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





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S Schweizerischer Kalibrierdienst

- Service suisse d'étalonnage
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- Swiss Calibration Service

Accreditation No.: SCS 0108

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Client	PC Test	
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Certificate No: ES	3-3318 Feb	17
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13-01-2017

CALIB	RATION C	ERTIFI	CATE
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ES3DV3 - SN:3318

Calibration procedure(s)

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

Calibration date:

February 10, 2017

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

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

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	1D	Cal Date (Certificate No.)	Scheduled Calibration
Power meter NRP	SN: 104778	06-Apr-16 (No. 217-02288/02289)	Apr-17
Power sensor NRP-Z91	SN: 103244	06-Apr-16 (No. 217-02288)	Apr-17
Power sensor NRP-Z91	SN: 103245	06-Apr-16 (No. 217-02289)	Apr-17
Reference 20 dB Attenuator	SN: S5277 (20x)	05-Apr-16 (No. 217-02293)	Apr-17
Reference Probe ES3DV2	SN: 3013	31-Dec-16 (No. ES3-3013_Dec16)	Dec-17
DAE4	SN: 660	7-Dec-16 (No. DAE4-660_Dec16)	Dec-17
Secondary Standards	ID	Check Date (in house)	Scheduled Check
Power meter E4419B	SN: GB41293874	06-Apr-16 (in house check Jun-16)	In house check: Jun-18
Power sensor E4412A	SN: MY41498087	06-Apr-16 (in house check Jun-16)	In house check: Jun-18
Power sensor E4412A	SN: 000110210	06-Apr-16 (in house check Jun-16)	In house check: Jun-18
RF generator HP 8648C	SN: US3642U01700	04-Aug-99 (in house check Jun-16)	In house check: Jun-18
Network Analyzer HP 8753E	SN: US37390585	18-Oct-01 (in house check Oct-16)	In house check: Oct-17

	Name	Function	Signature	
Calibrated by:	Claudio Leubler	Laboratory Technician	(1)ED	
			YES	전철관관학
Approved by:	Kalja Pokovic	Technical Manager	PORC	
			10.000	
			Issued: February 13, 2017	7
This calibration certificat	e shall not be reproduced except in full	without written approval of the lab	oratory.	

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Glossary:	
TSL	tissue simulating liquid
NORMx,y,z	sensitivity in free space
ConvF	sensitivity in TSL / NORMx,y,z
DCP	diode compression point
CF	crest factor (1/duty_cycle) of the RF signal
A, B, C, D	modulation dependent linearization parameters
Polarization φ	φ rotation around probe axis
Polarization 9	ϑ rotation around an axis that is in the plane normal to probe axis (at measurement center), i.e., $\vartheta = 0$ is normal to probe axis
	the second s

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

Calibration is Performed According to the Following Standards:

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

Methods Applied and Interpretation of Parameters:

- NORMx, y, z: Assessed for E-field polarization 9 = 0 (f ≤ 900 MHz in TEM-cell; f > 1800 MHz: R22 waveguide). NORMx, y, z are only intermediate values, i.e., the uncertainties of NORMx, y, z does not affect the E²-field uncertainty inside TSL (see below ConvF).
- NORM(f)x,y,z = NORMx,y,z * frequency_response (see Frequency Response Chart). This linearization is implemented in DASY4 software versions later than 4.2. The uncertainty of the frequency response is included in the stated uncertainty of ConvF.
- DCPx, y, z: DCP are numerical linearization parameters assessed based on the data of power sweep with CW signal (no uncertainty required). DCP does not depend on frequency nor media.
- PAR: PAR is the Peak to Average Ratio that is not calibrated but determined based on the signal characteristics
- Ax,y,z; Bx,y,z; Cx,y,z; Dx,y,z; VRx,y,z: A, B, C, D are numerical linearization parameters assessed based on the data of power sweep for specific modulation signal. The parameters do not depend on frequency nor media. VR is the maximum calibration range expressed in RMS voltage across the diode.
- ConvF and Boundary Effect Parameters: Assessed in flat phantom using E-field (or Temperature Transfer Standard for f ≤ 800 MHz) and inside waveguide using analytical field distributions based on power measurements for f > 800 MHz. The same setups are used for assessment of the parameters applied for boundary compensation (alpha, depth) of which typical uncertainty values are given. These parameters are used in DASY4 software to improve probe accuracy close to the boundary. The sensitivity in TSL corresponds to NORMx,y,z * ConvF whereby the uncertainty corresponds to that given for ConvF. A frequency dependent ConvF is used in DASY version 4.4 and higher which allows extending the validity from ± 50 MHz to ± 100 MHz.
- Spherical isotropy (3D deviation from isotropy): in a field of low gradients realized using a flat phantom exposed by a patch antenna.
- Sensor Offset: The sensor offset corresponds to the offset of virtual measurement center from the probe tip (on probe axis). No tolerance required.
- Connector Angle: The angle is assessed using the information gained by determining the NORMx (no uncertainty required).

Probe ES3DV3

SN:3318

Manufactured: Calibrated:

January 10, 2012 February 10, 2017

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

Basic Calibration Parameters

	Sensor X	Sensor Y	Sensor Z	Unc (k=2)
Norm $(\mu V/(V/m)^2)^A$	1.11	0.89	1.24	± 10.1 %
DCP (mV) ⁸	104.2	104.2	103.5	

Modulation Calibration Parameters

UID	Communication System Name		Α	В	С	D	VR	Unc ^E
			dB	dBõV		dB	m∨	(k=2)
0	CW	Х	0.0	0.0	1.0	0.00	207.9	±3.3 %
	1	Y	0.0	0.0	1.0		188.2	
		Z	0.0	0.0	1.0		201.5	

Note: For details on UID parameters see Appendix.

Sensor Model Parameters

	C1	C2	α	T1	T2	Т3	T4	T5	T6
	fF	fF	V⁻¹	ms.V⁻²	ms.V⁻¹	ms	V-2	V ⁻¹	
Х	63.42	453.7	35.34	29.18	2.667	5.1	0.885	0.445	1.01
Y	50.41	352.5	33.95	25.81	1.921	5.062	1.77	0.176	1.007
Z	62.08	445.4	35.38	29.73	3.23	5.1	0.803	0.494	1.012

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.

	0							
f (MHz) ^c	Relative Permittivity ^F	Conductivity (S/m) ^F	ConvF X	ConvF Y	ConvF Z	Alpha ^G	Depth ^G (mm)	Unc (k=2)
750	41.9	0.89	6.73	6.73	6.73	0.43	1.53	± 12.0 %
835	41.5	0.90	6.47	6.47	6.47	0.57	1.36	± 12.0 %
1750	40.1	1.37	5.49	5.49	5.49	0.74	1.19	± 12.0 %
1900	40.0	1.40	5.31	5.31	5.31	0.60	1.33	± 12.0 %
2300	39.5	1.67	4.95	4.95	4.95	0.60	1.42	± 12.0 %
2450	39.2	1.80	4.74	4.74	4.74	0.71	1.28	± 12.0 %
2600	39.0	1.96	4.53	4.53	4.53	0.75	1.35	± 12.0 %

Calibration Parameter Determined in Head Tissue Simulating Media

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

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

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

			•		-			
f (MHz) ^c	Relative Permittivity ^F	Conductivity (S/m) ^F	ConvF X	ConvF Y	ConvF Z	Alpha ^G	Depth ^G (mm)	Unc (k=2)
750	55.5	0.96	6.50	6.50	6.50	0.62	1.33	± 12.0 %
835	55.2	0.97	6.37	6.37	6.37	0.66	1.31	± 12.0 %
1750	53.4	1.49	5.12	5.12	5.12	0.42	1.72	± 12.0 %
1900	53.3	1.52	4.96	4.96	4.96	0.67	1.38	± 12.0 %
2300	52.9	1.81	4.70	4.70	4.70	0.77	1.22	± 12.0 %
2450	52.7	1.95	4.55	4.55	4.55	0.75	1.17	± 12.0 %
2600	52.5	2.16	4.34	4.34	4.34	0.80	1.05	± 12.0 %

Calibration Parameter Determined in Body Tissue Simulating Media

^c Frequency validity above 300 MHz of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to ± 50 MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is ± 10, 25, 40, 50 and 70 MHz for ConvF assessments at 30, 64, 128, 150 and 220 MHz respectively. Above 5 GHz frequency validity can be extended to ± 110 MHz. ^F At frequencies below 3 GHz, the validity of tissue parameters (ε and σ) can be relaxed to ± 10% if liquid compensation formula is applied to

^F At frequencies below 3 GHz, the validity of tissue parameters (ε and σ) can be relaxed to ± 10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters (ε and σ) is restricted to ± 5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters. ^G Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is

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



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

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



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

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

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

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Conversion Factor Assessment

Other Probe Parameters

Sensor Arrangement	Triangular
Connector Angle (°)	79.3
Mechanical Surface Detection Mode	enabled
Optical Surface Detection Mode	disabled
Probe Overall Length	337 mm
Probe Body Diameter	10 mm
Tip Length	10 mm
Tip Diameter	4 mm
Probe Tip to Sensor X Calibration Point	2 mm
Probe Tip to Sensor Y Calibration Point	2 mm
Probe Tip to Sensor Z Calibration Point	2 mm
Recommended Measurement Distance from Surface	3 mm

Appendix: Modulation Calibration Parameters

ÜID	Communication System Name		A dB	B dBõV	C	D dB	VR mV	Max Unc ^E (k=2)
0	CW	X	0.00	0.00	1.00	0.00	207.9	(K-2) +33%
_ `		Ŷ	0.00	0.00	1.00	0.00	188.2	1 0.0 /a
		7	0.00	0.00	1.00		201.5	
10010- CAA	SAR Validation (Square, 100ms, 10ms)	x	10.65	83.39	20.62	10.00	25.0	± 9.6 %
		Y	8.27	79.56	18.19		25.0	
		Z	9.41	81.26	20.29		25.0	
10011- CAB	UMTS-FDD (WCDMA)	X	1.26	70.62	17.25	0.00	150.0	± 9.6 %
		Y	1.14	69.56	16.54		150.0	
		Z	1.10	67.80	15.49		150.0	
10012- CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps)	X	1.36	66.00	16.64	0.41	150.0	± 9.6 %
		Y	1.31	65.69	16.25		150.0	
		Z	1.33	65.14	15.84		150.0	
10013- CAB	OFDM, 6 Mbps)	X	5.21	67.34	17.59	1.46	150.0	± 9.6 %
		Y	5.03	67.33	17.37		150.0	
10021- DAC	GSM-FDD (TDMA, GMSK)	X	5.21 30.30	67.28 102.62	17.47 28.60	9.39	50.0	± 9.6 %
0,0		Y	85.74	117 41	31.25		50.0	
	· · · · · · · · · · · · · · · · · · ·	7	16.72	92.33	25.82		50.0	
10023- DAC	GPRS-FDD (TDMA, GMSK, TN 0)	X	25.90	99.89	27.85	9.57	50.0	±9.6 %
		Y	53.57	110.04	29.42		50.0	
		Z	15.58	90.96	25.42		50.0	
10024- DAC	GPRS-FDD (TDMA, GMSK, TN 0-1)	X	100.00	119.72	31.24	6.56	60.0	±9.6 %
		Y	100.00	116.42	29.08		60.0	
		Z	69.15	114.71	30.44		60.0	
10025- DAC	EDGE-FDD (TDMA, 8PSK, TN 0)	X	21.22	110.03	42.06	12.57	50.0	± 9.6 %
ļ		<u>Υ</u>	14.02	98.31	37.05		50.0	
10026- DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1)	X	20.65	107.68	41.04 37.14	9.56	50.0 60.0	±9.6 %
		Y	17.09	100.87	34.58		60.0	
		Ż	19.56	102.47	35.45		60.0	
10027- DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2)	X	100.00	118.87	29.89	4.80	80.0	± 9.6 %
		Y	100.00	115.45	27.78		80.0	
		Z	100.00	119.07	30.22		80.0	
10028- DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2-3)	X	100.00	119.42	29.31	3.55	100.0	± 9.6 %
		Y	100.00	115.85	27.21	L	100.0	
		Z	100.00	119.09	29.37		100.0	
10029- DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2)	X	14.97	97.57	32.79	7.80	80.0	± 9.6 %
ļ		<u> Y</u>	11.33	91.85	30.38		80.0	
40000		Z		94.63	31.63	L	80.0	100%
10030- CAA	IEEE 802.15.1 Bluetooth (GFSK, DH1)		100.00	118.36	30.01	5.30	70.0	±9.6%
ļ		Y	100.00	114.74	27.76			
10031-	IEEE 802.15.1 Bluetooth (GFSK, DH3)	<u>Z</u> X	100.00	121.98	28.84	1.88	100.0	± 9.6 %
		Y	100.00	117.00	26.24		100.0	
l		1 Z	1 100.00	120.23	28.25	1	1 100.0	1

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10032- CAA	IEEE 802.15.1 Bluetooth (GFSK, DH5)	X	100.00	128.67	30.50	1.17	100.0	± 9.6 %
		Y	100.00	122.90	27.66		100.0	
		Z	100.00	124.38	28.87		100.0	
10033- CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH1)	X	24.23	102.94	29.00	5.30	70.0	± 9.6 %
		Y	23.03	100.70	27.25		70.0	
40004		Z	13.78	92.43	25.72		70.0	
10034- CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH3)	X	11.07	94.32	25.04	1.88	100.0	± 9.6 %
		Y	10.51	92.09	23.22		100.0	
40005		Z	6.22	84.45	21.59		100.0	
CAA	DH5)	X	5.82	86.43	22.33	1.17	100.0	± 9.6 %
		Y	5.46	84.67	20.69		100.0	
		Z	3.82	79.09	19.43		100.0	
10036- CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH1)	X	30.87	107.24	30.28	5.30	70.0	± 9.6 %
		Y	31.94	106.09	28.82		70.0	
40007		Z	15.75	94.83	26.54		70.0	
CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH3)	X	10.70	93.84	24.85	1.88	100.0	± 9.6 %
n		Y	9.44	90.62	22.74		100.0	
10020		Z	6.06	84.12	21.44		100.0	
CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH5)	X	6.09	87.40	22.75	1.17	100.0	± 9.6 %
		Ŷ	5.73	85.66	21.12		100.0	
10000		Z	3.92	79.69	19.73		100.0	
10039- <u>C</u> AB	CDMA2000 (1xRTT, RC1)	X	2.51	76.10	18.44	0.00	150.0	± 9.6 %
		Y	2.58	77.34	18.13		150.0	
		Z	1.93	71.68	16.25		150.0	
10042- CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4- DQPSK, Halfrate)	X	100.00	118.55	30.95	7.78	50.0	± 9.6 %
		Y	100.00	115.26	28.77		50.0	
		Z	30.52	101.01	26.83		50.0	
10044- CAA	IS-91/EIA/TIA-553 FDD (FDMA, FM)	Х	0.01	122.84	6.61	0.00	150.0	± 9.6 %
		Y	0.00	101.52	0.76	· .	150.0	
		Z	0.01	121.65	1.51		150.0	·
10048- CAA	DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24)	X	12.97	86.24	25.23	13.80	25.0	± 9.6 %
		Y	16.21	90.42	25.53		25.0	
		Z	11.00	82.40	24.22		25.0	
10049- CAA	DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12)	Х	16.11	91.33	25.58	10.79	40.0	± 9.6 %
		Y	21.17	95.34	25.70	·····	40.0	
10000		Z	12.51	86.41	24.27		40.0	
10056- CAA	UMTS-TDD (TD-SCDMA, 1.28 Mcps)	Х	14.93	90.68	26.04	9.03	50.0	± 9.6 %
		Y	15.30	90.91	25.15		50.0	
		Z	12.28	86.39	24.64		50.0	
10058- DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)	Х	10.77	90.92	29.72	6.55	100.0	± 9.6 %
		Y	8.37	86.08	27.58		100.0	
10050		Z	10.19	88.91	28.83		100.0	
10059- CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps)	X	1.56	68.48	17.84	0.61	110.0	±9.6 %
		Y	1.47	67.87	17.29		110.0	
10000		Z	1.52	67.28	16.88		110.0	
10060- CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps)	X	100.00	133.74	34.89	1.30	110.0	± 9.6 %
		Y	100.00	132.17	33.87		110.0	
		Z	100.00	130.92	33.73		110.0	

10061- CAB	IEEE 802.11b WIFI 2.4 GHz (DSSS, 11 Mbps)	X	16.46	105.21	30.01	2.04	110.0	± 9.6 %
0/10			11.67	00.37	27.84		110.0	
		7	8.39	92.33	25.80		110.0	
10062- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps)	X	4.94	67.14	16.89	0.49	100.0	± 9.6 %
		Y	4.78	67.19	16.74		100.0	
		Z	4.92	67.01	16.73		100.0	
10063- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps)	X	4.98	67.31	17.04	0.72	100.0	± 9.6 %
		Y	4.81	67.33	16.86		100.0	
		Z	4.96	67.18	16.88		100.0	
10064- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps)	X	5.32	67.65	17.30	0.86	100.0	± 9.6 %
		Y	5.11	67.60	17.09		100.0	
10005		Z	5.31	67.54	17.16		100.0	
10065- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps)	X	5.22	67.69	17.47	1.21	100.0	±9.6 %
		<u>Y</u>	5.01	67.59	17.23		100.0	
40000		Z	5.22	67.59	17.34		100.0	
CAB	Mbps)	X	5.28	67.82	17.71	1.46	100.0	± 9.6 %
			5.05	67.68	17.43		100.0	
10067			5.28	67.74	17.58	0.04	100.0	10.00
CAB	Mbps)		0.09	07.95	18,15	2.04	100.0	±9.6%
<u> </u>		Y	5.36	67.86	17.87		100.0	
10068-	IEEE 802 11a/b WIEL5 CHz (OEDM 48		5.74	69.25	18.00	2.55	100.0	+06%
CAB	Mbps)		0.74	00.00	18.54	2.55	100.0	±9.6 %
			5.47	68.07	18.17		100.0	
10069.	IFEE 802 11a/b W/IEI 5 GHz (OEDM 54		5.02	69.30	10.47	2.67	100.0	+06%
CAB	Mbps)		5.02	00.20	40.04	2.07	100.0	± 9.0 %
		Y 7	5.55	68.05	18.34		100.0	
10071-	IEEE 802 11a W/iEi 2 4 GHz	+ \ 	5.00	67.58	17.07	1 00	100.0	+06%
CAB	(DSSS/OFDM, 9 Mbps)		5.00	67.50	47.70	1.55	100.0	± 9.0 %
			5.10	67.56	17.88		100.0	
10072-	IEEE 802.11g WiFi 2.4 GHz	X	5.42	68.17	18.31	2.30	100.0	± 9.6 %
CAB	USSS/OFDM, 12 Mbps)		E 00	69.04	10.01		100.0	
		7	5.20	08.01	18.01		100.0	
10073-	IEEE 802.11g WiFi 2.4 GHz	X	5.56	68.52	18.74	2.83	100.0	± 9.6 %
		Υ I	5.32	68.31	18 39		100.0	
		Ż	5.60	68.54	18.67		100.0	
10074- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps)	X	5.59	68.60	19.01	3.30	100.0	± 9.6 %
]		Y	5.35	68.34	18.61	İ	100.0	
		Z	5.65	68.66	18.95		100.0	
10075- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps)	X	5.76	69.14	19.54	3.82	90.0	±9.6 %
		Y	5.46	68.68	19.02		90.0	
		Z	5.83	69.24	19.50		90.0	
10076- CAB	IEEE 802.11g WIFi 2.4 GHz (DSSS/OFDM, 48 Mbps)	X	5.75	68.91	19.64	4.15	90.0	±9.6 %
		Y	5.48	68.50	19.14		90.0	
L		Z	5.84	69.05	19.63		90.0	-
10077- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps)	X	5.79	69.00	19.75	4.30	90.0	± 9.6 %
		Y	5.52	68.61	19.25		90.0	
		Z	5.89	69.15	19.74		90.0	

10081-	CDMA2000 (1xRTT, RC3)	Х	1.18	70.18	15.67	0.00	150.0	± 9.6 %
			1.02	60.06	44.95		450.0	
		7	0.97	66 70	14.50		150.0	
10082- CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4- DQPSK, Fullrate)	X	2.27	64.65	9.36	4.77	80.0	±9.6 %
		Y	1.70	62.49	7.53		80.0	
		Z	2.45	65.05	9.86		80.0	
10090- DAC	GPRS-FDD (TDMA, GMSK, TN 0-4)	X	100.00	119.81	31.30	6.56	60.0	± 9.6 %
		Y	100.00	116.49	29.13		60.0	
		Z	65.88	114.04	30.31		60.0	
10097- CAB	UMTS-FDD (HSDPA)	X	1.98	68.72	16.60	0.00	150.0	± 9.6 %
		Ŷ	1.94	68.99	16.45		150.0	
40000		Z	1.87	67.43	15.70		150.0	
10098- CAB	UMTS-FDD (HSUPA, Subtest 2)	X	1.94	68.72	16.59	0.00	150.0	± 9.6 %
		Y	1.90	68.95	16.42		150.0	
40000		Z	1.83	67.41	15.68		150.0	
10099- DAC	EDGE-FDD (TDMA, 8PSK, TN 0-4)	X	22.60	106.99	37.08	9.56	60.0	±9.6 %
		Y	17.07	100.80	34.55		60.0	
10100		Z	19.45	102.29	35.39		60.0	
CAC	MHz, QPSK)	X	3.50	71.91	17.47	0.00	150.0	± 9.6 %
		Y	3.32	71.58	17.29		150.0	
40101		Z	3.29	70.63	16.73		150.0	
CAC	MHz, 16-QAM)	X	3.47	68.41	16.46	0.00	150.0	±9.6 %
		Y	3.33	68.22	16.28		150.0	
10100		Z	3.39	67.84	16.04		150.0	
CAC	MHz, 64-QAM)	X	3.56	68.27	16.50	0.00	150.0	± 9.6 %
		Y	3.43	68.17	16.36		150.0	
40402		Z	3.49	67.75	16.11		150.0	
CAC	MHz, QPSK)	X	8.90	78.76	21.58	3.98	65.0	±9.6 %
		Y	8.47	78.68	21.35		65.0	
10101	1 TC TOD (00 CDMA 400% DD 00	Z	8.34	77.15	20.86		65.0	
CAC	MHz, 16-QAM)	X	8.80	77.42	21.93	3.98	65.0	±9.6 %
		Υ Υ	8.21	76.81	21.41		65.0	
10105-	TE-TOD (SC-EDMA 100% BB 20	4 X	8.69	76.77	21.58	2.09	65.0	100%
CAC	MHz, 64-QAM)		7.00	74.71	21.04	3.90	05.0	±9.6 %
		Y 7	7.62	75.33	21.07		65.0	
10108-	LTE-EDD (SC-EDMA 100% RB 10		2.00	74.75	20.97	0.00	65.0	1.0.0.0
CAD	MHz, QPSK)		3.09	71.08	17.31	0.00	150.0	±9.6 %
			2.90	70.80	17.14		150.0	
10109-			2.90	69.83	16.56	0.00	150.0	
CAD	MHz, 16-QAM)	^	3.14	68.25	16.42	0.00	150.0	±9.6 %
	· · · · · · · · · · · · · · · · · · ·	Y	2.99	68.15	16.24		150.0	
10110	THE EDD (SC EDMA 1000/ DD E MUT	- <u>-</u>	3.05	67.61	15.95		150.0	
CAD	QPSK)		2.04	/0.21	17.07	0.00	150.0	± 9.6 %
	· · · · · · · · · · · · · · · · · · ·	<u> </u>	2.36	69.95	16.81		150.0	
10111			2.39	68.91	16.24	0.00	150.0	
CAD	16-QAM)	×	2.84	68.87	16.76	0.00	150.0	±9.6 %
		<u> </u>	2.74	69.25	16.71		150.0	
		4	2.73	68.00	16.14		1 150.0	

10112- CAD	LTE-FDD (SC-FDMA, 100% RB, 10	X	3.25	68.12	16.42	0.00	150.0	± 9.6 %
0/10		Y	3.11	68,10	16.28		150.0	
		Ż	3.17	67.53	15.98		150.0	
10113- CAD	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	Х	2.99	68.87	16.82	0.00	150.0	± 9.6 %
		Y	2.90	69.34	16.82		150.0	
40444		Z	2.88	68.07	16.24		150.0	
CAB	Mbps, BPSK)	X	5.29	67.49	16.64	0.00	150.0	± 9.6 %
			5.18	67.60	16.59		150.0	
10115-	EEE 802.11n (HT Greenfield 81 Mbns	<u> </u>	5.67	67.81	16.80	0.00	150.0	+06%
CAB	16-QAM)		0.07	01.01	10.00	0.00	100.0	1 9.0 %
		Y	5.49	67.77	16.68		150.0	
40440		Z	5.63	67.65	16.65		150.0	
CAB	64-QAM)	X	5.43	67.78	16.70	0.00	150.0	± 9.6 %
		Y	5.29	67.82	16.63		150.0	
10117	IEEE 802 11n (HT Mixed 13 5 Mbps		5.39	67.60	16.54	0.00	150.0	10.0%
CAB	BPSK)		5.30	07.00	10.00	0.00	150.0	±9.0 %
			5.10	67.35	16.55		150.0	
10118-	IEEE 802.11n (HT Mixed, 81 Mbps, 16-	$\frac{2}{x}$	5.73	67.95	16.88	0.00	150.0	+96%
CAB	QAM)		5 50	67.09	10.00		150.0	20.0 %
		T 7	<u> </u>	67.80	16.80		150.0	
10119- CAB	IEEE 802.11n (HT Mixed, 135 Mbps, 64- QAM)	X	5.40	67.74	16.70	0.00	150.0	± 9.6 %
		Y	5.26	67.75	16.61		150.0	
		Z	5.37	67.56	16.53		150.0	
10140- CAC	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	X	3.61	68.27	16.43	0.00	150.0	± 9.6 %
		Y	3.47	68.16	16.27		150.0	
		Z	3.54	67.76	16.04		150.0	
10141- CAC	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	X	3.73	68.28	16.55	0.00	150.0	± 9.6 %
		Y	3.59	68.25	16.43		150.0	
10142-	LTE-EDD (SC-EDMA 100% RB 3 MHz		3.00	70.20	16.17	0.00	150.0	+96%
CAD	QPSK)		2.00	70.23	10.07	0.00	150.0	1 9.0 %
		Y	2.16	70.21	16.65	1	150.0	
10143- CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-0AM)	X	2.74	69.72	16.76	0.00	150.0	± 9.6 %
00		Y	2.67	70.41	16.67	1	150.0	
		Z	2.59	68.55	15.97		150.0	
10144- CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	X	2.56	67.80	15.39	0.00	150.0	± 9.6 %
		Y	2.37	67.67	14.84		150.0	
40445		Z	2.45	66.93	14.76		150.0	
10145- CAD	MHz, QPSK)	X	1.73	69.15	15.06	0.00	150.0	± 9.6 %
			1.44	67.55	13.30		150.0	
10146-	LTE-FDD (SC-FDMA, 100% RB, 1.4	X	4.00	75.69	17.38	0.00	150.0	± 9.6 %
		Y	2.68	70.09	13.45		150.0	
		Z	3.36	72.93	16.09		150.0	
10147- CAD	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	X	5.35	79.98	19.20	0.00	150.0	± 9.6 %
		Y	3.76	74.33	15.35		150.0	
1		ΙΖ	4.15	1 75.99	17.51	1	1 150.0	1

10149-	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-OAM)	X	3.15	68.30	16.47	0.00	150.0	± 9.6 %
		Y	3.00	68.22	16.29		150.0	
		Z	3.06	67.66	15.99		150.0	·
10150- CAC	1.TE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	X	3.26	68.16	16.46	0.00	150.0	± 9.6 %
		Y	3.12	68.16	16.32		150.0	
		Z	3.18	67.57	16.02		150.0	
10151- CAC	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	X	9.51	81.17	22.64	3.98	65.0	± 9.6 %
		Y	9.26	81.54	22.52		65.0	
		Z	9.00	79.66	21.96		65.0	
10152- CAC	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	X	8.48	77.76	21.88	3.98	65.0	± 9.6 %
		Y	7.81	76.97	21.19		65.0	
		Z	8.33	76.97	21.46		65.0	
10153- CAC	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	X	8.81	78.38	22.46	3.98	65.0	± 9.6 %
		Y	8.28	78.00	21.97		65.0	
		Z	8.64	77.56	22.02		65.0	
10154- CAD	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	X	2.61	70.67	17.35	0.00	150.0	± 9.6 %
		Y	2.43	70.50	17.14		150.0	
		Z	2.44	69.28	16.48		150.0	
10155- CAD	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	X	2.84	68.87	16.77	0.00	150.0	± 9.6 %
		Y	2.74	69.26	16.73		150.0	
		Z	2.73	68.00	16.15		150.0	
10156- CAD	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	X	2.21	70.73	17.05	0.00	150.0	± 9.6 %
		Y	2.04	70.63	16.63		150.0	
		Z	2.02	68.93	15.94		150.0	
10157- CAD	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	X	2.42	68.64	15.67	0.00	150.0	± 9.6 %
		Y	2.25	68.58	15.08		150.0	
		Z	2.28	67.47	14.87		150.0	
10158- CAD	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	X	2.99	68.92	16.86	0.00	150.0	±9.6 %
		Y	2.90	69.42	16.87		150.0	· · · ·
		Z	2.89	68.11	16.28		150.0	
10159- CAD	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	X	2.54	69.05	15.93	0.00	150.0	±9.6 %
		Y	2.38	69.17	15.42		150.0	
		Z	2.38	67.83	15.11		150.0	
10160- CAC	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	Х	3.02	69.72	16.97	0.00	150.0	± 9.6 %
		Y	2.87	69.64	16.82		150 0	
		Z	2.89	68.80	16.35		150.0	·
10161- CAC	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	X	3.15	68.06	16.41	0.00	150.0	±9.6 %
		Y	3.02	68.13	16.28	···	150.0	<u> </u>
		Z	3.07	67.45	15.95		150.0	
10162- CAC	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	x	3.25	68.09	16.46	0.00	150.0	± 9.6 %
		Y	3.13	68 25	16 37		150.0	
		z	3,18	67.52	16.02	<u></u>	150.0	
10166- CAD	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	X	4.03	70.84	19.96	3.01	150.0	±9.6 %
		Y	3.83	71.14	19.84		150.0	· · · · · · · · · · · · · · · · · · ·
		Z	4.01	70.55	19.74	·	150.0	
10167- CAD	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	X	5.25	74.55	20.76	3.01	150.0	± 9.6 %
		Y	5 14	75.60	20.85		160.0	
· · · · · · · · · · · · · · · · · · ·		z	5.18	74.06	20.47		150.0	
		· · · · · ·					1 10010 1	

10168- CAD	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	X	5.75	76.52	21.89	3.01	150.0	± 9.6 %
		Y	6.00	78.90	22.58		150.0	
		Z	5.63	75.85	21.52		150.0	
10169- CAC	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	Х	3.71	72.74	20.84	3.01	150.0	± 9.6 %
		Y	3.37	72.07	20.29		150.0	
40470		Z	3.67	72.12	20.45		150.0	
10170- CAC	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	X	5.90	81.03	23.83	3.01	150.0	± 9.6 %
		Y	6.20	83.55	24.55		150.0	
40474		Z	5.54	79.34	23.04		150.0	
AAC	64-QAM)	X	4.69	76.04	20.92	3.01	150.0	± 9.6 %
		Y 7	4.32	75.87	20.46		150.0	
10172			4.54	75.03	20,42	0.00	150.0	
CAC	QPSK)		39.66	116.21	35.79	6.02	65.0	± 9.6 %
		Y 7	26.05	109.12	33.27		65.0	
10173-	LTE-TOD (SC-EDMA 1 RB 20 MHz	2 - X	52.93	110.22	33.90	6.00	65.0	10.00
CAC	16-QAM)		52.04	110.00	33.60	0.02	05.0	± 9.0 %
		7	22.54	120.00	35.61		65.0	
10174-	LTE-TDD (SC-EDMA_1 RB_20 MHz	<u>7</u>	36.42	107.54	31.10	6.02	65.0	+06%
CAC	64-QAM)		50.42	107.04	24.04	0.02	05.0	± 9.0 %
····		7	0Z.Z4	113.81	31.84		65.0	
10175- CAD	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, OPSK)	X	3.66	72.37	29.05	3.01	150.0	± 9.6 %
0/10		Y	3.31	71.62	19.97		150.0	
		Ż	3.62	71.80	20.21		150.0	
10176- CAD	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	X	5.91	81.06	23.84	3.01	150.0	± 9.6 %
		Y	6.22	83.59	24.56		150.0	
		Z	5.55	79.36	23.05		150.0	
10177- CAF	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	X	3.70	72.55	20.68	3.01	150.0	±9.6 %
		Y	3.35	71.84	20.10		150.0	
		Z	3.65	71.95	20.31		150.0	
10178- CAD	QAM)	X	5.81	80.70	23.67	3.01	150.0	± 9.6 %
		Y	6.07	83.11	24.35		150.0	
10179-	LTE-FDD (SC-FDMA, 1 RB, 10 MHz,	X	5.47 5.24	79.07 78.36	22.91 22.22	3.01	150.0 150.0	± 9.6 %
0/10		V V	5 11	79.33	22.28		150.0	
		Ż	5.00	77.05	21.59		150.0	
10180- CAD	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 64- QAM)	X	4.67	75.92	20.85	3.01	150.0	±9.6 %
		Y	4.29	75.73	20.38		150.0	
		Z	4.52	74.94	20.36		150.0	
10181- CAC	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	X	3.69	72.54	20.68	3.01	150.0	± 9.6 %
		Y	3.34	71.81	20.09		150.0	
		Z	3.65	71.94	20.30		150.0	-
10182- CAC	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	X	5.80	80.67	23.66	3.01	150.0	± 9.6 %
		<u>Υ</u>	6.06	83.07	24.33		150.0	
10183-	LTE-FDD (SC-FDMA, 1 RB, 15 MHz,	Z X	5.46 4.66	79.04 75.89	22.90 20.84	3.01	150.0 150.0	± 9.6 %
AAB	б4-QAM)		4.00	75 70	00.00		1	
		Y 7	4.28	74.00	20.30		150.0	
		1 4	1 4.01	14.02	20.00	1	1 100.0	5

10184- CAD	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, OPSK)	X	3.70	72.58	20.70	3.01	150.0	± 9.6 %
		Y	3.35	71.87	20.12		150.0	
		Z	3.66	71.98	20.32		150.0	
10185- CAD	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16- QAM)	X	5.83	80.75	23.70	3.01	150.0	± 9.6 %
		Y	6.11	83.20	24.39		150.0	
		Z	5.49	79.12	22.93		150.0	
10186- AAD	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64- QAM)	X	4.69	75.98	20.88	3.01	150.0	± 9.6 %
		Ϋ́	4.31	75.80	20.41		150.0	
l		Ζ	4.54	74.99	20.38		150.0	
10187- CAD	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	X	3.71	72.62	20.75	3.01	150.0	± 9.6 %
		Y	3.36	71.93	20,19		150.0	
		Z	3.67	72.03	20.37		150.0	
10188- CAD	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	X	6.08	81.63	24.13	3.01	150.0	± 9.6 %
		Y	6.51	84.55	25.01		150.0	
		Z	5.69	79.85	23.31		150.0	
10189- AAD	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	X	4.82	76.52	21.19	3.01	150.0	± 9.6 %
		Y	4.47	76.53	20.81		150.0	
		Z	4.65	75.46	20.66		150.0	
10193- CAB	IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK)	х	4.72	66.91	16.43	0.00	150.0	± 9.6 %
		Y	4.58	67.02	16.33		150.0	
		Z	4.68	66.73	16.24		150.0	
10194- CAB	IEEE 802.11n (HT Greenfield, 39 Mbps, 16-QAM)	Х	4.92	67.29	16.55	0.00	150.0	± 9.6 %
		Y	4.76	67.35	16.45		150.0	
		Z	4.88	67.10	16.36		150.0	
10195- CAB	IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM)	Х	4.96	67.30	16.55	0.00	150.0	± 9.6 %
		Y	4.80	67.37	16.46		150.0	
		Z	4.92	67.11	16.37		150.0	
10196- CAB	IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK)	Х	4.74	67.02	16.47	0.00	150.0	±9.6 %
		Y	4.59	67.09	16.35		150.0	
		Z	4.70	66.83	16.28		150.0	
10197- CAB	IEEE 802.11n (HT Mixed, 39 Mbps, 16- QAM)	х	4.93	67.31	16.56	0.00	150.0	± 9.6 %
		Y	4.77	67.37	16.46		150.0	
		Z	4.90	67.12	16.37	·	150.0	
10198- CAB	IEEE 802.11n (HT Mixed, 65 Mbps, 64- QAM)	X	4.96	67.32	16.56	0.00	150.0	± 9.6 %
		Y	4.80	67.39	16.47		150.0	
		Z	4.93	67.13	16.38		150.0	
10219- CAB	IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK)	X	4.69	67.04	16.44	0.00	150.0	±9.6 %
		Y	4.54	67.11	16.31	·	150.0	
		Z	4.65	66.84	16.24		150.0	
10220- CAB	IEEE 802.11n (HT Mixed, 43.3 Mbps, 16- QAM)	Х	4.93	67.31	16.56	0.00	150.0	± 9.6 %
		Y	4.77	67.34	16.45	h	150.0	
		Z	4.90	67.11	16.37	,	150.0	· · · · · · · · · · · · · · · · · · ·
10221- CAB	IEEE 802.11n (HT Mixed, 72.2 Mbps, 64- QAM)	X	4.97	67.25	16.55	0.00	150.0	± 9.6 %
		TY I	4.81	67.32	16.45		150.0	
		Z	4.93	67.06	16.37		150.0	
10222- CAB	IEEE 802.11n (HT Mixed, 15 Mbps, BPSK)	X	5.28	67.55	16.68	0.00	150.0	± 9.6 %
		Y	5.13	67 49	16.55		150.0	
		Z	5.25	67.37	16.50		150.0	

10223-	IEEE 802.11n (HT Mixed, 90 Mbps, 16-	X	5.67	67.92	16.89	0.00	150.0	± 9.6 %
CAD		V	5 43	67.67	16.66		150.0	
		7	5.43	67.75	16.00		150.0	
10224- CAB	IEEE 802.11n (HT Mixed, 150 Mbps, 64- QAM)	X	5.33	67.64	16.65	0.00	150.0	± 9.6 %
		Y	5.17	67.60	16.53		150.0	
10225-	LIMTS-EDD (HSPA+)		2.00	07.40	16.47	0.00	150.0	
CAB			2.99	00.02	10.92	0.00	150.0	± 9.6 %
		Y 7	2.87	66.77	15.69		150.0	
10226-	LTE-TDD (SC-EDMA_1 RB_14 MHz	X	2.94	117.30	15.53	6.02	150.0	+069/
CAA	16-QAM)		00.00	117.50	34.20	0.02	05.0	± 9.0 %
		Y 7	100.00	126.89	35.76		65.0	
10227-	LTE-TDD (SC-EDMA_1 RB_14 MHz	X	39.10	107.38	31.54	6.02	65.0	+06%
CAA	64-QAM)			109.19	51.57	0.02	05.0	± 9.0 %
		Y	88.35	122.59	34.09		65.0	
10228-	LTE-TOD (SC-EDMA 1 RB 14 MHz		20.90	101.76	29.43	6.02	65.0	+06%
CAA	QPSK)		40,41	120.01	57.06	0.02	05.0	1 9.0 %
		Y	45.84	120.16	36.35		65.0	
10220.			31.93	111.39	34.43	0.00	65.0	
CAB	QAM)		52.17	115.76	33.79	0.02	65.0	±9.6%
		Y	100.00	126.65	35.62		65.0	
10220		Z	32.55	106.35	31.18	0.00	65.0	
CAB	QAM)		37.48	108.07	31.19	6.02	65.0	± 9.6 %
		Y	75.87	119.84	33.34		65.0	
10001		Z	25.90	100.97	29.14	0.00	65.0	100%
CAB	QPSK)	^	45.44	119.21	36.63	6.02	65.0	± 9.6 %
		Y	41.18	117.91	35.67		65.0	
10000			30.52	110.38	34.07	0.00	65.0	1000
CAC	QAM)		52.80	115.78	33.80	0.02	65.0	± 9.6 %
		<u> </u>	100.00	126.66	35.62		65.0	
10233			32.54	106.35	31.18	6.00	65.0	10.0%
CAC	QAM)		37.04	100.11	31.20	0.02	05.0	±9.6%
		Y	75.89	119.86	33.34		65.0	
10004			25.92	100.99	29.14	0.00	65.0	100%
CAC	QPSK)		42.47	117.03	36.10	6.02	65.0	±9.6 %
		<u>Y</u>	37.31	115.74	34.97		65.0	
10225		<u> </u>	29.08	109.25	33.65	6.00	65.0	+0.0%
CAC	16-QAM)	<u> </u>	53.08	115.89	33.83	0.02	05.0	±9.6%
		Y	100.00	126.67	35.62		65.0	
10000			32.64	106.42	31.20		65.0	10.0.1/
CAC	64-QAM)		37.96	108.28	51.24	0.02	05.0	±9.6 %
		Y 7	77.12	120.09	33.39		65.0	
10237-	LTE-TDD (SC-FDMA_1 RB_10 MHz	X	46 10	119.52	36 72	6.02	65.0	+96%
CAC	QPSK)			10.02	00.12	0.02	00.0	- 0.0 /0
 		Y	41.64	118.15	35.73		65.0	
10238-	LTE-TOD (SC-EDMA 1 PR 15 MH-		52.80	110.60	34.14	6.02	65.0	+06%
CAC	16-QAM)		02.09	110.02	00.01	0.02	00.0	± 9.0 %
ļ		<u>Y</u>	100.00	126.66	35.62	[65.0	
1	1	14	1 32.35	1 100.37	1 31.18	1	1 05.0	1

10239-	LTE-TDD (SC-FDMA, 1 RB, 15 MHz,	X	37.59	108.15	31.21	6.02	65.0	± 9.6 %
			75.87	110.87	33.34		65.0	
		7	25.03	101.02	20.16		65.0	
10240-	LTE-TDD (SC-FDMA, 1 RB, 15 MHz	X	45.90	119 44	36.69	6.02	65.0	+06%
CAC	QPSK)		10.00	110.44	00.00	0.02	05.0	± 9.0 %
		Y	41.47	118.08	35.71		65.0	
		Z	30.71	110.54	34.12		65.0	
10241-	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz,	X	13.10	88.25	28.31	6.98	65.0	± 9.6 %
	TO-QAM)		12.64	00.00	07.07		05.0	
······			12.04	00.00	27.87		0.00	
10242-	TETOD (SC EDMA 50% DR 4 4 MUT		13.02	87.59	27.99	0.00	65.0	
CAA	64-QAM)	^	11.02	00.04	27.10	6.98	65.0	± 9.6 %
		Y	10.36	84.46	26.20		65.0	
		Z	12.32	86.33	27.43		65.0	
10243-	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz,	X	9.39	82.67	26.96	6.98	65.0	+9.6%
CAA	QPSK)							- 010 /0
		Y	7.89	80.01	25.32		65.0	
		Z	10.15	83.98	27.43		65.0	
10244-	LTE-TDD (SC-FDMA, 50% RB, 3 MHz,	X	10.37	82.39	22.15	3.98	65.0	±9.6 %
CAB	16-QAM)		0.04			. <u>.</u>		
		Γ <u>Υ</u>	9.21	80.31	20.18		65.0	
10245		<u> </u>	9.60	80.54	21.38		65.0	ļ
CAB	64-QAM)	X	10.20	81.86	21.90	3.98	65.0	±9.6 %
		Y	8.91	79.56	19.85		65.0	
		Z	9.50	80.13	21.18		65.0	• ••••••••
10246-	LTE-TDD (SC-FDMA, 50% RB, 3 MHz,	X	10.29	85.01	23.02	3.98	65.0	+96%
CAB	QPSK)				20102	0.00	00.0	10.0 %
		Y	9.28	83.44	21.56		65.0	
		Z	8.83	81.79	21.72		65.0	
10247- CAC	LTE-TDD (SC-FDMA, 50% RB, 5 MHz,	Х	8.11	78.82	21.25	3.98	65.0	±9.6 %
0,10	10 (30 (11))		7 33	77 59	10.00		05.0	
		7	7.33	77.00	19.99		65.0	
10248-	LTE-TOD (SC-EDMA 50% BB 5 MHz	- <u>2</u> - Y	8.00	70.21	20.00	2.00	65.0	
CAC	64-QAM)		0.09	70.51	21.04	3.90	05.0	±9.6%
		Y	7.21	76.86	19.68		65.0	
		Ζ	7.75	77.03	20.41		65.0	
10249- CAC	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, OPSK)	X	11.01	86.29	24.03	3.98	65.0	±9.6 %
		Y	10.81	86.39	23.39	· · · · · · · · · · · · · · · · · · ·	65.0	
		Ż	9.54	83.16	22.78		65.0	
10250-	LTE-TDD (SC-FDMA, 50% RB, 10 MHz,	X	8.83	80.24	22.94	3.98	65.0	± 9.6 %
CAC	16-QAM)	- V	0.00	00.07	00.40			
		7	0.30	80.07	22.43		65.0	
10251-	LTE-TOD (SC-EDMA 50% RB 10 MHz	2 V	0.40	70.94	22.29	2.00	65.0	
CAC	64-QAM)	^	0.37	76.15	21.84	3.98	65.0	±9.6%
		Y	7.73	77.46	21.06		65.0	
		Z	8.17	77.24	21.36		65.0	
10252-	LTE-TDD (SC-FDMA, 50% RB, 10 MHz,	Х	10.43	84.63	24.00	3.98	65.0	±9.6 %
CAC	QPSK)							/.
		<u>Y</u>	10.38	85.34	23.87		65.0	
40050		Z	9.48	82.30	23.02		65.0	
10253- CAC	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	X	8.24	77.12	21.67	3.98	65.0	± 9.6 %
		Y	7.62	76.41	20.97		65.0	
		Z	8.12	76.42	21.28		65.0	
10254-	LTE-TDD (SC-FDMA, 50% RB, 15 MHz,	Х	8.59	77.78	22.22	3.98	65.0	±9.6 %
			9.06	77.00		<u> </u>	05.0	
			0.00	77.05	21.07		65.0	
			0.40	11.00	21.0		0.00	

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10255- CAC	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	X	9.19	80.79	22.74	3.98	65.0	± 9.6 %
		Y	8 89	81.04	22.54	1	65.0	
		Ż	8.75	79.38	22.04		65.0	<u> </u>
10256- CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	X	9.46	80.54	20.72	3.98	65.0	± 9.6 %
		Y	7.26	76.12	17.61		65.0	
		Z	8.73	78.73	19.97		65.0	
10257- CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	Х	9.23	79.78	20.35	3.98	65.0	± 9.6 %
		Y	6.96	75.17	17.14		65.0	
40050		Z	8.59	78.13	19.66		65.0	
10258- CAA	LTE-IDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	X	9.10	82.63	21.62	3.98	65.0	± 9.6 %
·.		Y	7.16	78.79	19.11		65.0	
10050		Z	7.85	79.60	20.38		65.0	
CAB	16-QAM)	×	8.39	79.27	21.82	3.98	65.0	± 9.6 %
		Y 	7.73	78.47	20.85	· · · · · · · · · · · · · · · · · · ·	65.0	
10260	LTE TOD (SC EDMA 400% PR 2 MUS		8.02	77.92	21.16	0.00	65.0	
CAB	64-QAM)		8.39	78.99	21.73	3.98	65.0	± 9.6 %
		Y	7.70	78.11	20.72		65.0	
10261-			8.05	04.05	21.09	2.00	65.0	
CAB	QPSK)		10.34	84.95	23.83	3.98	65.0	± 9.6 %
		Y 7	10.04	85.03	23.28		65.0	
10262-			9.23	82.32	22.74	2.00	65.0	10.6.11
CAC	16-QAM)		8.82	80.21	22.91	3.98	65.0	± 9.6 %
		Y	8.36	80.01	22.38		65.0	
10262		4	8.47	78.91	22.26	2.00	65.0	100%
CAC	64-QAM)		8.36	78.15	21.85	3.98	65.0	± 9.6 %
		Y	1.12	//.44	21.06		65.0	
10264-			0.17	94.50	21.37	2.09	65.0	+06%
CAC	QPSK)		40.07	04.50	23.55	3.30	05.0	± 9.0 %
		7	10.27	00.13	23.77		05.0	
10265-	LTE-TDD (SC-FDMA, 100% RB, 10	X	9.43 8.48	77.76	21.88	3.98	65.0	± 9.6 %
		Y	7 81	76.97	21.20		65.0	
		z	8.32	76.97	21.47		65.0	
10266- CAC	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	X	8.81	78.38	22.45	3.98	65.0	± 9.6 %
		Y	8.27	77.98	21.97		65.0	· · ·
		Z	8.64	77.56	22.02	1	65.0	
10267- CAC	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	X	9.50	81.14	22.63	3.98	65.0	± 9.6 %
		Y	9.25	81.50	22.50		65.0	
		Z	8.99	79.63	21.95		65.0	
10268- CAC	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	Х	8.86	77.06	21.92	3.98	65.0	± 9.6 %
		Y	8.31	76.56	21.43		65.0	
		Z	8.78	76.48	21.59		65.0	
10269- CAC	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	X	8.77	76.63	21.82	3.98	65.0	± 9.6 %
		Y	8.23	76.12	21.32		65.0	
		Z	8.71	76.12	21.52		65.0	
10270- CAC	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	X	8.91	78.30	21.65	3.98	65.0	± 9.6 %
		Y	8.57	78.39	21.47		65.0	
		Z	8.67	77.36	21.19		65.0	

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10274- CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8 10)	X	2.73	66.93	15.81	0.00	150.0	± 9.6 %
0,10		Y	2.66	67.19	15.64		150.0	
		Z	2.67	66.38	15.35		150.0	
10275- CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.4)	X	1.85	69.82	16.81	0.00	150.0	± 9.6 %
		Y	1.73	69.48	16.43		150.0	
10277		- 2	1.70	68.07	15.69		150.0	
CAA		X	5.86	70.53	14.71	9.03	50.0	±9.6 %
		Y	4.40	66.90	11.75		50.0	
		Z	6.19	70.94	15.24		50.0	
10278- CAA	PHS (QPSK, BW 884MHz, Rolloff 0.5)	X	10.27	82.27	21.99	9.03	50.0	± 9.6 %
		Y	7.88	77.57	18.90		50.0	
		Z	9.35	79.97	21.25		50.0	
10279- CAA	PHS (QPSK, BW 884MHz, Rolloff 0.38)	X	10.47	82.49	22.08	9.03	50.0	± 9.6 %
		Y	8.00	77.73	18.99		50.0	
		Z	9.52	80.18	21.35		50.0	
10290- AAB	CDMA2000, RC1, SO55, Full Rate	X	2.00	72.56	16.71	0.00	150.0	± 9.6 %
		Y	1.81	72.10	15.72		150.0	
		Z	1.64	69.27	14.92		150.0	
10291- AAB	CDMA2000, RC3, SO55, Full Rate	Х	1.15	69.82	15.49	0.00	150.0	± 9.6 %
		Y	0.99	68.71	14.17		150.0	
		Z	0.95	66.46	13.46		150.0	
10292- AAB	CDMA2000, RC3, SO32, Full Rate	X	1.59	75.79	18.53	0.00	150.0	± 9.6 %
		Y	1.63	76.74	18.06		150.0	
		Z	1.13	69.78	15.46		150.0	
10293- AAB	CDMA2000, RC3, SO3, Full Rate	X	2.45	82.81	21.72	0.00	150.0	± 9.6 %
		Y	4.29	91.48	23.73		150.0	
		Ż	1.46	73.68	17.64		150.0	
10295- AAB	CDMA2000, RC1, SO3, 1/8th Rate 25 fr.	X	11.26	85.50	25.18	9.03	50.0	± 9.6 %
		Y	11.00	85.02	23.98		50.0	
		z	10.64	83.52	24.39		50.0	
10297- AAB	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	X	3.10	71.18	17.38	0.00	150.0	± 9.6 %
		Y	2.91	70.92	17.21		150.0	
		Ż	2.91	69.91	16.61	· · · · · · · · · · · · · · · · · · ·	150.0	
10298- AAC	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	X	2.01	70.53	16.33	0.00	150.0	± 9.6 %
		Y I	1.80	70.02	15.42		150.0	
		7	1.38	68.34	15.01		150.0	
10299- AAC	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	X	4.29	76.33	18.36	0.00	150.0	± 9.6 %
		Y	3.82	74 61	16 37		150.0	h
		7	3.76	74.04	17.28		150.0	
10300-	LTE-EDD (SC-EDMA, 50% RB, 3 MHz	X	3.03	70.18	15.03	0.00	150.0	+0.6.0/
AAC	64-QAM)		0.00	07.04	10.00		150.0	19.0 %
<u> </u>		- 7	2.30	07.31	12.44		150.0	
10301-	IEEE 802.16e WIMAX (29:18, 5ms,	X	5.75	69.06 68.04	<u>14.39</u> 18.85	4.17	150.0 80.0	± 9.6 %
		†γ†	5.34	67,59	18.38		80.0	
		Ż	6.02	68.99	19.26		80.0	
10302- AAA	IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC, 3 CTRL symbols)	X	6.35	69.28	19.97	4.96	80.0	± 9.6 %
		γ	5 77	67.89	18.02		80.0	
		z	6.57	69.95	20.23		80.0	

10303-	IEEE 802.16e WIMAX (31:15, 5ms,	X	6.22	69.45	20.09	4.96	80.0	± 9.6 %
AAA	10MHz, 64QAM, PUSC)		5 50	07.70	40.00			
			0.08 6.47	70.23	18.88		80.0	
10304- AAA	IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, 64QAM, PUSC)	X	5.82	68.59	19.17	4.17	80.0	± 9.6 %
		Y	5.30	67.36	18.23		80.0	
		Z	6.00	69.14	19.36		80.0	
10305- AAA	IEEE 802.16e WiMAX (31:15, 10ms, 10MHz, 64QAM, PUSC, 15 symbols)	X	7.58	77.08	24.20	6.02	50.0	± 9.6 %
		Y Y	6.71	75.99	23.36		50.0	
10306- AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz 64QAM PUSC 18 symbols)	X	8.94 6.74	72.69	25.44 22.39	6.02	50.0 50.0	± 9.6 %
		Y	6.02	71.61	21.57		50.0	
		Z	7.38	74.60	23.18		50.0	
10307- AAA	IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, QPSK, PUSC, 18 symbols)	X	6.88	73.57	22.61	6.02	50.0	± 9.6 %
		Y	6.12	72.48	21.82		50.0	
10209		Z	7.63	75.68	23.46		50.0	
AAA	10MHz, 16QAM, PUSC)	X	6.95	74.06	22.85	6.02	50.0	± 9.6 %
			0.19	76.22	22.10		50.0	
10309-	IEEE 802,16e WIMAX (29:18, 10ms	X	6.88	73.08	22.59	6.02	50.0	+96%
AAA	10MHz, 16QAM, AMC 2x3, 18 symbols)		5 75	60.67	20.39	0.02	50.0	1 0.0 /
			7 54	75.02	20.00		50.0	
10310- AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, AMC 2x3, 18 symbols)	X	6.76	72.98	22.43	6.02	50.0	± 9.6 %
		Y	6.05	71.97	21.66		50.0	
		Z	7.45	74.97	23.24		50.0	
10311- AAB	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	X	3.46	70.38	16.96	0.00	150.0	± 9.6 %
		Y	3.29	70.15	16.82		150.0	
10313	IDEN 1:3		3.26	69.20	16.26	6.00	150.0	+060/
AAA			7.42	78.07	19.01	0.99	70.0	± 9.0 %
			7.51	78.37	19.04		70.0	
10314- AAA	IDEN 1:6	X	11.07	87.09	24.45	10.00	30.0	± 9.6 %
		Y	12.16	89.30	24.68		30.0	
		Z	8.76	82.33	22.85		30.0	
10315- AAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 96pc duty cycle)	X	1.21	65.47	16.38	0.17	150.0	± 9.6 %
			1.17	65.32	16.10		150.0	
10316-	IEEE 802 11a WiEi 2.4 GHz (ERP-	X	4.82	67 11	15.52	0.17	150.0	+96%
AAB	OFDM, 6 Mbps, 96pc duty cycle)		4.66	67.15	16.04	0.17	150.0	2 3.0 %
		7	4.00	66.95	16.46		150.0	
10317- AAB	IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle)	X	4.82	67.11	16.64	0.17	150.0	± 9.6 %
		Y	4.66	67.15	16.49		150.0	
		Z	4.80	66.95	16.46		150.0	
10400- AAC	IEEE 802.11ac WiFi (20MHz, 64-QAM, 99pc duty cycle)	X	4.93	67.37	16.55	0.00	150.0	±9.6 %
			4.75	67.39	16.43		150.0	
10404			4.90	67.18	16.37	0.00	150.0	+0.0.11
AAC	99pc duty cycle)		0.00	07.43	10.03	0.00	150.0	I 9.0 %
		Y 7	0.44 5.53	67.34	16.07		150.0	
			. 0.00		10.70			

10402-	IEEE 802.11ac WiFi (80MHz, 64-QAM,	X	5.86	67.95	16.72	0.00	150.0	± 9.6 %
- AAC		+	5 70	67.90	16.50		450.0	
			5.83	67.70	16.59		150.0	
10403-	CDMA2000 (1xEV-DO, Rev. 0)	† x -	2.00	72.56	16.50	0.00	1115.0	+06%
AAB				11.00	10.71	0.00	113.0	1 9.0 %
		Ý	1.81	72.10	15.72		115.0	
10.00		Z	1.64	69.27	14.92		115.0	· · · · · ·
10404-	CDMA2000 (1xEV-DO, Rev. A)	X	2.00	72.56	16.71	0.00	115.0	± 9.6 %
	· · · · · · · · · · · · · · · · · · ·							
		1 <u>7</u>	1.81	72.10	15.72		115.0	
10406-	CDMA2000, RC3, SO32, SCH0, Full	<u> </u>	1.04	125.12	14.92	0.00	115.0	100%
AAB	Rate		100.00	120.12	52.40	0.00	100.0	±9.0 %
		Y	100.00	117.90	28.49		100.0	
		Z	100.00	124.11	32.05		100.0	
10410-	LTE-TDD (SC-FDMA, 1 RB, 10 MHz,	X	100.00	121.42	31.29	3.23	80.0	± 9.6 %
AAB	QPSK, UL Subframe=2,3,4,7,8,9)							
	· · · · · · · · · · · · · · · · · · ·	Y	100.00	118.14	29.02		80.0	
10415-	IEEE 802 11h WiEi 2 4 GHz (DSSS_1		100.00	121.09	31.26	0.00	80.0	
AAA	Mbps, 99pc duty cycle)	^	1.05	63.84	15.45	0.00	150.0	±9.6 %
		Y	1.03	63 83	15.26		150.0	
		Ż	1.03	63.06	14.64	· · · · ·	150.0	
10416-	IEEE 802.11g WiFi 2.4 GHz (ERP-	X	4.72	66.95	16.47	0.00	150.0	+ 9.6 %
AAA	OFDM, 6 Mbps, 99pc duty cycle)							_ 0.0 %
		Y	4.58	67.06	16.39		150.0	
40447		Z	4.69	66.77	16.29		150.0	
104 (7- AAA	Mbns 99nc duty cycle)	X	4.72	66.95	16.47	0.00	150.0	±9.6 %
7001	mobs, sepe duty cycle)	v	1 59	67.06	16.20		450.0	
· · · · · · · · · · · · · · · · · · ·		7	4.50	66.77	16.29		150.0	·
10418- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 99pc duty cycle, Long	X	4.71	67.09	16.48	0.00	150.0	± 9.6 %
			1 67	07.00	10.11		1-0.0	
		7	4.57	66.00	16.41		150.0	
10419- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 99pc duty cycle, Short preambule)	X	4.73	67.05	16.49	0.00	150.0	±9.6 %
		Y	4.59	67.17	16.41		150.0	
		Z	4.70	66.86	16.30		150.0	······
10422- AAA	IEEE 802.11n (HT Greenlield, 7.2 Mbps, BPSK)	Х	4.86	67.05	16.50	0.00	150.0	± 9.6 %
		Y	4.71	67.16	16.42		150.0	
40400		Z	4.82	66.88	16.32		150.0	
10423- AAA	Mbps, 16-QAM)	X	5.07	67.45	16.64	0.00	150.0	±9.6 %
		Ι <u>Υ</u>	4.88	67.49	16.53		150.0	
10424-	IEEE 802 11n (HT Groonfield 72.2	4	5.03	67.26	16.46		150.0	
	Mbps, 64-QAM)		4.97	67.38	16.61	0.00	150.0	± 9.6 %
		<u>γ</u>	4.80	67.44	16.51		150.0	
10425- AAA	IEEE 802.11n (HT Greenfield, 15 Mbps, BPSK)	X	5.55	67.72	16.42	0.00	150.0 150.0	± 9.6 %
		Y	5.40	67.74	16.67		150.0	
		Z	5.52	67.56	16.60		150.0	
10426- 	IEEE 802.11n (HT Greenfield, 90 Mbps, 16-QAM)	X	5.56	67.76	16.77	0.00	150.0	± 9.6 %
		Y	5.41	67.76	16.67		150.0	
		Z	5.53	67.59	16.61		150.0	

10427-	IEEE 802.11n (HT Greenfield, 150 Mbps,	X	5.58	67.76	16.77	0.00	150.0	± 9.6 %
AAA	64-QAM)	v	5.40	67.74	10.00		450.0	
		1 7	<u> </u>	67.59	16.60		150.0	
10430-	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1)	X	4.39	70.34	18.26	0.00	150.0	± 9.6 %
		Y	4.45	71.92	18.77		150.0	
		Z	4.28	69.73	17.80		150.0	
10431- AAA	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1)	Х	4.47	67.55	16.57	0.00	150.0	±9.6 %
		Y	4.28	67.68	16.44		150.0	
		Ζ	4.42	67.30	16.33		150.0	
10432- AAA	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1)	X	4.75	67.43	16.59	0.00	150.0	±9.6 %
		Y	4.57	67.51	16.47		150.0	
10/22		Z	4.71	67.22	16.38	0.00	150.0	
AAA	LTE-PDD (OPDMA, 20 MH2, E-1M 3.1)	×	4.99	67.43	16.63	0.00	150.0	± 9.6 %
······		Y	4.82	67.48	16.53		150.0	
10434-	W-CDMA (BS Test Model 1, 64 DBCH)		4.95	67.24	16.45	0.00	150.0	10.0 %
AAA			4.40	71.07	10.20	0.00	150.0	±9.0 %
		Y	4.62	73.01	18.85	·	150.0	
10435-	LTE-TDD (SC-EDMA_1 RB_20 MHz	X	4.34	121.26	31.21	3.23	80.0	+96%
AAB	QPSK, UL Subframe=2,3,4,7,8,9)		400.00	121.20	01.21	0.20	00.0	1 9.0 %
		ř 7	100.00	117.94	28.93		80.0	
10447-	LTE-EDD (OEDMA 5 MHz E-TM 3.1	X	3 79	67.68	16.16	0.00	150.0	+96%
AAA	Clipping 44%)		0.70	07.00	10.10	0.00	130.0	1 9.0 %
			3.59	67.83	15.87		150.0	
10448-	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1,	X	4.28	67.32	16.43	0.00	150.0	± 9.6 %
		Y	4 12	67.46	16 30		150.0	
		7	4.23	67.06	16.18		150.0	
10449- AAA	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1, Cliping 44%)	X	4.53	67.25	16.49	0.00	150.0	± 9.6 %
		Y	4.38	67.35	16.38		150.0	
		Z	4.49	67.03	16.27		150.0	
10450- AAA	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	X	4.71	67.18	16.49	0.00	150.0	±9.6 %
		Y	4.57	67.25	16.39		150.0	
40454		Z	4.68	66.98	16.29	0.00	150.0	
10451- AAA	W-CDMA (BS Test Model 1, 64 DPCH, Clipping 44%)	X	3.73	68.01	15.94	0.00	150.0	±9.6 %
		<u>Y</u>	3.50	68.08	15.53		150.0	
40450		Z	3.65	67.53	15.55	0.00	150.0	
10456- AAA	IEEE 802.11ac WIFI (160MHz, 64-QAM, 99pc duty cycle)	X	6.41	68.33	16.92	0.00	150.0	±9.6%
ļ		Y -	6.26	68.26	16.79		150.0	
10457			0.38	65.59	16.79	0.00	150.0	+06%
AAA			0.00	00.00	10.22	0.00	130.0	1 9.0 70
		Y 7	3.82	65.69	16.10		150.0	
10458-	CDMA2000 (1xEV-DO, Rev. B, 2	X	3.54	67.26	15.47	0.00	150.0	± 9.6 %
AAA		Y	3.31	67.35	14.92		150.0	
		Z	3.47	66.87	15.11		150.0	
10459- AAA	CDMA2000 (1xEV-DO, Rev. B, 3 carriers)	X	4.64	65.34	16.09	0.00	150.0	±9.6 %
		Y	4.30	65.17	15.60		150.0	
		Z	4.52	64.85	15.72		150.0	

10460- AAA	UMTS-FDD (WCDMA, AMR)	X	1.11	71.80	18.35	0.00	150.0	± 9.6 %
		Ŷ	1.02	70.94	17.72		150.0	
		Ż	0.94	68.21	16 13	<u> </u>	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	125.25	33.13	3.29	80.0	± 9.6 %
		Y	100.00	123.29	31.43		80.0	
ļ		Z	100.00	123.80	32.59		80.0	
10462- AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	111.09	26.31	3.23	80.0	± 9.6 %
		Y	100.00	103.84	22.21	· · · ·	80.0	
		Z	100.00	110.71	26.28		80.0	
10463- AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	108.22	24.94	3.23	80.0	± 9.6 %
		Y	4.72	73.15	13 51		80.0	
		Z	72.14	104.46	24.20		80.0	
10464- AAA	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	123.51	32.16	3.23	80.0	± 9.6 %
		Y	100.00	120.82	30.14		80.0	
		7	100.00	120.02	31.67		80.0	
10465-	LTE-TDD (SC-EDMA_1 RB_3 MHz_16-	X	100.00	110.62	26.09	3.22	80.0	1000
AAA	QAM, UL Subframe=2,3,4,7,8,9)		07.07	04.04	20.00	3,23	00.0	± 9.0 %
		T 7	27.97	91.21	19.17		80.0	
10466			100.00	110.30	26.07		80.0	
AAA	QAM, UL Subframe=2,3,4,7,8,9)		100.00	107.77	24.72	3.23	80.0	± 9.6 %
		Y	3.48	70.24	12.45		80.0	
40407		Z	39.27	97.36	22.41		80.0	
AAB	QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	123.71	32.25	3.23	80.0	± 9.6 %
		Y	100.00	121.09	30.25		80.0	
		Z	100.00	122.32	31.75		80.0	
10468- AAB	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	110.77	26.14	3.23	80.0	±9.6 %
		Y	40.47	94.85	20.08		80.0	
		Z	100.00	110.43	26.13		80.0	
10469- AAB	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	Х	100.00	107.78	24.72	3.23	80.0	± 9.6 %
		Ϋ́	3.50	70.33	12.47		80.0	
		Z	40.62	97.74	22.51		80.0	
10470- AAB	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	Х	100.00	123.74	32.26	3.23	80.0	± 9.6 %
		Y	100.00	121.11	30.26		80.0	
		Z	100.00	122.35	31.76		80.0	
10471- AAB	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	х	100.00	110.72	26.12	3.23	80.0	± 9.6 %
		Y	38.79	94.39	19.96		80.0	
		Z	100.00	110.39	26.11		80.0	
10472- AAB	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	Х	100.00	107.74	24.69	3.23	80.0	± 9.6 %
		Y	3.46	70.20	12.41		80.0	
		Ζ	40.93	97.80	22.51		80.0	
10473- AAB	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	123.71	32.25	3.23	80.0	± 9.6 %
		Y	100.00	121.07	30.24	······	80.0	
		Z	100.00	122.32	31.75		80.0	
10474- AAB	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	Х	100.00	110.73	26.12	3.23	80.0	± 9.6 %
		Y	37.59	94.10	19.89		80.0	
		Z	100.00	110.40	26 11		80.0	
10475- AAB	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64- QAM, UL Subframe=2.3.4.7.8.9)	x	100.00	107.75	24.70	3.23	80.0	± 9.6 %
		Ŷ	3 4 3	70 14	12.40		80.0	
		7	40.21	97.61	22.40		80.0	
				01.01	22.70		00.0	

10477- AAB	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	110.58	26.05	3.23	80.0	± 9.6 %
		Y	28.26	91.26	19.16		80.0	
··		Ζ	100.00	110.26	26.05		80.0	
10478- AAB	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	107.71	24.68	3.23	80.0	± 9.6 %
		Y	3.38	69.99	12.33		80.0	
10470		Z	39.53	97.39	22.40		80.0	
AAA	QPSK, UL Subframe=2,3,4,7,8,9)	X	16.61	96.96	27.34	3.23	80.0	± 9.6 %
		Y	32.48	106.45	28.76		80.0	
10480- AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL Subframe=2.3.4.7.8.9)	X	20.13	90.02	25.04	3.23	80.0	± 9.6 %
		Y	34.21	99.63	24.79	l	80.0	
		Z	12.99	87.40	22.71		80.0	1
10481- AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	17.26	91.33	23.70	3.23	80.0	± 9.6 %
· · · · · ·		Y	20.52	91.89	22.28		80.0	
10400		Z	11.58	85.08	21.67		80.0	
10482- AAA	QPSK, UL Subframe=2,3,4,7,8,9)	X	7.19	82.36	21.43	2.23	80.0	± 9.6 %
		Y 7	6.22	80.40	19.88		80.0	
10483-	LTE-TOD (SC-EDMA 50% RB 3 MHz		0.41	94.60	19.43	0.00	80.0	+06%
AAA	16-QAM, UL Subframe=2,3,4,7,8,9)		10.00	04.05	22.14	2.23	00.0	± 9.0 %
		Y 7	9.30	82.35	20.02		80.0	
10484- AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	9.50	83.16	20.55	2.23	80.0	± 9.6 %
		Y	8.10	80.30	19.34		80.0	· · · · · · · · · · · · · · · · · · ·
		Z	7.64	79.37	20.17		80.0	
10485- AAB	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	7.05	82.24	22.03	2.23	80.0	± 9.6 %
		Y	6.34	81.22	21.08		80.0	
10496			5.64	78.03	20.28	0.00	80.0	
AAB	16-QAM, UL Subframe=2,3,4,7,8,9)		0.27	74.77	19.00	2.23	80.0	± 9.6 %
		7	4.62	72.67	17.02		80.0	
10487- AAB	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Subframe=2.3.4.7.8.9)	X	5.20	74.21	18.78	2.23	80.0	± 9.6 %
		Y	4.72	73.41	17.75		80.0	
		Z	4.74	72.26	17.79		80.0	
10488- AAB	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	6.49	79.45	21.44	2.23	80.0	± 9.6 %
		Y	5.74	78.36	20.74		80.0	
10490		Z	5.67	76.65	20.18	0.00	80.0	10.0 %
AAB	16-QAM, UL Subframe=2,3,4,7,8,9)		5.12	73.18	19.22	2.23	80.0	± 9.6 %
		Y 7	4.72	71.00	18.67		80.0	
10490-	LTE-TDD (SC-EDMA_50% RB_10 MHz		<u>4.07</u> 5.15	72 75	10.00	2.23	80.0	+96%
AAB	64-QAM, UL Subframe=2,3,4,7,8,9)		4.76	72.10	18.54	2.20	80.0	1 3.0 %
		Ż	4.93	71.59	18.41		80.0	
10491- AAB	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	5.99	76.19	20.30	2.23	80.0	± 9.6 %
		Y	5.39	75.34	19.75		80.0	
		Z	5.53	74.37	19.41		80.0	
10492- AAB	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	5.26	71.76	18.85	2.23	80.0	± 9.6 %
		Y	4.86	71.30	18.38		80.0	
1		Z	1 5.11	70.90	I 18.33	1	1 80.0	1

10493-	LTE-TDD (SC-FDMA, 50% RB, 15 MHz,	X	5.30	71.51	18.76	2.23	80.0	± 9.6 %
7410	04-02-10, 01 00011ame-2, 0, 4, 7, 0, 9)	Y	4.91	71.07	18.30		80.0	
		Z	5.17	70.71	18.27		80.0	·
10494- AAB	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	6.84	78.43	20.95	2.23	80.0	± 9.6 %
		Y	6.08	77.35	20.35	· · · · ·	80.0	
		Z	6.10	76.07	19.88		80.0	
10495- AAB	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	5.38	72.41	19.10	2.23	80.0	± 9.6 %
		Y	4.95	71.82	18.61		80.0	-
10.100		Z	5.20	71.44	18.53		80.0	
10496- AAB	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	5.39	71.89	18.93	2.23	80.0	± 9.6 %
			4.98	71.37	18.47		80.0	
10407		Z	5.24	71.04	18.41		80.0	
AAA	MHz, QPSK, UL Subframe=2,3,4,7,8,9	X	5.97	79.48	19.78	2.23	80.0	±9.6 %
		<u>Y</u>	4.38	75.06	17.02		80.0	
10400		Z	4.42	74.52	17.73		80.0	
10498- AAA	MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	4.17	71.56	15.92	2.23	80.0	± 9.6 %
		Y	2.60	65.94	12.29		80.0	· ···
		Z	3.55	68.95	14.65		80.0	
10499- AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	4.06	70.87	15.52	2.23	80.0	± 9.6 %
		Y	2.47	65.10	11.77		80.0	
		Z	3.49	68.43	14.31		80.0	
10500- AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	6.49	80.29	21.53	2.23	80.0	± 9.6 %
		Y	5.83	79.38	20.74		80.0	
		Z	5.49	76.96	20.08		80.0	
10501- AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	5.17	73.94	19.00	2.23	80.0	± 9.6 %
		Y	4.77	73.47	18.24		80.0	
40500		Z	4.79	72.25	18.12		80.0	
10502- AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	5.19	73.61	18.84	2.23	80.0	± 9.6 %
		Y	4.79	73.16	18.07		80.0	
10500		Z	4.83	72.02	17.99		80.0	
10503- AAB	QPSK, UL Subframe=2,3,4,7,8,9)	X	6.41	79.23	21.35	2.23	80.0	± 9.6 %
		<u>Y</u>	5.64	78.08	20.63		80.0	
10504		Z	5.60	76.47	20.11		80.0	
AAB	16-QAM, UL Subframe=2,3,4,7,8,9)	X	5.09	73.10	19.17	2.23	80.0	± 9.6 %
		Y J	4.69	72.61	18.60		80.0	
10505	LTE-TOD (SC EDMA 1000/ DD 5 MUT-	+ 🗧	4.85	/1.82	18.46	0.00	80.0	
AAB	64-QAM, UL Subframe=2,3,4,7,8,9)		0.13	72.00	19.02	2.23	80.0	± 9.6 %
			4.73	74.50	18.47		80.0	
10506-	ITE-TOD (SC-EDMA 100% PR 10		4.91	79.00	18.36	0.00	80.0	
AAB	MHz, QPSK, UL Subframe=2,3,4,7,8,9)		0.78	78,28	20.88	2.23	80.0	± 9.6 %
		<u>⊢ ĭ</u> -	0.01	11.16	20.27		80.0	
10507-	TETDD (SC-EDMA 100% PP 10		0.00	70.95	19.82	0.00	80.0	
AAB	MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)		0.30	72.35	19.07	2.23	80.0	± 9.6 %
		Y	4.93	71.74	18.57		80.0	
		Z [5.18	71.38	18.50		80.0	· · ·

10508- AAB	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	5.37	71.83	18.89	2.23	80.0	± 9.6 %
		Y	4.96	71.29	18.42		80.0	
		Ż	5.23	70.98	18.38		80.0	
10509- AAB	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	Х	6.48	75.49	19.83	2.23	80.0	± 9.6 %
		Ý	5.91	74.73	19.37		80.0	
		Z	6.04	73.93	19.06		80.0	
10510- AAB	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	5.74	71.59	18.80	2.23	80.0	±9.6 %
		Y	5.32	71.00	18.37		80.0	
		Z	5.62	70.87	18.36		80.0	
10511- AAB	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	5.74	71.18	18.68	2.23	80.0	± 9.6 %
		Y	5.33	70.64	18.26		80.0	
		Z	5.63	70.53	18.27		80.0	
10512- AAB	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	7.25	77.99	20.61	2.23	80.0	± 9.6 %
		Y	6.50	76.91	20.04		80.0	
10510		Z	6.53	75.84	19.64		80.0	
AAB	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	5.72	72.19	19.03	2.23	80.0	± 9.6 %
		Y	5.25	71.45	18.54		80.0	
40-44		Z	5.56	71.34	18.53		80.0	
10514- AAB	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	5.63	71.53	18.83	2.23	80.0	± 9.6 %
		Y	5.21	70.89	18.37		80.0	
		Z	5.51	70.80	18.38		80.0	
10515- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 99pc duty cycle)	X	1.02	64.11	15.57	0.00	150.0	± 9.6 %
		Y	1.00	64.07	15.36		150.0	
10516			0.99	63.25	14.70		150.0	
AAA	Mbps, 99pc duty cycle)		0.98	79,68	22.01	0.00	150.0	± 9.6 %
			0.64	70.66	20.20		150.0	
10517-	IEEE 802 11h W/iEi 2 4 GHz (DSSS_11		0.04	67.05	16.70	0.00	150.0	+0.6.0/
AAA	Mbps, 99pc duty cycle)		0.91	66.61	16.70	0.00	150.0	± 9.6 %
		7	0.07	65.23	16.37		150.0	
10518- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc duty cycle)	X	4.72	67.03	16.46	0.00	150.0	± 9.6 %
		Y	4.58	67.14	16.37		150.0	
		Z	4.68	66.84	16.27		150.0	
10519- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 99pc duty cycle)	Х	4.94	67.33	16.60	0.00	150.0	± 9.6 %
		Y	4.77	67.38	16.49		150.0	
		Z	4.90	67.14	16.41		150.0	
10520- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 99pc duty cycle)	X	4.79	67.32	16.53	0.00	150.0	± 9.6 %
		<u>Y</u>	4.62	67.35	16.42		150.0	
10521- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24	X	4.75	67.11 67.33	16.33 16.52	0.00	150.0 150.0	± 9.6 %
			4 55	67 35	16.41	1	150.0	
		z I	4.68	67.11	16.32		150.0	
10522- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc duty cycle)	X	4.76	67.29	16.55	0.00	150.0	± 9.6 %
		Y	4.61	67.43	16.49		150.0	
		Z	4.73	67.10	16.35		150.0	

10523-	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48	X	4.64	67.20	16.41	0.00	150.0	± 9.6 %
		- V	4 49	67.31	16.34		150.0	
		7	4 60	66.98	16.20		150.0	
10524- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc duty cycle)	X	4.72	67.26	16.54	0.00	150.0	± 9.6 %
		Y	4.55	67.35	16.45		150.0	
		Z	4.68	67.06	16.34		150.0	1
10525- AAA	IEEE 802.11ac WiFi (20MHz, MCS0, 99pc duty cycle)	X	4.67	66.28	16.12	0.00	150.0	± 9.6 %
		Y	4.54	66.41	16.05		150.0	
		Z	4.64	66.07	15.92		150.0	1
10526- AAA	IEEE 802.11ac WiFi (20MHz, MCS1, 99pc duty cycle)	X	4.88	66.69	16.27	0.00	150.0	± 9.6 %
		Y	4.71	66.78	16.19		150.0	
(0.50		Z	4.84	66.48	16.07		150.0	
10527- AAA	IEEE 802.11ac WiFi (20MHz, MCS2, 99pc duty cycle)	X	4.79	66.67	16.23	0.00	150.0	±9.6 %
		<u>Y</u>	4.64	66.75	16.14		150.0	
40500		Z	4.75	66.45	16.02		150.0	
AAA	99pc duty cycle)	X	4.81	66.69	16.26	0.00	150.0	± 9.6 %
·		Y	4.65	66.76	16.17		150.0	
40500		Z	4.77	66.47	16.05		150.0	
AAA	BEE 802.11ac WIFI (20MHz, MCS4, 99pc duty cycle)	X	4.81	66.69	16.26	0.00	150.0	± 9.6 %
		Y	4.65	66.76	16.17		150.0	
40524		Z	4.77	66.47	16.05		150.0	
AAA	199pc duty cycle)	X	4.83	66.85	16.29	0.00	150.0	± 9.6 %
		Y	4.65	66.88	16.19		150.0	
40500		Z	4.78	66.62	16.08		150.0	-
AAA	BEEE 802.11ac WIFI (20MHz, MCS7, 99pc duty cycle)	X	4.68	66.72	16.24	0.00	150.0	± 9.6 %
		<u> </u>	4.51	66.74	16.13		150.0	
40522			4.63	66.47	16.02		150.0	
AAA	99pc duty cycle)	X	4.83	66.71	16.24	0.00	150.0	± 9.6 %
		Y	4.66	66.81	16.16		150.0	
40504			4.78	66.49	16.03		150.0	
AAA	BEE 802.11ac WIFI (40MHz, MCS0, 99pc duty cycle)	X	5.33	66.83	16.29	0.00	150.0	± 9.6 %
		<u> </u>	5.18	66.84	16.20		150.0	
10525		Z	5.29	66.64	16.12		150.0	
AAA	99pc duty cycle)	X	5.40	66.97	16.35	0.00	150.0	± 9.6 %
		<u> </u>	5.25	67.01	16.28		150.0	
10526		Z	5.36	66.78	16.17		150.0	
AAA	IEEE 802.11ac WIFI (40MHz, MCS2, 99pc duty cycle)	X	5.27	66.97	16.34	0.00	150.0	± 9.6 %
		<u> </u>	5.12	66.97	16.25		150.0	
40507		Z	5.23	66.76	16.15		150.0	
AAA	99pc duty cycle)	X	5.33	66.94	16.32	0.00	150.0	± 9.6 %
		Y	5.18	66.94	16.23		150.0	
10529		Z	5.29	66.75	16.14		150.0	
AAA	99pc duty cycle)	X	5.45	67.02	16.40	0.00	150.0	± 9.6 %
		<u> Y</u>	5.27	66.95	16.28		150.0	
10540			5.41	66.83	16.23		150.0	
AAA	99pc duty cycle)	X	5.35	66.96	16.39	0.00	150.0	±9.6 %
·		Y	5.20	66.97	16.30		150.0	
			5.31	66.77	16.21		150.0	

10541- AAA	IEEE 802.11ac WiFi (40MHz, MCS7, 99pc duty cycle)	X	5.33	66.87	16.34	0.00	150.0	± 9.6 %
		Y	5.17	66.84	16.23		150.0	
		Z	5.29	66.67	16.16		150.0	
10542- AAA	IEEE 802.11ac WiFi (40MHz, MCS8, 99pc duty cycle)	X	5.48	66.90	16.37	0.00	150.0	± 9.6 %
		Ŷ	5.32	66.90	16.27		150.0	
10542		Z	5.44	66.72	16.20		150.0	
AAA	99pc duty cycle)	X	5.56	66.90	16.38	0.00	150.0	± 9.6 %
		<u> </u>	5.40	66.93	16.30		150.0	
10544-	IEEE 802,11ac WiFi (80MHz, MCS0,	X	<u> </u>	66.92	16.22	0.00	150.0	+96%
AAA	99pc duty cycle)		0.00	00.02	10.21	0.00	100.0	1 0.0 70
		Y	5.49	66.94	16.19		150.0	
40545		Z	5.57	66.75	16.10		150.0	
AAA	99pc duty cycle)	X	5.82	67.35	16.42	0.00	150.0	± 9.6 %
		Y	5.68	67.35	16.34		150.0	
10546-	IEEE 802 11ac WIEI (80MHz MCS2	<u> </u>	5.79	67.18	16.26	0.00	150.0	
AAA	99pc duty cycle)		5.71	07.20	10.30	0.00	150.0	± 9.6 %
		7	5.67	67.10	16.20		150.0	
10547-	IEEE 802.11ac WiFi (80MHz, MCS3	X	5.07	67.04	16.21	0.00	150.0	+96%
AAA	99pc duty cycle)			01120	10.10	0.00	100.0	10.0 %
		Y -	5.63	67.19	16.27		150.0	
10548-	IEEE 802 11ac WIEL (80MHz MCS4		5.75	67.11	16.24	0.00	150.0	1000
AAA	99pc duty cycle)		0.10	00.04	17.00	0.00	150.0	± 9.6 %
		Y	5.89	68.14	16.71		150.0	
10550-	IEEE 802 11ac W/IEI /80MHz_MCS6		<u> </u>	67.17	16.82	0.00	150.0	+06%
AAA	99pc duty cycle)		0.72	07.17	10.30	0.00	150.0	± 9.0 %
		Y	5.58	67.16	16.27		150.0	
40554		Z	5.68	66.99	16.19		150.0	
10551- AAA	99pc duty cycle)	X	5.74	67.28	16.37	0.00	150.0	±9.6 %
		Y	5.59	67.21	16.26		150.0	
10552			5.70	67.08	16.20	0.00	150.0	1000
AAA	99pc duty cycle)		5.04	07.02	10.20	0.00	150.0	± 9.6 %
······		7	5.50	66.92	16.17		150.0	
10553-	IEEE 802.11ac WiFi (80MHz, MCS9,	X	5.73	67.06	16.31	0.00	150.0	± 9.6 %
		T	5.58	67.04	16.21		150.0	
		Z	5.69	66.89	16.15		150.0	
10554- AAA	IEEE 1602.11ac WiFi (160MHz, MCS0, 99pc duty cycle)	X	6.01	67.31	16.36	0.00	150.0	± 9.6 %
		Y	5.89	67.29	16.27		150.0	
		Z	5.97	67.14	16.21		150.0	
10555- AAA	IEEE 1602.11ac WiFi (160MHz, MCS1, 99pc duty cycle)	X	6.16	67.66	16.51	0.00	150.0	± 9.6 %
		Y	6.02	67.59	16.39		150.0	
10556			6.12	67.49	16.35	0.00	150.0	
AAA	99pc duty cycle)	X	0.17	67.67	16.51	0.00	150.0	± 9.6 %
		Y	6.04	67.64	16.41		150.0	
10557-	IEEE 1602.11ac WiFi (160MHz, MCS3,	<u>Z</u> X	6.14 6.16	67.64	16.35	0.00	150.0	± 9.6 %
AAA	99pc auty cycle)		6.01	67.55	16.20		150.0	
		7	6.12	67.46	16.36		150.0	
						1	,	

10558-	IEEE 1602.11ac WiFi (160MHz, MCS4,	X	6.23	67.85	16.64	0.00	150.0	± 9.6 %
AAA	sepc auty cycle)	+	0.00				<u> </u>	L
·		Υ -	6.06	67.71	16.48	<u> </u>	150.0	
10560	IEEE 1602 1100 MIEL (160MUL- MODO	<u> </u>	6.19	67.66	16.47		150.0	
AAA	99pc duty cycle)	X	6.21	67.65	16.58	0.00	150.0	± 9.6 %
		Y	6.05	67.56	16.44		150.0	
10501		Z	6.17	67.48	16.42		150.0	
10561- AAA	JEEE 1602.11ac WiFi (160MHz, MCS7, 99pc duty cycle)	X	6.12	67.61	16.60	0.00	150.0	± 9.6 %
		Y	5.97	67.52	16.46		150.0	
		Z	6.09	67.44	16.44		150.0	
10562- AAA	IEEE 1602.11ac WiFi (160MHz, MCS8, 99pc duty cycle)	X	6.30	68.15	16.87	0.00	150.0	± 9.6 %
		Y	6.10	67.92	16.66		150.0	
		Z	6.26	67.96	16.71		150.0	
10563- AAA	IEEE 1602.11ac WiFi (160MHz, MCS9, 99pc duty cycle)	X	6.62	68.62	17.05	0.00	150.0	± 9.6 %
		Y	6.35	68.25	16.78		150.0	1
10-0		Z	6.58	68.47	16.91		150.0	
10564- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 9 Mbps, 99pc duty cycle)	X	5.06	67.17	16.65	0.46	150.0	± 9.6 %
		Y	4.90	67.19	16.50		150.0	
		Z	5.03	67.02	16.49		150.0	
10565- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 12 Mbps, 99pc duty cycle)	X	5,32	67.64	16.96	0.46	150.0	± 9.6 %
		Y	5.14	67.66	16.84		150.0	
		Z	5.29	67.48	16.80		150.0	
10566- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 18 Mbps, 99pc duty cycle)	X	5.16	67.53	16.80	0.46	150.0	± 9.6 %
		Y	4.97	67.52	16.66	l	150.0	
		Z	5.12	67.36	16.63		150.0	
10567- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 24 Mbps, 99pc duty cycle)	X	5.18	67.87	17.11	0.46	150.0	± 9.6 %
		Y	5.01	67.94	17.03		150.0	
		Z	5.14	67.68	16.93	·	150.0	
10568- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 36 Mbps, 99pc duty cycle)	Х	5.07	67.28	16.58	0.46	150.0	± 9.6 %
		Y	4.89	67.27	16.41	·	150.0	
		Z	5.04	67.14	16.42		150.0	
10569- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 48 Mbps, 99pc duty cycle)	X	5.11	67.89	17.13	0.46	150.0	± 9.6 %
		Y	4.97	68.06	17.11		150.0	
		Z	5.08	67.69	16.94		150.0	
10570- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 54 Mbps, 99pc duty cycle)	X	5.16	67.75	17.08	0.46	150.0	± 9.6 %
		Y	5.00	67.87	17.02		150.0	········
		Z	5.13	67.56	16.90		150.0	
10571- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90pc duty cycle)	X	1.41	67.04	17.13	0.46	130.0	± 9.6 %
		Y	1.34	66.60	16.67		130.0	
		Z	1.38	66.01	16.24		130.0	
10572- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 90pc duty cycle)	X	1.44	67.79	17.55	0.46	130.0	± 9.6 %
		Y	1.37	67.37	17.11	1	130.0	· · · · ·
		Z	1.40	66.61	16.58		130.0	
10573- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 90pc duty cycle)	X	48.76	135.45	36.87	0.46	130.0	± 9.6 %
		Y	13.63	114.31	31.46		130.0	
		Z	3.91	91.83	24.74		130.0	
10574- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 90pc duty cycle)	Х	1.88	76.30	21.44	0.46	130.0	±9.6 %
		Y	1.78	75.95	21.10		130.0	
		Z	1.63	72.68	19.39	·	130.0	
				<u> </u>				

10575- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 90pc duty cycle)	X	4.87	67.03	16.75	0.46	130.0	± 9.6 %
		T Y	4.71	67.06	16 59		130.0	
		Ż	4.85	66.89	16.59		130.0	
10576- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 9 Mbps, 90pc duty cycle)	X	4.90	67.18	16.80	0.46	130.0	± 9.6 %
		Y	4.74	67.24	16.66		130.0	
		Z	4.88	67.03	16.63		130.0	
10577- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 12 Mbps, 90pc duty cycle)	X	5.14	67.51	16.98	0.46	130.0	± 9.6 %
		Y	4.95	67.52	16.83		130.0	
40570		Z	5.11	67.36	16.82		130.0	
AAA	OFDM, 18 Mbps, 90pc duty cycle)	X	5.03	67.68	17.07	0.46	130.0	± 9.6 %
		Y 	4.85	67.72	16.95		130.0	
10579-	IEEE 802 11a M/IEI 2 4 CHz (DSSS		5.00	67.50	16.89		130.0	
AAA	OFDM, 24 Mbps, 90pc duty cycle)		4.82	67.12	16.49	0.46	130.0	± 9.6 %
			4.61	66.00	16.24	· · · · · · · · · · · · · · · · · · ·	130.0	
10580-	IFEE 802 11g WiFi 2 4 GHz (DSSS-		4.79	67.09	16.33	0.40	130.0	100%
AAA	OFDM, 36 Mbps, 90pc duty cycle)		4.00	07.00	10.49	0.46	130.0	± 9.6 %
			4.00	66.04	10.20		130.0	·
10581-	IEEE 802.11g WiFi 2.4 GHz (DSSS-	X	4.04	67 77	17.04	0.46	130.0	+96%
AAA	OFDM, 48 Mbps, 90pc duty cycle)		4.04	67.70	16.04	0.40	130.0	± 9.0 %
· · · · ·		7	4.75	67.57	16.91		130.0	
10582- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 54 Mbps, 90pc duty cycle)	X	4.77	66.89	16.31	0.46	130.0	± 9.6 %
		Y	4.55	66.70	16.01		130.0	·
		Z	4.75	66.75	16.15		130.0	
10583- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 90pc duty cycle)	X	4.87	67.03	16.75	0.46	130.0	± 9.6 %
		Y	4.71	67.06	16.59		130.0	
		Z	4.85	66.89	16.59		130.0	
10584- 	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 90pc duty cycle)	X	4.90	67.18	16.80	0.46	130.0	± 9.6 %
		Y	4.74	67.24	16.66		130.0	
		Z	4.88	67.03	16.63		130.0	
10585- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90pc duty cycle)	X	5.14	67.51	16.98	0.46	130.0	± 9.6 %
		Y	4.95	67.52	16.83		130.0	
40500			5.11	67.36	16.82		130.0	
10586- AAA	Mbps, 90pc duty cycle)	X	5.03	67.68	17.07	0.46	130.0	± 9.6 %
		<u> </u>	4.85	67.72	16.95		130.0	
10507			5.00	67.50	16.89	0.40	130.0	
AAA	Mbps, 90pc duty cycle)	X	4.82	67.12	16.49	0.46	130.0	± 9.6 %
		Y -	4.61	66.97	16.24		130.0	
10599			4.79	66,96	16.33	0.40	130.0	1000
AAA	Mbps, 90pc duty cycle)		4.00	67.08	10.49	0.46	130.0	±9.6 %
		Y	4.65	66.99	16.25	l	130.0	,
10580		4	4.84	67.77	17.04	0.40	130.0	+0.0.0/
AAA	Mbps, 90pc duty cycle)		4.94	07.77	17.04	0.46	130.0	± 9.6 %
			4.75	67.79	16.91		130.0	
10590- AAA	IEEE 802.11a/h WiFl 5 GHz (OFDM, 54	<u> </u>	4.91	66.89	16.84	0.46	130.0	± 9.6 %
/ / / /		V V	4 55	66 70	16.01	· · · · ·	130.0	
		Ż	4.75	66.75	16.15		130.0	
	· · · · · · · · · · · · · · · · · · ·	1				1	1	1

10591-	IEEE 802.11n (HT Mixed, 20MHz,	X	5.02	67.07	16.83	0.46	130.0	± 9.6 %
AAA	MCS0, 90pc duty cycle)						1	
		Y	4.86	67.11	16.68		130.0	
		Z	5.00	66.93	16.67		130.0	
10592-	IEEE 802.11n (HT Mixed, 20MHz,	X	5.20	67.42	16.95	0.46	130.0	± 9.6 %
AAA	MCS1, 90pc duty cycle)							
		Y	5.02	67.45	16.81		130.0	<u> -</u>
		Z	5.17	67.28	16.79		130.0	
10593-	IEEE 802.11n (HT Mixed, 20MHz,	X	5.13	67.39	16.87	0.46	130.0	± 9.6 %
AAA	MCS2, 90pc duty cycle)							
		Y .	4.94	67.36	16.70		130.0	
		Z	5.11	67.24	16.71		130.0	
10594-	IEEE 802.11n (HT Mixed, 20MHz,	X	5.18	67.52	17.00	0.46	130.0	± 9.6 %
AAA	MCS3, 90pc duty cycle)		a					
		Y	5.00	67.54	16.86		130.0	
10505			5.15	67.37	16.84		130.0	
10595-	IEEE 802.11n (HT Mixed, 20MHz,		5.16	67.51	16.92	0.46	130.0	± 9.6 %
AAA	MCS4, 90pc duty cycle)							
	· · · · · · · · · · · · · · · · · · ·	Y	4.97	67.49	16.75		130.0	
40500		Z	5.13	67.35	16.75		130.0	
10596-	IEEE 802.11n (HT Mixed, 20MHz,		5.10	67.51	16.92	0.46	130.0	±9.6 %
AAA	MCS5, 90pc duty cycle)							
		Y	4.90	67.49	16.76		130.0	
40507		- 4	5.07	67.36	16.76		130.0	
10597-	IEEE 802.11n (HT Mixed, 20MHz,		5.05	67.46	16.83	0.46	130.0	± 9.6 %
AAA	MCS6, 90pc duty cycle)		4.05					
		- Y	4.85	67.39	16.64		130.0	
10509			5.02	67.30	16.67		130.0	
10098-	NCS7, OCRA duty available		5.03	67.69	17.08	0.46	130.0	±9.6 %
AAA				07.00	40.00		100.0	
			4.84	67.66	16.92		130.0	
10500			5.00	67.51	16.90		130.0	
10599-	IEEE 802.11n (H1 MIXED, 40MHZ,		5.70	67.69	17.03	0.46	130.0	± 9.6 %
			E 60	07.04	40.00			
		7	0.02	07.01	10.80		130.0	
10600-	IEEE 902 11p / HT Mixed 40MUhr	- <u>4</u>	5.67	67.57	16.89	0.10	130.0	
AAA	MCS1_90nc duty cycle)	^	0.93	68.39	17.35	0.46	130.0	± 9.6 %
		v	5.66	68.03	17.04		120.0	
		7	5.00	69.03	17.04		130.0	
10601-	IEEE 802 11n (HT Mixed 40MHz		5.03	67.06	47.40	0.40	130.0	10.00
AAA	MCS2_90nc duty cycle)		0.70	07.90	17.10	0.40	130.0	±9.6%
			5 55	67 79	16.94		120.0	
		7	5.73	67.82	17.01		130.0	
10602-	IEEE 802 11n (HT Mixed 40MHz		5.85	67.02	17.01	0.46	120.0	+069/
AAA	MCS3. 90pc duty cycle)		0.00	07.30	17.00	0.40	130.0	19.0%
		Y	5 64	67 79	16.85		130.0	
		7	5.82	67.84	16.00		130.0	
10603-	IEEE 802.11n (HT Mixed, 40MHz	X	5.02	68.31	17 37	0.46	130.0	+06%
AAA	MCS4. 90pc duty cycle)		0.00	00.01	17.57	0.40	130.0	19.0%
			5.73	68 12	17 15		130.0	
		7	5.91	68.13	17 20		130.0	
10604-	IEEE 802.11n (HT Mixed 40MHz		5 70	67.66	17.20	0.46	130.0	106%
AAA	MCS5. 90pc duty cycle)		0.10	07.00	17.00	0.40	130.0	19.0 %
		Y	5.53	67 58	16.87	·	130.0	
			5.68	67.53	16.89	· · · · · · · · · · · · · · · · · · ·	130.0	
10605-	IEEE 802.11n (HT Mixed, 40MHz,		5.82	67.98	17.20	0.46	130.0	+06%
AAA	MCS6. 90pc duty cycle)		0.02	07.00	11.20	0.40	100.0	1 9.0 %
		Y	5.64	67,90	17.03		130.0	
		Z	5.79	67.85	17 07		130.0	<u> </u>
10606-	IEEE 802.11n (HT Mixed, 40MHz	x	5.59	67.45	16.81	0.46	130.0	+96%
AAA	MCS7, 90pc duty cycle)		2100		, 0,01	0.70	100.0	2 3.0 70
		Y	5.39	67.26	16.56		130.0	
		Ż	5.56	67.33	16.68		130.0	h
							,	

10607- AAA	IEEE 802.11ac WiFi (20MHz, MCS0, 90pc duty cycle)	X	4.85	66.37	16.44	0.46	130.0	± 9.6 %
		Y	4.70	66.44	16.32		130.0	
		Z	4.82	66.20	16.26		130.0	
10608- AAA	IEEE 802.11ac WIFi (20MHz, MCS1, 90pc duty cycle)	X	5.07	66.80	16.60	0.46	130.0	± 9.6 %
		Y	4.89	66.85	16.48		130.0	
40000		Z	5.04	66.63	16.42		130.0	
10609- AAA	IEEE 802.11ac WiFi (20MHz, MCS2, 90pc duty cycle)	X	4.96	66.70	16.47	0.46	130.0	± 9.6 %
		Y	4.78	66.70	16.32		130.0	
10610			4.93	66.52	16.29		130.0	
AAA	90pc duty cycle)	X	5.01	66.84	16.62	0.46	130.0	± 9.6 %
		- Y	4.83	66.87	16.49		130.0	
10611-			4.98	00.00	16.44	0.40	130.0	
AAA	90pc duty cycle)		4.84	00.09	10.49	0.46	130.0	±9.6%
			4.75	00.07	16.34		130.0	
10612-	IEEE 802 11ac WIEI (20MHz MCS5		4.91	16.00	16.51	0.46	130.0	+069/
AAA	90pc duty cycle)		4,50	66.00	10.04	0.40	130.0	± 9.0 %
			4.70	66.67	16.30		130.0	
10613-	IEEE 802,11ac WiEi (20MHz, MCS6		4.52	66 79	16.30	0.46	130.0	+06%
	90pc duty cycle)		4.07	00.70	40.00	0.40	100.0	1 9.0 %
		7	4.76	00.71	16.20		130.0	
10614-	IEEE 802.11ac WiFi (20MHz, MCS7,	X	4.94	66.94	16.66	0.46	130.0	± 9.6 %
	90pc duty cycle)		1 74		10.51			
		- Y - 7	4.71	66.72	16.51		130.0	
10615-	IEEE 802.11ac WiFi (20MHz, MCS8,	X	4.80	66.52	16.46	0.46	130.0	± 9.6 %
AAA			4 74	66.49	16.10		120.0	
		7	4.74	66 36	16.10		130.0	
10616-	IEEE 802,11ac WiFi (40MHz, MCS0,	X	5.51	66.93	16.62	0.46	130.0	+96%
AAA	90pc duty cycle)		5 24	66.90	16.40	0.10	120.0	
		7	5/8	66 77	16.49		130.0	
10617- AAA	IEEE 802.11ac WiFi (40MHz, MCS1, 90pc duty cycle)	X	5.57	67.04	16.64	0.46	130.0	± 9.6 %
		Y	5.41	67.05	16.54		130.0	
		Ż	5.54	66.88	16.49		130.0	
10618- AAA	IEEE 802.11ac WiFi (40MHz, MCS2, 90pc duty cycle)	X	5.46	67.12	16.70	0.46	130.0	±9.6 %
		Y	5.30	67.08	16.57		130.0	
		Z	5.43	66.94	16.53		130.0	
10619- AAA	IEEE 802.11ac WiFi (40MHz, MCS3, 90pc duty cycle)	X	5.49	66.94	16.55	0.46	130.0	± 9.6 %
		Y	5.31	66.88	16.40		130.0	
		Z	5.46	66.78	16.40		130.0	
10620- AAA	IEEE 802.11ac WiFi (40MHz, MCS4, 90pc duty cycle)	X	5.61	67.07	16.67	0.46	130.0	± 9.6 %
		Y	5.41	66.92	16.47		130.0	
		Z	5.58	66.91	16.51		130.0	
10621- AAA	IEEE 802.11ac WiFi (40MHz, MCS5, 90pc duty cycle)	X	5.57	67.08	16.78	0.46	130.0	± 9.6 %
		Y	5.41	67.05	16.66		130.0	
		<u>Z</u>	5.54	66.91	16.62		130.0	
10622- AAA	IEEE 802.11ac WIFI (40MHz, MCS6, 90pc duty cycle)	X	5.58	67.21	16.84	0.46	130.0	± 9.6 %
		Y	5.42	67.22	16.74		130.0	
		Z	5.54	67.04	16.67	1	130.0	
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10623-	IEEE 802.11ac WiFi (40MHz, MCS7,	X	5.47	66.83	16.54	0.46	130.0	± 9.6 %
	90pc duty cycle)			<u> </u>				
		Y	5.29	66.72	16.36		130.0	
10624		Z	5.44	66.67	16.38		130.0	
AAA	90pc duty cycle)	×	5.65	66.97	16.67	0.46	130.0	± 9.6 %
		Y	5.48	66.92	16.52		130.0	
1000		Z	5.63	66.83	16.52		130.0	
10625- 	IEEE 802.11ac WiFi (40MHz, MCS9, 90pc duty cycle)	X	6.08	68.09	17.28	0.46	130.0	± 9.6 %
		Y	5.86	67.92	17.07		130.0	
		Z	6.05	67.95	17.14		130.0	
10626- AAA	IEEE 802.11ac WiFi (80MHz, MCS0, 90pc duty cycle)	X	5.76	66.94	16.55	0.46	130.0	± 9.6 %
		Y	5.63	66.92	16.43		130.0	
		Z	5.73	66.80	16.40		130.0	
10627- 	IEEE 802.11ac WiFi (80MHz, MCS1, 90pc duty cycle)	X	6.03	67.53	16.79	0.46	130.0	± 9.6 %
		Y	5.87	67.49	16.67		130.0	
		Z	6.00	67.38	16.65		130.0	
10628- AAA	IEEE 802.11ac WiFi (80MHz, MCS2, 90pc duty cycle)	X	5.84	67.16	16.55	0.46	130.0	± 9.6 %
		Y	5.67	67.02	16.37		130.0	
		Z	5.81	67.01	16.41		130.0	
10629- AAA	IEEE 802.11ac WiFi (80MHz, MCS3, 90pc duty cycle)	X	5.93	67.23	16.58	0.46	130.0	± 9.6 %
		Y	5.75	67.09	16.40		130.0	
		Z	5.90	67.08	16.43		130.0	
10630- AAA	IEEE 802.11ac WiFi (80MHz, MCS4, 90pc duty cycle)	X	6.57	69.29	17.61	0.46	130.0	± 9.6 %
		Y	6.20	68.62	17.15		130.0	
		Z	6.52	69.09	17.44		130.0	
10631- AAA	IEEE 802.11ac WiFi (80MHz, MCS5, 90pc duty cycle)	X	6.37	68.79	17.53	0.46	130.0	± 9.6 %
		Y	6.10	68.43	17.26		130.0	
		Z	6.32	68.57	17.35		130.0	
10632- AAA	IEEE 802.11ac WiFi (80MHz, MCS6, 90pc duty cycle)	X	6.00	67.56	16.93	0.46	130.0	± 9.6 %
		Y	5.85	67.56	16.85		130.0	
		Z	5.96	67.39	16.77		130.0	
10633- AAA	IEEE 802.11ac WiFi (80MHz, MCS7, 90pc duty cycle)	X	5.94	67.43	16.71	0.46	130.0	± 9.6 %
		Y	5.73	67.19	16.48		130.0	
		Ż	5.91	67.25	16.55		130.0	
10634- AAA	IEEE 802.11ac WiFi (80MHz, MCS8, 90pc duty cycle)	X	5.91	67.37	16.74	0.46	130.0	± 9.6 %
· · · · · · · · · · · · · · · · · · ·		T Y	5.72	67.22	16.56	·	130.0	
		Ż	5.87	67.19	16.57		130.0	
10635- AAA	IEEE 802.11ac WiFi (80MHz, MCS9, 90pc duty cycle)	X	5.80	66.77	16.19	0.46	130.0	± 9.6 %
	· · · · · · · · · · · · · · · · · · ·	TY	5.59	66.52	15.94		130.0	<u> </u>
		Ż	5.77	66.64	16.07		130.0	
10636- AAA	IEEE 1602.11ac WiFi (160MHz, MCS0, 90pc duty cycle)	x	6.17	67.34	16.65	0.46	130.0	±9.6 %
		Y	6.04	67.28	16.50		130.0	
		Z	6.15	67.20	16.51		130.0	
10637- AAA	IEEE 1602.11ac WiFi (160MHz, MCS1, 90pc duty cycle)	X	6.35	67.76	16.83	0.46	130.0	± 9.6 %
		TYT	6.20	67.66	16.68		130.0	
		Z	6.32	67.61	16.69		130.0	
10638- AAA	IEEE 1602.11ac WiFi (160MHz, MCS2, 90pc duty cycle)	X	6.35	67.72	16.79	0.46	130.0	±9.6 %
		+ _Y +	6.20	67.63	16 64		130.0	
		Z	6.32	67.58	16.65		130.0	

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10639-	IEEE 1602.11ac WiFi (160MHz, MCS3,	X	6.35	67 74	16.85	0.46	130.0	+96%
AAA	90pc duty cycle)			01.11	10.00	0.40	100.0	1 9.0 %
		Y	6.18	67.59	16.66		130.0	
		Z	6.32	67.59	16.70		130.0	
10640- AAA	IEEE 1602.11ac WiFi (160MHz, MCS4, 90pc duty cycle)	X	6.39	67.87	16.86	0.46	130.0	± 9.6 %
		Y	6.18	67.60	16.61		130.0	
		Z	6.36	67.71	16.72		130.0	
10641- AAA	IEEE 1602.11ac WiFi (160MHz, MCS5, 90pc duty cycle)	X	6.37	67.56	16.72	0.46	130.0	± 9.6 %
		Y	6.22	67.48	16.57		130.0	
		Z	6.34	67.42	16.59		130.0	
10642- AAA	IEEE 1602.11ac WiFi (160MHz, MCS6, 90pc duty cycle)	Х	6.43	67.86	17.02	0.46	130.0	± 9.6 %
		Y	6.27	67.76	16.88		130.0	
		Z	6.40	67.70	16.88		130.0	
10643- 	IEEE 1602.11ac WiFi (160MHz, MCS7, 90pc duty cycle)	X	6.27	67.59	16.80	0.46	130.0	±9.6 %
		Y	6.10	67.43	16.61		130.0	
		Z	6.24	67.44	16.67		130.0	
10644- AAA	IEEE 1602.11ac WiFi (160MHz, MCS8, 90pc duty cycle)	X	6.52	68.35	17.21	0.46	130.0	±9.6 %
		Y	6.27	67.95	16.89		130.0	
		Z	6.48	68.18	17.06		130.0	
10645- AAA	IEEE 1602.11ac WiFi (160MHz, MCS9, 90pc duty cycle)	X	6.86	68.85	17.40	0.46	130.0	± 9.6 %
		Y	6.65	68.64	17.18		130.0	
		Z	6.84	68.75	17.29		130.0	
10646- AAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,7)	X	42.01	120.68	39.91	9.30	60.0	± 9.6 %
		Y	39.04	120.15	39.21		60.0	
		Z	32.57	113.89	37.85		60.0	
10647- AAB	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,7)	X	44.40	122.83	40.67	9.30	60.0	± 9.6 %
		Y	37.67	120.23	39.39		60.0	
		Z	34.51	116.06	38.63		60.0	
10648- AAA	CDMA2000 (1x Advanced)	X	0.92	66.62	13.41	0.00	150.0	± 9.6 %
		Y	0.77	65.29	11.91		150.0	
		Z	0.81	64.38	11.88		150.0	

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

Calibration Laboratory of

Schmid & Partner Engineering AG Zeughausstrasse 43, 8004 Zurich, Switzerland Hac-MRA



SSchweizerischer KallbrierdienstCService suisse d'étalonnageSServizio svizzero di taraturaSwiss Calibration Service

Issued: April 18, 2017

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

PC Test Client

Certificate No: EX3-7406_Apr17

CALIBRATION	CERTIFICATE								
Object	EX3DV4 - SN:7406)							
Calibration procedure(s) QA CAL-01.v9, QA CAL-12.v9, QA CAL-23.v5, QA CAL-25.v6 Calibration procedure for dosimetric E-field probes									
	· · · · · · · · · · · · · · · · · · ·		5-3-2017						
Calibration date:	April 18, 2017								
This calibration certificate docum The measurements and the unc	nents the traceability to nation ertainties with confidence prot	al standards, which realize the physical units bability are given on the following pages and a	of measurements (SI). are part of the certificate.						
	· · · · · ·	, , , , , , , , , , , , , , , , , , , ,	·						
All calibrations have been condu	ucted in the closed laboratory f	facility: environment temperature (22 ± 3)°C a	nd humidity < 70%.						
Calibration Equipment used (M8	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 Attenualor	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						
		Chack Data (in hourse)	Sobodulad Chack						
Secondary Standards	D CALL OD 44202974	Of Apr 16 (in house)	In house check: Jun-18						
Power meter E4419B	SN: 0041293014	06 Apr 16 (in house check Jun-16)	In house check: Jun-18						
Power sensor E4412A	SN: M141490007	06-Apr-16 (in house check Jun-16)	In house check: Jun-18						
Power sensor HD 9649C	SN: 000110210	04-Aug-99 (in house check Jun-16)	In house check: Jun-18						
Notwork Applyzor HD 97535	SN: US37300595	18-Oct-01 (in house check Oct-16)	In house check: Oct-17						
THE WOIN ANALYZEL THE OF DOC	014.0001080000								
	Name	Function	Signature						
Calibrated by:	Michael Weber	Laboratory Technician	111405						
Approved by:	Katja Pokovic	Technical Manager	ON						

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

Calibration Laboratory of Schmid & Partner

Engineering AG Zeughausstrasse 43, 8004 Zurich, Switzerland



Schweizerischer Kalibrierdienst S

Service suisse d'étalonnage С

Accreditation No.: SCS 0108

- Servizio svizzero di taratura S
- Swiss Calibration Service

Accredited by the Swiss Accreditation Service (SAS) The Swiss Accreditation Service is one of the signatories to the EA Multilateral Agreement for the recognition of calibration certificates

Glossarv:

TSL	tissue simulating liquid				
NORMx,y,z	sensitivity in free space				
ConvF	sensitivity in TSL / NORMx,y,z				
DCP	diode compression point				
CF	crest factor (1/duty_cycle) of the RF signal				
A, B, C, D	modulation dependent linearization parameters				
Polarization ϕ	φ rotation around probe axis				
Polarization 9	ϑ rotation around an axis that is in the plane normal to probe axis (at measurement center), i.e. $\vartheta = 0$ is normal to probe axis				

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

Calibration is Performed According to the Following Standards:

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

Methods Applied and Interpretation of Parameters:

- NORMx.v.z: Assessed for E-field polarization $\vartheta = 0$ (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 nor media. VR is the maximum calibration range expressed in RMS voltage across the diode.
- ConvF and Boundary Effect Parameters: Assessed in flat phantom using E-field (or Temperature Transfer Standard for f < 800 MHz) and inside waveguide using analytical field distributions based on power measurements for f > 800 MHz. The same setups are used for assessment of the parameters applied for boundary compensation (alpha, depth) of which typical uncertainty values are given. These parameters are used in DASY4 software to improve probe accuracy close to the boundary. The sensitivity in TSL corresponds to NORMx, y, z * ConvF whereby the uncertainty corresponds to that given for ConvF. A frequency dependent ConvF is used in DASY version 4.4 and higher which allows extending the validity from ± 50 MHz to ± 100 MHz.
- Spherical isotropy (3D deviation from isotropy): in a field of low gradients realized using a flat phantom exposed by a patch antenna.
- Sensor Offset: The sensor offset corresponds to the offset of virtual measurement center from the probe tip (on probe axis). No tolerance required.
- Connector Angle: The angle is assessed using the information gained by determining the NORMx (no uncertainty required).

Probe EX3DV4

SN:7406

Manufactured: November 24, 2015 Calibrated: April 18, 2017 April 18, 2017

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

Basic Calibration Parameters

	Sensor X	Sensor Y	Sensor Z	Unc (k=2)
Norm $(\mu V/(V/m)^2)^A$	0.47	0.42	0.45	± 10.1 %
DCP (mV) ^B	99.5	98.3	95.1	

Modulation Calibration Parameters

UID	Communication System Name		Α	В	С	D	VR	Unc ^E
			dB	dBõV		dB	mV	(k=2)
0	CW	X	0.0	0.0	1.0	0.00	138.9	±2.5 %
_		Y	0.0	0.0	1.0		129.6	
		Z	0.0	0.0	1.0		128.2	

Note: For details on UID parameters see Appendix.

Sensor Model Parameters

	C1	C2	α	T1	T2	Т3	T4	T5	T6
	fF	fF	V-1	ms.V⁻²	ms.V⁻¹	ms	V-2	V-1	
Х	48.83	366.9	36.13	15.06	1.101	4.968	0.251	0.437	1.003
Y	19.57	145.7	35.6	3.888	0.704	4.934	0	0.021	1.004
Z	45.42	343.9	36.58	10.69	0.846	4.98	0	0.36	1.004

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.

			•					
f (MHz) ^C	Relative Permittivity ^F	Conductivity (S/m) ^F	ConvF X	ConvF Y	ConvF Z	Alpha ^G	Depth ^G _(mm)	Unc (k=2)
600	42.7	0.88 .	10.42	10.42	10.42	0.10	1.20	± 13.3 %
750	41.9	0.89	10.26	10.26	10.26	0.52	0.80	± 12.0 %
835	41.5	0.90	9.97	9.97	9.97	0.53	0.81	± 12.0 %
1750	40.1	1.37	8.88	8.88	8.88	0.42	0.80	± 12.0 %
1900	40.0	1.40	8.40	8.40	8.40	0.26	0.87	± 12.0 %
2300	39.5	1.67	8.04	8.04	8.04	0.25	0.80	± 12.0 %
2450	39.2	1.80	7.68	7.68	7.68	0.38	0.80	± 12.0 %
2600	39.0	1.96	7.44	7.44	7.44	0.40	0.83	± 12.0 %

Calibration Parameter Determined in Head Tissue Simulating Media

^c Frequency validity above 300 MHz of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to ± 50 MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is ± 10, 25, 40, 50 and 70 MHz for ConvF assessments at 30, 64, 128, 150 and 220 MHz respectively. Above 5 GHz frequency validity can be extended to ± 110 MHz. ^F At frequencies below 3 GHz, the validity of tissue parameters (ϵ and σ) can be relaxed to ± 10% if liquid compensation formula is applied to

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

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

			-		-			
f (MHz) ^c	Relative Permittivity ^F	Conductivity (S/m) ^F	ConvF X	ConvF Y	ConvF Z	Alpha ^G	Depth ^G (mm)	Unc (k=2)
600	56.1	0.95	10.82	10.82	10.82	0.10	1.20	± 13.3 %
750	55.5	0.96	9.90	9.90	9.90	0.51	0.83	± 12.0 %
835	55.2	0.97	9.77	9.77	9.77	0.46	0.80	± 12.0 %
1750	53.4	1.49	8.08	8.08	8.08	0.41	0.85	± 12.0 %
1900	53.3	1.52	7.81	7.81	7.81	0.44	0.80	± 12.0 %
2300	52.9	1.81	7.65	7.65	7.65	0.38	0.84	± 12.0 %
2450	52.7	1.95	7.60	7.60	7.60	0.33	0.89	± 12.0 %
2600	52.5	2.16	7.31	7.31	7.31	0.31	0.94	± 12.0 %

Calibration Parameter Determined in Body Tissue Simulating Media

^c Frequency validity above 300 MHz of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to ± 50 MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is ± 10, 25, 40, 50 and 70 MHz for ConvF assessments at 30, 64, 128, 150 and 220 MHz respectively. Above 5 GHz frequency validity can be extended to ± 110 MHz. ^F At frequencies below 3 GHz, the validity of tissue parameters (ϵ and σ) can be relaxed to ± 10% if liquid compensation formula is applied to

^F At frequencies below 3 GHz, the validity of tissue parameters (ϵ and σ) can be relaxed to ± 10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters (ϵ and σ) is restricted to ± 5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters. ^G Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is

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



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

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



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

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



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

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



Conversion Factor Assessment

Other Probe Parameters

Triangular
0
enabled
disabled
337 mm
10 mm
9 mm
2.5 mm
1 mm
1 mm
1 mm
1.4 mm

April 18, 2017

EX3DV4-SN:7406

Appendix: Modulation Calibration Parameters

ŪD	Communication System Name		A dB	B dBõV	С	D dB	VR mV	Max Unc ^E (k=2)
0	CW	X	0.00	0.00	1.00	0.00	<u>138.</u> 9	± 2.5 %
		Y	0.00	0.00	1.00		129.6	
100.15		Ζ	0.00	0.00	1.00		128.2	
10010- CAA	SAR Validation (Square, 100ms, 10ms)	Х	2.73	66.22	10.89	10.00	20.0	± 9.6 %
		Y	2.50	65.91	10.39		20.0	
		Z	2.53	65.90	10.54		20.0	
10011- CAB	UMTS-FDD (WCDMA)	X	1.16	69.53	16.71	0.00	150.0	± 9.6 %
		Y	1.55	76.79	19.47		150.0	
10010			1.09	66.24	15.96	0.41	150.0	+06%
CAB	Mbps)		1.21	04.30	10.70	0.41	150.0	± 9.0 %
		Y 7	1.20	62.07	16.13		150.0	
10012	IEEE 802 110 WiEi 2 4 CHz (DSSS		4.87	66.56	16.09	146	150.0	+96%
CAB	OFDM, 6 Mbps)		4.07	67.07	10.90		150.0	1 3.0 78
		1 7	4,34	07.27 66.50	16.90		150.0	
10021-	GSM-FDD (TDMA, GMSK)	X	4.65 9.99	82.36	18.50	9.39	50.0	± 9.6 %
		Y	13.63	85.86	18.88		50.0	
	· · · · · · · · · · · · · · · · · · ·	Z	18.22	90.00	20.60		50.0	
10023- DAC	GPRS-FDD (TDMA, GMSK, TN 0)	X	8.49	80.16	17.78	9.57	50.0	± 9.6 %
		Y	7.32	78.16	16.31		50.0	
		Z	12.47	85.19	19.17		50.0	
10024- DAC	GPRS-FDD (TDMA, GMSK, TN 0-1)	X	18.19	89.55	19.31	6.56	60.0	± 9.6 %
		Y	100.00	107.67	23.01		60.0	
		Z	100.00	108.36	23.76		60.0	
10025- DAC	EDGE-FDD (TDMA, 8PSK, TN 0)	X	5.54	75.78	27.74	12.57	50.0	± 9.6 %
		Υ Υ	8.76	92.32	36.08		50.0	
40.000			4.44	70.37	25.26	0.56	50.0	+06%
10026- DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1)		9.90	90.90	01.21	9.50	60.0	<u> </u>
		Y 7	5.70	81.99	20.04		60.0	
10027-	GPRS-FDD (TDMA, GMSK, TN 0-1-2)	X	100.00	106.69	22.59	4.80	80.0	± 9.6 %
			100.00	110 45	23 34	<u> </u>	80.0	
┣────		Ż	100.00	108.23	22.93		80.0	<u> </u>
10028- DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2-3)	X	100.00	107.01	22.11	3.55	100.0	±9.6 %
		Y	100.00	117.41	25.54		100.0	
		Z	100.00	109.42	22.79		100.0	
10029- DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2)	X	6.41	81.80	26.70	7.80	80.0	±9.6 %
		Y	3.86	73.74	24.21		80.0	
			5.17	78.18	25.56		80.0	
10030- CAA	IEEE 802.15.1 Bluetooth (GFSK, DH1)		13.75	86.21	17.68	5.30	/0.0	±9.5%
L		<u> Y</u>	8.41	82.76	15.88		/0.0	
10031-	IEEE 802,15,1 Bluetooth (GFSK, DH3)		100.00	106.60	22.49	1.88	100.0	± 9.6 %
CAA			100.00	100.00	05 54		100.0	
		Y 7	100.00	108.90	20.01	1	100.0	
I _		1 4	100.00	1 100.09	<u> </u>		1 100.0	L

10032- CAA	IEEE 802.15.1 Bluetooth (GFSK, DH5)	X	100.00	113.18	22.62	1.17	100.0	± 9.6 %
		Y	100.00	160.14	39.75		100 0	
		Z	100.00	117.70	24.05		100.0	
10033- CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH1)	X	6.02	81.27	20.17	5.30	70.0	± 9.6 %
		Y	2.18	67.67	12.00		70.0	
40004		Z	5.24	80.63	20.08		70.0	
10034- CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH3)	X	2.82	75.11	17.10	1.88	100.0	±9.6 %
		Y	0.75	61.82	7.32		100.0	
		Z	2.29	73.13	16.28		100.0	<u> </u>
10035- CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH5)	Х	2.17	73.18	16.32	1.17	100.0	± 9.6 %
		Y	0.59	61.24	6.75		100.0	<u> </u>
		Z	1.79	71.19	15.39		100.0	
10036- CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH1)	Х	7.12	83.90	21.15	5.30	70.0	± 9.6 %
		Y	2.26	68.25	12.32		70.0	
		Z	6.24	83.43	21.13		70.0	
10037- CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH3)	х	2.66	74.41	16.79	1.88	100.0	± 9.6 %
		Y	0.71	61.41	7.10		100.0	
		Z	2.15	72.41	15.96		100.0	
10038- CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH5)	X	2.20	73.62	16.61	1.17	100.0	± 9.6 %
		Y	0.60	61.36	6.93		100.0	
		Z	1.80	71.51	15.64		100.0	
10039- CAB	CDMA2000 (1xRTT, RC1)	X	2.76	78.09	18.48	0.00	150.0	± 9.6 %
		Y	0.37	60.00	5.64		150.0	
		Z	2.22	74.97	16.93		150.0	
10042- CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4- DQPSK, Halfrate)	X	7.43	78.80	16.12	7.78	50.0	± 9.6 %
		Y	8.26	80.71	16.15		50 0	
		Z	12.01	84.59	17.75		50.0	
10044- CAA	IS-91/EIA/TIA-553 FDD (FDMA, FM)	X	0.00	100.49	0.10	0.00	150.0	± 9.6 %
		Y	0.04	60.00	50.13		150.0	
		Z	0.00	96.59	0.05		150.0	
10048- CAA	DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24)	X	6.27	73.35	16.78	13.80	25.0	±9.6 %
		Y	5.47	69.78	14.42		25.0	
·		Z	7.09	74.59	16.89		25.0	
10049- CAA	DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12)	X	6.62	76.07	16.59	10.79	40.0	± 9.6 %
		Y	5.50	73.13	14.63		40.0	
		Z	7.47	77.74	16.92		40.0	
10056- CAA	UMTS-TDD (TD-SCDMA, 1.28 Mcps)	Х	8.73	81.97	20.70	9.03	50.0	± 9.6 %
		Y	5.30	74.02	15.71		50.0	
		Z	9.70	84.35	21 49		50.0	
10058- DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)	X	4.93	77.02	24.10	6.55	100.0	± 9.6 %
		Y	3.18	70.36	21.96		100.0	
10050		Z	4.10	73.99	23.08		100.0	
CAB	IEEE 802.11b WIFi 2.4 GHz (DSSS, 2 Mbps)	X	1.26	65.49	16.19	0.61	110.0	± 9.6 %
		Y	1.20	65.95	16.36		110.0	— — -
400000		Z	1.20	64.67	15.74		110.0	
10060- CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps)	X	13.21	104.87	27.26	1.30	110.0	± 9.6 %
		Γγ İ	4.90	96,93	26.57		110 0	
		Z	4.52	91.43	23.95		110.0	

10061-	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11	X	2.92	78.86	20.97	2.04	110.0	±9.6 %
CAB	Mbps)	V	4.70	70.05	40.05		140.0	
		7	2 19	75.20	19.05		110.0	
10062-	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6	x	4.70	66.68	16.55	0.49	100.0	± 9.6 %
		Y	4.18	67.42	16.56		100.0	———
		Z	4.65	66.61	16.51		100.0	
10063- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps)	X	4.70	66.73	16.62	0.72	100.0	± 9.6 %
		Y	4.18	67.49	16.63		100.0	
		Z	4.66	66.66	16.57		100.0	
10064- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps)	X	4.99	66.98	16.82	0.86	100.0	±9.6 %
		Y	4.36	67.60	16.75		100.0	
10065.	IEEE 802 112/h WIEL5 CH7 (OEDM 18		4,94	66.90	16.78	4.04	100.0	+0.0%
CAB	Mbps)	^	4.00	00.04	10.07	1.21	100.0	19.0 %
		Y	4.23	67.25	16.71		100.0	
10066-	IEEE 802 11a/b WiEi 5 GHz (OEDM 24	- <u>-</u>	4.80	66.93	16.83	1 46	100.0	+06%
CAB	Mbps)		4.00	00.00	10.55	1.40	100.0	1 5.0 %
	· · · · · · · · · · · · · · · · · · ·	Y 7	4.21	67.08	16.71		100.0	
10067-	IEEE 802.11a/h WiFi 5 GHz (OFDM. 36	X	5.14	66.93	17.36	2.04	100.0	+96%
CAB	Mbps)		4.40	67.40	46.00	2.04	100.0	
		7	<u>4.40</u> 5.08	66.86	10.99		100.0	
10068-	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48	X	5.19	66.98	17.55	2.55	100.0	± 9.6 %
	Mbps)		4 50	67.97	47.05		100.0	
			4.52 5.12	66.84	17.50		100.0	
10069-	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54	X	5.27	66.95	17.72	2.67	100.0	± 9.6 %
		Y	4,52	67.17	17.38		100.0	
		Z	5.20	66.85	17.69		100.0	
10071- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps)	X	4.96	66.60	17.22	1.99	100.0	± 9.6 %
		Y	4.44	67.29	17.20		100.0	
		Z	4.91	66.53	17.19		100.0	
10072- CAB	(DSSS/OFDM, 12 Mbps)	X	4.94	66.90	17.40	2.30	100.0	± 9.6 %
		Y	4.35	67.27	17.25		100.0	
10072			4.87	66.79	17.36	2.02	100.0	106%
CAB	(DSSS/OFDM, 18 Mbps)		4.55	07.03	17.07	2.03	100.0	1 9.0 %
			4.41	67.49	17.58			
10074-	IEEE 802 11g WiEi 2 4 GHz	X	4.92	66.90	17.03	3 30	100.0	+96%
CAB	(DSSS/OFDM, 24 Mbps)		1.07	07.70	47.04	0.00	100.0	10.0 %
			4.49	67.70	17.84		100.0	
10075-	IEEE 802.11g WiEi 2.4 GHz	1 X	5.02	67.05	18.08	3.82	90.0	± 9.6 %
CAB	(DSSS/OFDM, 36 Mbps)		4 5 5	67.02	40.40		00.0	
		7	4.00	66.85	18.01		90.0	
10076-	IEEE 802.11g WiFi 2.4 GHz	X	5.03	66.84	18.17	4.15	90.0	± 9.6 %
		Y	4.61	67.72	18.28		90.0	
		Z	4.95	66.65	18.12		90.0	
10077- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps)	X	5.06	66.90	18.26	4.30	90.0	± 9.6 %
		Y	4.65	67.85	18.42		90.0	
		ΙZ	4.98	66.71	18.21	1	90.0	

10081-	CDMA2000 (1xRTT, RC3)	X	1.05	69.26	14.55	0.00	150.0	± 9.6 %
			0.00	00.00	5.00		450.0	
			0.28	67.44	12.33		150.0	
10082-	IS-54 / IS-136 FDD (TDMA/FDM, PI/4-	X	0.92	58.22	3.69	4.77	80.0	± 9.6 %
CAB	DQPSK, Fullrate)							
		Y	0.41	56.78	1.87		80.0	
10090-	GPRS-FDD (TDMA_GMSK_TN 0-4)		0.54	57.53 80.03	2.88	6.56	80.0	+06%
DAC			11.00	03.05	13.13	0.50	00.0	1.5.0 %
		Y	100.00	107.61	23.00		60.0	
40007		Z	100.00	108.37	23.77		60.0	
CAB	UMTS-FDD (HSDPA)	X	1.96	68.94	16.57	0.00	150.0	±9.6 %
		Y	2.57	76.20	18.23		150.0	
		Z	1.90	68.41	16,17		150.0	
10098-	UMTS-FDD (HSUPA, Subtest 2)	X	1.92	68.91	16.54	0.00	150.0	± 9.6 %
		Y	2.54	76.26	18.30		150.0	
		ż	1.86	68.36	16.14		150.0	
10099-	EDGE-FDD (TDMA, 8PSK, TN 0-4)	Х	9.94	91.01	31.21	9.56	60.0	± 9.6 %
		· v	E 70	00.00	00.00			
		Υ 7	5.73	82.09	28.86		60.0	
10100-	LTE-FDD (SC-FDMA, 100% RB, 20	X	3.32	71.40	17.37	0.00	150.0	+9.6%
CAC	MHz, QPSK)							
		Υ	2.95	71.83	18.07		150.0	
10101-	I TE EDD (SC EDMA 100% BB 20		3.20	70.72	17.06	0.00	150.0	
CAC	MHz, 16-QAM)	^	3.33	07.99	10.32	0.00	150.0	±9.6%
		Y	3.00	68.42	16.63		150.0	<u> </u>
		Z	3.27	67.68	16.15		150.0	
10102- CAC	LTE-FDD (SC-FDMA, 100% RB, 20	X	3.43	67.94	16.40	0.00	150.0	± 9.6 %
0/10		Y	3.10	68.46	16.71		150.0	
		Z	3.37	67.66	16.24		150.0	
10103- CAC	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	X	6.02	73.90	19.30	3.98	65.0	± 9.6 %
		Y	4.68	73.18	19.41		65.0	
40404		Z	5.62	73.49	19.33		65.0	
CAC	ETE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	×	6.42	73.34	19.91	3.98	65.0	±9.6 %
		Υ Υ	4.72	70.79	18.81		65.0	
10105-	LTE-TDD (SC-EDMA 100% BB 20	+ 2 -	5.88	72.35	19.63	2.00	65.0	+069/
CAC	MHz, 64-QAM)	^	0.54	75.01	20.09	3.90	05.0	± 9.0 %
		Y	4.65	70.25	18.83		65.0	
40400			5.51	70.92	19.28		65.0	
CAD	MHz, QPSK)	^	2.90	70.63	17.22	0.00	150.0	± 9.6 %
		Ý	2.58	72.09	18.15		150.0	
		Z	2.79	69.99	16.90		150.0	_
10109- CAD	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	X	2.99	67.94	16.29	0.00	150.0	± 9.6 %
		Y	2.69	69.27	16.60	_	150.0	
10110		Z	2.93	67.61	16.08	0.00	150.0	
CAD	QPSK)	<u>^</u>	2.3/	09.82	16.91	0.00	150.0	± 9.6 %
<u> </u>		<u>Y</u>	2.17	72.66	17.66		150.0	
10111			2.27	69.17	16.53	0.00	150.0	
CAD	16-QAM)		2.75	09.14	16.80	0.00	150.0	± 9.6 %
		<u>Ι</u> Υ	2.72	72.65	17.00		150.0	
L		12	2.68	68.77	16.52		150.0	

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10112-	LTE-FDD (SC-FDMA, 100% RB, 10	X	3.11	67.90	16.33	0.00	150.0	±9.6 %
		Y	2.81	69 41	16 67		150.0	
		z	3.05	67.61	16.14		150.0	
10113- CAD	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	X	2.91	69.24	16.90	0.00	150.0	± 9.6 %
		Υ	2.80	72.45	16.91		150.0	
		Z	2.83	68.91	16.64		150.0	
10114- CAB	IEEE 802.11n (HT Greenfield, 13.5 Mbps, BPSK)	X	5.18	67.36	16.63	0.00	150.0	±9.6 %
	·	Y	4.69	67.54	16.80		150.0	
10115	IEEE 902 110 /UT Crossfold 91 Mbss	4	5.15	67.30	16.59	0.00	150.0	100%
CAB	16-QAM)		0.40	07.70	10.70	0.00	150.0	±9.0 %
			-4.94	67.70	16.67		150.0	
10116-	IEEE 802.11n (HT Greenfield, 135 Mbps,	X	5.28	67.57	16.65	0.00	150.0	± 9.6 %
0/10		Y I	4.76	67.79	16.84		150.0	
		Z	5.24	67.47	16.61		150.0	
10117- CAB	IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK)	X	5.14	67.22	16.57	0.00	150.0	± 9.6 %
		Y	4.68	67.44	16.77		150.0	
		Z	5.11	67.13	16.53		150.0	
10118- CAB	IEEE 802.11n (HT Mixed, 81 Mbps, 16- QAM)	X	5.56	67.71	16.81	0.00	150.0	± 9.6 %
		Y	4.92	67.65	16.80		150.0	
10110	LEFE 902 41p /LT Mixed 425 Mbps 64	4	5.51	67.59	16.75	0.00	150.0	+0614
CAB	QAM)		5.26	07.51	10.04	0.00	150.0	19.6%
		<u>Y</u> .	4.75	67.71	16.81		150.0	
10140- CAC	LTE-FDD (SC-FDMA, 100% RB, 15	X	3.47	67.94	16.32	0.00	150.0	± 9.6 %
UAC		Y	3.08	68 53	16 60		150.0	
		Ż	3.41	67.65	16.15		150.0	
10141- CAC	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	X	3.59	68.02	16.48	0.00	150.0	± 9.6 %
		Y	3.23	68.87	16.85		150.0	
		Z	3.53	67.77	16.33		150.0	
10142- CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	X	2.17	70.14	16.75	0.00	150.0	± 9.6 %
		Y I	1.93	72.39	15.85		150.0	
10143-	LTE-FDD (SC-FDMA, 100% RB, 3 MHz,	X	2.06	69.38 70.39	16.26	0.00	150.0	±9.6%
040		Y	1 77	67.88	12.65		150.0	
		Ż	2.58	69.83	16.31		150.0	
10144- CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	X	2.37	67.50	14.86	0.00	150.0	± 9.6 %
		Y	1.24	63.02	9.52		150.0	
		Z	2.27	66.99	14.42		150.0	
10145- CAD	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	×	1.43	67.32	13.24	0.00	150.0	± 9.6 %
		<u> </u>	0.41	60.00	4.04	ļ	150.0	1
10146-	LTE-FDD (SC-FDMA, 100% RB, 1.4	Z X	1.25 1.83	65.61 65.71	11.99 11.47	0.00	150.0 150.0	± 9.6 %
CAD	MHz, 16-QAM)	Y	19.01	355.37	40.53		150.0	
		Z	1.52	64.01	10.27		150.0	
10147- CAD	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	×	2.14	67.65	12.55	0.00	150.0	± 9.6 %
		<u>Y</u>	123.11	63.95	2.67		150.0	
1		ΙZ	1.70	65.34	111.08	1	1 150.0	1

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10149- CAC	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-04M)	X	3.00	68.01	16.34	0.00	150.0	± 9.6 %
		Y	2.71	69.38	16.67		150.0	
		Z	2.94	67.68	16.14		150.0	
10150- CAC	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	X	3.12	67.96	16.38	0.00	150.0	± 9.6 %
		Y	2.83	69.51	16.73		150.0	<u> </u>
			3.06	67.68	16.19		150.0	
10151- CAC	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	X	6.55	76.73	20.51	3.98	65.0	± 9.6 %
		Y	4.65	75.11	19.92		65.0	
		Z	5.91	75.87	20.37		65.0	·
10152- CAC	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	X	5.92	73.14	19.51	3.98	65.0	± 9.6 %
		Y	4.14	70.22	17.64		65.0	· · · · ·
		Z	5.38	72.11	19.20		65.0	
10153- CAC	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	X	6.32	74.15	20.32	3.98	65.0	± 9.6 %
		Y	4,49	71.52	18.62		65.0	
		Z	5.75	73.14	20.03		65.0	
10154- CAD	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	Х	2.44	70.37	17.23	0.00	150.0	± 9.6 %
		Y	2.24	73.24	17.96	-	150.0	<u> </u>
		Z	2.32	69.67	16.83		150.0	
10155- CAD	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	X	2.75	69.15	16.81	0.00	150.0	± 9.6 %
		Y	2.75	72.83	17.10	-	150.0	
		Z	2.68	68.79	16.53		150.0	
10156- CAD	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	Х	2.05	70.60	16.74	0.00	150.0	± 9.6 %
		Y	1.46	69.42	13.50	·	150.0	
		Ż	1.92	69.63	16.11		150.0	
10157- CAD	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	X	2.25	68.47	15.12	0.00	150.0	± 9.6 %
		Y	0.93	61.53	7,91	-	150.0	
		Z	2.13	67.76	14.53		150.0	
10158- CAD	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	Х	2.91	69.31	16.96	0.00	150.0	± 9.6 %
		Y	2.84	72.68	17.03		150.0	
		Z	2.84	68.99	16.70		150.0	
10159- CAD	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	X	2.39	69.07	15.47	0.00	150.0	± 9.6 %
		Y	0.94	61.44	7.84		150.0	
		Z	2.25	68.30	14.85		150.0	
10160- CAC	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	X	2.87	69.48	16.90	0.00	150.0	± 9.6 %
		<u> </u>	2.53	71.06	17.44		150.0	
		Z	2.80	69.08	16.66		150.0	
10161- <u>CAC</u>	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	X	3.02	67.94	16.33	0.00	150.0	± 9.6 %
		Y	2.72	69.68	16.46		150.0	
		Z	2.96	67.65	16.13		150.0	
10162- CAC	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	X	3.13	68.07	16.43	0.00	150.0	± 9.6 %
		Y	2.84	70.03	16.63		150.0	
		Z	3.07	67.81	16.24		150.0	
10166- CAD	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	X	3.48	69.00	18.84	3.01	150.0	± 9.6 %
		Y	2.37	66.02	18.17		150.0	
		Z	3.30	68.39	18.62		150.0	
10167- CAD	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	X	4.17	71.58	19.19	3.01	150.0	± 9.6 %
		Y	2.29	67.15	18.12		150 0	
		Z	3.79	70.56	18.83		150.0	

10168-	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-0.0M)	X	4.66	74.00	20.63	3.01	150.0	± 9.6 %
		Γ _Υ Ι	2,48	69.25	19.67		150.0	
		Z	4.22	72.96	20.30		150.0	_
10169- CAC	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	X	2.83	68.21	18.52	3.01	150.0	± 9.6 %
		Y	1.98	64.24	17.28		150.0	
40470		Z	2.57	66.84	17.97		150.0	
CAC	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	X	3.78	/3.8/	20.84	3.01	150.0	±9.6 %
			1.95	66.56 71.40	18.68		150.0	
10171-	LTE-FDD (SC-FDMA, 1 RB, 20 MHz	X	3.08	69.63	17.94	3.01	150.0	+96%
AAC	64-QAM)		4.70	01.00	10.04		150.0	_ 010 %
			1.72	64.21	16.34		150.0	
10172-	TE-TDD (SC-EDMA_1 RB_20 MHz	X	<u> </u>	80.62	23.60	6.02	65.0	+96%
CAC	QPSK)	Â	0.12		20.00	0.02	00.0	10.0 %
		Y	2.15	69.85	20.42		65.0	
10173-	LTE-TOD (SC EDMA 1 RB 20 MHz		4.45	78.76 86.28	23.36	6.02	65.0 65.0	+06%
CAC	16-QAM)		0.97	00.20	23.79	0.02	05.0	19.0 %
		Y	2.26	72.00	19.72		65.0	
10174-	TE-TOD (SC-EDMA_1 RB_20 MHz		7.82	83.09	23.30	6.02	65.0	+96%
CAC	64-QAM)		7.02	00.00	22.10	0.02	00.0	10.0 //
		Υ	1.97	69.58	18.06		65.0	
10175		4	2 70	67.00	21.15	3.01	65.U 150.0	+96%
CAD	QPSK)		2.19	07.90	10.20	5.01	130.0	19.0 %
		Y	1.97	64.07	17.08		150.0	
40470		Z	2.54	66.56	17.72	0.01	150.0	100%
10176- CAD	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	X	3.78	73.89	20.85	3.01	150.0	±9.6%
		Y	1.95	66.57	18.69		150.0	
40477			3.16	71.52	20.03	2.04	150.0	1069/
CAF	QPSK)		2.02	00.00	10.30	3.01	150.0	± 9.0 %
		Y 7	1.98	64.12	17.12		150.0	
10178-	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16-	X	3.74	73.65	20.71	3.01	150.0	± 9.6 %
CAD	QAM)	 			10.05	· · · ·		
			1.95	66.53	18.65		150.0	
10179-	LTE-FDD (SC-FDMA, 1 RB, 10 MHz,	X	3.39	71.52	19.91	3.01	150.0	±9.6 %
		+	1.82	65.39	17.45	<u> </u>	150.0	
<u> </u>		Ż	2.87	69.52	18.50		150.0	
10180- CAD	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 64- QAM)	X	3.08	69.55	17.88	3.01	150.0	± 9.6 %
		Y	1.72	64.21	16.33		150.0	
		Z	2.64	67.75	17.21		150.0	
10181- CAC	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	X	2.81	68.04	18.35	3.01	150.0	± 9.6 %
		Y	1.97	64.11	17.12		150.0	
10100			2.56	66.68	17.80		150.0	+0.0%
10182- CAC	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)		3.73	/3.62	20.70	3.01	150.0	±9.6%
		Ύ	1.95	66.51	18.64		150.0	ļ
40400		Z	3.13	71.29	19.90	2.04	150.0	+06%
AAB	64-QAM)		3.07	08.00		3.01	150.0	1 3.0 %
		Y Y	1.72	64.19	16.32		150.0	
1		14	L 2.64	07.72	1 17.20	1	0.001	1

10184- CAD	LTE-FDD (SC-FDMA, 1 RB, 3 MHz,	X	2.82	68.08	18.37	3.01	150.0	± 9.6 %
		Y	1.98	64 13	17 13		150.0	
		Z	2.56	66 72	17.83		150.0	
10185- CAD	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16- QAM)	X	3.75	73.70	20.74	3.01	150.0	± 9.6 %
		Y	1.96	66.56	18.67		150.0	<u>├</u>
40400		<u> </u>	3.14	71.36	19.94		150.0	
AAD	QAM)	X	3.09	69.60	17.91	3.01	150.0	± 9.6 %
		Y	1.73	64.23	16.35		150.0	
<u> </u>		Z	2.65	67.78	17.23		150.0	
10187- CAD	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	X	2.83	68.13	18.43	3.01	150.0	±9.6 %
		Y	1.99	64.22	17.23		150.0	
		Z	2.57	66.77	17.89		150.0	
10188- CAD	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	X	3.88	74.41	21.15	3.01	150.0	± 9.6 %
		Y	1.98	66.86	18.93		150.0	
		Z	3.23	71.97	20.32		150.0	
10189- _AAD	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	X	3.15	70.02	18.19	3.01	150.0	± 9.6 %
		Y	1.74	64.44	16.55		150.0	
		Z	2.70	68.15	17.50	· · · · ·	150.0	
10193- CAB	IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK)	X	4.57	66.79	16.35	0.00	150.0	± 9.6 %
		Y	4.14	67.99	16.59		150.0	
		Z	4.54	66.72	16.28	<u>.</u>	150.0	
10194- <u>C</u> AB	IEEE 802.11n (HT Greenfield, 39 Mbps, 16-QAM)	X	4.75	67.11	16.47	0.00	150.0	±9.6 %
		Y	4.22	68.00	16.68		150 0	
		Ζ	4.70	67.02	16.41		150.0	
10195- CAB	IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM)	X	4.79	67.14	16.49	0.00	150.0	± 9.6 %
		TY	4.23	67 92	16.65		150 0	
		Ż	4 74	67.05	16.43		150.0	
10196- CAB	IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK)	X	4.58	66.86	16.37	0.00	150.0	± 9.6 %
		Y	4.11	67.92	16.54		150.0	
		Z	4.54	66.78	16.30		150.0	
10197- CAB	IEEE 802.11n (HT Mixed, 39 Mbps, 16- QAM)	X	4.76	67.13	16.48	0.00	150.0	± 9.6 %
		Y	4.23	68.00	16.69		150 0	
		Z	4.71	67.04	16.42		150.0	
10198- <u>C</u> AB	IEEE 802.11n (HT Mixed, 65 Mbps, 64- QAM)	X	4.79	67.15	16.50	0.00	150.0	± 9.6 %
		Y	4.22	67.91	16.64		150.0	<u> </u>
		Z	4.74	67.07	16.44	·	150.0	
10219- CAB	IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK)	X	4.53	66.88	16.34	0.00	150.0	± 9.6 %
		Y	4.08	68.06	16.58		150.0	
		Z	4.49	66.80	16.27		150.0	
10220- CAB	IEEE 802.11n (HT Mixed, 43.3 Mbps, 16- QAM)	X	4.76	67.10	16.47	0.00	150.0	± 9.6 %
		[Y]	4.22	67.96	16.67		150.0	
		Z	4.71	67.01	16.41		150.0	
10221- CAB	IEEE 802.11n (HT Mixed, 72.2 Mbps, 64- QAM)	X	4.80	67.08	16.48	0.00	150.0	±9.6 %
		Y	4.25	67.92	16.65		150.0	
		Z	4.75	67.00	16.42		150.0	
10222- CAB	IEEE 802.11n (HT Mixed, 15 Mbps, BPSK)	X	5.12	67.23	16.57	0.00	150.0	± 9.6 %
		Y	4.67	67.48	16.77		150 0	·
		Z	5.09	67.14	16.52		150.0	

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10223- CAB	IEEE 802.11n (HT Mixed, 90 Mbps, 16- QAM)	X	5.42	67.42	16.68	0.00	150.0	± 9.6 %
		Y	4.85	67.57	16.77		150.0	
		Z	5.40	67.40	16.67		150.0	
10224- CAB	IEEE 802.11n (HT Mixed, 150 Mbps, 64- QAM)	X	5.17	67.35	16.56	0.00	150.0	±9.6 %
		Y	4.71	67.68	16.79		150.0	
10225			5.13	67.25	16.51	0.00	150.0	
CAB		×	2.87	66.58	15.73	0.00	150.0	± 9.6 %
		Y	2.38	67.09	13.98		150.0	
10226		2	2.82	66.38	15.50	0.00		
CAA	16-QAM)		9.50	87.34	24.24	6.02	65.0	± 9.6 %
		- <u>Y</u> -	2.34	72.67	20.10		65.0	
10227		4	0.70	84.60	23.83	0.00	65.0	10.0 %
CAA	64-QAM)		8.72	84.77	22.80	6.02	65.0	±9.6%
		Y	2.21	71.55	18.95		65.0	
40000			6.78	83.00	22.65	0.00	65.0	
CAA	QPSK)	^	7.70	87.24	26.02	6.02	65.0	±9.6%
		<u>Y</u> -	2.35	71.63	21.26		65.0	
40000		4	5.43	82.72	24.92	0.00	65.0	
CAB	QAM)	^	9.03	86.38	23.83	6.02	65.0	±9.6%
	· · · · · · · · · · · · · · · · · · ·	Y	2.27	72.06	19.75		65.0	
10000		Z	6.67	83.69	23.42		65.0	
10230- CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64- QAM)	X	8.29	83.90	22.43	6.02	65.0	± 9.6 %
		Y	2.13	70.90	18.60		65.0	
		Z	6.44	82.12	22.26		65.0	
10231- CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	X	7.38	86.38	25.64	6.02	65.0	±9.6 %
		Y	2.30	71.12	20.95		65.0	
		Z	5.24	81.97	24.56		65.0	
10232- CAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16- QAM)	X	9.02	86.36	23.83	6.02	65.0	± 9.6 %
		Y	2.27	72.05	19.75		65.0	
		Ζ	6.65	83.67	23.41		65.0	
10233- CAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64- QAM)	X	8.28	83.89	22.42	6.02	65.0	± 9.6 %
		Y	2.13	70.87	18.59		65.0	
		Z	6.43	82.09	22.25		65.0	
10234- CAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	X	7.10	85.54	25.23	6.02	65.0	± 9.6 %
		Y	2.26	70.79	20.68		65.0	
		Z	5.08	81.30	24.19		65.0	
10235- CAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	X	9.02	86.38	23.84	6.02	65.0	± 9.6 %
		Y	2.27	72.05	19.76		65.0	
		Z	6.65	83.69	23.42		65.0	
10236- CAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	X	8.34	83.99	22.45	6.02	65.0	± 9.6 %
		Y	2.15	70.97	18.63		65.0	
		Z	6.48	82.21	22.28		65.0	
10237- CAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	X	7.38	86.43	25.66	6.02	65.0	± 9.6 %
		Y	2.30	71.11	20.95		65.0	
		Z	5.24	82.00	24.57		65.0	
10238- CAC	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	X	9.00	86.33	23.82	6.02	65.0	±9.6 %
		Y	2.26	72.03	19.74		65.0	
		Z	6.63	83.64	23.40		65.0	

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10239-	LTE-TDD (SC-FDMA, 1 RB, 15 MHz,	X	8.25	83.86	22.41	6.02	65.0	± 9.6 %
CAC	64-QAM)							
	·	Y	<u>2.13</u>	70.85	18.59		65.0	
40040		Z	6.41	82.06	22.24		65.0	
10240- CAC	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	X	7.36	86.38	25.64	6.02	65.0	± 9.6 %
		Y	2.30	71.11	20.95		65.0	
		Z	5.22	81.96	24.56		65.0	
10241- CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	X	7.65	78.90	23.86	6.98	65.0	± 9.6 %
		Y	4.15	74.63	23.03		65.0	
-		Z	6.65	77.23	23.41		65.0	
10242- CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	X	7.40	78.25	23.51	6.98	65.0	±9.6 %
		Y	3.84	73.21	22.33		65.0	
		Z	6.07	75.38	22.52		65.0	
10243- CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	X	6.13	75.50	23.22	6.98	65.0	± 9.6 %
		Y	3.68	71.24	22.18		65.0	
		Z	5.17	72.72	22.17		65.0	
10244- CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	X	4.96	71.78	16.23	3.98	65.0	± 9.6 %
		Y	1.47	60.59	6.86		65.0	
		Z	4.27	70.57	15.63		65.0	
10245- CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	X	4.90	71.39	16.01	3.98	65.0	± 9.6 %
		Y	1.47	60.48	6.73		65.0	
		Z	4.22	70.14	15.39		65.0	
10246- CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	X	4.94	75.03	17.94	3.98	65.0	± 9.6 %
		Y	1.46	62.04	8.51		65.0	
		Z	4.23	73.72	17.40		65.0	
10247- CAC	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	X	4.94	72.43	17.57	3.98	65.0	± 9.6 %
		Y	2.10	63.24	9.90		65.0	
		Z	4.38	71.34	17.07		65.0	
10248- CAC	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	Х	4.96	72.03	17.39	3.98	65.0	± 9.6 %
		Y	2.10	62.93	9.72		65.0	
		Z	4.40	70.92	16.87		65.0	
10249- CAC	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, OPSK)	X	6.07	78.35	20.13	3.98	65.0	± 9.6 %
		Y	2 33	67 19	12.94		65.0	
		Z	5.28	77.21	19.80		65.0	
10250- CAC	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	X	5.95	75.24	20.37	3.98	65.0	± 9.6 %
		Y	3.82	70.93	16.95		65.0	·
		Z	5.33	74.14	20.02		65.0	
10251- CAC	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	X	5.69	73.28	19.20	3.98	65.0	± 9.6 %
		Y	3,45	68.36	15 25	ł — — —	65.0	<u> </u>
		7	5.13	72 25	18.83		65.0	
10252- CAC	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	X	6.58	78.88	21.28	3.98	65.0	± 9.6 %
.		Y	4.11	75.12	18,99		65.0	· · · ·
		Z	5.80	77.80	21.07		65.0	1 .
10253- CAC	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	X	5.80	72.65	19.29	3.98	65.0	± 9.6 %
		İΥ	4.01	69.64	16.98	-	65.0	
		Ż	5.29	71.67	18.98		65.0	
10254- CAC	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	X	6.17	73.58	20.02	3.98	65.0	± 9.6 %
<u> </u>			4.31	70.68	17 76	· · · ·	65.0	<u> </u>
		Ż	5.63	72.60	19.71		65.0	
								1

10255-	LTE-TDD (SC-FDMA, 50% RB, 15 MHz,	X	6.29	76.23	20.52	3.98	65.0	± 9.6 %
CAC	QPSK)							
		Y	4.41	74.27	19.43	ļ	65.0	
10256-	LTE-TDD (SC-EDMA 100% BB 14		5.67	75.30	20.34	2 00	65.0	1069/
CAA	MHz, 16-QAM)	^	0,00	00.20	13.03	0.90	0.00	±9.0 %
		Y	1.05	58.86	4.54		65.0	
		Z	3.28	66.95	12.85		65.0	
10257-	LTE-TDD (SC-FDMA, 100% RB, 1.4	X	3.85	67.85	13.35	3.98	65.0	±9.6 %
CAA	MHZ, 64-QAM)		4.05	F0 75	1.00			
			1.05	<u>58.75</u> 66.51	4.30		65.0	
10258-	LTE-TDD (SC-FDMA, 100% RB, 1.4	X	3.78	70.85	15.35	3.98	65.0	+96%
CAA	MHz, QPSK)		011 0	/ 0.00	10.00	0.00	00.0	10.0 /0
		Y	1.11	60.00	5.99		65.0	
		Z	3.18	69.35	14.58		65.0	
10259-	LTE-TDD (SC-FDMA, 100% RB, 3 MHz,	X	5.33	73.49	18.59	3.98	65.0	± 9.6 %
			2.60	65.55	12.14		65.0	
		7	4.76	72 43	18 16		65.0	
10260-	LTE-TDD (SC-FDMA, 100% RB, 3 MHz,	X	5.38	73.29	18.52	3.98	65.0	± 9.6 %
CAB	64-QAM)							
		Y	2.62	65.36	12.01		65.0	
40004		Z	4.80	72.23	18.08		65.0	
10201-	LTE-TDD (SC-FDMA, 100% RB, 3 MHz,	×	6.02	/7.89	20,37	3.98	65.0	± 9.6 %
		Y I	2.87	69 70	14.96		65.0	1
		Ż	5.26	76.76	20.06		65.0	
10262-	LTE-TDD (SC-FDMA, 100% RB, 5 MHz,	X	5.94	75.19	20.32	3.98	65.0	± 9.6 %
CAC	16-QAM)							
		<u>Y</u>	3.80	70.83	16.88		65.0	
10060		Z	5.32	74.09	19.98	0.00	65.0	1000
10263- CAC	64-0AM)	^	5.68	/ 3.20	19.19	3.98	65.0	± 9.6 %
0/10		Y	3.45	68.35	15.24		65.0	
		Z	5.12	72.23	18.82		65.0	
10264-	LTE-TDD (SC-FDMA, 100% RB, 5 MHz,	X	6.52	78.70	21.19	3.98	65.0	± 9.6 %
CAC	QPSK)							
		Y Y	4.06	74.89	18.86		65.0	
10265			5./5	72.44	20.97	2.00	65.0	+06%
CAC	MHz 16-QAM)	^	0.92	1 73.14	19.02	3.90	05.0	19.0 %
		Y	4.14	70.23	17.64		65.0	
		Z	5.38	72.12	19.20		65.0	
10266-	LTE-TDD (SC-FDMA, 100% RB, 10	X	6.31	74.13	20.31	3.98	65.0	± 9.6 %
CAC	MHZ, 64-QAM)		4 40	74 50	18.00	<u> -</u>	GE O	
ļ		7 7	4.49	73.12	20.02		65.0	
10267-	LTE-TDD (SC-FDMA, 100% RB, 10	X	6,54	76.70	20.02	3,98	65.0	± 9.6 %
CAC	MHz, QPSK)		2.01					
		Y	4.64	75.05	19.89		65.0	
		Z	5.90	75.83	20.35		65.0	
10268-	LTE-TDD (SC-FDMA, 100% RB, 15	X	6.58	73.24	19.99	3.98	65.0	± 9.6 %
LAC			4 80	71.06	18.02		65.0	
	1	Z	6.05	72.29	19.72		65.0	
10269-	LTE-TDD (SC-FDMA, 100% RB, 15	x	6.56	72.88	19.90	3.98	65.0	± 9.6 %
CAC	MHz, 64-QAM)			<u> </u>	Į			
		Y	4.96	70.94	18.86		65.0	
40070			6.05	71.95	19.63	0.00	65.0	
	LTE-TDD (SC-FDMA, 100% RB, 15 MHz OPSK)	×	0.52	/4.64	19.82	3.98	0.00	±9.0 %
		Y	4.97	73.67	19.72	1	65.0	
- · ·		7	5.98	73.87	19.71	1	65.0	1

10274-	UMTS-FDD (HSUPA, Subtest 5, 3GPP	Х	2.66	67.03	15.70	0.00	150.0	± 9.6 %
CAB	Rel8.10)							
		Y	2.34	68.55	14.63		150.0	
10275.	LIMTS-EDD (HSLIPA Subtect 5 3CPP	 	2.62	60.41	15.48	0.00	150.0	
CAB	Rel8.4)	^	1.75	09.41	00.00	0.00	150.0	±9.6 %
		Y	2.02	74.91	18.12		150.0	
		Ζ	1.67	68.59	16.06		150.0	
10277-	PHS (QPSK)	Х	2.57	62.13	7.82	9.03	50.0	±9.6 %
	· · · · · · · · · · · · · · · · · · ·	Y	1.60	59.68	4.94		50.0	
10279		<u> </u>	2.20	61.44	7.11	- 0.00	50.0	
CAA	FHS(QFSR,BW,OO4WIDZ,RUIIOII,U.3)	^	4.20	09.41	14.02	9.03	50.0	±9.6%
		Y	2.29	61.84	7.55		50.0	
		Z	3.87	68.64	13.41		50.0	
10279-	PHS (QPSK, BW 884MHz, Rolloff 0.38)	X	4.37	69.66	14.18	9.03	50.0	± 9.6 %
CAA	· · · · · · · · · · · · · · · · · · ·							
		Y	2.31	61.88	7.61		50.0	
		Ζ	3.97	68.90	13.58		<u>5</u> 0.0	
10290-	CDMA2000, RC1, SO55, Full Rate	Х	1.85	72.31	15.88	0.00	150.0	±9.6 %
AAB		v	0.26	60.00	5 00		450.0	
	· · · · · · · · · · · · · · · · · · ·	ז 7	0.30	70.17	0.29		150.0	
10291-	CDMA2000 RC3 SO55 Full Rate	X	1.00	68.88	14.05	0.00	150.0	+96%
AAB		^	1.02	00.00	14.00	0.00	150.0	1 3.0 %
		Y	0.28	60.00	5.31		150.0	
		Ζ	0.90	67.15	13.20		150.0	
10292-	CDMA2000, RC3, SO32, Full Rate	Х	1.80	77.95	18.61	0.00	150.0	± 9.6 %
AAB								
		Y	0.38	62.69	7.21		150.0	
40000		Z	1.39	74.03	16.69		150.0	
10293-	CDMA2000, RC3, SO3, Full Rate	X	5.83	95.82	25.10	0.00	150.0	±9.6 %
		V	100.00	107.50	20.43		150.0	
		7	3 54	87 74	20.45		150.0	
10295-	CDMA2000, RC1, SO3, 1/8th Rate 25 fr.	X	7.34	78 85	20.80	9.03	50.0	+96%
AAB				,				2010 //
		Y	17.07	85.10	19.02		50.0	
		Ζ	7.80	80.40	21.29		50.0	
10297-	LTE-FDD (SC-FDMA, 50% RB, 20 MHz,	Х	2.92	70.76	17.30	0.00	150.0	± 9.6 %
AAB	QPSK)	v-	0.00	70.07			150.0	
		Y 7	2.60	72.27	18.25		150.0	
10298-	LTE-EDD (SC-EDMA 50% PB 3 MHz	2 V	2.00	70.10	16.98	0.00	150.0	+06%
AAC	QPSK)		1.01	09.90	10.49	0.00	150.0	± 9.0 %
		Y	0.52	60.00	6.04		150.0	-
	· .	Ż	1.63	68.52	14.51		150.0	
10299-	LTE-FDD (SC-FDMA, 50% RB, 3 MHz,	Х	2.47	68.97	14.03	0.00	150.0	± 9.6 %
AAC	16-QAM)							
		Y	0.58	60.00	4.73		150.0	
		Z	2.10	67.38	13.05		150.0	
10300-	LTE-FDD (SC-FDMA, 50% RB, 3 MHz,	X	1.87	64.64	11.20	0.00	150.0	±9.6 %
	64-QAM)	~	0.50	00.00	4.04		450.0	
		Y 7	0.56	60.00	4.04		150.0	
10301-	IEEE 802 16e W/MAX /20:18 5mc		1.04	64.00	10.41	4 17	50.0	+06%
AAA	10MHz, QPSK, PUSC)	^	4.04	04.39	11.52	4.17	JU.0	1 9.0 %
		Y	3.97	66.09	16.87		50.0	
<u> </u>	· · · · · · · · · · · · · · · · · · ·	Ż	4.63	65.19	17.38		50.0	
10302-	IEEE 802.16e WIMAX (29:18, 5ms,	x	5.19	65.93	18.20	4.96	50.0	± 9.6 %
AAA	10MHz, QPSK, PUSC, 3 CTRL symbols)	L						
		Y	4.41	66.55	17.60		50.0	
		Z	5.08	65.68	18.02	1	50.0	

10303- AAA	IEEE 802.16e WIMAX (31:15, 5ms, 10MHz, 64QAM, PUSC)	X	4.95	65.59	18.05	4.96	50.0	± 9.6 %
		Y	4.26	66.62	17.49		50.0	
		Z	4.83	65.30	17,84		50.0	
10304- AAA	IEEE 802.16e WIMAX (29:18, 5ms, 10MHz, 64QAM, PUSC)	X	4.75	65.47	17.56	4.17	50.0	± 9.6 %
		Y	4.05	66.34	16.93		50.0	
10205		Z	4.65	65.23	17.38		50.0	
AAA	IEEE 802.166 WIMAX (31:15, 10ms, 10MHz, 64QAM, PUSC, 15 symbols)	X	4.49	67.73	19.78	6.02	35.0	± 9.6 %
		Y	3.71	67.28	16.67		35.0	
10306- AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 64QAM, PUSC, 18 symbols)	X	4.28	66.48	19.23 19.22	6.02	35.0	± 9.6 %
		Y	4.04	67.06	17.49		35.0	
		Z	4.60	65.99	18.86		35.0	
10307- AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, PUSC, 18 symbols)	X	4.67	66.74	19.24	6.02	35.0	± 9.6 %
		Y	3.93	66.99	17.33		35.0	
4000		Z	4.50	66.15	18.83		35.0	
10308- AAA	IEEE 802.166 WIMAX (29:18, 10ms, 10MHz, 16QAM, PUSC)	X	4.65	66.96	19.39	6.02	35.0	± 9.6 %
			3.96	67.42	17.62		35.0	
10309-	IFFF 802 16e WiMAX (29:18, 10ms		4.47	66.69	10.90	6.02	35.0	+96%
AAA	10MHz, 16QAM, AMC 2x3, 18 symbols)		4.00	67.23	17.69	0.02	35.0	T 9.0 %
		7	4.07	66 17	18.98		35.0	
10310- AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, AMC 2x3, 18 symbols)	X	4.70	66.58	19.22	6.02	35.0	± 9.6 %
		TY	4.03	67.27	17.61		35.0	
		Z	4.55	66.06	18.84		35.0	
10311- AAB	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	X	3.29	69.98	16.90	0.00	150.0	± 9.6 %
		Y	2.90	70.63	17.62		150.0	
10313	iDEN 1:3		3.17	09.35	10.00	6.00	150.0	+06%
AAA			2.53	70.03	15.90	0.55	70.0	1 9.0 %
	·	7	2.00	70.12	14.78		70.0	
10314- AAA	IDEN 1:6	X	4.28	75.46	19.37	10.00	30.0	± 9.6 %
		Y	4.79	80.62	22.06		30.0	
		Z	4.09	76.26	19.99		30.0	
10315- AAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 96pc duty cycle)	X	1.12	64.41	15.77	0.17	150.0	± 9.6 %
		<u> ¥ </u>	1.15	65.92	16.47	ļ	150.0	
10216			1.10	63.89	15.39	0.17	150.0	+06%
AAB	OFDM, 6 Mbps, 96pc duty cycle)		4.61	67.47	16.37	0.17	150.0	±9.6 %
		7	4.09	66.65	16.39		150.0	
10317- AAB	IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle)	X	4.61	66.72	16.37	0.17	150.0	± 9.6 %
		Y	4.09	67.47	16.39		150.0	
		Z	4.56	66.65	16.32		150.0	· · ·
10400- AAC	IEEE 802.11ac WiFi (20MHz, 64-QAM, 99pc duty cycle)	X	4.74	67.15	16.46	0.00	150.0	± 9.6 %
		Y	4.09	67.65	16.48		150.0	
10121		Z	4.69	67.06	16.40		150.0	10.0.0
10401- AAC	IEEE 802.11ac WIFI (40MHz, 64-QAM, 99pc duly cycle)	X	5.44	67.31	16.60	0.00	150.0	± 9.6 %
		Y 7	4.84 5.42	67.27	16.60		150.0	
		· •	· · · · · · · · · · · · · · · · · · ·	1 11.21	10.01			

10402-	IEEE 802.11ac WIFi (80MHz, 64-QAM,	X	5.69	67.61	16.60	0.00	150.0	± 9.6 %
AAC		+ -	5 04	67.70	46.00		450.0	<u> </u>
		+	5.65	67.50	10.00		150.0	
10403-	CDMA2000 (1xEV-DO_Rev_0)		1.85	72.31	15.88	0.00	1150.0	+06%
AAB			1.00	12.01	15.66	0.00	115.0	I9.0 %
		Y	0.36	60.00	5.29		115.0	
		Z	1.58	70.17	14.63		115.0	
10404-	CDMA2000 (1xEV-DO, Rev. A)	X	1.85	72.31	15.88	0.00	115.0	± 9.6 %
AAB								
		Y	0.36	60.00	5.29		115.0	
40400		<u>Z</u> .	1.58	70.17	14.63		115.0	
10406-	CDMA2000, RC3, SO32, SCH0, Full	X	53.12	115.17	29.24	0.00	100.0	± 9.6 %
AAB		~	100.00	404.05	07.70			
		ř 7	100.00	124.65	27.76		100.0	
10/10-			20.03	109.13	27.97	0.00	100.0	
AAB	QPSK, UL Subframe=2.3.4.7.8.9	^	0.00	03.00	19.17	3.23	00.0	±9.0%
		Y	1.37	73.33	16.57	· · · ·	80.0	
		z	5.13	82.70	19.33		80.0	
10415-	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1	X	1.04	63.68	15.36	0.00	150.0	+96%
AAA	Mbps, 99pc duty cycle)							
		Y	1.11	65.66	16.32		150.0	
		Z	1.04	63.32	15.03		150.0	
10416-	IEEE 802.11g WiFi 2.4 GHz (ERP-	X	4.58	66.83	16.42	0.00	150.0	± 9.6 %
	OFDM, 6 Mbps, 99pc duty cycle)							
		Y	4.11	67.78	16.58		150.0	
40447		Z	4.54	66.76	16.35		150.0	
10417-	IEEE 802.11a/h WIFI 5 GHz (OFDM, 6	X	4.58	66.83	16.42	0.00	150.0	± 9.6 %
<u> </u>		v		67.70	40 50		450.0	
			4.11	66 76	16.35		150.0	
10418-	IEEE 802 110 WiEi 2 4 GHz (DSSS-		4.04	67.00	16.44	0.00	150.0	
AAA	OFDM, 6 Mbps, 99pc duty cycle, Long		4.57	07.00	10.44	0.00	150.0	±9.0 %
					10.00			
		Y 7	4.09	68.01	16.69		150.0	
10/10.			4.53	66.93	16.39	0.00	150.0	
AAA	OFDM, 6 Mbps, 99pc duty cycle, Short preambule)		4.59	00.94	16.44	0.00	150.0	±9.6 %
		Y	4.11	67.93	16.65		150.0	
		Z	4.55	66.87	_ 16.38_		150.0	
10422- AAA	IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK)	X	4.71	66.93	16.45	0.00	150.0	± 9.6 %
		Υ	4.19	67.82	16.64		150.0	
		Z	4.66	66.86	16.39		150.0	
10423- 	IEEE 802.11n (HT Greenfield, 43.3 Mbps, 16-QAM)	X	4.87	67.25	16.56	0.00	150.0	± 9.6 %
		Y	4.27	68.04	16.70		150.0	
		Z	4.82	67.16	16.50		150.0	
10424- AAA	IEEE 802.11n (HT Greenfield, 72.2 Mbps, 64-QAM)	X	4.79	67.20	16.54	0.00	150.0	± 9.6 %
		Y	4.21	67.94	16.67		150.0	
		Z	4.74	67.12	16.47		150.0	
10425- AAA	IEEE 802.11n (HT Greenfield, 15 Mbps, BPSK)	X	5.39	67.48	16.69	0.00	150.0	± 9.6 %
		Y	4.86	67.72	16.85	·	150.0	
		Z	5.35	67.38	16.64		150.0	
10426- AAA	IEEE 802.11n (HT Greenfield, 90 Mbps, 16-QAM)	X	5.40	67.51	16.70	0.00	150.0	±9.6 %
		Y	4.89	67.85	16.91		150.0	
		Z	5.37	67.47	16.68		150.0	

10427-	IEEE 802.11n (HT Greenfield, 150 Mbps,	X	5.41	67.49	16.68	0.00	150.0	± 9.6 %
	64-QAM)	$\left - \right\rangle$	4 97	67.74	46.00		450.0	
		7	<u>4.07</u> 5.37	67.41	16.64		150.0	
10430- AAA	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1)	X	4.48	71.93	18.89	0.00	150.0	± 9.6 %
		Y	5.16	77.88	19.19		150.0	
10/31		Z	4.43	71.96	18.79		150.0	
			4.27	67.46	16.46	0.00	150.0	±9.6%
		Y	3.63	68.54	16.11		150.0	
10432-	LTE-EDD (OEDMA 15 MHz E-TM 3.1)		4.21	67.36	16.35	0.00	150.0	+96%
AAA			4.00	07.20	10.00	0.00	150.0	1 9.0 %
			3.98	68.25	16.55		150.0	
10433-	LTE-EDD (OEDMA, 20 MHz, E-TM 3 1)		4.01	67.19	16.56	0.00	150.0	+96%
AAA				07.21	10.00		100.0	± 5.0 %
			4.24	67.15	16.70		150.0	
10434-	W-CDMA (BS Test Model 1 64 DPCH)		4.70	73.09	18.99	0.00	150.0	+96%
AAA			1.07	74.00	10.00		100.0	10.0 //
·	· · · · · · · · · · · · · · · · · · ·	Y Z	4.20	74.62	16.81		150.0	
10435-	LTE-TOD (SC-EDMA 1 8B 20 MHz	X	6.37	82.80	18.04	3.23	80.0	+96%
AAB	QPSK, UL Subframe=2,3,4,7,8,9)		0.07		10.00	0.20	00.0	10.070
		Y	1.33	72.76	16.26		80.0	
10447-	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1,	X	3.58	67.63	15.88	0.00	150.0	± 9.6 %
		Y	2.52	66.35	12.95		150.0	
·		Ż	3.50	67.43	15.64		150.0	
10448- AAA	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, Clippin 44%)	X	4.11	67.25	16.33	0.00	150.0	± 9.6 %
		Y	3.54	68.41	16.05		150.0	
10110		Z	4.05	67.14	16.22		150.0	
10449- AAA	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1, Cliping 44%)	X	4.38	67.12	16.41	0.00	150.0	±9.6 %
		Y	3.87	68.13	16.50		150.0	
10450-	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1,	2 X	4.33	67.03	16.42	0.00	150.0	± 9.6 %
AAA	Clipping 44%)	Y	4 09	67.80	16 59		150.0	
		z	4.53	66.93	16.35		150.0	
10451- AAA	W-CDMA (BS Test Model 1, 64 DPCH, Clipping 44%)	X	3.49	67.88	15.53	0.00	150.0	± 9.6 %
		Y	2.00	64.08	10.79		150.0	
		Z	3.38	67.58	15.21		150.0	
10456- AAA	IEEE 802.11ac WiFi (160MHz, 64-QAM, 99pc duty cycle)	X	6.26	68.00	16.81	0.00	150.0	±9.6 %
		Y	6.16	68.95	17.43		150.0	
10457			6.24	67.94	16.79	0.00	150.0	+06%
AAA			3.0Z	00.40	10.13	0.00	100.0	1 9.0 %
		Y	3.61	66.92	16.42		150.0	
10458-	CDMA2000 (1xEV-DO Rev B 2		3.01	67 12	14.89	0.00	150.0	+96%
AAA	carriers)		1 4 4	60.50	7 40		150.0	20.070
		+ ¥	3.18	66 78	1.42		150.0	
10459-	CDMA2000 (1xEV-DO, Rev. B, 3	X	4.43	65.51	15.86	0.00	150.0	± 9.6 %
	camers)	Y	2.62	61.35	10.29		150.0	
		Ż	4.37	65.53	15.72	· ·	150.0	

10460-	UMTS-FDD (WCDMA, AMR)	X	1.04	71.02	17.96	0.00	150.0	± 9.6 %
		v	1 96	84.00	22.02		150.0	
		7	0.97	69.34	16.98		150.0	
10461- AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK, UL Subframe=2.3.4.7.8.9)	X	3.48	77.15	17.91	3.29	80.0	± 9.6 %
		Y	0.97	69.25	15.91		80.0	
(0100		Z	2.58	75.48	17.77		80.0	
10462- AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	1.03	60.33	8.14	3.23	80.0	± 9.6 %
		Y 7	0.21	55.42	3.53		80.0	
10463-	LTE-TOD (SC-EDMA_1 RB_14 MHz	2 X	0.64 1.01	60.00	7.93	3.23	80.0	+96%
AAA	64-QAM, UL Subframe=2,3,4,7,8,9)		1.01	00.00	7.01	0.20	00.0	± 3.0 %
<u> </u>		Y	28.36	203.22	3.05		80.0	
10464-		4	0.86	60.00	7.39	2.02	80.0	
	QPSK, UL Subframe=2,3,4,7,8,9)		2.04	10.32	10.90	3.23	80.0	I 9.0 %
		Y 7	0.75	66.12 72.11	13.77		80.0	
10465-	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-	X	0.99	60.00	7.91	3.23	80.0	± 9.6 %
AAA	QAM, UL Subframe=2,3,4,7,8,9)							//
		<u>Y</u> .	29.96	194.97	5.15		80.0	
10466-		- 4 -	0.84	60.00	7.86	2.02	80.0	1000
AAA	QAM, UL Subframe=2,3,4,7,8,9)		1.01	60.00	7.40	3.23	80.0	±9.6 %
		Y	30.98	196.96	1.83		80.0	
10467- AAB	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK_UL_Subframe=2.3.4.7.8.9)	X	2.77	73.96		3.23	80.0	± 9.6 %
		Y	0.77	66.65	14.10		80.0	
		Ζ	2.12	72.73	16.19		80.0	
10468- AAB	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	X	0.99	60.08	7.96	3.23	80.0	±9.6 %
		Y	0.21	55.39	3.50		80.0	
10460		Z	0.84	60.00	7.88	0.00	80.0	1000
AAB	QAM, UL Subframe=2,3,4,7,8,9		1.01	60.00	7.40	3.23	80.0	± 9.6 %
	- · · · · · · · · · · · · · · · · · · ·	Y 7	30.66	197.41	1.31		80.0	
10470- AAB	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2.3.4.7.8.9)	X	2.76	73.94	16.23	3.23	80.0	± 9.6 %
		Y	0.77	66.67	14.10		80.0	
		Ζ	2.11	72.72	16.18		80.0	
10471- AAB	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	х	0.99	60.05	7.93	3.23	80.0	± 9.6 %
	· · · · · · · · · · · · · · · · · · ·	Y	29.34	196.18	6.49		80.0	
10472		Z	0.84	60.00	7.87	0.00	80.0	
AAB	QAM, UL Subframe=2,3,4,7,8,9)	^	1.01	80.00	7.40	3.23	80.0	± 9.6 %
		Y	30.49	197.73	1.27		80.0	
10473-	LTE-TOD (SC-FDMA_1 RB_15 MHz	X	2.76	73.00	16.22	3 23	80.0	+06%
AAB	QPSK, UL Subframe=2,3,4,7,8,9)		2.70	10.00	10.22	0.20	00.0	1 9.0 %
		Y 7	2 11	72 60	14.08		0.08	
10474- AAB	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16- QAM_UI_Subframe=2.3.4.7.8.9)	X	0.99	60.03	7.93	3.23	80.0	± 9.6 %
		Y	29.25	196.25	6.42		80.0	
		Z	0.84	60.00	7.87	<u> </u>	80.0	
10475- AAB	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	X	1.01	60.00	7.45	3.23	80.0	±9.6 %
		Y	30.47	197.62	1.42		80.0	
		Z	0.86	60.00	7.33		80.0	

10477- AAB	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	X	0.98	60.00	7.89	3.23	80.0	±9.6 %
		Y	29.49	195.72	5.56		80.0	
		Ζ	0.84	60.00	7.84		80.0	
10478- 	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	X	1.01	60.00	7.44	3.23	80.0	± 9.6 %
		Y	30.62	197.39	1.80		80.0	
10470-		<u> </u>	0.86	60.00	7.32	2.00	80.0	
AAA	QPSK, UL Subframe=2,3,4,7,8,9)		3.00	74.90	10.39	3.23	80.0	± 9.6 %
		7	2.49	74.50	19.20		80.0	
10480- AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	3.37	69.78	14.78	3.23	80.0	± 9.6 %
		Y	0.68	60.27	8.31		80.0	
		Ζ	2.92	69.11	14.47		80.0	
10481- AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	2.92	67.65	13.55	3.23	80.0	± 9.6 %
		Y	0.66	60.00	7.51		80.0	
10402		Z	2.50	66.84	13.14	0.00	80.0	1000
AAA	QPSK, UL Subframe=2,3,4,7,8,9)	X	2.52	68.86	15.13	2.23	80.0	± 9.6 %
		- Y - 7	0.83	60.00	6.91		80.0	
10483-	LTE-TDD (SC-EDMA 50% RB 3 MHz	. <u>4</u>	2.14	67.07	14.41	2.23	80.0	+96%
AAA	16-QAM, UL Subframe=2,3,4,7,8,9)		4.05	60.00	5.00	2,20	00.0	2 3.0 %
		ř 7	2.44	65.91	5.62		80.0	
10484- AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Subframe=2 3 4 7 8 9)	X	2.80	66.60	13.51	2.23	80.0	± 9.6 %
		Y	1.07	60.00	5.60		80.0	
		Ζ	2.40	65.34	12.79		80.0	
10485- AAB	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	2.96	70.85	16.91	2.23	80.0	± 9.6 %
		Y	1.17	62.58	10.56		80.0	<u> </u>
40400		Z	2.58	69.54	16.39	0.00	80.0	
AAB	16-QAM, UL Subframe=2,3,4,7,8,9)		2.90	07.72	15.13	2.23	80.0	±9.0 %
		Y 7	1.13	66.76	14.61		80.0	
10487-	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-OAM UL Subframe=2.3.4.7.8.9)	X	2.97	67.43	14.99	2.23	80.0	± 9.6 %
7010		Y -	1.16	60.00	7.81		80.0	
		Ż	2.67	66.49	14.47		80.0	
10488- AAB	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	3.38	70.90	17.67	2.23	80.0	± 9.6 %
		Y	2.25	69.00	16.17		80.0	
		Z	3.02	69.76	17.29	0.00	80.0	
10489- AAB	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	3.39	68.12	16.57	2.23	80.0	± 9.6 %
			2.32	66.16	14.18		80.0	
10400			3.13	68.02	16.20	2.23	80.0	+96%
AAB	64-QAM, UL Subframe=2,3,4,7,8,9)		0.49	00.02	10.04	2.25	00.0	1 9.0 %
			2.33	67 30	16.25		80.0	
10491-	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, OPSK_UL_Subframe=2.3.4.7.8.9)	X	3.68	69.90	17.42	2.23	80.0	± 9.6 %
		Y	2.62	68.57	16.67		80.0	
		Z	3.36	68.97	17.13	<u> </u>	80.0	
10492- AAB	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM, UL Subframe=2.3.4.7.8.9)	X	3.77	67.68	16.72	2.23	80.0	±9.6 %
		Y	2.84	66.78	15.53		80.0	
1		Z	3.53	67.02	16.47		80.0	

10493- AAB	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM, UL Subframe=2.3.4.7.8.9)	X	3.84	67.59	16.70	2.23	80.0	± 9.6 %
		Y	2.87	66.60	15.40		80.0	
		Z	3.60	66.95	16.45		80.0	
10494- AAB	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	3.93	71.14	17.78	2.23	80.0	± 9.6 %
		Y	2.77	69.47	17.23		80.0	
		Z	3.56	70.11	17.48		80.0	_
10495- AAB	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	3.80	68.03	16.89	2.23	80.0	± 9.6 %
		Y	2,91	67.12	16.06		80.0	
		Z	3.55	67.32	16.64		80.0	
10496- AAB	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	3.89	67.83	16.85	2.23	80.0	± 9.6 %
		Y	2.99	66.99	16.00		80.0	
40.407		Z	3.64	67.16	16.61		80.0	
10497- AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	1.81	64.83	12.37	2.23	80.0	± 9.6 %
		Y	0.97	60.00	4.80		80.0	
40400		Z	1.52	63.38	11.47		80.0	
10498- AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	1.56	60.98	9.46	2.23	80.0	± 9.6 %
		Y	19.60	209.65	15.97		80.0	
		Ζ	1.35	60.00	8.64		80.0	
10499- AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	×	1.53	60.58	9.11	2.23	80.0	± 9.6 %
		Y	17.31	229.94	<u>5.5</u> 2		80.0	
		Z	1.37	60.00	8.51		80.0	
10500- AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	3.10	70.67	17.16	2.23	80.0	± 9.6 %
		Y	1.60	65.48	12.91		80.0	
		Z	2.73	69.49	16.71		80.0	
10501- AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	3.16	67.97	15.73	2.23	80.0	±9.6 %
_		Y	1.34	60.72	9.33		80.0	
10500		Z	2.88	67.15	15.31		80.0	
10502- AAA	64-QAM, UL Subframe=2,3,4,7,8,9)	X	3.22	67.87	15.63	2,23	80.0	± 9.6 %
		<u>Y</u>	1.33	60.43	9.07		80.0	
40500		Z	2.93	67.06	15.21		80.0	
10503- AAB	QPSK, UL Subframe=2,3,4,7,8,9)	×	3.34	70.72	17.57	2.23	80.0	± 9.6 %
		Y -	2.22	68.78	16.06		80.0	
40504			2.98	69.59	17.20		80.0	
AAB	16-QAM, UL Subframe=2,3,4,7,8,9)		3.37	68.03	16.51	2.23	80.0	± 9.6 %
			2.30	00.01	14.09		80.0	·
10505			0.11	67.02	10.20	0.00	80.0	
AAB	64-QAM, UL Subframe=2,3,4,7,8,9)		0.04	07.93	10.49	2.23	00.0	±9.0 %
<u> </u>		7	2.37	67.00	13.87	<u> </u>	0.06	
10506-			3.00	71.01	17 74	2.22	80.0	+0.6.04
AAB	MHz, QPSK, UL Subframe=2,3,4,7,8,9)		0.75	71.01	47.45	2.23	00.0	± 9.0 %
}			2.10	60.00	17.10			+
10507-	LTE-TDD (SC-EDMA_100% RB_10		3 78	67 97	16.95	2.22	80.0	+96%
AAB	MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)		0.10	01.31	10.00	2.20		13.0 %
		Y	2.90	67.04	16.01		80.0	
		ΙZ	3.53	67.26	16.61		80.0	

10508- AAB	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM, UL Subformer 2, 2, 4, 7, 8, 0)	X	3.87	67.76	16.81	2.23	80.0	± 9.6 %
	Subtrame=2,3,4,7,8,9)		0.07		45.05			
		Y 7	2.97	66.90	15.95		80.0	
10509-	LTE-TOD (SC-EDMA 100% PR 15		<u> </u>	07.09	10.57	2.02	80.0	
AAB	MHz, QPSK, UL Subframe=2,3,4,7,8,9)		4.29	70.13	17.39	2.23	80.0	±9.6 %
		<u> Y</u>	3.19	68.68	17.10		80.0	
40540			3.96	69.31	17.16		80.0	
AAB	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	×	4.29	67.87	16.94	2.23	80.0	± 9.6 %
		I Y I	3.35	66.74	16.37		80.0	
		Z	4.04	67.22	16.73		80.0	
10511- AAB	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	4.35	67.67	16.90	2.23	80.0	± 9.6 %
		Y	3.43	66.67	16.35		80.0	
		Z	4.11	67.05	16.70		80.0	
10512- AAB	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	4.41	71.37	17.74	2.23	80.0	± 9.6 %
		I Y	3.20	69.31	17.29		80.0	
		Z	4.03	70.41	17.47		80.0	
10513- AAB	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	4.17	68.08	17.01	2.23	80.0	± 9.6 %
		Y	3.27	66.70	16.44		80.0	
		Z	3.92	67.38	16.78		80.0	
10514- AAB	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	4.20	67.73	16.93	2.23	80.0	± 9.6 %
		Y	3.34	66.53	16.38		80.0	
		Z	3.96	67.07	16.71		80.0	
10515- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 99pc duty cycle)	X	1.01	63.92	15.46	0.00	150.0	± 9.6 %
		Y	1.07	66.05	16.52		150.0	
		Z	1.00	63.52	15.11		150.0	
10516- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc duty cycle)	X	0.80	76.03	20.57	0.00	150.0	± 9.6 %
		Y	1.63	90.26	26.95		150.0	
		Z	0.67	72.14	18.59		150.0	0.0.0/
10517- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, <u>99pc duty cycle)</u>	X	0.88	66.52	16.52	0.00	150.0	± 9.6 %
		Y	0.99	69.72	18.29		150.0	
		Z	0.86	65.67	15.91		150.0	
10518- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc duly cycle)	X	4.57	66.91	16.40	0.00	150.0	± 9.6 %
	··· ··	<u> </u>	4.10	67.98	16.63		150.0	
			4.53	66.84	16.34	0.00		100%
10519- AAA	Mbps, 99pc duty cycle)	X	4.75	67.14	16.51	0.00	150.0	± 9.6 %
		<u>Y</u>	4.20	68.09	16.69		150.0	
40500		<u> <u></u></u>	4.70	07.05	16.44		150.0	+0.00
10520- AAA	Mbps, 99pc duty cycle)	X	4.61	67.11	16.44	0.00	150.0	±9.6 %
		<u>Y</u>	4.07	67.97	10.60		150.0	<u> </u>
10521-	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24	X	4.56	67.01	16.37	0.00	150.0	± 9.6 %
~~~	wops, sope duty cycley		4 00	67.83	16.53		150.0	<u> </u>
<b>├</b> ──		7	4.00	67.00	16 36	┢╺────	150.0	
10522- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36	X	4.60	67.20	16.52	0.00	150.0	± 9.6 %
		Y	4,00	67.82	16.53	1	150.0	
		Z	4.55	67.12	16.45	[·	150.0	

10523- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 99pc duty cycle)	X	4.49	67.08	16.37	0.00	150.0	± 9.6 %
			4 01	68 16	16.68		150.0	·
		Ż	4.44	67.01	16.31		150.0	
10524- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc duty cycle)	x	4.54	67.12	16.48	0.00	150.0	± 9.6 %
		Y	3.97	67.92	16.63		150.0	
		Z	4.49	67.03	16.42		150.0	
10525- AAA	IEEE 802.11ac WiFi (20MHz, MCS0, 99pc duty cycle)	X	4.54	66.18	16.08	0.00	150.0	± 9.6 %
	· · · · · · · · · · · · · · · · · · ·	<u>Y</u>	4.09	67.26	16.38		150.0	
10500		Z	4.50	66.10	16.02		150.0	
<u>A</u> AA	99pc duty cycle)	X	4.71	66.55	16.22	0.00	150.0	± 9.6 %
		Y J	4.14	67.37	16.43		150.0	
10527		- <del></del> -	4.65	66.45	16.16	0.00	150.0	
	99pc duly cycle)		4.63	66.51	16.17	0.00	150.0	± 9.6 %
			4.11	67.44	16.42		150.0	
10528-			4.58	66.52	16.10	0.00	150.0	
	99pc duty cycle)		4.04	00.00	10.20	0.00	150.0	±9.6 %
	· · · · · · · · · · · · · · · · · · ·		4.10	07.35	16.39		150.0	
10529-	IEEE 802 11ac WiEi (20MHz MCS4		4.09	66.53	16.13	0.00	150.0	+06 1/
AAA	99pc duty cycle)		4.04	00.00	10.20	0.00	150.0	I 9.0 %
		Y J	4.10	67.35	16.39		150.0	
10531-			4.59	66.42	16.13	- 00	150.0	
AAA	99pc duty cycle)	×	4.64	66.64	16.22	0.00	150.0	± 9.6 %
		<u> </u>	4.06	67.36	16.37		150.0	
10522		+	4.58	66.51	16.14		150.0	
AAA	99pc duty cycle)	X	4.50	66.50	16.16	0.00	150.0	±9.6%
			3.98	67.28	16.33		150.0	
10533-			4.44	66.37	16.07	0.00	150.0	
AAA	99pc duty cycle)		4.00	00.00	10.19	0.00	150.0	±9.6 %
			4.11	67.58	16.46		150.0	
10534-	IEEE 802 11ac WiEi (40MHz_MCS0		4.00	66 50	16.13	0.00	150.0	+06%
AAA	99pc duty cycle)		4.70	66.06	16.25	0.00	150.0	± 9.0 %
			<u>4.70</u> 5.12	66.49	16.45		150.0	
10535- AAA	IEEE 802.11ac WIFi (40MHz, MCS1, 99pc duty cycle)	X	5.24	66.77	16.31	0.00	150.0	± 9.6 %
		T Y	4,70	67.00	16 48		150.0	
		Z	5.20	66.68	16.26		150.0	
10536- AAA	IEEE 802.11ac WIFi (40MHz, MCS2, 99pc duty cycle)	X	5.11	66.73	16.27	0.00	150.0	± 9.6 %
		Y	4.62	67.02	16.47		150.0	
		Z	5.07	66.63	16.22		150.0	
10537- AAA	IEEE 802.11ac WiFi (40MHz, MCS3, 99pc duty cycle)	X	5.17	66.69	16.25	0.00	150.0	± 9.6 %
		Y	4.71	67.16	16.55		150.0	
		Z	5.13	66.59	16.20		<u>150</u> .0	
10538- AAA	IEEE 802.11ac WiFi (40MHz, MCS4, 99pc duty cycle)	X	5.26	66.70	16.30	0.00	150.0	± 9.6 %
		Y	4.72	66.92	16.45		150.0	
		Z	5.21	66.59	16.24		150.0	
10540- AAA	IEEE 802.11ac WiFi (40MHz, MCS6, 99pc duty cycle)	X	5.19	66.73	16.33	0.00	150.0	±9.6 %
		Y	4.66	66.87	16.46		150.0	
		ΙzΤ	5.14	66.60	16.27		150.0	

10541- AAA	IEEE 802.11ac WiFi (40MHz, MCS7, 99pc duty cycle)	X	5.16	66.59	16.25	0.00	150.0	± 9.6 %
		Y	4.67	66.90	16.44		150.0	
		Z	5.12	66.48	16.19		150.0	-
10542- AAA	IEEE 802.11ac WiFi (40MHz, MCS8, 99pc duty cycle)	X	5.31	66.65	16.29	0.00	150.0	± 9.6 %
		Y	4.80	66.97	16.49		150.0	
10542			5.27	66.55	16.25		150.0	
AAA	99pc duty cycle)		5.39	66.68	16.33	0.00	150.0	± 9.6 %
			4.85	67.01	16.54		150.0	
10544- AAA	IEEE 802.11ac WiFi (80MHz, MCS0, 99pc duly cycle)	X	<u> </u>	66.68	16.28	0.00	150.0	± 9.6 %
		Τγ	5.09	66.77	16.36		150.0	
		Z	5.46	66.59	16.17		150.0	
10545- AAA	IEEE 802.11ac WiFi (80MHz, MCS1, 99pc duty cycle)	X	5.68	67.10	16.37	0.00	150.0	± 9.6 %
		Y	5.20	67.11	16.51		150.0	
10546		Z	5.65	67.02	16.33		150.0	
10546- AAA	99pc duty cycle)	X	5.55	66.89	16.28	0.00	150.0	± 9.6 %
		Y	5.10	66.84	16.37		150.0	
10547-	1555 802 11ac W/61 (80MHz MCS2		5.51	66.02	16.22	0.00	150.0	
AAA	99pc duty cycle)		5.02	00.93	10.29	0.00	150.0	±9.6%
		Y 7	5.22	67.15	16.53		150.0	
10548- AAA	IEEE 802.11ac WIFi (80MHz, MCS4, 99oc duty cycle)	X	5.87	67.85	16.24	0.00	150.0	± 9.6 %
		Y Y	5 13	67.04	16 46		150.0	
		Z	5.82	67.71	16.65	<u> </u>	150.0	
10550- <u>A</u> AA	IEEE 802.11ac WiFi (80MHz, MCS6, 99pc duty cycle)	X	5.58	66.91	16.30	0.00	150.0	± 9.6 %
		Y	5.24	67.42	16.68	1	150.0	
		Z	5.55	66.83	16.27		150.0	
10551- AAA	IEEE 802.11ac WiFi (80MHz, MCS7, 99pc duty cycle)	X	5.58	66.96	16.28	0.00	150.0	± 9.6 %
		$\frac{1}{7}$	5.07	66.77	16.33		150.0	
10552-	IEEE 802.11ac WiFi (80MHz, MCS8,	X	5.54	66.76	16.23	0.00	150.0	±9.6 %
			5.09	66.99	1643		150.0	
		Ż	5.47	66.66	16.15		150.0	
10553- AAA	IEEE 802.11ac WiFi (80MHz, MCS9, 99pc duty cycle)	X	5.58	66.78	16.23	0.00	150.0	± 9.6 %
		Y	5.11	66.82	16.35		150.0	
100-1		Z	5.54	66.67	16.18		150.0	
10554- AAA	IEEE 1602.11ac WiFi (160MHz, MCS0, 99pc duty cycle)	X	5.89	67.03	16.29	0.00	150.0	± 9.6 %
		Υ Υ	5.55	66.98	16.39		150.0	
10555			5.87	67.22	16.25	0.00	150.0	1069
AAA	99pc duty cycle)		5.02	07.00	10.41	0.00	150.0	± 9.0 %
	· • • • • • • • • • • • • • • • • • • •	7	5.01	67.24	16.40	· ·	150.0	
10556-	IEEE 1602.11ac WiFi (160MHz, MCS2,	X	6.04	67.38	16.43	0.00	150.0	± 9.6 %
		Y	5.65	67.28	16.52		150.0	
		Z	6.02	67.29	16.39	1	150.0	
10557- AAA	IEEE 1602.11ac WiFi (160MHz, MCS3, 99pc duly cycle)	X	6.01	67.28	16.40	0.00	150.0	±9.6 %
		Y	5. <u>6</u> 0	67.14	16.47		150.0	
		Z	5.97	67.17	16.35		150.0	

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10558-	IEEE 1602.11ac WiFi (160MHz, MCS4,	X	6.05	67.44	16.50	0.00	150.0	± 9.6 %
AAA	99pc outy cycle)		5 55	67.02	16.43		150.0	
		z	6.02	67.33	16.45		150.0	
10560- AAA	IEEE 1602.11ac WiFi (160MHz, MCS6, 99pc duty cycle)	X	6.05	67.29	16.46	0.00	150.0	± 9.6 %
		Y	5.59	67.02	16.46		150.0	
10501		Z	6.01	67.17	16.41		150.0	
10561- AAA	IEEE 1602.11ac WiFi (160MHz, MCS7, 99pc duty cycle)	X	5.97	67.26	16.48	0.00	150.0	± 9.6 %
		Y	5.53	66.98	16.46		150.0	
10562			5.94	67.16	16.44	0.00	150.0	
AAA	99pc duty cycle)		0.09	07.03	10.07	0.00	150.0	±9.6 %
		Y 7	<u> </u>	67.19	16.57		150.0	
10563-	IEEE 1602,11ac WIEI (160MHz_MCS9		6.00	67.85	16.00	0.00	150.0	+96%
AAA	99pc duty cycle)		5.96	67.79	16.94	0.00	150.0	1 3.0 %
		7	<u> </u>	67.47	16.55		150.0	
10564- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 9 Mbps, 99pc duty cycle)	x	4.89	66.92	16.50	0.46	150.0	± 9.6 %
		Y	4.37	67.73	16.65		150.0	
		Z	4.84	66.85	16.44		150.0	
10565- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 12 Mbps, 99pc duty cycle)	X	5.12	67.38	16.83	0.46	150.0	± 9.6 %
		Ŷ	4.53	68.17	16.98		150.0	
40500		Z	5.07	67.30	16.78		150.0	
10566- AAA	OFDM, 18 Mbps, 99pc duty cycle)	X	4.95	67.23	16.64	0.46	150.0	± 9.6 %
		<u> </u>	4.37	67.89	16.75		150.0	
10567.			4.90	67.65	16.58	0.46	150.0	1069/
AAA	OFDM, 24 Mbps, 99pc duty cycle)		4.90	07.03	47.40	0.40	150.0	± 9.0 %
	· · · · · · · · · · · · · · · · · · ·	Y 7	4.44	67.56	17.19		150.0	
10568-	IEEE 802.11g WiFi 2.4 GHz (DSSS-	X	4.85	66.96	16.38	0.46	150.0	+96%
AAA	OFDM, 36 Mbps, 99pc duty cycle)	Y	4 20	67.26	16.25		150.0	
	· · · · · · · · · · · · · · · · · · ·	z	4.80	66.87	16.32		150.0	
10569- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 48 Mbps, 99pc duty cycle)	X	4.94	67.75	17.08	0.46	150.0	± 9.6 %
		Y	4.45	68.76	17.43		150.0	
		Z	4.90	67.68	17.04		150.0	
10570- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 54 Mbps, 99pc duty cycle)	X	4.98	67.59	17.02	0.46	150.0	± 9.6 %
ļ		Y	4.39	68.33	17.21		150.0	
40574		Z	4.93	67.52	16.97	0.40	150.0	
AAA	Mbps, 90pc duly cycle)	X	1.19	64.81	15.85	0.46	130.0	± 9.6 %
		Y 7	1.17	65.59	16.16		130.0	· · · · · ·
10572-	IEEE 802 11b WiEi 2.4 GHz (DSSS 2		1.10	65.43	15.44	0.46	130.0	+96%
	Mbps, 90pc duty cycle)		1.21	00.40	40.04	0.40	100.0	1 9.0 %
		7	1 17	<u> </u>	15.01		130.0	
10573-	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5	X	2.73	90.43	24.99	0.46	130.0	± 9.6 %
		Y	2.86	95.55	28.03		130.0	
		Z	1.51	81.07	21.85		130.0	<u>                                      </u>
10574- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 90pc duly cycle)	Х	1.39	72.10	19.60	0.46	130.0	± 9.6 %
		Y	1.35	73.36	20.46		130.0	
			1.26	70.26	18.73		130.0	

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10575- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OEDM 6 Mbps 90pc duty cycle)	X	4.65	66.62	16.45	0.46	130.0	± 9.6 %
	er bin, e hibbs, cope daty cycle)	Y	4 13	67.33	16.45	<u> </u>	130.0	
		Ż	4.61	66.55	16.40	<u> </u>	130.0	
10576- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 9 Mbps, 90pc duty cycle)	X	4.68	66.80	16.53	0.46	130.0	± 9.6 %
		Y	4.17	67.68	16.63		130.0	
40577		Z	4.64	66.73	16.48		130.0	
AAA	OFDM, 12 Mbps, 90pc duty cycle)	X	4.88	67.09	16.70	0.46	130.0	± 9.6 %
		Y	4.28	67.86	16.75	[	130.0	
10578-	IEEE 802 11g WiEi 2 4 GHz (DSSS-	+	4.83	67.01	16.65	0.46	130.0	
AAA	OFDM, 18 Mbps, 90pc duty cycle)		4.70	69.05	10.02	0.40	130.0	±9.0 %
			4.22	67.18	16.92		130.0	
10579- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 24 Mbps, 90pc duty cycle)	X	4.53	66.48	16.08	0.46	130.0	± 9.6 %
		Y	3.91	66.80	15.89		130.0	
		Z	4.48	66.37	16.01		130.0	
10580- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 36 Mbps, 90pc duty cycle)	X	4.58	66.51	16.09	0.46	130.0	± 9.6 %
		Y	3.89	66.66	15.78		130.0	
10581-			4.53	66.42	16.03	0.40	130.0	
AAA	OFDM, 48 Mbps, 90pc duty cycle)		4.00	69.49	10.70	0.40	130.0	±9.6 %
	· · · · · · · · · · · · · · · · · · ·	7	4.14	67.21	16.94		130.0	
10582- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 54 Mbps, 90pc duly cycle)	x	4.47	66.23	15.85	0.46	130.0	± 9.6 %
		Y	3.80	66.45	15.61		130.0	
10500		Z	4.42	66.12	15.78		130.0	
10583- AAA	IEEE 802.11a/n WiFi 5 GHz (OFDM, 6 Mbps, 90pc duty cycle)	X	4.65	66.62	16.45	0.46	130.0	± 9.6 %
		<u> </u>	4.13	67.33	16.45		130.0	
10584- AAA	IEEE 802.11a/n WiFi 5 GHz (OFDM, 9 Mbps, 90pc duty cycle)	X	4.68	66.80	16.53	0.46	130.0	± 9.6 %
		Y	4.17	67.68	16.63		130.0	
		Z	4.64	66.73	16.48		130.0	
10585- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90pc duty cycle)	X	4.88	67.09	16.70	0.46	130.0	± 9.6 %
		Y	4.28	67.86	16.75		130.0	
10596		Z	4.83	67.01	16.65	0.40	130.0	
AAA	Mbps, 90pc duty cycle)		4.78	07.27	16.82	0.46	130.0	±9.6 %
		- <u>7</u> -	4,22	67.19	16.92		130.0	
10587-	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24	X	4.53	66.48	16.08	0.46	130.0	± 9.6 %
		+ y	3,91	66.80	15.89		130.0	<b></b>
		Ż	4.48	66.37	16.01		130.0	
10588- AAA	IEEE 802.11a/n WiFi 5 GHz (OFDM, 36 Mbps, 90pc duty cycle)	X	4.58	66.51	16.09	0.46	130.0	± 9.6 %
.   .		Y	3.89	66.66	15.78		130.0	-
10500		Z	4.53	66.42	16.03	0.40	130.0	
AAA	Mbps, 90pc duty cycle)		4.68	67.30	16.76	0.46	130.0	± 9.6 %
		Y 7	4.14	68.18	16.94		130.0	
10590-	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54	X	4.03	66.23	15.85	0.46	130.0	± 9.6 %
-~~~\		Η γ	3.80	66.45	15.61		130.0	
	· · · ·	Ż	4.42	66.12	15.78		130.0	

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10591-	IEEE 802.11n (HT Mixed, 20MHz,	X	4.80	66.69	16.56	0.46	130.0	± 9.6 %
AAA	MCS0, 90pc duly cycle)		4.00	07.40	40.05		400.0	
	· · · · · · · · · · · · · · · · · · ·		4.29	67.48	16.65		130.0	
10592-	IFEE 802 11n /HT Mixed 20MHz		4.70	67.02	10.02	0.46	130.0	+06%
AAA	MCS1, 90pc duly cycle)		4.30	07.02	10.09	0.40	130.0	I 9.0 %
		Y	4.35	67.66	16.74		130.0	
		Z	4.91	66.95	16.65		130.0	
10593-	IEEE 802.11n (HT Mixed, 20MHz,	X	4.87	66.92	16.57	0.46	130.0	± 9.6 %
AAA	MCS2, 90pc duty cycle)		4.00	07.50	40.00		400.0	
			4.28	07.00	16.50		130.0	
10594-	IEEE 802 11n (HT Mixed 20MHz		4.02	67.10	16.73	0.46	130.0	+96%
AAA	MCS3, 90pc duty cycle)	$  ^{ }$	4.00	07.10	10.75	0.40	100.0	1 3.0 %
		Y	4.32	67.69	16.75		130.0	
		Z	4.88	67.02	16.68		130.0	
10595-	IEEE 802.11n (HT Mixed, 20MHz,	X	4.90	67.04	16.62	0.46	130.0	± 9.6 %
AAA	MCS4, 90pc duty cycle)							
		<u> </u>	4.28	67.67	16.66		130.0	
40500			4.85	66.97	16.57		130.0	
10596-	LEEE 802.11n (HT Mixed, 20MHz,		4.83	67.04	16.62	0.46	130.0	±9.6 %
~~~			<u> </u>	67.48	16.58		130.0	
			4.78	66.95	16.50		130.0	
10597-	IEEE 802.11n (HT Mixed, 20MHz.		4.78	66.93	16.50	0.46	130.0	+96%
AAA	MCS6, 90pc duty cycle)			00.00	10.00	0.10	100.0	1 0.0 /0
		Y	4.17	67.42	16.44		130.0	
		Z	4.73	66.84	16.44		130.0	
10598-	IEEE 802.11n (HT Mixed, 20MHz,	X	4.77	67.20	16.78	0.46	130.0	± 9.6 %
AAA	MCS7, 90pc duty cycle)		(00	- 07.07	40.05	-	400.0	
		- Y	4.23	67.00	16.85		130.0	
10500	IEEE 802 11n /HT Mixed 40MHz		4.72	67.09	16.72	0.46	130.0	106%
AAA	MCS0_90pc duty cycle)		0.40	01.23	10.77	0.40	130.0	±9.0 %
		Y	5.11	68.05	17.18		130.0	
	· · · · · · · · · · · · · · · · · · ·	Ż	5.44	67.15	16.74		130.0	
10600-	IEEE 802.11n (HT Mixed, 40MHz,	X	5.60	67.61	16.93	0.46	130.0	± 9.6 %
AAA	MCS1, 90pc duty cycle)							
		Y	5.02	67.79	17.02		130.0	
		Z	5.57	67.57	_ 16.91		130.0	
10601-	IEEE 802.11n (HT Mixed, 40MHz,		5.49	67.38	16.83	0.46	130.0	± 9.6 %
			4.00	67 77	17.04		420.0	1
			4.99	67.21	16.91		130.0	
10602-	IEEE 802 11n (HT Mixed 40MHz		5.40	67.40	16.75	0.46	130.0	+96%
AAA	MCS3, 90pc duly cycle)		0.00	07.40	10.75	0.40	100.0	1 3.0 %
		Y	5.00	67.54	16.84		130.0	
		Z	5.57	67.40	16.76		130.0	
10603-	IEEE 802.11n (HT Mixed, 40MHz,	X	5.67	67.72	17.05	0.46	130.0	± 9.6 %
<u></u>	MCS4, 90pc duty cycle)							
· · -	· · · · · · · · · · · · · · · · · · ·	Y Y	5.02	67.69	17.07		130.0	
10604	IFFF 900 445 (UT Ningel 40MU)		5.64	67.68	17.04		130.0	
ΔΔΔ	MCS5_90oc duly cycle)	^	5.49	67.21	16.78	0.46	130.0	± 9.6 %
		- v	5.00	67.56	16.96		130.0	
	· ·	Ż	5.49	67.27	16.82		130.0	
10605-	IEEE 802.11n (HT Mixed, 40MHz,	X	5.59	67.50	16.92	0.46	130.0	± 9.6 %
AAA	MCS6, 90pc duty cycle)							
		Y	4.95	67.41	16.89		130.0	
		Z	5.56	67.47	16.92		130.0	
10606- AAA	ILEE 802.11n (HT Mixed, 40MHz, MCS7, 90pc duly cycle)		5.33	66.83	16.44	0.46	130.0	± 9.6 %
		Y	4.96	67.58	16.81		130.0	·
		Z	5.28	66.72	16.40		130.0	

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10607-	IEEE 802.11ac WiFi (20MHz, MCS0,	X	4.64	66.02	16.19	0.46	130.0	± 9.6 %
			A 16	66.01	46.06		400.0	
	· · · · · · · · · · · · · · · · · · ·	7	4.10	65.91	16.36		130.0	
10608- AAA	IEEE 802.11ac WiFi (20MHz, MCS1, 90pc duty cycle)	X	4.83	66.42	16.36	0.46	130.0	± 9.6 %
		Y	4.22	67.08	16.44		130.0	
40000		Z	4.78	66.34	16.31		130.0	
10609- AAA	IEEE 802.11ac WIFi (20MHz, MCS2, 90pc duty cycle)		4.71	66.26	16.19	0.46	130.0	± 9.6 %
		Ý	4.14	66.94	16.27		130.0	
10610- AAA	IEEE 802.11ac WiFi (20MHz, MCS3, 90pc duty cycle)	X	4.67	66.42	16.14	0.46	1 <u>30.0</u> 130.0	± 9.6 %
		Y	4.18	67.09	16.43		130.0	
		Z	4.72	66.34	16.31		130.0	
10611- AAA	IEEE 802.11ac WiFi (20MHz, MCS4, 90pc duty cycle)	X	4.68	66.22	16.20	0.46	130.0	± 9.6 %
		<u> </u>	4.10	66.87	16.26		130.0	
10612- AAA	IEEE 802.11ac WiFi (20MHz, MCS5, 90oc duty cycle)	X	4.63	66.13 66.36	16.14	0.46	130.0	± 9.6 %
		TY-	4.03	66.77	16.18		130.0	
		Z	4.63	66.26	16.18		130.0	
10613- AAA	IEEE 802.11ac WiFi (20MHz, MCS6, 90pc duty cycle)	X	4.69	66.24	16.12	0.46	130.0	± 9.6 %
		<u> </u>	4.05	66.68	16.06		130.0	
10614- AAA	IEEE 802.11ac WiFi (20MHz, MCS7, 90pc duty cycle)	- <u>Z</u> X	4.63 4.64	66.46	16.05 16.37	0.46	130.0 130.0	± 9.6 %
		Y	4.09	67.10	16.44		130.0	
		Z	4.59	66.36	16.31		130.0	
10615- AAA	IEEE 802.11ac WiFi (20MHz, MCS8, 90pc duty cycle)	X	4.68	66.02	15.96	0.46	130.0	± 9.6 %
		<u> </u>	4.06	66.66	15.97		130.0	
10616-	IEEE 802 11ac WIEI (40MHz MCS0		4.62	65.94	15.90	0.46	130.0	+069/
AAA	90pc duly cycle)	-	4 78	66 74	16.50	0.40	130.0	1 9.0 %
		z	5.26	66.40	16.35		130.0	
10617- AAA	IEEE 802.11ac WiFi (40MHz, MCS1, 90pc duty cycle)	X	5.36	66.65	16.44	0.46	130.0	± 9.6 %
		Y	4.78	66.75	16.51		130.0	
10618-	IEEE 802.11ac WIFi (40MHz, MCS2,	Z X	5.33 5.25	66.60 66.67	<u>16.42</u> 16.46	0.46	130.0 130.0	± 9.6 %
		Y	4.72	66.85	16.58		130.0	
		Z	5.21	66.61	16.44	<u> </u>	130.0	
10619- AAA	IEEE 802.11ac WiFi (40MHz, MCS3, 90pc duty cycle)	X	5.26	66.46	16.29	0.46	130.0	± 9.6 %
		<u> </u>	4.77	66.81	16.49		130.0	
10620			5.22	66.38	16.26	0.46	130.0	1069/
AAA	90pc duty cycle)	\downarrow	4.78	66.60	16.30	0.40	130.0	± 9.0 %
		Z	5.31	66.41	16.33		130.0	- · · · · · · · · · · · · · · · · · · ·
10621- AAA	IEEE 802.11ac WiFi (40MHz, MCS5, 90pc duty cycle)	X	5.35	66.65	16.56	0.46	130.0	±9.6 %
		Y	4.83	66.85	16.68		130.0	
10000		_ Z	5.32	66.59	16.54		130.0	
10622- AAA	IEEE 802.11ac WiFi (40MHz, MCS6, 90pc duly cycle)		5.37	66.81	16.63	0.46	130.0	± 9.6 %
		Y 7	4.79	66.84	16,68		130.0	
	•		0.00	· vv./ T				

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10623-	IEEE 802.11ac WiFi (40MHz, MCS7,	X	5.24	66.32	16.25	0.46	130.0	± 9.6 %
<u> </u>	90pc duty cycle)			·				
		Y	4.72	66.50	16.34		130.0	
40004		Z	5.20	<u>6</u> 6.24	16.22		130.0	
10624- 	IEEE 802.11ac WiFi (40MHz, MCS8, 90pc duty cycle)	X	5.43	66.52	16.42	0.46	130.0	± 9.6 %
		Y	4.88	66.72	16.52		130.0	
4000		Z	5.40	66.45	16.39		130.0	
10625- AAA	IEEE 802.11ac WiFi (40MHz, MCS9, 90pc duty cycle)	X	5.79	67.47	16.94	0.46	130.0	± 9.6 %
		Y	5.00	67.06	16.76	_	130.0	
40000		Z	5.70	67.26	16.85		130.0	
AAA	90pc duty cycle)	X	5.59	66.53	16.33	0.46	130.0	± 9.6 %
		<u> </u>	<u>5.18</u>	66.57	16.44		130.0	
40007		Z	5.56	66.46	16.31		130.0	
AAA	90pc duly cycle)	X	5.83	67.09	16.57	0.46	130.0	± 9.6 %
		<u> Y</u>	5.32	67.03	16.66		130.0	
40000		Z	5.81	67.05	16.57		130.0	
AAA	90pc duty cycle)	X	5.62	66.61	16.26	0.46	130.0	± 9.6 %
		<u>Y</u>	5.14	66.45	<u> 16.28 </u>		130.0	
40000		Z	5.58	66.50	16.22		130.0	
AAA	90pc duty cycle)	X	5.69	66.66	16.28	0.46	130.0	± 9.6 %
	· · · · · · · · · · · · · · · · · · ·	Y	5.30	66.90	16.51		130.0	
40000		Z	5.66	66.57	<u>16.25</u>	<u> </u>	130.0	
AAA	90pc duty cycle)	X	6.12	68.14	17.02	0.46	130.0	± 9.6 %
		<u> </u>	5.23	66.85	16.50		130.0	
40604			6.06	67.97	16.95		130.0	
AAA	90pc duty cycle)	×	6.03	67.99	17.15	0.46	130.0	±9.6 %
		<u>Y</u>	5.35	67.44	17.00		130.0	
10622		<u> </u>	5.98	67.84	17.09	0.40	130.0	
AAA	90pc duty cycle)		0.60	07.16	10.70	0.46	130.0	± 9.6 %
	·		5.50	67.84	17.20		130.0	
10622			5.78	67.15	16.76	0.40	130.0	
AAA	90pc duly cycle)		5.08	66.78	16.38	0.46	130.0	±9.6 %
			5.16	66.59	16.40		130.0	
10634-	IEEE 802.11ac WiFi (80MHz, MCS8,	X	5.65	66.82	16.35	0.46	130.0	± 9.6 %
			5 24	66 99 -	16.65	<u> </u>	130.0	·
	·	+ '	5.63	66 72	16.43	1	130.0	
10635- AAA	IEEE 802.11ac WiFi (80MHz, MCS9, 90pc duty cycle)	X	5.54	66.10	15.82	0.46	130.0	± 9.6 %
		+γ I	5.01	65.92	15 79		130.0	
		Ż	5.50	65.99	15.78		130.0	
10636- AAA	IEEE 1602.11ac WiFi (160MHz, MCS0, 90pc duty cycle)	X	6.00	66.89	16.41	0.46	130.0	± 9.6 %
		Y	5.65	66.81	16.48		130.0	
		Z	5.98	66.82	16.39		130.0	
10637- AAA	IEEE 1602.11ac WiFi (160MHz, MCS1, 90pc duty cycle)	X	6.16	67.27	16.58	0.46	130.0	± 9.6 %
		Y	5.75	67.13	16.64	i –	130.0	1
		Z	6.14	67.21	16.57		130.0	1
10638- AAA	IEEE 1602.11ac WiFi (160MHz, MCS2, 90pc duty cycle)	X	6.15	67.24	16.55	0.46	130.0	± 9.6 %
		Y	5.76	67.17	16.64	<u> </u>	130.0	
		Z	6.13	67.17	16.53	t —	130.0	

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10630				<u> </u>				
_AAA	90pc duty cycle)	X	6.13	67.20	16.57	0.46	130.0	± 9.6 %
		Y	5.71	67.01	16.60		130.0	+
		Z	6.11	67.11	16.54	<u> </u>	130.0	t
10640- AAA	IEEE 1602.11ac WiFi (160MHz, MCS4, 90pc duty cycle)	X	6.13	67.19	16.51	0.46	130.0	± 9.6 %
		Y	5.60	66.69	16.38	·	130.0	<u> </u>
		Z	6.11	67.10	16.47		130.0	·
10641- 	IEEE 1602.11ac WiFi (160MHz, MCS5, 90pc duty cycle)	X	6.18	67.10	16.48	0.46	130.0	± 9.6 %
		Y	5.73	66.87	16,49	<u> </u>	130.0	<u> </u>
		Z	6.17	67.05	16.47	<u> </u>	130.0	<u> </u>
10642- AAA	IEEE 1602.11ac WiFi (160MHz, MCS6, 90pc duty cycle)	Х	6.23	67.38	16.79	0.46	130.0	± 9.6 %
		Y	5.75	67.07	16.76		130.0	
		Z	6.20	67.30	16.77		130.0	<u> </u>
10643- 	IEEE 1602.11ac WiFi (160MHz, MCS7, 90pc duty cycle)	X	6.06	67.04	16.51	0.46	130.0	± 9.6 %
		Y	5.58	66.67	16.43		130.0	
		Z	6.04	66.97	16.50		130.0	
10644- 	IEEE 1602.11ac WiFi (160MHz, MCS8, 90pc duty cycle)	X	6.22	67.52	16.78	0.46	130.0	± 9.6 %
		Y	5.68	67.01	16.62		130.0	
		Z	6.17	67.37	16.71		130.0	
10645- AAA	IEEE 1602.11ac WiFi (160MHz, MCS9, 90pc duty cycle)	X	6.52	68.03	16.98	0.46	130.0	± 9.6 %
		Y	6.07	67.95	17.07		130.0	
		Z	6.34	67.53	16.76		130.0	
10646- AAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,7)	X	13.12	97.57	31.83	9.30	60.0	± 9.6 %
		Y T	3.90	78.39	26.30		60.0	
		Z	9.88	93.63	31.05		60.0	
10647- AAB	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,7)	X	12.04	96.40	31.56	9.30	60.0	± 9.6 %
		Y	3.54	76.66	25.68		60.0	
		Z	8.93	92.04	30.63		60.0	
10648- AAA	CDMA2000 (1x Advanced)	X	0.77	65.21	11.99	0.00	150.0	± 9.6 %
		Y	0.27	60.00	4.67		150.0	
		Z	0.71	64.17	11.12		150.0	

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

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





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

09-28-2016

Accreditation No.: SCS 0108

Accredited by the Swiss Accreditation Service (SAS) The Swiss Accreditation Service Is one of the signatories to the EA Multilateral Agreement for the recognition of calibration certificates

Client PC Test

Certificate No: ES3-3287_Sep16

CALIBRATION CERTIFICATE

Object

ES3DV3 - SN:3287

Calibration procedure(s)

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

Calibration date:

September 19, 2016

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

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

Calibration Equipment used (M&TE critical for calibration)

ID	Cal Date (Certificate No.)	Scheduled Calibration
SN: 104778	06-Apr-16 (No. 217-02288/02289)	Apr-17
SN: 103244	06-Apr-16 (No. 217-02288)	Apr-17
SN: 103245	06-Apr-16 (No. 217-02289)	Apr-17
SN: S5277 (20x)	05-Apr-16 (No. 217-02293)	Apr-17
SN: 3013	31-Dec-15 (No. ES3-3013_Dec15)	Dec-16
SN: 660 23-Dec-15 (No. DAE4-660_Dec15)		Dec-16
ID	Check Date (in house)	Scheduled Check
SN: GB41293874	06-Apr-16 (in house check Jun-16)	In house check: Jun-18
SN: MY41498087	06-Apr-16 (in house check Jun-16)	In house check: Jun-18
SN: 000110210	06-Apr-16 (in house check Jun-16)	In house check: Jun-18
SN: US3642U01700	04-Aug-99 (in house check Jun-16)	In house check: Jun-18
SN: US37390585	18-Oct-01 (in house check Oct-15)	In house check: Oct-16
	ID SN: 104778 SN: 103244 SN: 103245 SN: S5277 (20x) SN: 3013 SN: 660 ID SN: GB41293874 SN: MY41498087 SN: 000110210 SN: US3642U01700 SN: US37390585	ID Cal Date (Certificate No.) SN: 104778 06-Apr-16 (No. 217-02288/02289) SN: 103244 06-Apr-16 (No. 217-02288) SN: 103245 06-Apr-16 (No. 217-02289) SN: 55277 (20x) 05-Apr-16 (No. 217-02293) SN: 3013 31-Dec-15 (No. ES3-3013_Dec15) SN: 660 23-Dec-15 (No. DAE4-660_Dec15) ID Check Date (in house) SN: GB41293874 06-Apr-16 (in house check Jun-16) SN: 000110210 06-Apr-16 (in house check Jun-16) SN: US3642U01700 04-Aug-99 (in house check Jun-16) SN: US37390585 18-Oct-01 (in house check Oct-15)

	Name	Function	Signature
Calibrated by:	Leif Klysner	Laboratory Technician	\$ D 11/1
			sey high
Approved by:	Katja Pokovic	Technical Manager	Retty
	3 - J		
			Issued: September 20, 2016
This calibration certificate	e shall not be reproduced except in ful	without written approval of the laboratory	l.

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



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Multilateral Agreement for the recognition of calibration certificates

Glossary: TSL tissue simulating liquid NORMx,y,z sensitivity in free space sensitivity in TSL / NORMx,y,z ConvF DCP diode compression point CF crest factor (1/duty_cycle) of the RF signal A, B, C, D modulation dependent linearization parameters Polarization @ φ rotation around probe axis Polarization 9 9 rotation around an axis that is in the plane normal to probe axis (at measurement center), i.e., $\vartheta = 0$ 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
- Techniques", June 2013
 b) IEC 62209-1, "Procedure to measure the Specific Absorption Rate (SAR) for hand-held devices used in close proximity to the ear (frequency range of 300 MHz to 3 GHz)", February 2005
- c) IEC 62209-2, "Procedure to determine the Specific Absorption Rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)", March 2010
- d) KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

Methods Applied and Interpretation of Parameters:

- NORMx, y, z: Assessed for E-field polarization 9 = 0 (f ≤ 900 MHz in TEM-cell; f > 1800 MHz: R22 waveguide). NORMx, y, z are only intermediate values, i.e., the uncertainties of NORMx, y, z does not affect the E²-field uncertainty inside TSL (see below *ConvF*).
- NORM(f)x, y, z = NORMx, y, z * frequency_response (see Frequency Response Chart). This linearization is implemented in DASY4 software versions later than 4.2. The uncertainty of the frequency response is included in the stated uncertainty of ConvF.
- DCPx, y, z: DCP are numerical linearization parameters assessed based on the data of power sweep with CW signal (no uncertainty required). DCP does not depend on frequency nor media.
- *PAR:* PAR is the Peak to Average Ratio that is not calibrated but determined based on the signal characteristics
- Ax,y,z; Bx,y,z; Cx,y,z; Dx,y,z; VRx,y,z: A, B, C, D are numerical linearization parameters assessed based on the data of power sweep for specific modulation signal. The parameters do not depend on frequency nor media. VR is the maximum calibration range expressed in RMS voltage across the diode.
- ConvF and Boundary Effect Parameters: Assessed in flat phantom using E-field (or Temperature Transfer Standard for f ≤ 800 MHz) and inside waveguide using analytical field distributions based on power measurements for f > 800 MHz. The same setups are used for assessment of the parameters applied for boundary compensation (alpha, depth) of which typical uncertainty values are given. These parameters are used in DASY4 software to improve probe accuracy close to the boundary. The sensitivity in TSL corresponds to NORMx, y, z * ConvF whereby the uncertainty corresponds to that given for ConvF. A frequency dependent ConvF is used in DASY version 4.4 and higher which allows extending the validity from ± 50 MHz to ± 100 MHz.
- Spherical isotropy (3D deviation from isotropy): in a field of low gradients realized using a flat phantom exposed by a patch antenna.
- Sensor Offset: The sensor offset corresponds to the offset of virtual measurement center from the probe tip (on probe axis). No tolerance required.
- Connector Angle: The angle is assessed using the information gained by determining the NORMx (no uncertainty required).

Accreditation No.: SCS 0108

Probe ES3DV3

SN:3287

Manufactured: June 7, 2010 Calibrated: September 19

September 19, 2016

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

Basic Calibration Parameters

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

Modulation Calibration Parameters

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

Note: For details on UID parameters see Appendix.

Sensor Model Parameters

	C1	C2	α	T1	T2	Т3	T4	Т5	Т6
	fF	fF	V-1	ms.V⁻²	ms.V⁻¹	ms	V-2	V-1	
X	65.67	459.4	34.07	29.08	2.68	5.077	2	0.308	1.009
Ý	71.46	511.8	35.31	29.86	3.707	5.1	0.748	0.607	1.009
Ζ	50.48	357,3	34.55	27.84	2.262	5.1	1.583	0.279	1.01

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

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

^a 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.

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

Calibration Parameter Determined in Head Tissue Simulating Media

^c Frequency validity above 300 MHz of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to ± 50 MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is ± 10, 25, 40, 50 and 70 MHz for ConvF assessments at 30, 64, 128, 150 and 220 MHz respectively. Above 5 GHz frequency validity can be extended to ± 110 MHz. ^F At frequencies below 3 GHz, the validity of tissue parameters (ε and σ) can be relaxed to ± 10% if liquid compensation formula is applied to

⁶ At frequencies below 3 GHz, the validity of tissue parameters (ϵ and σ) can be relaxed to \pm 10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters (ϵ and σ) is restricted to \pm 5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target lissue parameters. ⁶ Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is

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

			-		-			
f (MHz) ^C	Relative Permittivity ^F	Conductivity (S/m) ^F	C <u>onv</u> F X	ConvF Y	ConvF Z	Alpha ^G	Depth ^G (mm)	Unc (k=2)
750	55.5	0.96	6.64	6.64	6.64	0.27	1.86	_ ± 12.0 %
835	55.2	0.97	6.55	6.55	6.55	0.50	1.37	± 12.0 %
1750	53.4	1.49	5.11	5.11	5.11	0.33	1.85	± 12.0 %
1900	53.3	1.52	4.94	4.94	4.94	0.42	1.59	± 12.0 %
2300	52.9	1.81	4.55	4.55	4.55	0.55	1.42	± 12.0 %
2450	52.7	1.95	4.35	4.35	4.35	0.80	1.09	± 12.0 %
2600	52.5	2.16	4.12	4.12	4.12	0.80	1.10	± 12.0 %

Calibration Parameter Determined in Body Tissue Simulating Media

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

validity can be extended to \pm 110 MHz. ^F At frequencies below 3 GHz, the validity of tissue parameters (ϵ and σ) can be relaxed to \pm 10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters (ϵ and σ) is restricted to \pm 5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.

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



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

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



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

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



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

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



Conversion Factor Assessment

Other Probe Parameters

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

Appendix: Modulation Calibration Parameters

	Communication System Name		A dB	B dB√uV	С	D dB	VR mV	Max Unc ^E
								(k=2)
0	CW	Х	0.00	0.00	1.00	0.00	198.4	± 3.5 %
		Y	0.00	0.00	1.00		189.6	
10010		Z	0.00	0.00	1.00		184.8	
CAA	SAR Validation (Square, 100ms, 10ms)		9.57	81.27	19.66	10.00	25.0	±9.6%
	_	Y	9.48	81.17	20.59		25.0	
		Z	11.44	84.72	20.81		25.0	
10011- CAB	UMTS-FDD (WCDMA)	X	1.41	73.12	18.60	0.00	150.0	±9.6 %
		Y	<u> 1</u> .09	67.36	15.29		150.0	
		Z	1.04	67.24	15.12		150.0	
10012- CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps)	X	1.39	66.79	17.15	0.41	150.0	±9.6 %
		Y	1.33	64.98	15.75		150.0	
		Z	1.31	64.97	15.66		150.0	
10013- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps)	X	5.20	67.40	17.54	1.46	150.0	± 9.6 %
		Y	5.27	67. <u>18</u>	17.41		150.0	
		Z	5.09	67 <u>.33</u>	17.40		150.0	
10021- DAB	GSM-FDD (TDMA, GMSK)	X	25.12	98.64	27.15	9.39	50.0	± 9.6 %
		Y	16.05	91.61	25.96		50.0	
		Z	54.58	112.47	31.02		50.0	
10023- DAB	GPRS-FDD (TDMA, GMSK, TN 0)	X	21.90	96.28	26.48	9.57	50.0	± 9.6 %
		<u>Y</u>	15.04	90.31	25.57		50.0	
		Z	40.95	107.64	29.77		50.0	
10024- DAB	GPRS-FDD (TDMA, GMSK, TN 0-1)	X	100.00	118.44	30.60	6.56	60.0	± 9.6 %
		Y	56.85	112.42	_30.28		60.0	
		<u> Z</u>	100.00	119.26	30.80		60.0	
10025- DAB	EDGE-FDD (TDMA, 8PSK, TN 0)	X	15.98	100.03	37.68	12.57	50.0	± 9.6 %
		<u> </u>	12.36	89.89	33.32		50.0	
		<u>Z</u>	14.92	100.13	38.33		50.0	
10026- DAB	EDGE-FDD (TDMA, 8PSK, TN 0-1)	X	19.89	102.72	35.15	9.56	60.0	± 9.6 %
ļ		ΙΥ	15.11	94.49	32.22		60.0	
40007			21.10	106.39	36.94	4 00 -	60.0	1069
10027- DAB	GPRS-FDD (TDMA, GMSK, TN 0-1-2)	×	100.00	117.46	29.21	4.80	80.0	± 9.6 %
<u> </u>		Υ ↓	100.00		30.83		80.0	
40000			100.00	118.35	29.47	2.55	100.0	+06%
10028- DAB	GPRS-FDD (TDMA, GMSK, TN 0-1-2-3)		100.00	117.97	20.03	3.55	100.0	I 9.0 %
		Ι <u>Υ</u>	100.00	119.91	29.91	 		
40000		+ 🗧	100.00	118.74	20.84	7 00	80.0	+0.6.%
10029- DAB	EDGE-FDD (TDMA, 8PSK, TN 0-1-2)	×	14.03	95.19	31.54	7.80	80.0	I 9.0 %
ļ		Y	11.54	89.32	29.33		80.0	
40000			13.09	95.17	31.96	F 20	00.0	+060/
10030- CAA	IEEE 802.15.1 Bluetooth (GESK, DH1)		100.00	117.04	29.36	5.30		I9.0%
L		<u> </u>	100.00	119.78	31.12			
			100.00	117.69	29.49	4.00		1000
10031- CAA	IEEE 802.15.1 Bluetooth (GFSK, DH3)	×	100.00	120.90	28.34	1.88	100.0	± 9.0 %
		<u> </u>	100.00	121.14	28.78	l	100.0	
1		ΙZ	100.00	119.84	27.78		<u> </u>	

10032-	IEEE 802.15.1 Bluetooth (GFSK, DH5)	X	100.00	128.75	30.50	1.17	100.0	± 9.6 %
0/01		$+_{Y}$	100.00	125 19	29.33		100.0	
		İŻ	100.00	124.54	28.68	┦───	100.0	<u> </u>
10033- CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH1)	X	24.47	102.44	28.62	5.30	70.0	± 9.6 %
		Y	12.93	91.34	25.64		70.0	
		Z	20.22	99.06	27.27		70.0	
10034- _CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH3)	X	15.75	99.73	26.60	1.88	100.0	± 9.6 %
		ΤY	6.06	84.29	21.90		100.0	
		Z	7.41	86.87	21.79		100.0	
10035- CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH5)	X	8.06	91.60	24.06	1.17	100.0	± 9.6 %
		Y	3.71	78.74	19.66	<u> </u>	100.0	
		7	4 06	80.00	19.00	<u> </u>	100.0	
10036-	IEEE 802,15,1 Bluetooth (8-DPSK, DH1)		31 59	106.91	29.95	5 30	70.0	+06%
CAA			14.71	00.01	20.00	. 0.00	70.0	19.0 %
		$+\frac{1}{7}$	14.71	93.73	26.48		70.0	
10037-	IEEE 802 15 1 Bluetooth (9 DBSI/ DU2)		25.49	103.04	28.49	-	70.0	
CAA			15.02	99.00	26.34	1.88	100.0	± 9.6 %
		Y	<u>5.91</u>	83.93	21.74		100.0	
40000		<u>Z</u>	6.95	86.01	21.48		100.0	
10038- CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH5)	X	8.64	92.97	24.58	1.17	100.0	± 9.6 %
		Y	3.82	79.37	19.97		100.0	
		Z	4.16	80.58	19.47		100.0	
10039- CAB	CDMA2000 (1xRTT, RC1)	X	3.32	80.83	20.52	0.00	150.0	± 9.6 %
		Y	1.99	71.59	16.56		150.0	
		Z	1.78	71.38	15.53		150.0	
10042- CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4- DQPSK, Halfrate)	X	93.96	116.51	30.17	7.78	50.0	± 9.6 %
		Υ	28.36	100.31	27.04		50.0	
		Z	100.00	118.01	30.46		50.0	
10044- CAA	IS-91/EIA/TIA-553 FDD (FDMA, FM)	X	0.00	110.81	0.68	0.00	150.0	± 9.6 %
		Y	0.00	94.68	0.92		150.0	
		Z	0.01	95.27	0.89		150.0	
10048- CAA	DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24)	X	12.13	84.40	24.33	13.80	25.0	± 9.6 %
		Υ	11.03	81.88	24.36		25.0	
		Z	15.47	90.17	26.32		25.0	
10049- CAA	DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12)	X	14.56	88.92	24.53	10.79	40.0	± 9.6 %
		Y	12.34	85.94	24.48		40.0	—— —
		Z	20.46	95.78	26.73		40 0	
10056- CAA	UMTS-TDD (TD-SCDMA, 1.28 Mcps)	X	13.90	88.80	25.15	9.03	50.0	±9.6 %
		Y	11.60	84,93	24.34	·	50.0	
		Z	15.96	92.01	26 12		50.0	
10058- DAB	EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)	х	10.54	89.79	28.95	6.55	100.0	±9.6 %
		Y	9.17	85.43	27.21		100.0	
40070		Z	9.28	88.15	28.66		100.0	
10059- _CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps)	X	1.62	69.54	18.42	0.61	110.0	± 9.6 %
		Y	1.52	67.09	16.78		110.0	
		Z	1.47	67.00	16.67		110.0	
10060- CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps)	х	100.00	133.57	34.76	1.30	110.0	± 9.6 %
		Y	47.37	119.92	31 34		110.0	——
		z	100.00	131.70	33 88		110.0	
					00.00		10.0	

10061-	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11	X	24.29	111.37	31.49	2.04	110.0	± 9.6 %
0/10		Y	7 57	90.21	25.12		110.0	
		Ż	8.96	94.42	26.47		110.0	
10062- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps)	Х	4.94	67.26	16.92	0.49	100.0	± 9.6 %
		Y	4.99	66.94	16.70		100.0	
10062			4.80	67.06	16.67	0.70	100.0	
CAB	Mbps)		4.98	67.42	17.05	0.72	100.0	± 9.6 %
·		7	0.03	67.22	16.80		100.0	
10064- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps)	X	5.33	67.75	17.30	0.86	100.0	± 9.6 %
		Y	5.40	67.50	17.13		100.0	
		Z	5.14	67.52	17.06		100.0	
10065- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps)	X	5.22	67.77	17.45	1.21	100.0	± 9.6 %
		<u>Y</u>	5.30	67.55	17.30		100.0	
10066-	1555 802 110/b W/Ei 5 CHz (OEDM 24		5.05	67.55	17.23	1 46	100.0	+06%
CAB	Mbps)		5.20	07.09	17.07	1.40	100.0	± 9.0 %
	· · · · ·	7	5.37	67.69	17.04		100.0	
10067- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36	X	5.58	67.96	18.07	2.04	100.0	± 9.6 %
		Y	5.70	67.83	17.99		100.0	
· ·		Z	5.44	67.94	17.97		100.0	
10068- CAB	IEEE 802.11a/h WIFi 5 GHz (OFDM, 48 Mbps)	X	5.73	68.36	18.44	2.55	100.0	± 9.6 %
		Y	5.86	68.26	18.38		100.0	
40000		Z	5.56	68.20	18.31		100.0	
10069- CAB	Mbps)		5.80	68.22	18.58	2.67	100.0	± 9.6 %
			5.95	68.21	18.50		100.0	
10071- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps)	X	5.34	67.61	17.91	1.99	100.0	± 9.6 %
		Y	5.43	67.44	17.80		100.0	
		Z	5.23	67.57	17.79		100.0	
10072- <u>C</u> AB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps)	X	5.41	68.20	18.23	2.30	100.0	± 9.6 %
		<u>Y</u>	5.52	68.04	18.13		100.0	
10073-	IEEE 802.11g WiFi 2.4 GHz	X	5.28	68.10 68.52	18.11 18.63	2.83	100.0	±9.6 %
0,0		Y	5.67	68.41	18.56		100.0	
		Z	5.42	68.46	18.55		100.0	
10074- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps)	X	5.57	68.60	18.89	3.30	100.0	± 9.6 %
		Y	5.71	68.53	18.84		100.0	
40075			5.46	68.55	18.80	0.00	100.0	10.0.01
10075- CAB	(DSSS/OFDM, 36 Mbps)	X	5.74	69.13	19.40	3.82	90.0	± 9.6 %
		Y 7	5.91	68.07	19.39		90.0	
10076-	IEEE 802.11g WiFi 2.4 GHz	X	5.73	68.87	19.48	4.15	90.0	± 9.6 %
		Y	5.91	68.89	19.48		90.0	
		Z	5.64	68.84	19.44		90.0	
10077- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps)	X	5.76	68.96	19.58	4.30	90.0	± 9.6 %
		Y	5.95	68.98	19.59		90.0	
	1	ΙZ	5.68	68.95	19.55		90.0	

10081-	CDMA2000 (1xRTT, RC3)	X	1.45	73.74	17.54	0.00	150.0	± 9.6 %
		- _Y	1.01	66 70	13 93		150.0	
		$\frac{1}{Z}$	0.86	65.95	12.65		150.0	
10082- CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4- DOPSK, Fullrate)	X	2.22	64.23	9.03	4.77	80.0	± 9.6 %
		Y	2.60	65.39	10.25		80.0	
10000		<u> </u>	2.07	64.06	8.86		80.0	
10090- DAB	GPRS-FDD (TDMA, GMSK, TN 0-4)	X	100.00	118.52	30.65	6.56	60.0	± 9.6 %
		_ Y	54.54	111.83	30.17		60.0	
		Z	100.00	119.33	30.85		60.0	
10097- CAB	UMTS-FDD (HSDPA)	X	2.07	69.87	17.29	0.00	150.0	± 9.6 %
		Y	1.87	67.25	15.70	1	150.0	
		Z	1.83	67.53	15.55		150.0	
10098- CAB	UMTS-FDD (HSUPA, Subtest 2)	X	2.03	69.88	17.28	0.00	150.0	± 9.6 %
		ΙΥ	1.83	67.20	15.65		150.0	
		Z	1.80	67.49	15.52		150.0	
10099- DAB	EDGE-FDD (TDMA, 8PSK, TN 0-4)	X	19.79	102.55	35.10	9.56	60.0	± 9.6 %
		Ý	15.06	94.38	32.19		60.0	
		Z	21.07	106.24	36.89		60.0	<u> </u>
10100- CAB	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	X	3.71	73.15	18.05	0.00	150.0	± 9.6 %
		Ý	3.34	70.68	16.71		150.0	
		Z	3.15	70.31	16.60	<u> </u>	150.0	<u> </u>
10101- CAB	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	X	3.53	68.94	16.73	0.00	150.0	± 9.6 %
		Y	3.44	67.88	16.03		150 0	
		Z	3.28	67.66	15.91		150.0	
10102- CAB	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	X	3.62	68.78	16.77	0.00	150.0	± 9.6 %
		Y	3.55	67.81	16.12		150.0	·
		Z	3.38	67.61	16.00		150.0	
10103- CAB	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	Х	9.03	78.84	21.45	3.98	65.0	± 9.6 %
		Y	8.52	77.08	20.81		65.0	
<u> </u>		Z	8.79	79.04	21.64		65.0	
10104- CAB	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	X	8.83	77.31	21.70	3.98	65.0	± 9.6 %
		TY	8.68	76.21	21.28		65 0	·
		Z	8.45	77.10	21.68		65.0	
10105- CAB	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	X	8.12	75.63	21.27	3.98	65.0	±9.6 %
		Y	7.58	73.53	20.37		65.0	
		Z	7.68	75.16	21.11		65.0	
10108- CAC	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	X	3.26	72.24	17.88	0.00	150.0	±9.6 %
		TY 1	2.97	69.86	16.52		150.0	
		Z	2.76	69.54	16.43		150.0	
10109- CAC	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	X	3.21	68.83	16.74	0.00	150.0	± 9.6 %
		Y	3.12	67.65	15.97		150.0	
		Z	2.93	67.47	15.80		150.0	
10110- CAC	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	X	2.68	71.31	17.65	0.00	150.0	± 9.6 %
		Y	2.45	68.82	16,19		150.0	
		Z	2.25	68.65	16.05		150.0	
10111- CAC	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	X	2.94	69.70	17.25	0.00	150.0	± 9.6 %
		Y	2.81	68.04	16.25		150.0	
		Z	2.63	68.09	16.01		150.0	
		·						

10112- CAC	LTE-FDD (SC-FDMA, 100% RB, 10	X	3.32	68.66	16.72	0.00	150.0	± 9.6 %
0/10			3.24	67.56	16.01		150.0	
			3.06	67.45	15.01		150.0	
10113-	I TE-EDD (SC-EDMA_100% BB_5 MHz	$\frac{2}{x}$	3.00	69.65	17.28	0.00	150.0	+96%
CAC	64-QAM)	$ ^{} $	0.00	00.00	17.20	0.00	100.0	1 3.0 76
		Y	2.97	68.11	16.35		150.0	
		Z	2.78	68.22	16.13		150.0	
10114-	IEEE 802.11n (HT Greenfield, 13.5	X	5.30	67.67	16.69	0.00	150.0	± 9.6 %
CAB	Mbps, BPSK)							
		Y	5.32	67.34	16.45		150.0	
_		Z	5.18	67.41	16.46		150.0	
10115-	IEEE 802.11n (HT Greenfield, 81 Mbps,	X	5.68	67.95	16.83	0.00	150.0	± 9.6 %
CAB	<u>16-QAM)</u>						L	
		Y	5.74	67.75	16.66		150.0	
		Z	5.49	67.60	16.57		150.0	_
10116-	IEEE 802.11n (HT Greenfield, 135 Mbps,	X	5.43	67.93	16.74	0.00	150.0	±9.6 %
CAB	64-QAM)	<u> </u>		07 50	40.70		172.0	
		Y	5.45	67.58	16.50		150.0	
40447			5.29	67.63	16.50	0.00	150.0	
		^	5.31	67.69	16.73	0.00	150.0	±9.6%
CAB			E 00	67.25	46.40		450.0	
		7	5 15	67.00	16.40		150.0	
10118	LIEFE 802 11p (HT Mixed 81 Mbps 16		5.72	69.05	16.90	0.00	150.0	+06%
CAB		^	5.75	06.00	10.09	0.00	130.0	I 9.0 %
OND		Y	5.76	67 71	16.65		150.0	<u> </u>
	· · · · · · · · · · · · · · · · · · ·	7	5.58	67.82	16.69		150.0	
10119-	IFEE 802 11n (HT Mixed 135 Mbos 64-	X	5 40	67.88	16.00	0.00	150.0	+96%
CAB	QAM)		0.40	01.00	10.10	0.00	100.0	20.0 /0
		Y	5.42	67.54	16.49		150.0	
		z	5.26	67.56	16.48		150.0	
10140-	LTE-FDD (SC-FDMA, 100% RB, 15	X	3.67	68.77	16.68	0.00	150.0	± 9.6 %
CAB	MHz, 16-QAM)							
		Y	3.60	67.81	16.05		150.0	
		Z	3.42	67.62	15.92		150.0	
10141-	LTE-FDD (SC-FDMA, 100% RB, 15	X	3.79	68.75	16.79	0.00	150.0	±9.6 %
CAB	MHz, 64-QAM)							
		Y	3.72	67.84	16.19		150.0	
			3.54	67.70	16.08	. <u> </u>	150.0	
10142-	LTE-FDD (SC-FDMA, 100% RB, 3 MHz,	X	2.48	71.58	17.67	0.00	150.0	± 9.6 %
CAC	QPSK)						150.0	
		<u> </u>	2.22	68.66	16.03		150.0	
10110		Z	2.02	68.57	15.71	0.00	150.0	
10143-	LIE-FDD (SC-FDMA, 100% RB, 3 MHz,		2.90	70.86	17.43	0.00	150.0	± 9.6 %
UAU			2.69	69.64	16.00		150.0	
			2.00	69.74	10.20		150.0	
10144			2,40	60.71	15.71	0.00	150.0	+06%
	64 OAM	^	2.05	00.00	10.07	0.00	150.0	± 9.0 %
			2.53	66.90	14 94		150.0	
		7	2 20	66 75	14 27		150.0	
10145-	LTE-EDD (SC-EDMA_100% RB_1.4	X	2.00	71.65	16 48	0.00	150.0	±9.6 %
CAC	MHz, QPSK)	``						
<u> </u>	· · · · · · · · · · · · · · · · · · ·	Ϋ́	1.64	67.49	14.42		150.0	
		Z	1.28	65.53	12.17		150.0	
10146-	LTE-FDD (SC-FDMA, 100% RB, 1.4	X	6.65	82.42	19.81	0.00	150.0	± 9.6 %
CAC	MHz, 16-QAM)							L
		Y	3.51	73.00	16.51		150.0	
		Z	2.73	70.16	13.72		150.0	
10147- CAC	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	X	11.62	90.60	22.70	0.00	150.0	± 9.6 %
		Y	4.34	76.22	18.03		150.0	
		Z	3.53	73.44	15.25	1	150.0	

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10149- CAB	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	X	3.22	68.90	16.79	0.00	150.0	± 9.6 %
		Y	3.13	67.70	16.01	-	150.0	
		Z	2.94	67.52	15.84		150.0	
10150- CAB	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	X	3.33	68.71	16.76	0.00	150.0	± 9.6 %
		Y	3.25	67.61	16.05		150.0	
		<u>Z</u>	3.06	67.50	15.89		150.0	
10151- CAB	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	X	9.59	81.08	22.43	3.98	65.0	± 9.6 %
		Y	8.87	78.87	21.64		65.0	
		Z	9.33	81.38	22.62		65.0	
10152- CAB	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	X	8.50	77.58	21.63	3.98	65.0	± 9.6 %
		Y	8.30	76.31	21.16		65.0	
		Z	8.08	77.33	21.50		65.0	
10153- CAB	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	X	8.85	78.28	22.25	3.98	65.0	± 9.6 %
		<u>Y</u>	8.62	76.95	21.75		65.0	
		Z	8.48	78.15	22.17		65.0	
10154- CAC	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	X	2.77	71.95	18.01	0.00	150.0	± 9.6 %
		<u>Y</u>	2.51	69.32	16.50		150.0	
		<u>Z</u>	2.29	69.01	16.28		150.0	
10155- CAC	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	X	2.94	69.69	17.25	0.00	150.0	± 9.6 %
		Y	2.80	68.03	16.25		150.0	
		Z	2.63	68.10	16.02		150.0	
10156- CAC	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	X	2.40	72.31	17.91	0.00	150.0	±9.6 %
		Y	2.09	68.89	16.05		150.0	
		Z	1.86	68.62	15.51		150.0	
10157- CAC	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	X	2.55	69.65	16.30	0.00	150.0	± 9.6 %
		Y	2.36	67.46	15.11		150.0	
		Z	2.12	67.25	14.30		150.0	
10158- CAC	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	X	3.10	69.70	17.32	0.00	150.0	± 9.6 %
		Y	2.97	68.15	16.39		150.0	
		Z	2.78	68.27	16.17		150.0	
10159- CAC	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	X	2.69	70.18	16.62	0.00	150.0	±9.6 %
		Y	2.48	67.89	15.40		150.0	
		Z	2.22	67.66	14.56		150.0	
10160- CAB	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	X	3.10	70.43	17.35	0.00	150.0	±9.6 %
		Y	2.94	68.69	16.29		150.0	
		L Z	2.78	68.69	16.25		150.0	
10161- CAB	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	X	3.22	68.62	16.74	0.00	150.0	± 9.6 %
		<u> </u>	3.14	67.48	16.00		150.0	
		Z	2.96	67.42	15.82		150.0	
10162- CAB	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	X	3.32	68.61	16.76	0.00	150.0	±9.6 %
		Y	3.24	67.49	16.04		150.0	
40400		Z	3.07	67.56	15.92		150.0	
10166- CAC	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	X	4.32	72.20	20.50	3.01	150.0	± 9.6 %
		Y	4.09	70.13	19.37		150.0	
		Z	3.89	71.03	19.86		150.0	
10167- CAC	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	X	6.13	77.20	21.71	3.01	150.0	± 9.6 %
		Y	5.31	73.40	20.02		150.0	
		Z	5.17	75.28	20.82		150.0	

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10168- CAC	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz,	X	6.94	79.87	23.11	3.01	150.0	± 9.6 %
0/10		İΥ	5.79	75.28	21.14		150.0	
		Z	5.82	77.80	22.20		150.0	
10169- CAB	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	X	4.47	76.31	22.20	3.01	150.0	±9.6 %
		Y	3.93	72.42	20.26		150.0	
		Z	3.45	71.87	20.27		150.0	
10170- CAB	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	X	9.97	90.37	26.89	3.01	150.0	± 9.6 %
		Y	6.08	79.64	22.84		150.0	
40474		Z	5.69	81.07	23.66	2.04	150.0	
AAB	64-QAM)		0.58	81.51	22.12	3.01	150.0	± 9.6 %
			4.82	74.69	19.94		150.0	
10172-	TE-TOD (SC-EDMA_1 RB_20 MHz	X	73.64	126.23	37 77	6.02	65.0	+96%
CAB	QPSK)	-	10.04	00.20	20.04	0.02	65.0	10.0 %
		7	50.70	122 38	29.94		65.0	
10173- CAB	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	X	94.74	123.96	35.21	6.02	65.0	± 9.6 %
0,10		Y	22.61	98.04	28.47		65.0	
		Z	96.90	127.66	36.64		65.0	
10174- CAB	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	X	56.11	113.11	31.91	6.02	65.0	± 9.6 %
		Y	18.59	93.53	26.66		65.0	
		Z	65.46	118.77	33.84		65.0	
10175- _CAC	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	X	4.37	75.74	21.85	3.01	150.0	± 9.6 %
		<u>-</u>	3.86	71.99	19.97		150.0	
10176-	LTE-FDD (SC-FDMA, 1 RB, 10 MHz,	X	<u>3.41</u> 9.99	90.41	20.02	3.01	150.0	± 9.6 %
CAC	16-QAM)		6.00	70.66	22.85		150.0	
		7	5.70	81 10	23.67	-	150.0	
10177- CAF	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, OPSK)	X	4.43	76.02	22.00	3.01	150.0	± 9.6 %
		Y	3.90	72.21	20.10		150.0	
		Z	3.44	71.69	20.11		150.0	
10178- CAC	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16- QAM)	X	9.65	89.71	26.63	3.01	150.0	± 9.6 %
		Y	<u>5.97</u>	79.26	22.66		150.0	_
			5.62	80.80	23.53		150.0	
10179- CAC	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	X	7.97	85.43	24.54	3.01	150.0	± 9.6 %
		+ Y	5.36	79.42	21.19	<u> </u>	150.0	
10190			4.90	81 29	21.92	3.01	150.0	+96%
CAC	QAM)		4 70	74.55	10.96		150.0	
ļ			4.79	75 44	20.42	<u> </u>	150.0	
10181-	LTE-FDD (SC-FDMA, 1 RB, 15 MHz.	X	4.42	75.99	21.99	3.01	150.0	± 9.6 %
CAB	QPSK)	Υ Y	3,90	72.19	20.09		150.0	
		Ż	3.43	71.67	20.11		150.0	
10182- CAB	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	X	9.63	89.67	26.62	3.01	150.0	± 9.6 %
		Y	5.96	79.23	22.65		150.0	
		Z	5.61	80.77	23.51		150.0	
10183- AAA	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	X	6.50	81.25	22.60	3.01	150.0	± 9.6 %
		Y	4.78	74.53	19.85		150.0	
1		ΙZ	4.37	/5.41	20.41	1	150.0	1

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10184-	LTE-FDD (SC-FDMA, 1 RB, 3 MHz,	X	4.44	76.05	22.02	3.01	150.0	± 9.6 %
CAC		+	2.01	72.24	20.10		450.0	
			3.81	71 70	20.12		150.0	
10185-	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16-	$\frac{2}{x}$	9.70	89.80	26.67	3.01	150.0	± 9.6 %
CAC	QAM)	Y	5 99	79.32	22.68	<u> </u>	150.0	
		7	5.64	80.86	23.56	ł	150.0	
10186- AAC	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64-	X	6.54	81.37	22.64	3.01	150.0	± 9.6 %
		+	4.81	74.60	10.90	<u> </u>	450.0	
		+ +	4.01	75.50	19.00		150.0	
10187-	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz,	X	4.45	76.10	20.45	3.01	150.0	± 9.6 %
CAC		-				ļ		
		Y	3.92	72.26	20.15	┢───	150.0	
10100			3.46	71.78	20.19		150.0	
CAC	16-QAM)	X	10.51	91.45	27.34	3.01	150.0	± 9.6 %
		Y	6.26	80.23	23.14		150.0	
		Z	5.89	81.76	24.00		150.0	
10189- _AAC	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	X	6.85	82.27	23.07	3.01	150.0	± 9.6 %
		Y	4.94	75,14	20.19	<u> </u>	150.0	-
		Z	4.52	76.06	20.77	<u> </u>	150.0	
10193- CAB	IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK)	X	4.73	67.10	16.51	0.00	150.0	± 9.6 %
		TY	4 75	66 68	16.23	┣ ──	150.0	<u> </u>
		17	4.57	66 79	16.16	<u> </u>	150.0	
10194- CAB	IEEE 802.11n (HT Greenfield, 39 Mbps, 16-QAM)	X	4.94	67.48	16.62	0.00	150.0	± 9.6 %
			1 06	67.09	16.24	<u> </u>	450.0	<u> </u>
		$\frac{1}{7}$	4.30	67.11	16.04	<u> </u>	150.0	
10195- CAB	IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM)	X	4.98	67.48	16.62	0.00	150.0	± 9.6 %
		+	5.00	67.07	40.04			
			0.00	67.07	10.34	<u> </u>	150.0	
10196- CAB	IEEE 802.11n (HT Mixed, 6.5 Mbps,	X	4.79	67.14	16.55	0.00	<u>150.0</u> 150.0	± 9.6 %
0/10			4 70	<u> </u>	40.07		<u> </u>	
		7	4.70	00.80	16.27		150.0	
10197-	IEEE 802 11n /HT Mixed 30 Mbps 16		4.00	00.86	16.18		150.0	
CAB	QAM)		4.96	67.50	16.63	0.00	150.0	±9.6 %
		Y	4.98	<u>67.09</u>	<u>16.35</u>		150.0	
10198-	IEEE 802.11n (HT Mixed, 65 Mbps, 64-	Z X	<u>4.76</u> 4.99	67.14 67.50	<u>16.30</u> 16.63	0.00	150.0	+96%
CAB	QAM)							
	· · · · · · · · · · · · · · · · · · ·	⊢≚⊣	5.01	67.09	16.35		150.0	
10240		Z	4.79	67.16	16.31		150.0	
CAB	BPSK)	X	4.71	67.23	16.53	0.00	150.0	± 9.6 %
		Y	4.73	66.82	16.24		150.0	<u> </u>
10000		Z	4.53	66.87	16.14		150.0	
10220- CAB	IEEE 802.11n (HT Mixed, 43.3 Mbps, 16- QAM)	X	4.96	67.50	16.63	0.00	150.0	±9.6%
		Y	4.98	67.10	16.35		150.0	
4000		Z	4.76	67.11	16.29		150.0	
10221- CAB	IEEE 802.11n (HT Mixed, 72.2 Mbps, 64- QAM)	X	4.99	67.43	16.62	0.00	150.0	±9.6 %
		Y	5.01	67.03	16.34		150.0	[
_		Z	4.80	67.09	16.30		150.0	
10222- CAB	IEEE 802.11n (HT Mixed, 15 Mbps, BPSK)	X	5.29	67.72	16.73	0.00	150.0	±9.6 %
		_	5.31	67.38	16.40		150.0	
		z	5.12	67.29	16 41		150.0	
					10.71		130.0	

10223-	IEEE 802.11n (HT Mixed, 90 Mbps, 16-	X	5.67	68.03	16.90	0.00	150.0	± 9.6 %
		Y	5.70	67.71	16.67		150.0	
		Z	5.43	67.50	16.54		150.0	
10224- CAB	IEEE 802.11n (HT Mixed, 150 Mbps, 64- QAM)	X	5.35	67.84	16.72	0.00	150.0	± 9.6 %
		Y	5.37	67.51	16.48		150.0	
10225-	LIMTS-FDD (HSPA+)	X	5.17	67.01	16.39	0.00	150.0	+96%
CAB			0.00	01.01	10.10	0.00	100.0	2 0.0 /1
			3.00	66.12	15.59		150.0	
10226-	LTE-TOD (SC-EDMA_1 RB_14 MHz		2.04	125 13	35.58	6.02	65.0	+96%
CĂĂ	16-QAM)		100.00	120.10		0.02	00.0	- 0.0 //
		Y Z	23.60	98,91	28.82		65.0	
10227-			100.00	128.43	30.91	6.02	65.0	+96%
CAA	64-QAM)		01.10	114.00	02.47	0.02	00.0	10.0 %
· · -		<u>Y</u>	19.96	94.87	27.16		65.0	
10009		Z	73.77	120.96	34.46	6.02	65.0	1069V
10228- CAA	QPSK)		72.10	120.03	30.01	0.02	05.0	1 9.0 %
		<u>Y</u>	21.44	101.40	31.05		65.0	
40000			53.16	123.89	37.96	6.00	65.0	+0.6.04
10229- CAB	QAM)	^	94.57	123.93	35.21	0.02	05.0	I 9.0 %
		Y	22.66	98.06	28.49		65.0	
40000		Z	96.87	127.65	36.65	0.00	65.0	1000
10230- CAB	QAM)	X	56.39	113.28	31.99	6.02	65.0	±9.0%
		Y	19.26	94.16	26.88		65.0	
1000/			66.99	119.13	33.93	0.00	65.0	100%
10231- CAB	OPSK)	X	66.18	124.67	37.45	6.02	65.0	± 9.6 %
		Y	20.62	100.55	30.72		65.0	
40000			48.89	122.07	37.41	6.00	65.0	+0.6.9/
10232- CAB	QAM)		94.09	123.90	35.21	0.02	65.0	I 9.0 %
		<u>Y</u>	22.64	98.05	28.48		65.0	
10000			97.00	127.68	30.00	6.02	65.0	+96%
CAB	QAM)		00.02	115.55	52.00	0.02	00.0	1 0.0 %
		Y	19.26	94.17	26.88		65.0	
40004			67.07	119.16	33.94	6.02	65.0	+06%
10234- CAB	QPSK)		00.20	122.09	50.01	0.02	05.0	19.0 %
		<u> </u>	19.81	99.63	30.34		65.0	
40005	LTE TOD (00 FOMA 4 DD 40 MU-		45.11	120.21	36.81	6.02	65.0	+96%
10235- CAB	16-QAM)		95.36	124.09	35.25	0.02	03.0	1 9.0 %
		Υ	22.67	98.09	28.50		65.0	
			97.77	127.84	36.70		65.0	
10236- CAB	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	×	57.18	113.50	32.04	6.02	65.0	± 9.0 %
		Y	19.38	94.26	26.90		65.0	
			68.10	119.39	33.99		65.0	+0.0 %
10237- CAB	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)		67.28	125.01	37.54	0.02	05.0	±9.0 %
		Y	20.74	100.68	30.76		65.0	
		Z	49.59	122.38	37.49		65.0	1.0.0.0
10238- CAB	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	X	95.00	124.02	35.23	6.02	65.0	±9.6%
		Y	22.64	98.06	28.49		65.0	
		Z	97.19	127.73	36.66	i	65.0	1

10239-	LTE-TDD (SC-FDMA, 1 RB, 15 MHz,	X	56.67	113.39	32.01	6.02	65.0	± 9.6 %
	04-QAM)	+	19.26	94.19	26.88	<u> </u>	65.0	├ ──
		+ ;	67.13	110 10	20.00	+	65.0	
10240-	LTE-TDD (SC-EDMA, 1 RB, 15 MHz		67.00	124.03	37.52	6.02	65.0	
CAB	QPSK)		07.00	124.00	07.02	0.02	05.0	I 9.0 %
		Y	20.68	100.63	30.74		65.0	
		Z	49.37	122.30	37.47		65.0	
10241- CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	X	14.43	89.77	28.56	6.98	65.0	± 9.6 %
		Y	12.31	85.00	26.80		65.0	·
		Z	13.89	90.56	28.94		65.0	
10242- CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	X	13.70	88.57	28.03	6.98	65.0	± 9.6 %
		Y	10.82	82.08	25.53		65.0	<u> </u>
		Z	13,16	89.30	28.37		65.0	
10243-	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz,	X	10.55	84.90	27.56	6.98	65.0	+96%
CAA	QPSK)							2 0.0 70
		<u>Y</u> _	<u> </u>	79.49	25.25		65.0	
40044		<u>Z</u>	9.99	85.03	27.70		65.0	
10244- CAB	16-QAM)	X	11.43	83.67	22.47	3.98	65.0	± 9.6 %
		ΙY	9.78	80.48	21.64		65.0	
		Z	9.76	81.22	20.90		65.0	
10245- CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	X	11.21	83.09	22.22	3.98	65.0	± 9.6 %
		Y	9.71	80.13	21.47	<u> </u>	65.0	
		Z	9.48	80.50	20.58	<u> </u>	65.0	<u> </u>
10246- CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	X	10.58	85.22	23.00	3.98	65.0	±9.6%
		Y	8.86	81.57	21.94	·	65.0	<u> </u>
		Z	9.16	83.05	21.67		65.0	† ──── ── ── ── ── ── ── ── ── ── ── ──
10247- <u>CA</u> B	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	X	8.25	78.94	21.22	3.98	65.0	± 9.6 %
-		Y	7.85	77.32	20.79		65.0	╞╴┈────┤
		z	7.47	77.61	20.18		65.0	
10248- CAB	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	X	8.20	78.37	20.99	3.98	65.0	±9.6 %
		Y	7.89	76.93	20.61		65.0	
		Z	7.41	77.03	19.93		65.0	
10249- CAB	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	X	11.20	86.28	23.89	3.98	65.0	± 9.6 %
		Y	9.29	82.26	22.62		65.0	
		Z	10.48	85.66	23.36		65.0	
10250- CAB	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	X	8.93	80.25	22.81	3.98	65.0	±9.6 %
		Y	8.46	78.37	22.14		65.0	<u> </u>
		Z	8.46	79.88	22.48		65.0	
10251- CAB	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	X	8.39	77.98	21.64	3.98	65.0	±9.6 %
		Y	8.12	76.54	21.14		65.0	<u> </u>
		Z	7.98	77.74	21.34		65.0	
10252- CAB	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	х	10.53	84.51	23.78	3.98	65.0	± 9.6 %
		Y	9.19	81.18	22.63		65.0	
40050		Z	10.24	84.82	23.86		65.0	
10253- CAB	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	X	8.25	76.95	21.44	3.98	65.0	±9.6%
		Y	8.10	75.77	21.00		65.0	
		Z	7.89	76.78	21.28		65.0	
10254- CAB	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	x	8.62	77.66	22.02	3.98	65.0	± 9.6 %
		Υİ	8.44	76.43	21.56		65.0	
		Z	8.28	77.57	21.89		65.0	

10255- CAB	LTE-TDD (SC-FDMA, 50% RB, 15 MHz,	X	9.25	80.67	22.52	3.98	65.0	± 9.6 %
		Y	8.61	78.53	21.74		65.0	
		Ż	9.00	80.97	22.67		65.0	
10256- CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	X	10.45	81.80	21.06	3.98	65.0	± 9.6 %
		Y	9.25	79.43	20.63		65.0	
10257		Z	8.10	77.76	18.69	2.00	65.0	106%
CAA	MHz, 64-QAM)		0.17	79.05	20.00	3.90	65.0	± 9.0 %
	+	7	<u>9.17</u> 7.78	76.90	18 23		65.0	
10258- CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	X	9.51	83.16	21.76	3.98	65.0	± 9.6 %
		Y	8.34	80.46	21.12		65.0	
		Z	7.35	79.00	19.46		65.0	
10259- CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	X	8.50	79.32	21.74	3.98	65.0	± 9.6 %
		Y	8.08	77.61	21.22		65.0	
40000		Z	7.86	78.44	21.00	2.00	65.0	
CAB	64-QAM)		06.8	79.04	21.00	3.96	0.00	± 9.0 %
		Y 7	8.14	78.11	21.18		65.0	
10261-	1 TE-TDD (SC-EDMA, 100% RB, 3 MHz,	X	10.46	84.88	23.66	3.98	65.0	± 9.6 %
CAB	QPSK)		8.00	81.35	22.40		65.0	
		7	0.99	84.54	23.31		65.0	· · · ·
10262- CAB	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	X	8.92	80.22	22.77	3.98	65.0	± 9.6 %
		Y	8.45	78.35	22.11		65.0	
		Z	8.45	79.83	22.45		65.0	
10263- CAB	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	X	8.39	77.98	21.64	3.98	65.0	± 9.6 %
		Y	8.12	76.54	21.14		65.0	
10264-			10.46	84.37	21.33	3.98	65.0	+96%
CAB	QPSK)		0.45	01.07	20.1	0.00	65.0	
l	<u>+-</u> ·	7	9.15 10.16	84.65	22.57		65.0	
10265- CAB	LTE-TDD (SC-FDMA, 100% RB, 10 MHz 16-QAM)	X	8.50	77.59	21.64	3.98	65.0	± 9.6 %
		Y	8.29	76.32	21.16		65.0	
		Z	8.08	77.33	21.51		65.0	
10266- CAB	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	X	8.85	78.27	22.25	3.98	65.0	± 9.6 %
		Υ Υ	8.62	76.95	21.75		65.0	
10267	LTE TOD (SC EDMA 100% PB 10		0.48	81.04	22.17	3 08	65.0	+96%
CAB	MHz, QPSK)		9.00	70.05	22.72	0.00	65.0	1 0.0 %
			0.80	81 34	21.03	<u> </u>	65.0	
10268-	LTE-TDD (SC-FDMA, 100% RB, 15 MHz 16-QAM)	X	8.89	76.95	21.70	3.98	65.0	± 9.6 %
		Y	8.78	75.95	21.31		65.0	
		Z	8.54	76.83	21.69		65.0	
10269- CAB	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	X	8.79	76.51	21.59	3.98	65.0	± 9.6 %
		<u> </u>	8.71	75.58	21.23	-	65.0	
40070		<u>−</u> Z	8.47	76.42	21.58	3.00	65.0	+96%
CAB	MHz, QPSK)		0.80	70.20		2.90	65.0	1 9.0 %
		ľ	8 70	78.39	20.90	<u> </u>	65.0	<u> </u>

10274- CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8 10)	X	2.76	67.40	16.12	0.00	150.0	± 9.6 %
		Y	2.68	66.20	15.35		150.0	+
		Z	2.61	66.55	15.21	<u> </u>	150.0	-
10275- CAB	UMTS-FDD (HSUPA, Sublest 5, 3GPP Rel8.4)	X	1.97	71.33	17.64	0.00	150.0	± 9.6 %
		Y	1.71	67.84	15.61		150.0	
40077		<u>Z</u>	1.63	67.82	15.44		150.0	
10277- CAA			5.79	70.12	14.44	9.03	50.0	± 9.6 %
		Y	6.71	72.04	16.24		50.0	
10278		<u> </u>	5.20	69.01	13.39		50.0	
			10.14	81.72	21.64	9.03	50.0	± 9.6 %
		<u> </u>	10.00	81.13	22.16		50.0	
		Z	8.80	79.36	20.19		50.0	
10279- CAA	PHS (QPSK, BW 884MHz, Rolloff 0.38)	X	10.33	81.92	21.72	9.03	50.0	± 9.6 %
		Υ	10.19	81.33	22.24		50.0	
		Z	8.92	79.53	20.27	<u> </u>	50.0	
10290- AAB	CDMA2000, RC1, SO55, Full Rate	X	2.41	75.76	18.30	0.00	150.0	± 9.6 %
		Y	1.70	69.18	15.23		150.0	t
		Z	1.46	68.58	14.00		150.0	
10291- AAB	CDMA2000, RC3, SO55, Full Rate	X	1.39	73.22	17.31	0.00	150.0	± 9.6 %
		Y	0.98	66.45	13.79		150.0	
		Z	0.85	65.74	12,53		150.0	<u> </u>
10292- AAB	CDMA2000, RC3, SO32, Full Rate	X	2.43	83.14	21.70	0.00	150.0	±9.6 %
		Y	1.15	69.63	15.75	t —	150.0	
		Z	1.04	69.40	14.71		150.0	
10293- AAB	CDMA2000, RC3, SO3, Full Rate	X	5.22	96.14	26.57	0.00	150.0	± 9.6 %
		Y	1.48	73.58	17.97		150.0	
		Z	1.47	74.43	17.37		150.0	
10295- AAB	CDMA2000, RC1, SO3, 1/8th Rate 25 fr.	X	10.48	83.75	24.32	9.03	50.0	±9.6 %
		Y	9.84	81.54	23.85		50.0	
		Z	11.88	86.37	24.91		50.0	
10297- 	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	X	3.28	72.37	17.95	0.00	150.0	± 9.6 %
		Y	2.98	69.95	16.59		150.0	
		Z	2.77	69.63	16.49		150.0	
10298- 	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	X	2.26	72.62	17.48	0.00	150.0	± 9.6 %
		Y	1.88	68.51	15.39		150.0	
40000		Z	1.59	67.65	14.14		150.0	
10299- AAB	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	X	6.40	81.89	20.37	0.00	150.0	± 9.6 %
		Y	3.78	73.44	17.26		150.0	
10000		Z	3.62	73.66	16.18		150.0	
10300- AAB	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	X	3.72	72.73	16.07	0.00	150.0	± 9.6 %
		Y	2.96	68.88	14.55		150.0	
1000		Z	2.44	67.52	12.75		150.0	
10301- AAA	IEEE 802.16e WIMAX (29:18, 5ms, 10MHz, QPSK, PUSC)	X	5.70	68.03	18.84	4.17	80.0	±9.6 %
		YI	5.77	67.36	18.35		80.0	
		Z	5.64	68.37	18.74		80.0	
10302- AAA	IEEE 802.16e WIMAX (29:18, 5ms, 10MHz, QPSK, PUSC, 3 CTRL symbols)	X	6.21	68.72	19.60	4.96	80.0	± 9.6 %
		Y	6.41	68.65	19.47		- 80 0	———
		Z	6.13	69.05	19.54		80.0	

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10303-	IEEE 802.16e WiMAX (31:15, 5ms,	X	6.07	68.83	19.70	4.96	80.0	± 9.6 %
		Y	6.30	68 82	19.58		80.0	
		Z	5.97	69.08	19.56		80.0	
10304- AAA	IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, 64QAM, PUSC)	X	5.71	68.13	18.89	4.17	80.0	± 9.6 %
		Y	5.89	68.01	18.73		80.0	
		Z	5.61	68.35	18.73		80.0	
10305- AAA	IEEE 802.16e WIMAX (31:15, 10ms, 10MHz, 64QAM, PUSC, 15 symbols)	X	6.90	74.81	23.11	6.02	50.0	± 9.6 %
		<u>Y</u>	9.48	82.28	26.60		50.0	
10306-	IEEE 802.16e WiMAX (29:18, 10ms,	X	<u>9.03</u> 6.40	82.45 71.34	26.20	6.02	<u>50.0</u> 50.0	± 9.6 %
AAA	10MHz, 64QAM, PUSC, 18 symbols)			74 50			50.0	
			6.75	71.50	21.57		50.0	
10307-	LEEE 802 16e WIMAY (20:18, 10ms		6.43	72.04	21.00	6.02	50.0	+96%
AAA	10MHz, QPSK, PUSC, 18 symbols)		6.95	72.10	21.02	0.02	50.0	
		7	6.50	72.67	21.70		50.0	
10308-	IEEE 802.16e WIMAX (29:18, 10ms,	X	6.53	72.49	22.02	6.02	50.0	± 9.6 %
AAA		Y	6.89	72.58	21.88		50.0	
		Z	6.59	73.18	21.92		50.0	
10309- AAA	IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, 16QAM, AMC 2x3, 18 symbols)	X	6.52	71.66	21.81	6.02	50.0	± 9.6 %
		Y	6.86	71.77	21.70		50.0	
		Z	6.53	72.35	21.74		50.0	
10310- AAA	IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, QPSK, AMC 2x3, 18 symbols)	X	6.41	71.57	21.66	6.02	50.0	± 9.6 %
		Y	6.75	71.71	21.56		50.0	
		Z	6.45	72.29	21.59		50.0	100%
10311- AAA	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	X	3.66	/1.55	17.51	0.00	150.0	± 9.6 %
		Y	3.33	69.32	16.27		150.0	
10313-	IDEN 1:3	X	8.19	79.62	19.16	6.99	70.0	± 9.6 %
AAA			7 35	77 72	18 90		70.0	
		7	8.21	80.46	19.57		70.0	
10314-	IDEN 1:6	X	11.35	86.83	24.06	10.00	30.0	± 9.6 %
		Y	8.72	81.68	22.69		30.0	
		Z	10.81	87.34	24.49		30.0	
10315- AAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 96pc duty cycle)	X	1.24	66.34	16.99	0.17	150.0	± 9.6 %
		Y	1.18	64.44	15.46		150.0	
		Z	1.17	64.45	15.36	0.47	150.0	100%
10316- AAB	IEEE 802.11g WiFi 2.4 GHz (ERP- OFDM, 6 Mbps, 96pc duly cycle)	X	4.83	67.25	16.68	0.17	150.0	±9.6 %
·		<u> </u>	4.86	66.88	16.43		150.0	
40247			4.08	67.25	16.39	0.17	150.0	+96%
AAB	Mbps, 96pc duty cycle)	Ļ_	4.00	66.00	10.00	0.11	150.0	10.0 //
		7	4.00	66.00	16.39	-	150.0	<u> </u>
10400-	IEEE 802.11ac WiFi (20MHz, 64-QAM,	X	4.96	67.54	16.61	0.00	150.0	±9.6 %
		+	4,98	67.13	16.32		150.0	1
		$+\dot{z}$	4.75	67.19	16.29		150.0	
10401-	IEEE 802.11ac WiFi (40MHz, 64-QAM, 99pc duly cycle)	X	5.54	67.49	16.61	0.00	150.0	± 9.6 %
10.0		Y	5.56	67.14	16.37		150.0	
<u> </u>		7	5.45	67.43	16.49		150.0	

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10402-	IEEE 802.11ac WiFi (80MHz, 64-QAM,	X	5.87	68.11	16.75	0.00	150.0	± 9.6 %
AAC	99pc duty cycle)	<u> </u>				[
<u> </u>		<u> </u>	5.89	67.80	16.54		150.0	
10403		<u> </u>	5.70	67.70	16.47	1	150.0	
AAB	CDMA2000 (TXEV-DO, Rev. 0)	^	2.47	/5.76	18.30	0.00	115.0	± 9.6 %
		Y	1.70	69.18	15.23		115.0	
		Z	1.46	68.58	14.00	1	115.0	
10404-	CDMA2000 (1xEV-DO, Rev. A)	X	2.41	75.76	18.30	0.00	115.0	± 9.6 %
- AAD			4 70	00.40	45.00	<u> </u>		
		7	1.70	69.18	15.23		115.0	
10406-	CDMA2000, RC3, SO32, SCH0, Full	$+\frac{2}{x}$	100.00	120 32	30.30		115.0	+06%
AAB	Rate		100.00	120.02	00.00	0.00	100.0	19.0 %
		- Y	37.67	108.93	28.46		100.0	
		Z	100.00	119.28	29.39	<u> </u>	100.0	
10410- 	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	118.51	29.90	3.23	80.0	± 9.6 %
		Y_	100.00	119.74	30.88		80.0	
40445		<u>Z</u>	100.00	<u>120.9</u> 9	30.71		80.0	
10415- AAA	Mbps, 99pc duty cycle)	X	1.06	64.54	16.02	0.00	150.0	± 9.6 %
		Y	1.03	62,90	14.57		150.0	
10/16			1.03	63.04	14.51		150.0	
	OFDM, 6 Mbps, 99pc duty cycle)	X	4.73	67.12	16.55	0.00	150.0	±9.6 %
		Y	4.75	66.70	16.25		150.0	
10417-			4.58	66.83	16.23		150.0	
	Mbps, 99pc duty cycle)		4.73	67.12	16.55	0.00	150.0	± 9.6 %
	<u> </u>	<u>Υ</u>	4.75	66.70	16.25		150.0	
10418- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 99pc duty cycle, Long preambule)	X	4.72	67.27	16.56	0.00	150.0	± 9.6 %
		Y	4.73	66.83	16 25		150.0	
		Z	4.56	66.98	16.24		150.0	
10419- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 99pc duty cycle, Short preambule)	X	4.75	67.23	16.56	0.00	150.0	±9.6%
		Y	4.76	66.80	16.26		150.0	
40400			4.59	66.94	16.24		150.0	
10422- 	IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK)	X	4.87	67.22	16.56	0.00	150.0	± 9.6 %
		Y	4.89	66.82	16.28		150.0	
10422			4.71	66.94	16.26		150.0	
<u>AAA</u>	Mbps, 16-QAM)		5.09	67.62 	16.71	0.00	150.0	±9.6%
		+ <u>Y</u>	5.12	67.23	16.44		150.0	
10424-	IFFF 802 11n (HT Greenfield 72.2		4.88	67.27	16.38		150.0	
AAA	Mbps, 64-QAM)		5.00	07.55	16.68	0.00	150.0	± 9.6 %
·			5.02	67.15	16.39		150.0	
10425- AAA	IEEE 802.11n (HT Greenfield, 15 Mbps, BPSK)	X	5.55	67.83	16.35	0.00	<u>150.0</u> 150.0	± 9.6 %
		Y	5.59	67.55	16.57		150.0	
		Z	5.40	67.57	16.55		150.0	
10426- AAA	IEEE 802.11n (HT Greenfield, 90 Mbps, 16-QAM)	X	5.56	67.88	16.79	0.00	150.0	± 9.6 %
		Y	5.60	67.58	16.58		150.0	—l
	L	Z	5.41	67.59	16.56		150.0	

10427-	IEEE 802.11n (HT Greenfield, 150 Mbps,	X	5.59	67.91	16.80	0.00	150.0	± 9.6 %
AAA	04-QAM)	Y	5.63	67.61	16.59		150.0	
		Z	5.42	67.56	16.54		150.0	
10430- AAA	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1)	Х	4.54	71.07	18.70	0.00	150.0	± 9.6 %
		Y_	4.46	69.99	18.11		150.0	
1.5.1.5.1		Z	4.20	70.41	17.89	0.00	150.0	
10431- AAA	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1)	X	4.50	67.77	16.69	0.00	150.0	±9.6 %
		Y 7	4.51	67.23	16.34		150.0	
10/32-		2 X	4.20	67.63	16.21	0.00	150.0	+96%
AAA			4.70	01.00		0.00	100.0	
		Y	4.80	67.18	16.37		150.0	
10/33			4.00	67.62	16.29	0.00	150.0	+96%
AAA			5.01	07.02	40.71	0.00	450.0	<u> </u>
		Y 7	5.04	67.21	16.43		150.0	
10434-	W-CDMA (BS Test Model 1, 64 DPCH)	X	4.61	71.93	18.79	0.00	150.0	±9.6 %
AAA			4.00				15010	
		Y	4.53	70.61	18.11		150.0	
10425			4.27	118 35	29.82	3.23	80.0	+96%
	QPSK, UL Subframe=2,3,4,7,8,9)		100.00	110.55	23.02	0.20	00.0	1 0.0 %
		Y	100.00	119.61	30.82		80.0	
		Z	100.00	120.81	30.62	0.00	80.0	1069/
10447- AAA	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	X	3.85	68.02	16.38	0.00	150.0	± 9.0 %
		Υ Υ	3.83	67.22	15.92		150.0	
40440			3.54	67.56	15.53	0.00	150.0	+96%
10448- AAA	Clippin 44%)		4.01	07.30	10.00	0.00	150.0	1 9.0 %
		Y 7	4.32	67.13	16.19		150.0	
10449-	LTE-EDD (OEDMA_15 MHz_E-TM 3.1		4.10	67.47	16.59	0.00	150.0	± 9.6 %
AAA	Cliping 44%)		1.00				10010	
			4.57	66.98	16.26	┣──	150.0	
10450			4.3/	67.38	16.19	0.00	150.0	+96%
AAA	Clipping 44%)		4.75	07.00	10.00	0.00	100.0	
		<u>Υ</u>	4.74	66.94	16.27		150.0	
40454	W CDMA (DS Toot Made) 1 64 DDCH	<u> ∠</u>	4.56	67.01	16.22	0.00	150.0	+96%
AAA	Clipping 44%)		3.01	00.42	10.23	0.00	150.0	13.0 %
		<u>Y</u>	3.77	67.50	15.73		150.0	
40450		+	3.44	69.45	15.16		150.0	+96%
10456- AAA	99pc duty cycle)		0.40	06.43	10.93	0.00	150.0	1 3.0 %
		Y	6.44	68.23	16.77		150.0	
		<u> Z</u>	6.27	68.12	16.71	0.00	150.0	
10457- AAA	UMTS-FDD (DC-HSDPA)	X	3.89	65.77	16.30	0.00	150.0	± 9.6 %
		Y.	3.90	65.36	15.99		150.0	
10459	CDMA2000 (1xEV-DO Rey B 2		3.60	67 53	15.95	0.00	150.0	+96%
AAA			0.00	01.00			100.0	
		Y	3.56	66.59	15.22		150.0	
40.450		Z	3.27	66.88	14.62	0.00	150.0	+06%
10459- AAA	CDMA2000 (1XEV-DO, Rev. B, 3 carriers)		4.70	00.00	10.23	0.00	150.0	1 9.0 %
		<u>Y</u>	4.63	64.60	15.71		150.0	
Ì		1 Z	4.2/	1 04.65	1 10.38	1	1 100.0	1

10460-	UMTS-FDD (WCDMA, AMR)	X	1.28	75.29	20.20	0.00	150.0	± 9.6 %
_ AAA		_						
		<u> </u>	0.92	67.71	15.91		150.0	
10461-		<u></u>	0.90	67.71	15.78		150.0	
	QPSK, UL Subframe=2,3,4,7,8,9)		100.00	122.97	32.01	3.29	80.0	± 9.6 %
		<u> </u>	100.00	121.34	31.70		80.0	
10462		<u>Z</u>	100.00	125.58	32.88		80.0	
10462- AAA	LTE-1DD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	108.03	24.84	3.23	80.0	± 9.6 %
		Y	100.00	109.86	26.18		80.0	<u> </u>
		Z	100.00	108.99	24.93		80.0	
10463- AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	105.21	23.49	3.23	80.0	± 9.6 %
		Y	47.92	99.26	23.13		80.0	
		<u>Z</u>	100.00	105.71	23.36		80.0	
10464- AAA	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	121.12	31.00	3.23	80.0	±9.6 %
		Y	100.00	119.76	30.82	1	80.0	
		Z	100.00	123.61	31.80		80.0	
10465- AAA	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	107.54	24.59	3.23	80.0	± 9.6 %
_		Y	92.10	108.50	25.75		80 0	
		Z	100.00	108.47	24.68	<u> </u>	80.0	
10466- AAA	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	104.76	23.28	3.23	80.0	±9.6 %
		ŤΥ	27.79	92.79	21.40	<u> </u>	80.0	<u> </u>
		Z	53.71	98.96	21.73	<u> </u>	80.0	<u> </u>
10467- AAA	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	121.32	31.10	3.23	80.0	± 9.6 %
		Y	100.00	119.93	30.90	<u> </u>	800	
		Z	100.00	123.83	31.91		80.0	
10468- AAA	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16- QAM, UL Subframe=2.3.4.7.8.9)	X	100.00	107.68	24.66	3.23	80.0	± 9.6 %
		Y	100.00	109.58	26.02		80.0	
		Z	100.00	108.64	24 75		80.0	<u> </u>
10469- AAA	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	104.76	23.27	3.23	80.0	±9.6 %
		Y	28.45	93.06	21 47		80.0	
		Z	57.15	99.60	21.88		80.0	
10470- AAA	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2.3.4.7.8.9)	X	100.00	121.35	31.10	3.23	80.0	± 9.6 %
		Y	100.00	119 95	30.90		80.0	
		Z	100.00	123.86	31.91		80.0	
10471- AAA	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	107.63	24.63	3.23	80.0	± 9.6 %
		Y	100.00	109.54	26.00		80.0	
		Z	100.00	108.59	24.73		80.0	┝────┨
10472- AAA	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	Х	100.00	104.72	23.24	3.23	80.0	± 9.6 %
		Y	28.52	93.08	21 46		80.0	
		Z	57.07	99.54	21.85		80.0	
10473- AAA	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	121.32	31.09	3.23	80.0	± 9.6 %
		Y	100.00	119.92	30.89		80.0	
10474		Z	100.00	123.84	31.90		80.0	
AAA	QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	107.64	24.63	3.23	80.0	± 9.6 %
		Y	100.00	109.55	26.00		80.0	
10175		Z	100.00	108.60	24.73		80.0	——
10475- AAA	LIE-TDD (SC-FDMA, 1 RB, 15 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	104.73	23.25	3.23	80.0	± 9.6 %
		Y	28.13	92.93	21.42		80.0	
		Z	55.36	99.25	21.78		80.0	
					-			

10477- AAA	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-	Х	100.00	107.49	24.56	3.23	80.0	± 9.6 %
		Y	96.57	109.01	25.85		80.0	
		Z	100.00	108.42	24.64		80.0	
10478- AAA	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	х	100.00	104.68	23.23	3.23	80.0	± 9.6 %
		Y	27.68	92.72	21.36		80.0	
		Ζ	53.23	98.81	21.67		80.0	
10479- AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	26.63	104.01	29.13	3.23	80.0	± 9.6 %
		Y	9.63	86.48	23.96		80.0	
10490			24.30	102.59	28.22	3.23	80.0	+96%
10480- AAA	16-QAM, UL Subframe=2,3,4,7,8,9)		30.31	102.90	27.02	J.2J	00.0	<u> </u>
		Y 7	11.50	85.06	22.20		80.0	
10481-	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64 OAM LIL Subframe=2.3.4.7.8.9)	X	30.40	98.59	25.52	3.23	80.0	± 9.6 %
~~~		Y	10.74	83.47	21.41		80.0	·
· · · -		Z	20.94	92.98	23.18		80.0	
10482- AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	x	8.51	84.82	22.25	2.23	80.0	± 9.6 %
		Y	5.60	77.58	19.80		80.0	
		<u>Z</u>	5.41	78.09	19.19		80.0	
10483- AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	14.01	88.92	23.41	2.23	80.0	±9.6 %
		<u>Y</u>	8.14	80.18	20.73		80.0	
10484-	LTE-TDD (SC-FDMA, 50% RB, 3 MHz,	<u> </u>	9.32	82.50	20.44 22.82	2.23	80.0	± 9.6 %
AAA	64-QAM, OL SUOITAITIE-2,5,4,7,6,9)	Η _Y	7 81	79.33	20.43		80.0	
		Ż	8.26	80.64	19.81		80.0	
10485- AAA	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	×	8.06	84.25	22.66	2.23	80.0	± 9.6 %
		Y	5.75	77.87	20.37		80.0	
		Z	5.68	79.10	20.42		80.0	
10486- AAA	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	×	5.66	75.87	19.43	2.23	80.0	±9.6%
		Υ Υ	4.94	72.86	18.29		80.0	
10487-	TE-TDD (SC-EDMA 50% BB, 5 MHz.		4.62	75.25	19.19	2.23	80.0	± 9.6 %
AAA	64-QAM, UL Subframe=2,3,4,7,8,9)		4 94	72.51	18,16		80.0	
		Ż	4.56	72.51	17.46		80.0	
10488- AAA	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, OPSK UI, Subframe=2.3.4.7.8.9)	Ī	7.10	80.82	21.84	2.23	80.0	± 9.6 %
		Y	5.79	76.47	20.13		80.0	
		Z	5.49	77.19	20.36	1	80.0	
10489- AAA	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	5.34	73.87	19.44	2.23	80.0	± 9.6 %
		<u> </u>	5.00	71.87	18.57	┣ -	80.0	
		₩₹	4.68	72.1/	10.4/	2.22	80.0	+96%
10490- 	64-QAM, UL Subframe=2,3,4,7,8,9)		5.35	74.50	19.20	2.20	80.0	2 0.0 /0
·		+ ¥	0.06 4 74	71.55	18.40		80.0	
10491-	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, OPSK LII, Subframe=2.3.4.7.8.9)	X	6.36	77.12	20.56	2.23	80.0	± 9.6 %
~~~		Y	5.66	74.28	19.36	1	80.0	
		Z	5.31	74.67	19.54		80.0	
10492- AAA	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	5.41	72.24	18.98	2.23	80.0	± 9.6 %
		Y	5.23	70.84	18.33		80.0	<u> </u>
1		Z	4.89	1 71.01	18.29	1	80.0	

V 6.28 70.63 18.27 80.0 10494 LTE-TDD (SC-FDMA, 50% RB, 20 MHz, AAA V 6.30 77.13 18.22 80.0 10495 LTE-TDD (SC-FDMA, 50% RB, 20 MHz, AAA Y 6.30 76.13 19.88 80.0 10495 LTE-TDD (SC-FDMA, 50% RB, 20 MHz, AAA Y 5.56 72.97 19.25 2.23 80.0 ± 9.6 %. AAA 16-QAM, UL Subfame=2.34,7.8.9) Y 5.33 71.45 18.55 80.0 ± 9.6 %. AAA 16-QAM, UL Subfame=2.34,7.8.9) Y 5.37 71.03 16.42 80.0 ± 9.6 %. AAA 4-QAM, UL Subfame=2.34,7.8.9) Y 4.37 18.23 20.82 2.23 80.0 ± 9.6 %. AAA 44-QAM, UL Subfame=2.34,7.8.9) Y 4.87 75.75 16.64 80.0 19.6 %. AAA 12, 16-QAM, LU, Subfame=2.34,7.8.9) Y 4.47 73.29 16.69 2.23 80.0 ± 9.6 %. 10496 LTE-TDD (SC-FDMA, 100% RB, 1.4	10493- AAA	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	5.44	71.94	18.88	2.23	80.0	± 9.6 %
10494 TE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9) Y 6,43 79,70 21,31 2,23 80.0 10495. LTE-TDD (SC-FDMA, 50% RB, 20 MHz, AAA Y 6,30 76,43 79,70 21,31 2,23 80.0 10495. LTE-TDD (SC-FDMA, 50% RB, 20 MHz, AAA Y 5,36 76,40 20.05 90.0 ± 9.6 % 10495. LTE-TDD (SC-FDMA, 50% RB, 20 MHz, AAA Y 5,33 71.44 18.50 90.0 ± 9.6 % 10496. LTE-TDD (SC-FDMA, 50% RB, 20 MHz, AAA Y 5,54 72.39 19.06 2.23 60.0 ± 9.6 % 10497. LTE-TDD (SC-FDMA, 100% RB, 1.4 X 7.71 18.28 20.23 60.0 ± 9.6 % 10497. LTE-TDD (SC-FDMA, 100% RB, 1.4 X 4.73 73.29 16.68 60.0 19.6 % 10498. LTE-TDD (SC-FDMA, 100% RB, 1.4 X 4.73 73.29 16.69 2.23 60.0 ± 9.6 % 10499. LTE-TDD (SC-FDMA, 100% RB, 1.4 X 4.73			ΤY	5.28	70.63	18.27	1	80.0	
$ \begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrr$			Ż	4.94	70.81	18 22		80.0	
Y 6.30 76.13 19.88 60.0 10495- LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-0AM, UL Subframe=2,3,4,7,8,9) X 5.56 72.97 19.25 2.23 80.0 ±9.6 %. AAA 16-0AM, UL Subframe=2,3,4,7,8,9) Y 5.33 71.45 18.55 90.0 C 4.97 71.144 18.55 90.0 90.0 10496- LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 4-0AM, UL Subframe=2,3,4,7,8,9) Y 5.37 71.03 18.42 90.0 90.0 10497- LTE-TDD (SC-FDMA, 100% RB, 1.4 X 7.31 82.38 20.82 2.23 90.0 ±9.6 % AAA MHz, OPSK, UL Subframe=2,3,4,7,8,9) Y 4.87 73.79 16.68 80.0 10498- LTE-TDD (SC-FDMA, 100% RB, 1.4 X 4.03 73.89 16.68 80.0 ±9.6 % Subframe=2,3,4,7,8,9) Y 4.12 70.77 15.97 80.0 ±9.6 % Subframe=2,3,4,7,8,9) Y 4.12 70.77 15.97 80.0	10494- AAA	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	7.43	79.70	21.31	2.23	80.0	± 9.6 %
10495- IAAA LTE-TDD (SC-FDMA, 50% RB, 20 MHz, IE-QAM, UL Subframe=2,3,4,7,8,9) Z 5.56 72.97 19.25 2.23 80.0 ± 9.6 % Indege LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) Y 5.54 72.39 19.06 2.23 80.0 ± 9.6 % Ava 64-QAM, UL Subframe=2,3,4,7,8,9) Y 5.54 72.39 19.06 2.23 80.0 ± 9.6 % Ava 64-QAM, UL Subframe=2,3,4,7,8,9) Y 5.37 71.08 18.38 80.0 ± 9.6 % 10497- LTE-TDD (SC-FDMA, 100% RB, 1.4 X 7.31 82.38 2.082 2.23 80.0 ± 9.6 % 10498- LTE-TDD (SC-FDMA, 100% RB, 1.4 X 4.73 73.29 16.69 2.23 80.0 ± 9.6 % 10498- LTE-TDD (SC-FDMA, 100% RB, 1.4 X 4.75 73.68 16.69 2.23 80.0 ± 9.6 % 10499- LTE-TDD (SC-FDMA, 100% RB, 1.4 X 4.75 73.64 16.69 2.23 80.0 ± 9.6 %			Y	6.30	76.13	19.88		80.0	
10489- NAA LTE-TOD (SC-FDMA, 50% RB, 20 MHz, to 2MM, UL Subframe=2,3,4,7,8,9) Y 5.56 72.97 19.25 2.23 80.0 ± 9.6 %. AAA t-OAM, UL Subframe=2,3,4,7,8,9) Y 5.33 71.45 18.55 80.0 T0495- 4-0AM, UL Subframe=2,3,4,7,8,9) Y 5.34 72.39 19.06 2.23 80.0 ± 9.6 %. AAA 6-OAM, UL Subframe=2,3,4,7,8,9) Y 5.37 71.03 18.42 90.0 C 5.01 77.108 18.64 90.0 90.0 AAA 4.403 73.388 16.68 80.0 19.6 %. AAA Hz, DPSC-FDMA, 100% RB, 1.4 X 4.03 73.388 16.69 80.0 19.6 %. 10498- LTE-TDD (SC-FDMA, 100% RB, 1.4 X 4.59 72.54 16.69 2.23 80.0 ± 9.6 %. Ubframe=2,3,4,7,8,9) Y 4.12 70.77 15.97 80.0 19.6 %. U0499- LTE-TDD (SC-FDMA, 100% RB, 1.4 X 4.59 72.54 16.2			Z	5.88	76.40	20.05		80.0	
Y 5.33 71.45 18.55 80.0 10496- AAA LTE-TDD (SC-FDMA, 50% RB, 20 MHz, G4-GAM, UL Subframe=2,34,7,8,9) Y 5.37 71.03 18.42 90.0 10497- AAA LTE-TDD (SC-FDMA, 100% RB, 14 MHz, QPSK, UL Subframe=2,34,7,8,9) Y 5.37 71.03 18.42 90.0 10497- AAA MHz, QPSK, UL Subframe=2,34,7,8,9) Y 4.37 75.75 18.84 80.0 ±9.6 % 10498- AAA MHz, 16-QAM, UL Subframe=2,34,7,8,9) Y 4.37 73.29 16.69 2.23 80.0 ±9.6 % 10498- AAA Subframe=2,34,7,8,9) Y 4.12 70.77 15.97 80.0 ±9.6 % 10499- AAA LTE-TDD (SC-FDMA, 100% RB, 1.4 X 4.59 72.54 16.27 2.23 80.0 ±9.6 % AAA Subframe=2,3.4,7,8,9) Y 4.10 70.38 15.70 80.0 ±9.6 % AAA G4-GAM, UL X 4.59 72.84 18.33 22.01 2.23 80.0 ±9.6 % AAA<	10495- AAA	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	5.56	72.97	19.25	2.23	80.0	± 9.6 %
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $			Y	5.33	71.45	18.55		80.0	
Diago Life:TDU (SC-FDMA, 100%, RB, 20, MHz, X) 5.54 72.39 19.06 2.23 80.0 ± 9.6 % AAA -CAAM, UL Subframe=2,3,4,7,8,9) Y 5.37 71.03 18.42 80.0 10497- LTE-TDD (SC-FDMA, 100% RB, 1.4 X 7.31 82.38 20.82 2.23 80.0 ± 9.6 % AAA MHz, QPSK, UL Subframe=2,3,4,7,8,9) Y 4.87 75.75 18.64 80.0 10498- LTE-TDD (SC-FDMA, 100% RB, 1.4 X 4.73 73.29 16.69 2.23 80.0 ± 9.6 % AAA MHz, 16-GAM, UL X 4.73 73.29 16.69 2.23 80.0 ± 9.6 % AAA MHz, 16-AM, UL X 4.73 73.29 16.79 80.0 ± 9.6 % AAA Subframe=2,3,4,7,8,9) Y 4.10 70.38 15.70 80.0 ± 9.6 % AAA GPSK, UL Subframe=2,3,4,7,8,9) Y 5.57 76.69 20.07 80.0 ± 9.6 % AAA G	10400		<u>Z</u>	4.97	71.48	18.50		80.0	
V 5.37 71.03 18.42 80.0 10497- LTE-TDD (SC-FDMA, 100% RB, 1.4 X 7.31 82.38 20.82 2.23 80.0 ± 9.6 % AAA MHz, QPSK, UL Subframe=2,3,4,7,8,9) Y 4.87 75.75 18.64 80.0 10498- LTE-TDD (SC-FDMA, 100% RB, 1.4 X 4.73 73.29 16.69 2.23 80.0 ± 9.6 % Subframe=2,3,4,7,8,9) Y 4.12 70.77 15.97 80.0 ± 9.6 % 10499- LTE-TDD (SC-FDMA, 100% RB, 1.4 X 4.59 72.54 16.27 2.23 80.0 ± 9.6 % AAA MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) Y 4.10 70.38 15.70 80.0 ± 9.6 % 10500- LTE-TDD (SC-FDMA, 100% RB, 3 MHz, X 5.57 76.68 20.07 80.0 ± 9.6 % AAA GPSK, UL Subframe=2,3,4,7,8,9) Y 5.57 76.68 20.07 80.0 ± 9.6 % AAA GPSC,FDMA, 100% RB, 3 MHz, X 5.46	AAA	64-QAM, UL Subframe=2,3,4,7,8,9)	X	5.54	72.39	19.06	2.23	80.0	± 9.6 %
10497- AAA LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, CPSK, UL Subframe=2,3,4,7,8,9) Y 4.87 4.03 73.1 75.75 18.84 16.88 20.0 2.23 80.0 80.0 ± 9.6 % 10498- AAA LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) Y 4.87 4.73 73.29 16.69 2.23 80.0 ± 9.6 % 10499- AAA LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) Y 4.12 70.77 15.97 80.0 ± 9.6 % 10499- AAA LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) Y 4.10 70.38 15.70 80.0 ± 9.6 % 10500- MAA QPSK, UL Subframe=2,3,4,7,8,9) Y 5.57 76.69 20.07 80.0 ± 9.6 % 10501- UTE-TDD (SC-FDMA, 100% RB, 3 MHz, AAA 16-QAM, UL Subframe=2,3,4,7,8,9) Y 5.57 76.69 20.07 80.0 ± 9.6 % AAA 10501- UTE-TDD (SC-FDMA, 100% RB, 3 MHz, AAA Y 5.46 74.81 19.33 2.23 80.0 ± 9.6 % AAA 10-GAM, UL Subframe=2,3,4,7,8,9) Y 4.94 72.50			Y	5.37	71.03	18.42		80.0	
AAA MHz, QPSK, UL Subframe=2,3,4,7,8,9) X 7.31 82.38 20.82 2.23 80.0 ± 9.6 % 10498- AAA LTE-TDD (SC-FDMA, 100% RB, 1.4 Subframe=2,3,4,7,8,9) Y 4.87 75.75 18.64 80.0 10499- AAA LTE-TDD (SC-FDMA, 100% RB, 1.4 Subframe=2,3,4,7,8,9) Y 4.173 73.29 16.69 2.23 80.0 ± 9.6 % 10499- AAA LTE-TDD (SC-FDMA, 100% RB, 1.4 Subframe=2,3,4,7,8,9) Y 4.12 70.77 15.97 80.0 ± 9.6 % 10499- MAA LTE-TDD (SC-FDMA, 100% RB, 1.4 Subframe=2,3,4,7,8,9) Y 4.10 70.38 15.70 80.0 ± 9.6 % 10500- MAA LTE-TDD (SC-FDMA, 100% RB, 3 MHz, AA Y 5.57 76.69 20.07 80.0 ± 9.6 % AAA LTE-TDD (SC-FDMA, 100% RB, 3 MHz, AA Y 5.54 74.81 19.33 2.23 80.0 ± 9.6 % AAA LTE-TDD (SC-FDMA, 100% RB, 3 MHz, AAA Y 4.94 72.30 18.33 80.0 ± 9.6 % AAA 4-AAA Y	10497-	LTE-TOD (SC EDMA 100% PR 14	14	5.01	/1.08	18.38		80.0	
V 4.87 75,75 18.64 80.0 10496- AAA LTE-TDD (SC-FDMA, 100% RB, 1.4 Subframe=2,3,4,7,8,9) X 4.73 73.29 16.69 2.23 80.0 ± 9.6 % 10499- AAA LTE-TDD (SC-FDMA, 100% RB, 1.4 Subframe=2,3,4,7,8,9) Y 4.12 70.77 15.97 80.0 ± 9.6 % 10499- AAA LTE-TDD (SC-FDMA, 100% RB, 1.4 Subframe=2,3,4,7,8,9) X 4.59 72.54 16.27 2.23 80.0 ± 9.6 % AAA MHz, 64-OAM, UL Subframe=2,3,4,7,8,9) Y 4.10 70.38 15.70 80.0 ± 9.6 % AAA QPSK, UL Subframe=2,3,4,7,8,9) Y 5.57 76.69 20.07 80.0 ± 9.6 % AAA 16-QAM, UL Subframe=2,3,4,7,8,9) Y 5.57 76.69 20.07 80.0 ± 9.6 % AAA 16-QAM, UL Subframe=2,3,4,7,8,9) Y 4.94 72.30 18.33 80.0 ± 9.6 % AAA 16-QAM, UL Subframe=2,3,4,7,8,9) Y 4.94 72.05 18.20 80.0 ± 9.6 % </td <td></td> <td>MHz, QPSK, UL Subframe=2,3,4,7,8,9)</td> <td></td> <td>7.31</td> <td>82.38</td> <td>20.82</td> <td>2.23</td> <td>80.0</td> <td>± 9.6 %</td>		MHz, QPSK, UL Subframe=2,3,4,7,8,9)		7.31	82.38	20.82	2.23	80.0	± 9.6 %
10498- AAA LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) X 4,73 73,29 16,69 2.23 80.0 ± 9.6 % 10499- AAA LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 164-QAM, UL Subframe=2,3,4,7,8,9) Y 4,12 70,77 15,97 90.0 60.0 ± 9.6 % 10499- AAA LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) X 4,59 72,54 16,27 2.23 80.0 ± 9.6 % 0500- LTE-TDD (SC-FDMA, 100% RB, 3 MHz, AAA X 4,59 72,54 16,27 2.23 80.0 ± 9.6 % 0400- CF-DDA, 100% RB, 3 MHz, AAA X 4,10 70.38 15,70 80.0 ± 9.6 % 0400- CF-DDA, 100% RB, 3 MHz, AAA X 5,57 76.69 20.07 80.0 ± 9.6 % 0400- Z 5,44 77,85 20,24 60.0 ± 9.6 % AAA 16-GAM, UL Subframe=2,3,4,78,9) Y 4,94 72.07 18.33 80.0 ± 9.6 % AAA 16-GAM, UL Subframe=2,3,4,78,9)			- ¥	4.87	75.75	18.64		0.08	
AAA MHz, 16-QAM, UL Subframe=2,3,4,7,8,9 Y 4.13 73.29 16.69 2.23 80.0 ± 9.6 % 10499- AAA TE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) Y 4.12 70.77 15.97 80.0 ± 9.6 % 10499- AAA TE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) Y 4.10 70.38 15.70 80.0 ± 9.6 % 10500- AAA QPSK, UL Subframe=2,3,4,7,8,9) Y 4.10 70.38 15.70 80.0 ± 9.6 % AAA QPSK, UL Subframe=2,3,4,7,8,9) Y 5.57 76.69 20.07 80.0 ± 9.6 % AAA QPSK, UL Subframe=2,3,4,7,8,9) Y 5.546 74.81 19.33 2.23 80.0 ± 9.6 % AAA 64-QAM, UL Subframe=2,3,4,7,8,9) Y 4.96 72.30 18.33 80.0 ± 9.6 % AAA G4-QAM, UL Subframe=2,3,4,7,8,9) Y 4.98 72.30 18.33 80.0 ± 9.6 % AAA G4-QAM, UL Subframe=2,3,4,7,8,9) Y 4.98 <td>10498-</td> <td></td> <td></td> <td>4.03</td> <td>73.68</td> <td>16.68</td> <td><u> </u></td> <td>80.0</td> <td></td>	10498-			4.03	73.68	16.68	<u> </u>	80.0	
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	AAA	MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)		4.73	73.29	16.69	2.23	80.0	± 9.6 %
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$			<u>Y</u>	4.12	70.77	15.97		80.0	
10499- AAA LTE-TDD (SC-FDMA, 100% RB, 1.4 Subframe=2,3,4,7,8,9) X 4.59 72.54 16.27 2.23 80.0 ± 9.6 % 10500- AAA UTE-TDD (SC-FDMA, 100% RB, 3 MHz, AAA X 7.19 81.83 22.01 2.23 80.0 ± 9.6 % 10500- AAA UTE-TDD (SC-FDMA, 100% RB, 3 MHz, AAA X 7.19 81.83 22.01 2.23 80.0 ± 9.6 % 10501- LTE-TDD (SC-FDMA, 100% RB, 3 MHz, AAA X 5.57 76.69 20.07 80.0 ± 9.6 % 10501- LTE-TDD (SC-FDMA, 100% RB, 3 MHz, AAA X 5.46 74.81 19.33 80.0 ± 9.6 % 10502- LTE-TDD (SC-FDMA, 100% RB, 3 MHz, AAA X 5.46 72.67 17.97 80.0 ± 9.6 % 10502- LTE-TDD (SC-FDMA, 100% RB, 5 MHz, AAA X 5.46 72.43 19.15 2.23 80.0 ± 9.6 % 10503- LTE-TDD (SC-FDMA, 100% RB, 5 MHz, AAA X 5.46 72.67 17.37 2.23 80.0 ± 9.6 % 10504- AAA GPSK, UL Subframe=2,3.4,7,8,9) Y 5.72 76.28 20.04 80.0 ± 9.6 % 10505- AAA	40400		Z	2.73	66.24	12.60		80.0	<u> </u>
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	10499- AAA 	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	×	4.59	72.54	16.27	2.23	80.0	±9.6 %
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $			Y	4.10	70.38	15.70		80.0	<u> </u>
10500- AAA CIE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9) X 7.19 81.83 22.01 2.23 80.0 ± 9.6 % 10501- LTE-TDD (SC-FDMA, 100% RB, 3 MHz, AAA Y 5.57 76.69 20.07 80.0 ± 9.6 % 10501- AAA LTE-TDD (SC-FDMA, 100% RB, 3 MHz, AAA X 5.44 77.85 20.24 80.0 ± 9.6 % 10502- AAA LTE-TDD (SC-FDMA, 100% RB, 3 MHz, AAA X 5.46 74.81 19.33 2.23 80.0 ± 9.6 % 10502- AAA CF-TDD (SC-FDMA, 100% RB, 3 MHz, AAA X 5.46 74.43 19.15 2.23 80.0 ± 9.6 % 10503- AAA CF-TDD (SC-FDMA, 100% RB, 5 MHz, AAA Y 4.98 72.05 18.20 80.0 ± 9.6 % 10503- AAA CFE-TDD (SC-FDMA, 100% RB, 5 MHz, AAA X 6.99 80.56 21.73 2.23 80.0 ± 9.6 % 10504- AAA GPSK, UL Subframe=2,3,4,7,8,9) Y 5.31 73.78 19.39 2.23 80.0 ± 9.6 % 10505- AAA GC-FDMA, 100% RB, 5 MHz,	40500		Z	2.62	65.47	12.11		80.0	<u> </u>
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	10500- AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	7.19	81.83	22.01	2.23	80.0	± 9.6 %
$\begin{array}{c c c c c c c c c c c c c c c c c c c $			Y	5.57	76.69	20.07		80.0	
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	10501	LTE TOD (CO FDMA 4000 DD A MUL	Z	5.44	77.85	20.24		80.0	
$\begin{array}{c c c c c c c c c c c c c c c c c c c $		16-QAM, UL Subframe=2,3,4,7,8,9)	X	5.46	74.81	19.33	2.23	80.0	± 9.6 %
$\begin{array}{c c c c c c c c c c c c c c c c c c c $			Y	4.94	72.30	<u>18</u> .33		80.0	
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	10502-			4.65	72.67	17.97		80.0	
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	AAA	64-QAM, UL Subframe=2,3,4,7,8,9)	X	5.46	74.43	19.15	2.23	80.0	± 9.6 %
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		· · · · · · · · · · · · · · · · · · ·	Y -	4.98	72.05	18.20		80.0	
AAA QPSK, UL Subframe=2,3,4,7,8,9) Y 5.72 76.28 20.04 80.0 ± 9.6 % 10504- AAA LTE-TDD (SC-FDMA, 100% RB, 5 MHz, AAA X 5.31 73.78 19.39 2.23 80.0 ± 9.6 % 10504- AAA LTE-TDD (SC-FDMA, 100% RB, 5 MHz, AAA X 5.31 73.78 19.39 2.23 80.0 ± 9.6 % 10505- AAA 16-QAM, UL Subframe=2,3,4,7,8,9) Y 4.98 71.79 18.52 80.0 ± 9.6 % 10505- AAA CE-FDMA, 100% RB, 5 MHz, AAA X 5.32 73.26 19.21 2.23 80.0 ± 9.6 % 10505- AAA G4-QAM, UL Subframe=2,3,4,7,8,9) Y 5.03 71.44 18.42 80.0 10506- AAA LTE-TDD (SC-FDMA, 100% RB, 10 AAA X 7.35 79.52 21.23 2.23 80.0 ± 9.6 % 10506- AAA LTE-TDD (SC-FDMA, 100% RB, 10 AAA X 7.35 79.52 21.23 2.23 80.0 ± 9.6 % 10507- AAA MHz, QPSK, UL Subframe=2,3,4,7,8,9) Y 6.24 75.99 19.82 80.0 ± 9.6 % 1	10503-		4	4.68	72.41	_ <u>17.81</u>		80.0	
Y 5.72 76.28 20.04 80.0 10504- AAA LTE-TDD (SC-FDMA, 100% RB, 5 MHz, AAA X 5.31 73.78 19.39 2.23 80.0 ± 9.6 % 2 4.98 71.79 18.52 80.0 ± 9.6 % 2 4.98 71.79 18.52 80.0 ± 9.6 % 10505- AAA LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) X 5.32 73.26 19.21 2.23 80.0 ± 9.6 % 10505- AAA 64-QAM, UL Subframe=2,3,4,7,8,9) Y 5.03 71.44 18.41 80.0 2 4.72 71.78 18.31 80.0 ± 9.6 % 10506- AAA LTE-TDD (SC-FDMA, 100% RB, 10 AAA X 7.35 79.52 21.23 2.23 80.0 ± 9.6 % 10506- AAA MHz, QPSK, UL Subframe=2,3,4,7,8,9) Y 6.24 75.99 19.82 80.0 ± 9.6 % 10507- AAA MHz, 16-QAM, UL X 5.53 72.90 19.22 2.23 80.0 ± 9.6	<u>AAA</u>	QPSK, UL Subframe=2,3,4,7,8,9)	X	6.99	80.56	21.73	2.23	80.0	± 9.6 %
10504- AAA LTE-TDD (SC-FDMA, 100% RB, 5 MHz, AAA X 5.31 73.78 19.39 2.23 80.0 ± 9.6 % Y 4.98 71.79 18.52 80.0 ± 9.6 % Z 4.66 72.08 18.42 80.0 ± 9.6 % 10505- AAA LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) X 5.32 73.26 19.21 2.23 80.0 ± 9.6 % 10505- AAA G4-QAM, UL Subframe=2,3,4,7,8,9) Y 5.03 71.44 18.41 80.0 2 4.72 71.78 18.31 80.0 ± 9.6 % 10506- AAA LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9) X 7.35 79.52 21.23 2.23 80.0 ± 9.6 % 10506- AAA MHz, QPSK, UL Subframe=2,3,4,7,8,9) Y 6.24 75.99 19.82 80.0 ± 9.6 % 10507- AAA MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) Y 5.31 71.39 18.51 80.0 ± 9.6 % 2 5.31 71.39 18.51 80.0 ± 9.6 % ± 9.6 % ± 9.6 % ± 9.6 %				5.72	76.28	20.04		80.0	
Y 4.98 71.79 18.52 80.0 10505- AAA LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) X 5.32 73.26 19.21 2.23 80.0 ± 9.6 % 10506- AAA LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9) Y 5.03 71.44 18.41 80.0 10506- AAA LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9) X 7.35 79.52 21.23 2.23 80.0 ± 9.6 % 10507- AAA LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9) X 7.35 79.52 21.23 2.23 80.0 ± 9.6 % 10507- AAA LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) X 5.53 72.90 19.22 2.23 80.0 ± 9.6 % 2 5.81 76.25 19.98 80.0 ± 9.6 %	10504- AAA	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM, UL Subframe=2.3 4 7 8 9)	X	5.31	76.98	20.27 19.39	2.23	80.0 80.0	± 9.6 %
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			$ \gamma $	4 98	71 70	18 50		000	┨─────┤
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$				4.66	72 08	18.42		00.0	├── ─┤
Y 5.03 71.44 18.41 80.0 10506- AAA LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9) X 7.35 79.52 21.23 2.23 80.0 ± 9.6 % V 6.24 75.99 19.82 80.0 ± 9.6 % 10507- AAA LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) X 5.53 76.25 19.98 80.0 V 5.53 72.90 19.22 2.23 80.0 ± 9.6 % V 5.53 72.90 19.22 2.23 80.0 ± 9.6 % Z 5.31 71.39 18.51 80.0 ± 9.6 %	10505- AAA	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	x	5.32	73.26	19.21	2.23	80.0	±9.6 %
Z 4.72 71.78 18.31 80.0 10506- AAA LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9) X 7.35 79.52 21.23 2.23 80.0 ± 9.6 % V 6.24 75.99 19.82 80.0 ± 9.6 % 10507- AAA LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) X 5.53 76.25 19.98 80.0 2 5.83 76.25 19.98 80.0 ± 9.6 % 4AA MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) Y 5.31 71.39 18.51 80.0			Γγ 1	5.03	71.44	18 41		800-	⊢
10506- AAA LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9) X 7.35 79.52 21.23 2.23 80.0 ± 9.6 % V 6.24 75.99 19.82 80.0 ± 9.6 % 10507- AAA LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) X 5.53 76.25 19.98 80.0 Y 5.31 71.39 18.51 80.0 ± 9.6 %			Z	4.72	71.78	18.31		80.0	
Y 6.24 75.99 19.82 80.0 10507- AAA LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) X 5.53 76.25 19.98 80.0 Y 5.53 72.90 19.22 2.23 80.0 ± 9.6 % Z 5.31 71.39 18.51 80.0 ± 9.6 %	10506- AAA	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	х	7.35	79.52	21.23	2.23	80.0	±9.6 %
ID507- AAA LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) Z 5.83 76.25 19.98 80.0 Y 5.31 71.39 18.51 80.0 ± 9.6 %			Y	6.24	75.99	19.82		80.0	<u> </u>
TUSU7- AAA LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) X 5.53 72.90 19.22 2.23 80.0 ± 9.6 % Y 5.31 71.39 18.51 80.0 ± 9.6 %	40505		Z	5.83	76.25	19.98		80.0	├── ── ─
Y 5.31 71.39 18.51 80.0	10507- AAA	L1E-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	5.53	72.90	19.22	2.23	80.0	± 9.6 %
Z 4.95 71.42 19.47 80.0			- Y [5.31	71.30	18.51		90.0	
			z	4 95	71 42	18 /7	— —	00.0	

10508-	LTE-TDD (SC-FDMA, 100% RB, 10	X	5.52	72.31	19.02	2.23	80.0	± 9.6 %
AAA	MHz, 64-QAM, UL							
	Subframe=2,3,4,7,8,9)							
		Y	5.35	70.96	18.38		80.0	
		Z	4.99	71.02	18.34		80.0	
10509-	LTE-TDD (SC-FDMA, 100% RB, 15		6.86	76.40	20.08	2.23	80.0	± 9.6 %
AAA	MHz, QPSK, UL Subframe=2.3.4.7.8.9)							
		t v t	6 23	74.05	19.09		80.0	
		╞╌╤╌┤	5.83	74 13	10.00		80.0	
10510			5.00	79.10	19.10	2.22	80.0	+06%
10510-	LIE-IDD (SC-FDMA, 100% KB, 15	^	5.69	12.04	10.91	2.23	00.0	± 9.0 %
AAA								
	Subtrame=2,3,4,7,8,9}			70.04	10.00		00 0	
		Y I	5.75	70.91	18.36		0.08	··
		Z	5.36	70.80	18.32		80.0	
10511-	LTE-TDD (SC-FDMA, 100% RB, 15	X	5.86	71.58	18.77	2.23	80.0	± 9.6 %
AAA	MHz, 64-QAM, UL							
	Subframe=2,3,4,7,8,9)							
		Y	5.75	70.55	18.27		80.0	
		Z	5.39	70.48	18.23		80.0	
10512-	LTE-TDD (SC-FDMA, 100% RB, 20	X	7,85	79.24	20.97	2.23	80.0	± 9.6 %
AAA	MHz_QPSK_UL_Subframe=2.3.4.7.8.9)							
			6 75	76.04	19 69		80.0	
		7	6 30	76.05	10.00		80.0	
40540	1 TE TOD (80 EDMA 400% DB 20		5.00	70.00	10.11	2.02	80.0	+06%
10513-	LIE-100 (SC-FDMA, 100% RB, 20	^	5.80	12.12	19.10	2.23	00.0	I9.0 %
AAA				1			'!	
	Subtrame=2,3,4,7,8,9)				10.55			
		Y	<u>5.70</u>	/1.43	18.55		80.0	
		Z	5.29		18.47		80.0	
10514-	LTE-TDD (SC-FDMA, 100% RB, 20	X	5.77	72.00	18.94	2.23	80.0	±9.6 %
AAA	MHz, 64-QAM, UL				ļ			
	Subframe=2,3,4,7,8,9)	1						
		Y	5.64	70.86	18.38		80.0	
		Z	5.26	70.69	18.32		80.0	
10515-	IFFF 802.11b WiFi 2.4 GHz (DSSS. 2	X	1.03	64.88	16,19	0.00	150.0	± 9.6 %
AAA	Mbps 99pc duty cycle)							
		Y	0.99	63 07	14.62		150.0	
		7	0.00	63.20	14 56		150.0	-
10516		- <u>-</u>	4.64	01.20	26.85	0.00	150.0	+96%
	Mbps . 00ps duty syste)	^	1.04	31.04	20.05	0.00	100.0	1 0.0 /0
AAA	Mops, aape duty cycle)			00.00	40.00		150.0	
		- <u>-</u>	0.59	09.22	10.00		150.0	
		2	0.59	69.23	16.57		150.0	
10517-	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11	X	0.96	68.68	17.89	0.00	150.0	± 9.6 %
AAA	Mbps, 99pc duty cycle)		_			<u> </u>		
		<u>Y</u>	0.84	64.94	15.18		150.0	
		Z	0.84	64.94	15.09		150.0	
10518-	IEEE 802.11a/h WiFi 5 GHz (OFDM. 9	X	4.73	67.22	16.54	0.00	150.0	± 9.6 %
AAA	Mbps, 99pc duty cycle)	1						
		Y	4.75	66.79	16.24		150.0	
		Z	4.57	66.91	16.20		150.0	
10510	IEEE 802 11a/b WIEL5 GHz (OEDM 12		4 96	67.51	16.67	0.00	150.0	± 9.6 %
A A A		^	1.00	37.01				
1.00			1 00	67.12	16 20		150.0	
L		+	4.00	67.12	16.00	<u> </u>	150.0	
L		+ 4	4.70	07.10	10.00		150.0	+0.6%
10520-	IEEE 802.11a/h WIFI 5 GHz (OFDM, 18	X	4.82	07.52	10.62	0.00	100.0	1 9.0 %
AAA	Mops, 99pc duty cycle)	+		07.00	40.00	├ ──	450.0	
	<u> </u>	Ι <u>Υ</u>	4.84	67.09	10.32		150.0	
			4.61	67.11	16.25		150.0	+
10521-	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24	X	4.75	67.54	16.61	0.00	150.0	±9.6 %
AAA	Mbps, 99pc duty cycle)						<u> </u>	ļ
		Y	4.77	67.10	16.31		150.0	
<u> </u>		Z	4.54	67.10	16.23		150.0	
10522-	IEEE 802.11a/n WiFi 5 GHz (OFDM: 36	X	4.79	67.47	16.62	0.00	150.0	± 9.6 %
ΔΔΔ	Mbps 99pc duty cycle)]	1		l
1001		TY	4,80	67.00	16.30	1	150.0	
		7	4,60	67 19	16.31	1	150.0	<u> </u>
	•		1 7.00	1 01110	1 10.01	1		

10523-	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48	X	4.66	67.41	16.50	0.00	150.0	± 9.6 %
	Mbps, 99pc duly cycle)							
		- <u>Y</u>	4.67	66.95	16.18		150.0	
10524-	IEEE 802 11a/b WiEi 5 GHz (OEDM 54		4.48	67.04	16.16		150.0	
AAA	Mbps, 99pc duty cycle)		4.74	07.44	16.62	0.00	150.0	± 9.6 %
		Y	4.76	66.99	16.31	<u> </u>	150.0	
10505		Z	4.54	67.10	16.28		150.0	
10525-	IEEE 802.11ac WiFi (20MHz, MCS0,	X	4.69	66.48	16.21	0.00	150.0	± 9.6 %
<u>~~</u>				+		_		
			4.70	66.02	15.89		150.0	
10526-	IEEE 802.11ac WiFi (20MHz, MCS1	- <u>×</u>	4.00	66.00	15.87	- 0.00	150.0	
AAA	99pc duty cycle)		4.01	00.30	10.55	0.00	150.0	± 9.6 %
		Y	4.91	66.43	16.04	+	150.0	<u> </u>
		Z	4.70	66.52	16.01	1 –	150.0	
10527-	IEEE 802.11ac WiFi (20MHz, MCS2,	X	4.82	66.89	16.32	0.00	150.0	± 9.6 %
	99pc duty cycle)	<u> </u>	<u> </u>					
		$\frac{Y}{7}$	4.83	66.42	16.00		150.0	
10528-	JEEE 802 11ac WiEi (20MHz MCS3		4.62	66.47	15.95		150.0	
AAA	99pc duty cycle)		4.04	00.91	16.35	0.00	150.0	± 9.6 %
		Y	4.85	66.44	16.03		150.0	
40500		Z	4.63	66.49	15.99		150.0	<u>├─</u> ──
10529- AAA	IEEE 802.11ac WiFi (20MHz, MCS4,	X	4.84	66.91	16.35	0.00	150.0	±9.6 %
		+	4.85	66.44	40.00	<u> </u>		
		7	4.63	66.49	15.03	<u> </u>	150.0	
10531-	IEEE 802.11ac WiFi (20MHz, MCS6,	X	4.86	67.08	16 39	0.00	150.0	
AAA	99pc duty cycle)			01.00	10.00	0.00	150.0	1 19.0 %
		Y	4.87	66.60	16.06		150.0	
10520		Z	4.63	66.60	16.00		150.0	
AAA	99pc duty cycle)	X	4.71	66.97	16.35	0.00	150.0	± 9.6 %
		V	172	66.40	16.00		450 0	L
		7	4.72	66 45	15.02		150.0	
10533-	IEEE 802.11ac WiFi (20MHz, MCS8,	X	4.86	66.93	16.33	0.00	150.0	+06%
AAA	99pc duty cycle)				10.00	0.00	100.0	19.0%
		Y	4.87	66.45	16.01		150.0	
10534-		Z	4.64	66.54	15.97		150.0	
AAA	1 99pc duly cycle)	X	5.34	67.03	16.36	0.00	150.0	±9.6%
		Y	5 36	66 66	16 11		450.0	
		Z	5.17	66.62	16.06		150.0	
10535-	IEEE 802.11ac WiFi (40MHz, MCS1,	X	5.42	67.17	16.42	0.00	150.0	+ 9.6 %
AAA	99pc duty cycle)						100.0	10.0 /0
		ΙΥ	5.43	66.80	16.16		150.0	
10536-	IEEE 802 11ac WiEi (40MHz MCS2		5.24	66.80	16.14		150.0	
AAA	99pc duly cycle)	^	5.29	67.18	16.41	0.00	150.0	±9.6%
		t y t	5.30	66 78	16 13		150.0	
		z	5.11	66.74	16.09		150.0	
10537-	IEEE 802.11ac WiFi (40MHz, MCS3,	Х	5.35	67.14	16.39	0.00	150.0	+96%
AAA	99pc duty cycle)					0.00	100.0	1 0.0 %
<u> </u>	† — — — — — —	¥	5.36	66.75	16.12		150.0	
10538-			5.16	66.71	16.08		150.0	
AAA	99pc duty cycle)		5.47	67.20	16.46	0.00	150.0	±9.6%
		Y	5 49	66.85	16.21		450.0	
		z	5.26	66 74	16.13		150.0	
10540-	IEEE 802.11ac WiFi (40MHz, MCS6,	X	5.36	67.15	16.45	0.00	150.0	+ 9 6 %
<u>AAA</u>	99pc duty cycle)					0,00		± 0.0 /0
		<u> </u>	5.38	66.77	16.18		150.0	
	L	<u> </u>	5.19	66.76	16.16		150.0	

10541- AAA	IEEE 802.11ac WiFi (40MHz, MCS7, 99pc duty cycle)	X	5.35	67.08	16.42	0.00	150.0	± 9.6 %
7001		Y.	5.38	66.75	16.17		150.0	
		Z	5.16	66.62	16.08		150.0	
10542- AAA	IEEE 802.11ac WiFi (40MHz, MCS8, 99pc duty cycle)	X	5.49	67.08	16.42	0.00	150.0	±9.6 %
		Y	5.51	66.73	16.18		150.0	
		Z	5.31	66.69	16.13		150.0	
10543- AAA	IEEE 802.11ac WiFi (40MHz, MCS9, 99pc duly cycle)	X	5.58	67.09	16.44	0.00	150.0	± 9.6 %
		<u>Y</u>	5.61	66.77	16.21		150.0	
10544			5.39	67.12	16.17	0.00	150.0	+06%
AAA	99pc duty cycle)		5.01	07.12	10.00	0.00	150.0	1 9.0 %
			5.02	66.74	16.09		150.0	
10545-	LIEFE 802.11ac WiFi (80MHz, MCS1.	X	5.83	67.51	16.46	0.00	150.0	±9.6 %
AAA	99pc duty cycle)		5.94	67.15	16.70	0.00	150.0	
		7	5.68	67.15	16.22		150.0	·
10546- AAA	IEEE 802.11ac WiFi (80MHz, MCS2, 99pc duty cycle)	X	5.72	67.42	16.44	0.00	150.0	± 9.6 %
		Y	5.73	67.08	16.20		150.0	
		Z	5.55	66.95	16.13		150.0	
10547- AAA	IEEE 802.11ac WIFi (80MHz, MCS3, 99pc duty cycle)	X	5.81	67.48	16.46	0.00	150.0	±9.6 %
		Y	5.83	67.17	16.24		150.0	
		Z	5.62	66.99	<u>16.14</u>	0.00	150.0	
10548- AAA	IEEE 802.11ac WiFi (80MHz, MCS4, 99pc duty cycle)	X	6.10	68.50	16.94	0.00	150.0	± 9.6 %
		ΙΥ	6.15	68.24	16.74		150.0	
10550			5.89	67.98	16.61	0.00	150.0	+06%
AAA	99pc duly cycle)		5.74	07.30	10.42	0.00	150.0	1 9.0 %
		Y 7	5.75	67.01	16.18		150.0	
10551-	IEEE 802 11ac WiEi (80MHz_MCS7	X	5.76	67.47	16.43	0.00	150.0	± 9.6 %
AAA	99pc duty cycle)		5 79	67.44	16.20		150.0	
		7	5.78	67.00	16.20		150.0	
10552-	IEEE 802.11ac WiFi (80MHz, MCS8,	X	5.66	67.23	16.33	0.00	150.0	± 9.6 %
		Y	5.67	66.89	16.10		150.0	
		Z	5.49	66.80	16.03		150.0	
10553- AAA	IEEE 802.11ac WiFi (80MHz, MCS9, 99pc duly cycle)	X	5.75	67.26	16.37	0.00	150.0	± 9.6 %
		Y	5.76	66.93	16.14	<u> </u>	150.0	
4077			5.58	66.84	16.08	0.00	150.0	+0.0.0/
10554- AAA	IEEE 1602.11ac WiFi (160MHz, MCS0, 99pc duty cycle)	X	6.01	67.49	16.42	0.00	150.0	± 9.6 %
		<u>Y</u>	6.02	67.17	16.20		150.0	
10555	IEEE 1602 11ac WIEI (160MHz MOS1		<u> </u>	67.85	16.15	0.00	150.0	+9.6%
AAA	99pc duty cycle)		6.00	67.66	16.36		150.0	20.0 /0
		7	6.02	67.41	16.30		150.0	·
10556-	IEEE 1602.11ac WiFi (160MHz, MCS2,	X	6.18	67.83	16.55	0.00	150.0	± 9.6 %
		Y	6.19	67.51	16.33		150.0	t
		Ż	6.04	67.46	16.30		150.0	
10557- AAA	IEEE 1602.11ac WiFi (160MHz, MCS3, 99pc duty cycle)	X	6.17	67.82	16.57	0.00	150.0	± 9.6 %
		Y	<u>6.1</u> 9	67.52	16.36	L	150.0	
		7	6.00	67.36	16.27		150.0	
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	IEEE 1602.11ac WiFi (160MHz, MCS4,	X	6.23	68.01	16.68	0.00	150.0	± 9.6 %
<u>~~</u>		+	6.05	67.70	40.47	<u> </u>		
		$+\frac{1}{7}$	6.05	67.52	16.4/	-	150.0	
10560-	IEEE 1602,11ac WiEi (160MHz_MCS6		6.00	67.95	16.37		150.0	+
AAA	99pc duty cycle)		0.22	07.00	10.03	0.00	150.0	± 9.6 %
		Y	6.25	67.56	16.43	<u> </u>	150.0	
		<u>Z</u>	6.05	67.37	16.33		150.0	
10561- AAA	IEEE 1602.11ac WiFi (160MHz, MCS7, 99oc duty cycle)	X	6.13	67.79	16.64	0.00	150.0	± 9.6 %
		ΤY	6.15	67.49	16.43	<u> </u>	150.0	<u> </u>
		Ż	5.97	67.35	16 35		150.0	╀────-
10562-	IEEE 1602.11ac WIFI (160MHz, MCS8,		6 29	68.28	16.80	0.00	150.0	+0.6.0/
AAA	99pc duty cycle)				10.03	0.00	150.0	± 9.0 %
		<u>Y</u>	6.33	68.01	16.70		150.0	
10500			6.10	67.74	16.55		150.0	
AAA	IEEE 1602.11ac WiFi (160MHz, MCS9, 99pc duly cycle)	X	6.57	68.63	17.00	0.00	150.0	± 9.6 %
		Y	6.57	68.27	16.77		150.0	
		Z	6.35	68.10	16.68		150.0	
10564- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 9 Mbps, 99pc duty cycle)	X	5.07	67.31	16.69	0.46	150.0	± 9.6 %
		Y	5.10	66.95	16.44		150.0	<u> </u>
		Z	4.91	67.04	16.40		150.0	┢────
10565- <u>AAA</u>	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 12 Mbps, 99pc duty cycle)	X	5.34	67.80	17.01	0.46	150.0	± 9.6 %
		Y	5.38	67.46	16.78		150 0	
		Z	5.14	67.47	16.71		150.0	
10566- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 18 Mbps, 99pc duty cycle)	X	5.17	67.69	16.85	0.46	150.0	± 9.6 %
		Y	5.21	67.33	16.61	<u> </u>	150.0	<u> </u>
		Z	4.97	67.33	16.54		150.0	
10567- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 24 Mbps, 99pc duty cycle)	X	5.20	68.09	17.20	0.46	150.0	± 9.6 %
		Y	5.23	67.71	16.94		150.0	
		Z	5.00	67.68	16.86		150.0	
10568- <u>AAA</u>	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 36 Mbps, 99pc duty cycle)	X	5.08	67.38	16.59	0.46	150.0	± 9.6 %
		Y	5.11	67.01	16.33		150 0	
		Z	4.90	67.16	16.34		150.0	
10569- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 48 Mbps, 99pc duty cycle)	Х	5.14	68.11	17.22	0.46	150.0	± 9.6 %
		Y	5.16	67.71	16.95		150.0	
		Z	4.96	67.77	16.91		150.0	
10570- <u>A</u> AA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 54 Mbps, 99pc duty cycle)	X	5.18	67.92	17.15	0.46	150.0	± 9.6 %
		Y	5.21	67.52	16.88		150.0	
		Z	4.99	67.63	16.86		150.0	
10571- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90pc duty cycle)	X	1.45	67.97	17.69	0.46	130.0	±9.6 %
		TY	1.38	65.84	16.15		130.0	{
		Z	1.34	65.80	16.05		130.0	
10572- <u>A</u> AA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 90pc duty cycle)	X	1.49	68.86	18.18	0.46	130.0	± 9.6 %
		Y	1.40	66.47	16.51		130.0	
40570		Z	1.36	66.39	16.40		130.0	———————————————————————————————————————
10573- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 90pc duty cycle)	X	100.00	149.30	40.22	0.46	130.0	±9.6 %
		Y	3.11	88.03	23.54	— —	130.0	
400774		Z	3.23	89.37	24.00		130.0	
10574- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 90pc duly cycle)	X	2.21	80.01	23.13	0.46	130.0	± 9.6 %
		Y	1.65	72.75	19.44		130.0	
		Z	1.56	72.33	19.21	— —	130.0	———————————————————————————————————————
							100.0	

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10575- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 90pc duty cycle)	X	4.88	67.15	16.77	0.46	130.0	± 9.6 %
		Y	4.92	66.81	16.54		130.0	
		Z	4.73	66.93	16.51		130.0	
10576- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 9 Mbps, 90pc duty cycle)	X	4.91	67.32	16.84	0.46	130.0	± 9.6 %
		Y	4.94	66.97	16.61		130.0	
40577		Z	4.75	67.08	16.56		130.0	
10577- AAA	OFDM, 12 Mbps, 90pc duty cycle)	X	5.15	67.65	17.01	0.46	130.0	± 9.6 %
		7	5.20	67.33	16.79		130.0	-
10578- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OEDM, 18 Mbps, 90pc duty cycle)	X	5.05	67.86	17.13	0.46	130.0	± 9.6 %
		Y	5.09	67.50	16.89	-	130.0	
		Z	4.85	67.51	16.82		130.0	
10579- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 24 Mbps, 90pc duty cycle)	X	4.82	67.24	16.51	0.46	130.0	± 9.6 %
		Y	4.87	66.90	16.27		130.0	
40500		Z	4.63	66.89	16.19	0.40	130.0	10.00
10580- AAA	OFDM, 36 Mbps, 90pc duty cycle)	X	4.86	67.17	16.48	0.46	130.0	±9.6%
		Y 7	4.91	66.83	16.25		130.0	
10581-	IEEE 802 11g WiEi 2 4 GHz (DSSS-		4.00	67.92	17 11	0.46	130.0	+96%
AAA	OFDM, 48 Mbps, 90pc duty cycle)		5.00	67.61	16.96	0.40	130.0	10.0 %
		7	0.00 4.76	67.57	16.00		130.0	
10582- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 54 Mbps, 90pc duty cycle)	X	4.78	66.97	16.29	0.46	130.0	± 9.6 %
		Y	4.83	66.64	16.06		130.0	
		Z	4.58	66.67	16.00		130.0	
10583- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 90pc duty cycle)	X	4.88	67.15	16.77	0.46	130.0	± 9.6 %
		Y	4.92	66.81	16.54		130.0	
40504			4.73	66.93	16.51	0.46	130.0	+06%
AAA	Mbps, 90pc duty cycle)		4.91	66.07	10.04	0.40	130.0	1 3.0 78
			4.94	67.08	16.01		130.0	
10585-	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12	X	5.15	67.65	17.01	0.46	130.0	±9.6 %
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		Y	5.20	67.33	16.79		130.0	
		Z	4.96	67.36	16.73		130.0	
10586- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 90pc duty cycle)	X	5.05	67.86	17.13	0.46	130.0	± 9.6 %
		Y –	5.09	67.50	16.89	<u> </u>	130.0	
40507			4.85	67.51	16.82	0.46	130.0	+06%
10587- AAA	Mbps, 90pc duty cycle)		4.82	67.24	16.51	0.46	130.0	± 9.0 %
		Y 7	4.8/	66.90	16.27		130.0	
10588-	IEEE 802 11a/b W/Ei 5 GHz (OEDM 36	<u> </u>	4.05	67.17	16.19	0.46	130.0	+96%
AAA	Mbps, 90pc duty cycle)		4.00	66.83	16.25		130.0	- 0.0 %
		7	4.68	66.92	16.22		130.0	
10589- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48	X	4.96	67.97	17.11	0.46	130.0	± 9.6 %
		Y	5.00	67.61	16.86		130.0	
		Z	4.76	67.57	16.77		130.0	
10590- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 90pc duly cycle)	X	4.78	66.97	16.29	0.46	130.0	± 9.6 %
		Y	4.83	66.64	16.06		130.0	
1		1 Z	4.58	1 66.67	16.00	1	130.0	1

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10591-	IEEE 802.11n (HT Mixed, 20MHz,	X	5.03	67.20	16.86	0.46	130.0	± 9.6 %
_^			5.07	66.00	46.64	╀───	400.0	
<u>├</u>			4.88	66.97	16.60	+	130.0	
10592- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS1, 90pc duty cycle)	X	5.21	67.55	16.98	0.46	130.0	± 9.6 %
		Ý	5.26	67.23	16.76		130.0	
		Z	5.03	67.30	16.73		130.0	
10593- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS2, 90pc duty cycle)	X	5.14	67.52	16.89	0.46	130.0	± 9.6 %
		Y	5.19	67.20	16.68		130.0	
40504		<u> </u>	4.96	67.23	16.62		130.0	
10594- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS3, 90pc duly cycle)	X	5.19	67.66	17.03	0.46	130.0	± 9.6 %
		<u> </u>	5.24	67.33	16.81		130.0	
10505	IEEE 902 11p (UT Mixed 20Mile	<u> </u>	5.01	67.38	16.76	<u> </u>	130.0	ļ
AAA	MCS4, 90pc duty cycle)		5.17	67.65	16.95	0.46	130.0	± 9.6 %
		Y	5.23	67.33	16.73	I	130.0	
10596-	IEEE 802 11p (HT Mixed 20MHz		4.98	67.35	16.67		130.0	
AAA	MCS5, 90pc duty cycle)		5.11	07.04	16.94	0.46	130.0	± 9.6 %
		7	5.10	67.30	16.71	<u> </u>	130.0	
10597-	IEEE 802 11n (HT Mixed 20MHz		4.92	67.50	16.67		130.0	1000
AAA	MCS6, 90pc duty cycle)	- .	5.00	67.00	10.00	0.46	130.0	± 9.6 %
		7	1 97	67.20	10.64		130.0	
10598- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS7, 90pc duty cycle)	X	5.05	67.87	17.14	0.46	130.0	± 9.6 %
		Υ	5.09	67.53	16 91	<u> </u>	130.0	
_		 Z	4.85	67.47	16.80		130.0	
10599- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS0, 90pc duty cycle)	X	5.68	67.76	17.01	0.46	130.0	± 9.6 %
		Y	5.74	67.54	16.84		130.0	
		Z	5.54	67.51	16.80		130.0	
10600- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS1, 90pc duty cycle)	Х	5.91	68.42	17.31	0.46	130.0	± 9.6 %
		Y	6.00	68.29	17.19		130.0	
40004		Z	<u>5.6</u> 9	67.96	17.01		130.0	
10601- AAA	MCS2, 90pc duty cycle)	_ X	5.75	68.03	17.13	0.46	130.0	± 9.6 %
	<u> </u>	- <u>Y</u>	5.81	67.81	16.96		130.0	
10602- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS3, 90pc duty cycle)	X	5.85	67.70 68.05	16.89 17.05	0.46	1 <u>30.0</u> 130.0	± 9.6 %
		Y	5.93	67.91	16.93		130.0	
		Z	5.67	67.73	16.83		130.0	
10603- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS4, 90pc duty cycle)	X	5.97	68.46	17.38	0.46	130.0	± 9.6 %
		Y	6.05	68.29	17.25		130.0	
40001		Z	5.74	68.01	17.09		130.0	
10604- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS5, 90pc duty cycle)	X	5.70	67.75	17.03	0.46	130.0	± 9.6 %
		<u> </u>	5.76	67.53	16.86		130.0	
10605		Z	5.55	67.48	16.81		130.0	
	MCS6, 90pc duty cycle)		5.80	68.03	17.16	0.46	130.0	± 9.6 %
<u> </u>		- <u>Y</u>	5.86	67.81	17.00		130.0	
10606-	IEEE 802 11p /LIT Mixed 40MIL	- Z	5.67	67.84	17.00		130.0	
AAA	MCS7, 90pc duty cycle)	X	5.58	67.53	16.79	0.46	130.0	± 9.6 %
		<u> </u>	5.62	67.26	16.60		130.0	
			5.41	67.19	16.54		130.0	

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10607-	IEEE 802.11ac WiFi (20MHz, MCS0,	X	4.86	66.52	16.48	0.46	130.0	± 9.6 %
- AAA		- v	4 89	66 14	16.23		130.0	
		Ż	4.71	66.27	16.21		130.0	
10608- AAA	IEEE 802.11ac WiFi (20MHz, MCS1, 90pc duty cycle)	x	5.09	66.96	16.64	0.46	130.0	±9.6 %
		Ϋ́	5.12	66.58	16.39		130.0	
40600		<u>Z</u>	4.90	66.67	16.37		130.0	
10609- AAA	IEEE 802.11ac WIFI (20MHz, MCS2, 90pc duty cycle)	X	4.98	66.85	16.52	0.46	130.0	±9.6 %
		7	<u>5.01</u>	66.53	16.20		130.0	
10610- AAA	IEEE 802.11ac WiFi (20MHz, MCS3, 90pc duty cycle)	X	5.03	67.01	16.67	0.46	130.0	± 9.6 %
		Y	5.06	66.63	_16.42		130.0	
		Z	4.84	66.68	_16.37		130.0	
10611- AAA	IEEE 802.11ac WiFi (20MHz, MCS4, 90pc duty cycle)	X	4.96	66.86	16.54	0.46	130.0	± 9.6 %
		Y	4.99	66.50	16.29		130.0	
10612- AAA	IEEE 802.11ac WiFi (20MHz, MCS5, 90pc duty cycle)	X	4.76 4.97	67.00	16.23	0.46	130.0	±9.6 %
1001		Y	5.01	66.61	16.31		130.0	
		Z	4.77	66.66	16.28		130.0	
10613- AAA	IEEE 802.11ac WiFi (20MHz, MCS6, 90pc duty cycle)	X	4.99	66.94	16.49	0.46	130.0	± 9.6 %
		Y	5.03	66.55	16.23		130.0	
40044		Z	4.77	66.56	16.17	0.40	130.0	100%
10614- AAA	90pc duty cycle)		4.92	67.15	16.73	0.46	130.0	± 9.6 %
		Ý 7	4.95	66.70	16.38		130.0	
10615- AAA	IEEE 802.11ac WiFi (20MHz, MCS8, 90pc duty cycle)	X	4.95	66.65	16.31	0.46	130.0	± 9.6 %
		Y	4.99	66.28	16.06		130.0	
		Z	4.76	66.36	16.03		130.0	
10616- AAA	IEEE 802.11ac WiFi (40MHz, MCS0, 90pc duty cycle)	X	5.51	67.07	16.65	0.46	130.0	± 9.6 %
		Y 7	5.55	66.78	16.45		130.0	
10617- AAA	IEEE 802.11ac WiFi (40MHz, MCS1, 90pc duty cycle)	X	5.58	67.18	16.67	0.46	130.0	± 9.6 %
		Y	5.62	66.89	16.46		130.0	
		Z	5.43	66.92	16.46		130.0	
10618- AAA	IEEE 802.11ac WiFi (40MHz, MCS2, 90pc duty cycle)	X	5.47	67.27	16.74	0.46	130.0	±9.6 %
		<u> </u>	5.50	66.95	16.52		130.0	
10610			5.31	67.07	16.57	0.46	130.0	+96%
AAA	90pc duly cycle)		5.49	66.76	16.36	0.40	130.0	± 9.0 %
		7	5 33	66.76	16.33		130.0	
10620- AAA	IEEE 802.11ac WiFi (40MHz, MCS4, 90pc duty cycle)	X	5.62	67.19	16.68	0.46	130.0	± 9.6 %
		Y	<u>5.6</u> 7	66.93	16.49		130.0	
		Z	5.42	66.79	16.40		130.0	
10621- AAA	IEEE 802.11ac WiFi (40MHz, MCS5, 90pc duty cycle)	X	5.59	67.25	16.82	0.46	130.0	± 9.6 %
<u> </u>		<u> </u>	5.63	66.98	16.62		130.0	
10622-	IEEE 802.11ac WiFi (40MHz, MCS6,	 X	5.41 5.58	66.88 67.35	16.56 16.86	0.46	130.0	± 9.6 %
	90pc duly cycle)		5.00	67.00	16.66		120.0	
			5.62	67.06	16.60		130.0	

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10623-	IEEE 802.11ac WiFI (40MHz, MCS7, 90pc duly cycle)	X	5.48	66.99	16.57	0.46	130.0	± 9.6 %
70.01		Y	5.54	66.75	16.40		130.0	
		Z	5.31	66.61	16.29		130.0	
10624- AAA	IEEE 802.11ac WiFi (40MHz, MCS8, 90pc duly cycle)	X	5.65	67.09	16.68	0.46	130.0	± 9.6 %
		Y	5.69	66.81	16.49		130.0	
		Z	5.50	66.79	16.45		130.0	
10625- AAA	IEEE 802.11ac WiFi (40MHz, MCS9, 90pc duty cycle)	X	6.03	68.01	17.18	0.46	130.0	± 9.6 %
		Y	6.05	67.65	16.95		130.0	
		Z	5.88	67.81	17.01		130.0	
10626- AAA	IEEE 802.11ac WiFi (80MHz, MCS0, 90pc duty cycle)	X	5.76	67.09	16.57	0.46	130.0	± 9.6 %
		Y	5.79	66.81	16.38	-	130.0	
	-	Z	5.64	66.79	16.35		130.0	
10627- AAA	IEEE 802.11ac WiFi (80MHz, MCS1, 90pc duty cycle)	X	6.01	67.60	16.77	0.46	130.0	± 9.6 %
		Y	6.04	67.32	16.58		130.0	
		Z	5.89	67.37	16.60		130.0	
10628- AAA	IEEE 802.11ac WiFi (80MHz, MCS2, 90pc duty cycle)	X	5.83	67.28	16.56	0.46	130.0	± 9.6 %
		Y	5.87	67.01	16.37		130.0	
		Z	5.69	66.92	16.32		130.0	
10629- AAA	IEEE 802.11ac WiFi (80MHz, MCS3, 90pc duty cycle)	X	5.93	67.36	16.58	0.46	130.0	± 9.6 %
		Y	5.99	67.16	16.43		130.0	
		Z	5.77	67.00	<u>1</u> 6.35		130.0	
10630- AAA	IEEE 802.11ac WiFi (80MHz, MCS4, 90pc duty cycle)	X	6.47	69.11	17.45	0.46	130.0	± 9.6 %
		Y	6.56	68.99	17.34		130.0	
		Z	6.24	68.58	17.14		130.0	
10631- AAA	IEEE 802.11ac WiFi (80MHz, MCS5, 90pc duty cycle)	X	6.36	68.89	17.53	0.46	130.0	± 9.6 %
		Y	6.44	68.71	17.39		130.0	
		Z	6.09	68.24	17.15		130.0	
10632- AAA	IEEE 802.11ac WiFi (80MHz, MCS6, 90pc duty cycle)	X	6.00	67.73	16.97	0.46	130.0	± 9.6 %
		Y	6.05	67.48	16.79		130.0	
		Z	5.85	67.39	16,74		130.0	
10633- AAA	IEEE 802.11ac WiFi (80MHz, MCS7, 90pc duly cycle)	X	5.95	67.59	16.73	0.46	130.0	± 9.6 %
		Y	6.01	67.38	16.58		130.0	
		Z	5.74	67.05	16.41		130.0	
10634- AAA	IEEE 802.11ac WiFi (80MHz, MCS8, 90pc duty cycle)	X	5.92	67.56	16.78	0.46	130.0	± 9.6 %
		Y	5.98	67.34	16.62		130.0	
		Z	5.72	67.07	16.47		130.0	
10635- AAA	IEEE 802.11ac WiFi (80MHz, MCS9, 90pc duty cycle)	X	5.80	66.87	16.18	0.46	130.0	± 9.6 %
		Y	5.85	66.64	16.01		130.0	
		Z	5.62	66.48	15.93		130.0	
10636- AAA	IEEE 1602.11ac WiFi (160MHz, MCS0, 90pc duly cycle)	X	6.16	67.47	16.65	0.46	130.0	± 9.6 %
		Y	6.19	67.22	16.49		130.0	
		Z	6.06	67.16	16.44		130.0	
10637- 	IEEE 1602.11ac WiFi (160MHz, MCS1, 90pc duty cycle)	X	6.34	67.89	16.84	0.46	130.0	± 9.6 %
		Y	6.39	67.69	16.69		130.0	
		Z	6.22	67.55	16.62		130.0	
10638- AAA	IEEE 1602.11ac WiFi (160MHz, MCS2, 90pc duty cycle)	X	6.33	67.82	16.78	0.46	130.0	± 9.6 %
		Y	6.36	67.57	16.61		130.0	
		Z	6.21	67.52	16.58		130.0	

ES3DV3-SN:3287

September 19, 2016

40000			6.24	67.00	46.06	0.46	120.0	1069/
10639-		^	0.34	07.00	10.00	0.40	130.0	19.0 %
AAA			638	67.64	16 70		130.0	
	1		6 19	67.47	16.60		130.0	
10640-	IEEE 1602 11ac W/iEi (160MHz MCS4		6.37	67.96	16.84	0.46	130.0	+96%
AAA	90pc duly cycle)		0.57	07.30	10.04	0.40	150.0	1 3.0 70
		Y	6.42	67.75	16.69		130.0	
		Z	6.20	67.51	16.57		130.0	
10641- AAA	IEEE 1602.11ac WiFi (160MHz, MCS5, 90pc duty cycle)	X	6.36	67.66	16.71	0.46	130.0	± 9.6 %
		Y	6.40	67.44	16.56		130.0	
		Z	6.24	67.40	16.53		130.0	
10642- AAA	IEEE 1602.11ac WiFi (160MHz, MCS6, 90pc duty cycle)	X	6.44	68.03	17.05	0.46	130.0	±9.6 %
		Y	6.49	67.81	16.91		130.0	
		Ż	6.28	67.62	16.80		130.0	
10643-	IEEE 1602.11ac WiFi (160MHz, MCS7,	X	6.26	67.70	16.80	0.46	130.0	± 9.6 %
AAA			6.21	67.49	16.64		130.0	
		1	0.31	67.24	16.57		120.0	
40044		<u> </u>	6.12	60.44	10.07	0.46	120.0	+06%
10644- AAA	90pc duty cycle)		6.50	00.41	17.10	0.40	130.0	± 9.0 %
		Y	6.57	68.25	17.05		<u>130.0</u>	
		Z	6.29	67.86	1 <u>6.85</u>		130.0	
10645- AAA	IEEE 1602.11ac WiFi (160MHz, MCS9, 90pc duty cycle)	X	6.78	68.77	17.29	0.46	130.0	± 9.6 %
		Y	6.81	68.48	17.11		130.0	
		Z	6.68	68.60	17.18		130.0	
10646- AAB	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2.7)	X	37.14	116.21	38.03	9.30	60.0	± 9.6 %
		Y	19.95	100.33	33.06		60.0	
		Ż	62.05	131.91	43.22		60.0	
10647-	LTE-TDD (SC-EDMA, 1 RB, 20 MHz	Tx^{-}	38.52	117.84	38.64	9,30	60.0	± 9.6 %
	QPSK, UL Subframe=2,7)							
		Y	20.25	101.35	33.50		60.0	
		Z	63.43	133.45	43.81		60.0	
10648- AAA	CDMA2000 (1x Advanced)	X	1.03	68.68	14.68	0.00	150.0	±9.6 %
<u> -</u>		Y	0.85	64.54	12.30		150.0	
		Z	0.71	63.65	10.90		150.0	
						•		

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

Calibration Laboratory of

PC Test

Client

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





Schweizerischer Kalibrierdienst

- Service suisse d'étalonnage С
 - 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

Certificate No: EX3-3589_Jan17

CALIBRATION CERTIFICATE

Object	EX3DV4 - SN:3589	
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	BN 201-26
Calibration date:	January 13, 2017	.:
This calibration certificate doc The measurements and the u	uments the traceability to national standards, which realize the physical units of measurements (S ncertainties with confidence probability are given on the following pages and are part of the certific	I). cate.

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

Calibration Equipment used (M&TE critical for calibration)

Brimany Standards		Cal Date (Certificate No.)	Scheduled Calibration
	SN: 104778	06-Apr-16 (No. 217-02288/02289)	Apr-17
Power sensor NRP-Z91	SN: 103244	06-Apr-16 (No. 217-02288)	Арг-17
Power sensor NRP-Z91	SN: 103245	06-Apr-16 (No. 217-02289)	Apr-17
Reference 20 dB Attenuator	SN: S5277 (20x)	05-Apr-16 (No. 217-02293)	Apr-17
Reference Probe ES3DV2	SN: 3013	31-Dec-16 (No. ES3-3013_Dec16)	Dec-17
DAE4	SN: 660	7-Dec-16 (No. DAE4-660_Dec16)	Dec-17
Secondary Standards	ID	Check Date (in house)	Scheduled Check
Power meter E4419B	SN: GB41293874	06-Apr-16 (in house check Jun-16)	In house check: Jun-18
Power sensor E4412A	SN: MY41498087	06-Apr-16 (in house check Jun-16)	In house check: Jun-18
Power sensor E4412A	SN: 000110210	06-Apr-16 (in house check Jun-16)	In house check: Jun-18
RE generator HP 8648C	SN: US3642U01700	04-Aug-99 (in house check Jun-16)	In house check: Jun-18
Network Analyzer HP 8753E	SN: US37390585	18-Oct-01 (in house check Oct-16)	In house check: Oct-17

Calibrated by:	Name Michael Weber		Function Laboratory Technician	Signature
Approved by:	Kalja Pokovic		Technical Manager	blet
		ant in full without a	rillon approval of the laborato	Issued: January 16, 2017

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





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Glossary:

TSL	tissue simulating liquid
NORMx,y,z	sensitivity in free space
ConvF	sensitivity in TSL / NORMx,y,z
DCP	diode compression point
CF	crest factor (1/duty_cycle) of the RF signal
Ă, B, C, D	modulation dependent linearization parameters
Polarization ϕ	φ rotation around probe axis
Polarization 9	9 rotation around an axis that is in the plane normal to probe axis (at measurement center),
	i.e., $\vartheta = 0$ is normal to probe axis

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

Calibration is Performed According to the Following Standards:

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

Methods Applied and Interpretation of Parameters:

- NORMx, y, z: Assessed for E-field polarization 9 = 0 (f ≤ 900 MHz in TEM-cell; f > 1800 MHz: R22 waveguide). NORMx, y, z are only intermediate values, i.e., the uncertainties of NORMx, y, z does not affect the E²-field uncertainty inside TSL (see below ConvF).
- NORM(f)x, y, z = NORMx, y, z * frequency_response (see Frequency Response Chart). This linearization is
 implemented in DASY4 software versions later than 4.2. The uncertainty of the frequency response is included
 in the stated uncertainty of ConvF.
- DCPx, y, z: DCP are numerical linearization parameters assessed based on the data of power sweep with CW signal (no uncertainty required). DCP does not depend on frequency nor media.
- PAR: PAR is the Peak to Average Ratio that is not calibrated but determined based on the signal characteristics
- Ax,y,z; Bx,y,z; Cx,y,z; Dx,y,z; VRx,y,z: A, B, C, D are numerical linearization parameters assessed based on the data of power sweep for specific modulation signal. The parameters do not depend on frequency nor media. VR is the maximum calibration range expressed in RMS voltage across the diode.
- ConvF and Boundary Effect Parameters: Assessed in flat phantom using E-field (or Temperature Transfer Standard for f ≤ 800 MHz) and inside waveguide using analytical field distributions based on power measurements for f > 800 MHz. The same setups are used for assessment of the parameters applied for boundary compensation (alpha, depth) of which typical uncertainty values are given. These parameters are used in DASY4 software to improve probe accuracy close to the boundary. The sensitivity in TSL corresponds to NORMx, y, z * ConvF whereby the uncertainty corresponds to that given for ConvF. A frequency dependent ConvF is used in DASY version 4.4 and higher which allows extending the validity from ± 50 MHz to ± 100 MHz.
- Spherical isotropy (3D deviation from isotropy): in a field of low gradients realized using a flat phantom exposed by a patch antenna.
- Sensor Offset: The sensor offset corresponds to the offset of virtual measurement center from the probe tip (on probe axis). No tolerance required.
- Connector Angle: The angle is assessed using the information gained by determining the NORMx (no uncertainty required).

Probe EX3DV4

SN:3589

Manufactured: Calibrated:

March 30, 2006 January 13, 2017

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

Basic Calibration Parameters

	Sensor X	Sensor Y	Sensor Z	Unc (k=2)
Norm $(\mu V/(V/m)^2)^A$	0.45	0.39	0.39	± 10.1 %
DCP (mV) ^B	103.1	103.4	99.2	

Modulation Calibration Parameters

UID	Communication System Name		A dB	B dB√μV	C	D dB	VR mV	Unc ^E (k=2)
0	CW	X	0.0	0.0	1.0	0.00	161.2	±3.3 %
		Y	0.0	0.0	1.0		173.7	
		Z	0.0	0.0	1.0		135.7	
10010- CAA	SAR Validation (Square, 100ms, 10ms)	×	4.33	68.3	14.2	10.00	44.8	±1.9 %
		Y	3.03	64.9	12.6		44.0	_
		Z	1.75	59.1	10.5		48.9	
10062- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps)	X	10.36	69.2	21.9	8.68	126.5	±2.7 %
		Y	10.35	68.8	21.4		136.4	
		Z	10.74	70.2	22.3		149.4	
10117- CAB	IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK)	X	10.30	69.0	21.3	8.07	131.3	±1.9 %
		Y	10.24	68.6	20.9		140.6	
		Z	9.68	67.3	20.2		105.8	
10196- CAB	IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK)	X	9.88	68.6	21.2	8.10	125.0	±2.2 %
		Y	9.95	68.5	20.9		134.8	
		Z	9.28	67.0	20.1		100.7	
10400- AAC	IEEE 802.11ac WiFi (20MHz, 64-QAM, 99pc duty cycle)	X	10.17	68.9	21.6	8.37	125.5	±2.2 %
		Y	10.21	68.7	21.1		134.8	
		Z	9.53	67.2	20.4		100.7	
10401- AAC	IEEE 802.11ac WiFi (40MHz, 64-QAM, 99pc duly cycle)	X	10.95	69.6	21.9	8.60	134.0	±2.5 %
		Y	10.86	69.1	21.4		143.2	
		Z	10.34	67.9	20.8		107.9	<u> </u>
10402- AAC	IEEE 802.11ac WiFi (80MHz, 64-QAM, 99pc duty cycle)	X	11.11	70.0	21.9	8.53	134.7	±2.5 %
		Y	10.77	68.9	21.1		141.7	L
<u> </u>		Z	10.46	68.2	20.7		107.7	

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.

f (MHz) ^C	Relative Permittivity ^F	Conductivity (S/m) ^F	ConvF X	ConvF Y	ConvF Z	Alpha ^G	Depth ^G (mm)	Unc (k=2)
5250	35.9	4.71	4.78	4.78	4.78	0.30	1.80	<u>± 13.1 %</u>
5600	35.5	5.07	4.24	4.24	4.24	0.40	1.80	± 13.1 %
5750	35.4	5.22	4.44	4.44	4.44	0.40	1.80	± 13.1 %

Calibration Parameter Determined in Head Tissue Simulating Media

^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 validity can be extended to ± 110 MHz.

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

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

f (MHz) ^c	Relative Permittivity ^F	Conductivity (S/m) ^F	ConvF X	ConvF Y	ConvF Z	Alpha ^G	Depth ^G (mm)	Unc (k=2)
5250	48.9	5.36	4.19	4.19	4.19	0.40	1.90	± 13.1 %
5600	48.5	5.77	3.82	3.82	3.82	0.40	1.90	± 13.1 %
5750	48.3	5.94	3.83	3.83	3.83	0.50	1.90	± 13.1 %

Calibration Parameter Determined in Body Tissue Simulating Media

^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 validity can be extended to ± 110 MHz. ^F At frequencies below 3 GHz, the validity of tissue parameters (ε and σ) can be relaxed to ± 10% if liquid compensation formula is applied to

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

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



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

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



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

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



Dynamic Range f(SAR_{head})

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

Certificate No: EX3-3589_Jan17



Conversion Factor Assessment

Other Probe Parameters

Sensor Arrangement	Triangular
Connector Angle (°)	141.4
Mechanical Surface Detection Mode	enabled
Optical Surface Detection Mode	disabled
Probe Overall Length	337 mm
Probe Body Diameter	10 mm
Tip Length	9 mm
Tip Diameter	2.5 mm
Probe Tip to Sensor X Calibration Point	1 mm
Probe Tip to Sensor Y Calibration Point	1 mm
Probe Tip to Sensor Z Calibration Point	1 mm
Recommended Measurement Distance from Surface	1.4 mm

APPENDIX D: SAR TISSUE SPECIFICATIONS

Measurement Procedure for Tissue verification:

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

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

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

Frequency (MHz)	750	750	835	835	1750	1750	1900	1900	2450-2600	2450-2600	5200-5800	5200-5800
Tissue	Head	Body	Head	Body	Head	Body	Head	Body	Head	Body	Head	Body
Ingredients (% by weight)												
Bactericide			0.1	0.1								
DGBE					47	31	44.92	29.44		26.7		
HEC	S		1	1								
NaCl	2-3	See page 2	1.45	0.94	0.4	0.2	0.18	0.39	See page 4	0.1	See page 5	
Sucrose			57	44.9								
Polysorbate (Tween) 80												20
Water			40.45	53.06	52.6	68.8	54.9	70.17		73.2		80

 Table D-I

 Composition of the Tissue Equivalent Matter

	FCC ID: ZNFM703		SAR EVALUATION REPORT	🕒 LG	Approved by: Quality Manager
	Test Dates:	DUT Type:			APPENDIX D:
	06/19/17 - 07/28/17	Portable Handset			Page 1 of 5
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2 Composition / Information on ingredients

The Item is composed of	of the following ingredients:
H ₂ O	Water, 35 – 58%
Sucrose	Sugar, white, refined, 40 - 60%
NaCl	Sodium Chloride, 0 – 6%
Hydroxyethyl-cellulose	Medium Viscosity (CAS# 9004-62-0), <0.3%
Preventol-D7	Preservative: aqueous preparation, (CAS# 55965-84-9), containing
	5-chloro-2-methyl-3(2H)-isothiazolone and 2-methyyl-3(2H)-isothiazolone,
	0.1 - 0.7%
	Relevant for safety; Refer to the respective Safety Data Sheet*.

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

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

Measurement Certificate / Material Test

Item Name	Body Tissue Simulating Liquid (MSL750V2)
Product No.	SL AAM 075 AA (Batch: 150518-2)
Manufacturer	SPEAG

Measurement Method

TSL dielectric parameters measured using calibrated DAK probe.

Setup Validation

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

Target Parameters

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

Test Condition

Ambient	Environment temperatur (22 ± 3)°C and humidity < 70%.	_
TSL Temperature	22°C	
Test Date	20-Apr-16	
Operator	WM	

Additional Information

TSL Density 1.212 g/cm³ TSL Heat-capacity 3.006 kJ/(kg*K)



Figure D-2 750MHz Body Tissue Equivalent Matter

				Annancial box
	FCC ID: ZNFM703	PCTEST	SAR EVALUATION REPORT	Approved by:
		Y SROCHERENE LARORATERY, INC.		Quality Manager
	Test Dates:	DUT Type:		APPENDIX D:
	06/19/17 - 07/28/17	Portable Handset		Page 2 of 5
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				01/30/2017

Measurement Certificate / Material Test

Item Name	Head Tissue Simulating Liquid (HSL750V2)	
Product No.	SL AAH 075 AB (Batch: 160322-2)	
Manufacturer	SPEAG	

Measurement Method

TSL dielectric parameters measured using calibrated DAK probe.

Setup Validation

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

Target Parameters

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

Test Condition

Ambient	Environment temperatur (22 ± 3)°C and humidity < 70%.
TSL Temperature	22°C
Test Date	23-Mar-16
Operator	WM

Additional Information

ISL Density	1.204	g/cm
TSL Heat-capacity	2.701	kJ/(kg*K)





Frequency MHz

Figure D-3 750MHz Head Tissue Equivalent Matter

	FCC ID: ZNFM703		SAR EVALUATION REPORT	🕒 LG	Approved by:
					Quality Manager
	Test Dates:	DUT Type:			APPENDIX D:
	06/19/17 - 07/28/17	Portable Handset			Page 3 of 5
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The Item is composed of the	he following ingre	adients:
Water	50 - 73 %	
Non-ionic detergents	25 - 50 %	polyoxyethylenesorbitan monolaurate
NaCl	0 - 2%	
Preservative	0.05 - 0.1%	6 Preventol-D7
Safety relevant ingredients		
CAS-No. 55965-84-9	< 0.1 %	aqueous preparation, containing 5-chloro-2-methyl-3(2H)- isothiazolone and 2-methyyl-3(2H)-isothiazolone
CAS-No. 9005-64-5	<50 %	polyoxyethylenesorbitan monolaurate
According to international marked by symbols.	guidelines, the pr	roduct is not a dangerous mixture and therefore not required to be

Figure D-4 Composition of 2.4-2.6 GHz Head Tissue Equivalent Matter

Note: 2.4-2.6 GHz head liquid recipes are proprietary SPEAG. Since the composition is approximate to the actual liquids utilized, the manufacturer tissue-equivalent liquid data sheets are provided below.

Item N	lame		Hear	Tise	te Sir	nulation	I iquid 4	BBI 1900-3800V2V
Produc	ct No		SI A	AH 10	6 AR	Batch	160330	1DDL1900-3600V3)
Manuf	acture	r	SPE	AG	- 110	water.		
Mone.	irame	of Mart	thed					
ISL di	electri	c para	meter	s mea	sured	using ca	alibrated	AK probe.
Setup	Valid	ation						
Validat	tion re	sults v	vere w	ithin ±	2.5%	towards	the targe	t values of Methanol.
Target	Para	meter	s					
Target	paran	neters	as de	fined i	n the	EEE 15	28 and IE	C 62209 compliance standards.
Test C	onditi	ion						
Ambie	nt		Envir	onmer	nt tem	peratur	(22 ± 3)°(and humidity < 70%.
ISL Te	empera	ature	22°C					
operat	ate lor		JO-M WM	ar-16				
A state								
SL D	ensitv	norm	ation 1.054	a/cm	-			
TSL H	eat-ca	pacity	3.389) kJ/(k)	g*K)			
-	Measu	red		Targe	1	Diff to T	arget [%]	
1900	e' 40.7	e" 12.3	sigma 1.3	eps 40.0	sigma	Δ-eps	A-sigma	10.0
1950	40.5	12.5	1.4	40.0	1.4	1.7	-0.9	¥ 15 ¥ 50
2000	40.3	12.6	1.4	40.0	1.4	0.8	0.1	25
2050	40.1	12.7	1.5	39.9	1.4	0.6	0.5	0.0
2100	39.9	12.9	1.5	39.8	1.5	0.3	0.9	2.5
2150	39.8	13.0	1.6	39.7	1.5	0.1	1.2	^O -5.0
2200	39.6	13,1	1.0	39.6	1.6	-0.2	1.7	-7.5
2300	39.2	13.3	1.7	39.5	1.0	-0.6	2.0	-10.0
2350	39.1	13.5	1.8	39.4	1.7	-0.8	2.9	
2400	38.9	13.6	1.8	39.3	1.8	-1.0	3.4	Frequency MHz
2450	38.7	13.7	1.9	39.2	1.8	-1.2	4.0	
2500	38.5	13.8	1.9	39.1	1.9	-1.5	3.9	
2800	38.3	13.9	2.0	39.1	1.9	-1.9	3.5	10.0
2650	37.9	14.7	21	38.0	2.0	.2.6	3.9	7.5
2700	37.8	14.3	2.2	38.9	2.1	-2.8	3.9	5.0
2750	37.5	14.4	22	38.8	2.1	-3.3	3.6	0.0 proc
2800	37.4	14.5	2.3	38.8	2.2	-3.6	3.6	8 -25 T
2850	37.2	14.6	23	38.7	2.2	-3.9	3.7	\$.50
2950	36.8	14.8	24	38.6	23	-45	3.0	-7.5 ·
3000	36.6	14.9	2.5	38.5	2.4	-4.8	3.6	-10.0
3050	36.4	15.0	2.5	38.4	2.5	-5.2	3.8	1900 2100 2300 2500 2700 2900 3100 3300 3500 3700 3900
3100	36.2	15.1	2.6	38.4	2.5	-5,6	3.8	Frequency MHz
3150	35.1	15.2	27	38.3	2.6	-5.9	4.0	and an an an an an an an an an an an an an
3250	35.7	15.3	2.8	38.2	2.7	-6.6	4.1	
3300	35.5	15.3	2.8	38.2	2.7	-6.9	4.0	
3350	35.4	15.4	2.9	38.1	2.8	-7.2	4.2	
3400	35.2	15.5	2.9	38.0	2.8	-7.5	4.1	
3450	35.0	15.5	3.0	38.0	2.9	-7.8	4.2	
3550	34.7	15.6	3.0	37.9	3.0	-8.1	4.2	
3600	34.5	15.7	3.1	37.8	3.0	-8.7	4.4	
3650	34,4	15.8	3.2	37.8	3.1	-9.0	4.3	
3700	34.2	15.8	3.3	37.7	3.1	-9.3	4.5	
3750	34.1	15.9	3.3	37.6	3.2	-9.5	4,4	
3800	33.9	15.9	3.4	37.6	3.2	-9.9	4.7	
-1450 I	10.0	16.0	10.0	37.6	3.3	-10.1	4.7	

Figure D-5 2.4-2.6 GHz Head Tissue Equivalent Matter

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2 Composition / Information on ingredients

The Item is composed of the following ingredients: Water 50 - 65%Mineral oil 10 - 30%Emulsifiers 8 - 25%Sodium salt 0 - 1.5%Figure D-6

Composition of 5 GHz Head Tissue Equivalent Matter

Note: 5GHz head liquid recipes are proprietary SPEAG. Since the composition is approximate to the actual liquids utilized, the manufacturer tissue-equivalent liquid data sheets are provided below.

tem N	lame		Head	d Tiss	ue Sin	nulatin	g Liquid (H	HBBL3500-	5800	V5)				
Produ	ct No.		SL A	AH 50	2 AG	(Batch:	160331-2)		,				
Manu	acture	er	SPE	AG										
Aeasi	ureme	nt Me	thod											
TSL d	ielectr	ic para	meter	s mea	sured	using c	alibrated D	AK probe.						
		100												
Setup	Valid	ation		Ale les	0.50									
valida	tion re	suits v	vere w	nthin ±	2.5%	toward	s the targe	t values of M	letha	inol.			_	
Targe	t Para	meter	s											
Target	parar	neters	as de	fined	in the I	EEE 15	28 and IEC	C 62209 cor	nplia	nce stan	dards.			
Tool (a nalit													_
Amhie	onait	ion	Envir	onmo	nt tom	oratur	/00 . 0100	and house of the		0.01			_	
TSL T	emper	ature	22°C	onne	in tem	raiur	(22 ± 3)°C	and numidi	y < 7	0%.				
Test D	late		4-Apr	-16										
Opera	tor		WM											
Additi	onal	aform	ation											
TSI D	ensity	norm	0.985	a/cm	3									
ISL H	eat-ca	pacity	3.383	kJ/(k	q*K)									
		-									_			
	Measu	red	_	Targe	t	Diff.to T	arget [%]	10.7						
[MHz]	e'	e"	sigma	eps	sigma	∆-eps	∆-sigma	10.0						
3500	39.0	15.12	2.86	38.0	2.81	2.5	1.8	₹ 50 ·	_					
3600	38.7	15.08	3.02	37.8	3.02	2.3	0.9	ATTE 2.5					and a second	
3700	38.6	15.08	3.10	37.7	3.12	2.4	-0.6	Le 0.0	-				******	
3800	38.4	15.07	3.19	37.6	3.22	2.2	-0.9	à -2.5 -						
3900	38.3	15.09	3.27	37.5	3.32	2.2	-1.6	-5.0 -		_	_			
4000	38.2	15.10	3.36	37.4	3.43	2.3	-1.9	-7.5 -						
4100	38.1	15.13	3.45	37.2	3.53	2.3	-2.2	-10.0	~	2000		40.00		
4300	37.8	15.22	3.55	37.1	3.63	2.3	-2.2	34	10	3900	4400 Erection	4900	5400	5900
4400	37.7	15.29	3.74	36.9	3.84	2.2	-2.5				rieque	ny mriz		
4500	37.6	15.34	3.84	36.8	3.94	2.2	-2.5							
4600	37.4	15.41	3,94	36.7	4.04	2.0	-2.5							
4700	37.3	15.47	4.05	36.6	4.14	2.0	-2.2	10.0		1				
4800	37.1	15.53	4.15	36.4	4.25	1.8	-2.2	2 50	-					
4850	37.1	15.57	4.20	36.4	4.30	2.0	-2.2	\$ 2.5						
4950	36.9	15.62	4.20	36.3	4.35	1.8	22	0.0	-	~				
5000	36.8	15.66	4.35	36.2	4.45	1.6	.22	Puo -2.5 -			*******	********	*******	
5050	36.8	15.68	4.40	36.2	4.50	1.8	-2.2	2 -5.0					_	-
5100	36.7	15.73	4.46	36.1	4,55	1.7	-2.0	ā -7.5 -						
5150	36.6	15.75	4.51	36.0	4.60	1.5	-2.0	-10.0	30	3900	4400	4900	5400	5900
5200	36.5	15.78 15.80	4.57	36.0	4.66	1.4	-1.8				Freque	ncy MHz	0.100	0000
5300	36.4	15.84	4.67	35.9	4.76	1.5	-1.8							
5350	36.3	15.85	4.72	35.8	4.81	1.4	-1.8							
5400	36.2	15.88	4.77	35.8	4.86	1.2	-1.9							
5450	36.2	15.90	4.82	35.7	4.91	1.4	-1.9							
500	36.1	15.91	4.87	35.6	4.96	1.3	-1.9							
5600	35.0	15.95	4.93	35.6	5.01	1.2	-1.7							
5650	35.9	16.02	5.04	35.5	5.12	1.2	-1.5							
5700	35.8	16.05	5.09	35.4	5.17	1.1	-1.5							
1100 1							10							
5750	35.7	16.09	5.15	35.4	5.22	1.0	-1.0							
5750 5800	35.7 35.7	16.09 16.10	5.15	35.4 35.3	5.22	1.1	-1.3							
5750 5800 5850	35.7 35.7 35.6	16.09 16.10 16.14	5.15 5.20 5.25	35.4 35.3 35.3	5.22 5.27 5.34	1.1 0.8	-1.3 -1.6							

Figure D-7 5GHz Head Tissue Equivalent Matter

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APPENDIX E: SAR SYSTEM VALIDATION

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

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

	OAR Oystein Vandation Outliniary													
SAR	EPEO		PROBE	DROBE			COND.	PERM.	CI	VALIDATIO	N	MC	D. VALIDATIO	N
SYSTEM		DATE	SN	TVPE	PROBE C	AL. POINT	(7)	(sr)	SENSITIVITY	PROBE	PROBE	MOD.	DUTY	PAR
#			ON				(0)	(61)	OLINOITIVITT	LINEARITY	ISOTROPY	TYPE	FACTOR	I AN
J	750	6/21/2017	3209	ES3DV3	750	Head	0.868	39.874	PASS	PASS	PASS	N/A	N/A	N/A
1	835	4/25/2017	3213	ES3DV3	835	Head	0.891	40.147	PASS	PASS	PASS	GMSK	PASS	N/A
E	1750	4/18/2017	3319	ES3DV3	1750	Head	1.373	39.389	PASS	PASS	PASS	N/A	N/A	N/A
J	1900	6/5/2017	3209	ES3DV3	1900	Head	1.456	39.187	PASS	PASS	PASS	GMSK	PASS	N/A
I	2450	6/1/2017	3213	ES3DV3	2450	Head	1.876	40.253	PASS	PASS	PASS	OFDM/TDD	PASS	PASS
I	2600	6/1/2017	3213	ES3DV3	2600	Head	2.059	39.650	PASS	PASS	PASS	TDD	PASS	N/A
Н	5250	6/10/2017	3914	EX3DV4	5250	Head	4.580	35.029	PASS	PASS	PASS	OFDM	N/A	PASS
Н	5600	6/10/2017	3914	EX3DV4	5600	Head	4.940	34.501	PASS	PASS	PASS	OFDM	N/A	PASS
Н	5750	6/10/2017	3914	EX3DV4	5750	Head	5.103	34.300	PASS	PASS	PASS	OFDM	N/A	PASS
E	750	4/27/2017	3319	ES3DV3	750	Body	0.947	55.383	PASS	PASS	PASS	N/A	N/A	N/A
Н	835	3/2/2017	3318	ES3DV3	835	Body	0.982	53.900	PASS	PASS	PASS	GMSK	PASS	N/A
E	835	4/4/2017	3319	ES3DV3	835	Body	0.954	53.125	PASS	PASS	PASS	GMSK	PASS	N/A
Н	1750	4/13/2017	3318	ES3DV3	1750	Body	1.512	51.846	PASS	PASS	PASS	N/A	N/A	N/A
Н	1900	3/15/2017	3318	ES3DV3	1900	Body	1.556	52.524	PASS	PASS	PASS	GMSK	PASS	N/A
K	2450	5/3/2017	7406	EX3DV4	2450	Body	1.995	50.521	PASS	PASS	PASS	OFDM/TDD	PASS	PASS
K	2600	5/3/2017	7406	EX3DV4	2600	Body	2.203	49.895	PASS	PASS	PASS	TDD	PASS	N/A
G	2600	9/27/2016	3287	ES3DV3	2600	Body	2.236	50.316	PASS	PASS	PASS	TDD	PASS	N/A
D	5250	2/2/2017	3589	EX3DV4	5250	Body	5.422	47.823	PASS	PASS	PASS	OFDM	N/A	PASS
D	5600	2/2/2017	3589	EX3DV4	5600	Body	5.882	47.193	PASS	PASS	PASS	OFDM	N/A	PASS
D	5750	2/2/2017	3589	EX3DV4	5750	Body	6.117	46.985	PASS	PASS	PASS	OFDM	N/A	PASS

Table E-I SAR System Validation Summary

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

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APPENDIX G: WIFI POWER REDUCTION VERIFICATION

This device was tested by the test lab to verify power reduction in WIFI power levels when audio is routed through the ear-piece of the device.

G1. **Test Procedure**

The following procedure was utilized to verify power reduction in normal operating conditions:

- The WIFI antenna of the DUT is connected via a conducted connection to a CMW500 with WIFI 1. signaling and measurement functions.
- 2. A WIFI data transmission is initiated and WIFI power is measured by the CMW500.
- 3. The DUT is connected via a radiated connection to a second CMW500 and a speech call is initiated, simultaneously with the WIFI data transmission.
- 4. Audio is verified to be routed through the held-to-ear speaker and the WIFI power is measured. The speakerphone is toggled on and off to ensure power reduction is reactivated when audio is restored to the held-to-ear speaker.
- 5. The WIFI powers are measured and compared to the reduced power levels to verify the WIFI power reduction mechanism.
- Repeat for each WIFI mode (e.g. 802.11b, 802.11g, etc...) supported by the DUT. 6.



Figure 1 – Verification of WIFI Power Reduction

G2. Verification Data Summary

The WIFI power reduction mechanism was verified under the above test procedures and conditions. The maximum and reduced WIFI power levels were within the tune-up range.

FCC ID	IMEI	Mode	Channel	Target Max Power (dBm)	Measured Power (dBm)	Target Reduced Power (dBm)	Measured Power (dBm)
		802.11b	6	21.00	20.84	16.00	16.17
ZNFM703	01767	802.11g	6	19.00	19.17	16.00	15.87
		802.11n	6	18.00	18.22	16.00	15.81

Table 1 – Data Summary of Power Reduction

Maximum Allowed Output Power: Target Power +1 dB

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