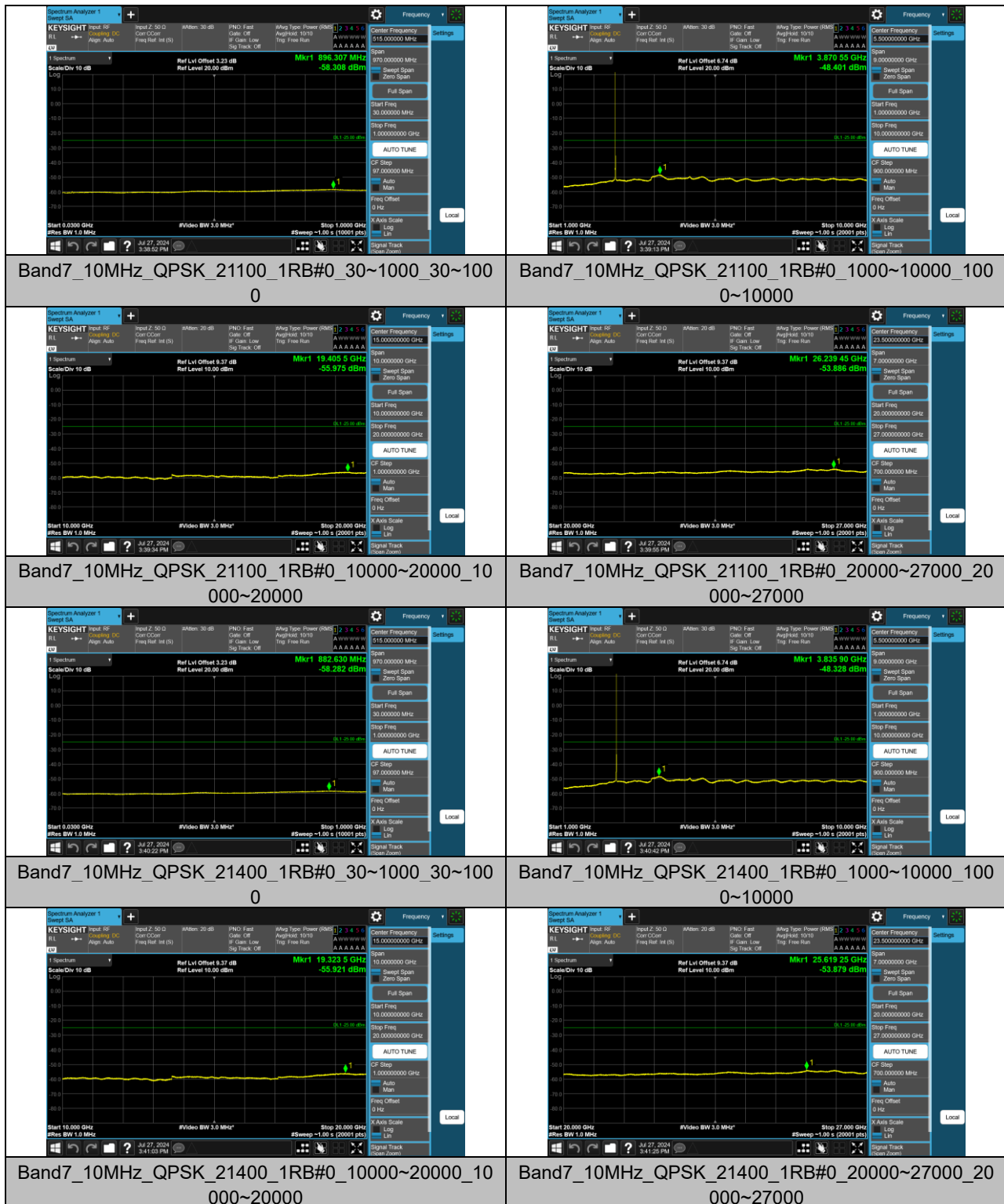
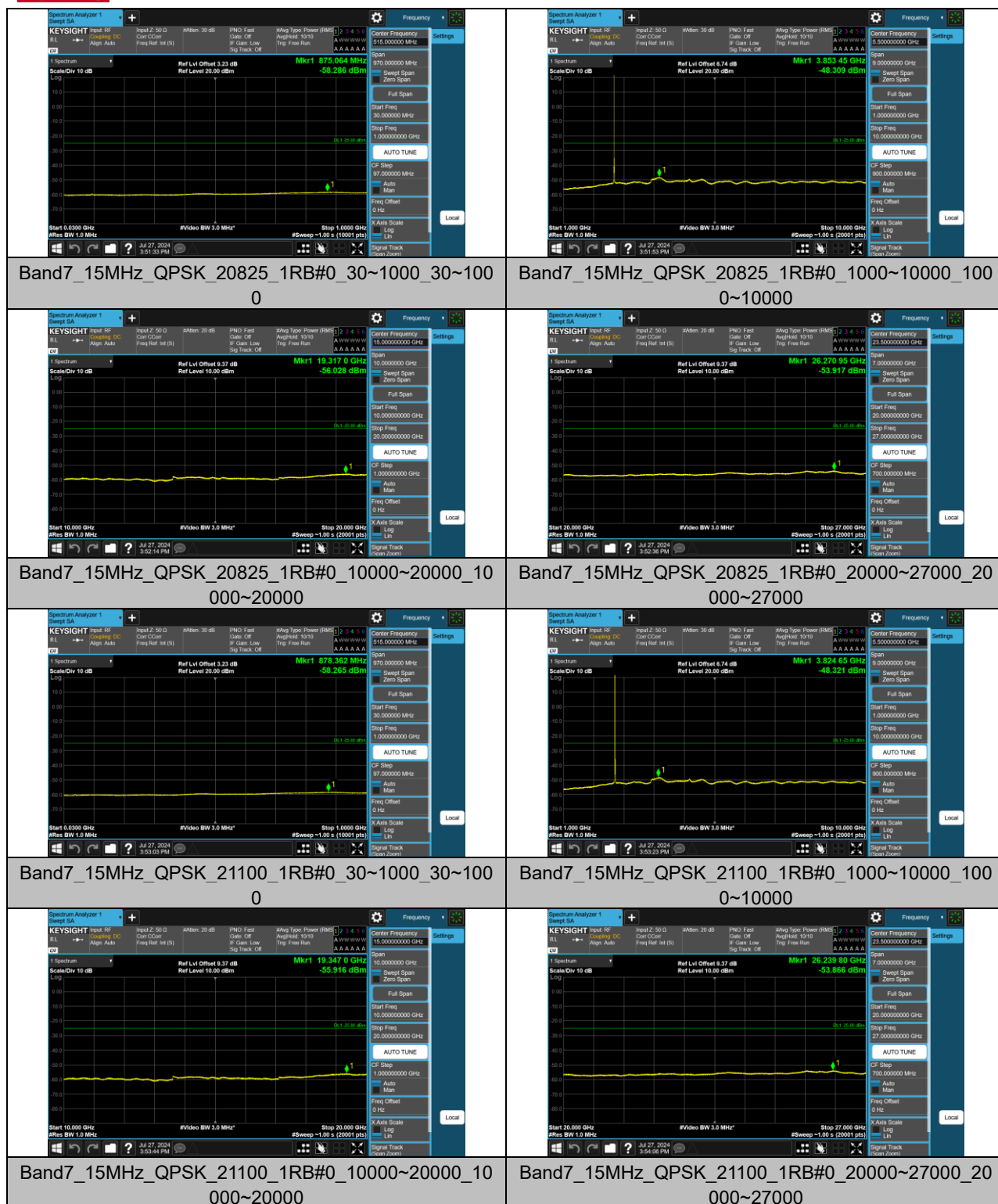
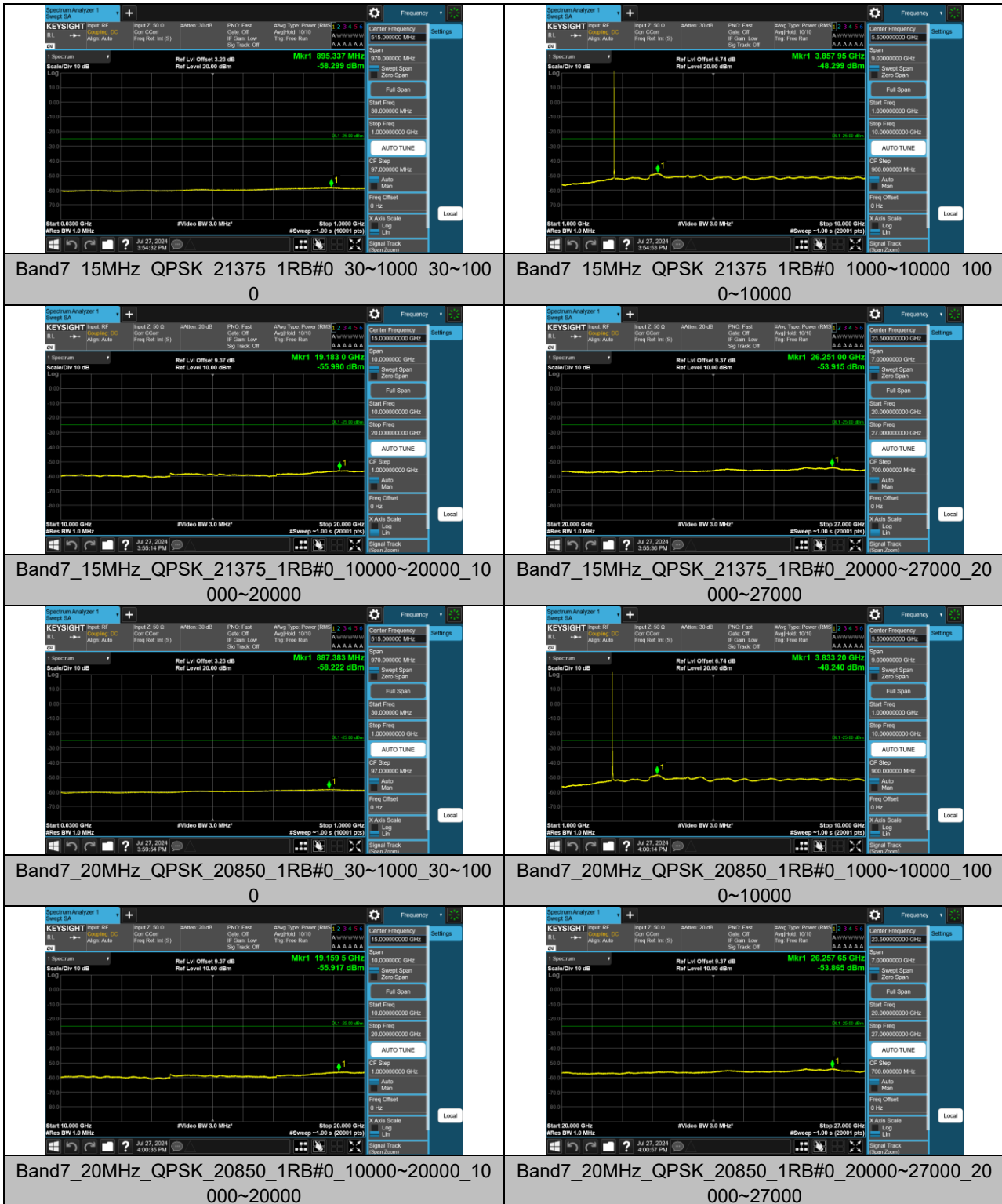


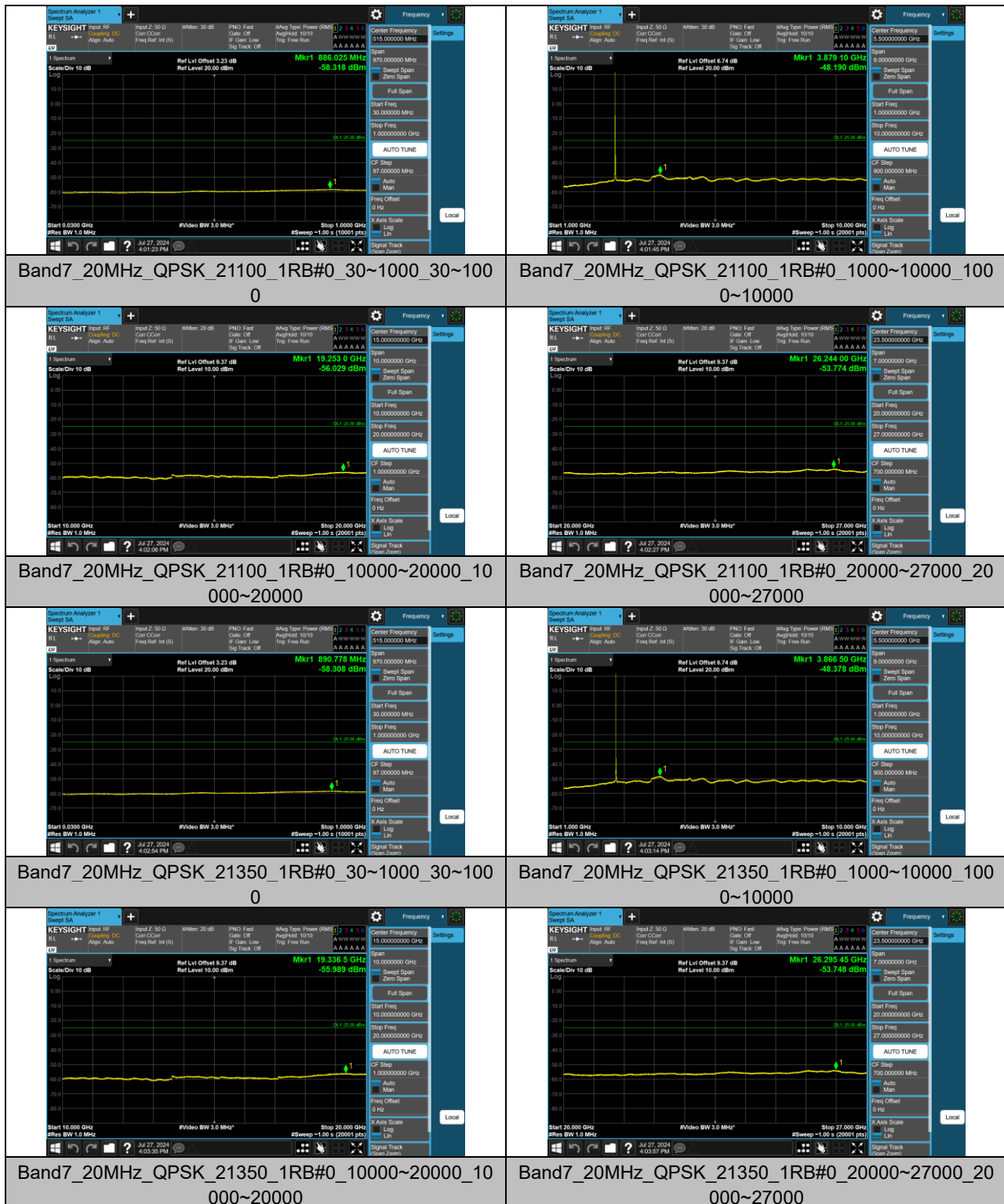








Reference No.: W7L-P24050018RF06



## FREQUENCY STABILITY TEST RESULT

| Voltage |           |            |         |                  |               |                  |                |                 |            |            |             |         |
|---------|-----------|------------|---------|------------------|---------------|------------------|----------------|-----------------|------------|------------|-------------|---------|
| Band    | Bandwidth | Modulation | Channel | RB Configuration | Voltage [Vdc] | Temperature (°C) | Deviation (Hz) | Deviation (ppm) | FL (MHz)   | FH (MHz)   | Limit (MHz) | Verdict |
| Band7   | 10MHz     | QPSK       | 20800   | 50RB #0          | VN            | NT               | -1217.63       | -0.486080       | 2500.55007 | ---        | 2500-2570   | PASS    |
| Band7   | 10MHz     | QPSK       | 20800   | 50RB #0          | VL            | NT               | 1069.52        | 0.426955        | 2500.5424  | ---        | 2500-2570   | PASS    |
| Band7   | 10MHz     | QPSK       | 20800   | 50RB #0          | VH            | NT               | -1238.22       | -0.494299       | 2500.54619 | ---        | 2500-2570   | PASS    |
| Band7   | 10MHz     | QPSK       | 21400   | 50RB #0          | VN            | NT               | -1240.00       | -0.483431       | ---        | 2569.47061 | 2500-2570   | PASS    |
| Band7   | 10MHz     | QPSK       | 21400   | 50RB #0          | VL            | NT               | -3900.00       | -1.520468       | ---        | 2569.46985 | 2500-2570   | PASS    |
| Band7   | 10MHz     | QPSK       | 21400   | 50RB #0          | VH            | NT               | -2140.00       | -0.834308       | ---        | 2569.47326 | 2500-2570   | PASS    |

| Temperature |           |            |         |                  |               |                  |                |                 |            |            |             |         |
|-------------|-----------|------------|---------|------------------|---------------|------------------|----------------|-----------------|------------|------------|-------------|---------|
| Band        | Bandwidth | Modulation | Channel | RB Configuration | Voltage [Vdc] | Temperature (°C) | Deviation (Hz) | Deviation (ppm) | FL (MHz)   | FH (MHz)   | Limit (MHz) | Verdict |
| Band7       | 10MHz     | QPSK       | 20800   | 50RB #0          | NV            | -30              | -1103.76       | -0.440622       | 2500.54131 | ---        | 2500-2570   | PASS    |
| Band7       | 10MHz     | QPSK       | 20800   | 50RB #0          | NV            | -20              | 1176.70        | 0.469739        | 2500.53991 | ---        | 2500-2570   | PASS    |
| Band7       | 10MHz     | QPSK       | 20800   | 50RB #0          | NV            | -10              | -1351.58       | -0.539555       | 2500.54451 | ---        | 2500-2570   | PASS    |
| Band7       | 10MHz     | QPSK       | 20800   | 50RB #0          | NV            | 0                | -1379.53       | -0.550711       | 2500.54433 | ---        | 2500-2570   | PASS    |
| Band7       | 10MHz     | QPSK       | 20800   | 50RB #0          | NV            | 10               | 1238.96        | 0.494593        | 2500.54657 | ---        | 2500-2570   | PASS    |
| Band7       | 10MHz     | QPSK       | 20800   | 50RB #0          | NV            | 20               | -1372.11       | -0.547750       | 2500.54201 | ---        | 2500-2570   | PASS    |
| Band7       | 10MHz     | QPSK       | 20800   | 50RB #0          | NV            | 30               | 1331.96        | 0.531721        | 2500.54276 | ---        | 2500-2570   | PASS    |
| Band7       | 10MHz     | QPSK       | 20800   | 50RB #0          | NV            | 40               | 1334.16        | 0.532600        | 2500.54854 | ---        | 2500-2570   | PASS    |
| Band7       | 10MHz     | QPSK       | 20800   | 50RB #0          | NV            | 50               | -1473.01       | -0.588027       | 2500.55144 | ---        | 2500-2570   | PASS    |
| Band7       | 10MHz     | QPSK       | 21400   | 50RB #0          | NV            | -30              | -5440.00       | -2.120858       | ---        | 2569.46661 | 2500-2570   | PASS    |
| Band7       | 10MHz     | QPSK       | 21400   | 50RB #0          | NV            | -20              | -2380.00       | -0.927875       | ---        | 2569.47462 | 2500-2570   | PASS    |
| Band7       | 10MHz     | QPSK       | 21400   | 50RB #0          | NV            | -10              | -4340.00       | -1.692008       | ---        | 2569.46826 | 2500-2570   | PASS    |
| Band7       | 10MHz     | QPSK       | 21400   | 50RB #0          | NV            | 0                | -1190.00       | -0.463000       | ---        | 2569.46826 | 2500-2570   | PASS    |



BUREAU  
VERITAS

Reference No.: W7L-P24050018RF06

|       |           |      |       |            |    |    |              |               |     |                |               |      |
|-------|-----------|------|-------|------------|----|----|--------------|---------------|-----|----------------|---------------|------|
|       | z         |      |       | #0         |    |    | 00           | 938           |     | 47431          | 2570          |      |
| Band7 | 10MH<br>z | QPSK | 21400 | 50RB<br>#0 | NV | 10 | -3740.<br>00 | -1.458<br>090 | --- | 2569.<br>47091 | 2500-<br>2570 | PASS |
| Band7 | 10MH<br>z | QPSK | 21400 | 50RB<br>#0 | NV | 20 | -4340.<br>00 | -1.692<br>008 | --- | 2569.<br>46796 | 2500-<br>2570 | PASS |
| Band7 | 10MH<br>z | QPSK | 21400 | 50RB<br>#0 | NV | 30 | -2300.<br>00 | -0.896<br>686 | --- | 2569.<br>4731  | 2500-<br>2570 | PASS |
| Band7 | 10MH<br>z | QPSK | 21400 | 50RB<br>#0 | NV | 40 | -5520.<br>00 | -2.152<br>047 | --- | 2569.<br>46773 | 2500-<br>2570 | PASS |
| Band7 | 10MH<br>z | QPSK | 21400 | 50RB<br>#0 | NV | 50 | -3520.<br>00 | -1.372<br>320 | --- | 2569.<br>47373 | 2500-<br>2570 | PASS |

## LTE BAND 12

### PEAK-TO-AVERAGE RATIO(CCDF) TEST RESULT

| Band   | Bandwidth | Modulation | Channel | RB Configuration | Result(dB) | Limit(dB) | Verdict |
|--------|-----------|------------|---------|------------------|------------|-----------|---------|
| Band12 | 1.4MHz    | QPSK       | 23017   | 1RB#0            | 3.82       | 13        | PASS    |
| Band12 | 1.4MHz    | QPSK       | 23017   | 6RB#0            | 5.07       | 13        | PASS    |
| Band12 | 1.4MHz    | QPSK       | 23095   | 1RB#0            | 3.92       | 13        | PASS    |
| Band12 | 1.4MHz    | QPSK       | 23095   | 6RB#0            | 5.48       | 13        | PASS    |
| Band12 | 1.4MHz    | QPSK       | 23173   | 1RB#0            | 3.89       | 13        | PASS    |
| Band12 | 1.4MHz    | QPSK       | 23173   | 6RB#0            | 5.47       | 13        | PASS    |
| Band12 | 1.4MHz    | 16QAM      | 23017   | 1RB#0            | 5.06       | 13        | PASS    |
| Band12 | 1.4MHz    | 16QAM      | 23017   | 6RB#0            | 6.02       | 13        | PASS    |
| Band12 | 1.4MHz    | 16QAM      | 23095   | 1RB#0            | 5.90       | 13        | PASS    |
| Band12 | 1.4MHz    | 16QAM      | 23095   | 6RB#0            | 6.35       | 13        | PASS    |
| Band12 | 1.4MHz    | 16QAM      | 23173   | 1RB#0            | 5.91       | 13        | PASS    |
| Band12 | 1.4MHz    | 16QAM      | 23173   | 6RB#0            | 6.31       | 13        | PASS    |
| Band12 | 3MHz      | QPSK       | 23025   | 1RB#0            | 3.71       | 13        | PASS    |
| Band12 | 3MHz      | QPSK       | 23025   | 15RB#0           | 5.01       | 13        | PASS    |
| Band12 | 3MHz      | QPSK       | 23095   | 1RB#0            | 3.70       | 13        | PASS    |
| Band12 | 3MHz      | QPSK       | 23095   | 15RB#0           | 5.29       | 13        | PASS    |
| Band12 | 3MHz      | QPSK       | 23165   | 1RB#0            | 3.65       | 13        | PASS    |
| Band12 | 3MHz      | QPSK       | 23165   | 15RB#0           | 4.91       | 13        | PASS    |
| Band12 | 3MHz      | 16QAM      | 23025   | 1RB#0            | 5.59       | 13        | PASS    |
| Band12 | 3MHz      | 16QAM      | 23025   | 15RB#0           | 5.95       | 13        | PASS    |
| Band12 | 3MHz      | 16QAM      | 23095   | 1RB#0            | 5.74       | 13        | PASS    |
| Band12 | 3MHz      | 16QAM      | 23095   | 15RB#0           | 6.13       | 13        | PASS    |
| Band12 | 3MHz      | 16QAM      | 23165   | 1RB#0            | 5.57       | 13        | PASS    |
| Band12 | 3MHz      | 16QAM      | 23165   | 15RB#0           | 5.85       | 13        | PASS    |
| Band12 | 5MHz      | QPSK       | 23035   | 1RB#0            | 3.70       | 13        | PASS    |
| Band12 | 5MHz      | QPSK       | 23035   | 25RB#0           | 4.89       | 13        | PASS    |
| Band12 | 5MHz      | QPSK       | 23095   | 1RB#0            | 3.63       | 13        | PASS    |
| Band12 | 5MHz      | QPSK       | 23095   | 25RB#0           | 5.35       | 13        | PASS    |
| Band12 | 5MHz      | QPSK       | 23155   | 1RB#0            | 3.65       | 13        | PASS    |
| Band12 | 5MHz      | QPSK       | 23155   | 25RB#0           | 4.88       | 13        | PASS    |
| Band12 | 5MHz      | 16QAM      | 23035   | 1RB#0            | 4.86       | 13        | PASS    |
| Band12 | 5MHz      | 16QAM      | 23035   | 25RB#0           | 5.78       | 13        | PASS    |
| Band12 | 5MHz      | 16QAM      | 23095   | 1RB#0            | 5.60       | 13        | PASS    |
| Band12 | 5MHz      | 16QAM      | 23095   | 25RB#0           | 6.03       | 13        | PASS    |
| Band12 | 5MHz      | 16QAM      | 23155   | 1RB#0            | 4.75       | 13        | PASS    |
| Band12 | 5MHz      | 16QAM      | 23155   | 25RB#0           | 5.77       | 13        | PASS    |
| Band12 | 10MHz     | QPSK       | 23060   | 1RB#0            | 3.63       | 13        | PASS    |
| Band12 | 10MHz     | QPSK       | 23060   | 50RB#0           | 5.35       | 13        | PASS    |
| Band12 | 10MHz     | QPSK       | 23095   | 1RB#0            | 3.65       | 13        | PASS    |
| Band12 | 10MHz     | QPSK       | 23095   | 50RB#0           | 5.31       | 13        | PASS    |
| Band12 | 10MHz     | QPSK       | 23130   | 1RB#0            | 3.70       | 13        | PASS    |

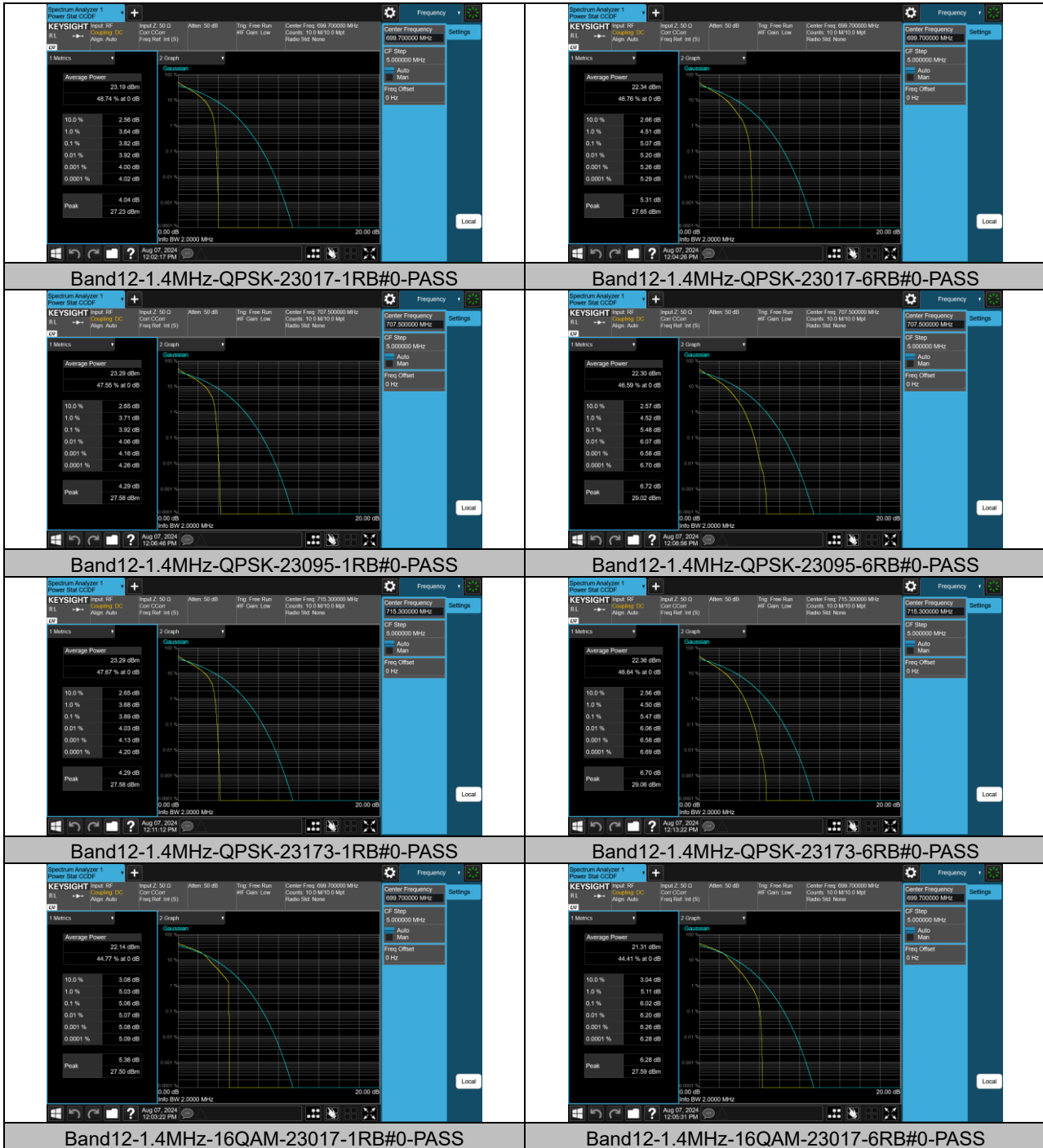


BUREAU  
VERITAS

Reference No.: W7L-P24050018RF06

|        |       |       |       |        |      |    |      |
|--------|-------|-------|-------|--------|------|----|------|
| Band12 | 10MHz | QPSK  | 23130 | 50RB#0 | 4.63 | 13 | PASS |
| Band12 | 10MHz | 16QAM | 23060 | 1RB#0  | 5.71 | 13 | PASS |
| Band12 | 10MHz | 16QAM | 23060 | 50RB#0 | 6.08 | 13 | PASS |
| Band12 | 10MHz | 16QAM | 23095 | 1RB#0  | 5.59 | 13 | PASS |
| Band12 | 10MHz | 16QAM | 23095 | 50RB#0 | 6.04 | 13 | PASS |
| Band12 | 10MHz | 16QAM | 23130 | 1RB#0  | 5.56 | 13 | PASS |
| Band12 | 10MHz | 16QAM | 23130 | 50RB#0 | 5.58 | 13 | PASS |

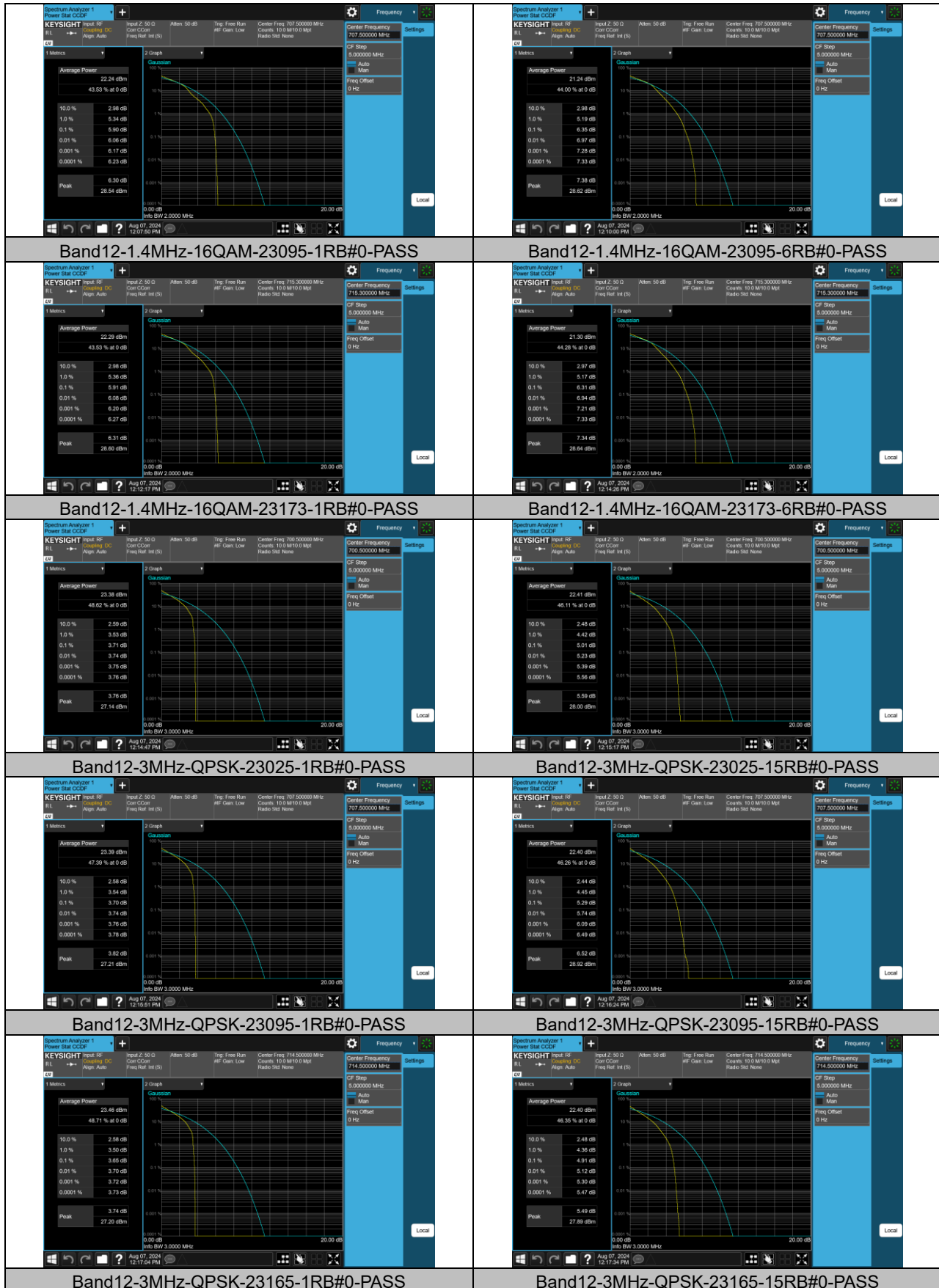
## TEST GRAPHS





BUREAU  
VERITAS

Reference No.: W7L-P24050018RF06



BV 7Layers Communications Technology  
(Shenzhen) Co., Ltd

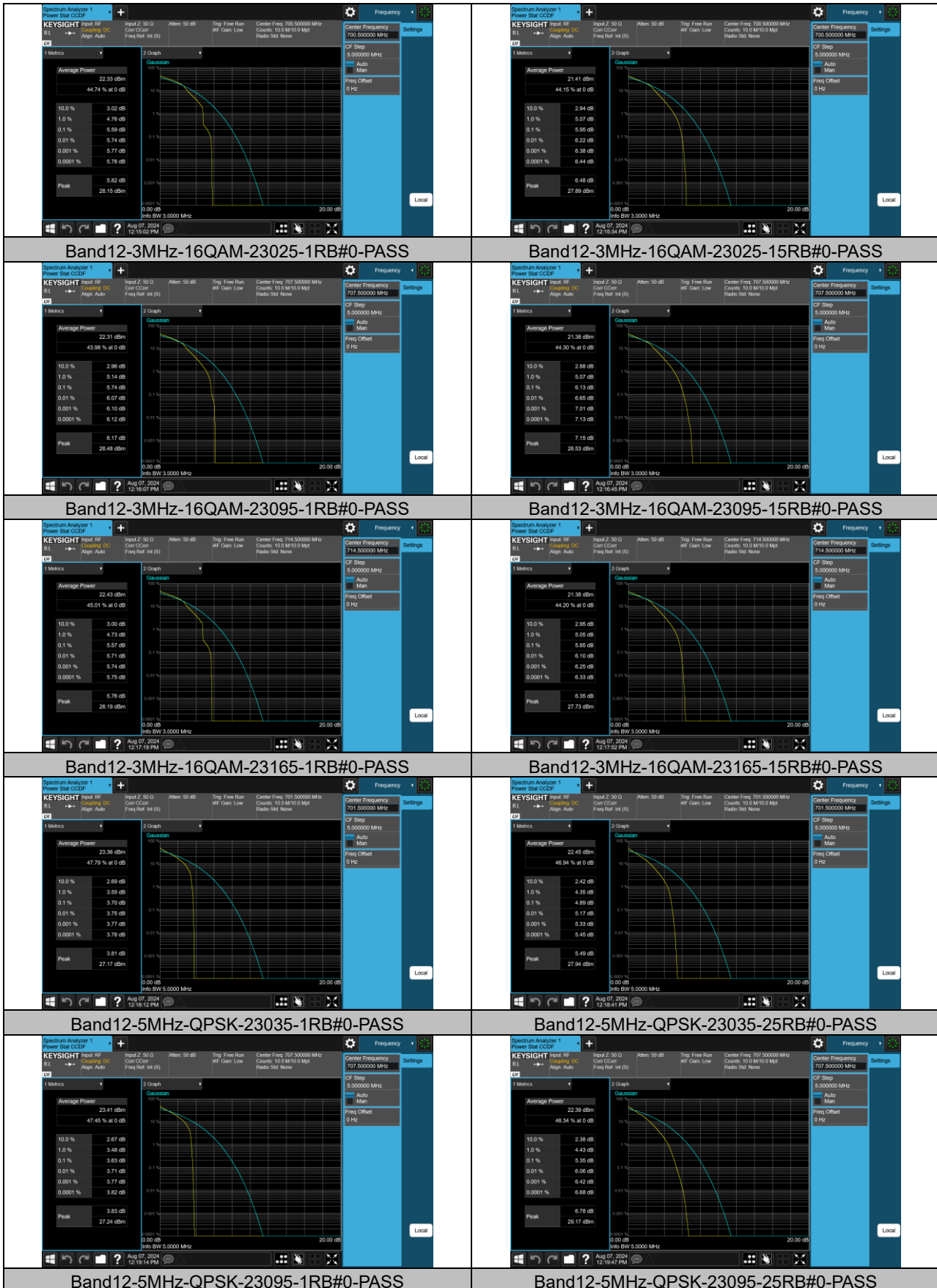
Room B37, Warehouse A5, No.3 Chiwan 4th Road,  
Zhaoshang Street, Nanshan District Shenzhen,  
Guangdong, People's Republic of China

Tel: +86 755 8869 6566  
Fax: +86 755 8869 6577  
Email: [customerservice.sw@bureauveritas.com](mailto:customerservice.sw@bureauveritas.com)



BUREAU  
VERITAS

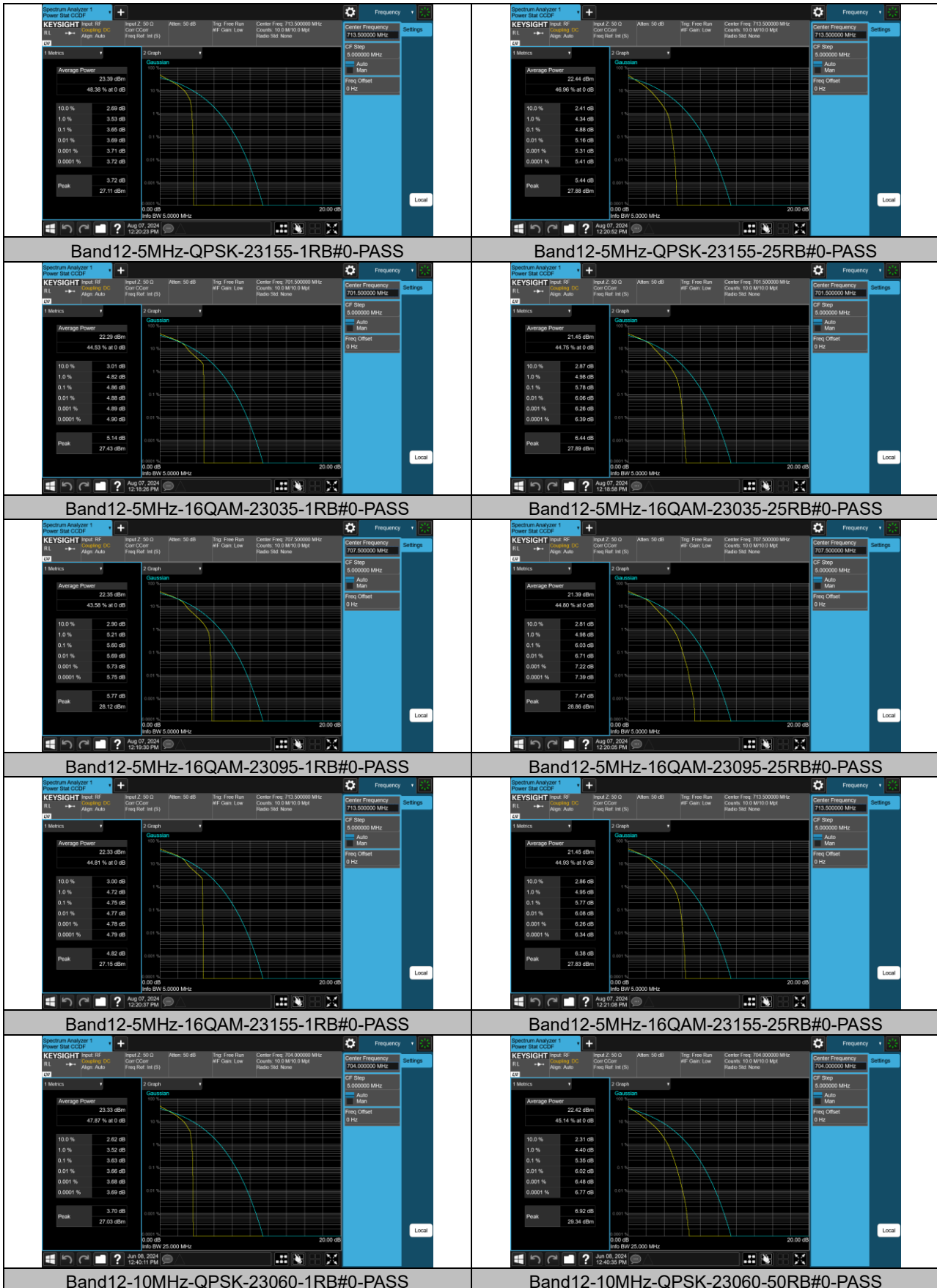
Reference No.: W7L-P24050018RF06





BUREAU  
VERITAS

Reference No.: W7L-P24050018RF06



BV 7Layers Communications Technology  
(Shenzhen) Co., Ltd

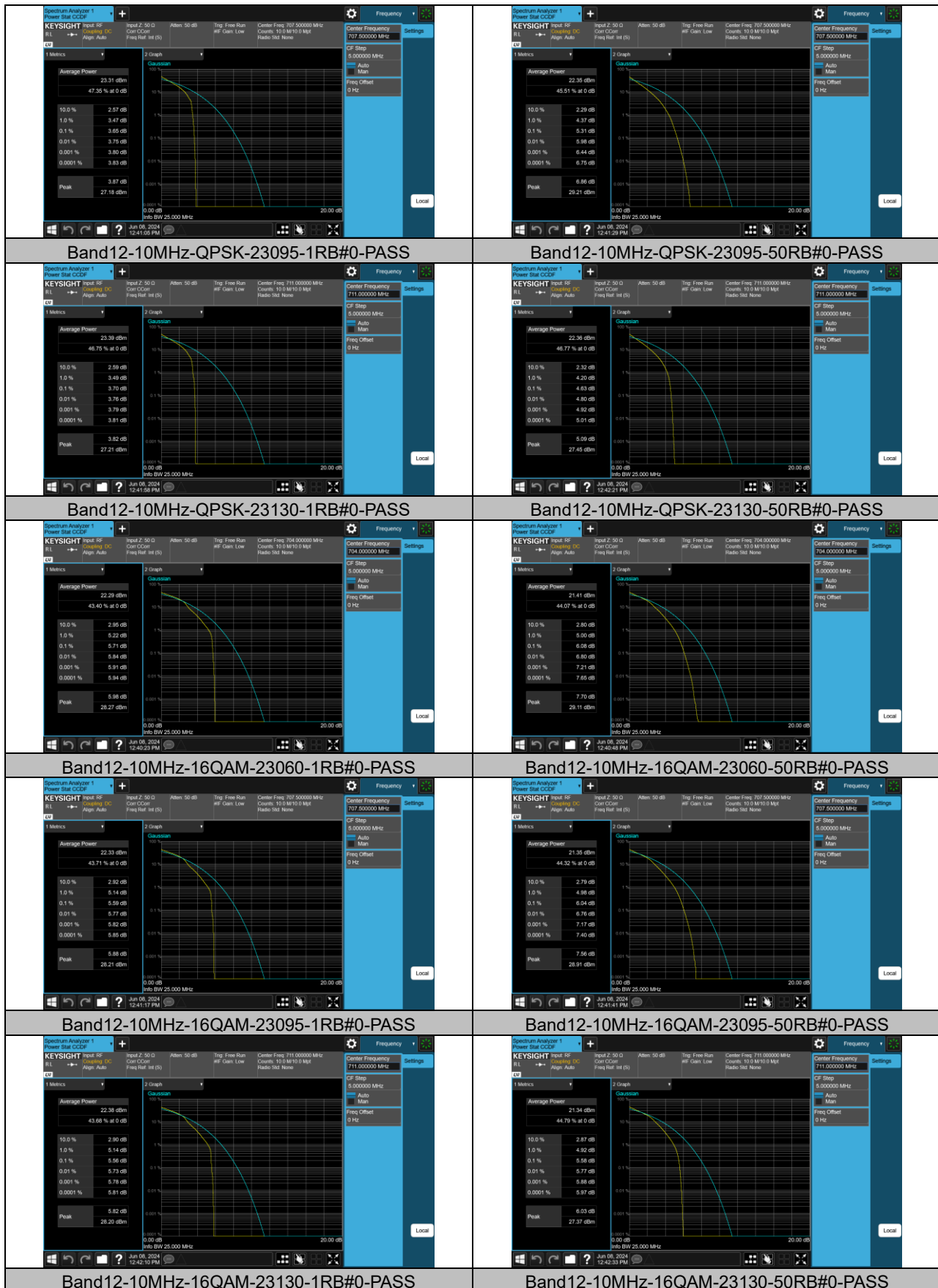
Room B37, Warehouse A5, No.3 Chiwan 4th Road,  
Zhaoshang Street, Nanshan District Shenzhen,  
Guangdong, People's Republic of China

Tel: +86 755 8869 6566  
Fax: +86 755 8869 6577  
Email: [customerservice.sw@bureauveritas.com](mailto:customerservice.sw@bureauveritas.com)



BUREAU  
VERITAS

Reference No.: W7L-P24050018RF06



BV 7Layers Communications Technology  
(Shenzhen) Co., Ltd

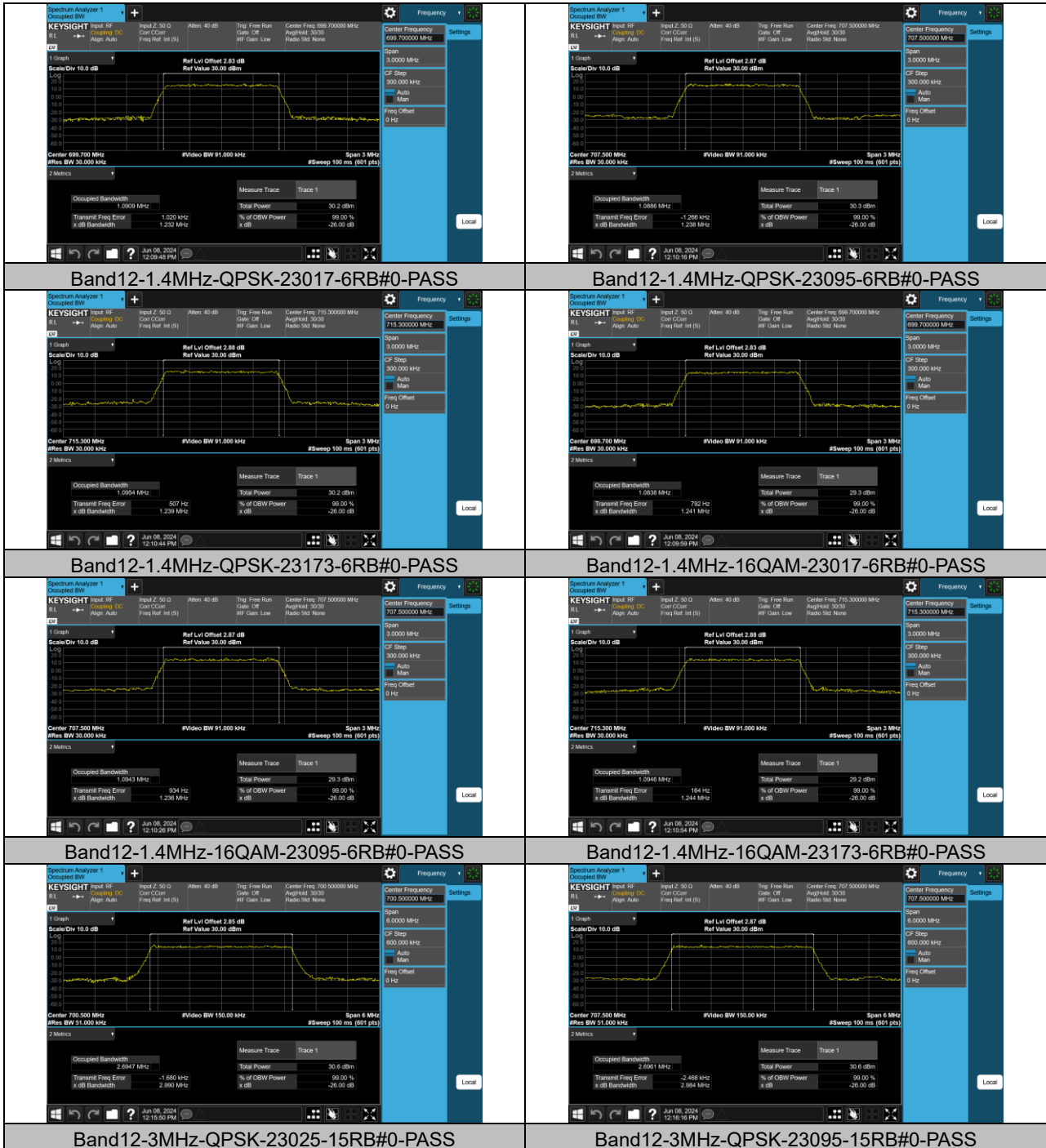
Room B37, Warehouse A5, No.3 Chiwan 4th Road,  
Zhaoshang Street, Nanshan District Shenzhen,  
Guangdong, People's Republic of China

Tel: +86 755 8869 6566  
Fax: +86 755 8869 6577  
Email: [customerservice.sw@bureauveritas.com](mailto:customerservice.sw@bureauveritas.com)

## 26DB BANDWIDTH AND OCCUPIED BANDWIDTH TEST RESULT

| Band   | Bandwidth | Modulation | Channel | RB Configuration | Occupied<br>Bandwidth<br>(MHz) | 26dB Bandwidth<br>(MHz) | Verdict |
|--------|-----------|------------|---------|------------------|--------------------------------|-------------------------|---------|
| Band12 | 1.4MHz    | QPSK       | 23017   | 6RB#0            | 1.0909                         | 1.232                   | PASS    |
| Band12 | 1.4MHz    | QPSK       | 23095   | 6RB#0            | 1.0886                         | 1.238                   | PASS    |
| Band12 | 1.4MHz    | QPSK       | 23173   | 6RB#0            | 1.0954                         | 1.239                   | PASS    |
| Band12 | 1.4MHz    | 16QAM      | 23017   | 6RB#0            | 1.0838                         | 1.241                   | PASS    |
| Band12 | 1.4MHz    | 16QAM      | 23095   | 6RB#0            | 1.0943                         | 1.236                   | PASS    |
| Band12 | 1.4MHz    | 16QAM      | 23173   | 6RB#0            | 1.0946                         | 1.244                   | PASS    |
| Band12 | 3MHz      | QPSK       | 23025   | 15RB#0           | 2.6947                         | 2.990                   | PASS    |
| Band12 | 3MHz      | QPSK       | 23095   | 15RB#0           | 2.6961                         | 2.984                   | PASS    |
| Band12 | 3MHz      | QPSK       | 23165   | 15RB#0           | 2.6914                         | 2.976                   | PASS    |
| Band12 | 3MHz      | 16QAM      | 23025   | 15RB#0           | 2.6943                         | 2.985                   | PASS    |
| Band12 | 3MHz      | 16QAM      | 23095   | 15RB#0           | 2.6989                         | 2.990                   | PASS    |
| Band12 | 3MHz      | 16QAM      | 23165   | 15RB#0           | 2.7015                         | 3.014                   | PASS    |
| Band12 | 5MHz      | QPSK       | 23035   | 25RB#0           | 4.5195                         | 5.011                   | PASS    |
| Band12 | 5MHz      | QPSK       | 23095   | 25RB#0           | 4.5217                         | 5.015                   | PASS    |
| Band12 | 5MHz      | QPSK       | 23155   | 25RB#0           | 4.5154                         | 4.999                   | PASS    |
| Band12 | 5MHz      | 16QAM      | 23035   | 25RB#0           | 4.5086                         | 4.995                   | PASS    |
| Band12 | 5MHz      | 16QAM      | 23095   | 25RB#0           | 4.5085                         | 5.009                   | PASS    |
| Band12 | 5MHz      | 16QAM      | 23155   | 25RB#0           | 4.5070                         | 4.992                   | PASS    |
| Band12 | 10MHz     | QPSK       | 23060   | 50RB#0           | 8.9987                         | 9.905                   | PASS    |
| Band12 | 10MHz     | QPSK       | 23095   | 50RB#0           | 9.0032                         | 9.900                   | PASS    |
| Band12 | 10MHz     | QPSK       | 23130   | 50RB#0           | 8.9826                         | 9.832                   | PASS    |
| Band12 | 10MHz     | 16QAM      | 23060   | 50RB#0           | 8.9781                         | 9.832                   | PASS    |
| Band12 | 10MHz     | 16QAM      | 23095   | 50RB#0           | 8.9948                         | 9.824                   | PASS    |
| Band12 | 10MHz     | 16QAM      | 23130   | 50RB#0           | 8.9731                         | 9.807                   | PASS    |

## TEST GRAPHS





BUREAU  
VERITAS

Reference No.: W7L-P24050018RF06

