.0 150.0	± 9.6 %
CAE	MHz, 16-QAM)	 , , 					4500	ļ
		Y	1.12	61.74	7.81		150.0	
10117	1 TE EDD (00 ED) 1 4000 DE : :	Z	2.13	66.87	12.42		150.0	- 0 0 6
10147- CAE	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	X	3.51	73.94	16.07	0.00	150.0	± 9.6 %
		Υ	1.20	62.39	8.26		150.0	
		Z	2.49	68.91	13.52		150.0	

40440		.,			··			
10149- CAD	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	×	2.93	67.20	15.74	0.00	150.0	± 9.6 %
		Y	2.77	67.66	15.94		150.0	
40450	LTE EDD (OO FOLK FOR OD FALL)	Z	2.79	66.16	14.94	<u> </u>	150.0	
10150- CAD	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	X	3.06	67.19	15.80	0.00	150.0	± 9.6 %
		Y	2.89	67.70	16.00		150.0	
		Z	2.92	66.22	15.04		150.0	
10151- CAD	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	Х	9.10	82,72	23.34	3.98	65.0	± 9.6 %
		Y	7.77	83,35	24.03		65.0	
		Z	7.87	80.11	22.17		65.0	
10152- CAD	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	Х	7.25	76.84	21.53	3.98	65.0	±9.6%
		Y	5.77	75.38	21.12		65.0	
		Z	6.65	75.29	20.73		65.0	
10153- CAD	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	Х	7.68	77.84	22.31	3.98	65.0	± 9.6 %
		Y	6.19	76.52	21,97		65.0	
		Z	7.06	76.27	21.51		65.0	
10154- CAE	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	Х	2.27	68.60	16.13	0.00	150.0	± 9.6 %
		Y	2.14	69.66	16.57		150.0	
		Z	2.05	66.63	14.78		150.0	
10155- CAE	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	Х	2.63	67.80	15.97	0.00	150.0	±9.6 %
		Y	2.51	68.91	16.18		150.0	
		Z	2.45	66.40	14.93		150,0	
10156- CAE	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	Х	1.85	68.17	15.39	0.00	150.0	±9.6 %
		Y	1.69	69.14	15,17		150.0	<u> </u>
····		Z	1.62	65.76	13.75		150.0	
10157- CAE	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	X	2.12	66.91	14.29	0.00	150.0	± 9.6 %
		Y	1.79	66.54	13.00		150.0	
		Z	1.92	65.19	13,05		150.0	
10158- CAE	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	Х	2.79	68.00	16.14	0.00	150.0	±9.6 %
*****		Y	2.66	69.10	16.32		150.0	
***************************************		Ż	2.61	66.65	15.15		150.0	
10159- CAE	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	Х	2.23	67.39	14.59	0.00	150.0	± 9.6 %
		Y	1.87	66.87	13.20		150.0	
		Z	2.01	65.56	13.30		150.0	
10160- CAD	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	Х	2.74	68.23	16.07	0.00	150.0	±9.6%
VII.V.		Y	2.64	69.20	16.55		150.0	
		Z	2.55	66.80	15.05		150.0	
10161- CAD	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	Х	2.95	67.11	15.74	0.00	150.0	± 9.6 %
		Y	2.78	67.68	15.88		150.0	
		Z	2.81	66.11	14,94		150.0	
10162- CAD	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	X	3.06	67.24	15.84	0.00	150.0	± 9.6 %
		Υ	2.89	67.90	16.02	·····	150.0	
		Z	2.92	66.26	15.07	~~~~	150.0	
10166- CAE	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	Х	3.70	69.58	19.27	3.01	150.0	± 9.6 %
		Y	3.28	69.68	19,46		150.0	
		Z	3.63	69.00	18.75		150.0	11V
10167- CAE	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	Х	4.55	72.43	19.74	3.01	150.0	± 9.6 %
		Y	3.95	72.87	20.04		150.0	
		Ż	4.44	71.75	19.18		150.0	
		<u> </u>	7.77	1 1.10	10.10		100.0	

10168- CAE	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	Х	5.04	74.67	21.06	3.01	150.0	± 9.6 %
		Υ	4.45	75.52	21.56		150.0	
		Z	4.90	73.87	20.45		150.0	
10169- CAD	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	Х	3.13	69.42	19.23	3.01	150.0	± 9.6 %
		Υ	2.65	68.12	18.80		150.0	
		Z	3.07	68.78	18.63		150.0	
10170- CAD	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	Х	4.32	75.44	21.61	3.01	150.0	± 9.6 %
		Y	3.45	73.89	21,21		150.0	
····		Z	4.18	74.42	20.85		150.0	
10171- AAD	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	Х	3.55	71,24	18.84	3.01	150.0	±9.6 %
		Υ	2.88	70.12	18.52		150.0	
		Z	3.46	70.45	18.18		150.0	
10172- CAD	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	Х	22.91	110.27	34.84	6.02	65.0	± 9.6 %
		Y	8.26	96.77	32.08		65.0	
		Z	13.81	99.89	31.52		65.0	
10173- CAD	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	Х	55.63	121.17	35.70	6.02	65.0	± 9.6 %
		Y	30.82	118.44	36.12		65.0	
		Z	32.47	110.93	32.74		65.0	
10174- CAD	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	Х	39.54	113.02	32.93	6.02	65.0	±9.6 %
		Υ	23.05	110.98	33.34	***********	65.0	
		Z	23.65	103.70	30.13		65.0	
10175- CAE	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	Х	3.09	69.10	18.97	3.01	150.0	±9.6 %
		Y	2,62	67.88	18.58		150.0	
		Z	3.03	68.48	18.39		150.0	
10176- CAE	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	Х	4.33	75.46	21,62	3.01	150.0	±9.6 %
		Υ	3.46	73.91	21.22		150.0	
		Z	4.19	74.44	20.86		150.0	
10177- CAG	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	X	3.12	69.26	19.08	3.01	150.0	± 9.6 %
		Υ	2.64	67.99	18.65		150.0	
		Z	3.06	68.63	18,48		150.0	
10178- CAE	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)	Х	4.28	75.20	21.48	3.01	150.0	± 9.6 %
		Y	3.44	73.78	21.14		150.0	
		Z	4,14	74.21	20.73		150.0	
10179- CAE	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	Х	3.90	73.22	20.10	3.01	150.0	±9.6 %
		Y	3.15	71.97	19.77		150.0	ļ
10180-	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 64-	Z	3,78 3,54	72.29 71.16	19.37 18.79	3.01	150.0 150.0	± 9.6 %
CAE	QAM)	Y		70.08	18.49	3.01	150.0	I 9.0 %
			2.88		74174			
10181-	LTE EDD (OC COMA 4 DD 45 ML)	Z	3.45	70.38	18.13	2.04	150.0	1000
CAD	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	Х	3.11	69.24	19.07	3,01	150.0	± 9.6 %
		Y	2.63	67.97	18.65		150.0	
10182- CAD	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	Z X	3.05 4.27	68.61 75.18	18.48 21.47	3.01	150.0 150.0	± 9.6 %
UMU	TUTG/NYI)	Y	3,43	73.75	21.13		150.0	
		Z	4.14	74.19	20.72			
10183-	LTE-FDD (SC-FDMA, 1 RB, 15 MHz,	X	3.53	74.19	18.78	3.01	150.0 150.0	1060
AAC	64-QAM)					3.03		±9.6 %
·		Y	2.88	70.06	18.48		150.0	
		Z	3.44	70.36	18.12		150.0	

Certificate No: EX3-3922_Nov17

EX3DV4-SN:3922

10184- CAD	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	X	3.12	69.29	19.09	3.01	150.0	± 9.6 %
		Υ	2.64	68,01	18.67		150.0	
		Z	3.06	68.65	18.50		150.0	
10185- CAD	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)	X	4.29	75.25	21.51	3.01	150.0	±9.6 %
~~~~		Y	3.45	73.82	21.16		150.0	
		Z	4.16	74.26	20.76		150.0	
10186- AAD	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)	Х	3.55	71,20	18.81	3.01	150.0	± 9.6 %
		Υ	2.89	70.12	18.52		150.0	
		Z	3.46	70.42	18.15		150.0	
10187- CAE	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	X	3.13	69.33	19.15	3.01	150.0	± 9.6 %
		Y	2.65	68.08	18.74		150.0	
		Z	3.07	68.70	18,55		150.0	
10188- CAE	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	Х	4.44	75.95	21.90	3.01	150.0	±9.6 %
		Y	3.54	74.36	21.49		150.0	
		Z	4.29	74.91	21.13		150.0	
10189- AAE	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	Х	3.63	71.64	19.09	3.01	150.0	± 9.6 %
		Υ	2.95	70.50	18.77		150.0	
		Z	3.53	70.83	18.42		150.0	
10193- CAB	IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK)	Х	4.57	66,49	16.08	0.00	150.0	± 9.6 %
		Υ	4.36	66.85	16.18		150.0	
		Z	4,49	66.12	15.71		150.0	
10194- CAB	IEEE 802.11n (HT Greenfield, 39 Mbps, 16-QAM)	Х	4.74	66.82	16.20	0.00	150.0	± 9,6 %
		Υ	4.50	67.09	16.31		150.0	
		Z	4.67	66.44	15.83		150.0	
10195- CAB	IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM)	Х	4.79	66.85	16.22	0.00	150.0	± 9.6 %
		Y	4.53	67.11	16.33		150.0	
~~~		Z	4.71	66.47	15.85		150.0	
10196- CAB	IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK)	Z X	4.57	66.56	16.11	0.00	150.0	±9.6%
		Y	4.34	66.85	16.17		150.0	
		Z	4.50	66.18	15.73		150.0	ļ
10197- CAB	IEEE 802.11n (HT Mixed, 39 Mbps, 16-QAM)	x	4.76	66.84	16.21	0.00	150.0	± 9.6 %
		Υ	4.51	67.10	16.32		150.0	
		Ż	4.68	66.46	15.84		150.0	
10198- CAB	IEEE 802.11n (HT Mixed, 65 Mbps, 64-QAM)	X	4.79	66.86	16.23	0.00	150.0	±9.6%
		Y	4.53	67.11	16.33		150.0	
		Z	4.71	66.49	15.86		150.0	
10219- CAB	IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK)	Х	4.52	66,57	16.07	0.00	150.0	± 9.6 %
		Y	4.29	66.89	16.14		150.0	
		Z	4,45	66.18	15.68		150.0	
10220- CAB	IEEE 802.11n (HT Mixed, 43.3 Mbps, 16-QAM)	X	4.75	66.82	16.21	0.00	150.0	±9.6 %
		Υ	4.50	67.06	16.31	***************************************	150.0	
		Z	4.68	66,44	15.84		150.0	
10221- CAB	IEEE 802.11n (HT Mixed, 72.2 Mbps, 64-QAM)	Х	4.80	66.80	16.22	0.00	150.0	± 9.6 %
		Y	4.54	67.05	16.32		150.0	
		Ż	4.72	66,43	15.85		150.0	
10222- CAB	IEEE 802.11n (HT Mixed, 15 Mbps, BPSK)	X	5.11	67.01	16.33	0.00	150.0	± 9.6 %
		Y	4.91	67.12	16.44		150.0	
*****		z	5.04	66.66	15.99		150.0	
	·		0.07	170.00	10.00	·	100.0	

10223- CAB	IEEE 802.11n (HT Mixed, 90 Mbps, 16-QAM)	Х	5,42	67.19	16.44	0.00	150.0	± 9.6 %
		Y	5.17	67.31	16.55		150.0	
		Ζ	5,35	66.87	16.13		150.0	
10224- CAB	IEEE 802.11n (HT Mixed, 150 Mbps, 64-QAM)	Х	5.16	67.12	16.31	0.00	150.0	±9.6%
		Υ	4.95	67.23	16.43		150.0	
		Z	5.08	66.77	15.97		150.0	
10225- CAB	UMTS-FDD (HSPA+)	Х	2.83	65.90	15.26	0.00	150.0	±9.6 %
		Υ	2.64	66.43	15.06		150.0	
		Z	2.73	65.11	14.56		150.0	
10226- CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	Х	63.57	123.88	36.49	6.02	65.0	±9.6%
		Y	35.48	121.38	37.00		65.0	
		Z	36.12	113.06	33.42		65.0	
10227- CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	Х	51.61	117.88	34.29	6.02	65.0	±9.6%
		Υ	38.44	120.37	35.86		65.0	
		Z	31.38	108.65	31.57		65.0	
10228- CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	X	28,51	115.16	36.33	6.02	65.0	± 9.6 %
v		Υ	9.53	100.12	33.25		65.0	
		Z	17.50	104.98	33.15		65.0	
10229- CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16- QAM)	Х	56.02	121.29	35.74	6.02	65.0	±9.6%
		Υ	31.08	118.56	36.15		65.0	
		Z	32.73	111.05	32.78		65.0	
10230- CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)	Х	46.07	115.69	33.64	6.02	65.0	± 9.6 %
		Υ	32.82	117,30	34.98		65.0	
		Z	28.59	106,87	31.00		65.0	
10231- CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	Х	26.24	113.32	35.73	6.02	65.0	±9.6%
		Y	9.00	98.78	32.73		65.0	
		Z	16.41	103.56	32.64		65.0	
10232- CAD	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)	Х	56.00	121.29	35.74	6.02	65.0	±9.6 %
		Y	31.03	118.56	36.15		65.0	
		Z	32.69	111.04	32.78		65.0	
10233- CAD	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64- QAM)	Х	45.99	115.67	33.63	6.02	65.0	± 9.6 %
		Y	32.61	117.20	34.96		65.0	
		Z	28,53	106.85	30.99		65.0	
10234- CAD	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	Х	24.41	111.60	35.12	6.02	65.0	±9.6%
		Y	8.65	97.77	32.27		65.0	
		Z	15.51	102.25	32.12		65.0	
10235- CAD	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	Х	56.25	121.39	35.77	6.02	65.0	±9.6%
		Υ	31.20	118.68	36.19		65.0	
		Z	32.77	111.11	32.80		65.0	
10236- CAD	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	Х	46.86	115.97	33.70	6.02	65.0	± 9.6 %
		Υ	33.64	117.72	35.08		65.0	
		Z	28.97	107.08	31.05		65.0	
10237- CAD	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	Х	26.45	113.52	35.78	6.02	65,0	± 9.6 %
		Υ	9.02	98.88	32.77		65.0	
		Z	16.48	103.69	32.68		65.0	
10238- CAD	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	Х	55.98	121.30	35.74	6.02	65.0	±9.6 %
UAU		Y	30.98	118.55	36.15		65.0	T
		1 .	00,00	110.00				

Certificate No: EX3-3922_Nov17 Page 20 of 38

10239-	LTE-TDD (SC-FDMA, 1 RB, 15 MHz,	X	45.90	115.66	33.63	6.02	65.0	± 9.6 %
CAD	64-QAM)	Y	32.42	117.13	34.95		65.0	-
		Z	28.45	106.82	30.99	 	65.0	-
10240- CAD	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	X	26.33	113.44	35.76	6.02	65.0	± 9.6 %
		Y	9.00	98.85	32.76	1	65.0	
		Z	16.42	103.62	32.66		65.0	
10241- CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	X	10.07	84.89	27.17	6.98	65.0	± 9.6 %
ļ		Y	8.48	85.82	27.97		65.0	
10242-	LTE TOD /OO FOLL FOR OF A LINE	Z	9.42	83.49	26.49		65.0	
CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	Х	9.62	83.89	26.70	6.98	65.0	±9.6%
		Y	8.07	84.80	27.50		65.0	
10243-	TE TOD (SO FOME FOR DE 4 4 MIL	Z	8.78	81.98	25.82		65.0	
CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	X	7.49	79.90	26.00	6.98	65.0	±9.6%
		Y	6.06	79.30	26.24		65.0	
10244-	LTE-TDD (SC-FDMA, 50% RB, 3 MHz,	Z	6.89	78.08	25.09	200	65.0	1000
CAB	16-QAM)	X	9.99	83.65	22.16	3.98	65.0	±9.6 %
		Z	5.92	76.90	18.09		65.0	ļ
10245-	LTE-TDD (SC-FDMA, 50% RB, 3 MHz.	X	8.32 9.55	80.61 82.63	20.83		65.0	
CAB	64-QAM)				21.73	3.98	65.0	±9.6 %
		Y	5.48	75.50	17.46		65.0	
10246-	LTE-TDD (SC-FDMA, 50% RB, 3 MHz.	Z	8.04	79.78	20.46		65.0	
CAB	QPSK)		10.75	87.85	23.54	3.98	65.0	±9.6 %
		Y	7.46	84.12	21,21		65.0	
10247-	LTE-TDD (SC-FDMA, 50% RB, 5 MHz.	Z	7.49	81.97	21.23		65.0	
CAD	16-QAM)	Х	7.05	78.53	20.82	3.98	65.0	± 9.6 %
		Y	5.10	75.52	18.72		65.0	<u> </u>
10248-	LTE-TDD (SC-FDMA, 50% RB, 5 MHz.	Z X	6.05	75.99	19.59		65.0	
CAD	64-QAM)		6.88	77.62	20.43	3.98	65.0	±9.6 %
		Y	4.87	74.30	18.18		65.0	
10249-	LTE-TDD (SC-FDMA, 50% RB, 5 MHz.	Z X	6.00	75.32	19,29		65.0	
CAD	QPSK)		12.17	90.46	25.25	3.98	65.0	± 9.6 %
		Y	11.28	92.21	25.40		65.0	
10250-	LTE-TDD (SC-FDMA, 50% RB, 10 MHz.	Z	8.74	84.78	23.07		65.0	
CAD	16-QAM)		7.83	80.37	23.01	3.98	65.0	±9.6%
	1	Y	6.20	79.06	22.43		65.0	ļ
10251- CAD	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	X	6.92 7.19	78.10 77.51	21.92 21.51	3.98	65.0 65.0	± 9.6 %
		Y	5.63	75.97	20.72		GE O	
······································		z	6.50	75.72	20.72		65.0	
10252-	LTE-TDD (SC-FDMA, 50% RB, 10 MHz,	$\frac{2}{x}$	10.60	87.58	25.11	3.98	65.0 65.0	+060/
CAD	QPSK)	Ŷ	9.46	89.47		3.80		±9.6%
		Z	8.47	83.54	26.06		65.0	
10253- CAD	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	X	7.03	76.14	23.47 21.26	3.98	65.0 65.0	± 9.6 %
····		Y	5.67	74.89	20.81		GE O	
		z	6.47	74.69	20.81	··	65.0	
10254-	LTE-TDD (SC-FDMA, 50% RB, 15 MHz,	x	7.44	77.09	21,97	3.98	65.0 65.0	1060
CAD	64-QAM)					3.80		± 9.6 %
		Y	6.03	75.88	21.53		65.0	·
		Z	6.86	75.60	21.19		65.0	

10255- CAD	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	X	8.54	81.84	23.25	3.98	65.0	±9.6 %
		Υ	7.24	82.29	23.80		65.0	İ
		Z	7.45	79.36	22.12		65.0	
10256- CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	Х	8,24	79,99	19.83	3,98	65.0	±9.6 %
		Y	3.52	69.17	13.46		65.0	
		Z	6.74	76.91	18.43		65.0	
10257- CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	Х	7.70	78.55	19.18	3.98	65.0	±9.6 %
		Y	3.29	67.96	12.77		65.0	
~~~~~~~~		Z	6,41	75.78	17.88		65.0	
10258- CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	Х	8.06	82.58	20.92	3.98	65.0	±9.6 %
		Υ	3.74	73.03	15.71		65.0	1
		Z	5.75	77.43	18.76		65.0	1
10259- CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	Х	7.35	79.15	21.58	3.98	65.0	±9,6 %
		Υ	5.61	77.14	20.18		65.0	
40000	1 TO TOO (00 PD) 4: (00 PD)	Z	6.39	76.75	20.41		65.0	
10260- CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	X	7.30	78.71	21.41	3.98	65.0	±9.6%
		Y	5.54	76.53	19.91		65.0	
		Z	6.40	76.43	20.30		65.0	
10261- CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	X	10.52	87.84	24.75	3.98	65.0	±9.6%
		Υ	9.43	89.34	25.09		65.0	
		Z	8.09	83.22	22.89		65.0	
10262- CAD	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	X	7.81	80,31	22.96	3.98	65.0	±9.6 %
		Y	6.18	78.97	22,37		65.0	
		Z	6.91	78.04	21.88		65.0	
10263- CAD	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	Х	7.18	77.49	21.51	3.98	65.0	± 9.6 %
		Υ	5.62	75.94	20.71		65.0	
		Z.	6.49	75.70	20,59		65.0	
10264- CAD	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	Х	10.47	87.33	25.00	3.98	65.0	±9.6 %
		Y	9.30	89.13	25.91		65.0	
		Z	8.38	83.33	23.37		65.0	
10265- CAD	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	X	7.24	76.84	21.54	3.98	65.0	±9.6%
		Υ	5.77	75.38	21.12		65.0	
		Z	6.64	75.29	20.73		65.0	
10266- CAD	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	Х	7.68	77.82	22.30	3.98	65.0	±9.6%
		Y	6.19	76,50	21.96		65.0	
		Z	7.06	76.26	21.50		65.0	
10267- CAD	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	X	9.08	82.67	23.32	3.98	65.0	±9.6%
		Υ	7.74	83.27	24.00		65.0	L
		Z	7.85	80.06	22.15		65.0	
10268- CAD	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	X	7.73	76.25	21.66	3.98	65.0	± 9.6 %
		Y	6.29	74.83	21.35		65.0	
		Z	7.22	75.02	21.00		65.0	
10269- CAD	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	Х	7.63	75.72	21.50	3.98	65.0	±9.6%
		Υ	6.26	74.33	21.17		65.0	L
		Z	7.17	74.56	20.87		65.0	
10270- CAD	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	Х	8.16	78.72	21.94	3.98	65.0	±9.6%
		Υ	6.83	78.36	22.23		65.0	
		Z	7.42	77.03	21.11		65.0	1

Certificate No: EX3-3922_Nov17 Page 22 of 38

10274- CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8,10)	X	2.59	66.15	15.11	0.00	150.0	± 9.6 %
		Y	2.50	67.14	15.17		150.0	<b></b>
		Z	2.47	65.19	14.30	1	150.0	
10275- CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.4)	Х	1.59	67.24	15.20	0.00	150.0	±9.6%
		Υ	1.59	68.96	15.86		150.0	
		Z	1.41	65.03	13.61		150.0	
10277- CAA	PHS (QPSK)	Х	2.88	63,88	9.19	9.03	50.0	± 9.6 %
		Υ	1.50	60.00	5.26		50.0	1
		Z	2.57	63.07	8.53		50.0	
10278- CAA	PHS (QPSK, BW 884MHz, Rolloff 0.5)	X	13.64	88.52	22.50	9.03	50.0	±9.6%
		Y	3.82	70.53	13.60		50.0	
		Z	9.48	83.22	20.46		50.0	
10279- CAA	PHS (QPSK, BW 884MHz, Rolloff 0.38)	Х	13.81	88.65	22.60	9.03	50.0	± 9.6 %
		Y	3.97	70.94	13.86	<u> </u>	50.0	
40000	00140000 504 65	Z	9.68	83.45	20.60		50.0	
10290- AAB	CDMA2000, RC1, SO55, Full Rate	Х	1.45	68.11	13.95	0.00	150.0	± 9.6 %
		Y	1.04	66.23	11.42		150.0	
10291-	CDM40000 DO0 COTE E I'M	Z	1,16	64.74	11.79	<u> </u>	150.0	
AAB	CDMA2000, RC3, SO55, Full Rate	X	0.83	65,20	12.40	0.00	150.0	± 9.6 %
		Y	0.64	64.34	10.30		150.0	
40000	050440000 7000 0000 7 117	Z	0.69	62.48	10.33	ļ	150.0	
10292- AAB	CDMA2000, RC3, SO32, Full Rate	X	1,00	68.65	14.50	0.00	150.0	± 9.6 %
		Υ	1.04	70.68	13.62	<u> </u>	150.0	
10000		Z	0.74	63.90	11.44		150.0	
10293- AAB	CDMA2000, RC3, SO3, Full Rate	Х	1.42	73.67	17.19	0.00	150.0	± 9.6 %
		Y	4.51	88.63	20.36		150.0	
40005		Z	0.87	65.86	12.87		150.0	
10295- AAB	CDMA2000, RC1, SO3, 1/8th Rate 25 fr.	Х	13.04	92.10	27.12	9,03	50.0	± 9.6 %
		Υ	89.47	123.70	34.18		50.0	
10000		Z	10.40	88.04	25.54		50.0	
10297- AAC	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	Х	2,75	69.26	16.34	0.00	150.0	±9.6%
		Υ	2.62	70.06	16.86		150.0	
40000		Z	2.50	67.45	15.14		150.0	
10298- AAC	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	X	1.59	67.33	14.16	0.00	150.0	± 9.6 %
		Υ	1.21	65.83	12.02		150.0	
40000	1775 5555 (24 551)	Z	1.36	64.73	12.38		150.0	
10299- AAC	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	Х	3.25	72,49	16.21	0.00	150.0	±9.6 %
		Y	1.86	66.60	11.67		150.0	
10202	LTT FDD 100 FBIT	Z	2.67	69.25	14.40		150.0	
10300- AAC	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	Х	2.29	66.76	12.86	0.00	150.0	± 9.6 %
		Y	1.34	62.41	8,77		150.0	
10301- AAA	IEEE 802.16e WIMAX (29:18, 5ms,	Z X	2,09 4.98	65.32 65.86	11.82 17.65	4.17	150.0 50.0	± 9.6 %
/ V/V3	10MHz, QPSK, PUSC)	<del>  ,,  </del>	4.00	00.00	, <del></del>			
		Y	4,63	66.36	17.72		50.0	
10302-	IEEE 902 160 WIMAY /20/49 =	Z	4.82	65.17	17.13	1.6-	50.0	
AAA	IEEE 802.16e WIMAX (29:18, 5ms, 10MHz, QPSK, PUSC, 3 CTRL symbols)	Х	5.45	66.44	18.35	4.96	50.0	± 9.6 %
		Y	5.06	66,66	18.26		50.0	
	1	Z	5.34	65.98	17.96		50.0	

10303- AAA	IEEE 802.16e WIMAX (31:15, 5ms, 10MHz, 64QAM, PUSC)	Х	5.22	66.18	18.24	4.96	50.0	±9.6 %
		Y	4.81	66.31	18.06		50.0	
		Z	5.11	65.69	17.82		50.0	
10304- AAA	IEEE 802.16e WIMAX (29:18, 5ms, 10MHz, 64QAM, PUSC)	Х	5.00	65.94	17.66	4.17	50.0	±9.6%
		Υ	4.64	66.23	17.57		50.0	
		Z	4.89	65.44	17.24		50.0	
10305- AAA	IEEE 802.16e WiMAX (31:15, 10ms, 10MHz, 64QAM, PUSC, 15 symbols)	Х	4.85	68.97	20.43	6.02	35.0	±9.6%
· · · · · · · · · · · · · · · · · · ·		Υ	4.24	68.22	19.36		35.0	
~~~~		Z	4.63	67,91	19.70		35.0	
10306- AAA	IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, 64QAM, PUSC, 18 symbols)	Х	5.05	67.46	19.74	6.02	35.0	± 9.6 %
		Y	4.55	67.22	19.12		35.0	
		Z	4.90	66.76	19.19		35.0	
10307- AAA	IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, QPSK, PUSC, 18 symbols)	Х	4.98	67.80	19.78	6.02	35.0	±9.6 %
		Υ	4.43	67.25	19.02		35.0	
		Z	4.82	67.00	19.19		35.0	
10308- AAA	IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, 16QAM, PUSC)	Х	4.97	68.02	19.93	6.02	35.0	± 9.6 %
		Υ	4.41	67.51	19.19		35.0	
		Z	4.79	67.20	19.32		35.0	
10309- AAA	IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, 16QAM, AMC 2x3, 18 symbols)	Х	5.12	67.73	19.90	6.02	35.0	±9.6%
		Y	4.57	67.33	19.23		35.0	
		Z	4,97	67.01	19.35		35.0	ì
10310- AAA	IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, QPSK, AMC 2x3, 18 symbols)	Х	5.01	67.57	19.73	6.02	35.0	±9.6 %
····		Y	4.50	67.29	19.11		35.0	
		Z	4.85	66.84	19.17		35.0	
10311- AAC	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	Х	3.10	68.61	16.02	0.00	150.0	±9.6 %
		Y	2.98	69.21	16.47		150.0	
		Z	2.83	66.90	14.91		150.0	
10313- AAA	IDEN 1:3	Х	9.28	84.22	20.34	6.99	70.0	± 9.6 %
		Y	9.97	89.26	22.12		70.0	
		Z	5.73	77.83	17.93		70.0	
10314- AAA	IDEN 1:6	Х	20.75	102.60	29.12	10,00	30.0	± 9.6 %
		Y	21.78	109.37	31.63		30.0	
		Z	8.22	87.81	24.52		30.0	
10315- AAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 96pc duty cycle)	Х	1.11	63.72	15.07	0.17	150.0	±9.6 %
		Y	1.07	64.37	15,57		150.0	
		Z	1.04	62.32	13.71	1	150.0	
10316- AAB	IEEE 802,11g WiFi 2.4 GHz (ERP- OFDM, 6 Mbps, 96pc duty cycle)	Х	4.64	66.61	16.27	0.17	150.0	±9.6%
		Y	4.40	66.89	16.37		150.0	
		, Z	4.57	66.24	15.90		150.0	<u></u>
10317- AAB	IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle)	Х	4.64	66.61	16.27	0.17	150.0	±9.6 %
		Y	4.40	66.89	16.37		150.0	
		Z	4.57	66.24	15.90		150.0	
10400- AAC	IEEE 802.11ac WiFi (20MHz, 64-QAM, 99pc duty cycle)	Х	4.74	66.87	16.19	0.00	150.0	±9.6 %
		Υ	4.46	67.12	16.30		150.0	
		Z	4.66	66.49	15.82		150.0	
	IEEE 802.11ac WiFi (40MHz, 64-QAM,	X	5.42	67.04	16.34	0.00	150.0	±9.6 %
10401- AAC		1						
10401- AAC	99pc duty cycle)	Y	5.12	66.91	16.31		150.0	

~~~~								
	1.75.75.75.7	Y	5.16	67.42	16.58		150.0	
10426- AAA	IEEE 802.11n (HT Greenfield, 90 Mbps, 16-QAM)	Х	5.39	67.25	16,44	0.00	150.0	± 9.6 %
10100	The state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s	Z	5.31	66.92	16.12		150.0	
	L	Υ	5.14	67.33	16.54		150.0	·····
10425- AAA	IEEE 802.11n (HT Greenfield, 15 Mbps, BPSK)	X	5.38	67.25	16.44	0.00	150.0	± 9.6 %
4040=		Z	4.71	66.54	15.90		150.0	
		Υ	4.53	67,17	16.37	~	150.0	
AAA	Mbps, 64-QAM)	*	4.79	66.92	16.27	0.00	150.0	± 9.6 %
10424-	IEEE 802.11n (HT Greenfield, 72.2	Z	4.80	66.60	15.93		150.0	
		Y	4.59	67.21	16.39		150.0	
AAA	Mbps, 16-QAM)					0.00		1 3.0 %
10423-	IEEE 802.11n (HT Greenfield, 43,3	X	4.63	66.27 66.97	15.81 16.30	0.00	150,0 150.0	± 9.6 %
		Y Z	4.47 4.63	66.95	16.30		150.0	
AAA	BPSK)							0.0 /0
10422-	IEEE 802.11n (HT Greenfield, 7.2 Mbps,	X	4.70	66.64	16.17	0.00	150.0 150.0	± 9.6 %
		Y	4.36 4.50	66.98 66.25	16.29 15.78		150.0 150.0	
AAA 	OFDM, 6 Mbps, 99pc duty cycle, Short preambule)	V	A 2/2	CC 00	40.00		4500	
10419-	IEEE 802.11g WiFI 2.4 GHz (DSSS-	Х	4.58	66.63	16.16	0.00	150.0	±9.6 %
		Z	4.48	66.28	15.77		150.0	
	preambule)	Υ	4,35	67.06	16.31		150.0	
10418- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 99pc duty cycle, Long	Х	4.56	66.67	16.15	0.00	150.0	±9.6 %
		Z	4.50	66.15	15.77		150.0	
AAA	Mbps, 99pc duty cycle)	Υ	4.35	66.84	16.25	*****	150.0	
10417-	IEEE 802.11a/h WiFl 5 GHz (OFDM, 6	X	4.57	66.53	16.14	0.00	150.0	± 9.6 %
		Z	4.50	66.15	15.77		150.0	
AAA	OFDM, 6 Mbps, 99pc duty cycle)	Y	4.35	66,84	16.25		150.0	
10416-	IEEE 802.11g WiFi 2.4 GHz (ERP-	Х	4.57	66.53	16.14	0.00	150.0	±9.6 %
		Z	0.96	61.45	13.07		150.0	
'CANA	mops, sape duty cycle)	Y	0.99	63,47	14.91		150.0	
10415- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle)	Х	1.01	62.61	14.33	0.00	150.0	±9.6%
		Z	100.00	123.35	31.39		80.0	
		Y	100.00	132.61	34.49		80.0	
AAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	Х	100.00	125.09	32.32	3.23	80.0	± 9.6 %
10410-	TE TOD /OC EDMA 4 DD 40 MI	Z	15.83	96.62	24.47		100.0	
		Y	100.00	121.95	29.73		100.0	
10406- AAB	CDMA2000, RC3, SO32, SCH0, Full Rate	X	93.39	124.85	32.36	0.00	100.0	±9.6%
		Z	1.16	64.74	11.79		115.0	
MAD		Y	1.04	66.23	11.42		115.0	
10404- AAB	CDMA2000 (1xEV-DO, Rev. A)	X	1.45	68.11	13.95	0.00	115.0	±9.6 %
		Z	1.16	64.74	11.79		115.0	
		Y	1.04	66.23	11.42		115.0	
10403- AAB	CDMA2000 (1xEV-DO, Rev. 0)	X	1.45	68.11	13.95	0.00	115.0	±9.6%
30355		Z	5.61	67.12	16.09		150.0	
		Y	5.46	67.44	16.46	<del> </del>	150.0	
AAC	99pc duty cycle)	1			ĺ	1		

10427- AAA	IEEE 802.11n (HT Greenfield, 150 Mbps, 64-QAM)	Х	5.40	67.24	16.44	0.00	150.0	± 9.6 %
,,,,,,	( OT GOTHY)	Y	5.12	67.21	16.47		150.0	
		Z	5.33	66.92	16.12		150.0	
10430-	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1)	X	4.28	70.44	18.07	0.00	150.0	± 9.6 %
AAB						0.00		2 0.0 /0
	<del></del>	Y	4.14	71.87	18.16		150.0	
10431-	LTC COD (OCCUL) (CAMIL E TILO ()	Z.	4.07	69.38	17.29		150.0	
AAB	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1)	X	4.26	67.04	16.14	0.00	150.0	± 9.6 %
		Y	3.97	67.47	16.15		150.0	
	<u> </u>	Z.	4.16	66.54	15.68		150.0	
10432- AAB	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1)	Х	4.56	66.94	16.21	0.00	150.0	±9.6%
		Y	4.29	67.28	16.30		150.0	
	7.7.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1	Z	4.47	66.52	15.81		150.0	
10433- AAB	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1)	Х	4.81	66.95	16.29	0.00	150.0	± 9.6 %
		Y	4.54	67.20	16.39		150.0	
		Z X	4.73	66.57	15.92		150.0	
10434- AAA	W-CDMA (BS Test Model 1, 64 DPCH)		4.37	71.26	18.05	0.00	150.0	±9.6%
		Υ	4.23	72.71	17.94		150.0	
		Z	4.10	69.95	17.16		150.0	
10435- AAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	Х	100.00	124.88	32.22	3.23	0,08	±9.6 %
		Y	100.00	132.33	34.36		80.0	
		Z	100.00	123.15	31.29		80.0	
10447- AAB	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	Х	3.55	67.01	15.50	0.00	150.0	±9.6%
		Y	3.22	67.33	15.04		150.0	
		Z	3.42	66.26	14.87		150.0	
10448- AAB	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, Clippin 44%)	Х	4.09	66.82	16.00	0.00	150.0	±9.6 %
		Υ	3,84	67.27	16.03		150.0	
		Z	4.00	66.30	15,52		150.0	
10449- AAB	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1, Cliping 44%)	Х	4.36	66.77	16.11	0.00	150.0	± 9.6 %
		Y	4.13	67.11	16.20		150.0	
		Z	4.28	66.32	15.69		150.0	
10450- AAB	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	Х	4.56	66.71	16.14	0.00	150.0	±9.6%
		Y	4.34	66.98	16.25		150.0	
		Z	4,48	66,31	15.75		150.0	
10451- AAA	W-CDMA (BS Test Model 1, 64 DPCH, Clipping 44%)	Х	3.45	67.20	15.16	0.00	150.0	±9.6 %
		Y	3.02	67.10	14.30		150.0	
		Z	3.30	66.32	14.46		150.0	
10456- AAA	IEEE 802,11ac WiFi (160MHz, 64-QAM, 99pc duty cycle)	Х	6.24	67.82	16.61	0.00	150.0	±9.6%
		Y	6.06	67.84	16.69	İ	150.0	
		Z	6.17	67.55	16.33		150.0	
10457- AAA	UMTS-FDD (DC-HSDPA)	Х	3.81	65.16	15.84	0.00	150.0	± 9.6 %
		Y	3,70	65.58	15.98		150.0	
		Z	3.75	64.81	15.45		150.0	
10458- AAA	CDMA2000 (1xEV-DO, Rev. B, 2 carriers)	Х	4.00	70.43	17.44	0.00	150.0	± 9.6 %
		Y	3.69	71.08	16.66		150.0	
		Z	3.75	69.12	16.52		150.0	
10459- AAA	CDMA2000 (1xEV-DO, Rev. B, 3 carriers)	X	5.12	68.09	18.07	0.00	150.0	±9.6%
	34370507	Y	4.73	68.62	17.62	<del> </del>	150.0	<del> </del>
		; Y	4,1.3	1 00.02	1 17.02	1	1 100.0	•

10460- AAA	UMTS-FDD (WCDMA, AMR)	X	0.86	66.87	15.37	0.00	150.0	±9.6 %
		Y	0.95 0.72	70.33	17.05 12.85		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	63.56 130.48	34.84	3.29	150.0 80.0	± 9.6 %
		Y	100.00	140,16	37.94		80.0	
		Z	100.00	127.51	33.38		80.0	
10462- AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	Х	100.00	112.24	26.23	3.23	80.0	±9.6%
		Y	100.00	110.13	24.11		80.0	
10463-	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz,	Z	67.10	104.99	23.84	ļ	80.0	
AAA	64-QAM, UL Subframe=2,3,4,7,8,9)	Y	100.00 6.18	108.27 79.22	24,36	3.23	80.0	±9.6 %
		Z	7,19	79.22	15.32 16.50		80.0	-
10464- AAA	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	128.35	33.68	3.23	80.0	±9.6%
7///	QFSR, OL Subitaine-2,3,4,7,8,9)	Y	100.00	137.42	36.46		80.0	
		Z	100.00	125.21	32.15		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	111.56	25.90	3.23	80.0	± 9.6 %
		Υ	100.00	109.13	23.66		80.0	
		Z	21.07	92.23	20.67		80.0	
10466- AAA	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	×	100.00	107.63	24.06	3.23	80.0	± 9.6 %
		Y	2.43	70.85	12.64		80.0	
10467- AAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	Z X	4.66 100.00	74.87 128.63	14.99 33.81	3.23	0.08 0.08	± 9.6 %
75.00	Q: O17, OE OBDITATIO-2,0,4,7,0,0)	Y	100.00	137.88	36.66		80.0	
		Z	100.00	125.47	32.26		80.0	
10468- AAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	111.77	26.00	3.23	80.0	± 9.6 %
		Y	100.00	109.52	23.83		80.0	
		Z	27.11	95.03	21.41		80.0	
10469- AAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	Х	100.00	107.65	24.07	3.23	80.0	± 9.6 %
		Υ	2.53	71,21	12.76		80.0	
10470-	LTE TOD (OO ES) IA A DO AO IO	Z	4.72	75.01	15.04		80.0	
AAC AAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	128.68	33.82	3.23	80.0	±9,6%
		Y Z	100.00 100.00	137.95 125.51	36.68		80.0	
10471- AAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	111.71	32.27 25.97	3.23	80.0 80.0	± 9.6 %
		Y	100.00	109,41	23.78		80.0	
10170		Z	26.88	94.90	21.36		80.0	
10472- AAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	Х	100.00	107.59	24.03	3.23	80.0	±9.6%
		Y	2.45	70.92	12.65		80.0	
10473-	LTE-TDD (SC-FDMA, 1 RB, 15 MHz,	Z	4.68	74.91	14.99	0.00	80.0	
AAC	QPSK, UL Subframe=2,3,4,7,8,9)	Y	100.00	128.64	33.80	3.23	80.0	±9.6%
		Z	100.00 100.00	137.92 125,47	36.66		80.0	
10474- AAC	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	111.72	32.26 25.97	3.23	80.0 80.0	± 9.6 %
		Y	100.00	109.42	23.78		80.0	~/
		Z	26.23	94.65	21.30		80.0	
10475- AAC	LTE-TOD (SC-FDMA, 1 RB, 15 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	Х	100.00	107.61	24.04	3,23	80.0	± 9.6 %
		Υ	2.42	70.81	12.61	····	80.0	
		Z	4.63	74.81	14.96		80.0	

10477- AAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	111.52	25.87	3.23	80.0	± 9.6 %
	So mil ou desirante Ejerni, jejer	Y	100.00	109.08	23.63		80.0	
		Z	21.80	92,57	20,74		80.0	
10478- AAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	Х	100.00	107.54	24.01	3.23	80.0	±9.6%
		Υ	2.34	70.48	12.48		80.0	
		Z	4.57	74.66	14.90		80.0	
10479- AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	Х	21.05	102.62	28.79	3.23	80.0	±9.6 %
		Υ	100.00	130.18	35.05		80.0	
		Z	8.79	88.04	24.08		80.0	
10480- AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	31.10	101.37	26.40	3.23	80.0	± 9.6 %
		Υ	100.00	115.77	28.24		80.0	
		Z	10.81	85.97	21,62		80.0	
10481- AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	Х	23.43	96.25	24.59	3.23	80.0	± 9.6 %
		Y	100.00	112.73	26.77		80.0	
		Z	8,90	82.56	20.16		80.0	
10482- AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	4.87	78.15	19.51	2.23	80.0	± 9.6 %
		Y	4.24	77.89	18.18		80.0	
		Z	2.92	70.65	16.24		80.0	
10483- AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	10.85	86.14	22.05	2.23	80.0	±9.6%
		Y	5,65	77,21	17.13		80.0	
		Z	5.95	77.30	18.74		80,0	
10484- AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	Х	9,22	83.60	21.23	2.23	80.0	±9,6%
		Υ	4.45	74.14	16.03		80.0	
•••••		Z	5.48	75.91	18.23		80.0	
10485- AAC	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	Х	4.88	78.37	20.46	2.23	80.0	± 9.6 %
		Y	4.98	81.42	21.09		80.0	
		Z	3.27	71.98	17.62		80.0	
10486- AAC	LTE-TDD (SC-FDMA, 50% R8, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	Х	4,14	72.53	17.76	2.23	80.0	±9.6%
		Y	3.42	71.82	16.50		80.0	
		Z.	3.25	68.80	15.87		80.0	
10487- AAC	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	Х	4.09	71.98	17.52	2.23	80.0	± 9.6 %
		Υ	3,30	70.93	16.10		80.0	
		Z	3.27	68.50	15.73		80.0	
10488- AAC	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	Х	4.71	76.07	20.18	2.23	80.0	± 9.6 %
		Υ	4.06	76.75	20,65		80.0	
		Z	3.64	71.70	18.11		80.0	
10489- AAC	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	Х	4.12	71.10	18.27	2.23	80.0	±9.6%
		Y	3.59	71.27	18.18		80.0	
		Z	3.59	68.70	16.94		80.0	
10490- AAC	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	Х	4.20	70.81	18.16	2.23	80.0	± 9.6 %
		Υ	3.64	70.93	18.02		80.0	
		Z	3,69	68.58	16,91		0.08	
10491- AAC	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	Х	4.67	73.62	19.32	2.23	80.0	±9.6 %
		Y	3.94	73.47	19.55		80.0	
		Z	3.91	70.58	17.78		80.0	
		· · · · ·	T	00.00	18.03	2.23	80.0	± 9.6 %
10492- AAC	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	Х	4.37	69.92	10.03	2.23	60.0	1.0.0 /0
10492- AAC		X	4.37 3.77	69.63	17.93	2.23	80.0	2 3.0 70

Certificate No: EX3-3922_Nov17 Page 28 of 38

10493- AAC	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	4.43	69.73	17.96	2.23	80.0	± 9.6 %
		Y	3.81	69.42	17.83	1	80.0	_
		Z	4.03	68,08	16.99	<b> </b>	80.0	
10494- AAC	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	Х	5.23	75.62	19.94	2.23	80.0	± 9.6 %
		Y	4.39	75.38	20,21		80.0	
		Z	4.21	71.94	18.18		80.0	1
10495- AAC	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	Х	4.43	70.42	18.26	2.23	80.0	± 9.6 %
		Y	3.80	69.92	18.16	1	80.0	
		Z	3.99	68.56	17,19		80.0	
10496- AAC	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	Х	4.49	70.03	18.13	2.23	80.0	±9.6%
		Y	3,85	69.57	18.02		80.0	
10497-	1 TE TOD (00 ED) (1 (00) ED)	Z	4.08	68.33	17.13		80.0	
AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	3.69	73.99	17.05	2.23	80.0	± 9.6 %
		Y	1.69	65.87	11.88		80.0	<u> </u>
10498-	LTE-TDD (SC-FDMA, 100% RB, 1.4	Z	2.22	67.13	13.87		80.0	
AAA	MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)		2.44	65.88	12.63	2.23	80.0	±9.6%
-,,		Υ	1.16	60.00	7.66	<u> </u>	80.0	
		Z	1,89	62.82	10.87		80.0	
10499- AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	Х	2.33	65.07	12.12	2.23	80.0	± 9.6 %
		Υ	1.18	60.00	7.48		80.0	
		Z	1.85	62.36	10.50		0.08	1
10500- AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	4.64	76.82	20.15	2.23	80.0	± 9.6 %
		Y	4.39	78.97	20.75		80.0	
10001		Z	3.37	71.60	17.73		80.0	
10501- AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	×	4.12	71.88	17.92	2.23	80.0	±9.6%
		Y	3.59	72.06	17.33		0.08	
10502-	1.75 TOD (00 FD144 4000) DG 0144	Z	3.41	68.79	16.30		80.0	
AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	Х	4.17	71.65	17.77	2.23	80.0	± 9.6 %
		Υ	3.59	71.67	17.07		80.0	
10503-	LITTE TOP (OO FOLIA 1999)	Z	3,47	68.69	16.20		80.0	
AAC	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	Х	4.65	75.83	20.08	2.23	80.0	±9.6%
		Y	4.00	76.48	20.53		80.0	ļ
10504- AAC	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	3.60 4.10	71.52 71.00	18.02 18.21	2.23	80.0 80.0	±9.6 %
		Y	3.56	71.15	18.11		80.0	<del> </del>
		ż	3.57	68.61	16.89		80.0	
10505- AAC	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	4.17	70.71	18.10	2.23	80.0	±9.6 %
		Υ	3.61	70.82	17.96		80.0	
		Z	3.67	68.49	16.86		80.0	
10506- AAC	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	Х	5.18	75,44	19.86	2.23	80.0	± 9.6 %
······································		Y	4.34	75.20	20.13		80.0	
10507-	LTE TOD (OC FOMA 4000) DD (C	Z	4.18	71.80	18.11		80.0	
AAC	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	Х	4.42	70.36	18.22	2.23	80.0	± 9.6 %
		Υ	3.78	69.86	18.12		80.0	
		Z	3.98	68.50				

10508- AAC	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	Х	4.47	69.96	18.08	2.23	80.0	±9.6%
		TY	3.84	69.49	17.97		80.0	
		Ż	4.06	68.27	17.09		80.0	
10509- AAC	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	5.29	73.44	19,06	2.23	80.0	± 9.6 %
	Thinks at one of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of t	TY	4.51	72.94	19.20		80.0	
		Ż	4.55	70.83	17.74		80.0	
10510- AAC	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	4.86	69.84	18.07	2,23	80.0	± 9.6 %
		Y	4.19	69.10	17.93		80.0	
,		Z	4.49	68.38	17.21		80.0	
10511- AAC	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	4.89	69.51	17.97	2.23	80.0	±9.6 %
<del></del>		Y	4.24	68.83	17.84		80.0	
		Z	4.54	68.15	17.16		80.0	
10512- AAC	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	Х	5.76	75.57	19.74	2.23	80.0	±9.6%
		Y	4.84	74.92	19.86		80.0	
		Z	4.72	72.21	18.14		80.0	
10513- AAC	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	Х	4.78	70.25	18.23	2.23	80.0	±9.6%
		Y	4.09	69,35	18.06		80.0	
		Z	4.37	68.63	17.29		80.0	
10514- AAC	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	Х	4.76	69.71	18.06	2.23	80.0	±9.6 %
***************************************		Y	4.10	68.87	17.89		80.0	
		Z	4.39	68.24	17.19		80.0	
10515- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 99pc duty cycle)	Х	0.97	62,76	14.36	0.00	150.0	±9.6%
		Υ	0.95	63.70	14.99		150.0	
		Z	0.92	61.51	13.03		150.0	
10516- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc duty cycle)	Х	0.54	67.78	15,81	0.00	150.0	±9.6 %
		Υ	0.74	75.39	19.60		150.0	
		Z	0.42	62.99	12.11		150.0	ļ
10517- AAA	IEEE 802.11b WIFI 2.4 GHz (DSSS, 11 Mbps, 99pc duty cycle)	Х	0.81	64.33	14.78	0.00	150.0	±9.6 %
		Υ	0.81	65.99	15.86		150.0	
		Z	0.73	62.24	12.86		150.0	<u> </u>
10518- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc duty cycle)	Х	4.56	66.60	16.12	0.00	150.0	±9.6%
		Υ	4.34	66.95	16.24		150.0	ļ
	-Vpu	Z X	4.49	66.22	15.74		150.0	
10519- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 99pc duty cycle)		4.76	66.85	16.24	0.00	150.0	± 9.6 %
		Υ	4.49	67,11	16.33		150.0	
		Z	4.68	66.47	15.87		150.0	
10520- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 99pc duty cycle)	Х	4.61	66,81	16.16	0.00	150.0	± 9.6 %
		Υ	4.34	67.05	16.25		150.0	
10521-	IEEE 802.11a/h WIFI 5 GHz (OFDM, 24	Z X	4.52 4.54	66.41 66.81	15.77 16.15	0.00	150.0 150.0	± 9.6 %
AAA	Mbps, 99pc duty cycle)	<b> </b>	1.00	07.00	10.00		450.0	
		Y	4.28	67.02	16.23		150.0	<del> </del>
10500	COMPANDA OR ALL HANDELE OF COMPANDA OR	Z	4.46	66.39	15.75	0.00	150.0	+060/
10522- AAA	IEEE 802.11a/h WIFI 5 GHz (OFDM, 36 Mbps, 99pc duty cycle)	X	4,60	66.87	16.22	0.00	150.0	± 9.6 %
		Υ	4.33	67.14	16.32		150.0	
		Z	4.51	66.46	15.83	1	150.0	i

10523- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48	X	4,47	66.74	16.07	0.00	150.0	± 9.6 %
,vv1	Mbps, 99pc duty cycle)	Y	4.26	67.16	16.26	-	150.0	-
		Z	4,39	66.32	15.67		150.0	
10524- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc duty cycle)	X	4.54	66.79	16.19	0.00	150.0	±9.6%
		Y	4.28	67.11	16.32		150.0	
		Z	4.46	66.38	15.80		150.0	
10525- AAA	IEEE 802.11ac WiFi (20MHz, MCS0, 99pc duty cycle)	Х	4.52	65.84	15.78	0.00	150.0	±9.6%
		Y	4.32	66.22	15.94		150.0	
10526-	IEEE 802.11ac WiFi (20MHz, MCS1,	Z	4.43	65.43	15.39	<u> </u>	150.0	
AAA	99pc duty cycle)		4.69	66.22	15.93	0.00	150.0	± 9.6 %
		Z	4.44 4.60	66.50	16.06	ļ	150.0	
10527-	IEEE 802.11ac WiFi (20MHz, MCS2,	X		65.79	15.53		150.0	
AAA	99pc duty cycle)	Ŷ	4.61	66.18	15.87	0.00	150.0	±9.6%
			4.37	66.47	16.00	ļ	150.0	
10528-	IEEE 802.11ac WiFi (20MHz, MCS3,	Z	4.52 4.63	65.74 66.19	15.47 15.90	0.00	150.0	4000
AAA	99pc duty cycle)	Y	4.03	66.49		0.00	150.0	±9.6 %
		Z	4.54	65.76	16.03 15.50	ļ	150.0	
10529-	IEEE 802.11ac WiFi (20MHz, MCS4,	X	4.63	66.19	15.90	0.00	150.0	1000
AAA	99pc duty cycle)	Ŷ	4.03			0,00	150.0	±9.6%
			4.54	66.49 65.76	16.03	ļ	150.0	
10531- AAA	IEEE 802.11ac WiFi (20MHz, MCS6, 99pc duty cycle)	Z X	4.63	66.31	15.50 15.92	0.00	150.0 150.0	± 9.6 %
	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	Υ	4.35	66.51	16.01		150.0	
		Z	4.53	65,85	15.50	<b></b>	150.0	
10532- AAA	IEEE 802.11ac WiFi (20MHz, MCS7, 99pc duty cycle)	X	4,48	66.16	15.85	0.00	150.0	± 9.6 %
		Y	4.23	66.37	15.94		150.0	
		Z	4.39	65.69	15.43		150.0	······
10533- AAA	IEEE 802.11ac WiFi (20MHz, MCS8, 99pc duty cycle)	Х	4.64	66.23	15.89	0.00	150.0	±9.6 %
		Y	4.39	66.57	16.04		150.0	
		Z	4.55	65.79	15.49		150.0	
10534- AAA	IEEE 802.11ac WiFi (40MHz, MCS0, 99pc duty cycle)	Х	5.16	66.33	15.97	0.00	150.0	± 9.6 %
****		Y	4.94	66,44	16.08		150.0	
		Z	5.08	65.97	15.63		150.0	
10535- AAA	IEEE 802.11ac WiFi (40MHz, MCS1, 99pc duty cycle)	Х	5,22	66.49	16.04	0.00	150.0	± 9.6 %
		Y	4.98	66.57	16.14		150.0	
10500	Company of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the contro	Z	5.14	66.12	15.69		150.0	
10536- AAA	IEEE 802.11ac WiFl (40MHz, MCS2, 99pc duty cycle)	Х	5.09	66.45	16.00	0.00	150.0	±9.6 %
***************************************		Y	4.87	66.58	16.12		150.0	
10507	TETE 000 44 1175 (1014)	Z	5.01	66.06	15.64		150.0	
10537- AAA	IEEE 802.11ac WiFi (40MHz, MCS3, 99pc duty cycle)	X	5.15	66.42	15.99	0.00	150.0	±9.6 %
•		Y	4.94	66.57	16.12		150.0	
10538- AAA	IEEE 802.11ac WiFi (40MHz, MCS4, 99pc duty cycle)	X	5.07 5.25	66.05 66.46	15.64 16.05	0.00	150.0 150.0	± 9.6 %
, 4 1/1	Toole dary chole)	Y	5.00	66.53	40.44		450.0	
·····		Z	5.16	66.09	16.14		150.0	
10540-	IEEE 802.11ac WiFi (40MHz, MCS6,	X	5.16	66.45	15.71 16.06	0.00	150.0	1000
AAA	99pc duty cycle)					0.00	150.0	±9.6 %
		Y	4.93	66.49	16.14		150.0	***************************************
		Z	5.09	66.08	15.71		150.0	

10541- AAA	IEEE 802.11ac WiFi (40MHz, MCS7, 99pc duty cycle)	Х	5.15	66.33	16.00	0.00	150.0	±9.6 %
		Y	4.91	66.41	16.08		150.0	
		Z	5.07	65.97	15.65		150.0	
10542- AAA	IEEE 802.11ac WiFi (40MHz, MCS8, 99pc duty cycle)	Х	5.30	66.40	16.05	0.00	150.0	±9.6%
		Υ	5.07	66.50	16.14		150.0	
		Z	5,22	66.06	15.71		150.0	
10543- AAA	IEEE 802.11ac WiFi (40MHz, MCS9, 99pc duty cycle)	Х	5.38	66.44	16.08	0.00	150.0	± 9.6 %
		Υ	5.14	66.58	16.21		150.0	
		Z	5.30	66.10	15.76		150.0	
10544- AAA	IEEE 802.11ac WiFi (80MHz, MCS0, 99pc duty cycle)	Х	5.46	66.46	15.97	0.00	150.0	± 9.6 %
		Y	5.28	66.51	16.06	<u> </u>	150.0	
		Z	5.38	66.12	15.65		150.0	
10545- AAA	IEEE 802.11ac WiFi (80MHz, MCS1, 99pc duty cycle)	Х	5.65	66.85	16.12	0.00	150.0	± 9.6 %
		Y	5.46	66.95	16.24		150.0	
		Z	5.57	66.50	15.79	<u> </u>	150.0	
10546- AAA	IEEE 802.11ac WiFi (80MHz, MCS2, 99pc duty cycle)	X	5.53	66,68	16.05	0.00	150.0	±9.6%
	1	Y	5.31	66.63	16.09		150.0	
		Z	5.45	66.33	15.72		150.0	
10547- AAA	IEEE 802.11ac WiFi (80MHz, MCS3, 99pc duty cycle)	Х	5.61	66.72	16.06	0.00	150.0	± 9.6 %
		Υ	5.39	66.75	16.15		150.0	
		Z	5.52	66.37	15.73		150.0	
10548- AAA	IEEE 802.11ac WiFi (80MHz, MCS4, 99pc duty cycle)	Х	5.85	67.61	16.48	0.00	150.0	± 9.6 %
		Y	5.53	67.36	16.43		150.0	
		Z	5.74	67.19	16.11		150.0	
10550- AAA	IEEE 802.11ac WiFi (80MHz, MCS6, 99pc duty cycle)	Х	5.56	66.68	16.05	0.00	150.0	±9.6%
		Y	5,37	66.83	16.21		150.0	
		Z	5.47	66.33	15.73		150.0	
10551- AAA	IEEE 802.11ac WiFi (80MHz, MCS7, 99pc duty cycle)	X	5.56	66.73	16.04	0.00	150.0	± 9.6 %
		Υ	5.31	66.60	16.05		150.0	
		Z	5.48	66.38	15.72		150.0	
10552- AAA	IEEE 802.11ac WiFi (80MHz, MCS8, 99pc duty cycle)	Х	5.48	66,53	15.95	0.00	150.0	±9.6%
		Υ	5.29	66.63	16.07		150.0	
		Z	5.40	66.19	15.63		150.0	
10553- AAA	IEEE 802.11ac WiFi (80MHz, MCS9, 99pc duty cycle)	X	5.57	66.58	16.01	0.00	150.0	± 9.6 %
		Y	5.34	66.57	16.07		150.0	
	~~~	Z	5.49	66.24	15.69		150.0	
10554- AAB	IEEE 802.11ac WiFi (160MHz, MCS0, 99pc duty cycle)	X	5.86	66.83	16.07	0.00	150.0	±9.6 %
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Y	5.70	66,84	16.14		150.0	ļ
		Z	5.79	66.51	15.76	ļ	150.0	
10555- AAB	IEEE 802.11ac WiFi (160MHz, MCS1, 99pc duty cycle)	Х	5.99	67.12	16.19	0.00	150.0	±9.6 %
		Y	5.79	67.06	16.23		150.0	
		Z	5.91	66.79	15.88		150.0	
10556- AAB	IEEE 802.11ac WiFi (160MHz, MCS2, 99pc duty cycle)	Х	6,01	67.16	16.20	0.00	150.0	±9.6 %
		Υ	5.83	67.17	16.28		150.0	
		Z	5.93	66.83	15.90		150.0	<u></u>
10557- AAB	IEEE 802.11ac WiFi (160MHz, MCS3, 99pc duty cycle)	Х	5.98	67.09	16.19	0.00	150.0	± 9.6 %
		Y	5.79	67.04	16.23		150.0	
		Z	5.90	66,76	15.88	T	150.0	

10558-	IEEE 802.11ac WiFi (160MHz, MCS4,	X	6.03	67.25	16.28	0.00	150.0	± 9.6 %
AAB	99pc duty cycle)	$+_{\mathbf{Y}}$	5.80	67,10	16.28	-	150.0	
		Z	5.95	66.91	15.97	<u> </u>	150.0	
10560- AAB	IEEE 802.11ac WIFI (160MHz, MCS6, 99pc duty cycle)	X	6.03	67.11	16.25	0.00	150.0	± 9.6 %
		Y	5.82	67.03	16.28	1	150.0	
		Z	5.95	66.79	15.95		150.0	
10561- AAB	IEEE 802.11ac WiFi (160MHz, MCS7, 99pc duty cycle)	Х	5.95	67.06	16.26	0.00	150.0	± 9.6 %
		Y	5.75	67.02	16.31	1	150.0	
		Z	5.87	66.74	15.96		150.0	
10562- AAB	IEEE 802.11ac WiFi (160MHz, MCS8, 99pc duty cycle)	Х	6.08	67.46	16.46	0.00	150.0	± 9.6 %
····		Y	5.80	67.18	16.39		150.0	
10000		Z	5,99	67.10	16.14		150.0	
10563- AAB	IEEE 802.11ac WiFi (160MHz, MCS9, 99pc duty cycle)	Х	6.37	67.91	16.64	0,00	150.0	± 9.6 %
		Y	5.90	67.15	16.34		150.0	
40504	TEET OOG 44 - NOTE O 4 OUT OF THE	Z	6.25	67.49	16.29	<u> </u>	150.0	L
10564- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 9 Mbps, 99pc duty cycle)	X	4.89	66.71	16.30	0.46	150.0	±9.6%
		Y	4.66	66.99	16.40		150.0	
10565-	TECE 000 (4 UNE) O (OU) (E000	Z	4.82	66.37	15.96	ļ	150.0	
AAA	IEEE 802.11g WIFI 2.4 GHz (DSSS- OFDM, 12 Mbps, 99pc duty cycle)	Х	5.13	67.16	16.62	0.46	150.0	± 9.6 %
		Y	4.85	67,38	16.70		150.0	
10500	Legen and delivery	Z	5.06	66.82	16.28		150.0	
10566- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 18 Mbps, 99pc duty cycle)	X	4.96	67.01	16.44	0,46	150.0	±9.6%
		Y	4.69	67.21	16.51		150.0	
10000		Z	4.89	66,65	16.09		150.0	
10567- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 24 Mbps, 99pc duty cycle)	Х	4.99	67.40	16.79	0.46	150.0	±9.6 %
		Y	4.72	67.59	16.87		150.0	
10500		Z	4.91	67.01	16.42		150.0	
10568- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 36 Mbps, 99pc duty cycle)	Х	4.88	66.78	16.21	0.46	150.0	± 9.6 %
		Y	4.59	66.97	16.28		150.0	
40000		Z	4.80	66.43	15.86		150.0	
10569- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 48 Mbps, 99pc duty cycle)	Х	4.94	67.48	16.84	0.46	150.0	± 9.6 %
		Y	4.72	67.83	17.02		150.0	
40570	1000	Z	4.86	67.08	16.47		150.0	
10570- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 54 Mbps, 99pc duty cycle)	Х	4.98	67.32	16.77	0.46	150.0	± 9.6 %
		Y	4,71	67.60	16.90		150.0	
10571-	IEEE 900 115 WIE 0 1 015 10000 1	Z	4.90	66.95	16.41		150.0	
AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90pc duty cycle)	Х	1.22	64.72	15.64	0.46	130.0	± 9.6 %
	1	Y	1.15	65.06	16.01		130.0	
10572-	IEEE 902 115 MIEE 2 4 01 5 70000 0	Z	1.14	63.13	14.22		130.0	
AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 90pc duty cycle)	X	1.24	65.31	16.00	0.46	130.0	±9.6%
		Y	1,16	65.69	16.41		130.0	
10573- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 90pc duty cycle)	Z X	1.15 2.25	63.54 85.40	14.48 22.87	0.46	130.0 130.0	± 9.6 %
· · · · · · · · · · · · · · · · · · ·	7, 77, 77, 77, 77, 77, 77, 77, 77, 77,	Y	6.32	106.96	30.28		1300	
		Z	0.93	70.33			130.0	
10574-	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11	X	1.38	71.07	16.00 18.84	0.46	130.0 130.0	1000
AAA	Mbps, 90pc duty cycle)	Ŷ				0.46		± 9.6 %
			1.33	72.52	19.89		130.0	
		Z	1.13	66.91	16.12		130.0	

AAA	Mbps, 90pc duty cycle)	Y	4,24	66.38	15.88		130.0	<u> </u>
10590-	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54	X	4,54	66.22	15.83	0.46	130.0	±9.6%
		Z	4.64	66.79	16.27		130.0	
		Y	4.46	67.48	16.79		130.0	
10589- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 90pc duty cycle)	Х	4.72	67.20	16.66	0.46	130.0	± 9.6 %
		Z	4.56	66.12	15.70		130.0	
		Υ	4.34	66.67	16.11		130.0	
10588- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 90pc duty cycle)	Х	4.64	66.48	16.06	0.46	130.0	±9.6%
		Z	4.51	66.09	15.67	0.10	130.0	1.000
		Y	4.31	66.60	16.08		130.0	
10587- AAA	Mbps, 90pc duty cycle)					0.40		13.076
10507	IEEE 802.11a/h WIFI 5 GHz (OFDM, 24	X	4.74 4.59	66,77 66,46	16.34 16.04	0.46	130.0	±9.6 %
	7	Y	4.55	67.37	16.79		130.0	
10586- AAA	IEEE 802.11a/n WiFi 5 GHz (OFDM, 18 Mbps, 90pc duty cycle)	X	4.82	67.16	16.72	0.46	130.0	± 9.6 %
		Z	4.85	66,64	16.26		130.0	
AAA	Mbps, 90pc duty cycle)	Y	4.64	67.23	16.69		130.0	
10585-	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12	X	4.93	67.00	16.62	0.46	130.0	± 9.6 %
		Ζ	4,64	66.34	16.08		130.0	
, 4757	mobel cohe and elect	Y	4.48	67.01	16.55		130.0	
10584- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 90pc duty cycle)	Х	4.72	66.70	16.45	0.46	130.0	± 9.6 %
		Z	4.62	66.19	16.03		130.0	
, s // \	mage, cape day eyerej	Y	4.45	66.81	16.47		130.0	
10583- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 90pc duty cycle)	Х	4.69	66.54	16.38	0.46	130.0	± 9.6 %
		Z	4.46	65.86	15.47		130.0	
7000	T. This o' mope, copy date of ore)	Υ	4.24	66.38	15.88		130.0	
10582- AAA	OFDM, 54 Mbps, 90pc duty cycle)	^	4.04	00.22	10.83	0.46	130.0	I 9.0 %
10582-	IEEE 802.11g WiFi 2.4 GHz (DSSS-	Z	4.64 4.54	66.79 66.22	16.27 15.83	0.46	130.0	± 9.6 %
		Y	4,46	67.48	16.79		130.0	
AAA	OFDM, 48 Mbps, 90pc duty cycle)					V.40		20.070
10581-	IEEE 802.11g WIFI 2.4 GHz (DSSS-	Z	4.56 4.72	66.12 67.20	15.70 16.66	0.46	130.0 130.0	± 9.6 %
		Y	4.34	66.67	16.11		130.0	
AAA	OFDM, 36 Mbps, 90pc duty cycle)							
10580-	IEEE 802.11g WiFi 2.4 GHz (DSSS-	χ	4.64	66.48	16.06	0.46	130.0	±9.6%
		Z	4.51	66.09	15.67		130.0	
AAA	OFDM, 24 Mbps, 90pc duty cycle)	Y	4,31	66.60	16.08		130.0	
10579-	IEEE 802.11g WiFi 2.4 GHz (DSSS-	X	4.59	66.46	16.04	0.46	130.0	± 9.6 %
		z	4.74	66.77	16.34		130.0	
AAA	OFDM, 18 Mbps, 90pc duty cycle)	Y	4,55	67.37	16.79		130.0	- Los and
10578-	IEEE 802.11g WiFi 2.4 GHz (DSSS-	X	4.82	67.16	16.72	0.46	130.0	± 9.6 %
***************************************		Z	4.85	66.64	16.26		130.0	
AAA	OFDM, 12 Mbps, 90pc duty cycle)	Y	4.64	67.23	16.69		130.0	
10577-	IEEE 802.11g WiFi 2.4 GHz (DSSS-	Х	4.93	67.00	16.62	0.46	130.0	± 9.6 %
		Z	4.64	66.34	16.08		130.0	
AAA	OFDM, 9 Mbps, 90pc duty cycle)	Y	4.48	67.01	16.55		130.0	
10576-	IEEE 802.11g WIFI 2.4 GHz (DSSS-	X	4.72	66.70	16.45	0.46	130.0	± 9.6 %
		Ż	4.62	66.19	16.03		130.0	
	OFDM, 6 Mbps, 90pc duty cycle)	TY	4,45	66.81	16,47		130.0	
AAA				1	}			

Certificate No: EX3-3922_Nov17

Page 34 of 38

10591- AAA								
Jane	IEEE 802.11n (HT Mixed, 20MHz, MCS0, 90pc duty cycle)	X	4.84	66.60	16,48	0.46	130.0	± 9.6 %
		Y	4.61	66.88	16.58		130.0	
		Z	4.78	66.27	16.14		130.0	
10592- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS1, 90pc duty cycle)	X	5.00	66.94	16.61	0.46	130.0	±9.6 %
ļ		Υ	4.72	67.17	16.70		130.0	
		Z	4.93	66.60	16.27		130.0	
10593- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS2, 90pc duty cycle)	X	4.92	66.86	16.50	0.46	130.0	±9.6%
		Y	4.64	67.05	16.57		130.0	
		Z	4.85	66.51	16.15		130.0	
10594- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS3, 90pc duty cycle)	X	4.98	67.02	16.65	0.46	130.0	±9.6 %
		Y	4.70	67.22	16.73		130.0	
		Z	4.90	66.67	16.30	1	130.0	
10595- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS4, 90pc duty cycle)	X	4.95	66.98	16.55	0.46	130.0	±9.6%
		Y	4.67	67.21	16.65		130.0	
		Z	4.87	66.62	16.20		130.0	
10596- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS5, 90pc duty cycle)	X	4.88	66.97	16.55	0.46	130.0	±9.6 %
		Y	4.60	67.18	16.64		130.0	
		Z	4.81	66.61	16.19		130.0	
10597- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS6, 90pc duty cycle)	X	4.83	66.88	16.44	0.46	130.0	±9.6%
		Y	4.55	67.05	16.50	Ī	130,0	
		Z	4.76	66.51	16.08		130.0	
10598- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS7, 90pc duty cycle)	×	4.82	67.12	16.70	0.46	130.0	± 9.6 %
		Υ	4.54	67.27	16.75		130.0	
		Z	4.73	66.73	16.32	İ	130.0	
10599- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS0, 90pc duty cycle)	X	5.50	67.15	16.68	0.46	130.0	±9.6 %
		Y	5.28	67.31	16.81		130.0	
		Z	5.44	66.86	16.38		130.0	
10600- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS1, 90pc duty cycle)	Х	5.64	67.56	16.86	0.46	130.0	± 9.6 %
		Y	5.38	67.66	16.96		130.0	
		Z	5.56	67.23	16.54	-	130.0	
10601- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS2, 90pc duty cycle)	X	5.53	67.32	16.75	0.46	130.0	± 9.6 %
		Y	5.29	67.45	16.87		130.0	
		Ż	5.46	67.01	16.44		130.0	
10602- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS3, 90pc duty cycle)	X	5.62	67.31	16.67	0.46	130.0	± 9.6 %
		Y	5.38	67.49	16.81		130.0	
		Z	5.55	67.02	16.37		130.0	
10603- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS4, 90pc duty cycle)	X	5.71	67.66	16.97	0.46	130.0	± 9.6 %
		Y	5.45	67.77	17.09		130.0	
		Z	5.64	67.34	16.66		130.0	
10604- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS5, 90pc duty cycle)	X	5.51	67.11	16.68	0.46	130.0	± 9.6 %
		Y	5.33	67.40	16.88		130.0	
		Z	5.44	66.82	16.39		130.0	
10605- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS6, 90pc duty cycle)	X	5.62	67.42	16.84	0.46	130.0	± 9.6 %
		Y	5.37	67.54	16.95		130.0	
		Z	5.55	67.12	16.53		130.0	
	IEEE 802.11n (HT Mixed, 40MHz,	X	5.39	66.86	16.42	0.46	130.0	± 9.6 %
10606- AAA	MCS7, 90pc duty cycle)						1	
	MCS7, 90pc duty cycle)	-	5.16	66.99	16.54		130.0	

10607-	IEEE 802.11ac WiFi (20MHz, MCSo,	X	4.68	65.91	16.10	0.46	130.0	± 9.6 %
AAA	90pc duty cycle)							
~~~~		Y	4.46	66.25	16.24		130.0	
10000	1	Z	4.60	65.53	15.73		130.0	ļ
10608- AAA	IEEE 802.11ac WiFi (20MHz, MCS1, 90pc duty cycle)	X	4.87	66.32	16.26	0.46	130.0	±9.6 %
		Y	4.60	66.58	16.39		130.0	
		Z	4.78	65.92	15.89		130.0	
10609- AAA	IEEE 802.11ac WiFi (20MHz, MCS2, 90pc duty cycle)	Х	4.76	66.17	16.11	0.46	130.0	± 9.6 %
		Y	4.50	66,43	16.22		130.0	
		Z	4.67	65.77	15.73		130.0	
10610- AAA	IEEE 802.11ac WiFl (20MHz, MCS3, 90pc duty cycle)	×	4.81	66.33	16.27	0.46	130.0	±9.6%
		Y	4.55	66.59	16.38		130.0	
		Z	4.72	65.92	15.89		130.0	
10611- AAA	IEEE 802.11ac WiFi (20MHz, MCS4, 90pc duty cycle)	×	4.73	66,14	16.12	0.46	130.0	± 9.6 %
		Y	4.46	66.39	16.23		130.0	
· · · · · · · · · · · · · · · · · · ·		Z	4.64	65.73	15.74		130.0	
10612- AAA	IEEE 802.11ac WiFi (20MHz, MCS5, 90pc duty cycle)	Х	4.74	66.29	16.16	0.46	130.0	±9.6%
		Y	4.45	66.53	16,28		130.0	
		Z	4.65	65.87	15.77		130,0	
10613- AAA	IEEE 802.11ac WiFi (20MHz, MCS6, 90pc duty cycle)	Х	4.74	66.18	16.05	0.46	130.0	± 9.6 %
		Υ	4.45	66.34	16.12		130.0	
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		Z	4.65	65,77	15,67		130.0	
10614- AAA	IEEE 802.11ac WiFi (20MHz, MCS7, 90pc duty cycle)	X	4,68	66.37	16.28	0.46	130.0	± 9.6 %
		Υ	4.41	66.56	16.36		130.0	
		Z	4.59	65.93	15.88		130.0	
10615- AAA	IEEE 802.11ac WiFi (20MHz, MCS8, 90pc duty cycle)	Х	4.73	65.97	15.90	0.46	130.0	± 9.6 %
		Y	4,46	66.25	16.01		130.0	
		Z	4.64	65.58	15.53		130.0	
10616- AAA	IEEE 802.11ac WiFi (40MHz, MCS0, 90pc duty cycle)	Х	5.33	66.42	16.30	0.46	130.0	±9.6%
		Y	5.09	66.51	16.39		130.0	
		Z	5.25	66.08	15.97		130.0	
10617- AAA	IEEE 802.11ac WiFi (40MHz, MCS1, 90pc duty cycle)	Х	5.39	66,56	16.34	0.46	130.0	± 9.6 %
		Y	5.13	66.64	16.44	***************************************	130.0	***************************************
		Z	5.31	66.22	16.01		130.0	
10618- AAA	IEEE 802.11ac WiFi (40MHz, MCS2, 90pc duty cycle)	X	5.28	66.59	16.37	0.46	130.0	± 9.6 %
		Y	5.05	66.71	16.49		130.0	
		Z	5.19	66.23	16.03		130.0	
10619- AAA	IEEE 802.11ac WiFi (40MHz, MCS3, 90pc duty cycle)	Х	5.30	66.41	16.22	0.46	130.0	±9.6 %
		Υ	5.07	66.54	16.34		130.0	
		Z	5.22	66.06	15.88		130.0	
10620- AAA	IEEE 802.11ac WiFi (40MHz, MCS4, 90pc duty cycle)	Х	5.39	66.47	16.30	0.46	130.0	±9.6 %
		Y	5.14	66,53	16.38		130.0	
		Z	5.32	66.13	15.97		130.0	
10621- AAA	IEEE 802.11ac WiFi (40MHz, MCS5, 90pc duty cycle)	X	5.39	66.57	16.46	0.46	130.0	± 9.6 %
		Y	5.14	66.62	16,54		130.0	
		Z	5.31	66.23	16.14		130.0	
10622- AAA	IEEE 802.11ac WiFi (40MHz, MCS6, 90pc duty cycle)	Х	5.39	66.72	16.53	0.46	130.0	± 9.6 %
		Y	5.13	66.72	16.59		130.0	

10623- AAA	IEEE 802.11ac WiFi (40MHz, MCS7, 90pc duty cycle)	X	5.27	66.26	16.18	0.46	130.0	± 9.6 %
		Y	5.02	66.29	16.24		130.0	
10001		Z	5.20	65.93	15.86		130.0	
10624- AAA	IEEE 802.11ac WiFi (40MHz, MCS8, 90pc duty cycle)	Х	5.47	66.46	16.34	0.46	130.0	± 9.6 %
		Y	5.22	66.54	16.42		130.0	
40005	Proper O.O. A.A. Marie and A.A.	Z	5,39	66.14	16.03		130.0	
10625- AAA	IEEE 802.11ac WiFi (40MHz, MCS9, 90pc duty cycle)	X	5.84	67.45	16.88	0.46	130.0	± 9.6 %
		Y	5.30	66,66	16.55		130.0	
10626-	TERM AND ALL DEVENIENCES	Z	5.75	67.07	16.54	1	130.0	
AAA	IEEE 802.11ac WiFi (80MHz, MCS0, 90pc duty cycle)	Х	5.61	66.48	16.25	0.46	130.0	±9.6 %
		Y	5.42	66.52	16.34		130.0	
4000=	1555	Z	5.54	66.18	15.95		130.0	
10627- AAA	IEEE 802.11ac WiFi (80MHz, MCS1, 90pc duty cycle)	X	5.85	67.01	16.48	0.46	130.0	± 9.6 %
		Y	5.65	67.12	16.61		130.0	
10628-	HEET 900 44 - Mary Cold III - 1000	Z	5.77	66.68	16.17		130.0	
10628- AAA	IEEE 802.11ac WiFi (80MHz, MCS2, 90pc duty cycle)		5.65	66.59	16.21	0.46	130.0	±9.6 %
		Y	5.42	66.51	16.24	<u> </u>	130.0	
10629-	IFFE DOO 44 - MIFE COST 1	Z	5.58	66.27	15.90		130.0	
10629- AAA	IEEE 802.11ac WiFi (80MHz, MCS3, 90pc duty cycle)	X	5.74	66.69	16,24	0.46	130.0	±9.6%
		Y	5.52	66.70	16.33		130.0	
10000		Z	5,66	66.36	15.94		130.0	
10630- AAA	IEEE 802.11ac WiFi (80MHz, MCS4, 90pc duty cycle)	Х	6.17	68.13	16.97	0.46	130.0	± 9.6 %
		Y	5.75	67.60	16.79		130.0	
***************************************		Z	6.05	67.69	16.60		130.0	
10631- AAA	IEEE 802.11ac WiFi (80MHz, MCS5, 90pc duty cycle)	Х	6.08	67.96	17.07	0.46	130.0	± 9.6 %
		Υ	5.72	67.60	16.96		130.0	
		Z	5.97	67.56	16.72		130.0	
10632- AAA	IEEE 802.11ac WIFI (80MHz, MCS6, 90pc duty cycle)	Х	5.82	67.08	16.65	0.46	130.0	± 9.6 %
		Y	5.65	67.28	16.83		130.0	
		Z	5,74	66.75	16.33		130.0	
10633- AAA	IEEE 802.11ac WIFI (80MHz, MCS7, 90pc duty cycle)	X	5.72	66.76	16.32	0.46	130.0	± 9.6 %
		Y	5.45	66.59	16.31		130.0	
72		Z	5,64	66.44	16.01		130.0	
10634- AAA	IEEE 802.11ac WiFi (80MHz, MCS8, 90pc duty cycle)	Х	5.70	66.79	16.39	0.46	130.0	± 9.6 %
······································		Y	5.47	66.77	16.45		130.0	
4000=	(FFFF 444	Z	5.63	66.46	16.08		130.0	
10635- AAA	IEEE 802.11ac WiFi (80MHz, MCS9, 90pc duly cycle)	Х	5.59	66.14	15.80	0.46	130.0	±9.6 %
·		Y	5.34	66.06	15.83		130.0	
1000-		Z	5.52	65.85	15.51		130.0	
10636- AAB	IEEE 802.11ac WiFi (160MHz, MCS0, 90pc duty cycle)	Х	6.02	66.86	16.35	0.46	130.0	±9.6 %
		Y	5.86	66.86	16.41		130.0	
1000=		Z	5.95	66.56	16.06		130.0	
10637- AAB	IEEE 802.11ac WiFi (160MHz, MCS1, 90pc duty cycle)	X	6.17	67.22	16.51	0.46	130.0	±9.6 %
		Y	5.97	67.16	16.55	····	130.0	***
		Z	6.10	66.91	16.22		130.0	
10638-	IEEE 802.11ac WiFi (160MHz, MCS2,	X	6.18	67.20	16.48	0.46	130.0	± 9.6 %
AAB	90pc duty cycle)							
	90pc duty cycle)	Y	6.00	67,24	16.57		130.0	

10639- AAB	IEEE 802.11ac WiFI (160MHz, MCS3, 90pc duty cycle)	Х	6.16	67.17	16.51	0.46	130.0	± 9.6 %
	3000	Y	5.95	67.10	16.54		130.0	
		Z	6.08	66.87	16.22		130.0	
10640- AAB	IEEE 802.11ac WiFi (160MHz, MCS4, 90pc duty cycle)	Х	6.17	67.19	16.46	0.46	130.0	± 9.6 %
		Y	5.92	67.01	16.44		130.0	
		Z	6.09	66.88	16.17		130.0	
10641- AAB	IEEE 802.11ac WiFi (160MHz, MCS5, 90pc duty cycle)	Х	6.20	67.05	16.41	0.46	130.0	± 9.6 %
		Υ	6.01	67.09	16.50		130.0	
		Z	6.13	66.77	16.13		130.0	
10642- AAB	IEEE 802.11ac WiFi (160MHz, MCS6, 90pc duty cycle)	Х	6.25	67.34	16.72	0.46	130.0	± 9.6 %
	·	Y	6.03	67.26	16.75		130.0	
		Z	6.18	67.04	16.43		130.0	
10643- AAB	IEEE 802.11ac WIFI (160MHz, MCS7, 90pc duty cycle)	Х	6.08	67.01	16.45	0.46	130.0	±9.6%
		Υ	5.88	66.98	16.51		130.0	
		Z	6.01	66.71	16.17		130.0	
10644- AAB	IEEE 802.11ac WiFi (160MHz, MCS8, 90pc duty cycle)	Х	6.26	67.55	16.75	0.46	130.0	± 9.6 %
		Υ	5.94	67.16	16.62		130.0	
		Z	6.17	67.22	16.44		130.0	
10645- AAB	IEEE 802.11ac WiFi (160MHz, MCS9, 90pc duty cycle)	Х	6.68	68.35	17.09	0.46	130.0	±9.6 %
		Υ	6.07	67.21	16.61		130.0	
·		Z	6.55	67.93	16.75	<u> </u>	130.0	
10646- AAD	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,7)	Х	50.85	132,52	44.24	9,30	60.0	±9.6%
		Υ	20.70	121.95	43.56		60.0	
		Z.	29.84	120.12	40.73		60.0	
10647- AAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,7)	Х	42.76	129.31	43.55	9.30	60.0	±9.6%
		Υ	15.62	115.37	41.74		60.0	
		Z	25.56	117.23	40.05		60.0	
10648- AAA	CDMA2000 (1x Advanced)	Х	0.70	63.25	10.84	0.00	150.0	± 9.6 %
		Υ	0.49	61.73	8.31		150.0	
		Z	0.62	61.44	9.27		150.0	
10652- AAB	LTE-TDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	Х	3.96	67.79	17.06	2.23	80.0	±9.6 %
		Υ	3,56	68.00	16.93	ļ	80.0	
		Z	3.68	66.46	16.20		80.0	
10653- AAB	LTE-TDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)	X	4.44	66.99	17.10	2.23	80.0	± 9.6 %
·····		Y	4.02	66.80	16.97		80.0	
		Z	4.23	66.09	16.47	ļ	80.0	1.000
10654- AAB	LTE-TDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)	Х	4.40	66.63	17.09	2.23	80.0	±9.6 %
		Υ	4.01	66.32	16.96		80.0	
		Z	4.21	65.79	16.49		80.0	
10655- AAB	LTE-TDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	X	4.45	66.63	17.12	2,23	80.0	±9.6%
		Υ	4.08	66.20	16.98		80.0	
		Z	4.27	65.81	16.53		0.08	l

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