

## 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 SGS-TW (Auden)

Certificate No: DAE4-1336\_Aug18

### CALIBRATION CERTIFICATE

Object DAE4 - SD 000 D04 BM - SN: 1336

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

Calibration date: August 06, 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  |
|-------------------------------|--------------------|----------------------------|------------------------|
| Kelthley Multimeter Type 2001 | SN: 0810278        | 31-Aug-17 (No:21092)       | Aug-18                 |
| 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-18 |
| Calibrator Box V2.1           | SE UMS 006 AA 1002 | 04-Jan-18 (in house check) | In house check: Jan-18 |

|                |                           |                                   |               |
|----------------|---------------------------|-----------------------------------|---------------|
| Calibrated by: | Name<br>Dominique Steffen | Function<br>Laboratory Technician | Signature<br> |
| Approved by:   | Sven Kühn                 | Deputy Manager                    |               |

Issued: August 6, 2018

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Certificate No: DAE4-1336\_Aug18

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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          | 403.344 $\pm$ 0.02% (k=2) | 403.624 $\pm$ 0.02% (k=2) | 403.107 $\pm$ 0.02% (k=2) |
| Low Range           | 3.95102 $\pm$ 1.50% (k=2) | 3.98703 $\pm$ 1.50% (k=2) | 3.99683 $\pm$ 1.50% (k=2) |

**Connector Angle**

|                                           |                                     |
|-------------------------------------------|-------------------------------------|
| Connector Angle to be used in DASY system | 287.0 $^{\circ}$ $\pm$ 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 | 200042.98                 | 8.65                         | 0.00      |
| Channel X + Input | 20006.34                  | 1.11                         | 0.01      |
| Channel X - Input | -20005.65                 | -0.58                        | 0.00      |
| Channel Y + Input | 200034.32                 | 0.12                         | 0.00      |
| Channel Y + Input | 20003.47                  | -1.57                        | -0.01     |
| Channel Y - Input | -20006.39                 | -1.21                        | 0.01      |
| Channel Z + Input | 200032.22                 | -2.05                        | -0.00     |
| Channel Z + Input | 20002.78                  | -2.14                        | -0.01     |
| Channel Z - Input | -20007.34                 | -2.09                        | 0.01      |

| Low Range         | Reading ( $\mu\text{V}$ ) | Difference ( $\mu\text{V}$ ) | Error (%) |
|-------------------|---------------------------|------------------------------|-----------|
| Channel X + Input | 2001.47                   | 0.30                         | 0.01      |
| Channel X + Input | 201.92                    | 0.79                         | 0.39      |
| Channel X - Input | -198.26                   | 0.59                         | -0.30     |
| Channel Y + Input | 2001.55                   | 0.37                         | 0.02      |
| Channel Y + Input | 200.97                    | -0.11                        | -0.05     |
| Channel Y - Input | -199.34                   | -0.43                        | 0.22      |
| Channel Z + Input | 2001.12                   | 0.04                         | 0.00      |
| Channel Z + Input | 200.15                    | -0.88                        | -0.44     |
| Channel Z - Input | -200.14                   | -1.15                        | 0.58      |

### 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                            | 6.04                                         | 4.72                                        |
|           | - 200                          | -4.13                                        | -4.79                                       |
| Channel Y | 200                            | -3.65                                        | -3.78                                       |
|           | - 200                          | 2.68                                         | 2.45                                        |
| Channel Z | 200                            | 22.40                                        | 22.16                                       |
|           | - 200                          | -24.83                                       | -25.10                                      |

### 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                | -                           | 6.12                        | -1.64                       |
| Channel Y | 200                | 9.19                        | -                           | 6.46                        |
| Channel Z | 200                | 8.44                        | 6.31                        | -                           |

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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 | 15666            | 16509           |
| Channel Y | 15907            | 15587           |
| Channel Z | 15855            | 15507           |

#### 5. Input Offset Measurement

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

Input 10MΩ

|           | Average (μV) | min. Offset (μV) | max. Offset (μV) | Std. Deviation (μV) |
|-----------|--------------|------------------|------------------|---------------------|
| Channel X | 0.87         | -0.00            | 2.62             | 0.36                |
| Channel Y | 3.53         | 2.87             | 4.59             | 0.34                |
| Channel Z | -0.18        | -1.34            | 1.53             | 0.54                |

#### 6. Input Offset Current

Nominal Input circuitry offset current on all channels: <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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Accreditation No.: **SCS 0108**

Client **SGS-TW (Auden)**

Certificate No: **EX3-3938\_Oct18**

## CALIBRATION CERTIFICATE

Object **EX3DV4 - SN:3938**

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: **October 24, 2018**

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

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

Calibration Equipment used (M&TE critical for calibration)

| Primary Standards          | ID               | Cal Date (Certificate No.)        | Scheduled Calibration  |
|----------------------------|------------------|-----------------------------------|------------------------|
| Power meter NRP            | SN: 104778       | 04-Apr-18 (No. 217-02672/02673)   | Apr-19                 |
| Power sensor NRP-Z91       | SN: 103244       | 04-Apr-18 (No. 217-02672)         | Apr-19                 |
| Power sensor NRP-Z91       | SN: 103245       | 04-Apr-18 (No. 217-02673)         | Apr-19                 |
| Reference 20 dB Attenuator | SN: S5277 (20x)  | 04-Apr-18 (No. 217-02682)         | Apr-19                 |
| Reference Probe ES3DV2     | SN: 3013         | 30-Dec-17 (No. ES3-3013_Dec17)    | Dec-18                 |
| DAE4                       | SN: 660          | 21-Dec-17 (No. DAE4-660_Dec17)    | Dec-18                 |
| Secondary Standards        | ID               | Check Date (in house)             | Scheduled Check        |
| Power meter E4419B         | SN: GB41293874   | 06-Apr-16 (in house check Jun-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 E8358A    | SN: US41080477   | 31-Mar-14 (in house check Oct-18) | In house check: Oct-19 |

|                                                                                                                 | Name           | Function              | Signature |
|-----------------------------------------------------------------------------------------------------------------|----------------|-----------------------|-----------|
| Calibrated by:                                                                                                  | Jelon Kastrati | Laboratory Technician |           |
| Approved by:                                                                                                    | Katja Pokovic  | Technical Manager     |           |
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| Issued: October 24, 2018                                                                                        |                |                       |           |

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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  $E^2$ -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: EX3-3938\_Oct18

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EX3DV4 – SN:3938

October 24, 2018

# Probe EX3DV4

## SN:3938

Manufactured: May 2, 2013  
Calibrated: October 24, 2018

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

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EX3DV4- SN:3938

October 24, 2018

**DASY/EASY - Parameters of Probe: EX3DV4 - SN:3938****Basic Calibration Parameters**

|                                                               | Sensor X | Sensor Y | Sensor Z | Unc (k=2)    |
|---------------------------------------------------------------|----------|----------|----------|--------------|
| Norm ( $\mu\text{V}/(\text{V}/\text{m})^{2/3}$ ) <sup>A</sup> | 0.51     | 0.57     | 0.33     | $\pm 10.1\%$ |
| DCP (mV) <sup>B</sup>                                         | 103.2    | 100.3    | 107.8    |              |

**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>C</sup><br>(k=2) |
|-----|---------------------------|---|---------|------------------------------|-----|---------|----------|---------------------------|
| 0   | CW                        | X | 0.0     | 0.0                          | 1.0 | 0.00    | 164.0    | $\pm 3.5\%$               |
|     |                           | Y | 0.0     | 0.0                          | 1.0 |         | 174.2    |                           |
|     |                           | Z | 0.0     | 0.0                          | 1.0 |         | 176.3    |                           |

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 | 59.09    | 436.9    | 35.15                       | 26.09                               | 1.205                               | 5.10     | 1.012                 | 0.575                 | 1.009 |
| Y | 53.22    | 408.3    | 37.24                       | 24.25                               | 1.457                               | 5.10     | 0.000                 | 0.766                 | 1.013 |
| Z | 46.65    | 332.5    | 32.92                       | 15.26                               | 1.153                               | 4.98     | 2.000                 | 0.225                 | 1.006 |

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

<sup>A</sup> The uncertainties of Norm X,Y,Z do not affect the E<sup>2</sup>-field uncertainty inside TSL (see Pages 5 and 6).<sup>B</sup> Numerical linearization parameter: uncertainty not required.<sup>C</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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EX3DV4- SN:3938

October 24, 2018

## DASY/EASY - Parameters of Probe: EX3DV4 - SN:3938

### Calibration Parameter Determined in Head 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) |
|----------------------|------------------------------------|---------------------------------|---------|---------|---------|--------------------|-------------------------|-----------|
| 750                  | 41.9                               | 0.89                            | 9.82    | 9.82    | 9.82    | 0.45               | 0.80                    | ± 12.0 %  |
| 835                  | 41.5                               | 0.90                            | 9.50    | 9.50    | 9.50    | 0.50               | 0.85                    | ± 12.0 %  |
| 900                  | 41.5                               | 0.97                            | 9.25    | 9.25    | 9.25    | 0.33               | 1.04                    | ± 12.0 %  |
| 1450                 | 40.5                               | 1.20                            | 8.53    | 8.53    | 8.53    | 0.30               | 0.86                    | ± 12.0 %  |
| 1750                 | 40.1                               | 1.37                            | 8.32    | 8.32    | 8.32    | 0.36               | 0.90                    | ± 12.0 %  |
| 1900                 | 40.0                               | 1.40                            | 7.95    | 7.95    | 7.95    | 0.29               | 0.90                    | ± 12.0 %  |
| 2000                 | 40.0                               | 1.40                            | 7.93    | 7.93    | 7.93    | 0.36               | 0.80                    | ± 12.0 %  |
| 2300                 | 39.5                               | 1.67                            | 7.59    | 7.59    | 7.59    | 0.37               | 0.80                    | ± 12.0 %  |
| 2450                 | 39.2                               | 1.80                            | 7.17    | 7.17    | 7.17    | 0.38               | 0.83                    | ± 12.0 %  |
| 2600                 | 39.0                               | 1.96                            | 7.11    | 7.11    | 7.11    | 0.38               | 0.87                    | ± 12.0 %  |
| 5250                 | 35.9                               | 4.71                            | 5.00    | 5.00    | 5.00    | 0.40               | 1.80                    | ± 13.1 %  |
| 5600                 | 35.5                               | 5.07                            | 4.65    | 4.65    | 4.65    | 0.40               | 1.80                    | ± 13.1 %  |
| 5750                 | 35.4                               | 5.22                            | 4.76    | 4.76    | 4.76    | 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>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.

<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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EX3DV4-SN:3938

October 24, 2018

## DASY/EASY - Parameters of Probe: EX3DV4 - SN:3938

### Calibration Parameter Determined in Body 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 (mm) <sup>g</sup> | Unc (k=2) |
|----------------------|------------------------------------|---------------------------------|---------|---------|---------|--------------------|-------------------------|-----------|
| 750                  | 55.5                               | 0.96                            | 9.72    | 9.72    | 9.72    | 0.46               | 0.87                    | ± 12.0 %  |
| 835                  | 55.2                               | 0.97                            | 9.56    | 9.56    | 9.56    | 0.41               | 0.92                    | ± 12.0 %  |
| 900                  | 55.0                               | 1.05                            | 9.33    | 9.33    | 9.33    | 0.48               | 0.87                    | ± 12.0 %  |
| 1450                 | 54.0                               | 1.30                            | 7.98    | 7.98    | 7.98    | 0.32               | 0.90                    | ± 12.0 %  |
| 1750                 | 53.4                               | 1.49                            | 7.83    | 7.83    | 7.83    | 0.43               | 0.90                    | ± 12.0 %  |
| 1900                 | 53.3                               | 1.52                            | 7.52    | 7.52    | 7.52    | 0.33               | 0.96                    | ± 12.0 %  |
| 2000                 | 53.3                               | 1.52                            | 7.62    | 7.62    | 7.62    | 0.36               | 0.89                    | ± 12.0 %  |
| 2300                 | 52.9                               | 1.81                            | 7.33    | 7.33    | 7.33    | 0.42               | 0.87                    | ± 12.0 %  |
| 2450                 | 52.7                               | 1.95                            | 7.30    | 7.30    | 7.30    | 0.35               | 0.87                    | ± 12.0 %  |
| 2600                 | 52.5                               | 2.16                            | 7.15    | 7.15    | 7.15    | 0.33               | 0.95                    | ± 12.0 %  |
| 5250                 | 48.9                               | 5.36                            | 4.23    | 4.23    | 4.23    | 0.50               | 1.90                    | ± 13.1 %  |
| 5600                 | 48.5                               | 5.77                            | 3.77    | 3.77    | 3.77    | 0.50               | 1.90                    | ± 13.1 %  |
| 5800                 | 48.2                               | 6.00                            | 4.00    | 4.00    | 4.00    | 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.

<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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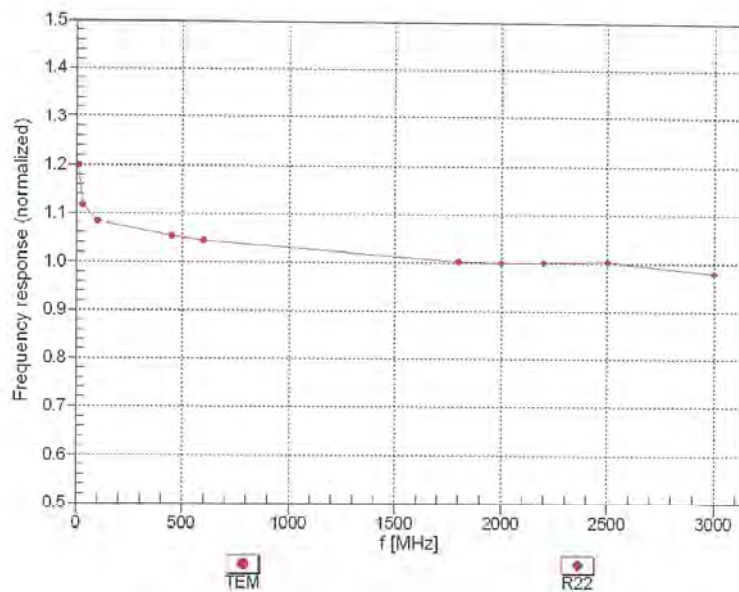
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EX3DV4-SN:3938

October 24, 2018

## 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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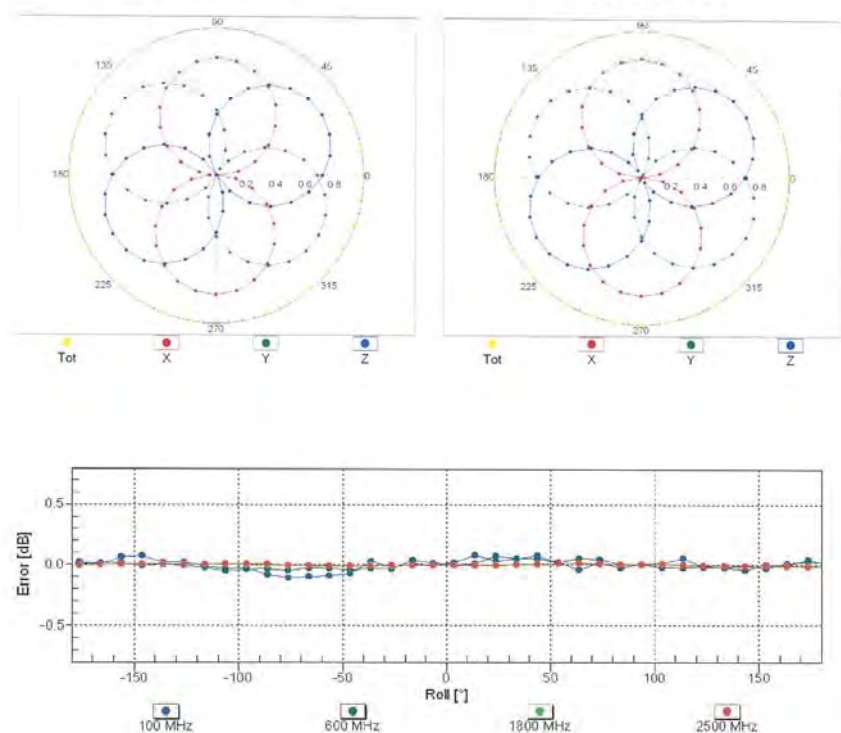
EX3DV4- SN:3938

October 24, 2018

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

f=600 MHz,TEM

f=1800 MHz,R22



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

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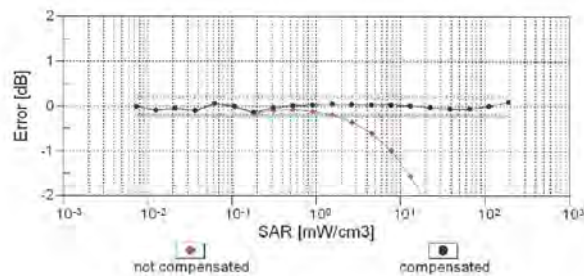
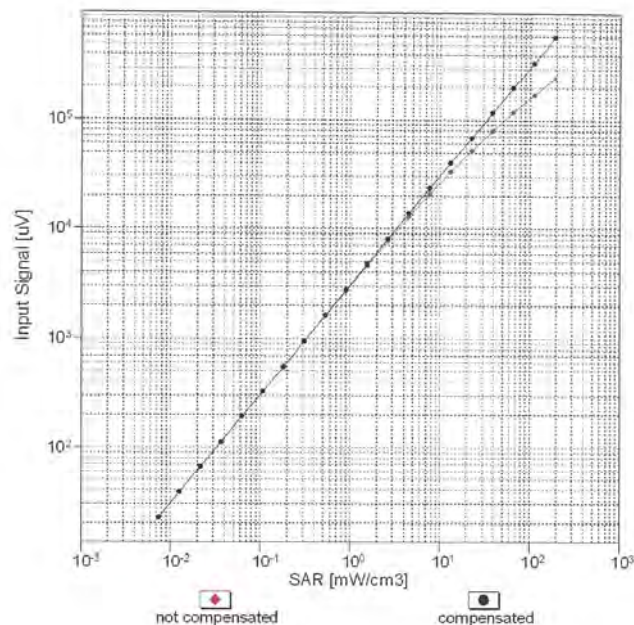
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## Dynamic Range $f(\text{SAR}_{\text{head}})$ (TEM cell, $f_{\text{eval}} = 1900 \text{ MHz}$ )



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

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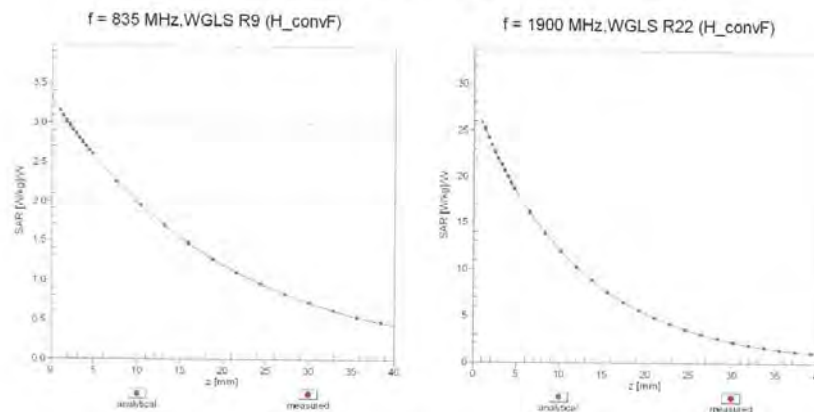
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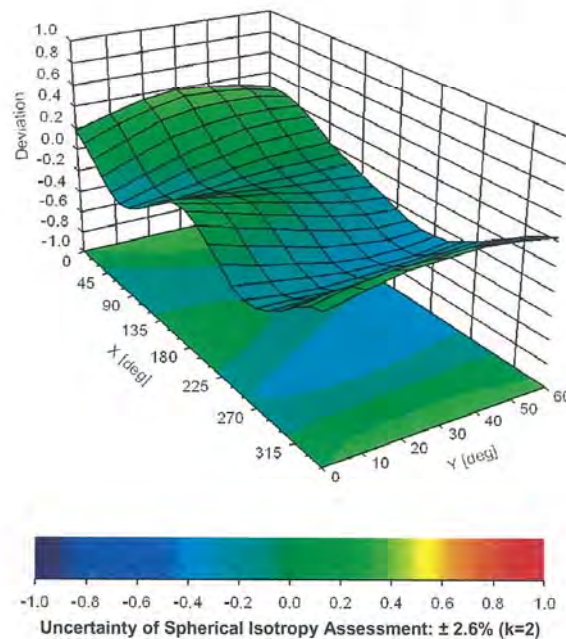
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## Conversion Factor Assessment



## Deviation from Isotropy in Liquid Error ( $\phi, \theta$ ), $f = 900$ MHz



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EX3DV4-- SN:3938

October 24, 2018

## DASY/EASY - Parameters of Probe: EX3DV4 - SN:3938

### Other Probe Parameters

|                                               |            |
|-----------------------------------------------|------------|
| Sensor Arrangement                            | Triangular |
| Connector Angle (°)                           | -26.4      |
| Mechanical Surface Detection Mode             | enabled    |
| Optical Surface Detection Mode                | disabled   |
| Probe Overall Length                          | 337 mm     |
| Probe Body Diameter                           | 10 mm      |
| Tip Length                                    | 9 mm       |
| Tip Diameter                                  | 2.5 mm     |
| Probe Tip to Sensor X Calibration Point       | 1 mm       |
| Probe Tip to Sensor Y Calibration Point       | 1 mm       |
| Probe Tip to Sensor Z Calibration Point       | 1 mm       |
| Recommended Measurement Distance from Surface | 1.4 mm     |

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**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>±</sup><br>(k=2) |
|---------------|-----------------------------------------------|---|---------|------------|-------|---------|----------|----------------------------------|
| 0             | CW                                            | X | 0.00    | 0.00       | 1.00  | 0.00    | 164.0    | ± 3.5 %                          |
|               |                                               | Y | 0.00    | 0.00       | 1.00  |         | 174.2    |                                  |
|               |                                               | Z | 0.00    | 0.00       | 1.00  |         | 176.3    |                                  |
| 10010-<br>CAA | SAR Validation (Square, 100ms, 10ms)          | X | 11.84   | 84.28      | 19.03 | 10.00   | 20.0     | ± 9.6 %                          |
|               |                                               | Y | 4.75    | 72.52      | 14.55 |         | 20.0     |                                  |
|               |                                               | Z | 2.70    | 65.86      | 10.62 |         | 20.0     |                                  |
| 10011-<br>CAB | UMTS-FDD (WCDMA)                              | X | 1.25    | 71.04      | 17.46 | 0.00    | 150.0    | ± 9.6 %                          |
|               |                                               | Y | 0.87    | 65.19      | 13.50 |         | 150.0    |                                  |
|               |                                               | Z | 1.10    | 69.84      | 16.56 |         | 150.0    |                                  |
| 10012-<br>CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps)      | X | 1.29    | 65.77      | 16.62 | 0.41    | 150.0    | ± 9.6 %                          |
|               |                                               | Y | 1.13    | 63.57      | 14.74 |         | 150.0    |                                  |
|               |                                               | Z | 1.17    | 64.77      | 15.66 |         | 150.0    |                                  |
| 10013-<br>CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps) | X | 5.06    | 67.01      | 17.40 | 1.46    | 150.0    | ± 9.6 %                          |
|               |                                               | Y | 4.93    | 66.63      | 17.09 |         | 150.0    |                                  |
|               |                                               | Z | 4.79    | 66.72      | 16.84 |         | 150.0    |                                  |
| 10021-<br>DAC | GSM-FDD (TDMA, GMSK)                          | X | 100.00  | 118.51     | 30.68 | 9.39    | 50.0     | ± 9.6 %                          |
|               |                                               | Y | 100.00  | 117.47     | 30.14 |         | 50.0     |                                  |
|               |                                               | Z | 9.68    | 81.68      | 18.25 |         | 50.0     |                                  |
| 10023-<br>DAC | GPRS-FDD (TDMA, GMSK, TN 0)                   | X | 100.00  | 118.45     | 30.70 | 9.57    | 50.0     | ± 9.6 %                          |
|               |                                               | Y | 100.00  | 117.42     | 30.17 |         | 50.0     |                                  |
|               |                                               | Z | 8.28    | 79.56      | 17.55 |         | 50.0     |                                  |
| 10024-<br>DAC | GPRS-FDD (TDMA, GMSK, TN 0-1)                 | X | 100.00  | 116.27     | 28.62 | 6.56    | 60.0     | ± 9.6 %                          |
|               |                                               | Y | 100.00  | 113.88     | 27.38 |         | 60.0     |                                  |
|               |                                               | Z | 17.36   | 88.43      | 18.89 |         | 60.0     |                                  |
| 10025-<br>DAC | EDGE-FDD (TDMA, 8PSK, TN 0)                   | X | 14.85   | 105.13     | 41.16 | 12.57   | 50.0     | ± 9.6 %                          |
|               |                                               | Y | 6.69    | 80.08      | 30.32 |         | 50.0     |                                  |
|               |                                               | Z | 5.13    | 73.32      | 26.13 |         | 50.0     |                                  |
| 10026-<br>DAC | EDGE-FDD (TDMA, 8PSK, TN 0-1)                 | X | 28.61   | 116.31     | 40.38 | 9.56    | 60.0     | ± 9.6 %                          |
|               |                                               | Y | 17.18   | 103.12     | 35.82 |         | 60.0     |                                  |
|               |                                               | Z | 10.76   | 92.22      | 31.22 |         | 60.0     |                                  |
| 10027-<br>DAC | GPRS-FDD (TDMA, GMSK, TN 0-1-2)               | X | 100.00  | 116.23     | 27.82 | 4.80    | 80.0     | ± 9.6 %                          |
|               |                                               | Y | 100.00  | 112.20     | 25.80 |         | 80.0     |                                  |
|               |                                               | Z | 100.00  | 105.42     | 22.06 |         | 80.0     |                                  |
| 10028-<br>DAC | GPRS-FDD (TDMA, GMSK, TN 0-1-2-3)             | X | 100.00  | 117.56     | 27.68 | 3.55    | 100.0    | ± 9.6 %                          |
|               |                                               | Y | 100.00  | 111.19     | 24.62 |         | 100.0    |                                  |
|               |                                               | Z | 100.00  | 105.06     | 21.28 |         | 100.0    |                                  |
| 10029-<br>DAC | EDGE-FDD (TDMA, 8PSK, TN 0-1-2)               | X | 14.44   | 99.44      | 33.73 | 7.80    | 80.0     | ± 9.6 %                          |
|               |                                               | Y | 10.38   | 91.48      | 30.62 |         | 80.0     |                                  |
|               |                                               | Z | 6.98    | 83.31      | 26.90 |         | 80.0     |                                  |
| 10030-<br>CAA | IEEE 802.15.1 Bluetooth (GFSK, DH1)           | X | 100.00  | 115.12     | 27.62 | 5.30    | 70.0     | ± 9.6 %                          |
|               |                                               | Y | 100.00  | 111.80     | 25.93 |         | 70.0     |                                  |
|               |                                               | Z | 13.15   | 85.08      | 17.21 |         | 70.0     |                                  |
| 10031-<br>CAA | IEEE 802.15.1 Bluetooth (GFSK, DH3)           | X | 100.00  | 120.41     | 27.44 | 1.88    | 100.0    | ± 9.6 %                          |
|               |                                               | Y | 100.00  | 105.86     | 20.93 |         | 100.0    |                                  |
|               |                                               | Z | 100.00  | 102.30     | 18.93 |         | 100.0    |                                  |

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|           |                                                     |   |        |        |       |       |       |         |
|-----------|-----------------------------------------------------|---|--------|--------|-------|-------|-------|---------|
| 10032-CAA | IEEE 802.15.1 Bluetooth (GFSK, DH5)                 | X | 100.00 | 129.17 | 29.93 | 1.17  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 100.00 | 101.34 | 18.13 |       | 100.0 |         |
|           |                                                     | Z | 100.00 | 104.25 | 18.92 |       | 100.0 |         |
| 10033-CAA | IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH1)           | X | 100.00 | 128.01 | 35.11 | 5.30  | 70.0  | ± 9.6 % |
|           |                                                     | Y | 30.26  | 106.06 | 28.70 |       | 70.0  |         |
|           |                                                     | Z | 7.06   | 82.85  | 20.36 |       | 70.0  |         |
| 10034-CAA | IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH3)           | X | 31.82  | 111.52 | 29.61 | 1.88  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 4.94   | 81.70  | 19.61 |       | 100.0 |         |
|           |                                                     | Z | 3.36   | 77.14  | 17.43 |       | 100.0 |         |
| 10035-CAA | IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH5)           | X | 8.76   | 93.74  | 24.54 | 1.17  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 2.58   | 74.38  | 16.61 |       | 100.0 |         |
|           |                                                     | Z | 2.45   | 74.78  | 16.51 |       | 100.0 |         |
| 10036-CAA | IEEE 802.15.1 Bluetooth (8-DPSK, DH1)               | X | 100.00 | 128.33 | 35.27 | 5.30  | 70.0  | ± 9.6 % |
|           |                                                     | Y | 49.56  | 114.02 | 30.85 |       | 70.0  |         |
|           |                                                     | Z | 8.61   | 85.86  | 21.44 |       | 70.0  |         |
| 10037-CAA | IEEE 802.15.1 Bluetooth (8-DPSK, DH3)               | X | 28.47  | 109.85 | 29.14 | 1.88  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 4.63   | 80.88  | 19.28 |       | 100.0 |         |
|           |                                                     | Z | 3.10   | 76.20  | 17.05 |       | 100.0 |         |
| 10038-CAA | IEEE 802.15.1 Bluetooth (8-DPSK, DH5)               | X | 9.40   | 95.18  | 25.08 | 1.17  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 2.66   | 74.97  | 16.94 |       | 100.0 |         |
|           |                                                     | Z | 2.52   | 75.36  | 16.85 |       | 100.0 |         |
| 10039-CAB | CDMA2000 (1xRTT, RC1)                               | X | 2.91   | 78.68  | 19.30 | 0.00  | 150.0 | ± 9.6 % |
|           |                                                     | Y | 1.40   | 67.94  | 13.51 |       | 150.0 |         |
|           |                                                     | Z | 2.98   | 79.60  | 18.61 |       | 150.0 |         |
| 10042-CAB | IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Halfrate) | X | 100.00 | 114.29 | 27.89 | 7.78  | 50.0  | ± 9.6 % |
|           |                                                     | Y | 100.00 | 112.24 | 26.83 |       | 50.0  |         |
|           |                                                     | Z | 7.08   | 77.79  | 15.66 |       | 50.0  |         |
| 10044-CAA | IS-91/EIA/TIA-553 FDD (FDMA, FM)                    | X | 0.00   | 111.10 | 2.98  | 0.00  | 150.0 | ± 9.6 % |
|           |                                                     | Y | 0.12   | 121.97 | 13.25 |       | 150.0 |         |
|           |                                                     | Z | 0.02   | 124.98 | 11.44 |       | 150.0 |         |
| 10048-CAA | DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24)           | X | 100.00 | 120.31 | 32.96 | 13.80 | 25.0  | ± 9.6 % |
|           |                                                     | Y | 26.80  | 98.60  | 27.12 |       | 25.0  |         |
|           |                                                     | Z | 6.10   | 73.04  | 16.68 |       | 25.0  |         |
| 10049-CAA | DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12)         | X | 100.00 | 118.79 | 31.19 | 10.79 | 40.0  | ± 9.6 % |
|           |                                                     | Y | 42.73  | 105.35 | 27.59 |       | 40.0  |         |
|           |                                                     | Z | 6.52   | 75.70  | 16.44 |       | 40.0  |         |
| 10056-CAA | UMTS-TDD (TD-SCDMA, 1.28 Mcps)                      | X | 59.92  | 116.40 | 32.89 | 9.03  | 50.0  | ± 9.6 % |
|           |                                                     | Y | 20.27  | 96.61  | 26.81 |       | 50.0  |         |
|           |                                                     | Z | 8.73   | 81.48  | 20.30 |       | 50.0  |         |
| 10058-DAC | EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)                   | X | 9.49   | 90.34  | 29.75 | 6.55  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 7.41   | 84.68  | 27.34 |       | 100.0 |         |
|           |                                                     | Z | 5.31   | 78.46  | 24.34 |       | 100.0 |         |
| 10059-CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps)            | X | 1.45   | 68.16  | 17.83 | 0.61  | 110.0 | ± 9.6 % |
|           |                                                     | Y | 1.24   | 65.28  | 15.64 |       | 110.0 |         |
|           |                                                     | Z | 1.24   | 66.08  | 16.24 |       | 110.0 |         |
| 10060-CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps)          | X | 100.00 | 136.52 | 35.66 | 1.30  | 110.0 | ± 9.6 % |
|           |                                                     | Y | 100.00 | 127.82 | 31.55 |       | 110.0 |         |
|           |                                                     | Z | 75.11  | 127.04 | 31.74 |       | 110.0 |         |

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|           |                                                |   |       |        |       |      |       |         |
|-----------|------------------------------------------------|---|-------|--------|-------|------|-------|---------|
| 10061-CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps)      | X | 37.93 | 122.29 | 34.76 | 2.04 | 110.0 | ± 9.6 % |
|           |                                                | Y | 7.04  | 91.70  | 25.29 |      | 110.0 |         |
|           |                                                | Z | 3.71  | 82.53  | 21.92 |      | 110.0 |         |
| 10062-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps)       | X | 4.83  | 66.93  | 16.78 | 0.49 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.68  | 66.44  | 16.40 |      | 100.0 |         |
|           |                                                | Z | 4.61  | 66.82  | 16.41 |      | 100.0 |         |
| 10063-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps)       | X | 4.86  | 67.07  | 16.91 | 0.72 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.71  | 66.58  | 16.52 |      | 100.0 |         |
|           |                                                | Z | 4.62  | 66.89  | 16.47 |      | 100.0 |         |
| 10064-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps)      | X | 5.19  | 67.38  | 17.15 | 0.86 | 100.0 | ± 9.6 % |
|           |                                                | Y | 5.02  | 66.91  | 16.79 |      | 100.0 |         |
|           |                                                | Z | 4.90  | 67.10  | 16.66 |      | 100.0 |         |
| 10065-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps)      | X | 5.07  | 67.37  | 17.30 | 1.21 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.91  | 66.89  | 16.94 |      | 100.0 |         |
|           |                                                | Z | 4.77  | 66.99  | 16.73 |      | 100.0 |         |
| 10066-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps)      | X | 5.11  | 67.44  | 17.51 | 1.46 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.95  | 66.98  | 17.15 |      | 100.0 |         |
|           |                                                | Z | 4.78  | 66.99  | 16.85 |      | 100.0 |         |
| 10067-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps)      | X | 5.40  | 67.52  | 17.91 | 2.04 | 100.0 | ± 9.6 % |
|           |                                                | Y | 5.26  | 67.17  | 17.62 |      | 100.0 |         |
|           |                                                | Z | 5.06  | 67.09  | 17.23 |      | 100.0 |         |
| 10068-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps)      | X | 5.51  | 67.80  | 18.25 | 2.55 | 100.0 | ± 9.6 % |
|           |                                                | Y | 5.36  | 67.40  | 17.94 |      | 100.0 |         |
|           |                                                | Z | 5.11  | 67.14  | 17.41 |      | 100.0 |         |
| 10069-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps)      | X | 5.58  | 67.69  | 18.40 | 2.67 | 100.0 | ± 9.6 % |
|           |                                                | Y | 5.44  | 67.37  | 18.13 |      | 100.0 |         |
|           |                                                | Z | 5.19  | 67.11  | 17.58 |      | 100.0 |         |
| 10071-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps)  | X | 5.17  | 67.17  | 17.75 | 1.99 | 100.0 | ± 9.6 % |
|           |                                                | Y | 5.05  | 66.81  | 17.46 |      | 100.0 |         |
|           |                                                | Z | 4.88  | 66.78  | 17.09 |      | 100.0 |         |
| 10072-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps) | X | 5.21  | 67.68  | 18.06 | 2.30 | 100.0 | ± 9.6 % |
|           |                                                | Y | 5.08  | 67.27  | 17.74 |      | 100.0 |         |
|           |                                                | Z | 4.87  | 67.11  | 17.28 |      | 100.0 |         |
| 10073-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps) | X | 5.30  | 67.92  | 18.44 | 2.83 | 100.0 | ± 9.6 % |
|           |                                                | Y | 5.18  | 67.55  | 18.13 |      | 100.0 |         |
|           |                                                | Z | 4.94  | 67.26  | 17.56 |      | 100.0 |         |
| 10074-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps) | X | 5.29  | 67.90  | 18.65 | 3.30 | 100.0 | ± 9.6 % |
|           |                                                | Y | 5.19  | 67.54  | 18.34 |      | 100.0 |         |
|           |                                                | Z | 4.93  | 67.18  | 17.70 |      | 100.0 |         |
| 10075-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps) | X | 5.40  | 68.26  | 19.10 | 3.82 | 90.0  | ± 9.6 % |
|           |                                                | Y | 5.26  | 67.86  | 18.77 |      | 90.0  |         |
|           |                                                | Z | 4.98  | 67.33  | 17.99 |      | 90.0  |         |
| 10076-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps) | X | 5.38  | 67.97  | 19.17 | 4.15 | 90.0  | ± 9.6 % |
|           |                                                | Y | 5.29  | 67.64  | 18.88 |      | 90.0  |         |
|           |                                                | Z | 5.00  | 67.13  | 18.10 |      | 90.0  |         |
| 10077-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps) | X | 5.41  | 68.03  | 19.26 | 4.30 | 90.0  | ± 9.6 % |
|           |                                                | Y | 5.32  | 67.72  | 18.98 |      | 90.0  |         |
|           |                                                | Z | 5.03  | 67.21  | 18.19 |      | 90.0  |         |

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|-----------|-----------------------------------------------------|---|--------|--------|-------|------|-------|---------|
| 10081-CAB | CDMA2000 (1xRTT, RC3)                               | X | 1.20   | 70.94  | 15.87 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 0.68   | 63.33  | 10.59 |      | 150.0 |         |
|           |                                                     | Z | 0.97   | 69.12  | 14.01 |      | 150.0 |         |
| 10082-CAB | IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Fullrate) | X | 1.35   | 61.30  | 6.54  | 4.77 | 80.0  | ± 9.6 % |
|           |                                                     | Y | 1.15   | 60.10  | 5.56  |      | 80.0  |         |
|           |                                                     | Z | 0.90   | 60.00  | 4.82  |      | 80.0  |         |
| 10090-DAC | GPRS-FDD (TDMA, GMSK, TN 0-4)                       | X | 100.00 | 116.34 | 28.67 | 6.56 | 60.0  | ± 9.6 % |
|           |                                                     | Y | 100.00 | 113.98 | 27.45 |      | 60.0  |         |
|           |                                                     | Z | 16.80  | 88.08  | 18.81 |      | 60.0  |         |
| 10097-CAB | UMTS-FDD (HSDPA)                                    | X | 1.98   | 69.10  | 16.78 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 1.66   | 66.14  | 14.64 |      | 150.0 |         |
|           |                                                     | Z | 1.92   | 69.38  | 16.52 |      | 150.0 |         |
| 10098-CAB | UMTS-FDD (HSUPA, Subtest 2)                         | X | 1.94   | 69.09  | 16.77 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 1.62   | 66.08  | 14.59 |      | 150.0 |         |
|           |                                                     | Z | 1.87   | 69.33  | 16.49 |      | 150.0 |         |
| 10099-DAC | EDGE-FDD (TDMA, 8PSK, TN 0-4)                       | X | 28.67  | 116.31 | 40.37 | 9.56 | 60.0  | ± 9.6 % |
|           |                                                     | Y | 17.22  | 103.14 | 35.83 |      | 60.0  |         |
|           |                                                     | Z | 10.80  | 92.24  | 31.22 |      | 60.0  |         |
| 10100-CAE | LTE-FDD (SC-FDMA, 100% RB, 20 MHz, QPSK)            | X | 3.51   | 72.21  | 17.62 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 2.94   | 69.12  | 15.85 |      | 150.0 |         |
|           |                                                     | Z | 3.29   | 71.84  | 17.33 |      | 150.0 |         |
| 10101-CAE | LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)          | X | 3.42   | 68.37  | 16.44 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 3.15   | 66.88  | 15.45 |      | 150.0 |         |
|           |                                                     | Z | 3.25   | 68.19  | 16.19 |      | 150.0 |         |
| 10102-CAE | LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)          | X | 3.51   | 68.25  | 16.50 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 3.25   | 66.87  | 15.57 |      | 150.0 |         |
|           |                                                     | Z | 3.35   | 68.16  | 16.28 |      | 150.0 |         |
| 10103-CAG | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK)            | X | 9.10   | 80.51  | 22.32 | 3.98 | 65.0  | ± 9.6 % |
|           |                                                     | Y | 7.71   | 77.60  | 21.05 |      | 65.0  |         |
|           |                                                     | Z | 6.72   | 75.86  | 19.85 |      | 65.0  |         |
| 10104-CAG | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)          | X | 8.36   | 77.67  | 22.08 | 3.98 | 65.0  | ± 9.6 % |
|           |                                                     | Y | 7.55   | 75.78  | 21.18 |      | 65.0  |         |
|           |                                                     | Z | 6.54   | 73.78  | 19.84 |      | 65.0  |         |
| 10105-CAG | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)          | X | 8.22   | 77.35  | 22.27 | 3.98 | 65.0  | ± 9.6 % |
|           |                                                     | Y | 7.00   | 74.28  | 20.84 |      | 65.0  |         |
|           |                                                     | Z | 6.41   | 73.35  | 19.98 |      | 65.0  |         |
| 10108-CAG | LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK)            | X | 3.07   | 71.32  | 17.44 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 2.58   | 68.37  | 15.67 |      | 150.0 |         |
|           |                                                     | Z | 2.85   | 71.00  | 17.15 |      | 150.0 |         |
| 10109-CAG | LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)          | X | 3.09   | 68.24  | 16.43 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 2.80   | 66.64  | 15.30 |      | 150.0 |         |
|           |                                                     | Z | 2.92   | 68.15  | 16.17 |      | 150.0 |         |
| 10110-CAG | LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)             | X | 2.51   | 70.39  | 17.16 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 2.08   | 67.38  | 15.21 |      | 150.0 |         |
|           |                                                     | Z | 2.30   | 70.10  | 16.80 |      | 150.0 |         |
| 10111-CAG | LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)           | X | 2.83   | 69.15  | 16.90 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 2.49   | 67.13  | 15.44 |      | 150.0 |         |
|           |                                                     | Z | 2.71   | 69.56  | 16.76 |      | 150.0 |         |

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|           |                                                |   |      |       |       |      |       |         |
|-----------|------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10112-CAG | LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)     | X | 3.20 | 68.13 | 16.43 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 2.93 | 66.65 | 15.39 |      | 150.0 |         |
|           |                                                | Z | 3.04 | 68.13 | 16.21 |      | 150.0 |         |
| 10113-CAG | LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)      | X | 2.98 | 69.16 | 16.96 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 2.64 | 67.31 | 15.61 |      | 150.0 |         |
|           |                                                | Z | 2.87 | 69.66 | 16.87 |      | 150.0 |         |
| 10114-CAC | IEEE 802.11n (HT Greenfield, 13.5 Mbps, BPSK)  | X | 5.21 | 67.32 | 16.54 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 5.08 | 66.85 | 16.21 |      | 150.0 |         |
|           |                                                | Z | 5.06 | 67.43 | 16.43 |      | 150.0 |         |
| 10115-CAC | IEEE 802.11n (HT Greenfield, 81 Mbps, 16-QAM)  | X | 5.56 | 67.60 | 16.68 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 5.42 | 67.13 | 16.37 |      | 150.0 |         |
|           |                                                | Z | 5.34 | 67.52 | 16.48 |      | 150.0 |         |
| 10116-CAC | IEEE 802.11n (HT Greenfield, 135 Mbps, 64-QAM) | X | 5.33 | 67.58 | 16.59 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 5.19 | 67.09 | 16.26 |      | 150.0 |         |
|           |                                                | Z | 5.15 | 67.61 | 16.44 |      | 150.0 |         |
| 10117-CAC | IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK)       | X | 5.21 | 67.33 | 16.56 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 5.06 | 66.76 | 16.19 |      | 150.0 |         |
|           |                                                | Z | 5.03 | 67.31 | 16.39 |      | 150.0 |         |
| 10118-CAC | IEEE 802.11n (HT Mixed, 81 Mbps, 16-QAM)       | X | 5.63 | 67.75 | 16.76 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 5.50 | 67.34 | 16.48 |      | 150.0 |         |
|           |                                                | Z | 5.41 | 67.66 | 16.55 |      | 150.0 |         |
| 10119-CAC | IEEE 802.11n (HT Mixed, 135 Mbps, 64-QAM)      | X | 5.30 | 67.52 | 16.58 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 5.16 | 67.02 | 16.24 |      | 150.0 |         |
|           |                                                | Z | 5.13 | 67.55 | 16.43 |      | 150.0 |         |
| 10140-CAE | LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)     | X | 3.56 | 68.24 | 16.42 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 3.29 | 66.88 | 15.49 |      | 150.0 |         |
|           |                                                | Z | 3.39 | 68.15 | 16.19 |      | 150.0 |         |
| 10141-CAE | LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)     | X | 3.68 | 68.26 | 16.55 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 3.42 | 66.99 | 15.68 |      | 150.0 |         |
|           |                                                | Z | 3.52 | 68.25 | 16.36 |      | 150.0 |         |
| 10142-CAE | LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK)        | X | 2.31 | 70.61 | 17.10 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 1.84 | 67.11 | 14.76 |      | 150.0 |         |
|           |                                                | Z | 2.12 | 70.48 | 16.65 |      | 150.0 |         |
| 10143-CAE | LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)      | X | 2.77 | 70.28 | 16.99 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 2.31 | 67.48 | 15.00 |      | 150.0 |         |
|           |                                                | Z | 2.68 | 70.99 | 16.78 |      | 150.0 |         |
| 10144-CAE | LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)      | X | 2.51 | 67.86 | 15.37 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 2.14 | 65.60 | 13.59 |      | 150.0 |         |
|           |                                                | Z | 2.29 | 67.65 | 14.67 |      | 150.0 |         |
| 10145-CAF | LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)      | X | 1.73 | 69.60 | 15.10 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 1.11 | 63.66 | 10.90 |      | 150.0 |         |
|           |                                                | Z | 1.33 | 67.08 | 12.73 |      | 150.0 |         |
| 10146-CAF | LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)    | X | 4.24 | 75.96 | 17.12 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 2.46 | 68.71 | 13.45 |      | 150.0 |         |
|           |                                                | Z | 2.36 | 68.35 | 12.25 |      | 150.0 |         |
| 10147-CAF | LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)    | X | 6.45 | 81.86 | 19.47 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 3.10 | 71.79 | 14.97 |      | 150.0 |         |
|           |                                                | Z | 3.29 | 72.21 | 14.01 |      | 150.0 |         |

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|           |                                            |   |       |       |       |      |       |         |
|-----------|--------------------------------------------|---|-------|-------|-------|------|-------|---------|
| 10149-CAE | LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)  | X | 3.10  | 68.31 | 16.47 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.81  | 66.69 | 15.35 |      | 150.0 |         |
|           |                                            | Z | 2.93  | 68.23 | 16.22 |      | 150.0 |         |
| 10150-CAE | LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)  | X | 3.21  | 68.18 | 16.48 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.94  | 66.70 | 15.43 |      | 150.0 |         |
|           |                                            | Z | 3.05  | 68.20 | 16.26 |      | 150.0 |         |
| 10151-CAG | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)    | X | 10.13 | 83.77 | 23.67 | 3.98 | 65.0  | ± 9.6 % |
|           |                                            | Y | 8.42  | 80.52 | 22.26 |      | 65.0  |         |
|           |                                            | Z | 6.89  | 77.61 | 20.59 |      | 65.0  |         |
| 10152-CAG | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)  | X | 8.04  | 78.08 | 22.05 | 3.98 | 65.0  | ± 9.6 % |
|           |                                            | Y | 7.13  | 75.91 | 20.96 |      | 65.0  |         |
|           |                                            | Z | 6.04  | 73.58 | 19.44 |      | 65.0  |         |
| 10153-CAG | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)  | X | 8.44  | 78.92 | 22.75 | 3.98 | 65.0  | ± 9.6 % |
|           |                                            | Y | 7.56  | 76.89 | 21.74 |      | 65.0  |         |
|           |                                            | Z | 6.48  | 74.70 | 20.30 |      | 65.0  |         |
| 10154-CAG | LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)    | X | 2.59  | 70.97 | 17.50 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.12  | 67.77 | 15.47 |      | 150.0 |         |
|           |                                            | Z | 2.38  | 70.74 | 17.16 |      | 150.0 |         |
| 10155-CAG | LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)  | X | 2.83  | 69.15 | 16.90 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.49  | 67.14 | 15.45 |      | 150.0 |         |
|           |                                            | Z | 2.71  | 69.57 | 16.78 |      | 150.0 |         |
| 10156-CAG | LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)     | X | 2.21  | 71.19 | 17.23 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 1.68  | 67.01 | 14.46 |      | 150.0 |         |
|           |                                            | Z | 2.01  | 71.01 | 16.65 |      | 150.0 |         |
| 10157-CAG | LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)   | X | 2.40  | 68.89 | 15.72 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 1.95  | 65.89 | 13.48 |      | 150.0 |         |
|           |                                            | Z | 2.19  | 68.70 | 14.94 |      | 150.0 |         |
| 10158-CAG | LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)  | X | 2.98  | 69.22 | 17.01 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.65  | 67.36 | 15.65 |      | 150.0 |         |
|           |                                            | Z | 2.88  | 69.75 | 16.93 |      | 150.0 |         |
| 10159-CAG | LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)   | X | 2.54  | 69.44 | 16.05 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.05  | 66.31 | 13.77 |      | 150.0 |         |
|           |                                            | Z | 2.34  | 69.42 | 15.34 |      | 150.0 |         |
| 10160-CAE | LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)    | X | 2.96  | 69.71 | 16.97 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.62  | 67.67 | 15.60 |      | 150.0 |         |
|           |                                            | Z | 2.78  | 69.58 | 16.72 |      | 150.0 |         |
| 10161-CAE | LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)  | X | 3.11  | 68.11 | 16.44 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.83  | 66.60 | 15.34 |      | 150.0 |         |
|           |                                            | Z | 2.95  | 68.19 | 16.22 |      | 150.0 |         |
| 10162-CAE | LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)  | X | 3.21  | 68.15 | 16.50 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.94  | 66.74 | 15.46 |      | 150.0 |         |
|           |                                            | Z | 3.06  | 68.32 | 16.32 |      | 150.0 |         |
| 10166-CAF | LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)   | X | 4.07  | 71.03 | 19.91 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.79  | 69.95 | 19.36 |      | 150.0 |         |
|           |                                            | Z | 3.83  | 71.36 | 19.76 |      | 150.0 |         |
| 10167-CAF | LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM) | X | 5.42  | 74.80 | 20.67 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 4.77  | 72.79 | 19.75 |      | 150.0 |         |
|           |                                            | Z | 5.29  | 76.01 | 20.77 |      | 150.0 |         |

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|-----------|--------------------------------------------|---|--------|--------|-------|------|-------|---------|
| 10168-CAF | LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM) | X | 6.05   | 77.17  | 21.98 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 5.30   | 75.09  | 21.09 |      | 150.0 |         |
|           |                                            | Z | 6.36   | 79.86  | 22.71 |      | 150.0 |         |
| 10169-CAE | LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)      | X | 3.85   | 72.93  | 20.70 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.33   | 70.15  | 19.41 |      | 150.0 |         |
|           |                                            | Z | 3.47   | 72.51  | 20.23 |      | 150.0 |         |
| 10170-CAE | LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)    | X | 6.37   | 81.48  | 23.72 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 4.75   | 76.10  | 21.63 |      | 150.0 |         |
|           |                                            | Z | 7.01   | 85.04  | 24.72 |      | 150.0 |         |
| 10171-AAE | LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)    | X | 4.87   | 75.76  | 20.53 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.87   | 71.72  | 18.83 |      | 150.0 |         |
|           |                                            | Z | 4.54   | 76.13  | 20.23 |      | 150.0 |         |
| 10172-CAG | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)      | X | 80.41  | 131.60 | 39.78 | 6.02 | 65.0  | ± 9.6 % |
|           |                                            | Y | 18.51  | 103.18 | 32.14 |      | 65.0  |         |
|           |                                            | Z | 14.22  | 97.99  | 29.18 |      | 65.0  |         |
| 10173-CAG | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)    | X | 100.00 | 127.75 | 36.65 | 6.02 | 65.0  | ± 9.6 % |
|           |                                            | Y | 30.31  | 107.15 | 31.45 |      | 65.0  |         |
|           |                                            | Z | 25.08  | 102.02 | 28.13 |      | 65.0  |         |
| 10174-CAG | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)    | X | 60.73  | 116.92 | 33.35 | 6.02 | 65.0  | ± 9.6 % |
|           |                                            | Y | 21.73  | 99.84  | 28.80 |      | 65.0  |         |
|           |                                            | Z | 17.08  | 94.57  | 25.40 |      | 65.0  |         |
| 10175-CAG | LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)      | X | 3.78   | 72.50  | 20.41 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.29   | 69.80  | 19.15 |      | 150.0 |         |
|           |                                            | Z | 3.40   | 71.98  | 19.88 |      | 150.0 |         |
| 10176-CAG | LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)    | X | 6.38   | 81.51  | 23.73 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 4.76   | 76.12  | 21.65 |      | 150.0 |         |
|           |                                            | Z | 7.03   | 85.08  | 24.74 |      | 150.0 |         |
| 10177-CAI | LTE-FDD (SC-FDMA, 1 RB, 5 MHz, QPSK)       | X | 3.82   | 72.71  | 20.53 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.32   | 69.97  | 19.25 |      | 150.0 |         |
|           |                                            | Z | 3.44   | 72.23  | 20.02 |      | 150.0 |         |
| 10178-CAG | LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)     | X | 6.26   | 81.12  | 23.55 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 4.70   | 75.86  | 21.51 |      | 150.0 |         |
|           |                                            | Z | 6.85   | 84.54  | 24.51 |      | 150.0 |         |
| 10179-CAG | LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)    | X | 5.53   | 78.38  | 21.95 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 4.26   | 73.73  | 20.08 |      | 150.0 |         |
|           |                                            | Z | 5.53   | 80.03  | 22.20 |      | 150.0 |         |
| 10180-CAG | LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)     | X | 4.85   | 75.63  | 20.46 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.85   | 71.63  | 18.78 |      | 150.0 |         |
|           |                                            | Z | 4.51   | 75.97  | 20.14 |      | 150.0 |         |
| 10181-CAE | LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)      | X | 3.82   | 72.69  | 20.52 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.31   | 69.95  | 19.24 |      | 150.0 |         |
|           |                                            | Z | 3.44   | 72.20  | 20.01 |      | 150.0 |         |
| 10182-CAE | LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)    | X | 6.25   | 81.09  | 23.54 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 4.70   | 75.84  | 21.50 |      | 150.0 |         |
|           |                                            | Z | 6.83   | 84.50  | 24.49 |      | 150.0 |         |
| 10183-AAD | LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)    | X | 4.84   | 75.60  | 20.44 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.85   | 71.61  | 18.77 |      | 150.0 |         |
|           |                                            | Z | 4.50   | 75.94  | 20.13 |      | 150.0 |         |

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|           |                                               |   |      |       |       |      |       |         |
|-----------|-----------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10184-CAE | LTE-FDD (SC-FDMA, 1 RB, 3 MHz, QPSK)          | X | 3.83 | 72.74 | 20.54 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 3.32 | 70.00 | 19.27 |      | 150.0 |         |
|           |                                               | Z | 3.45 | 72.26 | 20.04 |      | 150.0 |         |
| 10185-CAE | LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)        | X | 6.29 | 81.18 | 23.58 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.72 | 75.91 | 21.53 |      | 150.0 |         |
|           |                                               | Z | 6.88 | 84.63 | 24.55 |      | 150.0 |         |
| 10186-AAE | LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)        | X | 4.86 | 75.68 | 20.48 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 3.87 | 71.68 | 18.80 |      | 150.0 |         |
|           |                                               | Z | 4.53 | 76.04 | 20.17 |      | 150.0 |         |
| 10187-CAF | LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)        | X | 3.84 | 72.79 | 20.60 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 3.33 | 70.05 | 19.33 |      | 150.0 |         |
|           |                                               | Z | 3.46 | 72.34 | 20.11 |      | 150.0 |         |
| 10188-CAF | LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)      | X | 6.59 | 82.17 | 24.06 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.88 | 76.63 | 21.93 |      | 150.0 |         |
|           |                                               | Z | 7.44 | 86.21 | 25.23 |      | 150.0 |         |
| 10189-AAF | LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)      | X | 5.01 | 76.28 | 20.81 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 3.96 | 72.12 | 19.08 |      | 150.0 |         |
|           |                                               | Z | 4.72 | 76.84 | 20.60 |      | 150.0 |         |
| 10193-CAC | IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK)  | X | 4.64 | 66.78 | 16.35 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.48 | 66.22 | 15.91 |      | 150.0 |         |
|           |                                               | Z | 4.48 | 66.93 | 16.19 |      | 150.0 |         |
| 10194-CAC | IEEE 802.11n (HT Greenfield, 39 Mbps, 16-QAM) | X | 4.84 | 67.15 | 16.46 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.66 | 66.55 | 16.03 |      | 150.0 |         |
|           |                                               | Z | 4.65 | 67.23 | 16.31 |      | 150.0 |         |
| 10195-CAC | IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM) | X | 4.88 | 67.16 | 16.47 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.70 | 66.58 | 16.05 |      | 150.0 |         |
|           |                                               | Z | 4.69 | 67.26 | 16.32 |      | 150.0 |         |
| 10196-CAC | IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK)       | X | 4.66 | 66.88 | 16.38 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.49 | 66.29 | 15.93 |      | 150.0 |         |
|           |                                               | Z | 4.48 | 66.99 | 16.21 |      | 150.0 |         |
| 10197-CAC | IEEE 802.11n (HT Mixed, 39 Mbps, 16-QAM)      | X | 4.85 | 67.17 | 16.47 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.67 | 66.58 | 16.04 |      | 150.0 |         |
|           |                                               | Z | 4.66 | 67.25 | 16.32 |      | 150.0 |         |
| 10198-CAC | IEEE 802.11n (HT Mixed, 65 Mbps, 64-QAM)      | X | 4.88 | 67.18 | 16.48 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.70 | 66.60 | 16.06 |      | 150.0 |         |
|           |                                               | Z | 4.69 | 67.27 | 16.33 |      | 150.0 |         |
| 10219-CAC | IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK)       | X | 4.61 | 66.90 | 16.35 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.43 | 66.30 | 15.89 |      | 150.0 |         |
|           |                                               | Z | 4.43 | 67.01 | 16.18 |      | 150.0 |         |
| 10220-CAC | IEEE 802.11n (HT Mixed, 43.3 Mbps, 16-QAM)    | X | 4.85 | 67.15 | 16.47 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.67 | 66.56 | 16.04 |      | 150.0 |         |
|           |                                               | Z | 4.65 | 67.22 | 16.31 |      | 150.0 |         |
| 10221-CAC | IEEE 802.11n (HT Mixed, 72.2 Mbps, 64-QAM)    | X | 4.89 | 67.10 | 16.46 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.71 | 66.53 | 16.05 |      | 150.0 |         |
|           |                                               | Z | 4.70 | 67.20 | 16.31 |      | 150.0 |         |
| 10222-CAC | IEEE 802.11n (HT Mixed, 15 Mbps, BPSK)        | X | 5.19 | 67.35 | 16.57 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 5.03 | 66.77 | 16.18 |      | 150.0 |         |
|           |                                               | Z | 5.01 | 67.33 | 16.39 |      | 150.0 |         |

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|-----------|-------------------------------------------|---|--------|--------|-------|------|-------|---------|
| 10223-CAC | IEEE 802.11n (HT Mixed, 90 Mbps, 16-QAM)  | X | 5.54   | 67.61  | 16.71 | 0.00 | 150.0 | ± 9.6 % |
|           |                                           | Y | 5.35   | 66.99  | 16.32 |      | 150.0 |         |
|           |                                           | Z | 5.29   | 67.45  | 16.47 |      | 150.0 |         |
| 10224-CAC | IEEE 802.11n (HT Mixed, 150 Mbps, 64-QAM) | X | 5.24   | 67.46  | 16.55 | 0.00 | 150.0 | ± 9.6 % |
|           |                                           | Y | 5.08   | 66.87  | 16.16 |      | 150.0 |         |
|           |                                           | Z | 5.06   | 67.45  | 16.38 |      | 150.0 |         |
| 10225-CAB | UMTS-FDD (HSPA+)                          | X | 2.94   | 66.61  | 15.90 | 0.00 | 150.0 | ± 9.6 % |
|           |                                           | Y | 2.72   | 65.45  | 14.90 |      | 150.0 |         |
|           |                                           | Z | 2.80   | 66.78  | 15.59 |      | 150.0 |         |
| 10226-CAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)  | X | 100.00 | 127.97 | 36.79 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 33.01  | 108.86 | 32.02 |      | 65.0  |         |
|           |                                           | Z | 28.60  | 104.35 | 28.88 |      | 65.0  |         |
| 10227-CAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)  | X | 71.64  | 120.02 | 34.24 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 27.56  | 104.08 | 30.11 |      | 65.0  |         |
|           |                                           | Z | 21.67  | 98.19  | 26.50 |      | 65.0  |         |
| 10228-CAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)    | X | 83.76  | 133.19 | 40.33 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 27.23  | 111.37 | 34.65 |      | 65.0  |         |
|           |                                           | Z | 14.92  | 99.20  | 29.65 |      | 65.0  |         |
| 10229-CAC | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)    | X | 100.00 | 127.75 | 36.66 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 30.45  | 107.22 | 31.48 |      | 65.0  |         |
|           |                                           | Z | 25.36  | 102.20 | 28.19 |      | 65.0  |         |
| 10230-CAC | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)    | X | 64.64  | 118.06 | 33.66 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 25.67  | 102.71 | 29.64 |      | 65.0  |         |
|           |                                           | Z | 19.55  | 96.45  | 25.91 |      | 65.0  |         |
| 10231-CAC | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK)      | X | 74.78  | 130.72 | 39.63 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 25.26  | 109.74 | 34.10 |      | 65.0  |         |
|           |                                           | Z | 13.84  | 97.69  | 29.10 |      | 65.0  |         |
| 10232-CAF | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)    | X | 100.00 | 127.76 | 36.66 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 30.44  | 107.22 | 31.48 |      | 65.0  |         |
|           |                                           | Z | 25.32  | 102.18 | 28.18 |      | 65.0  |         |
| 10233-CAF | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)    | X | 64.74  | 118.10 | 33.67 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 25.65  | 102.71 | 29.64 |      | 65.0  |         |
|           |                                           | Z | 19.51  | 96.43  | 25.91 |      | 65.0  |         |
| 10234-CAF | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK)      | X | 66.79  | 128.16 | 38.87 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 23.59  | 108.16 | 33.53 |      | 65.0  |         |
|           |                                           | Z | 12.92  | 96.23  | 28.52 |      | 65.0  |         |
| 10235-CAF | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)   | X | 100.00 | 127.77 | 36.66 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 30.53  | 107.29 | 31.50 |      | 65.0  |         |
|           |                                           | Z | 25.37  | 102.23 | 28.19 |      | 65.0  |         |
| 10236-CAF | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)   | X | 65.78  | 118.34 | 33.73 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 25.93  | 102.87 | 29.68 |      | 65.0  |         |
|           |                                           | Z | 19.72  | 96.57  | 25.94 |      | 65.0  |         |
| 10237-CAF | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)     | X | 76.22  | 131.13 | 39.74 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 25.46  | 109.93 | 34.16 |      | 65.0  |         |
|           |                                           | Z | 13.89  | 97.78  | 29.12 |      | 65.0  |         |
| 10238-CAF | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)   | X | 100.00 | 127.76 | 36.66 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 30.42  | 107.23 | 31.48 |      | 65.0  |         |
|           |                                           | Z | 25.26  | 102.15 | 28.17 |      | 65.0  |         |

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|-----------|--------------------------------------------|---|-------|--------|-------|------|------|---------|
| 10239-CAF | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)    | X | 64.82 | 118.13 | 33.68 | 6.02 | 65.0 | ± 9.6 % |
|           |                                            | Y | 25.62 | 102.71 | 29.64 |      | 65.0 |         |
|           |                                            | Z | 19.45 | 96.40  | 25.90 |      | 65.0 |         |
| 10240-CAF | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK)      | X | 75.84 | 131.04 | 39.71 | 6.02 | 65.0 | ± 9.6 % |
|           |                                            | Y | 25.37 | 109.86 | 34.14 |      | 65.0 |         |
|           |                                            | Z | 13.84 | 97.74  | 29.11 |      | 65.0 |         |
| 10241-CAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM) | X | 12.34 | 87.77  | 28.06 | 6.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 10.61 | 84.69  | 26.80 |      | 65.0 |         |
|           |                                            | Z | 9.45  | 83.27  | 25.34 |      | 65.0 |         |
| 10242-CAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM) | X | 11.90 | 86.96  | 27.68 | 6.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 9.43  | 82.13  | 25.70 |      | 65.0 |         |
|           |                                            | Z | 8.88  | 82.07  | 24.81 |      | 65.0 |         |
| 10243-CAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)   | X | 9.29  | 83.62  | 27.37 | 6.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 7.60  | 79.19  | 25.41 |      | 65.0 |         |
|           |                                            | Z | 6.90  | 78.26  | 24.23 |      | 65.0 |         |
| 10244-CAC | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)   | X | 11.62 | 85.25  | 22.95 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 9.03  | 81.02  | 21.07 |      | 65.0 |         |
|           |                                            | Z | 5.90  | 74.19  | 17.01 |      | 65.0 |         |
| 10245-CAC | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)   | X | 11.21 | 84.37  | 22.59 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 8.74  | 80.23  | 20.72 |      | 65.0 |         |
|           |                                            | Z | 5.76  | 73.60  | 16.72 |      | 65.0 |         |
| 10246-CAC | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)     | X | 13.76 | 91.33  | 25.01 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 8.27  | 82.50  | 21.35 |      | 65.0 |         |
|           |                                            | Z | 5.24  | 75.79  | 17.95 |      | 65.0 |         |
| 10247-CAF | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)   | X | 8.15  | 80.38  | 21.81 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 6.57  | 76.53  | 19.78 |      | 65.0 |         |
|           |                                            | Z | 5.10  | 72.95  | 17.52 |      | 65.0 |         |
| 10248-CAF | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)   | X | 7.96  | 79.46  | 21.43 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 6.50  | 75.86  | 19.49 |      | 65.0 |         |
|           |                                            | Z | 5.09  | 72.45  | 17.30 |      | 65.0 |         |
| 10249-CAF | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)     | X | 14.67 | 92.89  | 26.21 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 9.72  | 85.51  | 23.23 |      | 65.0 |         |
|           |                                            | Z | 6.59  | 79.52  | 20.29 |      | 65.0 |         |
| 10250-CAF | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)  | X | 8.79  | 81.74  | 23.60 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 7.53  | 78.89  | 22.19 |      | 65.0 |         |
|           |                                            | Z | 6.20  | 76.02  | 20.42 |      | 65.0 |         |
| 10251-CAF | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)  | X | 8.02  | 78.77  | 22.12 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 7.01  | 76.36  | 20.84 |      | 65.0 |         |
|           |                                            | Z | 5.83  | 73.77  | 19.14 |      | 65.0 |         |
| 10252-CAF | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)    | X | 12.21 | 89.16  | 25.66 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 9.34  | 84.33  | 23.66 |      | 65.0 |         |
|           |                                            | Z | 7.08  | 80.06  | 21.46 |      | 65.0 |         |
| 10253-CAF | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)  | X | 7.75  | 77.29  | 21.77 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 6.93  | 75.28  | 20.72 |      | 65.0 |         |
|           |                                            | Z | 5.92  | 73.10  | 19.23 |      | 65.0 |         |
| 10254-CAF | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)  | X | 8.16  | 78.13  | 22.42 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 7.34  | 76.22  | 21.42 |      | 65.0 |         |
|           |                                            | Z | 6.32  | 74.11  | 19.99 |      | 65.0 |         |

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|-----------|---------------------------------------------|---|-------|-------|-------|------|------|---------|
| 10255-CAF | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK)     | X | 9.52  | 82.96 | 23.63 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 8.03  | 79.93 | 22.27 |      | 65.0 |         |
|           |                                             | Z | 6.60  | 77.07 | 20.60 |      | 65.0 |         |
| 10256-CAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM) | X | 10.25 | 82.65 | 21.16 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 7.42  | 77.45 | 18.77 |      | 65.0 |         |
|           |                                             | Z | 4.37  | 69.73 | 14.06 |      | 65.0 |         |
| 10257-CAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM) | X | 9.67  | 81.35 | 20.60 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 7.07  | 76.36 | 18.24 |      | 65.0 |         |
|           |                                             | Z | 4.27  | 69.13 | 13.71 |      | 65.0 |         |
| 10258-CAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)   | X | 11.24 | 87.41 | 23.06 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 6.32  | 77.82 | 18.86 |      | 65.0 |         |
|           |                                             | Z | 3.88  | 71.16 | 15.20 |      | 65.0 |         |
| 10259-CAC | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)   | X | 8.37  | 80.75 | 22.39 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 6.95  | 77.37 | 20.63 |      | 65.0 |         |
|           |                                             | Z | 5.53  | 74.09 | 18.58 |      | 65.0 |         |
| 10260-CAC | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)   | X | 8.31  | 80.29 | 22.23 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 6.94  | 77.04 | 20.51 |      | 65.0 |         |
|           |                                             | Z | 5.55  | 73.86 | 18.49 |      | 65.0 |         |
| 10261-CAC | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK)     | X | 12.47 | 89.95 | 25.58 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 9.00  | 84.05 | 23.10 |      | 65.0 |         |
|           |                                             | Z | 6.47  | 78.99 | 20.51 |      | 65.0 |         |
| 10262-CAF | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)   | X | 8.78  | 81.69 | 23.56 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 7.52  | 78.83 | 22.15 |      | 65.0 |         |
|           |                                             | Z | 6.19  | 75.95 | 20.38 |      | 65.0 |         |
| 10263-CAF | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)   | X | 8.01  | 78.76 | 22.12 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 7.00  | 76.35 | 20.83 |      | 65.0 |         |
|           |                                             | Z | 5.82  | 73.75 | 19.13 |      | 65.0 |         |
| 10264-CAF | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK)     | X | 12.07 | 88.92 | 25.56 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 9.25  | 84.11 | 23.56 |      | 65.0 |         |
|           |                                             | Z | 7.01  | 79.85 | 21.36 |      | 65.0 |         |
| 10265-CAF | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)  | X | 8.04  | 78.09 | 22.05 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 7.13  | 75.91 | 20.97 |      | 65.0 |         |
|           |                                             | Z | 6.04  | 73.58 | 19.44 |      | 65.0 |         |
| 10266-CAF | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)  | X | 8.44  | 78.91 | 22.74 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 7.55  | 76.88 | 21.73 |      | 65.0 |         |
|           |                                             | Z | 6.47  | 74.69 | 20.29 |      | 65.0 |         |
| 10267-CAF | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)    | X | 10.11 | 83.73 | 23.66 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 8.41  | 80.47 | 22.25 |      | 65.0 |         |
|           |                                             | Z | 6.87  | 77.57 | 20.57 |      | 65.0 |         |
| 10268-CAF | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)  | X | 8.39  | 77.19 | 22.02 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 7.65  | 75.51 | 21.20 |      | 65.0 |         |
|           |                                             | Z | 6.70  | 73.67 | 19.92 |      | 65.0 |         |
| 10269-CAF | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)  | X | 8.26  | 76.63 | 21.86 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 7.58  | 75.05 | 21.07 |      | 65.0 |         |
|           |                                             | Z | 6.67  | 73.30 | 19.83 |      | 65.0 |         |
| 10270-CAF | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK)    | X | 8.88  | 79.53 | 22.20 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 7.84  | 77.34 | 21.20 |      | 65.0 |         |
|           |                                             | Z | 6.74  | 75.30 | 19.86 |      | 65.0 |         |

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|           |                                                                    |   |       |        |       |      |       |         |
|-----------|--------------------------------------------------------------------|---|-------|--------|-------|------|-------|---------|
| 10274-CAB | UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.10)                          | X | 2.69  | 67.00  | 15.83 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 2.47  | 65.61  | 14.67 |      | 150.0 |         |
|           |                                                                    | Z | 2.60  | 67.27  | 15.58 |      | 150.0 |         |
| 10275-CAB | UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.4)                           | X | 1.83  | 70.14  | 16.96 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 1.44  | 66.20  | 14.31 |      | 150.0 |         |
|           |                                                                    | Z | 1.70  | 69.74  | 16.44 |      | 150.0 |         |
| 10277-CAA | PHS (QPSK)                                                         | X | 3.93  | 66.44  | 11.36 | 9.03 | 50.0  | ± 9.6 % |
|           |                                                                    | Y | 3.47  | 64.75  | 10.20 |      | 50.0  |         |
|           |                                                                    | Z | 2.62  | 62.17  | 7.82  |      | 50.0  |         |
| 10278-CAA | PHS (QPSK, BW 884MHz, Rolloff 0.5)                                 | X | 14.62 | 89.25  | 23.47 | 9.03 | 50.0  | ± 9.6 % |
|           |                                                                    | Y | 7.61  | 78.00  | 18.87 |      | 50.0  |         |
|           |                                                                    | Z | 4.29  | 69.20  | 13.78 |      | 50.0  |         |
| 10279-CAA | PHS (QPSK, BW 884MHz, Rolloff 0.38)                                | X | 14.85 | 89.41  | 23.56 | 9.03 | 50.0  | ± 9.6 % |
|           |                                                                    | Y | 7.77  | 78.24  | 18.99 |      | 50.0  |         |
|           |                                                                    | Z | 4.39  | 69.44  | 13.93 |      | 50.0  |         |
| 10290-AAB | CDMA2000, RC1, SO55, Full Rate                                     | X | 2.10  | 73.72  | 17.06 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 1.20  | 65.83  | 12.24 |      | 150.0 |         |
|           |                                                                    | Z | 1.79  | 72.49  | 15.56 |      | 150.0 |         |
| 10291-AAB | CDMA2000, RC3, SO55, Full Rate                                     | X | 1.16  | 70.51  | 15.66 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 0.67  | 63.17  | 10.49 |      | 150.0 |         |
|           |                                                                    | Z | 0.94  | 68.71  | 13.80 |      | 150.0 |         |
| 10292-AAB | CDMA2000, RC3, SO32, Full Rate                                     | X | 1.93  | 79.24  | 19.72 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 0.76  | 65.41  | 12.01 |      | 150.0 |         |
|           |                                                                    | Z | 2.01  | 80.04  | 18.85 |      | 150.0 |         |
| 10293-AAB | CDMA2000, RC3, SO3, Full Rate                                      | X | 4.24  | 91.88  | 24.62 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 0.99  | 68.94  | 14.19 |      | 150.0 |         |
|           |                                                                    | Z | 16.88 | 110.82 | 28.51 |      | 150.0 |         |
| 10295-AAB | CDMA2000, RC1, SO3, 1/8th Rate 25 fr.                              | X | 12.27 | 89.66  | 26.50 | 9.03 | 50.0  | ± 9.6 % |
|           |                                                                    | Y | 10.64 | 85.72  | 24.40 |      | 50.0  |         |
|           |                                                                    | Z | 6.99  | 77.74  | 20.11 |      | 50.0  |         |
| 10297-AAD | LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)                            | X | 3.09  | 71.44  | 17.51 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 2.59  | 68.47  | 15.73 |      | 150.0 |         |
|           |                                                                    | Z | 2.87  | 71.14  | 17.24 |      | 150.0 |         |
| 10298-AAD | LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK)                             | X | 2.03  | 71.15  | 16.52 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 1.39  | 65.75  | 12.91 |      | 150.0 |         |
|           |                                                                    | Z | 1.75  | 70.22  | 15.26 |      | 150.0 |         |
| 10299-AAD | LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)                           | X | 4.66  | 77.12  | 18.36 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 3.14  | 71.80  | 15.64 |      | 150.0 |         |
|           |                                                                    | Z | 3.75  | 74.00  | 15.70 |      | 150.0 |         |
| 10300-AAD | LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)                           | X | 2.97  | 69.66  | 14.52 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 2.26  | 66.29  | 12.46 |      | 150.0 |         |
|           |                                                                    | Z | 2.17  | 66.32  | 11.62 |      | 150.0 |         |
| 10301-AAA | IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC)                 | X | 5.32  | 66.98  | 18.36 | 4.17 | 50.0  | ± 9.6 % |
|           |                                                                    | Y | 5.22  | 66.88  | 18.11 |      | 50.0  |         |
|           |                                                                    | Z | 4.67  | 65.61  | 17.38 |      | 50.0  |         |
| 10302-AAA | IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC, 3 CTRL symbols) | X | 5.74  | 67.34  | 18.93 | 4.96 | 50.0  | ± 9.6 % |
|           |                                                                    | Y | 5.58  | 66.87  | 18.46 |      | 50.0  |         |
|           |                                                                    | Z | 5.16  | 66.25  | 18.09 |      | 50.0  |         |

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|-----------|---------------------------------------------------------------------|---|-------|--------|-------|-------|-------|---------|
| 10303-AAA | IEEE 802.16e WiMAX (31:15, 5ms, 10MHz, 64QAM, PUSC)                 | X | 5.54  | 67.22  | 18.91 | 4.96  | 50.0  | ± 9.6 % |
|           |                                                                     | Y | 5.37  | 66.70  | 18.39 |       | 50.0  |         |
|           |                                                                     | Z | 4.93  | 65.95  | 17.95 |       | 50.0  |         |
| 10304-AAA | IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, 64QAM, PUSC)                 | X | 5.28  | 66.83  | 18.25 | 4.17  | 50.0  | ± 9.6 % |
|           |                                                                     | Y | 5.10  | 66.29  | 17.74 |       | 50.0  |         |
|           |                                                                     | Z | 4.73  | 65.82  | 17.46 |       | 50.0  |         |
| 10305-AAA | IEEE 802.16e WiMAX (31:15, 10ms, 10MHz, 64QAM, PUSC, 15 symbols)    | X | 5.67  | 72.27  | 22.34 | 6.02  | 35.0  | ± 9.6 % |
|           |                                                                     | Y | 5.72  | 72.48  | 21.90 |       | 35.0  |         |
|           |                                                                     | Z | 4.68  | 68.90  | 20.05 |       | 35.0  |         |
| 10306-AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 64QAM, PUSC, 18 symbols)    | X | 5.47  | 68.37  | 20.21 | 6.02  | 35.0  | ± 9.6 % |
|           |                                                                     | Y | 5.52  | 69.50  | 20.64 |       | 35.0  |         |
|           |                                                                     | Z | 4.82  | 67.24  | 19.32 |       | 35.0  |         |
| 10307-AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, PUSC, 18 symbols)     | X | 5.58  | 70.12  | 21.19 | 6.02  | 35.0  | ± 9.6 % |
|           |                                                                     | Y | 5.54  | 70.11  | 20.79 |       | 35.0  |         |
|           |                                                                     | Z | 4.75  | 67.57  | 19.37 |       | 35.0  |         |
| 10308-AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, PUSC)                | X | 5.58  | 70.46  | 21.39 | 6.02  | 35.0  | ± 9.6 % |
|           |                                                                     | Y | 5.56  | 70.49  | 21.00 |       | 35.0  |         |
|           |                                                                     | Z | 4.74  | 67.84  | 19.54 |       | 35.0  |         |
| 10309-AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, AMC 2x3, 18 symbols) | X | 5.56  | 68.68  | 20.38 | 6.02  | 35.0  | ± 9.6 % |
|           |                                                                     | Y | 5.61  | 69.80  | 20.81 |       | 35.0  |         |
|           |                                                                     | Z | 4.87  | 67.43  | 19.45 |       | 35.0  |         |
| 10310-AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, AMC 2x3, 18 symbols)  | X | 5.54  | 69.67  | 21.04 | 6.02  | 35.0  | ± 9.6 % |
|           |                                                                     | Y | 5.51  | 69.73  | 20.68 |       | 35.0  |         |
|           |                                                                     | Z | 4.78  | 67.38  | 19.33 |       | 35.0  |         |
| 10311-AAD | LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK)                            | X | 3.47  | 70.67  | 17.10 | 0.00  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 2.93  | 67.81  | 15.46 |       | 150.0 |         |
|           |                                                                     | Z | 3.26  | 70.40  | 16.86 |       | 150.0 |         |
| 10313-AAA | iDEN 1:3                                                            | X | 10.55 | 84.71  | 20.54 | 6.99  | 70.0  | ± 9.6 % |
|           |                                                                     | Y | 5.52  | 75.51  | 16.93 |       | 70.0  |         |
|           |                                                                     | Z | 3.35  | 69.99  | 14.11 |       | 70.0  |         |
| 10314-AAA | iDEN 1:6                                                            | X | 24.93 | 102.67 | 28.79 | 10.00 | 30.0  | ± 9.6 % |
|           |                                                                     | Y | 8.40  | 84.46  | 22.81 |       | 30.0  |         |
|           |                                                                     | Z | 4.59  | 75.67  | 18.98 |       | 30.0  |         |
| 10315-AAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 96pc duty cycle)           | X | 1.16  | 65.40  | 16.44 | 0.17  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 1.01  | 63.11  | 14.44 |       | 150.0 |         |
|           |                                                                     | Z | 1.08  | 64.77  | 15.73 |       | 150.0 |         |
| 10316-AAB | IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 96pc duty cycle)       | X | 4.72  | 66.92  | 16.53 | 0.17  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.56  | 66.38  | 16.12 |       | 150.0 |         |
|           |                                                                     | Z | 4.51  | 66.86  | 16.22 |       | 150.0 |         |
| 10317-AAC | IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle)             | X | 4.72  | 66.92  | 16.53 | 0.17  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.56  | 66.38  | 16.12 |       | 150.0 |         |
|           |                                                                     | Z | 4.51  | 66.86  | 16.22 |       | 150.0 |         |
| 10400-AAD | IEEE 802.11ac WiFi (20MHz, 64-QAM, 99pc duty cycle)                 | X | 4.84  | 67.20  | 16.45 | 0.00  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.66  | 66.61  | 16.02 |       | 150.0 |         |
|           |                                                                     | Z | 4.63  | 67.25  | 16.28 |       | 150.0 |         |
| 10401-AAD | IEEE 802.11ac WiFi (40MHz, 64-QAM, 99pc duty cycle)                 | X | 5.46  | 67.20  | 16.49 | 0.00  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 5.35  | 66.85  | 16.23 |       | 150.0 |         |
|           |                                                                     | Z | 5.28  | 67.24  | 16.32 |       | 150.0 |         |

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|           |                                                                                 |   |        |        |       |      |       |         |
|-----------|---------------------------------------------------------------------------------|---|--------|--------|-------|------|-------|---------|
| 10402-AAD | IEEE 802.11ac WiFi (80MHz, 64-QAM, 99pc duty cycle)                             | X | 5.76   | 67.75  | 16.60 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 5.61   | 67.21  | 16.26 |      | 150.0 |         |
|           |                                                                                 | Z | 5.57   | 67.70  | 16.42 |      | 150.0 |         |
| 10403-AAB | CDMA2000 (1xEV-DO, Rev. 0)                                                      | X | 2.10   | 73.72  | 17.06 | 0.00 | 115.0 | ± 9.6 % |
|           |                                                                                 | Y | 1.20   | 65.83  | 12.24 |      | 115.0 |         |
|           |                                                                                 | Z | 1.79   | 72.49  | 15.56 |      | 115.0 |         |
| 10404-AAB | CDMA2000 (1xEV-DO, Rev. A)                                                      | X | 2.10   | 73.72  | 17.06 | 0.00 | 115.0 | ± 9.6 % |
|           |                                                                                 | Y | 1.20   | 65.83  | 12.24 |      | 115.0 |         |
|           |                                                                                 | Z | 1.79   | 72.49  | 15.56 |      | 115.0 |         |
| 10406-AAB | CDMA2000, RC3, SO32, SCH0, Full Rate                                            | X | 100.00 | 122.19 | 31.29 | 0.00 | 100.0 | ± 9.6 % |
|           |                                                                                 | Y | 29.24  | 105.80 | 27.50 |      | 100.0 |         |
|           |                                                                                 | Z | 100.00 | 114.73 | 27.11 |      | 100.0 |         |
| 10410-AAF | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9, Subframe Conf=4) | X | 100.00 | 121.06 | 30.81 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                                 | Y | 100.00 | 121.88 | 31.03 |      | 80.0  |         |
|           |                                                                                 | Z | 83.71  | 111.58 | 25.89 |      | 80.0  |         |
| 10415-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle)                       | X | 1.03   | 63.90  | 15.54 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 0.91   | 61.92  | 13.65 |      | 150.0 |         |
|           |                                                                                 | Z | 0.99   | 63.88  | 15.24 |      | 150.0 |         |
| 10416-AAA | IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 99pc duty cycle)                   | X | 4.64   | 66.82  | 16.39 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 4.48   | 66.26  | 15.97 |      | 150.0 |         |
|           |                                                                                 | Z | 4.48   | 66.96  | 16.25 |      | 150.0 |         |
| 10417-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 99pc duty cycle)                       | X | 4.64   | 66.82  | 16.39 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 4.48   | 66.26  | 15.97 |      | 150.0 |         |
|           |                                                                                 | Z | 4.48   | 66.96  | 16.25 |      | 150.0 |         |
| 10418-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Long preamble)   | X | 4.63   | 66.97  | 16.41 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 4.47   | 66.40  | 15.97 |      | 150.0 |         |
|           |                                                                                 | Z | 4.47   | 67.14  | 16.29 |      | 150.0 |         |
| 10419-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Short preamble)  | X | 4.65   | 66.92  | 16.41 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 4.49   | 66.36  | 15.98 |      | 150.0 |         |
|           |                                                                                 | Z | 4.49   | 67.08  | 16.28 |      | 150.0 |         |
| 10422-AAB | IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK)                                    | X | 4.78   | 66.92  | 16.42 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 4.61   | 66.37  | 16.01 |      | 150.0 |         |
|           |                                                                                 | Z | 4.61   | 67.05  | 16.28 |      | 150.0 |         |
| 10423-AAB | IEEE 802.11n (HT Greenfield, 43.3 Mbps, 16-QAM)                                 | X | 4.98   | 67.29  | 16.55 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 4.79   | 66.71  | 16.13 |      | 150.0 |         |
|           |                                                                                 | Z | 4.77   | 67.36  | 16.39 |      | 150.0 |         |
| 10424-AAB | IEEE 802.11n (HT Greenfield, 72.2 Mbps, 64-QAM)                                 | X | 4.89   | 67.24  | 16.52 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 4.70   | 66.65  | 16.10 |      | 150.0 |         |
|           |                                                                                 | Z | 4.69   | 67.32  | 16.37 |      | 150.0 |         |
| 10425-AAB | IEEE 802.11n (HT Greenfield, 15 Mbps, BPSK)                                     | X | 5.44   | 67.47  | 16.62 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 5.32   | 67.05  | 16.33 |      | 150.0 |         |
|           |                                                                                 | Z | 5.25   | 67.48  | 16.46 |      | 150.0 |         |
| 10426-AAB | IEEE 802.11n (HT Greenfield, 90 Mbps, 16-QAM)                                   | X | 5.45   | 67.50  | 16.63 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 5.32   | 67.06  | 16.33 |      | 150.0 |         |
|           |                                                                                 | Z | 5.26   | 67.50  | 16.46 |      | 150.0 |         |

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|-----------|----------------------------------------------------------------|---|--------|--------|-------|------|-------|---------|
| 10427-AAB | IEEE 802.11n (HT Greenfield, 150 Mbps, 64-QAM)                 | X | 5.47   | 67.52  | 16.63 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 5.33   | 67.04  | 16.31 |      | 150.0 |         |
|           |                                                                | Z | 5.28   | 67.50  | 16.46 |      | 150.0 |         |
| 10430-AAD | LTE-FDD (OFDMA, 5 MHz, E-TM 3.1)                               | X | 4.44   | 70.94  | 18.55 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.14   | 70.00  | 17.76 |      | 150.0 |         |
|           |                                                                | Z | 4.53   | 72.71  | 19.04 |      | 150.0 |         |
| 10431-AAD | LTE-FDD (OFDMA, 10 MHz, E-TM 3.1)                              | X | 4.38   | 67.45  | 16.50 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.17   | 66.74  | 15.93 |      | 150.0 |         |
|           |                                                                | Z | 4.18   | 67.60  | 16.31 |      | 150.0 |         |
| 10432-AAC | LTE-FDD (OFDMA, 15 MHz, E-TM 3.1)                              | X | 4.67   | 67.30  | 16.51 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.47   | 66.66  | 16.03 |      | 150.0 |         |
|           |                                                                | Z | 4.47   | 67.41  | 16.34 |      | 150.0 |         |
| 10433-AAC | LTE-FDD (OFDMA, 20 MHz, E-TM 3.1)                              | X | 4.90   | 67.28  | 16.55 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.72   | 66.69  | 16.12 |      | 150.0 |         |
|           |                                                                | Z | 4.71   | 67.36  | 16.39 |      | 150.0 |         |
| 10434-AAA | W-CDMA (BS Test Model 1, 64 DPCH)                              | X | 4.58   | 71.86  | 18.63 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.21   | 70.69  | 17.67 |      | 150.0 |         |
|           |                                                                | Z | 4.78   | 74.08  | 19.21 |      | 150.0 |         |
| 10435-AAF | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | X | 100.00 | 120.88 | 30.73 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                | Y | 100.00 | 121.69 | 30.95 |      | 80.0  |         |
|           |                                                                | Z | 66.38  | 108.66 | 25.18 |      | 80.0  |         |
| 10447-AAD | LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)                 | X | 3.72   | 67.65  | 16.10 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 3.44   | 66.58  | 15.18 |      | 150.0 |         |
|           |                                                                | Z | 3.50   | 67.81  | 15.74 |      | 150.0 |         |
| 10448-AAD | LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)                | X | 4.21   | 67.23  | 16.37 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.00   | 66.50  | 15.77 |      | 150.0 |         |
|           |                                                                | Z | 4.02   | 67.40  | 16.18 |      | 150.0 |         |
| 10449-AAC | LTE-FDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)                | X | 4.46   | 67.14  | 16.42 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.27   | 66.48  | 15.91 |      | 150.0 |         |
|           |                                                                | Z | 4.28   | 67.27  | 16.26 |      | 150.0 |         |
| 10450-AAC | LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)                | X | 4.64   | 67.06  | 16.42 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.47   | 66.43  | 15.96 |      | 150.0 |         |
|           |                                                                | Z | 4.47   | 67.16  | 16.26 |      | 150.0 |         |
| 10451-AAA | W-CDMA (BS Test Model 1, 64 DPCH, Clipping 44%)                | X | 3.66   | 68.00  | 15.89 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 3.33   | 66.69  | 14.77 |      | 150.0 |         |
|           |                                                                | Z | 3.40   | 68.05  | 15.38 |      | 150.0 |         |
| 10456-AAB | IEEE 802.11ac WiFi (160MHz, 64-QAM, 99pc duty cycle)           | X | 6.29   | 68.08  | 16.78 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 6.17   | 67.63  | 16.50 |      | 150.0 |         |
|           |                                                                | Z | 6.11   | 68.01  | 16.58 |      | 150.0 |         |
| 10457-AAA | UMTS-FDD (DC-HSDPA)                                            | X | 3.83   | 65.45  | 16.13 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 3.72   | 64.89  | 15.67 |      | 150.0 |         |
|           |                                                                | Z | 3.74   | 65.60  | 15.98 |      | 150.0 |         |
| 10458-AAA | CDMA2000 (1xEV-DO, Rev. B, 2 carriers)                         | X | 4.16   | 70.93  | 18.07 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 3.83   | 69.80  | 17.01 |      | 150.0 |         |
|           |                                                                | Z | 4.35   | 73.12  | 18.49 |      | 150.0 |         |
| 10459-AAA | CDMA2000 (1xEV-DO, Rev. B, 3 carriers)                         | X | 5.20   | 68.00  | 18.25 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 5.01   | 67.77  | 17.91 |      | 150.0 |         |
|           |                                                                | Z | 5.25   | 69.65  | 18.70 |      | 150.0 |         |

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|-----------|-------------------------------------------------------------------|---|--------|--------|-------|------|-------|---------|
| 10460-AAA | UMTS-FDD (WCDMA, AMR)                                             | X | 1.12   | 72.77  | 18.83 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                   | Y | 0.73   | 65.44  | 13.95 |      | 150.0 |         |
|           |                                                                   | Z | 1.01   | 71.76  | 18.00 |      | 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 | 126.43 | 33.33 | 3.29 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 100.00 | 125.87 | 32.93 |      | 80.0  |         |
|           |                                                                   | Z | 90.37  | 116.03 | 27.82 |      | 80.0  |         |
| 10462-AAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 100.00 | 109.98 | 25.58 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 100.00 | 109.45 | 25.26 |      | 80.0  |         |
|           |                                                                   | Z | 1.10   | 60.79  | 7.88  |      | 80.0  |         |
| 10463-AAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 100.00 | 106.70 | 24.02 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 49.13  | 98.79  | 22.03 |      | 80.0  |         |
|           |                                                                   | Z | 1.03   | 60.00  | 7.05  |      | 80.0  |         |
| 10464-AAB | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 100.00 | 124.44 | 32.24 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 100.00 | 123.71 | 31.77 |      | 80.0  |         |
|           |                                                                   | Z | 25.98  | 98.94  | 23.07 |      | 80.0  |         |
| 10465-AAB | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 100.00 | 109.41 | 25.30 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 100.00 | 108.89 | 24.99 |      | 80.0  |         |
|           |                                                                   | Z | 1.05   | 60.34  | 7.60  |      | 80.0  |         |
| 10466-AAB | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 100.00 | 106.17 | 23.77 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 17.42  | 87.73  | 19.16 |      | 80.0  |         |
|           |                                                                   | Z | 1.03   | 60.00  | 7.00  |      | 80.0  |         |
| 10467-AAE | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 100.00 | 124.67 | 32.35 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 100.00 | 123.95 | 31.88 |      | 80.0  |         |
|           |                                                                   | Z | 34.96  | 102.47 | 23.96 |      | 80.0  |         |
| 10468-AAE | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 100.00 | 109.58 | 25.38 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 100.00 | 109.06 | 25.07 |      | 80.0  |         |
|           |                                                                   | Z | 1.06   | 60.45  | 7.67  |      | 80.0  |         |
| 10469-AAE | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 100.00 | 106.18 | 23.77 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 18.04  | 88.11  | 19.26 |      | 80.0  |         |
|           |                                                                   | Z | 1.03   | 60.00  | 7.00  |      | 80.0  |         |
| 10470-AAE | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | X | 100.00 | 124.71 | 32.35 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 100.00 | 123.98 | 31.88 |      | 80.0  |         |
|           |                                                                   | Z | 35.24  | 102.56 | 23.97 |      | 80.0  |         |
| 10471-AAE | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | X | 100.00 | 109.53 | 25.35 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 100.00 | 109.01 | 25.04 |      | 80.0  |         |
|           |                                                                   | Z | 1.05   | 60.40  | 7.64  |      | 80.0  |         |
| 10472-AAE | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)  | X | 100.00 | 106.13 | 23.74 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 17.90  | 88.00  | 19.21 |      | 80.0  |         |
|           |                                                                   | Z | 1.03   | 60.00  | 6.99  |      | 80.0  |         |
| 10473-AAE | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | X | 100.00 | 124.67 | 32.34 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 100.00 | 123.95 | 31.87 |      | 80.0  |         |
|           |                                                                   | Z | 34.67  | 102.34 | 23.91 |      | 80.0  |         |
| 10474-AAE | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | X | 100.00 | 109.54 | 25.35 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 100.00 | 109.01 | 25.04 |      | 80.0  |         |
|           |                                                                   | Z | 1.05   | 60.39  | 7.63  |      | 80.0  |         |
| 10475-AAE | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)  | X | 100.00 | 106.14 | 23.74 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 17.52  | 87.78  | 19.16 |      | 80.0  |         |
|           |                                                                   | Z | 1.03   | 60.00  | 6.99  |      | 80.0  |         |

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October 24, 2018

|           |                                                                     |   |        |        |       |      |      |         |
|-----------|---------------------------------------------------------------------|---|--------|--------|-------|------|------|---------|
| 10477-AAF | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)    | X | 100.00 | 109.37 | 25.27 | 3.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 100.00 | 108.84 | 24.96 |      | 80.0 |         |
|           |                                                                     | Z | 1.03   | 80.28  | 7.55  |      | 80.0 |         |
| 10478-AAF | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)    | X | 100.00 | 106.09 | 23.72 | 3.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 17.03  | 87.46  | 19.06 |      | 80.0 |         |
|           |                                                                     | Z | 1.03   | 60.00  | 6.98  |      | 80.0 |         |
| 10479-AAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)   | X | 32.47  | 108.40 | 30.35 | 3.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 23.42  | 102.58 | 28.36 |      | 80.0 |         |
|           |                                                                     | Z | 8.33   | 85.84  | 21.97 |      | 80.0 |         |
| 10480-AAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 42.90  | 105.02 | 27.50 | 3.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 20.70  | 94.12  | 24.14 |      | 80.0 |         |
|           |                                                                     | Z | 6.08   | 76.74  | 17.02 |      | 80.0 |         |
| 10481-AAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 32.63  | 100.01 | 25.80 | 3.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 15.67  | 89.38  | 22.38 |      | 80.0 |         |
|           |                                                                     | Z | 4.46   | 72.49  | 15.13 |      | 80.0 |         |
| 10482-AAB | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 9.20   | 87.35  | 23.04 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 3.94   | 74.35  | 17.65 |      | 80.0 |         |
|           |                                                                     | Z | 2.70   | 70.00  | 15.33 |      | 80.0 |         |
| 10483-AAB | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 15.24  | 90.75  | 23.81 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 9.78   | 83.78  | 21.08 |      | 80.0 |         |
|           |                                                                     | Z | 3.87   | 71.04  | 15.19 |      | 80.0 |         |
| 10484-AAB | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 12.87  | 88.08  | 23.00 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 8.49   | 81.59  | 20.36 |      | 80.0 |         |
|           |                                                                     | Z | 3.66   | 70.14  | 14.84 |      | 80.0 |         |
| 10485-AAE | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 7.98   | 85.70  | 23.28 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 4.36   | 75.94  | 19.15 |      | 80.0 |         |
|           |                                                                     | Z | 3.22   | 72.33  | 17.26 |      | 80.0 |         |
| 10486-AAE | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 5.36   | 76.17  | 19.55 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 3.79   | 70.74  | 16.72 |      | 80.0 |         |
|           |                                                                     | Z | 3.08   | 68.57  | 15.26 |      | 80.0 |         |
| 10487-AAE | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 5.22   | 75.40  | 19.25 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 3.77   | 70.31  | 16.54 |      | 80.0 |         |
|           |                                                                     | Z | 3.08   | 68.23  | 15.10 |      | 80.0 |         |
| 10488-AAE | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | X | 6.58   | 81.06  | 22.14 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 4.49   | 74.73  | 19.35 |      | 80.0 |         |
|           |                                                                     | Z | 3.58   | 72.12  | 17.94 |      | 80.0 |         |
| 10489-AAE | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | X | 4.86   | 73.47  | 19.42 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 4.01   | 70.32  | 17.71 |      | 80.0 |         |
|           |                                                                     | Z | 3.48   | 68.92  | 16.70 |      | 80.0 |         |
| 10490-AAE | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)  | X | 4.88   | 72.95  | 19.23 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 4.10   | 70.09  | 17.64 |      | 80.0 |         |
|           |                                                                     | Z | 3.57   | 68.77  | 16.66 |      | 80.0 |         |
| 10491-AAE | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | X | 5.85   | 76.95  | 20.70 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 4.52   | 72.66  | 18.69 |      | 80.0 |         |
|           |                                                                     | Z | 3.82   | 70.84  | 17.60 |      | 80.0 |         |
| 10492-AAE | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | X | 4.94   | 71.68  | 18.90 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 4.31   | 69.40  | 17.63 |      | 80.0 |         |
|           |                                                                     | Z | 3.83   | 68.32  | 16.79 |      | 80.0 |         |

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|-----------|----------------------------------------------------------------------|---|------|-------|-------|------|------|---------|
| 10493-AAE | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 4.97 | 71.38 | 18.79 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 4.37 | 69.24 | 17.58 |      | 80.0 |         |
|           |                                                                      | Z | 3.90 | 68.20 | 16.76 |      | 80.0 |         |
| 10494-AAF | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 6.95 | 79.86 | 21.58 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 4.99 | 74.37 | 19.18 |      | 80.0 |         |
|           |                                                                      | Z | 4.13 | 72.26 | 18.02 |      | 80.0 |         |
| 10495-AAF | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 5.07 | 72.39 | 19.18 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 4.37 | 69.87 | 17.84 |      | 80.0 |         |
|           |                                                                      | Z | 3.87 | 68.70 | 16.98 |      | 80.0 |         |
| 10496-AAF | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 5.07 | 71.80 | 18.98 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 4.43 | 69.53 | 17.74 |      | 80.0 |         |
|           |                                                                      | Z | 3.95 | 68.45 | 16.92 |      | 80.0 |         |
| 10497-AAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)   | X | 7.77 | 84.28 | 21.25 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 2.76 | 69.51 | 14.83 |      | 80.0 |         |
|           |                                                                      | Z | 1.83 | 65.26 | 12.27 |      | 80.0 |         |
| 10498-AAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 4.10 | 72.22 | 15.94 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 2.08 | 63.53 | 11.20 |      | 80.0 |         |
|           |                                                                      | Z | 1.49 | 60.84 | 9.11  |      | 80.0 |         |
| 10499-AAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 3.88 | 71.14 | 15.38 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 2.02 | 62.98 | 10.80 |      | 80.0 |         |
|           |                                                                      | Z | 1.45 | 60.40 | 8.75  |      | 80.0 |         |
| 10500-AAB | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 6.85 | 82.59 | 22.44 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 4.30 | 75.01 | 19.09 |      | 80.0 |         |
|           |                                                                      | Z | 3.32 | 71.99 | 17.46 |      | 80.0 |         |
| 10501-AAB | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 5.08 | 74.80 | 19.39 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 3.90 | 70.59 | 17.11 |      | 80.0 |         |
|           |                                                                      | Z | 3.27 | 68.83 | 15.87 |      | 80.0 |         |
| 10502-AAB | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 5.08 | 74.42 | 19.19 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 3.94 | 70.38 | 16.98 |      | 80.0 |         |
|           |                                                                      | Z | 3.32 | 68.68 | 15.75 |      | 80.0 |         |
| 10503-AAE | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 6.47 | 80.76 | 22.03 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 4.42 | 74.51 | 19.24 |      | 80.0 |         |
|           |                                                                      | Z | 3.53 | 71.90 | 17.84 |      | 80.0 |         |
| 10504-AAE | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 4.84 | 73.36 | 19.37 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 3.99 | 70.22 | 17.65 |      | 80.0 |         |
|           |                                                                      | Z | 3.46 | 68.82 | 16.64 |      | 80.0 |         |
| 10505-AAE | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 4.85 | 72.84 | 19.17 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 4.07 | 69.98 | 17.58 |      | 80.0 |         |
|           |                                                                      | Z | 3.55 | 68.67 | 16.60 |      | 80.0 |         |
| 10506-AAE | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | X | 6.87 | 79.65 | 21.49 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 4.94 | 74.20 | 19.10 |      | 80.0 |         |
|           |                                                                      | Z | 4.10 | 72.10 | 17.94 |      | 80.0 |         |
| 10507-AAE | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | X | 5.05 | 72.32 | 19.14 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 4.35 | 69.81 | 17.80 |      | 80.0 |         |
|           |                                                                      | Z | 3.85 | 68.63 | 16.94 |      | 80.0 |         |

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|-----------|---------------------------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10508-AAE | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 5.05 | 71.72 | 18.93 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 4.41 | 69.46 | 17.70 |      | 80.0  |         |
|           |                                                                     | Z | 3.93 | 68.38 | 16.87 |      | 80.0  |         |
| 10509-AAE | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)   | X | 6.42 | 76.31 | 20.23 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 5.10 | 72.45 | 18.45 |      | 80.0  |         |
|           |                                                                     | Z | 4.44 | 71.04 | 17.56 |      | 80.0  |         |
| 10510-AAE | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 5.41 | 71.43 | 18.82 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 4.81 | 69.39 | 17.73 |      | 80.0  |         |
|           |                                                                     | Z | 4.34 | 68.44 | 16.99 |      | 80.0  |         |
| 10511-AAE | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 5.40 | 70.96 | 18.67 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 4.84 | 69.09 | 17.65 |      | 80.0  |         |
|           |                                                                     | Z | 4.39 | 68.21 | 16.94 |      | 80.0  |         |
| 10512-AAF | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)   | X | 7.47 | 79.47 | 21.24 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 5.46 | 74.25 | 18.99 |      | 80.0  |         |
|           |                                                                     | Z | 4.64 | 72.47 | 17.97 |      | 80.0  |         |
| 10513-AAF | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 5.39 | 72.08 | 19.07 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 4.72 | 69.76 | 17.86 |      | 80.0  |         |
|           |                                                                     | Z | 4.23 | 68.69 | 17.07 |      | 80.0  |         |
| 10514-AAF | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 5.30 | 71.34 | 18.83 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 4.71 | 69.27 | 17.73 |      | 80.0  |         |
|           |                                                                     | Z | 4.25 | 68.30 | 16.97 |      | 80.0  |         |
| 10515-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 99pc duty cycle)           | X | 0.99 | 64.18 | 15.67 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 0.87 | 62.03 | 13.65 |      | 150.0 |         |
|           |                                                                     | Z | 0.96 | 64.13 | 15.35 |      | 150.0 |         |
| 10516-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc duty cycle)         | X | 1.07 | 82.62 | 23.29 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 0.42 | 66.18 | 13.67 |      | 150.0 |         |
|           |                                                                     | Z | 0.79 | 78.03 | 21.08 |      | 150.0 |         |
| 10517-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 99pc duty cycle)          | X | 0.89 | 87.34 | 17.01 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 0.70 | 63.35 | 13.75 |      | 150.0 |         |
|           |                                                                     | Z | 0.83 | 66.82 | 16.43 |      | 150.0 |         |
| 10518-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc duty cycle)           | X | 4.64 | 66.90 | 16.38 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.47 | 66.33 | 15.94 |      | 150.0 |         |
|           |                                                                     | Z | 4.47 | 67.04 | 16.24 |      | 150.0 |         |
| 10519-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 99pc duty cycle)          | X | 4.85 | 67.18 | 16.51 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.67 | 66.59 | 16.08 |      | 150.0 |         |
|           |                                                                     | Z | 4.65 | 67.25 | 16.34 |      | 150.0 |         |
| 10520-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 99pc duty cycle)          | X | 4.71 | 67.17 | 16.45 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.52 | 66.54 | 15.99 |      | 150.0 |         |
|           |                                                                     | Z | 4.51 | 67.23 | 16.28 |      | 150.0 |         |
| 10521-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc duty cycle)          | X | 4.64 | 67.19 | 16.44 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.45 | 66.53 | 15.97 |      | 150.0 |         |
|           |                                                                     | Z | 4.44 | 67.24 | 16.27 |      | 150.0 |         |
| 10522-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc duty cycle)          | X | 4.69 | 67.17 | 16.48 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.51 | 66.60 | 16.04 |      | 150.0 |         |
|           |                                                                     | Z | 4.50 | 67.33 | 16.35 |      | 150.0 |         |

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|           |                                                            |   |      |       |       |      |       |         |
|-----------|------------------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10523-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 99pc duty cycle) | X | 4.56 | 67.08 | 16.34 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.38 | 66.45 | 15.88 |      | 150.0 |         |
|           |                                                            | Z | 4.39 | 67.23 | 16.22 |      | 150.0 |         |
| 10524-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc duty cycle) | X | 4.64 | 67.13 | 16.46 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.45 | 66.52 | 16.01 |      | 150.0 |         |
|           |                                                            | Z | 4.44 | 67.24 | 16.32 |      | 150.0 |         |
| 10525-AAB | IEEE 802.11ac WiFi (20MHz, MCS0, 99pc duty cycle)          | X | 4.60 | 66.17 | 16.06 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.43 | 65.55 | 15.60 |      | 150.0 |         |
|           |                                                            | Z | 4.44 | 66.33 | 15.94 |      | 150.0 |         |
| 10526-AAB | IEEE 802.11ac WiFi (20MHz, MCS1, 99pc duty cycle)          | X | 4.80 | 66.57 | 16.20 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.60 | 65.93 | 15.75 |      | 150.0 |         |
|           |                                                            | Z | 4.61 | 66.68 | 16.07 |      | 150.0 |         |
| 10527-AAB | IEEE 802.11ac WiFi (20MHz, MCS2, 99pc duty cycle)          | X | 4.72 | 66.55 | 16.16 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.52 | 65.88 | 15.69 |      | 150.0 |         |
|           |                                                            | Z | 4.53 | 66.66 | 16.02 |      | 150.0 |         |
| 10528-AAB | IEEE 802.11ac WiFi (20MHz, MCS3, 99pc duty cycle)          | X | 4.73 | 66.57 | 16.19 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.54 | 65.90 | 15.72 |      | 150.0 |         |
|           |                                                            | Z | 4.55 | 66.67 | 16.05 |      | 150.0 |         |
| 10529-AAB | IEEE 802.11ac WiFi (20MHz, MCS4, 99pc duty cycle)          | X | 4.73 | 66.57 | 16.19 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.54 | 65.90 | 15.72 |      | 150.0 |         |
|           |                                                            | Z | 4.55 | 66.67 | 16.05 |      | 150.0 |         |
| 10531-AAB | IEEE 802.11ac WiFi (20MHz, MCS6, 99pc duty cycle)          | X | 4.74 | 66.72 | 16.22 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.53 | 66.01 | 15.73 |      | 150.0 |         |
|           |                                                            | Z | 4.53 | 66.77 | 16.06 |      | 150.0 |         |
| 10532-AAB | IEEE 802.11ac WiFi (20MHz, MCS7, 99pc duty cycle)          | X | 4.60 | 66.59 | 16.17 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.39 | 65.86 | 15.66 |      | 150.0 |         |
|           |                                                            | Z | 4.40 | 66.64 | 16.01 |      | 150.0 |         |
| 10533-AAB | IEEE 802.11ac WiFi (20MHz, MCS8, 99pc duty cycle)          | X | 4.75 | 66.60 | 16.17 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.55 | 65.94 | 15.70 |      | 150.0 |         |
|           |                                                            | Z | 4.56 | 66.73 | 16.05 |      | 150.0 |         |
| 10534-AAB | IEEE 802.11ac WiFi (40MHz, MCS0, 99pc duty cycle)          | X | 5.24 | 66.67 | 16.21 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 5.08 | 66.08 | 15.82 |      | 150.0 |         |
|           |                                                            | Z | 5.06 | 66.70 | 16.06 |      | 150.0 |         |
| 10535-AAB | IEEE 802.11ac WiFi (40MHz, MCS1, 99pc duty cycle)          | X | 5.31 | 66.81 | 16.26 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 5.14 | 66.24 | 15.89 |      | 150.0 |         |
|           |                                                            | Z | 5.12 | 66.85 | 16.13 |      | 150.0 |         |
| 10536-AAB | IEEE 802.11ac WiFi (40MHz, MCS2, 99pc duty cycle)          | X | 5.18 | 66.81 | 16.25 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 5.01 | 66.19 | 15.84 |      | 150.0 |         |
|           |                                                            | Z | 5.00 | 66.84 | 16.11 |      | 150.0 |         |
| 10537-AAB | IEEE 802.11ac WiFi (40MHz, MCS3, 99pc duty cycle)          | X | 5.24 | 66.77 | 16.23 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 5.07 | 66.17 | 15.84 |      | 150.0 |         |
|           |                                                            | Z | 5.06 | 66.79 | 16.08 |      | 150.0 |         |
| 10538-AAB | IEEE 802.11ac WiFi (40MHz, MCS4, 99pc duty cycle)          | X | 5.35 | 66.82 | 16.29 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 5.17 | 66.21 | 15.90 |      | 150.0 |         |
|           |                                                            | Z | 5.14 | 66.79 | 16.12 |      | 150.0 |         |
| 10540-AAB | IEEE 802.11ac WiFi (40MHz, MCS6, 99pc duty cycle)          | X | 5.25 | 66.78 | 16.29 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 5.09 | 66.21 | 15.91 |      | 150.0 |         |
|           |                                                            | Z | 5.07 | 66.78 | 16.13 |      | 150.0 |         |

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|           |                                                    |   |      |       |       |      |       |         |
|-----------|----------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10541-AAB | IEEE 802.11ac WiFi (40MHz, MCS7, 99pc duty cycle)  | X | 5.24 | 66.69 | 16.24 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.06 | 66.08 | 15.84 |      | 150.0 |         |
|           |                                                    | Z | 5.05 | 66.69 | 16.08 |      | 150.0 |         |
| 10542-AAB | IEEE 802.11ac WiFi (40MHz, MCS8, 99pc duty cycle)  | X | 5.38 | 66.72 | 16.27 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.22 | 66.16 | 15.90 |      | 150.0 |         |
|           |                                                    | Z | 5.20 | 66.74 | 16.12 |      | 150.0 |         |
| 10543-AAB | IEEE 802.11ac WiFi (40MHz, MCS9, 99pc duty cycle)  | X | 5.47 | 66.74 | 16.29 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.30 | 66.21 | 15.95 |      | 150.0 |         |
|           |                                                    | Z | 5.27 | 66.76 | 16.14 |      | 150.0 |         |
| 10544-AAB | IEEE 802.11ac WiFi (80MHz, MCS0, 99pc duty cycle)  | X | 5.52 | 66.77 | 16.19 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.38 | 66.20 | 15.82 |      | 150.0 |         |
|           |                                                    | Z | 5.37 | 66.80 | 16.04 |      | 150.0 |         |
| 10545-AAB | IEEE 802.11ac WiFi (80MHz, MCS1, 99pc duty cycle)  | X | 5.72 | 67.14 | 16.31 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.58 | 66.63 | 15.99 |      | 150.0 |         |
|           |                                                    | Z | 5.53 | 67.12 | 16.15 |      | 150.0 |         |
| 10546-AAB | IEEE 802.11ac WiFi (80MHz, MCS2, 99pc duty cycle)  | X | 5.61 | 67.04 | 16.28 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.45 | 66.44 | 15.91 |      | 150.0 |         |
|           |                                                    | Z | 5.43 | 66.99 | 16.10 |      | 150.0 |         |
| 10547-AAB | IEEE 802.11ac WiFi (80MHz, MCS3, 99pc duty cycle)  | X | 5.70 | 67.12 | 16.31 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.53 | 66.49 | 15.92 |      | 150.0 |         |
|           |                                                    | Z | 5.50 | 67.02 | 16.11 |      | 150.0 |         |
| 10548-AAB | IEEE 802.11ac WiFi (80MHz, MCS4, 99pc duty cycle)  | X | 5.93 | 67.96 | 16.70 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.82 | 67.53 | 16.41 |      | 150.0 |         |
|           |                                                    | Z | 5.64 | 67.63 | 16.39 |      | 150.0 |         |
| 10550-AAB | IEEE 802.11ac WiFi (80MHz, MCS6, 99pc duty cycle)  | X | 5.63 | 67.00 | 16.27 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.47 | 66.43 | 15.91 |      | 150.0 |         |
|           |                                                    | Z | 5.45 | 67.00 | 16.12 |      | 150.0 |         |
| 10551-AAB | IEEE 802.11ac WiFi (80MHz, MCS7, 99pc duty cycle)  | X | 5.65 | 67.07 | 16.26 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.48 | 66.48 | 15.89 |      | 150.0 |         |
|           |                                                    | Z | 5.46 | 67.04 | 16.10 |      | 150.0 |         |
| 10552-AAB | IEEE 802.11ac WiFi (80MHz, MCS8, 99pc duty cycle)  | X | 5.55 | 66.86 | 16.18 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.39 | 66.26 | 15.80 |      | 150.0 |         |
|           |                                                    | Z | 5.39 | 66.89 | 16.04 |      | 150.0 |         |
| 10553-AAB | IEEE 802.11ac WiFi (80MHz, MCS9, 99pc duty cycle)  | X | 5.65 | 66.91 | 16.22 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.48 | 66.32 | 15.86 |      | 150.0 |         |
|           |                                                    | Z | 5.47 | 66.91 | 16.07 |      | 150.0 |         |
| 10554-AAC | IEEE 802.11ac WiFi (160MHz, MCS0, 99pc duty cycle) | X | 5.92 | 67.13 | 16.27 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.78 | 66.58 | 15.93 |      | 150.0 |         |
|           |                                                    | Z | 5.77 | 67.13 | 16.11 |      | 150.0 |         |
| 10555-AAC | IEEE 802.11ac WiFi (160MHz, MCS1, 99pc duty cycle) | X | 6.06 | 67.44 | 16.39 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.92 | 66.89 | 16.06 |      | 150.0 |         |
|           |                                                    | Z | 5.88 | 67.38 | 16.21 |      | 150.0 |         |
| 10556-AAC | IEEE 802.11ac WiFi (160MHz, MCS2, 99pc duty cycle) | X | 6.07 | 67.47 | 16.40 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.94 | 66.94 | 16.07 |      | 150.0 |         |
|           |                                                    | Z | 5.90 | 67.42 | 16.23 |      | 150.0 |         |
| 10557-AAC | IEEE 802.11ac WiFi (160MHz, MCS3, 99pc duty cycle) | X | 6.06 | 67.43 | 16.40 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.91 | 66.85 | 16.05 |      | 150.0 |         |
|           |                                                    | Z | 5.87 | 67.36 | 16.22 |      | 150.0 |         |

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|-----------|-----------------------------------------------------------------|---|--------|--------|-------|------|-------|---------|
| 10558-AAC | IEEE 802.11ac WiFi (160MHz, MCS4, 99pc duty cycle)              | X | 6.11   | 67.60  | 16.50 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 5.96   | 67.02  | 16.15 |      | 150.0 |         |
|           |                                                                 | Z | 5.91   | 67.50  | 16.30 |      | 150.0 |         |
| 10560-AAC | IEEE 802.11ac WiFi (160MHz, MCS6, 99pc duty cycle)              | X | 6.11   | 67.46  | 16.47 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 5.95   | 66.87  | 16.11 |      | 150.0 |         |
|           |                                                                 | Z | 5.92   | 67.38  | 16.28 |      | 150.0 |         |
| 10561-AAC | IEEE 802.11ac WiFi (160MHz, MCS7, 99pc duty cycle)              | X | 6.02   | 67.40  | 16.48 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 5.87   | 66.84  | 16.13 |      | 150.0 |         |
|           |                                                                 | Z | 5.84   | 67.33  | 16.29 |      | 150.0 |         |
| 10562-AAC | IEEE 802.11ac WiFi (160MHz, MCS8, 99pc duty cycle)              | X | 6.16   | 67.82  | 16.69 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 6.01   | 67.26  | 16.35 |      | 150.0 |         |
|           |                                                                 | Z | 5.93   | 67.63  | 16.44 |      | 150.0 |         |
| 10563-AAC | IEEE 802.11ac WiFi (160MHz, MCS9, 99pc duty cycle)              | X | 6.47   | 68.29  | 16.86 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 6.34   | 67.82  | 16.58 |      | 150.0 |         |
|           |                                                                 | Z | 6.09   | 67.70  | 16.43 |      | 150.0 |         |
| 10564-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 99pc duty cycle)  | X | 4.97   | 66.98  | 16.53 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 4.81   | 66.46  | 16.14 |      | 150.0 |         |
|           |                                                                 | Z | 4.78   | 67.02  | 16.32 |      | 150.0 |         |
| 10565-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 99pc duty cycle) | X | 5.23   | 67.46  | 16.85 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 5.05   | 66.93  | 16.47 |      | 150.0 |         |
|           |                                                                 | Z | 5.01   | 67.49  | 16.66 |      | 150.0 |         |
| 10566-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 99pc duty cycle) | X | 5.06   | 67.34  | 16.69 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 4.88   | 66.77  | 16.28 |      | 150.0 |         |
|           |                                                                 | Z | 4.84   | 67.32  | 16.46 |      | 150.0 |         |
| 10567-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 99pc duty cycle) | X | 5.09   | 67.74  | 17.04 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 4.91   | 67.15  | 16.63 |      | 150.0 |         |
|           |                                                                 | Z | 4.89   | 67.80  | 16.87 |      | 150.0 |         |
| 10568-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 99pc duty cycle) | X | 4.97   | 67.07  | 16.45 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 4.80   | 66.54  | 16.05 |      | 150.0 |         |
|           |                                                                 | Z | 4.74   | 67.03  | 16.19 |      | 150.0 |         |
| 10569-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 99pc duty cycle) | X | 5.03   | 67.78  | 17.08 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 4.86   | 67.22  | 16.68 |      | 150.0 |         |
|           |                                                                 | Z | 4.85   | 67.93  | 16.95 |      | 150.0 |         |
| 10570-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 99pc duty cycle) | X | 5.08   | 67.62  | 17.01 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 4.90   | 67.08  | 16.62 |      | 150.0 |         |
|           |                                                                 | Z | 4.88   | 67.73  | 16.86 |      | 150.0 |         |
| 10571-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90pc duty cycle)       | X | 1.32   | 66.77  | 17.12 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 1.14   | 64.23  | 15.06 |      | 130.0 |         |
|           |                                                                 | Z | 1.17   | 65.28  | 15.86 |      | 130.0 |         |
| 10572-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 90pc duty cycle)       | X | 1.36   | 67.60  | 17.59 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 1.16   | 64.80  | 15.39 |      | 130.0 |         |
|           |                                                                 | Z | 1.19   | 65.98  | 16.28 |      | 130.0 |         |
| 10573-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 90pc duty cycle)     | X | 100.00 | 150.25 | 40.35 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 1.94   | 81.80  | 20.21 |      | 130.0 |         |
|           |                                                                 | Z | 5.37   | 101.40 | 27.76 |      | 130.0 |         |
| 10574-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 90pc duty cycle)      | X | 1.86   | 77.53  | 22.17 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 1.28   | 70.31  | 17.98 |      | 130.0 |         |
|           |                                                                 | Z | 1.45   | 73.83  | 20.12 |      | 130.0 |         |

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|           |                                                                 |   |      |       |       |      |       |         |
|-----------|-----------------------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10575-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 90pc duty cycle)  | X | 4.77 | 66.82 | 16.63 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.62 | 66.32 | 16.23 |      | 130.0 |         |
|           |                                                                 | Z | 4.56 | 66.75 | 16.29 |      | 130.0 |         |
| 10576-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 90pc duty cycle)  | X | 4.80 | 66.99 | 16.69 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.64 | 66.47 | 16.29 |      | 130.0 |         |
|           |                                                                 | Z | 4.59 | 66.94 | 16.38 |      | 130.0 |         |
| 10577-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 90pc duty cycle) | X | 5.03 | 67.31 | 16.86 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.85 | 66.78 | 16.47 |      | 130.0 |         |
|           |                                                                 | Z | 4.78 | 67.21 | 16.54 |      | 130.0 |         |
| 10578-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 90pc duty cycle) | X | 4.93 | 67.50 | 16.98 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.75 | 66.94 | 16.57 |      | 130.0 |         |
|           |                                                                 | Z | 4.69 | 67.42 | 16.68 |      | 130.0 |         |
| 10579-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 90pc duty cycle) | X | 4.69 | 66.84 | 16.33 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.52 | 66.24 | 15.89 |      | 130.0 |         |
|           |                                                                 | Z | 4.43 | 66.57 | 15.89 |      | 130.0 |         |
| 10580-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 90pc duty cycle) | X | 4.74 | 66.81 | 16.32 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.57 | 66.26 | 15.90 |      | 130.0 |         |
|           |                                                                 | Z | 4.47 | 66.59 | 15.90 |      | 130.0 |         |
| 10581-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 90pc duty cycle) | X | 4.83 | 67.59 | 16.95 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.65 | 66.98 | 16.51 |      | 130.0 |         |
|           |                                                                 | Z | 4.59 | 67.47 | 16.62 |      | 130.0 |         |
| 10582-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 90pc duty cycle) | X | 4.64 | 66.58 | 16.12 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.47 | 66.00 | 15.67 |      | 130.0 |         |
|           |                                                                 | Z | 4.36 | 66.28 | 15.65 |      | 130.0 |         |
| 10583-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 90pc duty cycle)       | X | 4.77 | 66.82 | 16.63 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.62 | 66.32 | 16.23 |      | 130.0 |         |
|           |                                                                 | Z | 4.56 | 66.75 | 16.29 |      | 130.0 |         |
| 10584-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 90pc duty cycle)       | X | 4.80 | 66.99 | 16.69 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.64 | 66.47 | 16.29 |      | 130.0 |         |
|           |                                                                 | Z | 4.59 | 66.94 | 16.38 |      | 130.0 |         |
| 10585-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90pc duty cycle)      | X | 5.03 | 67.31 | 16.86 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.85 | 66.78 | 16.47 |      | 130.0 |         |
|           |                                                                 | Z | 4.78 | 67.21 | 16.54 |      | 130.0 |         |
| 10586-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 90pc duty cycle)      | X | 4.93 | 67.50 | 16.98 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.75 | 66.94 | 16.57 |      | 130.0 |         |
|           |                                                                 | Z | 4.69 | 67.42 | 16.68 |      | 130.0 |         |
| 10587-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 90pc duty cycle)      | X | 4.69 | 66.84 | 16.33 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.52 | 66.24 | 15.89 |      | 130.0 |         |
|           |                                                                 | Z | 4.43 | 66.57 | 15.89 |      | 130.0 |         |
| 10588-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 90pc duty cycle)      | X | 4.74 | 66.81 | 16.32 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.57 | 66.26 | 15.90 |      | 130.0 |         |
|           |                                                                 | Z | 4.47 | 66.59 | 15.90 |      | 130.0 |         |
| 10589-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 90pc duty cycle)      | X | 4.83 | 67.59 | 16.95 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.65 | 66.98 | 16.51 |      | 130.0 |         |
|           |                                                                 | Z | 4.59 | 67.47 | 16.62 |      | 130.0 |         |
| 10590-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 90pc duty cycle)      | X | 4.64 | 66.58 | 16.12 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.47 | 66.00 | 15.67 |      | 130.0 |         |
|           |                                                                 | Z | 4.36 | 66.28 | 15.65 |      | 130.0 |         |

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|           |                                                       |   |      |       |       |      |       |         |
|-----------|-------------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10591-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS0, 90pc duty cycle) | X | 4.92 | 66.87 | 16.71 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.77 | 66.38 | 16.34 |      | 130.0 |         |
|           |                                                       | Z | 4.71 | 66.82 | 16.40 |      | 130.0 |         |
| 10592-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS1, 90pc duty cycle) | X | 5.09 | 67.22 | 16.84 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.93 | 66.72 | 16.47 |      | 130.0 |         |
|           |                                                       | Z | 4.86 | 67.15 | 16.53 |      | 130.0 |         |
| 10593-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS2, 90pc duty cycle) | X | 5.02 | 67.17 | 16.74 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.85 | 66.64 | 16.36 |      | 130.0 |         |
|           |                                                       | Z | 4.77 | 67.04 | 16.40 |      | 130.0 |         |
| 10594-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS3, 90pc duty cycle) | X | 5.07 | 67.32 | 16.89 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.90 | 66.80 | 16.51 |      | 130.0 |         |
|           |                                                       | Z | 4.83 | 67.23 | 16.57 |      | 130.0 |         |
| 10595-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS4, 90pc duty cycle) | X | 5.05 | 67.29 | 16.79 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.87 | 66.75 | 16.40 |      | 130.0 |         |
|           |                                                       | Z | 4.80 | 67.17 | 16.46 |      | 130.0 |         |
| 10596-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS5, 90pc duty cycle) | X | 4.98 | 67.29 | 16.80 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.81 | 66.75 | 16.40 |      | 130.0 |         |
|           |                                                       | Z | 4.73 | 67.16 | 16.45 |      | 130.0 |         |
| 10597-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS6, 90pc duty cycle) | X | 4.94 | 67.23 | 16.70 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.76 | 66.66 | 16.29 |      | 130.0 |         |
|           |                                                       | Z | 4.68 | 67.05 | 16.33 |      | 130.0 |         |
| 10598-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS7, 90pc duty cycle) | X | 4.92 | 67.49 | 16.98 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.74 | 66.90 | 16.55 |      | 130.0 |         |
|           |                                                       | Z | 4.68 | 67.34 | 16.63 |      | 130.0 |         |
| 10599-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS0, 90pc duty cycle) | X | 5.58 | 67.43 | 16.88 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.44 | 66.96 | 16.56 |      | 130.0 |         |
|           |                                                       | Z | 5.34 | 67.25 | 16.55 |      | 130.0 |         |
| 10600-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS1, 90pc duty cycle) | X | 5.74 | 67.88 | 17.07 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.60 | 67.47 | 16.79 |      | 130.0 |         |
|           |                                                       | Z | 5.43 | 67.51 | 16.64 |      | 130.0 |         |
| 10601-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS2, 90pc duty cycle) | X | 5.61 | 67.61 | 16.95 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.48 | 67.17 | 16.66 |      | 130.0 |         |
|           |                                                       | Z | 5.35 | 67.37 | 16.60 |      | 130.0 |         |
| 10602-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS3, 90pc duty cycle) | X | 5.70 | 67.58 | 16.86 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.56 | 67.17 | 16.58 |      | 130.0 |         |
|           |                                                       | Z | 5.45 | 67.40 | 16.52 |      | 130.0 |         |
| 10603-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS4, 90pc duty cycle) | X | 5.80 | 67.93 | 17.16 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.65 | 67.49 | 16.87 |      | 130.0 |         |
|           |                                                       | Z | 5.52 | 67.69 | 16.81 |      | 130.0 |         |
| 10604-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS5, 90pc duty cycle) | X | 5.58 | 67.37 | 16.87 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.44 | 66.92 | 16.57 |      | 130.0 |         |
|           |                                                       | Z | 5.37 | 67.27 | 16.59 |      | 130.0 |         |
| 10605-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS6, 90pc duty cycle) | X | 5.68 | 67.64 | 17.00 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.56 | 67.28 | 16.75 |      | 130.0 |         |
|           |                                                       | Z | 5.43 | 67.44 | 16.66 |      | 130.0 |         |
| 10608-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS7, 90pc duty cycle) | X | 5.46 | 67.16 | 16.64 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.33 | 66.69 | 16.32 |      | 130.0 |         |
|           |                                                       | Z | 5.20 | 66.87 | 16.23 |      | 130.0 |         |

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|-----------|---------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10607-AAB | IEEE 802.11ac WiFi (20MHz, MCS0, 90pc duty cycle) | X | 4.76 | 66.21 | 16.35 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.80 | 65.86 | 15.94 |      | 130.0 |         |
|           |                                                   | Z | 4.55 | 66.17 | 16.05 |      | 130.0 |         |
| 10608-AAB | IEEE 802.11ac WiFi (20MHz, MCS1, 90pc duty cycle) | X | 4.97 | 66.64 | 16.51 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.79 | 66.07 | 16.11 |      | 130.0 |         |
|           |                                                   | Z | 4.73 | 66.56 | 16.21 |      | 130.0 |         |
| 10609-AAB | IEEE 802.11ac WiFi (20MHz, MCS2, 90pc duty cycle) | X | 4.86 | 66.52 | 16.38 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.68 | 65.92 | 15.84 |      | 130.0 |         |
|           |                                                   | Z | 4.62 | 66.40 | 16.04 |      | 130.0 |         |
| 10610-AAB | IEEE 802.11ac WiFi (20MHz, MCS3, 90pc duty cycle) | X | 4.91 | 66.68 | 16.54 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.73 | 66.08 | 16.11 |      | 130.0 |         |
|           |                                                   | Z | 4.67 | 66.58 | 16.22 |      | 130.0 |         |
| 10611-AAB | IEEE 802.11ac WiFi (20MHz, MCS4, 90pc duty cycle) | X | 4.83 | 66.50 | 16.39 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.65 | 65.89 | 15.96 |      | 130.0 |         |
|           |                                                   | Z | 4.59 | 66.36 | 16.05 |      | 130.0 |         |
| 10612-AAB | IEEE 802.11ac WiFi (20MHz, MCS5, 90pc duty cycle) | X | 4.85 | 66.66 | 16.44 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.66 | 66.04 | 16.00 |      | 130.0 |         |
|           |                                                   | Z | 4.59 | 66.49 | 16.08 |      | 130.0 |         |
| 10613-AAB | IEEE 802.11ac WiFi (20MHz, MCS6, 90pc duty cycle) | X | 4.86 | 66.57 | 16.33 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.67 | 65.94 | 15.89 |      | 130.0 |         |
|           |                                                   | Z | 4.59 | 66.36 | 15.95 |      | 130.0 |         |
| 10614-AAB | IEEE 802.11ac WiFi (20MHz, MCS7, 90pc duty cycle) | X | 4.80 | 66.77 | 16.57 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.60 | 66.11 | 16.11 |      | 130.0 |         |
|           |                                                   | Z | 4.55 | 66.63 | 16.24 |      | 130.0 |         |
| 10615-AAB | IEEE 802.11ac WiFi (20MHz, MCS8, 90pc duty cycle) | X | 4.83 | 66.31 | 16.17 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.65 | 65.72 | 15.74 |      | 130.0 |         |
|           |                                                   | Z | 4.57 | 66.14 | 15.79 |      | 130.0 |         |
| 10616-AAB | IEEE 802.11ac WiFi (40MHz, MCS0, 90pc duty cycle) | X | 5.40 | 66.72 | 16.51 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.25 | 66.20 | 16.17 |      | 130.0 |         |
|           |                                                   | Z | 5.18 | 66.58 | 16.21 |      | 130.0 |         |
| 10617-AAB | IEEE 802.11ac WiFi (40MHz, MCS1, 90pc duty cycle) | X | 5.46 | 66.82 | 16.52 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.32 | 66.35 | 16.21 |      | 130.0 |         |
|           |                                                   | Z | 5.23 | 66.70 | 16.24 |      | 130.0 |         |
| 10618-AAB | IEEE 802.11ac WiFi (40MHz, MCS2, 90pc duty cycle) | X | 5.36 | 66.91 | 16.59 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.20 | 66.37 | 16.23 |      | 130.0 |         |
|           |                                                   | Z | 5.13 | 66.77 | 16.30 |      | 130.0 |         |
| 10619-AAB | IEEE 802.11ac WiFi (40MHz, MCS3, 90pc duty cycle) | X | 5.38 | 66.73 | 16.44 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.23 | 66.21 | 16.09 |      | 130.0 |         |
|           |                                                   | Z | 5.14 | 66.53 | 16.10 |      | 130.0 |         |
| 10620-AAB | IEEE 802.11ac WiFi (40MHz, MCS4, 90pc duty cycle) | X | 5.49 | 66.81 | 16.52 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.33 | 66.26 | 16.17 |      | 130.0 |         |
|           |                                                   | Z | 5.23 | 66.56 | 16.17 |      | 130.0 |         |
| 10621-AAB | IEEE 802.11ac WiFi (40MHz, MCS5, 90pc duty cycle) | X | 5.47 | 66.89 | 16.68 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.31 | 66.35 | 16.33 |      | 130.0 |         |
|           |                                                   | Z | 5.24 | 66.76 | 16.40 |      | 130.0 |         |
| 10622-AAB | IEEE 802.11ac WiFi (40MHz, MCS6, 90pc duty cycle) | X | 5.47 | 67.00 | 16.72 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.33 | 66.52 | 16.41 |      | 130.0 |         |
|           |                                                   | Z | 5.25 | 66.89 | 16.45 |      | 130.0 |         |

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|           |                                                    |   |      |       |       |      |       |         |
|-----------|----------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10623-AAB | IEEE 802.11ac WiFi (40MHz, MCS7, 90pc duty cycle)  | X | 5.36 | 66.59 | 16.41 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.20 | 66.04 | 16.05 |      | 130.0 |         |
|           |                                                    | Z | 5.12 | 66.39 | 16.07 |      | 130.0 |         |
| 10624-AAB | IEEE 802.11ac WiFi (40MHz, MCS8, 90pc duty cycle)  | X | 5.54 | 66.74 | 16.54 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.40 | 66.26 | 16.22 |      | 130.0 |         |
|           |                                                    | Z | 5.31 | 66.59 | 16.23 |      | 130.0 |         |
| 10625-AAB | IEEE 802.11ac WiFi (40MHz, MCS9, 90pc duty cycle)  | X | 5.91 | 67.68 | 17.05 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.81 | 67.35 | 16.82 |      | 130.0 |         |
|           |                                                    | Z | 5.60 | 67.33 | 16.85 |      | 130.0 |         |
| 10626-AAB | IEEE 802.11ac WiFi (80MHz, MCS0, 90pc duty cycle)  | X | 5.66 | 66.76 | 16.44 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.54 | 66.25 | 16.12 |      | 130.0 |         |
|           |                                                    | Z | 5.47 | 66.64 | 16.16 |      | 130.0 |         |
| 10627-AAB | IEEE 802.11ac WiFi (80MHz, MCS1, 90pc duty cycle)  | X | 5.90 | 67.26 | 16.64 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.79 | 66.84 | 16.38 |      | 130.0 |         |
|           |                                                    | Z | 5.67 | 67.08 | 16.34 |      | 130.0 |         |
| 10628-AAB | IEEE 802.11ac WiFi (80MHz, MCS2, 90pc duty cycle)  | X | 5.73 | 66.91 | 16.42 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.58 | 66.38 | 16.08 |      | 130.0 |         |
|           |                                                    | Z | 5.49 | 66.66 | 16.06 |      | 130.0 |         |
| 10629-AAB | IEEE 802.11ac WiFi (80MHz, MCS3, 90pc duty cycle)  | X | 5.81 | 66.97 | 16.43 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.67 | 66.48 | 16.13 |      | 130.0 |         |
|           |                                                    | Z | 5.56 | 66.69 | 16.07 |      | 130.0 |         |
| 10630-AAB | IEEE 802.11ac WiFi (80MHz, MCS4, 90pc duty cycle)  | X | 6.26 | 68.50 | 17.19 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 6.18 | 68.17 | 16.96 |      | 130.0 |         |
|           |                                                    | Z | 5.83 | 67.70 | 16.58 |      | 130.0 |         |
| 10631-AAB | IEEE 802.11ac WiFi (80MHz, MCS5, 90pc duty cycle)  | X | 6.19 | 68.38 | 17.32 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 6.03 | 67.83 | 16.99 |      | 130.0 |         |
|           |                                                    | Z | 5.86 | 67.92 | 16.89 |      | 130.0 |         |
| 10632-AAB | IEEE 802.11ac WiFi (80MHz, MCS6, 90pc duty cycle)  | X | 5.89 | 67.37 | 16.83 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.75 | 66.88 | 16.53 |      | 130.0 |         |
|           |                                                    | Z | 5.67 | 67.23 | 16.57 |      | 130.0 |         |
| 10633-AAB | IEEE 802.11ac WiFi (80MHz, MCS7, 90pc duty cycle)  | X | 5.81 | 67.14 | 16.55 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.64 | 66.53 | 16.18 |      | 130.0 |         |
|           |                                                    | Z | 5.57 | 66.89 | 16.21 |      | 130.0 |         |
| 10634-AAB | IEEE 802.11ac WiFi (80MHz, MCS8, 90pc duty cycle)  | X | 5.79 | 67.15 | 16.62 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.63 | 66.56 | 16.26 |      | 130.0 |         |
|           |                                                    | Z | 5.56 | 66.95 | 16.31 |      | 130.0 |         |
| 10635-AAB | IEEE 802.11ac WiFi (80MHz, MCS9, 90pc duty cycle)  | X | 5.68 | 66.48 | 16.03 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.52 | 65.92 | 15.67 |      | 130.0 |         |
|           |                                                    | Z | 5.41 | 66.16 | 15.62 |      | 130.0 |         |
| 10636-AAC | IEEE 802.11ac WiFi (160MHz, MCS0, 90pc duty cycle) | X | 6.07 | 67.13 | 16.52 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.95 | 66.65 | 16.23 |      | 130.0 |         |
|           |                                                    | Z | 5.87 | 66.97 | 16.23 |      | 130.0 |         |
| 10637-AAC | IEEE 802.11ac WiFi (160MHz, MCS1, 90pc duty cycle) | X | 6.23 | 67.50 | 16.68 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 6.11 | 67.04 | 16.40 |      | 130.0 |         |
|           |                                                    | Z | 6.00 | 67.28 | 16.36 |      | 130.0 |         |
| 10638-AAC | IEEE 802.11ac WiFi (160MHz, MCS2, 90pc duty cycle) | X | 6.23 | 67.47 | 16.65 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 6.11 | 67.00 | 16.36 |      | 130.0 |         |
|           |                                                    | Z | 6.01 | 67.28 | 16.34 |      | 130.0 |         |

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|-----------|--------------------------------------------------------|---|--------|--------|-------|-------|-------|---------|
| 10639-AAC | IEEE 802.11ac WiFi (160MHz, MCS3, 90pc duty cycle)     | X | 6.23   | 67.49  | 16.70 | 0.46  | 130.0 | ± 9.6 % |
|           |                                                        | Y | 6.09   | 66.97  | 16.39 |       | 130.0 |         |
|           |                                                        | Z | 6.00   | 67.25  | 16.37 |       | 130.0 |         |
| 10640-AAC | IEEE 802.11ac WiFi (160MHz, MCS4, 90pc duty cycle)     | X | 6.25   | 67.53  | 16.67 | 0.46  | 130.0 | ± 9.6 % |
|           |                                                        | Y | 6.11   | 67.01  | 16.35 |       | 130.0 |         |
|           |                                                        | Z | 5.99   | 67.21  | 16.29 |       | 130.0 |         |
| 10641-AAC | IEEE 802.11ac WiFi (160MHz, MCS5, 90pc duty cycle)     | X | 6.25   | 67.31  | 16.57 | 0.46  | 130.0 | ± 9.6 % |
|           |                                                        | Y | 6.13   | 66.85  | 16.30 |       | 130.0 |         |
|           |                                                        | Z | 6.03   | 67.11  | 16.28 |       | 130.0 |         |
| 10642-AAC | IEEE 802.11ac WiFi (160MHz, MCS6, 90pc duty cycle)     | X | 6.33   | 67.65  | 16.91 | 0.46  | 130.0 | ± 9.6 % |
|           |                                                        | Y | 6.18   | 67.13  | 16.60 |       | 130.0 |         |
|           |                                                        | Z | 6.10   | 67.47  | 16.62 |       | 130.0 |         |
| 10643-AAC | IEEE 802.11ac WiFi (160MHz, MCS7, 90pc duty cycle)     | X | 6.15   | 67.31  | 16.65 | 0.46  | 130.0 | ± 9.6 % |
|           |                                                        | Y | 6.02   | 66.82  | 16.34 |       | 130.0 |         |
|           |                                                        | Z | 5.91   | 67.06  | 16.30 |       | 130.0 |         |
| 10644-AAC | IEEE 802.11ac WiFi (160MHz, MCS8, 90pc duty cycle)     | X | 6.35   | 67.93  | 16.98 | 0.46  | 130.0 | ± 9.6 % |
|           |                                                        | Y | 6.21   | 67.40  | 16.65 |       | 130.0 |         |
|           |                                                        | Z | 6.05   | 67.49  | 16.53 |       | 130.0 |         |
| 10645-AAC | IEEE 802.11ac WiFi (160MHz, MCS9, 90pc duty cycle)     | X | 6.71   | 68.51  | 17.21 | 0.46  | 130.0 | ± 9.6 % |
|           |                                                        | Y | 6.68   | 68.36  | 17.09 |       | 130.0 |         |
|           |                                                        | Z | 6.25   | 67.70  | 16.59 |       | 130.0 |         |
| 10646-AAF | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,7)  | X | 86.17  | 140.32 | 45.40 | 9.30  | 60.0  | ± 9.6 % |
|           |                                                        | Y | 39.04  | 122.44 | 40.63 |       | 60.0  |         |
|           |                                                        | Z | 18.19  | 104.43 | 33.83 |       | 60.0  |         |
| 10647-AAF | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,7) | X | 80.45  | 139.77 | 45.45 | 9.30  | 60.0  | ± 9.6 % |
|           |                                                        | Y | 36.72  | 121.94 | 40.66 |       | 60.0  |         |
|           |                                                        | Z | 16.41  | 102.98 | 33.52 |       | 60.0  |         |
| 10648-AAA | CDMA2000 (1x Advanced)                                 | X | 0.87   | 66.51  | 13.20 | 0.00  | 150.0 | ± 9.6 % |
|           |                                                        | Y | 0.58   | 61.72  | 9.15  |       | 150.0 |         |
|           |                                                        | Z | 0.69   | 64.69  | 11.24 |       | 150.0 |         |
| 10652-AAD | LTE-TDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)         | X | 4.31   | 69.00  | 17.79 | 2.23  | 80.0  | ± 9.6 % |
|           |                                                        | Y | 3.89   | 67.35  | 16.71 |       | 80.0  |         |
|           |                                                        | Z | 3.64   | 67.10  | 16.29 |       | 80.0  |         |
| 10653-AAD | LTE-TDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)        | X | 4.72   | 67.91  | 17.64 | 2.23  | 80.0  | ± 9.6 % |
|           |                                                        | Y | 4.40   | 66.72  | 16.87 |       | 80.0  |         |
|           |                                                        | Z | 4.16   | 66.48  | 16.48 |       | 80.0  |         |
| 10654-AAD | LTE-TDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)        | X | 4.64   | 67.52  | 17.60 | 2.23  | 80.0  | ± 9.6 % |
|           |                                                        | Y | 4.36   | 66.39  | 16.88 |       | 80.0  |         |
|           |                                                        | Z | 4.14   | 66.16  | 16.50 |       | 80.0  |         |
| 10655-AAE | LTE-TDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)        | X | 4.69   | 67.54  | 17.64 | 2.23  | 80.0  | ± 9.6 % |
|           |                                                        | Y | 4.42   | 66.40  | 16.92 |       | 80.0  |         |
|           |                                                        | Z | 4.19   | 66.14  | 16.53 |       | 80.0  |         |
| 10658-AAA | Pulse Waveform (200Hz, 10%)                            | X | 100.00 | 116.89 | 30.15 | 10.00 | 50.0  | ± 9.6 % |
|           |                                                        | Y | 27.27  | 97.34  | 24.81 |       | 50.0  |         |
|           |                                                        | Z | 5.41   | 73.00  | 14.99 |       | 50.0  |         |
| 10659-AAA | Pulse Waveform (200Hz, 20%)                            | X | 100.00 | 114.06 | 27.78 | 6.99  | 60.0  | ± 9.6 % |
|           |                                                        | Y | 100.00 | 111.99 | 26.70 |       | 60.0  |         |
|           |                                                        | Z | 5.58   | 74.98  | 14.50 |       | 60.0  |         |

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|-----------|-----------------------------|---|--------|--------|-------|------|-------|---------|
| 10660-AAA | Pulse Waveform (200Hz, 40%) | X | 100.00 | 113.57 | 26.20 | 3.98 | 80.0  | ± 9.6 % |
|           |                             | Y | 100.00 | 108.48 | 23.71 |      | 80.0  |         |
|           |                             | Z | 17.55  | 86.88  | 16.64 |      | 80.0  |         |
| 10661-AAA | Pulse Waveform (200Hz, 60%) | X | 100.00 | 116.76 | 26.28 | 2.22 | 100.0 | ± 9.6 % |
|           |                             | Y | 100.00 | 105.43 | 21.11 |      | 100.0 |         |
|           |                             | Z | 100.00 | 100.82 | 18.62 |      | 100.0 |         |
| 10662-AAA | Pulse Waveform (200Hz, 80%) | X | 100.00 | 127.89 | 28.96 | 0.97 | 120.0 | ± 9.6 % |
|           |                             | Y | 3.43   | 74.94  | 10.68 |      | 120.0 |         |
|           |                             | Z | 100.00 | 98.67  | 16.42 |      | 120.0 |         |
| 10670-AAA | Bluetooth Low Energy        | X | 100.00 | 117.22 | 26.83 | 2.19 | 100.0 | ± 9.6 % |
|           |                             | Y | 100.00 | 107.88 | 22.47 |      | 100.0 |         |
|           |                             | Z | 100.00 | 104.58 | 20.49 |      | 100.0 |         |

<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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