



## Report

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## Report

### Conducted output power

| Band                 | Channel | Frequency (MHz) | Power (dBm) | Gain (dB) | EIRP (dBm) | EIRP Limit (dBm) | Verdict |
|----------------------|---------|-----------------|-------------|-----------|------------|------------------|---------|
| WCDMA Band2          | 9262    | 1852.4          | 18.28       | -0.4      | 17.88      | 33.01            | PASS    |
| WCDMA Band2          | 9400    | 1880            | 18.15       | -0.4      | 17.75      | 33.01            | PASS    |
| WCDMA Band2          | 9538    | 1907.6          | 18.06       | -0.4      | 17.66      | 33.01            | PASS    |
| HSDPA Band2 Subtest1 | 9262    | 1852.4          | 18.33       | -0.4      | 17.93      | 33.01            | PASS    |
| HSDPA Band2 Subtest2 | 9262    | 1852.4          | 17.80       | -0.4      | 17.40      | 33.01            | PASS    |
| HSDPA Band2 Subtest3 | 9262    | 1852.4          | 17.48       | -0.4      | 17.08      | 33.01            | PASS    |
| HSDPA Band2 Subtest4 | 9262    | 1852.4          | 17.56       | -0.4      | 17.16      | 33.01            | PASS    |
| HSDPA Band2 Subtest1 | 9400    | 1880            | 18.23       | -0.4      | 17.83      | 33.01            | PASS    |
| HSDPA Band2 Subtest2 | 9400    | 1880            | 17.94       | -0.4      | 17.54      | 33.01            | PASS    |
| HSDPA Band2 Subtest3 | 9400    | 1880            | 17.69       | -0.4      | 17.29      | 33.01            | PASS    |
| HSDPA Band2 Subtest4 | 9400    | 1880            | 17.65       | -0.4      | 17.25      | 33.01            | PASS    |
| HSDPA Band2 Subtest1 | 9538    | 1907.6          | 18.10       | -0.4      | 17.70      | 33.01            | PASS    |
| HSDPA Band2 Subtest2 | 9538    | 1907.6          | 17.92       | -0.4      | 17.52      | 33.01            | PASS    |
| HSDPA Band2 Subtest3 | 9538    | 1907.6          | 17.61       | -0.4      | 17.21      | 33.01            | PASS    |
| HSDPA Band2 Subtest4 | 9538    | 1907.6          | 17.28       | -0.4      | 16.88      | 33.01            | PASS    |
| HSUPA Band2 Subtest1 | 9262    | 1852.4          | 18.30       | -0.4      | 17.90      | 33.01            | PASS    |
| HSUPA Band2 Subtest2 | 9262    | 1852.4          | 18.23       | -0.4      | 17.83      | 33.01            | PASS    |
| HSUPA Band2 Subtest3 | 9262    | 1852.4          | 17.94       | -0.4      | 17.54      | 33.01            | PASS    |
| HSUPA Band2 Subtest4 | 9262    | 1852.4          | 18.19       | -0.4      | 17.79      | 33.01            | PASS    |
| HSUPA Band2 Subtest5 | 9262    | 1852.4          | 17.88       | -0.4      | 17.48      | 33.01            | PASS    |
| HSUPA Band2 Subtest1 | 9400    | 1880            | 18.11       | -0.4      | 17.71      | 33.01            | PASS    |
| HSUPA Band2 Subtest2 | 9400    | 1880            | 18.09       | -0.4      | 17.69      | 33.01            | PASS    |
| HSUPA Band2 Subtest3 | 9400    | 1880            | 17.98       | -0.4      | 17.58      | 33.01            | PASS    |
| HSUPA Band2 Subtest4 | 9400    | 1880            | 18.14       | -0.4      | 17.74      | 33.01            | PASS    |
| HSUPA Band2 Subtest5 | 9400    | 1880            | 17.77       | -0.4      | 17.37      | 33.01            | PASS    |
| HSUPA Band2 Subtest1 | 9538    | 1907.6          | 17.98       | -0.4      | 17.58      | 33.01            | PASS    |
| HSUPA Band2 Subtest2 | 9538    | 1907.6          | 18.00       | -0.4      | 17.60      | 33.01            | PASS    |
| HSUPA Band2 Subtest3 | 9538    | 1907.6          | 17.61       | -0.4      | 17.21      | 33.01            | PASS    |
| HSUPA Band2 Subtest4 | 9538    | 1907.6          | 18.05       | -0.4      | 17.65      | 33.01            | PASS    |
| HSUPA Band2 Subtest5 | 9538    | 1907.6          | 17.82       | -0.4      | 17.42      | 33.01            | PASS    |



## Report

| Band                 | Channel | Frequency (MHz) | Power (dBm) | Gain (dB) | EIRP (dBm) | EIRP Limit (dBm) | Verdict |
|----------------------|---------|-----------------|-------------|-----------|------------|------------------|---------|
| WCDMA Band4          | 1312    | 1712.4          | 21.18       | -0.56     | 20.62      | 30               | PASS    |
| WCDMA Band4          | 1450    | 1740            | 20.92       | -0.56     | 20.36      | 30               | PASS    |
| WCDMA Band4          | 1513    | 1752.6          | 20.93       | -0.56     | 20.37      | 30               | PASS    |
| HSDPA Band4 Subtest1 | 1312    | 1712.4          | 21.12       | -0.56     | 20.56      | 30               | PASS    |
| HSDPA Band4 Subtest2 | 1312    | 1712.4          | 20.69       | -0.56     | 20.13      | 30               | PASS    |
| HSDPA Band4 Subtest3 | 1312    | 1712.4          | 20.32       | -0.56     | 19.76      | 30               | PASS    |
| HSDPA Band4 Subtest4 | 1312    | 1712.4          | 20.23       | -0.56     | 19.67      | 30               | PASS    |
| HSDPA Band4 Subtest1 | 1450    | 1740            | 20.75       | -0.56     | 20.19      | 30               | PASS    |
| HSDPA Band4 Subtest2 | 1450    | 1740            | 20.50       | -0.56     | 19.94      | 30               | PASS    |
| HSDPA Band4 Subtest3 | 1450    | 1740            | 20.25       | -0.56     | 19.69      | 30               | PASS    |
| HSDPA Band4 Subtest4 | 1450    | 1740            | 19.97       | -0.56     | 19.41      | 30               | PASS    |
| HSDPA Band4 Subtest1 | 1513    | 1752.6          | 20.71       | -0.56     | 20.15      | 30               | PASS    |
| HSDPA Band4 Subtest2 | 1513    | 1752.6          | 20.36       | -0.56     | 19.80      | 30               | PASS    |
| HSDPA Band4 Subtest3 | 1513    | 1752.6          | 20.21       | -0.56     | 19.65      | 30               | PASS    |
| HSDPA Band4 Subtest4 | 1513    | 1752.6          | 20.17       | -0.56     | 19.61      | 30               | PASS    |
| HSUPA Band4 Subtest1 | 1312    | 1712.4          | 20.98       | -0.56     | 20.42      | 30               | PASS    |
| HSUPA Band4 Subtest2 | 1312    | 1712.4          | 20.95       | -0.56     | 20.39      | 30               | PASS    |
| HSUPA Band4 Subtest3 | 1312    | 1712.4          | 20.54       | -0.56     | 19.98      | 30               | PASS    |
| HSUPA Band4 Subtest4 | 1312    | 1712.4          | 20.85       | -0.56     | 20.29      | 30               | PASS    |
| HSUPA Band4 Subtest5 | 1312    | 1712.4          | 20.64       | -0.56     | 20.08      | 30               | PASS    |
| HSUPA Band4 Subtest1 | 1450    | 1740            | 20.69       | -0.56     | 20.13      | 30               | PASS    |
| HSUPA Band4 Subtest2 | 1450    | 1740            | 20.63       | -0.56     | 20.07      | 30               | PASS    |
| HSUPA Band4 Subtest3 | 1450    | 1740            | 20.54       | -0.56     | 19.98      | 30               | PASS    |
| HSUPA Band4 Subtest4 | 1450    | 1740            | 20.64       | -0.56     | 20.08      | 30               | PASS    |
| HSUPA Band4 Subtest5 | 1450    | 1740            | 20.64       | -0.56     | 20.08      | 30               | PASS    |
| HSUPA Band4 Subtest1 | 1513    | 1752.6          | 20.45       | -0.56     | 19.89      | 30               | PASS    |
| HSUPA Band4 Subtest2 | 1513    | 1752.6          | 20.59       | -0.56     | 20.03      | 30               | PASS    |
| HSUPA Band4 Subtest3 | 1513    | 1752.6          | 20.59       | -0.56     | 20.03      | 30               | PASS    |
| HSUPA Band4 Subtest4 | 1513    | 1752.6          | 20.61       | -0.56     | 20.05      | 30               | PASS    |
| HSUPA Band4 Subtest5 | 1513    | 1752.6          | 20.52       | -0.56     | 19.96      | 30               | PASS    |



## Report

| Band                 | Channel | Frequency (MHz) | Power (dBm) | Gain (dB) | ERP (dBm) | ERP Limit (dBm) | Verdict |
|----------------------|---------|-----------------|-------------|-----------|-----------|-----------------|---------|
| WCDMA Band5          | 4132    | 826.4           | 19.40       | -1.32     | 15.93     | 38.45           | PASS    |
| WCDMA Band5          | 4182    | 836.4           | 19.31       | -1.32     | 15.84     | 38.45           | PASS    |
| WCDMA Band5          | 4233    | 846.6           | 19.24       | -1.32     | 15.77     | 38.45           | PASS    |
| HSDPA Band5 Subtest1 | 4132    | 826.4           | 19.41       | -1.32     | 15.94     | 38.45           | PASS    |
| HSDPA Band5 Subtest2 | 4132    | 826.4           | 19.19       | -1.32     | 15.72     | 38.45           | PASS    |
| HSDPA Band5 Subtest3 | 4132    | 826.4           | 19.04       | -1.32     | 15.57     | 38.45           | PASS    |
| HSDPA Band5 Subtest4 | 4132    | 826.4           | 18.79       | -1.32     | 15.32     | 38.45           | PASS    |
| HSDPA Band5 Subtest1 | 4182    | 836.4           | 19.30       | -1.32     | 15.83     | 38.45           | PASS    |
| HSDPA Band5 Subtest2 | 4182    | 836.4           | 19.10       | -1.32     | 15.63     | 38.45           | PASS    |
| HSDPA Band5 Subtest3 | 4182    | 836.4           | 18.94       | -1.32     | 15.47     | 38.45           | PASS    |
| HSDPA Band5 Subtest4 | 4182    | 836.4           | 18.83       | -1.32     | 15.36     | 38.45           | PASS    |
| HSDPA Band5 Subtest1 | 4233    | 846.6           | 19.20       | -1.32     | 15.73     | 38.45           | PASS    |
| HSDPA Band5 Subtest2 | 4233    | 846.6           | 19.01       | -1.32     | 15.54     | 38.45           | PASS    |
| HSDPA Band5 Subtest3 | 4233    | 846.6           | 18.78       | -1.32     | 15.31     | 38.45           | PASS    |
| HSDPA Band5 Subtest4 | 4233    | 846.6           | 18.61       | -1.32     | 15.14     | 38.45           | PASS    |
| HSUPA Band5 Subtest1 | 4132    | 826.4           | 19.25       | -1.32     | 15.78     | 38.45           | PASS    |
| HSUPA Band5 Subtest2 | 4132    | 826.4           | 19.27       | -1.32     | 15.80     | 38.45           | PASS    |
| HSUPA Band5 Subtest3 | 4132    | 826.4           | 19.13       | -1.32     | 15.66     | 38.45           | PASS    |
| HSUPA Band5 Subtest4 | 4132    | 826.4           | 19.25       | -1.32     | 15.78     | 38.45           | PASS    |
| HSUPA Band5 Subtest5 | 4132    | 826.4           | 18.92       | -1.32     | 15.45     | 38.45           | PASS    |
| HSUPA Band5 Subtest1 | 4182    | 836.4           | 19.00       | -1.32     | 15.53     | 38.45           | PASS    |
| HSUPA Band5 Subtest2 | 4182    | 836.4           | 19.39       | -1.32     | 15.92     | 38.45           | PASS    |
| HSUPA Band5 Subtest3 | 4182    | 836.4           | 18.87       | -1.32     | 15.40     | 38.45           | PASS    |
| HSUPA Band5 Subtest4 | 4182    | 836.4           | 19.32       | -1.32     | 15.85     | 38.45           | PASS    |
| HSUPA Band5 Subtest5 | 4182    | 836.4           | 19.33       | -1.32     | 15.86     | 38.45           | PASS    |
| HSUPA Band5 Subtest1 | 4233    | 846.6           | 18.91       | -1.32     | 15.44     | 38.45           | PASS    |
| HSUPA Band5 Subtest2 | 4233    | 846.6           | 19.15       | -1.32     | 15.68     | 38.45           | PASS    |
| HSUPA Band5 Subtest3 | 4233    | 846.6           | 18.98       | -1.32     | 15.51     | 38.45           | PASS    |
| HSUPA Band5 Subtest4 | 4233    | 846.6           | 19.13       | -1.32     | 15.66     | 38.45           | PASS    |
| HSUPA Band5 Subtest5 | 4233    | 846.6           | 18.98       | -1.32     | 15.51     | 38.45           | PASS    |



## Report

### Frequency stability

| UMTS Band 2 /1880MHz |                 |            |            |                           |        |
|----------------------|-----------------|------------|------------|---------------------------|--------|
| Temperature (°C)     | Voltage         | Freq. Dev. | Freq. Dev. | Limit                     | Result |
|                      | (Volt)          | (Hz)       | (ppm)      |                           |        |
| 50                   | Normal Voltage  | -0.36      | 0.000      | Within<br>Authorized Band | PASS   |
| 40                   |                 | -0.05      | 0.000      |                           |        |
| 30                   |                 | 0.15       | 0.000      |                           |        |
| 20                   |                 | -1.47      | -0.001     |                           |        |
| 10                   |                 | 0.00       | 0.000      |                           |        |
| 0                    |                 | -0.12      | 0.000      |                           |        |
| -10                  |                 | -0.17      | 0.000      |                           |        |
| -20                  |                 | -0.26      | 0.000      |                           |        |
| -30                  |                 | 0.26       | 0.000      |                           |        |
| 20                   | Maximum Voltage | -0.04      | 0.000      |                           |        |
| 20                   | BEP             | -0.23      | 0.000      |                           |        |

| UMTS Band 4 /1740MHz |                 |            |            |                           |        |
|----------------------|-----------------|------------|------------|---------------------------|--------|
| Temperature (°C)     | Voltage         | Freq. Dev. | Freq. Dev. | Limit                     | Result |
|                      | (Volt)          | (Hz)       | (ppm)      |                           |        |
| 50                   | Normal Voltage  | 2.22       | 0.001      | Within<br>Authorized Band | PASS   |
| 40                   |                 | -2.01      | -0.001     |                           |        |
| 30                   |                 | 1.85       | 0.001      |                           |        |
| 20                   |                 | 2.25       | 0.001      |                           |        |
| 10                   |                 | 2.20       | 0.001      |                           |        |
| 0                    |                 | 1.91       | 0.001      |                           |        |
| -10                  |                 | 1.67       | 0.001      |                           |        |
| -20                  |                 | 1.72       | 0.001      |                           |        |
| -30                  |                 | 1.78       | 0.001      |                           |        |
| 20                   | Maximum Voltage | 2.03       | 0.001      |                           |        |
| 20                   | BEP             | 1.87       | 0.001      |                           |        |



## Report

| UMTS Band 5 / 836.6MHz |                 |            |            |        |        |
|------------------------|-----------------|------------|------------|--------|--------|
| Temperature (°C)       | Voltage         | Freq. Dev. | Freq. Dev. | Limit  | Result |
|                        | (Volt)          | (Hz)       | (ppm)      |        |        |
| 50                     | Normal Voltage  | -1.01      | -0.001     | 2.5ppm | PASS   |
| 40                     |                 | -0.94      | -0.001     |        |        |
| 30                     |                 | 1.14       | 0.001      |        |        |
| 20                     |                 | 0.82       | 0.001      |        |        |
| 10                     |                 | -0.94      | -0.001     |        |        |
| 0                      |                 | -1.35      | -0.002     |        |        |
| -10                    |                 | -1.38      | -0.002     |        |        |
| -20                    |                 | 1.26       | 0.002      |        |        |
| -30                    |                 | -1.12      | -0.001     |        |        |
| 20                     | Maximum Voltage | 1.37       | 0.002      |        |        |
| 20                     | BEP             | -0.95      | -0.001     |        |        |

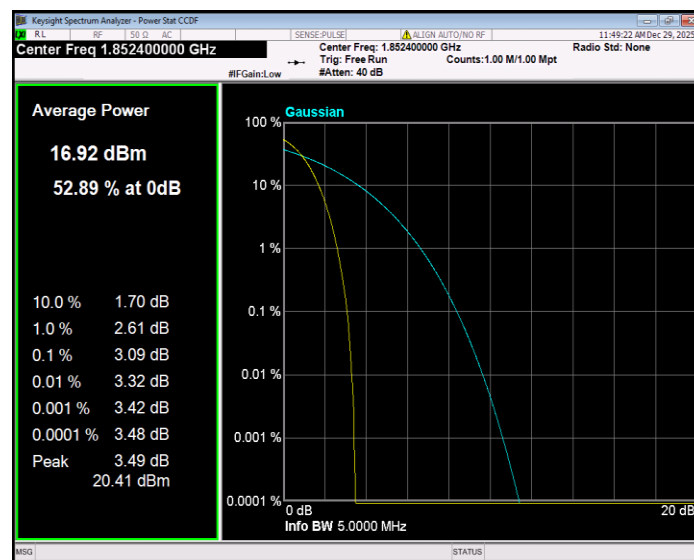


## Report

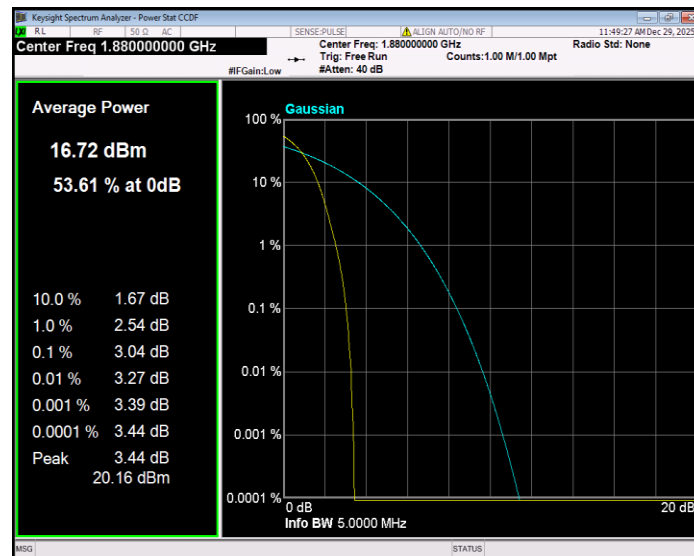
### Peak-to-Average Ratio

| Band        | Channel | Frequency (MHz) | Result (dB) | high Limit (dB) | Verdict |
|-------------|---------|-----------------|-------------|-----------------|---------|
| WCDMA Band2 | 9262    | 1852.4          | 3.09        | 13              | PASS    |
| WCDMA Band2 | 9400    | 1880            | 3.04        | 13              | PASS    |
| WCDMA Band2 | 9538    | 1907.6          | 3.04        | 13              | PASS    |
| WCDMA Band4 | 1312    | 1712.4          | 3.10        | 13              | PASS    |
| WCDMA Band4 | 1450    | 1740            | 3.07        | 13              | PASS    |
| WCDMA Band4 | 1513    | 1752.6          | 3.07        | 13              | PASS    |
| WCDMA Band5 | 4132    | 826.4           | 3.06        | 13              | PASS    |
| WCDMA Band5 | 4182    | 836.4           | 3.10        | 13              | PASS    |
| WCDMA Band5 | 4233    | 846.6           | 3.08        | 13              | PASS    |

WCDMA Band2 Channel=9262



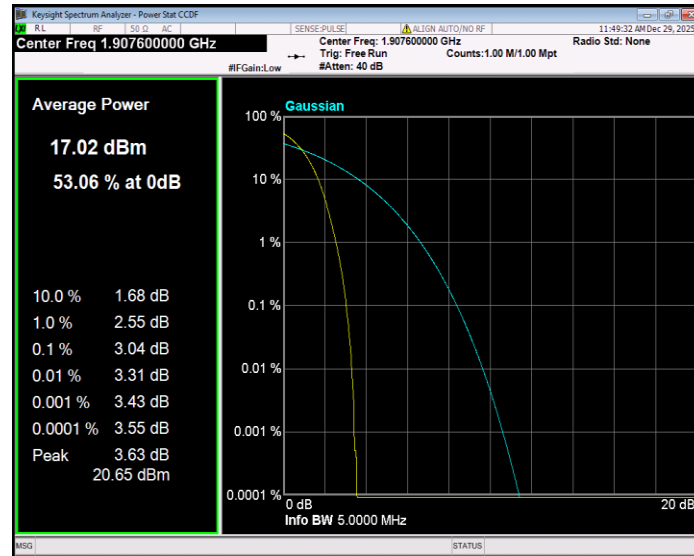
WCDMA Band2 Channel=9400



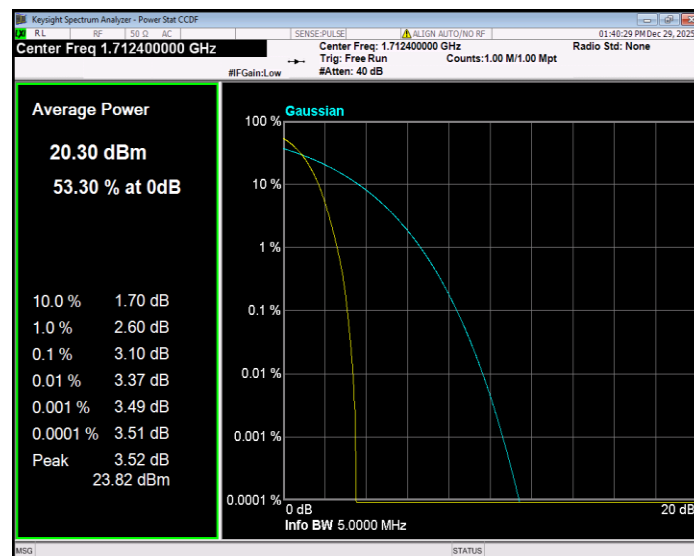
WCDMA Band2 Channel=9538



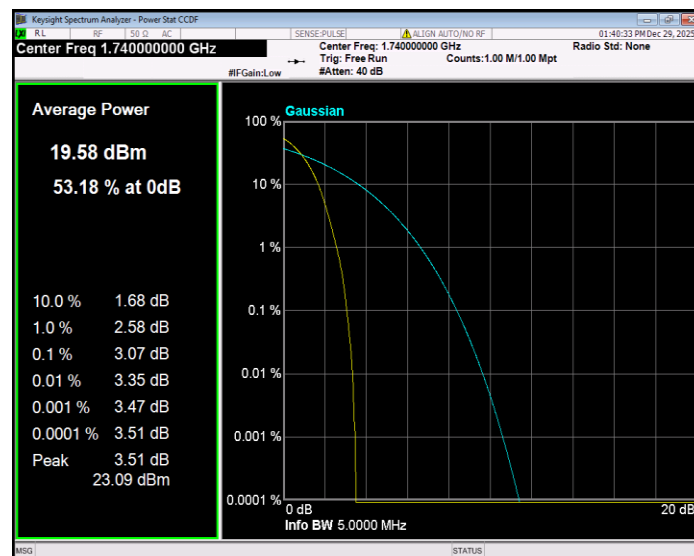
## Report



WCDMA Band4 Channel=1312



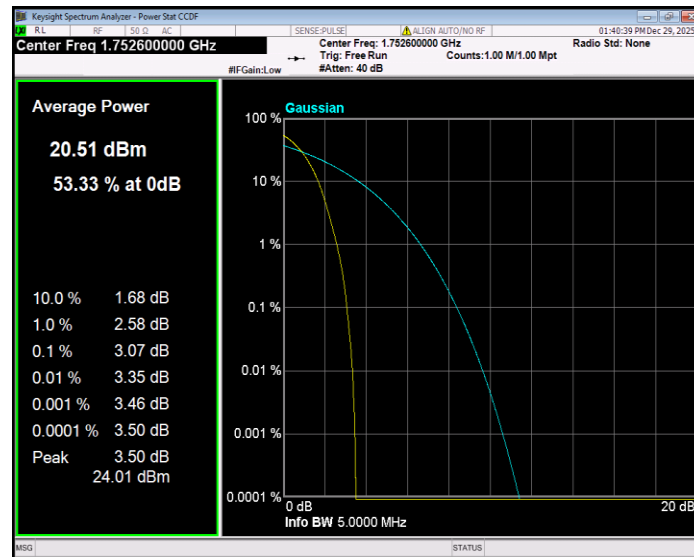
WCDMA Band4 Channel=1450



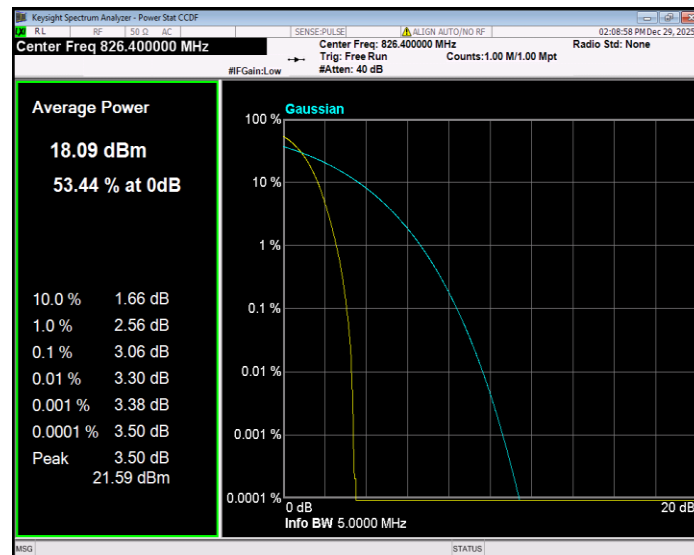


## Report

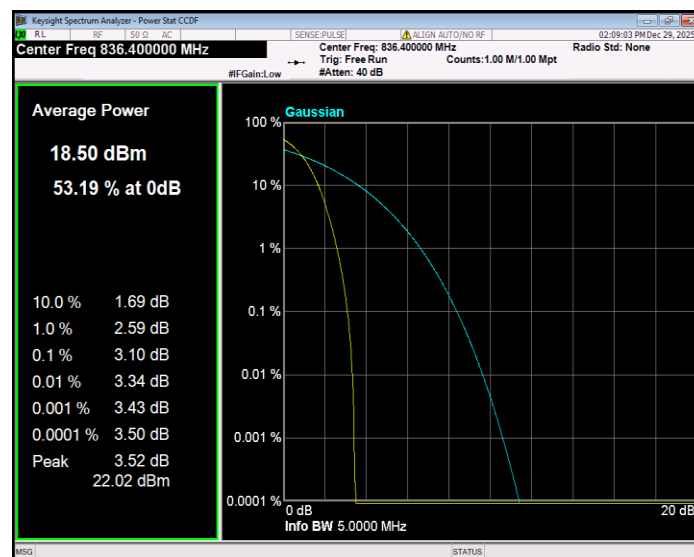
### WCDMA Band4 Channel=1513



### WCDMA Band5 Channel=4132



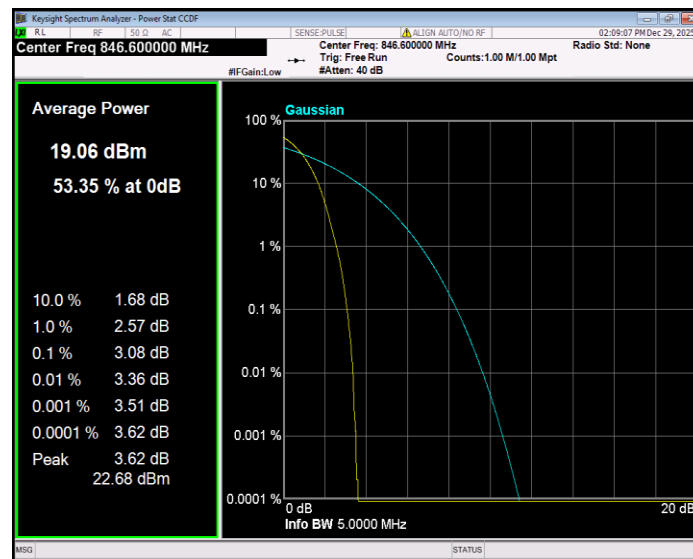
### WCDMA Band5 Channel=4182





## Report

WCDMA Band5 Channel=4233



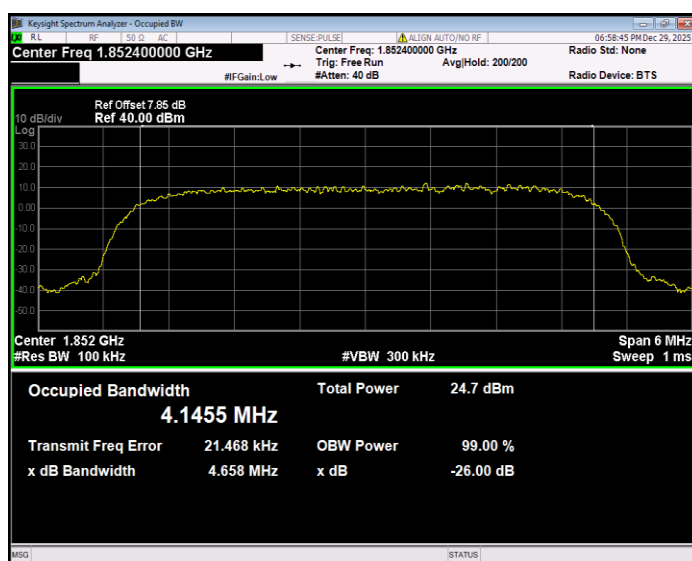


## Report

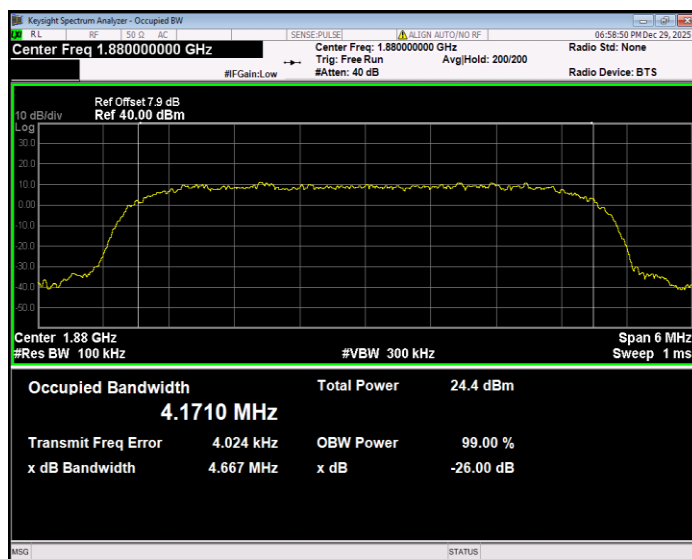
### Occupied bandwidth

| Band        | Channel | Frequency (MHz) | 99% OBW (MHz) | -26dB EBW (MHz) | Verdict |
|-------------|---------|-----------------|---------------|-----------------|---------|
| WCDMA Band2 | 9262    | 1852.4          | 4.146         | 4.658           | PASS    |
| WCDMA Band2 | 9400    | 1880            | 4.171         | 4.667           | PASS    |
| WCDMA Band2 | 9538    | 1907.6          | 4.172         | 4.666           | PASS    |
| WCDMA Band4 | 1312    | 1712.4          | 4.158         | 4.668           | PASS    |
| WCDMA Band4 | 1450    | 1740            | 4.161         | 4.669           | PASS    |
| WCDMA Band4 | 1513    | 1752.6          | 4.161         | 4.677           | PASS    |
| WCDMA Band5 | 4132    | 826.4           | 4.154         | 4.691           | PASS    |
| WCDMA Band5 | 4182    | 836.4           | 4.149         | 4.677           | PASS    |
| WCDMA Band5 | 4233    | 846.6           | 4.136         | 4.680           | PASS    |

WCDMA Band2 Channel=9262



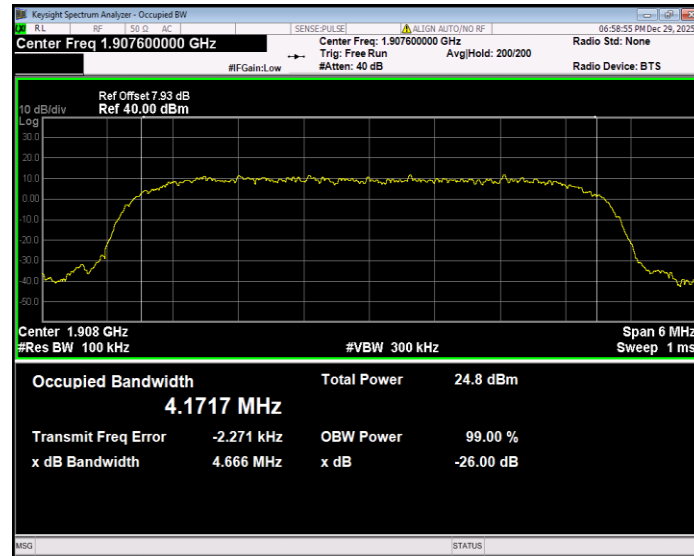
WCDMA Band2 Channel=9400



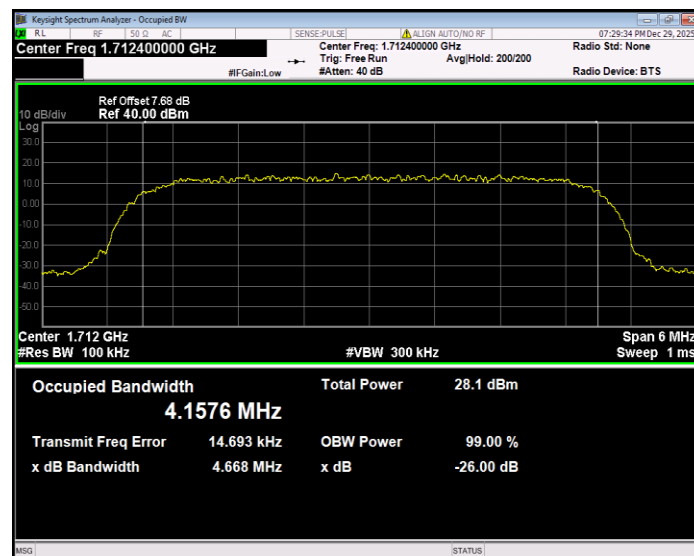
WCDMA Band2 Channel=9538



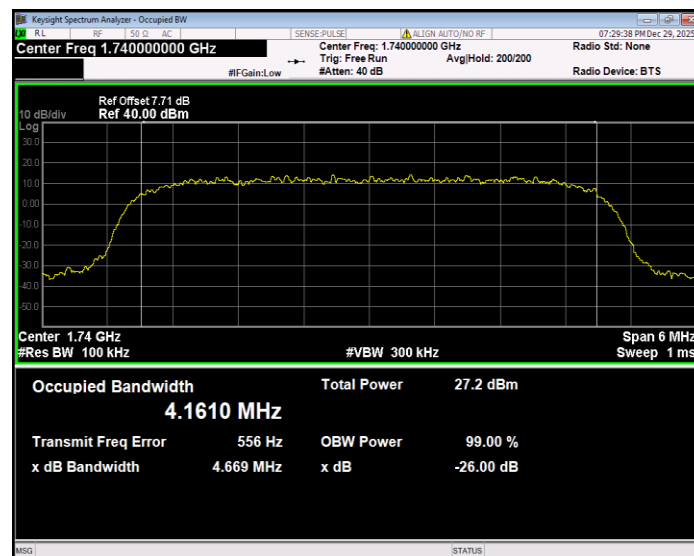
## Report



WCDMA Band4 Channel=1312



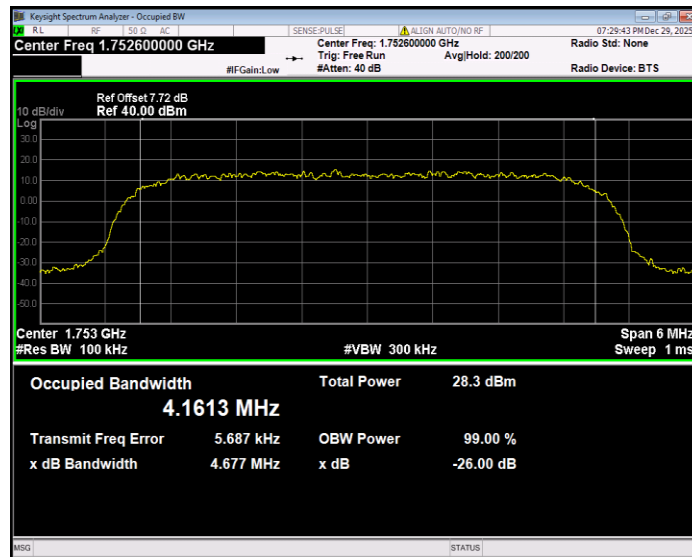
WCDMA Band4 Channel=1450



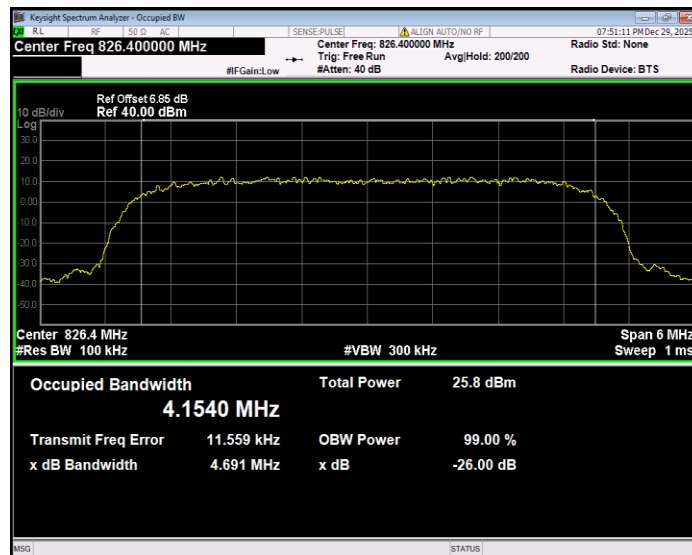


## Report

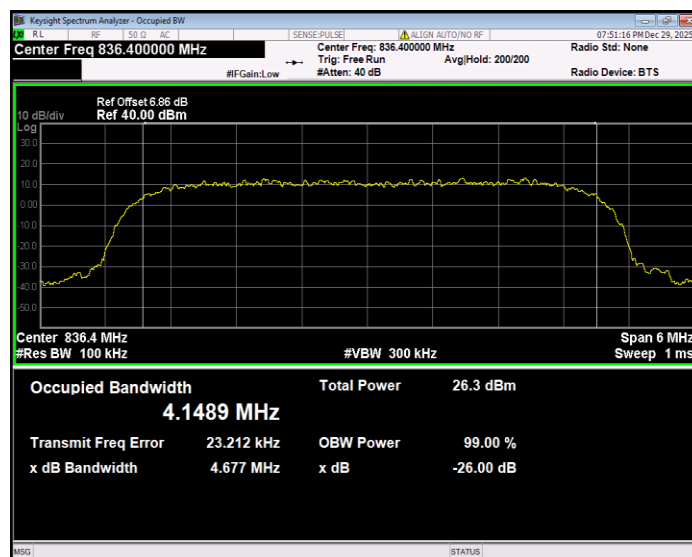
### WCDMA Band4 Channel=1513



### WCDMA Band5 Channel=4132



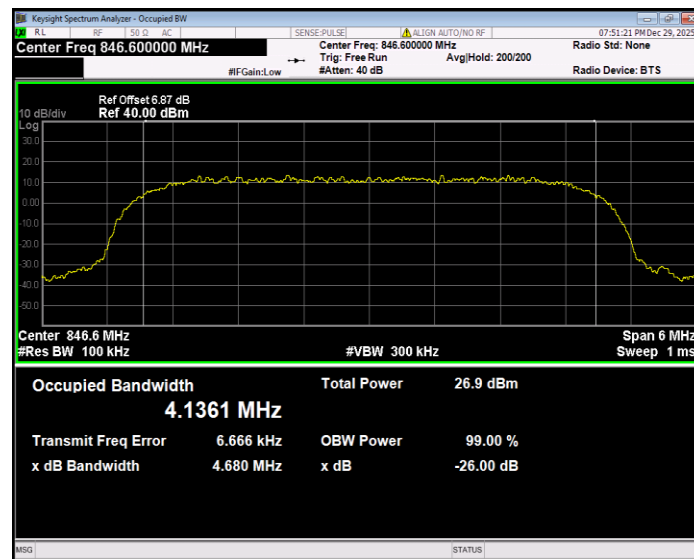
### WCDMA Band5 Channel=4182





# Report

WCDMA Band5 Channel=4233



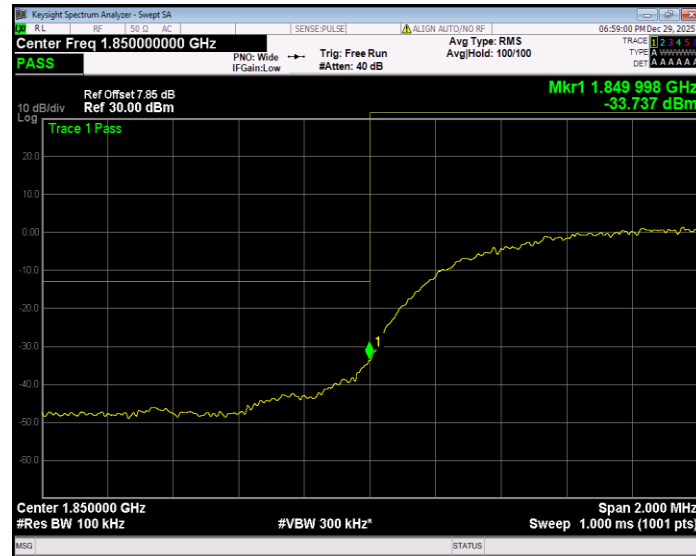


## Report

### Band edge

| Band        | Channel | Frequency (MHz) | Spur Freq (MHz) | Spur Level (dBm) | Limit (dBm) | Verdict |
|-------------|---------|-----------------|-----------------|------------------|-------------|---------|
| WCDMA Band2 | 9262    | 1852.4          | 1850.00         | -33.73           | -13         | PASS    |
| WCDMA Band2 | 9538    | 1907.6          | 1910.00         | -31.35           | -13         | PASS    |
| WCDMA Band4 | 1312    | 1712.4          | 1710.00         | -29.64           | -13         | PASS    |
| WCDMA Band4 | 1513    | 1752.6          | 1755.00         | -28.22           | -13         | PASS    |
| WCDMA Band5 | 4132    | 826.4           | 824.00          | -31.17           | -13         | PASS    |
| WCDMA Band5 | 4233    | 846.6           | 849.00          | -29.83           | -13         | PASS    |

WCDMA Band2 Channel=9262



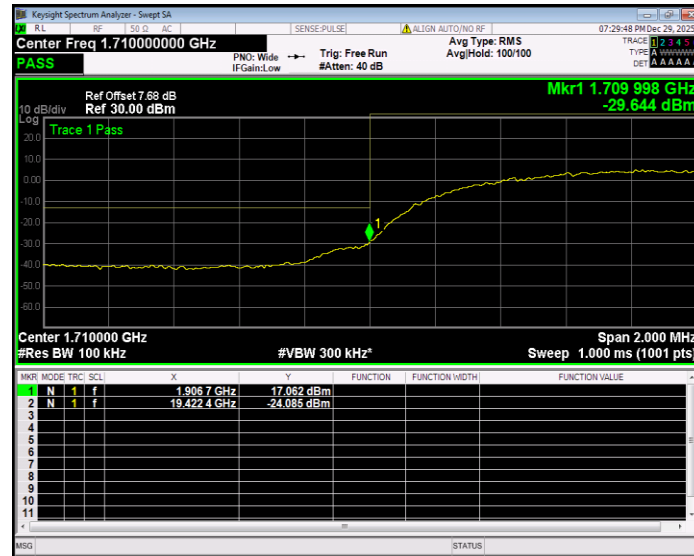
WCDMA Band2 Channel=9538



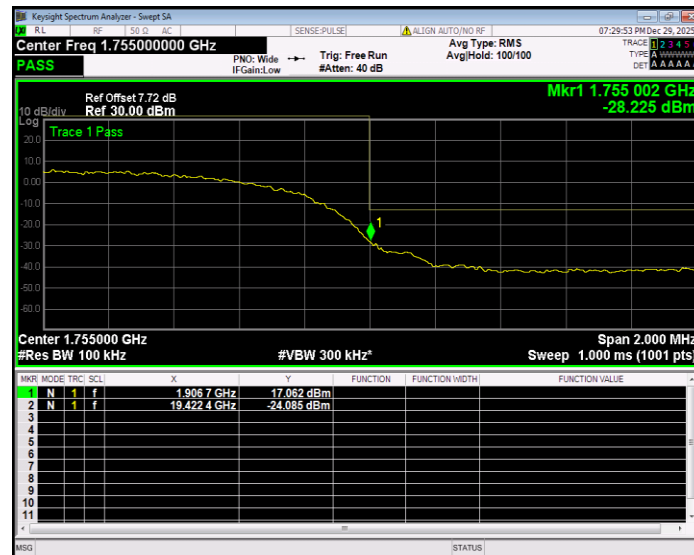
WCDMA Band4 Channel=1312



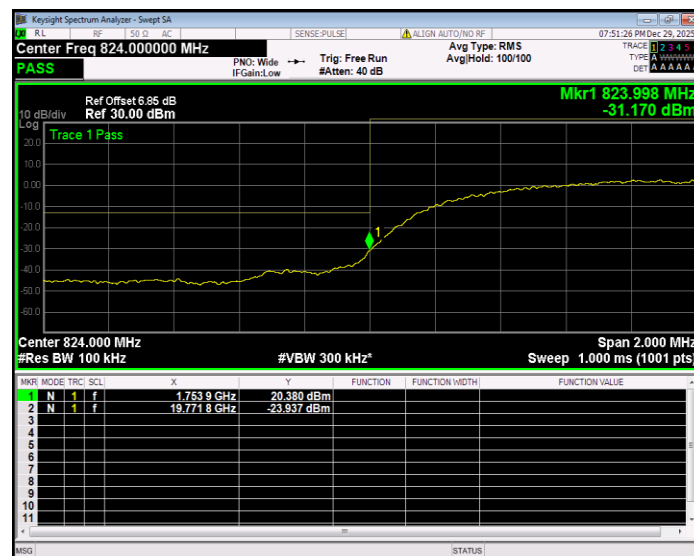
## Report



WCDMA Band4 Channel=1513



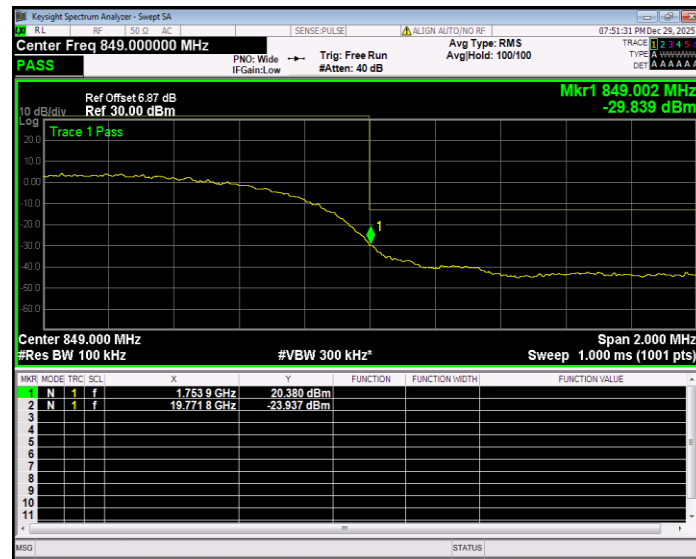
WCDMA Band5 Channel=4132





# Report

WCDMA Band5 Channel=4233



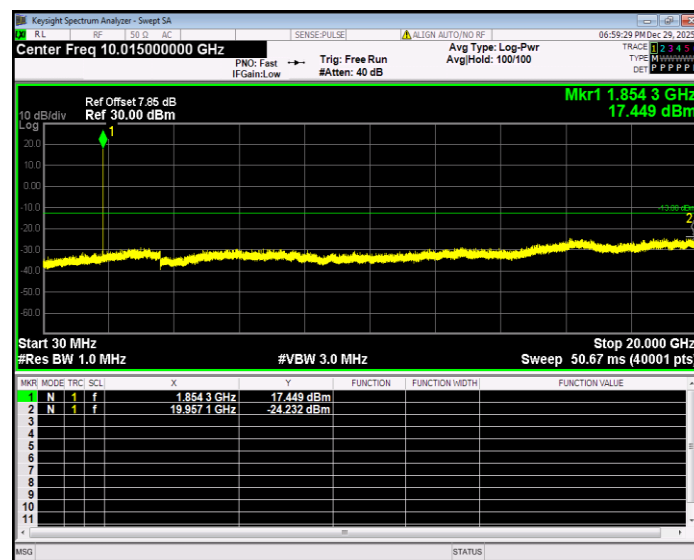


## Report

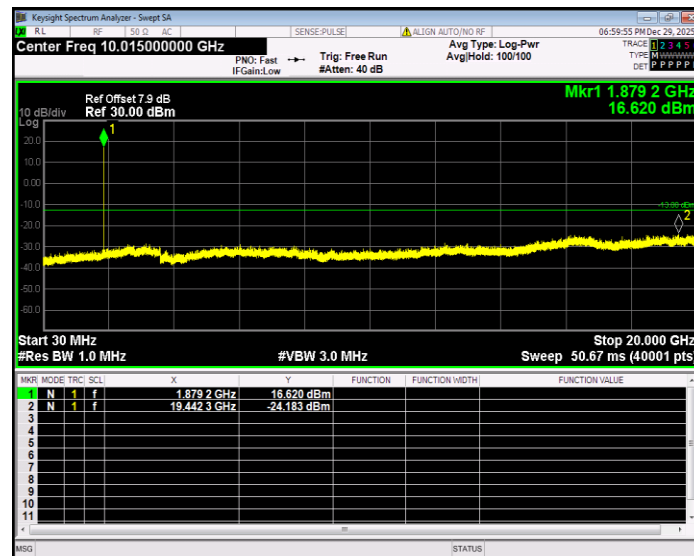
### Out-of-band emissions

| Band        | Channel | Frequency (MHz) | Spur Freq (MHz) | Spur Level (dBm) | Limit (dBm) | Verdict |
|-------------|---------|-----------------|-----------------|------------------|-------------|---------|
| WCDMA Band2 | 9262    | 1852.4          | 19957.06        | -24.23           | -13         | PASS    |
| WCDMA Band2 | 9400    | 1880            | 19442.34        | -24.18           | -13         | PASS    |
| WCDMA Band2 | 9538    | 1907.6          | 19422.37        | -24.08           | -13         | PASS    |
| WCDMA Band4 | 1312    | 1712.4          | 19722.42        | -24.63           | -13         | PASS    |
| WCDMA Band4 | 1450    | 1740            | 19033.45        | -23.99           | -13         | PASS    |
| WCDMA Band4 | 1513    | 1752.6          | 19771.84        | -23.93           | -13         | PASS    |
| WCDMA Band5 | 4132    | 826.4           | 3095.03         | -28.76           | -13         | PASS    |
| WCDMA Band5 | 4182    | 836.4           | 3427.53         | -29.19           | -13         | PASS    |
| WCDMA Band5 | 4233    | 846.6           | 2658.84         | -29.04           | -13         | PASS    |

WCDMA Band2 Channel=9262



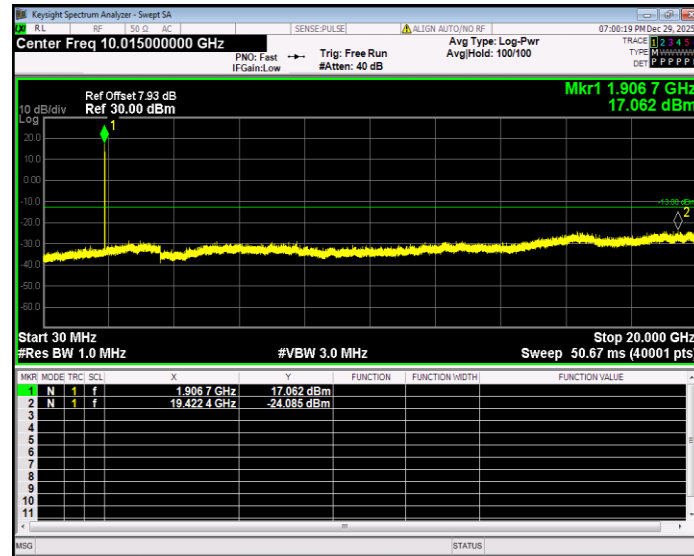
WCDMA Band2 Channel=9400



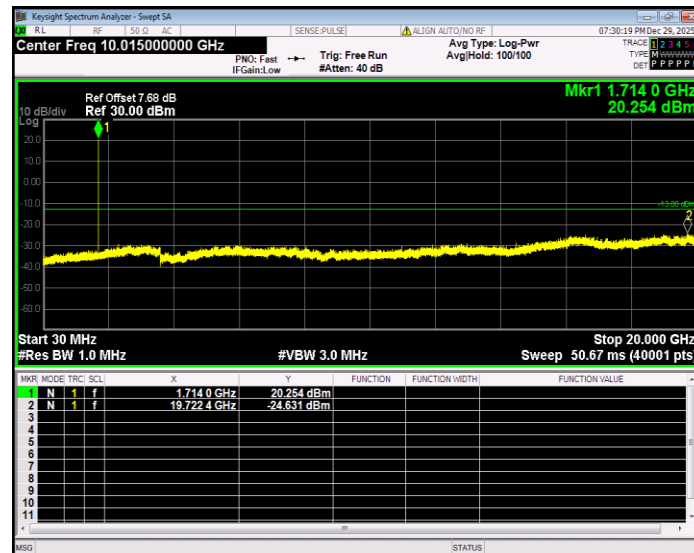
WCDMA Band2 Channel=9538



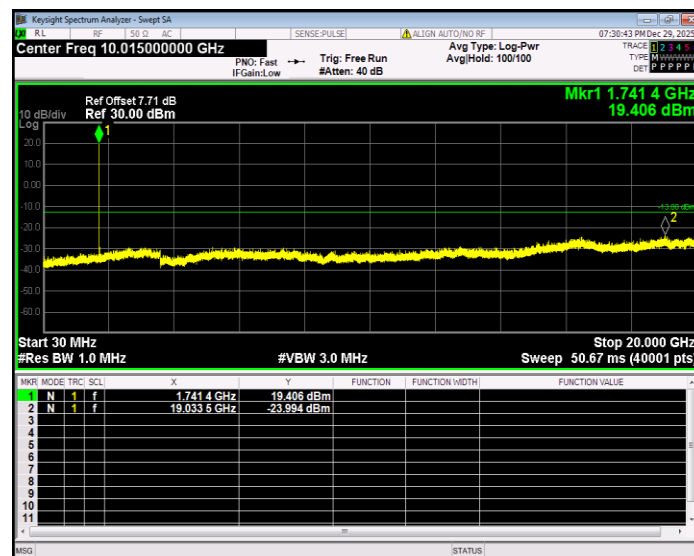
## Report



WCDMA Band4 Channel=1312



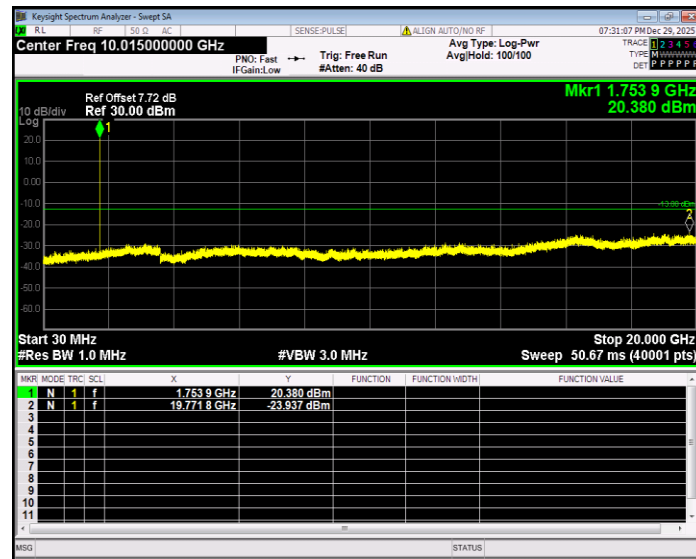
WCDMA Band4 Channel=1450



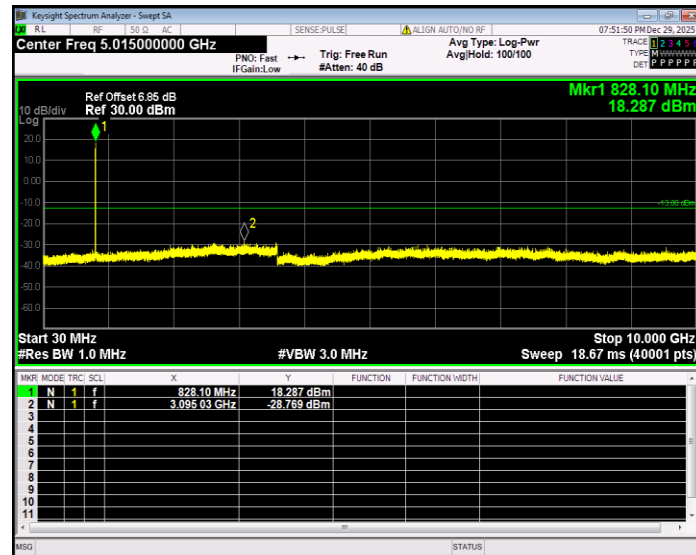


## Report

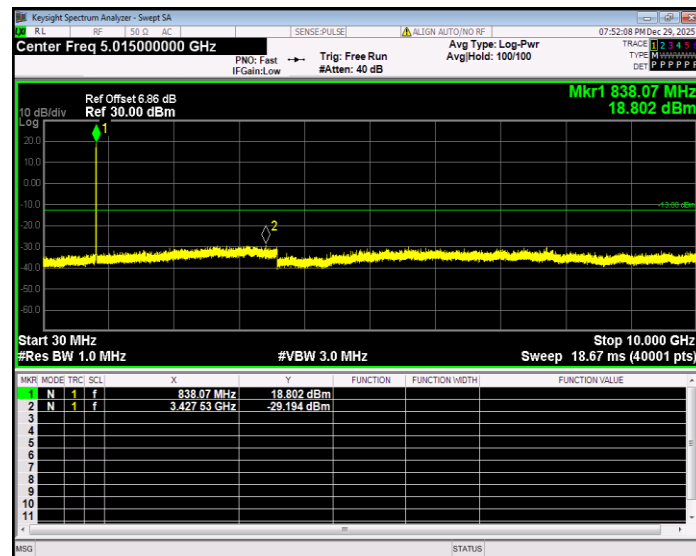
### WCDMA Band4 Channel=1513



### WCDMA Band5 Channel=4132



### WCDMA Band5 Channel=4182





# Report

WCDMA Band5 Channel=4233

