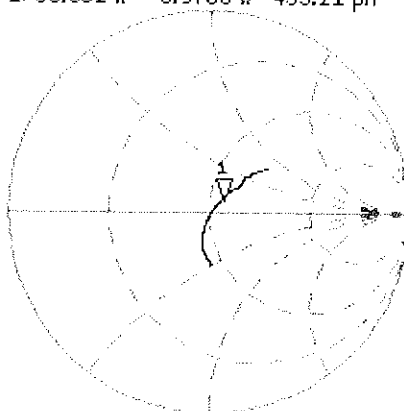


Impedance Measurement Plot for Head TSL

17 Aug 2017 12:38:03
 CH1 S11 1 U FS 1: 55.682 Ω 6.9766 Ω 453.21 μH 2 450.000 000 MHz

*
 Del
 CA



Avg
 16

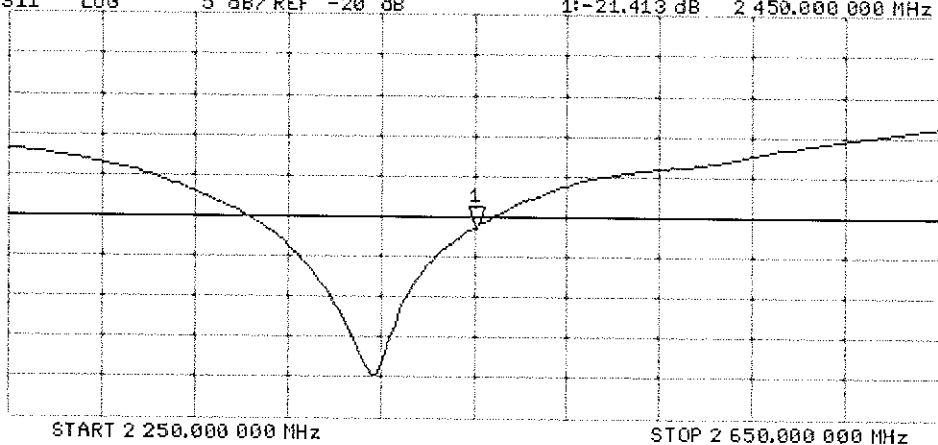
H1d

CH2 S11 LOG 5 dB/REF -20 dB 1: -21.413 dB 2 450.000 000 MHz

CA

Avg
 16

H1d



DASY5 Validation Report for Body TSL

Date: 17.08.2017

Test Laboratory: SPEAG, Zurich, Switzerland

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN: 719

Communication System: UID 0 - CW; Frequency: 2450 MHz

Medium parameters used: $f = 2450$ MHz; $\sigma = 2.03$ S/m; $\epsilon_r = 51.9$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

- Probe: EX3DV4 - SN7349; ConvF(8.1, 8.1, 8.1); Calibrated: 31.05.2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 28.03.2017
- Phantom: Flat Phantom 5.0 (back); Type: QD 000 P50 AA; Serial: 1002
- DASY52 52.10.0(1446); SEMCAD X 14.6.10(7417)

Dipole Calibration for Body Tissue/Pin=250 mW, d=10mm/Zoom Scan (7x7x7)/Cube 0:

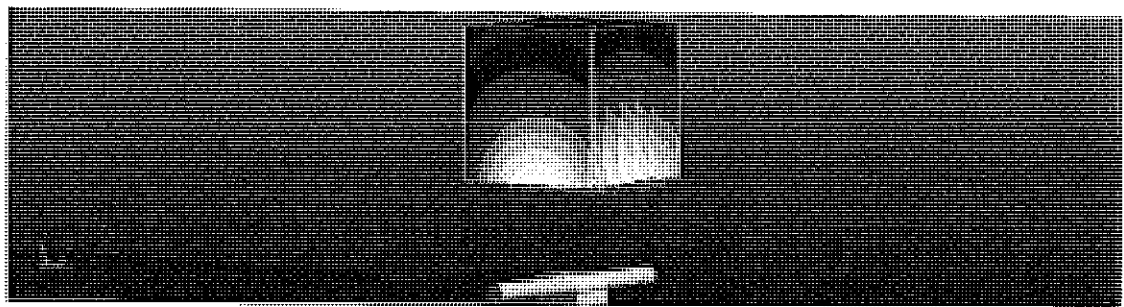
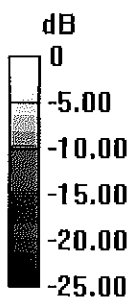
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 103.0 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 25.2 W/kg

SAR(1 g) = 12.8 W/kg; SAR(10 g) = 6 W/kg

Maximum value of SAR (measured) = 19.8 W/kg

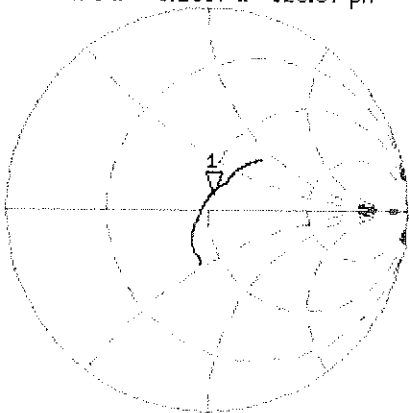


0 dB = 19.8 W/kg = 12.97 dBW/kg

Impedance Measurement Plot for Body TSL

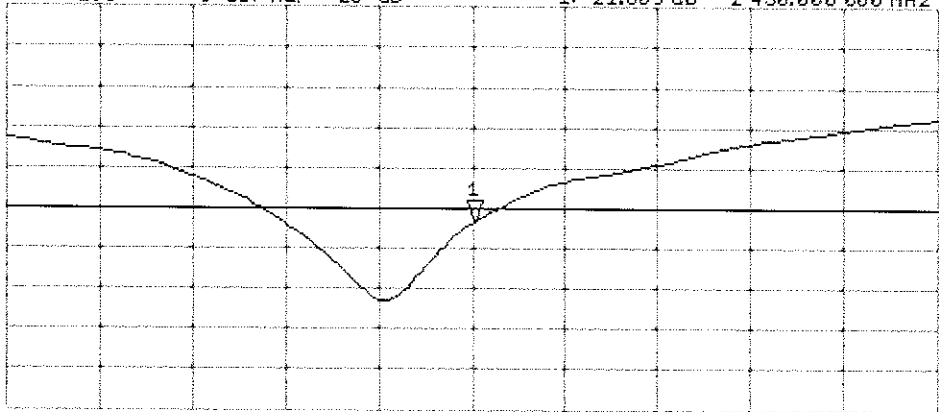
17 Aug 2017 12:37:27
[CH1] S11 1 U FS 1: 51.379 Ω 8.1367 Ω 528.57 μ H 2 450.000 000 MHz

*
De1
C4
Avg
16
H1d



CH2 S11 LOG 5 dB/REF -20 dB 1: -21.809 dB 2 450.000 000 MHz

C4
Avg
16
H1d



Certification of Calibration

Object D2450V2 – SN: 719

Calibration procedure(s) Procedure for Calibration Extension for SAR Dipoles.

Extended Calibration date: 07/18/2018

Description: SAR Validation Dipole at 2450 MHz.

Calibration Equipment used:

Manufacturer	Model	Description	Cal Date	Cal Interval	Cal Due	Serial Number
Agilent	E4438C	ESG Vector Signal Generator	3/24/2017	Biennial	3/24/2019	MY42082385
Agilent	8753ES	S-Parameter Network Analyzer	9/14/2017	Annual	9/14/2018	US39170118
Amplifier Research	15S1G6	Amplifier	CBT	N/A	CBT	433971
Anritsu	ML2495A	Power Meter	11/28/2017	Annual	11/28/2018	1039008
Anritsu	MA2411B	Pulse Power Sensor	3/2/2018	Annual	3/2/2019	1207364
Anritsu	MA2411B	Pulse Power Sensor	11/15/2017	Annual	11/15/2018	1339007
Control Company	4040	Therm./Clock/Humidity Monitor	3/31/2017	Biennial	3/31/2019	170232394
Control Company	4352	Ultra Long Stem Thermometer	5/2/2017	Biennial	5/2/2019	170330156
Keysight	772D	Dual Directional Coupler	CBT	N/A	CBT	MY52180215
Keysight Technologies	85033E	Standard Mechanical Calibration Kit (DC to 9GHz, 3.5mm)	6/4/2018	Annual	6/4/2019	MY53401181
Mini-Circuits	BW-N20W5+	DC to 18 GHz Precision Fixed 20 dB Attenuator	CBT	N/A	CBT	N/A
Mini-Circuits	NLP-2950+	Low Pass Filter DC to 2700 MHz	CBT	N/A	CBT	N/A
Narda	4772-3	Attenuator (3dB)	CBT	N/A	CBT	9406
Pasternack	PE2209-10	Bidirectional Coupler	CBT	N/A	CBT	N/A
Pasternack	PE5011-1	Torque Wrench	7/19/2017	Biennial	7/19/2019	N/A
SPEAG	DAE4	Dasy Data Acquisition Electronics	3/7/2018	Annual	3/7/2019	1368
SPEAG	DAE4	Dasy Data Acquisition Electronics	8/9/2017	Annual	8/9/2018	1323
SPEAG	DAK-3.5	Dielectric Assessment Kit	9/12/2017	Annual	9/12/2018	1091
SPEAG	ES3DV3	SAR Probe	3/13/2018	Annual	3/13/2019	3319
SPEAG	ES3DV3	SAR Probe	8/14/2017	Annual	8/14/2018	3332

Measurement Uncertainty = $\pm 23\%$ (k=2)

	Name	Function	Signature
Calibrated By:	Brodie Halfoster	Test Engineer	<i>BRODIE HALFOSTER</i>
Approved By:	Kaitlin O'Keefe	Senior Technical Manager	<i>KOK</i>

DIPOLE CALIBRATION EXTENSION

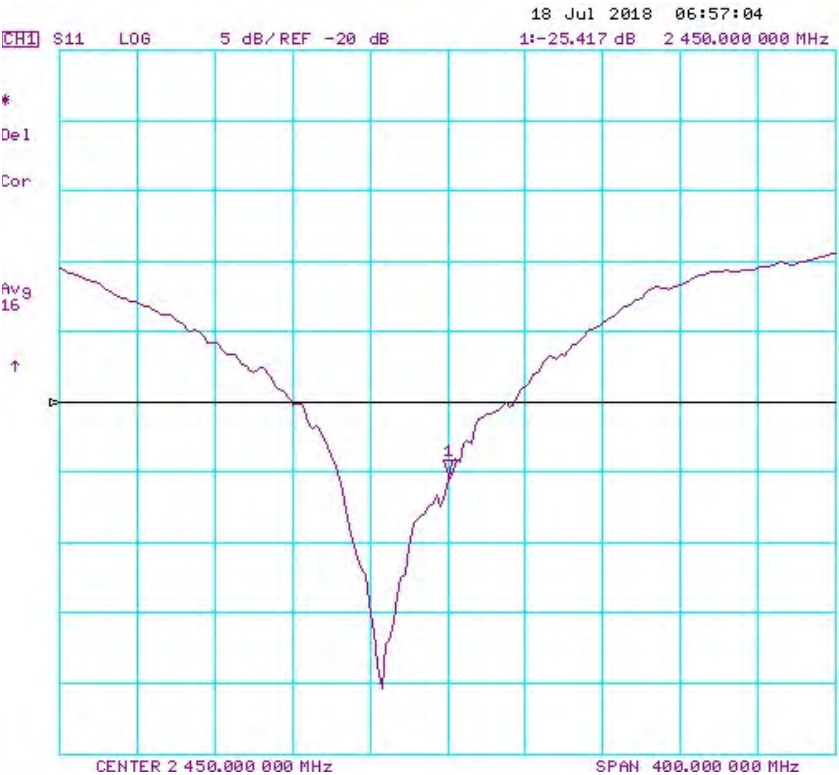
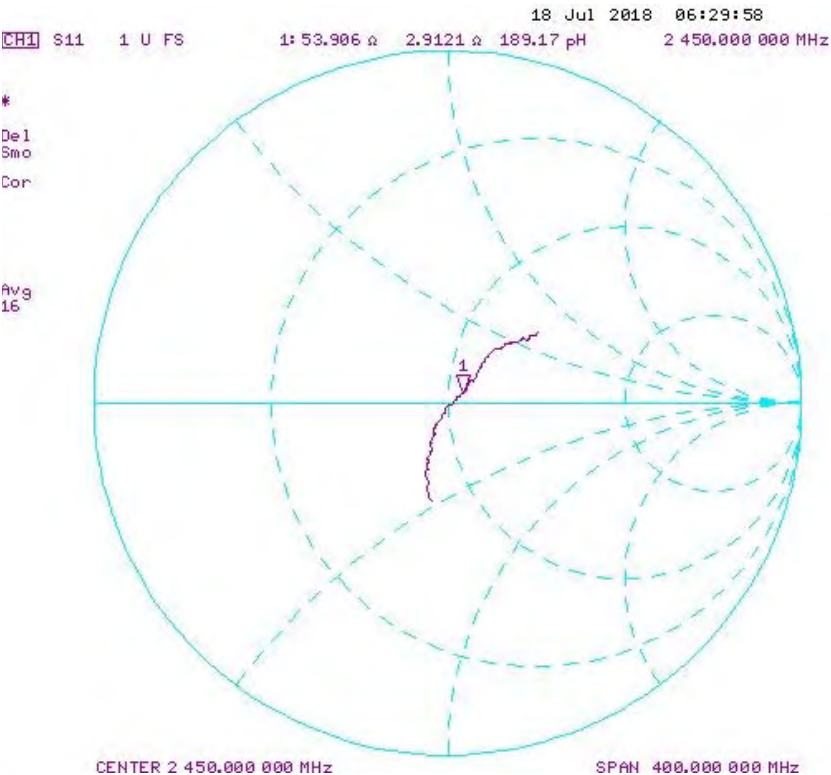
Per KDB 865664 D01, calibration intervals of up to three years may be considered for reference dipoles when it is demonstrated that the SAR target, impedance and return loss of a dipole have remained stable according to the following requirements:

1. The measured SAR does not deviate more than 10% from the target on the calibration certificate.
2. The return-loss does not deviate more than 20% from the previous measurement and meets the required 20dB minimum return-loss requirement.
3. The measurement of real or imaginary parts of impedance does not deviate more than 5Ω from the previous measurement.

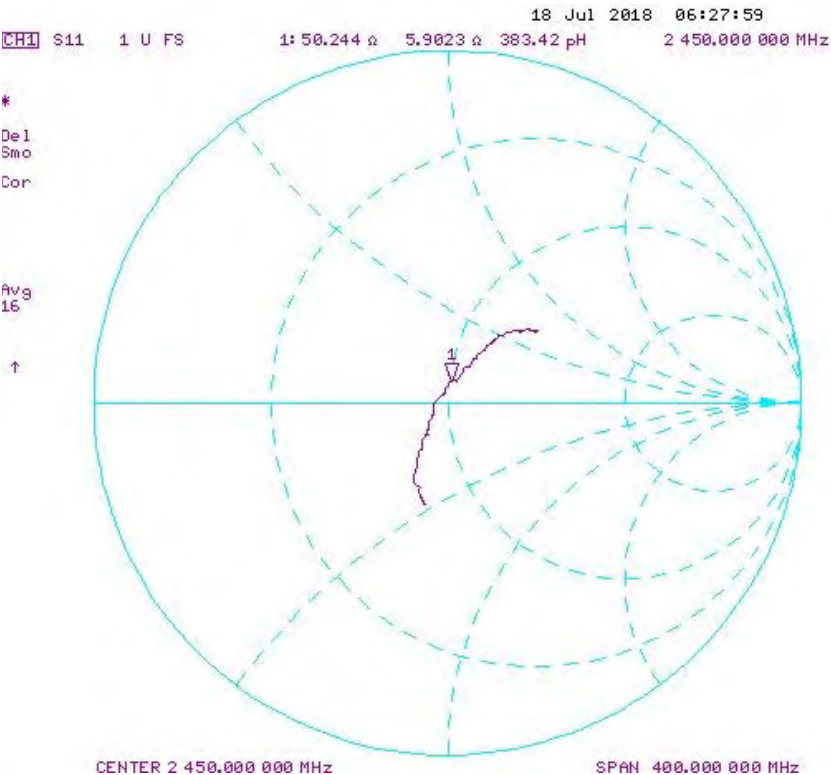
The following dipole was checked to pass the above 3 requirements to have 2-year calibration period from the calibration date:

Calibration Date	Extension Date	Certificate Electrical Delay (ns)	Certificate SAR Target Head (1g) W/kg @ 20.0 dBm	Measured Head SAR (1g) W/kg @ 20.0 dBm	Deviation 1g (%)	Certificate SAR Target Body (10g) W/kg @ 20.0 dBm	Measured Body SAR (10g) W/kg @ 20.0 dBm	Deviation 10g (%)	Certificate Impedance Head (Ohm) Real	Measured Impedance Head (Ohm) Real	Difference (Ohm) Real	Certificate Impedance Head (Ohm) Imaginary	Measured Impedance Head (Ohm) Imaginary	Difference (Ohm) Imaginary	Certificate Return Loss Head (dB)	Measured Return Loss Head (dB)	Deviation (%)	PASS/FAIL
8/17/2017	7/18/2018	1.150	5.19	5.46	5.20%	2.43	2.51	3.29%	55.7	53.9	1.8	7.0	2.9	4.1	-21.4	-25.4	-18.70%	PASS
Calibration Date	Extension Date	Certificate Electrical Delay (ns)	Certificate SAR Target Body (1g) W/kg @ 20.0 dBm	Measured Body SAR (1g) W/kg @ 20.0 dBm	Deviation 1g (%)	Certificate SAR Target Body (10g) W/kg @ 20.0 dBm	Measured Body SAR (10g) W/kg @ 20.0 dBm	Deviation 10g (%)	Certificate Impedance Body (Ohm) Real	Measured Impedance Body (Ohm) Real	Difference (Ohm) Real	Certificate Impedance Body (Ohm) Imaginary	Measured Impedance Body (Ohm) Imaginary	Difference (Ohm) Imaginary	Certificate Return Loss Body (dB)	Measured Return Loss Body (dB)	Deviation (%)	PASS/FAIL
8/17/2017	7/18/2018	1.150	5.01	5.19	3.59%	2.37	2.38	0.42%	51.4	50.2	1.2	8.1	5.9	2.2	-21.8	-24.6	-12.80%	PASS

Impedance & Return-Loss Measurement Plot for Head TSL



Impedance & Return-Loss Measurement Plot for Body TSL





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

Accreditation No.: **SCS 0108**

Client **PC Test**

Certificate No: **D2450V2-797_Sep17**

CALIBRATION CERTIFICATE

Object **D2450V2 - SN:797**

Calibration procedure(s) **QA CAL-05.v9**
 Calibration procedure for dipole validation kits above 700 MHz

Calibration date: **September 11, 2017**

SCS
10/03/2017
Extended PMV
9/20/2018

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-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. 217-02522)	Apr-18
Reference 20 dB Attenuator	SN: 5058 (20k)	07-Apr-17 (No. 217-02528)	Apr-18
Type-N mismatch combination	SN: 5047.2 / 06327	07-Apr-17 (No. 217-02529)	Apr-18
Reference Probe EX3DV4	SN: 7349	31-May-17 (No. EX3-7349_May17)	May-18
DAE4	SN: 601	28-Mar-17 (No. DAE4-601_Mar17)	Mar-18
Secondary Standards	ID #	Check Date (in house)	Scheduled Check
Power meter EPM-442A	SN: GB37480704	07-Oct-15 (in house check Oct-16)	In house check: Oct-18
Power sensor HP 8481A	SN: US37292783	07-Oct-15 (in house check Oct-16)	In house check: Oct-18
Power sensor HP 8481A	SN: MY41092317	07-Oct-15 (in house check Oct-18)	In house check: Oct-18
RF generator R&S SMT-06	SN: 100972	15-Jun-15 (in house check Oct-16)	In house check: Oct-18
Network Analyzer HP 8753E	SN: US37390585	18-Oct-01 (in house check Oct-16)	In house check: Oct-17

Calibrated by: **Michael Weber** Function: **Laboratory Technician**

Approved by: **Katja Pokovic** Technical Manager

Signature

Issued: September 11, 2017

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



S Schweizerischer Kalibrierdienst
C Service suisse d'étalonnage
S 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

Accreditation No.: **SCS 0108**

Glossary:

TSL	tissue simulating liquid
ConvF	sensitivity in TSL / NORM x,y,z
N/A	not applicable or not measured

Calibration is Performed According to the Following Standards:

- IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013
- IEC 62209-1, "Measurement procedure for the assessment of Specific Absorption Rate (SAR) from hand-held and body-mounted devices used next to the ear (frequency range of 300 MHz to 6 GHz)", July 2016
- IEC 62209-2, "Procedure to determine the Specific Absorption Rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)", March 2010
- KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

Additional Documentation:

- DASY4/5 System Handbook

Methods Applied and Interpretation of Parameters:

- Measurement Conditions:** Further details are available from the Validation Report at the end of the certificate. All figures stated in the certificate are valid at the frequency indicated.
- Antenna Parameters with TSL:** The dipole is mounted with the spacer to position its feed point exactly below the center marking of the flat phantom section, with the arms oriented parallel to the body axis.
- Feed Point Impedance and Return Loss:** These parameters are measured with the dipole positioned under the liquid filled phantom. The impedance stated is transformed from the measurement at the SMA connector to the feed point. The Return Loss ensures low reflected power. No uncertainty required.
- Electrical Delay:** One-way delay between the SMA connector and the antenna feed point. No uncertainty required.
- SAR measured:** SAR measured at the stated antenna input power.
- SAR normalized:** SAR as measured, normalized to an input power of 1 W at the antenna connector.
- SAR for nominal TSL parameters:** The measured TSL parameters are used to calculate the nominal SAR result.

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%.

Measurement Conditions

DASY system configuration, as far as not given on page 1.

DASY Version	DASY5	V52.10.0
Extrapolation	Advanced Extrapolation	
Phantom	Modular Flat Phantom	
Distance Dipole Center - TSL	10 mm	with Spacer
Zoom Scan Resolution	dx, dy, dz = 5 mm	
Frequency	2450 MHz $\pm$ 1 MHz	

Head TSL parameters

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	39.2	1.80 mho/m
Measured Head TSL parameters	(22.0 $\pm$ 0.2) °C	37.8 $\pm$ 6 %	1.86 mho/m $\pm$ 6 %
Head TSL temperature change during test	< 0.5 °C	---	---

SAR result with Head TSL

SAR averaged over 1 cm ³ (1 g) of Head TSL	Condition	
SAR measured	250 mW input power	13.5 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	52.7 W/kg $\pm$ 17.0 % (k=2)

SAR averaged over 10 cm ³ (10 g) of Head TSL	condition	
SAR measured	250 mW input power	6.28 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	24.8 W/kg $\pm$ 16.5 % (k=2)

Body TSL parameters

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Body TSL parameters	22.0 °C	52.7	1.95 mho/m
Measured Body TSL parameters	(22.0 $\pm$ 0.2) °C	51.9 $\pm$ 6 %	2.04 mho/m $\pm$ 6 %
Body TSL temperature change during test	< 0.5 °C	---	---

SAR result with Body TSL

SAR averaged over 1 cm ³ (1 g) of Body TSL	Condition	
SAR measured	250 mW input power	13.1 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	51.1 W/kg $\pm$ 17.0 % (k=2)

SAR averaged over 10 cm ³ (10 g) of Body TSL	condition	
SAR measured	250 mW input power	6.14 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	24.2 W/kg $\pm$ 16.5 % (k=2)

Appendix (Additional assessments outside the scope of SCS 0108)

Antenna Parameters with Head TSL

Impedance, transformed to feed point	$53.8 \Omega + 7.4 j\Omega$
Return Loss	- 21.9 dB

Antenna Parameters with Body TSL

Impedance, transformed to feed point	$49.7 \Omega + 9.1 j\Omega$
Return Loss	- 20.9 dB

General Antenna Parameters and Design

Electrical Delay (one direction)	1.152 ns
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After long term use with 100W radiated power, only a slight warming of the dipole near the feedpoint can be measured.

The dipole is made of standard semirigid coaxial cable. The center conductor of the feeding line is directly connected to the second arm of the dipole. The antenna is therefore short-circuited for DC-signals. On some of the dipoles, small end caps are added to the dipole arms in order to improve matching when loaded according to the position as explained in the "Measurement Conditions" paragraph. The SAR data are not affected by this change. The overall dipole length is still according to the Standard.

No excessive force must be applied to the dipole arms, because they might bend or the soldered connections near the feedpoint may be damaged.

Additional EUT Data

Manufactured by	SPEAG
Manufactured on	January 24, 2006

DASY5 Validation Report for Head TSL

Date: 11.09.2017

Test Laboratory: SPEAG, Zurich, Switzerland

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN: 797

Communication System: UID 0 - CW; Frequency: 2450 MHz

Medium parameters used: $f = 2450$ MHz; $\sigma = 1.86$ S/m; $\epsilon_r = 37.8$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

- Probe: EX3DV4 - SN7349; ConvF(8.12, 8.12, 8.12); Calibrated: 31.05.2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 28.03.2017
- Phantom: Flat Phantom 5.0 (front); Type: QD 000 P50 AA; Serial: 1001
- DASY52 52.10.0(1446); SEMCAD X 14.6.10(7417)

Dipole Calibration for Head Tissue/ $P_{in}=250$ mW, $d=10$ mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 113.5 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 26.9 W/kg

SAR(1 g) = 13.5 W/kg; SAR(10 g) = 6.28 W/kg

Maximum value of SAR (measured) = 21.6 W/kg

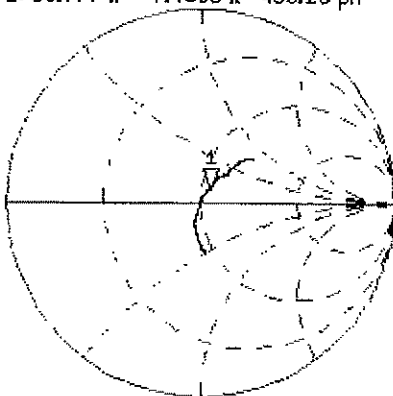


0 dB = 21.6 W/kg = 13.34 dBW/kg

Impedance Measurement Plot for Head TSL

11 Sep 2017 11:52:57
 CH1 S11 1 U FS 1: 53.777 Ω 7.4395 Ω 493.28 pF 2 450.000 000 MHz

*
 Del
 CA



AVG
 16

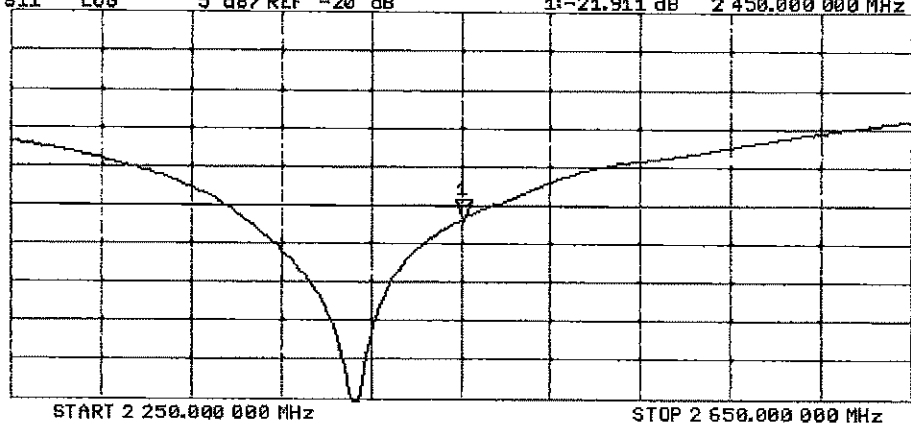
H1d

CH2 S11 LOG 5 dB/REF -20 dB 1: -21.911 dB 2 450.000 000 MHz

CA

AVG
 16

H1d



START 2 250.000 000 MHz

STOP 2 650.000 000 MHz

DASY5 Validation Report for Body TSL

Date: 11.09.2017

Test Laboratory: SPEAG, Zurich, Switzerland

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN: 797

Communication System: UID 0 - CW; Frequency: 2450 MHz

Medium parameters used: $f = 2450$ MHz; $\sigma = 2.04$ S/m; $\epsilon_r = 51.9$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

- Probe: EX3DV4 - SN7349; ConvF(8.1, 8.1, 8.1); Calibrated: 31.05.2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 28.03.2017
- Phantom: Flat Phantom 5.0 (back); Type: QD 000 P50 AA; Serial: 1002
- DASY52 52.10.0(1446); SEMCAD X 14.6.10(7417)

Dipole Calibration for Body Tissue/Pin=250 mW, d=10mm/Zoom Scan (7x7x7)/Cube 0:

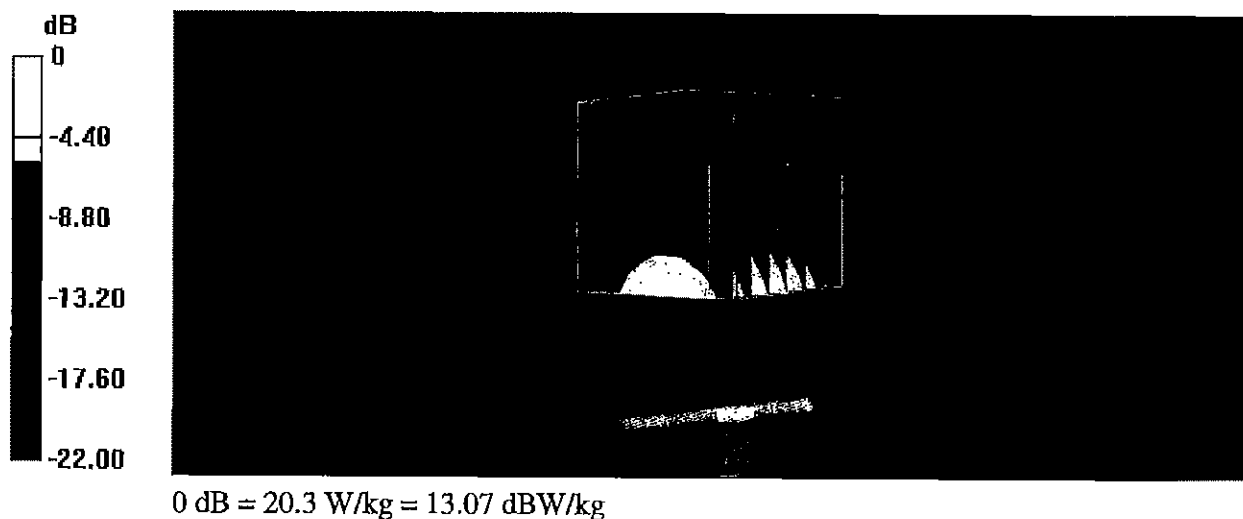
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 105.4 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 25.6 W/kg

SAR(1 g) = 13.1 W/kg; SAR(10 g) = 6.14 W/kg

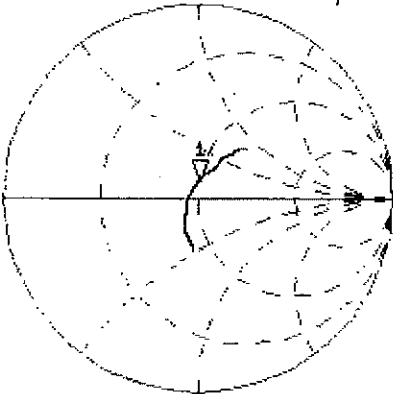
Maximum value of SAR (measured) = 20.3 W/kg



Impedance Measurement Plot for Body TSL

11 Sep 2017 11:52:10
CH1 S11 1 U FS 1: 49.725 Ω 9.0703 Ω 589.22 pH 2 450.000 000 MHz

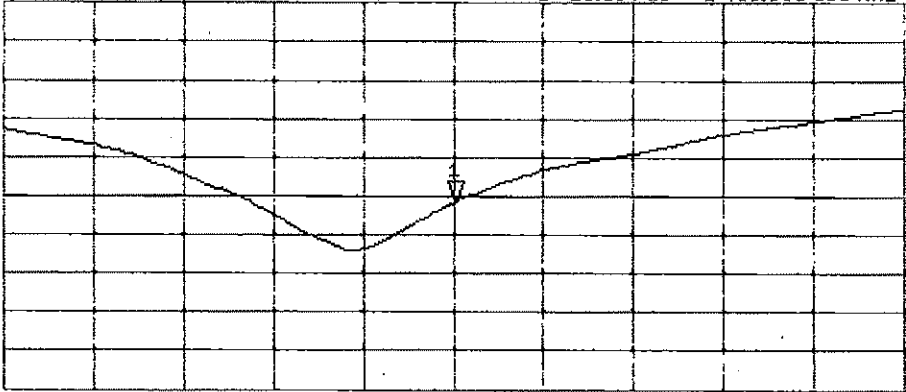
De1
CA



Avg
16
H1d

CH2 S11 LOG 5 dB/REF -20 dB 1:-20.854 dB 2 450.000 000 MHz

CA
Avg
16
H1d



START 2 250.000 000 MHz STOP 2 650.000 000 MHz

Certification of Calibration

Object D2450V2 – SN: 797

Calibration procedure(s) Procedure for Calibration Extension for SAR Dipoles.

Extended Calibration date: September 11, 2018

Description: SAR Validation Dipole at 2450 MHz.

Calibration Equipment used:

Manufacturer	Model	Description	Cal Date	Cal Interval	Cal Due	Serial Number
Control Company	4040	Therm./Clock/Humidity Monitor	3/31/2017	Biennial	3/31/2019	170232394
Control Company	4352	Ultra Long Stem Thermometer	5/2/2017	Biennial	5/2/2019	170330156
Amplifier Research	15S1G6	Amplifier	CBT	N/A	CBT	433971
Narda	4772-3	Attenuator (3dB)	CBT	N/A	CBT	9406
Keysight	772D	Dual Directional Coupler	CBT	N/A	CBT	MY52180215
Keysight Technologies	85033E	Standard Mechanical Calibration Kit (DC to 9GHz, 3.5mm)	6/4/2018	Annual	6/4/2019	MY53401181
Agilent	8753ES	S-Parameter Vector Network Analyzer	8/30/2018	Annual	8/30/2019	MY40003841
Mini-Circuits	BW-N20W5+	DC to 18 GHz Precision Fixed 20 dB Attenuator	CBT	N/A	CBT	N/A
SPEAG	DAK-3.5	Dielectric Assessment Kit	5/15/2018	Annual	5/15/2019	1070
SPEAG	EX3DV4	SAR Probe	7/20/2018	Annual	7/20/2019	7410
SPEAG	DAE4	Dasy Data Acquisition Electronics	7/11/2018	Annual	7/11/2019	1322
SPEAG	ES3DV3	SAR Probe	3/13/2018	Annual	3/13/2019	3319
SPEAG	DAE4	Dasy Data Acquisition Electronics	3/7/2018	Annual	3/7/2019	1368
Anritsu	MA2411B	Pulse Power Sensor	3/2/2018	Annual	7/20/2019	1207364
Anritsu	MA2411B	Pulse Power Sensor	3/2/2018	Annual	3/2/2019	1339018
Anritsu	ML2495A	Power Meter	10/22/2017	Annual	10/22/2018	1328004
Agilent	N5182A	MXG Vector Signal Generator	4/18/2018	Annual	4/18/2019	MY47420800
Seekonk	NC-100	Torque Wrench	7/11/2018	Annual	7/11/2019	N/A
MiniCircuits	VLF-6000+	Low Pass Filter	CBT	N/A	CBT	N/A
Narda	4014C-6	4 - 8 GHz SMA 6 dB Directional Coupler	CBT	N/A	CBT	N/A

Note: CBT (Calibrated Before Testing). Prior to testing, the measurement paths containing a cable, amplifier, attenuator, coupler or filter were connected to a calibrated source (i.e. a signal generator) to determine the losses of the measurement path.

Measurement Uncertainty = $\pm 23\%$ (k=2)

	Name	Function	Signature
Calibrated By:	Brodie Halfoster	Team Lead Engineer	<i>BRODIE HALFOSTER</i>
Approved By:	Kaitlin O'Keefe	Senior Technical Manager	<i>KOK</i>

DIPOLE CALIBRATION EXTENSION

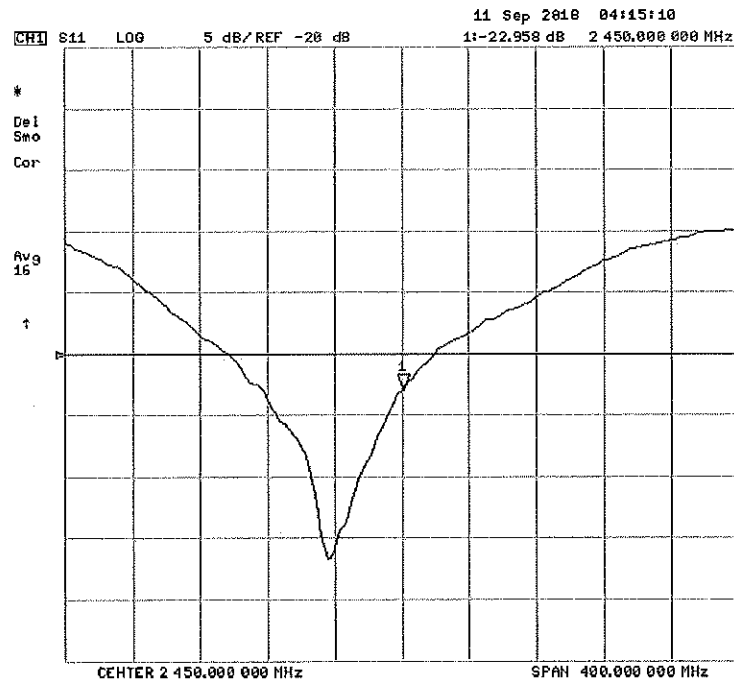
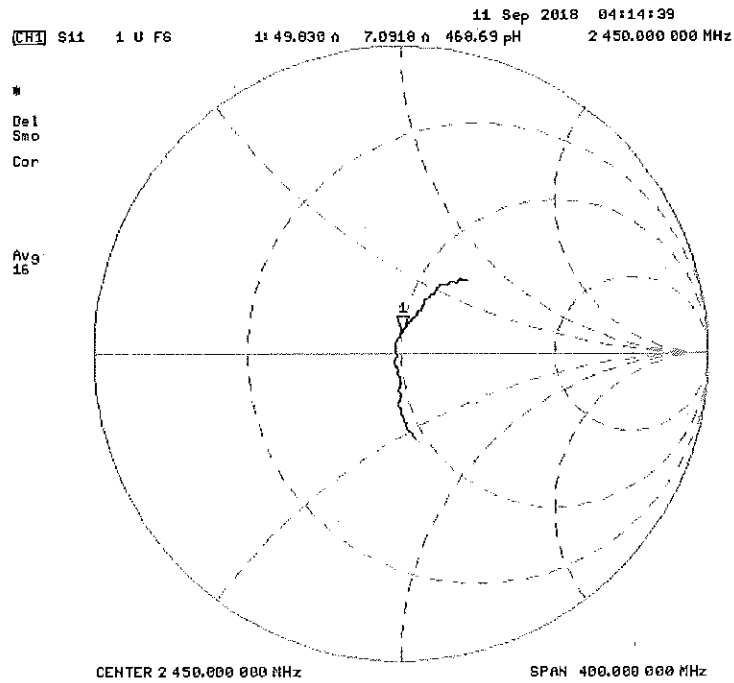
Per KDB 865664 D01, calibration intervals of up to three years may be considered for reference dipoles when it is demonstrated that the SAR target, impedance and return loss of a dipole have remained stable according to the following requirements:

1. The measured SAR does not deviate more than 10% from the target on the calibration certificate.
2. The return-loss does not deviate more than 20% from the previous measurement and meets the required 20dB minimum return-loss requirement.
3. The measurement of real or imaginary parts of impedance does not deviate more than 5Ω from the previous measurement.

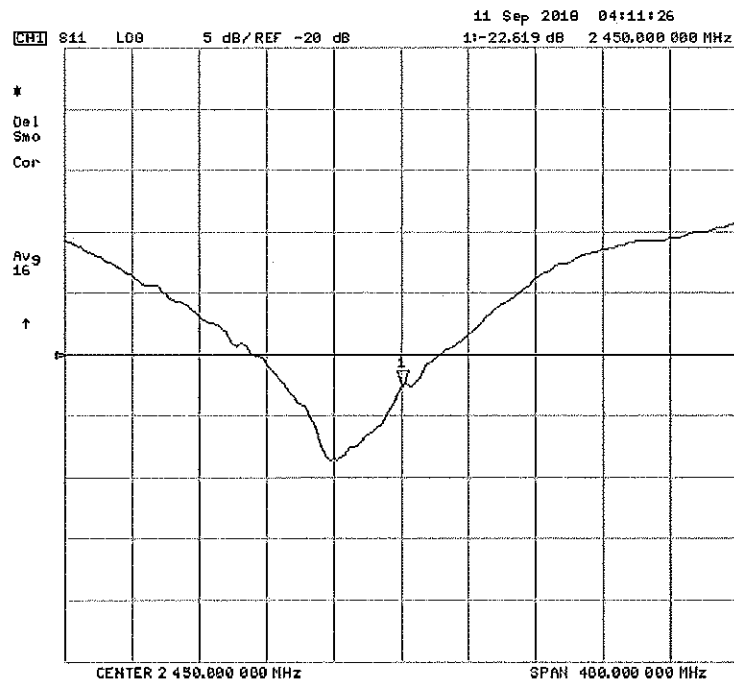
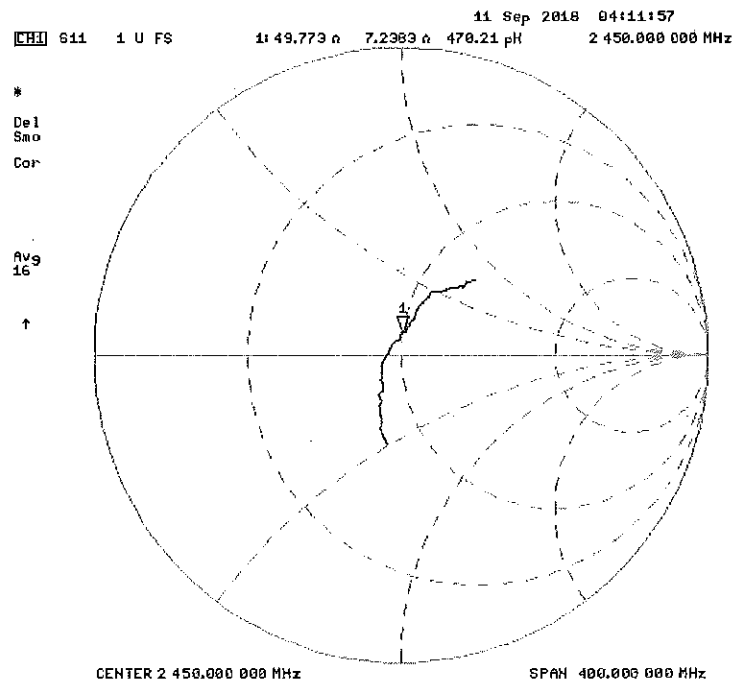
The following dipole was checked to pass the above 3 requirements to have 2-year calibration period from the calibration date:

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100

Impedance & Return-Loss Measurement Plot for Head TSL



Impedance & Return-Loss Measurement Plot for Body TSL





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 Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: **SCS 0108**

Client **PC Test**

Certificate No: **D2600V2-1004_Apr18**

CALIBRATION CERTIFICATE

Object **D2600V2 - SN:1004**

Calibration procedure(s) **QA CAL-05.v10**
Calibration procedure for dipole validation kits above 700 MHz

BN ✓
 05-01-2018

Calibration date: **April 11, 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 $(22 \pm 3)^{\circ}\text{C}$ 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: 5058 (20k)	04-Apr-18 (No. 217-02682)	Apr-19
Type-N mismatch combination	SN: 5047.2 / 06327	04-Apr-18 (No. 217-02683)	Apr-19
Reference Probe EX3DV4	SN: 7349	30-Dec-17 (No. EX3-7349_Dec17)	Dec-18
DAE4	SN: 601	26-Oct-17 (No. DAE4-601_Oct17)	Oct-18

Secondary Standards	ID #	Check Date (in house)	Scheduled Check
Power meter EPM-442A	SN: GB37480704	07-Oct-15 (in house check Oct-16)	In house check: Oct-18
Power sensor HP 8481A	SN: US37292783	07-Oct-15 (in house check Oct-16)	In house check: Oct-18
Power sensor HP 8481A	SN: MY41092317	07-Oct-15 (in house check Oct-16)	In house check: Oct-18
RF generator R&S SMT-06	SN: 100972	15-Jun-15 (in house check Oct-16)	In house check: Oct-18
Network Analyzer HP 8753E	SN: US37390585	18-Oct-01 (in house check Oct-17)	In house check: Oct-18

Calibrated by: **Michael Weber** **Laboratory Technician**

Signature

Approved by: **Katja Pokovic** **Technical Manager**

Issued: April 12, 2018

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



Accredited by the Swiss Accreditation Service (SAS)

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Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: **SCS 0108**

Glossary:

TSL	tissue simulating liquid
ConvF	sensitivity in TSL / NORM x,y,z
N/A	not applicable or not measured

Calibration is Performed According to the Following Standards:

- IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013
- IEC 62209-1, "Measurement procedure for the assessment of Specific Absorption Rate (SAR) from hand-held and body-mounted devices used next to the ear (frequency range of 300 MHz to 6 GHz)", July 2016
- IEC 62209-2, "Procedure to determine the Specific Absorption Rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)", March 2010
- KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

Additional Documentation:

- DASY4/5 System Handbook

Methods Applied and Interpretation of Parameters:

- Measurement Conditions:** Further details are available from the Validation Report at the end of the certificate. All figures stated in the certificate are valid at the frequency indicated.
- Antenna Parameters with TSL:** The dipole is mounted with the spacer to position its feed point exactly below the center marking of the flat phantom section, with the arms oriented parallel to the body axis.
- Feed Point Impedance and Return Loss:** These parameters are measured with the dipole positioned under the liquid filled phantom. The impedance stated is transformed from the measurement at the SMA connector to the feed point. The Return Loss ensures low reflected power. No uncertainty required.
- Electrical Delay:** One-way delay between the SMA connector and the antenna feed point. No uncertainty required.
- SAR measured:** SAR measured at the stated antenna input power.
- SAR normalized:** SAR as measured, normalized to an input power of 1 W at the antenna connector.
- SAR for nominal TSL parameters:** The measured TSL parameters are used to calculate the nominal SAR result.

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%.

Measurement Conditions

DASY system configuration, as far as not given on page 1.

DASY Version	DASY5	V52.10.0
Extrapolation	Advanced Extrapolation	
Phantom	Modular Flat Phantom	
Distance Dipole Center - TSL	10 mm	with Spacer
Zoom Scan Resolution	dx, dy, dz = 5 mm	
Frequency	2600 MHz $\pm$ 1 MHz	

Head TSL parameters

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	39.0	1.96 mho/m
Measured Head TSL parameters	(22.0 $\pm$ 0.2) °C	37.8 $\pm$ 6 %	2.03 mho/m $\pm$ 6 %
Head TSL temperature change during test	< 0.5 °C	----	----

SAR result with Head TSL

SAR averaged over 1 cm³ (1 g) of Head TSL	Condition	
SAR measured	250 mW input power	14.3 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	55.9 W/kg $\pm$ 17.0 % (k=2)

SAR averaged over 10 cm³ (10 g) of Head TSL	condition	
SAR measured	250 mW input power	6.35 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	25.1 W/kg $\pm$ 16.5 % (k=2)

Body TSL parameters

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Body TSL parameters	22.0 °C	52.5	2.16 mho/m
Measured Body TSL parameters	(22.0 $\pm$ 0.2) °C	52.1 $\pm$ 6 %	2.19 mho/m $\pm$ 6 %
Body TSL temperature change during test	< 0.5 °C	----	----

SAR result with Body TSL

SAR averaged over 1 cm³ (1 g) of Body TSL	Condition	
SAR measured	250 mW input power	13.8 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	54.8 W/kg $\pm$ 17.0 % (k=2)

SAR averaged over 10 cm³ (10 g) of Body TSL	condition	
SAR measured	250 mW input power	6.20 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	24.7 W/kg $\pm$ 16.5 % (k=2)

Appendix (Additional assessments outside the scope of SCS 0108)

Antenna Parameters with Head TSL

Impedance, transformed to feed point	47.7 Ω - 5.7 j Ω
Return Loss	- 24.1 dB

Antenna Parameters with Body TSL

Impedance, transformed to feed point	46.0 Ω - 3.8 j Ω
Return Loss	- 24.9 dB

General Antenna Parameters and Design

Electrical Delay (one direction)	1.149 ns
----------------------------------	----------

After long term use with 100W radiated power, only a slight warming of the dipole near the feedpoint can be measured.

The dipole is made of standard semirigid coaxial cable. The center conductor of the feeding line is directly connected to the second arm of the dipole. The antenna is therefore short-circuited for DC-signals. On some of the dipoles, small end caps are added to the dipole arms in order to improve matching when loaded according to the position as explained in the "Measurement Conditions" paragraph. The SAR data are not affected by this change. The overall dipole length is still according to the Standard.

No excessive force must be applied to the dipole arms, because they might bend or the soldered connections near the feedpoint may be damaged.

Additional EUT Data

Manufactured by	SPEAG
Manufactured on	December 23, 2006

DASY5 Validation Report for Head TSL

Date: 11.04.2018

Test Laboratory: SPEAG, Zurich, Switzerland

DUT: Dipole 2600 MHz; Type: D2600V2; Serial: D2600V2 - SN: 1004

Communication System: UID 0 - CW; Frequency: 2600 MHz

Medium parameters used: $f = 2600$ MHz; $\sigma = 2.03$ S/m; $\epsilon_r = 37.8$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

- Probe: EX3DV4 - SN7349; ConvF(7.7, 7.7, 7.7); Calibrated: 30.12.2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 26.10.2017
- Phantom: Flat Phantom 5.0 (front); Type: QD 000 P50 AA; Serial: 1001
- DASY52 52.10.0(1446); SEMCAD X 14.6.10(7417)

Dipole Calibration for Head Tissue/Pin=250 mW, d=10mm/Zoom Scan (7x7x7)/Cube 0:

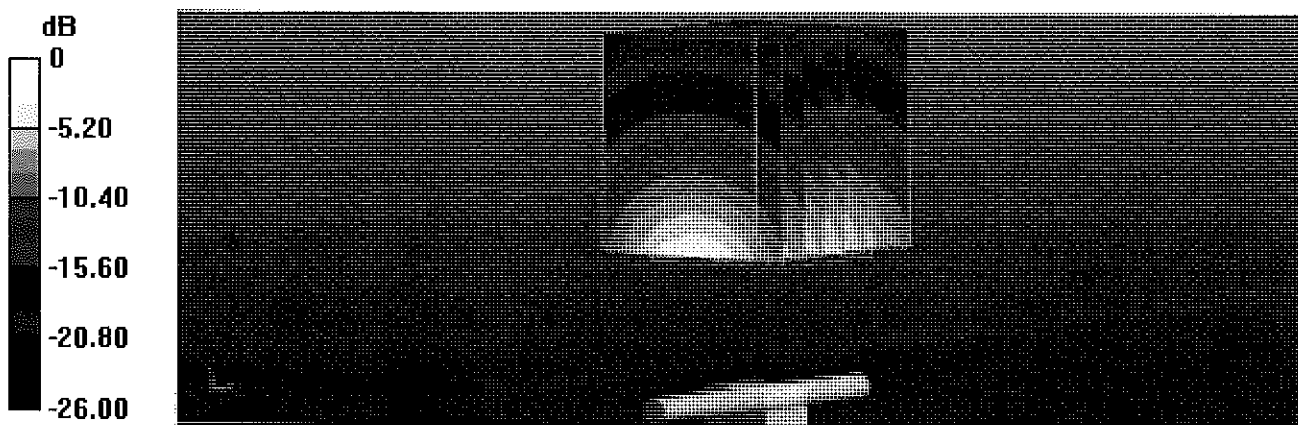
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 118.5 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 28.6 W/kg

SAR(1 g) = 14.3 W/kg; SAR(10 g) = 6.35 W/kg

Maximum value of SAR (measured) = 23.9 W/kg



0 dB = 23.9 W/kg = 13.78 dBW/kg

Impedance Measurement Plot for Head TSL

11 Apr 2018 11:25:16
 [CH1] S11 1 U FS 1: 47.721 Ω -5.6836 Ω 10.770 pF 2 500.000 000 MHz

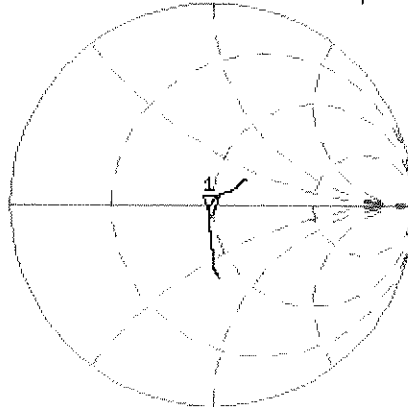
*

De1

CA

Avg
16

H1d

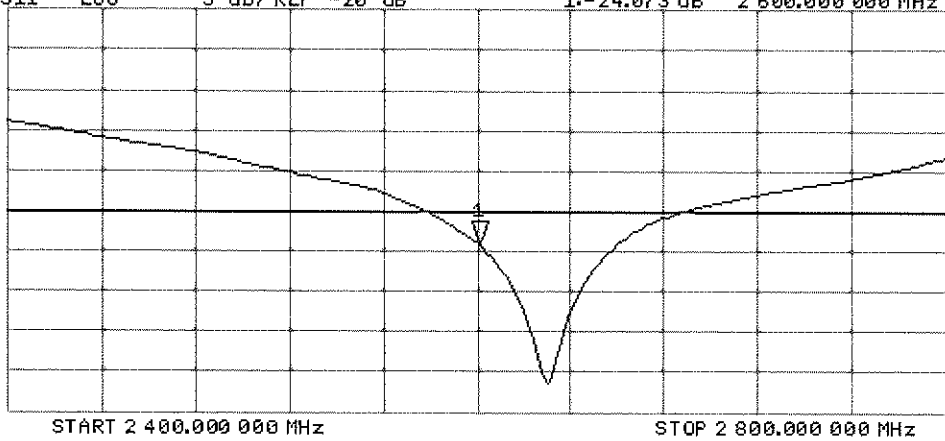


CH2 S11 LOG 5 dB/REF -20 dB 1: -24.073 dB 2 500.000 000 MHz

CA

Avg
16

H1d



DASY5 Validation Report for Body TSL

Date: 11.04.2018

Test Laboratory: SPEAG, Zurich, Switzerland

DUT: Dipole 2600 MHz; Type: D2600V2; Serial: D2600V2 - SN: 1004

Communication System: UID 0 - CW; Frequency: 2600 MHz

Medium parameters used: $f = 2600$ MHz; $\sigma = 2.19$ S/m; $\epsilon_r = 52.1$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

- Probe: EX3DV4 - SN7349; ConvF(7.81, 7.81, 7.81); Calibrated: 30.12.2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 26.10.2017
- Phantom: Flat Phantom 5.0 (back); Type: QD 000 P50 AA; Serial: 1002
- DASY52 52.10.0(1446); SEMCAD X 14.6.10(7417)

Dipole Calibration for Body Tissue/Pin=250 mW, d=10mm/Zoom Scan (7x7x7)/Cube 0:

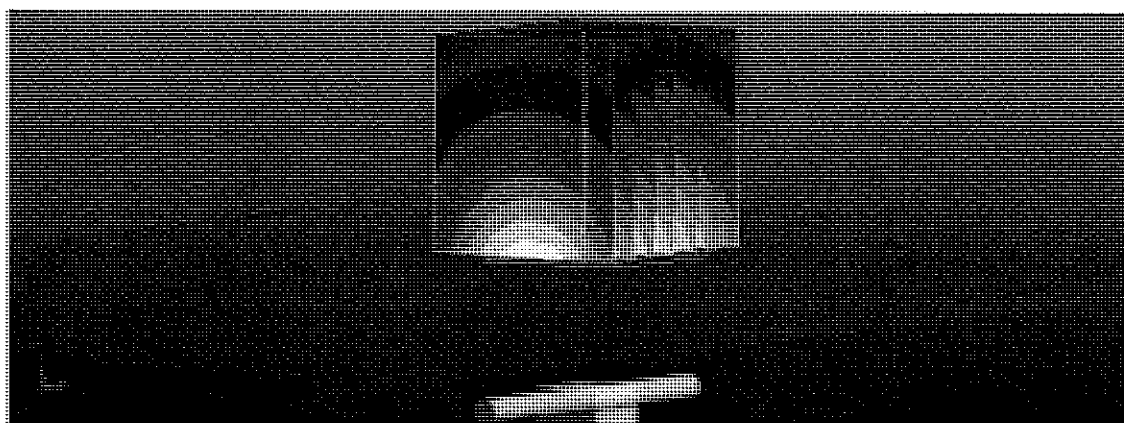
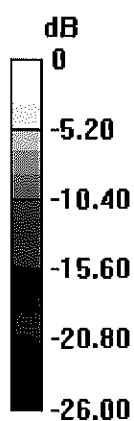
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 108.5 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 28.3 W/kg

SAR(1 g) = 13.8 W/kg; SAR(10 g) = 6.2 W/kg

Maximum value of SAR (measured) = 22.9 W/kg

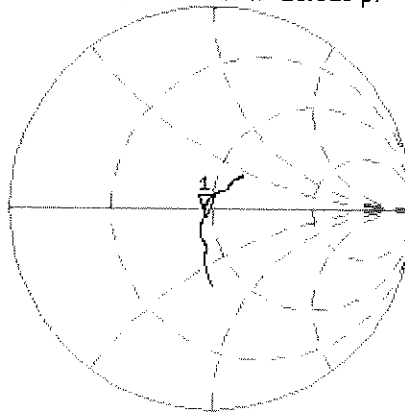


0 dB = 22.9 W/kg = 13.60 dBW/kg

Impedance Measurement Plot for Body TSL

CH1 S11 1 U FS 11 Apr 2018 11:24:36
 1: 46.039 Ω -3.7520 Ω 16.315 pF 2 600.000 000 MHz

*
 Del
 CA



Avg
 16

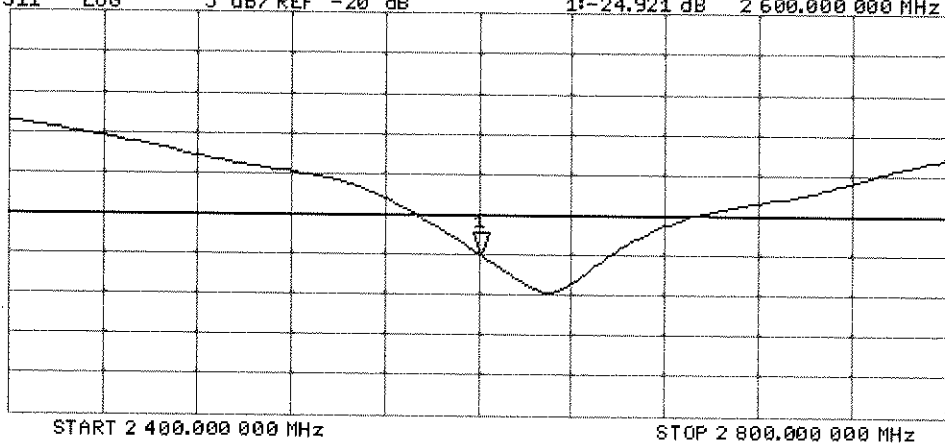
H1d

CH2 S11 LOG 5 dB/REF -20 dB 1: -24.921 dB 2 600.000 000 MHz

CA

Avg
 16

H1d





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 Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: **SCS 0108**

Client **PC Test**

Certificate No: **D2600V2-1064_Jun17**

CALIBRATION CERTIFICATE

Object **D2600V2 - SN:1064**

Calibration procedure(s) **QA CAL-05.v9**
Calibration procedure for dipole validation kits above 700 MHz

Calibration date: **June 07, 2017**

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

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

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID #	Cal Date (Certificate No.)	Scheduled Calibration
Power meter NRP	SN: 104778	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. 217-02522)	Apr-18
Reference 20 dB Attenuator	SN: 5058 (20k)	07-Apr-17 (No. 217-02528)	Apr-18
Type-N mismatch combination	SN: 5047.2 / 06327	07-Apr-17 (No. 217-02529)	Apr-18
Reference Probe EX3DV4	SN: 7349	31-Dec-16 (No. EX3-7349_Dec16)	Dec-17
DAE4	SN: 601	28-Mar-17 (No. DAE4-601_Mar17)	Mar-18

Secondary Standards	ID #	Check Date (in house)	Scheduled Check
Power meter EPM-442A	SN: GB37480704	07-Oct-15 (in house check Oct-16)	In house check: Oct-18
Power sensor HP 8481A	SN: US37292783	07-Oct-15 (in house check Oct-16)	In house check: Oct-18
Power sensor HP 8481A	SN: MY41092317	07-Oct-15 (in house check Oct-16)	In house check: Oct-18
RF generator R&S SMT-06	SN: 100972	15-Jun-15 (in house check Oct-16)	In house check: Oct-18
Network Analyzer HP 8753E	SN: US37390585	18-Oct-01 (in house check Oct-16)	In house check: Oct-17

Calibrated by: **Johannes Kurikka** Function: **Laboratory Technician**

Approved by: **Katja Pokovic** Technical Manager

Signature

[Signature]

[Signature]

Issued: June 8, 2017

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



Accredited by the Swiss Accreditation Service (SAS)

Accreditation No.: **SCS 0108**

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
ConvF	sensitivity in TSL / NORM x,y,z
N/A	not applicable or not measured

Calibration is Performed According to the Following Standards:

- IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013
- IEC 62209-1, "Measurement procedure for the assessment of Specific Absorption Rate (SAR) from hand-held and body-mounted devices used next to the ear (frequency range of 300 MHz to 6 GHz)", July 2016
- IEC 62209-2, "Procedure to determine the Specific Absorption Rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)", March 2010
- KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

Additional Documentation:

- DASY4/5 System Handbook

Methods Applied and Interpretation of Parameters:

- Measurement Conditions:** Further details are available from the Validation Report at the end of the certificate. All figures stated in the certificate are valid at the frequency indicated.
- Antenna Parameters with TSL:** The dipole is mounted with the spacer to position its feed point exactly below the center marking of the flat phantom section, with the arms oriented parallel to the body axis.
- Feed Point Impedance and Return Loss:** These parameters are measured with the dipole positioned under the liquid filled phantom. The impedance stated is transformed from the measurement at the SMA connector to the feed point. The Return Loss ensures low reflected power. No uncertainty required.
- Electrical Delay:** One-way delay between the SMA connector and the antenna feed point. No uncertainty required.
- SAR measured:** SAR measured at the stated antenna input power.
- SAR normalized:** SAR as measured, normalized to an input power of 1 W at the antenna connector.
- SAR for nominal TSL parameters:** The measured TSL parameters are used to calculate the nominal SAR result.

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%.

Measurement Conditions

DASY system configuration, as far as not given on page 1.

DASY Version	DASY5	V52.10.0
Extrapolation	Advanced Extrapolation	
Phantom	Modular Flat Phantom	
Distance Dipole Center - TSL	10 mm	with Spacer
Zoom Scan Resolution	dx, dy, dz = 5 mm	
Frequency	2600 MHz $\pm$ 1 MHz	

Head TSL parameters

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	39.0	1.96 mho/m
Measured Head TSL parameters	(22.0 $\pm$ 0.2) °C	37.3 $\pm$ 6 %	2.02 mho/m $\pm$ 6 %
Head TSL temperature change during test	< 0.5 °C	----	----

SAR result with Head TSL

SAR averaged over 1 cm ³ (1 g) of Head TSL	Condition	
SAR measured	250 mW input power	14.6 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	57.0 W/kg $\pm$ 17.0 % (k=2)

SAR averaged over 10 cm ³ (10 g) of Head TSL	condition	
SAR measured	250 mW input power	6.46 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	25.5 W/kg $\pm$ 16.5 % (k=2)

Body TSL parameters

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Body TSL parameters	22.0 °C	52.5	2.16 mho/m
Measured Body TSL parameters	(22.0 $\pm$ 0.2) °C	51.7 $\pm$ 6 %	2.22 mho/m $\pm$ 6 %
Body TSL temperature change during test	< 0.5 °C	----	----

SAR result with Body TSL

SAR averaged over 1 cm ³ (1 g) of Body TSL	Condition	
SAR measured	250 mW input power	13.9 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	54.7 W/kg $\pm$ 17.0 % (k=2)

SAR averaged over 10 cm ³ (10 g) of Body TSL	condition	
SAR measured	250 mW input power	6.15 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	24.4 W/kg $\pm$ 16.5 % (k=2)

Appendix (Additional assessments outside the scope of SCS 0108)

Antenna Parameters with Head TSL

Impedance, transformed to feed point	49.4 Ω - 6.3 j Ω
Return Loss	- 23.9 dB

Antenna Parameters with Body TSL

Impedance, transformed to feed point	46.4 Ω - 4.1 j Ω
Return Loss	- 25.0 dB

General Antenna Parameters and Design

Electrical Delay (one direction)	1.151 ns
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After long term use with 100W radiated power, only a slight warming of the dipole near the feedpoint can be measured.

The dipole is made of standard semirigid coaxial cable. The center conductor of the feeding line is directly connected to the second arm of the dipole. The antenna is therefore short-circuited for DC-signals. On some of the dipoles, small end caps are added to the dipole arms in order to improve matching when loaded according to the position as explained in the "Measurement Conditions" paragraph. The SAR data are not affected by this change. The overall dipole length is still according to the Standard.

No excessive force must be applied to the dipole arms, because they might bend or the soldered connections near the feedpoint may be damaged.

Additional EUT Data

Manufactured by	SPEAG
Manufactured on	August 14, 2012

DASY5 Validation Report for Head TSL

Date: 07.06.2017

Test Laboratory: SPEAG, Zurich, Switzerland

DUT: Dipole 2600 MHz; Type: D2600V2; Serial: D2600V2 - SN:1064

Communication System: UID 0 - CW; Frequency: 2600 MHz

Medium parameters used: $f = 2600$ MHz; $\sigma = 2.02$ S/m; $\epsilon_r = 37.3$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

- Probe: EX3DV4 - SN7349; ConvF(7.96, 7.96, 7.96); Calibrated: 31.05.2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 28.03.2017
- Phantom: Flat Phantom 5.0 (front); Type: QD 000 P50 AA; Serial: 1001
- DASY52 52.10.0(1446); SEMCAD X 14.6.10(7417)

Dipole Calibration for Head Tissue/Pin=250 mW, d=10mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 115.9 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 32.1 W/kg

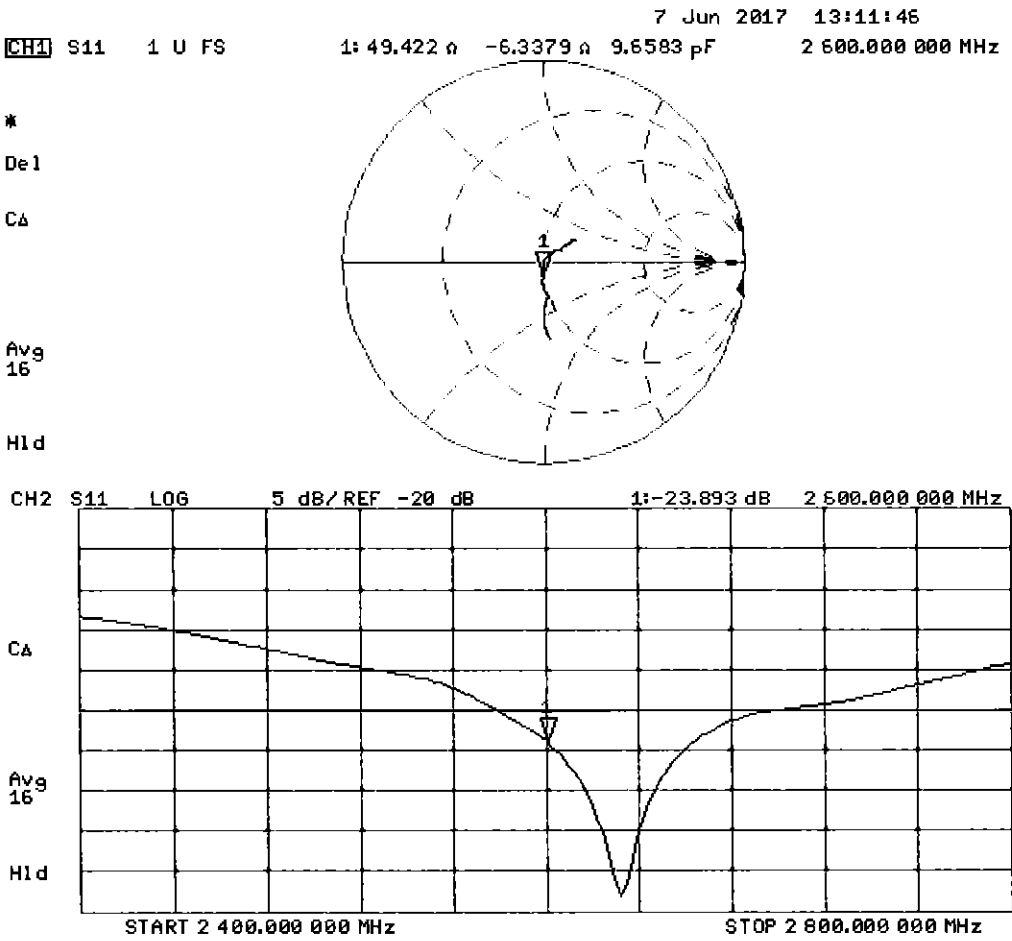
SAR(1 g) = 14.6 W/kg; SAR(10 g) = 6.46 W/kg

Maximum value of SAR (measured) = 24.5 W/kg



0 dB = 24.5 W/kg = 13.89 dBW/kg

Impedance Measurement Plot for Head TSL



DASY5 Validation Report for Body TSL

Date: 07.06.2017

Test Laboratory: SPEAG, Zurich, Switzerland

DUT: Dipole 2600 MHz; Type: D2600V2; Serial: D2600V2 - SN:1064

Communication System: UID 0 - CW; Frequency: 2600 MHz

Medium parameters used: $f = 2600$ MHz; $\sigma = 2.22$ S/m; $\epsilon_r = 51.7$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

- Probe: EX3DV4 - SN7349; ConvF(7.94, 7.94, 7.94); Calibrated: 31.05.2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 28.03.2017
- Phantom: Flat Phantom 5.0 (back); Type: QD 000 P50 AA; Serial: 1002
- DASY52 52.10.0(1446); SEMCAD X 14.6.10(7417)

Dipole Calibration for Body Tissue/Pin=250 mW, d=10mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 101.9 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 29.8 W/kg

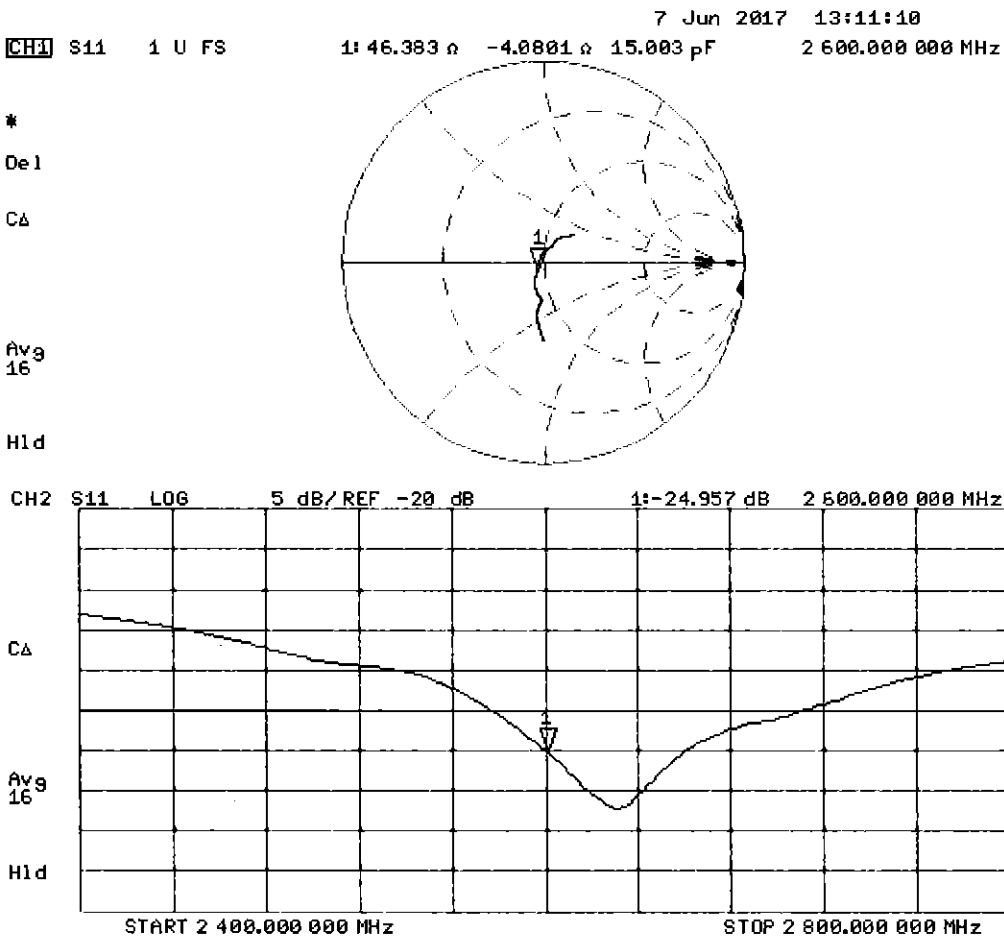
SAR(1 g) = 13.9 W/kg; SAR(10 g) = 6.15 W/kg

Maximum value of SAR (measured) = 22.4 W/kg



0 dB = 22.4 W/kg = 13.50 dBW/kg

Impedance Measurement Plot for Body TSL



Certification of Calibration

Object D2600V2 – SN: 1064

Calibration procedure(s) Procedure for Calibration Extension for SAR Dipoles.

Extended Calibration date: 06/04/2018

Description: SAR Validation Dipole at 2600 MHz.

Calibration Equipment used:

Manufacturer	Model	Description	Cal Date	Cal Interval	Cal Due	Serial Number
Agilent	E4438C	ESG Vector Signal Generator	3/24/2017	Biennial	3/24/2019	MY42082385
Agilent	8753ES	S-Parameter Network Analyzer	9/14/2017	Annual	9/14/2018	U539170118
Amplifier Research	15S1G6	Amplifier	CBT	N/A	CBT	433971
Anritsu	ML2495A	Power Meter	11/28/2017	Annual	11/28/2018	1039008
Anritsu	MA2411B	Pulse Power Sensor	3/2/2018	Annual	3/2/2019	1207364
Anritsu	MA2411B	Pulse Power Sensor	11/15/2017	Annual	11/15/2018	1339007
Control Company	4040	Therm./Clock/Humidity Monitor	3/31/2017	Biennial	3/31/2019	170232394
Control Company	4352	Ultra Long Stem Thermometer	5/2/2017	Biennial	5/2/2019	170330156
Keysight	772D	Dual Directional Coupler	CBT	N/A	CBT	MY52180215
Keysight Technologies	85033E	Standard Mechanical Calibration Kit (DC to 9GHz, 3.5mm)	6/4/2018	Annual	6/4/2019	MY53401181
Mini-Circuits	BW-N20W5+	DC to 18 GHz Precision Fixed 20 dB Attenuator	CBT	N/A	CBT	N/A
Mini-Circuits	NLP-2950+	Low Pass Filter DC to 2700 MHz	CBT	N/A	CBT	N/A
Narda	4772-3	Attenuator (3dB)	CBT	N/A	CBT	9406
Pasternack	PE2209-10	Bidirectional Coupler	CBT	N/A	CBT	N/A
Pasternack	PE5011-1	Torque Wrench	7/19/2017	Biennial	7/19/2019	N/A
SPEAG	DAE4	Dasy Data Acquisition Electronics	6/21/2017	Annual	6/21/2018	1333
SPEAG	DAE4	Dasy Data Acquisition Electronics	3/7/2018	Annual	3/7/2019	1368
SPEAG	DAKS-3.5	Portable Dielectric Assessment Kit	7/11/2017	Annual	7/11/2018	1039
SPEAG	ES3DV3	SAR Probe	8/14/2017	Annual	8/14/2018	3332
SPEAG	ES3DV3	SAR Probe	3/13/2018	Annual	3/13/2019	3319

Measurement Uncertainty = $\pm 23\%$ (k=2)

	Name	Function	Signature
Calibrated By:	Brodie Halfoster	Test Engineer	<i>BRODIE HALFOSTER</i>
Approved By:	Kaitlin O'Keefe	Senior Technical Manager	<i>KOK</i>

DIPOLE CALIBRATION EXTENSION

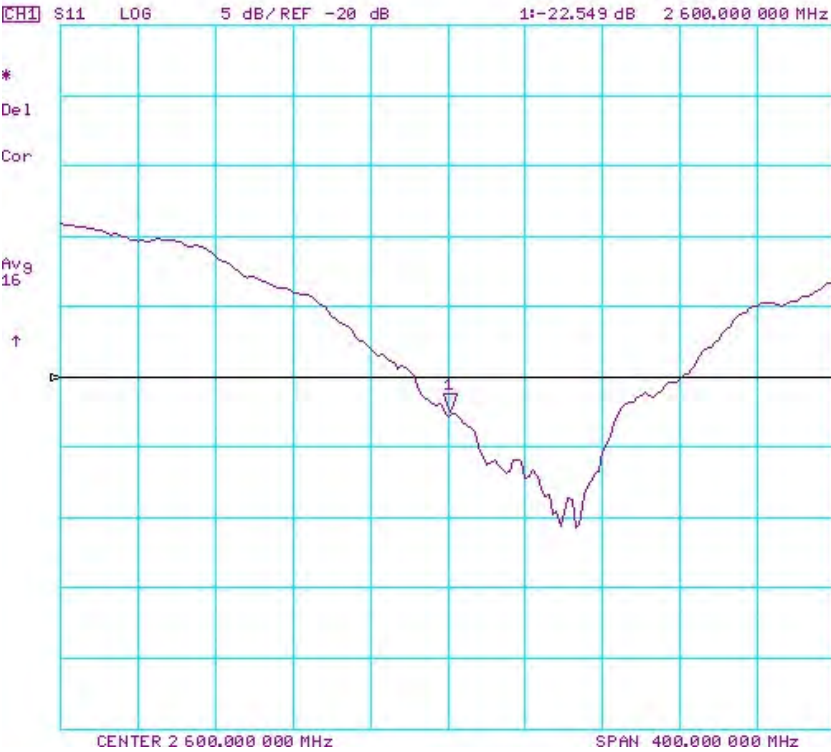
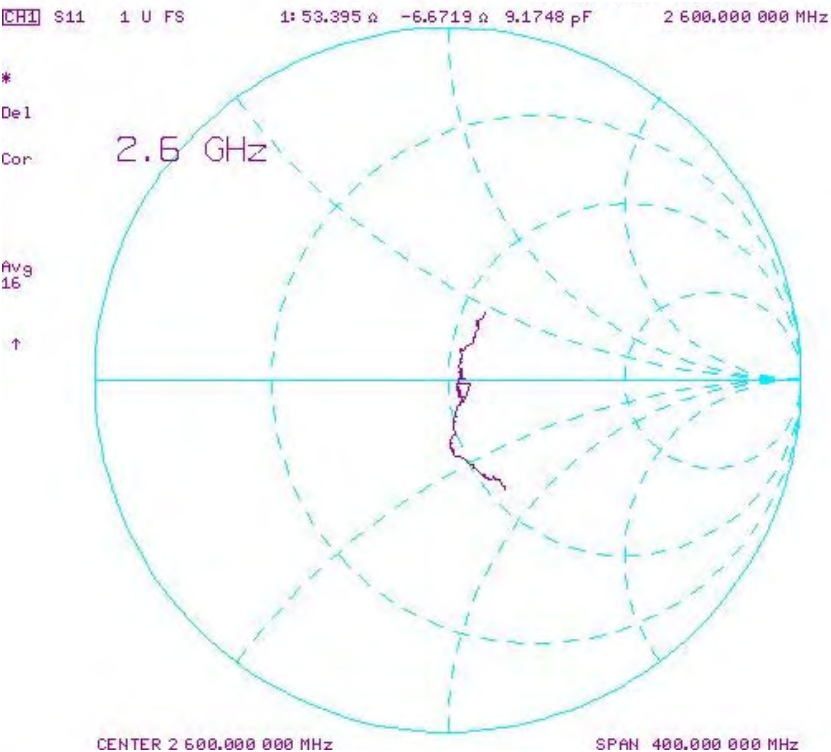
Per KDB 865664 D01, calibration intervals of up to three years may be considered for reference dipoles when it is demonstrated that the SAR target, impedance and return loss of a dipole have remained stable according to the following requirements:

1. The measured SAR does not deviate more than 10% from the target on the calibration certificate.
2. The return-loss does not deviate more than 20% from the previous measurement and meets the required 20dB minimum return-loss requirement.
3. The measurement of real or imaginary parts of impedance does not deviate more than 5Ω from the previous measurement.

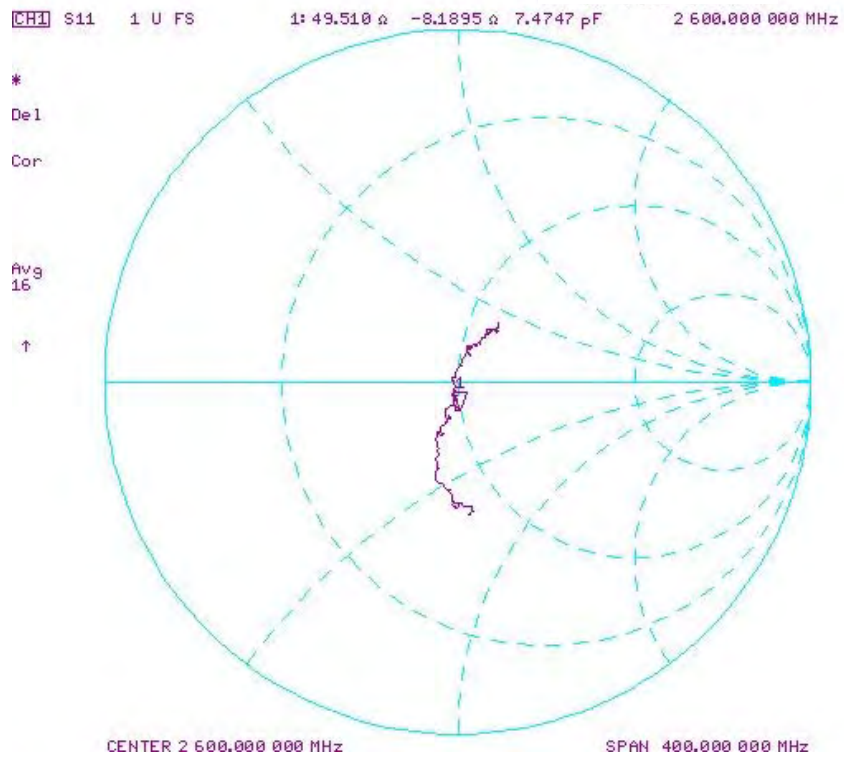
The following dipole was checked to pass the above 3 requirements to have 2-year calibration period from the calibration date:

Calibration Date	Extension Date	Certificate Electrical Delay (ns)	Certificate SAR Target Head (1g) W/kg @ 20.0 dBm	Measured Head SAR (1g) W/kg @ 20.0 dBm	Deviation 1g (%)	Certificate SAR Target Head (10g) W/kg @ 20.0 dBm	Measured Head SAR (10g) W/kg @ 20.0 dBm	Deviation 10g (%)	Certificate Impedance Head (Ohm) Real	Measured Impedance Head (Ohm) Real	Difference (Ohm) Real	Certificate Impedance Head (Ohm) Imaginary	Measured Impedance Head (Ohm) Imaginary	Difference (Ohm) Imaginary	Certificate Return Loss Head (dB)	Measured Return Loss Head (dB)	Deviation (%)	PASS/FAIL
6/7/2017	6/4/2018	1.151	5.70	5.71	0.18%	2.55	2.51	-1.57%	49.4	53.4	4.0	-6.3	-6.7	0.4	-23.9	-22.5	5.90%	PASS
Calibration Date	Extension Date	Certificate Electrical Delay (ns)	Certificate SAR Target Body (1g) W/kg @ 20.0 dBm	Measured Body SAR (1g) W/kg @ 20.0 dBm	Deviation 1g (%)	Certificate SAR Target Body (10g) W/kg @ 20.0 dBm	Measured Body SAR (10g) W/kg @ 20.0 dBm	Deviation 10g (%)	Certificate Impedance Body (Ohm) Real	Measured Impedance Body (Ohm) Real	Difference (Ohm) Real	Certificate Impedance Body (Ohm) Imaginary	Measured Impedance Body (Ohm) Imaginary	Difference (Ohm) Imaginary	Certificate Return Loss Body (dB)	Measured Return Loss Body (dB)	Deviation (%)	PASS/FAIL
6/7/2017	6/4/2018	1.151	5.47	5.65	3.29%	2.44	2.48	1.64%	46.4	49.5	3.1	-4.1	-8.2	4.1	-25.0	-21.8	12.80%	PASS

Impedance & Return-Loss Measurement Plot for Head TSL



Impedance & Return-Loss Measurement Plot for Body TSL





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

Accreditation No.: **SCS 0108**

Client **PC Test**

Certificate No: **D5GHzV2-1057_Jan18**

CALIBRATION CERTIFICATE

Object **D5GHzV2 - SN:1057**

Calibration procedure(s) **QA CAL-22.v2**
Calibration procedure for dipole validation kits between 3-6 GHz

Calibration date: **January 16, 2018**

BN ✓
 01-25-2018

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-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. 217-02522)	Apr-18
Reference 20 dB Attenuator	SN: 5058 (20k)	07-Apr-17 (No. 217-02528)	Apr-18
Type-N mismatch combination	SN: 5047.2 / 06327	07-Apr-17 (No. 217-02529)	Apr-18
Reference Probe EX3DV4	SN: 3503	30-Dec-17 (No. EX3-3503_Dec17)	Dec-18
DAE4	SN: 601	26-Oct-17 (No. DAE4-601_Oct17)	Oct-18

Secondary Standards	ID #	Check Date (in house)	Scheduled Check
Power meter EPM-442A	SN: GB37480704	07-Oct-15 (in house check Oct-16)	In house check: Oct-18
Power sensor HP 8481A	SN: US37292783	07-Oct-15 (in house check Oct-16)	In house check: Oct-18
Power sensor HP 8481A	SN: MY41092317	07-Oct-15 (in house check Oct-16)	In house check: Oct-18
RF generator R&S SMT-06	SN: 100972	15-Jun-15 (in house check Oct-16)	In house check: Oct-18
Network Analyzer HP 8753E	SN: US37390585	18-Oct-01 (in house check Oct-17)	In house check: Oct-18

Calibrated by: **Leif Klysner** Name Function
 Laboratory Technician

Approved by: **Katja Pokovic** Technical Manager

Signature

Issued: January 18, 2018

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



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

Accreditation No.: **SCS 0108**

Glossary:

TSL	tissue simulating liquid
ConvF	sensitivity in TSL / NORM x,y,z
N/A	not applicable or not measured

Calibration is Performed According to the Following Standards:

- IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013
- IEC 62209-1, "Measurement procedure for the assessment of Specific Absorption Rate (SAR) from hand-held and body-mounted devices used next to the ear (frequency range of 300 MHz to 6 GHz)", July 2016
- IEC 62209-2, "Procedure to determine the Specific Absorption Rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)", March 2010
- KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

Additional Documentation:

- DASY4/5 System Handbook

Methods Applied and Interpretation of Parameters:

- Measurement Conditions:* Further details are available from the Validation Report at the end of the certificate. All figures stated in the certificate are valid at the frequency indicated.
- Antenna Parameters with TSL:* The dipole is mounted with the spacer to position its feed point exactly below the center marking of the flat phantom section, with the arms oriented parallel to the body axis.
- Feed Point Impedance and Return Loss:* These parameters are measured with the dipole positioned under the liquid filled phantom. The impedance stated is transformed from the measurement at the SMA connector to the feed point. The Return Loss ensures low reflected power. No uncertainty required.
- Electrical Delay:* One-way delay between the SMA connector and the antenna feed point. No uncertainty required.
- SAR measured:* SAR measured at the stated antenna input power.
- SAR normalized:* SAR as measured, normalized to an input power of 1 W at the antenna connector.
- SAR for nominal TSL parameters:* The measured TSL parameters are used to calculate the nominal SAR result.

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%.

Measurement Conditions

DASY system configuration, as far as not given on page 1.

DASY Version	DASY5	V52.10.0
Extrapolation	Advanced Extrapolation	
Phantom	Modular Flat Phantom V5.0	
Distance Dipole Center - TSL	10 mm	with Spacer
Zoom Scan Resolution	dx, dy = 4.0 mm, dz = 1.4 mm	Graded Ratio = 1.4 (Z direction)
Frequency	5200 MHz $\pm$ 1 MHz 5250 MHz $\pm$ 1 MHz 5600 MHz $\pm$ 1 MHz 5750 MHz $\pm$ 1 MHz 5800 MHz $\pm$ 1 MHz	

Head TSL parameters at 5250 MHz

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	35.9	4.71 mho/m
Measured Head TSL parameters	(22.0 $\pm$ 0.2) °C	36.2 $\pm$ 6 %	4.55 mho/m $\pm$ 6 %
Head TSL temperature change during test	< 0.5 °C	----	----

SAR result with Head TSL at 5250 MHz

SAR averaged over 1 cm ³ (1 g) of Head TSL	Condition	
SAR measured	100 mW input power	7.91 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	79.2 W/kg $\pm$ 19.9 % (k=2)

SAR averaged over 10 cm ³ (10 g) of Head TSL	condition	
SAR measured	100 mW input power	2.28 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	22.8 W/kg $\pm$ 19.5 % (k=2)

Head TSL parameters at 5600 MHz

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	35.5	5.07 mho/m
Measured Head TSL parameters	(22.0 ± 0.2) °C	35.8 ± 6 %	4.90 mho/m ± 6 %
Head TSL temperature change during test	< 0.5 °C	----	----

SAR result with Head TSL at 5600 MHz

SAR averaged over 1 cm ³ (1 g) of Head TSL	Condition	
SAR measured	100 mW input power	8.41 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	84.1 W/kg ± 19.9 % (k=2)

SAR averaged over 10 cm ³ (10 g) of Head TSL	condition	
SAR measured	100 mW input power	2.40 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	24.0 W/kg ± 19.5 % (k=2)

Head TSL parameters at 5750 MHz

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	35.4	5.22 mho/m
Measured Head TSL parameters	(22.0 ± 0.2) °C	35.5 ± 6 %	5.06 mho/m ± 6 %
Head TSL temperature change during test	< 0.5 °C	----	----

SAR result with Head TSL at 5750 MHz

SAR averaged over 1 cm ³ (1 g) of Head TSL	Condition	
SAR measured	100 mW input power	8.06 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	80.5 W/kg ± 19.9 % (k=2)

SAR averaged over 10 cm ³ (10 g) of Head TSL	condition	
SAR measured	100 mW input power	2.30 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	23.0 W/kg ± 19.5 % (k=2)

Body TSL parameters at 5200 MHz

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Body TSL parameters	22.0 °C	49.0	5.30 mho/m
Measured Body TSL parameters	(22.0 ± 0.2) °C	47.3 ± 6 %	5.41 mho/m ± 6 %
Body TSL temperature change during test	< 0.5 °C	----	----

SAR result with Body TSL at 5200 MHz

SAR averaged over 1 cm ³ (1 g) of Body TSL	Condition	
SAR measured	100 mW input power	7.36 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	73.1 W/kg ± 19.9 % (k=2)

SAR averaged over 10 cm ³ (10 g) of Body TSL	condition	
SAR measured	100 mW input power	2.06 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	20.4 W/kg ± 19.5 % (k=2)

Body TSL parameters at 5250 MHz

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Body TSL parameters	22.0 °C	48.9	5.36 mho/m
Measured Body TSL parameters	(22.0 ± 0.2) °C	47.2 ± 6 %	5.48 mho/m ± 6 %
Body TSL temperature change during test	< 0.5 °C	----	----

SAR result with Body TSL at 5250 MHz

SAR averaged over 1 cm ³ (1 g) of Body TSL	Condition	
SAR measured	100 mW input power	7.64 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	75.9 W/kg ± 19.9 % (k=2)

SAR averaged over 10 cm ³ (10 g) of Body TSL	condition	
SAR measured	100 mW input power	2.13 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	21.1 W/kg ± 19.5 % (k=2)

Body TSL parameters at 5600 MHz

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Body TSL parameters	22.0 °C	48.5	5.77 mho/m
Measured Body TSL parameters	(22.0 ± 0.2) °C	46.6 ± 6 %	5.94 mho/m ± 6 %
Body TSL temperature change during test	< 0.5 °C	----	----

SAR result with Body TSL at 5600 MHz

SAR averaged over 1 cm ³ (1 g) of Body TSL	Condition	
SAR measured	100 mW input power	8.05 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	79.9 W/kg ± 19.9 % (k=2)

SAR averaged over 10 cm ³ (10 g) of Body TSL	condition	
SAR measured	100 mW input power	2.25 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	22.3 W/kg ± 19.5 % (k=2)

Body TSL parameters at 5750 MHz

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Body TSL parameters	22.0 °C	48.3	5.94 mho/m
Measured Body TSL parameters	(22.0 ± 0.2) °C	46.3 ± 6 %	6.15 mho/m ± 6 %
Body TSL temperature change during test	< 0.5 °C	----	----

SAR result with Body TSL at 5750 MHz

SAR averaged over 1 cm ³ (1 g) of Body TSL	Condition	
SAR measured	100 mW input power	7.72 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	76.7 W/kg ± 19.9 % (k=2)

SAR averaged over 10 cm ³ (10 g) of Body TSL	condition	
SAR measured	100 mW input power	2.14 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	21.2 W/kg ± 19.5 % (k=2)

Body TSL parameters at 5800 MHz

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Body TSL parameters	22.0 °C	48.2	6.00 mho/m
Measured Body TSL parameters	(22.0 ± 0.2) °C	46.2 ± 6 %	6.22 mho/m ± 6 %
Body TSL temperature change during test	< 0.5 °C	----	----

SAR result with Body TSL at 5800 MHz

SAR averaged over 1 cm³ (1 g) of Body TSL	Condition	
SAR measured	100 mW input power	7.68 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	76.3 W/kg ± 19.9 % (k=2)

SAR averaged over 10 cm³ (10 g) of Body TSL	condition	
SAR measured	100 mW input power	2.13 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	21.1 W/kg ± 19.5 % (k=2)

Appendix (Additional assessments outside the scope of SCS 0108)

Antenna Parameters with Head TSL at 5250 MHz

Impedance, transformed to feed point	50.0 Ω - 5.5 j Ω
Return Loss	- 25.2 dB

Antenna Parameters with Head TSL at 5600 MHz

Impedance, transformed to feed point	54.7 Ω - 2.1 j Ω
Return Loss	- 26.2 dB

Antenna Parameters with Head TSL at 5750 MHz

Impedance, transformed to feed point	52.7 Ω + 0.0 j Ω
Return Loss	- 31.5 dB

Antenna Parameters with Body TSL at 5200 MHz

Impedance, transformed to feed point	49.3 Ω - 6.7 j Ω
Return Loss	- 23.4 dB

Antenna Parameters with Body TSL at 5250 MHz

Impedance, transformed to feed point	48.4 Ω - 3.9 j Ω
Return Loss	- 27.4 dB

Antenna Parameters with Body TSL at 5600 MHz

Impedance, transformed to feed point	55.3 Ω - 1.6 j Ω
Return Loss	- 25.6 dB

Antenna Parameters with Body TSL at 5750 MHz

Impedance, transformed to feed point	52.6 Ω + 1.1 j Ω
Return Loss	- 31.2 dB

Antenna Parameters with Body TSL at 5800 MHz

Impedance, transformed to feed point	51.8 Ω - 0.4 j Ω
Return Loss	- 34.9 dB

General Antenna Parameters and Design

Electrical Delay (one direction)	1.203 ns
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After long term use with 100W radiated power, only a slight warming of the dipole near the feedpoint can be measured.

The dipole is made of standard semirigid coaxial cable. The center conductor of the feeding line is directly connected to the second arm of the dipole. The antenna is therefore short-circuited for DC-signals. On some of the dipoles, small end caps are added to the dipole arms in order to improve matching when loaded according to the position as explained in the "Measurement Conditions" paragraph. The SAR data are not affected by this change. The overall dipole length is still according to the Standard.

No excessive force must be applied to the dipole arms, because they might bend or the soldered connections near the feedpoint may be damaged.

Additional EUT Data

Manufactured by	SPEAG
Manufactured on	November 27, 2006

Appendix (Additional assessments outside the scope of SCS 0108)

Measurement Conditions (f=5200 MHz)

DASY system configuration, as far as not given on page 1 and 3.

Phantom	SAM Head Phantom	For usage with cSAR3DV2-R/L
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SAR result with SAM Head (Top)

SAR averaged over 1 cm ³ (1 g) of Head TSL	Condition	
SAR measured	100 mW input power	8.24 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	82.6 W/kg ± 20.3 % (k=2)

SAR averaged over 10 cm ³ (10 g) of Head TSL	condition	
SAR measured	100 mW input power	2.35 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	23.6 W/kg ± 19.9 % (k=2)

SAR result with SAM Head (Mouth)

SAR averaged over 1 cm ³ (1 g) of Head TSL	Condition	
SAR measured	100 mW input power	8.54 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	85.6 W/kg ± 20.3 % (k=2)

SAR averaged over 10 cm ³ (10 g) of Head TSL	condition	
SAR measured	100 mW input power	2.37 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	23.7 W/kg ± 19.9 % (k=2)

SAR result with SAM Head (Neck)

SAR averaged over 1 cm ³ (1 g) of Head TSL	Condition	
SAR measured	100 mW input power	8.14 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	81.6 W/kg ± 20.3 % (k=2)

SAR averaged over 10 cm ³ (10 g) of Head TSL	condition	
SAR measured	100 mW input power	2.37 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	23.7 W/kg ± 19.9 % (k=2)

SAR result with SAM Head (Ear)

SAR averaged over 1 cm ³ (1 g) of Head TSL	Condition	
SAR measured	100 mW input power	5.16 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	51.7 W/kg ± 20.3 % (k=2)

SAR averaged over 10 cm ³ (10 g) of Head TSL	condition	
SAR measured	100 mW input power	1.76 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	17.7 W/kg ± 19.9 % (k=2)

Measurement Conditions (f=5800 MHz)

DASY system configuration, as far as not given on page 1 and 3.

Phantom	SAM Head Phantom	For usage with cSAR3DV2-R/L
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SAR result with SAM Head (Top)

SAR averaged over 1 cm ³ (1 g) of Head TSL	Condition	
SAR measured	100 mW input power	8.62 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	86.3 W/kg $\pm$ 20.3 % (k=2)

SAR averaged over 10 cm ³ (10 g) of Head TSL	condition	
SAR measured	100 mW input power	2.41 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	24.1 W/kg $\pm$ 19.9 % (k=2)

SAR result with SAM Head (Mouth)

SAR averaged over 1 cm ³ (1 g) of Head TSL	Condition	
SAR measured	100 mW input power	8.88 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	88.9 W/kg $\pm$ 20.3 % (k=2)

SAR averaged over 10 cm ³ (10 g) of Head TSL	condition	
SAR measured	100 mW input power	2.44 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	24.4 W/kg $\pm$ 19.9 % (k=2)

SAR result with SAM Head (Neck)

SAR averaged over 1 cm ³ (1 g) of Head TSL	Condition	
SAR measured	100 mW input power	8.33 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	83.4 W/kg $\pm$ 20.3 % (k=2)

SAR averaged over 10 cm ³ (10 g) of Head TSL	condition	
SAR measured	100 mW input power	2.35 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	23.5 W/kg $\pm$ 19.9 % (k=2)

SAR result with SAM Head (Ear)

SAR averaged over 1 cm ³ (1 g) of Head TSL	Condition	
SAR measured	100 mW input power	5.68 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	56.8 W/kg $\pm$ 20.3 % (k=2)

SAR averaged over 10 cm ³ (10 g) of Head TSL	condition	
SAR measured	100 mW input power	1.89 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	18.9 W/kg $\pm$ 19.9 % (k=2)

Test Laboratory: SPEAG, Zurich, Switzerland

DUT: Dipole D5GHzV2; Type: D5GHzV2; Serial: D5GHzV2 - SN:1057

Communication System: UID 0 - CW; Frequency: 5250 MHz, Frequency: 5600 MHz, Frequency: 5750 MHz
Medium parameters used: $f = 5250$ MHz; $\sigma = 4.55$ S/m; $\epsilon_r = 36.2$; $\rho = 1000$ kg/m³,
Medium parameters used: $f = 5600$ MHz; $\sigma = 4.9$ S/m; $\epsilon_r = 35.8$; $\rho = 1000$ kg/m³,
Medium parameters used: $f = 5750$ MHz; $\sigma = 5.06$ S/m; $\epsilon_r = 35.5$; $\rho = 1000$ kg/m³
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

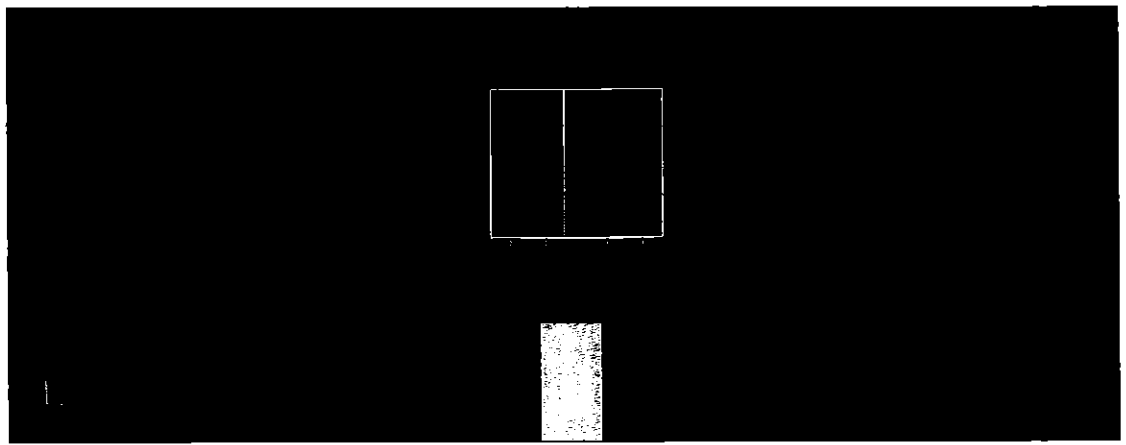
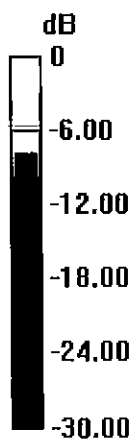
DASY52 Configuration:

- Probe: EX3DV4 - SN3503; ConvF(5.51, 5.51, 5.51); Calibrated: 30.12.2017, ConvF(5.05, 5.05, 5.05); Calibrated: 30.12.2017, ConvF(4.98, 4.98, 4.98); Calibrated: 30.12.2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601 - modified; Calibrated: 26.10.2017
- Phantom: Flat Phantom 5.0 (front); Type: QD 000 P50 AA; Serial: 1001
- DASY52 52.10.0(1446); SEMCAD X 14.6.10(7417)

Dipole Calibration for Head Tissue/Pin=100mW, dist=10mm, f=5250 MHz/Zoom Scan, dist=1.4mm (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 72.54 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 27.5 W/kg
SAR(1 g) = 7.91 W/kg; SAR(10 g) = 2.28 W/kg
Maximum value of SAR (measured) = 17.7 W/kg

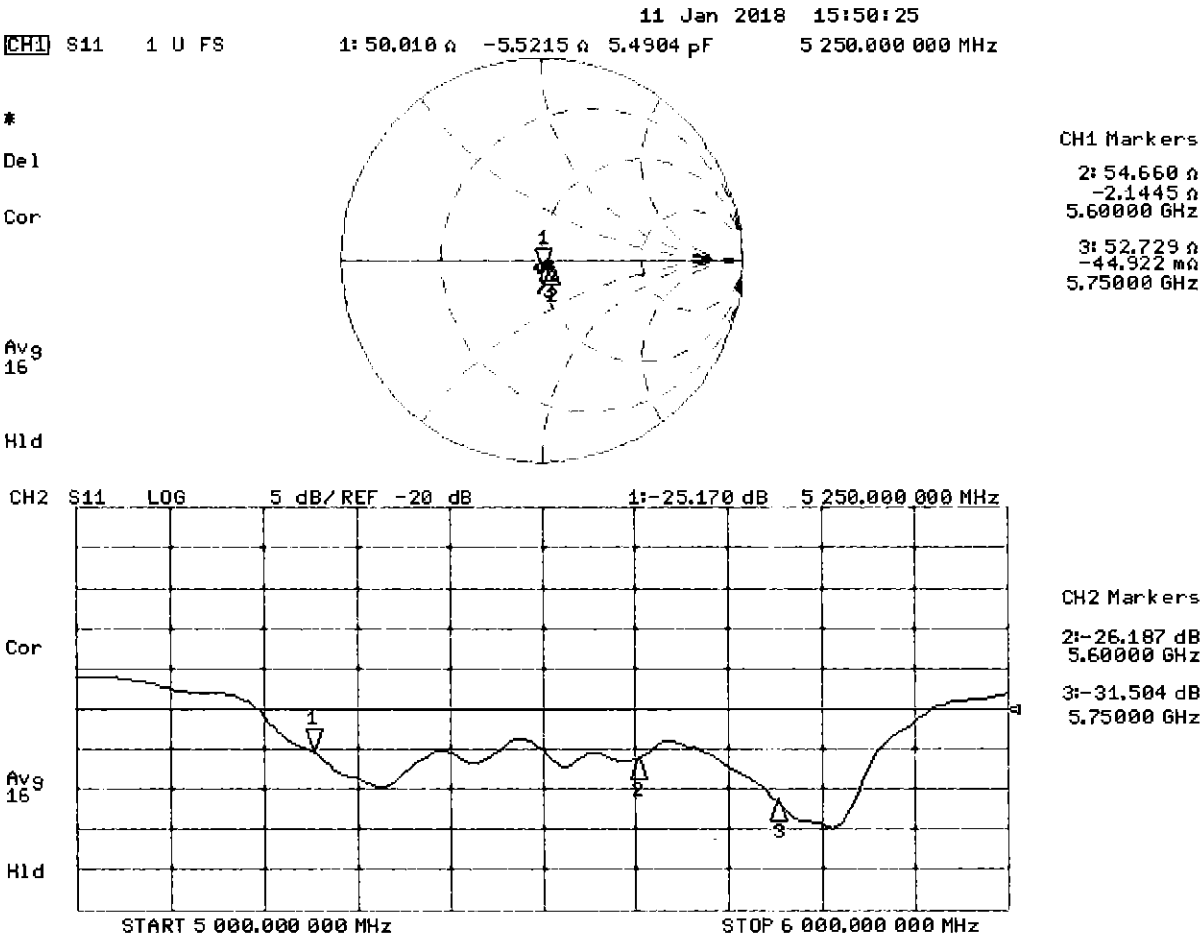
Dipole Calibration for Head Tissue/Pin=100mW, dist=10mm, f=5600 MHz/Zoom Scan, dist=1.4mm (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 72.77 V/m; Power Drift = -0.07 dB
Peak SAR (extrapolated) = 32.2 W/kg
SAR(1 g) = 8.41 W/kg; SAR(10 g) = 2.4 W/kg
Maximum value of SAR (measured) = 19.7 W/kg

Dipole Calibration for Head Tissue/Pin=100mW, dist=10mm, f=5750 MHz/Zoom Scan, dist=1.4mm (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 70.93 V/m; Power Drift = -0.09 dB
Peak SAR (extrapolated) = 31.4 W/kg
SAR(1 g) = 8.06 W/kg; SAR(10 g) = 2.3 W/kg
Maximum value of SAR (measured) = 18.9 W/kg



0 dB = 18.9 W/kg = 12.76 dBW/kg

Impedance Measurement Plot for Head TSL



DASY5 Validation Report for Body TSL

Date: 10.01.2018

Test Laboratory: SPEAG, Zurich, Switzerland

DUT: Dipole D5GHzV2; Type: D5GHzV2; Serial: D5GHzV2 - SN:1057

Communication System: UID 0 - CW; Frequency: 5200 MHz, Frequency: 5250 MHz, Frequency: 5600 MHz, Frequency: 5750 MHz, Frequency: 5800 MHz

Medium parameters used: $f = 5200$ MHz; $\sigma = 5.41$ S/m; $\epsilon_r = 47.3$; $\rho = 1000$ kg/m³,

Medium parameters used: $f = 5250$ MHz; $\sigma = 5.48$ S/m; $\epsilon_r = 47.2$; $\rho = 1000$ kg/m³,

Medium parameters used: $f = 5600$ MHz; $\sigma = 5.94$ S/m; $\epsilon_r = 46.6$; $\rho = 1000$ kg/m³,

Medium parameters used: $f = 5750$ MHz; $\sigma = 6.15$ S/m; $\epsilon_r = 46.3$; $\rho = 1000$ kg/m³,

Medium parameters used: $f = 5800$ MHz; $\sigma = 6.22$ S/m; $\epsilon_r = 46.2$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

- Probe: EX3DV4 - SN3503; ConvF(5.35, 5.35, 5.35); Calibrated: 30.12.2017, ConvF(5.26, 5.26, 5.26); Calibrated: 30.12.2017, ConvF(4.65, 4.65, 4.65); Calibrated: 30.12.2017, ConvF(4.57, 4.57, 4.57); Calibrated: 30.12.2017, ConvF(4.53, 4.53, 4.53); Calibrated: 30.12.2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 26.10.2017
- Phantom: Flat Phantom 5.0 (back); Type: QD 000 P50 AA; Serial: 1002
- DASY52 52.10.0(1446); SEMCAD X 14.6.10(7417)

Dipole Calibration for Body Tissue/Pin=100mW, dist=10mm, f=5200 MHz/Zoom Scan, dist=1.4mm (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 64.05 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 27.6 W/kg

SAR(1 g) = 7.36 W/kg; SAR(10 g) = 2.06 W/kg

Maximum value of SAR (measured) = 17.1 W/kg

Dipole Calibration for Body Tissue/Pin=100mW, dist=10mm, f=5250 MHz/Zoom Scan, dist=1.4mm (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 64.53 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 29.4 W/kg

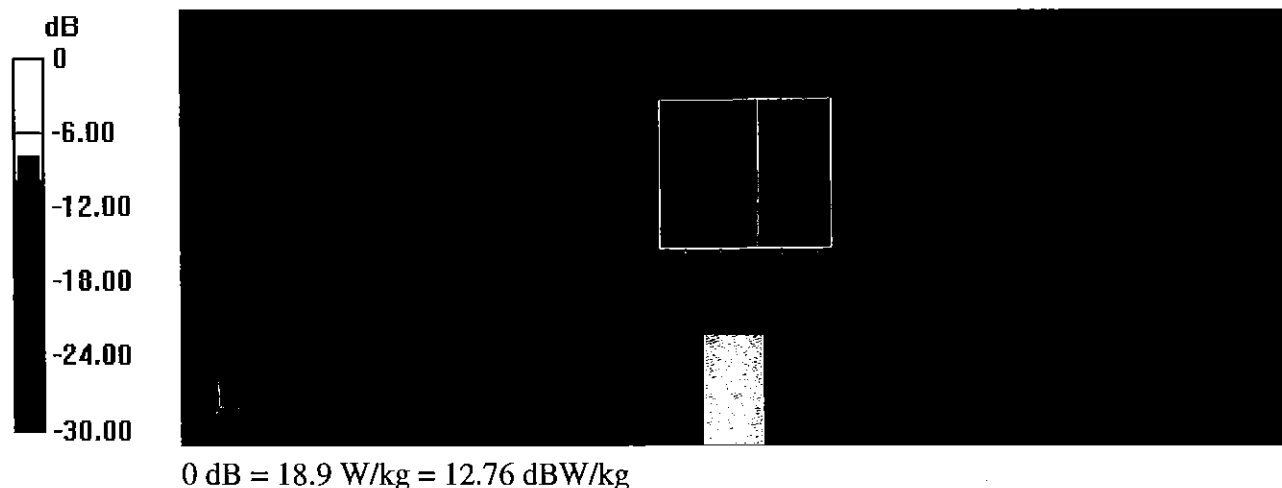
SAR(1 g) = 7.64 W/kg; SAR(10 g) = 2.13 W/kg

Maximum value of SAR (measured) = 17.9 W/kg

Dipole Calibration for Body Tissue/Pin=100mW, dist=10mm, f=5600 MHz/Zoom Scan, dist=1.4mm (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 65.09 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 34.0 W/kg
SAR(1 g) = 8.05 W/kg; SAR(10 g) = 2.25 W/kg
Maximum value of SAR (measured) = 19.5 W/kg

Dipole Calibration for Body Tissue/Pin=100mW, dist=10mm, f=5750 MHz/Zoom Scan, dist=1.4mm (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 63.45 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 32.9 W/kg
SAR(1 g) = 7.72 W/kg; SAR(10 g) = 2.14 W/kg
Maximum value of SAR (measured) = 18.9 W/kg

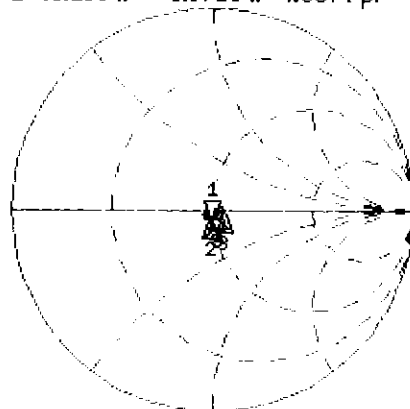
Dipole Calibration for Body Tissue/Pin=100mW, dist=10mm, f=5800 MHz/Zoom Scan, dist=1.4mm (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 63.14 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 33.3 W/kg
SAR(1 g) = 7.68 W/kg; SAR(10 g) = 2.13 W/kg



Impedance Measurement Plot for Body TSL

10 Jan 2018 17:45:41
CH1 S11 1 U FS 1: 49.266 Ω -6.6719 Ω 4.5874 pF 5 200.000 000 MHz

*
 Del
 Cor
 Avg
 16
 H1d

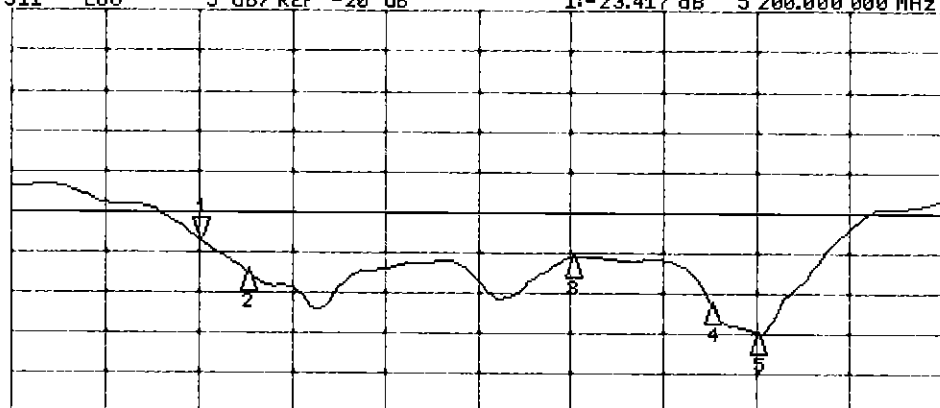


CH1 Markers

2: 48.449 Ω
 -3.9297 Ω
 5.25000 GHz
 3: 55.279 Ω
 -1.5723 Ω
 5.60000 GHz
 4: 52.627 Ω
 1.0625 Ω
 5.75000 GHz
 5: 51.801 Ω
 -375.00 m Ω
 5.80000 GHz

CH2 S11 LOG 5 dB/ REF -20 dB 1: -23.417 dB 5 200.000 000 MHz

Cor
 Avg
 16
 H1d



CH2 Markers

2: -27.356 dB
 5.25000 GHz
 3: -25.621 dB
 5.60000 GHz
 4: -31.162 dB
 5.75000 GHz
 5: -34.851 dB
 5.80000 GHz

DASY5 Validation Report for SAM Head

Date: 16.01.2018

Test Laboratory: SPEAG, Zurich, Switzerland

DUT: Dipole 5GHz; Type: D5GHzV2; Serial: D5GHzV2 - SN:1057

Communication System: UID 0 - CW; Frequency: 5200 MHz, Frequency: 5800 MHz

Medium parameters used: $f = 5200$ MHz; $\sigma = 4.59$ S/m; $\epsilon_r = 36.5$; $\rho = 1000$ kg/m³,

Medium parameters used: $f = 5800$ MHz; $\sigma = 5.28$ S/m; $\epsilon_r = 35.4$; $\rho = 1000$ kg/m³

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY52 Configuration:

- Probe: EX3DV4 - SN3503; ConvF(5.75, 5.75, 5.75); Calibrated: 30.12.2017, ConvF(4.96, 4.96, 4.96); Calibrated: 30.12.2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 26.10.2017
- Phantom: SAM Head
- DASY52 52.10.0(1446); SEMCAD X 14.6.10(7417)

SAM Head/Top - 5200/Zoom Scan (8x8x7)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=1.4$ mm

Reference Value = 72.99 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 30.6 W/kg

SAR(1 g) = 8.24 W/kg; SAR(10 g) = 2.35 W/kg

Maximum value of SAR (measured) = 19.7 W/kg

SAM Head/Top - 5800/Zoom Scan (8x8x7)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=1.4$ mm

Reference Value = 73.00 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 36.5 W/kg

SAR(1 g) = 8.62 W/kg; SAR(10 g) = 2.41 W/kg

Maximum value of SAR (measured) = 21.9 W/kg

SAM Head/Mouth - 5200/Zoom Scan (8x8x7)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=1.4$ mm

Reference Value = 72.79 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 29.5 W/kg

SAR(1 g) = 8.54 W/kg; SAR(10 g) = 2.37 W/kg

Maximum value of SAR (measured) = 20.7 W/kg

SAM Head/Mouth - 5800/Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 71.69 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 34.9 W/kg

SAR(1 g) = 8.88 W/kg; SAR(10 g) = 2.44 W/kg

Maximum value of SAR (measured) = 23.0 W/kg

SAM Head/Neck - 5200/Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 72.48 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 27.9 W/kg

SAR(1 g) = 8.14 W/kg; SAR(10 g) = 2.37 W/kg

Maximum value of SAR (measured) = 19.3 W/kg

SAM Head/Neck - 5800/Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 72.90 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 33.4 W/kg

SAR(1 g) = 8.33 W/kg; SAR(10 g) = 2.35 W/kg

Maximum value of SAR (measured) = 21.8 W/kg

SAM Head/Ear - 5200/Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 54.68 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 16.3 W/kg

SAR(1 g) = 5.16 W/kg; SAR(10 g) = 1.76 W/kg

Maximum value of SAR (measured) = 11.1 W/kg

SAM Head/Ear - 5800/Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 56.96 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 21.2 W/kg

SAR(1 g) = 5.68 W/kg; SAR(10 g) = 1.89 W/kg

Maximum value of SAR (measured) = 13.8 W/kg



0 dB = 13.8 W/kg = 11.40 dBW/kg



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 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: **D5GHzV2-1191_Sep16**

CALIBRATION CERTIFICATE

Object **D5GHzV2 - SN:1191**

Calibration procedure(s) **QA CAL-22.v2**
Calibration procedure for dipole validation kits between 3-6 GHz

BNV
09-28-2016

Calibration date: **September 21, 2016**

Extended PMV
9/20/2018

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	06-Apr-16 (No. 217-02288/02289)	Apr-17
Power sensor NRP-Z91	SN: 103244	06-Apr-16 (No. 217-02288)	Apr-17
Power sensor NRP-Z91	SN: 103245	06-Apr-16 (No. 217-02289)	Apr-17
Reference 20 dB Attenuator	SN: 5058 (20k)	05-Apr-16 (No. 217-02292)	Apr-17
Type-N mismatch combination	SN: 5047.2 / 06327	05-Apr-16 (No. 217-02295)	Apr-17
Reference Probe EX3DV4	SN: 3503	30-Jun-16 (No. EX3-3503_Jun16)	Jun-17
DAE4	SN: 601	30-Dec-15 (No. DAE4-601_Dec15)	Dec-16

Secondary Standards	ID #	Check Date (in house)	Scheduled Check
Power meter EPM-442A	SN: GB37480704	07-Oct-15 (No. 217-02222)	In house check: Oct-16
Power sensor HP 8481A	SN: US37292783	07-Oct-15 (No. 217-02222)	In house check: Oct-16
Power sensor HP 8481A	SN: MY41092317	07-Oct-15 (No. 217-02223)	In house check: Oct-16
RF generator R&S SMT-06	SN: 100972	15-Jun-15 (in house check Jun-15)	In house check: Oct-16
Network Analyzer HP 8753E	SN: US37390585	18-Oct-01 (in house check Oct-15)	In house check: Oct-16

Calibrated by: **Leif Klysner** Name: **Leif Klysner** Function: **Laboratory Technician**

Approved by: **Katja Pokovic** Name: **Katja Pokovic** Function: **Technical Manager**

Signature
Leif Klysner
Katja Pokovic

Issued: September 22, 2016

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



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Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: **SCS 0108**

Glossary:

TSL	tissue simulating liquid
ConvF	sensitivity in TSL / NORM x,y,z
N/A	not applicable or not measured

Calibration is Performed According to the Following Standards:

- IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013
- IEC 62209-2, "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
- KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

Additional Documentation:

- DASY4/5 System Handbook

Methods Applied and Interpretation of Parameters:

- Measurement Conditions:** Further details are available from the Validation Report at the end of the certificate. All figures stated in the certificate are valid at the frequency indicated.
- Antenna Parameters with TSL:** The dipole is mounted with the spacer to position its feed point exactly below the center marking of the flat phantom section, with the arms oriented parallel to the body axis.
- Feed Point Impedance and Return Loss:** These parameters are measured with the dipole positioned under the liquid filled phantom. The impedance stated is transformed from the measurement at the SMA connector to the feed point. The Return Loss ensures low reflected power. No uncertainty required.
- Electrical Delay:** One-way delay between the SMA connector and the antenna feed point. No uncertainty required.
- SAR measured:** SAR measured at the stated antenna input power.
- SAR normalized:** SAR as measured, normalized to an input power of 1 W at the antenna connector.
- SAR for nominal TSL parameters:** The measured TSL parameters are used to calculate the nominal SAR result.

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%.

Measurement Conditions

DASY system configuration, as far as not given on page 1.

DASY Version	DASY5	V52.8.8
Extrapolation	Advanced Extrapolation	
Phantom	Modular Flat Phantom V5.0	
Distance Dipole Center - TSL	10 mm	with Spacer
Zoom Scan Resolution	dx, dy = 4.0 mm, dz = 1.4 mm	Graded Ratio = 1.4 (Z direction)
Frequency	5250 MHz $\pm$ 1 MHz 5600 MHz $\pm$ 1 MHz 5750 MHz $\pm$ 1 MHz	

Head TSL parameters at 5250 MHz

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	35.9	4.71 mho/m
Measured Head TSL parameters	(22.0 $\pm$ 0.2) °C	34.5 $\pm$ 6 %	4.59 mho/m $\pm$ 6 %
Head TSL temperature change during test	< 0.5 °C	----	----

SAR result with Head TSL at 5250 MHz

SAR averaged over 1 cm ³ (1 g) of Head TSL	Condition	
SAR measured	100 mW input power	7.96 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	78.9 W/kg $\pm$ 19.9 % (k=2)

SAR averaged over 10 cm ³ (10 g) of Head TSL	condition	
SAR measured	100 mW input power	2.29 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	22.6 W/kg $\pm$ 19.5 % (k=2)

Head TSL parameters at 5600 MHz

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	35.5	5.07 mho/m
Measured Head TSL parameters	(22.0 ± 0.2) °C	34.0 ± 6 %	4.93 mho/m ± 6 %
Head TSL temperature change during test	< 0.5 °C	----	----

SAR result with Head TSL at 5600 MHz

SAR averaged over 1 cm ³ (1 g) of Head TSL	Condition	
SAR measured	100 mW input power	8.45 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	83.6 W / kg ± 19.9 % (k=2)

SAR averaged over 10 cm ³ (10 g) of Head TSL	condition	
SAR measured	100 mW input power	2.41 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	23.8 W/kg ± 19.5 % (k=2)

Head TSL parameters at 5750 MHz

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	35.4	5.22 mho/m
Measured Head TSL parameters	(22.0 ± 0.2) °C	33.8 ± 6 %	5.08 mho/m ± 6 %
Head TSL temperature change during test	< 0.5 °C	----	----

SAR result with Head TSL at 5750 MHz

SAR averaged over 1 cm ³ (1 g) of Head TSL	Condition	
SAR measured	100 mW input power	7.99 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	79.1 W/kg ± 19.9 % (k=2)

SAR averaged over 10 cm ³ (10 g) of Head TSL	condition	
SAR measured	100 mW input power	2.27 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	22.4 W/kg ± 19.5 % (k=2)

Body TSL parameters at 5250 MHz

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Body TSL parameters	22.0 °C	48.9	5.36 mho/m
Measured Body TSL parameters	(22.0 ± 0.2) °C	47.4 ± 6 %	5.52 mho/m ± 6 %
Body TSL temperature change during test	< 0.5 °C	----	----

SAR result with Body TSL at 5250 MHz

SAR averaged over 1 cm ³ (1 g) of Body TSL	Condition	
SAR measured	100 mW input power	7.74 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	77.0 W/kg ± 19.9 % (k=2)

SAR averaged over 10 cm ³ (10 g) of Body TSL	condition	
SAR measured	100 mW input power	2.17 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	21.6 W/kg ± 19.5 % (k=2)

Body TSL parameters at 5600 MHz

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Body TSL parameters	22.0 °C	48.5	5.77 mho/m
Measured Body TSL parameters	(22.0 ± 0.2) °C	46.8 ± 6 %	6.00 mho/m ± 6 %
Body TSL temperature change during test	< 0.5 °C	----	----

SAR result with Body TSL at 5600 MHz

SAR averaged over 1 cm ³ (1 g) of Body TSL	Condition	
SAR measured	100 mW input power	7.96 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	79.2 W/kg ± 19.9 % (k=2)

SAR averaged over 10 cm ³ (10 g) of Body TSL	condition	
SAR measured	100 mW input power	2.24 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	22.2 W/kg ± 19.5 % (k=2)

Body TSL parameters at 5750 MHz

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Body TSL parameters	22.0 °C	48.3	5.94 mho/m
Measured Body TSL parameters	(22.0 ± 0.2) °C	46.5 ± 6 %	6.21 mho/m ± 6 %
Body TSL temperature change during test	< 0.5 °C	----	----

SAR result with Body TSL at 5750 MHz

SAR averaged over 1 cm ³ (1 g) of Body TSL	Condition	
SAR measured	100 mW input power	7.65 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	76.1 W/kg ± 19.9 % (k=2)

SAR averaged over 10 cm ³ (10 g) of Body TSL	condition	
SAR measured	100 mW input power	2.14 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	21.2 W/kg ± 19.5 % (k=2)

Appendix (Additional assessments outside the scope of SCS 0108)

Antenna Parameters with Head TSL at 5250 MHz

Impedance, transformed to feed point	55.7 Ω - 4.3 j Ω
Return Loss	- 23.4 dB

Antenna Parameters with Head TSL at 5600 MHz

Impedance, transformed to feed point	58.3 Ω - 3.2 j Ω
Return Loss	- 21.8 dB

Antenna Parameters with Head TSL at 5750 MHz

Impedance, transformed to feed point	58.1 Ω + 4.8 j Ω
Return Loss	- 21.2 dB

Antenna Parameters with Body TSL at 5250 MHz

Impedance, transformed to feed point	56.1 Ω - 3.7 j Ω
Return Loss	- 23.4 dB

Antenna Parameters with Body TSL at 5600 MHz

Impedance, transformed to feed point	58.9 Ω - 1.7 j Ω
Return Loss	- 21.7 dB

Antenna Parameters with Body TSL at 5750 MHz

Impedance, transformed to feed point	59.5 Ω + 6.9 j Ω
Return Loss	- 19.4 dB

General Antenna Parameters and Design

Electrical Delay (one direction)	1.204 ns
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After long term use with 100W radiated power, only a slight warming of the dipole near the feedpoint can be measured.

The dipole is made of standard semirigid coaxial cable. The center conductor of the feeding line is directly connected to the second arm of the dipole. The antenna is therefore short-circuited for DC-signals. On some of the dipoles, small end caps are added to the dipole arms in order to improve matching when loaded according to the position as explained in the "Measurement Conditions" paragraph. The SAR data are not affected by this change. The overall dipole length is still according to the Standard.

No excessive force must be applied to the dipole arms, because they might bend or the soldered connections near the feedpoint may be damaged.

Additional EUT Data

Manufactured by	SPEAG
Manufactured on	August 28, 2003

DASY5 Validation Report for Head TSL

Date: 21.09.2016

Test Laboratory: SPEAG, Zurich, Switzerland

DUT: Dipole D5GHzV2; Type: D5GHzV2; Serial: D5GHzV2 - SN:1191

Communication System: UID 0 - CW; Frequency: 5250 MHz, Frequency: 5600 MHz, Frequency: 5750 MHz
Medium parameters used: $f = 5250$ MHz; $\sigma = 4.59$ S/m; $\epsilon_r = 34.5$; $\rho = 1000$ kg/m³, Medium parameters used: $f = 5600$ MHz; $\sigma = 4.93$ S/m; $\epsilon_r = 34$; $\rho = 1000$ kg/m³, Medium parameters used: $f = 5750$ MHz; $\sigma = 5.08$ S/m; $\epsilon_r = 33.8$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

- Probe: EX3DV4 - SN3503; ConvF(5.42, 5.42, 5.42); Calibrated: 30.06.2016, ConvF(4.89, 4.89, 4.89); Calibrated: 30.06.2016, ConvF(4.85, 4.85, 4.85); Calibrated: 30.06.2016;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 30.12.2015
- Phantom: Flat Phantom 5.0 (front); Type: QD000P50AA; Serial: 1001
- DASY52 52.8.8(1258); SEMCAD X 14.6.10(7372)

Dipole Calibration for Head Tissue/Pin=100mW, dist=10mm, f=5250 MHz/Zoom Scan, dist=1.4mm (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 68.49 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 28.6 W/kg

SAR(1 g) = 7.96 W/kg; SAR(10 g) = 2.29 W/kg

Maximum value of SAR (measured) = 18.2 W/kg

Dipole Calibration for Head Tissue/Pin=100mW, dist=10mm, f=5600 MHz/Zoom Scan, dist=1.4mm (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 69.34 V/m; Power Drift = -0.00 dB

Peak SAR (extrapolated) = 32.9 W/kg

SAR(1 g) = 8.45 W/kg; SAR(10 g) = 2.41 W/kg

Maximum value of SAR (measured) = 20.0 W/kg

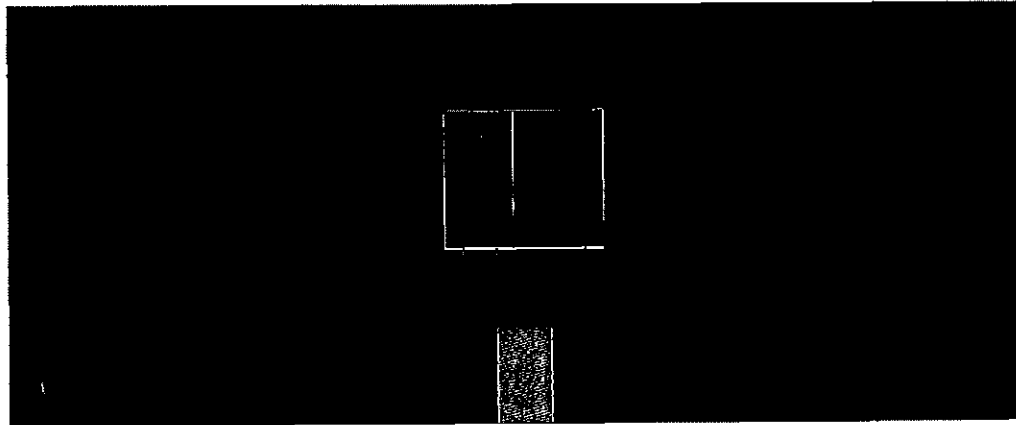
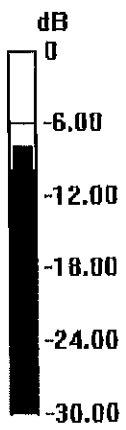
Dipole Calibration for Head Tissue/Pin=100mW, dist=10mm, f=5750 MHz/Zoom Scan, dist=1.4mm (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 67.15 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 32.3 W/kg

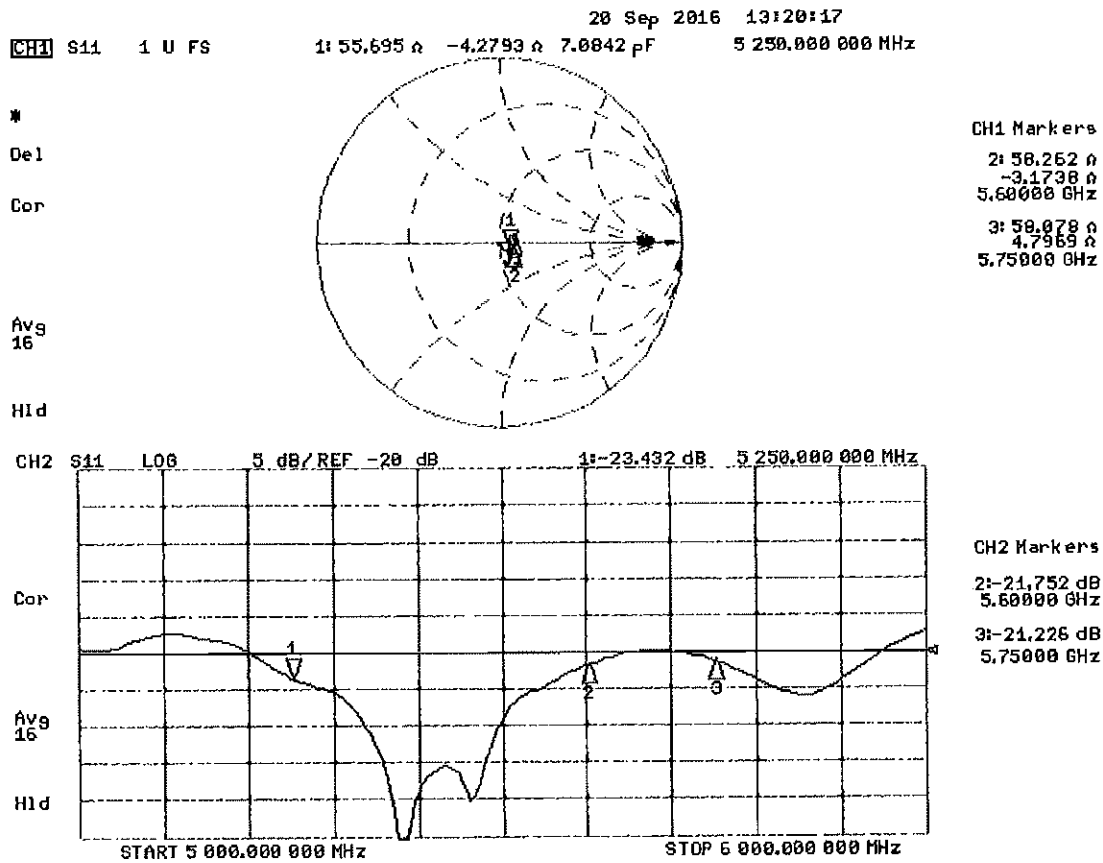
SAR(1 g) = 7.99 W/kg; SAR(10 g) = 2.27 W/kg

Maximum value of SAR (measured) = 19.3 W/kg



0 dB = 18.2 W/kg = 12.60 dBW/kg

Impedance Measurement Plot for Head TSL



DASY5 Validation Report for Body TSL

Date: 20.09.2016

Test Laboratory: SPEAG, Zurich, Switzerland

DUT: Dipole D5GHzV2; Type: D5GHzV2; Serial: D5GHzV2 - SN:1191

Communication System: UID 0 - CW; Frequency: 5250 MHz, Frequency: 5600 MHz, Frequency: 5750 MHz
Medium parameters used: $f = 5250$ MHz; $\sigma = 5.52$ S/m; $\epsilon_r = 47.4$; $\rho = 1000$ kg/m³, Medium parameters used: $f = 5600$ MHz; $\sigma = 6$ S/m; $\epsilon_r = 46.8$; $\rho = 1000$ kg/m³, Medium parameters used: $f = 5750$ MHz; $\sigma = 6.21$ S/m; $\epsilon_r = 46.5$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

- Probe: EX3DV4 - SN3503; ConvF(4.85, 4.85, 4.85); Calibrated: 30.06.2016, ConvF(4.35, 4.35, 4.35); Calibrated: 30.06.2016, ConvF(4.3, 4.3, 4.3); Calibrated: 30.06.2016;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 30.12.2015
- Phantom: Flat Phantom 5.0 (back); Type: QD000P50AA; Serial: 1002
- DASY52 52.8.8(1258); SEMCAD X 14.6.10(7372)

Dipole Calibration for Body Tissue/Pin=100mW, dist=10mm, f=5250MHz/Zoom Scan, dist=1.4mm (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 66.49 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 29.1 W/kg

SAR(1 g) = 7.74 W/kg; SAR(10 g) = 2.17 W/kg

Maximum value of SAR (measured) = 17.7 W/kg

Dipole Calibration for Body Tissue/Pin=100mW, dist=10mm, f=5600 MHz/Zoom Scan, dist=1.4mm (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 65.85 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 32.5 W/kg

SAR(1 g) = 7.96 W/kg; SAR(10 g) = 2.24 W/kg

Maximum value of SAR (measured) = 18.8 W/kg

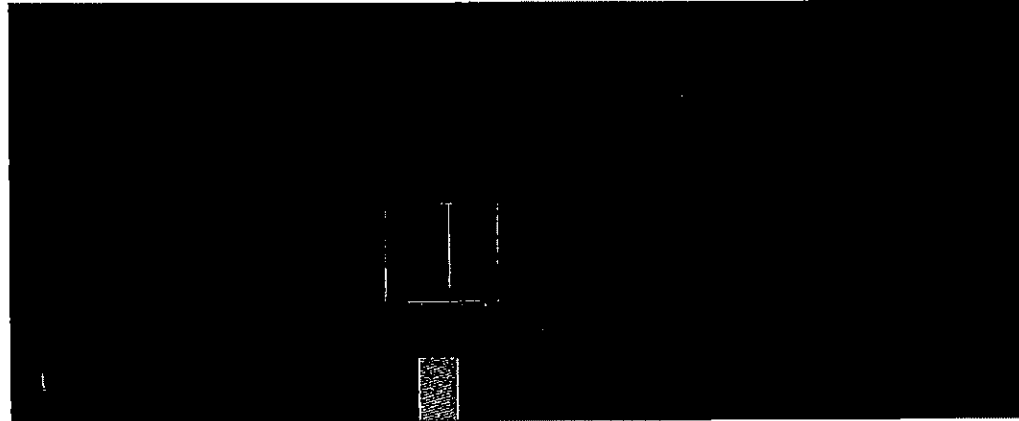
Dipole Calibration for Body Tissue/Pin=100mW, dist=10mm, f=5750 MHz/Zoom Scan, dist=1.4mm (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 64.21 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 32.7 W/kg

SAR(1 g) = 7.65 W/kg; SAR(10 g) = 2.14 W/kg

Maximum value of SAR (measured) = 18.5 W/kg



0 dB = 17.7 W/kg = 12.48 dBW/kg

Impedance Measurement Plot for Body TSL

20 Sep 2016 13:19:13
 CH1 S11 1 U FS 1: 56.143 Ω -3.6992 Ω 0.1950 pF 5 250.000 000 MHz

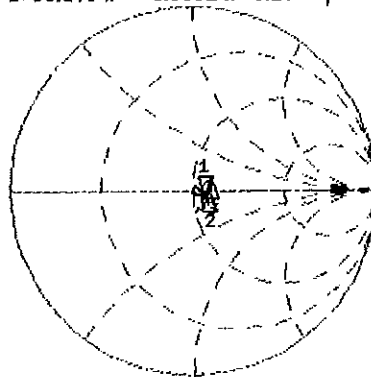
#

De1

Cor

Avg
16

H1d



CH1 Markers

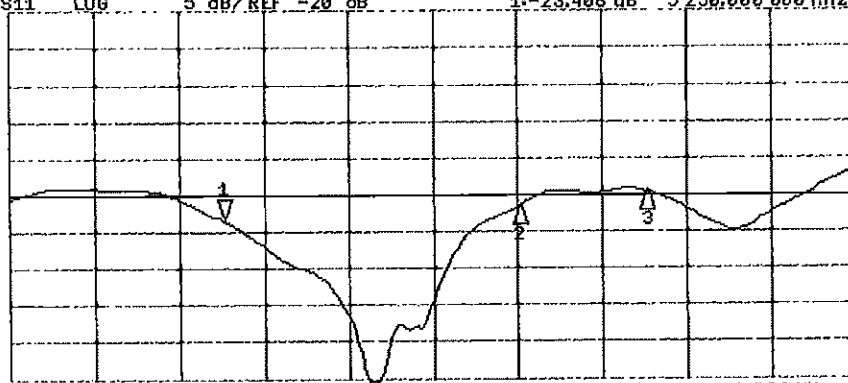
2: 58.887 Ω
 -1.6504 Ω
 5.60000 GHz
 3: 59.510 Ω
 8.3121 Ω
 5.75000 GHz

CH2 S11 LOG 5 dB/REF -20 dB 1: -23.406 dB 5 250.000 000 MHz

Cor

Avg
16

H1d



CH2 Markers

2: -21.616 dB
 5.60000 GHz
 3: -19.400 dB
 5.75000 GHz

Certification of Calibration

Object: D5GHzV2 – SN: 1191

Calibration procedure(s): Procedure for Calibration Extension for SAR Dipoles.

Extension Calibration date: 9/19/2017

Description: SAR Validation Dipole at 5250, 5600, and 5750 MHz.

Calibration Equipment used:

Manufacturer	Model	Description	Cal Date	Cal Interval	Cal Due	Serial Number
Control Company	4040	Therm./Clock/Humidity Monitor	3/31/2017	Biennial	3/31/2019	170232394
Control Company	4352	Ultra Long Stem Thermometer	5/2/2017	Biennial	5/2/2019	170330156
Amplifier Research	15S166	Amplifier	CBT	N/A	CBT	433971
Narda	4772-3	Attenuator (3dB)	CBT	N/A	CBT	9406
Keysight	772D	Dual Directional Coupler	CBT	N/A	CBT	MY52180215
Keysight Technologies	85033E	Standard Mechanical Calibration Kit (DC to 9GHz, 3.5mm)	6/1/2017	Annual	6/1/2018	MY53401181
Agilent	8753ES	S-Parameter Network Analyzer	10/26/2016	Annual	10/26/2017	US39170118
Mini-Circuits	BW-N20WS+	DC to 18 GHz Precision Fixed 20 dB Attenuator	CBT	N/A	CBT	N/A
SPEAG	DAK-3.5	Dielectric Assessment Kit	5/10/2017	Annual	5/10/2018	1070
SPEAG	EX3DV4	SAR Probe	1/13/2017	Annual	1/13/2018	3589
SPEAG	EX3DV4	SAR Probe	2/13/2017	Annual	2/13/2018	3914
SPEAG	DAE4	Dasy Data Acquisition Electronics	1/16/2017	Annual	1/16/2018	1466
SPEAG	DAE4	Dasy Data Acquisition Electronics	2/9/2017	Annual	2/9/2018	665
Anritsu	MA2411B	Pulse Power Sensor	2/10/2017	Annual	2/10/2018	1207364
Anritsu	MA2411B	Pulse Power Sensor	2/10/2017	Annual	2/10/2018	1339018
Anritsu	ML2495A	Power Meter	10/16/2015	Biennial	10/16/2017	941001
Agilent	N5182A	MXG Vector Signal Generator	2/28/2017	Annual	2/28/2018	MY47420800
Seekonk	NC-100	Torque Wrench	11/6/2015	Biennial	11/6/2017	N/A
MiniCircuits	VLF-6000+	Low Pass Filter	CBT	N/A	CBT	N/A
Narda	4014C-6	4 - 8 GHz SMA 6 dB Directional Coupler	CBT	N/A	CBT	N/A

Measurement Uncertainty = $\pm 23\%$ (k=2)

	Name	Function	Signature
Calibrated By:	Brodie Halfoster	Test Engineer	<i>BRODIE HALFOSTER</i>
Approved By:	Kaitlin O'Keefe	Senior Technical Manager	<i>KOK</i>

DIPOLE CALIBRATION EXTENSION

Per KDB 865664 D01, calibration intervals of up to three years may be considered for reference dipoles when it is demonstrated that the SAR target, impedance and return loss of a dipole have remained stable according to the following requirements:

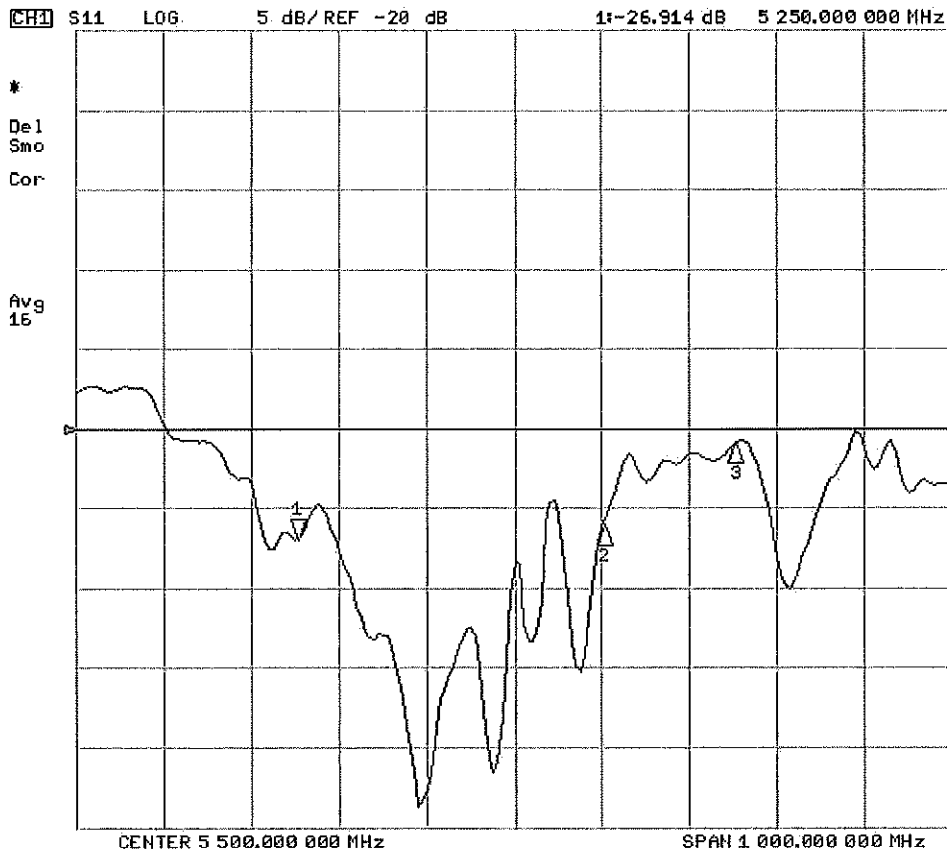
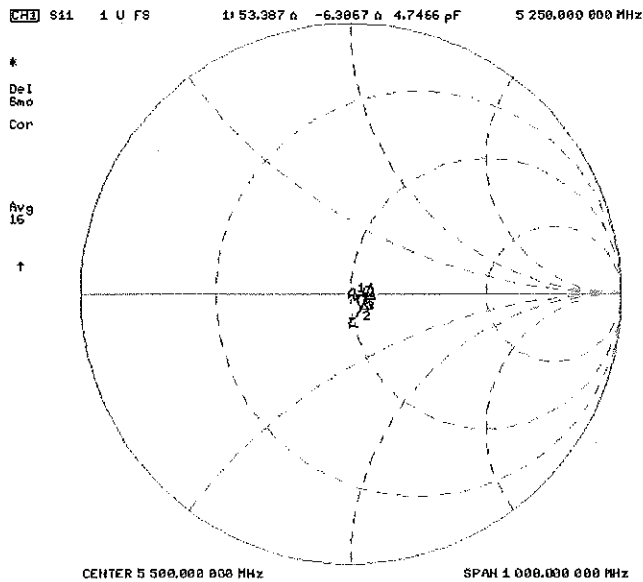
1. The measured SAR does not deviate more than 10% from the target on the calibration certificate.
2. The return-loss does not deviate more than 20% from the previous measurement and meets the required 20dB minimum return-loss requirement.
3. The measurement of real or imaginary parts of impedance does not deviate more than 5Ω from the previous measurement.

The following dipole was checked to pass the above 3 requirements to have 2-year calibration period from the calibration date:

Frequency (MHz)	Calibration Date	Extension Date	Certificate Electrical Delay (ps)	Certificate SAR Target Head (10 W/kg @ 17.0 dBm)	Measured Head SAR (10 W/kg @ 17.0 dBm)	Deviation %	Certificate SAR Target Head (50 W/kg @ 17.0 dBm)	Measured Head SAR (50 W/kg @ 17.0 dBm)	Deviation %	Certificate Impedance Head (Ohm) Real	Measured Impedance Head (Ohm) Real	Difference (Ohm) Real	Certificate Impedance Head (Ohm) Imaginary	Measured Impedance Head (Ohm) Imaginary	Difference (Ohm) Imaginary	Certificate Return Loss Head (dB)	Measured Return Loss Head (dB)	Deviation (%)	PASS/FAIL
8350	8/21/2016	8/15/2017	1.204	3.55	3.70	+4.21%	6.10	5.95	-2.46%	55.7	51.4	-7.7	-4.3	-6.4	-2.1	-23.4	-16.7	-16.6%	PASS
8650	8/21/2016	8/15/2017	1.204	4.15	4.05	-2.52%	6.10	5.10	-16.4%	56.3	55.4	-0.9	-4.2	-1.2	3.0	-21.8	-22.1	-13.6%	PASS
8750	8/21/2016	8/15/2017	1.204	3.95	3.54	-10.3%	6.10	5.10	-16.4%	55.1	51.4	-3.7	-4.6	-3.9	0.7	-21.2	-21.0	0.9%	PASS

Frequency (MHz)	Calibration Date	Extension Date	Certificate Electrical Delay (ps)	Certificate SAR Target Body (10 W/kg @ 17.0 dBm)	Measured Body SAR (10 W/kg @ 17.0 dBm)	Deviation %	Certificate SAR Target Body (50 W/kg @ 17.0 dBm)	Measured Body SAR (50 W/kg @ 17.0 dBm)	Deviation %	Certificate Impedance Body (Ohm) Real	Measured Impedance Body (Ohm) Real	Difference (Ohm) Real	Certificate Impedance Body (Ohm) Imaginary	Measured Impedance Body (Ohm) Imaginary	Difference (Ohm) Imaginary	Certificate Return Loss Body (dB)	Measured Return Loss Body (dB)	Deviation (%)	PASS/FAIL
8350	8/21/2016	8/15/2017	1.204	5.85	5.80	-0.85%	6.68	6.66	-0.30%	56.1	54.0	-2.1	-4.7	-3.3	1.4	-23.4	-21.5	-8.0%	PASS
8650	8/21/2016	8/15/2017	1.204	3.95	4.05	2.52%	6.10	5.10	-16.4%	56.3	55.4	-0.9	-4.2	-1.2	3.0	-21.8	-21.5	-13.6%	PASS
8750	8/21/2016	8/15/2017	1.204	3.81	3.55	-6.81%	6.08	6.03	-0.77%	56.5	53.9	-2.6	-5.9	-3.2	2.7	-19.4	-21.1	-8.76%	PASS

Impedance & Return-Loss Measurement Plot for Head TSL



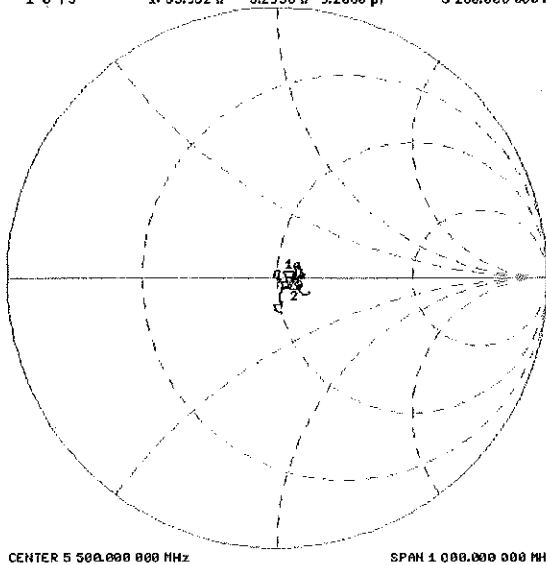
Impedance & Return-Loss Measurement Plot for Body TSL

[CH1] S11 1 U FS 1: 53.982 Ω -3.2930 Ω 9.2060 pF 5 250.000 000 MHz

*
Del
Smo
Cor

Avg
15

↑



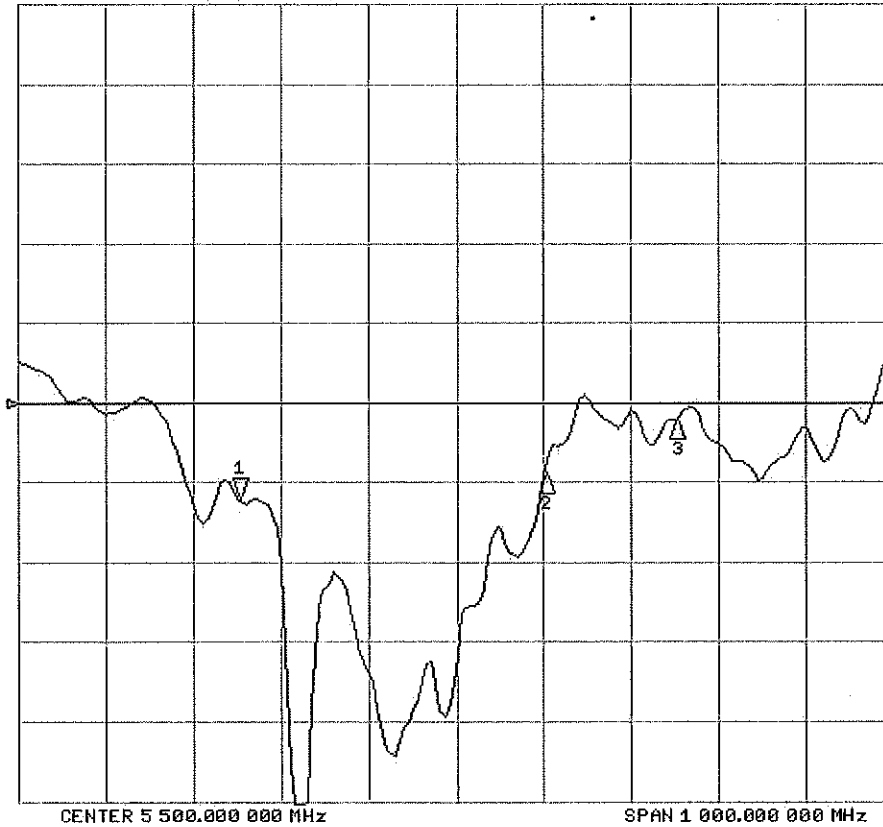
CH1 Markers

2: 55.500 Ω
0.4727 Ω
5.60000 GHz
3: 57.965 Ω
5.1660 Ω
5.75000 GHz

[CH1] S11 LOG 5 dB/REF -20 dB 1: -25.991 dB 5 250.000 000 MHz

*
Del
Smo
Cor

Avg
15



CH1 Markers

2: -24.481 dB
5.60000 GHz

3: -21.092 dB
5.75000 GHz

Certification of Calibration

Object D5GHzV2 – SN: 1191

Calibration procedure(s) Procedure for Calibration Extension for SAR Dipoles.

Extension Calibration date: 9/11/2018

Description: SAR Validation Dipole at 5250, 5600, and 5750 MHz.

Calibration Equipment used:

Manufacturer	Model	Description	Cal Date	Cal Interval	Cal Due	Serial Number
Control Company	4040	Therm./Clock/Humidity Monitor	3/31/2017	Biennial	3/31/2019	170232394
Control Company	4352	Ultra Long Stem Thermometer	5/2/2017	Biennial	5/2/2019	170330156
Amplifier Research	1551G6	Amplifier	CBT	N/A	CBT	433971
Narda	4772-3	Attenuator (3dB)	CBT	N/A	CBT	9406
Keysight	772D	Dual Directional Coupler	CBT	N/A	CBT	MY52180215
Keysight Technologies	85033E	Standard Mechanical Calibration Kit (DC to 9GHz, 3.5mm)	6/4/2018	Annual	6/4/2019	MY53401181
Agilent	8753ES	S-Parameter Vector Network Analyzer	8/30/2018	Annual	8/30/2019	MY40003841
Mini-Circuits	BW-N20W5+	DC to 18 GHz Precision Fixed 20 dB Attenuator	CBT	N/A	CBT	N/A
SPEAG	DAK-3.5	Dielectric Assessment Kit	5/15/2018	Annual	5/15/2019	1070
SPEAG	EX3DV4	SAR Probe	6/25/2018	Annual	6/25/2019	7409
SPEAG	DAE4	Dasy Data Acquisition Electronics	6/18/2018	Annual	6/18/2019	1334
SPEAG	EX3DV4	SAR Probe	4/18/2018	Annual	4/18/2019	7357
SPEAG	DAE4	Dasy Data Acquisition Electronics	4/11/2018	Annual	4/11/2019	1407
Anritsu	MA2411B	Pulse Power Sensor	3/2/2018	Annual	3/2/2019	1207364
Anritsu	MA2411B	Pulse Power Sensor	3/2/2018	Annual	3/2/2019	1339018
Anritsu	ML2495A	Power Meter	10/22/2017	Annual	10/22/2018	1328004
Agilent	N5182A	MXG Vector Signal Generator	4/18/2018	Annual	4/18/2019	MY47420800
Seekonk	NC-100	Torque Wrench	7/11/2018	Annual	7/11/2019	N/A
MiniCircuits	VLF-6000+	Low Pass Filter	CBT	N/A	CBT	N/A
Narda	4014C-6	4 - 8 GHz SMA 6 dB Directional Coupler	CBT	N/A	CBT	N/A

Note: CBT (Calibrated Before Testing). Prior to testing, the measurement paths containing a cable, amplifier, attenuator, coupler or filter were connected to a calibrated source (i.e. a signal generator) to determine the losses of the measurement path.

Measurement Uncertainty = $\pm 23\%$ (k=2)

	Name	Function	Signature
Calibrated By:	Brodie Halbfoster	Test Engineer	<i>BRODIE HALBFOSTER</i>
Approved By:	Kaitlin O'Keefe	Senior Technical Manager	<i>KOK</i>

DIPOLE CALIBRATION EXTENSION

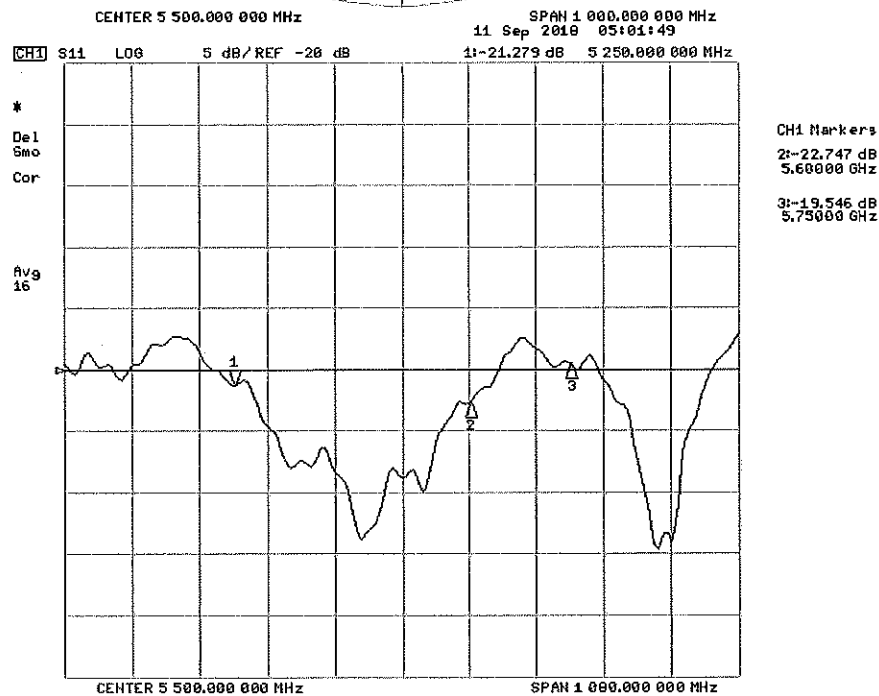
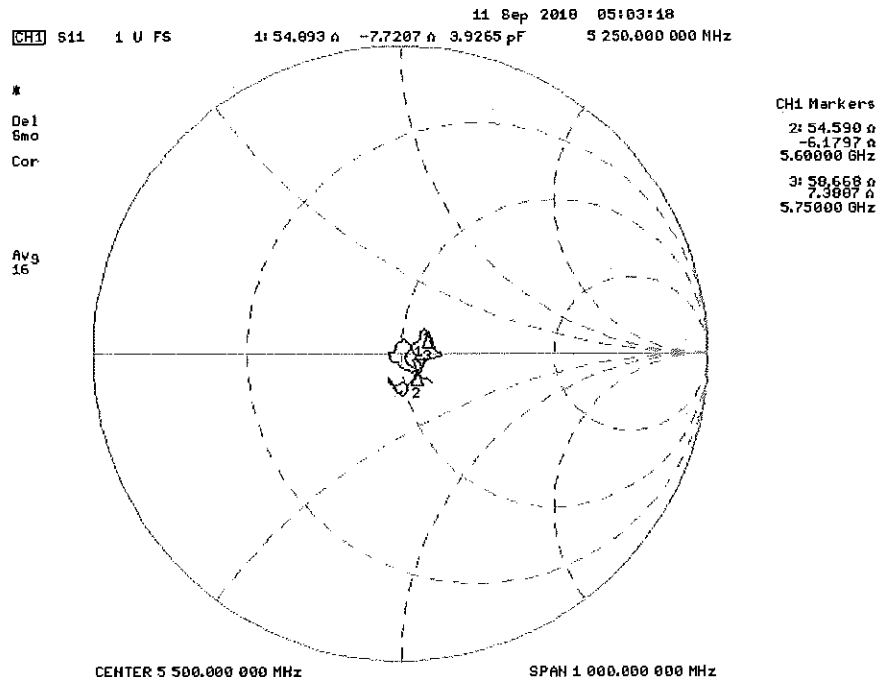
Per KDB 865664 D01, calibration intervals of up to three years may be considered for reference dipoles when it is demonstrated that the SAR target, impedance and return loss of a dipole have remained stable according to the following requirements:

1. The measured SAR does not deviate more than 10% from the target on the calibration certificate.
2. The return-loss does not deviate more than 20% from the previous measurement and meets the required 20dB minimum return-loss requirement.
3. The measurement of real or imaginary parts of impedance does not deviate more than 5Ω from the previous measurement.

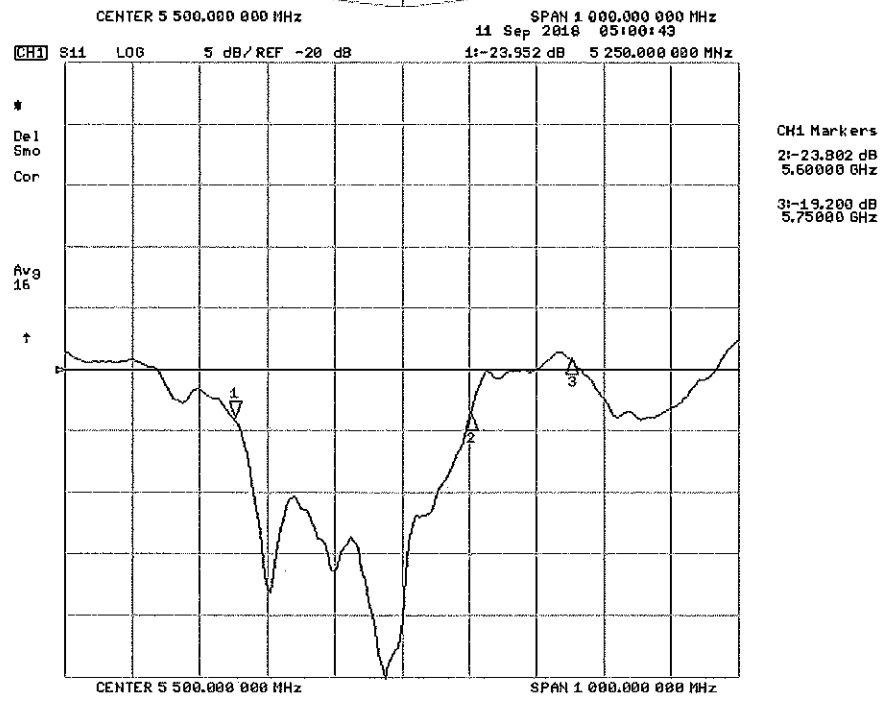
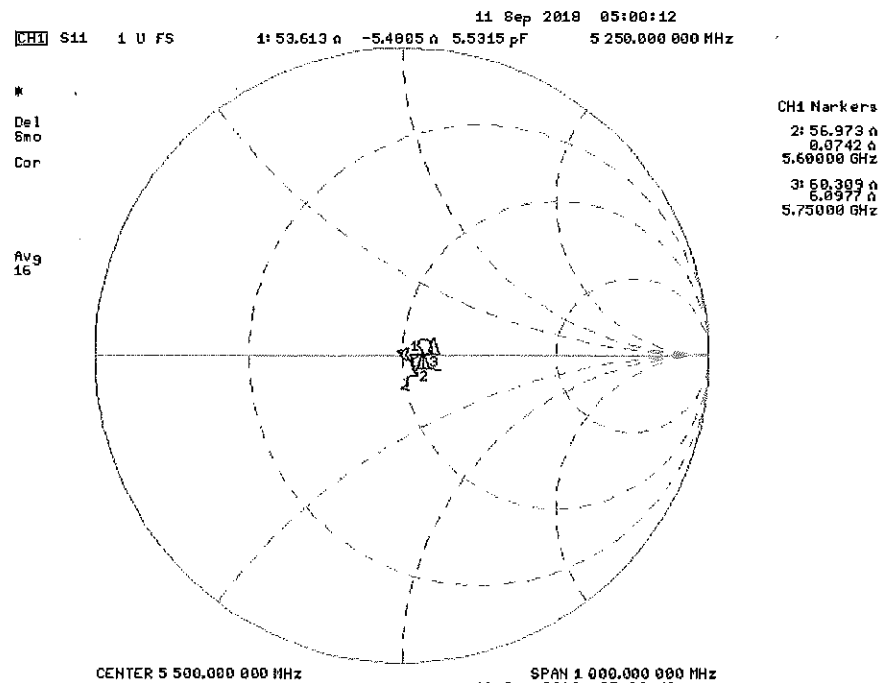
The following dipole was checked to pass the above 3 requirements to have 3-year calibration period from the calibration date:

Category	Item	Sub-Item	Unit	Q1 2023	Q2 2023	Q3 2023	Q4 2023	Q1 2024	Q2 2024	Q3 2024	Q4 2024	Q1 2025	Q2 2025	Q3 2025	Q4 2025	Q1 2026	Q2 2026	Q3 2026	Q4 2026	Q1 2027	Q2 2027	Q3 2027	Q4 2027	Q1 2028	Q2 2028	Q3 2028	Q4 2028	Q1 2029	Q2 2029	Q3 2029	Q4 2029	Q1 2030	Q2 2030	Q3 2030	Q4 2030	Q1 2031	Q2 2031	Q3 2031	Q4 2031	Q1 2032	Q2 2032	Q3 2032	Q4 2032	Q1 2033	Q2 2033	Q3 2033	Q4 2033	Q1 2034	Q2 2034	Q3 2034	Q4 2034	Q1 2035	Q2 2035	Q3 2035	Q4 2035	Q1 2036	Q2 2036	Q3 2036	Q4 2036	Q1 2037	Q2 2037	Q3 2037	Q4 2037	Q1 2038	Q2 2038	Q3 2038	Q4 2038	Q1 2039	Q2 2039	Q3 2039	Q4 2039	Q1 2040	Q2 2040	Q3 2040	Q4 2040	Q1 2041	Q2 2041	Q3 2041	Q4 2041	Q1 2042	Q2 2042	Q3 2042	Q4 2042	Q1 2043	Q2 2043	Q3 2043	Q4 2043	Q1 2044	Q2 2044	Q3 2044	Q4 2044	Q1 2045	Q2 2045	Q3 2045	Q4 2045	Q1 2046	Q2 2046	Q3 2046	Q4 2046	Q1 2047	Q2 2047	Q3 2047	Q4 2047	Q1 2048	Q2 2048	Q3 2048	Q4 2048	Q1 2049	Q2 2049	Q3 2049	Q4 2049	Q1 2050	Q2 2050	Q3 2050	Q4 2050	Q1 2051	Q2 2051	Q3 2051	Q4 2051	Q1 2052	Q2 2052	Q3 2052	Q4 2052	Q1 2053	Q2 2053	Q3 2053	Q4 2053	Q1 2054	Q2 2054	Q3 2054	Q4 2054	Q1 2055	Q2 2055	Q3 2055	Q4 2055	Q1 2056	Q2 2056	Q3 2056	Q4 2056	Q1 2057	Q2 2057	Q3 2057	Q4 2057	Q1 2058	Q2 2058	Q3 2058	Q4 2058	Q1 2059	Q2 2059	Q3 2059	Q4 2059	Q1 2060	Q2 2060	Q3 2060	Q4 2060	Q1 2061	Q2 2061	Q3 2061	Q4 2061	Q1 2062	Q2 2062	Q3 2062	Q4 2062	Q1 2063	Q2 2063	Q3 2063	Q4 2063	Q1 2064	Q2 2064	Q3 2064	Q4 2064	Q1 2065	Q2 2065	Q3 2065	Q4 2065	Q1 2066	Q2 2066	Q3 2066	Q4 2066	Q1 2067	Q2 2067	Q3 2067	Q4 2067	Q1 2068	Q2 2068	Q3 2068	Q4 2068	Q1 2069	Q2 2069	Q3 2069	Q4 2069	Q1 2070	Q2 2070	Q3 2070	Q4 2070	Q1 2071	Q2 2071	Q3 2071	Q4 2071	Q1 2072	Q2 2072	Q3 2072	Q4 2072	Q1 2073	Q2 2073	Q3 2073	Q4 2073	Q1 2074	Q2 2074	Q3 2074	Q4 2074	Q1 2075	Q2 2075	Q3 2075	Q4 2075	Q1 2076	Q2 2076	Q3 2076	Q4 2076	Q1 2077	Q2 2077	Q3 2077	Q4 2077	Q1 2078	Q2 2078	Q3 2078	Q4 2078	Q1 2079	Q2 2079	Q3 2079	Q4 2079	Q1 2080	Q2 2080	Q3 2080	Q4 2080	Q1 2081	Q2 2081	Q3 2081	Q4 2081	Q1 2082	Q2 2082	Q3 2082	Q4 2082	Q1 2083	Q2 2083	Q3 2083	Q4 2083	Q1 2084	Q2 2084	Q3 2084	Q4 2084	Q1 2085	Q2 2085	Q3 2085	Q4 2085	Q1 2086	Q2 2086	Q3 2086	Q4 2086	Q1 2087	Q2 2087	Q3 2087	Q4 2087	Q1 2088	Q2 2088	Q3 2088	Q4 2088	Q1 2089	Q2 2089	Q3 2089	Q4 2089	Q1 2090	Q2 2090	Q3 2090	Q4 2090	Q1 2091	Q2 2091	Q3 2091	Q4 2091	Q1 2092	Q2 2092	Q3 2092	Q4 2092	Q1 2093	Q2 2093	Q3 2093	Q4 2093	Q1 2094	Q2 2094	Q3 2094	Q4 2094	Q1 2095	Q2 2095	Q3 2095	Q4 2095	Q1 2096	Q2 2096	Q3 2096	Q4 2096	Q1 2097	Q2 2097	Q3 2097	Q4 2097	Q1 2098	Q2 2098	Q3 2098	Q4 2098	Q1 2099	Q2 2099	Q3 2099	Q4 2099	Q1 2100	Q2 2100	Q3 2100	Q4 2100	Q1 2101	Q2 2101	Q3 2101	Q4 2101	Q1 2102	Q2 2102	Q3 2102	Q4 2102	Q1 2103	Q2 2103	Q3 2103	Q4 2103	Q1 2104	Q2 2104	Q3 2104	Q4 2104	Q1 2105	Q2 2105	Q3 2105	Q4 2105	Q1 2106	Q2 2106	Q3 2106	Q4 2106	Q1 2107	Q2 2107	Q3 2107	Q4 2107	Q1 2108	Q2 2108	Q3 2108	Q4 2108	Q1 2109	Q2 2109	Q3 2109	Q4 2109	Q1 2110	Q2 2110	Q3 2110	Q4 2110	Q1 2111	Q2 2111	Q3 2111	Q4 2111	Q1 2112	Q2 2112	Q3 2112	Q4 2112	Q1 2113	Q2 2113	Q3 2113	Q4 2113	Q1 2114	Q2 2114	Q3 2114	Q4 2114	Q1 2115	Q2 2115	Q3 2115	Q4 2115	Q1 2116	Q2 2116	Q3 2116	Q4 2116	Q1 2117	Q2 2117	Q3 2117	Q4 2117	Q1 2118	Q2 2118	Q3 2118	Q4 2118	Q1 2119	Q2 2119	Q3 2119	Q4 2119	Q1 2120	Q2 2120	Q3 2120	Q4 2120	Q1 2121	Q2 2121	Q3 2121	Q4 2121	Q1 2122	Q2 2122	Q3 2122	Q4 2122	Q1 2123	Q2 2123	Q3 2123	Q4 2123	Q1 2124	Q2 2124	Q3 2124	Q4 2124	Q1 2125	Q2 2125	Q3 2125	Q4 2125	Q1 2126	Q2 2126	Q3 2126	Q4 2126	Q1 2127	Q2 2127	Q3 2127	Q4 2127	Q1 2128	Q2 2128	Q3 2128	Q4 2128	Q1 2129	Q2 2129	Q3 2129	Q4 2129	Q1 2130	Q2 2130	Q3 2130	Q4 2130	Q1 2131	Q2 2131	Q3 2131	Q4 2131	Q1 2132	Q2 2132	Q3 2132	Q4 2132	Q1 2133	Q2 2133	Q3 2133	Q4 2133	Q1 2134	Q2 2134	Q3 2134	Q4 2134	Q1 2135	Q2 2135	Q3 2135	Q4 2135	Q1 2136	Q2 2136	Q3 2136	Q4 2136	Q1 2137	Q2 2137	Q3 2137	Q4 2137	Q1 2138	Q2 2138	Q3 2138	Q4 2138	Q1 2139	Q2 2139	Q3 2139	Q4 2139	Q1 2140	Q2 2140	Q3 2140	Q4 2140	Q1 2141	Q2 2141	Q3 2141	Q4 2141	Q1 2142	Q2 2142	Q3 2142	Q4 2142	Q1 2143	Q2 2143	Q3 2143	Q4 2143	Q1 2144	Q2 2144	Q3 2144	Q4 2144	Q1 2145	Q2 2145	Q3 2145	Q4 2145	Q1 2146	Q2 2146	Q3 2146	Q4 2146	Q1 2147	Q2 2147	Q3 2147	Q4 2147	Q1 2148	Q2 2148	Q3 2148	Q4 2148	Q1 2149	Q2 2149	Q3 2149	Q4 2149	Q1 2150	Q2 2150	Q3 2150	Q4 2150	Q1 2151	Q2 2151	Q3 2151	Q4 2151	Q1 2152	Q2 2152	Q3 2152	Q4 2152	Q1 2153	Q2 2153	Q3 2153	Q4 2153	Q1 2154	Q2 2154	Q3 2154	Q4 2154	Q1 2155	Q2 2155	Q3 2155	Q4 2155	Q1 2156	Q2 2156	Q3 2156	Q4 2156	Q1 2157	Q2 2157	Q3 2157	Q4 2157	Q1 2158	Q2 2158	Q3 2158	Q4 2158	Q1 2159	Q2 2159	Q3 2159	Q4 2159	Q1 2160	Q2 2160	Q3 2160	Q4 2160	Q1 2161	Q2 2161	Q3 2161	Q4 2161	Q1 2162	Q2 2162	Q3 2162	Q4 2162	Q1 2163	Q2 2163	Q3 2163	Q4 2163	Q1 2164	Q2 2164	Q3 2164	Q4 2164	Q1 2165	Q2 2165	Q3 2165	Q4 2165	Q1 2166	Q2 2166	Q3 2166	Q4 2166	Q1 2167	Q2 2167	Q3 2167	Q4 2167	Q1 2168	Q2 2168	Q3 2168	Q4 2168	Q1 2169	Q2 2169	Q3 2169	Q4 2169	Q1 2170	Q2 2170	Q3 2170	Q4 2170	Q1 2171	Q2 2171	Q3 2171	Q4 2171	Q1 2172	Q2 2172	Q3 2172	Q4 2172	Q1 2173	Q2 2173	Q3 2173	Q4 2173	Q1 2174	Q2 2174	Q3 2174	Q4 2174	Q1 2175	Q2 2175	Q3 2175	Q4 2175	Q1 2176	Q2 2176	Q3 2176	Q4 2176	Q1 2177	Q2 2177	Q3 2177	Q4 2177	Q1 2178	Q2 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2209	Q4 2209	Q1 2210	Q2 2210	Q3 2210	Q4 2210	Q1 2211	Q2 2211	Q3 2211	Q4 2211	Q1 2212	Q2 2212	Q3 2212	Q4 2212	Q1 2213	Q2 2213	Q3 2213	Q4 2213	Q1 2214	Q2 2214	Q3 2214	Q4 2214	Q1 2215	Q2 2215	Q3 2215	Q4 2215	Q1 2216	Q2 2216	Q3 2216	Q4 2216	Q1 2217	Q2 2217	Q3 2217	Q4 2217	Q1 2218	Q2 2218	Q3 2218	Q4 2218	Q1 2219	Q2 2219	Q3 2219	Q4 2219	Q1 2220	Q2 2220	Q3 2220	Q4 2220	Q1 2221	Q2 2221	Q3 2221	Q4 2221	Q1 2222	Q2 2222	Q3 2222	Q4 2222	Q1 2223	Q2 2223	Q3 2223	Q4 2223	Q1 2224	Q2 2224	Q3 2224	Q4 2224	Q1 2225	Q2 2225	Q3 2225	Q4 2225	Q1 2226	Q2 2226	Q3 2226	Q4 2226	Q1 2227	Q2 2227	Q3 2227	Q4 2227	Q1 2228	Q2 2228	Q3 2228	Q4 2228	Q1 2229	Q2 2229	Q3 2229	Q4 2229	Q1 2230	Q2 2230	Q3 2230	Q4 2230	Q1 2231	Q2 2231	Q3 2231	Q4 2231	Q1 2232	Q2 2232	Q3 2232	Q4 2232	Q1 2233	Q2 2233	Q3 2233	Q4 2233	Q1 2234	Q2 2234	Q3 2234	Q4 2234	Q1 2235	Q2 2235	Q3 2235	Q4 2235	Q1 2236	Q2 2236	Q3 2236	Q4 2236	Q1 2237	Q2 2237	Q3 2237	Q4 2237	Q1 2238	Q2 2238	Q3 2238	Q4 2238	Q1 2239	Q2 2239	Q3 2239	Q4 2239	Q1 2240	Q2 2240	Q3 2240	Q4 2240	Q1 2241	Q2 2241	Q3 2241	Q4 2241	Q1 2242	Q2 2242	Q3 2242	Q4 2242	Q1 2243	Q2 2243	Q3 2243	Q4 2243	Q1 2244	Q2 2244	Q3 2244	Q4 2244	Q1 2245	Q2 2245	Q3 2245	Q4 2245	Q1 2246	Q2 2246	Q3 2246	Q4 2246	Q1 2247	Q2 2247	Q3 2247	Q4 2247	Q1 2248	Q2 2248	Q3 2248	Q4 2248	Q1 2249	Q2 2249	Q3 2249	Q4 2249	Q1 2250	Q2 2250	Q3 2250	Q4 2250	Q1 2251	Q2 2251	Q3 2251	Q4 2251	Q1 2252	Q2 2252	Q3 2252	Q4 2252	Q1 2253	Q2 2253	Q3 2253	Q4 2253	Q1 2254	Q2 2254	Q3 2254	Q4 2254	Q1 2255	Q2 2255	Q3 2255	Q4 2255	Q1 2256	Q2 2256	Q3 2256	Q4 2256	Q1 2257	Q2 2257	Q3 2257	Q4 2257	Q1 2258	Q2 2258	Q3 2258	Q4 2258	Q1 2259	Q2 2259	Q3 2259	Q4 2259	Q1 2260	Q2 2260	Q3 2260	Q4 2260	Q1 2261	Q2 2261	Q3 2261	Q4 2261	Q1 2262	Q2 2262	Q3 2262	Q4 2262	Q1 2263	Q2 2263	Q3 2263	Q4 2263	Q1 2264	Q2 2264	Q3 2264	Q4 2264	Q1 2265	Q2 2265	Q3 2265	Q4 2265	Q1 2266	Q2 2266	Q3 2266	Q4 2266	Q1 2267	Q2 2267	Q3 2267	Q4 2267	Q1 2268	Q2 2268	Q3 2268	Q4 2268	Q1 2269	Q2 2269	Q3 2269	Q4 2269	Q1 2270	Q2 2270	Q3 2270	Q4 2270	Q1 2271	Q2 2271	Q3 2271	Q4 2271	Q1 2272	Q2 2272	Q3 2272	Q4 2272	Q1 2273	Q2 2273	Q3 2273	Q4 2273	Q1 2274	Q2 2274	Q3 2274	Q4 2274	Q1 2275	Q2 2275	Q3 2275	Q4 2275	Q1 2276	Q2 2276	Q3 2276	Q4 2276	Q1 2277	Q2 2277	Q3 2277	Q4 2277	Q1 2278	Q2 2278	Q3 2278	Q4 2278	Q1 2279	Q2 2279	Q3 2279	Q4 2279	Q1 2280	Q2 2
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Impedance & Return-Loss Measurement Plot for Head TSL



Impedance & Return-Loss Measurement Plot for Body TSL





Accredited by the Swiss Accreditation Service (SAS)

Accreditation No.: **SCS 0108**

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

Client **PC Test**

Certificate No: **ES3-3213_Feb18**

CALIBRATION CERTIFICATE

Object **ES3DV3 - SN:3213**

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

*Bm ✓
03-02-2018*

Calibration date: **February 13, 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 $(22 \pm 3)^\circ\text{C}$ 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

Calibrated by:	Name Michael Weber	Function Laboratory Technician	Signature 
Approved by:	Katja Pokovic	Technical Manager	
This calibration certificate shall not be reproduced except in full without written approval of the laboratory.			Issued: February 13, 2018



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Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: **SCS 0108**

Glossary:

TSL	tissue simulating liquid
NORM _{x,y,z}	sensitivity in free space
ConvF	sensitivity in TSL / NORM _{x,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 ϑ	ϑ rotation around an axis that is in the plane normal to probe axis (at measurement center), i.e., $\vartheta = 0$ is normal to probe axis
Connector Angle	information used in DASY system to align probe sensor X to the robot coordinate system

Calibration is Performed According to the Following Standards:

- IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013
- IEC 62209-1, "Measurement procedure for the assessment of Specific Absorption Rate (SAR) from hand-held and body-mounted devices used next to the ear (frequency range of 300 MHz to 6 GHz)", July 2016
- IEC 62209-2, "Procedure to determine the Specific Absorption Rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)", March 2010
- KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

Methods Applied and Interpretation of Parameters:

- NORM_{x,y,z}**: Assessed for E-field polarization $\vartheta = 0$ ($f \leq 900$ MHz in TEM-cell; $f > 1800$ MHz: R22 waveguide). NORM_{x,y,z} are only intermediate values, i.e., the uncertainties of NORM_{x,y,z} does not affect the E^2 -field uncertainty inside TSL (see below **ConvF**).
- NORM(f)_{x,y,z}** = NORM_{x,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**.
- DCP_{x,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
- A_{x,y,z}; B_{x,y,z}; C_{x,y,z}; D_{x,y,z}; VR_{x,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 $f \leq 800$ 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 NORM_{x,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 NORM_x (no uncertainty required).

Probe ES3DV3

SN:3213

Manufactured: October 14, 2008
Calibrated: February 13, 2018

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

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

Basic Calibration Parameters

	Sensor X	Sensor Y	Sensor Z	Unc (k=2)
Norm ($\mu V/(V/m)^2$) ^A	1.43	1.32	1.29	$\pm 10.1 \%$
DCP (mV) ^B	100.3	104.3	100.0	

Modulation Calibration Parameters

UID	Communication System Name		A dB	B dB $\sqrt{\mu V}$	C	D dB	VR mV	Unc ^E (k=2)
0	CW	X	0.0	0.0	1.0	0.00	219.3	$\pm 2.7 \%$
		Y	0.0	0.0	1.0		219.1	
		Z	0.0	0.0	1.0		213.7	

Note: For details on UID parameters see Appendix.

Sensor Model Parameters

	C1 fF	C2 fF	α V^{-1}	T1 ms. V^{-2}	T2 ms. V^{-1}	T3 ms	T4 V^{-2}	T5 V^{-1}	T6
X	55.43	404.4	36.34	28.23	1.967	5.10	0.398	0.555	1.011
Y	56.36	406.4	35.71	28.34	2.153	5.10	1.040	0.438	1.013
Z	52.80	385.3	36.34	28.19	1.829	5.10	0.000	0.541	1.011

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

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

^B Numerical linearization parameter: uncertainty not required.

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

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

Calibration Parameter Determined in Head Tissue Simulating Media

f (MHz) ^C	Relative Permittivity ^F	Conductivity (S/m) ^F	ConvF X	ConvF Y	ConvF Z	Alpha ^G	Depth ^G (mm)	Unc (k=2)
750	41.9	0.89	6.75	6.75	6.75	0.64	1.30	± 12.0 %
835	41.5	0.90	6.42	6.42	6.42	0.48	1.50	± 12.0 %
1750	40.1	1.37	5.45	5.45	5.45	0.52	1.41	± 12.0 %
1900	40.0	1.40	5.30	5.30	5.30	0.79	1.17	± 12.0 %
2300	39.5	1.67	4.94	4.94	4.94	0.59	1.37	± 12.0 %
2450	39.2	1.80	4.72	4.72	4.72	0.80	1.21	± 12.0 %
2600	39.0	1.96	4.53	4.53	4.53	0.72	1.33	± 12.0 %

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

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

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

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

Calibration Parameter Determined in Body Tissue Simulating Media

f (MHz) ^C	Relative Permittivity ^F	Conductivity (S/m) ^F	ConvF X	ConvF Y	ConvF Z	Alpha ^G	Depth ^G (mm)	Unc (k=2)
750	55.5	0.96	6.30	6.30	6.30	0.80	1.13	± 12.0 %
835	55.2	0.97	6.20	6.20	6.20	0.41	1.66	± 12.0 %
1750	53.4	1.49	5.10	5.10	5.10	0.37	1.82	± 12.0 %
1900	53.3	1.52	4.88	4.88	4.88	0.59	1.51	± 12.0 %
2300	52.9	1.81	4.62	4.62	4.62	0.80	1.30	± 12.0 %
2450	52.7	1.95	4.53	4.53	4.53	0.80	1.25	± 12.0 %
2600	52.5	2.16	4.33	4.33	4.33	0.80	1.25	± 12.0 %

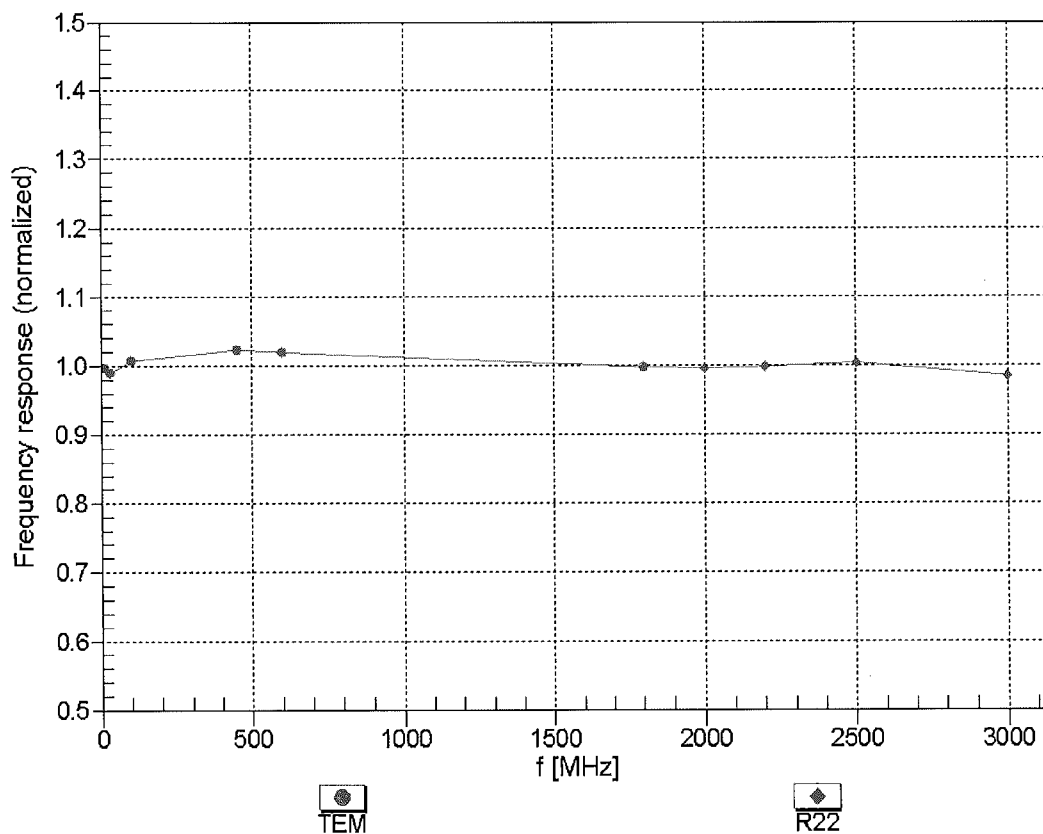
^C Frequency validity above 300 MHz of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to ± 50 MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is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

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

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

Frequency Response of E-Field

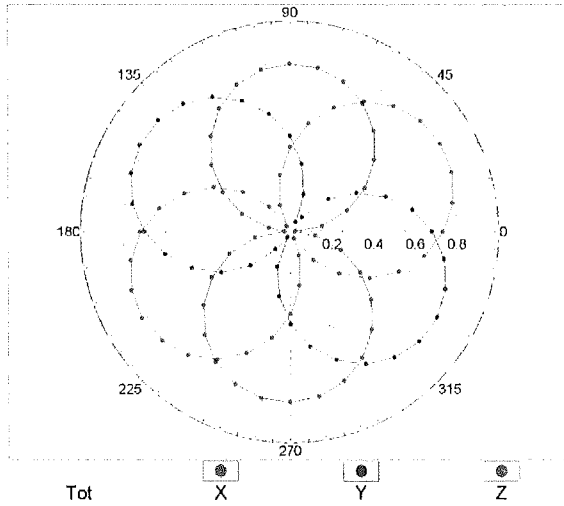
(TEM-Cell:ifi110 EXX, Waveguide: R22)



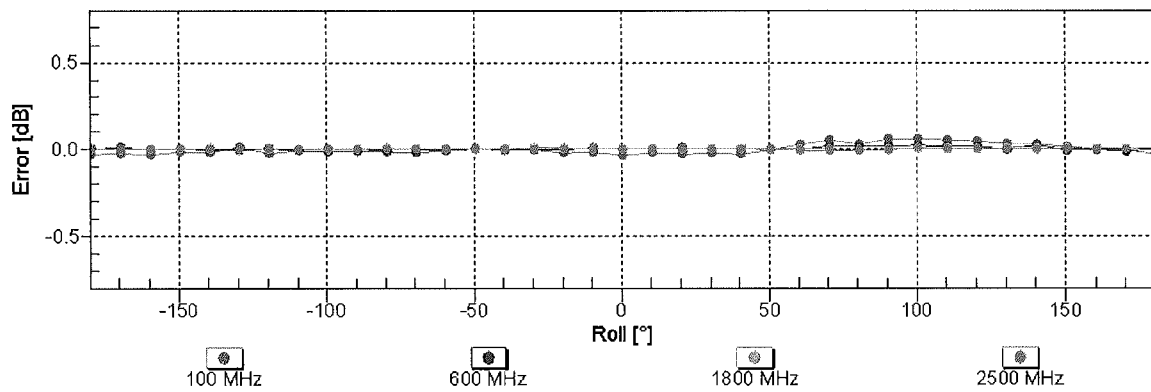
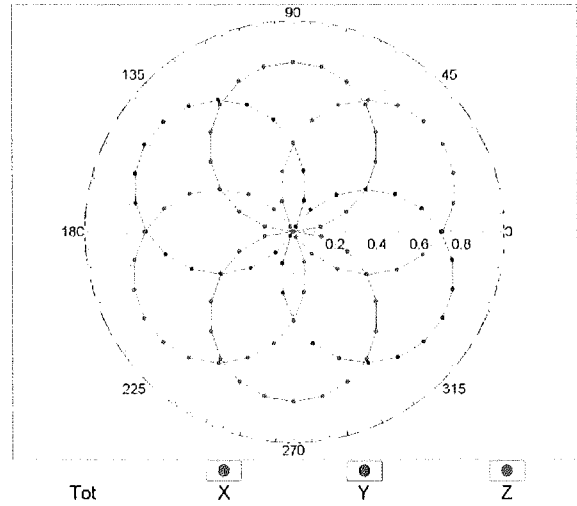
Uncertainty of Frequency Response of E-field: $\pm 6.3\%$ ($k=2$)

Receiving Pattern (ϕ), $\theta = 0^\circ$

f=600 MHz,TEM



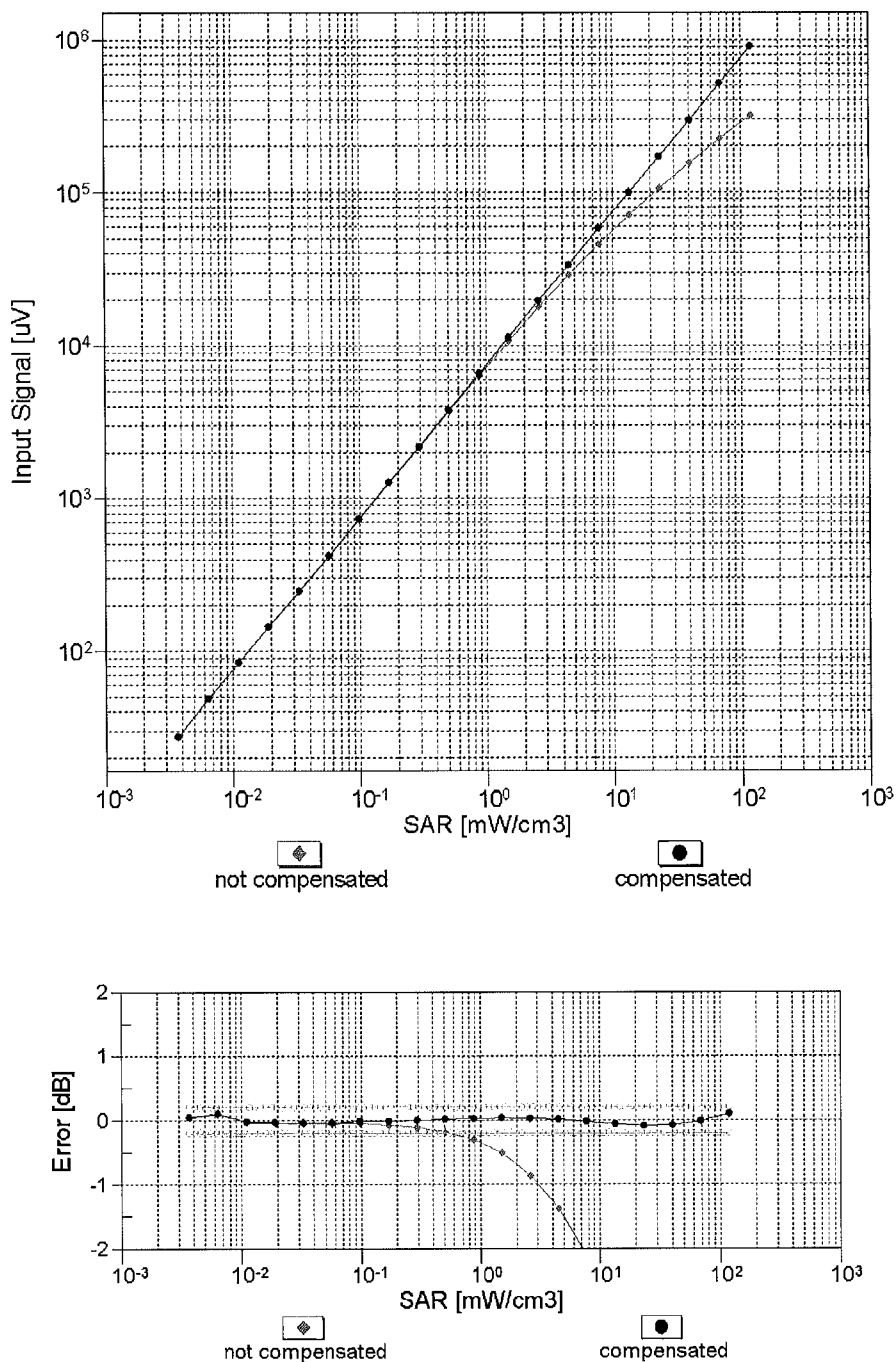
f=1800 MHz,R22



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

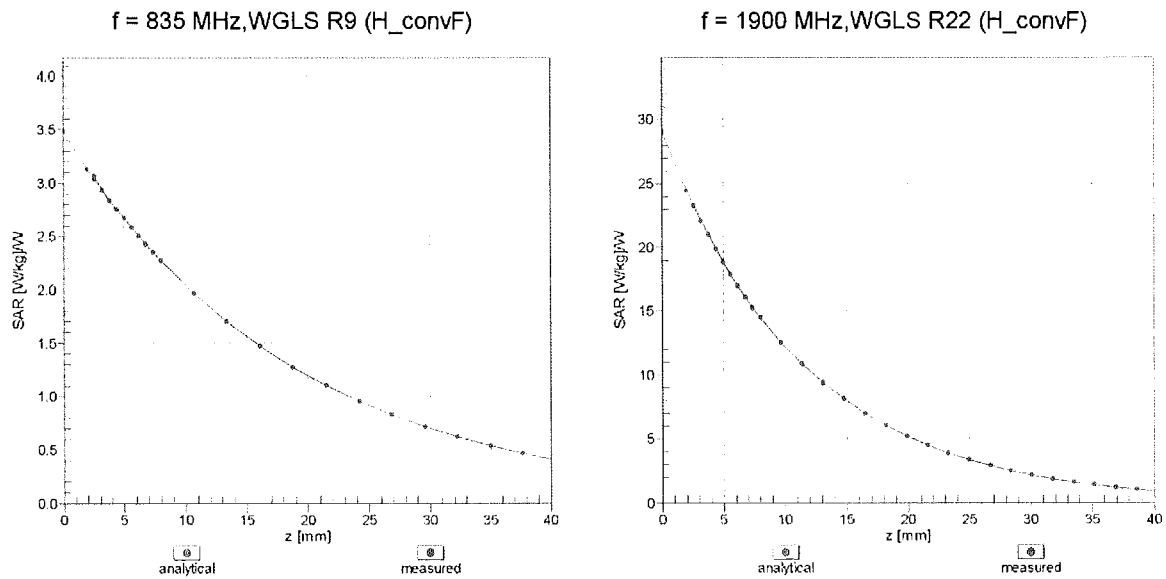
Dynamic Range f(SAR_{head})

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



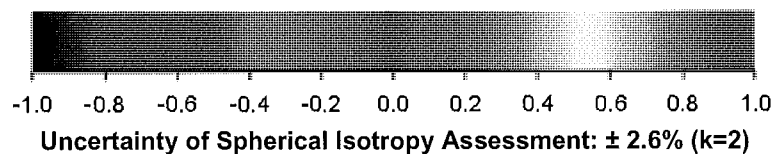
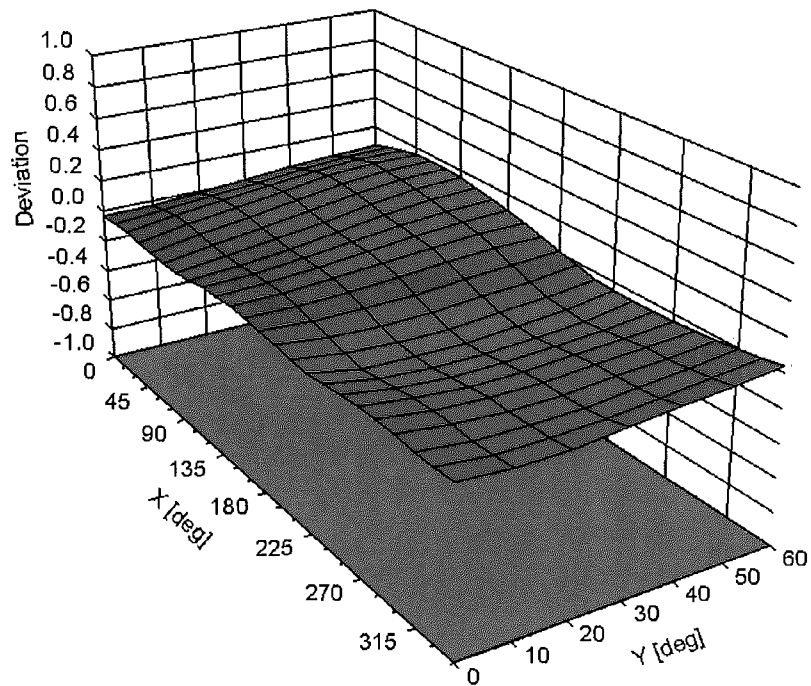
Uncertainty of Linearity Assessment: ± 0.6% (k=2)

Conversion Factor Assessment



Deviation from Isotropy in Liquid

Error (ϕ, θ), $f = 900 \text{ MHz}$



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

Other Probe Parameters

Sensor Arrangement	Triangular
Connector Angle (°)	100.6
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 dB $\sqrt{\mu V}$	C	D dB	VR mV	Max Unc ^E (k=2)
0	CW	X	0.00	0.00	1.00	0.00	219.3	$\pm 2.7 \%$
		Y	0.00	0.00	1.00		219.1	
		Z	0.00	0.00	1.00		213.7	
10010- CAA	SAR Validation (Square, 100ms, 10ms)	X	7.64	78.36	17.77	10.00	25.0	$\pm 9.6 \%$
		Y	8.93	80.69	18.99		25.0	
		Z	7.43	77.97	17.46		25.0	
10011- CAB	UMTS-FDD (WCDMA)	X	0.94	65.73	13.94	0.00	150.0	$\pm 9.6 \%$
		Y	1.08	67.98	15.48		150.0	
		Z	0.93	65.52	13.77		150.0	
10012- CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps)	X	1.23	64.18	15.06	0.41	150.0	$\pm 9.6 \%$
		Y	1.29	65.11	15.84		150.0	
		Z	1.22	64.10	14.97		150.0	
10013- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps)	X	5.06	67.01	17.27	1.46	150.0	$\pm 9.6 \%$
		Y	5.11	67.24	17.46		150.0	
		Z	5.03	67.01	17.25		150.0	
10021- DAC	GSM-FDD (TDMA, GMSK)	X	58.23	111.57	29.90	9.39	50.0	$\pm 9.6 \%$
		Y	38.28	105.54	28.67		50.0	
		Z	83.35	116.76	31.01		50.0	
10023- DAC	GPRS-FDD (TDMA, GMSK, TN 0)	X	42.41	106.55	28.63	9.57	50.0	$\pm 9.6 \%$
		Y	31.06	102.12	27.76		50.0	
		Z	55.17	110.35	29.43		50.0	
10024- DAC	GPRS-FDD (TDMA, GMSK, TN 0-1)	X	100.00	116.42	29.15	6.56	60.0	$\pm 9.6 \%$
		Y	100.00	117.64	29.89		60.0	
		Z	100.00	115.95	28.84		60.0	
10025- DAC	EDGE-FDD (TDMA, 8PSK, TN 0)	X	22.66	114.16	43.61	12.57	50.0	$\pm 9.6 \%$
		Y	32.36	125.54	47.77		50.0	
		Z	20.92	112.18	42.96		50.0	
10026- DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1)	X	22.06	107.62	37.21	9.56	60.0	$\pm 9.6 \%$
		Y	29.09	114.84	39.79		60.0	
		Z	22.32	108.24	37.43		60.0	
10027- DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2)	X	100.00	114.90	27.59	4.80	80.0	$\pm 9.6 \%$
		Y	100.00	116.49	28.47		80.0	
		Z	100.00	114.42	27.29		80.0	
10028- DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2-3)	X	100.00	114.37	26.58	3.55	100.0	$\pm 9.6 \%$
		Y	100.00	116.53	27.70		100.0	
		Z	100.00	113.85	26.28		100.0	
10029- DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2)	X	13.21	95.56	31.98	7.80	80.0	$\pm 9.6 \%$
		Y	16.23	100.64	33.98		80.0	
		Z	13.05	95.55	31.99		80.0	
10030- CAA	IEEE 802.15.1 Bluetooth (GFSK, DH1)	X	100.00	114.59	27.76	5.30	70.0	$\pm 9.6 \%$
		Y	100.00	116.05	28.60		70.0	
		Z	100.00	114.06	27.44		70.0	
10031- CAA	IEEE 802.15.1 Bluetooth (GFSK, DH3)	X	100.00	112.38	24.24	1.88	100.0	$\pm 9.6 \%$
		Y	100.00	116.66	26.24		100.0	
		Z	100.00	111.54	23.82		100.0	

10032-CAA	IEEE 802.15.1 Bluetooth (GFSK, DH5)	X	100.00	112.51	23.27	1.17	100.0	± 9.6 %
		Y	100.00	119.82	26.49		100.0	
		Z	100.00	111.35	22.74		100.0	
10033-CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH1)	X	19.77	98.57	26.87	5.30	70.0	± 9.6 %
		Y	22.51	101.06	27.89		70.0	
		Z	20.62	99.03	26.84		70.0	
10034-CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH3)	X	5.26	81.87	19.91	1.88	100.0	± 9.6 %
		Y	7.30	87.04	22.01		100.0	
		Z	5.17	81.44	19.55		100.0	
10035-CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH5)	X	2.97	75.56	17.30	1.17	100.0	± 9.6 %
		Y	4.02	80.17	19.40		100.0	
		Z	2.90	75.11	16.93		100.0	
10036-CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH1)	X	25.61	102.92	28.18	5.30	70.0	± 9.6 %
		Y	28.89	105.33	29.15		70.0	
		Z	27.23	103.63	28.21		70.0	
10037-CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH3)	X	5.03	81.31	19.68	1.88	100.0	± 9.6 %
		Y	7.01	86.52	21.80		100.0	
		Z	4.92	80.81	19.30		100.0	
10038-CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH5)	X	3.05	76.11	17.60	1.17	100.0	± 9.6 %
		Y	4.14	80.86	19.74		100.0	
		Z	2.97	75.64	17.22		100.0	
10039-CAB	CDMA2000 (1xRTT, RC1)	X	1.52	68.64	14.11	0.00	150.0	± 9.6 %
		Y	1.86	71.69	15.85		150.0	
		Z	1.44	68.18	13.70		150.0	
10042-CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Halfrate)	X	100.00	115.25	28.83	7.78	50.0	± 9.6 %
		Y	100.00	116.43	29.57		50.0	
		Z	100.00	114.73	28.50		50.0	
10044-CAA	IS-91/EIA/TIA-553 FDD (FDMA, FM)	X	0.00	111.44	0.10	0.00	150.0	± 9.6 %
		Y	0.00	116.05	0.75		150.0	
		Z	0.00	113.36	0.21		150.0	
10048-CAA	DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24)	X	15.69	90.02	25.55	13.80	25.0	± 9.6 %
		Y	13.84	87.79	25.13		25.0	
		Z	17.52	91.95	25.99		25.0	
10049-CAA	DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12)	X	19.88	94.41	25.54	10.79	40.0	± 9.6 %
		Y	17.39	92.41	25.24		40.0	
		Z	22.32	96.16	25.89		40.0	
10056-CAA	UMTS-TDD (TD-SCDMA, 1.28 Mcps)	X	15.96	91.92	25.75	9.03	50.0	± 9.6 %
		Y	16.02	92.06	26.04		50.0	
		Z	16.84	92.83	25.91		50.0	
10058-DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)	X	9.21	88.16	28.55	6.55	100.0	± 9.6 %
		Y	10.78	91.87	30.15		100.0	
		Z	9.04	87.96	28.49		100.0	
10059-CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps)	X	1.36	66.07	16.00	0.61	110.0	± 9.6 %
		Y	1.46	67.28	16.91		110.0	
		Z	1.35	65.96	15.91		110.0	
10060-CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps)	X	52.62	119.34	30.14	1.30	110.0	± 9.6 %
		Y	100.00	130.86	33.40		110.0	
		Z	47.54	117.73	29.68		110.0	

10061-CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps)	X	7.64	91.52	25.20	2.04	110.0	± 9.6 %
		Y	11.51	98.81	27.78		110.0	
		Z	7.56	91.41	25.11		110.0	
10062-CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps)	X	4.79	66.76	16.54	0.49	100.0	± 9.6 %
		Y	4.84	66.99	16.73		100.0	
		Z	4.76	66.76	16.52		100.0	
10063-CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps)	X	4.82	66.91	16.68	0.72	100.0	± 9.6 %
		Y	4.87	67.15	16.87		100.0	
		Z	4.79	66.91	16.65		100.0	
10064-CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps)	X	5.14	67.25	16.96	0.86	100.0	± 9.6 %
		Y	5.20	67.49	17.14		100.0	
		Z	5.10	67.24	16.93		100.0	
10065-CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps)	X	5.04	67.27	17.12	1.21	100.0	± 9.6 %
		Y	5.10	67.51	17.31		100.0	
		Z	5.00	67.25	17.09		100.0	
10066-CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps)	X	5.09	67.39	17.35	1.46	100.0	± 9.6 %
		Y	5.15	67.65	17.54		100.0	
		Z	5.06	67.37	17.32		100.0	
10067-CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps)	X	5.41	67.60	17.83	2.04	100.0	± 9.6 %
		Y	5.47	67.85	18.03		100.0	
		Z	5.38	67.60	17.82		100.0	
10068-CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps)	X	5.53	67.90	18.19	2.55	100.0	± 9.6 %
		Y	5.60	68.19	18.41		100.0	
		Z	5.49	67.88	18.16		100.0	
10069-CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps)	X	5.62	67.88	18.39	2.67	100.0	± 9.6 %
		Y	5.69	68.17	18.62		100.0	
		Z	5.57	67.88	18.36		100.0	
10071-CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps)	X	5.20	67.23	17.66	1.99	100.0	± 9.6 %
		Y	5.25	67.48	17.85		100.0	
		Z	5.17	67.24	17.64		100.0	
10072-CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps)	X	5.24	67.75	17.96	2.30	100.0	± 9.6 %
		Y	5.31	68.03	18.18		100.0	
		Z	5.21	67.74	17.94		100.0	
10073-CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps)	X	5.36	68.08	18.38	2.83	100.0	± 9.6 %
		Y	5.44	68.38	18.61		100.0	
		Z	5.33	68.07	18.36		100.0	
10074-CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps)	X	5.39	68.13	18.62	3.30	100.0	± 9.6 %
		Y	5.47	68.45	18.87		100.0	
		Z	5.36	68.12	18.60		100.0	
10075-CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps)	X	5.52	68.55	19.10	3.82	90.0	± 9.6 %
		Y	5.61	68.93	19.38		90.0	
		Z	5.48	68.52	19.07		90.0	
10076-CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps)	X	5.53	68.37	19.24	4.15	90.0	± 9.6 %
		Y	5.62	68.75	19.52		90.0	
		Z	5.50	68.36	19.22		90.0	
10077-CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps)	X	5.57	68.46	19.34	4.30	90.0	± 9.6 %
		Y	5.66	68.84	19.63		90.0	
		Z	5.54	68.44	19.32		90.0	

10081-CAB	CDMA2000 (1xRTT, RC3)	X	0.76	64.13	11.38	0.00	150.0	± 9.6 %
		Y	0.90	66.35	12.99		150.0	
		Z	0.73	63.81	11.00		150.0	
10082-CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Fullrate)	X	1.73	62.47	7.53	4.77	80.0	± 9.6 %
		Y	1.91	63.29	8.22		80.0	
		Z	1.67	62.23	7.30		80.0	
10090-DAC	GPRS-FDD (TDMA, GMSK, TN 0-4)	X	100.00	116.51	29.21	6.56	60.0	± 9.6 %
		Y	100.00	117.72	29.95		60.0	
		Z	100.00	116.03	28.90		60.0	
10097-CAB	UMTS-FDD (HSDPA)	X	1.73	66.45	14.86	0.00	150.0	± 9.6 %
		Y	1.84	67.58	15.67		150.0	
		Z	1.71	66.38	14.75		150.0	
10098-CAB	UMTS-FDD (HSUPA, Subtest 2)	X	1.70	66.40	14.82	0.00	150.0	± 9.6 %
		Y	1.81	67.56	15.65		150.0	
		Z	1.68	66.33	14.71		150.0	
10099-DAC	EDGE-FDD (TDMA, 8PSK, TN 0-4)	X	22.00	107.50	37.17	9.56	60.0	± 9.6 %
		Y	28.88	114.61	39.71		60.0	
		Z	22.27	108.13	37.40		60.0	
10100-CAD	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	X	3.03	69.43	16.03	0.00	150.0	± 9.6 %
		Y	3.22	70.56	16.70		150.0	
		Z	2.99	69.29	15.96		150.0	
10101-CAD	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	X	3.23	67.20	15.61	0.00	150.0	± 9.6 %
		Y	3.33	67.78	16.01		150.0	
		Z	3.20	67.12	15.56		150.0	
10102-CAD	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	X	3.34	67.17	15.71	0.00	150.0	± 9.6 %
		Y	3.42	67.69	16.08		150.0	
		Z	3.31	67.10	15.66		150.0	
10103-CAD	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	X	8.49	78.45	21.33	3.98	65.0	± 9.6 %
		Y	8.79	79.00	21.62		65.0	
		Z	8.39	78.42	21.32		65.0	
10104-CAD	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	X	8.27	76.76	21.53	3.98	65.0	± 9.6 %
		Y	8.57	77.41	21.89		65.0	
		Z	8.21	76.79	21.53		65.0	
10105-CAD	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	X	8.13	76.44	21.71	3.98	65.0	± 9.6 %
		Y	7.83	75.63	21.42		65.0	
		Z	7.93	76.10	21.55		65.0	
10108-CAE	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	X	2.67	68.71	15.86	0.00	150.0	± 9.6 %
		Y	2.83	69.80	16.55		150.0	
		Z	2.63	68.57	15.78		150.0	
10109-CAE	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	X	2.89	66.95	15.47	0.00	150.0	± 9.6 %
		Y	2.98	67.57	15.91		150.0	
		Z	2.86	66.87	15.40		150.0	
10110-CAE	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	X	2.17	67.76	15.45	0.00	150.0	± 9.6 %
		Y	2.32	68.94	16.22		150.0	
		Z	2.13	67.62	15.34		150.0	
10111-CAE	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	X	2.56	67.34	15.57	0.00	150.0	± 9.6 %
		Y	2.66	68.04	16.08		150.0	
		Z	2.53	67.28	15.48		150.0	

10112-CAE	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	X	3.02	66.95	15.54	0.00	150.0	± 9.6 %
		Y	3.10	67.51	15.95		150.0	
		Z	2.98	66.88	15.48		150.0	
10113-CAE	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	X	2.72	67.49	15.72	0.00	150.0	± 9.6 %
		Y	2.81	68.13	16.19		150.0	
		Z	2.68	67.45	15.64		150.0	
10114-CAC	IEEE 802.11n (HT Greenfield, 13.5 Mbps, BPSK)	X	5.17	67.15	16.34	0.00	150.0	± 9.6 %
		Y	5.21	67.35	16.50		150.0	
		Z	5.15	67.16	16.34		150.0	
10115-CAC	IEEE 802.11n (HT Greenfield, 81 Mbps, 16-QAM)	X	5.53	67.49	16.54	0.00	150.0	± 9.6 %
		Y	5.58	67.70	16.70		150.0	
		Z	5.48	67.42	16.49		150.0	
10116-CAC	IEEE 802.11n (HT Greenfield, 135 Mbps, 64-QAM)	X	5.30	67.42	16.41	0.00	150.0	± 9.6 %
		Y	5.34	67.62	16.57		150.0	
		Z	5.27	67.41	16.40		150.0	
10117-CAC	IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK)	X	5.15	67.08	16.33	0.00	150.0	± 9.6 %
		Y	5.20	67.30	16.50		150.0	
		Z	5.12	67.04	16.30		150.0	
10118-CAC	IEEE 802.11n (HT Mixed, 81 Mbps, 16-QAM)	X	5.63	67.73	16.67	0.00	150.0	± 9.6 %
		Y	5.66	67.91	16.81		150.0	
		Z	5.59	67.70	16.64		150.0	
10119-CAC	IEEE 802.11n (HT Mixed, 135 Mbps, 64-QAM)	X	5.27	67.36	16.39	0.00	150.0	± 9.6 %
		Y	5.31	67.56	16.55		150.0	
		Z	5.24	67.35	16.38		150.0	
10140-CAD	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	X	3.38	67.18	15.64	0.00	150.0	± 9.6 %
		Y	3.47	67.70	16.01		150.0	
		Z	3.35	67.11	15.59		150.0	
10141-CAD	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	X	3.50	67.27	15.81	0.00	150.0	± 9.6 %
		Y	3.59	67.74	16.15		150.0	
		Z	3.47	67.21	15.77		150.0	
10142-CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	X	1.93	67.51	15.04	0.00	150.0	± 9.6 %
		Y	2.09	68.84	15.93		150.0	
		Z	1.89	67.35	14.89		150.0	
10143-CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	X	2.38	67.70	15.18	0.00	150.0	± 9.6 %
		Y	2.51	68.61	15.82		150.0	
		Z	2.34	67.60	15.02		150.0	
10144-CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	X	2.24	66.02	13.89	0.00	150.0	± 9.6 %
		Y	2.36	66.87	14.53		150.0	
		Z	2.19	65.88	13.71		150.0	
10145-CAE	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	X	1.22	64.47	11.59	0.00	150.0	± 9.6 %
		Y	1.37	66.07	12.76		150.0	
		Z	1.15	64.01	11.10		150.0	
10146-CAE	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	X	2.40	68.51	13.38	0.00	150.0	± 9.6 %
		Y	3.25	72.57	15.44		150.0	
		Z	2.13	67.36	12.68		150.0	
10147-CAE	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	X	2.86	70.85	14.59	0.00	150.0	± 9.6 %
		Y	4.17	75.98	16.98		150.0	
		Z	2.50	69.50	13.83		150.0	

10149-CAD	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	X	2.90	67.00	15.51	0.00	150.0	± 9.6 %
		Y	2.99	67.62	15.95		150.0	
		Z	2.86	66.92	15.44		150.0	
10150-CAD	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	X	3.02	66.99	15.58	0.00	150.0	± 9.6 %
		Y	3.11	67.55	15.98		150.0	
		Z	2.99	66.93	15.52		150.0	
10151-CAD	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	X	8.96	80.66	22.26	3.98	65.0	± 9.6 %
		Y	9.32	81.32	22.60		65.0	
		Z	9.00	80.93	22.35		65.0	
10152-CAD	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	X	7.88	76.96	21.35	3.98	65.0	± 9.6 %
		Y	8.23	77.73	21.78		65.0	
		Z	7.82	76.98	21.33		65.0	
10153-CAD	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	X	8.28	77.78	22.03	3.98	65.0	± 9.6 %
		Y	8.58	78.42	22.39		65.0	
		Z	8.24	77.86	22.04		65.0	
10154-CAE	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	X	2.21	68.11	15.68	0.00	150.0	± 9.6 %
		Y	2.36	69.30	16.45		150.0	
		Z	2.17	67.96	15.57		150.0	
10155-CAE	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	X	2.56	67.35	15.58	0.00	150.0	± 9.6 %
		Y	2.66	68.05	16.10		150.0	
		Z	2.53	67.29	15.50		150.0	
10156-CAE	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	X	1.77	67.43	14.78	0.00	150.0	± 9.6 %
		Y	1.94	68.94	15.78		150.0	
		Z	1.72	67.23	14.58		150.0	
10157-CAE	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	X	2.05	66.34	13.82	0.00	150.0	± 9.6 %
		Y	2.19	67.38	14.58		150.0	
		Z	2.00	66.16	13.59		150.0	
10158-CAE	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	X	2.72	67.54	15.76	0.00	150.0	± 9.6 %
		Y	2.82	68.17	16.23		150.0	
		Z	2.68	67.50	15.68		150.0	
10159-CAE	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	X	2.14	66.71	14.07	0.00	150.0	± 9.6 %
		Y	2.28	67.74	14.81		150.0	
		Z	2.09	66.52	13.84		150.0	
10160-CAD	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	X	2.72	68.07	15.82	0.00	150.0	± 9.6 %
		Y	2.84	68.89	16.38		150.0	
		Z	2.69	68.00	15.76		150.0	
10161-CAD	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	X	2.91	66.88	15.50	0.00	150.0	± 9.6 %
		Y	3.00	67.45	15.91		150.0	
		Z	2.88	66.82	15.43		150.0	
10162-CAD	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	X	3.02	67.01	15.60	0.00	150.0	± 9.6 %
		Y	3.11	67.54	16.00		150.0	
		Z	2.99	66.96	15.54		150.0	
10166-CAE	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	X	3.77	69.87	19.29	3.01	150.0	± 9.6 %
		Y	3.99	71.07	20.04		150.0	
		Z	3.62	69.43	19.11		150.0	
10167-CAE	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	X	4.72	72.88	19.79	3.01	150.0	± 9.6 %
		Y	5.23	74.95	20.86		150.0	
		Z	4.39	72.04	19.48		150.0	

10168-CAE	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	X	5.18	74.86	20.97	3.01	150.0	± 9.6 %
		Y	5.75	76.97	22.01		150.0	
		Z	4.80	74.00	20.67		150.0	
10169-CAD	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	X	3.27	70.16	19.42	3.01	150.0	± 9.6 %
		Y	3.60	72.33	20.65		150.0	
		Z	3.01	68.98	18.94		150.0	
10170-CAD	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	X	4.60	76.17	21.67	3.01	150.0	± 9.6 %
		Y	5.62	80.32	23.51		150.0	
		Z	3.98	74.14	20.96		150.0	
10171-AAD	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	X	3.81	72.17	19.05	3.01	150.0	± 9.6 %
		Y	4.54	75.67	20.74		150.0	
		Z	3.36	70.59	18.47		150.0	
10172-CAD	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	X	30.28	111.82	34.48	6.02	65.0	± 9.6 %
		Y	76.86	130.98	39.85		65.0	
		Z	23.60	107.83	33.49		65.0	
10173-CAD	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	X	34.72	108.92	31.80	6.02	65.0	± 9.6 %
		Y	74.54	122.99	35.68		65.0	
		Z	31.06	107.91	31.67		65.0	
10174-CAD	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	X	26.76	102.85	29.55	6.02	65.0	± 9.6 %
		Y	50.48	114.18	32.83		65.0	
		Z	23.63	101.61	29.31		65.0	
10175-CAE	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	X	3.23	69.86	19.18	3.01	150.0	± 9.6 %
		Y	3.55	72.01	20.41		150.0	
		Z	2.98	68.71	18.72		150.0	
10176-CAE	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	X	4.60	76.19	21.68	3.01	150.0	± 9.6 %
		Y	5.63	80.35	23.53		150.0	
		Z	3.98	74.16	20.97		150.0	
10177-CAG	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	X	3.26	70.01	19.27	3.01	150.0	± 9.6 %
		Y	3.58	72.16	20.50		150.0	
		Z	3.00	68.84	18.80		150.0	
10178-CAE	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)	X	4.55	75.95	21.56	3.01	150.0	± 9.6 %
		Y	5.56	80.06	23.39		150.0	
		Z	3.95	73.96	20.86		150.0	
10179-CAE	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	X	4.17	74.04	20.23	3.01	150.0	± 9.6 %
		Y	5.04	77.87	21.99		150.0	
		Z	3.65	72.28	19.60		150.0	
10180-CAE	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)	X	3.80	72.10	19.00	3.01	150.0	± 9.6 %
		Y	4.52	75.59	20.69		150.0	
		Z	3.36	70.53	18.43		150.0	
10181-CAD	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	X	3.25	69.99	19.27	3.01	150.0	± 9.6 %
		Y	3.58	72.15	20.49		150.0	
		Z	3.00	68.83	18.80		150.0	
10182-CAD	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	X	4.54	75.93	21.54	3.01	150.0	± 9.6 %
		Y	5.55	80.04	23.38		150.0	
		Z	3.94	73.93	20.85		150.0	
10183-AAC	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	X	3.79	72.07	18.99	3.01	150.0	± 9.6 %
		Y	4.51	75.56	20.68		150.0	
		Z	3.35	70.51	18.42		150.0	

10184-CAD	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	X	3.26	70.03	19.29	3.01	150.0	± 9.6 %
		Y	3.59	72.19	20.51		150.0	
		Z	3.01	68.87	18.82		150.0	
10185-CAD	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)	X	4.56	76.00	21.58	3.01	150.0	± 9.6 %
		Y	5.57	80.12	23.42		150.0	
		Z	3.96	74.00	20.89		150.0	
10186-AAD	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)	X	3.81	72.14	19.03	3.01	150.0	± 9.6 %
		Y	4.54	75.64	20.72		150.0	
		Z	3.37	70.57	18.45		150.0	
10187-CAE	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	X	3.27	70.08	19.34	3.01	150.0	± 9.6 %
		Y	3.60	72.24	20.57		150.0	
		Z	3.02	68.91	18.87		150.0	
10188-CAE	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	X	4.71	76.65	21.94	3.01	150.0	± 9.6 %
		Y	5.78	80.88	23.80		150.0	
		Z	4.07	74.57	21.23		150.0	
10189-AAE	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	X	3.89	72.56	19.29	3.01	150.0	± 9.6 %
		Y	4.65	76.13	21.00		150.0	
		Z	3.43	70.95	18.70		150.0	
10193-CAC	IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK)	X	4.57	66.50	16.04	0.00	150.0	± 9.6 %
		Y	4.61	66.73	16.23		150.0	
		Z	4.54	66.49	16.01		150.0	
10194-CAC	IEEE 802.11n (HT Greenfield, 39 Mbps, 16-QAM)	X	4.75	66.84	16.16	0.00	150.0	± 9.6 %
		Y	4.80	67.09	16.35		150.0	
		Z	4.71	66.82	16.14		150.0	
10195-CAC	IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM)	X	4.79	66.87	16.18	0.00	150.0	± 9.6 %
		Y	4.84	67.11	16.37		150.0	
		Z	4.76	66.85	16.15		150.0	
10196-CAC	IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK)	X	4.58	66.58	16.07	0.00	150.0	± 9.6 %
		Y	4.63	66.82	16.26		150.0	
		Z	4.54	66.56	16.03		150.0	
10197-CAC	IEEE 802.11n (HT Mixed, 39 Mbps, 16-QAM)	X	4.77	66.86	16.18	0.00	150.0	± 9.6 %
		Y	4.82	67.11	16.37		150.0	
		Z	4.73	66.84	16.15		150.0	
10198-CAC	IEEE 802.11n (HT Mixed, 65 Mbps, 64-QAM)	X	4.80	66.89	16.19	0.00	150.0	± 9.6 %
		Y	4.85	67.13	16.38		150.0	
		Z	4.76	66.87	16.17		150.0	
10219-CAC	IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK)	X	4.52	66.58	16.02	0.00	150.0	± 9.6 %
		Y	4.58	66.83	16.22		150.0	
		Z	4.49	66.56	15.99		150.0	
10220-CAC	IEEE 802.11n (HT Mixed, 43.3 Mbps, 16-QAM)	X	4.76	66.85	16.17	0.00	150.0	± 9.6 %
		Y	4.81	67.09	16.36		150.0	
		Z	4.72	66.82	16.14		150.0	
10221-CAC	IEEE 802.11n (HT Mixed, 72.2 Mbps, 64-QAM)	X	4.80	66.82	16.18	0.00	150.0	± 9.6 %
		Y	4.86	67.06	16.37		150.0	
		Z	4.77	66.80	16.16		150.0	
10222-CAC	IEEE 802.11n (HT Mixed, 15 Mbps, BPSK)	X	5.13	67.08	16.32	0.00	150.0	± 9.6 %
		Y	5.18	67.32	16.50		150.0	
		Z	5.10	67.04	16.29		150.0	

10223-CAC	IEEE 802.11n (HT Mixed, 90 Mbps, 16-QAM)	X	5.46	67.35	16.49	0.00	150.0	± 9.6 %
		Y	5.51	67.58	16.66		150.0	
		Z	5.42	67.30	16.45		150.0	
10224-CAC	IEEE 802.11n (HT Mixed, 150 Mbps, 64-QAM)	X	5.17	67.18	16.29	0.00	150.0	± 9.6 %
		Y	5.22	67.40	16.46		150.0	
		Z	5.14	67.14	16.27		150.0	
10225-CAB	UMTS-FDD (HSPA+)	X	2.80	65.74	15.07	0.00	150.0	± 9.6 %
		Y	2.87	66.19	15.45		150.0	
		Z	2.77	65.70	14.98		150.0	
10226-CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	X	37.38	110.41	32.30	6.02	65.0	± 9.6 %
		Y	81.50	124.82	36.22		65.0	
		Z	33.47	109.42	32.18		65.0	
10227-CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	X	29.60	104.69	30.14	6.02	65.0	± 9.6 %
		Y	53.65	115.37	33.21		65.0	
		Z	27.65	104.42	30.19		65.0	
10228-CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	X	32.41	113.60	35.07	6.02	65.0	± 9.6 %
		Y	69.82	129.54	39.59		65.0	
		Z	28.33	111.82	34.72		65.0	
10229-CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)	X	34.78	108.94	31.81	6.02	65.0	± 9.6 %
		Y	74.32	122.93	35.67		65.0	
		Z	31.14	107.94	31.68		65.0	
10230-CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)	X	27.87	103.54	29.74	6.02	65.0	± 9.6 %
		Y	50.12	114.03	32.79		65.0	
		Z	25.97	103.21	29.78		65.0	
10231-CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	X	30.34	112.17	34.60	6.02	65.0	± 9.6 %
		Y	64.44	127.76	39.06		65.0	
		Z	26.54	110.39	34.24		65.0	
10232-CAD	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)	X	34.78	108.95	31.81	6.02	65.0	± 9.6 %
		Y	74.45	122.97	35.68		65.0	
		Z	31.13	107.95	31.68		65.0	
10233-CAD	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)	X	27.88	103.55	29.75	6.02	65.0	± 9.6 %
		Y	50.22	114.08	32.80		65.0	
		Z	25.97	103.22	29.78		65.0	
10234-CAD	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	X	28.47	110.69	34.07	6.02	65.0	± 9.6 %
		Y	59.28	125.81	38.45		65.0	
		Z	24.97	108.97	33.72		65.0	
10235-CAD	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	X	34.92	109.04	31.84	6.02	65.0	± 9.6 %
		Y	75.02	123.12	35.72		65.0	
		Z	31.25	108.03	31.71		65.0	
10236-CAD	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	X	28.18	103.71	29.79	6.02	65.0	± 9.6 %
		Y	50.93	114.30	32.85		65.0	
		Z	26.26	103.39	29.82		65.0	
10237-CAD	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	X	30.66	112.40	34.66	6.02	65.0	± 9.6 %
		Y	65.75	128.19	39.17		65.0	
		Z	26.79	110.61	34.30		65.0	
10238-CAD	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	X	34.79	108.97	31.82	6.02	65.0	± 9.6 %
		Y	74.62	123.02	35.69		65.0	
		Z	31.13	107.96	31.69		65.0	

10239-CAD	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	X	27.87	103.57	29.75	6.02	65.0	± 9.6 %
		Y	50.30	114.13	32.82		65.0	
		Z	25.95	103.23	29.78		65.0	
10240-CAD	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	X	30.53	112.33	34.64	6.02	65.0	± 9.6 %
		Y	65.39	128.09	39.15		65.0	
		Z	26.68	110.54	34.28		65.0	
10241-CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	X	11.82	86.67	27.53	6.98	65.0	± 9.6 %
		Y	13.66	90.07	29.00		65.0	
		Z	11.24	86.07	27.33		65.0	
10242-CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	X	11.41	85.92	27.17	6.98	65.0	± 9.6 %
		Y	13.45	89.74	28.82		65.0	
		Z	10.57	84.73	26.73		65.0	
10243-CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	X	9.24	83.16	27.04	6.98	65.0	± 9.6 %
		Y	10.64	86.64	28.68		65.0	
		Z	8.64	81.99	26.56		65.0	
10244-CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	X	9.03	80.20	20.72	3.98	65.0	± 9.6 %
		Y	9.95	81.82	21.52		65.0	
		Z	8.70	79.77	20.42		65.0	
10245-CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	X	8.84	79.62	20.45	3.98	65.0	± 9.6 %
		Y	9.72	81.20	21.24		65.0	
		Z	8.49	79.13	20.13		65.0	
10246-CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	X	8.67	82.28	21.37	3.98	65.0	± 9.6 %
		Y	9.40	83.61	22.04		65.0	
		Z	8.57	82.11	21.15		65.0	
10247-CAD	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	X	7.23	77.21	20.08	3.98	65.0	± 9.6 %
		Y	7.59	77.99	20.54		65.0	
		Z	7.13	77.07	19.88		65.0	
10248-CAD	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	X	7.20	76.70	19.86	3.98	65.0	± 9.6 %
		Y	7.57	77.51	20.35		65.0	
		Z	7.09	76.52	19.65		65.0	
10249-CAD	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	X	9.92	84.79	23.00	3.98	65.0	± 9.6 %
		Y	10.62	85.95	23.57		65.0	
		Z	10.01	85.03	22.98		65.0	
10250-CAD	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	X	8.21	79.48	22.35	3.98	65.0	± 9.6 %
		Y	8.54	80.13	22.71		65.0	
		Z	8.20	79.60	22.34		65.0	
10251-CAD	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	X	7.75	77.32	21.20	3.98	65.0	± 9.6 %
		Y	8.11	78.10	21.64		65.0	
		Z	7.70	77.35	21.14		65.0	
10252-CAD	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	X	9.77	84.02	23.49	3.98	65.0	± 9.6 %
		Y	10.31	84.92	23.94		65.0	
		Z	9.89	84.42	23.60		65.0	
10253-CAD	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	X	7.68	76.36	21.13	3.98	65.0	± 9.6 %
		Y	8.00	77.10	21.55		65.0	
		Z	7.63	76.40	21.10		65.0	
10254-CAD	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	X	8.06	77.17	21.76	3.98	65.0	± 9.6 %
		Y	8.36	77.82	22.13		65.0	
		Z	8.03	77.25	21.75		65.0	

10255-CAD	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	X	8.65	80.28	22.35	3.98	65.0	± 9.6 %
		Y	9.02	80.99	22.72		65.0	
		Z	8.68	80.54	22.43		65.0	
10256-CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	X	7.67	77.22	18.70	3.98	65.0	± 9.6 %
		Y	8.58	78.99	19.61		65.0	
		Z	7.24	76.45	18.22		65.0	
10257-CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	X	7.44	76.40	18.29	3.98	65.0	± 9.6 %
		Y	8.29	78.12	19.18		65.0	
		Z	6.99	75.59	17.78		65.0	
10258-CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	X	7.04	78.52	19.29	3.98	65.0	± 9.6 %
		Y	7.71	79.96	20.05		65.0	
		Z	6.74	77.86	18.83		65.0	
10259-CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	X	7.62	78.03	20.88	3.98	65.0	± 9.6 %
		Y	7.97	78.76	21.31		65.0	
		Z	7.55	78.00	20.76		65.0	
10260-CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	X	7.62	77.74	20.79	3.98	65.0	± 9.6 %
		Y	7.97	78.46	21.21		65.0	
		Z	7.55	77.69	20.65		65.0	
10261-CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	X	9.43	83.76	22.98	3.98	65.0	± 9.6 %
		Y	10.04	84.84	23.52		65.0	
		Z	9.50	84.03	22.99		65.0	
10262-CAD	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	X	8.20	79.43	22.31	3.98	65.0	± 9.6 %
		Y	8.53	80.09	22.68		65.0	
		Z	8.18	79.55	22.30		65.0	
10263-CAD	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	X	7.75	77.31	21.19	3.98	65.0	± 9.6 %
		Y	8.10	78.09	21.64		65.0	
		Z	7.69	77.34	21.14		65.0	
10264-CAD	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	X	9.70	83.85	23.41	3.98	65.0	± 9.6 %
		Y	10.24	84.77	23.87		65.0	
		Z	9.81	84.24	23.51		65.0	
10265-CAD	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	X	7.88	76.96	21.35	3.98	65.0	± 9.6 %
		Y	8.22	77.73	21.78		65.0	
		Z	7.82	76.99	21.33		65.0	
10266-CAD	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	X	8.27	77.77	22.03	3.98	65.0	± 9.6 %
		Y	8.58	78.42	22.39		65.0	
		Z	8.23	77.85	22.03		65.0	
10267-CAD	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	X	8.94	80.62	22.25	3.98	65.0	± 9.6 %
		Y	9.31	81.28	22.59		65.0	
		Z	8.98	80.89	22.34		65.0	
10268-CAD	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	X	8.36	76.49	21.55	3.98	65.0	± 9.6 %
		Y	8.63	77.08	21.88		65.0	
		Z	8.31	76.53	21.55		65.0	
10269-CAD	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	X	8.29	76.07	21.45	3.98	65.0	± 9.6 %
		Y	8.55	76.65	21.78		65.0	
		Z	8.24	76.11	21.45		65.0	
10270-CAD	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	X	8.43	77.83	21.33	3.98	65.0	± 9.6 %
		Y	8.69	78.31	21.60		65.0	
		Z	8.42	77.98	21.39		65.0	

10274-CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.10)	X	2.55	65.90	14.85	0.00	150.0	± 9.6 %
		Y	2.63	66.48	15.31		150.0	
		Z	2.53	65.88	14.78		150.0	
10275-CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.4)	X	1.52	66.64	14.62	0.00	150.0	± 9.6 %
		Y	1.66	68.17	15.66		150.0	
		Z	1.50	66.49	14.49		150.0	
10277-CAA	PHS (QPSK)	X	4.62	67.49	12.27	9.03	50.0	± 9.6 %
		Y	5.00	68.49	13.05		50.0	
		Z	4.42	66.98	11.81		50.0	
10278-CAA	PHS (QPSK, BW 884MHz, Rolloff 0.5)	X	8.56	79.12	19.84	9.03	50.0	± 9.6 %
		Y	9.04	80.04	20.47		50.0	
		Z	8.20	78.37	19.32		50.0	
10279-CAA	PHS (QPSK, BW 884MHz, Rolloff 0.38)	X	8.72	79.33	19.94	9.03	50.0	± 9.6 %
		Y	9.22	80.28	20.58		50.0	
		Z	8.35	78.58	19.43		50.0	
10290-AAB	CDMA2000, RC1, SO55, Full Rate	X	1.31	66.62	12.89	0.00	150.0	± 9.6 %
		Y	1.55	69.01	14.40		150.0	
		Z	1.25	66.21	12.49		150.0	
10291-AAB	CDMA2000, RC3, SO55, Full Rate	X	0.75	63.97	11.28	0.00	150.0	± 9.6 %
		Y	0.88	66.12	12.85		150.0	
		Z	0.72	63.66	10.91		150.0	
10292-AAB	CDMA2000, RC3, SO32, Full Rate	X	0.85	66.24	12.81	0.00	150.0	± 9.6 %
		Y	1.08	69.81	15.02		150.0	
		Z	0.81	65.82	12.39		150.0	
10293-AAB	CDMA2000, RC3, SO3, Full Rate	X	1.07	69.43	14.80	0.00	150.0	± 9.6 %
		Y	1.49	74.49	17.52		150.0	
		Z	1.02	68.94	14.36		150.0	
10295-AAB	CDMA2000, RC1, SO3, 1/8th Rate 25 fr.	X	11.66	86.40	24.85	9.03	50.0	± 9.6 %
		Y	11.94	86.89	25.26		50.0	
		Z	12.14	87.13	24.94		50.0	
10297-AAC	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	X	2.68	68.79	15.92	0.00	150.0	± 9.6 %
		Y	2.84	69.89	16.60		150.0	
		Z	2.64	68.65	15.84		150.0	
10298-AAC	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	X	1.50	66.36	13.40	0.00	150.0	± 9.6 %
		Y	1.68	68.07	14.56		150.0	
		Z	1.44	66.01	13.05		150.0	
10299-AAC	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	X	2.99	70.93	15.34	0.00	150.0	± 9.6 %
		Y	3.88	74.74	17.20		150.0	
		Z	2.71	70.03	14.84		150.0	
10300-AAC	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	X	2.29	66.50	12.57	0.00	150.0	± 9.6 %
		Y	2.73	68.87	13.94		150.0	
		Z	2.09	65.76	12.08		150.0	
10301-AAA	IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC)	X	5.48	67.66	18.50	4.17	80.0	± 9.6 %
		Y	5.78	68.84	19.23		80.0	
		Z	5.37	67.36	18.28		80.0	
10302-AAA	IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC, 3 CTRL symbols)	X	5.94	68.12	19.14	4.96	80.0	± 9.6 %
		Y	6.22	69.31	19.91		80.0	
		Z	5.87	68.03	19.05		80.0	

10303-AAA	IEEE 802.16e WiMAX (31:15, 5ms, 10MHz, 64QAM, PUSC)	X	5.76	68.09	19.15	4.96	80.0	± 9.6 %
		Y	6.07	69.41	19.99		80.0	
		Z	5.69	67.97	19.02		80.0	
10304-AAA	IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, 64QAM, PUSC)	X	5.43	67.45	18.35	4.17	80.0	± 9.6 %
		Y	5.68	68.54	19.05		80.0	
		Z	5.37	67.37	18.26		80.0	
10305-AAA	IEEE 802.16e WiMAX (31:15, 10ms, 10MHz, 64QAM, PUSC, 15 symbols)	X	7.18	77.42	24.28	6.02	50.0	± 9.6 %
		Y	9.01	83.08	27.04		50.0	
		Z	7.00	76.95	23.93		50.0	
10306-AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 64QAM, PUSC, 18 symbols)	X	5.96	70.23	20.82	6.02	50.0	± 9.6 %
		Y	6.58	72.76	22.30		50.0	
		Z	5.86	69.99	20.61		50.0	
10307-AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, PUSC, 18 symbols)	X	6.41	73.34	22.47	6.02	50.0	± 9.6 %
		Y	6.70	73.58	22.50		50.0	
		Z	6.29	73.03	22.22		50.0	
10308-AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, PUSC)	X	6.49	73.92	22.75	6.02	50.0	± 9.6 %
		Y	6.78	74.12	22.76		50.0	
		Z	6.37	73.60	22.50		50.0	
10309-AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, AMC 2x3, 18 symbols)	X	6.06	70.55	21.00	6.02	50.0	± 9.6 %
		Y	6.71	73.17	22.53		50.0	
		Z	5.95	70.29	20.78		50.0	
10310-AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, AMC 2x3, 18 symbols)	X	5.95	70.41	20.82	6.02	50.0	± 9.6 %
		Y	6.61	73.05	22.35		50.0	
		Z	6.20	72.46	22.04		50.0	
10311-AAC	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	X	3.02	68.11	15.62	0.00	150.0	± 9.6 %
		Y	3.19	69.13	16.23		150.0	
		Z	2.98	67.98	15.55		150.0	
10313-AAA	iDEN 1:3	X	6.80	77.50	18.05	6.99	70.0	± 9.6 %
		Y	7.71	79.38	18.97		70.0	
		Z	6.80	77.56	18.00		70.0	
10314-AAA	iDEN 1:6	X	9.17	84.53	23.10	10.00	30.0	± 9.6 %
		Y	10.17	86.19	23.87		30.0	
		Z	9.47	85.21	23.28		30.0	
10315-AAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 96pc duty cycle)	X	1.09	63.63	14.71	0.17	150.0	± 9.6 %
		Y	1.15	64.55	15.51		150.0	
		Z	1.08	63.56	14.63		150.0	
10316-AAB	IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 96pc duty cycle)	X	4.67	66.69	16.26	0.17	150.0	± 9.6 %
		Y	4.72	66.94	16.46		150.0	
		Z	4.64	66.69	16.24		150.0	
10317-AAC	IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle)	X	4.67	66.69	16.26	0.17	150.0	± 9.6 %
		Y	4.72	66.94	16.46		150.0	
		Z	4.64	66.69	16.24		150.0	
10400-AAD	IEEE 802.11ac WiFi (20MHz, 64-QAM, 99pc duty cycle)	X	4.75	66.92	16.17	0.00	150.0	± 9.6 %
		Y	4.81	67.18	16.37		150.0	
		Z	4.72	66.89	16.14		150.0	
10401-AAD	IEEE 802.11ac WiFi (40MHz, 64-QAM, 99pc duty cycle)	X	5.45	67.19	16.39	0.00	150.0	± 9.6 %
		Y	5.49	67.37	16.55		150.0	
		Z	5.44	67.22	16.40		150.0	

10402-AAD	IEEE 802.11ac WiFi (80MHz, 64-QAM, 99pc duty cycle)	X	5.72	67.54	16.41	0.00	150.0	± 9.6 %
		Y	5.76	67.75	16.56		150.0	
		Z	5.68	67.48	16.38		150.0	
10403-AAB	CDMA2000 (1xEV-DO, Rev. 0)	X	1.31	66.62	12.89	0.00	115.0	± 9.6 %
		Y	1.55	69.01	14.40		115.0	
		Z	1.25	66.21	12.49		115.0	
10404-AAB	CDMA2000 (1xEV-DO, Rev. A)	X	1.31	66.62	12.89	0.00	115.0	± 9.6 %
		Y	1.55	69.01	14.40		115.0	
		Z	1.25	66.21	12.49		115.0	
10406-AAB	CDMA2000, RC3, SO32, SCH0, Full Rate	X	25.28	103.83	26.72	0.00	100.0	± 9.6 %
		Y	100.00	122.83	31.28		100.0	
		Z	15.62	98.87	25.67		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	120.77	30.63	3.23	80.0	± 9.6 %
		Y	100.00	121.50	31.09		80.0	
		Z	100.00	121.84	30.99		80.0	
10415-AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle)	X	0.97	62.31	13.89	0.00	150.0	± 9.6 %
		Y	1.01	63.10	14.65		150.0	
		Z	0.96	62.25	13.81		150.0	
10416-AAA	IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 99pc duty cycle)	X	4.57	66.54	16.10	0.00	150.0	± 9.6 %
		Y	4.62	66.78	16.29		150.0	
		Z	4.54	66.53	16.07		150.0	
10417-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 99pc duty cycle)	X	4.57	66.54	16.10	0.00	150.0	± 9.6 %
		Y	4.62	66.78	16.29		150.0	
		Z	4.54	66.53	16.07		150.0	
10418-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Long preamble)	X	4.55	66.67	16.10	0.00	150.0	± 9.6 %
		Y	4.61	66.92	16.30		150.0	
		Z	4.53	66.67	16.08		150.0	
10419-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Short preamble)	X	4.58	66.63	16.11	0.00	150.0	± 9.6 %
		Y	4.63	66.88	16.30		150.0	
		Z	4.55	66.63	16.09		150.0	
10422-AAB	IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK)	X	4.70	66.66	16.14	0.00	150.0	± 9.6 %
		Y	4.75	66.89	16.33		150.0	
		Z	4.67	66.65	16.12		150.0	
10423-AAB	IEEE 802.11n (HT Greenfield, 43.3 Mbps, 16-QAM)	X	4.89	67.00	16.27	0.00	150.0	± 9.6 %
		Y	4.94	67.25	16.46		150.0	
		Z	4.85	66.98	16.24		150.0	
10424-AAB	IEEE 802.11n (HT Greenfield, 72.2 Mbps, 64-QAM)	X	4.80	66.94	16.23	0.00	150.0	± 9.6 %
		Y	4.85	67.19	16.42		150.0	
		Z	4.76	66.92	16.20		150.0	
10425-AAB	IEEE 802.11n (HT Greenfield, 15 Mbps, BPSK)	X	5.43	67.40	16.49	0.00	150.0	± 9.6 %
		Y	5.46	67.59	16.64		150.0	
		Z	5.40	67.39	16.48		150.0	
10426-AAB	IEEE 802.11n (HT Greenfield, 90 Mbps, 16-QAM)	X	5.43	67.42	16.49	0.00	150.0	± 9.6 %
		Y	5.47	67.60	16.64		150.0	
		Z	5.40	67.41	16.48		150.0	

10427-AAB	IEEE 802.11n (HT Greenfield, 150 Mbps, 64-QAM)	X	5.43	67.37	16.46	0.00	150.0	± 9.6 %
		Y	5.47	67.57	16.62		150.0	
		Z	5.41	67.36	16.45		150.0	
10430-AAB	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1)	X	4.15	69.76	17.63	0.00	150.0	± 9.6 %
		Y	4.19	69.88	17.76		150.0	
		Z	4.12	69.84	17.60		150.0	
10431-AAB	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1)	X	4.26	67.02	16.07	0.00	150.0	± 9.6 %
		Y	4.33	67.32	16.31		150.0	
		Z	4.22	67.00	16.02		150.0	
10432-AAB	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1)	X	4.56	66.95	16.16	0.00	150.0	± 9.6 %
		Y	4.62	67.22	16.37		150.0	
		Z	4.52	66.93	16.13		150.0	
10433-AAB	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1)	X	4.81	66.98	16.25	0.00	150.0	± 9.6 %
		Y	4.87	67.22	16.44		150.0	
		Z	4.78	66.96	16.22		150.0	
10434-AAA	W-CDMA (BS Test Model 1, 64 DPCH)	X	4.20	70.38	17.52	0.00	150.0	± 9.6 %
		Y	4.25	70.53	17.68		150.0	
		Z	4.16	70.46	17.47		150.0	
10435-AAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	120.59	30.55	3.23	80.0	± 9.6 %
		Y	100.00	121.33	31.01		80.0	
		Z	100.00	121.65	30.91		80.0	
10447-AAB	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	X	3.54	66.87	15.35	0.00	150.0	± 9.6 %
		Y	3.62	67.29	15.69		150.0	
		Z	3.49	66.83	15.25		150.0	
10448-AAB	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)	X	4.09	66.78	15.91	0.00	150.0	± 9.6 %
		Y	4.15	67.09	16.16		150.0	
		Z	4.05	66.76	15.87		150.0	
10449-AAB	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)	X	4.36	66.75	16.04	0.00	150.0	± 9.6 %
		Y	4.42	67.03	16.26		150.0	
		Z	4.33	66.74	16.01		150.0	
10450-AAB	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	X	4.56	66.71	16.09	0.00	150.0	± 9.6 %
		Y	4.61	66.97	16.29		150.0	
		Z	4.53	66.69	16.06		150.0	
10451-AAA	W-CDMA (BS Test Model 1, 64 DPCH, Clipping 44%)	X	3.43	67.01	14.98	0.00	150.0	± 9.6 %
		Y	3.53	67.50	15.37		150.0	
		Z	3.37	66.93	14.84		150.0	
10456-AAB	IEEE 802.11ac WiFi (160MHz, 64-QAM, 99pc duty cycle)	X	6.29	67.98	16.66	0.00	150.0	± 9.6 %
		Y	6.32	68.16	16.79		150.0	
		Z	6.26	67.96	16.65		150.0	
10457-AAA	UMTS-FDD (DC-HSDPA)	X	3.79	65.17	15.80	0.00	150.0	± 9.6 %
		Y	3.83	65.41	16.01		150.0	
		Z	3.78	65.16	15.77		150.0	
10458-AAA	CDMA2000 (1xEV-DO, Rev. B, 2 carriers)	X	3.84	69.59	16.93	0.00	150.0	± 9.6 %
		Y	3.91	69.84	17.18		150.0	
		Z	3.81	69.69	16.86		150.0	
10459-AAA	CDMA2000 (1xEV-DO, Rev. B, 3 carriers)	X	5.05	67.70	17.82	0.00	150.0	± 9.6 %
		Y	5.09	67.77	17.90		150.0	
		Z	5.00	67.75	17.77		150.0	

10460-AAA	UMTS-FDD (WCDMA, AMR)	X	0.79	65.91	14.37	0.00	150.0	± 9.6 %
		Y	0.92	68.57	16.19		150.0	
		Z	0.78	65.69	14.19		150.0	
10461-AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	124.09	32.24	3.29	80.0	± 9.6 %
		Y	100.00	125.81	33.13		80.0	
		Z	100.00	125.28	32.66		80.0	
10462-AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	82.18	106.66	24.50	3.23	80.0	± 9.6 %
		Y	100.00	110.22	25.68		80.0	
		Z	90.90	108.32	24.86		80.0	
10463-AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	13.11	84.75	18.36	3.23	80.0	± 9.6 %
		Y	100.00	107.13	24.20		80.0	
		Z	11.64	83.97	18.10		80.0	
10464-AAA	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	122.05	31.13	3.23	80.0	± 9.6 %
		Y	100.00	123.91	32.10		80.0	
		Z	100.00	123.17	31.52		80.0	
10465-AAA	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	34.70	96.83	22.08	3.23	80.0	± 9.6 %
		Y	100.00	109.74	25.45		80.0	
		Z	33.97	97.14	22.15		80.0	
10466-AAA	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	8.66	80.23	16.95	3.23	80.0	± 9.6 %
		Y	88.88	105.43	23.71		80.0	
		Z	7.53	79.24	16.62		80.0	
10467-AAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	122.26	31.23	3.23	80.0	± 9.6 %
		Y	100.00	124.12	32.19		80.0	
		Z	100.00	123.40	31.62		80.0	
10468-AAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	42.56	99.17	22.68	3.23	80.0	± 9.6 %
		Y	100.00	109.90	25.52		80.0	
		Z	42.79	99.79	22.82		80.0	
10469-AAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	8.79	80.40	17.00	3.23	80.0	± 9.6 %
		Y	94.78	106.12	23.86		80.0	
		Z	7.65	79.43	16.67		80.0	
10470-AAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	122.29	31.23	3.23	80.0	± 9.6 %
		Y	100.00	124.15	32.20		80.0	
		Z	100.00	123.43	31.63		80.0	
10471-AAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	42.39	99.09	22.65	3.23	80.0	± 9.6 %
		Y	100.00	109.85	25.49		80.0	
		Z	42.62	99.70	22.79		80.0	
10472-AAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	8.75	80.33	16.97	3.23	80.0	± 9.6 %
		Y	95.63	106.16	23.85		80.0	
		Z	7.61	79.36	16.63		80.0	
10473-AAC	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	122.26	31.22	3.23	80.0	± 9.6 %
		Y	100.00	124.13	32.18		80.0	
		Z	100.00	123.40	31.61		80.0	
10474-AAC	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	41.57	98.89	22.60	3.23	80.0	± 9.6 %
		Y	100.00	109.86	25.49		80.0	
		Z	41.71	99.48	22.73		80.0	
10475-AAC	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	8.66	80.23	16.94	3.23	80.0	± 9.6 %
		Y	92.76	105.86	23.79		80.0	
		Z	7.52	79.25	16.60		80.0	

10477-AAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	36.02	97.20	22.15	3.23	80.0	± 9.6 %
		Y	100.00	109.70	25.42		80.0	
		Z	35.46	97.58	22.24		80.0	
10478-AAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	8.55	80.07	16.88	3.23	80.0	± 9.6 %
		Y	89.69	105.45	23.69		80.0	
		Z	7.42	79.08	16.54		80.0	
10479-AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	12.76	92.36	25.32	3.23	80.0	± 9.6 %
		Y	18.65	98.88	27.57		80.0	
		Z	13.95	94.12	25.81		80.0	
10480-AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	12.57	87.00	22.01	3.23	80.0	± 9.6 %
		Y	19.95	93.91	24.32		80.0	
		Z	12.93	87.73	22.15		80.0	
10481-AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	10.42	83.70	20.62	3.23	80.0	± 9.6 %
		Y	16.05	89.97	22.81		80.0	
		Z	10.45	84.04	20.63		80.0	
10482-AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	4.39	75.05	18.02	2.23	80.0	± 9.6 %
		Y	5.40	78.13	19.40		80.0	
		Z	4.23	74.62	17.69		80.0	
10483-AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	7.31	79.21	19.52	2.23	80.0	± 9.6 %
		Y	9.15	82.68	20.99		80.0	
		Z	7.17	79.05	19.31		80.0	
10484-AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	6.75	77.88	19.05	2.23	80.0	± 9.6 %
		Y	8.31	81.08	20.44		80.0	
		Z	6.55	77.60	18.79		80.0	
10485-AAC	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	4.80	76.47	19.36	2.23	80.0	± 9.6 %
		Y	5.70	79.15	20.55		80.0	
		Z	4.72	76.35	19.21		80.0	
10486-AAC	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	4.16	71.40	17.03	2.23	80.0	± 9.6 %
		Y	4.57	72.84	17.80		80.0	
		Z	4.07	71.21	16.82		80.0	
10487-AAC	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	4.14	70.99	16.86	2.23	80.0	± 9.6 %
		Y	4.52	72.34	17.60		80.0	
		Z	4.04	70.79	16.64		80.0	
10488-AAC	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	4.95	75.43	19.57	2.23	80.0	± 9.6 %
		Y	5.59	77.40	20.48		80.0	
		Z	4.87	75.36	19.51		80.0	
10489-AAC	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	4.39	71.05	17.97	2.23	80.0	± 9.6 %
		Y	4.67	72.07	18.53		80.0	
		Z	4.33	71.01	17.90		80.0	
10490-AAC	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	4.47	70.81	17.90	2.23	80.0	± 9.6 %
		Y	4.74	71.76	18.43		80.0	
		Z	4.41	70.77	17.83		80.0	
10491-AAC	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	4.94	73.38	18.92	2.23	80.0	± 9.6 %
		Y	5.38	74.76	19.60		80.0	
		Z	4.87	73.32	18.89		80.0	
10492-AAC	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	4.67	70.17	17.91	2.23	80.0	± 9.6 %
		Y	4.91	70.97	18.36		80.0	
		Z	4.62	70.13	17.86		80.0	

10493-AAC	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	4.74	70.00	17.86	2.23	80.0	± 9.6 %
		Y	4.96	70.77	18.30		80.0	
		Z	4.68	69.97	17.81		80.0	
10494-AAC	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	5.42	74.96	19.36	2.23	80.0	± 9.6 %
		Y	5.98	76.57	20.11		80.0	
		Z	5.33	74.86	19.31		80.0	
10495-AAC	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	4.74	70.64	18.10	2.23	80.0	± 9.6 %
		Y	4.99	71.49	18.58		80.0	
		Z	4.68	70.58	18.06		80.0	
10496-AAC	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	4.80	70.29	18.01	2.23	80.0	± 9.6 %
		Y	5.03	71.08	18.45		80.0	
		Z	4.74	70.24	17.97		80.0	
10497-AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	3.26	70.91	15.58	2.23	80.0	± 9.6 %
		Y	4.08	73.99	17.07		80.0	
		Z	3.04	70.05	15.01		80.0	
10498-AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	2.52	65.21	12.20	2.23	80.0	± 9.6 %
		Y	2.96	67.17	13.35		80.0	
		Z	2.32	64.31	11.53		80.0	
10499-AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	2.46	64.66	11.82	2.23	80.0	± 9.6 %
		Y	2.87	66.51	12.93		80.0	
		Z	2.25	63.75	11.14		80.0	
10500-AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	4.75	75.65	19.32	2.23	80.0	± 9.6 %
		Y	5.48	77.92	20.36		80.0	
		Z	4.68	75.58	19.22		80.0	
10501-AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	4.26	71.24	17.39	2.23	80.0	± 9.6 %
		Y	4.61	72.46	18.05		80.0	
		Z	4.19	71.15	17.24		80.0	
10502-AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	4.30	71.03	17.26	2.23	80.0	± 9.6 %
		Y	4.65	72.20	17.90		80.0	
		Z	4.23	70.93	17.11		80.0	
10503-AAC	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	4.89	75.24	19.48	2.23	80.0	± 9.6 %
		Y	5.52	77.21	20.39		80.0	
		Z	4.81	75.16	19.42		80.0	
10504-AAC	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	4.37	70.96	17.92	2.23	80.0	± 9.6 %
		Y	4.66	71.99	18.49		80.0	
		Z	4.31	70.92	17.85		80.0	
10505-AAC	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	4.44	70.72	17.85	2.23	80.0	± 9.6 %
		Y	4.72	71.68	18.38		80.0	
		Z	4.39	70.68	17.78		80.0	
10506-AAC	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	5.37	74.82	19.29	2.23	80.0	± 9.6 %
		Y	5.93	76.44	20.05		80.0	
		Z	5.29	74.72	19.25		80.0	
10507-AAC	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	4.72	70.58	18.07	2.23	80.0	± 9.6 %
		Y	4.98	71.44	18.54		80.0	
		Z	4.67	70.52	18.02		80.0	

10508-AAC	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	4.78	70.23	17.97	2.23	80.0	± 9.6 %
		Y	5.02	71.02	18.41		80.0	
		Z	4.72	70.18	17.93		80.0	
10509-AAC	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	5.48	73.02	18.63	2.23	80.0	± 9.6 %
		Y	5.87	74.15	19.19		80.0	
		Z	5.41	72.94	18.60		80.0	
10510-AAC	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	5.18	70.13	17.99	2.23	80.0	± 9.6 %
		Y	5.40	70.84	18.39		80.0	
		Z	5.12	70.07	17.96		80.0	
10511-AAC	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	5.21	69.83	17.92	2.23	80.0	± 9.6 %
		Y	5.42	70.49	18.29		80.0	
		Z	5.15	69.78	17.89		80.0	
10512-AAC	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	5.85	74.74	19.13	2.23	80.0	± 9.6 %
		Y	6.39	76.18	19.80		80.0	
		Z	5.76	74.62	19.09		80.0	
10513-AAC	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	5.10	70.52	18.13	2.23	80.0	± 9.6 %
		Y	5.34	71.31	18.56		80.0	
		Z	5.03	70.43	18.08		80.0	
10514-AAC	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	5.08	70.03	18.00	2.23	80.0	± 9.6 %
		Y	5.29	70.75	18.40		80.0	
		Z	5.02	69.96	17.96		80.0	
10515-AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 99pc duty cycle)	X	0.93	62.43	13.89	0.00	150.0	± 9.6 %
		Y	0.97	63.29	14.71		150.0	
		Z	0.92	62.37	13.81		150.0	
10516-AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc duty cycle)	X	0.48	66.52	14.26	0.00	150.0	± 9.6 %
		Y	0.65	71.79	17.60		150.0	
		Z	0.47	66.19	14.01		150.0	
10517-AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 99pc duty cycle)	X	0.76	63.81	14.08	0.00	150.0	± 9.6 %
		Y	0.83	65.38	15.37		150.0	
		Z	0.75	63.68	13.95		150.0	
10518-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc duty cycle)	X	4.56	66.61	16.07	0.00	150.0	± 9.6 %
		Y	4.61	66.85	16.27		150.0	
		Z	4.53	66.60	16.05		150.0	
10519-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 99pc duty cycle)	X	4.76	66.88	16.21	0.00	150.0	± 9.6 %
		Y	4.82	67.13	16.41		150.0	
		Z	4.73	66.86	16.18		150.0	
10520-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 99pc duty cycle)	X	4.61	66.83	16.12	0.00	150.0	± 9.6 %
		Y	4.67	67.09	16.32		150.0	
		Z	4.57	66.81	16.09		150.0	
10521-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc duty cycle)	X	4.54	66.82	16.10	0.00	150.0	± 9.6 %
		Y	4.60	67.09	16.31		150.0	
		Z	4.51	66.79	16.07		150.0	
10522-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc duty cycle)	X	4.60	66.88	16.17	0.00	150.0	± 9.6 %
		Y	4.65	67.13	16.37		150.0	
		Z	4.56	66.87	16.15		150.0	

10523-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 99pc duty cycle)	X	4.47	66.73	16.00	0.00	150.0	± 9.6 %
		Y	4.52	66.99	16.21		150.0	
		Z	4.44	66.72	15.98		150.0	
10524-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc duty cycle)	X	4.55	66.81	16.14	0.00	150.0	± 9.6 %
		Y	4.60	67.07	16.35		150.0	
		Z	4.51	66.79	16.12		150.0	
10525-AAB	IEEE 802.11ac WiFi (20MHz, MCS0, 99pc duty cycle)	X	4.52	65.83	15.72	0.00	150.0	± 9.6 %
		Y	4.57	66.08	15.92		150.0	
		Z	4.49	65.82	15.70		150.0	
10526-AAB	IEEE 802.11ac WiFi (20MHz, MCS1, 99pc duty cycle)	X	4.70	66.21	15.87	0.00	150.0	± 9.6 %
		Y	4.76	66.48	16.07		150.0	
		Z	4.66	66.20	15.85		150.0	
10527-AAB	IEEE 802.11ac WiFi (20MHz, MCS2, 99pc duty cycle)	X	4.61	66.17	15.81	0.00	150.0	± 9.6 %
		Y	4.67	66.44	16.02		150.0	
		Z	4.58	66.15	15.78		150.0	
10528-AAB	IEEE 802.11ac WiFi (20MHz, MCS3, 99pc duty cycle)	X	4.63	66.19	15.85	0.00	150.0	± 9.6 %
		Y	4.69	66.46	16.05		150.0	
		Z	4.60	66.17	15.82		150.0	
10529-AAB	IEEE 802.11ac WiFi (20MHz, MCS4, 99pc duty cycle)	X	4.63	66.19	15.85	0.00	150.0	± 9.6 %
		Y	4.69	66.46	16.05		150.0	
		Z	4.60	66.17	15.82		150.0	
10531-AAB	IEEE 802.11ac WiFi (20MHz, MCS6, 99pc duty cycle)	X	4.63	66.31	15.86	0.00	150.0	± 9.6 %
		Y	4.69	66.59	16.07		150.0	
		Z	4.59	66.28	15.83		150.0	
10532-AAB	IEEE 802.11ac WiFi (20MHz, MCS7, 99pc duty cycle)	X	4.48	66.15	15.79	0.00	150.0	± 9.6 %
		Y	4.55	66.44	16.01		150.0	
		Z	4.45	66.12	15.75		150.0	
10533-AAB	IEEE 802.11ac WiFi (20MHz, MCS8, 99pc duty cycle)	X	4.64	66.22	15.83	0.00	150.0	± 9.6 %
		Y	4.70	66.49	16.03		150.0	
		Z	4.60	66.20	15.80		150.0	
10534-AAB	IEEE 802.11ac WiFi (40MHz, MCS0, 99pc duty cycle)	X	5.17	66.38	15.95	0.00	150.0	± 9.6 %
		Y	5.22	66.61	16.12		150.0	
		Z	5.14	66.36	15.93		150.0	
10535-AAB	IEEE 802.11ac WiFi (40MHz, MCS1, 99pc duty cycle)	X	5.24	66.55	16.02	0.00	150.0	± 9.6 %
		Y	5.29	66.77	16.19		150.0	
		Z	5.21	66.54	16.01		150.0	
10536-AAB	IEEE 802.11ac WiFi (40MHz, MCS2, 99pc duty cycle)	X	5.11	66.49	15.97	0.00	150.0	± 9.6 %
		Y	5.16	66.73	16.15		150.0	
		Z	5.07	66.46	15.95		150.0	
10537-AAB	IEEE 802.11ac WiFi (40MHz, MCS3, 99pc duty cycle)	X	5.17	66.48	15.97	0.00	150.0	± 9.6 %
		Y	5.22	66.71	16.14		150.0	
		Z	5.14	66.45	15.95		150.0	
10538-AAB	IEEE 802.11ac WiFi (40MHz, MCS4, 99pc duty cycle)	X	5.27	66.54	16.05	0.00	150.0	± 9.6 %
		Y	5.32	66.77	16.22		150.0	
		Z	5.23	66.49	16.02		150.0	
10540-AAB	IEEE 802.11ac WiFi (40MHz, MCS6, 99pc duty cycle)	X	5.19	66.52	16.05	0.00	150.0	± 9.6 %
		Y	5.24	66.75	16.22		150.0	
		Z	5.16	66.50	16.03		150.0	

10541-AAB	IEEE 802.11ac WiFi (40MHz, MCS7, 99pc duty cycle)	X	5.16	66.38	15.97	0.00	150.0	± 9.6 %
		Y	5.21	66.61	16.15		150.0	
		Z	5.13	66.35	15.95		150.0	
10542-AAB	IEEE 802.11ac WiFi (40MHz, MCS8, 99pc duty cycle)	X	5.32	66.47	16.04	0.00	150.0	± 9.6 %
		Y	5.37	66.69	16.20		150.0	
		Z	5.29	66.44	16.02		150.0	
10543-AAB	IEEE 802.11ac WiFi (40MHz, MCS9, 99pc duty cycle)	X	5.41	66.52	16.08	0.00	150.0	± 9.6 %
		Y	5.45	66.73	16.24		150.0	
		Z	5.38	66.51	16.07		150.0	
10544-AAB	IEEE 802.11ac WiFi (80MHz, MCS0, 99pc duty cycle)	X	5.47	66.50	15.95	0.00	150.0	± 9.6 %
		Y	5.51	66.71	16.11		150.0	
		Z	5.45	66.47	15.93		150.0	
10545-AAB	IEEE 802.11ac WiFi (80MHz, MCS1, 99pc duty cycle)	X	5.69	66.97	16.13	0.00	150.0	± 9.6 %
		Y	5.73	67.17	16.28		150.0	
		Z	5.66	66.95	16.12		150.0	
10546-AAB	IEEE 802.11ac WiFi (80MHz, MCS2, 99pc duty cycle)	X	5.56	66.76	16.04	0.00	150.0	± 9.6 %
		Y	5.60	66.98	16.21		150.0	
		Z	5.52	66.71	16.02		150.0	
10547-AAB	IEEE 802.11ac WiFi (80MHz, MCS3, 99pc duty cycle)	X	5.64	66.85	16.08	0.00	150.0	± 9.6 %
		Y	5.69	67.07	16.24		150.0	
		Z	5.60	66.78	16.04		150.0	
10548-AAB	IEEE 802.11ac WiFi (80MHz, MCS4, 99pc duty cycle)	X	6.00	68.11	16.68	0.00	150.0	± 9.6 %
		Y	6.04	68.30	16.83		150.0	
		Z	5.95	68.00	16.63		150.0	
10550-AAB	IEEE 802.11ac WiFi (80MHz, MCS6, 99pc duty cycle)	X	5.58	66.74	16.04	0.00	150.0	± 9.6 %
		Y	5.62	66.95	16.20		150.0	
		Z	5.55	66.72	16.03		150.0	
10551-AAB	IEEE 802.11ac WiFi (80MHz, MCS7, 99pc duty cycle)	X	5.58	66.77	16.02	0.00	150.0	± 9.6 %
		Y	5.63	67.00	16.18		150.0	
		Z	5.55	66.74	16.00		150.0	
10552-AAB	IEEE 802.11ac WiFi (80MHz, MCS8, 99pc duty cycle)	X	5.49	66.55	15.92	0.00	150.0	± 9.6 %
		Y	5.53	66.77	16.08		150.0	
		Z	5.46	66.52	15.90		150.0	
10553-AAB	IEEE 802.11ac WiFi (80MHz, MCS9, 99pc duty cycle)	X	5.58	66.61	15.98	0.00	150.0	± 9.6 %
		Y	5.63	66.83	16.14		150.0	
		Z	5.55	66.57	15.96		150.0	
10554-AAC	IEEE 802.11ac WiFi (160MHz, MCS0, 99pc duty cycle)	X	5.88	66.89	16.06	0.00	150.0	± 9.6 %
		Y	5.92	67.10	16.21		150.0	
		Z	5.86	66.86	16.04		150.0	
10555-AAC	IEEE 802.11ac WiFi (160MHz, MCS1, 99pc duty cycle)	X	6.03	67.23	16.21	0.00	150.0	± 9.6 %
		Y	6.07	67.43	16.35		150.0	
		Z	6.00	67.20	16.19		150.0	
10556-AAC	IEEE 802.11ac WiFi (160MHz, MCS2, 99pc duty cycle)	X	6.04	67.26	16.21	0.00	150.0	± 9.6 %
		Y	6.08	67.46	16.36		150.0	
		Z	6.02	67.23	16.20		150.0	
10557-AAC	IEEE 802.11ac WiFi (160MHz, MCS3, 99pc duty cycle)	X	6.01	67.18	16.19	0.00	150.0	± 9.6 %
		Y	6.06	67.39	16.35		150.0	
		Z	5.98	67.14	16.17		150.0	

10558-AAC	IEEE 802.11ac WiFi (160MHz, MCS4, 99pc duty cycle)	X	6.07	67.37	16.30	0.00	150.0	± 9.6 %
		Y	6.12	67.58	16.46		150.0	
		Z	6.04	67.31	16.27		150.0	
10560-AAC	IEEE 802.11ac WiFi (160MHz, MCS6, 99pc duty cycle)	X	6.06	67.18	16.25	0.00	150.0	± 9.6 %
		Y	6.10	67.40	16.41		150.0	
		Z	6.03	67.14	16.23		150.0	
10561-AAC	IEEE 802.11ac WiFi (160MHz, MCS7, 99pc duty cycle)	X	5.98	67.16	16.28	0.00	150.0	± 9.6 %
		Y	6.02	67.38	16.43		150.0	
		Z	5.95	67.13	16.26		150.0	
10562-AAC	IEEE 802.11ac WiFi (160MHz, MCS8, 99pc duty cycle)	X	6.14	67.65	16.52	0.00	150.0	± 9.6 %
		Y	6.18	67.88	16.69		150.0	
		Z	6.10	67.57	16.48		150.0	
10563-AAC	IEEE 802.11ac WiFi (160MHz, MCS9, 99pc duty cycle)	X	6.53	68.40	16.85	0.00	150.0	± 9.6 %
		Y	6.57	68.59	17.00		150.0	
		Z	6.44	68.19	16.75		150.0	
10564-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 99pc duty cycle)	X	4.91	66.77	16.29	0.46	150.0	± 9.6 %
		Y	4.96	67.01	16.49		150.0	
		Z	4.88	66.76	16.26		150.0	
10565-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 99pc duty cycle)	X	5.15	67.23	16.61	0.46	150.0	± 9.6 %
		Y	5.20	67.46	16.79		150.0	
		Z	5.11	67.20	16.58		150.0	
10566-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 99pc duty cycle)	X	4.98	67.08	16.43	0.46	150.0	± 9.6 %
		Y	5.04	67.33	16.62		150.0	
		Z	4.94	67.05	16.40		150.0	
10567-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 99pc duty cycle)	X	5.00	67.42	16.74	0.46	150.0	± 9.6 %
		Y	5.05	67.64	16.92		150.0	
		Z	4.96	67.39	16.72		150.0	
10568-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 99pc duty cycle)	X	4.90	66.88	16.22	0.46	150.0	± 9.6 %
		Y	4.96	67.15	16.44		150.0	
		Z	4.87	66.87	16.19		150.0	
10569-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 99pc duty cycle)	X	4.95	67.46	16.77	0.46	150.0	± 9.6 %
		Y	5.00	67.68	16.94		150.0	
		Z	4.91	67.46	16.76		150.0	
10570-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 99pc duty cycle)	X	4.99	67.34	16.73	0.46	150.0	± 9.6 %
		Y	5.04	67.57	16.91		150.0	
		Z	4.95	67.33	16.71		150.0	
10571-AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90pc duty cycle)	X	1.25	64.93	15.40	0.46	130.0	± 9.6 %
		Y	1.32	65.99	16.25		130.0	
		Z	1.24	64.84	15.31		130.0	
10572-AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 90pc duty cycle)	X	1.27	65.48	15.72	0.46	130.0	± 9.6 %
		Y	1.35	66.62	16.60		130.0	
		Z	1.26	65.38	15.63		130.0	
10573-AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 90pc duty cycle)	X	2.10	81.92	20.57	0.46	130.0	± 9.6 %
		Y	6.18	99.59	26.88		130.0	
		Z	1.98	81.02	20.18		130.0	
10574-AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 90pc duty cycle)	X	1.40	70.72	18.14	0.46	130.0	± 9.6 %
		Y	1.59	73.16	19.61		130.0	
		Z	1.38	70.53	18.01		130.0	

10575-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 90pc duty cycle)	X	4.72	66.64	16.39	0.46	130.0	± 9.6 %
		Y	4.77	66.88	16.58		130.0	
		Z	4.69	66.63	16.36		130.0	
10576-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 90pc duty cycle)	X	4.74	66.78	16.44	0.46	130.0	± 9.6 %
		Y	4.79	67.02	16.63		130.0	
		Z	4.71	66.78	16.41		130.0	
10577-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 90pc duty cycle)	X	4.96	67.10	16.62	0.46	130.0	± 9.6 %
		Y	5.01	67.33	16.80		130.0	
		Z	4.92	67.08	16.59		130.0	
10578-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 90pc duty cycle)	X	4.85	67.23	16.70	0.46	130.0	± 9.6 %
		Y	4.90	67.46	16.88		130.0	
		Z	4.81	67.21	16.67		130.0	
10579-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 90pc duty cycle)	X	4.63	66.62	16.07	0.46	130.0	± 9.6 %
		Y	4.70	66.91	16.30		130.0	
		Z	4.60	66.59	16.04		130.0	
10580-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 90pc duty cycle)	X	4.68	66.64	16.09	0.46	130.0	± 9.6 %
		Y	4.74	66.93	16.33		130.0	
		Z	4.64	66.62	16.06		130.0	
10581-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 90pc duty cycle)	X	4.75	67.28	16.64	0.46	130.0	± 9.6 %
		Y	4.81	67.52	16.83		130.0	
		Z	4.71	67.26	16.61		130.0	
10582-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 90pc duty cycle)	X	4.59	66.41	15.89	0.46	130.0	± 9.6 %
		Y	4.65	66.72	16.14		130.0	
		Z	4.55	66.37	15.85		130.0	
10583-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 90pc duty cycle)	X	4.72	66.64	16.39	0.46	130.0	± 9.6 %
		Y	4.77	66.88	16.58		130.0	
		Z	4.69	66.63	16.36		130.0	
10584-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 90pc duty cycle)	X	4.74	66.78	16.44	0.46	130.0	± 9.6 %
		Y	4.79	67.02	16.63		130.0	
		Z	4.71	66.78	16.41		130.0	
10585-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90pc duty cycle)	X	4.96	67.10	16.62	0.46	130.0	± 9.6 %
		Y	5.01	67.33	16.80		130.0	
		Z	4.92	67.08	16.59		130.0	
10586-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 90pc duty cycle)	X	4.85	67.23	16.70	0.46	130.0	± 9.6 %
		Y	4.90	67.46	16.88		130.0	
		Z	4.81	67.21	16.67		130.0	
10587-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 90pc duty cycle)	X	4.63	66.62	16.07	0.46	130.0	± 9.6 %
		Y	4.70	66.91	16.30		130.0	
		Z	4.60	66.59	16.04		130.0	
10588-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 90pc duty cycle)	X	4.68	66.64	16.09	0.46	130.0	± 9.6 %
		Y	4.74	66.93	16.33		130.0	
		Z	4.64	66.62	16.06		130.0	
10589-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 90pc duty cycle)	X	4.75	67.28	16.64	0.46	130.0	± 9.6 %
		Y	4.81	67.52	16.83		130.0	
		Z	4.71	67.26	16.61		130.0	
10590-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 90pc duty cycle)	X	4.59	66.41	15.89	0.46	130.0	± 9.6 %
		Y	4.65	66.72	16.14		130.0	
		Z	4.55	66.37	15.85		130.0	

10591-AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS0, 90pc duty cycle)	X	4.87	66.69	16.48	0.46	130.0	± 9.6 %
		Y	4.92	66.92	16.67		130.0	
		Z	4.84	66.69	16.46		130.0	
10592-AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS1, 90pc duty cycle)	X	5.03	67.03	16.61	0.46	130.0	± 9.6 %
		Y	5.08	67.26	16.79		130.0	
		Z	5.00	67.02	16.59		130.0	
10593-AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS2, 90pc duty cycle)	X	4.96	66.97	16.51	0.46	130.0	± 9.6 %
		Y	5.01	67.21	16.70		130.0	
		Z	4.92	66.95	16.48		130.0	
10594-AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS3, 90pc duty cycle)	X	5.01	67.11	16.65	0.46	130.0	± 9.6 %
		Y	5.06	67.34	16.83		130.0	
		Z	4.97	67.10	16.62		130.0	
10595-AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS4, 90pc duty cycle)	X	4.98	67.08	16.55	0.46	130.0	± 9.6 %
		Y	5.04	67.32	16.74		130.0	
		Z	4.94	67.06	16.53		130.0	
10596-AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS5, 90pc duty cycle)	X	4.92	67.08	16.55	0.46	130.0	± 9.6 %
		Y	4.98	67.33	16.75		130.0	
		Z	4.88	67.06	16.53		130.0	
10597-AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS6, 90pc duty cycle)	X	4.87	67.00	16.45	0.46	130.0	± 9.6 %
		Y	4.93	67.26	16.65		130.0	
		Z	4.83	66.97	16.42		130.0	
10598-AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS7, 90pc duty cycle)	X	4.85	67.21	16.69	0.46	130.0	± 9.6 %
		Y	4.90	67.45	16.87		130.0	
		Z	4.81	67.18	16.66		130.0	
10599-AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS0, 90pc duty cycle)	X	5.55	67.30	16.72	0.46	130.0	± 9.6 %
		Y	5.59	67.50	16.88		130.0	
		Z	5.52	67.28	16.71		130.0	
10600-AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS1, 90pc duty cycle)	X	5.76	67.97	17.04	0.46	130.0	± 9.6 %
		Y	5.80	68.15	17.19		130.0	
		Z	5.71	67.90	16.99		130.0	
10601-AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS2, 90pc duty cycle)	X	5.61	67.58	16.85	0.46	130.0	± 9.6 %
		Y	5.65	67.77	17.00		130.0	
		Z	5.57	67.54	16.83		130.0	
10602-AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS3, 90pc duty cycle)	X	5.69	67.58	16.77	0.46	130.0	± 9.6 %
		Y	5.73	67.78	16.94		130.0	
		Z	5.66	67.57	16.76		130.0	
10603-AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS4, 90pc duty cycle)	X	5.77	67.85	17.03	0.46	130.0	± 9.6 %
		Y	5.81	68.03	17.18		130.0	
		Z	5.73	67.82	17.01		130.0	
10604-AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS5, 90pc duty cycle)	X	5.55	67.27	16.73	0.46	130.0	± 9.6 %
		Y	5.60	67.47	16.89		130.0	
		Z	5.52	67.24	16.71		130.0	
10605-AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS6, 90pc duty cycle)	X	5.69	67.68	16.94	0.46	130.0	± 9.6 %
		Y	5.73	67.87	17.10		130.0	
		Z	5.66	67.69	16.94		130.0	
10606-AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS7, 90pc duty cycle)	X	5.43	67.03	16.48	0.46	130.0	± 9.6 %
		Y	5.48	67.26	16.66		130.0	
		Z	5.41	67.03	16.47		130.0	

10607-AAB	IEEE 802.11ac WiFi (20MHz, MCS0, 90pc duty cycle)	X	4.70	65.95	16.07	0.46	130.0	± 9.6 %
		Y	4.75	66.19	16.26		130.0	
		Z	4.67	65.95	16.05		130.0	
10608-AAB	IEEE 802.11ac WiFi (20MHz, MCS1, 90pc duty cycle)	X	4.89	66.37	16.24	0.46	130.0	± 9.6 %
		Y	4.95	66.62	16.43		130.0	
		Z	4.86	66.36	16.22		130.0	
10609-AAB	IEEE 802.11ac WiFi (20MHz, MCS2, 90pc duty cycle)	X	4.78	66.23	16.09	0.46	130.0	± 9.6 %
		Y	4.84	66.50	16.29		130.0	
		Z	4.75	66.21	16.06		130.0	
10610-AAB	IEEE 802.11ac WiFi (20MHz, MCS3, 90pc duty cycle)	X	4.83	66.38	16.24	0.46	130.0	± 9.6 %
		Y	4.89	66.63	16.43		130.0	
		Z	4.80	66.36	16.22		130.0	
10611-AAB	IEEE 802.11ac WiFi (20MHz, MCS4, 90pc duty cycle)	X	4.75	66.21	16.10	0.46	130.0	± 9.6 %
		Y	4.81	66.47	16.30		130.0	
		Z	4.72	66.18	16.07		130.0	
10612-AAB	IEEE 802.11ac WiFi (20MHz, MCS5, 90pc duty cycle)	X	4.77	66.37	16.14	0.46	130.0	± 9.6 %
		Y	4.83	66.65	16.36		130.0	
		Z	4.73	66.35	16.12		130.0	
10613-AAB	IEEE 802.11ac WiFi (20MHz, MCS6, 90pc duty cycle)	X	4.78	66.28	16.05	0.46	130.0	± 9.6 %
		Y	4.84	66.57	16.26		130.0	
		Z	4.74	66.25	16.02		130.0	
10614-AAB	IEEE 802.11ac WiFi (20MHz, MCS7, 90pc duty cycle)	X	4.71	66.42	16.24	0.46	130.0	± 9.6 %
		Y	4.77	66.68	16.44		130.0	
		Z	4.67	66.39	16.22		130.0	
10615-AAB	IEEE 802.11ac WiFi (20MHz, MCS8, 90pc duty cycle)	X	4.76	66.06	15.90	0.46	130.0	± 9.6 %
		Y	4.82	66.34	16.11		130.0	
		Z	4.72	66.04	15.87		130.0	
10616-AAB	IEEE 802.11ac WiFi (40MHz, MCS0, 90pc duty cycle)	X	5.36	66.52	16.31	0.46	130.0	± 9.6 %
		Y	5.40	66.73	16.47		130.0	
		Z	5.33	66.49	16.29		130.0	
10617-AAB	IEEE 802.11ac WiFi (40MHz, MCS1, 90pc duty cycle)	X	5.42	66.67	16.35	0.46	130.0	± 9.6 %
		Y	5.47	66.87	16.51		130.0	
		Z	5.40	66.69	16.36		130.0	
10618-AAB	IEEE 802.11ac WiFi (40MHz, MCS2, 90pc duty cycle)	X	5.31	66.69	16.37	0.46	130.0	± 9.6 %
		Y	5.36	66.91	16.54		130.0	
		Z	5.28	66.66	16.36		130.0	
10619-AAB	IEEE 802.11ac WiFi (40MHz, MCS3, 90pc duty cycle)	X	5.34	66.55	16.24	0.46	130.0	± 9.6 %
		Y	5.39	66.77	16.41		130.0	
		Z	5.31	66.53	16.23		130.0	
10620-AAB	IEEE 802.11ac WiFi (40MHz, MCS4, 90pc duty cycle)	X	5.44	66.61	16.33	0.46	130.0	± 9.6 %
		Y	5.49	66.85	16.50		130.0	
		Z	5.40	66.57	16.30		130.0	
10621-AAB	IEEE 802.11ac WiFi (40MHz, MCS5, 90pc duty cycle)	X	5.41	66.65	16.46	0.46	130.0	± 9.6 %
		Y	5.46	66.85	16.61		130.0	
		Z	5.38	66.63	16.44		130.0	
10622-AAB	IEEE 802.11ac WiFi (40MHz, MCS6, 90pc duty cycle)	X	5.43	66.83	16.54	0.46	130.0	± 9.6 %
		Y	5.47	67.03	16.69		130.0	
		Z	5.41	66.83	16.53		130.0	

10623-AAB	IEEE 802.11ac WiFi (40MHz, MCS7, 90pc duty cycle)	X	5.31	66.37	16.20	0.46	130.0	± 9.6 %
		Y	5.36	66.60	16.37		130.0	
		Z	5.28	66.35	16.18		130.0	
10624-AAB	IEEE 802.11ac WiFi (40MHz, MCS8, 90pc duty cycle)	X	5.51	66.60	16.37	0.46	130.0	± 9.6 %
		Y	5.55	66.80	16.53		130.0	
		Z	5.48	66.57	16.35		130.0	
10625-AAB	IEEE 802.11ac WiFi (40MHz, MCS9, 90pc duty cycle)	X	5.96	67.84	17.04	0.46	130.0	± 9.6 %
		Y	6.00	68.03	17.20		130.0	
		Z	5.91	67.77	17.00		130.0	
10626-AAB	IEEE 802.11ac WiFi (80MHz, MCS0, 90pc duty cycle)	X	5.63	66.56	16.25	0.46	130.0	± 9.6 %
		Y	5.67	66.76	16.40		130.0	
		Z	5.61	66.54	16.24		130.0	
10627-AAB	IEEE 802.11ac WiFi (80MHz, MCS1, 90pc duty cycle)	X	5.91	67.22	16.54	0.46	130.0	± 9.6 %
		Y	5.95	67.40	16.68		130.0	
		Z	5.89	67.20	16.54		130.0	
10628-AAB	IEEE 802.11ac WiFi (80MHz, MCS2, 90pc duty cycle)	X	5.69	66.73	16.24	0.46	130.0	± 9.6 %
		Y	5.74	66.95	16.40		130.0	
		Z	5.67	66.70	16.22		130.0	
10629-AAB	IEEE 802.11ac WiFi (80MHz, MCS3, 90pc duty cycle)	X	5.78	66.80	16.27	0.46	130.0	± 9.6 %
		Y	5.82	67.01	16.42		130.0	
		Z	5.76	66.81	16.27		130.0	
10630-AAB	IEEE 802.11ac WiFi (80MHz, MCS4, 90pc duty cycle)	X	6.42	68.87	17.30	0.46	130.0	± 9.6 %
		Y	6.45	69.07	17.46		130.0	
		Z	6.35	68.76	17.24		130.0	
10631-AAB	IEEE 802.11ac WiFi (80MHz, MCS5, 90pc duty cycle)	X	6.17	68.24	17.17	0.46	130.0	± 9.6 %
		Y	6.22	68.45	17.31		130.0	
		Z	6.11	68.14	17.12		130.0	
10632-AAB	IEEE 802.11ac WiFi (80MHz, MCS6, 90pc duty cycle)	X	5.86	67.20	16.67	0.46	130.0	± 9.6 %
		Y	5.89	67.37	16.79		130.0	
		Z	5.84	67.20	16.66		130.0	
10633-AAB	IEEE 802.11ac WiFi (80MHz, MCS7, 90pc duty cycle)	X	5.75	66.86	16.33	0.46	130.0	± 9.6 %
		Y	5.80	67.09	16.49		130.0	
		Z	5.72	66.81	16.30		130.0	
10634-AAB	IEEE 802.11ac WiFi (80MHz, MCS8, 90pc duty cycle)	X	5.73	66.86	16.39	0.46	130.0	± 9.6 %
		Y	5.78	67.07	16.54		130.0	
		Z	5.70	66.82	16.36		130.0	
10635-AAB	IEEE 802.11ac WiFi (80MHz, MCS9, 90pc duty cycle)	X	5.63	66.29	15.85	0.46	130.0	± 9.6 %
		Y	5.69	66.55	16.05		130.0	
		Z	5.60	66.24	15.82		130.0	
10636-AAC	IEEE 802.11ac WiFi (160MHz, MCS0, 90pc duty cycle)	X	6.06	66.98	16.37	0.46	130.0	± 9.6 %
		Y	6.09	67.16	16.51		130.0	
		Z	6.04	66.95	16.36		130.0	
10637-AAC	IEEE 802.11ac WiFi (160MHz, MCS1, 90pc duty cycle)	X	6.23	67.40	16.57	0.46	130.0	± 9.6 %
		Y	6.27	67.58	16.70		130.0	
		Z	6.21	67.38	16.55		130.0	
10638-AAC	IEEE 802.11ac WiFi (160MHz, MCS2, 90pc duty cycle)	X	6.23	67.37	16.53	0.46	130.0	± 9.6 %
		Y	6.27	67.56	16.67		130.0	
		Z	6.21	67.35	16.52		130.0	

10639-AAC	IEEE 802.11ac WiFi (160MHz, MCS3, 90pc duty cycle)	X	6.21	67.31	16.55	0.46	130.0	± 9.6 %
		Y	6.25	67.51	16.69		130.0	
		Z	6.18	67.27	16.52		130.0	
10640-AAC	IEEE 802.11ac WiFi (160MHz, MCS4, 90pc duty cycle)	X	6.23	67.39	16.53	0.46	130.0	± 9.6 %
		Y	6.28	67.61	16.69		130.0	
		Z	6.20	67.33	16.50		130.0	
10641-AAC	IEEE 802.11ac WiFi (160MHz, MCS5, 90pc duty cycle)	X	6.24	67.19	16.45	0.46	130.0	± 9.6 %
		Y	6.28	67.39	16.60		130.0	
		Z	6.22	67.18	16.44		130.0	
10642-AAC	IEEE 802.11ac WiFi (160MHz, MCS6, 90pc duty cycle)	X	6.29	67.45	16.73	0.46	130.0	± 9.6 %
		Y	6.33	67.63	16.87		130.0	
		Z	6.26	67.41	16.72		130.0	
10643-AAC	IEEE 802.11ac WiFi (160MHz, MCS7, 90pc duty cycle)	X	6.13	67.18	16.51	0.46	130.0	± 9.6 %
		Y	6.18	67.38	16.66		130.0	
		Z	6.11	67.15	16.49		130.0	
10644-AAC	IEEE 802.11ac WiFi (160MHz, MCS8, 90pc duty cycle)	X	6.35	67.83	16.86	0.46	130.0	± 9.6 %
		Y	6.40	68.06	17.03		130.0	
		Z	6.30	67.74	16.80		130.0	
10645-AAC	IEEE 802.11ac WiFi (160MHz, MCS9, 90pc duty cycle)	X	6.89	68.98	17.38	0.46	130.0	± 9.6 %
		Y	6.90	69.10	17.50		130.0	
		Z	6.83	68.87	17.33		130.0	
10646-AAD	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,7)	X	48.50	125.76	41.37	9.30	60.0	± 9.6 %
		Y	90.47	140.91	45.72		60.0	
		Z	50.32	127.46	41.96		60.0	
10647-AAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,7)	X	48.77	126.82	41.82	9.30	60.0	± 9.6 %
		Y	98.14	143.92	46.67		60.0	
		Z	49.92	128.24	42.34		60.0	
10648-AAA	CDMA2000 (1x Advanced)	X	0.66	62.51	9.96	0.00	150.0	± 9.6 %
		Y	0.73	63.91	11.18		150.0	
		Z	0.63	62.25	9.61		150.0	
10652-AAB	LTE-TDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	X	4.17	68.03	16.99	2.23	80.0	± 9.6 %
		Y	4.34	68.67	17.39		80.0	
		Z	4.13	68.01	16.93		80.0	
10653-AAB	LTE-TDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)	X	4.68	67.42	17.15	2.23	80.0	± 9.6 %
		Y	4.82	67.93	17.48		80.0	
		Z	4.65	67.40	17.11		80.0	
10654-AAB	LTE-TDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)	X	4.64	67.10	17.16	2.23	80.0	± 9.6 %
		Y	4.76	67.59	17.48		80.0	
		Z	4.61	67.07	17.13		80.0	
10655-AAB	LTE-TDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	X	4.70	67.12	17.21	2.23	80.0	± 9.6 %
		Y	4.82	67.61	17.53		80.0	
		Z	4.67	67.08	17.17		80.0	
10658-AAA	Pulse Waveform (200Hz, 10%)	X	17.27	91.20	23.98	10.00	50.0	± 9.6 %
		Y	16.02	90.22	23.99		50.0	
		Z	18.59	92.23	24.12		50.0	
10659-AAA	Pulse Waveform (200Hz, 20%)	X	100.00	114.98	28.67	6.99	60.0	± 9.6 %
		Y	100.00	116.21	29.42		60.0	
		Z	100.00	114.43	28.33		60.0	

10660-AAA	Pulse Waveform (200Hz, 40%)	X	100.00	112.03	25.82	3.98	80.0	± 9.6 %
		Y	100.00	113.99	26.86		80.0	
		Z	100.00	111.43	25.48		80.0	
10661-AAA	Pulse Waveform (200Hz, 60%)	X	100.00	111.06	24.05	2.22	100.0	± 9.6 %
		Y	100.00	114.62	25.75		100.0	
		Z	100.00	110.31	23.67		100.0	
10662-AAA	Pulse Waveform (200Hz, 80%)	X	100.00	108.64	21.32	0.97	120.0	± 9.6 %
		Y	100.00	117.33	25.06		120.0	
		Z	100.00	107.31	20.72		120.0	

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



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

Accreditation No.: **SCS 0108**

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

BN ✓
 03/30/2018

Calibration date: **March 13, 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-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

Calibrated by:	Name Jeton Kastrati	Function Laboratory Technician	Signature
Approved by:	Katja Pokovic	Technical Manager	
			Issued: March 15, 2018
This calibration certificate shall not be reproduced except in full without written approval of the laboratory.			



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 Multilateral Agreement for the recognition of calibration certificates

Glossary:

TSL	tissue simulating liquid
NORM _{x,y,z}	sensitivity in free space
ConvF	sensitivity in TSL / NORM _{x,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 ϑ	ϑ rotation around an axis that is in the plane normal to probe axis (at measurement center), i.e., $\vartheta = 0$ is normal to probe axis
Connector Angle	information used in DASY system to align probe sensor X to the robot coordinate system

Calibration is Performed According to the Following Standards:

- IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013
- IEC 62209-1, "Measurement procedure for the assessment of Specific Absorption Rate (SAR) from hand-held and body-mounted devices used next to the ear (frequency range of 300 MHz to 6 GHz)", July 2016
- IEC 62209-2, "Procedure to determine the Specific Absorption Rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)", March 2010
- KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

Methods Applied and Interpretation of Parameters:

- NORM_{x,y,z}**: Assessed for E-field polarization $\vartheta = 0$ ($f \leq 900$ MHz in TEM-cell; $f > 1800$ MHz: R22 waveguide). NORM_{x,y,z} are only intermediate values, i.e., the uncertainties of NORM_{x,y,z} does not affect the E²-field uncertainty inside TSL (see below ConvF).
- NORM(f)_{x,y,z}** = NORM_{x,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.
- DCP_{x,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
- A_{x,y,z}; B_{x,y,z}; C_{x,y,z}; D_{x,y,z}; VR_{x,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 $f \leq 800$ 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 NORM_{x,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 NORM_x (no uncertainty required).

Probe ES3DV3

SN:3319

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

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

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

Basic Calibration Parameters

	Sensor X	Sensor Y	Sensor Z	Unc (k=2)
Norm ($\mu\text{V}/(\text{V}/\text{m})^2$) ^A	1.08	1.05	1.12	$\pm 10.1 \%$
DCP (mV) ^B	104.0	103.0	104.0	

Modulation Calibration Parameters

UID	Communication System Name		A dB	B dB $\sqrt{\mu\text{V}}$	C	D dB	VR mV	Unc ^E (k=2)
0	CW	X	0.0	0.0	1.0	0.00	197.9	$\pm 3.8 \%$
		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 fF	C2 fF	α V^{-1}	T1 $\text{ms}\cdot\text{V}^{-2}$	T2 $\text{ms}\cdot\text{V}^{-1}$	T3 ms	T4 V^{-2}	T5 V^{-1}	T6
X	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%.

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

^B Numerical linearization parameter: uncertainty not required.

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

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

Calibration Parameter Determined in Head Tissue Simulating Media

f (MHz) ^C	Relative Permittivity ^F	Conductivity (S/m) ^F	ConvF X	ConvF Y	ConvF Z	Alpha ^G	Depth ^G (mm)	Unc (k=2)
750	41.9	0.89	6.70	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 %

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

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

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

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

Calibration Parameter Determined in Body Tissue Simulating Media

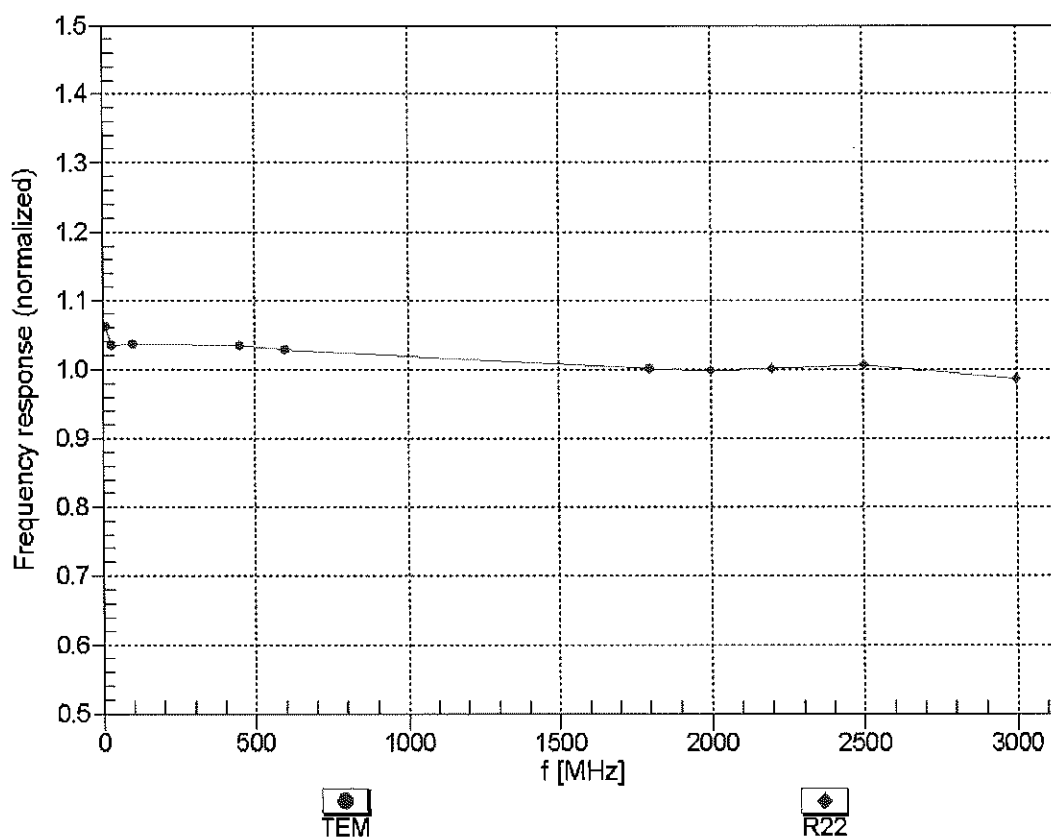
f (MHz) ^c	Relative Permittivity ^F	Conductivity (S/m) ^F	ConvF X	ConvF Y	ConvF Z	Alpha ^G	Depth ^G (mm)	Unc (k=2)
750	55.5	0.96	6.32	6.32	6.32	0.65	1.26	± 12.0 %
835	55.2	0.97	6.20	6.20	6.20	0.80	1.14	± 12.0 %
1750	53.4	1.49	5.05	5.05	5.05	0.76	1.27	± 12.0 %
1900	53.3	1.52	4.84	4.84	4.84	0.55	1.56	± 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 %

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

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

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

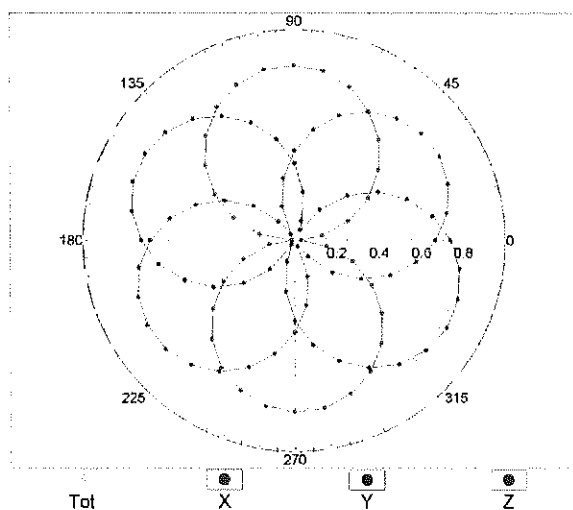
Frequency Response of E-Field (TEM-Cell:ifi110 EXX, Waveguide: R22)



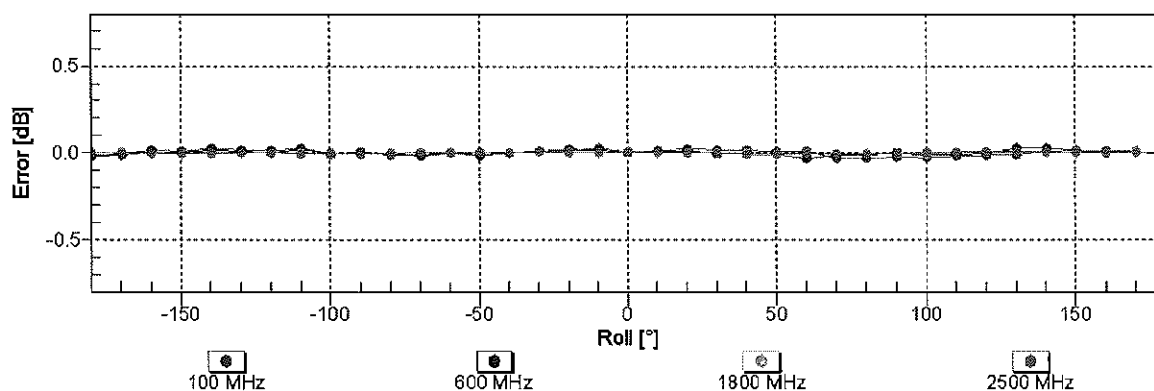
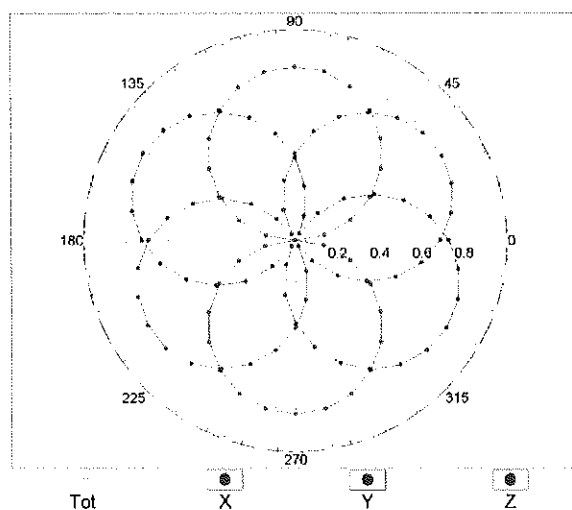
Uncertainty of Frequency Response of E-field: $\pm 6.3\%$ ($k=2$)

Receiving Pattern (ϕ), $\theta = 0^\circ$

f=600 MHz,TEM

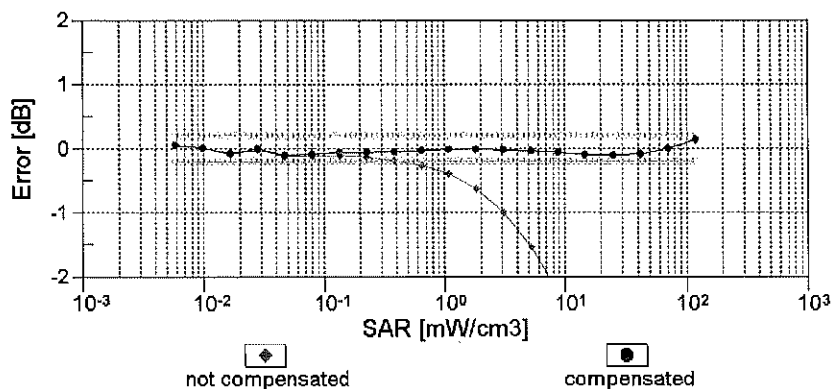
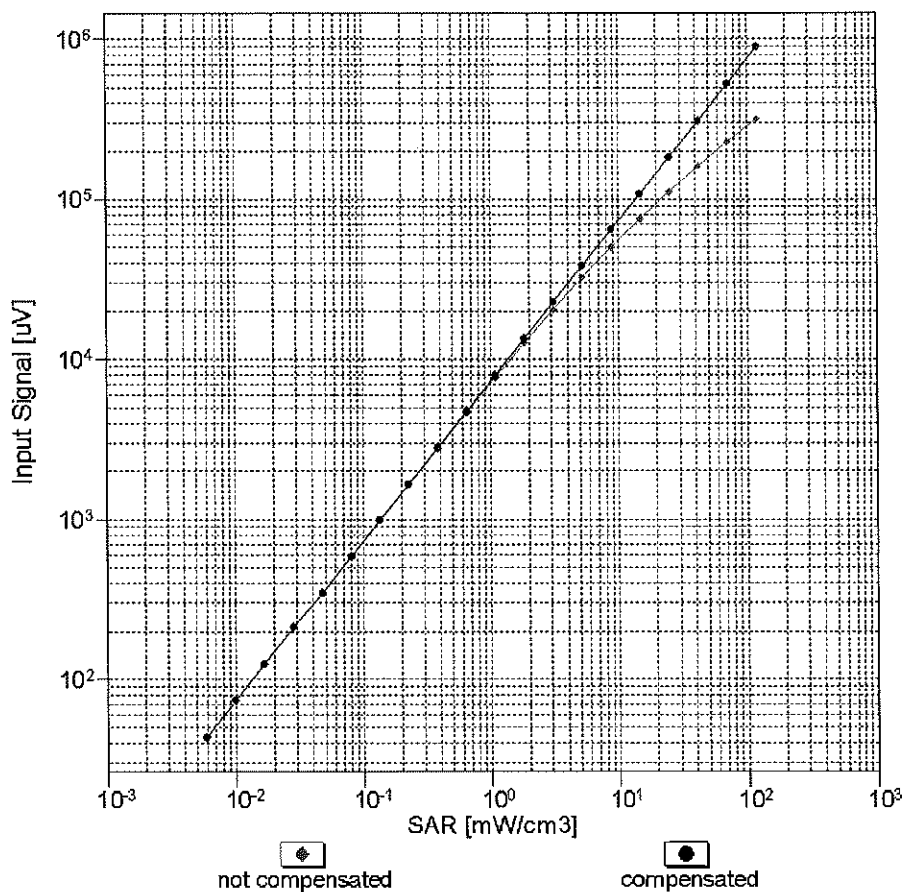


f=1800 MHz,R22



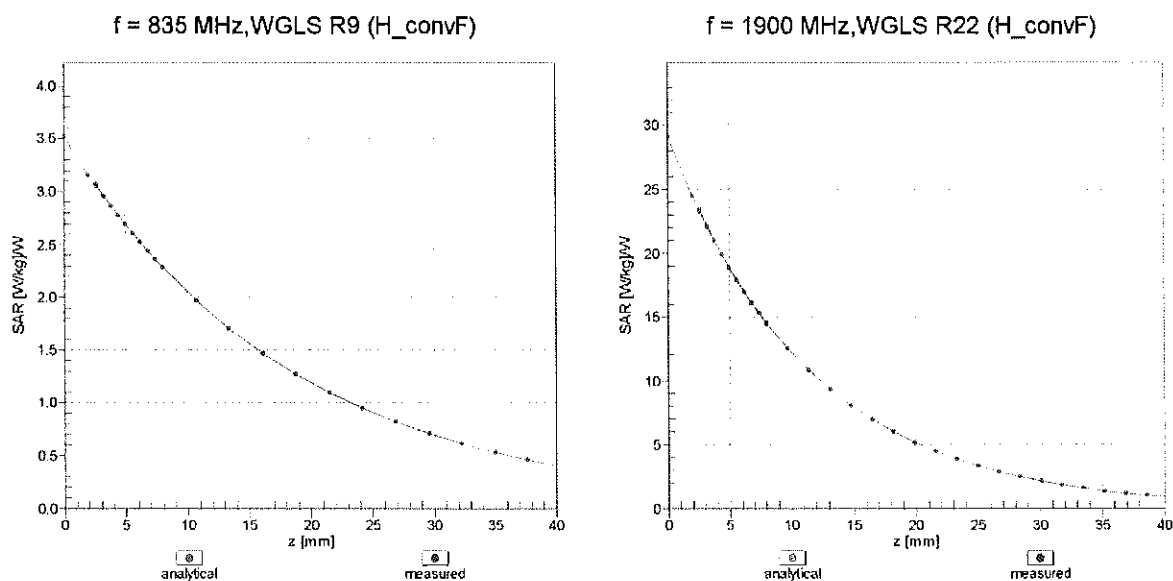
Uncertainty of Axial Isotropy Assessment: $\pm 0.5\%$ (k=2)

Dynamic Range $f(\text{SAR}_{\text{head}})$ (TEM cell , $f_{\text{eval}} = 1900 \text{ MHz}$)



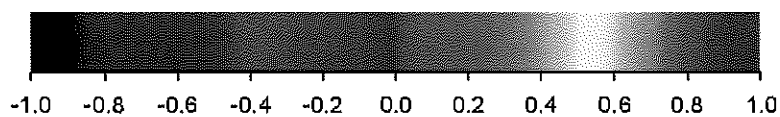
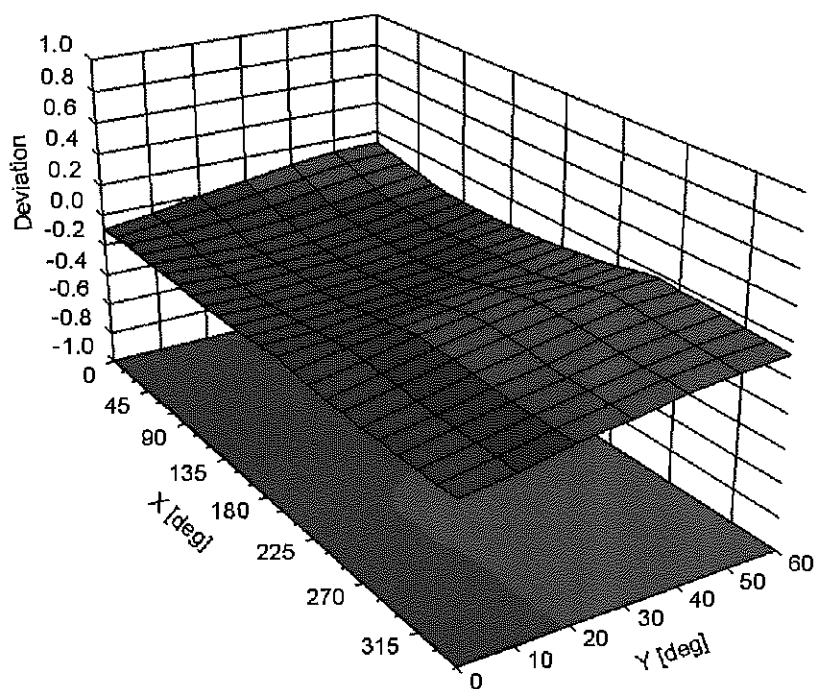
Uncertainty of Linearity Assessment: $\pm 0.6\%$ ($k=2$)

Conversion Factor Assessment



Deviation from Isotropy in Liquid

Error (ϕ, θ), $f = 900 \text{ MHz}$



Uncertainty of Spherical Isotropy Assessment: $\pm 2.6\%$ ($k=2$)

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

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 dB μ V	C	D dB	VR mV	Max Unc ^E (k=2)
0	CW	X	0.00	0.00	1.00	0.00	197.9	$\pm 3.8 \%$
		Y	0.00	0.00	1.00		198.2	
		Z	0.00	0.00	1.00		200.6	
10010- CAA	SAR Validation (Square, 100ms, 10ms)	X	9.56	81.28	19.98	10.00	25.0	$\pm 9.6 \%$
		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	$\pm 9.6 \%$
		Y	0.99	67.12	14.82		150.0	
		Z	1.12	68.87	16.00		150.0	
10012- CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps)	X	1.37	66.58	17.00	0.41	150.0	$\pm 9.6 \%$
		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	$\pm 9.6 \%$
		Y	5.08	67.20	17.36		150.0	
		Z	5.20	67.32	17.47		150.0	
10021- DAC	GSM-FDD (TDMA, GMSK)	X	20.40	95.52	26.57	9.39	50.0	$\pm 9.6 \%$
		Y	29.46	101.11	27.60		50.0	
		Z	14.66	89.52	24.83		50.0	
10023- DAC	GPRS-FDD (TDMA, GMSK, TN 0)	X	18.37	93.61	26.02	9.57	50.0	$\pm 9.6 \%$
		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	$\pm 9.6 \%$
		Y	100.00	117.39	29.93		60.0	
		Z	47.21	108.31	28.71		60.0	
10025- DAC	EDGE-FDD (TDMA, 8PSK, TN 0)	X	21.09	108.48	41.18	12.57	50.0	$\pm 9.6 \%$
		Y	17.11	102.80	38.82		50.0	
		Z	18.44	103.12	38.97		50.0	
10026- DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1)	X	21.59	105.09	36.25	9.56	60.0	$\pm 9.6 \%$
		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	$\pm 9.6 \%$
		Y	100.00	115.83	28.28		80.0	
		Z	100.00	118.30	29.89		80.0	
10028- DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2-3)	X	100.00	118.84	29.14	3.55	100.0	$\pm 9.6 \%$
		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	$\pm 9.6 \%$
		Y	12.90	93.80	31.06		80.0	
		Z	13.60	93.82	31.09		80.0	
10030- CAA	IEEE 802.15.1 Bluetooth (GFSK, DH1)	X	100.00	118.11	30.01	5.30	70.0	$\pm 9.6 \%$
		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	$\pm 9.6 \%$
		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)	X	100.00	127.26	29.88	1.17	100.0	± 9.6 %
		Y	100.00	114.89	24.38		100.0	
		Z	100.00	122.11	27.79		100.0	
10033-CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH1)	X	21.21	99.84	27.91	5.30	70.0	± 9.6 %
		Y	19.09	97.43	26.61		70.0	
		Z	13.98	92.26	25.56		70.0	
10034-CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH3)	X	14.93	98.23	25.94	1.88	100.0	± 9.6 %
		Y	7.46	86.71	21.62		100.0	
		Z	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	
		Z	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	
		Z	15.99	94.67	26.38		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	
		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	
		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	
		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	
		Z	10.45	80.79	23.56		25.0	
10049-CAA	DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12)	X	13.41	87.55	24.40	10.79	40.0	± 9.6 %
		Y	15.25	89.77	24.55		40.0	
		Z	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		110.0	
		Z	100.00	130.16	33.31		110.0	

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 %
		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)	X	4.90	67.24	16.94	0.49	100.0	± 9.6 %
		Y	4.79	66.94	16.63		100.0	
		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	
		Z	4.95	67.23	16.89		100.0	
10064-CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps)	X	5.28	67.75	17.35	0.86	100.0	± 9.6 %
		Y	5.16	67.43	17.04		100.0	
		Z	5.30	67.59	17.17		100.0	
10065-CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps)	X	5.19	67.81	17.53	1.21	100.0	± 9.6 %
		Y	5.07	67.47	17.22		100.0	
		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)	X	5.57	68.10	18.21	2.04	100.0	± 9.6 %
		Y	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)	X	5.73	68.50	18.60	2.55	100.0	± 9.6 %
		Y	5.58	68.13	18.28		100.0	
		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	
		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	
		Z	5.35	67.60	17.87		100.0	
10072-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	
		Z	5.44	68.21	18.22		100.0	
10073-CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps)	X	5.57	68.74	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-CAB	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	
		Z	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	
		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	
		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		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	
		Z	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	
		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	
		Z	1.87	67.93	15.97		150.0	
10098-CAB	UMTS-FDD (HSUPA, Subtest 2)	X	1.97	69.46	16.95	0.00	150.0	± 9.6 %
		Y	1.74	67.28	15.38		150.0	
		Z	1.84	67.91	15.95		150.0	
10099-DAC	EDGE-FDD (TDMA, 8PSK, TN 0-4)	X	21.45	104.88	36.18	9.56	60.0	± 9.6 %
		Y	18.89	102.07	34.98		60.0	
		Z	18.39	100.05	34.32		60.0	
10100-CAD	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	X	3.55	72.46	17.74	0.00	150.0	± 9.6 %
		Y	3.14	70.29	16.48		150.0	
		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	
		Z	3.39	68.08	16.14		150.0	
10102-CAD	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	X	3.54	68.46	16.61	0.00	150.0	± 9.6 %
		Y	3.37	67.56	15.95		150.0	
		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	
		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	
		Z	7.71	74.28	20.69		65.0	
10108-CAE	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	X	3.11	71.64	17.59	0.00	150.0	± 9.6 %
		Y	2.75	69.54	16.32		150.0	
		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	
		Z	3.06	67.87	16.07		150.0	
10110-CAE	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	X	2.56	70.84	17.38	0.00	150.0	± 9.6 %
		Y	2.24	68.61	15.94		150.0	
		Z	2.42	69.44	16.48		150.0	
10111-CAE	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	X	2.84	69.29	16.96	0.00	150.0	± 9.6 %
		Y	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	
		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	
		Z	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	
		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 %
		Y	5.28	67.54	16.47		150.0	
		Z	5.37	67.64	16.53		150.0	
10117-CAC	IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK)	X	5.26	67.57	16.70	0.00	150.0	± 9.6 %
		Y	5.15	67.22	16.40		150.0	
		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	
		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	
		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	
		Z	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)	X	2.76	70.34	17.00	0.00	150.0	± 9.6 %
		Y	2.47	68.62	15.73		150.0	
		Z	2.62	69.02	16.23		150.0	
10144-CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	X	2.54	68.16	15.50	0.00	150.0	± 9.6 %
		Y	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)	X	1.75	69.86	15.18	0.00	150.0	± 9.6 %
		Y	1.29	65.55	12.27		150.0	
		Z	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	
		Z	3.50	73.50	16.33		150.0	
10147-CAE	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	X	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	
		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	
		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		150.0	

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	
		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	
		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)	X	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)	X	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-AAC	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	X	4.58	75.56	20.68	3.01	150.0	± 9.6 %
		Y	3.92	72.80	19.18		150.0	
		Z	4.67	75.15	20.27		150.0	

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 %
		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 %
		Y	5.09	78.33	22.53		150.0	
		Z	5.99	80.44	23.37		150.0	
10189-AAE	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	X	4.73	76.16	21.02	3.01	150.0	± 9.6 %
		Y	4.04	73.37	19.51		150.0	
		Z	4.82	75.73	20.60		150.0	
10193-CAC	IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK)	X	4.67	66.99	16.47	0.00	150.0	± 9.6 %
		Y	4.56	66.66	16.13		150.0	
		Z	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	
		Z	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)	X	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	
		Z	4.91	67.18	16.39		150.0	
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)	X	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	
10222-CAC	IEEE 802.11n (HT Mixed, 15 Mbps, BPSK)	X	5.23	67.59	16.70	0.00	150.0	± 9.6 %
		Y	5.12	67.23	16.39		150.0	
		Z	5.22	67.42	16.51		150.0	

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	
		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	
		Z	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	
		Z	30.07	109.15	33.47		65.0	
10229-CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)	X	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	
		Z	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	
		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	
		Z	22.90	97.90	27.98		65.0	
10237-CAD	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	X	42.99	117.54	36.03	6.02	65.0	± 9.6 %
		Y	31.67	111.68	34.11		65.0	
		Z	29.03	108.38	33.18		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)	X	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)	X	13.21	88.13	28.12	6.98	65.0	± 9.6 %
		Y	12.19	86.75	27.34		65.0	
		Z	12.93	86.92	27.56		65.0	
10242-CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	X	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 %
		Y	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		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		65.0	
		Z	8.49	77.01	21.74		65.0	

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	
		Z	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	
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	
		Z	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 %
		Y	8.64	77.97	21.34		65.0	
		Z	8.71	77.32	21.10		65.0	

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)	X	6.00	70.47	14.76	9.03	50.0	± 9.6 %
		Y	5.21	68.57	13.21		50.0	
		Z	6.28	70.88	15.27		50.0	
10278-CAA	PHS (QPSK, BW 884MHz, Rolloff 0.5)	X	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)	X	9.72	80.54	21.26	9.03	50.0	± 9.6 %
		Y	8.86	78.97	20.05		50.0	
		Z	9.46	79.72	21.15		50.0	
10290-AAB	CDMA2000, RC1, SO55, Full Rate	X	2.18	74.40	17.31	0.00	150.0	± 9.6 %
		Y	1.44	68.27	13.81		150.0	
		Z	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	
		Z	0.97	67.39	13.90		150.0	
10292-AAB	CDMA2000, RC3, SO32, Full Rate	X	2.10	80.68	20.23	0.00	150.0	± 9.6 %
		Y	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.	X	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)	X	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	
		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	
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	
		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	
		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	
		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	
		Z	7.71	75.76	23.39		50.0	
10308-AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, PUSC)	X	7.56	75.95	23.55	6.02	50.0	± 9.6 %
		Y	7.22	76.07	23.58		50.0	
		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 %
		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 %
		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	
		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	
		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	
		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	
		Z	4.88	67.23	16.38		150.0	
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 %
		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	
		Z	1.72	70.30	15.40		115.0	
10406-AAB	CDMA2000, RC3, SO32, SCH0, Full Rate	X	100.00	125.34	32.57	0.00	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	
		Z	1.00	63.31	14.86		150.0	
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	4.57	66.70	16.19		150.0	
		Z	4.67	66.81	16.30		150.0	
10417-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 99pc duty cycle)	X	4.68	67.03	16.52	0.00	150.0	± 9.6 %
		Y	4.57	66.70	16.19		150.0	
		Z	4.67	66.81	16.30		150.0	
10418-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Long preamble)	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 preamble)	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)	X	4.81	67.13	16.54	0.00	150.0	± 9.6 %
		Y	4.70	66.81	16.22		150.0	
		Z	4.80	66.92	16.33		150.0	
10423-AAB	IEEE 802.11n (HT Greenfield, 43.3 Mbps, 16-QAM)	X	5.01	67.51	16.68	0.00	150.0	± 9.6 %
		Y	4.89	67.16	16.35		150.0	
		Z	5.01	67.31	16.47		150.0	
10424-AAB	IEEE 802.11n (HT Greenfield, 72.2 Mbps, 64-QAM)	X	4.92	67.45	16.65	0.00	150.0	± 9.6 %
		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		150.0	
		Z	5.49	67.58	16.59		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		150.0	

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	
		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	
		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	
		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	
		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	
		Z	3.73	67.41	15.90		150.0	
10448-AAB	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 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, Clipping 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	
		Z	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)	X	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	3.78	65.32	15.90		150.0	
		Z	3.84	65.45	16.04		150.0	
10458-AAA	CDMA2000 (1xEV-DO, Rev. B, 2 carriers)	X	4.10	70.68	17.90	0.00	150.0	± 9.6 %
		Y	3.95	70.36	17.40		150.0	
		Z	3.98	69.73	17.40		150.0	
10459-AAA	CDMA2000 (1xEV-DO, Rev. B, 3 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	

10460-AAA	UMTS-FDD (WCDMA, AMR)	X	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)	X	100.00	124.72	32.88	3.29	80.0	± 9.6 %
		Y	100.00	122.71	31.63		80.0	
		Z	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)	X	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)	X	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	
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		80.0	
		Z	33.12	94.61	21.54		80.0	

10477-AAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	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 %
		Y	17.72	96.96	26.53		80.0	
		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	
		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	
		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	
		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)	X	11.70	86.22	22.45	2.23	80.0	± 9.6 %
		Y	8.73	81.47	20.24		80.0	
		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	
		Z	5.22	71.29	18.47		80.0	

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-AAC	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	7.26	79.46	21.31	2.23	80.0	± 9.6 %
		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-AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	4.23	71.63	15.72	2.23	80.0	± 9.6 %
		Y	2.88	66.72	12.99		80.0	
		Z	3.81	69.89	15.10		80.0	
10499-AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	4.07	70.79	15.25	2.23	80.0	± 9.6 %
		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 %
		Y	4.78	71.81	18.34		80.0	
		Z	5.05	72.00	18.55		80.0	
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-AAC	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	5.49	72.85	19.25	2.23	80.0	± 9.6 %
		Y	5.02	71.50	18.47		80.0	
		Z	5.31	71.82	18.66		80.0	

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 %
		Y	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	
		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	
		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 %
		Y	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	
		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	
		Z	0.73	74.56	19.01		150.0	
10517-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	
		Z	0.84	65.95	15.79		150.0	
10518-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc duty cycle)	X	4.67	67.12	16.50	0.00	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	
		Z	4.74	67.17	16.35		150.0	
10521-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc duty cycle)	X	4.67	67.41	16.56	0.00	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	

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 %
		Y	4.47	66.91	16.11		150.0	
		Z	4.58	67.04	16.22		150.0	
10524-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc duty cycle)	X	4.67	67.35	16.59	0.00	150.0	± 9.6 %
		Y	4.55	66.98	16.24		150.0	
		Z	4.67	67.11	16.36		150.0	
10525-AAB	IEEE 802.11ac WiFi (20MHz, MCS0, 99pc duty cycle)	X	4.63	66.37	16.17	0.00	150.0	± 9.6 %
		Y	4.52	66.01	15.83		150.0	
		Z	4.62	66.13	15.94		150.0	
10526-AAB	IEEE 802.11ac WiFi (20MHz, MCS1, 99pc duty cycle)	X	4.83	66.78	16.32	0.00	150.0	± 9.6 %
		Y	4.70	66.40	15.97		150.0	
		Z	4.82	66.54	16.09		150.0	
10527-AAB	IEEE 802.11ac WiFi (20MHz, MCS2, 99pc duty cycle)	X	4.75	66.76	16.27	0.00	150.0	± 9.6 %
		Y	4.62	66.36	15.92		150.0	
		Z	4.74	66.51	16.04		150.0	
10528-AAB	IEEE 802.11ac WiFi (20MHz, MCS3, 99pc duty cycle)	X	4.77	66.78	16.31	0.00	150.0	± 9.6 %
		Y	4.64	66.38	15.95		150.0	
		Z	4.76	66.54	16.08		150.0	
10529-AAB	IEEE 802.11ac WiFi (20MHz, MCS4, 99pc duty cycle)	X	4.77	66.78	16.31	0.00	150.0	± 9.6 %
		Y	4.64	66.38	15.95		150.0	
		Z	4.76	66.54	16.08		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 %
		Y	4.64	66.50	15.97		150.0	
		Z	4.77	66.69	16.10		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 %
		Y	4.49	66.35	15.90		150.0	
		Z	4.62	66.56	16.05		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 %
		Y	4.65	66.41	15.94		150.0	
		Z	4.77	66.55	16.05		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 %
		Y	5.17	66.53	16.03		150.0	
		Z	5.27	66.70	16.13		150.0	
10535-AAB	IEEE 802.11ac WiFi (40MHz, MCS1, 99pc duty cycle)	X	5.35	67.03	16.39	0.00	150.0	± 9.6 %
		Y	5.24	66.69	16.10		150.0	
		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 %
		Y	5.10	66.65	16.06		150.0	
		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 %
		Y	5.17	66.63	16.05		150.0	
		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 %
		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	
		Z	5.29	66.82	16.22		150.0	

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 %
		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	
		Z	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	
		Z	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	

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	
		Z	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-AAC	IEEE 802.11ac WiFi (160MHz, MCS7, 99pc duty cycle)	X	6.08	67.64	16.61	0.00	150.0	± 9.6 %
		Y	5.97	67.29	16.33		150.0	
		Z	6.06	67.49	16.44		150.0	
10562-AAC	IEEE 802.11ac WiFi (160MHz, MCS8, 99pc duty cycle)	X	6.25	68.16	16.88	0.00	150.0	± 9.6 %
		Y	6.13	67.77	16.57		150.0	
		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 %
		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	
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 %
		Y	4.96	67.67	16.89		150.0	
		Z	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 %
		Y	5.00	67.52	16.83		150.0	
		Z	5.11	67.61	16.91		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 %
		Y	1.29	65.83	16.01		130.0	
		Z	1.37	66.57	16.56		130.0	
10572-AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 90pc duty cycle)	X	1.47	68.62	18.01	0.46	130.0	± 9.6 %
		Y	1.32	66.50	16.39		130.0	
		Z	1.40	67.26	16.95		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 %
		Y	1.59	73.49	19.59		130.0	
		Z	1.75	74.78	20.34		130.0	

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	
		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)	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	
10577-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-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	
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	
		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)	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	
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)	X	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		130.0	
		Z	4.73	66.78	16.14		130.0	

10591-AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS0, 90pc duty cycle)	X	4.98	67.15	16.87	0.46	130.0	± 9.6 %
		Y	4.87	66.85	16.57		130.0	
		Z	4.98	66.97	16.68		130.0	
10592-AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS1, 90pc duty cycle)	X	5.15	67.50	16.99	0.46	130.0	± 9.6 %
		Y	5.04	67.19	16.69		130.0	
		Z	5.16	67.32	16.80		130.0	
10593-AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS2, 90pc duty cycle)	X	5.09	67.46	16.91	0.46	130.0	± 9.6 %
		Y	4.96	67.12	16.59		130.0	
		Z	5.09	67.29	16.72		130.0	
10594-AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS3, 90pc duty cycle)	X	5.14	67.60	17.04	0.46	130.0	± 9.6 %
		Y	5.02	67.28	16.73		130.0	
		Z	5.14	67.42	16.84		130.0	
10595-AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS4, 90pc duty cycle)	X	5.11	67.58	16.95	0.46	130.0	± 9.6 %
		Y	4.99	67.24	16.64		130.0	
		Z	5.12	67.40	16.76		130.0	
10596-AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS5, 90pc duty cycle)	X	5.05	67.59	16.96	0.46	130.0	± 9.6 %
		Y	4.93	67.24	16.64		130.0	
		Z	5.06	67.40	16.76		130.0	
10597-AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS6, 90pc duty cycle)	X	5.00	67.53	16.87	0.46	130.0	± 9.6 %
		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		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		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	
		Z	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	

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	
		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	
		Z	4.97	66.72	16.46		130.0	
10611-AAB	IEEE 802.11ac WiFi (20MHz, MCS4, 90pc duty cycle)	X	4.89	66.78	16.54	0.46	130.0	± 9.6 %
		Y	4.76	66.39	16.20		130.0	
		Z	4.89	66.57	16.33		130.0	
10612-AAB	IEEE 802.11ac WiFi (20MHz, MCS5, 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	
		Z	4.91	66.73	16.37		130.0	
10613-AAB	IEEE 802.11ac WiFi (20MHz, MCS6, 90pc duty cycle)	X	4.93	66.87	16.50	0.46	130.0	± 9.6 %
		Y	4.79	66.46	16.14		130.0	
		Z	4.93	66.66	16.28		130.0	
10614-AAB	IEEE 802.11ac WiFi (20MHz, MCS7, 90pc duty cycle)	X	4.85	67.03	16.71	0.46	130.0	± 9.6 %
		Y	4.72	66.63	16.36		130.0	
		Z	4.85	66.82	16.49		130.0	
10615-AAB	IEEE 802.11ac WiFi (20MHz, MCS8, 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	
		Z	4.90	66.40	16.12		130.0	
10616-AAB	IEEE 802.11ac WiFi (40MHz, MCS0, 90pc duty cycle)	X	5.47	66.98	16.66	0.46	130.0	± 9.6 %
		Y	5.36	66.66	16.38		130.0	
		Z	5.46	66.82	16.47		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)	X	5.56	67.11	16.69	0.46	130.0	± 9.6 %
		Y	5.44	66.75	16.39		130.0	
		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 %
		Y	5.42	66.81	16.54		130.0	
		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	

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	
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		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	

10639-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	
		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	
		Z	6.33	67.75	16.70		130.0	
10641-AAC	IEEE 802.11ac WiFi (160MHz, MCS5, 90pc duty cycle)	X	6.33	67.58	16.73	0.46	130.0	± 9.6 %
		Y	6.23	67.29	16.48		130.0	
		Z	6.31	67.45	16.57		130.0	
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	
		Z	6.46	68.22	17.05		130.0	
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		80.0	
10653-AAB	LTE-TDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)	X	5.05	68.61	17.89	2.23	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 %
		Y	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	
		Z	4.99	67.90	17.61		80.0	
10658-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	
		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	
		Z	23.49	96.54	25.38		60.0	

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	

^E 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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 Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: **SCS 0108**

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

Calibration date: **March 27, 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-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

Calibrated by:	Name Michael Weber	Function Laboratory Technician	Signature
Approved by:	Katja Pokovic	Technical Manager	
			Issued: March 27, 2018
This calibration certificate shall not be reproduced except in full without written approval of the laboratory.			



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Accreditation No.: **SCS 0108**

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Glossary:

TSL	tissue simulating liquid
NORM _{x,y,z}	sensitivity in free space
ConvF	sensitivity in TSL / NORM _{x,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 ϑ	ϑ rotation around an axis that is in the plane normal to probe axis (at measurement center), i.e., $\vartheta = 0$ is normal to probe axis
Connector Angle	information used in DASY system to align probe sensor X to the robot coordinate system

Calibration is Performed According to the Following Standards:

- IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013
- IEC 62209-1, "Measurement procedure for the assessment of Specific Absorption Rate (SAR) from hand-held and body-mounted devices used next to the ear (frequency range of 300 MHz to 6 GHz)", July 2016
- IEC 62209-2, "Procedure to determine the Specific Absorption Rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)", March 2010
- KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

Methods Applied and Interpretation of Parameters:

- NORM_{x,y,z}**: Assessed for E-field polarization $\vartheta = 0$ ($f \leq 900$ MHz in TEM-cell; $f > 1800$ MHz: R22 waveguide). NORM_{x,y,z} are only intermediate values, i.e., the uncertainties of NORM_{x,y,z} does not affect the E^2 -field uncertainty inside TSL (see below ConvF).
- NORM(f)_{x,y,z}** = NORM_{x,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.
- DCP_{x,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
- A_{x,y,z}; B_{x,y,z}; C_{x,y,z}; D_{x,y,z}; VR_{x,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 $f \leq 800$ 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 NORM_{x,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 NORM_x (no uncertainty required).

Probe ES3DV3

SN:3347

Manufactured:	March 15, 2012
Repaired:	March 15, 2018
Calibrated:	March 27, 2018

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

DASY/EASY - Parameters of Probe: ES3DV3 - SN:3347

Basic Calibration Parameters

	Sensor X	Sensor Y	Sensor Z	Unc (k=2)
Norm ($\mu\text{V}/(\text{V}/\text{m})^2$) ^A	1.15	1.18	1.21	$\pm 10.1 \%$
DCP (mV) ^B	101.9	105.1	102.9	

Modulation Calibration Parameters

UID	Communication System Name		A dB	B dB/ μV	C	D dB	VR mV	Unc ^E (k=2)
0	CW	X	0.0	0.0	1.0	0.00	201.8	$\pm 3.3 \%$
		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^{-1}	T1 $\text{ms} \cdot \text{V}^{-2}$	T2 $\text{ms} \cdot \text{V}^{-1}$	T3 ms	T4 V^{-2}	T5 V^{-1}	T6
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%.

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

^B Numerical linearization parameter: uncertainty not required.

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

DASY/EASY - Parameters of Probe: ES3DV3 - SN:3347

Calibration Parameter Determined in Head Tissue Simulating Media

f (MHz) ^C	Relative Permittivity ^F	Conductivity (S/m) ^F	ConvF X	ConvF Y	ConvF Z	Alpha ^G	Depth ^G (mm)	Unc (k=2)
750	41.9	0.89	6.77	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	5.11	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 %

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

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

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

DASY/EASY - Parameters of Probe: ES3DV3 - SN:3347

Calibration Parameter Determined in Body Tissue Simulating Media

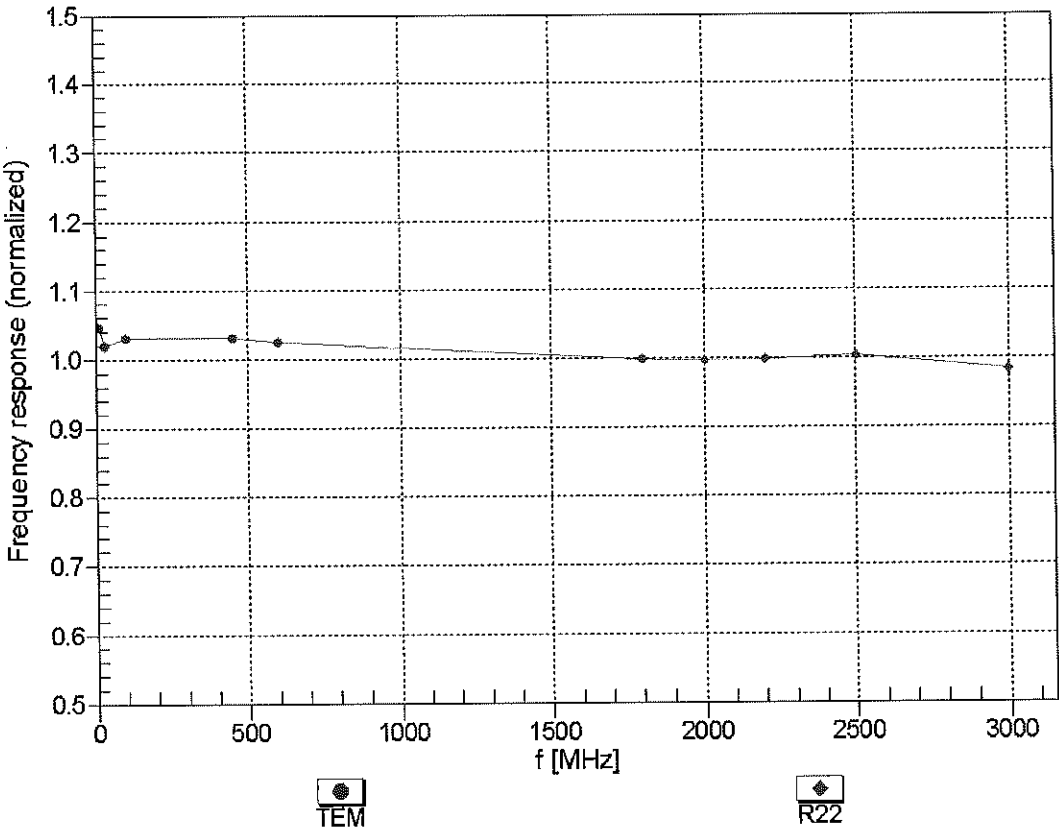
f (MHz) ^C	Relative Permittivity ^F	Conductivity (S/m) ^F	ConvF X	ConvF Y	ConvF Z	Alpha ^G	Depth ^G (mm)	Unc (k=2)
750	55.5	0.96	6.59	6.59	6.59	0.77	1.22	± 12.0 %
835	55.2	0.97	6.37	6.37	6.37	0.80	1.17	± 12.0 %
1750	53.4	1.49	5.17	5.17	5.17	0.49	1.59	± 12.0 %
1900	53.3	1.52	4.94	4.94	4.94	0.52	1.49	± 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 %

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

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

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

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

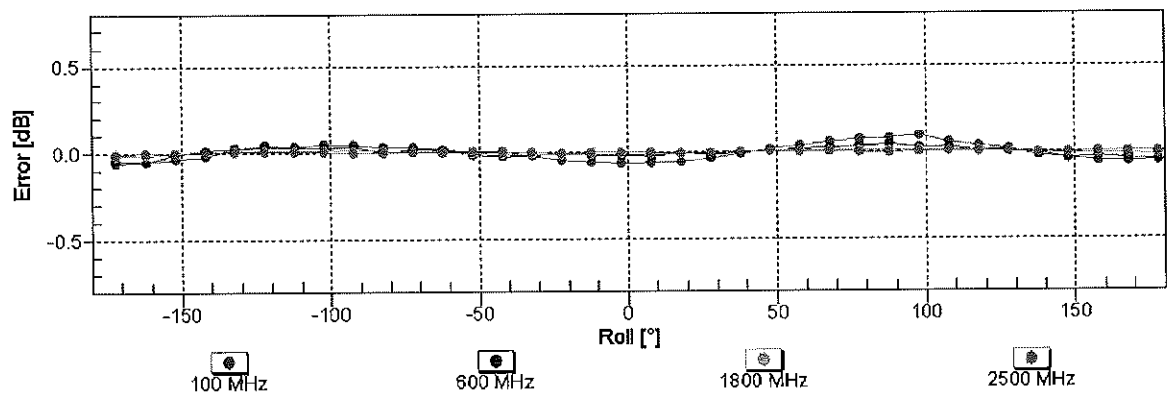
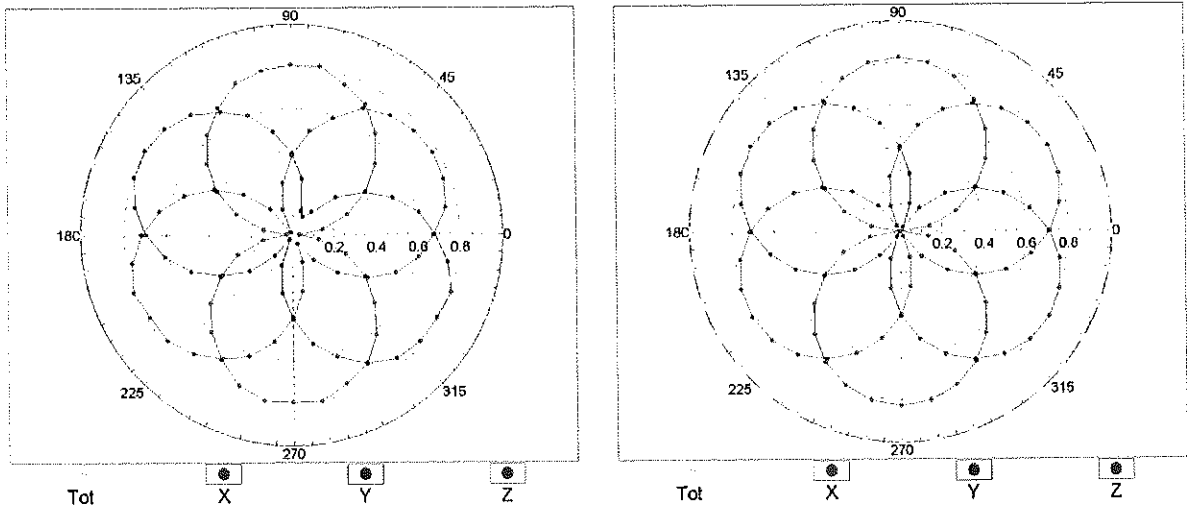


Uncertainty of Frequency Response of E-field: $\pm 6.3\%$ (k=2)

Receiving Pattern (ϕ), $\theta = 0^\circ$

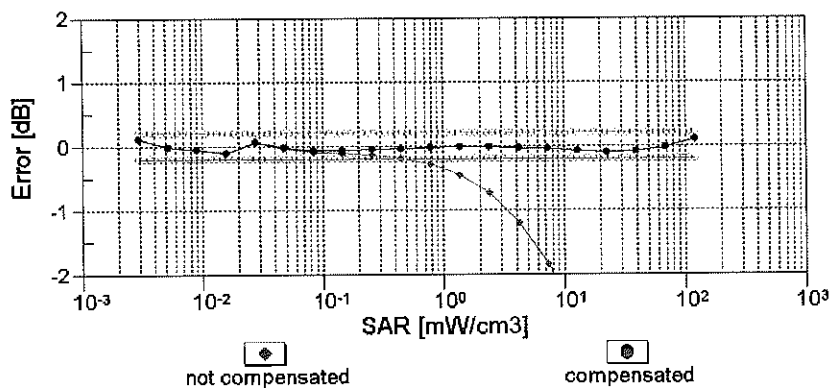
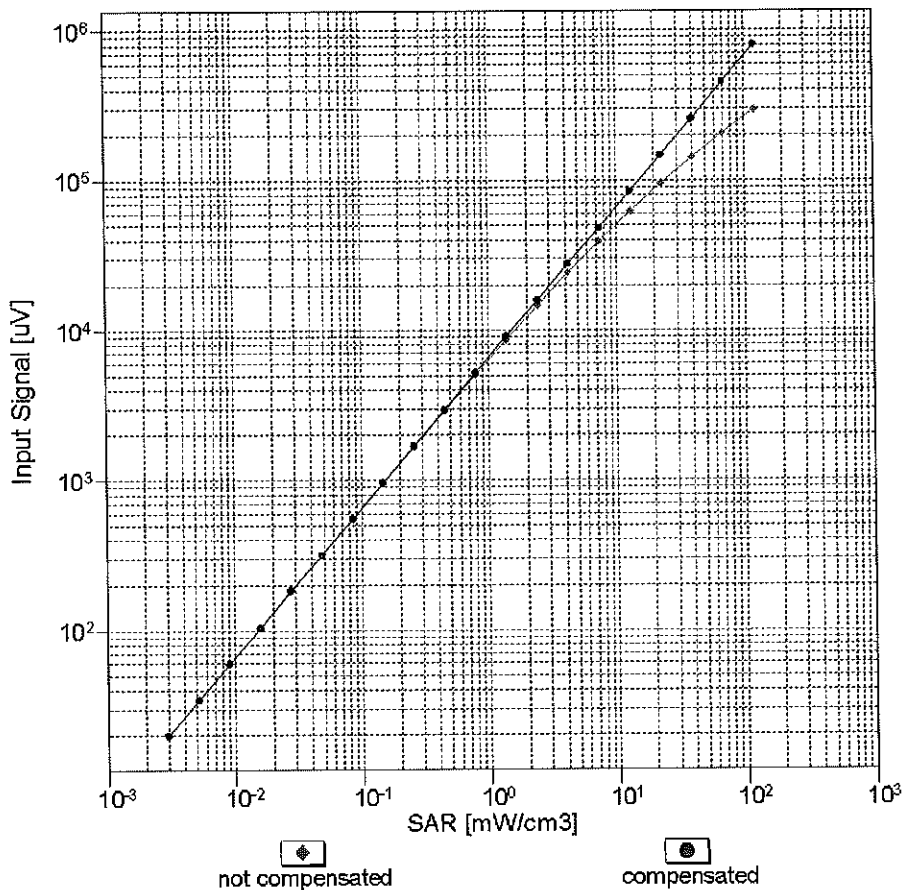
f=600 MHz,TEM

f=1800 MHz,R22



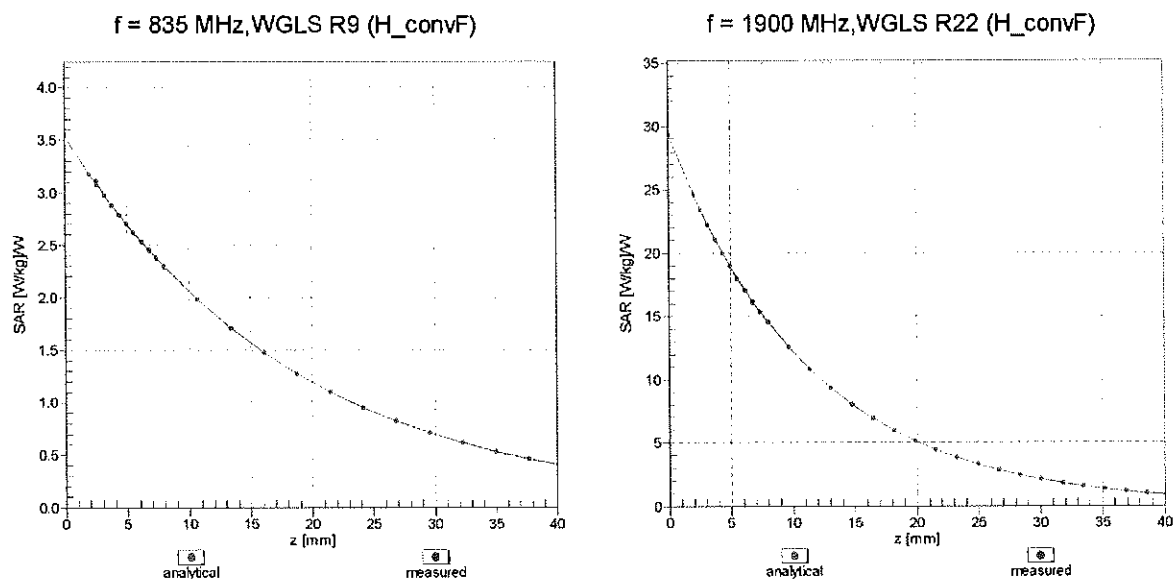
Uncertainty of Axial Isotropy Assessment: $\pm 0.5\%$ ($k=2$)

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



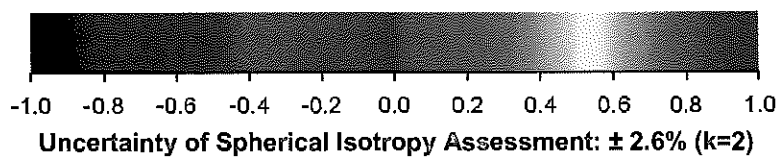
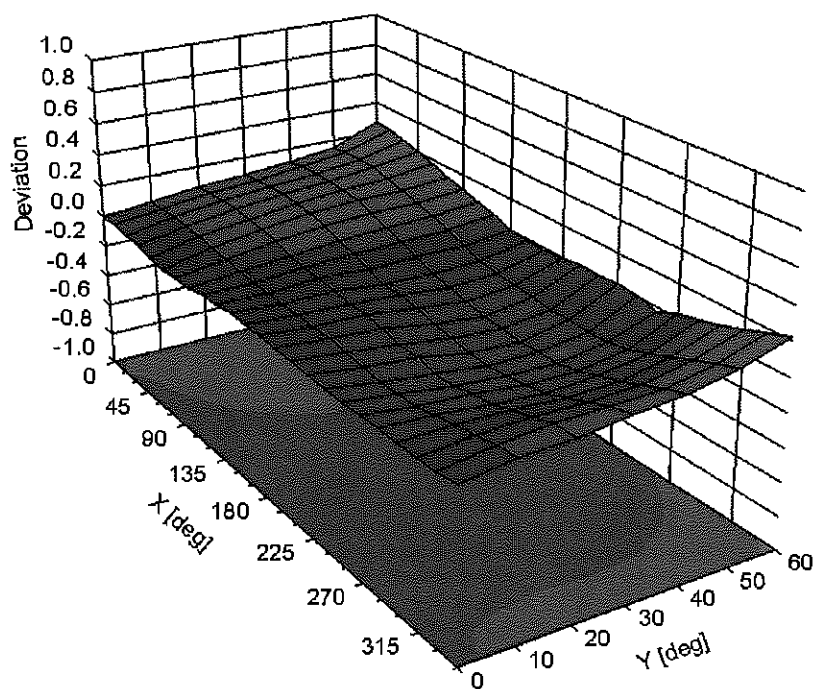
Uncertainty of Linearity Assessment: ± 0.6% (k=2)

Conversion Factor Assessment



Deviation from Isotropy in Liquid

Error (ϕ, θ), $f = 900 \text{ MHz}$



DASY/EASY - Parameters of Probe: ES3DV3 - SN:3347**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

UID	Communication System Name		A dB	B dB $\sqrt{\mu V}$	C	D dB	VR mV	Max Unc ^E (k=2)
0	CW	X	0.00	0.00	1.00	0.00	201.8	$\pm 3.3 \%$
		Y	0.00	0.00	1.00		203.9	
		Z	0.00	0.00	1.00		204.8	
10010- CAA	SAR Validation (Square, 100ms, 10ms)	X	7.57	78.06	17.49	10.00	25.0	$\pm 9.6 \%$
		Y	9.85	82.39	18.69		25.0	
		Z	7.35	77.81	17.08		25.0	
10011- CAB	UMTS-FDD (WCDMA)	X	0.93	66.02	14.08	0.00	150.0	$\pm 9.6 \%$
		Y	0.97	66.67	14.52		150.0	
		Z	0.93	66.21	14.17		150.0	
10012- CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps)	X	1.22	64.40	15.16	0.41	150.0	$\pm 9.6 \%$
		Y	1.24	64.68	15.35		150.0	
		Z	1.21	64.49	15.23		150.0	
10013- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps)	X	5.02	67.09	17.26	1.46	150.0	$\pm 9.6 \%$
		Y	4.93	67.32	17.31		150.0	
		Z	4.97	67.16	17.27		150.0	
10021- DAC	GSM-FDD (TDMA, GMSK)	X	91.36	118.07	31.34	9.39	50.0	$\pm 9.6 \%$
		Y	100.00	119.30	31.14		50.0	
		Z	100.00	118.75	31.10		50.0	
10023- DAC	GPRS-FDD (TDMA, GMSK, TN 0)	X	58.54	111.16	29.65	9.57	50.0	$\pm 9.6 \%$
		Y	100.00	119.20	31.14		50.0	
		Z	100.00	118.71	31.13		50.0	
10024- DAC	GPRS-FDD (TDMA, GMSK, TN 0-1)	X	100.00	115.85	28.82	6.56	60.0	$\pm 9.6 \%$
		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	$\pm 9.6 \%$
		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	$\pm 9.6 \%$
		Y	31.58	119.85	41.69		60.0	
		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	$\pm 9.6 \%$
		Y	100.00	115.58	27.56		80.0	
		Z	100.00	113.91	26.92		80.0	
10028- DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2-3)	X	100.00	113.86	26.30	3.55	100.0	$\pm 9.6 \%$
		Y	100.00	115.98	27.02		100.0	
		Z	100.00	113.53	26.01		100.0	
10029- DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2)	X	12.94	95.02	31.64	7.80	80.0	$\pm 9.6 \%$
		Y	14.07	99.40	33.81		80.0	
		Z	12.89	95.72	32.02		80.0	
10030- CAA	IEEE 802.15.1 Bluetooth (GFSK, DH1)	X	100.00	113.99	27.43	5.30	70.0	$\pm 9.6 \%$
		Y	100.00	114.60	27.41		70.0	
		Z	100.00	113.38	26.98		70.0	
10031- CAA	IEEE 802.15.1 Bluetooth (GFSK, DH3)	X	100.00	111.77	23.93	1.88	100.0	$\pm 9.6 \%$
		Y	100.00	115.39	25.33		100.0	
		Z	100.00	111.26	23.59		100.0	

10032-CAA	IEEE 802.15.1 Bluetooth (GFSK, DH5)	X	100.00	111.85	22.94	1.17	100.0	± 9.6 %
		Y	100.00	118.40	25.59		100.0	
		Z	100.00	111.34	22.62		100.0	
10033-CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH1)	X	23.91	101.19	27.41	5.30	70.0	± 9.6 %
		Y	36.18	107.81	28.88		70.0	
		Z	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 %
		Y	7.24	85.92	20.55		100.0	
		Z	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		70.0	
		Z	45.73	111.34	29.95		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	
		Z	6.31	84.13	20.12		100.0	
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)	X	17.94	92.17	26.06	13.80	25.0	± 9.6 %
		Y	42.19	107.21	29.95		25.0	
		Z	24.74	97.63	27.36		25.0	
10049-CAA	DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12)	X	22.69	96.29	25.94	10.79	40.0	± 9.6 %
		Y	68.20	113.74	30.23		40.0	
		Z	32.65	101.85	27.19		40.0	
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)	X	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	
		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 %
		Y	9.59	96.73	27.06		110.0	
		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	
		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	
		Z	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	
		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	
		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-CAB	CDMA2000 (1xRTT, RC3)	X	0.74	64.32	11.31	0.00	150.0	± 9.6 %
		Y	0.70	64.20	10.81		150.0	
		Z	0.71	64.15	10.92		150.0	
10082-CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Fullrate)	X	1.69	62.26	7.32	4.77	80.0	± 9.6 %
		Y	1.49	62.02	6.99		80.0	
		Z	1.55	61.83	6.90		80.0	
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	
		Z	1.72	67.00	15.02		150.0	
10098-CAB	UMTS-FDD (HSUPA, Subtest 2)	X	1.69	66.71	14.93	0.00	150.0	± 9.6 %
		Y	1.72	67.36	15.13		150.0	
		Z	1.69	66.94	14.98		150.0	
10099-DAC	EDGE-FDD (TDMA, 8PSK, TN 0-4)	X	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)	X	3.02	69.66	16.13	0.00	150.0	± 9.6 %
		Y	2.98	69.86	16.33		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 %
		Y	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 %
		Y	7.72	76.48	21.73		65.0	
		Z	7.57	75.55	21.26		65.0	
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	
		Z	2.61	68.99	16.01		150.0	
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)	X	2.15	67.97	15.52	0.00	150.0	± 9.6 %
		Y	2.09	68.27	15.68		150.0	
		Z	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 %
		Y	2.49	67.90	15.64		150.0	
		Z	2.51	67.74	15.66		150.0	

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 %
		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	
		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	
		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	
		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	
		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	
		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	
		Z	2.33	68.17	15.16		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	
		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		150.0	
		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	
		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	
		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)	X	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)	X	2.54	67.61	15.66	0.00	150.0	± 9.6 %
		Y	2.49	67.93	15.66		150.0	
		Z	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)	X	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	
		Z	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)	X	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	

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 %
		Y	4.42	77.92	22.61		150.0	
		Z	4.51	77.09	22.03		150.0	
10171-AAD	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	X	3.64	71.74	18.65	3.01	150.0	± 9.6 %
		Y	3.56	73.31	19.70		150.0	
		Z	3.59	72.29	19.01		150.0	
10172-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	
		Z	24.87	109.58	33.89		65.0	
10173-CAD	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	X	37.36	109.91	31.76	6.02	65.0	± 9.6 %
		Y	100.00	131.53	37.83		65.0	
		Z	66.45	121.49	34.95		65.0	
10174-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	
		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	
		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 %
		Y	4.43	77.95	22.63		150.0	
		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)	X	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	
		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	
		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	
		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)	X	3.14	69.68	18.95	3.01	150.0	± 9.6 %
		Y	2.99	69.99	19.44		150.0	
		Z	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	
		Z	4.48	76.92	21.94		150.0	
10186-AAD	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)	X	3.64	71.70	18.62	3.01	150.0	± 9.6 %
		Y	3.56	73.30	19.69		150.0	
		Z	3.60	72.26	18.98		150.0	
10187-CAE	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	X	3.15	69.73	19.01	3.01	150.0	± 9.6 %
		Y	3.00	70.06	19.51		150.0	
		Z	3.08	69.90	19.22		150.0	
10188-CAE	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	X	4.60	76.65	21.77	3.01	150.0	± 9.6 %
		Y	4.55	78.49	22.93		150.0	
		Z	4.65	77.69	22.36		150.0	
10189-AAE	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	X	3.72	72.15	18.90	3.01	150.0	± 9.6 %
		Y	3.65	73.76	19.97		150.0	
		Z	3.69	72.74	19.28		150.0	
10193-CAC	IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK)	X	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)	X	4.70	66.91	16.15	0.00	150.0	± 9.6 %
		Y	4.60	67.08	16.18		150.0	
		Z	4.65	66.95	16.16		150.0	
10195-CAC	IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM)	X	4.74	66.94	16.17	0.00	150.0	± 9.6 %
		Y	4.65	67.11	16.20		150.0	
		Z	4.69	66.98	16.18		150.0	
10196-CAC	IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK)	X	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		150.0	
10219-CAC	IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK)	X	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		150.0	
		Z	5.03	67.12	16.30		150.0	

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		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	
		Z	2.73	65.95	15.01		150.0	
10226-CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	X	40.90	111.69	32.33	6.02	65.0	± 9.6 %
		Y	100.00	131.74	37.97		65.0	
		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	
		Z	56.03	116.66	33.17		65.0	
10228-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	
		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	
		Z	66.68	121.54	34.97		65.0	
10230-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	
		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	
		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	
		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	
		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	
		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	
		Z	67.18	121.70	35.01		65.0	
10236-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	
		Z	50.96	114.84	32.62		65.0	
10237-CAD	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	X	30.42	112.00	34.26	6.02	65.0	± 9.6 %
		Y	58.39	129.80	39.98		65.0	
		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)	X	29.75	104.43	29.68	6.02	65.0	± 9.6 %
		Y	100.00	129.11	36.55		65.0	
		Z	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)	X	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		65.0	
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		65.0	
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)	X	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 %
		Y	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	
		Z	8.04	77.70	21.84		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	
		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	
		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	
		Z	6.63	77.70	18.41		65.0	
10259-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	
		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	
		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	
		Z	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	
		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	
		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	
		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	
		Z	8.56	78.72	21.66		65.0	

10274-CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.10)	X	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)	X	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)	X	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)	X	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	
		Z	7.88	77.58	18.63		50.0	
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	
		Z	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		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	67.94	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		80.0	

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	
		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	20.44	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	
		Z	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	
		Z	5.38	67.33	16.41		150.0	

10402-AAD	IEEE 802.11ac WiFi (80MHz, 64-QAM, 99pc duty cycle)	X	5.66	67.55	16.37	0.00	150.0	± 9.6 %
		Y	5.56	67.58	16.37		150.0	
		Z	5.60	67.52	16.36		150.0	
10403-AAB	CDMA2000 (1xEV-DO, Rev. 0)	X	1.28	66.85	12.83	0.00	115.0	± 9.6 %
		Y	1.15	66.36	12.07		115.0	
		Z	1.21	66.57	12.40		115.0	
10404-AAB	CDMA2000 (1xEV-DO, Rev. A)	X	1.28	66.85	12.83	0.00	115.0	± 9.6 %
		Y	1.15	66.36	12.07		115.0	
		Z	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)	X	100.00	119.16	29.68	3.23	80.0	± 9.6 %
		Y	100.00	122.81	30.98		80.0	
		Z	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-AAA	IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 99pc duty cycle)	X	4.53	66.62	16.09	0.00	150.0	± 9.6 %
		Y	4.45	66.83	16.13		150.0	
		Z	4.48	66.68	16.10		150.0	
10417-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 99pc duty cycle)	X	4.53	66.62	16.09	0.00	150.0	± 9.6 %
		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 preamble)	X	4.51	66.76	16.09	0.00	150.0	± 9.6 %
		Y	4.44	67.00	16.16		150.0	
		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 preamble)	X	4.54	66.72	16.10	0.00	150.0	± 9.6 %
		Y	4.46	66.94	16.15		150.0	
		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		150.0	
		Z	5.33	67.49	16.49		150.0	

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	
		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	
		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	
		Z	4.15	67.18	16.04		150.0	
10432-AAB	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	
		Z	4.46	67.08	16.15		150.0	
10433-AAB	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1)	X	4.76	67.04	16.24	0.00	150.0	± 9.6 %
		Y	4.66	67.21	16.27		150.0	
		Z	4.71	67.08	16.24		150.0	
10434-AAA	W-CDMA (BS Test Model 1, 64 DPCH)	X	4.23	70.97	17.72	0.00	150.0	± 9.6 %
		Y	4.07	71.14	17.40		150.0	
		Z	4.21	71.31	17.74		150.0	
10435-AAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 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	
		Z	100.00	119.99	29.88		80.0	
10447-AAB	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	X	3.49	66.99	15.32	0.00	150.0	± 9.6 %
		Y	3.34	67.16	15.09		150.0	
		Z	3.41	67.04	15.22		150.0	
10448-AAB	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 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, Clipping 44%)	X	4.32	66.84	16.03	0.00	150.0	± 9.6 %
		Y	4.23	67.04	16.06		150.0	
		Z	4.27	66.90	16.04		150.0	
10450-AAB	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	X	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	
		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	
		Z	6.19	67.99	16.63		150.0	
10457-AAA	UMTS-FDD (DC-HSDPA)	X	3.77	65.25	15.79	0.00	150.0	± 9.6 %
		Y	3.75	65.50	15.83		150.0	
		Z	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	
		Z	3.84	70.49	17.05		150.0	
10459-AAA	CDMA2000 (1xEV-DO, Rev. B, 3 carriers)	X	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-AAA	UMTS-FDD (WCDMA, AMR)	X	0.79	66.34	14.61	0.00	150.0	± 9.6 %
		Y	0.84	67.16	15.15		150.0	
		Z	0.79	66.65	14.76		150.0	
10461-AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	122.59	31.33	3.29	80.0	± 9.6 %
		Y	100.00	128.70	33.71		80.0	
		Z	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)	X	21.46	90.49	19.92	3.23	80.0	± 9.6 %
		Y	100.00	107.87	23.85		80.0	
		Z	100.00	106.49	23.49		80.0	
10463-AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	5.25	74.65	14.70	3.23	80.0	± 9.6 %
		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 %
		Y	100.00	126.35	32.46		80.0	
		Z	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)	X	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	
		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)	X	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 %
		Y	9.29	81.22	16.33		80.0	
		Z	4.83	74.11	14.24		80.0	
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	
		Z	100.00	122.78	31.03		80.0	
10471-AAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	13.37	85.38	18.46	3.23	80.0	± 9.6 %
		Y	100.00	107.40	23.62		80.0	
		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	
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	
		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 %
		Y	100.00	107.19	23.51		80.0	
		Z	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 %
		Y	8.76	80.61	16.13		80.0	
		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	
		Z	30.71	105.97	28.68		80.0	
10480-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 %
		Y	53.06	106.13	26.31		80.0	
		Z	23.73	95.20	23.69		80.0	
10481-AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 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	
		Z	15.46	88.60	21.40		80.0	
10482-AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 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	
		Z	4.74	76.54	18.16		80.0	
10483-AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 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	
		Z	7.91	80.19	19.17		80.0	
10484-AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	6.29	76.73	18.22	2.23	80.0	± 9.6 %
		Y	6.51	77.64	17.97		80.0	
		Z	6.95	78.27	18.51		80.0	
10485-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	19.82		80.0	
		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	
		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 %
		Y	3.95	71.26	16.39		80.0	
		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 %
		Y	5.01	76.93	20.15		80.0	
		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)	X	4.47	71.61	18.14	2.23	80.0	± 9.6 %
		Y	4.30	71.84	18.12		80.0	
		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	
		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)	X	5.06	74.04	19.16	2.23	80.0	± 9.6 %
		Y	4.88	74.37	19.37		80.0	
		Z	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	

10493-AAC	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	4.76	70.36	17.96	2.23	80.0	± 9.6 %
		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)	X	4.78	71.03	18.23	2.23	80.0	± 9.6 %
		Y	4.59	71.11	18.27		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)	X	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)	X	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)	X	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)	X	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		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 %
		Y	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		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		80.0	
		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)	X	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 Subframe=2,3,4,7,8,9)	X	4.76	70.96	18.19	2.23	80.0	± 9.6 %
		Y	4.57	71.05	18.23		80.0	
		Z	4.69	71.07	18.24		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	
		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	
		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	
		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	
		Z	5.97	75.65	19.51		80.0	
10513-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	
		Z	5.03	70.83	18.26		80.0	
10514-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	
		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 %
		Y	0.95	63.05	14.27		150.0	
		Z	0.91	62.72	14.07		150.0	
10516-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	0.54	68.48	15.75		150.0	
		Z	0.49	67.82	15.05		150.0	
10517-AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 99pc duty cycle)	X	0.75	64.05	14.24	0.00	150.0	± 9.6 %
		Y	0.79	64.60	14.65		150.0	
		Z	0.75	64.23	14.37		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	
		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	
		Z	4.50	66.93	16.11		150.0	
10521-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc duty cycle)	X	4.49	66.89	16.09	0.00	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 %
		Y	4.45	67.16	16.21		150.0	
		Z	4.50	67.02	16.19		150.0	

10523-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 99pc duty cycle)	X	4.43	66.81	16.00	0.00	150.0	± 9.6 %
		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	15.74		150.0	
10526-AAB	IEEE 802.11ac WiFi (20MHz, MCS1, 99pc duty cycle)	X	4.65	66.29	15.87	0.00	150.0	± 9.6 %
		Y	4.55	66.47	15.91		150.0	
		Z	4.59	66.34	15.88		150.0	
10527-AAB	IEEE 802.11ac WiFi (20MHz, MCS2, 99pc duty cycle)	X	4.57	66.25	15.81	0.00	150.0	± 9.6 %
		Y	4.47	66.43	15.85		150.0	
		Z	4.52	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 %
		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)	X	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	
		Z	4.38	66.25	15.78		150.0	
10533-AAB	IEEE 802.11ac WiFi (20MHz, MCS8, 99pc duty cycle)	X	4.59	66.30	15.83	0.00	150.0	± 9.6 %
		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	
		Z	5.15	66.64	16.04		150.0	
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		150.0	
		Z	5.01	66.57	15.98		150.0	
10537-AAB	IEEE 802.11ac WiFi (40MHz, MCS3, 99pc duty cycle)	X	5.12	66.52	15.95	0.00	150.0	± 9.6 %
		Y	5.03	66.63	15.99		150.0	
		Z	5.07	66.54	15.97		150.0	
10538-AAB	IEEE 802.11ac WiFi (40MHz, MCS4, 99pc duty cycle)	X	5.22	66.56	16.02	0.00	150.0	± 9.6 %
		Y	5.11	66.64	16.04		150.0	
		Z	5.16	66.56	16.02		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	
		Z	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	
		Z	5.30	66.57	16.07		150.0	
10544-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		150.0	
		Z	5.40	66.56	15.95		150.0	
10545-AAB	IEEE 802.11ac WiFi (80MHz, MCS1, 99pc duty cycle)	X	5.64	67.00	16.11	0.00	150.0	± 9.6 %
		Y	5.55	67.08	16.15		150.0	
		Z	5.60	67.02	16.13		150.0	
10546-AAB	IEEE 802.11ac WiFi (80MHz, MCS2, 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	
		Z	5.46	66.76	16.01		150.0	
10547-AAB	IEEE 802.11ac WiFi (80MHz, MCS3, 99pc duty cycle)	X	5.58	66.83	16.03	0.00	150.0	± 9.6 %
		Y	5.49	66.87	16.05		150.0	
		Z	5.53	66.81	16.03		150.0	
10548-AAB	IEEE 802.11ac WiFi (80MHz, MCS4, 99pc duty cycle)	X	5.89	67.94	16.56	0.00	150.0	± 9.6 %
		Y	5.69	67.68	16.43		150.0	
		Z	5.80	67.83	16.51		150.0	
10550-AAB	IEEE 802.11ac WiFi (80MHz, MCS6, 99pc duty cycle)	X	5.53	66.79	16.03	0.00	150.0	± 9.6 %
		Y	5.46	66.91	16.08		150.0	
		Z	5.49	66.81	16.05		150.0	
10551-AAB	IEEE 802.11ac WiFi (80MHz, MCS7, 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	
		Z	5.49	66.83	16.02		150.0	
10552-AAB	IEEE 802.11ac WiFi (80MHz, MCS8, 99pc duty cycle)	X	5.44	66.61	15.91	0.00	150.0	± 9.6 %
		Y	5.38	66.72	15.95		150.0	
		Z	5.40	66.62	15.92		150.0	
10553-AAB	IEEE 802.11ac WiFi (80MHz, MCS9, 99pc duty cycle)	X	5.53	66.66	15.96	0.00	150.0	± 9.6 %
		Y	5.45	66.72	15.99		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	
		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	
		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-AAC	IEEE 802.11ac WiFi (160MHz, MCS4, 99pc duty cycle)	X	6.01	67.37	16.26	0.00	150.0	± 9.6 %
		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)	X	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)	X	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 %
		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		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 %
		Y	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)	X	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	

10575-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-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	
10576-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-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	
10577-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	
		Z	4.85	67.20	16.60		130.0	
10578-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-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	
10579-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-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	
10580-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-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	
		Z	4.57	66.71	16.05		130.0	
10581-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	
		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	
		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	
		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	4.41	66.60	15.88		130.0	
		Z	4.46	66.43	15.82		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 %
		Y	4.74	66.96	16.50		130.0	
		Z	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-AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS2, 90pc duty cycle)	X	4.91	67.02	16.48	0.46	130.0	± 9.6 %
		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	
		Z	5.65	67.89	17.01		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)	X	5.63	67.69	16.90	0.46	130.0	± 9.6 %
		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	

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	
		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	
		Z	4.73	66.50	16.25		130.0	
10611-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	
		Z	4.65	66.31	16.10		130.0	
10612-AAB	IEEE 802.11ac WiFi (20MHz, MCS5, 90pc duty cycle)	X	4.72	66.43	16.13	0.46	130.0	± 9.6 %
		Y	4.60	66.61	16.18		130.0	
		Z	4.66	66.47	16.14		130.0	
10613-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	
		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	
		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 %
		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	
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	
		Z	6.14	67.38	16.50		130.0	

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		130.0	
		Z	6.11	67.30	16.50		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	
		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	
		Z	6.19	67.46	16.71		130.0	
10643-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	
		Z	6.04	67.18	16.47		130.0	
10644-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	
		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 %
		Y	6.24	67.62	16.66		130.0	
		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	
		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	
		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	
		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	
		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	
		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	
		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	
		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	
		Z	100.00	113.56	27.75		60.0	

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%)	X	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	

^E 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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 Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: **SCS 0108**

Client **PC Test**

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

Calibrated by: **Name** Claudio Leubler **Function** Laboratory Technician **Signature**

Approved by: **Name** Katja Pokovic **Function** Technical Manager **Signature**

Issued: April 19, 2018

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



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Accreditation No.: **SCS 0108**

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
NORM _{x,y,z}	sensitivity in free space
ConvF	sensitivity in TSL / NORM _{x,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 ϑ	ϑ rotation around an axis that is in the plane normal to probe axis (at measurement center), i.e., $\vartheta = 0$ is normal to probe axis
Connector Angle	information used in DASY system to align probe sensor X to the robot coordinate system

Calibration is Performed According to the Following Standards:

- IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013
- IEC 62209-1, "Measurement procedure for the assessment of Specific Absorption Rate (SAR) from hand-held and body-mounted devices used next to the ear (frequency range of 300 MHz to 6 GHz)", July 2016
- IEC 62209-2, "Procedure to determine the Specific Absorption Rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)", March 2010
- KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

Methods Applied and Interpretation of Parameters:

- NORM_{x,y,z}**: Assessed for E-field polarization $\vartheta = 0$ ($f \leq 900$ MHz in TEM-cell; $f > 1800$ MHz: R22 waveguide). NORM_{x,y,z} are only intermediate values, i.e., the uncertainties of NORM_{x,y,z} does not affect the E²-field uncertainty inside TSL (see below ConvF).
- NORM(f)_{x,y,z}** = NORM_{x,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.
- DCP_{x,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
- A_{x,y,z}; B_{x,y,z}; C_{x,y,z}; D_{x,y,z}; VR_{x,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 $f \leq 800$ 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 NORM_{x,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 NORM_x (no uncertainty required).

Probe EX3DV4

SN:7357

Manufactured: February 5, 2015
Calibrated: April 18, 2018

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

DASY/EASY - Parameters of Probe: EX3DV4 - SN:7357

Basic Calibration Parameters

	Sensor X	Sensor Y	Sensor Z	Unc (k=2)
Norm ($\mu\text{V}/(\text{V}/\text{m})^2$) ^A	0.37	0.48	0.40	$\pm 10.1 \%$
DCP (mV) ^B	89.1	99.1	96.4	

Modulation Calibration Parameters

UID	Communication System Name		A dB	B dB $\sqrt{\mu\text{V}}$	C	D dB	VR mV	Unc ^E (k=2)
0	CW	X	0.0	0.0	1.0	0.00	151.5	$\pm 2.7 \%$
		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^{-1}	T1 $\text{ms}\cdot\text{V}^{-2}$	T2 $\text{ms}\cdot\text{V}^{-1}$	T3 ms	T4 V^{-2}	T5 V^{-1}	T6
X	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%.

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

^B Numerical linearization parameter; uncertainty not required.

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

DASY/EASY - Parameters of Probe: EX3DV4 - SN:7357

Calibration Parameter Determined in Head Tissue Simulating Media

f (MHz) ^C	Relative Permittivity ^F	Conductivity (S/m) ^F	ConvF X	ConvF Y	ConvF Z	Alpha ^G	Depth ^G (mm)	Unc (k=2)
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 %

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

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

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

DASY/EASY - Parameters of Probe: EX3DV4 - SN:7357

Calibration Parameter Determined in Body Tissue Simulating Media

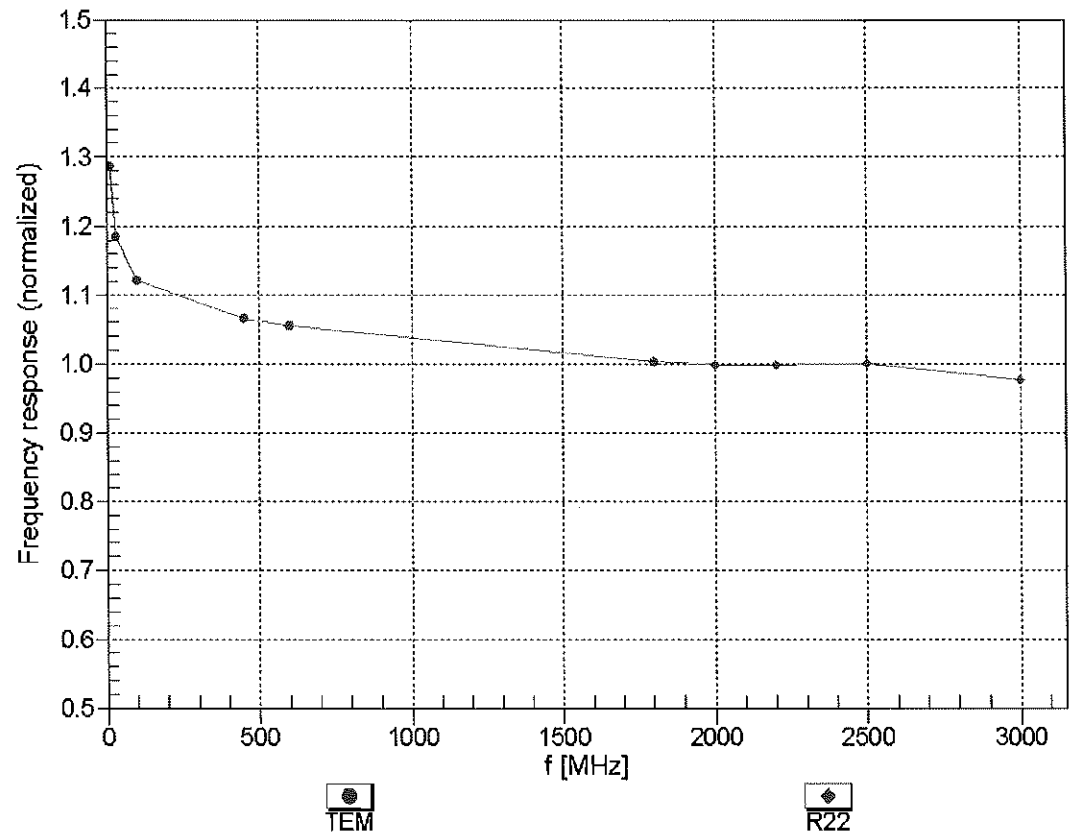
f (MHz) ^C	Relative Permittivity ^F	Conductivity (S/m) ^F	ConvF X	ConvF Y	ConvF Z	Alpha ^G	Depth ^G (mm)	Unc (k=2)
150	61.9	0.80	12.99	12.99	12.99	0.00	1.00	± 13.3 %
300	58.2	0.92	12.08	12.08	12.08	0.05	1.20	± 13.3 %
450	56.7	0.94	11.52	11.52	11.52	0.08	1.20	± 13.3 %
750	55.5	0.96	10.37	10.37	10.37	0.47	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 %

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

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

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

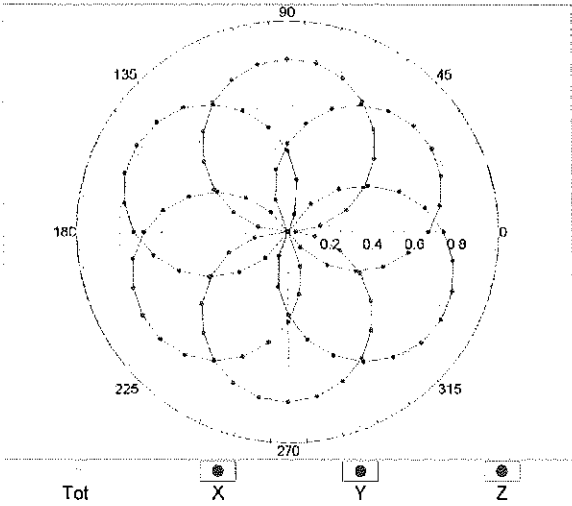
Frequency Response of E-Field
(TEM-Cell:ifi110 EXX, Waveguide: R22)



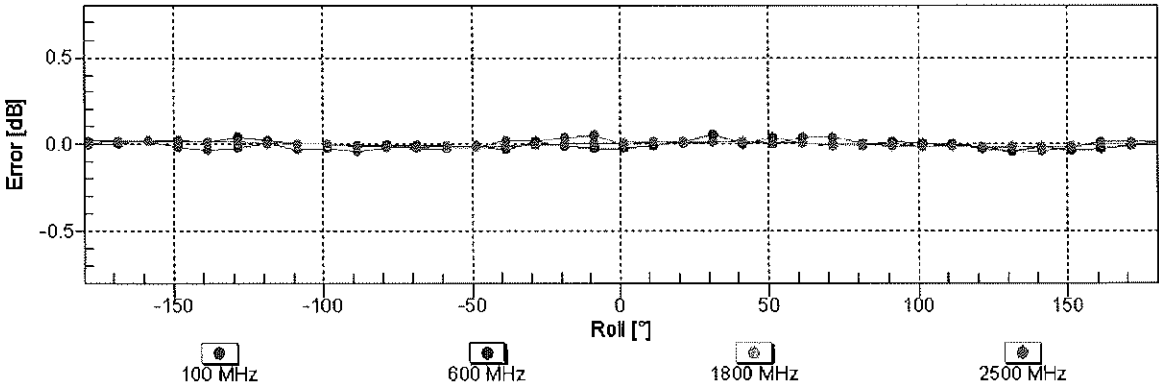
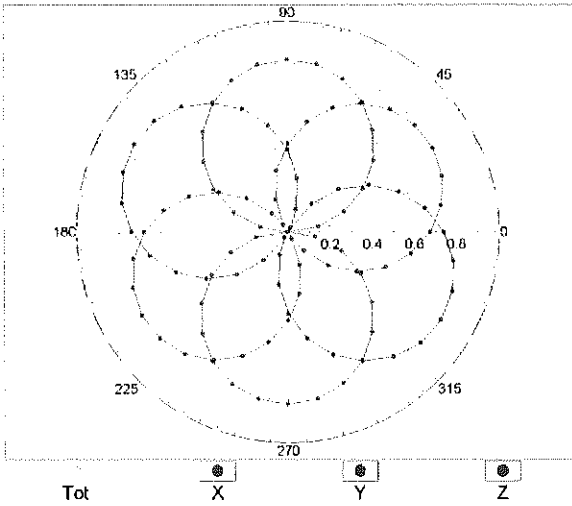
Uncertainty of Frequency Response of E-field: $\pm 6.3\%$ ($k=2$)

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

f=600 MHz,TEM

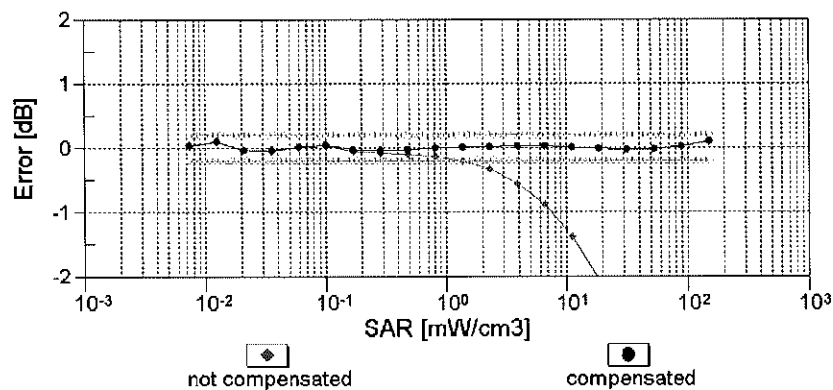
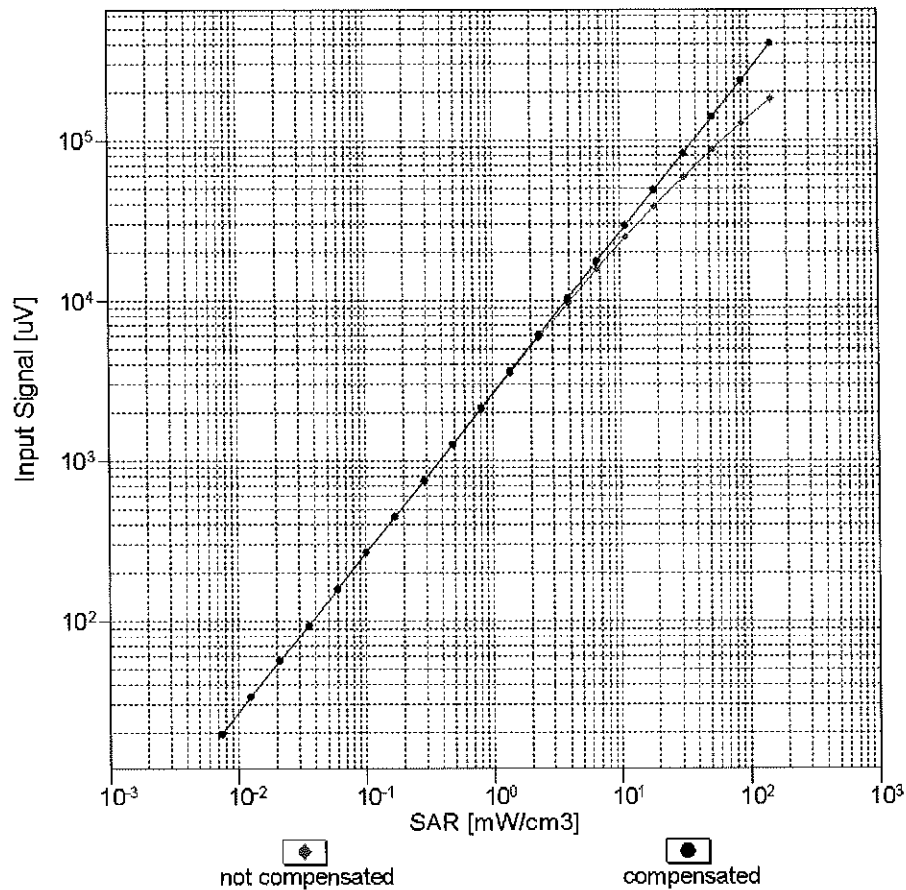


f=1800 MHz,R22



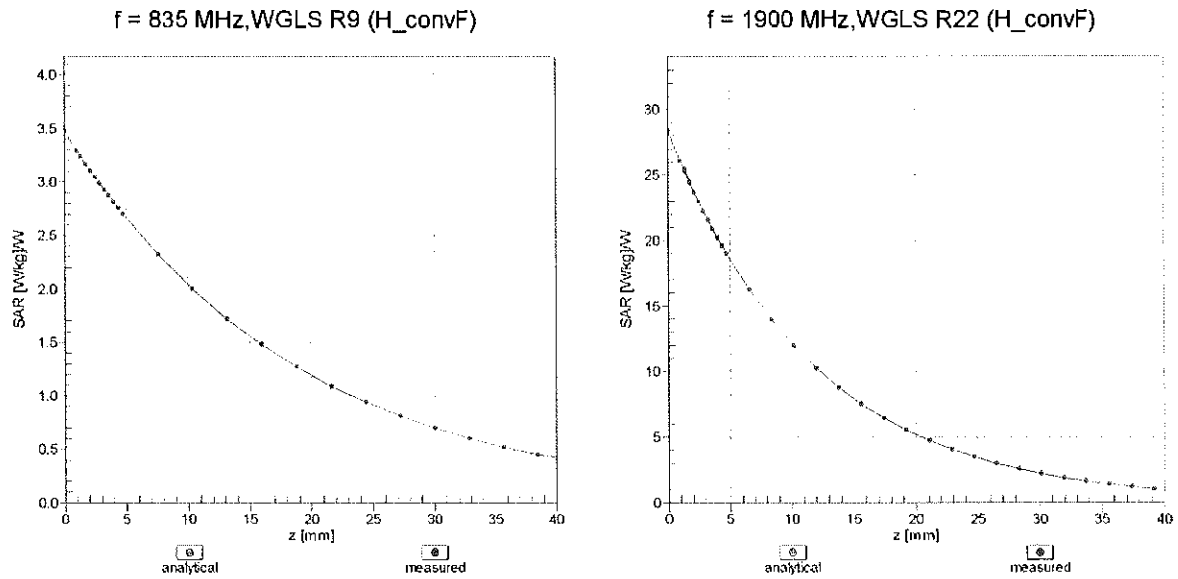
Uncertainty of Axial Isotropy Assessment: $\pm 0.5\%$ (k=2)

Dynamic Range $f(\text{SAR}_{\text{head}})$ (TEM cell, $f_{\text{eval}} = 1900 \text{ MHz}$)



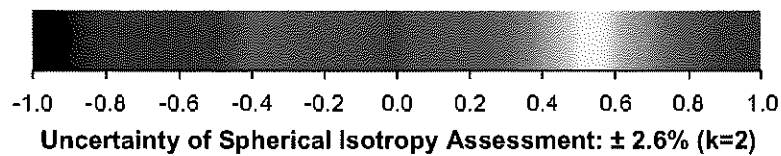
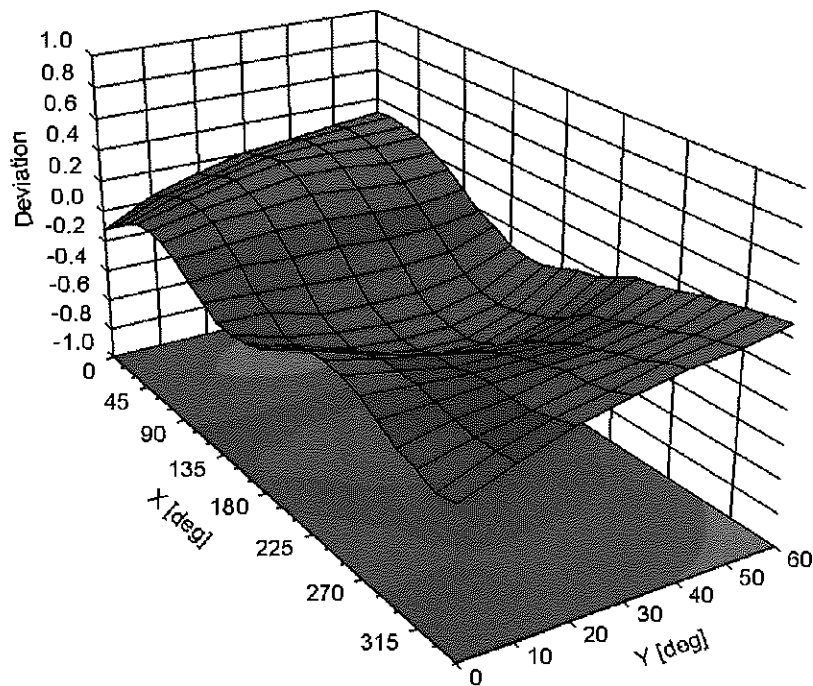
Uncertainty of Linearity Assessment: $\pm 0.6\%$ ($k=2$)

Conversion Factor Assessment



Deviation from Isotropy in Liquid

Error (ϕ , θ), $f = 900 \text{ MHz}$



DASY/EASY - Parameters of Probe: EX3DV4 - SN:7357

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

Appendix: Modulation Calibration Parameters

UID	Communication System Name		A dB	B dB $\sqrt{\mu V}$	C	D dB	VR mV	Max Unc ^E (k=2)
0	CW	X	0.00	0.00	1.00	0.00	151.5	$\pm 2.7\%$
		Y	0.00	0.00	1.00		139.1	
		Z	0.00	0.00	1.00		158.4	
10010- CAA	SAR Validation (Square, 100ms, 10ms)	X	1.67	61.93	7.65	10.00	20.0	$\pm 9.6\%$
		Y	2.82	69.17	11.50		20.0	
		Z	1.68	62.20	7.72		20.0	
10011- CAB	UMTS-FDD (WCDMA)	X	0.91	67.36	14.64	0.00	150.0	$\pm 9.6\%$
		Y	1.03	67.52	15.32		150.0	
		Z	0.87	67.00	14.33		150.0	
10012- CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps)	X	1.03	63.20	14.83	0.41	150.0	$\pm 9.6\%$
		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)	X	4.63	66.39	16.96	1.46	150.0	$\pm 9.6\%$
		Y	4.87	66.69	17.19		150.0	
		Z	4.64	66.53	16.99		150.0	
10021- DAC	GSM-FDD (TDMA, GMSK)	X	3.67	70.27	12.79	9.39	50.0	$\pm 9.6\%$
		Y	100.00	116.17	27.83		50.0	
		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	$\pm 9.6\%$
		Y	100.00	115.39	27.52		50.0	
		Z	8.91	80.25	16.55		50.0	
10024- DAC	GPRS-FDD (TDMA, GMSK, TN 0-1)	X	1.80	66.18	9.84	6.56	60.0	$\pm 9.6\%$
		Y	100.00	120.19	28.55		60.0	
		Z	100.00	103.30	20.82		60.0	
10025- DAC	EDGE-FDD (TDMA, 8PSK, TN 0)	X	3.42	64.49	22.34	12.57	50.0	$\pm 9.6\%$
		Y	6.04	85.62	35.55		50.0	
		Z	3.44	65.04	22.85		50.0	
10026- DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1)	X	6.25	83.47	29.08	9.56	60.0	$\pm 9.6\%$
		Y	9.24	95.88	35.47		60.0	
		Z	6.56	85.41	30.17		60.0	
10027- DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2)	X	0.96	63.24	7.67	4.80	80.0	$\pm 9.6\%$
		Y	100.00	125.59	30.06		80.0	
		Z	100.00	100.14	18.62		80.0	
10028- DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2-3)	X	0.48	60.36	5.50	3.55	100.0	$\pm 9.6\%$
		Y	100.00	132.37	32.13		100.0	
		Z	99.97	95.45	15.98		100.0	
10029- DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2)	X	4.19	75.28	24.64	7.80	80.0	$\pm 9.6\%$
		Y	5.35	81.78	28.49		80.0	
		Z	4.26	76.21	25.31		80.0	
10030- CAA	IEEE 802.15.1 Bluetooth (GFSK, DH1)	X	1.09	63.09	7.76	5.30	70.0	$\pm 9.6\%$
		Y	100.00	120.14	28.06		70.0	
		Z	4.93	76.05	12.90		70.0	
10031- CAA	IEEE 802.15.1 Bluetooth (GFSK, DH3)	X	0.27	60.00	3.17	1.88	100.0	$\pm 9.6\%$
		Y	100.00	135.00	31.47		100.0	
		Z	0.26	60.00	3.07		100.0	

10032-CAA	IEEE 802.15.1 Bluetooth (GFSK, DH5)	X	27.08	314.20	3.36	1.17	100.0	± 9.6 %
		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)	X	3.08	73.10	16.00	5.30	70.0	± 9.6 %
		Y	100.00	136.30	37.75		70.0	
		Z	7.37	86.92	21.69		70.0	
10034-CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH3)	X	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)	X	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)	X	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)	X	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)	X	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)	X	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)	X	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		100.0	
10059-CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps)	X	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	
		Z	39.44	123.36	31.22		110.0	

10061-CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps)	X	1.80	74.31	19.24	2.04	110.0	± 9.6 %
		Y	3.02	83.93	24.56		110.0	
		Z	2.14	78.36	21.37		110.0	
10062-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	
		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 %
		Y	4.85	66.96	17.05		100.0	
		Z	4.58	66.69	16.81		100.0	
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		100.0	
		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	
		Z	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	
		Z	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)	X	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	

10081-CAB	CDMA2000 (1xRTT, RC3)	X	0.45	61.00	7.50	0.00	150.0	± 9.6 %
		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	
		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	
		Z	1.68	67.71	15.15		150.0	
10098-CAB	UMTS-FDD (HSUPA, Subtest 2)	X	1.67	67.85	15.26	0.00	150.0	± 9.6 %
		Y	1.79	67.66	15.66		150.0	
		Z	1.64	67.65	15.11		150.0	
10099-DAC	EDGE-FDD (TDMA, 8PSK, TN 0-4)	X	6.29	83.56	29.10	9.56	60.0	± 9.6 %
		Y	9.34	96.14	35.56		60.0	
		Z	6.61	85.53	30.21		60.0	
10100-CAD	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	X	2.90	69.76	16.53	0.00	150.0	± 9.6 %
		Y	3.14	70.37	16.71		150.0	
		Z	2.89	69.82	16.39		150.0	
10101-CAD	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	X	3.04	67.08	15.83	0.00	150.0	± 9.6 %
		Y	3.24	67.51	15.94		150.0	
		Z	3.03	67.13	15.70		150.0	
10102-CAD	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	X	3.15	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	
		Z	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)	X	4.78	69.37	18.75	3.98	65.0	± 9.6 %
		Y	5.83	73.15	20.89		65.0	
		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	
		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	
		Z	2.67	67.07	15.55		150.0	
10110-CAE	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	X	1.99	68.49	15.84	0.00	150.0	± 9.6 %
		Y	2.22	68.71	16.15		150.0	
		Z	1.98	68.38	15.68		150.0	
10111-CAE	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	X	2.41	68.19	15.80	0.00	150.0	± 9.6 %
		Y	2.61	68.17	16.11		150.0	
		Z	2.40	68.17	15.74		150.0	

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)	X	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)	X	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)	X	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)	X	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)	X	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	
		Z	1.13	61.55	7.80		150.0	

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)	X	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	
		Z	4.69	71.33	19.06		65.0	
10153-CAD	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	X	4.95	71.72	19.46	3.98	65.0	± 9.6 %
		Y	5.84	74.66	21.37		65.0	
		Z	5.05	72.49	19.99		65.0	
10154-CAE	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	X	2.04	68.92	16.11	0.00	150.0	± 9.6 %
		Y	2.27	69.12	16.41		150.0	
		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	
		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)	X	1.63	65.15	12.07	0.00	150.0	± 9.6 %
		Y	2.08	67.20	14.25		150.0	
		Z	1.66	65.43	12.31		150.0	
10158-CAE	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	X	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	
		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	
		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	
		Z	2.81	67.37	15.72		150.0	
10166-CAE	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	X	3.14	68.82	18.96	3.01	150.0	± 9.6 %
		Y	3.40	68.62	18.58		150.0	
		Z	3.24	69.38	19.21		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	

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)	X	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)	X	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)	X	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	

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	
		Z	2.57	67.53	18.30		150.0	
10185-CAD	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)	X	3.16	71.97	20.21	3.01	150.0	± 9.6 %
		Y	3.44	72.09	19.94		150.0	
		Z	3.39	73.31	20.81		150.0	
10186-AAD	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)	X	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	
		Z	3.51	74.04	21.24		150.0	
10189-AAE	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	X	2.67	68.35	17.55	3.01	150.0	± 9.6 %
		Y	2.99	69.18	17.77		150.0	
		Z	2.80	69.24	17.97		150.0	
10193-CAC	IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK)	X	4.32	66.50	16.16	0.00	150.0	± 9.6 %
		Y	4.52	66.59	16.14		150.0	
		Z	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)	X	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)	X	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)	X	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		150.0	
		Z	4.25	66.55	16.01		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	
		Z	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	
		Z	4.88	66.88	16.36		150.0	

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+)	X	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)	X	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	
		Z	8.63	91.28	26.88		65.0	

10239-CAD	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	X	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	
10241-CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	X	6.28	77.75	23.74	6.98	65.0	± 9.6 %
		Y	7.17	79.66	25.20		65.0	
		Z	6.62	79.11	24.64		65.0	
10242-CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	X	5.61	75.51	22.71	6.98	65.0	± 9.6 %
		Y	7.01	79.22	24.95		65.0	
		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)	X	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)	X	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	
		Z	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	
		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	
		Z	4.43	71.53	18.56		65.0	
10252-CAD	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	X	4.80	76.28	20.36	3.98	65.0	± 9.6 %
		Y	7.12	83.67	24.31		65.0	
		Z	5.40	79.04	21.81		65.0	
10253-CAD	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	X	4.54	70.25	18.29	3.98	65.0	± 9.6 %
		Y	5.37	73.18	20.35		65.0	
		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	

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	
		Z	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	
		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)	X	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 %
		Y	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	

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	
		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	X	0.44	60.90	7.41	0.00	150.0	± 9.6 %
		Y	0.81	65.70	12.35		150.0	
		Z	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	
		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-AAA	IEEE 802.16e WiMAX (31:15, 5ms, 10MHz, 64QAM, PUSC)	X	4.65	65.68	17.92	4.96	50.0	± 9.6 %
		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 %
		Y	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	
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	
		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		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	
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	
		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	
		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)	X	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 %
		Y	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 preamble)	X	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 preamble)	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 %
		Y	4.65	66.73	16.25		150.0	
		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	
		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	
		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	
		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	
		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	
		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	
		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, Clipping 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, Clipping 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	
		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		150.0	
		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)	X	0.82	68.91	15.77	0.00	150.0	± 9.6 %
		Y	0.90	68.29	16.15		150.0	
		Z	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)	X	2.32	75.39	17.14	3.29	80.0	± 9.6 %
		Y	100.00	131.59	34.49		80.0	
		Z	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)	X	0.79	60.00	6.50	3.23	80.0	± 9.6 %
		Y	1.49	65.34	10.90		80.0	
		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	
		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	
		Z	0.74	60.00	7.72		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	
		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)	X	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	
		Z	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)	X	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)	X	0.76	60.00	7.03	3.23	80.0	± 9.6 %
		Y	3.21	73.75	14.66		80.0	
		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	
		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	
		Z	100.00	125.78	30.99		80.0	
10474-AAC	LTE-TDD (SC-FDMA, 1 RB, 15 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	3.17	73.64	14.62		80.0	
		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	
		Z	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	
		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	
		Z	3.41	71.49	14.62		80.0	
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	
		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	
		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	
		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		80.0	
		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 %
		Y	3.72	68.46	17.58		80.0	
		Z	3.26	67.14	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 %
		Y	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 %
		Y	2.67	71.65	16.05		80.0	
		Z	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)	X	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)	X	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)	X	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	
		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	
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 %
		Y	3.73	68.80	17.76		80.0	
		Z	3.26	67.37	16.77		80.0	

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	
		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	
		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	
		Z	3.62	67.27	16.91		80.0	
10514-AAC	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	3.58	66.23	16.41	2.23	80.0	± 9.6 %
		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	
		Z	0.69	64.87	14.81		150.0	
10518-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc duty cycle)	X	4.31	66.61	16.23	0.00	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	
		Z	4.31	66.74	16.13		150.0	
10521-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc duty cycle)	X	4.25	66.68	16.22	0.00	150.0	± 9.6 %
		Y	4.48	66.88	16.21		150.0	
		Z	4.24	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	
		Z	4.30	66.85	16.22		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)	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	
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)	X	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	
		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	
		Z	4.91	66.26	16.06		150.0	

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)	X	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	
		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)	X	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)	X	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)	X	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		150.0	

10558-AAC	IEEE 802.11ac WiFi (160MHz, MCS4, 99pc duty cycle)	X	5.82	66.86	16.35	0.00	150.0	± 9.6 %
		Y	5.99	67.26	16.33		150.0	
		Z	5.79	66.94	16.24		150.0	
10560-AAC	IEEE 802.11ac WiFi (160MHz, MCS6, 99pc duty cycle)	X	5.84	66.78	16.35	0.00	150.0	± 9.6 %
		Y	5.98	67.11	16.29		150.0	
		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	
		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	
		Z	5.80	67.03	16.35		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	
		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	
		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	
		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)	X	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)	X	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)	X	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)	X	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-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	
10576-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	
		Z	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	
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	
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 %
		Y	4.45	66.25	15.88		130.0	
		Z	4.18	65.90	15.60		130.0	

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	4.78	66.64	16.53		130.0	
		Z	4.55	66.49	16.40		130.0	
10592-AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS1, 90pc duty cycle)	X	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	
		Z	4.59	66.67	16.38		130.0	
10594-AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS3, 90pc duty cycle)	X	4.64	66.77	16.61	0.46	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	
		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	4.80	67.00	16.60		130.0	
		Z	4.54	66.79	16.44		130.0	
10597-AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS6, 90pc duty cycle)	X	4.49	66.57	16.34	0.46	130.0	± 9.6 %
		Y	4.75	66.90	16.48		130.0	
		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	5.57	67.58	16.91		130.0	
		Z	5.39	67.54	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	
		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	
		Z	5.49	67.76	17.09		130.0	
10604-AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS5, 90pc duty cycle)	X	5.42	67.47	17.05	0.46	130.0	± 9.6 %
		Y	5.46	67.19	16.76		130.0	
		Z	5.37	67.38	16.88		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-AAB	IEEE 802.11ac WiFi (20MHz, MCS0, 90pc duty cycle)	X	4.40	65.75	16.09	0.46	130.0	± 9.6 %
		Y	4.62	65.97	16.16		130.0	
		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	
		Z	4.55	66.18	16.20		130.0	
10609-AAB	IEEE 802.11ac WiFi (20MHz, MCS2, 90pc duty cycle)	X	4.43	65.91	16.05	0.46	130.0	± 9.6 %
		Y	4.69	66.22	16.16		130.0	
		Z	4.44	66.00	16.00		130.0	
10610-AAB	IEEE 802.11ac WiFi (20MHz, MCS3, 90pc duty cycle)	X	4.49	66.09	16.23	0.46	130.0	± 9.6 %
		Y	4.74	66.38	16.32		130.0	
		Z	4.49	66.18	16.19		130.0	
10611-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	
		Z	4.40	65.97	16.02		130.0	
10612-AAB	IEEE 802.11ac WiFi (20MHz, MCS5, 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	
		Z	4.40	66.10	16.06		130.0	
10613-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	
		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	
		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	
		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	
		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	

10623-AAB	IEEE 802.11ac WiFi (40MHz, MCS7, 90pc duty cycle)	X	4.99	65.86	16.14	0.46	130.0	± 9.6 %
		Y	5.22	66.30	16.24		130.0	
		Z	4.98	65.96	16.08		130.0	
10624-AAB	IEEE 802.11ac WiFi (40MHz, MCS8, 90pc duty cycle)	X	5.20	66.20	16.38	0.46	130.0	± 9.6 %
		Y	5.41	66.49	16.39		130.0	
		Z	5.19	66.26	16.30		130.0	
10625-AAB	IEEE 802.11ac WiFi (40MHz, MCS9, 90pc duty cycle)	X	5.30	66.37	16.54	0.46	130.0	± 9.6 %
		Y	5.75	67.41	16.90		130.0	
		Z	5.33	66.58	16.52		130.0	
10626-AAB	IEEE 802.11ac WiFi (80MHz, MCS0, 90pc duty cycle)	X	5.40	66.14	16.28	0.46	130.0	± 9.6 %
		Y	5.57	66.51	16.31		130.0	
		Z	5.38	66.23	16.21		130.0	
10627-AAB	IEEE 802.11ac WiFi (80MHz, MCS1, 90pc duty cycle)	X	5.71	67.03	16.70	0.46	130.0	± 9.6 %
		Y	5.80	67.06	16.54		130.0	
		Z	5.65	66.96	16.54		130.0	
10628-AAB	IEEE 802.11ac WiFi (80MHz, MCS2, 90pc duty cycle)	X	5.40	66.15	16.18	0.46	130.0	± 9.6 %
		Y	5.60	66.59	16.25		130.0	
		Z	5.38	66.23	16.10		130.0	
10629-AAB	IEEE 802.11ac WiFi (80MHz, MCS3, 90pc duty cycle)	X	5.55	66.49	16.35	0.46	130.0	± 9.6 %
		Y	5.67	66.64	16.26		130.0	
		Z	5.49	66.42	16.19		130.0	
10630-AAB	IEEE 802.11ac WiFi (80MHz, MCS4, 90pc duty cycle)	X	5.95	67.89	17.05	0.46	130.0	± 9.6 %
		Y	6.08	68.07	16.98		130.0	
		Z	5.84	67.71	16.83		130.0	
10631-AAB	IEEE 802.11ac WiFi (80MHz, MCS5, 90pc duty cycle)	X	5.77	67.48	17.05	0.46	130.0	± 9.6 %
		Y	5.99	67.89	17.07		130.0	
		Z	5.74	67.53	16.95		130.0	
10632-AAB	IEEE 802.11ac WiFi (80MHz, MCS6, 90pc duty cycle)	X	5.72	67.25	16.96	0.46	130.0	± 9.6 %
		Y	5.77	67.11	16.70		130.0	
		Z	5.64	67.12	16.77		130.0	
10633-AAB	IEEE 802.11ac WiFi (80MHz, MCS7, 90pc duty cycle)	X	5.44	66.28	16.29	0.46	130.0	± 9.6 %
		Y	5.66	66.76	16.36		130.0	
		Z	5.44	66.43	16.24		130.0	
10634-AAB	IEEE 802.11ac WiFi (80MHz, MCS8, 90pc duty cycle)	X	5.44	66.38	16.39	0.46	130.0	± 9.6 %
		Y	5.64	66.78	16.43		130.0	
		Z	5.43	66.48	16.32		130.0	
10635-AAB	IEEE 802.11ac WiFi (80MHz, MCS9, 90pc duty cycle)	X	5.30	65.61	15.72	0.46	130.0	± 9.6 %
		Y	5.53	66.14	15.85		130.0	
		Z	5.29	65.70	15.64		130.0	
10636-AAC	IEEE 802.11ac WiFi (160MHz, MCS0, 90pc duty cycle)	X	5.86	66.55	16.40	0.46	130.0	± 9.6 %
		Y	5.98	66.87	16.39		130.0	
		Z	5.82	66.61	16.30		130.0	
10637-AAC	IEEE 802.11ac WiFi (160MHz, MCS1, 90pc duty cycle)	X	6.02	66.98	16.61	0.46	130.0	± 9.6 %
		Y	6.13	67.25	16.56		130.0	
		Z	5.97	67.00	16.48		130.0	
10638-AAC	IEEE 802.11ac WiFi (160MHz, MCS2, 90pc duty cycle)	X	6.03	67.01	16.60	0.46	130.0	± 9.6 %
		Y	6.13	67.22	16.53		130.0	
		Z	5.97	67.00	16.46		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	67.17	16.55		130.0	
		Z	5.93	66.87	16.44		130.0	
10640-AAC	IEEE 802.11ac WiFi (160MHz, MCS4, 90pc duty cycle)	X	5.92	66.70	16.42	0.46	130.0	± 9.6 %
		Y	6.12	67.19	16.50		130.0	
		Z	5.91	66.82	16.35		130.0	
10641-AAC	IEEE 802.11ac WiFi (160MHz, MCS5, 90pc duty cycle)	X	6.06	66.91	16.55	0.46	130.0	± 9.6 %
		Y	6.16	67.10	16.47		130.0	
		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	
		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	
		Z	5.87	66.78	16.42		130.0	
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)	X	6.74	88.72	29.93	9.30	60.0	± 9.6 %
		Y	14.54	108.61	38.31		60.0	
		Z	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 %
		Y	100.00	113.13	25.67		60.0	
		Z	2.52	68.36	10.82		60.0	

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	

^E 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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Accreditation No.: **SCS 0108**

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 Multilateral Agreement for the recognition of calibration certificates

Client **PC Test**

Certificate No: **EX3-7409_Jun18**

CALIBRATION CERTIFICATE

Object **EX3DV4 - SN:7409**

Calibration procedure(s) **QA CAL-01.v9, QA CAL-14.v4, QA CAL-23.v5, QA CAL-25.v6**
Calibration procedure for dosimetric E-field probes

Calibration date: **June 25, 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 $(22 \pm 3)^\circ\text{C}$ 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-18)	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 HP 8753E	SN: US37390585	18-Oct-01 (in house check Oct-17)	In house check: Oct-18

Calibrated by: **Name** Claudio Leubler **Function** Laboratory Technician

Approved by: **Name** Katja Pokovic **Function** Technical Manager

Signature

Issued: June 26, 2018

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



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Accreditation No.: **SCS 0108**

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
NORM _{x,y,z}	sensitivity in free space
ConvF	sensitivity in TSL / NORM _{x,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 ϑ	ϑ rotation around an axis that is in the plane normal to probe axis (at measurement center), i.e., $\vartheta = 0$ is normal to probe axis
Connector Angle	information used in DASY system to align probe sensor X to the robot coordinate system

Calibration is Performed According to the Following Standards:

- IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013
- IEC 62209-1, "Measurement procedure for the assessment of Specific Absorption Rate (SAR) from hand-held and body-mounted devices used next to the ear (frequency range of 300 MHz to 6 GHz)", July 2016
- IEC 62209-2, "Procedure to determine the Specific Absorption Rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)", March 2010
- KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

Methods Applied and Interpretation of Parameters:

- NORM_{x,y,z}**: Assessed for E-field polarization $\vartheta = 0$ ($f \leq 900$ MHz in TEM-cell; $f > 1800$ MHz: R22 waveguide). NORM_{x,y,z} are only intermediate values, i.e., the uncertainties of NORM_{x,y,z} does not affect the E²-field uncertainty inside TSL (see below **ConvF**).
- NORM(f)_{x,y,z}** = NORM_{x,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**.
- DCP_{x,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
- A_{x,y,z}; B_{x,y,z}; C_{x,y,z}; D_{x,y,z}; VR_{x,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 $f \leq 800$ 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 NORM_{x,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 NORM_x (no uncertainty required).

Probe EX3DV4

SN:7409

Manufactured: November 24, 2015
Calibrated: June 25, 2018

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

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

Basic Calibration Parameters

	Sensor X	Sensor Y	Sensor Z	Unc (k=2)
Norm ($\mu\text{V}/(\text{V}/\text{m})^2$) ^A	0.38	0.33	0.38	$\pm 10.1 \%$
DCP (mV) ^B	100.8	102.3	97.7	

Modulation Calibration Parameters

UID	Communication System Name		A dB	B dB/ μV	C	D dB	VR mV	Unc ^E (k=2)
0	CW	X	0.0	0.0	1.0	0.00	157.1	$\pm 2.2 \%$
		Y	0.0	0.0	1.0		172.6	
		Z	0.0	0.0	1.0		175.7	

Note: For details on UID parameters see Appendix.

Sensor Model Parameters

	C1 fF	C2 fF	α V^{-1}	T1 $\text{ms}\cdot\text{V}^{-2}$	T2 $\text{ms}\cdot\text{V}^{-1}$	T3 ms	T4 V^{-2}	T5 V^{-1}	T6
X	15.40	116.5	36.38	2.655	0.140	4.978	0.000	0.017	1.008
Y	27.94	206.6	35.20	4.338	0.095	4.989	1.642	0.000	1.004
Z	31.47	244.0	37.99	3.819	0.313	5.030	0.103	0.363	1.006

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

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

^B Numerical linearization parameter: uncertainty not required.

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

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

Calibration Parameter Determined in Head Tissue Simulating Media

f (MHz) ^C	Relative Permittivity ^F	Conductivity (S/m) ^F	ConvF X	ConvF Y	ConvF Z	Alpha ^G	Depth ^G (mm)	Unc (k=2)
750	41.9	0.89	9.91	9.91	9.91	0.44	0.90	± 12.0 %
835	41.5	0.90	9.67	9.67	9.67	0.46	0.85	± 12.0 %
1750	40.1	1.37	8.43	8.43	8.43	0.38	0.80	± 12.0 %
1900	40.0	1.40	8.05	8.05	8.05	0.38	0.84	± 12.0 %
2300	39.5	1.67	7.57	7.57	7.57	0.32	0.80	± 12.0 %
2450	39.2	1.80	7.23	7.23	7.23	0.34	0.86	± 12.0 %
2600	39.0	1.96	6.98	6.98	6.98	0.39	0.86	± 12.0 %
5250	35.9	4.71	5.20	5.20	5.20	0.40	1.80	± 13.1 %
5600	35.5	5.07	4.77	4.77	4.77	0.40	1.80	± 13.1 %
5750	35.4	5.22	4.82	4.82	4.82	0.40	1.80	± 13.1 %

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

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

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

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

Calibration Parameter Determined in Body Tissue Simulating Media

f (MHz) ^C	Relative Permittivity ^F	Conductivity (S/m) ^F	ConvF X	ConvF Y	ConvF Z	Alpha ^G	Depth ^G (mm)	Unc (k=2)
750	55.5	0.96	9.82	9.82	9.82	0.52	0.84	± 12.0 %
835	55.2	0.97	9.63	9.63	9.63	0.48	0.80	± 12.0 %
1750	53.4	1.49	7.91	7.91	7.91	0.36	0.93	± 12.0 %
1900	53.3	1.52	7.60	7.60	7.60	0.44	0.80	± 12.0 %
2300	52.9	1.81	7.36	7.36	7.36	0.38	0.88	± 12.0 %
2450	52.7	1.95	7.24	7.24	7.24	0.33	0.89	± 12.0 %
2600	52.5	2.16	7.07	7.07	7.07	0.32	0.96	± 12.0 %
5250	48.9	5.36	4.67	4.67	4.67	0.50	1.90	± 13.1 %
5600	48.5	5.77	4.25	4.25	4.25	0.50	1.90	± 13.1 %
5750	48.3	5.94	4.32	4.32	4.32	0.50	1.90	± 13.1 %

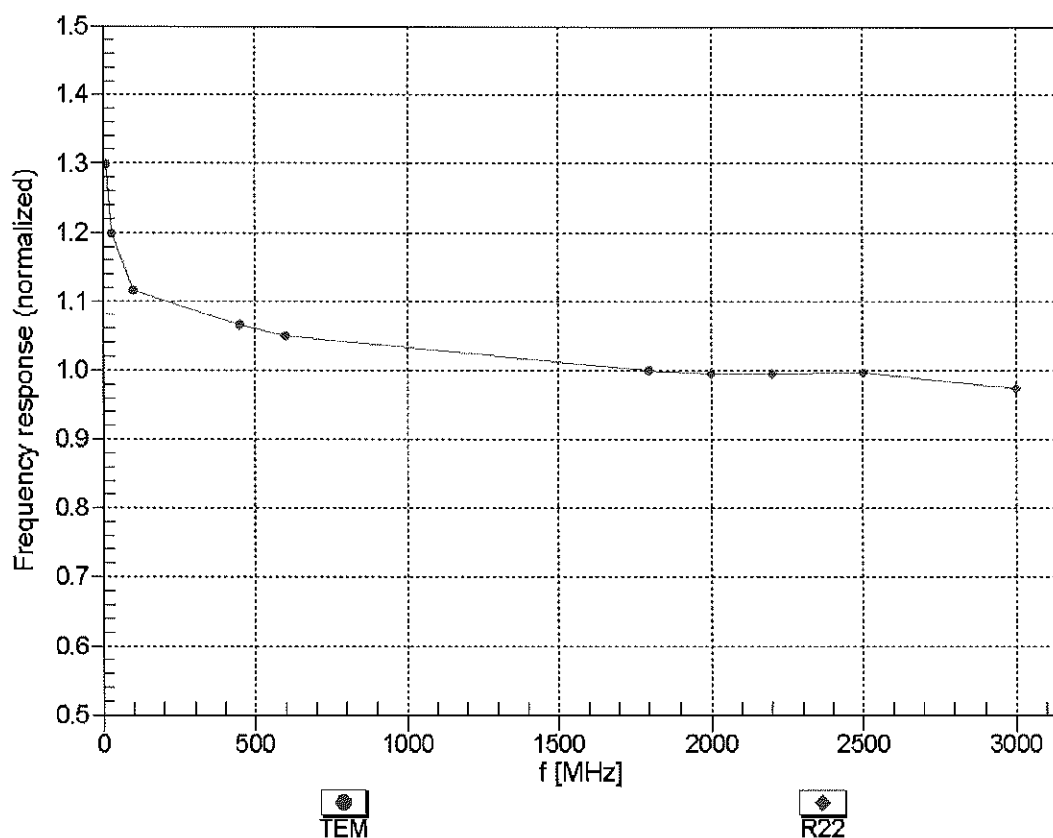
^C Frequency validity above 300 MHz of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to ± 50 MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is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

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

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

Frequency Response of E-Field

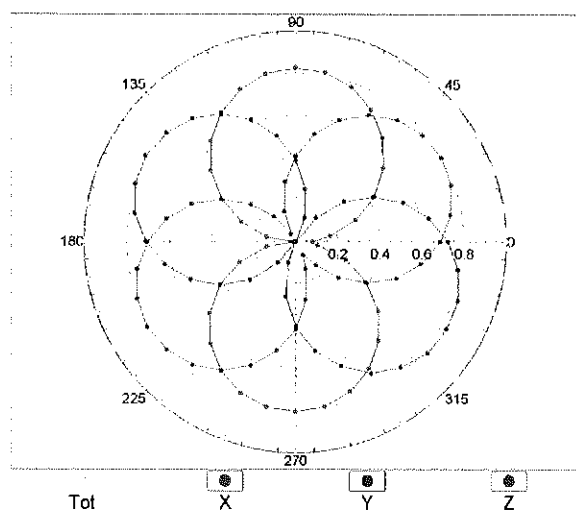
(TEM-Cell:ifi110 EXX, Waveguide: R22)



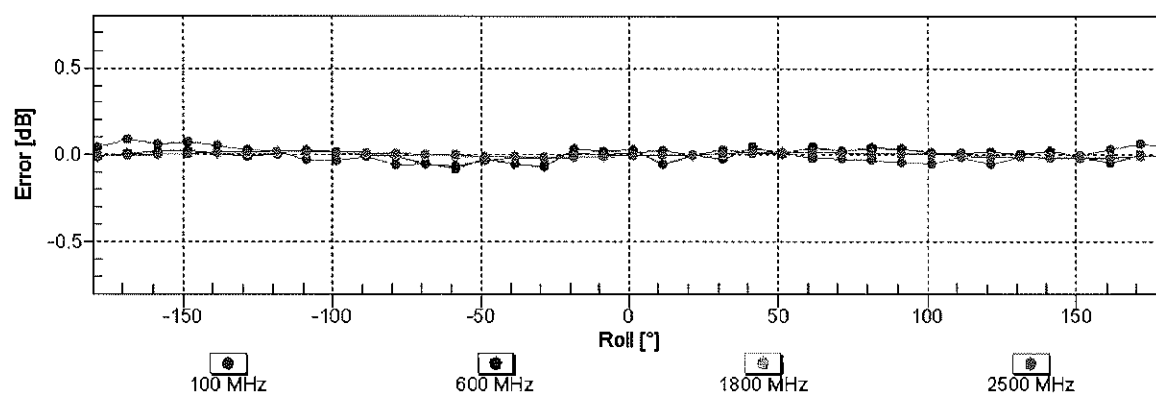
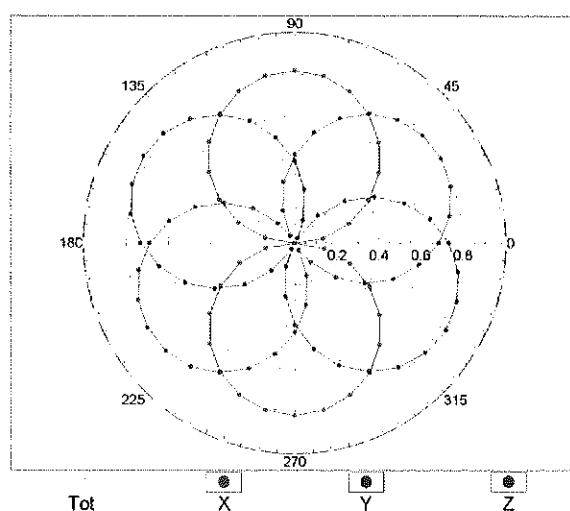
Uncertainty of Frequency Response of E-field: $\pm 6.3\%$ ($k=2$)

Receiving Pattern (ϕ), $\theta = 0^\circ$

f=600 MHz,TEM

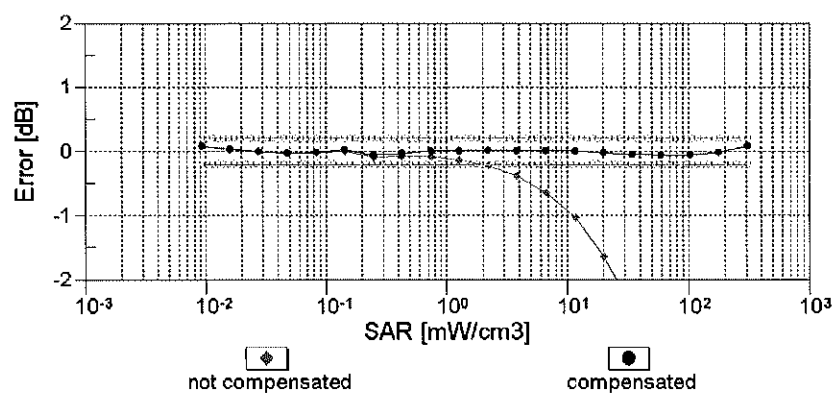
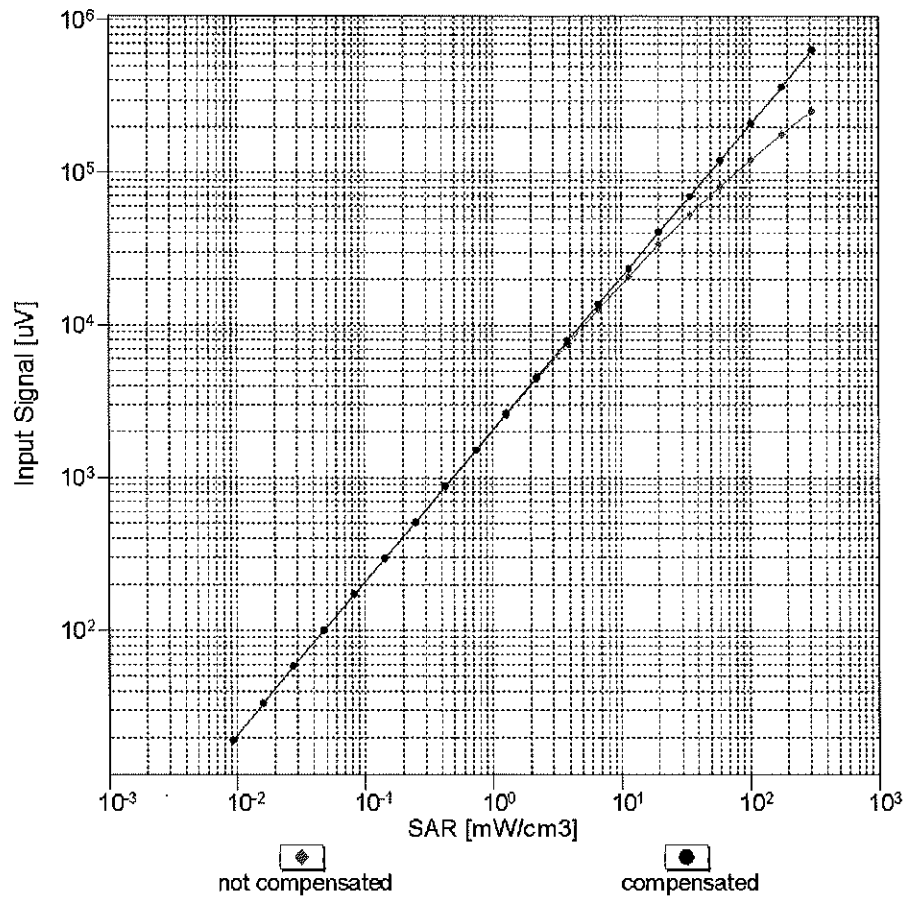


f=1800 MHz,R22



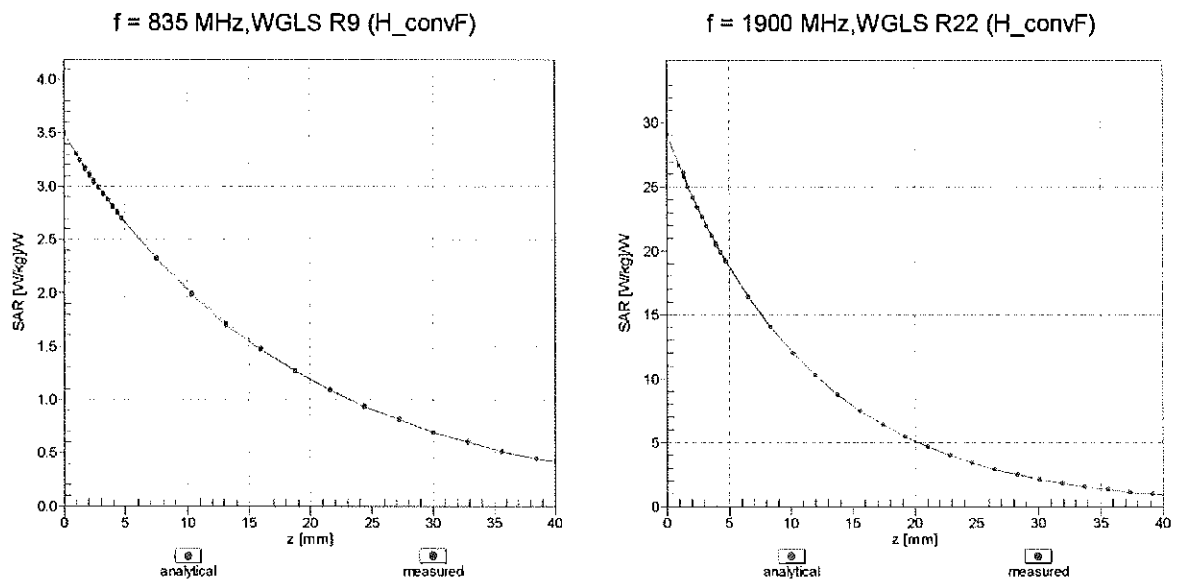
Uncertainty of Axial Isotropy Assessment: $\pm 0.5\%$ ($k=2$)

Dynamic Range $f(\text{SAR}_{\text{head}})$ (TEM cell, $f_{\text{eval}} = 1900 \text{ MHz}$)



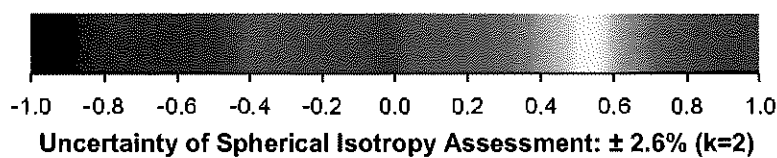
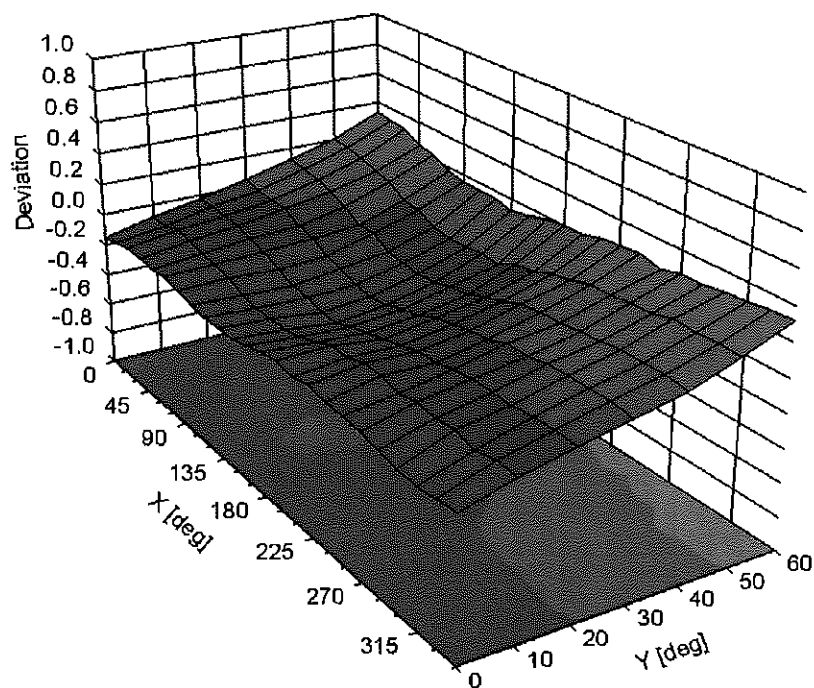
Uncertainty of Linearity Assessment: $\pm 0.6\%$ ($k=2$)

Conversion Factor Assessment



Deviation from Isotropy in Liquid

Error (ϕ, θ), $f = 900 \text{ MHz}$



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

Other Probe Parameters

Sensor Arrangement	Triangular
Connector Angle (°)	41.5
Mechanical Surface Detection Mode	enabled
Optical Surface Detection Mode	disabled
Probe Overall Length	337 mm
Probe Body Diameter	10 mm
Tip Length	9 mm
Tip Diameter	2.5 mm
Probe Tip to Sensor X Calibration Point	1 mm
Probe Tip to Sensor Y Calibration Point	1 mm
Probe Tip to Sensor Z Calibration Point	1 mm
Recommended Measurement Distance from Surface	1.4 mm

Appendix: Modulation Calibration Parameters

UID	Communication System Name		A dB	B dB $\sqrt{\mu V}$	C	D dB	VR mV	Max Unc ^E (k=2)
0	CW	X	0.00	0.00	1.00	0.00	157.1	$\pm 2.2\%$
		Y	0.00	0.00	1.00		172.6	
		Z	0.00	0.00	1.00		175.7	
10010- CAA	SAR Validation (Square, 100ms, 10ms)	X	1.25	60.42	5.97	10.00	20.0	$\pm 9.6\%$
		Y	1.37	61.35	6.72		20.0	
		Z	1.46	61.54	7.06		20.0	
10011- CAB	UMTS-FDD (WCDMA)	X	0.71	66.47	12.38	0.00	150.0	$\pm 9.6\%$
		Y	1.49	76.31	19.52		150.0	
		Z	0.80	65.38	13.27		150.0	
10012- CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps)	X	0.97	63.61	14.22	0.41	150.0	$\pm 9.6\%$
		Y	1.14	65.32	16.39		150.0	
		Z	1.01	62.66	14.20		150.0	
10013- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps)	X	3.98	66.92	16.39	1.46	150.0	$\pm 9.6\%$
		Y	4.51	67.09	17.14		150.0	
		Z	4.51	66.48	16.81		150.0	
10021- DAC	GSM-FDD (TDMA, GMSK)	X	2.93	68.02	10.47	9.39	50.0	$\pm 9.6\%$
		Y	5.30	74.12	13.20		50.0	
		Z	8.30	79.26	15.55		50.0	
10023- DAC	GPRS-FDD (TDMA, GMSK, TN 0)	X	2.04	64.26	8.75	9.57	50.0	$\pm 9.6\%$
		Y	3.75	70.52	11.87		50.0	
		Z	5.18	74.16	13.81		50.0	
10024- DAC	GPRS-FDD (TDMA, GMSK, TN 0-1)	X	0.77	60.84	5.97	6.56	60.0	$\pm 9.6\%$
		Y	100.00	98.81	18.33		60.0	
		Z	7.39	79.44	14.17		60.0	
10025- DAC	EDGE-FDD (TDMA, 8PSK, TN 0)	X	2.92	62.32	21.25	12.57	50.0	$\pm 9.6\%$
		Y	3.79	70.21	26.28		50.0	
		Z	3.08	62.64	21.59		50.0	
10026- DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1)	X	4.19	76.79	26.73	9.56	60.0	$\pm 9.6\%$
		Y	5.08	81.51	29.10		60.0	
		Z	4.89	79.35	27.91		60.0	
10027- DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2)	X	0.43	60.00	4.84	4.80	80.0	$\pm 9.6\%$
		Y	100.00	98.82	17.61		80.0	
		Z	99.96	97.90	17.31		80.0	
10028- DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2-3)	X	0.29	60.00	4.20	3.55	100.0	$\pm 9.6\%$
		Y	100.00	100.72	17.79		100.0	
		Z	0.57	63.31	6.83		100.0	
10029- DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2)	X	3.08	70.55	22.84	7.80	80.0	$\pm 9.6\%$
		Y	3.50	73.17	24.28		80.0	
		Z	3.45	72.07	23.57		80.0	
10030- CAA	IEEE 802.15.1 Bluetooth (GFSK, DH1)	X	0.52	60.00	4.79	5.30	70.0	$\pm 9.6\%$
		Y	1.54	67.33	9.06		70.0	
		Z	1.17	65.26	8.49		70.0	
10031- CAA	IEEE 802.15.1 Bluetooth (GFSK, DH3)	X	0.04	196.26	30.81	1.88	100.0	$\pm 9.6\%$
		Y	0.17	60.00	4.10		100.0	
		Z	15.90	60.96	1.69		100.0	

10032-CAA	IEEE 802.15.1 Bluetooth (GFSK, DH5)	X	0.00	86.08	35.43	1.17	100.0	± 9.6 %
		Y	99.99	344.89	100.44		100.0	
		Z	1.14	132.41	13.71		100.0	
10033-CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH1)	X	0.95	60.75	6.54	5.30	70.0	± 9.6 %
		Y	4.98	80.79	18.23		70.0	
		Z	3.25	75.39	16.74		70.0	
10034-CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH3)	X	3.04	65.72	5.34	1.88	100.0	± 9.6 %
		Y	1.68	70.56	12.82		100.0	
		Z	0.99	64.34	10.07		100.0	
10035-CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH5)	X	24.75	218.80	26.78	1.17	100.0	± 9.6 %
		Y	1.37	69.43	12.15		100.0	
		Z	0.77	62.85	8.95		100.0	
10036-CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH1)	X	0.94	60.83	6.63	5.30	70.0	± 9.6 %
		Y	7.23	85.73	19.90		70.0	
		Z	3.94	78.17	17.83		70.0	
10037-CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH3)	X	1.41	63.61	4.82	1.88	100.0	± 9.6 %
		Y	1.40	68.85	12.14		100.0	
		Z	0.93	63.88	9.84		100.0	
10038-CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH5)	X	26.17	217.46	26.16	1.17	100.0	± 9.6 %
		Y	1.45	70.29	12.67		100.0	
		Z	0.78	63.02	9.17		100.0	
10039-CAB	CDMA2000 (1xRTT, RC1)	X	21.96	306.20	30.49	0.00	150.0	± 9.6 %
		Y	1.63	72.13	12.95		150.0	
		Z	0.63	61.62	7.75		150.0	
10042-CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Halfrate)	X	1.01	60.95	6.26	7.78	50.0	± 9.6 %
		Y	1.74	65.58	9.03		50.0	
		Z	1.77	65.58	9.34		50.0	
10044-CAA	IS-91/EIA/TIA-553 FDD (FDMA, FM)	X	0.10	124.30	3.45	0.00	150.0	± 9.6 %
		Y	0.01	119.74	2.99		150.0	
		Z	0.14	123.41	9.03		150.0	
10048-CAA	DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24)	X	2.82	62.25	9.34	13.80	25.0	± 9.6 %
		Y	3.46	64.98	10.90		25.0	
		Z	4.35	67.54	12.61		25.0	
10049-CAA	DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12)	X	2.47	64.28	8.96	10.79	40.0	± 9.6 %
		Y	3.27	67.55	10.82		40.0	
		Z	4.02	69.88	12.36		40.0	
10056-CAA	UMTS-TDD (TD-SCDMA, 1.28 Mcps)	X	2.81	66.64	10.78	9.03	50.0	± 9.6 %
		Y	11.82	86.24	20.09		50.0	
		Z	9.59	84.12	20.02		50.0	
10058-DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)	X	2.65	68.11	20.96	6.55	100.0	± 9.6 %
		Y	2.94	70.05	22.07		100.0	
		Z	2.91	69.15	21.44		100.0	
10059-CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps)	X	0.95	64.02	14.39	0.61	110.0	± 9.6 %
		Y	1.14	66.10	16.82		110.0	
		Z	1.00	63.23	14.55		110.0	
10060-CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps)	X	1.76	81.26	19.48	1.30	110.0	± 9.6 %
		Y	100.00	150.16	40.00		110.0	
		Z	1.90	81.85	20.27		110.0	

10061-CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps)	X	1.18	69.71	16.58	2.04	110.0	± 9.6 %
		Y	1.94	78.32	21.99		110.0	
		Z	1.40	71.35	18.33		110.0	
10062-CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps)	X	3.80	66.99	15.87	0.49	100.0	± 9.6 %
		Y	4.35	67.21	16.69		100.0	
		Z	4.31	66.43	16.23		100.0	
10063-CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps)	X	3.81	67.06	15.96	0.72	100.0	± 9.6 %
		Y	4.36	67.29	16.77		100.0	
		Z	4.32	66.52	16.32		100.0	
10064-CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps)	X	3.97	67.23	16.12	0.86	100.0	± 9.6 %
		Y	4.56	67.40	16.91		100.0	
		Z	4.55	66.72	16.52		100.0	
10065-CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps)	X	3.85	66.82	16.06	1.21	100.0	± 9.6 %
		Y	4.42	67.15	16.92		100.0	
		Z	4.42	66.52	16.58		100.0	
10066-CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps)	X	3.83	66.65	16.06	1.46	100.0	± 9.6 %
		Y	4.41	67.05	17.01		100.0	
		Z	4.42	66.49	16.71		100.0	
10067-CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps)	X	4.01	66.66	16.35	2.04	100.0	± 9.6 %
		Y	4.65	67.23	17.40		100.0	
		Z	4.70	66.78	17.19		100.0	
10068-CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps)	X	4.12	66.97	16.78	2.55	100.0	± 9.6 %
		Y	4.69	67.14	17.56		100.0	
		Z	4.73	66.69	17.36		100.0	
10069-CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps)	X	4.11	66.73	16.77	2.67	100.0	± 9.6 %
		Y	4.72	67.08	17.69		100.0	
		Z	4.78	66.70	17.53		100.0	
10071-CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps)	X	4.07	66.96	16.68	1.99	100.0	± 9.6 %
		Y	4.59	67.07	17.37		100.0	
		Z	4.60	66.53	17.10		100.0	
10072-CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps)	X	3.98	66.89	16.71	2.30	100.0	± 9.6 %
		Y	4.51	67.19	17.50		100.0	
		Z	4.54	66.70	17.26		100.0	
10073-CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps)	X	4.03	67.09	17.06	2.83	100.0	± 9.6 %
		Y	4.56	67.35	17.81		100.0	
		Z	4.59	66.87	17.58		100.0	
10074-CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps)	X	4.11	67.36	17.40	3.30	100.0	± 9.6 %
		Y	4.57	67.31	17.95		100.0	
		Z	4.60	66.82	17.73		100.0	
10075-CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps)	X	4.18	67.58	17.73	3.82	90.0	± 9.6 %
		Y	4.58	67.25	18.15		90.0	
		Z	4.61	66.79	17.96		90.0	
10076-CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps)	X	4.24	67.48	17.91	4.15	90.0	± 9.6 %
		Y	4.61	67.08	18.28		90.0	
		Z	4.65	66.67	18.13		90.0	
10077-CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps)	X	4.28	67.60	18.06	4.30	90.0	± 9.6 %
		Y	4.64	67.18	18.41		90.0	
		Z	4.68	66.76	18.25		90.0	

10081-CAB	CDMA2000 (1xRTT, RC3)	X	7.85	258.95	40.09	0.00	150.0	± 9.6 %
		Y	0.57	64.50	9.19		150.0	
		Z	0.37	60.00	6.09		150.0	
10082-CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Fullrate)	X	72.13	59.07	0.77	4.77	80.0	± 9.6 %
		Y	7.02	60.09	1.53		80.0	
		Z	7.63	60.12	1.53		80.0	
10090-DAC	GPRS-FDD (TDMA, GMSK, TN 0-4)	X	0.78	60.88	6.00	6.56	60.0	± 9.6 %
		Y	100.00	98.83	18.35		60.0	
		Z	8.66	80.77	14.58		60.0	
10097-CAB	UMTS-FDD (HSDPA)	X	1.12	65.69	11.46	0.00	150.0	± 9.6 %
		Y	2.39	74.48	18.29		150.0	
		Z	1.58	66.95	14.31		150.0	
10098-CAB	UMTS-FDD (HSUPA, Subtest 2)	X	1.11	65.81	11.55	0.00	150.0	± 9.6 %
		Y	2.34	74.47	18.31		150.0	
		Z	1.54	66.88	14.28		150.0	
10099-DAC	EDGE-FDD (TDMA, 8PSK, TN 0-4)	X	4.22	76.90	26.77	9.56	60.0	± 9.6 %
		Y	5.12	81.66	29.15		60.0	
		Z	4.92	79.46	27.95		60.0	
10100-CAD	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	X	2.39	69.31	16.37	0.00	150.0	± 9.6 %
		Y	3.20	72.58	18.18		150.0	
		Z	2.69	68.81	15.94		150.0	
10101-CAD	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	X	2.61	67.07	15.44	0.00	150.0	± 9.6 %
		Y	3.12	68.53	16.66		150.0	
		Z	2.91	66.65	15.40		150.0	
10102-CAD	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	X	2.71	67.23	15.58	0.00	150.0	± 9.6 %
		Y	3.22	68.53	16.74		150.0	
		Z	3.02	66.72	15.54		150.0	
10103-CAD	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	X	3.72	71.26	18.49	3.98	65.0	± 9.6 %
		Y	4.70	73.63	19.84		65.0	
		Z	4.41	71.81	18.98		65.0	
10104-CAD	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	X	3.95	69.27	17.90	3.98	65.0	± 9.6 %
		Y	4.71	71.04	19.29		65.0	
		Z	4.63	70.10	18.86		65.0	
10105-CAD	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	X	3.78	68.25	17.72	3.98	65.0	± 9.6 %
		Y	4.47	69.73	18.97		65.0	
		Z	4.37	68.68	18.48		65.0	
10108-CAE	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	X	1.98	69.15	15.95	0.00	150.0	± 9.6 %
		Y	2.77	72.39	18.20		150.0	
		Z	2.29	68.22	15.72		150.0	
10109-CAE	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	X	2.19	67.24	14.70	0.00	150.0	± 9.6 %
		Y	2.80	69.06	16.71		150.0	
		Z	2.54	66.58	15.14		150.0	
10110-CAE	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	X	1.35	66.94	13.41	0.00	150.0	± 9.6 %
		Y	2.32	72.63	18.00		150.0	
		Z	1.78	67.28	14.92		150.0	
10111-CAE	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	X	1.58	65.90	12.12	0.00	150.0	± 9.6 %
		Y	2.81	72.30	17.60		150.0	
		Z	2.22	67.49	14.99		150.0	

10112-CAE	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	X	2.30	67.45	14.81	0.00	150.0	± 9.6 %
		Y	2.93	69.12	16.76		150.0	
		Z	2.66	66.72	15.26		150.0	
10113-CAE	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	X	1.64	65.77	12.05	0.00	150.0	± 9.6 %
		Y	2.95	72.32	17.65		150.0	
		Z	2.37	67.73	15.17		150.0	
10114-CAC	IEEE 802.11n (HT Greenfield, 13.5 Mbps, BPSK)	X	4.34	66.99	16.28	0.00	150.0	± 9.6 %
		Y	4.86	67.57	16.78		150.0	
		Z	4.82	66.90	16.32		150.0	
10115-CAC	IEEE 802.11n (HT Greenfield, 81 Mbps, 16-QAM)	X	4.58	67.29	16.33	0.00	150.0	± 9.6 %
		Y	5.08	67.61	16.77		150.0	
		Z	5.06	66.98	16.35		150.0	
10116-CAC	IEEE 802.11n (HT Greenfield, 135 Mbps, 64-QAM)	X	4.40	67.26	16.31	0.00	150.0	± 9.6 %
		Y	4.93	67.75	16.79		150.0	
		Z	4.89	67.04	16.31		150.0	
10117-CAC	IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK)	X	4.33	66.90	16.26	0.00	150.0	± 9.6 %
		Y	4.84	67.46	16.74		150.0	
		Z	4.79	66.75	16.26		150.0	
10118-CAC	IEEE 802.11n (HT Mixed, 81 Mbps, 16-QAM)	X	4.58	67.24	16.31	0.00	150.0	± 9.6 %
		Y	5.15	67.78	16.86		150.0	
		Z	5.14	67.21	16.48		150.0	
10119-CAC	IEEE 802.11n (HT Mixed, 135 Mbps, 64-QAM)	X	4.39	67.16	16.27	0.00	150.0	± 9.6 %
		Y	4.94	67.78	16.81		150.0	
		Z	4.90	67.08	16.34		150.0	
10140-CAD	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	X	2.65	67.18	15.35	0.00	150.0	± 9.6 %
		Y	3.23	68.57	16.65		150.0	
		Z	3.03	66.74	15.44		150.0	
10141-CAD	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	X	2.80	67.68	15.68	0.00	150.0	± 9.6 %
		Y	3.37	68.79	16.86		150.0	
		Z	3.16	66.97	15.67		150.0	
10142-CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	X	0.71	61.44	8.06	0.00	150.0	± 9.6 %
		Y	2.27	74.06	17.56		150.0	
		Z	1.48	66.51	13.59		150.0	
10143-CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	X	0.73	60.00	6.15	0.00	150.0	± 9.6 %
		Y	2.80	73.44	16.54		150.0	
		Z	1.85	66.55	13.15		150.0	
10144-CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	X	0.73	60.00	5.65	0.00	150.0	± 9.6 %
		Y	1.85	66.75	12.85		150.0	
		Z	1.61	64.01	11.28		150.0	
10145-CAE	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	X	5.16	385.51	36.59	0.00	150.0	± 9.6 %
		Y	0.54	60.00	5.91		150.0	
		Z	0.58	60.00	5.88		150.0	
10146-CAE	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	X	0.00	60.00	0.00	0.00	150.0	± 9.6 %
		Y	0.74	60.00	4.95		150.0	
		Z	0.80	60.00	5.53		150.0	
10147-CAE	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	X	0.00	60.00	0.00	0.00	150.0	± 9.6 %
		Y	0.60	58.26	3.86		150.0	
		Z	0.82	60.00	5.58		150.0	

10149-CAD	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	X	2.21	67.36	14.78	0.00	150.0	± 9.6 %
		Y	2.81	69.16	16.77		150.0	
		Z	2.55	66.65	15.19		150.0	
10150-CAD	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	X	2.32	67.56	14.88	0.00	150.0	± 9.6 %
		Y	2.94	69.22	16.82		150.0	
		Z	2.67	66.78	15.30		150.0	
10151-CAD	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	X	3.66	73.29	18.78	3.98	65.0	± 9.6 %
		Y	4.98	76.80	21.12		65.0	
		Z	4.55	74.40	20.06		65.0	
10152-CAD	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	X	3.31	68.29	16.15	3.98	65.0	± 9.6 %
		Y	4.23	70.96	18.67		65.0	
		Z	4.14	69.89	18.22		65.0	
10153-CAD	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	X	3.64	69.78	17.29	3.98	65.0	± 9.6 %
		Y	4.61	72.30	19.68		65.0	
		Z	4.49	71.11	19.19		65.0	
10154-CAE	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	X	1.38	67.29	13.63	0.00	150.0	± 9.6 %
		Y	2.40	73.30	18.35		150.0	
		Z	1.82	67.63	15.14		150.0	
10155-CAE	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	X	1.60	66.02	12.20	0.00	150.0	± 9.6 %
		Y	2.83	72.40	17.66		150.0	
		Z	2.23	67.54	15.03		150.0	
10156-CAE	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	X	0.51	60.00	5.91	0.00	150.0	± 9.6 %
		Y	2.15	74.23	16.90		150.0	
		Z	1.25	65.50	12.43		150.0	
10157-CAE	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	X	0.57	60.00	4.69	0.00	150.0	± 9.6 %
		Y	1.61	66.51	12.13		150.0	
		Z	1.35	63.41	10.38		150.0	
10158-CAE	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	X	1.65	65.90	12.13	0.00	150.0	± 9.6 %
		Y	2.98	72.51	17.74		150.0	
		Z	2.38	67.83	15.24		150.0	
10159-CAE	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	X	0.59	60.00	4.69	0.00	150.0	± 9.6 %
		Y	1.68	66.77	12.27		150.0	
		Z	1.39	63.54	10.48		150.0	
10160-CAD	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	X	1.93	68.16	15.00	0.00	150.0	± 9.6 %
		Y	2.76	71.39	17.74		150.0	
		Z	2.38	67.93	15.64		150.0	
10161-CAD	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	X	2.12	67.05	14.02	0.00	150.0	± 9.6 %
		Y	2.84	69.35	16.71		150.0	
		Z	2.55	66.69	15.09		150.0	
10162-CAD	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	X	2.21	67.37	14.17	0.00	150.0	± 9.6 %
		Y	2.96	69.65	16.87		150.0	
		Z	2.66	66.96	15.26		150.0	
10166-CAE	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	X	2.13	65.17	17.70	3.01	150.0	± 9.6 %
		Y	3.00	69.75	19.60		150.0	
		Z	2.90	67.96	18.43		150.0	
10167-CAE	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	X	1.98	65.92	17.43	3.01	150.0	± 9.6 %
		Y	3.74	74.17	20.63		150.0	
		Z	3.28	70.17	18.57		150.0	

10168-CAE	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	X	2.18	68.43	19.32	3.01	150.0	± 9.6 %
		Y	4.55	78.58	22.96		150.0	
		Z	3.73	73.08	20.34		150.0	
10169-CAD	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	X	1.87	64.00	17.04	3.01	150.0	± 9.6 %
		Y	2.53	68.75	19.16		150.0	
		Z	2.36	66.10	17.52		150.0	
10170-CAD	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	X	1.85	66.74	18.73	3.01	150.0	± 9.6 %
		Y	3.84	78.32	23.19		150.0	
		Z	2.87	70.66	19.54		150.0	
10171-AAD	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	X	1.59	63.66	15.82	3.01	150.0	± 9.6 %
		Y	2.83	71.75	19.17		150.0	
		Z	2.39	66.90	16.66		150.0	
10172-CAD	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	X	1.63	66.94	19.47	6.02	65.0	± 9.6 %
		Y	2.64	75.18	23.09		65.0	
		Z	2.68	72.94	21.86		65.0	
10173-CAD	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	X	1.75	70.70	19.61	6.02	65.0	± 9.6 %
		Y	6.55	90.87	26.66		65.0	
		Z	4.15	79.90	22.82		65.0	
10174-CAD	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	X	1.33	66.12	16.85	6.02	65.0	± 9.6 %
		Y	3.87	81.08	22.62		65.0	
		Z	2.77	72.65	19.43		65.0	
10175-CAE	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	X	1.85	63.78	16.81	3.01	150.0	± 9.6 %
		Y	2.49	68.40	18.88		150.0	
		Z	2.33	65.83	17.28		150.0	
10176-CAE	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	X	1.86	66.75	18.74	3.01	150.0	± 9.6 %
		Y	3.85	78.36	23.20		150.0	
		Z	2.87	70.68	19.55		150.0	
10177-CAG	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	X	1.86	63.82	16.84	3.01	150.0	± 9.6 %
		Y	2.51	68.53	18.95		150.0	
		Z	2.34	65.93	17.35		150.0	
10178-CAE	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)	X	1.85	66.70	18.70	3.01	150.0	± 9.6 %
		Y	3.81	78.15	23.10		150.0	
		Z	2.85	70.55	19.47		150.0	
10179-CAE	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	X	1.70	65.12	17.16	3.01	150.0	± 9.6 %
		Y	3.27	74.82	21.01		150.0	
		Z	2.59	68.61	17.93		150.0	
10180-CAE	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)	X	1.59	63.66	15.82	3.01	150.0	± 9.6 %
		Y	2.82	71.71	19.14		150.0	
		Z	2.39	66.88	16.63		150.0	
10181-CAD	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	X	1.86	63.82	16.84	3.01	150.0	± 9.6 %
		Y	2.50	68.51	18.95		150.0	
		Z	2.34	65.92	17.34		150.0	
10182-CAD	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	X	1.85	66.68	18.69	3.01	150.0	± 9.6 %
		Y	3.80	78.11	23.08		150.0	
		Z	2.85	70.52	19.45		150.0	
10183-AAC	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	X	1.59	63.65	15.80	3.01	150.0	± 9.6 %
		Y	2.82	71.68	19.12		150.0	
		Z	2.38	66.86	16.62		150.0	

10184-CAD	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	X	1.86	63.84	16.85	3.01	150.0	± 9.6 %
		Y	2.51	68.55	18.97		150.0	
		Z	2.35	65.96	17.36		150.0	
10185-CAD	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)	X	1.86	66.74	18.73	3.01	150.0	± 9.6 %
		Y	3.83	78.22	23.13		150.0	
		Z	2.86	70.59	19.49		150.0	
10186-AAD	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)	X	1.59	63.69	15.83	3.01	150.0	± 9.6 %
		Y	2.83	71.76	19.16		150.0	
		Z	2.39	66.91	16.65		150.0	
10187-CAE	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	X	1.87	63.97	16.99	3.01	150.0	± 9.6 %
		Y	2.53	68.67	19.08		150.0	
		Z	2.36	66.04	17.45		150.0	
10188-CAE	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	X	1.89	67.14	19.05	3.01	150.0	± 9.6 %
		Y	4.00	79.20	23.64		150.0	
		Z	2.94	71.15	19.86		150.0	
10189-AAE	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	X	1.61	63.93	16.07	3.01	150.0	± 9.6 %
		Y	2.91	72.32	19.52		150.0	
		Z	2.43	67.24	16.90		150.0	
10193-CAC	IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK)	X	3.74	67.40	15.79	0.00	150.0	± 9.6 %
		Y	4.29	67.57	16.55		150.0	
		Z	4.20	66.51	15.90		150.0	
10194-CAC	IEEE 802.11n (HT Greenfield, 39 Mbps, 16-QAM)	X	3.82	67.41	15.90	0.00	150.0	± 9.6 %
		Y	4.40	67.71	16.67		150.0	
		Z	4.32	66.72	16.05		150.0	
10195-CAC	IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM)	X	3.83	67.37	15.89	0.00	150.0	± 9.6 %
		Y	4.42	67.68	16.66		150.0	
		Z	4.35	66.72	16.06		150.0	
10196-CAC	IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK)	X	3.72	67.37	15.75	0.00	150.0	± 9.6 %
		Y	4.26	67.52	16.51		150.0	
		Z	4.17	66.48	15.88		150.0	
10197-CAC	IEEE 802.11n (HT Mixed, 39 Mbps, 16-QAM)	X	3.82	67.41	15.91	0.00	150.0	± 9.6 %
		Y	4.41	67.70	16.67		150.0	
		Z	4.33	66.72	16.05		150.0	
10198-CAC	IEEE 802.11n (HT Mixed, 65 Mbps, 64-QAM)	X	3.82	67.36	15.88	0.00	150.0	± 9.6 %
		Y	4.41	67.66	16.65		150.0	
		Z	4.34	66.71	16.05		150.0	
10219-CAC	IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK)	X	3.68	67.48	15.78	0.00	150.0	± 9.6 %
		Y	4.22	67.61	16.52		150.0	
		Z	4.13	66.53	15.85		150.0	
10220-CAC	IEEE 802.11n (HT Mixed, 43.3 Mbps, 16-QAM)	X	3.82	67.41	15.91	0.00	150.0	± 9.6 %
		Y	4.40	67.66	16.65		150.0	
		Z	4.32	66.68	16.04		150.0	
10221-CAC	IEEE 802.11n (HT Mixed, 72.2 Mbps, 64-QAM)	X	3.85	67.40	15.91	0.00	150.0	± 9.6 %
		Y	4.43	67.62	16.64		150.0	
		Z	4.36	66.67	16.05		150.0	
10222-CAC	IEEE 802.11n (HT Mixed, 15 Mbps, BPSK)	X	4.34	66.97	16.27	0.00	150.0	± 9.6 %
		Y	4.82	67.47	16.73		150.0	
		Z	4.77	66.77	16.26		150.0	

10223-CAC	IEEE 802.11n (HT Mixed, 90 Mbps, 16-QAM)	X	4.49	67.10	16.25	0.00	150.0	± 9.6 %
		Y	5.02	67.50	16.74		150.0	
		Z	5.01	66.90	16.33		150.0	
10224-CAC	IEEE 802.11n (HT Mixed, 150 Mbps, 64-QAM)	X	4.35	67.14	16.26	0.00	150.0	± 9.6 %
		Y	4.86	67.63	16.73		150.0	
		Z	4.81	66.90	16.25		150.0	
10225-CAB	UMTS-FDD (HSPA+)	X	1.60	62.87	10.00	0.00	150.0	± 9.6 %
		Y	2.64	67.73	15.37		150.0	
		Z	2.42	65.46	14.06		150.0	
10226-CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	X	1.83	71.58	20.13	6.02	65.0	± 9.6 %
		Y	7.36	93.10	27.50		65.0	
		Z	4.39	80.98	23.33		65.0	
10227-CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	X	1.73	70.59	18.93	6.02	65.0	± 9.6 %
		Y	7.00	90.72	25.86		65.0	
		Z	4.34	79.99	22.28		65.0	
10228-CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	X	1.83	69.36	20.71	6.02	65.0	± 9.6 %
		Y	3.28	79.62	24.97		65.0	
		Z	3.15	76.53	23.48		65.0	
10229-CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)	X	1.76	70.79	19.64	6.02	65.0	± 9.6 %
		Y	6.63	91.03	26.72		65.0	
		Z	4.18	80.00	22.86		65.0	
10230-CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)	X	1.65	69.73	18.45	6.02	65.0	± 9.6 %
		Y	6.22	88.63	25.09		65.0	
		Z	4.10	78.96	21.82		65.0	
10231-CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	X	1.79	68.81	20.33	6.02	65.0	± 9.6 %
		Y	3.15	78.74	24.52		65.0	
		Z	3.06	75.85	23.10		65.0	
10232-CAD	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)	X	1.76	70.77	19.64	6.02	65.0	± 9.6 %
		Y	6.61	91.00	26.71		65.0	
		Z	4.18	79.98	22.86		65.0	
10233-CAD	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)	X	1.65	69.70	18.44	6.02	65.0	± 9.6 %
		Y	6.19	88.57	25.08		65.0	
		Z	4.09	78.93	21.81		65.0	
10234-CAD	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	X	1.76	68.43	20.02	6.02	65.0	± 9.6 %
		Y	3.07	78.12	24.14		65.0	
		Z	2.98	75.33	22.76		65.0	
10235-CAD	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	X	1.76	70.76	19.64	6.02	65.0	± 9.6 %
		Y	6.61	91.04	26.73		65.0	
		Z	4.18	80.00	22.87		65.0	
10236-CAD	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	X	1.66	69.79	18.48	6.02	65.0	± 9.6 %
		Y	6.30	88.80	25.14		65.0	
		Z	4.13	79.05	21.85		65.0	
10237-CAD	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	X	1.78	68.76	20.32	6.02	65.0	± 9.6 %
		Y	3.15	78.74	24.53		65.0	
		Z	3.05	75.85	23.11		65.0	
10238-CAD	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	X	1.76	70.75	19.64	6.02	65.0	± 9.6 %
		Y	6.59	90.97	26.70		65.0	
		Z	4.17	79.95	22.85		65.0	

10239-CAD	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	X	1.65	69.67	18.43	6.02	65.0	± 9.6 %
		Y	6.16	88.50	25.06		65.0	
		Z	4.07	78.89	21.79		65.0	
10240-CAD	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	X	1.78	68.77	20.32	6.02	65.0	± 9.6 %
		Y	3.14	78.73	24.52		65.0	
		Z	3.05	75.83	23.10		65.0	
10241-CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	X	3.09	71.04	21.81	6.98	65.0	± 9.6 %
		Y	5.84	80.29	25.20		65.0	
		Z	5.54	77.13	23.79		65.0	
10242-CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	X	2.70	68.41	20.47	6.98	65.0	± 9.6 %
		Y	4.94	76.94	23.76		65.0	
		Z	4.89	74.64	22.64		65.0	
10243-CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	X	2.78	67.24	20.54	6.98	65.0	± 9.6 %
		Y	4.14	72.94	22.88		65.0	
		Z	4.22	71.72	22.18		65.0	
10244-CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	X	0.80	57.73	3.36	3.98	65.0	± 9.6 %
		Y	2.15	64.01	10.18		65.0	
		Z	2.44	64.99	11.42		65.0	
10245-CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	X	0.82	57.61	3.20	3.98	65.0	± 9.6 %
		Y	2.13	63.69	9.96		65.0	
		Z	2.42	64.65	11.19		65.0	
10246-CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	X	0.87	60.00	5.50	3.98	65.0	± 9.6 %
		Y	2.12	67.09	12.65		65.0	
		Z	2.17	66.84	12.89		65.0	
10247-CAD	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	X	1.26	60.00	6.38	3.98	65.0	± 9.6 %
		Y	2.78	67.32	13.60		65.0	
		Z	2.82	66.99	13.82		65.0	
10248-CAD	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	X	1.30	60.00	6.40	3.98	65.0	± 9.6 %
		Y	2.73	66.64	13.26		65.0	
		Z	2.81	66.52	13.58		65.0	
10249-CAD	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	X	1.24	61.72	8.36	3.98	65.0	± 9.6 %
		Y	3.85	75.74	18.20		65.0	
		Z	3.35	73.06	17.32		65.0	
10250-CAD	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	X	2.74	67.58	14.25	3.98	65.0	± 9.6 %
		Y	4.25	73.58	19.37		65.0	
		Z	4.02	71.93	18.78		65.0	
10251-CAD	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	X	2.46	65.14	12.48	3.98	65.0	± 9.6 %
		Y	3.86	70.68	17.56		65.0	
		Z	3.78	69.64	17.25		65.0	
10252-CAD	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	X	2.82	71.28	16.40	3.98	65.0	± 9.6 %
		Y	4.98	79.52	21.77		65.0	
		Z	4.29	76.11	20.42		65.0	
10253-CAD	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	X	3.12	67.32	15.07	3.98	65.0	± 9.6 %
		Y	4.18	70.66	18.33		65.0	
		Z	4.10	69.61	17.93		65.0	
10254-CAD	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	X	3.39	68.52	15.96	3.98	65.0	± 9.6 %
		Y	4.50	71.75	19.15		65.0	
		Z	4.39	70.63	18.74		65.0	

10255-CAD	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	X	3.40	72.07	17.90	3.98	65.0	± 9.6 %
		Y	4.72	76.03	20.86		65.0	
		Z	4.36	73.79	19.90		65.0	
10256-CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	X	0.74	56.57	1.48	3.98	65.0	± 9.6 %
		Y	1.50	60.83	7.03		65.0	
		Z	1.77	61.73	8.31		65.0	
10257-CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	X	0.63	56.72	1.58	3.98	65.0	± 9.6 %
		Y	1.50	60.62	6.80		65.0	
		Z	1.77	61.47	8.06		65.0	
10258-CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	X	0.75	60.00	4.13	3.98	65.0	± 9.6 %
		Y	1.38	61.96	8.52		65.0	
		Z	1.52	62.42	9.24		65.0	
10259-CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	X	1.62	61.68	8.48	3.98	65.0	± 9.6 %
		Y	3.35	69.89	15.82		65.0	
		Z	3.28	68.97	15.69		65.0	
10260-CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	X	1.65	61.61	8.42	3.98	65.0	± 9.6 %
		Y	3.36	69.55	15.64		65.0	
		Z	3.31	68.75	15.57		65.0	
10261-CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	X	1.63	64.06	10.69	3.98	65.0	± 9.6 %
		Y	4.19	76.83	19.42		65.0	
		Z	3.63	73.87	18.36		65.0	
10262-CAD	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	X	2.73	67.47	14.17	3.98	65.0	± 9.6 %
		Y	4.22	73.47	19.30		65.0	
		Z	4.00	71.83	18.72		65.0	
10263-CAD	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	X	2.46	65.13	12.47	3.98	65.0	± 9.6 %
		Y	3.85	70.66	17.56		65.0	
		Z	3.77	69.62	17.25		65.0	
10264-CAD	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	X	2.78	71.03	16.25	3.98	65.0	± 9.6 %
		Y	4.91	79.23	21.63		65.0	
		Z	4.25	75.88	20.29		65.0	
10265-CAD	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	X	3.31	68.31	16.16	3.98	65.0	± 9.6 %
		Y	4.23	70.96	18.67		65.0	
		Z	4.14	69.89	18.23		65.0	
10266-CAD	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	X	3.64	69.75	17.27	3.98	65.0	± 9.6 %
		Y	4.61	72.28	19.66		65.0	
		Z	4.48	71.09	19.18		65.0	
10267-CAD	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	X	3.65	73.23	18.74	3.98	65.0	± 9.6 %
		Y	4.96	76.74	21.09		65.0	
		Z	4.55	74.35	20.04		65.0	
10268-CAD	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	X	4.08	69.60	17.97	3.98	65.0	± 9.6 %
		Y	4.89	71.20	19.41		65.0	
		Z	4.81	70.25	18.99		65.0	
10269-CAD	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	X	4.15	69.51	17.90	3.98	65.0	± 9.6 %
		Y	4.93	70.92	19.29		65.0	
		Z	4.85	69.98	18.89		65.0	
10270-CAD	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	X	4.11	72.44	19.03	3.98	65.0	± 9.6 %
		Y	5.01	74.05	20.18		65.0	
		Z	4.76	72.38	19.41		65.0	

10274-CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.10)	X	1.45	63.39	10.22	0.00	150.0	± 9.6 %
		Y	2.58	68.99	15.79		150.0	
		Z	2.26	65.99	14.08		150.0	
10275-CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.4)	X	1.00	66.09	12.05	0.00	150.0	± 9.6 %
		Y	1.98	74.04	18.23		150.0	
		Z	1.30	66.38	13.95		150.0	
10277-CAA	PHS (QPSK)	X	4.43	65.00	5.66	9.03	50.0	± 9.6 %
		Y	1.25	57.54	2.57		50.0	
		Z	1.34	58.35	3.69		50.0	
10278-CAA	PHS (QPSK, BW 884MHz, Rolloff 0.5)	X	1.39	58.79	4.19	9.03	50.0	± 9.6 %
		Y	2.00	62.01	7.70		50.0	
		Z	2.27	62.99	8.81		50.0	
10279-CAA	PHS (QPSK, BW 884MHz, Rolloff 0.38)	X	1.42	58.87	4.28	9.03	50.0	± 9.6 %
		Y	2.04	62.14	7.84		50.0	
		Z	2.32	63.16	8.96		50.0	
10290-AAB	CDMA2000, RC1, SO55, Full Rate	X	24.89	264.54	21.43	0.00	150.0	± 9.6 %
		Y	0.75	64.32	9.28		150.0	
		Z	0.55	60.53	6.84		150.0	
10291-AAB	CDMA2000, RC3, SO55, Full Rate	X	8.17	257.05	37.61	0.00	150.0	± 9.6 %
		Y	0.54	64.12	8.98		150.0	
		Z	0.37	60.00	6.07		150.0	
10292-AAB	CDMA2000, RC3, SO32, Full Rate	X	2.31	326.58	8.83	0.00	150.0	± 9.6 %
		Y	100.00	114.29	23.68		150.0	
		Z	0.37	60.29	6.50		150.0	
10293-AAB	CDMA2000, RC3, SO3, Full Rate	X	2.41	304.08	37.98	0.00	150.0	± 9.6 %
		Y	100.00	121.87	26.96		150.0	
		Z	0.47	62.33	8.10		150.0	
10295-AAB	CDMA2000, RC1, SO3, 1/8th Rate 25 fr.	X	11.16	76.14	13.68	9.03	50.0	± 9.6 %
		Y	24.30	94.04	23.00		50.0	
		Z	21.29	93.19	23.41		50.0	
10297-AAC	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	X	2.00	69.33	16.06	0.00	150.0	± 9.6 %
		Y	2.80	72.57	18.31		150.0	
		Z	2.31	68.33	15.80		150.0	
10298-AAC	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	X	8.49	243.95	30.00	0.00	150.0	± 9.6 %
		Y	0.98	64.80	10.42		150.0	
		Z	0.78	61.52	8.38		150.0	
10299-AAC	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	X	12.17	331.10	45.12	0.00	150.0	± 9.6 %
		Y	0.99	61.11	7.01		150.0	
		Z	1.06	61.03	7.46		150.0	
10300-AAC	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	X	10.15	348.38	28.30	0.00	150.0	± 9.6 %
		Y	0.82	59.43	5.36		150.0	
		Z	0.95	60.00	6.23		150.0	
10301-AAA	IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC)	X	3.30	64.31	15.03	4.17	50.0	± 9.6 %
		Y	4.07	65.29	17.00		50.0	
		Z	4.16	64.88	16.72		50.0	
10302-AAA	IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC, 3 CTRL symbols)	X	3.81	65.12	15.99	4.96	50.0	± 9.6 %
		Y	4.52	65.76	17.66		50.0	
		Z	4.66	65.71	17.60		50.0	

10303-AAA	IEEE 802.16e WiMAX (31:15, 5ms, 10MHz, 64QAM, PUSC)	X	3.64	65.07	15.71	4.96	50.0	± 9.6 %
		Y	4.29	65.44	17.44		50.0	
		Z	4.42	65.39	17.39		50.0	
10304-AAA	IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, 64QAM, PUSC)	X	3.46	64.98	15.29	4.17	50.0	± 9.6 %
		Y	4.15	65.58	17.11		50.0	
		Z	4.21	64.95	16.68		50.0	
10305-AAA	IEEE 802.16e WiMAX (31:15, 10ms, 10MHz, 64QAM, PUSC, 15 symbols)	X	2.52	62.00	12.12	6.02	35.0	± 9.6 %
		Y	3.52	65.78	17.45		35.0	
		Z	3.76	66.23	17.67		35.0	
10306-AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 64QAM, PUSC, 18 symbols)	X	3.12	63.64	14.29	6.02	35.0	± 9.6 %
		Y	3.94	65.53	17.75		35.0	
		Z	4.14	65.73	17.85		35.0	
10307-AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, PUSC, 18 symbols)	X	3.01	63.42	14.02	6.02	35.0	± 9.6 %
		Y	3.81	65.44	17.59		35.0	
		Z	4.01	65.68	17.70		35.0	
10308-AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, PUSC)	X	3.02	63.75	14.28	6.02	35.0	± 9.6 %
		Y	3.78	65.60	17.74		35.0	
		Z	3.98	65.86	17.83		35.0	
10309-AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, AMC 2x3, 18 symbols)	X	3.17	63.94	14.58	6.02	35.0	± 9.6 %
		Y	3.94	65.55	17.83		35.0	
		Z	4.14	65.77	17.93		35.0	
10310-AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, AMC 2x3, 18 symbols)	X	3.11	63.82	14.42	6.02	35.0	± 9.6 %
		Y	3.89	65.58	17.76		35.0	
		Z	4.09	65.78	17.84		35.0	
10311-AAC	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	X	2.31	68.15	15.92	0.00	150.0	± 9.6 %
		Y	3.15	71.23	17.71		150.0	
		Z	2.66	67.57	15.55		150.0	
10313-AAA	iDEN 1:3	X	1.67	67.67	13.40	6.99	70.0	± 9.6 %
		Y	2.25	71.10	15.22		70.0	
		Z	1.73	67.06	13.24		70.0	
10314-AAA	iDEN 1:6	X	6.12	86.17	23.14	10.00	30.0	± 9.6 %
		Y	7.14	89.19	24.60		30.0	
		Z	3.49	76.84	20.05		30.0	
10315-AAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 96pc duty cycle)	X	0.91	63.92	14.34	0.17	150.0	± 9.6 %
		Y	1.09	65.84	16.70		150.0	
		Z	0.93	62.70	14.16		150.0	
10316-AAB	IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 96pc duty cycle)	X	3.71	66.95	15.64	0.17	150.0	± 9.6 %
		Y	4.26	67.26	16.51		150.0	
		Z	4.21	66.40	15.98		150.0	
10317-AAC	IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle)	X	3.71	66.95	15.64	0.17	150.0	± 9.6 %
		Y	4.26	67.26	16.51		150.0	
		Z	4.21	66.40	15.98		150.0	
10400-AAD	IEEE 802.11ac WiFi (20MHz, 64-QAM, 99pc duty cycle)	X	3.67	66.95	15.61	0.00	150.0	± 9.6 %
		Y	4.32	67.59	16.58		150.0	
		Z	4.27	66.67	15.99		150.0	
10401-AAD	IEEE 802.11ac WiFi (40MHz, 64-QAM, 99pc duty cycle)	X	4.49	66.84	16.09	0.00	150.0	± 9.6 %
		Y	5.01	67.23	16.55		150.0	
		Z	4.95	66.47	16.07		150.0	

10402-AAD	IEEE 802.11ac WiFi (80MHz, 64-QAM, 99pc duty cycle)	X	4.90	67.23	16.33	0.00	150.0	± 9.6 %
		Y	5.37	67.75	16.72		150.0	
		Z	5.33	67.10	16.30		150.0	
10403-AAB	CDMA2000 (1xEV-DO, Rev. 0)	X	24.89	264.54	21.43	0.00	115.0	± 9.6 %
		Y	0.75	64.32	9.28		115.0	
		Z	0.55	60.53	6.84		115.0	
10404-AAB	CDMA2000 (1xEV-DO, Rev. A)	X	24.89	264.54	21.43	0.00	115.0	± 9.6 %
		Y	0.75	64.32	9.28		115.0	
		Z	0.55	60.53	6.84		115.0	
10406-AAB	CDMA2000, RC3, SO32, SCH0, Full Rate	X	0.25	60.00	3.04	0.00	100.0	± 9.6 %
		Y	100.00	107.14	22.27		100.0	
		Z	35.03	104.04	23.84		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	1.11	74.02	16.29	3.23	80.0	± 9.6 %
		Y	100.00	123.32	29.06		80.0	
		Z	3.02	80.23	18.57		80.0	
10415-AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle)	X	0.88	63.60	14.08	0.00	150.0	± 9.6 %
		Y	1.05	65.44	16.40		150.0	
		Z	0.90	62.27	13.77		150.0	
10416-AAA	IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 99pc duty cycle)	X	3.72	67.22	15.78	0.00	150.0	± 9.6 %
		Y	4.26	67.46	16.59		150.0	
		Z	4.18	66.47	15.97		150.0	
10417-AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 99pc duty cycle)	X	3.72	67.22	15.78	0.00	150.0	± 9.6 %
		Y	4.26	67.46	16.59		150.0	
		Z	4.18	66.47	15.97		150.0	
10418-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Long preamble)	X	3.67	67.37	15.86	0.00	150.0	± 9.6 %
		Y	4.26	67.73	16.69		150.0	
		Z	4.18	66.68	16.03		150.0	
10419-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Short preamble)	X	3.70	67.32	15.83	0.00	150.0	± 9.6 %
		Y	4.28	67.63	16.66		150.0	
		Z	4.19	66.61	16.02		150.0	
10422-AAB	IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK)	X	3.79	67.23	15.85	0.00	150.0	± 9.6 %
		Y	4.37	67.55	16.64		150.0	
		Z	4.30	66.59	16.04		150.0	
10423-AAB	IEEE 802.11n (HT Greenfield, 43.3 Mbps, 16-QAM)	X	3.85	67.43	15.91	0.00	150.0	± 9.6 %
		Y	4.48	67.79	16.72		150.0	
		Z	4.41	66.83	16.12		150.0	
10424-AAB	IEEE 802.11n (HT Greenfield, 72.2 Mbps, 64-QAM)	X	3.80	67.32	15.87	0.00	150.0	± 9.6 %
		Y	4.41	67.73	16.70		150.0	
		Z	4.34	66.77	16.09		150.0	
10425-AAB	IEEE 802.11n (HT Greenfield, 15 Mbps, BPSK)	X	4.52	67.29	16.36	0.00	150.0	± 9.6 %
		Y	5.01	67.60	16.77		150.0	
		Z	5.00	66.98	16.36		150.0	
10426-AAB	IEEE 802.11n (HT Greenfield, 90 Mbps, 16-QAM)	X	4.54	67.39	16.40	0.00	150.0	± 9.6 %
		Y	5.06	67.79	16.86		150.0	
		Z	5.04	67.17	16.45		150.0	

10427-AAB	IEEE 802.11n (HT Greenfield, 150 Mbps, 64-QAM)	X	4.54	67.34	16.38	0.00	150.0	± 9.6 %
		Y	5.02	67.56	16.74		150.0	
		Z	4.99	66.89	16.30		150.0	
10430-AAB	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1)	X	2.54	67.86	12.99	0.00	150.0	± 9.6 %
		Y	5.20	77.46	20.26		150.0	
		Z	4.04	72.15	17.87		150.0	
10431-AAB	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1)	X	3.04	66.93	14.37	0.00	150.0	± 9.6 %
		Y	3.88	68.36	16.49		150.0	
		Z	3.75	66.95	15.66		150.0	
10432-AAB	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1)	X	3.52	67.40	15.50	0.00	150.0	± 9.6 %
		Y	4.19	67.98	16.66		150.0	
		Z	4.09	66.85	15.96		150.0	
10433-AAB	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1)	X	3.82	67.39	15.92	0.00	150.0	± 9.6 %
		Y	4.43	67.78	16.72		150.0	
		Z	4.36	66.81	16.12		150.0	
10434-AAA	W-CDMA (BS Test Model 1, 64 DPCH)	X	1.61	62.74	9.15	0.00	150.0	± 9.6 %
		Y	5.68	78.98	20.05		150.0	
		Z	3.98	72.24	17.17		150.0	
10435-AAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	1.04	73.03	15.81	3.23	80.0	± 9.6 %
		Y	100.00	122.83	28.83		80.0	
		Z	2.85	79.40	18.23		80.0	
10447-AAB	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	X	1.63	62.08	8.98	0.00	150.0	± 9.6 %
		Y	3.10	68.15	14.99		150.0	
		Z	2.89	66.18	13.94		150.0	
10448-AAB	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)	X	2.97	66.84	14.33	0.00	150.0	± 9.6 %
		Y	3.76	68.19	16.40		150.0	
		Z	3.63	66.75	15.54		150.0	
10449-AAB	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)	X	3.43	67.31	15.47	0.00	150.0	± 9.6 %
		Y	4.05	67.84	16.58		150.0	
		Z	3.95	66.68	15.86		150.0	
10450-AAB	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	X	3.70	67.17	15.79	0.00	150.0	± 9.6 %
		Y	4.26	67.58	16.60		150.0	
		Z	4.17	66.58	15.96		150.0	
10451-AAA	W-CDMA (BS Test Model 1, 64 DPCH, Clipping 44%)	X	1.22	60.20	6.79	0.00	150.0	± 9.6 %
		Y	2.78	67.25	13.76		150.0	
		Z	2.61	65.48	12.83		150.0	
10456-AAB	IEEE 802.11ac WiFi (160MHz, 64-QAM, 99pc duty cycle)	X	5.60	67.64	16.61	0.00	150.0	± 9.6 %
		Y	6.26	68.94	17.34		150.0	
		Z	6.00	67.69	16.64		150.0	
10457-AAA	UMTS-FDD (DC-HSDPA)	X	3.27	66.46	15.58	0.00	150.0	± 9.6 %
		Y	3.68	66.34	16.37		150.0	
		Z	3.59	65.30	15.71		150.0	
10458-AAA	CDMA2000 (1xEV-DO, Rev. B, 2 carriers)	X	1.12	60.00	5.83	0.00	150.0	± 9.6 %
		Y	3.56	71.73	16.05		150.0	
		Z	3.03	68.42	14.58		150.0	
10459-AAA	CDMA2000 (1xEV-DO, Rev. B, 3 carriers)	X	2.37	61.19	9.10	0.00	150.0	± 9.6 %
		Y	4.86	70.51	17.92		150.0	
		Z	4.63	68.94	17.35		150.0	

10460-AAA	UMTS-FDD (WCDMA, AMR)	X	0.77	69.97	14.37	0.00	150.0	± 9.6 %
		Y	1.81	83.33	22.94		150.0	
		Z	0.70	66.15	13.99		150.0	
10461-AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	1.10	74.88	17.91	3.29	80.0	± 9.6 %
		Y	100.00	130.63	32.41		80.0	
		Z	2.28	78.08	18.84		80.0	
10462-AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	5.93	230.19	29.26	3.23	80.0	± 9.6 %
		Y	0.59	60.00	5.55		80.0	
		Z	0.64	60.00	7.06		80.0	
10463-AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	3.96	233.23	22.29	3.23	80.0	± 9.6 %
		Y	23.26	230.85	21.52		80.0	
		Z	0.66	60.00	6.36		80.0	
10464-AAA	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	0.60	67.04	13.62	3.23	80.0	± 9.6 %
		Y	100.00	124.51	29.50		80.0	
		Z	1.46	72.00	15.83		80.0	
10465-AAA	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	6.88	228.32	21.10	3.23	80.0	± 9.6 %
		Y	0.24	55.14	2.95		80.0	
		Z	0.64	60.00	7.00		80.0	
10466-AAA	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	4.90	230.59	11.80	3.23	80.0	± 9.6 %
		Y	24.92	227.37	29.84		80.0	
		Z	0.66	60.00	6.32		80.0	
10467-AAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	0.65	68.17	14.23	3.23	80.0	± 9.6 %
		Y	100.00	125.25	29.82		80.0	
		Z	1.58	73.06	16.29		80.0	
10468-AAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	6.75	228.62	22.92	3.23	80.0	± 9.6 %
		Y	0.24	55.19	3.02		80.0	
		Z	0.64	60.00	7.02		80.0	
10469-AAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	4.89	230.67	12.36	3.23	80.0	± 9.6 %
		Y	24.62	227.52	30.16		80.0	
		Z	0.66	60.00	6.32		80.0	
10470-AAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	0.65	68.21	14.25	3.23	80.0	± 9.6 %
		Y	100.00	125.26	29.81		80.0	
		Z	1.58	73.08	16.29		80.0	
10471-AAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	6.71	228.68	22.79	3.23	80.0	± 9.6 %
		Y	0.24	55.16	2.98		80.0	
		Z	0.64	60.00	7.01		80.0	
10472-AAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	4.83	230.72	12.16	3.23	80.0	± 9.6 %
		Y	24.39	227.78	30.29		80.0	
		Z	0.66	60.00	6.30		80.0	
10473-AAC	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	0.65	68.12	14.21	3.23	80.0	± 9.6 %
		Y	100.00	125.20	29.78		80.0	
		Z	1.57	73.01	16.25		80.0	
10474-AAC	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	6.67	228.73	22.56	3.23	80.0	± 9.6 %
		Y	0.59	60.00	5.48		80.0	
		Z	0.64	60.00	7.01		80.0	
10475-AAC	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	4.82	230.67	11.80	3.23	80.0	± 9.6 %
		Y	24.34	227.67	30.21		80.0	
		Z	0.66	60.00	6.30		80.0	

10477-AAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	6.74	228.54	21.21	3.23	80.0	± 9.6 %
		Y	0.23	55.08	2.89		80.0	
		Z	0.64	60.00	6.98		80.0	
10478-AAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	4.84	230.57	11.22	3.23	80.0	± 9.6 %
		Y	24.37	227.68	30.04		80.0	
		Z	0.66	60.00	6.29		80.0	
10479-AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	3.02	84.98	21.47	3.23	80.0	± 9.6 %
		Y	100.00	125.48	31.72		80.0	
		Z	5.02	83.00	20.76		80.0	
10480-AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	0.47	60.00	6.63	3.23	80.0	± 9.6 %
		Y	1.92	67.54	11.86		80.0	
		Z	1.73	65.44	11.67		80.0	
10481-AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	0.22	55.04	3.12	3.23	80.0	± 9.6 %
		Y	1.09	61.90	8.89		80.0	
		Z	1.31	62.31	9.77		80.0	
10482-AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	53.67	208.87	10.65	2.23	80.0	± 9.6 %
		Y	1.05	62.14	9.95		80.0	
		Z	0.98	60.56	9.26		80.0	
10483-AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	64.01	327.64	15.81	2.23	80.0	± 9.6 %
		Y	1.10	60.00	7.60		80.0	
		Z	1.21	60.00	8.23		80.0	
10484-AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	72.15	316.72	7.23	2.23	80.0	± 9.6 %
		Y	1.13	60.00	7.59		80.0	
		Z	1.24	60.00	8.22		80.0	
10485-AAC	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	0.75	60.00	6.88	2.23	80.0	± 9.6 %
		Y	2.48	72.41	16.54		80.0	
		Z	1.64	65.93	13.71		80.0	
10486-AAC	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	1.01	60.00	5.53	2.23	80.0	± 9.6 %
		Y	1.68	63.79	11.57		80.0	
		Z	1.58	62.22	10.94		80.0	
10487-AAC	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	1.04	60.00	5.50	2.23	80.0	± 9.6 %
		Y	1.66	63.28	11.27		80.0	
		Z	1.59	61.98	10.79		80.0	
10488-AAC	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	1.44	64.72	13.06	2.23	80.0	± 9.6 %
		Y	2.82	72.60	18.56		80.0	
		Z	2.27	68.12	16.38		80.0	
10489-AAC	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	1.47	61.87	10.73	2.23	80.0	± 9.6 %
		Y	2.82	68.91	16.54		80.0	
		Z	2.48	66.05	15.16		80.0	
10490-AAC	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	1.47	61.55	10.50	2.23	80.0	± 9.6 %
		Y	2.86	68.61	16.37		80.0	
		Z	2.55	65.97	15.11		80.0	
10491-AAC	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	1.98	66.25	14.91	2.23	80.0	± 9.6 %
		Y	2.98	70.44	18.02		80.0	
		Z	2.64	67.54	16.51		80.0	
10492-AAC	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	2.19	64.63	13.64	2.23	80.0	± 9.6 %
		Y	3.11	67.88	16.76		80.0	
		Z	2.90	65.95	15.77		80.0	