

# LTE Cat M Appendix-Frequency Stability

| Band: 2 / Bandwidth: 20MHz |         |               |        |               |                  |                     |                       |       |         |
|----------------------------|---------|---------------|--------|---------------|------------------|---------------------|-----------------------|-------|---------|
| Modulation                 | Channel | RB Allocation |        | Temp.<br>(°C) | Voltage<br>(VDC) | Freq. Error<br>(Hz) | Freq. vs. Rated (ppm) |       | Verdict |
|                            |         | Size          | Offset |               |                  |                     | Result                | Limit |         |
| QPSK                       | Low     | 6             | 0      | 20            | 3.3              | -7.300              | -0.0039               | /     | Pass    |
|                            |         |               |        |               | 3.8              | 6.670               | 0.0036                | /     | Pass    |
|                            |         |               |        |               | 4.3              | 1.890               | 0.001                 | /     | Pass    |
|                            |         |               |        | -30           | 3.8              | -0.418              | -0.0002               | /     | Pass    |
|                            |         |               |        | -20           | 3.8              | 1.774               | 0.001                 | /     | Pass    |
|                            |         |               |        | -10           | 3.8              | -4.241              | -0.0023               | /     | Pass    |
|                            |         |               |        | 0             | 3.8              | 1.451               | 0.0008                | /     | Pass    |
|                            |         |               |        | 10            | 3.8              | -2.420              | -0.0013               | /     | Pass    |
|                            |         |               |        | 30            | 3.8              | -3.757              | -0.002                | /     | Pass    |
|                            |         |               |        | 40            | 3.8              | 3.200               | 0.0017                | /     | Pass    |
|                            |         |               |        | 50            | 3.8              | -3.648              | -0.002                | /     | Pass    |
|                            | Middle  | 6             | 0      | 20            | 3.3              | 4.432               | 0.0024                | /     | Pass    |
|                            |         |               |        |               | 3.8              | 0.043               | 0                     | /     | Pass    |
|                            |         |               |        |               | 4.3              | -3.366              | -0.0018               | /     | Pass    |
|                            |         |               |        | -30           | 3.8              | -4.102              | -0.0022               | /     | Pass    |
|                            |         |               |        | -20           | 3.8              | -4.796              | -0.0026               | /     | Pass    |
|                            |         |               |        | -10           | 3.8              | -0.814              | -0.0004               | /     | Pass    |
|                            |         |               |        | 0             | 3.8              | -4.152              | -0.0022               | /     | Pass    |
|                            |         |               |        | 10            | 3.8              | 4.199               | 0.0022                | /     | Pass    |
|                            |         |               |        | 30            | 3.8              | -2.738              | -0.0015               | /     | Pass    |
|                            |         |               |        | 40            | 3.8              | 2.611               | 0.0014                | /     | Pass    |
|                            |         |               |        | 50            | 3.8              | 1.462               | 0.0008                | /     | Pass    |
|                            | High    | 6             | 0      | 20            | 3.3              | 2.109               | 0.0011                | /     | Pass    |
|                            |         |               |        |               | 3.8              | 4.297               | 0.0023                | /     | Pass    |
|                            |         |               |        |               | 4.3              | -3.560              | -0.0019               | /     | Pass    |
|                            |         |               |        | -30           | 3.8              | -2.198              | -0.0012               | /     | Pass    |
|                            |         |               |        | -20           | 3.8              | -4.886              | -0.0026               | /     | Pass    |
|                            |         |               |        | -10           | 3.8              | 4.142               | 0.0022                | /     | Pass    |
|                            |         |               |        | 0             | 3.8              | -4.236              | -0.0022               | /     | Pass    |
|                            |         |               |        | 10            | 3.8              | -0.968              | -0.0005               | /     | Pass    |
|                            |         |               |        | 30            | 3.8              | 0.672               | 0.0004                | /     | Pass    |
|                            |         |               |        | 40            | 3.8              | -0.016              | 0                     | /     | Pass    |
|                            |         |               |        | 50            | 3.8              | 4.989               | 0.0026                | /     | Pass    |
| 16QAM                      | Low     | 5             | 0      | 20            | 3.3              | 5.200               | 0.0028                | /     | Pass    |
|                            |         |               |        |               | 3.8              | 1.600               | 0.0009                | /     | Pass    |
|                            |         |               |        |               | 4.3              | 4.300               | 0.0023                | /     | Pass    |
|                            |         |               |        | -30           | 3.8              | -2.061              | -0.0011               | /     | Pass    |
|                            |         |               |        | -20           | 3.8              | -0.128              | -0.0001               | /     | Pass    |
|                            |         |               |        | -10           | 3.8              | -3.239              | -0.0017               | /     | Pass    |
|                            |         |               |        | 0             | 3.8              | 1.252               | 0.0007                | /     | Pass    |
|                            |         |               |        | 10            | 3.8              | -3.453              | -0.0019               | /     | Pass    |
|                            |         |               |        | 30            | 3.8              | -0.321              | -0.0002               | /     | Pass    |
|                            |         |               |        | 40            | 3.8              | 4.112               | 0.0022                | /     | Pass    |
|                            |         |               |        | 50            | 3.8              | 3.253               | 0.0017                | /     | Pass    |
|                            | Middle  | 5             | 0      | 20            | 3.3              | 2.455               | 0.0013                | /     | Pass    |
|                            |         |               |        |               | 3.8              | 4.778               | 0.0025                | /     | Pass    |
|                            |         |               |        |               | 4.3              | -2.099              | -0.0011               | /     | Pass    |
|                            |         |               |        | -30           | 3.8              | -3.939              | -0.0021               | /     | Pass    |
|                            |         |               |        | -20           | 3.8              | -3.081              | -0.0016               | /     | Pass    |
|                            |         |               |        | -10           | 3.8              | 2.705               | 0.0014                | /     | Pass    |
|                            |         |               |        | 0             | 3.8              | 1.205               | 0.0006                | /     | Pass    |
|                            |         |               |        | 10            | 3.8              | 4.103               | 0.0022                | /     | Pass    |
|                            |         |               |        | 30            | 3.8              | -2.642              | -0.0014               | /     | Pass    |
|                            |         |               |        | 40            | 3.8              | -0.300              | -0.0002               | /     | Pass    |

|  |      |   |   |     |     |        |         |   |      |
|--|------|---|---|-----|-----|--------|---------|---|------|
|  | High | 5 | 0 | 50  | 3.8 | -0.022 | 0       | / | Pass |
|  |      |   |   | 20  | 3.3 | -1.769 | -0.0009 | / | Pass |
|  |      |   |   |     | 3.8 | 0.327  | 0.0002  | / | Pass |
|  |      |   |   |     | 4.3 | 1.534  | 0.0008  | / | Pass |
|  |      |   |   | -30 | 3.8 | 0.687  | 0.0004  | / | Pass |
|  |      |   |   | -20 | 3.8 | 3.284  | 0.0017  | / | Pass |
|  |      |   |   | -10 | 3.8 | -1.131 | -0.0006 | / | Pass |
|  |      |   |   | 0   | 3.8 | -0.574 | -0.0003 | / | Pass |
|  |      |   |   | 10  | 3.8 | -2.668 | -0.0014 | / | Pass |
|  |      |   |   | 30  | 3.8 | 3.224  | 0.0017  | / | Pass |
|  |      |   |   | 40  | 3.8 | 0.190  | 0.0001  | / | Pass |
|  |      |   |   | 50  | 3.8 | 2.147  | 0.0011  | / | Pass |

| Band: 4 / Bandwidth: 20MHz |         |               |        |               |                  |                     |                       |       |         |
|----------------------------|---------|---------------|--------|---------------|------------------|---------------------|-----------------------|-------|---------|
| Modulation                 | Channel | RB Allocation |        | Temp.<br>(°C) | Voltage<br>(VDC) | Freq. Error<br>(Hz) | Freq. vs. Rated (ppm) |       | Verdict |
|                            |         | Size          | Offset |               |                  |                     | Result                | Limit |         |
| QPSK                       | Low     | 6             | 0      | 20            | 3.3              | -5.8100             | -0.0034               | /     | Pass    |
|                            |         |               |        |               | 3.8              | 3.8600              | 0.0022                | /     | Pass    |
|                            |         |               |        |               | 4.3              | 0.3600              | 0.0002                | /     | Pass    |
|                            |         |               |        | -30           | 3.8              | 2.3772              | 0.0014                | /     | Pass    |
|                            |         |               |        | -20           | 3.8              | -4.8796             | -0.0028               | /     | Pass    |
|                            |         |               |        | -10           | 3.8              | -3.4924             | -0.002                | /     | Pass    |
|                            |         |               |        | 0             | 3.8              | -3.9512             | -0.0023               | /     | Pass    |
|                            |         |               |        | 10            | 3.8              | -5.6875             | -0.0033               | /     | Pass    |
|                            |         |               |        | 30            | 3.8              | 5.0682              | 0.0029                | /     | Pass    |
|                            |         |               |        | 40            | 3.8              | 5.2549              | 0.0031                | /     | Pass    |
|                            |         |               |        | 50            | 3.8              | -1.4189             | -0.0008               | /     | Pass    |
|                            | Middle  | 6             | 0      | 20            | 3.3              | 0.1936              | 0.0001                | /     | Pass    |
|                            |         |               |        |               | 3.8              | 6.0081              | 0.0035                | /     | Pass    |
|                            |         |               |        |               | 4.3              | 5.9346              | 0.0034                | /     | Pass    |
|                            |         |               |        | -30           | 3.8              | -0.0789             | 0                     | /     | Pass    |
|                            |         |               |        | -20           | 3.8              | 2.2962              | 0.0013                | /     | Pass    |
|                            |         |               |        | -10           | 3.8              | 1.4799              | 0.0009                | /     | Pass    |
|                            |         |               |        | 0             | 3.8              | -4.0309             | -0.0023               | /     | Pass    |
|                            |         |               |        | 10            | 3.8              | -1.7823             | -0.001                | /     | Pass    |
|                            |         |               |        | 30            | 3.8              | 3.8491              | 0.0022                | /     | Pass    |
|                            |         |               |        | 40            | 3.8              | -0.6449             | -0.0004               | /     | Pass    |
|                            |         |               |        | 50            | 3.8              | 1.7696              | 0.001                 | /     | Pass    |
|                            | High    | 6             | 0      | 20            | 3.3              | -3.8748             | -0.0022               | /     | Pass    |
|                            |         |               |        |               | 3.8              | 3.9189              | 0.0022                | /     | Pass    |
|                            |         |               |        |               | 4.3              | -3.8102             | -0.0022               | /     | Pass    |
|                            |         |               |        | -30           | 3.8              | -1.1641             | -0.0007               | /     | Pass    |
|                            |         |               |        | -20           | 3.8              | -1.5550             | -0.0009               | /     | Pass    |
|                            |         |               |        | -10           | 3.8              | 1.8686              | 0.0011                | /     | Pass    |
|                            |         |               |        | 0             | 3.8              | -0.0906             | -0.0001               | /     | Pass    |
|                            |         |               |        | 10            | 3.8              | -3.5479             | -0.002                | /     | Pass    |
|                            |         |               |        | 30            | 3.8              | -1.3972             | -0.0008               | /     | Pass    |
|                            |         |               |        | 40            | 3.8              | -5.0034             | -0.0029               | /     | Pass    |
|                            |         |               |        | 50            | 3.8              | 2.5289              | 0.0014                | /     | Pass    |
| 16QAM                      | Low     | 5             | 0      | 20            | 3.3              | 3.5000              | 0.002                 | /     | Pass    |
|                            |         |               |        |               | 3.8              | 1.6000              | 0.0009                | /     | Pass    |
|                            |         |               |        |               | 4.3              | 4.2000              | 0.0024                | /     | Pass    |
|                            |         |               |        | -30           | 3.8              | -6.2458             | -0.0036               | /     | Pass    |
|                            |         |               |        | -20           | 3.8              | 5.4015              | 0.0031                | /     | Pass    |
|                            |         |               |        | -10           | 3.8              | 3.7185              | 0.0022                | /     | Pass    |
|                            |         |               |        | 0             | 3.8              | -4.9497             | -0.0029               | /     | Pass    |
|                            |         |               |        | 10            | 3.8              | 3.9648              | 0.0023                | /     | Pass    |
|                            |         |               |        | 30            | 3.8              | -2.3563             | -0.0014               | /     | Pass    |
|                            |         |               |        | 40            | 3.8              | 6.3191              | 0.0037                | /     | Pass    |
|                            |         |               |        | 50            | 3.8              | -3.5053             | -0.002                | /     | Pass    |
|                            | Middle  | 5             | 0      | 20            | 3.3              | 5.7641              | 0.0033                | /     | Pass    |
|                            |         |               |        |               | 3.8              | -2.1670             | -0.0013               | /     | Pass    |
|                            |         |               |        |               | 4.3              | -6.2538             | -0.0036               | /     | Pass    |
|                            |         |               |        | -30           | 3.8              | -4.8645             | -0.0028               | /     | Pass    |
|                            |         |               |        | -20           | 3.8              | 3.7913              | 0.0022                | /     | Pass    |
|                            |         |               |        | -10           | 3.8              | 5.2992              | 0.0031                | /     | Pass    |
|                            |         |               |        | 0             | 3.8              | -5.9503             | -0.0034               | /     | Pass    |
|                            |         |               |        | 10            | 3.8              | -3.4712             | -0.002                | /     | Pass    |
|                            |         |               |        | 30            | 3.8              | -0.6050             | -0.0003               | /     | Pass    |
|                            |         |               |        | 40            | 3.8              | 6.6300              | 0.0038                | /     | Pass    |

|  |      |   |   |     |     |         |         |         |      |
|--|------|---|---|-----|-----|---------|---------|---------|------|
|  |      |   |   | 50  | 3.8 | -1.5726 | -0.0009 | /       | Pass |
|  | High | 5 | 0 | 20  | 3.3 | -4.5024 | -0.0026 | /       | Pass |
|  |      |   |   |     | 3.8 | 6.1158  | 0.0035  | /       | Pass |
|  |      |   |   |     | 4.3 | -2.9254 | -0.0017 | /       | Pass |
|  |      |   |   |     | -30 | 3.8     | -5.8131 | -0.0033 | /    |
|  |      |   |   | -20 | 3.8 | -2.1579 | -0.0012 | /       | Pass |
|  |      |   |   | -10 | 3.8 | 1.4508  | 0.0008  | /       | Pass |
|  |      |   |   | 0   | 3.8 | -1.6725 | -0.001  | /       | Pass |
|  |      |   |   | 10  | 3.8 | 4.6305  | 0.0027  | /       | Pass |
|  |      |   |   | 30  | 3.8 | 3.0694  | 0.0018  | /       | Pass |
|  |      |   |   | 40  | 3.8 | -0.2922 | -0.0002 | /       | Pass |
|  |      |   |   | 50  | 3.8 | 5.5790  | 0.0032  | /       | Pass |

| Band: 5 / Bandwidth: 10MHz |         |               |        |               |                  |                     |                       |             |         |
|----------------------------|---------|---------------|--------|---------------|------------------|---------------------|-----------------------|-------------|---------|
| Modulation                 | Channel | RB Allocation |        | Temp.<br>(°C) | Voltage<br>(VDC) | Freq. Error<br>(Hz) | Freq. vs. Rated (ppm) |             | Verdict |
|                            |         | Size          | Offset |               |                  |                     | Result                | Limit       |         |
| QPSK                       | Low     | 6             | 0      | 20            | 3.3              | -3.3800             | -0.0041               | -2.5 to 2.5 | Pass    |
|                            |         |               |        |               | 3.8              | -1.9700             | -0.0024               | -2.5 to 2.5 | Pass    |
|                            |         |               |        |               | 4.3              | -4.0600             | -0.0049               | -2.5 to 2.5 | Pass    |
|                            |         |               |        | -30           | 3.8              | -4.1128             | -0.005                | -2.5 to 2.5 | Pass    |
|                            |         |               |        | -20           | 3.8              | 0.1729              | 0.0002                | -2.5 to 2.5 | Pass    |
|                            |         |               |        | -10           | 3.8              | 0.2776              | 0.0003                | -2.5 to 2.5 | Pass    |
|                            |         |               |        | 0             | 3.8              | 5.9279              | 0.0072                | -2.5 to 2.5 | Pass    |
|                            |         |               |        | 10            | 3.8              | 4.1230              | 0.005                 | -2.5 to 2.5 | Pass    |
|                            |         |               |        | 30            | 3.8              | -5.7696             | -0.007                | -2.5 to 2.5 | Pass    |
|                            |         |               |        | 40            | 3.8              | 4.2509              | 0.0051                | -2.5 to 2.5 | Pass    |
|                            |         |               |        | 50            | 3.8              | -1.3685             | -0.0017               | -2.5 to 2.5 | Pass    |
|                            | Middle  | 6             | 0      | 20            | 3.3              | -2.3075             | -0.0028               | -2.5 to 2.5 | Pass    |
|                            |         |               |        |               | 3.8              | 3.1455              | 0.0038                | -2.5 to 2.5 | Pass    |
|                            |         |               |        |               | 4.3              | -2.1050             | -0.0025               | -2.5 to 2.5 | Pass    |
|                            |         |               |        | -30           | 3.8              | 4.4412              | 0.0053                | -2.5 to 2.5 | Pass    |
|                            |         |               |        | -20           | 3.8              | 1.7840              | 0.0021                | -2.5 to 2.5 | Pass    |
|                            |         |               |        | -10           | 3.8              | -5.0222             | -0.006                | -2.5 to 2.5 | Pass    |
|                            |         |               |        | 0             | 3.8              | -5.1283             | -0.0061               | -2.5 to 2.5 | Pass    |
|                            |         |               |        | 10            | 3.8              | -4.7629             | -0.0057               | -2.5 to 2.5 | Pass    |
|                            |         |               |        | 30            | 3.8              | -1.2166             | -0.0015               | -2.5 to 2.5 | Pass    |
|                            |         |               |        | 40            | 3.8              | 5.7511              | 0.0069                | -2.5 to 2.5 | Pass    |
|                            |         |               |        | 50            | 3.8              | 2.8529              | 0.0034                | -2.5 to 2.5 | Pass    |
|                            | High    | 6             | 0      | 20            | 3.3              | -2.5416             | -0.003                | -2.5 to 2.5 | Pass    |
|                            |         |               |        |               | 3.8              | 0.2483              | 0.0003                | -2.5 to 2.5 | Pass    |
|                            |         |               |        |               | 4.3              | -1.0908             | -0.0013               | -2.5 to 2.5 | Pass    |
|                            |         |               |        | -30           | 3.8              | 5.3379              | 0.0063                | -2.5 to 2.5 | Pass    |
|                            |         |               |        | -20           | 3.8              | -5.4767             | -0.0065               | -2.5 to 2.5 | Pass    |
|                            |         |               |        | -10           | 3.8              | 0.2786              | 0.0003                | -2.5 to 2.5 | Pass    |
|                            |         |               |        | 0             | 3.8              | -1.3959             | -0.0017               | -2.5 to 2.5 | Pass    |
|                            |         |               |        | 10            | 3.8              | -3.3720             | -0.004                | -2.5 to 2.5 | Pass    |
|                            |         |               |        | 30            | 3.8              | -3.4573             | -0.0041               | -2.5 to 2.5 | Pass    |
|                            |         |               |        | 40            | 3.8              | -0.9771             | -0.0012               | -2.5 to 2.5 | Pass    |
|                            |         |               |        | 50            | 3.8              | 6.3896              | 0.0076                | -2.5 to 2.5 | Pass    |
| 16QAM                      | Low     | 5             | 0      | 20            | 3.3              | -1.5000             | -0.0018               | -2.5 to 2.5 | Pass    |
|                            |         |               |        |               | 3.8              | -4.2000             | -0.0051               | -2.5 to 2.5 | Pass    |
|                            |         |               |        |               | 4.3              | 5.2000              | 0.0063                | -2.5 to 2.5 | Pass    |
|                            |         |               |        | -30           | 3.8              | -2.6612             | -0.0032               | -2.5 to 2.5 | Pass    |
|                            |         |               |        | -20           | 3.8              | 1.1468              | 0.0014                | -2.5 to 2.5 | Pass    |
|                            |         |               |        | -10           | 3.8              | -0.3321             | -0.0004               | -2.5 to 2.5 | Pass    |
|                            |         |               |        | 0             | 3.8              | 3.4414              | 0.0042                | -2.5 to 2.5 | Pass    |
|                            |         |               |        | 10            | 3.8              | 3.4482              | 0.0042                | -2.5 to 2.5 | Pass    |
|                            |         |               |        | 30            | 3.8              | 1.8636              | 0.0022                | -2.5 to 2.5 | Pass    |
|                            |         |               |        | 40            | 3.8              | 3.4204              | 0.0041                | -2.5 to 2.5 | Pass    |
|                            |         |               |        | 50            | 3.8              | 2.8719              | 0.0035                | -2.5 to 2.5 | Pass    |
|                            | Middle  | 5             | 0      | 20            | 3.3              | -1.9407             | -0.0023               | -2.5 to 2.5 | Pass    |
|                            |         |               |        |               | 3.8              | -3.4487             | -0.0041               | -2.5 to 2.5 | Pass    |
|                            |         |               |        |               | 4.3              | 6.2291              | 0.0074                | -2.5 to 2.5 | Pass    |
|                            |         |               |        | -30           | 3.8              | -6.6751             | -0.008                | -2.5 to 2.5 | Pass    |
|                            |         |               |        | -20           | 3.8              | 6.7652              | 0.0081                | -2.5 to 2.5 | Pass    |
|                            |         |               |        | -10           | 3.8              | -4.4374             | -0.0053               | -2.5 to 2.5 | Pass    |
|                            |         |               |        | 0             | 3.8              | 5.5438              | 0.0066                | -2.5 to 2.5 | Pass    |
|                            |         |               |        | 10            | 3.8              | 4.0253              | 0.0048                | -2.5 to 2.5 | Pass    |
|                            |         |               |        | 30            | 3.8              | 0.0829              | 0.0001                | -2.5 to 2.5 | Pass    |
|                            |         |               |        | 40            | 3.8              | -2.3437             | -0.0028               | -2.5 to 2.5 | Pass    |

|  |      |   |   |     |     |         |         |             |             |
|--|------|---|---|-----|-----|---------|---------|-------------|-------------|
|  |      |   |   | 50  | 3.8 | -6.2589 | -0.0075 | -2.5 to 2.5 | Pass        |
|  | High | 5 | 0 | 20  | 3.3 | -6.3042 | -0.0075 | -2.5 to 2.5 | Pass        |
|  |      |   |   |     | 3.8 | -0.7728 | -0.0009 | -2.5 to 2.5 | Pass        |
|  |      |   |   |     | 4.3 | -6.9033 | -0.0082 | -2.5 to 2.5 | Pass        |
|  |      |   |   |     | -30 | 3.8     | 3.5087  | 0.0042      | -2.5 to 2.5 |
|  |      |   |   | -20 | 3.8 | -2.6213 | -0.0031 | -2.5 to 2.5 | Pass        |
|  |      |   |   | -10 | 3.8 | 2.3165  | 0.0027  | -2.5 to 2.5 | Pass        |
|  |      |   |   | 0   | 3.8 | 3.6173  | 0.0043  | -2.5 to 2.5 | Pass        |
|  |      |   |   | 10  | 3.8 | -2.2141 | -0.0026 | -2.5 to 2.5 | Pass        |
|  |      |   |   | 30  | 3.8 | -3.2440 | -0.0038 | -2.5 to 2.5 | Pass        |
|  |      |   |   | 40  | 3.8 | 6.8407  | 0.0081  | -2.5 to 2.5 | Pass        |
|  |      |   |   | 50  | 3.8 | 2.5807  | 0.0031  | -2.5 to 2.5 | Pass        |

| Band: 12 / Bandwidth: 10MHz |         |               |        |               |                  |                     |                       |       |         |
|-----------------------------|---------|---------------|--------|---------------|------------------|---------------------|-----------------------|-------|---------|
| Modulation                  | Channel | RB Allocation |        | Temp.<br>(°C) | Voltage<br>(VDC) | Freq. Error<br>(Hz) | Freq. vs. Rated (ppm) |       | Verdict |
|                             |         | Size          | Offset |               |                  |                     | Result                | Limit |         |
| QPSK                        | Low     | 6             | 0      | 20            | 3.3              | 1.7500              | 0.0025                | /     | Pass    |
|                             |         |               |        |               | 3.8              | -0.5400             | -0.0008               | /     | Pass    |
|                             |         |               |        |               | 4.3              | -1.3400             | -0.0019               | /     | Pass    |
|                             |         |               |        | -30           | 3.8              | -3.6124             | -0.0051               | /     | Pass    |
|                             |         |               |        | -20           | 3.8              | -5.1246             | -0.0073               | /     | Pass    |
|                             |         |               |        | -10           | 3.8              | -2.0632             | -0.0029               | /     | Pass    |
|                             |         |               |        | 0             | 3.8              | 1.3109              | 0.0019                | /     | Pass    |
|                             |         |               |        | 10            | 3.8              | -3.4714             | -0.0049               | /     | Pass    |
|                             |         |               |        | 30            | 3.8              | -4.0122             | -0.0057               | /     | Pass    |
|                             |         |               |        | 40            | 3.8              | -3.1056             | -0.0044               | /     | Pass    |
|                             |         |               |        | 50            | 3.8              | -5.9308             | -0.0084               | /     | Pass    |
|                             | Middle  | 6             | 0      | 20            | 3.3              | 3.2135              | 0.0045                | /     | Pass    |
|                             |         |               |        |               | 3.8              | -3.3757             | -0.0048               | /     | Pass    |
|                             |         |               |        |               | 4.3              | -2.3165             | -0.0033               | /     | Pass    |
|                             |         |               |        | -30           | 3.8              | -5.4955             | -0.0078               | /     | Pass    |
|                             |         |               |        | -20           | 3.8              | 3.1410              | 0.0044                | /     | Pass    |
|                             |         |               |        | -10           | 3.8              | -3.4869             | -0.0049               | /     | Pass    |
|                             |         |               |        | 0             | 3.8              | 1.2347              | 0.0017                | /     | Pass    |
|                             |         |               |        | 10            | 3.8              | -3.3677             | -0.0048               | /     | Pass    |
|                             |         |               |        | 30            | 3.8              | -2.6795             | -0.0038               | /     | Pass    |
|                             |         |               |        | 40            | 3.8              | 5.2436              | 0.0074                | /     | Pass    |
|                             |         |               |        | 50            | 3.8              | -6.8205             | -0.0096               | /     | Pass    |
|                             | High    | 6             | 0      | 20            | 3.3              | 0.3322              | 0.0005                | /     | Pass    |
|                             |         |               |        |               | 3.8              | 5.3525              | 0.0075                | /     | Pass    |
|                             |         |               |        |               | 4.3              | 3.9202              | 0.0055                | /     | Pass    |
|                             |         |               |        | -30           | 3.8              | 1.0403              | 0.0015                | /     | Pass    |
|                             |         |               |        | -20           | 3.8              | -5.1100             | -0.0072               | /     | Pass    |
|                             |         |               |        | -10           | 3.8              | 2.1215              | 0.003                 | /     | Pass    |
|                             |         |               |        | 0             | 3.8              | 1.1384              | 0.0016                | /     | Pass    |
|                             |         |               |        | 10            | 3.8              | -0.3164             | -0.0004               | /     | Pass    |
|                             |         |               |        | 30            | 3.8              | 3.3694              | 0.0047                | /     | Pass    |
|                             |         |               |        | 40            | 3.8              | -4.5294             | -0.0064               | /     | Pass    |
|                             |         |               |        | 50            | 3.8              | -4.3681             | -0.0061               | /     | Pass    |
| 16QAM                       | Low     | 5             | 0      | 20            | 3.3              | -0.6900             | -0.001                | /     | Pass    |
|                             |         |               |        |               | 3.8              | -0.1700             | -0.0002               | /     | Pass    |
|                             |         |               |        |               | 4.3              | 0.2300              | 0.0003                | /     | Pass    |
|                             |         |               |        | -30           | 3.8              | 5.1034              | 0.0072                | /     | Pass    |
|                             |         |               |        | -20           | 3.8              | -2.2238             | -0.0032               | /     | Pass    |
|                             |         |               |        | -10           | 3.8              | -4.1429             | -0.0059               | /     | Pass    |
|                             |         |               |        | 0             | 3.8              | 0.3596              | 0.0005                | /     | Pass    |
|                             |         |               |        | 10            | 3.8              | 1.0407              | 0.0015                | /     | Pass    |
|                             |         |               |        | 30            | 3.8              | 6.4788              | 0.0092                | /     | Pass    |
|                             |         |               |        | 40            | 3.8              | -6.8973             | -0.0098               | /     | Pass    |
|                             |         |               |        | 50            | 3.8              | -6.7486             | -0.0096               | /     | Pass    |
|                             | Middle  | 5             | 0      | 20            | 3.3              | 3.1287              | 0.0044                | /     | Pass    |
|                             |         |               |        |               | 3.8              | -2.0718             | -0.0029               | /     | Pass    |
|                             |         |               |        |               | 4.3              | 4.1378              | 0.0058                | /     | Pass    |
|                             |         |               |        | -30           | 3.8              | 1.5391              | 0.0022                | /     | Pass    |
|                             |         |               |        | -20           | 3.8              | -6.9498             | -0.0098               | /     | Pass    |
|                             |         |               |        | -10           | 3.8              | 1.4328              | 0.002                 | /     | Pass    |
|                             |         |               |        | 0             | 3.8              | 6.7794              | 0.0096                | /     | Pass    |
|                             |         |               |        | 10            | 3.8              | 5.4576              | 0.0077                | /     | Pass    |
|                             |         |               |        | 30            | 3.8              | 1.0820              | 0.0015                | /     | Pass    |
|                             |         |               |        | 40            | 3.8              | -2.4808             | -0.0035               | /     | Pass    |

|  |      |   |   |     |     |         |         |   |      |
|--|------|---|---|-----|-----|---------|---------|---|------|
|  |      |   |   | 50  | 3.8 | -0.9492 | -0.0013 | / | Pass |
|  | High | 5 | 0 | 20  | 3.3 | 3.2903  | 0.0046  | / | Pass |
|  |      |   |   |     | 3.8 | -6.8481 | -0.0096 | / | Pass |
|  |      |   |   |     | 4.3 | 1.6365  | 0.0023  | / | Pass |
|  |      |   |   | -30 | 3.8 | 6.9123  | 0.0097  | / | Pass |
|  |      |   |   | -20 | 3.8 | -0.3981 | -0.0006 | / | Pass |
|  |      |   |   | -10 | 3.8 | 6.9674  | 0.0098  | / | Pass |
|  |      |   |   | 0   | 3.8 | -2.1301 | -0.003  | / | Pass |
|  |      |   |   | 10  | 3.8 | 4.0130  | 0.0056  | / | Pass |
|  |      |   |   | 30  | 3.8 | -2.5478 | -0.0036 | / | Pass |
|  |      |   |   | 40  | 3.8 | 2.5139  | 0.0035  | / | Pass |
|  |      |   |   | 50  | 3.8 | 4.0848  | 0.0057  | / | Pass |

| Band: 13 / Bandwidth: 10MHz |         |               |        |               |                  |                     |                       |       |         |
|-----------------------------|---------|---------------|--------|---------------|------------------|---------------------|-----------------------|-------|---------|
| Modulation                  | Channel | RB Allocation |        | Temp.<br>(°C) | Voltage<br>(VDC) | Freq. Error<br>(Hz) | Freq. vs. Rated (ppm) |       | Verdict |
|                             |         | Size          | Offset |               |                  |                     | Result                | Limit |         |
| QPSK                        | Middle  | 6             | 0      | 20            | 3.3              | -2.6900             | -0.0034               | /     | Pass    |
|                             |         |               |        |               | 3.8              | -6.0808             | -0.0078               | /     | Pass    |
|                             |         |               |        |               | 4.3              | 0.8189              | 0.001                 | /     | Pass    |
|                             |         |               |        | -30           | 3.8              | -2.2530             | -0.0029               | /     | Pass    |
|                             |         |               |        | -20           | 3.8              | 2.2366              | 0.0029                | /     | Pass    |
|                             |         |               |        | -10           | 3.8              | 0.1793              | 0.0002                | /     | Pass    |
|                             |         |               |        | 0             | 3.8              | 1.7753              | 0.0023                | /     | Pass    |
|                             |         |               |        | 10            | 3.8              | -4.5010             | -0.0058               | /     | Pass    |
|                             |         |               |        | 30            | 3.8              | -2.5524             | -0.0033               | /     | Pass    |
|                             |         |               |        | 40            | 3.8              | -0.1751             | -0.0002               | /     | Pass    |
|                             |         |               |        | 50            | 3.8              | 4.7842              | 0.0061                | /     | Pass    |
| 16QAM                       | Middle  | 5             | 0      | 20            | 3.3              | 1.4366              | 0.0018                | /     | Pass    |
|                             |         |               |        |               | 3.8              | -3.9180             | -0.005                | /     | Pass    |
|                             |         |               |        |               | 4.3              | -5.3280             | -0.0068               | /     | Pass    |
|                             |         |               |        | -30           | 3.8              | -5.5073             | -0.007                | /     | Pass    |
|                             |         |               |        | -20           | 3.8              | -0.6695             | -0.0009               | /     | Pass    |
|                             |         |               |        | -10           | 3.8              | -2.9810             | -0.0038               | /     | Pass    |
|                             |         |               |        | 0             | 3.8              | -4.7759             | -0.0061               | /     | Pass    |
|                             |         |               |        | 10            | 3.8              | 6.9200              | 0.0088                | /     | Pass    |
|                             |         |               |        | 30            | 3.8              | 5.8833              | 0.0075                | /     | Pass    |
|                             |         |               |        | 40            | 3.8              | 1.7375              | 0.0022                | /     | Pass    |
|                             |         |               |        | 50            | 3.8              | 5.2778              | 0.0067                | /     | Pass    |

| Band: 25 / Bandwidth: 20MHz |         |               |         |            |               |                  |                       |       |         |
|-----------------------------|---------|---------------|---------|------------|---------------|------------------|-----------------------|-------|---------|
| Modulation                  | Channel | RB Allocation |         | Temp. (°C) | Voltage (VDC) | Freq. Error (Hz) | Freq. vs. Rated (ppm) |       | Verdict |
|                             |         | Size          | Offset  |            |               |                  | Result                | Limit |         |
| QPSK                        | Low     | 6             | 0       | 20         | 3.3           | -6.6400          | -0.0036               | /     | Pass    |
|                             |         |               |         |            | 3.8           | -6.2700          | -0.0034               | /     | Pass    |
|                             |         |               |         |            | 4.3           | -5.7200          | -0.0031               | /     | Pass    |
|                             |         |               |         | -30        | 3.8           | -2.7881          | -0.0015               | /     | Pass    |
|                             |         |               |         | -20        | 3.8           | -2.7610          | -0.0015               | /     | Pass    |
|                             |         |               |         | -10        | 3.8           | -5.9869          | -0.0032               | /     | Pass    |
|                             |         |               |         | 0          | 3.8           | 3.4103           | 0.0018                | /     | Pass    |
|                             |         |               |         | 10         | 3.8           | 2.3900           | 0.0013                | /     | Pass    |
|                             |         |               |         | 30         | 3.8           | 3.3943           | 0.0018                | /     | Pass    |
|                             |         |               |         | 40         | 3.8           | 4.8364           | 0.0026                | /     | Pass    |
|                             | 50      | 3.8           | 3.9565  | 0.0021     | /             | Pass             |                       |       |         |
|                             | Middle  | 6             | 0       | 20         | 3.3           | -2.0548          | -0.0011               | /     | Pass    |
|                             |         |               |         |            | 3.8           | -1.3959          | -0.0007               | /     | Pass    |
|                             |         |               |         |            | 4.3           | 4.8246           | 0.0026                | /     | Pass    |
|                             |         |               |         | -30        | 3.8           | -5.1478          | -0.0027               | /     | Pass    |
|                             |         |               |         | -20        | 3.8           | 2.4492           | 0.0013                | /     | Pass    |
|                             |         |               |         | -10        | 3.8           | -4.6436          | -0.0025               | /     | Pass    |
|                             |         |               |         | 0          | 3.8           | -3.0991          | -0.0016               | /     | Pass    |
|                             |         |               |         | 10         | 3.8           | -0.4822          | -0.0003               | /     | Pass    |
|                             |         |               |         | 30         | 3.8           | 2.0773           | 0.0011                | /     | Pass    |
|                             |         |               |         | 40         | 3.8           | 2.8712           | 0.0015                | /     | Pass    |
|                             | 50      | 3.8           | 0.7538  | 0.0004     | /             | Pass             |                       |       |         |
|                             | High    | 6             | 0       | 20         | 3.3           | 0.9230           | 0.0005                | /     | Pass    |
|                             |         |               |         |            | 3.8           | -2.2123          | -0.0012               | /     | Pass    |
|                             |         |               |         |            | 4.3           | 1.4548           | 0.0008                | /     | Pass    |
|                             |         |               |         | -30        | 3.8           | 0.7480           | 0.0004                | /     | Pass    |
|                             |         |               |         | -20        | 3.8           | -3.7847          | -0.002                | /     | Pass    |
|                             |         |               |         | -10        | 3.8           | 2.4357           | 0.0013                | /     | Pass    |
|                             |         |               |         | 0          | 3.8           | 4.5370           | 0.0024                | /     | Pass    |
|                             |         |               |         | 10         | 3.8           | -0.5252          | -0.0003               | /     | Pass    |
|                             |         |               |         | 30         | 3.8           | -1.0102          | -0.0005               | /     | Pass    |
|                             |         |               |         | 40         | 3.8           | 6.8424           | 0.0036                | /     | Pass    |
|                             | 50      | 3.8           | -1.9085 | -0.001     | /             | Pass             |                       |       |         |
| 16QAM                       | Low     | 5             | 0       | 20         | 3.3           | 3.9000           | 0.0021                | /     | Pass    |
|                             |         |               |         |            | 3.8           | 2.5000           | 0.0013                | /     | Pass    |
|                             |         |               |         |            | 4.3           | 6.1000           | 0.0033                | /     | Pass    |
|                             |         |               |         | -30        | 3.8           | 1.0059           | 0.0005                | /     | Pass    |
|                             |         |               |         | -20        | 3.8           | 3.5223           | 0.0019                | /     | Pass    |
|                             |         |               |         | -10        | 3.8           | 4.4088           | 0.0024                | /     | Pass    |
|                             |         |               |         | 0          | 3.8           | -0.1836          | -0.0001               | /     | Pass    |
|                             |         |               |         | 10         | 3.8           | 6.9070           | 0.0037                | /     | Pass    |
|                             |         |               |         | 30         | 3.8           | -2.9714          | -0.0016               | /     | Pass    |
|                             |         |               |         | 40         | 3.8           | 5.1959           | 0.0028                | /     | Pass    |
|                             | 50      | 3.8           | -6.8196 | -0.0037    | /             | Pass             |                       |       |         |
|                             | Middle  | 5             | 0       | 20         | 3.3           | 2.1678           | 0.0012                | /     | Pass    |
|                             |         |               |         |            | 3.8           | -3.3585          | -0.0018               | /     | Pass    |
|                             |         |               |         |            | 4.3           | 1.3500           | 0.0007                | /     | Pass    |
|                             |         |               |         | -30        | 3.8           | 3.7644           | 0.002                 | /     | Pass    |
|                             |         |               |         | -20        | 3.8           | 4.2369           | 0.0023                | /     | Pass    |
|                             |         |               |         | -10        | 3.8           | 5.5911           | 0.003                 | /     | Pass    |
|                             |         |               |         | 0          | 3.8           | -4.1411          | -0.0022               | /     | Pass    |
|                             |         |               |         | 10         | 3.8           | 1.6186           | 0.0009                | /     | Pass    |
|                             |         |               |         | 30         | 3.8           | -0.2744          | -0.0001               | /     | Pass    |
|                             | 40      | 3.8           | -6.7308 | -0.0036    | /             | Pass             |                       |       |         |
|                             | 50      | 3.8           | -3.5578 | -0.0019    | /             | Pass             |                       |       |         |
| High                        | 5       | 0             | 20      | 3.3        | -1.4441       | -0.0008          | /                     | Pass  |         |

|  |  |  |  |     |     |         |         |   |      |
|--|--|--|--|-----|-----|---------|---------|---|------|
|  |  |  |  |     | 3.8 | -5.7684 | -0.003  | / | Pass |
|  |  |  |  |     | 4.3 | -6.9297 | -0.0036 | / | Pass |
|  |  |  |  | -30 | 3.8 | -3.8909 | -0.002  | / | Pass |
|  |  |  |  | -20 | 3.8 | 4.9365  | 0.0026  | / | Pass |
|  |  |  |  | -10 | 3.8 | -6.8758 | -0.0036 | / | Pass |
|  |  |  |  | 0   | 3.8 | -4.0449 | -0.0021 | / | Pass |
|  |  |  |  | 10  | 3.8 | -6.9883 | -0.0037 | / | Pass |
|  |  |  |  | 30  | 3.8 | 3.2589  | 0.0017  | / | Pass |
|  |  |  |  | 40  | 3.8 | 0.1447  | 0.0001  | / | Pass |
|  |  |  |  | 50  | 3.8 | 0.9248  | 0.0005  | / | Pass |

| Band: 26a / Bandwidth: 10MHz |         |               |        |               |                  |                     |                       |       |         |
|------------------------------|---------|---------------|--------|---------------|------------------|---------------------|-----------------------|-------|---------|
| Modulation                   | Channel | RB Allocation |        | Temp.<br>(°C) | Voltage<br>(VDC) | Freq. Error<br>(Hz) | Freq. vs. Rated (ppm) |       | Verdict |
|                              |         | Size          | Offset |               |                  |                     | Result                | Limit |         |
| QPSK                         | Middle  | 6             | 0      | 20            | 3.3              | -1.5900             | -0.0019               | /     | Pass    |
|                              |         |               |        |               | 3.8              | -5.4183             | -0.0066               | /     | Pass    |
|                              |         |               |        |               | 4.3              | 2.3644              | 0.0029                | /     | Pass    |
|                              |         |               |        | -30           | 3.8              | 5.9480              | 0.0073                | /     | Pass    |
|                              |         |               |        | -20           | 3.8              | -1.0004             | -0.0012               | /     | Pass    |
|                              |         |               |        | -10           | 3.8              | -6.9424             | -0.0085               | /     | Pass    |
|                              |         |               |        | 0             | 3.8              | 3.9985              | 0.0049                | /     | Pass    |
|                              |         |               |        | 10            | 3.8              | 6.2544              | 0.0076                | /     | Pass    |
|                              |         |               |        | 30            | 3.8              | 3.4609              | 0.0042                | /     | Pass    |
|                              |         |               |        | 40            | 3.8              | 2.3094              | 0.0028                | /     | Pass    |
| 16QAM                        | Middle  | 5             | 0      | 20            | 3.3              | 0.1962              | 0.0002                | /     | Pass    |
|                              |         |               |        |               | 3.8              | -1.9241             | -0.0023               | /     | Pass    |
|                              |         |               |        |               | 4.3              | -4.3096             | -0.0053               | /     | Pass    |
|                              |         |               |        | -30           | 3.8              | -4.6568             | -0.0057               | /     | Pass    |
|                              |         |               |        | -20           | 3.8              | 6.9830              | 0.0085                | /     | Pass    |
|                              |         |               |        | -10           | 3.8              | 0.4290              | 0.0005                | /     | Pass    |
|                              |         |               |        | 0             | 3.8              | 1.6792              | 0.0021                | /     | Pass    |
|                              |         |               |        | 10            | 3.8              | -0.1794             | -0.0002               | /     | Pass    |
|                              |         |               |        | 30            | 3.8              | 0.9497              | 0.0012                | /     | Pass    |
|                              |         |               |        | 40            | 3.8              | -5.8097             | -0.0071               | /     | Pass    |
|                              |         |               |        | 50            | 3.8              | 5.4497              | 0.0067                | /     | Pass    |

| Band: 26b / Bandwidth: 15MHz |         |               |        |               |                  |                     |                       |             |         |
|------------------------------|---------|---------------|--------|---------------|------------------|---------------------|-----------------------|-------------|---------|
| Modulation                   | Channel | RB Allocation |        | Temp.<br>(°C) | Voltage<br>(VDC) | Freq. Error<br>(Hz) | Freq. vs. Rated (ppm) |             | Verdict |
|                              |         | Size          | Offset |               |                  |                     | Result                | Limit       |         |
| QPSK                         | Low     | 6             | 0      | 20            | 3.3              | 0.8600              | 0.001                 | -2.5 to 2.5 | Pass    |
|                              |         |               |        |               | 3.8              | -4.9800             | -0.0061               | -2.5 to 2.5 | Pass    |
|                              |         |               |        |               | 4.3              | -1.9000             | -0.0023               | -2.5 to 2.5 | Pass    |
|                              |         |               |        | -30           | 3.8              | -0.3985             | -0.0005               | -2.5 to 2.5 | Pass    |
|                              |         |               |        | -20           | 3.8              | -9.6235             | -0.0117               | -2.5 to 2.5 | Pass    |
|                              |         |               |        | -10           | 3.8              | -9.5013             | -0.0116               | -2.5 to 2.5 | Pass    |
|                              |         |               |        | 0             | 3.8              | 9.4144              | 0.0115                | -2.5 to 2.5 | Pass    |
|                              |         |               |        | 10            | 3.8              | 3.8244              | 0.0047                | -2.5 to 2.5 | Pass    |
|                              |         |               |        | 30            | 3.8              | 1.6298              | 0.002                 | -2.5 to 2.5 | Pass    |
|                              |         |               |        | 40            | 3.8              | 3.8835              | 0.0047                | -2.5 to 2.5 | Pass    |
|                              |         |               |        | 50            | 3.8              | -8.3472             | -0.0102               | -2.5 to 2.5 | Pass    |
|                              | Middle  | 6             | 0      | 20            | 3.3              | 7.8290              | 0.0094                | -2.5 to 2.5 | Pass    |
|                              |         |               |        |               | 3.8              | 9.4262              | 0.0113                | -2.5 to 2.5 | Pass    |
|                              |         |               |        |               | 4.3              | -5.2175             | -0.0063               | -2.5 to 2.5 | Pass    |
|                              |         |               |        | -30           | 3.8              | -2.1543             | -0.0026               | -2.5 to 2.5 | Pass    |
|                              |         |               |        | -20           | 3.8              | -6.8948             | -0.0083               | -2.5 to 2.5 | Pass    |
|                              |         |               |        | -10           | 3.8              | -6.6278             | -0.008                | -2.5 to 2.5 | Pass    |
|                              |         |               |        | 0             | 3.8              | 1.5102              | 0.0018                | -2.5 to 2.5 | Pass    |
|                              |         |               |        | 10            | 3.8              | 7.8855              | 0.0095                | -2.5 to 2.5 | Pass    |
|                              |         |               |        | 30            | 3.8              | 9.2556              | 0.0111                | -2.5 to 2.5 | Pass    |
|                              |         |               |        | 40            | 3.8              | -0.9368             | -0.0011               | -2.5 to 2.5 | Pass    |
|                              |         |               |        | 50            | 3.8              | -1.8761             | -0.0023               | -2.5 to 2.5 | Pass    |
|                              | High    | 6             | 0      | 20            | 3.3              | -8.5058             | -0.0101               | -2.5 to 2.5 | Pass    |
|                              |         |               |        |               | 3.8              | -1.4848             | -0.0018               | -2.5 to 2.5 | Pass    |
|                              |         |               |        |               | 4.3              | -1.0756             | -0.0013               | -2.5 to 2.5 | Pass    |
|                              |         |               |        | -30           | 3.8              | -3.8318             | -0.0046               | -2.5 to 2.5 | Pass    |

|       |        |   |   |     |     |         |         |             |      |
|-------|--------|---|---|-----|-----|---------|---------|-------------|------|
|       |        |   |   | -20 | 3.8 | -2.6595 | -0.0032 | -2.5 to 2.5 | Pass |
|       |        |   |   | -10 | 3.8 | 2.2252  | 0.0026  | -2.5 to 2.5 | Pass |
|       |        |   |   | 0   | 3.8 | -3.5649 | -0.0042 | -2.5 to 2.5 | Pass |
|       |        |   |   | 10  | 3.8 | 0.4321  | 0.0005  | -2.5 to 2.5 | Pass |
|       |        |   |   | 30  | 3.8 | 0.4184  | 0.0005  | -2.5 to 2.5 | Pass |
|       |        |   |   | 40  | 3.8 | -6.6323 | -0.0079 | -2.5 to 2.5 | Pass |
|       |        |   |   | 50  | 3.8 | 0.0038  | 0       | -2.5 to 2.5 | Pass |
| 16QAM | Low    | 5 | 0 | 20  | 3.3 | -1.5000 | -0.0018 | -2.5 to 2.5 | Pass |
|       |        |   |   |     | 3.8 | -2.4000 | -0.0029 | -2.5 to 2.5 | Pass |
|       |        |   |   |     | 4.3 | 1.6000  | 0.0019  | -2.5 to 2.5 | Pass |
|       |        |   |   | -30 | 3.8 | 0.6306  | 0.0008  | -2.5 to 2.5 | Pass |
|       |        |   |   | -20 | 3.8 | 8.1540  | 0.0099  | -2.5 to 2.5 | Pass |
|       |        |   |   | -10 | 3.8 | -1.9920 | -0.0024 | -2.5 to 2.5 | Pass |
|       |        |   |   | 0   | 3.8 | -4.1582 | -0.0051 | -2.5 to 2.5 | Pass |
|       |        |   |   | 10  | 3.8 | 0.8887  | 0.0011  | -2.5 to 2.5 | Pass |
|       |        |   |   | 30  | 3.8 | 1.2959  | 0.0016  | -2.5 to 2.5 | Pass |
|       |        |   |   | 40  | 3.8 | 2.1863  | 0.0027  | -2.5 to 2.5 | Pass |
|       |        |   |   | 50  | 3.8 | -0.5694 | -0.0007 | -2.5 to 2.5 | Pass |
|       | Middle | 5 | 0 | 20  | 3.3 | 9.4108  | 0.0113  | -2.5 to 2.5 | Pass |
|       |        |   |   |     | 3.8 | -2.7553 | -0.0033 | -2.5 to 2.5 | Pass |
|       |        |   |   |     | 4.3 | 6.2251  | 0.0075  | -2.5 to 2.5 | Pass |
|       |        |   |   | -30 | 3.8 | 1.6238  | 0.002   | -2.5 to 2.5 | Pass |
|       |        |   |   | -20 | 3.8 | -9.4357 | -0.0113 | -2.5 to 2.5 | Pass |
|       |        |   |   | -10 | 3.8 | 4.7884  | 0.0058  | -2.5 to 2.5 | Pass |
|       |        |   |   | 0   | 3.8 | -1.7618 | -0.0021 | -2.5 to 2.5 | Pass |
|       |        |   |   | 10  | 3.8 | -2.0162 | -0.0024 | -2.5 to 2.5 | Pass |
|       |        |   |   | 30  | 3.8 | 9.6357  | 0.0116  | -2.5 to 2.5 | Pass |
|       |        |   |   | 40  | 3.8 | 0.5652  | 0.0007  | -2.5 to 2.5 | Pass |
|       |        |   |   | 50  | 3.8 | 5.0456  | 0.0061  | -2.5 to 2.5 | Pass |
|       | High   | 5 | 0 | 20  | 3.3 | -9.8633 | -0.0117 | -2.5 to 2.5 | Pass |
|       |        |   |   |     | 3.8 | -7.1225 | -0.0085 | -2.5 to 2.5 | Pass |
|       |        |   |   |     | 4.3 | 0.1236  | 0.0001  | -2.5 to 2.5 | Pass |
|       |        |   |   | -30 | 3.8 | 0.3407  | 0.0004  | -2.5 to 2.5 | Pass |
|       |        |   |   | -20 | 3.8 | -6.7430 | -0.008  | -2.5 to 2.5 | Pass |
|       |        |   |   | -10 | 3.8 | 8.4044  | 0.01    | -2.5 to 2.5 | Pass |
|       |        |   |   | 0   | 3.8 | -1.4486 | -0.0017 | -2.5 to 2.5 | Pass |
|       |        |   |   | 10  | 3.8 | 2.1833  | 0.0026  | -2.5 to 2.5 | Pass |
|       |        |   |   | 30  | 3.8 | -8.5938 | -0.0102 | -2.5 to 2.5 | Pass |
|       |        |   |   | 40  | 3.8 | 2.8258  | 0.0034  | -2.5 to 2.5 | Pass |
|       |        |   |   | 50  | 3.8 | -8.5032 | -0.0101 | -2.5 to 2.5 | Pass |

| Band: 66 / Bandwidth: 20MHz |         |               |        |               |                  |                     |                       |       |         |
|-----------------------------|---------|---------------|--------|---------------|------------------|---------------------|-----------------------|-------|---------|
| Modulation                  | Channel | RB Allocation |        | Temp.<br>(°C) | Voltage<br>(VDC) | Freq. Error<br>(Hz) | Freq. vs. Rated (ppm) |       | Verdict |
|                             |         | Size          | Offset |               |                  |                     | Result                | Limit |         |
| QPSK                        | Low     | 6             | 0      | 20            | 3.3              | -7.4100             | -0.0043               | /     | Pass    |
|                             |         |               |        |               | 3.8              | -1.7700             | -0.001                | /     | Pass    |
|                             |         |               |        |               | 4.3              | 5.3500              | 0.0031                | /     | Pass    |
|                             |         |               |        | -30           | 3.8              | 4.9007              | 0.0028                | /     | Pass    |
|                             |         |               |        | -20           | 3.8              | -4.1067             | -0.0024               | /     | Pass    |
|                             |         |               |        | -10           | 3.8              | -1.4087             | -0.0008               | /     | Pass    |
|                             |         |               |        | 0             | 3.8              | 0.5382              | 0.0003                | /     | Pass    |
|                             |         |               |        | 10            | 3.8              | 8.4532              | 0.0049                | /     | Pass    |
|                             |         |               |        | 30            | 3.8              | 0.8817              | 0.0005                | /     | Pass    |
|                             |         |               |        | 40            | 3.8              | 7.3183              | 0.0043                | /     | Pass    |
|                             |         |               |        | 50            | 3.8              | 8.4867              | 0.0049                | /     | Pass    |
|                             | Middle  | 6             | 0      | 20            | 3.3              | -6.8914             | -0.0039               | /     | Pass    |
|                             |         |               |        |               | 3.8              | 7.4705              | 0.0043                | /     | Pass    |
|                             |         |               |        |               | 4.3              | -4.7378             | -0.0027               | /     | Pass    |
|                             |         |               |        | -30           | 3.8              | -0.8088             | -0.0005               | /     | Pass    |
|                             |         |               |        | -20           | 3.8              | -4.9187             | -0.0028               | /     | Pass    |
|                             |         |               |        | -10           | 3.8              | -1.0696             | -0.0006               | /     | Pass    |
|                             |         |               |        | 0             | 3.8              | -8.1974             | -0.0047               | /     | Pass    |
|                             |         |               |        | 10            | 3.8              | -5.0912             | -0.0029               | /     | Pass    |
|                             |         |               |        | 30            | 3.8              | 5.0064              | 0.0029                | /     | Pass    |
|                             |         |               |        | 40            | 3.8              | -8.4526             | -0.0048               | /     | Pass    |
|                             |         |               |        | 50            | 3.8              | 9.9480              | 0.0057                | /     | Pass    |
|                             | High    | 6             | 0      | 20            | 3.3              | 8.7814              | 0.005                 | /     | Pass    |
|                             |         |               |        |               | 3.8              | 1.9187              | 0.0011                | /     | Pass    |
|                             |         |               |        |               | 4.3              | -4.4504             | -0.0025               | /     | Pass    |
|                             |         |               |        | -30           | 3.8              | 5.4355              | 0.0031                | /     | Pass    |
|                             |         |               |        | -20           | 3.8              | -9.7850             | -0.0055               | /     | Pass    |
|                             |         |               |        | -10           | 3.8              | 0.2411              | 0.0001                | /     | Pass    |
|                             |         |               |        | 0             | 3.8              | 6.1051              | 0.0034                | /     | Pass    |
|                             |         |               |        | 10            | 3.8              | -3.0627             | -0.0017               | /     | Pass    |
|                             |         |               |        | 30            | 3.8              | 4.1684              | 0.0024                | /     | Pass    |
|                             |         |               |        | 40            | 3.8              | 6.4509              | 0.0036                | /     | Pass    |
|                             |         |               |        | 50            | 3.8              | 5.5162              | 0.0031                | /     | Pass    |
| 16QAM                       | Low     | 5             | 0      | 20            | 3.3              | -2.3500             | -0.0014               | /     | Pass    |
|                             |         |               |        |               | 3.8              | -3.1110             | -0.0018               | /     | Pass    |
|                             |         |               |        |               | 4.3              | -4.5613             | -0.0027               | /     | Pass    |
|                             |         |               |        | -30           | 3.8              | -8.9840             | -0.0052               | /     | Pass    |
|                             |         |               |        | -20           | 3.8              | 6.3530              | 0.0037                | /     | Pass    |
|                             |         |               |        | -10           | 3.8              | -2.3295             | -0.0014               | /     | Pass    |
|                             |         |               |        | 0             | 3.8              | 6.4772              | 0.0038                | /     | Pass    |
|                             |         |               |        | 10            | 3.8              | 7.5487              | 0.0044                | /     | Pass    |
|                             |         |               |        | 30            | 3.8              | 1.7283              | 0.001                 | /     | Pass    |
|                             |         |               |        | 40            | 3.8              | 8.2297              | 0.0048                | /     | Pass    |
|                             |         |               |        | 50            | 3.8              | -4.1100             | -0.0024               | /     | Pass    |
|                             | Middle  | 5             | 0      | 20            | 3.3              | -0.4482             | -0.0003               | /     | Pass    |
|                             |         |               |        |               | 3.8              | 1.0640              | 0.0006                | /     | Pass    |
|                             |         |               |        |               | 4.3              | 1.1544              | 0.0007                | /     | Pass    |
|                             |         |               |        | -30           | 3.8              | -0.0477             | 0                     | /     | Pass    |
|                             |         |               |        | -20           | 3.8              | 9.0359              | 0.0052                | /     | Pass    |
|                             |         |               |        | -10           | 3.8              | -5.9402             | -0.0034               | /     | Pass    |
|                             |         |               |        | 0             | 3.8              | -1.5554             | -0.0009               | /     | Pass    |
|                             |         |               |        | 10            | 3.8              | -0.0304             | 0                     | /     | Pass    |
|                             |         |               |        | 30            | 3.8              | 5.9250              | 0.0034                | /     | Pass    |
|                             |         |               |        | 40            | 3.8              | 7.7124              | 0.0044                | /     | Pass    |

|  |      |   |   |     |     |         |         |        |      |
|--|------|---|---|-----|-----|---------|---------|--------|------|
|  |      |   |   | 50  | 3.8 | 6.0933  | 0.0035  | /      | Pass |
|  | High | 5 | 0 | 20  | 3.3 | -2.9924 | -0.0017 | /      | Pass |
|  |      |   |   |     | 3.8 | -9.1988 | -0.0052 | /      | Pass |
|  |      |   |   |     | 4.3 | -3.2455 | -0.0018 | /      | Pass |
|  |      |   |   |     | -30 | 3.8     | 6.3560  | 0.0036 | /    |
|  |      |   |   | -20 | 3.8 | -7.4196 | -0.0042 | /      | Pass |
|  |      |   |   | -10 | 3.8 | 9.1398  | 0.0052  | /      | Pass |
|  |      |   |   | 0   | 3.8 | -8.0734 | -0.0046 | /      | Pass |
|  |      |   |   | 10  | 3.8 | 7.7364  | 0.0044  | /      | Pass |
|  |      |   |   | 30  | 3.8 | -1.7066 | -0.001  | /      | Pass |
|  |      |   |   | 40  | 3.8 | 8.8294  | 0.005   | /      | Pass |
|  |      |   |   | 50  | 3.8 | -7.9173 | -0.0045 | /      | Pass |

| Band: 85 / Bandwidth: 10MHz |         |               |        |               |                  |                     |                       |       |         |
|-----------------------------|---------|---------------|--------|---------------|------------------|---------------------|-----------------------|-------|---------|
| Modulation                  | Channel | RB Allocation |        | Temp.<br>(°C) | Voltage<br>(VDC) | Freq. Error<br>(Hz) | Freq. vs. Rated (ppm) |       | Verdict |
|                             |         | Size          | Offset |               |                  |                     | Result                | Limit |         |
| QPSK                        | Low     | 6             | 0      | 20            | 3.3              | -2.1000             | -0.003                | /     | Pass    |
|                             |         |               |        |               | 3.8              | 5.2600              | 0.0075                | /     | Pass    |
|                             |         |               |        |               | 4.3              | 0.4100              | 0.0006                | /     | Pass    |
|                             |         |               |        | -30           | 3.8              | 6.8338              | 0.0097                | /     | Pass    |
|                             |         |               |        | -20           | 3.8              | -3.0580             | -0.0043               | /     | Pass    |
|                             |         |               |        | -10           | 3.8              | -3.3411             | -0.0048               | /     | Pass    |
|                             |         |               |        | 0             | 3.8              | 8.1025              | 0.0115                | /     | Pass    |
|                             |         |               |        | 10            | 3.8              | 7.1247              | 0.0101                | /     | Pass    |
|                             |         |               |        | 30            | 3.8              | -5.4633             | -0.0078               | /     | Pass    |
|                             |         |               |        | 40            | 3.8              | -3.6480             | -0.0052               | /     | Pass    |
|                             |         |               |        | 50            | 3.8              | 3.5146              | 0.005                 | /     | Pass    |
|                             | Middle  | 6             | 0      | 20            | 3.3              | -8.8962             | -0.0126               | /     | Pass    |
|                             |         |               |        |               | 3.8              | -3.4657             | -0.0049               | /     | Pass    |
|                             |         |               |        |               | 4.3              | 0.7033              | 0.001                 | /     | Pass    |
|                             |         |               |        | -30           | 3.8              | 7.2423              | 0.0102                | /     | Pass    |
|                             |         |               |        | -20           | 3.8              | 7.8578              | 0.0111                | /     | Pass    |
|                             |         |               |        | -10           | 3.8              | 7.9563              | 0.0113                | /     | Pass    |
|                             |         |               |        | 0             | 3.8              | 8.2877              | 0.0117                | /     | Pass    |
|                             |         |               |        | 10            | 3.8              | -7.8375             | -0.0111               | /     | Pass    |
|                             |         |               |        | 30            | 3.8              | 6.3619              | 0.009                 | /     | Pass    |
|                             |         |               |        | 40            | 3.8              | 8.5862              | 0.0121                | /     | Pass    |
|                             |         |               |        | 50            | 3.8              | 9.8445              | 0.0139                | /     | Pass    |
|                             | High    | 6             | 0      | 20            | 3.3              | 7.0337              | 0.0099                | /     | Pass    |
|                             |         |               |        |               | 3.8              | -0.7721             | -0.0011               | /     | Pass    |
|                             |         |               |        |               | 4.3              | 0.8035              | 0.0011                | /     | Pass    |
|                             |         |               |        | -30           | 3.8              | 8.1464              | 0.0115                | /     | Pass    |
|                             |         |               |        | -20           | 3.8              | -1.6227             | -0.0023               | /     | Pass    |
|                             |         |               |        | -10           | 3.8              | -5.0932             | -0.0072               | /     | Pass    |
|                             |         |               |        | 0             | 3.8              | -3.7387             | -0.0053               | /     | Pass    |
|                             |         |               |        | 10            | 3.8              | -6.8727             | -0.0097               | /     | Pass    |
|                             |         |               |        | 30            | 3.8              | 1.7072              | 0.0024                | /     | Pass    |
|                             |         |               |        | 40            | 3.8              | 2.7636              | 0.0039                | /     | Pass    |
|                             |         |               |        | 50            | 3.8              | -9.4085             | -0.0132               | /     | Pass    |
| 16QAM                       | Low     | 5             | 0      | 20            | 3.3              | 3.1500              | 0.0045                | /     | Pass    |
|                             |         |               |        |               | 3.8              | 2.4650              | 0.0035                | /     | Pass    |
|                             |         |               |        |               | 4.3              | 0.4100              | 0.0006                | /     | Pass    |
|                             |         |               |        | -30           | 3.8              | 2.3211              | 0.0033                | /     | Pass    |
|                             |         |               |        | -20           | 3.8              | 6.2716              | 0.0089                | /     | Pass    |
|                             |         |               |        | -10           | 3.8              | 1.9446              | 0.0028                | /     | Pass    |
|                             |         |               |        | 0             | 3.8              | -1.0219             | -0.0015               | /     | Pass    |
|                             |         |               |        | 10            | 3.8              | 1.6064              | 0.0023                | /     | Pass    |
|                             |         |               |        | 30            | 3.8              | -0.6727             | -0.001                | /     | Pass    |
|                             |         |               |        | 40            | 3.8              | 9.1904              | 0.0131                | /     | Pass    |
|                             |         |               |        | 50            | 3.8              | -8.9506             | -0.0127               | /     | Pass    |
|                             | Middle  | 5             | 0      | 20            | 3.3              | 2.7716              | 0.0039                | /     | Pass    |
|                             |         |               |        |               | 3.8              | 6.8194              | 0.0096                | /     | Pass    |
|                             |         |               |        |               | 4.3              | 6.4974              | 0.0092                | /     | Pass    |
|                             |         |               |        | -30           | 3.8              | 7.6975              | 0.0109                | /     | Pass    |
|                             |         |               |        | -20           | 3.8              | -4.2180             | -0.006                | /     | Pass    |
|                             |         |               |        | -10           | 3.8              | 1.3158              | 0.0019                | /     | Pass    |
|                             |         |               |        | 0             | 3.8              | 5.5116              | 0.0078                | /     | Pass    |
|                             |         |               |        | 10            | 3.8              | -3.2425             | -0.0046               | /     | Pass    |
|                             |         |               |        | 30            | 3.8              | -5.7411             | -0.0081               | /     | Pass    |
|                             |         |               |        | 40            | 3.8              | 3.9246              | 0.0056                | /     | Pass    |

|  |      |   |   |     |     |         |         |        |      |
|--|------|---|---|-----|-----|---------|---------|--------|------|
|  |      |   |   | 50  | 3.8 | 3.6718  | 0.0052  | /      | Pass |
|  | High | 5 | 0 | 20  | 3.3 | -6.2185 | -0.0087 | /      | Pass |
|  |      |   |   |     | 3.8 | 2.8128  | 0.004   | /      | Pass |
|  |      |   |   |     | 4.3 | 1.5476  | 0.0022  | /      | Pass |
|  |      |   |   |     | -30 | 3.8     | 7.7005  | 0.0108 | /    |
|  |      |   |   | -20 | 3.8 | -7.5536 | -0.0106 | /      | Pass |
|  |      |   |   | -10 | 3.8 | 6.9841  | 0.0098  | /      | Pass |
|  |      |   |   | 0   | 3.8 | -6.7834 | -0.0095 | /      | Pass |
|  |      |   |   | 10  | 3.8 | 6.2507  | 0.0088  | /      | Pass |
|  |      |   |   | 30  | 3.8 | -6.1757 | -0.0087 | /      | Pass |
|  |      |   |   | 40  | 3.8 | 5.7722  | 0.0081  | /      | Pass |
|  |      |   |   | 50  | 3.8 | -6.6067 | -0.0093 | /      | Pass |