

## Appendix B - DAE & Probe Calibration Certificate

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



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Accreditation No.: SCS 0108

Client **Auden**

Certificate No: DAE4-914\_Dec18

### CALIBRATION CERTIFICATE

Object DAE4 - SD 000 D04 BK - SN: 914

Calibration procedure(s) QA CAL-06.v29  
Calibration procedure for the data acquisition electronics (DAE)

Calibration date: December 11, 2018

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

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

Calibration Equipment used (M&TE critical for calibration)

| Primary Standards             | ID #               | Cal Date (Certificate No.) | Scheduled Calibration  |
|-------------------------------|--------------------|----------------------------|------------------------|
| Keithley Multimeter Type 2001 | SN: 0810278        | 03-Sep-18 (No:23488)       | Sep-19                 |
| Secondary Standards           | ID #               | Check Date (in house)      | Scheduled Check        |
| Auto DAE Calibration Unit     | SE UWS 053 AA 1001 | 04-Jan-18 (in house check) | In house check: Jan-19 |
| Calibrator Box V2.1           | SE UMS 006 AA 1002 | 04-Jan-18 (in house check) | In house check: Jan-19 |

Calibrated by: Name Eric Hainfeld Function Laboratory Technician Signature

Approved by: Sven Kühn Deputy Manager

This calibration certificate shall not be reproduced except in full without written approval of the laboratory. Issued: December 11, 2018.

Certificate No: DAE4-914\_Dec18

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## Glossary

**DAE** data acquisition electronics  
**Connector angle** information used in DASY system to align probe sensor X to the robot coordinate system.

## Methods Applied and Interpretation of Parameters

- **DC Voltage Measurement:** Calibration Factor assessed for use in DASY system by comparison with a calibrated instrument traceable to national standards. The figure given corresponds to the full scale range of the voltmeter in the respective range.
- **Connector angle:** The angle of the connector is assessed measuring the angle mechanically by a tool inserted. Uncertainty is not required.
- The following parameters as documented in the Appendix contain technical information as a result from the performance test and require no uncertainty.
  - **DC Voltage Measurement Linearity:** Verification of the Linearity at +10% and -10% of the nominal calibration voltage. Influence of offset voltage is included in this measurement.
  - **Common mode sensitivity:** Influence of a positive or negative common mode voltage on the differential measurement.
  - **Channel separation:** Influence of a voltage on the neighbor channels not subject to an input voltage.
  - **AD Converter Values with inputs shorted:** Values on the internal AD converter corresponding to zero input voltage
  - **Input Offset Measurement:** Output voltage and statistical results over a large number of zero voltage measurements.
  - **Input Offset Current:** Typical value for information; Maximum channel input offset current, not considering the input resistance.
  - **Input resistance:** Typical value for information; DAE input resistance at the connector, during internal auto-zeroing and during measurement.
  - **Low Battery Alarm Voltage:** Typical value for information. Below this voltage, a battery alarm signal is generated.
  - **Power consumption:** Typical value for information. Supply currents in various operating modes.

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### DC Voltage Measurement

A/D - Converter Resolution nominal

High Range: 1LSB = 6.1 $\mu$ V , full range = -100...+300 mV

Low Range: 1LSB = 61nV , full range = -1.....+3mV

DASY measurement parameters: Auto Zero Time: 3 sec; Measuring time: 3 sec

| Calibration Factors | X                         | Y                         | Z                         |
|---------------------|---------------------------|---------------------------|---------------------------|
| High Range          | 405.118 $\pm$ 0.02% (k=2) | 404.309 $\pm$ 0.02% (k=2) | 403.887 $\pm$ 0.02% (k=2) |
| Low Range           | 3.99249 $\pm$ 1.50% (k=2) | 3.98909 $\pm$ 1.50% (k=2) | 3.99066 $\pm$ 1.50% (k=2) |

### Connector Angle

|                                           |                                    |
|-------------------------------------------|------------------------------------|
| Connector Angle to be used in DASY system | 64.0 $^{\circ}$ $\pm$ 1 $^{\circ}$ |
|-------------------------------------------|------------------------------------|

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## Appendix (Additional assessments outside the scope of SCS0108)

### 1. DC Voltage Linearity

| High Range        | Reading ( $\mu\text{V}$ ) | Difference ( $\mu\text{V}$ ) | Error (%) |
|-------------------|---------------------------|------------------------------|-----------|
| Channel X + Input | 199998.58                 | 2.11                         | 0.00      |
| Channel X + Input | 19998.57                  | -2.75                        | -0.01     |
| Channel X - Input | -20000.73                 | 1.25                         | -0.01     |
| Channel Y + Input | 199998.17                 | 2.01                         | 0.00      |
| Channel Y + Input | 19997.28                  | -3.97                        | -0.02     |
| Channel Y - Input | -20001.99                 | -0.10                        | 0.00      |
| Channel Z + Input | 199997.18                 | 0.68                         | 0.00      |
| Channel Z + Input | 19998.61                  | -2.66                        | -0.01     |
| Channel Z - Input | -20002.03                 | -0.10                        | 0.00      |

| Low Range         | Reading ( $\mu\text{V}$ ) | Difference ( $\mu\text{V}$ ) | Error (%) |
|-------------------|---------------------------|------------------------------|-----------|
| Channel X + Input | 2001.17                   | 0.30                         | 0.02      |
| Channel X + Input | 200.57                    | -0.58                        | -0.29     |
| Channel X - Input | -199.13                   | -0.34                        | 0.17      |
| Channel Y + Input | 2000.87                   | -0.05                        | -0.00     |
| Channel Y + Input | 200.49                    | -0.62                        | -0.31     |
| Channel Y - Input | -199.14                   | -0.42                        | 0.21      |
| Channel Z + Input | 2000.66                   | -0.18                        | -0.01     |
| Channel Z + Input | 200.17                    | -0.94                        | -0.47     |
| Channel Z - Input | -200.12                   | -1.35                        | 0.68      |

### 2. Common mode sensitivity

DASY measurement parameters: Auto Zero Time: 3 sec; Measuring time: 3 sec

|           | Common mode Input Voltage (mV) | High Range Average Reading ( $\mu\text{V}$ ) | Low Range Average Reading ( $\mu\text{V}$ ) |
|-----------|--------------------------------|----------------------------------------------|---------------------------------------------|
| Channel X | 200                            | -12.83                                       | -14.43                                      |
|           | -200                           | 15.19                                        | 13.34                                       |
| Channel Y | 200                            | -5.26                                        | -5.22                                       |
|           | -200                           | 4.18                                         | 4.10                                        |
| Channel Z | 200                            | 5.91                                         | 5.36                                        |
|           | -200                           | -7.27                                        | -7.63                                       |

### 3. Channel separation

DASY measurement parameters: Auto Zero Time: 3 sec; Measuring time: 3 sec

|           | Input Voltage (mV) | Channel X ( $\mu\text{V}$ ) | Channel Y ( $\mu\text{V}$ ) | Channel Z ( $\mu\text{V}$ ) |
|-----------|--------------------|-----------------------------|-----------------------------|-----------------------------|
| Channel X | 200                | -                           | 3.18                        | -4.63                       |
| Channel Y | 200                | 7.77                        | -                           | 2.34                        |
| Channel Z | 200                | 9.02                        | 5.71                        | -                           |

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**4. AD-Converter Values with inputs shorted**

DASY measurement parameters: Auto Zero Time: 3 sec; Measuring time: 3 sec

|           | High Range (LSB) | Low Range (LSB) |
|-----------|------------------|-----------------|
| Channel X | 16113            | 12727           |
| Channel Y | 16145            | 15429           |
| Channel Z | 16017            | 14873           |

**5. Input Offset Measurement**

DASY measurement parameters: Auto Zero Time: 3 sec; Measuring time: 3 sec

Input 10M $\Omega$ 

|           | Average ( $\mu$ V) | min. Offset ( $\mu$ V) | max. Offset ( $\mu$ V) | Std. Deviation ( $\mu$ V) |
|-----------|--------------------|------------------------|------------------------|---------------------------|
| Channel X | 0.17               | -0.89                  | 1.03                   | 0.39                      |
| Channel Y | 1.31               | -0.62                  | 2.92                   | 0.71                      |
| Channel Z | 0.01               | -1.10                  | 1.53                   | 0.60                      |

**6. Input Offset Current**

Nominal input circuitry offset current on all channels: &lt;25fA

**7. Input Resistance** (Typical values for information)

|           | Zeroing (kOhm) | Measuring (MOhm) |
|-----------|----------------|------------------|
| Channel X | 200            | 200              |
| Channel Y | 200            | 200              |
| Channel Z | 200            | 200              |

**8. Low Battery Alarm Voltage** (Typical values for information)

| Typical values | Alarm Level (VDC) |
|----------------|-------------------|
| Supply (+ Vcc) | +7.9              |
| Supply (- Vcc) | -7.6              |

**9. Power Consumption** (Typical values for information)

| Typical values | Switched off (mA) | Stand by (mA) | Transmitting (mA) |
|----------------|-------------------|---------------|-------------------|
| Supply (+ Vcc) | +0.01             | +6            | +14               |
| Supply (- Vcc) | -0.01             | -8            | -9                |

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Certificate No: EX3-3801\_Jun18

## CALIBRATION CERTIFICATE

Object EX3DV4 - SN:3801

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

Calibration date: June 26, 2018

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

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

Calibration Equipment used (M&TE critical for calibration)

| Primary Standards          | ID               | Cal Date (Certificate No.)        | Scheduled Calibration  |
|----------------------------|------------------|-----------------------------------|------------------------|
| Power meter NRP            | SN: 104778       | 04-Apr-18 (No. 217-02672/02673)   | Apr-19                 |
| Power sensor NRP-Z91       | SN: 103244       | 04-Apr-18 (No. 217-02672)         | Apr-19                 |
| Power sensor NRP-Z91       | SN: 103245       | 04-Apr-18 (No. 217-02673)         | Apr-19                 |
| Reference 20 dB Attenuator | SN: S5277 (20x)  | 04-Apr-18 (No. 217-02682)         | Apr-19                 |
| Reference Probe ES3DV2     | SN: 3013         | 30-Dec-17 (No. ES3-3013_Dec17)    | Dec-18                 |
| DAE4                       | SN: 860          | 21-Dec-17 (No. DAE4-860_Dec17)    | Dec-18                 |
| Secondary Standards        | ID               | Check Date (in house)             | Scheduled Check        |
| Power meter E4419B         | SN: GB41293874   | 06-Apr-16 (in house check Jun-18) | In house check: Jun-20 |
| Power sensor E4412A        | SN: MY41498087   | 06-Apr-16 (in house check Jun-18) | In house check: Jun-20 |
| Power sensor E4412A        | SN: 000110210    | 06-Apr-16 (in house check Jun-18) | In house check: Jun-20 |
| RF generator HP 8648C      | SN: US3642U01700 | 04-Aug-99 (in house check Jun-18) | In house check: Jun-20 |
| Network Analyzer HP 8753E  | SN: US37390585   | 18-Oct-01 (in house check Oct-17) | In house check: Oct-18 |

|                                                                                                                 |                         |                                   |                       |
|-----------------------------------------------------------------------------------------------------------------|-------------------------|-----------------------------------|-----------------------|
| Calibrated by:                                                                                                  | Name<br>Claudio Leubler | Function<br>Laboratory Technician | Signature<br>         |
| Approved by:                                                                                                    | Katja Pokovic           | Technical Manager                 |                       |
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## Glossary:

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

## Calibration is Performed According to the Following Standards:

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

## Methods Applied and Interpretation of Parameters:

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

Certificate No: EX3-3801\_Jun18

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EX3DV4 – SN:3801

June 26, 2018

# Probe EX3DV4

## SN:3801

Manufactured: April 5, 2011  
Calibrated: June 26, 2018

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

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**DASY/EASY - Parameters of Probe: EX3DV4 - SN:3801****Basic Calibration Parameters**

|                                                           | Sensor X | Sensor Y | Sensor Z | Unc (k=2)    |
|-----------------------------------------------------------|----------|----------|----------|--------------|
| Norm ( $\mu\text{V}/(\text{V}/\text{m})^2$ ) <sup>A</sup> | 0.53     | 0.57     | 0.52     | $\pm 10.1\%$ |
| DCP (mV) <sup>B</sup>                                     | 101.8    | 101.3    | 96.8     |              |

**Modulation Calibration Parameters**

| UID | Communication System Name |   | A<br>dB | B<br>dB $\sqrt{\mu\text{V}}$ | C   | D<br>dB | VR<br>mV | Unc <sup>E</sup><br>(k=2) |
|-----|---------------------------|---|---------|------------------------------|-----|---------|----------|---------------------------|
| 0   | CW                        | X | 0.0     | 0.0                          | 1.0 | 0.00    | 166.4    | $\pm 3.0\%$               |
|     |                           | Y | 0.0     | 0.0                          | 1.0 |         | 173.4    |                           |
|     |                           | Z | 0.0     | 0.0                          | 1.0 |         | 164.7    |                           |

Note: For details on UID parameters see Appendix.

**Sensor Model Parameters**

|   | C1<br>fF | C2<br>fF | $\alpha$<br>$\text{V}^{-1}$ | T1<br>$\text{ms}\cdot\text{V}^{-2}$ | T2<br>$\text{ms}\cdot\text{V}^{-1}$ | T3<br>ms | T4<br>$\text{V}^{-2}$ | T5<br>$\text{V}^{-1}$ | T6    |
|---|----------|----------|-----------------------------|-------------------------------------|-------------------------------------|----------|-----------------------|-----------------------|-------|
| X | 43.02    | 327.9    | 36.76                       | 18.19                               | 0.894                               | 5.085    | 0.000                 | 0.523                 | 1.011 |
| Y | 48.75    | 365.0    | 35.77                       | 24.10                               | 0.825                               | 5.100    | 0.855                 | 0.468                 | 1.008 |
| Z | 43.58    | 332.6    | 36.84                       | 15.47                               | 0.783                               | 5.090    | 0.000                 | 0.516                 | 1.010 |

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

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

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## DASY/EASY - Parameters of Probe: EX3DV4 - SN:3801

### Calibration Parameter Determined in Head Tissue Simulating Media

| f (MHz) <sup>C</sup> | Relative Permittivity <sup>E</sup> | Conductivity (S/m) <sup>F</sup> | ConvF X | ConvF Y | ConvF Z | Alpha <sup>G</sup> | Depth <sup>H</sup> (mm) | Unc (k=2) |
|----------------------|------------------------------------|---------------------------------|---------|---------|---------|--------------------|-------------------------|-----------|
| 150                  | 52.3                               | 0.76                            | 11.05   | 11.05   | 11.05   | 0.00               | 1.00                    | ± 13.3 %  |
| 450                  | 43.5                               | 0.87                            | 9.90    | 9.90    | 9.90    | 0.15               | 1.30                    | ± 13.3 %  |
| 750                  | 41.9                               | 0.89                            | 9.50    | 9.50    | 9.50    | 0.43               | 0.96                    | ± 12.0 %  |
| 835                  | 41.5                               | 0.90                            | 9.08    | 9.08    | 9.08    | 0.51               | 0.85                    | ± 12.0 %  |
| 900                  | 41.5                               | 0.97                            | 8.95    | 8.95    | 8.95    | 0.51               | 0.87                    | ± 12.0 %  |
| 1450                 | 40.5                               | 1.20                            | 8.17    | 8.17    | 8.17    | 0.33               | 0.80                    | ± 12.0 %  |
| 1750                 | 40.1                               | 1.37                            | 8.10    | 8.10    | 8.10    | 0.39               | 0.84                    | ± 12.0 %  |
| 1900                 | 40.0                               | 1.40                            | 7.78    | 7.78    | 7.78    | 0.36               | 0.84                    | ± 12.0 %  |
| 2100                 | 39.8                               | 1.49                            | 7.90    | 7.90    | 7.90    | 0.35               | 0.80                    | ± 12.0 %  |
| 2450                 | 39.2                               | 1.80                            | 7.08    | 7.08    | 7.08    | 0.35               | 0.86                    | ± 12.0 %  |
| 2600                 | 39.0                               | 1.96                            | 6.94    | 6.94    | 6.94    | 0.40               | 0.86                    | ± 12.0 %  |
| 3500                 | 37.9                               | 2.91                            | 6.88    | 6.88    | 6.88    | 0.25               | 1.20                    | ± 13.1 %  |
| 5200                 | 36.0                               | 4.66                            | 4.93    | 4.93    | 4.93    | 0.40               | 1.80                    | ± 13.1 %  |
| 5300                 | 35.9                               | 4.76                            | 4.70    | 4.70    | 4.70    | 0.40               | 1.80                    | ± 13.1 %  |
| 5500                 | 35.6                               | 4.96                            | 4.82    | 4.82    | 4.82    | 0.40               | 1.80                    | ± 13.1 %  |
| 5600                 | 35.5                               | 5.07                            | 4.69    | 4.69    | 4.69    | 0.40               | 1.80                    | ± 13.1 %  |
| 5800                 | 35.3                               | 5.27                            | 4.61    | 4.61    | 4.61    | 0.40               | 1.80                    | ± 13.1 %  |

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

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

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

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## DASY/EASY - Parameters of Probe: EX3DV4 - SN:3801

### Calibration Parameter Determined in Body Tissue Simulating Media

| f (MHz) <sup>C</sup> | Relative Permittivity <sup>F</sup> | Conductivity (S/m) <sup>F</sup> | ConvF X | ConvF Y | ConvF Z | Alpha <sup>G</sup> | Depth (mm) <sup>G</sup> | Unc (k=2) |
|----------------------|------------------------------------|---------------------------------|---------|---------|---------|--------------------|-------------------------|-----------|
| 150                  | 61.9                               | 0.80                            | 10.74   | 10.74   | 10.74   | 0.00               | 1.00                    | ± 13.3 %  |
| 450                  | 56.7                               | 0.94                            | 10.16   | 10.16   | 10.16   | 0.09               | 1.25                    | ± 13.3 %  |
| 750                  | 55.5                               | 0.96                            | 9.19    | 9.19    | 9.19    | 0.49               | 0.83                    | ± 12.0 %  |
| 835                  | 55.2                               | 0.97                            | 9.04    | 9.04    | 9.04    | 0.53               | 0.80                    | ± 12.0 %  |
| 900                  | 55.0                               | 1.05                            | 9.01    | 9.01    | 9.01    | 0.44               | 0.89                    | ± 12.0 %  |
| 1450                 | 54.0                               | 1.30                            | 7.93    | 7.93    | 7.93    | 0.33               | 0.80                    | ± 12.0 %  |
| 1750                 | 53.4                               | 1.49                            | 7.68    | 7.68    | 7.68    | 0.49               | 0.82                    | ± 12.0 %  |
| 1900                 | 53.3                               | 1.52                            | 7.37    | 7.37    | 7.37    | 0.38               | 0.86                    | ± 12.0 %  |
| 2100                 | 53.2                               | 1.62                            | 7.79    | 7.79    | 7.79    | 0.42               | 0.80                    | ± 12.0 %  |
| 2450                 | 52.7                               | 1.95                            | 7.19    | 7.19    | 7.19    | 0.41               | 0.84                    | ± 12.0 %  |
| 2600                 | 52.5                               | 2.16                            | 7.01    | 7.01    | 7.01    | 0.30               | 0.99                    | ± 12.0 %  |
| 3500                 | 51.3                               | 3.31                            | 6.90    | 6.90    | 6.90    | 0.25               | 1.25                    | ± 13.1 %  |
| 5200                 | 49.0                               | 5.30                            | 4.23    | 4.23    | 4.23    | 0.50               | 1.90                    | ± 13.1 %  |
| 5300                 | 48.9                               | 5.42                            | 4.09    | 4.09    | 4.09    | 0.50               | 1.90                    | ± 13.1 %  |
| 5500                 | 48.6                               | 5.65                            | 3.94    | 3.94    | 3.94    | 0.50               | 1.90                    | ± 13.1 %  |
| 5600                 | 48.5                               | 5.77                            | 3.80    | 3.80    | 3.80    | 0.50               | 1.90                    | ± 13.1 %  |
| 5800                 | 48.2                               | 6.00                            | 3.95    | 3.95    | 3.95    | 0.50               | 1.90                    | ± 13.1 %  |

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

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

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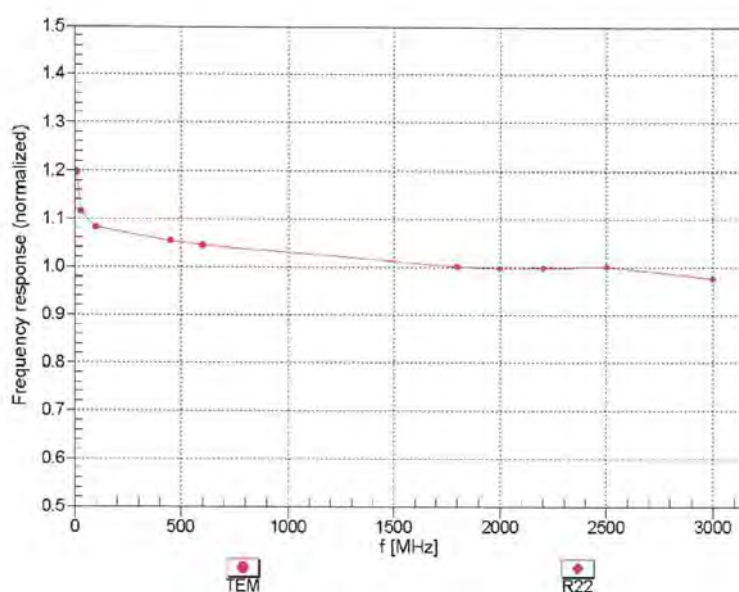
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## Frequency Response of E-Field (TEM-Cell:ifi110 EXX, Waveguide: R22)



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

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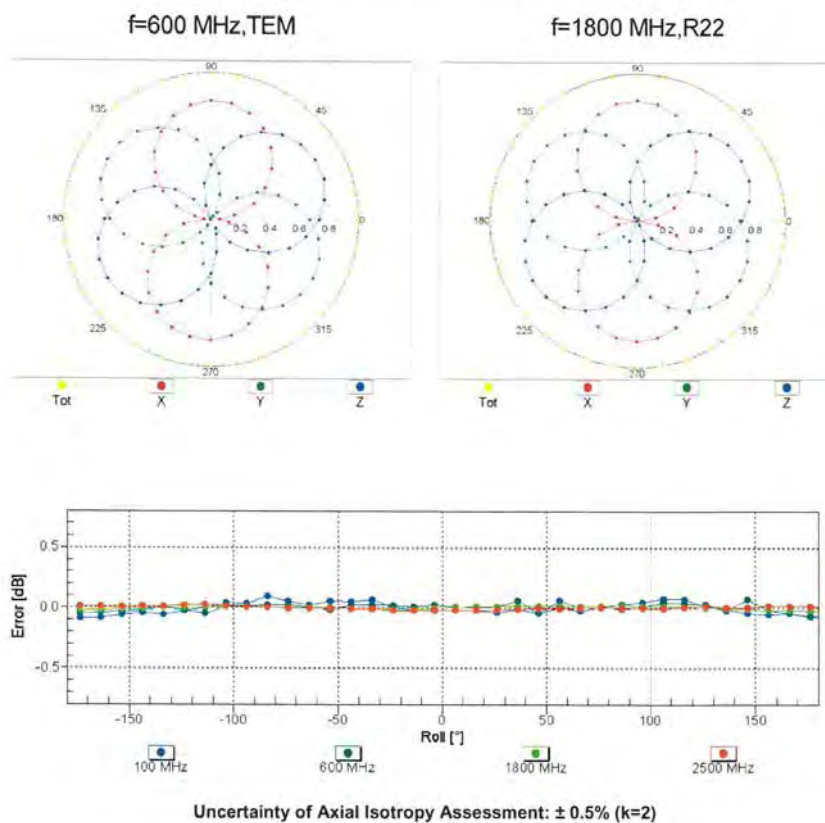
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## Receiving Pattern ( $\phi$ ), $\theta = 0^\circ$



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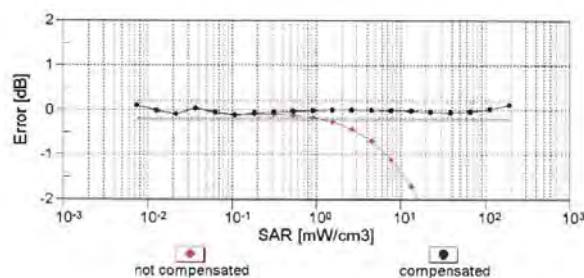
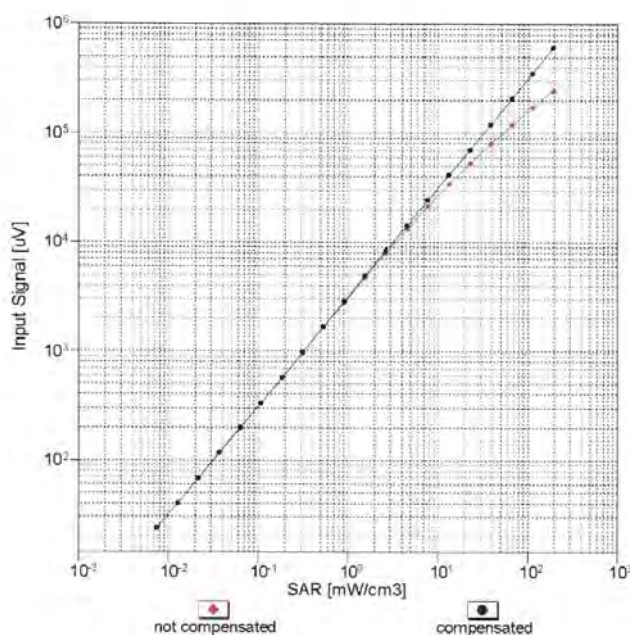
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## Dynamic Range $f(\text{SAR}_{\text{head}})$ (TEM cell, $f_{\text{eval}} = 1900 \text{ MHz}$ )



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

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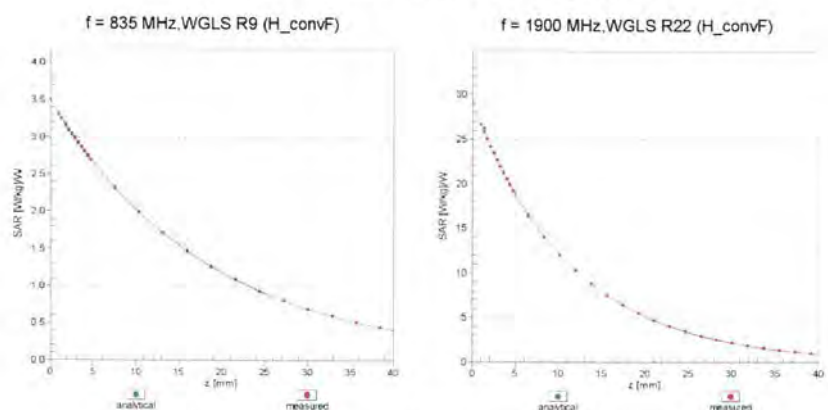
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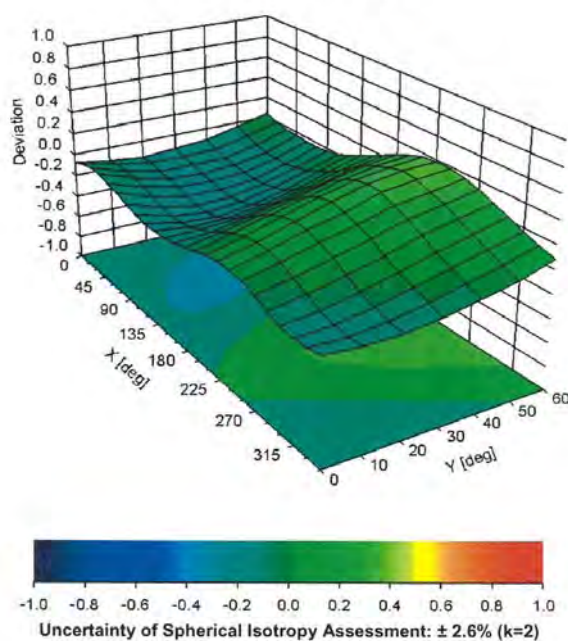
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## Conversion Factor Assessment



## Deviation from Isotropy in Liquid

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



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**DASY/EASY - Parameters of Probe: EX3DV4 - SN:3801****Other Probe Parameters**

|                                               |            |
|-----------------------------------------------|------------|
| Sensor Arrangement                            | Triangular |
| Connector Angle (°)                           | 126.3      |
| Mechanical Surface Detection Mode             | enabled    |
| Optical Surface Detection Mode                | disabled   |
| Probe Overall Length                          | 337 mm     |
| Probe Body Diameter                           | 10 mm      |
| Tip Length                                    | 9 mm       |
| Tip Diameter                                  | 2.5 mm     |
| Probe Tip to Sensor X Calibration Point       | 1 mm       |
| Probe Tip to Sensor Y Calibration Point       | 1 mm       |
| Probe Tip to Sensor Z Calibration Point       | 1 mm       |
| Recommended Measurement Distance from Surface | 1.4 mm     |

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### Appendix: Modulation Calibration Parameters

| UID           | Communication System Name                     |   | A<br>dB | B<br>dB/μV | C     | D<br>dB | VR<br>mV | Max<br>Unc <sup>E</sup><br>(k=2) |
|---------------|-----------------------------------------------|---|---------|------------|-------|---------|----------|----------------------------------|
| 0             | CW                                            | X | 0.00    | 0.00       | 1.00  | 0.00    | 166.4    | ± 3.0 %                          |
|               |                                               | Y | 0.00    | 0.00       | 1.00  |         | 173.4    |                                  |
|               |                                               | Z | 0.00    | 0.00       | 1.00  |         | 164.7    |                                  |
| 10010-<br>CAA | SAR Validation (Square, 100ms, 10ms)          | X | 3.37    | 69.78      | 12.74 | 10.00   | 20.0     | ± 9.6 %                          |
|               |                                               | Y | 6.44    | 76.86      | 15.76 |         | 20.0     |                                  |
|               |                                               | Z | 3.21    | 69.39      | 12.43 |         | 20.0     |                                  |
| 10011-<br>CAB | UMTS-FDD (WCDMA)                              | X | 0.83    | 64.38      | 12.95 | 0.00    | 150.0    | ± 9.6 %                          |
|               |                                               | Y | 0.99    | 67.13      | 14.98 |         | 150.0    |                                  |
|               |                                               | Z | 0.83    | 64.35      | 12.93 |         | 150.0    |                                  |
| 10012-<br>CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps)      | X | 1.10    | 62.97      | 14.26 | 0.41    | 150.0    | ± 9.6 %                          |
|               |                                               | Y | 1.20    | 64.42      | 15.48 |         | 150.0    |                                  |
|               |                                               | Z | 1.09    | 62.83      | 14.21 |         | 150.0    |                                  |
| 10013-<br>CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps) | X | 4.80    | 66.58      | 16.95 | 1.46    | 150.0    | ± 9.6 %                          |
|               |                                               | Y | 4.93    | 66.87      | 17.23 |         | 150.0    |                                  |
|               |                                               | Z | 4.79    | 66.54      | 16.94 |         | 150.0    |                                  |
| 10021-<br>DAC | GSM-FDD (TDMA, GMSK)                          | X | 100.00  | 116.48     | 28.92 | 9.39    | 50.0     | ± 9.6 %                          |
|               |                                               | Y | 100.00  | 116.87     | 29.39 |         | 50.0     |                                  |
|               |                                               | Z | 100.00  | 116.44     | 28.77 |         | 50.0     |                                  |
| 10023-<br>DAC | GPRS-FDD (TDMA, GMSK, TN 0)                   | X | 100.00  | 116.20     | 28.84 | 9.57    | 50.0     | ± 9.6 %                          |
|               |                                               | Y | 100.00  | 116.71     | 29.35 |         | 50.0     |                                  |
|               |                                               | Z | 100.00  | 116.08     | 28.65 |         | 50.0     |                                  |
| 10024-<br>DAC | GPRS-FDD (TDMA, GMSK, TN 0-1)                 | X | 100.00  | 113.53     | 26.55 | 6.56    | 60.0     | ± 9.6 %                          |
|               |                                               | Y | 100.00  | 114.45     | 27.34 |         | 60.0     |                                  |
|               |                                               | Z | 100.00  | 114.34     | 26.74 |         | 60.0     |                                  |
| 10025-<br>DAC | EDGE-FDD (TDMA, 8PSK, TN 0)                   | X | 4.69    | 72.18      | 26.92 | 12.57   | 50.0     | ± 9.6 %                          |
|               |                                               | Y | 15.97   | 110.85     | 44.06 |         | 50.0     |                                  |
|               |                                               | Z | 4.44    | 71.01      | 26.44 |         | 50.0     |                                  |
| 10026-<br>DAC | EDGE-FDD (TDMA, 8PSK, TN 0-1)                 | X | 11.01   | 95.24      | 33.64 | 9.56    | 60.0     | ± 9.6 %                          |
|               |                                               | Y | 27.30   | 117.67     | 41.25 |         | 60.0     |                                  |
|               |                                               | Z | 9.87    | 93.32      | 33.15 |         | 60.0     |                                  |
| 10027-<br>DAC | GPRS-FDD (TDMA, GMSK, TN 0-1-2)               | X | 100.00  | 112.38     | 25.28 | 4.80    | 80.0     | ± 9.6 %                          |
|               |                                               | Y | 100.00  | 114.07     | 26.45 |         | 80.0     |                                  |
|               |                                               | Z | 100.00  | 113.67     | 25.65 |         | 80.0     |                                  |
| 10028-<br>DAC | GPRS-FDD (TDMA, GMSK, TN 0-1-2-3)             | X | 100.00  | 111.82     | 24.34 | 3.55    | 100.0    | ± 9.6 %                          |
|               |                                               | Y | 100.00  | 114.73     | 26.07 |         | 100.0    |                                  |
|               |                                               | Z | 100.00  | 113.39     | 24.82 |         | 100.0    |                                  |
| 10029-<br>DAC | EDGE-FDD (TDMA, 8PSK, TN 0-1-2)               | X | 6.96    | 84.53      | 28.40 | 7.80    | 80.0     | ± 9.6 %                          |
|               |                                               | Y | 12.11   | 97.00      | 33.17 |         | 80.0     |                                  |
|               |                                               | Z | 6.28    | 82.79      | 27.89 |         | 80.0     |                                  |
| 10030-<br>CAA | IEEE 802.15.1 Bluetooth (GFSK, DH1)           | X | 100.00  | 111.17     | 25.02 | 5.30    | 70.0     | ± 9.6 %                          |
|               |                                               | Y | 100.00  | 112.86     | 26.19 |         | 70.0     |                                  |
|               |                                               | Z | 100.00  | 112.10     | 25.26 |         | 70.0     |                                  |
| 10031-<br>CAA | IEEE 802.15.1 Bluetooth (GFSK, DH3)           | X | 100.00  | 105.29     | 20.26 | 1.88    | 100.0    | ± 9.6 %                          |
|               |                                               | Y | 100.00  | 113.55     | 24.19 |         | 100.0    |                                  |
|               |                                               | Z | 100.00  | 105.78     | 20.26 |         | 100.0    |                                  |

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|-----------|-----------------------------------------------------|---|--------|--------|-------|-------|-------|---------|
| 10032-CAA | IEEE 802.15.1 Bluetooth (GFSK, DH5)                 | X | 100.00 | 101.22 | 17.75 | 1.17  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 100.00 | 116.20 | 24.29 |       | 100.0 |         |
|           |                                                     | Z | 100.00 | 100.56 | 17.31 |       | 100.0 |         |
| 10033-CAA | IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH1)           | X | 18.92  | 99.43  | 26.35 | 5.30  | 70.0  | ± 9.6 % |
|           |                                                     | Y | 100.00 | 126.11 | 33.82 |       | 70.0  |         |
|           |                                                     | Z | 20.67  | 102.09 | 27.36 |       | 70.0  |         |
| 10034-CAA | IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH3)           | X | 3.06   | 75.57  | 16.71 | 1.88  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 9.98   | 92.25  | 23.17 |       | 100.0 |         |
|           |                                                     | Z | 2.90   | 75.55  | 16.88 |       | 100.0 |         |
| 10035-CAA | IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH5)           | X | 1.83   | 70.29  | 14.26 | 1.17  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 4.00   | 80.96  | 19.27 |       | 100.0 |         |
|           |                                                     | Z | 1.74   | 70.11  | 14.32 |       | 100.0 |         |
| 10036-CAA | IEEE 802.15.1 Bluetooth (8-DPSK, DH1)               | X | 30.39  | 106.85 | 28.45 | 5.30  | 70.0  | ± 9.6 % |
|           |                                                     | Y | 100.00 | 126.44 | 33.98 |       | 70.0  |         |
|           |                                                     | Z | 35.81  | 110.82 | 29.76 |       | 70.0  |         |
| 10037-CAA | IEEE 802.15.1 Bluetooth (8-DPSK, DH3)               | X | 2.84   | 74.70  | 16.36 | 1.88  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 8.90   | 90.73  | 22.69 |       | 100.0 |         |
|           |                                                     | Z | 2.69   | 74.65  | 16.52 |       | 100.0 |         |
| 10038-CAA | IEEE 802.15.1 Bluetooth (8-DPSK, DH5)               | X | 1.85   | 70.62  | 14.50 | 1.17  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 4.14   | 81.72  | 19.65 |       | 100.0 |         |
|           |                                                     | Z | 1.75   | 70.43  | 14.57 |       | 100.0 |         |
| 10039-CAB | CDMA2000 (1xRTT, RC1)                               | X | 1.12   | 65.78  | 11.74 | 0.00  | 150.0 | ± 9.6 % |
|           |                                                     | Y | 1.72   | 71.14  | 15.18 |       | 150.0 |         |
|           |                                                     | Z | 1.13   | 65.83  | 11.81 |       | 150.0 |         |
| 10042-CAB | IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Halfrate) | X | 100.00 | 111.21 | 25.70 | 7.78  | 50.0  | ± 9.6 % |
|           |                                                     | Y | 100.00 | 112.25 | 26.50 |       | 50.0  |         |
|           |                                                     | Z | 100.00 | 111.42 | 25.65 |       | 50.0  |         |
| 10044-CAA | IS-91/EIA/TIA-553 FDD (FDMA, FM)                    | X | 0.04   | 119.18 | 11.18 | 0.00  | 150.0 | ± 9.6 % |
|           |                                                     | Y | 0.01   | 110.75 | 9.59  |       | 150.0 |         |
|           |                                                     | Z | 0.04   | 119.30 | 10.88 |       | 150.0 |         |
| 10048-CAA | DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24)           | X | 100.00 | 116.95 | 30.57 | 13.80 | 25.0  | ± 9.6 % |
|           |                                                     | Y | 100.00 | 118.90 | 31.58 |       | 25.0  |         |
|           |                                                     | Z | 100.00 | 115.50 | 29.86 |       | 25.0  |         |
| 10049-CAA | DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12)         | X | 100.00 | 116.02 | 29.07 | 10.79 | 40.0  | ± 9.6 % |
|           |                                                     | Y | 100.00 | 116.75 | 29.64 |       | 40.0  |         |
|           |                                                     | Z | 100.00 | 115.45 | 28.70 |       | 40.0  |         |
| 10056-CAA | UMTS-TDD (TD-SCDMA, 1.28 Mcps)                      | X | 26.45  | 101.81 | 27.79 | 9.03  | 50.0  | ± 9.6 % |
|           |                                                     | Y | 95.09  | 123.36 | 33.94 |       | 50.0  |         |
|           |                                                     | Z | 35.26  | 107.00 | 29.30 |       | 50.0  |         |
| 10058-DAC | EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)                   | X | 5.27   | 78.98  | 25.36 | 6.55  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 7.85   | 87.34  | 28.81 |       | 100.0 |         |
|           |                                                     | Z | 4.82   | 77.53  | 24.91 |       | 100.0 |         |
| 10059-CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps)            | X | 1.16   | 64.21  | 14.95 | 0.61  | 110.0 | ± 9.6 % |
|           |                                                     | Y | 1.31   | 66.27  | 16.46 |       | 110.0 |         |
|           |                                                     | Z | 1.14   | 63.97  | 14.87 |       | 110.0 |         |
| 10060-CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps)          | X | 8.60   | 97.03  | 24.51 | 1.30  | 110.0 | ± 9.6 % |
|           |                                                     | Y | 100.00 | 133.40 | 34.07 |       | 110.0 |         |
|           |                                                     | Z | 7.00   | 95.42  | 24.31 |       | 110.0 |         |

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|-----------|------------------------------------------------|---|-------|--------|-------|------|-------|---------|
| 10061-CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps)      | X | 3.49  | 81.85  | 22.13 | 2.04 | 110.0 | ± 9.6 % |
|           |                                                | Y | 10.88 | 100.68 | 28.62 |      | 110.0 |         |
|           |                                                | Z | 3.06  | 80.49  | 21.85 |      | 110.0 |         |
| 10062-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps)       | X | 4.56  | 66.41  | 16.26 | 0.49 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.69  | 66.72  | 16.55 |      | 100.0 |         |
|           |                                                | Z | 4.56  | 66.38  | 16.26 |      | 100.0 |         |
| 10063-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps)       | X | 4.58  | 66.53  | 16.38 | 0.72 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.72  | 66.85  | 16.68 |      | 100.0 |         |
|           |                                                | Z | 4.58  | 66.50  | 16.38 |      | 100.0 |         |
| 10064-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps)      | X | 4.86  | 66.80  | 16.63 | 0.86 | 100.0 | ± 9.6 % |
|           |                                                | Y | 5.01  | 67.14  | 16.92 |      | 100.0 |         |
|           |                                                | Z | 4.86  | 66.78  | 16.63 |      | 100.0 |         |
| 10065-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps)      | X | 4.75  | 66.74  | 16.76 | 1.21 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.90  | 67.11  | 17.07 |      | 100.0 |         |
|           |                                                | Z | 4.75  | 66.71  | 16.76 |      | 100.0 |         |
| 10066-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps)      | X | 4.77  | 66.80  | 16.95 | 1.46 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.93  | 67.18  | 17.28 |      | 100.0 |         |
|           |                                                | Z | 4.77  | 66.76  | 16.95 |      | 100.0 |         |
| 10067-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps)      | X | 5.09  | 67.08  | 17.46 | 2.04 | 100.0 | ± 9.6 % |
|           |                                                | Y | 5.24  | 67.39  | 17.76 |      | 100.0 |         |
|           |                                                | Z | 5.08  | 67.03  | 17.46 |      | 100.0 |         |
| 10068-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps)      | X | 5.14  | 67.13  | 17.70 | 2.55 | 100.0 | ± 9.6 % |
|           |                                                | Y | 5.32  | 67.54  | 18.04 |      | 100.0 |         |
|           |                                                | Z | 5.13  | 67.08  | 17.69 |      | 100.0 |         |
| 10069-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps)      | X | 5.22  | 67.17  | 17.91 | 2.67 | 100.0 | ± 9.6 % |
|           |                                                | Y | 5.40  | 67.53  | 18.24 |      | 100.0 |         |
|           |                                                | Z | 5.22  | 67.11  | 17.90 |      | 100.0 |         |
| 10071-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps)  | X | 4.91  | 66.72  | 17.29 | 1.99 | 100.0 | ± 9.6 % |
|           |                                                | Y | 5.04  | 67.03  | 17.58 |      | 100.0 |         |
|           |                                                | Z | 4.90  | 66.67  | 17.29 |      | 100.0 |         |
| 10072-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps) | X | 4.90  | 67.07  | 17.53 | 2.30 | 100.0 | ± 9.6 % |
|           |                                                | Y | 5.05  | 67.46  | 17.86 |      | 100.0 |         |
|           |                                                | Z | 4.89  | 67.01  | 17.52 |      | 100.0 |         |
| 10073-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps) | X | 4.99  | 67.32  | 17.91 | 2.83 | 100.0 | ± 9.6 % |
|           |                                                | Y | 5.14  | 67.73  | 18.26 |      | 100.0 |         |
|           |                                                | Z | 4.97  | 67.24  | 17.90 |      | 100.0 |         |
| 10074-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps) | X | 5.00  | 67.29  | 18.10 | 3.30 | 100.0 | ± 9.6 % |
|           |                                                | Y | 5.15  | 67.70  | 18.46 |      | 100.0 |         |
|           |                                                | Z | 4.97  | 67.19  | 18.08 |      | 100.0 |         |
| 10075-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps) | X | 5.05  | 67.46  | 18.45 | 3.82 | 90.0  | ± 9.6 % |
|           |                                                | Y | 5.22  | 67.96  | 18.86 |      | 90.0  |         |
|           |                                                | Z | 5.02  | 67.34  | 18.42 |      | 90.0  |         |
| 10076-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps) | X | 5.08  | 67.31  | 18.60 | 4.15 | 90.0  | ± 9.6 % |
|           |                                                | Y | 5.23  | 67.75  | 18.99 |      | 90.0  |         |
|           |                                                | Z | 5.05  | 67.18  | 18.57 |      | 90.0  |         |
| 10077-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps) | X | 5.11  | 67.39  | 18.71 | 4.30 | 90.0  | ± 9.6 % |
|           |                                                | Y | 5.26  | 67.83  | 19.09 |      | 90.0  |         |
|           |                                                | Z | 5.08  | 67.25  | 18.67 |      | 90.0  |         |

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|           |                                                     |   |        |        |       |      |       |         |
|-----------|-----------------------------------------------------|---|--------|--------|-------|------|-------|---------|
| 10081-CAB | CDMA2000 (1xRTT, RC3)                               | X | 0.58   | 62.15  | 9.26  | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 0.79   | 65.29  | 12.01 |      | 150.0 |         |
|           |                                                     | Z | 0.59   | 62.18  | 9.31  |      | 150.0 |         |
| 10082-CAB | IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Fullrate) | X | 0.89   | 60.00  | 5.00  | 4.77 | 80.0  | ± 9.6 % |
|           |                                                     | Y | 1.06   | 60.10  | 5.42  |      | 80.0  |         |
|           |                                                     | Z | 0.82   | 60.00  | 4.83  |      | 80.0  |         |
| 10090-DAC | GPRS-FDD (TDMA, GMSK, TN 0-4)                       | X | 100.00 | 113.61 | 26.61 | 6.56 | 60.0  | ± 9.6 % |
|           |                                                     | Y | 100.00 | 114.52 | 27.40 |      | 60.0  |         |
|           |                                                     | Z | 100.00 | 114.43 | 26.80 |      | 60.0  |         |
| 10097-CAB | UMTS-FDD (HSDPA)                                    | X | 1.61   | 65.84  | 14.20 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 1.79   | 67.45  | 15.49 |      | 150.0 |         |
|           |                                                     | Z | 1.61   | 65.80  | 14.19 |      | 150.0 |         |
| 10098-CAB | UMTS-FDD (HSUPA, Subtest 2)                         | X | 1.57   | 65.77  | 14.15 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 1.75   | 67.41  | 15.45 |      | 150.0 |         |
|           |                                                     | Z | 1.57   | 65.73  | 14.14 |      | 150.0 |         |
| 10099-DAC | EDGE-FDD (TDMA, 8PSK, TN 0-4)                       | X | 11.08  | 95.35  | 33.68 | 9.56 | 60.0  | ± 9.6 % |
|           |                                                     | Y | 27.49  | 117.79 | 41.28 |      | 60.0  |         |
|           |                                                     | Z | 9.94   | 93.45  | 33.20 |      | 60.0  |         |
| 10100-CAD | LTE-FDD (SC-FDMA, 100% RB, 20 MHz, QPSK)            | X | 2.79   | 68.48  | 15.57 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 3.10   | 70.20  | 16.56 |      | 150.0 |         |
|           |                                                     | Z | 2.79   | 68.46  | 15.56 |      | 150.0 |         |
| 10101-CAD | LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)          | X | 3.04   | 66.54  | 15.23 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 3.21   | 67.43  | 15.84 |      | 150.0 |         |
|           |                                                     | Z | 3.04   | 66.53  | 15.23 |      | 150.0 |         |
| 10102-CAD | LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)          | X | 3.15   | 66.58  | 15.37 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 3.32   | 67.39  | 15.93 |      | 150.0 |         |
|           |                                                     | Z | 3.15   | 66.57  | 15.36 |      | 150.0 |         |
| 10103-CAD | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK)            | X | 6.94   | 77.02  | 20.93 | 3.98 | 65.0  | ± 9.6 % |
|           |                                                     | Y | 8.30   | 79.59  | 21.98 |      | 65.0  |         |
|           |                                                     | Z | 6.60   | 76.51  | 20.82 |      | 65.0  |         |
| 10104-CAD | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)          | X | 6.60   | 74.37  | 20.62 | 3.98 | 65.0  | ± 9.6 % |
|           |                                                     | Y | 7.74   | 76.89  | 21.76 |      | 65.0  |         |
|           |                                                     | Z | 6.34   | 73.90  | 20.51 |      | 65.0  |         |
| 10105-CAD | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)          | X | 6.43   | 73.76  | 20.67 | 3.98 | 65.0  | ± 9.6 % |
|           |                                                     | Y | 7.21   | 75.46  | 21.47 |      | 65.0  |         |
|           |                                                     | Z | 6.12   | 73.09  | 20.46 |      | 65.0  |         |
| 10108-CAE | LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK)            | X | 2.42   | 67.75  | 15.36 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 2.70   | 69.42  | 16.38 |      | 150.0 |         |
|           |                                                     | Z | 2.42   | 67.73  | 15.35 |      | 150.0 |         |
| 10109-CAE | LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)          | X | 2.68   | 66.30  | 15.02 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 2.87   | 67.25  | 15.73 |      | 150.0 |         |
|           |                                                     | Z | 2.69   | 66.28  | 15.02 |      | 150.0 |         |
| 10110-CAE | LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)             | X | 1.93   | 66.75  | 14.78 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 2.19   | 68.51  | 15.97 |      | 150.0 |         |
|           |                                                     | Z | 1.93   | 66.73  | 14.77 |      | 150.0 |         |
| 10111-CAE | LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)           | X | 2.36   | 66.83  | 15.03 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 2.58   | 67.98  | 15.96 |      | 150.0 |         |
|           |                                                     | Z | 2.36   | 66.80  | 15.03 |      | 150.0 |         |

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|           |                                                |   |      |       |       |      |       |         |
|-----------|------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10112-CAE | LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)     | X | 2.81 | 66.38 | 15.13 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 2.99 | 67.24 | 15.78 |      | 150.0 |         |
|           |                                                | Z | 2.82 | 66.36 | 15.13 |      | 150.0 |         |
| 10113-CAE | LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)      | X | 2.51 | 67.07 | 15.23 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 2.73 | 68.12 | 16.09 |      | 150.0 |         |
|           |                                                | Z | 2.52 | 67.04 | 15.23 |      | 150.0 |         |
| 10114-CAC | IEEE 802.11n (HT Greenfield, 13.5 Mbps, BPSK)  | X | 4.99 | 66.82 | 16.16 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 5.10 | 67.13 | 16.38 |      | 150.0 |         |
|           |                                                | Z | 5.00 | 66.82 | 16.16 |      | 150.0 |         |
| 10115-CAC | IEEE 802.11n (HT Greenfield, 81 Mbps, 16-QAM)  | X | 5.25 | 66.91 | 16.21 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 5.40 | 67.27 | 16.46 |      | 150.0 |         |
|           |                                                | Z | 5.26 | 66.91 | 16.22 |      | 150.0 |         |
| 10116-CAC | IEEE 802.11n (HT Greenfield, 135 Mbps, 64-QAM) | X | 5.07 | 66.99 | 16.17 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 5.20 | 67.33 | 16.40 |      | 150.0 |         |
|           |                                                | Z | 5.08 | 66.99 | 16.17 |      | 150.0 |         |
| 10117-CAC | IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK)       | X | 4.96 | 66.69 | 16.10 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 5.07 | 67.00 | 16.33 |      | 150.0 |         |
|           |                                                | Z | 4.96 | 66.68 | 16.10 |      | 150.0 |         |
| 10118-CAC | IEEE 802.11n (HT Mixed, 81 Mbps, 16-QAM)       | X | 5.33 | 67.12 | 16.33 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 5.48 | 67.48 | 16.57 |      | 150.0 |         |
|           |                                                | Z | 5.34 | 67.12 | 16.33 |      | 150.0 |         |
| 10119-CAC | IEEE 802.11n (HT Mixed, 135 Mbps, 64-QAM)      | X | 5.06 | 66.96 | 16.16 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 5.17 | 67.27 | 16.38 |      | 150.0 |         |
|           |                                                | Z | 5.07 | 66.96 | 16.16 |      | 150.0 |         |
| 10140-CAD | LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)     | X | 3.18 | 66.58 | 15.28 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 3.35 | 67.40 | 15.85 |      | 150.0 |         |
|           |                                                | Z | 3.18 | 66.57 | 15.28 |      | 150.0 |         |
| 10141-CAD | LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)     | X | 3.31 | 66.74 | 15.49 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 3.48 | 67.49 | 16.02 |      | 150.0 |         |
|           |                                                | Z | 3.31 | 66.73 | 15.48 |      | 150.0 |         |
| 10142-CAD | LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK)        | X | 1.67 | 66.36 | 14.09 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 1.96 | 68.43 | 15.60 |      | 150.0 |         |
|           |                                                | Z | 1.68 | 66.34 | 14.10 |      | 150.0 |         |
| 10143-CAD | LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)      | X | 2.13 | 66.92 | 14.26 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 2.43 | 68.64 | 15.63 |      | 150.0 |         |
|           |                                                | Z | 2.14 | 66.91 | 14.27 |      | 150.0 |         |
| 10144-CAD | LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)      | X | 1.95 | 64.98 | 12.78 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 2.21 | 66.44 | 14.07 |      | 150.0 |         |
|           |                                                | Z | 1.96 | 64.98 | 12.81 |      | 150.0 |         |
| 10145-CAE | LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)      | X | 0.89 | 61.84 | 8.95  | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 1.18 | 64.72 | 11.53 |      | 150.0 |         |
|           |                                                | Z | 0.90 | 61.92 | 9.05  |      | 150.0 |         |
| 10146-CAE | LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)    | X | 1.50 | 63.67 | 9.83  | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 2.10 | 66.97 | 12.06 |      | 150.0 |         |
|           |                                                | Z | 1.48 | 63.51 | 9.75  |      | 150.0 |         |
| 10147-CAE | LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)    | X | 1.66 | 64.83 | 10.55 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 2.53 | 69.23 | 13.24 |      | 150.0 |         |
|           |                                                | Z | 1.63 | 64.59 | 10.43 |      | 150.0 |         |

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|           |                                            |   |      |       |       |      |       |         |
|-----------|--------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10149-CAD | LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)  | X | 2.69 | 66.35 | 15.07 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.88 | 67.31 | 15.77 |      | 150.0 |         |
|           |                                            | Z | 2.70 | 66.34 | 15.06 |      | 150.0 |         |
| 10150-CAD | LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)  | X | 2.82 | 66.43 | 15.17 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.00 | 67.30 | 15.82 |      | 150.0 |         |
|           |                                            | Z | 2.82 | 66.41 | 15.17 |      | 150.0 |         |
| 10151-CAD | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)    | X | 7.29 | 79.43 | 21.93 | 3.98 | 65.0  | ± 9.6 % |
|           |                                            | Y | 9.32 | 83.12 | 23.40 |      | 65.0  |         |
|           |                                            | Z | 6.94 | 78.98 | 21.87 |      | 65.0  |         |
| 10152-CAD | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)  | X | 6.14 | 74.36 | 20.27 | 3.98 | 65.0  | ± 9.6 % |
|           |                                            | Y | 7.37 | 77.20 | 21.60 |      | 65.0  |         |
|           |                                            | Z | 5.87 | 73.88 | 20.17 |      | 65.0  |         |
| 10153-CAD | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)  | X | 6.57 | 75.50 | 21.13 | 3.98 | 65.0  | ± 9.6 % |
|           |                                            | Y | 7.80 | 78.18 | 22.37 |      | 65.0  |         |
|           |                                            | Z | 6.29 | 74.99 | 21.02 |      | 65.0  |         |
| 10154-CAE | LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)    | X | 1.96 | 67.07 | 14.99 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.23 | 68.90 | 16.22 |      | 150.0 |         |
|           |                                            | Z | 1.97 | 67.05 | 14.99 |      | 150.0 |         |
| 10155-CAE | LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)  | X | 2.36 | 66.85 | 15.05 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.58 | 68.00 | 15.98 |      | 150.0 |         |
|           |                                            | Z | 2.37 | 66.82 | 15.05 |      | 150.0 |         |
| 10156-CAE | LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)     | X | 1.49 | 66.02 | 13.56 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 1.80 | 68.47 | 15.37 |      | 150.0 |         |
|           |                                            | Z | 1.50 | 66.01 | 13.58 |      | 150.0 |         |
| 10157-CAE | LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)   | X | 1.74 | 65.03 | 12.45 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.04 | 66.94 | 14.07 |      | 150.0 |         |
|           |                                            | Z | 1.75 | 65.04 | 12.50 |      | 150.0 |         |
| 10158-CAE | LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)  | X | 2.52 | 67.13 | 15.27 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.73 | 68.18 | 16.14 |      | 150.0 |         |
|           |                                            | Z | 2.52 | 67.10 | 15.27 |      | 150.0 |         |
| 10159-CAE | LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)   | X | 1.82 | 65.36 | 12.68 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.15 | 67.39 | 14.35 |      | 150.0 |         |
|           |                                            | Z | 1.83 | 65.38 | 12.73 |      | 150.0 |         |
| 10160-CAD | LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)    | X | 2.49 | 67.29 | 15.33 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.71 | 68.48 | 16.17 |      | 150.0 |         |
|           |                                            | Z | 2.50 | 67.27 | 15.32 |      | 150.0 |         |
| 10161-CAD | LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)  | X | 2.71 | 66.34 | 15.05 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.90 | 67.23 | 15.75 |      | 150.0 |         |
|           |                                            | Z | 2.71 | 66.32 | 15.05 |      | 150.0 |         |
| 10162-CAD | LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)  | X | 2.82 | 66.54 | 15.20 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.01 | 67.37 | 15.86 |      | 150.0 |         |
|           |                                            | Z | 2.82 | 66.52 | 15.19 |      | 150.0 |         |
| 10166-CAE | LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)   | X | 3.40 | 69.00 | 18.89 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.70 | 70.05 | 19.33 |      | 150.0 |         |
|           |                                            | Z | 3.38 | 68.85 | 18.78 |      | 150.0 |         |
| 10167-CAE | LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM) | X | 4.04 | 71.48 | 19.17 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 4.70 | 73.38 | 19.92 |      | 150.0 |         |
|           |                                            | Z | 4.01 | 71.26 | 19.04 |      | 150.0 |         |

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|-----------|--------------------------------------------|---|-------|--------|-------|------|-------|---------|
| 10168-CAE | LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM) | X | 4.52  | 73.94  | 20.64 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 5.25  | 75.73  | 21.26 |      | 150.0 |         |
|           |                                            | Z | 4.48  | 73.68  | 20.49 |      | 150.0 |         |
| 10169-CAD | LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)      | X | 2.77  | 67.75  | 18.34 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.18  | 70.11  | 19.36 |      | 150.0 |         |
|           |                                            | Z | 2.75  | 67.60  | 18.22 |      | 150.0 |         |
| 10170-CAD | LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)    | X | 3.59  | 72.80  | 20.42 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 4.67  | 76.93  | 21.92 |      | 150.0 |         |
|           |                                            | Z | 3.54  | 72.56  | 20.26 |      | 150.0 |         |
| 10171-AAD | LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)    | X | 2.99  | 69.00  | 17.71 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.76  | 72.40  | 19.07 |      | 150.0 |         |
|           |                                            | Z | 2.96  | 68.80  | 17.56 |      | 150.0 |         |
| 10172-CAD | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)      | X | 9.91  | 94.44  | 29.85 | 6.02 | 65.0  | ± 9.6 % |
|           |                                            | Y | 26.96 | 112.91 | 35.22 |      | 65.0  |         |
|           |                                            | Z | 8.39  | 91.68  | 29.04 |      | 65.0  |         |
| 10173-CAD | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)    | X | 17.47 | 101.05 | 30.02 | 6.02 | 65.0  | ± 9.6 % |
|           |                                            | Y | 73.48 | 124.50 | 35.94 |      | 65.0  |         |
|           |                                            | Z | 15.60 | 99.60  | 29.69 |      | 65.0  |         |
| 10174-CAD | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)    | X | 14.33 | 96.21  | 27.96 | 6.02 | 65.0  | ± 9.6 % |
|           |                                            | Y | 38.46 | 111.23 | 31.91 |      | 65.0  |         |
|           |                                            | Z | 12.63 | 94.55  | 27.54 |      | 65.0  |         |
| 10175-CAE | LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)      | X | 2.74  | 67.47  | 18.09 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.14  | 69.79  | 19.11 |      | 150.0 |         |
|           |                                            | Z | 2.72  | 67.32  | 17.97 |      | 150.0 |         |
| 10176-CAE | LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)    | X | 3.59  | 72.83  | 20.43 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 4.68  | 76.96  | 21.93 |      | 150.0 |         |
|           |                                            | Z | 3.55  | 72.58  | 20.27 |      | 150.0 |         |
| 10177-CAG | LTE-FDD (SC-FDMA, 1 RB, 5 MHz, QPSK)       | X | 2.76  | 67.60  | 18.18 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.17  | 69.94  | 19.20 |      | 150.0 |         |
|           |                                            | Z | 2.74  | 67.46  | 18.06 |      | 150.0 |         |
| 10178-CAE | LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)     | X | 3.56  | 72.65  | 20.32 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 4.63  | 76.72  | 21.81 |      | 150.0 |         |
|           |                                            | Z | 3.52  | 72.40  | 20.17 |      | 150.0 |         |
| 10179-CAE | LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)    | X | 3.26  | 70.78  | 18.93 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 4.17  | 74.53  | 20.35 |      | 150.0 |         |
|           |                                            | Z | 3.22  | 70.55  | 18.78 |      | 150.0 |         |
| 10180-CAE | LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)     | X | 2.99  | 68.95  | 17.67 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.75  | 72.33  | 19.02 |      | 150.0 |         |
|           |                                            | Z | 2.95  | 68.75  | 17.52 |      | 150.0 |         |
| 10181-CAD | LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)      | X | 2.75  | 67.59  | 18.17 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.17  | 69.93  | 19.20 |      | 150.0 |         |
|           |                                            | Z | 2.73  | 67.44  | 18.06 |      | 150.0 |         |
| 10182-CAD | LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)    | X | 3.56  | 72.62  | 20.31 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 4.62  | 76.70  | 21.80 |      | 150.0 |         |
|           |                                            | Z | 3.51  | 72.38  | 20.16 |      | 150.0 |         |
| 10183-AAC | LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)    | X | 2.98  | 68.93  | 17.66 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.74  | 72.31  | 19.01 |      | 150.0 |         |
|           |                                            | Z | 2.95  | 68.73  | 17.51 |      | 150.0 |         |

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|-----------|-----------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10184-CAD | LTE-FDD (SC-FDMA, 1 RB, 3 MHz, QPSK)          | X | 2.76 | 67.63 | 18.19 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 3.18 | 69.97 | 19.22 |      | 150.0 |         |
|           |                                               | Z | 2.74 | 67.48 | 18.08 |      | 150.0 |         |
| 10185-CAD | LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)        | X | 3.58 | 72.69 | 20.35 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.64 | 76.77 | 21.83 |      | 150.0 |         |
|           |                                               | Z | 3.53 | 72.45 | 20.19 |      | 150.0 |         |
| 10186-AAD | LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)        | X | 3.00 | 68.99 | 17.69 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 3.76 | 72.38 | 19.04 |      | 150.0 |         |
|           |                                               | Z | 2.96 | 68.79 | 17.54 |      | 150.0 |         |
| 10187-CAE | LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)        | X | 2.77 | 67.68 | 18.26 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 3.19 | 70.03 | 19.28 |      | 150.0 |         |
|           |                                               | Z | 2.75 | 67.54 | 18.15 |      | 150.0 |         |
| 10188-CAE | LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)      | X | 3.68 | 73.28 | 20.71 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.80 | 77.49 | 22.22 |      | 150.0 |         |
|           |                                               | Z | 3.63 | 73.04 | 20.56 |      | 150.0 |         |
| 10189-AAE | LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)      | X | 3.05 | 69.36 | 17.95 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 3.85 | 72.83 | 19.33 |      | 150.0 |         |
|           |                                               | Z | 3.02 | 69.15 | 17.80 |      | 150.0 |         |
| 10193-CAC | IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK)  | X | 4.37 | 66.23 | 15.79 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.50 | 66.54 | 16.08 |      | 150.0 |         |
|           |                                               | Z | 4.38 | 66.22 | 15.79 |      | 150.0 |         |
| 10194-CAC | IEEE 802.11n (HT Greenfield, 39 Mbps, 16-QAM) | X | 4.53 | 66.52 | 15.92 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.67 | 66.86 | 16.20 |      | 150.0 |         |
|           |                                               | Z | 4.54 | 66.50 | 15.92 |      | 150.0 |         |
| 10195-CAC | IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM) | X | 4.57 | 66.55 | 15.95 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.71 | 66.89 | 16.22 |      | 150.0 |         |
|           |                                               | Z | 4.58 | 66.54 | 15.94 |      | 150.0 |         |
| 10196-CAC | IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK)       | X | 4.37 | 66.26 | 15.80 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.50 | 66.60 | 16.10 |      | 150.0 |         |
|           |                                               | Z | 4.38 | 66.25 | 15.80 |      | 150.0 |         |
| 10197-CAC | IEEE 802.11n (HT Mixed, 39 Mbps, 16-QAM)      | X | 4.54 | 66.53 | 15.94 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.68 | 66.88 | 16.22 |      | 150.0 |         |
|           |                                               | Z | 4.55 | 66.52 | 15.93 |      | 150.0 |         |
| 10198-CAC | IEEE 802.11n (HT Mixed, 65 Mbps, 64-QAM)      | X | 4.57 | 66.56 | 15.96 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.71 | 66.90 | 16.23 |      | 150.0 |         |
|           |                                               | Z | 4.58 | 66.55 | 15.95 |      | 150.0 |         |
| 10219-CAC | IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK)       | X | 4.32 | 66.27 | 15.75 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.45 | 66.61 | 16.06 |      | 150.0 |         |
|           |                                               | Z | 4.32 | 66.26 | 15.75 |      | 150.0 |         |
| 10220-CAC | IEEE 802.11n (HT Mixed, 43.3 Mbps, 16-QAM)    | X | 4.54 | 66.50 | 15.92 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.68 | 66.85 | 16.21 |      | 150.0 |         |
|           |                                               | Z | 4.54 | 66.49 | 15.92 |      | 150.0 |         |
| 10221-CAC | IEEE 802.11n (HT Mixed, 72.2 Mbps, 64-QAM)    | X | 4.58 | 66.50 | 15.95 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.72 | 66.83 | 16.22 |      | 150.0 |         |
|           |                                               | Z | 4.59 | 66.49 | 15.94 |      | 150.0 |         |
| 10222-CAC | IEEE 802.11n (HT Mixed, 15 Mbps, BPSK)        | X | 4.93 | 66.68 | 16.09 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 5.04 | 67.01 | 16.33 |      | 150.0 |         |
|           |                                               | Z | 4.94 | 66.67 | 16.09 |      | 150.0 |         |

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|-----------|-------------------------------------------|---|-------|--------|-------|------|-------|---------|
| 10223-CAC | IEEE 802.11n (HT Mixed, 90 Mbps, 16-QAM)  | X | 5.24  | 66.96  | 16.26 | 0.00 | 150.0 | ± 9.6 % |
|           |                                           | Y | 5.34  | 67.20  | 16.45 |      | 150.0 |         |
|           |                                           | Z | 5.25  | 66.96  | 16.26 |      | 150.0 |         |
| 10224-CAC | IEEE 802.11n (HT Mixed, 150 Mbps, 64-QAM) | X | 4.97  | 66.79  | 16.07 | 0.00 | 150.0 | ± 9.6 % |
|           |                                           | Y | 5.09  | 67.12  | 16.31 |      | 150.0 |         |
|           |                                           | Z | 4.98  | 66.78  | 16.07 |      | 150.0 |         |
| 10225-CAB | UMTS-FDD (HSPA+)                          | X | 2.61  | 65.30  | 14.50 | 0.00 | 150.0 | ± 9.6 % |
|           |                                           | Y | 2.77  | 66.01  | 15.22 |      | 150.0 |         |
|           |                                           | Z | 2.62  | 65.28  | 14.51 |      | 150.0 |         |
| 10226-CAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)  | X | 19.06 | 102.80 | 30.64 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 84.74 | 127.31 | 36.73 |      | 65.0  |         |
|           |                                           | Z | 16.97 | 101.30 | 30.30 |      | 65.0  |         |
| 10227-CAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)  | X | 18.47 | 100.66 | 29.36 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 61.00 | 119.15 | 34.00 |      | 65.0  |         |
|           |                                           | Z | 16.71 | 99.46  | 29.10 |      | 65.0  |         |
| 10228-CAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)    | X | 11.22 | 97.35  | 30.90 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 42.26 | 122.26 | 37.83 |      | 65.0  |         |
|           |                                           | Z | 9.70  | 95.02  | 30.26 |      | 65.0  |         |
| 10229-CAB | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)    | X | 17.60 | 101.16 | 30.06 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 73.82 | 124.58 | 35.96 |      | 65.0  |         |
|           |                                           | Z | 15.72 | 99.72  | 29.73 |      | 65.0  |         |
| 10230-CAB | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)    | X | 16.98 | 99.07  | 28.81 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 54.30 | 116.97 | 33.37 |      | 65.0  |         |
|           |                                           | Z | 15.38 | 97.90  | 28.55 |      | 65.0  |         |
| 10231-CAB | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK)      | X | 10.61 | 96.11  | 30.42 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 38.34 | 120.13 | 37.18 |      | 65.0  |         |
|           |                                           | Z | 9.21  | 93.87  | 29.80 |      | 65.0  |         |
| 10232-CAD | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)    | X | 17.57 | 101.15 | 30.06 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 73.88 | 124.60 | 35.97 |      | 65.0  |         |
|           |                                           | Z | 15.69 | 99.70  | 29.73 |      | 65.0  |         |
| 10233-CAD | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)    | X | 16.93 | 99.04  | 28.80 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 54.26 | 116.98 | 33.37 |      | 65.0  |         |
|           |                                           | Z | 15.34 | 97.87  | 28.54 |      | 65.0  |         |
| 10234-CAD | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK)      | X | 10.13 | 95.03  | 29.94 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 35.09 | 118.08 | 36.51 |      | 65.0  |         |
|           |                                           | Z | 8.83  | 92.87  | 29.34 |      | 65.0  |         |
| 10235-CAD | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)   | X | 17.61 | 101.20 | 30.07 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 74.39 | 124.74 | 36.01 |      | 65.0  |         |
|           |                                           | Z | 15.72 | 99.75  | 29.75 |      | 65.0  |         |
| 10236-CAD | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)   | X | 17.15 | 99.23  | 28.85 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 55.30 | 117.26 | 33.44 |      | 65.0  |         |
|           |                                           | Z | 15.54 | 98.06  | 28.59 |      | 65.0  |         |
| 10237-CAD | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)     | X | 10.63 | 96.19  | 30.45 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 38.84 | 120.43 | 37.26 |      | 65.0  |         |
|           |                                           | Z | 9.22  | 93.94  | 29.82 |      | 65.0  |         |
| 10238-CAD | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)   | X | 17.54 | 101.13 | 30.05 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 73.93 | 124.62 | 35.97 |      | 65.0  |         |
|           |                                           | Z | 15.66 | 99.68  | 29.72 |      | 65.0  |         |

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|           |                                            |   |       |        |       |      |      |         |
|-----------|--------------------------------------------|---|-------|--------|-------|------|------|---------|
| 10239-CAD | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)    | X | 16.87 | 99.00  | 28.79 | 6.02 | 65.0 | ± 9.6 % |
|           |                                            | Y | 54.20 | 116.98 | 33.38 |      | 65.0 |         |
|           |                                            | Z | 15.28 | 97.83  | 28.53 |      | 65.0 |         |
| 10240-CAD | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK)      | X | 10.60 | 96.15  | 30.43 | 6.02 | 65.0 | ± 9.6 % |
|           |                                            | Y | 38.66 | 120.35 | 37.24 |      | 65.0 |         |
|           |                                            | Z | 9.20  | 93.89  | 29.81 |      | 65.0 |         |
| 10241-CAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM) | X | 8.68  | 82.76  | 26.12 | 6.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 11.24 | 87.33  | 27.87 |      | 65.0 |         |
|           |                                            | Z | 8.20  | 81.79  | 25.80 |      | 65.0 |         |
| 10242-CAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM) | X | 8.24  | 81.67  | 25.60 | 6.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 9.94  | 84.69  | 26.78 |      | 65.0 |         |
|           |                                            | Z | 7.73  | 80.54  | 25.21 |      | 65.0 |         |
| 10243-CAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)   | X | 6.66  | 78.27  | 25.11 | 6.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 7.69  | 80.76  | 26.19 |      | 65.0 |         |
|           |                                            | Z | 6.24  | 77.03  | 24.63 |      | 65.0 |         |
| 10244-CAB | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)   | X | 6.51  | 76.73  | 18.61 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 8.90  | 80.96  | 20.59 |      | 65.0 |         |
|           |                                            | Z | 6.20  | 76.45  | 18.60 |      | 65.0 |         |
| 10245-CAB | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)   | X | 6.23  | 75.82  | 18.19 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 8.52  | 80.01  | 20.18 |      | 65.0 |         |
|           |                                            | Z | 5.95  | 75.55  | 18.18 |      | 65.0 |         |
| 10246-CAB | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)     | X | 5.89  | 78.26  | 19.20 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 10.33 | 86.66  | 22.77 |      | 65.0 |         |
|           |                                            | Z | 5.69  | 78.38  | 19.42 |      | 65.0 |         |
| 10247-CAD | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)   | X | 5.27  | 73.98  | 18.20 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 6.98  | 78.14  | 20.37 |      | 65.0 |         |
|           |                                            | Z | 5.06  | 73.79  | 18.26 |      | 65.0 |         |
| 10248-CAD | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)   | X | 5.20  | 73.29  | 17.89 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 6.82  | 77.27  | 20.01 |      | 65.0 |         |
|           |                                            | Z | 5.00  | 73.09  | 17.94 |      | 65.0 |         |
| 10249-CAD | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)     | X | 7.64  | 82.87  | 21.98 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 12.50 | 90.52  | 24.99 |      | 65.0 |         |
|           |                                            | Z | 7.27  | 82.69  | 22.09 |      | 65.0 |         |
| 10250-CAD | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)  | X | 6.39  | 77.19  | 21.35 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 7.97  | 80.62  | 22.94 |      | 65.0 |         |
|           |                                            | Z | 6.07  | 76.69  | 21.28 |      | 65.0 |         |
| 10251-CAD | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)  | X | 5.95  | 74.70  | 19.94 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 7.31  | 77.83  | 21.49 |      | 65.0 |         |
|           |                                            | Z | 5.69  | 74.26  | 19.87 |      | 65.0 |         |
| 10252-CAD | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)    | X | 7.81  | 82.79  | 23.08 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 11.09 | 88.26  | 25.20 |      | 65.0 |         |
|           |                                            | Z | 7.35  | 82.26  | 23.04 |      | 65.0 |         |
| 10253-CAD | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)  | X | 6.02  | 73.87  | 20.02 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 7.15  | 76.53  | 21.33 |      | 65.0 |         |
|           |                                            | Z | 5.76  | 73.39  | 19.91 |      | 65.0 |         |
| 10254-CAD | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)  | X | 6.41  | 74.89  | 20.77 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 7.57  | 77.46  | 22.02 |      | 65.0 |         |
|           |                                            | Z | 6.13  | 74.39  | 20.66 |      | 65.0 |         |

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|           |                                             |   |       |       |       |      |      |         |
|-----------|---------------------------------------------|---|-------|-------|-------|------|------|---------|
| 10255-CAD | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK)     | X | 6.95  | 78.78 | 21.87 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 8.80  | 82.37 | 23.35 |      | 65.0 |         |
|           |                                             | Z | 6.59  | 78.27 | 21.78 |      | 65.0 |         |
| 10256-CAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM) | X | 4.69  | 71.51 | 15.31 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 6.81  | 76.30 | 17.77 |      | 65.0 |         |
|           |                                             | Z | 4.50  | 71.34 | 15.32 |      | 65.0 |         |
| 10257-CAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM) | X | 4.47  | 70.51 | 14.76 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 6.44  | 75.12 | 17.21 |      | 65.0 |         |
|           |                                             | Z | 4.29  | 70.34 | 14.77 |      | 65.0 |         |
| 10258-CAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)   | X | 4.06  | 72.26 | 15.82 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 7.18  | 80.25 | 19.65 |      | 65.0 |         |
|           |                                             | Z | 3.95  | 72.43 | 16.05 |      | 65.0 |         |
| 10259-CAB | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)   | X | 5.72  | 75.25 | 19.37 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 7.37  | 79.06 | 21.29 |      | 65.0 |         |
|           |                                             | Z | 5.47  | 74.94 | 19.38 |      | 65.0 |         |
| 10260-CAB | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)   | X | 5.72  | 74.91 | 19.23 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 7.31  | 78.59 | 21.12 |      | 65.0 |         |
|           |                                             | Z | 5.48  | 74.60 | 19.24 |      | 65.0 |         |
| 10261-CAB | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK)     | X | 7.27  | 81.87 | 22.09 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 10.93 | 88.24 | 24.66 |      | 65.0 |         |
|           |                                             | Z | 6.86  | 81.50 | 22.12 |      | 65.0 |         |
| 10262-CAD | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)   | X | 6.37  | 77.12 | 21.30 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 7.95  | 80.56 | 22.90 |      | 65.0 |         |
|           |                                             | Z | 6.05  | 76.62 | 21.23 |      | 65.0 |         |
| 10263-CAD | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)   | X | 5.94  | 74.67 | 19.93 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 7.30  | 77.80 | 21.49 |      | 65.0 |         |
|           |                                             | Z | 5.68  | 74.24 | 19.86 |      | 65.0 |         |
| 10264-CAD | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK)     | X | 7.72  | 82.55 | 22.97 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 10.95 | 88.00 | 25.09 |      | 65.0 |         |
|           |                                             | Z | 7.26  | 82.02 | 22.93 |      | 65.0 |         |
| 10265-CAD | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)  | X | 6.14  | 74.37 | 20.28 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 7.36  | 77.20 | 21.61 |      | 65.0 |         |
|           |                                             | Z | 5.87  | 73.89 | 20.17 |      | 65.0 |         |
| 10266-CAD | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)  | X | 6.57  | 75.48 | 21.12 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 7.80  | 78.16 | 22.36 |      | 65.0 |         |
|           |                                             | Z | 6.28  | 74.97 | 21.00 |      | 65.0 |         |
| 10267-CAD | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)    | X | 7.27  | 79.38 | 21.91 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 9.30  | 83.06 | 23.38 |      | 65.0 |         |
|           |                                             | Z | 6.92  | 78.93 | 21.85 |      | 65.0 |         |
| 10268-CAD | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)  | X | 6.75  | 74.24 | 20.68 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 7.82  | 76.54 | 21.74 |      | 65.0 |         |
|           |                                             | Z | 6.49  | 73.77 | 20.56 |      | 65.0 |         |
| 10269-CAD | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)  | X | 6.72  | 73.83 | 20.55 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 7.73  | 76.02 | 21.58 |      | 65.0 |         |
|           |                                             | Z | 6.46  | 73.36 | 20.43 |      | 65.0 |         |
| 10270-CAD | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK)    | X | 6.94  | 76.39 | 20.90 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 8.26  | 78.95 | 21.97 |      | 65.0 |         |
|           |                                             | Z | 6.65  | 75.97 | 20.82 |      | 65.0 |         |

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|           |                                                                    |   |       |       |       |      |       |         |
|-----------|--------------------------------------------------------------------|---|-------|-------|-------|------|-------|---------|
| 10274-CAB | UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.10)                          | X | 2.40  | 65.55 | 14.34 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 2.55  | 66.36 | 15.12 |      | 150.0 |         |
|           |                                                                    | Z | 2.40  | 65.52 | 14.34 |      | 150.0 |         |
| 10275-CAB | UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.4)                           | X | 1.37  | 65.59 | 13.82 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 1.57  | 67.69 | 15.34 |      | 150.0 |         |
|           |                                                                    | Z | 1.37  | 65.56 | 13.81 |      | 150.0 |         |
| 10277-CAA | PHS (QPSK)                                                         | X | 2.46  | 62.30 | 7.92  | 9.03 | 50.0  | ± 9.6 % |
|           |                                                                    | Y | 2.99  | 63.83 | 9.17  |      | 50.0  |         |
|           |                                                                    | Z | 2.33  | 62.06 | 7.69  |      | 50.0  |         |
| 10278-CAA | PHS (QPSK, BW 884MHz, Rolloff 0.5)                                 | X | 4.98  | 72.46 | 15.62 | 9.03 | 50.0  | ± 9.6 % |
|           |                                                                    | Y | 8.77  | 80.80 | 19.53 |      | 50.0  |         |
|           |                                                                    | Z | 5.06  | 73.09 | 15.89 |      | 50.0  |         |
| 10279-CAA | PHS (QPSK, BW 884MHz, Rolloff 0.38)                                | X | 5.10  | 72.72 | 15.78 | 9.03 | 50.0  | ± 9.6 % |
|           |                                                                    | Y | 8.97  | 81.08 | 19.68 |      | 50.0  |         |
|           |                                                                    | Z | 5.19  | 73.36 | 16.06 |      | 50.0  |         |
| 10290-AAB | CDMA2000, RC1, SO55, Full Rate                                     | X | 0.97  | 64.08 | 10.61 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 1.37  | 68.00 | 13.49 |      | 150.0 |         |
|           |                                                                    | Z | 0.98  | 64.13 | 10.68 |      | 150.0 |         |
| 10291-AAB | CDMA2000, RC3, SO55, Full Rate                                     | X | 0.58  | 62.04 | 9.17  | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 0.77  | 65.07 | 11.88 |      | 150.0 |         |
|           |                                                                    | Z | 0.58  | 62.07 | 9.23  |      | 150.0 |         |
| 10292-AAB | CDMA2000, RC3, SO32, Full Rate                                     | X | 0.64  | 63.79 | 10.46 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 0.99  | 69.13 | 14.24 |      | 150.0 |         |
|           |                                                                    | Z | 0.64  | 63.81 | 10.51 |      | 150.0 |         |
| 10293-AAB | CDMA2000, RC3, SO3, Full Rate                                      | X | 0.81  | 66.57 | 12.32 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 1.56  | 75.54 | 17.45 |      | 150.0 |         |
|           |                                                                    | Z | 0.81  | 66.55 | 12.35 |      | 150.0 |         |
| 10295-AAB | CDMA2000, RC1, SO3, 1/8th Rate 25 fr.                              | X | 11.79 | 88.13 | 24.57 | 9.03 | 50.0  | ± 9.6 % |
|           |                                                                    | Y | 13.93 | 91.96 | 26.60 |      | 50.0  |         |
|           |                                                                    | Z | 12.03 | 89.02 | 24.99 |      | 50.0  |         |
| 10297-AAC | LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)                            | X | 2.43  | 67.83 | 15.42 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 2.71  | 69.51 | 16.44 |      | 150.0 |         |
|           |                                                                    | Z | 2.43  | 67.81 | 15.41 |      | 150.0 |         |
| 10298-AAC | LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK)                             | X | 1.17  | 64.21 | 11.42 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 1.51  | 67.23 | 13.79 |      | 150.0 |         |
|           |                                                                    | Z | 1.18  | 64.25 | 11.49 |      | 150.0 |         |
| 10299-AAC | LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)                           | X | 2.14  | 67.38 | 12.81 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 2.87  | 70.55 | 14.69 |      | 150.0 |         |
|           |                                                                    | Z | 2.09  | 67.00 | 12.62 |      | 150.0 |         |
| 10300-AAC | LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)                           | X | 1.64  | 63.53 | 10.15 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 2.07  | 65.55 | 11.64 |      | 150.0 |         |
|           |                                                                    | Z | 1.63  | 63.41 | 10.08 |      | 150.0 |         |
| 10301-AAA | IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC)                 | X | 4.80  | 65.91 | 17.41 | 4.17 | 50.0  | ± 9.6 % |
|           |                                                                    | Y | 5.18  | 67.15 | 18.29 |      | 50.0  |         |
|           |                                                                    | Z | 4.75  | 65.66 | 17.30 |      | 50.0  |         |
| 10302-AAA | IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC, 3 CTRL symbols) | X | 5.25  | 66.32 | 18.01 | 4.96 | 50.0  | ± 9.6 % |
|           |                                                                    | Y | 5.53  | 67.15 | 18.67 |      | 50.0  |         |
|           |                                                                    | Z | 5.21  | 66.16 | 17.95 |      | 50.0  |         |

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|-----------|---------------------------------------------------------------------|---|-------|-------|-------|-------|-------|---------|
| 10303-AAA | IEEE 802.16e WiMAX (31:15, 5ms, 10MHz, 64QAM, PUSC)                 | X | 5.02  | 66.03 | 17.86 | 4.96  | 50.0  | ± 9.6 % |
|           |                                                                     | Y | 5.30  | 66.93 | 18.58 |       | 50.0  |         |
|           |                                                                     | Z | 4.98  | 65.85 | 17.79 |       | 50.0  |         |
| 10304-AAA | IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, 64QAM, PUSC)                 | X | 4.79  | 65.79 | 17.29 | 4.17  | 50.0  | ± 9.6 % |
|           |                                                                     | Y | 5.06  | 66.59 | 17.94 |       | 50.0  |         |
|           |                                                                     | Z | 4.76  | 65.63 | 17.23 |       | 50.0  |         |
| 10305-AAA | IEEE 802.16e WiMAX (31:15, 10ms, 10MHz, 64QAM, PUSC, 15 symbols)    | X | 4.90  | 69.87 | 20.22 | 6.02  | 35.0  | ± 9.6 % |
|           |                                                                     | Y | 5.31  | 71.48 | 21.54 |       | 35.0  |         |
|           |                                                                     | Z | 4.75  | 69.22 | 19.95 |       | 35.0  |         |
| 10306-AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 64QAM, PUSC, 18 symbols)    | X | 4.99  | 68.00 | 19.55 | 6.02  | 35.0  | ± 9.6 % |
|           |                                                                     | Y | 5.28  | 69.01 | 20.47 |       | 35.0  |         |
|           |                                                                     | Z | 4.90  | 67.60 | 19.37 |       | 35.0  |         |
| 10307-AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, PUSC, 18 symbols)     | X | 4.92  | 68.28 | 19.55 | 6.02  | 35.0  | ± 9.6 % |
|           |                                                                     | Y | 5.25  | 69.46 | 20.56 |       | 35.0  |         |
|           |                                                                     | Z | 4.82  | 67.84 | 19.36 |       | 35.0  |         |
| 10308-AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, PUSC)                | X | 4.92  | 68.59 | 19.73 | 6.02  | 35.0  | ± 9.6 % |
|           |                                                                     | Y | 5.26  | 69.83 | 20.78 |       | 35.0  |         |
|           |                                                                     | Z | 4.82  | 68.12 | 19.53 |       | 35.0  |         |
| 10309-AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, AMC 2x3, 18 symbols) | X | 5.04  | 68.19 | 19.68 | 6.02  | 35.0  | ± 9.6 % |
|           |                                                                     | Y | 5.35  | 69.29 | 20.64 |       | 35.0  |         |
|           |                                                                     | Z | 4.95  | 67.79 | 19.50 |       | 35.0  |         |
| 10310-AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, AMC 2x3, 18 symbols)  | X | 4.96  | 68.14 | 19.55 | 6.02  | 35.0  | ± 9.6 % |
|           |                                                                     | Y | 5.25  | 69.19 | 20.50 |       | 35.0  |         |
|           |                                                                     | Z | 4.87  | 67.72 | 19.37 |       | 35.0  |         |
| 10311-AAC | LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK)                            | X | 2.77  | 67.21 | 15.18 | 0.00  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 3.07  | 68.80 | 16.10 |       | 150.0 |         |
|           |                                                                     | Z | 2.77  | 67.19 | 15.17 |       | 150.0 |         |
| 10313-AAA | iDEN 1:3                                                            | X | 4.50  | 74.82 | 16.72 | 6.99  | 70.0  | ± 9.6 % |
|           |                                                                     | Y | 8.14  | 81.70 | 19.31 |       | 70.0  |         |
|           |                                                                     | Z | 4.21  | 74.79 | 16.81 |       | 70.0  |         |
| 10314-AAA | iDEN 1:6                                                            | X | 6.62  | 83.57 | 22.82 | 10.00 | 30.0  | ± 9.6 % |
|           |                                                                     | Y | 15.63 | 96.40 | 26.94 |       | 30.0  |         |
|           |                                                                     | Z | 6.51  | 84.13 | 23.15 |       | 30.0  |         |
| 10315-AAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 96pc duty cycle)           | X | 1.00  | 62.64 | 14.01 | 0.17  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 1.09  | 64.02 | 15.23 |       | 150.0 |         |
|           |                                                                     | Z | 0.99  | 62.54 | 13.97 |       | 150.0 |         |
| 10316-AAB | IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 96pc duty cycle)       | X | 4.44  | 66.34 | 15.98 | 0.17  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.58  | 66.68 | 16.29 |       | 150.0 |         |
|           |                                                                     | Z | 4.45  | 66.32 | 15.98 |       | 150.0 |         |
| 10317-AAC | IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle)             | X | 4.44  | 66.34 | 15.98 | 0.17  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.58  | 66.68 | 16.29 |       | 150.0 |         |
|           |                                                                     | Z | 4.45  | 66.32 | 15.98 |       | 150.0 |         |
| 10400-AAD | IEEE 802.11ac WiFi (20MHz, 64-QAM, 99pc duty cycle)                 | X | 4.51  | 66.55 | 15.91 | 0.00  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.66  | 66.92 | 16.21 |       | 150.0 |         |
|           |                                                                     | Z | 4.52  | 66.54 | 15.91 |       | 150.0 |         |
| 10401-AAD | IEEE 802.11ac WiFi (40MHz, 64-QAM, 99pc duty cycle)                 | X | 5.26  | 66.85 | 16.18 | 0.00  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 5.36  | 67.11 | 16.38 |       | 150.0 |         |
|           |                                                                     | Z | 5.27  | 66.86 | 16.18 |       | 150.0 |         |

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|-----------|---------------------------------------------------------------------------------|---|--------|--------|-------|------|-------|---------|
| 10402-AAD | IEEE 802.11ac WiFi (80MHz, 64-QAM, 99pc duty cycle)                             | X | 5.49   | 67.07  | 16.16 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 5.61   | 67.41  | 16.38 |      | 150.0 |         |
|           |                                                                                 | Z | 5.50   | 67.07  | 16.16 |      | 150.0 |         |
| 10403-AAB | CDMA2000 (1xEV-DO, Rev. 0)                                                      | X | 0.97   | 64.08  | 10.61 | 0.00 | 115.0 | ± 9.6 % |
|           |                                                                                 | Y | 1.37   | 68.00  | 13.49 |      | 115.0 |         |
|           |                                                                                 | Z | 0.98   | 64.13  | 10.68 |      | 115.0 |         |
| 10404-AAB | CDMA2000 (1xEV-DO, Rev. A)                                                      | X | 0.97   | 64.08  | 10.61 | 0.00 | 115.0 | ± 9.6 % |
|           |                                                                                 | Y | 1.37   | 68.00  | 13.49 |      | 115.0 |         |
|           |                                                                                 | Z | 0.98   | 64.13  | 10.68 |      | 115.0 |         |
| 10406-AAB | CDMA2000, RC3, SO32, SCH0, Full Rate                                            | X | 30.79  | 107.36 | 27.23 | 0.00 | 100.0 | ± 9.6 % |
|           |                                                                                 | Y | 100.00 | 120.16 | 29.82 |      | 100.0 |         |
|           |                                                                                 | Z | 19.65  | 100.98 | 25.49 |      | 100.0 |         |
| 10410-AAD | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9, Subframe Conf=4) | X | 100.00 | 124.91 | 31.71 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                                 | Y | 100.00 | 121.32 | 30.41 |      | 80.0  |         |
|           |                                                                                 | Z | 100.00 | 125.61 | 31.93 |      | 80.0  |         |
| 10415-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle)                       | X | 0.92   | 61.75  | 13.36 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 0.98   | 62.81  | 14.44 |      | 150.0 |         |
|           |                                                                                 | Z | 0.92   | 61.72  | 13.35 |      | 150.0 |         |
| 10416-AAA | IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 99pc duty cycle)                   | X | 4.37   | 66.26  | 15.86 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 4.50   | 66.58  | 16.15 |      | 150.0 |         |
|           |                                                                                 | Z | 4.38   | 66.25  | 15.86 |      | 150.0 |         |
| 10417-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 99pc duty cycle)                       | X | 4.37   | 66.26  | 15.86 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 4.50   | 66.58  | 16.15 |      | 150.0 |         |
|           |                                                                                 | Z | 4.38   | 66.25  | 15.86 |      | 150.0 |         |
| 10418-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Long preamble)   | X | 4.36   | 66.42  | 15.89 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 4.49   | 66.74  | 16.17 |      | 150.0 |         |
|           |                                                                                 | Z | 4.37   | 66.40  | 15.88 |      | 150.0 |         |
| 10419-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Short preamble)  | X | 4.38   | 66.37  | 15.89 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 4.51   | 66.69  | 16.17 |      | 150.0 |         |
|           |                                                                                 | Z | 4.39   | 66.35  | 15.89 |      | 150.0 |         |
| 10422-AAB | IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK)                                    | X | 4.50   | 66.38  | 15.91 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 4.63   | 66.69  | 16.18 |      | 150.0 |         |
|           |                                                                                 | Z | 4.51   | 66.36  | 15.91 |      | 150.0 |         |
| 10423-AAB | IEEE 802.11n (HT Greenfield, 43.3 Mbps, 16-QAM)                                 | X | 4.64   | 66.66  | 16.02 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 4.79   | 67.00  | 16.30 |      | 150.0 |         |
|           |                                                                                 | Z | 4.65   | 66.65  | 16.02 |      | 150.0 |         |
| 10424-AAB | IEEE 802.11n (HT Greenfield, 72.2 Mbps, 64-QAM)                                 | X | 4.57   | 66.61  | 15.99 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 4.72   | 66.95  | 16.27 |      | 150.0 |         |
|           |                                                                                 | Z | 4.58   | 66.60  | 15.99 |      | 150.0 |         |
| 10425-AAB | IEEE 802.11n (HT Greenfield, 15 Mbps, BPSK)                                     | X | 5.19   | 66.94  | 16.22 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 5.31   | 67.25  | 16.45 |      | 150.0 |         |
|           |                                                                                 | Z | 5.20   | 66.93  | 16.22 |      | 150.0 |         |
| 10426-AAB | IEEE 802.11n (HT Greenfield, 90 Mbps, 16-QAM)                                   | X | 5.21   | 67.03  | 16.26 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 5.32   | 67.28  | 16.46 |      | 150.0 |         |
|           |                                                                                 | Z | 5.22   | 67.02  | 16.26 |      | 150.0 |         |

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|-----------|----------------------------------------------------------------|---|--------|--------|-------|------|-------|---------|
| 10427-AAB | IEEE 802.11n (HT Greenfield, 150 Mbps, 64-QAM)                 | X | 5.21   | 66.94  | 16.22 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 5.33   | 67.26  | 16.44 |      | 150.0 |         |
|           |                                                                | Z | 5.22   | 66.94  | 16.22 |      | 150.0 |         |
| 10430-AAB | LTE-FDD (OFDMA, 5 MHz, E-TM 3.1)                               | X | 4.02   | 70.30  | 17.56 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.18   | 70.49  | 17.96 |      | 150.0 |         |
|           |                                                                | Z | 4.02   | 70.25  | 17.56 |      | 150.0 |         |
| 10431-AAB | LTE-FDD (OFDMA, 10 MHz, E-TM 3.1)                              | X | 4.00   | 66.69  | 15.72 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.18   | 67.12  | 16.13 |      | 150.0 |         |
|           |                                                                | Z | 4.01   | 66.67  | 15.72 |      | 150.0 |         |
| 10432-AAB | LTE-FDD (OFDMA, 15 MHz, E-TM 3.1)                              | X | 4.33   | 66.63  | 15.89 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.48   | 67.00  | 16.21 |      | 150.0 |         |
|           |                                                                | Z | 4.33   | 66.61  | 15.89 |      | 150.0 |         |
| 10433-AAB | LTE-FDD (OFDMA, 20 MHz, E-TM 3.1)                              | X | 4.58   | 66.64  | 16.01 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.73   | 66.99  | 16.29 |      | 150.0 |         |
|           |                                                                | Z | 4.59   | 66.63  | 16.01 |      | 150.0 |         |
| 10434-AAA | W-CDMA (BS Test Model 1, 64 DPCH)                              | X | 4.06   | 70.92  | 17.34 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.27   | 71.30  | 17.90 |      | 150.0 |         |
|           |                                                                | Z | 4.06   | 70.88  | 17.35 |      | 150.0 |         |
| 10435-AAC | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | X | 100.00 | 124.67 | 31.60 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                | Y | 100.00 | 121.12 | 30.31 |      | 80.0  |         |
|           |                                                                | Z | 100.00 | 125.37 | 31.82 |      | 80.0  |         |
| 10447-AAB | LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)                 | X | 3.24   | 66.36  | 14.69 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 3.47   | 67.09  | 15.42 |      | 150.0 |         |
|           |                                                                | Z | 3.25   | 66.35  | 14.70 |      | 150.0 |         |
| 10448-AAB | LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)                | X | 3.86   | 66.46  | 15.57 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.02   | 66.90  | 15.99 |      | 150.0 |         |
|           |                                                                | Z | 3.86   | 66.45  | 15.58 |      | 150.0 |         |
| 10449-AAB | LTE-FDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)                | X | 4.15   | 66.44  | 15.77 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.29   | 66.82  | 16.11 |      | 150.0 |         |
|           |                                                                | Z | 4.16   | 66.43  | 15.77 |      | 150.0 |         |
| 10450-AAB | LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)                | X | 4.36   | 66.40  | 15.85 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.49   | 66.75  | 16.14 |      | 150.0 |         |
|           |                                                                | Z | 4.37   | 66.38  | 15.84 |      | 150.0 |         |
| 10451-AAA | W-CDMA (BS Test Model 1, 64 DPCH, Clipping 44%)                | X | 3.07   | 66.27  | 14.09 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 3.35   | 67.23  | 15.01 |      | 150.0 |         |
|           |                                                                | Z | 3.09   | 66.28  | 14.12 |      | 150.0 |         |
| 10456-AAB | IEEE 802.11ac WiFi (160MHz, 64-QAM, 99pc duty cycle)           | X | 6.10   | 67.60  | 16.46 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 6.17   | 67.80  | 16.60 |      | 150.0 |         |
|           |                                                                | Z | 6.11   | 67.59  | 16.46 |      | 150.0 |         |
| 10457-AAA | UMTS-FDD (DC-HSDPA)                                            | X | 3.68   | 64.94  | 15.56 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 3.76   | 65.22  | 15.86 |      | 150.0 |         |
|           |                                                                | Z | 3.68   | 64.92  | 15.56 |      | 150.0 |         |
| 10458-AAA | CDMA2000 (1xEV-DO, Rev. B, 2 carriers)                         | X | 3.64   | 69.83  | 16.43 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 3.92   | 70.59  | 17.30 |      | 150.0 |         |
|           |                                                                | Z | 3.65   | 69.81  | 16.46 |      | 150.0 |         |
| 10459-AAA | CDMA2000 (1xEV-DO, Rev. B, 3 carriers)                         | X | 4.90   | 68.31  | 17.78 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.99   | 68.05  | 17.92 |      | 150.0 |         |
|           |                                                                | Z | 4.90   | 68.27  | 17.79 |      | 150.0 |         |

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|-----------|-------------------------------------------------------------------|---|--------|--------|-------|------|-------|---------|
| 10460-AAA | UMTS-FDD (WCDMA, AMR)                                             | X | 0.70   | 64.51  | 13.31 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                   | Y | 0.86   | 67.82  | 15.75 |      | 150.0 |         |
|           |                                                                   | Z | 0.70   | 64.47  | 13.28 |      | 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 | 128.99 | 33.67 | 3.29 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 100.00 | 126.52 | 32.84 |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 129.61 | 33.85 |      | 80.0  |         |
| 10462-AAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 11.24  | 85.71  | 18.56 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 100.00 | 107.01 | 23.71 |      | 80.0  |         |
|           |                                                                   | Z | 7.60   | 81.91  | 17.44 |      | 80.0  |         |
| 10463-AAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 2.22   | 68.12  | 12.22 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 8.52   | 79.99  | 16.22 |      | 80.0  |         |
|           |                                                                   | Z | 1.89   | 66.79  | 11.65 |      | 80.0  |         |
| 10464-AAA | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 100.00 | 126.35 | 32.27 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 100.00 | 124.09 | 31.55 |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 126.89 | 32.42 |      | 80.0  |         |
| 10465-AAA | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 5.43   | 78.04  | 16.22 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 61.58  | 101.53 | 22.35 |      | 80.0  |         |
|           |                                                                   | Z | 4.13   | 75.48  | 15.36 |      | 80.0  |         |
| 10466-AAA | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 1.84   | 66.23  | 11.40 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 5.22   | 75.15  | 14.66 |      | 80.0  |         |
|           |                                                                   | Z | 1.61   | 65.19  | 10.92 |      | 80.0  |         |
| 10467-AAC | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 100.00 | 126.67 | 32.42 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 100.00 | 124.36 | 31.67 |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 127.22 | 32.57 |      | 80.0  |         |
| 10468-AAC | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 6.42   | 79.84  | 16.80 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 95.13  | 106.08 | 23.39 |      | 80.0  |         |
|           |                                                                   | Z | 4.76   | 76.99  | 15.88 |      | 80.0  |         |
| 10469-AAC | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 1.85   | 66.30  | 11.43 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 5.30   | 75.30  | 14.71 |      | 80.0  |         |
|           |                                                                   | Z | 1.62   | 65.24  | 10.95 |      | 80.0  |         |
| 10470-AAC | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | X | 100.00 | 126.70 | 32.42 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 100.00 | 124.39 | 31.67 |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 127.26 | 32.58 |      | 80.0  |         |
| 10471-AAC | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | X | 6.33   | 79.66  | 16.73 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 93.01  | 105.78 | 23.31 |      | 80.0  |         |
|           |                                                                   | Z | 4.69   | 76.83  | 15.81 |      | 80.0  |         |
| 10472-AAC | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)  | X | 1.84   | 66.22  | 11.39 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 5.23   | 75.17  | 14.65 |      | 80.0  |         |
|           |                                                                   | Z | 1.60   | 65.17  | 10.90 |      | 80.0  |         |
| 10473-AAC | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | X | 100.00 | 126.67 | 32.40 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 100.00 | 124.35 | 31.66 |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 127.22 | 32.56 |      | 80.0  |         |
| 10474-AAC | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | X | 6.23   | 79.51  | 16.69 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 89.77  | 105.43 | 23.23 |      | 80.0  |         |
|           |                                                                   | Z | 4.63   | 76.70  | 15.77 |      | 80.0  |         |
| 10475-AAC | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)  | X | 1.83   | 66.18  | 11.37 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 5.17   | 75.07  | 14.62 |      | 80.0  |         |
|           |                                                                   | Z | 1.59   | 65.13  | 10.89 |      | 80.0  |         |

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June 26, 2018

|           |                                                                     |   |       |        |       |      |      |         |
|-----------|---------------------------------------------------------------------|---|-------|--------|-------|------|------|---------|
| 10477-AAC | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)    | X | 5.49  | 78.15  | 16.23 | 3.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 65.26 | 102.05 | 22.44 |      | 80.0 |         |
|           |                                                                     | Z | 4.15  | 75.54  | 15.36 |      | 80.0 |         |
| 10478-AAC | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)    | X | 1.81  | 66.09  | 11.33 | 3.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 5.09  | 74.88  | 14.55 |      | 80.0 |         |
|           |                                                                     | Z | 1.58  | 65.06  | 10.85 |      | 80.0 |         |
| 10479-AAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)   | X | 18.48 | 99.99  | 27.17 | 3.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 22.20 | 101.96 | 27.87 |      | 80.0 |         |
|           |                                                                     | Z | 14.17 | 96.33  | 26.21 |      | 80.0 |         |
| 10480-AAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 14.09 | 89.36  | 21.95 | 3.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 20.63 | 93.88  | 23.53 |      | 80.0 |         |
|           |                                                                     | Z | 11.71 | 87.23  | 21.36 |      | 80.0 |         |
| 10481-AAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 9.14  | 82.86  | 19.53 | 3.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 14.27 | 88.02  | 21.43 |      | 80.0 |         |
|           |                                                                     | Z | 7.91  | 81.27  | 19.06 |      | 80.0 |         |
| 10482-AAA | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 2.52  | 69.21  | 14.96 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 5.13  | 78.71  | 19.34 |      | 80.0 |         |
|           |                                                                     | Z | 2.46  | 69.28  | 15.12 |      | 80.0 |         |
| 10483-AAA | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 4.99  | 74.88  | 17.01 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 7.65  | 80.31  | 19.44 |      | 80.0 |         |
|           |                                                                     | Z | 4.60  | 74.09  | 16.78 |      | 80.0 |         |
| 10484-AAA | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 4.44  | 73.15  | 16.36 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 6.72  | 78.36  | 18.77 |      | 80.0 |         |
|           |                                                                     | Z | 4.14  | 72.49  | 16.16 |      | 80.0 |         |
| 10485-AAC | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 3.13  | 72.16  | 17.32 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 5.32  | 79.69  | 20.70 |      | 80.0 |         |
|           |                                                                     | Z | 3.02  | 71.96  | 17.37 |      | 80.0 |         |
| 10486-AAC | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 2.95  | 68.06  | 15.01 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 4.18  | 72.74  | 17.56 |      | 80.0 |         |
|           |                                                                     | Z | 2.88  | 68.00  | 15.09 |      | 80.0 |         |
| 10487-AAC | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 2.94  | 67.68  | 14.83 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 4.10  | 72.11  | 17.30 |      | 80.0 |         |
|           |                                                                     | Z | 2.88  | 67.63  | 14.91 |      | 80.0 |         |
| 10488-AAC | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | X | 3.50  | 71.98  | 18.18 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 4.95  | 77.05  | 20.46 |      | 80.0 |         |
|           |                                                                     | Z | 3.37  | 71.66  | 18.14 |      | 80.0 |         |
| 10489-AAC | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | X | 3.43  | 68.78  | 16.82 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 4.19  | 71.55  | 18.33 |      | 80.0 |         |
|           |                                                                     | Z | 3.34  | 68.53  | 16.79 |      | 80.0 |         |
| 10490-AAC | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)  | X | 3.52  | 68.64  | 16.78 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 4.25  | 71.23  | 18.22 |      | 80.0 |         |
|           |                                                                     | Z | 3.43  | 68.39  | 16.75 |      | 80.0 |         |
| 10491-AAC | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | X | 3.74  | 70.64  | 17.84 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 4.79  | 74.22  | 19.51 |      | 80.0 |         |
|           |                                                                     | Z | 3.63  | 70.36  | 17.79 |      | 80.0 |         |
| 10492-AAC | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | X | 3.79  | 68.16  | 16.96 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 4.41  | 70.27  | 18.11 |      | 80.0 |         |
|           |                                                                     | Z | 3.70  | 67.92  | 16.91 |      | 80.0 |         |

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|-----------|----------------------------------------------------------------------|---|------|-------|-------|------|------|---------|
| 10493-AAC | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 3.85 | 68.05 | 16.92 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 4.46 | 70.06 | 18.03 |      | 80.0 |         |
|           |                                                                      | Z | 3.76 | 67.81 | 16.88 |      | 80.0 |         |
| 10494-AAC | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 4.02 | 71.95 | 18.24 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 5.39 | 76.25 | 20.12 |      | 80.0 |         |
|           |                                                                      | Z | 3.90 | 71.68 | 18.20 |      | 80.0 |         |
| 10495-AAC | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 3.82 | 68.49 | 17.15 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 4.47 | 70.75 | 18.33 |      | 80.0 |         |
|           |                                                                      | Z | 3.72 | 68.24 | 17.10 |      | 80.0 |         |
| 10496-AAC | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 3.90 | 68.26 | 17.09 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 4.51 | 70.34 | 18.20 |      | 80.0 |         |
|           |                                                                      | Z | 3.81 | 68.02 | 17.05 |      | 80.0 |         |
| 10497-AAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)   | X | 1.64 | 63.93 | 11.45 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 3.48 | 72.94 | 16.17 |      | 80.0 |         |
|           |                                                                      | Z | 1.62 | 64.10 | 11.64 |      | 80.0 |         |
| 10498-AAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 1.36 | 60.00 | 8.37  | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 2.11 | 64.18 | 11.38 |      | 80.0 |         |
|           |                                                                      | Z | 1.34 | 60.00 | 8.46  |      | 80.0 |         |
| 10499-AAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 1.38 | 60.00 | 8.24  | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 2.00 | 63.38 | 10.85 |      | 80.0 |         |
|           |                                                                      | Z | 1.36 | 60.00 | 8.32  |      | 80.0 |         |
| 10500-AAA | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 3.25 | 71.93 | 17.62 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 4.97 | 78.02 | 20.41 |      | 80.0 |         |
|           |                                                                      | Z | 3.13 | 71.66 | 17.62 |      | 80.0 |         |
| 10501-AAA | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 3.19 | 68.55 | 15.79 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 4.19 | 72.26 | 17.86 |      | 80.0 |         |
|           |                                                                      | Z | 3.11 | 68.40 | 15.83 |      | 80.0 |         |
| 10502-AAA | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 3.23 | 68.38 | 15.66 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 4.22 | 71.98 | 17.69 |      | 80.0 |         |
|           |                                                                      | Z | 3.16 | 68.25 | 15.70 |      | 80.0 |         |
| 10503-AAC | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 3.45 | 71.77 | 18.08 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 4.88 | 76.80 | 20.35 |      | 80.0 |         |
|           |                                                                      | Z | 3.33 | 71.45 | 18.04 |      | 80.0 |         |
| 10504-AAC | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 3.41 | 68.67 | 16.76 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 4.17 | 71.45 | 18.27 |      | 80.0 |         |
|           |                                                                      | Z | 3.32 | 68.43 | 16.73 |      | 80.0 |         |
| 10505-AAC | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 3.50 | 68.54 | 16.72 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 4.23 | 71.13 | 18.16 |      | 80.0 |         |
|           |                                                                      | Z | 3.41 | 68.30 | 16.69 |      | 80.0 |         |
| 10506-AAC | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | X | 3.99 | 71.81 | 18.17 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 5.34 | 76.07 | 20.04 |      | 80.0 |         |
|           |                                                                      | Z | 3.87 | 71.54 | 18.13 |      | 80.0 |         |
| 10507-AAC | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | X | 3.80 | 68.43 | 17.11 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 4.45 | 70.68 | 18.30 |      | 80.0 |         |
|           |                                                                      | Z | 3.71 | 68.18 | 17.07 |      | 80.0 |         |

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|-----------|---------------------------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10508-AAC | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 3.89 | 68.19 | 17.05 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 4.50 | 70.26 | 18.15 |      | 80.0  |         |
|           |                                                                     | Z | 3.79 | 67.95 | 17.00 |      | 80.0  |         |
| 10509-AAC | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)   | X | 4.34 | 70.70 | 17.76 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 5.36 | 73.79 | 19.16 |      | 80.0  |         |
|           |                                                                     | Z | 4.23 | 70.47 | 17.73 |      | 80.0  |         |
| 10510-AAC | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 4.29 | 68.19 | 17.17 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 4.88 | 70.06 | 18.13 |      | 80.0  |         |
|           |                                                                     | Z | 4.20 | 67.96 | 17.12 |      | 80.0  |         |
| 10511-AAC | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 4.35 | 67.98 | 17.12 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 4.91 | 69.72 | 18.03 |      | 80.0  |         |
|           |                                                                     | Z | 4.26 | 67.75 | 17.07 |      | 80.0  |         |
| 10512-AAC | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)   | X | 4.50 | 72.02 | 18.14 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 5.87 | 75.98 | 19.85 |      | 80.0  |         |
|           |                                                                     | Z | 4.38 | 71.80 | 18.12 |      | 80.0  |         |
| 10513-AAC | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 4.18 | 68.39 | 17.24 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 4.80 | 70.47 | 18.29 |      | 80.0  |         |
|           |                                                                     | Z | 4.08 | 68.16 | 17.19 |      | 80.0  |         |
| 10514-AAC | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 4.21 | 68.03 | 17.15 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 4.78 | 69.92 | 18.12 |      | 80.0  |         |
|           |                                                                     | Z | 4.11 | 67.80 | 17.09 |      | 80.0  |         |
| 10515-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 99pc duty cycle)           | X | 0.88 | 61.83 | 13.34 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 0.94 | 62.98 | 14.49 |      | 150.0 |         |
|           |                                                                     | Z | 0.88 | 61.80 | 13.32 |      | 150.0 |         |
| 10516-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc duty cycle)         | X | 0.41 | 64.58 | 12.89 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 0.57 | 70.03 | 16.74 |      | 150.0 |         |
|           |                                                                     | Z | 0.41 | 64.53 | 12.84 |      | 150.0 |         |
| 10517-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 99pc duty cycle)          | X | 0.70 | 62.81 | 13.29 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 0.79 | 64.81 | 15.03 |      | 150.0 |         |
|           |                                                                     | Z | 0.70 | 62.78 | 13.27 |      | 150.0 |         |
| 10518-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc duty cycle)           | X | 4.36 | 66.33 | 15.84 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.49 | 66.65 | 16.13 |      | 150.0 |         |
|           |                                                                     | Z | 4.37 | 66.32 | 15.84 |      | 150.0 |         |
| 10519-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 99pc duty cycle)          | X | 4.53 | 66.54 | 15.95 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.68 | 66.89 | 16.24 |      | 150.0 |         |
|           |                                                                     | Z | 4.54 | 66.53 | 15.95 |      | 150.0 |         |
| 10520-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 99pc duty cycle)          | X | 4.38 | 66.47 | 15.86 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.53 | 66.84 | 16.16 |      | 150.0 |         |
|           |                                                                     | Z | 4.39 | 66.46 | 15.86 |      | 150.0 |         |
| 10521-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc duty cycle)          | X | 4.31 | 66.44 | 15.83 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.46 | 66.84 | 16.15 |      | 150.0 |         |
|           |                                                                     | Z | 4.32 | 66.44 | 15.83 |      | 150.0 |         |
| 10522-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc duty cycle)          | X | 4.37 | 66.58 | 15.94 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.52 | 66.93 | 16.24 |      | 150.0 |         |
|           |                                                                     | Z | 4.38 | 66.57 | 15.94 |      | 150.0 |         |

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|           |                                                            |   |      |       |       |      |       |         |
|-----------|------------------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10523-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 99pc duty cycle) | X | 4.27 | 66.46 | 15.79 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.40 | 66.80 | 16.08 |      | 150.0 |         |
|           |                                                            | Z | 4.28 | 66.44 | 15.79 |      | 150.0 |         |
| 10524-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc duty cycle) | X | 4.32 | 66.49 | 15.90 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.47 | 66.85 | 16.20 |      | 150.0 |         |
|           |                                                            | Z | 4.32 | 66.48 | 15.90 |      | 150.0 |         |
| 10525-AAB | IEEE 802.11ac WiFi (20MHz, MCS0, 99pc duty cycle)          | X | 4.32 | 65.56 | 15.51 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.45 | 65.90 | 15.80 |      | 150.0 |         |
|           |                                                            | Z | 4.33 | 65.54 | 15.51 |      | 150.0 |         |
| 10526-AAB | IEEE 802.11ac WiFi (20MHz, MCS1, 99pc duty cycle)          | X | 4.47 | 65.88 | 15.64 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.62 | 66.26 | 15.94 |      | 150.0 |         |
|           |                                                            | Z | 4.47 | 65.87 | 15.64 |      | 150.0 |         |
| 10527-AAB | IEEE 802.11ac WiFi (20MHz, MCS2, 99pc duty cycle)          | X | 4.39 | 65.83 | 15.57 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.54 | 66.22 | 15.88 |      | 150.0 |         |
|           |                                                            | Z | 4.40 | 65.82 | 15.57 |      | 150.0 |         |
| 10528-AAB | IEEE 802.11ac WiFi (20MHz, MCS3, 99pc duty cycle)          | X | 4.40 | 65.85 | 15.60 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.56 | 66.24 | 15.91 |      | 150.0 |         |
|           |                                                            | Z | 4.41 | 65.83 | 15.60 |      | 150.0 |         |
| 10529-AAB | IEEE 802.11ac WiFi (20MHz, MCS4, 99pc duty cycle)          | X | 4.40 | 65.85 | 15.60 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.56 | 66.24 | 15.91 |      | 150.0 |         |
|           |                                                            | Z | 4.41 | 65.83 | 15.60 |      | 150.0 |         |
| 10531-AAB | IEEE 802.11ac WiFi (20MHz, MCS6, 99pc duty cycle)          | X | 4.38 | 65.90 | 15.59 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.55 | 66.34 | 15.92 |      | 150.0 |         |
|           |                                                            | Z | 4.39 | 65.89 | 15.59 |      | 150.0 |         |
| 10532-AAB | IEEE 802.11ac WiFi (20MHz, MCS7, 99pc duty cycle)          | X | 4.25 | 65.75 | 15.52 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.41 | 66.19 | 15.85 |      | 150.0 |         |
|           |                                                            | Z | 4.26 | 65.74 | 15.52 |      | 150.0 |         |
| 10533-AAB | IEEE 802.11ac WiFi (20MHz, MCS8, 99pc duty cycle)          | X | 4.41 | 65.91 | 15.60 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.57 | 66.29 | 15.90 |      | 150.0 |         |
|           |                                                            | Z | 4.42 | 65.89 | 15.60 |      | 150.0 |         |
| 10534-AAB | IEEE 802.11ac WiFi (40MHz, MCS0, 99pc duty cycle)          | X | 4.96 | 66.00 | 15.73 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 5.09 | 66.34 | 15.97 |      | 150.0 |         |
|           |                                                            | Z | 4.97 | 65.99 | 15.73 |      | 150.0 |         |
| 10535-AAB | IEEE 802.11ac WiFi (40MHz, MCS1, 99pc duty cycle)          | X | 5.03 | 66.17 | 15.81 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 5.16 | 66.52 | 16.05 |      | 150.0 |         |
|           |                                                            | Z | 5.03 | 66.17 | 15.81 |      | 150.0 |         |
| 10536-AAB | IEEE 802.11ac WiFi (40MHz, MCS2, 99pc duty cycle)          | X | 4.90 | 66.11 | 15.76 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 5.03 | 66.47 | 16.01 |      | 150.0 |         |
|           |                                                            | Z | 4.91 | 66.11 | 15.76 |      | 150.0 |         |
| 10537-AAB | IEEE 802.11ac WiFi (40MHz, MCS3, 99pc duty cycle)          | X | 4.95 | 66.08 | 15.75 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 5.08 | 66.43 | 16.00 |      | 150.0 |         |
|           |                                                            | Z | 4.96 | 66.07 | 15.75 |      | 150.0 |         |
| 10538-AAB | IEEE 802.11ac WiFi (40MHz, MCS4, 99pc duty cycle)          | X | 5.04 | 66.10 | 15.80 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 5.17 | 66.45 | 16.05 |      | 150.0 |         |
|           |                                                            | Z | 5.04 | 66.09 | 15.80 |      | 150.0 |         |
| 10540-AAB | IEEE 802.11ac WiFi (40MHz, MCS6, 99pc duty cycle)          | X | 4.97 | 66.08 | 15.81 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 5.11 | 66.47 | 16.07 |      | 150.0 |         |
|           |                                                            | Z | 4.97 | 66.08 | 15.81 |      | 150.0 |         |

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|-----------|----------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10541-AAB | IEEE 802.11ac WiFi (40MHz, MCS7, 99pc duty cycle)  | X | 4.95 | 65.97 | 15.74 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.08 | 66.34 | 16.00 |      | 150.0 |         |
|           |                                                    | Z | 4.95 | 65.97 | 15.74 |      | 150.0 |         |
| 10542-AAB | IEEE 802.11ac WiFi (40MHz, MCS8, 99pc duty cycle)  | X | 5.10 | 66.08 | 15.81 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.23 | 66.41 | 16.05 |      | 150.0 |         |
|           |                                                    | Z | 5.11 | 66.07 | 15.81 |      | 150.0 |         |
| 10543-AAB | IEEE 802.11ac WiFi (40MHz, MCS9, 99pc duty cycle)  | X | 5.17 | 66.10 | 15.85 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.31 | 66.44 | 16.09 |      | 150.0 |         |
|           |                                                    | Z | 5.18 | 66.09 | 15.85 |      | 150.0 |         |
| 10544-AAB | IEEE 802.11ac WiFi (80MHz, MCS0, 99pc duty cycle)  | X | 5.30 | 66.13 | 15.75 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.40 | 66.46 | 15.97 |      | 150.0 |         |
|           |                                                    | Z | 5.30 | 66.12 | 15.75 |      | 150.0 |         |
| 10545-AAB | IEEE 802.11ac WiFi (80MHz, MCS1, 99pc duty cycle)  | X | 5.48 | 66.56 | 15.92 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.59 | 66.86 | 16.12 |      | 150.0 |         |
|           |                                                    | Z | 5.49 | 66.55 | 15.92 |      | 150.0 |         |
| 10546-AAB | IEEE 802.11ac WiFi (80MHz, MCS2, 99pc duty cycle)  | X | 5.34 | 66.28 | 15.79 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.46 | 66.66 | 16.04 |      | 150.0 |         |
|           |                                                    | Z | 5.35 | 66.28 | 15.79 |      | 150.0 |         |
| 10547-AAB | IEEE 802.11ac WiFi (80MHz, MCS3, 99pc duty cycle)  | X | 5.41 | 66.35 | 15.82 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.53 | 66.70 | 16.05 |      | 150.0 |         |
|           |                                                    | Z | 5.42 | 66.35 | 15.82 |      | 150.0 |         |
| 10548-AAB | IEEE 802.11ac WiFi (80MHz, MCS4, 99pc duty cycle)  | X | 5.62 | 67.15 | 16.20 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.76 | 67.56 | 16.45 |      | 150.0 |         |
|           |                                                    | Z | 5.63 | 67.16 | 16.20 |      | 150.0 |         |
| 10550-AAB | IEEE 802.11ac WiFi (80MHz, MCS6, 99pc duty cycle)  | X | 5.38 | 66.38 | 15.86 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.49 | 66.68 | 16.06 |      | 150.0 |         |
|           |                                                    | Z | 5.39 | 66.37 | 15.85 |      | 150.0 |         |
| 10551-AAB | IEEE 802.11ac WiFi (80MHz, MCS7, 99pc duty cycle)  | X | 5.37 | 66.33 | 15.80 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.50 | 66.72 | 16.04 |      | 150.0 |         |
|           |                                                    | Z | 5.38 | 66.34 | 15.80 |      | 150.0 |         |
| 10552-AAB | IEEE 802.11ac WiFi (80MHz, MCS8, 99pc duty cycle)  | X | 5.30 | 66.20 | 15.73 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.41 | 66.53 | 15.95 |      | 150.0 |         |
|           |                                                    | Z | 5.31 | 66.19 | 15.73 |      | 150.0 |         |
| 10553-AAB | IEEE 802.11ac WiFi (80MHz, MCS9, 99pc duty cycle)  | X | 5.37 | 66.20 | 15.77 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.50 | 66.56 | 16.00 |      | 150.0 |         |
|           |                                                    | Z | 5.38 | 66.20 | 15.77 |      | 150.0 |         |
| 10554-AAC | IEEE 802.11ac WiFi (160MHz, MCS0, 99pc duty cycle) | X | 5.71 | 66.50 | 15.85 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.81 | 66.82 | 16.06 |      | 150.0 |         |
|           |                                                    | Z | 5.72 | 66.50 | 15.85 |      | 150.0 |         |
| 10555-AAC | IEEE 802.11ac WiFi (160MHz, MCS1, 99pc duty cycle) | X | 5.83 | 66.78 | 15.97 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.93 | 67.11 | 16.18 |      | 150.0 |         |
|           |                                                    | Z | 5.83 | 66.78 | 15.98 |      | 150.0 |         |
| 10556-AAC | IEEE 802.11ac WiFi (160MHz, MCS2, 99pc duty cycle) | X | 5.85 | 66.84 | 16.00 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.95 | 67.16 | 16.20 |      | 150.0 |         |
|           |                                                    | Z | 5.86 | 66.84 | 16.00 |      | 150.0 |         |
| 10557-AAC | IEEE 802.11ac WiFi (160MHz, MCS3, 99pc duty cycle) | X | 5.81 | 66.72 | 15.96 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.92 | 67.07 | 16.18 |      | 150.0 |         |
|           |                                                    | Z | 5.82 | 66.71 | 15.96 |      | 150.0 |         |

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|-----------|-----------------------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10558-AAC | IEEE 802.11ac WiFi (160MHz, MCS4, 99pc duty cycle)              | X | 5.85 | 66.86 | 16.05 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 5.96 | 67.22 | 16.27 |      | 150.0 |         |
|           |                                                                 | Z | 5.86 | 66.86 | 16.05 |      | 150.0 |         |
| 10560-AAC | IEEE 802.11ac WiFi (160MHz, MCS6, 99pc duty cycle)              | X | 5.85 | 66.73 | 16.02 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 5.96 | 67.08 | 16.24 |      | 150.0 |         |
|           |                                                                 | Z | 5.85 | 66.73 | 16.02 |      | 150.0 |         |
| 10561-AAC | IEEE 802.11ac WiFi (160MHz, MCS7, 99pc duty cycle)              | X | 5.78 | 66.71 | 16.04 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 5.88 | 67.05 | 16.26 |      | 150.0 |         |
|           |                                                                 | Z | 5.79 | 66.71 | 16.04 |      | 150.0 |         |
| 10562-AAC | IEEE 802.11ac WiFi (160MHz, MCS8, 99pc duty cycle)              | X | 5.86 | 66.98 | 16.18 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 6.00 | 67.41 | 16.44 |      | 150.0 |         |
|           |                                                                 | Z | 5.87 | 66.99 | 16.18 |      | 150.0 |         |
| 10563-AAC | IEEE 802.11ac WiFi (160MHz, MCS9, 99pc duty cycle)              | X | 5.96 | 66.91 | 16.11 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 6.20 | 67.62 | 16.50 |      | 150.0 |         |
|           |                                                                 | Z | 5.97 | 66.93 | 16.12 |      | 150.0 |         |
| 10564-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 99pc duty cycle)  | X | 4.70 | 66.44 | 16.03 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 4.82 | 66.76 | 16.31 |      | 150.0 |         |
|           |                                                                 | Z | 4.70 | 66.43 | 16.03 |      | 150.0 |         |
| 10565-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 99pc duty cycle) | X | 4.91 | 66.87 | 16.35 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 5.05 | 67.19 | 16.62 |      | 150.0 |         |
|           |                                                                 | Z | 4.91 | 66.86 | 16.35 |      | 150.0 |         |
| 10566-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 99pc duty cycle) | X | 4.74 | 66.69 | 16.15 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 4.89 | 67.04 | 16.44 |      | 150.0 |         |
|           |                                                                 | Z | 4.75 | 66.68 | 16.15 |      | 150.0 |         |
| 10567-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 99pc duty cycle) | X | 4.77 | 67.08 | 16.52 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 4.91 | 67.41 | 16.78 |      | 150.0 |         |
|           |                                                                 | Z | 4.78 | 67.07 | 16.52 |      | 150.0 |         |
| 10568-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 99pc duty cycle) | X | 4.65 | 66.47 | 15.92 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 4.80 | 66.85 | 16.23 |      | 150.0 |         |
|           |                                                                 | Z | 4.66 | 66.47 | 15.92 |      | 150.0 |         |
| 10569-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 99pc duty cycle) | X | 4.74 | 67.23 | 16.61 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 4.87 | 67.51 | 16.84 |      | 150.0 |         |
|           |                                                                 | Z | 4.75 | 67.21 | 16.60 |      | 150.0 |         |
| 10570-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 99pc duty cycle) | X | 4.76 | 67.06 | 16.53 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 4.90 | 67.36 | 16.78 |      | 150.0 |         |
|           |                                                                 | Z | 4.77 | 67.05 | 16.53 |      | 150.0 |         |
| 10571-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90pc duty cycle)       | X | 1.10 | 63.42 | 14.47 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 1.22 | 65.16 | 15.85 |      | 130.0 |         |
|           |                                                                 | Z | 1.08 | 63.24 | 14.41 |      | 130.0 |         |
| 10572-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 90pc duty cycle)       | X | 1.11 | 63.89 | 14.77 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 1.24 | 65.79 | 16.22 |      | 130.0 |         |
|           |                                                                 | Z | 1.09 | 63.70 | 14.70 |      | 130.0 |         |
| 10573-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 90pc duty cycle)     | X | 1.08 | 73.84 | 17.41 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 1.49 | 96.37 | 26.07 |      | 130.0 |         |
|           |                                                                 | Z | 1.00 | 73.13 | 17.22 |      | 130.0 |         |
| 10574-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 90pc duty cycle)      | X | 1.13 | 68.08 | 16.84 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 1.43 | 72.28 | 19.34 |      | 130.0 |         |
|           |                                                                 | Z | 1.10 | 67.75 | 16.73 |      | 130.0 |         |

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|           |                                                                 |   |      |       |       |      |       |         |
|-----------|-----------------------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10575-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 90pc duty cycle)  | X | 4.50 | 66.27 | 16.10 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.63 | 66.61 | 16.40 |      | 130.0 |         |
|           |                                                                 | Z | 4.50 | 66.26 | 16.10 |      | 130.0 |         |
| 10576-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 90pc duty cycle)  | X | 4.52 | 66.45 | 16.17 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.65 | 66.77 | 16.46 |      | 130.0 |         |
|           |                                                                 | Z | 4.52 | 66.43 | 16.17 |      | 130.0 |         |
| 10577-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 90pc duty cycle) | X | 4.70 | 66.71 | 16.33 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.85 | 67.04 | 16.62 |      | 130.0 |         |
|           |                                                                 | Z | 4.71 | 66.70 | 16.33 |      | 130.0 |         |
| 10578-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 90pc duty cycle) | X | 4.60 | 66.85 | 16.43 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.75 | 67.20 | 16.72 |      | 130.0 |         |
|           |                                                                 | Z | 4.61 | 66.83 | 16.43 |      | 130.0 |         |
| 10579-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 90pc duty cycle) | X | 4.36 | 66.09 | 15.70 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.52 | 66.52 | 16.06 |      | 130.0 |         |
|           |                                                                 | Z | 4.37 | 66.07 | 15.70 |      | 130.0 |         |
| 10580-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 90pc duty cycle) | X | 4.41 | 66.16 | 15.74 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.57 | 66.57 | 16.09 |      | 130.0 |         |
|           |                                                                 | Z | 4.42 | 66.15 | 15.74 |      | 130.0 |         |
| 10581-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 90pc duty cycle) | X | 4.50 | 66.88 | 16.37 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.65 | 67.26 | 16.67 |      | 130.0 |         |
|           |                                                                 | Z | 4.51 | 66.86 | 16.37 |      | 130.0 |         |
| 10582-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 90pc duty cycle) | X | 4.30 | 65.86 | 15.49 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.47 | 66.30 | 15.86 |      | 130.0 |         |
|           |                                                                 | Z | 4.31 | 65.85 | 15.49 |      | 130.0 |         |
| 10583-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 90pc duty cycle)       | X | 4.50 | 66.27 | 16.10 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.63 | 66.61 | 16.40 |      | 130.0 |         |
|           |                                                                 | Z | 4.50 | 66.26 | 16.10 |      | 130.0 |         |
| 10584-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 90pc duty cycle)       | X | 4.52 | 66.45 | 16.17 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.65 | 66.77 | 16.46 |      | 130.0 |         |
|           |                                                                 | Z | 4.52 | 66.43 | 16.17 |      | 130.0 |         |
| 10585-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90pc duty cycle)      | X | 4.70 | 66.71 | 16.33 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.85 | 67.04 | 16.62 |      | 130.0 |         |
|           |                                                                 | Z | 4.71 | 66.70 | 16.33 |      | 130.0 |         |
| 10586-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 90pc duty cycle)      | X | 4.60 | 66.85 | 16.43 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.75 | 67.20 | 16.72 |      | 130.0 |         |
|           |                                                                 | Z | 4.61 | 66.83 | 16.43 |      | 130.0 |         |
| 10587-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 90pc duty cycle)      | X | 4.36 | 66.09 | 15.70 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.52 | 66.52 | 16.06 |      | 130.0 |         |
|           |                                                                 | Z | 4.37 | 66.07 | 15.70 |      | 130.0 |         |
| 10588-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 90pc duty cycle)      | X | 4.41 | 66.16 | 15.74 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.57 | 66.57 | 16.09 |      | 130.0 |         |
|           |                                                                 | Z | 4.42 | 66.15 | 15.74 |      | 130.0 |         |
| 10589-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 90pc duty cycle)      | X | 4.50 | 66.88 | 16.37 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.65 | 67.26 | 16.67 |      | 130.0 |         |
|           |                                                                 | Z | 4.51 | 66.86 | 16.37 |      | 130.0 |         |
| 10590-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 90pc duty cycle)      | X | 4.30 | 65.86 | 15.49 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.47 | 66.30 | 15.86 |      | 130.0 |         |
|           |                                                                 | Z | 4.31 | 65.85 | 15.49 |      | 130.0 |         |

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|-----------|-------------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10591-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS0, 90pc duty cycle) | X | 4.65 | 66.36 | 16.22 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.78 | 66.66 | 16.49 |      | 130.0 |         |
|           |                                                       | Z | 4.65 | 66.34 | 16.22 |      | 130.0 |         |
| 10592-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS1, 90pc duty cycle) | X | 4.79 | 66.67 | 16.35 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.93 | 66.99 | 16.62 |      | 130.0 |         |
|           |                                                       | Z | 4.79 | 66.66 | 16.35 |      | 130.0 |         |
| 10593-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS2, 90pc duty cycle) | X | 4.70 | 66.55 | 16.21 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.85 | 66.90 | 16.51 |      | 130.0 |         |
|           |                                                       | Z | 4.71 | 66.54 | 16.21 |      | 130.0 |         |
| 10594-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS3, 90pc duty cycle) | X | 4.76 | 66.73 | 16.38 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.91 | 67.07 | 16.66 |      | 130.0 |         |
|           |                                                       | Z | 4.76 | 66.72 | 16.38 |      | 130.0 |         |
| 10595-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS4, 90pc duty cycle) | X | 4.72 | 66.69 | 16.28 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.87 | 67.03 | 16.56 |      | 130.0 |         |
|           |                                                       | Z | 4.73 | 66.67 | 16.28 |      | 130.0 |         |
| 10596-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS5, 90pc duty cycle) | X | 4.66 | 66.67 | 16.27 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.81 | 67.03 | 16.56 |      | 130.0 |         |
|           |                                                       | Z | 4.66 | 66.65 | 16.27 |      | 130.0 |         |
| 10597-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS6, 90pc duty cycle) | X | 4.61 | 66.55 | 16.13 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.76 | 66.93 | 16.45 |      | 130.0 |         |
|           |                                                       | Z | 4.61 | 66.53 | 16.13 |      | 130.0 |         |
| 10598-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS7, 90pc duty cycle) | X | 4.59 | 66.77 | 16.39 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.74 | 67.15 | 16.70 |      | 130.0 |         |
|           |                                                       | Z | 4.60 | 66.76 | 16.39 |      | 130.0 |         |
| 10599-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS0, 90pc duty cycle) | X | 5.32 | 66.88 | 16.47 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.44 | 67.19 | 16.70 |      | 130.0 |         |
|           |                                                       | Z | 5.33 | 66.88 | 16.48 |      | 130.0 |         |
| 10600-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS1, 90pc duty cycle) | X | 5.45 | 67.29 | 16.65 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.56 | 67.56 | 16.85 |      | 130.0 |         |
|           |                                                       | Z | 5.45 | 67.29 | 16.66 |      | 130.0 |         |
| 10601-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS2, 90pc duty cycle) | X | 5.34 | 67.05 | 16.54 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.46 | 67.33 | 16.76 |      | 130.0 |         |
|           |                                                       | Z | 5.35 | 67.04 | 16.55 |      | 130.0 |         |
| 10602-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS3, 90pc duty cycle) | X | 5.46 | 67.19 | 16.54 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.55 | 67.37 | 16.70 |      | 130.0 |         |
|           |                                                       | Z | 5.47 | 67.18 | 16.53 |      | 130.0 |         |
| 10603-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS4, 90pc duty cycle) | X | 5.52 | 67.44 | 16.80 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.63 | 67.66 | 16.97 |      | 130.0 |         |
|           |                                                       | Z | 5.53 | 67.43 | 16.80 |      | 130.0 |         |
| 10604-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS5, 90pc duty cycle) | X | 5.40 | 67.11 | 16.62 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.45 | 67.17 | 16.71 |      | 130.0 |         |
|           |                                                       | Z | 5.40 | 67.08 | 16.61 |      | 130.0 |         |
| 10605-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS6, 90pc duty cycle) | X | 5.45 | 67.23 | 16.67 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.55 | 67.47 | 16.87 |      | 130.0 |         |
|           |                                                       | Z | 5.46 | 67.22 | 16.67 |      | 130.0 |         |
| 10606-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS7, 90pc duty cycle) | X | 5.18 | 66.51 | 16.16 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.31 | 66.84 | 16.41 |      | 130.0 |         |
|           |                                                       | Z | 5.19 | 66.49 | 16.16 |      | 130.0 |         |

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|-----------|---------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10607-AAB | IEEE 802.11ac WiFi (20MHz, MCS0, 90pc duty cycle) | X | 4.48 | 65.64 | 15.83 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.61 | 65.97 | 16.11 |      | 130.0 |         |
|           |                                                   | Z | 4.49 | 65.63 | 15.83 |      | 130.0 |         |
| 10608-AAB | IEEE 802.11ac WiFi (20MHz, MCS1, 90pc duty cycle) | X | 4.64 | 66.01 | 15.99 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.80 | 66.37 | 16.28 |      | 130.0 |         |
|           |                                                   | Z | 4.65 | 66.00 | 15.99 |      | 130.0 |         |
| 10609-AAB | IEEE 802.11ac WiFi (20MHz, MCS2, 90pc duty cycle) | X | 4.54 | 65.84 | 15.81 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.69 | 66.23 | 16.12 |      | 130.0 |         |
|           |                                                   | Z | 4.54 | 65.83 | 15.81 |      | 130.0 |         |
| 10610-AAB | IEEE 802.11ac WiFi (20MHz, MCS3, 90pc duty cycle) | X | 4.59 | 66.00 | 15.98 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.74 | 66.38 | 16.28 |      | 130.0 |         |
|           |                                                   | Z | 4.59 | 65.99 | 15.98 |      | 130.0 |         |
| 10611-AAB | IEEE 802.11ac WiFi (20MHz, MCS4, 90pc duty cycle) | X | 4.50 | 65.80 | 15.82 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.66 | 66.19 | 16.13 |      | 130.0 |         |
|           |                                                   | Z | 4.51 | 65.79 | 15.82 |      | 130.0 |         |
| 10612-AAB | IEEE 802.11ac WiFi (20MHz, MCS5, 90pc duty cycle) | X | 4.50 | 65.94 | 15.85 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.67 | 66.35 | 16.18 |      | 130.0 |         |
|           |                                                   | Z | 4.51 | 65.93 | 15.86 |      | 130.0 |         |
| 10613-AAB | IEEE 802.11ac WiFi (20MHz, MCS6, 90pc duty cycle) | X | 4.50 | 65.79 | 15.72 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.67 | 66.23 | 16.06 |      | 130.0 |         |
|           |                                                   | Z | 4.51 | 65.78 | 15.72 |      | 130.0 |         |
| 10614-AAB | IEEE 802.11ac WiFi (20MHz, MCS7, 90pc duty cycle) | X | 4.45 | 65.99 | 15.96 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.61 | 66.40 | 16.28 |      | 130.0 |         |
|           |                                                   | Z | 4.46 | 65.98 | 15.96 |      | 130.0 |         |
| 10615-AAB | IEEE 802.11ac WiFi (20MHz, MCS8, 90pc duty cycle) | X | 4.50 | 65.64 | 15.59 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.66 | 66.04 | 15.92 |      | 130.0 |         |
|           |                                                   | Z | 4.50 | 65.63 | 15.59 |      | 130.0 |         |
| 10616-AAB | IEEE 802.11ac WiFi (40MHz, MCS0, 90pc duty cycle) | X | 5.13 | 66.09 | 16.06 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.26 | 66.43 | 16.30 |      | 130.0 |         |
|           |                                                   | Z | 5.14 | 66.09 | 16.06 |      | 130.0 |         |
| 10617-AAB | IEEE 802.11ac WiFi (40MHz, MCS1, 90pc duty cycle) | X | 5.20 | 66.29 | 16.13 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.32 | 66.60 | 16.36 |      | 130.0 |         |
|           |                                                   | Z | 5.21 | 66.29 | 16.14 |      | 130.0 |         |
| 10618-AAB | IEEE 802.11ac WiFi (40MHz, MCS2, 90pc duty cycle) | X | 5.09 | 66.30 | 16.15 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.21 | 66.61 | 16.38 |      | 130.0 |         |
|           |                                                   | Z | 5.10 | 66.29 | 16.15 |      | 130.0 |         |
| 10619-AAB | IEEE 802.11ac WiFi (40MHz, MCS3, 90pc duty cycle) | X | 5.10 | 66.08 | 15.98 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.23 | 66.42 | 16.22 |      | 130.0 |         |
|           |                                                   | Z | 5.11 | 66.08 | 15.98 |      | 130.0 |         |
| 10620-AAB | IEEE 802.11ac WiFi (40MHz, MCS4, 90pc duty cycle) | X | 5.18 | 66.12 | 16.05 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.32 | 66.47 | 16.30 |      | 130.0 |         |
|           |                                                   | Z | 5.19 | 66.12 | 16.05 |      | 130.0 |         |
| 10621-AAB | IEEE 802.11ac WiFi (40MHz, MCS5, 90pc duty cycle) | X | 5.20 | 66.27 | 16.24 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.32 | 66.58 | 16.46 |      | 130.0 |         |
|           |                                                   | Z | 5.20 | 66.27 | 16.25 |      | 130.0 |         |
| 10622-AAB | IEEE 802.11ac WiFi (40MHz, MCS6, 90pc duty cycle) | X | 5.21 | 66.44 | 16.32 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.33 | 66.73 | 16.53 |      | 130.0 |         |
|           |                                                   | Z | 5.22 | 66.44 | 16.33 |      | 130.0 |         |

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|           |                                                    |   |      |       |       |      |       |         |
|-----------|----------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10623-AAB | IEEE 802.11ac WiFi (40MHz, MCS7, 90pc duty cycle)  | X | 5.08 | 65.93 | 15.93 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.21 | 66.29 | 16.19 |      | 130.0 |         |
|           |                                                    | Z | 5.09 | 65.93 | 15.94 |      | 130.0 |         |
| 10624-AAB | IEEE 802.11ac WiFi (40MHz, MCS8, 90pc duty cycle)  | X | 5.27 | 66.16 | 16.11 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.40 | 66.47 | 16.35 |      | 130.0 |         |
|           |                                                    | Z | 5.28 | 66.15 | 16.12 |      | 130.0 |         |
| 10625-AAB | IEEE 802.11ac WiFi (40MHz, MCS9, 90pc duty cycle)  | X | 5.52 | 66.79 | 16.49 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.74 | 67.39 | 16.86 |      | 130.0 |         |
|           |                                                    | Z | 5.54 | 66.83 | 16.51 |      | 130.0 |         |
| 10626-AAB | IEEE 802.11ac WiFi (80MHz, MCS0, 90pc duty cycle)  | X | 5.45 | 66.17 | 16.04 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.55 | 66.49 | 16.26 |      | 130.0 |         |
|           |                                                    | Z | 5.46 | 66.17 | 16.04 |      | 130.0 |         |
| 10627-AAB | IEEE 802.11ac WiFi (80MHz, MCS1, 90pc duty cycle)  | X | 5.69 | 66.77 | 16.30 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.78 | 67.03 | 16.49 |      | 130.0 |         |
|           |                                                    | Z | 5.69 | 66.76 | 16.31 |      | 130.0 |         |
| 10628-AAB | IEEE 802.11ac WiFi (80MHz, MCS2, 90pc duty cycle)  | X | 5.46 | 66.20 | 15.95 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.58 | 66.58 | 16.20 |      | 130.0 |         |
|           |                                                    | Z | 5.47 | 66.20 | 15.96 |      | 130.0 |         |
| 10629-AAB | IEEE 802.11ac WiFi (80MHz, MCS3, 90pc duty cycle)  | X | 5.54 | 66.30 | 15.99 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.66 | 66.63 | 16.22 |      | 130.0 |         |
|           |                                                    | Z | 5.55 | 66.30 | 16.00 |      | 130.0 |         |
| 10630-AAB | IEEE 802.11ac WiFi (80MHz, MCS4, 90pc duty cycle)  | X | 5.89 | 67.55 | 16.62 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 6.06 | 68.03 | 16.92 |      | 130.0 |         |
|           |                                                    | Z | 5.91 | 67.58 | 16.64 |      | 130.0 |         |
| 10631-AAB | IEEE 802.11ac WiFi (80MHz, MCS5, 90pc duty cycle)  | X | 5.82 | 67.43 | 16.76 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.97 | 67.86 | 17.02 |      | 130.0 |         |
|           |                                                    | Z | 5.83 | 67.44 | 16.77 |      | 130.0 |         |
| 10632-AAB | IEEE 802.11ac WiFi (80MHz, MCS6, 90pc duty cycle)  | X | 5.66 | 66.86 | 16.49 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.75 | 67.08 | 16.64 |      | 130.0 |         |
|           |                                                    | Z | 5.67 | 66.85 | 16.49 |      | 130.0 |         |
| 10633-AAB | IEEE 802.11ac WiFi (80MHz, MCS7, 90pc duty cycle)  | X | 5.53 | 66.40 | 16.08 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.65 | 66.74 | 16.31 |      | 130.0 |         |
|           |                                                    | Z | 5.53 | 66.39 | 16.09 |      | 130.0 |         |
| 10634-AAB | IEEE 802.11ac WiFi (80MHz, MCS8, 90pc duty cycle)  | X | 5.51 | 66.41 | 16.15 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.63 | 66.76 | 16.38 |      | 130.0 |         |
|           |                                                    | Z | 5.51 | 66.41 | 16.15 |      | 130.0 |         |
| 10635-AAB | IEEE 802.11ac WiFi (80MHz, MCS9, 90pc duty cycle)  | X | 5.38 | 65.73 | 15.53 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.52 | 66.14 | 15.81 |      | 130.0 |         |
|           |                                                    | Z | 5.39 | 65.73 | 15.54 |      | 130.0 |         |
| 10636-AAC | IEEE 802.11ac WiFi (160MHz, MCS0, 90pc duty cycle) | X | 5.88 | 66.55 | 16.14 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.96 | 66.85 | 16.34 |      | 130.0 |         |
|           |                                                    | Z | 5.88 | 66.55 | 16.15 |      | 130.0 |         |
| 10637-AAC | IEEE 802.11ac WiFi (160MHz, MCS1, 90pc duty cycle) | X | 6.02 | 66.92 | 16.31 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 6.11 | 67.22 | 16.51 |      | 130.0 |         |
|           |                                                    | Z | 6.03 | 66.93 | 16.32 |      | 130.0 |         |
| 10638-AAC | IEEE 802.11ac WiFi (160MHz, MCS2, 90pc duty cycle) | X | 6.02 | 66.89 | 16.27 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 6.12 | 67.20 | 16.48 |      | 130.0 |         |
|           |                                                    | Z | 6.02 | 66.89 | 16.28 |      | 130.0 |         |

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|           |                                                        |   |        |        |       |       |       |         |
|-----------|--------------------------------------------------------|---|--------|--------|-------|-------|-------|---------|
| 10639-AAC | IEEE 802.11ac WiFi (160MHz, MCS3, 90pc duty cycle)     | X | 5.99   | 66.82  | 16.28 | 0.46  | 130.0 | ± 9.6 % |
|           |                                                        | Y | 6.09   | 67.15  | 16.50 |       | 130.0 |         |
|           |                                                        | Z | 6.00   | 66.82  | 16.29 |       | 130.0 |         |
| 10640-AAC | IEEE 802.11ac WiFi (160MHz, MCS4, 90pc duty cycle)     | X | 5.99   | 66.81  | 16.22 | 0.46  | 130.0 | ± 9.6 % |
|           |                                                        | Y | 6.10   | 67.17  | 16.45 |       | 130.0 |         |
|           |                                                        | Z | 5.99   | 66.82  | 16.23 |       | 130.0 |         |
| 10641-AAC | IEEE 802.11ac WiFi (160MHz, MCS5, 90pc duty cycle)     | X | 6.05   | 66.80  | 16.24 | 0.46  | 130.0 | ± 9.6 % |
|           |                                                        | Y | 6.14   | 67.07  | 16.42 |       | 130.0 |         |
|           |                                                        | Z | 6.06   | 66.80  | 16.24 |       | 130.0 |         |
| 10642-AAC | IEEE 802.11ac WiFi (160MHz, MCS6, 90pc duty cycle)     | X | 6.08   | 67.00  | 16.51 | 0.46  | 130.0 | ± 9.6 % |
|           |                                                        | Y | 6.18   | 67.31  | 16.70 |       | 130.0 |         |
|           |                                                        | Z | 6.09   | 67.00  | 16.51 |       | 130.0 |         |
| 10643-AAC | IEEE 802.11ac WiFi (160MHz, MCS7, 90pc duty cycle)     | X | 5.93   | 66.71  | 16.25 | 0.46  | 130.0 | ± 9.6 % |
|           |                                                        | Y | 6.02   | 67.01  | 16.46 |       | 130.0 |         |
|           |                                                        | Z | 5.93   | 66.71  | 16.25 |       | 130.0 |         |
| 10644-AAC | IEEE 802.11ac WiFi (160MHz, MCS8, 90pc duty cycle)     | X | 6.03   | 67.03  | 16.43 | 0.46  | 130.0 | ± 9.6 % |
|           |                                                        | Y | 6.18   | 67.49  | 16.72 |       | 130.0 |         |
|           |                                                        | Z | 6.04   | 67.04  | 16.44 |       | 130.0 |         |
| 10645-AAC | IEEE 802.11ac WiFi (160MHz, MCS9, 90pc duty cycle)     | X | 6.17   | 67.10  | 16.43 | 0.46  | 130.0 | ± 9.6 % |
|           |                                                        | Y | 6.47   | 67.97  | 16.92 |       | 130.0 |         |
|           |                                                        | Z | 6.18   | 67.13  | 16.45 |       | 130.0 |         |
| 10646-AAD | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,7)  | X | 19.17  | 110.50 | 37.83 | 9.30  | 60.0  | ± 9.6 % |
|           |                                                        | Y | 100.00 | 147.85 | 47.85 |       | 60.0  |         |
|           |                                                        | Z | 16.64  | 107.87 | 37.15 |       | 60.0  |         |
| 10647-AAC | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,7) | X | 16.90  | 108.32 | 37.31 | 9.30  | 60.0  | ± 9.6 % |
|           |                                                        | Y | 88.18  | 146.06 | 47.63 |       | 60.0  |         |
|           |                                                        | Z | 14.61  | 105.54 | 36.57 |       | 60.0  |         |
| 10648-AAA | CDMA2000 (1x Advanced)                                 | X | 0.50   | 60.79  | 7.93  | 0.00  | 150.0 | ± 9.6 % |
|           |                                                        | Y | 0.64   | 62.89  | 10.17 |       | 150.0 |         |
|           |                                                        | Z | 0.50   | 60.83  | 7.99  |       | 150.0 |         |
| 10652-AAB | LTE-TDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)         | X | 3.55   | 66.61  | 16.13 | 2.23  | 80.0  | ± 9.6 % |
|           |                                                        | Y | 3.97   | 68.09  | 17.10 |       | 80.0  |         |
|           |                                                        | Z | 3.49   | 66.41  | 16.10 |       | 80.0  |         |
| 10653-AAB | LTE-TDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)        | X | 4.10   | 66.10  | 16.44 | 2.23  | 80.0  | ± 9.6 % |
|           |                                                        | Y | 4.44   | 67.21  | 17.15 |       | 80.0  |         |
|           |                                                        | Z | 4.04   | 65.91  | 16.40 |       | 80.0  |         |
| 10654-AAB | LTE-TDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)        | X | 4.10   | 65.77  | 16.48 | 2.23  | 80.0  | ± 9.6 % |
|           |                                                        | Y | 4.40   | 66.84  | 17.14 |       | 80.0  |         |
|           |                                                        | Z | 4.04   | 65.58  | 16.43 |       | 80.0  |         |
| 10655-AAB | LTE-TDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)        | X | 4.17   | 65.74  | 16.53 | 2.23  | 80.0  | ± 9.6 % |
|           |                                                        | Y | 4.46   | 66.82  | 17.18 |       | 80.0  |         |
|           |                                                        | Z | 4.11   | 65.55  | 16.47 |       | 80.0  |         |
| 10658-AAA | Pulse Waveform (200Hz, 10%)                            | X | 75.07  | 110.20 | 27.10 | 10.00 | 50.0  | ± 9.6 % |
|           |                                                        | Y | 100.00 | 114.77 | 28.62 |       | 50.0  |         |
|           |                                                        | Z | 100.00 | 113.64 | 27.73 |       | 50.0  |         |
| 10659-AAA | Pulse Waveform (200Hz, 20%)                            | X | 100.00 | 110.55 | 25.39 | 6.99  | 60.0  | ± 9.6 % |
|           |                                                        | Y | 100.00 | 111.82 | 26.31 |       | 60.0  |         |
|           |                                                        | Z | 100.00 | 110.88 | 25.38 |       | 60.0  |         |

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|           |                             |   |        |        |       |      |       |         |
|-----------|-----------------------------|---|--------|--------|-------|------|-------|---------|
| 10660-AAA | Pulse Waveform (200Hz, 40%) | X | 100.00 | 107.54 | 22.75 | 3.98 | 80.0  | ± 9.6 % |
|           |                             | Y | 100.00 | 110.49 | 24.46 |      | 80.0  |         |
|           |                             | Z | 100.00 | 108.31 | 22.90 |      | 80.0  |         |
| 10661-AAA | Pulse Waveform (200Hz, 60%) | X | 100.00 | 104.54 | 20.30 | 2.22 | 100.0 | ± 9.6 % |
|           |                             | Y | 100.00 | 111.15 | 23.54 |      | 100.0 |         |
|           |                             | Z | 100.00 | 104.99 | 20.30 |      | 100.0 |         |
| 10662-AAA | Pulse Waveform (200Hz, 80%) | X | 5.09   | 77.36  | 11.00 | 0.97 | 120.0 | ± 9.6 % |
|           |                             | Y | 100.00 | 111.11 | 21.88 |      | 120.0 |         |
|           |                             | Z | 1.05   | 68.52  | 8.18  |      | 120.0 |         |

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

**- End of report -**

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