

# 1. Effective (Isotropic) Radiated Power Output Data

## 1.1 Band5\_ERP

### 1.1.1 Test Result

| Band: 5 |         |              |                 |                       |            |           |         |         |
|---------|---------|--------------|-----------------|-----------------------|------------|-----------|---------|---------|
| ENV     | Mode    |              | Frequency (MHz) | Conducted Power (dBm) | Gain (dbi) | ERP (dBm) |         | Verdict |
|         | Network | Subset       |                 |                       |            | Result    | Limit   |         |
| NTNV    | RMC     | 12.2kbps RMC | 826.4           | 22.77                 | -0.5       | 20.12     | <=38.45 | Pass    |
|         |         |              | 836.6           | 22.77                 | -0.5       | 20.12     | <=38.45 | Pass    |
|         |         |              | 846.6           | 22.78                 | -0.5       | 20.13     | <=38.45 | Pass    |
|         | HSDPA   | Subtest 1    | 826.4           | 22.80                 | -0.5       | 20.15     | <=38.45 | Pass    |
|         |         | Subtest 2    | 826.4           | 22.92                 | -0.5       | 20.27     | <=38.45 | Pass    |
|         |         | Subtest 3    | 826.4           | 22.94                 | -0.5       | 20.29     | <=38.45 | Pass    |
|         |         | Subtest 4    | 826.4           | 22.90                 | -0.5       | 20.25     | <=38.45 | Pass    |
|         |         | Subtest 1    | 836.6           | 22.34                 | -0.5       | 19.69     | <=38.45 | Pass    |
|         |         | Subtest 2    | 836.6           | 22.54                 | -0.5       | 19.89     | <=38.45 | Pass    |
|         |         | Subtest 3    | 836.6           | 22.59                 | -0.5       | 19.94     | <=38.45 | Pass    |
|         |         | Subtest 4    | 836.6           | 22.50                 | -0.5       | 19.85     | <=38.45 | Pass    |
|         |         | Subtest 1    | 846.6           | 22.70                 | -0.5       | 20.05     | <=38.45 | Pass    |
|         |         | Subtest 2    | 846.6           | 22.88                 | -0.5       | 20.23     | <=38.45 | Pass    |
|         |         | Subtest 3    | 846.6           | 22.91                 | -0.5       | 20.26     | <=38.45 | Pass    |
|         |         | Subtest 4    | 846.6           | 22.86                 | -0.5       | 20.21     | <=38.45 | Pass    |
|         | HSUPA   | Subtest 1    | 826.4           | 20.80                 | -0.5       | 18.15     | <=38.45 | Pass    |
|         |         | Subtest 2    | 826.4           | 20.78                 | -0.5       | 18.13     | <=38.45 | Pass    |
|         |         | Subtest 3    | 826.4           | 20.31                 | -0.5       | 17.66     | <=38.45 | Pass    |
|         |         | Subtest 4    | 826.4           | 20.30                 | -0.5       | 17.65     | <=38.45 | Pass    |
|         |         | Subtest 5    | 826.4           | 20.58                 | -0.5       | 17.93     | <=38.45 | Pass    |
|         |         | Subtest 1    | 836.6           | 20.27                 | -0.5       | 17.62     | <=38.45 | Pass    |
|         |         | Subtest 2    | 836.6           | 20.20                 | -0.5       | 17.55     | <=38.45 | Pass    |
|         |         | Subtest 3    | 836.6           | 19.74                 | -0.5       | 17.09     | <=38.45 | Pass    |
|         |         | Subtest 4    | 836.6           | 19.69                 | -0.5       | 17.04     | <=38.45 | Pass    |
|         |         | Subtest 5    | 836.6           | 19.73                 | -0.5       | 17.08     | <=38.45 | Pass    |
|         |         | Subtest 1    | 846.6           | 20.68                 | -0.5       | 18.03     | <=38.45 | Pass    |
|         |         | Subtest 2    | 846.6           | 20.42                 | -0.5       | 17.77     | <=38.45 | Pass    |
|         |         | Subtest 3    | 846.6           | 20.17                 | -0.5       | 17.52     | <=38.45 | Pass    |
|         |         | Subtest 4    | 846.6           | 20.17                 | -0.5       | 17.52     | <=38.45 | Pass    |
|         |         | Subtest 5    | 846.6           | 20.46                 | -0.5       | 17.81     | <=38.45 | Pass    |

Note1: ERP=Conducted Power+Antenna Gain-2.15

## 2. Frequency Stability

### 2.1 Band5

#### 2.1.1 Test Result

| Band: 5 |                 |            |               |                  |                       |             |         |
|---------|-----------------|------------|---------------|------------------|-----------------------|-------------|---------|
| Network | Frequency (MHz) | Temp. (°C) | Voltage (VDC) | Freq. Error (Hz) | Freq. vs. Rated (ppm) |             | Verdict |
|         |                 |            |               |                  | Result                | Limit       |         |
| RMC     | 826.4           | 20         | 3.27          | 1.61             | 0.00                  | -2.5 to 2.5 | Pass    |
|         |                 |            | 3.85          | 1.30             | 0.00                  | -2.5 to 2.5 | Pass    |
|         |                 |            | 4.43          | 0.84             | 0.00                  | -2.5 to 2.5 | Pass    |
|         |                 | -30        | 3.85          | 1.52             | 0.00                  | -2.5 to 2.5 | Pass    |
|         |                 | -20        | 3.85          | 1.49             | 0.00                  | -2.5 to 2.5 | Pass    |
|         |                 | -10        | 3.85          | 1.54             | 0.00                  | -2.5 to 2.5 | Pass    |
|         |                 | 0          | 3.85          | 1.67             | 0.00                  | -2.5 to 2.5 | Pass    |
|         |                 | 10         | 3.85          | 1.09             | 0.00                  | -2.5 to 2.5 | Pass    |
|         |                 | 30         | 3.85          | 1.09             | 0.00                  | -2.5 to 2.5 | Pass    |
|         |                 | 40         | 3.85          | 0.89             | 0.00                  | -2.5 to 2.5 | Pass    |
|         |                 | 50         | 3.85          | 0.43             | 0.00                  | -2.5 to 2.5 | Pass    |
|         | 836.6           | 20         | 3.27          | -1.29            | -0.00                 | -2.5 to 2.5 | Pass    |
|         |                 |            | 3.85          | -1.42            | -0.00                 | -2.5 to 2.5 | Pass    |
|         |                 |            | 4.43          | -0.93            | -0.00                 | -2.5 to 2.5 | Pass    |
|         |                 | -30        | 3.85          | -1.36            | -0.00                 | -2.5 to 2.5 | Pass    |
|         |                 | -20        | 3.85          | -0.58            | -0.00                 | -2.5 to 2.5 | Pass    |
|         |                 | -10        | 3.85          | -0.21            | -0.00                 | -2.5 to 2.5 | Pass    |
|         |                 | 0          | 3.85          | 0.31             | 0.00                  | -2.5 to 2.5 | Pass    |
|         |                 | 10         | 3.85          | 0.32             | 0.00                  | -2.5 to 2.5 | Pass    |
|         |                 | 30         | 3.85          | 0.15             | 0.00                  | -2.5 to 2.5 | Pass    |
|         |                 | 40         | 3.85          | -0.73            | -0.00                 | -2.5 to 2.5 | Pass    |
|         |                 | 50         | 3.85          | -0.92            | -0.00                 | -2.5 to 2.5 | Pass    |
|         | 846.6           | 20         | 3.27          | 1.30             | 0.00                  | -2.5 to 2.5 | Pass    |
|         |                 |            | 3.85          | 0.65             | 0.00                  | -2.5 to 2.5 | Pass    |
|         |                 |            | 4.43          | 0.87             | 0.00                  | -2.5 to 2.5 | Pass    |
|         |                 | -30        | 3.85          | 0.64             | 0.00                  | -2.5 to 2.5 | Pass    |
|         |                 | -20        | 3.85          | 0.89             | 0.00                  | -2.5 to 2.5 | Pass    |
|         |                 | -10        | 3.85          | 0.94             | 0.00                  | -2.5 to 2.5 | Pass    |
|         |                 | 0          | 3.85          | 1.35             | 0.00                  | -2.5 to 2.5 | Pass    |
|         |                 | 10         | 3.85          | 0.98             | 0.00                  | -2.5 to 2.5 | Pass    |
|         |                 | 30         | 3.85          | 1.14             | 0.00                  | -2.5 to 2.5 | Pass    |
|         |                 | 40         | 3.85          | 0.78             | 0.00                  | -2.5 to 2.5 | Pass    |
|         |                 | 50         | 3.85          | 0.69             | 0.00                  | -2.5 to 2.5 | Pass    |
| HSDPA   | 826.4           | 20         | 3.27          | 7.24             | 0.01                  | -2.5 to 2.5 | Pass    |
|         |                 |            | 3.85          | 6.78             | 0.01                  | -2.5 to 2.5 | Pass    |
|         |                 |            | 4.43          | 6.72             | 0.01                  | -2.5 to 2.5 | Pass    |
|         |                 | -30        | 3.85          | 6.53             | 0.01                  | -2.5 to 2.5 | Pass    |
|         |                 | -20        | 3.85          | 6.67             | 0.01                  | -2.5 to 2.5 | Pass    |
|         |                 | -10        | 3.85          | 6.74             | 0.01                  | -2.5 to 2.5 | Pass    |
|         |                 | 0          | 3.85          | 7.15             | 0.01                  | -2.5 to 2.5 | Pass    |
|         |                 | 10         | 3.85          | 7.37             | 0.01                  | -2.5 to 2.5 | Pass    |
|         |                 | 30         | 3.85          | 6.61             | 0.01                  | -2.5 to 2.5 | Pass    |
|         |                 | 40         | 3.85          | 7.13             | 0.01                  | -2.5 to 2.5 | Pass    |
|         |                 | 50         | 3.85          | 6.52             | 0.01                  | -2.5 to 2.5 | Pass    |
|         | 836.6           | 20         | 3.27          | 6.58             | 0.01                  | -2.5 to 2.5 | Pass    |
|         |                 |            | 3.85          | 6.58             | 0.01                  | -2.5 to 2.5 | Pass    |

|       |       |     |      |       |       |             |      |
|-------|-------|-----|------|-------|-------|-------------|------|
|       |       |     | 4.43 | 6.81  | 0.01  | -2.5 to 2.5 | Pass |
|       |       | -30 | 3.85 | 6.91  | 0.01  | -2.5 to 2.5 | Pass |
|       |       | -20 | 3.85 | 6.37  | 0.01  | -2.5 to 2.5 | Pass |
|       |       | -10 | 3.85 | 5.89  | 0.01  | -2.5 to 2.5 | Pass |
|       |       | 0   | 3.85 | 5.82  | 0.01  | -2.5 to 2.5 | Pass |
|       |       | 10  | 3.85 | 5.76  | 0.01  | -2.5 to 2.5 | Pass |
|       |       | 30  | 3.85 | 5.62  | 0.01  | -2.5 to 2.5 | Pass |
|       |       | 40  | 3.85 | 5.82  | 0.01  | -2.5 to 2.5 | Pass |
|       |       | 50  | 3.85 | 5.51  | 0.01  | -2.5 to 2.5 | Pass |
|       | 846.6 | 20  | 3.27 | 4.89  | 0.01  | -2.5 to 2.5 | Pass |
|       |       |     | 3.85 | 5.04  | 0.01  | -2.5 to 2.5 | Pass |
|       |       |     | 4.43 | 5.28  | 0.01  | -2.5 to 2.5 | Pass |
|       |       | -30 | 3.85 | 5.51  | 0.01  | -2.5 to 2.5 | Pass |
|       |       | -20 | 3.85 | 5.43  | 0.01  | -2.5 to 2.5 | Pass |
|       |       | -10 | 3.85 | 5.03  | 0.01  | -2.5 to 2.5 | Pass |
|       |       | 0   | 3.85 | 5.21  | 0.01  | -2.5 to 2.5 | Pass |
|       |       | 10  | 3.85 | 5.22  | 0.01  | -2.5 to 2.5 | Pass |
|       |       | 30  | 3.85 | 4.84  | 0.01  | -2.5 to 2.5 | Pass |
|       |       | 40  | 3.85 | 4.91  | 0.01  | -2.5 to 2.5 | Pass |
|       |       | 50  | 3.85 | 4.51  | 0.01  | -2.5 to 2.5 | Pass |
| HSUPA | 826.4 | 20  | 3.27 | -2.32 | -0.00 | -2.5 to 2.5 | Pass |
|       |       |     | 3.85 | -3.96 | -0.00 | -2.5 to 2.5 | Pass |
|       |       |     | 4.43 | -2.87 | -0.00 | -2.5 to 2.5 | Pass |
|       |       | -30 | 3.85 | -2.74 | -0.00 | -2.5 to 2.5 | Pass |
|       |       | -20 | 3.85 | -2.53 | -0.00 | -2.5 to 2.5 | Pass |
|       |       | -10 | 3.85 | -3.95 | -0.00 | -2.5 to 2.5 | Pass |
|       |       | 0   | 3.85 | -3.78 | -0.00 | -2.5 to 2.5 | Pass |
|       |       | 10  | 3.85 | -3.26 | -0.00 | -2.5 to 2.5 | Pass |
|       |       | 30  | 3.85 | -2.20 | -0.00 | -2.5 to 2.5 | Pass |
|       |       | 40  | 3.85 | -1.80 | -0.00 | -2.5 to 2.5 | Pass |
|       |       | 50  | 3.85 | -3.76 | -0.00 | -2.5 to 2.5 | Pass |
|       | 836.6 | 20  | 3.27 | -7.67 | -0.01 | -2.5 to 2.5 | Pass |
|       |       |     | 3.85 | -5.56 | -0.01 | -2.5 to 2.5 | Pass |
|       |       |     | 4.43 | -5.67 | -0.01 | -2.5 to 2.5 | Pass |
|       |       | -30 | 3.85 | -5.60 | -0.01 | -2.5 to 2.5 | Pass |
|       |       | -20 | 3.85 | -7.06 | -0.01 | -2.5 to 2.5 | Pass |
|       |       | -10 | 3.85 | -7.25 | -0.01 | -2.5 to 2.5 | Pass |
|       |       | 0   | 3.85 | -7.29 | -0.01 | -2.5 to 2.5 | Pass |
|       |       | 10  | 3.85 | -6.04 | -0.01 | -2.5 to 2.5 | Pass |
|       |       | 30  | 3.85 | -4.95 | -0.01 | -2.5 to 2.5 | Pass |
|       |       | 40  | 3.85 | -5.66 | -0.01 | -2.5 to 2.5 | Pass |
|       |       | 50  | 3.85 | -6.57 | -0.01 | -2.5 to 2.5 | Pass |
|       | 846.6 | 20  | 3.27 | -1.17 | -0.00 | -2.5 to 2.5 | Pass |
|       |       |     | 3.85 | -0.71 | -0.00 | -2.5 to 2.5 | Pass |
|       |       |     | 4.43 | -1.52 | -0.00 | -2.5 to 2.5 | Pass |
|       |       | -30 | 3.85 | -1.48 | -0.00 | -2.5 to 2.5 | Pass |
|       |       | -20 | 3.85 | -1.39 | -0.00 | -2.5 to 2.5 | Pass |
|       |       | -10 | 3.85 | -1.00 | -0.00 | -2.5 to 2.5 | Pass |
|       |       | 0   | 3.85 | -1.63 | -0.00 | -2.5 to 2.5 | Pass |
|       |       | 10  | 3.85 | -3.04 | -0.00 | -2.5 to 2.5 | Pass |
|       |       | 30  | 3.85 | -3.08 | -0.00 | -2.5 to 2.5 | Pass |
|       |       | 40  | 3.85 | -3.08 | -0.00 | -2.5 to 2.5 | Pass |
|       |       | 50  | 3.85 | -1.52 | -0.00 | -2.5 to 2.5 | Pass |

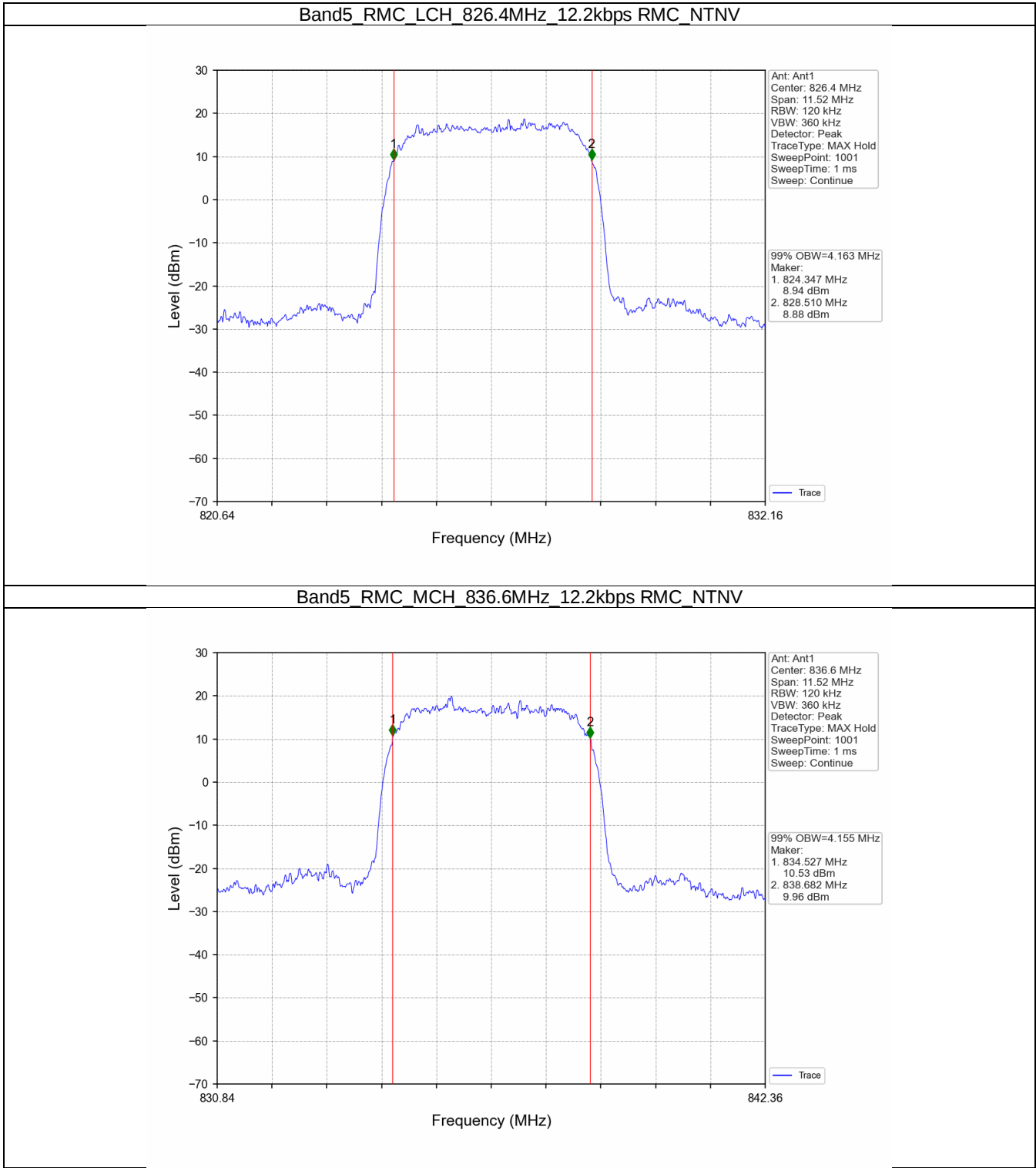
### 3. 99% & 26dB Bandwidth

#### 3.1 Band5\_OBW

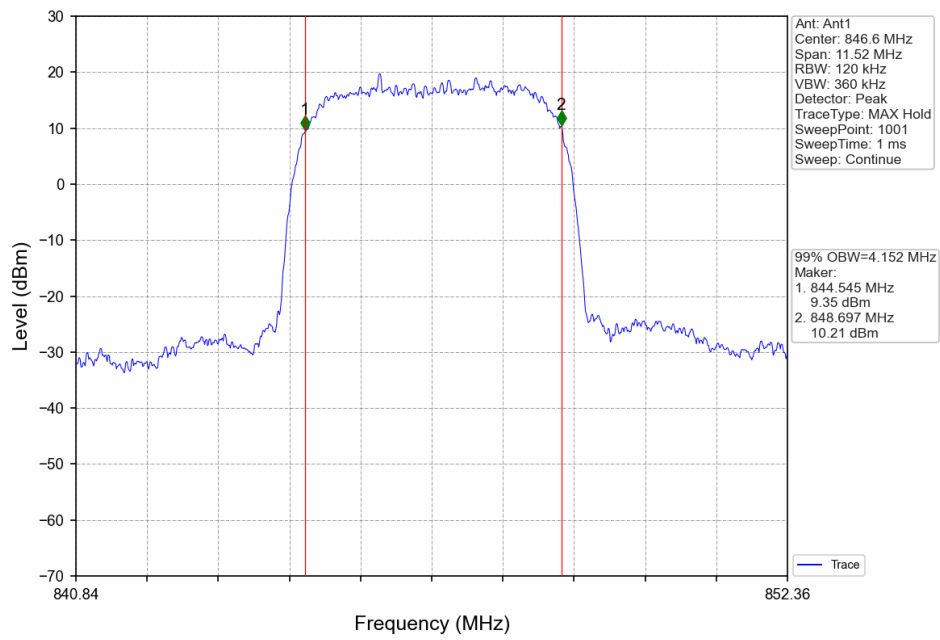
##### 3.1.1 Test Result

| Band: 5 |         |              |                    |                              |         |
|---------|---------|--------------|--------------------|------------------------------|---------|
| ENV     | Mode    |              | Frequency<br>(MHz) | 99% Occupied Bandwidth (MHz) | Verdict |
|         | Network | Subset       |                    | Result                       |         |
| NTNV    | RMC     | 12.2kbps RMC | 826.4              | 4.163                        | Pass    |
|         |         |              | 836.6              | 4.155                        | Pass    |
|         |         |              | 846.6              | 4.152                        | Pass    |
|         | HSDPA   | Subtest 1    | 826.4              | 4.153                        | Pass    |
|         |         |              | 836.6              | 4.163                        | Pass    |
|         |         |              | 846.6              | 4.150                        | Pass    |
|         | HSUPA   | Subtest 1    | 826.4              | 4.163                        | Pass    |
|         |         |              | 836.6              | 4.180                        | Pass    |
|         |         |              | 846.6              | 4.129                        | Pass    |

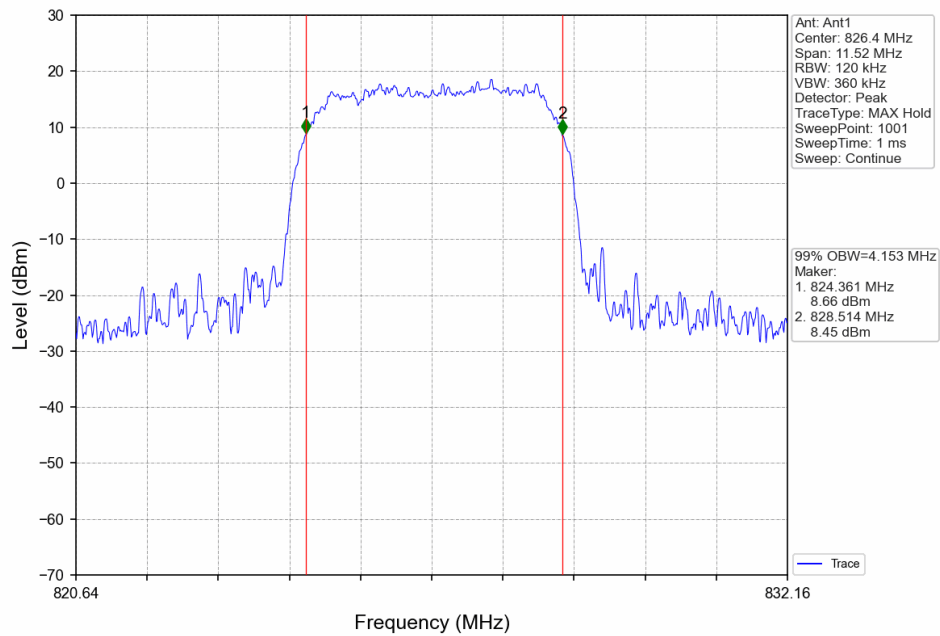
3.1.2 Test Graph



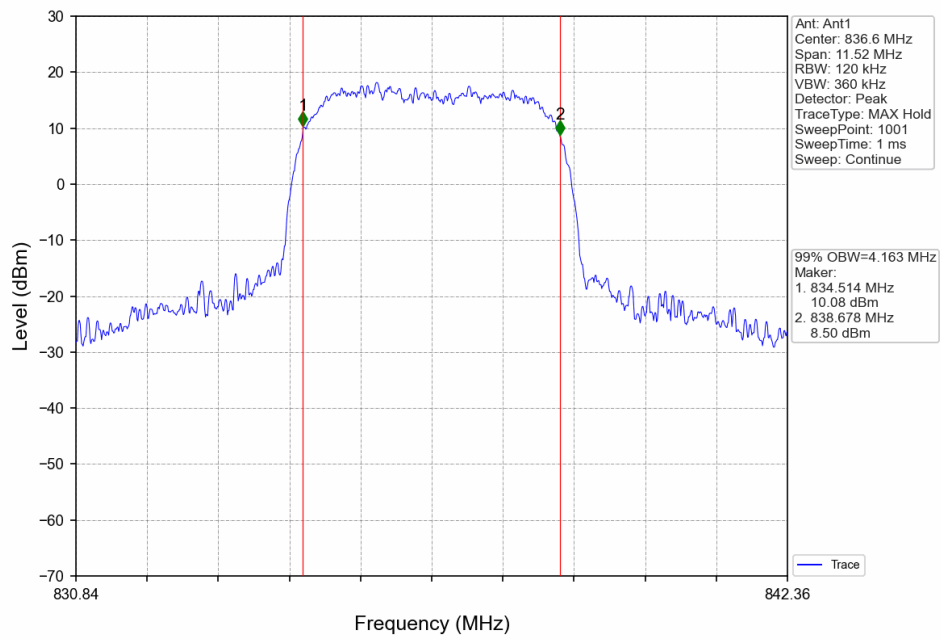
# Band5\_RMC\_HCH\_846.6MHz\_12.2kbps RMC\_NTNV



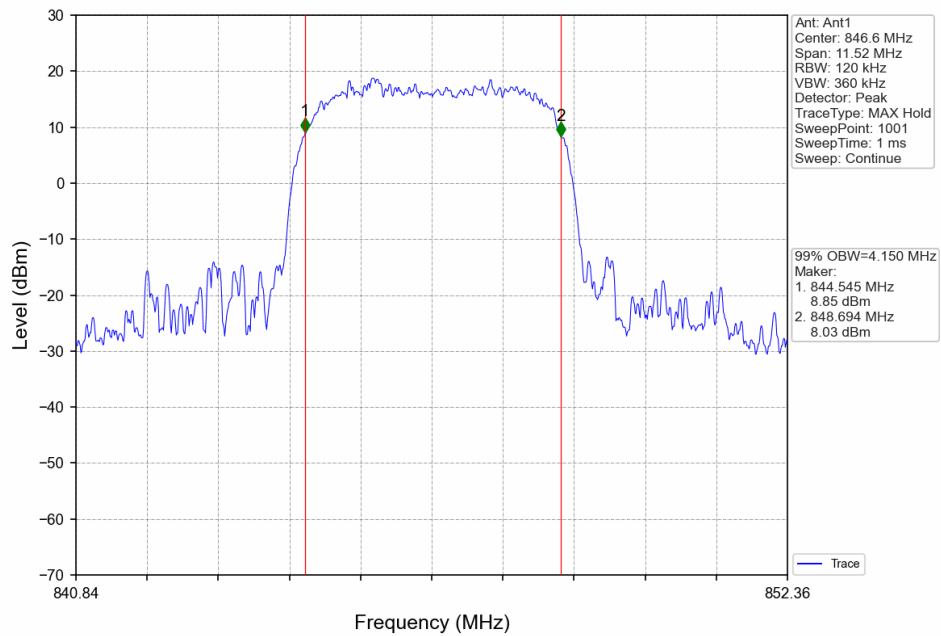
# Band5\_HSDPA\_LCH\_826.4MHz\_Subtest 1\_NTNV



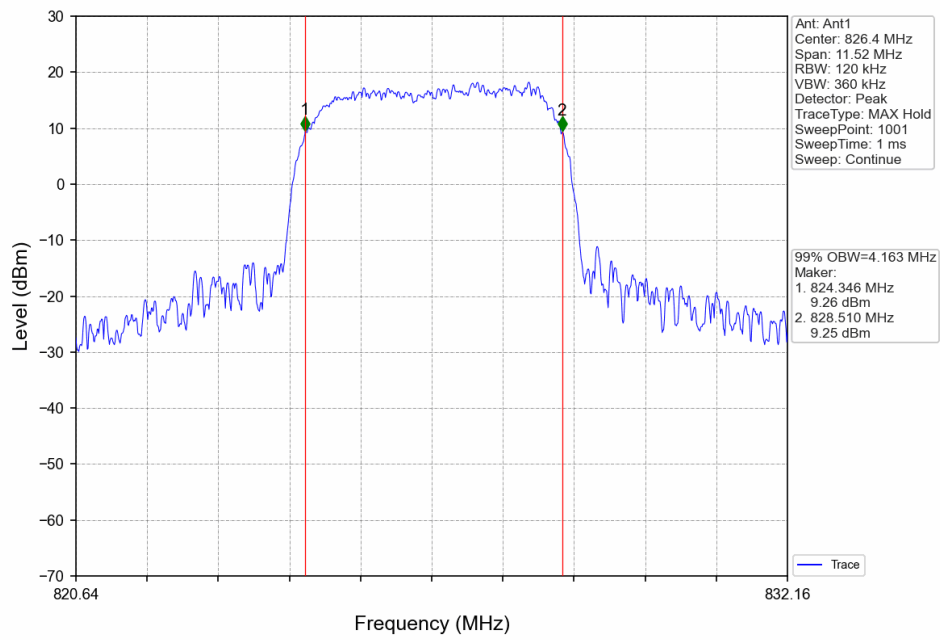
# Band5\_HSDPA\_MCH\_836.6MHz\_Subtest 1\_NTNV



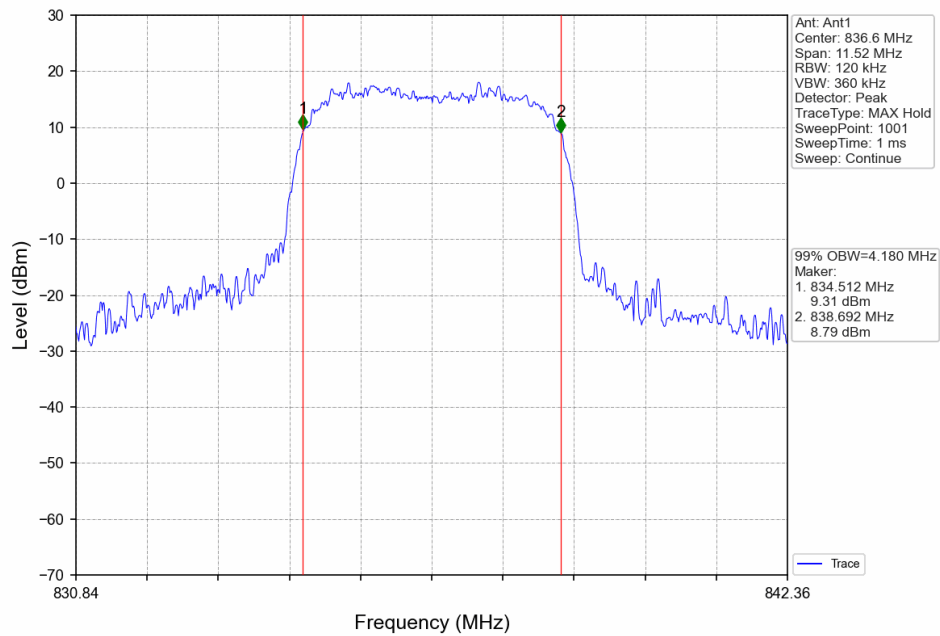
# Band5\_HSDPA\_HCH\_846.6MHz\_Subtest 1\_NTNV



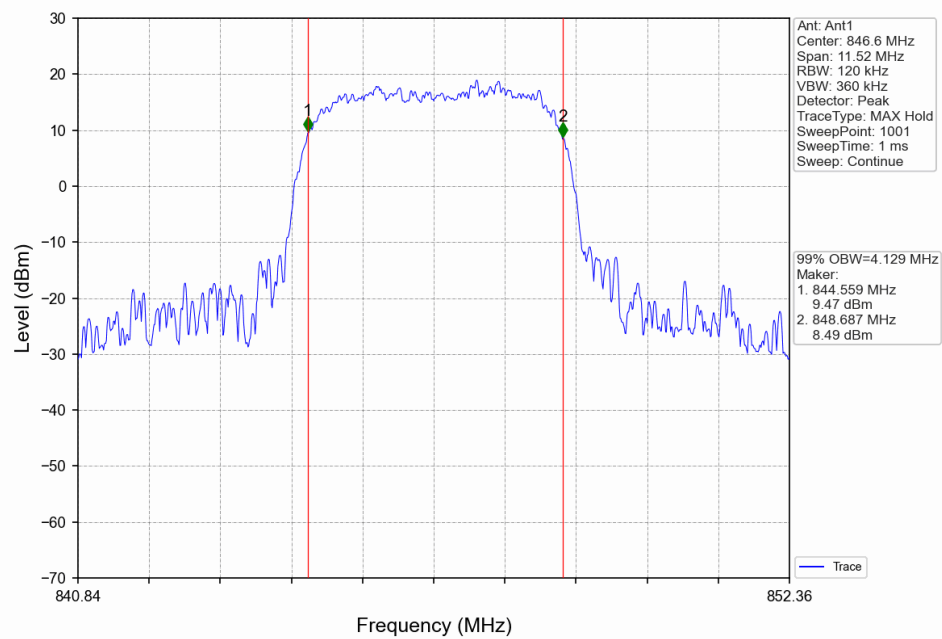
# Band5\_HSUPA\_LCH\_826.4MHz\_Subtest 1\_NTNV



# Band5\_HSUPA\_MCH\_836.6MHz\_Subtest 1\_NTNV



Band5\_HSUPA\_HCH\_846.6MHz\_Subtest 1\_NTNV

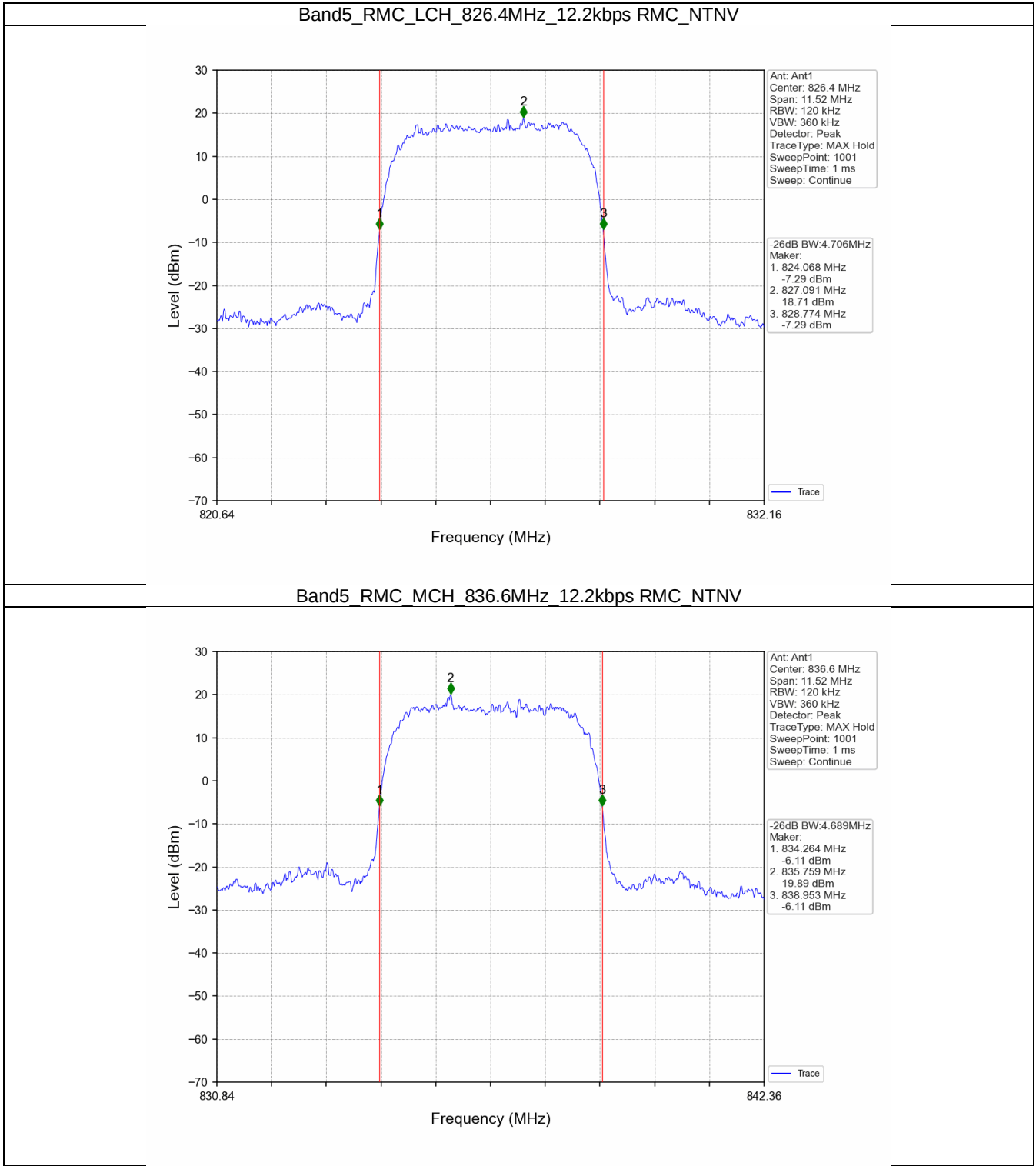


### 3.2 Band5\_XDB

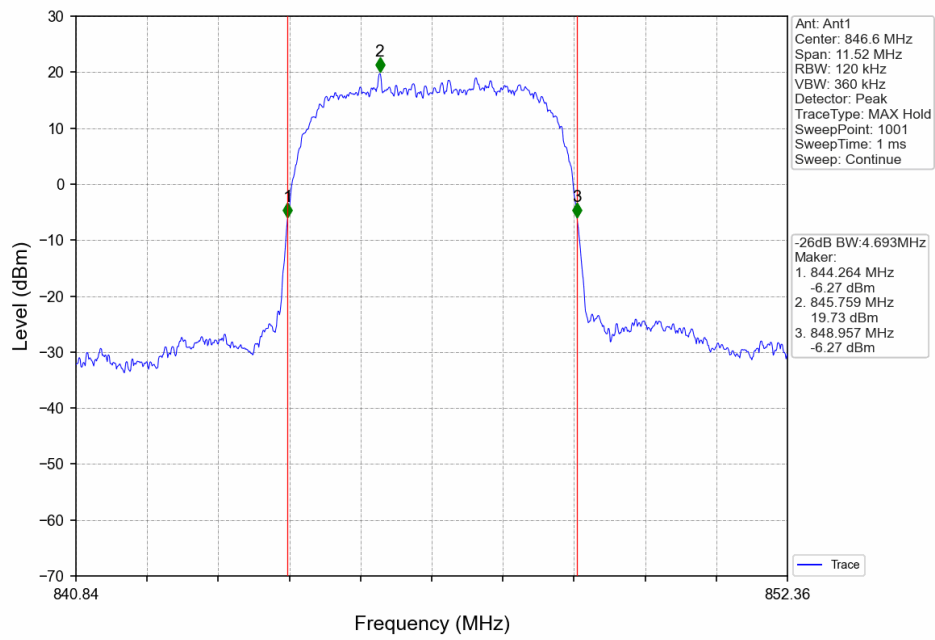
#### 3.2.1 Test Result

| Band: 5 |         |              |                 |                      |         |
|---------|---------|--------------|-----------------|----------------------|---------|
| ENV     | Mode    |              | Frequency (MHz) | 26dB Bandwidth (MHz) | Verdict |
|         | Network | Subset       |                 | Result               |         |
| NTNV    | RMC     | 12.2kbps RMC | 826.4           | 4.706                | Pass    |
|         |         |              | 836.6           | 4.689                | Pass    |
|         |         |              | 846.6           | 4.693                | Pass    |
|         | HSDPA   | Subtest 1    | 826.4           | 4.704                | Pass    |
|         |         |              | 836.6           | 4.723                | Pass    |
|         |         |              | 846.6           | 4.701                | Pass    |
|         | HSUPA   | Subtest 1    | 826.4           | 4.709                | Pass    |
|         |         |              | 836.6           | 4.721                | Pass    |
|         |         |              | 846.6           | 4.682                | Pass    |

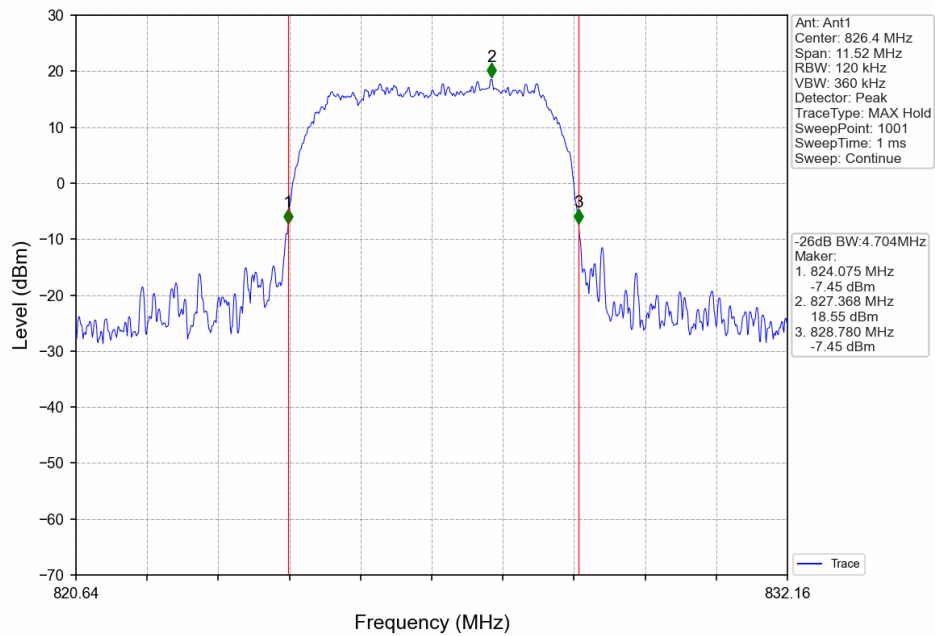
3.2.2 Test Graph



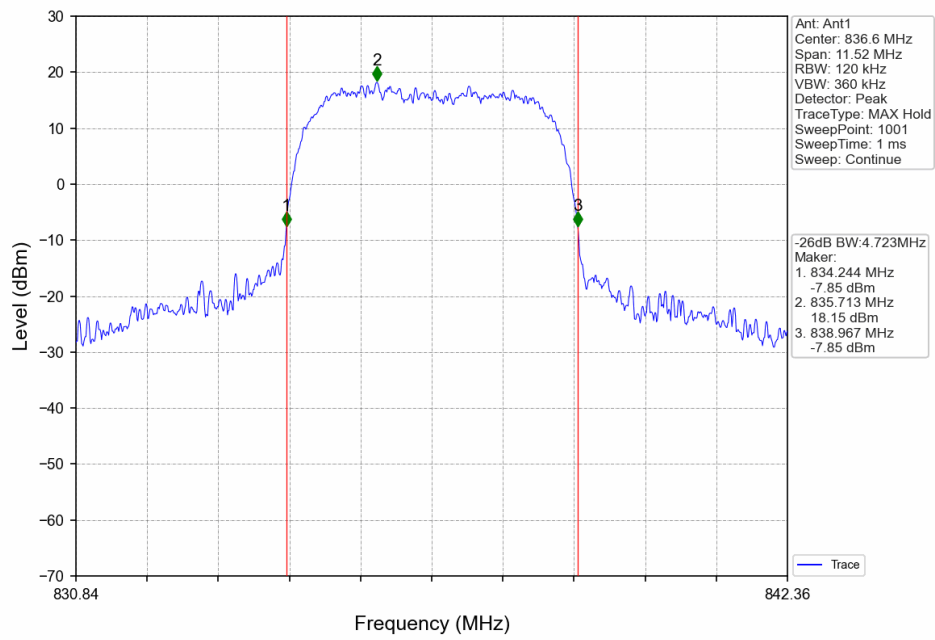
# Band5\_RMC\_HCH\_846.6MHz\_12.2kbps RMC\_NTNV



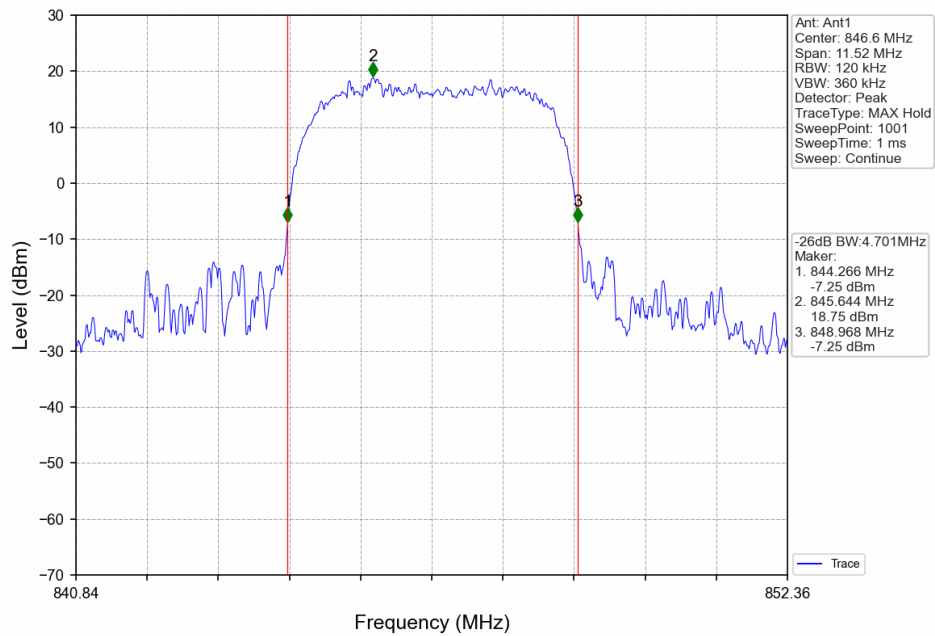
# Band5\_HSDPA\_LCH\_826.4MHz\_Subtest 1\_NTNV



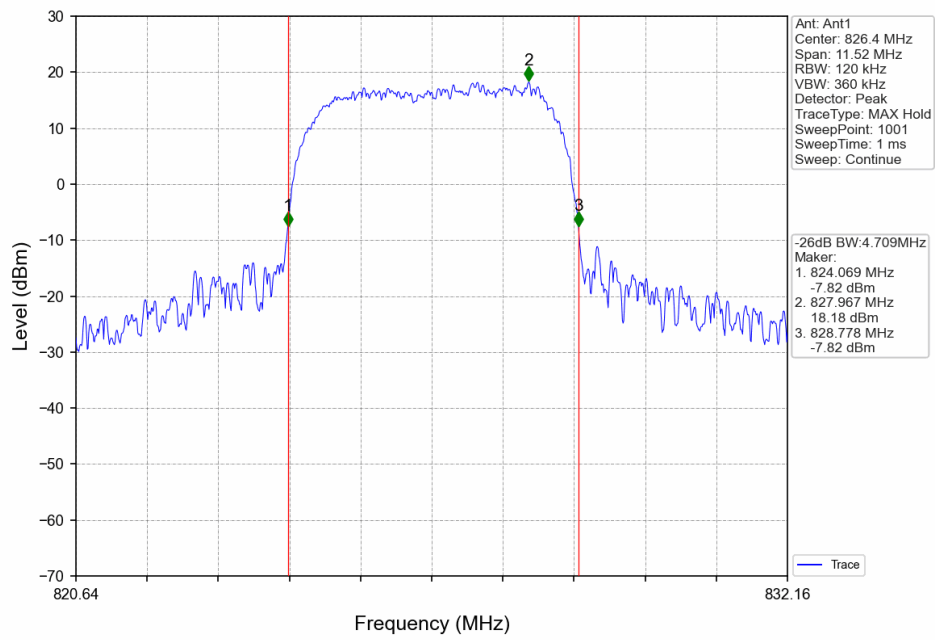
# Band5\_HSDPA\_MCH\_836.6MHz\_Subtest 1\_NTNV



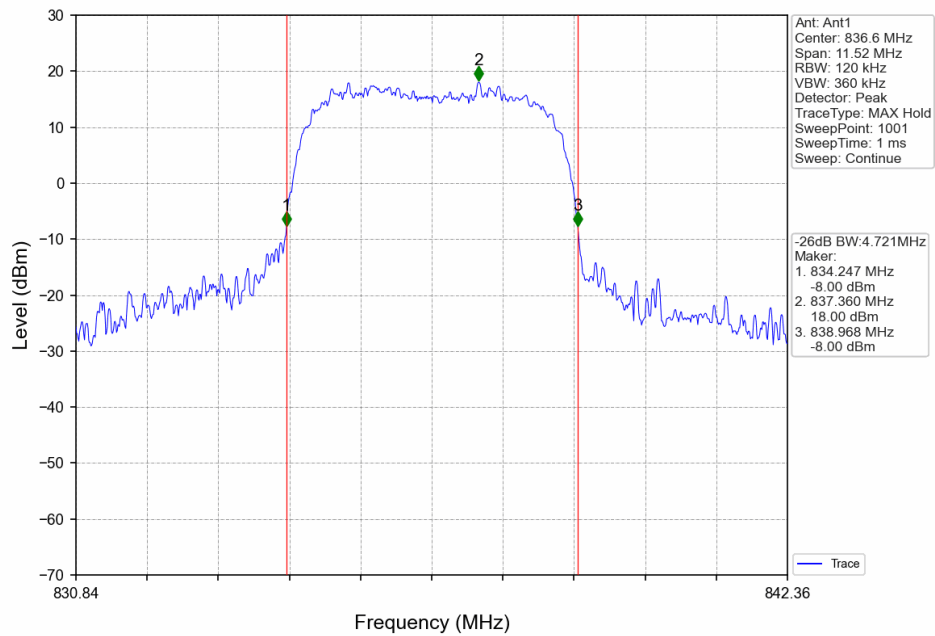
# Band5\_HSDPA\_HCH\_846.6MHz\_Subtest 1\_NTNV



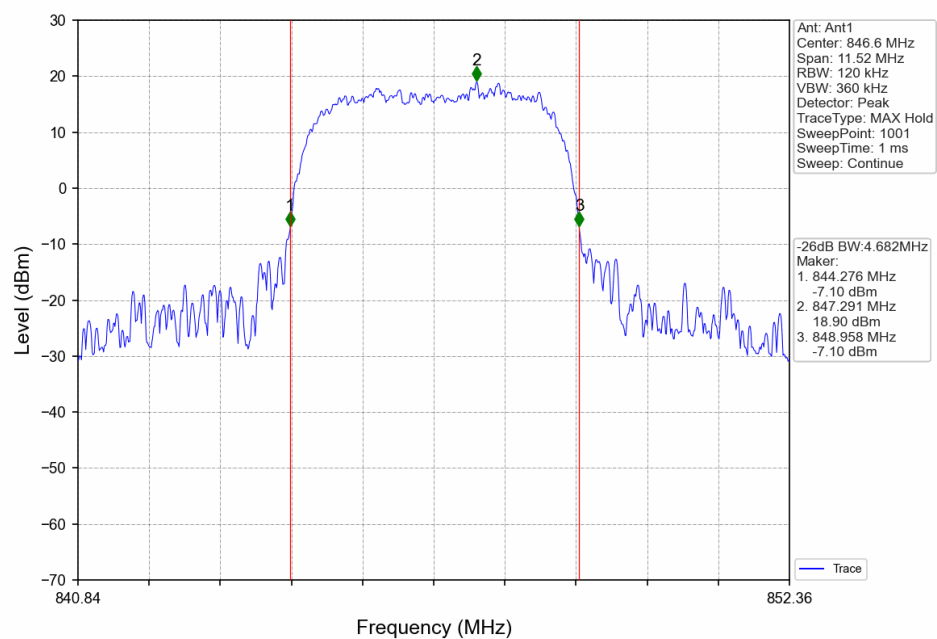
# Band5\_HSUPA\_LCH\_826.4MHz\_Subtest 1\_NTNV



# Band5\_HSUPA\_MCH\_836.6MHz\_Subtest 1\_NTNV



# Band5 HSUPA HCH 846.6MHz Subtest 1 NTN



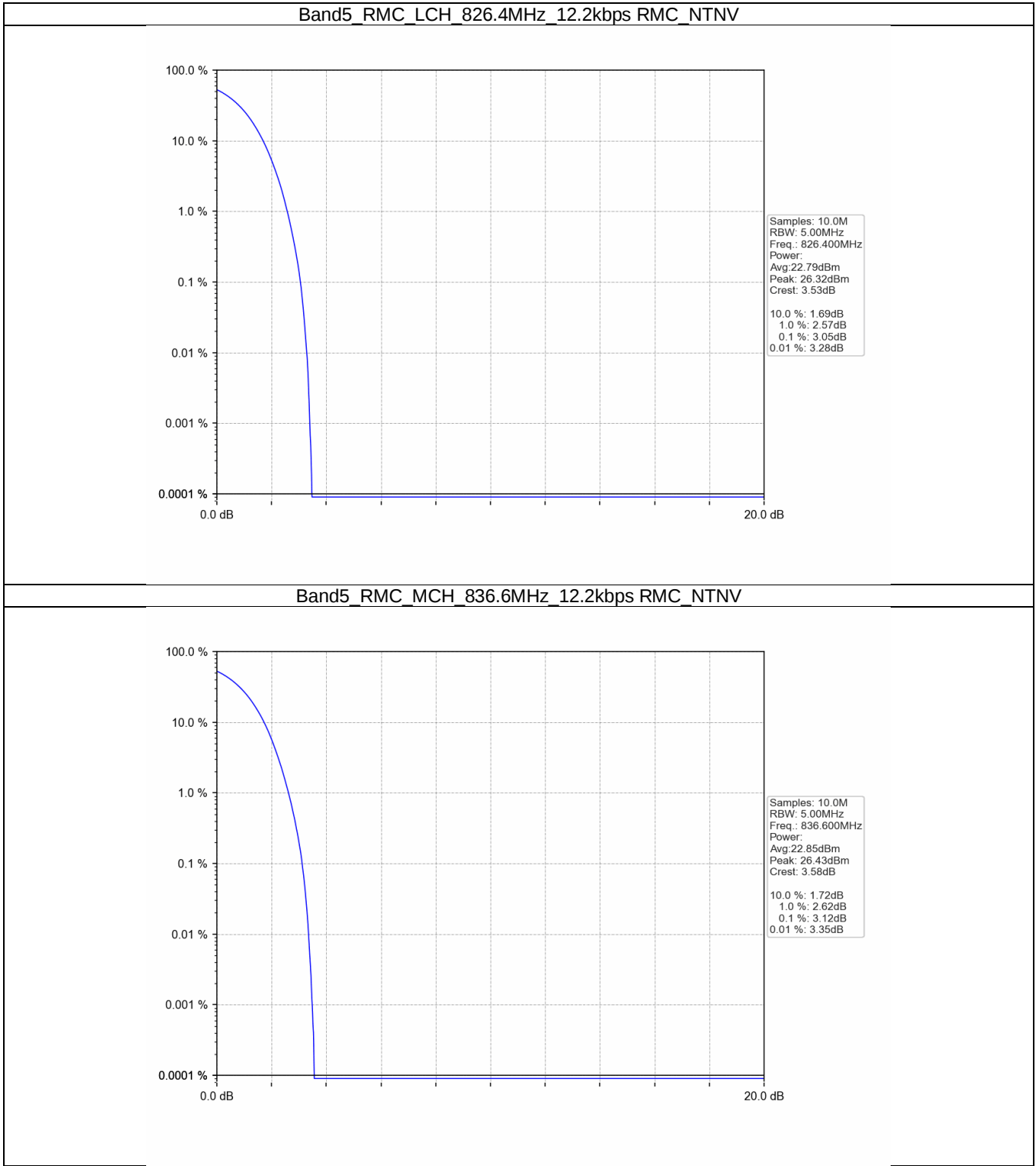
## 4. Peak-Average Ratio

### 4.1 Band5

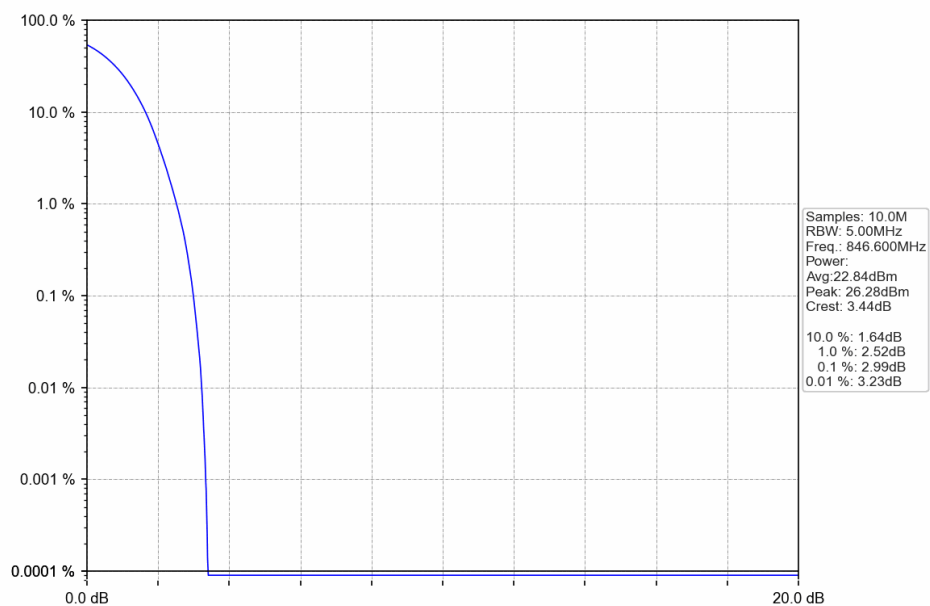
#### 4.1.1 Test Result

| Band: 5 |         |              |                    |                         |       |         |
|---------|---------|--------------|--------------------|-------------------------|-------|---------|
| ENV     | Mode    |              | Frequency<br>(MHz) | Peak-Average Ratio (dB) |       | Verdict |
|         | Network | Subset       |                    | Result                  | Limit |         |
| NTNV    | RMC     | 12.2kbps RMC | 826.4              | 3.05                    | <=13  | Pass    |
|         |         |              | 836.6              | 3.12                    | <=13  | Pass    |
|         |         |              | 846.6              | 2.99                    | <=13  | Pass    |
|         | HSDPA   | Subtest 1    | 826.4              | 5.82                    | <=13  | Pass    |
|         |         |              | 836.6              | 5.86                    | <=13  | Pass    |
|         |         |              | 846.6              | 5.67                    | <=13  | Pass    |
|         | HSUPA   | Subtest 1    | 826.4              | 5.82                    | <=13  | Pass    |
|         |         |              | 836.6              | 5.83                    | <=13  | Pass    |
|         |         |              | 846.6              | 5.69                    | <=13  | Pass    |

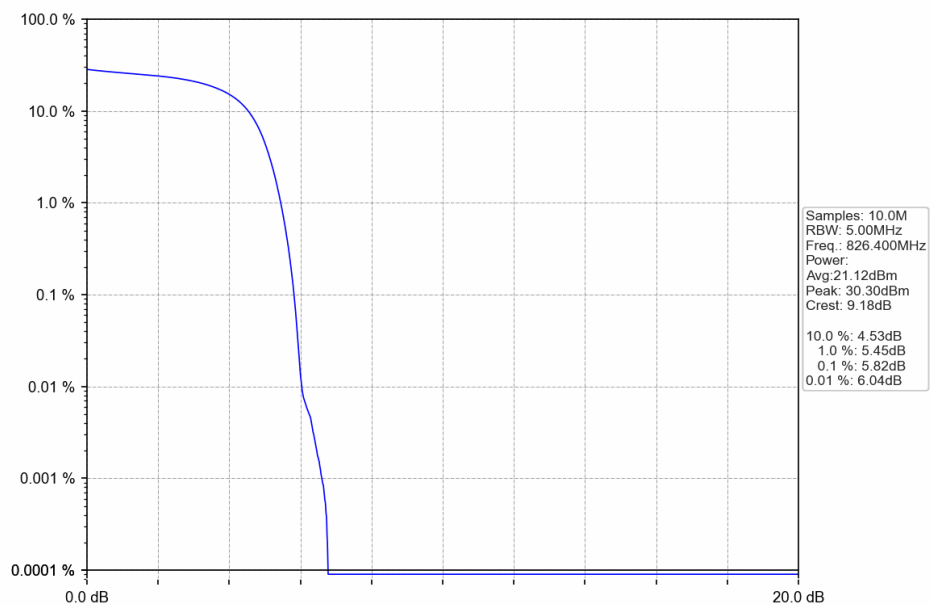
4.1.2 Test Graph



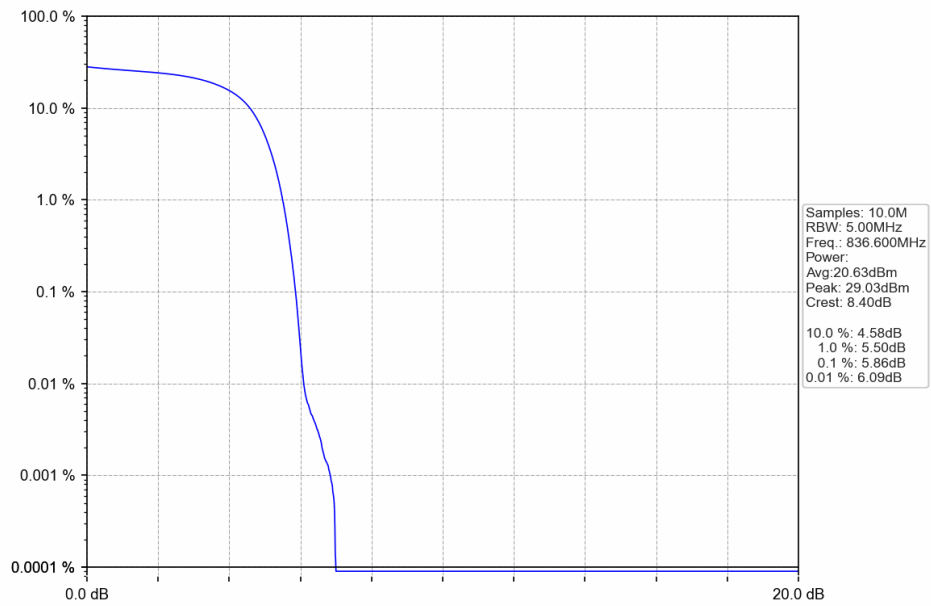
# Band5\_RMC\_HCH\_846.6MHz\_12.2kbps RMC\_NTNV



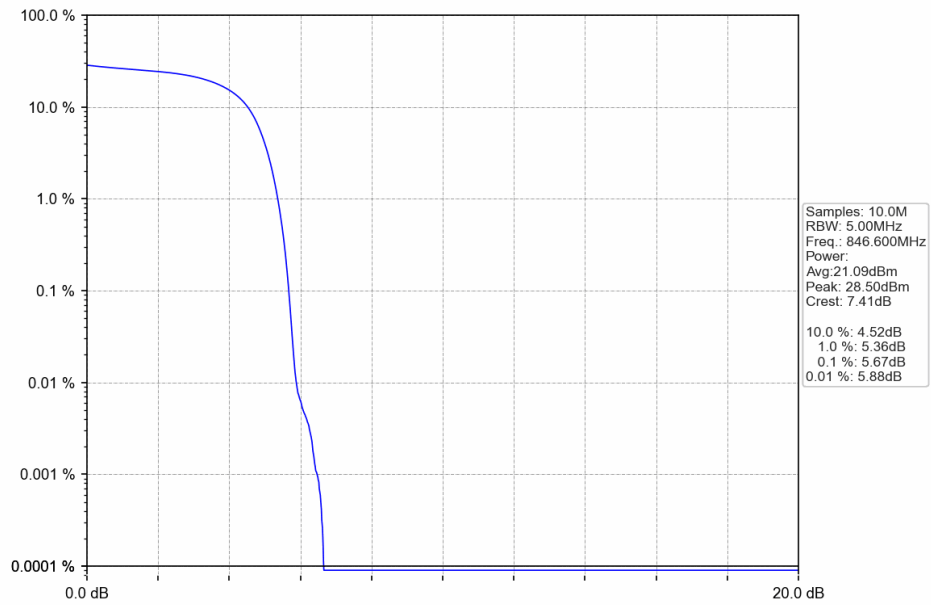
# Band5\_HSDPA\_LCH\_826.4MHz\_Subtest 1\_NTNV



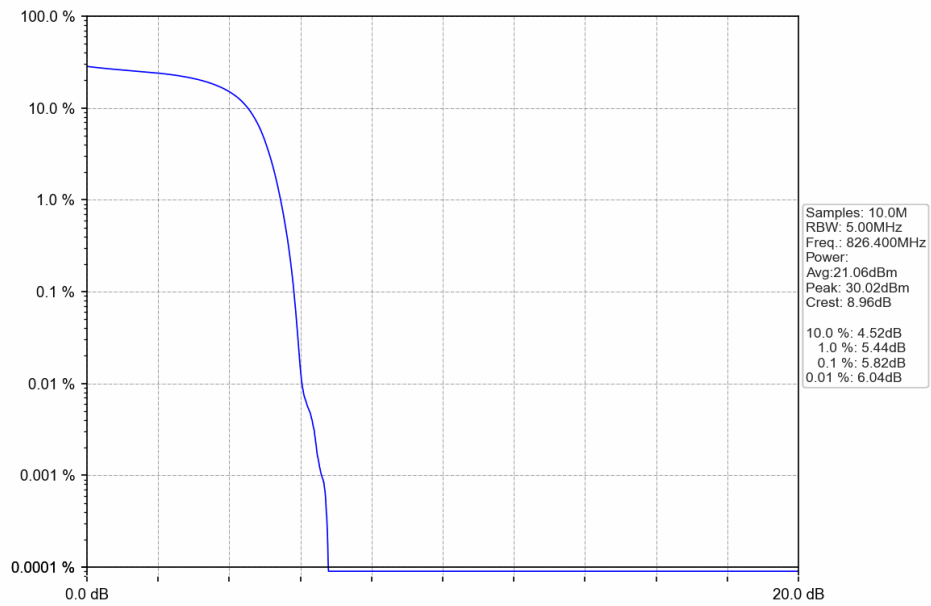
# Band5\_HSDPA\_MCH\_836.6MHz\_Subtest 1\_NTNV



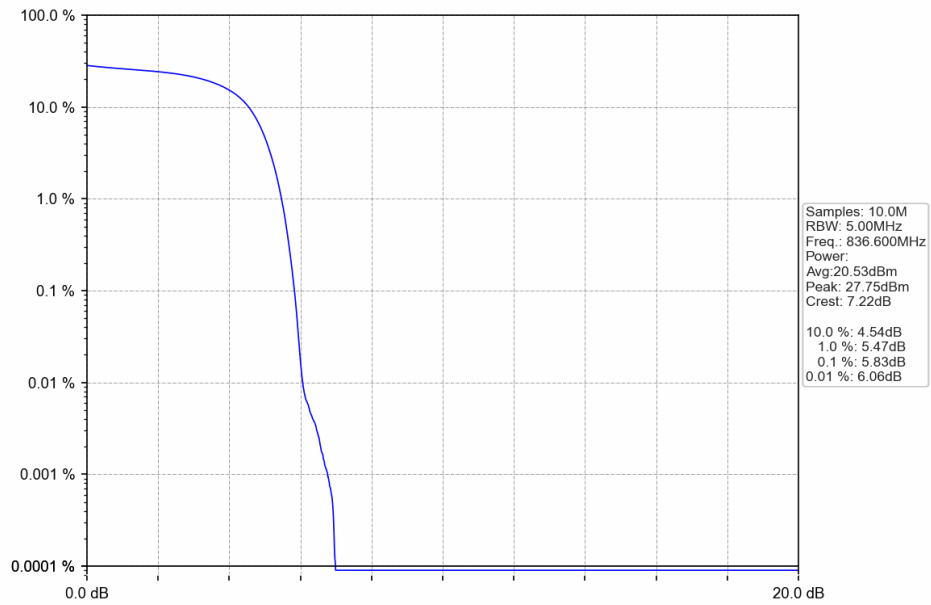
# Band5\_HSDPA\_HCH\_846.6MHz\_Subtest 1\_NTNV



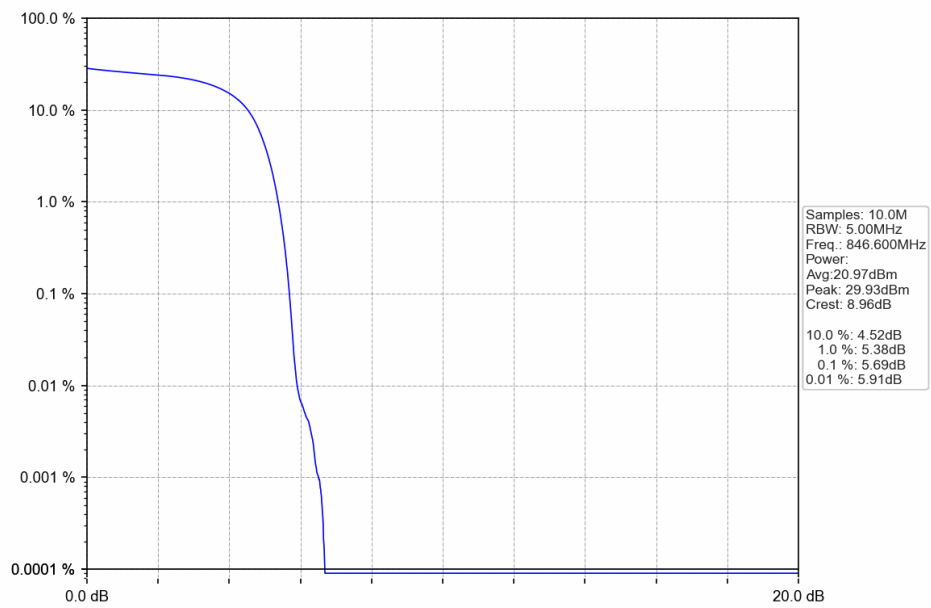
# Band5\_HSUPA\_LCH\_826.4MHz\_Subtest 1\_NTNV



# Band5\_HSUPA\_MCH\_836.6MHz\_Subtest 1\_NTNV



Band5 HSUPA HCH 846.6MHz Subtest 1\_NTNV



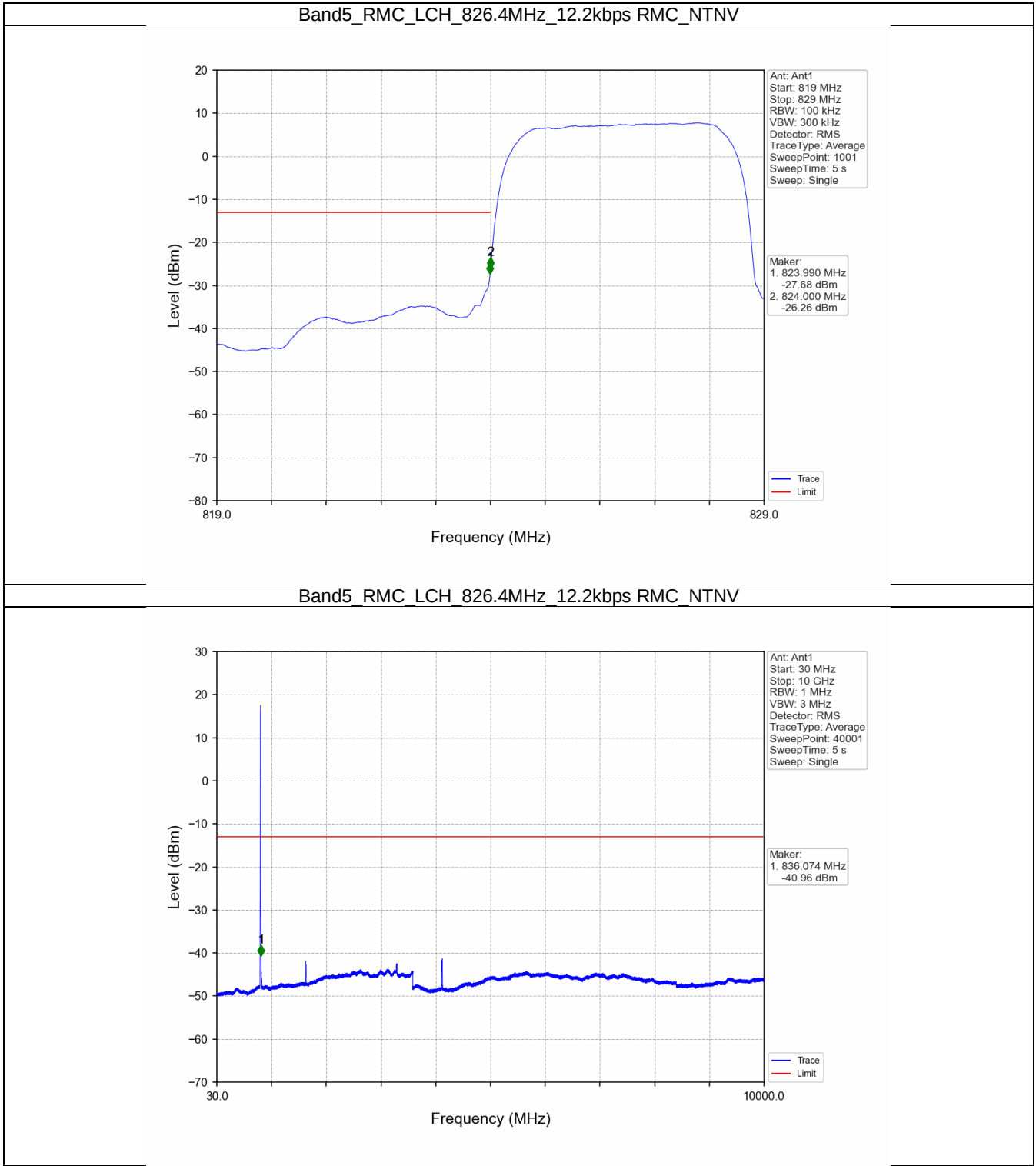
## 5. Spurious Emission

### 5.1 Band5

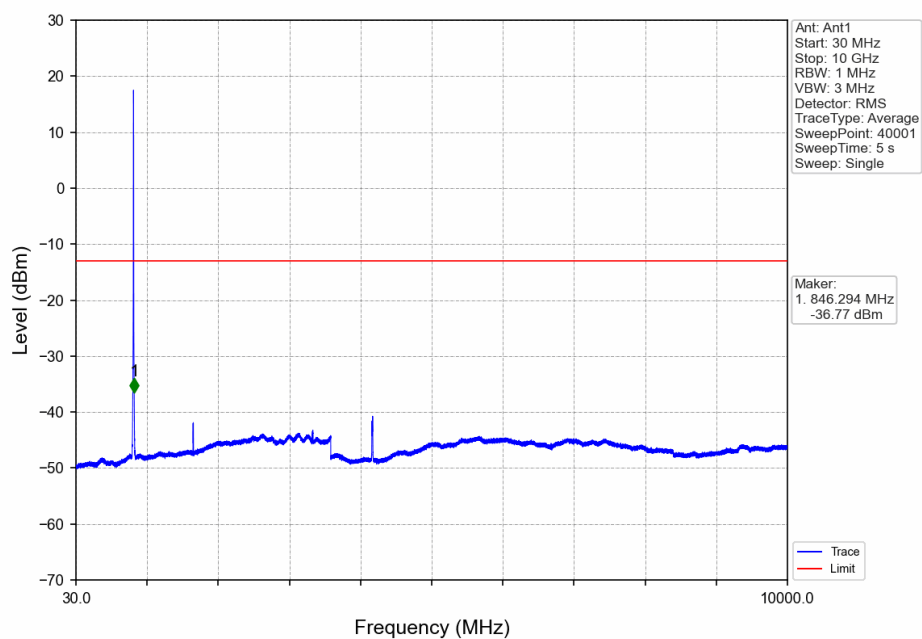
#### 5.1.1 Test Result

| Band: 5 |         |              |                 |                     |       |         |
|---------|---------|--------------|-----------------|---------------------|-------|---------|
| ENV     | Mode    |              | Frequency (MHz) | Spurious Emission   |       | Verdict |
|         | Network | Subset       |                 | Result              | Limit |         |
| NTNV    | RMC     | 12.2kbps RMC | 826.4           | Refer To Test Graph |       | Pass    |
|         |         |              | 836.6           | Refer To Test Graph |       | Pass    |
|         |         |              | 846.6           | Refer To Test Graph |       | Pass    |
|         | HSDPA   | Subtest 1    | 826.4           | Refer To Test Graph |       | Pass    |
|         |         |              | 836.6           | Refer To Test Graph |       | Pass    |
|         |         |              | 846.6           | Refer To Test Graph |       | Pass    |
|         | HSUPA   | Subtest 1    | 826.4           | Refer To Test Graph |       | Pass    |
|         |         |              | 836.6           | Refer To Test Graph |       | Pass    |
|         |         |              | 846.6           | Refer To Test Graph |       | Pass    |

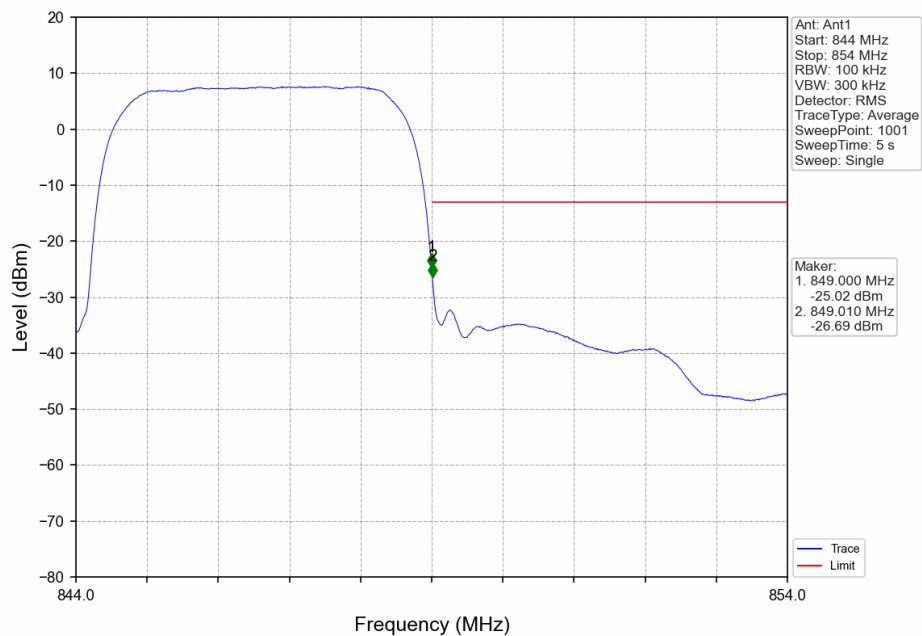
5.1.2 Test Graph



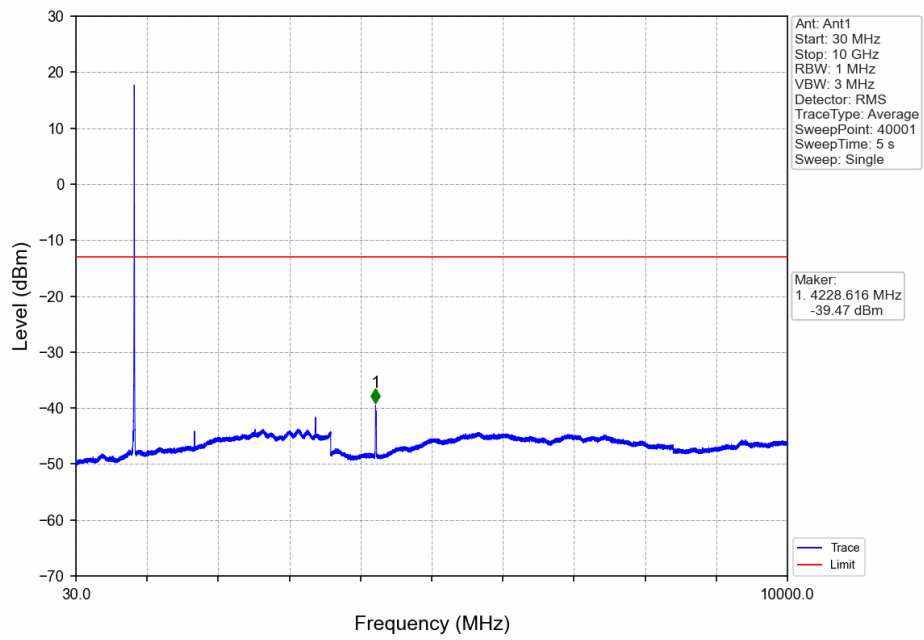
# Band5\_RMC\_MCH\_836.6MHz\_12.2kbps RMC\_NTNV



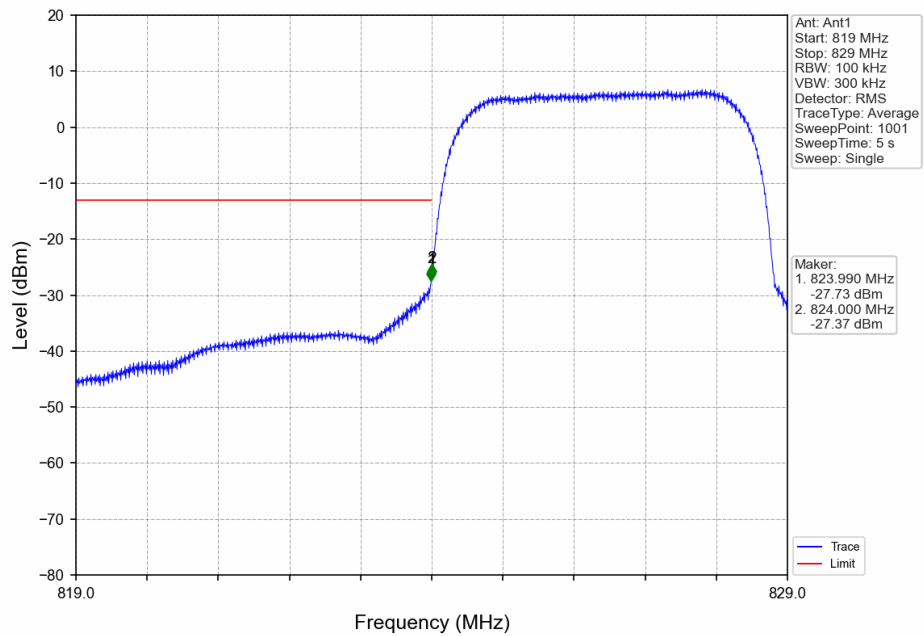
# Band5\_RMC\_HCH\_846.6MHz\_12.2kbps RMC\_NTNV



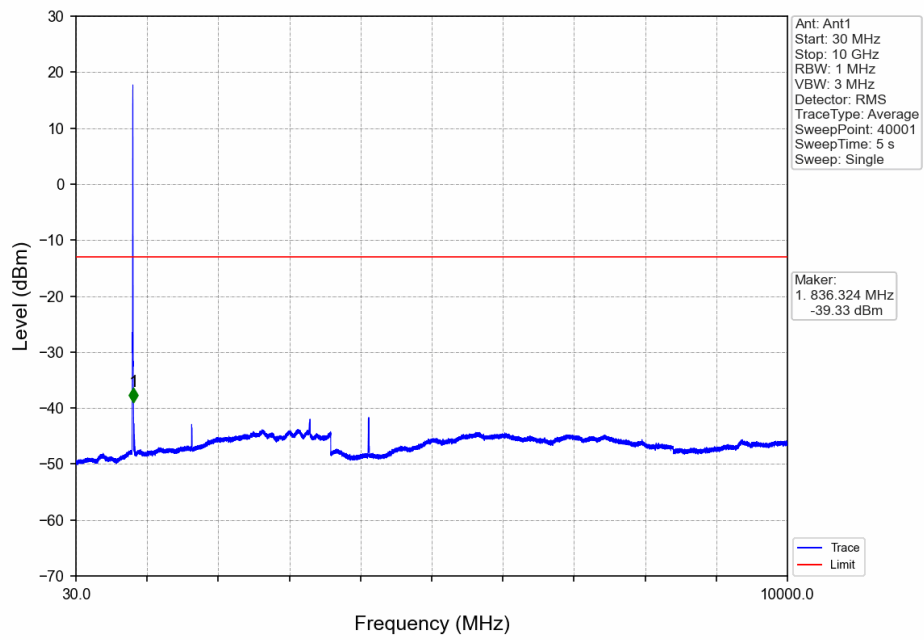
# Band5\_RMC\_HCH\_846.6MHz\_12.2kbps RMC\_NTNV



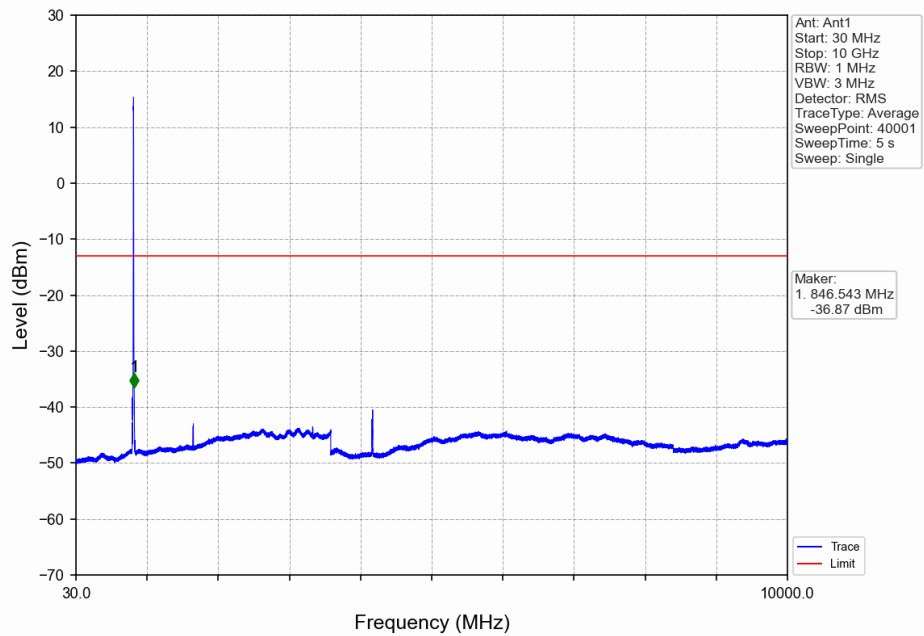
# Band5\_HSDPA\_LCH\_826.4MHz\_Subtest 1\_NTNV



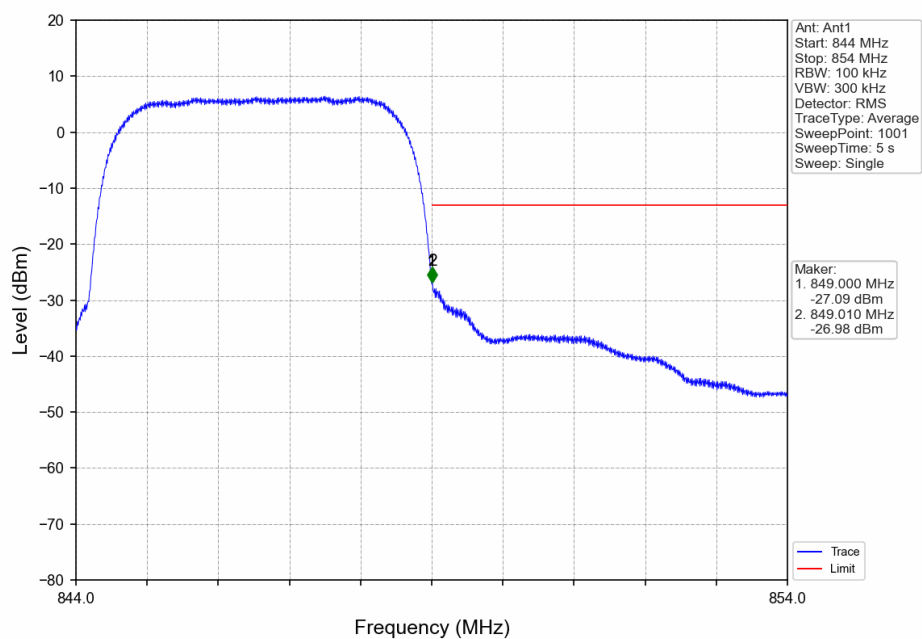
# Band5\_HSDPA\_LCH\_826.4MHz\_Subtest 1\_NTNV



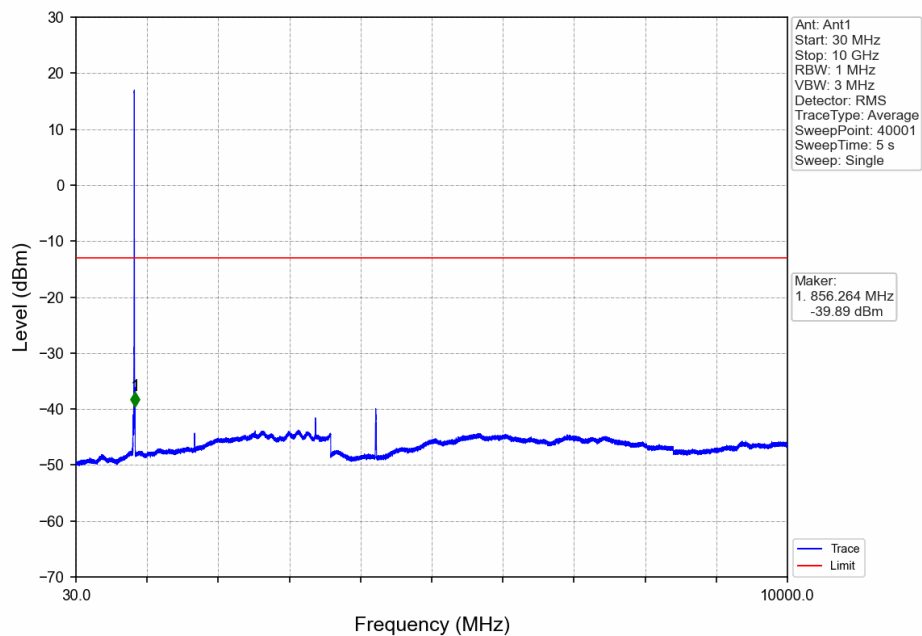
# Band5\_HSDPA\_MCH\_836.6MHz\_Subtest 1\_NTNV



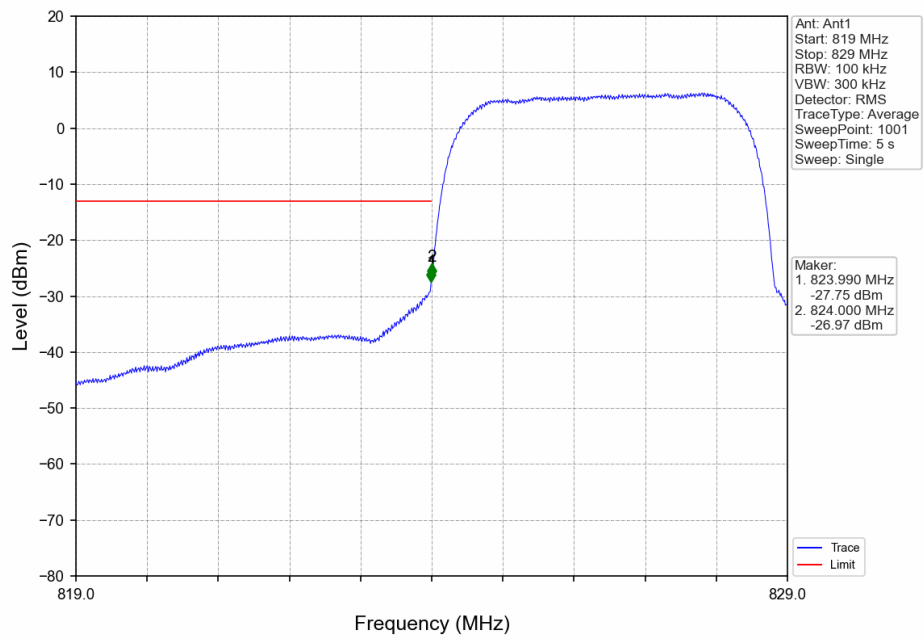
# Band5\_HSDPA\_HCH\_846.6MHz\_Subtest 1\_NTNV



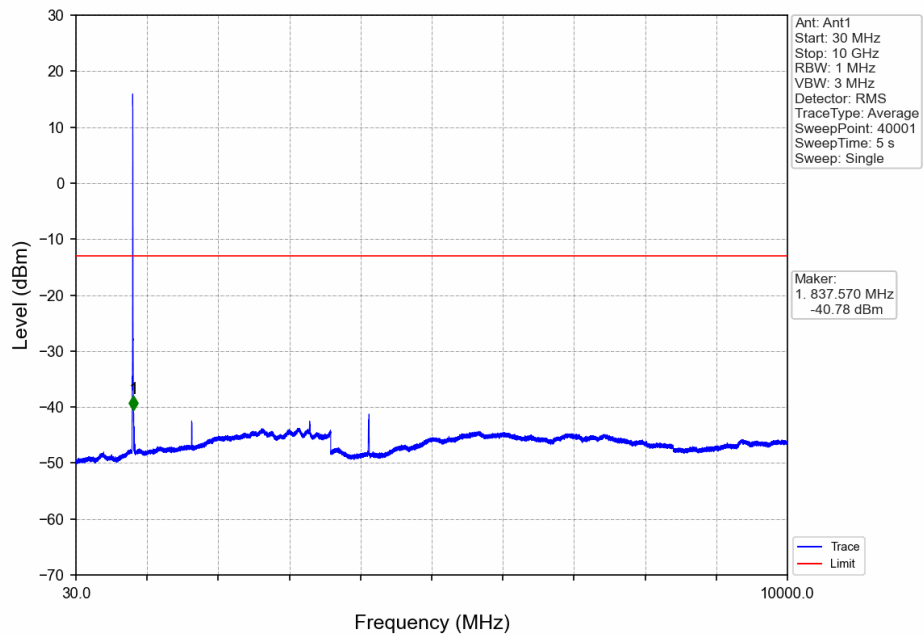
# Band5\_HSDPA\_HCH\_846.6MHz\_Subtest 1\_NTNV



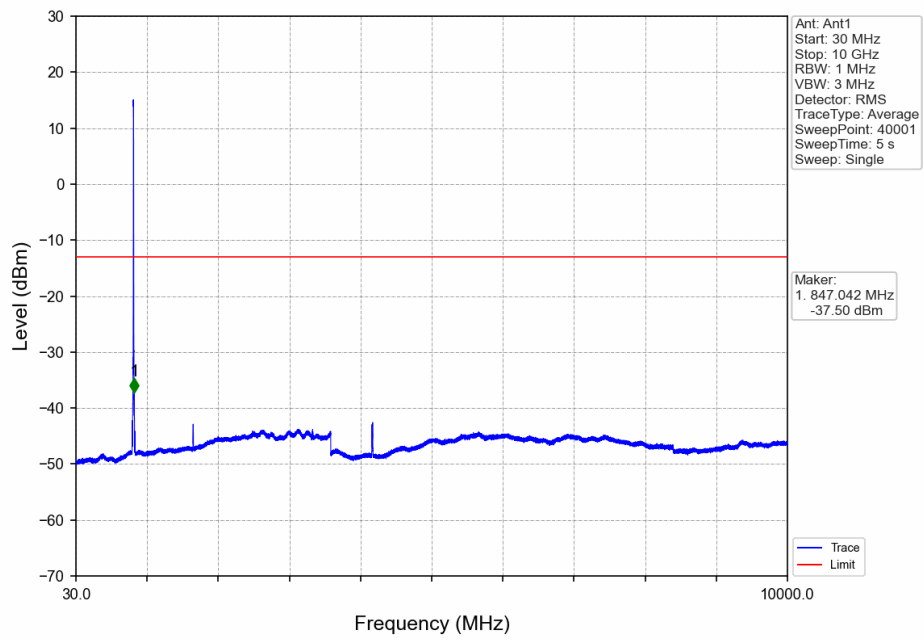
# Band5\_HSUPA\_LCH\_826.4MHz\_Subtest 1\_NTNV



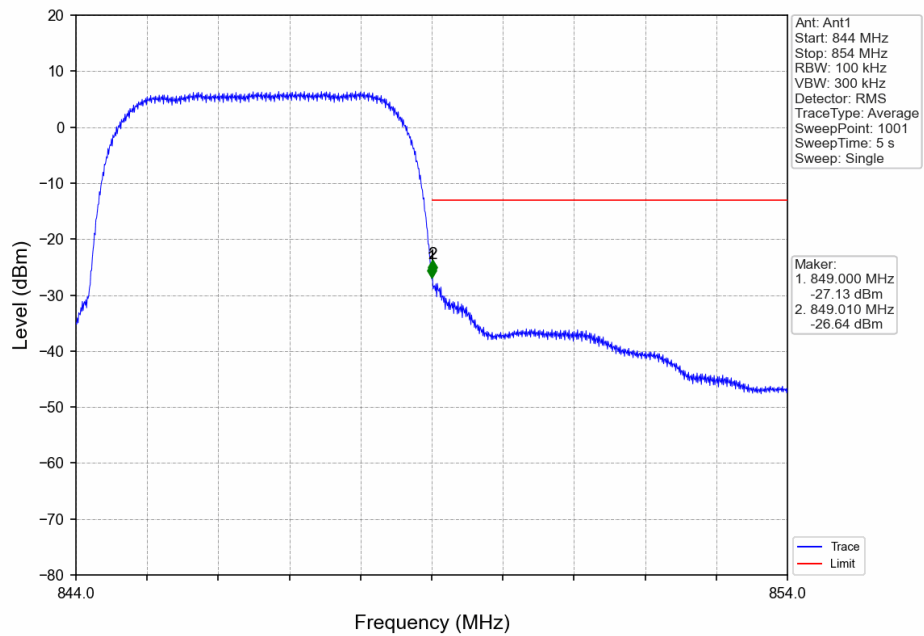
# Band5\_HSUPA\_LCH\_826.4MHz\_Subtest 1\_NTNV



# Band5\_HSUPA\_MCH\_836.6MHz\_Subtest 1\_NTNV



# Band5\_HSUPA\_HCH\_846.6MHz\_Subtest 1\_NTNV



Band5\_HSUPA\_HCH\_846.6MHz\_Subtest 1\_NTNV

