PCTEST*

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NEAR-FIELD POWER DENSITY EVALUATION REPORT

Applicant Name: LG Electronics U.S.A., Inc. 1000 Sylvan Avenue Englewood Cliffs, NJ 07632 United States Date of Testing: 03/21/19 - 05/01/19 Test Site/Location: PCTEST Lab, Columbia, MD, USA Document Serial No.: 1M1903070034-15-R2.ZNF

FCC ID: ZNFV450VM

APPLICANT: LG ELECTRONICS U.S.A., INC.

DUT Type: Portable Handset

Application Type: Class II Permissive Change

FCC Rule Part(s): CFR §2.1093 Model: LM-V450VM

Additional Model(s): LMV450VM, V450VM
Test Device Serial No.: Pre-production: 05961

Band & Mode	Tx Frequency	Power Density
	(MHz)	W/m²
5G NR - n261	27500 - 28350	4.34
5G NR - n260	5G NR - n260 37000 - 40000 4.7	
Total Exposure Ratio		0.94
	PASS	

Note: The above Power Density (S) values are maximum MIMO values. NR Band n261 was evaluated using MIMO polarization (both H+V components active). NR Band n260 used the sum of SISO H polarization and SISO V polarization individual evaluations.

Note: This revised Test Report (S/N: 1M1903070034-15-R2.ZNF) supersedes and replaces the previously issued test report on the same subject device for the same type of testing as indicated. Please discard or destroy the previously issued test report(s) and dispose of it accordingly.

I attest to the accuracy of data. All measurements reported herein were performed by me or were made under my supervision and are correct to the best of my knowledge and belief. I assume full responsibility for the completeness of these measurements and vouch for the qualifications of all persons taking them. Test results reported herein relate only to the item(s) tested.

Randy Ortanez President





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1 DEVICE UNDER TEST

1.1 Device Overview

NR Operations Information						
Form Factor			Porta	ıble Handset		
Frequency Range of each NR transmission band			NR	Band n261		
			NR	Band n260		
Channel Bandwidths			NR Band n26	61: 50MHz, 100MHz		
			NR Band n26	60: 50MHz, 100MHz		
Channel Numbers and Frequencies		Low Mid High			High	
	Channel	Frequency (GHz)	Channel	Frequency (GHz)	Channel	Frequency (GHz)
NR Band n261: 50MHz BW	2071413	27.53484	2077867	27.92208	2084491	28.31952
NR Band n261: 100MHz BW	2071821	27.55932	2077891	27.92352	2084035	28.29216
NR Band n260: 50MHz BW	2229621	37.02732	2254123	38.49744	2278603	39.96624
NR Band n260: 100MHz BW	2230029	37.05180	2254147	38.49888	2278331	39.94992
Subcarrier Spacing (kHz)				120		
Total Number of Supported Uplink CCs (SISO)		4				
Total Number of Supported Uplink CCs (MIMO)		4				
Modulations Supported in UL		CP-OFDM-QPSK, CP-OFDM-16QAM, CP-OFDM-64QAM				
LTE Anchor Bands			LTE Ba	nd 13/5/4/66/2		

1.2 Time-Averaging and Input Power Specifications

This device uses Qualcomm Smart Transmit for 5G NR operations. Per FCC Guidance, power density compliance for 5G mmWave was assessed at the maximum time averaged power.

All power density measurements for this device were performed at the input.power.limit below. Input power is per antenna element and polarization for each antenna module. These levels represent the maximum time averaged input power available to each antenna module.

Table 1-1 Input.Power.Limit

Mode/Band	Antenna	Input Power (dBm) SISO	Input Power (dBm) MIMO
5G NR n261	QTM-0	-3	-3
3G NR 11201	QTM-1	-3	-3
5G NR n260	QTM-0	-0.2	-0.2
OG NK 11200	QTM-1	-0.2	-0.2

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1.3 **DUT Antenna Locations**

The device has 2 antenna arrays (QTM-0 and QTM-1) Particular DUT edges were not required to be evaluated for power density if the edges were greater than 2.5 cm from the transmitting antenna according to FCC KDB Publication 941225 D06v02r01 Section III and FCC KDB Publication 648474 D04v01r03. The distances between the transmit antennas and the edges of the device are included in the filing.

> Table 1-2 **Device Edges/Sides for PD Testing**

Antenna	Back	Front	Тор	Bottom	Right	Left
QTM-0	YES	YES	YES	NO	NO	YES
QTM-1	YES	YES	YES	NO	YES	NO

1.4 **Simultaneous Transmission Capabilities**

According to FCC KDB Publication 447498 D01v06, transmitters are considered to be operating simultaneously when there is overlapping transmission, with the exception of transmissions during network hand-offs with maximum hand-off duration less than 30 seconds.

This device contains multiple transmitters that may operate simultaneously, and therefore requires a simultaneous transmission analysis according to FCC KDB Publication 447498 D01v06 4.3.2 procedures.

> Table 1-3 Simultaneous Transmission Scenarios with NR

No.	Capable Transmit Configuration	Head	Body-Worn Accessory	Wireless Router	Phablet	Notes
1	LTE + 2.4 GHz WI-FI + 5G NR	Yes	Yes	Yes	Yes	
2	LTE + 5 GHz WI-FI + 5G NR	Yes	Yes	Yes	Yes	
3	LTE + 2.4 GHz Bluetooth + 5G NR	Yes^	Yes	Yes^	Yes	^ Bluetooth Tethering is considered
4	LTE + 2.4 GHz WI-FI MIMO + 5G NR	Yes	Yes	Yes	Yes	
5	LTE + 5 GHz WI-FI MIMO + 5G NR	Yes	Yes	Yes	Yes	
6	LTE + 2.4 GHz Bluetooth + 5 GHz WI-FI + 5G NR	Yes^	Yes	Yes^	Yes	^ Bluetooth Tethering is considered
7	LTE + 2.4 GHz Bluetooth + 5 GHz WI-FI MIMO + 5G NR	Yes^	Yes	Yes^	Yes	^ Bluetooth Tethering is considered
8	LTE + 2.4 GHz WI-FI Ant 1 + 5 GHz WI-FI Ant 2 + 5G NR	Yes	Yes	Yes	Yes	
9	LTE + 5G NR	Yes	Yes	N/A	Yes	

- 1. NR antenna arrays cannot transmit simultaneously.
- 2. Simultaneous 5G NR + LTE operations are possible only with LTE B13/5/4/66/2.
- 3. 2.4 GHz WLAN and 2.4 GHz Bluetooth share the same antenna path and cannot transmit simultaneously themselves.
- 4. All non-5G NR licensed modes share the same antenna path and cannot transmit simultaneously.
- 5. 5G NR operations are limited to non-standalone (EN-DC) operations only.

1.5 **Guidance Applied**

- November 2017 & October 2018 TCBC Workshop Notes
- SPEAG DASY6 System Handbook (February 2019)
- IEC Draft TR 63170: 2018
- FCC KDB 865664 D02 v01r04
- FCC KDB 447498 D01 v02r01

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MEASUREMENT SYSTEM

2.1 **Measurement Setup**

Power Density measurements for mmWave frequencies were performed using the DASY6 with cDASY6 5G module. The DASY6 is made by Schmid & Partner Engineering AG (SPEAG) in Zurich, Switzerland and consists of a high precision robotics system (Staubli), robot controller, desktop computer, near-field probe, probe alignment sensor, and the 5G phantom. The robot is a six-axis industrial robot, performing precise movements to position the probe to the location (points) of maximum electromagnetic field (EMF).

2.2 SPEAG EUmmWV3 Probe / E-Field 5G Probe

The EUmmWV3 probe consists of two dipoles optimally arranged to obtain pseudo-vector information.

Frequency Range	750 MHz – 110 GHz
Dynamic Range	< 20 V/m - 10,000 V/m with PRE-10 (min < 50 V/m - 3,000 V/m)
Position Precision	< 0.2 mm (cDASY6)
Dimensions	Probe Overall Length: 320 mm Probe Body Diameter: 8 mm Probe Tip Length: 23 mm Probe Tip Diameter: Encapsulation 8 mm (Internal sensor < 1mm) Distance from Probe Tip to Sensor X Calibration Point: 1.5 mm Distance from Probe Tip to Sensor Y Calibration Point: 1.5 mm
Applications	E-field measurements of 5G devices and other mm-wave transmitters operating above 10 GHz in < 2 mm distance from device (free-space) Power density, H-field and far-field analysis using total field reconstruction
Compatibility	cDASY6 + 5G-Module measurement SW1.6.0.12 and visualization SW1.6.2.3

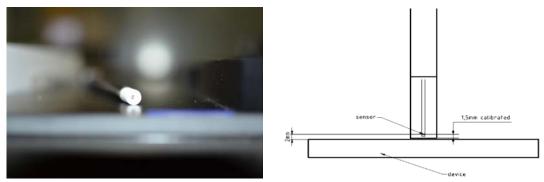


Figure 3-1 **EUmmWV3 Probe**

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2.3 Power Density Assessment Based on E-Field Measurements

Within a short distance from the transmitting source, power density was determined based on both electric and magnetic fields. Generally, the magnitude and phase of two components of either the E-field or H-field were needed on a sufficiently large surface to fully characterize the total E-field and H-field distributions. Nevertheless, solutions based on direct measurement of E-field and H-field can be used to compute power density. The general measurement approach used for this device was:

- The local E field on the measurement surface was measured at a reference location where the field is well above the noise level. This reference level was used at the end of this procedure to assess output power drift of the DUT during the measurement.
- b) The electric field on the measurement surface was scanned. Measurements are conducted according to the instructions provided by the measurement system manufacturer. Measurement spatial resolution can depend on the measured field characteristic and measurement methodology used by the system. The planar scan step size was configured at $\lambda/4$.
- c) For cDASY6, H-field was calculated from the measured E-field using a reconstruction algorithm. As the power density calculation requires knowledge of both amplitude and phase, reconstruction algorithms can also be used to obtain field information from the measured E-field data (e.g. the phase from the amplitude if only the amplitude is measured). H-field and phase data was reconstructed from repeated measurements (three per measurement point) on two measurement planes separated by $\lambda/4$.
- d) The total spatial-average power density distribution on the evaluation surface is determined per the below equation. The spatial averaging area, A, is specified by the applicable exposure limits or regulatory requirements. A circular shape was used.

$$PDavg = \frac{1}{2A} \int_{A} |Re(ExH)| \cdot ds$$

- e) The maximum spatial-average on the evaluation surface is the final quantity to determine compliance against applicable limits.
- The local E field reference value, at the same location as step 2, was re-measured after the scan was complete to calculate the power drift. If the drift deviated by more than 5%, the power density test and drift measurements were repeated.

2.4 **Reconstruction Algorithm**

Computation of the power density in general requires measurement information from the both E-field and H-field amplitudes and phases in the plane of incidence. Reconstruction of these quantities from pseudo-vector E-field measurements is feasible according to the manufacturer, as they are determined via Maxwell's equations. As such, the SPEAG reconstruction approach was based on the Gerchberg-Saxton algorithm, which benefits from the availability of the E-field polarization ellipse information obtained with the EUmmWV3 probe.

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3 RF EXPOSURE LIMITS FOR POWER DENSITY

3.1 Uncontrolled Environment

UNCONTROLLED ENVIRONMENTS are defined as locations where there is the exposure of individuals who have no knowledge or control of their exposure. The general population/uncontrolled exposure limits are applicable to situations in which the general public may be exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure. Members of the general public would come under this category when exposure is not employment-related; for example, in the case of a wireless transmitter that exposes persons in its vicinity.

3.2 Controlled Environment

CONTROLLED ENVIRONMENTS are defined as locations where there is exposure that may be incurred by persons who are aware of the potential for exposure, (i.e. as a result of employment or occupation). In general, occupational/controlled exposure limits are applicable to situations in which persons are exposed as a consequence of their employment, who have been made fully aware of the potential for exposure and can exercise control over their exposure. This exposure category is also applicable when the exposure is of a transient nature due to incidental passage through a location where the exposure levels may be higher than the general population/uncontrolled limits, but the exposed person is fully aware of the potential for exposure and can exercise control over his or her exposure by leaving the area or by some other appropriate means.

3.3 RF Exposure Limits for Frequencies Above 6 GHz

Per §1.1310, (d)(3), the MPE limits are applied for frequencies above 6 GHz. Power Density is expressed in units of W/m² or mW/cm².

Power density was spatially averaged over a circular area of 4 cm² per interim FCC Guidance for near-field power density evaluations per October 2018 TCB Workshop notes.

Table 3-1
Human Exposure Limits Specified in FCC 47 CFR §1.1310

Human Exposure to Radiofrequency (RF) Radiation Limits												
Frequency Range [MHz]	Power Density [mW/cm²]	Average Time [Minutes]										
(A) Limits For Oc	ccupational / Controlled Environ	ments (f = frequency)										
1,500 – 100,000	5.0	6										
(B) Limits For Genera	al Population / Uncontrolled Env	rironments (f = frequency)										
1,500 – 100,000	1.0	30										

Note: 1.0 mW/cm² is 10 W/m²

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4 SYSTEM VERIFICATION

4.1 Test System Verification

The system was verified to be within ±0.66 dB of the power density targets on the calibration certificate according to the test system specification in the user's manual and calibration facility recommendation. The 0.66 dB deviation threshold represents the expanded uncertainty for system performance checks using SPEAG's mmWave verification sources. The same spatial resolution and measurement region used in the source calibration was applied during the system check.

The measured power density distribution of verification source was also confirmed through visual inspection to have no noticeable differences, both spatially (shape) and numerically (level) from the distribution provided by the manufacturer, per November 2017 TCBC Workshop Notes.

Table 4-1 System Check Results

				Syst	em Verific	ation				
Syst.	Freq.	Date	Source	Probe		mal S ver 4cm²)	Deviation		TAL S ver 4cm²)	Deviation
-	(GHz)	2 333	SN	SN	Meas.	Target	(dB)	Meas.	Target	(dB)
N	30	03/21/2019	1035	9389	37.5	34.8	0.32	38.0	35.1	0.34
N	30	03/22/2019	1035	9389	33.1	34.8	-0.22	33.6	35.1	-0.19
N	30	04/02/2019	1035	9389	37.1	34.8	0.28	37.8	35.1	0.32
N	30	04/03/2019	1035	9389	36.5	34.8	0.21	37.1	35.1	0.24
N	30	04/05/2019	1035	9389	36.4	34.8	0.20	37.1	35.1	0.24
N	30	04/07/2019	1035	9389	36.5	34.8	0.21	37.1	35.1	0.24
N	30	04/09/2019	1035	9389	37.3	34.8	0.30	37.8	35.1	0.32
N	30	04/19/2019	1002	9389	35.6	35.6	0.00	36.1	36.2	-0.01
N	30	04/21/2019	1002	9389	35.3	35.6	-0.04	35.8	36.2	-0.05
N	30	04/22/2019	1002	9389	35.1	35.6	-0.06	35.6	36.2	-0.07
М	30	04/23/2019	1015	9407	35.0	35.5	-0.06	35.5	36.1	-0.07
N	30	04/23/2019	1002	9389	35.0	35.6	-0.07	35.6	36.2	-0.07
N	30	04/24/2019	1002	9389	32.4	35.6	-0.41	33.0	36.2	-0.40
М	30	04/25/2019	1015	9407	35.1	35.5	-0.05	35.5	36.1	-0.07
N	30	04/26/2019	1002	9389	33.0	35.6	-0.33	33.6	36.2	-0.32
М	30	04/29/2019	1015	9407	35.0	35.5	-0.06	35.4	36.1	-0.09
N	30	04/29/2019	1002	9389	33.9	35.6	-0.21	34.4	36.2	-0.22
N	30	04/30/2019	1002	9389	33.2	35.6	-0.30	33.8	36.2	-0.30
N	30	05/01/2019	1002	9389	33.5	35.6	-0.26	33.9	36.2	-0.29

Note: A **10 mm distance spacing** was used from the reference horn antenna aperture to the probe element. This includes 4.45 mm from the reference antenna horn aperture to the surface of the verification source plus 5.55 mm from the surface to the probe. The SPEAG software requires a setting of "5.55 mm" for the correct set up.

Figure 4-1
System Verification Setup Photo

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5.1 Power Density Results

Table 5-1
NR Band n261 QTM-0 Test Results (CP-OFDM)

					<u> </u>				RESULT			- III.)			
FREQUE	ENCY	Beam ID1	Beam ID2	# CC	BW	Modulation	RB Size	RB Offset	Power Drift	Evaluation Distance	DUT surface	DUT S/N	Normal S	Total S	Plot #
MHz	Ch.	Н	V		MHz				dB				W/m²	W/m²	
27559.3	Low	19	146	1	100	QPSK	1	0	-0.03	2 mm	Left	05961	3.370	3.910	
27923.5	Mid	19	146	1	100	QPSK	1	0	-0.15	2 mm	Left	05961	2.560	3.040	
28292.2	High	19	146	1	100	QPSK	1	0	0.02	2 mm	Left	05961	2.490	2.990	
27559.3	Low	19	146	1	100	16QAM	1	0	0.1	2 mm	Left	05961	2.560	2.950	
27559.3	Low	19	146	1	100	64QAM	1	0	-0.1	2 mm	Left	05961	3.630	4.340	A1
27559.3		19	146		100		1	0							
27659.3		19	146		100		1	0							
27759.3	27759.3 Low 19 146 4 100 64QAM 1						0	-0.17	2 mm	Left	05961	1.610	1.900		
27859.3		19	146		100		1	0							
27534.8	Low	19	146	1	50	64QAM	1	0	0.06	2 mm	Left	05961	2.660	3.230	
27559.3	Low	19	146	1	100	64QAM	33	0	-0.18	2 mm	Left	05961	2.520	2.960	
27559.3	Low	19	146	1	100	64QAM	66	0	-0.16	2 mm	Left	05961	2.510	3.070	
27559.3	Low	27	155	1	100	QPSK	1	0	-0.10	2 mm	Left	05961	3.370	3.830	
27923.5	Mid	27	155	1	100	QPSK	1	0	-0.19	2 mm	Left	05961	2.870	3.370	
28292.2	High	27	155	1	100	QPSK	1	0	-0.08	2 mm	Left	05961	2.890	3.310	
27559.3	Low	27	155	1	100	16QAM	1	0	-0.05	2 mm	Left	05961	1.720	1.960	
27559.3	Low	27	155	1	100	64QAM	1	0	-0.13	2 mm	Left	05961	3.310	3.840	
27559.3		27	155		100		1	0							
27659.3	ĺ	27	155	١.	100		1	0	0.07	0	1.6	05004	4.000	4.000	
27759.3	Low	27	155	4	100	64QAM	1	0	-0.07	2 mm	Left	05961	1.660	1.890	
27859.3		27	155		100	+	1	0							
27534.8	Low	27	155	1	50	64QAM	1	0	-0.14	2 mm	Left	05961	2.810	3.270	
27559.3	Low	27	155	1	100	64QAM	33	0	-0.15	2 mm	Left	05961	2.800	3.300	
27559.3	Low	27	155	1	100	64QAM	66	0	0.03	2 mm	Left	05961	2.470	2.840	
27559.3	Low	19	146	1	100	64QAM	1	0	-0.13	2 mm	Back	05961	0.346	0.741	
27559.3	Low	19	146	1	100	64QAM	1	0	0.11	2 mm	Front	05961	1.010	1.250	
27559.3	27559.3 Low 17 149 1 100 64QAM 1 0							0	-0.06	2 mm	Тор	05961	0.418	0.469	
	47 CFR §1.1310 - SAFETY LIMIT Spatial Average Uncontrolled Exposure / General Population								Power Density 10 W/m² averaged over 4 cm²						

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Table 5-2 NR Band n261 QTM-1 Test Results (CP-OFDM)

					Dane				RESULT		0.0	,,,			
FREQUE	ENCY	Beam ID1	Beam ID2	# CC	BW	Modulation	RB Size	RB Offset	Power Drift	Evaluation Distance	DUT surface	DUT S/N	Normal S	Total S	Plot #
MHz	Ch.	Н	V		MHz				dB				W/m²	W/m²	
27559.3	Low	22	150	1	100	QPSK	1	0	-0.14	2 mm	Right	05961	1.640	2.310	
27923.5	Mid	22	150	1	100	QPSK	1	0	-0.01	2 mm	Right	05961	1.480	2.300	
28292.2	High	22	150	1	100	QPSK	1	0	-0.11	2 mm	Right	05961	1.490	2.120	
27559.3	Low	22	150	1	100	16QAM	1	0	-0.09	2 mm	Right	05961	1.210	1.580	
27559.3	Low	22	150	1	100	64QAM	1	0	0.08	2 mm	Right	05961	2.450	3.140	
27559.3		22	150		100		1	0							
27659.3		22	150	,	100	040414	1	0	0.04	0	Distri	05004	4.040	4.770	
27759.3	Low	22	150	4	100	64QAM	1	0	-0.04	2 mm	Right	05961	1.310	1.770	
27859.3		22	150		100		1	0							
27534.8	Low	22	150	1	50	64QAM	1	0	-0.04	2 mm	Right	05961	1.980	2.640	
27559.3	Low	22	150	1	100	64QAM	33	0	-0.04	2 mm	Right	05961	1.630	2.330	
27559.3	Low	22	150	1	100	64QAM	66	0	-0.18	2 mm	Right	05961	1.830	2.300	
27559.3	Low	14	142	1	100	QPSK	1	0	-0.14	2 mm	Right	05961	3.040	3.390	
27923.5	Mid	14	142	1	100	QPSK	1	0	-0.19	2 mm	Right	05961	2.210	2.470	
28292.2	High	14	142	1	100	QPSK	1	0	-0.16	2 mm	Right	05961	2.080	2.430	
27559.3	Low	14	142	1	100	16QAM	1	0	-0.01	2 mm	Right	05961	1.850	2.120	
27559.3	Low	14	142	1	100	64QAM	1	0	-0.02	2 mm	Right	05961	2.420	2.680	
27559.3		14	142		100		1	0							
27659.3		14	142		100		1	0							
27759.3	Low	14	142	4	100	QPSK	1	0	-0.18	2 mm	Right	05961	2.150	2.500	
27859.3		14	142		100		1	0							
27534.8	Low	14	142	1	50	QPSK	1	0	0.18	2 mm	Right	05961	2.170	2.420	
27559.3	Low	14	142	1	100	QPSK	33	0	0.02	2 mm	Right	05961	2.280	2.520	
27559.3	Low	14	142	1	100	QPSK	66	0	-0.06	2 mm	Right	05961	3.010	3.500	A2
27559.3	Low	22	150	1	100	64QAM	1	0	-0.03	2 mm	Back	05961	0.517	0.659	
27559.3	Low	14	142	1	100	QPSK	66	0	-0.04	2 mm	Front	05961	0.980	1.240	
27559.3	Low	12	141	1	100	QPSK	66	0	-0.15	2 mm	Тор	05961	0.233	0.258	
	47 CFR §1.1310 - SAFETY LIMIT Spatial Average Uncontrolled Exposure / General Population									Power Density 10 W/m² averaged over 4 cm²					

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Table 5-3 NR Band n260 QTM-0 Test Results (CP-OFDM)

			<u>a i i</u>	<u> </u>	200				RESULT		13 (01	011	J141)	
									 			Π	Π		
FREQUE	NCY	Beam ID1	Beam ID2	# CC	BW	Modulation	RB Size	RB Offset	Power Drift	Evaluation Distance	DUT surface	DUT S/N	Normal S	Total S	Plot#
MHz	Ch.	Н	٧		MHz				dB			ļ	W/m²	W/m²	
37051.8	Low	20		1	100	QPSK	1	0	0.14	2 mm	Left	05961	1.800	2.490	
38498.9	Mid	20	-	1	100	QPSK	1	0	-0.06	2 mm	Left	05961	1.330	1.800	
39949.9	High	20	-	1	100	QPSK	1	0	0.04	2 mm	Left	05961	1.650	2.020	
37051.8	Low	20	-	1	100	16QAM	1	0	0.14	2 mm	Left	05961	1.070	1.500	
37051.8	Low	20	-	1	100	64QAM	1	0	-0.13	2 mm	Left	05961	0.969	1.370	
37051.8					100		1	0							
37151.8	Low	20		4	100	QPSK	1	0	-0.04	2 mm	Left	05961	0.788	1.060	
37251.8					100		1	0							
37351.8					100		1	0							
37027.3	Low	20	-	1	50	QPSK	1	0	0.18	2 mm	Left	05961	1.260	1.960	
37051.8	Low	20		1	100	QPSK	33	0	0.04	2 mm	Left	05961	1.340	1.900	
37051.8	Low	20		1	100	QPSK	66	0	0.19	2 mm	Left	05961	1.460	1.970	
37051.8	Low	17	-	1	100	QPSK	1	0	-0.14	2 mm	Left	05961	1.920	2.600	А3
38498.9	Mid	17		1	100	QPSK	1	0	0.05	2 mm	Left	05961	1.550	2.100	
39949.9	High	17		1	100	QPSK	1	0	0.09	2 mm	Left	05961	1.400	1.770	
37051.8	Low	17		1	100	16QAM	1	0	0.02	2 mm	Left	05961	0.900	1.310	
37051.8	Low	17		1	100	64QAM	1	0	-0.12	2 mm	Left	05961	1.010	1.390	
37051.8					100		1	0							
37151.8					100		1	0	1						
37251.8	Low	17	-	4	100	QPSK	1	0	-0.13	2 mm	Left	05961	0.692	0.928	
37351.8					100		1	0							
37027.3	Low	17		1	50	QPSK	1	0	0.04	2 mm	Left	05961	1.500	2.040	
37051.8	Low	17	-	1	100	QPSK	33	0	0.1	2 mm	Left	05961	1.180	1.650	
37051.8	Low	17		1	100	QPSK	66	0	0	2 mm	Left	05961	1.380	1.800	
37051.8	Low	-	145	1	100	QPSK	1	0	0.14	2 mm	Left	05961	1.570	1.900	
38498.9	Mid	_	145	1	100	QPSK	1	0	0.05	2 mm	Left	05961	1.690	2.140	A4
39949.9	High		145	1	100	QPSK	1	0	-0.06	2 mm	Left	05961	1.550	1.910	***
38498.9	Mid	_	145	1	100	16QAM	1	0	0.13	2 mm	Left	05961	1.480	1.840	
38498.9	Mid		145	1	100	64QAM	1	0	0.14	2 mm	Left	05961	1.170	1.420	
38498.9	IVEG	-	142		100	OHQAW	1	0	0.14	2111111	Leit	03801	1.170	1.420	
38598.9					100		1	0							
38698.9	Mid	-	145	4	100	QPSK		0	-0.18	2 mm	Left	05961	1.060	1.320	
38798.9					100		1	0							
					- '					_					
38497.4	Mid	-	145	1	50	QPSK	1	0	-0.01	2 mm	Left	05961	1.620	2.090	
38498.9	Mid	-	145	1	100	QPSK	33	0	0.14	2 mm	Left	05961	1.660	2.060	
38498.9	Mid	•	145	1	100	QPSK	66	0	0	2 mm	Left	05961	1.550	1.870	
37051.8	Low	-	149	1	100	QPSK	1	0	0.15	2 mm	Left	05961	1.710	2.090	
38498.9	Mid	-	149	1	100	QPSK	1	0	0	2 mm	Left	05961	1.580	1.890	
39949.9	High	-	149	1	100	QPSK	1	0	0.05	2 mm	Left	05961	1.600	1.940	
37051.8	Low	-	149	1	100	16QAM	1	0	0.02	2 mm	Left	05961	1.410	1.750	
37051.8	Low	-	149	1	100	64QAM	1	0	-0.16	2 mm	Left	05961	1.640	2.060	
37051.8					100		1	0	1						
37151.8	Low		149	4	100	QPSK	1	0	-0.12	2 mm	Left	05961	0.855	1.120	
37251.8					100		1	0							
37351.8					100		1	0							
37027.3	Low	-	149	1	50	QPSK	1	0	-0.13	2 mm	Left	05961	1.650	2.060	
37051.8	Low	-	149	1	100	QPSK	33	0	0.09	2 mm	Left	05961	1.640	2.080	
37051.8	Low		149	1	100	QPSK	66	0	0.2	2 mm	Left	05961	1.670	2.000	
37051.8	Low	17	-	1	100	QPSK	1	0	0.05	2 mm	Back	05961	0.733	0.758	
37051.8	Low	-	149	1	100	QPSK	1	0	-0.17	2 mm	Back	05961	0.602	0.682	
37051.8	Low	19		1	100	QPSK	1	0	-0.18	2 mm	Front	05961	1.990	2.040	
38498.9	Mid	-	146	1	100	QPSK	1	0	-0.13	2 mm	Front	05961	0.808	1.110	
37051.8	Low	20	-	1	100	QPSK	1	0	-0.15	2 mm	Тор	05961	0.358	0.386	
38498.9	Mid		145	1	100	QPSK	1	0	-0.13	2 mm	Тор	05961	0.332	0.349	
		47		1.1310 -		LIMIT			Power Density						
	Spatial Average Uncontrolled Exposure / General Population								10 W/m² averaged over 4 cm²						

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Table 5-4 NR Band n260 QTM-1 Test Results (CP-OFDM)

									RESULT	rs					
FREQUE		Beam ID1	Beam ID2	# CC	BW	Modulation	RB Size	RB Offset	Power Drift	Evaluation Distance	DUT surface	DUT S/N	Normal S	Total S	Plot #
MHz	Ch.	H	V -		MHz	opou		0	dB		Bille	05004	W/m²	W/m²	
37051.8	Low	16		1	100	QPSK	1		0.08	2 mm	Right	05961	1.570	2.080	
	Mid	16	-	1	100	QPSK	1	0	0.03	2 mm	Right	05961	1.060	1.410	
39949.9	High	16	-	1	100	QPSK	1	0	-0.12	2 mm	Right	05961	1.290	1.630	
37051.8	Low	16	-	1	100	16QAM	1	0	-0.1	2 mm	Right	05961	1.020	1.420	
37051.8	Low	16	-	1	100	64QAM	1	0	0.12	2 mm	Right	05961	1.010	1.300	
37051.8					100		1	0							
37151.8		16		4	100	OPSK	1	0	-0.14	2 mm	Billi	05961	0.767	1.010	
37251.8	Low	16	-	-	100	ursk	1	0	-0.14	211111	Right	00961	0.767	1.010	
37351.8					100	Ī	1	0							
37027.3	Low	16	-	1	50	QPSK	1	0	-0.21	2 mm	Right	05961	1.520	1.990	
37051.8	Low	16	-	1	100	QPSK	33	0	-0.08	2 mm	Right	05961	1.190	1.590	
37051.8	Low	16	_	1	100	QPSK	66	0	-0.01	2 mm	Right	05961	1.220	1.710	
37051.8	Low	25		1	100	OPSK	1	0	-0.19	2 mm	Right	05961	1.360	1.830	
38498.9	Mid	25		1	100	QPSK	1	0	0.09	2 mm		05961	1.460	1.820	
			-								Right				
39949.9	High	25	-	1	100	QPSK	1	0	-0.12	2 mm	Right	05961	0.876	1.170	
37051.8	Low	25	-	1	100	16QAM	1	0	0	2 mm	Right	05961	1.040	1.400	
37051.8	Low	25	-	1	100	64QAM	1	0	0.08	2 mm	Right	05961	0.746	1.130	
37051.8					100		1	0							
37151.8	Low	25	_	4	100	QPSK	1	0	-0.19	2 mm	Right	05961	0.836	1.060	
37251.8	LOW	2.5		"	100	Qr SK	1	0	-0.18	2111111	Right	03301	0.030	1.000	
37351.8					100		1	0							
37027.3	Low	25	-	1	50	QPSK	1	0	-0.08	2 mm	Right	05961	1.600	2.230	A5
37027.3	Low	25	-	1	50	QPSK	16	0	-0.18	2 mm	Right	05961	1.230	1.600	
37027.3	Low	25		1	50	QPSK	32	0	-0.2	2 mm	Right	05961	0.933	1.430	
37051.8	Low		144	1	100	QPSK	1	0	0.09	2 mm	Right	05961	1.710	2.060	
38498.9	Mid	-	144	1	100	QPSK	1	0	0.16	2 mm	Right	05961	1.260	1.550	
		_											- '	- '''	
39949.9	High	-	144	1	100	QPSK	1	0	0.15	2 mm	Right	05961	1.820	2.190	
39949.9	High		144	1	100	16QAM	1	0	0.14	2 mm	Right	05961	1.490	1.830	
39949.9	High	-	144	1	100	64QAM	1	0	-0.17	2 mm	Right	05961	1.050	1.280	
39649.2					100		1	0							
39749.2	High		144	4	100	QPSK	1	0	-0.12	2 mm	Right	05961	0.802	0.977	
39849.2					100		1	0							
39949.2					100		1	0							
39966.2	High	-	144	1	50	QPSK	1	0	-0.15	2 mm	Right	05961	1.490	1.820	
39949.9	High		144	1	100	QPSK	33	0	0.19	2 mm	Right	05961	1.470	1.840	
39949.9	High	-	144	1	100	QPSK	66	0	0.1	2 mm	Right	05961	1.720	2.160	
37051.8	Low	-	153	1	100	QPSK	1	0	-0.16	2 mm	Right	05961	1.750	2.140	
38498.9	Mid	-	153	1	100	QPSK	1	0	-0.19	2 mm	Right	05961	1.260	1.630	
39949.9	High	-	153	1	100	QPSK	1	0	-0.18	2 mm	Right	05961	1.710	2.210	
39949.9	High	-	153	1	100	16QAM	1	0	0.18	2 mm	Right	05961	1.590	1.950	
														- '''	
39949.9	High	-	153	1	100	64QAM	1	0	-0.12	2 mm	Right	05961	0.930	1.180	
39649.2					100		1	0	-						
39749.2	High		153	4	100	QPSK	1	0	-0.14	2 mm	Right	05961	0.778	0.943	
39849.2					100		1	0							
39949.2					100		1	0							
39966.2	High	-	153	1	50	QPSK	1	0	-0.11	2 mm	Right	05961	1.640	2.090	
39949.9	High	,	153	1	100	QPSK	33	0	-0.08	2 mm	Right	05961	1.450	1.870	
39949.9	High	-	153	1	100	QPSK	66	0	-0.03	2 mm	Right	05961	1.770	2.240	A6
37027.3	Low	23	-	1	50	QPSK	1	0	0.13	2 mm	Back	05961	0.512	0.522	
39949.9	High	-	151	1	100	QPSK	66	0	0.14	2 mm	Back	05961	0.261	0.316	
37051.8	Low	16		1	100	QPSK	1	0	-0.07	2 mm	Front	05961	0.972	1.020	
39949.9	High		144	1	100	QPSK	1	0	-0.11	2 mm	Front	05961	0.573	0.829	
37051.8	Low	16		1	100	QPSK	1	0	-0.19	2 mm	Тор	05961	0.292	0.325	
39949.9		.0	144	1	100	QPSK	1	0	0.12	2 mm		05961	0.341	0.353	
30049.9	High	, A-		1.1310 -			<u> </u>		0.12	£ (IIII)	Top	wer Der		0.303	
			5	Spatial Av	rerage				10 W/m²						
	Uncontrolled Exposure / General Population										avera	ged ove	r 4 Cm²		

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5.2 Power Density Test Notes

General Notes:

- 1. The manufacturer has confirmed that the devices tested have the same physical, mechanical and thermal characteristics and are within operational tolerances expected for production units.
- 2. Power density was calculated by repeated E-field measurements on two measurement planes separated by $\lambda/4$. Please see Section 2.3 for more details of the evaluation process.
- 3. DUT was configured to transmit with a manufacturer provided test software to control specific antenna(s) and Beam ID(s) to ensure the test configurations constant for the entire evaluation.
- 4. Batteries are fully charged at the beginning of the Power Density measurements. The DUT was connected to a wall charger for some measurement due to test duration. It was confirmed that the charger plugged into this DUT does not impact the near-field PD test results.
- This device contains transmitters that may operate simultaneously. Therefore, simultaneous transmission analysis is required to evaluate SAR and Power Density. Total exposure ratio (TER) is evaluated in Appendix D.
- 6. NR Band n261 was evaluated using MIMO polarization (both H+V components active). Due to SW and HW limitations, NR Band n260 was evaluated using SISO H polarization and SISO V polarization separately. MIMO operations for n260 were assessed in Annex D for simultaneous transmission analysis.
- 7. Per FCC guidance, all beams were simulated in the near field for each antenna and evaluation plane. For the worst case edge, the paired beam IDs with the highest simulated power density (combined) were measured for low, mid, and high channel with 1CC, CP-OFDM QPSK, and 100 MHz BW. Additional evaluations with highest simulated paired beam IDs were made at CP-OFDM 16QAM, CP-OFDM 64QAM, 4 CCs, 50MHz BW, half RB sizes, and full RB sizes. The process was repeated for second highest simulated paired beam IDs.
- 8. Back side, front side, and top edge were measured with the paired beam IDs with the highest simulated power density (combined) with the RF configuration that resulted in the maximum power density.
- 9. This device has power reduction for some WLAN modes for simultaneous transmission compliance. Refer to SAR test report for SAR compliance data.

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EQUIPMENT LIST

Manufacturer	Model	Description	Cal Date	Cal Interval	Cal Due	Serial Number
-	WL25-1	Conducted Cable Set (25GHz)	10/31/2018	Annual	10/31/2019	WL25-1
Agilent	N9038A	MXE EMI Receiver	6/11/2018	Annual	6/11/2019	MY51210133
Emco	3116	Horn Antenna (18 - 40GHz)	6/7/2018	Triennial	6/7/2021	9203-2178
Huber+Suhner	Sucoflex 102A	40GHz Radiated Cable	8/23/2018	Annual	8/23/2019	251425001
Rohde & Schwarz	SFUNIT-Rx	Shielded Filter Unit	6/25/2018	Annual	6/25/2019	102133
Rohde & Schwarz	TS-PR40	26.5-40 GHz Pre-Amplifier	9/19/2018	Annual	9/19/2019	100037
Rohde & Schwarz	FSW67	Signal / Spectrum Analyzer	8/17/2018	Annual	8/17/2019	103200
SPEAG	EUmmWV3	EUmmWV3 Probe	11/6/2018	Annual	11/6/2019	9389
SPEAG	EUmmWV3	EUmmWV3 Probe	12/7/2018	Annual	12/7/2019	9407
SPEAG	SM 003 100 AA	30GHz System Verification Ka- Band Source Antenna	3/19/2019	Annual	3/19/2020	1002
SPEAG	SM 003 100 AA	30GHz System Verification Ka- Band Source Antenna	10/1/2018	Annual	10/1/2019	1015
SPEAG	SM 003 100 AA	30GHz System Verification Ka- Band Source Antenna	1/28/2019	Annual	1/28/2020	1035
SPEAG	DAE4	Dasy Data Acquisition Electronics	10/18/2018	Annual	10/18/2019	1333
SPEAG	DAE4	Dasy Data Acquisition Electronics	8/14/2018	Annual	8/14/2019	1323
HP	8564E	Spectrum Analyzer (9 kHz - 40 GHz)	7/23/2018	Annual	7/23/2019	3846A01599
Agilent	N9030A	PXA Signal Analyzer (44GHz)	5/25/2018	Annual	5/25/2019	MY52350166
Com-Power	AL-130	9kHz - 30MHz Loop Antenna	10/10/2017	Biennial	10/10/2019	121034
Com-Power	PAM-103	Pre-Amplifier (1-1000MHz)	9/17/2018	Annual	9/17/2019	441119
Emco	3115	Horn Antenna (1-18GHz)	3/28/2018	Biennial	3/28/2020	9704-5182
Keysight Technologies	N9030A	PXA Signal Analyzer	8/6/2018	Annual	8/6/2019	MY54490576
Rohde & Schwarz	180-442-KF	Horn (Small)	8/21/2018	Annual	8/21/2019	U157403-01
Rohde & Schwarz	ESU26	EMI Test Receiver (26.5GHz)	5/21/2018	Annual	5/21/2019	100342
Rohde & Schwarz	SFUNIT-Rx	Shielded Filter Unit	6/18/2018	Annual	6/18/2019	102134
Sunol	JB5	Bi-Log Antenna (30M - 5GHz)	4/19/2018	Biennial	4/19/2020	A051107
Virginia Diodes Inc	SAX252	Spectrum Analyzer Extension Module	5/14/2018	Annual	5/14/2019	SAX252
Virginia Diodes Inc	SAX253	Spectrum Analyzer Extension Module	5/8/2018	Annual	5/8/2019	SAX253
Virginia Diodes Inc	SAX254	Spectrum Analyzer Extension Module	5/8/2018	Annual	5/8/2019	SAX254

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MEASUREMENT UNCERTAINTIES

					f =	
a	b	С	d	е	b x e/d	g
	Unc.	Prob.			ui	
Uncertainty Component		Dist.	Div.	ci	(± dB)	vi
Measurement System	Į.					
Probe Calibration	0.49	N	1	1.0	0.49	∞
Hemispherical Isotropy	0.5	R	1.73	1.0	0.29	8
Linearity	0.2	R	1.73	0.0	0.00	8
Detection Limits	0.04	R	1.73	1.0	0.02	8
Modulation Response	0.4	R	1.73	1.0	0.23	8
Resource Block Offset	0.1	R	1.73	1.0	0.06	8
Readout Electronics	0.03	N	1	1.0	0.03	8
Response Time	0	R	1.73	1.0	0.00	8
Integration Time	0	R	1.73	1.0	0.00	8
RF Ambient Conditions - Noise	0.04	R	1.73	1.0	0.02	8
RF Ambient Conditions - Reflections	0.21	R	1.73	1.0	0.12	∞
Probe Positioner	0.04	R	1.73	1.0	0.02	8
Probe Positioning	0.3	R	1.73	1.0	0.17	8
Post-processing	0.6	R	1.73	1.0	0.35	8
Test Sample Related					1	
Power Drift	0.22	R	1.73	1.0	0.13	∞
Input Power	0.0	N	1	0.0	0.00	∞
Combined Standard Uncertainty (k=1)		RSS			0.75	8
Expanded Uncertainty			_			
(95% CONFIDENCE LEVEL)		k:	=2		1.5	

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8 CONCLUSION

8.1 Measurement Conclusion

The power density measurements and total exposure ratio analysis indicate that the DUT complies with the RF radiation exposure limits of the FCC, with respect to all parameters subject to this test. These measurements were taken to simulate the RF effects of RF exposure under worst-case conditions. Precise laboratory measures were taken to assure repeatability of the tests. The results and statements relate only to the item(s) tested.

Please note that the RF Exposure and distribution of electromagnetic energy in the body are very complex phenomena that depend on the mass, shape, and size of the body, the orientation of the body with respect to the field vectors, and the electrical properties of both the body and the environment. Other variables that may play a substantial role in possible biological effects are those that characterize the environment (e.g. ambient temperature, air velocity, relative humidity, and body insulation) and those that characterize the individual (e.g. age, gender, activity level, debilitation, or disease). Because various factors may interact with one another to vary the specific biological outcome of an exposure to electromagnetic fields, any protection guide should consider maximal amplification of biological effects as a result of field-body interactions, environmental conditions, and physiological variables.

FCC ID: ZNFV450VM	PCTEST:	NEAR-FIELD POWER DENSITY EVALUATION REPORT	L G	Approved by: Quality Manager
Document S/N:	Test Dates:	DUT Type:		
1M1903070034-15-R2.ZNF	03/21/19 – 05/01/19	Portable Handset		Page 16 of 17

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- 6. A. P. Anderson and S. Sali. New Possibilities for Phaseless Microwave Diagnostics. Part 1: Error Reduction Techniques. IEE Proceedings H Microwaves, Antennas and Propagation 132(5): 290 298, 1985
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- 9. November 2017 Telecommunications Certification Body Council (TCBC) Workshop Notes
- 10. SPEAG Application Note 5G Compliance Testing with DASY6
- 11. October 2018 Telecommunications Certification Body Council (TCBC) Workshop notes

FCC ID: ZNFV450VM	PCTEST*	NEAR-FIELD POWER DENSITY EVALUATION REPORT LG	Approved by: Quality Manager
Document S/N:	Test Dates:	DUT Type:	
1M1903070034-15-R2.ZNF	03/21/19 – 05/01/19	Portable Handset	Page 17 of 17

APPENDIX A: TEST PLOTS

Date: 04-03-2019

Ant. QTM-0; Beam 19/146; MIMO; Low Ch.; 1CC, 100 MHz BW, CP-OFDM-64QAM, 1RB, 0 RB Offset

Device Under Test Properties

DUT	Serial Number	DUT Type
ZNFV450VM	05961	Phone

Exposure Conditions

Phantom Section	Position	Test Distance [mm]	Band	Frequency [MHz]
5 G	EDGE LEFT	2.00	n261	27559.3

Hardware Setup

Probe, Calibration Date	DAE, Calibration Date
EUmmWV3 - SN9389, 2018-11-06	DAE4 Sn1323, 2018-08-14

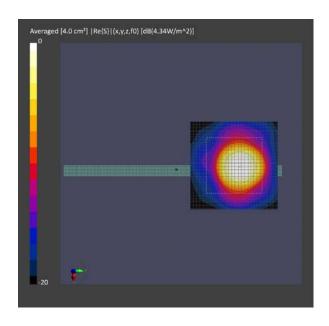
Software Setup

Software	Software Version
cDasy6 Module mmWave	1.6.2.3

Scans Setup

Scan Type	5G Scan
Grid Extents [mm]	60.0 x 60.0
Grid Steps [lambda]	0.25 x 0.25
Sensor Surface [mm]	2.0

Scan Type	5G Scan
Avg. Area [cm²]	4.00
pStot avg [W/m²]	4.34
pS _n avg [W/m²]	3.63
E _{peak} [V/m]	80.8
Power Drift [dB]	-0.10



Date: 04-07-2019

Ant. QTM-1; Beam 14/142; MIMO; Low Ch.; 1CC, 100 MHz BW, CP-OFDM-QPSK, 66 RB, 0 RB Offset

Device Under Test Properties

DUT	Serial Number	DUT Type
ZNFV450VM	05961	Phone

Exposure Conditions

Phantom Section	Position	Test Distance [mm]	Band	Frequency [MHz]
5G	EDGE RIGHT	2.00	n / 6 l	27559.3

Hardware Setup

Probe, Calibration Date	DAE, Calibration Date
EUmmWV3 - SN9389, 2018-11-06	DAE4 Sn1323, 2018-08-14

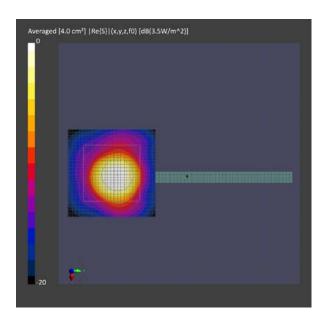
Software Setup

Software	Software Version
cDasy6 Module mmWave	1.6.2.3

Scans Setup

Scan Type	5G Scan
Grid Extents [mm]	60.0 x 60.0
Grid Steps [lambda]	0.25 x 0.25
Sensor Surface [mm]	2.0

Scan Type	5G Scan
Avg. Area [cm²]	4.00
pS _{tot} avg [W/m ²]	3.50
pS _n avg [W/m ²]	3.01
E _{peak} [V/m]	65.3
Power Drift [dB]	-0.06



Date: 04-09-2019

Ant. QTM-0; Beam 17; H; Low Ch.; 1CC, 100 MHz BW, CP-OFDM-QPSK, 1 RB, 0 RB Offset

Device Under Test Properties

DUT	Serial Number	DUT Type
ZNFV450VM	05961	Phone

Exposure Conditions

Phantom Section	Position	Test Distance [mm]	Band	Frequency [MHz]
5G	EDGE LEFT	2.00	n260	37051.8

Hardware Setup

Probe, Calibration Date	DAE, Calibration Date
EUmmWV3 - SN9389, 2018-11-06	DAE4 Sn1323, 2018-08-14

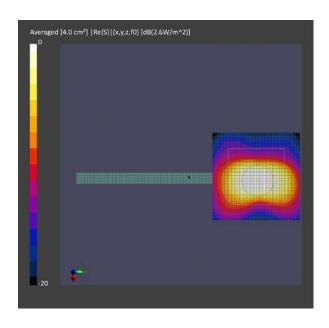
Software Setup

Software	Software Version
cDasy6 Module mmWave	1.6.2.3

Scans Setup

Scan Type	5G Scan
Grid Extents [mm]	60.0 x 60.0
Grid Steps [lambda]	0.25 x 0.25
Sensor Surface [mm]	2.0

Scan Type	5G Scan
Avg. Area [cm²]	4.00
pS _{tot} avg [W/m ²]	2.60
pS _n avg [W/m²]	1.92
E _{peak} [V/m]	68.8
Power Drift [dB]	-0.14



Date: 04-19-2019

Ant. QTM-0; Beam 145; V; Mid Ch.; 1CC, 100 MHz BW, CP-OFDM-QPSK, 1 RB, 0 RB Offset

Device Under Test Properties

DUT	Serial Number	DUT Type
ZNFV450VM	05961	Phone

Exposure Conditions

Phantom Section	Position	Test Distance [mm]	Band	Frequency [MHz]
5G	EDGE LEFT	2.00	n260	38498.9

Hardware Setup

Probe, Calibration Date	DAE, Calibration Date
EUmmWV3 - SN9389, 2018-11-06	DAE4 Sn1323, 2018-08-14

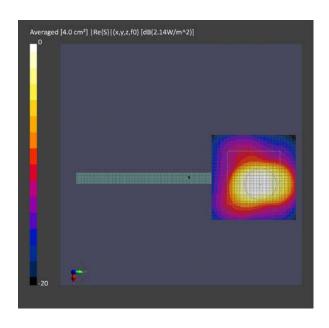
Software Setup

Software	Software Version
cDasy6 Module mmWave	1.6.2.3

Scans Setup

Scan Type	5G Scan
Grid Extents [mm]	60.0 x 60.0
Grid Steps [lambda]	0.25 x 0.25
Sensor Surface [mm]	2.0

Scan Type	5G Scan
Avg. Area [cm²]	4.00
pStot avg [W/m²]	2.14
pS _n avg [W/m ²]	1.69
E _{peak} [V/m]	72.8
Power Drift [dB]	0.05



Date: 04-21-2019

Ant. QTM-1; Beam 25; H; Low Ch.; 1CC, 50 MHz BW, CP-OFDM-QPSK, 1 RB, 0 RB Offset

Device Under Test Properties

DUT	Serial Number	DUT Type
ZNFV450VM	05961	Phone

Exposure Conditions

Phantom Section	Position	Test Distance [mm]	Band	Frequency [MHz]
5G	EDGE RIGHT	2.00	n260	37027.3

Hardware Setup

Probe, Calibration Date	DAE, Calibration Date
EUmmWV3 - SN9389, 2018-11-06	DAE4 Sn1323, 2018-08-14

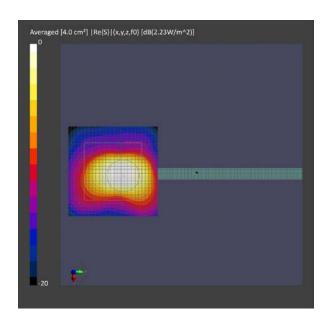
Software Setup

Software	Software Version
cDasy6 Module mmWave	1.6.2.3

Scans Setup

Scan Type	5G Scan
Grid Extents [mm]	60.0 x 60.0
Grid Steps [lambda]	0.25 x 0.25
Sensor Surface [mm]	2.0

Scan Type	5G Scan
Avg. Area [cm²]	4.00
pStot avg [W/m²]	2.23
pS _n avg [W/m²]	1.60
E _{peak} [V/m]	66.6
Power Drift [dB]	-0.08



Date: 04-26-2019

Ant. QTM-1; Beam 153; V; High Ch.; 1CC, 100 MHz BW, CP-OFDM-QPSK, 66 RB, 0 RB Offset

Device Under Test Properties

DUT	Serial Number	DUT Type
ZNFV450VM	05961	Phone

Exposure Conditions

Phantom Section	Position	Test Distance [mm]	Band	Frequency [MHz]
5G	EDGE RIGHT	2.00	n260	39949.9

Hardware Setup

Probe, Calibration Date	DAE, Calibration Date
EUmmWV3 - SN9389, 2018-11-06	DAE4 Sn1323, 2018-08-14

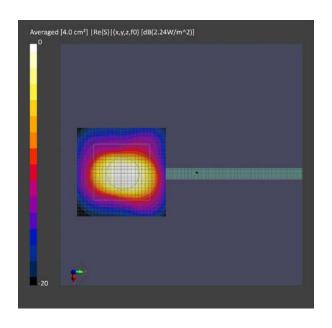
Software Setup

Software	Software Version
cDasy6 Module mmWave	1.6.2.3

Scans Setup

Scan Type	5G Scan
Grid Extents [mm]	60.0 x 60.0
Grid Steps [lambda]	0.25 x 0.25
Sensor Surface [mm]	2.0

Scan Type	5G Scan
Avg. Area [cm²]	4.00
pStot avg [W/m²]	2.24
pS _n avg [W/m²]	1.77
E _{peak} [V/m]	67.6
Power Drift [dB]	-0.03



APPENDIX B: SYSTEM VERIFICATION PLOTS

Date: 03-21-2019
30 GHz Verification

Device Under Test Properties

DUT	Serial Number	DUT Type
Verification Source	1035	30 GHz

Exposure Conditions

Phantom Section	Position	Test Distance [mm]	Band	Frequency [MHz]
5G	FRONT	5.55	Validation band	30000.0

Hardware Setup

Probe, Calibration Date	DAE, Calibration Date
EUmmWV3 - SN9389, 2018-11-06	DAE4 Sn1323, 2018-08-14

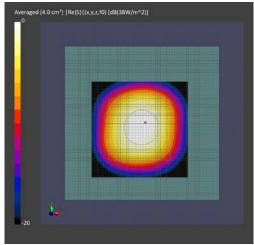
Software Setup

Software	Software Version
cDasy6 Module mmWave	1.6.2.3

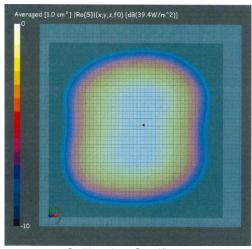
Scans Setup

Scan Type	5G Scan
Grid Extents [mm]	60.0 x 60.0
Grid Steps [lambda]	0.25 x 0.25
Sensor Surface [mm]	5.55

Scan Type	5G Scan
Avg. Area [cm²]	4.00
pS _{tot} avg [W/m ²]	38.0
pS _n avg [W/m²]	37.5
E _{peak} [V/m]	140
Total S Deviation [dB]	0.34



PCTEST System Verification



Calibration Certificate

Date: 04-24-2019 30 GHz Verification

Device Under Test Properties

DUT	Serial Number	DUT Type
Verification Source	1002	30 GHz

Exposure Conditions

Phantom Section	Position	Test Distance [mm]	Band	Frequency [MHz]
5G	FRONT	5.55	Validation band	30000.0

Hardware Setup

Probe, Calibration Date	DAE, Calibration Date
EUmmWV3 - SN9389, 2018-11-06	DAE4 Sn1323, 2018-08-14

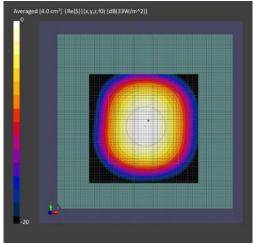
Software Setup

Software	Software Version
cDasy6 Module mmWave	1.6.2.3

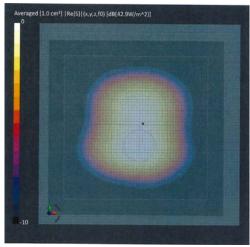
Scans Setup

Scan Type	5G Scan
Grid Extents [mm]	60.0 x 60.0
Grid Steps [lambda]	0.25 x 0.25
Sensor Surface [mm]	5.55

Scan Type	5G Scan
Avg. Area [cm²]	4.00
pS _{tot} avg [W/m ²]	33.0
pS _n avg [W/m²]	32.4
E _{peak} [V/m]	134
Total S Deviation [dB]	-0.40



PCTEST System Verification



Calibration Certificate

Date: 04-29-2019 30 GHz Verification

Device Under Test Properties

DUT	Serial Number	DUT Type
Verification Source	1015	30 GHz

Exposure Conditions

Phantom Section	Position	Test Distance [mm]	Band	Frequency [MHz]
5G	FRONT	5.55	Validation band	30000.0

Hardware Setup

Probe, Calibration Date	DAE, Calibration Date
EUmmWV3 - SN9407, 2018-12-07	DAE4 Sn1333, 2018-10-18

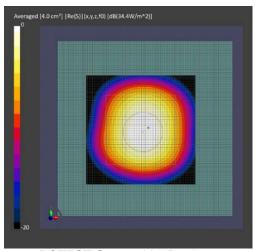
Software Setup

Software	Software Version
cDasy6 Module mmWave	1.6.2.3

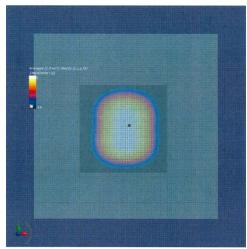
Scans Setup

Scan Type	5G Scan
Grid Extents [mm]	60.0 x 60.0
Grid Steps [lambda]	0.25 x 0.25
Sensor Surface [mm]	5.55

Scan Type	5G Scan
Avg. Area [cm²]	4.00
pS _{tot} avg [W/m ²]	35.4
pS _n avg [W/m ²]	35.0
E _{peak} [V/m]	137
Total S Deviation [dB]	-0.09



PCTEST System Verification



Calibration Certificate

APPENDIX C: CALIBRATION CERTIFICATES

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





S

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

Client

PC Test

Certificate No: EUmmWV3-9389 Nov18/2

CALIBRATION CERTIFICATE (Replacement of No: EUmmWV3-9389_Nov18)

Object

EUmmWV3 - SN:9389

Calibration procedure(s)

QA CAL-02.v9, QA CAL-25.v7, QA CAL-42.v2

Calibration procedure for E-field probes optimized for close near field

evaluations in air

Calibration date:

November 6, 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)°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 ER3DV6	SN: 2328	09-Oct-18 (No. ER3-2328_Oct18)	Oct-19
DAE4	SN: 789	07-Aug-18 (No. DAE4-789_Aug18)	Aug-19
Secondary Standards	ID	Check Date (in house)	Cohe dute d Olympia
Power meter E4419B	SN: GB41293874	06-Apr-16 (in house check Jun-18)	Scheduled Check In house check: Jun-20
Power sensor E4412A	SN: MY41498087	06-Apr-16 (in house check Jun-18)	In house check: Jun-20
Power sensor E4412A	SN: 000110210	06-Apr-16 (in house check Jun-18)	In house check: Jun-20
RF generator HP 8648C	SN: US3642U01700	04-Aug-99 (in house check Jun-18)	In house check: Jun-20
Network Analyzer HP 8753E	SN: US37390585	18-Oct-01 (in house check Oct-18)	In house check: Oct. 10

Name Function Signature Calibrated by: Jeton Kastrati Laboratory Technician Approved by: Katja Pokovic Technical Manager

Issued: February 20, 2019

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

Calibration Laboratory of

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





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Swiss Calibration Service

Accreditation No.: SCS 0108

Accredited by the Swiss Accreditation Service (SAS)

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

Glossary:

NORMx,y,z DCP

sensitivity in free space

CF

diode compression point

A, B, C, D

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

Polarization φ

φ rotation around probe axis

Polarization 9

9 rotation around an axis that is in the plane normal to probe axis (at measurement center),

i.e., 9 = 0 is normal to probe axis

Connector Angle Sensor Angles information used in DASY system to align probe sensor X to the robot coordinate system sensor deviation from the probe axis, used to calculate the field orientation and polarization

is the wave propagation direction

Calibration is Performed According to the Following Standards:

a) IEEE Std 1309-2005, "IEEE Standard for calibration of electromagnetic field sensors and probes, excluding antennas, from 9 kHz to 40 GHz", December 2005

Methods Applied and Interpretation of Parameters:

- NORMx,y,z: Assessed for E-field polarization θ = 0 for XY sensors and θ = 90 for Z sensor (f ≤ 900 MHz in TEM-cell; f > 1800 MHz: R22 waveguide). For frequencies > 6 GHz, the far field in front of waveguide horn antennas is measured for a set of frequencies in various waveguide bands up to 110 GHz.
- DCPx,y,z: DCP are numerical linearization parameters assessed based on the data of power sweep with CW signal (no uncertainty required). DCP does not depend on frequency nor media.
- PAR: PAR is the Peak to Average Ratio that is not calibrated but determined based on the signal characteristics
- The frequency sensor model parameters are determined prior to calibration based on a frequency sweep (sensor model involving resistors R, R_p, inductance L and capacitors C, C_p).
- Ax,y,z; Bx,y,z; Cx,y,z; Dx,y,z; VRx,y,z: A, B, C, D are numerical linearization parameters assessed based on the data of power sweep for specific modulation signal. The parameters do not depend on frequency nor media. VR is the maximum calibration range expressed in RMS voltage across the diode.
- Sensor Offset: The sensor offset corresponds to the mechanical from the probe tip (on probe axis). No
 tolerance required.
- Connector Angle: The angle is assessed using the information gained by determining the NORMx (no uncertainty required).
- Equivalent Sensor Angle: The two probe sensors are mounted in the same plane at different angles. The
 angles are assessed using the information gained by determining the NORMx (no uncertainty required).
- Spherical isotropy (3D deviation from isotropy): in a locally homogeneous field realized using an open waveguide / horn setup.

DASY - Parameters of Probe: EUmmWV3 - SN:9389

Basic Calibration Parameters

	Sensor X	Sensor Y	Unc (k=2)
Norm $(\mu V/(V/m)^2)$	0.01988	0.02280	± 10.1 %
DCP (mV) ^B	113.0	102.0	•
Equivalent Sensor Angle	-58.3	32.8	

Calibration results for Frequency Response (750 MHz - 110 GHz)

Calibration results for Frequency Response (750 MHz – 110 GHz)								
Frequency GHz	Target E-Field V/m	Deviation Sensor X dB	Deviation Sensor Y dB	Unc (k=2) dB				
0.75	77.2	-0.21	0.35	± 0.43 dB				
1.8	140.4	0.14	0.24	± 0.43 dB				
2	133.0	0.08	0.12	± 0.43 dB				
2.2	124.8	0.01	-0.02	± 0.43 dB				
2.5	123.0	-0.06	-0.16	± 0.43 dB				
3.5	256.2	0.04	-0.28	± 0.43 dB				
3.7	249.8	0.08	-0.27	± 0.43 dB				
6.6	41.8	0.36	0.42	± 0.98 dB				
8	48.4	-0.06	-0.28	± 0.98 dB				
10	54.4	-0.05	-0.05	± 0.98 dB				
15	71.5	0.51	-0.14	± 0.98 dB				
18	85.3	-0.45	-0.05	± 0.98 dB				
26.6	96.9	-0.11	0.14	± 0.98 dB				
30	92.6	0.18	0.18	± 0.98 dB				
35	93.7	-0.30	-0.11	± 0.98 dB				
40	91.5	-0.57	-0.44	± 0.98 dB				
50	19.6	-0.24	0.23	± 0.98 dB				
55	22.4	0.41	0.30	± 0.98 dB				
60	23.0	0.00	-0.09	± 0.98 dB				
65	27.4	-0.67	-0.40	± 0.98 dB				
70	23.9	-0.65	-0.52	± 0.98 dB				
75	20.0	-0.57	-0.47	± 0.98 dB				
75	14.8	-0.12	0.09	± 0.98 dB				
80	22.5	0.02	0.18	± 0.98 dB				
85	22.8	0.05	0.03	± 0.98 dB				
90	23.8	0.03	0.06	± 0.98 dB				
92	23.9	0.02	-0.12	± 0.98 dB				
95	20.5	-0.17	-0.26	± 0.98 dB				
97	24.4	0.02	-0.22	± 0.98 dB				
100	22.6	0.12	-0.13	± 0.98 dB				
105	22.7	-0.24	-0.17	± 0.98 dB				
110	19.7	-0.24	-0.08	± 0.98 dB				

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%.

^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 - Parameters of Probe: EUmmWV3 - SN:9389

Calibration Results for Modulation Response

UID	Communication System Name		A dB	B dBõV	С	D dB	VR mV	Max dev.	Max Unc ^E
0	cw	+	0.00	0.00	1.00	0.00	121.7	± 3.8 %	(k=2)
		T Y	0.00	0.00	1.00	0.00	58.3	± 3.0 %	± 4.7 %
10352-	Pulse Waveform (200Hz, 10%)	X	1.72	60.00	12.48	10.00	6.0	± 1.9 %	± 9.6 %
AAA		Y	1.95	60.00	12.91	10.00	6.0	2 1.0 70	2 3.0 76
10353-	Pulse Waveform (200Hz, 20%)	X	14.00	80.00	17.00	6.99	12.0	± 0.9 %	± 9.6 %
AAA		Υ	1.09	60.00	12.37	1	12.0	1 3.3 ,0	- 0.0 /0
10354-	Pulse Waveform (200Hz, 40%)	Х	0.55	60.00	10.89	3.98	23,0	± 0.9 %	± 9.6 %
AAA		Y	0.60	60.00	11.54		23.0	1	= 5.5 /5
10355-	Pulse Waveform (200Hz, 60%)	X	0.34	60.00	10.31	2.22	27.0	± 1.0 %	± 9.6 %
AAA		Y	0.17	67.15	1.82	1	27.0		
10387-	QPSK Waveform, 1 MHz	X	0.35	110.01	6.91	0.00	22.0	± 0.6 %	± 9.6 %
AAA		Υ	0.00	70.39	18.81	1	22.0		
10388-	QPSK Waveform, 10 MHz	Х	1.11	60.00	11.75	0.00	22.0	± 1.1 %	± 9.6 %
AAA		Υ	1.42	60.00	11.34	1	22.0		
10396-	64-QAM Waveform, 100 kHz	Х	1.68	60.00	13.52	3.01	17.0	± 0.8 %	± 9.6 %
AAA		Υ	1.94	60.00	13.61		17.0	1	
10399-	64-QAM Waveform, 40 MHz	Х	1.93	60.00	12.29	0.00	19.0	± 1.6 %	± 9.6 %
AAA		Υ	2.23	60.00	12.20		19.0		
10414-	WLAN CCDF, 64-QAM, 40MHz	Х	2.81	60.00	12.72	0.00	12.0	± 1.4 %	± 9.6 %
AAA		Υ	3.22	60.00	12.60		12.0	1	

Note: For details on all calibrated UID parameters see Appendix

Calibration Results for Linearity Response

Frequency GHz	Target E-Field V/m	Deviation Sensor X dB	Deviation Sensor Y dB	Unc (k=2) dB
0.9	50.0	0.07	-0.14	± 0.2 dB
0.9	100.0	-0.01	0.01	± 0.2 dB
0.9	500.0	0.00	0.00	± 0.2 dB
0.9	1000.0	0.01	0.02	± 0.2 dB
0.9	1500.0	0.00	0.03	± 0.2 dB
0.9	2000.0	0.00	0.00	± 0.2 dB

Sensor Frequency Model Parameters

	Sensor X	Sensor Y
R (Ω)	42.51	41.62
$R_{\rho}(\Omega)$	94.34	92.12
L (nH)	0.03051	0.03188
C (pF)	0.2518	0.2571
C _p (pF)	0.1293	0.1209

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	Т6
X	20.9	145.90	31.43	0.92	2.19	4.97	0.00	0.67	1.00
Y	18.3	136.24	35.34	0.00	1.59	5.00	0.00	1.06	1.00

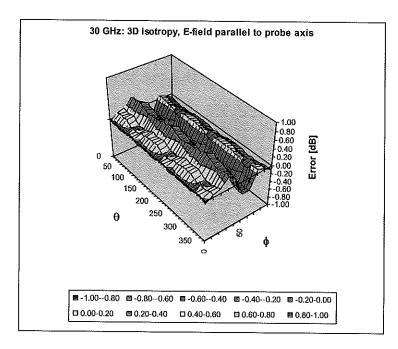
EUmmWV3 - SN: 9389 November 6, 2018

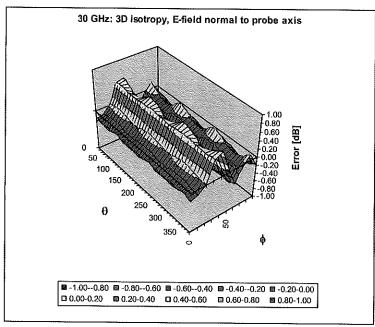
DASY - Parameters of Probe: EUmmWV3 - SN:9389

Other Probe Parameters

Sensor Arrangement	Rectangular
Connector Angle (°)	-75.1
Mechanical Surface Detection Mode	enabled
Optical Surface Detection Mode	disabled
Probe Overall Length	320 mm
Probe Body Diameter	8 mm
Tip Length	23 mm
Tip Diameter	8.0 mm
Probe Tip to Sensor X Calibration Point	1.5 mm
Probe Tip to Sensor Y Calibration Point	1.5 mm

Deviation from Isotropy in Air f = 30 GHz





Probe isotropy for E_{tot} : probe rotated ϕ = 0° to 360°, tilted from field propagation direction \vec{k} Parallel to the field propagation (ψ =0° - 90°): deviation within ± 0.48 dB Normal to field orientation (θ =0° - 90°): deviation within ± 0.52 dB

Appendix: Modulation Calibration Parameters

UID	Rev	Communication System Name	Group	PAR (dB)	Unc ^E (k=2)
0		CW	cw	0.00	± 4.7 %
10010	CAA	SAR Validation (Square, 100ms, 10ms)	Test	10.00	± 9.6 %
10011	CAB	UMTS-FDD (WCDMA)	WCDMA	2.91	± 9.6 %
10012	CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps)	WLAN	1.87	± 9.6 %
10013	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps)	WLAN	9.46	± 9.6 %
10021	DAC	GSM-FDD (TDMA, GMSK)	GSM	9.39	± 9.6 %
10023	DAC	GPRS-FDD (TDMA, GMSK, TN 0)	GSM	9.57	± 9.6 %
10024	DAC	GPRS-FDD (TDMA, GMSK, TN 0-1)	GSM	6.56	± 9.6 %
10025	DAC	EDGE-FDD (TDMA, 8PSK, TN 0)	GSM	12.62	± 9.6 %
10026	DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1)	GSM	9.55	± 9.6 %
10027 10028	DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2)	GSM	4.80	± 9.6 %
10028	DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2-3)	GSM	3.55	± 9.6 %
10029	DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2)	GSM	7.78	± 9.6 %
10030	CAA	IEEE 802.15.1 Bluetooth (GFSK, DH1)	Bluetooth	5.30	± 9.6 %
10031		IEEE 802.15.1 Bluetooth (GFSK, DH3)	Bluetooth	1.87	± 9.6 %
10032	CAA	IEEE 802.15.1 Bluetooth (GFSK, DH5)	Bluetooth	1.16	± 9.6 %
10033	CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH1)	Bluetooth	7.74	± 9.6 %
10034	CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH3) IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH5)	Bluetooth	4.53	± 9.6 %
10035	CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH5)	Bluetooth	3.83	± 9.6 %
10037	CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH1)	Bluetooth	8.01	± 9.6 %
10037	CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH3)	Bluetooth	4.77	± 9.6 %
10039	CAB	CDMA2000 (1xRTT, RC1)	Bluetooth	4.10	± 9.6 %
10042	CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Halfrate)	CDMA2000	4.57	± 9.6 %
10042	CAA	IS-91/EIA/TIA-553 FDD (FDMA, FM)	AMPS	7.78	± 9.6 %
10048	CAA	DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24)	AMPS DECT	0.00	± 9.6 %
10049	CAA	DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12)	DECT	13.80	± 9.6 %
10056	CAA	UMTS-TDD (TD-SCDMA, 1.28 Mcps)	TD-SCDMA	10.79	± 9.6 %
10058	DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)	GSM	11.01 6.52	± 9.6 % ± 9.6 %
10059	CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps)	WLAN	2.12	± 9.6 %
10060	CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps)	WLAN	2.83	± 9.6 %
10061	CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps)	WLAN	3.60	± 9.6 %
10062	CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps)	WLAN	8.68	± 9.6 %
10063	CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps)	WLAN	8.63	± 9.6 %
10064	CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps)	WLAN	9.09	± 9.6 %
10065	CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps)	WLAN	9.00	± 9.6 %
10066	CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps)	WLAN	9.38	± 9.6 %
10067	CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps)	WLAN	10.12	± 9.6 %
10068	CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps)	WLAN	10.24	± 9.6 %
10069	CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps)	WLAN	10.56	± 9.6 %
10071	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps)	WLAN	9.83	± 9.6 %
10072	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps)	WLAN	9.62	± 9.6 %
10073	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps)	WLAN	9.94	± 9.6 %
10074	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps)	WLAN	10.30	± 9.6 %
10075	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps)	WLAN	10.77	± 9.6 %
10076	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps)	WLAN	10.94	± 9.6 %
10077	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps)	WLAN	11.00	± 9.6 %
10081	CAB	CDMA2000 (1xRTT, RC3)	CDMA2000	3.97	± 9.6 %
10082	CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Fullrate)	AMPS	4.77	±9.6 %
10090	DAC	GPRS-FDD (TDMA, GMSK, TN 0-4)	GSM	6.56	± 9.6 %
10097	CAB	UMTS-FDD (HSDPA)	WCDMA	3.98	± 9.6 %
10098	CAB	UMTS-FDD (HSUPA, Subtest 2)	WCDMA	3.98	± 9.6 %
10099	DAC	EDGE-FDD (TDMA, 8PSK, TN 0-4)	GSM	9.55	± 9.6 %
10100	CAE	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	LTE-FDD	5.67	± 9.6 %
10101	CAE	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	LTE-FDD	6.42	± 9.6 %
10102	CAE	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	LTE-FDD	6.60	± 9.6 %
10103 10104	CAG	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	LTE-TDD	9.29	± 9.6 %
10104	CAG	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	LTE-TDD	9.97	± 9.6 %
10108	CAG	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	LTE-TDD	10.01	± 9.6 %
10100	CAG	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	LTE-FDD	5.80	± 9.6 %

10100	CAC	LTE EDD (CO EDMA 400N DD 40 MILL 40 OAM)	Trees	0.40	
10109	CAG	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	LTE-FDD	6.43	± 9.6 %
		LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	LTE-FDD	5.75	±9.6%
10111	CAG	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	LTE-FDD	6.44	±9.6%
10112	CAG	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	LTE-FDD	6.59	± 9.6 %
10113	CAG	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	LTE-FDD	6.62	± 9.6 %
10114	CAC	IEEE 802.11n (HT Greenfield, 13.5 Mbps, BPSK)	WLAN	8.10	±9.6%
10115	CAC	IEEE 802.11n (HT Greenfield, 81 Mbps, 16-QAM)	WLAN	8.46	± 9.6 %
10116	CAC	IEEE 802.11n (HT Greenfield, 135 Mbps, 64-QAM)	WLAN	8.15	±9.6%
10117	CAC	IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK)	WLAN	8.07	± 9.6 %
10118	CAC	IEEE 802.11n (HT Mixed, 81 Mbps, 16-QAM)	WLAN	8.59	± 9.6 %
10119	CAC	IEEE 802.11n (HT Mixed, 135 Mbps, 64-QAM)	WLAN	8.13	±9.6%
10140	CAE	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	LTE-FDD	6.49	± 9.6 %
10141	CAE	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	LTE-FDD	6.53	± 9.6 %
10142	CAE	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	LTE-FDD	5.73	± 9.6 %
10143	CAE	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	LTE-FDD	6.35	± 9.6 %
10144	CAE	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	LTE-FDD	6.65	±9.6%
10145	CAF	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	LTE-FDD	5.76	± 9.6 %
10146	CAF	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	LTE-FDD	6.41	± 9.6 %
10147	CAF	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	LTE-FDD	6.72	± 9.6 %
10149	CAE	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	LTE-FDD	6.42	± 9.6 %
10150	CAE	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	LTE-FDD	6.60	± 9.6 %
10151	CAG	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	LTE-TDD	9.28	±9.6%
10152	CAG	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	LTE-TDD	9.92	± 9.6 %
10153	CAG	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	LTE-TDD	10.05	±9.6%
10154	CAG	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	LTE-FDD	5.75	±9.6%
10155	CAG	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	LTE-FDD	6.43	± 9.6 %
10156	CAG	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	LTE-FDD	5.79	± 9.6 %
10157	CAG	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	LTE-FDD	6.49	± 9.6 %
10158	CAG	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	LTE-FDD	6.62	± 9.6 %
10159	CAG	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	LTE-FDD	6.56	± 9.6 %
10160	CAE	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	LTE-FDD	5.82	± 9.6 %
10161	CAE	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	LTE-FDD	6.43	± 9.6 %
10162	CAE	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	LTE-FDD	6.58	± 9.6 %
10166	CAF	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	LTE-FDD	5.46	± 9.6 %
10167	CAF	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	LTE-FDD	6.21	± 9.6 %
10168	CAF	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	LTE-FDD	6.79	± 9.6 %
10169	CAE	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	LTE-FDD	5.73	± 9.6 %
10170	CAE	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	LTE-FDD	6.52	± 9.6 %
10171	AAE	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	LTE-FDD	6.49	± 9.6 %
10172	CAG	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	LTE-TDD	9.21	± 9.6 %
10173	CAG	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	LTE-TDD	9.48	± 9.6 %
10174	CAG	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	LTE-TDD	10.25	± 9.6 %
10175	CAG	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	LTE-FDD	5.72	± 9.6 %
10176	CAG	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	LTE-FDD	6.52	± 9.6 %
10177	CAI	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	LTE-FDD	5.73	± 9.6 %
10178	CAG	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)	LTE-FDD	6.52	± 9.6 %
10179	CAG	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	LTE-FDD	6.50	± 9.6 %
10180	CAG	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)	LTE-FDD	6.50	± 9.6 %
10181	CAE	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	LTE-FDD	5.72	± 9.6 %
10182	CAE	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	LTE-FDD	6.52	± 9.6 %
10183	AAD	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	LTE-FDD	6.50	± 9.6 %
10184	CAE	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	LTE-FDD	5.73	± 9.6 %
10185	CAE	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)	LTE-FDD	6.51	± 9.6 %
10186	AAE	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)	LTE-FDD	6.50	± 9.6 %
10187	CAF	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	LTE-FDD	5.73	± 9.6 %
10188	CAF	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	LTE-FDD	6.52	± 9.6 %
10189	AAF	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 10-QAM)	LTE-FDD		± 9.6 %
10193	CAC	IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK)	WLAN	6.50 8.09	
10193	CAC	IEEE 802.11n (HT Greenfield, 6.5 Mbps, BFSK)	WLAN		±9.6%
10194	CAC	IEEE 802.11n (HT Greenfield, 59 Mbps, 16-QAM)	WLAN	8.12	±9.6%
10195	CAC	IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK)		8.21	±9.6 %
10196	CAC		WLAN	8.10	± 9.6 %
10197	CAC	IEEE 802.11n (HT Mixed, 39 Mbps, 16-QAM)	WLAN	8.13	±9.6%
10198		IEEE 802.11n (HT Mixed, 65 Mbps, 64-QAM)	WLAN	8.27	±9.6 %
10219	CAC	IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK)	WLAN	8.03	± 9.6 %

10000					
10220	CAC	IEEE 802.11n (HT Mixed, 43.3 Mbps, 16-QAM)	WLAN	8.13	± 9.6 %
10221	CAC	IEEE 802.11n (HT Mixed, 72.2 Mbps, 64-QAM)	WLAN	8.27	± 9.6 %
10222	CAC	IEEE 802.11n (HT Mixed, 15 Mbps, BPSK)	WLAN	8.06	± 9.6 %
10223	CAC	IEEE 802.11n (HT Mixed, 90 Mbps, 16-QAM)	WLAN	8.48	± 9.6 %
10224	CAC	IEEE 802.11n (HT Mixed, 150 Mbps, 64-QAM)	WLAN		
10225	CAB	UMTS-FDD (HSPA+)		8.08	± 9.6 %
10226	CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	WCDMA	5.97	± 9.6 %
10227	CAA	LTE TOD (SC-FDMA, LRB, 1.4 MHZ, 16-QAM)	LTE-TDD	9.49	± 9.6 %
		LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	LTE-TDD	10.26	± 9.6 %
10228	CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	LTE-TDD	9.22	± 9.6 %
10229	CAC	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)	LTE-TDD	9.48	± 9.6 %
10230	CAC	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)	LTE-TDD	10.25	± 9.6 %
10231	CAC	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	LTE-TDD	9.19	± 9.6 %
10232	CAF	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)	LTE-TDD	9.48	± 9.6 %
10233	CAF	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)	LTE-TDD	10.25	
10234	CAF	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK)			± 9.6 %
10235	CAF	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	LTE-TDD	9.21	± 9.6 %
10236	CAF	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	LTE-TDD	9.48	± 9.6 %
10237	CAF	LTE TOD (OC FDMA, LRB, 10 MHZ, 64-QAM)	LTE-TDD	10.25	± 9.6 %
		LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	LTE-TDD	9.21	± 9.6 %
10238	CAF	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	LTE-TDD	9.48	± 9.6 %
10239	CAF	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	LTE-TDD	10.25	± 9.6 %
10240	CAF	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	LTE-TDD	9.21	± 9.6 %
10241	CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	LTE-TDD	9.82	± 9.6 %
10242	CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	LTE-TDD	9.86	± 9.6 %
10243	CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	LTE-TDD	9.46	± 9.6 %
10244	CAC	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	LTE-TDD	10.06	
10245	CAC	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)			±9.6 %
10246	CAC	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	LTE-TDD	10.06	± 9.6 %
10247	CAF	LTE TOD (CC FDMA, 50% RB, 5 MILL, QPSK)	LTE-TDD	9.30	± 9.6 %
10248	+	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	LTE-TDD	9.91	± 9.6 %
	CAF	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	LTE-TDD	10.09	±9.6 %
10249	CAF	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	LTE-TDD	9.29	± 9.6 %
10250	CAF	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	LTE-TDD	9.81	± 9.6 %
10251	CAF	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	LTE-TDD	10.17	± 9.6 %
10252	CAF	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	LTE-TDD	9.24	± 9.6 %
10253	CAF	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	LTE-TDD	9.90	± 9.6 %
10254	CAF	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	LTE-TDD	10.14	± 9.6 %
10255	CAF	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	LTE-TDD		
10256	CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)		9.20	± 9.6 %
10257	CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	LTE-TDD	9.96	± 9.6 %
10258	CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	LTE-TDD	10.08	± 9.6 %
10259	CAC	LTE-TOD (SC-FDMA, 100% RB, 1.4 MMZ, QPSK)	LTE-TDD	9.34	± 9.6 %
		LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	LTE-TDD	9.98	± 9.6 %
10260	CAC	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	LTE-TDD	9.97	±9.6 %
10261	CAC	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	LTE-TDD	9.24	± 9.6 %
10262	CAF	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	LTE-TDD	9.83	± 9.6 %
10263	CAF	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	LTE-TDD	10.16	± 9.6 %
10264	CAF	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	LTE-TDD	9.23	± 9.6 %
10265	CAF	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	LTE-TDD	9.92	
10266	CAF	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	LTE-TOD		±9.6 %
10267	CAF	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)		10.07	± 9.6 %
10268	CAF	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	LTE-TDD	9.30	±9.6%
10269	CAF	TTE-TDD (SC EDMA 100% DD 45 ML - 04 O44)	LTE-TDD	10.06	± 9.6 %
10209	, 	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	LTE-TDD	10.13	± 9.6 %
	CAF	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	LTE-TDD	9.58	± 9.6 %
10274	CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.10)	WCDMA	4.87	± 9.6 %
10275	CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.4)	WCDMA	3.96	± 9.6 %
10277	CAA	PHS (QPSK)	PHS	11.81	± 9.6 %
10278	CAA	PHS (QPSK, BW 884MHz, Rolloff 0.5)	PHS	11.81	± 9.6 %
10279	CAA	PHS (QPSK, BW 884MHz, Rolloff 0.38)	PHS	12.18	± 9.6 %
10290	AAB	CDMA2000, RC1, SO55, Full Rate	CDMA2000	3.91	
10291	AAB	CDMA2000, RC3, SO55, Full Rate	CDMA2000 CDMA2000		± 9.6 %
10292	AAB	CDMA2000, RC3, SO32, Full Rate		3.46	± 9.6 %
10293	AAB	CDMA2000 DC3 CO3 Evil Data	CDMA2000	3.39	± 9.6 %
		CDMA2000, RC3, SO3, Full Rate	CDMA2000	3.50	± 9.6 %
10295	AAB	CDMA2000, RC1, SO3, 1/8th Rate 25 fr.	CDMA2000	12.49	± 9.6 %
10297	AAD	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	LTE-FDD	5.81	± 9.6 %
10298	AAD	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	LTE-FDD	5.72	± 9.6 %
10299	AAD	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	LTE-FDD	6.39	± 9.6 %
					70

10300	AAD	LITE EDD (SC CDMA EON ED AMILE OF CARE	T	T	
10300	AAA	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM) IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC)	LTE-FDD	6.60	±9.6%
10302	AAA	IEEE 802.16e WIMAX (29:18, 5ms, 10MHz, QPSK, PUSC)	WiMAX	12.03	± 9.6 %
10002	7	symbols)	WiMAX	12.57	± 9.6 %
10303	AAA	IEEE 802.16e WIMAX (31:15, 5ms, 10MHz, 64QAM, PUSC)	10(18.8.0.)/	40.50	
10304	AAA	IEEE 802.16e WIMAX (29:18, 5ms, 10MHz, 64QAM, PUSC)	WIMAX	12.52	± 9.6 %
10305	AAA	IEEE 802.16e WIMAX (23.16, 3115, 10MHz, 64QAM, PUSC, 15	WiMAX	11.86	± 9.6 %
10000	~~·	symbols)	WiMAX	15.24	± 9.6 %
10306	AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 64QAM, PUSC, 18	10004030	44.07	1000
	' ' ' '	symbols)	WiMAX	14.67	± 9.6 %
10307	AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, PUSC, 18	WiMAX	14.49	1.000
		symbols)	VVIIVIAA	14.49	± 9.6 %
10308	AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, PUSC)	WIMAX	14.46	± 9.6 %
10309	AAA	IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, 16QAM, AMC 2x3, 18	WIMAX	14.58	± 9.6 %
		symbols)	171111111111111111111111111111111111111	17.00	2 0.0 %
10310	AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, AMC 2x3, 18	WIMAX	14.57	± 9.6 %
		symbols)	*************************************	14.01	2 0.0 %
10311	AAD	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	LTE-FDD	6.06	± 9.6 %
10313	AAA	iDEN 1:3	iDEN	10.51	± 9.6 %
10314	AAA	IDEN 1:6	iDEN	13.48	± 9.6 %
10315	AAB	IEEE 802,11b WiFi 2,4 GHz (DSSS, 1 Mbps, 96pc duty cycle)	WLAN	1.71	± 9.6 %
10316	AAB	IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 96pc duty cycle)	WLAN	8.36	± 9.6 %
10317	AAC	IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle)	WLAN	8.36	± 9.6 %
10352	AAA	Pulse Waveform (200Hz, 10%)	Generic	10.00	± 9.6 %
10353	AAA	Pulse Waveform (200Hz, 20%)	Generic	6.99	± 9.6 %
10354	AAA	Pulse Waveform (200Hz, 40%)	Generic	3.98	± 9.6 %
10355	AAA	Pulse Waveform (200Hz, 60%)	Generic	2.22	± 9.6 %
10356	AAA	Pulse Waveform (200Hz, 80%)	Generic	0.97	± 9.6 %
10387	AAA	QPSK Waveform, 1 MHz	Generic	5.10	± 9.6 %
10388	AAA	QPSK Waveform, 10 MHz	Generic	5.22	± 9.6 %
10396	AAA	64-QAM Waveform, 100 kHz	Generic	6.27	± 9.6 %
10399	AAA	64-QAM Waveform, 40 MHz	Generic	6.27	± 9.6 %
10400	AAD	IEEE 802.11ac WiFi (20MHz, 64-QAM, 99pc duty cycle)	WLAN	8.37	± 9.6 %
10401	AAD	IEEE 802.11ac WiFi (40MHz, 64-QAM, 99pc duty cycle)	WLAN	8.60	± 9.6 %
10402	AAD	IEEE 802.11ac WiFi (80MHz, 64-QAM, 99pc duty cycle)	WLAN	8.53	± 9.6 %
10403	AAB	CDMA2000 (1xEV-DO, Rev. 0)	CDMA2000	3.76	± 9.6 %
10404	AAB	CDMA2000 (1xEV-DO, Rev. A)	CDMA2000	3.77	± 9.6 %
10406	AAB	CDMA2000, RC3, SO32, SCH0, Full Rate	CDMA2000	5.22	± 9.6 %
10410	AAF	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL	LTE-TDD	7.82	± 9.6 %
		Subframe=2,3,4,7,8,9, Subframe Conf=4)			
10414	AAA	WLAN CCDF, 64-QAM, 40MHz	Generic	8.54	± 9.6 %
10415	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle)	WLAN	1.54	± 9.6 %
10416	AAA	IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 99pc duty cycle)	WLAN	8.23	± 9.6 %
10417	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 99pc duty cycle)	WLAN	8.23	± 9.6 %
10418	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle,	WLAN	8.14	± 9.6 %
40440		Long preambule)			
10419	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle,	WLAN	8.19	± 9.6 %
10420	AAD	Short preambule)			
10422	AAB	IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK)	WLAN	8.32	± 9.6 %
10423	AAB	IEEE 802.11n (HT Greenfield, 43.3 Mbps, 16-QAM)	WLAN	8.47	± 9.6 %
10424	AAB	IEEE 802.11n (HT Greenfield, 72.2 Mbps, 64-QAM)	WLAN	8.40	± 9.6 %
10425	AAB	IEEE 802.11n (HT Greenfield, 15 Mbps, BPSK)	WLAN	8.41	± 9.6 %
10426 10427	AAB	IEEE 802.11n (HT Greenfield, 90 Mbps, 16-QAM)	WLAN	8.45	± 9.6 %
	AAB	IEEE 802.11n (HT Greenfield, 150 Mbps, 64-QAM)	WLAN	8.41	± 9.6 %
10430 10431	AAD	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1)	LTE-FDD	8.28	± 9.6 %
10431	AAD AAC	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1)	LTE-FDD	8.38	± 9.6 %
10432	AAC	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1)	LTE-FDD	8.34	± 9.6 %
10433	AAA	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1)	LTE-FDD	8.34	± 9.6 %
10434	AAF	W-CDMA (BS Test Model 1, 64 DPCH)	WCDMA	8.60	± 9.6 %
10400	\ \	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.82	± 9.6 %
10447	AAD	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	LIFEDD	7.50	
10448	AAD	LTE-FDD (OFDMA, 3 MHz, E-TM 3.1, Clipping 44%) LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, Clippin 44%)	LTE-FDD	7.56	± 9.6 %
10449	AAC	LTE-FDD (OFDMA, 10 MHz, E-1M 3.1, Clippin 44%) LTE-FDD (OFDMA, 15 MHz, E-TM 3.1, Cliping 44%)	LTE-FDD	7.53	± 9.6 %
10449	AAC	LTE-FDD (OFDMA, 13 MHz, E-TM 3.1, Clipping 44%)	LTE-FDD	7.51	± 9.6 %
		, DO (OF DIVIN, 20 IVIETZ, E-TIVES. I, CIIPPING 44%)	LTE-FDD	7.48	± 9.6 %

1945 AAS IEEE 902 11st WIFT (1998) 1945 A.	10451	AAA	W-CDMA (BS Test Model 1, 64 DPCH, Clipping 44%)	MACONA	750	T . 0 0 0/
19468			IEEE 802.11ac WiFi (160MHz, 64-OAM, 99nc duty cycle)	WCDMA	7.59	± 9.6 %
19488 AAA CDMA200 (18EV-DQ Rev. B. 2 carriers) CDMA2000 e.55 \$.5.6 % 19.6 % 19.6 % CDMA2000 c.55 \$.5.6 % 19.6 % 19.6 % CDMA2000 c.55 \$.5.6 % CDMA2000 c.55 c.5.6 % c.			UMTS-FDD (DC-HSDPA)		1	
19499 AAA CDMA2000 (TSEVED O, Rev. B. 3 cerriers)						
10460	10459		CDMA2000 (1xEV-DO, Rev. B, 3 carriers)			
10461		AAA	UMTS-FDD (WCDMA, AMR)			
10462	10461	AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK, UL			
10463 AA LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM, UL LTE-TDD 8.56 \$9.6 % Subframe=2,3,4,7,8,9 \$10464 AAB LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM, UL LTE-TDD 7.82 \$9.6 % \$10465 AAB LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM, UL LTE-TDD 8.32 \$9.6 % \$10466 AAB LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM, UL LTE-TDD 8.57 \$9.6 % \$10467 AAE LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM, UL LTE-TDD 8.57 \$9.6 % \$10467 AAE LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL LTE-TDD 8.52 \$9.6 % \$10469 AAE LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM, UL LTE-TDD 8.32 \$9.6 % \$19.6 % \$10469 AAE LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM, UL LTE-TDD 8.32 \$9.6 % \$10469 AAE LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM, UL LTE-TDD 8.56 \$9.6 % \$10470 AAE LTE-TDD (SC-FDMA, 1 RB, 1 MHz, 16-QAM, UL LTE-TDD 8.52 \$9.6 % \$10470 AAE LTE-TDD (SC-FDMA, 1 RB, 1 MHz, 16-QAM, UL LTE-TDD 8.52 \$9.6 % \$10470 AAE LTE-TDD (SC-FDMA, 1 RB, 1 MHz, 16-QAM, UL LTE-TDD 8.52 \$9.6 % \$10470 AAE LTE-TDD (SC-FDMA, 1 RB, 1 MHz, 16-QAM, UL LTE-TDD 8.57 \$9.6 % \$10470 AAE LTE-TDD (SC-FDMA, 1 RB, 1 5 MHz, 16-QAM, UL LTE-TDD 8.57 \$9.6 % \$10470 AAE LTE-TDD (SC-FDMA, 1 RB, 1 5 MHz, 2 QPSK, UL LTE-TDD 8.57 \$9.6 % \$10470 AAE LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM, UL LTE-TDD 8.57 \$9.6 % \$10470 AAE LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM, UL LTE-TDD 8.57 \$9.6 % \$10470 AAE LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM, UL LTE-TDD 8.57 \$9.6 % \$10470 AAE LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM, UL LTE-TDD 8.57 \$9.6 % \$10470 AAE LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM, UL LTE-TDD 8.57 \$9.6 % \$10470 AAE LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM, UL LTE-TDD 8.57 \$9.6 % \$10470 AAE LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM, UL LTE-TDD 8.6 % \$10470 AAE LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM, UL LTE-TDD 8.6 % \$10470 AAE LTE-TDD (SC-FDMA, 50 MHz, 16-QAM, UL LTE-TDD		ļ	Subframe=2,3,4,7,8,9)			
10463	10462	AAA		LTE-TDD	8.30	± 9.6 %
10464 AAB LTE-TDD (SC-FDMA, 1RB, 3 MHz, QPSK, UL LTE-TDD 7.82 ±9.6 % Subframe-2,3.4,7.8 9 10465 AAB LTE-TDD (SC-FDMA, 1RB, 3 MHz, G-QAM, UL LTE-TDD 8.32 ±9.6 % Subframe-2,3.4,7.8 9 10466 AAB LTE-TDD (SC-FDMA, 1RB, 3 MHz, 64-QAM, UL LTE-TDD 8.57 ±9.6 % Subframe-2,3.4,7.8 9 10467 AAE LTE-TDD (SC-FDMA, 1RB, 5 MHz, QPSK, UL LTE-TDD 7.82 ±9.6 % Subframe-2,3.4,7.8 9 10468 AAE LTE-TDD (SC-FDMA, 1RB, 5 MHz, GA-QAM, UL LTE-TDD 8.32 ±9.6 % Subframe-2,3.4,7.8 9 10469 AAE LTE-TDD (SC-FDMA, 1RB, 5 MHz, 64-QAM, UL LTE-TDD 8.56 ±9.6 % Subframe-2,3.4,7.8 9 10470 AAE LTE-TDD (SC-FDMA, 1RB, 10 MHz, 16-QAM, UL LTE-TDD 7.82 ±9.6 % Subframe-2,3.4,7.8 9 10471 AAE LTE-TDD (SC-FDMA, 1RB, 10 MHz, 16-QAM, UL LTE-TDD 8.32 ±9.6 % Subframe-2,3.4,7.8 9 10472 AAE LTE-TDD (SC-FDMA, 1RB, 10 MHz, 16-QAM, UL LTE-TDD 8.32 ±9.6 % Subframe-2,3.4,7.8 9 10472 AAE LTE-TDD (SC-FDMA, 1RB, 10 MHz, 16-QAM, UL LTE-TDD 8.57 ±9.6 % Subframe-2,3.4,7.8 9 10473 AAE LTE-TDD (SC-FDMA, 1RB, 15 MHz, 16-QAM, UL LTE-TDD 8.57 ±9.6 % Subframe-2,3.4,7.8 9 10474 AAE LTE-TDD (SC-FDMA, 1RB, 15 MHz, 16-QAM, UL LTE-TDD 8.32 ±9.6 % Subframe-2,3.4,7.8 9 10474 AAE LTE-TDD (SC-FDMA, 1RB, 15 MHz, 16-QAM, UL LTE-TDD 8.32 ±9.6 % Subframe-2,3.4,7.8 9 10475 AAE LTE-TDD (SC-FDMA, 1RB, 15 MHz, 16-QAM, UL LTE-TDD 8.57 ±9.6 % Subframe-2,3.4,7.8 9 10476 AAE LTE-TDD (SC-FDMA, 1RB, 15 MHz, 16-QAM, UL LTE-TDD 8.57 ±9.6 % Subframe-2,3.4,7.8 9 10478 AAF LTE-TDD (SC-FDMA, 1RB, 20 MHz, 16-QAM, UL LTE-TDD 8.57 ±9.6 % Subframe-2,3.4,7.8 9 10479 AAA LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL LTE-TDD 8.45 ±9.6 % Subframe-2,3.4,7.8 9 10488 AAB LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL LTE-TDD 8.45 ±9.6 % Subframe-2,3.4,7.8 9 10489 AAE LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL LTE-TDD 8.60 ±9.6 % Subframe-2,3.4,7.8 9 10489 AA	40400	+	Subframe=2,3,4,7,8,9)			
10464	10463	AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM, UL	LTE-TDD	8.56	± 9.6 %
Subframe-2,3,4,7,8,9	10464	AAD				
10466	10404	AAB		LTE-TDD	7.82	± 9.6 %
Subframe=2,3,4,7,8,9 Subf	10465	AAR				
10466 AAB	10100	1,0,0	Subframe=2 3 4 7 8 9)	LIE-IDD	8.32	± 9.6 %
Subframe=2,3,4,7,8,9 Subf	10466	AAB		I TE TOO	0.57	1000
10467			Subframe=2.3.4.7.8.9)	LIE-IDD	0.57	± 9.6 %
Subframe=2,3,4,7,8,9 Subf	10467	AAE	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL	I TE-TOD	7.82	+96%
Subframe=2,3,4,7,8,9			Subframe=2,3,4,7,8,9)		1.02	2 0.0 %
Subframe=2,3,4,7,8,9	10468	AAE	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM, UL	LTE-TDD	8.32	± 9.6 %
Subframe=2,3,4,7,8,9 LTE-TDD SFDMA, 1 RB, 10 MHz, QPSK, UL LTE-TDD SUbframe=2,3,4,7,8,9 LTE-TDD SC-FDMA, 1 RB, 10 MHz, 16-QAM, UL LTE-TDD SFDMA, 1 RB, 10 MHz, 16-QAM, UL LTE-TDD SFDMA, 1 RB, 10 MHz, 16-QAM, UL LTE-TDD SFDMA, 1 RB, 10 MHz, 64-QAM, UL LTE-TDD SFDMA, 1 RB, 10 MHz, 64-QAM, UL LTE-TDD SFDMA, 1 RB, 15 MHz, QPSK, UL LTE-TDD SFDMA, 1 RB, 15 MHz, QPSK, UL LTE-TDD SFDMA, 1 RB, 15 MHz, 16-QAM, UL LTE-TDD SFDMA, 1 RB, 20 MHz, 16-QAM, UL LTE-TDD SFDMA, 18-SPM, 14-MHz, 16-QAM, UL LTE-TDD SFDMA, 18-SPM, 14-MHz, 16-QAM, UL LTE-TDD SFDMA, 50% RB, 1.4 MHz, 16-QAM, UL LTE-TDD SFDMA, 50% RB, 1.4 MHz, 16-QAM, UL LTE-TDD SFDMA, 50% RB, 1.4 MHz, 16-QAM, UL LTE-TDD SFDMA, 50% RB, 3 MHz, 4-QAM, UL LTE-TDD SFDMA, 50% RB, 3 MHz, 16-QAM, UL LTE-TDD SFDMA, 50% RB, 3 MHz, 16-QAM, UL LTE-TDD SFDMA, 50% RB, 3 MHz, 16-QAM, UL LTE-TDD SFDMA, 50% RB, 5 MHz, 64-QAM, UL LTE-TDD SFDMA, 50% RB, 5 MHz, 64-QAM, UL LTE-TDD SFDMA, 50% RB, 5 MHz, 64-QAM, UL LTE-TDD SFDMA, 50% RB, 5 MHz, 64			Subframe=2,3,4,7,8,9)			- 3.5 .5
10470	10469	AAE	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM, UL	LTE-TDD	8.56	± 9.6 %
Subframe=2,3,4,7,8,9	40470	A A F				
10471 AAE LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM, UL LTE-TDD S.32 ±9.6 % Subframe=2,3.4,7,8,9 Subframe=2,3.4,7,8,9 LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK, UL LTE-TDD S.57 ±9.6 % Subframe=2,3.4,7,8,9 Subf	10470	AAE	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL	LTE-TDD	7.82	± 9.6 %
Subframe=2,3,4,7,8,9 LTE-TDD S.57 ±9.6 % Subframe=2,3,4,7,8,9 Su	10471	1 A A E	Subirarne=2,3,4,7,8,9)			
10472	10471	AAC		LTE-TDD	8.32	±9.6 %
Subframe=2,3,4,7,8,9	10472	ΔΔE		LTE TOO		
10473 AAE	10-772	1	Subframe=2.3.4.7.8.9)	LIE-IDD	8.57	± 9.6 %
Subframe=2,3,4,7,8,9	10473	AAE	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, OPSK, III	I TE-TOD	7 92	+069/
10474				FIETIDO	7.02	1 3.0 %
Subframe=2,3,4,7,8,9)	10474	AAE	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM, UL	LTE-TDD	8.32	±9.6 %
Subframe=2,3,4,7,8,9 LTE-TDD S.32			Subframe=2,3,4,7,8,9)			
10477 AAF LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 3 MHz, G4-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 3 MHz, G4-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 5 MHz, G4-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 5 MHz, G4-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 5 MHz, G4-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 10 MHz, G4-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 10 MHz, G4-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 10 MHz, G4-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 10 MHz, G4-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 10 MHz, G4-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 10 MHz, G4-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 10 MHz, G4-QAM, UL Subframe=2,3,4,7,8,9) <td>10475</td> <td>AAE</td> <td>LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM, UL</td> <td>LTE-TDD</td> <td>8.57</td> <td>± 9.6 %</td>	10475	AAE	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM, UL	LTE-TDD	8.57	± 9.6 %
Subframe=2,3,4,7,8,9 LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 5 MHz, G4-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 5 MHz, G4-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 5 MHz, G4-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 10 MHz, G4-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 10 MHz, G4-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 10 MHz, G4-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 10 MHz, G4-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 10 MHz, G4-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 10 MHz, G4-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 10 MHz, G4-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 10 MHz, G4-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 10 MHz, G4-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 10 MHz, G4-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 10 MHz, G4-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 10 MHz, G4-QAM, UL S	40477		Subframe=2,3,4,7,8,9)			
10478 AAF LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 5 MHz, GPSK, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 5 MHz, GPSK, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 5 MHz, GPSK, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 5 MHz, GPSK, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 5 MHz, GPSK, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 10 MHz, GPSK, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 10 MHz, GPSK, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 10 MHz, GPSK, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 10 MHz, GPSK, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 10 MHz, GPSK, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 10 MHz, GPSK, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 10 MHz, GPSK, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9) LTE-	10477	AAF	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM, UL	LTE-TDD	8.32	±9.6%
Subframe=2,3,4,7,8,9 Subframe=2,3,4,7,8,9 10479	10478	1 1 1	LTE TDD (SC EDMA 4 DD 20 MHz C4 CAM LII			
10479 AAA LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9) LTE-TDD 7.74 ± 9.6 % 10480 AAA LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD 8.18 ± 9.6 % 10481 AAA LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD 8.45 ± 9.6 % 10482 AAB LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9) LTE-TDD 7.71 ± 9.6 % 10483 AAB LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD 8.39 ± 9.6 % 10484 AAB LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9) LTE-TDD 7.59 ± 9.6 % 10485 AAE LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD 8.38 ± 9.6 % 10486 AAE LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD 8.60 ± 9.6 % 10487 AAE LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD 7.70 ± 9.6 % 10489 AAE LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD 8.54	10470	AAF		LTE-TDD	8.57	± 9.6 %
Subframe=2,3,4,7,8,9)	10479	AAA		TE TOD	77 *7.4	1000
10480 AAA LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD 8.18 ±9.6 % 10481 AAA LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD 8.45 ±9.6 % 10482 AAB LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9) LTE-TDD 7.71 ±9.6 % 10483 AAB LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD 8.39 ±9.6 % 10484 AAB LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD 7.59 ±9.6 % 10485 AAE LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD 8.38 ±9.6 % 10486 AAE LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD 8.60 ±9.6 % 10487 AAE LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9) LTE-TDD 7.70 ±9.6 % 10489 AAE LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD 8.54 ±9.6 % 10490 AAE LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD 8.54 ±9.		"""	Subframe=2.3.4.7.8.9)	LIE-IDD	7.74	± 9.6 %
Subframe=2,3,4,7,8,9 LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 10 MHz,	10480	AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-OAM, UI	I TE-TOD	8 18	+06%
10481 AAA LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD 8.45 ± 9.6 % 10482 AAB LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9) LTE-TDD 7.71 ± 9.6 % 10483 AAB LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD 8.39 ± 9.6 % 10484 AAB LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD 8.47 ± 9.6 % 10485 AAE LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9) LTE-TDD 7.59 ± 9.6 % 10486 AAE LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD 8.60 ± 9.6 % 10487 AAE LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD 7.70 ± 9.6 % 10489 AAE LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD 8.31 ± 9.6 % 10490 AAE LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD 8.54 ± 9.6 % 10491 AAE LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD 7.74			Subframe=2,3,4,7,8,9)		0.10	1 3.0 %
Subframe=2,3,4,7,8,9 LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL STE-TDD (SC-F	10481	AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL	LTE-TDD	8.45	+9.6%
Subframe=2,3,4,7,8,9 LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) ± 9.6 %			Subframe=2,3,4,7,8,9)			= 5.5 %
Subframe=2,3,4,7,8,9 LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL STE-TDD (SC-FDMA, 50% RB, 16 MHz, QPSK, UL SUBframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL STE-TDD (SC-FDMA, 50% RB, 16 MHz, QPSK, UL STE-T	10482	AAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL	LTE-TDD	7.71	± 9.6 %
Subframe=2,3,4,7,8,9) 10484 AAB LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) 10485 AAE LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9) 10486 AAE LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) 10487 AAE LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) 10488 AAE LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9) 10489 AAE LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) 10490 AAE LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) 10491 AAE LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) 10491 AAE LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	40.400					
10484 AAB LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD 8.47 ± 9.6 % 10485 AAE LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9) LTE-TDD 7.59 ± 9.6 % 10486 AAE LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD 8.38 ± 9.6 % 10487 AAE LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD 8.60 ± 9.6 % 10488 AAE LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9) LTE-TDD 7.70 ± 9.6 % 10490 AAE LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD 8.54 ± 9.6 % 10491 AAE LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL LTE-TDD 7.74 + 9.6 %	10483	AAB	LIE-IDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM, UL	LTE-TDD	8.39	± 9.6 %
Subframe=2,3,4,7,8,9 Subf	10494	AAB	OUDITATHO=2,3,4,7,8,9)			
10485 AAE LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9) LTE-TDD 7.59 ± 9.6 % 10486 AAE LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD 8.38 ± 9.6 % 10487 AAE LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD 8.60 ± 9.6 % 10488 AAE LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9) LTE-TDD 7.70 ± 9.6 % 10490 AAE LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD 8.54 ± 9.6 % 10491 AAE LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL LTE-TDD 7.74 + 9.6 %	10404	AAD		LTE-TDD	8.47	± 9.6 %
Subframe=2,3,4,7,8,9) 10486	10485	AAF	TE-TDD (SC-EDMA 50% RR 5 MH- ORSK 111	LTC TOD	7.50	4000
10486 AAE LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD 8.38 ± 9.6 % 10487 AAE LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD 8.60 ± 9.6 % 10488 AAE LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9) LTE-TDD 7.70 ± 9.6 % 10489 AAE LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD 8.31 ± 9.6 % 10490 AAE LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD 8.54 ± 9.6 % 10491 AAE LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL LTE-TDD 7.74 + 9.6 %	10 100	' " "		LIE-IDD	7.59	± 9.6 %
Subframe=2,3,4,7,8,9 Subf	10486	AAE		I TE-TOD	0.30	+06%
10487 AAE LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD 8.60 ± 9.6 % 10488 AAE LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9) LTE-TDD 7.70 ± 9.6 % 10489 AAE LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD 8.31 ± 9.6 % 10490 AAE LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD 8.54 ± 9.6 % 10491 AAE LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL LTE-TDD 7.74 + 9.6 %			Subframe=2,3,4,7,8,9)	- - -	0.30	1 5.0 %
Subframe=2,3,4,7,8,9	10487	AAE	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL	LTE-TDD	8.60	+96%
Subframe=2,3,4,7,8,9) 10489			Subframe=2,3,4,7,8,9)		-100	- 3.0 /0
Subframe=2,3,4,7,8,9)	10488	AAE		LTE-TDD	7.70	± 9.6 %
Subframe=2,3,4,7,8,9) 10490 AAE LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) 10491 AAE LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL LTE-TDD 7.74 + 9.6 %	40400		Subframe=2,3,4,7,8,9)			
10490 AAE LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL LTE-TDD 8.54 ± 9.6 % Subframe=2,3,4,7,8,9) 10491 AAE LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL LTE-TDD 7.74 + 9.6 %	10489	AAE	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL	LTE-TDD	8.31	±9.6 %
Subframe=2,3,4,7,8,9) 10491 AAE LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL LTE-TDD 7.74 + 9.6 %	10400	A A E				
10491 AAE LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL LTE-TDD 7.74 + 9.6 %	10480	AAE	LIE-IDD (30-FDWA, 30% KB, 70 MHZ, 64-QAM, UL Subframe=2 3.4.7.8.9)	LTE-TOD	8.54	± 9.6 %
	10491	AAF		I TE TOO	774	4.000
		1300	Subframe=2,3,4,7,8,9)	FIE-IDD	1.14	אַ ט.פּ ד
			-1:1:1:1:1:1			

10492	AAE	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.41	± 9.6 %
10493	AAE	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM, UL	LTE-TDD	8.55	± 9.6 %
10494	AAF	Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK, UL	LTE-TDD	7.74	± 9.6 %
10495	AAF	Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM, UL	LTE-TDD	8.37	± 9.6 %
10496	AAF	Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM, UL	LTE-TDD	8.54	± 9.6 %
10497	AAA	Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK, UL	LTE-TDD	7.67	± 9.6 %
10498	AAA	Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM, UL			
		Subframe=2,3,4,7,8,9)	LTE-TDD	8.40	± 9.6 %
10499	AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.68	± 9.6 %
10500	AAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.67	± 9.6 %
10501	AAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.44	±9.6 %
10502	AAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.52	± 9.6 %
10503	AAE	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK, UL	LTE-TDD	7.72	± 9.6 %
10504	AAE	Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM, UL	LTE-TDD	8.31	± 9.6 %
10505	AAE	Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL	LTE-TDD	8.54	± 9.6 %
10506	AAE	Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL	LTE-TDD	7.74	± 9.6 %
10507	AAE	Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM, UL	LTE-TDD	8.36	± 9.6 %
10508	AAE	Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM, UL			
10509		Subframe=2,3,4,7,8,9)	LTE-TDD	8.55	± 9.6 %
	AAE	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.99	± 9.6 %
10510	AAE	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.49	± 9.6 %
10511	AAE	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.51	± 9.6 %
10512	AAF	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.74	± 9.6 %
10513	AAF	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.42	± 9.6 %
10514	AAF	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL	LTE-TDD	8.45	± 9.6 %
10515	AAA	Subframe=2,3,4,7,8,9) IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 99pc duty cycle)	WLAN	1.58	± 9.6 %
10516	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc duty cycle)	WLAN	1.57	± 9.6 %
10517	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 99pc duty cycle)	WLAN	1.58	± 9.6 %
10518	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc duty cycle)	WLAN	8.23	± 9.6 %
10519	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 99pc duty cycle)	WLAN	8.39	± 9.6 %
10520	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 99pc duty cycle)	WLAN	8.12	±9.6%
10521	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc duty cycle)	WLAN	7.97	± 9.6 %
10522	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc duty cycle)	WLAN	8.45	
10523	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 99pc duty cycle)	WLAN		±9.6 % ±9.6 %
10524	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc duty cycle)	WLAN	8.08 8.27	
10525	AAB	IEEE 802.11ac WiFi (20MHz, MCS0, 99pc duty cycle)			± 9.6 %
10526	AAB	IEEE 802.11ac WiFi (20MHz, MCS1, 99pc duty cycle)	WLAN	8.36	±9.6 %
10527	AAB	IEEE 802.11ac WiF1 (20MHz, MCS1, 99pc duty cycle)	WLAN	8.42	± 9.6 %
10528	AAB	IEEE 802.11ac WiF1 (20MHz, MOS2, 99pc duty cycle)	WLAN	8.21	± 9.6 %
10528	AAB	IEEE 802.11ac WiFi (20MHz, MCS3, 99pc duty cycle)	WLAN	8.36	± 9.6 %
10529		IEEE 802.11ac WiFi (20MHz, MCS4, 99pc duty cycle)	WLAN	8.36	±96%
10531	AAB	IEEE 802.11ac WiFi (20MHz, MCS6, 99pc duty cycle)	WLAN	8.43	±96%
10532	AAB	IEEE 802.11ac WiFi (20MHz, MCS7, 99pc duty cycle)	WLAN	8.29	±96%
10533	AAB	IEEE 802.11ac WiFi (20MHz, MCS8, 99pc duty cycle)	WLAN	8.38	± 9.6 %
10034	AAB	IEEE 802.11ac WiFi (40MHz, MCS0, 99pc duty cycle)	WLAN	8.45	±9.6%

10505					
10535	AAB	IEEE 802.11ac WiFi (40MHz, MCS1, 99pc duty cycle)	WLAN	8.45	± 9.6 %
10536	AAB	IEEE 802.11ac WiFi (40MHz, MCS2, 99pc duty cycle)	WLAN	8.32	± 9.6 %
10537	AAB	IEEE 802.11ac WiFi (40MHz, MCS3, 99pc duty cycle)	WLAN	8.44	± 9.6 %
10538	AAB	IEEE 802.11ac WiFi (40MHz, MCS4, 99pc duty cycle)	WLAN	8.54	± 9.6 %
10540	AAB	IEEE 802.11ac WiFi (40MHz, MCS6, 99pc duty cycle)	WLAN	8.39	± 9.6 %
10541	AAB	IEEE 802.11ac WiFi (40MHz, MCS7, 99pc duty cycle)	WLAN	8.46	± 9.6 %
10542	AAB	IEEE 802.11ac WiFi (40MHz, MCS8, 99pc duty cycle)	WLAN	8.65	± 9.6 %
10543	AAB	IEEE 802.11ac WiFi (40MHz, MCS9, 99pc duty cycle)	WLAN	8.65	± 9.6 %
10544	AAB	IEEE 802.11ac WiFi (80MHz, MCS0, 99pc duty cycle)	WLAN	8.47	
10545	AAB	IEEE 802.11ac WiFi (80MHz, MCS1, 99pc duty cycle)	WLAN		± 9.6 %
10546	AAB	IEEE 802.11ac WiFi (80MHz, MCS2, 99pc duty cycle)	WLAN	8.55	± 9.6 %
10547	AAB	IEEE 802.11ac WiFi (80MHz, MCS3, 99pc duty cycle)		8.35	± 9.6 %
10548	AAB	IEEE 802.11ac WiFi (80MHz, MCS4, 99pc duty cycle)	WLAN	8.49	± 9.6 %
10550	AAB	IEEE 802.11ac WiFi (80MHz, MCS6, 99pc duty cycle)	WLAN	8.37	± 9.6 %
10551	AAB	IEEE 802.11ac WiFi (80MHz, MCS7, 99pc duty cycle)	WLAN	8.38	± 9.6 %
10552	AAB	IEEE 802.11ac WiFi (80MHz, MCS8, 99pc duty cycle)	WLAN	8.50	± 9.6 %
10553	AAB	IEEE 902.11ac WIFT (OUWIFZ, MCCSS, 99pc duty cycle)	WLAN	8.42	± 9.6 %
10554		IEEE 802.11ac WiFi (80MHz, MCS9, 99pc duty cycle)	WLAN	8.45	± 9.6 %
10555	AAC	IEEE 802.11ac WiFi (160MHz, MCS0, 99pc duty cycle)	WLAN	8.48	± 9.6 %
	AAC	IEEE 802.11ac WiFi (160MHz, MCS1, 99pc duty cycle)	WLAN	8.47	± 9.6 %
10556	AAC	IEEE 802.11ac WiFi (160MHz, MCS2, 99pc duty cycle)	WLAN	8.50	± 9.6 %
10557	AAC	IEEE 802.11ac WiFi (160MHz, MCS3, 99pc duty cycle)	WLAN	8.52	± 9.6 %
10558	AAC	IEEE 802.11ac WiFi (160MHz, MCS4, 99pc duty cycle)	WLAN	8.61	± 9.6 %
10560	AAC	IEEE 802.11ac WiFi (160MHz, MCS6, 99pc duty cycle)	WLAN	8.73	± 9.6 %
10561	AAC	IEEE 802.11ac WiFi (160MHz, MCS7, 99pc duty cycle)	WLAN	8.56	± 9.6 %
10562	AAC	IEEE 802.11ac WiFi (160MHz, MCS8, 99pc duty cycle)	WLAN	8.69	± 9.6 %
10563	AAC	IEEE 802.11ac WiFi (160MHz, MCS9, 99pc duty cycle)	WLAN	8.77	± 9.6 %
10564	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 99pc duty	WLAN	8.25	
	İ	cycle)	MITTIN	0.20	± 9.6 %
10565	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 99pc duty	WLAN	0 15	1000
		cycle)	WLAN	8.45	± 9.6 %
10566	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 99pc duty	WLAN	0.40	. 0.0 %
		cycle)	VVLAIN	8.13	± 9.6 %
10567	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 99pc duty	10/LAN	0.00	
		cycle)	WLAN	8.00	± 9.6 %
10568	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 99pc duty	10/1 001	 	
	''	cycle)	WLAN	8.37	± 9.6 %
10569	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 99pc duty	14/1 431		
	' ' ' ' '	cycle)	WLAN	8.10	± 9.6 %
10570	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 99pc duty	1411 441		
100.0	1	cycle)	WLAN	8.30	± 9.6 %
10571	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90pc duty cycle)	1.00 2.1	<u> </u>	
10572	AAA	IEEE 802.11b WIF1 2.4 GHz (DSSS, 1 Wbps, 90pc duty cycle)	WLAN	1.99	± 9.6 %
10572	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 90pc duty cycle)	WLAN	1.99	± 9.6 %
10574		IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 90pc duty cycle)	WLAN	1.98	_± 9.6 %
10575	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 90pc duty cycle)	WLAN	1.98	± 9.6 %
10075	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 90pc duty	WLAN	8.59	±9.6%
10570	0.00	cycle)			
10576	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 90pc duty	WLAN	8.60	± 9.6 %
40577		cycle)		. [
10577	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 90pc duty	WLAN	8.70	± 9.6 %
10000		cycle)			
10578	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 90pc duty	WLAN	8.49	± 9.6 %
		cycle)		1	
10579	AAA	IEEE 802.11g WiFl 2.4 GHz (DSSS-OFDM, 24 Mbps, 90pc duty	WLAN	8.36	± 9.6 %
	****	cycle)		1	_ *** /*
10580	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 90pc duty	WLAN	8.76	± 9.6 %
		cycle)		""	
10581	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 90pc duty	WLAN	8.35	± 9.6 %
		cycle)		0.00	20,0 %
10582	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 90pc duty	WLAN	8.67	± 9.6 %
		cycle)	1	3.07	- J.U /0
10583	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 90pc duty cycle)	WLAN	8.59	± 9.6 %
10584	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 90pc duty cycle)	WLAN	8.60	± 9.6 %
10585	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90pc duty cycle)	WLAN		
10586	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 90pc duty cycle)	WLAN	8.70 8.49	± 9.6 %
10587	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 90pc duty cycle)	WLAN	-	± 9.6 %
		the contract of the contract o	I AN FULL	8.36	± 9.6 %

10500	1 4 4 5				
10588	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 90pc duty cycle)	WLAN	8.76	±9.6%
10589	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 90pc duty cycle)	WLAN	8.35	±9.6 %
10590	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 90pc duty cycle)	WLAN	8.67	± 9.6 %
10591	AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS0, 90pc duty cycle)	WLAN	8.63	
10592	AAB	IEEE 902.11n (ITT Mixed, 20MI Iz, MOSO, 90pc duty cycle)			± 9.6 %
		IEEE 802.11n (HT Mixed, 20MHz, MCS1, 90pc duty cycle)	WLAN	8.79	± 9.6 %
10593	AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS2, 90pc duty cycle)	WLAN	8.64	± 9.6 %
10594	AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS3, 90pc duty cycle)	WLAN	8.74	±9.6 %
10595	AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS4, 90pc duty cycle)	WLAN	8.74	± 9.6 %
10596	AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS5, 90pc duty cycle)	WLAN	8.71	± 9.6 %
10597	AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS6, 90pc duty cycle)	WLAN	·	
10598	AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS7, 90pc duty cycle)		8.72	± 9.6 %
10599	1	IEEE 802.1 III (HT MIXEU, 20MHZ, MICS7, 90pc duty cycle)	WLAN	8.50	± 9.6 %
	AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS0, 90pc duty cycle)	WLAN	8.79	± 9.6 %
10600	AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS1, 90pc duty cycle)	WLAN	8.88	± 9.6 %
10601	AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS2, 90pc duty cycle)	WLAN	8.82	± 9.6 %
10602	AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS3, 90pc duty cycle)	WLAN	8.94	± 9.6 %
10603	AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS4, 90pc duty cycle)	WLAN		
10604	AAB			9.03	± 9.6 %
		IEEE 802.11n (HT Mixed, 40MHz, MCS5, 90pc duty cycle)	WLAN	8.76	± 9.6 %
10605	AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS6, 90pc duty cycle)	WLAN	8.97	± 9.6 %
10606	AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS7, 90pc duty cycle)	WLAN	8.82	± 9.6 %
10607	AAB	IEEE 802.11ac WiFi (20MHz, MCS0, 90pc duty cycle)	WLAN	8.64	± 9.6 %
10608	AAB	IEEE 802.11ac WiFi (20MHz, MCS1, 90pc duty cycle)	WLAN	8.77	± 9.6 %
10609	AAB	IEEE 802.11ac WiFi (20MHz, MCS2, 90pc duty cycle)	WLAN		
10610	AAB	IEEE 802.11ac WiFi (20MHz, MCS3, 90pc duty cycle)		8.57	±9.6%
			WLAN	8.78	±9.6%
10611	AAB	IEEE 802.11ac WiFi (20MHz, MCS4, 90pc duty cycle)	WLAN	8.70	± 9.6 %
10612	AAB	IEEE 802.11ac WiFi (20MHz, MCS5, 90pc duty cycle)	WLAN	8.77	± 9.6 %
10613	AAB	IEEE 802.11ac WiFi (20MHz, MCS6, 90pc duty cycle)	WLAN	8.94	±9.6%
10614	AAB	IEEE 802.11ac WiFi (20MHz, MCS7, 90pc duty cycle)	WLAN	8.59	±9.6%
10615	AAB	IEEE 802.11ac WiFi (20MHz, MCS8, 90pc duty cycle)	WLAN	8.82	± 9.6 %
10616	AAB	IEEE 802.11ac WiFi (40MHz, MCS0, 90pc duty cycle)			
10617		IFFE BOO 44 MIFE (40MHz, MOO4, 90	WLAN	8.82	± 9.6 %
	AAB	IEEE 802.11ac WiFi (40MHz, MCS1, 90pc duty cycle)	WLAN	8.81	± 9.6 %
10618	AAB	IEEE 802.11ac WiFi (40MHz, MCS2, 90pc duty cycle)	WLAN	8.58	± 9.6 %
10619	AAB	IEEE 802.11ac WiFi (40MHz, MCS3, 90pc duty cycle)	WLAN	8.86	± 9.6 %
10620	AAB	IEEE 802.11ac WiFi (40MHz, MCS4, 90pc duty cycle)	WLAN	8.87	± 9.6 %
10621	AAB	IEEE 802.11ac WiFi (40MHz, MCS5, 90pc duty cycle)	WLAN	8.77	± 9.6 %
10622	AAB	IEEE 802.11ac WiFi (40MHz, MCS6, 90pc duty cycle)	WLAN	8.68	
10623	AAB				± 9.6 %
		IEEE 802.11ac WiFi (40MHz, MCS7, 90pc duty cycle)	WLAN	8.82	± 9.6 %
10624	AAB	IEEE 802.11ac WiFi (40MHz, MCS8, 90pc duty cycle)	WLAN	8.96	± 9.6 %
10625	AAB	IEEE 802.11ac WiFi (40MHz, MCS9, 90pc duty cycle)	WLAN	8.96	± 9.6 %
10626	AAB	IEEE 802.11ac WiFi (80MHz, MCS0, 90pc duty cycle)	WLAN	8.83	±9.6%
10627	AAB	IEEE 802.11ac WiFi (80MHz, MCS1, 90pc duty cycle)	WLAN	8.88	±9.6%
10628	AAB	IEEE 802.11ac WiFi (80MHz, MCS2, 90pc duty cycle)	WLAN	8.71	± 9.6 %
10629	AAB	IEEE 802.11ac WiFi (80MHz, MCS3, 90pc duty cycle)			
10630	AAB	IEEE 002.11ac WIFI (00MIL, NICOS, 90PC duty cycle)	WLAN	8.85	±9.6%
		IEEE 802.11ac WiFi (80MHz, MCS4, 90pc duty cycle)	WLAN	8.72	± 9.6 %
10631	AAB	IEEE 802.11ac WiFi (80MHz, MCS5, 90pc duty cycle)	WLAN	8.81	± 9.6 %
10632	AAB	IEEE 802.11ac WiFi (80MHz, MCS6, 90pc duty cycle)	WLAN	8.74	±9.6 %
10633	AAB	IEEE 802.11ac WiFi (80MHz, MCS7, 90pc duty cycle)	WLAN	8.83	± 9.6 %
10634	AAB	IEEE 802.11ac WiFi (80MHz, MCS8, 90pc duty cycle)	WLAN	8.80	±9.6 %
10635	AAB	IEEE 802.11ac WiFi (80MHz, MCS9, 90pc duty cycle)	WLAN	8.81	± 9.6 %
10636	AAC	IEEE 802.11ac WiFi (160MHz, MCS0, 90pc duty cycle)			
			WLAN	8.83	± 9.6 %
10637	AAC	IEEE 802.11ac WiFi (160MHz, MCS1, 90pc duty cycle)	WLAN	8.79	± 9.6 %
10638	AAC	IEEE 802.11ac WiFl (160MHz, MCS2, 90pc duty cycle)	WLAN	8.86	± 9.6 %
10639	AAC	IEEE 802.11ac WiFi (160MHz, MCS3, 90pc duty cycle)	WLAN	8.85	± 9.6 %
10640	AAC	IEEE 802.11ac WiFi (160MHz, MCS4, 90pc duty cycle)	WLAN	8.98	± 9.6 %
10641	AAC	IEEE 802.11ac WiFi (160MHz, MCS5, 90pc duty cycle)	WLAN	9.06	± 9.6 %
10642	AAC	IEEE 802.11ac WiFi (160MHz, MCS6, 90pc duty cycle)			
10643	AAC		WLAN	9.06	± 9.6 %
		IEEE 802.11ac WiFi (160MHz, MCS7, 90pc duty cycle)	WLAN	8.89	± 9.6 %
10644	AAC	IEEE 802.11ac WiFi (160MHz, MCS8, 90pc duty cycle)	WLAN	9.05	± 9.6 %
10645	AAC	IEEE 802.11ac WiFi (160MHz, MCS9, 90pc duty cycle)	WLAN	9.11	± 9.6 %
10646	AAF	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,7)	LTE-TDD	11.96	± 9.6 %
10647	AAF	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,7)	LTE-TDD	11.96	± 9.6 %
10648	AAA	CDMA2000 (1x Advanced)			
10652	AAD		CDMA2000	3.45	± 9.6 %
		LTE-TDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	LTE-TDD	6.91	±9.6%
10653	AAD	LTE-TDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)	LTE-TDD	7.42	± 9.6 %
10654	AAD	LTE-TDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)	LTE-TDD	6.96	± 9.6 %

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10655	AAE	LTE-TDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	LTE-TOD	7.21	± 9.6 %
10658	AAA	Pulse Waveform (200Hz, 10%)	Test	10.00	± 9.6 %
10659	AAA	Pulse Waveform (200Hz, 20%)	Test	6.99	± 9.6 %
10660	AAA	Pulse Waveform (200Hz, 40%)	Test	3.98	± 9.6 %
10661	AAA	Pulse Waveform (200Hz, 60%)	Test	2.22	± 9.6 %
10662	AAA	Pulse Waveform (200Hz, 80%)	Test	0.97	± 9.6 %
10670	AAA	Bluetooth Low Energy	Bluetooth	2.19	± 9.6 %

^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

Client

PC Test

Certificate No: EUmmWV3-9407_Dec18/2

CALIBRATION CERTIFICATE (Replacement of No: EUmmWV3-9407_Dec18)

Object

EUmmWV3 - SN:9407

Calibration procedure(s)

QA CAL-02.v9, QA CAL-25.v7, QA CAL-42.v2

Calibration procedure for E-field probes optimized for close near field

evaluations in air

Calibration date:

December 7, 2018

12-01-

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 ER3DV6	SN: 2328	09-Oct-18 (No. ER3-2328_Oct18)	Oct-19
DAE4	SN: 789	07-Aug-18 (No. DAE4-789_Aug18)	Aug-19
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-18)	In house check: Oct-19

Name Function Signature
Calibrated by: Jeton Kastrati Laboratory Technician

Approved by:

Katja Pokovic

Technical Manager

Issued: February 20, 2019

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

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





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Glossary:

NORMx,y,z DCP sensitivity in free space

CF.

diode compression point crest factor (1/duty_cycle) of the RF signal

A. B. C. D

modulation dependent linearization parameters

Polarization φ

φ rotation around probe axis

Polarization 9

9 rotation around an axis that is in the plane normal to probe axis (at measurement center),

i.e., 9 = 0 is normal to probe axis

Connector Angle Sensor Angles information used in DASY system to align probe sensor X to the robot coordinate system sensor deviation from the probe axis, used to calculate the field orientation and polarization

is the wave propagation direction

Calibration is Performed According to the Following Standards:

a) IEEE Std 1309-2005, "IEEE Standard for calibration of electromagnetic field sensors and probes, excluding antennas, from 9 kHz to 40 GHz", December 2005

Methods Applied and Interpretation of Parameters:

- NORMx,y,z: Assessed for E-field polarization θ = 0 for XY sensors and θ = 90 for Z sensor (f ≤ 900 MHz in TEM-cell; f > 1800 MHz: R22 waveguide). For frequencies > 6 GHz, the far field in front of waveguide horn antennas is measured for a set of frequencies in various waveguide bands up to 110 GHz.
- DCPx,y,z: DCP are numerical linearization parameters assessed based on the data of power sweep with CW signal (no uncertainty required). DCP does not depend on frequency nor media.
- PAR: PAR is the Peak to Average Ratio that is not calibrated but determined based on the signal characteristics
- The frequency sensor model parameters are determined prior to calibration based on a frequency sweep (sensor model involving resistors R, R_p, inductance L and capacitors C, C_p).
- Ax,y,z; Bx,y,z; Cx,y,z; Dx,y,z; VRx,y,z: A, B, C, D are numerical linearization parameters assessed based on the data of power sweep for specific modulation signal. The parameters do not depend on frequency nor media. VR is the maximum calibration range expressed in RMS voltage across the diode.
- Sensor Offset: The sensor offset corresponds to the mechanical from the probe tip (on probe axis). No
 tolerance required.
- Connector Angle: The angle is assessed using the information gained by determining the NORMx (no uncertainty required).
- Equivalent Sensor Angle: The two probe sensors are mounted in the same plane at different angles. The
 angles are assessed using the information gained by determining the NORMx (no uncertainty required).
- Spherical isotropy (3D deviation from isotropy): in a locally homogeneous field realized using an open waveguide / horn setup.

EUmmWV3 - SN: 9407

DASY - Parameters of Probe: EUmmWV3 - SN:9407

Basic Calibration Parameters

	Sensor X	Sensor Y	Unc (k=2)
Norm $(\mu V/(V/m)^2)$	0.02306	0.02753	± 10.1 %
DCP (mV) ⁸	105.0	115.0	
Equivalent Sensor Angle	-58.5	31.3	

Calibration results for Frequency Response (750 MHz - 110 GHz)

Calibratio		Frequency Response (750 MHz – 110 GHz)					
Frequency GHz	Target E-Field V/m	Deviation Sensor X dB	Deviation Sensor Y dB	Unc (k=2) dB			
0.75							
	77.2	-0.18	0.36	± 0.43 dB			
1.8	140.4	0.10	0.22	± 0.43 dB			
2	133.0	0.10	0.17	± 0.43 dB			
2.2	124.8	0.02	-0.01	± 0.43 dB			
2.5	123.0	-0.05	-0.18	± 0.43 dB			
3.5	256.2	0.10	-0.25	± 0.43 dB			
3.7	249.8	0.15	-0.24	± 0.43 dB			
6.6	41.8	0.55	0.41	± 0.98 dB			
8	48.4	0.06	-0.24	± 0.98 dB			
10	54.4	-0.04	-0.05	± 0.98 dB			
15	71.5	0.53	-0.06	± 0.98 dB			
18	85.3	-0.24	0.18	± 0.98 dB			
26.6	96.9	-0.12	0.16	L O OO -ID			
30	92.6	0.09		± 0.98 dB			
35	93.7	-0.34	0.19	± 0.98 dB			
40	91.5	-0.64	-0.10	± 0.98 dB			
	91.5	-0.04	-0.52	± 0.98 dB			
50	19.6	-0.05	0.05	± 0.98 dB			
55	22.4	0.57	0.30	± 0.98 dB			
60	23.0	0.01	-0.11	± 0.98 dB			
65	27.4	-0.59	-0.30	± 0.98 dB			
70	23.9	-0.36	-0.42	± 0.98 dB			
75	20.0	-0.28	-0.18	± 0.98 dB			
75	14.8	0.03	0.22	± 0.98 dB			
80	22.5	0.23	0.32	± 0.98 dB			
85	22.8	0.06	0.12	± 0.98 dB			
90	23.8	-0.01	0.04	± 0.98 dB			
92	23.9	0.24	-0.03	± 0.98 dB			
95	20.5	0.13	-0.14	± 0.98 dB			
97	24.4	0.04	-0.19	± 0.98 dB			
100	22.6	0.15	-0.12	± 0.98 dB			
105	22.7	-0.19	-0.12	± 0.98 dB			
110	19.7	-0.15	-0.02				
	1011	-0.10	-0.02	± 0.98 dB			

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%.

^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 - Parameters of Probe: EUmmWV3 - SN:9407

Calibration Results for Modulation Response

UID	Communication System Name		A dB	B dBõV	С	D dB	VR mV	Max dev.	Max Unc ^E
0	CW	X	0.00	0.00	1.00	0.00	108.0	± 3.3 %	(k=2) ± 4.7 %
		Y	0.00	0.00	1.00	0.00	85.6	2 0.0 70	- 1.1 /0
10352-	Pulse Waveform (200Hz, 10%)	X	1.97	60.00	13.47	10.00	6.0	± 1.1 %	± 9.6 %
AAA		Y	2.54	60.00	13.53		6.0		
10353-	Pulse Waveform (200Hz, 20%)	Х	1.29	60.00	12.43	6.99	12.0	± 1.1 %	± 9.6 %
AAA		Υ	28.00	84.00	19.00		12,0		
10354-	Pulse Waveform (200Hz, 40%)	X	0.73	60.00	11,28	3.98	23.0	± 1.2 %	± 9.6 %
AAA		Υ	0.89	60.00	11.74		23.0	1	
10355-	Pulse Waveform (200Hz, 60%)	X	0.43	60.00	10.58	2.22	27.0	± 1.1 %	± 9.6 %
AAA		Y	0.69	60.00	10.62		27.0	1	
10387-	QPSK Waveform, 1 MHz	X	1.23	60.00	5.65	0.00	22.0	± 1.1 %	± 9.6 %
AAA		Y	0.00	96.37	12.02		22.0	1	
10388-	QPSK Waveform, 10 MHz	Х	1.17	60.00	11.82	0.00	22.0	± 1.0 %	± 9.6 %
AAA		Υ	1.56	60.00	11.24		22.0]	İ
10396-	64-QAM Waveform, 100 kHz	Х	2.08	61.53	14.15	3.01	17.0	±0.7%	± 9.6 %
AAA		Υ	2.06	60.00	13.60		17.0		
10399-	64-QAM Waveform, 40 MHz	Х	1.99	60.00	12.30	0.00	19.0	± 1.5 %	± 9.6 %
AAA		Υ	2.40	60.00	12.02		19.0		
10414-	WLAN CCDF, 64-QAM, 40MHz	Х	3.00	60.00	12.75	0.00	12.0	± 1.2 %	± 9.6 %
AAA		Y	3.55	60.00	12.43		12.0		

Note: For details on all calibrated UID parameters see Appendix

Calibration Results for Linearity Response

Frequency GHz	Target E-Field V/m	Deviation Sensor X dB	Deviation Sensor Y dB	Unc (k=2) dB
0.9	50.0	-0.01	-0.13	± 0.2 dB
0.9	100.0	0.01	0.05	± 0.2 dB
0.9	500.0	0.05	-0.01	± 0.2 dB
0.9	1000.0	0.07	0.01	± 0.2 dB
0.9	1500.0	0.05	0.01	± 0.2 dB
0.9	2000.0	0.00	0.01	± 0.2 dB

Sensor Frequency Model Parameters

	Sensor X	Sensor Y
R (Ω)	41.52	42.76
$R_{p}(\Omega)$	94.77	91.62
L (nH)	0.02912	0.03146
C (pF)	0.2597	0.2713
C _p (pF)	0.1361	0.1196

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	Т6
X	31.8	224.82	32.11	0.92	3.62	4.98	0.00	1.03	1.01
Υ	23.7	177.92	35.61	0.92	3.36	5.00	0.00	1.22	1.01

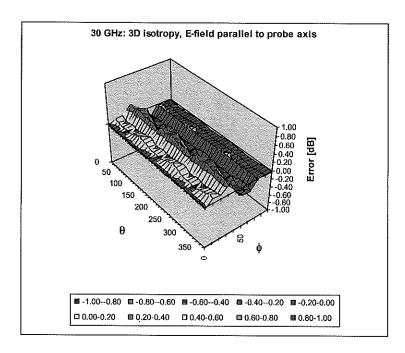
EUmmWV3 - SN: 9407 December 7, 2018

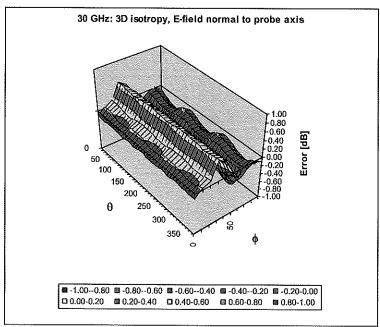
DASY - Parameters of Probe: EUmmWV3 - SN:9407

Other Probe Parameters

Sensor Arrangement	Rectangular
Connector Angle (°)	201.4
Mechanical Surface Detection Mode	enabled
Optical Surface Detection Mode	disabled
Probe Overall Length	320 mm
Probe Body Diameter	8 mm
Tip Length	23 mm
Tip Diameter	8.0 mm
Probe Tip to Sensor X Calibration Point	1.5 mm
Probe Tip to Sensor Y Calibration Point	1.5 mm

Deviation from Isotropy in Air





Probe isotropy for E_{tot}: probe rotated φ = 0° to 360°, tilted from field propagation direction \vec{k} Parallel to the field propagation (ψ =0° - 90°): deviation within ± 0.33 dB Normal to field orientation (ϑ =0° - 90°): deviation within ± 0.53 dB

Appendix: Modulation Calibration Parameters

UID	Rev	Communication System Name	Group	PAR	Unc
0		CW		(dB)	(k=2)
10010	CAA		CW	0.00	± 4.7 %
10010	CAA	SAR Validation (Square, 100ms, 10ms) UMTS-FDD (WCDMA)	Test	10.00	± 9.6 %
10011	CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps)	WCDMA	2.91	± 9.6 %
10012	CAB	IEEE 802.110 WIF1 2.4 GHz (DSSS, 1 MDDS)	WLAN	1.87	± 9.6 %
10013	DAC	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps) GSM-FDD (TDMA, GMSK)	WLAN	9.46	± 9.6 %
10023	DAC	GPRS-FDD (TDMA, GMSK)	GSM	9.39	± 9.6 %
10024	DAC	GPRS-FDD (TDMA, GMSK, TN 0) GPRS-FDD (TDMA, GMSK, TN 0-1)	GSM	9.57	±9.6 %
10025	DAC	EDGE-FDD (TDMA, 8PSK, TN 0)	GSM	6.56	± 9.6 %
10026	DAC	EDGE-FDD (TDMA, 8PSK, TN 0)	GSM	12.62	± 9.6 %
10027	DAC	GPRS-FDD (TDMA, GMSK, TN 0-1)	GSM	9.55	± 9.6 %
10028	DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2-3)	GSM GSM	4.80	± 9.6 %
10029	DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)		3.55	± 9.6 %
10030	CAA	IEEE 802.15.1 Bluetooth (GFSK, DH1)	GSM	7.78	± 9.6 %
10031	CAA	IEEE 802.15.1 Bluetooth (GFSK, DH3)	Bluetooth Bluetooth	5.30	± 9.6 %
10032	CAA	IEEE 802.15.1 Bluetooth (GFSK, DH5)	Bluetooth	1.87	± 9.6 %
10033	CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH1)	Bluetooth	1.16	± 9.6 %
10034	CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH3)	Bluetooth	7.74 4.53	± 9.6 %
10035	CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH5)	Bluetooth	3.83	± 9.6 % ± 9.6 %
10036	CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH1)	Bluetooth	8.01	± 9.6 %
10037	CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH3)	Bluetooth	4.77	± 9.6 %
10038	CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH5)	Bluetooth	4.10	± 9.6 %
10039	CAB	CDMA2000 (1xRTT, RC1)	CDMA2000	4.57	± 9.6 %
10042	CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Halfrate)	AMPS	7.78	± 9.6 %
10044	CAA	IS-91/EIA/TIA-553 FDD (FDMA, FM)	AMPS	0.00	± 9.6 %
10048	CAA	DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24)	DECT	13.80	± 9.6 %
10049	CAA	DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12)	DECT	10.79	± 9.6 %
10056	CAA	UMTS-TDD (TD-SCDMA, 1.28 Mcps)	TD-SCDMA	11.01	± 9.6 %
10058	DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)	GSM	6.52	± 9.6 %
10059	CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps)	WLAN	2.12	± 9.6 %
10060	CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps)	WLAN	2.83	± 9.6 %
10061	CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps)	WLAN	3.60	± 9.6 %
10062	CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps)	WLAN	8.68	± 9.6 %
10063	CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps)	WLAN	8.63	± 9.6 %
10064	CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps)	WLAN	9.09	± 9.6 %
10065	CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps)	WLAN	9.00	± 9.6 %
10066	CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps)	WLAN	9.38	± 9.6 %
10067	CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps)	WLAN	10.12	± 9.6 %
10068	CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps)	WLAN	10.24	± 9.6 %
10069	CAC	IEEE 802.11a/h WIFi 5 GHz (OFDM, 54 Mbps)	WLAN	10.56	±9.6 %
10071	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps)	WLAN	9.83	± 9.6 %
10072	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps)	WLAN	9.62	±9.6 %
10073	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps)	WLAN	9.94	± 9.6 %
10074 10075	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps)	WLAN	10.30	± 9.6 %
10075	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps)	WLAN	10.77	± 9.6 %
10076	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps) IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps)	WLAN	10.94	±9.6%
10077	CAB	CDMA2000 (1xRTT, RC3)	WLAN	11.00	± 9.6 %
10081	CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Fullrate)	CDMA2000	3.97	± 9.6 %
10090	DAC	GPRS-FDD (TDMA, GMSK, TN 0-4)	AMPS	4.77	± 9.6 %
10097	CAB	UMTS-FDD (HSDPA)	GSM	6.56	± 9.6 %
10098	CAB	UMTS-FDD (HSUPA, Subtest 2)	WCDMA WCDMA	3.98	± 9.6 %
10099	DAC	EDGE-FDD (TDMA, 8PSK, TN 0-4)		3.98	±9.6 %
10100	CAE	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	GSM LTE-FDD	9.55	±9.6%
10101	CAE	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)		5.67	± 9.6 %
10102	CAE	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	LTE-FDD LTE-FDD	6.42	± 9.6 %
10103	CAG	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	LTE-FDD	6.60 9.29	± 9.6 %
10104	CAG	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	LTE-TDD	9.29	± 9.6 %
10105	CAG	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	LTE-TDD	10.01	± 9.6 % ± 9.6 %
10108	CAG	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	LTE-FDD	5.80	± 9.6 %
			LIW-1 DD	0.00	± 0.0 /0

10109	CAC	LTE CDD (OC TOUR 4000) DT LESS			
	CAG	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	LTE-FDD	6.43	± 9.6 %
10110	CAG	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	LTE-FDD	5.75	± 9.6 %
10111	CAG	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	LTE-FDD	6.44	± 9.6 %
10112	CAG	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	LTE-FDD	6.59	± 9.6 %
10113	CAG	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	LTE-FDD		
10114	CAC	IEEE 802.11n (HT Greenfield, 13.5 Mbps, BPSK)		6.62	± 9.6 %
10115	CAC	IEEE 802.11n (HT Greenfield, 81 Mbps, 16-QAM)	WLAN	8.10	± 9.6 %
10116	CAC	IEEE 902.44 (UT Organistic 405.45)	WLAN	8.46	± 9.6 %
10117		IEEE 802.11n (HT Greenfield, 135 Mbps, 64-QAM)	WLAN	8.15	± 9.6 %
	CAC	IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK)	WLAN	8.07	± 9.6 %
10118	CAC	IEEE 802.11n (HT Mixed, 81 Mbps, 16-QAM)	WLAN	8.59	± 9.6 %
10119	CAC	IEEE 802.11n (HT Mixed, 135 Mbps, 64-QAM)	WLAN	8.13	± 9.6 %
10140	CAE	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	LTE-FDD	6.49	± 9.6 %
10141	CAE	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	LTE-FDD	6.53	± 9.6 %
10142	CAE	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	LTE-FDD	5.73	± 9.6 %
10143	CAE	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	LTE-FDD	··	
10144	CAE	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	····	6.35	± 9.6 %
10145	CAF	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	LTE-FDD	6.65	± 9.6 %
10146	CAF	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	LTE-FDD	5.76	± 9.6 %
10147	CAF	LTE FDD (SC-FDMA, 100% RB, 1.4 MHZ, 16-QAM)	LTE-FDD	6.41	± 9.6 %
		LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	LTE-FDD	6.72	± 9.6 %
10149	CAE	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	LTE-FDD	6.42	± 9.6 %
10150	CAE	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	LTE-FDD	6.60	± 9.6 %
10151	CAG	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	LTE-TDD	9.28	± 9.6 %
10152	CAG	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	LTE-TDD	9.92	± 9.6 %
10153	CAG	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	LTE-TDD	10.05	± 9.6 %
10154	CAG	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	LTE-FDD	5.75	± 9.6 %
10155	CAG	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)			
10156	CAG	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	LTE-FDD	6.43	± 9.6 %
10157	CAG	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	LTE-FDD	5.79	± 9.6 %
10158	CAG	LTE EDD (SC EDMA FOR ED 40 MHZ, 10-QAM)	LTE-FDD	6.49	±9.6%
10159	1	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	LTE-FDD	6.62	± 9.6 %
	CAG	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	LTE-FDD	6.56	± 9.6 %
10160	CAE	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	LTE-FDD	5.82	±9.6%
10161	CAE	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	LTE-FDD	6.43	± 9.6 %
10162	CAE	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	LTE-FDD	6.58	± 9.6 %
10166	CAF	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	LTE-FDD	5.46	± 9.6 %
10167	CAF	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	LTE-FDD	6.21	± 9.6 %
10168	CAF	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	LTE-FDD	6.79	± 9.6 %
10169	CAE	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	LTE-FDD		
10170	CAE	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)		5.73	± 9.6 %
10171	AAE	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	LTE-FDD	6.52	±9.6 %
10172	CAG	TE TOD (SC COMA 4 DD 20 MIL ODG)	LTE-FDD	6.49	± 9.6 %
10173	CAG	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	LTE-TDD	9.21	± 9.6 %
10174	CAG	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	LTE-TDD	9.48	± 9.6 %
		LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	LTE-TDD	10.25	± 9.6 %
10175	CAG	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	LTE-FDD	5.72	± 9.6 %
10176	CAG	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	LTE-FDD	6.52	± 9.6 %
10177	CAI	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	LTE-FDD	5.73	± 9.6 %
10178	CAG	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)	LTE-FDD	6.52	± 9.6 %
10179	CAG	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	LTE-FDD	6.50	± 9.6 %
10180	CAG	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)	LTE-FDD	6.50	± 9.6 %
10181	CAE	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	LTE-FDD		
10182	CAE	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)		5.72	± 9.6 %
10183	AAD	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	LTE-FDD	6.52	±9.6%
10184	CAE	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	LTE-FDD	6.50	± 9.6 %
10185	CAE		LTE-FDD	5.73	± 9.6 %
10186		LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)	LTE-FDD	6.51	± 9.6 %
	AAE	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)	LTE-FDD	6.50	± 9.6 %
10187	CAF	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	LTE-FDD	5.73	±9.6%
10188	CAF	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	LTE-FDD	6.52	± 9.6 %
10189	AAF	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	LTE-FDD	6.50	±9.6%
10193	CAC	IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK)	WLAN	8.09	± 9.6 %
10194	CAC	IEEE 802.11n (HT Greenfield, 39 Mbps, 16-QAM)	WLAN	8.12	± 9.6 %
10195	CAC	IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM)	WLAN	8.21	± 9.6 %
10196	CAC	IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK)	WLAN		
10197	CAC	IEEE 802.11n (HT Mixed, 39 Mbps, 16-QAM)		8.10	± 9.6 %
10198	CAC	IEEE 802.11n (HT Mixed, 65 Mbps, 64-QAM)	WLAN	8.13	± 9.6 %
10219	CAC	IEEE 802.11n (HT Mixed, 65 Mbps, 64-QAM)	WLAN	8.27	± 9.6 %
10210	U/ (U	TELE GOZ. I III (I I I MILAGU, 1.2 MIDPS, DPSK)	WLAN	8.03	± 9.6 %

10220	CAC	IEEE 902 11n /UT Mixed 42 2 Mb 40 0 0 40	1 10/1 A 1 2		1
		IEEE 802.11n (HT Mixed, 43.3 Mbps, 16-QAM)	WLAN	8.13	±9.6%
10221	CAC	IEEE 802.11n (HT Mixed, 72.2 Mbps, 64-QAM)	WLAN	8.27	± 9.6 %
10222	CAC	IEEE 802.11n (HT Mixed, 15 Mbps, BPSK)	WLAN	8.06	± 9.6 %
10223	CAC	IEEE 802.11n (HT Mixed, 90 Mbps, 16-QAM)	WLAN	8.48	± 9.6 %
10224	CAC	IEEE 802.11n (HT Mixed, 150 Mbps, 64-QAM)	WLAN	8.08	± 9.6 %
10225	CAB	UMTS-FDD (HSPA+)	WCDMA	5.97	± 9.6 %
10226	CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	LTE-TDD	9.49	± 9.6 %
10227	CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	LTE-TDD		
10228	CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)		10.26	± 9.6 %
10229	CAC	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)	LTE-TDD	9.22	± 9.6 %
10230	CAC	LTE-TOD (SC-PDIVIA, 1 RB, 3 MITZ, 10-QAM)	LTE-TDD	9.48	±9.6%
		LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)	LTE-TDD	10.25	± 9.6 %
10231	CAC	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	LTE-TDD	9.19	± 9.6 %
10232	CAF	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)	LTE-TDD	9.48	± 9.6 %
10233	CAF	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)	LTE-TDD	10.25	± 9.6 %
10234	CAF	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	LTE-TDD	9.21	± 9.6 %
10235	CAF	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	LTE-TDD	9.48	± 9.6 %
10236	CAF	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	LTE-TDD	10.25	± 9.6 %
10237	CAF	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	LTE-TDD	9.21	± 9.6 %
10238	CAF	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)			
10239	CAF	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	LTE-TDD	9.48	± 9.6 %
10239	CAF		LTE-TDD	10.25	± 9.6 %
		LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	LTE-TDD	9.21	± 9.6 %
10241	CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	LTE-TDD	9.82	±9.6%
10242	CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	LTE-TDD	9.86	± 9.6 %
10243	CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	LTE-TDD	9.46	± 9.6 %
10244	CAC	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	LTE-TDD	10.06	±9.6 %
10245	CAC	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	LTE-TDD	10.06	± 9.6 %
10246	CAC	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	LTE-TDD	9.30	± 9.6 %
10247	CAF	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	LTE-TDD	9.91	± 9.6 %
10248	CAF	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	LTE-TDD	10.09	± 9.6 %
10249	CAF	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	LTE-TDD		
10250	CAF	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)		9.29	± 9.6 %
10251	CAF		LTE-TDD	9.81	±9.6%
		LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	LTE-TDD	10.17	±9.6%
10252	CAF	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	LTE-TDD	9.24	± 9.6 %
10253	CAF	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	LTE-TDD	9.90	± 9.6 %
10254	CAF	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	LTE-TDD	10.14	± 9.6 %
10255	CAF	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	LTE-TDD	9.20	± 9.6 %
10256	CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	LTE-TDD	9.96	± 9.6 %
10257	CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	LTE-TDD	10.08	± 9.6 %
10258	CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	LTE-TDD	9.34	±9.6%
10259	CAC	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	LTE-TDD	9.98	± 9.6 %
10260	CAC	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	LTE-TDD	9.97	± 9.6 %
10261	CAC	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK)			
10262	CAF	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	LTE-TDD	9.24	± 9.6 %
10263		LTE TOD (CO FDMA 400% DD 5 MU- C4 CAAM	LTE-TDD	9.83	±9.6%
	CAF	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	LTE-TDD	10.16	±96%
10264	CAF	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	LTE-TDD	9.23	±9.6%
10265	CAF	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	LTE-TDD	9.92	± 9.6 %
10266	CAF	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	LTE-TDD	10.07	± 9.6 %
10267	CAF	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	LTE-TDD	9.30	± 9.6 %
10268	CAF	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	LTE-TDD	10.06	± 9.6 %
10269	CAF	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	LTE-TDD	10.13	± 9.6 %
10270	CAF	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	LTE-TDD	9.58	± 9.6 %
10274	CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.10)	WCDMA	4.87	± 9.6 %
10275	CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.4)	WCDMA	3.96	± 9.6 %
10277	CAA	PHS (QPSK)	PHS		
10278	CAA	PHS (QPSK, BW 884MHz, Rolloff 0.5)		11.81	± 9.6 %
10279			PHS	11.81	± 9.6 %
	CAA	PHS (QPSK, BW 884MHz, Rolloff 0.38)	PHS	12.18	± 9.6 %
10290	AAB	CDMA2000, RC1, SO55, Full Rate	CDMA2000	3.91	± 9.6 %
10291	AAB	CDMA2000, RC3, SO55, Full Rate	CDMA2000	3.46	± 9.6 %
10292	AAB	CDMA2000, RC3, SO32, Full Rate	CDMA2000	3.39	± 9.6 %
10293	AAB	CDMA2000, RC3, SO3, Full Rate	CDMA2000	3.50	± 9.6 %
10295	AAB	CDMA2000, RC1, SO3, 1/8th Rate 25 fr.	CDMA2000	12.49	± 9.6 %
10297	AAD	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	LTE-FDD	5.81	± 9.6 %
10298	AAD	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	LTE-FDD	5.72	± 9.6 %
10299	AAD	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)			
0200	, , , ,	THE FOR TOO FEMAL, OUT NE, O WILL, TO-WAIVI)	LTE-FDD	6.39	± 9.6 %

10300	AAD	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	LTE-FDD	6.60	± 9.6 %
10301	AAA	IEEE 802.16e WIMAX (29:18, 5ms, 10MHz, QPSK, PUSC)	WiMAX	12.03	±9.6 %
10302	AAA	IEEE 802.16e WIMAX (29:18, 5ms, 10MHz, QPSK, PUSC, 3 CTRL	WiMAX	12.57	± 9.6 %
	' ' ' ' '	symbols)	VVIIVE-OX	12.07	± 3.0 /6
10303	AAA	IEEE 802.16e WiMAX (31:15, 5ms, 10MHz, 64QAM, PUSC)	WiMAX	12.52	± 9.6 %
10304	AAA	IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, 64QAM, PUSC)	WiMAX	11.86	± 9.6 %
10305	AAA	IEEE 802.16e WIMAX (31:15, 10ms, 10MHz, 64QAM, PUSC, 15	WiMAX	15.24	± 9.6 %
		symbols)			
10306	AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 64QAM, PUSC, 18	WiMAX	14.67	± 9.6 %
		symbols)			
10307	AAA	IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, QPSK, PUSC, 18	WiMAX	14.49	± 9.6 %
40000		symbols)			
10308 10309	AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, PUSC)	WiMAX	14.46	±9.6 %
10309	AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, AMC 2x3, 18 symbols)	WiMAX	14.58	± 9.6 %
10310	AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, AMC 2x3, 18	WiMAX	14.57	± 9.6 %
10010	/ / / / /	symbols)	VVIIVIAA	14.57	I 9.0 %
10311	AAD	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	LTE-FDD	6.06	± 9.6 %
10313	AAA	iDEN 1:3	IDEN	10.51	± 9.6 %
10314	AAA	IDEN 1:6	IDEN	13.48	± 9.6 %
10315	AAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 96pc duty cycle)	WLAN	1.71	±9.6 %
10316	AAB	IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 96pc duty cycle)	WLAN	8.36	± 9.6 %
10317	AAC	IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle)	WLAN	8.36	± 9.6 %
10352	AAA	Pulse Waveform (200Hz, 10%)	Generic	10.00	± 9.6 %
10353	AAA	Pulse Waveform (200Hz, 20%)	Generic	6.99	± 9.6 %
10354	AAA	Pulse Waveform (200Hz, 40%)	Generic	3.98	±9.6 %
10355	AAA	Pulse Waveform (200Hz, 60%)	Generic	2.22	± 9.6 %
10356	AAA	Pulse Waveform (200Hz, 80%)	Generic	0.97	± 9.6 %
10387	AAA	QPSK Waveform, 1 MHz	Generic	5.10	±9.6 %
10388	AAA	QPSK Waveform, 10 MHz	Generic	5.22	± 9.6 %
10396	AAA	64-QAM Waveform, 100 kHz	Generic	6.27	± 9.6 %
10399	AAA	64-QAM Waveform, 40 MHz	Generic	6.27	± 9.6 %
10400	AAD	IEEE 802.11ac WiFi (20MHz, 64-QAM, 99pc duty cycle)	WLAN	8.37	± 9.6 %
10401	AAD	IEEE 802.11ac WiFi (40MHz, 64-QAM, 99pc duty cycle)	WLAN	8.60	± 9.6 %
10402	AAD	IEEE 802.11ac WiFi (80MHz, 64-QAM, 99pc duty cycle)	WLAN	8.53	±9.6%
10403	AAB	CDMA2000 (1xEV-DO, Rev. 0)	CDMA2000	3.76	± 9.6 %
10404 10406	AAB	CDMA2000 (1xEV-DO, Rev. A)	CDMA2000	3.77	± 9.6 %
10406	AAB AAF	CDMA2000, RC3, SO32, SCH0, Full Rate LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL	CDMA2000	5.22	± 9.6 %
10410	AAI	Subframe=2,3,4,7,8,9, Subframe Conf=4)	LTE-TDD	7.82	± 9.6 %
10414	AAA	WLAN CCDF, 64-QAM, 40MHz	Generic	8.54	± 9.6 %
10415	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle)	WLAN	1.54	± 9.6 %
10416	AAA	IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 99pc duty cycle)	WLAN	8.23	± 9.6 %
10417	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 99pc duty cycle)	WLAN	8.23	±9.6 %
10418	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle,	WLAN	8.14	± 9.6 %
		Long preambule)	.,,	0.11	20.070
10419	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle,	WLAN	8.19	± 9.6 %
		Short preambule)			
10422	AAB	IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK)	WLAN	8.32	± 9.6 %
10423	AAB	IEEE 802.11n (HT Greenfield, 43.3 Mbps, 16-QAM)	WLAN	8.47	±9.6%
10424	AAB	IEEE 802.11n (HT Greenfield, 72.2 Mbps, 64-QAM)	WLAN	8.40	± 9.6 %
10425	AAB	IEEE 802.11n (HT Greenfield, 15 Mbps, BPSK)	WLAN	8.41	± 9.6 %
10426	AAB	IEEE 802.11n (HT Greenfield, 90 Mbps, 16-QAM)	WLAN	8.45	± 9.6 %
10427	AAB	IEEE 802.11n (HT Greenfield, 150 Mbps, 64-QAM)	WLAN	8.41	± 9.6 %
10430	AAD	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1)	LTE-FDD	8.28	± 9.6 %
10431	AAD	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1)	LTE-FDD	8.38	± 9.6 %
10432	AAC	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1)	LTE-FDD	8.34	± 9.6 %
10433	AAC	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1)	LTE-FDD	8.34	± 9.6 %
10434	AAA	W-CDMA (BS Test Model 1, 64 DPCH)	WCDMA	8.60	± 9.6 %
10435	AAF	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL	LTE-TDD	7.82	± 9.6 %
10447	AAD	Subframe=2,3,4,7,8,9) LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	LTE EDD	7.50	+069/
10447	AAD	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%) LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, Clippin 44%)	LTE-FDD	7.56	± 9.6 %
10449	AAC	LTE-FDD (OFDMA, 10 MHz, E-1M 3.1, Cliping 44%)	LTE-FDD LTE-FDD	7.53 7.51	±9.6 %
10449	AAC	LTE-FDD (OFDMA, 13 MHz, E-TW 3.1, Clipping 44%)	LTE-FDD	7.51	± 9.6 % ± 9.6 %
10700	,,,,,	; (Or	LIL-FUU	1.40	± 3.0 /0

10451	AAA	W-CDMA (BS Test Model 1, 64 DPCH, Clipping 44%)	WCDMA	7.59	± 9.6 %
10456	AAB	IEEE 802.11ac WiFi (160MHz, 64-QAM, 99pc duty cycle)	WLAN	8.63	± 9.6 %
10457	AAA	UMTS-FDD (DC-HSDPA)	WCDMA	6.62	± 9.6 %
10458	AAA	CDMA2000 (1xEV-DO, Rev. B, 2 carriers)	CDMA2000	6.55	± 9.6 %
10459	AAA	CDMA2000 (1xEV-DO, Rev. B, 3 carriers)	CDMA2000	8.25	± 9.6 %
10460	AAA	UMTS-FDD (WCDMA, AMR)	WCDMA	2.39	± 9.6 %
10461	AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK, UL	LTE-TDD	7.82	± 9.6 %
10462	AAA	Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.30	± 9.6 %
10463	AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.56	± 9.6 %
10464	AAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.82	± 9.6 %
10465	AAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM, UL. Subframe=2,3,4,7,8,9)	LTE-TDD	8.32	± 9.6 %
10466	AAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.57	± 9.6 %
10467	AAE	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.82	± 9.6 %
10468	AAE	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.32	±9.6%
10469	AAE	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.56	± 9.6 %
10470	AAE	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.82	±9.6%
10471	AAE	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.32	± 9.6 %
10472	AAE	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.57	± 9.6 %
10473	AAE	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.82	± 9.6 %
10474 10475	AAE	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.32	± 9.6 %
10475	AAE AAF	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.57	± 9.6 %
10477	AAF	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM, UL	LTE-TDD	8.32	± 9.6 %
10478	AAA	Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 1 RB, 20 MHZ, 64-QAM, 0L Subframe=2,3,4,7,8,9)	LTE-TDD	8.57	± 9.6 %
10480	AAA	Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL	LTE-TDD	7.74	± 9.6 %
10481	AAA	Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL	LTE-TDD	8.18 8.45	± 9.6 %
10482	AAB	Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL			± 9.6 %
10483	AAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM, UL	LTE-TDD	7.71	± 9.6 %
10484	AAB	Subframe=2,3,4,7,8,9)	LTE-TDD	8.39	± 9.6 %
10484	AAE	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL. Subframe=2,3,4,7,8,9)	LTE-TDD	8.47	± 9.6 %
10486	AAE	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TOD	7.59	± 9.6 %
10486	AAE	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.38	± 9.6 %
10488	AAE	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL	LTE-TDD	8.60	± 9.6 %
10489	AAE	Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSR, UL SUBFrame=2,3,4,7,8,9)	LTE-TDD	7.70	± 9.6 %
10469	AAE	Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL SUBFrame=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL	LTE-TOD	8.31	± 9.6 %
10490	AAE	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL	LTE-TDD	8.54	± 9.6 %
10401	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Subframe=2,3,4,7,8,9)	LTE-TDD	7.74	± 9.6 %

AGE						
10493	10492	AAE	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM, UL	LTE-TDD	8.41	± 9.6 %
Subframe=2,3,4,7,8,9 10494 AF LTE-TDD (CF-FDMA, 509)* RB, 20 MHz, QPSK, UL LTE-TDD 7,74 1,9,6 % Subframe=2,3,4,7,8,9 10495 AF LTE-TDD (CF-FDMA, 509* RB, 20 MHz, 16-QAM, UL LTE-TDD 8,37 1,9,6 % Subframe=2,3,4,7,8,9 10496 AF LTE-TDD (CF-FDMA, 509* RB, 20 MHz, 16-QAM, UL LTE-TDD 8,37 1,9,6 % Subframe=2,3,4,7,8,9 10497 AA LTE-TDD (CF-FDMA, 1009* RB, 1.4 MHz, GPSK, UL LTE-TDD 7,67 1,9,6 % 10498 AA LTE-TDD (SC-FDMA, 1009* RB, 1.4 MHz, 16-QAM, UL LTE-TDD 8,40 1,9,6 % Subframe=2,3,4,7,8,9 10499 AA LTE-TDD (CF-FDMA, 1009* RB, 1.4 MHz, GF-QAM, UL LTE-TDD 8,68 1,9,6 % Subframe=2,3,4,7,8,9 10500 AB LTE-TDD (CF-FDMA, 1009* RB, 3 MHz, GF-QAM, UL LTE-TDD 7,67 1,9,6 % Subframe=2,3,4,7,8,9 10500 AB LTE-TDD (CF-FDMA, 1009* RB, 3 MHz, GF-QAM, UL LTE-TDD 8,44 1,9,6 % Subframe=2,3,4,7,8,9 10500 AB LTE-TDD (CF-FDMA, 1009* RB, 3 MHz, GF-QAM, UL LTE-TDD 8,44 1,9,6 % Subframe=2,3,4,7,8,9 10500 AB LTE-TDD (CF-FDMA, 1009* RB, 5 MHz, GF-QAM, UL LTE-TDD 8,52 1,9,6 % Subframe=2,3,4,7,8,9 10500 AB LTE-TDD (CF-FDMA, 1009* RB, 5 MHz, GF-QAM, UL LTE-TDD 3,52 1,9,6 % 1,9	10493	AAE		I TE-TOD	8 5 5	+96%
10495 AAF LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM, UL LTE-TDD 8.37 ± 9.6 %			Subframe=2,3,4,7,8,9)		0.00	1 3.0 %
10496	10494	AAF		LTE-TDD	7.74	± 9.6 %
10496 AF LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM, UL LTE-TDD 8.54 ±9.6 % Subframe=2,3,4,7,8,9 10497 AA LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK, UL LTE-TDD 7.67 ±9.6 % Subframe=2,3,4,7,8,9 10498 AA LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM, UL LTE-TDD 8.40 ±9.6 % Subframe=2,3,4,7,8,9 10499 AA LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM, UL LTE-TDD 8.68 ±9.6 % Subframe=2,3,4,7,8,9 10500 AA LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL LTE-TDD 8.68 ±9.6 % Subframe=2,3,4,7,8,9 10501 AAB LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL LTE-TDD 8.44 ±9.6 % Subframe=2,3,4,7,8,9 10501 AAB LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL LTE-TDD 8.52 ±9.6 % Subframe=2,3,4,7,8,9 10501 AAB LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 84-QAM, UL LTE-TDD 8.52 ±9.6 % Subframe=2,3,4,7,8,9 10503 AAE LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK, UL LTE-TDD 8.52 ±9.6 % Subframe=2,3,4,7,8,9 10503 AAE LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK, UL LTE-TDD 8.31 ±9.6 % Subframe=2,3,4,7,8,9 10504 AAE LTE-TDD (SC-FDMA, 100% RB, 5 MHz, GPSK, UL LTE-TDD 8.54 ±9.6 % Subframe=2,3,4,7,8,9 10506 AAE LTE-TDD (SC-FDMA, 100% RB, 5 MHz, GPSK, UL LTE-TDD 8.54 ±9.6 % Subframe=2,3,4,7,8,9 10506 AAE LTE-TDD (SC-FDMA, 100% RB, 5 MHz, GPSK, UL LTE-TDD 8.56 % Subframe=2,3,4,7,8,9 10506 AAE LTE-TDD (SC-FDMA, 100% RB, 10 MHz, GPSK, UL LTE-TDD 8.56 % Subframe=2,3,4,7,8,9 10506 AAE LTE-TDD (SC-FDMA, 100% RB, 10 MHz, GPSK, UL LTE-TDD 8.56 % Subframe=2,3,4,7,8,9 10506 AAE LTE-TDD (SC-FDMA, 100% RB, 10 MHz, GPSK, UL LTE-TDD 8.56 % Subframe=2,3,4,7,8,9 10506 AAE LTE-TDD (SC-FDMA, 100% RB, 10 MHz, GPSK, UL LTE-TDD 8.56 % Subframe=2,3,4,7,8,9 10506 AAE LTE-TDD (SC-FDMA, 100% RB, 15 MHz, GPSK, UL LTE-TDD 8.56 % Subframe=2,3,4,7,8,9 10506 AAE LTE-TDD (SC-FDMA, 100% RB, 15 MHz, GPSK, UL LTE-TDD 8.56 % Subframe=2,3,4,7,8,9 10506 AAE LTE-TDD (SC-	10495	AAF		LTE TOD	0.07	1000
10499			Subframe=2,3,4,7,8,9)	LIE-IDD	8.37	± 9.6 %
10499	10496	AAF	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM, UL	LTE-TDD	8.54	± 9.6 %
10498 AAA LTE-TDD (SC-FDMA, 100% RB, 14 MHz, 16-QAM, UL LTE-TDD 8.40 ±9.6 % Subframe-2.3.4, 7.8.9)	10407	ΑΛΛ				
10499	10491	1	Subframe=2.3.4.7.8.9)	LIE-IDD	7.67	± 9.6 %
ASUBrame-2,3,4,7,8,9 ASUBRAME-2,3,4,7,8,9 ASUBRAME-2,3,4,7,8,9 ASUBRAME-2,3,4,7,8,9 ASUBRAME-2,3,4,7,8,9 ASUBRAME-2,3,4,7,8,9 ASUBRAME-2,3,4,7,8,9 ASUBRAME-2,3,4,7,8,9 ASUBRAME-2,3,4,7,8,9 ASUBRAME-2,3,4,7,8,9 ASUBRAME-2,3,4,7,8,9 ASUBRAME-2,3,4,7,8,9 ASUBRAME-2,3,4,7,8,9 ASUBRAME-2,3,4,7,8,9 ASUBRAME-2,3,4,7,8,9	10498	AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM, UL	LTE-TDD	8.40	± 9.6 %
Subframe=2,3,4,7,8,9 10500 A3B LTE-TDD (SC-FDMA, 100% RB, 3 MHz, GPSK, UL LTE-TDD 8.44 ±9.6 % 10501 A3B LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM, UL LTE-TDD 8.44 ±9.6 % 10502 A3B LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM, UL LTE-TDD 8.52 ±9.6 % 10503 A3E LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK, UL LTE-TDD 7.72 ±9.6 % 10504 A3E LTE-TDD (SC-FDMA, 100% RB, 5 MHz, GPSK, UL LTE-TDD 8.31 ±9.6 % 10504 A3E LTE-TDD (SC-FDMA, 100% RB, 5 MHz, GPSK, UL LTE-TDD 8.31 ±9.6 % 10505 A3E LTE-TDD (SC-FDMA, 100% RB, 5 MHz, GPSK, UL LTE-TDD 8.54 ±9.6 % 10506 A3E LTE-TDD (SC-FDMA, 100% RB, 10 MHz, GPSK, UL LTE-TDD 7.74 ±9.6 % 10506 A3E LTE-TDD (SC-FDMA, 100% RB, 10 MHz, GPSK, UL LTE-TDD 7.74 ±9.6 % 10506 A3E LTE-TDD (SC-FDMA, 100% RB, 10 MHz, GPSK, UL LTE-TDD 8.36 ±9.6 % 10507 A3E LTE-TDD (SC-FDMA, 100% RB, 10 MHz, GPSK, UL LTE-TDD 8.36 ±9.6 % 10506 A3E LTE-TDD (SC-FDMA, 100% RB, 10 MHz, GPSK, UL LTE-TDD 8.55 ±9.6 % 10506 A3E LTE-TDD (SC-FDMA, 100% RB, 10 MHz, G4-QAM, UL LTE-TDD 8.55 ±9.6 % 10506 A3E LTE-TDD (SC-FDMA, 100% RB, 10 MHz, G4-QAM, UL LTE-TDD 8.55 ±9.6 % 10506 A3E LTE-TDD (SC-FDMA, 100% RB, 15 MHz, G4-QAM, UL LTE-TDD 8.55 ±9.6 % 10506 A3E LTE-TDD (SC-FDMA, 100% RB, 15 MHz, G4-QAM, UL LTE-TDD 8.55 ±9.6 % 10506 A3E LTE-TDD SC-FDMA, 100% RB, 15 MHz, G4-QAM, UL LTE-TDD 8.51 ±9.6 % 10506 A3E LTE-TDD SC-FDMA, 100% RB, 15 MHz, G4-QAM, UL LTE-TDD 8.51 ±9.6 % 10506 A3E LTE-TDD SC-FDMA, 100% RB, 5 MHz, G4-QAM, UL LTE-TDD 8.45 ±9.6 % 10506 A3E LTE-TDD SC-FDMA, 100% RB, 5 MHz, G4-QAM, UL LTE-TDD 8.45 ±9.6 % 10506 A3E LTE-TDD SC-FDMA, 100% RB, 5 MHz, G4-QAM, UL LTE-TDD 8.45 ±9.6 % 10506 A3E LTE-TDD SC-FDMA, 100% RB, 50 MHz, G4-QAM, UL LTE-TDD 8.45 ±9.6 % 10506 A3E LTE-TDD SC-FDMA, 100% RB, 50 MHz, G4-QAM, UL LTE-TDD 8.4	10400	1				
10500	10499	AAA		LTE-TDD	8.68	± 9.6 %
Subframe=2,3,4,7,8,9 Subf	10500	AAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL	LTE-TDD	7.67	+9.6 %
Subframe=2,3,4,7,8,9 S.52	40-54		Subframe=2,3,4,7,8,9)			2 0.0 70
10502	10501	AAB		LTE-TDD	8.44	± 9.6 %
Subframe=2,3,4,7,8,9 Care Subframe=2,3,4,7,8,9 Care	10502	AAB		L TE-TOD	8 52	+06%
Subframe=2,3,4,7,8,9 LTE-TDD S.31 ±9,6 % Subframe=2,3,4,7,8,9 LTE-TDD S.51 ±9,6 % Subframe=2,3,4,7,8,9 LTE-TDD S.5-FDMA, 100% RB, 5 MHz, 64-QAM, UL LTE-TDD S.5-FDMA, 8,9 LTE-TDD S.5-FDMA, 100% RB, 10 MHz, QPSK, UL LTE-TDD T.74 ±9,6 % Subframe=2,3,4,7,8,9 Subframe=2,3,4,7,8,9 LTE-TDD S.5-FDMA, 100% RB, 10 MHz, 16-QAM, UL LTE-TDD S.36 ±9,6 % Subframe=2,3,4,7,8,9 Subframe=2,3,4,7,8,9 LTE-TDD S.5-FDMA, 100% RB, 10 MHz, 16-QAM, UL LTE-TDD S.5-FDMA, 100% RB, 10 MHz, 16-QAM, UL LTE-TDD S.5-FDMA, 100% RB, 10 MHz, 16-QAM, UL LTE-TDD S.5-FDMA, 100% RB, 15 MHz, QPSK, UL LTE-TDD S.5-FDMA, 100% RB, 15 MHz, QPSK, UL LTE-TDD T.99 ±9,6 % Subframe=2,3,4,7,8,9 Subframe=2,3,4,7,8,9 LTE-TDD S.5-FDMA, 100% RB, 15 MHz, 16-QAM, UL LTE-TDD S.5-FDMA, 100% RB, 15 MHz, 16-QAM, UL LTE-TDD S.5-FDMA, 100% RB, 15 MHz, 16-QAM, UL LTE-TDD S.5-FDMA, 100% RB, 15 MHz, 64-QAM, UL LTE-TDD S.5-FDMA, 100% RB, 15 MHz, 64-QAM, UL LTE-TDD S.5-FDMA, 100% RB, 10 MHz, 64-QAM, UL LTE-TDD S.5-FDMA, 100% RB, 20 MHz, 16-QAM, UL LTE-TDD S.5-FDMA, 100% RB, 20 MHz, 16-QAM, UL LTE-TDD S.5-FDMA, 100% RB, 20 MHz, 64-QAM, UL LTE-TDD S.5-FDMA, 100% RB,			Subframe=2,3,4,7,8,9)	L. 1 L. 1 DD	0.52	1 5.0 /6
10504 AAE LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM, UL LTE-TDD 8.31 ± 9.6 % Subframe=2,3.4,7.8,9 Subframe=2,3.4,7.8,9 LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL LTE-TDD 8.54 ± 9.6 % Subframe=2,3.4,7.8,9 LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL LTE-TDD 8.36 ± 9.6 % Subframe=2,3.4,7.8,9 LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM, UL LTE-TDD 8.36 ± 9.6 % Subframe=2,3.4,7.8,9 LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM, UL LTE-TDD 8.55 ± 9.6 % Subframe=2,3.4,7.8,9 LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK, UL LTE-TDD 7.99 ± 9.6 % Subframe=2,3.4,7.8,9 Subframe=2,3.4,7.8,9 LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM, UL LTE-TDD 8.49 ± 9.6 % Subframe=2,3.4,7.8,9 Subframe=2,3.4,7.8,9 LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM, UL LTE-TDD 8.49 ± 9.6 % Subframe=2,3.4,7.8,9 Subframe=2,3.4,7.8,9 LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM, UL LTE-TDD 8.51 ± 9.6 % Subframe=2,3.4,7.8,9 Subframe=2,3.4,7.8,9 LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK, UL LTE-TDD 8.51 ± 9.6 % Subframe=2,3.4,7.8,9 Subframe=2,3.4,7.8,9 LTE-TDD (SC-FDMA, 100% RB, 20 MHz, GPSK, UL LTE-TDD 8.42 ± 9.6 % Subframe=2,3.4,7.8,9 Subframe=2,3.4,7.8,	10503	AAE	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK, UL	LTE-TDD	7.72	± 9.6 %
Subframe=2,3,4,7,8,9 10505	10504	AAF		LTC TOD	0.04	1000
10505	10004	' ' ' ' '	Subframe=2,3,4,7,8,9)	LIE-IUU	8.31	± 9.6 %
10506	10505	AAE	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL	LTE-TDD	8.54	± 9.6 %
Subframe=2,3,4,7,8,9	10506	A A E				
10507	10300	AAE		LIE-TOD	7.74	± 9.6 %
Subframe=2,3,4,7,8,9	10507	AAE	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM, UL	LTE-TDD	8.36	± 9.6 %
Subframe=2,3,4,7,8,9 LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK, UL	40500					
10509	10508	AAE	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM, UL	LTE-TDD	8.55	± 9.6 %
Subframe=2,3,4,7,8,9 LTE-TDD S.49 ±9.6 % Subframe=2,3,4,7,8,9 LTE-TDD S.47,8,9 LTE-TDD S.51 ±9.6 % Subframe=2,3,4,7,8,9 LTE-TDD S.51 ±9.6 % Subframe=2,3,4,7,8,9 LTE-TDD SC-FDMA, 100% RB, 20 MHz, QPSK, UL LTE-TDD T.74 ±9.6 % Subframe=2,3,4,7,8,9 LTE-TDD SC-FDMA, 100% RB, 20 MHz, QPSK, UL LTE-TDD SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL LTE-TDD SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL LTE-TDD SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL LTE-TDD SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL LTE-TDD S.42 ±9.6 % Subframe=2,3,4,7,8,9 Subframe=2,3,4,7,8,9 ULAN 1.58 ±9.6 % Subframe=2,3,4,7,8,9 Subframe=2,3,4,7,8,9 ULAN 1.58 ±9.6 % Subframe=2,3,4,7,8,9 ULAN 1.58 ±9.6 % Subframe=2,3,4,7,8,9 Subframe=2,3,4,7,8,9 ULAN 8.23 ±9.6 % Subframe=2,3,4,7,8,9 ULAN 8.24 ±9.6 % Subframe=2,3,4,7,8,9 ULAN 8.24 ±9.6 % Subframe=2,3,4,7,8,9 ULAN 8.26 ±9.6 % Subframe=2,3,4,7,8,9 ULAN 8.27 ±9.6 % Subframe=2,3,4,7,8,9 ULAN 8.26 ±9.6 % Subframe=2,3,4,7,8,9	10509	AAE		I TE-TOD	7 99	+96%
Subframe=2,3,4,7,8,9 LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 2		ļ	Subframe=2,3,4,7,8,9)			2 0.0 /0
10511	10510	AAE		LTE-TDD	8.49	± 9.6 %
Subframe=2,3,4,7,8,9 LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK, UL LTE-TDD 7.74 ± 9.6 % Subframe=2,3,4,7,8,9 LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL LTE-TDD 8.42 ± 9.6 % Subframe=2,3,4,7,8,9 LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL LTE-TDD 8.45 ± 9.6 % Subframe=2,3,4,7,8,9 LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL LTE-TDD 8.45 ± 9.6 % Subframe=2,3,4,7,8,9 LTE-TDD SUBFrame=2,3,4,7,8,9 LTE-TDD SUBFrame=2,3,4,7,8,9 LTE-TDD SUBFrame=2,3,4,7,8,9 SUBFrame=2,3,4,7,8,9 UNAN 1.58 ± 9.6 % SUBFrame=2,3,4,7,8,9 UNAN 1.58	10511	AAE		I TE-TOD	8.51	+06%
Subframe=2,3,4,7,8,9 LTE-TDD S.42			Subframe=2,3,4,7,8,9)		0.51	1 3.0 %
10513	10512	AAF	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK, UL	LTE-TDD	7.74	± 9.6 %
Subframe=2,3,4,7,8,9) 10514 AAF LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) 10515 AAA IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 99pc duty cycle) WLAN 1.58 ± 9.6 % 10516 AAA IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc duty cycle) WLAN 1.57 ± 9.6 % 10517 AAA IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 99pc duty cycle) WLAN 1.58 ± 9.6 % 10518 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc duty cycle) WLAN 8.23 ± 9.6 % 10519 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 99pc duty cycle) WLAN 8.39 ± 9.6 % 10520 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 99pc duty cycle) WLAN 8.12 ± 9.6 % 10521 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc duty cycle) WLAN 7.97 ± 9.6 % 10522 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 99pc duty cycle) WLAN 8.45 ± 9.6 % 10523 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 99pc duty cycle) WLAN 8.45 ± 9.6 % 10524 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc duty cycle) WLAN 8.08 ± 9.6 % 10525 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc duty cycle) WLAN 8.27 ± 9.6 % 10526 AAB IEEE 802.11ac WiFi (20MHz, MCS0, 99pc duty cycle) WLAN 8.27 ± 9.6 % 10527 AAB IEEE 802.11ac WiFi (20MHz, MCS1, 99pc duty cycle) WLAN 8.21 ± 9.6 % 10528 AAB IEEE 802.11ac WiFi (20MHz, MCS3, 99pc duty cycle) WLAN 8.21 ± 9.6 % 10529 AAB IEEE 802.11ac WiFi (20MHz, MCS3, 99pc duty cycle) WLAN 8.21 ± 9.6 % 10520 AAB IEEE 802.11ac WiFi (20MHz, MCS3, 99pc duty cycle) WLAN 8.36 ± 9.6 % 10521 AAB IEEE 802.11ac WiFi (20MHz, MCS3, 99pc duty cycle) WLAN 8.36 ± 9.6 % 10522 AAB IEEE 802.11ac WiFi (20MHz, MCS3, 99pc duty cycle) WLAN 8.36 ± 9.6 % 10523 AAB IEEE 802.11ac WiFi (20MHz, MCS3, 99pc duty cycle) WLAN 8.36 ± 9.6 % 10531 AAB IEEE 802.11ac WiFi (20MHz, MCS3, 99pc duty cycle) WLAN 8.39 ± 9.6 % 10533 AAB IEEE 802.11ac WiFi (20MHz, MCS6, 99pc duty cycle) WLAN 8.29 ± 9.6 % 10533 AAB IEEE 802.11ac WiFi (20MHz, MCS6, 99pc duty cycle) WLAN 8.38 ± 9.6 %	10513	AAF	SUDTRAME=2,3,4,7,8,9)	I TE TOD	0.40	1000
10514		' " "	Subframe=2,3,4,7,8,9)	LIE-IDD	0.42	± 9.0 %
10515 AAA IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 99pc duty cycle) WLAN 1.58 ± 9.6 % 10516 AAA IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc duty cycle) WLAN 1.57 ± 9.6 % 10517 AAA IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 99pc duty cycle) WLAN 1.58 ± 9.6 % 10518 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc duty cycle) WLAN 8.23 ± 9.6 % 10519 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 99pc duty cycle) WLAN 8.39 ± 9.6 % 10520 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 99pc duty cycle) WLAN 8.12 ± 9.6 % 10521 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc duty cycle) WLAN 7.97 ± 9.6 % 10522 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc duty cycle) WLAN 8.45 ± 9.6 % 10523 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 99pc duty cycle) WLAN 8.27 ± 9.6 % 10524 AAB IEEE 802.11ac WiFi (20MHz, MCS0, 99pc duty cycle) WLAN 8.27 <	10514	AAF	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL	LTE-TDD	8.45	± 9.6 %
10516 AAA IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc duty cycle) WLAN 1.57 ± 9.6 % 10517 AAA IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 99pc duty cycle) WLAN 1.58 ± 9.6 % 10518 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc duty cycle) WLAN 8.23 ± 9.6 % 10519 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 99pc duty cycle) WLAN 8.39 ± 9.6 % 10520 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 99pc duty cycle) WLAN 8.12 ± 9.6 % 10521 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc duty cycle) WLAN 7.97 ± 9.6 % 10522 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc duty cycle) WLAN 8.45 ± 9.6 % 10523 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 99pc duty cycle) WLAN 8.08 ± 9.6 % 10524 AAB IEEE 802.11ac WiFi (20MHz, MCS0, 99pc duty cycle) WLAN 8.27 ± 9.6 % 10525 AAB IEEE 802.11ac WiFi (20MHz, MCS1, 99pc duty cycle) WLAN 8.36 ± 9.6	10515	A A A				
10517 AAA IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 99pc duty cycle) WLAN 1.58 ± 9.6 % 10518 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc duty cycle) WLAN 8.23 ± 9.6 % 10519 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 99pc duty cycle) WLAN 8.39 ± 9.6 % 10520 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 99pc duty cycle) WLAN 8.12 ± 9.6 % 10521 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc duty cycle) WLAN 7.97 ± 9.6 % 10522 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc duty cycle) WLAN 8.45 ± 9.6 % 10523 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 99pc duty cycle) WLAN 8.08 ± 9.6 % 10524 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc duty cycle) WLAN 8.27 ± 9.6 % 10525 AAB IEEE 802.11ac WiFi (20MHz, MCS0, 99pc duty cycle) WLAN 8.36 ± 9.6 % 10526 AAB IEEE 802.11ac WiFi (20MHz, MCS2, 99pc duty cycle) WLAN 8.21 ± 9.6						
10518 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc duty cycle) WLAN 8.23 ± 9.6 % 10519 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 99pc duty cycle) WLAN 8.39 ± 9.6 % 10520 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 99pc duty cycle) WLAN 8.12 ± 9.6 % 10521 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc duty cycle) WLAN 7.97 ± 9.6 % 10522 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc duty cycle) WLAN 8.45 ± 9.6 % 10523 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 99pc duty cycle) WLAN 8.08 ± 9.6 % 10524 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc duty cycle) WLAN 8.27 ± 9.6 % 10525 AAB IEEE 802.11ac WiFi (20MHz, MCS0, 99pc duty cycle) WLAN 8.36 ± 9.6 % 10526 AAB IEEE 802.11ac WiFi (20MHz, MCS1, 99pc duty cycle) WLAN 8.21 ± 9.6 % 10527 AAB IEEE 802.11ac WiFi (20MHz, MCS3, 99pc duty cycle) WLAN 8.36 ± 9.6 %		,		***************************************		
10519 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 99pc duty cycle) WLAN 8.39 ± 9.6 % 10520 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 99pc duty cycle) WLAN 8.12 ± 9.6 % 10521 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc duty cycle) WLAN 7.97 ± 9.6 % 10522 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc duty cycle) WLAN 8.45 ± 9.6 % 10523 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 99pc duty cycle) WLAN 8.08 ± 9.6 % 10524 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc duty cycle) WLAN 8.27 ± 9.6 % 10525 AAB IEEE 802.11ac WiFi (20MHz, MCS0, 99pc duty cycle) WLAN 8.36 ± 9.6 % 10526 AAB IEEE 802.11ac WiFi (20MHz, MCS1, 99pc duty cycle) WLAN 8.42 ± 9.6 % 10527 AAB IEEE 802.11ac WiFi (20MHz, MCS3, 99pc duty cycle) WLAN 8.36 ± 9.6 % 10528 AAB IEEE 802.11ac WiFi (20MHz, MCS4, 99pc duty cycle) WLAN 8.36 ± 9.6 % 10531 AAB IEEE 802.11ac WiFi (20MHz, MCS6, 99pc duty cycle) </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>						
10520 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 99pc duty cycle) WLAN 8.12 ± 9.6 % 10521 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc duty cycle) WLAN 7.97 ± 9.6 % 10522 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc duty cycle) WLAN 8.45 ± 9.6 % 10523 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 99pc duty cycle) WLAN 8.08 ± 9.6 % 10524 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc duty cycle) WLAN 8.27 ± 9.6 % 10525 AAB IEEE 802.11ac WiFi (20MHz, MCS0, 99pc duty cycle) WLAN 8.36 ± 9.6 % 10526 AAB IEEE 802.11ac WiFi (20MHz, MCS1, 99pc duty cycle) WLAN 8.42 ± 9.6 % 10527 AAB IEEE 802.11ac WiFi (20MHz, MCS3, 99pc duty cycle) WLAN 8.21 ± 9.6 % 10528 AAB IEEE 802.11ac WiFi (20MHz, MCS4, 99pc duty cycle) WLAN 8.36 ± 9.6 % 10531 AAB IEEE 802.11ac WiFi (20MHz, MCS6, 99pc duty cycle) WLAN 8.43 ± 9.6 %			IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 99pc duty cycle)			
10521 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc duty cycle) WLAN 7.97 ± 9.6 % 10522 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc duty cycle) WLAN 8.45 ± 9.6 % 10523 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 99pc duty cycle) WLAN 8.08 ± 9.6 % 10524 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc duty cycle) WLAN 8.27 ± 9.6 % 10525 AAB IEEE 802.11ac WiFi (20MHz, MCS0, 99pc duty cycle) WLAN 8.36 ± 9.6 % 10526 AAB IEEE 802.11ac WiFi (20MHz, MCS1, 99pc duty cycle) WLAN 8.42 ± 9.6 % 10527 AAB IEEE 802.11ac WiFi (20MHz, MCS3, 99pc duty cycle) WLAN 8.21 ± 9.6 % 10528 AAB IEEE 802.11ac WiFi (20MHz, MCS4, 99pc duty cycle) WLAN 8.36 ± 9.6 % 10529 AAB IEEE 802.11ac WiFi (20MHz, MCS6, 99pc duty cycle) WLAN 8.36 ± 9.6 % 10531 AAB IEEE 802.11ac WiFi (20MHz, MCS7, 99pc duty cycle) WLAN 8.43 ± 9.6 % <			IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbns, 99pc duty cycle)			
10522 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc duty cycle) WLAN 8.45 ± 9.6 % 10523 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 99pc duty cycle) WLAN 8.08 ± 9.6 % 10524 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc duty cycle) WLAN 8.27 ± 9.6 % 10525 AAB IEEE 802.11ac WiFi (20MHz, MCS0, 99pc duty cycle) WLAN 8.36 ± 9.6 % 10526 AAB IEEE 802.11ac WiFi (20MHz, MCS1, 99pc duty cycle) WLAN 8.42 ± 9.6 % 10527 AAB IEEE 802.11ac WiFi (20MHz, MCS2, 99pc duty cycle) WLAN 8.21 ± 9.6 % 10528 AAB IEEE 802.11ac WiFi (20MHz, MCS3, 99pc duty cycle) WLAN 8.36 ± 9.6 % 10529 AAB IEEE 802.11ac WiFi (20MHz, MCS4, 99pc duty cycle) WLAN 8.36 ± 9.6 % 10531 AAB IEEE 802.11ac WiFi (20MHz, MCS6, 99pc duty cycle) WLAN 8.43 ± 9.6 % 10532 AAB IEEE 802.11ac WiFi (20MHz, MCS7, 99pc duty cycle) WLAN 8.29 ± 9.6 % 10533 AAB IEEE 802.11ac WiFi (20MHz, MCS8, 99pc duty cycle) WLAN					}	
10523 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 99pc duty cycle) WLAN 8.08 ± 9.6 % 10524 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc duty cycle) WLAN 8.27 ± 9.6 % 10525 AAB IEEE 802.11ac WiFi (20MHz, MCS0, 99pc duty cycle) WLAN 8.36 ± 9.6 % 10526 AAB IEEE 802.11ac WiFi (20MHz, MCS1, 99pc duty cycle) WLAN 8.42 ± 9.6 % 10527 AAB IEEE 802.11ac WiFi (20MHz, MCS2, 99pc duty cycle) WLAN 8.21 ± 9.6 % 10528 AAB IEEE 802.11ac WiFi (20MHz, MCS3, 99pc duty cycle) WLAN 8.36 ± 9.6 % 10529 AAB IEEE 802.11ac WiFi (20MHz, MCS4, 99pc duty cycle) WLAN 8.36 ± 9.6 % 10531 AAB IEEE 802.11ac WiFi (20MHz, MCS6, 99pc duty cycle) WLAN 8.43 ± 9.6 % 10532 AAB IEEE 802.11ac WiFi (20MHz, MCS7, 99pc duty cycle) WLAN 8.29 ± 9.6 % 10533 AAB IEEE 802.11ac WiFi (20MHz, MCS8, 99pc duty cycle) WLAN 8.38 ± 9.6 %			IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps. 99pc duty cycle)			
10524 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc duty cycle) WLAN 8.27 ± 9.6 % 10525 AAB IEEE 802.11ac WiFi (20MHz, MCS0, 99pc duty cycle) WLAN 8.36 ± 9.6 % 10526 AAB IEEE 802.11ac WiFi (20MHz, MCS1, 99pc duty cycle) WLAN 8.42 ± 9.6 % 10527 AAB IEEE 802.11ac WiFi (20MHz, MCS2, 99pc duty cycle) WLAN 8.21 ± 9.6 % 10528 AAB IEEE 802.11ac WiFi (20MHz, MCS3, 99pc duty cycle) WLAN 8.36 ± 9.6 % 10529 AAB IEEE 802.11ac WiFi (20MHz, MCS4, 99pc duty cycle) WLAN 8.36 ± 9.6 % 10531 AAB IEEE 802.11ac WiFi (20MHz, MCS6, 99pc duty cycle) WLAN 8.43 ± 9.6 % 10532 AAB IEEE 802.11ac WiFi (20MHz, MCS7, 99pc duty cycle) WLAN 8.29 ± 9.6 % 10533 AAB IEEE 802.11ac WiFi (20MHz, MCS8, 99pc duty cycle) WLAN 8.38 ± 9.6 %		AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 99pc duty cycle)			
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10526 AAB IEEE 802.11ac WiFi (20MHz, MCS1, 99pc duty cycle) WLAN 8.42 ± 9.6 % 10527 AAB IEEE 802.11ac WiFi (20MHz, MCS2, 99pc duty cycle) WLAN 8.21 ± 9.6 % 10528 AAB IEEE 802.11ac WiFi (20MHz, MCS3, 99pc duty cycle) WLAN 8.36 ± 9.6 % 10529 AAB IEEE 802.11ac WiFi (20MHz, MCS4, 99pc duty cycle) WLAN 8.36 ± 9.6 % 10531 AAB IEEE 802.11ac WiFi (20MHz, MCS6, 99pc duty cycle) WLAN 8.43 ± 9.6 % 10532 AAB IEEE 802.11ac WiFi (20MHz, MCS7, 99pc duty cycle) WLAN 8.29 ± 9.6 % 10533 AAB IEEE 802.11ac WiFi (20MHz, MCS8, 99pc duty cycle) WLAN 8.38 ± 9.6 %			IEEE 802.11ac WiFi (20MHz, MCS0, 99pc duty cycle)			
10527 AAB IEEE 802.11ac WiFi (20MHz, MCS2, 99pc duty cycle) WLAN 8.21 ± 9.6 % 10528 AAB IEEE 802.11ac WiFi (20MHz, MCS3, 99pc duty cycle) WLAN 8.36 ± 9.6 % 10529 AAB IEEE 802.11ac WiFi (20MHz, MCS4, 99pc duty cycle) WLAN 8.36 ± 9.6 % 10531 AAB IEEE 802.11ac WiFi (20MHz, MCS6, 99pc duty cycle) WLAN 8.43 ± 9.6 % 10532 AAB IEEE 802.11ac WiFi (20MHz, MCS7, 99pc duty cycle) WLAN 8.29 ± 9.6 % 10533 AAB IEEE 802.11ac WiFi (20MHz, MCS8, 99pc duty cycle) WLAN 8.38 ± 9.6 %			IEEE 802.11ac WiFi (20MHz, MCS1, 99pc duty cycle)			
10528 AAB IEEE 802.11ac WiFi (20MHz, MCS3, 99pc duty cycle) WLAN 8.36 ± 9.6 % 10529 AAB IEEE 802.11ac WiFi (20MHz, MCS4, 99pc duty cycle) WLAN 8.36 ± 9.6 % 10531 AAB IEEE 802.11ac WiFi (20MHz, MCS6, 99pc duty cycle) WLAN 8.43 ± 9.6 % 10532 AAB IEEE 802.11ac WiFi (20MHz, MCS7, 99pc duty cycle) WLAN 8.29 ± 9.6 % 10533 AAB IEEE 802.11ac WiFi (20MHz, MCS8, 99pc duty cycle) WLAN 8.38 ± 9.6 %			IEEE 802.11ac WiFi (20MHz, MCS2, 99pc duty cycle)	WLAN	8.21	
10529 AAB IEEE 802.11ac WiFi (20MHz, MCS4, 99pc duty cycle) WLAN 8.36 ± 9.6 % 10531 AAB IEEE 802.11ac WiFi (20MHz, MCS6, 99pc duty cycle) WLAN 8.43 ± 9.6 % 10532 AAB IEEE 802.11ac WiFi (20MHz, MCS7, 99pc duty cycle) WLAN 8.29 ± 9.6 % 10533 AAB IEEE 802.11ac WiFi (20MHz, MCS8, 99pc duty cycle) WLAN 8.38 ± 9.6 %						
10531 AAB IEEE 802.11ac WiFi (20MHz, MCS6, 99pc duty cycle) WLAN 8.43 ± 9.6 % 10532 AAB IEEE 802.11ac WiFi (20MHz, MCS7, 99pc duty cycle) WLAN 8.29 ± 9.6 % 10533 AAB IEEE 802.11ac WiFi (20MHz, MCS8, 99pc duty cycle) WLAN 8.38 ± 9.6 %				WLAN		
10533 AAB IEEE 802.11ac WiFi (20MHz, MCS8, 99pc duty cycle) WLAN 8.38 ± 9.6 %					8.43	±9.6%
10101 115 115 115 115 115 115 115 115 11						
10004 MAD IEEE 802.TTac WIFT (40MHz, MCS0, 99pc duty cycle) WLAN 8.45 ± 9.6 %						
	10034	I AAB	IEEE 602.1186 WIFI (40MHZ, MCS0, 99pc duty cycle)	WLAN	8.45	± 9.6 %

10536 AAB						
10583 AAB IEEE 802.11ac WFI (40MHz, MCS8, 99pc duty cycle) WLAN 8.32 2.9.6 % 10587 AAB IEEE 802.11ac WFI (40MHz, MCS8, 99pc duty cycle) WLAN 8.44 9.6 % 60598 AAB IEEE 802.11ac WFI (40MHz, MCS8, 99pc duty cycle) WLAN 8.39 9.6 % 10591 AAB IEEE 802.11ac WFI (40MHz, MCS8, 99pc duty cycle) WLAN 8.39 9.6 % 10591 AAB IEEE 802.11ac WFI (40MHz, MCS8, 99pc duty cycle) WLAN 8.46 4.9.6 % 10592 AAB IEEE 802.11ac WFI (40MHz, MCS8, 99pc duty cycle) WLAN 8.46 4.9.6 % 10592 AAB IEEE 802.11ac WFI (40MHz, MCS8, 99pc duty cycle) WLAN 8.46 4.9.6 % 10593 AAB IEEE 802.11ac WFI (40MHz, MCS8, 99pc duty cycle) WLAN 8.46 4.9.6 % 10594 AAB IEEE 802.11ac WFI (80MHz, MCS9, 99pc duty cycle) WLAN 8.47 4.9.6 % 10594 AAB IEEE 802.11ac WFI (80MHz, MCS9, 99pc duty cycle) WLAN 8.47 4.9.6 % 10594 AAB IEEE 802.11ac WFI (80MHz, MCS9, 99pc duty cycle) WLAN 8.47 4.9.6 % 10594 AAB IEEE 802.11ac WFI (80MHz, MCS9, 99pc duty cycle) WLAN 8.49 4.9.6 % 10594 AAB IEEE 802.11ac WFI (80MHz, MCS9, 99pc duty cycle) WLAN 8.49 4.9.6 % 10594 AAB IEEE 802.11ac WFI (80MHz, MCS9, 99pc duty cycle) WLAN 8.49 4.9.6 % 10594 AAB IEEE 802.11ac WFI (80MHz, MCS9, 99pc duty cycle) WLAN 8.49 4.9.6 % 10595 AAB IEEE 802.11ac WFI (80MHz, MCS9, 99pc duty cycle) WLAN 8.49 4.9.6 % 10595 AAB IEEE 802.11ac WFI (80MHz, MCS9, 99pc duty cycle) WLAN 8.49 4.9.6 % 10595 AAB IEEE 802.11ac WFI (80MHz, MCS9, 99pc duty cycle) WLAN 8.49 4.9.6 % 10595 AAB IEEE 802.11ac WFI (80MHz, MCS9, 99pc duty cycle) WLAN 8.49 4.9.6 % 10595 AAB IEEE 802.11ac WFI (80MHz, MCS9, 99pc duty cycle) WLAN 8.59 4.9.6 % 10595 AAB IEEE 802.11ac WFI (80MHz, MCS9, 99pc duty cycle) WLAN 8.59 4.9.6 % 10595 AAB IEEE 802.11ac WFI (80MHz, MCS9, 99pc duty cycle) WLAN 8.42 4.9.6 % 10595 AAB IEEE 802.11ac WFI (80MHz, MCS9, 99pc duty cycle) WLAN 8.42 4.9.6 % 105	10535	AAB	IEEE 802.11ac WiFi (40MHz, MCS1, 99pc duty cycle)	WLAN	8.45	+96%
1953 AAB IEEE 602.11ac WFI (40MHz, MCS3, 99pc duty cycle) WLAN 8.44 2.9.6 %		AAB	IEEE 802.11ac WiFi (40MHz, MCS2, 99nc duty cycle)			
190598 AAB	10537	AAB	IEEE 802 11ac WiFi (40MHz, MCS3, 99nc duty cyclo)		***************************************	
105941 AAB IEEE 802.11ac WFI (60MHz, MCS8) 99pc duty cycle) WILAN 8.59 13.6 % 10594 AAB IEEE 802.11ac WFI (60MHz, MCS8) 99pc duty cycle) WILAN 8.69 13.6 % 10594 AAB IEEE 802.11ac WFI (60MHz, MCS8) 99pc duty cycle) WILAN 8.65 13.6 % 10594 AAB IEEE 802.11ac WFI (60MHz, MCS8) 99pc duty cycle) WILAN 8.65 13.6 % 10594 AAB IEEE 802.11ac WFI (60MHz, MCS8) 99pc duty cycle) WILAN 8.65 13.6 % 10594 AAB IEEE 802.11ac WFI (60MHz, MCS8) 99pc duty cycle) WILAN 8.65 13.6 % 10594 AAB IEEE 802.11ac WFI (60MHz, MCS8) 99pc duty cycle) WILAN 8.55 13.6 % 10594 AAB IEEE 802.11ac WFI (60MHz, MCS8) 99pc duty cycle) WILAN 8.55 13.6 % 10594 AAB IEEE 802.11ac WFI (60MHz, MCS8) 99pc duty cycle) WILAN 8.55 13.6 % 10594 AAB IEEE 802.11ac WFI (60MHz, MCS8) 99pc duty cycle) WILAN 8.57 13.6 % 10595 AAB IEEE 802.11ac WFI (60MHz, MCS8) 99pc duty cycle) WILAN 8.57 13.6 % 10595 AAB IEEE 802.11ac WFI (60MHz, MCS8) 99pc duty cycle) WILAN 8.57 13.6 % 10595 AAB IEEE 802.11ac WFI (60MHz, MCS8) 99pc duty cycle) WILAN 8.57 13.6 % 10595 AAB IEEE 802.11ac WFI (60MHz, MCS8) 99pc duty cycle) WILAN 8.50 13.6 % 10595 AAB IEEE 802.11ac WFI (60MHz, MCS8) 99pc duty cycle) WILAN 8.50 13.6 % 10595 AAC IEEE 802.11ac WFI (60MHz, MCS8) 99pc duty cycle) WILAN 8.40 13.6 % 10595 AAC IEEE 802.11ac WFI (60MHz, MCS8) 99pc duty cycle) WILAN 8.45 13.6 % 10595 AAC IEEE 802.11ac WFI (60MHz, MCS8) 99pc duty cycle) WILAN 8.45 13.6 % 10595 AAC IEEE 802.11ac WFI (60MHz, MCS8) 99pc duty cycle) WILAN 8.45 13.6 % 10595 AAC IEEE 802.11ac WFI (60MHz, MCS8) 99pc duty cycle) WILAN 8.45 13.6 % 10595 AAC IEEE 802.11ac WFI (60MHz, MCS8) 99pc duty cycle) WILAN 8.50 13.6 % 10595 AAC IEEE 802.11ac WFI (60MHz, MCS8) 99pc duty cycle) WILAN 8.50 13.6 % 10595 AAC IEEE 802.11ac WFI (60MHz, MCS8) 99pc duty cycle) WILAN 8.50 13.6			IEEE 802 11ac WiFi (40MHz, MCC4, 00m duty cycle)			
19541 AAB IEEE 802.11ac WFI (40MHz, MCSS, 99pc duty cycle)			TEEE 002.1 fac vviri (40MHz, MCS4, 99pc duty cycle)			
19542 AAB IEEE 802.11ac WIFF (40MHz, MCSS, 99pc duty cycle)			TEEE 802.11ac WIFI (40MHz, MCS6, 99pc duty cycle)		8.39	± 9.6 %
10943 A8B			IEEE 802.11ac WiFi (40MHz, MCS7, 99pc duty cycle)	WLAN	8.46	± 9.6 %
10544 AAB IEEE 802.11ac WIFI (40MHz, MCS9, 99pc duty cycle) WLAN 8.65 4.96 % 10546 AAB IEEE 802.11ac WIFI (80MHz, MCS0, 99pc duty cycle) WLAN 8.55 4.96 % 10547 AAB IEEE 802.11ac WIFI (80MHz, MCS1, 99pc duty cycle) WLAN 8.55 4.96 % 10547 AAB IEEE 802.11ac WIFI (80MHz, MCS2, 99pc duty cycle) WLAN 8.55 4.96 % 10547 AAB IEEE 802.11ac WIFI (80MHz, MCS2, 99pc duty cycle) WLAN 8.49 4.96 % 10547 AAB IEEE 802.11ac WIFI (80MHz, MCS3, 99pc duty cycle) WLAN 8.39 4.96 % 10550 AAB IEEE 802.11ac WIFI (80MHz, MCS3, 99pc duty cycle) WLAN 8.39 4.96 % 10550 AAB IEEE 802.11ac WIFI (80MHz, MCS3, 99pc duty cycle) WLAN 8.39 4.96 % 10550 AAB IEEE 802.11ac WIFI (80MHz, MCS3, 99pc duty cycle) WLAN 8.39 4.96 % 10550 AAB IEEE 802.11ac WIFI (80MHz, MCS3, 99pc duty cycle) WLAN 8.42 4.96 % 10550 AAB IEEE 802.11ac WIFI (80MHz, MCS3, 99pc duty cycle) WLAN 8.42 4.96 % 10550 AAC IEEE 802.11ac WIFI (80MHz, MCS3, 99pc duty cycle) WLAN 8.42 4.96 % 10550 AAC IEEE 802.11ac WIFI (160MHz, MCS3, 99pc duty cycle) WLAN 8.42 4.96 % 10550 AAC IEEE 802.11ac WIFI (160MHz, MCS3, 99pc duty cycle) WLAN 8.45 4.96 % 10555 AAC IEEE 802.11ac WIFI (160MHz, MCS3, 99pc duty cycle) WLAN 8.47 4.96 % 10555 AAC IEEE 802.11ac WIFI (160MHz, MCS3, 99pc duty cycle) WLAN 8.47 4.96 % 10556 AAC IEEE 802.11ac WIFI (160MHz, MCS3, 99pc duty cycle) WLAN 8.57 4.96 % 10556 AAC IEEE 802.11ac WIFI (160MHz, MCS3, 99pc duty cycle) WLAN 8.57 4.96 % 10556 AAC IEEE 802.11ac WIFI (160MHz, MCS3, 99pc duty cycle) WLAN 8.57 4.96 % 10556 AAC IEEE 802.11ac WIFI (160MHz, MCS3, 99pc duty cycle) WLAN 8.57 4.96 % 10566 AAC IEEE 802.11ac WIFI (160MHz, MCS3, 99pc duty cycle) WLAN 8.57 4.96 % 10566 AAC IEEE 802.11ac WIFI (160MHz, MCS3, 99pc duty cycle) WLAN 8.59 4.96 % 10566 AAC IEEE 802.11ac WIFI (160Mhz, MCS3, 99pc duty cycle) WLAN 8.			IEEE 802.11ac WiFi (40MHz, MCS8, 99pc duty cycle)	WIAN		
10544 AAB IEEE 802.11ac WIFI (80MHz, MCS0, 99pc duty cycle) WiLAN 8.47 2.9.6 % 10546 AAB IEEE 802.11ac WIFI (80MHz, MCS1, 99pc duty cycle) WILAN 8.35 5.9.6 % 10547 AAB IEEE 802.11ac WIFI (80MHz, MCS2, 99pc duty cycle) WILAN 8.49 5.9.6 % 10548 AAB IEEE 802.11ac WIFI (80MHz, MCS3, 99pc duty cycle) WILAN 8.49 5.9.6 % 10550 AAB IEEE 802.11ac WIFI (80MHz, MCS3, 99pc duty cycle) WILAN 8.49 5.9.6 % 10550 AAB IEEE 802.11ac WIFI (80MHz, MCS3, 99pc duty cycle) WILAN 8.35 5.9.6 % 10550 AAB IEEE 802.11ac WIFI (80MHz, MCS3, 99pc duty cycle) WILAN 8.50 5.9.6 % 10550 AAB IEEE 802.11ac WIFI (80MHz, MCS3, 99pc duty cycle) WILAN 8.50 5.9.6 % 10550 AAB IEEE 802.11ac WIFI (80MHz, MCS3, 99pc duty cycle) WILAN 8.42 19.6 % 10550 AAB IEEE 802.11ac WIFI (80MHz, MCS3, 99pc duty cycle) WILAN 8.42 19.6 % 10550 AAB IEEE 802.11ac WIFI (80MHz, MCS3, 99pc duty cycle) WILAN 8.42 19.6 % 10550 AAC IEEE 802.11ac WIFI (80MHz, MCS3, 99pc duty cycle) WILAN 8.42 19.6 % 10550 AAC IEEE 802.11ac WIFI (80MHz, MCS3, 99pc duty cycle) WILAN 8.44 19.6 % 10550 AAC IEEE 802.11ac WIFI (160MHz, MCS3, 99pc duty cycle) WILAN 8.45 19.6 % 10550 AAC IEEE 802.11ac WIFI (160MHz, MCS3, 99pc duty cycle) WILAN 8.50 19.6 % 10550 AAC IEEE 802.11ac WIFI (160MHz, MCS3, 99pc duty cycle) WILAN 8.50 19.6 % 10550 AAC IEEE 802.11ac WIFI (160MHz, MCS3, 99pc duty cycle) WILAN 8.50 19.6 % 10550 AAC IEEE 802.11ac WIFI (160MHz, MCS3, 99pc duty cycle) WILAN 8.50 19.6 % 10550 AAC IEEE 802.11ac WIFI (160MHz, MCS3, 99pc duty cycle) WILAN 8.50 19.6 % 10560 AAC IEEE 802.11ac WIFI (160MHz, MCS3, 99pc duty cycle) WILAN 8.50 19.6 % 10560 AAC IEEE 802.11ac WIFI (160MHz, MCS3, 99pc duty cycle) WILAN 8.50 19.6 % 10560 AAC IEEE 802.11ac WIFI (160MHz, MCS3, 99pc duty cycle) WILAN 8.50 19.6 % 10560 AAC IEEE 802.11ac WIFI (160MHz, MCS3,	10543	AAB	IEEE 802.11ac WiFi (40MHz, MCS9, 99pc duty cycle)			
19545 AAB IEEE 802.11 ac WIFF (80MHz, MCS2, 99pc duty cycle) WLAN 8,55 3,6 % 3,6	10544		IEEE 802 11ac WiEi (80MHz, MCS0, 90pc duty cycle)			
10546 AAB			IEEE 802.11ac Will (COMITE, MCCO, 59pc daty Cycle)			
10547 AAB IEEE 802.11ac WiFi (00MHz, MCS3, 99pc duty cycle) WLAN 6.49 ±9.6 % 10569 AAB IEEE 802.11ac WiFi (00MHz, MCS4, 99pc duty cycle) WLAN 8.37 ±9.6 % 10551 AAB IEEE 802.11ac WiFi (00MHz, MCS4, 99pc duty cycle) WLAN 8.50 ±9.6 % 10553 AAB IEEE 802.11ac WiFi (00MHz, MCS6, 99pc duty cycle) WLAN 8.50 ±9.6 % 10553 AAB IEEE 802.11ac WiFi (00MHz, MCS6, 99pc duty cycle) WLAN 8.50 ±9.6 % 10553 AAB IEEE 802.11ac WiFi (00MHz, MCS9, 99pc duty cycle) WLAN 8.42 ±9.6 % 10553 AAB IEEE 802.11ac WiFi (00MHz, MCS9, 99pc duty cycle) WLAN 8.45 ±9.6 % 10555 AAC IEEE 802.11ac WiFi (100MHz, MCS9, 99pc duty cycle) WLAN 8.47 ±9.6 % 10555 AAC IEEE 802.11ac WiFi (100MHz, MCS9, 99pc duty cycle) WLAN 8.47 ±9.6 % 10555 AAC IEEE 802.11ac WiFi (100MHz, MCS9, 99pc duty cycle) WLAN 8.47 ±9.6 % 10555 AAC IEEE 802.11ac WiFi (100MHz, MCS9, 99pc duty cycle) WLAN 8.50 ±9.6 % 10555 AAC IEEE 802.11ac WiFi (100MHz, MCS9, 99pc duty cycle) WLAN 8.50 ±9.6 % 10556 AAC IEEE 802.11ac WiFi (100MHz, MCS9, 99pc duty cycle) WLAN 8.51 ±9.6 % 10556 AAC IEEE 802.11ac WiFi (100MHz, MCS9, 99pc duty cycle) WLAN 8.50 ±9.6 % 10556 AAC IEEE 802.11ac WiFi (100MHz, MCS9, 99pc duty cycle) WLAN 8.50 ±9.6 % 10566 AAC IEEE 802.11ac WiFi (100MHz, MCS9, 99pc duty cycle) WLAN 8.50 ±9.6 % 10566 AAA IEEE 802.11ac WiFi (100MHz, MCS9, 99pc duty cycle) WLAN 8.50 ±9.6 % 10566 AAA IEEE 802.11ac WiFi (100MHz, MCS9, 99pc duty cycle) WLAN 8.57 ±9.6 % 10566 AAA IEEE 802.11ac WiFi (100MHz, MCS9, 99pc duty cycle) WLAN 8.57 ±9.6 % 10566 AAA IEEE 802.11ac WiFi (20SSS-OFDM, 20DS) WIAN 8.57 ±9.6 % 10566 AAA IEEE 802.11ac WiFi (20SSS-OFDM, 20DS) WIAN 8.59 ±9.6 % 10570 AAA IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 20DS) WIAN 8.50 ±9.6 % 10571 AAA IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 20DS) WIAN 8.50 ±9.6 % 10571 AAA IEEE 80			TEEE 802.1 Fac WIFT (OUIVITZ, MICST, 99pc duty cycle)		8.55	± 9.6 %
10548			IEEE 802.11ac WiFi (80MHz, MCS2, 99pc duty cycle)	WLAN	8.35	± 9.6 %
10556			IEEE 802.11ac WiFi (80MHz, MCS3, 99pc duty cycle)	WLAN		
10550 AAB IEEE 802.11ac WIF (80MHz, MCS6, 99pc duty cycle) WLAN 8.38 £ 96 % 10552 AAB IEEE 802.11ac WIF (80MHz, MCS7, 99pc duty cycle) WLAN 8.42 £ 96 % 10553 AAB IEEE 802.11ac WIF (80MHz, MCS6, 99pc duty cycle) WLAN 8.42 £ 96 % 10554 AAC IEEE 802.11ac WIF (160MHz, MCS6, 99pc duty cycle) WLAN 8.42 £ 96 % 10554 AAC IEEE 802.11ac WIF (160MHz, MCS6, 99pc duty cycle) WLAN 8.44 £ 9.6 % 10555 AAC IEEE 802.11ac WIF (160MHz, MCS6, 99pc duty cycle) WLAN 8.47 £ 9.6 % 10555 AAC IEEE 802.11ac WIF (160MHz, MCS6, 99pc duty cycle) WLAN 8.47 £ 9.6 % 10555 AAC IEEE 802.11ac WIF (160MHz, MCS6, 99pc duty cycle) WLAN 8.50 £ 9.6 % 10555 AAC IEEE 802.11ac WIF (160MHz, MCS6, 99pc duty cycle) WLAN 8.50 £ 9.6 % 10556 AAC IEEE 802.11ac WIF (160MHz, MCS6, 99pc duty cycle) WLAN 8.50 £ 9.6 % 10556 AAC IEEE 802.11ac WIF (160MHz, MCS6, 99pc duty cycle) WLAN 8.50 £ 9.6 % 10556 AAC IEEE 802.11ac WIF (160MHz, MCS6, 99pc duty cycle) WLAN 8.73 £ 9.6 % 10556 AAC IEEE 802.11ac WIF (160MHz, MCS6, 99pc duty cycle) WLAN 8.69 £ 9.6 % 10556 AAC IEEE 802.11ac WIF (160MHz, MCS6, 99pc duty cycle) WLAN 8.69 £ 9.6 % 10556 AAC IEEE 802.11ac WIF (160MHz, MCS6, 99pc duty cycle) WLAN 8.69 £ 9.6 % 10556 AAA IEEE 802.11ac WIF (160MHz, MCS6, 99pc duty cycle) WLAN 8.69 £ 9.6 % 10556 AAA IEEE 802.11ac WIF (160MHz, MCS6, 99pc duty cycle) WLAN 8.57 £ 9.6 % 10556 AAA IEEE 802.11g WIF 2.4 GHz (DSSS-OFDM, 12 Mbps, 99pc duty WLAN 8.30 £ 9.6 % 10556 AAA IEEE 802.11g WIF 2.4 GHz (DSSS-OFDM, 24 Mbps, 99pc duty WLAN 8.30 £ 9.6 % 10566 AAA IEEE 802.11g WIF 2.4 GHz (DSSS-OFDM, 24 Mbps, 99pc duty WLAN 8.30 £ 9.6 % 10570 AAA IEEE 802.11g WIF 2.4 GHz (DSSS-OFDM, 36 Mbps, 90pc duty WLAN 8.30 £ 9.6 % 10571 AAA IEEE 802.11g WIF 2.4 GHz (DSSS-OFDM, 48 Mbps, 90pc duty WLAN 8.70 £ 9.6 % 10571 AAA IEEE	10548	AAB	IEEE 802.11ac WiFi (80MHz, MCS4, 99pc duty cycle)			
10551 AAB IEEE 802.11ac WiFI (80MHz, MCS7, 99pc duty cycle) WILAN 8.30 ±9.6 % 10553 AAB IEEE 802.11ac WiFI (80MHz, MCS8, 99pc duty cycle) WILAN 8.42 ±9.6 % 10553 AAC IEEE 802.11ac WiFI (80MHz, MCS8, 99pc duty cycle) WILAN 8.45 ±9.6 % 10554 AAC IEEE 802.11ac WiFI (80MHz, MCS8, 99pc duty cycle) WILAN 8.48 ±9.6 % 10555 AAC IEEE 802.11ac WiFI (160MHz, MCS8, 99pc duty cycle) WILAN 8.48 ±9.6 % 10556 AAC IEEE 802.11ac WiFI (160MHz, MCS8, 99pc duty cycle) WILAN 8.50 ±9.6 % 10556 AAC IEEE 802.11ac WiFI (160MHz, MCS8, 99pc duty cycle) WILAN 8.50 ±9.6 % 10556 AAC IEEE 802.11ac WiFI (160MHz, MCS8, 99pc duty cycle) WILAN 8.50 ±9.6 % 10556 AAC IEEE 802.11ac WiFI (160MHz, MCS8, 99pc duty cycle) WILAN 8.61 ±9.6 % 10560 AAC IEEE 802.11ac WiFI (160MHz, MCS8, 99pc duty cycle) WILAN 8.61 ±9.6 % 10560 AAC IEEE 802.11ac WiFI (160MHz, MCS8, 99pc duty cycle) WILAN 8.61 ±9.6 % 10560 AAC IEEE 802.11ac WiFI (160MHz, MCS8, 99pc duty cycle) WILAN 8.56 ±9.6 % 10560 AAC IEEE 802.11ac WiFI (160MHz, MCS8, 99pc duty cycle) WILAN 8.56 ±9.6 % 10560 AAC IEEE 802.11ac WiFI (160MHz, MCS8, 99pc duty cycle) WILAN 8.56 ±9.6 % 10560 AAC IEEE 802.11ac WiFI (160MHz, MCS8, 99pc duty cycle) WILAN 8.56 ±9.6 % 10560 AAC IEEE 802.11ac WiFI (160MHz, MCS8, 99pc duty cycle) WILAN 8.57 ±9.6 % 10560 AAA IEEE 802.11ac WiFI (160MHz, MCS8, 99pc duty cycle) WILAN 8.25 ±9.6 % 10560 AAA IEEE 802.11ac WiFI (160MHz, MCS8, 99pc duty cycle) WILAN 8.45 ±9.6 % 10560 AAA IEEE 802.11ac WiFI (24 GHz (DSSS-OFDM, 18 Mbps, 99pc duty WILAN 8.37 ±9.6 % 10560 AAA IEEE 802.11ac WiFI (24 GHz (DSSS-OFDM, 24 Mbps, 99pc duty WILAN 8.30 ±9.6 % 10570 AAA IEEE 802.11ac WiFI (24 GHz (DSSS-OFDM, 48 Mbps, 90pc duty WILAN 8.30 ±9.6 % 10571 AAA IEEE 802.11b WiFI (24 GHz (DSSS-OFDM, 48 Mbps, 90pc duty WILAN 8.50 ±9.6 % 10573 AAA IEEE	10550	AAB	IEEE 802 11ac WiFi (80MHz, MCS6, 99pc duty cycle)			
10552			IEEE 802 1100 WiEi (90MHz, MCC7, 00m a dubu and b)			
10553			IEEE 002.1 fac WIFI (00MHZ, MCS7, 99pc duty cycle)			
10554 AAC			IEEE 802.11ac WIFI (80MHz, MCS8, 99pc duty cycle)	WLAN	8.42	± 9.6 %
10556			IEEE 802.11ac WiFi (80MHz, MCS9, 99pc duty cycle)	WLAN	8.45	
10855	10554	AAC	IEEE 802.11ac WiFi (160MHz, MCS0, 99pc duty cycle)		******	
10556	10555	AAC	IEEE 802 11ac WiFi (160MHz, MCS1, 99pc duty cyclo)			
10557			IEEE 802 11ac WiFi (160MUz, MCC2, 00pc duty cycle)			
10558			IEEE 002.1 fac WiFi (100MHz, MC52, 99pc duty cycle)			± 9.6 %
10580			IEEE OUZ.TTac vviri (ToUMHz, MCS3, 99pc duty cycle)		8.52	± 9.6 %
10560			IEEE 802.11ac WiFi (160MHz, MCS4, 99pc duty cycle)	WLAN		
10561 AAC IEEE 802.11ac WIFI (160MHz, MCSR, 99pc duty cycle) WLAN 8.56 £ 9.6 % 10563 AAC IEEE 802.11ac WIFI (160MHz, MCSR, 99pc duty cycle) WLAN 8.77 £ 9.6 % 10564 AAA IEEE 802.11ac WIFI (160MHz, MCSR, 99pc duty cycle) WLAN 8.77 £ 9.6 % 10565 AAA IEEE 802.11g WIFI 2.4 GHz (DSSS-OFDM, 9 Mbps, 99pc duty WLAN 8.25 £ 9.6 % 10566 AAA IEEE 802.11g WIFI 2.4 GHz (DSSS-OFDM, 12 Mbps, 99pc duty WLAN 8.45 £ 9.6 % 10566 AAA IEEE 802.11g WIFI 2.4 GHz (DSSS-OFDM, 18 Mbps, 99pc duty WLAN 8.13 £ 9.6 % 10567 AAA IEEE 802.11g WIFI 2.4 GHz (DSSS-OFDM, 18 Mbps, 99pc duty WLAN 8.00 £ 9.6 % 10568 AAA IEEE 802.11g WIFI 2.4 GHz (DSSS-OFDM, 36 Mbps, 99pc duty WLAN 8.00 £ 9.6 % 10569 AAA IEEE 802.11g WIFI 2.4 GHz (DSSS-OFDM, 36 Mbps, 99pc duty WLAN 8.10 £ 9.6 % 10570 AAA IEEE 802.11g WIFI 2.4 GHz (DSSS-OFDM, 48 Mbps, 99pc duty WLAN 8.30 £ 9.6 % 10571 AAA IEEE 802.11g WIFI 2.4 GHz (DSSS-OFDM, 54 Mbps, 99pc duty WLAN 8.30 £ 9.6 % 10572 AAA IEEE 802.11b WIFI 2.4 GHz (DSSS, 1 Mbps, 90pc duty cycle) WLAN 1.99 £ 9.6 % 10573 AAA IEEE 802.11b WIFI 2.4 GHz (DSSS, 5 Mbps, 90pc duty cycle) WLAN 1.99 £ 9.6 % 10574 AAA IEEE 802.11b WIFI 2.4 GHz (DSSS, 5 Mbps, 90pc duty cycle) WLAN 1.98 £ 9.6 % 10575 AAA IEEE 802.11b WIFI 2.4 GHz (DSSS, 5 Mbps, 90pc duty cycle) WLAN 1.98 £ 9.6 % 10576 AAA IEEE 802.11b WIFI 2.4 GHz (DSSS-OFDM, 6 Mbps, 90pc duty cycle) WLAN 1.98 £ 9.6 % 10576 AAA IEEE 802.11g WIFI 2.4 GHz (DSSS-OFDM, 18 Mbps, 90pc duty cycle) WLAN 1.98 £ 9.6 % 10576 AAA IEEE 802.11g WIFI 2.4 GHz (DSSS-OFDM, 18 Mbps, 90pc duty cycle) WLAN 1.98 £ 9.6 % 10578 AAA IEEE 802.11g WIFI 2.4 GHz (DSSS-OFDM, 18 Mbps, 90pc duty cycle) WLAN 8.60 £ 9.6 % 10580 AAA IEEE 802.11g WIFI 2.4 GHz (DSSS-OFDM, 18 Mbps, 90pc duty cycle) WLAN 8.67 £ 9.6 % 10580 AAA IEEE 802.11g WIFI 2.4 GHz (DSSS-OFDM, 18 Mbps, 90pc duty cycle) WLAN			IEEE 802.11ac WiFi (160MHz, MCS6, 99pc duty cycle)			
10562	10561	AAC	IEEE 802.11ac WIFI (160MHz, MCS7, 99nc duty cycle)			
10563			IEEE 802 11ac WiFi (160MHz, MCC9, 00pg duty cycle)			
10564			IEEE 902 4400 MSE: (400MHz, MCOO, 99pc duty cycle)			
10565			IEEE 802.11ac WIFT (160MHZ, MCS9, 99pc duty cycle)	WLAN	8.77	± 9.6 %
Oycle Oycl	10564	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 99pc duty	WLAN	8.25	
Cycle AAA IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 99pc duty cycle) WLAN 8.13 ± 9.6 % (Cycle) WLAN EEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 99pc duty cycle) WLAN 8.00 ± 9.6 % (Cycle) WLAN EEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 99pc duty cycle) WLAN 8.37 ± 9.6 % (Cycle) WLAN EEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 99pc duty cycle) WLAN 8.10 ± 9.6 % (Cycle) WLAN EEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 99pc duty cycle) WLAN 8.30 ± 9.6 % (Cycle) WLAN EEE 802.11b WiFi 2.4 GHz (DSSS, 5 Mbps, 90pc duty cycle) WLAN 1.99 ± 9.6 % (Cycle) WLAN 1.90 ± 9.6 % (Cycle) WLAN 1.90 ± 9.6 % (Cycle) WLAN 1.9			cycle)		İ	
Cycle AAA IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 99pc duty cycle) WLAN 8.13 ± 9.6 % (Cycle) WLAN EEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 99pc duty cycle) WLAN 8.00 ± 9.6 % (Cycle) WLAN EEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 99pc duty cycle) WLAN 8.37 ± 9.6 % (Cycle) WLAN EEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 99pc duty cycle) WLAN 8.10 ± 9.6 % (Cycle) WLAN EEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 99pc duty cycle) WLAN 8.30 ± 9.6 % (Cycle) WLAN EEE 802.11b WiFi 2.4 GHz (DSSS, 5 Mbps, 90pc duty cycle) WLAN 1.99 ± 9.6 % (Cycle) WLAN 1.90 ± 9.6 % (Cycle) WLAN 1.90 ± 9.6 % (Cycle) WLAN 1.9	10565	AAA	IEEE 802.11a WiFi 2.4 GHz (DSSS-OFDM 12 Mbps 99pc duty	M/LAN	0.45	+ O 6 9/
10566				VVLAN	0.43	± 9.0 %
10567	10566	ΔΔΔ		1100 111		
10567	10000	1		WLAN	8.13	± 9.6 %
Cycle Cycl	40507					
10568	10567	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 99pc duty	WLAN	8.00	±9.6%
10569			cycle)			
10569	10568	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 99nc duty	WLAN	8 37	+96%
10569				44 m) (14	0.57	1 9.0 %
Cycle	10569	ΔΔΔ		1411 431		
10570	10000	1,000	auda)	WLAN	8.10	± 9.6 %
10571 AAA IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90pc duty cycle) WLAN 1.99 ± 9.6 % 10572 AAA IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 90pc duty cycle) WLAN 1.99 ± 9.6 % 10573 AAA IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 90pc duty cycle) WLAN 1.98 ± 9.6 % 10574 AAA IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 90pc duty cycle) WLAN 1.98 ± 9.6 % 10575 AAA IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 90pc duty cycle) WLAN 1.98 ± 9.6 % 10576 AAA IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 90pc duty cycle) WLAN 8.60 ± 9.6 % 10577 AAA IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 90pc duty cycle) WLAN 8.70 ± 9.6 % 10578 AAA IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 90pc duty cycle) WLAN 8.49 ± 9.6 % 10579 AAA IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 90pc duty cycle) WLAN 8.36 ± 9.6 % 10580 AAA IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 90pc duty cycle) WLAN 8.36 ± 9.6 % 10581 AAA IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 90pc duty cycle) WLAN 8.35 ± 9.6 % 10582 AAA IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 90pc duty cycle) WLAN 8.67 ± 9.6 % 10582 AAA IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 90pc duty cycle) WLAN 8.67 ± 9.6 % 10583 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 90pc duty cycle) WLAN 8.60 ± 9.6 % 10586 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90pc duty cycle) WLAN 8.70 ± 9.6 % 10586 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90pc duty cycle) WLAN 8.70 ± 9.6 % 10586 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90pc duty cycle) WLAN 8.70 ± 9.6 % 10586 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90pc duty cycle) WLAN 8.49 ± 9.6 % 10586 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90pc duty cycle) WLAN 8.49 ± 9.6 % 10586 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90pc duty cycle) WLAN 8.49 ± 9.6 % 10586 AAB IEEE 802	40570	1000				
10571	10570	AAA		WLAN	8.30	±9.6%
10572						
10572	10571	AAA	IEEE 802.11b WiFl 2.4 GHz (DSSS, 1 Mbps, 90pc duty cycle)	WI AN	1 99	+96%
10573	10572	AAA	IEEE 802 11h WiEi 2.4 GHz (DSSS, 2 Mbps, 90pc duty cyclo)			
10574 AAA IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 90pc duty cycle) WLAN 1.98 ± 9.6 % 10575 AAA IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 90pc duty cycle) WLAN 8.59 ± 9.6 % 10576 AAA IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 90pc duty cycle) WLAN 8.60 ± 9.6 % 10577 AAA IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 90pc duty cycle) WLAN 8.70 ± 9.6 % 10578 AAA IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 90pc duty cycle) WLAN 8.49 ± 9.6 % 10579 AAA IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 90pc duty cycle) WLAN 8.36 ± 9.6 % 10580 AAA IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 90pc duty cycle) WLAN 8.76 ± 9.6 % 10581 AAA IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 90pc duty cycle) WLAN 8.35 ± 9.6 % 10582 AAA IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 90pc duty cycle) WLAN 8.67 ± 9.6 % 10583 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 90pc duty cycle)			IEEE 802 11h M/Ei 2.4 CH- (DOCC, 2 Mbps, Jope duty cycle)			
10575			IEEE 903 446 WIE 3 4 OLE (DOGS, 3.5 IVIDDS, 9UDC duty cycle)			
10576			IEEE 002.1 to WIFI 2.4 GHZ (DSSS, 11 Mbps, 90pc duty cycle)		1.98	±9.6%
10576	10575	AAA		WLAN	8.59	
10577			cycle)			75
10577	10576	AAA	IEEE 802.11g WiFl 2.4 GHz (DSSS-OFDM, 9 Mbps, 90nc duty	WLAN	8.60	+96%
10577 AAA IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 90pc duty cycle) WLAN 8.70 ± 9.6 % 10578 AAA IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 90pc duty cycle) WLAN 8.49 ± 9.6 % 10579 AAA IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 90pc duty cycle) WLAN 8.36 ± 9.6 % 10580 AAA IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 90pc duty cycle) WLAN 8.76 ± 9.6 % 10581 AAA IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 90pc duty cycle) WLAN 8.35 ± 9.6 % 10582 AAA IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 90pc duty cycle) WLAN 8.67 ± 9.6 % 10583 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 90pc duty cycle) WLAN 8.59 ± 9.6 % 10584 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90pc duty cycle) WLAN 8.60 ± 9.6 % 10586 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 90pc duty cycle) WLAN 8.70 ± 9.6 % 10586 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 90pc duty cycle) WLAN 8.49 ± 9.6 %	1		cycle)	445714	0.00	± 3.0 76
10578	10577	ΔΔΔ		300.031		
10578 AAA IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 90pc duty cycle) WLAN 8.49 ± 9.6 % 10579 AAA IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 90pc duty cycle) WLAN 8.36 ± 9.6 % 10580 AAA IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 90pc duty cycle) WLAN 8.76 ± 9.6 % 10581 AAA IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 90pc duty cycle) WLAN 8.35 ± 9.6 % 10582 AAA IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 90pc duty cycle) WLAN 8.67 ± 9.6 % 10583 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 90pc duty cycle) WLAN 8.59 ± 9.6 % 10585 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90pc duty cycle) WLAN 8.70 ± 9.6 % 10586 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 90pc duty cycle) WLAN 8.70 ± 9.6 %	'00''	1,7,67	Overlay	WLAN	8.70	± 9.6 %
Cycle 10579	10570					
Cycle	10578	AAA		WLAN	8.49	± 9.6 %
Cycle Cycl				1		
Cycle	10579	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mhns, 90nc duty	WLAN	836	+96%
10580 AAA IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 90pc duty cycle) WLAN 8.76 ± 9.6 % 10581 AAA IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 90pc duty cycle) WLAN 8.35 ± 9.6 % 10582 AAA IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 90pc duty cycle) WLAN 8.67 ± 9.6 % 10583 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 90pc duty cycle) WLAN 8.59 ± 9.6 % 10584 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 90pc duty cycle) WLAN 8.60 ± 9.6 % 10585 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90pc duty cycle) WLAN 8.70 ± 9.6 % 10586 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 90pc duty cycle) WLAN 8.49 ± 9.6 %	1			******	0.50	± 0.0 /6
cycle) cycle) 0.76 19.6 % 10581 AAA IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 90pc duty cycle) WLAN 8.35 ± 9.6 % 10582 AAA IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 90pc duty cycle) WLAN 8.67 ± 9.6 % 10583 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 90pc duty cycle) WLAN 8.59 ± 9.6 % 10584 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90pc duty cycle) WLAN 8.60 ± 9.6 % 10585 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 90pc duty cycle) WLAN 8.70 ± 9.6 % 10586 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 90pc duty cycle) WLAN 8.49 ± 9.6 %	10580	ΔΔΔ		300 031	 	
10581 AAA IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 90pc duty cycle) WLAN 8.35 ± 9.6 % 10582 AAA IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 90pc duty cycle) WLAN 8.67 ± 9.6 % 10583 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 90pc duty cycle) WLAN 8.59 ± 9.6 % 10584 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 90pc duty cycle) WLAN 8.60 ± 9.6 % 10585 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90pc duty cycle) WLAN 8.70 ± 9.6 % 10586 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 90pc duty cycle) WLAN 8.49 ± 9.6 %	,5555	' ' ' '	ovelol	WLAN	8.76	± 9.6 %
10582	10504					
Cycle	10581	AAA		WLAN	8.35	±9.6%
10583 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 90pc duty cycle) WLAN 8.59 ± 9.6 %						
10583 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 90pc duty cycle) WLAN 8.59 ± 9.6 %	10582	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 90pc duty	WLAN	8.67	+96%
10583 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 90pc duty cycle) WLAN 8.59 ± 9.6 % 10584 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 90pc duty cycle) WLAN 8.60 ± 9.6 % 10585 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90pc duty cycle) WLAN 8.70 ± 9.6 % 10586 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 90pc duty cycle) WLAN 8.49 ± 9.6 %			cycle)	1.2.11	0.01	± 0.0 /0
10584 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 90pc duty cycle) WLAN 8.60 ± 9.6 % 10585 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90pc duty cycle) WLAN 8.70 ± 9.6 % 10586 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 90pc duty cycle) WLAN 8.49 ± 9.6 %	10583	AAR		300 000	1 2 2 2	
10585 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90pc duty cycle) WLAN 8.70 ± 9.6 % 10586 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 90pc duty cycle) WLAN 8.49 ± 9.6 %			TETE 900 44-75 WIFT OUT (OFDIA 3 17)			
10585 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90pc duty cycle) WLAN 8.70 ± 9.6 % 10586 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 90pc duty cycle) WLAN 8.49 ± 9.6 %			IEEE OUZ. I Ta/II WIFT 5 GHZ (OFDM, 9 Mbps, 90pc duty cycle)		8.60	± 9.6 %
10586 AAB IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 90pc duty cycle) WLAN 8.49 ± 9.6 %			IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90pc duty cycle)	WLAN	8.70	
10007 AAD IEEE 000 44 % MEET = 011 40 FEAT = 11 11	*******	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 90pc duty cycle)			
1 (2, 2. mopo, sopo daty dydio) WLAIN 0.30 19.0 %	10587	AAB	IEEE 802,11a/h WiFi 5 GHz (OFDM, 24 Mhns, 90nc duty cycle)			
			2 mopo, copo daty cycle)	AA EVALA	; 0.30	T 9.0 70

10588	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 90pc duty cycle)	WLAN	8.76	± 9.6 %
10589	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 90pc duty cycle)	WLAN	8.35	± 9.6 %
10590	AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 90pc duty cycle)	WLAN	8.67	± 9.6 %
10591	AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS0, 90pc duty cycle)	WLAN	8.63	± 9.6 %
10592	AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS1, 90pc duty cycle)	WLAN	8.79	± 9.6 %
10593	AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS2, 90pc duty cycle)	WLAN	8.64	± 9.6 %
10594	AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS3, 90pc duty cycle)	WLAN	8.74	± 9.6 %
10595	AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS4, 90pc duty cycle)	WLAN	8.74	± 9.6 %
10596	AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS5, 90pc duty cycle)	WLAN	8.71	± 9.6 %
10597	AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS6, 90pc duty cycle)	WLAN	8.72	± 9.6 %
10598	AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS7, 90pc duty cycle)	WLAN	8.50	±9.6 %
10599	AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS0, 90pc duty cycle)	WLAN	8.79	± 9.6 %
10600	AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS1, 90pc duty cycle)	WLAN	8.88	± 9.6 %
10601	AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS2, 90pc duty cycle)	WLAN	8.82	± 9.6 %
10602	AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS3, 90pc duty cycle)	WLAN	8.94	± 9.6 %
10603	AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS4, 90pc duty cycle)	WLAN	9.03	± 9.6 %
10604	AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS5, 90pc duty cycle)	WLAN	8.76	± 9.6 %
10605	AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS6, 90pc duty cycle)	WLAN	8.97	± 9.6 %
10606	AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS7, 90pc duty cycle)	WLAN	8.82	± 9.6 %
10607	AAB	IEEE 802.11ac WiFi (20MHz, MCS0, 90pc duty cycle)	WLAN	8.64	± 9.6 %
10608	AAB	IEEE 802.11ac WiFi (20MHz, MCS1, 90pc duty cycle)	WLAN	8.77	± 9.6 %
10609	AAB	IEEE 802.11ac WiFi (20MHz, MCS2, 90pc duty cycle)	WLAN	8.57	± 9.6 %
10610	AAB	IEEE 802.11ac WiFi (20MHz, MCS3, 90pc duty cycle)	WLAN	8.78	± 9.6 %
10611	AAB	IEEE 802.11ac WiFi (20MHz, MCS4, 90pc duty cycle)	WLAN	8.70	±9.6 %
10612	AAB	IEEE 802.11ac WiFi (20MHz, MCS5, 90pc duty cycle)	WLAN	8.77	±9.6 %
10613	AAB	IEEE 802.11ac WiFi (20MHz, MCS6, 90pc duty cycle)	WLAN	8.94	± 9.6 %
10614	AAB	IEEE 802.11ac WiFi (20MHz, MCS7, 90pc duty cycle)	WLAN	8.59	± 9.6 %
10615	AAB	IEEE 802.11ac WiFi (20MHz, MCS8, 90pc duty cycle)	WLAN	8.82	± 9.6 %
10616	AAB	IEEE 802.11ac WiFi (40MHz, MCS0, 90pc duty cycle)	WLAN	8.82	± 9.6 %
10617 10618	AAB	IEEE 802.11ac WiFi (40MHz, MCS1, 90pc duty cycle)	WLAN	8.81	± 9.6 %
10619	AAB	IEEE 802.11ac WiFi (40MHz, MCS2, 90pc duty cycle)	WLAN	8,58	± 9.6 %
10619	AAB AAB	IEEE 802.11ac WiFi (40MHz, MCS3, 90pc duty cycle)	WLAN	8.86	± 9.6 %
10620	AAB	IEEE 802.11ac WiFi (40MHz, MCS4, 90pc duty cycle)	WLAN	8.87	± 9.6 %
10621	AAB	IEEE 802.11ac WiFi (40MHz, MCS5, 90pc duty cycle) IEEE 802.11ac WiFi (40MHz, MCS6, 90pc duty cycle)	WLAN	8.77	± 9.6 %
10623	AAB	IEEE 802.11ac WiFi (40MHz, MCS6, 90pc duty cycle)	WLAN	8.68	± 9.6 %
10624	AAB	IEEE 802.11ac WiFi (40MHz, MCS8, 90pc duty cycle)	WLAN	8.82	± 9.6 %
10625	AAB	IEEE 802.11ac WiFi (40MHz, MCS9, 90pc duty cycle)	WLAN	8.96	± 9.6 %
10626	AAB	IEEE 802.11ac WiFi (80MHz, MCS0, 90pc duty cycle)	WLAN WLAN	8.96	±9.6 %
10627	AAB	IEEE 802.11ac WiFi (80MHz, MCS1, 90pc duty cycle)	WLAN	8.83 8.88	± 9.6 %
10628	AAB	IEEE 802.11ac WiFi (80MHz, MCS2, 90pc duty cycle)	WLAN	8.71	***************************************
10629	AAB	IEEE 802.11ac WiFi (80MHz, MCS3, 90pc duty cycle)	WLAN	8.85	± 9.6 % ± 9.6 %
10630	AAB	IEEE 802.11ac WiFi (80MHz, MCS4, 90pc duty cycle)	WLAN	8.72	± 9.6 %
10631	AAB	IEEE 802.11ac WiFi (80MHz, MCS5, 90pc duty cycle)	WLAN	8.81	± 9.6 %
10632	AAB	IEEE 802.11ac WiFi (80MHz, MCS6, 90pc duty cycle)	WLAN	8.74	± 9.6 %
10633	AAB	IEEE 802.11ac WiFi (80MHz, MCS7, 90pc duty cycle)	WLAN	8.83	± 9.6 %
10634	AAB	IEEE 802.11ac WiFi (80MHz, MCS8, 90pc duty cycle)	WLAN	8.80	± 9.6 %
10635	AAB	IEEE 802.11ac WiFi (80MHz, MCS9, 90pc duty cycle)	WLAN	8.81	± 9.6 %
10636	AAC	IEEE 802.11ac WiFi (160MHz, MCS0, 90pc duty cycle)	WLAN	8.83	± 9.6 %
10637	AAC	IEEE 802.11ac WiFi (160MHz, MCS1, 90pc duty cycle)	WLAN	8.79	± 9.6 %
10638	AAC	IEEE 802.11ac WiFi (160MHz, MCS2, 90pc duty cycle)	WLAN	8.86	± 9.6 %
10639	AAC	IEEE 802.11ac WiFi (160MHz, MCS3, 90pc duty cycle)	WLAN	8.85	± 9.6 %
10640	AAC	IEEE 802.11ac WiFi (160MHz, MCS4, 90pc duty cycle)	WLAN	8.98	± 9.6 %
10641	AAC	IEEE 802.11ac WiFi (160MHz, MCS5, 90pc duty cycle)	WLAN	9.06	± 9.6 %
10642	AAC	IEEE 802.11ac WiFi (160MHz, MCS6, 90pc duty cycle)	WLAN	9.06	± 9.6 %
10643	AAC	IEEE 802.11ac WiFi (160MHz, MCS7, 90pc duty cycle)	WLAN	8.89	± 9,6 %
10644	AAC	IEEE 802.11ac WiFi (160MHz, MCS8, 90pc duty cycle)	WLAN	9.05	±9.6 %
10645	AAC	IEEE 802.11ac WiFi (160MHz, MCS9, 90pc duty cycle)	WLAN	9.11	± 9.6 %
10646	AAF	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,7)	LTE-TDD	11.96	± 9.6 %
10647	AAF	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,7)	LTE-TDD	11.96	± 9.6 %
10648	AAA	CDMA2000 (1x Advanced)	CDMA2000	3.45	± 9.6 %
10652	AAD	LTE-TDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	LTE-TDD	6.91	± 9.6 %
10653	AAD AAD	LTE-TDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%) LTE-TDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)	LTE-TDD	7.42	± 9.6 %
10654			LTE-TDD	6.96	± 9.6 %

EUmmWV3 - SN: 9407 December 7, 2018

10655	AAE	LTE-TDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	LTE-TDD	7.21	± 9.6 %
10658	AAA	Pulse Waveform (200Hz, 10%)	Test	10.00	
10659	AAA	Pulse Waveform (200Hz, 20%)	Test		± 9.6 %
10660	AAA	Pulse Waveform (200Hz, 40%)	· · · · · · · · · · · · · · · · · · ·	6.99	± 9.6 %
10661	AAA	Pulse Waveform (200Hz, 60%)	Test	3.98	±9.6 %
10662	AAA	Pulse Waveform (200Hz, 80%)	Test	2.22	± 9.6 %
10670	AAA	Bluetooth Low Energy	Test	0.97	± 9.6 %
10010	1,000	I Diderootti Low Ellergy	Bluetooth	2.19	± 9.6 %

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

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





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Client

PC Test

Certificate No: 5G-Veri30-1035_Jan19

CALIBRATION CERTIFICATE

Object

5G Verification Source 30 GHz - SN: 1035

Calibration procedure(s)

QA CAL-45.v2

Calibration procedure for sources in air above 6 GHz

Calibration date:

January 28, 2019

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

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

Calibration Equipment used (M&TE critical for calibration)

ID#	Cal Date (Certificate No.)	Scheduled Calibration
SN: 9374	31-Dec-18 (No. EUmmWV3-9374_Dec18)	Dec-19
SN: 1215	26-Feb-18 (No. DAE4-1215_Feb18)	Feb-19
ID#	Check Date (in house)	Scheduled Check
	SN: 9374 SN: 1215	SN: 9374 31-Dec-18 (No. EUmmWV3-9374_Dec18) SN: 1215 26-Feb-18 (No. DAE4-1215_Feb18)

Name

Function

Calibrated by:

Leif Klysner

Laboratory Technician

Approved by:

Katja Pokovic

Technical Manager

Issued: January 29, 2019

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Certificate No: 5G-Veri30-1035_Jan19

Page 1 of 4

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





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Glossary

CW

Continuous wave

Calibration is Performed According to the Following Standards

- Internal procedure QA CAL-45-5Gsources
- IEC TR 63170 ED1, "Measurement procedure for the evaluation of power density related to human exposure to radio frequency fields from wireless communication devices operating between 6 GHz and 100 GHz", January 2018

Methods Applied and Interpretation of Parameters

- Coordinate System: z-axis in the waveguide horn boresight, x-axis is in the direction of the E-field, y-axis normal to the others in the field scanning plane parallel to the horn flare and horn flange.
- Measurement Conditions: (1) 10 GHz: The forward power to the horn antenna is measured prior and after the measurement with a power sensor. During the measurements, the horn is directly connected to the cable taking into account the 0.4dB horn loss. (2) 30, 60 and 90 GHz: The verification sources are switched on for at least 30 minutes. Absorbers are used around the probe cub and at the ceiling to minimize reflections.
- Horn Positioning: The waveguide horn is mounted vertically on the flange of the waveguide source to allow vertical positioning of the EUmmW probe during the scan. The plane is parallel to the phantom surface. Probe distance is verified using mechanical gauges positioned on the flare of the horn.
- *E- field distribution:* E field is measured in two x-y-plane (10mm, 10mm + λ /4) with a vectorial E-field probe. The E-field value stated as calibration value represents the E-field-maxima and the averaged (1cm² and 4cm²) power density values at 10mm in front of the horn.
- Field polarization: Above the open horn, linear polarization of the field is expected. This is verified graphically in the field representation.

Calibrated Quantity

 Local peak E-field (V/m) and peak values of the total and normal component of the poynting vector |Re{S}| and n.Re{S} averaged over the surface area of 1 cm² (pStotavg1cm² and pSnavg1cm²) and 4cm² (pStotavg4cm² and pSnavg4cm²) at the nominal operational frequency of the verification source.

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%.

Certificate No: 5G-Veri30-1035_Jan19 Page 2 of 4

Measurement Conditions

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

DASY Version	cDASY6 Module mmWave	V1.4
Phantom	5G Phantom	
Distance Horn Aperture - plane	10 mm	
XY Scan Resolution	dx, dy = 2.5 mm	
Number of measured planes	2 (10mm, 10mm + λ/4)	
Frequency	30 GHz ± 10 MHz	

Calibration Parameters, 30 GHz

Distance Horn Aperture to Measured Plane	Prad1 (mW)	Max E-field (V/m)	Uncertainty (k = 2)	Avg Power Density n.Re{S}, Re{S} (W/m2)		Uncertainty (k = 2)
				1 cm ²	4 cm ²	
10 mm	31.8	131	1.27 dB	39.0, 39.4	34.8, 35.1	1.28 dB

Certificate No: 5G-Veri30-1035_Jan19

I derived from far-field data

DASY Report

Measurement Report for 5G Verification Source 30 GHz, UID 0 -, Channel 30000 (30000.0MHz)

Device under Test Properties

Name, ManufacturerDimensions [mm]IMEIDUT Type5G Verification Source 30 GHz100.0 x 100.0 x 100.0SN: 1035

Exposure Conditions

Phantom Section	Position, Test Distance [mm]	Band	Group,	Frequency [MHz], Channel Number	Conversion Factor
5G -	5.55 mm	Validation band	CW	30000.0, 30000	1.0

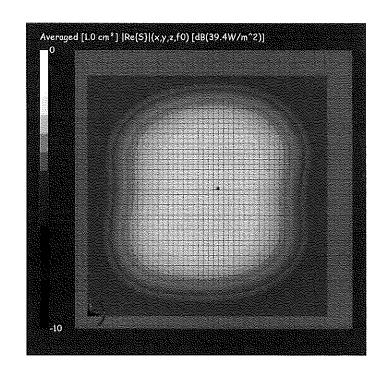
Hardware Setup

Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
5G Phantom	Air	EUmmWV3 - SN9374, 2018-12-31	DAE4 Sn1215, 2018-02-26

Scan Setup

•	5G Scan		5G Scan
Grid Extents [mm]	60.0 x 60.0	Date	2019-01-28, 16:37
Grid Steps [lambda]	0.25 x 0.25	Avg. Area [cm²]	1.00
Sensor Surface [mm]	5.55	pStot avg [W/m ²]	39.0
MAIA	MAIA not used	pS _n avg [W/m ²]	39.4
		E _{peak} [V/m]	131
		Power Drift (dB)	0.05

Measurement Results



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





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Client

PC Test

Certificate No: 5G-Veri30-1002_Mar19

CALIBRATION O	ERTIFICAT	TE .	
Object	5G Verification	Source 30 GHz - SN: 1002	
Calibration procedure(s)	QA CAL-45.v2 Calibration prod	cedure for sources in air above 6 GHz	2NV
Calibration date:	March 19, 2019	9	BN 4-15-201
This calibration certificate docum The measurements and the unce All calibrations have been condu	ertaintles with confidence	national standards, which realize the physical units of probability are given on the following pages and an attory facility: environment temperature (22 \pm 3)°C ar	re part of the certificate.
Calibration Equipment used (M&	3		Scheduled Calibration
Primary Standards Reference Probe EUmmWV3	ID # SN: 9374	Cal Date (Certificate No.) 31-Dec-18 (No. EUmmWV3-9374_Dec18)	Dec-19
DAE4	SN: 1215	22-Feb-19 (No. DAE4-1215_Feb19)	Feb-20
Secondary Standards	ID#	Check Date (in house)	Scheduled Check
	Nama	Function	Signature
Calibrated by:	Name Jeton Kastrati	Function Laboratory Technician	# C
Approved by:	Katja Pokovic	Technical Manager	V Alle
			Issued: March 20, 2019

Certificate No: 5G-Veri30-1002_Mar19

Page 1 of 4

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Glossary

CW

Continuous wave

Calibration is Performed According to the Following Standards

Internal procedure QA CAL-45-5Gsources

• IEC TR 63170 ED1, "Measurement procedure for the evaluation of power density related to human exposure to radio frequency fields from wireless communication devices operating between 6 GHz and 100 GHz", January 2018

Methods Applied and Interpretation of Parameters

- Coordinate System: z-axis in the waveguide horn boresight, x-axis is in the direction of the E-field, y-axis normal to the others in the field scanning plane parallel to the horn flare and horn flange.
- Measurement Conditions: (1) 10 GHz: The forward power to the horn antenna is measured prior and after the measurement with a power sensor. During the measurements, the horn is directly connected to the cable taking into account the 0.2dB horn loss. (2) 30, 60 and 90 GHz: The verification sources are switched on for at least 30 minutes. Absorbers are used around the probe cub and at the ceiling to minimize reflections.
- Horn Positioning: The waveguide horn is mounted vertically on the flange of the waveguide source to allow vertical positioning of the EUmmW probe during the scan. The plane is parallel to the phantom surface. Probe distance is verified using mechanical gauges positioned on the flare of the horn.
- E- field distribution: E field is measured in two x-y-plane (10mm, 10mm + λ/4) with a
 vectorial E-field probe. The E-field value stated as calibration value represents the E-fieldmaxima and the averaged (1cm² and 4cm²) power density values at 10mm in front of the
 horn.
- Field polarization: Above the open horn, linear polarization of the field is expected. This is verified graphically in the field representation.

Calibrated Quantity

 Local peak E-field (V/m) and peak values of the total and normal component of the poynting vector |Re{S}| and n.Re{S} averaged over the surface area of 1 cm² (pStotavg1cm² and pSnavg1cm²) and 4cm² (pStotavg4cm² and pSnavg4cm²) at the nominal operational frequency of the verification source.

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	cDASY6 Module mmWave	V1.6
Phantom	5G Phantom	
Distance Horn Aperture - plane	10 mm	
XY Scan Resolution	dx, dy = 2.5 mm	
Number of measured planes	2 (10mm, 10mm + \(\mathcal{N} 4 \)	
Frequency	30 GHz ± 10 MHz	

Calibration Parameters, 30 GHz

Distance Horn Aperture	Prad1	Max E-field	Uncertainty	Avg Power Density		Uncertainty
to Measured Plane	(mW)	(V/m)	(k = 2)	n.Re{S}, Re{S}		(k = 2)
				(W/m2)		
				1 cm ²	4 cm ²	
10 mm	34.8	139	1.27 dB	43.0, 43.6	35.6, 36.2	1.28 dB

¹ derived from far-field data

DASY Report

Measurement Report for 5G Verification Source 30 GHz, UID 0 -, Channel 30000 (30000.0MHz)

Device under Test Properties

Name, Manufacturer Dimensions [mm] IMEI DUT Type 5G Verification Source 30 GHz 100.0 x 100.0 x 100.0 SN: 1002

Exposure Conditions

Phantom Section Position, Test Distance Group, Frequency [MHz], **Conversion Factor** [mm] **Channel Number** 5G -5.55 mm Validation band 30000.0, 1.0 30000

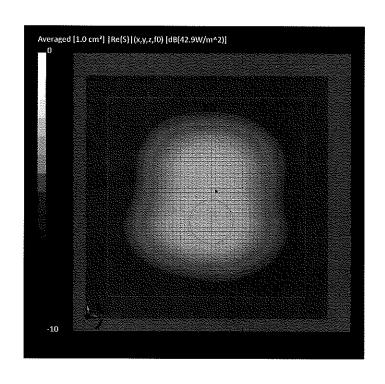
Hardware Setup

Phantom Medium Probe, Calibration Date **DAE, Calibration Date** 5G Phantom EUmmWV3 - SN9374, 2018-12-31 DAE4 Sn1215, 2019-02-22

Scan Setup

	5G Scan		5G Scan
Grid Extents [mm]	60.0 x 60.0	Date	2019-03-19, 12:21
Grid Steps [lambda]	0.25 x 0.25	Avg. Area [cm ²]	1.00
Sensor Surface [mm]	5,55	pS _{tot} avg [W/m ²]	43.6
MAIA	MAIA not used	pS _n avg [W/m ²]	43.0
		E _{peak} [V/m]	139
		Power Drift [dB]	0.02

Measurement Results



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

Client

PC Test

Certificate No: 5G-Veri30-1015_Oct18

CALIBRATION C	ERTIFICAT	E	
Object	5G Verification	Source 30 GHz - SN: 1015	
Calibration procedure(s)	QA CAL-45.v2 Calibration prod	cedure for sources in air above 6 GHz	•
Calibration date:	October 01, 20	18	
	· · · · · · · · · · · · · · · · · · ·	national standards, which realize the physical units of probability are given on the following pages and a	
All calibrations have been conduc	cted in the closed labora	atory facility: environment temperature (22 \pm 3)°C ar	nd humidity < 70%.
Calibration Equipment used (M&1	TE critical for calibration)	
Primary Standards	ID#	Cal Date (Certificate No.)	Scheduled Calibration
Reference Probe EUmmWV3	SN: 9374	23-Mar-18 (No. EUmmWV3-9374_Mar18)	Mar-19
DAE4	SN: 1215	26-Feb-18 (No. DAE4-1215_Feb18)	Feb-19
Secondary Standards	ID#	Check Date (in house)	Scheduled Check
	Name	Function	Signature
Calibrated by:	Leif Klysner	Laboratory Technician	Sel Mo
Approved by:	Katja Pokovic	Technical Manager	y page

Issued: October 4, 2018

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Glossary

CW

Continuous wave

Calibration is Performed According to the Following Standards

- Internal procedure QA CAL-45-5Gsources
- IEC TR 63170 ED1, "Measurement procedure for the evaluation of power density related to human exposure to radio frequency fields from wireless communication devices operating between 6 GHz and 100 GHz", January 2018
- S. Pfeifer et al. Total Field Reconstruction in the Near Field Using Pseudo-Vector E-Field Measurements, IEEE Transactions on Electromagnetic Compatibility, TEMC.2018.2837897

Methods Applied and Interpretation of Parameters

- Coordinate System: z-axis in the waveguide horn boresight, x-axis is in the direction of the E-field, y-axis normal to the others in the field scanning plane parallel to the horn flare and horn flange.
- Measurement Conditions: (1) 10 GHz: The forward power to the horn antenna is measured prior and after the measurement with a power sensor. During the measurements, the horn is directly connected to the cable considering the 0.4dB horn loss. (2) 30, 60 and 90 GHz: The verification sources are switched on for at least 30 minutes. Absorbers are used around the probe cup and at the ceiling to minimize reflections.
- Horn Positioning: The waveguide horn is mounted vertically on the flange of the waveguide source to allow vertical positioning of the EUmmW probe during the scan. The plane is parallel to the phantom surface. Probe distance is verified using mechanical gauges positioned on the flare of the horn.
- E- field distribution: E field is measured in two x-y-plane (10mm, 10mm + λ/4) with a
 vectorial E-field probe. The E-field value stated as calibration value represents the E-fieldmaxima.
- Power Density: The power density values averaged over 1cm² and 4cm² at 10mm in front of the horn are reconstructed from the E-field according to TEMC.2018.2837897.
- Field polarization: Above the open horn, linear polarization of the field is expected. This is verified graphically in the field representation.

Calibrated Quantity

Local peak E-field (V/m) and peak values of the total and normal component of the poynting vector |Re{S}| and n.Re{S} averaged over the surface area of 1 cm² (pStotavg1cm² and pSnavg1cm²) and 4cm² (pStotavg4cm² and pSnavg4cm²) at the nominal operational frequency of the verification source.

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%.

Certificate No: 5G-Veri30-1015_Oct18 Page 2 of 4

Measurement Conditions

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

DASY Version	cDASY6 Module mmWave	V1.4	
Phantom	5G Phantom		
Distance Horn Aperture - plane	10 mm		
XY Scan Resolution	dx, dy = 2.5 mm		
Number of measured planes	2 (10mm, 10mm + \(\mathcal{N} 4 \)		
Frequency	30 GHz ± 10 MHz		

Calibration Parameters, 30 GHz

Distance Horn Aperture to Measured Plane	P _{rad} i (mW)	Max E-field (V/m)	Uncertainty $(k=2)$	Avg Power Density n.Re{S}, Re{S} (W/m²)		Uncertainty $(k=2)$
				1 cm ²	4 cm ²	
10 mm	33.5	135	1.27 dB	41.7, 42.0	35.5, 36.1	1.28 dB

Certificate No: 5G-Veri30-1015_Oct18

 $^{^{1}}$ derived from far-field data

DASY Report

Measurement Report for 5G Verification Source 30 GHz, UID 0 -, Channel 30000 (30000.0MHz)

Device under Test Properties

DUT Type Name, Manufacturer Dimensions [mm] IME SN: 1015

5G Verification Source 30 GHz

100.0 x 100.0 x 100.0

Exposure Conditions

Frequency [MHz], **Conversion Factor Phantom Section** Position, Test Distance Band Group,

[mm]

5G -5.55 mm Validation band CW 30000.0,

Channel Number

30000

1.0

Hardware Setup

Probe, Calibration Date DAE, Calibration Date Medium Phantom EUmmWV3 - SN9374, 2018-03-23 DAE4 Sn1215, 2018-02-26 5G Phantom Air

Scan Setup

Measurement Results SG Scan 5G Scan 2018-10-01, 17:20 Grid Extents [mm] 60.0 x 60.0 Date Grid Steps [lambda] 0.25 x 0.25 Avg. Area [cm²] 1.00 pStot avg [W/m²] 42.0 Sensor Surface [mm] 5.55 MAIA pS_n avg [W/m²] 41.7 MAIA not used E_{peak} [V/m] 135 Power Drift [dB] -0.07

