| $\begin{array}{\|l\|} \hline 10623- \\ A A B \\ \hline \end{array}$ | IEEE 802.11ac WiFi (40MHz, MCS7, 90 pc duty cycle) | X | 4.39 | 66.10 | 15.89 | 0.46 | 130.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 4.89 | 66.49 | 16.36 |  | 130.0 |  |
|  |  | Z | 4.86 | 65.84 | 15.96 |  | 130.0 |  |
| $\begin{aligned} & 10624- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (40MHz, MCS8, 90pc duty cycle) | X | 4.54 | 66.35 | 16.10 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.06 | 66.70 | 16.53 |  | 130.0 |  |
|  |  | Z | 5.05 | 66.11 | 16.17 |  | 130.0 |  |
| $\begin{aligned} & 10625- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (40MHz, MCS9, 90 pc duty cycle) | X | 4.65 | 66.63 | 16.32 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.15 | 66.88 | 16.69 |  | 130.0 |  |
|  |  | Z | 5.16 | 66.34 | 16.36 |  | 130.0 |  |
| $\begin{aligned} & 10626- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11 ac WiFi (80MHz, MCS0, 90 pc duty cycle) | X | 4.87 | 66.09 | 16.03 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.31 | 66.64 | 16.44 |  | 130.0 |  |
|  |  | Z | 5.28 | 66.07 | 16.09 |  | 130.0 |  |
| $\begin{aligned} & 10627- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (80MHz, MCS1, 90 pc duty cycle) | X | 4.96 | 66.39 | 16.17 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.52 | 67.25 | 16.73 |  | 130.0 |  |
|  |  | Z | 5.53 | 66.80 | 16.43 |  | 130.0 |  |
| $\begin{aligned} & 10628- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (80MHz, MCS2, 90 pc duty cycle) | X | 4.83 | 65.96 | 15.85 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.28 | 66.56 | 16.30 |  | 130.0 |  |
|  |  | Z | 5.27 | 66.03 | 15.96 |  | 130.0 |  |
| $\begin{aligned} & 10629- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (80MHz, MCS3, 90pc duty cycle) | X | 4.89 | 66.11 | 15.93 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.45 | 66.99 | 16.52 |  | 130.0 |  |
|  |  | Z | 5.45 | 66.49 | 16.20 |  | 130.0 |  |
| $\begin{aligned} & 10630- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11ac WiFi (80MHz, MCS4, 90 pc duty cycle) | X | 4.94 | 66.47 | 16.13 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.52 | 67.40 | 16.73 |  | 130.0 |  |
|  |  | Z | 5.58 | 67.09 | 16.50 |  | 130.0 |  |
| $\begin{aligned} & 10631 \text { - } \\ & \text { AAB } \end{aligned}$ | IEEE 802.11ac WiFi (80MHz, MCS5, 90 pc duty cycle) | X | 5.04 | 67.01 | 16.63 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.56 | 67.66 | 17.07 |  | 130.0 |  |
|  |  | Z | 5.56 | 67.16 | 16.74 |  | 130.0 |  |
| $\begin{aligned} & 10632- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11ac WiFi ( $80 \mathrm{MHz}, \mathrm{MCS}$, 90 pc duty cycle) | X | 5.02 | 66.85 | 16.55 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.59 | 67.70 | 17.10 |  | 130.0 |  |
|  |  | Z | 5.59 | 67.18 | 16.77 |  | 130.0 |  |
| $\begin{aligned} & 10633- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11 ac WiFi $(80 \mathrm{MHz}, \mathrm{MCS} 7$, 90 pc duty cycle) | X | 4.86 | 66.17 | 16.01 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.30 | 66.64 | 16.39 |  | 130.0 |  |
|  |  | Z | 5.27 | 66.07 | 16.03 |  | 130.0 |  |
| $\begin{aligned} & 10634- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11ac WiFi ( $80 \mathrm{MHz}, \mathrm{MCS}$, 90 pc duty cycle) | X | 4.95 | 66.64 | 16.30 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.35 | 66.92 | 16.58 |  | 130.0 |  |
|  |  | Z | 5.32 | 66.32 | 16.21 |  | 130.0 |  |
| $\begin{array}{\|l} \hline 10635- \\ \text { AAB } \\ \hline \end{array}$ | IEEE 802.11ac WiFi ( $80 \mathrm{MHz}, \mathrm{MCS}$, 90 pc duty cycle) | X | 4.70 | 65.44 | 15.34 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.17 | 66.01 | 15.82 |  | 130.0 |  |
|  |  | Z | 5.16 | 65.50 | 15.50 |  | 130.0 |  |
| $\begin{array}{\|l\|} \hline 10636- \\ \text { AAC } \\ \hline \end{array}$ | IEEE 802.11ac WiFi ( $160 \mathrm{MHz}, \mathrm{MCSO}$, 90 pc duty cycle) | X | 5.37 | 66.35 | 16.11 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.75 | 66.94 | 16.50 |  | 130.0 |  |
|  |  | Z | 5.74 | 66.45 | 16.20 |  | 130.0 |  |
| $\begin{array}{\|l\|} \hline 10637- \\ \text { AAC } \\ \hline \end{array}$ | IEEE 802.11 ac WiFi ( 160 MHz , MCS1, 90 pc duty cycle) 90 pc duty cycle) | X | 5.47 | 66.68 | 16.28 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.84 | 67.17 | 16.61 |  | 130.0 |  |
|  |  | Z | 5.85 | 66.75 | 16.34 |  | 130.0 |  |
| $\begin{aligned} & 10638- \\ & A A C \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (160MHz, MCS2, 90 pc duty cycle) | X | 5.45 | 66.60 | 16.21 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.91 | 67.37 | 16.68 |  | 130.0 |  |
|  |  | Z | 5.90 | 66.89 | 16.39 |  | 130.0 |  |


| $\begin{aligned} & 10639- \\ & \text { AAC } \end{aligned}$ | IEEE 802.11ac WiFi (160MHz, MCS3, 90pc duty cycle) | $X$ | 5.40 | 66.48 | 16.20 | 0.46 | 130.0 | $\pm 9.6 \%$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $Y$ | 5.83 | 67.15 | 16.61 |  | 130.0 |  |
| $\begin{aligned} & 10640- \\ & \mathrm{AAC} \\ & \hline \end{aligned}$ |  | Z | 5.82 | 66.67 | 16.32 |  | 130.0 |  |
|  | IEEE 802.11ac WiFi ( 160 MHz , MCS4, 90 pc duty cycle) | X | 5.32 | 66.22 | 15.99 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.75 | 66.89 | 16.42 |  | 130.0 |  |
|  |  | Z | 5.75 | 66.45 | 16.15 |  | 130.0 |  |
| $\begin{aligned} & 10641- \\ & \text { AAC } \\ & \hline \end{aligned}$ | IEEE 802.11 ac WiFi ( $160 \mathrm{MHz}, \mathrm{MCS} 5$, 90 pc duty cycle) | X | 5.45 | 66.45 | 16.13 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.88 | 67.07 | 16.54 |  | 130.0 |  |
|  |  | Z | 5.90 | 66.70 | 16.30 |  | 130.0 |  |
| $\begin{aligned} & 10642- \\ & \text { AAC } \end{aligned}$ | IEEE 802.11ac WiFi (160MHz, MCS6, 90 pc duty cycle) | X | 5.46 | 66.60 | 16.39 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.90 | 67.28 | 16.81 |  | 130.0 |  |
|  |  | Z | 5.89 | 66.80 | 16.53 |  | 130.0 |  |
| $\begin{aligned} & 10643- \\ & \text { AAC } \end{aligned}$ | IEEE 802.11ac WiFi ( $160 \mathrm{MHz}, \mathrm{MCS} 7$, 90 pc duty cycle) | X | 5.28 | 66.13 | 16.00 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.73 | 66.91 | 16.51 |  | 130.0 |  |
|  |  | Z | 5.74 | 66.48 | 16.24 |  | 130.0 |  |
| $\begin{aligned} & 10644- \\ & \text { AAC } \end{aligned}$ | IEEE 802.11ac WiFi ( 160 MHz , MCS8, 90 pc duty cycle) | X | 5.42 | 66.58 | 16.26 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.78 | 67.08 | 16.62 |  | 130.0 |  |
|  |  | Z | 5.78 | 66.62 | 16.33 |  | 130.0 |  |
| $\begin{aligned} & 10645- \\ & \text { AAC } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (160MHz, MCS9, 90 pc duty cycle) | X | 5.81 | 67.58 | 16.73 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.91 | 67.16 | 16.62 |  | 130.0 |  |
|  |  | Z | 5.93 | 66.77 | 16.38 |  | 130.0 |  |
| $\begin{aligned} & 10646- \\ & \text { AAD } \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 5 MHz , QPSK, UL Subframe $=2,7$ ) | X | 2.64 | 72.38 | 24.11 | 9.30 | 60.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.60 | 84.41 | 29.31 |  | 60.0 |  |
|  |  | Z | 4.84 | 83.41 | 28.63 |  | 60.0 |  |
| $\begin{aligned} & 10647- \\ & \text { AAC } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 20 MHz , QPSK, UL Subframe=2,7) | X | 2.46 | 71.01 | 23.55 | 9.30 | 60.0 | $\pm 9.6$ \% |
|  |  | Y | 4.04 | 81.81 | 28.38 |  | 60.0 |  |
|  |  | Z | 4.35 | 81.42 | 27.96 |  | 60.0 |  |
| $\begin{aligned} & \text { 10648- } \\ & \text { AAA } \end{aligned}$ | CDMA2000 (1x Advanced) | X | 2.44 | 155.88 | 0.83 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | $Y$ | 0.35 | 60.28 | 6.28 |  | 150.0 |  |
|  |  | $Z$ | 0.35 | 60.00 | 5.54 |  | 150.0 |  |
| $\begin{aligned} & 10652- \\ & \mathrm{AAB} \\ & \hline \end{aligned}$ | LTE-TDD (OFDMA, 5 MHz , E-TM 3.1. Clipping 44\%) | X | 2.08 | 63.49 | 12.30 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | $Y$ | 3.15 | 67.39 | 16.19 |  | 80.0 |  |
|  |  | Z | 2.91 | 65.29 | 15.14 |  | 80.0 |  |
| $\begin{aligned} & 10653- \\ & \text { AAB } \\ & \hline \end{aligned}$ | LTE-TDD (OFDMA, 10 MHz , E-TM 3.1, Clipping 44\%) | X | 3.02 | 65.17 | 14.89 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 3.64 | 66.22 | 16.46 |  | 80.0 |  |
|  |  | Z | 3.52 | 64.96 | 15.78 |  | 80.0 |  |
| $\begin{aligned} & 10654- \\ & \text { AAB } \end{aligned}$ | LTE-TDD (OFDMA, 15 MHz , E-TM 3.1, Clipping 44\%) | $X$ | 3.20 | 64.95 | 15.39 | 2.23 | 80.0 | $\pm 9.6 \%$ |
|  |  | Y | 3.67 | 65.70 | 16.49 |  | 80.0 |  |
|  |  | Z | 3.57 | 64.61 | 15.88 |  | 80.0 |  |
| $\begin{aligned} & 10655- \\ & \text { AAB } \end{aligned}$ | LTE-TDD (OFDMA, 20 MHz , E-TM 3.1, Clipping 44\%) | X | 3.35 | 64.77 | 15.59 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 3.76 | 65.50 | 16.51 |  | 80.0 |  |
|  |  | Z | 3.66 | 64.52 | 15.94 |  | 80.0 |  |
| $\begin{aligned} & 10658- \\ & \text { AAA } \\ & \hline \end{aligned}$ | Pulse Waveform (200Hz, 10\%) | X | 2.01 | 62.76 | 7.94 | 10.00 | 50.0 | $\pm 9.6 \%$ |
|  |  | Y | 2.58 | 65.57 | 9.73 |  | 50.0 |  |
|  |  | Z | 3.05 | 67.26 | 11.01 |  | 50.0 |  |
| $\begin{aligned} & 10659- \\ & \text { AAA } \\ & \hline \end{aligned}$ | Pulse Waveform ( $200 \mathrm{~Hz}, 20 \%$ ) | X | 0.84 | 60.00 | 5.36 | 6.99 | 60.0 | $\pm 9.6$ \% |
|  |  | Y | 1.33 | 63.54 | 7.82 |  | 60.0 |  |
|  |  | Z | 1.53 | 64.53 | 8.66 |  | 60.0 |  |


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

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# Calibration Laboratory of <br> Schmid \& Partner <br> Engineering AG <br> Zeughausstrasse 43, 8004 Zurich, Switzerland <br>  <br> S Schweizerischer Kalibrierdienst <br> C Service suisse d'étalonnage <br> S Servizio svizzero di taratura <br> Swiss Calibration Service 

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

Client
PC Test
Certificate No: ES3-3347. Mar18
CALIBRATION CERTIFICATE

Object
ES3DV3 - SN:3347

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

Calibration date:
March 27, 2018

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

All calibrations have been conducted in the closed laboratory facility: environment temperature $(22 \pm 3)^{\circ} \mathrm{C}$ and humidity $<70 \%$

Calibration Equipment used (M\&TE critical for calibration)

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

Calibrated by; $\quad$ Name

[^1]
## Calibration Laboratory of

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


S Schweizerischer Kalibrierdienst

Accredited by the Swiss Accreditation Service (SAS)
Accreditation No.: SCS 0108
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Multilateral Agreement for the recognition of calibration certificates

## Glossary:

TSL
NORMx,y,z
ConvF
DCP
CF
A, B, C, D
Polarization $\varphi$
Polarization $\vartheta$
Connector Angle
tissue simulating liquid sensitivity in free space sensitivity in TSL / NORMx,y,z diode compression point crest factor (1/duty_cycle) of the RF signal modulation dependent linearization parameters $\varphi$ rotation around probe axis $\vartheta$ rotation around an axis that is in the plane normal to probe axis (at measurement center), i.e., $\vartheta=0$ is normal to probe axis information used in DASY system to align probe sensor X to the robot coordinate system

## Calibration is Performed According to the Following Standards:

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

## Methods Applied and Interpretation of Parameters:

- NORMx,y,z: Assessed for E-field polarization $\vartheta=0$ ( $f \leq 900 \mathrm{MHz}$ in TEM-cell; $f>1800 \mathrm{MHz}$ : R22 waveguide). NORMx,y,z are only intermediate values, i.e., the uncertainties of NORM $x, y, z$ does not affect the $E^{2}$-field uncertainty inside TSL (see below ConvF).
- $\operatorname{NORM}(f) x, y, z=N O R M x, y, z$ * frequency response (see Frequency Response Chart). This linearization is implemented in DASY4 software versions later than 4.2. The uncertainty of the frequency response is included in the stated uncertainty of ConvF.
- 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
- $A x, y, z ; B x, y, z ; C x, y, z ; D x, y, z ; \vee R x, y, z: A, B, C, D$ are numerical linearization parameters assessed based on the data of power sweep for specific modulation signal. The parameters do not depend on frequency nor media. $V R$ is the maximum calibration range expressed in RMS voltage across the diode.
- ConvF and Boundary Effect Parameters: Assessed in flat phantom using E-field (or Temperature Transfer Standard for $\mathrm{f} \leq 800 \mathrm{MHz}$ ) and inside waveguide using analytical field distributions based on power measurements for $f>800 \mathrm{MHz}$. The same setups are used for assessment of the parameters applied for boundary compensation (alpha, depth) of which typical uncertainty values are given. These parameters are used in DASY4 software to improve probe accuracy close to the boundary. The sensitivity in TSL corresponds to NORMx,y,z *ConvF whereby the uncertainty corresponds to that given for ConvF. A frequency dependent ConvF is used in DASY version 4.4 and higher which allows extending the validity from $\pm 50 \mathrm{MHz}$ to $\pm 100$ MHz .
- Spherical isotropy (3D deviation from isotropy): in a field of low gradients realized using a flat phantom exposed by a patch antenna.
- Sensor Offset: The sensor offset corresponds to the offset of virtual measurement center from the probe tip (on probe axis). No tolerance required.
- Connector Angle: The angle is assessed using the information gained by determining the NORMx (no uncertainty required).


# Probe ES3DV3 

## SN:3347

Manufactured: March 15, 2012

Repaired:
Calibrated:

March 15, 2018
March 27, 2018

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

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

Basic Calibration Parameters

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

## Modulation Calibration Parameters

| UID | Communication System Name |  | $\mathbf{A}$ <br> $\mathbf{d B}$ | $\mathbf{B}$ <br> $\mathbf{d B} \sqrt{ } \mathbf{\mu} \mathbf{V}$ | $\mathbf{C}$ | $\mathbf{D}$ <br> $\mathbf{d B}$ | $\mathbf{V R}$ <br> $\mathbf{m V}$ | $\mathbf{U n c}^{\mathbf{E}}$ <br> $\mathbf{k}=\mathbf{2})$ |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | CW | X | 0.0 | 0.0 | 1.0 | 0.00 | 201.8 | $\pm 3.3 \%$ |
|  |  | Y | 0.0 | 0.0 | 1.0 |  | 203.9 |  |
|  |  | Z | 0.0 | 0.0 | 1.0 |  | 204.8 |  |

Note: For details on UID parameters see Appendix.
Sensor Model Parameters

|  | $\mathbf{C 1}$ <br> $\mathbf{f F}$ | $\mathbf{C 2}$ <br> $\mathbf{f F}$ | $\mathbf{\alpha}$ <br> $\mathbf{V}^{-\mathbf{1}}$ | $\mathbf{T 1}$ <br> $\mathbf{m s .} \mathbf{V}^{-\mathbf{2}}$ | $\mathbf{T 2}$ <br> $\mathbf{m s . \mathbf { V } ^ { - 1 }}$ | $\mathbf{T 3}$ <br> $\mathbf{m s}$ | $\mathbf{T 4}$ <br> $\mathbf{V}^{\mathbf{- 2}}$ | $\mathbf{T 5}$ <br> $\mathbf{V}^{\mathbf{- 1}}$ | $\mathbf{T 6}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| X | 52.41 | 376.6 | 35.43 | 28.01 | 1.852 | 5.10 | 0.578 | 0.488 | 1.008 |
| Y | 42.65 | 300.9 | 34.31 | 25.12 | 1.310 | 5.10 | 1.279 | 0.204 | 1.011 |
| Z | 48.12 | 344.8 | 35.26 | 27.10 | 1.587 | 5.10 | 0.868 | 0.385 | 1.009 |

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor $\mathrm{k}=2$, which for a normal distribution corresponds to a coverage probability of approximately $95 \%$.
${ }^{\text {A }}$ The uncertainties of Norm $X, Y, Z$ do not affect the $E^{2}$-field uncertainty inside TSL (see Pages 5 and 6).
${ }^{\mathrm{B}}$ Numerical linearization parameter: uncertainty not required.
${ }^{\text {E }}$ Uncertainty is determined using the max. deviation from linear response applying rectangular distribution and is expressed for the square of the field value.

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

Calibration Parameter Determined in Head Tissue Simulating Media

| $\mathbf{f ( M H z ) ^ { \mathbf { C } }}$ | Relative <br> Permittivity $^{\mathbf{F}}$ | Conductivity <br> $(\mathbf{S} / \mathrm{m})^{F}$ | ConvF X | ConvF Y | ConvF Z | Alpha $^{\mathbf{G}}$ | Depth <br> $(\mathbf{m m})$ | Unc <br> $(\mathbf{k}=\mathbf{2})$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 750 | 41.9 | 0.89 | 6.77 | 6.77 | 6.77 | 0.65 | 1.32 | $\pm 12.0 \%$ |
| 835 | 41.5 | 0.90 | 6.41 | 6.41 | 6.41 | 0.40 | 1.64 | $\pm 12.0 \%$ |
| 1750 | 40.1 | 1.37 | 5.58 | 5.58 | 5.58 | 0.54 | 1.42 | $\pm 12.0 \%$ |
| 1900 | 40.0 | 1.40 | 5.36 | 5.36 | 5.36 | 0.80 | 1.16 | $\pm 12.0 \%$ |
| 2300 | 39.5 | 1.67 | 5.11 | 5.11 | 5.11 | 0.74 | 1.29 | $\pm 12.0 \%$ |
| 2450 | 39.2 | 1.80 | 4.81 | 4.81 | 4.81 | 0.80 | 1.24 | $\pm 12.0 \%$ |
| 2600 | 39.0 | 1.96 | 4.66 | 4.66 | 4.66 | 0.75 | 1.25 | $\pm 12.0 \%$ |

[^2]
## DASYIEASY - Parameters of Probe: ES3DV3 - SN:3347

Calibration Parameter Determined in Body Tissue Simulating Media

| $\mathrm{f}(\mathrm{MHz})^{\text {c }}$ | $\begin{gathered} \text { Relative } \\ \text { Permittivity } \\ \hline \end{gathered}$ | Conductivity $(\mathrm{S} / \mathrm{m})^{\mathrm{F}}$ | ConvF X | ConvFY | ConvF Z | Alpha ${ }^{\text {G }}$ | $\begin{gathered} \text { Depth }^{6} \\ (\mathrm{~mm}) \end{gathered}$ | $\begin{aligned} & \text { Unc } \\ & (\mathrm{k}=2) \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 750 | 55.5 | 0.96 | 6.59 | 6.59 | 6.59 | 0.77 | 1.22 | $\pm 12.0 \%$ |
| 835 | 55.2 | 0.97 | 6.37 | 6.37 | 6.37 | 0.80 | 1.17 | $\pm 12.0 \%$ |
| 1750 | 53.4 | 1.49 | 5.17 | 5.17 | 5.17 | 0.49 | 1.59 | $\pm 12.0 \%$ |
| 1900 | 53.3 | 1.52 | 4.94 | 4.94 | 4.94 | 0.52 | 1.49 | $\pm 12.0 \%$ |
| 2300 | 52.9 | 1.81 | 4.74 | 4.74 | 4.74 | 0.80 | 1.25 | $\pm 12.0 \%$ |
| 2450 | 52.7 | 1.95 | 4.64 | 4.64 | 4.64 | 0.75 | 1.20 | $\pm 12.0 \%$ |
| 2600 | 52.5 | 2.16 | 4.49 | 4.49 | 4.49 | 0.80 | 1.20 | $\pm 12.0 \%$ |

[^3]Frequency Response of E-Field (TEM-Cell:ifif110 EXX, Waveguide: R22)


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


##  (TEM cell , feyal $=1900 \mathrm{MHz}$ )




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

## Conversion Factor Assessment



Deviation from Isotropy in Liquid Error $(\phi, \vartheta), f=900 \mathrm{MHz}$



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

Other Probe Parameters

| Sensor Arrangement | Triangular |
| :--- | ---: |
| Connector Angle $\left(^{\circ}\right.$ ) | -16.5 |
| Mechanical Surface Detection Mode | enabled |
| Optical Surface Detection Mode | disabled |
| Probe Overall Length | 337 mm |
| Probe Body Diameter | 10 mm |
| Tip Length | 10 mm |
| Tip Diameter | 4 mm |
| Probe Tip to Sensor X Calibration Point | 2 mm |
| Probe Tip to Sensor Y Calibration Point | 2 mm |
| Probe Tip to Sensor Z Calibration Point | 2 mm |
| Recommended Measurement Distance from Surface | 3 mm |

## Appendix: Modulation Calibration Parameters

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


| $\begin{aligned} & 10032- \\ & \text { CAA } \end{aligned}$ | IEEE 802.15.1 Bluetooth (GFSK, DH5) | X | 100.00 | 111.85 | 22.94 | 1.17 | 100.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 100.00 | 118.40 | 25.59 |  | 100.0 |  |
|  |  | Z | 100.00 | 111.34 | 22.62 |  | 100.0 |  |
| $\begin{aligned} & 10033- \\ & \text { CAA } \end{aligned}$ | IEEE 802.15.1 Bluetooth (P//4-DQPSK, DH1) | X | 23.91 | 101.19 | 27.41 | 5.30 | 70.0 | $\pm 9.6$ \% |
|  |  | Y | 36.18 | 107.81 | 28.88 |  | 70.0 |  |
|  |  | Z | 30.63 | 104.89 | 28.18 |  | 70.0 |  |
| $\begin{aligned} & 10034- \\ & \text { CAA } \\ & \hline \end{aligned}$ | IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH3) | X | 6.24 | 84.08 | 20.44 | 1.88 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 7.24 | 85.92 | 20.55 |  | 100.0 |  |
|  |  | Z | 6.85 | 85.19 | 20.50 |  | 100.0 |  |
| $\begin{aligned} & \text { 10035- } \\ & \text { CAA } \end{aligned}$ | IEEE 802.15.1 Bluetooth (P//4-DQPSK, DH5) | X | 3.29 | 76.95 | 17.63 | 1.17 | 100.0 | $\pm 9.6 \%$ |
|  |  | Y | 3.58 | 78.09 | 17.57 |  | 100.0 |  |
|  |  | Z | 3.42 | 77.43 | 17.51 |  | 100.0 |  |
| $\begin{aligned} & 10036- \\ & \text { CAA } \\ & \hline \end{aligned}$ | IEEE 802.15.1 Bluetooth (8-DPSK, DH1) | X | 32.79 | 106.39 | 28.91 | 5.30 | 70.0 | $\pm 9.6$ \% |
|  |  | Y | 55.24 | 114.58 | 30.68 |  | 70.0 |  |
|  |  | Z | 45.73 | 111.34 | 29.95 |  | 70.0 |  |
| $\begin{aligned} & 10037- \\ & \text { CAA } \end{aligned}$ | IEEE 802.15.1 Bluetooth (8-DPSK, DH3) | X | 5.86 | 83.28 | 20.13 | 1.88 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 6.54 | 84.66 | 20.12 |  | 100.0 |  |
|  |  | Z | 6.31 | 84.13 | 20.12 |  | 100.0 |  |
| $\begin{aligned} & 10038- \\ & \text { CAA } \\ & \hline \end{aligned}$ | IEEE 802.15.1 Bluetooth (8-DPSK, DH5) | X | 3.39 | 77.59 | 17.96 | 1.17 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 3.66 | 78.64 | 17.87 |  | 100.0 |  |
|  |  | Z | 3.53 | 78.11 | 17.85 |  | 100.0 |  |
| $\begin{aligned} & 10039- \\ & \mathrm{CAB} \\ & \hline \end{aligned}$ | CDMA2000 (1xRTT, RC1) | X | 1.52 | 69.16 | 14.18 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 1.40 | 68.90 | 13.55 |  | 150.0 |  |
|  |  | Z | 1.46 | 69.03 | 13.83 |  | 150.0 |  |
| $\begin{aligned} & 10042- \\ & \text { CAB } \end{aligned}$ | IS-54 / IS-136 FDD (TDMA/FDM, PI/4DQPSK, Halfrate) | X | 100.00 | 114.62 | 28.47 | 7.78 | 50.0 | $\pm 9.6 \%$ |
|  |  | Y | 100.00 | 114.70 | 28.14 |  | 50.0 |  |
|  |  | Z | 100.00 | 113.88 | 27.92 |  | 50.0 |  |
| $10044-$$\mathrm{CAA}$ | IS-91/EIA/TIA-553 FDD (FDMA, FM) | X | 0.01 | 121.88 | 0.68 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 0.00 | 97.83 | 1.91 |  | 150.0 |  |
|  |  | Z | 0.01 | 122.55 | 0.35 |  | 150.0 |  |
| $\begin{aligned} & 10048- \\ & \mathrm{CAA} \\ & \hline \end{aligned}$ | DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24) | X | 17.94 | 92.17 | 26.06 | 13.80 | 25.0 | $\pm 9.6 \%$ |
|  |  | Y | 42.19 | 107.21 | 29.95 |  | 25.0 |  |
|  |  | Z | 24.74 | 97.63 | 27.36 |  | 25.0 |  |
| $\begin{aligned} & 10049- \\ & \text { CAA } \\ & \hline \end{aligned}$ | DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12) | X | 22.69 | 96.29 | 25.94 | 10.79 | 40.0 | $\pm 9.6 \%$ |
|  |  | Y | 68.20 | 113.74 | 30.23 |  | 40.0 |  |
|  |  | Z | 32.65 | 101.85 | 27.19 |  | 40.0 |  |
| $\begin{aligned} & 10056- \\ & \text { CAA } \end{aligned}$ | UMTS-TDD (TD-SCDMA, 1.28 Mcps ) | X | 16.99 | 92.79 | 25.84 | 9.03 | 50.0 | $\pm 9.6$ \% |
|  |  | Y | 27.63 | 101.84 | 28.34 |  | 50.0 |  |
|  |  | Z | 20.13 | 95.81 | 26.57 |  | 50.0 |  |
| $\begin{aligned} & 10058- \\ & \text { DAC } \end{aligned}$ | EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3) | X | 9.12 | 87.95 | 28.36 | 6.55 | 100.0 | $\pm 9.6 \%$ |
|  |  | Y | 8.98 | 89.45 | 29.43 |  | 100.0 |  |
|  |  | Z | 8.90 | 88.06 | 28.51 |  | 100.0 |  |
| $\begin{aligned} & 10059- \\ & \text { CAB } \end{aligned}$ | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps) | X | 1.37 | 66.39 | 16.16 | 0.61 | 110.0 | $\pm 9.6 \%$ |
|  |  | Y | 1.38 | 66.59 | 16.33 |  | 110.0 |  |
|  |  | Z | 1.36 | 66.49 | 16.23 |  | 110.0 |  |
| $\begin{aligned} & 10060- \\ & \mathrm{CAB} \\ & \hline \end{aligned}$ | IEEE 802.11 b WiFi 2.4 GHz (DSSS, 5.5 Mbps) | X | 100.00 | 128.08 | 31.98 | 1.30 | 110.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 131.22 | 33.31 |  | 110.0 |  |
|  |  | Z | 100.00 | 128.65 | 32.15 |  | 110.0 |  |


| $\begin{aligned} & 10061- \\ & C A B \end{aligned}$ | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps) | X | 9.25 | 94.71 | 26.12 | 2.04 | 110.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 9.59 | 96.73 | 27.06 |  | 110.0 |  |
|  |  | Z | 10.28 | 96.95 | 26.85 |  | 110.0 |  |
| $\begin{aligned} & 10062- \\ & \text { CAC } \\ & \hline \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps) | X | 4.74 | 66.85 | 16.53 | 0.49 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 4.66 | 67.04 | 16.57 |  | 100.0 |  |
|  |  | Z | 4.70 | 66.90 | 16.54 |  | 100.0 |  |
| $\begin{aligned} & 10063- \\ & \text { CAC } \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps) | X | 4.78 | 67.00 | 16.67 | 0.72 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 4.69 | 67.19 | 16.70 |  | 100.0 |  |
|  |  | Z | 4.73 | 67.05 | 16.68 |  | 100.0 |  |
| $\begin{aligned} & 10064- \\ & \text { CAC } \\ & \hline \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps) | X | 5.09 | 67.32 | 16.93 | 0.86 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 4.97 | 67.46 | 16.94 |  | 100.0 |  |
|  |  | Z | 5.03 | 67.35 | 16.93 |  | 100.0 |  |
| $\begin{aligned} & 10065- \\ & \text { CAC } \\ & \hline \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps) | X | 4.99 | 67.34 | 17.10 | 1.21 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 4.88 | 67.46 | 17.11 |  | 100.0 |  |
|  |  | Z | 4.93 | 67.36 | 17.10 |  | 100.0 |  |
| $\begin{aligned} & 10066- \\ & \text { CAC } \end{aligned}$ | IEEE $802.11 \mathrm{a} / \mathrm{h}$ WiFi 5 GHz (OFDM, 24 Mbps ) | X | 5.05 | 67.46 | 17.33 | 1.46 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 4.92 | 67.57 | 17.33 |  | 100.0 |  |
|  |  | Z | 4.98 | 67.48 | 17.32 |  | 100.0 |  |
| $\begin{array}{\|l\|} \hline 10067- \\ \text { CAC } \\ \hline \end{array}$ | IEEE $802.11 \mathrm{a} / \mathrm{h}$ WiFi 5 GHz (OFDM, 36 Mbps) | X | 5.36 | 67.67 | 17.81 | 2.04 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 5.25 | 67.92 | 17.88 |  | 100.0 |  |
|  |  | Z | 5.30 | 67.73 | 17.82 |  | 100.0 |  |
| $\begin{aligned} & 10068- \\ & \text { CAC } \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps) | X | 5.48 | 67.95 | 18.15 | 2.55 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 5.33 | 68.04 | 18.16 |  | 100.0 |  |
|  |  | Z | 5.40 | 67.94 | 18.13 |  | 100.0 |  |
| 10069-$\mathrm{CAC}$ | IEEE 802,11a/h WiFi 5 GHz (OFDM, 54 Mbps) | X | 5.56 | 67.94 | 18.35 | 2.67 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 5.42 | 68.11 | 18.40 |  | 100.0 |  |
|  |  | Z | 5.49 | 67.96 | 18.34 |  | 100.0 |  |
| $\begin{aligned} & 10071- \\ & \mathrm{CAB} \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps ) | X | 5.16 | 67.32 | 17.64 | 1.99 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 5.07 | 67.53 | 17.70 |  | 100.0 |  |
|  |  | Z | 5.11 | 67.37 | 17.65 |  | 100.0 |  |
| $\begin{aligned} & 10072- \\ & \text { CAB } \\ & \hline \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps ) | X | 5.20 | 67.83 | 17.95 | 2.30 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 5.09 | 67.99 | 18.00 |  | 100.0 |  |
|  |  | Z | 5.14 | 67.86 | 17.96 |  | 100.0 |  |
| $\begin{array}{\|l} \hline 10073- \\ \mathrm{CAB} \\ \hline \end{array}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps ) | X | 5.32 | 68.17 | 18.37 | 2.83 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 5.22 | 68.36 | 18.44 |  | 100.0 |  |
|  |  | Z | 5.26 | 68.20 | 18.38 |  | 100.0 |  |
| $\begin{array}{\|l\|} \hline 10074- \\ \mathrm{CAB} \\ \hline \end{array}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps ) | X | 5.35 | 68.22 | 18.60 | 3.30 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 5.26 | 68.43 | 18.68 |  | 100.0 |  |
|  |  | Z | 5.29 | 68.25 | 18.61 |  | 100.0 |  |
| $\begin{aligned} & \hline 10075- \\ & \mathrm{CAB} \\ & \hline \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps ) | X | 5.48 | 68.62 | 19.07 | 3.82 | 90.0 | $\pm 9.6$ \% |
|  |  | Y | 5.35 | 68.73 | 19.11 |  | 90.0 |  |
|  |  | Z | 5.40 | 68.60 | 19.05 |  | 90.0 |  |
| $\begin{aligned} & 10076- \\ & \text { CAB } \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps ) | X | 5.50 | 68.45 | 19.21 | 4.15 | 90.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.40 | 68.64 | 19.31 |  | 90.0 |  |
|  |  | Z | 5.44 | 68.46 | 19.21 |  | 90.0 |  |
| $\begin{aligned} & 10077- \\ & \mathrm{CAB} \\ & \hline \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps ) | X | 5.54 | 68.54 | 19.31 | 4.30 | 90.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.44 | 68.76 | 19.43 |  | 90.0 |  |
|  |  | Z | 5.48 | 68.56 | 19.32 |  | 90.0 |  |



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


| $\begin{aligned} & 10149- \\ & \text { CAD } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, $50 \%$ RB, 20 MHz , 16-QAM) | X | 2.87 | 67.13 | 15.54 | 0.00 | 150.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 2.81 | 67.29 | 15.59 |  | 150.0 |  |
|  |  | Z | 2.83 | 67.17 | 15.55 |  | 150.0 |  |
| $\begin{aligned} & 10150- \\ & \text { CAD } \end{aligned}$ | LTE-FDD (SC-FDMA, $50 \% \mathrm{RB}, 20 \mathrm{MHz}$, 64-QAM) | X | 2.99 | 67.13 | 15.61 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 2.93 | 67.31 | 15.66 |  | 150.0 |  |
|  |  | Z | 2.95 | 67.18 | 15.62 |  | 150.0 |  |
| $\begin{array}{\|l\|} \hline 10151- \\ \text { CAD } \\ \hline \end{array}$ | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 20 \mathrm{MHz}$, QPSK) | X | 9.21 | 81.33 | 22.45 | 3.98 | 65.0 | $\pm 9.6 \%$ |
|  |  | Y | 9.55 | 83.12 | 23.24 |  | 65.0 |  |
|  |  | Z | 9.38 | 82.15 | 22.79 |  | 65.0 |  |
| $\begin{aligned} & 10152- \\ & \text { CAD } \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \%$ RB, 20 MHz , 16-QAM) | X | 7.89 | 77.12 | 21.32 | 3.98 | 65.0 | $\pm 9.6 \%$ |
|  |  | Y | 7.75 | 77.78 | 21.62 |  | 65.0 |  |
|  |  | Z | 7.80 | 77.32 | 21.39 |  | 65.0 |  |
| $\begin{array}{\|l\|} \hline 10153- \\ \text { CAD } \\ \hline \end{array}$ | LTE-TDD (SC-FDMA, $50 \%$ RB, $20 \mathrm{MHz}_{\text {I }}$ 64-QAM) | X | 8.33 | 78.05 | 22.06 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 8.20 | 78.76 | 22.36 |  | 65.0 |  |
|  |  | Z | 8.27 | 78.34 | 22.17 |  | 65.0 |  |
| 10154CAE | LTE-FDD (SC-FDMA, $50 \% \mathrm{RB}, 10 \mathrm{MHz}$, QPSK) | X | 2.19 | 68.34 | 15.77 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 2.13 | 68.58 | 15.88 |  | 150.0 |  |
|  |  | Z | 2.15 | 68.43 | 15.80 |  | 150.0 |  |
| 10155-$\mathrm{CAE}$ | LTE-FDD (SC-FDMA, $50 \% \mathrm{RB}, 10 \mathrm{MHz}$,,$~$ | X | 2.54 | 67.61 | 15.66 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.49 | 67.93 | 15.66 |  | 150.0 |  |
|  |  | Z | 2.51 | 67.76 | 15.67 |  | 150.0 |  |
| $\begin{aligned} & 10156- \\ & \text { CAE } \end{aligned}$ | LTE-FDD (SC-FDMA, $50 \%$ RB, 5 MHz , QPSK) | X | 1.75 | 67.70 | 14.83 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 1.67 | 67.86 | 14.67 |  | 150.0 |  |
|  |  | Z | 1.70 | 67.75 | 14.73 |  | 150.0 |  |
| 10157-CAE | LTE-FDD (SC-FDMA, $50 \%$ RB, 5 MHz , 16-QAM) | X | 2.01 | 66.49 | 13.77 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 1.89 | 66.41 | 13.28 |  | 150.0 |  |
|  |  | Z | 1.95 | 66.44 | 13.53 |  | 150.0 |  |
| 10158- <br> CAE | LTE-FDD (SC-FDMA, $50 \% \mathrm{RB}, 10 \mathrm{MHz}$, 64-QAM) | X | 2.70 | 67.82 | 15.85 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.64 | 68.13 | 15.83 |  | 150.0 |  |
|  |  | Z | 2.67 | 67.98 | 15.86 |  | 150.0 |  |
| $\begin{aligned} & 10159- \\ & \mathrm{CAE} \end{aligned}$ | LTE-FDD (SC-FDMA, $50 \% \mathrm{RB}, 5 \mathrm{MHz}$, 64-QAM) | X | 2.11 | 66.90 | 14.04 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 1.98 | 66.74 | 13.50 |  | 150.0 |  |
|  |  | Z | 2.04 | 66.83 | 13.79 |  | 150.0 |  |
| $\begin{array}{\|l\|} \hline 10160- \\ \text { CAD } \\ \hline \end{array}$ | LTE-FDD (SC-FDMA, $50 \%$ RB, 15 MHz , QPSK) | X | 2.69 | 68.21 | 15.87 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.64 | 68.50 | 16.02 |  | 150.0 |  |
|  |  | Z | 2.66 | 68.34 | 15.93 |  | 150.0 |  |
| $\begin{array}{\|l\|} \hline 10161- \\ \text { CAD } \\ \hline \end{array}$ | LTE-FDD (SC-FDMA, $50 \%$ RB, 15 MHz , 16-QAM) | X | 2.88 | 67.04 | 15.53 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.82 | 67.25 | 15.56 |  | 150.0 |  |
|  |  | Z | 2.84 | 67.11 | 15.53 |  | 150.0 |  |
| $\begin{aligned} & 10162- \\ & \text { CAD } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, $50 \% \mathrm{RB}, 15 \mathrm{MHz}$, 64-QAM) | X | 2.99 | 67.17 | 15.64 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.93 | 67.43 | 15.68 |  | 150.0 |  |
|  |  | Z | 2.96 | 67.27 | 15.66 |  | 150.0 |  |
| $\begin{aligned} & 10166- \\ & \text { CAE } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, $50 \%$ RB, 1.4 MHz , QPSK) | X | 3.67 | 69.76 | 19.07 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.59 | 70.61 | 19.72 |  | 150.0 |  |
|  |  | Z | 3.64 | 70.17 | 19.36 |  | 150.0 |  |
| $10167-$$\mathrm{CAE}$ | LTE-FDD (SC-FDMA, $50 \% \mathrm{RB}, 1.4 \mathrm{MHz}$, 16-QAM) | X | 4.60 | 72.78 | 19.56 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.59 | 74.59 | 20.58 |  | 150.0 |  |
|  |  | Z | 4.60 | 73.54 | 19.97 |  | 150.0 |  |


| $\begin{aligned} & 10168- \\ & \text { CAE } \end{aligned}$ | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 50 \% \text { RB, } 1.4 \mathrm{MHz}, \\ & \text { 64-QAM) } \end{aligned}$ | X | 5.10 | 75.00 | 20.86 | 3.01 | 150.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 5.17 | 77.15 | 22.00 |  | 150.0 |  |
| $\begin{aligned} & 10169- \\ & \text { CAD } \end{aligned}$ |  | Z | 5.18 | 76.08 | 21.41 |  | 150.0 |  |
|  | LTE-FDD (SC-FDMA, 1 RB, 20 MHz , QPSK) | X | 3.14 | 69.82 | 19.09 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.99 | 70.11 | 19.57 |  | 150.0 |  |
| $\begin{aligned} & 10170- \\ & \text { CAD } \end{aligned}$ |  | Z | 3.08 | 69.99 | 19.30 |  | 150.0 |  |
|  | LTE-FDD (SC-FDMA, 1 RB, 20 MHz , 16-QAM) | X | 4.48 | 76.11 | 21.47 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.42 | 77.92 | 22.61 |  | 150.0 |  |
| $10171$ <br> AAD |  | Z | 4.51 | 77.09 | 22.03 |  | 150.0 |  |
|  | LTE-FDD (SC-FDMA, 1 RB, 20 MHz , 64-QAM) | X | 3.64 | 71.74 | 18.65 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.56 | 73.31 | 19.70 |  | 150.0 |  |
| $\begin{array}{\|l} \hline 10172- \\ \text { CAD } \end{array}$ |  | Z | 3.59 | 72.29 | 19.01 |  | 150.0 |  |
|  | LTE-TDD (SC-FDMA, 1 RB, 20 MHz , QPSK) | X | 21.10 | 104.74 | 32.18 | 6.02 | 65.0 | $\pm 9.6 \%$ |
|  |  | Y | 44.31 | 124.23 | 38.59 |  | 65.0 |  |
| $\begin{aligned} & 10173- \\ & \text { CAD } \\ & \hline \end{aligned}$ |  | Z | 24.87 | 109.58 | 33.89 |  | 65.0 |  |
|  | LTE-TDD (SC-FDMA, 1 RB, 20 MHz , 16-QAM) | X | 37.36 | 109.91 | 31.76 | 6.02 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 131.53 | 37.83 |  | 65.0 |  |
|  |  | Z | 66,45 | 121.49 | 34.95 |  | 65.0 |  |
| $\begin{aligned} & 10174- \\ & \text { CAD } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 1 \text { RB, } 20 \mathrm{MHz} \text {, } \\ & \text { 64-QAM) } \end{aligned}$ | X | 28.71 | 103.81 | 29.50 | 6.02 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 93.12 | 128.22 | 36.43 |  | 65.0 |  |
|  |  | Z | 36.57 | 109.34 | 31.20 |  | 65.0 |  |
| $\begin{aligned} & 10175- \\ & \text { CAE } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, 1 RB, 10 MHz , QPSK) | X | 3.10 | 69.50 | 18.83 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.96 | 69.84 | 19.35 |  | 150.0 |  |
|  |  | Z | 3.04 | 69.66 | 19.04 |  | 150.0 |  |
| $\begin{aligned} & 10176- \\ & \text { CAE } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 1 \text { RB, } 10 \mathrm{MHz} \text {, } \\ & \text { 16-QAM) } \end{aligned}$ | X | 4.49 | 76.13 | 21.48 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.43 | 77.95 | 22.63 |  | 150.0 |  |
|  |  | Z | 4.52 | 77.11 | 22.04 |  | 150.0 |  |
| 10177- <br> CAG | LTE-FDD (SC-FDMA, 1 RB, 5 MHz , QPSK) | X | 3.13 | 69.65 | 18.93 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.98 | 69.97 | 19.42 |  | 150.0 |  |
|  |  | Z | 3.07 | 69.81 | 19.14 |  | 150.0 |  |
| $\begin{aligned} & 10178 \\ & \text { CAE } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16QAM) | X | 4.43 | 75.88 | 21.35 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.39 | 77.75 | 22.52 |  | 150.0 |  |
|  |  | Z | 4.47 | 76.86 | 21.91 |  | 150.0 |  |
| $\begin{aligned} & 10179- \\ & \mathrm{CAE} \end{aligned}$ | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 1 \text { RB, } 10 \mathrm{MHz} \text {, } \\ & \text { 64-QAM) } \end{aligned}$ | X | 4.01 | 73.75 | 19.90 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.96 | 75.54 | 21.04 |  | 150.0 |  |
|  |  | Z | 4.01 | 74.52 | 20.37 |  | 150.0 |  |
| $\begin{aligned} & 10180- \\ & \text { CAE } \end{aligned}$ | LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 64QAM) | X | 3.63 | 71.66 | 18.60 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.55 | 73.25 | 19.66 |  | 150.0 |  |
|  |  | Z | 3.59 | 72.21 | 18.96 |  | 150.0 |  |
| $\begin{aligned} & 10181- \\ & \text { CAD } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, 1 RB, 15 MHz , QPSK) | X | 3.13 | 69.64 | 18.92 | 3.01 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 2.98 | 69.95 | 19.42 |  | 150.0 |  |
|  |  | Z | 3.06 | 69.80 | 19.13 |  | 150.0 |  |
| $\begin{aligned} & 10182- \\ & \text { CAD } \end{aligned}$ | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 1 \text { RB, } 15 \mathrm{MHz} \text {, } \\ & \text { 16-QAM) } \end{aligned}$ | X | 4.42 | 75.86 | 21.34 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.38 | 77.72 | 22.51 |  | 150.0 |  |
|  |  | Z | 4.46 | 76.83 | 21.90 |  | 150.0 |  |
| $\begin{aligned} & 10183- \\ & \text { AAC } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, 1 RB, 15 MHz , 64-QAM) | X | 3.62 | 71.63 | 18.59 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.55 | 73.22 | 19.65 |  | 150.0 |  |
|  |  | Z | 3.58 | 72.19 | 18.94 |  | 150.0 |  |


| $\begin{aligned} & 10184- \\ & \text { CAD } \end{aligned}$ | LTE-FDD (SC-FDMA, 1 RB, 3 MHz , QPSK) | X | 3.14 | 69.68 | 18.95 | 3.01 | 150.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 2.99 | 69.99 | 19.44 |  | 150.0 |  |
|  |  | Z | 3.07 | 69.84 | 19.16 |  | 150.0 |  |
| $\begin{aligned} & 10185- \\ & \text { CAD } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, 1 RB, $3 \mathrm{MHz}, 16-$ QAM) | X | 4.45 | 75.93 | 21.38 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.40 | 77.80 | 22.55 |  | 150.0 |  |
|  |  | Z | 4.48 | 76.92 | 21.94 |  | 150.0 |  |
| $\begin{aligned} & 10186- \\ & \text { AAD } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, 1 RB, 3 MHz , 64QAM) | X | 3.64 | 71.70 | 18.62 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.56 | 73.30 | 19.69 |  | 150.0 |  |
|  |  | Z | 3.60 | 72.26 | 18.98 |  | 150.0 |  |
| $\begin{aligned} & 10187- \\ & \text { CAE } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz , QPSK) | X | 3.15 | 69.73 | 19.01 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.00 | 70.06 | 19.51 |  | 150.0 |  |
|  |  | Z | 3.08 | 69.90 | 19.22 |  | 150.0 |  |
| $\begin{aligned} & 10188- \\ & \text { CAE } \end{aligned}$ | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 1 \mathrm{RB}, 1.4 \mathrm{MHz} \text {, } \\ & \text { 16-QAM) } \end{aligned}$ | X | 4.60 | 76.65 | 21.77 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.55 | 78.49 | 22.93 |  | 150.0 |  |
|  |  | Z | 4.65 | 77.69 | 22.36 |  | 150.0 |  |
| $\begin{aligned} & 10189- \\ & \text { AAE } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 1 \text { RB, } 1.4 \mathrm{MHz} \text {, } \\ & \text { 64-QAM) } \end{aligned}$ | X | 3.72 | 72.15 | 18.90 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.65 | 73.76 | 19.97 |  | 150.0 |  |
|  |  | Z | 3.69 | 72.74 | 19.28 |  | 150.0 |  |
| $\begin{aligned} & 10193- \\ & \text { CAC } \\ & \hline \end{aligned}$ | IEEE 802.11 n (HT Greenfield, 6.5 Mbps , BPSK) | X | 4.52 | 66.58 | 16.02 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.45 | 66.79 | 16.05 |  | 150.0 |  |
|  |  | Z | 4.48 | 66.63 | 16.03 |  | 150.0 |  |
| $\begin{aligned} & 10194- \\ & \text { CAC } \end{aligned}$ | IEEE 802.11n (HT Greenfield, 39 Mbps, 16-QAM) | X | 4.70 | 66.91 | 16.15 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.60 | 67.08 | 16.18 |  | 150.0 |  |
|  |  | Z | 4.65 | 66.95 | 16.16 |  | 150.0 |  |
| $\begin{aligned} & 10195- \\ & \text { CAC } \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Greenfield, 65 Mbps , 64-QAM) | X | 4.74 | 66.94 | 16.17 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.65 | 67.11 | 16.20 |  | 150.0 |  |
|  |  | Z | 4.69 | 66.98 | 16.18 |  | 150.0 |  |
| $\begin{aligned} & 10196- \\ & \text { CAC } \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK) | X | 4.53 | 66.65 | 16.05 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.44 | 66.83 | 16.06 |  | 150.0 |  |
|  |  | Z | 4.48 | 66.69 | 16.05 |  | 150.0 |  |
| $\begin{aligned} & 10197- \\ & \text { CAC } \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Mixed, 39 Mbps , 16QAM) | X | 4.72 | 66.93 | 16.16 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.62 | 67.10 | 16.19 |  | 150.0 |  |
|  |  | Z | 4.66 | 66.97 | 16.17 |  | 150.0 |  |
| $\begin{aligned} & 10198- \\ & \text { CAC } \end{aligned}$ | IEEE 802.11n (HT Mixed, 65 Mbps, 64QAM) | X | 4.75 | 66.96 | 16.18 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.64 | 67.13 | 16.21 |  | 150.0 |  |
|  |  | Z | 4.69 | 67.00 | 16.19 |  | 150.0 |  |
| $\begin{aligned} & 10219- \\ & \text { CAC } \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK) | X | 4.48 | 66.66 | 16.00 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.39 | 66.84 | 16.01 |  | 150.0 |  |
|  |  | Z | 4.43 | 66.70 | 16.00 |  | 150.0 |  |
| $\begin{aligned} & 10220- \\ & \text { CAC } \end{aligned}$ | IEEE 802.11n (HT Mixed, 43.3 Mbps, 16QAM) | X | 4.71 | 66.91 | 16.16 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.61 | 67.06 | 16.18 |  | 150.0 |  |
|  |  | Z | 4.66 | 66.94 | 16.16 |  | 150.0 |  |
| 10221-$\mathrm{CAC}$ | IEEE 802.1 ln (HT Mixed, 72.2 Mbps, 64QAM) | X | 4.76 | 66.89 | 16.17 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.65 | 67.06 | 16.20 |  | 150.0 |  |
|  |  | Z | 4.70 | 66.93 | 16.18 |  | 150.0 |  |
| $\begin{aligned} & 10222- \\ & \mathrm{CAC} \end{aligned}$ | IEEE 802.11n (HT Mixed, 15 Mbps , BPSK) | X | 5.08 | 67.11 | 16.29 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.00 | 67.21 | 16.33 |  | 150.0 |  |
|  |  | Z | 5.03 | 67.12 | 16.30 |  | 150.0 |  |


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


| $\begin{aligned} & 10239- \\ & \text { CAD } \\ & \hline \end{aligned}$ | ```LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)``` | X | 29.75 | 104.43 | 29.68 | 6.02 | 65.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 100.00 | 129.11 | 36.55 |  | 65.0 |  |
|  |  | Z | 50.17 | 114.63 | 32.57 |  | 65.0 |  |
| $\begin{aligned} & 10240- \\ & \text { CAD } \end{aligned}$ | LTE-TDD (SC-FDMA, $1 \mathrm{RB}, 15 \mathrm{MHz}$, QPSK) QPSK) | X | 30.30 | 111.94 | 34.24 | 6.02 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 58.14 | 129.72 | 39.96 |  | 65.0 |  |
|  |  | Z | 39.09 | 118.59 | 36.36 |  | 65.0 |  |
| $\begin{aligned} & 10241- \\ & \text { CAA } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 1.4 \mathrm{MHz}$, 16-QAM) | X | 11.80 | 86.80 | 27.35 | 6.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 13.67 | 92.53 | 29.81 |  | 65.0 |  |
|  |  | Z | 12.27 | 88.56 | 28.08 |  | 65.0 |  |
| 10242- CAA | LTE-TDD (SC-FDMA, $50 \%$ RB, 1.4 MHz , 64-QAM) | X | 10.15 | 83.59 | 26.03 | 6.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 12.26 | 90.20 | 28.90 |  | 65.0 |  |
|  |  | Z | 10.49 | 85.23 | 26.75 |  | 65.0 |  |
| $\begin{aligned} & 10243- \\ & \text { CAA } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 1.4 \mathrm{MHz}$, QPSK) | X | 8.15 | 80.45 | 25.67 | 6.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 9.07 | 85.16 | 28.03 |  | 65.0 |  |
|  |  | Z | 8.20 | 81.43 | 26.18 |  | 65.0 |  |
| $\begin{aligned} & 10244- \\ & \mathrm{CAB} \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 50 \% \mathrm{RB}, 3 \mathrm{MHz} \text {, } \\ & \text { 16-QAM) } \end{aligned}$ | X | 8.77 | 79.58 | 20.12 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 8.68 | 79.98 | 19.73 |  | 65.0 |  |
|  |  | Z | 8.93 | 80.10 | 20.07 |  | 65.0 |  |
| $\begin{aligned} & 10245- \\ & \text { CAB } \end{aligned}$ | ```LTE-TDD (SC-FDMA, 50% RB, 3 MHZ, 64-QAM)``` | X | 8.56 | 78.94 | 19.83 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 8.27 | 79.00 | 19.30 |  | 65.0 |  |
|  |  | Z | 8.60 | 79.28 | 19.71 |  | 65.0 |  |
| $\begin{aligned} & 10246- \\ & \text { CAB } \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \%$ RB, 3 MHz , QPSK) | X | 9.05 | 82.96 | 21.42 | 3.98 | 65.0 | $\pm 9.6 \%$ |
|  |  | Y | 8.67 | 82.79 | 20.89 |  | 65.0 |  |
|  |  | Z | 9.07 | 83.18 | 21.25 |  | 65.0 |  |
| $\begin{aligned} & 10247- \\ & \text { CAD } \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 50 \% \mathrm{RB}, 5 \mathrm{MHz} \text {, } \\ & \text { 16-QAM) } \end{aligned}$ | X | 7.31 | 77.47 | 20.01 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 6.88 | 77.10 | 19.42 |  | 65.0 |  |
|  |  | Z | 7.16 | 77.42 | 19.78 |  | 65.0 |  |
| $\begin{aligned} & 10248- \\ & \text { CAD } \end{aligned}$ | ```LTE-TDD (SC-FDMA, 50% RB, 5 MHz,``` | X | 7.23 | 76.85 | 19.75 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 6.75 | 76.40 | 19.13 |  | 65.0 |  |
|  |  | Z | 7.04 | 76.72 | 19.48 |  | 65.0 |  |
| $\begin{aligned} & \text { 10249- } \\ & \text { CAD } \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 50 \% \text { RB, } 5 \mathrm{MHz} \text {, } \\ & \text { QPSK) } \end{aligned}$ | X | 10.55 | 85.88 | 23.24 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | $Y$ | 11.23 | 87.71 | 23.62 |  | 65.0 |  |
|  |  | Z | 11.08 | 87.02 | 23.49 |  | 65.0 |  |
| $\begin{aligned} & 10250- \\ & \mathrm{CAD} \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 50 \% \text { RB, } 10 \mathrm{MHz} \text {, } \\ & \text { 16-QAM) } \end{aligned}$ | X | 8.37 | 79.97 | 22.44 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 8.25 | 80.64 | 22.58 |  | 65.0 |  |
|  |  | Z | 8.37 | 80.40 | 22.54 |  | 65.0 |  |
| $\begin{aligned} & 10251- \\ & \text { CAD } \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 10 \mathrm{MHz}$, 64-QAM) | X | 7.79 | 77.55 | 21.17 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 7.62 | 78.12 | 21.26 |  | 65.0 |  |
|  |  | Z | 7.71 | 77.78 | 21.18 |  | 65.0 |  |
| $\begin{aligned} & 10252- \\ & \text { CAD } \end{aligned}$ | ```LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)``` | X | 10.26 | 85.03 | 23.77 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 11.07 | 87.53 | 24.67 |  | 65.0 |  |
|  |  | Z | 10.72 | 86.30 | 24.20 |  | 65.0 |  |
| $\begin{aligned} & 10253- \\ & \text { CAD } \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 50 \% \mathrm{RB}, 15 \mathrm{MHz} \text {, } \\ & \text { 16-QAM) } \end{aligned}$ | X | 7.69 | 76.53 | 21.09 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 7.57 | 77.22 | 21.35 |  | 65.0 |  |
|  |  | Z | 7.61 | 76.75 | 21.15 |  | 65.0 |  |
| $\begin{aligned} & 10254- \\ & \text { CAD } \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \%$ RB, 15 MHz , 64-QAM) | X | 8.11 | 77.42 | 21.76 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 7.99 | 78.11 | 22.01 |  | 65.0 |  |
|  |  | Z | 8.04 | 77.70 | 21.84 |  | 65.0 |  |


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


| 10274CAB | UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.10) | X | 2.53 | 66.08 | 14.88 | 0.00 | 150.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 2.52 | 66.54 | 14.91 |  | 150.0 |  |
|  |  | Z | 2.51 | 66.24 | 14.87 |  | 150.0 |  |
| $\begin{aligned} & 10275- \\ & \mathrm{CAB} \end{aligned}$ | UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.4) | X | 1.51 | 66.90 | 14.72 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 1.52 | 67.44 | 14.98 |  | 150.0 |  |
|  |  | Z | 1.50 | 67.06 | 14.77 |  | 150.0 |  |
| $\begin{aligned} & 10277- \\ & \text { CAA } \\ & \hline \end{aligned}$ | PHS (QPSK) | X | 4.49 | 67.07 | 11.86 | 9.03 | 50.0 | $\pm 9.6$ \% |
|  |  | Y | 3.76 | 65.67 | 10.51 |  | 50.0 |  |
|  |  | Z | 4.09 | 66.15 | 11.03 |  | 50.0 |  |
| $\begin{aligned} & 10278- \\ & \text { CAA } \\ & \hline \end{aligned}$ | PHS (QPSK, BW 884MHz, Rolloff 0.5) | X | 8.37 | 78.55 | 19.37 | 9.03 | 50.0 | $\pm 9.6 \%$ |
|  |  | Y | 7.19 | 76.56 | 17.89 |  | 50.0 |  |
|  |  | Z | 7.75 | 77.39 | 18.52 |  | 50.0 |  |
| 10279-CAA | PHS (QPSK, BW 884MHz, Rolloff 0.38) | X | 8.51 | 78.75 | 19.47 | 9.03 | 50.0 | $\pm 9.6$ \% |
|  |  | Y | 7.31 | 76.76 | 18.01 |  | 50.0 |  |
|  |  | Z | 7.88 | 77.58 | 18.63 |  | 50.0 |  |
| $\begin{aligned} & 10290- \\ & \text { AAB } \end{aligned}$ | CDMA2000, RC1, SO55, Full Rate | X | 1.28 | 66.85 | 12.83 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 1.15 | 66.36 | 12.07 |  | 150.0 |  |
|  |  | Z | 1.21 | 66.57 | 12.40 |  | 150.0 |  |
| $\begin{aligned} & 10291- \\ & \text { AAB } \end{aligned}$ | CDMA2000, RC3, SO55, Full Rate | X | 0.73 | 64.15 | 11.20 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | $Y$ | 0.69 | 64.04 | 10.71 |  | 150.0 |  |
|  |  | Z | 0.69 | 63.98 | 10.82 |  | 150.0 |  |
| $\begin{aligned} & 10292- \\ & \mathrm{AAB} \end{aligned}$ | CDMA2000, RC3, SO32, Fuil Rate | X | 0.85 | 66.79 | 12.92 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | $Y$ | 0.83 | 67.15 | 12.67 |  | 150.0 |  |
|  |  | Z | 0.82 | 66.81 | 12.63 |  | 150.0 |  |
| $\begin{aligned} & 10293- \\ & \text { AAB } \end{aligned}$ | CDMA2000, RC3, SO3, Full Rate | X | 1.14 | 70.77 | 15.25 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | $Y$ | 1.22 | 72.07 | 15.35 |  | 150.0 |  |
|  |  | Z | 1.16 | 71.38 | 15.20 |  | 150.0 |  |
| $\begin{aligned} & 10295- \\ & \text { AAB } \end{aligned}$ | CDMA2000, RC1, SO3, 1/8th Rate 25 fr. | X | 11.92 | 86.64 | 24.71 | 9.03 | 50.0 | $\pm 9.6$ \% |
|  |  | Y | 15.63 | 91.98 | 26.09 |  | 50.0 |  |
|  |  | Z | 13.21 | 88.61 | 25.13 |  | 50.0 |  |
| $\begin{aligned} & 10297- \\ & \text { AAC } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, $50 \% \mathrm{RB}, 20 \mathrm{MHz}$, QPSK) | X | 2.66 | 69.01 | 16.01 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 2.60 | 69.22 | 16.21 |  | 150.0 |  |
|  |  | Z | 2.62 | 69.08 | 16.08 |  | 150.0 |  |
| $\begin{aligned} & 10298- \\ & \text { AAC } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, $50 \%$ RB, 3 MHz , QPSK) | X | 1.46 | 66.51 | 13.33 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 1.32 | 65.99 | 12.56 |  | 150.0 |  |
|  |  | Z | 1.39 | 66.26 | 12.94 |  | 150.0 |  |
| $\begin{aligned} & 10299- \\ & \text { AAC } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 50 \% \mathrm{RB}, 3 \mathrm{MHz} \text {, } \\ & \text { 16-QAM) } \end{aligned}$ | X | 2.70 | 69.70 | 14.37 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.67 | 70.31 | 14.00 |  | 150.0 |  |
|  |  | Z | 2.72 | 70.11 | 14.27 |  | 150.0 |  |
| $\begin{aligned} & 10300- \\ & \text { AAC } \end{aligned}$ | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 50 \% \mathrm{RB}, 3 \mathrm{MHz} \text {, } \\ & \text { 64-QAM) } \end{aligned}$ | X | 2.09 | 65.56 | 11.69 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 1.84 | 65.02 | 10.77 |  | 150.0 |  |
|  |  | Z | 1.98 | 65.35 | 11.29 |  | 150.0 |  |
| $10301$ <br> AAA | IEEE 802.16e WiMAX ( $29: 18,5 \mathrm{~ms}$, 10 MHz, QPSK, PUSC) | X | 5.46 | 67.87 | 18.50 | 4.17 | 80.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.32 | 68.03 | 18.43 |  | 80.0 |  |
|  |  | Z | 5.39 | 67.94 | 18.48 |  | 80.0 |  |
| $\begin{aligned} & 10302- \\ & \text { AAA } \end{aligned}$ | IEEE 802.16e WIMAX ( $29: 18,5 \mathrm{~ms}$, 10 MHz, QPSK, PUSC, 3 CTRL symbols) | $X$ | 5.85 | 67.98 | 18.95 | 4.96 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 5.80 | 68.69 | 19.24 |  | 80.0 |  |
|  |  | Z | 5.75 | 67.96 | 18.88 |  | 80.0 |  |


| $\begin{array}{\|l\|} \hline 10303- \\ \text { AAA } \\ \hline \end{array}$ | IEEE 802.16 e WiMAX ( $31: 15,5 \mathrm{~ms}$, 10MHz, 64QAM, PUSC) | X | 5.66 | 67.92 | 18.92 | 4.96 | 80.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 5.61 | 68.61 | 19.19 |  | 80.0 |  |
| $\begin{aligned} & 10304- \\ & \text { AAA } \\ & \hline \end{aligned}$ |  | Z | 5.56 | 67.86 | 18.83 |  | 80.0 |  |
|  | IEEE 802.16e WiMAX (29:18, 5ms, 10MHZ, 64QAM, PUSC) | X | 5.35 | 67.35 | 18.18 | 4.17 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 5.30 | 68.04 | 18.43 |  | 80.0 |  |
| $\begin{aligned} & 10305- \\ & \text { AAA } \\ & \hline \end{aligned}$ |  | Z | 5.26 | 67.36 | 18.12 |  | 80.0 |  |
|  | IEEE 802.16 e WIMAX $(31: 15,10 \mathrm{~ms}$, $10 \mathrm{MHz}, 64 \mathrm{QAM}, \mathrm{PUSC}, 15$ symbols) | X | 7.05 | 76.99 | 23.82 | 6.02 | 50.0 | $\pm 9.6$ \% |
|  |  | Y | 7.19 | 78.32 | 24.16 |  | 50.0 |  |
|  |  | Z | 6.80 | 76.50 | 23.43 |  | 50.0 |  |
| 10306-AAA | IEEE 802.16e WiMAX (29:18, 10ms, $10 \mathrm{MHz}, 64 \mathrm{QAM}$, PUSC, 18 symbols) | X | 5.82 | 69.84 | 20.44 | 6.02 | 50.0 | $\pm 9.6$ \% |
|  |  | Y | 5.84 | 70.99 | 20.86 |  | 50.0 |  |
|  |  | Z | 6.02 | 71.90 | 21.62 |  | 50.0 |  |
| $\begin{aligned} & 10307- \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.16 e WiMAX ( $29: 18$, 10ms, $10 \mathrm{MHz}, \mathrm{QPSK}, \mathrm{PUSC}, 18$ symbols) | X | 6.31 | 73.07 | 22.13 | 6.02 | 50.0 | $\pm 9.6$ \% |
|  |  | Y | 5.83 | 71.38 | 20.88 |  | 50.0 |  |
|  |  | Z | 6.11 | 72.72 | 21.84 |  | 50.0 |  |
| $\begin{aligned} & 10308- \\ & \text { AAA } \end{aligned}$ | IEEE 802.16e WiMAX (29:18, 10 ms , $10 \mathrm{MHz}, 16 \mathrm{QAM}, \mathrm{PUSC}$ ) | X | 6.39 | 73.64 | 22.41 | 6.02 | 50.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.90 | 71.88 | 21.13 |  | 50.0 |  |
|  |  | Z | 6.20 | 73.31 | 22.13 |  | 50.0 |  |
| $10309-$AAA | IEEE 802.16 e WIMAX $(29: 18,10 \mathrm{~ms}$, $10 \mathrm{MHz}, 16 \mathrm{QAM}$, AMC $2 \times 3,18$ symbols) | X | 5.91 | 70.12 | 20.60 | 6.02 | 50.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.91 | 71.23 | 21.02 |  | 50.0 |  |
|  |  | Z | 6.11 | 72.19 | 21.79 |  | 50.0 |  |
| $\begin{aligned} & 10310- \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.16e WIMAX (29:18, 10ms, 10 MHz , QPSK, AMC $2 \times 3,18$ symbols) | X | 6.22 | 72.50 | 21.95 | 6.02 | 50.0 | $\pm 9.6$ \% |
|  |  | Y | 5.84 | 71.19 | 20.88 |  | 50.0 |  |
|  |  | Z | 6.05 | 72.25 | 21.70 |  | 50.0 |  |
| $\begin{array}{\|l} 10311- \\ \text { AAC } \\ \hline \end{array}$ | LTE-FDD (SC-FDMA, 100\% RB, 15 MHz, QPSK $)$ | X | 3.00 | 68.33 | 15.71 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.96 | 68.52 | 15.89 |  | 150.0 |  |
|  |  | Z | 2.97 | 68.38 | 15.77 |  | 150.0 |  |
| 10313-AAA | IDEN 1:3 | X | 6.99 | 77.76 | 18.02 | 6.99 | 70.0 | $\pm 9.6$ \% |
|  |  | Y | 8.29 | 81.34 | 19.42 |  | 70.0 |  |
|  |  | Z | 7.24 | 78.54 | 18.23 |  | 70.0 |  |
| $\begin{aligned} & 10314- \\ & \text { AAA } \end{aligned}$ | iDEN 1:6 | X | 10.49 | 86.54 | 23.63 | 10.00 | 30.0 | $\pm 9.6$ \% |
|  |  | Y | 12.83 | 91.81 | 25.63 |  | 30.0 |  |
|  |  | Z | 11.85 | 89.04 | 24.41 |  | 30.0 |  |
| 10315- <br> AAB | IEEE 802.11 b WiFi 2.4 GHz (DSSS, 1 Mbps, 96pc duty cycle) | X | 1.08 | 63.85 | 14.84 | 0.17 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 1.11 | 64.19 | 15.04 |  | 150.0 |  |
|  |  | Z | 1.08 | 63.97 | 14.91 |  | 150.0 |  |
| $\begin{aligned} & 10316- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (ERPOFDM, $6 \mathrm{Mbps}, 96 \mathrm{pc}$ duty cycle) | X | 4.62 | 66.77 | 16.25 | 0.17 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.54 | 66.97 | 16.29 |  | 150.0 |  |
|  |  | Z | 4.57 | 66.82 | 16.26 |  | 150.0 |  |
| 10317- <br> AAC | IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle) | X | 4.62 | 66.77 | 16.25 | 0.17 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.54 | 66.97 | 16.29 |  | 150.0 |  |
|  |  | Z | 4.57 | 66.82 | 16.26 |  | 150.0 |  |
| $\begin{aligned} & 10400- \\ & \text { AAD } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (20MHz, 64-QAM, $99 p \mathrm{duty}$ cycle) | X | 4.70 | 66.97 | 16.15 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.59 | 67.15 | 16.19 |  | 150.0 |  |
|  |  | Z | 4.64 | 67.01 | 16.16 |  | 150.0 |  |
| $\begin{aligned} & 10401- \\ & \text { AAD } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (40MHz, 64-QAM, 99pc duty cycle) | X | 5.41 | 67.24 | 16.37 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.32 | 67.38 | 16.42 |  | 150.0 |  |
|  |  | Z | 5.38 | 67.33 | 16.41 |  | 150.0 |  |


| $\begin{aligned} & \text { 10402- } \\ & \text { AAD } \end{aligned}$ | IEEE 802.11ac WiFi (80MHz, 64-QAM, 99 pc duty cycle) | X | 5.66 | 67.55 | 16.37 | 0.00 | 150.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 5.56 | 67.58 | 16.37 |  | 150.0 |  |
|  |  | Z | 5.60 | 67.52 | 16.36 |  | 150.0 |  |
| $\begin{aligned} & 10403- \\ & A A B \\ & \hline \end{aligned}$ | CDMA2000 (1xEV-DO, Rev. 0) | X | 1.28 | 66.85 | 12.83 | 0.00 | 115.0 | $\pm 9.6$ \% |
|  |  | Y | 1.15 | 66.36 | 12.07 |  | 115.0 |  |
|  |  | Z | 1.21 | 66.57 | 12.40 |  | 115.0 |  |
| 10404-$\mathrm{AAB}$ | CDMA2000 (1xEV-DO, Rev. A) | X | 1.28 | 66.85 | 12.83 | 0.00 | 115.0 | $\pm 9.6$ \% |
|  |  | Y | 1.15 | 66.36 | 12.07 |  | 115.0 |  |
|  |  | Z | 1.21 | 66.57 | 12.40 |  | 115.0 |  |
| $\begin{aligned} & 10406- \\ & \text { AAB } \\ & \hline \end{aligned}$ | CDMA2000, RC3, SO32, SCH0, Full Rate | X | 31.97 | 105.65 | 26.52 | 0.00 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 119.11 | 28.78 |  | 100.0 |  |
|  |  | Z | 100.00 | 120.25 | 29.60 |  | 100.0 |  |
| $\begin{aligned} & 10410- \\ & \text { AAD } \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 10 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$, Subframe Conf=4) | X | 100.00 | 119.16 | 29.68 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 122.81 | 30.98 |  | 80.0 |  |
|  |  | Z | 100.00 | 120.19 | 29.97 |  | 80.0 |  |
| 10415AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle) | X | 0.96 | 62.46 | 13.98 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 0.99 | 62.90 | 14.23 |  | 150.0 |  |
|  |  | Z | 0.95 | 62.59 | 14.06 |  | 150.0 |  |
| $\begin{aligned} & 10416- \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.11g WiFi 2.4 GHz (ERPOFDM, 6 Mbps , 99 pc duty cycle) | X | 4.53 | 66.62 | 16.09 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.45 | 66.83 | 16.13 |  | 150.0 |  |
|  |  | Z | 4.48 | 66.68 | 16.10 |  | 150.0 |  |
| $\begin{aligned} & 10417- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 99 pc duty cycle) | X | 4.53 | 66.62 | 16.09 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.45 | 66.83 | 16.13 |  | 150.0 |  |
|  |  | Z | 4.48 | 66.68 | 16.10 |  | 150.0 |  |
| 10418AAA | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, $6 \mathrm{Mbps}, 99 \mathrm{pc}$ duty cycle, Long preambule) | X | 4.51 | 66.76 | 16.09 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.44 | 67.00 | 16.16 |  | 150.0 |  |
|  |  | Z | 4.47 | 66.83 | 16.12 |  | 150.0 |  |
| 10419-AAA | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 6 Mbps, 99 pc duty cycle, Short preambule) | X | 4.54 | 66.72 | 16.10 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.46 | 66.94 | 16.15 |  | 150.0 |  |
|  |  | Z | 4.49 | 66.78 | 16.12 |  | 150.0 |  |
| 10422-$\mathrm{AAB}$ | IEEE 802.11n (HT Greenfield, 7.2 Mbps , BPSK) | X | 4.66 | 66.73 | 16.13 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.57 | 66.94 | 16.17 |  | 150.0 |  |
|  |  | Z | 4.61 | 66.79 | 16.14 |  | 150.0 |  |
| $10423-$$\mathrm{AAB}$ | IEEE 802.11n (HT Greenfield, 43.3 Mbps, 16-QAM) | X | 4.83 | 67.07 | 16.25 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.72 | 67.22 | 16.28 |  | 150.0 |  |
|  |  | Z | 4.77 | 67.10 | 16.25 |  | 150.0 |  |
| $\begin{aligned} & 10424- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Greenfield, 72.2 Mbps, 64-QAM) | X | 4.75 | 67.01 | 16.22 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.64 | 67.18 | 16.25 |  | 150.0 |  |
|  |  | Z | 4.69 | 67.05 | 16.23 |  | 150.0 |  |
| 10425- <br> AAB | IEEE 802.11 n (HT Greenfield, 15 Mbps , BPSK) | X | 5.37 | 67.43 | 16.45 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.26 | 67.46 | 16.45 |  | 150.0 |  |
|  |  | Z | 5.32 | 67.43 | 16.46 |  | 150.0 |  |
| 10426-$A A B$ | IEEE 802.11 n (HT Greenfield, 90 Mbps , 16-QAM) | X | 5.37 | 67.44 | 16.46 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.28 | 67.55 | 16.49 |  | 150.0 |  |
|  |  | Z | 5.33 | 67.49 | 16.49 |  | 150.0 |  |



| $\begin{aligned} & 10460- \\ & \text { AAA } \end{aligned}$ | UMTS-FDD (WCDMA, AMR) | X | 0.79 | 66.34 | 14.61 | 0.00 | 150.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 0.84 | 67.16 | 15.15 |  | 150.0 |  |
|  |  | Z | 0.79 | 66.65 | 14.76 |  | 150.0 |  |
| 10461-$\mathrm{AAA}$ | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 100.00 | 122.59 | 31.33 | 3.29 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 128.70 | 33.71 |  | 80.0 |  |
|  |  | Z | 100.00 | 124.88 | 32.17 |  | 80.0 |  |
| 10462-$\mathrm{AAA}$ | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz , 16-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 21.46 | 90.49 | 19.92 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 107.87 | 23.85 |  | 80.0 |  |
|  |  | Z | 100.00 | 106.49 | 23.49 |  | 80.0 |  |
| 10463- <br> AAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz , 64-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 5.25 | 74.65 | 14.70 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 19.71 | 88.51 | 18.38 |  | 80.0 |  |
|  |  | Z | 7.19 | 78.06 | 15.56 |  | 80.0 |  |
| 10464- <br> AAA | LTE-TDD (SC-FDMA, 1 RB, 3 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 100.00 | 120.34 | 30.14 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 126.35 | 32.46 |  | 80.0 |  |
|  |  | Z | 100.00 | 122.50 | 30.92 |  | 80.0 |  |
| $\begin{aligned} & 10465- \\ & \text { AAA } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 3 MHz , 16QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 11.73 | 83.97 | 18.05 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 107.24 | 23.55 |  | 80.0 |  |
|  |  | Z | 41.80 | 97.17 | 21.26 |  | 80.0 |  |
| 10466-AAA | LTE-TDD (SC-FDMA, 1 RB, 3 MHz , 64QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 4.09 | 72.04 | 13.74 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 8.97 | 80.87 | 16.24 |  | 80.0 |  |
|  |  | Z | 4.77 | 73.97 | 14.19 |  | 80.0 |  |
| $\begin{aligned} & 10467- \\ & \text { AAC } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 5 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 100.00 | 120.57 | 30.24 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 126.64 | 32.58 |  | 80.0 |  |
|  |  | Z | 100.00 | 122.76 | 31.03 |  | 80.0 |  |
| $\begin{aligned} & 10468- \\ & \text { AAC } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, $5 \mathrm{MHz}, 16-$ QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 13.52 | 85.52 | 18.51 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 107.47 | 23.65 |  | 80.0 |  |
|  |  | Z | 60.78 | 101.09 | 22.20 |  | 80.0 |  |
| $\begin{aligned} & \hline 10469- \\ & \text { AAC } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, $5 \mathrm{MHz}, 64-$ QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 4.11 | 72.11 | 13.77 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 9.29 | 81.22 | 16.33 |  | 80.0 |  |
|  |  | Z | 4.83 | 74.11 | 14.24 |  | 80.0 |  |
| $\begin{array}{\|l} \hline 10470- \\ \text { AAC } \\ \hline \end{array}$ | LTE-TDD (SC-FDMA, 1 RB, 10 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 100.00 | 120.59 | 30.24 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 126.67 | 32.59 |  | 80.0 |  |
|  |  | Z | 100.00 | 122.78 | 31.03 |  | 80.0 |  |
| $10471$ <br> AAC | L.TE-TDD (SC-FDMA, 1 RB, $10 \mathrm{MHz}, 16-$ QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 13.37 | 85.38 | 18.46 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 107.40 | 23.62 |  | 80.0 |  |
|  |  | Z | 59.33 | 100.79 | 22.11 |  | 80.0 |  |
| $10472-$ AAC | LTE-TDD (SC-FDMA, 1 RB, 10 MHz , 64QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 4.08 | 72.03 | 13.72 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 9.15 | 81.05 | 16.27 |  | 80.0 |  |
|  |  | Z | 4.78 | 73.98 | 14.18 |  | 80.0 |  |
| $\begin{aligned} & 10473- \\ & \text { AAC } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 15 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 100.00 | 120.56 | 30.23 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 126.64 | 32.58 |  | 80.0 |  |
|  |  | Z | 100.00 | 122.75 | 31.02 |  | 80.0 |  |
| 10474AAC | LTE-TDD (SC-FDMA, 1 RB, $15 \mathrm{MHz}, 16-$ QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 13.19 | 85.24 | 18.42 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 107.40 | 23.61 |  | 80.0 |  |
|  |  | Z | 57.55 | 100.4.9 | 22.04 |  | 80.0 |  |
| 10475AAC | LTE-TDD (SC-FDMA, 1 RB, $15 \mathrm{MHz}, 64-$ QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 4.06 | 71.97 | 13.71 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 8.99 | 80.90 | 16.23 |  | 80.0 |  |
|  |  | Z | 4.73 | 73.90 | 14.15 |  | 80.0 |  |


| $\begin{aligned} & 10477- \\ & \text { AAC } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 20 MHz , 16QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 11.86 | 84.06 | 18.05 | 3.23 | 80.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $Y$ | 100.00 | 107.19 | 23.51 |  | 80.0 |  |
| $\begin{aligned} & 10478- \\ & \text { AAC } \\ & \hline \end{aligned}$ |  | Z | 43.65 | 97.56 | 21.32 |  | 80.0 |  |
|  | LTE-TDD (SC-FDMA, 1 RB, 20 MHz , 64QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 4.02 | 71.87 | 13.66 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 8.76 | 80.61 | 16.13 |  | 80.0 |  |
|  |  | Z | 4.66 | 73.74 | 14.09 |  | 80.0 |  |
| $\begin{aligned} & \text { 10479- } \\ & \text { AAA } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 1.4 \mathrm{MHz}$, QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 14.17 | 93.60 | 25.28 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 63.86 | 118.32 | 31.85 |  | 80.0 |  |
|  |  | Z | 30.71 | 105.97 | 28.68 |  | 80.0 |  |
| $\begin{aligned} & 10480- \\ & \text { AAA } \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 1.4 \mathrm{MHz}$, 16-QAM, UL Subframe $=2,3,4,7,8,9$ ) | $X$ | 12.48 | 86.47 | 21.39 | 3.23 | 80.0 | $\pm 9.6 \%$ |
|  |  | Y | 53.06 | 106.13 | 26.31 |  | 80.0 |  |
|  |  | Z | 23.73 | 95.20 | 23.69 |  | 80.0 |  |
| $\begin{aligned} & 10481- \\ & \text { AAA } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \%$ RB, 1.4 MHz , 64-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 9.79 | 82.49 | 19.78 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | $Y$ | 26.62 | 95.88 | 23.20 |  | 80.0 |  |
|  |  | Z | 15.46 | 88.60 | 21.40 |  | 80.0 |  |
| $\begin{aligned} & \text { 10482- } \\ & \text { AAA } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 3 \mathrm{MHz}$, QPSK, UL Subframe $=2,3,4,7,8,9$ ) | $X$ | 4.76 | 76.35 | 18.33 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 4.38 | 75.77 | 17.66 |  | 80.0 |  |
|  |  | Z | 4.74 | 76.54 | 18.16 |  | 80.0 |  |
| $\begin{aligned} & 10483- \\ & \text { AAA } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 3 \mathrm{MHz}$, $16-$ QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 6.86 | 78.09 | 18.71 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 7.58 | 79.80 | 18.72 |  | 80.0 |  |
|  |  | Z | 7.91 | 80.19 | 19.17 |  | 80.0 |  |
| $\begin{aligned} & 10484- \\ & \text { AAA } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 3 \mathrm{MHz}$, 64-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 6.29 | 76.73 | 18.22 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 6.51 | 77.64 | 17.97 |  | 80.0 |  |
|  |  | Z | 6.95 | 78.27 | 18.51 |  | 80.0 |  |
| $\begin{aligned} & 10485- \\ & \text { AAC } \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \%$ RB, 5 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 5.21 | 77.92 | 19.79 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 5.14 | 78.56 | 19.82 |  | 80.0 |  |
|  |  | Z | 5.34 | 78.68 | 19.95 |  | 80.0 |  |
| $\begin{aligned} & 10486- \\ & \text { AAC } \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \%$ RB, 5 MHz , 16-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 4.30 | 72.12 | 17.19 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 4.02 | 71.85 | 16.65 |  | 80.0 |  |
|  |  | Z | 4.23 | 72.22 | 17.03 |  | 80.0 |  |
| $\begin{aligned} & 10487- \\ & \text { AAC } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \%$ RB, 5 MHz , 64-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 4.25 | 71.63 | 16.98 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 3.95 | 71.26 | 16.39 |  | 80.0 |  |
|  |  | Z | 4.16 | 71.66 | 16.79 |  | 80.0 |  |
| $\begin{aligned} & 10488- \\ & \text { AAC } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \%$ RB, 10 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 5.17 | 76.41 | 19.90 | 2.23 | 80.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.01 | 76.93 | 20.15 |  | 80.0 |  |
|  |  | Z | 5.17 | 76.91 | 20.10 |  | 80.0 |  |
| $\begin{aligned} & 10489- \\ & \text { AAC } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \%$ RB, 10 MHz , 16-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 4.47 | 71.61 | 18.14 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 4.30 | 71.84 | 18.12 |  | 80.0 |  |
|  |  | $Z$ | 4.42 | 71.84 | 18.19 |  | 80.0 |  |
| $\begin{aligned} & 10490- \\ & \text { AAC } \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 10 \mathrm{MHz}$, 64-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 4.53 | 71.33 | 18.05 | 2.23 | 80.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.36 | 71.56 | 18.01 |  | 80.0 |  |
|  |  | Z | 4.48 | 71.55 | 18.09 |  | 80.0 |  |
| $\begin{aligned} & 10491- \\ & \text { AAC } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \%$ RB, 15 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 5.06 | 74.04 | 19.16 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 4.88 | 74.37 | 19.37 |  | 80.0 |  |
|  |  | Z | 5.01 | 74.33 | 19.30 |  | 80.0 |  |
| $\begin{aligned} & 10492- \\ & \text { AAC } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \%$ RB, $15 \mathrm{MH} H$, 16-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 4.71 | 70.55 | 18.02 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 4.54 | 70.71 | 18.05 |  | 80.0 |  |
|  |  | Z | 4.64 | 70.68 | 18.06 |  | 80.0 |  |


| $\begin{aligned} & 10493- \\ & \text { AAC } \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \%$ RB, 15 MHz , 64-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 4.76 | 70.36 | 17.96 | 2.23 | 80.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 4.58 | 70.52 | 17.98 |  | 80.0 |  |
|  |  | Z | 4.69 | 70.49 | 18.00 |  | 80.0 |  |
| 10494AAC | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 20 \mathrm{MHz}$, QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 5.60 | 75.75 | 19.64 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 5.37 | 76.02 | 19.87 |  | 80.0 |  |
|  |  | Z | 5.56 | 76.06 | 19.81 |  | 80.0 |  |
| $\begin{array}{\|l\|} \hline 10495- \\ \text { AAC } \\ \hline \end{array}$ | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 20 \mathrm{MHz}$, 16-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 4.78 | 71.03 | 18.23 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 4.59 | 71.11 | 18.27 |  | 80.0 |  |
|  |  | Z | 4.71 | 71.14 | 18.28 |  | 80.0 |  |
| 10496AAC | LTE-TDD (SC-FDMA, $50 \%$ RB, 20 MHz , 64-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 4.83 | 70.65 | 18.12 | 2.23 | 80.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.64 | 70.74 | 18.15 |  | 80.0 |  |
|  |  | Z | 4.75 | 70.76 | 18.17 |  | 80.0 |  |
| $\begin{aligned} & \text { 10497- } \\ & \text { AAA } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $100 \%$ RB, 1.4 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 3.37 | 71.45 | 15.57 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 2.72 | 69.17 | 13.95 |  | 80.0 |  |
|  |  | 2 | 3.09 | 70.50 | 14.83 |  | 80.0 |  |
| 10498- <br> AAA | LTE-TDD (SC-FDMA, $100 \%$ RB, 1.4 MHz, 16-QAM, UL <br> Subframe $=2,3,4,7,8,9$ ) | X | 2.40 | 64.81 | 11.76 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | $Y$ | 1.75 | 62.03 | 9.60 |  | 80.0 |  |
|  |  | Z | 2.07 | 63.39 | 10.68 |  | 80.0 |  |
| $\begin{aligned} & 10499- \\ & \text { AAA } \end{aligned}$ | LTE-TDD (SC-FDMA, $100 \%$ RB, 1.4 $\mathrm{MHz}, 64-\mathrm{QAM}, \mathrm{UL}$ Subframe $=2,3,4,7,8,9$ ) | X | 2.32 | 64.18 | 11.33 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 1.68 | 61.41 | 9.14 |  | 80.0 |  |
|  |  | Z | 1.99 | 62.76 | 10.23 |  | 80.0 |  |
| $\begin{aligned} & 10500- \\ & \text { AAA } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $100 \% \mathrm{RB}, 3 \mathrm{MHz}$, QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 5.05 | 76.85 | 19.69 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 4.98 | 77.59 | 19.85 |  | 80.0 |  |
|  |  | Z | 5.12 | 77.53 | 19.88 |  | 80.0 |  |
| $\begin{aligned} & 10501- \\ & \text { AAA } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $100 \% \mathrm{RB}, 3 \mathrm{MHz}$, 16-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 4.38 | 71.91 | 17.55 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 4.19 | 72.01 | 17.27 |  | 80.0 |  |
|  |  | Z | 4.33 | 72.13 | 17.50 |  | 80.0 |  |
| $\begin{aligned} & 10502- \\ & \text { AAA } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $100 \%$ RB, 3 MHz , 64-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 4.41 | 71.66 | 17.40 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 4.21 | 71.71 | 17.09 |  | 80.0 |  |
|  |  | Z | 4.36 | 71.85 | 17.33 |  | 80.0 |  |
| 10503-AAC | LTE-TDD (SC-FDMA, $100 \% \mathrm{RB}, 5 \mathrm{MHz}$, QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 5.10 | 76.19 | 19.80 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 4.94 | 76.71 | 20.05 |  | 80.0 |  |
|  |  | Z | 5.10 | 76.67 | 19.99 |  | 80.0 |  |
| 10504-AAC | LTE-TDD (SC-FDMA, $100 \% \mathrm{RB}, 5 \mathrm{MHz}$, 16-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 4.44 | 71.51 | 18.08 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 4.28 | 71.74 | 18.06 |  | 80.0 |  |
|  |  | Z | 4.39 | 71.73 | 18.13 |  | 80.0 |  |
| 10505-$\mathrm{AAC}$ | LTE-TDD (SC-FDMA, $100 \% \mathrm{RB}, 5 \mathrm{MHz}$, 64-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 4.51 | 71.23 | 18.00 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 4.34 | 71.46 | 17.96 |  | 80.0 |  |
|  |  | Z | 4.45 | 71.44 | 18.03 |  | 80.0 |  |
| $\begin{aligned} & 10506- \\ & \text { AAC } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $100 \%$ RB, 10 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 5.55 | 75.59 | 19.57 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 5.33 | 75.87 | 19.80 |  | 80.0 |  |
|  |  | Z | 5.51 | 75.90 | 19.73 |  | 80.0 |  |
| $\begin{aligned} & 10507- \\ & \text { AAC } \end{aligned}$ | LTE-TDD (SC-FDMA, $100 \%$ RB, 10 MHz, 16-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 4.76 | 70.96 | 18.19 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 4.57 | 71.05 | 18.23 |  | 80.0 |  |
|  |  | Z | 4.69 | 71.07 | 18.24 |  | 80.0 |  |


| $\begin{aligned} & 10508- \\ & \text { AAC } \end{aligned}$ | LTE-TDD (SC-FDMA, 100\% RB, 10 MHz, 64-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 4.81 | 70.58 | 18.08 | 2.23 | 80.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 4.62 | 70.68 | 18.11 |  | 80.0 |  |
| $\begin{aligned} & 10509- \\ & \text { AAC } \\ & \hline \end{aligned}$ |  | Z | 4.73 | 70.68 | 18.12 |  | 80.0 |  |
|  | LTE-TDD (SC-FDMA, 100\% RB, 15 MHz, QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 5.59 | 73.58 | 18.84 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 5.39 | 73.76 | 19.02 |  | 80.0 |  |
|  |  | Z | 5.53 | 73.76 | 18.95 |  | 80.0 |  |
| $\begin{aligned} & 10510- \\ & \text { AAC } \end{aligned}$ | LTE-TDD (SC-FDMA, 100\% RB, 15 $\mathrm{MHz}, 16-\mathrm{QAM}, \mathrm{UL}$ <br> Subframe $=2,3,4,7,8,9$ ) | X | 5.20 | 70.42 | 18.08 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 4.99 | 70.43 | 18.12 |  | 80.0 |  |
|  |  | Z | 5.11 | 70.45 | 18.12 |  | 80.0 |  |
| $\begin{aligned} & 10511- \\ & \text { AAC } \end{aligned}$ | LTE-TDD (SC-FDMA, 100\% RB, 15 MHz, 64-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 5.22 | 70.10 | 18.00 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 5.03 | 70.13 | 18.04 |  | 80.0 |  |
|  |  | Z | 5.14 | 70.14 | 18.03 |  | 80.0 |  |
| $\begin{aligned} & 10512- \\ & \text { AAC } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 100\% RB, 20 MHz, QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 6.02 | 75.44 | 19.39 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 5.78 | 75.56 | 19.57 |  | 80.0 |  |
|  |  | Z | 5.97 | 75.65 | 19.51 |  | 80.0 |  |
| $\begin{aligned} & 10513- \\ & \text { AAC } \end{aligned}$ | LTE-TDD (SC-FDMA, 100\% RB, 20 $\mathrm{MHz}, 16-\mathrm{QAM}, \mathrm{UL}$ Subframe $=2,3,4,7,8,9$ ) | X | 5.12 | 70.82 | 18.23 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 4.91 | 70.75 | 18.25 |  | 80.0 |  |
|  |  | Z | 5.03 | 70.83 | 18.26 |  | 80.0 |  |
| $\begin{aligned} & 10514- \\ & \text { AAC } \end{aligned}$ | LTE-TDD (SC-FDMA, 100\% RB, 20 $\mathrm{MHz}, 64-\mathrm{QAM}, \mathrm{UL}$ Subframe $=2,3,4,7,8,9$ ) | X | 5.09 | 70.31 | 18.08 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 4.90 | 70.27 | 18.11 |  | 80.0 |  |
|  |  | Z | 5.01 | 70.33 | 18.11 |  | 80.0 |  |
| 10515-$A A A$ | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 <br> Mbps, $99 p \mathrm{~d}$ duty cycle) | X | 0.92 | 62.60 | 13.99 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 0.95 | 63.05 | 14.27 |  | 150.0 |  |
|  |  | Z | 0.91 | 62.72 | 14.07 |  | 150.0 |  |
| 10516-AAA | IEEE 802.11 b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc duty cycle) | X | 0.48 | 67.26 | 14.71 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 0.54 | 68.48 | 15.75 |  | 150.0 |  |
|  |  | Z | 0.49 | 67.82 | 15.05 |  | 150.0 |  |
| 10517- <br> AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 99pc duty cycle) | X | 0.75 | 64.05 | 14.24 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 0.79 | 64.60 | 14.65 |  | 150.0 |  |
|  |  | Z | 0.75 | 64.23 | 14.37 |  | 150.0 |  |
| $\begin{aligned} & \hline 10518- \\ & A A B \\ & \hline \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc duty cycle) | X | 4.52 | 66.69 | 16.06 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.44 | 66.90 | 16.10 |  | 150.0 |  |
|  |  | Z | 4.47 | 66.75 | 16.07 |  | 150.0 |  |
| $\begin{array}{\|l\|} \hline 10519- \\ A A B \\ \hline \end{array}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 99pc duty cycle) | X | 4.71 | 66.95 | 16.20 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.60 | 67.11 | 16.21 |  | 150.0 |  |
|  |  | Z | 4.65 | 66.98 | 16.20 |  | 150.0 |  |
| $\begin{aligned} & 10520- \\ & A A B \\ & \hline \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 99pc duty cycle) | X | 4.56 | 66.90 | 16.11 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.46 | 67.05 | 16.12 |  | 150.0 |  |
|  |  | Z | 4.50 | 66.93 | 16.11 |  | 150.0 |  |
| $\begin{aligned} & 10521- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE $802.11 \mathrm{a} / \mathrm{h}$ WiFi 5 GHz (OFDM, 24 Mbps, 99pc duty cycle) | X | 4.49 | 66.89 | 16.09 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.39 | 67.03 | 16.11 |  | 150.0 |  |
|  |  | Z | 4.44 | 66.91 | 16.09 |  | 150.0 |  |
| 10522- <br> AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc duty cycle) | X | 4.55 | 66.96 | 16.17 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.45 | 67.16 | 16.21 |  | 150.0 |  |
|  |  | Z | 4.50 | 67.02 | 16.19 |  | 150.0 |  |


| $\begin{aligned} & 10523- \\ & A A B \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 99pc duty cycle) | X | 4.43 | 66.81 | 16.00 | 0.00 | 150.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 4.35 | 67.05 | 16.07 |  | 150.0 |  |
|  |  | Z | 4.38 | 66.88 | 16.02 |  | 150.0 |  |
| $\begin{aligned} & 10524- \\ & A A B \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc duty cycle) | X | 4.50 | 66.89 | 16.14 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.39 | 67.08 | 16.18 |  | 150.0 |  |
|  |  | Z | 4.44 | 66.94 | 16.15 |  | 150.0 |  |
| $\begin{aligned} & \text { 10525- } \\ & \mathrm{AAB} \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi ( $20 \mathrm{MHz}, \mathrm{MCSO}$, 99pc duty cycle) | X | 4.47 | 65.92 | 15.72 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.40 | 66.15 | 15.78 |  | 150.0 |  |
|  |  | Z | 4.43 | 65.98 | 15.74 |  | 150.0 |  |
| $\begin{aligned} & 10526= \\ & \text { AAB } \end{aligned}$ | IEEE 802.11ac WiFi (20MHz, MCS1, 99pc duty cycle) | X | 4.65 | 66.29 | 15.87 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.55 | 66.47 | 15.91 |  | 150.0 |  |
|  |  | Z | 4.59 | 66.34 | 15.88 |  | 150.0 |  |
| $\begin{aligned} & 10527- \\ & A A B \end{aligned}$ | IEEE 802.11ac WiFi ( 20 MHz , MCS2, 99pc duty cycle) | X | 4.57 | 66.25 | 15.81 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.47 | 66.43 | 15.85 |  | 150.0 |  |
|  |  | Z | 4.52 | 66.29 | 15.82 |  | 150.0 |  |
| $\begin{aligned} & 10528- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11ac WiFi (20MHz, MCS3, $99 p \mathrm{duty}$ cycle) | x | 4.58 | 66.27 | 15.84 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.49 | 66.45 | 15.88 |  | 150.0 |  |
|  |  | Z | 4.53 | 66.31 | 15.85 |  | 150.0 |  |
| $\begin{aligned} & 10529- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11ac WiFi (20MHz, MCS4, 99pc duty cycle) | X | 4.58 | 66.27 | 15.84 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.49 | 66.45 | 15.88 |  | 150.0 |  |
|  |  | Z | 4.53 | 66.31 | 15.85 |  | 150.0 |  |
| $\begin{aligned} & 10531- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11ac WiFi ( $20 \mathrm{MHz}, \mathrm{MCS6}$, 99pc duty cycle) | X | 4.58 | 66.38 | 15.85 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.46 | 66.51 | 15.87 |  | 150.0 |  |
|  |  | Z | 4.52 | 66.40 | 15.86 |  | 150.0 |  |
| $\begin{aligned} & \hline 10532- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11ac WiFi (20MHz, MCS7, 99 pc duty cycle) | X | 4.44 | 66.22 | 15.78 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.33 | 66.36 | 15.80 |  | 150.0 |  |
|  |  | Z | 4.38 | 66.25 | 15.78 |  | 150.0 |  |
| $\begin{aligned} & 10533- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11ac WiFi (20MHz, MCS8, 99 pc duty cycle) | X | 4.59 | 66.30 | 15.83 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.49 | 66.51 | 15.88 |  | 150.0 |  |
|  |  | Z | 4.54 | 66.36 | 15.84 |  | 150.0 |  |
| $\begin{aligned} & 10534- \\ & A A B \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (40MHz, MCSO, 99pc duty cycle) | X | 5.13 | 66.43 | 15.94 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.04 | 66.54 | 15.97 |  | 150.0 |  |
|  |  | Z | 5.08 | 66.45 | 15.95 |  | 150.0 |  |
| $\begin{aligned} & 10535- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (40MHz, MCS1, 99 pc duty cycle) | X | 5.20 | 66.61 | 16.01 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.10 | 66.71 | 16.05 |  | 150.0 |  |
|  |  | Z | 5.15 | 66.64 | 16.04 |  | 150.0 |  |
| $\begin{aligned} & 10536- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11ac WiFi (40MHz, MCS2, 99pc duty cycle) | X | 5.06 | 66.54 | 15.96 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.98 | 66.67 | 16.01 |  | 150.0 |  |
|  |  | Z | 5.01 | 66.57 | 15.98 |  | 150.0 |  |
| $\begin{aligned} & 10537- \\ & A A B \end{aligned}$ | IEEE 802.11ac WiFi (40MHz, MCS3, 99 pc duty cycle) | X | 5.12 | 66.52 | 15.95 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | $Y$ | 5.03 | 66.63 | 15.99 |  | 150.0 |  |
|  |  | Z | 5.07 | 66.54 | 15.97 |  | 150.0 |  |
| $\begin{aligned} & 10538- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11ac WiFi (40MHz, MCS4, $99 p c$ duty cycle) | X | 5.22 | 66.56 | 16.02 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.11 | 66.64 | 16.04 |  | 150.0 |  |
|  |  | Z | 5.16 | 66.56 | 16.02 |  | 150.0 |  |
| $\begin{aligned} & 10540- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11ac WiFi (40MHz, MCS6, 99pc duty cycle) | X | 5.14 | 66.57 | 16.03 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.04 | 66.62 | 16.05 |  | 150.0 |  |
|  |  | Z | 5.10 | 66.60 | 16.05 |  | 150.0 |  |


| $\begin{aligned} & 10541- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11ac WiFi (40MHz, MCS7, 99 pc duty cycle) | X | 5.11 | 66.43 | 15.96 | 0.00 | 150.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 5.02 | 66.51 | 15.98 |  | 150.0 |  |
| $\begin{aligned} & 10542- \\ & \text { AAB } \end{aligned}$ |  | Z | 5.07 | 66.45 | 15.97 |  | 150.0 |  |
|  | IEEE 802.11ac WiFi (40MHz, MCS8, 99 pc duty cycle) | X | 5.27 | 66.51 | 16.02 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.18 | 66.61 | 16.04 |  | 150.0 |  |
|  |  | Z | 5.22 | 66.53 | 16.03 |  | 150.0 |  |
| $\begin{aligned} & 10543- \\ & A A B \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (40MHz, MCS9, 99 pc duty cycle) | X | 5.36 | 66.57 | 16.06 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.24 | 66.63 | 16.08 |  | 150.0 |  |
|  |  | Z | 5.30 | 66.57 | 16.07 |  | 150.0 |  |
| $\begin{aligned} & 10544- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi ( 80 MHz , MCS0, 99pc duty cycle) | X | 5.43 | 66.55 | 15.94 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.37 | 66.65 | 15.97 |  | 150.0 |  |
|  |  | Z | 5.40 | 66.56 | 15.95 |  | 150.0 |  |
| $\begin{aligned} & 10545- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi ( 80 MHz , MCS1, 99 pc duty cycle) | X | 5.64 | 67.00 | 16.11 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.55 | 67.08 | 16.15 |  | 150.0 |  |
|  |  | Z | 5.60 | 67.02 | 16.13 |  | 150.0 |  |
| $\begin{aligned} & 10546- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (80MHz, MCS2, 99pc duty cycle) | X | 5.50 | 66.78 | 16.02 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.41 | 66.80 | 16.02 |  | 150.0 |  |
|  |  | Z | 5.46 | 66.76 | 16.01 |  | 150.0 |  |
| $\begin{aligned} & 10547- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11 ac WiFi ( 80 MHz , MCS3, 99pc duty cycle) | X | 5.58 | 66.83 | 16.03 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.49 | 66.87 | 16.05 |  | 150.0 |  |
|  |  | Z | 5.53 | 66.81 | 16.03 |  | 150.0 |  |
| $\begin{aligned} & 10548- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (80MHz, MCS4, 99pc duty cycle) | X | 5.89 | 67.94 | 16.56 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.69 | 67.68 | 16.43 |  | 150.0 |  |
|  |  | Z | 5.80 | 67.83 | 16.51 |  | 150.0 |  |
| $\begin{aligned} & 10550- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi ( 80 MHz , MCS6, 99 pc duty cycle) | X | 5.53 | 66.79 | 16.03 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.46 | 66.91 | 16.08 |  | 150.0 |  |
|  |  | Z | 5.49 | 66.81 | 16.05 |  | 150.0 |  |
| $\begin{aligned} & 10551- \\ & A A B \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (80MHz, MCS7, 99 pc duty cycle) | X | 5.53 | 66.82 | 16.01 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.44 | 66.85 | 16.02 |  | 150.0 |  |
|  |  | Z | 5.49 | 66.83 | 16.02 |  | 150.0 |  |
| $\begin{aligned} & 10552- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi ( 80 MHz , MCS8, 99pc duty cycle) | X | 5.44 | 66.61 | 15.91 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.38 | 66.72 | 15.95 |  | 150.0 |  |
|  |  | Z | 5.40 | 66.62 | 15.92 |  | 150.0 |  |
| $\begin{aligned} & 10553- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11ac WiFi (80MHz, MCS9, 99pc duty cycle) | X | 5.53 | 66.66 | 15.96 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.45 | 66.72 | 15.99 |  | 150.0 |  |
|  |  | Z | 5.48 | 66.65 | 15.97 |  | 150.0 |  |
| $\begin{aligned} & 10554- \\ & \text { AAC } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi ( $160 \mathrm{MHz}, \mathrm{MCS} 0$, 99 pc duty cycle) | X | 5.84 | 66.93 | 16.04 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.78 | 67.01 | 16.06 |  | 150.0 |  |
|  |  | Z | 5.81 | 66.94 | 16.05 |  | 150.0 |  |
| $\begin{array}{\|l} \hline 10555- \\ \text { AAC } \\ \hline \end{array}$ | IEEE 802.11ac WiFi ( 160 MHz , MCS1, 99pc duty cycle) | X | 5.98 | 67.25 | 16.17 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.90 | 67.29 | 16.19 |  | 150.0 |  |
|  |  | Z | 5.94 | 67.25 | 16.18 |  | 150.0 |  |
| $\begin{aligned} & 10556- \\ & \text { AAC } \\ & \hline \end{aligned}$ | IEEE 802.1 1ac WiFi ( 160 MHz , MCS2, 99pc duty cycle) | X | 6.00 | 67.29 | 16.19 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.93 | 67.35 | 16.21 |  | 150.0 |  |
|  |  | Z | 5.96 | 67.30 | 16.20 |  | 150.0 |  |
| $\begin{aligned} & \hline 10557- \\ & \text { AAC } \\ & \hline \end{aligned}$ | IEEE 802:1 1 ac WiFi ( $160 \mathrm{MHz}, \mathrm{MCS} 3$, 99pc duty cycle) | X | 5.96 | 67.20 | 16.16 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.88 | 67.23 | 16.17 |  | 150.0 |  |
|  |  | Z | 5.92 | 67.18 | 16.16 |  | 150.0 |  |


| $\begin{array}{\|l\|} \hline 10558- \\ \text { AAC } \\ \hline \end{array}$ | IEEE 802.11ac WiFi (160MHz, MCS4, 99pc duty cycle) | X | 6.01 | 67.37 | 16.26 | 0.00 | 150.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 5.92 | 67.38 | 16.26 |  | 150.0 |  |
|  |  | Z | 5.97 | 67.35 | 16.26 |  | 150.0 |  |
| $\begin{aligned} & 10560- \\ & \text { AAC } \end{aligned}$ | IEEE 802.11ac WiFi ( 160 MHz , MCS6, 99pc duty cycle) | X | 6.01 | 67.21 | 16.22 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.92 | 67.24 | 16.23 |  | 150.0 |  |
|  |  | Z | 5.96 | 67.19 | 16.22 |  | 150.0 |  |
| $\begin{aligned} & 10561- \\ & A A C \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi ( 160 MHz , MCS7, 99pc duty cycle) | X | 5.93 | 67.18 | 16.25 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.85 | 67.23 | 16.26 |  | 150.0 |  |
|  |  | Z | 5.89 | 67.18 | 16.25 |  | 150.0 |  |
| $\begin{aligned} & 10562- \\ & \text { AAC } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (160MHz, MCS8, 99pc duty cycle) | X | 6.07 | 67.61 | 16.46 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.94 | 67.50 | 16.40 |  | 150.0 |  |
|  |  | Z | 6.01 | 67.54 | 16.43 |  | 150.0 |  |
| $\begin{aligned} & 10563- \\ & \text { AAC } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (160MHz, MCS9, 99 pc duty cycle) | X | 6.39 | 68.16 | 16.69 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 6.02 | 67.41 | 16.31 |  | 150.0 |  |
|  |  | Z | 6.19 | 67.71 | 16.48 |  | 150.0 |  |
| $\begin{aligned} & \text { 10564- } \\ & \text { AAA } \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 9 Mbps, $99 p \mathrm{duty}$ cycle) | X | 4.86 | 66.83 | 16.26 | 0.46 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.78 | 67.03 | 16.31 |  | 150.0 |  |
|  |  | Z | 4.81 | 66.87 | 16.27 |  | 150.0 |  |
| $\begin{aligned} & 10565- \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, $12 \mathrm{Mbps}, 99 \mathrm{pc}$ duty cycle) | X | 5.09 | 67.28 | 16.58 | 0.46 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.98 | 67.43 | 16.60 |  | 150.0 |  |
|  |  | Z | 5.03 | 67.31 | 16.59 |  | 150.0 |  |
| $\begin{aligned} & 10566- \\ & \text { AAA } \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 18 Mbps , 99 pc duty cycle) | X | 4.93 | 67.13 | 16.40 | 0.46 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.82 | 67.27 | 16.42 |  | 150.0 |  |
|  |  | Z | 4.87 | 67.15 | 16.40 |  | 150.0 |  |
| $\begin{aligned} & 10567- \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 24 Mbps, 99 pc duty cycle) | X | 4.95 | 67.50 | 16.74 | 0.46 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.84 | 67.61 | 16.74 |  | 150.0 |  |
|  |  | Z | 4.90 | 67.52 | 16.74 |  | 150.0 |  |
| $\begin{aligned} & 10568- \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 36 Mbps , $99 p \mathrm{duty}$ cycle) | X | 4.85 | 66.93 | 16.19 | 0.46 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.74 | 67.12 | 16.24 |  | 150.0 |  |
|  |  | Z | 4.79 | 66.97 | 16.19 |  | 150.0 |  |
| 10569- AAA | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 48 Mbps, $99 p \mathrm{duty}$ cycle) | X | 4.91 | 67.57 | 16.79 | 0.46 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.82 | 67.76 | 16.84 |  | 150.0 |  |
|  |  | Z | 4.86 | 67.64 | 16.82 |  | 150.0 |  |
| $\begin{aligned} & 10570- \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 54 Mbps, 99 pc duty cycle) | X | 4.94 | 67.43 | 16.73 | 0.46 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.84 | 67.60 | 16.77 |  | 150.0 |  |
|  |  | Z | 4.89 | 67.48 | 16.75 |  | 150.0 |  |
| $\begin{aligned} & \text { 10571- } \\ & \text { AAA } \end{aligned}$ | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90pc duty cycle) | X | 1.25 | 65.19 | 15.53 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 1.27 | 65.45 | 15.71 |  | 130.0 |  |
|  |  | Z | 1.24 | 65.29 | 15.60 |  | 130.0 |  |
| $\begin{aligned} & 10572- \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 90 pc duty cycle) | X | 1.27 | 65.79 | 15.87 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 1.28 | 66.03 | 16.05 |  | 130.0 |  |
|  |  | Z | 1.26 | 65.90 | 15.96 |  | 130.0 |  |
| 10573-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 90 pc duty cycle) | X | 2.61 | 85.52 | 21.81 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 2.97 | 88.51 | 23.34 |  | 130.0 |  |
|  |  | Z | 3.01 | 88.05 | 22.71 |  | 130.0 |  |
| $\begin{aligned} & 10574- \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.11 b WiFi 2.4 GHz (DSSS, 11 Mbps, 90pc duty cycle) | X | 1.44 | 71.64 | 18.59 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 1.44 | 71.68 | 18.74 |  | 130.0 |  |
|  |  | Z | 1.45 | 72.00 | 18.80 |  | 130.0 |  |


| $10575-$ AAA | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 6 Mbps , 90 pc duty cycle) | X | 4.68 | 66.71 | 16.37 | 0.46 | 130.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 4.59 | 66.91 | 16.41 |  | 130.0 |  |
| $\begin{array}{\|l} \hline 10576- \\ \text { AAA } \\ \hline \end{array}$ |  | Z | 4.63 | 66.76 | 16.38 |  | 130.0 |  |
|  | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, $9 \mathrm{Mbps}, 90 \mathrm{pc}$ duty cycle) | X | 4.70 | 66.86 | 16.43 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.61 | 67.07 | 16.47 |  | 130.0 |  |
| 10577-$A A A$ |  | Z | 4.65 | 66.92 | 16.44 |  | 130.0 |  |
|  | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 12 Mbps, 90 pc duty cycle) | X | 4.91 | 67.16 | 16.60 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.79 | 67.31 | 16.62 |  | 130.0 |  |
| $10578-$ <br> AAA |  | Z | 4.85 | 67.20 | 16.60 |  | 130.0 |  |
|  | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, $18 \mathrm{Mbps}, 90 \mathrm{pc}$ duty cycle) | X | 4.81 | 67.32 | 16.69 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.69 | 67.44 | 16.70 |  | 130.0 |  |
| $\begin{aligned} & 10579- \\ & \text { AAA } \end{aligned}$ |  | Z | 4.75 | 67.35 | 16.70 |  | 130.0 |  |
|  | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 24 Mbps, 90 pc duty cycle) | X | 4.58 | 66.65 | 16.03 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.47 | 66.80 | 16.06 |  | 130.0 |  |
| $\begin{aligned} & 10580- \\ & \text { AAA } \\ & \hline \end{aligned}$ |  | Z | 4.52 | 66.66 | 16.02 |  | 130.0 |  |
|  | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 36 Mbps, 90 pc duty cycle) | X | 4.63 | 66.68 | 16.05 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.52 | 66.87 | 16.11 |  | 130.0 |  |
| $\begin{aligned} & 10581- \\ & \text { AAA } \end{aligned}$ |  | Z | 4.57 | 66.71 | 16.05 |  | 130.0 |  |
|  | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 48 Mbps, 90 pc duty cycle) | X | 4.71 | 67.36 | 16.64 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.60 | 67.52 | 16.66 |  | 130.0 |  |
|  |  | Z | 4.65 | 67.41 | 16.65 |  | 130.0 |  |
| $\begin{aligned} & 10582- \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, $54 \mathrm{Mbps}, 90 \mathrm{pc}$ duty cycle) | X | 4.53 | 66.42 | 15.83 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.41 | 66.60 | 15.88 |  | 130.0 |  |
|  |  | Z | 4.4.6 | 66.43 | 15.82 |  | 130.0 |  |
| $\begin{aligned} & 10583- \\ & A A B \\ & \hline \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 90pc duty cycle) | X | 4.68 | 66.71 | 16.37 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.59 | 66.91 | 16.41 |  | 130.0 |  |
| $\begin{aligned} & \text { 10584- } \\ & \text { AAB } \end{aligned}$ |  | Z | 4.63 | 66.76 | 16.38 |  | 130.0 |  |
|  | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 90 pc duty cycle) | X | 4.70 | 66.86 | 16.43 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.61 | 67.07 | 16.47 |  | 130.0 |  |
|  |  | Z | 4.65 | 66.92 | 16.44 |  | 130.0 |  |
| $\begin{aligned} & 10585= \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE $802.11 \mathrm{a} / \mathrm{h}$ WiFi 5 GHz (OFDM, 12 Mbps, 90pc duty cycle) | X | 4.91 | 67.16 | 16.60 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.79 | 67.31 | 16.62 |  | 130.0 |  |
|  |  | Z | 4.85 | 67.20 | 16.60 |  | 130.0 |  |
| $\begin{aligned} & 10586- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE $802.11 \mathrm{a} / \mathrm{h}$ WiFi 5 GHz (OFDM, 18 Mbps, 90pc duty cycle) | X | 4.81 | 67.32 | 16.69 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.69 | 67.44 | 16.70 |  | 130.0 |  |
|  |  | Z | 4.75 | 67.35 | 16.70 |  | 130.0 |  |
| $\begin{aligned} & 10587- \\ & \mathrm{AAB} \\ & \hline \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 90pc duity cycle) | X | 4.58 | 66.65 | 16.03 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.47 | 66.80 | 16.06 |  | 130.0 |  |
|  |  | Z | 4.52 | 66.66 | 16.02 |  | 130.0 |  |
| $\begin{array}{\|l\|} \hline 10588- \\ A A B \\ \hline \end{array}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 90pc duty cycle) | X | 4.63 | 66.68 | 16.05 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.52 | 66.87 | 16.11 |  | 130.0 |  |
|  |  | Z | 4.57 | 66.71 | 16.05 |  | 130.0 |  |
| $\begin{aligned} & 10589- \\ & A A B \\ & \hline \end{aligned}$ | IEEE $802.11 \mathrm{a} / \mathrm{h}$ WiFi 5 GHz (OFDM, 48 Mbps, 90pc duty cycle) | X | 4.71 | 67.36 | 16.64 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.60 | 67.52 | 16.66 |  | 130.0 |  |
|  |  | Z | 4.65 | 67.41 | 16.65 |  | 130.0 |  |
| $\begin{aligned} & 10590- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 90pc duty cycle) | X | 4.53 | 66.42 | 15.83 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.41 | 66.60 | 15.88 |  | 130.0 |  |
|  |  | Z | 4.46 | 66.43 | 15.82 |  | 130.0 |  |


| $\begin{aligned} & 10591- \\ & A A B \end{aligned}$ | IEEE 802.11n (HT Mixed, 20MHz, MCSO, 90pc duty cycle) | X | 4.83 | 66.77 | 16.47 | 0.46 | 130.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 4.74 | 66.96 | 16.50 |  | 130.0 |  |
|  |  | Z | 4.78 | 66.82 | 16.48 |  | 130.0 |  |
| $\begin{aligned} & \text { 10592- } \\ & \text { AAB } \end{aligned}$ | IEEE 802.11n (HT Mixed, 20MHz, MCS1, 90pc duty cycle) | X | 4.98 | 67.10 | 16.60 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.87 | 67.27 | 16.63 |  | 130.0 |  |
|  |  | Z | 4.93 | 67.14 | 16.61 |  | 130.0 |  |
| $\begin{aligned} & \hline 10593- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Mixed, 20MHz, MCS2, 90pc duty cycle) | X | 4.91 | 67.02 | 16.48 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.80 | 67.17 | 16.51 |  | 130.0 |  |
|  |  | Z | 4.85 | 67.05 | 16.49 |  | 130.0 |  |
| $\begin{aligned} & 10594- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Mixed, 20MHz MCS3, 90pc duty cycle) | X | 4.96 | 67.18 | 16.63 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.85 | 67.33 | 16.66 |  | 130.0 |  |
|  |  | Z | 4.90 | 67.22 | 16.64 |  | 130.0 |  |
| $\begin{aligned} & 10595- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11n (HT Mixed, 20MHz, MCS4, 90pc duty cycle) | X | 4.93 | 67.14 | 16.53 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.82 | 67.31 | 16.57 |  | 130.0 |  |
|  |  | Z | 4.87 | 67.18 | 16.54 |  | 130.0 |  |
| $\begin{aligned} & 10596- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11n (HT Mixed, 20MHz, MCS5, 90pc duty cycle) | X | 4.87 | 67.14 | 16.54 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | $Y$ | 4.76 | 67.30 | 16.57 |  | 130.0 |  |
|  |  | Z | 4.81 | 67.18 | 16.54 |  | 130.0 |  |
| $\begin{aligned} & 10597- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11n (HT Mixed, 20MHz, MCS6, 90pc duty cycle) | X | 4.82 | 67.05 | 16.42 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.71 | 67.19 | 16.44 |  | 130.0 |  |
|  |  | Z | 4.76 | 67.07 | 16.42 |  | 130.0 |  |
| 10598- $\mathrm{AAB}$ | IEEE 802.11 n (HT Mixed, 20MHz, MCS7, 90pc duty cycle) | X | 4.80 | 67.28 | 16.68 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.69 | 67.37 | 16.67 |  | 130.0 |  |
|  |  | Z | 4.74 | 67.29 | 16.67 |  | 130.0 |  |
| $\begin{aligned} & 10599- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Mixed, 40MHz, MCSO, 90pc duty cycle) | X | 5.50 | 67.33 | 16.69 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.40 | 67.43 | 16.72 |  | 130.0 |  |
|  |  | Z | 5.46 | 67.38 | 16.72 |  | 130.0 |  |
| $\begin{aligned} & 10600 \times \\ & \text { AAB } \end{aligned}$ | IEEE 802.11n (HT Mixed, 40 MHz , MCS1, 90 pc duty cycle) | X | 5.67 | 67.87 | 16.93 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.53 | 67.86 | 16.92 |  | 130.0 |  |
|  |  | Z | 5.61 | 67.87 | 16.94 |  | 130.0 |  |
| $\begin{aligned} & 10601- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11 n (HT Mixed, 40MHz, MCS2, 90pc duty cycle) | X | 5.54 | 67.56 | 16.79 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.42 | 67.61 | 16.80 |  | 130.0 |  |
|  |  | Z | 5.48 | 67.56 | 16.80 |  | 130.0 |  |
| 10602- <br> AAB | IEEE 802.11 n (HT Mixed, 40 MHz , MCS3, 90pc duty cycle) | X | 5.63 | 67.58 | 16.72 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.55 | 67.79 | 16.82 |  | 130.0 |  |
|  |  | Z | 5.59 | 67.64 | 16.76 |  | 130.0 |  |
| $\begin{aligned} & 10603- \\ & A A B \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Mixed, 40MHz, MCS4, 90pc duty cycle) | X | 5.71 | 67.86 | 16.99 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.61 | 68.00 | 17.05 |  | 130.0 |  |
|  |  | Z | 5.65 | 67.89 | 17.01 |  | 130.0 |  |
| $\begin{aligned} & 10604- \\ & \mathrm{AAB} \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Mixed, 40MHz, MCS5, 90pc duty cycle) | X | 5.50 | 67.29 | 16.70 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.49 | 67.68 | 16.88 |  | 130.0 |  |
|  |  | Z | 5.47 | 67.39 | 16.75 |  | 130.0 |  |
| $\begin{aligned} & 10605- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11 n (HT Mixed, 40 MHz , MCS6, 90pc duty cycle) | X | 5.63 | 67.69 | 16.90 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.53 | 67.80 | 16.94 |  | 130.0 |  |
|  |  | Z | 5.59 | 67.74 | 16.92 |  | 130.0 |  |
| $\begin{aligned} & 10606- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11n (HT Mixed, 40MHz MCS7, 90pc duty cycle) | X | 5.39 | 67.07 | 16.45 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.27 | 67.10 | 16.45 |  | 130.0 |  |
|  |  | Z | 5.31 | 66.99 | 16.41 |  | 130.0 |  |


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


| $\begin{aligned} & 10623-1 \\ & A A B \end{aligned}$ | IEEE 802.11ac WiFi (40MHz, MCS7, 90 pc duty cycle) | X | 5.26 | 66.41 | 16.17 | 0.46 | 130.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 5.16 | 66.51 | 16.20 |  | 130.0 |  |
|  |  | Z | 5.21 | 66.44 | 16.19 |  | 130.0 |  |
| $\begin{array}{\|l\|} \hline 10624- \\ \text { AAB } \\ \hline \end{array}$ | IEEE 802.11ac WiFi (40MHz, MCS8, 90 pc duty cycle) | X | 5.45 | 66.63 | 16.34 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.35 | 66.71 | 16.36 |  | 130.0 |  |
|  |  | Z | 5.40 | 66.64 | 16.35 |  | 130.0 |  |
| $\begin{aligned} & 10625- \\ & A A B \end{aligned}$ | IEEE 802.11ac WiFi (40MHz, MCS9, 90pc duty cycle) | X | 5.87 | 67.75 | 16.95 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.59 | 67.32 | 16.72 |  | 130.0 |  |
|  |  | Z | 5.77 | 67.62 | 16.89 |  | 130.0 |  |
| $\begin{aligned} & 10626- \\ & \mathrm{AAB} \end{aligned}$ | IEEE 802.11ac WiFi ( 80 MHz , MCSO, 90pc duty cycle) | X | 5.59 | 66.61 | 16.24 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.53 | 66.71 | 16.27 |  | 130.0 |  |
|  |  | Z | 5.56 | 66.63 | 16.25 |  | 130.0 |  |
| $\begin{array}{\|l\|} \hline 10627- \\ \mathrm{AAB} \\ \hline \end{array}$ | IEEE 802.11ac WiFi (80MHz, MCS1, 90 pc duty cycle) | X | 5.86 | 67.23 | 16.51 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.77 | 67.31 | 16.54 |  | 130.0 |  |
|  |  | Z | 5.82 | 67.26 | 16.53 |  | 130.0 |  |
| $\begin{aligned} & 10628- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WIFi (80MHz, MCS2, 90 pc duty cycle) | X | 5.64 | 66.75 | 16.20 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.54 | 66.76 | 16.20 |  | 130.0 |  |
|  |  | Z | 5.59 | 66.73 | 16.20 |  | 130.0 |  |
| $\begin{aligned} & 10629- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (80MHz, MCS3, 90 pc duty cycle) | X | 5.74 | 66.86 | 16.25 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.63 | 66.85 | 16.25 |  | 130.0 |  |
|  |  | Z | 5.67 | 66.78 | 16.22 |  | 130.0 |  |
| $\begin{aligned} & 10630- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11ac WiFi ( 80 MHz , MCS4, 90 pc duty cycle) | X | 6.27 | 68.62 | 17.13 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.98 | 68.12 | 16.89 |  | 130.0 |  |
|  |  | Z | 6.16 | 68.44 | 17.05 |  | 130.0 |  |
| $\begin{aligned} & 10631 \text { - } \\ & \text { AAB } \end{aligned}$ | IEEE 802.11ac WiFi ( 80 MHz , MCS5, 90 pc duty cycle) | X | 6.08 | 68.18 | 17.10 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.89 | 67.92 | 16.96 |  | 130.0 |  |
|  |  | Z | 6.00 | 68.07 | 17.05 |  | 130.0 |  |
| $\begin{aligned} & 10632- \\ & A A B \end{aligned}$ | IEEE 802.11ac WiFi ( 80 MHz , MCS6, 90 pc duty cycle) | X | 5.81 | 67.25 | 16.65 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.73 | 67.36 | 16.70 |  | 130.0 |  |
|  |  | Z | 5.78 | 67.29 | 16.68 |  | 130.0 |  |
| $\begin{aligned} & 10633- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11ac WiFi ( 80 MHz , MCS7, 90 pc duty cycle) | X | 5.70 | 66.88 | 16.30 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.61 | 66.94 | 16.32 |  | 130.0 |  |
|  |  | Z | 5.64 | 66.86 | 16.29 |  | 130.0 |  |
| $\begin{aligned} & 10634- \\ & \mathrm{AAB} \end{aligned}$ | IEEE 802.11ac WiFi ( 80 MHz , MCS8, 90 pc duty cycle) | X | 5.68 | 66.90 | 16.36 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.59 | 66.94 | 16.37 |  | 130.0 |  |
|  |  | Z | 5.63 | 66.89 | 16.36 |  | 130.0 |  |
| $\begin{aligned} & 10635- \\ & A A B \end{aligned}$ | IEEE 802.11ac WiFi (80MHz, MCS9, 90 pc duty cycle) | X | 5.57 | 66.28 | 15.80 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.47 | 66.33 | 15.83 |  | 130.0 |  |
|  |  | Z | 5.52 | 66.25 | 15.79 |  | 130.0 |  |
| $\begin{aligned} & 10636- \\ & \text { AAC } \end{aligned}$ | IEEE 802.11ac WiFi ( $160 \mathrm{MHz}, \mathrm{MCSO}$, 90 pc duty cycle) | X | 6.01 | 67.00 | 16.34 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.95 | 67.08 | 16.37 |  | 130.0 |  |
|  |  | Z | 5.98 | 67.00 | 16.35 |  | 130.0 |  |
| $\begin{aligned} & 10637- \\ & \text { AAC } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (160MHz, MCS1, 90 pc duty cycle) | X | 6.18 | 67.41 | 16.53 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 6.10 | 67.45 | 16.54 |  | 130.0 |  |
|  |  | Z | 6.14 | 67.41 | 16.54 |  | 130.0 |  |
| $\begin{aligned} & 10638 \\ & \text { AAC } \end{aligned}$ | IEEE 802.11ac WiFi (160MHz, MCS2, 90 pc duty cycle) | X | 6.18 | 67.38 | 16.49 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 6.10 | 67.42 | 16.51 |  | 130.0 |  |
|  |  | Z | 6.14 | 67.38 | 16.50 |  | 130.0 |  |


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


| $10660-$ <br> AAA | Pulse Waveform (200Hz, 40\%) | X | 100.00 | 111.43 | 25.50 | 3.98 | 80.0 | $\pm 9.6 \%$ |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 100.00 | 112.46 | 25.73 |  | 80.0 |  |
| $10661-$ <br> AAA | Pulse Waveform $(200 \mathrm{~Hz}, 60 \%)$ | Z | 100.00 | 110.79 | 25.07 |  | 80.0 |  |
|  |  | Y | 100.00 | 110.47 | 23.74 | 2.22 | 100.0 | $\pm 9.6 \%$ |
|  |  | Z | 100.00 | 113.00 | 109.90 | 24.78 |  | 100.0 |
| $10662-$ <br> AAA | Pulse Waveform (200Hz, $80 \%)$ | X | 100.00 | 107.83 | 20.38 |  | 100.0 |  |
|  |  | Y | 100.00 | 115.39 | 23.98 |  | 12.07 | 120.0 |
|  | $\pm 9.6 \%$ |  |  |  |  |  |  |  |

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

Calibration Laboratory of Schmid \& Partner<br>Engineering AG<br>Zeughausstrasse 43, 8004 Zurich, Switzerland



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Coff incateNo: ES3-3332-Aug18
CALIBRATION CERTIFICATE
Object
ES3DV3 - SN:3332

QA CAL-01.v9, QA CAL-23,V5, QA CAL-25v6 Calibration procedure for dosimetric. E-field probes

Calibration date:
August 222018
This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI).
The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.
All calibrations have been conducted in the closed laboratory facility: environment temperature $(22 \pm 3)^{\circ} \mathrm{C}$ 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 | O4-Apr-18 (No. 217-02672/02673) | Apr-19 |
| Power sensor NRP-Z91 | SN: 103244 | O4-Apr-18 (No. 217-02672) | Apr-19 |
| Power sensor NRP-Z91 | SN: 103245 | O4-Apr-18 (No. 217-02673) | Apr-19 |
| Reference 20 dB Attenuator | SN: S5277 (20x) | 04-Apr-18 (No. 217-02682) | Apr-19 |
| Reference Probe ES3DV2 | SN: 3013 | 30-Dec-17 (No. ES3-3013_Dec17) | Dec-18 |
| DAE4 | 21-Dec-17 (No. DAE4-660_Dec17) | Dec-18 |  |
|  |  |  |  |
| Secondary Standards 660 | ID | Check Date (in house) | Scheduled Check |
| Power meter E4419B | SN: GB41293874 | O6-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 | O4-Aug-99 (in house check Jun-18) | In house check: Jun-20 |
| Network Analyzer E8358A | SN: US41080477 | 31-Mar-14 (in house check Oct-17) | In house check: Oct-18 |



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Issued: August 24, 2018

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Multilateral Agreement for the recognition of calibration certificates

## Glossary:

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

Connector Angle

## Calibration is Performed According to the Following Standards:

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

## Methods Applied and Interpretation of Parameters:

- NORM $\quad$, $y, z$ : Assessed for E-field polarization $\vartheta=0$ ( $f \leq 900 \mathrm{MHz}$ in TEM-cell; $\mathrm{f}>1800 \mathrm{MHz}$ : R22 waveguide). NORM $x, y, z$ are only intermediate values, i.e., the uncertainties of NORM $x, y, z$ does not affect the $E^{2}$-field uncertainty inside TSL (see below ConvF).
- $N O R M(f) x, y, z=N O R M x, y, z$ * frequency_response (see Frequency Response Chart). This linearization is implemented in DASY4 software versions later than 4.2. The uncertainty of the frequency response is included in the stated uncertainty of ConvF.
- $\quad D C P x, y, z:$ DCP are numerical linearization parameters assessed based on the data of power sweep with CW
signal (no uncertainty required). DCP does not depend on frequency nor media signal (no uncertainty required). DCP does not depend on frequency nor media.
- PAR: PAR is the Peak to Average Ratio that is not calibrated but determined based on the signal
characteristics
- Ax,y,z; $B x, y, z ; C x, y, z ; D x, y, z ; V R x, y, z: A, B, C, D$ are numerical linearization parameters assessed based on the data of power sweep for specific modulation signal. The parameters do not depend on frequency nor media. VR is the maximum calibration range expressed in RMS voltage across the diode.
- ConvF and Boundary Effect Parameters: Assessed in flat phantom using E-field (or Temperature Transfer Standard for $f \leq 800 \mathrm{MHz}$ ) and inside waveguide using analytical field distributions based on power measurements for $\mathrm{f}>800 \mathrm{MHz}$. The same setups are used for assessment of the parameters applied for boundary compensation (alpha, depth) of which typical uncertainty values are given. These parameters are used in DASY4 software to improve probe accuracy close to the boundary. The sensitivity in TSL corresponds to NORMx,y,z* ConvF whereby the uncertainty corresponds to that given for ConvF. A frequency dependent ConvF is used in DASY version 4.4 and higher which allows extending the validity from $\pm 50 \mathrm{MHz}$ to $\pm 100$
MHz .
- Spherical isotropy ( $3 D$ deviation from isotropy): in a field of low gradients realized using a flat phantom
exposed by a patch antenna.
- Sensor Offset: The sensor offset corresponds to the offset of virtual measurement center from the probe tip
(on probe axis). No tolerance required.
- Connector Angle: The angle is assessed using the information gained by determining the NORMX (no
uncertainty required).


# Probe ES3DV3 

## SN:3332

Manufactured: January 24, 2012
Calibrated: August 22, 2018

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

## DASY/EASY - Parameters of Probe: ES3DV3 - SN:3332

Basic Calibration Parameters

|  | Sensor $\mathbf{X}$ | Sensor $\mathbf{Y}$ | Sensor $\mathbf{Z}$ | Unc (k=2) |
| :--- | :---: | :---: | :---: | :---: |
| Norm $\left(\mu \mathrm{V} /(\mathrm{V} / \mathrm{m})^{2}\right)^{\mathrm{A}}$ | 1.00 | 0.93 | 0.88 | $\pm 10.1 \%$ |
| $\mathrm{DCP}(\mathrm{mV})^{\mathrm{B}}$ | 108.0 | 100.7 | 105.6 |  |

## Modulation Calibration Parameters

| UID | Communication System Name |  | $\mathbf{A}$ <br> $\mathbf{d B}$ | $\mathbf{B}$ <br> $\mathbf{d B} \sqrt{ } \mathbf{~ V ~}$ | $\mathbf{C}$ | $\mathbf{D}$ <br> $\mathbf{d B}$ | $\mathbf{V R}$ <br> $\mathbf{m V}$ | $\mathbf{U n c}^{\mathbf{E}}$ <br> $(\mathbf{k}=\mathbf{2})$ |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | CW | X | 0.0 | 0.0 | 1.0 | 0.00 | 197.1 | $\pm 3.0 \%$ |
|  |  | Y | 0.0 | 0.0 | 1.0 |  | 178.9 |  |
|  | Z | 0.0 | 0.0 | 1.0 |  | 180.8 |  |  |

Sensor Model Parameters

|  | $\mathbf{C 1}$ <br> $\mathbf{f F}$ | $\mathbf{C 2}$ <br> $\mathbf{f F}$ | $\mathbf{a}$ <br> $\mathbf{V}^{-\mathbf{1}}$ | $\mathbf{T 1}$ <br> $\mathbf{m s .} . \mathbf{V}^{-\mathbf{2}}$ | $\mathbf{T 2}$ <br> $\mathbf{m s .} \mathbf{V}^{\mathbf{1}}$ | $\mathbf{T 3}$ <br> $\mathbf{m s}$ | $\mathbf{T 4}$ <br> $\mathbf{V}^{-\mathbf{2}}$ | $\mathbf{T 5}$ <br> $\mathbf{V}^{\mathbf{- 1}}$ | $\mathbf{T 6}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| X | 78.09 | 549.0 | 34.29 | 47.67 | 3.865 | 5.10 | 1.015 | 0.631 | 1.012 |
| Y | 48.63 | 359.6 | 37.37 | 27.76 | 1.869 | 5.10 | 0.000 | 0.517 | 1.012 |
| Z | 44.72 | 319.5 | 35.44 | 25.26 | 1.758 | 5.10 | 1.534 | 0.198 | 1.012 |

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

[^4]
## DASY/EASY - Parameters of Probe: ES3DV3 - SN:3332

Calibration Parameter Determined in Head Tissue Simulating Media

| $\mathbf{f ( M H z ) ^ { \text { c } }}$ | Relative <br> Permittivity $^{\mathbf{F}}$ | Conductivity <br> $(\mathbf{S} / \mathrm{m})^{\boldsymbol{F}}$ | ConvF X | ConvF Y | ConvF Z | Alpha $^{\mathbf{G}}$ | Depth <br> $(\mathbf{m m})$ | Unc <br> $(\mathbf{k}=2)$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 750 | 41.9 | 0.89 | 6.74 | 6.74 | 6.74 | 0.56 | 1.39 | $\pm 12.0 \%$ |
| 835 | 41.5 | 0.90 | 6.49 | 6.49 | 6.49 | 0.38 | 1.72 | $\pm 12.0 \%$ |
| 1750 | 40.1 | 1.37 | 5.37 | 5.37 | 5.37 | 0.64 | 1.38 | $\pm 12.0 \%$ |
| 1900 | 40.0 | 1.40 | 5.15 | 5.15 | 5.15 | 0.80 | 1.24 | $\pm 12.0 \%$ |
| 2300 | 39.5 | 1.67 | 4.82 | 4.82 | 4.82 | 0.79 | 1.30 | $\pm 12.0 \%$ |
| 2450 | 39.2 | 1.80 | 4.61 | 4.61 | 4.61 | 0.80 | 1.26 | $\pm 12.0 \%$ |
| 2600 | 39.0 | 1.96 | 4.50 | 4.50 | 4.50 | 0.80 | 1.38 | $\pm 12.0 \%$ |

${ }^{c}$ Frequency validity above 300 MHz of $\pm 100 \mathrm{MHz}$ only applies for DASY v4.4 and higher (see Page 2), else it is restricted to $\pm 50 \mathrm{MHz}$. The
uncertainty is the RSS of the ConvF uncertainty at caliiration frequency and the uncertainty for the indicated frequency band. Frequency validity
below 300 MHz is $\pm 10,25,40,50$ and 70 MHz for ConvF assessments at $30,64,128,150$ and 220 MHz respectively. Above 5 GHz frequency
validity can be extended to $\pm 110 \mathrm{MHz}$.
F At frequencies below 3 GHz , the validity of tissue parameters ( E and $\sigma$ ) can be relaxed to $\pm 10 \%$ if liquid compensation formula is applied to
measured SAR values. At frequencies above 3 GHz , the validity of tissue parameters ( $\varepsilon$ and $\sigma$ ) is restricted to $\pm 5 \%$. The uncertainty is the RSS of
the Conv uncertainty for indicated target tissue parameters.
GAlph/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is
always less than $\pm 1 \%$ for frequencies below 3 GHz and below $\pm 2 \%$ for frequencies between $3-6 \mathrm{GHz}$ at any distance larger than half the probe tip
diameter from the boundary.

## DASY/EASY - Parameters of Probe: ES3DV3 - SN:3332

Calibration Parameter Determined in Body Tissue Simulating Media

| $\mathbf{f ( M H z ) ^ { \mathbf { c } }}$ | Relative <br> Permittivity $^{\mathbf{F}}$ | Conductivity <br> $(\mathbf{S} / \mathrm{m})^{\mathrm{F}}$ | ConvF X | ConvF Y | ConvF Z | Alpha $^{\mathbf{G}}$ | Depth <br> $(\mathrm{mm})$ | Unc <br> $(\mathbf{k}=\mathbf{2})$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 750 | 55.5 | 0.96 | 6.46 | 6.46 | 6.46 | 0.50 | 1.47 | $\pm 12.0 \%$ |
| 835 | 55.2 | 0.97 | 6.29 | 6.29 | 6.29 | 0.49 | 1.52 | $\pm 12.0 \%$ |
| 1750 | 53.4 | 1.49 | 4.99 | 4.99 | 4.99 | 0.66 | 1.39 | $\pm 12.0 \%$ |
| 1900 | 53.3 | 1.52 | 4.77 | 4.77 | 4.77 | 0.49 | 1.69 | $\pm 12.0 \%$ |
| 2300 | 52.9 | 1.81 | 4.58 | 4.58 | 4.58 | 0.80 | 1.27 | $\pm 12.0 \%$ |
| 2450 | 52.7 | 1.95 | 4.42 | 4.42 | 4.42 | 0.80 | 1.23 | $\pm 12.0 \%$ |
| 2600 | 52.5 | 2.16 | 4.36 | 4.36 | 4.36 | 0.80 | 1.30 | $\pm 12.0 \%$ |

${ }^{c}$ Frequency validity above 300 MHz of $\pm 100 \mathrm{MHz}$ only applies for DASY v4.4 and higher (see Page 2 ), else it is restricted to $\pm 50 \mathrm{MHz}$. The
uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validy
below 300 MHz is $\pm 10,25,40,50$ and 70 MHz for ConvF assessments at $30,64,128,150$ and 220 MHz respectively. Above 5 GHz frequency
validity can be extended to $\pm 110 \mathrm{MHz}$.
Ft frequencies below 3 GHz , the validity of tissue parameters ( $\varepsilon$ and $\sigma$ ) can be relaxed to $\pm 10 \%$ if liquid compensation formula is applied to
measured SAR values. At frequencies above 3 GHz , the validity of tissue parameters ( $\varepsilon$ and $\sigma$ ) is restricted to $\pm 5 \%$. The uncertainty is the RSS of
the ConvF uncertainty for indicated target tissue parameters.
G Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is
always less than $\pm 1 \%$ for frequencies below 3 GHz and below $\pm 2 \%$ for frequencies between $3-6 \mathrm{GHz}$ at any distance larger than half the probe tip
diameter from the boundary.

## Frequency Response of E-Field

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

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

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



## Dynamic Range f(SAR $\left.{ }_{\text {head }}\right)$ <br> (TEM cell , $\mathrm{f}_{\text {eval }}=1900 \mathrm{MHz}$ )




## Uncertainty of Linearity Assessment: $\pm \mathbf{0 . 6 \%}(\mathrm{k}=2)$

## Conversion Factor Assessment





## DASY/EASY - Parameters of Probe: ES3DV3 - SN:3332

Other Probe Parameters

| Sensor Arrangement | Triangular |
| :--- | ---: |
| Connector Angle ( ${ }^{\circ}$ ) | 49.3 |
| Mechanical Surface Detection Mode | enabled |
| Optical Surface Detection Mode | disabled |
| Probe Overall Length | 337 mm |
| Probe Body Diameter | 10 mm |
| Tip Length | 10 mm |
| Tip Diameter | 4 mm |
| Probe Tip to Sensor X Calibration Point | 2 mm |
| Probe Tip to Sensor Y Calibration Point | 2 mm |
| Probe Tip to Sensor Z Calibration Point | 2 mm |
| Recommended Measurement Distance from Surface | 3 mm |

## Appendix: Modulation Calibration Parameters

| UID | Communication System Name |  | A | $\frac{\mathrm{B}}{\mathrm{~dB} \sqrt{\mu V}}$ | C | $\begin{gathered} \mathrm{D} \\ \mathrm{~dB} \end{gathered}$ | $\begin{aligned} & \hline \mathrm{VR} \\ & \mathrm{mV} \end{aligned}$ | Max <br> Unc ${ }^{\text {E }}$ <br> ( $k=2$ ) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | CW | X | 0.00 | 0.00 | 1.00 | 0.00 | 197.1 | $\pm 3.0 \%$ |
|  |  | Y | 0.00 | 0.00 | 1.00 |  | 178.9 |  |
|  |  | Z | 0.00 | 0.00 | 1.00 |  | 180.8 |  |
| $\begin{aligned} & 10010 \\ & \mathrm{CAA} \end{aligned}$ | SAR Validation (Square, $100 \mathrm{~ms}, 10 \mathrm{~ms}$ ) | X | 9.42 | 78.82 | 19.48 | 10.00 | 25.0 | $\pm 9.6$ \% |
|  |  | Y | 6.63 | 76.23 | 16.58 |  | 25.0 |  |
|  |  | Z | 9.95 | 82.20 | 18.88 |  | 25.0 |  |
| 10011- CAB | UMTS-FDD (WCDMA) | X | 1.26 | 70.77 | 17.22 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 1.02 | 68.32 | 15.46 |  | 150.0 |  |
|  |  | Z | 1.96 | 80.99 | 21.92 |  | 150.0 |  |
| $\begin{aligned} & 10012- \\ & \text { CAB } \\ & \hline \end{aligned}$ | IEEE 802.11 b WiFi 2.4 GHz (DSSS, 1 Mbps) | X | 1.45 | 66.89 | 16.90 | 0.41 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 1.23 | 65.24 | 15.98 |  | 150.0 |  |
|  |  | Z | 1.37 | 68.12 | 18.18 |  | 150.0 |  |
| $\begin{aligned} & 10013- \\ & \text { CAB } \\ & \hline \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 6 Mbps ) | X | 5.34 | 67.48 | 17.57 | 1.46 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.99 | 67.25 | 17.50 |  | 150.0 |  |
|  |  | Z | 5.00 | 67.78 | 17.86 |  | 150.0 |  |
| $\begin{aligned} & 10021- \\ & \text { DAC } \end{aligned}$ | GSM-FDD (TDMA, GMSK) | X | 12.77 | 84.95 | 23.28 | 9.39 | 50.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 119.15 | 31.42 |  | 50.0 |  |
|  |  | Z | 100.00 | 120.12 | 31.83 |  | 50.0 |  |
| $\begin{aligned} & 10023- \\ & \text { DAC } \end{aligned}$ | GPRS-FDD (TDMA, GMSK, TN 0) | X | 12.48 | 84.43 | 23.15 | 9.57 | 50.0 | $\pm 9.6$ \% |
|  |  | Y | 86.81 | 116.95 | 30.93 |  | 50.0 |  |
|  |  | Z | 100.00 | 120.03 | 31.84 |  | 50.0 |  |
| $\begin{aligned} & \text { 10024- } \\ & \text { חAC } \end{aligned}$ | GPRS-FDD (TDMA, GMSK, TN 0-1) | X | 19.50 | 92.72 | 24.37 | 6.56 | 60.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 115.50 | 28.55 |  | 60.0 |  |
|  |  | Z | 100.00 | 117.36 | 29.38 |  | 60.0 |  |
| $\begin{aligned} & 10025- \\ & \text { DAC } \end{aligned}$ | EDGE-FDD (TDMA, 8PSK, TN 0) | X | 20.38 | 102.14 | 37.71 | 12.57 | 50.0 | $\pm 9.6$ \% |
|  |  | Y | 13.39 | 98.42 | 37.69 |  | 50.0 |  |
|  |  | $\underline{Z}$ | 21.48 | 114.30 | 44.00 |  | 50.0 |  |
| $\begin{aligned} & 10026- \\ & \text { DAC } \\ & \hline \end{aligned}$ | EDGE-FDD (TDMA, 8PSK, TN 0-1) | X | 19.45 | 98.14 | 32.99 | 9.56 | 60.0 | $\pm 9.6$ \% |
|  |  | Y | 21.29 | 107.30 | 37.11 |  | 60.0 |  |
|  |  | Z | 29.82 | 117.28 | 40.71 |  | 60.0 |  |
| $\begin{aligned} & 10027- \\ & \text { DAC } \end{aligned}$ | GPRS-FDD (TDMA, GMSK, TN 0-1-2) | X | 78.41 | 113.09 | 28.82 | 4.80 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 113.99 | 27.00 |  | 80.0 |  |
|  |  | Z | 100.00 | 117.09 | 28.40 |  | 80.0 |  |
| $\begin{aligned} & 10028- \\ & \text { DAC } \\ & \hline \end{aligned}$ | GPRS-FDD (TDMA, GMSK, TN 0-1-2-3) | X | 100.00 | 115.97 | 28.54 | 3.55 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 113.45 | 25.99 |  | 100.0 |  |
|  |  | Z | 100.00 | 118.36 | 28.18 |  | 100.0 |  |
| $\begin{aligned} & 10029- \\ & \text { DAC } \end{aligned}$ | EDGE-FDD (TDMA, 8PSK, TN 0-1-2) | X | 15.82 | 94.16 | 30.58 | 7.80 | 80.0 | $\pm 9.6 \%$ |
|  |  | Y | 12.96 | 95.82 | 32.14 |  | 80.0 |  |
|  |  | Z | 15.83 | 101.85 | 34.64 |  | 80.0 |  |
| $\begin{aligned} & 10030- \\ & \text { CAA } \end{aligned}$ | IEEE 802.15.1 Bluetooth (GFSK, DH1) | X | 30.02 | 99.14 | 25.52 | 5.30 | 70.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 113.53 | 27.10 |  | 70.0 |  |
|  |  | Z | 100.00 | 115.93 | 28.18 |  | 70.0 |  |
| $10031-$ CAA | IEEE 802.15.1 Bluetooth (GFSK, DH3) | X | 100.00 | 117.08 | 27.44 | 1.88 | 100.0 | $\pm 9.6$ \% |
|  |  | $Y$ | 100.00 | 110.43 | 23.19 |  | 100.0 |  |
|  |  | Z | 100.00 | 121.04 | 27.72 |  | 100.0 |  |


| $\begin{aligned} & 10032- \\ & \text { CAA } \end{aligned}$ | IEEE 802.15.1 Bluetooth (GFSK, DH5) | X | 100.00 | 121.10 | 28.01 | 1.17 | 100.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 100.00 | 109.05 | 21.56 |  | 100.0 |  |
|  |  | Z | 100.00 | 131.65 | 30.85 |  | 100.0 |  |
| $\begin{aligned} & 10033- \\ & \text { CAA } \\ & \hline \end{aligned}$ | IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH1) | X | 15.47 | 91.95 | 25.45 | 5.30 | 70.0 | $\pm 9.6$ \% |
|  |  | Y | 36.27 | 107.53 | 28.96 |  | 70.0 |  |
|  |  | Z | 100.00 | 124.57 | 33.43 |  | 70.0 |  |
| $\begin{aligned} & 10034- \\ & \text { CAA } \\ & \hline \end{aligned}$ | IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH3) | X | 11.82 | 92.83 | 24.46 | 1.88 | 100.0 | $\pm 9.6 \%$ |
|  |  | Y | 11.15 | 91.90 | 22.61 |  | 100.0 |  |
|  |  | Z | 100.00 | 123.85 | 31.14 |  | 100.0 |  |
| $\begin{aligned} & 10035- \\ & \text { CAA } \\ & \hline \end{aligned}$ | IEEE 802.15.1 Bluetooth (P//4-DQPSK, DH5) | X | 7.24 | 87.64 | 22.66 | 1.17 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 4.86 | 82.23 | 19.22 |  | 100.0 |  |
|  |  | Z | 100.00 | 124.65 | 30.94 |  | 100.0 |  |
| $\begin{aligned} & 10036- \\ & \text { CAA } \\ & \hline \end{aligned}$ | IEEE 802.15.1 Bluetooth (8-DPSK, DH1) | X | 17.25 | 93.92 | 26.14 | 5.30 | 70.0 | $\pm 9.6$ \% |
|  |  | Y | 57.69 | 115.00 | 30.95 |  | 70.0 |  |
|  |  | Z | 100.00 | 124.83 | 33.56 |  | 70.0 |  |
| $10037-$ CAA | IEEE 802.15.1 Bluetooth (8-DPSK, DH3) | X | 11.64 | 92.58 | 24.33 | 1.88 | 100.0 | $\pm 9.6$ \% |
|  |  | $\overline{\mathrm{Y}}$ | 9.91 | 90.34 | 22.11 |  | 100.0 |  |
|  |  | Z | 100.00 | 123.84 | 31.10 |  | 100.0 |  |
| $\begin{aligned} & 10038- \\ & \text { CAA } \\ & \hline \end{aligned}$ | IEEE 802.15.1 Bluetooth (8-DPSK, DH5) | X | 7.73 | 88.84 | 23.12 | 1.17 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 5.20 | 83.43 | 19.73 |  | 100.0 |  |
|  |  | Z | 100.00 | 125.47 | 31.30 |  | 100.0 |  |
| $\begin{aligned} & 10039- \\ & \text { CAB } \\ & \hline \end{aligned}$ | CDMA2000 (1xRTT, RC1) | X | 2.46 | 75.15 | 18.41 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 1.75 | 71.72 | 15.00 |  | 150.0 |  |
|  |  | Z | 52.61 | 118.51 | 29.24 |  | 150.0 |  |
| $\begin{aligned} & 10042- \\ & C A B \end{aligned}$ | IS-54 / IS-136 FDD (TDMA/FDM, Pl/4- DQPSK, Halfrate) | X | 15.38 | 87.96 | 22.90 | 7.78 | 50.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 114.07 | 28.11 |  | 50.0 |  |
|  |  | Z | 100.00 | 115.43 | 28.70 |  | 50.0 |  |
| $\begin{aligned} & 10044- \\ & \text { CAA } \\ & \hline \end{aligned}$ | IS-91/EIATTIA-553 FDD (FDMA, FM) | X | 0.00 | 109.43 | 1.47 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 0.07 | 124.46 | 3.53 |  | 150.0 |  |
|  |  | Z | 0.02 | 127.99 | 9.72 |  | 150.0 |  |
| $\begin{aligned} & 10048- \\ & \text { CAA } \\ & \hline \end{aligned}$ | DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24) | X | 11.14 | 80.20 | 23.45 | 13.80 | 25.0 | $\pm 9.6$ \% |
|  |  | Y | 18.30 | 92.38 | 25.95 |  | 25.0 |  |
|  |  | Z | 24.06 | 97.54 | 27.61 |  | 25.0 |  |
| $\begin{aligned} & 10049- \\ & \text { CAA } \\ & \hline \end{aligned}$ | DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12) | X | 11.59 | 82.45 | 22.87 | 10.79 | 40.0 | $\pm 9.6$ \% |
|  |  | Y | 24.33 | 97.29 | 26.07 |  | 40.0 |  |
|  |  | Z | 43.63 | 107.25 | 29.02 |  | 40.0 |  |
| $\begin{aligned} & 10056- \\ & \text { CAA } \end{aligned}$ | UMTS-TDD (TD-SCDMA, 1.28 Mcps) | X | 12.19 | 83.90 | 23.66 | 9.03 | 50.0 | $\pm 9.6$ \% |
|  |  | Y | 17.95 | 93.68 | 25.97 |  | 50.0 |  |
|  |  | $\underline{Z}$ | 27.06 | 101.31 | 28.42 |  | 50.0 |  |
| $\begin{aligned} & 10058- \\ & \text { DAC } \end{aligned}$ | EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3) | X | 13.09 | 91.03 | 28.81 | 6.55 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 9.14 | 88.74 | 28.90 |  | 100.0 |  |
|  |  | Z | 10.48 | 93.03 | 30.88 |  | 100.0 |  |
| $\begin{aligned} & 10059- \\ & \mathrm{CAB} \\ & \hline \end{aligned}$ | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 | X | 1.79 | 70.10 | 18.30 | 0.61 | 110.0 | $\pm 9.6$ \% |
|  |  | Y | 1.40 | 67.63 | 17.15 |  | 110.0 |  |
|  |  | Z | 1.63 | 71.61 | 19.81 |  | 110.0 |  |
| $\begin{aligned} & 10060- \\ & \mathrm{CAB} \\ & \hline \end{aligned}$ | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps) | X | 100.00 | 127.35 | 32.46 | 1.30 | 110.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 129.77 | 32.62 |  | 110.0 |  |
|  |  | Z | 100.00 | 138.31 | 36.39 |  | 110.0 |  |


| $\begin{aligned} & 10061- \\ & \mathrm{CAB} \end{aligned}$ | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps) | X | 21.19 | 104.59 | 28.93 | 2.04 | 110.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 21.01 | 109.32 | 30.57 |  | 110.0 |  |
|  |  | Z | 100.00 | 139.60 | 38.91 |  | 110.0 |  |
| $\begin{aligned} & 10062- \\ & \text { CAC } \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps) | X | 5.03 | 67.18 | 16.84 | 0.49 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 4.72 | 66.99 | 16.78 |  | 100.0 |  |
|  |  | Z | 4.74 | 67.59 | 17.18 |  | 100.0 |  |
| $\begin{aligned} & 10063- \\ & \text { CAC } \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps) | X | 5.09 | 67.39 | 17.01 | 0.72 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 4.76 | 67.15 | 16.92 |  | 100.0 |  |
|  |  | Z | 4.78 | 67.75 | 17.32 |  | 100.0 |  |
| $\begin{aligned} & 10064- \\ & \text { CAC } \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps) | X | 5.47 | 67.77 | 17.28 | 0.86 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 5.05 | 67.45 | 17.17 |  | 100.0 |  |
|  |  | Z | 5.06 | 67.99 | 17.53 |  | 100.0 |  |
| $\begin{aligned} & 1006! \\ & \mathrm{CAC} \\ & \hline \end{aligned}$ | IEEE 802.112/h WiFi 5 GHz (OFDM, 18 Mbps) | X | 5.38 | 67.86 | 17.47 | 1.21 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 4.96 | 67.47 | 17.34 |  | 100.0 |  |
|  |  | Z | 4.96 | 68.01 | 17.71 |  | 100.0 |  |
| $\begin{aligned} & 10066- \\ & \text { CAC } \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps) | X | 5.46 | 68.05 | 17.72 | 1.46 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 5.01 | 67.60 | 17.57 |  | 100.0 |  |
|  |  | Z | 5.01 | 68.13 | 17.93 |  | 100.0 |  |
| $\begin{aligned} & 10067- \\ & \text { CAC } \\ & \hline \end{aligned}$ | IEEE $802.11 \mathrm{a} / \mathrm{h}$ WiFi 5 GHz (OFDM, 36 Mbps) | X | 5.80 | 68.19 | 18.18 | 2.04 | 100.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.33 | 67.84 | 18.06 |  | 100.0 |  |
|  |  | Z | 5.33 | 68.37 | 18.40 |  | 100.0 |  |
| $\begin{aligned} & 10068- \\ & \text { CAC } \\ & \hline \end{aligned}$ | IEEE $802.11 \mathrm{a} / \mathrm{h}$ WiFi 5 GHz (OFDM, 48 Mbps) | X | 6.00 | 68.72 | 18.61 | 2.55 | 100.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.43 | 68.06 | 18.37 |  | 100.0 |  |
|  |  | Z | 5.42 | 68.51 | 18.68 |  | 100.0 |  |
| $\begin{aligned} & 10069- \\ & \text { CAC } \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps) | X | 6.05 | 68.52 | 18.74 | 2.67 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 5.52 | 68.08 | 18.58 |  | 100.0 |  |
|  |  | Z | 5.50 | 68.55 | 18.89 |  | 100.0 |  |
| $\begin{aligned} & 10071- \\ & \text { CAB } \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps ) | X | 5.51 | 67.79 | 17.99 | 1.99 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 5.13 | 67.47 | 17.88 |  | 100.0 |  |
|  |  | Z | 5.14 | 67.98 | 18.23 |  | 100.0 |  |
| $\begin{aligned} & 10072- \\ & \text { CAB } \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps ) | X | 5.64 | 68.50 | 18.36 | 2.30 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 5.17 | 67.98 | 18.20 |  | 100.0 |  |
|  |  | Z | 5.18 | 68.52 | 18.56 |  | 100.0 |  |
| $\begin{aligned} & 10073- \\ & \mathrm{CAB} \\ & \hline \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps ) | X | 5.82 | 68.97 | 18.83 | 2.83 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 5.30 | 68.34 | 18.62 |  | 100.0 |  |
|  |  | Z | 5.31 | 68.89 | 18.99 |  | 100.0 |  |
| $\begin{aligned} & 10074 \\ & \mathrm{CAB} \\ & \hline \end{aligned}$ | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps ) | X | 5.90 | 69.21 | 19.18 | 3.30 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 5.33 | 68.38 | 18.85 |  | 100.0 |  |
|  |  | Z | 5.35 | 68.94 | 19.21 |  | 100.0 |  |
| $\begin{aligned} & 10075- \\ & \text { CAB } \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz <br> (DSSS/OFDM, 36 Mbps ) | X | 6.17 | 70.00 | 19.82 | 3.82 | 90.0 | $\pm 9.6$ \% |
|  |  | Y | 5.45 | 68.75 | 19.29 |  | 90.0 |  |
|  |  | Z | 5.46 | 69.27 | 19.63 |  | 90.0 |  |
| $\begin{aligned} & 10076- \\ & \text { CAB } \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz <br> (DSSS/OFDM, 48 Mbps ) | X | 6.17 | 69.81 | 19.93 | 4.15 | 90.0 | $\pm 9.6$ \% |
|  |  | Y | 5.48 | 68.60 | 19.44 |  | 90.0 |  |
|  |  | Z | 5.49 | 69.13 | 19.79 |  | 90.0 |  |
| $\begin{aligned} & 10077- \\ & \text { CAB } \\ & \hline \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps ) | X | 6.22 | 69.93 | 20.05 | 4.30 | 90.0 | $\pm 9.6$ \% |
|  |  | $\bar{Y}$ | 5.52 | 68.70 | 19.55 |  | 90.0 |  |
|  |  | Z | 5.54 | 69.25 | 19.91 |  | 90.0 |  |


| $\begin{aligned} & 10081- \\ & \mathrm{CAB} \end{aligned}$ | CDMA2000 (1xRTT, RC3) | X | 1.22 | 70.18 | 15.99 | 0.00 | 150.0 | $\pm 9.6 \%$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 0.75 | 65.38 | 11.51 |  | 150.0 |  |
|  |  | Z | 4.57 | 89.94 | 21.35 |  | 150.0 |  |
| $\begin{aligned} & 10082- \\ & \text { CAB } \\ & \hline \end{aligned}$ | IS-54 / IS-136 FDD (TDMA/FDM, PI/4DQPSK, Fullrate) | X | 3.24 | 65.99 | 10.64 | 4.77 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 1.56 | 61.71 | 6.84 |  | 80.0 |  |
|  |  | Z | 1.58 | 62.24 | 7.20 |  | 80.0 |  |
| $\begin{aligned} & 10090- \\ & \text { DAC } \end{aligned}$ | GPRS-FDD (TDMA, GMSK, TN 0-4) | X | 19.21 | 92.51 | 24.34 | 6.56 | 60.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 115.60 | 28.62 |  | 60.0 |  |
|  |  | Z | 100.00 | 117.45 | 29.44 |  | 60.0 |  |
| $\begin{aligned} & 10097- \\ & \mathrm{CAB} \end{aligned}$ | UMTS-FDD (HSDPA) | X | 1.97 | 68.64 | 16.58 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 1.80 | 68.08 | 15.77 |  | 150.0 |  |
|  |  | Z | 2.29 | 73.12 | 18.59 |  | 150.0 |  |
| $\begin{aligned} & 10098- \\ & \text { CAB } \end{aligned}$ | UMTS-FDD (HSUPA, Subtest 2) | X | 1.93 | 68.63 | 16.56 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 1.77 | 68.05 | 15.74 |  | 150.0 |  |
|  |  | Z | 2.25 | 73.20 | 18.63 |  | 150.0 |  |
| $\begin{aligned} & 10099- \\ & \text { DAC } \\ & \hline \end{aligned}$ | EDGE-FDD (TDMA, $\overline{8} \mathrm{PSK}, \mathrm{TN} 0-4$ ) | X | 19.33 | 97.96 | 32.93 | 9.56 | 60.0 | $\pm 9.6$ \% |
|  |  | Y | 21.25 | 107.21 | 37.08 |  | 60.0 |  |
|  |  | Z | 29.69 | 117.12 | 40.65 |  | 60.0 |  |
| $10100-$ CAE | LTE-FDD (SC-FDMA, 100\% RB, 20 MHz, QPSK) | X | 3.63 | 72.34 | 17.50 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.12 | 70.54 | 16.77 |  | 150.0 |  |
|  |  | Z | 3.66 | 74.09 | 18.73 |  | 150.0 |  |
| $\begin{aligned} & 10101- \\ & \text { CAE } \end{aligned}$ | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 100 \% \text { RB, } 20 \\ & \mathrm{MHz}, 16-\mathrm{QAM}) \end{aligned}$ | X | 3.54 | 68.64 | 16.46 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.22 | 67.66 | 16.03 |  | 150.0 |  |
|  |  | Z | 3.38 | 69.19 | 17.04 |  | 150.0 |  |
| 10102- <br> CAE | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 100 \% \text { RB, } 20 \\ & \text { MHz, } 64-Q A M) \end{aligned}$ | X | 3.63 | 68.48 | 16.50 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.32 | 67.62 | 16.12 |  | 150.0 |  |
|  |  | Z | 3.47 | 69.03 | 17.07 |  | 150.0 |  |
| $\begin{aligned} & 10103- \\ & \text { CAF } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 100 \% \mathrm{RB}, 20 \\ & \mathrm{MHz}, \text { QPSK) } \end{aligned}$ | X | 9.60 | 77.98 | 20.88 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 8.57 | 79.27 | 21.80 |  | 65.0 |  |
|  |  | Z | 9.60 | 82.02 | 23.04 |  | 65.0 |  |
| 10104~ CAF | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 100 \% \text { RB, } 20 \\ & \text { MHz, } 16-Q A M) \end{aligned}$ | X | 9.69 | 77.23 | 21.47 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 8.23 | 77.25 | 21.84 |  | 65.0 |  |
|  |  | Z | 8.54 | 78.60 | 22.55 |  | 65.0 |  |
| 10105-CAF | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 100 \% \text { RB, } 20 \\ & \mathrm{MHz}, 64-Q A M) \end{aligned}$ | X | 9.05 | 75.93 | 21.18 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 7.61 | 75.69 | 21.48 |  | 65.0 |  |
|  |  | Z | 7.84 | 76.85 | 22.11 |  | 65.0 |  |
| 10108-$\mathrm{CAF}$ | LTE-FDD (SC-FDMA, $100 \%$ RB, 10 $\mathrm{MHz}, ~ Q P S K$ ) | X | 3.21 | 71.41 | 17.30 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | $\bar{Y}$ | 2.73 | 69.90 | 16.65 |  | 150.0 |  |
|  |  | Z | 3.19 | 73.55 | 18.73 |  | 150.0 |  |
| $\begin{aligned} & 10109- \\ & \text { CAF } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 100 \% \text { RB, } 10 \\ & \mathrm{MHz}, 16-\mathrm{QAM}) \\ & \hline \end{aligned}$ | X | 3.22 | 68.43 | 16.43 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.87 | 67.56 | 15.94 |  | 150.0 |  |
|  |  | Z | 3.05 | 69.41 | 17.13 |  | 150.0 |  |
| 10110-$\mathrm{CAF}$ | LTE-FDD (SC-FDMA, 100\% RB, 5 MHz , QPSK). | X | 2.65 | 70.36 | 17.02 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.21 | 69.13 | 16.28 |  | 150.0 |  |
|  |  | Z | 2.67 | 73.44 | 18.72 |  | 150.0 |  |
| 10111CAF | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 100 \% \text { RB, } 5 \mathrm{MHz} \text {, } \\ & \text { 16-QAM) } \end{aligned}$ | X | 2.92 | 68.88 | 16.78 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.58 | 68.46 | 16.21 |  | 150.0 |  |
|  |  | Z | 2.91 | 71.43 | 17.92 |  | 150.0 |  |

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| 10149- CAE | LTE-FDD (SC-FDMA, $50 \% \mathrm{RB}, 20 \mathrm{MHz}$, 16-QAM) | X | 3.23 | 68.49 | 16.47 | 0.00 | 150.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 2.88 | 67.63 | 15.99 |  | 150.0 |  |
|  |  | Z | 3.06 | 69.48 | 17.18 |  | 150.0 |  |
| $\begin{aligned} & 10150- \\ & \text { CAE } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, $50 \%$ RB, 20 MHz , 64-QAM) | X | 3.34 | 68.30 | 16.46 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.00 | 67.60 | 16.04 |  | 150.0 |  |
|  |  | Z | 3.17 | 69.33 | 17.15 |  | 150.0 |  |
| $10151-$ <br> CAF | LTE-TDD (SC-FDMA, $50 \%$ RB, 20 MHz , QPSK) QPSK) | X | 9.84 | 79.35 | 21.54 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 9.60 | 82.68 | 23.15 |  | 65.0 |  |
|  |  | Z | 11.17 | 86.29 | 24.69 |  | 65.0 |  |
| $\begin{aligned} & 10152- \\ & \text { CAF } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 20 \mathrm{MHz}$, 16-QAM) | X | 9.38 | 77.46 | 21.41 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 7.87 | 77.55 | 21.64 |  | 65.0 |  |
|  |  | Z | 8.30 | 79.24 | 22.48 |  | 65.0 |  |
| $\begin{aligned} & 10153- \\ & \text { CAF } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \%$ RB, 20 MHz , 64-QAM) | X | 9.69 | 78.02 | 21.96 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 8.35 | 78.61 | 22.44 |  | 65.0 |  |
|  |  | Z | 8.80 | 80.29 | 23.26 |  | 65.0 |  |
| 10154CAF | LTE-FDD (SC-FDMA, $50 \%$ RB, 10 MHz , QPSK) | X | 2.73 | 70.94 | 17.37 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.26 | 69.58 | 16.56 |  | 150.0 |  |
|  |  | Z | 2.76 | 74.09 | 19.07 |  | 150.0 |  |
| $\begin{aligned} & 10155- \\ & \text { CAF } \end{aligned}$ | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 50 \% \mathrm{RB}, 10 \mathrm{MHz} \text {, } \\ & \text { 16-QAM) } \end{aligned}$ | X | 2.91 | 68.86 | 16.78 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.59 | 68.48 | 16.23 |  | 150.0 |  |
|  |  | Z | 2.91 | 71.46 | 17.95 |  | 150.0 |  |
| $\begin{aligned} & 10156- \\ & \text { CAF } \end{aligned}$ | LTE-FDD (SC-FDMA, $50 \%$ RB, 5 MHz , QPSK) | X | 2.32 | 70.75 | 17.13 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 1.82 | 69.20 | 15.59 |  | 150.0 |  |
|  |  | Z | 2.67 | 76.62 | 19.28 |  | 150.0 |  |
| $\overline{10157-}$ <br> CAF | LTE-FDD (SC-FDMA, $50 \%$ RB, 5 MHz , 16-QAM) | X | 2.51 | 68.55 | 15.88 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.02 | 67.19 | 14.01 |  | 150.0 |  |
|  |  | Z | 2.51 | 71.43 | 16.23 |  | 150.0 |  |
| $\begin{array}{\|l\|} \hline 10158- \\ \text { CAF } \\ \hline \end{array}$ | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 50 \% \mathrm{RB}, 10 \mathrm{MHz} \text {, } \\ & \text { 64-QAM) } \end{aligned}$ | X | 3.07 | 68.88 | 16.86 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.74 | 68.67 | 16.40 |  | 150.0 |  |
|  |  | Z | 3.06 | 71.46 | 18.00 |  | 150.0 |  |
| $\begin{aligned} & 10159- \\ & \text { CAF } \end{aligned}$ | LTE-FDD (SC-FDMA, $50 \%$ RB, 5 MHz , 64-QAM) | X | 2.63 | 68.95 | 16.16 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.12 | 67.60 | 14.28 |  | 150.0 |  |
|  |  | Z | 2.66 | 72.05 | 16.56 |  | 150.0 |  |
| $\begin{aligned} & 10160- \\ & \text { CAE } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 50 \% \mathrm{RB}, 15 \mathrm{MHz} \\ & \text { QPSK) } \end{aligned}$ | X | 3.07 | 69.70 | 16.85 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 2.79 | 69.30 | 16.59 |  | 150.0 |  |
|  |  | Z | 3.11 | 72.09 | 18.25 |  | 150.0 |  |
| 10161-$\mathrm{CAE}$ | LTE-FDD (SC-FDMA, $50 \%$ RB, 15 MHz , 16-QAM) | X | 3.23 | 68.15 | 16.42 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 2.89 | 67.55 | 15.96 |  | 150.0 |  |
|  |  | Z | 3.08 | 69.40 | 17.13 |  | 150.0 |  |
| $\begin{aligned} & 10162- \\ & \text { CAE } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, $50 \%$ RB, 15 MHz , 64-QAM) | X | 3.32 | 68.09 | 16.43 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.01 | 67.70 | 16.07 |  | 150.0 |  |
|  |  | Z | 3.19 | 69.52 | 17.22 |  | 150.0 |  |
| $\begin{array}{\|l\|} \hline 10166- \\ \text { CAF } \\ \hline \end{array}$ | LTE-FDD (SC-FDMA, $50 \%$ RB, 1.4 MHz , QPSK) | X | 4.36 | 71.31 | 20.07 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.63 | 70.37 | 19.86 |  | 150.0 |  |
|  |  | Z | 3.95 | 73.18 | 21.42 |  | 150.0 |  |
| $\begin{aligned} & 10167- \\ & \text { CAF } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 50 \% \mathrm{RB}, 1.4 \mathrm{MHz} \text {, } \\ & \text { 16-QAM) } \end{aligned}$ | X | 5.89 | 75.08 | 20.88 | 3.01 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.45 | 73.33 | 20.30 |  | 150.0 |  |
|  |  | Z | 5.63 | 79.06 | 22.89 |  | 150.0 |  |


| $\begin{aligned} & 10168- \\ & \text { CAF } \end{aligned}$ | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 50 \% \text { RB, } 1.4 \mathrm{MHz}, \\ & \text { 64-QAM) } \end{aligned}$ | X | 6.40 | 76.88 | 21.92 | 3.01 | 150.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 5.01 | 75.97 | 21.82 |  | 150.0 |  |
|  |  | Z | 6.77 | 83.15 | 24.88 |  | 150.0 |  |
| $\begin{aligned} & 10169- \\ & \text { CAE } \end{aligned}$ | LTE-FDD (SC-FDMA, 1 RB, 20 MHz , QPSK) | X | 4.60 | 75.35 | 21.65 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.97 | 69.56 | 19.58 |  | 150.0 |  |
|  |  | Z | 3.41 | 73.71 | 21.83 |  | 150.0 |  |
| $10170-$ <br> CAE | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 1 \text { RB, } 20 \mathrm{MHz} \text {, } \\ & \text { 16-QAM) } \end{aligned}$ | X | 7.83 | 83.93 | 24.50 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.08 | 75.84 | 22.10 |  | 150.0 |  |
|  |  | $\underline{Z}$ | 6.92 | 87.94 | 27.06 |  | 150.0 |  |
| 10171- <br> AAE | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 1 \text { RB, } 20 \mathrm{MHz} \text {, } \\ & \text { 64-QAM) } \end{aligned}$ | X | 6.05 | 78.35 | 21.51 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.33 | 71.38 | 19.14 |  | 150.0 |  |
|  |  | Z | 4.75 | 79.49 | 22.76 |  | 150.0 |  |
| $\begin{aligned} & 10172- \\ & \text { CAF } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 20 MHz , QPSK) | X | 32.12 | 106.34 | 32.04 | 6.02 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 25.48 | 111.02 | 34.77 |  | 65.0 |  |
|  |  | $\underline{Z}$ | 100.00 | 141.62 | 43.22 |  | 65.0 |  |
| $\begin{aligned} & 10173- \\ & \text { CAF } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 1 \mathrm{RB}, 20 \mathrm{MHz}, \\ & \text { 16-QAM) } \end{aligned}$ | X | 26.36 | 98.72 | 28.41 | 6.02 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 57.87 | 120.75 | 35.39 |  | 65.0 |  |
|  |  | Z | 100.00 | 131.52 | 37.94 |  | 65.0 |  |
| $\begin{aligned} & 10174- \\ & \text { CAF } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 20 MHz , 64-QAM) | X | 22.32 | 94.77 | 26.80 | 6.02 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 36.69 | 110.68 | 32.10 |  | 65.0 |  |
|  |  | Z | 100.00 | 129.19 | 36.70 |  | 65.0 |  |
| $\begin{aligned} & 10175- \\ & \text { CAF } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, 1 RB, 10 MHz , QPSK) | X | 4.51 | 74.86 | 21.35 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.93 | 69.23 | 19.32 |  | 150.0 |  |
|  |  | Z | 3.36 | 73.27 | 21.52 |  | 150.0 |  |
| $\begin{aligned} & 10176- \\ & \text { CAF } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, 1 RB, 10 MHz , 16-QAM) | X | 7.84 | 83.95 | 24.51 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | $Y$ | 4.09 | 75.86 | 22.12 |  | 150.0 |  |
|  |  | Z | 6.94 | 87.99 | 27.08 |  | 150.0 |  |
| $\begin{aligned} & 10177- \\ & \text { CAH } \end{aligned}$ | LTE-FDD (SC-FDMA, 1 RB, 5 MHz , QPSK) | X | 4.57 | 75.10 | 21.48 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.95 | 69.39 | 19.42 |  | 150.0 |  |
|  |  | Z | 3.39 | 73.47 | 21.63 |  | 150.0 |  |
| $\begin{aligned} & 10178- \\ & \text { CAF } \end{aligned}$ | LTE-FDD (SC-FDMA, 1 RB, 5 MHz , 16QAM) | X | 7.66 | 83.48 | 24.31 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.04 | 75.62 | 21.99 |  | 150.0 |  |
|  |  | $\underline{Z}$ | 6.81 | 87.55 | 26.90 |  | 150.0 |  |
| $\begin{aligned} & 10179- \\ & \text { CAF } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 1 \mathrm{RB}, 10 \mathrm{MHz} \text {, } \\ & \text { 64-QAM) } \end{aligned}$ | X | 6.80 | 80.80 | 22.79 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.67 | 73.50 | 20.50 |  | 150.0 |  |
|  |  | Z | 5.74 | 83.57 | 24.78 |  | 150.0 |  |
| $\begin{aligned} & 10180- \\ & \text { CAF } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, 1 RB, 5 MHz , 64 QAM) | X | 6.00 | 78.18 | 21.42 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.32 | 71.31 | 19.09 |  | 150.0 |  |
|  |  | Z | 4.73 | 79.37 | 22.69 |  | 150.0 |  |
| $\begin{aligned} & 10181- \\ & \text { CAE } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, 1 RB, 15 MHz , QPSK) | X | 4.56 | 75.08 | 21.47 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.95 | 69.37 | 19.41 |  | 150.0 |  |
|  |  | Z | 3.38 | 73.45 | 21.62 |  | 150.0 |  |
| $\begin{aligned} & 10182- \\ & \text { CAE } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, 1 RB, 15 MHz , 16-QAM) | X | 7.65 | 83.46 | 24.30 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.04 | 75.59 | 21.97 |  | 150.0 |  |
|  |  | Z | 6.79 | 87.50 | 26.88 |  | 150.0 |  |
| 10183- $A A D$ | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 1 \mathrm{RB}, 15 \mathrm{MHz}, \\ & \text { 64-QAM) } \end{aligned}$ | X | 5.99 | 78.15 | 21.41 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.31 | 71.28 | 19.08 |  | 150.0 |  |
|  |  | Z | 4.72 | 79.33 | 22.67 |  | 150.0 |  |


| 10184- CAE | LTE-FDD (SC-FDMA, 1 RB, 3 MHz , QPSK) | X | 4.58 | 75.13 | 21.50 | 3.01 | 150.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 2.96 | 69.42 | 19.43 |  | 150.0 |  |
|  |  | Z | 3.40 | 73.51 | 21.65 |  | 150.0 |  |
| $\begin{aligned} & 10185- \\ & \text { CAE } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16QAM) | X | 7.69 | 83.54 | 24.34 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.06 | 75.67 | 22.01 |  | 150.0 |  |
|  |  | Z | 6.84 | 87.64 | 26.93 |  | 150.0 |  |
| $\begin{aligned} & 10186- \\ & \text { AAE } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, 1 RB, 3 MHz , 64QAM) | X | 6.02 | 78.23 | 21.44 | 3.01 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 3.33 | 71.36 | 19.12 |  | 150.0 |  |
|  |  | Z | 4.75 | 79.45 | 22.72 |  | 150.0 |  |
| $\begin{aligned} & 10187- \\ & \text { CAF } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz , QPSK) | X | 4.58 | 75.15 | 21.53 | 3.01 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 2.97 | 69.47 | 19.50 |  | 150.0 |  |
|  |  | Z | 3.41 | 73.59 | 21.73 |  | 150.0 |  |
| $\begin{aligned} & 10188- \\ & \text { CAF } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 1 \text { RB, } 1.4 \mathrm{MHz} \text {, } \\ & \text { 16-QAM) } \end{aligned}$ | X | 8.08 | 84.57 | 24.81 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.19 | 76.40 | 22.42 |  | 150.0 |  |
|  |  | Z | 7.29 | 89.05 | 27.55 |  | 150.0 |  |
| $\begin{aligned} & 10189- \\ & \text { AAF } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 1 \text { RB, } 1.4 \mathrm{MHz} \text {, } \\ & \text { 64-QAM) } \end{aligned}$ | X | 6.22 | 78.86 | 21.77 | 3.01 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 3.41 | 71.81 | 19.41 |  | 150.0 |  |
|  |  | Z | 4.95 | 80.26 | 23.14 |  | 150.0 |  |
| $\begin{aligned} & 10193- \\ & \text { CAC } \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Greenfield, 6.5 Mbps , BPSK) | X | 4.78 | 66.90 | 16.38 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.50 | 66.72 | 16.26 |  | 150.0 |  |
|  |  | Z | 4.53 | 67.38 | 16.70 |  | 150.0 |  |
| $\begin{aligned} & 10194- \\ & \text { CAC } \end{aligned}$ | IEEE 802.11n (HT Greenfield, 39 Mbps , 16-QAM) | X | 5.00 | 67.31 | 16.48 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.67 | 67.04 | 16.39 |  | 150.0 |  |
|  |  | Z | 4.70 | 67.68 | 16.83 |  | 150.0 |  |
| $\begin{aligned} & 10195- \\ & \text { CAC } \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM) | X | 5.04 | 67.29 | 16.47 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.71 | 67.07 | 16.41 |  | 150.0 |  |
|  |  | Z | 4.74 | 67.71 | 16.84 |  | 150.0 |  |
| $\begin{aligned} & 10196- \\ & \text { CAC } \end{aligned}$ | IEEE 802.11n (HT Mixed, 6.5 Mbps , BPSK) | X | 4.82 | 67.02 | 16.42 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.50 | 66.78 | 16.28 |  | 150.0 |  |
|  |  | Z | 4.53 | 67.44 | 16.72 |  | 150.0 |  |
| $\begin{aligned} & 10197- \\ & \text { CAC } \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Mixed, 39 Mbps , 16QAM) | X | 5.02 | 67.32 | 16.48 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.69 | 67.06 | 16.41 |  | 150.0 |  |
|  |  | Z | 4.71 | 67.70 | 16.84 |  | 150.0 |  |
| $\begin{aligned} & 10198- \\ & \text { CAC } \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Mixed, 65 Mbps , 64QAM) | X | 5.05 | 67.30 | 16.47 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.71 | 67.09 | 16.42 |  | 150.0 |  |
|  |  | Z | 4.74 | 67.73 | 16.86 |  | 150.0 |  |
| $\begin{aligned} & 10219- \\ & \text { CAC } \end{aligned}$ | IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK) | X | 4.77 | 67.05 | 16.40 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.45 | 66.80 | 16.24 |  | 150.0 |  |
|  |  | Z | 4.48 | 67.48 | 16.70 |  | 150.0 |  |
| $\begin{aligned} & 10220- \\ & \text { CAC } \end{aligned}$ | IEEE 802.11n (HT Mixed, $43.3 \mathrm{Mbps}, 16-$ QAM) | X | 5.03 | 67.33 | 16.49 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.68 | 67.03 | 16.40 |  | 150.0 |  |
|  |  | Z | 4.70 | 67.66 | 16.83 |  | 150.0 |  |
| $\begin{array}{\|l\|} \hline 10221- \\ \text { CAC } \\ \hline \end{array}$ | IEEE 802.11n (HT Mixed, 72.2 Mbps, 64QAM) | X | 5.05 | 67.25 | 16.47 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.72 | 67.02 | 16.41 |  | 150.0 |  |
|  |  | Z | 4.74 | 67.64 | 16.83 |  | 150.0 |  |
| $\begin{aligned} & 10222- \\ & \text { CAC } \end{aligned}$ | IEEE 802.11 n (HT Mixed, 15 Mbps , BPSK) | X | 5.34 | 67.61 | 16.61 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.07 | 67.21 | 16.54 |  | 150.0 |  |
|  |  | Z | 5.08 | 67.73 | 16.91 |  | 150.0 |  |



| $\begin{aligned} & 10239- \\ & \text { CAE } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 1 \text { RB, } 15 \mathrm{MHz} \text {, } \\ & \text { 64-QAM) } \end{aligned}$ | X | 21.89 | 94.52 | 26.76 | 6.02 | 65.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 46.90 | 115.06 | 33.29 |  | 65.0 |  |
|  |  | Z | 100.00 | 129.10 | 36.67 |  | 65.0 |  |
| $\begin{aligned} & 10240- \\ & \text { CAE } \\ & \hline \end{aligned}$ | $\text { LTE-TDD (SC-FDMA, } 1 \text { RB, } 15 \mathrm{MHz} \text {, }$ QPSK) | X | 31.00 | 106.13 | 32.04 | 6.02 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 40.53 | 120.63 | 37.43 |  | 65.0 |  |
|  |  | Z | 100.00 | 141.21 | 42.99 |  | 65.0 |  |
| $\begin{aligned} & 10241- \\ & \text { CAA } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 50 \% \mathrm{RB}, 1 . \overline{4} \mathrm{MHz} \\ & \text { 16-QAM) } \end{aligned}$ | X | 15.20 | 88.40 | 27.99 | 6.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 11.69 | 87.73 | 28.05 |  | 65.0 |  |
|  |  | Z | 16.07 | 96.04 | 31.20 |  | 65.0 |  |
| $\begin{aligned} & 10242- \\ & \text { CAA } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 50 \% \mathrm{RB}, 1.4 \mathrm{MHz} \text {, } \\ & \text { 64-QAM) } \end{aligned}$ | X | 14.49 | 87.29 | 27.50 | 6.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 10.22 | 84.78 | 26.83 |  | 65.0 |  |
|  |  | Z | 15.79 | 95.59 | 30.95 |  | 65.0 |  |
| $\begin{aligned} & 10243- \\ & \text { CAA } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 1.4 \mathrm{MHz}$, QPSK) | X | 12.40 | 86.09 | 27.90 | 6.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 8.19 | 81.47 | 26.43 |  | 65.0 |  |
|  |  | Z | 9.24 | 85.48 | 28.29 |  | 65.0 |  |
| $\begin{aligned} & 10244- \\ & \text { CAC } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 50 \% \text { RB, } 3 \mathrm{MHz} \text {, } \\ & \text { 16-QAM) } \end{aligned}$ | X | 11.54 | 82.02 | 22.22 | 3.98 | 65.0 | $\pm 9.6 \%$ |
|  |  | Y | 9.48 | 81.46 | 20.89 |  | 65.0 |  |
|  |  | Z | 12.71 | 86.40 | 22.44 |  | 65.0 |  |
| $\begin{aligned} & 10245- \\ & \text { CAC } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 50 \% \text { RB, } 3 \mathrm{MHz} \text {, } \\ & \text { 64-QAM) } \end{aligned}$ | X | 11.44 | 81.67 | 22.06 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 9.07 | 80.51 | 20.47 |  | 65.0 |  |
|  |  | Z | 11.70 | 84.81 | 21.83 |  | 65.0 |  |
| $\begin{aligned} & 10246- \\ & \text { CAC } \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \%$ RB, 3 MHz , QPSK) | X | 10.31 | 82.48 | 22.10 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 9.63 | 84.19 | 21.69 |  | 65.0 |  |
|  |  | Z | 14.42 | 91.22 | 24.11 |  | 65.0 |  |
| $\begin{aligned} & 10247- \\ & \text { CAE } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 50 \% \text { RB, } 5 \mathrm{MHz} \text {, } \\ & \text { 16-QAM) } \end{aligned}$ | X | 9.10 | 78.58 | 21.15 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 7.30 | 77.79 | 20.02 |  | 65.0 |  |
|  |  | Z | 8.19 | 80.29 | 21.02 |  | 65.0 |  |
| $\begin{aligned} & 10248- \\ & \text { CAE } \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 50 \% \text { RB, } 5 \mathrm{MHz} \text {, } \\ & \text { 64-QAM) } \end{aligned}$ | X | 9.13 | 78.20 | 21.01 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 7.16 | 77.02 | 19.70 |  | 65.0 |  |
|  |  | Z | 7.86 | 79.17 | 20.57 |  | 65.0 |  |
| $\begin{aligned} & 10249- \\ & \text { CAE } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 5 \mathrm{MHz}$, QPSK) | X | 10.61 | 82.90 | 22.61 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 11.92 | 88.38 | 24.07 |  | 65.0 |  |
|  |  | Z | 18.47 | 96.60 | 26.87 |  | 65.0 |  |
| $\begin{aligned} & 10250- \\ & \text { CAE } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 50 \% \text { RB, } 10 \mathrm{MHz} \text {, } \\ & \text { 16-QAM) } \end{aligned}$ | X | 9.67 | 79.53 | 22.36 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 8.55 | 80.92 | 22.90 |  | 65.0 |  |
|  |  | Z | 9.43 | 83.45 | 23.99 |  | 65.0 |  |
| $\begin{aligned} & 10251- \\ & \text { CAE } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 50 \% \mathrm{RB}, 10 \mathrm{MHz} \text {, } \\ & \text { 64-QAM) } \end{aligned}$ | X | 9.25 | 77.73 | 21.44 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 7.81 | 78.08 | 21.44 |  | 65.0 |  |
|  |  | Z | 8.39 | 80.07 | 22.34 |  | 65.0 |  |
| $\begin{aligned} & 10252- \\ & \text { CAE } \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 50 \% \mathrm{RB}, 10 \mathrm{MHz} \text {, } \\ & \text { QPSK) } \end{aligned}$ | X | 10.35 | 81.73 | 22.54 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 11.25 | 87.35 | 24.73 |  | 65.0 |  |
|  |  | Z | 14.90 | 93.35 | 26.99 |  | 65.0 |  |
| $\begin{aligned} & 10253- \\ & \text { CAE } \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 50 \% \text { RB, } 15 \mathrm{MHz} \text {, } \\ & \text { 16-QAM) } \end{aligned}$ | X | 9.18 | 77.01 | 21.32 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 7.67 | 76.96 | 21.38 |  | 65.0 |  |
|  |  | Z | 8.07 | 78.58 | 22.18 |  | 65.0 |  |
| $\begin{aligned} & \text { 10254- } \\ & \text { CAE } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 50 \% \text { RB, } 15 \mathrm{MHz} \text {, } \\ & \text { 64-QAM) } \end{aligned}$ | X | 9.51 | 77.59 | 21.83 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | $Y$ | 8.12 | 77.94 | 22.10 |  | 65.0 |  |
|  |  | Z | 8.53 | 79.55 | 22.87 |  | 65.0 |  |

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| 10255- CAE | LTE-TDD (SC-FDMA, $50 \%$ RB, 15 MHz , QPSK) | X | 9.66 | 79.25 | 21.74 | 3.98 | 65.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 9.21 | 82.22 | 23.19 |  | 65.0 |  |
| $\begin{aligned} & 10256- \\ & \text { CAA } \end{aligned}$ |  | Z | 10.61 | 85.65 | 24.67 |  | 65.0 |  |
|  | LTE-TDD (SC-FDMA, 100\% RB, 1.4 $\mathrm{MHz}, 16-\mathrm{QAM}$ ) | X | 11.12 | 81.22 | 21.37 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 7.30 | 76.74 | 18.05 |  | 65.0 |  |
| $\begin{aligned} & 10257- \\ & \text { CAA } \\ & \hline \end{aligned}$ |  | Z | 8.86 | 79.77 | 18.95 |  | 65.0 |  |
|  | LTE-TDD (SC-FDMA, 100\% RB, 1.4 $\mathrm{MHz}, 64-\mathrm{QAM}$ ) | X | 11.03 | 80.77 | 21.15 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 6.90 | 75.55 | 17.47 |  | 65.0 |  |
| $\begin{aligned} & 10258- \\ & \text { CAA } \end{aligned}$ |  | Z | 8.00 | 77.93 | 18.14 |  | 65.0 |  |
|  | LTE-TDD (SC-FDMA, 100\% RB, 1.4 $\mathrm{MHz}, \mathrm{QPSK})$ | X | 10.01 | 81.84 | 21.51 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 6.80 | 78.08 | 18.61 |  | 65.0 |  |
| $\begin{aligned} & 10259- \\ & \text { CAC } \end{aligned}$ |  | Z | 8.78 | 82.35 | 20.16 |  | 65.0 |  |
|  | 16-TDD (SC-FDMA, $100 \%$ RB, 3 MHz , | X | 9.31 | 78.82 | 21.54 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 7.80 | 78.97 | 21.06 |  | 65.0 |  |
| $\begin{aligned} & 10260- \\ & \text { CAC } \end{aligned}$ |  | Z | 8.71 | 81.52 | 22.11 |  | 65.0 |  |
|  | 64-QAM) | X | 9.35 | 78.65 | 21.50 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 7.74 | 78.54 | 20.90 |  | 65.0 |  |
| $\begin{aligned} & 10261- \\ & \text { CAC } \\ & \hline \end{aligned}$ |  | Z | 8.53 | 80.86 | 21.86 |  | 65.0 |  |
|  | LTE-TDD (SC-FDMA, $100 \% \mathrm{RB}, 3 \mathrm{MHz}$, QPSK) | X | 10.28 | 82.11 | 22.51 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 10.92 | 86.93 | 24.01 |  | 65.0 |  |
| $\begin{aligned} & 10262- \\ & \text { CAE } \end{aligned}$ |  | $\underline{Z}$ | 15.27 | 93.62 | 26.42 |  | 65.0 |  |
|  | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, 100\% RB, } 5 \mathrm{MHz} \text {, } \\ & \text { 16-QAM) } \end{aligned}$ | X | 9.66 | 79.50 | 22.33 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 8.53 | 80.85 | 22.85 |  | 65.0 |  |
| $\begin{aligned} & 10263- \\ & \text { CAE } \end{aligned}$ |  | Z | 9.40 | 83.37 | 23.94 |  | 65.0 |  |
|  | 64-QAM) (SC-FDMA, $100 \%$ RB, 5 MHz , | X | 9.25 | 77.74 | 21.45 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 7.80 | 78.07 | 21.44 |  | 65.0 |  |
| $\begin{aligned} & 10264- \\ & \text { CAE } \end{aligned}$ |  | Z | 8.37 | 80.04 | 22.33 |  | 65.0 |  |
|  | LTE-TDD (SC-FDMA, $100 \%$ RB, 5 MHz , QPSK) | X | 10.31 | 81.65 | 22.49 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 11.12 | 87.10 | 24.62 |  | 65.0 |  |
| $\begin{aligned} & 10265- \\ & \text { CAE } \end{aligned}$ |  | Z | 14.67 | 93.03 | 26.86 |  | 65.0 |  |
|  | LTE-TDD (SC-FDMA, $100 \%$ RB, 10 $\mathrm{MHz}, 16-\mathrm{QAM}$ ) | X | 9.37 | 77.47 | 21.42 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 7.87 | 77.56 | 21.65 |  | 65.0 |  |
| $\begin{aligned} & 10266- \\ & \text { CAE } \end{aligned}$ |  | Z | 8.30 | 79.25 | 22.48 |  | 65.0 |  |
|  | LTE-TDD (SC-FDMA, 100\% RB, 10 $\mathrm{MHz}, 64-\mathrm{QAM}$ ) | X | 9.69 | 78.02 | 21.95 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 8.35 | 78.60 | 22.43 |  | 65.0 |  |
| $\begin{aligned} & 10267- \\ & \text { CAE } \end{aligned}$ |  | Z | 8.79 | 80.28 | 23.25 |  | 65.0 |  |
|  | LTE-TDD (SC-FDMA, 100\% RB, 10 $\mathrm{MHz}, \mathrm{QPSK}$ ) | X | 9.83 | 79.33 | 21.53 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 9.57 | 82.63 | 23.13 |  | 65.0 |  |
| $\begin{aligned} & 10268- \\ & \text { CAE } \\ & \hline \end{aligned}$ |  | Z | 11.14 | 86.22 | 24.67 |  | 65.0 |  |
|  | LTE-TDD (SC-FDMA, 100\% RB, 15 $\mathrm{MHz}, 16-\mathrm{QAM}$ ) | X | 9.75 | 76.94 | 21.50 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 8.31 | 76.97 | 21.85 |  | 65.0 |  |
| $\begin{aligned} & 10269- \\ & \text { CAE } \end{aligned}$ |  | Z | 8.58 | 78.21 | 22.50 |  | 65.0 |  |
|  | LTE-TDD (SC-FDMA, 100\% RB, 15 $\mathrm{MHz}, 64-\mathrm{QAM}$ ) | X | 9.68 | 76.63 | 21.46 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 8.23 | 76.50 | 21.72 |  | 65.0 |  |
| $\begin{aligned} & 10270- \\ & \text { CAE } \\ & \hline \end{aligned}$ |  | Z | 8.46 | 77.65 | 22.33 |  | 65.0 |  |
|  | LTE-TDD (SC-FDMA, 100\% RB, 15 MHz, QPSK) | X | 9.55 | 77.46 | 20.93 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 8.64 | 78.97 | 21.93 |  | 65.0 |  |
|  |  | Z | 9.32 | 81.05 | 22.93 |  | 65.0 |  |


| $\begin{aligned} & 10274- \\ & \text { CAB } \\ & \hline \end{aligned}$ | UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.10) | X | 2.73 | 66.78 | 15.78 | 0.00 | 150.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 2.55 | 66.65 | 15.27 |  | 150.0 |  |
|  |  | Z | 2.75 | 68.72 | 16.54 |  | 150.0 |  |
| $\begin{aligned} & 10275- \\ & \text { CAB } \\ & \hline \end{aligned}$ | UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.4) | X | 1.87 | 69.90 | 16.79 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 1.59 | 68.43 | 15.65 |  | 150.0 |  |
|  |  | Z | 2.20 | 75.02 | 19.24 |  | 150.0 |  |
| $\begin{aligned} & 10277- \\ & \text { CAA } \\ & \hline \end{aligned}$ | PHS (QPSK) | X | 7.66 | 72.68 | 16.62 | 9.03 | 50.0 | $\pm 9.6$ \% |
|  |  | Y | 4.18 | 66.19 | 11.16 |  | 50.0 |  |
|  |  | Z | 4.13 | 66.37 | 11.19 |  | 50.0 |  |
| $\begin{aligned} & \text { 10278- } \\ & \text { CAA } \end{aligned}$ | PHS (QPSK, BW 884MHz, Rolloff 0.5) | X | 10.94 | 81.02 | 21.98 | 9.03 | 50.0 | $\pm 9.6$ \% |
|  |  | Y | 7.49 | 76.58 | 18.26 |  | 50.0 |  |
|  |  | Z | 7.86 | 77.61 | 18.61 |  | 50.0 |  |
| $\begin{aligned} & 10279- \\ & \text { CAA } \\ & \hline \end{aligned}$ | PHS (QPSK, BW 884MHz, Rolloff 0.38) | X | 11.14 | 81.24 | 22.06 | 9.03 | 50.0 | $\pm 9.6$ \% |
|  |  | Y | 7.62 | 76.77 | 18.37 |  | 50.0 |  |
|  |  | Z | 7.98 | 77.79 | 18.71 |  | 50.0 |  |
| $\begin{aligned} & 10290- \\ & \text { AAB } \\ & \hline \end{aligned}$ | CDMA2000, RC1, SO55, Full Rate | X | 2.02 | 72.05 | 16.87 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 1.33 | 68.08 | 13.10 |  | 150.0 |  |
|  |  | Z | 5.38 | 87.48 | 20.69 |  | 150.0 |  |
| $\begin{aligned} & 10291- \\ & \text { AAB } \\ & \hline \end{aligned}$ | CDMA2000, RC3, SO55, Full Rate | X | 1.18 | 69.79 | 15.81 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 0.73 | 65.15 | 11.37 |  | 150.0 |  |
|  |  | Z | 3.84 | 87.72 | 20.65 |  | 150.0 |  |
| $\begin{aligned} & 10292- \\ & \text { AAB } \\ & \hline \end{aligned}$ | CDMA2000, RC3, SO32, Full Rate | X | 1.55 | 75.05 | 18.57 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 1.00 | 69.92 | 14.02 |  | 150.0 |  |
|  |  | Z | 100.00 | 134.47 | 33.06 |  | 150.0 |  |
| $\begin{aligned} & 10293- \\ & \text { AAB } \end{aligned}$ | CDMA2000, RC3, SO3, Full Rate | X | 2.21 | 80.93 | 21.38 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.08 | 79.76 | 18.45 |  | 150.0 |  |
|  |  | Z | 100.00 | 139.87 | 35.55 |  | 150.0 |  |
| $\begin{aligned} & 10295- \\ & \text { AAB } \end{aligned}$ | CDMA2000, RC1, SO3, 1/8th Rate 25 fr. | X | 11.13 | 82.58 | 24.08 | 9.03 | 50.0 | $\pm 9.6$ \% |
|  |  | Y | 14.34 | 89.67 | 25.47 |  | 50.0 |  |
|  |  | Z | 17.18 | 93.30 | 26.68 |  | 50.0 |  |
| $\begin{aligned} & 10297- \\ & \text { AAD } \end{aligned}$ | $\text { LTE-FDD (SC-FDMA, } 50 \% \mathrm{RB}, 20 \mathrm{MHz} \text {, }$ QPSK) | X | 3.22 | 71.51 | 17.36 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.74 | 70.01 | 16.73 |  | 150.0 |  |
|  |  | Z | 3.22 | 73.71 | 18.81 |  | 150.0 |  |
| $\begin{aligned} & \hline 10298- \\ & \text { AAD } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 50 \% \text { RB, } 3 \mathrm{MHz} \text {, } \\ & \text { QPSK) } \end{aligned}$ | X | 2.12 | 70.61 | 16.68 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 1.48 | 67.44 | 13.59 |  | 150.0 |  |
|  |  | Z | 2.54 | 76.34 | 17.79 |  | 150.0 |  |
| $\begin{array}{\|l} \hline 10299- \\ \text { AAD } \\ \hline \end{array}$ | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 50 \% \text { RB, } 3 \mathrm{MHz} \text {, } \\ & \text { 16-QAM) } \end{aligned}$ | X | 4.96 | 77.74 | 19.43 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.19 | 73.05 | 15.98 |  | 150.0 |  |
|  |  | Z | 13.80 | 92.66 | 22.38 |  | 150.0 |  |
| $\begin{aligned} & 10300- \\ & \text { AAD } \end{aligned}$ | LTE-FDD (SC-FDMA, $50 \%$ RB, 3 MHz , 64-QAM) | X | 3.67 | 72.02 | 16.38 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 2.03 | 66.12 | 12.02 |  | 150.0 |  |
|  |  | Z | 2.70 | 70.04 | 13.54 |  | 150.0 |  |
| $\begin{aligned} & 10301- \\ & \text { AAA } \end{aligned}$ | IEEE 802.16e WiMAX (29:18, 5 ms , 10 MHz, QPSK, PUSC) | X | 6.27 | 69.26 | 19.45 | 4.17 | 80.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.47 | 68.28 | 18.78 |  | 80.0 |  |
|  |  | Z | 5.65 | 69.45 | 19.41 |  | 80.0 |  |
| $\begin{aligned} & 10302- \\ & \text { AAA } \end{aligned}$ | IEEE 802.16e WiMAX ( $29: 18,5 \mathrm{~ms}$, 10 MHz, QPSK, PUSC, 3 CTRL symbols) | X | 6.79 | 69.98 | 20.24 | 4.96 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 5.81 | 68.13 | 19.08 |  | 80.0 |  |
|  |  | Z | 5.96 | 69.31 | 19.75 |  | 80.0 |  |

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| 10402- $\mathrm{AAD}$ | IEEE 802.11ac WiFi (80MHz, 64-QAM, 99 pc duty cycle) | X | 5.92 | 68.01 | 16.64 | 0.00 | 150.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 5.63 | 67.57 | 16.57 |  | 150.0 |  |
|  |  | Z | 5.64 | 68.02 | 16.88 |  | 150.0 |  |
| $\begin{aligned} & 10403- \\ & \mathrm{AAB} \\ & \hline \end{aligned}$ | CDMA2000 (1xEV-DO, Rev. 0) | X | 2.02 | 72.05 | 16.87 | 0.00 | 115.0 | $\pm 9.6$ \% |
|  |  | Y | 1.33 | 68.08 | 13.10 |  | 115.0 |  |
|  |  | Z | 5.38 | 87.48 | 20.69 |  | 115.0 |  |
| $\begin{aligned} & 10404- \\ & \text { AAB } \\ & \hline \end{aligned}$ | CDMA2000 (1xEV-DO, Rev. A) | X | 2.02 | 72.05 | 16.87 | 0.00 | 115.0 | $\pm 9.6$ \% |
|  |  | Y | 1.33 | 68.08 | 13.10 |  | 115.0 |  |
|  |  | Z | 5.38 | 87.48 | 20.69 |  | 115.0 |  |
| $\begin{aligned} & 10406- \\ & \mathrm{AAB} \\ & \hline \end{aligned}$ | CDMA2000, RC3, SO32, SCH 0, Full Rate | X | 100.00 | 123.59 | 32.30 | 0.00 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 127.86 | 33.09 |  | 100.0 |  |
|  |  | Z | 100.00 | 123.04 | 30.66 |  | 100.0 |  |
| $\begin{aligned} & 10410- \\ & \text { AAE } \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 10 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$, Subframe Conf=4) | X | 100.00 | 117.66 | 30.25 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 123.71 | 31.68 |  | 80.0 |  |
|  |  | Z | 100.00 | 125.06 | 32.10 |  | 80.0 |  |
| $\begin{aligned} & 10415- \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle) | X | 1.03 | 63.82 | 15.39 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 0.95 | 63.14 | 14.76 |  | 150.0 |  |
|  |  | Z | 1.05 | 65.76 | 16.99 |  | 150.0 |  |
| $\begin{aligned} & \text { 10416- } \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (ERPOFDM, 6 Mbps , 99 pc duty cycle) | X | 4.78 | 66.90 | 16.39 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.50 | 66.77 | 16.34 |  | 150.0 |  |
|  |  | Z | 4.53 | 67.42 | 16.78 |  | 150.0 |  |
| $\begin{aligned} & 10417- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 99pc duty cycle) | X | 4.78 | 66.90 | 16.39 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.50 | 66.77 | 16.34 |  | 150.0 |  |
|  |  | Z | 4.53 | 67.42 | 16.78 |  | 150.0 |  |
| $\begin{aligned} & \text { 10418- } \\ & \text { AAA } \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 6 Mbps, 99pc duty cycle, Long preambule) | X | 4.76 | 67.04 | 16.38 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.49 | 66.93 | 16.36 |  | 150.0 |  |
|  |  | Z | 4.53 | 67.63 | 16.83 |  | 150.0 |  |
| 10419- <br> AAA | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, $6 \mathrm{Mbps}, 99 \mathrm{pc}$ duty cycle, Short preambule) | X | 4.79 | 67.00 | 16.40 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.51 | 66.88 | 16.36 |  | 150.0 |  |
|  |  | Z | 4.55 | 67.55 | 16.82 |  | 150.0 |  |
| $\begin{aligned} & 10422- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK) | X | 4.92 | 67.01 | 16.41 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.63 | 66.87 | 16.38 |  | 150.0 |  |
|  |  | Z | 4.66 | 67.51 | 16.81 |  | 150.0 |  |
| $\begin{aligned} & 10423- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Greenfield, 43.3 Mbps, 16-QAM) | X | 5.17 | 67.45 | 16.57 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.80 | 67.19 | 16.49 |  | 150.0 |  |
|  |  | Z | 4.81 | 67.82 | 16.91 |  | 150.0 |  |
| $\begin{aligned} & 10424- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Greenfield, 72.2 Mbps, 64-QAM) | X | 5.06 | 67.37 | 16.53 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.72 | 67.14 | $16 . \overline{46}$ |  | 150.0 |  |
|  |  | Z | 4.74 | 67.79 | 16.90 |  | 150.0 |  |
| $\begin{aligned} & 10425- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Greenfield, 15 Mbps , BPSK) | X | 5.61 | 67.73 | 16.66 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.37 | 67.58 | 16.73 |  | 150.0 |  |
|  |  | Z | 5.35 | 67.97 | 17.02 |  | 150.0 |  |
| 10426-$\mathrm{AAB}$ | IEEE 802.11 n (HT Greenfield, 90 Mbps , 16-QAM) | X | 5.63 | 67.77 | 16.67 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.40 | 67.71 | 16.79 |  | 150.0 |  |
|  |  | Z | 5.39 | 68.12 | 17.09 |  | 150.0 |  |


| $\begin{aligned} & 10427- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Greenfield, 150 Mbps , 64-QAM) | X | 5.66 | 67.84 | 16.70 | 0.00 | 150.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 5.39 | 67.59 | 16.72 |  | 150.0 |  |
| 10430- <br> AAC | LTE-FDD (OFDMA, 5 MHz , E-TM 3.1) | Z | 5.38 | 68.01 | 17.03 |  | 150.0 |  |
|  |  | X | 4.51 | 70.10 | 18.24 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.24 | 71.22 | 18.35 |  | 150.0 |  |
| 10431- <br> AAC | LTE-FDD (OFDMA, $10 \mathrm{MHz}, \mathrm{E}-\mathrm{TM} 3.1$ ) | Z | 4.53 | 73.23 | 19.40 |  | 150.0 |  |
|  |  | X | 4.58 | 67.49 | 16.53 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.18 | 67.35 | 16.31 |  | 150.0 |  |
| 10432-AAC | LTE-FDD (OFDMA, $15 \mathrm{MHz}, \mathrm{E}-\mathrm{TM} 3.1$ ) | $\underline{Z}$ | 4.23 | 68.26 | 16.89 |  | 150.0 |  |
|  |  | X | 4.85 | 67.42 | 16.52 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.48 | 67.20 | 16.40 |  | 150.0 |  |
| 10433- <br> AAC | LTE-FDD (OFDMA, 20 MHz , E-TM 3.1) | Z | 4.52 | 67.94 | 16.89 |  | 150.0 |  |
|  |  | X | 5.09 | 67.45 | 16.57 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.73 | 67.17 | 16.48 |  | 150.0 |  |
| 10434- <br> AAA | W-CDMA (BS Test Model 1, 64 DPCH) | Z | 4.75 | 67.82 | 16.92 |  | 150.0 |  |
|  |  | X | 4.59 | 70.69 | 18.26 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.35 | 72.09 | 18.28 |  | 150.0 |  |
| 10435- <br> AAE | LTE-TDD (SC-FDMA, 1 RB, 20 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$ ) | Z | 4.80 | 74.69 | 19.54 |  | 150.0 |  |
|  |  | X | 100.00 | 117.55 | 30.20 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | $Y$ | 100.00 | 123.49 | 31.58 |  | 80.0 |  |
| $\begin{aligned} & 10447- \\ & \text { AAC } \end{aligned}$ |  | $\underline{Z}$ | 100.00 | 124.81 | 31.99 |  | 80.0 |  |
|  | Clipping 44\%) | X | 3.92 | 67.59 | 16.23 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.45 | 67.33 | 15.52 |  | 150.0 |  |
| 10448- <br> AAC |  | Z | 3.58 | 68.73 | 16.33 |  | 150.0 |  |
|  | LTE-FDD (OFDMA, 10 MHz , E-TM 3.1, Clippin 44\%) | X | 4.37 | 67.26 | 16.39 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.02 | 67.12 | 16.17 |  | 150.0 |  |
| $10449$ <br> AAC |  | Z | 4.08 | 68.05 | 16.77 |  | 150.0 |  |
|  | LTE-FDD (OFDMA, 15 MHz, E-TM 3.1, Cliping 44\%) | X | 4.61 | 67.24 | 16.43 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.29 | 67.02 | 16.30 |  | 150.0 |  |
| $\begin{aligned} & 10450- \\ & \text { AAC } \end{aligned}$ |  | $\underline{Z}$ | 4.34 | 67.79 | 16.81 |  | 150.0 |  |
|  | Clipping 44\%) <br> (OFDMA, 20 MHz, E-TM 3.1, | X | 4.77 | 67.19 | 16.43 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.49 | 66.93 | 16.33 |  | 150.0 |  |
| 10451-AAA |  | Z | 4.53 | 67.61 | 16.79 |  | 150.0 |  |
|  | W-CDMA (BS Test Model 1, 64 DPCH, Clipping 44\%) | X | 3.88 | 67.92 | 16.10 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.33 | 67.43 | 15.05 |  | 150.0 |  |
| 10456-$\mathrm{AAB}$ |  | Z | 3.49 | 69.03 | 15.93 |  | 150.0 |  |
|  | 99pc duty cycle) | X | 6.46 | 68.41 | 16.85 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 6.26 | 68.12 | 16.87 |  | 150.0 |  |
| 10457AAA |  | Z | 6.25 | 68.49 | 17.13 |  | 150.0 |  |
|  | UMTS-FDD (DC-HSDPA) | X | 3.90 | 65.59 | 16.17 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.76 | 65.38 | 16.04 |  | 150.0 |  |
| $\begin{aligned} & 10458- \\ & \text { AAA } \\ & \hline \end{aligned}$ |  | Z | 3.79 | 66.03 | 16.51 |  | 150.0 |  |
|  | CDMA2000 (1xEV-DO, Rev. B, 2 carriers) | X | 4.07 | 69.24 | 17.56 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.96 | 71.20 | 17.54 |  | 150.0 |  |
| 10459-AAA |  | Z | 4.42 | 73.99 | 18.87 |  | 150.0 |  |
|  | CDMA2000 (1xEV-DO, Rev. B, 3 carriers) | X | 5.22 | 66.85 | 17.78 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.09 | 68.80 | 18.35 |  | 150.0 |  |
|  |  | Z | 5.15 | 69.70 | 18.77 |  | 150.0 |  |


| $\begin{aligned} & 10460- \\ & \text { AAA } \\ & \hline \end{aligned}$ | UMTS-FDD (WCDMA, AMR) | X | 1.09 | 71.95 | 18.33 | 0.00 | 150.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 0.90 | 69.62 | 16.52 |  | 150.0 |  |
|  |  | Z | 2.47 | 89.66 | 25.89 |  | 150.0 |  |
| $\begin{aligned} & 10461- \\ & \text { AAA } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 100.00 | 119.29 | 31.07 | 3.29 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 129.27 | 34.27 |  | 80.0 |  |
|  |  | Z | 100.00 | 135.07 | 36.63 |  | 80.0 |  |
| $\begin{aligned} & 10462- \\ & \text { AAA } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz , 16-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 100.00 | 109.03 | 26.12 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 110.72 | 25.52 |  | 80.0 |  |
|  |  | Z | 100.00 | 111.86 | 25.68 |  | 80.0 |  |
| $\begin{aligned} & 10463- \\ & \text { AAA } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz , 64-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 100.00 | 107.11 | 25.19 | 3.23 | 80.0 | $\pm 9.6 \%$ |
|  |  | Y | 100.00 | 106.80 | 23.66 |  | 80.0 |  |
|  |  | Z | 100.00 | 106.90 | 23.37 |  | 80.0 |  |
| $\begin{aligned} & 10464- \\ & \text { AAB } \end{aligned}$ | LTE-TDD (SC-FDMA, $1 \mathrm{RB}, 3 \mathrm{MHz}$, QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 100.00 | 117.90 | 30.29 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 127.01 | 33.06 |  | 80.0 |  |
|  |  | Z | 100.00 | 132.87 | 35.42 |  | 80.0 |  |
| 10465- $\mathrm{AAB}$ | LTE-TDD (SC-FDMA, 1 RB, $3 \mathrm{MHz}, 16-$ QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 100.00 | 108.70 | 25.94 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 110.09 | 25.21 |  | 80.0 |  |
|  |  | Z | 100.00 | 111.09 | 25.32 |  | 80.0 |  |
| $\begin{aligned} & 10466- \\ & \text { AAB } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 3 MHz , 64QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 100.00 | 106.79 | 25.02 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 106.23 | 23.39 |  | 80.0 |  |
|  |  | Z | 100.00 | 106.21 | 23.05 |  | 80.0 |  |
| 10467- $\mathrm{AAD}$ | LTE-TDD (SC-FDMA, 1 RB, 5 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 100.00 | 118.04 | 30.36 | 3.23 | 80.0 | $\pm 9.6 \%$ |
|  |  | Y | 100.00 | 127.30 | 33.19 |  | 80.0 |  |
|  |  | Z | 100.00 | 133.22 | 35.58 |  | 80.0 |  |
| $\begin{aligned} & 10468- \\ & \text { AAD } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 5 MHz , 16QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 100.00 | 108.80 | 25.99 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 110.30 | 25.31 |  | 80.0 |  |
|  |  | Z | 100.00 | 111.37 | 25.44 |  | 80.0 |  |
| $\begin{aligned} & 10469- \\ & \text { AAD } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 5 MHz , 64QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 100.00 | 106.79 | 25.02 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 106.25 | 23.40 |  | 80.0 |  |
|  |  | Z | 100.00 | 106.24 | 23.06 |  | 80.0 |  |
| $\begin{aligned} & 10470- \\ & \text { AAD } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 10 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 100.00 | 118.06 | 30.36 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 127.34 | 33.19 |  | 80.0 |  |
|  |  | Z | 100.00 | 133.28 | 35.59 |  | 80.0 |  |
| $\begin{aligned} & 10471- \\ & \text { AAD } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 10 MHz , 16QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 100.00 | 108.76 | 25.97 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 110.24 | 25.28 |  | 80.0 |  |
|  |  | Z | 100.00 | 111.29 | 25.40 |  | 80.0 |  |
| $\begin{aligned} & 10472- \\ & \text { AAD } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 10 MHz , 64QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 100.00 | 106.76 | 25.00 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 106.18 | 23.36 |  | 80.0 |  |
|  |  | Z | 100.00 | 106.15 | 23.01 |  | 80.0 |  |
| $\begin{aligned} & 10473- \\ & \text { AAD } \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 15 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 100.00 | 118.04 | 30.35 | 3.23 | 80.0 | $\pm 9.6 \%$ |
|  |  | Y | 100.00 | 127.30 | 33.18 |  | 80.0 |  |
|  |  | Z | 100.00 | 133.25 | 35.58 |  | 80.0 |  |
| $\begin{aligned} & 10474- \\ & \text { AAD } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 15 MHz , 16QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 100.00 | 108.77 | 25.98 | 3.23 | 80.0 | $\pm 9.6 \%$ |
|  |  | Y | 100.00 | 110.25 | 25.28 |  | 80.0 |  |
|  |  | Z | 100.00 | 111.30 | 25.41 |  | 80.0 |  |
| 10475- AAD | LTE-TDD (SC-FDMA, 1 RB, 15 MHz , 64QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 100.00 | 106.77 | 25.00 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 106.20 | 23.36 |  | 80.0 |  |
|  |  | Z | 100.00 | 106.17 | 23.02 |  | 80.0 |  |



| 10493- AAD | LTE-TDD (SC-FDMA, $50 \%$ RB, 15 MHz , 64-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 6.14 | 72.54 | 18.97 | 2.23 | 80.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 4.86 | 71.18 | 18.48 |  | 80.0 |  |
|  |  | Z | 5.36 | 73.62 | 19.72 |  | 80.0 |  |
| $10494-$ $\mathrm{AAE}$ | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 20 \mathrm{MHz}$, QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 8.31 | 79.62 | 20.98 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 6.15 | 77.89 | 20.70 |  | 80.0 |  |
|  |  | Z | 8.68 | 84.61 | 23.48 |  | 80.0 |  |
| 10495- <br> AAE | LTE-TDD (SC-FDMA, 50\% RB, 20 MHz , 16-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 6.32 | 73.62 | 19.32 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 4.90 | 71.93 | 18.81 |  | 80.0 |  |
|  |  | Z | 5.49 | 74.66 | 20.19 |  | 80.0 |  |
| 10496- <br> AAE | LTE-TDD (SC-FDMA, $50 \%$ RB, 20 MHz , 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 6.28 | 73.03 | 19.14 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 4.92 | 71.46 | 18.66 |  | 80.0 |  |
|  |  | Z | 5.43 | 73.91 | 19.92 |  | 80.0 |  |
| $\begin{aligned} & 10497- \\ & \text { AAA } \end{aligned}$ | LTE-TDD (SC-FDMA, $100 \%$ RB, 1.4 MHz, QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 7.65 | 81.23 | 20.62 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 3.65 | 72.58 | 15.66 |  | 80.0 |  |
|  |  | Z | 21.09 | 94.73 | 22.69 |  | 80.0 |  |
| $\begin{aligned} & 10498-1 \\ & \text { AAA } \end{aligned}$ | LTE-TDD (SC-FDMA, 100\% RB, 1.4 MHz, 16-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 5.65 | 74.32 | 17.51 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 2.09 | 63.47 | 10.71 |  | 80.0 |  |
|  |  | Z | 2.52 | 66.12 | 11.86 |  | 80.0 |  |
| $\begin{aligned} & \text { 10499- } \\ & \text { AAA } \end{aligned}$ | LTE-TDD (SC-FDMA, $100 \%$ RB, 1.4 MHz, 64-QAM, UL <br> Subframe $=2,3,4,7,8,9$ ) | X | 5.60 | 73.85 | 17.24 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 2.00 | 62.76 | 10.22 |  | 80.0 |  |
|  |  | Z | 2.24 | 64.62 | 11.02 |  | 80.0 |  |
| $\begin{aligned} & 10500- \\ & \text { AAB } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 100\% RB, 3 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 7.98 | 81.23 | 21.57 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 6.26 | 80.85 | 21.25 |  | 80.0 |  |
|  |  | Z | 14.66 | 95.46 | 26.32 |  | 80.0 |  |
| $\begin{aligned} & 10501- \\ & \mathrm{AAB} \end{aligned}$ | LTE-TDD (SC-FDMA, 100\% RB, 3 MHz, 16-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 6.12 | 74.87 | 19.30 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 4.73 | 73.59 | 18.23 |  | 80.0 |  |
|  |  | Z | 6.73 | 79.86 | 20.79 |  | 80.0 |  |
| $\begin{aligned} & 10502- \\ & \text { AAB } \end{aligned}$ | LTE-TDD (SC-FDMA, $100 \%$ RB, 3 MHz , 64-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 6.10 | 74.47 | 19.13 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 4.73 | 73.21 | 18.02 |  | 80.0 |  |
|  |  | Z | 6.58 | 79.10 | 20.44 |  | 80.0 |  |
| $\begin{aligned} & 10503- \\ & \text { AAD } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $100 \%$ RB, 5 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 7.94 | 80.44 | 21.39 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 5.89 | 79.20 | 21.13 |  | 80.0 |  |
|  |  | Z | 9.82 | 88.78 | 24.83 |  | 80.0 |  |
| $\begin{aligned} & 10504- \\ & \text { AAD } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $100 \%$ RB, 5 MHz , 16-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 6.06 | 74.25 | 19.42 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 4.67 | 72.88 | 18.78 |  | 80.0 |  |
|  |  | Z | 5.71 | 77.06 | 20.69 |  | 80.0 |  |
| $\begin{aligned} & 10505- \\ & \text { AAD } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 100\% RB, 5 MHz , 64-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 6.04 | 73.70 | 19.25 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 4.70 | 72.48 | 18.64 |  | 80.0 |  |
|  |  | Z | 5.62 | 76.28 | 20.40 |  | 80.0 |  |
| $\begin{aligned} & \hline 10506- \\ & \text { AAD } \end{aligned}$ | LTE-TDD (SC-FDMA, 100\% RB, 10 MHz, QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 8.23 | 79.46 | 20.92 | 2.23 | 80.0 | $\pm 9.6 \%$ |
|  |  | Y | 6.08 | 77.69 | 20.61 |  | 80.0 |  |
|  |  | Z | 8.55 | 84.33 | 23.37 |  | 80.0 |  |
| $\begin{aligned} & 10507- \\ & \text { AAD } \end{aligned}$ | LTE-TDD (SC-FDMA, 100\% RB, 10 MHz, 16-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 6.29 | 73.56 | 19.28 | 2.23 | 80.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.88 | 71.86 | 18.77 |  | 80.0 |  |
|  |  | Z | 5.47 | 74.58 | 20.15 |  | 80.0 |  |

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| $\begin{aligned} & \text { 10508- } \\ & \text { AAD } \end{aligned}$ | LTE-TDD (SC-FDMA, $100 \%$ RB, 10 MHz, 64-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 6.26 | 72.96 | 19.10 | 2.23 | 80.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 4.90 | 71.38 | 18.62 |  | 80.0 |  |
| $\begin{array}{\|l} \hline 10509- \\ \text { AAD } \\ \hline \end{array}$ |  | Z | 5.41 | 73.81 | 19.87 |  | 80.0 |  |
|  | MHz, QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 7.61 | 76.55 | 19.89 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 5.85 | 74.80 | 19.56 |  | 80.0 |  |
| $\begin{aligned} & 10510- \\ & \text { AAD } \end{aligned}$ |  | Z | 7.10 | 78.86 | 21.43 |  | 80.0 |  |
|  | MHz, 16-QAM, UL <br> Subframe $=2,3,4,7,8,9$ ) | X | 6.61 | 72.71 | 18.99 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 5.25 | 70.97 | 18.53 |  | 80.0 |  |
| $\begin{aligned} & 10511- \\ & \text { AAD } \end{aligned}$ |  | Z | 5.63 | 72.87 | 19.56 |  | 80.0 |  |
|  | MHz, 64-QAM, UL <br> Subframe $=2,3,4,7,8,9$ ) | X | 6.56 | 72.25 | 18.87 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 5.26 | 70.60 | 18.43 |  | 80.0 |  |
| 10512- <br> AAE |  | Z | 5.60 | 72.35 | 19.38 |  | 80.0 |  |
|  | LTE-TDD (SC-FDMA, 100\% RB, 20 <br> MHz, QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 8.64 | 79.13 | 20.66 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 6.45 | 77.03 | 20.24 |  | 80.0 |  |
| 10513- <br> AAE |  | Z | 8.55 | 82.55 | 22.59 |  | 80.0 |  |
|  | $\mathrm{MHz}, 16-\mathrm{QAM}, \mathrm{UL}$ <br> Subframe $=2,3,4,7,8,9$ ) | X | 6.66 | 73.45 | 19.25 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 5.19 | 71.42 | 18.71 |  | 80.0 |  |
| 10514- <br> AAE |  | Z | 5.63 | 73.53 | 19.83 |  | 80.0 |  |
|  | MHz, 64-QAM, UL <br> Subframe $=2,3,4,7,8,9$ ) | X | 6.51 | 72.73 | 19.04 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 5.14 | 70.84 | 18.53 |  | 80.0 |  |
| $\begin{aligned} & 10515- \\ & \text { AAA } \\ & \hline \end{aligned}$ |  | Z | 5.51 | 72.71 | 19.55 |  | 80.0 |  |
|  | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 99 pc duty cycle) | X | 0.99 | 64.09 | 15.51 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 0.91 | 63.36 | 14.83 |  | 150.0 |  |
| 10516-AAA |  | $\underline{Z}$ | 1.02 | 66.28 | 17.27 |  | 150.0 |  |
|  | Mbps, 99pc duty cycle) <br> 2.4 GHz (DSSS, 5.5 | X | 0.99 | 80.49 | 22.15 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 0.72 | 75.52 | 18.82 |  | 150.0 |  |
| $10517-$ <br> AAA |  | Z | 100.00 | 176.41 | 49.28 |  | 150.0 |  |
|  | Mbps, 99pc duty cycle) | X | 0.89 | 67.15 | 16.75 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 0.78 | 65.73 | 15.58 |  | 150.0 |  |
| $\begin{aligned} & 10518- \\ & \text { AAB } \\ & \hline \end{aligned}$ |  | Z | 1.04 | 72.66 | 20.23 |  | 150.0 |  |
|  | TEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc duty cycle) | X | 4.78 | 67.01 | 16.39 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.49 | 66.85 | 16.32 |  | 150.0 |  |
| $\begin{aligned} & 10519- \\ & \text { AAB } \\ & \hline \end{aligned}$ |  | Z | 4.53 | 67.52 | 16.77 |  | 150.0 |  |
|  | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 99pc duty cycle) | X | 5.04 | 67.34 | 16.53 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.68 | 67.08 | 16.44 |  | 150.0 |  |
| $\begin{aligned} & 10520- \\ & \text { AAB } \\ & \hline \end{aligned}$ |  | Z | 4.70 | 67.72 | 16.87 |  | 150.0 |  |
|  | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 99pc duty cycle) | X | 4.88 | 67.34 | 16.47 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.53 | 67.04 | 16.36 |  | 150.0 |  |
| $\begin{aligned} & 10521- \\ & \text { AAB } \\ & \hline \end{aligned}$ |  | Z | 4.56 | 67.71 | 16.81 |  | 150.0 |  |
|  | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc duty cycle) | X | 4.81 | 67.36 | 16.46 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.46 | 67.02 | 16.34 |  | 150.0 |  |
| $\begin{aligned} & 10522- \\ & \text { AAB } \\ & \hline \end{aligned}$ |  | Z | 4.49 | 67.71 | 16.81 |  | 150.0 |  |
|  | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99 pc duty cycle) | X | 4.84 | 67.20 | 16.43 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.52 | 67.14 | 16.44 |  | 150.0 |  |
|  |  | Z | 4.56 | 67.84 | 16.91 |  | 150.0 |  |


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

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| $10541-$ AAB | IEEE 802.11ac WiFi (40MHz, MCS7, 99pc duty cycle) | X | 5.42 | 67.02 | 16.32 | 0.00 | 150.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 5.11 | 66.54 | 16.21 |  | 150.0 |  |
| $\begin{aligned} & 10542- \\ & \text { AAB } \\ & \hline \end{aligned}$ |  | Z | 5.12 | 67.08 | 16.58 |  | 150.0 |  |
|  | 99pc duty cycle) | X | 5.54 | 66.95 | 16.29 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.26 | 66.62 | 16.26 |  | 150.0 |  |
| $\begin{aligned} & 10543- \\ & A A B \\ & \hline \end{aligned}$ |  | Z | 5.28 | 67.14 | 16.62 |  | 150.0 |  |
|  | IEEE 802.11ac WiFi ( $40 \mathrm{MHz}, \mathrm{MCS} 9$, 99pc duty cycle) | X | 5.67 | 67.05 | 16.35 | 0.00 | 150.0 | $\pm 9.6$ \% |
| $\begin{aligned} & 10544- \\ & \text { AAB } \end{aligned}$ |  | Y | 5.34 | 66.68 | 16.32 |  | 150.0 |  |
|  |  | Z | 5.34 | 67.15 | 16.64 |  | 150.0 |  |
|  | IEEE 802.11ac WiFi (80MHz, MCSO, 99pe duty cycle) | X | 5.64 | 67.00 | 16.21 | 0.00 | 150.0 | $\pm 9.6$ \% |
| $\begin{aligned} & 10545- \\ & \text { AAB } \\ & \hline \end{aligned}$ |  | Y | 5.43 | 66.63 | 16.17 |  | 150.0 |  |
|  |  | Z | 5.46 | 67.13 | 16.51 |  | 150.0 |  |
|  | IEEE 802.11ac WiFi (80MHz, MCS1, 99 pc duty cycle) | X | 5.86 | 67.34 | 16.31 | 0.00 | 150.0 | $\pm 9.6$ \% |
| $\begin{aligned} & 10546- \\ & \mathrm{AAB} \\ & \hline \end{aligned}$ |  | Y | 5.66 | 67.18 | 16.39 |  | 150.0 |  |
|  |  | Z | 5.67 | 67.64 | 16.72 |  | 150.0 |  |
|  | 99pc duty cycle) | X | 5.77 | 67.34 | 16.33 | 0.00 | 150.0 | $\pm 9.6$ \% |
| $\begin{aligned} & 10547- \\ & A A B \end{aligned}$ |  | Y | 5.50 | 66.85 | 16.24 |  | 150.0 |  |
|  |  | Z | 5.52 | 67.32 | 16.57 |  | 150.0 |  |
|  | 99 pc duty cycle) | X | 5.87 | 67.43 | 16.36 | 0.00 | 150.0 | $\pm 9.6$ \% |
| $\begin{aligned} & 10548- \\ & \text { AAB } \\ & \hline \end{aligned}$ |  | Y | 5.58 | 66.90 | 16.26 |  | 150.0 |  |
|  |  | Z | 5.59 | 67.39 | 16.60 |  | 150.0 |  |
|  | 99pc duty cycle) | X | 6.12 | 68.32 | 16.77 | 0.00 | 150.0 | $\pm 9.6$ \% |
| $\begin{aligned} & 10550- \\ & \text { AAB } \end{aligned}$ |  | Y | 5.96 | 68.26 | 16.91 |  | 150.0 |  |
|  |  | Z | 5.88 | 68.47 | 17.11 |  | 150.0 |  |
|  | $\begin{aligned} & \text { IEEE } 802.11 \text { ac WiFi ( } 80 \mathrm{MHz}, \mathrm{MCS} \text {, } \\ & \text { 99pc duty cycle) } \\ & \hline \end{aligned}$ | X | 5.79 | 67.25 | 16.29 | 0.00 | 150.0 | $\pm 9.6$ \% |
| $\begin{aligned} & 10551- \\ & \mathrm{AAB} \\ & \hline \end{aligned}$ |  | Y | 5.55 | 66.95 | 16.31 |  | 150.0 |  |
|  |  | Z | 5.57 | 67.45 | 16.65 |  | 150.0 |  |
|  | $\begin{aligned} & \text { IEEE 802.11ac WiFi ( } 80 \mathrm{MHz}, \mathrm{MCS7} \text {, } \\ & \text { 99pc duty cycle) } \end{aligned}$ | X | 5.80 | 67.34 | 16.30 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.53 | 66.88 | 16.23 |  | 150.0 |  |
| $\begin{aligned} & 10552- \\ & \text { AAB } \\ & \hline \end{aligned}$ |  | Z | 5.55 | 67.39 | 16.58 |  | 150.0 |  |
|  | $\begin{aligned} & \text { IEEE } 802.11 \mathrm{ac} \text { WiFi ( } 80 \mathrm{MHz}, \mathrm{MCS8}, \\ & 99 \mathrm{pc} \text { duty cycle) } \end{aligned}$ | X | 5.70 | 67.13 | 16.22 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.44 | 66.67 | 16.13 |  | 150.0 |  |
| $\begin{aligned} & 10553- \\ & \mathrm{AAB} \\ & \hline \end{aligned}$ |  | Z | 5.47 | 67.20 | 16.49 |  | 150.0 |  |
|  | IEEE 802.11ac WiFi (80MHz, MCS9, $99 p \mathrm{duty}$ cycle) | X | 5.80 | 67.16 | 16.25 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.52 | 66.70 | 16.18 |  | 150.0 |  |
| 10554- <br> AAC |  | Z | 5.54 | 67.19 | 16.52 |  | 150.0 |  |
|  | TEEE 802.11 ac WiFi (160MHz, MCSO, 99 pc duty cycle) | X | 6.03 | 67.39 | 16.30 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.86 | 67.00 | 16.26 |  | 150.0 |  |
| $10555-$ <br> AAC |  | Z | 5.88 | 67.46 | 16.57 |  | 150.0 |  |
|  | EEEE 802.11ac WiFi (160MHz, MCS1, 99pc duty cycle) | X | 6.23 | 67.82 | 16.48 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 6.01 | 67.38 | 16.43 |  | 150.0 |  |
| $\begin{aligned} & 10556- \\ & \text { AAC } \\ & \hline \end{aligned}$ |  | Z | 6.01 | 67.80 | 16.72 |  | 150.0 |  |
|  | IEEE 802.11ac WiFi (160MHz, MCS2, 99pc duty cycle) | X | 6.21 | 67.73 | 16.43 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 6.02 | 67.38 | 16.42 |  | 150.0 |  |
| $\begin{aligned} & 10557- \\ & \text { AAC } \end{aligned}$ |  | $\underline{Z}$ | 6.04 | 67.85 | 16.74 |  | 150.0 |  |
|  | TEEE 802.11ac WiFi ( $160 \mathrm{MHz}, \mathrm{MCS} 3$, 99pc duty cycle) | X | 6.21 | 67.74 | 16.46 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.97 | 67.26 | 16.38 |  | 150.0 |  |
|  |  | Z | 5.99 | 67.71 | 16.68 |  | 150.0 |  |


| 10558- <br> AAC | IEEE 802.11ac WiFi (160MHz, MCS4, 99 pc duty cycle) | X | 6.27 | 67.93 | 16.57 | 0.00 | 150.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 6.02 | 67.44 | 16.49 |  | 150.0 |  |
|  |  | Z | 6.04 | 67.88 | 16.79 |  | 150.0 |  |
| $10560-$$A A C$ | IEEE 802.11ac WiFi (160MHz, MCS6, 99 pc duty cycle) | X | 6.29 | 67.82 | 16.55 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 6.01 | 67.26 | 16.43 |  | 150.0 |  |
|  |  | Z | 6.02 | 67.70 | 16.73 |  | 150.0 |  |
| $\begin{aligned} & 10561- \\ & \text { AAC } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi ( $160 \mathrm{MHz}, \mathrm{MCS} 7$, 99 pc duty cycle) | X | 6.18 | 67.73 | 16.55 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.95 | 67.28 | 16.48 |  | 150.0 |  |
|  |  | Z | 5.96 | 67.72 | 16.78 |  | 150.0 |  |
| $\begin{aligned} & 10562- \\ & \text { AAC } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi ( 160 MHz , MCS8, $99 p \mathrm{duty}$ cycle) | X | 6.34 | 68.21 | 16.79 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 6.07 | 67.66 | 16.67 |  | 150.0 |  |
|  |  | Z | 6.06 | 68.04 | 16.94 |  | 150.0 |  |
| $\begin{aligned} & 10563- \\ & \text { AAC } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi ( 160 MHz , MCS9, 99 pc duty cycle) | X | 6.54 | 68.35 | 16.80 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 6.27 | 67.90 | 16.75 |  | 150.0 |  |
|  |  | Z | 6.17 | 68.00 | 16.88 |  | 150.0 |  |
| $\begin{aligned} & \text { 10564- } \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, $9 \mathrm{Mbps}, 99 \mathrm{pc}$ duty cycle) | X | 5.13 | 67.16 | 16.58 | 0.46 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.83 | 66.94 | 16.49 |  | 150.0 |  |
|  |  | Z | 4.85 | 67.53 | 16.89 |  | 150.0 |  |
| $\begin{aligned} & 10565- \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 12 Mbps, 99 pc duty cycle) | X | 5.43 | 67.67 | 16.90 | 0.46 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.06 | 67.39 | 16.81 |  | 150.0 |  |
|  |  | Z | 5.07 | 67.95 | 17.19 |  | 150.0 |  |
| $\begin{aligned} & 10566- \\ & \text { AAA } \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 18 Mbps , 99 pc duty cycle) | X | 5.25 | 67.56 | 16.74 | 0.46 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.89 | 67.24 | 16.63 |  | 150.0 |  |
|  |  | Z | 4.91 | 67.83 | 17.03 |  | 150.0 |  |
| $\begin{aligned} & 10567- \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 24 Mbps , 99 pc duty cycle) | X | 5.28 | 67.94 | 17.06 | 0.46 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.92 | 67.63 | 16.99 |  | 150.0 |  |
|  |  | Z | 4.94 | 68.24 | 17.40 |  | 150.0 |  |
| $\begin{aligned} & \text { 10568- } \\ & \text { AAA } \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 36 Mbps , 99 pc duty cycle) | X | 5.15 | 67.23 | 16.47 | 0.46 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.81 | 67.05 | 16.42 |  | 150.0 |  |
|  |  | Z | 4.83 | 67.65 | 16.83 |  | 150.0 |  |
| $\begin{aligned} & \text { 10569- } \\ & \text { AAA } \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 48 Mbps , 99 pc duty cycle) | X | 5.21 | 67.93 | 17.06 | 0.46 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.89 | 67.75 | 17.06 |  | 150.0 |  |
|  |  | Z | 4.92 | 68.42 | 17.51 |  | 150.0 |  |
| 10570-AAA | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 54 Mbps , 99 pc duty cycle) | X | 5.25 | 67.71 | 16.98 | 0.46 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.91 | 67.59 | 16.99 |  | 150.0 |  |
|  |  | Z | 4.93 | 68.22 | 17.41 |  | 150.0 |  |
| 10571- <br> AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90 pc duty cycle) | X | 1.55 | 68.26 | 17.49 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 1.27 | 66.22 | 16.43 |  | 130.0 |  |
|  |  | Z | 1.44 | 69.66 | 18.90 |  | 130.0 |  |
| 10572-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 90 pc duty cycle) | X | 1.60 | 69.11 | 17.93 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 1.29 | 67.00 | 16.87 |  | 130.0 |  |
|  |  | Z | 1.50 | 70.89 | 19.56 |  | 130.0 |  |
| 10573AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 90pc duty cycle) | X | 100.00 | 141.39 | 37.07 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 46.60 | 130.15 | 33.95 |  | 130.0 |  |
|  |  | Z | 100.00 | 156.98 | 42.98 |  | 130.0 |  |
| 10574AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 90pc duty cycle) | X | 2.35 | 79.26 | 22.24 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 1.71 | 75.87 | 20.88 |  | 130.0 |  |
|  |  | Z | 3.27 | 90.44 | 27.60 |  | 130.0 |  |

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| 10575- AAA | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 6 Mbps , 90 pc duty cycle) | X | 4.96 | 67.05 | 16.69 | 0.46 | 130.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 4.65 | 66.85 | 16.61 |  | 130.0 |  |
| 10576-AAA |  | $\underline{Z}$ | 4.67 | 67.45 | 17.02 |  | 130.0 |  |
|  | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, $9 \mathrm{Mbps}, 90 \mathrm{pc}$ duty cycle) | X | 4.99 | 67.21 | 16.75 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.68 | 67.02 | 16.67 |  | 130.0 |  |
|  |  | Z | 4.70 | 67.64 | 17.09 |  | 130.0 |  |
| 10577AAA | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, $12 \mathrm{Mbps}, 90 \mathrm{pc}$ duty cycle) | X | 5.25 | 67.57 | 16.93 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.87 | 67.30 | 16.84 |  | 130.0 |  |
|  |  | Z | 4.88 | 67.89 | 17.24 |  | 130.0 |  |
| 10578AAA | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, $18 \mathrm{Mbps}, 90 \mathrm{pc}$ duty cycle) | X | 5.15 | 67.76 | 17.03 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.77 | 67.47 | 16.95 |  | 130.0 |  |
|  |  | Z | 4.79 | 68.09 | 17.37 |  | 130.0 |  |
| $\begin{aligned} & \text { 10579- } \\ & \text { AAA } \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 24 Mbps , 90 pc duty cycle) | X | 4.94 | 67.22 | 16.46 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.54 | 66.75 | 16.25 |  | 130.0 |  |
|  |  | $\underline{Z}$ | 4.56 | 67.37 | 16.68 |  | 130.0 |  |
| $\begin{aligned} & 10580- \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 36 Mbps , 90 pc duty cycle) | X | 4.98 | 67.11 | 16.42 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.59 | 66.80 | 16.28 |  | 130.0 |  |
|  |  | $\underline{Z}$ | 4.60 | 67.42 | 16.71 |  | 130.0 |  |
| 10581- <br> AAA | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 48 Mbps , 90 pc duty cycle) | X | 5.08 | 67.93 | 17.03 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.68 | 67.53 | 16.91 |  | 130.0 |  |
|  |  | Z | 4.71 | 68.21 | 17.36 |  | 130.0 |  |
| $\begin{aligned} & 10582- \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.11g WiFi 2.4 GHz (DSSSOFDM, $54 \mathrm{Mbps}, 90 \mathrm{pc}$ duty cycle) | X | 4.90 | 66.94 | 16.26 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.48 | 66.52 | 16.04 |  | 130.0 |  |
|  |  | Z | 4.49 | 67.13 | 16.46 |  | 130.0 |  |
| $\begin{aligned} & 10583- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 90pc duty cycle) | X | 4.96 | 67.05 | 16.69 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.65 | 66.85 | 16.61 |  | 130.0 |  |
|  |  | Z | 4.67 | 67.45 | 17.02 |  | 130.0 |  |
| $\begin{aligned} & 10584- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 90pc duty cycle) | X | 4.99 | 67.21 | 16.75 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.68 | 67.02 | 16.67 |  | 130.0 |  |
|  |  | Z | 4.70 | 67.64 | 17.09 |  | 130.0 |  |
| $\begin{aligned} & 10585- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90pc duty cycle) | X | 5.25 | 67.57 | 16.93 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.87 | 67.30 | 16.84 |  | 130.0 |  |
|  |  | Z | 4.88 | 67.89 | 17.24 |  | 130.0 |  |
| $\begin{aligned} & 10586- \\ & \mathrm{AAB} \\ & \hline \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 90pc duty cycle) | X | 5.15 | 67.76 | 17.03 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.77 | 67.47 | 16.95 |  | 130.0 |  |
|  |  | Z | 4.79 | 68.09 | 17.37 |  | 130.0 |  |
| $\begin{aligned} & 10587- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 90pc duty cycle) | X | 4.94 | 67.22 | 16.46 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.54 | 66.75 | 16.25 |  | 130.0 |  |
|  |  | Z | 4.56 | 67.37 | 16.68 |  | 130.0 |  |
| $\begin{aligned} & 10588- \\ & A A B \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 90pc duty cycle) | X | 4.98 | 67.11 | 16.42 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.59 | 66.80 | 16.28 |  | 130.0 |  |
|  |  | Z | 4.60 | 67.42 | 16.71 |  | 130.0 |  |
| $\begin{aligned} & 10589- \\ & \mathrm{AAB} \\ & \hline \end{aligned}$ | IEEE $802.11 \mathrm{a} / \mathrm{h}$ WiFi 5 GHz (OFDM, 48 Mbps, 90pc duty cycle) | X | 5.08 | 67.93 | 17.03 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | $Y$ | 4.68 | 67.53 | 16.91 |  | 130.0 |  |
|  |  | $\underline{Z}$ | 4.71 | 68.21 | 17.36 |  | 130.0 |  |
| $\begin{aligned} & 10590- \\ & \mathrm{AAB} \\ & \hline \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 90pc duty cycle) | X | 4.90 | 66.94 | 16.26 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.48 | 66.52 | 16.04 |  | 130.0 |  |
|  |  | Z | 4.49 | 67.13 | 16.46 |  | 130.0 |  |


| 10591- <br> AAB | IEEE 802.11n (HT Mixed, 20MHz, MCSO, 90pc duty cycle) | X | 5.11 | 67.10 | 16.77 | 0.46 | 130.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 4.80 | 66.89 | 16.71 |  | 130.0 |  |
|  |  | Z | 4.81 | 67.46 | 17.09 |  | 130.0 |  |
| $\begin{aligned} & 10592- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Mixed, 20MHz, MCS1, 90pe duty cycle) | X | 5.30 | 67.44 | 16.88 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.95 | 67.23 | 16.84 |  | 130.0 |  |
|  |  | Z | 4.96 | 67.80 | 17.22 |  | 130.0 |  |
| $\begin{aligned} & \text { 10593- } \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Mixed, 20MHz, MCS2, 90pc duty cycle) | X | 5.24 | 67.45 | 16.82 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.87 | 67.14 | 16.72 |  | 130.0 |  |
|  |  | Z | 4.88 | 67.71 | 17.10 |  | 130.0 |  |
| $\begin{aligned} & \text { 10594- } \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Mixed, 20MHz, MCS3, 90pc duty cycle) | X | 5.29 | 67.56 | 16.94 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.93 | 67.31 | 16.88 |  | 130.0 |  |
|  |  | Z | 4.94 | 67.88 | 17.26 |  | 130.0 |  |
| $\begin{aligned} & 10595- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Mixed, 20MHz, MCS4, 90pc duty cycle) | X | 5.29 | 67.58 | 16.87 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.89 | 67.27 | 16.77 |  | 130.0 |  |
|  |  | Z | 4.91 | 67.86 | 17.17 |  | 130.0 |  |
| $\begin{aligned} & \text { 10596- } \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Mixed, 20MHz, MCS5, 90pc duty cycle) | X | 5.21 | 67.55 | 16.86 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.83 | 67.27 | 16.78 |  | 130.0 |  |
|  |  | Z | 4.85 | 67.88 | 17.19 |  | 130.0 |  |
| $\begin{aligned} & \text { 10597- } \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Mixed, 20MHz, MCS6, 90pc duty cycle) | X | 5.17 | 67.54 | 16.80 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.78 | 67.17 | 16.65 |  | 130.0 |  |
|  |  | Z | 4.80 | 67.76 | 17.06 |  | 130.0 |  |
| $\begin{aligned} & 10598- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Mixed, 20MHz, MCS7, 90pc duty cycle) | X | 5.16 | 67.82 | 17.06 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.76 | 67.40 | 16.92 |  | 130.0 |  |
|  |  | Z | 4.78 | 68.01 | 17.33 |  | 130.0 |  |
| $10599-$ <br> AAB | IEEE 802.11n (HT Mixed, 40MHz, MCSO, 90pc duty cycle) | X | 5.78 | 67.76 | 16.95 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.50 | 67.50 | 16.97 |  | 130.0 |  |
|  |  | Z | 5.48 | 67.89 | 17.25 |  | 130.0 |  |
| $\begin{aligned} & 10600- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11n (HT Mixed, 40MHz, MCS1, 90pc duty cycle) | X | 6.01 | 68.41 | 17.25 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.72 | 68.21 | 17.30 |  | 130.0 |  |
|  |  | Z | 5.66 | 68.47 | 17.51 |  | 130.0 |  |
| $\begin{array}{\|l\|} \hline 10601- \\ \text { AAB } \\ \hline \end{array}$ | IEEE 802.11n (HT Mixed, 40MHz, MCS2, 90pc duty cycle) | X | 5.85 | 68.03 | 17.07 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.55 | 67.76 | 17.09 |  | 130.0 |  |
|  |  | Z | 5.52 | 68.13 | 17.36 |  | 130.0 |  |
| $\begin{aligned} & 10602- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11 n (HT Mixed, 40 MHz , MCS3, 90pc duty cycle) | X | 5.97 | 68.13 | 17.04 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.67 | 67.88 | 17.06 |  | 130.0 |  |
|  |  | Z | 5.65 | 68.28 | 17.35 |  | 130.0 |  |
| 10603-$\mathrm{AAB}$ | IEEE 802.11n (HT Mixed, 40 MHz , MCS4, 90pc duty cycle) | X | 6.09 | 68.50 | 17.35 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.71 | 68.06 | 17.28 |  | 130.0 |  |
|  |  | Z | 5.71 | 68.52 | 17.60 |  | 130.0 |  |
| $\begin{aligned} & 10604- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11 n (HT Mixed, 40 MHz , MCS5, 90pc duty cycle) | X | 5.80 | 67.77 | 16.98 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.51 | 67.48 | 16.98 |  | 130.0 |  |
|  |  | Z | 5.55 | 68.08 | 17.37 |  | 130.0 |  |
| $\begin{aligned} & 10605- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Mixed, 40 MHz , MCS6, 90pc duty cycle) | X | 5.89 | 68.00 | 17.10 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.67 | 67.99 | 17.24 |  | 130.0 |  |
|  |  | Z | 5.64 | 68.35 | 17.51 |  | 130.0 |  |
| $10606-$ <br> AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS7, 90pc duty cycle) | X | 5.66 | 67.48 | 16.72 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.34 | 67.07 | 16.63 |  | 130.0 |  |
|  |  | Z | 5.34 | 67.50 | 16.94 |  | 130.0 |  |


| $\begin{aligned} & 10607- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (20MHz, MCSO, 90 pc duty cycle) | X | 4.93 | 66.37 | 16.37 | 0.46 | 130.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 4.64 | 66.20 | 16.32 |  | 130.0 |  |
|  |  | Z | 4.67 | 66.86 | 16.76 |  | 130.0 |  |
| $\begin{aligned} & 10608- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11ac WiFi (20MHz, MCS1, 90pc duty cycle) | X | 5.17 | 66.81 | 16.52 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.82 | 66.61 | 16.49 |  | 130.0 |  |
|  |  | Z | 4.85 | 67.26 | 16.93 |  | 130.0 |  |
| $\begin{aligned} & 1060 ؟ \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (20MHz, MCS2, 90 pc duty cycle) | X | 5.06 | 66.74 | 16.42 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.71 | 66.45 | 16.33 |  | 130.0 |  |
|  |  | Z | 4.74 | 67.12 | 16.77 |  | 130.0 |  |
| $\begin{aligned} & 1061 \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi ( $20 \mathrm{MHz}, \mathrm{MCS} 3$, 90 pc duty cycle) | X | 5.12 | 66.88 | 16.56 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | $Y$ | 4.76 | 66.62 | 16.49 |  | 130.0 |  |
|  |  | Z | 4.79 | 67.28 | 16.94 |  | 130.0 |  |
| $A A B$ | IEEE 802.11ac WiFi (20MHz, MCS4, 90 pc duty cycle) | X | 5.06 | 66.78 | 16.45 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.68 | 66.42 | 16.34 |  | 130.0 |  |
|  |  | Z | 4.71 | 67.09 | 16.79 |  | 130.0 |  |
| $\mathrm{AAB}$ | IEEE 802.11ac WiFi (20MHz, MCS5, 90 pc duty cycle) | X | 5.07 | 66.89 | 16.47 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.69 | 66.60 | 16.39 |  | 130.0 |  |
|  |  | Z | 4.72 | 67.29 | 16.86 |  | 130.0 |  |
| AAB | IEEE 802.11ac WiFi (20MHz, MCS6, 90 pc duty cycle) | X | 5.09 | 66.84 | 16.39 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.69 | 66.47 | 16.27 |  | 130.0 |  |
|  |  | Z | 4.72 | 67.12 | 16.71 |  | 130.0 |  |
| $\begin{aligned} & 10612 \\ & \mathrm{AAB} \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (20MHz, MCS7, 90 pc duty cycle) | X | 5.02 | 67.07 | 16.64 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.63 | 66.65 | 16.50 |  | 130.0 |  |
|  |  | Z | 4.67 | 67.34 | 16.97 |  | 130.0 |  |
| $\begin{array}{\|l\|} 1061 \\ \mathrm{AAB} \\ \hline \end{array}$ | EEE 802.11ac WiFi (20MHz, MCS8, 90pc duty cycle) | X | 5.05 | 66.55 | 16.22 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.68 | 66.26 | 16.11 |  | 130.0 |  |
|  |  | Z | 4.71 | 66.93 | 16.56 |  | 130.0 |  |
| $\begin{aligned} & 10616 \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (40MHz, MCSO, 90 pc duty cycle) | X | 5.58 | 67.01 | 16.56 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.30 | 66.67 | 16.53 |  | 130.0 |  |
|  |  | Z | 5.31 | 67.17 | 16.87 |  | 130.0 |  |
| $\begin{aligned} & 10617 \\ & \text { AAB } \end{aligned}$ | IEEE 802.11ac WiFi (40MHz, MCS1, 90 pc duty cycle) | X | 5.67 | 67.15 | 16.59 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.40 | 66.96 | 16.65 |  | 130.0 |  |
|  |  | Z | 5.40 | 67.43 | 16.98 |  | 130.0 |  |
| $\begin{aligned} & 1061 \\ & \mathrm{AAB} \\ & \hline \end{aligned}$ | IEEE 802.11 ac WiFi (40MHz, MCS2, 90 pc duty cycle) | X | 5.54 | 67.19 | 16.63 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.27 | 66.91 | 16.64 |  | 130.0 |  |
|  |  | Z | 5.28 | 67.44 | 17.00 |  | 130.0 |  |
| $\mathrm{AAB}$ | IEEE 802.11ac WiFi (40MHz, MCS3, 90pe duty cycle) | X | 5.56 | 66.99 | 16.47 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.29 | 66.74 | 16.49 |  | 130.0 |  |
|  |  | Z | 5.29 | 67.20 | 16.82 |  | 130.0 |  |
| AAB | IEEE 802.1 1ac WiFi (40MHz, MCS4, 90 pc duty cycle) | X | 5.71 | 67.17 | 16.61 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.37 | 66.74 | 16.54 |  | 130.0 |  |
|  |  | Z | 5.37 | 67.21 | 16.87 |  | 130.0 |  |
| $\begin{aligned} & 10621- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (40MHz, MCS5, 90pc duty cycle) | X | 5.67 | 67.21 | 16.74 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | $Y$ | 5.36 | 66.85 | 16.72 |  | 130.0 |  |
|  |  | $\underline{Z}$ | 5.37 | 67.34 | 17.05 |  | 130.0 |  |
| $\begin{aligned} & 1062 \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (40MHz, MCS6, 90 pc duty cycle) | X | 5.65 | 67.25 | 16.75 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.40 | 67.10 | 16.83 |  | 130.0 |  |
|  |  | Z | 5.39 | 67.52 | 17.14 |  | 130.0 |  |


| $\begin{aligned} & 10623- \\ & \mathrm{AAB} \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (40MHz, MCS7, 90 pc duty cycle) | X | 5.59 | 67.04 | 16.55 | 0.46 | 130.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 5.26 | 66.55 | 16.43 |  | 130.0 |  |
|  |  | Z | 5.26 | 67.02 | 16.76 |  | 130.0 |  |
| 10624-$\mathrm{AAB}$ | IEEE 802.11ac WiFi (40MHz, MCS8, 90 pc duty cycle) | X | 5.72 | 67.01 | 16.59 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.45 | 66.76 | 16.60 |  | 130.0 |  |
|  |  | Z | 5.45 | 67.20 | 16.91 |  | 130.0 |  |
| $\begin{array}{\|l\|} \hline 10625- \\ \text { AAB } \\ \hline \end{array}$ | IEEE 802.11ac WiFi (40MHz, MCS9, $90 \mathrm{pc} \text { duty cycle) }$ | X | 6.03 | 67.67 | 16.96 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.87 | 67.91 | 17.22 |  | 130.0 |  |
|  |  | Z | 5.76 | 68.04 | 17.38 |  | 130.0 |  |
| $\begin{aligned} & 10626- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi ( 80 MHz , MCSO, 90 pe duty cycle) | X | 5.81 | 67.03 | 16.49 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.60 | 66.70 | 16.47 |  | 130.0 |  |
|  |  | Z | 5.61 | 67.15 | 16.78 |  | 130.0 |  |
| $\begin{aligned} & 10627- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (80MHz, MCS1, 90 pc duty cycle) | X | 6.05 | 67.45 | 16.63 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.90 | 67.46 | 16.82 |  | 130.0 |  |
|  |  | Z | 5.89 | 67.86 | 17.10 |  | 130.0 |  |
| $\begin{aligned} & 10628- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (80MHz, MCS2, 90 pc duty cycle) | X | 5.90 | 67.26 | 16.49 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.65 | 66.83 | 16.44 |  | 130.0 |  |
|  |  | Z | 5.64 | 67.23 | 16.72 |  | 130.0 |  |
| $\begin{array}{\|l\|} \hline 10629- \\ \mathrm{AAB} \\ \hline \end{array}$ | IEEE 802.11ac WiFi (80MHz, MCS3, 90 pc duty cycle) | X | 6.01 | 67.37 | 16.53 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.73 | 66.92 | 16.48 |  | 130.0 |  |
|  |  | Z | 5.72 | 67.32 | 16.76 |  | 130.0 |  |
| $\begin{aligned} & 10630- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi ( $80 \mathrm{MHz}, \mathrm{MCS} 4$, 90 pc duty cycle) | X | 6.52 | 69.01 | 17.35 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 6.39 | 69.08 | 17.54 |  | 130.0 |  |
|  |  | Z | 6.23 | 69.06 | 17.62 |  | 130.0 |  |
| $\begin{aligned} & 10631- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (80MHz, MCS5, 90 pc duty cycle) | X | 6.47 | 68.93 | 17.48 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 6.08 | 68.29 | 17.35 |  | 130.0 |  |
|  |  | Z | 6.04 | 68.60 | 17.59 |  | 130.0 |  |
| $\begin{aligned} & 10632- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (80MHz, MCS6, 90 pc duty cycle) | X | 6.09 | 67.71 | 16.89 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.86 | 67.50 | 16.98 |  | 130.0 |  |
|  |  | Z | 5.85 | 67.92 | 17.27 |  | 130.0 |  |
| $\begin{aligned} & 10633- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi ( 80 MHz , MCS7, 90 pc duty cycle) | X | 6.03 | 67.58 | 16.67 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.68 | 66.89 | 16.50 |  | 130.0 |  |
|  |  | Z | 5.69 | 67.38 | 16.83 |  | 130.0 |  |
| $\begin{aligned} & 10634- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi ( $80 \mathrm{MHz}, \mathrm{MCS}$, 90 pc duty cycle) | X | 6.01 | 67.57 | 16.72 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.67 | 66.94 | 16.58 |  | 130.0 |  |
|  |  | Z | 5.68 | 67.40 | 16.89 |  | 130.0 |  |
| 10635-$\mathrm{AAB}$ | IEEE 802.11ac WiFi (80MHz, MCS9, 90 pc duty cycle) | X | 5.89 | 66.92 | 16.15 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.55 | 66.28 | 15.98 |  | 130.0 |  |
|  |  | Z | 5.55 | 66.70 | 16.28 |  | 130.0 |  |
| $\begin{aligned} & 10636- \\ & \text { AAC } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi ( 160 MHz , MCSO, 90 pe duty cycle) | X | 6.20 | 67.41 | 16.57 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 6.03 | 67.08 | 16.57 |  | 130.0 |  |
|  |  | Z | 6.04 | 67.48 | 16.84 |  | 130.0 |  |
| 10637-AAC | IEEE 802.11ac WiFi ( 160 MHz , MCS1, 90 pc duty cycle) | X | 6.42 | 67.92 | 16.80 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 6.22 | 67.58 | 16.80 |  | 130.0 |  |
|  |  | Z | 6.21 | 67.94 | 17.05 |  | 130.0 |  |
| $\begin{aligned} & 10638- \\ & \text { AAC } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (160MHz, MCS2, 90 pc duty cycle) | X | 6.37 | 67.75 | 16.69 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 6.22 | 67.55 | 16.76 |  | 130.0 |  |
|  |  | Z | 6.21 | 67.90 | 17.01 |  | 130.0 |  |


| 10639- $A A C$ | IEEE 802.11ac WiFi (160MHz, MCS3, 90 pc duty cycle) | X | 6.40 | 67.84 | 16.78 | 0.46 | 130.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 6.16 | 67.39 | 16.73 |  | 130.0 |  |
|  |  | Z | 6.16 | 67.78 | 16.99 |  | 130.0 |  |
| AAC | 90 pc duty cycle) | X | 6.43 | 67.93 | 16.78 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 6.17 | 67.42 | 16.68 |  | 130.0 |  |
|  |  | Z | 6.17 | 67.80 | 16.95 |  | 130.0 |  |
| $\begin{aligned} & 1064 \\ & \text { AAC } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi ( $160 \mathrm{MHz}, \mathrm{MCS} 5$, 90 pc duty cycle) | X | 6.43 | 67.66 | 16.66 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 6.23 | 67.37 | 16.68 |  | 130.0 |  |
|  |  | $\underline{Z}$ | 6.24 | 67.78 | 16.96 |  | 130.0 |  |
| $\mathrm{AAC}$ | 90 pc duty cycle) | X | 6.52 | 68.06 | 17.01 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 6.25 | 67.55 | 16.94 |  | 130.0 |  |
| 10643- |  | Z | 6.25 | 67.94 | 17.20 |  | 130.0 |  |
| AAC | 90 pc duty cycle) | X | 6.33 | 67.69 | 16.75 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 6.11 | 67.31 | 16.72 |  | 130.0 |  |
|  |  | Z | 6.10 | 67.69 | 16.98 |  | 130.0 |  |
| AAC | IEEE 802.11ac WiFI (160MHz, MCS8, 90pe duty cycle) | X | 6.58 | 68.44 | 17.15 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 6.26 | 67.77 | 16.96 |  | 130.0 |  |
|  |  | Z | 6.23 | 68.07 | 17.19 |  | 130.0 |  |
| $\mathrm{AAC}$ | 90 pc duty cycle) | X | 6.78 | 68.54 | 17.13 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 6.61 | 68.43 | 17.26 |  | 130.0 |  |
|  |  | Z | 6.40 | 68.24 | 17.24 |  | 130.0 |  |
| AAE | LTE-TDD (SC-FDMA, 1 RB, 5 MHz , QPSK, UL Subframe $=2,7$ ) | X | 24.78 | 102.91 | 33.53 | 9.30 | 60.0 | $\pm 9.6$ \% |
|  |  | Y | 62.18 | 133.63 | 43.81 |  | 60.0 |  |
|  |  | Z | 100.00 | 147.17 | 47.73 |  | 60.0 |  |
| AAE | LTE-TDD (SC-FDMA, 1 RB, 20 MHz , QPSK, UL Subframe $=2,7$ ) | X | 26.20 | 104.83 | 34.24 | 9.30 | 60.0 | $\pm 9.6$ \% |
|  |  | Y | 61.16 | 134.29 | 44.17 |  | 60.0 |  |
|  |  | Z | 100.00 | 148.47 | 48.28 |  | 60.0 |  |
| AAA | CDMA2000 (1x Advanced) | X | 0.97 | 66.86 | 13.86 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 0.59 | 62.80 | 9.54 |  | 150.0 |  |
|  |  | Z | 1.00 | 70.16 | 13.59 |  | 150.0 |  |
| $\mathrm{AAC}$ | LTE-TDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44\%) | X | 5.15 | 70.12 | 18.13 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 4.25 | 69.02 | 17.48 |  | 80.0 |  |
|  |  | Z | 4.61 | 71.14 | 18.58 |  | 80.0 |  |
| AAC | LTE-TDD (OFDMA, 10 MHz , E-TM 3.1, Clipping 44\%) | X | 5.54 | 69.21 | 18.03 | 2.23 | 80.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.68 | 67.95 | 17.51 |  | 80.0 |  |
|  |  | Z | 4.86 | 69.18 | 18.22 |  | 80.0 |  |
| AAC | Clipping 44\%) <br> (OFDMA, 15 MHz, E-TM 3.1, | X | 5.43 | 68.90 | 18.02 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 4.64 | 67.55 | 17.50 |  | 80.0 |  |
|  |  | Z | 4.78 | 68.64 | 18.16 |  | 80.0 |  |
| $\begin{aligned} & 1065 \\ & \text { AAD } \\ & \hline \end{aligned}$ | LTE-TDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44\%) | X | 5.48 | 68.99 | 18.07 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 4.70 | 67.51 | 17.53 |  | 80.0 |  |
|  |  | Z | 4.83 | 68.53 | 18.16 |  | 80.0 |  |
| $\begin{aligned} & 1065 \\ & \text { AAA } \end{aligned}$ | Pulse Waveform (200Hz, 10\%) | X | 11.40 | 81.94 | 22.18 | 10.00 | 50.0 | $\pm 9.6$ \% |
|  |  | Y | 19.50 | 92.75 | 24.13 |  | 50.0 |  |
|  |  | Z | 35.42 | 102.56 | 27.13 |  | 50.0 |  |
| $\begin{aligned} & 10655 \\ & \text { AAA } \end{aligned}$ | Pulse Waveform (200Hz, 20\%) | X | 14.93 | 87.71 | 22.77 | 6.99 | 60.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 113.85 | 27.97 |  | 60.0 |  |
|  |  | Z | 100.00 | 115.25 | 28.59 |  | 60.0 |  |


| $10660-$ <br> AAA | Pulse Waveform (200HZ, 40\%) | X | 100.00 | 114.86 | 28.35 | 3.98 | 80.0 | $\pm 9.6 \%$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  | Y | 100.00 | 110.72 | 25.06 |  | 80.0 |  |
|  |  | Z | 100.00 | 114.19 | 26.61 |  | 80.0 |  |
| $10661-$ <br> AAA | Pulse Waveform $(200 \mathrm{~Hz}, 60 \%)$ | X | 100.00 | 115.39 | 27.09 | 2.22 | 100.0 | $\pm 9.6 \%$ |
|  |  | Y | 100.00 | 109.17 | 23.03 |  | 100.0 |  |
|  |  | Z | 100.00 | 117.05 | 26.45 |  | 100.0 |  |
| $10662-$ <br> AAA | Pulse Waveform $(200 \mathrm{~Hz}, 80 \%)$ | X | 100.00 | 120.85 | 27.46 | 0.97 | 120.0 | $\pm 9.6 \%$ |
|  |  | Y | 100.00 | 103.08 | 18.77 |  | 120.0 |  |
|  |  | Z | 100.00 | 130.20 | 29.74 |  | 120.0 |  |

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

Calibration Laboratory of<br>Schmid \& Partner<br>Engineering AG<br>Zeughausstrasse 43, 8004 Zurich, Switzerland

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


S Schweizerischer Kalibrierdienst
C Service suisse d'étalonnage
$\mathbf{S}$ Servizio svizzero di taratura
Swiss Calibration Service

Accreditation No.: SCS 0108

Client PCTest

## Cerificate No: ES3-3319. Mar18

## CALIBRATION CERTIFICATE

| Object | ES3DV3 - SN:3319 |  |
| :---: | :---: | :---: |
| Calibration procedure(s) | QA CAL-01.v9, QA CAL-23.v5, QA CAL-25.v6 Calibration procedure for dosimetric E-field probes |  |
| Calibration date: | March 13, 2018 |  |

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

All calibrations have been conducted in the closed laboratory facility: environment temperature $(22 \pm 3)^{\circ} \mathrm{C}$ and humidity $<70 \%$.

Calibration Equipment used (M\&TE critical for calibration)

| Primary Standards | ID | Cal Date (Certificate No.) | Scheduled Calibration |
| :---: | :---: | :---: | :---: |
| Power meter NRP | SN: 104778 | 04-Apr-17 (No. 217-02521/02522) | Apr-18 |
| Power sensor NRP-Z91 | SN: 103244 | 04-Apr-17 (No. 217-02521) | Apr-18 |
| Power sensor NRP-Z91 | SN: 103245 | 04-Apr-17 (No. 217-02525) | Apr-18 |
| Reference 20 dB Attenuator | SN: S5277 (20x) | 07-Apr-17 (No. 217-02528) | Apr-18 |
| Reference Probe ES3DV2 | SN: 3013 | 30-Dec-17 (No. ES3-3013_Dec17) | Dec-18 |
| DAE4 | SN: 660 | 21-Dec-17 (No. DAE4-660 Dec17) | Dec-18 |
| Secondary Standards | ID | Check Date (in house) | Scheduled Check |
| Power meter E4419B | SN: GB41293874 | 06-Apr-16 (in house check Jun-16) | In house check: Jun-18 |
| Power sensor E4412A | SN: MY41498087 | 06-Apr-16 (in house check Jun-16) | In house check: Jun-18 |
| Power sensor E4412A | SN: 000110210 | 06-Apr-16 (in house check Jun-16) | In house check: Jun-18 |
| RF generator HP 8648C | SN: US3642U01700 | 04-Aug-99 (in house check Jun-16) | In house check: Jun-18 |
| Network Analyzer HP 8753E | SN: US37390585 | 18-Oct-01 (in house check Oct-17) | In house check: Oct-18 |



Issued: March 15, 2018
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Multilateral Agreement for the recognition of calibration certificates

## Glossary:

TSL
NORMx,y,z
ConvF
DCP
CF
A, B, C, D
Polarization $\varphi$
Polarization $\vartheta$

```
tissue simulating liquid sensitivity in free space sensitivity in TSL / NORM \(x, y, z\) diode compression point crest factor (1/duty_cycle) of the RF signal modulation dependent linearization parameters \(\varphi\) rotation around probe axis \(\vartheta\) rotation around an axis that is in the plane normal to probe axis (at measurement center), i.e., \(\vartheta=0\) is normal to probe axis
Connector Angle information used in DASY system to align probe sensor \(X\) to the robot coordinate system
```


## Calibration is Performed According to the Following Standards:

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

## Methods Applied and Interpretation of Parameters:

- NORMx,y,z: Assessed for E-field polarization $\vartheta=0$ ( $f \leq 900 \mathrm{MHz}$ in TEM-cell; $\mathrm{f}>1800 \mathrm{MHz}$ : R22 waveguide). NORMx,y,z are only intermediate values, i.e., the uncertainties of NORM $x, y, z$ does not affect the $E^{2}$-field uncertainty inside TSL (see below ConvF).
- NORM(f) $x, y, z=$ NORM $M, y, z$ * frequency_response (see Frequency Response Chart). This linearization is implemented in DASY4 software versions later than 4.2. The uncertainty of the frequency response is included in the stated uncertainty of ConvF.
- DCPx,y,z: DCP are numerical linearization parameters assessed based on the data of power sweep with CW signal (no uncertainty required). DCP does not depend on frequency nor media.
- PAR: PAR is the Peak to Average Ratio that is not calibrated but determined based on the signal characteristics
- $A x, y, z ; B x, y, z ; C x, y, z ; D x, y, z ; V R x, y, z: A, B, C, D$ are numerical linearization parameters assessed based on the data of power sweep for specific modulation signal. The parameters do not depend on frequency nor media. VR is the maximum calibration range expressed in RMS voltage across the diode.
- ConvF and Boundary Effect Parameters: Assessed in flat phantom using E-field (or Temperature Transfer Standard for $f \leq 800 \mathrm{MHz}$ ) and inside waveguide using analytical field distributions based on power measurements for $\mathrm{f}>800 \mathrm{MHz}$. The same setups are used for assessment of the parameters applied for boundary compensation (alpha, depth) of which typical uncertainty values are given. These parameters are used in DASY4 software to improve probe accuracy close to the boundary. The sensitivity in TSL corresponds to NORMx,y,z* ConvF whereby the uncertainty corresponds to that given for ConvF. A frequency dependent ConvF is used in DASY version 4.4 and higher which allows extending the validity from $\pm 50 \mathrm{MHz}$ to $\pm 100$ MHz .
- Spherical isotropy (3D deviation from isotropy): in a field of low gradients realized using a flat phantom exposed by a patch antenna.
- Sensor Offset: The sensor offset corresponds to the offset of virtual measurement center from the probe tip (on probe axis). No tolerance required.
- Connector Angle: The angle is assessed using the information gained by determining the NORMX (no uncertainty required).


# Probe ES3DV3 

## SN:3319

Manufactured: January 10, 2012
Calibrated: $\quad$ March 13,2018

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

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

## Basic Calibration Parameters

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

Modulation Calibration Parameters

| UID | Communication System Name |  | $\mathbf{A}$ <br> $\mathbf{d B}$ | $\mathbf{B}$ <br> $\mathbf{d B} \sqrt{ } \mathbf{~} \mathbf{V}$ | $\mathbf{C}$ | $\mathbf{D}$ <br> $\mathbf{d B}$ | $\mathbf{V R}$ <br> $\mathbf{m V}$ | $\mathbf{U n c}^{\mathbf{E}}$ <br> $\mathbf{( k = 2 )}$ |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | CW | X | 0.0 | 0.0 | 1.0 | 0.00 | 197.9 | $\pm 3.8 \%$ |
|  |  | Y | 0.0 | 0.0 | $\mathbf{1 . 0}$ |  | 198.2 |  |
|  |  | Z | 0.0 | 0.0 | 1.0 |  | 200.6 |  |

Note: For details on UID parameters see Appendix.

Sensor Model Parameters

|  | $\mathbf{C 1}$ <br> $\mathbf{f F}$ | $\mathbf{C 2}$ <br> $\mathbf{f F}$ | $\mathbf{\alpha}$ <br> $\mathbf{V}^{\mathbf{- 1}}$ | $\mathbf{T 1}$ <br> $\mathbf{m s .} \mathbf{V}^{-\mathbf{2}}$ | $\mathbf{T 2}$ <br> $\mathbf{m s} . \mathbf{V}^{-1}$ | $\mathbf{T 3}$ <br> $\mathbf{m s}$ | $\mathbf{T} 4$ <br> $\mathbf{V}^{-\mathbf{2}}$ | $\mathbf{T} 5$ <br> $\mathbf{V}^{-1}$ | $\mathbf{T 6}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| X | 60.52 | 430.8 | 35.08 | 29.64 | 3.011 | 5.10 | 0.615 | 0.538 | 1.010 |
| Y | 55.79 | 400.8 | 35.48 | 29.01 | 2.492 | 5.10 | 0.600 | 0.518 | 1.009 |
| Z | 63.98 | 455.3 | 34.93 | 29.72 | 3.442 | 5.10 | 0.679 | 0.571 | 1.011 |

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

[^5]
## DASY/EASY - Parameters of Probe: ES3DV3 - SN:3319

Calibration Parameter Determined in Head Tissue Simulating Media

| $\mathrm{f}(\mathrm{MHz})^{\mathrm{C}}$ | Relative Permittivity ${ }^{\text {F }}$ | Conductivity $(\mathrm{S} / \mathrm{m})^{\mathrm{F}}$ | ConvF X | ConvF Y | ConvF Z | Alpha ${ }^{\text {G }}$ | $\begin{gathered} \text { Depth }^{6} \\ (\mathrm{~mm}) \end{gathered}$ | $\begin{gathered} \text { Unc } \\ (\mathrm{k}=2) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 750 | 41.9 | 0.89 | 6.70 | 6.70 | 6.70 | 0.80 | 1.21 | $\pm 12.0 \%$ |
| 835 | 41.5 | 0.90 | 6.44 | 6.44 | 6.44 | 0.80 | 1.17 | $\pm 12.0 \%$ |
| 1750 | 40.1 | 1.37 | 5.49 | 5.49 | 5.49 | 0.65 | 1.43 | $\pm 12.0 \%$ |
| 1900 | 40.0 | 1.40 | 5.29 | 5.29 | 5.29 | 0.76 | 1.30 | $\pm 12.0$ \% |
| 2300 | 39.5 | 1.67 | 5.06 | 5.06 | 5.06 | 0.72 | 1.29 | $\pm 12.0 \%$ |
| 2450 | 39.2 | 1.80 | 4.71 | 4.71 | 4.71 | 0.77 | 1.30 | $\pm 12.0$ \% |
| 2600 | 39.0 | 1.96 | 4.55 | 4.55 | 4.55 | 0.80 | 1.31 | $\pm 12.0 \%$ |

${ }^{c}$ Frequency validity above 300 MHz of $\pm 100 \mathrm{MHz}$ only applies for DASY v4.4 and higher (see Page 2), else it is restricted to $\pm 50 \mathrm{MHz}$. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is $\pm 10,25,40,50$ and 70 MHz for ConvF assessments at $30,64,128,150$ and 220 MHz respectively. Above 5 GHz frequency validity can be extended to $\pm 110 \mathrm{MHz}$.
${ }^{F}$ At frequencies below 3 GHz , the validity of tissue parameters ( $\varepsilon$ and $\sigma$ ) can be relaxed to $\pm 10 \%$ if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz , the validity of tissue parameters ( $\varepsilon$ and $\sigma$ ) is restricted to $\pm 5 \%$. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.
${ }^{G}$ Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than $\pm 1 \%$ for frequencies below 3 GHz and below $\pm 2 \%$ for frequencies between $3-6 \mathrm{GHz}$ at any distance larger than half the probe tip diameter from the boundary.

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

## Calibration Parameter Determined in Body Tissue Simulating Media

| $\mathrm{f}(\mathrm{MHz})^{\text {c }}$ | Relative Permittivity ${ }^{\text {F }}$ | Conductivity $(\mathrm{S} / \mathrm{m})^{\mathrm{F}}$ | ConvF X | ConvF Y | ConvF 2 | Alpha ${ }^{\text {G }}$ | $\begin{gathered} \text { Depth }^{\sigma} \\ (\mathrm{mm}) \end{gathered}$ | $\begin{aligned} & \text { Unc } \\ & (k=2) \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 750 | 55.5 | 0.96 | 6.32 | 6.32 | 6.32 | 0.65 | 1.26 | $\pm 12.0 \%$ |
| 835 | 55.2 | 0.97 | 6.20 | 6.20 | 6.20 | 0.80 | 1.14 | $\pm 12.0 \%$ |
| 1750 | 53.4 | 1.49 | 5.05 | 5.05 | 5.05 | 0.76 | 1.27 | $\pm 12.0 \%$ |
| 1900 | 53.3 | 1.52 | 4.84 | 4.84 | 4.84 | 0.55 | 1.56 | $\pm 12.0 \%$ |
| 2300 | 52.9 | 1.81 | 4.63 | 4.63 | 4.63 | 0.80 | 1.30 | $\pm 12.0 \%$ |
| 2450 | 52.7 | 1.95 | 4.51 | 4.51 | 4.51 | 0.80 | 1.25 | $\pm 12.0 \%$ |
| 2600 | 52.5 | 2.16 | 4.33 | 4.33 | 4.33 | 0.80 | 1.20 | $\pm 12.0 \%$ |

${ }^{c}$ Frequency validity above 300 MHz of $\pm 100 \mathrm{MHz}$ only applies for DASY v4.4 and higher (see Page 2), else it is restricted to $\pm 50 \mathrm{MHz}$. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncerlainty for the indicated frequency band. Frequency validity below 300 MHz is $\pm 10,25,40,50$ and 70 MHz for ConvF assessments at $30,64,128,150$ and 220 MHz respectively. Above 5 GHz frequency validity can be extended to $\pm 110 \mathrm{MHz}$.
${ }^{F}$ At frequencies below 3 GHz , the validity of tissue parameters ( $\epsilon$ and $\sigma$ ) can be relaxed to $\pm 10 \%$ if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz , the validity of tissue parameters ( E and $\sigma$ ) is restricted to $\pm 5 \%$. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.
${ }^{6}$ Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than $\pm 1 \%$ for frequencies below 3 GHz and below $\pm 2 \%$ for frequencies between $3-6 \mathrm{GHz}$ at any distance larger than half the probe tip diameter from the boundary.

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


Uncertainty of Frequency Response of Enfield: $\pm 6.3 \%(k=2)$

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

$\mathrm{f}=600 \mathrm{MHz}$,TEM

$\mathrm{f}=1800 \mathrm{MHz}, \mathrm{R} 22$



Uncertainty of Axial Isotropy Assessment: $\pm \mathbf{0 . 5 \%}(\mathrm{k}=2$ )

## Dynamic Range f(SAR head $)$ <br> (TEM cell , $\mathrm{f}_{\text {eval }}=1900 \mathrm{MHz}$ )




Uncertainty of Linearity Assessment: $\mathbf{\pm 0 . 6 \%}$ ( $\mathbf{k = 2}$ )

## Conversion Factor Assessment



Error ( $\phi, \vartheta$ ), f=900 MHz



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

Other Probe Parameters

| Sensor Arrangement | Triangular |
| :--- | ---: |
| Connector Angle ( ${ }^{\circ}$ ) | 60.4 |
| Mechanical Surface Detection Mode | enabled |
| Optical Surface Detection Mode | disabled |
| Probe Overall Length | 337 mm |
| Probe Body Diameter | 10 mm |
| Tip Length | 10 mm |
| Tip Diameter | 4 mm |
| Probe Tip to Sensor X Calibration Point | 2 mm |
| Probe Tip to Sensor Y Calibration Point | 2 mm |
| Probe Tip to Sensor Z Calibration Point | 2 mm |
| Recommended Measurement Distance from Surface | 3 mm |

Appendix: Modulation Calibration Parameters

| UID | Communication System Name |  | $\begin{gathered} \mathrm{A} \\ \mathrm{~dB} \end{gathered}$ |  | C | $\begin{gathered} \mathrm{D} \\ \mathrm{~dB} \end{gathered}$ | $\begin{aligned} & \mathrm{VR} \\ & \mathrm{mV} \end{aligned}$ | $\begin{aligned} & \operatorname{Max}^{\text {Unc }} \\ & (\mathrm{k}=2) \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | CW | $X$ | 0.00 | 0.00 | 1.00 | 0.00 | 197.9 | $\pm 3.8 \%$ |
|  |  | $Y$ | 0.00 | 0.00 | 1.00 |  | 198.2 |  |
|  |  | Z | 0.00 | 0.00 | 1.00 |  | 200.6 |  |
| $\begin{aligned} & 10010- \\ & \text { CAA } \end{aligned}$ | SAR Validation (Square, $100 \mathrm{~ms}, 10 \mathrm{~ms}$ ) | X | 9.56 | 81.28 | 19.98 | 10.00 | 25.0 | $\pm 9.6 \%$ |
|  |  | Y | 8.09 | 78.70 | 18.35 |  | 25.0 |  |
|  |  | Z | 8.70 | 79.52 | 19.57 |  | 25.0 |  |
| $\begin{aligned} & 10011- \\ & \mathrm{CAB} \end{aligned}$ | UMTS-FDD (WCDMA) | X | 1.34 | 72.37 | 18.08 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 0.99 | 67.12 | 14.82 |  | 150.0 |  |
|  |  | Z | 1.12 | 68.87 | 16.00 |  | 150.0 |  |
| $\begin{aligned} & 10012- \\ & \text { CAB } \end{aligned}$ | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps) | X | 1.37 | 66.58 | 17.00 | 0.41 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 1.25 | 64.92 | 15.59 |  | 150.0 |  |
|  |  | $Z$ | 1.32 | 65.58 | 16.11 |  | 150.0 |  |
| $\begin{aligned} & 10013- \\ & \text { CAB } \\ & \hline \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 6 Mbps ) | X | 5.18 | 67.48 | 17.64 | 1.46 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.08 | 67.20 | 17.36 |  | 150.0 |  |
|  |  | $Z$ | 5.20 | 67.32 | 17.47 |  | 150.0 |  |
| $10021-$ DAC | GSM-FDD (TDMA, GMSK) | X | 20.40 | 95.52 | 26.57 | 9.39 | 50.0 | $\pm 9.6$ \% |
|  |  | $Y$ | 29.46 | 101.11 | 27.60 |  | 50.0 |  |
|  |  | Z | 14.66 | 89.52 | 24.83 |  | 50.0 |  |
| $\begin{aligned} & 10023- \\ & \text { DAC } \end{aligned}$ | GPRS-FDD (TDMA, GMSK, TN 0) | X | 18.37 | 93.61 | 26.02 | 9.57 | 50.0 | $\pm 9.6$ \% |
|  |  | Y | 24.41 | 97.95 | 26.72 |  | 50.0 |  |
|  |  | Z | 13.84 | 88.39 | 24.49 |  | 50.0 |  |
| 10024- <br> DAC | GPRS-FDD (TDMA, GMSK, TN 0-1) | X | 100.00 | 119.56 | 31.31 | 6.56 | 60.0 | $\pm 9.6 \%$ |
|  |  | Y | 100.00 | 117.39 | 29.93 |  | 60.0 |  |
|  |  | Z | 47.21 | 108.31 | 28.71 |  | 60.0 |  |
| $\begin{aligned} & 10025- \\ & \text { DAC } \\ & \hline \end{aligned}$ | EDGE-FDD (TDMA, 8PSK, TN 0) | X | 21.09 | 108.48 | 41.18 | 12.57 | 50.0 | $\pm 9.6$ \% |
|  |  | Y | 17.11 | 102.80 | 38.82 |  | 50.0 |  |
|  |  | Z | 18.44 | 103.12 | 38.97 |  | 50.0 |  |
| 10026- <br> DAC | EDGE-FDD (TDMA, 8PSK, TN 0-1) | X | 21.59 | 105.09 | 36.25 | 9.56 | 60.0 | $\pm 9.6$ \% |
|  |  | Y | 18.95 | 102.20 | 35.03 |  | 60.0 |  |
|  |  | Z | 18.49 | 100.22 | 34.38 |  | 60.0 |  |
| 10027DAC | GPRS-FDD (TDMA, GMSK, TN 0-1-2) | $X$ | 100.00 | 118.49 | 29.83 | 4.80 | 80.0 | $\pm 9.6 \%$ |
|  |  | $Y$ | 100.00 | 115.83 | 28.28 |  | 80.0 |  |
|  |  | Z | 100.00 | 118.30 | 29.89 |  | 80.0 |  |
| $\begin{aligned} & 10028- \\ & \text { DAC } \end{aligned}$ | GPRS-FDD (TDMA, GMSK, TN 0-1-2-3) | X | 100.00 | 118.84 | 29.14 | 3.55 | 100.0 | $\pm 9.6 \%$ |
|  |  | $Y$ | 100.00 | 115.36 | 27.25 |  | 100.0 |  |
|  |  | Z | 100.00 | 118.10 | 28.92 |  | 100.0 |  |
| $\begin{aligned} & 10029- \\ & \text { DAC } \end{aligned}$ | EDGE-FDD (TDMA, 8PSK, TN 0-1-2) | X | 15.08 | 97.16 | 32.49 | 7.80 | 80.0 | $\pm 9.6 \%$ |
|  |  | $Y$ | 12.90 | 93.80 | 31.06 |  | 80.0 |  |
|  |  | Z | 13.60 | 93.82 | 31.09 |  | 80.0 |  |
| $\begin{aligned} & 10030- \\ & \text { CAA } \end{aligned}$ | IEEE 802.15.1 Bluetooth (GFSK, DH1) | X | 100.00 | 118.11 | 30.01 | 5.30 | 70.0 | $\pm 9.6 \%$ |
|  |  | $Y$ | 100.00 | 115.58 | 28.50 |  | 70.0 |  |
|  |  | Z | 100.00 | 118.16 | 30.20 |  | 70.0 |  |
| 10031CAA | IEEE 802.15.1 Bluetooth (GFSK, DH3) | X | 100.00 | 121.01 | 28.44 | 1.88 | 100.0 | $\pm 9.6$ \% |
|  |  | $Y$ | 100.00 | 114.03 | 25.11 |  | 100.0 |  |
|  |  | Z | 100.00 | 118.73 | 27.54 |  | 100.0 |  |


| $\begin{aligned} & 10032- \\ & \text { CAA } \\ & \hline \end{aligned}$ | IEEE 802.15.1 Bluetooth (GFSK, DH5) | X | 100.00 | 127.26 | 29.88 | 1.17 | 100.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 100.00 | 114.89 | 24.38 |  | 100.0 |  |
|  |  | Z | 100.00 | 122.11 | 27.79 |  | 100.0 |  |
| $\begin{aligned} & 10033- \\ & \text { CAA } \end{aligned}$ | IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH1) | X | 21.21 | 99.84 | 27.91 | 5.30 | 70.0 | $\pm 9.6$ \% |
|  |  | Y | 19.09 | 97.43 | 26.61 |  | 70.0 |  |
|  |  | Z | 13.98 | 92.26 | 25.56 |  | 70.0 |  |
| $\begin{aligned} & 10034- \\ & \text { CAA } \\ & \hline \end{aligned}$ | IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH3) | X | 14.93 | 98.23 | 25.94 | 1.88 | 100.0 | $\pm 9.6 \%$ |
|  |  | Y | 7.46 | 86.71 | 21.62 |  | 100.0 |  |
|  |  | Z | 7.45 | 87.10 | 22.42 |  | 100.0 |  |
| $\begin{aligned} & 10035- \\ & \text { CAA } \end{aligned}$ | IEEE 802.15.1 Bluetooth (P//4-DQPSK, DH5) | X | 7.98 | 90.77 | 23.49 | 1.17 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 3.97 | 79.58 | 18.90 |  | 100.0 |  |
|  |  | Z | 4.48 | 81.52 | 20.27 |  | 100.0 |  |
| $\begin{aligned} & 10036- \\ & \mathrm{CAA} \\ & \hline \end{aligned}$ | IEEE 802.15.1 Bluetooth (8-DPSK, DH1) | X | 26.12 | 103.52 | 29.04 | 5.30 | 70.0 | $\pm 9.6$ \% |
|  |  | Y | 24.16 | 101.42 | 27.84 |  | 70.0 |  |
|  |  | Z | 15.99 | 94.67 | 26.38 |  | 70.0 |  |
| $\begin{aligned} & 10037- \\ & \text { CAA } \end{aligned}$ | IEEE 802.15.1 Bluetooth (8-DPSK, DH3) | X | 14.25 | 97.55 | 25.70 | 1.88 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 7.04 | 85.92 | 21.32 |  | 100.0 |  |
|  |  | Z | 7.24 | 86.72 | 22.25 |  | 100.0 |  |
| $\begin{aligned} & 10038- \\ & \text { CAA } \end{aligned}$ | IEEE 802.15.1 Bluetooth (8-DPSK, DH5) | X | 8.53 | 92.07 | 23.99 | 1.17 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 4.13 | 80.37 | 19.27 |  | 100.0 |  |
|  |  | Z | 4.65 | 82.31 | 20.62 |  | 100.0 |  |
| $\begin{aligned} & 10039- \\ & \text { CAB } \\ & \hline \end{aligned}$ | CDMA2000 (1xRTT, RC1) | X | 2.96 | 79.09 | 19.43 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 1.75 | 71.10 | 15.36 |  | 150.0 |  |
|  |  | Z | 2.10 | 73.23 | 16.92 |  | 150.0 |  |
| $\begin{aligned} & 10042- \\ & \mathrm{CAB} \end{aligned}$ | IS-54 / IS-136 FDD (TDMA/FDM, Pl/4DQPSK, Halfrate) | X | 53.77 | 109.05 | 28.70 | 7.78 | 50.0 | $\pm 9.6$ \% |
|  |  | Y | 79.10 | 112.95 | 28.86 |  | 50.0 |  |
|  |  | Z | 23.46 | 96.42 | 25.41 |  | 50.0 |  |
| $\begin{aligned} & 10044- \\ & \text { CAA } \end{aligned}$ | IS-91/EIA/TIA-553 FDD (FDMA, FM) | X | 0.00 | 123.18 | 1.26 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 0.02 | 127.84 | 0.07 |  | 150.0 |  |
|  |  | Z | 0.00 | 110.77 | 4.52 |  | 150.0 |  |
| $\begin{aligned} & 10048- \\ & \text { CAA } \\ & \hline \end{aligned}$ | DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24) | X | 11.41 | 83.11 | 24.20 | 13.80 | 25.0 | $\pm 9.6$ \% |
|  |  | Y | 12.66 | 85.48 | 24.49 |  | 25.0 |  |
|  |  | Z | 10.45 | 80.79 | 23.56 |  | 25.0 |  |
| $\begin{aligned} & 10049 \text { - } \\ & \text { CAA } \end{aligned}$ | DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12) | X | 13.41 | 87.55 | 24.40 | 10.79 | 40.0 | $\pm 9.6$ \% |
|  |  | Y | 15.25 | 89.77 | 24.55 |  | 40.0 |  |
|  |  | Z | 11.61 | 84.53 | 23.55 |  | 40.0 |  |
| $\begin{aligned} & 10056- \\ & \text { CAA } \end{aligned}$ | UMTS-TDD (TD-SCDMA, 1.28 Mcps) | X | 13.37 | 87.98 | 25.03 | 9.03 | 50.0 | $\pm 9.6$ \% |
|  |  | Y | 13.72 | 88.51 | 24.74 |  | 50.0 |  |
|  |  | Z | 11.72 | 85.02 | 24.05 |  | 50.0 |  |
| $\begin{aligned} & 10058- \\ & \text { DAC } \end{aligned}$ | EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3) | X | 11.14 | 91.28 | 29.72 | 6.55 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 9.52 | 87.98 | 28.26 |  | 100.0 |  |
|  |  | Z | 10.41 | 88.91 | 28.62 |  | 100.0 |  |
| $\begin{aligned} & 10059- \\ & \text { CAB } \end{aligned}$ | IEEE 802.11 b WiFi 2.4 GHz (DSSS, 2 Mbps) | X | 1.60 | 69.38 | 18.31 | 0.61 | 110.0 | $\pm 9.6$ \% |
|  |  | Y | 1.43 | 67.15 | 16.67 |  | 110.0 |  |
|  |  | Z | 1.53 | 67.97 | 17.25 |  | 110.0 |  |
| $\begin{aligned} & 10060- \\ & \text { CAB } \\ & \hline \end{aligned}$ | IEEE 802.11 b WiFi 2.4 GHz (DSSS, 5.5 Mbps) | X | 100.00 | 133.15 | 34.60 | 1.30 | 110.0 | $\pm 9.6 \%$ |
|  |  | Y | 100.00 | 128.63 | 32.36 |  | 110.0 |  |
|  |  | Z | 100.00 | 130.16 | 33.31 |  | 110.0 |  |


| $\begin{aligned} & 10061- \\ & \text { CAB } \end{aligned}$ | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps) | X | 24.68 | 111.64 | 31.63 | 2.04 | 110.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 11.26 | 97.49 | 27.04 |  | 110.0 |  |
|  |  | Z | 10.95 | 96.57 | 26.98 |  | 110.0 |  |
| $\begin{aligned} & 10062- \\ & \text { CAC } \\ & \hline \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps) | X | 4.90 | 67.24 | 16.94 | 0.49 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 4.79 | 66.94 | 16.63 |  | 100.0 |  |
|  |  | Z | 4.90 | 67.05 | 16.74 |  | 100.0 |  |
| $\begin{aligned} & 10063- \\ & \text { CAC } \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps) | X | 4.95 | 67.42 | 17.09 | 0.72 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 4.84 | 67.10 | 16.77 |  | 100.0 |  |
|  |  | Z | 4.95 | 67.23 | 16.89 |  | 100.0 |  |
| 10064CAC | IEEE $802.11 \mathrm{a} / \mathrm{h} \mathrm{WiFi} 5 \mathrm{GHz}$ (OFDM, 12 Mbps) | X | 5.28 | 67.75 | 17.35 | 0.86 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 5.16 | 67.43 | 17.04 |  | 100.0 |  |
|  |  | Z | 5.30 | 67.59 | 17.17 |  | 100.0 |  |
| $\begin{aligned} & 10065- \\ & \text { CAC } \end{aligned}$ | IEEE $802.11 \mathrm{a} / \mathrm{h}$ WiFi 5 GHz (OFDM, 18 Mbps) | X | 5.19 | 67.81 | 17.53 | 1.21 | 100.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.07 | 67.47 | 17.22 |  | 100.0 |  |
|  |  | Z | 5.21 | 67.65 | 17.35 |  | 100.0 |  |
| $\begin{aligned} & 10066- \\ & \text { CAC } \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps) | X | 5.25 | 67.95 | 17.76 | 1.46 | 100.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.12 | 67.61 | 17.44 |  | 100.0 |  |
|  |  | Z | 5.27 | 67.80 | 17.59 |  | 100.0 |  |
| $\begin{aligned} & 10067- \\ & \text { CAC } \end{aligned}$ | IEEE $802.11 \mathrm{a} / \mathrm{h}$ WiFi 5 GHz (OFDM, 36 | X | 5.57 | 68.10 | 18.21 | 2.04 | 100.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.44 | 67.80 | 17.92 |  | 100.0 |  |
|  |  | Z | 5.60 | 67.97 | 18.05 |  | 100.0 |  |
| 10068- CAC | IEEE $802.11 \mathrm{a} / \mathrm{h}$ WiFi 5 GHz (OFDM, 48 Mbps) | X | 5.73 | 68.50 | 18.60 | 2.55 | 100.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.58 | 68.13 | 18.28 |  | 100.0 |  |
|  |  | Z | 5.77 | 68.41 | 18.46 |  | 100.0 |  |
| $\begin{aligned} & 10069- \\ & \text { CAC } \end{aligned}$ | IEEE $802.11 \mathrm{a} / \mathrm{h}$ WiFi 5 GHz (OFDM, 54 Mbps) | X | 5.81 | 68.43 | 18.78 | 2.67 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 5.66 | 68.09 | 18.46 |  | 100.0 |  |
|  |  | Z | 5.84 | 68.33 | 18.64 |  | 100.0 |  |
| $\begin{aligned} & 10071- \\ & \mathrm{CAB} \\ & \hline \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps ) | X | 5.34 | 67.73 | 18.04 | 1.99 | 100.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.22 | 67.44 | 17.75 |  | 100.0 |  |
|  |  | Z | 5.35 | 67.60 | 17.87 |  | 100.0 |  |
| $\begin{aligned} & \hline 10072- \\ & \mathrm{CAB} \\ & \hline \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps ) | X | 5.42 | 68.35 | 18.39 | 2.30 | 100.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.29 | 68.00 | 18.07 |  | 100.0 |  |
|  |  | Z | 5.44 | 68.21 | 18.22 |  | 100.0 |  |
| $\begin{aligned} & 10073- \\ & C A B \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps ) | X | 5.57 | 68.74 | 18.83 | 2.83 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 5.42 | 68.36 | 18.50 |  | 100.0 |  |
|  |  | Z | 5.60 | 68.62 | 18.66 |  | 100.0 |  |
| $\begin{array}{\|l\|} \hline 10074- \\ \mathrm{CAB} \\ \hline \end{array}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps ) | X | 5.61 | 68.84 | 19.10 | 3.30 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 5.46 | 68.44 | 18.75 |  | 100.0 |  |
|  |  | Z | 5.65 | 68.74 | 18.95 |  | 100.0 |  |
| $\begin{aligned} & 10075- \\ & \text { CAB } \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps ) | X | 5.79 | 69.40 | 19.63 | 3.82 | 90.0 | $\pm 9.6$ \% |
|  |  | Y | 5.61 | 68.91 | 19.24 |  | 90.0 |  |
|  |  | Z | 5.85 | 69.35 | 19.51 |  | 90.0 |  |
| $\begin{array}{\|l} \hline 10076- \\ \mathrm{CAB} \\ \hline \end{array}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps ) | X | 5.80 | 69.20 | 19.75 | 4.15 | 90.0 | $\pm 9.6$ \% |
|  |  | Y | 5.64 | 68.73 | 19.37 |  | 90.0 |  |
|  |  | Z | 5.86 | 69.15 | 19.63 |  | 90.0 |  |
| $\begin{aligned} & 10077- \\ & \text { CAB } \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps ) | X | 5.84 | 69.30 | 19.86 | 4.30 | 90.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.68 | 68.82 | 19.47 |  | 90.0 |  |
|  |  | Z | 5.90 | 69.25 | 19.74 |  | 90.0 |  |


| $\begin{aligned} & 10081- \\ & \mathrm{CAB} \end{aligned}$ | CDMA2000 (1xRTT, RC3) | X | 1.29 | 72.14 | 16.36 | 0.00 | 150.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 0.81 | 65.51 | 12.24 |  | 150.0 |  |
|  |  | Z | 0.99 | 67.68 | 14.05 |  | 150.0 |  |
| $\begin{aligned} & 10082- \\ & \text { CAB } \end{aligned}$ | IS-54 / IS-136 FDD (TDMA/FDM, PI/4DQPSK, Fullrate) | X | 2.36 | 64.73 | 9.48 | 4.77 | 80.0 | $\pm 9.6 \%$ |
|  |  | Y | 1.97 | 63.15 | 8.18 |  | 80.0 |  |
|  |  | Z | 2.45 | 64.78 | 9.67 |  | 80.0 |  |
| $\begin{aligned} & 10090- \\ & \text { DAC } \\ & \hline \end{aligned}$ | GPRS-FDD (TDMA, GMSK, TN 0-4) | X | 100.00 | 119.65 | 31.37 | 6.56 | 60.0 | $\pm 9.6 \%$ |
|  |  | Y | 100.00 | 117.49 | 29.99 |  | 60.0 |  |
|  |  | Z | 45.52 | 107.81 | 28.61 |  | 60.0 |  |
| $\begin{aligned} & 10097- \\ & \text { CAB } \end{aligned}$ | UMTS-FDD (HSDPA) | X | 2.00 | 69.44 | 16.95 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 1.78 | 67.32 | 15.42 |  | 150.0 |  |
|  |  | Z | 1.87 | 67.93 | 15.97 |  | 150.0 |  |
| $\begin{aligned} & 10098- \\ & \text { CAB } \end{aligned}$ | UMTS-FDD (HSUPA, Subtest 2) | X | 1.97 | 69.46 | 16.95 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 1.74 | 67.28 | 15.38 |  | 150.0 |  |
|  |  | Z | 1.84 | 67.91 | 15.95 |  | 150.0 |  |
| $\begin{array}{\|l} \hline 10099- \\ \text { DAC } \\ \hline \end{array}$ | EDGE-FDD (TDMA, 8PSK, TN 0-4) | X | 21.45 | 104.88 | 36.18 | 9.56 | 60.0 | $\pm 9.6 \%$ |
|  |  | Y | 18.89 | 102.07 | 34.98 |  | 60.0 |  |
|  |  | Z | 18.39 | 100.05 | 34.32 |  | 60.0 |  |
| $\begin{aligned} & 10100- \\ & \text { CAD } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, 100\% RB, 20 $\mathrm{MHz}, \mathrm{QPSK}$ ) | X | 3.55 | 72.46 | 17.74 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.14 | 70.29 | 16.48 |  | 150.0 |  |
|  |  | Z | 3.35 | 71.19 | 16.95 |  | 150.0 |  |
| $\begin{aligned} & 10101- \\ & \text { CAD } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, 100\% RB, 20 $\mathrm{MHz}, 16-\mathrm{QAM}$ ) | X | 3.45 | 68.62 | 16.57 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 3.26 | 67.61 | 15.85 |  | 150.0 |  |
|  |  | Z | 3.39 | 68.08 | 16.14 |  | 150.0 |  |
| $\begin{aligned} & 10102- \\ & \text { CAD } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 100 \% \text { RB, } 20 \\ & \text { MHz, 64-QAM) } \end{aligned}$ | X | 3.54 | 68.46 | 16.61 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 3.37 | 67.56 | 15.95 |  | 150.0 |  |
|  |  | Z | 3.49 | 67.97 | 16.20 |  | 150.0 |  |
| $\begin{aligned} & 10103- \\ & \text { CAD } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 100\% RB, 20 $\mathrm{MHz}, \mathrm{QPSK}$ ) | X | 8.98 | 78.82 | 21.57 | 3.98 | 65.0 | $\pm 9.6 \%$ |
|  |  | Y | 8.50 | 78.15 | 21.17 |  | 65.0 |  |
|  |  | Z | 8.60 | 77.58 | 20.95 |  | 65.0 |  |
| $\begin{aligned} & 10104- \\ & \text { CAD } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 100 \% \text { RB, } 20 \\ & \mathrm{MHz}, 16-\mathrm{QAM}) \end{aligned}$ | X | 8.85 | 77.44 | 21.89 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 8.45 | 76.83 | 21.49 |  | 65.0 |  |
|  |  | Z | 8.72 | 76.72 | 21.48 |  | 65.0 |  |
| $\begin{aligned} & 10105- \\ & \text { CAD } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 100 \% \text { RB, } 20 \\ & \text { MHZ, } 64-Q A M) \end{aligned}$ | X | 8.33 | 76.23 | 21.66 | 3.98 | 65.0 | $\pm 9.6 \%$ |
|  |  | Y | 7.79 | 75.22 | 21.09 |  | 65.0 |  |
|  |  | Z | 7.71 | 74.28 | 20.69 |  | 65.0 |  |
| 10108-CAE | LTE-FDD (SC-FDMA, 100\% RB, 10 MHz, QPSK) | X | 3.11 | 71.64 | 17.59 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.75 | 69.54 | 16.32 |  | 150.0 |  |
|  |  | Z | 2.95 | 70.37 | 16.78 |  | 150.0 |  |
| $10109$CAE | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 100 \% \text { RB, } 10 \\ & \mathrm{MHz}, 16-\mathrm{QAM} \text { ) } \end{aligned}$ | X | 3.12 | 68.50 | 16.56 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 2.92 | 67.41 | 15.75 |  | 150.0 |  |
|  |  | Z | 3.06 | 67.87 | 16.07 |  | 150.0 |  |
| 10110-CAE | LTE-FDD (SC-FDMA, $100 \% \mathrm{RB}, 5 \mathrm{MHz}$, QPSK) | X | 2.56 | 70.84 | 17.38 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 2.24 | 68.61 | 15.94 |  | 150.0 |  |
|  |  | Z | 2.42 | 69.44 | 16.48 |  | 150.0 |  |
| 10111 CAE | LTE-FDD (SC-FDMA, $100 \% \mathrm{RB}, 5 \mathrm{MHz}$, $16-\mathrm{QAM})$ | X | 2.84 | 69.29 | 16.96 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.62 | 68.02 | 15.99 |  | 150.0 |  |
|  |  | Z | 2.75 | 68.36 | 16.33 |  | 150.0 |  |


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


| $\begin{aligned} & 10149- \\ & \text { CAD } \end{aligned}$ | LTE-FDD (SC-FDMA, $50 \% \mathrm{RB}, 20 \mathrm{MHz}$, | X | 3.13 | 68.56 | 16.60 | 0.00 | 150.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 2.93 | 67.47 | 15.80 |  | 150.0 |  |
|  |  | Z | 3.07 | 67.93 | 16.12 |  | 150.0 |  |
| $\begin{array}{\|l} \hline 10150- \\ \text { CAD } \\ \hline \end{array}$ | LTE-FDD (SC-FDMA, $50 \%$ RB, 20 MHz , 64-QAM) | X | 3.24 | 68.40 | 16.59 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.05 | 67.43 | 15.85 |  | 150.0 |  |
|  |  | Z | 3.18 | 67.82 | 16.13 |  | 150.0 |  |
| $\begin{aligned} & 10151- \\ & \mathrm{CAD} \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \%$ RB, 20 MHz , QPSK) | X | 9.59 | 81.21 | 22.61 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 9.21 | 80.79 | 22.27 |  | 65.0 |  |
|  |  | Z | 9.05 | 79.62 | 21.87 |  | 65.0 |  |
| $\begin{aligned} & 10152- \\ & \text { CAD } \end{aligned}$ | $\qquad$ 16-QAM) | X | 8.53 | 77.77 | 21.82 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 8.07 | 77.03 | 21.32 |  | 65.0 |  |
|  |  | Z | 8.36 | 76.93 | 21.37 |  | 65.0 |  |
| $\begin{aligned} & 10153- \\ & \text { CAD } \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \%$ RB, 20 MHz , 64-QAM) | X | 8.87 | 78.41 | 22.41 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 8.48 | 77.88 | 22.02 |  | 65.0 |  |
|  |  | Z | 8.68 | 77.54 | 21.94 |  | 65.0 |  |
| $\begin{aligned} & 10154- \\ & \text { CAE } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, $50 \%$ RB, 10 MHz , QPSK) | X | 2.63 | 71.34 | 17.67 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.29 | 69.04 | 16.21 |  | 150.0 |  |
|  |  | Z | 2.48 | 69.88 | 16.75 |  | 150.0 |  |
| 10155- <br> CAE | LTE-FDD (SC-FDMA, $50 \% \mathrm{RB}, 10 \mathrm{MHz}$, 16-QAM) | X | 2.84 | 69.30 | 16.97 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.62 | 68.03 | 16.00 |  | 150.0 |  |
|  |  | Z | 2.75 | 68.36 | 16.34 |  | 150.0 |  |
| $\begin{aligned} & 10156- \\ & \text { CAE } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 50 \% \text { RB, } 5 \mathrm{MHz} \text {, } \\ & \text { QPSK) } \end{aligned}$ | X | 2.26 | 71.67 | 17.44 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 1.86 | 68.59 | 15.46 |  | 150.0 |  |
|  |  | Z | 2.07 | 69.64 | 16.29 |  | 150.0 |  |
| 10157-CAE | LTE-FDD (SC-FDMA, $50 \%$ RB, 5 MHz , 16-QAM) | X | 2.42 | 69.16 | 15.83 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 2.11 | 67.12 | 14.31 |  | 150.0 |  |
|  |  | Z | 2.30 | 67.87 | 15.10 |  | 150.0 |  |
| 10158-$\mathrm{CAE}$ | LTE-FDD (SC-FDMA, $50 \% \mathrm{RB}, 10 \mathrm{MHz}$, 64-QAM) | X | 2.99 | 69.33 | 17.05 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.78 | 68.20 | 16.17 |  | 150.0 |  |
|  |  | Z | 2.90 | 68.44 | 16.46 |  | 150.0 |  |
| $10159$CAE | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 50 \% \mathrm{RB}, 5 \mathrm{MHz} \text {, } \\ & \text { 64-QAM) } \end{aligned}$ | X | 2.55 | 69.60 | 16.11 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.22 | 67.56 | 14.60 |  | 150.0 |  |
|  |  | Z | 2.41 | 68.28 | 15.37 |  | 150.0 |  |
| $\begin{aligned} & 10160- \\ & \text { CAD } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, $50 \%$ RB, 15 MHz , QPSK) | X | 3.02 | 70.16 | 17.19 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.77 | 68.66 | 16.17 |  | 150.0 |  |
|  |  | Z | 2.91 | 69.14 | 16.50 |  | 150.0 |  |
| $\begin{aligned} & 10161- \\ & \text { CAD } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, $50 \%$ RB, 15 MHz , 16-QAM) | X | 3.13 | 68.32 | 16.54 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 2.95 | 67.34 | 15.78 |  | 150.0 |  |
|  |  | Z | 3.07 | 67.70 | 16.08 |  | 150.0 |  |
| $\begin{aligned} & 10162- \\ & \text { CAD } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, $50 \%$ RB, 15 MHz , 64-QAM) | X | 3.23 | 68.35 | 16.60 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.06 | 67.45 | 15.88 |  | 150.0 |  |
|  |  | Z | 3.18 | 67.74 | 16.14 |  | 150.0 |  |
| $\begin{aligned} & 10166- \\ & \text { CAE } \end{aligned}$ | LTE-FDD (SC-FDMA, $50 \%$ RB, 1.4 MHz , QPSK) | X | 4.02 | 71.10 | 20.08 | 3.01 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 3.79 | 70.19 | 19.37 |  | 150.0 |  |
|  |  | Z | 4.03 | 70.69 | 19.72 |  | 150.0 |  |
| $\begin{aligned} & 10167- \\ & \text { CAE } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, $50 \%$ RB, 1.4 MHz , 16-QAM) | X | 5.24 | 74.71 | 20.79 | 3.01 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.82 | 73.39 | 19.92 |  | 150.0 |  |
|  |  | Z | 5.25 | 74.14 | 20.39 |  | 150.0 |  |


| $\begin{aligned} & 10168- \\ & \text { CAE } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 50 \% \mathrm{RB}, 1.4 \mathrm{MHz}, \\ & \text { 64-QAM) } \end{aligned}$ | X | 5.76 | 76.76 | 21.96 | 3.01 | 150.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 5.36 | 75.66 | 21.24 |  | 150.0 |  |
|  |  | Z | 5.73 | 75.99 | 21.47 |  | 150.0 |  |
| $\begin{aligned} & 10169- \\ & \text { CAD } \end{aligned}$ | LTE-FDD (SC-FDMA, 1 RB, 20 MHz , QPSK) | X | 3.69 | 72.72 | 20.82 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.33 | 70.78 | 19.63 |  | 150.0 |  |
|  |  | Z | 3.78 | 72.61 | 20.53 |  | 150.0 |  |
| $\begin{aligned} & 10170- \\ & \text { CAD } \end{aligned}$ | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 1 \mathrm{RB}, 20 \mathrm{MHz} \text {, } \\ & \text { 16-QAM) } \end{aligned}$ | X | 5.76 | 80.54 | 23.62 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.94 | 77.74 | 22.22 |  | 150.0 |  |
|  |  | Z | 5.83 | 79.90 | 23.09 |  | 150.0 |  |
| $10171 \text { - }$ <br> AAD | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 1 \text { RB, } 20 \mathrm{MHz}, \\ & \text { 64-QAM) } \end{aligned}$ | X | 4.61 | 75.69 | 20.76 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.94 | 72.92 | 19.25 |  | 150.0 |  |
|  |  | Z | 4.70 | 75.28 | 20.35 |  | 150.0 |  |
| $\begin{aligned} & 10172- \\ & \text { CAD } \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 1 \text { RB, } 20 \mathrm{MHz}, \\ & \text { QPSK) } \end{aligned}$ | X | 36.99 | 114.19 | 35.08 | 6.02 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 22.97 | 105.21 | 32.24 |  | 65.0 |  |
|  |  | Z | 26.68 | 106.36 | 32.56 |  | 65.0 |  |
| $\begin{aligned} & 10173- \\ & \text { CAD } \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 1 \mathrm{RB}, 20 \mathrm{MHz} \text {, } \\ & \text { 16-QAM) } \end{aligned}$ | X | 41.01 | 110.69 | 32.32 | 6.02 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 35.83 | 108.35 | 31.36 |  | 65.0 |  |
|  |  | Z | 28.00 | 102.66 | 29.85 |  | 65.0 |  |
| $\begin{aligned} & 10174- \\ & \text { CAD } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 1 \text { RB, } 20 \mathrm{MHz}, \\ & \text { 64-QAM) } \end{aligned}$ | X | 30.73 | 104.07 | 29.95 | 6.02 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 27.27 | 102.14 | 29.08 |  | 65.0 |  |
|  |  | Z | 22.20 | 97.35 | 27.81 |  | 65.0 |  |
| 10175- CAE | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 1 \text { RB, } 10 \mathrm{MHz} \text {, } \\ & \text { QPSK) } \end{aligned}$ | X | 3.64 | 72.35 | 20.56 | 3.01 | 150.0 | $\pm 9.6 \%$ |
|  |  | $Y$ | 3.28 | 70.42 | 19.36 |  | 150.0 |  |
|  |  | Z | 3.72 | 72.25 | 20.28 |  | 150.0 |  |
| 10176- CAE | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 1 \mathrm{RB}, 10 \mathrm{MHz} \text {, } \\ & \text { 16-QAM) } \end{aligned}$ | X | 5.77 | 80.56 | 23.63 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.95 | 77.76 | 22.23 |  | 150.0 |  |
|  |  | Z | 5.84 | 79.92 | 23.10 |  | 150.0 |  |
| 10177- CAG | LTE-FDD (SC-FDMA, $1 \mathrm{RB}, 5 \mathrm{MHz}$, QPSK) | X | 3.67 | 72.53 | 20.66 | 3.01 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 3.31 | 70.60 | 19.46 |  | 150.0 |  |
|  |  | Z | 3.76 | 72.42 | 20.38 |  | 150.0 |  |
| $\begin{aligned} & 10178- \\ & \text { CAE } \end{aligned}$ | LTE-FDD (SC-FDMA, 1 RB, 5 MHz , 16QAM) | X | 5.68 | 80.23 | 23.47 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.88 | 77.46 | 22.08 |  | 150.0 |  |
|  |  | Z | 5.74 | 79.60 | 22.95 |  | 150.0 |  |
| 10179- CAE | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 1 \text { RB, } 10 \mathrm{MHz} \text {, } \\ & \text { 64-QAM) } \end{aligned}$ | X | 5.14 | 77.96 | 22.04 | 3.01 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.38 | 75.13 | 20.57 |  | 150.0 |  |
|  |  | Z | 5.21 | 77.41 | 21.56 |  | 150.0 |  |
| $\begin{aligned} & 10180- \\ & \text { CAE } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, 1 RB, 5 MHz , 64QAM) | X | 4.59 | 75.59 | 20.70 | 3.01 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 3.92 | 72.83 | 19.19 |  | 150.0 |  |
|  |  | Z | 4.68 | 75.18 | 20.29 |  | 150.0 |  |
| $\begin{aligned} & 10181- \\ & \text { CAD } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 1 \mathrm{RB}, 15 \mathrm{MHz} \text {, } \\ & \text { QPSK) } \end{aligned}$ | X | 3.66 | 72.51 | 20.66 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.30 | 70.58 | 19.46 |  | 150.0 |  |
|  |  | Z | 3.75 | 72.41 | 20.37 |  | 150.0 |  |
| $\begin{aligned} & 10182- \\ & \text { CAD } \end{aligned}$ | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 1 \text { RB, } 15 \mathrm{MHz}, \\ & \text { 16-QAM) } \end{aligned}$ | X | 5.67 | 80.21 | 23.46 | 3.01 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.87 | 77.43 | 22.07 |  | 150.0 |  |
|  |  | Z | 5.73 | 79.57 | 22.94 |  | 150.0 |  |
| 10183- <br> AAC | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 1 \mathrm{RB}, 15 \mathrm{MHz} \text {, } \\ & \text { 64-QAM) } \end{aligned}$ | X | 4.58 | 75.56 | 20.68 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.92 | 72.80 | 19,18 |  | 150.0 |  |
|  |  | Z | 4.67 | 75.15 | 20.27 |  | 150.0 |  |


| $\begin{aligned} & 10184- \\ & \text { CAD } \end{aligned}$ | LTE-FDD (SC-FDMA, 1 RB, 3 MHz , QPSK) | X | 3.68 | 72.56 | 20.68 | 3.01 | 150.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 3.32 | 70.63 | 19.48 |  | 150.0 |  |
|  |  | Z | 3.77 | 72.45 | 20.39 |  | 150.0 |  |
| $\begin{aligned} & 10185- \\ & \text { CAD } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16QAM) | X | 5.70 | 80.29 | 23.50 | 3.01 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.90 | 77.51 | 22.11 |  | 150.0 |  |
|  |  | Z | 5.76 | 79.65 | 22.97 |  | 150.0 |  |
| $\begin{aligned} & 10186- \\ & \text { AAD } \end{aligned}$ | LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64QAM) | X | 4.61 | 75.64 | 20.72 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.94 | 72.88 | 19.21 |  | 150.0 |  |
|  |  | Z | 4.69 | 75.23 | 20.31 |  | 150.0 |  |
| $\begin{array}{\|l} \hline 10187- \\ \text { CAE } \\ \hline \end{array}$ | LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK) | X | 3.69 | 72.61 | 20.73 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.33 | 70.68 | 19.54 |  | 150.0 |  |
|  |  | Z | 3.77 | 72.50 | 20.44 |  | 150.0 |  |
| 10188-CAE | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, 1 RB, } 1.4 \mathrm{MHz}, \\ & \text { 16-QAM) } \end{aligned}$ | X | 5.93 | 81.11 | 23.91 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.09 | 78.33 | 22.53 |  | 150.0 |  |
|  |  | Z | 5.99 | 80.44 | 23.37 |  | 150.0 |  |
| 10189- <br> AAE | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, 1 RB, } 1.4 \mathrm{MHz} \text {, } \\ & \text { 64-QAM) } \end{aligned}$ | X | 4.73 | 76.16 | 21.02 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.04 | 73.37 | 19.51 |  | 150.0 |  |
|  |  | Z | 4.82 | 75.73 | 20.60 |  | 150.0 |  |
| 10193-CAC | IEEE 802.11n (HT Greenfield, 6.5 Mbps , BPSK) | X | 4.67 | 66.99 | 16.47 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.56 | 66.66 | 16.13 |  | 150.0 |  |
|  |  | Z | 4.66 | 66.78 | 16.26 |  | 150.0 |  |
| $\begin{aligned} & 10194- \\ & \text { CAC } \end{aligned}$ | IEEE 802.11n (HT Greenfield, 39 Mbps , 16-QAM) | X | 4.87 | 67.36 | 16.58 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.75 | 67.00 | 16.25 |  | 150.0 |  |
|  |  | Z | 4.87 | 67.15 | 16.37 |  | 150.0 |  |
| $\begin{aligned} & 10195- \\ & \text { CAC } \\ & \hline \end{aligned}$ | IEEE 802.1 1n (HT Greenfield, 65 Mbps , 64-QAM) | X | 4.91 | 67.37 | 16.59 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.79 | 67.03 | 16.27 |  | 150.0 |  |
|  |  | Z | 4.91 | 67.16 | 16.38 |  | 150.0 |  |
| $\begin{aligned} & 10196- \\ & \text { CAC } \\ & \hline \end{aligned}$ | IEEE 802.11 n (HT Mixed, 6.5 Mbps , BPSK) | X | 4.69 | 67.10 | 16.51 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.58 | 66.74 | 16.16 |  | 150.0 |  |
|  |  | Z | 4.69 | 66.88 | 16.30 |  | 150.0 |  |
| $\begin{array}{\|l} \hline 10197- \\ \text { CAC } \\ \hline \end{array}$ | IEEE 802.11n (HT Mixed, 39 Mbps , 16QAM) | X | 4.89 | 67.38 | 16.59 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.77 | 67.03 | 16.26 |  | 150.0 |  |
|  |  | Z | 4.88 | 67.17 | 16.38 |  | 150.0 |  |
| 10198-$\mathrm{CAC}$ | IEEE 802.11n (HT Mixed, 65 Mbps, 64QAM) | X | 4.92 | 67.39 | 16.60 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.80 | 67.05 | 16.28 |  | 150.0 |  |
|  |  | Z | 4.91 | 67.18 | 16.39 |  | 150.0 |  |
| $\begin{array}{\|l} \hline 10219- \\ \text { CAC } \\ \hline \end{array}$ | IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK) | X | 4.64 | 67.11 | 16.47 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.53 | 66.75 | 16.12 |  | 150.0 |  |
|  |  | Z | 4.64 | 66.90 | 16.26 |  | 150.0 |  |
| $\begin{aligned} & 10220- \\ & \text { CAC } \end{aligned}$ | IEEE 802.11 n (HT Mixed, 43.3 Mbps , 16QAM) | X | 4.88 | 67.37 | 16.59 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.76 | 67.01 | 16.26 |  | 150.0 |  |
|  |  | Z | 4.88 | 67.17 | 16.38 |  | 150.0 |  |
| $\begin{aligned} & 10221- \\ & \text { CAC } \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Mixed, 72.2 Mbps, 64QAM) | X | 4.92 | 67.32 | 16.59 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.80 | 66.98 | 16.27 |  | 150.0 |  |
|  |  | Z | 4.92 | 67.11 | 16.38 |  | 150.0 |  |
| $\begin{aligned} & 10222- \\ & \text { CAC } \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Mixed, 15 Mbps , BPSK) | X | 5.23 | 67.59 | 16.70 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.12 | 67.23 | 16.39 |  | 150.0 |  |
|  |  | Z | 5.22 | 67.42 | 16.51 |  | 150.0 |  |


| $10223-$ <br> CAC | IEEE 802.11n (HT Mixed, 90 Mbps, 16- <br> QAM) | X | 5.61 | 67.92 | 16.89 | 0.00 | 150.0 | $\pm 9.6 \%$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  | Y | 5.46 | 67.48 | 16.54 |  | 150.0 |  |
| $10224-$ |  |  |  |  |  |  |  |  |
| CAC | lEEE 802.11n (HT Mixed, 150 Mbps, 64- <br> QAM) | X | 5.61 | 67.78 | 16.72 |  | 150.0 |  |
|  |  | Y | 5.17 | 67.68 | 16.67 | 0.00 | 150.0 | $\pm 9.6 \%$ |
| $10225-$ <br> CAB | UMTS-FDD (HSPA+) | Z | 5.27 | 67.52 | 16.37 |  | 16.48 |  |


| $\begin{aligned} & 10239- \\ & \text { CAD } \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 1 \text { RB, } 15 \mathrm{MHz} \text {, } \\ & \text { 64-QAM) } \end{aligned}$ | X | 31.24 | 104.44 | 30.08 | 6.02 | 65.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 28.46 | 102.92 | 29.32 |  | 65.0 |  |
|  |  | Z | 22.74 | 97.82 | 27.96 |  | 65.0 |  |
| $\begin{aligned} & 10240- \\ & \text { CAD } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 1 \text { RB, } 15 \mathrm{MHz} \text {, } \\ & \text { QPSK) } \end{aligned}$ | X | 42.83 | 117.47 | 36.01 | 6.02 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 31.56 | 111.62 | 34.09 |  | 65.0 |  |
|  |  | Z | 28.94 | 108.32 | 33.17 |  | 65.0 |  |
| $\begin{aligned} & 10241- \\ & \text { CAA } \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 1.4 \mathrm{MHz}$, 16-QAM) | X | 13.21 | 88.13 | 28.12 | 6.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 12.19 | 86.75 | 27.34 |  | 65.0 |  |
|  |  | Z | 12.93 | 86.92 | 27.56 |  | 65.0 |  |
| $\begin{aligned} & 10242- \\ & \text { CAA } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 1.4 \mathrm{MHz}$, 64-QAM) | X | 11.82 | 85.64 | 27.08 | 6.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 11.88 | 86.18 | 27.05 |  | 65.0 |  |
|  |  | Z | 11.71 | 84.70 | 26.62 |  | 65.0 |  |
| $\begin{aligned} & 10243- \\ & \text { CAA } \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 1.4 \mathrm{MHz}$, QPSK) | X | 9.69 | 83.18 | 27.04 | 6.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 8.48 | 80.58 | 25.71 |  | 65.0 |  |
|  |  | Z | 9.71 | 82.55 | 26.66 |  | 65.0 |  |
| $\begin{aligned} & 10244- \\ & \text { CAB } \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 3 \mathrm{MHz}$, 16-QAM) | X | 10.16 | 81.71 | 21.73 | 3.98 | 65.0 | $\pm 9.6 \%$ |
|  |  | Y | 9.31 | 80.28 | 20.70 |  | 65.0 |  |
|  |  | Z | 9.66 | 80.44 | 21.31 |  | 65.0 |  |
| $\begin{aligned} & \hline 10245- \\ & \mathrm{CAB} \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \%$ RB, 3 MHz , 64-QAM) | X | 9.99 | 81.19 | 21.49 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 9.12 | 79.71 | 20.44 |  | 65.0 |  |
|  |  | Z | 9.56 | 80.04 | 21.12 |  | 65.0 |  |
| $\begin{aligned} & 10246- \\ & C A B \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 3 \mathrm{MHz}$, QPSK) | X | 10.26 | 84.67 | 22.74 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 9.22 | 82.91 | 21.64 |  | 65.0 |  |
|  |  | Z | 9.02 | 82.03 | 21.79 |  | 65.0 |  |
| $\begin{aligned} & 10247- \\ & \text { CAD } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \%$ RB, 5 MHz , 16-QAM) | X | 8.13 | 78.66 | 21.05 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 7.56 | 77.60 | 20.25 |  | 65.0 |  |
|  |  | Z | 7.81 | 77.51 | 20.59 |  | 65.0 |  |
| $\begin{aligned} & 10248- \\ & \text { CAD } \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 5 \mathrm{MHz}$, 64-QAM) | X | 8.10 | 78.15 | 20.84 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 7.50 | 77.03 | 20.01 |  | 65.0 |  |
|  |  | Z | 7.84 | 77.14 | 20.44 |  | 65.0 |  |
| $\begin{aligned} & 10249- \\ & \text { CAD } \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \%$ RB, 5 MHz , QPSK) | X | 11.10 | 86.20 | 23.88 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 10.38 | 85.15 | 23.14 |  | 65.0 |  |
|  |  | Z | 9.69 | 83.27 | 22.77 |  | 65.0 |  |
| $\begin{aligned} & 10250- \\ & \text { CAD } \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 10 \mathrm{MHz}$, | X | 8.90 | 80.26 | 22.85 | 3.98 | 65.0 | $\pm 9.6 \%$ |
|  |  | Y | 8.50 | 79.72 | 22.41 |  | 65.0 |  |
|  |  | Z | 8.55 | 78.98 | 22.26 |  | 65.0 |  |
| $\begin{aligned} & 10251- \\ & \text { CAD } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 10 \mathrm{MHz}$, 64-QAM) | X | 8.43 | 78.18 | 21.77 | 3.98 | 65.0 | $\pm 9.6 \%$ |
|  |  | Y | 7.97 | 77.44 | 21.21 |  | 65.0 |  |
|  |  | Z | 8.21 | 77.20 | 21.30 |  | 65.0 |  |
| $\begin{aligned} & 10252- \\ & C A D \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \%$ RB, 10 MHz , QPSK) | X | 10.55 | 84.69 | 23.95 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 10.10 | 84.18 | 23.52 |  | 65.0 |  |
|  |  | Z | 9.56 | 82.30 | 22.95 |  | 65.0 |  |
| $\begin{aligned} & 10253- \\ & \text { CAD } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 15 \mathrm{MHz}$, 16-QAM) | X | 8.29 | 77.16 | 21.61 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 7.87 | 76.45 | 21.11 |  | 65.0 |  |
|  |  | Z | 8.15 | 76.38 | 21.20 |  | 65.0 |  |
| $\begin{aligned} & 10254- \\ & \text { CAD } \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 15 \mathrm{MHz}$, | X | 8.65 | 77.83 | 22.17 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 8.27 | 77.28 | 21.75 |  | 65.0 |  |
|  |  | Z | 8.49 | 77.01 | 21.74 |  | 65.0 |  |


| $\begin{aligned} & 10255- \\ & \text { CAD } \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \%$ RB, 15 MHz , QPSK) | X | 9.28 | 80.86 | 22.71 | 3.98 | 65.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 8.89 | 80.40 | 22.35 |  | 65.0 |  |
|  |  | Z | 8.80 | 79.34 | 21.99 |  | 65.0 |  |
| $\begin{aligned} & 10256- \\ & \text { CAA } \end{aligned}$ | LTE-TDD (SC-FDMA, 100\% RB, 1.4 $\mathrm{MHz}, 16$-QAM) | X | 9.13 | 79.62 | 20.18 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 7.96 | 77.38 | 18.74 |  | 65.0 |  |
|  |  | Z | 8.84 | 78.74 | 19.97 |  | 65.0 |  |
| $\begin{aligned} & 10257- \\ & \text { CAA } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 100 \% \text { RB, } 1.4 \\ & \mathrm{MHz}, 64-\mathrm{QAM} \text { ) } \end{aligned}$ | X | 8.90 | 78.86 | 19.81 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 7.73 | 76.58 | 18.34 |  | 65.0 |  |
|  |  | Z | 8.71 | 78.17 | 19.67 |  | 65.0 |  |
| $\begin{array}{\|l} \hline 10258- \\ \text { CAA } \\ \hline \end{array}$ | LTE-TDD (SC-FDMA, 100\% RB, 1.4 MHz, QPSK) | X | 8.90 | 81.94 | 21.19 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 7.60 | 79.37 | 19.69 |  | 65.0 |  |
|  |  | Z | 8.10 | 80.01 | 20.54 |  | 65.0 |  |
| $\begin{array}{\|l} \hline 10259- \\ \text { CAB } \\ \hline \end{array}$ | LTE-TDD (SC-FDMA, $100 \%$ RB, 3 MHz, 16-QAM) | X | 8.43 | 79.20 | 21.67 | 3.98 | 65.0 | $\pm 9.6 \%$ |
|  |  | Y | 7.92 | 78.34 | 21.01 |  | 65.0 |  |
|  |  | Z | 8.11 | 78.01 | 21.17 |  | 65.0 |  |
| $\begin{array}{\|l\|} \hline 10260- \\ \mathrm{CAB} \\ \hline \end{array}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 100 \% \mathrm{RB}, 3 \mathrm{MHz} \text {, } \\ & \text { 64-QAM) } \end{aligned}$ | X | 8.43 | 78.91 | 21.57 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 7.92 | 78.05 | 20.91 |  | 65.0 |  |
|  |  | Z | 8.14 | 77.80 | 21.11 |  | 65.0 |  |
| $\begin{aligned} & 10261- \\ & \mathrm{CAB} \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $100 \%$ RB, 3 MHz , QPSK) | X | 10.44 | 84.93 | 23.72 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 9.81 | 84.03 | 23.07 |  | 65.0 |  |
|  |  | Z | 9.35 | 82.40 | 22.71 |  | 65.0 |  |
| $\begin{aligned} & 10262- \\ & \text { CAD } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $100 \%$ RB, 5 MHz , 16-QAM) | X | 8.89 | 80.23 | 22.82 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 8.49 | 79.67 | 22.37 |  | 65.0 |  |
|  |  | Z | 8.55 | 78.95 | 22.23 |  | 65.0 |  |
| $\begin{array}{\|l} \hline 10263- \\ \text { CAD } \\ \hline \end{array}$ |  | X | 8.43 | 78.18 | 21.77 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 7.96 | 77.43 | 21.21 |  | 65.0 |  |
|  |  | Z | 8.21 | 77.20 | 21.30 |  | 65.0 |  |
| $\begin{array}{\|l\|} \hline 10264- \\ \text { CAD } \\ \hline \end{array}$ | LTE-TDD (SC-FDMA, $100 \%$ RB, 5 MHz , QPSK) | X | 10.49 | 84.56 | 23.88 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 10.02 | 84.01 | 23.44 |  | 65.0 |  |
|  |  | Z | 9.51 | 82.19 | 22.89 |  | 65.0 |  |
| $\begin{aligned} & 10265- \\ & \text { CAD } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 100 \% \text { RB, } 10 \\ & \mathrm{MHz}, 16-\mathrm{QAM} \text { ) } \end{aligned}$ | X | 8.52 | 77.77 | 21.82 | 3.98 | 65.0 | $\pm 9.6 \%$ |
|  |  | Y | 8.07 | 77.03 | 21.32 |  | 65.0 |  |
|  |  | Z | 8.36 | 76.93 | 21.38 |  | 65.0 |  |
| $\begin{aligned} & \hline 10266- \\ & \text { CAD } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 100 \% \text { RB, } 10 \\ & \mathrm{MHz}, 64-\mathrm{QAM}) \end{aligned}$ | X | 8.87 | 78.41 | 22.40 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 8.48 | 77.88 | 22.01 |  | 65.0 |  |
|  |  | Z | 8.68 | 77.54 | 21.94 |  | 65.0 |  |
| $\begin{aligned} & 10267- \\ & \text { CAD } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $100 \%$ RB, 10 MHz, QPSK) | X | 9.58 | 81.18 | 22.60 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 9.19 | 80.75 | 22.26 |  | 65.0 |  |
|  |  | Z | 9.04 | 79.59 | 21.85 |  | 65.0 |  |
| $\begin{aligned} & 10268- \\ & \text { CAD } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $100 \% \mathrm{RB}, 15$ | X | 8.91 | 77.09 | 21.88 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 8.54 | 76.56 | 21.51 |  | 65.0 |  |
|  |  | Z | 8.80 | 76.43 | 21.50 |  | 65.0 |  |
| $\begin{aligned} & \text { 10269- } \\ & \text { CAD } \end{aligned}$ | LTE-TDD (SC-FDMA, 100\% RB, 15 $\mathrm{MHz}, 64-\mathrm{QAM}$ ) | X | 8.82 | 76.67 | 21.78 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 8.46 | 76.15 | 21.41 |  | 65.0 |  |
|  |  | Z | 8.73 | 76.06 | 21.42 |  | 65.0 |  |
| $\begin{aligned} & 10270- \\ & \text { CAD } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 100\% RB, 15 MHz, QPSK) | X | 8.97 | 78.33 | 21.62 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 8.64 | 77.97 | 21.34 |  | 65.0 |  |
|  |  | Z | 8.71 | 77.32 | 21.10 |  | 65.0 |  |


| $\begin{aligned} & 10274- \\ & \text { CAB } \\ & \hline \end{aligned}$ | UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.10) | X | 2.72 | 67.23 | 15.95 | 0.00 | 150.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 2.57 | 66.31 | 15.13 |  | 150.0 |  |
|  |  | Z | 2.65 | 66.56 | 15.46 |  | 150.0 |  |
| $\begin{aligned} & 10275- \\ & \mathrm{CAB} \end{aligned}$ | UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.4) | X | 1.89 | 70.77 | 17.26 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 1.58 | 67.67 | 15.25 |  | 150.0 |  |
|  |  | Z | 1.72 | 68.75 | 16.01 |  | 150.0 |  |
| $\begin{aligned} & 10277- \\ & \text { CAA } \\ & \hline \end{aligned}$ | PHS (QPSK) | X | 6.00 | 70.47 | 14.76 | 9.03 | 50.0 | $\pm 9.6$ \% |
|  |  | Y | 5.21 | 68.57 | 13.21 |  | 50.0 |  |
|  |  | Z | 6.28 | 70.88 | 15.27 |  | 50.0 |  |
| $\begin{aligned} & 10278- \\ & \text { CAA } \end{aligned}$ | PHS (QPSK, BW 884MHz, Rolloff 0.5) | X | 9.55 | 80.33 | 21.17 | 9.03 | 50.0 | $\pm 9.6$ \% |
|  |  | Y | 8.72 | 78.79 | 19.97 |  | 50.0 |  |
|  |  | Z | 9.29 | 79.51 | 21.06 |  | 50.0 |  |
| $\begin{aligned} & 10279- \\ & \text { CAA } \end{aligned}$ | PHS (QPSK, BW 884MHz, Rolloff 0.38) | X | 9.72 | 80.54 | 21.26 | 9.03 | 50.0 | $\pm 9.6 \%$ |
|  |  | Y | 8.86 | 78.97 | 20.05 |  | 50.0 |  |
|  |  | Z | 9.46 | 79.72 | 21.15 |  | 50.0 |  |
| $\begin{aligned} & 10290- \\ & \text { AAB } \end{aligned}$ | CDMA2000, RC1, SO55, Full Rate | X | 2.18 | 74.40 | 17.31 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 1.44 | 68.27 | 13.81 |  | 150.0 |  |
|  |  | Z | 1.72 | 70.30 | 15.40 |  | 150.0 |  |
| $\begin{aligned} & \text { 10291- } \\ & A A B \\ & \hline \end{aligned}$ | CDMA2000, RC3, SO55, Full Rate | X | 1.24 | 71.68 | 16.15 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 0.80 | 65.30 | 12.12 |  | 150.0 |  |
|  |  | Z | 0.97 | 67.39 | 13.90 |  | 150.0 |  |
| $\begin{aligned} & 10292- \\ & \text { AAB } \\ & \hline \end{aligned}$ | CDMA2000, RC3, SO32, Full Rate | X | 2.10 | 80.68 | 20.23 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 0.98 | 68.86 | 14.25 |  | 150.0 |  |
|  |  | Z | 1.23 | 71.77 | 16.34 |  | 150.0 |  |
| $\begin{aligned} & 10293- \\ & \text { AAB } \\ & \hline \end{aligned}$ | CDMA2000, RC3, SO3, Full Rate | X | 4.35 | 92.52 | 24.81 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 1.43 | 74.29 | 17.12 |  | 150.0 |  |
|  |  | Z | 1.75 | 77.17 | 19.08 |  | 150.0 |  |
| $\begin{aligned} & \hline 10295- \\ & A A B \end{aligned}$ | CDMA2000, RC1, SO3, 1/8th Rate 25 fr . | X | 11.19 | 84.61 | 24.64 | 9.03 | 50.0 | $\pm 9.6$ \% |
|  |  | Y | 11.12 | 84.62 | 24.20 |  | 50.0 |  |
|  |  | Z | 10.33 | 82.52 | 23.91 |  | 50.0 |  |
| $\begin{aligned} & 10297- \\ & \text { AAC } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, $50 \%$ RB, 20 MHz , QPSK) | X | 3.13 | 71.75 | 17.66 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.77 | 69.64 | 16.38 |  | 150.0 |  |
|  |  | Z | 2.96 | 70.46 | 16.84 |  | 150.0 |  |
| $\begin{aligned} & 10298- \\ & \text { AAC } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, $50 \% \mathrm{RB}, 3 \mathrm{MHz}$, QPSK) | X | 2.07 | 71.56 | 16.68 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 1.59 | 67.63 | 14.15 |  | 150.0 |  |
|  |  | Z | 1.84 | 69.13 | 15.41 |  | 150.0 |  |
| $\begin{aligned} & 10299- \\ & \text { AAC } \end{aligned}$ | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 50 \% \mathrm{RB}, 3 \mathrm{MHz} \text {, } \\ & \text { 16-QAM) } \end{aligned}$ | X | 4.44 | 77.05 | 18.50 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 3.17 | 71.89 | 15.69 |  | 150.0 |  |
|  |  | Z | 3.89 | 74.52 | 17.46 |  | 150.0 |  |
| $\begin{aligned} & 10300- \\ & \text { AAC } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 50 \% \text { RB, } 3 \mathrm{MHz} \text {, } \\ & \text { 64-QAM) } \end{aligned}$ | X | 2.98 | 70.18 | 14.87 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 2.33 | 66.80 | 12.64 |  | 150.0 |  |
|  |  | Z | 2.88 | 69.22 | 14.45 |  | 150.0 |  |
| $\begin{aligned} & 10301- \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.16e WiMAX (29:18, 5ms, 10MHZ, QPSK, PUSC) | X | 5.88 | 68.71 | 19.12 | 4.17 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 5.67 | 68.35 | 18.79 |  | 80.0 |  |
|  |  | Z | 5.96 | 68.70 | 19.05 |  | 80.0 |  |
| $\begin{aligned} & 10302- \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.16e WiMAX (29:18, 5ms, 10 MHz, QPSK, PUSC, 3 CTRL symbols) | X | 6.49 | 69.93 | 20.23 | 4.96 | 80.0 | $\pm 9.6 \%$ |
|  |  | Y | 6.06 | 68.48 | 19.24 |  | 80.0 |  |
|  |  | Z | 6.58 | 69.96 | 20.17 |  | 80.0 |  |


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


| $\begin{aligned} & 10402- \\ & \text { AAD } \end{aligned}$ | IEEE 802.11ac WiFi (80MHz, 64-QAM, 99pc duty cycle) | X | 5.81 | 67.99 | 16.74 | 0.00 | 150.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 5.71 | 67.67 | 16.46 |  | 150.0 |  |
|  |  | Z | 5.80 | 67.83 | 16.56 |  | 150.0 |  |
| 10403-$\mathrm{AAB}$ | CDMA2000 (1xEV-DO, Rev. 0) | X | 2.18 | 74.40 | 17.31 | 0.00 | 115.0 | $\pm 9.6$ \% |
|  |  | Y | 1.44 | 68.27 | 13.81 |  | 115.0 |  |
|  |  | Z | 1.72 | 70.30 | 15.40 |  | 115.0 |  |
| 10404- <br> AAB | CDMA2000 (1xEV-DO, Rev. A) | X | 2.18 | 74.40 | 17.31 | 0.00 | 115.0 | $\pm 9.6 \%$ |
|  |  | Y | 1.44 | 68.27 | 13.81 |  | 115.0 |  |
|  |  | Z | 1.72 | 70.30 | 15.40 |  | 115.0 |  |
| $\begin{aligned} & 10406- \\ & \text { AAB } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { CDMA2000, RC3, SO32, SCH0, Full } \\ & \text { Rate } \end{aligned}$ | X | 100.00 | 125.34 | 32.57 | 0.00 | 100.0 | $\pm 9.6 \%$ |
|  |  | Y | 100.00 | 122.30 | 30.90 |  | 100.0 |  |
|  |  | Z | 100.00 | 123.59 | 31.86 |  | 100.0 |  |
| 10410- <br> AAD | LTE-TDD (SC-FDMA, 1 RB, 10 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$, Subframe Conf=4) | X | 100.00 | 121.08 | 31.14 | 3.23 | 80.0 | $\pm 9.6 \%$ |
|  |  | Y | 100.00 | 119.39 | 30.03 |  | 80.0 |  |
|  |  | Z | 100.00 | 119.84 | 30.69 |  | 80.0 |  |
| $\begin{array}{\|l} \hline 10415- \\ \text { AAA } \\ \hline \end{array}$ | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle) | X | 1.04 | 64.21 | 15.75 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 0.96 | 62.81 | 14.37 |  | 150.0 |  |
|  |  | Z | 1.00 | 63.31 | 14.86 |  | 150.0 |  |
| $\begin{aligned} & 10416- \\ & \text { AAA } \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (ERPOFDM, 6 Mbps, 99 pc duty cycle) | X | 4.68 | 67.03 | 16.52 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.57 | 66.70 | 16.19 |  | 150.0 |  |
|  |  | Z | 4.67 | 66.81 | 16.30 |  | 150.0 |  |
| 10417- <br> AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 99pc duty cycle) | X | 4.68 | 67.03 | 16.52 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.57 | 66.70 | 16.19 |  | 150.0 |  |
|  |  | Z | 4.67 | 66.81 | 16.30 |  | 150.0 |  |
| 10418-AAA | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 6 Mbps, 99 pc duty cycle, Long preambule) | X | 4.66 | 67.18 | 16.53 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.55 | 66.84 | 16.19 |  | 150.0 |  |
|  |  | Z | 4.65 | 66.94 | 16.30 |  | 150.0 |  |
| 10419- <br> AAA | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 6 Mbps , 99pc duty cycle, Short preambule) | X | 4.69 | 67.13 | 16.53 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.58 | 66.80 | 16.20 |  | 150.0 |  |
|  |  | Z | 4.68 | 66.91 | 16.31 |  | 150.0 |  |
| 10422-$\mathrm{AAB}$ | IEEE 802.11n (HT Greenfield, 7.2 Mbps , BPSK) | X | 4.81 | 67.13 | 16.54 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.70 | 66.81 | 16.22 |  | 150.0 |  |
|  |  | Z | 4.80 | 66.92 | 16.33 |  | 150.0 |  |
| $\begin{aligned} & 10423- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Greenfield, 43.3 Mbps, 16-QAM) | X | 5.01 | 67.51 | 16.68 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.89 | 67.16 | 16.35 |  | 150.0 |  |
|  |  | Z | 5.01 | 67.31 | 16.47 |  | 150.0 |  |
| $\begin{aligned} & 10424- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.1 1 n (HT Greenfield, 72.2 Mbps, 64-QAM) | X | 4.92 | 67.45 | 16.65 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.80 | 67.10 | 16.32 |  | 150.0 |  |
|  |  | Z | 4.92 | 67.24 | 16.43 |  | 150.0 |  |
| $\begin{aligned} & 10425- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11 n (HT Greenfield, 15 Mbps , BPSK) | X | 5.50 | 67.77 | 16.79 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.41 | 67.50 | 16.53 |  | 150.0 |  |
|  |  | Z | 5.49 | 67.58 | 16.59 |  | 150.0 |  |
| 10426- <br> AAB | IEEE 802.11n (HT Greenfield, 90 Mbps, 16-QAM) | X | 5.51 | 67.80 | 16.80 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.41 | 67.51 | 16.53 |  | 150.0 |  |
|  |  | Z | 5.50 | 67.62 | 16.60 |  | 150.0 |  |


| $\begin{aligned} & 10427- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Greenfield, 150 Mbps , 64-QAM) | X | 5.53 | 67.79 | 16.79 | 0.00 | 150.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 5.42 | 67.48 | 16.51 |  | 150.0 |  |
|  |  | Z | 5.52 | 67.63 | 16.61 |  | 150.0 |  |
| $10430-$ | LTE-FDD (OFDMA, 5 MHz , E-TM 3.1) | X | 4.38 | 70.70 | 18.40 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.25 | 70.46 | 18.05 |  | 150.0 |  |
|  |  | Z | 4.31 | 70.02 | 17.98 |  | 150.0 |  |
| $\begin{aligned} & 10431- \\ & A A B \\ & \hline \end{aligned}$ | LTE-FDD (OFDMA, 10 MHz , E-TM 3.1) | X | 4.42 | 67.67 | 16.62 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.27 | 67.23 | 16.20 |  | 150.0 |  |
|  |  | Z | 4.41 | 67.37 | 16.37 |  | 150.0 |  |
| $\begin{aligned} & 10432- \\ & \text { AAB } \end{aligned}$ | LTE-FDD (OFDMA, 15 MHz , E-TM 3.1) | X | 4.70 | 67.52 | 16.63 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.57 | 67.13 | 16.26 |  | 150.0 |  |
|  |  | Z | 4.70 | 67.28 | 16.40 |  | 150.0 |  |
| $\begin{aligned} & 10433- \\ & \text { AAB } \end{aligned}$ | LTE-FDD (OFDMA, $20 \mathrm{MHz}, \mathrm{E}-\mathrm{TM} 3.1$ ) | X | 4.94 | 67.50 | 16.67 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.82 | 67.14 | 16.34 |  | 150.0 |  |
|  |  | Z | 4.94 | 67.29 | 16.46 |  | 150.0 |  |
| $\begin{aligned} & \text { 10434- } \\ & \text { AAA } \end{aligned}$ | W-CDMA (BS Test Model 1, 64 DPCH ) | X | 4.49 | 71.52 | 18.43 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.34 | 71.22 | 18.01 |  | 150.0 |  |
|  |  | Z | 4.39 | 70.68 | 17.96 |  | 150.0 |  |
| $\begin{array}{\|l} \hline 10435- \\ \text { AAC } \\ \hline \end{array}$ | LTE-TDD (SC-FDMA, 1 RB, 20 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 100.00 | 120.92 | 31.06 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 119.22 | 29.95 |  | 80.0 |  |
|  |  | Z | 100.00 | 119.70 | 30.62 |  | 80.0 |  |
| 10447-$\mathrm{AAB}$ | LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44\%) | X | 3.75 | 67.86 | 16.21 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.56 | 67.20 | 15.57 |  | 150.0 |  |
|  |  | Z | 3.73 | 67.41 | 15.90 |  | 150.0 |  |
| 10448- <br> AAB | LTE-FDD (OFDMA, 10 MHz , E-TM 3.1, Clippin 44\%) | X | 4.24 | 67.45 | 16.49 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.10 | 67.00 | 16.05 |  | 150.0 |  |
|  |  | Z | 4.22 | 67.14 | 16.23 |  | 150.0 |  |
| 10449AAB | LTE-FDD (OFDMA, 15 MHz , E-TM 3.1, Cliping 44\%) | X | 4.49 | 67.35 | 16.53 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.37 | 66.95 | 16.16 |  | 150.0 |  |
|  |  | Z | 4.48 | 67.09 | 16.30 |  | 150.0 |  |
| $\begin{aligned} & \hline 10450- \\ & A A B \\ & \hline \end{aligned}$ | LTE-FDD (OFDMA, 20 MHz , E-TM 3.1, Clipping 44\%) | X | 4.67 | 67.26 | 16.53 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.56 | 66.89 | 16.18 |  | 150.0 |  |
|  |  | Z | 4.66 | 67.04 | 16.31 |  | 150.0 |  |
| 10451- <br> AAA | W-CDMA (BS Test Model 1,64 DPCH, Clipping 44\%) | X | 3.69 | 68.21 | 15.98 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 3.47 | 67.39 | 15.23 |  | 150.0 |  |
|  |  | Z | 3.66 | 67.69 | 15.67 |  | 150.0 |  |
| $\begin{array}{\|l\|} \hline 10456- \\ \text { AAB } \\ \hline \end{array}$ | IEEE 802.11ac WiFi (160MHz, 64-QAM, 99pc duty cycle) | X | 6.36 | 68.35 | 16.93 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 6.27 | 68.07 | 16.69 |  | 150.0 |  |
|  |  | Z | 6.35 | 68.21 | 16.77 |  | 150.0 |  |
| 10457- <br> AAA | UMTS-FDD (DC-HSDPA) | X | 3.86 | 65.66 | 16.26 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.78 | 65.32 | 15.90 |  | 150.0 |  |
|  |  | Z | 3.84 | 65.45 | 16.04 |  | 150.0 |  |
| $\begin{array}{\|l\|} \hline 10458- \\ \text { AAA } \\ \hline \end{array}$ | CDMA2000 (1xEV-DO, Rev. B, 2 carriers) | X | 4.10 | 70.68 | 17.90 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.95 | 70.36 | 17.40 |  | 150.0 |  |
|  |  | Z | 3.98 | 69.73 | 17.40 |  | 150.0 |  |
| $\begin{array}{\|l} \hline 10459- \\ \text { AAA } \\ \hline \end{array}$ | CDMA2000 (1xEV-DO, Rev. B, 3 carriers) | X | 5.16 | 67.87 | 18.15 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.08 | 67.96 | 18.01 |  | 150.0 |  |
|  |  | Z | 5.12 | 67.39 | 17.86 |  | 150.0 |  |


| 10460- <br> AAA | UMTS-FDD (WCDMA, AMR) | X | 1.21 | 74.36 | 19.56 | 0.00 | 150.0 | $\pm 9.6 \%$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 0.84 | 67.73 | 15.53 |  | 150.0 |  |
|  |  | Z | 0.96 | 69.69 | 16.87 |  | 150.0 |  |
| 10461-AAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 100.00 | 124.72 | 32.88 | 3.29 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 122.71 | 31.63 |  | 80.0 |  |
|  |  | Z | 100.00 | 122.27 | 31.89 |  | 80.0 |  |
| 10462- AAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz , 16-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 100.00 | 110.81 | 26.22 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 107.68 | 24.48 |  | 80.0 |  |
|  |  | Z | 100.00 | 109.58 | 25.81 |  | 80.0 |  |
| 10463-$\mathrm{AAA}$ | LTE-TDD (SC-FDMA, 1RB, 1.4 MHz , 64-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 100.00 | 108.02 | 24.88 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 17.57 | 87.04 | 18.79 |  | 80.0 |  |
|  |  | Z | 57.71 | 101.03 | 23.21 |  | 80.0 |  |
| $10464$ AAA | LTE-TDD (SC-FDMA, 1 RB, 3 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 100.00 | 122.99 | 31.92 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 120.66 | 30.52 |  | 80.0 |  |
|  |  | Z | 100.00 | 120.59 | 30.96 |  | 80.0 |  |
| $10465-$ AAA | LTE-TDD (SC-FDMA, $1 \mathrm{RB}, 3 \mathrm{MHz}, 16-$ QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 100.00 | 110.36 | 26.00 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 69.93 | 103.37 | 23.39 |  | 80.0 |  |
|  |  | Z | 100.00 | 109.17 | 25.60 |  | 80.0 |  |
| $\begin{aligned} & \text { 10466- } \\ & \text { AAA } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 100.00 | 107.59 | 24.67 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 10.32 | 81.39 | 17.12 |  | 80.0 |  |
|  |  | Z | 32.56 | 94.43 | 21.51 |  | 80.0 |  |
| 10467-AAC | LTE-TDD (SC-FDMA, 1 RB, 5 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 100.00 | 123.18 | 32.01 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 120.88 | 30.62 |  | 80.0 |  |
|  |  | Z | 100.00 | 120.77 | 31.04 |  | 80.0 |  |
| 10468- <br> AAC | LTE-TDD (SC-FDMA, 1 RB, $5 \mathrm{MHz}, 16-$ QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 100.00 | 110.50 | 26.06 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 95.55 | 106.84 | 24.20 |  | 80.0 |  |
|  |  | Z | 100.00 | 109.30 | 25.66 |  | 80.0 |  |
| 10469- <br> AAC | LTE-TDD (SC-FDMA, 1 RB, $5 \mathrm{MHz}, 64-$ QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 100.00 | 107.60 | 24.67 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 10.51 | 81.58 | 17.17 |  | 80.0 |  |
|  |  | Z | 33.51 | 94.76 | 21.58 |  | 80.0 |  |
| 10470-$\mathrm{AAC}$ | LTE-TDD (SC-FDMA, 1 RB, 10 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 100.00 | 123.21 | 32.02 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 120.90 | 30.62 |  | 80.0 |  |
|  |  | Z | 100.00 | 120.79 | 31.05 |  | 80.0 |  |
| $\begin{aligned} & 10471- \\ & \text { AAC } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 10 MHz , $16-$ QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 100.00 | 110.46 | 26.04 | 3.23 | 80.0 | $\pm 9.6 \%$ |
|  |  | Y | 94.56 | 106.68 | 24.14 |  | 80.0 |  |
|  |  | Z | 100.00 | 109.26 | 25.63 |  | 80.0 |  |
| 10472- <br> AAC | LTE-TDD (SC-FDMA, 1 RB, $10 \mathrm{MHz}, 64-$ QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 100.00 | 107.56 | 24.64 | 3.23 | 80.0 | $\pm 9.6 \%$ |
|  |  | Y | 10.43 | 81.48 | 17.13 |  | 80.0 |  |
|  |  | Z | 33.64 | 94.78 | 21.58 |  | 80.0 |  |
| 10473-AAC | LTE-TDD (SC-FDMA, 1 RB, 15 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 100.00 | 123.19 | 32.00 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 120.87 | 30.61 |  | 80.0 |  |
|  |  | Z | 100.00 | 120.77 | 31.03 |  | 80.0 |  |
| $\begin{aligned} & 10474- \\ & \text { AAC } \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, $15 \mathrm{MHz}, 16-$ QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 100.00 | 110.47 | 26.04 | 3.23 | 80.0 | $\pm 9.6 \%$ |
|  |  | Y | 92.06 | 106.40 | 24.08 |  | 80.0 |  |
|  |  | Z | 100.00 | 109.26 | 25.64 |  | 80.0 |  |
| $\begin{aligned} & 10475- \\ & \text { AAC } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 15 MHz , 64QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 100.00 | 107.57 | 24.65 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 10.30 | 81.37 | 17.09 |  | 80.0 |  |
|  |  | Z | 33.12 | 94.61 | 21.54 |  | 80.0 |  |


| 10477- <br> AAC | LTE-TDD (SC-FDMA, 1 RB, 20 MHz , 16QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 100.00 | 110.32 | 25.97 | 3.23 | 80.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 73.47 | 103.85 | 23.47 |  | 80.0 |  |
|  |  | Z | 100.00 | 109.13 | 25.57 |  | 80.0 |  |
| 10478AAC | LTE-TDD (SC-FDMA, 1 RB, 20 MHz , 64QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 100.00 | 107.52 | 24.63 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 10.13 | 81.17 | 17.03 |  | 80.0 | $\pm 9.6 \%$ |
| 10479-AAA |  | Z | 32.56 | 94.40 | 21.47 |  | 80.0 |  |
|  | LTE-TDD (SC-FDMA, $50 \%$ RB, 1.4 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 23.24 | 102.02 | 28.60 | 3.23 | 80.0 |  |
|  |  | Y | 17.72 | 96.96 | 26.53 |  | 80.0 | $\pm 9.6$ \% |
| 10480- <br> AAA |  | Z | 12.62 | 91.31 | 25.32 |  | 80.0 |  |
|  | LTE-TDD (SC-FDMA, $50 \%$ RB, 1.4 MHz , 16-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 23.79 | 96.38 | 25.31 | 3.23 | 80.0 |  |
|  |  | Y | 16.50 | 90.35 | 22.90 |  | 80.0 | $\pm 9.6$ \% |
| 10481-$\mathrm{AAA}$ |  | Z | 13.56 | 87.65 | 22.71 |  | 80.0 |  |
|  | LTE-TDD (SC-FDMA, $50 \%$ RB, 1.4 MHz , 64-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 19.64 | 92.74 | 23.93 | 3.23 | 80.0 |  |
|  |  | Y | 13.10 | 86.39 | 21.35 |  | 80.0 | $\pm 9.6$ \% |
| 10482-AAA |  | Z | 12.05 | 85.29 | 21.66 |  | 80.0 |  |
|  | LTE-TDD (SC-FDMA, $50 \%$ RB, 3 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 8.49 | 84.69 | 22.05 | 2.23 | 80.0 |  |
|  |  | Y | 5.66 | 78.52 | 19.36 |  | 80.0 | $\pm 9.6$ \% |
| $\begin{aligned} & \text { 10483- } \\ & \text { AAA } \\ & \hline \end{aligned}$ |  | Z | 6.07 | 79.11 | 20.05 |  | 80.0 |  |
|  | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 3 \mathrm{MHz}$, 16-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 11.70 | 86.22 | 22.45 | 2.23 | 80.0 |  |
|  |  | Y | 8.73 | 81.47 | 20.24 |  | 80.0 | $\pm 9.6$ \% |
| 10484- <br> AAA |  | Z | 8.71 | 81.39 | 20.85 |  | 80.0 |  |
|  | LTE-TDD (SC-FDMA, $50 \%$ RB, 3 MHz , 64-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 10.50 | 84.41 | 21.86 | 2.23 | 80.0 |  |
|  |  | Y | 7.92 | 79.90 | 19.71 |  | 80.0 |  |
| $10485-$$\mathrm{AAC}$ |  | Z | 8.18 | 80.26 | 20.46 |  | 80.0 | $\pm 9.6$ \% |
|  | LTE-TDD (SC-FDMA, $50 \%$ RB, 5 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 8.12 | 84.44 | 22.68 | 2.23 | 80.0 |  |
|  |  | Y | 5.95 | 79.56 | 20.54 |  | 80.0 |  |
| 10486-$\mathrm{AAC}$ |  | Z | 6.24 | 79.61 | 20.83 |  | 80.0 | $\pm 9.6$ \% |
|  | LTE-TDD (SC-FDMA, $50 \%$ RB, 5 MHz , 16-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 5.60 | 75.72 | 19.25 | 2.23 | 80.0 |  |
|  |  | Y | 4.71 | 73.16 | 17.81 |  | 80.0 | $\pm 9.6$ \% |
|  |  | Z | 5.00 | 73.46 | 18.29 |  | 80.0 |  |
| $\begin{aligned} & 10487- \\ & \text { AAC } \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \%$ RB, 5 MHz , 64-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 5.48 | 75.06 | 18.99 | 2.23 | 80.0 |  |
|  |  | Y | 4.65 | 72.64 | 17.60 |  | 80.0 | $\pm 9.6$ \% |
|  |  | Z | 4.96 | 73.01 | 18.11 |  | 80.0 |  |
| $\begin{aligned} & 10488- \\ & \text { AAC } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 10 \mathrm{MHz}$, QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 7.06 | 80.88 | 21.92 | 2.23 | 80.0 |  |
|  |  | Y | 5.70 | 77.55 | 20.40 |  | 80.0 | $\pm 9.6$ \% |
|  |  | Z | 6.08 | 77.77 | 20.57 |  | 80.0 |  |
| $\begin{aligned} & 10489- \\ & \text { AAC } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \%$ RB, 10 MHz , 16 -QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 5.31 | 73.88 | 19.45 | 2.23 | 80.0 |  |
|  |  | Y | 4.75 | 72.25 | 18.50 |  | 80.0 | $\pm 9.6$ \% |
|  |  | Z | 5.02 | 72.44 | 18.71 |  | 80.0 |  |
| $10490-$ $\mathrm{AAC}$ | LTE-TDD (SC-FDMA, $50 \%$ RB, 10 MHz , 64-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 5.32 | 73.40 | 19.28 | 2.23 | 80.0 |  |
|  |  | Y | 4.80 | 71.92 | 18.39 |  | 80.0 |  |
|  |  | Z | 5.07 | 72.08 | 18.60 |  | 80.0 | $\pm 9.6$ \% |
| 10491- <br> AAC | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 15 \mathrm{MHz}$, QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 6.29 | 77.08 | 20.62 | 2.23 | 80.0 |  |
|  |  | Y | 5.44 | 74.84 | 19.51 |  | 80.0 |  |
|  |  | Z | 5.78 | 75.12 | 19.66 |  | 80.0 |  |
| $\begin{array}{\|l\|} \hline 10492- \\ \text { AAC } \\ \hline \end{array}$ | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 15 \mathrm{MHz}$, 16-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 5.38 | 72.26 | 19.03 | 2.23 | 80.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.95 | 71.03 | 18.29 |  | 80.0 |  |
|  |  | Z | 5.22 | 71.29 | 18.47 |  | 80.0 |  |


| 10493- <br> AAC | LTE-TDD (SC-FDMA, $50 \%$ RB, 15 MHz , 64-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 5.41 | 71.97 | 18.93 | 2.23 | 80.0 | $\pm 9.6 \%$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 4.99 | 70.82 | 18.22 |  | 80.0 |  |
|  |  | Z | 5.27 | 71.06 | 18.40 |  | 80.0 |  |
| $\begin{aligned} & 10494- \\ & \text { AAC } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 20 \mathrm{MHz}$, QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 7.26 | 79.46 | 21.31 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 6.08 | 76.70 | 20.04 |  | 80.0 |  |
|  |  | Z | 6.47 | 77.03 | 20.19 |  | 80.0 |  |
| $\begin{aligned} & 10495- \\ & \text { AAC } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 20 \mathrm{MHz}$, 16-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 5.52 | 72.92 | 19.28 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 5.04 | 71.57 | 18.51 |  | 80.0 |  |
|  |  | Z | 5.33 | 71.88 | 18.69 |  | 80.0 |  |
| 10496-$\mathrm{AAC}$ | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 20 \mathrm{MHz}$, 64-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 5.51 | 72.36 | 19.10 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 5.07 | 71.15 | 18.38 |  | 80.0 |  |
|  |  | Z | 5.35 | 71.43 | 18.55 |  | 80.0 |  |
| 10497- <br> AAA | LTE-TDD (SC-FDMA, $100 \%$ RB, 1.4 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 6.84 | 81.16 | 20.14 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 4.18 | 74.07 | 16.91 |  | 80.0 |  |
|  |  | Z | 4.97 | 76.21 | 18.38 |  | 80.0 |  |
| $\begin{aligned} & \text { 10498- } \\ & \text { AAA } \end{aligned}$ | LTE-TDD (SC-FDMA, $100 \%$ RB, 1.4 $\mathrm{MHz}, 16-\mathrm{QAM}, \mathrm{UL}$ Subframe $=2,3,4,7,8,9$ ) | X | 4.23 | 71.63 | 15.72 | 2.23 | 80.0 | $\pm 9.6 \%$ |
|  |  | Y | 2.88 | 66.72 | 12.99 |  | 80.0 |  |
|  |  | Z | 3.81 | 69.89 | 15.10 |  | 80.0 |  |
| $\begin{aligned} & \text { 10499- } \\ & \text { AAA } \end{aligned}$ | LTE-TDD (SC-FDMA, 100\% RB, 1.4 MHz, 64-QAM, UL <br> Subframe $=2,3,4,7,8,9$ ) | X | 4.07 | 70.79 | 15.25 | 2.23 | 80.0 | $\pm 9.6 \%$ |
|  |  | Y | 2.78 | 66.03 | 12.55 |  | 80.0 |  |
|  |  | Z | 3.73 | 69.33 | 14.75 |  | 80.0 |  |
| $\begin{aligned} & 10500- \\ & \text { AAA } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $100 \%$ RB, 3 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 7.25 | 82.07 | 22.09 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 5.64 | 78.16 | 20.30 |  | 80.0 |  |
|  |  | Z | 5.95 | 78.24 | 20.53 |  | 80.0 |  |
| $\begin{array}{\|l} \hline 10501- \\ \text { AAA } \\ \hline \end{array}$ | LTE-TDD (SC-FDMA, $100 \% \mathrm{RB}, 3 \mathrm{MHz}$, 16-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 5.43 | 74.78 | 19.24 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 4.72 | 72.72 | 18.04 |  | 80.0 |  |
|  |  | Z | 4.99 | 72.91 | 18.39 |  | 80.0 |  |
| $\begin{aligned} & 10502- \\ & \text { AAA } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 100\% RB, 3 MHz, 64-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 5.43 | 74.40 | 19.05 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 4.75 | 72.45 | 17.89 |  | 80,0 |  |
|  |  | Z | 5.01 | 72.63 | 18.25 |  | 80.0 |  |
| $\begin{aligned} & 10503- \\ & \text { AAC } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $100 \%$ RB, 5 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 6.96 | 80.64 | 21.82 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 5.62 | 77.31 | 20.29 |  | 80.0 |  |
|  |  | Z | 6.00 | 77.58 | 20.48 |  | 80.0 |  |
| $\begin{aligned} & 10504- \\ & \text { AAC } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $100 \%$ RB, 5 MHz , 16-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 5.28 | 73.79 | 19.40 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 4.72 | 72.15 | 18.44 |  | 80.0 |  |
|  |  | Z | 5.00 | 72.37 | 18.67 |  | 80.0 |  |
| $\begin{array}{\|l\|} \hline 10505- \\ \text { AAC } \\ \hline \end{array}$ | LTE-TDD (SC-FDMA, $100 \%$ RB, 5 MHz , 64-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 5.30 | 73.31 | 19.23 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 4.78 | 71.81 | 18.34 |  | 80.0 |  |
|  |  | Z | 5.05 | 72.00 | 18.55 |  | 80.0 |  |
| $\begin{aligned} & 10506- \\ & \text { AAC } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 100\% RB, 10 MHz, QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 7.19 | 79.29 | 21.23 | 2.23 | 80.0 | $\pm 9.6 \%$ |
|  |  | Y | 6.02 | 76.53 | 19.97 |  | 80.0 |  |
|  |  | Z | 6.42 | 76.89 | 20.13 |  | 80.0 |  |
| $\begin{aligned} & 10507- \\ & \text { AAC } \end{aligned}$ | LTE-TDD (SC-FDMA, 100\% RB, 10 MHz, 16-QAM, UL <br> Subframe $=2,3,4,7,8,9$ ) | X | 5.49 | 72.85 | 19.25 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 5.02 | 71.50 | 18.47 |  | 80.0 |  |
|  |  | Z | 5.31 | 71.82 | 18.66 |  | 80.0 |  |


| $\begin{aligned} & 10508- \\ & \text { AAC } \end{aligned}$ | LTE-TDD (SC-FDMA, 100\% RB, 10 $\mathrm{MHz}, 64-\mathrm{QAM}, \mathrm{UL}$ Subframe $=2,3,4,7,8,9$ ) | X | 5.49 | 72.29 | 19.06 | 2.23 | 80.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 5.05 | 71.07 | 18.34 |  | 80.0 |  |
|  |  | Z | 5.33 | 71.37 | 18.52 |  | 80.0 |  |
| $\begin{aligned} & 10509- \\ & \text { AAC } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $100 \%$ RB, 15 MHz, QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 6.71 | 76.12 | 20.06 | 2.23 | 80.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.94 | 74.25 | 19.13 |  | 80.0 |  |
|  |  | Z | 6.28 | 74.57 | 19.27 |  | 80.0 |  |
| $10510-$ <br> AAC | LTE-TDD (SC-FDMA, 100\% RB, 15 MHz, 16-QAM, UL <br> Subframe $=2,3,4,7,8,9$ ) | X | 5.84 | 71.95 | 18.94 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 5.42 | 70.86 | 18.30 |  | 80.0 |  |
|  |  | Z | 5.71 | 71.20 | 18.47 |  | 80.0 |  |
| 10511- <br> AAC | LTE-TDD (SC-FDMA, $100 \%$ RB, 15 MHz, 64-QAM, UL <br> Subframe $=2,3,4,7,8,9$ ) | X | 5.82 | 71.51 | 18.81 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 5.44 | 70.51 | 18.21 |  | 80.0 |  |
|  |  | Z | 5.71 | 70.83 | 18.37 |  | 80.0 |  |
| 10512- $A A C$ | LTE-TDD (SC-FDMA, 100\% RB, 20 MHz, QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 7.61 | 78.80 | 20.90 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 6.48 | 76.29 | 19.75 |  | 80.0 |  |
|  |  | Z | 6.88 | 76.71 | 19.92 |  | 80.0 |  |
| 10513- <br> AAC | LTE-TDD (SC-FDMA, 100\% RB, 20 MHz, 16-QAM, UL <br> Subframe $=2,3,4,7,8,9$ ) | X | 5.82 | 72.58 | 19.18 | 2.23 | 80.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.36 | 71.33 | 18.47 |  | 80.0 |  |
|  |  | Z | 5.67 | 71.74 | 18.66 |  | 80.0 |  |
| 10514- <br> AAC | LTE-TDD (SC-FDMA, 100\% RB, 20 MHz, 64-QAM, UL <br> Subframe $=2,3,4,7,8,9$ ) | X | 5.73 | 71.89 | 18.96 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 5.32 | 70.77 | 18.31 |  | 80.0 |  |
|  |  | Z | 5.61 | 71.15 | 18.49 |  | 80.0 |  |
| 10515- <br> AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 99pc duty cycle) | X | 1.00 | 64.53 | 15.90 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 0.92 | 62.98 | 14.41 |  | 150.0 |  |
|  |  | Z | 0.96 | 63.54 | 14.94 |  | 150.0 |  |
| $\begin{aligned} & 10516- \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.11 b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc duty cycle) | X | 1.68 | 91.06 | 26.34 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 0.55 | 69.99 | 16.34 |  | 150.0 |  |
|  |  | Z | 0.73 | 74.56 | 19.01 |  | 150.0 |  |
| $\begin{aligned} & 10517- \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 99pc duty cycle) | X | 0.92 | 68.12 | 17.45 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 0.77 | 64.83 | 14.89 |  | 150.0 |  |
|  |  | Z | 0.84 | 65.95 | 15.79 |  | 150.0 |  |
| $\begin{aligned} & 10518- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE $802.11 \mathrm{a} / \mathrm{h}$ WiFi 5 GHz (OFDM, 9 Mbps, 99pc duty cycle) | X | 4.67 | 67.12 | 16.50 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.56 | 66.77 | 16.17 |  | 150.0 |  |
|  |  | Z | 4.66 | 66.89 | 16.28 |  | 150.0 |  |
| $\begin{aligned} & 10519- \\ & \mathrm{AAB} \\ & \hline \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 99pc duty cycle) | X | 4.89 | 67.40 | 16.64 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.77 | 67.04 | 16.30 |  | 150.0 |  |
|  |  | Z | 4.89 | 67.19 | 16.43 |  | 150.0 |  |
| $\begin{aligned} & 10520- \\ & \text { AAB } \end{aligned}$ | IEEE $802.11 \mathrm{a} / \mathrm{h}$ WiFI 5 GHz (OFDM, 18 Mbps, 99pc duty cycle) | X | 4.74 | 67.39 | 16.57 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.61 | 67.01 | 16.22 |  | 150.0 |  |
|  |  | Z | 4.74 | 67.17 | 16.35 |  | 150.0 |  |
| $\begin{aligned} & 10521- \\ & A A B \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc duty cycle) | X | 4.67 | 67.41 | 16.56 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.55 | 67.00 | 16.20 |  | 150.0 |  |
|  |  | Z | 4.67 | 67.18 | 16.34 |  | 150.0 |  |
| 10522- <br> AAB | IEEE $802.11 \mathrm{a} / \mathrm{h}$ WiFi 5 GHz (OFDM, 36 Mbps, 99pc duty cycle) | X | 4.72 | 67.39 | 16.60 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.60 | 67.04 | 16.27 |  | 150.0 |  |
|  |  | Z | 4.71 | 67.14 | 16.36 |  | 150.0 |  |


| $\begin{aligned} & 10523- \\ & \mathrm{AAB} \\ & \hline \end{aligned}$ | IEEE $802.11 \mathrm{a} / \mathrm{h} \mathrm{WiFi} 5 \mathrm{GHz}$ (OFDM, 48 Mbps, 99pc duty cycle) | X | 4.59 | 67.29 | 16.46 | 0.00 | 150.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 4.47 | 66.91 | 16.11 |  | 150.0 |  |
|  |  | Z | 4.58 | 67.04 | 16.22 |  | 150.0 |  |
| $\begin{array}{\|l\|} \hline 10524- \\ \mathrm{AAB} \\ \hline \end{array}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc duty cycle) | X | 4.67 | 67.35 | 16.59 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.55 | 66.98 | 16.24 |  | 150.0 |  |
|  |  | Z | 4.67 | 67.11 | 16.36 |  | 150.0 |  |
| $\begin{aligned} & 10525- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11ac WiFi (20MHz, MCSO, 99pc duty cycle) | X | 4.63 | 66.37 | 16.17 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.52 | 66.01 | 15.83 |  | 150.0 |  |
|  |  | Z | 4.62 | 66.13 | 15.94 |  | 150.0 |  |
| $\begin{aligned} & \hline 10526- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (20MHz, MCS1, 99pc duty cycle) | X | 4.83 | 66.78 | 16.32 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.70 | 66.40 | 15.97 |  | 150.0 |  |
|  |  | Z | 4.82 | 66.54 | 16.09 |  | 150.0 |  |
| $\begin{aligned} & \hline 10527- \\ & A A B \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (20MHz, MCS2, 99 pc duty cycle) | X | 4.75 | 66.76 | 16.27 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.62 | 66.36 | 15.92 |  | 150.0 |  |
|  |  | Z | 4.74 | 66.51 | 16.04 |  | 150.0 |  |
| $\begin{aligned} & 10528- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (20MHz, MCS3, 99 pc duty cycle) | X | 4.77 | 66.78 | 16.31 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.64 | 66.38 | 15.95 |  | 150.0 |  |
|  |  | Z | 4.76 | 66.54 | 16.08 |  | 150.0 |  |
| $\begin{aligned} & 10529- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (20MHz, MCS4, 99pc duty cycle) | X | 4.77 | 66.78 | 16.31 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.64 | 66.38 | 15.95 |  | 150.0 |  |
|  |  | Z | 4.76 | 66.54 | 16.08 |  | 150.0 |  |
| $\begin{aligned} & 10531- \\ & A A B \end{aligned}$ | IEEE 802.11ac WiFi (20MHz, MCS6, 99pc duty cycle) | X | 4.78 | 66.93 | 16.34 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.64 | 66.50 | 15.97 |  | 150.0 |  |
|  |  | Z | 4.77 | 66.69 | 16.10 |  | 150.0 |  |
| $\begin{aligned} & 10532- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11ac WiFi (20MHz, MCS7, 99 pc duty cycle) | X | 4.63 | 66.80 | 16.29 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.49 | 66.35 | 15.90 |  | 150.0 |  |
|  |  | Z | 4.62 | 66.56 | 16.05 |  | 150.0 |  |
| $\begin{array}{\|l\|} \hline 10533- \\ \text { AAB } \\ \hline \end{array}$ | IEEE 802.11ac WiFi (20MHz, MCS8, 99 pc duty cycle) | X | 4.78 | 66.80 | 16.29 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.65 | 66.41 | 15.94 |  | 150.0 |  |
|  |  | Z | 4.77 | 66.55 | 16.05 |  | 150.0 |  |
| $\begin{aligned} & 10534- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE $802.11 \mathrm{ac} \mathrm{WiFi} \mathrm{(40MHz}, \mathrm{MCSO}$, 99pc duty cycle) | X | 5.28 | 66.88 | 16.33 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.17 | 66.53 | 16.03 |  | 150.0 |  |
|  |  | Z | 5.27 | 66.70 | 16.13 |  | 150.0 |  |
| $\begin{aligned} & 10535- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi ( 40 MHz , MCS1, 99 pc duty cycle) | X | 5.35 | 67.03 | 16.39 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.24 | 66.69 | 16.10 |  | 150.0 |  |
|  |  | Z | 5.34 | 66.84 | 16.18 |  | 150.0 |  |
| $\begin{aligned} & 10536- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (40MHz, MCS2, 99pc duty cycle) | X | 5.22 | 67.03 | 16.37 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.10 | 66.65 | 16.06 |  | 150.0 |  |
|  |  | Z | 5.21 | 66.83 | 16.16 |  | 150.0 |  |
| $\begin{aligned} & 10537- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (40MHz, MCS3, 99pc duty cycle) | X | 5.29 | 67.00 | 16.36 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.17 | 66.63 | 16.05 |  | 150.0 |  |
|  |  | Z | 5.27 | 66.80 | 16.15 |  | 150.0 |  |
| $\begin{aligned} & 10538- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11ac WiFi (40MHz, MCS4, 99 pc duty cycle) | X | 5.40 | 67.06 | 16.43 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.27 | 66.69 | 16.12 |  | 150.0 |  |
|  |  | Z | 5.39 | 66.88 | 16.23 |  | 150.0 |  |
| $\begin{aligned} & 10540- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11ac WiFi (40MHz, MCS6, 99 pc duty cycle) | X | 5.30 | 67.01 | 16.42 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.19 | 66.66 | 16.12 |  | 150.0 |  |
|  |  | Z | 5.29 | 66.82 | 16.22 |  | 150.0 |  |


| $\begin{aligned} & \hline 10541- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11 ac WiFi ( 40 MHz , MCS7, 99pc duty cycle) | X | 5.28 | 66.90 | 16.36 | 0.00 | 150.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 5.16 | 66.53 | 16.05 |  | 150.0 |  |
|  |  | Z | 5.27 | 66.74 | 16.17 |  | 150.0 |  |
| $\begin{aligned} & \text { 10542- } \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11 ac WiFi (40MHz, MCS8, 99pc duty cycle) | X | 5.43 | 66.95 | 16.40 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.32 | 66.61 | 16.11 |  | 150.0 |  |
|  |  | Z | 5.42 | 66.77 | 16.20 |  | 150.0 |  |
| $\begin{array}{\|l\|} \hline 10543- \\ \text { AAB } \\ \hline \end{array}$ | IEEE 802.11ac WiFi (40MHz, MCS9, 99pc duty cycle) | X | 5.51 | 66.95 | 16.41 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.40 | 66.65 | 16.14 |  | 150.0 |  |
|  |  | Z | 5.51 | 66.78 | 16.22 |  | 150.0 |  |
| $\begin{aligned} & 10544- \\ & \text { AAB } \end{aligned}$ | IEEE 802,11ac WiFi ( $80 \mathrm{MHZ}, \mathrm{MCSO}$, 99pc duty cycle) | X | 5.56 | 66.97 | 16.30 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.46 | 66.64 | 16.02 |  | 150.0 |  |
|  |  | Z | 5.54 | 66.80 | 16.11 |  | 150.0 |  |
| $\begin{aligned} & \text { 10545- } \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi ( 80 MHz , MCS1, 99pc duty cycle) | X | 5.78 | 67.41 | 16.46 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.68 | 67.09 | 16.19 |  | 150.0 |  |
|  |  | Z | 5.76 | 67.21 | 16.25 |  | 150.0 |  |
| $\begin{aligned} & \text { 10546- } \\ & \text { AAB } \end{aligned}$ | IEEE 802.11ac WiFi (80MHz, MCS2, 99pc duty cycle) | X | 5.66 | 67.27 | 16.41 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.55 | 66.90 | 16.11 |  | 150.0 |  |
|  |  | Z | 5.65 | 67.10 | 16.22 |  | 150.0 |  |
| $\begin{aligned} & \text { 10547- } \\ & \mathrm{AAB} \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi ( 80 MHz , MCS3, 99 pc duty cycle) | X | 5.75 | 67.34 | 16.43 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.64 | 66.99 | 16.14 |  | 150.0 |  |
|  |  | Z | 5.73 | 67.16 | 16.24 |  | 150.0 |  |
| $\begin{aligned} & \hline 10548- \\ & \mathrm{AAB} \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi ( 80 MHz , MCS4, 99pc duty cycle) | X | 6.10 | 68.57 | 17.02 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.97 | 68.15 | 16.70 |  | 150.0 |  |
|  |  | Z | 6.06 | 68.30 | 16.78 |  | 150.0 |  |
| $\begin{aligned} & 10550- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11ac WiFi (80MHz, MCS6, 99pc duty cycle) | X | 5.68 | 67.21 | 16.39 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.57 | 66.88 | 16.11 |  | 150.0 |  |
|  |  | Z | 5.66 | 67.04 | 16.20 |  | 150.0 |  |
| $\begin{aligned} & \text { 10551- } \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (80MHz, MCS7, 99 pc duty cycle) | X | 5.70 | 67.30 | 16.39 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.58 | 66.93 | 16.09 |  | 150.0 |  |
|  |  | Z | 5.68 | 67.15 | 16.21 |  | 150.0 |  |
| $\begin{aligned} & 10552- \\ & A A B \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi ( $80 \mathrm{MHz}, \mathrm{MCS} 8$, 99pc duty cycle) | X | 5.59 | 67.05 | 16.28 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.48 | 66.70 | 15.99 |  | 150.0 |  |
|  |  | Z | 5.58 | 66.90 | 16.10 |  | 150.0 |  |
| $\begin{aligned} & \text { 10553- } \\ & \text { AAB } \end{aligned}$ | IEEE 802.11ac WiFi (80MHz, MCS9, 99pc duty cycle) | X | 5.69 | 67.10 | 16.33 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.57 | 66.76 | 16.05 |  | 150.0 |  |
|  |  | Z | 5.67 | 66.95 | 16.15 |  | 150.0 |  |
| 10554- <br> AAC | IEEE 802.11ac WiFi (160MHz, MCSO, 99pc duty cycle) | X | 5.97 | 67.34 | 16.39 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.87 | 67.02 | 16.12 |  | 150.0 |  |
|  |  | Z | 5.94 | 67.19 | 16.21 |  | 150.0 |  |
| 10555- <br> AAC | IEEE 802.11 ac WiFi ( $160 \mathrm{MHz}, \mathrm{MCS}$, 99pc duty cycle) | X | 6.12 | 67.69 | 16.53 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 6.01 | 67.35 | 16.26 |  | 150.0 |  |
|  |  | Z | 6.10 | 67.54 | 16.36 |  | 150.0 |  |
| $\begin{aligned} & \hline 10556- \\ & \text { AAC } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (160MHz, MCS2, 99pc duty cycle) | X | 6.13 | 67.71 | 16.53 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 6.03 | 67.38 | 16.27 |  | 150.0 |  |
|  |  | Z | 6.11 | 67.54 | 16.35 |  | 150.0 |  |
| $\begin{aligned} & 10557- \\ & \text { AAC } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi ( 160 MHz , MCS3, 99pc duty cycle) | X | 6.12 | 67.66 | 16.53 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 6.00 | 67.31 | 16.25 |  | 150.0 |  |
|  |  | Z | 6.10 | 67.52 | 16.36 |  | 150.0 |  |


| $\begin{aligned} & 10558- \\ & \text { AAC } \end{aligned}$ | IEEE 802.11ac WiFi ( 160 MHz , MCS4, 99pc duty cycle) | X | 6.18 | 67.86 | 16.65 | 0.00 | 150.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 6.06 | 67.49 | 16.36 |  | 150.0 |  |
|  |  | Z | 6.16 | 67.71 | 16.47 |  | 150.0 |  |
| $\begin{aligned} & 10560- \\ & \text { AAC } \end{aligned}$ | IEEE 802.11ac WiFi (160MHz, MCS6, $99 p c$ duty cycle) | X | 6.16 | 67.67 | 16.59 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 6.05 | 67.32 | 16.31 |  | 150.0 |  |
|  |  | Z | 6.15 | 67.54 | 16.42 |  | 150.0 |  |
| $\begin{aligned} & 10561- \\ & \text { AAC } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi ( 160 MHz , MCS7, 99 pc duty cycle) | X | 6.08 | 67.64 | 16.61 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.97 | 67.29 | 16.33 |  | 150.0 |  |
|  |  | Z | 6.06 | 67.49 | 16.44 |  | 150.0 |  |
| $\begin{aligned} & 10562- \\ & \text { AAC } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi ( 160 MHz , MCS8, 99 pc duty cycle) | X | 6.25 | 68.16 | 16.88 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 6.13 | 67.77 | 16.57 |  | 150.0 |  |
|  |  | Z | 6.23 | 68.01 | 16.70 |  | 150.0 |  |
| $\begin{aligned} & 10563- \\ & \text { AAC } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi ( 160 MHz , MCS9, 99 pc duty cycle) | X | 6.60 | 68.73 | 17.10 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | $Y$ | 6.50 | 68.45 | 16.86 |  | 150.0 |  |
|  |  | Z | 6.53 | 68.43 | 16.86 |  | 150.0 |  |
| $\begin{aligned} & 10564- \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, $9 \mathrm{Mbps}, 99 \mathrm{pc}$ duty cycle) | X | 5.01 | 67.24 | 16.68 | 0.46 | 150.0 | $\pm 9.6 \%$ |
|  |  | $Y$ | 4.90 | 66.90 | 16.36 |  | 150.0 |  |
|  |  | Z | 5.01 | 67.05 | 16.49 |  | 150.0 |  |
| $\begin{aligned} & 10565- \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 12 Mbps , 99 pc duty cycle) | X | 5.27 | 67.70 | 16.99 | 0.46 | 150.0 | $\pm 9.6$ \% |
|  |  | $Y$ | 5.15 | 67.37 | 16.68 |  | 150.0 |  |
|  |  | Z | 5.27 | 67.52 | 16.80 |  | 150.0 |  |
| $\begin{aligned} & 10566- \\ & \text { AAA } \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 18 Mbps , 99 pc duty cycle) | X | 5.11 | 67.60 | 16.84 | 0.46 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.98 | 67.23 | 16.50 |  | 150.0 |  |
|  |  | Z | 5.11 | 67.41 | 16.64 |  | 150.0 |  |
| $\begin{aligned} & 10567- \\ & \text { AAA } \end{aligned}$ | IEEE 802.11g WiFi 2.4 GHz (DSSSOFDM, $24 \mathrm{Mbps}, 99 \mathrm{pc}$ duty cycle) | X | 5.13 | 67.96 | 17.16 | 0.46 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.01 | 67.61 | 16.84 |  | 150.0 |  |
|  |  | Z | 5.13 | 67.75 | 16.95 |  | 150.0 |  |
| $\begin{aligned} & 10568- \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 36 Mbps, 99pc duty cycle) | X | 5.02 | 67.36 | 16.62 | 0.46 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.90 | 67.01 | 16.28 |  | 150.0 |  |
|  |  | Z | 5.02 | 67.16 | 16.41 |  | 150.0 |  |
| 10569AAA | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 48 Mbps , 99 pc duty cycle) | X | 5.07 | 67.97 | 17.18 | 0.46 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.96 | 67.67 | 16.89 |  | 150.0 |  |
|  |  | $Z$ | 5.06 | 67.76 | 16.96 |  | 150.0 |  |
| $\begin{aligned} & 10570- \\ & \text { AAA } \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 54 Mbps , 99 pc duty cycle) | X | 5.11 | 67.83 | 17.12 | 0.46 | 150.0 | $\pm 9.6$ \% |
|  |  | $Y$ | 5.00 | 67.52 | 16.83 |  | 150.0 |  |
|  |  | Z | 5.11 | 67.61 | 16.91 |  | 150.0 |  |
| $10571-$AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90 pc duty cycle) | X | 1.43 | 67.78 | 17.55 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 1.29 | 65.83 | 16.01 |  | 130.0 |  |
|  |  | Z | 1.37 | 66.57 | 16.56 |  | 130.0 |  |
| $10572-$AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 90pc duty cycle) | X | 1.47 | 68.62 | 18.01 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 1.32 | 66.50 | 16.39 |  | 130.0 |  |
|  |  | Z | 1.40 | 67.26 | 16.95 |  | 130.0 |  |
| $\begin{array}{\|l\|} \hline 10573- \\ \text { AAA } \\ \hline \end{array}$ | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 90pc duty cycle) | X | 100.00 | 147.77 | 39.50 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.11 | 95.86 | 25,26 |  | 130.0 |  |
|  |  | Z | 11.46 | 108.94 | 29.46 |  | 130.0 |  |
| $\begin{aligned} & \text { 10574- } \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 90 pc duty cycle) | X | 2.11 | 79.07 | 22.64 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 1.59 | 73.49 | 19.59 |  | 130.0 |  |
|  |  | $Z$ | 1.75 | 74.78 | 20.34 |  | 130.0 |  |


| 10575- <br> AAA | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, $6 \mathrm{Mbps}, 90 \mathrm{pc}$ duty cycle) | X | 4.84 | 67.12 | 16.79 | 0.46 | 130.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 4.72 | 66.80 | 16.47 |  | 130.0 |  |
|  |  | Z | 4.83 | 66.93 | 16.59 |  | 130.0 |  |
| 10576- AAA | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 9 Mbps , 90 pc duty cycle) | X | 4.86 | 67.28 | 16.85 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.75 | 66.95 | 16.53 |  | 130.0 |  |
|  |  | Z | 4.86 | 67.08 | 16.65 |  | 130.0 |  |
| 10577- AAA | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 12 Mbps, 90 pc duty cycle) | X | 5.09 | 67.60 | 17.02 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.97 | 67.26 | 16.71 |  | 130.0 |  |
|  |  | Z | 5.10 | 67.41 | 16.83 |  | 130.0 |  |
| 10578- AAA | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, $18 \mathrm{Mbps}, 90 \mathrm{pc}$ duty cycle) | X | 4.99 | 67.77 | 17.12 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.86 | 67.43 | 16.80 |  | 130.0 |  |
|  |  | Z | 4.99 | 67.57 | 16.91 |  | 130.0 |  |
| $\begin{aligned} & 10579- \\ & \text { AAA } \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 24 Mbps , 90pc duty cycle) | X | 4.77 | 67.19 | 16.53 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.64 | 66.77 | 16.15 |  | 130.0 |  |
|  |  | Z | 4.78 | 67.01 | 16.33 |  | 130.0 |  |
| $\begin{aligned} & 10580- \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, $36 \mathrm{Mbps}, 90 \mathrm{pc}$ duty cycle) | X | 4.81 | 67.17 | 16.53 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.68 | 66.78 | 16.16 |  | 130.0 |  |
|  |  | Z | 4.82 | 66.97 | 16.32 |  | 130.0 |  |
| 10581- AAA | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, $48 \mathrm{Mbps}, 90 \mathrm{pc}$ duty cycle) | X | 4.90 | 67.87 | 17.09 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.77 | 67.49 | 16.75 |  | 130.0 |  |
|  |  | Z | 4.90 | 67.66 | 16.87 |  | 130.0 |  |
| $\begin{aligned} & 10582- \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 54 Mbps, 90 pc duty cycle) | X | 4.73 | 66.96 | 16.34 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.59 | 66.53 | 15.94 |  | 130.0 |  |
|  |  | Z | 4.73 | 66.78 | 16.14 |  | 130.0 |  |
| 10583- $\mathrm{AAB}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 90pc duty cycle) | X | 4.84 | 67.12 | 16.79 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.72 | 66.80 | 16.47 |  | 130.0 |  |
|  |  | Z | 4.83 | 66.93 | 16.59 |  | 130.0 |  |
| $\begin{aligned} & 10584- \\ & A A B \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 90pc duty cycle) | X | 4.86 | 67.28 | 16.85 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.75 | 66.95 | 16.53 |  | 130.0 |  |
|  |  | Z | 4.86 | 67.08 | 16.65 |  | 130.0 |  |
| $\begin{aligned} & 10585- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90pc duty cycle) | X | 5.09 | 67.60 | 17.02 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.97 | 67.26 | 16.71 |  | 130.0 |  |
|  |  | Z | 5.10 | 67.41 | 16.83 |  | 130.0 |  |
| 10586- $A A B$ | IEEE $802.11 \mathrm{a} / \mathrm{h} \mathrm{WiFi} 5 \mathrm{GHz}$ (OFDM, 18 Mbps, 90pc duty cycle) | X | 4.99 | 67.77 | 17.12 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.86 | 67.43 | 16.80 |  | 130.0 |  |
|  |  | Z | 4.99 | 67.57 | 16.91 |  | 130.0 |  |
| 10587- <br> AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 90pc duty cycle) | X | 4.77 | 67.19 | 16.53 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.64 | 66.77 | 16.15 |  | 130.0 |  |
|  |  | Z | 4.78 | 67.01 | 16.33 |  | 130.0 |  |
| $\begin{aligned} & 10588- \\ & \text { AAB } \end{aligned}$ | IEEE $802.11 \mathrm{a} / \mathrm{h} \mathrm{WiFi} 5 \mathrm{GHz}$ (OFDM, 36 Mbps, 90pc duty cycle) | X | 4.81 | 67.17 | 16.53 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.68 | 66.78 | 16.16 |  | 130.0 |  |
|  |  | Z | 4.82 | 66.97 | 16.32 |  | 130.0 |  |
| $\begin{aligned} & 10589- \\ & \mathrm{AAB} \\ & \hline \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 90pc duty cycle) | X | 4.90 | 67.87 | 17.09 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.77 | 67.49 | 16.75 |  | 130.0 |  |
|  |  | Z | 4.90 | 67.66 | 16.87 |  | 130.0 |  |
| $\begin{aligned} & 10590- \\ & \mathrm{AAB} \\ & \hline \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 90pc duty cycle) | X | 4.73 | 66.96 | 16.34 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.59 | 66.53 | 15.94 |  | 130.0 |  |
|  |  | Z | 4.73 | 66.78 | 16.14 |  | 130.0 |  |


| $\begin{aligned} & 10591- \\ & A A B \end{aligned}$ | IEEE 802.11 n (HT Mixed, 20MHz, MCS0,90pc duty cycle) | X | 4.98 | 67.15 | 16.87 | 0.46 | 130.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 4.87 | 66.85 | 16.57 |  | 130.0 |  |
|  |  | Z | 4.98 | 66.97 | 16.68 |  | 130.0 |  |
| $\begin{aligned} & 10592- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11 n (HT Mixed, 20MHz, MCS1, 90pc duty cycle) | X | 5.15 | 67.50 | 16.99 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.04 | 67.19 | 16.69 |  | 130.0 |  |
|  |  | Z | 5.16 | 67.32 | 16.80 |  | 130.0 |  |
| $\begin{aligned} & 10593- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11 n (HT Mixed, 20MHz, MCS2, 90pe duty cycle) | X | 5.09 | 67.46 | 16.91 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.96 | 67.12 | 16.59 |  | 130.0 |  |
|  |  | Z | 5.09 | 67.29 | 16.72 |  | 130.0 |  |
| $\begin{array}{\|l\|} \hline 10594- \\ \text { AAB } \\ \hline \end{array}$ | IEEE 802.11n (HT Mixed, 20MHz, MCS3, 90pc duty cycle) | X | 5.14 | 67.60 | 17.04 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.02 | 67.28 | 16.73 |  | 130.0 |  |
|  |  | Z | 5.14 | 67.42 | 16.84 |  | 130.0 |  |
| $\begin{aligned} & 10595- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Mixed, 20MHz, MCS4, 90pc duty cycle) | X | 5.11 | 67.58 | 16.95 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.99 | 67.24 | 16.64 |  | 130.0 |  |
|  |  | Z | 5.12 | 67.40 | 16.76 |  | 130.0 |  |
| $\begin{aligned} & 10596 \ldots \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Mixed, 20MHz, MCS5, 90pc duty cycle) | X | 5.05 | 67.59 | 16.96 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.93 | 67.24 | 16.64 |  | 130.0 |  |
|  |  | Z | 5.06 | 67.40 | 16.76 |  | 130.0 |  |
| $\begin{aligned} & 10597- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11n (HT Mixed, 20MHz, MCS6, 90pc duty cycle) | X | 5.00 | 67.53 | 16.87 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.88 | 67.16 | 16.53 |  | 130.0 |  |
|  |  | Z | 5.01 | 67.35 | 16.68 |  | 130.0 |  |
| $\begin{aligned} & 10598- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11n (HT Mixed, 20MHz, MCS7, 90pc duty cycle) | X | 4.98 | 67.77 | 17.12 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.86 | 67.40 | 16.79 |  | 130.0 |  |
|  |  | Z | 4.99 | 67.58 | 16.92 |  | 130.0 |  |
| $\begin{aligned} & 10599- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11n (HT Mixed, 40MHz, MCSO, 90pc duty cycle) | X | 5.65 | 67.74 | 17.05 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.54 | 67.42 | 16.77 |  | 130.0 |  |
|  |  | Z | 5.65 | 67.58 | 16.87 |  | 130.0 |  |
| $\begin{aligned} & 10600- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Mixed, 40 MHz , MCS1, 90pc duty cycle) | X | 5.86 | 68.37 | 17.35 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.74 | 68.03 | 17.05 |  | 130.0 |  |
|  |  | Z | 5.87 | 68.25 | 17.19 |  | 130.0 |  |
| $\begin{aligned} & 10601- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11 n (HT Mixed, 40 MHz , MCS2, 90pc duty cycle) | X | 5.71 | 67.99 | 17.17 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.59 | 67.67 | 16.88 |  | 130.0 |  |
|  |  | Z | 5.71 | 67.84 | 16.99 |  | 130.0 |  |
| $\begin{aligned} & 10602- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Mixed, 40MHz, MCS3, 90 pc duty cycle) | X | 5.80 | 67.99 | 17.09 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.68 | 67.66 | 16.80 |  | 130.0 |  |
| $\begin{array}{\|l\|} \hline 10603- \\ \text { AAB } \\ \hline \end{array}$ |  | Z | 5.80 | 67.87 | 16.93 |  | 130.0 |  |
|  | IEEE 802.11n (HT Mixed, 40 MHz , MCS4, 90pc duty cycle) | X | 5.88 | 68.27 | 17.35 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.76 | 67.95 | 17.07 |  | 130.0 |  |
|  |  | Z | 5.91 | 68.22 | 17.22 |  | 130.0 |  |
| $\begin{aligned} & 10604- \\ & \mathrm{AAB} \\ & \hline \end{aligned}$ | IEEE 802.11 n (HT Mixed, 40MHz, MCS5, 90pc duty cycle) | X | 5.65 | 67.69 | 17.05 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.55 | 67.38 | 16.78 |  | 130.0 |  |
|  |  | Z | 5.65 | 67.55 | 16.88 |  | 130.0 |  |
| $\begin{array}{\|l\|} \hline 10605- \\ \text { AAB } \\ \hline \end{array}$ | IEEE 802.11n (HT Mixed, 40MHz, MCS6, 90pc duty cycle) | X | 5.77 | 68.03 | 17.23 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.67 | 67.75 | 16.97 |  | 130.0 |  |
|  |  | Z | 5.76 | 67.86 | 17.04 |  | 130.0 |  |
| $\begin{aligned} & \hline 10606-1 \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11 n (HT Mixed, 40 MHz , MCS7, 90pc duty cycle) | X | 5.54 | 67.48 | 16.82 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.42 | 67.14 | 16.52 |  | 130.0 |  |
|  |  | Z | 5.54 | 67.37 | 16.67 |  | 130.0 |  |


| $\begin{aligned} & 10607- \\ & \mathrm{AAB} \end{aligned}$ | IEEE 802.11ac WiFi (20MHz, MCS0, 90 pc duty cycle) | X | 4.81 | 66.46 | 16.48 | 0.46 | 130.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 4.70 | 66.13 | 16.17 |  | 130.0 |  |
| $\begin{aligned} & 10608- \\ & A A B \\ & \hline \end{aligned}$ |  | Z | 4.81 | 66.25 | 16.27 |  | 130.0 |  |
|  | IEEE 802.11ac WiFi (20MHz, MCS1, 90 pc duty cycle) | X | 5.03 | 66.90 | 16.65 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.90 | 66.55 | 16.34 |  | 130.0 |  |
|  |  | Z | 5.02 | 66.68 | 16.44 |  | 130.0 |  |
| $\begin{aligned} & 10609- \\ & \mathrm{AAB} \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (20MHz, MCS2, 90pc duty cycle) | X | 4.92 | 66.79 | 16.52 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.79 | 66.41 | 16.18 |  | 130.0 |  |
|  |  | Z | 4.92 | 66.57 | 16.31 |  | 130.0 |  |
| 10610-$A A B$ | IEEE 802.11ac WiFi (20MHz, MCS3, 90 pc duty cycle) | X | 4.97 | 66.94 | 16.67 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.84 | 66.57 | 16.34 |  | 130.0 |  |
|  |  | Z | 4.97 | 66.72 | 16.46 |  | 130.0 |  |
| 10611- <br> AAB | IEEE 802.11ac WiFi ( 20 MHz , MCS4, 90 pc duty cycle) | X | 4.89 | 66.78 | 16.54 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.76 | 66.39 | 16.20 |  | 130.0 |  |
|  |  | Z | 4.89 | 66.57 | 16.33 |  | 130.0 |  |
| 10612-$\mathrm{AAB}$ | IEEE 802.11ac WiFi (20MHz, MCS5, 90 pc duty cycle) | X | 4.92 | 66.95 | 16.59 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.78 | 66.55 | 16.24 |  | 130.0 |  |
|  |  | Z | 4.91 | 66.73 | 16.37 |  | 130.0 |  |
| $\begin{array}{\|l} \hline 10613- \\ A A B \\ \hline \end{array}$ | IEEE 802.11ac WiFi (20MHz, MCS6, 90 pc duty cycle) | X | 4.93 | 66.87 | 16.50 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.79 | 66.46 | 16.14 |  | 130.0 |  |
|  |  | Z | 4.93 | 66.66 | 16.28 |  | 130.0 |  |
| 10614-$A A B$ | IEEE 802.11ac WiFi ( 20 MHz , MCS7, 90pc duty cycle) | X | 4.85 | 67.03 | 16.71 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.72 | 66.63 | 16.36 |  | 130.0 |  |
|  |  | Z | 4.85 | 66.82 | 16.49 |  | 130.0 |  |
| $\begin{aligned} & \text { 10615- } \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (20MHz, MCS8, 90 pc duty cycle) | X | 4.90 | 66.61 | 16.33 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.76 | 66.22 | 15.98 |  | 130.0 |  |
|  |  | Z | 4.90 | 66.40 | 16.12 |  | 130.0 |  |
| $\begin{array}{\|l} \hline 10616- \\ \text { AAB } \\ \hline \end{array}$ | IEEE 802.11ac WiFi (40MHz, MCSO, 90 pc duty cycle) | X | 5.47 | 66.98 | 16.66 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.36 | 66.66 | 16.38 |  | 130.0 |  |
|  |  | Z | 5.46 | 66.82 | 16.47 |  | 130.0 |  |
| $\begin{array}{\|l\|} \hline 10617- \\ A A B \\ \hline \end{array}$ | IEEE 802.11ac WiFi (40MHz, MCS1, 90 pc duty cycle) | X | 5.52 | 67.09 | 16.68 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.42 | 66.80 | 16.41 |  | 130.0 |  |
|  |  | Z | 5.52 | 66.93 | 16.49 |  | 130.0 |  |
| $\begin{array}{\|l} 10618- \\ \text { AAB } \\ \hline \end{array}$ | IEEE 802.11ac WiFi (40MHz, MCS2, 90 pc duty cycle) | X | 5.42 | 67.18 | 16.74 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.31 | 66.84 | 16.45 |  | 130.0 |  |
|  |  | 2 | 5.41 | 67.00 | 16.54 |  | 130.0 |  |
| $\begin{aligned} & 10619- \\ & A A B \\ & \hline \end{aligned}$ | IEEE 802.11 ac WiFi (40MHz, MCS3, 90 pc duty cycle) | X | 5.45 | 67.00 | 16.59 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.34 | 66.68 | 16.31 |  | 130.0 |  |
|  |  | Z | 5.44 | 66.82 | 16.40 |  | 130.0 |  |
| $\begin{aligned} & \hline 10620- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11ac WiFi (40MHz, MCS4, 90 pc duty cycle) | X | 5.56 | 67.11 | 16.69 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.44 | 66.75 | 16.39 |  | 130.0 |  |
|  |  | Z | 5.56 | 66.95 | 16.51 |  | 130.0 |  |
| $\begin{aligned} & 10621- \\ & \mathrm{AAB} \end{aligned}$ | IEEE 802.11ac WiFi (40MHz, MCS5, 90pc duty cycle) | X | 5.53 | 67.13 | 16.81 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.42 | 66.81 | 16.54 |  | 130.0 |  |
|  |  | Z | 5.53 | 66.98 | 16.63 |  | 130.0 |  |
| 10622-$\mathrm{AAB}$ | IEEE 802.11ac WiFi (40MHz, MCS6, 90 pc duty cycle) | X | 5.53 | 67.27 | 16.87 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.43 | 66.97 | 16.61 |  | 130.0 |  |
|  |  | Z | 5.52 | 67.09 | 16.67 |  | 130.0 |  |


| $\begin{aligned} & 10623- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (40MHz, MCS7, 90 pc duty cycle) | X | 5.42 | 66.86 | 16.56 | 0.46 | 130.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 5.30 | 66.51 | 16.26 |  | 130.0 |  |
|  |  | Z | 5.42 | 66.73 | 16.39 |  | 130.0 |  |
| $\begin{aligned} & 10624- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11ac WiFi (40MHz, MCS8, 90 pc duty cycle) | X | 5.61 | 67.03 | 16.70 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.50 | 66.72 | 16.43 |  | 130.0 |  |
|  |  | Z | 5.60 | 66.86 | 16.51 |  | 130.0 |  |
| $\begin{aligned} & 10625- \\ & A A B \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (40MHz, MCS9, 90 pc duty cycle) | X | 6.05 | 68.19 | 17.33 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.94 | 67.90 | 17.07 |  | 130.0 |  |
|  |  | Z | 6.01 | 67.90 | 17.08 |  | 130.0 |  |
| $\begin{aligned} & 10626- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11ac WiFi (80MHz, MCSO, 90 pc duty cycle) | X | 5.72 | 66.99 | 16.57 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.63 | 66.69 | 16.31 |  | 130.0 |  |
|  |  | Z | 5.71 | 66.84 | 16.40 |  | 130.0 |  |
| $\begin{aligned} & 10627- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (80MHz, MCS1, 90 pc duty cycle) | X | 5.99 | 67.59 | 16.82 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.90 | 67.32 | 16.58 |  | 130.0 |  |
|  |  | Z | 5.97 | 67.39 | 16.62 |  | 130.0 |  |
| $\begin{aligned} & 10628- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi ( 80 MHz , MCS2, 90 pc duty cycle) | X | 5.80 | 67.20 | 16.57 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.69 | 66.85 | 16.29 |  | 130.0 |  |
|  |  | Z | 5.79 | 67.05 | 16.40 |  | 130.0 |  |
| $\begin{aligned} & 10629- \\ & A A B \\ & \hline \end{aligned}$ | IEEE 802.1 1ac WiFi ( 80 MHz , MCS3, 90 pc duty cycle) | X | 5.88 | 67.25 | 16.59 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.77 | 66.92 | 16.31 |  | 130.0 |  |
|  |  | Z | 5.87 | 67.12 ' | 16.43 |  | 130.0 |  |
| $\begin{aligned} & \text { 10630- } \\ & \text { AAB } \end{aligned}$ | IEEE 802.11ac WiFi (80MHz, MCS4, 90 pc duty cycle) | X | 6.51 | 69.31 | 17.62 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 6.37 | 68.86 | 17.28 |  | 130.0 |  |
|  |  | Z | 6.46 | 69.04 | 17.39 |  | 130.0 |  |
| $\begin{aligned} & 10631- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11ac WiFi (80MHz, MCS5, 90 pc duty cycle) | X | 6.31 | 68.81 | 17.54 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 6.17 | 68.39 | 17.24 |  | 130.0 |  |
|  |  | Z | 6.30 | 68.62 | 17.35 |  | 130.0 |  |
| $\begin{aligned} & 10632- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11ac WiFi (80MHz, MCS6, 90 pc duty cycle) | X | 5.95 | 67.61 | 16.96 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.85 | 67.34 | 16.73 |  | 130.0 |  |
|  |  | Z | 5.94 | 67.45 | 16.78 |  | 130.0 |  |
| $\begin{aligned} & 10633- \\ & A A B \end{aligned}$ | IEEE 802.11ac WiFi (80MHz, MCS7, 90 pc duty cycle) | X | 5.89 | 67.42 | 16.71 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.75 | 67.01 | 16.39 |  | 130.0 |  |
|  |  | Z | 5.89 | 67.32 | 16.56 |  | 130.0 |  |
| $\begin{array}{\|l\|} \hline 10634- \\ \text { AAB } \\ \hline \end{array}$ | IEEE 802.11ac WiFi (80MHz, MCS8, 90 pc duty cycle) | X | 5.85 | 67.37 | 16.74 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.73 | 67.02 | 16.46 |  | 130.0 |  |
|  |  | Z | 5.86 | 67.27 | 16.59 |  | 130.0 |  |
| $\begin{aligned} & 10635- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi ( $80 \mathrm{MHz}, \mathrm{MCS}$, 90 pc duty cycle) | X | 5.75 | 66.78 | 16.20 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.62 | 66.39 | 15.89 |  | 130.0 |  |
|  |  | Z | 5.75 | 66.67 | 16.05 |  | 130.0 |  |
| $\begin{aligned} & 10636- \\ & \text { AAC } \end{aligned}$ | IEEE 802.11ac WiFi (160MHz, MCSO, 90 pc duty cycle) | X | 6.13 | 67.38 | 16.66 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 6.05 | 67.09 | 16.42 |  | 130.0 |  |
|  |  | Z | 6.12 | 67.24 | 16.50 |  | 130.0 |  |
| $\begin{aligned} & 10637- \\ & \text { AAC } \end{aligned}$ | IEEE 802.11ac WiFi ( 160 MHz , MCS1, 90 pc duty cycle) | X | 6.31 | 67.79 | 16.85 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 6.21 | 67.50 | 16.60 |  | 130.0 |  |
|  |  | Z | 6.29 | 67.65 | 16.68 |  | 130.0 |  |
| $\begin{aligned} & 10638- \\ & \text { AAC } \\ & \hline \end{aligned}$ | IEEE 802.1 fac WiFi ( 160 MHz , MCS2, 90 pc duty cycle) | X | 6.31 | 67.76 | 16.81 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 6.21 | 67.47 | 16.56 |  | 130.0 |  |
|  |  | Z | 6.29 | 67.60 | 16.64 |  | 130.0 |  |


| $\begin{array}{\|l} \hline 10639- \\ \text { AAC } \\ \hline \end{array}$ | IEEE 802.11ac WiFi (160MHz, MCS3, 90 pc duty cycle) | X | 6.30 | 67.76 | 16.86 | 0.46 | 130.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 6.20 | 67.43 | 16.59 |  | 130.0 |  |
| $\begin{aligned} & 10640- \\ & \text { AAC } \\ & \hline \end{aligned}$ |  | Z | 6.29 | 67.63 | 16.70 |  | 130.0 |  |
|  | IEEE 802.1 1ac WiFi ( 160 MHz , MCS4, 90 pc duty cycle) | X | 6.34 | 67.87 | 16.86 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 6.22 | 67.50 | 16.57 |  | 130.0 |  |
| $\begin{aligned} & 10641- \\ & \text { AAC } \end{aligned}$ |  | Z | 6.33 | 67.75 | 16.70 |  | 130.0 |  |
|  | IEEE 802.11ac WiFi (160MHz, MCS5, 90 pc duty cycle) | X | 6.33 | 67.58 | 16.73 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 6.23 | 67.29 | 16.48 |  | 130.0 |  |
| 10642- <br> AAC |  | Z | 6.31 | 67.45 | 16.57 |  | 130.0 |  |
|  | IEEE 802.11ac WiFi ( 160 MHz , MCS6, 90 pc duty cycle) | X | 6.39 | 67.88 | 17.04 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 6.28 | 67.58 | 16.79 |  | 130.0 |  |
| 10643- <br> AAC |  | Z | 6.38 | 67.76 | 16.88 |  | 130.0 |  |
|  | IEEE 802.11ac WiFi ( 160 MHz , MCS7, 90 pc duty cycle) | X | 6.22 | 67.60 | 16.81 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 6.12 | 67.28 | 16.54 |  | 130.0 |  |
|  |  | Z | 6.21 | 67.48 | 16.65 |  | 130.0 |  |
| $\begin{aligned} & 10644- \\ & \text { AAC } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (160MHz, MCS8, 90 pc duty cycle) | X | 6.47 | 68.34 | 17.21 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 6.34 | 67.93 | 16.89 |  | 130.0 |  |
|  |  | Z | 6.46 | 68.22 | 17.05 |  | 130.0 |  |
| $\begin{array}{\|l} \hline 10645- \\ \text { AAC } \\ \hline \end{array}$ | IEEE 802.11ac WiFi ( 160 MHz , MCS9, 90pe duty cycle) | X | 6.86 | 69.01 | 17.48 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 6.84 | 68.95 | 17.35 |  | 130.0 |  |
|  |  | Z | 6.77 | 68.66 | 17.21 |  | 130.0 |  |
| $\begin{aligned} & \hline 10646- \\ & \text { AAD } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 5 MHz , QPSK, UL Subframe $=2,7$ ) | X | 39.97 | 118.78 | 39.16 | 9.30 | 60.0 | $\pm 9.6$ \% |
|  |  | Y | 36.64 | 117.33 | 38.51 |  | 60.0 |  |
|  |  | Z | 28.19 | 109.42 | 36.13 |  | 60.0 |  |
| 10647AAC | LTE-TDD (SC-FDMA, 1 RB, 20 MHz , QPSK, UL Subframe $=2,7$ ) | X | 43.22 | 121.45 | 40.07 | 9.30 | 60.0 | $\pm 9.6$ \% |
|  |  | Y | 37.61 | 118.78 | 39.06 |  | 60.0 |  |
|  |  | Z | 29.77 | 111.44 | 36.87 |  | 60.0 |  |
| 10648AAA | CDMA2000 (1x Advanced) | X | 0.92 | 67.44 | 13.60 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 0.67 | 63.31 | 10.51 |  | 150.0 |  |
|  |  | Z | 0.80 | 64.88 | 12.09 |  | 150.0 |  |
| $\begin{array}{\|l\|} \hline 10652- \\ \mathrm{AAB} \\ \hline \end{array}$ | LTE-TDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44\%) | X | 4.65 | 69.66 | 17.99 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 4.35 | 68.72 | 17.32 |  | 80.0 |  |
|  |  | Z | 4.56 | 68.93 | 17.55 |  | 80.0 |  |
| $\begin{aligned} & 10653- \\ & \text { AAB } \end{aligned}$ | LTE-TDD (OFDMA, 10 MHz , E-TM 3.1, Clipping 44\%) | X | 5.05 | 68.61 | 17.89 | 2.23 | 80.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.81 | 67.90 | 17.37 |  | 80.0 |  |
|  |  | Z | 5.01 | 68.17 | 17.57 |  | 80.0 |  |
| 10654-$\mathrm{AAB}$ | LTE-TDD (OFDMA, 15 MHz , E-TM 3.1, Clipping 44\%) | X | 4.97 | 68.24 | 17.87 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 4.75 | 67.55 | 17.37 |  | 80.0 |  |
|  |  | Z | 4.94 | 67.85 | 17.56 |  | 80.0 |  |
| $\begin{aligned} & 10655- \\ & \text { AAB } \end{aligned}$ | LTE-TDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44\%) | X | 5.03 | 68.27 | 17.91 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 4.81 | 67.56 | 17.41 |  | 80.0 |  |
|  |  | Z | 4.99 | 67.90 | 17.61 |  | 80.0 |  |
| 10658-AAA | Pulse Waveform (200Hz, 10\%) | X | 13.25 | 86.83 | 23.62 | 10.00 | 50.0 | $\pm 9.6$ \% |
|  |  | Y | 14.38 | 88.09 | 23.44 |  | 50.0 |  |
|  |  | Z | 11.47 | 83.98 | 22.82 |  | 50.0 |  |
| $\begin{aligned} & 10659- \\ & \text { AAA } \\ & \hline \end{aligned}$ | Pulse Waveform (200Hz, 20\%) | X | 55.89 | 109.63 | 28.77 | 6.99 | 60.0 | $\pm 9.6$ \% |
|  |  | Y | 73.21 | 111.71 | 28.47 |  | 60.0 |  |
|  |  | Z | 23.49 | 96.54 | 25.38 |  | 60.0 |  |


| $10660-$ <br> AAA | Pulse Waveform (200Hz, 40\%) | X | 100.00 | 116.44 | 28.38 | 3.98 | 80.0 | $\pm 9.6 \%$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  | Y | 100.00 | 113.18 | 26.58 |  | 80.0 |  |
|  |  | Z | 100.00 | 116.19 | 28.39 |  | 80.0 |  |
| $10661-$ <br> AAA | Pulse Waveform $(200 \mathrm{~Hz}, 60 \%)$ | X | 100.00 | 118.35 | 27.71 | 2.22 | 100.0 | $\pm 9.6 \%$ |
|  |  | Y | 100.00 | 112.59 | 24.89 |  | 100.0 |  |
|  |  | Z | 100.00 | 116.83 | 27.13 |  | 100.0 |  |
| $10662-$ <br> AAA | Pulse Waveform (200Hz, 80\%) | X | 100.00 | 126.67 | 29.16 | 0.97 | 120.0 | $\pm 9.6 \%$ |
|  |  | Y | 100.00 | 111.31 | 22.51 |  | 120.0 |  |
|  |  | Z | 100.00 | 120.40 | 26.63 |  | 120.0 |  |

[^6]Calibration Laboratory of Schmid \& Partner

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

Accreditation No.: SCS 0108
The Swiss Accreditation Service is one of the signatories to the EA
Multilateral Agreement for the recognition of calibration certificates
Client PCTest
Certificate No: EX3-7357 Apr18

CALIBRATION CERTIFICATE

Object
EX3DV4 - SN:7357

Calibration procedure(s)

Calibration date:

QA CAL-01.v9, QA CAL-12.v9, QA CAL-14.v4, QA CAL-23.v5, QA CAL-25.v6 Calibration procedure for dosimetric E-field probes

Apil 18, 2018

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

All calibrations have been conducted in the closed laboratory facility: environment temperature $(22 \pm 3)^{\circ} \mathrm{C}$ and humidity $<70 \%$.
Calibration Equipment used (M\&TE critical for calibration)

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

Calibrated by: $\quad$ Claudio Leubler,

Calibration Laboratory of<br>Schmid \& Partner<br>Engineering AG<br>Zeughausstrasse 43, 8004 Zurich, Switzeriand



S Schweizerischer Kalibrierdienst
C Service suisse d'étalonnage
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Accredited by the Swiss Accreditation Service (SAS)
Accreditation No.: SCS 0108
The Swiss Accreditation Service is one of the signatories to the EA
Multilateral Agreement for the recognition of calibration certificates
Glossary:
TSL
NORM $x, y, z$
ConvF
DCP
CF
A, B, C, D
Polarization $\varphi$
tissue simulating liquid sensitivity in free space sensitivity in TSL / NORM $x, y, z$ diode compression point crest factor ( $1 /$ duty_cycle) of the RF signal modulation dependent linearization parameters $\varphi$ rotation around probe axis
Polarization $\vartheta \quad \vartheta$ rotation around an axis that is in the plane normal to probe axis (at measurement center), i.e., $\vartheta=0$ is normal to probe axis

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

## Calibration is Performed According to the Following Standards:

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

## Methods Applied and Interpretation of Parameters:

- NORMx,y,z: Assessed for E-field polarization $9=0$ ( $f \leq 900 \mathrm{MHz}$ in TEM-cell; $\mathrm{f}>1800 \mathrm{MHz}$ : R22 waveguide). NORMx,y,z are only intermediate values, i.e., the uncertainties of NORM $x, y, z$ does not affect the $E^{2}$-field uncertainty inside TSL (see below ConvF).
- $N O R M(f) x, y, z=N O R M x, y, z *$ frequency_response (see Frequency Response Chart). This linearization is implemented in DASY4 software versions later than 4.2. The uncertainty of the frequency response is included in the stated uncertainty of ConvF.
- 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
- $A x, y, z ; B x, y, z ; C x, y, z ; D x, y, z ; V R x, y, z: A, B, C, D$ are numerical linearization parameters assessed based on the data of power sweep for specific modulation signal. The parameters do not depend on frequency nor media. $V R$ is the maximum calibration range expressed in RMS voltage across the diode.
- ConvF and Boundary Effect Parameters: Assessed in flat phantom using E-field (or Temperature Transfer Standard for $f \leq 800 \mathrm{MHz}$ ) and inside waveguide using analytical field distributions based on power measurements for $f>800 \mathrm{MHz}$. The same setups are used for assessment of the parameters applied for boundary compensation (alpha, depth) of which typical uncertainty values are given. These parameters are used in DASY4 software to improve probe accuracy close to the boundary. The sensitivity in TSL corresponds to NORMx,y,z * ConvF whereby the uncertainty corresponds to that given for ConvF. A frequency dependent ConvF is used in DASY version 4.4 and higher which allows extending the validity from $\pm 50 \mathrm{MHz}$ to $\pm 100$ MHz .
- Spherical isotropy ( $3 D$ deviation from isotropy): in a field of low gradients realized using a flat phantom exposed by a patch antenna.
- Sensor Offset: The sensor offset corresponds to the offset of virtual measurement center from the probe tip (on probe axis). No tolerance required.
- Connector Angle: The angle is assessed using the information gained by determining the NORMX (no uncertainty required).


# Probe EX3DV4 

## SN:7357

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

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

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

## Basic Calibration Parameters

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

## Modulation Calibration Parameters

| UID | Communication System Name |  | $\mathbf{A}$ <br> $\mathbf{d B}$ | $\mathbf{B}$ <br> $\mathbf{d B} \sqrt{ } \boldsymbol{\mu} \mathbf{V}$ | $\mathbf{C}$ | $\mathbf{D}$ <br> $\mathbf{d B}$ | $\mathbf{V R}$ <br> $\mathbf{m V}$ | $\mathbf{U n c}^{\mathbf{E}}$ <br> $(\mathbf{k}=\mathbf{2})$ |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | CW | X | 0.0 | 0.0 | 1.0 | 0.00 | 151.5 | $\pm 2.7 \%$ |
|  |  | $\mathbf{Y}$ | 0.0 | 0.0 | 1.0 |  | 139.1 |  |
|  |  | Z | 0.0 | 0.0 | 1.0 |  | 158.4 |  |

Note: For details on UID parameters see Appendix.

## Sensor Model Parameters

|  | $\mathbf{C 1}$ <br> $\mathbf{f F}$ | $\mathbf{C 2}$ <br> $\mathbf{f F}$ | $\mathbf{\alpha}$ <br> $\mathbf{V}^{\mathbf{- 1}}$ | $\mathbf{T 1}$ <br> $\mathbf{m s} . \mathbf{V}^{-\mathbf{2}}$ | $\mathbf{T 2}$ <br> $\mathbf{m s .} \mathbf{V}^{\mathbf{- 1}}$ | $\mathbf{T 3}$ <br> $\mathbf{m s}$ | $\mathbf{T 4}$ <br> $\mathbf{V}^{\mathbf{- 2}}$ | $\mathbf{T 5}$ <br> $\mathbf{V}^{\mathbf{- 1}}$ | $\mathbf{T 6}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| X | 37.91 | 303.3 | 40.25 | 6.413 | 0.832 | 4.998 | 0.00 | 0.454 | 1.006 |
| Y | 48.33 | 363.1 | 36.01 | 10.58 | 0.113 | 5.100 | 0.00 | 0.458 | 1.004 |
| Z | 39.38 | 305.2 | 38.03 | 5.76 | 0.610 | 5.046 | 0.00 | 0.461 | 1.008 |

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

[^7]
## DASY/EASY - Parameters of Probe: EX3DV4 - SN:7357

Calibration Parameter Determined in Head Tissue Simulating Media

| $\mathrm{f}(\mathrm{MHz})^{\text {c }}$ | Relative Permittivity ${ }^{\text {F }}$ | Conductivity $(\mathrm{S} / \mathrm{m})^{F}$ | ConvF X | ConvF Y | ConvF Z | Alpha ${ }^{\text {G }}$ | $\begin{gathered} \text { Depth }^{6} \\ (\mathrm{~mm}) \end{gathered}$ | $\begin{gathered} \text { Unc } \\ (k=2) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 64 | 54.2 | 0.75 | 14.92 | 14.92 | 14.92 | 0.00 | 1.00 | $\pm 13.3 \%$ |
| 150 | 52.3 | 0.76 | 13.49 | 13.49 | 13.49 | 0.00 | 1.00 | $\pm 13.3 \%$ |
| 300 | 45.3 | 0.87 | 12.37 | 12.37 | 12.37 | 0.08 | 1.20 | $\pm 13.3 \%$ |
| 450 | 43.5 | 0.87 | 11.17 | 11.17 | 11.17 | 0.14 | 1.20 | $\pm 13.3 \%$ |
| 750 | 41.9 | 0.89 | 10.50 | 10.50 | 10.50 | 0.45 | 0.85 | $\pm 12.0 \%$ |
| 835 | 41.5 | 0.90 | 10.11 | 10.11 | 10.11 | 0.37 | 0.93 | $\pm 12.0 \%$ |
| 1750 | 40.1 | 1.37 | 8.80 | 8.80 | 8.80 | 0.38 | 0.86 | $\pm 12.0 \%$ |
| 1900 | 40.0 | 1.40 | 8.47 | 8.47 | 8.47 | 0.18 | 0.83 | $\pm 12.0 \%$ |
| 2300 | 39.5 | 1.67 | 7.83 | 7.83 | 7.83 | 0.33 | 0.86 | $\pm 12.0$ \% |
| 2450 | 39.2 | 1.80 | 7.43 | 7.43 | 7.43 | 0.37 | 0.89 | $\pm 12.0 \%$ |
| 2600 | 39.0 | 1.96 | 7.13 | 7.13 | 7.13 | 0.27 | 0.98 | $\pm 12.0 \%$ |
| 5250 | 35.9 | 4.71 | 5.62 | 5.62 | 5.62 | 0.35 | 1.80 | $\pm 13.1$ \% |
| 5600 | 35.5 | 5.07 | 4.93 | 4.93 | 4.93 | 0.40 | 1.80 | $\pm 13.1$ \% |
| 5750 | 35.4 | 5.22 | 5.23 | 5.23 | 5.23 | 0.40 | 1.80 | $\pm 13.1$ \% |

${ }^{c}$ Frequency validity above 300 MHz of $\pm 100 \mathrm{MHz}$ only applies for DASY v4.4 and higher (see Page 2), else it is restricted to $\pm 50 \mathrm{MHz}$. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is $\pm 10,25,40,50$ and 70 MHz for ConvF assessments at $30,64,128,150$ and 220 MHz respectively. Above 5 GHz frequency validity can be extended to $\pm 110 \mathrm{MHz}$.
${ }^{F}$ At frequencies below 3 GHz , the validity of tissue parameters ( E and $\sigma$ ) can be relaxed to $\pm 10 \%$ if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz , the validity of tissue parameters ( E and $\sigma$ ) is restricted to $\pm 5 \%$. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.
${ }^{G}$ Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than $\pm 1 \%$ for frequencies below 3 GHz and below $\pm 2 \%$ for frequencies between $3-6 \mathrm{GHz}$ at any distance larger than half the probe tip diameter from the boundary.

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

Calibration Parameter Determined in Body Tissue Simulating Media

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

[^8]
## Frequency Response of E-Field



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

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



## Dynamic Range $f\left(S_{\text {A }}^{\text {head }}\right.$ ) (TEM cell, $\mathrm{f}_{\text {eval }}=1900 \mathrm{MHz}$ )



Uncertainty of Linearity Assessment: $\pm \mathbf{0 . 6 \%}(\mathbf{k = 2 )}$

## Conversion Factor Assessment



Error $(\phi, \vartheta), \mathbf{f}=\mathbf{9 0 0} \mathbf{~ M H z}$



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

Other Probe Parameters

| Sensor Arrangement | Triangular |
| :--- | ---: |
| Connector Angle $\left(^{\circ}\right.$ ) | 11.4 |
| Mechanical Surface Detection Mode | enabled |
| Optical Surface Detection Mode | disabled |
| Probe Overall Length | 337 mm |
| Probe Body Diameter | 10 mm |
| Tip Length | 9 mm |
| Tip Diameter | 2.5 mm |
| Probe Tip to Sensor X Calibration Point | 1 mm |
| Probe Tip to Sensor Y Calibration Point | 1 mm |
| Probe Tip to Sensor Z Calibration Point | 1 mm |
| Recommended Measurement Distance from Surface | 1.4 mm |

## Appendix: Modulation Calibration Parameters

| UID | Communication System Name |  | $\begin{gathered} \mathrm{A} \\ \mathrm{~dB} \end{gathered}$ | $\underset{d B \cup \mu v}{B}$ | C | $\begin{gathered} \mathrm{D} \\ \mathrm{~dB} \end{gathered}$ | $\begin{aligned} & \hline \text { VR } \\ & \mathrm{mV} \end{aligned}$ | $\begin{aligned} & \text { Max } \\ & \operatorname{Unc}^{E} \\ & (k=2) \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | CW | $X$ | 0.00 | 0.00 | 1.00 | 0.00 | 151.5 | $\pm 2.7 \%$ |
|  |  | Y | 0.00 | 0.00 | 1.00 |  | 139.1 |  |
|  |  | Z | 0.00 | 0.00 | 1.00 |  | 158.4 |  |
| $\begin{aligned} & 10010- \\ & \text { CAA } \end{aligned}$ | SAR Validation (Square, 100 $\mathrm{ms}, 10 \mathrm{~ms}$ ) | X | 1.67 | 61.93 | 7.65 | 10.00 | 20.0 | $\pm 9.6$ \% |
|  |  | Y | 2.82 | 69.17 | 11.50 |  | 20.0 |  |
|  |  | Z | 1.68 | 62.20 | 7.72 |  | 20.0 |  |
| 10011- CAB | UMTS-FDD (WCDMA) | X | 0.91 | 67.36 | 14.64 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 1.03 | 67.52 | 15.32 |  | 150.0 |  |
|  |  | Z | 0.87 | 67.00 | 14.33 |  | 150.0 |  |
| $\begin{aligned} & 10012- \\ & \mathrm{CAB} \end{aligned}$ | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps) | X | 1.03 | 63.20 | 14.83 | 0.41 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 1.15 | 63.79 | 15.34 |  | 150.0 |  |
|  |  | Z | 1.01 | 63.27 | 14.81 |  | 150.0 |  |
| $\begin{aligned} & 10013- \\ & \mathrm{CAB} \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 6 Mbps ) | X | 4.63 | 66.39 | 16.96 | 1.46 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.87 | 66.69 | 17.19 |  | 150.0 |  |
|  |  | Z | 4.64 | 66.53 | 16.99 |  | 150.0 |  |
| $\begin{aligned} & 10021- \\ & \text { DAC } \end{aligned}$ | GSM-FDD (TDMA, GMSK) | X | 3.67 | 70.27 | 12.79 | 9.39 | 50.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 116.17 | 27.83 |  | 50.0 |  |
|  |  | Z | 17.04 | 87.58 | 18.77 |  | 50.0 |  |
| $\begin{aligned} & 10023- \\ & \text { DAC } \end{aligned}$ | GPRS-FDD (TDMA, GMSK, TN 0) | X | 3.48 | 69.40 | 12.45 | 9.57 | 50.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 115.39 | 27.52 |  | 50.0 |  |
|  |  | Z | 8.91 | 80.25 | 16.55 |  | 50.0 |  |
| $\begin{aligned} & 10024- \\ & \text { DAC } \end{aligned}$ | GPRS-FDD (TDMA, GMSK, TN 0-1) | X | 1.80 | 66.18 | 9.84 | 6.56 | 60.0 | $\pm 9.6 \%$ |
|  |  | Y | 100.00 | 120.19 | 28.55 |  | 60.0 |  |
|  |  | Z | 100.00 | 103.30 | 20.82 |  | 60.0 |  |
| $\begin{aligned} & 10025- \\ & \text { DAC } \end{aligned}$ | EDGE-FDD (TDMA, 8PSK, TN 0) | X | 3.42 | 64.49 | 22.34 | 12.57 | 50.0 | $\pm 9.6$ \% |
|  |  | Y | 6.04 | 85.62 | 35.55 |  | 50.0 |  |
|  |  | Z | 3.44 | 65.04 | 22.85 |  | 50.0 |  |
| $\begin{aligned} & \hline 10026- \\ & \text { DAC } \\ & \hline \end{aligned}$ | EDGE-FDD (TDMA, 8PSK, TN 0-1) | X | 6.25 | 83.47 | 29.08 | 9.56 | 60.0 | $\pm 9.6$ \% |
|  |  | Y | 9.24 | 95.88 | 35.47 |  | 60.0 |  |
|  |  | Z | 6.56 | 85.41 | 30.17 |  | 60.0 |  |
| $\begin{aligned} & 10027- \\ & \text { DAC } \end{aligned}$ | GPRS-FDD (TDMA, GMSK, TN 0-1-2) | X | 0.96 | 63.24 | 7.67 | 4.80 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 125.59 | 30.06 |  | 80.0 |  |
|  |  | Z | 100.00 | 100.14 | 18.62 |  | 80.0 |  |
| $\begin{array}{\|l} \hline 10028- \\ \text { DAC } \\ \hline \end{array}$ | GPRS-FDD (TDMA, GMSK, TN 0-1-2-3) | X | 0.48 | 60.36 | 5.50 | 3.55 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 132.37 | 32.13 |  | 100.0 |  |
|  |  | Z | 99.97 | 95.45 | 15.98 |  | 100.0 |  |
| $\begin{aligned} & 10029- \\ & \text { DAC } \end{aligned}$ | EDGE-FDD (TDMA, 8PSK, TN 0-1-2) | X | 4.19 | 75.28 | 24.64 | 7.80 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 5.35 | 81.78 | 28.49 |  | 80.0 |  |
|  |  | Z | 4.26 | 76.21 | 25.31 |  | 80.0 |  |
| $\begin{aligned} & 10030- \\ & \text { CAA } \end{aligned}$ | IEEE 802.15.1 Bluetooth (GFSK, DH1) | X | 1.09 | 63.09 | 7.76 | 5.30 | 70.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 120.14 | 28.06 |  | 70.0 |  |
|  |  | Z | 4.93 | 76.05 | 12.90 |  | 70.0 |  |
| $\begin{aligned} & 10031- \\ & \text { CAA } \\ & \hline \end{aligned}$ | IEEE 802.15.1 Bluetooth (GFSK, DH3) | X | 0.27 | 60.00 | 3.17 | 1.88 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 135.00 | 31.47 |  | 100.0 |  |
|  |  | Z | 0.26 | 60.00 | 3.07 |  | 100.0 |  |


| $\begin{aligned} & 10032- \\ & \text { CAA } \end{aligned}$ | IEEE 802.15.1 Bluetooth (GFSK, DH5) | X | 27.08 | 314.20 | 3.36 | 1.17 | 100.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 100.00 | 149.06 | 35.68 |  | 100.0 |  |
|  |  | Z | 1.21 | 330.96 | 55.77 |  | 100.0 |  |
| $\begin{aligned} & 10033- \\ & \text { CAA } \\ & \hline \end{aligned}$ | IEEE 802.15.1 Bluetooth (P//4-DQPSK, DH1) | X | 3.08 | 73.10 | 16.00 | 5.30 | 70.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 136.30 | 37.75 |  | 70.0 |  |
|  |  | Z | 7.37 | 86.92 | 21.69 |  | 70.0 |  |
| $\begin{array}{\|l\|} \hline 10034- \\ \text { CAA } \\ \hline \end{array}$ | IEEE 802.15.1 Bluetooth (Pl/4-DQPSK, DH3) | X | 1.25 | 65.91 | 11.39 | 1.88 | 100.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.27 | 87.77 | 22.72 |  | 100.0 |  |
|  |  | Z | 1.70 | 70.42 | 13.93 |  | 100.0 |  |
| 10035-CAA | IEEE 802.15.1 Bluetooth (Pl/4-DQPSK, DH5) | X | 0.99 | 64.64 | 10.52 | 1.17 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 2.59 | 77.96 | 18.88 |  | 100.0 |  |
|  |  | Z | 1.19 | 67.26 | 12.19 |  | 100.0 |  |
| $\begin{aligned} & 10036- \\ & \text { CAA } \\ & \hline \end{aligned}$ | IEEE 802.15.1 Bluetooth (8-DPSK, DH1) | X | 3.48 | 74.91 | 16.77 | 5.30 | 70.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 136.90 | 38.02 |  | 70.0 |  |
|  |  | Z | 11.33 | 93.27 | 23.71 |  | 70.0 |  |
| $\begin{array}{\|l\|} \hline 10037- \\ \text { CAA } \\ \hline \end{array}$ | IEEE 802.15.1 Bluetooth (8-DPSK, DH3) | X | 1.18 | 65.50 | 11.18 | 1.88 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 4.66 | 86.12 | 22.16 |  | 100.0 |  |
|  |  | Z | 1.56 | 69.56 | 13.55 |  | 100.0 |  |
| $10038-$CAA | IEEE 802.15.1 Bluetooth (8-DPSK, DH5) | X | 1.00 | 64.92 | 10.78 | 1.17 | 100.0 | $\pm 9.6 \%$ |
|  |  | Y | 2.61 | 78.41 | 19.18 |  | 100.0 |  |
|  |  | Z | 1.21 | 67.70 | 12.52 |  | 100.0 |  |
| $\begin{aligned} & 10039- \\ & \mathrm{CAB} \end{aligned}$ | CDMA2000 (1xRTT, RC1) | X | 0.95 | 64.99 | 10.40 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 1.84 | 72.12 | 15.71 |  | 150.0 |  |
|  |  | Z | 1.02 | 65.84 | 10.98 |  | 150.0 |  |
| $\begin{aligned} & 10042- \\ & \text { CAB } \\ & \hline \end{aligned}$ | IS-54 / IS-136 FDD (TDMA/FDM, PI/4DQPSK, Halfrate) | X | 1.77 | 64.37 | 9.09 | 7.78 | 50.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 113.16 | 25.71 |  | 50.0 |  |
|  |  | Z | 2.56 | 68.32 | 10.93 |  | 50.0 |  |
| 10044-CAA | IS-91/EIA/TIA-553 FDD (FDMA, FM) | X | 0.31 | 133.81 | 11.51 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 0.00 | 104.03 | 5.27 |  | 150.0 |  |
|  |  | Z | 0.33 | 142.49 | 0.98 |  | 150.0 |  |
| $\begin{aligned} & \text { 10048- } \\ & \text { CAA } \end{aligned}$ | DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24) | X | 4.01 | 66.51 | 12.74 | 13.80 | 25.0 | $\pm 9.6 \%$ |
|  |  | Y | 100.00 | 110.91 | 26.95 |  | 25.0 |  |
|  |  | Z | 5.44 | 70.40 | 14.40 |  | 25.0 |  |
| $\begin{array}{\|l} \hline 10049- \\ \text { CAA } \\ \hline \end{array}$ | DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12) | X | 3.70 | 68.56 | 12.33 | 10.79 | 40.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 112.50 | 26.54 |  | 40.0 |  |
|  |  | Z | 5.22 | 72.87 | 14.17 |  | 40.0 |  |
| $\begin{array}{\|l\|} \hline 10056- \\ \text { CAA } \\ \hline \end{array}$ | UMTS-TDD (TD-SCDMA, 1.28 Mcps) | X | 6.09 | 76.95 | 17.81 | 9.03 | 50.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 128.62 | 35.43 |  | 50.0 |  |
|  |  | Z | 13.22 | 89.10 | 22.41 |  | 50.0 |  |
| $\begin{array}{\|l\|} \hline 10058- \\ \text { DAC } \\ \hline \end{array}$ | EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3) | X | 3.39 | 71.63 | 22.33 | 6.55 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 4.14 | 76.10 | 25.11 |  | 100.0 |  |
|  |  | Z | 3.42 | 72.27 | 22.83 |  | 100.0 |  |
| $\begin{aligned} & 10059- \\ & \mathrm{CAB} \\ & \hline \end{aligned}$ | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps) | X | 1.03 | 63.98 | 15.22 | 0.61 | 110.0 | $\pm 9.6 \%$ |
|  |  | Y | 1.18 | 64.90 | 16.05 |  | 110.0 |  |
|  |  | Z | 1.02 | 64.18 | 15.34 |  | 110.0 |  |
| $\begin{aligned} & 10060- \\ & \text { CAB } \end{aligned}$ | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps) | X | 5.25 | 93.28 | 23.11 | 1.30 | 110.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 145.92 | 38.93 |  | 110.0 |  |
|  |  | Z | 39.44 | 123.36 | 31.22 |  | 110.0 |  |


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


| $\begin{aligned} & 10081- \\ & \text { CAB } \\ & \hline \end{aligned}$ | CDMA2000 (1xRTT, RC3) | X | 0.45 | 61.00 | 7.50 | 0.00 | 150.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $Y$ | 0.83 | 65.94 | 12.49 |  | 150.0 |  |
|  |  | Z | 0.46 | 61.34 | 7.83 |  | 150.0 |  |
| $\begin{aligned} & 10082- \\ & \mathrm{CAB} \end{aligned}$ | IS-54 / IS-136 FDD (TDMA/FDM, PI/4DQPSK, Fullrate) | X | 0.68 | 60.00 | 3.10 | 4.77 | 80.0 | $\pm 9.6 \%$ |
|  |  | Y | 0.78 | 61.11 | 4.54 |  | 80.0 |  |
|  |  | Z | 0.72 | 60.00 | 2.85 |  | 80.0 |  |
| $\begin{aligned} & 10090- \\ & \text { DAC } \end{aligned}$ | GPRS-FDD (TDMA, GMSK, TN 0-4) | X | 1.84 | 66.30 | 9.91 | 6.56 | 60.0 | $\pm 9.6$ \% |
|  |  | $Y$ | 100.00 | 120,24 | 28.59 |  | 60.0 |  |
|  |  | Z | 100.00 | 103.44 | 20.90 |  | 60.0 |  |
| $\begin{aligned} & 10097- \\ & \text { CAB } \end{aligned}$ | UMTS-FDD (HSDPA) | X | 1.71 | 67.90 | 15.28 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | $Y$ | 1.82 | 67.70 | 15.69 |  | 150.0 |  |
|  |  | Z | 1.68 | 67.71 | 15.15 |  | 150.0 |  |
| $\begin{aligned} & 10098- \\ & \text { CAB } \end{aligned}$ | UMTS-FDD (HSUPA, Subtest 2) | X | 1.67 | 67.85 | 15.26 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 1.79 | 67.66 | 15.66 |  | 150.0 |  |
|  |  | Z | 1.64 | 67.65 | 15.11 |  | 150.0 |  |
| $\begin{aligned} & \text { 10099- } \\ & \text { DAC } \end{aligned}$ | EDGE-FDD (TDMA, 8PSK, TN 0-4) | X | 6.29 | 83.56 | 29.10 | 9.56 | 60.0 | $\pm 9.6$ \% |
|  |  | Y | 9.34 | 96.14 | 35.56 |  | 60.0 |  |
|  |  | Z | 6.61 | 85.53 | 30.21 |  | 60.0 |  |
| $\begin{aligned} & 10100- \\ & \text { CAD } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, $100 \%$ RB, 20 MHz, QPSK) | X | 2.90 | 69.76 | 16.53 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 3.14 | 70.37 | 16.71 |  | 150.0 |  |
|  |  | Z | 2.89 | 69.82 | 16.39 |  | 150.0 |  |
| $\begin{aligned} & 10101- \\ & \text { CAD } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, $100 \% \mathrm{RB}, 20$ $\mathrm{MHz}, 16-\mathrm{QAM})$ | X | 3.04 | 67.08 | 15.83 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 3.24 | 67.51 | 15.94 |  | 150.0 |  |
|  |  | Z | 3.03 | 67.13 | 15.70 |  | 150.0 |  |
| $\begin{aligned} & 10102- \\ & \text { CAD } \end{aligned}$ | LTE-FDD (SC-FDMA, $100 \%$ RB, 20 $\mathrm{MHz}, 64-\mathrm{QAM}$ ) | X | 3.15 | 67.10 | 15.95 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 3.34 | 67.47 | 16.02 |  | 150.0 |  |
|  |  | Z | 3.13 | 67.15 | 15.83 |  | 150.0 |  |
| $\begin{aligned} & 10103- \\ & \text { CAD } \end{aligned}$ | LTE-TDD (SC-FDMA, 100\% RB, 20 $\mathrm{MHz}, \mathrm{QPSK}$ ) | X | 4.81 | 72.04 | 18.88 | 3.98 | 65.0 | $\pm 9.6 \%$ |
|  |  | Y | 6.41 | 77.25 | 21.56 |  | 65.0 |  |
|  |  | Z | 5.14 | 73.67 | 19.73 |  | 65.0 |  |
| $\begin{aligned} & 10104- \\ & \text { CAD } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 100 \% \mathrm{RB}, 20 \\ & \mathrm{MHz}, 16-\mathrm{QAM}) \end{aligned}$ | X | 5.09 | 70.84 | 19.13 | 3.98 | 65.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.94 | 73.69 | 20.83 |  | 65.0 |  |
|  |  | Z | 5.16 | 71.44 | 19.51 |  | 65.0 |  |
| $\begin{aligned} & 10105- \\ & \text { CAD } \\ & \hline \end{aligned}$ | $\text { LTE-TDD (SC-FDMA, } 100 \% \text { RB, } 20$ $\mathrm{MHz}, 64-\mathrm{QAM})$ | X | 4.78 | 69.37 | 18.75 | 3.98 | 65.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.83 | 73.15 | 20.89 |  | 65.0 |  |
|  |  | Z | 4.90 | 70.20 | 19.25 |  | 65.0 |  |
| $\begin{aligned} & 10108- \\ & \text { CAE } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, $100 \%$ RB, 10 MHz, QPSK) | X | 2.51 | 69.24 | 16.41 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 2.74 | 69.60 | 16.54 |  | 150.0 |  |
|  |  | Z | 2.49 | 69.21 | 16.24 |  | 150.0 |  |
| $\begin{aligned} & 10109- \\ & \text { CAE } \end{aligned}$ | LTE-FDD (SC-FDMA, $100 \% \mathrm{RB}, 10$ $\mathrm{MHz}, 16-\mathrm{QAM}$ ) | X | 2.68 | 67.06 | 15.67 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 2.89 | 67.36 | 15.84 |  | 150.0 |  |
|  |  | Z | 2.67 | 67.07 | 15.55 |  | 150.0 |  |
| $\begin{aligned} & 10110- \\ & \text { CAE } \end{aligned}$ | LTE-FDD (SC-FDMA, $100 \% \mathrm{RB}, 5 \mathrm{MHz}$, QPSK) | X | 1.99 | 68.49 | 15.84 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.22 | 68.71 | 16.15 |  | 150.0 |  |
|  |  | Z | 1.98 | 68.38 | 15.68 |  | 150.0 |  |
| $\begin{aligned} & 10111- \\ & \text { CAE } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, $100 \%$ RB, 5 MHz , 16-QAM) | X | 2.41 | 68.19 | 15.80 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 2.61 | 68.17 | 16.11 |  | 150.0 |  |
|  |  | Z | 2.40 | 68.17 | 15.74 |  | 150.0 |  |

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| 10112CAE | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 100 \% \text { RB, } 10 \\ & \mathrm{MHz}, 64-\mathrm{QAM} \text { ) } \end{aligned}$ | X | 2.81 | 67.12 | 15.76 | 0.00 | 150.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 3.02 | 67.35 | 15.89 |  | 150.0 |  |
|  |  | Z | 2.80 | 67.12 | 15.64 |  | 150.0 |  |
| $\begin{aligned} & 10113- \\ & \text { CAE } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, $100 \%$ RB, 5 MHz , 64-QAM) | X | 2.56 | 68.40 | 15.97 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 2.76 | 68.30 | 16.24 |  | 150.0 |  |
|  |  | Z | 2.55 | 68.39 | 15.92 |  | 150.0 |  |
| 10114-$\mathrm{CAC}$ | IEEE 802.11n (HT Greenfield, 13.5 Mbps, BPSK) | X | 4.95 | 66.96 | 16.54 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.12 | 67.17 | 16.44 |  | 150.0 |  |
|  |  | Z | 4.92 | 66.97 | 16.39 |  | 150.0 |  |
| $\begin{aligned} & 10115- \\ & \text { CAC } \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Greenfield, 81 Mbps , 16-QAM) | X | 5.23 | 67.14 | 16.63 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.41 | 67.31 | 16.52 |  | 150.0 |  |
|  |  | Z | 5.18 | 67.06 | 16.45 |  | 150.0 |  |
| $\begin{aligned} & \text { 10116- } \\ & \text { CAC } \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Greenfield, 135 Mbps , 64-QAM) | X | 5.04 | 67.18 | 16.57 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.22 | 67.37 | 16.47 |  | 150.0 |  |
|  |  | Z | 5.01 | 67.18 | 16.42 |  | 150.0 |  |
| 10117CAC | IEEE 802.11n (HT Mixed, 13.5 Mbps , BPSK) | X | 4.94 | 66.92 | 16.53 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.09 | 67.03 | 16.39 |  | 150.0 |  |
|  |  | Z | 4.91 | 66.91 | 16.38 |  | 150.0 |  |
| 10118CAC | IEEE 802.11n (HT Mixed, 81 Mbps, 16QAM) | X | 5.34 | 67.47 | 16.81 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.50 | 67.52 | 16.63 |  | 150.0 |  |
|  |  | Z | 5.27 | 67.32 | 16.58 |  | 150.0 |  |
| 10119-$\mathrm{CAC}$ | IEEE 802.11n (HT Mixed, 135 Mbps , 64QAM) | X | 5.06 | 67.24 | 16.61 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.20 | 67.31 | 16.45 |  | 150.0 |  |
|  |  | Z | 5.01 | 67.18 | 16.43 |  | 150.0 |  |
| $\begin{aligned} & 10140- \\ & \text { CAD } \end{aligned}$ | LTE-FDD (SC-FDMA, 100\% RB, 15 $\mathrm{MHz}, 16-\mathrm{QAM}$ ) | X | 3.17 | 67.11 | 15.85 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.38 | 67.48 | 15.94 |  | 150.0 |  |
|  |  | Z | 3.16 | 67.15 | 15.73 |  | 150.0 |  |
| $\begin{aligned} & \hline 10141- \\ & \text { CAD } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 100 \% \text { RB, } 15 \\ & \mathrm{MHz}, 64-\mathrm{QAM} \text { ) } \end{aligned}$ | X | 3.30 | 67.28 | 16.06 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.50 | 67.57 | 16.11 |  | 150.0 |  |
|  |  | Z | 3.29 | 67.32 | 15.94 |  | 150.0 |  |
| $\begin{aligned} & 10142- \\ & \text { CAD } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, $100 \% \mathrm{RB}, 3 \mathrm{MHz}$, QPSK) | X | 1.73 | 68.17 | 14.94 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.00 | 68.71 | 15.82 |  | 150.0 |  |
|  |  | Z | 1.72 | 68.11 | 14.89 |  | 150.0 |  |
| $\begin{aligned} & \hline 10143- \\ & \text { CAD } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, $100 \% \mathrm{RB}, 3 \mathrm{MHz}$, 16-QAM) | X | 2.15 | 68.15 | 14.63 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.47 | 68.91 | 15.82 |  | 150.0 |  |
|  |  | Z | 2.17 | 68.32 | 14.76 |  | 150.0 |  |
| $\begin{array}{\|l\|} \hline 10144- \\ \text { CAD } \\ \hline \end{array}$ | LTE-FDD (SC-FDMA, $100 \% \mathrm{RB}, 3 \mathrm{MHz}$, 64-QAM) | X | 1.86 | 65.26 | 12.63 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.24 | 66.62 | 14.22 |  | 150.0 |  |
|  |  | Z | 1.88 | 65.43 | 12.77 |  | 150.0 |  |
| 10145- <br> CAE | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 100 \% \text { RB, } 1.4 \\ & \mathrm{MHz}, \text { QPSK) } \end{aligned}$ | X | 0.67 | 60.16 | 6.91 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 1.22 | 65.11 | 11.80 |  | 150.0 |  |
|  |  | Z | 0.71 | 60.61 | 7.39 |  | 150.0 |  |
| 10146- <br> CAE | LTE-FDD (SC-FDMA, 100\% RB, 1.4 $\mathrm{MHZ}, 16-\mathrm{QAM}$ ) | X | 0.95 | 60.06 | 6.44 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 1.65 | 64.56 | 10.76 |  | 150.0 |  |
|  |  | Z | 1.07 | 61.07 | 7.44 |  | 150.0 |  |
| 10147-$\mathrm{CAE}$ | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 100 \% \text { RB, } 1.4 \\ & \mathrm{MHz}, 64-\mathrm{QAM} \text { ) } \end{aligned}$ | X | 0.99 | 60.33 | 6.68 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 1.85 | 65.94 | 11.59 |  | 150.0 |  |
|  |  | Z | 1.13 | 61.55 | 7.80 |  | 150.0 |  |


| $\begin{aligned} & \hline 10149- \\ & \text { CAD } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, $50 \% \mathrm{RB}, 20 \mathrm{MHz}$, 16-QAM) | X | 2.69 | 67.13 | 15.72 | 0.00 | 150.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 2.90 | 67.42 | 15.88 |  | 150.0 |  |
|  |  | Z | 2.68 | 67.14 | 15.60 |  | 150.0 |  |
| $\begin{aligned} & 10150- \\ & \text { CAD } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, $50 \% \mathrm{RB}, 20 \mathrm{MHz}$, 64-QAM) | X | 2.82 | 67.19 | 15.80 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.03 | 67.40 | 15.93 |  | 150.0 |  |
|  |  | Z | 2.81 | 67.19 | 15.69 |  | 150.0 |  |
| $\begin{aligned} & 10151 \\ & \text { CAD } \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 20 \mathrm{MHz}$, QPSK) | X | 5.01 | 74.56 | 19.93 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 6.65 | 79.71 | 22.70 |  | 65.0 |  |
|  |  | Z | 5.36 | 76.27 | 20.86 |  | 65.0 |  |
| $\begin{aligned} & 10152- \\ & \text { CAD } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 20 \mathrm{MHz}$, 16-QAM) | X | 4.60 | 70.61 | 18.55 | 3.98 | 65.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.50 | 73.80 | 20.64 |  | 65.0 |  |
|  |  | Z | 4.69 | 71.33 | 19.06 |  | 65.0 |  |
| $\begin{aligned} & 10153- \\ & \text { CAD } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 20 \mathrm{MHz}$, 64-QAM) | X | 4.95 | 71.72 | 19.46 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 5.84 | 74.66 | 21.37 |  | 65.0 |  |
|  |  | Z | 5.05 | 72.49 | 19.99 |  | 65.0 |  |
| $10154-$CAE | LTE-FDD (SC-FDMA, $50 \% \mathrm{RB}, 10 \mathrm{MHz}$, QPSK) | X | 2.04 | 68.92 | 16.11 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.27 | 69.12 | 16.41 |  | 150.0 |  |
|  |  | Z | 2.03 | 68.83 | 15.96 |  | 150.0 |  |
| 10155- CAE | LTE-FDD (SC-FDMA, $50 \% \mathrm{RB}, 10 \mathrm{MHz}$, 16-QAM) | X | 2.41 | 68.23 | 15.84 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.61 | 68.18 | 16.13 |  | 150.0 |  |
|  |  | Z | 2.40 | 68.21 | 15.77 |  | 150.0 |  |
| 10156-CAE | LTE-FDD (SC-FDMA, $50 \%$ RB, 5 MHz , QPSK) | X | 1.51 | 67.60 | 14.13 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 1.84 | 68.81 | 15.61 |  | 150.0 |  |
|  |  | Z | 1.52 | 67.67 | 14.19 |  | 150.0 |  |
| 10157CAE | LTE-FDD (SC-FDMA, $50 \%$ RB, 5 MHz , 16-QAM) | X | 1.63 | 65.15 | 12.07 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.08 | 67.20 | 14.25 |  | 150.0 |  |
|  |  | Z | 1.66 | 65.43 | 12.31 |  | 150.0 |  |
| $\begin{aligned} & 10158-1 \\ & \text { CAE } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, $50 \%$ RB, 10 MHz , 64-QAM) | X | 2.57 | 68.50 | 16.04 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.77 | 68.36 | 16.29 |  | 150.0 |  |
|  |  | Z | 2.56 | 68.48 | 15.98 |  | 150.0 |  |
| $\begin{aligned} & 10159- \\ & \mathrm{CAE} \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 50 \% \text { RB, } 5 \mathrm{MHz} \text {, } \\ & \text { 64-QAM) } \end{aligned}$ | X | 1.70 | 65.38 | 12.24 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.19 | 67.65 | 14.54 |  | 150.0 |  |
|  |  | Z | 1.74 | 65.76 | 12.53 |  | 150.0 |  |
| $\begin{aligned} & 10160- \\ & \text { CAD } \end{aligned}$ | LTE-FDD (SC-FDMA, $50 \% \mathrm{RB}, 15 \mathrm{MHz}$, QPSK) | X | 2.62 | 68.99 | 16.41 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.74 | 68.65 | 16.32 |  | 150.0 |  |
|  |  | Z | 2.56 | 68.70 | 16.16 |  | 150.0 |  |
| $\begin{aligned} & 10161- \\ & \text { CAD } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, $50 \%$ RB, 15 MHz , 16-QAM) | X | 2.71 | 67.15 | 15.66 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.92 | 67.34 | 15.86 |  | 150.0 |  |
|  |  | Z | 2.70 | 67.15 | 15.57 |  | 150.0 |  |
| $\begin{aligned} & 10162- \\ & \text { CAD } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, $50 \% \mathrm{RB}, 15 \mathrm{MHz}$, 64-QAM) | X | 2.82 | 67.38 | 15.82 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 3.03 | 67.49 | 15.97 |  | 150.0 |  |
|  |  | Z | 2.81 | 67.37 | 15.72 |  | 150.0 |  |
| $\begin{aligned} & 10166- \\ & \text { CAE } \end{aligned}$ | LTE-FDD (SC-FDMA, $50 \%$ RB, 1.4 MHz , QPSK) | X | 3.14 | 68.82 | 18.96 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.40 | 68.62 | 18.58 |  | 150.0 |  |
|  |  | Z | 3.24 | 69.38 | 19.21 |  | 150.0 |  |
| $\begin{aligned} & 10167- \\ & \text { CAE } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, $50 \%$ RB, 1.4 MHz , 16-QAM) | X | 3.68 | 71.26 | 19.14 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.01 | 70.93 | 18.84 |  | 150.0 |  |
|  |  | Z | 3.86 | 71.98 | 19.46 |  | 150.0 |  |

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| $\begin{aligned} & 10168- \\ & \text { CAE } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, $50 \%$ RB, 1.4 MHz , 64-QAM) | X | 4.20 | 74.21 | 20.88 | 3.01 | 150.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 4.39 | 72.91 | 20.06 |  | 150.0 |  |
|  |  | Z | 4.45 | 75.16 | 21.28 |  | 150.0 |  |
| $\begin{aligned} & 10169- \\ & \text { CAD } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, 1 RB, 20 MHz , QPSK) | X | 2.49 | 66.95 | 18.11 | 3.01 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 2.73 | 67.59 | 18.14 |  | 150.0 |  |
|  |  | Z | 2.58 | 67.69 | 18.47 |  | 150.0 |  |
| $\begin{aligned} & \text { 10170- } \\ & \text { CAD } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 1 \mathrm{RB}, 20 \mathrm{MHz} \text {, } \\ & \text { 16-QAM) } \end{aligned}$ | X | 3.17 | 72.06 | 20.27 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.45 | 72,20 | 20.01 |  | 150.0 |  |
|  |  | Z | 3.40 | 73.44 | 20.89 |  | 150.0 |  |
| $\begin{aligned} & 10171- \\ & \text { AAD } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 1 \text { RB, } 20 \mathrm{MHz} \text {, } \\ & \text { 64-QAM) } \end{aligned}$ | X | 2.61 | 67.98 | 17.29 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.93 | 68.85 | 17.54 |  | 150.0 |  |
|  |  | Z | 2.74 | 68.83 | 17.69 |  | 150.0 |  |
| $\begin{aligned} & 10172- \\ & \text { CAD } \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 1 \text { RB, } 20 \mathrm{MHz} \text {, } \\ & \text { QPSK) } \end{aligned}$ | X | 3.59 | 76.79 | 22.90 | 6.02 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 7.70 | 92.12 | 29.64 |  | 65.0 |  |
|  |  | Z | 4.50 | 82.04 | 25.61 |  | 65.0 |  |
| $\begin{aligned} & 10173- \\ & \text { CAD } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 1 \text { RB, } 20 \mathrm{MHz} \text {, } \\ & \text { 16-QAM) } \end{aligned}$ | X | 5.40 | 81.69 | 22.80 | 6.02 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 14.31 | 100.07 | 30.15 |  | 65.0 |  |
|  |  | Z | 8.60 | 91.21 | 26.84 |  | 65.0 |  |
| $\begin{aligned} & \hline 10174- \\ & \text { CAD } \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 1 \text { RB, } 20 \mathrm{MHz} \text {, } \\ & \text { 64-QAM) } \end{aligned}$ | X | 3.41 | 73.68 | 19.23 | 6.02 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 12.55 | 96.17 | 28.30 |  | 65.0 |  |
|  |  | Z | 5.50 | 82.57 | 23.30 |  | 65.0 |  |
| 10175-CAE | LTE-FDD (SC-FDMA, 1 RB, 10 MHz , QPSK) | X | 2.47 | 66.66 | 17.85 | 3.01 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 2.70 | 67.34 | 17.92 |  | 150.0 |  |
|  |  | Z | 2.55 | 67.36 | 18.19 |  | 150.0 |  |
| 10176-$\mathrm{CAE}$ | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 1 \text { RB, } 10 \mathrm{MHz} \text {, } \\ & \text { 16-QAM) } \end{aligned}$ | X | 3.18 | 72.09 | 20.28 | 3.01 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 3.46 | 72.22 | 20.02 |  | 150.0 |  |
|  |  | Z | 3.41 | 73.46 | 20.90 |  | 150.0 |  |
| $\begin{aligned} & 10177- \\ & \text { CAG } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 1 \text { RB, } 5 \mathrm{MHz} \text {, } \\ & \text { QPSK) } \end{aligned}$ | X | 2.48 | 66.79 | 17.93 | 3.01 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 2.72 | 67.46 | 18.00 |  | 150.0 |  |
|  |  | Z | 2.57 | 67.51 | 18.28 |  | 150.0 |  |
| $\begin{aligned} & 10178- \\ & \text { CAE } \end{aligned}$ | LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16QAM) | X | 3.15 | 71.92 | 20.18 | 3.01 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 3.43 | 72.05 | 19.92 |  | 150.0 |  |
|  |  | Z | 3.38 | 73.25 | 20.78 |  | 150.0 |  |
| 10179-$\mathrm{CAE}$ | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 1 \mathrm{RB}, 10 \mathrm{MHz} \text {, } \\ & \text { 64-QAM) } \end{aligned}$ | X | 2.85 | 69.85 | 18.61 | 3.01 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 3.17 | 70.44 | 18.65 |  | 150.0 |  |
|  |  | Z | 3.03 | 70.94 | 19.12 |  | 150.0 |  |
| 10180- CAE | LTE-FDD (SC-FDMA, 1 RB, 5 MHz , 64QAM) | X | 2.61 | 67.94 | 17.25 | 3.01 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 2.92 | 68.79 | 17.50 |  | 150.0 |  |
|  |  | Z | 2.74 | 68.78 | 17.65 |  | 150.0 |  |
| $\begin{aligned} & 10181- \\ & \text { CAD } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, 1 RB, 15 MHz , QPSK) | X | 2.48 | 66.77 | 17.93 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.71 | 67.45 | 18.00 |  | 150.0 |  |
|  |  | Z | 2.56 | 67.49 | 18.28 |  | 150.0 |  |
| $\begin{aligned} & 10182- \\ & \text { CAD } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, 1 RB, 15 MHz , 16-QAM) | X | 3.15 | 71.89 | 20.17 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.42 | 72.03 | 19.91 |  | 150.0 |  |
|  |  | Z | 3.37 | 73.22 | 20.77 |  | 150.0 |  |
| $\begin{aligned} & 10183- \\ & \text { AAC } \end{aligned}$ | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 1 \text { RB, } 15 \mathrm{MHz} \text {, } \\ & \text { 64-QAM) } \end{aligned}$ | X | 2.60 | 67.92 | 17.24 | 3.01 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 2.92 | 68.77 | 17.49 |  | 150.0 |  |
|  |  | Z | 2.73 | 68.75 | 17.64 |  | 150.0 |  |


| $\begin{aligned} & 10184- \\ & \text { CAD } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 1 \mathrm{RB}, 3 \mathrm{MHz} \text {, } \\ & \text { QPSK) } \end{aligned}$ | X | 2.49 | 66.81 | 17.95 | 3.01 | 150.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 2.72 | 67.49 | 18.02 |  | 150.0 |  |
|  |  | Z | 2.57 | 67.53 | 18.30 |  | 150.0 |  |
| $\begin{aligned} & 10185- \\ & \text { CAD } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, 1 RB, 3 MHz , 16QAM) | X | 3.16 | 71.97 | 20.21 | 3.01 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 3.44 | 72.09 | 19.94 |  | 150.0 |  |
|  |  | Z | 3.39 | 73.31 | 20.81 |  | 150.0 |  |
| 10186-AAD | LTE-FDD (SC-FDMA, 1 RB, 3 MHz , 64QAM) | X | 2.62 | 67.98 | 17.28 | 3.01 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 2.93 | 68.83 | 17.52 |  | 150.0 |  |
|  |  | Z | 2.74 | 68.82 | 17.67 |  | 150.0 |  |
| 10187-CAE | LTE-FDD (SC-FDMA, 1RB, 1.4 MHz, QPSK) | X | 2.50 | 66.88 | 18.03 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.73 | 67.53 | 18.08 |  | 150.0 |  |
|  |  | Z | 2.58 | 67.61 | 18.38 |  | 150.0 |  |
| $\begin{aligned} & 10188- \\ & \text { CAE } \end{aligned}$ | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, 1RB, 1.4 MHz, } \\ & \text { 16-QAM) } \end{aligned}$ | X | 3.26 | 72.60 | 20.60 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.53 | 72.62 | 20.27 |  | 150.0 |  |
|  |  | Z | 3.51 | 74.04 | 21.24 |  | 150.0 |  |
| $10189-$$\mathrm{AAE}$ | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, 1 RB, } 1.4 \mathrm{MHz} \text {, } \\ & \text { 64-QAM) } \end{aligned}$ | X | 2.67 | 68.35 | 17.55 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.99 | 69.18 | 17.77 |  | 150.0 |  |
|  |  | Z | 2.80 | 69.24 | 17.97 |  | 150.0 |  |
| 10193-$\mathrm{CAC}$ | IEEE 802.11n (HT Greenfield, 6.5 Mbps , BPSK) | X | 4.32 | 66.50 | 16.16 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.52 | 66.59 | 16.14 |  | 150.0 |  |
|  |  | Z | 4.31 | 66.50 | 16.05 |  | 150.0 |  |
| $\begin{array}{\|l\|} \hline 10194- \\ \text { CAC } \\ \hline \end{array}$ | IEEE 802.11 n (HT Greenfield, 39 Mbps , 16-QAM) | X | 4.47 | 66.75 | 16.31 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.69 | 66.90 | 16.27 |  | 150.0 |  |
|  |  | Z | 4.46 | 66.77 | 16.19 |  | 150.0 |  |
| $\begin{aligned} & 10195- \\ & \text { CAC } \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Greenfield, 65 Mbps , 64-QAM) | X | 4.51 | 66.78 | 16.33 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.73 | 66.93 | 16.28 |  | 150.0 |  |
|  |  | Z | 4.50 | 66.80 | 16.21 |  | 150.0 |  |
| $\begin{array}{\|l} \hline 10196- \\ \text { CAC } \\ \hline \end{array}$ | IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK) | X | 4.31 | 66.51 | 16.16 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.52 | 66.65 | 16.16 |  | 150.0 |  |
|  |  | Z | 4.30 | 66.52 | 16.05 |  | 150.0 |  |
| $\begin{aligned} & 10197- \\ & \text { CAC } \end{aligned}$ | IEEE 802.11n (HT Mixed, 39 Mbps, 16QAM) | X | 4.48 | 66.77 | 16.32 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.70 | 66.92 | 16.28 |  | 150.0 |  |
|  |  | Z | 4.47 | 66.78 | 16.20 |  | 150.0 |  |
| $\begin{aligned} & 10198- \\ & \text { CAC } \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Mixed, 65 Mbps , 64QAM) | X | 4.50 | 66.79 | 16.33 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.73 | 66.95 | 16.30 |  | 150.0 |  |
|  |  | Z | 4.49 | 66.81 | 16.22 |  | 150.0 |  |
| $\begin{aligned} & 10219- \\ & \text { CAC } \end{aligned}$ | IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK) | X | 4.26 | 66.54 | 16.13 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.47 | 66.66 | 16.12 |  | 150.0 |  |
|  |  | Z | 4.25 | 66.55 | 16.01 |  | 150.0 |  |
| $\begin{aligned} & 10220- \\ & \text { CAC } \end{aligned}$ | IEEE 802.11n (HT Mixed, 43.3 Mbps, 16QAM) | X | 4.47 | 66.73 | 16.30 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.70 | 66.89 | 16.27 |  | 150.0 |  |
|  |  | Z | 4.46 | 66.74 | 16.19 |  | 150.0 |  |
| $\begin{aligned} & 10221- \\ & \text { CAC } \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Mixed, 72.2 Mbps, 64QAM) | X | 4.51 | 66.73 | 16.32 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.74 | 66.87 | 16.28 |  | 150.0 |  |
|  |  | Z | 4.51 | 66.74 | 16.20 |  | 150.0 |  |
| $\begin{aligned} & 10222- \\ & \text { CAC } \end{aligned}$ | IEEE 802.11n (HT Mixed, 15 Mbps , BPSK) | X | 4.91 | 66.89 | 16.51 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.06 | 67.05 | 16.39 |  | 150.0 |  |
|  |  | Z | 4.88 | 66.88 | 16.36 |  | 150.0 |  |

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| $\begin{aligned} & 10223- \\ & \text { CAC } \end{aligned}$ | IEEE 802.11n (HT Mixed, 90 Mbps , 16QAM) | X | 5.21 | 67.18 | 16.67 | 0.00 | 150.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 5.37 | 67.24 | 16.51 |  | 150.0 |  |
|  |  | Z | 5.17 | 67.14 | 16.51 |  | 150.0 |  |
| $\begin{array}{\|l\|} \hline 10224- \\ \text { CAC } \\ \hline \end{array}$ | IEEE 802.11n (HT Mixed, 150 Mbps , 64QAM) | X | 4.95 | 66.99 | 16.48 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.11 | 67.16 | 16.37 |  | 150.0 |  |
|  |  | Z | 4.91 | 66.98 | 16.33 |  | 150.0 |  |
| $\begin{array}{\|l} \hline 10225- \\ \mathrm{CAB} \\ \hline \end{array}$ | UMTS-FDD (HSPA+) | X | 2.57 | 65.87 | 14.82 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.79 | 66.10 | 15.32 |  | 150.0 |  |
|  |  | Z | 2.57 | 65.89 | 14.81 |  | 150.0 |  |
| $\begin{aligned} & \text { 10226- } \\ & \text { CAA } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 1 \mathrm{RB}, 1.4 \mathrm{MHz} \text {, } \\ & \text { 16-QAM) } \end{aligned}$ | X | 5.70 | 82.73 | 23.27 | 6.02 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 15.45 | 101.64 | 30.73 |  | 65.0 |  |
|  |  | Z | 9.36 | 92.89 | 27.50 |  | 65.0 |  |
| $\begin{array}{\|l\|} \hline 10227- \\ \text { CAA } \\ \hline \end{array}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 1 \text { RB, } 1.4 \mathrm{MHz} \text {, } \\ & 64-\mathrm{QAM} \text { ) } \end{aligned}$ | X | 5.51 | 81.11 | 22.01 | 6.02 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 15.16 | 99.52 | 29.37 |  | 65.0 |  |
|  |  | Z | 9.33 | 91.39 | 26.29 |  | 65.0 |  |
| $\begin{array}{\|l} \hline 10228- \\ \text { CAA } \\ \hline \end{array}$ | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz , QPSK) | X | 4.37 | 80.87 | 24.58 | 6.02 | 65.0 | $\pm 9.6 \%$ |
|  |  | Y | 8.06 | 93.39 | 30.16 |  | 65.0 |  |
|  |  | Z | 5.51 | 86.54 | 27.40 |  | 65.0 |  |
| $\begin{aligned} & 10229- \\ & \mathrm{CAB} \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 3 MHz , 16 QAM) | X | 5.43 | 81.78 | 22.83 | 6.02 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 14.43 | 100.19 | 30.19 |  | 65.0 |  |
|  |  | Z | 8.67 | 91.34 | 26.89 |  | 65.0 |  |
| $\begin{array}{\|l} \hline 10230- \\ \mathrm{CAB} \\ \hline \end{array}$ | LTE-TDD (SC-FDMA, 1 RB, 3 MHz , 64QAM) | X | 5.22 | 80.18 | 21.60 | 6.02 | 65.0 | $\pm 9.6 \%$ |
|  |  | Y | 14.07 | 98.09 | 28.85 |  | 65.0 |  |
|  |  | Z | 8.56 | 89.82 | 25.70 |  | 65.0 |  |
| $\begin{aligned} & 10231- \\ & \text { CAB } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $1 \mathrm{RB}, 3 \mathrm{MHz}$, QPSK) | X | 4.21 | 80.08 | 24.19 | 6.02 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 7.72 | 92.42 | 29.75 |  | 65.0 |  |
|  |  | Z | 5.25 | 85.50 | 26.93 |  | 65.0 |  |
| $\begin{array}{\|l} \hline 10232- \\ \text { CAD } \\ \hline \end{array}$ | LTE-TDD (SC-FDMA, 1 RB, 5 MHz , 16QAM) | X | 5.42 | 81.76 | 22.83 | 6.02 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 14.40 | 100.18 | 30.19 |  | 65.0 |  |
|  |  | Z | 8.65 | 91.31 | 26.89 |  | 65.0 |  |
| $\begin{aligned} & 10233- \\ & \text { CAD } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64QAM) | X | 5.21 | 80.16 | 21.59 | 6.02 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 14.03 | 98.05 | 28.84 |  | 65.0 |  |
|  |  | Z | 8.53 | 89.78 | 25.69 |  | 65.0 |  |
| $\begin{aligned} & 10234- \\ & \text { CAD } \\ & \hline \end{aligned}$ | ```lome-TDD (SC-FDMA, 1 RB, 5 MHz,``` | X | 4.09 | 79.41 | 23.80 | 6.02 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 7.46 | 91.57 | 29.34 |  | 65.0 |  |
|  |  | Z | 5.06 | 84.64 | 26.49 |  | 65.0 |  |
| $\begin{aligned} & 10235- \\ & \text { CAD } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 1 \text { RB, } 10 \mathrm{MHz} \text {, } \\ & \text { 16-QAM) } \end{aligned}$ | X | 5.43 | 81.79 | 22.84 | 6.02 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 14.42 | 100.22 | 30.20 |  | 65.0 |  |
|  |  | Z | 8.66 | 91.36 | 26.90 |  | 65.0 |  |
| $\begin{aligned} & 10236- \\ & \text { CAD } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 1 \mathrm{RB}, 10 \mathrm{MHz} \text {, } \\ & \text { 64-QAM) } \end{aligned}$ | X | 5.25 | 80.28 | 21.63 | 6.02 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 14.26 | 98.30 | 28.91 |  | 65.0 |  |
|  |  | Z | 8.64 | 89.96 | 25.74 |  | 65.0 |  |
| $\begin{aligned} & 10237- \\ & \text { CAD } \\ & \hline \end{aligned}$ | ```L.TE-TDD (SC-FDMA, 1RB, 10 MHz, QPSK)``` | X | 4.21 | 80.11 | 24.20 | 6.02 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 7.73 | 92.49 | 29.78 |  | 65.0 |  |
|  |  | Z | 5.25 | 85.54 | 26.95 |  | 65.0 |  |
| $\begin{aligned} & 10238- \\ & \text { CAD } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 1 \text { RB, } 15 \mathrm{MHz} \text {, } \\ & \text { 16-QAM) } \end{aligned}$ | X | 5.41 | 81.74 | 22.82 | 6.02 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 14.37 | 100.15 | 30.18 |  | 65.0 |  |
|  |  | Z | 8.63 | 91.28 | 26.88 |  | 65.0 |  |


| $\begin{aligned} & 10239- \\ & \text { CAD } \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 1 \text { RB, } 15 \mathrm{MHz}, \\ & \text { 64-QAM) } \end{aligned}$ | X | 5.19 | 80.13 | 21.58 | 6.02 | 65.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 13.97 | 98.01 | 28.83 |  | 65.0 |  |
|  |  | Z | 8.50 | 89.73 | 25.67 |  | 65.0 |  |
| $\begin{aligned} & 10240- \\ & \text { CAD } \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 15 MHz , QPSK) | X | 4.20 | 80.08 | 24.19 | 6.02 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 7.71 | 92.44 | 29.76 |  | 65.0 |  |
|  |  | Z | 5.24 | 85.50 | 26.94 |  | 65.0 |  |
| $10241$ CAA | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 1.4 \mathrm{MHz}$, 16-QAM) | X | 6.28 | 77.75 | 23.74 | 6.98 | 65.0 | $\pm 9.6 \%$ |
|  |  | Y | 7.17 | 79.66 | 25.20 |  | 65.0 |  |
|  |  | Z | 6.62 | 79.11 | 24.64 |  | 65.0 |  |
| $\begin{aligned} & 10242- \\ & \text { CAA } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 50\% RB, 1.4 MHz, 64-QAM) | X | 5.61 | 75.51 | 22.71 | 6.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 7.01 | 79.22 | 24.95 |  | 65.0 |  |
|  |  | Z | 6.04 | 77.21 | 23.74 |  | 65.0 |  |
| $\begin{aligned} & 10243- \\ & \text { CAA } \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 1.4 \mathrm{MHz}$, QPSK) | X | 4.77 | 72.80 | 22.43 | 6.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 5.72 | 75.84 | 24.40 |  | 65.0 |  |
|  |  | Z | 4.99 | 73.88 | 23.19 |  | 65.0 |  |
| $\begin{aligned} & 10244- \\ & \mathrm{CAB} \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 50 \% \text { RB, } 3 \mathrm{MHz} \text {, } \\ & \text { 16-QAM) } \end{aligned}$ | X | 3.08 | 66.71 | 12.88 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 5.65 | 76.51 | 19.16 |  | 65.0 |  |
|  |  | Z | 3.79 | 70.31 | 15.20 |  | 65.0 |  |
| $\begin{array}{\|l\|} \hline 10245- \\ \text { CAB } \\ \hline \end{array}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 50 \% \text { RB, } 3 \mathrm{MHz} \text {, } \\ & \text { 64-QAM) } \end{aligned}$ | X | 3.05 | 66.35 | 12.65 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 5.47 | 75.72 | 18.77 |  | 65.0 |  |
|  |  | Z | 3.68 | 69.62 | 14.83 |  | 65.0 |  |
| $\begin{aligned} & 10246- \\ & \text { CAB } \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \%$ RB, 3 MHz , QPSK) | X | 2.73 | 68.50 | 14.10 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 6.90 | 84.10 | 22.59 |  | 65.0 |  |
|  |  | Z | 3.38 | 72.30 | 16.31 |  | 65.0 |  |
| $\begin{aligned} & 10247- \\ & \text { CAD } \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \%$ RB, 5 MHz , 16-QAM) | X | 3.32 | 68.16 | 14.83 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 5.00 | 75.29 | 19.75 |  | 65.0 |  |
|  |  | Z | 3.63 | 70.11 | 16.18 |  | 65.0 |  |
| $\begin{aligned} & 10248- \\ & \text { CAD } \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 5 \mathrm{MHz}$, 64-QAM) | X | 3.35 | 67.83 | 14.68 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 4.95 | 74.49 | 19.36 |  | 65.0 |  |
|  |  | Z | 3.62 | 69.55 | 15.90 |  | 65.0 |  |
| $\begin{aligned} & 10249- \\ & \text { CAD } \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 5 \mathrm{MHz}$, QPSK) | X | 3.90 | 73.79 | 17.79 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 7.87 | 86.63 | 24.46 |  | 65.0 |  |
|  |  | Z | 4.87 | 78.17 | 20.05 |  | 65.0 |  |
| $\begin{aligned} & 10250- \\ & \text { CAD } \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 10 \mathrm{MHZ}$,,$~$ 16-QAM) | X | 4.46 | 72.43 | 19.10 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 5.61 | 76.63 | 21.92 |  | 65.0 |  |
|  |  | Z | 4.70 | 73.89 | 20.05 |  | 65.0 |  |
| $\begin{array}{\|l} \hline 10251- \\ \text { CAD } \\ \hline \end{array}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 50 \% \mathrm{RB}, 10 \mathrm{MHz} \\ & \text { 64-QAM) } \end{aligned}$ | X | 4.27 | 70.46 | 17.79 | 3.98 | 65.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.36 | 74.41 | 20.57 |  | 65.0 |  |
|  |  | Z | 4.43 | 71.53 | 18.56 |  | 65.0 |  |
| $\begin{aligned} & 10252- \\ & \text { CAD } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 10 \mathrm{MHz}$, QPSK) | X | 4.80 | 76.28 | 20.36 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 7.12 | 83.67 | 24.31 |  | 65.0 |  |
|  |  | Z | 5.40 | 79.04 | 21.81 |  | 65.0 |  |
| $\begin{array}{\|l\|} \hline 10253- \\ \text { CAD } \\ \hline \end{array}$ | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 15 \mathrm{MHz}$, 16-QAM) | X | 4.54 | 70.25 | 18.29 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 5.37 | 73.18 | 20.35 |  | 65.0 |  |
|  |  | Z | 4.62 | 70.94 | 18.80 |  | 65.0 |  |
| $\begin{aligned} & \text { 10254- } \\ & \hline \text { CAD } \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \%$ RB, 15 MHz , 64-QAM) | X | 4.85 | 71.22 | 19.07 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 5.69 | 74.00 | 21.02 |  | 65.0 |  |
|  |  | Z | 4.94 | 71.96 | 19.60 |  | 65.0 |  |


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


| $\begin{aligned} & 10274- \\ & \text { CAB } \end{aligned}$ | UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.10) | X | 2.41 | 66.43 | 14.82 | 0.00 | 150.0 | $\pm 9.6 \%$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 2.58 | 66.48 | 15.24 |  | 150.0 |  |
|  |  | Z | 2.39 | 66.38 | 14.76 |  | 150.0 |  |
| $\begin{aligned} & 10275- \\ & \text { CAB } \\ & \hline \end{aligned}$ | UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.4) | X | 1.45 | 67.76 | 15.04 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 1.61 | 67.98 | 15.58 |  | 150.0 |  |
|  |  | Z | 1.42 | 67.56 | 14.85 |  | 150.0 |  |
| $\begin{aligned} & 10277- \\ & \text { CAA } \\ & \hline \end{aligned}$ | PHS (QPSK) | X | 1.74 | 59.75 | 5.31 | 9.03 | 50.0 | $\pm 9.6$ \% |
|  |  | Y | 1.81 | 61.19 | 6.71 |  | 50.0 |  |
|  |  | Z | 1.73 | 59.88 | 5.41 |  | 50.0 |  |
| $\begin{aligned} & 10278- \\ & \text { CAA } \\ & \hline \end{aligned}$ | PHS (QPSK, BW 884MHz, Rolloff 0.5) | X | 2.71 | 64.14 | 10.09 | 9.03 | 50.0 | $\pm 9.6$ \% |
|  |  | Y | 10.58 | 86.01 | 20.92 |  | 50.0 |  |
|  |  | Z | 2.95 | 65.66 | 11.11 |  | 50.0 |  |
| $\begin{aligned} & 10279- \\ & \text { CAA } \end{aligned}$ | PHS (QPSK, BW 884MHz, Rolloff 0.38) | X | 2.77 | 64.34 | 10.25 | 9.03 | 50.0 | $\pm 9.6$ \% |
|  |  | Y | 10.86 | 86.33 | 21.10 |  | 50.0 |  |
|  |  | Z | 3.03 | 65.92 | 11.30 |  | 50.0 |  |
| $\begin{aligned} & 10290- \\ & \mathrm{AAB} \end{aligned}$ | CDMA2000, RC1, SO55, Full Rate | X | 0.78 | 62.91 | 9.04 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 1.44 | 68.67 | 13.91 |  | 150.0 |  |
|  |  | Z | 0.82 | 63.50 | 9.52 |  | 150.0 |  |
| $\begin{aligned} & 10291- \\ & \mathrm{AAB} \\ & \hline \end{aligned}$ | CDMA2000, RC3, SO55, Full Rate | X | 0.44 | 60.90 | 7.41 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 0.81 | 65.70 | 12.35 |  | 150.0 |  |
|  |  | Z | 0.46 | 61.22 | 7.73 |  | 150.0 |  |
| $\begin{aligned} & 10292- \\ & \mathrm{AAB} \\ & \hline \end{aligned}$ | CDMA2000, RC3, SO32, Full Rate | $X$ | 0.52 | 62.90 | 8.81 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 1.08 | 70.34 | 14.96 |  | 150.0 |  |
|  |  | Z | 0.54 | 63.47 | 9.26 |  | 150.0 |  |
| $\begin{aligned} & 10293- \\ & \text { AAB } \end{aligned}$ | CDMA2000, RC3, SO3, Full Rate | X | 0.85 | 67.98 | 11.75 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 1.81 | 77.73 | 18.47 |  | 150.0 |  |
|  |  | Z | 0.93 | 69.19 | 12.44 |  | 150.0 |  |
| $\begin{aligned} & 10295- \\ & \text { AAB } \\ & \hline \end{aligned}$ | CDMA2000, RC1, SO3, 1/8th Rate 25 fr. | X | 10.59 | 83.36 | 20.91 | 9.03 | 50.0 | $\pm 9.6 \%$ |
|  |  | $Y$ | 13.63 | 95.28 | 28.15 |  | 50.0 |  |
|  |  | Z | 12.33 | 87.48 | 22.99 |  | 50.0 |  |
| $\begin{aligned} & 10297- \\ & \text { AAC } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, $50 \% \mathrm{RB}, 20 \mathrm{MHz}$, QPSK) | X | 2.52 | 69.36 | 16.49 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 2.75 | 69.70 | 16.61 |  | 150.0 |  |
|  |  | Z | 2.51 | 69.33 | 16.32 |  | 150.0 |  |
| $\begin{aligned} & 10298- \\ & \text { AAC } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, $50 \%$ RB, 3 MHz , QPSK) | X | 1.02 | 63.71 | 10.46 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 1.56 | 67.65 | 14.07 |  | 150.0 |  |
|  |  | Z | 1.06 | 64.21 | 10.86 |  | 150.0 |  |
| $\begin{aligned} & 10299- \\ & \text { AAC } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 50 \% \text { RB, } 3 \mathrm{MHz} \text {, } \\ & \text { 16-QAM) } \end{aligned}$ | X | 1.41 | 63.10 | 9.49 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | $Y$ | 2.20 | 67.48 | 13.20 |  | 150.0 |  |
|  |  | Z | 1.66 | 65.04 | 10.89 |  | 150.0 |  |
| $\begin{aligned} & 10300- \\ & \mathrm{AAC} \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, $50 \% \mathrm{RB}, 3 \mathrm{MHz}$, 64-QAM) | X | 1.19 | 60.99 | 7.64 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 1.75 | 63.96 | 10.73 |  | 150.0 |  |
|  |  | Z | 1.30 | 61.89 | 8.49 |  | 150.0 |  |
| $\begin{aligned} & 10301- \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.16e WiMAX (29:18, 5 ms , 10 MHz, QPSK, PUSC) | X | 4.40 | 65.21 | 17.25 | 4.17 | 50.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.79 | 65.64 | 17.57 |  | 50.0 |  |
|  |  | Z | 4.51 | 65.62 | 17.36 |  | 50.0 |  |
| $\begin{aligned} & 10302- \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.16e WiMAX (29:18, 5ms, 10 MHz , QPSK, PUSC, 3 CTRL symbols) | $X$ | 4.89 | 66.01 | 18.10 | 4.96 | 50.0 | $\pm 9.6$ \% |
|  |  | $Y$ | 5.23 | 66.10 | 18.21 |  | 50.0 |  |
|  |  | Z | 4.90 | 65.76 | 17.79 |  | 50.0 |  |


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


| $\begin{aligned} & \text { 10402- } \\ & \text { AAD } \end{aligned}$ | IEEE 802.11ac WiFi (80MHz, 64-QAM, $99 p \mathrm{c}$ duty cycle) | X | 5.46 | 67.17 | 16.51 | 0.00 | 150.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 5.63 | 67.44 | 16.43 |  | 150.0 |  |
|  |  | Z | 5.43 | 67.19 | 16.37 |  | 150.0 |  |
| $\begin{aligned} & 10403- \\ & A A B \end{aligned}$ | CDMA2000 (1xEV-DO, Rev. 0) | X | 0.78 | 62.91 | 9.04 | 0.00 | 115.0 | $\pm 9.6$ \% |
|  |  | Y | 1.44 | 68.67 | 13.91 |  | 115.0 |  |
|  |  | Z | 0.82 | 63.50 | 9.52 |  | 115.0 |  |
| $\begin{aligned} & 10404- \\ & \text { AAB } \\ & \hline \end{aligned}$ | CDMA2000 (1xEV-DO, Rev. A) | X | 0.78 | 62.91 | 9.04 | 0.00 | 115.0 | $\pm 9.6 \%$ |
|  |  | Y | 1.44 | 68.67 | 13.91 |  | 115.0 |  |
|  |  | Z | 0.82 | 63.50 | 9.52 |  | 115.0 |  |
| $\begin{aligned} & 10406- \\ & \text { AAB } \end{aligned}$ | CDMA2000, RC3, SO32, SCH0, Full Rate | X | 100.00 | 119.25 | 28.40 | 0.00 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 9.50 | 91.59 | 22.98 |  | 100.0 |  |
|  |  | Z | 100.00 | 122.00 | 29,77 |  | 100.0 |  |
| $\begin{aligned} & 10410- \\ & \text { AAD } \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 10 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$, Subframe Conf=4) | X | 3.12 | 77.42 | 16.90 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 127.40 | 32.46 |  | 80.0 |  |
|  |  | Z | 100.00 | 125.01 | 30.73 |  | 80.0 |  |
| 10415-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, $99 p$ duty cycle) | X | 0.90 | 62.74 | 14.48 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 1.00 | 62.96 | 14.62 |  | 150.0 |  |
|  |  | Z | 0.88 | 62.66 | 14.28 |  | 150.0 |  |
| $10416$AAA | IEEE 802.11 g WiFi 2.4 GHz (ERPOFDM, $6 \mathrm{Mbps}, 99 \mathrm{pc}$ duty cycle) | X | 4.32 | 66.51 | 16.25 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.52 | 66.62 | 16.21 |  | 150.0 |  |
|  |  | Z | 4.30 | 66.52 | 16.13 |  | 150.0 |  |
| 10417- <br> AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 99pc duty cycle) | X | 4.32 | 66.51 | 16.25 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.52 | 66.62 | 16.21 |  | 150.0 |  |
|  |  | Z | 4.30 | 66.52 | 16.13 |  | 150.0 |  |
| $10418-$ <br> AAA | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, $6 \mathrm{Mbps}, 99 \mathrm{pc}$ duty cycle, Long preambule) | X | 4.31 | 66.71 | 16.30 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.51 | 66.79 | 16.23 |  | 150.0 |  |
|  |  | Z | 4.30 | 66.71 | 16.18 |  | 150.0 |  |
| $10419-$AAA | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 6 Mbps, 99 pc duty cycle, Short preambule) | X | 4.33 | 66.64 | 16.29 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.53 | 66.73 | 16.23 |  | 150.0 |  |
|  |  | Z | 4.32 | 66.65 | 16.17 |  | 150.0 |  |
| 10422-$\mathrm{AAB}$ | IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK) | X | 4.44 | 66.62 | 16.30 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.65 | 66.73 | 16.25 |  | 150.0 |  |
|  |  | Z | 4.43 | 66.63 | 16.18 |  | 150.0 |  |
| $10423-$ AAB | IEEE 802.11n (HT Greenfield, 43.3 Mbps, 16-QAM) | X | 4.57 | 66.89 | 16.39 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.81 | 67.05 | 16.36 |  | 150.0 |  |
|  |  | Z | 4.56 | 66.90 | 16.28 |  | 150.0 |  |
| $\begin{aligned} & 10424- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Greenfield, 72.2 Mbps, 64 -QAM) | X | 4.50 | 66.84 | 16.37 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.73 | 67.00 | 16.33 |  | 150.0 |  |
|  |  | Z | 4.49 | 66.86 | 16.25 |  | 150.0 |  |
| $\begin{aligned} & 10425- \\ & A A B \end{aligned}$ | IEEE 802.11 n (HT Greenfield, 15 Mbps , BPSK) | X | 5.17 | 67.18 | 16.65 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.33 | 67.30 | 16.51 |  | 150.0 |  |
|  |  | Z | 5.13 | 67.14 | 16.48 |  | 150.0 |  |
| $\begin{aligned} & 10426- \\ & \mathrm{AAB} \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Greenfield, 90 Mbps , 16-QAM) | X | 5.23 | 67.40 | 16.76 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.34 | 67.33 | 16.52 |  | 150.0 |  |
|  |  | Z | 5.16 | 67.27 | 16.54 |  | 150.0 |  |


| $\begin{aligned} & 10427- \\ & \mathrm{AAB} \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Greenfield, 150 Mbps , 64-QAM) | X | 5.16 | 67.07 | 16.58 | 0,00 | 150.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 5.35 | 67.30 | 16.51 |  | 150.0 |  |
|  |  | Z | 5.13 | 67.07 | 16.44 |  | 150.0 |  |
| $\begin{aligned} & 10430- \\ & \text { AAB } \\ & \hline \end{aligned}$ | LTE-FDD (OFDMA, 5 MHz , E-TM 3.1) | X | 4.20 | 72.13 | 18.43 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.22 | 70.70 | 18.10 |  | 150.0 |  |
|  |  | Z | 4.22 | 72.19 | 18.46 |  | 150.0 |  |
| 10431- <br> AAB | LTE-FDD (OFDMA, 10 MHz , E-TM 3.1) | X | 3.93 | 67.10 | 16.09 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.20 | 67.18 | 16.20 |  | 150.0 |  |
|  |  | Z | 3.93 | 67.10 | 16.01 |  | 150.0 |  |
| $\begin{aligned} & 10432- \\ & A A B \\ & \hline \end{aligned}$ | LTE-FDD (OFDMA, $15 \mathrm{MHz}, \mathrm{E}$-TM 3.1) | X | 4.26 | 66.93 | 16.28 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.50 | 67.05 | 16.28 |  | 150.0 |  |
|  |  | Z | 4.25 | 66.94 | 16.17 |  | 150.0 |  |
| 10433- $A A B$ | LTE-FDD (OFDMA, $20 \mathrm{MHz}, \mathrm{E}$-TM 3.1) | X | 4.52 | 66.87 | 16.39 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.75 | 67.03 | 16.35 |  | 150.0 |  |
|  |  | Z | 4.51 | 66.89 | 16.27 |  | 150.0 |  |
| $\begin{aligned} & 10434- \\ & \text { AAA } \end{aligned}$ | W-CDMA (BS Test Model 1, 64 DPCH) | X | 4.28 | 72.84 | 18.10 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.33 | 71.56 | 18.07 |  | 150.0 |  |
|  |  | Z | 4.34 | 73.06 | 18.24 |  | 150.0 |  |
| 10435- <br> AAC | LTE-TDD (SC-FDMA, 1 RB, 20 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 2.96 | 76.73 | 16.60 | 3.23 | 80.0 | $\pm 9.6 \%$ |
|  |  | Y | 100.00 | 127.17 | 32.36 |  | 80.0 |  |
|  |  | Z | 100.00 | 124.69 | 30.58 |  | 80.0 |  |
| 10447- <br> AAB | LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44\%) | X | 3.15 | 66.77 | 14.81 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 3.49 | 67.18 | 15.50 |  | 150.0 |  |
|  |  | Z | 3.17 | 66.84 | 14.85 |  | 150.0 |  |
| $\begin{aligned} & 10448- \\ & A A B \end{aligned}$ | LTE-FDD (OFDMA, 10 MHz , E-TM 3.1, Clippin 44\%) | X | 3.79 | 66.88 | 15.96 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.04 | 66.96 | 16.06 |  | 150.0 |  |
|  |  | Z | 3.79 | 66.88 | 15.87 |  | 150.0 |  |
| $\begin{aligned} & \text { 10449- } \\ & \text { AAB } \end{aligned}$ | LTE-FDD (OFDMA, 15 MHz , E-TM 3.1, Cliping 44\%) | X | 4.09 | 66.75 | 16.17 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.31 | 66.88 | 16.18 |  | 150.0 |  |
|  |  | Z | 4.08 | 66.77 | 16.07 |  | 150.0 |  |
| $\begin{aligned} & 10450- \\ & \text { AAB } \end{aligned}$ | LTE-FDD (OFDMA, 20 MHz , E-TM 3.1, Clipping 44\%) | X | 4.31 | 66.64 | 16.24 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.51 | 66.80 | 16.21 |  | 150.0 |  |
|  |  | Z | 4.30 | 66.66 | 16.12 |  | 150.0 |  |
| $\begin{aligned} & 10451- \\ & \text { AAA } \\ & \hline \end{aligned}$ | W-CDMA (BS Test Model 1, 64 DPCH, Clipping 44\%) | X | 2.94 | 66.45 | 13.98 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 3.38 | 67.33 | 15.10 |  | 150.0 |  |
|  |  | Z | 2.98 | 66.61 | 14.10 |  | 150.0 |  |
| $\begin{aligned} & 10456- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11 ac WiFi ( $160 \mathrm{MHz}, 64$-QAM, 99 pc duty cycle) | X | 6.17 | 67.89 | 16.91 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 6.20 | 67.84 | 16.66 |  | 150.0 |  |
|  |  | Z | 6.10 | 67.86 | 16.74 |  | 150.0 |  |
| $10457$ <br> AAA | UMTS-FDD (DC-HSDPA) | X | 3.65 | 65.21 | 15.97 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 3.78 | 65.27 | 15.92 |  | 150.0 |  |
|  |  | Z | 3.63 | 65.21 | 15.85 |  | 150.0 |  |
| $\begin{array}{\|l\|} \hline 10458- \\ \text { AAA } \\ \hline \end{array}$ | $\begin{aligned} & \text { CDMA2000 (1xEV-DO, Rev, B, } 2 \\ & \text { carriers) } \end{aligned}$ | X | 3.63 | 70.67 | 16.50 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 3.97 | 70.83 | 17.45 |  | 150.0 |  |
|  |  | Z | 3.75 | 71.23 | 16.87 |  | 150.0 |  |
| $\begin{aligned} & \text { 10459- } \\ & \text { AAA } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { CDMA2000 (1xEV-DO, Rev. B, } 3 \\ & \text { carriers) } \end{aligned}$ | X | 4.91 | 69.28 | 18.19 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.06 | 68.34 | 18.09 |  | 150.0 |  |
|  |  | Z | 4.97 | 69.44 | 18.31 |  | 150.0 |  |


| $\begin{aligned} & 10460- \\ & \text { AAA } \end{aligned}$ | UMTS-FDD (WCDMA, AMR) | X | 0.82 | 68.91 | 15.77 | 0.00 | 150.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 0.90 | 68.29 | 16.15 |  | 150.0 |  |
|  |  | Z | 0.77 | 68.38 | 15.37 |  | 150.0 |  |
| $10461$AAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 2.32 | 75.39 | 17.14 | 3.29 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 131.59 | 34.49 |  | 80.0 |  |
|  |  | Z | 100.00 | 129.59 | 32.92 |  | 80.0 |  |
| $\begin{array}{\|l} \hline 10462- \\ \text { AAA } \\ \hline \end{array}$ | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz , 16-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 0.76 | 60.00 | 7.09 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 4.63 | 77.57 | 16.00 |  | 80.0 |  |
|  |  | Z | 0.74 | 60.00 | 7.79 |  | 80.0 |  |
| 10463-AAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 0.79 | 60.00 | 6.50 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 1.49 | 65.34 | 10.90 |  | 80.0 |  |
|  |  | Z | 0.76 | 60.00 | 7.16 |  | 80.0 |  |
| $10464-$AAA | LTE-TDD (SC-FDMA, 1 RB, 3 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 1.48 | 69.57 | 14.21 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 128.72 | 32.98 |  | 80.0 |  |
|  |  | Z | 100.00 | 125.35 | 30.81 |  | 80.0 |  |
| $\begin{aligned} & 10465- \\ & \text { AAA } \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 0.76 | 60.00 | 7.02 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 2.92 | 72.75 | 14.31 |  | 80.0 |  |
|  |  | Z | 0.74 | 60.00 | 7.72 |  | 80.0 |  |
| $\begin{aligned} & 10466- \\ & \text { AAA } \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 0.79 | 60.00 | 6.46 | 3.23 | 80.0 | $\pm 9.6 \%$ |
|  |  | Y | 1.30 | 63.97 | 10.25 |  | 80.0 |  |
|  |  | Z | 0.76 | 60.00 | 7.11 |  | 80.0 |  |
| 10467- <br> AAC | LTE-TDD (SC-FDMA, 1 RB, 5 MHz , QPSK, UL. Subframe $=2,3,4,7,8,9$ ) | X | 1.57 | 70.35 | 14.56 | 3.23 | 80.0 | $\pm 9.6 \%$ |
|  |  | Y | 100.00 | 129.06 | 33.13 |  | 80.0 |  |
|  |  | Z | 100.00 | 125.82 | 31.02 |  | 80.0 |  |
| $\begin{aligned} & 10468- \\ & \text { AAC } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 5 MHz , 16QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 0.76 | 60.00 | 7.04 | 3.23 | 80.0 | $\pm 9.6 \%$ |
|  |  | Y | 3.25 | 73.90 | 14.73 |  | 80.0 |  |
|  |  | Z | 0.74 | 60.00 | 7.74 |  | 80.0 |  |
| $\begin{aligned} & 10469- \\ & \text { AAC } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 5 MHz , 64QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 0.79 | 60.00 | 6.46 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 1.30 | 64.00 | 10.26 |  | 80.0 |  |
|  |  | Z | 0.76 | 60.00 | 7.11 |  | 80.0 |  |
| 10470- <br> AAC | LTE-TDD (SC-FDMA, 1 RB, 10 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 1.56 | 70.33 | 14.55 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 129.11 | 33.14 |  | 80.0 |  |
|  |  | Z | 100.00 | 125.84 | 31.01 |  | 80.0 |  |
| 10471- <br> AAC | LTE-TDD (SC-FDMA, 1 RB, 10 MHz , 16 QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 0.76 | 60.00 | 7.03 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 3.21 | 73.75 | 14.66 |  | 80.0 |  |
|  |  | Z | 0.74 | 60.00 | 7.73 |  | 80.0 |  |
| 10472- AAC | LTE-TDD (SC-FDMA, 1 RB, $10 \mathrm{MHz}, 64-$ QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 0.79 | 60.00 | 6.44 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 1.29 | 63.92 | 10.21 |  | 80.0 |  |
|  |  | Z | 0.76 | 60.00 | 7.09 |  | 80.0 |  |
| 10473- <br> AAC | LTE-TDD (SC-FDMA, 1 RB, 15 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 1.56 | 70.28 | 14.52 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 129.06 | 33.12 |  | 80.0 |  |
|  |  | Z | 100.00 | 125.78 | 30.99 |  | 80.0 |  |
| $\begin{aligned} & \hline 10474- \\ & \text { AAC } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 15 MHz , 16 QAM, UL. Subframe $=2,3,4,7,8,9$ ) | X | 0.76 | 60.00 | 7.02 | 3.23 | 80.0 | $\pm 9.6 \%$ |
|  |  | Y | 3.17 | 73.64 | 14.62 |  | 80.0 |  |
|  |  | Z | 0.74 | 60.00 | 7.73 |  | 80.0 |  |
| $10475-$ <br> AAC | LTE-TDD (SC-FDMA, 1 RB, 15 MHz , 64QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 0.78 | 60.00 | 6.45 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 1.29 | 63.89 | 10.20 |  | 80.0 |  |
|  |  | Z | 0.76 | 60.00 | 7.09 |  | 80.0 |  |


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


| $\begin{array}{\|l\|} \hline 10493- \\ \text { AAC } \\ \hline \end{array}$ | LTE-TDD (SC-FDMA, $50 \%$ RB, 15 MHz , 64-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 3.20 | 66.19 | 16.02 | 2.23 | 80.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 3.78 | 68.30 | 17.52 |  | 80.0 |  |
|  |  | Z | 3.32 | 67.03 | 16.55 |  | 80.0 |  |
| $\begin{array}{\|l} \hline 10494- \\ \text { AAC } \\ \hline \end{array}$ | LTE-TDD (SC-FDMA, $50 \%$ RB, 20 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 3.09 | 69.16 | 17.09 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 4.18 | 73.66 | 19.49 |  | 80.0 |  |
|  |  | Z | 3.38 | 70.96 | 18.01 |  | 80.0 |  |
| 10495-AAC | LTE-TDD (SC-FDMA, $50 \%$ RB, 20 MHz , 16-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 3.16 | 66.52 | 16.26 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 3.75 | 68.86 | 17.79 |  | 80.0 |  |
|  |  | Z | 3.28 | 67.44 | 16.81 |  | 80.0 |  |
| $\begin{aligned} & \text { 10496- } \\ & \text { AAC } \\ & \hline \end{aligned}$ | L.TE-TDD (SC-FDMA, $50 \%$ RB, 20 MHz , 64-QAM, UL. Subframe $=2,3,4,7,8,9$ ) | X | 3.25 | 66.39 | 16.25 | 2.23 | 80.0 | $\pm 9.6 \%$ |
|  |  | Y | 3.82 | 68.54 | 17.67 |  | 80.0 |  |
|  |  | Z | 3.36 | 67.23 | 16.76 |  | 80.0 |  |
| $10497$ <br> AAA | LTE-TDD (SC-FDMA, 100\% RB, 1.4 MHz, QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 0.98 | 60.00 | 8.08 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 2.67 | 71.65 | 16.05 |  | 80.0 |  |
|  |  | Z | 0.96 | 60.00 | 8.56 |  | 80.0 |  |
| $\begin{aligned} & 10498- \\ & \text { AAA } \end{aligned}$ | LTE-TDD (SC-FDMA, $100 \%$ RB, 1.4 MHz, 16-QAM, UL <br> Subframe $=2,3,4,7,8,9$ ) | X | 1.18 | 60.00 | 7.01 | 2.23 | 80.0 | $\pm 9.6 \%$ |
|  |  | Y | 1.73 | 63.28 | 11.10 |  | 80.0 |  |
|  |  | Z | 1.15 | 60.00 | 7.42 |  | 80.0 |  |
| 10499- <br> AAA | LTE-TDD (SC-FDMA, 100\% RB, 1.4 MHz, 64-QAM, UL <br> Subframe $=2,3,4,7,8,9$ ) | X | 1.20 | 60.00 | 6.87 | 2.23 | 80.0 | $\pm 9.6 \%$ |
|  |  | Y | 1.65 | 62.50 | 10.55 |  | 80.0 |  |
|  |  | Z | 1.17 | 60.00 | 7.27 |  | 80.0 |  |
| $\begin{aligned} & 10500- \\ & \text { AAA } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 100\% RB, 3 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 2.22 | 67.95 | 15.51 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 3.54 | 74.72 | 19.65 |  | 80.0 |  |
|  |  | Z | 2.63 | 70.95 | 17.16 |  | 80.0 |  |
| $\begin{aligned} & \text { 10501- } \\ & \text { AAA } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $100 \%$ RB, 3 MHz , 16-QAM, UL. Subframe $=2,3,4,7,8,9$ ) | X | 2.29 | 65.10 | 13.66 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 3.38 | 70.39 | 17.41 |  | 80.0 |  |
|  |  | Z | 2.58 | 67.13 | 14.94 |  | 80.0 |  |
| $\begin{aligned} & \text { 10502~ } \\ & \text { AAA } \end{aligned}$ | LTE-TDD (SC-FDMA, $100 \%$ RB, 3 MHz , 64-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 2.32 | 64.94 | 13.52 | 2.23 | 80.0 | $\pm 9.6 \%$ |
|  |  | Y | 3.43 | 70.21 | 17.27 |  | 80.0 |  |
|  |  | Z | 2.61 | 66.92 | 14.77 |  | 80.0 |  |
| 10503- <br> AAC | LTE-TDD (SC-FDMA, $100 \% \mathrm{RB}, 5 \mathrm{MHz}$, QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 2.54 | 68.66 | 16.62 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 3.60 | 73.66 | 19.57 |  | 80.0 |  |
|  |  | Z | 2.84 | 70.82 | 17.80 |  | 80.0 |  |
| 10504-$A A C$ | LTE-TDD (SC-FDMA, $100 \%$ RB, 5 MHz , 16-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 2.69 | 66.32 | 15.48 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 3.40 | 69.42 | 17.73 |  | 80.0 |  |
|  |  | Z | 2.87 | 67.65 | 16.32 |  | 80.0 |  |
| $\begin{aligned} & 10505- \\ & \text { AAC } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $100 \%$ RB, 5 MHz , 64-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 2.78 | 66.26 | 15.46 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 3.48 | 69.19 | 17.63 |  | 80.0 |  |
|  |  | Z | 2.96 | 67.52 | 16.27 |  | 80.0 |  |
| $\begin{array}{\|l} \hline 10506- \\ \text { AAC } \\ \hline \end{array}$ | LTE-TDD (SC-FDMA, $100 \%$ RB, 10 MHz, QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 3.07 | 69.03 | 17.01 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 4.15 | 73.51 | 19.42 |  | 80.0 |  |
|  |  | Z | 3.35 | 70.80 | 17.93 |  | 80.0 |  |
| $\begin{aligned} & 10507- \\ & \text { AAC } \end{aligned}$ | LTE-TDD (SC-FDMA, 100\% RB, 10 MHz, 16-QAM, UL <br> Subframe $=2,3,4,7,8,9$ ) | X | 3.15 | 66.46 | 16.22 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 3.73 | 68.80 | 17.76 |  | 80.0 |  |
|  |  | Z | 3.26 | 67.37 | 16.77 |  | 80.0 |  |

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| $\begin{aligned} & 10508- \\ & \text { AAC } \end{aligned}$ | LTE-TDD (SC-FDMA, $100 \%$ RB, 10 MHz, 64-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 3.24 | 66.32 | 16.20 | 2.23 | 80.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 3.81 | 68.47 | 17.63 |  | 80.0 |  |
|  |  | Z | 3.35 | 67.15 | 16.71 |  | 80.0 |  |
| $\begin{aligned} & 10509- \\ & \text { AAC } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 100\% RB, 15 MHz, QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 3.51 | 68.36 | 16.83 | 2.23 | 80.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.41 | 71.84 | 18.68 |  | 80.0 |  |
| 10510- <br> AAC |  | Z | 3.72 | 69.67 | 17.51 |  | 80.0 | $\pm 9.6$ \% |
|  | LTE-TDD (SC-FDMA, $100 \%$ RB, 15 MHz, 16-QAM, UL <br> Subframe $=2,3,4,7,8,9$ ) | X | 3.65 | 66.40 | 16.44 | 2.23 | 80.0 |  |
|  |  | Y | 4.20 | 68.42 | 17.64 |  | 80.0 | $\pm 9.6$ \% |
| 10511- <br> AAC |  | Z | 3.74 | 67.11 | 16.83 |  | 80.0 |  |
|  | LTE-TDD (SC-FDMA, $100 \%$ RB, 15 MHz, 64-QAM, UL <br> Subframe $=2,3,4,7,8,9$ ) | X | 3.72 | 66.27 | 16.42 | 2.23 | 80.0 |  |
|  |  | Y | 4.25 | 68.13 | 17.55 |  | 80.0 | $\pm 9.6$ \% |
| 10512- <br> AAC |  | Z | 3.81 | 66.92 | 16.79 |  | 80.0 |  |
|  | LTE-TDD (SC-FDMA, $100 \%$ RB, 20 MHz, QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 3.53 | 69.27 | 17.06 | 2.23 | 80.0 |  |
|  |  | Y | 4.71 | 73.81 | 19.35 |  | 80.0 | $\pm 9.6$ \% |
| 10513- <br> AAC |  | Z | 3.83 | 70.97 | 17.89 |  | 80.0 |  |
|  | LTE-TDD (SC-FDMA, 100\% RB, 20 MHz, 16-QAM, UL <br> Subframe $=2,3,4,7,8,9$ ) | X | 3.53 | 66.49 | 16.47 | 2.23 | 80.0 |  |
|  |  | Y | 4.09 | 68.73 | 17.78 |  | 80.0 | $\pm 9.6$ \% |
| $\begin{aligned} & 10514- \\ & \text { AAC } \end{aligned}$ |  | Z | 3.62 | 67.27 | 16.91 |  | 80.0 |  |
|  | LTE-TDD (SC-FDMA, 100\% RB, 20 $\mathrm{MHz}, 64-\mathrm{QAM}, \mathrm{UL}$ <br> Subframe $=2,3,4,7,8,9$ ) | X | 3.58 | 66.23 | 16.41 | 2.23 | 80.0 |  |
|  |  | Y | 4.11 | 68.25 | 17.62 |  | 80.0 | $\pm 9.6$ \% |
|  |  | Z | 3.67 | 66.92 | 16.81 |  | 80.0 |  |
| 10515- <br> AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 99pc duty cycle) | X | 0.86 | 62.95 | 14.53 | 0.00 | 150.0 |  |
|  |  | Y | 0.96 | 63.14 | 14.68 |  | 150.0 | $\pm 9.6$ \% |
|  |  | 2 | 0.84 | 62.85 | 14.32 |  | 150.0 |  |
| $\begin{aligned} & 10516- \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc duty cycle) | X | 0.68 | 75.09 | 17.93 | 0.00 | 150.0 |  |
|  |  | Y | 0.60 | 70.79 | 17.39 |  | 150.0 | $\pm 9.6$ \% |
| $\begin{aligned} & 10517- \\ & \text { AAA } \\ & \hline \end{aligned}$ |  | Z | 0.59 | 73.58 | 17.02 |  | 150.0 |  |
|  | IEEE 802.11 b WiFi 2.4 GHz (DSSS, 11 Mbps, 99pc duty cycle) | X | 0.71 | 65.13 | 15.13 | 0.00 | 150.0 |  |
|  |  | Y | 0.81 | 65.08 | 15.31 |  | 150.0 |  |
|  |  | Z | 0.69 | 64.87 | 14.81 |  | 150.0 | $\pm 9.6$ \% |
| 10518- <br> AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc duty cycle) | X | 4.31 | 66.61 | 16.23 | 0.00 | 150.0 |  |
|  |  | Y | 4.51 | 66.70 | 16.19 |  | 150.0 | $\pm 9.6$ \% |
|  |  | Z | 4.30 | 66.61 | 16.12 |  | 150.0 |  |
| 10519- <br> AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 <br> Mbps, 99pc duty cycle) | X | 4.46 | 66.79 | 16.33 | 0.00 | 150.0 |  |
|  |  | Y | 4.69 | 66.93 | 16.31 |  | 150.0 |  |
|  |  | Z | 4.45 | 66.80 | 16.22 |  | 150.0 | $\pm 9.6$ \% |
| $\begin{aligned} & 10520- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 99pc duty cycle) | X | 4.32 | 66.72 | 16.24 | 0.00 | 150.0 |  |
|  |  | Y | 4.55 | 66.89 | 16.23 |  | 150.0 |  |
|  |  | Z | 4.31 | 66.74 | 16.13 |  | 150.0 | $\pm 9.6$ \% |
| $\begin{aligned} & 10521- \\ & A A B \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc duty cycle) | X | 4.25 | 66.68 | 16.22 | 0.00 | 150.0 |  |
|  |  | Y | 4.48 | 66.88 | 16.21 |  | 150.0 |  |
|  |  | Z | 4.24 | 66.71 | 16.11 |  | 150.0 |  |
| $\begin{aligned} & 10522- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc duty cycle) | X | 4.30 | 66.84 | 16.33 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.54 | 66.98 | 16.30 |  | 150.0 |  |
|  |  | Z | 4.30 | 66.85 | 16.22 |  | 150.0 |  |


| $\begin{aligned} & 10523- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 99pc duty cycle) | $X$ | 4.22 | 66.79 | 16.22 | 0.00 | 150.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $Y$ | 4.42 | 66.85 | 16.15 |  | 150.0 |  |
|  |  | Z | 4.21 | 66.79 | 16.10 |  | 150.0 |  |
| $\begin{aligned} & 10524- \\ & \mathrm{AAB} \\ & \hline \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc duty cycle) | $X$ | 4.25 | 66.78 | 16.31 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.48 | 66.90 | 16.27 |  | 150.0 |  |
|  |  | Z | 4.24 | 66.79 | 16.19 |  | 150.0 |  |
| $\begin{aligned} & 10525- \\ & \mathrm{AAB} \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (20MHz, MCS0, 99pc duty cycle) | X | 4.28 | 65.85 | 15.93 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.47 | 65.95 | 15.86 |  | 150.0 |  |
|  |  | Z | 4.27 | 65.86 | 15.81 |  | 150.0 |  |
| $\begin{aligned} & 10526- \\ & \mathrm{AAB} \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (20MHz, MCS1, 99 pc duty cycle) | X | 4.41 | 66.15 | 16.05 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | $Y$ | 4.64 | 66.31 | 16.00 |  | 150.0 |  |
|  |  | Z | 4.40 | 66.17 | 15.93 |  | 150.0 |  |
| $\begin{aligned} & 10527- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11ac WiFi (20MHz, MCS2, 99 pc duty cycle) | $X$ | 4.34 | 66.11 | 15.98 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | $Y$ | 4.56 | 66.27 | 15.95 |  | 150.0 |  |
|  |  | Z | 4.33 | 66.13 | 15.87 |  | 150.0 |  |
| $\begin{aligned} & 10528- \\ & \mathrm{AAB} \end{aligned}$ | IEEE 802.11 ac WiFi $(20 \mathrm{MHz}, \mathrm{MCS} 3$, 99pc duty cycle) | X | 4.35 | 66.13 | 16.02 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.58 | 66.29 | 15.98 |  | 150.0 |  |
|  |  | Z | 4.34 | 66.15 | 15.90 |  | 150.0 |  |
| $\begin{aligned} & 10529- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11ac WiFi (20MHz, MCS4, 99pc duty cycle) | X | 4.35 | 66.13 | 16.02 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.58 | 66.29 | 15.98 |  | 150.0 |  |
|  |  | Z | 4.34 | 66.15 | 15.90 |  | 150.0 |  |
| $\begin{aligned} & 10531- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (20MHz, MCS6, $99 p c$ duty cycle) | X | 4.32 | 66.16 | 16.00 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.57 | 66.39 | 15.99 |  | 150.0 |  |
|  |  | Z | 4.31 | 66.19 | 15.89 |  | 150.0 |  |
| $\begin{aligned} & 10532- \\ & \mathrm{AAB} \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (20MHz, MCS7, 99pc duty cycle) | X | 4.20 | 66.01 | 15.92 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.43 | 66.24 | 15.92 |  | 150.0 |  |
|  |  | Z | 4.19 | 66.04 | 15.81 |  | 150.0 |  |
| $\begin{aligned} & \hline 10533- \\ & \mathrm{AAB} \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (20MHz, MCS8, 99pc duty cycle) | X | 4.36 | 66.21 | 16.02 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.59 | 66.34 | 15.97 |  | 150.0 |  |
|  |  | Z | 4.35 | 66.22 | 15.90 |  | 150.0 |  |
| $\begin{aligned} & 10534- \\ & A A B \end{aligned}$ | IEEE 802.11ac WiFi (40MHz, MCS0, 99 pc duty cycle) | X | 4.94 | 66.18 | 16.13 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.11 | 66.38 | 16.03 |  | 150.0 |  |
|  |  | Z | 4.91 | 66.20 | 15.99 |  | 150.0 |  |
| $\begin{aligned} & 10535- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (40MHz, MCS1, 99 pc duty cycle) | X | 4.99 | 66.35 | 16.21 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.18 | 66.56 | 16.12 |  | 150.0 |  |
|  |  | Z | 4.97 | 66.36 | 16.07 |  | 150.0 |  |
| $\begin{aligned} & 10536- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (40MHz, MCS2, 99 pc duty cycle) | X | 4.87 | 66.32 | 16.17 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | $Y$ | 5.05 | 66.51 | 16.07 |  | 150.0 |  |
|  |  | Z | 4.85 | 66.34 | 16.04 |  | 150.0 |  |
| $\begin{aligned} & 10537- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi ( $40 \mathrm{MHz}, \mathrm{MCS} 3$, 99 pc duty cycle) | X | 4.94 | 66.34 | 16.18 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.10 | 66.48 | 16.06 |  | 150.0 |  |
|  |  | Z | 4.91 | 66.31 | 16.03 |  | 150.0 |  |
| $\begin{aligned} & 10538- \\ & A A B \\ & \hline \end{aligned}$ | ```IEEE 802.11ac WiFi (40MHz, MCS4, 99pc duty cycle)``` | X | 5.01 | 66.30 | 16.21 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.19 | 66.49 | 16.11 |  | 150.0 |  |
|  |  | Z | 4.98 | 66.30 | 16.06 |  | 150.0 |  |
| $\begin{aligned} & 10540- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (40MHz, MCS6, 99pc duty cycle) | X | 4.93 | 66.22 | 16.18 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.13 | 66.52 | 16.13 |  | 150.0 |  |
|  |  | Z | 4.91 | 66.26 | 16.06 |  | 150.0 |  |

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


| $\begin{aligned} & 10558- \\ & \text { AAC } \end{aligned}$ | IEEE 802.11ac WiFi ( $160 \mathrm{MHz}, \mathrm{MCS} 4$, $99 p \mathrm{duty}$ cycle) | X | 5.82 | 66.86 | 16.35 | 0.00 | 150.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 5.99 | 67.26 | 16.33 |  | 150.0 |  |
|  |  | Z | 5.79 | 66.94 | 16.24 |  | 150.0 |  |
| $\begin{aligned} & 10560- \\ & \text { AAC } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi ( 160 MHz , MCS6, 99 pc duty cycle) | X | 5.84 | 66.78 | 16.35 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.98 | 67.11 | 16.29 |  | 150.0 |  |
|  |  | Z | 5.80 | 66.82 | 16.22 |  | 150.0 |  |
| $\begin{aligned} & 10561- \\ & \text { AAC } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi ( 160 MHz , MCS7, 99pc duty cycle) | X | 5.78 | 66.81 | 16.39 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.91 | 67.08 | 16.31 |  | 150.0 |  |
|  |  | Z | 5.74 | 66.84 | 16.26 |  | 150.0 |  |
| $\begin{aligned} & 10562- \\ & \text { AAC } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (160MHz, MCS8, 99pc duty cycle) | X | 5.83 | 66.94 | 16.46 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 6.02 | 67.44 | 16.49 |  | 150.0 |  |
|  |  | Z | 5.80 | 67.03 | 16.35 |  | 150.0 |  |
| $\begin{aligned} & 10563- \\ & \text { AAC } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi ( 160 MHz , MCS9, 99pc duty cycle) | X | 5.98 | 67.08 | 16.50 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 6.21 | 67.62 | 16.54 |  | 150.0 |  |
|  |  | Z | 5.91 | 67.01 | 16.31 |  | 150.0 |  |
| $\begin{aligned} & \text { 10564- } \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, $9 \mathrm{Mbps}, 99 \mathrm{pc}$ duty cycle) | X | 4.63 | 66.62 | 16.36 | 0.46 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.84 | 66.79 | 16.36 |  | 150.0 |  |
|  |  | Z | 4.61 | 66.63 | 16.24 |  | 150.0 |  |
| $\begin{aligned} & 10565- \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.11g WiFi 2.4 GHz (DSSSOFDM, $12 \mathrm{Mbps}, 99 \mathrm{pc}$ duty cycle) | X | 4.83 | 67.05 | 16.69 | 0.46 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.06 | 67.22 | 16.67 |  | 150.0 |  |
|  |  | Z | 4.82 | 67.07 | 16.58 |  | 150.0 |  |
| $\begin{aligned} & \text { 10566- } \\ & \text { AAA } \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 18 Mbps , 99 pc duty cycle) | X | 4.66 | 66.85 | 16.48 | 0.46 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.90 | 67.07 | 16.49 |  | 150.0 |  |
|  |  | Z | 4.65 | 66.88 | 16.38 |  | 150.0 |  |
| $\begin{aligned} & 10567 \text { - } \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 24 Mbps, $99 p \mathrm{duty}$ cycle) | X | 4.70 | 67.27 | 16.87 | 0.46 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.93 | 67.45 | 16.84 |  | 150.0 |  |
|  |  | Z | 4.69 | 67.33 | 16.78 |  | 150.0 |  |
| $\begin{aligned} & \text { 10568- } \\ & \text { AAA } \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 36 Mbps , 99 pc duty cycle) | X | 4.56 | 66.58 | 16.20 | 0.46 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.81 | 66.86 | 16.28 |  | 150.0 |  |
|  |  | Z | 4.55 | 66.62 | 16.10 |  | 150.0 |  |
| $\begin{aligned} & \text { 10569- } \\ & \text { AAA } \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, $48 \mathrm{Mbps}, 99 \mathrm{pc}$ duty cycle) | X | 4.68 | 67.48 | 17.00 | 0.46 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.88 | 67.55 | 16.91 |  | 150.0 |  |
|  |  | Z | 4.67 | 67.53 | 16.91 |  | 150.0 |  |
| $\begin{aligned} & 10570- \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 54 Mbps , 99 pc duty cycle) | X | 4.69 | 67.30 | 16.91 | 0.46 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.92 | 67.39 | 16.83 |  | 150.0 |  |
|  |  | Z | 4.68 | 67.31 | 16.79 |  | 150.0 |  |
| $\begin{aligned} & 10571- \\ & \mathrm{AAA} \end{aligned}$ | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90pc duty cycle) | X | 1.00 | 63.45 | 14.91 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 1.13 | 64.20 | 15.58 |  | 130.0 |  |
|  |  | Z | 0.98 | 63.57 | 14.96 |  | 130.0 |  |
| $\begin{aligned} & 10572- \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 90pc duty cycle) | X | 1.01 | 64.01 | 15.28 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 1.14 | 64.75 | 15.94 |  | 130.0 |  |
|  |  | Z | 0.99 | 64.16 | 15.34 |  | 130.0 |  |
| $\begin{aligned} & 10573- \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.11 b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 90pc duty cycle) | X | 1.87 | 85.75 | 21.98 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 1.92 | 86.55 | 24.04 |  | 130.0 |  |
|  |  | Z | 2.25 | 89.51 | 23.31 |  | 130.0 |  |
| $\begin{aligned} & 10574- \\ & \mathrm{AAA} \\ & \hline \end{aligned}$ | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 90pc duty cycle) | X | 1.08 | 70.06 | 18.36 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 1.22 | 70.33 | 18.86 |  | 130.0 |  |
|  |  | Z | 1.09 | 70.58 | 18.62 |  | 130.0 |  |

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| $\begin{aligned} & 10575- \\ & \text { AAA } \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, $6 \mathrm{Mbps}, 90 \mathrm{pc}$ duty cycle) | X | 4.39 | 66.32 | 16.32 | 0.46 | 130.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 4.62 | 66.58 | 16.43 |  | 130.0 |  |
|  |  | Z | 4.39 | 66.40 | 16.27 |  | 130.0 |  |
| $10576$AAA | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 9 Mbps, 90 pc duty cycle) | X | 4.42 | 66.53 | 16.41 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.65 | 66.74 | 16.49 |  | 130.0 |  |
|  |  | Z | 4.42 | 66.60 | 16.36 |  | 130.0 |  |
| 10577-AAA | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 12 Mbps, 90 pc duty cycle) | X | 4.59 | 66.78 | 16.57 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.85 | 67.03 | 16.66 |  | 130.0 |  |
|  |  | Z | 4.59 | 66.86 | 16.52 |  | 130.0 |  |
| 10578- <br> AAA | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 18 Mbps , 90 pc duty cycle) | X | 4.49 | 66.94 | 16.68 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.74 | 67.18 | 16.75 |  | 130.0 |  |
|  |  | Z | 4.50 | 67.02 | 16.64 |  | 130.0 |  |
| 10579-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSSOFDM, 24 Mbps , 90 pc duty cycle) | X | 4.24 | 66.07 | 15.88 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.51 | 66.48 | 16.08 |  | 130.0 |  |
|  |  | Z | 4.24 | 66.15 | 15.83 |  | 130.0 |  |
| $\begin{aligned} & 10580- \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 36 Mbps, 90 pc duty cycle) | X | 4.28 | 66.14 | 15.91 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.56 | 66.53 | 16.11 |  | 130.0 |  |
|  |  | Z | 4.29 | 66.22 | 15.86 |  | 130.0 |  |
| $10581-$ <br> AAA | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 48 Mbps, 90 pc duty cycle) | X | 4.40 | 66.99 | 16.63 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.64 | 67.22 | 16.70 |  | 130.0 |  |
|  |  | Z | 4.40 | 67.08 | 16.59 |  | 130.0 |  |
| $\begin{aligned} & 10582- \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, $54 \mathrm{Mbps}, 90 \mathrm{pc}$ duty cycle) | X | 4.17 | 65.84 | 15.66 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.45 | 66.25 | 15.88 |  | 130.0 |  |
|  |  | Z | 4.18 | 65.90 | 15.60 |  | 130.0 |  |
| $\begin{aligned} & \text { 10583- } \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE $802.11 \mathrm{a} / \mathrm{h}$ WiFi 5 GHz (OFDM, 6 Mbps, 90 pc duty cycle) | X | 4.39 | 66.32 | 16.32 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.62 | 66.58 | 16.43 |  | 130.0 |  |
|  |  | Z | 4.39 | 66.40 | 16.27 |  | 130.0 |  |
| $\begin{array}{\|l\|} \hline 10584- \\ \text { AAB } \\ \hline \end{array}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 90pc duty cycle) | X | 4.42 | 66.53 | 16.41 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.65 | 66.74 | 16.49 |  | 130.0 |  |
|  |  | Z | 4.42 | 66.60 | 16.36 |  | 130.0 |  |
| $\begin{aligned} & 10585- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90 pc duty cycle) | X | 4.59 | 66.78 | 16.57 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.85 | 67.03 | 16.66 |  | 130.0 |  |
|  |  | Z | 4.59 | 66.86 | 16.52 |  | 130.0 |  |
| $\begin{array}{\|l\|} \hline 10586- \\ A A B \\ \hline \end{array}$ | IEEE $802.11 \mathrm{a} / \mathrm{h}$ WiFi 5 GHz (OFDM, 18 Mbps, 90pc duty cycle) | X | 4.49 | 66.94 | 16.68 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.74 | 67.18 | 16.75 |  | 130.0 |  |
|  |  | Z | 4.50 | 67.02 | 16.64 |  | 130.0 |  |
| $\begin{aligned} & \hline 10587- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 90pc duty cycle) | X | 4.24 | 66.07 | 15.88 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.51 | 66.48 | 16.08 |  | 130.0 |  |
|  |  | Z | 4.24 | 66.15 | 15.83 |  | 130.0 |  |
| $\begin{aligned} & 10588- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 90pc duty cycle) | X | 4.28 | 66.14 | 15.91 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.56 | 66.53 | 16.11 |  | 130.0 |  |
|  |  | Z | 4.29 | 66.22 | 15.86 |  | 130.0 |  |
| $\begin{aligned} & 10589- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 90 pc duty cycle) | X | 4.40 | 66.99 | 16.63 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | $Y$ | 4.64 | 67.22 | 16.70 |  | 130.0 |  |
|  |  | Z | 4.40 | 67.08 | 16.59 |  | 130.0 |  |
| $\begin{aligned} & \hline 10590- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 90pc duty cycle) | X | 4.17 | 65.84 | 15.66 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.45 | 66.25 | 15.88 |  | 130.0 |  |
|  |  | Z | 4.18 | 65.90 | 15.60 |  | 130.0 |  |


| $\begin{aligned} & 10591- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11n (HT Mixed, 20MHz, MCS0, 90 pc duty cycle) | X | 4.55 | 66.42 | 16.46 | 0.46 | 130.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 4.78 | 66.64 | 16.53 |  | 130.0 |  |
|  |  | Z | 4.55 | 66.49 | 16.40 |  | 130.0 |  |
| $\begin{aligned} & 10592- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11n (HT Mixed, 20 MHz , MCS1, 90pc duty cycle) | X | 4.67 | 66.72 | 16.59 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.93 | 66.98 | 16.66 |  | 130.0 |  |
|  |  | Z | 4.68 | 66.80 | 16.53 |  | 130.0 |  |
| $\begin{aligned} & 10593- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11n (HT Mixed, 20MHz, MCS2, 90pc duty cycle) | X | 4.59 | 66.59 | 16.43 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.85 | 66.88 | 16.54 |  | 130.0 |  |
|  |  | Z | 4.59 | 66.67 | 16.38 |  | 130.0 |  |
| $\begin{aligned} & 10594- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11n (HT Mixed, 20MHz, MCS3, 90pc duty cycle) | X | 4.64 | 66.77 | 16.61 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.90 | 67.05 | 16.69 |  | 130.0 |  |
|  |  | Z | 4.65 | 66.86 | 16.56 |  | 130.0 |  |
| $\begin{aligned} & 10595- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11n (HT Mixed, 20MHz, MCS4, 90pc duty cycle) | X | 4.61 | 66.75 | 16.51 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.87 | 67.00 | 16.59 |  | 130.0 |  |
|  |  | Z | 4.61 | 66.82 | 16.45 |  | 130.0 |  |
| $\begin{aligned} & 10596- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11n (HT Mixed, 20MHz, MCS5, 90pc duty cycle) | X | 4.54 | 66.71 | 16.50 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.80 | 67.00 | 16.60 |  | 130.0 |  |
|  |  | Z | 4.54 | 66.79 | 16.44 |  | 130.0 |  |
| $\begin{aligned} & 10597- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11n (HT Mixed, 20MHz, MCS6, 90pc duty cycle) | X | 4.49 | 66.57 | 16.34 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.75 | 66.90 | 16.48 |  | 130.0 |  |
|  |  | Z | 4.49 | 66.65 | 16.29 |  | 130.0 |  |
| $\begin{aligned} & 10598- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11n (HT Mixed, 20 MHz , MCS7, 90pc duty cycle) | X | 4.48 | 66.81 | 16.63 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.73 | 67.12 | 16.73 |  | 130.0 |  |
|  |  | Z | 4.49 | 66.91 | 16.58 |  | 130.0 |  |
| $\begin{aligned} & 10599- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11 n (HT Mixed, 40 MHz , MCS0, 90pc duty cycle) | X | 5.31 | 67.13 | 16.85 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | $Y$ | 5.45 | 67.20 | 16.74 |  | 130.0 |  |
|  |  | Z | 5.25 | 67.05 | 16.69 |  | 130.0 |  |
| $\begin{aligned} & 10600- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Mixed, 40 MHz , MCS1, 90pc duty cycle) | X | 5.48 | 67.76 | 17.14 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | $Y$ | 5.57 | 67.58 | 16.91 |  | 130.0 |  |
|  |  | Z | 5.39 | 67.54 | 16.90 |  | 130.0 |  |
| $\begin{aligned} & 10601- \\ & \mathrm{AAB} \end{aligned}$ | IEEE 802.11 n (HT Mixed, 40 MHz , MCS2, 90pc duty cycle) | X | 5.31 | 67.28 | 16.91 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.47 | 67.34 | 16.80 |  | 130.0 |  |
|  |  | Z | 5.27 | 67.22 | 16.76 |  | 130.0 |  |
| $\begin{aligned} & 10602- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Mixed, 40 MHz , MCS3, 90pc duty cycle) | X | 5.43 | 67.41 | 16.89 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.56 | 67.39 | 16.75 |  | 130.0 |  |
|  |  | Z | 5.40 | 67.36 | 16.75 |  | 130.0 |  |
| $\begin{aligned} & 10603- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11n (HT Mixed, 40 MHz , MCS4, 90pc duty cycle) | X | 5.54 | 67.82 | 17.25 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.64 | 67.67 | 17.02 |  | 130.0 |  |
|  |  | Z | 5.49 | 67.76 | 17.09 |  | 130.0 |  |
| $\begin{aligned} & 10604- \\ & A A B \end{aligned}$ | IEEE 802.11 n (HT Mixed, 40 MHz , MCS5, 90pe duty cycle) | X | 5.42 | 67.47 | 17.05 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | $Y$ | 5.46 | 67.19 | 16.76 |  | 130.0 |  |
|  |  | Z | 5.37 | 67.38 | 16.88 |  | 130.0 |  |
| $\begin{aligned} & 10605- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Mixed, 40 MHz , MCS6, 90pc duty cycle) | X | 5.43 | 67.47 | 17.04 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | $Y$ | 5.56 | 67.49 | 16.91 |  | 130.0 |  |
|  |  | Z | 5.37 | 67.38 | 16.87 |  | 130.0 |  |
| $\begin{aligned} & 10606- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Mixed, 40 MHz , MCS7, 90pc duty cycle) | X | 5.17 | 66.77 | 16.54 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.31 | 66.83 | 16.45 |  | 130.0 |  |
|  |  | Z | 5.12 | 66.68 | 16.37 |  | 130.0 |  |


| $10607-$ $\mathrm{AAB}$ | IEEE 802.11ac WiFi (20MHz, MCSO, 90 pc duty cycle) | X | 4.40 | 65.75 | 16.09 | 0.46 | 130.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 4.62 | 65.97 | 16.16 |  | 130.0 |  |
| $\begin{aligned} & 10608- \\ & \text { AAB } \end{aligned}$ |  | Z | 4.40 | 65.83 | 16.04 |  | 130.0 |  |
|  | IEEE 802.11ac WiFi (20MHz, MCS1, 90 pc duty cycle) | X | 4.54 | 66.09 | 16.24 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.80 | 66.37 | 16.32 |  | 130.0 |  |
| $\begin{aligned} & 10609- \\ & \text { AAB } \end{aligned}$ |  | Z | 4.55 | 66.18 | 16.20 |  | 130.0 |  |
|  | IEEE 802.11ac WiFi (20MHz, MCS2, 90 pc duty cycle) | X | 4.43 | 65.91 | 16.05 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.69 | 66.22 | 16.16 |  | 130.0 |  |
|  |  | Z | 4.44 | 66.00 | 16.00 |  | 130.0 |  |
| $\begin{aligned} & 10610- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11ac WiFi ( $20 \mathrm{MHz}, \mathrm{MCS3}$, 90 pc duty cycle) | X | 4.49 | 66.09 | 16.23 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.74 | 66.38 | 16.32 |  | 130.0 |  |
|  |  | Z | 4.49 | 66.18 | 16.19 |  | 130.0 |  |
| $\begin{aligned} & 10611- \\ & A A B \end{aligned}$ | IEEE 802.11ac WiFi ( $20 \mathrm{MHz}, \mathrm{MCS} 4$, 90pc duty cycle) | X | 4.40 | 65.88 | 16.06 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.66 | 66.19 | 16.17 |  | 130.0 |  |
|  |  | Z | 4.40 | 65.97 | 16.02 |  | 130.0 |  |
| 10612-$\mathrm{AAB}$ | IEEE 802.11ac WiFi (20MHz, MCS5, 90 pc duty cycle) | X | 4.39 | 66.01 | 16.10 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.66 | 66.35 | 16.22 |  | 130.0 |  |
|  |  | Z | 4.40 | 66.10 | 16.06 |  | 130.0 |  |
| 10613-$A A B$ | IEEE 802.11ac WiFi (20MHz, MCS6, 90 pc duty cycle) | X | 4.38 | 65.82 | 15.94 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.67 | 66.22 | 16.10 |  | 130.0 |  |
|  |  | Z | 4.39 | 65.92 | 15.90 |  | 130.0 |  |
| 10614-$A A B$ | IEEE 802.11ac WiFi (20MHz, MCS7, 90 pc duty cycle) | X | 4.35 | 66.06 | 16.21 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.61 | 66.40 | 16.32 |  | 130.0 |  |
|  |  | Z | 4.36 | 66.17 | 16.17 |  | 130.0 |  |
| 10615AAB | IEEE 802.11ac WiFi ( 20 MHz , MCS8, 90 pc duty cycle) | X | 4.39 | 65.69 | 15.81 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.66 | 66.03 | 15.96 |  | 130.0 |  |
|  |  | Z | 4.39 | 65.77 | 15.76 |  | 130.0 |  |
| $\begin{aligned} & 10616- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11 ac WiFi ( $40 \mathrm{MHz}, \mathrm{MCSO}$, 90 pc duty cycle) | X | 5.07 | 66.15 | 16.34 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.27 | 66.44 | 16.35 |  | 130.0 |  |
|  |  | Z | 5.05 | 66.21 | 16.25 |  | 130.0 |  |
| $\begin{aligned} & 10617- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11ac WiFi (40MHz, MCS1, 90 pc duty cycle) | X | 5.14 | 66.37 | 16.43 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.34 | 66.62 | 16.41 |  | 130.0 |  |
|  |  | Z | 5.12 | 66.42 | 16.33 |  | 130.0 |  |
| $\begin{aligned} & 10618- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (40MHz, MCS2, 90 pc duty cycle) | X | 5.03 | 66.38 | 16.45 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.22 | 66.62 | 16.43 |  | 130.0 |  |
|  |  | Z | 5.02 | 66.45 | 16.36 |  | 130.0 |  |
| $\begin{aligned} & 10619- \\ & A A B \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi ( $40 \mathrm{MHz}, \mathrm{MCS} 3$, 90 pc duty cycle) | X | 5.07 | 66.24 | 16.31 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.24 | 66.43 | 16.27 |  | 130.0 |  |
|  |  | Z | 5.03 | 66.23 | 16.18 |  | 130.0 |  |
| $\begin{array}{\|l\|} \hline 10620- \\ \text { AAB } \\ \hline \end{array}$ | IEEE 802.11ac WiFi ( 40 MHz , MCS4, 90 pc duty cycle) | X | 5.13 | 66.23 | 16.35 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.33 | 66.47 | 16.34 |  | 130.0 |  |
|  |  | Z | 5.11 | 66.25 | 16.24 |  | 130.0 |  |
| $\begin{aligned} & 10621- \\ & A A B \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (40MHz, MCS5, 90 pc duty cycle) | X | 5.12 | 66.28 | 16.51 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.33 | 66.60 | 16.51 |  | 130.0 |  |
|  |  | Z | 5.11 | 66.38 | 16.44 |  | 130.0 |  |
| $\begin{aligned} & 10622- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11ac WiFi (40MHz, MCS6, 90 pc duty cycle) | X | 5.11 | 66.38 | 16.55 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.34 | 66.76 | 16.59 |  | 130.0 |  |
|  |  | Z | 5.11 | 66.50 | 16.49 |  | 130.0 |  |


| $\begin{aligned} & 10623- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11 ac WiFi ( 40 MHz , MCS7, 90 pc duty cycle) | X | 4.99 | 65.86 | 16.14 | 0.46 | 130.0 | $\pm 9.6 \%$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 5.22 | 66.30 | 16.24 |  | 130.0 |  |
|  |  | Z | 4.98 | 65.96 | 16.08 |  | 130.0 |  |
| $\begin{aligned} & 10624- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11 ac WiFi (40MHz, MCS8, 90 pc duty cycle) | X | 5.20 | 66.20 | 16.38 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.41 | 66.49 | 16.39 |  | 130.0 |  |
|  |  | Z | 5.19 | 66.26 | 16.30 |  | 130.0 |  |
| $\begin{aligned} & 10625- \\ & A A B \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (40MHz, MCS9, 90 pc duty cycle) | X | 5.30 | 66.37 | 16.54 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.75 | 67.41 | 16.90 |  | 130.0 |  |
|  |  | Z | 5.33 | 66.58 | 16.52 |  | 130.0 |  |
| $\begin{aligned} & 10626- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (80MHz, MCSO, 90 pc duty cycle) | X | 5.40 | 66.14 | 16.28 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.57 | 66.51 | 16.31 |  | 130.0 |  |
|  |  | Z | 5.38 | 66.23 | 16.21 |  | 130.0 |  |
| $\begin{aligned} & 10627-1 \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (80MHz, MCS1, 90 pc duty cycle) | X | 5.71 | 67.03 | 16.70 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.80 | 67.06 | 16.54 |  | 130.0 |  |
|  |  | Z | 5.65 | 66.96 | 16.54 |  | 130.0 |  |
| $\begin{aligned} & 10628- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (80MHz, MCS2, 90 pc duty cycle) | X | 5.40 | 66.15 | 16.18 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.60 | 66.59 | 16.25 |  | 130.0 |  |
|  |  | Z | 5.38 | 66.23 | 16.10 |  | 130.0 |  |
| $\begin{aligned} & 10629- \\ & A A B \end{aligned}$ | IEEE 802.11ac WiFi (80MHz, MCS3, 90 pc duty cycle) | X | 5.55 | 66.49 | 16.35 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.67 | 66.64 | 16.26 |  | 130.0 |  |
|  |  | Z | 5.49 | 66.42 | 16.19 |  | 130.0 |  |
| $\begin{aligned} & 10630- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11 ac WiFi ( 80 MHz , MCS4, 90 pc duty cycle) | X | 5.95 | 67.89 | 17.05 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 6.08 | 68.07 | 16.98 |  | 130.0 |  |
|  |  | Z | 5.84 | 67.71 | 16.83 |  | 130.0 |  |
| $\begin{aligned} & 10631- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (80MHz, MCS5, 90 pc duty cycle) | X | 5.77 | 67.48 | 17.05 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.99 | 67.89 | 17.07 |  | 130.0 |  |
|  |  | Z | 5.74 | 67.53 | 16.95 |  | 130.0 |  |
| $\begin{aligned} & 10632- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (80MHz, MCS6, 90 pc duty cycle) | X | 5.72 | 67.25 | 16.96 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.77 | 67.11 | 16.70 |  | 130.0 |  |
|  |  | Z | 5.64 | 67.12 | 16.77 |  | 130.0 |  |
| $\begin{aligned} & 10633- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11ac WiFi ( 80 MHz , MCS7. 90 pc duty cycle) | X | 5.44 | 66.28 | 16.29 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.66 | 66.76 | 16.36 |  | 130.0 |  |
|  |  | Z | 5.44 | 66.43 | 16.24 |  | 130.0 |  |
| $\begin{aligned} & 10634- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi ( 80 MHz , MCS8, 90 pc duty cycle) | X | 5.44 | 66.38 | 16.39 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.64 | 66.78 | 16.43 |  | 130.0 |  |
|  |  | Z | 5.43 | 66.48 | 16.32 |  | 130.0 |  |
| $\begin{aligned} & 10635- \\ & A A B \end{aligned}$ | IEEE 802.11ac WiFi (80MHz, MCS9, 90 pc duty cycle) | X | 5.30 | 65.61 | 15.72 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.53 | 66.14 | 15.85 |  | 130.0 |  |
|  |  | Z | 5.29 | 65.70 | 15.64 |  | 130.0 |  |
| $\begin{aligned} & 10636- \\ & \text { AAC } \end{aligned}$ | IEEE 802.11ac WiFi (160MHz, MCSO, 90pc duty cycle) | X | 5.86 | 66.55 | 16.40 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.98 | 66.87 | 16.39 |  | 130.0 |  |
|  |  | Z | 5.82 | 66.61 | 16.30 |  | 130.0 |  |
| $\begin{aligned} & 10637- \\ & \text { AAC } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi ( $160 \mathrm{MHz}, \mathrm{MCS} 1$, 90 pc duty cycle) | X | 6.02 | 66.98 | 16.61 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 6.13 | 67.25 | 16.56 |  | 130.0 |  |
|  |  | Z | 5.97 | 67.00 | 16.48 |  | 130.0 |  |
| $\begin{aligned} & 10638- \\ & \text { AAC } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi ( 160 MHz , MCS2, 90 pc duty cycle) | X | 6.03 | 67.01 | 16.60 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 6.13 | 67.22 | 16.53 |  | 130.0 |  |
|  |  | Z | 5.97 | 67.00 | 16.46 |  | 130.0 |  |


| $\begin{array}{\|l\|} \hline 10639- \\ \text { AAC } \\ \hline \end{array}$ | IEEE 802.11ac WiFi ( 160 MHz , MCS3, 90 pc duty cycle) | X | 5.96 | 66.80 | 16.53 | 0.46 | 130.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 6.11 | 67.17 | 16.55 |  | 130.0 |  |
|  |  | Z | 5.93 | 66.87 | 16.44 |  | 130.0 |  |
| $\begin{aligned} & 10640- \\ & \text { AAC } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi ( 160 MHz , MCS4, 90 pc duty cycle) | X | 5.92 | 66.70 | 16.42 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 6.12 | 67.19 | 16.50 |  | 130.0 |  |
|  |  | Z | 5.91 | 66.82 | 16.35 |  | 130.0 |  |
| $10641-$ <br> AAC | IEEE 802.11ac WiFi ( 160 MHz , MCS5, 90 pc duty cycle) | X | 6.06 | 66.91 | 16.55 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 6.16 | 67.10 | 16.47 |  | 130.0 |  |
|  |  | Z | 6.01 | 66.89 | 16.41 |  | 130.0 |  |
| $\begin{aligned} & 10642- \\ & \text { AAC } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { IEEE } 802.11 \mathrm{ac} \mathrm{WiFi}(160 \mathrm{MHz}, \mathrm{MCS} 6 \text {, } \\ & 90 \mathrm{pc} \text { duty cycle) } \end{aligned}$ | X | 6.04 | 66.98 | 16.76 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 6.20 | 67.33 | 16.75 |  | 130.0 |  |
|  |  | Z | 6.02 | 67.07 | 16.68 |  | 130.0 |  |
| 10643- <br> AAC | IEEE 802.11ac WiFi ( 160 MHz , MCS7, 90 pc duty cycle) | X | 5.90 | 66.69 | 16.50 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 6.04 | 67.03 | 16.51 |  | 130.0 |  |
|  |  | Z | 5.87 | 66.78 | 16.42 |  | 130.0 |  |
| $\begin{aligned} & 10644- \\ & \text { AAC } \\ & \hline \end{aligned}$ | IEEE 802.11 ac WiFi ( 160 MHz , MCS8, 90 pc duty cycle) | X | 5.95 | 66.86 | 16.60 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 6.19 | 67.50 | 16.76 |  | 130.0 |  |
|  |  | Z | 5.94 | 66.99 | 16.54 |  | 130.0 |  |
| $\begin{aligned} & 10645- \\ & \text { AAC } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (160MHz, MCS9, 90 pc duty cycle) | X | 6.44 | 67.99 | 17.14 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 6.47 | 67.94 | 16.94 |  | 130.0 |  |
|  |  | Z | 6.16 | 67.33 | 16.68 |  | 130.0 |  |
| $\begin{aligned} & 10646- \\ & \text { AAD } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 5 MHz , QPSK, UL Subframe=2,7) | X | 7.50 | 90.48 | 30.44 | 9.30 | 60.0 | $\pm 9.6$ \% |
|  |  | Y | 17.43 | 112.38 | 39.34 |  | 60.0 |  |
|  |  | Z | 9.26 | 96.56 | 33.29 |  | 60.0 |  |
| 10647-$A A C$ | LTE-TDD (SC-FDMA, 1 RB, 20 MHz , QPSK, UL Subframe $=2,7$ ) | X | 6.74 | 88.72 | 29.93 | 9.30 | 60.0 | $\pm 9.6$ \% |
|  |  | Y | 14.54 | 108.61 | 38.31 |  | 60.0 |  |
|  |  | Z | 8.10 | 94.14 | 32.60 |  | 60.0 |  |
| $\begin{aligned} & \text { 10648- } \\ & \text { AAA } \\ & \hline \end{aligned}$ | CDMA2000 (1x Advanced) | X | 0.39 | 60.00 | 6.32 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 0.67 | 63.31 | 10.55 |  | 150.0 |  |
|  |  | Z | 0.38 | 60.00 | 6.43 |  | 150.0 |  |
| $\begin{aligned} & 10652- \\ & \mathrm{A} A \mathrm{~B} \\ & \hline \end{aligned}$ | LTE-TDD (OFDMA, 5 MHz , E-TM 3.1, Clipping 44\%) | X | 3.10 | 65.49 | 15.51 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 3.52 | 66.85 | 16.73 |  | 80.0 |  |
|  |  | Z | 3.18 | 66.07 | 15.91 |  | 80.0 |  |
| 10653-$\mathrm{AAB}$ | LTE-TDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44\%) | X | 3.70 | 65.11 | 16.04 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 4.03 | 66.07 | 16.78 |  | 80.0 |  |
|  |  | Z | 3.73 | 65.44 | 16.24 |  | 80.0 |  |
| $\begin{array}{\|l\|} \hline 10654- \\ \text { AAB } \\ \hline \end{array}$ | LTE-TDD (OFDMA, 15 MHz , E-TM 3.1, Clipping 44\%) | X | 3.73 | 64.77 | 16.12 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 4.00 | 65.69 | 16.76 |  | 80.0 |  |
|  |  | Z | 3.74 | 65.07 | 16.28 |  | 80.0 |  |
| $10655-$$\mathrm{AAB}$ | LTE-TDD (OFDMA, 20 MHz , E-TM 3.1, Clipping 44\%) | X | 3.81 | 64.71 | 16.17 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 4.06 | 65.68 | 16.79 |  | 80.0 |  |
|  |  | Z | 3.81 | 65.01 | 16.32 |  | 80.0 |  |
| $\begin{array}{\|l\|} \hline 10658- \\ \text { AAA } \\ \hline \end{array}$ | Pulse Waveform ( $200 \mathrm{~Hz}, 10 \%$ ) | X | 3.06 | 66.59 | 11.16 | 10.00 | 50.0 | $\pm 9.6$ \% |
|  |  | $Y$ | 100.00 | 111.68 | 26.09 |  | 50.0 |  |
|  |  | Z | 3.93 | 69.81 | 12.66 |  | 50.0 |  |
| $\begin{aligned} & 10659- \\ & \text { AAA } \\ & \hline \end{aligned}$ | Pulse Waveform ( $200 \mathrm{~Hz}, 20 \%$ ) | X | 1.63 | 63.81 | 8.65 | 6.99 | 60.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 113.13 | 25.67 |  | 60.0 |  |
|  |  | Z | 2.52 | 68.36 | 10.82 |  | 60.0 |  |


| 10660- <br> AAA | Pulse Waveform (200Hz, 40\%) | X | 0.57 | 60.00 | 5.26 | 3.98 | 80.0 | $\pm 9.6 \%$ |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 100.00 | 118.24 | 26.52 |  | 80.0 |  |
|  |  | Z | 0.68 | 61.70 | 6.30 |  | 80.0 |  |
| $10661-$ <br> AAA | Pulse Waveform (200Hz, 60\%) | X | 0.32 | 60.00 | 3.83 | 2.22 | 100.0 | $\pm 9.6 \%$ |
|  |  | Y | 100.00 | 125.46 | 28.15 |  | 100.0 |  |
|  |  | Z | 0.29 | 60.00 | 3.83 |  | 100.0 |  |
| $10662-$ <br> AAA | Pulse Waveform (200Hz, 80\%) | X | 7.43 | 367.15 | 53.93 | 0.97 | 120.0 | $\pm 9.6 \%$ |
|  |  | Y | 100.00 | 135.73 | 30.13 |  | 120.0 |  |

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

## APPENDIX D:SAR TISSUE SPECIFICATIONS

Measurement Procedure for Tissue verification:

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

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

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

Table D-I
Composition of the Tissue Equivalent Matter

| Frequency (MHz) | 750 | 750 | 835 | 835 | 1750 | 1750 | 1900 | 1900 | 2450 | 2450 | $\begin{gathered} 5200- \\ 5800 \\ \hline \end{gathered}$ | $\begin{gathered} 5200- \\ 5800 \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Tissue | Head | Body | Head | Body | Head | Body | Head | Body | Head | Body | Head | Body |
| Ingredients (\% by weight) |  |  |  |  |  |  |  |  |  |  |  |  |
| Bactericide | $\left\|\begin{array}{c} \text { See page } \\ 2-3 \end{array}\right\|$ | $\left\lvert\, \begin{gathered} \text { See page } \\ 2 \end{gathered}\right.$ | 0.1 | 0.1 |  |  |  |  | See page 4 |  | See page 5 | $\begin{array}{\|c} \text { See page } \\ 6 \end{array}$ <br> 6 |
| DGBE |  |  |  |  | 47 | 31 | 44.92 | 29.44 |  | 26.7 |  |  |
| HEC |  |  | 1 | 1 |  |  |  |  |  |  |  |  |
| NaCl |  |  | 1.45 | 0.94 | 0.4 | 0.2 | 0.18 | 0.39 |  | 0.1 |  |  |
| Sucrose |  |  | 57 | 44.9 |  |  |  |  |  |  |  |  |
| Water |  |  | 40.45 | 53.06 | 52.6 | 68.8 | 54.9 | 70.17 |  | 73.2 |  |  |


| FCC ID: A3LSMG9700 | CVPCTEST | SAR EVALUATION REPORT | snmsump | Approved by: <br> Quality Manager |
| :---: | :---: | :---: | :---: | :---: |
| Test Dates: <br> 12/09/2018-01/14/2019 | DUT Type: <br> Portable Handset |  |  | APPENDIX D: Page 1 of 6 |
| 19 PCTEST Engineering Laboratory, Inc. |  |  |  | $\begin{array}{r} \hline \text { REV } 21.2 \mathrm{M} \\ 12 / 05 / 2018 \end{array}$ |

## 2 Composition / Information on ingredients

| $\mathrm{H}_{2} \mathrm{O}$ | Water, 35-58\% |
| :---: | :---: |
| Sucrose | Sugar, white, refined, 40-60\% |
| NaCl | Sodium Chloride, 0-6\% |
| Hydroxyethyl-cellulose | Medium Viscosity (CAS\# 9004-62-0), <0.3\% |
| Preventol-D7 | Preservative: aqueous preparation, (CAS\# 55965-84-9), containing 5 -chloro-2-methyl-3(2H)-isothiazolone and 2-methyyl-3(2H)-isothiazolone, 0.1-0.7\% |

Figure D-1

## Composition of 750 MHz Head and Body Tissue Equivalent Matter

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


Zeughausstrasse 43, 8004 Zurich, Switzerland
Phone +41442459700 . Fax +41442459779
info@speag.com, http://www. speag.com

Measurement Certificate / Material Test


Figure D-2
750MHz Body Tissue Equivalent Matter

| FCC ID: A3LSMG9700 | SAR EVALUATION REPORT | Approved by: |
| :--- | :--- | :--- | :---: |
| Test Dates: | DUT Type: | Quality Manager |
| $12 / 09 / 2018-01 / 14 / 2019$ | Portable Handset | APPENDIX D: |
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Schmid \& Partner Engineering AG
Zeughausstrasse 43, 8004 Zurich, Switzerland

Zeughausstrasse 43, 8004 Zurich, Switzerland
Phone +41 44245 9700, Fax +41 442459779
info@speag.com, http://www.speag.com

Measurement Certificate / Material Test

| $\begin{array}{\|l} \hline \text { Item Name } \\ \text { Product No. } \\ \text { Manufacturer } \\ \hline \end{array}$ | Head Tissue Simulating Liquid (HSL750V2) <br> SLAAH 075 AA (Batch: 170612-4) <br> SPEAG |
| :---: | :---: |
| Measurement Method |  |
| TSL dielectric parameters measured using calibrated DAK probe. |  |
| Setup Validation |  |
| Validation results were within $\pm 2.5 \%$ towards the target values of Methanol. |  |
| Target Parameters |  |
| Target parameters as defined in the IEEE 1528 and IEC 62209 compliance standards. |  |
| Test Condition |  |
| Ambient TSL Temperature Test Date Operator | Environment temperatur $(22 \pm 3)^{\circ} \mathrm{C}$ and humidity $<70 \%$. $22^{\circ} \mathrm{C}$ <br> 20-Jun-17 <br> CL |



Figure D-3
750MHz Head Tissue Equivalent Matter

| FCC ID: A3LSMG9700 | CVPCEST | SAR EVALUATION REPORT | snmsunf | Approved by: <br> Quality Manager |
| :---: | :---: | :---: | :---: | :---: |
| Test Dates: 12/09/2018-01/14/2019 | DUT Type: <br> Portable Handset |  |  | APPENDIX D: <br> Page 3 of 6 |
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| Water | $50-73 \%$ |  |
| :---: | :---: | :---: |
| Non-ionic detergents | 25-50\% | polyoxyethylenesorbitan monolaurate |
| NaCl | 0-2\% |  |
| Preservative | 0.05-0.1\% | Preventol-D7 |
| Safety relevant ingredients: |  |  |
| CAS-No. 55965-84-9 | $<0.1$ \% | aqueous preparation, containing 5 -chloro-2-methyl-3(2H). isothiazolone and 2-methyyl-3(2H)-isothiazolone |
| CAS-No. 9005-64-5 | <50\% | polyoxyethylenesorbitan monolaurate |

According to international guidelines, the product is not a dangerous mixture and therefore not required to be marked by symbols.

Figure D-4
Composition of 2.4 GHz Head Tissue Equivalent Matter
Note: 2.4 GHz head liquid recipes are proprietary SPEAG. Since the composition is approximate to the actual liquids utilized, the manufacturer tissue-equivalent liquid data sheets are provided below.


Figure D-5
2.4 GHz Head Tissue Equivalent Matter

| FCC ID: A3LSMG9700 | CVPTEST | SAR EVALUATION REPORT | snmsump | Approved by: <br> Quality Manager |
| :---: | :---: | :---: | :---: | :---: |
| Test Dates: 12/09/2018-01/14/2019 | DUT Type: <br> Portable Handset |  |  | APPENDIX D: <br> Page 4 of 6 |
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## 2 Composition / Information on ingredients

The Item is composed of the following ingredients:

| Water | $50-65 \%$ |
| :--- | :--- |
| Mineral oil | $10-30 \%$ |
| Emulsifiers | $8-25 \%$ |
| Sodium salt | $0-1.5 \%$ |

Sodium salt
0-1.5\%
Figure D-6
Composition of 5 GHz Head Tissue Equivalent Matter
Note: 5 GHz head liquid recipes are proprietary SPEAG. Since the composition is approximate to the actual liquids utilized, the manufacturer tissue-equivalent liquid data sheets are provided below.


Figure D-7
5 GHz Head Tissue Equivalent Matter

| FCC ID: A3LSMG9700 | SAR EVALUATION REPORT | Approved by: |
| :--- | :--- | :--- | :---: |
| Test Dates: | DUT Type: | Quality Manager |
| $12 / 09 / 2018-01 / 14 / 2019$ | Portable Handset | APPENDIX D: |
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## 3 Composition / Information on ingredients

The Item is composed of the following ingredients:

| Water | $60-80 \%$ |
| :--- | :--- |
| Esters, Emulsifiers, Inhibitors | $20-40 \%$ |
| Sodium salt | $0-1.5 \%$ |

Figure D-8
Composition of 5 GHz Body Tissue Equivalent Matter
Note: 5 GHz Body liquid recipes are proprietary SPEAG. Since the composition is approximate to the actual liquids utilized, the manufacturer tissue-equivalent liquid data sheets are provided below.


Figure D-9
5 GHz Body Tissue Equivalent Matter

| FCC ID: A3LSMG9700 | CVPTEST | SAR EVALUATION REPORT | snmsump | Approved by: <br> Quality Manager |
| :---: | :---: | :---: | :---: | :---: |
| Test Dates: 12/09/2018-01/14/2019 | DUT Type: <br> Portable Handset |  |  | APPENDIX D: Page 6 of 6 |
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## APPENDIX E: SAR SYSTEM VALIDATION

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

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

Table E-1
SAR System Validation Summary - 1g

| $\begin{gathered} \text { SAR } \\ \text { SYSTEM } \\ \# \\ \hline \end{gathered}$ | FREQ. [MHz] | DATE | PROBE SN | PROBE CAL. POINT |  | COND. | PERM. | CW VALIDATION |  |  | MOD. VALIDATION |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | ( $\sigma$ ) | ( $\varepsilon$ ) | SENSITIVITY | PROBE LINEARITY | PROBE ISOTROPY | MOD. TYPE | DUTY FACTOR | PAR |
| M | 750 | 11/2/2018 | 3287 | 750 | Head | 0.908 | 42.19 | PASS | PASS | PASS | N/A | N/A | N/A |
| D | 750 | 10/26/2018 | 7357 | 750 | Head | 0.898 | 40.96 | PASS | PASS | PASS | N/A | N/A | N/A |
| G | 835 | 8/9/2018 | 7410 | 835 | Head | 0.889 | 40.915 | PASS | PASS | PASS | GMSK | PASS | N/A |
| M | 1750 | 11/5/2018 | 3287 | 1750 | Head | 1.342 | 39.217 | PASS | PASS | PASS | N/A | N/A | N/A |
| H | 1900 | 7/16/2018 | 7409 | 1900 | Head | 1.425 | 40.935 | PASS | PASS | PASS | GMSK | PASS | N/A |
| G | 2450 | 8/7/2018 | 7410 | 2450 | Head | 1.865 | 39.618 | PASS | PASS | PASS | OFDM/TDD | PASS | PASS |
| G | 2600 | 8/8/2018 | 7410 | 2600 | Head | 2.04 | 39.033 | PASS | PASS | PASS | TDD | PASS | N/A |
| H | 5250 | 7/5/2018 | 7409 | 5250 | Head | 4.492 | 34.994 | PASS | PASS | PASS | OFDM | N/A | PASS |
| H | 5600 | 7/5/2018 | 7409 | 5600 | Head | 4.839 | 34.496 | PASS | PASS | PASS | OFDM | N/A | PASS |
| H | 5750 | 7/5/2018 | 7409 | 5750 | Head | 4.995 | 34.288 | PASS | PASS | PASS | OFDM | N/A | PASS |
| 1 | 750 | 7/19/2018 | 7406 | 750 | Body | 0.969 | 53.451 | PASS | PASS | PASS | N/A | N/A | N/A |
| J | 835 | 9/11/2018 | 3347 | 835 | Body | 0.984 | 54.197 | PASS | PASS | PASS | GMSK | PASS | N/A |
| D | 1750 | 8/15/2018 | 7357 | 1750 | Body | 1.475 | 51.784 | PASS | PASS | PASS | N/A | N/A | N/A |
| E | 1900 | 12/3/2018 | 3332 | 1900 | Body | 1.518 | 51.796 | PASS | PASS | PASS | GMSK | PASS | N/A |
| M | 1900 | 11/1/2018 | 3287 | 1900 | Body | 1.567 | 51.955 | PASS | PASS | PASS | GMSK | PASS | N/A |
| K | 2450 | 4/3/2018 | 3319 | 2450 | Body | 2.043 | 51.13 | PASS | PASS | PASS | OFDM/TDD | PASS | PASS |
| J | 2450 | 10/15/2018 | 3347 | 2450 | Body | 2.025 | 51.09 | PASS | PASS | PASS | OFDM/TDD | PASS | PASS |
| K | 2600 | 4/3/2018 | 3319 | 2600 | Body | 2.225 | 50.665 | PASS | PASS | PASS | TDD | PASS | N/A |
| L | 5250 | 10/29/2018 | 7308 | 5250 | Body | 5.511 | 48.77 | PASS | PASS | PASS | OFDM | N/A | PASS |
| L | 5600 | 10/29/2018 | 7308 | 5600 | Body | 5.994 | 48.2 | PASS | PASS | PASS | OFDM | N/A | PASS |
| L | 5750 | 10/29/2018 | 7308 | 5750 | Body | 6.219 | 47.96 | PASS | PASS | PASS | OFDM | N/A | PASS |

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

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## APPENDIX G <br> POWER REDUCTION VERIFICATION

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

## G. 1 Power Verification Procedure

The power verification was performed according to the following procedure:

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

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## G. 2 Main Antenna Verification Summary

Table G-1
Power Measurement Verification for Main Antenna

| Mechanism(s) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Mode/Band |  | Conducted Power (dBm) |  |

## G. 3 WIFI Verification Summary

Table G-2
Power Measurement Verification WIFI

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

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

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| :--- | :--- | :--- | :---: |
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## APPENDIX H: DOWNLINK LTE CA RF CONDUCTED POWERS

### 1.1 LTE Downlink Only Carrier Aggregation Test Reduction Methodology

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

LTE DLCA Test Reduction Methodology:

- The supported combinations were arranged by the number of component carriers in columns.
- Any limitations on the PCC or SCC for each combination were identified alongside the combination (e.g. CA_2A-2A-4A-12A, but B12 can only be configured as a SCC).
- Power measurements were performed for "supersets" (LTE CA combinations with multiple components carriers) and any "subsets" (LTE CA combinations with fewer component carriers) that were not completely covered by the supersets.
- Only subsets that have the exact same components as a superset were excluded for measurement.
- When there were certain restrictions on component carriers that existed in the superset that were not applied for the subset, the subset configuration was additionally evaluated.
- Both inter-band and intra-band downlink carrier aggregation scenarios were considered.
- Downlink CA combinations for SISO and $4 \times 4$ Downlink MIMO operations were measured independently, per May 2017 TCBC Workshop notes.

Table 1 - Example of Exclusion Table for SISO Configurations


Table 2 - Example of Exclusion Table for 4x4 Downlink MIMO Configurations


Note: [CC] indicates component carrier with $4 \times 4$ DL MIMO antenna configuration

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| $12 / 09 / 18-01 / 14 / 19$ | Portable Handset | Page 1 of 4 |  |

### 1.2 LTE Downlink Only Carrier Aggregation Test Selection and Setup

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

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

General PCC and SCC configuration selection procedure

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


Figure 1
DL CA Power Measurement Setup



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

### 1.3 Downlink Carrier Aggregation RF Conducted Powers

### 1.3.1 LTE Band 41 as PCC

Table 1
Maximum Output Powers

|  | PCC |  |  |  |  |  |  |  |  | SCC 1 |  |  |  | SCC 2 |  |  |  | Power |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Combination | PCC Band | $\begin{aligned} & \text { PCC BW } \\ & {[\mathrm{MHz}]} \end{aligned}$ | $\begin{aligned} & \text { PCC (UL) } \\ & \text { Ch. } \end{aligned}$ | $\left\lvert\, \begin{gathered} \text { PCC (UL) } \\ \text { Freq. }[\mathrm{MHz}] \end{gathered}\right.$ | Modulation | $\left\lvert\, \begin{gathered} \text { PCC UL\# } \\ \text { RB } \end{gathered}\right.$ | $\left\lvert\, \begin{gathered} \text { PCC UL } \\ \text { RB Offset } \end{gathered}\right.$ | $\left\|\begin{array}{c} \mathrm{PCC}(\mathrm{DL}) \\ \mathrm{Ch} . \end{array}\right\|$ | PCC (DL) Freq. [MHz] | SCC Band | Scc BW [MHz] | $\left\|\begin{array}{c} \sec (\mathrm{DL}) \\ \mathrm{ch} . \end{array}\right\|$ | SCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | $\left\|\begin{array}{c} \sec (\mathrm{DL}) \\ \mathrm{ch} . \end{array}\right\|$ | SCC (DL) Freq. [MHz] | LTE Tx.Power with DL CA Enabled (dBm) | LTE Single Carrier Tx Power (dBm) |
| CA_41A-41A (1) | LTE B41 | 15 | 39750 | 2506 | QPSK | 1 | 0 | 39750 | 2506 | LTE B41 | 20 | 41490 | 2680 | . | - | - | - | 24.37 | 24.35 |
| CA_41C (1) | LTE B41 | 15 | 39750 | 2506 | QPSK | 1 | 0 | 39750 | 2506 | LTE B41 | 20 | 39921 | 2523.1 | - | - | - | - | 24.36 | 24.35 |
| CA_41D | LTE B41 | 15 | 39750 | 2506 | QPSK | 1 | 0 | 39750 | 2506 | LTE B41 | 20 | 39921 | 2523.1 | LTE B41 | 20 | 40119 | 2542.9 | 24.37 | 24.35 |

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

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

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

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| $12 / 09 / 18-01 / 14 / 19$ | Portable Handset | Page 3 of 4 |  |

### 1.4.1 LTE 4x4 MIMO DL Standalone Powers

Table 2
Maximum Output Powers

| LTE <br> Band | Bandwidth <br> $[\mathrm{MHz}]$ | Channel | Frequency <br> $[\mathrm{MHz}]$ | Modulation | RB <br> Size | RB <br> Offset | 4x4 DL MIMO <br> Tx. Power <br> $[\mathrm{dBm}]$ | Single <br> Antenna <br> Tx. <br> Power <br> $[\mathrm{dBm}]$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 41 | 15 | 39750 | 2506 | QPSK | 1 | 0 | 24.44 | 24.35 |

### 1.4.2 LTE Band 41 as PCC

Table 3
Maximum Output Powers

|  | pCC |  |  |  |  |  |  |  |  |  | scc 1 |  |  |  |  | scc 2 |  |  |  |  | Power |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Combination | PCC Band |  | Pcc (U) Channel | $\begin{array}{\|c\|c\|} \hline \text { Pcce (evi) } \\ \text { frequency } \\ \text { inmzal } \end{array}$ | Modulation | $\underset{\text { RB }}{\text { PCC UL }}$ | Pcc ut R8 offet | $\left\|\begin{array}{l} \text { Pcc (OU) } \\ \text { Channel } \end{array}\right\|$ |  | OLAat. | scc and | scc <br> sandwidh <br> [MW2] | (scc (0) $\begin{aligned} & \text { chanel } \\ & \text { Chane }\end{aligned}$ |  | Otant. | scc and |  | scc (ou) | $\begin{array}{\|c\|c\|c\|c\|c\|c\|c\|c\|c\|c\|c\|c\|c\|c\|} \substack{\text { minkry }} \end{array}$ | Otant. | Tx.Power with DL CA Enabled (dBm) |  |
|  |  | $\frac{15}{15}$ | ${ }_{\substack{39750 \\ 39750}}$ | $\frac{2506}{2506}$ | ${ }_{\text {QPSSK }}^{\text {OpSk }}$ | $\frac{1}{1}$ | $\bigcirc$ | ${ }^{39750} 3$ | $\frac{2506}{2506}$ | $\frac{4 \times 4}{2 \times 2}$ |  | $\stackrel{20}{20}$ | ${ }_{\text {41490 }}^{4149}$ | ${ }^{2688}$ | $\frac{2 \times 2}{4 \times 4}$ |  |  |  |  |  | ${ }_{\text {24,41 }}^{24.42}$ | ${ }_{\text {24, }}^{2435}$ |
|  | ${ }_{\text {Lex }}$ | ${ }_{15}^{15}$ | ${ }^{39750}$ | ${ }_{2506}$ | ${ }_{\text {apsk }}$ | $\frac{1}{1}$ | 0 | 39750 | ${ }_{206}$ | $\stackrel{2 \times 4}{4 \times 4}$ | ${ }_{\text {LIE E }}$ | ${ }_{20}^{20}$ | 41490 | ${ }^{2680}$ | ${ }_{4 \times 4}^{4 \times 4}$ |  |  |  |  |  | ${ }_{\text {24,44 }}^{24}$ | ${ }_{2}^{24.35}$ |
| CA, [141][1] | LTE B41 | ${ }^{15}$ | 39750 | ${ }^{2506}$ | apsk | 1 | 0 | 39750 | ${ }^{2506}$ | ${ }_{4 \times 4}$ | LTE E41 | ${ }^{20}$ | 39921 | ${ }^{2523.1}$ | $4 \times 4$ |  |  |  |  |  | ${ }_{24,43}^{24}$ | ${ }_{2}^{24.35}$ |
| CA [410] | LTE B41 | 15 | 39750 | 2006 | apsk | 1 | 0 | 39750 | 2506 | 4x4 | LTE E41 | ${ }^{20}$ | 39921 | 2233.1 | ${ }_{4 \times 4}$ | LTE E41 | 20 | 40119 | 2542.9 | $4 \times 4$ | 24.37 | ${ }_{2}^{24.35}$ |

### 1.5 Downlink Carrier Aggregation with CA_41C Uplink Carrier Aggregation enabled

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

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

### 1.5.1 DL Carrier Aggregation RF Conducted Powers

Table 4
Maximum Output Powers

|  | PCC |  |  |  |  |  |  | SCC 1 |  |  |  |  |  |  | SCC 2 |  |  |  | Power |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Combination | PCC Band | $\begin{array}{\|c\|} \hline \text { PCC } \\ \text { Bandwidth } \\ {[\mathrm{MHz}]} \end{array}$ | PCC (UL/DL) Channel |  | Modulation | $\underset{R B C O L}{ }$ | $\begin{gathered} \text { PCC UL } \\ \text { RB Offset } \end{gathered}$ | SCC Band | $\begin{gathered} \text { SCC } \\ \text { Bandwidth } \\ {[\mathrm{MHz}]} \end{gathered}$ | $\begin{array}{\|c\|} \hline \text { SCC } \\ \text { (UL/DL) } \\ \text { Channel } \end{array}$ |  | Modulatio <br> n | SCC UL\# RB | SCC UL RB Offset | SCC Band | $\begin{array}{\|c\|} \hline \text { SCC } \\ \text { Bandwidth } \\ {[\mathrm{MHz}]} \\ \hline \end{array}$ | SCC DL Channel | SCC DL Frequency [MHz] | ULCA Tx. Power with add'I CA config. active in DL (dBm) | ULCA Tx Power ( dBm ) |
| CA_41D | LTE B41 | 20 | 39750 | 2506.0 | QPSK | 1 | 99 | LTE B41 | 20 | 39948 | 2525.8 | QPSK | 1 | 0 | LTE B41 | 20 | 40146 | 2545.6 | 24.32 | 24.23 |

### 1.5.2 DL Carrier Aggregation with DL $4 \times 4$ MIMO RF Conducted Powers

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

Table 5
Maximum Output Powers

|  | PCC |  |  |  |  |  |  |  | SCC 1 |  |  |  |  |  |  |  | Power |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Combination | PCC Band | $\begin{array}{\|c} \text { PCC } \\ \text { Bandwidth } \\ {[\mathrm{MHz}]} \end{array}$ | PCC (UL/DL) Channel | PCC <br> (UL/DL) <br> Frequency <br> $[\mathrm{MHz}]$ | Modulation | $\underset{\text { RB }}{\text { PCC UL\# }}$ | PCC UL RB offset | DL Ant. Config. | SCC Band | SCC Bandwidth [MHz] | $\begin{gathered} \text { SCC } \\ (\mathrm{UL} / \mathrm{DL}) \\ \text { Channel } \end{gathered}$ | SCC <br> (UL/DL) <br> Frequency <br> [MHz] | Modulatio n | SCC UL\# RB | SCC UL RB Offset | DL Ant. Config. | ULCA Tx. Power with add'I CA config. active in DL (dBm) | ULCA Tx Power (dBm) |
| CA_[41C] (1) | LTE B41 | 20 | 39750 | 2506.0 | QPSK | 1 | 99 | $4 \times 4$ | LTE B41 | 20 | 39948 | 2525.8 | QPSK | 1 | 0 | $4 \times 4$ | 24.24 | 24.23 |



## APPENDIX I: IEEE 802.11AX RU SAR EXCLUSION

### 1.1 IEEE 802.11ax RU SAR Exclusion

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

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

### 1.2 IEEE 802.11ax RU Target Powers

1.2.1 Maximum 802.11ax RU WLAN Output Power


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| :--- | :--- | :--- | :--- |
| Quality |  |  |
| Manager |  |  |

### 1.2.2 Reduced 802.11ax RU WLAN Output Power



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



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



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### 1.3 IEEE 802.11ax Measured Powers

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

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

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

| RU Index | Tones | Ch. 1 | Ch. 2 | Ch. 6 | Ch. 9 | Ch. 10 | Ch. 11 | Ch. 12 | Ch. 13 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Average | Average | Average | Average | Average | Average | Average | Average |
| 0 | 26 | 13.86 |  | 13.61 |  |  | 13.71 | 10.91 | -5.98 |
| 4 | 26 | 13.79 |  | 13.70 |  |  | 13.97 | 10.70 | -6.08 |
| 8 | 26 | 13.61 |  | 13.76 |  |  | 13.59 | 10.77 | -5.88 |
| 37 | 52 | 15.44 |  | 15.66 |  |  | 15.42 | 11.36 | -2.52 |
| 38 | 52 | 15.88 |  | 15.90 |  |  | 15.84 | 11.72 | -2.92 |
| 40 | 52 | 15.49 |  | 15.70 |  |  | 15.67 | 11.96 | -3.13 |
| 53 | 106 | 17.51 |  | 17.55 |  | 17.55 | 17.20 | 11.36 | -0.40 |
| 54 | 106 | 17.55 |  | 17.90 |  | 17.91 | 17.34 | 11.18 | -0.41 |
| 61 | 242 | 14.73 | 17.97 | 17.15 | 17.64 | 16.89 | 8.35 | 8.05 | 2.34 |


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


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| :--- | :--- | :--- | :--- |
| Quality |  |  |
| Manager |  |  |

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


| FCC ID:A3LSMG9700 | RAR EVALUATION REPORT | Reviewed by: |
| :--- | :--- | :--- | :--- |
| Quality |  |  |
| Manager |  |  |


[^0]:    ${ }^{\text {E }}$ Uncertainty is determined using the max. deviation from linear response applying rectangular distribution and is expressed for the square of the field value.

[^1]:    This calibration certificate shall not be reproduced except in full without written approval of the laboratory.

[^2]:    ${ }^{\text {c }}$ Frequency validity above 300 MHz of $\pm 100 \mathrm{MHz}$ only applies for DASY v4.4 and higher (see Page 2), else it is restricted to $\pm 50 \mathrm{MHz}$. The uncerdainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is $\pm 10,25,40,50$ and 70 MHz for ConvF assessments at $30,64,128,150$ and 220 MHz respectively. Above 5 GHz frequency validity can be extended to $\pm 110 \mathrm{MHz}$.
    ${ }^{F}$ At frequencies below 3 GHz , the validity of tissue parameters ( $\varepsilon$ and $\sigma$ ) can be relaxed to $\pm 10 \%$ if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz , the validity of tissue parameters ( $\varepsilon$ and $\sigma$ ) is restricted to $\pm 5 \%$. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.
    ${ }^{\mathrm{G}}$ Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than $\pm 1 \%$ for frequencies below 3 GHz and below $\pm 2 \%$ for frequencies between $3-6 \mathrm{GHz}$ at any distance larger than half the probe tip diameter from the boundary.

[^3]:    ${ }^{\text {c }}$ Frequency validity above 300 MHz of $\pm 100 \mathrm{MHz}$ only applies for DASY v4.4 and higher (see Page 2), else it is restricted to $\pm 50 \mathrm{MHz}$. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is $\pm 10,25,40,50$ and 70 MHz for ConvF assessments at $30,64,128,150$ and 220 MHz respectively. Above 5 GHz frequency validity can be extended to $\pm 110 \mathrm{MHz}$.
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    ${ }^{6}$ Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than $\pm 1 \%$ for frequencies below 3 GHz and below $\pm 2 \%$ for frequencies between $3-6 \mathrm{GHz}$ at any distance larger than half the probe tip diameter from the boundary.

[^4]:    The uncertainties of Norm $X, Y, Z$ do not affect the $E^{2}$-field uncertainty inside TSL (see Pages 5 and 6).
    ${ }^{8}$ 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.

[^5]:    A The uncertainties of Norm $X, Y, Z$ do not affect the $E^{2}$-field uncertainty inside TSL (see Pages 5 and 6)
    ${ }^{B}$ Numerical linearization parameter: uncertainty not required.
    E Uncertainty is determined using the max. deviation from linear response applying rectangular distribution and is expressed for the square of the field value.

[^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.

[^7]:    A The uncertainties of Norm $X, Y, Z$ do not affect the $E^{2}$-field uncertainty inside TSL (see Pages 5 and 6)
    ${ }^{8}$ Numerical linearization parameter: uncertainty not required.
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