#### EX3DV4-SN:7409

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10623- AAB	IEEE 802.11ac WiFi (40MHz, MCS7, 90pc duty cycle)	X	4.39	66.10	15.89	0.46	130.0	± 9.6 %
		Y	4.89	66.49	16.36		130.0	
		Ż	4.86	65.84	15.96		130.0	·····
10624- AAB	IEEE 802.11ac WiFi (40MHz, MCS8, 90pc duty cycle)	X	4.54	66.35	16.10	0.46	130.0	± 9.6 %
		Y	5.06	66.70	16.53		130.0	
		Z	5.05	66.11	16.17		130.0	
10625-	IEEE 802.11ac WiFi (40MHz, MCS9,	X	4.65	66.63	16.32	0.46	130.0	± 9.6 %
AAB	90pc duty cycle)	Y	5.15	66.88	16.69		130.0	_ 0.0 %
		Z	5.16	66.34	16.36		130.0	
10626-	IEEE 802.11ac WiFi (80MHz, MCS0,	X	4.87	66.09	16.03	0.46	130.0	± 9.6 %
AAB	90pc duty cycle)					0.40		1 3.0 %
		Y	5.31	66.64	16.44		130.0	
		Z	5.28	66.07	16.09	~ / ~	130.0	
10627- AAB	IEEE 802.11ac WiFi (80MHz, MCS1, 90pc duty cycle)	X	4.96	66.39	16.17	0.46	130.0	± 9.6 %
		Y	5.52	67.25	16.73		130.0	
		Z	5.53	66.80	16.43		130.0	
10628- AAB	IEEE 802.11ac WiFi (80MHz, MCS2, 90pc duty cycle)	X	4.83	65.96	15.85	0.46	130.0	± 9.6 %
		Y	5.28	66.56	16.30		130.0	
		Z	5.27	66.03	15.96		130.0	
10629- AAB	IEEE 802.11ac WiFi (80MHz, MCS3, 90pc duty cycle)	X	4.89	66.11	15.93	0.46	130.0	± 9.6 %
		Y	5.45	66.99	16.52		130.0	
		Ż	5.45	66.49	16.20		130.0	
10630-	IEEE 802.11ac WiFi (80MHz, MCS4,	X	4.94	66.47	16.13	0.46	130.0	± 9.6 %
AAB	90pc duty cycle)					0.40		1.0.0 %
		Y	5.52	67.40	16.73		130.0	
		Z	5.58	67.09	16.50		130.0	
10631- AAB	IEEE 802.11ac WiFi (80MHz, MCS5, 90pc duty cycle)	X	5.04	67.01	16.63	0.46	130.0	± 9.6 %
		Y	5.56	67.66	17.07		130.0	
		Z	5.56	67.16	16.74		130.0	
10632- AAB	IEEE 802.11ac WiFi (80MHz, MCS6, 90pc duty cycle)	×	5.02	66.85	16.55	0.46	130.0	± 9.6 %
		Y	5.59	67.70	17.10		130.0	
		Z	5.59	67.18	16.77		130.0	
10633- AAB	IEEE 802.11ac WiFi (80MHz, MCS7, 90pc duty cycle)	×	4.86	66.17	16.01	0.46	130.0	± 9.6 %
		Y	5.30	66.64	16.39		130.0	
		Z	5.27	66.07	16.03		130.0	
10634- AAB	IEEE 802.11ac WiFi (80MHz, MCS8, 90pc duty cycle)	X	4.95	66.64	16.30	0.46	130.0	± 9.6 %
·····	land the second s	Y	5.35	66.92	16.58	İ	130.0	
		Z	5.32	66.32	16.21		130.0	1
10635- AAB	IEEE 802.11ac WiFi (80MHz, MCS9, 90pc duty cycle)	X	4.70	65.44	15.34	0.46	130.0	± 9.6 %
		Y	5.17	66.01	15.82	†	130.0	
**********		Z	5.16	65.50	15.50		130.0	l – – – – – – – – – – – – – – – – – – –
10636- AAC	IEEE 802.11ac WiFi (160MHz, MCS0, 90pc duty cycle)	X	5.37	66.35	16.11	0.46	130.0	± 9.6 %
70.0		Y	5.75	66.94	16.50		130.0	
		Z	5.74	66.45	16.20	+	130.0	
10637- AAC	IEEE 802.11ac WiFi (160MHz, MCS1, 90pc duty cycle)	X	5.47	66.68	16.28	0.46	130.0	± 9.6 %
7010		Y	5.84	67.17	16.61		130.0	
		Z			16.34			
10638-	IEEE 802.11ac WiFi (160MHz, MCS2,		5.85	66.75		0.40	130.0	+00%
AAC	90pc duty cycle)		5.45	66.60	16.21	0.46	130.0	± 9.6 %
i.		Y Z	5.91 5.90	67.37 66.89	16.68	ļ	130.0 130.0	

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10639- AAC	IEEE 802.11ac WiFi (160MHz, MCS3, 90pc duty cycle)	X	5.40	66.48	16.20	0.46	130.0	± 9.6 %
		Y	5.83	07.45	40.04		402.0	
			<u> </u>	67.15	16.61		130.0	
10640-	IEEE 802.11ac WiFi (160MHz, MCS4,	$\frac{2}{X}$	5.32	66.67 66.22	16.32	0.40	130.0	1000
AAC	90pc duty cycle)				15.99	0.46	130.0	± 9.6 %
	·····	<u>Y</u>	5.75	66.89	16.42		130.0	
40044		Z	5.75	66.45	16.15		130.0	
10641- AAC	IEEE 802.11ac WiFi (160MHz, MCS5, 90pc duty cycle)	X	5.45	66.45	16.13	0.46	130.0	± 9.6 %
		Y	5.88	67.07	16.54		130.0	
10010		Z	5.90	66.70	16.30		130.0	
10642- AAC	IEEE 802.11ac WiFi (160MHz, MCS6, 90pc duty cycle)	X	5.46	66.60	16.39	0.46	130.0	± 9.6 %
		Y	5.90	67.28	16.81		130.0	
		Z	5.89	66.80	16.53		130.0	
10643- AAC	IEEE 802.11ac WiFi (160MHz, MCS7, 90pc duty cycle)	X	5.28	66.13	16.00	0.46	130.0	± 9.6 %
		Y	5.73	66.91	16.51		130.0	
		Z	5.74	66.48	16.24		130.0	
10644- AAC	IEEE 802.11ac WiFi (160MHz, MCS8, 90pc duty cycle)	X	5.42	66.58	16.26	0.46	130.0	± 9.6 %
		Y	5.78	67.08	16.62		130.0	
		Z	5.78	66.62	16.33		130.0	
10645- AAC	IEEE 802.11ac WiFi (160MHz, MCS9, 90pc duty cycle)	Х	5.81	67.58	16.73	0.46	130.0	±9.6 %
		Y	5.91	67.16	16.62		130.0	
		Z	5.93	66.77	16.38		130.0	
10646- AAD	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,7)	X	2.64	72.38	24.11	9.30	60.0	± 9.6 %
		Y	4.60	84.41	29.31		60.0	
		Z	4.84	83.41	28.63		60.0	
10647- AAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,7)	X	2.46	71.01	23.55	9.30	60.0	± 9.6 %
		Y	4.04	81.81	28.38		60.0	
		Z	4.35	81.42	27.96		60.0	
10648- AAA	CDMA2000 (1x Advanced)	X	2.44	155.88	0.83	0.00	150.0	± 9.6 %
		Y	0.35	60.28	6.28		150.0	
		Z	0.35	60.00	5.54		150.0	
10652- AAB	LTE-TDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	X	2.08	63.49	12.30	2.23	80.0	± 9.6 %
		Y	3.15	67.39	16.19		80.0	
		Z	2.91	65.29	15.14		80.0	
10653- AAB	LTE-TDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)	X	3.02	65.17	14.89	2.23	80.0	± 9.6 %
		Y	3.64	66.22	16.46	·····	80.0	
		Z	3.52	64.96	15.78		80.0	
10654- AAB	LTE-TDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)	X	3.20	64.95	15.39	2.23	80.0	± 9.6 %
		Y	3.67	65.70	16.49	w	80.0	
		Z	3.57	64.61	15.88		80.0	
10655- AAB	LTE-TDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	X	3.35	64.77	15.59	2.23	80.0	± 9.6 %
		Y	3.76	65.50	16.51		80.0	
		Z	3.66	64.52	15.94		80.0	
10658- AAA	Pulse Waveform (200Hz, 10%)	X	2.01	62.76	7.94	10.00	50.0	± 9.6 %
		Y	2.58	65.57	9.73		50.0	
		Z	3.05	67.26	11.01		50.0	
10659- AAA	Pulse Waveform (200Hz, 20%)	X	0.84	60.00	5.36	6.99	60.0	± 9.6 %
		Y	1.33	63.54	7.82		60.0	

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June 25, 2018

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10660- AAA	Pulse Waveform (200Hz, 40%)	X	0.39	60.00	3.98	3.98	80.0	± 9.6 %
		Y	0.54	61.57	5.88		80.0	
		Z	0.45	60.00	5.04		80.0	
10661- AAA	Pulse Waveform (200Hz, 60%)	X	17.64	60.43	1.44	2.22	100.0	± 9.6 %
		Y	0.23	60.00	4.28		100.0	
······································		Z	0.25	60.00	3.48		100.0	
10662- AAA	Pulse Waveform (200Hz, 80%)	X	0.00	84.91	40.93	0.97	120.0	± 9.6 %
************		Y	49.30	1078.61	357.44		120.0	
		Z	0.03	139.18	4.12		120.0	

<sup>E</sup> 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

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: ES3-3347\_Mar18

## **CALIBRATION CERTIFICATE**

Object	ES3DV3 - SN:3347	
Calibration procedure(s)	QA CAL-01.v9, QA CAL-23.v5, QA CAL-25.v6 Calibration procedure for dosimetric E-field probes	vois
Calibration date:	March 27, 2018	
	ments the traceability to national standards, which realize the physical units of measurements (SI). certainties with confidence probability are given on the following pages and are part of the certificate.	
All calibrations have been cone	fucted in the closed laboratory facility: environment temperature (22 $\pm$ 3)°C and humidity < 70%.	
Calibration Equipment used (N	I&TE critical for calibration)	

Scheduled Calibration Primary Standards ID Cal Date (Certificate No.) 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 Apr-18 Power sensor NRP-Z91 04-Apr-17 (No. 217-02525) SN: 103245 Apr-18 Reference 20 dB Attenuator SN: S5277 (20x) 07-Apr-17 (No. 217-02528) Reference Probe ES3DV2 SN: 3013 30-Dec-17 (No. ES3-3013\_Dec17) Dec-18 DAE4 SN: 660 21-Dec-17 (No. DAE4-660\_Dec17) Dec-18 Scheduled Check Check Date (in house) Secondary Standards ID Power meter E4419B SN: GB41293874 06-Apr-16 (in house check Jun-16) In house check: Jun-18 06-Apr-16 (in house check Jun-16) In house check: Jun-18 Power sensor E4412A SN: MY41498087 SN: 000110210 06-Apr-16 (in house check Jun-16) In house check: Jun-18 Power sensor E4412A In house check: Jun-18 RF generator HP 8648C SN: US3642U01700 04-Aug-99 (in house check Jun-16) 18-Oct-01 (in house check Oct-17) In house check: Oct-18 Network Analyzer HP 8753E SN: US37390585

	Name	Function	Signature
Calibrated by:	Michael Weber	Laboratory Technician	
			<u>11.11225</u>
Approved by:	Katja Pokovic	Technical Manager	10 M
			10000
			Issued: March 27, 2018
This calibration certificat	e shall not be reproduced except in full	without written approval of the lab	oratory.

#### **Calibration Laboratory of**

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





Schweizerischer Kalibrierdienst S

Service suisse d'étalonnage

Accreditation No.: SCS 0108

- С 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

#### Glossary:

TSL	tissue simulating liquid
NORMx,y,z	sensitivity in free space
ConvF	sensitivity in TSL / NORMx,y,z
DCP	diode compression point
CF	crest factor (1/duty_cycle) of the RF signal
A, B, C, D	modulation dependent linearization parameters
Polarization φ	φ rotation around probe axis
Polarization 9	9 rotation around an axis that is in the plane normal to probe axis (at measurement center),
	i.e., $\vartheta = 0$ 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, ", "Measurement procedure for the assessment of Specific Absorption Rate (SAR) from handheld and body-mounted devices used next to the ear (frequency range of 300 MHz to 6 GHz)", July 2016
- c) IEC 62209-2, "Procedure to determine the Specific Absorption Rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)", March 2010
- d) KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

#### Methods Applied and Interpretation of Parameters:

- NORMx, y, z: Assessed for E-field polarization  $\vartheta = 0$  (f  $\leq 900$  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 E<sup>2</sup>-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:3347

Manufactured: Repaired: Calibrated:

March 15, 2012 March 15, 2018 March 27, 2018

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

#### **Basic Calibration Parameters**

	Sensor X	Sensor Y	Sensor Z	Unc (k=2)	
Norm $(\mu V/(V/m)^2)^A$	1.15	1.18	1.21	± 10.1 %	
DCP (mV) <sup>B</sup>	101.9	105.1	102.9		

#### **Modulation Calibration Parameters**

UID	Communication System Name	***	A dB	B dB√μV	С	D dB	VR mV	Unc <sup>≞</sup> (k=2)
0	CW	X	0.0	0.0	1.0	0.00	201.8	±3.3 %
		Y	0,0	0.0	1.0		203.9	
		Z	0.0	0.0	1.0		204.8	

Note: For details on UID parameters see Appendix.

#### Sensor Model Parameters

	C1 fF	C2 fF	α V <sup>-1</sup>	T1 ms.V <sup>-2</sup>	T2 ms.V⁻¹	T3 ms	T4 V⁻²	T5 V <sup>-1</sup>	Т6
X	52.41	376.6	35.43	28.01	1.852	5.10	0.578	0.488	1.008
Y	42.65	300.9	34.31	25.12	1.310	5.10	1.279	0.204	1.011
Z	48.12	344.8	35.26	27.10	1.587	5.10	0.868	0.385	1.009

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

<sup>A</sup> The uncertainties of Norm X,Y,Z do not affect the E<sup>2</sup>-field uncertainty inside TSL (see Pages 5 and 6). <sup>B</sup> Numerical linearization parameter: uncertainty not required. <sup>E</sup> 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) <sup>C</sup>	Relative Permittivity <sup>F</sup>	Conductivity (S/m) <sup>F</sup>	ConvF X	ConvF Y	ConvF Z	Alpha <sup>G</sup>	Depth <sup>G</sup> (mm)	Unc (k=2)
750	41.9	0.89	6.77	6.77	6.77	0.65	1.32	± 12.0 %
835	41.5	0.90	6.41	6.41	6.41	0.40	1.64	± 12.0 %
1750	40.1	1.37	5.58	5.58	5.58	0.54	1.42	± 12.0 %
1900	40.0	1.40	5.36	5.36	5.36	0.80	1.16	± 12.0 %
2300	39.5	1.67	5.1 <b>1</b>	5.11	5.11	0.74	1.29	± 12.0 %
2450	39.2	1.80	4.81	4.81	4.81	0.80	1.24	± 12.0 %
2600	39.0	1.96	4.66	4.66	4.66	0.75	1.25	± 12.0 %

#### Calibration Parameter Determined in Head Tissue Simulating Media

<sup>c</sup> 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.

<sup>F</sup> At frequencies below 3 GHz, the validity of tissue parameters ( $\varepsilon$  and  $\sigma$ ) 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 ( $\varepsilon$  and  $\sigma$ ) 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. <sup>G</sup> 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.

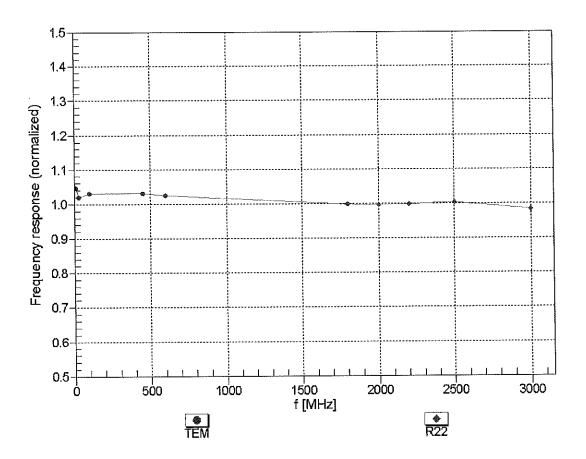
f (MHz) <sup>C</sup>	Relative Permittivity <sup>F</sup>	Conductivity (S/m) <sup>F</sup>	ConvF X	ConvF Y	ConvF Z	Alpha <sup>G</sup>	Depth <sup>G</sup> (mm)	Unc (k=2)
750	55.5	0.96	6.59	6.59	6.59	0.77	1.22	± 12.0 %
835	55.2	0.97	6.37	6.37	6.37	0.80	1.17	± 12.0 %
1750	53.4	1.49	5.17	5.17	5.17	0.49	1.59	± 12.0 %
1900	53.3	1.52	4.94	4.94	4.94	0.52	1.49	± 12.0 %
2300	52.9	1.81	4.74	4.74	4.74	0.80	1.25	± 12.0 %
2450	52.7	1.95	4.64	4.64	4.64	0.75	1.20	± 12.0 %
2600	52.5	2.16	4.49	4.49	4.49	0.80	1.20	± 12.0 %

#### Calibration Parameter Determined in Body Tissue Simulating Media

<sup>c</sup> 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. <sup>F</sup> At frequencies below 3 GHz, the validity of tissue parameters ( $\epsilon$  and  $\sigma$ ) can be relaxed to ± 10% if liquid compensation formula is applied to

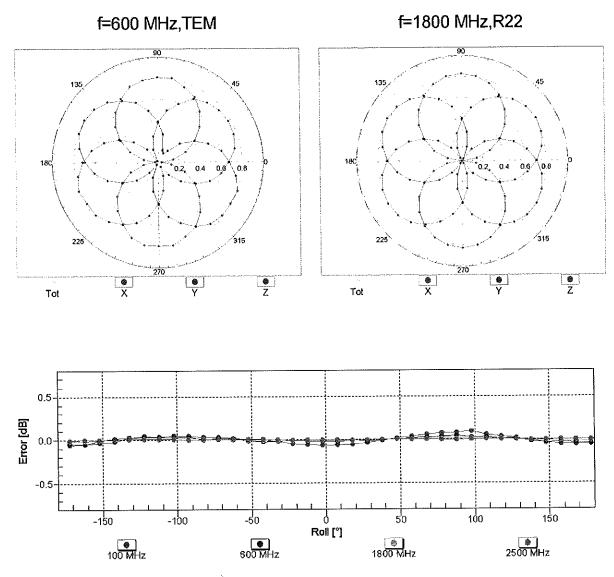
<sup>F</sup> At frequencies below 3 GHz, the validity of tissue parameters ( $\epsilon$  and  $\sigma$ ) can be relaxed to  $\pm$  10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters ( $\epsilon$  and  $\sigma$ ) is restricted 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. <sup>6</sup> 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.



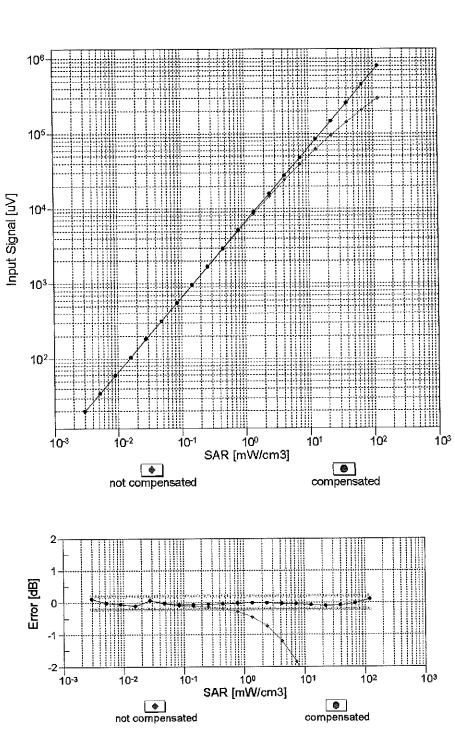
## Frequency Response of E-Field (TEM-Cell:ifi110 EXX, Waveguide: R22)

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



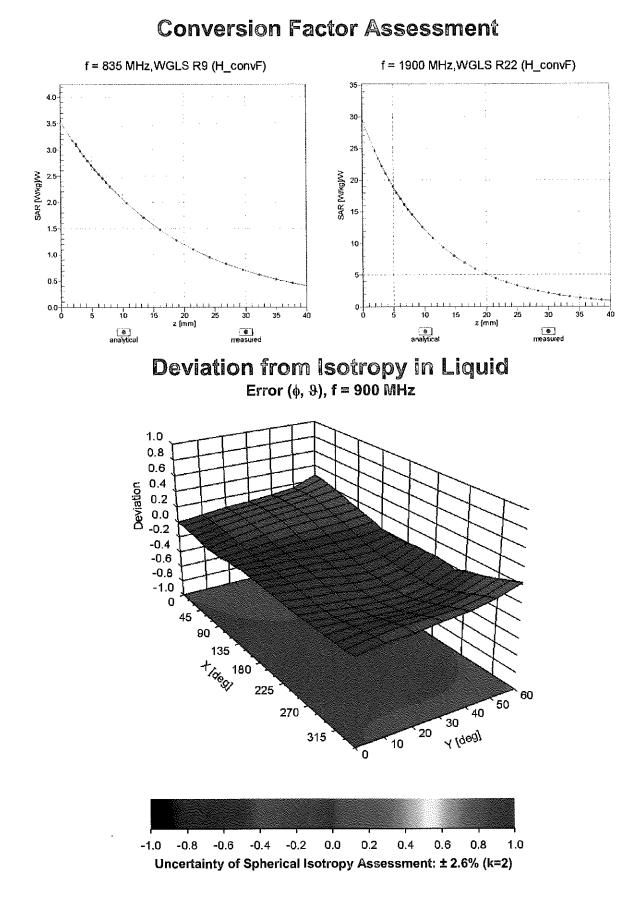
## Receiving Pattern ( $\phi$ ), $\vartheta = 0^{\circ}$

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



## Dynamic Range f(SAR<sub>head</sub>) (TEM cell , f<sub>eval</sub>= 1900 MHz)

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



#### **Other Probe Parameters**

Sensor Arrangement	Triangular
Connector Angle (°)	-16.5
Mechanical Surface Detection Mode	enabled
Optical Surface Detection Mode	disabled
Probe Overall Length	337 mm
Probe Body Diameter	10 mm
Tip Length	10 mm
Tip Diameter	4 mm
Probe Tip to Sensor X Calibration Point	2 mm
Probe Tip to Sensor Y Calibration Point	2 mm
Probe Tip to Sensor Z Calibration Point	2 mm
Recommended Measurement Distance from Surface	3 mm

### **Appendix: Modulation Calibration Parameters**

X.

UID	Communication System Name		A dB	B dBõV	С	D dB	VR mV	Max Unc <sup>E</sup> (k=2)
0	CW	X	0.00	0.00	1.00	0.00	201.8	± 3.3 %
		Y	0.00	0.00	1.00		203.9	
10010-		Z	0.00	0.00	1.00		204.8	
CAA	SAR Validation (Square, 100ms, 10ms)	X	7.57	78.06	17.49	10.00	25.0	± 9.6 %
		Y	9.85	82.39	18.69		25.0	
10011-	UMTS-FDD (WCDMA)	Z	7.35	77.81	17.08		25.0	
CAB		X	0.93	66,02	14.08	0.00	150.0	± 9.6 %
		Y	0.97	66.67	14.52		150.0	
10012-	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1	Z	0.93	66.21	14.17		150.0	
CAB	Mbps)	X	1.22	64.40	15.16	0.41	150.0	± 9.6 %
		Y	1.24	64.68	15.35		150.0	
10013-	IEEE 802.11g WiFi 2.4 GHz (DSSS-	Z	1.21	64.49	15.23	4.40	150.0	
CAB	OFDM, 6 Mbps)	×	5.02	67.09	17.26	1.46	150.0	± 9.6 %
		Y	4.93	67.32	17.31	ļ	150,0	
10021-	GSM-FDD (TDMA, GMSK)	ZX	4.97	67.16	17.27		150.0	
DAC			91.36	118.07	31.34	9.39	50.0	± 9.6 %
		Y	100.00	119.30	31.14	ļ	50.0	
10023-	GPRS-FDD (TDMA, GMSK, TN 0)	Z X	100.00	118.75	31.10	0.57	50.0	100%
DAC			58.54	111.16	29.65	9.57	50.0	± 9.6 %
		Y Z	100.00	119.20	31.14		50.0	
10024- DAC	GPRS-FDD (TDMA, GMSK, TN 0-1)	X	100.00	118.71 115.85	31.13 28.82	6.56	50.0 60.0	± 9.6 %
0/10		Y	100.00	116.32	28.70		60.0	
		Z	100.00	115.26	28.36		60.0	
10025- DAC	EDGE-FDD (TDMA, 8PSK, TN 0)	X	19.84	109.66	41.73	12.57	50.0	±9.6 %
		Y	49.03	143.08	53.86		50.0	
		Z	21.37	113.26	43.24		50.0	
10026- DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1)	X	21.22	106.46	36.65	9.56	60.0	± 9.6 %
		Y	31.58	119.85	41.69		60.0	
40007		Z	22.56	108.96	37.62		60.0	
10027- DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2)	X	100.00	114.36	27.28	4.80	80.0	±9.6 %
		Y	100.00	115.58	27.56		80.0	
10028-	GPRS-FDD (TDMA, GMSK, TN 0-1-2-3)	Z X	100.00 100.00	113.91 113.86	26.92 26.30	3.55	80.0 100.0	± 9.6 %
DAC						L		
		Y	100.00	115.98	27.02	<b> </b>	100.0	
10029-	EDGE-FDD (TDMA, 8PSK, TN 0-1-2)	Z	100.00	113.53	26.01	7.00	100.0	+0.0 %
DAC		X	12.94	95.02	31.64	7.80	80.0	± 9.6 %
		Y Z	14.07	99.40	33.81	<b> </b>	80.0	
10030- CAA	IEEE 802.15.1 Bluetooth (GFSK, DH1)	X	12.89 100.00	95.72 113.99	32.02 27.43	5.30	80.0 70.0	± 9.6 %
<u> </u>		Y	100.00	114.60	27.41	<u> </u>	70.0	
		Z	100.00	113.38	26.98		70.0	1
10031- CAA	IEEE 802.15.1 Bluetooth (GFSK, DH3)	X	100.00	111.77	23.93	1.88	100.0	± 9.6 %
		Y	100.00	115.39	25.33	1	100.0	
		Z	100.00	111.26	23.59		100.0	

40022	IFFF 002 15 1 Plustooth (CESK DUS)	Х	400.00	111.85	22.94	1.17	100.0	± 9.6 %
10032- CAA	IEEE 802.15.1 Bluetooth (GFSK, DH5)	^	100.00	CO.III	22,94	1.17	100.0	19.0 %
		Y	100.00	118.40	25.59		100.0	
		Ζ	100.00	111.34	22.62		100.0	
10033- CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH1)	Х	23.91	101.19	27.41	5.30	70.0	±9.6 %
		Y	36.18	107.81	28.88		70.0	
		Ζ	30.63	104.89	28.18		70.0	
10034- CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH3)	X	6.24	84.08	20.44	1.88	100.0	±9.6 %
		Υ	7.24	85.92	20.55		100.0	
		Ζ	6.85	85.19	20.50		100.0	
10035- CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH5)	X	3.29	76.95	17.63	1.17	100.0	± 9.6 %
		Y	3.58	78.09	17.57		100.0	
		Z	3,42	77.43	17.51		100.0	
10036- CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH1)	X	32.79	106.39	28.91	5.30	70.0	±9.6 %
		Y	55.24	114.58	30.68	L	70.0	
40007		Z	45.73	111.34	29.95	<u> </u>	70.0	
10037- CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH3)	X	5.86	83.28	20.13	1.88	100.0	± 9.6 %
		Y	6.54	84.66	20.12		100.0	
40000		Z	6.31	84.13	20.12		100.0	100%
10038- CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH5)	X	3.39	77.59	17.96	1.17	100.0	±9.6 %
		Y	3.66	78.64	17.87		100.0	
		Z	3.53	78.11	17.85		100.0	
10039- CAB	CDMA2000 (1xRTT, RC1)	X	1.52	69.16	14.18	0.00	150.0	±9.6 %
		Y	1.40	68.90	13.55		150.0	
		Z	1.46	69.03	13.83		150.0	
10042- CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4- DQPSK, Halfrate)	X	100.00	114.62	28.47	7.78	50.0	± 9.6 %
		Y	100.00	114.70	28.14		50.0	
		Z	100.00	113.88	27.92		50.0	
10044- CAA	IS-91/EIA/TIA-553 FDD (FDMA, FM)	X	0.01	121.88	0.68	0.00	150.0	± 9.6 %
		Y	0.00	97.83	1.91		150.0	
		Z	0.01	122.55	0.35		150.0	
10048- CAA	DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24)	×	17.94	92.17	26.06	13.80	25.0	± 9.6 %
		Y	42.19	107.21	29.95		25.0	
10049- CAA	DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12)	Z X	24.74 22.69	97.63 96.29	27.36 25.94	10.79	25.0 40.0	± 9.6 %
		Y	68.20	113.74	30.23		40.0	
		Z	32.65	101.85	27.19	+	40.0	<u> </u>
10056- CAA	UMTS-TDD (TD-SCDMA, 1.28 Mcps)	X	16.99	92.79	25.84	9.03	50.0	± 9.6 %
		Y	27.63	101.84	28.34		50.0	
		Z	20.13	95.81	26.57		50.0	
10058- DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)	X	9.12	87.95	28.36	6.55	100.0	± 9.6 %
		Y	8.98	89.45	29.43		100.0	
		Z	8.90	88.06	28.51		100.0	
10059- CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps)	×	1.37	66.39	16.16	0.61	110.0	± 9.6 %
		Y	1.38	66.59	16.33		110.0	
		Z	1.36	66.49	16.23		110.0	
10060- CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps)	X	100.00	128.08	31.98	1.30	110.0	± 9.6 %
		Y	100.00	131.22	33.31		110.0	1
		Z	100.00	128.65	32.15		110.0	

10061- CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps)	X	9.25	94.71	26.12	2.04	110.0	± 9.6 %
<u> </u>		Y	9.59	96.73	27.06		110.0	
10000		Z	10.28	96.95	26.85		110.0	
10062- CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps)	X	4.74	66.85	16.53	0.49	100.0	± 9.6 %
		Y	4.66	67.04	16.57		100.0	
		Z	4.70	66.90	16.54		100.0	
10063- CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps)	X	4.78	67.00	16.67	0.72	100.0	± 9.6 %
		Y	4.69	67.19	16.70		100.0	· · · · · · · · · · · · · · · · · · ·
10001		Z	4.73	67.05	16.68		100.0	
10064- CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps)	X	5.09	67.32	16.93	0.86	100.0	± 9.6 %
	······································	Y	4.97	67.46	16.94		100.0	
		Z	5.03	67.35	16.93		100.0	
10065- CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps)	X	4.99	67.34	17.10	1.21	100.0	± 9.6 %
		Y	4.88	67.46	17.11		100.0	[
		Z	4.93	67.36	17.10	-	100.0	
10066- CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps)	X	5.05	67.46	17.33	1.46	100.0	±9.6 %
		Y	4.92	67.57	17.33		100.0	
		Z	4.98	67.48	17.32		100.0	
10067- CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps)	X	5.36	67.67	17.81	2.04	100.0	± 9.6 %
		Y	5.25	67.92	17.88		100.0	
		Z	5.30	67.73	17.82		100.0	
10068- CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps)	X	5.48	67.95	18.15	2.55	100.0	± 9.6 %
		Y	5.33	68.04	18.16		100.0	
		Z	5.40	67.94	18.13		100.0	
10069- CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps)	X	5.56	67.94	18.35	2.67	100.0	±9.6 %
		Y	5.42	68.11	18.40		100.0	
		Z	5.49	67.96	18.34		100.0	
10071- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps)	X	5.16	67.32	17.64	1.99	100.0	± 9.6 %
		Y	5.07	67.53	17.70		100.0	
		Z	5.11	67.37	17.65		100.0	
10072- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps)	X	5.20	67.83	17.95	2.30	100.0	± 9.6 %
		Y	5.09	67.99	18.00		100.0	
		Z	5.14	67.86	17.96		100.0	
10073- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps)	X	5.32	68.17	18.37	2.83	100.0	±9.6 %
	•	Y	5.22	68.36	18.44		100.0	
		Ż	5.26	68.20	18.38		100.0	
10074- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps)	X	5.35	68.22	18.60	3.30	100.0	± 9.6 %
		Y	5.26	68.43	18.68		100.0	
		Z	5.29	68.25	18.61		100.0	
10075- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps)	X	5.48	68.62	19.07	3.82	90.0	± 9.6 %
		Y	5.35	68.73	19.11		90.0	
40070		Z	5.40	68.60	19.05		90.0	
10076- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps)	X	5.50	68.45	19.21	4.15	90.0	± 9.6 %
		Y	5.40	68.64	19.31		90.0	
100000		Z	5.44	68.46	19.21		90.0	
10077- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps)	X	5.54	68.54	19.31	4.30	90.0	±9.6 %
		Y	5,44	68.76	19.43		90.0	
		Z	5.48	68.56	19.32		90.0	

10081-	CDMA2000 (1xRTT, RC3)	х	0.74	64.32	11.31	0.00	150.0	± 9.6 %
CAB		Y	0.70	64.20	10.81		150.0	
		T Z	0.70	64.15	10.92		150.0	
10082-	IS-54 / IS-136 FDD (TDMA/FDM, PI/4-	X	1.69	62.26	7.32	4.77	80.0	± 9.6 %
CAB	DQPSK, Fullrate)	- <u>v</u>	1.49	62.02	6.99		80.0	
		Y	and the second				80.0	
		Z	1.55	61.83	6.90	0.50		1069/
10090- DAC	GPRS-FDD (TDMA, GMSK, TN 0-4)	X	100.00	115.94	28.89	6.56	60.0	± 9.6 %
		Y	100.00	116.39	28.75		60.0	
		Z	100.00	115.35	28.42		60.0	
10097- CAB	UMTS-FDD (HSDPA)	X	1.73	66.76	14.97	0.00	150.0	± 9.6 %
		Y	1.76	67.41	15.16		150.0	
		Ζ	1.72	67.00	15.02		150.0	
10098- CAB	UMTS-FDD (HSUPA, Subtest 2)	х	1.69	66.71	14.93	0.00	150.0	± 9.6 %
		Y	1.72	67.36	15.13		150.0	
		Ζ	1.69	66.94	14.98		150.0	
10099- DAC	EDGE-FDD (TDMA, 8PSK, TN 0-4)	Х	21.17	106.37	36.62	9.56	60.0	± 9,6 %
		Y	31.53	119.75	41.66		60.0	
		Z	22.53	108.88	37.59		60.0	
10100- CAD	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	Х	3.02	69.66	16.13	0.00	150.0	± 9.6 %
		Y	2.98	69.86	16.33	1	150.0	
		Z	2.99	69.71	16.19		150.0	
10101- CAD	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	X	3.20	67.30	15.63	0.00	150.0	± 9.6 %
		Y	3.15	67.42	15.72		150.0	
		Z	3.17	67.31	15.65		150.0	
10102- CAD	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	X	3.31	67.28	15.74	0.00	150.0	± 9.6 %
		Y	3.26	67.39	15,81		150.0	
		Z	3.27	67.30	15.76		150.0	
10103- CAD	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	X	8.39	78.42	21.27	3.98	65.0	±9.6 %
0.0		Υ	8.55	79.75	21.92		65.0	
		z	8.43	78.92	21.50		65.0	
10104- CAD	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	X	8.28	76.92	21.52	3.98	65.0	± 9.6 %
		Y	8.11	77.48	21.85		65.0	
		z	8.18	77.09	21.61		65.0	
10105- CAD	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	X	7.63	75.31	21.13	3.98	65.0	± 9.6 %
0.0		Y	7.72	76.48	21.73		65.0	
		Z	7.57	75.55	21.26		65.0	1
10108- CAE	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	X	2.65	68.92	15.95	0.00	150.0	± 9.6 %
		Y	2.59	69.14	16.15		150.0	1
		Ż	2.61	68.99	16.01		150.0	1
10109- CAE	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	X	2.86	67.08	15.50	0.00	150.0	± 9.6 %
		Y	2.80	67.24	15.55		150.0	
		Z	2.82	67.11	15.51		150.0	
10110- CAE	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	×	2.15	67.97	15.52	0.00	150.0	± 9.6 %
~		Y	2.09	68.27	15.68	İ	150.0	
		Ż	2.11	68.06	15.56		150.0	
10111- CAE	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	x	2.54	67.60	15.65	0.00	150.0	± 9.6 %
UNE		Y	2.49	67.90	15.64		150.0	
	1		1 2	01.00	1 10.0-7	1	1 .00.0	1

10112- CAE	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	X	2.98	67.08	15.57	0.00	150.0	±9.6 %
	1	Y	2.92	67.27	15.62		150.0	·
	······································	Z	2.94	67.13	15.58		150.0	
10113- CAE	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	X	2.70	67.76	15.81	0.00	150.0	± 9.6 %
		Y	2.63	68.07	15.78		150.0	
		Z	2.66	67.92	15.82		150.0	
10114- CAC	IEEE 802.11n (HT Greenfield, 13.5 Mbps, BPSK)	X	5.13	67.22	16.34	0.00	150.0	± 9.6 %
		Y	5.06	67.35	16.39		150.0	
10//7		Z	5.10	67.28	16.37		150.0	
10115- CAC	IEEE 802.11n (HT Greenfield, 81 Mbps, 16-QAM)	X	5.46	67.47	16.48	0.00	150.0	±9.6 %
********		Y	5.32	67.42	16.43		150.0	
40440		Z	5.39	67.43	16.46		150.0	
10116- CAC	IEEE 802.11n (HT Greenfield, 135 Mbps, 64-QAM)	X	5.25	67.46	16.39	0.00	150.0	± 9.6 %
		Y	5.15	67.53	16.41		150.0	
40447		Z	5.20	67.47	16.40		150.0	
10117- CAC	IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK)	X	5.10	67.11	16.30	0.00	150.0	± 9.6 %
		Y	5.03	67.22	16.34		150.0	
40440		Z	5.06	67.11	16.31		150.0	
10118- CAC	IEEE 802.11n (HT Mixed, 81 Mbps, 16- QAM)	X	5.56	67.71	16.61	0.00	150.0	± 9.6 %
		Y	5.40	67.63	16.55		150.0	
40440		Z	5.48	67.67	16.59		150.0	
10119- CAC	IEEE 802.11n (HT Mixed, 135 Mbps, 64- QAM)	X	5.22	67.39	16.37	0.00	150.0	± 9.6 %
		Y	5.13	67.49	16.40		150.0	
		Z	5.18	67.42	16.38		150.0	
10140- CAD	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	X	3.35	67.28	15.66	0.00	150.0	± 9.6 %
		Y	3.29	67.41	15.73		150.0	
		Z	3.31	67.30	15.68		150.0	
10141- CAD	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	X	3.47	67.38	15.84	0.00	150.0	±9.6 %
		Y	3.41	67.52	15.90		150.0	
		Z	3.43	67.42	15.86		150.0	
10142- CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	X	1.91	67.75	15.10	0.00	150.0	± 9.6 %
		Y	1.84	68.07	15.11		150.0	
		Z	1.87	67.86	15.08		150.0	
10143- CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	X	2.37	68.04	15.25	0.00	150.0	± 9.6 %
		Y	2.29	68.28	15.02		150.0	
10414		Z	2.33	68.17	15.16	<u> </u>	150.0	
10144- CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	X	2.20	66.14	13.84	0.00	150.0	± 9.6 %
		Y	2.08	66.17	13.48		150.0	
40445		Z	2.13	66.11	13.65		150.0	
10145- CAE	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	X	1.17	64.40	11.32	0.00	150.0	± 9.6 %
		Y	0.99	63.23	9.93	<u> </u>	150.0	
40440		Z	1.08	63.80	10.61		150.0	
10146- CAE	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	X	2.07	66.79	12.08	0.00	150.0	± 9.6 %
		Y	1.74	65.46	10.58		150.0	
404/		Z	1.93	66.25	11.43		150.0	
10147- CAE	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	X	2.41	68.68	13.11	0.00	150.0	± 9.6 %
		Y	2.02	67.13	11.50		150.0	
	1	Z	2.26	68.13	12.45		150.0	

10149- CAD	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	X	2.87	67.13	15.54	0.00	150.0	±9.6 %
		Y	2.81	67.29	15.59		150.0	
		z	2.83	67.17	15.55		150.0	
10150- CAD	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	X	2.99	67.13	15.61	0.00	150.0	±9.6 %
		Y	2,93	67.31	15.66		150.0	
		Z	2,95	67.18	15.62		150.0	
10151- CAD	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	X	9.21	81.33	22.45	3.98	65.0	±9.6 %
		Y	9.55	83.12	23.24		65.0	
		Z	9.38	82.15	22.79		65.0	
10152- CAD	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	X	7.89	77.12	21.32	3.98	65.0	±9.6 %
		Y	7.75	77.78	21.62		65.0	
		Z	7.80	77.32	21.39		65.0	
10153- CAD	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	×	8.33	78.05	22.06	3.98	65.0	± 9.6 %
		Y	8.20	78.76	22.36		65.0	
		Z	8.27	78.34	22.17		65.0	
10154- CAE	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	X	2.19	68.34	15.77	0.00	150.0	±9.6 %
		Y	2.13	68.58	15.88		150.0	
		Z	2.15	68.43	15.80		150.0	
10155- CAE	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	×	2.54	67.61	15.66	0.00	150.0	± 9.6 %
		Y	2.49	67.93	15.66	t	150.0	
		Ζ	2.51	67.76	15.67		150.0	
10156- CAE	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	X	1.75	67.70	14.83	0.00	150.0	± 9.6 %
		Y	1.67	67.86	14.67		150.0	
		Z	1.70	67.75	14.73		150.0	
10157- CAE	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	Х	2.01	66.49	13.77	0.00	150.0	± 9.6 %
		Y	1.89	66.41	13.28		150.0	
		Z	1,95	66.44	13.53		150.0	
10158- CAE	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	X	2.70	67.82	15.85	0.00	150.0	± 9.6 %
		Y	2.64	68.13	15.83		150.0	
		Z	2.67	67.98	15.86		150.0	
10159- CAE	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	X	2.11	66.90	14.04	0.00	150.0	±9.6 %
		Y	1.98	66.74	13.50		150.0	
		Z	2.04	66.83	13.79		150.0	
10160- CAD	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	X	2.69	68.21	15.87	0.00	150.0	± 9.6 %
		Y	2.64	68.50	16.02		150.0	
		Ζ	2.66	68.34	15.93		150.0	
10161- CAD	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	X	2.88	67.04	15.53	0.00	150.0	± 9.6 %
		Y	2.82	67.25	15.56		150.0	
		Z	2.84	67.11	15.53		150.0	
10162- CAD	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	×	2.99	67.17	15.64	0.00	150.0	± 9.6 %
	·····	Y	2.93	67.43	15.68		150.0	
		Z	2.96	67.27	15.66		150.0	
10166- CAE	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	X	3.67	69.76	19.07	3.01	150.0	± 9.6 %
		Y	3.59	70.61	19.72		150.0	
		Z	3.64	70.17	19.36		150,0	
10167- CAE	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	X	4.60	72.78	19.56	3.01	150.0	± 9.6 %
		Y	4.59	74.59	20.58		150.0	
		Z	4.60	73.54	19.97		150.0	İ

10168- CAE	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	X	5.10	75.00	20.86	3.01	150.0	± 9.6 %
		Y	5.17	77.15	22.00		150.0	
		Z	5.18	76.08	21.41		150.0	
10169- CAD	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	X	3.14	69.82	19.09	3.01	150.0	± 9.6 %
		Y	2,99	70.11	19.57		150.0	
		Z	3.08	69.99	19.30		150.0	
10170- CAD	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	X	4.48	76.11	21.47	3.01	150.0	± 9.6 %
		Υ	4.42	77.92	22.61		150.0	T
40474		Z	4.51	77.09	22.03		150.0	
10171- AAD	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	×	3.64	71.74	18.65	3.01	150.0	± 9.6 %
	a ang ang ang ang ang ang ang ang ang an	Y	3.56	73.31	19.70		150.0	
10172-		Z	3.59	72.29	19.01		150.0	
CAD	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	X	21.10	104.74	32.18	6.02	65.0	± 9.6 %
		Y	44.31	124.23	38.59		65.0	
10470		Z	24.87	109.58	33.89		65.0	
10173- CAD	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	×	37.36	109.91	31.76	6.02	65.0	± 9.6 %
<u> </u>		Y	100.00	131.53	37.83		65.0	
10174-		Z	66,45	121.49	34.95		65.0	
CAD	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	X	28.71	103.81	29.50	6.02	65.0	± 9.6 %
		Y	93.12	128.22	36.43		65.0	
40475		Z	36.57	109.34	31.20		65.0	
10175- CAE	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	X	3.10	69.50	18.83	3.01	150.0	±9.6 %
		Y	2.96	69.84	19.35		150.0	
40470		Z	3.04	69.66	19.04		150.0	
10176- CAE	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	X	4.49	76.13	21.48	3.01	150.0	± 9.6 %
·····		Υ	4.43	77.95	22.63		150.0	
40477		Z	4.52	77.11	22.04		150.0	
10177- CAG	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	X	3.13	69.65	18.93	3.01	150.0	± 9.6 %
		Y	2.98	69.97	19.42		150.0	
		Z	3.07	69.81	19.14		150.0	
10178- CAE	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16- QAM)	Х	4.43	75.88	21.35	3.01	150.0	± 9.6 %
		Y	4.39	77.75	22.52		150.0	
		Z	4.47	76.86	21.91		150.0	
10179- CAE	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	X	4.01	73.75	19.90	3.01	150.0	± 9.6 %
		Y	3.96	75.54	21.04		150.0	
40400		Z	4.01	74.52	20.37		150.0	
10180- CAE	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 64- QAM)	X	3.63	71.66	18.60	3.01	150.0	± 9.6 %
		Y	3.55	73.25	19.66		150.0	
40404		Z	3.59	72.21	18.96		150.0	
10181- CAD	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	X	3.13	69.64	18.92	3.01	150.0	± 9.6 %
		Y	2.98	69.95	19.42		150.0	
40402		Z	3.06	69.80	19.13		150.0	
10182- CAD	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	X	4.42	75.86	21.34	3.01	150.0	± 9.6 %
		Y	4.38	77.72	22.51		150.0	
		Z	4.46	76.83	21.90		150.0	
10183- AAC	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	X	3.62	71.63	18.59	3.01	150.0	± 9.6 %
		Y	3.55	73.22	19.65		150.0	
		Z	3.58	72.19	18.94		150.0	

10184- CAD	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	х	3.14	69.68	18.95	3.01	150.0	± 9.6 %
0,10		Y	2.99	69.99	19.44		150.0	
		ż	3.07	69.84	19.16		150.0	
10185- CAD	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16- QAM)	X	4.45	75.93	21.38	3.01	150.0	± 9.6 %
		Y	4.40	77.80	22.55		150.0	
		Ζ	4.48	76.92	21.94		150.0	
10186- AAD	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64- QAM)	х	3.64	71.70	18.62	3.01	150.0	± 9.6 %
		Y	3.56	73.30	19.69		150.0	
		Ζ	3.60	72.26	18.98		150.0	
10187- CAE	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	Х	3,15	69.73	19.01	3.01	150.0	± 9.6 %
		Y	3.00	70.06	19.51		150.0	
		Ζ	3.08	69.90	19.22		150.0	
10188- CAE	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	х	4.60	76.65	21.77	3.01	150.0	± 9.6 %
		Y	4.55	78.49	22.93		150.0	
		Ζ	4.65	77.69	22.36		150.0	
10189- AAE	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	х	3.72	72.15	18.90	3.01	150.0	±9.6 %
		Y	3.65	73.76	19.97		150.0	
		Ζ	3.69	72.74	19.28		150.0	
10193- CAC	IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK)	х	4.52	66.58	16.02	0.00	150.0	±9.6 %
		Y	4.45	66.79	16.05		150.0	
		Z	4.48	66.63	16.03		150.0	
10194- CAC	IEEE 802.11n (HT Greenfield, 39 Mbps, 16-QAM)	х	4.70	66.91	16.15	0.00	150.0	± 9.6 %
		Y	4.60	67.08	16.18		150.0	
		Ζ	4.65	66.95	16.16		150.0	
10195- CAC	IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM)	Х	4.74	66.94	16.17	0.00	150.0	± 9.6 %
		Y	4.65	67.11	16.20		150.0	
		Ζ	4.69	66.98	16.18		150.0	
10196- CAC	IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK)	Х	4.53	66.65	16.05	0.00	150.0	±9.6 %
		Y	4.44	66.83	16.06		150.0	
		Z	4.48	66.69	16.05		150.0	
10197- CAC	IEEE 802.11n (HT Mixed, 39 Mbps, 16- QAM)	X	4.72	66.93	16.16	0.00	150.0	± 9.6 %
		Y	4.62	67.10	16.19		150.0	
		Z	4.66	66.97	16.17		150.0	
10198- CAC	IEEE 802.11n (HT Mixed, 65 Mbps, 64- QAM)	X	4.75	66.96	16.18	0.00	150.0	± 9.6 %
		Y	4.64	67.13	16.21		150.0	
		Z	4.69	67.00	16.19	1	150.0	ļ
10219- CAC	IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK)	Х	4.48	66.66	16.00	0.00	150.0	± 9.6 %
		Y	4.39	66.84	16.01		150.0	
		Z	4.43	66.70	16.00		150.0	
10220- CAC	IEEE 802.11n (HT Mixed, 43.3 Mbps, 16- QAM)	X	4.71	66.91	16.16	0.00	150.0	± 9.6 %
		Y	4.61	67.06	16.18		150.0	
		Z	4.66	66.94	16.16		150.0	
10221- CAC	IEEE 802.11n (HT Mixed, 72.2 Mbps, 64- QAM)	X	4.76	66.89	16.17	0.00	150.0	± 9.6 %
		Y	4.65	67.06	16.20		150.0	
		Z	4.70	66.93	16.18		150.0	
10222- CAC	IEEE 802.11n (HT Mixed, 15 Mbps, BPSK)	X	5.08	67.11	16.29	0.00	150.0	± 9.6 %
		Y	5.00	67.21	16.33	1	150.0	
1	1							

10223- CAC	IEEE 802.11n (HT Mixed, 90 Mbps, 16- QAM)	X	5.40	67.34	16.44	0.00	150.0	± 9.6 %
		Y	5.30	67.47	16.48		150.0	· · · · · · · · · · · · · · · · · · ·
		Z	5.35	67.37	16.45	<u> </u>	150.0	
10224- CAC	IEEE 802.11n (HT Mixed, 150 Mbps, 64- QAM)	X	5.12	67.22	16.27	0.00	150.0	± 9.6 %
		Y	5.04	67.32	16.31		150.0	
		Z	5.08	67.23	16.28		150.0	
10225- CAB	UMTS-FDD (HSPA+)	X	2.77	65.87	15.07	0.00	150.0	± 9.6 %
		Y	2.71	66.11	14.95		150.0	
10000		Z	2.73	65.95	15.01		150.0	
10226- CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	×	40.90	111.69	32.33	6.02	65.0	±9.6 %
		Y	100.00	131.74	37.97		65.0	
40007		Z	76.08	124.13	35.71		65.0	
10227- CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	X	32.04	105.79	30.14	6.02	65.0	± 9.6 %
	····	Y	100.00	129.20	36.63		65.0	
10228-		Z	56.03	116.66	33.17		65.0	
CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	X	32.49	113.40	34.73	6.02	65.0	± 9.6 %
		Y	63.93	131.79	40.55		65.0	
40000		Z	42.68	120.45	36.94		65.0	
10229- CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16- QAM)	X	37.48	109.96	31.78	6.02	65.0	± 9.6 %
		Y	100.00	131.51	37.84	********	65.0	
10230-		Z	66.68	121.54	34.97		65.0	
CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64- QAM)	X	29.78	104.42	29.68	6.02	65.0	± 9.6 %
		Y	100.00	129.07	36.54		65.0	
40004		Z	50.21	114.61	32.57		65.0	
10231- CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	X	30.12	111.79	34.20	6.02	65.0	± 9.6 %
		Y	57.30	129.38	39.87		65.0	
40000		Z	38.78	118.39	36.30		65.0	
10232- CAD	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16- QAM)	X	37.48	109.97	31.78	6.02	65.0	±9.6 %
		Y	100.00	131.53	37.84		65.0	
10000		Z	66.72	121.56	34.98		65.0	
10233- CAD	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64- QAM)	X	29.77	104.42	29.68	6.02	65.0	± 9.6 %
		Y	100.00	129.09	36.55		65.0	
10001		Z	50.19	114.62	32.57		65.0	
10234- CAD	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	X	28.05	110.17	33.63	6.02	65.0	± 9.6 %
		Y	51.99	127.09	39.16		65.0	
10005		Z	35.54	116.41	35.65		65.0	
10235- CAD	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	X	37.64	110.05	31.80	6.02	65.0	±9.6 %
		Y	100.00	131,54	37.84		65.0	,
10236-		Z	67.18	121.70	35.01		65.0	
CAD	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	X	30.09	104.58	29.72	6.02	65.0	± 9.6 %
		Y	100.00	129.03	36.52		65.0	
10237-	LTE-TDD (SC-FDMA, 1 RB, 10 MHz,	Z X	50.96 30.42	114.84 112.00	<u>32.62</u> 34.26	6.02	65.0 65.0	± 9.6 %
CAD	QPSK)		<u> </u>	400.00				
*****		Y	58.39	129.80	39.98		65.0	
10220		Z	39.25	118.66	36.38		65.0	
10238- CAD	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	X	37.48	109.98	31.78	6.02	65.0	±9.6 %
••••••••••••••••••••••••••••••••••••••		Y	100.00	131.54	37,84		65.0	
		Z	66.77	121.59	34.98		65.0	

10239- CAD	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	х	29.75	104.43	29.68	6.02	65.0	± 9.6 %
		Y	100.00	129.11	36.55		65.0	
		Ζ	50.17	114.63	32.57		65.0	
10240- CAD	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	X	30.30	111.94	34.24	6.02	65.0	± 9.6 %
		Y	58.14	129.72	39.96		65.0	
		Z	39.09	118.59	36.36		65.0	
10241- CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	Х	11.80	86.80	27.35	6.98	65.0	±9.6 %
		Y	13.67	92.53	29.81		65.0	
		Z	12.27	88.56	28.08		65.0	
10242- CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	X	10.15	83.59	26.03	6.98	65.0	± 9.6 %
		Y	12.26	90.20	28.90		65.0	
		Z	10.49	85.23	26.75	0.00	65.0	1000
10243- CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	X	8.15	80.45	25.67	6.98	65.0	± 9.6 %
***		Y	9.07	85.16	28.03		65.0	
		Z	8.20	81.43	26.18	0.00	65.0	100%
10244- CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	X	8.77	79.58	20.12	3.98	65.0	± 9.6 %
		Y	8.68	79.98	19.73		65.0	
		Z	8.93	80.10	20.07		65.0	
10245- CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	X	8.56	78.94	19.83	3.98	65.0	± 9.6 %
		Y	8,27	79.00	19.30		65.0	
	······	Z	8.60	79.28	19.71		65.0	
10246- CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	×	9.05	82.96	21.42	3.98	65.0	±9.6 %
		Y	8.67	82.79	20.89		65.0	
		Z	9.07	83.18	21.25		65.0	
10247- CAD	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	X	7.31	77.47	20.01	3.98	65.0	± 9.6 %
		Y	6,88	77.10	19.42		65.0	
	······································	Z	7.16	77.42	19,78		65.0	
10248- CAD	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	X	7.23	76.85	19.75	3.98	65.0	± 9.6 %
		Y	6.75	76.40	19.13		65.0	
		Z	7.04	76.72	19.48		65.0	
10249- CAD	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	X	10.55	85.88	23.24	3.98	65.0	±9.6 %
		Υ	11.23	87.71	23.62		65.0	
		Z	11.08	87.02	23.49		65.0	
10250- CAD	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	X	8.37	79.97	22.44	3.98	65.0	± 9.6 %
		Y	8.25	80.64	22.58		65.0	
		Z	8.37	80.40	22.54		65.0	
10251- CAD	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	X	7.79	77.55	21.17	3.98	65.0	± 9.6 %
		Y	7.62	78.12	21.26		65.0	
		Z	7.71	77.78	21.18		65.0	
10252- CAD	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	X	10.26	85.03	23.77	3.98	65.0	± 9.6 %
		Y	11.07	87.53	24.67		65.0	
		Z	10.72	86.30	24.20		65.0	
10253- CAD	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	X	7.69	76.53	21.09	3.98	65.0	± 9.6 %
		Y	7.57	77.22	21.35		65.0	
		Z	7,61	76.75	21.15		65.0	
10254- CAD	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	X	8.11	77.42	21.76	3.98	65.0	±9.6 %
-		Y	7.99	78.11	22.01		65.0	
Į		Z	8.04	77.70	21.84	1	65.0	

10255- CAD	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	X	8.87	80.90	22.51	3.98	65.0	± 9.6 %
		Y	9.18	82.66	23.26		65.0	1
		Z	9.01	81.69	22.82		65.0	
10256- CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	X	7.19	76.04	17.83	3.98	65.0	± 9.6 %
		Y	6.37	74.72	16.60		65.0	
		Z	6.91	75.63	17.34		65.0	
10257- CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	X	6.95	75.20	17.41	3.98	65.0	± 9.6 %
		Y	6.01	73.59	16.03		65.0	
40050		Z	6.60	74.62	16.84		65.0	
10258- CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	X	7.08	78.57	19.08	3.98	65.0	± 9.6 %
	······································	Y	5.96	76.36	17.58		65.0	
10259-		Z	6.63	77.70	18.41		65.0	
CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	X	7.72	78.37	20.87	3.98	65.0	± 9.6 %
		Y	7.43	78.48	20.58		65.0	
40000		Z	7.64	78.54	20.77		65.0	
10260- CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	X	7.71	78.04	20.75	3.98	65.0	± 9.6 %
		Y	7.37	78.04	20.41		65.0	
10004		Z	7.60	78.14	20.63		65.0	
10261- CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	X	9.91	84.71	23.20	3.98	65.0	± 9.6 %
		Y	10.51	86.66	23.72		65.0	
40000		Ζ	10.31	85.78	23.47		65.0	
10262- CAD	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	X	8.35	79.91	22.40	3.98	65.0	± 9.6 %
		Y	8.23	80.57	22.53		65.0	
		Z	8.35	80.33	22.49		65.0	
10263- CAD	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	X	7.78	77.53	21.17	3.98	65.0	± 9.6 %
		Y	7.61	78.09	21.25		65.0	
		Z	7.70	77.76	21.18		65.0	
10264- CAD	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	X	10.16	84.83	23.68	3.98	65.0	± 9.6 %
		Y	10.94	87.30	24.57		65.0	
		Z	10.60	86.08	24.10		65.0	
10265- CAD	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	X	7.89	77.12	21.33	3.98	65.0	± 9.6 %
		Y	7.75	77.78	21.62		65.0	
		Z	7.80	77.33	21.40		65.0	
10266- CAD	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	X	8.32	78.04	22.05	3.98	65.0	± 9.6 %
		Y	8.20	78.75	22.36		65.0	
105		Z	8.26	78.33	22.16		65.0	
10267- CAD	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	X	9.19	81.29	22.44	3.98	65.0	± 9.6 %
		Y	9.53	83.07	23.22		65.0	
1000-		Z	9.36	82.10	22.77		65.0	
10268- CAD	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	X	8.37	76.65	21.54	3.98	65.0	± 9.6 %
		Y	8.20	77.22	21.85		65.0	
1000-		Z	8.27	76.83	21.63		65.0	
10269- CAD	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	X	8.29	76.22	21.43	3.98	65.0	± 9.6 %
		Y	8.13	76.76	21.72		65.0	
		Z	8.20	76.38	21.51		65.0	
10270- CAD	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	X	8.55	78.25	21.44	3.98	65.0	±9.6 %
		Y	8.58	79.32	21.98		65.0	<b></b>
		Z	8.56	78.72	21.66		65.0	<u>†</u>

10274- CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.10)	х	2.53	66.08	14.88	0.00	150.0	± 9.6 %
		Y	2.52	66.54	14.91		150.0	
		z	2.51	66.24	14.87		150.0	
10275- CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.4)	×	1.51	66.90	14.72	0.00	150.0	± 9.6 %
		Y	1.52	67.44	14.98		150.0	
		Z	1.50	67.06	14.77		150.0	
10277- CAA	PHS (QPSK)	х	4.49	67.07	11.86	9.03	50.0	± 9.6 %
		Y	3.76	65.67	10.51		50.0	
		Z	4.09	66.15	11.03		50.0	
10278- CAA	PHS (QPSK, BW 884MHz, Rolloff 0.5)	×	8.37	78.55	19.37	9.03	50.0	± 9.6 %
		Y	7.19	76.56	17.89		50.0	
		Z	7.75	77.39	18.52		50.0	
10279- CAA	PHS (QPSK, BW 884MHz, Rolloff 0.38)	X	8.51	78.75	19.47	9.03	50.0	± 9.6 %
		Y	7.31	76.76	18.01		50.0	
		Ζ	7.88	77.58	18.63		50.0	0.0.0/
10290- AAB	CDMA2000, RC1, SO55, Full Rate	X	1.28	66.85	12.83	0.00	150.0	±9.6 %
		Y	1.15	66.36	12.07		150.0	
		Ζ	1.21	66.57	12.40		150.0	
10291- AAB	CDMA2000, RC3, SO55, Full Rate	X	0.73	64.15	11.20	0.00	150.0	±9.6 %
		Y	0.69	64.04	10.71		150.0	
		Z	0.69	63.98	10.82		150.0	
10292- AAB	CDMA2000, RC3, SO32, Full Rate	X	0.85	66.79	12.92	0.00	150.0	±9.6 %
		Y	0.83	67.15	12.67		150.0	
		Z	0.82	66.81	12.63		150.0	
10293- AAB	CDMA2000, RC3, SO3, Full Rate	X	1.14	70.77	15.25	0.00	150.0	± 9.6 %
		Y	1.22	72.07	15.35		150.0	
		Z	1.16	71.38	15.20		150.0	
10295- AAB	CDMA2000, RC1, SO3, 1/8th Rate 25 fr.	X	11.92	86.64	24.71	9.03	50.0	± 9.6 %
		Y	15.63	91.98	26.09		50.0	
		Z	13.21	88.61	25,13		50.0	
10297- AAC	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	X	2.66	69.01	16.01	0.00	150.0	± 9.6 %
		Y	2.60	69.22	16.21		150.0	
		Z	2.62	69.08	16.08		150.0	
10298- AAC	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	X	1.46	66.51	13.33	0.00	150.0	± 9.6 %
		Y	1.32	65.99	12.56		150.0	
		Z	1.39	66.26	12.94		150.0	
10299- AAC	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	X	2.70	69.70	14.37	0.00	150.0	± 9.6 %
		Y	2.67	70.31	14.00		150.0	
		Z	2.72	70.11	14.27	ļ.,	150.0	
10300- AAC	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	X	2.09	65.56	11.69	0.00	150.0	± 9.6 %
		Y	1.84	65.02	10.77		150.0	
		Z	1.98	65.35	11.29		150.0	
10301- AAA	IEEE 802.16e WIMAX (29:18, 5ms, 10MHz, QPSK, PUSC)	X	5.46	67.87	18.50	4.17	80.0	±9.6 %
		Y	5.32	68.03	18.43		80.0	
		Z	5.39	67. <del>9</del> 4	18.48		80.0	
10302- AAA	IEEE 802.16e WIMAX (29:18, 5ms, 10MHz, QPSK, PUSC, 3 CTRL symbols)	X	5.85	67.98	18.95	4.96	80.0	±9.6 %
		Y	5.80	68.69	19.24		80.0	
	····	Z	5.75	67.96	18.88	1	80.0	1

10303- AAA	IEEE 802.16e WIMAX (31:15, 5ms, 10MHz, 64QAM, PUSC)	X	5.66	67.92	18.92	4.96	80.0	± 9.6 %
		Y	5.61	68.61	19.19		80.0	l
		Z	5.56	67.86	18.83		80.0	
10304- AAA	IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, 64QAM, PUSC)	X	5.35	67.35	18.18	4.17	80.0	± 9.6 %
		Y	5.30	68.04	18.43		80.0	
	······································	Z	5.26	67.36	18.12	·	80.0	
10305- AAA	IEEE 802.16e WiMAX (31:15, 10ms, 10MHz, 64QAM, PUSC, 15 symbols)	X	7.05	76.99	23.82	6.02	50.0	± 9.6 %
		Y	7.19	78.32	24.16		50.0	
		Z	6.80	76.50	23.43		50.0	
10306- AAA	IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, 64QAM, PUSC, 18 symbols)	X	5.82	69.84	20.43	6.02	50.0	± 9.6 %
		Y	5.84	70.99	20.86		50.0	
		Z	6.02	71.90	21.62		50.0	
10307- AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, PUSC, 18 symbols)	X	6.31	73.07	22.13	6.02	50.0	± 9.6 %
		Y	5.83	71.38	20.88		50.0	
		Z	6.11	72.72	21.84		50.0	
10308- AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, PUSC)	X	6.39	73.64	22.41	6.02	50.0	± 9.6 %
	······	Y	5.90	71.88	21.13		50.0	
		Z	6.20	73.31	22.13		50.0	
10309- AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, AMC 2x3, 18 symbols)	X	5.91	70.12	20.60	6.02	50.0	± 9.6 %
		Y	5.91	71.23	21.02		50.0	
		Z	6.11	72.19	21.79		50.0	
10310- AAA	IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, QPSK, AMC 2x3, 18 symbols)	X	6.22	72.50	21.95	6.02	50.0	± 9.6 %
		Y	5.84	71.19	20.88		50.0	
		Z	6.05	72.25	21.70		50.0	
10311- AAC	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	X	3.00	68.33	15.71	0.00	150.0	± 9.6 %
		Y	2.96	68.52	15.89		150.0	
		Z	2.97	68.38	15.77		150.0	
10313- AAA	IDEN 1:3	X	6.99	77.76	18.02	6.99	70.0	± 9.6 %
		Y	8.29	81.34	19.42		70.0	
		Z	7.24	78.54	18.23		70.0	
10314- AAA	iDEN 1:6	X	10.49	86.54	23.63	10.00	30.0	± 9.6 %
		Y	12.83	91.81	25.63		30.0	
*******		Ż	11.85	89.04	24.41		30.0	
10315- AAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 96pc duty cycle)	X	1.08	63.85	14.84	0.17	150.0	± 9.6 %
		Y	1.11	64.19	15.04		150.0	
		Z	1.08	63.97	14.91		150.0	
10316- AAB	IEEE 802.11g WiFi 2.4 GHz (ERP- OFDM, 6 Mbps, 96pc duty cycle)	X	4.62	66.77	16.25	0.17	150.0	± 9.6 %
		Y	4.54	66.97	16.29		150.0	
		Z	4.57	66.82	16.26		150.0	
10317- AAC	IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle)	X	4.62	66.77	16.25	0.17	150.0	± 9.6 %
		Y	4.54	66.97	16.29		150.0	
		Z	4.57	66,82	16.26		150.0	
10400- AAD	IEEE 802.11ac WiFi (20MHz, 64-QAM, 99pc duty cycle)	X	4.70	66,97	16.15	0.00	150.0	±9.6 %
	·	Y	4.59	67.15	16.19		150.0	
		Z	4.64	67.01	16.16		150.0	
10401- AAD	IEEE 802.11ac WiFi (40MHz, 64-QAM, 99pc duty cycle)	X	5.41	67.24	16.37	0.00	150.0	± 9.6 %
		Y	5.32	67.38	16.42		150.0	

10402-	IEEE 802.11ac WiFi (80MHz, 64-QAM,	х	5.66	67.55	16.37	0.00	150.0	± 9.6 %
AAD	99pc duty cycle)	Y	5.56	67 50	16.37		150.0	
		Y Z		67.58 67.52	16.37		150.0	
40.400			5.60 1.28	66.85	12.83	0.00	115.0	± 9.6 %
10403- AAB	CDMA2000 (1xEV-DO, Rev. 0)	X				0.00		19.0 %
		Y	1.15	66.36	12.07		115.0	
		Ζ	1.21	66.57	12.40		115.0	
10404- AAB	CDMA2000 (1xEV-DO, Rev. A)	Х	1.28	66.85	12.83	0.00	115.0	±9.6 %
		Y	1.15	66.36	12.07		115.0	
		Ζ	1.21	66.57	12.40		115.0	
10406- AAB	CDMA2000, RC3, SO32, SCH0, Full Rate	X	31.97	105.65	26.52	0.00	100.0	±9.6 %
		Y	100.00	119.11	28.78		100.0	
		Z	100.00	120.25	29.60		100.0	
10410- AAD	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9, Subframe Conf=4)	Х	100.00	119.16	29.68	3.23	80.0	±9.6 %
		Y	100.00	122.81	30.98		80.0	
		Ζ	100.00	120.19	29.97		80.0	
10415- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle)	X	0.96	62.46	13.98	0.00	150.0	±9.6 %
		Y	0.99	62.90	14.23		150.0	
		Z	0.95	62.59	14.06		150.0	
10416-	IEEE 802.11g WiFi 2.4 GHz (ERP-	X	4.53	66.62	16.09	0.00	150.0	±9.6 %
AAA	OFDM, 6 Mbps, 99pc duty cycle)							
		Y	4.45	66.83	16.13		150.0	
		Ż	4.48	66.68	16.10		150.0	
10417-	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6	X	4.53	66.62	16.09	0.00	150.0	± 9.6 %
AAB	Mbps, 99pc duty cycle)	Y	4.45	66.83	16.13		150.0	
		Z	4.48	66.68	16.10		150.0	
10418- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 99pc duty cycle, Long preambule)	X	4.51	66.76	16.09	0.00	150.0	± 9.6 %
		Y	4.44	67.00	16.16		150.0	1
		Z	4.47	66.83	16.12		150.0	
10419- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 99pc duty cycle, Short preambule)	X	4.54	66.72	16.10	0.00	150.0	± 9.6 %
		Y	4.46	66.94	16.15		150.0	1
		Z	4.49	66.78	16.12		150.0	
10422- AAB	IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK)	X	4.66	66.73	16.13	0.00	150.0	± 9.6 %
		Y	4.57	66.94	16.17		150.0	
		Z	4.61	66.79	16.14		150.0	
10423- AAB	IEEE 802.11n (HT Greenfield, 43.3 Mbps, 16-QAM)	X	4.83	67.07	16.25	0.00	150.0	± 9.6 %
		Y	4.72	67.22	16.28		150.0	
		Z	4.77	67.10	16.25		150.0	
10424- AAB	IEEE 802.11n (HT Greenfield, 72.2 Mbps, 64-QAM)	X	4.75	67.01	16.22	0,00	150.0	± 9.6 %
		Y	4.64	67.18	16.25		150.0	
		Z	4.69	67.05	16.23		150.0	
10425- AAB	IEEE 802.11n (HT Greenfield, 15 Mbps, BPSK)	X	5.37	67.43	16.45	0.00	150.0	± 9.6 %
		Y	5.26	67.46	16.45		150.0	
		Z	5.32	67.43	16.46		150.0	
10426- AAB	IEEE 802.11n (HT Greenfield, 90 Mbps, 16-QAM)	X	5.37	67.44	16.46	0.00	150.0	± 9.6 %
		Y	5.28	67.55	16.49	1	150.0	
						2		1

10427- AAB	IEEE 802.11n (HT Greenfield, 150 Mbps, 64-QAM)	X	5.38	67.41	16.44	0.00	150.0	± 9.6 %
		Y	5.27	67.46	16.44		150.0	<b></b>
		Z	5.33	67.43	16.45		150.0	
10430- AAB	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1)	X	4.17	70.27	17.81	0.00	150.0	± 9.6 %
		Y	4.03	70.48	17.58		150.0	
40404		Z	4.14	70.57	17.85		150.0	
10431- AAB	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1)	X	4.21	67.11	16.05	0.00	150.0	± 9.6 %
·····		Y	4.09	67.33	16.03		150.0	
10432-		Z	4.15	67.18	16.04		150.0	
	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1)	X	4.51	67.03	16.15	0.00	150.0	± 9.6 %
		Y	4.40	67.23	16.17		150.0	
10433-	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1)	Z	4.46	67.08	16.15		150.0	
AAB		X	4.76	67.04	16.24	0.00	150.0	± 9.6 %
- <u> </u>		Y	4.66	67.21	16.27		150.0	
10434-	W-CDMA (BS Test Model 1, 64 DPCH)	Z	4.71	67.08	16.24		150.0	
AAA		X	4.23	70.97	17.72	0.00	150.0	± 9,6 %
		Y	4.07	71.14	17.40		150.0	
10435-	LTE-TDD (SC-FDMA, 1 RB, 20 MHz,	Z	4.21	71.31	17.74		150.0	
AAC	QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	118.98	29.60	3.23	80.0	± 9.6 %
		Y	100.00	122.59	30.87		80.0	
10447-		Z	100.00	119.99	29.88		80.0	
AAB	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	Х	3.49	66.99	15.32	0.00	150.0	± 9.6 %
		Y	3.34	67.16	15.09		150.0	
40440		Ζ	3.41	67.04	15.22		150.0	
10448- AAB	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, Clippin 44%)	X	4.04	66.88	15.90	0.00	150.0	± 9.6 %
		Y	3.94	67.12	15.89		150.0	
		Z	3.99	66.95	15.89		150.0	
10449- AAB	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1, Cliping 44%)	X	4.32	66.84	16.03	0.00	150.0	±9.6 %
		Y	4.23	67.04	16.06		150.0	
		Ζ	4.27	66.90	16.04		150.0	
10450- AAB	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	Х	4.51	66.79	16.08	0.00	150.0	± 9.6 %
		Y	4.44	66.97	16.11		150.0	
		Z	4.47	66.83	16.09		150.0	
10451- AAA	W-CDMA (BS Test Model 1, 64 DPCH, Clipping 44%)	X	3.37	67.12	14.92	0.00	150.0	±9.6 %
		Y	3.19	67.13	14.54		150.0	
10450		Z	3.28	67.11	14.76		150.0	
10456- AAB	IEEE 802.11ac WiFi (160MHz, 64-QAM, 99pc duty cycle)	X	6.23	67.99	16.62	0.00	150.0	± 9.6 %
		Y	6.17	68.10	16.67		150.0	
40457		Ζ	6.19	67.99	16.63		150.0	
10457- AAA	UMTS-FDD (DC-HSDPA)	х	3.77	65.25	15.79	0.00	150.0	± 9.6 %
		Y	3.75	65.50	15.83		150.0	
40450		Ζ	3.75	65.32	15.80		150.0	
10458- AAA	CDMA2000 (1xEV-DO, Rev. B, 2 carriers)	X	3.87	70.16	17.10	0.00	150.0	± 9.6 %
		Y	3.71	70.34	16.66		150.0	
		Ζ	3.84	70.49	17.05		150.0	
10459- AAA	CDMA2000 (1xEV-DO, Rev. B, 3 carriers)	х	5.00	67.94	17.87	0.00	150.0	± 9.6 %
		Y	4.81	68.13	17.56		150.0	
		Z	4.96	68,23	17.89		150.0	

10460-	UMTS-FDD (WCDMA, AMR)	Х	0.79	66.34	14.61	0.00	150.0	±9.6 %
AAA		Y	0.84	67.16	15.15		150.0	
		Z	0.84	66.65	14.76		150.0	
10461-	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz,	X	100.00	122.59	31.33	3.29	80.0	± 9.6 %
AAA	QPSK, UL Subframe=2,3,4,7,8,9)							
		Y	100.00	128.70	33.71		80.0	
		Ζ	100.00	124.88	32.17		80.0	
10462- AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	×	21.46	90.49	19.92	3.23	80.0	± 9.6 %
		Y	100.00	107.87	23.85		80.0	
10463- AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	Z X	100.00 5.25	106.49 74.65	23.49 14.70	3.23	80.0 80.0	±9.6 %
AAA	04-QAW, OL Sabirane-2,3,4,7,0,3)	Y	19.71	88.51	18.38		80.0	
		Z	7.19	78.06	15.56		80.0	
10464- AAA	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	120.34	30.14	3.23	80.0	± 9.6 %
/001		Y	100.00	126.35	32.46		80.0	
		Ζ	100.00	122.50	30.92		80.0	
10465- AAA	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	Х	11.73	83.97	18.05	3.23	80.0	± 9.6 %
		Y	100.00	107.24	23.55		80.0	
		Z	41.80	97.17	21.26		80.0	
10466- AAA	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	X	4.09	72.04	13.74	3.23	80.0	± 9.6 %
		Y	8.97	80.87	16.24		80.0	
		Z	4.77	73.97	14.19		80.0	
10467- AAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	120.57	30.24	3.23	80.0	±9.6 %
		Y	100.00	126.64	32.58		80.0	ļ
		Z	100.00	122.76	31.03		80.0	
10468- AAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	×	13.52	85.52	18.51	3.23	80.0	± 9.6 %
		Y	100.00	107.47	23.65		80.0	
		Z	60.78	101.09	22.20		80.0	
10469- AAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	X	4.11	72.11	13.77	3.23	80.0	± 9.6 %
		<u>Y</u>	9.29	81.22	16.33		80.0	
		Z	.4.83	74.11	14.24	2.02	80.0	+06%
10470- AAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	120.59	30.24	3.23	80.0	± 9.6 %
·····		Y	100.00	126.67	32.59		80.0	
10471- AAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	Z X	100.00 13.37	122.78 85.38	31.03 18.46	3.23	80.0 80.0	± 9.6 %
		Y	100.00	107.40	23.62	1	80.0	1
······································		Z	59.33	100.79	22.11		80.0	
10472- AAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	X	4.08	72.03	13.72	3.23	80.0	± 9.6 %
		Y	9.15	81.05	16.27		80.0	
		Z	4.78	73.98	14.18		80.0	
10473- AAC	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	120,56	30.23	3.23	80.0	± 9.6 %
		Y	100.00	126.64	32.58		80.0	
		Z	100.00	122.75	31.02		80.0	
10474- AAC	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	X	13.19	85.24	18.42	3.23	80.0	± 9.6 %
		Y	100.00	107.40	23.61		80.0	
		Z	57.55	100.49	22.04		80.0	<u> </u>
10475- AAC	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	X	4.06	71.97	13.71	3.23	80.0	± 9.6 %
		Y	8.99	80.90	16.23		80.0	
1		Z	4.73	73.90	14.15		80.0	

10477- AAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	X	11.86	84.06	18.05	3.23	80.0	± 9.6 %
L		Y	100.00	107.19	23.51		80.0	
40.470		Ζ	43.65	97.56	21.32		80.0	
10478- AAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	X	4.02	71.87	13.66	3.23	80.0	± 9.6 %
		<u>Y</u>	8.76	80.61	16.13		80.0	
40470		Z	4.66	73.74	14.09		80.0	
10479- AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	14.17	93.60	25.28	3.23	80.0	± 9.6 %
		Y	63.86	118.32	31.85		80.0	
10480-	LTE TOD (CO EDMA FOR DE 4 ANT)	Z	30.71	105.97	28.68		80.0	
AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	12.48	86.47	21.39	3.23	80.0	± 9.6 %
*******		<u>  Y</u>	53.06	106.13	26.31		80.0	
10481-	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz,	Z	23.73	95.20	23.69		80.0	
AAA	64-QAM, UL Subframe=2,3,4,7,8,9)	X	9.79	82.49	19.78	3.23	80.0	± 9.6 %
		Y	26.62	95.88	23.20	·	80.0	
10482-	LTE-TDD (SC-FDMA, 50% RB, 3 MHz,	Z	15.46	88.60	21.40		80.0	
AAA	QPSK, UL Subframe=2,3,4,7,8,9)	X	4.76	76.35	18.33	2.23	80.0	±9.6 %
	······	Y	4.38	75.77	17.66		80.0	
10483-	LTE-TDD (SC-FDMA, 50% RB, 3 MHz,	Z	4.74	76.54	18.16		80.0	
AAA	16-QAM, UL Subframe=2,3,4,7,8,9)	X	6.86	78.09	18.71	2.23	80.0	± 9.6 %
		Y	7.58	79.80	18,72		80.0	
10484-	ITE TOD (SC EDMA 500/ DD 2 MIL	Z	7.91	80.19	19.17		80.0	
AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	×	6.29	76.73	18.22	2.23	80.0	± 9.6 %
		Y	6.51	77.64	17.97		80.0	
10485-		Z	6.95	78.27	18.51		80.0	
AAC	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	5.21	77.92	19.79	2.23	80.0	± 9.6 %
		Y	5.14	78.56	1 <del>9</del> .82		80.0	
40400		Z	5.34	78.68	19.95		80.0	
10486- AAC	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	4.30	72.12	17.19	2.23	80.0	± 9.6 %
		Y	4.02	71.85	16.65		80.0	
40407		Z	4.23	72.22	17.03		80.0	
10487- AAC	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	4.25	71.63	16.98	2.23	80.0	± 9.6 %
<b></b>		Y	3.95	71.26	16.39		80.0	
40.400		Z	4.16	71.66	16.79		80.0	
10488- AAC	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	5.17	76.41	19.90	2.23	80.0	± 9.6 %
	<u> </u>	Y	5.01	76.93	20.15		80.0	
10/00		Z	5.17	76.91	20.10		80.0	
10489- AAC	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	Х	4.47	71.61	18.14	2.23	80.0	±9.6 %
·····		Y	4.30	71.84	18.12		80.0	
10400		Z	4.42	71.84	18.19		80.0	
10490- AAC	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	4.53	71.33	18.05	2.23	80.0	± 9.6 %
		Y	4.36	71.56	18.01		80.0	
40404		Z	4.48	71.55	18.09		80.0	
10491- AAC	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	Х	5.06	74.04	19.16	2.23	80.0	± 9.6 %
		Y	4.88	74.37	19.37		80.0	
10102		Ζ	5.01	74.33	19.30		80.0	
10492- AAC	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	4.71	70.55	18.02	2.23	80.0	± 9.6 %
		Y	4.54	70.71	18.05		80.0	
		Z	4.64	70.68	18.06		80.0	

40400		хT	4.76	70.36	17.96	2.23	80.0	± 9.6 %
10493- AAC	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)		4.70	70.30		2.23		1 3.0 %
		Y	4.58	70,52	17.98		80.0	
		Z	4.69	70.49	18.00		80.0	
10494- AAC	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	5.60	75.75	19.64	2.23	80.0	± 9.6 %
		Y	5.37	76.02	19.87		80.0	
		Z	5.56	76.06	19.81		80.0	
10495- AAC	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	х	4.78	71.03	18.23	2.23	80.0	±9.6 %
······		Y	4.59	71.11	18.27		<sup>`</sup> 80.0	
		Z	4.71	71.14	18,28		80.0	
10496- AAC	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	Х	4.83	70.65	18.12	2.23	80.0	± 9.6 %
		Y	4.64	70.74	18.15		80.0	
		Z	4.75	70.76	18.17		80.0	
10497- AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	Х	3,37	71.45	15.57	2,23	80.0	± 9.6 %
		Y	2.72	69.17	13.95		80.0	
		Z	3.09	70.50	14.83		80.0	
10498- AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	×	2.40	64.81	11.76	2.23	80.0	± 9.6 %
		Y	1.75	62.03	9.60		80.0	
		Z	2.07	63.39	10.68		80.0	
10499- AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	х	2.32	64.18	11.33	2.23	80.0	± 9.6 %
		Y	1.68	61.41	9.14		80.0	
		Z	1.99	62.76	10.23		80.0	
10500- AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	5.05	76.85	19.69	2.23	80.0	± 9.6 %
		Y	4.98	77.59	19.85		80.0	
		Z	5.12	77,53	19.88		80.0	
10501- AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	4.38	71.91	17.55	2.23	80.0	±9.6 %
		Y	4.19	72.01	17.27	<u>]</u>	80.0	
		Z	4.33	72.13	17.50		80.0	
10502- AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	4.41	71.66	17.40	2.23	80.0	± 9.6 %
		Υ	4.21	71,71	17.09		80.0	
		Z	4.36	71.85	17.33		80.0	
10503- AAC	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	5.10	76.19	19.80	2.23	80.0	± 9.6 %
		Y	4.94	76.71	20.05		80.0	
	·······	Z	5.10	76.67	19.99		80.0	
10504- AAC	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	4.44	71.51	18.08	2.23	80.0	± 9.6 %
		Y	4.28	71.74	18.06		80.0	
		Z	4.39	71.73	18.13	1	80.0	
10505- AAC	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	4.51	71.23	18.00	2.23	80.0	± 9.6 %
		Y	4.34	71.46	17.96	1	80.0	1
		Z	4.45	71.44	18.03		80.0	
10506- AAC	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	Х	5.55	75.59	19.57	2.23	80.0	± 9.6 %
		Y	5.33	75.87	19.80		80.0	
		Z	5.51	75.90	19.73		80.0	
10507- AAC	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM, UL	X	4.76	70.96	18.19	2.23	80.0	± 9.6 %
,,,,,	Subframe=2.3.4.7.8.9)					1	1	1
	Subframe=2,3,4,7,8,9)	Y	4.57	71.05	18.23		80.0	

10508- AAC	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	4.81	70.58	18.08	2.23	80.0	± 9.6 %
		Y	4.62	70.68	18.11		80.0	
		Z	4.73	70.68	18.12		80.0	
10509- AAC	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	5.59	73.58	18.84	2.23	80.0	± 9.6 %
		Y	5.39	73.76	19.02		80.0	
10210		Z	5.53	73.76	18.95		80.0	
10510- AAC	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	5.20	70.42	18.08	2.23	80.0	± 9.6 %
		Y	4.99	70.43	18.12		80.0	
40544		Z	5.11	70.45	18.12		80.0	
10511- AAC	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	5.22	70.10	18.00	2.23	80.0	± 9.6 %
		Y	5.03	70.13	18.04		80.0	
40540		Z	5.14	70.14	18.03		80.0	
10512- AAC	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	6.02	75.44	19.39	2.23	80.0	± 9.6 %
		Y	5.78	75.56	19.57		80.0	
10513-		Z	5.97	75.65	19.51		80.0	
AAC	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL Subframe≃2,3,4,7,8,9)	X	5.12	70.82	18.23	2.23	80.0	± 9.6 %
		Y	4.91	70.75	18.25		80.0	
10514-		Z	5.03	70.83	18.26		80.0	
AAC	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	5.09	70.31	18.08	2.23	80.0	± 9.6 %
		Y	4.90	70.27	18.11		80.0	
10548		Z	5.01	70.33	18.11		80.0	
10515- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 99pc duty cycle)	X	0.92	62.60	13.99	0.00	150.0	± 9.6 %
		<u> </u>	0.95	63.05	14.27		150.0	
10516-		Z	0.91	62.72	14.07		150.0	
AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc duty cycle)	X	0.48	67.26	14.71	0.00	150.0	±9.6 %
		Y Z	0.54	68.48	15.75		150.0	
10517-	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11	X	0.49	67.82 64.05	15.05	0.00	150.0	
AAA	Mbps, 99pc duty cycle)	Y	0.75	64.60	14.24 14.65	0.00	150.0	± 9.6 %
		Z	0.75	64.23	14.05		150.0	
10518- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc duty cycle)	X	4.52	66.69	16.06	0.00	150.0	± 9.6 %
		Y	4,44	66.90	16.10		150.0	
		Z	4.47	66.75	16.07		150.0	
10519- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 99pc duty cycle)	X	4.71	66.95	16.20	0.00	150.0	± 9.6 %
		Y	4.60	67.11	16.21		150.0	
40500		Z	4.65	66.98	16.20		150.0	
10520- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 99pc duty cycle)	X	4.56	66.90	16.11	0.00	150.0	± 9.6 %
		Y	4.46	67.05	16.12		150.0	
10521- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc duty cycle)	Z X	<u>4.50</u> 4.49	66.93 66.89	16.11 16.09	0.00	150.0 150.0	± 9.6 %
		Y	4.39	67.03	16.11		150.0	
		Z	4.44	66.91	16.09		150.0	
10522- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc duty cycle)	X	4.55	66.96	16.17	0.00	150.0	± 9.6 %
		Υ	4.45	67.16	16.21		150.0	
		Z	4.50	67.02	16.19		150.0	

40500	IFFF 000 44-15 MIFE F OLD OFDM 49	X	4,43	66.81	16.00	0.00	150.0	± 9.6 %
10523- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 99pc duty cycle)		4,40	00.01	10.00	0.00	150.0	± 3.0 /u
		Y	4.35	67.05	16.07		150.0	
		Z	4.38	66.88	16.02		150.0	
10524- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc duty cycle)	X	4.50	66.89	16,14	0.00	150.0	± 9.6 %
		Y	4.39	67.08	16.18		150.0	
		Z	4.44	66.94	16.15		150.0	
10525- AAB	IEEE 802.11ac WIFI (20MHz, MCS0, 99pc duty cycle)	X	4.47	65.92	15.72	0.00	150.0	± 9.6 %
		Y	4.40	66.15	15.78		150.0	
		Z	4.43	65.98 66.29	15.74 15.87	0.00	150.0 150.0	± 9.6 %
10526- AAB	IEEE 802.11ac WiFi (20MHz, MCS1, 99pc duty cycle)	X	4.65	66.47	15.91	0.00	150.0	1 3.0 %
		Y Z	<u>4.55</u> 4.59	66.34	15.91		150.0	
10527-	IEEE 802.11ac WiFi (20MHz, MCS2,	X	4.57	66.25	15.81	0.00	150.0	±9.6 %
AAB	99pc duty cycle)	Y	4.57	66.43	15.85	0.00	150.0	20.0 //
		Z	4.47	66.29	15.82		150.0	
10528- AAB	IEEE 802.11ac WIFi (20MHz, MCS3, 99pc duty cycle)	X	4.58	66.27	15.84	0.00	150.0	± 9.6 %
10163		Y	4.49	66.45	15.88		150.0	
		Z	4.53	66.31	15.85		150.0	
10529- AAB	IEEE 802.11ac WiFi (20MHz, MCS4, 99pc duty cycle)	Х	4.58	66.27	15.84	0.00	150.0	±9.6 %
		Y	4.49	66.45	15.88		150.0	
		Z	4.53	66.31	15.85		150.0	
10531- AAB	IEEE 802.11ac WiFi (20MHz, MCS6, 99pc duty cycle)	X	4.58	66.38	15.85	0.00	150.0	± 9.6 %
		Y	4.46	66.51	15.87		150.0	
		Z	4.52	66.40	15.86		150.0	
10532- AAB	IEEE 802.11ac WiFi (20MHz, MCS7, 99pc duty cycle)	X	4.44	66.22	15.78	0.00	150.0	± 9.6 %
		Y	4.33	66.36	15.80		150.0	
10533-	IEEE 802.11ac WiFi (20MHz, MCS8,	Z X	4.38 4.59	66.25 66.30	15.78 15.83	0.00	150.0 150.0	± 9.6 %
AAB	99pc duty cycle)	Y	4.49	66.51	15.88		150.0	
		Z	4.54	66.36	15.84		150.0	
10534- AAB	IEEE 802.11ac WiFi (40MHz, MCS0, 99pc duty cycle)	X	5.13	66.43	15.94	0.00	150.0	±9.6 %
		Y	5.04	66.54	15.97		150.0	
		Z	5.08	66.45	15.95		150.0	
10535- AAB	IEEE 802.11ac WiFi (40MHz, MCS1, 99pc duty cycle)	X	5.20	66.61	16.01	0.00	150.0	± 9.6 %
		Y	5.10	66.71	16.05		150,0	<u> </u>
		Z	5.15	66.64	16.04	0.00	150.0	+0.0.9/
10536- AAB	IEEE 802.11ac WiFi (40MHz, MCS2, 99pc duty cycle)	X	5.06	66.54	15.96	0.00	150.0	± 9.6 %
		Y	4.98	66.67	16.01 15.98	<u> </u>	150.0 150.0	
10507		Z	5.01 5.12	66.57 66.52	15.98	0.00	150.0	± 9.6 %
10537- AAB	IEEE 802.11ac WiFi (40MHz, MCS3, 99pc duty cycle)			66.63	15.95	0.00	150.0	2 0.0 70
		Z	5.03 5.07	66.54	15.99		150.0	
10538- AAB	IEEE 802.11ac WiFi (40MHz, MCS4, 99pc duty cycle)	X	5.07	66.56	16.02	0.00	150.0	± 9.6 %
ערעי		Y	5.11	66.64	16.04	1	150.0	-
		Z	5.16	66.56	16.02	1	150.0	
10540- AAB	IEEE 802.11ac WiFi (40MHz, MCS6, 99pc duty cycle)	X	5.14	66.57	16.03	0.00	150.0	± 9.6 %
		Y	5.04	66.62	16.05		150.0	
		Z	5.10	66.60	16.05		150.0	

10541- AAB	IEEE 802.11ac WiFi (40MHz, MCS7, 99pc duty cycle)	X	5.11	66.43	15.96	0.00	150.0	±9.6 %
		Y	5.02	66.51	15.98		150.0	
		Ż	5.07	66.45	15.97		150.0	
10542- AAB	IEEE 802.11ac WiFi (40MHz, MCS8, 99pc duty cycle)	X	5.27	66.51	16.02	0.00	150.0	± 9.6 %
		Y	5.18	66.61	16.04		150.0	
		Z	5.22	66.53	16.03		150.0	
10543- AAB	IEEE 802.11ac WiFi (40MHz, MCS9, 99pc duty cycle)	X	5.36	66.57	16.06	0.00	150.0	± 9.6 %
		Y	5.24	66.63	16.08		150.0	
10544-		Z	5.30	66.57	16.07		150.0	
AAB	IEEE 802.11ac WiFi (80MHz, MCS0, 99pc duty cycle)	X	5.43	66.55	15.94	0.00	150.0	± 9.6 %
		Y	5.37	66.65	15.97	<u> </u>	150.0	ļ
10545-	IEEE 802.11ac WiFi (80MHz, MCS1,	Z	5.40	66.56	15.95		150.0	
AAB	99pc duty cycle)	X Y	5.64	67.00	16.11	0.00	150.0	± 9.6 %
			5.55	67.08	16.15		150.0	· · ·····
10546-	IEEE 802.11ac WiFi (80MHz, MCS2,	Z	5.60	67.02	16.13	<u> </u>	150.0	
AAB	99pc duty cycle)	X	5.50	66.78	16.02	0.00	150.0	± 9.6 %
		Y	5.41	66.80	16.02		150.0	L
10547-	IEEE 802.11ac WiFi (80MHz, MCS3,	Z X	5.46	66.76	16.01	0.00	150.0	
AAB	99pc duty cycle)		5.58	66.83	16.03	0.00	150.0	±9.6 %
		Y	5.49	66.87	16.05		150.0	
10548-	IEEE 802.11ac WiFi (80MHz, MCS4,	z X	5.53	66.81	16.03	<u> </u>	150.0	
AAB	99pc duty cycle)		5.89	67.94	16.56	0.00	150.0	±9.6 %
		Y	5.69	67.68	16.43		150.0	
10550-	IEEE 802.11ac WiFi (80MHz, MCS6,	ZX	5.80	67.83	16.51		150.0	
AAB	99pc duty cycle)		5.53	66.79	16.03	0.00	150.0	±9.6 %
		Y	5.46	66.91	16.08		150.0	
10551-	IEEE 802.11ac WiFi (80MHz, MCS7,	Z	5.49	66.81	16.05	0.00	150.0	
AAB	99pc duty cycle)	X	5.53	66.82	16.01	0.00	150.0	±9.6 %
······		Y	5.44	66.85	16.02		150.0	
10552-	1666 802 44 co ) 4/161 (80 MU - MOOD	Z	5.49	66.83	16.02		150.0	
AAB	IEEE 802.11ac WiFi (80MHz, MCS8, 99pc duty cycle)	X Y	5.44	66.61	15.91	0.00	150.0	± 9.6 %
	····		5.38	66.72	15.95		150.0	
10553- AAB	IEEE 802.11ac WiFi (80MHz, MCS9, 99pc duty cycle)	Z X	<u>5.40</u> 5.53	66.62 66.66	15.92 15.96	0.00	150.0 150.0	± 9.6 %
	······································	Y	5.45	66.72	15.99	L	150.0	······
		Z	5.48	66.65	15.97		150.0	
10554- AAC	IEEE 802.11ac WiFi (160MHz, MCS0, 99pc duty cycle)	X	5.84	66.93	16.04	0.00	150.0	± 9.6 %
		Y	5.78	67.01	16.06		150.0	
		Z	5.81	66.94	16.05		150.0	
10555- AAC	IEEE 802.11ac WiFi (160MHz, MCS1, 99pc duty cycle)	X	5.98	67.25	16.17	0.00	150.0	±9.6 %
		Y	5.90	67.29	16.19		150.0	
40555		Z	5.94	67.25	16.18		150.0	
10556- AAC	IEEE 802.11ac WiFi (160MHz, MCS2, 99pc duty cycle)	X	6.00	67.29	16.19	0.00	150.0	±9.6 %
		Y	5.93	67.35	16.21		150.0	
(000		Z	5.96	67.30	16.20		150.0	
10557- AAC	IEEE 802.11ac WiFi (160MHz, MCS3, 99pc duty cycle)	X	5.96	67.20	16.16	0.00	150.0	±9.6 %
		Y	5.88	67.23	16.17		150.0	
		Z	5.92	67.18	16.16		150.0	

10558-	IEEE 802.11ac WiFi (160MHz, MCS4,	X	6.01	67.37	16.26	0.00	150,0	± 9.6 %
AAC	99pc duty cycle)		0.01	07.57	10.20	0.00	100.0	1 0.0 70
		Y	5.92	67.38	16.26		150.0	
······		Z	5.97	67.35	16.26		150.0	
10560- AAC	IEEE 802.11ac WiFi (160MHz, MCS6, 99pc duty cycle)	Х	6.01	67.21	16.22	0.00	150.0	± 9.6 %
		Y	5.92	67.24	16.23		150.0	
		Z	5.96	67.19	16.22		150.0	
10561- AAC	IEEE 802.11ac WiFi (160MHz, MCS7, 99pc duty cycle)	X	5.93	67.18	16.25	0.00	150.0	± 9.6 %
		Y	5.85	67.23	16.26		150.0	
		Z	5.89	67.18	16.25		150.0	
10562- AAC	IEEE 802.11ac WiFi (160MHz, MCS8, 99pc duty cycle)	X	6.07	67.61	16.46	0.00	150.0	±9.6 %
		Y	5.94	67.50	16.40		150.0	
		Z	6.01	67.54	16.43		150.0	
10563- AAC	IEEE 802.11ac WiFi (160MHz, MCS9, 99pc duty cycle)	X	6.39	68.16	16.69	0.00	150.0	±9.6 %
		Y	6.02	67.41	16.31		150.0	
		Z	6.19	67.71	16.48		150.0	
10564- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 9 Mbps, 99pc duty cycle)	Х	4.86	66.83	16.26	0.46	150.0	±9.6 %
		Y	4.78	67.03	16.31		150.0	
		Z	4.81	66.87	16.27		150.0	
10565- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 12 Mbps, 99pc duty cycle)	X	5.09	67.28	16.58	0.46	150.0	± 9.6 %
		Y	4.98	67.43	16.60		150.0	
		Z	5.03	67.31	16.59		150.0	
10566- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 18 Mbps, 99pc duty cycle)	X	4.93	67,13	16.40	0.46	150.0	±9.6 %
<u> </u>		Y	4.82	67.27	16.42		150.0	
		Z	4.87	67.15	16.40		150.0	
10567- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 24 Mbps, 99pc duty cycle)	X	4.95	67.50	16.74	0.46	150.0	±9.6 %
		Y	4.84	67.61	16.74		150.0	
		Z	4.90	67.52	16.74		150.0	
10568- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 36 Mbps, 99pc duty cycle)	X	4.85	66.93	16.19	0.46	150.0	± 9.6 %
		Y	4.74	67.12	16.24		150.0	
		Z	4.79	66.97	16.19	1	150.0	
10569- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 48 Mbps, 99pc duty cycle)	X	4.91	67.57	16.79	0.46	150.0	± 9.6 %
		Y	4.82	67.76	16.84		150.0	
		Z	4.86	67.64	16.82		150.0	
10570- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 54 Mbps, 99pc duty cycle)	X	4.94	67.43	16.73	0.46	150.0	± 9.6 %
		Υ	4.84	67.60	16.77		150.0	
		Z	4.89	67.48	16.75		150.0	
10571- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90pc duty cycle)	Х	1.25	65.19	15.53	0.46	130.0	± 9.6 %
		Y	1.27	65.45	15.71		130.0	
		Z	1.24	65.29	15.60		130.0	
10572- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 90pc duty cycle)	X	1.27	65.79	15.87	0.46	130.0	± 9.6 %
		Y	1.28	66.03	16.05		130.0	
		Z	1.26	65.90	15.96		130.0	
10573- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 90pc duty cycle)	X	2.61	85.52	21.81	0.46	130.0	± 9.6 %
		Y	2.97	88.51	23.34		130.0	
		Z	3.01	88.05	22.71	[	130.0	
10574- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 90pc duty cycle)	X	1.44	71.64	18.59	0.46	130.0	± 9.6 %
		Y	1.44	71.68	18.74		130.0	
•		Z	1.45	72.00	18.80	+	130.0	1

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10575- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-	X	4.68	66.71	16.37	0.46	130.0	± 9.6 %
AAA	OFDM, 6 Mbps, 90pc duty cycle)							
		Y	4.59	66.91	16.41		130.0	
10576-	IEEE 802.11g WiFi 2.4 GHz (DSSS-	Z	4.63	66.76	16.38		130.0	
AAA	OFDM, 9 Mbps, 90pc duty cycle)	X	4.70	66.86	16.43	0.46	130.0	±9.6 %
	······································	Y	4.61	67.07	16.47		130.0	
10577-		Z	4.65	66.92	16.44		130.0	
AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 12 Mbps, 90pc duty cycle)	X	4.91	67.16	16.60	0.46	130.0	± 9.6 %
		Y	4.79	67.31	16.62		130.0	
10578-	IEEE 802.11g WiFi 2.4 GHz (DSSS-	Z	4.85	67.20	16.60		130.0	
AAA	OFDM, 18 Mbps, 90pc duty cycle)	X	4.81	67.32	16.69	0.46	130.0	± 9.6 %
		Y	4.69	67.44	16.70		130.0	
10579-	IEEE 802.11g WiFi 2.4 GHz (DSSS-	Z	4.75	67.35	16.70		130.0	
AAA	OFDM, 24 Mbps, 90pc duty cycle)	X	4.58	66.65	16.03	0.46	130.0	± 9.6 %
		Υ	4.47	66.80	16.06		130.0	
10580-	IEEE 802.11g WiFi 2.4 GHz (DSSS-	Z	4.52	66.66	16.02		130.0	
AAA	OFDM, 36 Mbps, 90pc duty cycle)	X	4.63	66.68	16.05	0.46	130.0	± 9.6 %
		Y	4.52	66.87	16.11		130.0	
10581-		Z	4.57	66.71	16.05		130.0	
AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 48 Mbps, 90pc duty cycle)	X	4.71	67.36	16.64	0.46	130.0	± 9.6 %
		Y	4.60	67.52	16.66		130.0	
10582-		Z	4.65	67.41	16.65		130.0	
10582- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 54 Mbps, 90pc duty cycle)	X	4.53	66.42	15.83	0.46	130.0	± 9.6 %
		Y	4.41	66.60	15.88		130.0	
40500		Z	4.46	66.43	15.82		130.0	
10583- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 90pc duty cycle)	X	4.68	66.71	16.37	0.46	130.0	± 9.6 %
		Y	4.59	66.91	16.41		130.0	
		Z	4.63	66.76	16.38		130,0	
10584- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 90pc duty cycle)	X	4.70	66.86	16.43	0.46	130.0	± 9.6 %
		Y	4.61	67.07	16.47		130.0	
		Z	4.65	66.92	16.44		130.0	
10585- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90pc duty cycle)	X	4.91	67.16	16.60	0.46	130.0	± 9.6 %
		Y	4.79	67.31	16.62		130.0	
	·······	Z	4.85	67.20	16.60		130.0	
10586- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 90pc duty cycle)	X	4.81	67.32	16.69	0.46	130.0	± 9.6 %
		Y	4.69	67.44	16.70		130.0	
		Z	4.75	67.35	16.70		130.0	
10587- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 90pc duty cycle)	X	4.58	66.65	16.03	0.46	130.0	± 9.6 %
	······	Y	4.47	66.80	16.06		130.0	
		Z	4.52	66.66	16.02	····	130.0	
10588- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 90pc duty cycle)	X	4.63	66.68	16.05	0.46	130.0	± 9.6 %
		Y	4.52	66.87	16.11		130.0	·
10000		Z	4.57	66.71	16.05		130.0	
10589- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 90pc duty cycle)	X	4.71	67.36	16.64	0.46	130.0	± 9.6 %
		Y	4.60	67.52	16.66		130.0	
		Z	4.65	67.41	16.65		130.0	
10590- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 90pc duty cycle)	X	4.53	66.42	15.83	0.46	130.0	± 9.6 %
		Y	4.44	00.00	13.00			····-
		Y	4.41	66.60	15.88		130.0	

10591- AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS0, 90pc duty cycle)	X	4.83	66.77	16.47	0.46	130.0	±9.6 %
	mood, sope daty byoldy	Y	4.74	66.96	16.50		130.0	
		Ż	4.78	66.82	16.48		130.0	
10592- AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS1, 90pc duty cycle)	X	4.98	67.10	16.60	0.46	130.0	±9.6 %
		Y	4.87	67.27	16.63		130.0	
		z	4.93	67.14	16.61		130.0	
10593- ААВ	IEEE 802.11n (HT Mixed, 20MHz, MCS2, 90pc duty cycle)	X	4.91	67.02	16,48	0.46	130.0	±9.6 %
	MODZ, Sope daty cycley	Y	4.80	67.17	16.51		130.0	
		Z	4.85	67.05	16.49		130.0	
10594- AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS3, 90pc duty cycle)	X	4.96	67.18	16.63	0.46	130.0	± 9.6 %
		Y	4.85	67.33	16.66		130.0	
		Z	4.90	67.22	16.64		130.0	
10595- AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS4, 90pc duty cycle)	X	4.93	67.14	16.53	0.46	130.0	±9.6 %
		Y	4.82	67.31	16.57		130.0	
		Z	4.87	67.18	16.54		130.0	
10596- AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS5, 90pc duty cycle)	X	4.87	67.14	16.54	0.46	130.0	±9.6 %
		Y	4.76	67.30	16.57		130.0	
		Z	4.81	67.18	16.54		130.0	
10597- AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS6, 90pc duty cycle)	X	4.82	67.05	16.42	0.46	130.0	± 9.6 %
		Y	4.71	67.19	16.44		130.0	
		Z	4.76	67.07	16.42		130.0	
10598- AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS7, 90pc duty cycle)	X	4.80	67.28	16.68	0.46	130.0	± 9.6 %
,,,,,		Y	4.69	67.37	16.67		130.0	
		Z	4.74	67.29	16.67		130.0	
10599- AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS0, 90pc duty cycle)	X	5.50	67.33	16.69	0.46	130.0	± 9.6 %
		Y	5.40	67.43	16.72		130.0	
*****		Z	5.46	67.38	16.72		130.0	
10600- AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS1, 90pc duty cycle)	X	5.67	67.87	16.93	0.46	130.0	±9.6 %
		Y	5.53	67.86	16.92		130.0	
		Z	5.61	67.87	16.94		130.0	
10601- AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS2, 90pc duty cycle)	X	5.54	67.56	16.79	0.46	130.0	± 9.6 %
		Y	5.42	67.61	16.80		130.0	
		Z	5.48	67.56	16.80		130.0	
10602- AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS3, 90pc duty cycle)	X	5.63	67.58	16.72	0.46	130.0	± 9.6 %
		Y	5.55	67.79	16.82		130.0	
		Z	5.59	67.64	16.76		130.0	
10603- AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS4, 90pc duty cycle)	X	5.71	67.86	16.99	0.46	130.0	± 9.6 %
		Y	5.61	68.00	17.05		130.0	1
		Z	5.65	67.89	17.01	1	130.0	
10604- AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS5, 90pc duty cycle)	X	5.50	67.29	16.70	0.46	130.0	± 9.6 %
·		Y	5.49	67.68	16.88		130.0	
		Z	5.47	67.39	16.75		130.0	
10605- AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS6, 90pc duty cycle)	×	5.63	67.69	16.90	0.46	130.0	± 9.6 %
<u> </u>		Y	5.53	67.80	16.94		130.0	
		Z	5.59	67.74	16.92		130.0	
10606- AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS7, 90pc duty cycle)	x	5.39	67.07	16.45	0.46	130.0	± 9.6 %
		Y	5.27	67.10	16.45		130.0	
	· .	Z	5.31	66.99	16.41		130.0	

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10607- AAB	IEEE 802.11ac WiFi (20MHz, MCS0, 90pc duty cycle)	X	4.65	66.04	16.07	0.46	130.0	± 9.6 %
·····		Y	4.58	66.26	16.12		130.0	
		Z	4.61	66.10	16.08		130.0	
10608- AAB	IEEE 802.11ac WiFi (20MHz, MCS1, 90pc duty cycle)	X	4.85	66.45	16.23	0.46	130.0	± 9.6 %
		Y	4.74	66.63	16.28		130.0	
		Z	4.79	66.50	16.25		130.0	
10609- AAB	IEEE 802.11ac WiFi (20MHz, MCS2, 90pc duty cycle)	X	4.74	66.30	16.07	0.46	130.0	± 9.6 %
		Y	4.63	66.48	16.11		130.0	
40040		Z	4.68	66.35	16.08		130.0	
10610- AAB	IEEE 802.11ac WiFi (20MHz, MCS3, 90pc duty cycle)	X	4.79	66.46	16.23	0.46	130.0	± 9.6 %
		Y	4.68	66.63	16.27		130.0	
10611-		Z	4.73	66.50	16.25		130.0	
AAB	IEEE 802.11ac WiFi (20MHz, MCS4, 90pc duty cycle)	X	4.70	66.28	16.09	0.46	130.0	± 9.6 %
		Y	4.60	66.45	16.12		130.0	
10612-	IEEE 802.11ac WiFi (20MHz, MCS5,	Z	4.65	66.31	16.10		130.0	
AAB	90pc duty cycle)	X	4.72	66.43	16.13	0.46	130.0	± 9.6 %
		Y	4.60	66.61	16.18	ļ	130.0	
10613-		Z	4.66	66.47	16.14		130.0	
AAB	IEEE 802.11ac WiFi (20MHz, MCS6, 90pc duty cycle)	X	4.72	66.33	16.02	0.46	130.0	± 9.6 %
		Y	4.60	66.47	16.05		130.0	
10011		Z	4.66	66.35	16.02		130.0	
10614- AAB	IEEE 802.11ac WiFi (20MHz, MCS7, 90pc duty cycle)	X	4.66	66.50	16.24	0.46	130.0	± 9.6 %
		Y	4.55	66.62	16.25		130.0	
		Z	4.60	66.53	16.25		130.0	
10615- AAB	IEEE 802.11ac WiFi (20MHz, MCS8, 90pc duty cycle)	X	4.71	66.12	15.87	0.46	130.0	± 9.6 %
		Y	4.60	66.33	15.93		130.0	
		Z	4.65	66.16	15.88		130.0	
10616- AAB	IEEE 802.11ac WiFi (40MHz, MCS0, 90pc duty cycle)	X	5.31	66.56	16.28	0.46	130.0	± 9.6 %
		Y	5.21	66.65	16.31		130.0	
		Z	5.26	66.57	16.29		130.0	
10617- AAB	IEEE 802.11ac WiFi (40MHz, MCS1, 90pc duty cycle)	X	5.38	66.74	16.35	0.46	130.0	± 9.6 %
·····		Y	5.29	66.86	16.39		130.0	
		Z	5.34	66.79	16.37		130.0	
10618- AAB	IEEE 802.11ac WiFi (40MHz, MCS2, 90pc duty cycle)	X	5.26	66.74	16.36	0.46	130.0	± 9.6 %
		Y	5.18	66.87	16.40		130.0	
		Z	5.22	66.77	16.38		130.0	
10619- AAB	IEEE 802.11ac WiFi (40MHz, MCS3, 90pc duty cycle)	X	5.29	66.59	16.22	0.46	130.0	± 9.6 %
		Y	5.19	66.67	16.25		130,0	
100		Z	5.23	66.58	16.22		130.0	-
10620- AAB	IEEE 802.11ac WiFi (40MHz, MCS4, 90pc duty cycle)	X	5.38	66.62	16.29	0.46	130.0	±9.6 %
		Y	5.27	66.70	16.31		130.0	
		Z	5.32	66.62	16.29		130.0	
10621- AAB	IEEE 802.11ac WiFi (40MHz, MCS5, 90pc duty cycle)	X	5.37	66.71	16.45	0.46	130.0	± 9.6 %
w		Y	5.27	66.80	16.47		130.0	
		Z	5.32	66.74	16.47		130.0	
10622- AAB	IEEE 802.11ac WiFi (40MHz, MCS6, 90pc duty cycle)	X	5.39	66.89	16.53	0.46	130.0	± 9.6 %
		Y	5.29	66.97	16.55		130.0	
		Z	5.34	66.92	16.55		130.0	

10623- AAB	IEEE 802.11ac WiFi (40MHz, MCS7, 90pc duty cycle)	X	5.26	66.41	16.17	0.46	130.0	±9.6 %
		Y	5,16	66.51	16.20		130.0	
		Z	5.21	66.44	16.19		130.0	
10624- AAB	IEEE 802.11ac WiFi (40MHz, MCS8, 90pc duty cycle)	X	5.45	66.63	16.34	0.46	130.0	± 9.6 %
		Y	5,35	66.71	16.36		130.0	
		Z	5.40	66.64	16.35		130.0	
10625- AAB	IEEE 802.11ac WiFi (40MHz, MCS9, 90pc duty cycle)	X	5.87	67.75	16.95	0.46	130.0	±9.6 %
		Y	5.59	67.32	16.72		130.0	
		Z	5.77	67.62	16.89		130.0	
10626- AAB	IEEE 802.11ac WiFi (80MHz, MCS0, 90pc duty cycle)	X	5.59	66.61	16.24	0.46	130.0	±9.6 %
		Y	5.53	66.71	16.27		130.0	
		Z	5.56	66.63	16.25		130.0	
10627- AAB	IEEE 802.11ac WiFi (80MHz, MCS1, 90pc duty cycle)	X	5.86	67.23	16.51	0.46	130.0	±9.6 %
		Y	5.77	67.31	16.54		130.0	
		Z	5.82	67.26	16.53		130.0	
10628- AAB	IEEE 802.11ac WIFi (80MHz, MCS2, 90pc duty cycle)	X	5.64	66.75	16.20	0.46	130.0	± 9.6 %
		Y	5.54	66.76	16.20		130.0	
		Z	5.59	66.73	16.20		130.0	
10629- AAB	IEEE 802.11ac WiFi (80MHz, MCS3, 90pc duty cycle)	X	5.74	66.86	16.25	0.46	130.0	± 9.6 %
		Y	5.63	66.85	16.25		130.0	
		Z	5.67	66.78	16.22		130.0	
10630- AAB	IEEE 802.11ac WiFi (80MHz, MCS4, 90pc duty cycle)	X	6.27	68.62	17.13	0.46	130.0	± 9.6 %
		Y	5.98	68.12	16.89		130.0	
		Z	6.16	68.44	17.05		130.0	
10631- AAB	IEEE 802.11ac WiFi (80MHz, MCS5, 90pc duty cycle)	X	6.08	68.18	17.10	0.46	130.0	± 9.6 %
		Y	5.89	67.92	16.96		130.0	
		Z	6.00	68.07	17.05		130.0	
10632- AAB	IEEE 802.11ac WiFi (80MHz, MCS6, 90pc duty cycle)	X	5.81	67.25	16.65	0.46	130.0	± 9.6 %
		Y	5.73	67.36	16.70		130.0	
		Z	5.78	67.29	16.68		130.0	
10633- AAB	IEEE 802.11ac WiFi (80MHz, MCS7, 90pc duty cycle)	X	5.70	66.88	16.30	0.46	130.0	±9.6 %
		Y	5.61	66.94	16.32		130.0	
		Z	5.64	66.86	16.29		130.0	
10634- AAB	IEEE 802.11ac WiFi (80MHz, MCS8, 90pc duty cycle)	X	5.68	66.90	16.36	0.46	130.0	± 9.6 %
		Y	5.59	66.94	16.37		130.0	
		Z	5.63	66.89	16.36		130.0	
10635- AAB	IEEE 802.11ac WiFi (80MHz, MCS9, 90pc duty cycle)	X	5.57	66.28	15.80	0.46	130.0	± 9.6 %
		Y	5.47	66.33	15.83		130.0	
		Z	5.52	66.25	15.79		130.0	1
10636- AAC	IEEE 802.11ac WiFi (160MHz, MCS0, 90pc duty cycle)	X	6.01	67.00	16.34	0.46	130.0	± 9.6 %
		Y	5.95	67.08	16.37		130.0	[
		Z	5.98	67.00	16.35		130.0	
10637- AAC	IEEE 802.11ac WiFi (160MHz, MCS1, 90pc duty cycle)	X	6.18	67.41	16.53	0.46	130.0	± 9.6 %
·····		Y	6.10	67.45	16.54		130.0	
		Z	6.14	67.41	16.54		130.0	
10638- AAC	IEEE 802.11ac WiFi (160MHz, MCS2, 90pc duty cycle)	X	6.18	67.38	16.49	0.46	130.0	± 9.6 %
		Y	6.10	67.42	16.51		130.0	

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10639- AAC	IEEE 802.11ac WiFi (160MHz, MCS3, 90pc duty cycle)	X	6,15	67.32	16.51	0.46	130.0	± 9.6 %
		Y	6.07	67.34	16.50	<u> </u>	130.0	<u> </u>
		Z	6.11	67.30	16.50	ŀ	130.0	
10640- AAC	IEEE 802.11ac WiFi (160MHz, MCS4, 90pc duty cycle)	X	6.17	67.36	16.47	0.46	130.0	± 9.6 %
		Y	6.07	67.36	16.47		130.0	
		Z	6.11	67.32	16.45		130.0	
10641- AAC	IEEE 802.11ac WiFi (160MHz, MCS5, 90pc duty cycle)	X	6.20	67.22	16.42	0.46	130.0	± 9.6 %
		Y	6.14	67.34	16.48		130.0	
40040		Z	6.17	67.26	16.44		130.0	
10642- AAC	IEEE 802.11ac WiFi (160MHz, MCS6, 90pc duty cycle)	X	6.24	67.47	16.71	0.46	130.0	± 9.6 %
· · · ·	······································	Y	6.15	67.50	16.71		130.0	
10643-		Z	6.19	67.46	16.71		130.0	
AAC	IEEE 802.11ac WiFi (160MHz, MCS7, 90pc duty cycle)	X	6.08	67.18	16.46	0.46	130.0	± 9.6 %
·····		Y	6.01	67.25	16.50		130.0	
10644-		Z	6.04	67.18	16.47		130.0	
AAC	IEEE 802.11ac WiFi (160MHz, MCS8, 90pc duty cycle)	X	6.27	67.76	16.77	0.46	130.0	± 9.6 %
		Y	6.11	67.57	16.67		130.0	
10645-		Z	6.19	67.64	16.72		130.0	
10645- AAC	IEEE 802.11ac WiFi (160MHz, MCS9, 90pc duty cycle)	X	6.75	68.75	17.22	0.46	130.0	± 9.6 %
		<u>Y</u>	6.24	67.62	16.66		130.0	
10646-		Z	6.47	68.11	16.92		130.0	
10646- AAD	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,7)	X	46.96	124.69	40.77	9.30	60.0	± 9.6 %
		Y	100.00	148.37	48.20		60.0	
40047		Z	67.01	134.85	43.85		60.0	
10647- AAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,7)	X	46.42	125.36	41.11	9.30	60.0	± 9.6 %
		Y	100.00	149.72	48.78		60.0	
10010		Z	63.71	134.73	44.00		60.0	
10648- AAA	CDMA2000 (1x Advanced)	X	0.63	62.54	9.79	0.00	150.0	± 9.6 %
		Y	0.58	62.24	9.19		150.0	
		Z	0.59	62.30	9.35		150.0	
10652- AAB	LTE-TDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	X	4.19	68.34	17.06	2.23	80.0	± 9.6 %
		Y	4.08	68.62	17.03		80.0	
40050		Z	4.14	68.48	17.06		80.0	
10653- AAB	LTE-TDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)	X	4.68	67.61	17.18	2.23	80.0	±9.6 %
		Y	4.56	67.77	17.19		80.0	
10054		Z	4.62	67.66	17.19		80,0	
10654- AAB	LTE-TDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)	X	4.63	67.27	17.19	2.23	80.0	± 9.6 %
		Y	4.54	67.39	17.21		80.0	
10005		Z	4.58	67.31	17.20		80.0	
10655- AAB	LTE-TDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	X	4.69	67.27	17.23	2.23	80.0	± 9.6 %
		Y	4.60	67.35	17.25		80.0	
10050		Z	4.64	67.28	17.23		80.0	
10658- AAA	Pulse Waveform (200Hz, 10%)	X	19.17	92.59	24.24	10.00	50.0	± 9.6 %
		Y	41.94	104.68	27.26		50.0	
40000		Z	24.50	96.17	24.98		50.0	
10659- AAA	Pulse Waveform (200Hz, 20%)	X	100.00	114.36	28.32	6.99	60.0	± 9.6 %
		Y	100.00	114.20	27.89		60.0	
	1	Z	100.00	113.56	27.75		60.0	

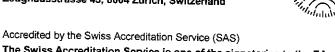
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10660- AAA	Pulse Waveform (200Hz, 40%)	X	100.00	111.43	25.50	3.98	80.0	± 9.6 %
		Y	100.00	112.46	25.73		80.0	
		Z	100.00	110.79	25.07		80.0	
10661- AAA	Pulse Waveform (200Hz, 60%)	X	100.00	110.47	23.74	2.22	100.0	± 9.6 %
		Y	100.00	113.22	24.78		100.0	
		Z	100.00	109.90	23.38		100.0	
10662- AAA	Pulse Waveform (200Hz, 80%)	Х	100.00	107.83	20.92	0.97	120.0	± 9.6 %
		Y	100.00	115.39	23.98		120.0	
		Z	100.00	107.00	20.48		120.0	

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

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





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- Swiss Calibration Service

The Swiss Accreditation Service is one of the signatories to the EA Multilateral Agreement for the recognition of calibration certificates Accreditation No.: SCS 0108

Client	PC Test		Certificate No: ES3-3332_Aug18	
CALI	BRATION	CERTIFICATE		
Object		ES3DV3 - SN:3332		
Calibratio	n procedure(s)	QA CAL-01.v9, QA CAL-23.v5, QA Calibration procedure for dosimetri	ic E-field probes	
Calibration	n date:	August 22, 2018	09-06-20	18
This calibr The meas	ration certificate docu urements and the ur	uments the traceability to national standards, which re acertainties with confidence probability are given on th	alize the physical units of measurements (SI). le following pages and are part of the certificate.	
All calibrat	tions have been con	ducted in the closed laboratory facility: environment te	emperature (22 ± 3)°C and humidity < 70%.	

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID	Cal Date (Certificate No.)	Schodulad Calibration
Power meter NRP	SN: 104778	04-Apr-18 (No. 217-02672/02673)	Scheduled Calibration
Power sensor NRP-Z91	SN: 103244	04-Apr-18 (No. 217-02672)	Apr-19
Power sensor NRP-Z91	SN: 103245	04-Apr-18 (No. 217-02673)	Apr-19 Apr-19
Reference 20 dB Attenuator	SN: S5277 (20x)	04-Apr-18 (No. 217-02682)	Apr-19
Reference Probe ES3DV2	SN: 3013		 Dec-18
DAE4	SN: 660	21-Dec-17 (No. DAE4-660_Dec17)	Dec-18
Secondary Standards		Check Date (in house)	
Power meter E4419B	SN: GB41293874	06-Apr-16 (in house check Jun-18)	Scheduled Check In house check: Jun-20
Power sensor E4412A	SN: MY41498087	06-Apr-16 (in house check Jun-18)	In house check: Jun-20
Power sensor E4412A	SN: 000110210	06-Apr-16 (in house check Jun-18)	In house check: Jun-20
RF generator HP 8648C	SN: US3642U01700	04-Aug-99 (in house check Jun-18)	In house check: Jun-20
Network Analyzer E8358A	SN: US41080477	31-Mar-14 (in house check Oct-17)	In house check: Oct-18

	Name	Function	Signature
Calibrated by:	Michael Weber	Laboratory Technician	<i></i>
			Ku2
Approved by:	Katja Pokovic	Technical Manager	
			KHL
This calibration certificate	e shall not be reproduced except in	full without written approval of the labo	Issued: August 24, 2018

# **Calibration Laboratory of**

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



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- Swiss Calibration Service

Accreditation No.: SCS 0108

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

## 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 Polarization ϑ	φ rotation around probe axis
Connector Angle	$\vartheta$ 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
Collibration to D. C	

# 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, ", "Measurement procedure for the assessment of Specific Absorption Rate (SAR) from handheld and body-mounted devices used next to the ear (frequency range of 300 MHz to 6 GHz)", July 2016
- c) IEC 62209-2, "Procedure to determine the Specific Absorption Rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)", March 2010
- d) KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

# Methods Applied and Interpretation of Parameters:

- NORMx, y, z: Assessed for E-field polarization  $\vartheta = 0$  (f  $\leq 900$  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 E<sup>2</sup>-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 ٠ 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:3332

Manufactured: Calibrated:

January 24, 2012 August 22, 2018

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) <sup>2</sup> ) <sup>A</sup> DCP (mV) <sup>B</sup>	1.00	0.93	0.88	± 10.1 %
	108.0	100.7	105.6	

# **Modulation Calibration Parameters**

UID Communication System Name	· · · · · · ·						
s statistication oystem Name		A	B	С	D	VR	Unc <sup>E</sup>
0	_	dB	dB√μV		dB	mV	(k=2)
0CW	X	0.0	0.0	1.0	0.00	197.1	±3.0 %
	Y	0.0	0.0	1.0	<u>+</u>	178.9	
	Z	0.0	0.0	1.0	<b></b> _	180.8	
Note: For details on LID parameters see Appen	ally .				<u> </u>		

te: For details on UID parameters see Appendix.

## Sensor Model Parameters

	C1 fF	C2 fF	α V <sup>-1</sup>	T1 ms.V <sup>-2</sup>	T2 ms.V <sup>-1</sup>	T3 ms	T4	T5	T6
_ <u>_X</u>	78.09	549.0	34.29	47.67	3.865	5.10	1.015	0.631	1.012
<u>Y</u>	48.63	359.6	37.37	27.76	1.869	5.10	0.000	0.517	1.012
<u> </u>	44.72	319.5	35.44	25.26	1.758	5.10	1.534	0.198	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%.

<sup>A</sup> The uncertainties of Norm X,Y,Z do not affect the E<sup>2</sup>-field uncertainty inside TSL (see Pages 5 and 6).

<sup>B</sup> Numerical linearization parameter: uncertainty not required.

<sup>E</sup> 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) <sup>C</sup>	Relative Permittivity <sup>F</sup>	Conductivity	ConvF X	ConvF Y	ConvF Z	Alpha <sup>G</sup>	Depth <sup>G</sup> (mm)	Unc (k=2)
750	41.9	0.89	6.74	6.74	6.74	0.56	1.39	± 12.0 %
835	41.5	0.90	6.49	6.49	6.49	0.38	1.72	± 12.0 %
1750	40.1	1.37	5.37	5.37	5.37	0.64	1.38	± 12.0 %
1900	40.0	1.40	5.15	5.15	5.15	0.80	1.24	± 12.0 %
2300	39.5	1.67	4.82	4.82	4.82	0.79	1.30	± 12.0 %
2450	39.2	1.80	4.61	4.61	4.61	0.80	1.26	± 12.0 %
2600	39.0	1.96	4.50	4.50	4.50	0.80	1.38	± 12.0 %

# Calibration Parameter Determined in Head Tissue Simulating Media

<sup>c</sup> 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  $\pm$  110 MHz. <sup>F</sup> At frequencies below 3 GHz, the validity of tissue parameters ( $\epsilon$  and  $\sigma$ ) 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 ( $\epsilon$  and  $\sigma$ ) is restricted to  $\pm$  5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters. <sup>6</sup> 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.

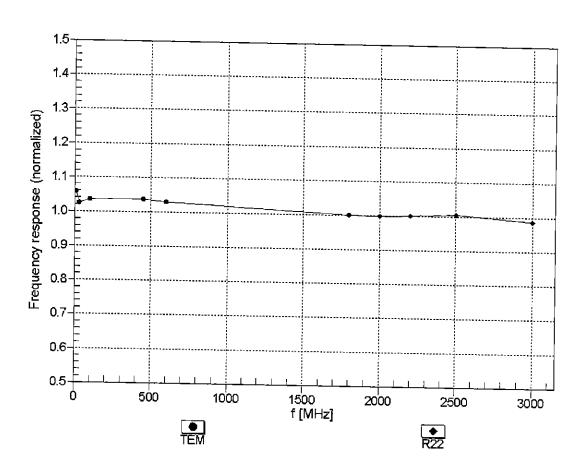
						• and		
f (MHz) <sup>c</sup>	Relative Permittivity <sup>F</sup>	Conductivity (S/m) <sup>F</sup>	ConvF X	ConvF Y	ConvF Z	Alpha <sup>G</sup>	Depth <sup>G</sup> (mm)	Unc (k=2)
750	55.5	0.96	6.46	6.46	6.46	0.50	1.47	± 12.0 %
835	55.2	0.97	6.29	6.29	6.29	0.49	1.52	± 12.0 %
_1750	53.4	1.49	4.99	4.99	4.99	0.66	1.39	± 12.0 %
1900	53.3	1.52	4.77	4.77	4.77	0.49	1.69	± 12.0 %
2300	52.9	1.81	4.58	4.58	4.58	0.80	1.27	± 12.0 %
2450	52.7	1.95	4.42	4.42	4.42	0.80	1.23	± 12.0 %
2600	52.5	2.16	4.36	4.36	4.36	0.80	1.30	± 12.0 %

# Calibration Parameter Determined in Body Tissue Simulating Media

<sup>c</sup> 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 validity can be extended to  $\pm$  100 MHz for ConvF assessments at 30, 64, 128, 150 and 220 MHz respectively. Above 5 GHz frequency

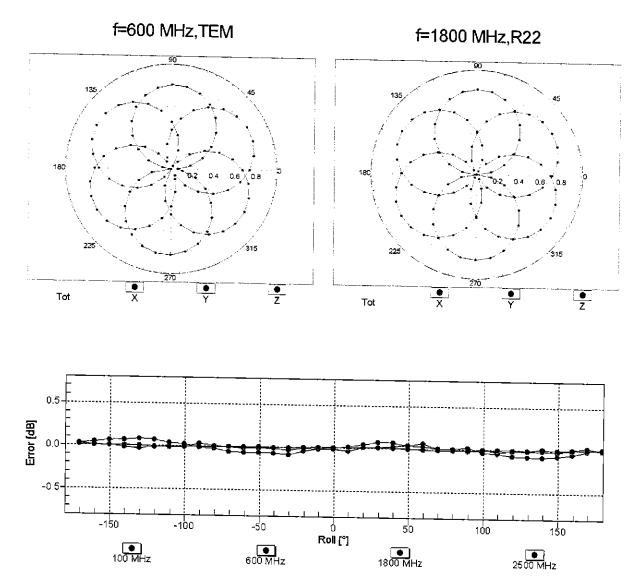
<sup>F</sup> At frequencies below 3 GHz, the validity of tissue parameters ( $\varepsilon$  and  $\sigma$ ) can be relaxed to  $\pm$  10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters ( $\varepsilon$  and  $\sigma$ ) is restricted to  $\pm$  5%. The uncertainty is the RSS of <sup>G</sup> Alpha/Depth are determined during cellback and a set of the convertice of the set of the convertice.

<sup>G</sup> 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.



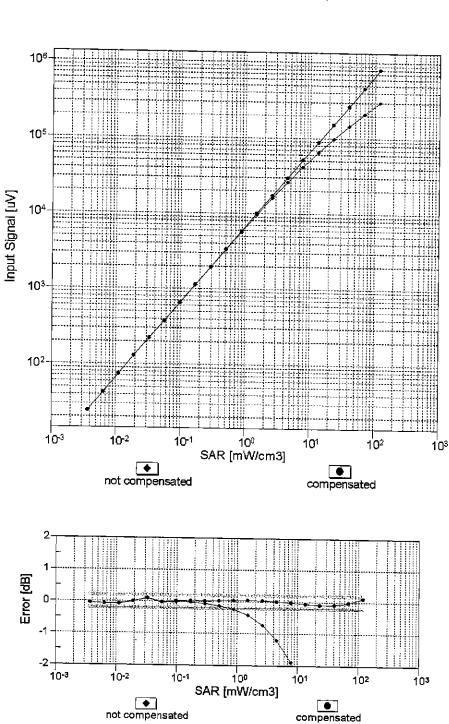
# Frequency Response of E-Field (TEM-Cell:ifi110 EXX, Waveguide: R22)

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



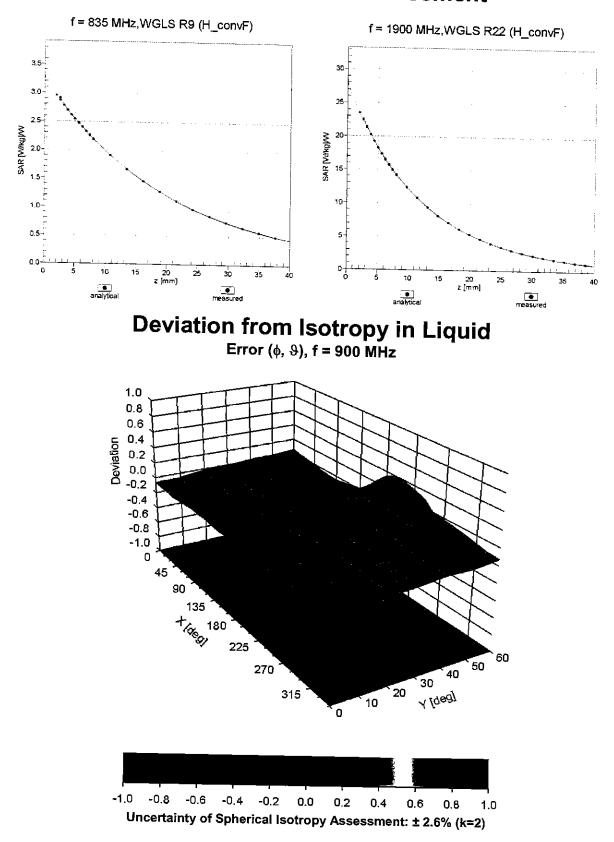
# Receiving Pattern ( $\phi$ ), $\vartheta = 0^{\circ}$

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



# Dynamic Range f(SAR<sub>head</sub>) (TEM cell , f<sub>eval</sub>= 1900 MHz)

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



# **Conversion Factor Assessment**

# Other Probe Parameters

Sensor Arrangement	Triangular
Connector Angle (°)	
Mechanical Surface Detection Mode	49.3
	enabled
Optical Surface Detection Mode	disabled
Probe Overall Length	337 mm
Probe Body Diameter	
Tip Length	10 mm
	10 mm
Tip Diameter	4 mm
Probe Tip to Sensor X Calibration Point	
Probe Tip to Sensor Y Calibration Point	2 mm
	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 dBõV	C	D dB	VR mV	Max Unc <sup>E</sup> (k=2)
0	CW	X	0.00	0.00	1.00	0.00	197.1	± 3.0 %
		Y	0.00	0.00	1.00		178.9	
10010-		Z	0.00	0.00	1.00		180.8	
	SAR Validation (Square, 100ms, 10ms)	X	9.42	78.82	19.48	10.00	25.0	± 9.6 %
		Y	6.63	76.23	16.58	<u> </u>	25.0	<u> </u>
10011-		Z	9.95	82.20	18.88		25.0	
CAB	UMTS-FDD (WCDMA)	X	1.26	70.77	17.22	0.00	150.0	± 9.6 %
	<u> </u>	<u>Y</u>	1.02	68.32	15.46		150.0	
10012-	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1	ZX	1.96	80.99	21.92		150.0	
CAB	Mbps)		1.45	66.89	16.90	0.41	150.0	± 9.6 %
		<u>Y</u>	1.23	65.24	15.98		150.0	
10013-	IEEE 802.11g WiFi 2.4 GHz (DSSS-	Z	1.37	68.12	18.18		150.0	
CAB	OFDM, 6 Mbps)	X	5.34	67.48	17.57	1.46	150.0	±9.6 %
		Y	4.99	67.25	17.50		150.0	
10021-	GSM-FDD (TDMA, GMSK)	Z	5.00	67.78	17.86	<u> </u>	_ 150.0	
DAC		X	12.77	84.95	23.28	9.39	50.0	±9.6 %
		Y	100.00	119.15	31.42	<u> </u>	<u>50</u> .0	
10023-	GPRS-FDD (TDMA, GMSK, TN 0)	<u>_Z</u>	100.00	120.12	31.83		50.0	
DAC		X	12.48	84.43	23.15	9.57	50.0	±9.6 %
		Y	86.81	116.95	30.93		50.0	
10024-	GPRS-FDD (TDMA, GMSK, TN 0-1)	ZX	100.00	120.03	31.84		50.0	
DAC			19.50	92.72	24.37	6.56	60.0	± 9.6 %
		<u>Y</u>	100.00	115.50	28.55		60.0	
10025-	EDGE-FDD (TDMA, 8PSK, TN 0)	Ž	100.00	117.36	29.38		60.0	
	EDGE-FDD (TDMA, 8PSK, TN 0)	X	20.38	102.14	37.71	12.57	50.0	± 9.6 %
	<u> </u>	Y	13.39	98.42	37.69		50.0	
10026-	EDGE-FDD (TDMA, 8PSK, TN 0-1)	Z	21.48	114.30	44.00		50.0	
DAC		X	19.45	98.14	32.99	9.56	60.0	±9.6 %
		Y	21.29	107.30	37.11		60.0	
10027-	GPRS-FDD (TDMA, GMSK, TN 0-1-2)	Z X	29.82	117.28 113.09	40.71 28.82	4.80	60.0 80.0	± 9.6 %
DAC					20.02	4.00	00.0	± 9.0 %
		Y	100.00	113.99	27.00		80.0	
40000		Z	100.00	117.09	28.40		80.0	
10028- DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2-3)	X	100.00	115.97	28.54	3.55	100.0	± 9.6 %
		Y	100.00	113.45	25.99		100.0	
10000		Z	100.00	118.36	28.18		100.0	
10029- DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2)	X	15.82	94.16	30.58	7.80	80.0	± 9.6 %
		Y	12.96	95.82	32.14		80.0	
10030-		Z	15.83	101.85	34.64		80.0	
CAA	IEEE 802.15.1 Bluetooth (GFSK, DH1)	X	30.02	99.14	25.52	5.30	70.0	± 9.6 %
		Y	100.00	113.53	27.10		70.0	
10031-		<u>Z</u>	100.00	115.93	28.18		70.0	-
CAA	IEEE 802.15.1 Bluetooth (GFSK, DH3)	X	100.00	117.08	27.44	1.88	100.0	± 9.6 %
		Y	100.00	110.43	23.19		100.0	
-		Z	100.00	121.04	27.72		100.0	

10032- CAA	IEEE 802.15.1 Bluetooth (GFSK, DH5)	х	100.00	121.10	28.01	1.17	100.0	± 9.6 %
		Y	100.00	109.05	21.56		100.0	
		Z	100.00	131.65	30.85		100.0	
10033- CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH1)	X	15.47	91.95	25.45	5.30	70.0	± 9.6 %
		Y	36.27	107.53	28.96		70.0	
		Z	100.00	124.57	33.43		70.0	
10034- CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH3)	Х	11.82	92.83	24.46	1.88	100.0	± 9.6 %
_	· · · · · · · · · · · · · · · · · · ·	_ Y	11.15	_ 91.90	22.61		100.0	
1000		Z	100.00	123.85	31.14		100.0	
10035- CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH5)	X	7.24	87.64	22.66	1.17	100.0	±9.6 %
		<u>Y</u>	4.86	82.23	19.22		100.0	
40000		Z	100.00	124.65	30.94		100.0	
10036- _CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH1)	X	17.25	93.92	26.14	5.30	70.0	±9.6 %
		<u>Y</u>	57.69	115.00	30.95		70.0	
10037-		Z	100.00	124.83	33.56		70.0	
CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH3)	X	11.64	92.58	24.33	1.88	100.0	± 9.6 %
		Y	9.91	90.34	22.11		100.0	
10038-		Z	100.00	123.84	31.10		100.0	
CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH5)	X	7.73	88.84	23.12	1.17	100.0	±9.6 %
		Y	5.20	83.43	19.73		100.0	
10039-		Z	100.00	125.47	31.30	_	100.0	
<u>C</u> AB	CDMA2000 (1xRTT, RC1)	X	2.46	75.15	18.41	0.00	150.0	± 9.6 %
		Y	1.75	<u>71.72</u>	15.00		150.0	
40040		Z	52.61	_118.51	<u>2</u> 9.24	<u> </u>	150.0	_
10042- CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4- DQPSK, Halfrate)	X	15.38	87.96	22.90	7.78	50.0	± 9.6 %
		Y	100.00	114.07	28.11		50.0	
10044-		Z	_100.00	115.43	28.70		50.0	
<u>CAA</u>	IS-91/EIA/TIA-553 FDD (FDMA, FM)	X	0.00	109.43	1.47	0.00	150.0	± 9.6 %
		Y	0.07	124.46	3.53		150.0	
10048-		Z	0.02	127.99	9.72	ļ	150.0	
CAA	DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24)	X	11.14	80.20	23.45	13.80	25.0	± 9.6 %
		Y	18.30	92.38	25.95		25.0	
10049-		Z	24.06	97.54	27.61		25.0	
CAA	DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12)	X	11.59	82.45	22.87	10.79	40.0	± 9.6 %
		Y	24.33	97.29	26.07		40.0	l
10056-		Z	43.63	107.25	29.02		40.0	
CAA	UMTS-TDD (TD-SCDMA, 1.28 Mcps)	X	12.19	83.90	23.66	9.03	50.0	± 9.6 %
		Y	17.95	93.68	25.97		50.0	
10058-		Z	27.06	101.31	28.42	<u> </u>	50.0	
DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)	X	13.09	91.03	28.81	6.55	100.0	±9.6 %
		Y	9.14	88.74	28.90	<u> </u>	100.0	
10059-		_ <u>Z</u>	10.48	93.03	30.88		100.0	
CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps)	X	1.79	70.10	18.30	0.61	110.0	± 9.6 %
		Y	1.40	_67.63	17.15	<u> </u>	110.0	
10060		Z	1.63	71.61	<u>1</u> 9.81		110.0	
10060- CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps)	×	100.00	127.35	32.46	1.30	110.0	± 9.6 %
		Υ	100.00	129.77	32.62		110.0	
		Z	100.00	138.31	36.39		110.0	

10061-	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11	x	21.19	104.59	28.93	2.04	110.0	± 9.6 %
CAB	Mbps)	Y	01-01-					2 9.0 %
			21.01	109.32	30.57		110.0	
10062-	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6	<u>Z</u>	100.00	139.60	38.91		110.0	
CAC	Mbps)	X	5.03	67.18	16.84	0.49	100.0	± 9.6 %
		Y	4.72	66.99	16.78		100.0	
10063-		Z	4.74	67.59	17.18		100.0	
CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps)	X	5.09	67.39	17.01	0.72	100.0	± 9.6 %
		Y	4.76	67.15	16.92		100.0	
10001		Z	4.78	67.75	17.32		100.0	
10064- CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps)	X	5.47	67.77	17.28	0.86	100.0	± 9.6 %
		Ý	5.05	67.45	17.17		100.0	<b>—</b> —
4000		Z	5.06	67.99	17.53		100.0	
10065- _CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps)	X	5.38	67.86	17.47	1.21	100.0	± 9.6 %
		Y	4.96	67.47	17.34		100.0	
1000		Z	4.96	68.01	17.71		100.0	+
10066- CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps)	X	5.46	68.05	17.72	1.46	100.0	± 9.6 %
		Ý	5.01	67.60	17.57		100.0	
		Z	5.01	68.13	17.93		100.0	
10067- CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps)	X	5.80	68.19	18.18	2.04	100.0	± 9.6 %
		Y	5.33	67.84	18.06		100.0	
		Z	5.33	68.37	18.40		100.0	
10068- CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps)	X	6.00	68.72	18.61	2.55	100.0	±9.6 %
		TY	5.43	68.06	18.37	·	100.0	
		Z	5.42	68.51	18.68		100.0	
10069- CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps)	X	6.05	68.52	18.74	2.67	100.0	± 9.6 %
		Y	5.52	68.08	18.58		100.0	
		Ż	5.50	68.55	18.89	<u> </u>	100.0	
10071- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps)	X	5.51	67.79	17.99	1.99	100.0	± 9.6 %
		Y	5.13	67.47	17.88		100.0	
		Z	5.14	67.98	18.23		100.0	
10072- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps)	X	5.64	68.50	18.36	2.30	100.0	± 9.6 %
		Y	5.17	67.98	18.20		100.0	
		Z	5.18	68.52	18.56		100.0	
10073- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps)	X	5.82	68.97	18.83	2.83	100.0	± 9.6 %
		Y	5.30	68.34	18.62		100.0	
		Z	5.31	68.89	18.99	<u> </u>	100.0	
10074- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps)	X	5.90	69.21	19.18	3.30	100.0	± 9.6 %
		Y	5.33	68.38	18.85		100.0	
		Z	5.35	68.94	19.21		100.0	
10075- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps)	X	6.17	70.00	19.82	3.82	90.0	± 9.6 %
		Y	5.45	68.75	19.29		90.0	
40070		Z	5.46	69.27	19.63		90.0	
10076- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps)	X	6.17	69.81	19.93	4.15	90.0	± 9.6 %
		Y	5.48	68.60	19.44		90.0	
400		Z	5.49	69.13	19.79		90.0	
10077- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps)	X	6.22	69.93	20.05	4.30	90.0	± 9.6 %
		Ý	5.52	68.70	19.55		90.0	
		Z	5.54	69.25	19.91		90.0	

10081- CAB	CDMA2000 (1xRTT, RC3)	x	1.22	70.18	15.99	0.00	150.0	± 9.6 %
	· · · · · · · · · · · · · · · · · · ·	Y	0.75	65.38	11.51		150.0	
		Z	4.57	89.94	21.35		150.0	
10082- CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4- DQPSK, Fullrate)	X	3.24	65.99	10.64	4,77	80.0	±9.6 %
		Y	1.56	61.71	6.84	-	80.0	
		Z	1.58	62.24	7.20		80.0	
10090- DAC	GPRS-FDD (TDMA, GMSK, TN 0-4)	X	19.21	92.51	24.34	6.56	60.0	± 9.6 %
		Y	100.00	115.60	28.62		60.0	
10097-		Z	100.00	117.45	29.44		60.0	
CAB	UMTS-FDD (HSDPA)	X	1.97	68.64	16.58	0.00	150.0	± 9.6 %
		Y	1.80	68.08	15.77		150.0	
10098-	UMTS-FDD (HSUPA, Subtest 2)	Z	2.29	73.12	18.59		150.0	
CAB		X	1.93	68.63	16.56	0.00	150.0	± 9.6 %
		Y	1.77	68.05	15.74		150.0	
10099-	EDGE-FDD (TDMA, 8PSK, TN 0-4)	Z	2.25	73.20	18.63	0.50	150.0	
DAC		X	19.33	97.96	32.93	9.56	60.0	±9.6 %
		Y_	21.25	107.21	37.08		_ 60.0	
10100-	LTE-FDD (SC-FDMA, 100% RB, 20	Z	29.69	117.12	40.65		60.0	
CAE	MHz, QPSK)	X	3.63	72.34	17.50	0.00	150.0	±9.6 %
		Y	3.12	70.54	16.77		150.0	
10101-		Z	3.66	74.09	18.73		150.0	
	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	×	3.54	68.64	16.46	0.00	150.0	± 9.6 %
		Y	3.22	67.66	16.03		150.0	
40 400		Z	3.38	69.19	17.04		150.0	
10102- CAE	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	X	3.63	68.48	16.50	0.00	150.0	± 9.6 %
		Y	3.32	67.62			150.0	
		Z	<u>3</u> .47	69.03	17.07		150.0	
10103- _CAF	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	X	9.60	77.98	20.88	3.98	65.0	±9.6 %
		Y	8.57	79.27	21.80		65.0	
		Z	9.60	82.02	23.04		65.0	
10104- CAF	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	X	9.69	77.23	21.47	3.98	65.0	± 9.6 %
		Ϋ́	8.23	77.25	21.84		65.0	
10105		Z	8.54	78.60	22.55		65.0	
10105- CAF	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	X	9.05	75.93	21.18	3.98	65.0	± 9.6 %
		Y	7.61	75.69	21.48		65.0	
10100		Z	7.84	76.85	22.11		65.0	
10108- CAF	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	X	3.21	71.41	17.30	0.00	150.0	± 9.6 %
		Y	2.73	69.90	16.65		150.0	-
40400		Z_	3.19	73.55	18.73		150.0	
10109- CAF	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	X	3.22	68.43	16.43	0.00	150.0	± 9.6 %
		_ Y	2.87	67.56	15.94		150.0	
40442		Z	3.05	69.41	17.13		150.0	
10110- CAF	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	X	2.65	70.36	17.02	0.00	150.0	± 9.6 %
		Y	2.21	69.13	16.28		150.0	
		Z	2.67	73.44	18.72	<u> </u>	150.0	
10111- CAF	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	X	2.92	68.88	16.78	0.00	150.0	± 9.6 %
		1				<u>├</u>	<u> </u>	<u> </u>
		Y	2.58	68.46	16.21		150.0	

10112-	LTE-FDD (SC-FDMA, 100% RB, 10	x	3.34	68.25	16.42	0.00	150.0	
CAF	MHz, 64-QAM)				10.42	0.00	150.0	±9.6%
		Y	2.99	67.54	15.99		150.0	<u>†                                    </u>
10113-	LTE-FDD (SC-FDMA, 100% RB, 5 MHz,	<u></u> _	3.16	69.26	17.10		150.0	
CAF	64-QAM)	X	3.07	68.84	16.83	0.00	150.0	± 9.6 %
		Y	2.74	68.60	16.35		150.0	<u> </u>
10114-	IEEE 802.11n (HT Greenfield, 13.5	Z	3.05	71.37	17.94		150.0	
CAC	Mbps, BPSK)	X	5.35	67.57	16.58	0.00	150.0	± 9.6 %
<u> </u>		Y	5.15	67.41	16.63		150.0	
10115-	IEEE 802.11n (HT Greenfield, 81 Mbps,	Z	5.16	67.92	16.99		150.0	
CAC	16-QAM)	X	5.82	68.09	16.83	0.00	150.0	± 9.6 %
		<u> </u>	5.43	67.52	16.70		150.0	
10116-		Z	5.42	67.96	17.01		150.0	<u> </u>
CAC	IEEE 802.11n (HT Greenfield, 135 Mbps, 64-QAM)	X	5.49	67.82	16.62	0.00	150.0	± 9.6 %
		Y	5.24	67.61	16.66		150.0	<u> </u>
10117-	IEEE 802.11n (HT Mixed, 13.5 Mbps,	Z	5.25	68.10	17.00		150.0	<u>├</u>
CAC	BPSK)	×	5.35	67.57	16.60	0.00	150.0	±9.6%
		Y	5.09	67.20	16.54		150.0	├ <b>-</b>
10118-		Z	<u>5.</u> 11	67.72	16.91		150.0	
CAC	IEEE 802.11n (HT Mixed, 81 Mbps, 16- QAM)	X	5.80	67.95	16.77	0.00	150.0	± 9.6 %
		Y	5.56	67.88	16.89		150.0	
10119-		Z	5.51	68.19	17.13		150.0	
	IEEE 802.11n (HT Mixed, 135 Mbps, 64- QAM)	X	5.44	67.73	16.59	0.00	150.0	± 9.6 %
	<u> </u>	Y	5.23	67.59	16.66		150.0	
10140-		Z	5.23	68.07	17.00		150.0	
CAE	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	X	3.69	68.48	16.43	0.00	150.0	± 9.6 %
		Y	3.35	67.62	16.03		150.0	<u> </u>
40444		Z	3.50	69.04	16.98		150.0	┝━━━╍━┩
10141- CAE	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	X	3.80	68.44	16.53	0.00	150.0	±9.6 %
		Y	3.48	67.71	16.21		150.0	
		Z	3.62	69.07	17.11		150.0	
10142- CAE	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	X	2.42	70.28	16.96	0.00	150.0	± 9.6 %
		Y	1.98	69.13	15.87		150.0	
		Z	2.62	74.97	18.94		150.0	
10143- CAE	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	X	2.82	69.59	16.86	0.00	150.0	± 9.6 %
		Y	2.44	69.14	15.79		150.0	
40444		Z	3.05	73.81	18.17		150.0	
10144- CAE	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	X	2.65	67.79	15.58	0.00	150.0	± 9.6 %
		Y	2.19	66.66	14.06		150.0	
4047-		Z	2.49	69.62	15.71		150.0	
10145- CAF	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	X	1.88	69.84	15.95	0.00	150.0	± 9.6 %
		Ý	1.09	64.21	10.81		150.0	
10110		Z	1.55	69.54	13.53	— …	150.0	
10146- CAF	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	X	5.08	78.70	19.31	0.00	150.0	± 9.6 %
		Y	2.13	67.99	12.61		150.0	
40447		Z	4.85	77.68	16.04		150.0	
10147-	LTE-FDD (SC-FDMA, 100% RB, 1.4	X	6.63	82.89	21.06	0.00	150.0	± 9.6 %
CAF	MHz, 64-QAM)							
CAF	MHz, 64-QAM)	Ŷ Z	2.80	71.43	14.29		150.0	

10149- CAE	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	x	3.23	68.49	16.47	0.00	150.0	±9.6 %
		Y	2.88	67.63	15.99		150.0	
		Z	3.06	69.48	17.18		150.0	
10150- CAE	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	х	3.34	68.30	16.46	0.00	150.0	± 9.6 %
		<u>Y</u>	3.00	67.60	16.04		150.0	
		Z	3.17	69.33	17.15		150.0	
10151- CAF	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	х	9.84	79.35	21.54	3.98	65.0	±9.6 %
		Y	9.60	82.68	23.15		65.0	
		Ζ	11.17	86.29	24.69		65.0	
10152- CAF	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	х	9.38	77.46	21.41	3.98	65.0	± 9.6 %
		Y	7.87	77.55	21.64		65.0	
		Ζ	8.30	79.24	22.48		65.0	
10153- CAF	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	х	9.69	78.02	21.96	3.98	65.0	± 9.6 %
		Y	8.35	78.61	22.44		65.0	
		Ζ	8.80	80.29	23.26		65.0	
10154- CAF	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	х	2.73	70.94	17.37	0.00	150.0	± 9.6 %
		Y	2.26	69.58	16.56		150.0	
		Ζ	2.76	74.09	19.07		150.0	
10155- CAF	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	Х	2.91	68.8 <u>ē</u>	16.78	0.00	150.0	± 9.6 %
		Y	2.59	68.48	16.23		150.0	
		Z	2.91	71.46	17.95		150.0	
10156- CAF	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	X	2.32	70.75	17.13	0.00	150.0	± 9.6 %
		Y	1.82	69.20	15.59		150.0	
		Z	2.67	76.62	19.28		150.0	
10157- CAF	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	X	2.51	68.55	15.88	0.00	150.0	± 9.6 %
		Y	2.02	67.19	14.01		150.0	
		Z	2.51	71.43	16.23		150.0	
10158- CAF	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	x	3.07	68.88	16.86	0.00	150.0	± 9.6 %
		Y	2.74	68.67	16.40		150.0	
		Z	3.06	71.46	18.00		150.0	
10159- CAF	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	x	2.63	68.95	16.16	0.00	150.0	± 9.6 %
		Y	2.12	67.60	14.28	<u> </u>	150.0	
		Z	2.66	72.05	16.56		150.0	
10160- CAE	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	X	3.07	69.70	16.85	0.00	150.0	± 9.6 %
		Y	2.79	69.30	16.59		150.0	<u> </u>
		Ż	3.11	72.09	18.25		150.0	
10161- CAE	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	X	3.23	68.15	16.42	0.00	150.0	± 9.6 %
		Y	2.89	<u>6</u> 7.55	15.96		150.0	
		Z	3.08	69.40	17.13		150.0	
10162- CAE	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	X	3.32	68.09	16.43	0.00	150.0	± 9.6 %
		Y	3.01	67.70	16.07		150.0	
		Z	3.19	69.52	17.22		150.0	
10166- CAF	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	×	4.36	71.31	20.07	3.01	150.0	± 9.6 %
		Y	3.63	70.37	19.86		150.0	
		Z	3.95	73.18	21.42		150.0	<u> </u>
10167- CAF	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	X	5.89	75.08	20.88	3.01	150.0	± 9.6 %
		Y	4.45	73.33	20.30	<u> </u>	150.0	1
			5.63			1-		1

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10168- CAF	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	X	6.40	76.88	21.92	3.01	150.0	± 9.6 %
		Y	5.01	75.97	21.82		150.0	<u>├ ──</u> ──-
		z	6.77	83.15	24.88	<u> </u>	150.0	<u> </u>
10169- CAE	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	X	4.60	75.35	21.65	3.01	150.0	± 9.6 %
		Y	2.97	69.56	19.58	<u> </u>	150.0	
		Z	3.41	73.71	21.83	<u> </u>	150.0	<u> </u>
10170- CAE	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	X	7.83	83.93	24.50	3.01	150.0	± 9.6 %
		Y	4.08	75.84	22.10		150.0	<u> </u>
		Z	6.92	87.94	27.06		150.0	<u></u>
10171- AAE	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	X	6.05	78.35	21.51	3.01	150.0	± 9.6 %
		Y	3.33	71.38	19.14		150.0	
40470		Z	4.75	79.49	22.76		150.0	
10172- CAF	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	×	32.12	106.34	32.04	6.02	65.0	± 9.6 %
		Y	25.48	111.02	34.77		65.0	
40470		Ż	100.00	141.62	43.22		65.0	
10173- CAF	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	X	26.36	98.72	28.41	6.02	65.0	± 9.6 %
		Y	<u>57.8</u> 7	120.75	35.39		65.0	
10174-		Z	100.00	131.52	37.94		65.0	
10174- _CAF	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	×	22.32	94.77	26.80	6.02	65.0	±9.6 %
		Ý	36.69	110.68	32.10		65.0	
40475		Z	100.00	129.19	36.70		65.0	
10175- CAF	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	X	4.51	74.86	21.35	3.01	150.0	± 9.6 %
		Y	2.93	69.23	19.32		150.0	
		Ž	3.36	73.27	21.52		150.0	·
10176- CAF	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	X	7.84	83.95	24.51	3.01	150.0	± 9.6 %
		Y	4.09	75.86	22.12		150.0	
		Ζ	6.94	87.99	27.08		150.0	
10177- CAH	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	X	4.57	75.10	21.48	3.01	150.0	± 9.6 %
		_Y	2.95	69.39	19.42		150.0	
		Ζ	3.39	73.47	21.63		150.0	
10178- CAF	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16- QAM)	X	7.66	83.48	24.31	3.01	150.0	± 9.6 %
		Y	4.04	75.62	21.99		150.0	
40470		Z	6.81	87.55	26.90		150.0	
10179- CAF	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	X	6.80	80.80	22.79	3.01	150.0	± 9.6 %
		Y	3.67	73.50	20.50		150.0	
40400		Z	5.74	83.57	24.78		150.0	
10180- CAF	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 64- QAM)	x	6.00	78.18	21.42	3.01	150.0	± 9.6 %
		Y	3.32	71.31	19.09		150.0	
40494		_Z [	4.73	79.37	22.69		150.0	
10181- CAE	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)		4.56	75.08	21.47	3.01	150.0	± 9.6 %
<u> </u>		<u>Y</u>	2.95	69.37	19.41		150.0	
40400		Z	3.38	73.45	21.62		150.0	
10182- CAE	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	×	7.65	83.46	24.30	3.01	150.0	±9.6 %
		Y	4.04	75.59	21.97		150.0	
40400		Z	6.79	87.50	26.88		150.0	
10183-		XT	E 00	78.15	21.41	3.01	150.0	± 9.6 %
AAD	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)		5.99	70.15	21.41	0.01	100.0	1 9.0 %
		Y Z	3.31 4.72	76.13 71.28 79.33	19.08		150.0	

10184- CAE	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	X	4.58	75.13	21.50	3.01	150.0	± 9.6 %
		Y	2.96	69.42	19.43		150.0	
	· · · · · · · · · · · · · · · · · · ·	z	3.40	73.51	21.65		150.0	
10185- CAE	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16- QAM)	X	7.69	83.54	24.34	3.01	150.0	± 9.6 %
		Y	4.06	75.67	22.01		150.0	-
		Z	6.84	87.64	26.93		150.0	
10186- AAE	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64- QAM)	×	6.02	78.23	21.44	3.01	150.0	± 9.6 %
		Y	3.33	71.36	19.12		150.0	
		Ζ	4.75	79.45	22.72		150.0	
10187- CAF	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	X	4.58	75.15	21.53	3.01	150.0	± 9.6 %
		Υ_	2.97	69.47	19.50		150.0	
		_ Z <sup>_</sup>	3.41	73.59	21.73		150.0	
10188- CAF	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	X	8.08	84.57	24.81	3.01	150.0	±9.6 %
		Y	<u>4.19</u>	76.40	_22.42		150.0	
		Z	7.29	89.05	27.55		150.0	
10189- _AAF	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	X	6.22	78.86	21.77	3.01	150.0	±9.6%
		Y	3.41	71.81	19.41		150.0	
		Z	4.95	80.26	23.14		150.0	
10193- CAC	IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK)	Х	4.78	66.90	16.38	0.00	150.0	± 9.6 %
		Y	4.50	66.72	16.26		150.0	
		Ζ	4.53	67.38	16.70		150.0	-
10194- CAC	IEEE 802.11n (HT Greenfield, 39 Mbps, 16-QAM)	X	5.00	67.31	16.48	0.00	150.0	± 9.6 %
		Y	4.67	67.04	16.39		150.0	
		Ζ	4.70	67.68	16.83	-	150.0	
10195- CAC	IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM)	х	5.04	67.29	16.47	0.00	150.0	± 9.6 %
		Y	4.71	67.07	16.41		150.0	
		Z	4.74	67.71	16.84		150.0	
10196- CAC	IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK)	X	4.82	67.02	16.42	0.00	150.0	± 9.6 %
		Y	4.50	66.78	16.28	† <b>-</b> -	150.0	
-		Z	4.53	67.44	16.72		150.0	
10197- CAC	IEEE 802.11n (HT Mixed, 39 Mbps, 16- QAM)	X	5.02	67.32	16.48	0.00	150.0	± 9.6 %
		Y	4.69	67.06	16.41		150.0	
		Z	4.71	67.70	16.84		150.0	
10198- _ <u>C</u> AC	IEEE 802.11n (HT Mixed, 65 Mbps, 64- QAM)	X	5.05	67.30	16.47	0.00	150.0	±9.6 %
		Y	4.71	67.09	16.42		150.0	
		Z	4.74	67.73	16.86		150.0	_
10219- _CAC	IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK)	X	4.77	67.05	16.40	0.00	150.0	± 9.6 %
<u> </u>		Y	4.45	66.80	16.24		150.0	
		Z	4.48	67.48	16.70		150.0	
10220- CAC	IEEE 802.11n (HT Mixed, 43.3 Mbps, 16- QAM)	x	5.03	67.33	16.49	0.00	150.0	± 9.6 %
		Y	4.68	67.03	16.40		150.0	
1000		Z	4.70	67.66	16.83		150.0	
10221- 	IEEE 802.11n (HT Mixed, 72.2 Mbps, 64- QAM)	X	5.05	67.25	16.47	0.00	150.0	± 9.6 %
<u> </u>		Υ	4.72	67.02	16.41		150.0	
		Z	4.74	67.64	16.83		_ 150.0	-
10222- CAC	IEEE 802.11n (HT Mixed, 15 Mbps, BPSK)	X	5.34	67.61	16.61	0.00	150.0	± 9.6 %
		Y	5.07	67.21	16.54		150.0	· · ·
		Z	5.08	67.73	16.91	1	150.0	· · · · · · · · · · · · · · · · · · ·

10223- CAC	IEEE 802.11n (HT Mixed, 90 Mbps, 16- QAM)	X	5.70	67.79	16.71	0.00	150.0	± 9.6 %
		Y Z	5.40	67.54	16.73		150.0	
10224-	IEEE 802.11n (HT Mixed, 150 Mbps, 64-	$\frac{z}{x}$	5.40	67.99	17.05		150.0	
CAC	QAM)		5.41	67.78	16.61	0.00	150.0	± 9.6 %
		Y	5.11	67.32	16.52		150.0	
10225-		Z	5.13	67.85	16.89		150.0	
	UMTS-FDD (HSPA+)		3.05	66.58	15.96	0.00	150.0	± 9.6 %
		Y	2.76	66.27	15.37		150.0	
10226-		Z	2.88	67.78	16.33		150.0	
	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	×	27.23	99.40	28.69	6.02	65.0	± 9.6 %
		Y	65.75	123.32	36.14		65.0	
10227-		Z	100.00	131.74	38.09		65.0	
<u>CAA</u>	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	X	22.47	95.04	26.98	6.02	65.0	± 9.6 %
<u>-</u>		Ý	52.29	117.1	33.90		65.0	
1005-		Z	100.00	129.21	36.75		65.0	
10228- CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	X	31.92	106.77	32,30	6.02	65.0	± 9.6 %
L		Y	44.47	122.64	38.05		65.0	<u> </u>
		Z	100.00	141.33	43.09		65.0	
10229- CAC	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16- QAM)	X	26.35	98.70	28.41	6.02	65.0	± 9.6 %
		Y	58.00	120.78	35.41		65.0	
		Z	100.00	131.51	37.95		65.0	
10230- CAC	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64- QAM)	X	21.85	94.47	26.74	6.02	65.0	± 9.6 %
		Y	46.94	115.04	33.28		65.0	— <b>—</b> —
		Z	100.00	129.06	36.65		65.0	
10231- CAC	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	X	30.80	105.98	32.00	6.02	65.0	± 9.6 %
		Y	40.17	120.41	37.37		65.0	
		Z	100.00	141 17	42.97		65.0	
10232- CAE	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16- QAM)	x	26.35	98.70	28.41	6.02	65.0	± 9.6 %
		Y	58.02	120.80	35.41		65.0	
		Z	100.00	131.52	37.95	·	65.0	
10233- CAE	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64- QAM)	X	21.87	94.50	26.75	6.02	65.0 65.0	±9.6 %
		Y	46.92	115.05	33.29		65.0	
		Z	100.00	129.08	36.66	<u> </u>	65.0	
10234- CAE	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	X	29.56	105.04	31.64	6.02	65.0	± 9.6 %
		Y	36.79	118.36	36.70		65.0	
		Z	100.00	140.82	42.77		65.0	
10235- 	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	X	26.39	98.75	28.42	6.02	65.0	± 9.6 %
		Y	58.45	120.95	35.45		65.0	
		Z	100.00	131.54	37.96		65.0	
10236- CAE	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	X	21.98	94.57	26.77	6.02	65.0	±9.6 %
		Y	47.66	115.29	33.34		65.0	
40007		Z	100.00	129.02	36.63		65.0	
10237- _CAE	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	X	31.07	106.17	32.05	6.02	65.0	± 9.6 %
		Y	40.73	120.72	37.45		65.0	
		Z	100.00	141.20	42.98		65.0	
10238- CAE	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	X	26.36	98.72	28.41	6.02	65.0	± 9.6 %
		Y	58.07	120.83	35.42		65.0	
		Z						

10000								
10239- CAE	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	Х	21.89	94.52	26.76	6.02	65.0	± 9.6 %
		Y	46.90	115.06	33.29		65.0	
	· · · · ·	Ż	100.00	129.10	36.67		65.0	
10240- CAE	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	×	31.00	106.13	32.04	6.02	65.0	±9.6 %
		Y	40.53	120.63	37.43		65.0	
_		Z	100.00	141.21	42.99		65.0	
10241- CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	Х	15.20	88.40	27.99	6.98	65.0	± 9.6 %
		Y	11.69	87.73	28.05		65.0	
_		Z	16.07	96.04	31.20		65.0	
10242- CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	×	14.49	87.29	27.50	6.98	65.0	±9.6 %
		Y	10.22	84.78	26.83		65.0	
		Z	15.79	95.59	30.95		65.0	
10243- CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	×	12.40	86.09	27.90	6.98	65.0	± 9.6 %
		Y	<u>8.19</u>	81.47	26.43		65.0	
		Z	9.24	85.48	28.29		65.0	
10244- CAC	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	×	11.54	82.02	22.22	3.98	65.0	±9.6 %
		Y	9.48	81.46	20.89		65.0	
		Z	12.71	86.40	22.44		65.0	
10245- CAC	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	X	11.44	81.67	22.06	3.98	65.0	± 9.6 %
		Y	9.07	80.51	20.47		65.0	
		Z	<u>1</u> 1.70	84.81	21.83		65.0	
10246- CAC	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	X	10.31	82.48	22.10	3.98	65.0	±9.6 %
		Y	9.63	84.19	21.69		65.0	
		Z	14.42	91.22	24.11		65.0	
10247- CAE	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	X	9.10	78.58	21.15	3.98	65.0	± 9.6 %
		Y	7.30	77.79	20.02		65.0	
		Z	8.19	80.29	21.02		65.0	
10248- _CAE	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	X	9.13	78.20	21.01	3.98	65.0	± 9.6 %
		Y	7.16	77.02	19.70		65.0	
		Z	7.86	79.17	20.57		65.0	
10249- CAE	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	X	10.61	82.90	22.61	3.98	65.0	± 9.6 %
		Y	11.92	88.38	24.07		65.0	
		Z	18.47	96.60	26.87		65.0	
10250- CAE	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	X	9.67	79.53	22.36	3.98	65.0	± 9.6 %
		Y	8.55	80.92	22.90		65.0	
		Z	9.43	83.45	23.99		65.0	
10251- CA <u>E</u>	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	×	9.25	77.73	21.44	3.98	65.0	± 9.6 %
<u> </u>		_Y	7.81	78.08	21.44		65.0	
10050		Z	8.39	80.07	22.34		65.0	
10252- CAE	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	X	10.35	81.73	22.54	3.98	65.0	± 9.6 %
		Y	11.25	87.35	24.73		65.0	
10050		Z	14.90	93.35	26.99	L .	65.0	
10253- CAE	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	×	9.18	77.01	21.32	3.98	65.0	± 9.6 %
	<u> </u>	Y	7.67	76.96	21.38		65.0	
400-54		Z	8.07	78.58	_22.18		65.0	
10254- CAE	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	X	9.51	77.59	21.83	3.98	65.0	± 9.6 %
		Y	8.12	77.94	22.10		65.0	
		Z	8.53	79.55	22.87		65.0	

10255- CAE	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	X	9.66	79.25	21.74	3.98	65.0	± 9.6 %
		+ <sub>Y</sub> -	9.21					
		Ż	10.61	82.22 85.65	23.19		65.0	┿───
10256- CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	T	11.12	81.22	21.37	3.98	<u>65.0</u> 65.0	± 9.6 %
		Υ Υ	7.30	76.74	18.05	<u> </u>	65.0	+
		Z	8.86	79.77	18.95		65.0	<u> </u>
10257- CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	X	11.03	80.77	21.15	3.98	65.0	± 9.6 %
		Y	6.90	75.55	17.47	<del> </del>	65.0	
10258-		Z	8.00	77.93	18.14		65.0	
CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	X	10.01	81.84	21.51	3.98	65.0	± 9.6 %
		<u> </u>	6.80	78.08	18.61		65.0	
10259-		Z	8.78	82.35	20.16		65.0	
CAC	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	X	9.31	78.82	21.54	3.98	65.0	± 9.6 %
		<u>Y</u>	7.80	78.97	21.06		65.0	
10260-	LTE-TDD (SC-FDMA, 100% RB, 3 MHz,	Z	8.71	81.52	22.11		65.0	<u> </u>
CAC	64-QAM)	X	9.35	78.65	21.50	3.98	65.0	± 9.6 %
		Y	7 74	78.54	20.90		65.0	<b></b>
10261-	LTE-TDD (SC-FDMA, 100% RB, 3 MHz,	Ž	8.53	80.86	21.86		65.0	
CAC	QPSK)	X	10.28	82.11	22.51	3.98	65.0	± 9.6 %
		Y	10.92	86.93	24.01		65.0	
10262-		Z	15.27	93.62	26.42		65.0	<del> </del>
CAE	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	X	9.66	79.50	22.33	3.98	65.0	± 9.6 %
	+	Y	<u> </u>	80.85	22.85		65.0	
10263-		Z	9.40	83.37	23.94		65.0	· <b>j _</b> ·
CAE	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	X	9.25	77.74	21.45	3.98	65.0	± 9.6 %
		Y	7.80	78.07	21.44		65.0	
10264-	LTE-TDD (SC-FDMA, 100% RB, 5 MHz,	Ž	8.37	80.04	22.33		65.0	
CAE	QPSK)	X	10.31	81.65	22.49	3.98	65.0	± 9.6 %
		<u>Y</u>	11.12	87.10	24.62		65.0	
10265-	LTE-TDD (SC-FDMA, 100% RB, 10	Z	14.67	93.03	26.86		65.0	
CAE	MHz, <u>16-QAM</u>	X	9.37	77.47	21.42	3.98	65.0	±9.6%
		<u>Y</u>	7.87	77.56	21.65		65.0	
10266- CAE	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	Z X	<u>8.30</u> 9.69	79.25 78.02	22.48 21.95	3.98	65.0 65.0	± 9.6 %
		Y	8.35	78.00				
		T Z	8.79	78.60	22.43		65.0	
10267- CAE	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	X	9.83	80.28 79.33	<u>23.25</u> 21.53	3.98	65.0 65.0	± 9.6 %
		Y	9.57	82.63	23.13		65.0	· · · · · · · · · · · · · · · · · · ·
		z	11.14	86.22	24.67		65.0	
10268- CAE	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	x	9.75	76.94	21.50	3.98	65.0 65.0	± 9.6 %
		Ý	8.31	76.97	21.85		65.0	
0000		Z	8.58	78.21	22.50		65.0	
10269- DAE	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	X	9.68	76.63	21.46	3.98	65.0	± 9.6 %
		Y	8.23	76.50	21.72		65.0	
0070		Z	8.46	77.65	22.33		65.0	
10270- CAE	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	X	9.55	77.46	20.93	3.98	65.0	± 9.6 %
		Y	8.64	78.97	24.02			
	······	z	0.04	10.91	21.93		65.0	

10274-	UMTS-FDD (HSUPA, Subtest 5, 3GPP	x	2.73	66.78	15.78	0.00	150.0	±9.6 %
CAB	Rel8.10)							
		Y	2.55	66.65	15.27		150.0	
		Z	2.75	68.72	16.54		150.0	
10275- CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rei8.4)	×	1.87	69.90	16.79	0.00	150.0	±9.6 %
		Y	1.59	68.43	15.65		150.0	
		Z	2.20	75.02	19.24		150.0	
10277- CAA	PHS (QPSK)	x	7.66	72.68	16.62	9.03	50.0	± 9.6 %
		Y	4.18	66.19	11.16		50.0	
		Ζ	4.13	66.37	11.19		50.0	
10278- CAA	PHS (QPSK, BW 884MHz, Rolloff 0.5)	×	10.94	81.02	21.98	9.03	50.0	± 9.6 %
		Y	7.49	76.58	18.26		50.0	
		Z	7.86	77.61	18.61		50.0	
10279- CAA	PHS (QPSK, BW 884MHz, Rolloff 0.38)	х	11.14	81.24	22.06	9.03	50.0	± 9.6 %
		Y	7.62	76.77	18.37		50.0	
		Z	7.98	77.79	18.71		50.0	
10290- AAB	CDMA2000, RC1, SO55, Full Rate	X	2.02	72.05	16.87	0.00	150.0	± 9.6 %
		Υ	1.33	68.08	13.10		150.0	
		Ζ	5.38	87.48	20.69		150.0	
10291- AAB	CDMA2000, RC3, SO55, Full Rate	х	1.18	69.79	15.81	0.00	150.0	± 9.6 %
		Y	0.73	65.15	11.37		150.0	
		_Z	3.84	87.72	20.65		150.0	
10292- AAB	CDMA2000, RC3, SO32, Full Rate	х	1.55	75.05	18.57	0.00	150.0	± 9.6 %
		Y	1.00	69.92	14.02		150.0	
		Ż	100.00	134.47	33.06		150.0	
10293- AAB	CDMA2000, RC3, SO3, Full Rate	Х	2.21	80.93	21.38	0.00	150.0	± 9.6 %
		Y	2.08	79.76	18.45		150.0	
-		Z	100.00	<u>139</u> .87	35.55		150.0	
10295- AAB	CDMA2000, RC1, SO3, 1/8th Rate 25 fr.	х	11.13	82.58	24.08	9.03	50.0	± 9.6 %
		Y	14.34	89.67	25.47		50.0	
		Ζ	17.18	93.30	26.68		50.0	-
10297- AAD	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	X	3.22	71.51	17.36	0.00	150.0	± 9.6 %
		Y	2.74	70.01	16.73		150.0	
		Z	3.22	73.71	18.81		150.0	
10298- AAD	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	×	2.12	70.61	16.68	0.00	150.0	± 9.6 %
		Y	1.48	67.44	13.59		150.0	
		Z	2.54	76.34	17.79		150.0	
10299- _AAD	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	X	4.96	77.74	19.43	0.00	150.0	± 9.6 %
		Y	<u>3.19</u>	73.05	15.98		150.0	
		Ζ	13.80	92.66	22.38		150.0	
10300- AAD	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	X	3.67	72.02	16.38	0.00	150.0	± 9.6 %
		Y	2.03	66.12	12.02		150.0	
		Z	2.70	70.04	13.54		150.0	
10301- <u>A</u> AA	IEEE 802.16e WIMAX (29:18, 5ms, 10MHz, QPSK, PUSC)	X	6.27	69.26	19.45	4.17	80.0	± 9.6 %
		Y	5.47	68.28	18.78		80.0	
		Z	5.65	69.45	19.41		80.0	
10302- AAA	IEEE 802.16e WIMAX (29:18, 5ms, 10MHz, QPSK, PUSC, 3 CTRL symbols)	×	6.79	69.98	20.24	4.96	80.0	± 9.6 %
		Ŷ	5.81	68.13	19.08		80.0	

10303- AAA	IEEE 802.16e WiMAX (31:15, 5ms, 10MHz, 64QAM, PUSC)	X	6.75	70.41	20.49	4.96	80.0	± 9.6 %
	IUMIHZ, 64QAM, PUSC)	<u> </u>		<u> </u>				
	<u> </u>	Y	5.62	68.04	19.04	<u> </u>	80.0	
10304-	IEEE 802.16e WIMAX (29:18, 5ms,	Z	5.78	69.30	19.73	<u> </u>	80.0	
AAA	10MHz, 64QAM, PUSC)		6.25	69.31	19.47	4.17	80.0	±9.6 %
<u> </u>		Y	5.32	67.54	18.34		80.0	
10305-	IEEE 802.16e WiMAX (31:15, 10ms,	Z	5.48	68.78	19.03		80.0	
AAA	10MHz, 64QAM, PUSC, 15 symbols)	X	9.38	80.55	25.65	6.02	50.0	±9.6 %
		<u>Y</u>	7.34	78.11	24.16		_ 50.0	
10306-	IEEE 802.16e WIMAX (29:18, 10ms,	Z	8.77	82.65	26.09		50.0	
AAA	10MHz, 64QAM, PUSC, 18 symbols)	Y	7.69	74.65	23.27	6.02	50.0	± 9.6 %
	<u> </u>		6.25	72.73	22.09		50.0	
10307-	IEEE 802.16e WiMAX (29:18, 10ms,	Z	6.15	72.04	21.51		50.0	
ÂĂĂĂ	10MHz, QPSK, PUSC, 18 symbols)		8.00	75.81	23.56	6.02	50.0	± 9.6 %
	······	Y	6.39	73.69	22.36	<u> </u>	50.0	
10308-	IEEE 802.16e WIMAX (29:18, 10ms,	Z	6.94	76.20	23.58	L	50.0	
AAA	10MHz, 16QAM, PUSC)		8.15	76.48	23.87	6.02	50.0	± 9.6 %
		Y	6.50	74.34	22.68		50.0	
10309-	IEEE 802.16e WIMAX (29:18, 10ms,	Z	7.15	77.13	24.02	L	50.0	
AAA	10MHz, 16QAM, AMC 2x3, 18 symbols)		7.81	74.87	23.37	6.02	50.0	± 9.6 %
		Y	6.35	73.04	22.27		50.0	
10310-	IEEE 802.16e WIMAX (29:18, 10ms,	Z	6.23	72.31	21.68	<u> </u>	50.0	
<u>A</u> AA	10MHz, QPSK, AMC 2x3, 18 symbols)	X	7.77	75.02	23.32	6.02	50.0	± 9.6 %
		Y	6.30	73.14	22.20		50.0	
10311-		Z	6.80	75.54	23.39		50.0	
AAD	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	X	3.59	70.81	17.00	0.00	150.0	± 9.6 %
		Ŷ	3.09	69.16	16.34		150.0	
10313-		Z	3.58	72.40	18.16		150.0	
<u>AAA</u>	iDEN 1:3	X	8.18	76.78	18.18	6.99	70.0	± 9.6 %
		Y	7.34	78.70	18.34		70.0	
10314-		Z	11.68	86.01	21.10		70.0	
AAA	iDEN 1:6	X	10.72	82.29	22.34	10.00	30.0	± 9.6 %
		Y	12.91	90.12	24.76		30.0	
10315-		Z	26.29	102.62	28.75		30.0	
AAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 96pc duty cycle)	X	1.26	66.14	16.58	0.17	150.0	± 9.6 %
	<u> </u>	<u>Y</u>	1.09	64.73	15.70		150.0	
10316-	IEEE 802.11g WiFi 2.4 GHz (ERP-	Z	1.22	67.80	18.09		150.0	
AAB	OFDM, 6 Mbps, 96pc duty cycle)	X	4.91	67.12	16.58	0.17	150.0	±9.6 %
	<u> </u>	Y	4.60	66.92	16.50		150.0	
10317-		<u></u>	4.62	67.56	1 <u>6.</u> 93		150.0	
AAC	IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle)	X	4.91	67.12	16.58	0.17	150.0	± 9.6 %
	· <u> </u>	Ŷ	4.60	66.92	16.50		150.0	
10400-	1555 802 1100 MUST (2014) - 04 0411	Z	4.62	67.56	<u>16</u> .93		150.0	
AAD	IEEE 802.11ac WiFi (20MHz, 64-QAM, 99pc duty cycle)	X	5.03	67.36	16.46	0.00	150.0	± 9.6 %
<u> </u>	<u></u>	Y	4.67	67.11	16.40		150.0	
10401-		Z	4.69	67.76	16.84		150.0	
10401- AAD	IEEE 802.11ac WiFi (40MHz, 64-QAM, 99pc duty cycle)	X	5.61	67.39	16.50	0.00	150.0	± 9.6 %
		Y	5.45	67.52	16.70		150.0	
		Z	5.44	67.97	17.02		150.0	

10402- AAD	IEEE 802.11ac WiFi (80MHz, 64-QAM, 99pc duty cycle)	Х	5.92	68.01	16.64	0.00	150.0	±9.6 %
		Y	5.63	67.57	16.57		150.0	
		Z	5.64	68.02	16.88		150.0	
10403- AAB	CDMA2000 (1xEV-DO, Rev. 0)	X	2.02	72.05	16.87	0.00	115.0	± 9.6 %
		Y	1.33	68.08	13.10		115.0	
		Ζ	5.38	87.48	20.69	1	115.0	
10404- AAB	CDMA2000 (1xEV-DO, Rev. A)	X	2.02	72.05	16.87	0.00	115.0	± 9.6 %
		Y	1.33	68.08	13.10		115.0	
		Z	5.38	87.48	_20.69		115.0	
10406- AAB	CDMA2000, RC3, SO32, SCH0, Full Rate	X	100.00	123.59	32.30	0.00	100.0	± 9.6 %
		Y	100.00	127.86	33.09		100.0	
40440		Z	100.00	123.04	30.66		100.0	
10410- AAE	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9, Subframe Conf=4)	X	100.00	117.66	30.25	3.23	80.0	± 9.6 %
		Y	100.00	123.71	31.68		80.0	
101/-		Z	_100.00	125.06	32.10		80.0	
10415- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle)	×	1.03	63.82	15.39	0.00	150.0	± 9.6 %
		Y	0.95	63.14	_ 14.76		150.0	
		Z	1.05	65.76	16.99		150.0	
10416- AAA	IEEE 802.11g WiFi 2.4 GHz (ERP- OFDM, 6 Mbps, 99pc duty cycle)	x	4.78	66.90	16.39	0.00	150.0	±9.6 %
		Y	4.50	66.77	16.34		150.0	
		Z	4.53	67.42	<u>16.78</u>		150.0	
10417- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 99pc duty cycle)	X	4.78	66.90	16.39	0.00	150.0	±9.6 %
_		Y	4.50	66.77	16.34		150.0	
		Z	4.53	67.42	16.78		150.0	
10418- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 99pc duty cycle, Long preambule)	X	4.76	67.04	16.38	0.00	150.0	± 9.6 %
. <u>.</u>		Y	4.49	66.93	16.36		150.0	
		Z	4.53	67.63	16.83		150.0	
10419- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 99pc duty cycle, Short preambule)	X	4.79	67.00	16.40	0.00	150.0	± 9.6 %
		Y	4.51	66.88	16.36		150.0	
		Z	4.55	67.55	16.82		150.0	
10422- AAB	IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK)	X	4.92	67.01	16.41	0.00	150.0	± 9.6 %
		_ Y	4.63	66.87	16.38		150.0	
40405		Z	4.66	67.51	16.81		150.0	
10423- <u>AA</u> B	IEEE 802.11n (HT Greenfield, 43.3 Mbps, 16-QAM)	×	5.17	67.45	16.57	0.00	150.0	±9.6 %
	<u> </u>	Y_	4.80	67.19	16.49		150.0	
40404		Z	4.81	67.82	_ 16.91	<u> </u>	150.0	
10424- AAB	IEEE 802.11n (HT Greenfield, 72.2 Mbps, 64-QAM)	X	5.06	67.37	16.53	0.00	150.0	±9.6%
	+	Y	4.72	67.14	16.46		150.0	
10425- AAB	IEEE 802.11n (HT Greenfield, 15 Mbps, BPSK)	Z X	<u>4.74</u> 5.61	67.79 67.73	16.90 16.66	0.00	150.0 150.0	± 9.6 %
		Y	5.37	67 50	40.70	<u> </u>	450.0	
		Z		67.58	16.73		150.0	
10426-	IEEE 802.11n (HT Greenfield, 90 Mbps,		5.35	67.97	17.02		150.0	
_AAB	16-QAM)	X	5.63	67.77	16.67	0.00	150.0	± 9.6 %
	<u> </u>	<u>Y</u>	5.40	67.71	16.79	<u> </u>	150.0	
Ĺ		Z	5.39	68.12	17.09		150.0	

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10427- AAB	IEEE 802.11n (HT Greenfield, 150 Mbps, 64-QAM)	X	5.66	67.84	16.70	0.00	150.0	± 9.6 %
		Y	5.39	67.59	16.72		150.0	<u>+</u>
10430-		Z	5.38	68.01	17.03		150.0	
AAC	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1)	X	4.51	70.10	18.24	0.00	150.0	± 9.6 %
		<u> </u>	4.24	71.22	18.35		150.0	T
10431-		<u></u>	4.53	73.23	19.40		150.0	
	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1)	×	4.58	67.49	16.53	0.00	150.0	± 9.6 %
		Y	4.18	67.35	16.31		150.0	
10432-		Z	4.23	68.26	16.89		150.0	<u> </u>
AAC	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1)	X	4.85	67.42	16.52	0.00	150.0	± 9.6 %
	<u> </u>	Y	4,48	67.20	16.40		150.0	+
10433-		Z	4.52	67.94	16.89		150.0	1
AAC	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1)	X	5.09	67.45	16.57	0.00	150.0	± 9.6 %
		Y	4.73	67.17	16.48		150.0	
10434-	W-CDMA (PS Tool Madel 4 Of DE ST	Z	4.75	67.82	16.92		150.0	
AAA	W-CDMA (BS Test Model 1, 64 DPCH)	X	4.59	70.69	18.26	0.00	150.0	± 9.6 %
<u> </u>		Y	4.35	72.09	18.28		150.0	†
10435-		Z	4.80	74.69	19.54		150.0	
	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	×	100.00	117.55	30.20	3.23	80.0	± 9.6 %
		Y	100.00	123.49	31.58		80.0	·
10447-		Z	100.00	124.81	31.99		80.0	
	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	X	3.92	67.59	16.23	0.00	150.0	± 9.6 %
		Y	3.45	67.33	15.52	<u> </u>	150.0	
10110		Z	3.58	68.73	16.33		150.0	
10448- AAC	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, Clippin 44%)	X	4.37	67.26	16.39	0.00	150.0	± 9.6 %
		Y	4.02	67.12	16.17	·	150.0	
10449-		Z	4.08	68.05	16.77		150.0	
AAC	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1, Cliping 44%)	X	4.61	67.24	16.43	0.00	150.0	± 9.6 %
		Y	4.29	67.02	16.30		150.0	
10450		Z	4.34	67.79	16.81		150.0	
10450- AAC	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	X	4.77	67.19	16.43	0.00	150.0	± 9.6 %
		Y	4.49	66.93	16.33		150.0	
40454		Z	4.53	67.61	16.79		150.0	
10451- AAA	W-CDMA (BS Test Model 1, 64 DPCH, Clipping 44%)	X	3.88	67.92	16.10	0.00	150.0	± 9.6 %
	<u> </u>	_Y	3.33	67.43	15.05		150.0	<u>-</u> -
10456-		_Z	3.49	69.03	15.93		150.0	·
AAB	IEEE 802.11ac WiFi (160MHz, 64-QAM, 99pc duty cycle)	X	6.46	68.41	16.85	0.00	150.0	± 9.6 %
		Y	6.26	68.12	16.87		150.0	
10457-		Z	6.25	68.49	17.13		150.0	
AAA	UMTS-FDD (DC-HSDPA)	X	3.90	65.59	16.17	0.00	150.0	±9.6 %
		Ŷ	3.76	65.38	16.04		150.0	
10458-		Z	3.79	66.03	16.51		150.0	
10458- AAA	CDMA2000 (1xEV-DO, Rev. B, 2 carriers)	×	4.07	69.24	17.56	0.00	150.0	± 9.6 %
		Y	3.96	71.20	17.54		150.0	
10450		Z	4.42	73.99	18.87		150.0	
10459- AAA	CDMA2000 (1xEV-DO, Rev. B, 3 carriers)	X	5.22	66.85	17.78	0.00	150.0	± 9.6 %
		14						
	<u> </u>	Y Z	5.09	68.80	18.35		150.0	

10460-	UMTS-FDD (WCDMA, AMR)	Х	1.09	71.95	18.33	0.00	150.0	± 9.6 %
AAA					10.50	·	1000	
		_Y	0.90	69.62	16.52 25.89		150.0 150.0	
10461- AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	Z X	2.47 100.00	89.66 119.29	25.89 31.07	3.29	80.0	± 9.6 %
,		Y	100.00	129.27	34.27		80.0	
		Z	100.00	135.07	36.63		80.0	
10462- AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	Х	100.00	109.03	26.12	3.23	80.0	± 9.6 %
		Y	100.00	110.72	25.52		80.0	
		Ζ	100.00	111.86	25.68		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	107.11	25.19	3.23	80.0	±9.6 %
		Y	100.00	106.80	23.66		80.0	
10464- AAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	Z X	100.00 100.00	106.90 117.90	23.37 30.29	3.23	80.0 80.0	± 9.6 %
AAD	QFSR, 0L Subiranie=2,3,4,7,6,8)	Y	100.00	127.01	33.06		80.0	
		Z	100.00	132.87	35.42		80.0	
10465- AAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	×	100.00	108.70	25.94	3.23	80.0	±9.6 %
		Y	100.00	110.09	25.21		80.0	
		Z	100.00	111.09	25.32		80.0	
10466- AAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	×	100.00	106.79	25.02	3.23	80.0	± 9.6 %
		Y	100.00	106.23	23.39		80.0	
		Z	100.00	106.21	23.05		80.0	
10467- AAD	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	118.04	30.36	3.23	80.0	±9.6%
	· · · · · · · · · · · · · · · · · · ·	Y	100.00	127.30	33.19		80.0	
10468- AAD	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	Z X	100.00 100.00	133.22 108.80	35.58 25.99	3.23	80.0 80.0	± 9.6 %
	QAM, OL Subhame=2,0,4,7,6,8)	Y	100.00	110.30	25.31		80.0	
		Ż	100.00	111.37	25.44		80.0	
10469- AAD	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	×	100.00	106.79	25.02	3.23	80.0	± 9.6 %
		Y	100.00	106.25	23.40		80.0	
		Z	100.00	106.24	23.06		80.0	
10470- AAD	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	118.06	30.36	3.23	80.0	± 9.6 %
		Y	100.00	127.34	33.19		80.0	
10471- AAD	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	Z X	100.00	133.28 108.76	35.59 25.97	3.23	80.0 80.0	± 9.6 %
	<u></u>	Y	100.00	110.24	25.28		80.0	+
		z	100.00	111.29	25.40	1	80.0	
10472- AAD	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	106.76	25.00	3.23	80.0	± 9.6 %
		Y	100.00	106.18	23.36		80.0	
		Z	100.00	106.15	23.01		80.0	
10473- AAD	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	118.04	30.35	3.23	80.0	± 9.6 %
<u> </u>		<u>Y</u>	100.00	127.30	33.18	ļ	80.0	
10474		Z	100.00	133.25	35.58		80.0	1000
10474- AAD	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	108.77	25.98	3.23	80.0	± 9.6 %
		Y Z	100.00	110.25	25.28		80.0	
10475- AAD	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	111.30	25.41	3.23	80.0 80.0	± 9.6 %
		Y	100.00	106.20	23.36	1	80.0	-
-		†ż	100.00	106.17	23.02	+	80.0	+

10477-	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-	X	100.00	108.66	25.92	3.23	80.0	
	QAM, UL Subframe=2,3,4,7,8,9)	$+_{Y}$				0.20		± 9.6 %
		<u>z</u>	100.00	110.04	25.18	<u> </u>	80.0	
10478-	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-	$\frac{2}{x}$	100.00	111.05	25.29		80.0	
AAE	QAM, UL Subframe=2,3,4,7,8,9)		100.00	106.74	24.99	3.23	80.0	± 9.6 %
		$\perp \underline{Y}$	100.00	106.13	23.33		80.0	
10479-	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz,	Z	100.00	106.08	22.98		80.0	
AAA	QPSK, UL Subframe=2,3,4,7,8,9)	X	17.17	94.88	26.67	3.23	80.0	± 9.6 %
		Y	100.00	126.13	34.20		80.0	
10480-	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz,	Z	100.00	128.86	35.27		80.0	
AAA	16-QAM, UL Subframe=2,3,4,7,8,9)	X	18.02	90.95	24.20	3.23	80.0	± 9.6 %
<u> </u>		Y	100.00	116.06	29,45		80.0	†
10481-	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz,	Z	100.00	117.09	29.64		80.0	<u> </u>
AAA	64-QAM, UL Subframe=2,3,4,7,8,9)	X	16.69	89.16	23.39	3.23	80.0	± 9.6 %
		Y	78.52	110.97	27.74		80.0	·
10482-	LTE-TDD (SC-FDMA, 50% RB, 3 MHz,	Z	100.00	114.83	28.52		80.0	<u>†                                    </u>
AAB	QPSK, UL Subframe=2,3,4,7,8,9)	X	8.60	82.86	21.58	2.23	80.0	± 9.6 %
┝╼────		<u>Y</u>	6.37	80.68	19.69		80.0	<u> </u>
10483-	LTE-TDD (SC-FDMA, 50% RB, 3 MHz,	Z	52.06	110.60	28.35		80.0	† <b></b>
AAB	16-QAM, UL Subframe=2,3,4,7,8,9)	X	12.06	85.41	22.66	2.23	80.0	± 9.6 %
		<u>Y</u>	17.37	91.48	23.08		80.0	
10484-	I TE TOD (OC FOMA FOR ON TO	Z	100.00	115.48	29.12		80.0	+
AAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	11.38	84.32	22.32	2.23	80.0	± 9.6 %
		Y	13.11	87.46	21.88		80.0	<u> </u>
10485-		Ź	100.00	115.15	29.01		80.0	<u> </u>
AAD	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	8.70	83.12	22.08	2.23	80.0	± 9.6 %
		Y	6.99	82.94	21.58		80.0	<u>+</u>
10100		Ζ	26.69	104.60	28.39		80.0	
10486- AAD	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	6.25	75.65	19.36	2.23	80.0	± 9.6 %
		Y	4.71	73.88	17.80		80.0	
		Z	7.77	82.03	20.93		80.0	
10487- AAD	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	6.19	75.17	19.19	2.23	80.0	± 9.6 %
		Y	4.58	73.14	17.50		80.0	
		Z	7.10	80.36	20.33		80.0	
10488- AAD	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	8.05	80.66	21.48	2.23	80.0	± 9.6 %
—·—_		Y	5.99	79.49	21.25		80.0	
10400		Z	10.08	89.23	24.99		80.0	<u> </u>
10489- AAD	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	6.08	74.33	19.47	2.23	80.0	± 9.6 %
		Y	4.70	73.00	18.85		80.0	
		Z	5.75	77.22	20.77		80.0	
10490- AAD	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	x	6.07	73.79	19.30	2.23	80.0	± 9.6 %
		Y	4.74	72.60	18.71		80.0	
10404		Z	5.67	76.43	20.47		80.0	
10491- AAD	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	7.20	77.33	20.36	2.23	80.0	± 9.6 %
		Y	5.44	75.84	20.10		80.0	
10/00		Z	7.08	81.24	22.47		80.0	
10492- AAD	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	6.12	72.85	19.06	2.23	80.0	± 9.6 %
		ΥT	4.82	71.42	18.57		80.0	
		Z						

10493- AAD	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	Х	6.14	72.54	18.97	2.23	80.0	± 9.6 %
		Y	4.86	71.18	18.48		80.0	
		Z	5.36	73.62	19.72		80.0	
10494- AAE	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	Х	8.31	79.62	20.98	2.23	80.0	± 9.6 %
		Y	6.15	77.89	20.70		80.0	
		Ζ	8.68	84.61	23.48		80.0	
10495- AAE	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	6.32	73.62	19.32	2.23	80.0	±9.6 %
		Ý	4.90	71.93	18.81		80.0	
		Z	5.49	74.66	20.1 <del>9</del>		80.0	
10496- AAE	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	6.28	73.03	19.14	2.23	80.0	±9.6 %
		Y	4.92	71.46	18.66		80.0	
		Z	5.43	73.91	19.92		80.0	
10497- AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	7.65	81.23	20.62	2.23	80.0	±9.6 %
		Y	3.65	72.58	15.66		80.0	
		Z	21.09	94.73	22.69		80.0	
10498- AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	×	5.65	74.32	17.51	2.23	80.0	± 9.6 %
		Y	2.09	63.47	10.71		80.0	
		Z	2.52	66.12	11.86		80.0	
10499- AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	5.60	73.85	17.24	2.23	80.0	± 9.6 %
		Y	2.00	62.76	10.22		80.0	
		Z	2.24	64.62	11.02		80.0	_
10500- AAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	7.98	81.23	21.57	2.23	80.0	±9.6 %
		Υ	6.26	80.85	21.25		80.0	
		Z	14.66	95.46	26.32		80.0	
10501- AAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	6.12	74.87	19.30	2.23	80.0	±9.6 %
-		Y	4.73	73.59	18.23		80.0	
		Z	6.73	79.86	20.79		80.0	
10502- <u>AAB</u>	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	6.10	74.47	19.13	2.23	80.0	± 9.6 %
		Y	4.73	73.21	18.02		80.0	
		Z	6.58	79.10	20.44		80.0	
10503- AAD	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	7.94	80.44	21.39	2.23	80.0	± 9.6 %
		Y	5.89	79.20	21.13		80.0	
		Z	9.82	88.78	24.83		80.0	
10504- _AAD	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	×	6.06	74.25	19.42	2.23	80.0	± 9.6 %
	<u> </u>	Y	4.67	72.88	18.78	<u>                                     </u>	80.0	
40		Z	_ 5.71	77.06	20.69		80.0	
10505- AAD	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	6.04	73.70	19.25	2.23	80.0	± 9.6 %
		Y	4.70	72.48	18.64		80.0	
10550		Z	5.62	76.28	20.40		80.0	
10506- AAD	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	×	8.23	79.46	20.92	2.23	80.0	± 9.6 %
	<u> </u>	Y	6.08	77.69	20.61		80.0	
		Z	<u>8.55</u>	84.33	23.37		80.0	
10507- AAD	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	×	6.29	73.56	19.28	2.23	80.0	± 9.6 %
		Y	4.88	71.86	18.77	<u> </u>	80.0	
		Z	5.47	74.58	20.15		80.0	

10508-							AL	igust 22, 20
AAD	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	6.26	72.96	19.10	2.23	80.0	± 9.6 %
		+ -	4.90	71.38	18.62			
		Ż	5.41	73.81	19.87		80.0	
10509- AAD	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	7.61	76.55	19.87	2.23	80.0	±9.6%
	<u> </u>	Y	5.85	74.00	40.50			
		† ż	7.10	74.80	19.56		80.0	
10510- AAD	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	6.61	78.86 72.71	<u>21.43</u> 18.99	2.23	80.0 80.0	± 9.6 %
		Υ ·	5.25	70.97	18.53	┥───		
		Z	5.63	72.87	19.56	+	80.0	<u> </u>
10511- AAD	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	6.56	72.25	18.87	2.23	80.0	± 9.6 %
		Y	5.26	70.60	18.43	<u>+</u> ·──	80.0	+
10512-		Z	5.60	72.35	19.38	<del>†</del> _	80.0	+
10512- AAE	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	8.64	79.13	20.66	2.23	80.0	± 9.6 %
		Y	6.45	77.03	20.24		80.0	+
10513-		Z	8.55	82.55	22.59	<u> </u>	80.0	+
AAE	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	6.66	73.45	19.25	2.23	80.0	± 9.6 %
		Y	5.19	71.42	18.71		80.0	<b>-</b>
10514- AAE	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL	Z X	5.63 6.51	7 <u>3.53</u> 72.73	<u>19.83</u> 19.04	2.23	80.0 80.0	± 9.6 %
	Subframe=2,3,4,7,8,9)	Ŷ	5.14					
		ż	5.51	70.84	18.53		80.0	
10515- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 99pc duty cycle)	X	0.99	64.09	19.55 15.51	0.00	80.0 150.0	±9.6%
		Y	0.91	63.36	14.83	<u> </u>	150.0	<u> </u>
40540		Z	1.02	66.28	17.27		150.0	<u>+</u>
10516- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc duty cycle)	X	0.99	80.49	22.15	0.00	150.0	± 9.6 %
		Y	0.72	75.52	18.82		150.0	
10517-	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11	Z	100.00	176.41	49.28		150.0	
4AA	Mbps, 99pc duty cycle)	X	0.89	67.15	16.75	0.00	150.0	± 9.6 %
<u> </u>		<u> </u>	0.78	65.73	_15.58		150.0	
10518- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc duty cycle)	Z X	<u>1.04</u> 4.78	72.66 67.01	20.23 16.39	0.00	150.0 150.0	± 9.6 %
		$\left  \frac{1}{\gamma} \right $	4.49	66.95	10.00			
		z	4.49	66.85 67.52	16.32 16.77		150.0	
10519- \AB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 99pc duty cycle)	X	5.04	67.34	16.53	0.00	150.0 150.0	± 9.6 %
		Ŷ	4.68	67.08	16.44		450.0	
		z	4.70	67.72	16.87		150.0 150.0	
10520- \AB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 99pc duty cycle)	X	4.88	67.34	16.47	0.00	150.0	±9.6%
		Y	4.53	67.04	16.36		150.0	
0521-		Z	4.56	67.71	16.81		150.0	
AB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc duty cycle)	X	4.81	67.36	16.46	0.00	150.0	±9.6 %
		Y	4.46	67.02	16.34		150.0	
0522-	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36	Ž	4.49	67.71	16.81		150.0	
AB	Mbps, 99pc duty cycle)	X	4.84	67.20	16.43	0.00	150.0	± 9.6 %
		Y	4.52	67.14	16.44		150.0	
	· · · · · · · · · · · · · · · · · · ·	_Z	4.56	67.84	16.91		150.0	

							·	
10523- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 99pc duty cycle)	X	4.71	67.20	16.33	0.00	150.0	± 9.6 %
		Y	4.40	66.99	16.27		150.0	
		z	4.45	67.74	16.78		150.0	
10524- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc duty cycle)	X	4.80	67.20	16.44	0.00	150.0	± 9.6 %
		Y	4.47	67.06	16.40		150.0	
		Ż	4.50	67.76	16.88		150.0	
10525- AAB	IEEE 802.11ac WiFi (20MHz, MCS0, 99pc duty cycle)	X	4.73	66.25	16.04	0.00	150.0	± 9.6 %
		Y	4.46	66.08	15.99		150.0	
		Z	4.50	66.81	16.47		150.0	
10526- AAB	IEEE 802.11ac WiFi (20MHz, MCS1, 99pc duty cycle)	X	4.96	66.67	16.18	0.00	150.0	±9.6 %
		Y	4.62	66.45	16.13		150.0	
		Z	4.66	67.17	16.61		150.0	
10527- AAB	IEEE 802.11ac WiFi (20MHz, MCS2, 99pc duty cycle)	X	4.88	66.68	16.16	0.00	150.0	± 9.6 %
		Y	4.55	66.41	16.07		150.0	
		Z	4.59	67.15	16.56		150.0	
10528- AAB	IEEE 802.11ac WiFi (20MHz, MCS3, 99pc duty cycle)	X	4.90	66.70	16.19	0.00	150.0	± 9.6 %
		Y	4.56	66.43	16.10		150.0	
		Z	4.61	67.16	16.59		150.0	
10529- AAB	IEEE 802.11ac WiFi (20MHz, MCS4, 99pc duty cycle)	X	4.90	66.70	16.19	0.00	150.0	± 9.6 %
		Y	4.56	<u>66.</u> 43	16.10		150.0	
		Ž	4.61	67.16	16.59		150.0	
10531- AAB	IEEE 802.11ac WiFi (20MHz, MCS6, 99pc duty cycle)	X	4.93	66.87	16.22	0.00	150.0	± 9.6 %
		Y	4.55	66.53	16.11		150.0	
		Z	4.59	67.26	16.61		150.0	
10532- AAB	IEEE 802.11ac WiFi (20MHz, MCS7, 99pc duty cycle)	Х	4.78	66.80	16.20	0.00	150.0	± 9.6 %
		Y	4.41	66.38	16.04		150.0	
		Z	4.46	67.13	16.55		150.0	
10533- AAB	IEEE 802.11ac WiFi (20MHz, MCS8, 99pc duty cycle)	X	4.92	66.70	16.16	0.00	150.0	± 9.6 %
		Y	4.57	66.48	16.09		150.0	-
<u></u>		Z	4.62	67.24	16.59		150.0	
10534- AAB	IEEE 802.11ac WiFi (40MHz, MCS0, 99pc duty cycle)	X	5.39	66.90	16.23	0.00	150.0	± 9.6 %
		Y	5.12	66.55	16.19		150.0	
		Z	5.14	_67.09	16.56		150.0	
10535- AAB	IEEE 802.11ac WiFi (40MHz, MCS1, 99pc duty cycle)	X	5.48	67.05	16.29	0.00	150.0	± 9.6 %
		Y	5.20	66.78	16.29	+	150.0	
10555		Z	5.21_	67.31	16.67		150.0	
10536- AAB	IEEE 802.11ac WiFi (40MHz, MCS2, 99pc duty cycle)	X	5.33	67.03	16.27	0.00	150.0	±9.6 %
		Y	5.06	66.69	16.23	ļ	150.0	
40505		Z	5.09	67.28	16.63		150.0	
10537- AAB	IEEE 802.11ac WiFi (40MHz, MCS3, 99pc duty cycle)	X	5.40	66.99	16.24	0.00	150.0	± 9.6 %
		Y	5.11	66.65	16.21		150.0	
40500		Z	5.14	67.22	16.60		150.0	<u> </u>
10538- AAB	IEEE 802.11ac WiFi (40MHz, MCS4, 99pc duty cycle)	X	5.53	67.09	16.33	0.00	150.0	±9.6 %
		Y	5.20	66.67	16.26		150.0	
40540		Z	5.22	67.20	16.63		<u>150.0</u>	
10540- AAB	IEEE 802.11ac WiFi (40MHz, MCS6, 99pc duty cycle)	X	5.41	67.00	16.30	0.00	150.0	± 9.6 %
		Y	5.14	66.71	16.30		150.0	
		Z	5.16	67.23	16.67		150.0	

10541-	IEEE 802.11ac WiFi (40MHz, MCS7,		<u> </u>					igust 22, 20
AAB	99pc duty cycle)	_ X	5.42	67.02	16.32	0.00	150.0	± 9.6 %
		Y	5.11	66.54	16.21		150.0	<u> -                                    </u>
10542-		Z	5.12	67.08	16.58		150.0	
AAB	IEEE 802.11ac WiFi (40MHz, MCS8, 99pc duty cycle)	X	5.54	66.95	16.29	0.00	150.0	± 9.6 %
		Y	5.26	66.62	16.26		150.0	
10543-		Z	5.28	67.14	16.62		150.0	
AAB	IEEE 802.11ac WiFi (40MHz, MCS9, 99pc duty cycle)	X	5.67	67.05	16.35	0.00	150.0	± 9.6 %
		<u>Y</u>	5.34	66.68	16.32	· · · ·	150.0	+
10544-	IEEE 802.11ac WiFi (80MHz, MCS0,	Z	5.34	67.15	16.64		150.0	+
AAB	99pc duty cycle)	X	5.64	67.00	16.21	0.00	150.0	± 9.6 %
		$- \frac{Y}{2}$	5.43	66.63	16.17		150.0	
10545-	IEEE 802.11ac WiFi (80MHz, MCS1,	<u>Z</u>	5.46	67.13	16.51		150.0	
AAB	99pc duty cycle)	×	5.86	67.34	16.31	0.00	150.0	± 9.6 %
-		Ŷ	5.66	67.18	16.39		150.0	
10546-	IEEE 802.11ac WiFi (80MHz, MCS2,	<u>Z</u>	5.67	67.64	16.72		150.0	<u> </u>
AAB	99pc duty cycle)	X	5.77	67.34	16.33	0.00	150.0	± 9.6 %
		<u>Y</u>	5.50	66.85	16.24		150.0	
10547-	IEEE 802.11ac WiFi (80MHz, MCS3,	Z	5.52	67.32	16.57		150.0	
AAB	99pc duty cycle)	×	5.87	67.43	16.36	0.00	150.0	± 9.6 %
		Y	5.58	66.90	16.26		150.0	<u>+</u>
10548-		Z	5.59	67.39	16.60		150.0	
AAB	IEEE 802.11ac WiFi (80MHz, MCS4, 99pc duty cycle)	X	6.12	68.32	16.77	0.00	150.0	± 9.6 %
		Y	5.96	68.26	16.91		150.0	<u> </u>
10550-		Z	5.88	68.47	17.11		150.0	<u> </u>
AAB	IEEE 802.11ac WiFi (80MHz, MCS6, 99pc duty cycle)	X	5.79	67.25	16.29	0.00	150.0	± 9.6 %
		Ý	5.55	66.95	16.31		150.0	
10551-	IEEE 802.11ac WiFi (80MHz, MCS7,	Z	5.57	67.45	16.65		150.0	†
AAB	99pc duty cycle)	X	5.80	67.34	16.30	0.00	150.0	± 9.6 %
		Y	5.53	66.88	16.23		150.0	
10552-	IEEE 802.11ac WIFI (80MHz, MCS8,	<u></u>	5.55	67.39	16.58		150.0	
AAB	99pc duty cycle)	X	5.70	67.13	16.22	0.00	150.0	± 9.6 %
			5.44	66.67	16.13		150.0	
10553-	IEEE 802.11ac WiFi (80MHz, MCS9,	Z	5.47	67.20	16.49		150.0	
AAB	99pc duty cycle)	×	5.80	67.16	16.25	0.00	150.0	± 9.6 %
		- Y Z	5.52	66.70	16.18		150.0	
10554- \AC	IEEE 802.11ac WiFi (160MHz, MCS0, 99pc duty cycle)	X	<u>5.54</u> 6.03	67.19 67.39	16.52 16.30	0.00	150.0 150.0	± 9.6 %
		TY 1	5.86	67.00	16.00		450.0	
		z i	5.88	67.46	16.26 16.57		150.0	
0555- \AC	IEEE 802.11ac WiFi (160MHz, MCS1, 99pc duty cycle)	- <u>-</u>	6.23	67.82	16.48	0.00	150.0 150.0	± 9.6 %
		- Ŷ	6.01	67.38	16.43		150.0	
		Z	6.01	67.80	16.72		150.0	
0556- AC	IEEE 802.11ac WiFi (160MHz, MCS2, 99pc duty cycle)	X	6.21	67.73	16.43	0.00	150.0 150.0	± 9.6 %
		Y	6.02	67.38	16.42		150.0	
<u> </u>		Z	6.04	67.85	16.74		150.0	
0557- AC	IEEE 802.11ac WiFi (160MHz, MCS3, 99pc duty cycle)	x	6.21	67.74	16.46	0.00	150.0	± 9.6 %
							ſ	
		Ϋ́	5.97	67.26	16.38		150.0	

10558- AAC	IEEE 802.11ac WiFi (160MHz, MCS4, 99pc duty cycle)	X	6.27	67.93	16.57	0.00	150.0	±9.6 %
AAC				1				
		Y	6.02	67.44	16.49		150.0	
		z	6.04	67.88	16.79		150.0	
10560- AAC	IEEE 802.11ac WiFi (160MHz, MCS6, 99pc duty cycle)	x	6.29	67.82	16.55	0.00	150.0	±9.6 %
		Y	6.01	67.26	16.43		150.0	
		Z	6.02	67.70	16.73		150.0	
10561- AAC	IEEE 802.11ac WiFi (160MHz, MCS7, 99pc duty cycle)	х	6.18	67.73	16.55	0.00	150.0	± 9.6 %
		Y	5.95	67.28	16.48		150.0	
		Z	5.96	67.72	16.78	0.00	150.0	
10562- AAC	IEEE 802.11ac WiFi (160MHz, MCS8, 99pc duty cycle)	X	6.34	68.21	16.79	0.00	150.0	± 9.6 %
		Y	6.07	67.66	16.67		150.0	
10562	IEEE 802.11ac WiFi (160MHz, MCS9,	ZX	<u>6.06</u> 6.54	68.04 68.35	16.94 16.80	0.00	150.0 150.0	±9.6 %
10563- AAC	99pc duty cycle)	A Y			16.75	0.00	150.0	± 9.0 %
		Z	<u>6.27</u> 6.17	67.90 68.00	16.75		150.0	·
10564-	IEEE 802.11g WiFi 2.4 GHz (DSSS-		<u> </u>	67.16	16.58	0.46	150.0	± 9.6 %
AAA	OFDM, 9 Mbps, 99pc duty cycle)	A Y	4.83	66.94	16.49	0,40	150.0	1 3.0 %
		Z	4.85	67.53	16.89		150.0	
10565- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 12 Mbps, 99pc duty cycle)	X	5.43	67.67	16.90	0.46	150.0	±9.6 %
7000		Y	5.06	67.39	16.81		150.0	
		Z	5.07	67.95	17.19		150.0	
10566- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 18 Mbps, 99pc duty cycle)	X	5.25	67.56	16.74	0.46	150.0	± 9.6 %
		Y	4.89	67.24	16.63		150.0	
L		Z	4.91	67.83	17.03		150.0	
10567- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 24 Mbps, 99pc duty cycle)	X	5.28	67.94	17.06	0.46	150.0	± 9.6 %
		Y	4.92	67.63	16.99		150.0	
		Z	4.94	68.24	17.40		150.0	
10568- _AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 36 Mbps, 99pc duty cycle)	×	5.15	67.23	16.47	0.46	150.0	± 9.6 %
l		Y	4.81	67.05	16.42		150.0	
10555		Z	4.83	67.65	16.83		150.0	
10569- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 48 Mbps, 99pc duty cycle)	×	5.21	67.93	17.06	0.46	150.0	± 9.6 %
ļ		Y	4.89	67.75	17.06	· · · ·	150.0	
10570- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 54 Mbps, 99pc duty cycle)	Z X	4.92 5.25	68.42 67.71	17.51 16.98	0.46	150.0 150.0	± 9.6 %
		Y	4.91	67.59	16.99		150.0	
-		Ż	4.93	68.22	17.41		150.0	
10571- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90pc duty cycle)	X	1.55	68.26	17.49	0.46	130.0	± 9.6 %
		Y	1.27	66.22	16.43		130.0	
		Z	1.44	69.66	18.90		130.0	
10572- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 90pc duty cycle)	X	1.60	69.11	17.93	0.46	130.0	± 9.6 %
		Y	1.29	67.00	16.87		130.0	
10570		Z	1.50	70.89	19.56	<u> </u>	130.0	
10573- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 90pc duty cycle)	X	100.00	141.39	37.07	0.46	130.0	± 9.6 %
		Y	46.60	130.15	33.95	+	130.0	1
10574-	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11	Z	100.00	156.98	42.98		130.0	1.0.0.0
	Mbps, 90pc duty cycle)	X	2.35	79.26	22.24	0.46	130.0	± 9.6 %
AAA		Y	1.71	75.87	20.88		130.0	

10575-	IEEE 802.11g WiFi 2.4 GHz (DSSS-	X	4.96	67.05	16.69	0.46	130.0	± 9.6 %
<u>AAA</u>	OFDM, 6 Mbps, 90pc duty cycle)					0.40	150.0	± 9.0 %
		Y	4.65	66.85	16.61		130.0	
10576-	IEEE 802.11g WiFi 2.4 GHz (DSSS-	- <u>z</u> X	4.67	67.45	17.02		130.0	
AAA	OFDM, 9 Mbps, 90pc duty cycle)		4.99	67.21	16.75	0.46	130.0	± 9.6 %
		<u>Y</u>	4.68	67.02	16.67		130.0	
10577-	JEEE 802.11g WiFi 2.4 GHz (DSSS-	$-\frac{2}{X}$	4.70	67.64	17.09		_130.0	
AAA	OFDM, 12 Mbps, 90pc duty cycle)		5.25	67.57	16.93	0.46	130.0	± 9.6 %
<u></u> -		$+$ $\frac{Y}{2}$	4.87	67.30	16.84		130.0	
10578- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 18 Mbps, 90pc duty cycle)	Z X	4.88 5.15	67.89 67.76	1 <u>7.24</u> 17.03	0.46	<u>130.0</u> 130.0	± 9.6 %
		$+ \cdot \cdot$		<u> </u>	<u> </u>			
		$\frac{Y}{Z}$	4.77	67.47	16.95		130.0	
10579-	IEEE 802.11g WiFi 2.4 GHz (DSSS-	$\frac{2}{X}$	4.79	68.09	17.37		130.0	
AAA	OFDM, 24 Mbps, 90pc duty cycle)		4.94	67.22	16.46	0.46	130.0	± 9.6 %
		<u>  Y</u>	4.54	66.75	16.25	•	130.0	
10580-	IEEE 802.11g WiFi 2.4 GHz (DSSS-	Ż	4.56	67.37	16.68	<u> </u>	130.0	L
AAA	OFDM, 36 Mbps, 90pc duty cycle)		4.98	67.11	16.42	0.46	130.0	± 9.6 %
		<u>  ¥</u>	4.59	66.80	16.28		130.0	
10581-	IEEE 802.11g WiFi 2.4 GHz (DSSS-	Z X	<u>4.60</u> 5.08	67.42	16.71	L	130.0	
AAA	OFDM, 48 Mbps, 90pc duty cycle)			67.93	17.03	0.46	130.0	± 9.6 %
		Y	4.68	67.53	16.91		130.0	
10582-	IEEE 802.11g WiFi 2.4 GHz (DSSS-	Z X	4.71	68.21	17.36		130.0	
_AAA	OFDM, 54 Mbps, 90pc duty cycle)		4.90	66.94	16.26	0.46	130.0	± 9.6 %
	<u>                                      </u>	Y	4.48	66.52	16.04		130.0	
10583-	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6	Z	4.49	67.13	16.46		130.0	
	Mbps, 90pc duty cycle)	X	4.96	67.05	16.69	0.46	130.0	± 9.6 %
		Y	4.65	66.85	16.61		130.0	·
10584-	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9	<u>Z</u>	4.67	67.45	17.02		130.0	
	Mbps, 90pc duty cycle)	X	4.99	67.21	16.75	0.46	130.0	±9.6 %
	<u> </u>	Y	4.68	67.02	16.67		130.0	
10585-		Z	4.70	67.64	17.09		130.0	† ··· –
AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90pc duty cycle)	X	5.25	67.57	16.93	0.46	130.0	± 9.6 %
		Y	4.87	67.30	16.84	· · · · · ·	130.0	
10586-		Z	4.88	67.89	17.24		130.0	
AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 90pc duty cycle)	X	5.15	67.76	17.03	0.46	130.0	±9.6 %
		Y	4.77	67.47	16.95		130.0	
10587-		Z	4.79	68.09	17.37		130.0	
AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 90pc duty cycle)	X	4.94	67.22	16.46	0.46	130.0	± 9.6 %
		Y	4.54	66.75	16.25		130.0	
10588-		Z	4.56	67.37	16.68		130.0	
AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 90pc duty cycle)	X	4.98	67.11	16.42	0.46	130.0	± 9.6 %
		<u>Y</u>	4.59	66.80	16.28		130.0	
10589-		Z	4.60	67.42	16.71		130.0	
AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 90pc duty cycle)	×	5.08	67.93	17.03	0.46	130.0	±9.6 %
		<u>Y</u>	4.68	67.53	16.91		130.0	
10500		Z	4.71	68.21	17.36		130.0	·
10590- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 90pc duty cycle)	X	4.90	66.94	16.26	0.46	130.0	± 9.6 %
		Y	4.48	66.52	16.04		130.0	
		Z	4.49	67.13	16.46		130.0	

10591-	IEEE 802.11n (HT Mixed, 20MHz,		5.11	67.10	16.77	0.46	130.0	±9.6 %
AAB	MCS0, 90pc duty cycle)		4.00	00.00	10.74		120.0	
		Y	4.80	66.89	16.71		130.0	
10592-	IEEE 802.11n (HT Mixed, 20MHz,	Z X	<u>4.81</u> 5.30	67.46 67.44	17.09	0.46	130.0 130.0	± 9.6 %
AAB	MCS1, 90pc duty cycle)	^	5.30	07.44	16.88	0.40	130.0	±9.0 %
AAD		Y	4.95	67.23	16.84		130.0	
		Z	4.96	67.80	17.22		130.0	
10593-	IEEE 802.11n (HT Mixed, 20MHz,	X	5.24	67.45	16.82	0.46	130.0	±9.6 %
AAB	MCS2, 90pc duty cycle)		0.24	07.40	10.02	0.40	100.0	1 3.0 %
		Y	4.87	67.14	16.72		130.0	
		Z	4.88	67.71	17.10		130.0	
10594-	IEEE 802.11n (HT Mixed, 20MHz,	X	5.29	67.56	16.94	0.46	130.0	±9.6 %
AAB	MCS3, 90pc duty cycle)							
		Y	4.93	67.31	16.88		130.0	
		Z	4.94	67.88	17.26		130.0	
10595-	IEEE 802.11n (HT Mixed, 20MHz,	X	5.29	67.58	16.87	0.46	130.0	±9.6 %
AAB	MCS4, 90pc duty cycle)							
		Y	4.89	67.27	16.77		130.0	
		Z	4.91	67.86	17.17		130.0	
10596-	IEEE 802.11n (HT Mixed, 20MHz,	X	5.21	67.55	16.86	0.46	130.0	± 9.6 %
AAB	MCS5, 90pc duty cycle)							
		<u> </u>	4.83	67.27	16.78		130.0	
		Z	4.85	67.88	17.19		130.0	
10597-	IEEE 802.11n (HT Mixed, 20MHz,	X	5.17	67.54	16.80	0.46	130.0	± 9.6 %
AAB	MCS6, 90pc duty cycle)			A- 1-	10 00		100.0	
		Y	4.78	67.17	16.65		130.0	
40500		Z	4.80	67.76	17.06	0.40	130.0	
10598- AAB	IEEE 802.11n (HT Mixed, 20MHz,	X	5.16	67.82	17.06	0.46	130.0	± 9.6 %
	MCS7, 90pc duty cycle)	ΙY	4.76	67.40	16.92		4000	
		Z	4.78	67.40	17.33		130.0 130.0	
10599-	IEEE 802.11n (HT Mixed, 40MHz,	X	5.78	67.76	16.95	0.46	130.0	± 9.6 %
AAB	MCS0, 90pc duty cycle)	^	5.76	07.70	10.90	0.40	130.0	± 9.0 %
		Y	5.50	67.50	16.97		130.0	
		Z	5.48	67.89	17.25		130.0	
10600-	IEEE 802.11n (HT Mixed, 40MHz,	- <del>Ī</del>	6.01	68.41	17.25	0.46	130.0	± 9.6 %
AAB	MCS1, 90pc duty cycle)		0.01	00.11	11.20	0.40	100.0	1 2 0.0 /0
		Y	5.72	68.21	17.30		130.0	
		Ž	5.66	68.47	17.51		130.0	
10601-	IEEE 802.11n (HT Mixed, 40MHz,	- <u>x</u>	5.85	68.03	17.07	0.46	130.0	± 9.6 %
AAB	MCS2, 90pc duty cycle)							
		Y	5.55	67.76	17.09		130.0	-
		Z	5.52	68.13	17.36	·	130.0	
10602-	IEEE 802.11n (HT Mixed, 40MHz,	X	5.97	68.13	17.04	0.46	130.0	± 9.6 %
AAB	MCS3, 90pc duty cycle)	_						
		Y	5.67	67.88	17.06		130.0	
_		Z	<u>5.6</u> 5	68.28	17.35		130.0	
10603-	IEEE 802.11n (HT Mixed, 40MHz,	X	6.09	68.50	17.35	0.46	130.0	± 9.6 %
AAB	MCS4, 90pc duty cycle)				<u> </u>	Ļ		
	<u> </u>	Y	5.71	<u>6</u> 8.06	17.28		130.0	
4000		Z	5.71	68.52	17.60		130.0	
10604-	IEEE 802.11n (HT Mixed, 40MHz,	Х	5.80	67.77	16.98	0.46	130.0	± 9.6 %
AAB	MCS5, 90pc duty cycle)						1	
		Y	5.51	67.48	16.98	ļ	130.0	
10605		Z	5.55	68.08	17.37	<b>0</b> / -	130.0	
10605- AAB	IEEE 802.11n (HT Mixed, 40MHz,	X	5.89	68.00	17.10	0.46	130.0	± 9.6 %
	MCS6, 90pc duty cycle)	- Y	E 07	67.00	17.04	<u> </u>	400.0	<u> </u>
			5.67	67.99	17.24		130.0	
10606-	IEEE 802.11n (HT Mixed, 40MHz,	Z	5.64	68.35	17.51	0.40	130.0	+
AAB	MCS7, 90pc duty cycle)	X	5.66	67.48	16.72	0.46	130.0	± 9.6 %
· · · · ·		Y	5.34	67.07	16.63		120.0	<u> </u>
		Z		67.07			130.0	<u> </u>
L	_1	<u> </u>	5.34	67.50	16.94	1	130.0	1

10607- AAB	IEEE 802.11ac WiFi (20MHz, MCS0, 90pc duty cycle)	X	4.93	66.37	16.37	0.46	130.0	± 9.6 %
			4.64	66.20	16.32	<u> </u>		+
		Ż	4.67	66.86			130.0	
10608- AAB	IEEE 802.11ac WiFi (20MHz, MCS1, 90pc duty cycle)	X	5.17	66.81	16.76 16.52	0.46	<u>130.0</u> 130.0	± 9.6 %
		Y	4.82	66.61	16.49		130.0	+
		Ż	4.85	67.26	16.93			+
10609- AAB	IEEE 802.11ac WiFi (20MHz, MCS2, 90pc duty cycle)	X	5.06	66.74	16.42	0.46	130.0 130.0	± 9.6 %
		Y	4.71	66.45	16.33	<u> </u>	130.0	·
		Z	4.74	67.12	16.77		130.0	<u> </u>
10610- AAB	IEEE 802.11ac WiFi (20MHz, MCS3, 90pc duty cycle)	X	5.12	66.88	16.56	0.46	130.0	± 9.6 %
		Y	4.76	66.62	16.49		130.0	+
40044		Z	4.79	67.28	16.94		130.0	+
10611- 	IEEE 802.11ac WiFi (20MHz, MCS4, 90pc duty cycle)	X	5.06	66.78	16.45	0.46	130.0	± 9.6 %
		Y	4.68	66.42	16.34		130.0	┼────┤
10612-		Z	4.71	67.09	16.79	ļ —	130.0	┼━───┥
AAB	IEEE 802.11ac WiFi (20MHz, MCS5, 90pc duty cycle)	X	5.07	66.89	16.47	0.46	130.0	± 9.6 %
		Ý	4.69	66.60	16.39		130.0	<u> </u>
10613-		<u>Z</u>	4.72	67.29	16.86		130.0	┼───┤
_AAB	IEEE 802.11ac WiFi (20MHz, MCS6, 90pc duty cycle)	X	5.09	66.84	16.39	0.46	130.0	±9.6 %
		Y	4.69	66.47	16.27		130.0	
10614-		Z	4.72	67.12	16.71		130.0	
AAB	IEEE 802.11ac WiFi (20MHz, MCS7, 90pc duty cycle)	×	5.02	67.07	16.64	0.46	130.0	± 9.6 %
	<u> </u>	Y	4.63	66.65	16.50		130.0	
10615-		Z	4.67	67.34	16.97		130.0	
	IEEE 802.11ac WiFi (20MHz, MCS8, 90pc duty cycle)	×	5.05	66.55	16.22	0.46	130.0	± 9.6 %
	<u> </u>	Y	4.68	66.26	16.11		130.0	
10616-		Z	4.71	66.93	16.56		130.0	
AAB	IEEE 802.11ac WiFi (40MHz, MCS0, 90pc duty cycle)	X	5.58	67.01	16.56	0.46	130.0	± 9.6 %
		<u> </u>	5.30	66.67	16.53		130.0	
10617-		Z	5.31	67.17	16.87		130.0	
AAB	IEEE 802.11ac WiFi (40MHz, MCS1, 90pc duty cycle)	X	5.67	67.15	16.59	0.46	130.0	± 9.6 %
		Y	5.40	66.96	16.65		130.0	
10618-		Z	5.40	67.43	16.98		130.0	
	IEEE 802.11ac WiFi (40MHz, MCS2, 90pc duty cycle)	X	5.54 	67.19	16.63	0.46	130.0	±9.6 %
<u> </u>		<u> </u>	5.27	66.91	16.64		130.0	
10619-	IEEE 802.11ac WiFi (40MHz, MCS3,	Z	5.28	67.44	17.00		130.0	
AAB	90pc duty cycle)	X	5.56	66.99	16.47	0.46	130.0	±9.6 %
	<u>+··</u>	Y	5.29	66.74	16.49		130.0	
10620-	IEEE 802.11ac WiFi (40MHz, MCS4,	Z	5.29	67.20	16.82		130.0	
AAB	90pc duty cycle)	X	5.71	67.17	16.61	0.46	130.0	±9.6 %
		<u> </u>	5.37	66.74	16.54		130.0	
10621-	IEEE 802.11ac WiFi (40MHz, MCS5,	Z	5.37	67.21	16.87		130.0	
AAB	90pc duty cycle)	X	5.67	67.21	16.74	0.46	130.0	± 9.6 %
		Y	5.36	66.85	16.72		130.0	
10622-	IEEE 802.11ac WiFi (40MHz, MCS6,	Z	5.37	67.34	17.05		130.0	
AAB	90pc duty cycle)	X	5.65	67.25	16.75	0.46	130.0	± 9.6 %
<u>-</u>		Y	5.40	67.10	16.83		130.0	
	<u> </u>	Z	5.39	67.52	17.14		130.0	

10623- AAB	IEEE 802.11ac WiFi (40MHz, MCS7, 90pc duty cycle)	X	5.59	67.04	16.55	0.46	130.0	± 9.6 %
		ΤΥ Ι	5.26	66.55	16.43		130.0	
		Z	5.26	67.02	16.76		130.0	
10624- AAB	IEEE 802.11ac WiFi (40MHz, MCS8, 90pc duty cycle)	X	5.72	67.01	16.59	0.46	130.0	± 9.6 %
		Y	5.45	66.76	16.60		130.0	
		Z	5.45	67.20	16.91		130.0	
10625- AAB	IEEE 802.11ac WiFi (40MHz, MCS9, 90pc duty cycle)	X	6.03	67.67	16.96	0.46	130.0	± 9.6 %
		Y	5.87	67.91	17.22		130.0	
		Z	5.76	68.04	17.38		130.0	
10626- AAB	IEEE 802.11ac WiFi (80MHz, MCS0, 90pc duty cycle)	X	5.81	67.03	16.49	0.46	130.0	± 9.6 %
		Y	5.60	66.70	16.47		130.0	
10007		Z	5.61	67.15	16.78	0.40	130.0	
10627- AAB	IEEE 802.11ac WiFi (80MHz, MCS1, 90pc duty cycle)	X	6.05	67.45	16.63	0.46	130.0	± 9.6 %
		Y	5.90	67.46	16.82		130.0	
40000		Z	5.89	67.86	17.10		130.0	
10628- AAB	IEEE 802.11ac WiFi (80MHz, MCS2, 90pc duty cycle)	X	5.90	67.26	16.49	0.46	130.0	± 9.6 %
		Y	5.65	66.83	16.44		130.0	
		Z	5.64	67.23	16.72		130.0	
10629- AAB	IEEE 802.11ac WiFi (80MHz, MCS3, 90pc duty cycle)	X	6.01	67.37	16.53	0.46	130.0	± 9.6 %
		Y	5.73	66.92	16.48		130.0	<u>_</u>
		Z	5.72	67.32	16.76		130.0	
10630- AAB	IEEE 802.11ac WiFi (80MHz, MCS4, 90pc duty cycle)	X	6.52	69.01	17.35	0.46	130.0	± 9.6 %
		Y	6.39	69.08	17.54		130.0	
		Z	6.23	69.06	17.62		130.0	
10631- AAB	IEEE 802.11ac WiFi (80MHz, MCS5, 90pc duty cycle)	X	6.47	68.93	17.48	0.46	130.0	± 9.6 %
		- Y	6.08	68.29	17.35		130.0	
		Ż	6.04	68.60	17.59		130.0	
10632- AAB	IEEE 802.11ac WiFi (80MHz, MCS6, 90pc duty cycle)	X	6.09	67.71	16.89	0.46	130.0	± 9.6 %
		Y	5.86	67.50	16.98		130.0	
		Z	5.85	67.92	17.27		130.0	
10633- AAB	IEEE 802.11ac WiFi (80MHz, MCS7, 90pc duty cycle)	X	6.03	67.58	16.67	0.46	130.0	± 9.6 %
		Y	5.68	66.89	16.50		130.0	
		Z	5.69	67.38	16.83		130.0	
10634- AAB	IEEE 802.11ac WiFi (80MHz, MCS8, 90pc duty cycle)	×	6.01	67.57	16.72	0.46	130.0	± 9.6 %
Ļ	·   ·	Y	5.67	66.94	16.58		130.0	
		Z	5.68	67.40	16.89		130.0	
10635- AAB	IEEE 802.11ac WiFi (80MHz, MCS9, 90pc duty cycle)	X	5.89	66.92	16.15	0.46	130.0	± 9.6 %
		Y	5.55	66.28	15.98		130.0	
40.7.7.		Z	5.55	66.70	16.28		130.0	
10636- AAC	IEEE 802.11ac WiFi (160MHz, MCS0, 90pc duty cycle)	X	6.20	67.41	16.57	0.46	130.0	± 9.6 %
		Y	6.03	67.08	16.57		130.0	
4000-		Z	6.04	67.48	16.84		130.0	
10637- AAC	IEEE 802.11ac WiFi (160MHz, MCS1, 90pc duty cycle)	X	6.42	67.92	16.80	0.46	130.0	± 9.6 %
		Y	6.22	67.58	16.80		130.0	
L		Z	6.21	67.94	17.05		130.0	
10638- AAC	IEEE 802.11ac WiFi (160MHz, MCS2, 90pc duty cycle)	X	6.37	67.75	16.69	0.46	130.0	± 9.6 %
		Y	6.22	67.55	16.76		130.0	
		Z	6.21	67.90	17.01		130.0	

10639- AAC	IEEE 802.11ac WiFi (160MHz, MCS3, 90pc duty cycle)	X	6.40	67.84	16.78	0.46	130.0	± 9.6 %
<u> </u>			<u> </u>					
		<u>Y</u>	6.16	67.39	16.73		130.0	
10640-	IEEE 802.11ac WiFi (160MHz, MCS4,		6.16	67.78	16.99		130.0	
AAC	90pc duty cycle)	X	6.43	67.93	16.78	0.46	130.0	± 9.6 %
		<u> </u>	6.17	67.42	16.68		130.0	
10641-		Z	6.17	67.80	16.95		130.0	
AAC	IEEE 802.11ac WiFi (160MHz, MCS5, 90pc duty cycle)	X	6.43	67.66	16.66	0.46	130.0	± 9.6 %
		<u>Y</u>	6.23	67.37	16.68		130.0	
10642-		Z	6.24	67.78	16.96		130.0	+
AAC	IEEE 802.11ac WiFi (160MHz, MCS6, 90pc duty cycle)	X	6.52	68.06	17.01	0.46	130.0	± 9.6 %
		<u>Y</u>	6.25	67.55	16.94		130.0	
10643-	IEEE 802 11 00 10/10/ (1000 4/1 - 1000	Z	6.25	67.94	17.20		130.0	<u> </u>
AAC	IEEE 802.11ac WiFi (160MHz, MCS7, 90pc duty cycle)	X	6.33	67.69	16.75	0.46	130.0	± 9.6 %
		Y	6.11	67.31	16.72		130.0	<del> </del>
10644-		Z	6.10	67.69	16.98		130.0	<u> </u>
AAC	IEEE 802.11ac WiFi (160MHz, MCS8, 90pc duty cycle)	X	6.58	68.44	17.15	0.46	130.0	± 9.6 %
	<u> </u>	Y	6.26	67.77	16.96		130.0	<u> </u>
10645-		Z	6.23	68.07	17.19		130.0	├ <b>─</b> ──
<u>AAC</u>	IEEE 802.11ac WiFi (160MHz, MCS9, 90pc duty cycle)	X	6.78	68.54	17.13	0.46	130.0	± 9.6 %
		Y	6.61	68.43	17.26		130.0	<u> </u>
40040		Z	6.40	68.24	17.24		130.0	
10646- AAE	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,7)	X	24.78	102.91	33.53	9.30	60.0	± 9.6 %
		Y	62.18	133.63	43.81		60.0	
10047		Z	100.00	147.17	47.73		60.0	
10647- AAE	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,7)	X	26.20	104.83	34.24	9.30	60.0	± 9.6 %
		Y	61.16	134.29	44.17		60.0	
10648-		Z	100.00	148.47	48.28		60.0	
AAA	CDMA2000 (1x Advanced)	X	0.97	66.86	13.86	0.00	150.0	± 9.6 %
		Y	0.59	62.80	9.54		150.0	
40050		Z	1.00	70.16	13.59		150.0	
10652- AAC	LTE-TDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	X	5.15	70.12	18.13	2.23	80.0	± 9.6 %
		Y	4.25	69.02	17.48		80.0	
		Z	4.61	71.14	18.58		80.0	
10653- AAC	LTE-TDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)	X	5.54	69.21	18.03	2.23	80.0	± 9.6 %
		Y	4.68	67.95	17.51		80.0	
1005 1		Z	4.86	69.18	18.22		80.0	
10654- \AC	LTE-TDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)	X	5.43	68.90	18.02	2.23	80.0	± 9.6 %
		Y	4.64	67.55	17.50		80.0	
		Z	4.78	68.64	18.16		80.0	
10655- AAD	LTE-TDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	X	5.48	68.99	18.07	2.23	80.0	± 9.6 %
		Y	4.70	67.51	17.53		80.0	
10650		Z	4.83	68.53	18.16		80.0	
10658- \AA	Pulse Waveform (200Hz, 10%)	X	11.40	81.94	22.18	10.00	50.0	± 9.6 %
		Y	19.50	92.75	24.13		50.0	
0000		Z	35.42	102.56	27.13		50.0	
10659-	Pulse Waveform (200Hz, 20%)	X	14.93	87.71	22.77	6.99	60.0	± 9.6 %
								- 0.0 /0
		Y	100.00	113.85	27.97		60.0	

10660- AAA	Pulse Waveform (200Hz, 40%)	X	100.00	114.86	28.35	3.98	80.0	±9.6 %
		Y	100.00	110.72	25.06		80.0	
		Z	100.00	114.19	26.61		80.0	
10661- AAA	Pulse Waveform (200Hz, 60%)	X	100.00	115.39	27.09	2.22	100.0	± 9.6 %
		Y	100.00	109.17	23.03		100.0	
		Z	100.00	117.05	26.45		100.0	_
10662- AAA	Pulse Waveform (200Hz, 80%)	X	100.00	120.85	27.46	0.97	120.0	±9.6 %
		Y	100.00	103.08	18.77		120.0	
		Z	100.00	130.20	29.74		120.0	1

<sup>E</sup> 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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Client PC Test

Certificate No: ES3-3319\_Mar18

## **CALIBRATION CERTIFICATE**

Object	ES3DV3 - SN:3319
Calibration procedure(s)	QA CAL-01.v9, QA CAL-23.v5, QA CAL-25.v6 Calibration procedure for dosimetric E-field probes
Calibration date:	March 13, 2018
	uments the traceability to national standards, which realize the physical units of measurements (SI). Incertainties with confidence probability are given on the following pages and are part of the certificate.
All calibrations have been cor	ducted in the closed laboratory facility: environment temperature (22 $\pm$ 3)°C and humidity < 70%.

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID	Cal Date (Certificate No.)	Scheduled Calibration
Power meter NRP	SN: 104778	04-Apr-17 (No. 217-02521/02522)	Apr-18
Power sensor NRP-Z91	SN: 103244	04-Apr-17 (No. 217-02521)	Apr-18
Power sensor NRP-Z91	SN: 103245	04-Apr-17 (No. 217-02525)	Apr-18
Reference 20 dB Attenuator	SN: S5277 (20x)	07-Apr-17 (No. 217-02528)	Apr-18
Reference Probe ES3DV2	SN: 3013	30-Dec-17 (No. ES3-3013_Dec17)	Dec-18
DAE4	SN: 660	21-Dec-17 (No. DAE4-660_Dec17)	Dec-18
Secondary Standards	ID	Check Date (in house)	Scheduled Check
Power meter E4419B	SN: GB41293874	06-Apr-16 (in house check Jun-16)	In house check: Jun-18
Power sensor E4412A	SN: MY41498087	06-Apr-16 (in house check Jun-16)	In house check: Jun-18
Power sensor E4412A	SN: 000110210	06-Apr-16 (in house check Jun-16)	In house check: Jun-18
RF generator HP 8648C	SN: US3642U01700	04-Aug-99 (in house check Jun-16)	In house check: Jun-18
Network Analyzer HP 8753E	SN: US37390585	18-Oct-01 (in house check Oct-17)	In house check: Oct-18

	Name	Function	Signature
Calibrated by:	Jeton Kastrati	Laboratory Technician	-1-10
			e ge
Approved by:	Katja Pokovic	Technical Manager	alite
			10000
			Issued: March 15, 2018

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

#### **Calibration Laboratory of** Schmid & Partner

Engineering AG Zeughausstrasse 43, 8004 Zurich, Switzerland





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#### **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	$\varphi$ 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, ", "Measurement procedure for the assessment of Specific Absorption Rate (SAR) from handheld and body-mounted devices used next to the ear (frequency range of 300 MHz to 6 GHz)", July 2016
- c) IEC 62209-2, "Procedure to determine the Specific Absorption Rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)", March 2010
- d) KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

#### Methods Applied and Interpretation of Parameters:

- NORMx, v.z: Assessed for E-field polarization  $\vartheta = 0$  (f  $\leq 900$  MHz in TEM-cell: f > 1800 MHz: R22 waveguide). NORMx, v,z are only intermediate values, i.e., the uncertainties of NORMx, v,z does not affect the E<sup>2</sup>-field uncertainty inside TSL (see below ConvF).
- $NORM(f)x,y,z = NORMx,y,z * frequency_response$  (see Frequency Response Chart). This linearization is implemented in DASY4 software versions later than 4.2. The uncertainty of the frequency response is included in the stated uncertainty of ConvF.
- DCPx, v,z; DCP are numerical linearization parameters assessed based on the data of power sweep with CW signal (no uncertainty required). DCP does not depend on frequency nor media.
- PAR: PAR is the Peak to Average Ratio that is not calibrated but determined based on the signal characteristics
- Ax, y, z; Bx, y, z; Cx, y, z; Dx, y, z; VRx, y, z; A, B, C, D are numerical linearization parameters assessed based on the data of power sweep for specific modulation signal. The parameters do not depend on frequency nor media. VR is the maximum calibration range expressed in RMS voltage across the diode.
- ConvF and Boundary Effect Parameters: Assessed in flat phantom using E-field (or Temperature Transfer Standard for  $f \le 800$  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:3319

Manufactured: Calibrated: January 10, 2012 March 13, 2018

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

#### **Basic Calibration Parameters**

	Sensor X	Sensor Y	Sensor Z	Unc (k=2)
Norm $(\mu V/(V/m)^2)^A$	1.08	1.05	1.12	± 10.1 %
DCP (mV) <sup>B</sup>	104.0	103.0	104.0	

#### **Modulation Calibration Parameters**

UID	Communication System Name		A dB	B dB√μV	С	D dB	VR mV	Unc <sup>±</sup> (k=2)
0	CW	X	0.0	0.0	1.0	0.00	197.9	±3.8 %
		Y	0.0	0.0	1.0		198.2	
		Z	0.0	0.0	1.0		200.6	

Note: For details on UID parameters see Appendix.

#### **Sensor Model Parameters**

	C1	C2	α	T1	T2	Т3	T4	T5	T6
	fF	fF	V <sup>-1</sup>	ms.V⁻²	ms.V <sup>~1</sup>	ms	V⁻²	V <sup>-1</sup>	
Х	60.52	430.8	35.08	29.64	3.011	5.10	0.615	0.538	1.010
Y	55.79	400.8	35.48	29.01	2.492	5.10	0.600	0.518	1.009
Z	63.98	455.3	34.93	29.72	3.442	5.10	0.679	0.571	1.011

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

<sup>A</sup> The uncertainties of Norm X,Y,Z do not affect the E<sup>2</sup>-field uncertainty inside TSL (see Pages 5 and 6).

<sup>B</sup> Numerical linearization parameter: uncertainty not required. <sup>E</sup> 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) <sup>C</sup>	Relative Permittivity <sup>F</sup>	Conductivity (S/m) <sup>F</sup>	ConvF X	ConvF Y	ConvF Z	Alpha <sup>G</sup>	Depth <sup>G</sup> (mm)	Unc (k=2)
750	41.9	0.89	6.70	6.70	6.70	0.80	1.21	± 12.0 %
835	41.5	0.90	6.44	6.44	6.44	0.80	1.17	± 12.0 %
1750	40.1	1.37	5.49	5.49	5.49	0.65	1.43	± 12.0 %
1900	40.0	1.40	5.29	5.29	5.29	0.76	1.30	± 12.0 %
2300	39.5	1.67	5.06	5.06	5.06	0.72	1.29	± 12.0 %
2450	39.2	1.80	4.71	4.71	4.71	0.77	1.30	± 12.0 %
2600	39.0	1.96	4.55	4.55	4.55	0.80	1.31	± 12.0 %

#### **Calibration Parameter Determined in Head Tissue Simulating Media**

<sup>c</sup> 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. <sup>F</sup> At frequencies below 3 GHz, the validity of tissue parameters ( $\epsilon$  and  $\sigma$ ) can be relaxed to ± 10% if liquid compensation formula is applied to

<sup>F</sup> At frequencies below 3 GHz, the validity of tissue parameters ( $\varepsilon$  and  $\sigma$ ) 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 ( $\varepsilon$  and  $\sigma$ ) is restricted to  $\pm$  5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters. <sup>G</sup> Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is

<sup>G</sup> 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.

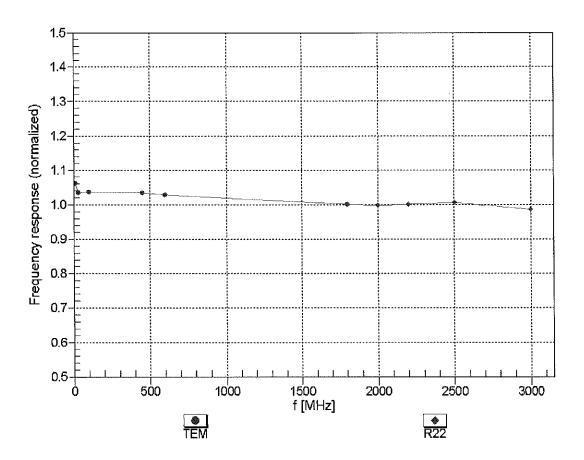
			-					
f (MHz) <sup>C</sup>	Relative Permittivity <sup>F</sup>	Conductivity (S/m) <sup>F</sup>	ConvF X	ConvF Y	ConvF Z	Alpha <sup>G</sup>	Depth <sup>G</sup> (mm)	Unc (k=2)
750	55.5	0.96	6.32	6.32	6.32	0.65	1.26	± 12.0 %
835	55.2	0.97	6.20	6.20	6.20	0.80	1.14	± 12.0 %
1750	53.4	1.49	5.05	5.05	5.05	0.76	1.27	± 12.0 %
1900	53.3	1.52	4.84	4.84	4.84	0.55	1.56	± 12.0 %
2300	52.9	1.81	4.63	4.63	4.63	0.80	1.30	± 12.0 %
2450	52.7	1.95	4.51	4.51	4.51	0.80	1.25	± 12.0 %
2600	52.5	2.16	4.33	4.33	4.33	0.80	1.20	± 12.0 %

#### Calibration Parameter Determined in Body Tissue Simulating Media

<sup>c</sup> 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. <sup>F</sup> At frequencies below 3 GHz, the validity of tissue parameters ( $\epsilon$  and  $\sigma$ ) can be relaxed to ± 10% if liquid compensation formula is applied to

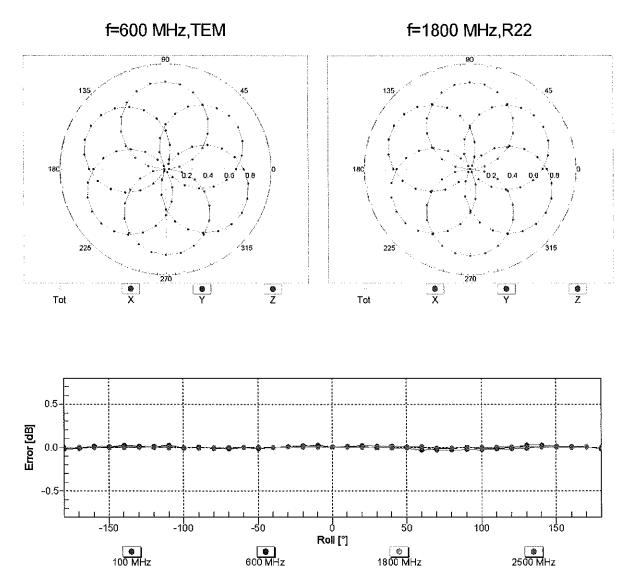
<sup>F</sup> At frequencies below 3 GHz, the validity of tissue parameters ( $\epsilon$  and  $\sigma$ ) can be relaxed to  $\pm$  10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters ( $\epsilon$  and  $\sigma$ ) is restricted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

<sup>o</sup> 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)

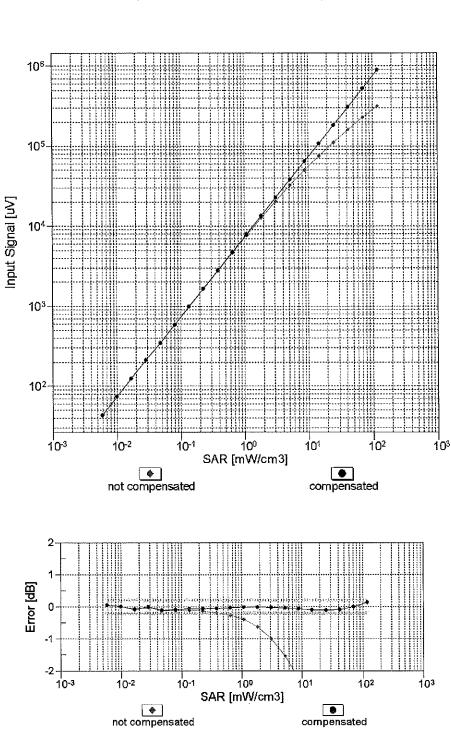
Uncertainty of Frequency Response of E-field: ± 6.3% (k=2)



## **Receiving** Pattern (φ), θ = 0°

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

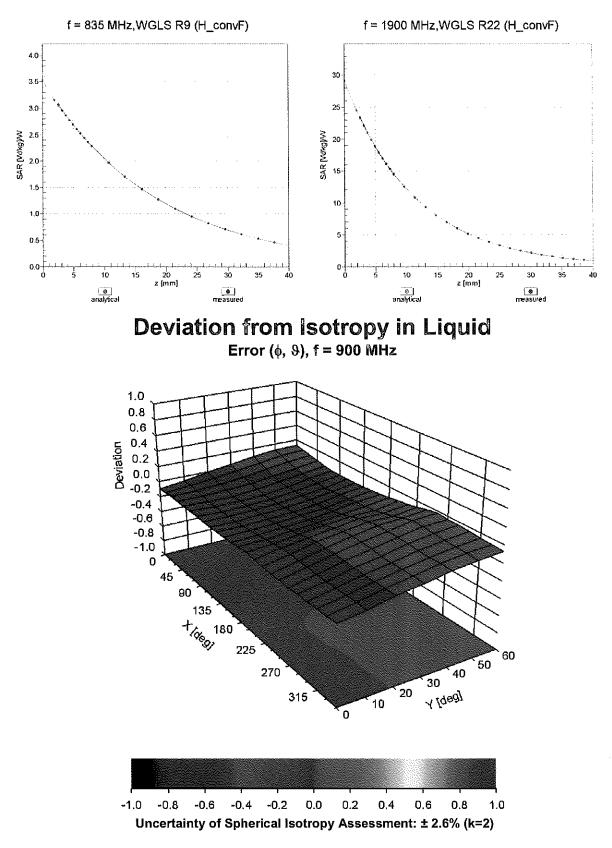
March 13, 2018



## Dynamic Range f(SAR<sub>head</sub>) (TEM cell , f<sub>eval</sub>= 1900 MHz)

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

.



## **Conversion Factor Assessment**

#### **Other Probe Parameters**

Sensor Arrangement	Triangular
Connector Angle (°)	60.4
Mechanical Surface Detection Mode	enabled
Optical Surface Detection Mode	disabled
Probe Overall Length	337 mm
Probe Body Diameter	10 mm
Tip Length	10 mm
Tip Diameter	4 mm
Probe Tip to Sensor X Calibration Point	2 mm
Probe Tip to Sensor Y Calibration Point	2 mm
Probe Tip to Sensor Z Calibration Point	2 mm
Recommended Measurement Distance from Surface	3 mm

### **Appendix: Modulation Calibration Parameters**

UID	Communication System Name		A dB	B dBõV	С	D dB	VR mV	Max Unc <sup>E</sup> (k=2)
0	CW	Х	0.00	0.00	1.00	0.00	197.9	± 3.8 %
		Y	0.00	0.00	1.00		198.2	·····
10010-	SAR Validation (Square, 100ms, 10ms)	Z X	0.00 9.56	0.00 81.28	1.00	10.00	200.6	
CAA	Office validation (oquare, rooms, roms)		9.00	01.20	19.98	10.00	25.0	± 9.6 %
		Y	8.09	78.70	18.35		25.0	
		Z	8.70	79.52	19.57		25.0	
10011- CAB	UMTS-FDD (WCDMA)	X	1.34	72.37	18.08	0.00	150.0	± 9.6 %
		Y	0.99	67.12	14.82		150.0	
10012-	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1	Z X	1.12 1.37	68.87 66.58	16.00 17.00	0,41	150.0 150.0	± 9.6 %
CAB	Mbps)		1.01	00.50	17.00	0,41	100.0	1 9.0 %
·		Y	1.25	64.92	15.59		150.0	
		Z	1.32	65.58	16.11		150.0	
10013- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps)	X	5.18	67.48	17.64	1.46	150.0	±9.6 %
		<u>Y</u>	5.08	67.20	17.36		150.0	
10021-	GSM-FDD (TDMA, GMSK)	Z X	5.20 20.40	67.32	17.47	0.00	150.0	
DAC		^ Y	20.40	95.52 101.11	26.57 27.60	9.39	50.0	± 9.6 %
		Z	14.66	89.52	24.83		50.0 50.0	
10023- DAC	GPRS-FDD (TDMA, GMSK, TN 0)	X	18.37	93.61	26.02	9.57	50.0	± 9.6 %
		Y	24.41	97.95	26.72		50.0	
		Z	13.84	88.39	24.49		50.0	
10024- DAC	GPRS-FDD (TDMA, GMSK, TN 0-1)	X	100.00	119.56	31.31	6.56	60.0	± 9.6 %
		Y	100.00	117.39	29.93		60.0	
10025-		Z	47.21	108.31	28.71	10.55	60.0	
DAC	EDGE-FDD (TDMA, 8PSK, TN 0)	X Y	21.09 17.11	108.48	41.18 38.82	12.57	50.0 50.0	± 9.6 %
		Z	18.44	102.80	38.97		50.0	
10026- DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1)	X	21.59	105.09	36.25	9.56	60.0	±9.6 %
		Y	18.95	102.20	35.03		60.0	
		Z	18.49	100.22	34.38		60.0	
10027- DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2)	X	100.00	118.49	29.83	4.80	80.0	± 9.6 %
		<u>  Y</u>	100.00	115.83	28.28		80.0	
10028- DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2-3)	Z X	100.00 100.00	118.30 118.84	29.89 29.14	3.55	80.0 100.0	± 9.6 %
2/10		Y	100.00	115.36	27.25		100.0	
		z	100.00	118.10	28.92		100.0	
10029- DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2)	X	15.08	97.16	32.49	7.80	80.0	± 9.6 %
		Y	12.90	93.80	31.06		80.0	
10030- CAA	IEEE 802.15.1 Bluetooth (GFSK, DH1)	Z X	13.60 100.00	93.82 118.11	31.09 30.01	5.30	80.0 70.0	± 9.6 %
		Y	100.00	115.58	28.50		70.0	
		Z	100.00	118.16	30.20		70.0	
10031- CAA	IEEE 802.15.1 Bluetooth (GFSK, DH3)	X	100.00	121.01	28.44	1.88	100.0	± 9.6 %
		Y	100.00	114.03	25.11		100.0	
		Z	100.00	118.73	27.54		100.0	

10032- CAA	IEEE 802.15.1 Bluetooth (GFSK, DH5)	Х	100.00	127.26	29.88	1.17	100.0	± 9.6 %
		Y	100.00	114.89	24.38		100.0	
		Ż	100.00	122.11	27.79		100.0	
10033- CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH1)	Х	21.21	99.84	27.91	5.30	70.0	± 9.6 %
		Y	19.09	97.43	26.61		70.0	
		Ζ	13.98	92.26	25.56		70.0	
10034- CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH3)	Х	14.93	98.23	25.94	1.88	100.0	± 9.6 %
		Y	7.46	86.71	21.62		100.0	
		Ζ	7.45	87.10	22.42		100.0	
10035- CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH5)	X	7.98	90,77	23.49	1.17	100.0	±9.6 %
		Y	3.97	79.58	18.90		100.0	
10000		Ζ	4.48	81.52	20.27		100.0	
10036- CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH1)	X	26,12	103.52	29.04	5.30	70.0	± 9.6 %
		Y	24.16	101.42	27.84		70.0	
40007		Z	15.99	94.67	26.38	4.00	70.0	
10037- CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH3)	X	14.25	97.55	25.70	1.88	100.0	± 9.6 %
		Y	7.04	85.92	21.32		100.0	
40000		Z	7.24	86.72	22.25		100.0	
10038- CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH5)	X	8.53	92.07	23.99	1.17	100.0	± 9.6 %
		Y	4.13	80.37	19.27		100.0	
10000		Z	4.65	82.31	20.62		100.0	
10039- CAB	CDMA2000 (1xRTT, RC1)	X	2.96	79.09	19.43	0.00	150.0	± 9.6 %
		Y	1.75	71.10	15.36		150.0	
		Z	2.10	73.23	16.92		150.0	
10042- CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4- DQPSK, Halfrate)	X	53.77	109.05	28.70	7.78	50.0	± 9.6 %
		Y	79.10	112.95	28.86		50.0	
		Z	23.46	96.42	25.41		50.0	
10044- CAA	IS-91/EIA/TIA-553 FDD (FDMA, FM)	X	0.00	123.18	1.26	0.00	150.0	± 9.6 %
		Y	0.02	127.84	0.07		150.0	
1		Z	0.00	110.77	4.52		150.0	
10048- CAA	DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24)	X	11.41	83.11	24.20	13.80	25.0	± 9.6 %
		Y	12.66	85.48	24.49		25.0	
10049- CAA	DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12)	X	10.45 13.41	80.79 87.55	23.56 24.40	10.79	25.0 40.0	± 9.6 %
		Y	15.25	89.77	24.55		40.0	ł
		Ż	11.61	84.53	23.55		40.0	
10056- CAA	UMTS-TDD (TD-SCDMA, 1.28 Mcps)	X	13.37	87.98	25.03	9.03	50.0	± 9.6 %
		Y	13.72	88.51	24.74		50.0	
		Z	11.72	85.02	24.05		50.0	
10058- DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)	X	11.14	91,28	29.72	6.55	100.0	± 9,6 %
		Y	9.52	87.98	28.26		100.0	
		Z	10.41	88.91	28.62		100.0	
10059- CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps)	X	1.60	69.38	18.31	0.61	110.0	± 9.6 %
	· · · · · · · · · · · · · · · · · · ·	Y	1.43	67.15	16.67		110.0	
		Z	1.53	67.97	17.25		110.0	
10060- CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps)	X	100.00	133.15	34.60	1.30	110.0	± 9.6 %
		Y	100.00	128.63	32.36	1	110.0	1
		Z	100.00	130.16	33.31		110.0	1

10061- CAB	IEEE 802.11b WIFi 2.4 GHz (DSSS, 11 Mbps)	X	24.68	111.64	31.63	2.04	110.0	± 9.6 %
	E-1	Y	11.26	97.49	27.04		110.0	
	· · · · · · · · · · · · · · · · · · ·	Z	10.95	96.57	26.98		110.0	
10062- CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps)	Х	4.90	67.24	16.94	0.49	100.0	± 9.6 %
		Y	4.79	66.94	16.63		100.0	
40000		Z	4.90	67.05	16.74		100.0	
10063- CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps)	X	4.95	67.42	17.09	0.72	100.0	± 9.6 %
		Y	4.84	67.10	16.77		100.0	
10064-	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12	Z X	4.95	67.23	16.89	0.00	100.0	
CAC	Mbps)	Y	5.28	67.75	17.35	0.86	100.0	± 9.6 %
		Z	5.30	67.43 67.59	17.04 17.17		100.0 100.0	
10065-	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18	X	5.19	67.81	17.53	1.21	100.0	± 9.6 %
CAC	Mbps)	Y	5.07	67.47	17.22	1.21	100.0	19.0 %
	·····	z	5.21	67.65	17.35		100.0	
10066- CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps)	X	5.25	67.95	17.76	1.46	100.0	± 9.6 %
		Y	5.12	67.61	17.44	[	100.0	
		Z	5.27	67.80	17.59		100.0	·
10067- CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps)	Х	5.57	68.10	18.21	2.04	100.0	± 9.6 %
		Υ	5.44	67.80	17.92		100.0	
		Z	5.60	67.97	18.05		100.0	
10068- CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps)	Х	5.73	68.50	18.60	2.55	100.0	± 9.6 %
		Y	5.58	68.13	18.28		100.0	
40000		Z	5.77	68.41	18.46		100.0	
10069- CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps)	X	5.81	68.43	18.78	2.67	100.0	±9.6 %
		Y	5.66	68.09	18.46		100.0	
40074		Z	5.84	68.33	18.64		100.0	
10071- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps)	X	5.34	67.73	18.04	1.99	100.0	± 9.6 %
		Y	5.22	67.44	17.75		100.0	
10072-		Z	5.35	67.60	17.87		100.0	
CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps)	X	5.42	68.35	18.39	2.30	100.0	± 9.6 %
		Y	5.29	68.00	18.07		100.0	
10073- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps)	X	5.44 5.57	68.21 68.74	18.22 18.83	2.83	100.0	± 9.6 %
		Y	5.42	68.36	18.50		100.0	
		Z	5.60	68.62	18.66		100.0	
10074- САВ	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps)	X	5.61	68.84	19.10	3.30	100.0	± 9.6 %
		Y	5.46	68.44	18.75		100.0	
		Ζ	5.65	68.74	18.95		100.0	
10075- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps)	X	5.79	69.40	19.63	3.82	90.0	±9.6 %
		Y	5.61	68.91	19.24		90.0	
40070		Z	5.85	69.35	19.51		90.0	
10076- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps)	X	5.80	69.20	19.75	4.15	90.0	± 9.6 %
		Y	5.64	68.73	19.37		90.0	1
40077		Z	5.86	69.15	19.63		90.0	
10077- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps)	X	5.84	69.30	19.86	4.30	90.0	± 9.6 %
		Y	5.68	68.82	19.47		90.0	
		Z	5.90	69.25	19.74	L	90.0	

10081- CAB	CDMA2000 (1xRTT, RC3)	X	1.29	72.14	16.36	0.00	150.0	±9.6 %
		Y	0.81	65,51	12.24		150.0	
		Ż	0.99	67.68	14.05		150.0	
10082- CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4- DQPSK, Fullrate)	X	2.36	64.73	9.48	4.77	80.0	± 9.6 %
		Y	1.97	63.15	8.18		80.0	
		Z	2.45	64.78	9.67		80.0	
10090- DAC	GPRS-FDD (TDMA, GMSK, TN 0-4)	X	100.00	119.65	31.37	6.56	60.0	± 9.6 %
		Y	100.00	117.49	29.99		60.0	
40007		Z	45.52	107.81	28.61		60.0	
10097- CAB	UMTS-FDD (HSDPA)	X	2.00	69.44	16.95	0.00	150.0	± 9.6 %
•••		Y	1.78	67.32	15.42		150.0	
10098-		Z X	1.87	67.93	15.97	0.00	150.0	
CAB	UMTS-FDD (HSUPA, Subtest 2)		1.97	69.46	16,95	0.00	150.0	± 9.6 %
		Y	1.74	67.28	15.38		150.0	
10099-	EDGE-FDD (TDMA, 8PSK, TN 0-4)	Z X	1.84 21.45	67.91	15.95	0.50	150.0	+0.0.0/
DAC	EDGE-FDD (TDIWA, OFSK, TN 0-4)			104.88	36.18	9.56	60.0	± 9.6 %
		Y Z	18.89	102.07	34.98		60.0	
10100-	LTE-FDD (SC-FDMA, 100% RB, 20		18.39	100.05	34.32	0.00	60.0	
CAD	MHz, QPSK)	X	3.55	72.46	17.74	0.00	150.0	± 9.6 %
····		Y	3.14	70.29	16.48		150.0	
40404		Z	3.35	71.19	16.95		150.0	
10101- CAD	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	X	3.45	68.62	16.57	0.00	150.0	± 9.6 %
		Y	3.26	67.61	15.85		150.0	
40400		Z	3.39	68.08	16.14		150.0	
10102- CAD	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	×	3.54	68.46	16.61	0.00	150.0	± 9.6 %
		Y	3.37	67.56	15.95		150.0	
10100		Z	3.49	67.97	16.20		150.0	
10103- CAD	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	X	8.98	78.82	21.57	3.98	65.0	± 9.6 %
		Y	8.50	78.15	21.17		65.0	·
		Z	8.60	77.58	20.95		65.0	
10104- CAD	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	X	8.85	77.44	21.89	3.98	65.0	± 9.6 %
		Y	8.45	76.83	21.49		65.0	
10105		Z	8.72	76.72	21.48		65.0	
10105- CAD	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	X	8.33	76.23	21.66	3.98	65.0	± 9.6 %
		Y	7.79	75.22	21.09		65.0	
40400		Z	7.71	74.28	20.69		65.0	
10108- CAE	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	×	3.11	71.64	17.59	0.00	150.0	± 9.6 %
		Y	2.75	69.54	16.32		150.0	
40400		Z	2.95	70.37	16.78		150.0	
10109- CAE	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	X	3.12	68.50	16.56	0.00	150.0	± 9.6 %
		Y	2.92	67.41	15.75		150.0	
10110- CAE	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	Z X	3.06 2.56	67.87 70.84	16.07 17.38	0.00	150.0 150.0	± 9.6 %
		Y	2.04	60.04	15.04		450.0	
			2.24	68.61	15.94		150.0	
10111-	LTE-FDD (SC-FDMA, 100% RB, 5 MHz,	Z	2.42 2.84	69.44	16.48	0.00	150.0	+0.0.00
CAE	16-QAM)			69.29	16.96	0.00	150.0	± 9.6 %
		Υ Υ	2.62	68.02	15.99		150.0	
		Z	2.75	68.36	16.33		150.0	

10112- CAE	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	X	3.23	68.35	16.55	0.00	150.0	±9.6 %
		Y	3.05	67.38	15.81		150.0	
		Z	3.18	67.77	16.10		150.0	
10113- CAE	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	X	2.98	69.28	17.01	0.00	150.0	± 9.6 %
·····		Y	2.77	68.14	16.13		150.0	1
		Z	2.90	68.40	16.43		150.0	
10114- CAC	IEEE 802.11n (HT Greenfield, 13.5 Mbps, BPSK)	X	5.25	67.55	16.67	0.00	150.0	± 9.6 %
	·····	Y	5.16	67.27	16.41		150.0	
10415		Ζ	5.23	67.36	16.47		150.0	
10115- CAC	IEEE 802.11n (HT Greenfield, 81 Mbps, 16-QAM)	X	5.62	67.87	16.84	0.00	150.0	± 9.6 %
		Y	5.53	67.61	16.59		150.0	
40440		Z	5.61	67.68	16.64		150.0	
10116- CAC	IEEE 802.11n (HT Greenfield, 135 Mbps, 64-QAM)	X	5.38	67.84	16.74	0.00	150.0	± 9.6 %
		Υ	5.28	67.54	16.47		150.0	
40447		Z	5.37	67.64	16.53		150.0	
10117- CAC	IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK)	×	5.26	67.57	16.70	0.00	150.0	± 9.6 %
		Y	5.15	67.22	16.40		150.0	I
40440		Z	5.24	67.39	16.51		150.0	
10118- CAC	IEEE 802.11n (HT Mixed, 81 Mbps, 16- QAM)	X	5.70	68.05	16.94	0.00	150.0	± 9.6 %
		Y	5.61	67.82	16.70		150.0	
40440		Z	5.67	67.81	16.71		150.0	
10119- CAC	IEEE 802.11n (HT Mixed, 135 Mbps, 64- QAM)	X	5.36	67.79	16.73	0.00	150.0	± 9.6 %
		Y	5.26	67.48	16.45		150.0	
10/10		Z	5.34	67.59	16.52		150.0	
10140- CAD	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	X	3.59	68.46	16.53	0.00	150.0	±9.6 %
		Y	3.41	67.56	15.87		150.0	
		Z	3.54	67.97	16.13		150.0	
10141- CAD	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	X	3.70	68.46	16.65	0.00	150.0	± 9.6 %
		Y	3.53	67.64	16.03		150.0	
		Ζ	3.65	67.99	16.26		150.0	
10142- CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	X	2.36	71.08	17.31	0.00	150.0	± 9.6 %
	······	Y	2.01	68.49	15.62		150.0	
		Z	2.20	69.37	16.30		150.0	
10143- CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	Х	2.76	70.34	17.00	0.00	150.0	± 9.6 %
		Y	2.47	68.62	15.73		150.0	
		Ζ	2.62	69.02	16.23		150.0	
10144- _CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	×	2.54	68.16	15.50	0.00	150.0	± 9.6 %
		Υ	2.28	66.60	14.27		150.0	
		Z	2.46	67.23	14.93		150.0	
10145- CAE	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	Х	1.75	69.86	15.18	0.00	150.0	± 9.6 %
		Y	1.29	65.55	12.27		150.0	
		Ζ	1.55	67.61	14.05		150.0	
10146- _CAE	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	X	4.07	76.05	17.30	0.00	150.0	± 9.6 %
		Y	2.52	69.20	13.62		150.0	
		Ζ	3.50	73.50	16.33		150.0	
10147- CAE	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	Х	5.72	80.95	19.32	0.00	150.0	± 9.6 %
		Y	3.13	72.10	15.05		150.0	
		Z	4.43	76.91	17.88		150.0	

10149- CAD	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	X	3.13	68.56	16.60	0.00	150.0	± 9.6 %
		Y	2.93	67.47	15.80		150.0	
		Z	3.07	67.93	16.12		150.0	
10150- CAD	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	X	3.24	68.40	16.59	0.00	150.0	± 9.6 %
		Y	3.05	67.43	15.85		150.0	
		Z	3.18	67.82	16.13		150.0	
10151- CAD	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	X	9.59	81.21	22.61	3.98	65.0	± 9.6 %
		Y	9.21	80.79	22.27		65.0	
		Z	9.05	79.62	21.87		65.0	
10152- CAD	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	X	8.53	77,77	21.82	3.98	65.0	± 9.6 %
		Y	8.07	77,03	21.32		65.0	
10150		Z	8.36	76.93	21.37		65.0	
10153- CAD	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	X	8.87	78.41	22.41	3.98	65.0	± 9.6 %
		Y	8.48	77.88	22.02		65.0	
1015		Z	8.68	77.54	21.94		65.0	
10154- CAE	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	X	2.63	71.34	17.67	0.00	150.0	± 9.6 %
		Y	2.29	69.04	16.21		150.0	
		Z	2.48	69.88	16.75		150.0	
10155- CAE	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	X	2.84	69.30	16.97	0.00	150.0	±9.6 %
		Y	2,62	68.03	16.00		150.0	
		Z	2.75	68.36	16.34		150.0	
10156- CAE	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	X	2.26	71.67	17.44	0.00	150.0	± 9.6 %
		Y	1.86	68.59	15.46		150.0	
		Z	2,07	69.64	16.29		150.0	
10157- CAE	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	X	2.42	69.16	15.83	0.00	150.0	± 9.6 %
		Y	2.11	67.12	14.31		150.0	
		Z	2.30	67.87	15.10		150.0	
10158- CAE	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	X	2.99	69.33	17.05	0.00	150.0	± 9.6 %
		Y	2.78	68.20	16.17		150.0	
		Z	2.90	68.44	16.46		150.0	
10159- CAE	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	X	2.55	69.60	16.11	0,00	150.0	± 9.6 %
		Y	2.22	67.56	14.60		150.0	
	····	Z	2.41	68.28	15.37		150.0	
10160- CAD	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	X	3.02	70.16	17.19	0.00	150.0	± 9.6 %
	· · · · · · · · · · · · · · · · · · ·	Y	2.77	68.66	16.17		150.0	
		Z	2.91	69.14	16.50		150.0	
10161- CAD	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	X	3.13	68.32	16.54	0.00	150.0	± 9.6 %
		Y	2.95	67.34	15.78		150.0	
		Z	3.07	67.70	16.08		150.0	
10162- CAD	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	X	3.23	68.35	16.60	0.00	150.0	± 9.6 %
		Y	3.06	67.45	15.88		150.0	
	· · · · · · · · · · · · · · · · · · ·	Z	3.18	67.74	16.14		150.0	
10166- CAE	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	X	4.02	71.10	20.08	3.01	150.0	± 9.6 %
		Y	3.79	70.19	19.37		150.0	
		Z	4.03	70.69	19.72		150.0	
10167- CAE	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	X	5.24	74.71	20.79	3.01	150.0	± 9.6 %
		Y	4.82	73.39	19.92	· · · · ·	150.0	
		Z	5.25	74.14	20.39	1	150.0	

40400		·						
10168- CAE	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	X	5.76	76.76	21.96	3.01	150.0	± 9.6 %
		Y	5.36	75.66	21.24		150.0	
		Z	5.73	75.99	21.47		150.0	
10169- CAD	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	X	3.69	72,72	20.82	3.01	150.0	± 9.6 %
		Y	3.33	70.78	19.63		150.0	
		Z	3.78	72.61	20.53		150.0	
10170- CAD	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	X	5.76	80.54	23.62	3.01	150.0	± 9.6 %
		Y	4.94	77.74	22.22		150.0	
	A	Z	5.83	79.90	23.09		150.0	
10171- AAD	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	X	4.61	75.69	20.76	3.01	150.0	± 9.6 %
		Y	3.94	72.92	19.25		150.0	
		Z	4.70	75.28	20.35		150.0	
10172- CAD	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	X	36.99	114.19	35.08	6.02	65.0	± 9.6 %
		Y	22.97	105.21	32.24		65.0	
		Z	26.68	106.36	32.56		65.0	
10173- CAD	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	X	41.01	110.69	32.32	6.02	65.0	± 9.6 %
		Y	35.83	108.35	31.36		65.0	
		Z	28.00	102.66	29.85		65.0	
10174- CAD	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	X	30.73	104.07	29.95	6.02	65.0	±9.6 %
		Y	27.27	102.14	29.08		65.0	[
		Z	22.20	97.35	27.81		65.0	
10175- CAE	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	X	3.64	72.35	20.56	3.01	150.0	± 9.6 %
		Y	3.28	70.42	19.36		150.0	
		Z	3.72	72.25	20.28		150.0	
10176- CAE	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	x	5.77	80.56	23.63	3.01	150.0	± 9.6 %
		Y	4,95	77.76	22.23		150.0	
		Z	5.84	79.92	23.10		150.0	· · · · · · · · · · · · · · · · · · ·
10177- CAG	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	X	3.67	72.53	20.66	3.01	150.0	± 9.6 %
		Y	3.31	70.60	19.46		150.0	1
		Z	3.76	72.42	20.38		150.0	
10178- CAE	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16- QAM)	X	5.68	80.23	23.47	3.01	150.0	± 9.6 %
		Y	4.88	77.46	22.08		150.0	
		Z	5.74	79.60	22.95		150.0	
10179- CAE	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	x	5.14	77.96	22.04	3.01	150.0	± 9.6 %
		Y	4.38	75.13	20.57		150.0	
		Z	5.21	77.41	21.56		150.0	
10180- CAE	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 64- QAM)	Х	4.59	75.59	20.70	3.01	150.0	± 9.6 %
		Y	3.92	72.83	19.19		150.0	
		Z	4.68	75.18	20.29		150.0	
10181- CAD	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	Х	3.66	72.51	20.66	3.01	150.0	± 9.6 %
		Y	3.30	70.58	19.46		150.0	
		Z	3.75	72.41	20.37		150.0	
10182- CAD	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	X	5.67	80.21	23.46	3.01	150.0	± 9.6 %
		Y	4.87	77.43	22.07		150.0	
		Z	5.73	79.57	22.94		150.0	
10183-	LTE-FDD (SC-FDMA, 1 RB, 15 MHz,	X	4.58	75.56	20.68	3.01	150.0	± 9.6 %
	64-QAM)				1		1	1
AAC	64-QAM)	Y	3.92	72.80	19,18		150.0	<b> </b>

10184- CAD	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	X	3.68	72.56	20.68	3.01	150.0	±9.6 %
*******		Y	3.32	70.63	19.48		150.0	
		z	3.77	72.45	20.39		150.0	
10185- CAD	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16- QAM)	X	5.70	80.29	23.50	3.01	150.0	± 9.6 %
		Y	4.90	77.51	22.11		150.0	
	· · · · · · · · · · · · · · · · · · ·	Z	5.76	79.65	22.97		150.0	
10186- AAD	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64- QAM)	X	4.61	75.64	20.72	3.01	150.0	±9.6 %
70.02	Sa (W)	Y	3.94	72.88	19.21		150.0	
		z	4.69	75.23	20.31	~	150.0	
10187- CAE	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	X	3.69	72.61	20.73	3.01	150.0	±9.6 %
		Y	3.33	70.68	19.54		150.0	
		Z	3.77	72.50	20.44		150.0	
10188- CAE	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	X	5.93	81.11	23.91	3.01	150.0	± 9.6 %
0/12		Y	5.09	78.33	22.53		150.0	
		Z	5.99	80.44	23.37		150.0	
10189-	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz,	X	4.73	76.16	23.37	3.01	150.0	± 9.6 %
AAE	64-QAM)	Ŷ				0.01		± 3.0 %
		r Z	4.04	73.37	19.51		150.0	
10193-		X	4.82	75.73	20.60	0.00	150.0	1000
CAC	IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK)		4.67	66.99	16.47	0.00	150.0	± 9.6 %
·····		Y	4.56	66,66	16.13		150.0	
		Ζ	4.66	66.78	16.26		150.0	
10194- CAC	IEEE 802.11n (HT Greenfield, 39 Mbps, 16-QAM)	X	4.87	67.36	16.58	0.00	150.0	± 9.6 %
		Y	4.75	67.00	16.25	}	150.0	
		Ζ	4.87	67.15	16.37		150.0	
10195- CAC	IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM)	X	4.91	67.37	16.59	0.00	150.0	± 9.6 %
		Y	4.79	67.03	16.27		150.0	
		Z	4.91	67.16	16.38		150.0	
10196- CAC	IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK)	Х	4.69	67.10	16.51	0,00	150.0	± 9.6 %
		Y	4.58	66.74	16.16		150.0	
		Z	4.69	66.88	16.30		150.0	
10197- CAC	IEEE 802.11n (HT Mixed, 39 Mbps, 16- QAM)	X	4.89	67.38	16.59	0.00	150.0	± 9.6 %
		Y	4.77	67.03	16.26		150.0	
		Z	4.88	67.17	16.38		150.0	
10198- CAC	IEEE 802.11n (HT Mixed, 65 Mbps, 64- QAM)	X	4.92	67.39	16.60	0.00	150.0	±9.6 %
		Y	4.80	67.05	16,28		150.0	1
		Z	4.91	67.18	16.39		150.0	1
10219- CAC	IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK)	X	4.64	67.11	16.47	0.00	150.0	±9.6 %
		Y	4.53	66.75	16.12		150.0	
		Z	4.64	66.90	16.26		150.0	
10220- CAC	IEEE 802.11n (HT Mixed, 43.3 Mbps, 16- QAM)	×	4.88	67.37	16.59	0.00	150.0	± 9.6 %
		Y	4.76	67.01	16.26		150.0	
		Z	4,88	67.17	16.38		150.0	
10221- CAC	IEEE 802.11n (HT Mixed, 72.2 Mbps, 64- QAM)	X	4.92	67.32	16.59	0.00	150.0	± 9.6 %
		Y	4.80	66,98	16.27	· ····	150.0	
		Z	4.92	67.11	16.38		150.0	1
10222- CAC	IEEE 802.11n (HT Mixed, 15 Mbps, BPSK)	X	5.23	67.59	16.70	0.00	150.0	± 9.6 %
0,10		Y	5.12	67.23	16.39		150.0	
		Z	5.22					····
	.1	L <u> </u>	0.22	67.42	16.51	1	150.0	L

10223- CAC	IEEE 802.11n (HT Mixed, 90 Mbps, 16- QAM)	X	5.61	67.92	16.89	0.00	150.0	± 9.6 %
		Y	5.46	67.48	16.54		150.0	
		Z	5.61	67.78	16.72	· · · · · · · · · · · · · · · · · · ·	150.0	
10224- CAC	IEEE 802.11n (HT Mixed, 150 Mbps, 64- QAM)	X	5.28	67.68	16.67	0.00	150.0	± 9.6 %
		Y	5.17	67.32	16.37		150.0	
		Z	5.27	67.52	16.48		150.0	
10225- CAB	UMTS-FDD (HSPA+)	X	2.96	66.82	16.01	0.00	150.0	±9.6%
		Y	2.82	66.09	15.31		150.0	
		Z	2.93	66.33	15.63		150.0	
10226- CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	X	43.59	111.94	32.75	6.02	65.0	± 9.6 %
		Y	38.77	109.92	31.88		65.0	
40007		Z	29.30	103.58	30.20		65.0	
10227- CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	X	32.72	105.33	30.40	6.02	65.0	± 9.6 %
		Y	30.31	104.10	29.73		65.0	
40000		Ζ	23.58	98.50	28.23		65.0	
10228- CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	X	45.04	118.57	36.38	6.02	65.0	± 9.6 %
		Y	33.63	112.96	34.54		65.0	
40000		Z	30.07	109.15	33.47		65.0	
10229- CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16- QAM)	×	40.99	110.67	32.33	6.02	65.0	± 9.6 %
		Y	35.91	108.38	31.38		65.0	
		Z	28.02	102.65	29.86		65.0	
10230- CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64- QAM)	X	31.17	104.37	30.06	6.02	65.0	± 9.6 %
		Y	28.46	102.90	29.31		65.0	
		Ζ	22.72	97.78	27.95		65.0	
10231- CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	X	42.43	117.25	35.96	6.02	65.0	± 9.6 %
		Y	31.37	111.47	34.05		65.0	
		Z	28.77	108.18	33.13		65.0	
10232- CAD	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16- QAM)	X	40.99	110.68	32.33	6.02	65.0	± 9.6 %
		Y	35.90	108.38	31.38		65.0	
		Z	28.01	102.65	29.86		65.0	
10233- CAD	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64- QAM)	X	31.21	104.41	30.07	6.02	65.0	±9.6 %
		Y	28.46	102.91	29.32		65.0	1
		Z	22.74	97.80	27.96		65.0	
10234- CAD	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	X	39.80	115.77	35.45	6.02	65.0	±9.6 %
		Y	29.32	109.94	33.51		65.0	
		Z	27.42	107.07	32.71		65.0	
10235- CAD	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	X	41.16	110.77	32.35	6.02	65.0	±9.6 %
		Y	36.04	108.46	31.40		65.0	
		Z	28.08	102.71	29.87		65.0	
10236- CAD	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	X	31.50	104.54	30.10	6.02	65.0	± 9.6 %
		Y	28.73	103.05	29.35		65.0	
10237- CAD	LTE-TDD (SC-FDMA, 1 RB, 10 MHz,	Z X	22.90 42.99	97.90 117.54	27.98 36.03	6.02	65.0 65.0	± 9.6 %
	QPSK)		04.07	444.00	04.44			
1.0.A.		Y	31.67	111.68	34.11		65.0	
10000		Z	29.03	108.38	33.18	0.00	65.0	
10238- CAD	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	X	41.04	110.71	32.33	6.02	65.0	± 9.6 %
		Y	35.91	108.40	31.38		65.0	
		Z	28.02	102.67	29.86		65.0	

10239- CAD	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	X	31.24	104.44	30.08	6.02	65.0	± 9.6 %
		Y	28.46	102.92	29.32		65.0	
		Z	22.74	97.82	27.96		65.0	
10240- CAD	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	Х	42.83	117.47	36.01	6.02	65.0	±9.6 %
		Y	31.56	111.62	34.09		65.0	
		Z	28.94	108.32	33.17		65.0	
10241- CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	Х	13.21	88.13	28.12	6.98	65.0	± 9.6 %
		Y	12.19	86.75	27.34		65.0	
		Ζ	12.93	86.92	27.56		65.0	
10242- CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	×	11.82	85.64	27.08	6.98	65.0	±9.6 %
		Y	11.88	86.18	27.05		65.0	
		Z	11.71	84.70	26.62		65.0	
10243- CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	X	9.69	83.18	27.04	6.98	65.0	±9.6 %
		Y	8.48	80.58	25.71		65.0	
		Z	9.71	82.55	26.66		65.0	
10244- CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	X	10.16	81.71	21.73	3.98	65.0	±9.6 %
		<u>Y</u>	9.31	80.28	20.70		65.0	
		Z	9.66	80.44	21.31		65.0	
10245- CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	X	9.99	81.19	21.49	3.98	65.0	± 9.6 %
		Y	9.12	79.71	20.44		65.0	
		Z	9.56	80.04	21.12		65.0	
10246- CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	X	10.26	84.67	22.74	3.98	65.0	± 9.6 %
		Y	9.22	82.91	21.64		65.0	
		Z	9.02	82.03	21.79		65.0	
10247- CAD	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	X	8.13	78.66	21.05	3.98	65.0	±9.6 %
		Y	7.56	77,60	20.25		65.0	
		Z	7.81	77.51	20.59		65.0	
10248- CAD	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	X	8.10	78.15	20.84	3.98	65.0	± 9.6 %
		Y	7.50	77.03	20.01		65.0	
		Z	7.84	77.14	20.44		65.0	
10249- CAD	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	X	11.10	86.20	23.88	3.98	65.0	± 9.6 %
*******		Y	10.38	85.15	23.14		65.0	
******		Z	9.69	83.27	22.77		65.0	
10250- CAD	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	X	8.90	80.26	22.85	3.98	65.0	± 9.6 %
		Y	8.50	79.72	22.41		65.0	
		Z	8.55	78.98	22.26		65.0	
10251- CAD	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	X	8.43	78.18	21.77	3.98	65.0	± 9.6 %
		Y	7.97	77.44	21.21		65.0	
		Z	8.21	77.20	21.30		65.0	
10252- CAD	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	X	10.55	84.69	23.95	3.98	65.0	± 9.6 %
		Y	10.10	84.18	23.52	1	65.0	
		Z	9.56	82.30	22.95		65.0	
10253- CAD	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	X	8.29	77.16	21.61	3.98	65.0	± 9.6 %
		Y	7.87	76.45	21.11		65.0	
		Z	8.15	76.38	21.20		65.0	
10254- CAD	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	X	8.65	77.83	22.17	3.98	65.0	± 9.6 %
		Y	8.27	77.28	21.75	1	65.0	-
		1		77.01				

10255- CAD	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	X	9.28	.80.86	22.71	3.98	65.0	± 9.6 %
		Y	8.89	80.40	22.35		65.0	
		Z	8.80	79.34	21.99		65.0	
10256- CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	X	9.13	79.62	20.18	3.98	65.0	± 9.6 %
		Y	7.96	77.38	18.74		65.0	
		Z	8.84	78.74	19.97		65.0	
10257- CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	X	8.90	78.86	19.81	3.98	65.0	± 9.6 %
		Y	7.73	76.58	18.34		65.0	
		Z	8.71	78.17	19.67		65.0	
10258- CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	X	8.90	81.94	21.19	3.98	65.0	± 9.6 %
·····		Y	7.60	79.37	19.69		65.0	
		Z	8.10	80.01	20.54		65.0	
10259- CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	X	8.43	79.20	21.67	3.98	65.0	± 9.6 %
		Y	7.92	78.34	21.01		65.0	
		Ζ	8.11	78.01	21.17		65.0	
10260- CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	X	8.43	78.91	21.57	3.98	65.0	± 9.6 %
		Y	7.92	78.05	20.91		65.0	
		Z	8.14	77.80	21.11		65.0	
10261- CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	X	10.44	84.93	23.72	3.98	65.0	±9.6 %
		Y	9.81	84.03	23.07		65.0	
		Z	9.35	82.40	22.71		65.0	
10262- CAD	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	X	8.89	80.23	22.82	3.98	65.0	± 9.6 %
		Y	8.49	79.67	22.37		65.0	
		Z	8.55	78.95	22.23		65.0	
10263- CAD	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	X	8.43	78.18	21.77	3.98	65.0	± 9.6 %
-		Y	7.96	77.43	21.21		65.0	
		Z	8.21	77.20	21.30		65.0	
10264- CAD	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	X	10.49	84.56	23.88	3.98	65.0	±9.6 %
		Y	10.02	84.01	23.44		65.0	
		Z	9.51	82.19	22.89		65.0	
10265- CAD	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	X	8.52	77.77	21.82	3.98	65.0	± 9.6 %
		Y	8.07	77.03	21.32		65.0	
		Z	8.36	76.93	21.38		65.0	
10266- CAD	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	X	8.87	78.41	22.40	3.98	65.0	±9.6 %
		Y	8,48	77.88	22.01		65.0	
		Z	8.68	77.54	21.94		65.0	
10267- CAD	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	X	9.58	81.18	22.60	3.98	65.0	±9.6 %
		Y	9.19	80.75	22.26		65.0	
		Z	9.04	79.59	21.85		65.0	İ
10268- CAD	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	X	8.91	77.09	21.88	3.98	65.0	± 9.6 %
		Y	8.54	76.56	21.51		65.0	
		Ζ	8.80	76.43	21.50		65.0	
10269- CAD	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	X	8.82	76.67	21.78	3.98	65.0	± 9.6 %
		Y	8.46	76.15	21.41		65.0	
		Z	8.73	76.06	21.42		65.0	
10270- CAD	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	X	8.97	78.33	21.62	3.98	65.0	± 9.6 %
CAD		Y	8.64	77.97	21.34		65.0	
		1 1 1	0.01	11.01	2 6.04		00.0	

10274- CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.10)	X	2.72	67.23	15.95	0.00	150.0	±9.6 %
		Y	2.57	66.31	15.13		150.0	
		Z	2.65	66.56	15.46		150.0	
10275- CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.4)	x	1.89	70.77	17.26	0.00	150.0	± 9.6 %
		Y	1.58	67.67	15.25		150.0	
		Z	1.72	68.75	16.01		150.0	
10277- CAA	PHS (QPSK)	Х	6.00	70.47	14.76	9.03	50.0	± 9.6 %
		Y	5.21	68.57	13.21		50.0	
		Ζ	6.28	70.88	15.27		50.0	
10278- CAA	PHS (QPSK, BW 884MHz, Rolloff 0.5)	Х	9.55	80.33	21.17	9.03	50.0	± 9.6 %
		Y	8.72	78.79	19.97		50.0	
		Z	9.29	79.51	21.06		50.0	
10279- CAA	PHS (QPSK, BW 884MHz, Rolloff 0.38)	×	9.72	80.54	21.26	9.03	50.0	± 9.6 %
		Υ	8.86	78.97	20.05		50.0	
		Ζ	9.46	79.72	21.15		50.0	
10290- AAB	CDMA2000, RC1, SO55, Full Rate	х	2.18	74.40	17.31	0.00	150.0	± 9.6 %
		Y	1.44	68.27	13.81		150.0	
		Ζ	1.72	70.30	15.40		150.0	
10291- AAB	CDMA2000, RC3, SO55, Full Rate	X	1.24	71.68	16.15	0.00	150.0	± 9.6 %
		Y	0.80	65.30	12.12		150.0	
		Ζ	0.97	67,39	13.90		150.0	
10292- AAB	CDMA2000, RC3, SO32, Full Rate	Х	2.10	80.68	20.23	0.00	150.0	± 9.6 %
		Υ	0.98	68.86	14.25		150.0	
		Z	1.23	71.77	16.34		150.0	
10293- AAB	CDMA2000, RC3, SO3, Full Rate	X	4.35	92.52	24.81	0.00	150.0	± 9.6 %
		Y	1.43	74.29	17.12		150.0	
		Z	1.75	77.17	19.08		150.0	
10295- AAB	CDMA2000, RC1, SO3, 1/8th Rate 25 fr.	Х	11.19	84.61	24.64	9.03	50.0	± 9.6 %
		Y	11.12	84.62	24.20		50.0	
		Z	10.33	82.52	23.91		50.0	
10297- AAC	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	X	3.13	71.75	17.66	0.00	150.0	± 9.6 %
		Y	2.77	69.64	16.38		150.0	
		Z	2.96	70.46	16.84		150.0	
10298- AAC	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	Х	2.07	71.56	16.68	0.00	150.0	± 9.6 %
		Y	1.59	67.63	14.15		150.0	
		Z	1.84	69.13	15.41		150.0	
10299- AAC	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	X	4.44	77.05	18.50	0.00	150.0	± 9.6 %
		Y	3.17	71.89	15.69		150.0	
		Z	3.89	74.52	17.46		150.0	
10300- AAC	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	X	2.98	70.18	14.87	0.00	150.0	± 9.6 %
		Y	2.33	66.80	12.64		150.0	
		Z	2.88	69.22	14.45		150.0	
10301- AAA	IEEE 802.16e WIMAX (29:18, 5ms, 10MHz, QPSK, PUSC)	X	5.88	68.71	19.12	4.17	80.0	± 9.6 %
		Y	5.67	68.35	18.79		80.0	
		Z	5.96	68.70	19.05		80.0	
10302- AAA	IEEE 802.16e WIMAX (29:18, 5ms, 10MHz, QPSK, PUSC, 3 CTRL symbols)	X	6.49	69.93	20.23	4.96	80.0	± 9.6 %
		Y	6.06	68.48	19.24		80.0	1
		Z	6.58	69.96	20.17	*****	80.0	******

10303- AAA	IEEE 802.16e WIMAX (31:15, 5ms, 10MHz, 64QAM, PUSC)	x	6.38	70.18	20.37	4.96	80.0	±9.6%
		Y	5.90	68.52	19.27		80.0	}
		Z	6.49	70.27	20.35		80.0	<u>.</u>
10304- AAA	IEEE 802.16e WIMAX (29:18, 5ms, 10MHz, 64QAM, PUSC)	X	5.94	69.20	19.41	4.17	80.0	± 9.6 %
	·····	Y	5.55	67.84	18.48		80.0	
10005		Z	6.02	69.19	19.33		80.0	
10305- AAA	IEEE 802.16e WIMAX (31:15, 10ms, 10MHz, 64QAM, PUSC, 15 symbols)	X	8.63	79.84	25.16	6.02	50.0	±9.6 %
		Y	8.50	80.74	25.49		50.0	<u> </u>
40000		Z	9.07	80.51	25.38		50.0	
10306- AAA	IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, 64QAM, PUSC, 18 symbols)	X	7.19	74.26	22.98	6.02	50.0	± 9.6 %
		Y	6.24	70.98	21.03		50.0	
40207		Z	7.44	74.65	23.11		50.0	
10307- AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, PUSC, 18 symbols)	X	7.43	75.32	23.26	6.02	50.0	±9.6 %
		Y	7.08	75.34	23.24		50.0	
40000		Z	7.71	75.76	23.39		50.0	
10308- AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, PUSC)	Х	7.56	75.95	23.55	6.02	50.0	± 9.6 %
		Y	7.22	76.07	23.58		50.0	
40000		Z	7.85	76.40	23.68		50.0	
10309- AAA	IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, 16QAM, AMC 2x3, 18 symbols)	X	7.34	74.67	23.20	6.02	50.0	± 9.6 %
	Ann	Y	6.34	71.28	21.21		50.0	
		Z	7.59	75.05	23.31		50.0	
10310- AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, AMC 2x3, 18 symbols)	X	7.26	74.63	23.05	6.02	50.0	± 9.6 %
		Y	6.24	71.19	21.04		50.0	
		Z	7.51	75.03	23.17		50.0	
10311- AAC	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	X	3.50	70.87	17.20	0.00	150.0	± 9.6 %
		Y	3.12	68.92	16.05		150.0	
		Z	3.32	69.72	16.47		150.0	
10313- AAA	iDEN 1:3	X	8.27	79.76	19.38	6.99	70.0	± 9.6 %
		Y	7.09	77.48	18.12		70.0	
		Z	7.27	77.42	18.52		70.0	
10314- AAA	IDEN 1:6	X	10.52	85.41	23.73	10.00	30.0	± 9.6 %
M		Y	9.80	84.47	23.05		30.0	
		Z	8.56	81.26	22.24		30.0	
10315- AAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 96pc duty cycle)	X	1.21	66.04	16.76	0.17	150.0	± 9.6 %
		Y	1.11	64.36	15.28		150.0	
40040		Z	1.16	64.99	15.81		150.0	
10316- AAB	IEEE 802.11g WiFi 2.4 GHz (ERP- OFDM, 6 Mbps, 96pc duty cycle)	X	4.78	67.20	16.69	0.17	150.0	± 9.6 %
		Y	4.67	66.87	16.36		150.0	
40047		Z	4.78	67.00	16.48		150.0	
10317- AAC	IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle)	X	4.78	67.20	16.69	0.17	150.0	± 9.6 %
		Y	4.67	66.87	16.36		150.0	
10400		Z	4.78	67.00	16.48		150.0	
10400- AAD	IEEE 802.11ac WiFi (20MHz, 64-QAM, 99pc duty cycle)	X	4.88	67.44	16.59	0.00	150.0	± 9.6 %
		Y	4.75	67.07	16.25		150.0	ļ
10101		Z	4.88	67.23	16.38		150.0	ļ
10401- AAD	IEEE 802.11ac WiFi (40MHz, 64-QAM, 99pc duty cycle)	X	5.52	67.51	16.67	0.00	150.0	± 9.6 %
		Y	5.43	67.26	16.42		150.0	
		Z	5.50	67.29	16.46	]	150.0	]

10402- AAD	IEEE 802.11ac WiFi (80MHz, 64-QAM, 99pc duty cycle)	X	5.81	67.99	16.74	0.00	150.0	±9.6 %
· 17 100		Y	5.71	67.67	16.46		150.0	
		z	5.80	67.83	16.56		150.0	
10403- AAB	CDMA2000 (1xEV-DO, Rev. 0)	X	2.18	74.40	17.31	0.00	115.0	± 9.6 %
		Y	1.44	68.27	13.81		115.0	
		Z	1.72	70.30	15.40		115.0	
10404- AAB	CDMA2000 (1xEV-DO, Rev. A)	X	2.18	74.40	17.31	0.00	115.0	± 9.6 %
		Y	1.44	68.27	13.81		115.0	
10406- AAB	CDMA2000, RC3, SO32, SCH0, Full Rate	Z X	1.72 100.00	70.30 125.34	15.40 32.57	0.00	115.0 100.0	±9.6 %
		Y	100.00	122.30	30.90		100.0	
	· · · · · · · · · · · · · · · · · · ·	Z	100.00	123.59	31.86		100.0	
10410- AAD	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9, Subframe Conf=4)	X	100.00	121.08	31.14	3.23	80.0	±9.6 %
		Y	100.00	119.39	30.03		80.0	
		Z	100.00	119.84	30.69		80.0	
10415- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle)	X	1.04	64.21	15.75	0.00	150.0	± 9.6 %
		Y	0.96	62.81	14.37		150.0	
40440		Z	1.00	63.31	14.86		150.0	100%
10416- AAA	IEEE 802.11g WiFi 2.4 GHz (ERP- OFDM, 6 Mbps, 99pc duty cycle)	X	4.68	67.03	16.52	0.00	150.0	± 9.6 %
		Y Z	4.57	66.70	16.19		150.0 150.0	
10417-	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6	X	4.67	66.81	16.30 16.52	0.00	150.0	± 9.6 %
AAB	Mbps, 99pc duty cycle)	Y	4.68	67.03 66.70	16.52	0.00	150.0	±9.0 %
		Z	4.57	66.81	16.19		150.0	
10418- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 99pc duty cycle, Long preambule)	X	4.66	67.18	16.53	0.00	150.0	± 9.6 %
		Y	4.55	66.84	16.19		150.0	
		Z	4.65	66.94	16.30		150.0	
10419- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 99pc duty cycle, Short preambule)	X	4.69	67.13	16.53	0.00	150.0	± 9.6 %
		Y	4.58	66.80	16.20		150.0	
		Z	4.68	66.91	16.31		150.0	
10422- AAB	IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK)	×	4.81	67.13	16.54	0.00	150.0	± 9.6 %
		Y	4.70	66.81	16.22	ļ	150.0	
10423- AAB	IEEE 802.11n (HT Greenfield, 43.3 Mbps, 16-QAM)	Z X	4.80 5.01	66,92 67.51	16.33 16.68	0.00	150.0 150.0	± 9.6 %
AAD		Y	4.89	67.16	16.35		150.0	
		Z	5.01	67.31	16.35		150.0	
10424-	IEEE 802.11n (HT Greenfield, 72.2	$\frac{2}{X}$	4.92	67.45	16.65	0.00	150.0	± 9.6 %
AAB	Mbps, 64-QAM)	Y	4.80	67.10	16.32		150.0	
		Z	4.92	67.24	16.43	+	150.0	
10425- AAB	IEEE 802.11n (HT Greenfield, 15 Mbps, BPSK)	X	5.50	67.77	16.79	0.00	150.0	± 9.6 %
	,	Y	5.41	67.50	16.53	1	150.0	1
		Z	5.49	67.58	16.59	1	150.0	
10426- AAB	IEEE 802.11n (HT Greenfield, 90 Mbps, 16-QAM)	X	5.51	67.80	16.80	0.00	150.0	± 9.6 %
		Y	5.41	67.51	16.53		150.0	
		Z	5.50	67.62	16.60	T	150.0	1

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10427- AAB	IEEE 802.11n (HT Greenfield, 150 Mbps, 64-QAM)	X	5.53	67.79	16.79	0.00	150.0	± 9.6 %
		Y	5.42	67.48	16.51		150.0	1
40400		Z	5.52	67.63	16.61		150.0	
10430- AAB	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1)	X	4.38	70.70	18.40	0.00	150.0	± 9.6 %
·····		Y	4.25	70.46	18.05		150.0	
		Z	4.31	70.02	17.98		150.0	
10431- AAB	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1)	X	4.42	67.67	16.62	0.00	150.0	± 9.6 %
		Y	4.27	67.23	16.20		150.0	
40400		Z	4.41	67.37	16.37		150.0	
10432- AAB	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1)	X	4.70	67.52	16.63	0.00	150.0	± 9.6 %
		Y	4.57	67.13	16.26		150.0	
40.400		Z	4.70	67.28	16.40		150.0	
10433- AAB	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1)	X	4.94	67.50	16.67	0.00	150.0	± 9.6 %
		Y	4.82	67.14	16.34		150.0	
40404		Z	4.94	67.29	16.46		150.0	[
10434- AAA	W-CDMA (BS Test Model 1, 64 DPCH)	X	4.49	71.52	18.43	0.00	150.0	± 9.6 %
		Y	4.34	71.22	18.01		150.0	
		Z	4.39	70.68	17.96		150.0	
10435- AAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	120.92	31.06	3.23	80.0	± 9.6 %
		Y	100.00	119.22	29.95		80.0	
		Z	100.00	119.70	30.62		80.0	
10447- AAB	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	X	3.75	67.86	16.21	0.00	150.0	±9.6 %
		Y	3.56	67.20	15.57		150.0	ļ
		Z	3.73	67.41	15.90		150.0	
10448- AAB	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, Clippin 44%)	X	4.24	67.45	16.49	0.00	150.0	± 9.6 %
		Y	4.10	67.00	16.05		150.0	
		Z	4.22	67.14	16.23		150.0	
10449- AAB	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1, Cliping 44%)	X	4.49	67.35	16.53	0.00	150.0	±9.6 %
		Y	4.37	66.95	16.16		150.0	
		Z	4,48	67.09	16.30		150.0	
10450- AAB	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	X	4.67	67.26	16.53	0.00	150.0	± 9.6 %
		Y	4.56	66.89	16.18		150.0	
	······································	Ζ	4.66	67.04	16.31		150.0	
10451- AAA	W-CDMA (BS Test Model 1, 64 DPCH, Clipping 44%)	X	3.69	68.21	15.98	0.00	150.0	± 9.6 %
		Y	3.47	67,39	15.23		150.0	
		Z	3.66	67.69	15.67		150.0	
10456- AAB	IEEE 802.11ac WiFi (160MHz, 64-QAM, 99pc duty cycle)	Х	6.36	68.35	16.93	0.00	150.0	± 9.6 %
·····		Y	6.27	68.07	16.69		150.0	
		Z	6.35	68.21	16.77		150.0	
10457- AAA	UMTS-FDD (DC-HSDPA)	x	3.86	65.66	16.26	0.00	150.0	±9.6 %
		Y Z	3.78 3.84	65.32 65.45	15.90 16.04		150.0 150.0	
10458-	CDMA2000 (1xEV-DO, Rev. B, 2	X	4,10	70.68	17.90	0.00	and and a state of the state of	100%
AAA	carriers)	Y	3.95			0.00	150.0	± 9.6 %
				70.36	17.40		150.0	
10459-	CDMA2000 (1xEV-DO, Rev. B, 3	Z	3.98	69.73	17.40		150.0	
AAA	carriers)	X	5.16	67.87	18.15	0.00	150.0	± 9.6 %
		Y	5.08	67.96	18.01		150.0	
		Z	5.12	67.39	17.86		150.0	

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10460- AAA	UMTS-FDD (WCDMA, AMR)	Х	1.21	74.36	19.56	0.00	150.0	± 9.6 %
		Y	0.84	67.73	15.53		150.0	
		Z	0.96	69.69	16.87		150.0	
10461- AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	Х	100.00	124.72	32.88	3.29	80.0	± 9.6 %
		Y	100.00	122,71	31.63		80.0	
		Ζ	100.00	122.27	31.89		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	110.81	26.22	3.23	80.0	± 9.6 %
		Y	100.00	107.68	24.48		80.0	
		Z	100.00	109.58	25.81		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	108.02	24.88	3.23	80.0	± 9.6 %
		Y	17.57	87.04	18.79		80.0	
		Z	57.71	101.03	23.21		80.0	
10464- AAA	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	122.99	31.92	3.23	80.0	± 9.6 %
		Y	100.00	120.66	30.52		80.0	
		Z	100.00	120.59	30.96		80.0	
10465- AAA	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	Х	100.00	110.36	26.00	3.23	80.0	± 9.6 %
		Y	69.93	103.37	23.39	[	80.0	
		Z	100.00	109.17	25.60		80.0	
10466- AAA	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	Х	100.00	107.59	24.67	3.23	80.0	± 9.6 %
		Y	10.32	81.39	17.12		80.0	
		Z	32.56	94.43	21.51		80.0	
10467- AAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	123.18	32.01	3.23	80.0	± 9.6 %
		Y	100.00	120.88	30.62		80.0	
		Z	100.00	120.77	31.04		80.0	
10468- AAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	110.50	26.06	3.23	80.0	± 9.6 %
		Y	95.55	106.84	24.20		80.0	
		Z	100.00	109.30	25.66		80.0	
10469- AAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	107.60	24.67	3.23	80.0	± 9.6 %
		Y	10.51	81.58	17.17		80.0	
		Z	33.51	94,76	21.58		80.0	
10470- AAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	123.21	32.02	3.23	80.0	± 9.6 %
		Y	100.00	120.90	30.62		80.0	
	······································	Z	100.00	120.79	31.05		80.0	1
10471- AAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	110.46	26.04	3.23	80.0	± 9.6 %
		Y	94.56	106.68	24.14		80.0	
		Z	100.00	109.26	25.63		80.0	
10472- AAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	107.56	24.64	3.23	80.0	± 9.6 %
		Y	10.43	81.48	17.13		80.0	
		Z	33.64	94.78	21.58		80.0	
10473- AAC	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	123.19	32.00	3.23	80.0	± 9.6 %
		Y	100.00	120.87	30.61		80.0	
		Z	100.00	120.77	31.03		80.0	
10474- AAC	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	110.47	26.04	3.23	80.0	±9.6 %
		Y	92.06	106.40	24.08		80.0	
		Z	100.00	109.26	25.64		80.0	
10475- AAC	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	107.57	24.65	3.23	80.0	± 9.6 %
		Y	10.30	81.37	17.09	1	80.0	
		Ż	33.12	94.61	21.54		80.0	

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10477- AAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	110.32	25.97	3.23	80.0	± 9.6 %
		Y	73.47	103.85	23.47		80.0	
		Z	100.00	109.13	25.57		80.0	
10478- AAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	107.52	24.63	3.23	80.0	± 9.6 %
		Y	10.13	81.17	17.03		80.0	
		Z	32.56	94.40	21.47		80.0	
10479- AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	23.24	102.02	28,60	3.23	80.0	±9.6 %
	·····	<u>Y</u>	17.72	96.96	26.53		80.0	
40400		Z	12.62	91.31	25.32		80.0	
10480- AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	23.79	96.38	25.31	3.23	80.0	± 9.6 %
		Y	16.50	90.35	22.90		80.0	
10101		Z	13.56	87.65	22.71		80.0	
10481- AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	19.64	92.74	23.93	3.23	80.0	± 9.6 %
		Y	13.10	86.39	21.35		80.0	
40400		Z	12.05	85.29	21.66		80.0	
10482- AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	8.49	84.69	22.05	2.23	80.0	±9.6 %
		Y	5.66	78.52	19.36		80.0	
40400		Z	6.07	79.11	20.05		80.0	
10483- AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	×	11.70	86.22	22.45	2.23	80.0	± 9.6 %
		Y	8.73	81.47	20.24		80.0	
40404		Z	8.71	81.39	20.85		80.0	
10484- AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	10.50	84.41	21.86	2.23	80.0	± 9.6 %
		Y	7.92	79.90	19.71		80.0	
		Z	8.18	80.26	20.46		80.0	
10485- AAC	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	8.12	84.44	22.68	2.23	80.0	±9.6 %
		Y	5.95	79.56	20.54		80.0	
		Z	6.24	79.61	20.83		80.0	
10486- AAC	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	x	5.60	75.72	19.25	2.23	80.0	± 9.6 %
		Y	4.71	73.16	17.81		80.0	
		Z	5.00	73.46	18.29		80.0	
10487- AAC	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	5.48	75.06	18.99	2.23	80.0	± 9.6 %
		Y	4.65	72.64	17.60		80.0	
		Z	4.96	73.01	18.11		80.0	
10488- AAC	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	7.06	80.88	21.92	2.23	80.0	± 9.6 %
		Y	5.70	77.55	20.40		80.0	
		Z	6.08	77.77	20.57		80.0	
10489- AAC	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	5.31	73.88	19.45	2.23	80.0	± 9.6 %
		Y	4.75	72.25	18.50		80.0	
		Z	5.02	72,44	18.71		80.0	
10490- AAC	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	5.32	73.40	19.28	2.23	80.0	± 9.6 %
		Y	4.80	71.92	18.39		80.0	
	·	Z	5.07	72.08	18.60		80.0	
10491- AAC	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	6.29	77.08	20.62	2.23	80.0	±9.6 %
		Y	5.44	74.84	19.51		80.0	
		Z	5.78	75.12	19.66		80.0	
10492- AAC	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	5.38	72.26	19.03	2.23	80.0	±9.6 %
		Y	4.95	71.03	18.29		80.0	1
		Z	5.22	71.29	18.47		80.0	1

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10493- AAC	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	5.41	71.97	18.93	2.23	80.0	±9.6 %
		Y	4.99	70.82	18.22	•••••	80.0	······
		Z	5.27	71.06	18.40		80.0	·····
10494-	LTE-TDD (SC-FDMA, 50% RB, 20 MHz,	X	7.26	79.46	21.31	2.23	80.0	± 9.6 %
AAC	QPSK, UL Subframe=2,3,4,7,8,9)					2.20		,.
		Y	6.08	76.70	20.04		80.0	
		Z	6.47	77.03	20.19		80.0	
10495- AAC	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	5.52	72.92	19.28	2.23	80.0	± 9.6 %
		Y	5.04	71.57	18.51		80.0	
		Z	5.33	71.88	18.69		80.0	
10496- AAC	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	5.51	72.36	19.10	2.23	80.0	± 9.6 %
		Y	5.07	71.15	18.38		80.0	
		Z	5.35	71.43	18.55		80.0	
10497- AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	6.84	81,16	20.14	2.23	80.0	± 9.6 %
		Y	4.18	74.07	16.91		80.0	
		Z	4.97	76.21	18.38		80.0	
10498-	LTE-TDD (SC-FDMA, 100% RB, 1.4	X	4.23	71.63	15.72	2.23	80.0	±9.6 %
AAA	MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)					2.20	5-10	
		Y	2,88	66.72	12.99		80.0	
		Z	3.81	69.89	15.10		80.0	1
10499-	LTE-TDD (SC-FDMA, 100% RB, 1.4	X	4.07	70.79	15.25	2.23	80.0	± 9.6 %
AAA	MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)			10.70	10.20	2.20	00.0	2 0.0 %
		Y	2.78	66.03	12.55		80.0	
		Z	3.73	69.33	14.75		80.0	
10500- AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	7.25	82.07	22.09	2.23	80.0	± 9.6 %
		Y	5.64	78.16	20.30		80.0	
		Z	5.95	78.24	20.53		80.0	
10501- AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	5.43	74.78	19.24	2.23	80.0	± 9.6 %
	· · ·	Y	4.72	72.72	18.04		80.0	
		Z	4.99	72.91	18.39		80.0	· · · ·
10502- AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	5.43	74.40	19.05	2.23	80.0	± 9.6 %
		Y	4.75	72.45	17.89		80,0	
		Z	5.01	72.63	18.25		80.0	
10503- AAC	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	6.96	80.64	21.82	2.23	80.0	± 9.6 %
		Y	5.62	77.31	20.29		80.0	
	**************************************	Z	6.00	77.58	20.48		80.0	
10504- AAC	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	5.28	73.79	19.40	2.23	80.0	± 9.6 %
		Y	4.72	72.15	18.44		80.0	
		Z	5.00	72.37	18.67		80.0	
10505- AAC	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	5.30	73.31	19.23	2.23	80.0	±9.6 %
		Υ	4.78	71.81	18.34		80.0	
		Z	5.05	72.00	18.55		80.0	1
10506- AAC	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	7.19	79.29	21.23	2.23	80.0	± 9.6 %
		Y	6.02	76.53	19.97		80.0	
		Z	6.42	76.89	20.13		80.0	
10507-	LTE-TDD (SC-FDMA, 100% RB, 10	X	5.49	72.85	19.25	2.23	80.0	± 9.6 %
AAC	MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)		0.40		.0.20	2.20		20.070
			5.00		+			
		Υ	5.02	71.50	18.47		80.0	

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10508- AAC	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	5.49	72.29	19.06	2.23	80.0	± 9.6 %
		Υ	5.05	71.07	18.34		80.0	
		Z	5.33	71.37	18.52		80.0	
10509- AAC	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	6.71	76.12	20.06	2.23	80.0	± 9.6 %
······		Y	5.94	74.25	19,13		80.0	
		Z	6.28	74.57	19.27		80.0	
10510- AAC	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	5.84	71.95	18.94	2.23	80.0	±9.6 %
		Y	5.42	70.86	18.30		80.0	
		Z	5.71	71.20	18.47		80.0	
10511- AAC	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	5.82	71.51	18.81	2.23	80.0	± 9.6 %
		Y	5.44	70.51	18.21		80.0	
		Z	5.71	70.83	18.37		80.0	
10512- _AAC	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	7.61	78.80	20.90	2.23	80.0	± 9.6 %
		Y	6.48	76.29	19.75		80.0	
40540		Z	6.88	76.71	19.92		80.0	
10513- AAC	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	5.82	72.58	19.18	2.23	80.0	± 9.6 %
		Y	5.36	71.33	18.47		80.0	
40544		Z	5.67	71.74	18.66		80.0	
10514- AAC	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	5.73	71.89	18.96	2.23	80.0	± 9.6 %
		Υ	5.32	70.77	18.31		80.0	
		Z	5.61	71.15	18.49		80.0	
10515- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 99pc duty cycle)	X	1.00	64.53	15.90	0.00	150.0	±9.6 %
		Y	0.92	62.98	14.41		150.0	
40540		Z	0.96	63.54	14.94		150.0	
10516- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc duty cycle)	X	1.68	91.06	26.34	0.00	150.0	± 9.6 %
		Y	0.55	69.99	16.34		150.0	
10517-		Z	0.73	74.56	19.01		150.0	
AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 99pc duty cycle)	X	0.92	68.12	17.45	0.00	150.0	±9.6 %
		Y	0.77	64.83	14.89		150.0	
10518- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc duty cycle)	Z X	<u>0.84</u> 4.67	65.95 67.12	15.79 16.50	0.00	150.0 150.0	±9.6 %
		Y	4.56	66.77	16.17		150.0	
		Z	4.66	66.89	16.28		150.0	
10519- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 99pc duty cycle)	X	4.89	67.40	16.64	0.00	150.0	± 9.6 %
		Y	4.77	67.04	16.30		150.0	
		Z	4.89	67.19	16.43		150.0	
10520- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 99pc duty cycle)	X	4.74	67.39	16.57	0.00	150.0	±9.6 %
		Y	4.61	67.01	16.22		150.0	
10521- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc duty cycle)	Z X	4.74 4.67	<u>67.17</u> 67.41	16.35 16.56	0.00	150.0 150.0	± 9.6 %
		Y	4.55	67.00	16.20		150.0	
·····		z	4.67	67.18	16.34		150.0	
10522- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc duty cycle)	X	4.72	67.39	16.60	0.00	150.0	±9.6 %
		Y	4.60	67.04	16.27		150.0	
		Z	4.71	67.14	16.36		150.0	

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AAB         Mbps, 98 pc duty cycle)         Y         4.47         66.51         16.0<									
Let         Let <thlet< th=""> <thlet< th=""> <thlet< th=""></thlet<></thlet<></thlet<>	10523- AAB	IEEE 802.11a/h WiFI 5 GHz (OFDM, 48 Mbps, 99pc duty cycle)	X	4.59	67.29	16.46	0.00	150.0	± 9.6 %
Image: Constraint of the constraint of the			Y	4.47	66.91	16.11		150.0	
10524         IEEE 802.11ab. WIFI 6 GHz (OFDM, 54         X         4.67         67.35         16.59         0.00         150.0         ± 5.6 %           AAB         Mbps, 99pc duty cycle)         Y         4.56         66.36         16.24         150.0         .           10525         IEEE 802.11ac WIFI (20MHz, MCS0, X         4.63         66.37         16.17         0.00         150.0         ± 5.6 %           AAB         Spbc duty cycle)         Y         4.52         66.01         15.83         150.0         ± 5.6 %           AAB         Spbc duty cycle)         Y         4.52         66.01         15.83         16.00         ± 9.6 %           AAB         Spbc duty cycle)         Y         4.70         66.42         16.37         10.00         ± 9.6 %           AAB         Spbc duty cycle)         Y         4.70         66.76         16.27         0.00         150.0         ± 9.6 %           AAB         Spbc duty cycle)         Y         4.62         66.36         15.92         150.0         ± 9.6 %           AAB         Spbc duty cycle)         Y         4.64         66.35         16.31         0.00         150.0         ± 9.6 %           AAB         Spbc duty c									
Y         4.455         66.98         16.24         150.0           1025- AAB         Sppc duty cycle)         X         4.67         67.11         16.36         150.0           1025- AAB         Sppc duty cycle)         Y         4.52         66.01         15.83         150.0           1052- AAB         Sppc duty cycle)         Y         4.52         66.01         15.83         150.0         ± 9.6 %           AAB         Sppc duty cycle)         Y         4.70         66.01         15.97         150.0         ± 9.6 %           AAB         Sppc duty cycle)         Y         4.75         66.76         16.27         0.00         150.0         ± 9.6 %           AAB         Sppc duty cycle)         Y         4.75         66.76         16.27         0.00         150.0         ± 9.6 %           AAB         Sppc duty cycle)         Y         4.42         66.36         15.92         150.0         ± 9.6 %           AAB         Sppc duty cycle)         Y         4.44         66.38         15.95         150.0         ± 9.6 %           10529-         IEEE 802.11ac WIFI (20MHz, MCS4,         X         4.77         66.78         16.31         0.00         150.0         ± 9							0.00		± 9.6 %
Image: Second state			Y	4.55	66.98	16.24		150.0	
10525- 99pc duty cycle)         X         4.63         66.37         16.17         0.00         150.0         ± 9.6 %, AAB           AAB         99pc duty cycle)         Y         4.52         66.01         15.83         150.0           10525- AAB         19pc duty cycle)         Y         4.82         66.74         16.32         0.00         150.0         ± 9.6 %, AAB           99pc duty cycle)         Y         4.70         66.74         16.92         0.00         150.0         ± 9.6 %, AAB           10527- AAB         IEEE 802.11ac WIFI (20MHz, MCS2, SPpc duty cycle)         X         4.75         66.76         16.27         0.00         150.0         ± 9.6 %, AAB           10528- Bepc duty cycle)         Y         4.62         66.36         15.92         150.0         ± 9.6 %, AAT           10528- Bepc duty cycle)         Y         4.64         66.34         15.00         ± 9.6 %, AAB         150.0         ± 9.6 %, AAB									
AAB         99pc duty cycle)         Y         4.52         66.01         15.83         150.0           10526- AAB         1EEE 802.11ac WiFI (20MHz, MCS1, AAB         X         4.83         66.78         16.32         0.00         150.0           10527- AAB         99pc duty cycle)         Y         4.70         66.40         15.97         150.0           10527- AAB         1EEE 802.11ac WiFI (20MHz, MCS2, AAB         Y         4.72         66.36         16.92         150.0           10528- AAB         99pc duty cycle)         X         4.75         66.76         16.27         0.00         150.0           10528- AAB         99pc duty cycle)         X         4.77         66.78         16.31         0.00         150.0           10528- AAB         99pc duty cycle)         X         4.77         66.78         16.31         0.00         150.0         2.8.6%           AAB         99pc duty cycle)         Y         4.64         66.34         15.05         150.0         160.0           10529-         IEEE 802.11ac WiFI (20MHz, MCS4, AB         4.77         66.74         16.08         150.0         150.0         2.9.6%           AB         99pc duty cycle)         Y         4.64         66.69	10525-	IEEE 802,11ac WiFi (20MHz, MCS0					0.00		+96%
Image: Constraint of the constraint of the		99pc duty cycle)							- 0.0 70
10526- 99pc duty cycle)         Y         4.83 4.88         96.78 966.74         16.32 165.07         0.00 150.0         150.0 150.0           AAB 99pc duty cycle)         Y         4.70 4.72         66.64         16.97 166.74         150.0           10527- 10527- 10528- AAB         IEEE 802.11ac WIFI (20MHz, MCS2, 99pc duty cycle)         Y         4.72 4.74         66.51 66.51         16.04         150.0           10528- 10528- 10529- 10531- 10529- 10531- 10531- 10531- 10531- 10531- 10531- 10531- 10531- 10531- 10531- 10532-									
AAB         99pc duty cycle)         Y         4.70         66.40         15.97         150.0           10527- AAB         12EE 802.11ac WIFI (20MHz, MCS2, AAB         X         4.75         66.76         16.27         0.00         150.0         ±9.8 %           10527- AAB         99pc duty cycle)         Y         4.62         66.65         16.22         150.0         ±9.8 %           10528- AAB         1EEE 802.11ac WIFI (20MHz, MCS3, AAB         X         4.77         66.78         16.31         0.00         150.0         ±9.6 %           10529- 10529- 10529- 10529- 10529- 10529- 10531- 10531- 10531- 10531- 10532- 10532- 10532- 10532- 10532- 10532- 10532- 10533- 1EEE 802.11ac WIFI (20MHz, MCS6, AAB         Y         4.64         66.38         15.95         150.0         ±9.6 %           10532- 10532- 10532- 10532- 10533- 10532- 10533- AAB         Y         4.64         66.50         15.97         150.0         ±9.6 %           10532- 10533- AAB         99pc duty cycle)         Y         4.64         66.53         16.00         150.0         ±9.6 %           10534- 0.00         150.0         Y         4.64         66.53         15.90         150.0         ±9.6 %           10534- 0.00         150.0         Y         4.64         66.53         15.90	10526	IEEE 802 11ac WIEL/20MHz MCS1					0.00		+06%
Z         4.82         66.64         16.09         150.0           AAB         99pc duty cycle)         Y         4.62         66.76         16.27         0.00         150.0         ± 9.6 %           AAB         99pc duty cycle)         Y         4.62         66.36         15.92         150.0         ± 9.6 %           10528-         IEEE 802.11ac WIFI (20MHz, MCS3,         X         4.77         66.78         16.31         0.00         ± 9.6 %           AAB         9pc duty cycle)         Y         4.64         66.38         15.95         150.0            10529-         IEEE 802.11ac WIFI (20MHz, MCS4,         X         4.77         66.78         16.31         0.00         150.0         ± 9.6 %           AAB         99pc duty cycle)         Y         4.64         66.38         15.95         150.0            10531-         IEEE 802.11ac WIFI (20MHz, MCS6,         X         4.78         66.69         16.10         150.0         ± 9.6 %           AAB         99pc duty cycle)         Y         4.64         66.50         15.97         150.0         ± 9.6 %           AAB         99pc duty cycle)         Y         4.64         66.60         16.05							0.00		1 3,0 78
10527- AAB         IEEE 802.11ac WiFi (20MHz, MCS2, 9pc duty cycle)         X         4.75         66.76         16.27         0.00         150.0         ± 9.6 % ± 9.6 %           10528- AAB         IEEE 802.11ac WiFi (20MHz, MCS3, 99pc duty cycle)         X         4.77         66.76         16.31         0.00         150.0         ± 9.6 % ± 9.6 %           10528- AAB         IEEE 802.11ac WiFi (20MHz, MCS4, 99pc duty cycle)         Y         4.64         66.38         15.95         150.0         ± 9.6 %           10529- 10529- 000         IEEE 802.11ac WiFi (20MHz, MCS4, AAB         Y         4.64         66.38         15.95         150.0         ± 9.6 %           AAB         9pc duty cycle)         Y         4.64         66.34         16.04         150.0         ± 9.6 %           AAB         9pc duty cycle)         Y         4.64         66.33         15.97         150.0         ± 9.6 %           AAB         9pc duty cycle)         Y         4.64         66.50         15.97         150.0         ± 9.6 %           AAB         9pc duty cycle)         Y         4.64         66.50         16.27         0.00         150.0         ± 9.6 %           AAB         9pc duty cycle)         Y         4.463         66.60         1									
AAB         99pc duty cycle)         Y         4.62         66.36         15.92         150.0           10529- AAB         IEEE 802.11ac WIFI (20MHz, MCS3, 99pc duty cycle)         X         4.77         66.78         16.04         150.0         150.0           10529- AAB         IEEE 802.11ac WIFI (20MHz, MCS4, AAB         Y         4.64         66.38         15.95         150.0           10529- AAB         IEEE 802.11ac WIFI (20MHz, MCS4, AAB         Y         4.64         66.38         15.95         150.0           10531- 10531- 99pc duty cycle)         Y         4.64         66.53         16.34         0.00         150.0         ± 9.6 %           AAB         99pc duty cycle)         Y         4.64         66.50         15.97         150.0           10531- 10531- 10532- 10533- 1EEE 802.11ac WIFI (20MHz, MCS7, AAB         Y         4.64         66.50         15.97         150.0           10532- 10533- AAB         IEEE 802.11ac WIFI (20MHz, MCS8, AAB         Y         4.63         66.60         16.29         0.00         150.0         ± 9.6 %           AAB         99pc duty cycle)         Y         4.43         66.36         16.29         0.00         150.0         ± 9.6 %           AAB         99pc duty cycle)	40507						0.00		
Z         4.74         66.51         16.04         150.0           10528- AAB         S9pc duty cycle)         Y         4.64         66.38         16.31         0.00         150.0         ± 9.6 %           AAB         S9pc duty cycle)         Y         4.64         66.38         15.95         150.0           10529- AAB         IEEE 802.11ac WiFI (20MHz, MCS4, AAB         Y         4.64         66.38         15.95         150.0           10531- AAB         Sppc duty cycle)         Y         4.64         66.54         16.08         150.0           10531- AAB         Sppc duty cycle)         Y         4.64         66.50         16.97         150.0           10531- AAB         Sppc duty cycle)         Y         4.64         66.50         16.87         150.0           10532- IEEE 802.11ac WiFI (20MHz, MCS7, AB         Y         4.64         66.35         15.90         150.0           10533- Bopc duty cycle)         Y         4.464         66.35         15.90         150.0         150.0           10533- Bopc duty cycle)         Y         4.464         66.56         16.05         150.0         150.0           10534- Bopc duty cycle)         Y         4.65         66.81         15.94<							0.00		±9.6 %
10528- AAB         IEEE 802.11ac WiFi (20MHz, MCS3, 99pc duty cycle)         X         4.77         66.78         16.31         0.00         150.0         ± 9.6 %           AAB         99pc duty cycle)         Y         4.64         66.33         15.95         150.0           10529- AAB         IEEE 802.11ac WiFi (20MHz, MCS4, 90pc duty cycle)         X         4.77         66.78         16.31         0.00         150.0         ± 9.6 %           AAB         90pc duty cycle)         Y         4.64         66.38         15.95         150.0         105.0         ± 9.6 %           AAB         90pc duty cycle)         Y         4.64         66.54         16.08         150.0         105.0         ± 9.6 %           AAB         90pc duty cycle)         Y         4.64         66.50         15.97         150.0         150.0         150.0         150.0         150.0         105.0         ± 9.6 %           AAB         90pc duty cycle)         Y         4.63         66.80         16.29         0.00         150.0         150.0         150.0         150.0         150.0         150.0         150.0         150.0         150.0         150.0         150.0         150.0         150.0         150.0         150.0									
AAB         99pc duty cycle)         Y         4.64         66.38         15.95         150.0           10529-         IEEE 802.11ac WIFI (20MHz, MCS4, 99pc duty cycle)         X         4.76         66.78         16.31         0.00         150.0         ± 9.6 %           AAB         99pc duty cycle)         Y         4.64         66.38         15.95         150.0           10531-         IEEE 802.11ac WIFI (20MHz, MCS6, 99pc duty cycle)         X         4.77         66.64         16.08         150.0           10531-         IEEE 802.11ac WIFI (20MHz, MCS7, 99pc duty cycle)         X         4.78         66.80         16.10         150.0         ± 9.6 %           AAB         99pc duty cycle)         Y         4.64         66.50         15.97         150.0         ± 9.6 %           AAB         99pc duty cycle)         X         4.63         66.80         16.10         150.0         ± 9.6 %           AAB         99pc duty cycle)         X         4.62         66.56         15.90         150.0         ± 9.6 %           AAB         99pc duty cycle)         X         4.78         66.80         16.29         0.00         150.0         ± 9.6 %           AAB         99pc duty cycle)         X									
Intersection         Z         4.76         66.54         16.08         150.0           AAB         99pc duty cycle)         Y         4.64         66.38         16.31         0.00         150.0         ± 9.6 %           AAB         99pc duty cycle)         Y         4.64         66.38         15.95         150.0         ± 9.6 %           AAB         99pc duty cycle)         Y         4.64         66.33         16.34         0.00         150.0         ± 9.6 %           AAB         99pc duty cycle)         Y         4.64         66.50         15.97         150.0         ± 9.6 %           AAB         99pc duty cycle)         Y         4.64         66.50         16.29         0.00         150.0         ± 9.6 %           AAB         99pc duty cycle)         Y         4.49         66.35         15.90         150.0         ± 9.6 %           AAB         99pc duty cycle)         Y         4.42         66.56         16.05         150.0         ± 9.6 %           AAB         99pc duty cycle)         Y         4.62         66.56         16.05         150.0         ± 9.6 %           AAB         99pc duty cycle)         Y         4.65         56.6.8         16.33<							0.00		± 9.6 %
10529- AAB       IEEE 802.11ac WiFi (20MHz, MCS4, 99pc duty cycle)       X       4.77       66.78       16.31       0.00       150.0       ± 9.6 %         10531- AAB       IEEE 802.11ac WiFi (20MHz, MCS6, 99pc duty cycle)       Y       4.64       66.38       15.95       150.0       ± 9.6 %         AAB       99pc duty cycle)       Y       4.64       66.50       15.97       150.0       ± 9.6 %         AAB       99pc duty cycle)       Z       4.77       66.69       16.10       150.0       ± 9.6 %         AAB       99pc duty cycle)       Z       4.77       66.69       16.10       150.0       ± 9.6 %         AAB       99pc duty cycle)       Z       4.77       66.80       16.29       0.00       150.0       ± 9.6 %         AAB       99pc duty cycle)       Y       4.49       66.35       15.90       150.0       ± 9.6 %         AAB       99pc duty cycle)       Y       4.78       66.80       16.29       0.00       150.0       ± 9.6 %         AAB       99pc duty cycle)       Y       5.28       66.81       15.33       0.00       150.0       ± 9.6 %         AAB       99pc duty cycle)       Y       5.17       66.55       16.05 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
AAB         99pc duty cycle)         Y         4.64         66.38         15.95         150.0           10531- AAB         IEEE 802.11ac WIFI (20MHz, MCS6, AAB         Y         4.64         66.38         16.34         0.00         150.0         ± 9.6 %           10531- AAB         99pc duty cycle)         Y         4.64         66.50         15.97         150.0         ± 9.6 %           10532- AAB         99pc duty cycle)         Y         4.64         66.50         15.97         150.0         ± 9.6 %           10532- AAB         99pc duty cycle)         X         4.63         66.80         16.29         0.00         150.0         ± 9.6 %           AAB         99pc duty cycle)         X         4.63         66.80         16.29         0.00         150.0         ± 9.6 %           AAB         99pc duty cycle)         Z         4.77         66.56         16.05         150.0         150.0         ± 9.6 %           AAB         99pc duty cycle)         Y         4.65         66.41         15.94         150.0         ± 9.6 %           AAB         99pc duty cycle)         Y         5.28         66.88         16.03         0.00         150.0         ± 9.6 %           AAB			Z	4.76	66.54	16.08		150.0	
Z         4.76         66.54         16.08         150.0           10531- AAB         IEEE 802.11ac WIFI (20MHz, MCS6, AAB         X         4.78         66.93         16.34         0.00         150.0         ± 9.6 %           10532- AAB         9pc duty cycle)         Y         4.64         66.50         16.10         150.0         ± 9.6 %           10532- AAB         9pc duty cycle)         X         4.63         66.80         16.29         0.00         150.0         ± 9.6 %           10533- AAB         9pc duty cycle)         Y         4.49         66.35         15.90         150.0         ± 9.6 %           AAB         9pc duty cycle)         Y         4.49         66.36         16.29         0.00         150.0         ± 9.6 %           AAB         9pc duty cycle)         Y         4.65         66.641         15.90         150.0         ± 9.6 %           AAB         9pc duty cycle)         Y         4.65         66.41         15.94         150.0         ± 9.6 %           AAB         9pc duty cycle)         Y         5.28         66.83         16.03         150.0         ± 9.6 %           AAB         9pc duty cycle)         Y         5.17         66.53			X	4.77	66.78	16.31	0.00	150.0	± 9.6 %
Image: constraint of the second sec			Y	4.64	66.38	15.95		150.0	[
10531- AAB         IEEE 802.11ac WiFi (20MHz, MCS6, 99pc duty cycle)         X         4.78         66.93         16.34         0.00         150.0         ± 9.6 %           AAB         99pc duty cycle)         Y         4.64         66.50         15.97         150.0            10532- AAB         IEEE 802.11ac WiFi (20MHz, MCS7, 99pc duty cycle)         X         4.63         66.80         16.29         0.00         150.0         ± 9.6 %           AAB         99pc duty cycle)         Y         4.49         66.35         15.90         150.0         ± 9.6 %           AAB         99pc duty cycle)         Z         4.62         66.64         16.29         0.00         150.0         ± 9.6 %           AAB         99pc duty cycle)         Y         4.78         66.80         16.29         0.00         150.0         ± 9.6 %           AAB         99pc duty cycle)         Y         4.77         66.55         16.05         150.0         ± 9.6 %           AAB         99pc duty cycle)         X         5.28         66.88         16.33         0.00         150.0         ± 9.6 %           AAB         99pc duty cycle)         X         5.34         66.53         16.03         150.0         ± 9			Z	4.76	66.54			150.0	
Y         4.64         66.50         15.97         150.0           10532- AAB         IEEE 802.11ac WiFi (20MHz, MCS7, 99pc duty cycle)         X         4.63         66.80         16.29         0.00         150.0         ± 9.6 %           AAB         99pc duty cycle)         Y         4.49         66.35         15.90         150.0         ± 9.6 %           AAB         99pc duty cycle)         Y         4.49         66.35         15.90         150.0         ± 9.6 %           10533- AAB         1EEE 802.11ac WiFi (20MHz, MCS8, 99pc duty cycle)         Y         4.65         66.41         15.94         150.0         ± 9.6 %           AAB         99pc duty cycle)         Y         4.65         66.41         15.94         150.0         ± 9.6 %           AAB         99pc duty cycle)         X         5.28         66.88         16.33         0.00         150.0         ± 9.6 %           AAB         99pc duty cycle)         Y         5.17         66.53         16.03         150.0         ± 9.6 %           AAB         99pc duty cycle)         Y         5.24         66.89         16.10         150.0         ± 9.6 %           AAB         99pc duty cycle)         Y         5.24         66			X	4.78			0.00		± 9.6 %
Image: constraint of the system of			Y	4 64	66 50	15.97		150.0	
10532- AAB         IEEE 802.11ac WiFi (20MHz, MCS7, 99pc duty cycle)         X         4.63         66.80         16.29         0.00         150.0         ± 9.6 %           AAB         99pc duty cycle)         Y         4.49         66.35         15.90         150.0         ±         9.6 %           10533- AAB         IEEE 802.11ac WiFi (20MHz, MCS8, AAB         Y         4.65         66.41         15.94         150.0         ±         9.6 %           10534- AAB         IEEE 802.11ac WiFi (40MHz, MCS0, AAB         Y         4.65         66.41         15.94         150.0         ±         9.6 %           10534- AAB         IEEE 802.11ac WiFi (40MHz, MCS0, AAB         Y         5.28         66.88         16.33         0.00         150.0         ±         9.6 %           10535- AAB         IEEE 802.11ac WiFi (40MHz, MCS1, AAB         Y         5.17         66.53         16.03         150.0         ±         9.6 %           10535- AAB         IEEE 802.11ac WiFi (40MHz, MCS1, AAB         Y         5.17         66.63         16.01         150.0         ±         9.6 %           10536- AAB         IEEE 802.11ac WiFi (40MHz, MCS2, AAB         Y         5.24         66.69         16.10         150.0         ±         9.6 % <tr< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr<>									
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$							0.00		± 9.6 %
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$				4 49	66.35	15.90		150.0	
10533- AAB         IEEE 802.11ac WiFi (20MHz, MCS8, 99pc duty cycle)         X         4.78         66.80         16.29         0.00         150.0         ± 9.6 %           AAB         99pc duty cycle)         Y         4.65         66.41         15.94         150.0         1           10534- AAB         1EEE 802.11ac WiFi (40MHz, MCS0, 99pc duty cycle)         X         5.28         66.88         16.33         0.00         150.0         ± 9.6 %           10535- AAB         1EEE 802.11ac WiFi (40MHz, MCS0, 99pc duty cycle)         Y         5.17         66.53         16.03         150.0         ± 9.6 %           10535- AAB         1EEE 802.11ac WiFi (40MHz, MCS1, 99pc duty cycle)         Y         5.17         66.69         16.10         150.0         ± 9.6 %           10536- AAB         1EEE 802.11ac WiFi (40MHz, MCS2, 99pc duty cycle)         Y         5.22         67.03         16.37         0.00         150.0         ± 9.6 %           10536- AAB         1EEE 802.11ac WiFi (40MHz, MCS2, 99pc duty cycle)         X         5.22         67.03         16.37         0.00         150.0         ± 9.6 %           10537- AAB         1EEE 802.11ac WiFi (40MHz, MCS3, AAB         X         5.29         67.00         16.36         0.00         150.0         ± 9.6 %									
Y4.65 $66.41$ $15.94$ $150.0$ 10534- AABIEEE 802.11ac WiFi (40MHz, MCS0, 99pc duty cycle)X $5.28$ $66.88$ $16.33$ $0.00$ $150.0$ $\pm 9.6\%$ 10534- AAB99pc duty cycle)Y $5.17$ $66.53$ $16.03$ $150.0$ $\pm 9.6\%$ 10535- AAB99pc duty cycle)Y $5.17$ $66.53$ $16.03$ $150.0$ $\pm 9.6\%$ 10535- AAB99pc duty cycle)Y $5.17$ $66.63$ $16.03$ $150.0$ $\pm 9.6\%$ 10535- AAB99pc duty cycle)Y $5.24$ $66.69$ $16.10$ $150.0$ $\pm 9.6\%$ 10536- AAB99pc duty cycle)Y $5.24$ $66.69$ $16.10$ $150.0$ $\pm 9.6\%$ 10536- AAB99pc duty cycle)Y $5.24$ $66.69$ $16.10$ $150.0$ $\pm 9.6\%$ 10536- AABIEEE 802.11ac WiFi (40MHz, MCS2, 99pc duty cycle)X $5.22$ $67.03$ $16.37$ $0.00$ $150.0$ $\pm 9.6\%$ 10537- AABIEEE 802.11ac WiFi (40MHz, MCS3, AABX $5.29$ $67.00$ $16.36$ $0.00$ $150.0$ $\pm 9.6\%$ 10538- AAB99pc duty cycle)Y $5.17$ $66.63$ $16.05$ $150.0$ $\pm 9.6\%$ 10538- AABIEEE 802.11ac WiFi (40MHz, MCS4, AABX $5.40$ $67.06$ $16.43$ $0.00$ $150.0$ $\pm 9.6\%$ 10540- AAB99pc duty cycle)Y $5.27$ $66.69$ $16.12$ $150.0$ $\pm 9.6\%$ 105							0.00		± 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 65	66.41	15.94		150.0	
10534- AAB       IEEE 802.11ac WiFi (40MHz, MCS0, 99pc duty cycle)       X       5.28       66.88       16.33       0.00       150.0       ± 9.6 %         0       Y       5.17       66.53       16.03       150.0 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
AAB         99pc duty cycle)         Y         5.17         66.53         16.03         150.0           10535- AAB         1EEE 802.11ac WiFi (40MHz, MCS1, 99pc duty cycle)         X         5.35         67.03         16.13         150.0         150.0           10535- AAB         99pc duty cycle)         Y         5.27         66.70         16.13         150.0         150.0           10535- AAB         99pc duty cycle)         Y         5.35         67.03         16.39         0.00         150.0         160.0           10536- AAB         1EEE 802.11ac WiFi (40MHz, MCS2, AAB         X         5.22         67.03         16.37         0.00         150.0         ± 9.6 %           10536- AAB         1EEE 802.11ac WiFi (40MHz, MCS2, AAB         Y         5.10         66.65         16.06         150.0         ± 9.6 %           10537- AAB         1EEE 802.11ac WiFi (40MHz, MCS3, AB         Y         5.17         66.63         16.05         150.0         ± 9.6 %           10538- AAB         99pc duty cycle)         Y         5.17         66.63         16.15         150.0         ± 9.6 %           10538- AAB         1EEE 802.11ac WiFi (40MHz, MCS4, AAB         X         5.40         67.06         16.43         0.00         150.0<	10534-	IEEE 802 11ac WiEi (40MHz_MCS0					0.00		+96%
IEEE 802.11ac WiFi (40MHz, MCS1, 99pc duty cycle)         Z         5.27         66.70         16.13         150.0           10535- AAB         99pc duty cycle)         Y         5.35         67.03         16.39         0.00         150.0         ± 9.6 %           AAB         99pc duty cycle)         Y         5.24         66.69         16.10         150.0         ± 9.6 %           10536- AAB         IEEE 802.11ac WiFi (40MHz, MCS2, 99pc duty cycle)         X         5.22         67.03         16.37         0.00         150.0         ± 9.6 %           10537- AAB         IEEE 802.11ac WiFi (40MHz, MCS3, 99pc duty cycle)         Y         5.10         66.65         16.06         150.0         ± 9.6 %           10537- AAB         1EEE 802.11ac WiFi (40MHz, MCS3, 99pc duty cycle)         X         5.29         67.00         16.36         0.00         150.0         ± 9.6 %           10538- AAB         1EEE 802.11ac WiFi (40MHz, MCS4, AB         X         5.40         67.06         16.43         0.00         150.0         ± 9.6 %           10538- AAB         IEEE 802.11ac WiFi (40MHz, MCS4, 99pc duty cycle)         X         5.40         67.06         16.43         0.00         150.0         ± 9.6 %           10540- AAB         99pc duty cycle) <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td>0.00</td><td></td><td>1 0.0 70</td></td<>							0.00		1 0.0 70
10535- AAB         IEEE 802.11ac WiFi (40MHz, MCS1, 99pc duty cycle)         X         5.35         67.03         16.39         0.00         150.0         ± 9.6 %           AAB         99pc duty cycle)         Y         5.24         66.69         16.10         1050.0         150.0         16.30         150.0 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>									
AAB       99pc duty cycle)       Y       5.24       66.69       16.10       150.0         10536- AAB       IEEE 802.11ac WiFi (40MHz, MCS2, 99pc duty cycle)       X       5.22       67.03       16.37       0.00       150.0       ± 9.6 %         10537- AAB       99pc duty cycle)       Y       5.10       66.65       16.06       150.0       ± 9.6 %         10537- AAB       99pc duty cycle)       Y       5.10       66.65       16.06       150.0       ± 9.6 %         10537- AAB       99pc duty cycle)       Y       5.10       66.63       16.16       150.0       ± 9.6 %         10538- AAB       99pc duty cycle)       Y       5.17       66.63       16.05       150.0       ± 9.6 %         10538- AAB       99pc duty cycle)       Y       5.17       66.63       16.05       150.0       ± 9.6 %         10538- AAB       1EEE 802.11ac WiFi (40MHz, MCS4, 99pc duty cycle)       X       5.40       67.06       16.43       0.00       150.0       ± 9.6 %         10538- AAB       1EEE 802.11ac WiFi (40MHz, MCS4, 99pc duty cycle)       X       5.40       67.01       16.42       0.00       150.0       ± 9.6 %         10540- AAB       1EEE 802.11ac WiFi (40MHz, MCS6, 99pc duty cycle)	40505						0.00		100%
Z         5.34         66.84         16.18         150.0           10536- AAB         IEEE 802.11ac WiFi (40MHz, MCS2, 99pc duty cycle)         X         5.22         67.03         16.37         0.00         150.0         ± 9.6 %           AAB         99pc duty cycle)         Y         5.10         66.65         16.06         150.0         ± 9.6 %           IO537- AAB         IEEE 802.11ac WiFi (40MHz, MCS3, 99pc duty cycle)         X         5.29         67.00         16.36         0.00         150.0         ± 9.6 %           IO537- AAB         IEEE 802.11ac WiFi (40MHz, MCS3, 99pc duty cycle)         X         5.29         67.00         16.36         0.00         150.0         ± 9.6 %           IO538- AAB         IEEE 802.11ac WiFi (40MHz, MCS4, AAB         Y         5.17         66.63         16.15         150.0         150.0           IO538- AAB         IEEE 802.11ac WiFi (40MHz, MCS4, AAB         Y         5.27         66.69         16.12         150.0         150.0           IO540- AAB         IEEE 802.11ac WiFi (40MHz, MCS6, AAB         Y         5.39         66.88         16.23         150.0         150.0           IO540- AAB         IEEE 802.11ac WiFi (40MHz, MCS6, AAB         Y         5.19         66.66         16.12         1							0.00		±9.6 %
10536- AAB       IEEE 802.11ac WiFi (40MHz, MCS2, 99pc duty cycle)       X       5.22       67.03       16.37       0.00       150.0       ± 9.6 %         AAB       99pc duty cycle)       Y       5.10       66.65       16.06       150.0       1         10537- AAB       IEEE 802.11ac WiFi (40MHz, MCS3, AAB       X       5.29       67.00       16.36       0.00       150.0       ± 9.6 %         10537- AAB       99pc duty cycle)       Y       5.17       66.63       16.05       150.0       ± 9.6 %         10538- AAB       99pc duty cycle)       Y       5.17       66.63       16.05       150.0       ± 9.6 %         10538- AAB       1EEE 802.11ac WiFi (40MHz, MCS4, AAB       X       5.40       67.06       16.43       0.00       150.0       ± 9.6 %         10538- AAB       1EEE 802.11ac WiFi (40MHz, MCS4, 99pc duty cycle)       X       5.40       67.06       16.43       0.00       150.0       ± 9.6 %         10540- AAB       99pc duty cycle)       Y       5.27       66.69       16.12       150.0       ± 9.6 %         10540- AAB       1EEE 802.11ac WiFi (40MHz, MCS6, AAB       X       5.30       67.01       16.42       0.00       150.0       ± 9.6 %         10					· · · · · · · · · · · · · · · · · · ·		l		
AAB         99pc duty cycle)         Y         5.10         66.65         16.06         150.0           10537- AAB         IEEE 802.11ac WiFi (40MHz, MCS3, 99pc duty cycle)         X         5.29         67.00         16.36         0.00         150.0         ± 9.6 %           10537- AAB         99pc duty cycle)         Y         5.17         66.63         16.05         150.0         ± 9.6 %           10538- AAB         99pc duty cycle)         Y         5.17         66.63         16.05         150.0         ± 9.6 %           10538- AAB         1EEE 802.11ac WiFi (40MHz, MCS4, AAB         Y         5.17         66.60         16.15         150.0         ± 9.6 %           10538- AAB         1EEE 802.11ac WiFi (40MHz, MCS4, AAB         Y         5.40         67.06         16.43         0.00         150.0         ± 9.6 %           10538- AAB         1EEE 802.11ac WiFi (40MHz, MCS4, 99pc duty cycle)         Y         5.27         66.69         16.12         150.0         ± 9.6 %           10540- AAB         1EEE 802.11ac WiFi (40MHz, MCS6, AAB         Y         5.30         67.01         16.42         0.00         150.0         ± 9.6 %           10540- AAB         99pc duty cycle)         Y         5.19         66.66         16.12 <td>10000</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	10000								
Z         5.21         66.83         16.16         150.0           10537- AAB         IEEE 802.11ac WiFi (40MHz, MCS3, 99pc duty cycle)         X         5.29         67.00         16.36         0.00         150.0         ± 9.6 %           AAB         99pc duty cycle)         Y         5.17         66.63         16.05         150.0         ± 9.6 %           IO538- AAB         IEEE 802.11ac WiFi (40MHz, MCS4, 99pc duty cycle)         X         5.40         67.06         16.43         0.00         150.0         ± 9.6 %           10538- AAB         IEEE 802.11ac WiFi (40MHz, MCS4, 99pc duty cycle)         X         5.40         67.06         16.43         0.00         150.0         ± 9.6 %           I0540- AAB         IEEE 802.11ac WiFi (40MHz, MCS6, AAB         Y         5.27         66.69         16.12         150.0         150.0           I0540- AAB         IEEE 802.11ac WiFi (40MHz, MCS6, AAB         X         5.30         67.01         16.42         0.00         150.0         ± 9.6 %           I0540- AAB         99pc duty cycle)         Y         5.19         66.66         16.12         150.0         ± 9.6 %					67.03		0.00		± 9.6 %
10537- AAB       IEEE 802.11ac WiFi (40MHz, MCS3, 99pc duty cycle)       X       5.29       67.00       16.36       0.00       150.0       ± 9.6 %         MAB       99pc duty cycle)       Y       5.17       66.63       16.05       150.0       ± 9.6 %         MAB       Y       5.17       66.63       16.05       150.0       ± 9.6 %         MAB       IEEE 802.11ac WiFi (40MHz, MCS4, AAB       X       5.40       67.06       16.43       0.00       150.0       ± 9.6 %         MAB       99pc duty cycle)       Y       5.27       66.69       16.12       150.0       ± 9.6 %         MAB       99pc duty cycle)       Y       5.27       66.69       16.12       150.0       ± 9.6 %         MAB       99pc duty cycle)       Y       5.27       66.69       16.12       150.0       ± 9.6 %         MAB       99pc duty cycle)       Y       5.27       66.69       16.12       150.0       ± 9.6 %         MAB       99pc duty cycle)       Y       5.39       66.88       16.23       150.0       ± 9.6 %         MAB       99pc duty cycle)       Y       5.19       66.66       16.12       150.0       ± 9.6 %									
AAB         99pc duty cycle)         Y         5.17         66.63         16.05         150.0           10538- AAB         IEEE 802.11ac WiFi (40MHz, MCS4, 99pc duty cycle)         X         5.27         66.80         16.15         150.0           10538- AAB         IEEE 802.11ac WiFi (40MHz, MCS4, 99pc duty cycle)         X         5.40         67.06         16.43         0.00         150.0         ± 9.6 %           10540- AAB         IEEE 802.11ac WiFi (40MHz, MCS6, 99pc duty cycle)         Y         5.27         66.69         16.12         150.0         ± 9.6 %           10540- AAB         IEEE 802.11ac WiFi (40MHz, MCS6, 99pc duty cycle)         X         5.30         67.01         16.42         0.00         150.0         ± 9.6 %           10540- AAB         IEEE 802.11ac WiFi (40MHz, MCS6, AAB         X         5.30         67.01         16.42         0.00         150.0         ± 9.6 %									
Z         5.27         66.80         16.15         150.0           10538- AAB         IEEE 802.11ac WiFi (40MHz, MCS4, 99pc duty cycle)         X         5.40         67.06         16.43         0.00         150.0         ± 9.6 %           V         5.27         66.69         16.12         150.0         ± 9.6 %           ID500         Y         5.27         66.69         16.12         150.0           ID540- AAB         IEEE 802.11ac WiFi (40MHz, MCS6, 99pc duty cycle)         X         5.30         67.01         16.42         0.00         150.0           IO540- AAB         IEEE 802.11ac WiFi (40MHz, MCS6, 99pc duty cycle)         Y         5.19         66.66         16.12         150.0					67.00	16.36	0.00	150.0	± 9.6 %
10538- AAB       IEEE 802.11ac WiFi (40MHz, MCS4, 99pc duty cycle)       X       5.40       67.06       16.43       0.00       150.0       ± 9.6 %         Y       5.27       66.69       16.12       150.0       ±       150.0       ±         Z       5.39       66.88       16.23       150.0       ±       150.0       ±       9.6 %         10540- AAB       IEEE 802.11ac WiFi (40MHz, MCS6, AAB       X       5.30       67.01       16.42       0.00       150.0       ±       9.6 %         Y       5.19       66.66       16.12       150.0       ±       9.6 %				5.17	66.63	16.05		150.0	
10538- AAB       IEEE 802.11ac WiFi (40MHz, MCS4, 99pc duty cycle)       X       5.40       67.06       16.43       0.00       150.0       ± 9.6 %         Y       5.27       66.69       16.12       150.0       ±       150.0       ±       9.6 %         IO540- AAB       IEEE 802.11ac WiFi (40MHz, MCS6, AAB       Z       5.39       66.88       16.23       150.0       ±       9.6 %         IO540- AAB       IEEE 802.11ac WiFi (40MHz, MCS6, 99pc duty cycle)       X       5.30       67.01       16.42       0.00       150.0       ±       9.6 %				5.27	66.80	16.15		150.0	
Y         5.27         66.69         16.12         150.0           Z         5.39         66.88         16.23         150.0           10540- AAB         IEEE 802.11ac WiFi (40MHz, MCS6, 99pc duty cycle)         X         5.30         67.01         16.42         0.00         150.0         ± 9.6 %           Y         5.19         66.66         16.12         150.0         ± 9.6 %							0.00		± 9.6 %
Z         5.39         66.88         16.23         150.0           10540- AAB         IEEE 802.11ac WiFi (40MHz, MCS6, 99pc duty cycle)         X         5.30         67.01         16.42         0.00         150.0         ± 9.6 %           Y         5.19         66.66         16.12         150.0         ± 9.6 %			Y	5.27	66.69	16.12		150.0	
10540- AAB         IEEE 802.11ac WiFi (40MHz, MCS6, 99pc duty cycle)         X         5.30         67.01         16.42         0.00         150.0         ± 9.6 %           Y         5.19         66.66         16.12         150.0         ± 9.6 %							1		
Y 5.19 66.66 16.12 150.0							0.00		± 9.6 %
				5 10	66 66	16 12		150.0	<u> </u>
	L		Z	5.29	66.82	16.22	<u>+</u>	150.0	

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10541- AAB	IEEE 802.11ac WiFi (40MHz, MCS7, 99pc duty cycle)	X	5.28	66.90	16.36	0.00	150.0	± 9.6 %
		Y	5.16	66.53	16.05		150.0	
		Z	5.27	66.74	16.17		150.0	
10542- AAB	IEEE 802.11ac WiFi (40MHz, MCS8, 99pc duty cycle)	X	5.43	66.95	16.40	0,00	150.0	±9.6 %
		Y	5.32	66.61	16.11		150.0	
		Z	5.42	66.77	16.20		150.0	
10543- AAB	IEEE 802.11ac WiFi (40MHz, MCS9, 99pc duty cycle)	X	5.51	66.95	16.41	0.00	150.0	± 9.6 %
	·····	Y	5.40	66.65	16.14		150.0	
		Z	5.51	66.78	16.22		150.0	
10544- AAB	IEEE 802.11ac WiFi (80MHz, MCS0, 99pc duty cycle)	X	5.56	66.97	16.30	0.00	150.0	±9.6 %
1.1		Y	5.46	66.64	16.02		150.0	
		Z	5.54	66.80	16.11		150.0	[
10545- AAB	IEEE 802.11ac WiFi (80MHz, MCS1, 99pc duty cycle)	X	5.78	67.41	16.46	0.00	150.0	± 9.6 %
		Y	5.68	67.09	16.19		150.0	
		Z	5.76	67.21	16.25		150.0	
10546- AAB	IEEE 802.11ac WiFi (80MHz, MCS2, 99pc duty cycle)	X	5.66	67.27	16.41	0.00	150.0	± 9.6 %
		Y	5.55	66.90	16.11		150.0	
		Z	5.65	67.10	16,22		150.0	
10547- AAB	IEEE 802.11ac WiFi (80MHz, MCS3, 99pc duty cycle)	X	5.75	67.34	16.43	0.00	150.0	± 9.6 %
		Y	5.64	66.99	16.14		150.0	
		Z	5.73	67.16	16.24		150.0	
10548- AAB	IEEE 802.11ac WiFi (80MHz, MCS4, 99pc duty cycle)	X	6.10	68.57	17.02	0.00	150.0	± 9.6 %
		Y	5.97	68.15	16.70		150.0	
		Z	6.06	68.30	16.78		150.0	
10550- AAB	IEEE 802.11ac WiFi (80MHz, MCS6, 99pc duty cycle)	X	5.68	67.21	16.39	0,00	150.0	± 9.6 %
		Y	5.57	66.88	16.11		150.0	
	****	Ż	5.66	67.04	16.20		150.0	
10551- AAB	IEEE 802.11ac WiFi (80MHz, MCS7, 99pc duty cycle)	X	5.70	67.30	16.39	0.00	150.0	± 9.6 %
		Y	5.58	66.93	16.09		150.0	
		Ż	5.68	67.15	16.21		150.0	
10552- AAB	IEEE 802.11ac WiFi (80MHz, MCS8, 99pc duty cycle)	X	5.59	67.05	16.28	0.00	150.0	±9.6 %
		Y	5.48	66.70	15.99		150.0	
		z	5.58	66.90	16.10		150.0	
10553- AAB	IEEE 802.11ac WiFi (80MHz, MCS9, 99pc duty cycle)	X	5.69	67.10	16.33	0.00	150.0	± 9.6 %
		Y	5.57	66.76	16.05		150.0	
		Z	5.67	66.95	16.15		150.0	
10554- AAC	IEEE 802.11ac WiFi (160MHz, MCS0, 99pc duty cycle)	X	5.97	67.34	16.39	0.00	150.0	±9.6 %
		Y	5.87	67.02	16.12		150.0	······································
		Z	5.94	67.19	16.21		150.0	
10555- AAC	IEEE 802.11ac WiFi (160MHz, MCS1, 99pc duty cycle)	X	6.12	67.69	16.53	0.00	150.0	± 9.6 %
		Y	6.01	67.35	16.26		150.0	
		Z	6.10	67.54	16.36		150.0	
10556- AAC	IEEE 802.11ac WiFi (160MHz, MCS2, 99pc duty cycle)	X	6.13	67.71	16.53	0.00	150.0	±9.6 %
		Y	6.03	67.38	16.27		150.0	
		Z	6.11	67.54	16.35		150.0	
10557- AAC	IEEE 802.11ac WiFi (160MHz, MCS3, 99pc duty cycle)	X	6.12	67.66	16.53	0.00	150.0	± 9.6 %
		Y	6.00	67.31	16.25		150.0	
		Z	6.10	67.52	16.36		150.0	

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10558- AAC	IEEE 802.11ac WiFi (160MHz, MCS4, 99pc duty cycle)	X	6.18	67.86	16.65	0.00	150.0	± 9.6 %
		Y	6.06	67.49	16.36		150.0	
	·····	Ż	6.16	67.71	16.47		150.0	
10560- AAC	IEEE 802.11ac WiFi (160MHz, MCS6, 99pc duty cycle)	X	6.16	67.67	16.59	0.00	150.0	± 9.6 %
		Y	6.05	67.32	16.31		150.0	
		Z	6.15	67.54	16.42		150.0	
10561-	IEEE 802.11ac WiFi (160MHz, MCS7,	X	6.08	67.64	16.61	0.00	150.0	± 9.6 %
AAC	99pc duty cycle)	Y	5.97	67.29	16.33	0.00	150.0	2 0.0 70
		z	6.06	67.49	16.44		150.0	
10562-	IEEE 802.11ac WiFi (160MHz, MCS8,	X	6.25	68.16	16.88	0.00	150.0	± 9.6 %
AAC	99pc duty cycle)					0.00		± 9.0 %
		Y	6.13	67.77	16.57		150.0	
10500		Z	6.23	68.01	16.70		150.0	
10563- AAC	IEEE 802.11ac WiFi (160MHz, MCS9, 99pc duty cycle)	X	6.60	68.73	17.10	0,00	150.0	± 9.6 %
		Y	6.50	68.45	16.86		150.0	
		Z	6.53	68.43	16.86		150.0	
10564- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 9 Mbps, 99pc duty cycle)	X	5.01	67.24	16.68	0.46	150.0	± 9.6 %
		Y	4.90	66.90	16.36		150.0	
		Z	5.01	67.05	16.49		150.0	
10565- AAA	IEEE 802.11g WIFI 2.4 GHz (DSSS- OFDM, 12 Mbps, 99pc duty cycle)	X	5.27	67.70	16.99	0.46	150.0	± 9.6 %
		Y	5.15	67.37	16.68		150.0	
		Z	5.27	67.52	16.80		150.0	
10566- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 18 Mbps, 99pc duty cycle)	X	5.11	67.60	16.84	0.46	150.0	± 9.6 %
1000		Y	4.98	67.23	16.50		150.0	
•		Z	5.11	67.41	16.64		150.0	
10567- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 24 Mbps, 99pc duty cycle)	X	5.13	67.96	17.16	0.46	150.0	± 9.6 %
		Y	5.01	67.61	16.84		150.0	
	***	Z	5.13	67.75	16.95		150.0	l
10568- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 36 Mbps, 99pc duty cycle)	X	5.02	67.36	16.62	0.46	150.0	± 9.6 %
,		Y	4.90	67.01	16.28		150.0	
·····		Z	5.02	67.16	16.41		150.0	
10569- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 48 Mbps, 99pc duty cycle)	X	5.07	67.97	17.18	0.46	150.0	± 9.6 %
1000		Y	4.96	67.67	16.89		150.0	
		Ż	5.06	67.76	16.96		150.0	
10570- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 54 Mbps, 99pc duty cycle)	X	5.11	67.83	17.12	0.46	150.0	± 9.6 %
73773		Y	5.00	67.52	16.83		150.0	
•••		Z	5.11	67.61	16.83		150.0 150.0	
10571- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90pc duty cycle)	X	1.43	67.78	17.55	0.46	130.0	± 9.6 %
7 11 11 1		Y	1.29	65.83	16.01		130.0	
		Z	1.29	66.57	16.56		130.0	
10572-	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2					0.40		1060/
10572- AAA	Mbps, 90pc duty cycle)	X	1.47	68.62	18.01	0.46	130.0	± 9.6 %
	····	Y	1.32	66.50	16.39	<b> </b>	130.0	<u> </u>
10		Z	1.40	67.26	16.95	<u> </u>	130.0	
10573- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 90pc duty cycle)	X	100.00	147.77	39.50	0.46	130.0	± 9.6 %
		Y	5.11	95.86	25,26		130.0	
		Z	11.46	108.94	29.46		130.0	
		-						
10574- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 90pc duty cycle)	X	2.11	79.07	22.64	0.46	130.0	± 9.6 %
10574- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 90pc duty cycle)	X	2.11 1.59		22.64 19.59	0.46	130.0 130.0	±9.6 %

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10575- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 90pc duty cycle)	X	4.84	67.12	16.79	0.46	130.0	± 9.6 %
		Y	4.72	66.80	16.47		130.0	<u> </u>
		Z	4.83	66.93	16.59		130.0	
10576- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 9 Mbps, 90pc duty cycle)	Х	4.86	67.28	16.85	0.46	130.0	± 9.6 %
		Υ	4.75	66.95	16.53		130.0	[
		Z	4.86	67.08	16,65		130.0	
10577- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 12 Mbps, 90pc duty cycle)	Х	5.09	67.60	17.02	0.46	130.0	± 9.6 %
	·····	Y	4.97	67.26	16.71		130.0	· · · · · · · · · · · · · · · · · · ·
		Z	5.10	67.41	16.83		130.0	
10578- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 18 Mbps, 90pc duty cycle)	X	4.99	67.77	17.12	0.46	130.0	± 9.6 %
		Y	4.86	67.43	16.80		130.0	
10		Z	4.99	67.57	16.91		130.0	
10579- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 24 Mbps, 90pc duty cycle)	X	4.77	67.19	16.53	0.46	130.0	± 9.6 %
······		Y	4.64	66.77	16.15		130.0	
		Z	4.78	67.01	16.33		130.0	
10580- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 36 Mbps, 90pc duty cycle)	Х	4.81	67.17	16.53	0.46	130.0	±9.6 %
		Y	4.68	66.78	16.16		130.0	
		Z	4.82	66.97	16.32		130.0	
10581- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 48 Mbps, 90pc duty cycle)	X	4.90	67.87	17.09	0.46	130.0	± 9.6 %
		Y	4.77	67.49	16.75		130.0	
		Z	4.90	67.66	16.87	****	130.0	
10582- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 54 Mbps, 90pc duty cycle)	Х	4.73	66.96	16.34	0.46	130.0	± 9.6 %
		Y	4.59	66.53	15.94		130.0	
		Z	4.73	66.78	16.14		130.0	
10583- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 90pc duty cycle)	X	4.84	67.12	16.79	0.46	130.0	± 9.6 %
		Y	4.72	66.80	16.47		130.0	
		Z	4.83	66.93	16.59		130.0	
10584- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 90pc duty cycle)	X	4.86	67.28	16.85	0.46	130.0	± 9.6 %
		Y	4.75	66.95	16.53		130.0	
		Z	4.86	67.08	16.65		130.0	
10585- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90pc duty cycle)	X	5.09	67.60	17.02	0.46	130.0	± 9.6 %
		Y	4.97	67.26	16.71		130.0	
		Z	5.10	67.41	16.83		130.0	
10586- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 90pc duty cycle)	X	4.99	67.77	17.12	0.46	130.0	± 9.6 %
		Y	4.86	67.43	16.80		130.0	[
		Z	4.99	67.57	16.91		130.0	
10587- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 90pc duty cycle)	X	4.77	67.19	16.53	0.46	130.0	±9.6 %
		Y	4.64	66.77	16.15		130.0	
		Z	4.78	67.01	16.33		130.0	
10588- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 90pc duty cycle)	X	4.81	67.17	16.53	0.46	130.0	± 9.6 %
		Y	4.68	66.78	16.16		130.0	
		Z	4.82	66.97	16.32		130.0	
10589- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 90pc duty cycle)	X	4.90	67.87	17.09	0.46	130.0	± 9.6 %
		Y	4.77	67.49	16.75		130.0	
		Z	4.90	67.66	16.87		130.0	
10590- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 90pc duty cycle)	X	4.73	66.96	16.34	0.46	130.0	± 9.6 %
		Y	4.59	66.53	15.94	L	130.0	
	······································	Ż	4.73	66.78	16.14		130.0	}

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10591-	IEEE 802.11n (HT Mixed, 20MHz,		4.98	67.15	16.87	0.46	130.0	±9,6 %
AAB	MCS0, 90pc duty cycle)		4.07	<u></u>	40.57		420.0	
		Y	4.87	66.85 66.97	16.57 16.68		130.0 130.0	
10592-	IEEE 802.11n (HT Mixed, 20MHz,	Z	<u>4.98</u> 5.15	67.50	16.99	0.46	130.0	± 9.6 %
AAB	MCS1, 90pc duty cycle)	^	0.10	07.50	10.99	0.40	130.0	1 9.0 %
7010		Y	5.04	67.19	16.69		130.0	
		Z	5.16	67.32	16.80		130.0	
10593-	IEEE 802.11n (HT Mixed, 20MHz,	X	5.09	67.46	16.91	0.46	130.0	±9.6 %
AAB	MCS2, 90pc duty cycle)							
***************************************		Y	4.96	67.12	16.59		130.0	
		Z	5.09	67.29	16.72		130.0	
10594-	IEEE 802.11n (HT Mixed, 20MHz,	Х	5.14	67.60	17.04	0.46	130.0	± 9.6 %
AAB	MCS3, 90pc duty cycle)							
	_	<u>Y</u>	5.02	67.28	16.73		130.0	
		Z	5.14	67.42	16.84		130.0	
10595-	IEEE 802.11n (HT Mixed, 20MHz,	X	5.11	67.58	16.95	0.46	130.0	± 9.6 %
AAB	MCS4, 90pc duty cycle)	Y	4.00	67.04	16.64		130.0	
			4.99	67.24 67.40	16.64		130.0	
10596-	IEEE 802.11n (HT Mixed, 20MHz,	Z	<u>5.12</u> 5.05	67.59	16.96	0.46	130.0	± 9.6 %
AAB	MCS5, 90pc duty cycle)	^	0.00	01.08	10.30	0.40	100.0	- 0.0 /0
		Y	4.93	67.24	16.64		130.0	
		Ż	5.06	67.40	16.76		130.0	
10597-	IEEE 802.11n (HT Mixed, 20MHz,	X	5.00	67.53	16.87	0.46	130.0	± 9.6 %
AAB	MCS6, 90pc duty cycle)							
		Y	4.88	67.16	16.53		130.0	
		Z	5.01	67.35	16.68		130.0	
10598- AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS7, 90pc duty cycle)	X	4.98	67.77	17.12	0.46	130.0	± 9.6 %
		Y	4.86	67.40	16.79		130.0	
		Z	4.99	67.58	16.92		130.0	
10599- AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS0, 90pc duty cycle)	X	5.65	67.74	17.05	0.46	130.0	±9.6 %
		Y	5.54	67.42	16.77		130.0	
		Z	5.65	67.58	16.87		130.0	
10600- AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS1, 90pc duty cycle)	X	5.86	68.37	17.35	0.46	130.0	± 9.6 %
		Y	5.74	68.03	17.05	1	130.0	
****************		Z	5.87	68.25	17.19		130.0	
10601- AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS2, 90pc duty cycle)	X	5.71	67.99	17.17	0.46	130.0	± 9.6 %
		Y	5.59	67.67	16.88		130.0	
		Z	5.71	67.84	16.99		130.0	
10602- AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS3, 90pc duty cycle)	X	5.80	67.99	17.09	0.46	130.0	± 9.6 %
		Y	5.68	67.66	16.80		130.0	
		Z	5.80	67.87	16.93		130.0	
10603- AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS4, 90pc duty cycle)	X	5.88	68.27	17.35	0.46	130.0	± 9.6 %
		Y	5.76	67.95	17.07		130.0	
		Z	5.91	68.22	17.22		130.0	
10604- AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS5, 90pc duty cycle)	X	5.65	67.69	17.05	0.46	130.0	± 9.6 %
		Y	5.55	67.38	16.78		130.0	
		Z	5.65	67.55	16.88	<u> </u>	130.0	
10605- AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS6, 90pc duty cycle)	X	5.77	68.03	17.23	0.46	130.0	± 9.6 %
		Y	5.67	67.75	16.97	[	130.0	
		<u>Z</u>	5.76	67.86	17.04		130.0	
10606- AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS7, 90pc duty cycle)	X	5.54	67.48	16.82	0.46	130.0	± 9.6 %
		Y	5.42	67.14	16.52		130.0	
		Z	5.54	67.37	16.67		130.0	

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10607- AAB	IEEE 802.11ac WiFi (20MHz, MCS0, 90pc duty cycle)	X	4.81	66.46	16.48	0.46	130.0	± 9.6 %
		Y	4.70	66.13	16,17		130.0	
		Z	4.81	66.25	16.27	* ******	130.0	
10608- AAB	IEEE 802.11ac WiFi (20MHz, MCS1, 90pc duty cycle)	X	5.03	66.90	16.65	0.46	130.0	±9.6 %
		Y	4.90	66.55	16.34		130.0	
		Z	5.02	66.68	16.44		130.0	
10609- AAB	IEEE 802.11ac WiFi (20MHz, MCS2, 90pc duty cycle)	X	4.92	66.79	16.52	0.46	130.0	± 9.6 %
		Y	4.79	66.41	16.18		130.0	
40040		Z	4.92	66.57	16.31		130.0	
10610- AAB	IEEE 802.11ac WiFi (20MHz, MCS3, 90pc duty cycle)	X	4.97	66.94	16.67	0.46	130.0	± 9.6 %
		Y	4.84	66.57	16.34	-	130.0	
10611-	IEEE 802.11ac WiFi (20MHz, MCS4,	Z	4.97	66.72	16.46		130.0	
AAB	90pc duty cycle)		4.89	66.78	16.54	0.46	130.0	± 9.6 %
		Y	4.76	66.39	16.20		130.0	
10612-	IEEE 802.11ac WiFI (20MHz, MCS5,	Z	4.89	66.57	16.33		130.0	
AAB	90pc duty cycle)	X	4.92	66.95	16.59	0.46	130.0	±9.6 %
		Y	4.78	66.55	16.24		130.0	
10613-	IEEE 802.11ac WiFi (20MHz, MCS6,	ZX	4.91	66.73	16.37	0.10	130.0	
AAB	90pc duty cycle)		4.93	66.87	16.50	0.46	130.0	± 9.6 %
·····	····	Y	4.79	66.46	16.14		130.0	
10614-	IEEE 802.11ac WiFi (20MHz, MCS7,	ZX	4.93	66.66	16.28	0.40	130.0	
AAB	90pc duty cycle)		4.85	67.03	16.71	0.46	130.0	± 9.6 %
		Y	4.72	66.63	16.36		130.0	
10615-	IEEE 802.11ac WiFI (20MHz, MCS8,	Z	4.85	66.82	16.49		130.0	
AAB	90pc duty cycle)	X	4.90	66.61	16.33	0.46	130.0	±9.6 %
		Y	4.76	66.22	15.98		130.0	
10616- AAB	IEEE 802.11ac WiFi (40MHz, MCS0, 90pc duty cycle)	Z X	<u>4.90</u> 5.47	66.40 66.98	16.12 16.66	0.46	130.0 130.0	± 9.6 %
/ / (0)		Y	5.36	66.66	16,38		130.0	
		Z	5.46	66.82	16.30		130.0	
10617- AAB	IEEE 802.11ac WiFi (40MHz, MCS1, 90pc duty cycle)	X	5.52	67.09	16.68	0.46	130.0	± 9.6 %
		Y	5.42	66.80	16.41		130.0	
•		Z	5.52	66.93	16.49		130.0	
10618- AAB	IEEE 802.11ac WiFi (40MHz, MCS2, 90pc duty cycle)	x	5.42	67.18	16.74	0.46	130.0	±9.6 %
		Y	5.31	66.84	16.45		130.0	
		Z	5.41	67.00	16.54		130.0	
10619- AAB	IEEE 802.11ac WiFi (40MHz, MCS3, 90pc duty cycle)	X	5.45	67.00	16.59	0.46	130.0	± 9.6 %
		Y	5.34	66.68	16.31		130.0	
		Z	5.44	66.82	16.40		130.0	
10620- AAB	IEEE 802.11ac WiFi (40MHz, MCS4, 90pc duty cycle)	Х	5.56	67.11	16.69	0.46	130.0	±9.6 %
		Y	5.44	66.75	16.39		130.0	
40004		Z	5.56	66.95	16.51		130.0	
10621- AAB	IEEE 802.11ac WiFi (40MHz, MCS5, 90pc duty cycle)	X	5.53	67.13	16.81	0.46	130.0	±9.6 %
	4	Y	5.42	66.81	16.54		130.0	
1007-		Z	5,53	66.98	16.63		130.0	
10622- AAB	IEEE 802.11ac WiFi (40MHz, MCS6, 90pc duty cycle)	X	5.53	67.27	16.87	0.46	130.0	±9.6 %
····		Y	5.43	66.97	16.61		130.0	
		Z	5.52	67.09	16.67		130.0	

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10623- AAB	IEEE 802.11ac WiFi (40MHz, MCS7, 90pc duty cycle)	X	5.42	66.86	16.56	0.46	130.0	±9.6 %
		Y	5.30	66.51	16.26		130.0	
		Z	5.42	66.73	16.39		130.0	
10624- AAB	IEEE 802.11ac WiFi (40MHz, MCS8, 90pc duty cycle)	X	5.61	67.03	16.70	0.46	130.0	±9.6 %
		Y	5.50	66.72	16.43		130.0	
		Z	5.60	66.86	16.51		130.0	
10625- AAB	IEEE 802.11ac WiFi (40MHz, MCS9, 90pc duty cycle)	X	6.05	68.19	17.33	0,46	130.0	± 9.6 %
		Y	5.94	67.90	17.07		130.0	
		Z	6.01	67.90	17.08		130.0	
10626- AAB	IEEE 802.11ac WiFi (80MHz, MCS0, 90pc duty cycle)	X	5.72	66.99	16.57	0.46	130.0	± 9.6 %
		Y	5.63	66.69	16.31		130.0	
		Z	5.71	66.84	16.40		130.0	
10627- AAB	IEEE 802.11ac WiFi (80MHz, MCS1, 90pc duty cycle)	X	5.99	67.59	16.82	0.46	130.0	± 9.6 %
		Y	5,90	67.32	16.58		130.0	
		Z	5.97	67.39	16.62		130.0	
10628- AAB	IEEE 802.11ac WiFi (80MHz, MCS2, 90pc duty cycle)	X	5.80	67.20	16.57	0.46	130.0	± 9.6 %
		Y	5.69	66.85	16.29		130.0	
		Z	5.79	67.05	16.40		130.0	<u> </u>
10629- AAB	IEEE 802.11ac WIFi (80MHz, MCS3, 90pc duty cycle)	X	5.88	67.25	16.59	0.46	130.0	± 9.6 %
		Y	5.77	66.92	16.31		130.0	
		Z	5.87	67.12 /	16.43		130.0	
10630- AAB	IEEE 802.11ac WiFi (80MHz, MCS4, 90pc duty cycle)	X	6.51	69.31	17.62	0.46	130.0	± 9.6 %
		Y	6.37	68.86	17.28		130.0	
		Z	6.46	69.04	17.39		130.0	
10631- AAB	IEEE 802.11ac WiFi (80MHz, MCS5, 90pc duty cycle)	X	6.31	68.81	17.54	0.46	130.0	± 9.6 %
		Y	6.17	68.39	17.24		130.0	
		Z	6.30	68.62	17.35		130.0	
10632- AAB	IEEE 802.11ac WiFi (80MHz, MCS6, 90pc duty cycle)	X	5.95	67.61	16.96	0.46	130.0	± 9.6 %
		Y	5.85	67.34	16.73		130.0	
	\\	Z	5,94	67.45	16.78		130.0	
10633- AAB	IEEE 802.11ac WiFi (80MHz, MCS7, 90pc duty cycle)	X	5.89	67.42	16.71	0.46	130.0	± 9.6 %
		Y	5.75	67.01	16.39		130.0	
		Z	5.89	67.32	16.56		130.0	
10634- AAB	IEEE 802.11ac WiFi (80MHz, MCS8, 90pc duty cycle)	X	5.85	67.37	16.74	0.46	130.0	± 9.6 %
		Y	5.73	67.02	16.46		130.0	
		Z	5.86	67.27	16.59		130.0	
10635- AAB	IEEE 802.11ac WiFi (80MHz, MCS9, 90pc duty cycle)	X	5,75	66.78	16.20	0.46	130.0	± 9.6 %
		Y	5.62	66.39	15.89		130.0	
		Z	5.75	66.67	16.05		130.0	
10636- AAC	IEEE 802.11ac WiFi (160MHz, MCS0, 90pc duty cycle)	X	6.13	67.38	16.66	0.46	130.0	± 9.6 %
		Y	6.05	67.09	16.42	<u> </u>	130.0	
		Z	6.12	67.24	16.50		130.0	
10637- AAC	IEEE 802.11ac WiFi (160MHz, MCS1, 90pc duty cycle)	X	6.31	67.79	16.85	0.46	130.0	± 9.6 %
		Y	6.21	67.50	16.60		130.0	
		Z	6.29	67.65	16.68		130.0	
10638- AAC	IEEE 802.11ac WiFi (160MHz, MCS2, 90pc duty cycle)	X	6.31	67.76	16.81	0.46	130.0	± 9.6 %
		Y	6.21	67.47	16.56		130.0	
		Z	6.29	67.60	16.64		130.0	

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10639-			T	···				
AAC	IEEE 802.11ac WiFi (160MHz, MCS3, 90pc duty cycle)	X	6.30	67.76	16.86	0.46	130.0	± 9.6 %
		Y	6.20	67.43	16.59		130.0	
40040		Z	6.29	67.63	16.70		130.0	
10640- AAC	IEEE 802.11ac WiFi (160MHz, MCS4, 90pc duty cycle)	X	6.34	67.87	16.86	0.46	130.0	± 9.6 %
		Y	6.22	67.50	16.57		130.0	1
		Z	6.33	67.75	16.70		130.0	1
10641- AAC	IEEE 802.11ac WiFi (160MHz, MCS5, 90pc duty cycle)	Х	6.33	67.58	16.73	0.46	130.0	± 9.6 %
		Y	6.23	67.29	16.48	]	130.0	
10010		Z	6.31	67.45	16.57	[	130.0	1
10642- AAC	IEEE 802.11ac WiFi (160MHz, MCS6, 90pc duty cycle)	X	6.39	67.88	17.04	0.46	130.0	± 9.6 %
		Y	6.28	67.58	16.79		130.0	
		Z	6.38	67.76	16.88		130.0	
10643- AAC	IEEE 802.11ac WiFi (160MHz, MCS7, 90pc duty cycle)	X	6.22	67.60	16.81	0.46	130.0	± 9.6 %
••••••		Y	6.12	67.28	16.54		130.0	
		Z	6.21	67.48	16.65		130.0	
10644- AAC	IEEE 802.11ac WiFi (160MHz, MCS8, 90pc duty cycle)	X	6.47	68.34	17.21	0.46	130.0	± 9.6 %
		Y	6.34	67.93	16.89		130.0	<b> </b>
		Z	6.46	68.22	17.05		130.0	1
10645- AAC	IEEE 802.11ac WiFi (160MHz, MCS9, 90pc duty cycle)	X	6.86	69.01	17.48	0.46	130.0	± 9.6 %
		Y	6.84	68.95	17.35		130.0	
		Z	6.77	68.66	17.21		130.0	
10646- AAD	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,7)	X	39.97	118.78	39.16	9.30	60.0	±9.6 %
		Y	36.64	117.33	38.51		60.0	
		Z	28.19	109.42	36.13	•• • • • • • • • • • • • • • • • • • • •	60.0	
10647- AAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,7)	X	43.22	121.45	40.07	9.30	60.0	± 9.6 %
		Y	37.61	118.78	39.06	,	60.0	
		Z	29.77	111.44	36.87		60.0	
10648- AAA	CDMA2000 (1x Advanced)	X	0.92	67.44	13.60	0.00	150.0	± 9.6 %
		Y	0.67	63.31	10.51		150.0	
		Z	0.80	64.88	12.09	·····	150.0	
10652- AAB	LTE-TDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	X	4.65	69.66	17.99	2.23	80.0	± 9.6 %
		Y	4.35	68.72	17.32		80.0	
		Z	4.56	68.93	17.55			
10653- AAB	LTE-TDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)	X	5.05	68.61	17.89	2.23	80.0 80.0	± 9.6 %
		Y	4.81	67.90	17.37		80.0	
		Z	5.01	68.17	17.57		80.0	
10654- AAB	LTE-TDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)	X	4.97	68.24	17.87	2.23	80.0	±9.6 %
		ΤΥ T	4.75	67.55	17.37		80.0	
		z	4.94	67.85	17.56		80.0	
10655- AAB	LTE-TDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	X	5.03	68.27	17.91	2.23	80.0	± 9.6 %
		Y	4.81	67.56	17.41		80.0	
10658-	Pulso Mayoform (2001 (= 4000)	Z	4.99	67.90	17.61		80.0	
AAA	Pulse Waveform (200Hz, 10%)	X	13.25	86.83	23.62	10.00	50.0	± 9,6 %
		Y	14.38	88.09	23.44		50.0	
40070		Z	11.47	83.98	22.82		50.0	
10659- AAA	Pulse Waveform (200Hz, 20%)	X	55.89	109.63	28.77	6.99	60.0	±9.6 %
		Y	73.21	111.71	28.47		60.0	······

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10660- AAA	Pulse Waveform (200Hz, 40%)	X	100.00	116.44	28.38	3.98	80.0	± 9.6 %
		Y	100.00	113.18	26.58		80.0	
		Z	100.00	116.19	28.39		80.0	
10661- AAA	Pulse Waveform (200Hz, 60%)	X	100.00	118,35	27.71	2.22	100.0	± 9.6 %
		Y	100.00	112.59	24.89		100.0	
		Z	100.00	116.83	27.13		100.0	
10662- AAA	Pulse Waveform (200Hz, 80%)	X	100.00	126.67	29.16	0.97	120.0	± 9.6 %
		Y	100.00	111.31	22.51		120.0	
		Z	100.00	120.40	26.63		120.0	

<sup>E</sup> 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**

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S Swiss Calibration Service

Accreditation No.: SCS 0108

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PC Test Client

Certificate No: EX3-7357\_Apr18

## CALIBRATION CERTIFICATE

Object	EX3DV4 - SN:7357
Calibration procedure(s)	QA CAL-01.v9, QA CAL-12.v9, QA CAL-14.v4, QA CAL-23.v5, QA CAL-25.v6 Calibration procedure for dosimetric E-field probes
Calibration date:	April 18, 2018

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

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

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID	Cal Date (Certificate No.)	Scheduled Calibration
Power meter NRP	SN: 104778	04-Apr-18 (No. 217-02672/02673)	Apr-19
Power sensor NRP-Z91	SN: 103244	04-Apr-18 (No. 217-02672)	Apr-19
Power sensor NRP-Z91	SN: 103245	04-Apr-18 (No. 217-02673)	Apr-19
Reference 20 dB Attenuator	SN: S5277 (20x)	04-Apr-18 (No. 217-02682)	Apr-19
Reference Probe ES3DV2	SN: 3013	30-Dec-17 (No. ES3-3013_Dec17)	Dec-18
DAE4	SN: 660	21-Dec-17 (No. DAE4-660_Dec17)	Dec-18
Secondary Standards	ID	Check Date (in house)	Scheduled Check
Power meter E4419B	SN: GB41293874	06-Apr-16 (in house check Jun-16)	In house check: Jun-18
Power sensor E4412A	SN: MY41498087	06-Apr-16 (in house check Jun-16)	In house check: Jun-18
Power sensor E4412A	SN: 000110210	06-Apr-16 (in house check Jun-16)	In house check: Jun-18
RF generator HP 8648C	SN: US3642U01700	04-Aug-99 (in house check Jun-16)	In house check: Jun-18
Network Analyzer HP 8753E	SN: US37390585	18-Oct-01 (in house check Oct-17)	In house check: Oct-18

	Name	Function	Signature
Calibrated by:	Claudio Leubler	Laboratory Technician	
			Jeh
Approved by:	Katja Pokovic	Technical Manager	22.0
			Jan 14
			Issued: April 19, 2018
This calibration certificate	e shall not be reproduced except in full	without written approval of the lab	naton

#### **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
A, B, C, D	modulation dependent linearization parameters
Polarization φ	φ rotation around probe axis
Polarization 9	$\vartheta$ 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, ", "Measurement procedure for the assessment of Specific Absorption Rate (SAR) from handheld and body-mounted devices used next to the ear (frequency range of 300 MHz to 6 GHz)", July 2016
- IEC 62209-2, "Procedure to determine the Specific Absorption Rate (SAR) for wireless communication devices c)
- used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)", March 2010
- KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz" d) –

#### Methods Applied and Interpretation of Parameters:

- NORMx, y, z: Assessed for E-field polarization  $\vartheta = 0$  (f  $\leq 900$  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 E<sup>2</sup>-field uncertainty inside TSL (see below ConvF).
- NORM(f)x,y,z = NORMx,y,z \* frequency response (see Frequency Response Chart). This linearization is ٠ 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  $f \le 800$  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  $\pm 50$  MHz to  $\pm 100$ 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:7357

Calibrated:

Manufactured: February 5, 2015 April 18, 2018

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) <sup>2</sup> ) <sup>A</sup>	0.37	0.48	0.40	± 10.1 %
DCP (mV) <sup>8</sup>	89.1	99.1	96.4	

#### **Modulation Calibration Parameters**

UID	Communication System Name		A dB	B dB√μV	С	D dB	VR mV	Unc <sup>±</sup> (k=2)
0	CW	X	0.0	0.0	1.0	0.00	151.5	±2.7 %
		Y	0.0	0.0	1.0		139.1	
		Z	0.0	0.0	1.0		158.4	

Note: For details on UID parameters see Appendix.

#### **Sensor Model Parameters**

	C1 fF	C2 fF	α V <sup>-1</sup>	T1 ms.V⁻²	T2 ms.V <sup>-1</sup>	T3 ms	Τ4 V⁻²	T5 V⁻¹	Т6
Х	37.91	303.3	40.25	6.413	0.832	4.998	0.00	0.454	1.006
Y	48.33	363.1	36.01	10.58	0.113	5.100	0.00	0.458	1.004
Z	39.38	305.2	38.03	5.76	0.610	5.046	0.00	0.461	1.008

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%.

<sup>A</sup> The uncertainties of Norm X,Y,Z do not affect the E<sup>2</sup>-field uncertainty inside TSL (see Pages 5 and 6).

<sup>B</sup> Numerical linearization parameter: uncertainty not required. <sup>E</sup> 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) <sup>c</sup>	Relative Permittivity <sup>F</sup>	Conductivity (S/m) <sup>F</sup>	ConvF X	ConvF Y	ConvF Z	Alpha <sup>G</sup>	Depth <sup>G</sup> (mm)	Unc (k=2)
64	54.2	0.75	14.92	14.92	14.92	0.00	1.00	± 13.3 %
150	52.3	0.76	13.49	13.49	13.49	0.00	1.00	± 13.3 %
300	45.3	0.87	12.37	12.37	12.37	0.08	1.20	± 13.3 %
450	43.5	0.87	11.17	11.17	11.17	0.14	1.20	± 13.3 %
750	41.9	0.89	10.50	10.50	10.50	0.45	0.85	± 12.0 %
835	41.5	0.90	10.11	10.11	10.11	0.37	0.93	± 12.0 %
1750	40.1	1.37	8.80	8.80	8.80	0.38	0.86	± 12.0 %
1900	40.0	1.40	8.47	8.47	8.47	0.18	0.83	± 12.0 %
2300	39.5	1.67	7.83	7.83	7.83	0.33	0.86	± 12.0 %
2450	39.2	1.80	7.43	7.43	7.43	0.37	0.89	± 12.0 %
2600	39.0	1.96	7.13	7.13	7.13	0.27	0.98	± 12.0 %
5250	35.9	4.71	5.62	5.62	5.62	0.35	1.80	± 13.1 %
5600	35.5	5.07	4.93	4.93	4.93	0.40	1.80	± 13.1 %
5750	35.4	5.22	5.23	5.23	5.23	0.40	1.80	± 13.1 %

#### Calibration Parameter Determined in Head Tissue Simulating Media

<sup>c</sup> 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.

<sup>6</sup> Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is

<sup>6</sup> 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.

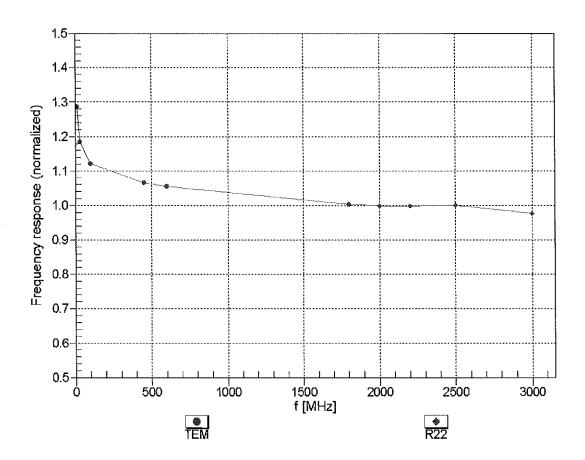
			-		_						
f (MHz) <sup>c</sup>	Relative Permittivity <sup>F</sup>	Conductivity (S/m) <sup>F</sup>	ConvF X	ConvF Y	ConvF Z	Alpha <sup>G</sup>	Depth <sup>G</sup> (mm)	Unc (k=2)			
150	61.9	0.80	12.99	12.99	12.99	0.00	1.00	± 13.3 %			
300	58.2	0.92	12.08	12.08	12.08	0.05	1.20	± 13.3 %			
450	56.7	0.94	11.52	11.52	11.52	0.08	1.20	± 13.3 %			
750	55.5	0.96	10.37	10.37	10.37	0.47	0.85	± 12.0 %			
835	55.2	0.97	10.17	10.17	10.17	0.37	0.93	± 12.0 %			
1750	53.4	1.49	8.43	8.43	8.43	0.37	0.86	± 12.0 %			
1900	53.3	1.52	8.08	8.08	8.08	0.36	0.83	± 12.0 %			
2300	52.9	1.81	7.74	7.74	7.74	0.38	0.85	± 12.0 %			
2450	52.7	1.95	7.60	7.60	7.60	0.35	0.88	± 12.0 %			
2600	52.5	2.16	7.44	7.44	7.44	0.33	0.93	± 12.0 %			
5250	48.9	5.36	4.78	4.78	4.78	0.50	1.80	± 13.1 %			
5600	48.5	5.77	4.20	4.20	4.20	0.50	1.80	± 13.1 %			
5750	48.3	5.94	4.21	4.21	4.21	0.50	1.80	± 13.1 %			

#### Calibration Parameter Determined in Body Tissue Simulating Media

<sup>C</sup> 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.

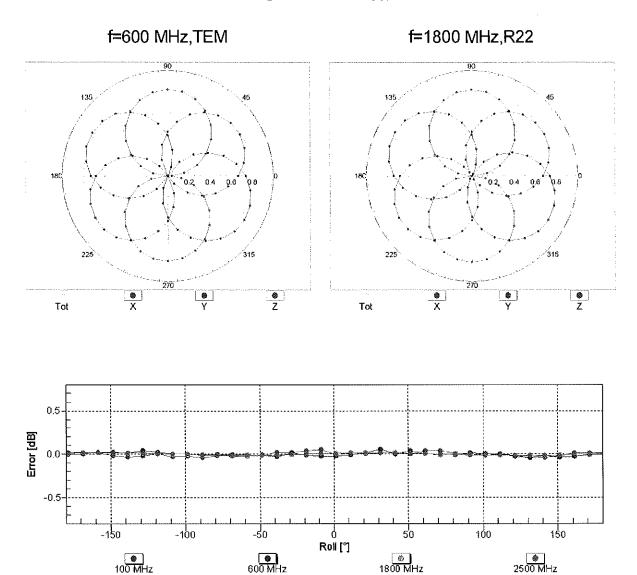
<sup>F</sup> At frequencies below 3 GHz, the validity of tissue parameters ( $\varepsilon$  and  $\sigma$ ) can be relaxed to  $\pm$  10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters ( $\varepsilon$  and  $\sigma$ ) is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

<sup>G</sup> 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)

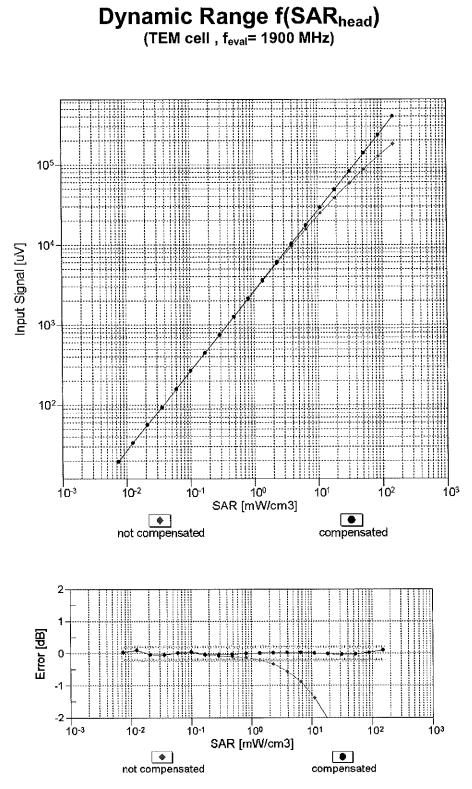
Uncertainty of Frequency Response of E-field: ± 6.3% (k=2)



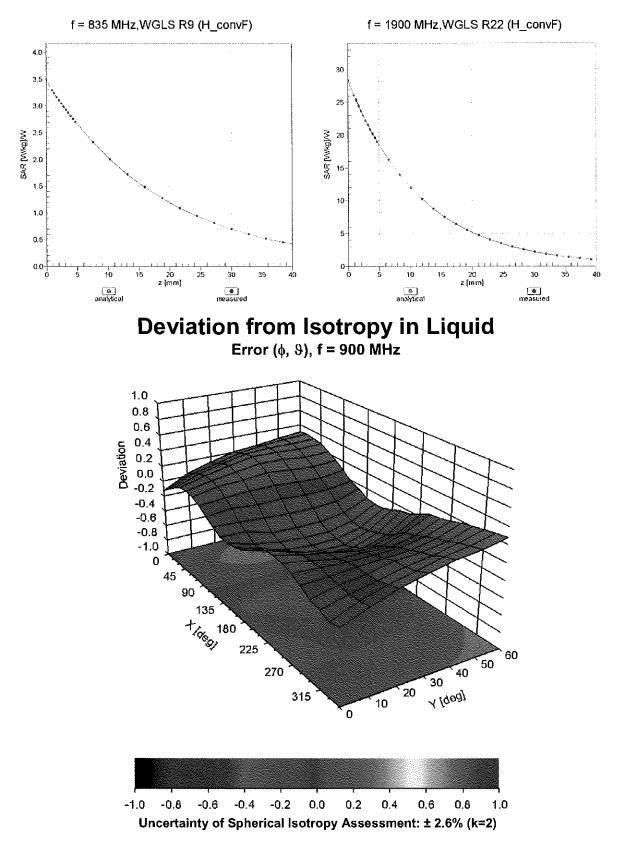
## Receiving Pattern ( $\phi$ ), $\vartheta = 0^{\circ}$

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

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



## **Conversion Factor Assessment**

#### **Other Probe Parameters**

Sensor Arrangement	Triangular
Connector Angle (°)	11.4
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

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UID	Communication System Name		A dB	B dBõV	С	D dB	VR mV	Max Unc <sup>E</sup> (k=2)
0	CW	Х	0.00	0.00	1.00	0.00	151.5	± 2,7 %
		Y	0.00	0.00	1.00		139.1	
10010-	SAR Validation (Square, 100ms, 10ms)	Z	0.00	0.00	1.00	40.00	158.4	
CAA	SAR Validation (Square, 100ms, 10ms)	. <b>X</b>	1.67	61.93	7.65	10.00	20.0	±9.6 %
		Y	2.82	69.17	11.50		20.0	
10011-		Z	1.68	62.20	7.72	0.00	20.0	
CAB	UMTS-FDD (WCDMA)	X	0.91	67.36	14.64	0.00	150.0	± 9.6 %
		Y	1.03	67.52	15.32		150.0	
10012-		Z	0.87	67.00	14.33	0.44	150.0	
CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps)	X	1.03	63.20	14.83	0.41	150.0	± 9.6 %
·····		Y	1.15	63.79	15.34		150.0	
		Z	1.01	63.27	14.81		150.0	
10013- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps)	х	4.63	66.39	16.96	1.46	150.0	± 9.6 %
		Y	4.87	66.69	17.19		150.0	
40004		Z	4.64	66.53	16.99		150.0	
10021- D <b>A</b> C	GSM-FDD (TDMA, GMSK)	X	3.67	70.27	12.79	9.39	50.0	± 9.6 %
		Y	100.00	116.17	27.83		50.0	
40000		Z	17.04	87.58	18.77		50.0	
10023- DAC	GPRS-FDD (TDMA, GMSK, TN 0)	X	3.48	69.40	12.45	9.57	50.0	± 9.6 %
		Y	100.00	115.39	27.52		50.0	
10024-	GPRS-FDD (TDMA, GMSK, TN 0-1)	Z	8.91	80.25	16.55	0.50	50.0	
DAC	GPRS-FDD (TDIMA, GIMSK, TN 0-1)	×	1.80	66.18	9.84	6.56	60.0	± 9.6 %
		Y	100.00	120.19	28.55		60.0	
10025-		Z X	100.00	103.30	20.82	40.57	60.0	100%
DAC	EDGE-FDD (TDMA, 8PSK, TN 0)		3.42	64.49	22.34	12.57	50.0	± 9.6 %
		Y	6.04	85.62	35.55		50.0	
10026-	EDGE-FDD (TDMA, 8PSK, TN 0-1)	Z X	3.44 6.25	65.04 83.47	22.85 29.08	9.56	50.0	± 9.6 %
DAC						9.56	60.0	±9.0 %
		Y Z	9.24 6.56	95.88 85.41	35.47 30.17		60.0 60.0	
10027-	GPRS-FDD (TDMA, GMSK, TN 0-1-2)	X	0.96	63.24	7.67	4.80	80.0	± 9.6 %
DAC						4.00		1 3.0 %
		Y	100.00	125.59	30.06		80.0	
40000		Z	100.00	100.14	18.62	2 66	80.0	
10028- DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2-3)	X	0.48	60.36	5.50	3.55	100.0	± 9.6 %
		Y	100.00	132.37	32.13	ļ	100.0	
40000		Z	99.97	95.45	15.98	7.00	100.0	100%
10029- DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2)	×	4.19	75.28	24.64	7.80	80.0	± 9.6 %
		Y	5.35	81.78	28.49	<u> </u>	80.0	
10030-	IEEE 802.15.1 Bluetooth (GFSK, DH1)	Z X	4.26	76.21 63.09	25.31	E 20	80.0 70.0	+06%
CAA					7.76	5.30		± 9.6 %
		Y	100.00	120.14	28.06	<b> </b>	70.0	
10031-	IEEE 802.15.1 Bluetooth (GFSK, DH3)	Z X	4.93 0.27	76.05 60.00	12.90 3.17	1.88	70.0	± 9.6 %
CAA		Y	100.00	135.00	31.47		100.0	
		Ż	0.26	60.00	3.07		100.0	

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10032-	IEEE 802.15.1 Bluetooth (GFSK, DH5)	X	27.08	314.20	3.36	1.17	100.0	± 9.6 %
CAA						1.17		1 9.0 %
		Y	100.00	149.06	35.68		100.0	
		Z	1.21	330.96	55.77		100.0	
10033- CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH1)	х	3.08	73.10	16.00	5.30	70.0	± 9.6 %
		Y	100.00	136.30	37.75		70.0	
		Ζ	7.37	86.92	21.69		70.0	
10034- CAA	IEEE 802.15.1 Bluetooth (Pl/4-DQPSK, DH3)	Х	1.25	65.91	11.39	1.88	100.0	± 9.6 %
		Y	5.27	87.77	22.72		100.0	
		Z	1.70	70.42	13.93		100.0	
10035- CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH5)	X	0.99	64.64	10.52	1.17	100.0	± 9.6 %
		Y	2.59	77.96	18.88		100.0	
		Z	1.19	67.26	12.19		100.0	
10036- CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH1)	Х	3.48	74.91	16.77	5.30	70.0	± 9.6 %
		Y	100.00	136.90	38.02		70.0	
		Z	11.33	93.27	23.71		70.0	
10037- CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH3)	Х	1.18	65.50	11.18	1.88	100.0	± 9.6 %
		Y	4.66	86.12	22.16		100.0	
		Z	1.56	69.56	13.55		100.0	
10038- CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH5)	X	1.00	64.92	10.78	1.17	100.0	± 9.6 %
		Y	2.61	78.41	19.18		100.0	
		Z	1.21	67.70	12,52		100.0	
10039- CAB	CDMA2000 (1xRTT, RC1)	Х	0.95	64.99	10.40	0.00	150.0	± 9.6 %
		Y	1.84	72.12	15.71		150.0	
		Z	1.02	65.84	10.98		150.0	
10042- CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4- DQPSK, Halfrate)	Х	1.77	64.37	9.09	7.78	50.0	±9.6 %
		Y	100.00	113.16	25.71		50.0	
		Z	2.56	68.32	10.93		50.0	
10044- CAA	IS-91/EIA/TIA-553 FDD (FDMA, FM)	х	0.31	133.81	11.51	0.00	150.0	± 9.6 %
		Y	0.00	104.03	5.27		150.0	
		Z	0.33	142.49	0.98	· · · · · · · · · · · · · · · · · · ·	150.0	
10048- CAA	DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24)	X	4.01	66.51	12.74	13.80	25.0	± 9.6 %
		Y	100.00	110.91	26.95		25.0	
		Z	5.44	70.40	14.40		25.0	
10049- CAA	DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12)	x	3.70	68.56	12.33	10.79	40.0	± 9.6 %
		Y	100.00	112.50	26.54		40.0	
·		Z	5.22	72.87	14.17		40.0	
10056- CAA	UMTS-TDD (TD-SCDMA, 1.28 Mcps)	×	6.09	76.95	17.81	9.03	50.0	±9.6 %
		Y	100.00	128.62	35.43		50.0	
		Z	13.22	89.10	22.41		50.0	
10058- DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)	X	3.39	71.63	22.33	6.55	100.0	± 9.6 %
		Y	4.14	76.10	25.11		100.0	
		Z	3.42	72.27	22.83	ļ	100.0	
10059- CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps)	Х	1.03	63.98	15.22	0.61	110.0	± 9.6 %
		Y	1.18	64.90	16.05		110.0	
		Z	1.02	64.18	15.34		110,0	
10060- CAB	IEEE 802.11b WIFi 2.4 GHz (DSSS, 5.5 Mbps)	X	5.25	93.28	23.11	1.30	110.0	± 9.6 %
		Y	100.00	145.92	38.93		110.0	<b>I</b>
		Z	39.44	123.36	31.22	[	110.0	

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10061-	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11	X	1.80	74.31	19.24	2.04	110.0	± 9.6 %
CAB	Mbps)							
		Y	3.02	83.93	24.56		110.0	
10062-		Z	2.14	78.36	21.37		110.0	
CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps)	X	4.44	66.41	16.45	0.49	100.0	± 9.6 %
		Y	4.68	66.67	16.57		100.0	
		Z	4.45	66.51	16.42		100.0	
10063- CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps)	X	4.45	66.48	16.52	0.72	100.0	± 9.6 %
		Y	4.69	66.78	16.69		100.0	
		Z	4.46	66.59	16.51		100.0	
10064- CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps)	X	4.70	66.70	16.72	0.86	100.0	± 9.6 %
		Y	4.99	67.05	16.93		100.0	
10005		Z	4.72	66.83	16.73		100.0	
10065- CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps)	X	4.56	66.53	16.77	1.21	100.0	± 9.6 %
		Υ	4.85	66.96	17.05		100.0	
10000		Z	4.58	66.69	16.81		100.0	L
10066- CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps)	X	4.57	66.51	16.90	1.46	100.0	± 9.6 %
		Y	4.87	66.98	17.22	l	100.0	
10007		Z	4.60	66.69	16.96		100.0	
10067- CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps)	X	4.86	66.77	17.36	2.04	100.0	± 9.6 %
		Y	5.15	67.13	17.68		100.0	
		Ζ	4.89	66.94	17.44		100.0	
10068- CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps)	X	4.88	66.65	17.49	2.55	100.0	± 9.6 %
		Y	5.20	67.19	17.93		100.0	
		Z	4.91	66.87	17.60		100.0	
10069- CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps)	X	4.95	66.72	17.70	2.67	100.0	± 9.6 %
		Y	5.28	67.17	18.11		100.0	
		Z	4.99	66.91	17.80		100.0	
10071- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps)	X	4.71	66.43	17.22	1.99	100.0	± 9.6 %
		Y	4.96	66.77	17.51		100.0	
		Z	4.73	66.59	17.28		100.0	
10072 CAB	IEEE 802.11g WIFi 2.4 GHz (DSSS/OFDM, 12 Mbps)	X	4.67	66.65	17.37	2.30	100.0	± 9.6 %
		Y	4.94	67.10	17.75		100.0	
		Z	4.69	66.85	17.47		100.0	
10073- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps)	X	4.72	66.79	17.66	2.83	100.0	± 9.6 %
		Y	4.99	67.24	18.08		100.0	
		Z	4.75	67.01	17.79		100.0	
10074- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps)	X	4.72	66.70	17.78	3.30	100.0	± 9.6 %
		Y	4.95	67.09	18.23		100.0	
		Ζ	4.74	66.91	17.92		100.0	
10075- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps)	X	4.74	66.71	18.01	3.82	90.0	± 9.6 %
		Y	4.98	67.20	18,56		90.0	
		Z	4.76	66.94	18.18		90.0	
10076- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps)	X	4.77	66.58	18.17	4.15	90.0	± 9.6 %
		Y	4.98	66.93	18.66		90.0	
		Z	4.79	66.78	18.33		90.0	
10077- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps)	Х	4.80	66.66	18.27	4.30	90.0	± 9.6 %
		Y	5.00	66.98	18.75		90.0	
		Z	4.82	66.86	18.43		90.0	

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CAB	CDMA2000 (1xRTT, RC3)	X	0.45	61.00	7.50	0.00	150.0	±9.6 %
	4	Y	0.83	65.94	12.49		150.0	
		Z	0.46	61.34	7.83		150.0	
10082- CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4- DQPSK, Fullrate)	X	0.68	60.00	3.10	4.77	80.0	± 9.6 %
		Y	0.78	61.11	4.54		80.0	
		Z	0.72	60.00	2.85		80.0	
10090- DAC	GPRS-FDD (TDMA, GMSK, TN 0-4)	X	1.84	66.30	9.91	6.56	60.0	± 9.6 %
		Y	100.00	120.24	28.59		60.0	
4000		Z	100.00	103.44	20.90		60.0	
10097- CAB	UMTS-FDD (HSDPA)	X	1.71	67.90	15.28	0.00	150.0	± 9.6 %
		Y	1.82	67.70	15.69		150.0	
40000		Z	1.68	67.71	15.15		150.0	
10098- CAB	UMTS-FDD (HSUPA, Subtest 2)	X Y	1.67	67.85 67.66	15.26 15.66	0.00	150.0 150.0	± 9.6 %
*								
10099-	EDGE-FDD (TDMA, 8PSK, TN 0-4)	Z X	1.64 6.29	67.65	15.11	0.50	150.0	+0.0 %
DAC	EDGE-FUD (IDMA, OPSN, IN 0-4)	X Y	9.34	83.56 96.14	29.10 35.56	9.56	60.0	± 9.6 %
		r Z	<u>9.34</u> 6.61	85.53	35.56		60.0 60.0	
10100-	LTE-FDD (SC-FDMA, 100% RB, 20	X	2.90	69.76	16.53	0.00	150.0	± 9.6 %
CAD	MHz, QPSK)	Ŷ	3.14	70.37	16.71	0.00	150.0	±9.0 %
		z	2.89	69.82	16.39		150.0	
10101-	LTE-FDD (SC-FDMA, 100% RB, 20	X	3.04	67.08	15.83	0.00	150.0	± 9.6 %
CAD	MHz, 16-QAM)	^ Y	3.24	67.51	15.83	0.00	150.0	± 9.0 %
		Z	3.03	67.13	15.94		150.0	u
10102- CAD	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	X	3.03	67.10	15.95	0.00	150.0	± 9.6 %
		Y	3.34	67.47	16.02		150.0	
		Z	3.13	67.15	15.83		150.0	
10103- CAD	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	X	4.81	72.04	18.88	3.98	65.0	±9.6 %
		Y	6.41	77.25	21.56		65.0	
		Ζ	5.14	73.67	19.73		65.0	
10104- CAD	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	X	5.09	70.84	19.13	3.98	65.0	± 9.6 %
		Y	5.94	73.69	20.83		65.0	
		Z	5.16	71.44	19,51		65.0	
10105- CAD	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	х	4.78	69.37	18.75	3.98	65.0	± 9,6 %
		Y	5.83	73.15	20.89		65.0	
10465		Z	4.90	70.20	19.25		65.0	
10108- CAE	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	X	2.51	69.24	16.41	0.00	150.0	± 9.6 %
		Y	2.74	69.60	16.54		150.0	
40400		Z	2.49	69.21	16.24		150.0	
10109- CAE	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	X	2.68	67.06	15.67	0.00	150.0	± 9.6 %
		Y	2.89	67.36	15.84		150.0	
10110- CAE	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	Z X	2.67 1.99	67.07 68.49	15.55 15.84	0.00	150.0 150.0	± 9.6 %
		Y	2.22	68.71	16.15		150.0	
		Z	1.98	68.38	15.68		150.0	
10111-	LTE-FDD (SC-FDMA, 100% RB, 5 MHz,	X	2.41	68.19	15.80	0.00	150.0	± 9.6 %
10111- CAE	16-QAM)	Y	2.61	68.17	16.11		150.0	

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10112- CAE	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	X	2.81	67.12	15.76	0.00	150.0	±9.6 %
		Y	3.02	67.35	15.89		150.0	
		Z	2.80	67.12	15.64		150.0	
10113- CAE	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	x	2.56	68.40	15.97	0.00	150.0	± 9.6 %
		Y	2.76	68.30	16.24		150.0	
		Z	2.55	68.39	15.92		150.0	
10114- CAC	IEEE 802.11n (HT Greenfield, 13.5 Mbps, BPSK)	x	4.95	66.96	16.54	0.00	150.0	± 9.6 %
		Y	5.12	67.17	16.44		150.0	
	· · · · · · · · · · · · · · · · · · ·	Z	4.92	66.97	16.39		150.0	
10115- CAC	IEEE 802.11n (HT Greenfield, 81 Mbps, 16-QAM)	X	5.23	67.14	16.63	0.00	150.0	± 9.6 %
		Y	5.41	67.31	16.52		150.0	
		Z	5.18	67.06	16.45		150.0	
10116- CAC	IEEE 802.11n (HT Greenfield, 135 Mbps, 64-QAM)	х	5.04	67.18	16.57	0.00	150.0	± 9.6 %
		Y	5.22	67.37	16.47		150.0	
		Z	5.01	67.18	16.42		150.0	
10117- CAC	IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK)	х	4.94	66.92	16.53	0.00	150.0	± 9.6 %
		Y	5.09	67.03	16.39		150.0	
		Z	4.91	66.91	16.38		150.0	
10118- CAC	IEEE 802.11n (HT Mixed, 81 Mbps, 16- QAM)	Х	5.34	67.47	16.81	0.00	150.0	± 9.6 %
		Y	5.50	67.52	16.63		150.0	
		Z	5.27	67.32	16.58		150.0	
10119- CAC	IEEE 802.11n (HT Mixed, 135 Mbps, 64- QAM)	×	5.06	67.24	16.61	0.00	150.0	± 9.6 %
		Y	5.20	67.31	16.45		150.0	
		Z	5.01	67.18	16.43		150.0	
10140- CAD	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	X	3.17	67.11	15.85	0.00	150.0	± 9.6 %
		Y	3,38	67.48	15.94		150.0	
		Z	3,16	67.15	15.73		150.0	
10141- CAD	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	X	3.30	67.28	16.06	0.00	150.0	± 9.6 %
		Y	3.50	67.57	16.11		150.0	
		Z	3.29	67.32	15.94		150.0	
10142- CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	X	1.73	68.17	14.94	0.00	150.0	± 9.6 %
		Y	2.00	68.71	15.82		150.0	
		Z	1.72	68.11	14.89		150.0	
10143- CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	x	2.15	68.15	14.63	0.00	150.0	± 9.6 %
		Y	2.47	68.91	15.82		150.0	
		Z	2.17	68.32	14.76		150.0	
10144- CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	X	1.86	65.26	12.63	0.00	150.0	± 9.6 %
		Y	2.24	66.62	14.22		150.0	
		Z	1.88	65.43	12.77		150.0	
10145- CAE	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	×	0.67	60.16	6.91	0.00	150.0	± 9.6 %
·····		Y	1.22	65.11	11.80		150.0	
		Z	0.71	60.61	7.39		150.0	
10146- CAE	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	X	0.95	60.06	6.44	0.00	150.0	± 9.6 %
		Y	1.65	64.56	10.76		150.0	
		Z	1.07	61.07	7.44		150.0	
10147- CAE	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	X	0.99	60.33	6.68	0.00	150.0	± 9.6 %
		Y	1.85	65.94	11.59		150.0	``

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10149- CAD	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	X	2.69	67.13	15.72	0.00	150.0	± 9.6 %
		Y	2.90	67.42	15.88		150.0	
		Z	2.68	67.14	15.60		150.0	
10150- CAD	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	×	2.82	67.19	15,80	0.00	150.0	± 9.6 %
		Y	3.03	67.40	15.93		150.0	
		Z	2.81	67.19	15.69		150.0	
10151- CAD	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	X	5.01	74.56	19.93	3.98	65.0	±9.6 %
	***	Y	6.65	79.71	22.70		65.0	
		Z	5.36	76.27	20.86		65.0	
10152- CAD	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	X	4.60	70.61	18.55	3.98	65.0	± 9.6 %
		Y	5.50	73.80	20.64		65.0	
10150		Z	4.69	71.33	19.06		65.0	
10153- CAD	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	×	4.95	71.72	19.46	3.98	65.0	± 9.6 %
		Y	5.84	74.66	21.37		65.0	
40.45		Z	5.05	72.49	19.99		65.0	
10154- CAE	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	×	2.04	68.92	16.11	0.00	150.0	± 9.6 %
		Y	2.27	69.12	16.41		150.0	
10155		Z	2.03	68.83	15.96		150.0	
10155- CAE	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	X	2.41	68.23	15.84	0.00	150.0	±9.6 %
		Y	2.61	68.18	16.13		150.0	
40450		Z	2.40	68.21	15.77		150.0	
10156- CAE	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	X	1.51	67.60	14.13	0.00	150.0	± 9.6 %
		Y	1.84	68.81	15.61		150.0	
		Z	1.52	67.67	14.19		150.0	
10157- CAE	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	×	1.63	65.15	12.07	0.00	150.0	± 9.6 %
		Y	2.08	67.20	14.25		150.0	
		Ζ	1.66	65.43	12.31		150.0	ļ
10158- CAE	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	Х	2.57	68.50	16.04	0.00	150.0	± 9.6 %
		Y	2.77	68.36	16.29		150.0	
		Z	2.56	68.48	15.98		150.0	
10159- CAE	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	X	1.70	65.38	12.24	0.00	150.0	± 9.6 %
		Y	2,19	67.65	14.54		150.0	
		Z	1.74	65.76	12.53		150.0	
10160- CAD	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	X	2.62	68,99	16.41	0.00	150.0	± 9.6 %
		Y	2.74	68.65	16.32		150.0	
10101		Z	2.56	68.70	16.16		150.0	
10161- CAD	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	X	2.71	67.15	15.66	0.00	150.0	± 9.6 %
		Y	2.92	67.34	15.86		150.0	
10100		Z	2.70	67.15	15.57		150.0	
10162- CAD	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	X	2.82	67.38	15.82	0.00	150.0	± 9.6 %
		Y	3.03	67.49	15.97		150.0	
10166-	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz,	Z X	<u>2.81</u> 3.14	67.37 68.82	15.72 18.96	3.01	150.0 150.0	± 9.6 %
CAE	QPSK)		0.40		40.50		4000	
		Y	3.40	68.62	18.58		150.0	<u> </u>
10107		Z	3.24	69.38	19.21	0.04	150.0	
10167- CAE	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	X	3.68	71.26	19.14	3.01	150.0	± 9.6 %
		Y	4.01	70.93	18.84		150.0	
		Z	3.86	71.98	19.46		150.0	

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10168- CAE	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	X	4.20	74.21	20.88	3.01	150.0	±9.6 %
		Y	4.39	72.91	20.06		150.0	
		Z	4.45	75,16	21.28		150.0	
10169- CAD	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	X	2.49	66.95	18.11	3.01	150.0	± 9.6 %
		Y	2.73	67.59	18.14		150.0	
		Z	2.58	67.69	18.47		150.0	
10170- CAD	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	Х	3.17	72.06	20.27	3.01	150.0	± 9.6 %
		Y	3.45	72.20	20.01		150.0	
		Z	3.40	73.44	20.89		150.0	
10171- AAD	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	×	2.61	67.98	17.29	3.01	150.0	± 9.6 %
		Y	2.93	68.85	17.54		150.0	
		Z	2.74	68.83	17.69		150.0	
10172- CAD	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	X	3.59	76.79	22.90	6.02	65.0	± 9.6 %
		Y	7.70	92.12	29.64		65.0	
		Z	4.50	82.04	25.61		65.0	
10173- CAD	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	Х	5.40	81.69	22.80	6.02	65.0	±9.6 %
		Y	14.31	100.07	30.15		65.0	
		Z	8,60	91.21	26.84		65.0	
10174- CAD	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	X	3.41	73.68	19.23	6.02	65.0	± 9.6 %
		Y	12.55	96.17	28.30		65.0	
		Z	5.50	82.57	23.30		65.0	
10175- CAE	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	X	2.47	66.66	17.85	3.01	150.0	± 9.6 %
		Y	2.70	67.34	17,92		150.0	
		Z	2.55	67.36	18.19		150.0	
10176- CAE	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	X	3.18	72.09	20.28	3.01	150.0	± 9.6 %
		Y	3.46	72.22	20.02		150.0	
		Z	3.41	73.46	20.90		150.0	
10177- CAG	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	X	2.48	66.79	17.93	3.01	150.0	±9.6 %
		Y	2.72	67.46	18.00		150.0	
		Z	2.57	67.51	18.28		150.0	
10178- CAE	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16- QAM)	X	3.15	71.92	20.18	3.01	150.0	± 9.6 %
		Y	3.43	72.05	19.92		150.0	
		Z	3.38	73.25	20.78		150.0	
10179- CAE	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	X	2.85	69.85	18.61	3.01	150.0	± 9.6 %
		Y	3.17	70.44	18.65		150.0	
		Z	3.03	70.94	19.12		150.0	
10180- CAE	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 64- QAM)	X	2.61	67.94	17.25	3.01	150.0	± 9.6 %
		Y	2.92	68.79	17.50		150.0	
		Z	2.74	68.78	17.65		150.0	
10181- CAD	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	X	2.48	66.77	17.93	3.01	150.0	± 9.6 %
		Y	2.71	67.45	18.00		150.0	
		Z	2.56	67.49	18.28		150.0	
10182- CAD	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	X	3.15	71.89	20.17	3.01	150.0	± 9.6 %
		Y	3.42	72.03	19.91		150.0	
		Z	3.37	73.22	20.77		150.0	
10183- AAC	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	X	2.60	67.92	17.24	3.01	150.0	± 9.6 %
,		Y	2.92	68.77	17.49		150.0	
· · ·		Z	2.73	68.75	17.64		150.0	1

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10184- CAD	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	X	2.49	66.81	17.95	3.01	150.0	± 9.6 %
		Y	2.72	67.49	18.02		150.0	
		ż	2.57	67.53	18.30		150.0	
10185- CAD	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16- QAM)	×	3.16	71.97	20.21	3.01	150.0	± 9.6 %
		Y	3.44	72.09	19.94		150.0	
		Ζ	3.39	73.31	20.81		150.0	
10186- AAD	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64- QAM)	Х	2,62	67.98	17.28	3.01	150.0	± 9.6 %
		Y	2.93	68.83	17.52		150.0	
		Z	2.74	68.82	17.67		150.0	
10187- CAE	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	X	2.50	66.88	18.03	3.01	150.0	±9.6 %
		Y	2,73	67.53	18.08		150.0	
		Z	2,58	67.61	18.38		150.0	
10188- CAE	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	X	3.26	72.60	20.60	3.01	150.0	± 9.6 %
		Y	3,53	72.62	20.27		150.0	
10105		Z	3.51	74.04	21.24		150.0	
10189- AAE	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	Х	2.67	68.35	17.55	3.01	150.0	± 9.6 %
		Y	2.99	69.18	17.77		150.0	
		Ζ	2.80	69.24	17.97		150.0	
10193- CAC	IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK)	Х	4.32	66.50	16.16	0.00	150.0	± 9.6 %
		Y	4.52	66.59	16.14		150.0	
		Ζ	4.31	66.50	16.05		150.0	
10194- CAC	IEEE 802.11n (HT Greenfield, 39 Mbps, 16-QAM)	X	4.47	66.75	16.31	0.00	150.0	± 9.6 %
		Y	4,69	66.90	16.27		150.0	
		Z	4.46	66.77	16.19		150.0	
10195- CAC	IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM)	Х	4.51	66.78	16.33	0.00	150.0	± 9.6 %
		Y	4.73	66.93	16.28		150.0	
		Z	4.50	66.80	16.21		150.0	
10196- CAC	IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK)	Х	4.31	66.51	16.16	0.00	150.0	± 9.6 %
		Y	4.52	66.65	16.16		150.0	
		Z	4.30	66.52	16.05		150.0	
10197- CAC	IEEE 802.11n (HT Mixed, 39 Mbps, 16- QAM)	X	4.48	66.77	16.32	0.00	150.0	± 9.6 %
		Y	4.70	66.92	16.28		150.0	
	····	Z	4.47	66.78	16.20		150.0	
10198- CAC	IEEE 802.11n (HT Mixed, 65 Mbps, 64- QAM)	Х	4.50	66.79	16.33	0.00	150.0	± 9.6 %
		Y	4.73	66.95	16.30		150.0	
		Z	4.49	66.81	16.22		150.0	
10219- CAC	IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK)	X	4.26	66.54	16.13	0.00	150.0	± 9.6 %
		Y	4.47	66.66	16.12	1	150.0	
		Z	4.25	66.55	16.01	ļ	150.0	
10220- CAC	IEEE 802.11n (HT Mixed, 43.3 Mbps, 16- QAM)	X	4.47	66.73	16.30	0.00	150.0	± 9.6 %
		Y	4.70	66.89	16.27		150.0	· ······
		Z	4.46	66.74	16.19		150.0	
10221- CAC	IEEE 802.11n (HT Mixed, 72.2 Mbps, 64- QAM)	X	4.51	66.73	16.32	0.00	150.0	± 9.6 %
		Y	4.74	66.87	16.28		150.0	
		Ζ	4.51	66.74	16.20		150.0	
10222- CAC	IEEE 802.11n (HT Mixed, 15 Mbps, BPSK)	X	4.91	66.89	16.51	0.00	150.0	± 9.6 %
		Y	5.06	67.05	16.39		150.0	1
		Ζ	4.88	66.88	16.36	1	150.0	1

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10223- CAC	IEEE 802.11n (HT Mixed, 90 Mbps, 16- QAM)	X	5.21	67.18	16.67	0.00	150.0	± 9.6 %
		Y	5.37	67.24	16.51		150.0	
		Z	5.17	67.14	16.51		150.0	
10224- CAC	IEEE 802.11n (HT Mixed, 150 Mbps, 64- QAM)	X	4.95	66.99	16.48	0.00	150.0	± 9,6 %
		Y	5.11	67.16	16.37		150.0	
		Z	4.91	66.98	16.33		150.0	
10225- CAB	UMTS-FDD (HSPA+)	Х	2.57	65.87	14.82	0.00	150.0	± 9.6 %
		Y	2.79	66.10	15.32		150.0	
		Z	2.57	65.89	14.81		150.0	
10226- CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	X	5.70	82.73	23.27	6.02	65.0	± 9.6 %
		Y	15.45	101.64	30.73		65.0	
		Z	9.36	92.89	27.50		65.0	
10227- CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	X	5.51	81.11	22.01	6.02	65.0	± 9.6 %
		Y	15.16	99.52	29.37		65.0	
		Z	9.33	91.39	26.29		65.0	
10228- CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	X	4.37	80.87	24.58	6.02	65.0	± 9.6 %
		Y	8.06	93.39	30.16		65.0	
		Z	5.51	86.54	27.40		65.0	
10229- CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16- QAM)	X	5.43	81.78	22.83	6.02	65.0	± 9.6 %
		Y	14.43	100.19	30.19		65.0	
		Z	8.67	91.34	26.89		65.0	
10230- CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64- QAM)	X	5.22	80.18	21.60	6.02	65.0	± 9.6 %
		Y	14.07	98.09	28.85		65.0	
		Z	8.56	89.82	25.70		65.0	
10231- CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	Х	4.21	80.08	24.19	6.02	65.0	± 9.6 %
		Y	7.72	92.42	29.75		65.0	
		Z	5.25	85.50	26.93		65.0	
10232- CAD	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16- QAM)	X	5.42	81.76	22.83	6.02	65.0	± 9.6 %
		Y	14.40	100.18	30.19		65.0	
		Z	8.65	91.31	26.89		65.0	
10233- CAD	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64- QAM)	X	5.21	80.16	21.59	6.02	65.0	± 9.6 %
		Y	14.03	98.05	28.84		65.0	
		Z	8.53	89.78	25.69		65.0	
10234- CAD	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	X	4.09	79.41	23.80	6.02	65.0	± 9.6 %
		Y	7.46	91.57	29.34		65.0	
		Z	5.06	84.64	26.49		65.0	
10235- CAD	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	X	5.43	81.79	22.84	6.02	65.0	± 9.6 %
		Y	14.42	100.22	30.20		65.0	
		Z	8.66	91.36	26.90		65.0	
10236- CAD	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	X	5.25	80.28	21.63	6.02	65.0	± 9.6 %
		Y	14,26	98.30	28.91		65.0	
		Z	8.64	89.96	25.74		65.0	
10237- CAD	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	X	4.21	80.11	24.20	6.02	65.0	± 9.6 %
		Y	7.73	92.49	29.78		65.0	
		Z	5.25	85.54	26.95		65.0	
10238- CAD	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	X	5.41	81.74	22.82	6.02	65.0	± 9.6 %
		Y	14.37	100.15	30.18		65.0	T
		Z	8.63	91.28	26.88		65.0	

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10239- CAD	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	Х	5.19	80.13	21.58	6.02	65.0	± 9.6 %
		Y	13.97	98.01	28.83	·	65.0	
		Z	8.50	89.73	25.67		65.0	
10240- CAD	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	X	4.20	80.08	24.19	6.02	65.0	± 9.6 %
		Y	7.71	92.44	29.76		65.0	
		Z	5.24	85.50	26.94		65.0	1
10241-	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz,	X	6,28	77.75	23.74	6.98	65.0	± 9.6 %
CAA	16-QAM)	Ŷ	7.17	79.66	25.20	0.50	65.0	1 3.0 %
		Z	6.62	79.00				
10242-	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz,	X	5.61	75.51	24.64	0.00	65.0	100%
CAA	64-QAM)				22.71	6.98	65.0	± 9.6 %
		Y	7.01	79.22	24.95		65.0	
40040		Z	6.04	77.21	23.74		65.0	
10243- CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	X	4.77	72.80	22,43	6.98	65.0	± 9.6 %
		Y	5.72	75.84	24.40		65.0	
	· · · · · · · · · · · · · · · · · · ·	Z	4.99	73.88	23.19		65.0	
10244- CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	Х	3.08	66.71	12.88	3.98	65.0	± 9,6 %
		Y	5.65	76.51	19.16		65.0	
		Z	3.79	70.31	15.20		65.0	
10245- CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	Х	3.05	66.35	12.65	3.98	65.0	± 9.6 %
		Y	5.47	75.72	18.77		65.0	
		Z	3.68	69.62	14.83		65.0	
10246- CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	X	2.73	68.50	14.10	3.98	65.0	± 9.6 %
		Y	6.90	84.10	22.59		65.0	
		Z	3.38	72.30	16.31		65.0	
10247- CAD	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	X	3.32	68.16	14.83	3.98	65.0	± 9.6 %
		Y	5.00	75.29	19.75		65.0	
		z	3.63	70.11	16.18		65.0	
10248- CAD	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	X	3.35	67.83	14.68	3.98	65.0	± 9.6 %
		Y	4.95	74.49	19.36		65.0	
		Ž	3.62	69.55	15.90		65.0	
10249- CAD	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	X	3.90	73.79	17.79	3.98	65.0	± 9.6 %
		Y	7.87	86.63	24.46		65.0	l
		z	4.87	78.17	20.05		65.0	
10250- CAD	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	X	4.46	72.43	19.10	3.98	65.0	± 9.6 %
		Y	5.61	76.63	21.92		65.0	
		z	4.70	73.89	20.05		65.0	
10251- CAD	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	X	4.27	70.46	17.79	3.98	65.0	± 9.6 %
		Y	5.36	74.41	20.57		65.0	
	- 141-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-	Z	4.43	71.53	18.56		65.0	l
10252-	LTE-TDD (SC-FDMA, 50% RB, 10 MHz,	X	4.43	76.28		3.98		+0.00/
CAD					20.36	3.90	65.0	± 9.6 %
		Y	7.12	83.67	24.31		65.0	
10253- CAD	LTE-TDD (SC-FDMA, 50% RB, 15 MHz,	Z X	5.40 4.54	79.04 70.25	21.81 18.29	3.98	65.0 65.0	± 9.6 %
	16-QAM)		E 07	70.70	00.07			<b> </b>
		Y	5.37	73.18	20.35		65.0	
40054		Z	4.62	70.94	18.80		65.0	
10254- CAD	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	X	4.85	71.22	19.07	3.98	65.0	± 9.6 %
		Y	5.69	74.00	21.02		65.0	
		Z	4.94	71.96	19.60		65.0	

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10255- CAD	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	X	4.83	74.07	19.88	3.98	65.0	±9.6 %
		Y	6.20	78.60	22.49		65.0	
		Ż	5.10	75.57	20.75		65.0	
10256- CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	X	2.29	63.25	9.85	3.98	65.0	± 9.6 %
		Y	4.33	72.34	16.30		65.0	
		Z	2.61	65.28	11.48		65.0	
10257- CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	X	2.28	62.96	9.60	3.98	65.0	± 9.6 %
		Y	4.16	71.35	15.76		65.0	
		Z	2.56	64.75	11.10		65.0	
10258- CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	X	1.96	64.07	10.75	3.98	65.0	± 9.6 %
		Y	4.97	78.32	19.50		65.0	
		Z	2.22	66.21	12.33		65.0	
10259- CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	X	3.77	69.86	16.44	3.98	65.0	± 9.6 %
		Y	5.26	75.82	20.54		65.0	
		Z	4.07	71.70	17.67		65.0	
10260- CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	X	3.81	69.66	16.35	3.98	65.0	± 9.6 %
		Y	5.26	75.42	20.36		65.0	
(05-)		Z	4.10	71.41	17.53		65.0	
10261- CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	X	4.13	74.31	18.63	3.98	65.0	± 9.6 %
		Y	6.91	83.89	23.89		65.0	
		Z	4.85	77.73	20.46		65.0	
10262- CAD	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	X	4.45	72.36	19.04	3.98	65.0	±9.6 %
		Y	5.60	76.58	21.88		65.0	
		Z	4.68	73.81	19.99		65.0	
10263- CAD	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	X	4.26	70.44	17.79	3.98	65.0	±9.6 %
		Y	5.34	74.38	20.56		65.0	
		Z	4.42	71.51	18.55		65.0	
10264- CAD	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	X	4.75	76.08	20.25	3.98	65.0	± 9.6 %
		Y	7.04	83.44	24.20		65.0	
		Z	5.33	78.79	21.68		65.0	
10265- CAD	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	X	4.60	70.61	18.56	3.98	65.0	± 9.6 %
		Y	5.50	73.80	20.64		65.0	
		Z	4.69	71.34	19.07		65.0	
10266- CAD	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	X	4.95	71.71	19.45	3.98	65.0	± 9.6 %
		Y	5.83	74.64	21.36		65.0	
		Z	5.05	72.48	19.97		65.0	
10267- CAD	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	Х	5.01	74.52	19.91	3.98	65.0	± 9.6 %
		Y	6.63	79.66	22.68		65.0	
		Z	5.35	76.22	20.84		65.0	
10268- CAD	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	X	5.27	70.89	19.25	3.98	65.0	± 9.6 %
		Y	6.07	73.43	20.81		65.0	
		Z	5.33	71.43	19.60		65.0	
10269- CAD	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	X	5.29	70.58	19.15	3.98	65.0	± 9.6 %
		Υ	6.04	72.94	20.64		65.0	
		Z	5.34	71.06	19.47		65.0	
10270- CAD	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	X	5.17	72.58	19.33	3.98	65.0	± 9.6 %
		Y	6.28	76.09	21.29		65.0	
		Z	5.35	73.62	19.93		65.0	1

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10274- CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.10)	X	2.41	66.43	14.82	0.00	150.0	± 9.6 %
		Y	2.58	66.48	15.24		150.0	
		Z	2.39	66.38	14.76		150.0	
10275- CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.4)	X	1.45	67.76	15.04	0.00	150.0	± 9.6 %
		Y	1.61	67.98	15.58		150.0	
		Z	1,42	67.56	14.85		150.0	
10277- CAA	PHS (QPSK)	X	1.74	59.75	5.31	9.03	50,0	± 9.6 %
		Y	1.81	61.19	6.71		50.0	
		Z	1.73	59.88	5.41		50.0	
10278- CAA	PHS (QPSK, BW 884MHz, Rolloff 0.5)	X	2.71	64.14	10.09	9.03	50.0	± 9.6 %
		Y	10.58	86.01	20.92		50.0	
		Z	2.95	65.66	11.11		50.0	
10279- CAA	PHS (QPSK, BW 884MHz, Rolloff 0.38)	X	2.77	64.34	10.25	9.03	50.0	± 9.6 %
		Y	10.86	86.33	21.10		50.0	
10-5-5-	1	Z	3.03	65.92	11.30		50.0	
10290- AAB	CDMA2000, RC1, SO55, Full Rate	X	0.78	62.91	9.04	0.00	150.0	± 9.6 %
		Y	1.44	68.67	13.91		150.0	
		Z	0.82	63.50	9.52		150.0	
10291- AAB	CDMA2000, RC3, SO55, Full Rate	Х	0.44	60.90	7.41	0.00	150.0	± 9.6 %
		Y	0.81	65.70	12.35		150.0	
		Ζ	0,46	61.22	7.73		150.0	
10292- AAB	CDMA2000, RC3, SO32, Full Rate	X	0.52	62.90	8.81	0.00	150.0	± 9.6 %
		Y	1.08	70.34	14.96		150.0	
		Z	0.54	63.47	9.26		150.0	
10293- AAB	CDMA2000, RC3, SO3, Full Rate	X	0.85	67.98	11.75	0,00	150.0	± 9.6 %
		Y	1.81	77.73	18.47		150.0	
	·	Z	0.93	69.19	12.44		150.0	
10295- AAB	CDMA2000, RC1, SO3, 1/8th Rate 25 fr.	X	10.59	83.36	20.91	9.03	50.0	± 9.6 %
		Y	13.63	95.28	28.15		50.0	
		Z	12.33	87.48	22.99		50.0	
10297- AAC	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	X	2.52	69.36	16.49	0.00	150.0	± 9.6 %
	·	Y	2.75	69.70	16.61		150.0	
		Z	2.51	69.33	16.32		150.0	
10298- AAC	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	X	1.02	63.71	10.46	0.00	150.0	±9.6 %
		Y	1.56	67.65	14.07		150.0	
		Z	1.06	64.21	10.86		150.0	
10299- AAC	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	X	1.41	63.10	9.49	0.00	150.0	± 9.6 %
		Y	2.20	67.48	13.20		150.0	
		Z	1.66	65.04	10.89		150.0	
10300- AAC	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	X	1.19	60.99	7.64	0.00	150.0	± 9.6 %
		Y	1.75	63.96	10.73		150.0	
1000		Z	1.30	61.89	8.49		150.0	
10301- AAA	IEEE 802.16e WIMAX (29:18, 5ms, 10MHz, QPSK, PUSC)	X	4.40	65.21	17.25	4.17	50.0	± 9.6 %
~		Y	4.79	65.64	17.57		50.0	
		Z	4.51	65.62	17.36		50.0	
10302- AAA	IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC, 3 CTRL symbols)	X	4.89	66.01	18.10	4.96	50.0	±9.6 %
		Y	5.23	66.10	18.21		50.0	·
· · · · ·		Z	4.90	65.76	17.79		50.0	

10303-	IEEE 802.16e WIMAX (31:15, 5ms,	X	4.65	65.68	17.92	4.96	50.0	± 9.6 %
AAA	10MHz, 64QAM, PUSC)	<u> </u>						
		Y	4.97	65.72	18.04		50.0	
		Z	4.66	65.38	17.59		50.0	
10304- AAA	IEEE 802.16e WIMAX (29:18, 5ms, 10MHz, 64QAM, PUSC)	X	4.43	65.21	17.19	4.17	50.0	± 9.6 %
	·····	Y	4.78	65.59	17.51		50.0	
		Z	4.47	65.30	17.12		50.0	
10305- AAA	IEEE 802.16e WIMAX (31:15, 10ms, 10MHz, 64QAM, PUSC, 15 symbols)	X	4.15	67.54	18.96	6.02	35.0	± 9.6 %
		Y	4.30	67.06	19.45		35.0	
		Z	4.22	67.78	19.08		35.0	
10306- AAA	IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, 64QAM, PUSC, 18 symbols)	X	4.43	66.43	18.72	6.02	35.0	± 9.6 %
		Υ	4.66	66.30	19.12		35.0	
		Z	4.49	66.64	18.78		35.0	
10307- AAA	IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, QPSK, PUSC, 18 symbols)	X	4.32	66.52	18.64	6.02	35.0	± 9.6 %
		Y	4.55	66.42	19.07		35.0	
		Z	4.38	66.74	18.71		35.0	<u>_</u>
10308- AAA	IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, 16QAM, PUSC)	X	4.30	66.75	18.79	6.02	35.0	±9.6 %
		Y	4.52	66.60	19.20		35.0	
		Z	4.37	66.98	18.86		35.0	
10309- AAA	IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, 16QAM, AMC 2x3, 18 symbols)	X	4.46	66.55	18.83	6.02	35.0	± 9.6 %
·····	· · · · · · · · · · · · · · · · · · ·	Y	4.72	66.54	19.28		35.0	
		Z	4.52	66.77	18.90		35.0	
10310- AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, AMC 2x3, 18 symbols)	X	4.39	66.51	18.71	6.02	35.0	± 9.6 %
		Y	4.60	66.34	19.08		35.0	
		Z	4.45	66.72	18.77		35.0	
10311- AAC	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	X	2.88	68.46	16.13	0.00	150.0	± 9.6 %
		Y	3.11	68.97	16.25		150.0	:
		Z	2.86	68.50	15.98		150.0	
10313- AAA	iDEN 1:3	X	1.87	66.02	12.37	6.99	70.0	± 9.6 %
		Y	5.52	82.21	20.17		70.0	
		Z	2.06	67.90	13.38		70.0	
10314- AAA	IDEN 1:6	X	2.66	70.48	16.99	10.00	30.0	± 9.6 %
		Y	9.77	95.91	27.98		30.0	
		Z	4.14	77.84	20.07		30.0	
10315- AAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 96pc duty cycle)	X	0.95	63.27	14.86	0.17	150.0	± 9.6 %
		Y	1.06	63.68	15.21		150.0	
		Z	0.93	63.28	14.78		150.0	
10316- AAB	IEEE 802.11g WiFi 2.4 GHz (ERP- OFDM, 6 Mbps, 96pc duty cycle)	X	4.35	66.42	16.23	0.17	150.0	± 9.6 %
		Y	4.58	66.66	16.32		150.0	ļ
		Z	4.34	66.49	16.17		150.0	
10317- AAC	IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle)	X	4.35	66.42	16.23	0.17	150.0	± 9.6 %
		Y	4.58	66.66	16.32	<u> </u>	150.0	
		Z	4.34	66.49	16.17		150.0	
10400- AAD	IEEE 802.11ac WiFi (20MHz, 64-QAM, 99pc duty cycle)	X	4.44	66.78	16.30	0.00	150.0	± 9.6 %
		Y	4.68	66.96	16.27		150.0	
		Z	4.43	66.80	16.17		150.0	
10401- AAD	IEEE 802.11ac WiFi (40MHz, 64-QAM, 99pc duty cycle)	X	5.15	66.76	16.42	0.00	150.0	± 9.6 %
		Y	5.39	67.16	16.44		150.0	
		Z	5.17	66.92	16.36		150.0	

10402- AAD	IEEE 802.11ac WiFi (80MHz, 64-QAM, 99pc duty cycle)	X	5.46	67.17	16.51	0.00	150.0	± 9.6 %
		Y	5.63	67.44	16.43		150.0	
		Z	5.43	67.19	16.37		150.0	
10403- AAB	CDMA2000 (1xEV-DO, Rev. 0)	X	0.78	62.91	9.04	0.00	115.0	±9.6 %
		Y	1.44	68.67	13.91		115.0	
		Z	0.82	63.50	9.52		115.0	l
10404- AAB	CDMA2000 (1xEV-DO, Rev. A)	X	0.78	62.91	9.04	0.00	115,0	±9.6 %
		Y	1.44	68.67	13.91		115.0	
10100		Z	0.82	63.50	9.52		115.0	
10406- AAB	CDMA2000, RC3, SO32, SCH0, Full Rate	X	100.00	119.25	28.40	0.00	100.0	± 9.6 %
		Y	9.50	91.59	22.98		100.0	
40.440		Z	100.00	122.00	29.77		100.0	
10410- AAD	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9, Subframe Conf=4)	X	3.12	77.42	16.90	3.23	80.0	± 9.6 %
	······································	Y	100.00	127.40	32.46		80.0	
		Z	100.00	125.01	30.73		80.0	
10415- AAA	IEEE 802.11b WIFi 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle)	х	0.90	62.74	14.48	0.00	150.0	±9.6 %
		Y	1.00	62.96	14.62		150.0	
		Z	0.88	62.66	14.28		150.0	
10416- AAA	IEEE 802.11g WiFi 2.4 GHz (ERP- OFDM, 6 Mbps, 99pc duty cycle)	X	4.32	66.51	16.25	0.00	150.0	± 9.6 %
		Υ	4.52	66.62	16.21		150.0	
		Z	4.30	66.52	16.13		150.0	
10417- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 99pc duty cycle)	X	4.32	66.51	16.25	0.00	150.0	± 9.6 %
	······································	Y	4.52	66.62	16.21		150.0	
		Z	4.30	66.52	16.13		150.0	
10418- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 99pc duty cycle, Long preambule)	×	4.31	66.71	16.30	0.00	150.0	± 9.6 %
		Y	4.51	66.79	16.23		150.0	
		Z	4.30	66.71	16.18		150.0	
10419- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 99pc duty cycle, Short preambule)	X	4.33	66.64	16.29	0.00	150.0	± 9.6 %
		Y	4.53	66.73	16.23		150.0	
		Z	4.32	66.65	16.17		150.0	
10422- AAB	IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK)	X	4.44	66.62	16.30	0.00	150.0	± 9.6 %
		Υ	4.65	66.73	16.25		150.0	
10.10-		Z	4.43	66.63	16.18		150.0	
10423- AAB	IEEE 802.11n (HT Greenfield, 43.3 Mbps, 16-QAM)	X	4.57	66.89	16.39	0.00	150.0	± 9.6 %
		Y	4.81	67.05	16.36		150.0	
4040		Z	4.56	66.90	16.28		150.0	
10424- AAB	IEEE 802.11n (HT Greenfield, 72.2 Mbps, 64-QAM)	X	4.50	66.84	16.37	0.00	150.0	± 9.6 %
		Y	4.73	67.00	16.33		150.0	
40405		Z	4.49	66.86	16.25		150.0	
10425- AAB	IEEE 802.11n (HT Greenfield, 15 Mbps, BPSK)	X	5.17	67.18	16.65	0.00	150.0	± 9.6 %
		Y	5.33	67.30	16.51		150.0	
101		Z	5.13	67.14	16.48		150.0	
10426- AAB	IEEE 802.11n (HT Greenfield, 90 Mbps, 16-QAM)	X	5.23	67.40	16.76	0.00	150.0	± 9.6 %
		Y	5.34	67.33	16.52		150.0	
		Z	5.16	67.27	16.54		150.0	

10427- AAB	IEEE 802.11n (HT Greenfield, 150 Mbps, 64-QAM)	X	5.16	67.07	16.58	0,00	150.0	± 9.6 %
		Y	5.35	67.30	16.51	·	150.0	
		Z	5.13	67.07	16.44		150.0	
10430- AAB	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1)	X	4.20	72.13	18.43	0.00	150.0	± 9.6 %
		Y	4.22	70.70	18.10		150.0	
		Z	4.22	72.19	18.46		150.0	
10431- AAB	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1)	X	3.93	67.10	16.09	0.00	150.0	± 9.6 %
		Y	4.20	67.18	16.20		150.0	
		Z	3.93	67.10	16.01		150.0	
10432- AAB	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1)	X	4.26	66.93	16.28	0.00	150.0	± 9.6 %
······		Y	4.50	67.05	16.28		150.0	
		Z	4.25	66.94	16.17		150.0	
10433- AAB	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1)	X	4.52	66.87	16.39	0.00	150.0	± 9.6 %
		Y	4.75	67.03	16.35		150.0	
10404		Z	4.51	66.89	16.27		150.0	
10434- AAA	W-CDMA (BS Test Model 1, 64 DPCH)	X	4.28	72.84	18.10	0.00	150.0	± 9.6 %
		Y	4.33	71.56	18.07		150.0	
40425		Z	4.34	73.06	18.24		150.0	
10435- AAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	2.96	76.73	16.60	3.23	80.0	± 9.6 %
		Y	100.00	127.17	32,36		80.0	
10117		Z	100.00	124.69	30.58		80.0	
10447- AAB	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	X	3.15	66.77	14.81	0.00	150.0	± 9.6 %
		Y	3.49	67.18	15.50		150.0	
		Z	3.17	66.84	14.85		150.0	
10448- AAB	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, Clippin 44%)	X	3.79	66.88	15.96	0.00	150.0	± 9.6 %
		Y	4.04	66.96	16.06		150.0	
		Z	3.79	66.88	15.87		150.0	
10449- AAB	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1, Cliping 44%)	X	4.09	66.75	16.17	0.00	150.0	± 9.6 %
		Y	4.31	66.88	16.18		150.0	
		Z	4.08	66.77	16.07		150.0	
10450- AAB	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	X	4.31	66.64	16.24	0.00	150.0	± 9.6 %
		Y	4.51	66.80	16.21		150.0	
101-1		Z	4.30	66.66	16.12		150.0	
10451- AAA	W-CDMA (BS Test Model 1, 64 DPCH, Clipping 44%)	X	2.94	66.45	13.98	0.00	150.0	± 9.6 %
		Y	3.38	67.33	15.10		150.0	
		Z	2.98	66.61	14.10		150.0	
10456- AAB	IEEE 802.11ac WiFi (160MHz, 64-QAM, 99pc duty cycle)	X	6.17	67.89	16.91	0.00	150.0	± 9.6 %
		Y	6.20	67,84	16.66		150.0	
		Z	6.10	67.86	16.74		150.0	
10457- AAA	UMTS-FDD (DC-HSDPA)	X	3.65	65.21	15.97	0.00	150.0	± 9.6 %
		Y	3.78	65.27	15.92	L	150.0	
10120		Z	3.63	65.21	15.85		150.0	
10458- AAA	CDMA2000 (1xEV-DO, Rev. B, 2 carriers)	X	3.63	70.67	16.50	0.00	150.0	± 9.6 %
		Y	3.97	70.83	17.45		150.0	
		Z	3.75	71.23	16.87		150.0	
10459- AAA	CDMA2000 (1xEV-DO, Rev. B, 3 carriers)	X	4.91	69.28	18.19	0.00	150.0	± 9.6 %
		Y	5.06	68.34	18.09		150.0	
		Z	4.97	69.44	18.31		150.0	

10460- AAA	UMTS-FDD (WCDMA, AMR)	х	0.82	68.91	15, <b>77</b>	0.00	150.0	± 9.6 %
		Y	0.90	68.29	16.15		150.0	
		Ζ	0.77	68.38	15.37		150.0	
10461- AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	Х	2.32	75.39	17.14	3.29	80.0	± 9.6 %
		Y	100.00	131.59	34.49		80.0	
		Ζ	100.00	129.59	32.92		80.0	
10462- AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	0.76	60.00	7.09	3.23	80.0	± 9.6 %
		Y	4.63	77.57	16.00		80.0	
		Z	0.74	60.00	7.79		80.0	
10463- AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	Х	0.79	60.00	6.50	3.23	80.0	± 9.6 %
		Y	1.49	65.34	10.90		80.0	
10101		Z	0.76	60.00	7.16		80.0	
10464- AAA	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	1.48	69.57	14.21	3.23	80.0	± 9.6 %
		Y	100.00	128.72	32.98		80.0	
10/0-		Z	100.00	125.35	30.81		80.0	
10465- AAA	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	X	0.76	60.00	7.02	3.23	80.0	±9.6 %
		Y	2.92	72.75	14.31		80.0	
10.100		Z	0.74	60.00	7.72	A	80.0	
10466- AAA	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	X	0.79	60.00	6.46	3.23	80.0	± 9.6 %
		Y	1.30	63.97	10.25		80.0	
40407		Z	0.76	60.00	7.11		80.0	
10467- AAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	Х	1.57	70.35	14.56	3.23	80.0	± 9.6 %
		Y	100.00	129.06	33.13		80.0	
		Z	100.00	125.82	31.02		80.0	
10468- AAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	X	0.76	60.00	7.04	3.23	80.0	± 9.6 %
		Y	3.25	73.90	14.73		80.0	
		Ζ	0.74	60.00	7.74		80.0	
10469- AAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	X	0.79	60.00	6.46	3.23	80.0	± 9.6 %
		Y	1.30	64.00	10.26		80.0	
		Z	0.76	60.00	7.11		80.0	
10470- AAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	×	1.56	70.33	14.55	3.23	80.0	± 9.6 %
		Y	100.00	129.11	33.14	-	80.0	
		Z	100.00	125.84	31.01		80.0	
10471- AAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	×	0.76	60.00	7.03	3.23	80.0	± 9.6 %
		Y	3.21	73.75	14.66		80.0	ļ
10.175		Z	0.74	60.00	7.73		80.0	
10472- AAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	X	0.79	60.00	6.44	3.23	80.0	± 9.6 %
		Y	1.29	63.92	10.21		80.0	
10		Z	0.76	60.00	7.09		80.0	
10473- AAC	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	1.56	70.28	14.52	3.23	80.0	±9.6 %
		Y	100.00	129.06	33.12		80.0	
10474-	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-	Z X	100.00 0.76	125.78 60.00	30.99 7.02	3.23	80.0 80.0	± 9.6 %
AAC	QAM, UL. Subframe=2,3,4,7,8,9)				L			<b> </b>
		Y	3.17	73.64	14.62		80.0	1
		Z	0.74	60.00	7.73		80.0	
10475- AAC	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	X	0.78	60.00	6.45	3.23	80.0	± 9.6 %
		Y	1.29	63.89	10.20		80.0	
		Z	0.76	60.00	7.09		80.0	

10477- AAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	x	0.76	60.00	7.00	3.23	80.0	± 9.6 %
		Y	2.91	72.72	14.27		80.0	
		Z	0.74	60.00	7.70		80.0	
10478- AAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	X	0.79	60.00	6.43	3.23	80.0	± 9.6 %
		Y	1.28	63.82	10.16		80.0	
		Z	0.76	60.00	7.08		80.0	
10479- AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	4.36	78.87	19.25	3.23	80.0	±9.6 %
		Y	6.72	85.93	23.37		80.0	
		Ζ	31.53	108.71	28.80		80.0	
10480- AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	2.01	65.44	11.92	3.23	80.0	± 9.6 %
		Y	7.23	81.86	20.03		80.0	ļ
40404		Z	6.32	79.43	17.87		80.0	
10481- AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	1.64	62.93	10.36	3.23	80.0	± 9.6 %
		Y	5.72	78.02	18.32		80.0	
40400		Z	3.41	71.49	14.62		80.0	L
10482- AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	1.29	62.41	10.80	2.23	80.0	± 9.6 %
		Y	3.64	76.21	18.93		80.0	
40.400		Z	1.66	65.83	12.91		80.0	
10483- AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	1.52	61.14	9.55	2.23	80.0	± 9.6 %
		Y	4.09	73.43	17.03		80.0	
		Z	2.32	66.35	12.70		80.0	
10484- AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	1.52	60.89	9.42	2.23	80.0	± 9.6 %
		Y	3.80	72.18	16.53		80.0	
		Z	2.19	65.41	12.27		80.0	
10485- AAC	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	1.96	67.14	14.58	2.23	80.0	± 9.6 %
		Y	3.64	76.20	19.95		80.0	
		Z	2.47	70.93	16.63		80.0	
10486- AAC	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	1.93	63.65	12.21	2.23	80.0	± 9.6 %
		Y	3.34	71.00	17.20		80.0	
		Z	2.25	65.99	13.71		80.0	
10487- AAC	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	1.95	63.41	12.07	2.23	80.0	± 9.6 %
		Y	3.31	70.45	16.94		80.0	
		Z	2.25	65.61	13.50		80.0	
10488- AAC	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	2.57	68.84	16.72	2.23	80.0	± 9.6 %
		Y	3.64	73.87	19.67		80.0	
		Z	2.88	71.05	17.92		80.0	
10489- AAC	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	2.71	66.42	15.54	2.23	80.0	±9.6 %
		Y	3.41	69.51	17.78		80.0	
10100		Z	2.89	67.77	16.40		80.0	
10490- AAC	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	2.80	66.35	15.53	2.23	80.0	± 9.6 %
		Y	3.50	69.28	17.68		80.0	
10101		Z	2.97	67.63	16.34		80.0	
10491- AAC	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	2.93	68.13	16.75	2.23	80.0	± 9.6 %
		Y	3.79	71.78	18.88	ļ	80.0	
10100		Z	3.14	69.61	17.57		80.0	
10492- AAC	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	3.14	66.26	16.05	2.23	80.0	± 9.6 %
AAC		1	~ - ^	1				
		Y Z	3.72 3.26	68.46 67.14	17.58 16.60		80.0	

10493- AAC	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	3.20	66.19	16.02	2.23	80.0	±9.6 %
		Υ	3.78	68.30	17.52		80.0	
		Z	3.32	67.03	16.55		80.0	
10494- AAC	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	3.09	69.16	17.09	2.23	80.0	± 9.6 %
		Y	4.18	73.66	19.49		80.0	
		Z	3.38	70.96	18.01		80.0	
10495- AAC	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	3.16	66.52	16.26	2.23	80.0	±9.6 %
		Y	3.75	68.86	17.79		80.0	
		Z	3.28	67.44	16.81		80.0	
10496- AAC	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	3.25	66.39	16.25	2.23	80.0	± 9.6 %
		Y	3.82	68.54	17.67		80.0	
		Z	3.36	67.23	16.76		80.0	
10497- AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	0.98	60.00	8.08	2.23	80.0	± 9.6 %
		Υ	2.67	71.65	16.05		80.0	
		Ζ	0.96	60.00	8.56		80.0	
10498- AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	1.18	60.00	7.01	2.23	80.0	± 9.6 %
		Y	1.73	63.28	11.10		80.0	
		Z	1.15	60.00	7.42		80.0	
10499- AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	1.20	60.00	6.87	2.23	80.0	± 9.6 %
		Y	1.65	62.50	10.55		80.0	
		Z	1.17	60.00	7.27		80.0	
10500- AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	Х	2.22	67.95	15.51	2.23	80.0	± 9.6 %
		Y	3.54	74.72	19.65		80.0	
		Z	2.63	70.95	17.16	*****	80.0	
10501- AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	2.29	65.10	13.66	2.23	80.0	± 9.6 %
		Y	3.38	70.39	17.41		80.0	
		Z	2.58	67.13	14.94		80.0	
10502- AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	Х	2.32	64.94	13.52	2.23	80.0	± 9.6 %
		Y	3.43	70.21	17.27		80.0	······
		Z	2.61	66.92	14.77		80.0	······································
10503- AAC	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	2.54	68.66	16.62	2.23	80.0	± 9.6 %
		Y	3.60	73.66	19.57		80.0	
		Z	2.84	70.82	17.80		80.0	
10504- AAC	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	х	2.69	66.32	15.48	2.23	80.0	± 9.6 %
		Y	3.40	69.42	17.73		80.0	
		Z	2.87	67.65	16.32		80.0	
10505- AAC	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	2.78	66.26	15.46	2.23	80.0	± 9.6 %
		Y	3.48	69.19	17.63		80.0	
1		Z	2.96	67.52	16.27		80.0	
10506- AAC	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	3.07	69.03	17.01	2.23	80.0	± 9.6 %
		Y	4.15	73.51	19.42		80.0	
		Z	3.35	70.80	17.93		80.0	
40507								
10507- AAC	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	3.15	66.46	16.22	2.23	80.0	± 9.6 %
		X	3.15	66.46 68.80	16.22	2.23	80.0	± 9.6 %

10508- AAC	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	3.24	66.32	16.20	2.23	80.0	± 9.6 %
		Y	3.81	68.47	17.63		80.0	
		Z	3.35	67.15	16.71		80.0	
10509- AAC	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	3.51	68.36	16.83	2.23	80.0	± 9.6 %
		Y	4.41	71.84	18.68		80,0	
		Z	3.72	69.67	17.51		80.0	
10510- AAC	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	3.65	66.40	16.44	2.23	80.0	± 9.6 %
		Y	4.20	68.42	17.64		80.0	
10511		Z	3.74	67.11	16.83		80.0	
10511- AAC	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	3.72	66.27	16.42	2.23	80.0	± 9.6 %
		Y	4.25	68.13	17.55		80.0	
		Z	3.81	66.92	16.79		80,0	
10512- AAC	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	3.53	69.27	17.06	2.23	80.0	± 9.6 %
		Y	4.71	73.81	19.35		80.0	
10542		Z	3.83	70.97	17.89		80.0	
10513- AAC	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	3.53	66.49	16.47	2.23	80.0	± 9.6 %
		Y	4.09	68.73	17.78		80.0	
10514- AAC	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	Z X	3.62 3.58	67.27 66.23	16.91 16.41	2.23	80.0 80.0	± 9.6 %
	Gubiranie=2,0,4,7,0,9)	Y	4.11	68.25	17.62		80.0	
	····	Z	3.67	66.92	16.81		80.0	
10515- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 99pc duty cycle)	X	0.86	62.95	14.53	0.00	150.0	± 9.6 %
		Y	0.96	63.14	14.68		150.0	
		Z	0.84	62,85	14.32		150.0	
10516- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc duty cycle)	X	0.68	75.09	17.93	0.00	150.0	± 9.6 %
		Y	0.60	70.79	17.39		150.0	
		Z	0.59	73.58	17.02		150.0	
10517- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 99pc duty cycle)	X	0.71	65.13	15.13	0.00	150.0	± 9.6 %
		Y	0.81	65.08	15.31		150.0	
10518- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc duty cycle)	Z X	0.69 4.31	64.87 66.61	14.81 16.23	0.00	150.0 150.0	± 9.6 %
		Y	4.51	66.70	16.19		150.0	
		Z	4.30	66.61	16.12		150.0	
10519- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 99pc duty cycle)	X	4.46	66.79	16.33	0.00	150.0	± 9.6 %
		Y	4.69	66.93	16.31		150.0	
		Z	4.45	66.80	16.22		150.0	
10520- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 99pc duty cycle)	X	4.32	66.72	16.24	0.00	150.0	± 9.6 %
		Y	4.55	66.89	16.23		150.0	
10521-	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24	ZX	4.31 4.25	66.74 66.68	16.13 16.22	0.00	150.0 150.0	± 9.6 %
AAB	Mbps, 99pc duty cycle)	Y	4.25	66.88	16.22	0.00	150.0	1.9.0 %
		Z	4.40	66.71	16.11		150.0	
10522- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc duty cycle)	X	4.30	66.84	16.33	0.00	150.0	± 9.6 %
		Y	4.54	66.98	16.30		150.0	
		Ż	4.30	66.85	16.22	1	150.0	

10523- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 99pc duty cycle)	X	4.22	66.79	16.22	0.00	150.0	± 9.6 %
		Y	4.42	66.85	16.15		150.0	
		Z	4.21	66.79	16.10		150.0	
10524- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc duty cycle)	X	4.25	66.78	16.31	0.00	150.0	±9.6 %
		Y	4.48	66.90	16.27		150.0	
		Z	4.24	66.79	16.19		150.0	
10525- AAB	IEEE 802.11ac WiFi (20MHz, MCS0, 99pc duty cycle)	X	4.28	65.85	15.93	0.00	150.0	±9.6 %
		Y	4.47	65.95	15.86		150.0	
		Z	4.27	65.86	15.81		150.0	
10526- AAB	IEEE 802.11ac WiFi (20MHz, MCS1, 99pc duty cycle)	X	4.41	66.15	16.05	0.00	150.0	± 9.6 %
		Y	4.64	66.31	16.00		150.0	
		Z	4.40	66.17	15.93		150.0	
10527- AAB	IEEE 802.11ac WiFi (20MHz, MCS2, 99pc duty cycle)	X	4.34	66.11	15.98	0.00	150.0	± 9.6 %
		Y	4.56	66.27	15.95		150.0	
		Z	4.33	66.13	15.87		150.0	
10528- AAB	IEEE 802.11ac WiFi (20MHz, MCS3, 99pc duty cycle)	X	4.35	66.13	16.02	0.00	150.0	± 9.6 %
		Y	4.58	66.29	15.98		150.0	
		Z	4.34	66.15	15.90		150.0	
10529- AAB	IEEE 802.11ac WIFi (20MHz, MCS4, 99pc duty cycle)	Х	4.35	66.13	16.02	0.00	150.0	± 9.6 %
		Y	4.58	66.29	15.98		150.0	
		Z	4.34	66.15	15.90		150.0	
10531- AAB	IEEE 802.11ac WiFi (20MHz, MCS6, 99pc duty cycle)	X	4.32	66.16	16.00	0.00	150.0	± 9.6 %
		Y	4.57	66.39	15.99		150.0	
		Z	4.31	66.19	15.89		150.0	
10532- AAB	IEEE 802.11ac WiFi (20MHz, MCS7, 99pc duty cycle)	Х	4.20	66.01	15.92	0.00	150.0	±9.6 %
		Y	4.43	66.24	15.92		150.0	
		Z	4.19	66.04	15.81		150.0	
10533- AAB	IEEE 802.11ac WiFi (20MHz, MCS8, 99pc duty cycle)	X	4.36	66.21	16.02	0.00	150.0	± 9.6 %
		Y	4.59	66.34	15.97		150.0	
		Z	4.35	66.22	15.90		150.0	
10534- AAB	IEEE 802.11ac WiFi (40MHz, MCS0, 99pc duty cycle)	X	4.94	66.18	16.13	0.00	150.0	± 9.6 %
		Y	5.11	66.38	16.03		150.0	······································
		Z	4.91	66.20	15.99		150.0	
10535- AAB	IEEE 802.11ac WiFi (40MHz, MCS1, 99pc duty cycle)	X	4.99	66.35	16.21	0.00	150.0	± 9.6 %
		Y	5.18	66.56	16.12		150.0	İ
		Z	4.97	66.36	16.07		150.0	
10536- AAB	IEEE 802.11ac WiFi (40MHz, MCS2, 99pc duty cycle)	X	4.87	66.32	16.17	0.00	150.0	± 9.6 %
		Y	5.05	66.51	16.07		150.0	
		Z	4.85	66.34	16.04		150.0	
10537- AAB	IEEE 802.11ac WiFi (40MHz, MCS3, 99pc duty cycle)	X	4.94	66.34	16.18	0.00	150.0	± 9.6 %
		Y	5.10	66.48	16.06		150,0	
		Z	4.91	66.31	16.03		150.0	
10538- AAB	IEEE 802.11ac WiFi (40MHz, MCS4, 99pc duty cycle)	X	5.01	66.30	16.21	0.00	150.0	± 9.6 %
		Y	5.19	66.49	16.11		150.0	
		Z	4.98	66.30	16.06		150.0	
10540- AAB	IEEE 802.11ac WiFi (40MHz, MCS6, 99pc duty cycle)	X	4.93	66.22	16.18	0.00	150.0	± 9.6 %
		Y	5.13	66.52	16.13		150.0	1
		Z	4.91	66.26	16.06	1	150.0	1

10541- AAB	IEEE 802.11ac WiFi (40MHz, MCS7, 99pc duty cycle)	X	4.90	66.09	16.10	0.00	150.0	± 9.6 %
		Y	5.10	66.38	16.06		150.0	
		z	4.88	66.13	15.98		150.0	
10542- AAB	IEEE 802.11ac WiFi (40MHz, MCS8, 99pc duty cycle)	X	5.07	66.24	16.19	0.00	150.0	±9.6 %
		Y	5.25	66.45	16.11		150.0	
		Z	5.04	66.26	16.06		150.0	
10543- AAB	IEEE 802.11ac WiFi (40MHz, MCS9, 99pc duty cycle)	X	5.16	66.37	16.29	0.00	150.0	± 9.6 %
		Y	5.33	66.48	16.14		150.0	
		Z	5.12	66.32	16.12		150.0	
10544- AAB	IEEE 802.11ac WiFi (80MHz, MCS0, 99pc duty cycle)	X	5.28	66.21	16.10	0.00	150.0	± 9.6 %
		Y	5.42	66.50	16.03		150.0	
		Z	5.25	66.26	15.98		150.0	
10545- AAB	IEEE 802.11ac WiFi (80MHz, MCS1, 99pc duty cycle)	Х	5.51	66.84	16.38	0.00	150.0	± 9.6 %
		Y	5.61	66.90	16.18		150.0	
		Z	5.45	66.77	16.19		150.0	
10546- AAB	IEEE 802.11ac WiFi (80MHz, MCS2, 99pc duty cycle)	X	5.32	66.36	16.14	0.00	150.0	± 9.6 %
		Y	5.48	66.70	16.10		150.0	
105/-		Z	5.29	66.40	16.02		150.0	
10547- AAB	IEEE 802.11ac WiFi (80MHz, MCS3, 99pc duty cycle)	X	5.43	66.58	16.25	0.00	150.0	± 9.6 %
		Y	5.55	66.74	16.11		150.0	
		Z	5.37	66.52	16.07		150.0	
10548- AAB	IEEE 802.11ac WiFi (80MHz, MCS4, 99pc duty cycle)	X	5.67	67.49	16.67	0.00	150.0	± 9.6 %
		Y	5.79	67.62	16.52		150.0	
		Z	5.59	67.37	16.46		150.0	
10550- AAB	IEEE 802.11ac WiFi (80MHz, MCS6, 99pc duty cycle)	Х	5.44	66.73	16.35	0.00	150.0	± 9.6 %
		Y	5.51	66.72	16.12		150.0	
		Z	5.36	66.62	16.14		150.0	
10551- AAB	IEEE 802.11ac WiFi (80MHz, MCS7, 99pc duty cycle)	X	5.31	66.31	16.10	0.00	150.0	± 9.6 %
		Y	5.52	66.76	16.10		150.0	
		Z	5.30	66.41	15.99		150.0	
10552- AAB	IEEE 802.11ac WiFi (80MHz, MCS8, 99pc duty cycle)	X	5.28	66.30	16.09	0.00	150.0	± 9.6 %
		Y	5.44	66.57	16.01		150.0	
		Z	5.25	66.34	15.96		150.0	
10553- AAB	IEEE 802.11ac WiFi (80MHz, MCS9, 99pc duty cycle)	Х	5.34	66.26	16.10	0.00	150.0	± 9.6 %
		Y	5.52	66.60	16.06		150.0	
		Z	5.31	66.32	15.98		150.0	
10554- AAC	IEEE 802.11ac WiFi (160MHz, MCS0, 99pc duty cycle)	X	5.72	66.58	16.20	0,00	150.0	± 9.6 %
		Y	5.83	66.86	16.12		150.0	
	······································	Z	5.67	66.61	16.06		150.0	
10555- AAC	IEEE 802.11ac WiFi (160MHz, MCS1, 99pc duty cycle)	X	5.84	66.90	16.34	0.00	150.0	± 9.6 %
		Y	5.95	67.15	16.24		150.0	
		Z	5.79	66.90	16.19		150.0	
10556- AAC	IEEE 802.11ac WiFi (160MHz, MCS2, 99pc duty cycle)	X	5.87	66.98	16.38	0.00	150.0	± 9.6 %
		Y	5.98	67.20	16.26		150.0	
		Z	5.82	66.99	16.23		150.0	
10557- AAC	IEEE 802.11ac WiFi (160MHz, MCS3, 99pc duty cycle)	Х	5.81	66.79	16.30	0.00	150.0	± 9.6 %
		Y	5.94	67.10	16.23		150.0	
		Z	5.77	66.83	16.17	1	150.0	r

10558-	IEEE 802.11ac WiFi (160MHz, MCS4,	X	5.82	66.86	16.35	0.00	150.0	± 9.6 %
AAC	99pc duty cycle)		E 00	07.00	40.00		450.0	
		Y	5.99	67.26	16.33		150.0	
10560-	IEEE 802.11ac WiFi (160MHz, MCS6,	ZX	5.79	66.94	16.24	0.00	150.0	
AAC	99pc duty cycle)		5.84	66.78	16.35	0.00	150.0	± 9.6 %
		Y	5.98	67.11	16.29		150.0	
40504		Z	5.80	66.82	16.22		150.0	
10561- AAC	IEEE 802.11ac WiFi (160MHz, MCS7, 99pc duty cycle)	X	5.78	66.81	16.39	0.00	150.0	±9.6 %
		Y	5.91	67.08	16.31		150.0	
10500		Z	5.74	66.84	16.26		150.0	
10562- AAC	IEEE 802.11ac WiFi (160MHz, MCS8, 99pc duty cycle)	X	5.83	66.94	16.46	0.00	150.0	± 9.6 %
		Y	6.02	67.44	16.49		150.0	
40500		Z	5.80	67.03	16.35	0.00	150.0	
10563- AAC	IEEE 802.11ac WiFi (160MHz, MCS9, 99pc duty cycle)	X	5.98	67.08	16.50	0.00	150.0	± 9.6 %
······		Y	6.21	67.62	16.54		150.0	
40504		Z	5.91	67.01	16.31		150.0	
10564- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 9 Mbps, 99pc duty cycle)	X	4.63	66.62	16.36	0.46	150.0	± 9.6 %
		Y	4.84	66.79	16.36		150.0	
40505		Z	4.61	66.63	16.24		150.0	
10565- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 12 Mbps, 99pc duty cycle)	X	4.83	67.05	16.69	0.46	150.0	± 9.6 %
		Y	5.06	67.22	16.67		150.0	
10500		Z	4.82	67.07	16.58		150.0	
10566- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 18 Mbps, 99pc duty cycle)	X	4.66	66.85	16.48	0.46	150.0	± 9.6 %
		Y	4.90	67.07	16.49		150.0	
		Z	4.65	66.88	16.38		150.0	
10567- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 24 Mbps, 99pc duty cycle)	X	4.70	67.27	16.87	0.46	150.0	± 9.6 %
		Y	4.93	67.45	16.84		150.0	
		Z	4.69	67.33	16.78		150.0	
10568- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 36 Mbps, 99pc duty cycle)	X	4.56	66.58	16.20	0.46	150.0	± 9.6 %
		Y	4.81	66.86	16.28		150.0	
		Z	4.55	66.62	16.10		150.0	
10569- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 48 Mbps, 99pc duty cycle)	Х	4.68	67.48	17.00	0.46	150.0	± 9.6 %
		Y	4.88	67.55	16.91		150.0	
		Z	4.67	67.53	16.91		150.0	
10570- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 54 Mbps, 99pc duty cycle)	Х	4.69	67.30	16.91	0.46	150.0	± 9.6 %
		Y	4.92	67.39	16.83		150.0	
		Z	4.68	67.31	16.79		150.0	
10571- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90pc duty cycle)	Х	1.00	63.45	14.91	0.46	130.0	± 9.6 %
		Y	1.13	64.20	15.58		130.0	
		Z	0.98	63.57	14.96		130.0	
10572- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 90pc duty cycle)	Х	1.01	64.01	15.28	0.46	130.0	± 9.6 %
		Y	1.14	64.75	15.94		130.0	
		Z	0.99	64.16	15.34		130.0	
10573- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 90pc duty cycle)	X	1.87	85.75	21.98	0.46	130.0	± 9.6 %
		Y	1.92	86.55	24.04		130.0	
		Z	2.25	89.51	23.31		130.0	
10574- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 90pc duty cycle)	X	1.08	70.06	18.36	0.46	130.0	± 9.6 %
		Y	1.22	70.33	18.86		130.0	
		Z	1.09	70.58	18.62		130.0	

10575- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-	X	4.39	66.32	16.32	0.46	130.0	± 9.6 %
	OFDM, 6 Mbps, 90pc duty cycle)		1.00		10.10			
		Y	4.62	66.58	16.43		130.0	
10576-		Z	4.39	66.40	16.27		130.0	
AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 9 Mbps, 90pc duty cycle)	X	4.42	66.53	16.41	0.46	130.0	± 9.6 %
		Y	4.65	66.74	16.49		130.0	
		Z	4.42	66.60	16.36		130.0	
10577- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 12 Mbps, 90pc duty cycle)	X	4.59	66.78	16.57	0.46	130.0	± 9.6 %
		Y	4.85	67.03	16.66		130.0	
		Z	4.59	66.86	16.52		130.0	
10578- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 18 Mbps, 90pc duty cycle)	X	4.49	66.94	16.68	0.46	130.0	± 9.6 %
		Y	4.74	67.18	16.75		130.0	
·		Z	4.50	67.02	16.64		130.0	
10579- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 24 Mbps, 90pc duty cycle)	X	4.24	66.07	15.88	0.46	130.0	± 9.6 %
		Y	4.51	66.48	16.08		130.0	
	······	Z	4.24	66.15	15.83		130.0	
10580- AAA	IEEE 802.11g WIFi 2.4 GHz (DSSS- OFDM, 36 Mbps, 90pc duty cycle)	X	4.28	66.14	15.91	0.46	130.0	± 9.6 %
		Y	4.56	66.53	16.11		130.0	
		Z	4.29	66.22	15.86		130.0	·
10581- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 48 Mbps, 90pc duty cycle)	X	4.40	66.99	16.63	0.46	130.0	± 9.6 %
		Y	4.64	67.22	16.70		130.0	
		Z	4.40	67.08	16.59		130.0	
10582- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 54 Mbps, 90pc duty cycle)	X	4.17	65.84	15.66	0.46	130.0	± 9.6 %
		Y	4.45	66.25	15.88		130.0	
		Ż	4.18	65.90	15.60		130.0	
10583- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 90pc duty cycle)	X	4.39	66.32	16.32	0.46	130.0	± 9.6 %
		Y	4.62	66.58	16.43		130.0	
		z	4.39	66.40	16.27		130.0	
10584- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 90pc duty cycle)	X	4.42	66.53	16.41	0.46	130.0	± 9.6 %
		Y	4.65	66.74	16.49		130.0	
		z	4.42	66.60	16.36		130.0	
10585- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90pc duty cycle)	X	4.59	66.78	16.57	0.46	130.0	±9.6 %
		Y	4.85	67.03	16.66		130.0	
		z	4.59	66.86	16.52		130.0	
10586- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 90pc duty cycle)	X	4.49	66.94	16.68	0.46	130.0	± 9.6 %
		Y	4.74	67.18	16.75		130.0	
		z	4.50	67.02	16.64		130.0	L
10587- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 90pc duty cycle)	X	4.24	66.07	15.88	0.46	130.0	±9.6 %
		Y	4.51	66.48	16,08		130.0	
		Z	4.24	66.15	15,83		130.0	L
10588- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 90pc duty cycle)	X	4.28	66.14	15.91	0.46	130.0	±9.6 %
		Y	4.56	66.53	16.11	,.,	130.0	
		Z	4.29	66.22	15.86		130.0	
10589- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 90pc duty cycle)	X	4.40	66.99	16.63	0.46	130.0	± 9.6 %
		Y	4.64	67.22	16.70		130.0	
		Z	4.40	67.08	16.59		130.0	
10590- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 90pc duty cycle)	X	4.17	65.84	15.66	0.46	130.0	± 9.6 %
	and the second	Y	4.45	66.25	15.88		130.0	
		z	4.18	65.90	15.60			

10591- AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS0, 90pc duty cycle)	X	4.55	66.42	16.46	0.46	130.0	± 9.6 %
		Y Z	4.78 4.55	66.64 66.49	16.53 16.40		130.0 130.0	
10592- AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS1, 90pc duty cycle)	×	4.67	66.72	16.59	0.46	130.0	± 9.6 %
		Y	4.93	66.98	16.66		130.0	
		Z	4.68	66.80	16.53		130.0	
10593- AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS2, 90pc duty cycle)	X	4.59	66.59	16.43	0.46	130.0	±9.6 %
		Y	4.85	66.88	16.54		130.0	
10594- AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS3, 90pc duty cycle)	Z X	4.59 4.64	66.67 66.77	16.38 16.61	0.46	130.0 130.0	± 9.6 %
		Y	4.90	67.05	16.69		130.0	
		Z	4.65	66.86	16.56		130.0	
10595- AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS4, 90pc duty cycle)	X	4.61	66.75	16.51	0.46	130.0	± 9.6 %
		Y	4.87	67.00	16.59		130.0	
40500		Z	4.61	66.82	16.45		130.0	
10596- AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS5, 90pc duty cycle)	X	4.54	66.71	16.50	0.46	130.0	± 9.6 %
		Y Z	<u>4.80</u> 4.54	67.00 66.79	16.60 16.44		130.0 130.0	
10597-	IEEE 802.11n (HT Mixed, 20MHz,	x	4.34	66.57	16.34	0.46	130.0	± 9.6 %
AAB	MCS6, 90pc duty cycle)	Y	4.49	66.90	16.48	0.40	130.0	1 5.0 %
		Z	4.49	66.65	16.29		130.0	
10598- AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS7, 90pc duty cycle)	X	4.48	66.81	16.63	0.46	130.0	± 9.6 %
		Y	4.73	67.12	16.73		130.0	
		Z	4.49	66.91	16.58		130.0	
10599- AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS0, 90pc duty cycle)	X	5.31	67.13	16.85	0.46	130.0	± 9.6 %
		Y	5.45	67.20	16.74		130.0	
		Z	5.25	67.05	16.69		130.0	
10600- AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS1, 90pc duty cycle)	X	5.48	67.76	17.14	0.46	130.0	± 9.6 %
		Y Z	5.57 5.39	67.58 67.54	16.91 16.90		130.0	
10601- AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS2, 90pc duty cycle)	X	5.31	67.28	16.91	0.46	130.0	± 9.6 %
		Y	5.47	67.34	16.80		130.0	
		Z	5.27	67.22	16.76		130.0	
10602- AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS3, 90pc duty cycle)	X	5.43	67.41	16.89	0.46	130.0	± 9.6 %
		Y	5.56	67.39	16.75		130.0	
10000		Z	5.40	67.36	16.75		130.0	
10603- AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS4, 90pc duty cycle)	X	5.54	67.82	17.25	0.46	130.0	± 9.6 %
		- Y	5.64	67.67	17.02		130.0	
10604- AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS5, 90pc duty cycle)	Z X	<u>5.49</u> 5.42	67.76 67.47	17.09 17.05	0.46	130.0 130.0	± 9.6 %
		Y Z	5.46 5.37	67.19 67.38	16.76 16.88		130.0 130.0	
10605- AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS6, 90pc duty cycle)	X	5.43	67.47	17.04	0.46	130.0	± 9.6 %
		Y	5.56	67.49	16.91		130.0	
		Z	5.37	67.38	16,87		130.0	
10606- AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS7, 90pc duty cycle)	X	5.17	66.77	16.54	0.46	130.0	± 9.6 %
		Y	5.31	66.83	16.45		130.0	
		Z	5.12	66.68	16.37		130.0	

10607-	IEEE 802.11ac WiFi (20MHz, MCS0,	X	4.40	65.75	16.09	0.46	130.0	± 9.6 %
AAB	90pc duty cycle)	_						
		Y	4.62	65.97	16.16		130.0	
10600		Z	4.40	65.83	16.04		130.0	
10608- AAB	IEEE 802.11ac WiFi (20MHz, MCS1, 90pc duty cycle)	X	4.54	66.09	16.24	0.46	130.0	± 9.6 %
		Y	4.80	66.37	16.32		130.0	
10000		Z	4.55	66.18	16.20		130.0	
10609- AAB	IEEE 802.11ac WiFi (20MHz, MCS2, 90pc duty cycle)	×	4.43	65.91	16.05	0.46	130.0	± 9.6 %
·····		Y	4.69	66.22	16.16		130.0	
10610-		Z	4.44	66.00	16.00		130.0	
AAB	IEEE 802.11ac WiFi (20MHz, MCS3, 90pc duty cycle)	X	4.49	66.09	16.23	0.46	130.0	± 9.6 %
		<u> </u>	4.74	66.38	16.32		130.0	
10611-		Z	4.49	66.18	16.19		130.0	
AAB	IEEE 802.11ac WiFi (20MHz, MCS4, 90pc duty cycle)	X	4.40	65.88	16.06	0.46	130.0	± 9.6 %
		Y	4.66	66.19	16.17		130.0	
10612-	IEEE 802.11ac WiFi (20MHz, MCS5,	Z	4.40	65.97	16.02		130.0	
AAB	90pc duty cycle)	X	4.39	66.01	16.10	0.46	130.0	± 9.6 %
		Y	4.66	66.35	16.22		130.0	
10613-		Z	4.40	66.10	16.06		130.0	
AAB	IEEE 802.11ac WiFi (20MHz, MCS6, 90pc duty cycle)	X	4.38	65.82	15.94	0.46	130.0	± 9.6 %
		Y	4,67	66.22	16,10		130.0	
40044		Z	4.39	65.92	15.90		130.0	
10614- AAB	IEEE 802.11ac WiFi (20MHz, MCS7, 90pc duty cycle)	X	4.35	66.06	16.21	0.46	130.0	± 9.6 %
		Y	4.61	66.40	16.32		130.0	
		Z	4.36	66.17	16.17		130.0	
10615- AAB	IEEE 802.11ac WiFi (20MHz, MCS8, 90pc duty cycle)	X	4.39	65.69	15.81	0.46	130.0	± 9.6 %
		Y	4.66	66.03	15.96		130.0	
		Z	4.39	65.77	15.76		130.0	
10616- AAB	IEEE 802.11ac WiFi (40MHz, MCS0, 90pc duty cycle)	X	5.07	66.15	16.34	0.46	130.0	± 9.6 %
·····		Y	5.27	66.44	16.35		130.0	
		Z	5.05	66.21	16.25		130.0	
10617- AAB	IEEE 802.11ac WiFi (40MHz, MCS1, 90pc duty cycle)	X	5.14	66.37	16.43	0.46	130.0	± 9.6 %
		Y	5.34	66.62	16.41		130.0	
		Z	5.12	66.42	16.33		130.0	
10618- AAB	IEEE 802.11ac WiFi (40MHz, MCS2, 90pc duty cycle)	X	5.03	66.38	16.45	0.46	130.0	± 9.6 %
		Y	5.22	66.62	16.43		130.0	
1001-		Z	5.02	66.45	16.36		130.0	
10619- AAB	IEEE 802.11ac WiFi (40MHz, MCS3, 90pc duty cycle)	X	5.07	66.24	16.31	0.46	130.0	±9.6 %
		Y	5.24	66.43	16.27		130.0	
10000		Z	5.03	66.23	16.18		130.0	
10620- AAB	IEEE 802.11ac WiFi (40MHz, MCS4, 90pc duty cycle)	X	5.13	66.23	16.35	0.46	130.0	±9.6 %
		Y	5.33	66.47	16.34		130.0	
40004		Z	5.11	66.25	16.24		130.0	
10621- AAB	IEEE 802.11ac WiFi (40MHz, MCS5, 90pc duty cycle)	X	5.12	66.28	16.51	0.46	130.0	± 9.6 %
	····	Y	5.33	66.60	16.51		130.0	
		Z	5.11	66.38	16.44		130.0	
10622- AAB	IEEE 802.11ac WiFi (40MHz, MCS6, 90pc duty cycle)	X	5.11	66.38	16.55	0.46	130.0	± 9.6 %
		Y	5.34	66.76	16.59		130.0	
		Z	5.11	66.50	16.49		130.0	

10624-       IEEE         AAB       90pc         10625-       IEEE         AAB       90pc         10626-       IEEE         AAB       90pc         10626-       IEEE         AAB       90pc         10627-       IEEE         AAB       90pc         10628-       IEEE         AAB       90pc         10628-       IEEE         AAB       90pc         10630-       IEEE         AAB       90pc         10630-       IEEE         AAB       90pc         10631-       IEEE         AAB       90pc         10632-       IEEE         AAB       90pc         10633-       IEEE         AAB       90pc         10633-       IEEE         AAB       90pc	duty cycle) 802.11ac WiFi (40MHz, MCS8, duty cycle) 802.11ac WiFi (40MHz, MCS9, duty cycle) 802.11ac WiFi (80MHz, MCS0, duty cycle) 802.11ac WiFi (80MHz, MCS1, duty cycle) 802.11ac WiFi (80MHz, MCS2, duty cycle) 802.11ac WiFi (80MHz, MCS3, duty cycle) 802.11ac WiFi (80MHz, MCS3, duty cycle)	Y         Z         X         Y         Z         X         Y         Z         X         Y         Z         X         Y         Z         X         Y         Z         X         Y         Z         X         Y         Z         X         Y         Z         X         Y         Z         X         Y         Z         X         Y         Z         X         Y         Z         X         Y         Z         X         Y         Z         X         Y         Z         X         Y         Z         X         Y         Z         X          Y         Z	5.22           4.98           5.20           5.41           5.19           5.30           5.75           5.33           5.40           5.57           5.38           5.71           5.80           5.65           5.40           5.65           5.40           5.65           5.40           5.65           5.40           5.67           5.40           5.67           5.67           5.67           5.67           5.67           5.67           5.67           5.67           5.67	66.30           65.96           66.20           66.49           66.26           66.37           67.41           66.58           66.14           66.51           66.23           67.03           67.06           66.96           66.15           66.59           66.23           66.49           66.49	16.24           16.08           16.39           16.30           16.54           16.52           16.28           16.31           16.54           16.54           16.51           16.52           16.31           16.54           16.54           16.54           16.54           16.54           16.54           16.54           16.54           16.54           16.54           16.55           16.10	0.46 0.46 0.46 0.46 0.46	130.0           130.0	± 9.6 % ± 9.6 % ± 9.6 % ± 9.6 % ± 9.6 %
AAB         90pc           10625-         IEEE           AAB         90pc           10626-         IEEE           AAB         90pc           10627-         IEEE           AAB         90pc           10627-         IEEE           AAB         90pc           10628-         IEEE           AAB         90pc           10628-         IEEE           AAB         90pc           10630-         IEEE           AAB         90pc           10630-         IEEE           AAB         90pc           10631-         IEEE           AAB         90pc           10632-         IEEE           AAB         90pc           10633-         IEEE           AAB         90pc           10633-         IEEE           AAB         90pc           10633-         IEEE           AAB         90pc	duty cycle) 802.11ac WiFi (40MHz, MCS9, duty cycle) 802.11ac WiFi (80MHz, MCS0, duty cycle) 802.11ac WiFi (80MHz, MCS1, duty cycle) 802.11ac WiFi (80MHz, MCS2, duty cycle) 802.11ac WiFi (80MHz, MCS3, duty cycle)	Z         X           Y         Z           X         Y           Z         X           Y         Z           X         Y           Z         X           Y         Z           X         Y           Z         X           Y         Z           X         Y           Z         X           Y         Z           X         Y           Z         X           Y         Z           X         Y           Z         X           Y         Z           X         Y           Z         X           Y         Z           X         Y           Z         X	4.98           5.20           5.41           5.19           5.30           5.75           5.33           5.40           5.57           5.38           5.71           5.80           5.65           5.40           5.65           5.40           5.65           5.40           5.65           5.40           5.65           5.40           5.65           5.40           5.60           5.38           5.55           5.67           5.49	65.96           66.20           66.49           66.26           66.37           67.41           66.58           66.14           66.51           66.23           67.03           67.06           66.96           66.15           66.59           66.23           66.49           66.49	16.08           16.39           16.30           16.54           16.52           16.28           16.31           16.54           16.54           16.51           16.21           16.54           16.54           16.54           16.54           16.54           16.54           16.54           16.54           16.54           16.54           16.55           16.10           16.35	0.46	130.0           130.0	± 9.6 % ± 9.6 % ± 9.6 %
AAB         90pc           10625-         IEEE           AAB         90pc           10626-         IEEE           AAB         90pc           10627-         IEEE           AAB         90pc           10627-         IEEE           AAB         90pc           10628-         IEEE           AAB         90pc           10628-         IEEE           AAB         90pc           10630-         IEEE           AAB         90pc           10630-         IEEE           AAB         90pc           10631-         IEEE           AAB         90pc           10633-         IEEE           AAB         90pc           10633-         IEEE           AAB         90pc	duty cycle) 802.11ac WiFi (40MHz, MCS9, duty cycle) 802.11ac WiFi (80MHz, MCS0, duty cycle) 802.11ac WiFi (80MHz, MCS1, duty cycle) 802.11ac WiFi (80MHz, MCS2, duty cycle) 802.11ac WiFi (80MHz, MCS3, duty cycle)	X           Y           Z           X           Y           Z           X           Y           Z           X           Y           Z           X           Y           Z           X           Y           Z           X           Y           Z           X           Y           Z           X           Y           Z           X           Y           Z           Y           Z           Y           Z           X           Y           Z           Y           Z           Y           Z           Y           Z           Y           Z           Y           Z           Y           Z	5.20           5.41           5.19           5.30           5.75           5.33           5.40           5.57           5.38           5.71           5.80           5.65           5.40           5.65           5.40           5.65           5.40           5.65           5.40           5.65           5.40           5.65           5.40           5.60           5.38           5.55           5.67           5.49	66.20           66.49           66.26           66.37           67.41           66.58           66.14           66.51           66.23           67.03           67.06           66.96           66.15           66.59           66.23           66.49           66.49	16.38         16.39         16.30         16.54         16.90         16.52         16.28         16.31         16.21         16.54         16.54         16.54         16.54         16.54         16.54         16.54         16.54         16.54         16.54         16.54         16.55         16.10         16.35	0.46	130.0           130.0	± 9.6 % ± 9.6 % ± 9.6 %
AAB         90pc           10626-         IEEE           AAB         90pc           10627-         IEEE           AAB         90pc           10627-         IEEE           AAB         90pc           10627-         IEEE           AAB         90pc           10628-         IEEE           AAB         90pc           10629-         IEEE           AAB         90pc           10630-         IEEE           AAB         90pc           10631-         IEEE           AAB         90pc           10633-         IEEE           AAB         90pc           10633-         IEEE           AAB         90pc	duty cycle) 802.11ac WiFi (80MHz, MCS0, duty cycle) 802.11ac WiFi (80MHz, MCS1, duty cycle) 802.11ac WiFi (80MHz, MCS2, duty cycle) 802.11ac WiFi (80MHz, MCS3, duty cycle) 802.11ac WiFi (80MHz, MCS3,	Z         X           Y         Z           X         Y           Z         X           Y         Z           X         Y           Z         X           Y         Z           X         Y           Z         X           Y         Z           X         Y           Z         X           Y         Z           X         Y           Z         X           Y         Z           X         Y           Z         X           Y         Z	5.19 5.30 5.75 5.33 5.40 5.57 5.38 5.71 5.80 5.65 5.40 5.60 5.38 5.55 5.60 5.38 5.55	66.26           66.37           67.41           66.58           66.14           66.51           66.23           67.03           67.06           66.96           66.15           66.59           66.49           66.49           66.64	16.30           16.54           16.90           16.52           16.28           16.31           16.21           16.54           16.54           16.54           16.54           16.54           16.54           16.54           16.54           16.54           16.55           16.10           16.35	0.46	130.0           130.0	± 9.6 %
AAB         90pc           10626-         IEEE           AAB         90pc           10627-         IEEE           AAB         90pc           10627-         IEEE           AAB         90pc           10627-         IEEE           AAB         90pc           10628-         IEEE           AAB         90pc           10629-         IEEE           AAB         90pc           10630-         IEEE           AAB         90pc           10631-         IEEE           AAB         90pc           10633-         IEEE           AAB         90pc           10633-         IEEE           AAB         90pc	duty cycle) 802.11ac WiFi (80MHz, MCS0, duty cycle) 802.11ac WiFi (80MHz, MCS1, duty cycle) 802.11ac WiFi (80MHz, MCS2, duty cycle) 802.11ac WiFi (80MHz, MCS3, duty cycle) 802.11ac WiFi (80MHz, MCS3,	X Y Z X Y Z X Y Z X Y Z X Y Z X Y Z Z X	5.30 5.75 5.33 5.40 5.57 5.38 5.71 5.80 5.65 5.40 5.60 5.38 5.55 5.67 5.49	66.37           67.41           66.58           66.14           66.51           66.23           67.03           67.06           66.96           66.15           66.59           66.23           66.49           66.49	16.54           16.90           16.52           16.28           16.31           16.21           16.70           16.54           16.54           16.54           16.54           16.54           16.54           16.54           16.54           16.55           16.10           16.35	0.46	130.0           130.0           130.0           130.0           130.0           130.0           130.0           130.0           130.0           130.0           130.0           130.0           130.0           130.0           130.0           130.0           130.0           130.0           130.0           130.0	± 9.6 %
AAB         90pc           10626-         IEEE           AAB         90pc           10627-         IEEE           AAB         90pc           10627-         IEEE           AAB         90pc           10627-         IEEE           AAB         90pc           10628-         IEEE           AAB         90pc           10629-         IEEE           AAB         90pc           10630-         IEEE           AAB         90pc           10631-         IEEE           AAB         90pc           10631-         IEEE           AAB         90pc           10633-         IEEE           AAB         90pc           10633-         IEEE           AAB         90pc	duty cycle) 802.11ac WiFi (80MHz, MCS0, duty cycle) 802.11ac WiFi (80MHz, MCS1, duty cycle) 802.11ac WiFi (80MHz, MCS2, duty cycle) 802.11ac WiFi (80MHz, MCS3, duty cycle) 802.11ac WiFi (80MHz, MCS3,	Y           Z           X           Y           Z           X           Y           Z           X           Y           Z           X           Y           Z           X           Y           Z           X           Y           Z           X           Y           Z           X           Y           Z           X           Y           Z           Y           Z           X	5.75 5.33 5.40 5.57 5.38 5.71 5.80 5.65 5.40 5.65 5.40 5.60 5.38 5.55 5.67 5.49	67.41 66.58 66.14 66.51 66.23 67.03 67.03 67.06 66.96 66.15 66.59 66.23 66.49 66.64	16.90           16.52           16.28           16.31           16.21           16.70           16.54           16.54           16.18           16.25           16.10           16.35	0.46	130.0 130.0 130.0 130.0 130.0 130.0 130.0 130.0 130.0 130.0 130.0 130.0	± 9.6 %
AAB       90pc         10627-       IEEE         AAB       90pc         10628-       IEEE         AAB       90pc         10629-       IEEE         AAB       90pc         10630-       IEEE         AAB       90pc         10631-       IEEE         AAB       90pc         10631-       IEEE         AAB       90pc         10633-       IEEE         AAB       90pc         10633-       IEEE         AAB       90pc         10633-       IEEE         AAB       90pc	duty cycle) 802.11ac WiFi (80MHz, MCS1, duty cycle) 802.11ac WiFi (80MHz, MCS2, duty cycle) 802.11ac WiFi (80MHz, MCS3, duty cycle) 802.11ac WiFi (80MHz, MCS4,	Z X Y Z X Y Z X Y Z X Y Z X Y Z Z	5.33 5.40 5.57 5.38 5.71 5.80 5.65 5.40 5.60 5.38 5.55 5.67 5.49	66.58           66.14           66.51           66.23           67.03           67.06           66.96           66.15           66.59           66.23           66.49           66.49           66.64	16.52           16.28           16.31           16.21           16.70           16.54           16.54           16.18           16.25           16.10           16.35	0.46	130.0           130.0           130.0           130.0           130.0           130.0           130.0           130.0           130.0           130.0           130.0           130.0           130.0           130.0           130.0           130.0           130.0           130.0	± 9.6 %
AAB       90pc         10627-       IEEE         AAB       90pc         10628-       IEEE         AAB       90pc         10629-       IEEE         AAB       90pc         10630-       IEEE         AAB       90pc         10631-       IEEE         AAB       90pc         10631-       IEEE         AAB       90pc         10633-       IEEE         AAB       90pc         10633-       IEEE         AAB       90pc         10633-       IEEE         AAB       90pc	duty cycle) 802.11ac WiFi (80MHz, MCS1, duty cycle) 802.11ac WiFi (80MHz, MCS2, duty cycle) 802.11ac WiFi (80MHz, MCS3, duty cycle) 802.11ac WiFi (80MHz, MCS4,	X Y Z X Y Z X Y Z X Y Z X Y Z	5.40 5.57 5.38 5.71 5.80 5.65 5.40 5.60 5.38 5.55 5.67 5.49	66.14           66.51           66.23           67.03           67.06           66.96           66.15           66.59           66.23           66.49           66.64	16.28           16.31           16.21           16.70           16.54           16.54           16.18           16.25           16.10           16.35	0.46	130.0           130.0           130.0           130.0           130.0           130.0           130.0           130.0           130.0           130.0           130.0           130.0           130.0           130.0           130.0           130.0	± 9.6 %
AAB       90pc         10627-       IEEE         AAB       90pc         10628-       IEEE         AAB       90pc         10629-       IEEE         AAB       90pc         10630-       IEEE         AAB       90pc         10631-       IEEE         AAB       90pc         10631-       IEEE         AAB       90pc         10633-       IEEE         AAB       90pc         10633-       IEEE         AAB       90pc         10633-       IEEE         AAB       90pc	duty cycle) 802.11ac WiFi (80MHz, MCS1, duty cycle) 802.11ac WiFi (80MHz, MCS2, duty cycle) 802.11ac WiFi (80MHz, MCS3, duty cycle) 802.11ac WiFi (80MHz, MCS4,	Y Z X Y Z X Y Z X Y Z X Y Z	5.57 5.38 5.71 5.80 5.65 5.40 5.60 5.38 5.55 5.67 5.49	66.51 66.23 67.03 67.06 66.96 66.15 66.59 66.23 66.49 66.64	16.31           16.21           16.70           16.54           16.54           16.18           16.25           16.10           16.35	0.46	130.0 130.0 130.0 130.0 130.0 130.0 130.0 130.0 130.0	± 9.6 %
AAB         90pc           10628-         IEEE           AAB         90pc           10629-         IEEE           AAB         90pc           10630-         IEEE           AAB         90pc           10630-         IEEE           AAB         90pc           10631-         IEEE           AAB         90pc           10631-         IEEE           AAB         90pc           10632-         IEEE           AAB         90pc           10633-         IEEE           AAB         90pc	e duty cycle) 802.11ac WiFi (80MHz, MCS2, duty cycle) 802.11ac WiFi (80MHz, MCS3, duty cycle) 802.11ac WiFi (80MHz, MCS4,	Z X Y Z X Y Z X Y Z X Y Z	5.38 5.71 5.80 5.65 5.40 5.60 5.38 5.55 5.67 5.49	66.23 67.03 67.06 66.96 66.15 66.59 66.23 66.49 66.64	16.21           16.70           16.54           16.54           16.18           16.25           16.10           16.35	0.46	130.0           130.0           130.0           130.0           130.0           130.0           130.0           130.0           130.0           130.0	± 9.6 %
AAB         90pc           10628-         IEEE           AAB         90pc           10629-         IEEE           AAB         90pc           10630-         IEEE           AAB         90pc           10630-         IEEE           AAB         90pc           10631-         IEEE           AAB         90pc           10631-         IEEE           AAB         90pc           10632-         IEEE           AAB         90pc           10633-         IEEE           AAB         90pc	e duty cycle) 802.11ac WiFi (80MHz, MCS2, duty cycle) 802.11ac WiFi (80MHz, MCS3, duty cycle) 802.11ac WiFi (80MHz, MCS4,	X Y Z X Y Z X Y Z X Y Z	5.71 5.80 5.65 5.40 5.60 5.38 5.55 5.67 5.49	67.03 67.06 66.96 66.15 66.59 66.23 66.49 66.64	16.70 16.54 16.54 16.18 16.25 16.10 16.35	0.46	130.0 130.0 130.0 130.0 130.0 130.0	± 9.6 %
AAB         90pc           10628-         IEEE           AAB         90pc           10629-         IEEE           AAB         90pc           10629-         IEEE           AAB         90pc           10630-         IEEE           AAB         90pc           10630-         IEEE           AAB         90pc           10631-         IEEE           AAB         90pc           10631-         IEEE           AAB         90pc           10633-         IEEE           AAB         90pc           10633-         IEEE           AAB         90pc	e duty cycle) 802.11ac WiFi (80MHz, MCS2, duty cycle) 802.11ac WiFi (80MHz, MCS3, duty cycle) 802.11ac WiFi (80MHz, MCS4,	Y Z X Y Z X Y Z Z	5.80 5.65 5.40 5.60 5.38 5.55 5.67 5.49	67.06 66.96 66.15 66.59 66.23 66.49 66.64	16.54 16.54 16.18 16.25 16.10 16.35	0.46	130.0 130.0 130.0 130.0 130.0	± 9.6 %
AAB         90pc           10629-         IEEE           AAB         90pc           10630-         IEEE           AAB         90pc           10631-         IEEE           AAB         90pc           10631-         IEEE           AAB         90pc           10632-         IEEE           AAB         90pc           10633-         IEEE           AAB         90pc           10633-         IEEE           AAB         90pc	802.11ac WiFi (80MHz, MCS3, duty cycle) 802.11ac WiFi (80MHz, MCS4,	Z X Y Z X Y Z Z	5.65 5.40 5.60 5.38 5.55 5.67 5.49	66.96 66.15 66.59 66.23 66.49 66.64	16.54 16.18 16.25 16.10 16.35		130.0 130.0 130.0 130.0	
AAB         90pc           10629-         IEEE           AAB         90pc           10630-         IEEE           AAB         90pc           10631-         IEEE           AAB         90pc           10631-         IEEE           AAB         90pc           10632-         IEEE           AAB         90pc           10633-         IEEE           AAB         90pc           10633-         IEEE           AAB         90pc	802.11ac WiFi (80MHz, MCS3, duty cycle) 802.11ac WiFi (80MHz, MCS4,	X Y Z X Y Z	5.40 5.60 5.38 5.55 5.67 5.49	66.15 66.59 66.23 66.49 66.64	16.18 16.25 16.10 16.35		130.0 130.0 130.0	
AAB         90pc           10629-         IEEE           AAB         90pc           10630-         IEEE           AAB         90pc           10631-         IEEE           AAB         90pc           10631-         IEEE           AAB         90pc           10631-         IEEE           AAB         90pc           10633-         IEEE           AAB         90pc           10633-         IEEE           AAB         90pc	802.11ac WiFi (80MHz, MCS3, duty cycle) 802.11ac WiFi (80MHz, MCS4,	Y Z X Y Z	5.60 5.38 5.55 5.67 5.49	66.59 66.23 66.49 66.64	16.25 16.10 16.35		130.0 130.0	
AAB         90pc           10630-         IEEE           AAB         90pc           10631-         IEEE           AAB         90pc           10632-         IEEE           AAB         90pc           10632-         IEEE           AAB         90pc           10633-         IEEE           AAB         90pc	duty cycle) 802.11ac WiFi (80MHz, MCS4,	Z X Y Z	5.38 5.55 5.67 5.49	66.23 66.49 66.64	16.10 16.35	0.46	130.0	+96%
AAB         90pc           10630-         IEEE           AAB         90pc           10631-         IEEE           AAB         90pc           10632-         IEEE           AAB         90pc           10632-         IEEE           AAB         90pc           10633-         IEEE           AAB         90pc	duty cycle) 802.11ac WiFi (80MHz, MCS4,	X Y Z	5.55 5.67 5.49	66.49 66.64	16.35	0.46		+96%
AAB         90pc           10630-         IEEE           AAB         90pc           10631-         IEEE           AAB         90pc           10632-         IEEE           AAB         90pc           10632-         IEEE           AAB         90pc           10633-         IEEE           AAB         90pc           10633-         IEEE           AAB         90pc	duty cycle) 802.11ac WiFi (80MHz, MCS4,	Y Z	5.67 5.49	66.64		0.46	130.0	1 +96%
AAB         90pc           10631-         IEEE           AAB         90pc           10632-         IEEE           AAB         90pc           10633-         IEEE           AAB         90pc           10633-         IEEE           AAB         90pc		Z	5.49		10.00			± 3.0 70
AAB         90pc           10631-         IEEE           AAB         90pc           10632-         IEEE           AAB         90pc           10633-         IEEE           AAB         90pc           10633-         IEEE           AAB         90pc					16.26		130.0	
AAB 90pc 10631- IEEE AAB 90pc 10632- IEEE AAB 90pc 10633- IEEE AAB 90pc		X		66.42	16.19	0.40	130.0	
AAB         90pc           10632-         IEEE           AAB         90pc           10633-         IEEE           AAB         90pc			5.95	67.89	17.05	0.46	130.0	± 9.6 %
AAB         90pc           10632-         IEEE           AAB         90pc           10633-         IEEE           AAB         90pc		Y	6.08	68.07	16.98		130.0	
10632- AAB 90pc 10633- AAB 90pc	802.11ac WiFi (80MHz, MCS5, duty cycle)	Z X	5.84 5.77	67.71 67.48	16.83 17.05	0.46	130.0 130.0	± 9.6 %
AAB 90pc 10633- AAB 90pc		Y	5.99	67.89	17.07		130.0	
AAB 90pc 10633- AAB 90pc		Z	5.74	67.53	16.95		130.0	
10633- IEEE AAB 90pc	802.11ac WiFi (80MHz, MCS6, duty cycle)	X	5.72	67.25	16.96	0.46	130.0	± 9,6 %
AAB 90pc		Y	5.77	67.11	16.70		130.0	
AAB 90pc		Z	5.64	67.12	16.77		130.0	
10624	802.11ac WiFi (80MHz, MCS7, duty cycle)	X	5.44	66.28	16.29	0.46	130.0	± 9.6 %
10624		Y	5.66	66.76	16.36		130.0	
10624		Z	5.44	66.43	16.24		130.0	
	802.11ac WiFi (80MHz, MCS8, duty cycle)	X	5.44	66.38	16.39	0.46	130.0	± 9.6 %
		Y	5.64	66,78	16.43		130.0	ļ
10007		Z	5.43	66.48	16.32		130.0	<u> </u>
	802.11ac WiFi (80MHz, MCS9, duty cycle)	X	5.30	65.61	15.72	0.46	130.0	± 9.6 %
		Y	5.53	66.14	15.85		130.0	
40000		Z	5.29	65.70	15.64		130.0	
	802.11ac WiFi (160MHz, MCS0, duty cycle)	X	5.86	66.55	16.40	0.46	130.0	± 9.6 %
		Y	5.98	66.87	16.39		130.0	
	802.11ac WiFi (160MHz, MCS1, duty cycle)	Z X	5.82 6.02	66.61 66.98	16.30 16.61	0.46	130.0 130.0	± 9.6 %
		Y	6.13	67.25	16.56		120.0	
		Z	5.97				130.0	
		X	6.03	67.00 67.01	16.48 16.60	0.46	130.0 130.0	± 9.6 %
	802.11ac WiFi (160MHz, MCS2,	1	6.13	67.22	16 50		420.0	
	802.11ac WiFi (160MHz, MCS2, duty cycle)	Y		1 07.22	16.53 16.46		130.0 130.0	

10639- AAC	IEEE 802.11ac WiFi (160MHz, MCS3, 90pc duty cycle)	X	5.96	66.80	16.53	0.46	130.0	± 9.6 %
		Y	6.11	07.47	40.55	<u> </u>	<u>  ,</u>	
				67.17	16.55	<u> </u>	130.0	
10640-	IEEE 802.11ac WiFi (160MHz, MCS4,		5.93	66.87	16.44		130.0	
AAC	90pc duty cycle)	X	5.92	66.70	16.42	0.46	130.0	± 9.6 %
		<u> </u>	6.12	67.19	16.50		130.0	
40044		Z	5.91	66.82	16.35		130.0	
10641- AAC	IEEE 802.11ac WiFi (160MHz, MCS5, 90pc duty cycle)	Х	6.06	66.91	16.55	0.46	130.0	± 9.6 %
		Y	6.16	67.10	16.47		130.0	
10010		Z	6.01	66.89	16.41		130.0	
10642- AAC	IEEE 802.11ac WiFi (160MHz, MCS6, 90pc duty cycle)	X	6.04	66.98	16.76	0.46	130.0	± 9.6 %
		Y	6.20	67.33	16.75		130.0	
40040		Z	6.02	67.07	16.68		130.0	
10643- AAC	IEEE 802.11ac WiFi (160MHz, MCS7, 90pc duty cycle)	X	5.90	66.69	16.50	0.46	130.0	± 9.6 %
		Y	6.04	67.03	16.51		130.0	
100/1		Z	5.87	66.78	16.42		130.0	1
10644- AAC	IEEE 802.11ac WiFi (160MHz, MCS8, 90pc duty cycle)	X	5.95	66.86	16.60	0.46	130.0	± 9.6 %
		Y	6.19	67.50	16.76		130.0	
		Z	5.94	66.99	16.54		130.0	
10645- AAC	IEEE 802.11ac WiFi (160MHz, MCS9, 90pc duty cycle)	X	6.44	67.99	17.14	0.46	130.0	± 9.6 %
		Y	6.47	67.94	16.94		130.0	
		Z	6.16	67.33	16.68		130.0	
10646- AAD	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,7)	X	7.50	90.48	30.44	9.30	60.0	± 9.6 %
		Y	17.43	112.38	39.34		60.0	
		Z	9.26	96.56	33.29		60.0	······
10647- AAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,7)	Х	6.74	88.72	29.93	9.30	60.0	± 9.6 %
		Y	14.54	108.61	38.31		60.0	<u> </u>
		Ż	8.10	94.14	32.60		60.0	
10648- AAA	CDMA2000 (1x Advanced)	X	0.39	60.00	6.32	0.00	150.0	±9.6 %
		Y	0.67	63.31	10.55		150.0	
		Z	0.38	60.00	6.43		150.0	
10652- AAB	LTE-TDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	X	3.10	65.49	15.51	2.23	80.0	± 9.6 %
		Y	3.52	66.85	16.73		80.0	
		Z	3.18	66.07	15.91		80.0	
10653- AAB	LTE-TDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)	X	3.70	65.11	16.04	2.23	80.0	± 9.6 %
		Y	4.03	66.07	16.78		80.0	
		Z	3.73	65.44	16.24		80.0	
10654- AAB	LTE-TDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)	X	3.73	64.77	16.12	2.23	80.0	± 9.6 %
		Y	4.00	65.69	16.76		80.0	
		Z	3.74	65.07	16.28		80.0	
10655- AAB	LTE-TDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	X	3.81	64.71	16.17	2.23	80.0	±9.6 %
		Y	4.06	65.68	16.79		80.0	
		Z	3.81	65.01	16.32		80.0	
10658- AAA	Pulse Waveform (200Hz, 10%)	X	3.06	66.59	11.16	10.00	50.0	± 9.6 %
		Y	100.00	111.68	26.09		50.0	
		Z	3.93	69.81	12.66		50.0	
10659- AAA	Pulse Waveform (200Hz, 20%)	X	1.63	63.81	8.65	6.99	60.0	± 9.6 %
-	I	-		ļ	l		I/	l
		Y	100.00	113.13	25.67		60.0	1

10660- AAA	Pulse Waveform (200Hz, 40%)	X	0.57	60.00	5.26	3.98	80.0	± 9.6 %
		Y	100.00	118.24	26.52		80.0	
		Z	0.68	61.70	6.30		80.0	
10661- AAA	Pulse Waveform (200Hz, 60%)	X	0.32	60.00	3.83	2.22	100.0	± 9.6 %
		Y	100.00	125.46	28.15		100.0	
		Z	0.29	60.00	3.83		100.0	
10662- AAA	Pulse Waveform (200Hz, 80%)	X	7.43	367.15	53.93	0.97	120.0	± 9.6 %
		Y	100.00	135.73	30.13		120.0	
		Z	0.00	228.51	107.76		120.0	

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

# 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
- 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,  $r^2 = \rho^2 + {\rho'}^2 - 2\rho\rho' \cos \phi'$ ,  $\omega$  is the angular frequency, and  $j = \sqrt{-1}$ .

		Com	positio	n of the	e lissue	e Equiva	alent Ma	atter				
Frequency (MHz)	750	750	835	835	1750	1750	1900	1900	2450	2450	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	See page	See page	1	1					S		See page	See page
NaCl	2-3	2	1.45	0.94	0.4	0.2	0.18	0.39	See page 4	0.1	5	6
Sucrose			57	44.9							]	
Water			40.45	53.06	52.6	68.8	54.9	70.17		73.2		

Table D-I Composition of the Tissue Equivalent Matter

FCC ID: A3LSMG9700		SAR EVALUATION REPORT	SAMSUNG	Approved by: Quality Manager
Test Dates:	DUT Type:			APPENDIX D:
12/09/2018-01/14/2019	Portable Handset			Page 1 of 6
© 2019 PCTEST Engineering Laborat	ory, Inc.			REV 21.2 M 12/05/2018

#### 2 Composition / Information on ingredients

The Item is composed of	of the following ingredients:
H <sub>2</sub> 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.

chmid	& Partr	ier cing	ineerir	ng AG			_	S		0	e	<u>a</u>		<u>g</u>	_	_
hone +	41 44	se 43, 8 245 97 m, http	00, Fax	x +41 4	14 245											
leas	urem	ent C	ertif	icate	/ Ma	terial	Test									
em Na roduc Manufa				M 075			g Liquid (M 170608-1)	SL750V2)	0							
loogu	romor	t Meth	bod													
				meas	ured u	using ca	alibrated DA	AK probe.						_		
	1.00	2.5		2			1.11									
	Valida		ore wi	thin +	2.5%	toward	s the target	values of M	lethan	ol.				_		
Sanakit				a. the plate	-19 / 9 /	and the second	and an and									
arget	Parar	neters			_	_	_			_			_		-	_
arget	param	neters a	as def	ined in	the II	EEE 15	528 and IEC	62209 cor	nplianc	e stand	dards.		_	_		_
	onditi			_						0/	_				_	-
							100 0100									
				onmer	t temp	peratur	(22 ± 3)°C	and humidi	ty < 70	70.						
	mpera	ature	22°C		it temp	peratur	(22 ± 3)°C ;	and humidi	ty < 70	70.						
TSL Te	empera ate	ature	22°C 20-Ju		it temp	peratur	(22 ± 3)°C	and humidi	ty < 70	70.						
ISL Te	empera ate	ature	22°C		it temp	beratur	(22 ± 3)°C :	and humidi	ty < 70	70.						_
rst Te Fest D Operat	empera ate or	ature	22°C 20-Ju CL		it temp	peratur	(22 ± 3)°C :	and humidi	y < 70	70.				_	_	_
rst Te Fest D Operat	empera ate or onal Ir	ature	22°C 20-Ju CL			peratur	(22 ± 3)°C :	and humidi	y < 70	70.					_	_
rst D Derat	empera ate or onal Ir ensity	ature	22°C 20-Ju CL tion 1.212	n-17 g/cm	3	peratur	(22 ± 3)°C :	and humidi	y < 70	70.					_	
rst D Derat	or or onal Ir ensity eat-ca	nforma	22°C 20-Ju CL tion 1.212	n-17 g/cm kJ/(kg	з g*K)			and humidi	iy < 70	70.						
TSL Te Test D Operat Addition TSL D TSL H	empera ate or onal Ir ensity eat-ca	ature nforma pacity red	22°C 20-Ju CL 1.212 3.006	g/cm kJ/(kg	3 g*K)	Diff.to	Target [%]	and humidi	y < 70	70.						_
TSL Te Test D Operat Addition TSL D TSL H	empera ate or onal Ir ensity eat-ca Measu e'	nforma pacity red e"	22°C 20-Ju CL 1.212 3.006 sigma	g/cm kJ/(kg Target eps	₃ g*K) t sigma	Diff.to ∆-eps	Target [%] Δ-sigma	10.0 °° 7.5	y < 70	70.						
Addition TSL Doperate Addition TSL Do TSL Ho (MHz) 600	empera ate or onal Ir ensity eat-ca Measu e' 57.3	nforma pacity red e" 25.02	22°C 20-Ju CL 1.212 3.006 sigma 0.84	g/cm kJ/(kj Target eps 56.1	3 g*K) t sigma 0,95	Diff.to A-eps 2.2	Target [%] Δ-sigma -12.2	10.0 °° 7.5	y < 70	70.						
TSL Te Test D Dperat Addition TSL D TSL H T[MHz] 600 625	empera ate or onal Ir ensity eat-ca Measu e' 57.3 57.1	nforma pacity red e" 25.02 24.67	22°C 20-Ju CL 1.212 3.006 sigma 0.84 0.86	g/cm kJ/(kg Targe eps 56.1 56.0	3 g*K) sigma 0.95 0.95	Diff.to A-eps 2.2 1.9	Target [%] Δ-sigma -12.2 -10.1	10.0 °° 7.5	y < 70	70.						
Addition Fest D Derat Addition FSL D FSL D FSL H (MHz) 600 625 650	empera ate or onal Ir ensity eat-ca Measu e' 57.3 57.1 56.8	ature nforma pacity red e" 25.02 24.67 24.32	22°C 20-Ju CL 1.212 3.006 sigma 0.84	g/cm kJ/(kj Target eps 56.1	3 g*K) t sigma 0,95	Diff.to A-eps 2.2	Target [%] Δ-sigma -12.2	10.0 % 7.5 % 4ivittuu 2.5 0.0	y < 70	10.			** *	Ţ		
Addition Fest D. Deperate Addition FSL Do FSL Ho FSL HO	mpera ate or onal Ir ensity eat-ca Measu e' 57.3 57.1 56.8 56.6	ature aforma pacity red e" 25.02 24.67 24.32 24.02	22°C 20-Ju CL 1.212 3.006 sigma 0.84 0.86 0.88 0.90	g/cm kJ/(kg Target 86.1 56.0 55.9	3 g*K) sigma 0.95 0.95 0.96	Diff.to Δ-eps 2.2 1.9 1.6	Target [%] ∆-sigma -12.2 -10.1 -8.0	10.0 % 7.5 % 4ivittuu 2.5 0.0	y < 70	70.	-		** *			
Addition Fest D Derat Addition FSL D FSL D FSL H (MHz) 600 625 650	empera ate or onal Ir ensity eat-ca Measu e' 57.3 57.1 56.8	ature nforma pacity red e" 25.02 24.67 24.32	22°C 20-Ju CL 1.212 3.006 sigma 0.84 0.86 0.88	g/cm kJ/(kg 56.1 56.0 55.9 55.8	g*K) sigma 0.95 0.95 0.96 0.96	Diff.to <u>A-eps</u> 2.2 1.9 1.6 1.3	Target [%] <u>A-sigma</u> -12.2 -10.1 -8.0 -5.8	10.0 % f5.0 0.0 -2.5 -7.5	y < 70		•					
SL Te Fest D Dperat Additie FSL D FSL H 600 625 650 675 700	empera ate or onal Ir ensity eat-ca Measu e' 57.3 57.1 56.8 56.6 56.3	ature aforma pacity red e" 25.02 24.67 24.32 24.02 23.71	22°C 20-Ju CL 1.212 3.006 sigma 0.84 0.86 0.88 0.90 0.92	g/cm kJ/(kg 56.1 56.0 55.9 55.8 55.7	g*K) sigma 0.95 0.95 0.96 0.96 0.96	Diff.to <b>Δ-eps</b> 2.2 1.9 1.6 1.3 1.1	Target [%] A-sigma -12.2 -10.1 -8.0 -5.8 -3.8	10.0 * 6.0 * 6.0 * 6.0 * 6.0 * 6.0 * 6.0 * 7.5 * 10.0		*	750	800	850	900	950	1000
SL Te Fest D Dperat Additie FSL D FSL H 600 625 650 675 700 725	empera ate or onal Ir ensity eat-ca Measu e' 57.3 57.1 56.8 56.6 56.3 56.1	ature pacity red e" 25.02 24.67 24.32 24.02 23.71 23.48	22°C 20-Ju CL 1.212 3.006 sigma 0.84 0.86 0.88 0.90 0.92 0.95	g/cm kJ/(kg 56.1 56.0 55.9 55.8 55.7 55.6	g*K) sigma 0.95 0.96 0.96 0.96 0.96	Diff.to <u>∆-eps</u> 2.2 1.9 1.6 1.3 1.1 0.8	Target [%] -12.2 -10.1 -8.0 -5.8 -3.8 -1.5	10.0 * 6.0 * 6.0 * 6.0 * 6.0 * 6.0 * 6.0 * 7.5 * 10.0	y < 70	*	750 Free	800 auency N	850	900	950	1000
SL Te Test D Dperat Addition TSL D TSL D TSL H (MHz) 600 625 650 675 700 725 750	empera ate or onal Ir ensity eat-ca 57.3 57.1 56.8 56.6 56.3 56.1 55.9	ature pacity red e" 25.02 24.67 24.32 24.02 23.71 23.48 23.25	22°C 20-Ju CL 1.212 3.006 sigma 0.84 0.86 0.88 0.90 0.92 0.95 0.97	n-17 g/cm kJ/(kg 56.1 56.0 55.9 55.8 55.7 55.6 55.5	g*K) sigma 0.95 0.95 0.96 0.96 0.96 0.96 0.96	Diff.to Δ-eps 2.2 1.9 1.6 1.3 1.1 0.8 0.6	Target [%] <u>A-sigma</u> -12.2 -10.1 -8.0 -5.8 -3.8 -1.5 0.7	10.0 * 6.0 * 6.0 * 6.0 * 6.0 * 6.0 * 6.0 * 7.5 * 10.0		*		800 quency N		900	950	1000
Addition FSL D Derat Addition FSL D FSL	empera ate or ensity eat-ca fr.3 57.3 57.1 56.8 56.6 56.3 56.1 55.9 55.6	nforma pacity red 25.02 24.67 24.32 24.02 23.71 23.48 23.25 23.04	22°C 20-Ju CL 1.212 3.006 sigma 0.84 0.86 0.88 0.90 0.92 0.95 0.97 0.99	n-17 g/cm kJ/(kg 56.1 56.0 55.9 55.8 55.7 55.6 55.5 55.4	g*K) sigma 0.95 0.95 0.96 0.96 0.96 0.96 0.96 0.96 0.97 0.97	Diff.to A-eps 2.2 1.9 1.6 1.3 1.1 0.8 0.6 0.3 0.1 -0.1	Target [%] <u>A-sigma</u> -12.2 -10.1 -8.0 -5.8 -3.8 -1.5 0.7 2.9 5.0 6.3	10.0 * 6.0 * 6.0 * 6.0 * 6.0 * 6.0 * 6.0 * 7.5 * 10.0		*				900	950	1000
SL Te Test D Derat Additi TSL D TSL D TSL H (MHz) 600 625 650 675 700 725 750 775 800	empera ate or ensity eat-ca Measu e' 57.3 57.1 56.8 56.6 56.3 56.1 55.9 55.6 55.4	nforma pacity red 25.02 24.67 24.32 24.02 23.71 23.48 23.25 23.04 22.82	22°C 20-Ju CL 1.212 3.006 9.84 0.84 0.86 0.88 0.90 0.92 0.95 0.97 0.99 1.02	n-17 g/cm kJ/(k eps 56.1 56.0 55.9 55.8 55.7 55.6 55.6 55.4 55.3	g*K) sigma 0.95 0.95 0.96 0.96 0.96 0.96 0.96 0.96 0.97 0.97	Diff.to <u>A-eps</u> 2.2 1.9 1.6 1.3 1.1 0.8 0.6 0.3 0.1	Target [%] ∆-sigma -12.2 -10.1 -8.0 -5.8 -1.5 0.7 2.9 5.0	10.0 3° 7.5 40 2.5 5.0 10.0 0.0 0.0 0.0 0.0 0.0 0.0		*				900	950	1000
SL Te Test D Derat Additi TSL D TSL H (MHz) 600 625 650 625 650 725 700 725 700 725 800 825	emperate           or           onal Ir           ensity           eat-ca           6'           57.3           57.1           56.8           56.6           56.3           56.4           55.9           55.4           55.2	nforma pacity red 25.02 24.67 24.32 24.02 23.48 23.25 23.04 23.24 23.04 23.25	22°C 20-Ju CL 1.212 3.006 sigma 0.84 0.86 0.88 0.90 0.92 0.92 0.92 0.92 1.02 1.04	n-17 g/cm kJ/(k eps 56.1 56.0 55.9 55.8 55.7 55.6 55.5 55.5 55.5 55.4 55.3 55.2	3 sigma 0.95 0.95 0.96 0.96 0.96 0.96 0.96 0.96 0.96 0.96 0.96 0.96 0.96 0.96 0.96 0.96 0.95 0.96 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.96 0.97 0.97 0.97 0.98 0.98 0.98 0.99 0.97 0.98 0.98 0.98 0.99 0.99 0.97 0.98	Diff.to A-eps 2.2 1.9 1.6 1.3 1.1 0.8 0.6 0.3 0.1 -0.1 -0.3 -0.4	Target [%] <u>∆-sigma</u> -12.2 -10.1 -8.0 -5.8 -1.5 <b>0.7</b> 2.9 5.0 6.3 6.9 7.5	10.0 * 7.5 5.0 10.0 10.0 10.0 10.0 10.0 10.0		*				900	950	1000
FSL Te fest D Dperat Addititi FSL D FSL D	empera ate or onal Ir ensity eat-ca 57.3 57.1 56.8 56.6 56.3 56.6 55.9 55.6 55.4 55.4 55.4 55.4	Aforma pacity red e" 24.02 24.67 24.32 23.71 23.48 23.25 23.04 22.82 22.56 22.56 22.57 22.34	22°C 20-Ju CL 1.212 3.006 9.84 0.86 0.88 0.90 0.92 0.95 0.97 0.99 1.02 1.04 1.05	n-17 g/cm kJ/(kj eps 56.1 55.9 55.8 55.7 55.6 55.5 55.4 55.2 55.2 55.2 55.2 55.2 55.2	3 sigma 0.95 0.96 0.96 0.96 0.96 0.96 0.96 0.96 0.97 0.97 0.98 0.99 0.98 0.99 1.02	Diff.to <u>A-eps</u> 2.2 1.9 1.6 1.3 1.1 0.8 0.6 0.3 0.1 -0.1 -0.3 0.1 -0.4 -0.4 -0.7	Target [%] A-sigma -12.2 -10.1 -8.0 -3.8 -1.5 0.7 2.9 5.0 6.3 6.9 7.5 6.7	10.0		*				900	950	1000
rsL Te fest D Dperat Addititi rsL D rsL H 600 625 650 675 700 725 700 725 800 825 838 850	emperaate oor onal Ir ensity eat-ca 57.3 57.1 56.8 56.6 55.4 55.6 55.4 55.4 55.4 55.4 55.4	nforma pacity 25.02 24.67 24.32 24.62 23.71 23.48 23.25 23.04 22.82 22.55 22.56 22.47 22.34 22.21	22°C 20-Ju 20-Ju CL 1.212 3.0006 5197 0.84 0.86 0.88 0.90 0.92 0.95 0.99 1.02 1.04 1.05 1.06 1.09 1.02	g/cm <sup>*</sup> kJ/(kj eps 56.1 55.9 55.8 55.7 55.6 55.4 55.3 55.2 55.2 55.2 55.2 55.2 55.2 55.2	3 sigma 0.95 0.96 0.96 0.96 0.96 0.96 0.96 0.96 0.97 0.97 0.98 0.99 0.98 0.99 1.02	Diff.to <b>A-eps</b> 22 1.9 1.3 1.1 0.8 <b>0.6</b> 0.3 0.1 -0.1 -0.3 -0.4 -0.7 -0.9	Target [%] <u>A-sigma</u> -12.1 -10.1 -8.0 -5.8 -1.5 0.7 5.0 6.3 6.9 7.5 6.7 5.9	10.0		*				900	950	1000
rst Test D Derat Addition rst D rst D rst H roo 625 650 625 650 725 775 800 725 775 800 825 888 888 850 875	emperate our content of the second se	nforma pacity red 25.02 24.67 24.32 24.02 23.71 23.48 23.74 23.48 23.25 22.82 22.85 22.82 22.85 22.82 22.85 22.82 22.85 22.84 22.85 22.84 22.85	22°C 20-Ju 20-J	g/cm kJ/(kk 56.1 55.9 55.8 55.7 55.6 55.4 55.3 55.2 55.2 55.2 55.2 55.2 55.2 55.2	3 sigma 0.95 0.96 0.96 0.96 0.96 0.96 0.96 0.96 0.96	Diff.to A-eps 22 1.9 1.8 1.3 1.1 0.8 0.6 0.3 0.1 -0.1 -0.3 -0.4 -0.7 -0.9 -1.3	Target [%] △-sigma -12.2 -10.1 -8.0 -5.8 -1.5 0.7 2.9 5.0 6.3 6.9 7.5 6.7 5.9 6.9	10.0		*				900	950	1000
In the second se	Measure           e*           57.3           57.4           56.6           55.4           55.2           55.4           54.3           54.3           54.3	Aformation and a second	22°C 20-Ju 20-Ju CL 12-12 3.006 5 5 5 5 5 5 5 5 5 5 5 5 5	g/cm <sup>1</sup> kJ/(kj 56.0 55.9 55.5 55.4 55.2 55.2 55.2 55.2 55.2 55.2	3 sigma 0.95 0.96 0.98 00 0.98 00 0.98 00 0.98 00 0.98 00 0.98 00 0.98 00 0.98 00 0.98 00 0.98 00 0.98 00 0.98 00 0.98 00 0.98 00 0.98 0000000000	Diff.to 22 1.9 1.8 1.3 1.1 0.8 0.6 0.3 0.1 -0.1 -0.3 -0.4 -0.7 -0.9 -1.3 -1.6	Target [%] A-sigma -12.1 -10.1	10.0		*				900	950	1000
In the second se	emperate our content of the second se	nforma pacity red 25.02 24.67 24.32 24.02 23.71 23.48 23.74 23.48 23.25 22.82 22.85 22.82 22.85 22.82 22.85 22.82 22.85 22.84 22.85 22.84 22.85	22°C 20-Ju 20-J	g/cm kJ/(kk 56.1 55.9 55.8 55.7 55.6 55.4 55.3 55.2 55.2 55.2 55.2 55.2 55.2 55.2	3 sigma 0.95 0.96 0.96 0.96 0.96 0.96 0.96 0.96 0.96	Diff.to A-eps 22 1.9 1.8 1.3 1.1 0.8 0.6 0.3 0.1 -0.1 -0.3 -0.4 -0.7 -0.9 -1.3	Target [%] △-sigma -12.2 -10.1 -8.0 -5.8 -1.5 0.7 2.9 5.0 6.3 6.9 7.5 6.7 5.9 6.9	10.0 3° 7.5 400 21.5 400 21.5 -10.0 6 10.0		*				900	950	1000

Figure D-2 750MHz Body Tissue Equivalent Matter

	FCC ID: A3LSMG9700	PCTEST	SAR EVALUATION REPORT		Approved by:
	TCC ID. ASEOMOSTOO	····· V skaterena oreaketare, cu		SAMSUNG	Quality Manager
	Test Dates:	DUT Type:			APPENDIX D:
	12/09/2018-01/14/2019	Portable Handset			Page 2 of 6
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Zeughausstrasse 43, 8004 Zurich, Switzerland Phone +41 44 245 9700, Fax +41 44 245 9779 info@speag.com, http://www.speag.com

#### Measurement Certificate / Material Test

Item Name	Head Tissue Simulating Liquid (HSL750V2)	
Product No.	SL AAH 075 AA (Batch: 170612-4)	
Manufacturer	SPEAG	

g

Measurement Method TSL dielectric parameters measured using calibrated DAK probe.

#### Setup Validation

Validation results were within  $\pm 2.5\%$  towards the target values of Methanol.

#### Target Parameters

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

#### **Test Condition**

Ambient	Environment temperatur (22 ± 3)°C and humidity < 70%.
TSL Temperature	22°C
Test Date	20-Jun-17
Operator	CL

#### Additional Information

TSL Density 1.284 g/cm<sup>3</sup> TSL Heat-capacity 2.701 kJ/(kg\*K)

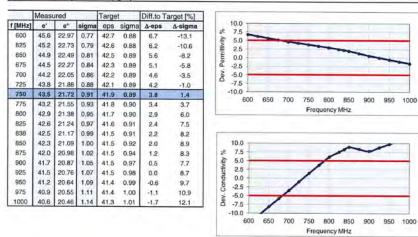


Figure D-3 750MHz Head Tissue Equivalent Matter

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3 Composition / Info The Item is composed of It		
Water	50 - 73 %	
Non-ionic detergents	25 - 50 %	polyoxyethylenesorbitan monolaurate
NaCl	0 - 2%	
Preservative	0.05 - 0.1%	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 According to international g marked by symbols.	<50 % guidelines, the pr	polyoxyethylenesorbitan monolaurate oduct is not a dangerous mixture and therefore not required to be

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

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

Schmid Zeugha	-	_	-	-	Switze	brebe		-	S		p	е		а		g	_	-
hone	+41 44 beag.co	245 9	700, Fa	ix +41	44 245	5 9779												
Meas	urem	ent	Certi	ficate	/ Ma	aterial	Test											
Item N Produc Manufa		j.		AH 19			Liquid (H 170619-1)		00-38	800V3	1)							
Measu TSL di				s mea:	sured	using ca	alibrated D	AK prob	e.	_	_	_	_	_	_	_	_	_
Setup			ere w	ithin +	2.5%	towards	the target	tvahies	of M	athan	ol	_						_
Target	Para	neter	s							_								
Target Test C	1.1		as del	fined in	n the l	EEE 15	28 and IEC	C 62209	com	pliand	e stan	idards		-	-			
Ambie TSL T	nt empera	-	22°C		nt ternş	peratur	(22 ± 3)°C	and hun	nidity	< 70	%.			_	-	-	_	
Test D Operat			20-Ju CL	in-17	_	_									_	_		_
Additi TSL D	ensity		1.054	g/cm		-		_	_									
TSL H			3.389			matrix a		_	_			_	_	_	_	_		_
(MHz)	Measu e'	e"	sigma	Target			argiet [%]		0.0 -									
1900	41.8	12.2	1.3	40.0	sigma	4.5	∆-sigma -8.2		7.5									
1950	41.6	12.3	1.3	40.0	1.4	4.0	-4.6		5.0	-	_	_	_		-	_	_	_
2000	41.4	12.4	1.4	40.0	1.4	3.6	-1.3	Permittivity	2.5		-	-						
2050	41.2	12.6	3.4	39.9	1.4	3.3	-0.9	Pen	0.0				-	-				
2100	41.1	12.7	1.5	39.8 39.7	1.5	3.1	-0.6		2.5					-	-	-		
2200	40.7	12.9	1.6	39.6	1.6	2.8	0.2		5.0	-	-			-			-	-
2250	40.6	13.0	1.6	39.6	1.6	25	0.5		7.5									
2300	40.4	132	1.7	39.5	17	23	1.1		190	0 210	2300 2	2500 27	00 29	00 310	0 33	300 3	1500 3	700 39
2350	40.2	13.3	1.7	39.4	1.7	21	1.5					Frequ	mary N	847				
2400	40,0	13.4	1.8	39.3	1.8	1.8	2.1											
2450	39.8	13.5	1.8	39.2	1.8	16	2.6											
2500	39.7 39.5	13.7	19	39.1 39,1	1.9	1.3	2.6	1					_	-	-	-	-	-
2600	39.5	13.9	2.0	39,0	2.0	0.8	2.2		0.0					_	_			
2650	39.1	14.0	21	38.9	2.0	0.5	2.6		7.5									
2700	39.0	14.2	21	38,9	2,1	02	2.7	hite .	5.0			-				****		
2750	38.7	14.3	22	38.8	2.1	-0.2	2.6	duct	0.0		1	-		-				
2800 2850	38.6 38.4	14.4	22	38.8	22	-0.8	25		2.5	r								
2850	38.4	14.5	23	38.7	22	-0.8	2.6		5.0					_		_		_
2950	38.1	14.7	2.4	38.6	2.3	-1.3	2.6	· - 1	7.5									
3000	37.9	14.8	25	38.5	2.4	-1.7	2.6	-10	0.0	0.040	2300 2	utaa ca	00.02			100		-
3060	37.7	14.8	2.5	38,4	2,5	-2.0	2.8		190	n 510	\$300 \$	:500 27	00 29	00 310	0.30	300 3	000 3	100 38
3100	37.5	14.9	2.6	38.4	2.5	-2.3	2.8	1				Freq	uency	MHZ				
3150	37.3	15.0	2.6	38.3	2.6	-2.6	2.9					_	-		_		_	
3250	37.0	15.1	27	38.2	2.7	-3.0	3.0											
3300	36.8	15.2	2.8	38.2	2.7	-3.6	3.1											
3350	36.6	15.3	2.8	38.1	2.8	-3.9	3.2											
3400	36.4	15.3	2.9	38.0	8,9	-4.2	3.3											
3450	36,3	15.4	3.0	38.0	2.9	-4.5	3.4											
3500	36.1	15.5	3.0	37.9	29	-4.8	3.5											
3550	36.0	15.5	3.1	37.9	3.0	-5.0	3.6											
3650	35.8	15.7	3.1	37,8	3.1	-5.6	3.8											
37/00	35.5	15.7	3.2	37,7	3.1	-5.8	3.9											
3750	35.4	15.8	3.3	37.6	-3,2	-6.1	3.9											
3800	35.2	15.9	3.4	37.6	3.2	-6.3	4.1											
3850	35.1	15.9	3.4	37.5	3.3	-6.6	4.1											
	- and the	1.000	<ul> <li></li></ul>	a - 110	410	1 4 M												

Figure D-5 2.4 GHz Head Tissue Equivalent Matter

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# 2 Composition / Information on ingredients

The Item is composed of the following ingredients:Water50 - 65%Mineral oil10 - 30%Emulsifiers8 - 25%Sodium salt0 - 1.5%

# Figure D-6

# Composition of 5 GHz Head Tissue Equivalent Matter

**Note:** 5 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.

	-	_	-	ning AG	_			S	;	р	е	а	g	
Phone	+41 44 peag.c	245 9	700, F	ax +41	44 24	5 9779								
Meas	suren	nent	Certi	ficat	e/M	aterial	Test							
	larne ct No. acture	r		AH 50			g Liquid (H 170613-1)	IBBL3500-56	800	V5)				
	ireme			s mea	sured	using c	alibrated D	AK probe	_					
Setup	Valid	ation						t values of M	etha	inol.				
Targe	t Para	meter	s					C 62209 com			dards.	_		
	ondit	ion									1			
Ambie TSL T Test D Opera	emper late	ature	Envir 22°C 20-Ju CL		nt tern	peratur	(22 ± 3)°C	and humidity	1<7	0%.				
	-			-	-				-	-				-
Additi TSL D TSL H	ensity		0.985	5 g/cm 3 kJ/(k										
	Méasu			Targe		Diff.to T	arget [%]	1	-	_	_			
[MHz] 3400	e' 38.6	e" 15.03	sigma 2.84	eps 38.0	sigma 2.81	Δ-eps 1.5	∆-sigma	10.0						
3500	38.5	15.00	2,92	37.9	2.91	1,5	0.3	Auntilitation 2.5	-	-	-		_	-
3600	38.3	14.98	3.00	37.8	3.02	1.3	-0.5	2.5			*******			
3800	38.1	14.96	3.16	37.6	3.22	1.4	-1.9	2.5						-
3900 4000	38.0 37.9	14.95 14.95	3.24	37.5	3.32	1.4	-2.5	-5.0	-		_			
4100	37.8	14.96	3.41	37.2	3.53	1.5	-3.3	-10.0		_				
4200	37.6 37.5	15,00	3.50 3.60	37.1	3.63	1.3	-3.6	340	0	3900	4400	4900	5400	5900
4400	37.5	15.05	3.60	37.0	3.73 3.84	1.3	-3.5 -3.5	-			Fredr	ency MHz		
4500	37.2	15.18	3.80	36.8	3.94	1.1	-3.5							
4600	37.1	15.24	3.90	36.7 38.6	4.04	1.2	-3.5 -3.4	10.0	_					
4800	36.8	15.35	4.10	36.4	4.25	1.0	-3.4	7.5 -						_
4850	36.8	15.35	4.14	36.4	4.30	1.1	-3.6	₩ 5.0 € 25			_			-
4900	36.7 36.6	15.38 15.39	4.19	36.3	4.35	1.0	-3.6 -3.6	0.0	~					
5000	36.5	15,42	4.29	36.2	4.45	0.8	-3.6	2.5 0.0 2.5	-	and the second division of the second divisio				
5050	36.5	15,43	4.34	36.2	4.50	0.9	-3.6		-	_	-			-
5100 5150	36.4	15.46 15.48	4.39	36.1 36.0	4.55	0.8	-3.6 -3.8	-10.0	_				_	
5200	36.2	15.50	4,48	36.0	4.66	0.6	-3.8	340	0	3900	4400 Etecs	4900 iency MHz	5400	5900
5250 5300	36.1	15.53	4.54	35.9	4.71	0.5	-3.5		-	-	, and	and an a		_
	35.0	15,56	4.63	35.8	4.81	0.5	-3.7							
5350	35.9	15.57	4.68	35.8	4.86	0.4	-3.7							
5400		15.59	4.73	35.7	4.91	0.6	-3.7							
5400 5450	35.9		4.78.00	-		0.4	-3.7							
5400	35.9 35.8 35.7	15.61	4.78 4.83	35.6 35.6	4.96	0.3	-3.7							
5400 5450 5550 5550 5600	35.8 35.7 35.6	15.61 15.65 15,66	4.83 4.88	35.6 35.5	5.01 5.07	0.3 0.2	-3.7 -3.7							
5400 5450 5550 5650 5650	35.8 35.7 35.6 35.6	15.61 15.65 15.66 15.70	4.83 4.88 4.93	35.6 35.5 35.5	5.01 5.07 5.12	0.3 0.2 0.4	-3.7 -3.7 -3.6							
5400 5450 5550 5600	35.8 35.7 35.6	15.61 15.65 15,66	4.83 4.88	35.6 35.5	5.01 5.07	0.3 0.2	-3.7 -3.7							
5400 5450 5550 5550 5600 5650 5650 5700	35.8 35.7 35.6 35.6 35.5	15.65 15.65 15.68 15.70 15.72	4.83 4.88 4.93 4.98	35.6 35.5 35.5 35.4	5.01 5.07 5.12 5.17	0.3 0.2 0.4 0.2	-3.7 -3.7 -3.6 -3.6							

Figure D-7 5 GHz Head Tissue Equivalent Matter

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## 3 Composition / Information on ingredients

The Item is composed of the fo	ollowing ingredients:
Water	60 - 80%
Esters, Emulsifiers, Inhibitors	20 - 40%
Sodium salt	0 - 1.5%

# Figure D-8 Composition of 5 GHz Body Tissue Equivalent Matter

**Note:** 5 GHz Body 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.

Schmid	d å Par	ther Er	ngineei	ring AG				S	p	е	а	g	
Phone	+41 44	see 43, 1 245 9 om, htt	700, F	ax +41	44 24	5 9779							
Meas	suren	nent	Certi	ificate	e/M	ateria	l Test						
tem N Produ Manuf		,		AM 50			g Liquid ( 180423-2	MBBL3500-5800V!	5)				
		nt Met		s mea	surad	using	alibrated [	AK nahn					
etup	Valida	ation											
arget	Para	meter	5					t values of Methani	ы. <u> </u>				
	ondit		as de	fined i	n the l	KDB 86	5664 com	liance standard.	-		_		
mbie	nt emper ate		Envir 22°C 25-Ap WM		nt term	peratur	(22 ± 3)°C	and humidity < 70°	K.				
SL D	ensity	pacity	0.996	i g/cmi i kJ/(kj					_			_	_
	Measu			Target			Target [%]	10.0					
(MHz) 3400	e' 50.7	e" 16.46	sigma 3.11	eps 51.5	sigma 3.20	-1.5	A-sigma	# 7.5					
3500	50.5	16.50	3.21	51.3	2.31	-1.6	-3.1	5.0 2.5 0.0					-
3600	50.4	16.56	3.32	51.2 51.1	3.43	-1.5	-3.2	2,5 - 0,0 -					
3800	50.2	16.72	3.53	50.9	3,66	-1.4	-3.7	·					
3900 4000	50.1 49.9	16.81	3.65	50.8	3.78	-1.5	-3.5	-5.0					-
4100	49.8	17.05	3.89	50.5	4.01	1.4	-3.3	-10.0					
4200	49.6	17.18	4.01	50.4	4.13	-1.5	-2.9	9400	3900	4400 Frequer	-4900	5400	5900
4400	49.5	17.32	4.14	50.2	4.25	+1.5	-2.5			Frequer	су мнг	_	_
1500	49.3	17.46	4.27	50.1	4.48	-1.6	-2.2	-					
1600	49.0	17.73	4.54	49.8	4.60	-1.7	-1.3	10.0					
1700	48.8	17.86	4.67	49.7	4.72	-1.8	-1.0	2 50					
1800 1850	48.6 48.5	17.99	4.80	49.6	4.83	-1.9	-0.7	A 25					-
1900	48.4	18.11	4.94	49.4	4.95	-2.1	-0.2	25 00 25		-	-		
1950	48.3	18.17	5.00	49.4	5.01	-2.1	-0.1		-	-			- A.
5000 5050	48.2	18.23	5.07	49.3 49.2	5.07	-22	0.1	-7.5					
5100	48.0	18.34	5.20	49.2	5.18	-23	0.3	-10.0			-	-	
5150	47.9	18.39	5.27	49.1	5.24	-2.4	0.6	3400	3900	4400 Frequer	4900 Key MHz	5400	5900
250	47.9	18.45	5.34	49.0	5,30	-23	0.8						
5300	47.7	18.56	5,47	48.9	5,42	-2.4	1.0						
	47.6	18.61	5.54	48.8	5.47	-2.5	1.2						
	47.5	18.67	5.61	48.7	5.53	-2.5	1.4						
5400			3.00		5.65	-2.6	1.6						
5400 5450	47.4	18,77	5.7A	48.6									
5400 5450 5500 5550	47.4 47.3 47.2	18,77	5.81	48.5	5.71	-2.8	1.8						
5400 5450 5500 5550 5600	47.4 47.3 47.2 47.1	18.77 18.83 18.88	5.81 5.88	48.5 48.5	5.71 5.77	-2.8	2.0						
5400 5450 5550 5550 5650 5650	47.4 47.3 47.2	18.77 18.83 18.88 18.93	5.81 5.88 5.95	48.5 48.5 48.4	5.71 5.77 5.82	-2.8 -2.7	2.0 2.1						
5400 5450 5550 5650 5650 5650 5700	47.4 47.3 47.2 47.1 47.1	18.77 18.83 18.88	5.81 5.88	48.5 48.5	5.71 5.77	-2.8	2.0						
5350 5400 5450 5650 5650 5650 5750 5750 5760 5860	47.4 47.3 47.2 47.1 47.1 47.1 47.0	18.77 18.83 16.88 18.93 18.99	5.81 5.88 5.95 6.02	48.5 48.5 48.4 48.3	5.71 5.77 5.82 5.68	-2.8 -2.7 -2.8	2.0 2.1 2.3						

Figure D-9 5 GHz Body 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.

				C C	ак зу	Stem v	anualio	n Summa	iry – ig				
SAR						COND.	PERM.	C	W VALIDATION		N	OD. VALIDATION	1
SYSTEM #	FREQ. [MHz]	DATE	PROBE SN	PROBE C	AL. POINT	(σ)	(ɛr)	SENSITIVITY	PROBE LINEARITY	PROBE ISOTROPY	MOD. TYPE	DUTY FACTOR	PAR
М	750	11/2/2018	3287	750	Head	0.908	42.19	PASS	PASS	PASS	N/A	N/A	N/A
D	750	10/26/2018	7357	750	Head	0.898	40.96	PASS	PASS	PASS	N/A	N/A	N/A
G	835	8/9/2018	7410	835	Head	0.889	40.915	PASS	PASS	PASS	GMSK	PASS	N/A
М	1750	11/5/2018	3287	1750	Head	1.342	39.217	PASS	PASS	PASS	N/A	N/A	N/A
Н	1900	7/16/2018	7409	1900	Head	1.425	40.935	PASS	PASS	PASS	GMSK	PASS	N/A
G	2450	8/7/2018	7410	2450	Head	1.865	39.618	PASS	PASS	PASS	OFDM/TDD	PASS	PASS
G	2600	8/8/2018	7410	2600	Head	2.04	39.033	PASS	PASS	PASS	TDD	PASS	N/A
Н	5250	7/5/2018	7409	5250	Head	4.492	34.994	PASS	PASS	PASS	OFDM	N/A	PASS
Н	5600	7/5/2018	7409	5600	Head	4.839	34.496	PASS	PASS	PASS	OFDM	N/A	PASS
Н	5750	7/5/2018	7409	5750	Head	4.995	34.288	PASS	PASS	PASS	OFDM	N/A	PASS
I	750	7/19/2018	7406	750	Body	0.969	53.451	PASS	PASS	PASS	N/A	N/A	N/A
J	835	9/11/2018	3347	835	Body	0.984	54.197	PASS	PASS	PASS	GMSK	PASS	N/A
D	1750	8/15/2018	7357	1750	Body	1.475	51.784	PASS	PASS	PASS	N/A	N/A	N/A
E	1900	12/3/2018	3332	1900	Body	1.518	51.796	PASS	PASS	PASS	GMSK	PASS	N/A
М	1900	11/1/2018	3287	1900	Body	1.567	51.955	PASS	PASS	PASS	GMSK	PASS	N/A
К	2450	4/3/2018	3319	2450	Body	2.043	51.13	PASS	PASS	PASS	OFDM/TDD	PASS	PASS
J	2450	10/15/2018	3347	2450	Body	2.025	51.09	PASS	PASS	PASS	OFDM/TDD	PASS	PASS
K	2600	4/3/2018	3319	2600	Body	2.225	50.665	PASS	PASS	PASS	TDD	PASS	N/A
L	5250	10/29/2018	7308	5250	Body	5.511	48.77	PASS	PASS	PASS	OFDM	N/A	PASS
L	5600	10/29/2018	7308	5600	Body	5.994	48.2	PASS	PASS	PASS	OFDM	N/A	PASS
L	5750	10/29/2018	7308	5750	Body	6.219	47.96	PASS	PASS	PASS	OFDM	N/A	PASS

Table E-1 SAR System Validation Summary – 1g

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 POWER REDUCTION VERIFICATION

Per the May 2017 TCBC Workshop Notes, demonstration of proper functioning of the power reduction mechanisms is required to support the corresponding SAR configurations. The verification process was divided into two parts: (1) evaluation of output power levels for individual or multiple triggering mechanisms and (2) evaluation of the triggering distances for proximity-based sensors.

# G.1 Power Verification Procedure

The power verification was performed according to the following procedure:

- 1. A base station simulator was used to establish a conducted RF connection and the output power was monitored. The power measurements were confirmed to be within expected tolerances for all states before and after a power reduction mechanism was triggered.
- 2. Step 1 was repeated for all relevant modes and frequency bands for the mechanism being investigated.
- 3. Steps 1 and 2 were repeated for all individual power reduction mechanisms and combinations thereof. For the combination cases, one mechanism was switched to a 'triggered' state at a time; powers were confirmed to be within tolerances after each additional mechanism was activated.

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# G.2 Main Antenna Verification Summary

Tower measurement vernication for main Antenna									
Mechanism(s)	Mode/Band	Conducted F	Power (dBm)						
1st		Un-triggered (Max)	Mechanism #1 (Reduced)						
Hotspot On	GPRS 1900	26.33	24.71						
Hotspot On	UMTS 1900	23.31	18.71						
Hotspot On	LTE FDD Band 4	23.77	19.75						
Hotspot On	LTE FDD Band 2	23.79	19.32						
Hotspot On	LTE FDD Band 25	23.81	19.26						
Hotspot On	LTE TDD Band 41	23.5	20.9						

 Table G-1

 Power Measurement Verification for Main Antenna

# G.3 WIFI Verification Summary

 Table G-2

 Power Measurement Verification WIFI

Mechanism(s)	Mode/Band	Conducted Power (dBm)						
1st		Un-triggered (Max)	Mechanism #1 (Reduced)					
Held-to-Ear	802.11b	19.37	15.96					
Held-to-Ear	802.11g	16.67	15.46					
Held-to-Ear	802.11n (2.4GHz)	16.96	15.38					
Held-to-Ear	802.11a	16.7	12.83					
Held-to-Ear	802.11n (5GHz, 20MHz BW)	16.95	13.33					
Held-to-Ear	802.11ac (20MHz BW)	17.06	13.05					
Held-to-Ear	802.11n (5GHz, 40MHz BW)	16.17	13.07					
Held-to-Ear	802.11ac (40MHz BW)	16.08	13.01					
Held-to-Ear	802.11ac (80MHz BW)	14.57	12.93					

\*Note: 802.11ax and MIMO WIFI modes were not evaluated due to equipment limitations.

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# APPENDIX H: DOWNLINK LTE CA RF CONDUCTED POWERS

# 1.1 LTE Downlink Only Carrier Aggregation Test Reduction Methodology

SAR test exclusion for LTE downlink Carrier Aggregation is determined by power measurements according to the number of component carriers (CCs) supported by the product implementation. Per April 2018 TCBC Workshop Notes, the following test reduction methodology was applied to determine the combinations required for conducted power measurements.

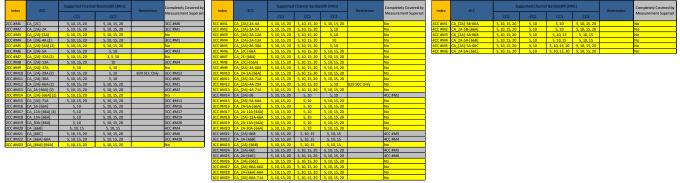
LTE DLCA Test Reduction Methodology:

- The supported combinations were arranged by the number of component carriers in columns.
- Any limitations on the PCC or SCC for each combination were identified alongside the combination (e.g. CA\_2A-2A-4A-12A, but B12 can only be configured as a SCC).
- Power measurements were performed for "supersets" (LTE CA combinations with multiple components carriers) and any "subsets" (LTE CA combinations with fewer component carriers) that were not completely covered by the supersets.
- Only subsets that have the exact same components as a superset were excluded for measurement.
- When there were certain restrictions on component carriers that existed in the superset that were not applied for the subset, the subset configuration was additionally evaluated.
- Both inter-band and intra-band downlink carrier aggregation scenarios were considered.
- Downlink CA combinations for SISO and 4x4 Downlink MIMO operations were measured independently, per May 2017 TCBC Workshop notes.



Table 1 – Example of Exclusion Table for SISO Configurations

# Table 2 – Example of Exclusion Table for 4x4 Downlink MIMO Configurations



Note: [CC] indicates component carrier with 4x4 DL MIMO antenna configuration

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# 1.2 LTE Downlink Only Carrier Aggregation Test Selection and Setup

SAR test exclusion for LTE downlink Carrier Aggregation is determined by power measurements according to the number component carriers (CCs) supported by the product implementation. For those configurations required by April 2018 TCBC Workshop Notes, conducted power measurements with LTE Carrier Aggregation (CA) (downlink only) active are made in accordance to KDB Publication 941225 D05Av01r02. The RRC connection is only handled by one cell, the primary component carrier (PCC) for downlink and uplink communications. After making a data connection to the PCC, the UE device adds secondary component carrier(s) (SCC) on the downlink only. All uplink communications and acknowledgements remain identical to specifications when downlink carrier aggregation is inactive on the PCC. Additional conducted output powers are measured with the downlink carrier aggregation inactive for the configuration with highest measured maximum conducted power with downlink carrier aggregation inactive measured among the channel bandwidth, modulation, and RB combinations in each frequency band.

Per FCC KDB Publication 941225 D05Av01r02, no SAR measurements are required for carrier aggregation configurations when the maximum average output power with downlink only carrier aggregation active is not more than 0.25 dB higher than the average output power with downlink only carrier aggregation inactive. All bands required for SAR testing per FCC KDB procedures were considered. Based on the measured maximum powers below, no additional SAR tests were required for DLCA SAR configurations.

General PCC and SCC configuration selection procedure

- PCC uplink channel, channel bandwidth, modulation and RB configurations were selected based on section C)3)b)ii) of KBD 941225 D05 V01r02. The downlink PCC channel was paired with the selected PCC uplink channel according to normal configurations without carrier aggregation.
- To maximize aggregated bandwidth, highest channel bandwidth available for that CA combination was selected for SCC. For inter-band CA, the SCC downlink channels were selected near the middle of their transmission bands. For contiguous intra-band CA, the downlink channel spacing between the component carriers was set to multiple of 300 kHz less than the nominal channel spacing defined in section 5.4.1A of 3GPP TS 36.521. For non-contiguous intra-band CA, the downlink channel spacing between the component carriers was set to be larger than the nominal channel spacing and provided maximum separation between the component carriers.
- All selected PCC and SCC(s) remained fully within the uplink/downlink transmission band of the respective component carrier.

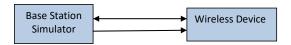


Figure 1 DL CA Power Measurement Setup

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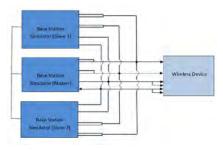


Figure 2 DL CA with DL 4x4 MIMO Power Measurement Setup

#### 1.3 **Downlink Carrier Aggregation RF Conducted Powers**

#### LTE Band 41 as PCC 1.3.1

C

	Maximum Output Powers																		
					PCC						SCC 1				SCC 2	2		Power	
Combination	PCC Band	PCC BW [MHz]	PCC (UL) Ch.	PCC (UL) Freq. [MHz]		PCC UL# RB	PCC UL RB Offset		PCC (DL) Freq. [MHz]	SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	LTE Tx.Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_41A-41A (1)	LTE B41	15	39750	2506	QPSK	1	0	39750	2506	LTE B41	20	41490	2680	-		-	-	24.37	24.35
CA_41C (1)	LTE B41	15	39750	2506	QPSK	1	0	39750	2506	LTE B41	20	39921	2523.1	-	-	-	-	24.36	24.35
CA 41D	I TE B41	15	39750	2506	OPSK	1	0	39750	2506	LTE B41	20	39921	2523.1	I TE B41	20	40119	2542.9	24.37	24.35

Table 1

#### DL CA with DL 4x4 MIMO RF Conduction Powers 1.4

This device supports downlink 4x4 MIMO operations for some LTE bands. Uplink transmission is limited to a single output stream. When carrier aggregation was applicable, the general test selection and setup procedures described in Section 1.2 were applied.

Per May 2017 TCB Workshop Notes, SAR for 4x4 DL MIMO was not needed since the maximum average output power in 4x4 DL MIMO mode was not more than 0.25 dB higher than the maximum output power with 4x4 DL MIMO inactive. Additionally, SAR for 4x4 MIMO Downlink Carrier Aggregation was not needed since the maximum average output power in 4x4 MIMO Downlink Carrier Aggregation mode was not more than 0.25 dB higher than the maximum output power with 4x4 MIMO Downlink and downlink carrier aggregation inactive.

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# 1.4.1 LTE 4x4 MIMO DL Standalone Powers

Table 2 Maximum Output Powers									
LTE Band	Bandwidth [MHz]	Channel	Frequency [MHz]	Modulation	RB Size	RB Offset	4x4 DL MIMO Tx. Power [dBm]	Single Antenna Tx. Power [dBm]	
41	15	39750	2506	QPSK	1	0	24.44	24.35	

# 1.4.2 LTE Band 41 as PCC

C

Table 3 Maximum Output Powers

		PCC									SCC 1						SCC	2			Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	PCC (DL)	PCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	LTE Tx.Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_[41A]-41A(1)	LTE B41	15	39750	2506	QPSK	1	0	39750	2506	4x4	LTE B41	20	41490	2680	2x2	-	-		-	-	24.41	24.35
CA_[41A]-41A (1)	LTE B41	15	39750	2506	QPSK	1	0	39750	2506	2x2	LTE B41	20	41490	2680	4x4	-	-	-	-	-	24.42	24.35
CA_[41A]-[41A] (1)	LTE B41	15	39750	2506	QPSK	1	0	39750	2506	4x4	LTE B41	20	41490	2680	4x4	-	-			-	24.44	24.35
CA_[41C] (1)	LTE B41	15	39750	2506	QPSK	1	0	39750	2506	4x4	LTE B41	20	39921	2523.1	4x4	-	-	-	-	-	24.43	24.35
CA_[41D]	LTE B41	15	39750	2506	QPSK	1	0	39750	2506	4x4	LTE B41	20	39921	2523.1	4x4	LTE B41	20	40119	2542.9	4x4	24.37	24.35

# 1.5 Downlink Carrier Aggregation with CA\_41C Uplink Carrier Aggregation enabled

This device supports uplink carrier aggregation (ULCA) with additional Carrier Aggregation configurations active in the downlink. Power measurements were performed with ULCA active and additional CA configurations active in the downlink for the configuration per Fall 2017 TCB Workshop Notes.

Per FCC Guidance, additional SAR measurements for these configurations were not required since their maximum output power was not more than 0.25 dB higher than the maximum output power for with only ULCA active.

# 1.5.1 DL Carrier Aggregation RF Conducted Powers

								ļ	Maxin	-	able Outp	-	wers							
				PCC							SCC 1					SCC 2			Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL/DL) Channel	PCC (UL/DL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC (UL/DL) Channel		Modulatio n	SCC UL# RB	SCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC DL Channel	SCC DL Frequency [MHz]	ULCA Tx. Power with add'l CA config. active in DL (dBm)	ULCA Tx Power (dBm)
CA_41D	LTE B41	20	39750	2506.0	QPSK	1	99	LTE B41	20	39948	2525.8	QPSK	1	0	LTE B41	20	40146	2545.6	24.32	24.23

# 1.5.2 DL Carrier Aggregation with DL 4x4 MIMO RF Conducted Powers

Note: 4x4 DL MIMO is only operating in the downlink. Uplink transmission is limited to a single output stream for each component carrier of ULCA.

							r	Maxir		able 5 Outpu		vers						
				PCC								S	CC 1				Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL/DL) Channel	PCC (UL/DL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	DL Ant. Config.	SCC Band	SCC         SCC         SCC           Band Width         (UL/DL)         (UL/DL)         Modulatio         SCC UL# RB         DL Ant.           [MHz]         Channel         [MHz]         (MHz)         Channel         Frequency         n         Offset         Config.					ULCA Tx. Power with add'l CA config. active in DL (dBm)	ULCA Tx Power (dBm)		
CA_[41C] (1)	LTE B41	20	39750	2506.0	QPSK	1	99	4x4	LTE B41	20	39948	2525.8	QPSK	1	0	4x4	24.24	24.23

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# APPENDIX I: IEEE 802.11AX RU SAR EXCLUSION

#### 1.1 IEEE 802.11ax RU SAR Exclusion

To make the most efficient use of the additional available subcarriers (data tones), IEEE 802.11ax can utilize Orthogonal Frequency-Division Multiple Access (OFDMA) which divides the existing 802.11 channels into smaller subchannels called Resource Units (RUs). Possible RU sizes are: 26T, 52T, 106T, 242T, 484T and 996T.

Per FCC Guidance, 802.11ax was considered a higher order 802.11 mode when compared to a/b/g/n/ac to apply KDB Publication 248227 D01v02r02 for OFDM mode selection. Therefore, SAR tests were not required for 802.11ax based on the maximum allowed output powers of OFDM modes and the reported SAR values. Per FCC Guidance, maximum conducted powers were performed for each RU size to demonstrate that the output powers would not be higher than the other OFDM 802.11 modes.

#### 1.2 **IEEE 802.11ax RU Target Powers**

			SISO (ANT	1) /in dBm			SISO (ANT2	2) /in dBm			MIMO (AL	L) /in dBm	
Tones		2.4G	5G/20Mhz	5G/40Mhz	5G/80Mhz	2.4G	5G/20Mhz	5G/40Mhz	5G/80Mhz	2.4G	5G/20Mhz	5G/40Mhz	5G/80Mhz
Tones							Ch & RU	J index					
	Maximum	14 ch 12: 11, ch 13: -5.5	11	11	11	14 ch 12: 11, ch 13: -5.5	11	11	11	14 ch 12: 11, ch 13: -5.5	11	11	11
26T	Nominal	13 ch 12: 10, ch 13: -6.5	10	10	10	13 ch 12: 10, ch 13: -6.5	10	10	10	13 ch 12: 10, ch 13: -6.5	10	10	10
	Maximum	16 ch 12: 12, ch 13: -2.5	13	13	13	16 ch 12: 12, ch 13: -2.5	13	13	13	16 ch 12: 12, ch 13: -2.5	13	13	13
52T	Nominal	15 ch 12: 11, ch 13: -3.5	12	12	12	15 ch 12: 11, ch 13: -3.5	12	12	12	15 ch 12: 11, ch 13: -3.5	12	12	12
	Maximum	18 ch 12: 11.5, ch 13: 0	15	15	15	18 ch 11: 17.5, ch 12: 11.5, ch 13: 0	15	15	15	18 ch 12: 11.5, ch 13: 0	15	15	15
106T	Nominal	17 ch 12: 10.5, ch 13: -1	14	14	14	17 ch 11: 16.5 ch 12: 10.5, ch 13: -1	14	14	14	17 ch 12: 10.5, ch 13: -1	14	14	14
	Maximum	18 ch 1: 15, ch 11: 13.5, ch 12: 8.5, ch 13: 3	18 ch 36: 15, ch 64: 16	17 ch 38: 13, ch 62: 14, ch 102: 15	16 ch 42: 12, ch 58, 12.5 ch 106: 12.5	18 ch 1: 15, ch: 10: 17 ch 11: 8.5, ch 12: 8.5, ch 13: 3	18 ch 36: 15, ch 64: 16	17 ch 38: 13, ch 62: 14, ch 102: 15	16 ch 42: 12, ch 58, 12.5 ch 106: 12.5	18 ch 1: 13, ch 11: 13.5, ch 12: 8.5, ch 13: 3	18 ch 36: 15, ch 64: 16	17 ch 38: 13, ch 62: 14, ch 102: 15	16 ch 42: 12, ch 58, 12.5 ch 106: 12.5
242T		17	17	16	15	17	17	16	15	17	17	16	15
	Nominal	ch 1: 14, ch 11, 12.5 ch 12: 7.5, ch 13: 2	ch 36: 14, ch 64: 15	ch 38: 12, ch 62: 13, ch 102: 14	ch 42: 11, ch 58, 11.5 ch 106: 11.5	ch 1: 14, ch 10: 16 ch 11: 7.5, ch 12: 7.5, ch 13: 2	ch 36: 14, ch 64: 15	ch 38: 12, ch 62: 13, ch 102: 14	ch 42: 11, ch 58, 11.5 ch 106: 11.5	ch 1: 12, ch 11: 12.5 ch 12: 7.5, ch 13: 2	ch 36: 14, ch 64: 15	ch 38: 12, ch 62: 13, ch 102: 14	ch 42: 11, ch 58, 11.5 ch 106: 11.5
404T	Maximum			17 ch 38: 13, ch 62: 14, ch 102: 15	16 ch 42: 12, ch 58, 12.5 ch 106: 12.5			17 ch 38: 13, ch 62: 14, ch 102: 15	16 ch 42: 12, ch 58, 12.5 ch 106: 12.5			17 ch 38: 13, ch 62: 14, ch 102: 15	16 ch 42: 12, ch 58, 12.5 ch 106: 12.5
484T	Nominal			16 ch 38: 12, ch 62: 13, ch 102: 14	15 ch 42: 11, ch 58, 11.5 ch 106: 11.5			16 ch 38: 12, ch 62: 13, ch 102: 14	15 ch 42: 11, ch 58, 11.5 ch 106: 11.5			16 ch 38: 12, ch 62: 13, ch 102: 14	15 ch 42: 11, ch 58, 11.5 ch 106: 11.5
- OPET	Maximum				16 ch 42: 12, ch 58, 12.5 ch 106: 12.5				16 ch 42: 12, ch 58, 12.5 ch 106: 12.5				16 ch 42: 12, ch 58, 12.5 ch 106: 12.5
996T	Nominal				15 ch 42: 11, ch 58, 11.5 ch 106: 11.5				15 ch 42: 11, ch 58, 11.5 ch 106: 11.5				15 ch 42: 11, ch 58, 11.5 ch 106: 11.5

#### 1.2.1 Maximum 802.11ax RU WLAN Output Power

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			SISO (ANT	1) /in dBm			SISO (ANT2	2) /in dBm			MIMO (AL	L) /in dBm	
Tones		2.4G	5G/20Mhz	5G/40Mhz	5G/80Mhz	2.4G	5G/20Mhz	5G/40Mhz	5G/80Mhz	2.4G	5G/20Mhz	5G/40Mhz	5G/80Mhz
Tories							Ch & RU	lindex					
	Maximum	14 ch 12: 11, ch 13: -5.5	11	11	11	14 ch 12: 11, ch 13: -5.5	11	11	11	14 ch 12: 11, ch 13: -5.5	11	11	11
26T	Nominal	13 ch 12: 10, ch 13: -6.5	10	10	10	13 ch 12: 10, ch 13: -6.5	10	10	10	13 ch 12: 10, ch 13: -6.5	10	10	10
	Maximum	16 ch 12: 12, ch 13: -2.5	13	13	13	16 ch 12: 12, ch 13: -2.5	13	13	13	16 ch 12: 12, ch 13: -2.5	13	13	13
52T	Nominal	15 ch 12: 11, ch 13: -3.5	12	12	12	15 ch 12: 11, ch 13: -3.5	12	12	12	15 ch 12: 11, ch 13: -3.5	12	12	12
106T	Maximum	17 ch 12: 11.5, ch 13: 0	14	14	14	17 ch 12: 11.5, ch 13: 0	14	14	14	18 ch 12: 11.5, ch 13: 0	14	14	14
1001	Nominal	16 ch 12: 10.5, ch 13: -1	13	13	13	16 ch 12: 10.5, ch 13: -1	13	13	13	17 ch 12: 10.5, ch 13: -1	13	13	13
		17		14	14	17		14	14	18	17	17	16
242T	Maximum	ch 1: 15, ch 11: 13.5, ch 12: 8.5, ch 13: 3	14	ch 38: 13	ch 42: 12, ch 58, 12.5 ch 106: 12.5	ch 1: 15, ch 11: 8.5, ch 12: 8.5, ch 13: 3	14	ch 38: 13	ch 42: 12, ch 58, 12.5 ch 106: 12.5	ch 1: 13, ch 11: 13.5, ch 12: 8.5, ch 13: 3	ch 36: 15, ch 64: 16	ch 38: 13, ch 62: 14, ch 102: 15	ch 42: 12, ch 58, 12.5 ch 106: 12.5
2421	Nominal	16 ch 1: 14, ch 11, 12.5 ch 12: 7.5, ch 13: 2	13	13 ch 38: 12	13 ch 42: 11, ch 58, 11.5 ch 106: 11.5	16 ch 1: 14, ch 11: 7.5, ch 12: 7.5, ch 13: 2	13	13 ch 38: 12	13 ch 42: 11, ch 58, 11.5 ch 106: 11.5	17 ch 1: 12, ch 11: 12.5 ch 12: 7.5, ch 13: 2	16 ch 36: 14, ch 64: 15	16 ch 38: 12, ch 62: 13, ch 102: 14	15 ch 42: 11, ch 58, 11.5 ch 106: 11.5
484T	Maximum			14 ch 38: 13	14 ch 42: 12, ch 58, 12.5 ch 106: 12.5			14 ch 38: 13	14 ch 42: 12, ch 58, 12.5 ch 106: 12.5			17 ch 38: 13, ch 62: 14, ch 102: 15	16 ch 42: 12, ch 58, 12.5 ch 106: 12.5
4041	Nominal			13 ch 38: 12	13 ch 42: 11, ch 58, 11.5 ch 106: 11.5			13 ch 38: 12	13 ch 42: 11, ch 58, 11.5 ch 106: 11.5			16 ch 38: 12, ch 62: 13, ch 102: 14	15 ch 42: 11, ch 58, 11.5 ch 106: 11.5
	Maximum				14 ch 42: 12, ch 58, 12.5 ch 106: 12.5				14 ch 42: 12, ch 58, 12.5 ch 106: 12.5				16 ch 42: 12, ch 58, 12.5 ch 106: 12.5
996T -	Nominal				13 ch 42: 11, ch 58, 11.5 ch 106: 11.5				13 ch 42: 11, ch 58, 11.5 ch 106: 11.5				15 ch 42: 11, ch 58, 11.5 ch 106: 11.5

# 1.2.2 Reduced 802.11ax RU WLAN Output Power

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# 1.2.3 Maximum 802.11ax RU WLAN Output Power During Conditions with Simultaneous 2.4 GHz WLAN and 5 GHz WLAN

			SISO (ANT	[1) /in dBm			SISO (ANT2	2) /in dBm			MIMO (AL	L) /in dBm	
Tones		2.4G	5G/20Mhz	5G/40Mhz	5G/80Mhz	2.4G	5G/20Mhz	5G/40Mhz	5G/80Mhz	2.4G	5G/20Mhz	5G/40Mhz	5G/80Mhz
Tories							Ch & RU	Index					
26T	Maximum	14 ch 12: 11, ch 13: -5.5	11	11	11	14 ch 12: 11, ch 13: -5.5	11	11	11	14 ch 12: 11, ch 13: -5.5	11	11	11
201	Nominal	13 ch 12: 10, ch 13: -6.5	10	10	10	13 ch 12: 10, ch 13: -6.5	10	10	10	13 ch 12: 10, ch 13: -6.5	10	10	10
52T	Maximum	16 ch 12: 12, ch 13: -2.5	13	13	13	16 ch 12: 12, ch 13: -2.5	13	13	13	16 ch 12: 12, ch 13: -2.5	13	13	13
321	Nominal	15 ch 12: 11, ch 13: -3.5	12	12	12	15 ch 12: 11, ch 13: -3.5	12	12	12	15 ch 12: 11, ch 13: -3.5	12	12	12
106T	Maximum	17 ch 12: 11.5, ch 13: 0	14	14	14	17 ch 12: 11.5, ch 13: 0	14	14	14	18 ch 12: 11.5, ch 13: 0	14	14	14
1001	Nominal	16 ch 12: 10.5, ch 13: -1	13	13	13	16 ch 12: 10.5, ch 13: -1	13	13	13	17 ch 12: 10.5, ch 13: -1	13	13	13
		17		14	14	17		14	14	18	17	17	16
0.07	Maximum	ch 1: 15, ch 11: 13.5, ch 12: 8.5, ch 13: 3	14	ch 38: 13	ch 42: 12, ch 58, 12.5 ch 106: 12.5	ch 1: 15, ch 11: 8.5, ch 12: 8.5, ch 13: 3	14	ch 38: 13	ch 42: 12, ch 58, 12.5 ch 106: 12.5	ch 1: 13, ch 11: 13.5, ch 12: 8.5, ch 13: 3	ch 36: 15, ch 64: 16	ch 38: 13, ch 62: 14, ch 102: 15	ch 42: 12, ch 58, 12.5 ch 106: 12.5
242T		16		13	13	16		13	13	17	16	16	15
	Nominal	ch 1: 14, ch 11, 12.5 ch 12: 7.5, ch 13: 2	13	ch 38: 12	ch 42: 11, ch 58, 11.5 ch 106: 11.5	ch 1: 14, ch 11: 7.5, ch 12: 7.5, ch 13: 2	13	ch 38: 12	ch 42: 11, ch 58, 11.5 ch 106: 11.5	ch 1: 12, ch 11: 12.5 ch 12: 7.5, ch 13: 2	ch 36: 14, ch 64: 15	ch 38: 12, ch 62: 13, ch 102: 14	ch 42: 11, ch 58, 11.5 ch 106: 11.5
				14	14			14	14			17	16
	Maximum			ch 38: 13	ch 42: 12, ch 58, 12.5 ch 106: 12.5			ch 38: 13	ch 42: 12, ch 58, 12.5 ch 106: 12.5			ch 38: 13, ch 62: 14, ch 102: 15	ch 42: 12, ch 58, 12.5 ch 106: 12.5
484T				13	13			13	13			16	15
	Nominal			ch 38: 12	ch 42: 11, ch 58, 11.5 ch 106: 11.5			ch 38: 12	ch 42: 11, ch 58, 11.5 ch 106: 11.5			ch 38: 12, ch 62: 13, ch 102: 14	ch 42: 11, ch 58, 11.5 ch 106: 11.5
					14				14				16
000T	Maximum				ch 42: 12, ch 58, 12.5 ch 106: 12.5				ch 42: 12, ch 58, 12.5 ch 106: 12.5				ch 42: 12, ch 58, 12.5 ch 106: 12.5
996T					13				13				15
	Nominal				ch 42: 11, ch 58, 11.5 ch 106: 11.5				ch 42: 11, ch 58, 11.5 ch 106: 11.5				ch 42: 11, ch 58, 11.5 ch 106: 11.5

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# 1.2.4 Reduced 802.11ax RU WLAN Output Power During Conditions with Simultaneous 2.4 GHz WLAN and 5 GHz WLAN

	-		SISO (AN	1) /in dBm			SISO (ANT2	2) /in dBm			MIMO (AL	L) /in dBm	
-		2.4G	5G/20Mhz	5G/40Mhz	5G/80Mhz	2.4G	5G/20Mhz	5G/40Mhz	5G/80Mhz	2.4G	5G/20Mhz	5G/40Mhz	5G/80Mhz
Tones					•		Ch & RU	J index				•	•
		14				14				14			
	Maximum	ch 12: 11, ch 13: -5.5	11	11	11	ch 12: 11, ch 13: -5.5	11	11	11	ch 12: 11, ch 13: -5.5	11	11	11
26T		13				13				13			
	Nominal	ch 12: 10, ch 13: -6.5	10	10	10	ch 12: 10, ch 13: -6.5	10	10	10	ch 12: 10, ch 13: -6.5	10	10	10
		14				14				16			
52T	Maximum	ch 12: 12, ch 13: -2.5	13	13	13	ch 12: 12, ch 13: -2.5	13	13	13	ch 12: 12, ch 13: -2.5	13	13	13
521		13	10	10		13	10			15	10	40	10
	Nominal	ch 12: 11, ch 13: -3.5	12	12	12	ch 12: 11, ch 13: -3.5	12	12	12	ch 12: 11, ch 13: -3.5	12	12	12
		14				14				17			
106T	Maximum	ch 12: 11.5, ch 13: 0	14	14	14	ch 12: 11.5, ch 13: 0	14	14	14	ch 12: 11.5, ch 13: 0	14	14	14
1001		13				13				16			
	Nominal	ch 12: 10.5, ch 13: -1	13	13	13	ch 12: 10.5, ch 13: -1	13	13	13	ch 12: 10.5, ch 13: -1	13	13	13
		14		14	14	14		14	14	17	17	17	16
	Marian	ch 11: 13.5,			ch 42: 12,	ch 11: 8.5,	14		ch 42: 12,	ch 1: 13,		ch 38: 13,	ch 42: 12,
	Maximum	ch 12: 8.5,	14	ch 38: 13	ch 58, 12.5	ch 12: 8.5,	14	ch 38: 13	ch 58, 12.5	ch 11: 13.5, ch 12: 8.5,	ch 36: 15, ch 64: 16	ch 62: 14,	ch 58, 12.5
242T		ch 13: 3			ch 106: 12.5	ch 13: 3			ch 106: 12.5	ch 13: 3	01104.10	ch 102: 15	ch 106: 12.5
2421		13		13	13	13		13	13	16	16	16	15
	Nominal	ch 11, 12.5	13		ch 42: 11,	ch 11: 7.5,	13		ch 42: 11,	ch 1: 12,	-h 00: 44	ch 38: 12,	ch 42: 11,
	ritorrina	ch 12: 7.5,	15	ch 38: 12	ch 58, 11.5	ch 12: 7.5,	10	ch 38: 12	ch 58, 11.5	ch 11: 12.5 ch 12: 7.5,	ch 36: 14, ch 64: 15	ch 62: 13,	ch 58, 11.5
		ch 13: 2			ch 106: 11.5	ch 13: 2			ch 106: 11.5	ch 13: 2		ch 102: 14	ch 106: 11.5
				14	14			14	14			17	16
	Maximum			ch 38: 13	ch 42: 12, ch 58, 12.5			ch 38: 13	ch 42: 12, ch 58, 12.5			ch 38: 13, ch 62: 14,	ch 42: 12, ch 58, 12.5
				01100.10	ch 106: 12.5			01100.10	ch 106: 12.5			ch 102: 15	ch 106; 12.5
484T				13	13			13	13			16	15
					ch 42: 11,				ch 42: 11,			ch 38: 12,	ch 42: 11,
	Nominal			ch 38: 12	ch 58, 11.5			ch 38: 12	ch 58, 11.5			ch 62: 13,	ch 58, 11.5
					ch 106: 11.5				ch 106: 11.5			ch 102: 14	ch 106: 11.5
					14				14				16
	Maximum				ch 42: 12,				ch 42: 12,				ch 42: 12,
					ch 58, 12.5 ch 106: 12.5				ch 58, 12.5 ch 106: 12.5				ch 58, 12.5 ch 106: 12.5
996T					13				13				15
	Nominal				ch 42: 11,				ch 42: 11,				ch 42: 11,
	1.000000				ch 58, 11.5				ch 58, 11.5				ch 58, 11.5
	1				ch 106: 11.5				ch 106: 11.5				ch 106: 11.5

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# 1.3 IEEE 802.11ax Measured Powers

<b></b>		Maxim	um 2.4 GHZ 8	02.11ax RU C	utput Power	– Ant 1		
RU Index	Tones	Ch. 1	Ch. 2	Ch. 6	Ch. 10	Ch. 11	Ch. 12	Ch. 13
		Average	Average	Average	Average	Average	Average	Average
0	26	13.9		13.92		13.72	10.95	-5.90
4	26	13.68		13.86		13.48	10.50	-5.99
8	26	13.84		13.61		13.74	10.82	-6.27
37	52	15.42		15.32		15.73	11.48	-2.63
38	52	15.68		15.56		15.97	11.87	-2.95
40	52	15.83		15.60		15.23	11.66	-2.53
53	106	17.54		17.94	17.94	17.47	11.04	-0.06
54	106	17.92		17.98	17.69	17.42	11.19	-0.22
61	242	12.62	17.71	17.78	17.97	13.05	8.39	2.76

Table 1 Maximum 2.4 GHz 802.11ax RU Output Power – Ant

Table 2Maximum 2.4 GHz 802.11ax RU Output Power – Ant 2

RU Index	RU Index Tones		Ch. 2	Ch. 6	Ch. 9	Ch. 10	Ch. 11	Ch. 12	Ch. 13
		Average	Average	Average	Average	Average	Average	Average	Average
0	26	13.86		13.61			13.71	10.91	-5.98
4	26	13.79		13.70			13.97	10.70	-6.08
8	26	13.61		13.76			13.59	10.77	-5.88
37	52	15.44		15.66			15.42	11.36	-2.52
38	52	15.88		15.90			15.84	11.72	-2.92
40	52	15.49		15.70			15.67	11.96	-3.13
53	106	17.51		17.55		17.55	17.20	11.36	-0.40
54	106	17.55		17.90		17.91	17.34	11.18	-0.41
61	242	14.73	17.97	17.15	17.64	16.89	8.35	8.05	2.34

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						5GHz -	20MHz						
			UNII 1	_		UNII 2A			UNII 2C	_		UNII 3	_
RU Index	Tones	Ch. 36	Ch. 40	Ch. 48	Ch. 52	Ch. 56	Ch. 64	Ch. 100	Ch. 120	Ch. 144	Ch. 149	Ch. 157	Ch. 165
		Average	Average	Average									
0	26	10.93	10.58	10.51	10.53	10.58	10.84	10.87	10.69	10.72	10.44	10.81	10.66
4	26	10.84	10.89	10.99	10.98	10.88	10.70	10.63	10.86	10.86	10.57	10.70	10.45
8	26	10.77	10.74	10.81	10.72	10.76	10.98	10.49	10.59	10.62	10.56	10.43	10.15
37	52	12.72	12.85	12.90	12.74	12.83	12.52	12.53	12.85	12.88	12.40	12.34	12.81
39	52	12.97	12.54	12.68	12.56	12.61	12.68	12.77	12.98	12.51	12.47	12.71	12.46
40	52	12.97	12.39	12.56	12.33	12.46	12.60	12.65	12.84	12.37	12.42	12.46	12.34
53 54	106	14.68 14.85	14.73 14.89	14.50 14.57	14.78 14.90	14.85 14.96	14.69	14.72	14.90 14.98	14.95 14.95	14.43 14.33	14.52	14.28
54 61	106 242	14.85		14.57	14.90	14.96	14.63	14.82 17.68				14.51	14.29 17.47
01	242	14.68	17.46	17.52	17.04	17.00	15.51	17.08	17.85	17.86	17.60	17.67	17.47
5GHz - 40MHz													
		UN		_	II 2A		UNII 2C		-	III 3			
RU Index										Ch. 159			
		Average											
0	26	10.93	10.53	10.99	10.57	10.97	10.59	10.81	10.98	10.52	-		
8	26	10.66	10.75	10.55	10.80	10.66	10.71	10.89	10.57	10.57	-		
17	26	10.48	10.53	10.61	10.72	10.72	10.71	10.83	10.74	10.52	-		
37	52	12.66	12.56	12.82	12.87	12.51	12.66	12.92	12.89	12.46	-		
40 44	52 52	12.83 12.84	12.64 12.65	12.61 12.83	12.82 12.97	12.57 12.85	12.67 12.75	12.80 12.88	12.78 12.96	12.84 12.64	-		
44 53	106	12.84	12.00	12.83	12.97	12.85	12.75	12.88	12.96	12.64	-		
53 54	106	14.45	14.78	14.48	14.59	14.74	14.80	14.95	14.51	14.59	-		
56	106	14.62	14.47	14.60	14.75	14.94	14.91	14.56	14.72	14.71	•		
61	242	12.87	16.49	16.67	13.66	14.58	16.84	16.97	16.68	16.55			
62	242	12.07	16.48	16.59	13.56	14.74	16.85	16.98	16.84	16.58			
65	484	12.61	16.75	16.47	13.69	14.80	16.76	16.92	16.96	16.88			
00	-10-1	12.01	10.10	-			10.70	10.52	10.00	10.00			
				5G	Hz - 80N	/IHz							
		UNII 1	UNII 1		UNII 2C		UNII 3						
RU Index	Tones	Ch. 42	Ch. 58	Ch. 106	Ch. 122	Ch. 138	Ch. 155						
		Average	Average	Average	Average	Average	Average						
0	26	10.98	10.88	10.54	10.57	10.69	10.45						
18	26	10.70	10.60	10.80	10.63	10.75	10.52						
36	26	10.67	10.62	10.62	10.57	10.65	10.55						
37	52	12.80	12.59	12.50	12.55	12.74	12.70						
44	52	12.89	12.91	12.84	12.97	12.96	12.72						
52	52	12.51	12.75	12.56	12.60	12.69	12.88						
53	106	14.47	14.55	14.49	14.60	14.65	14.71						
56	106	14.82	14.99	14.86	14.83	14.99	14.65						
60	106	14.59	14.38	14.60	14.62	14.70	14.78						
61	242	11.89	12.10	12.06	15.85	15.36	15.51						
62	242	11.60	12.30	12.38	15.99	15.68	15.79						
64	242	11.98	12.07	12.12	15.94	15.42	15.56						
65	484	11.62	12.26	11.96	15.63	15.72	15.65						
66 67	484	11.76	12.38	12.01	15.71	15.85	15.86						
	996	11.63	12.32	11.91	15.50	15.61	15.73						

Table 3 Maximum 5 GHz 802.11ax RU Output Power – Ant 1

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						5GHz -	20MHz						
		UNII 1			UNII 2A		UNII 2C			UNII 3			
RU Index	Tones	Ch. 36	Ch. 40	Ch. 48	Ch. 52	Ch. 56	Ch. 64	Ch. 100	Ch. 120	Ch. 144	Ch. 149	Ch. 157	Ch. 165
		Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average
0	26	10.92	10.90	10.70	10.99	10.50	10.74	10.80	10.63	10.83	10.65	10.92	10.78
4	26	10.85	10.80	10.90	10.76	10.90	10.95	10.97	10.87	10.95	10.92	10.96	10.90
8	26	10.67	10.52	10.82	10.46	10.67	10.74	10.71	10.36	10.65	10.51	10.77	10.73
37	52	12.62	12.67	12.88	12.78	12.83	12.96	12.93	12.82	12.90	12.69	12.74	12.72
39	52	12.90	12.84	12.59	12.85	12.53	12.71	12.93	12.82	12.93	12.76	12.99	12.85
40	52	12.69	12.83	12.55	12.73	12.47	12.61	12.84	12.64	12.78	12.60	12.81	12.71
53	106	14.62	14.62	14.76	14.82	14.83	14.99	14.93	14.68	14.69	14.74	14.83	14.65
54	106	14.77	14.71	14.87	14.76	14.96	14.67	14.85	14.51	14.72	14.53	14.68	14.61
61	242	14.74	17.71	17.89	17.50	17.58	15.89	17.59	17.68	17.71	17.70	17.83	17.69
5GHz - 40MHz													
		UN	III 1	UN	II 2A	UNII 2C			UNII 3				
RU Index	Tones	Ch. 38	Ch. 46	Ch. 54	Ch. 62	Ch. 102	Ch.118	Ch.142	Ch. 151	Ch. 159			
		Average	Average	Average	Average	Average	Average	Average	Average	Average			
0	26	10.86	10.92	10.83	10.94	10.83	10.68	10.61	10.60	10.76			
8	26	10.56	10.65	10.92	10.95	10.65	10.79	10.98	10.67	10.84	-		
17	26	10.46	10.64	10.78	10.95	10.86	10.86	10.54	10.65	10.86	-		
37	52	12.68	12.87	12.76	12.51	12.72	12.89	12.68	12.91	12.85	-		
41	52	12.55	12.78	12.70	12.71	12.88	12.82	12.58	12.89	12.79			
44	52	12.83	12.99	12.68	12.77	12.95	12.78	12.69	12.89	12.89			
53	106	14.76	14.53	14.52	14.54	14.50	14.53	14.89	14.83	14.54	-		
55	106	14.88	14.75	14.73	14.73	14.66	14.59	14.90	14.66	14.62	-		
56	106	14.87	14.60	14.52	14.51	14.68	14.38	14.72	14.86	14.44	-		
61	242	12.73	16.73	16.48	13.91	14.72	16.65	16.86	16.97	16.65	-		
62	242	12.67	16.72	16.64	13.81	14.99	16.78	16.81	16.99	16.81	-		
65	484	12.47	16.43	16.81	13.43	14.50	16.43	16.56	16.59	16.94			
				5G	Hz - 80N	/IHz							
		UNII 1	UNII 1		UNII 2C		UNII 3						
RU Index	Tones	Ch. 42	Ch. 58	Ch. 106	Ch. 122	Ch. 138	Ch. 155						
		Average	Average	Average	Average	Average	Average						
0	26	10.50	10.80	10.97	10.98	10.61	10.71						
18	26	10.60	10.61	10.93	10.86	10.97	10.93						
36	26	10.60	10.95	10.78	10.94	10.49	10.96						
37	52	12.63	12.42	12.75	12.52	12.58	12.68						
44	52	12.64	12.65	12.98	12.74	12.74	12.61						
52	52	12.85	12.66	12.68	12.42	12.52	12.72						
53	106	14.74	14.58	14.81	14.77	14.72	14.79						
57	106	14.74	14.64	14.64	14.86	14.95	14.61						
60	106	14.98	14.81	14.79	14.55	14.59	14.76						
61	242	11.77	12.13	12.23	15.99	15.88	15.89						
63	242	11.50	12.20	12.48	15.57	15.74	15.71						
64	242	11.79	12.17	12.45	15.48	15.84	15.49						
65	484	11.85	12.15	11.96	15.78	15.94	15.65						
66	484	11.95	12.29	12.07	15.96	15.96	15.66						
67		11.85	12.23	12.14	15.63	15.59	15.92						

Table 4Maximum 5 GHz 802.11ax RU Output Power – Ant 2

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