

# Appendix B

## WCDMA Band II & IV & V



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|          |                                 |    |
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# 1. Effective (Isotropic) Radiated Power

## 1.1. Test Result

| Band    | Channel | Conducted Power (dBm) | EIRP (dBm) | Limit(dBm) | Verdict |
|---------|---------|-----------------------|------------|------------|---------|
| Band II | 9262    | 22.98                 | 20.78      | 33.00      | PASS    |
| Band II | 9400    | 23.08                 | 20.88      | 33.00      | PASS    |
| Band II | 9538    | 23.06                 | 20.86      | 33.00      | PASS    |
| Band IV | 1312    | 22.95                 | 20.65      | 30.00      | PASS    |
| Band IV | 1413    | 23.13                 | 20.83      | 30.00      | PASS    |
| Band IV | 1513    | 23.12                 | 20.82      | 30.00      | PASS    |

| Band   | Channel | Conducted Power (dBm) | ERP (dBm) | Limit(dBm) | Verdict |
|--------|---------|-----------------------|-----------|------------|---------|
| Band V | 4132    | 23.11                 | 16.06     | 38.45      | PASS    |
| Band V | 4182    | 23.14                 | 16.09     | 38.45      | PASS    |
| Band V | 4233    | 23.07                 | 16.02     | 38.45      | PASS    |

Remark:

a: For getting the EIRP (Efficient Isotropic Radiated Power), the following formula should be taken to calculate it,

$ERP [dBm] = \text{Conducted Power} [dBm] + \text{Gain} [dBd]$

$EIRP [dBm] = \text{Conducted Power} [dBm] + \text{Gain} [dBi]$



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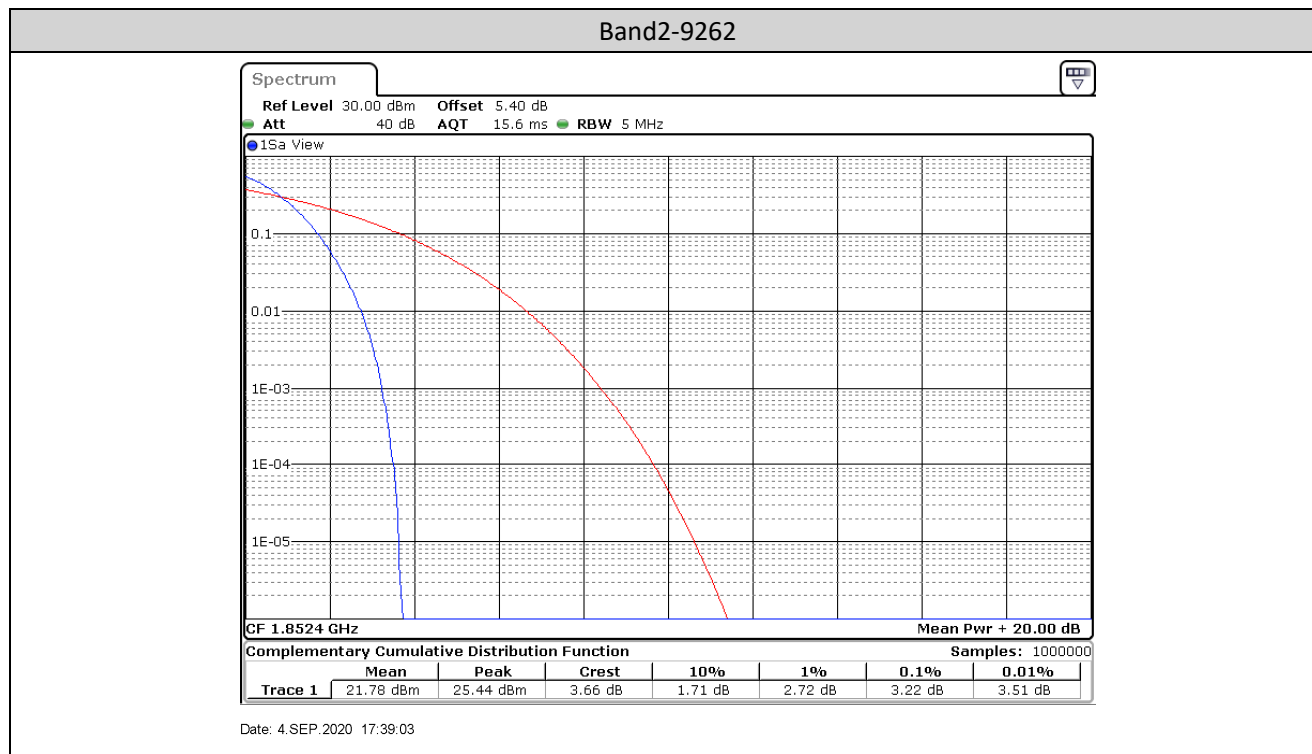
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## 2. Peak-to-Average Ratio(CCDF)

### 2.1. Test Result

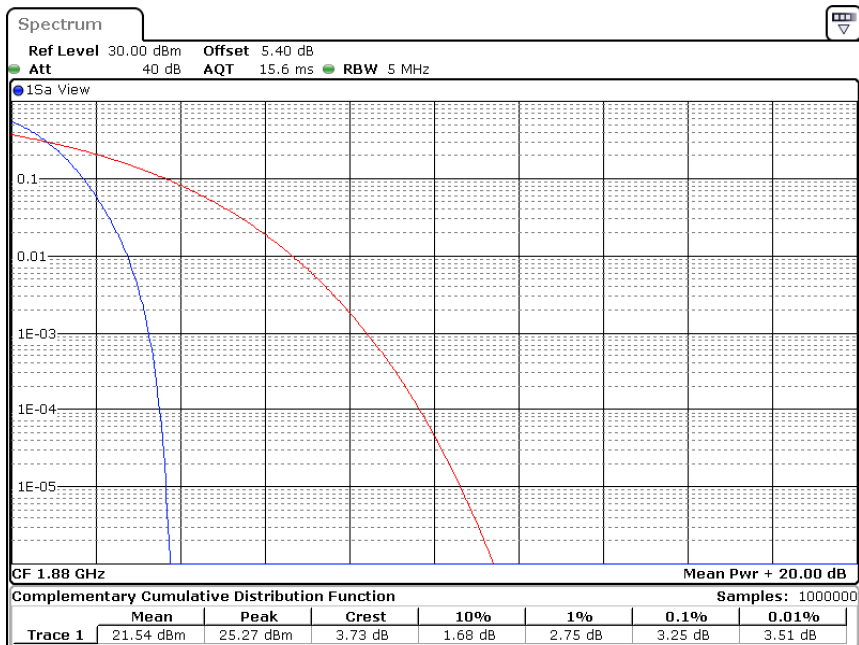
| Band  | Channel | Peak-to-Average Ratio(dB) | Limit(dBm) | Verdict |
|-------|---------|---------------------------|------------|---------|
| Band2 | 9262    | 3.22                      | 13         | PASS    |
| Band2 | 9400    | 3.25                      | 13         | PASS    |
| Band2 | 9538    | 3.28                      | 13         | PASS    |
| Band4 | 1312    | 3.22                      | 13         | PASS    |
| Band4 | 1413    | 3.19                      | 13         | PASS    |
| Band4 | 1513    | 3.25                      | 13         | PASS    |
| Band5 | 4132    | 3.13                      | 13         | PASS    |
| Band5 | 4182    | 3.19                      | 13         | PASS    |
| Band5 | 4233    | 3.16                      | 13         | PASS    |

### 2.2. Test Plots



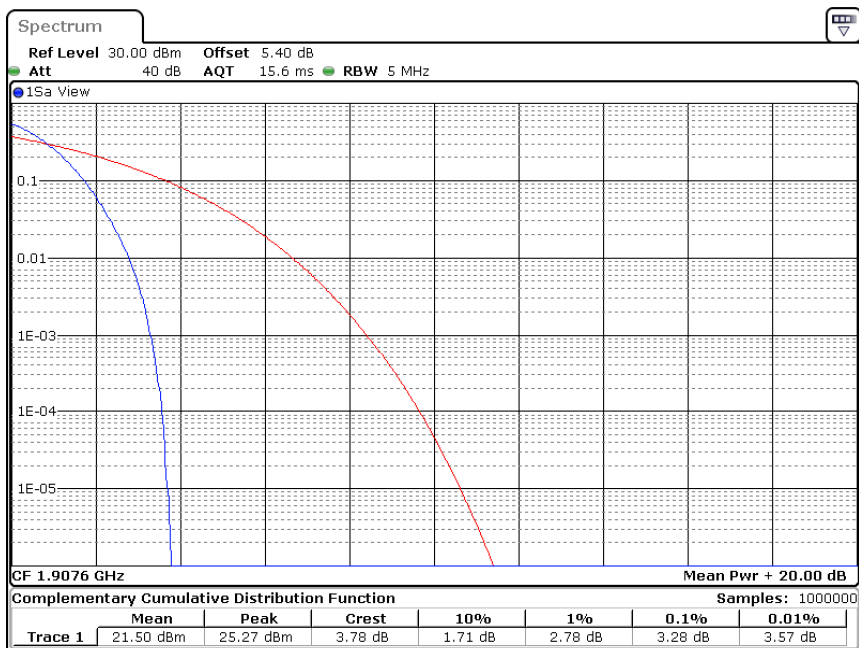


## Band2-9400



Date: 4.SEP.2020 17:39:16

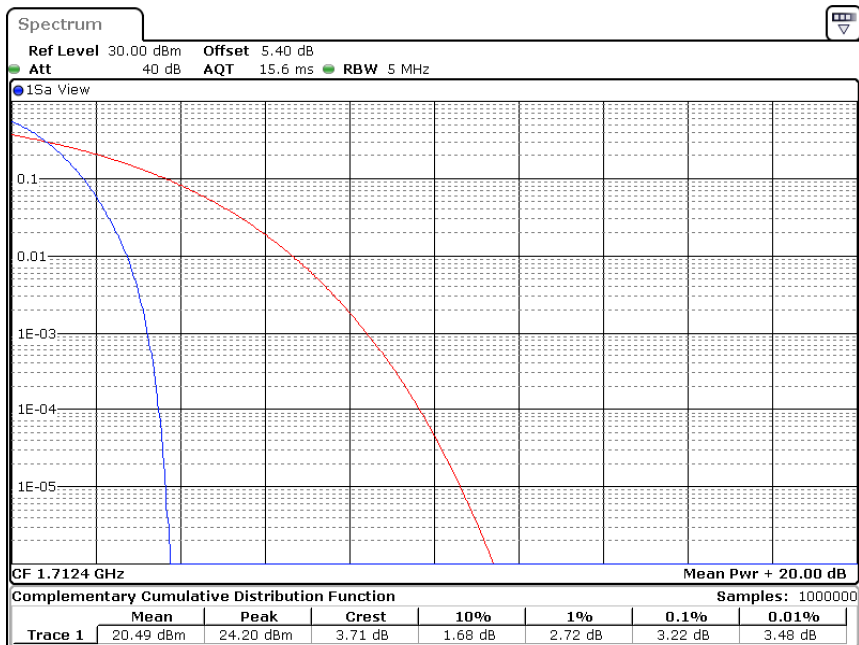
## Band2-9538



Date: 4.SEP.2020 17:39:29

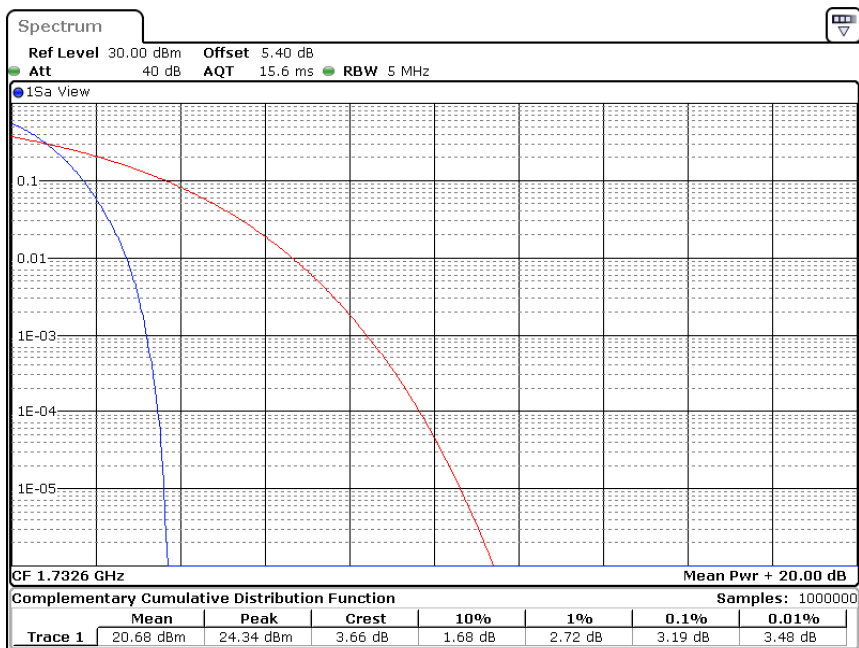


## Band4-1312



Date: 4.SEP.2020 17:56:59

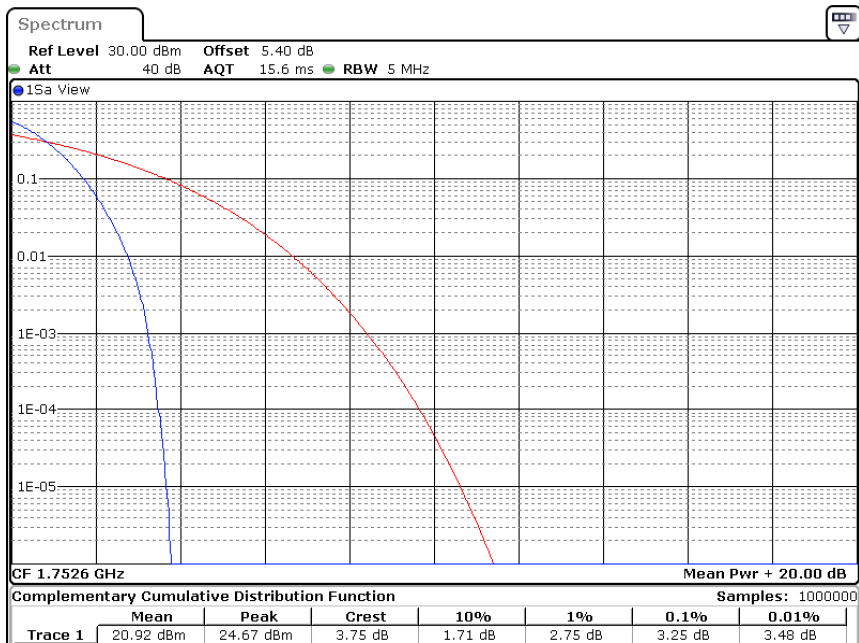
## Band4-1413



Date: 4.SEP.2020 17:57:12

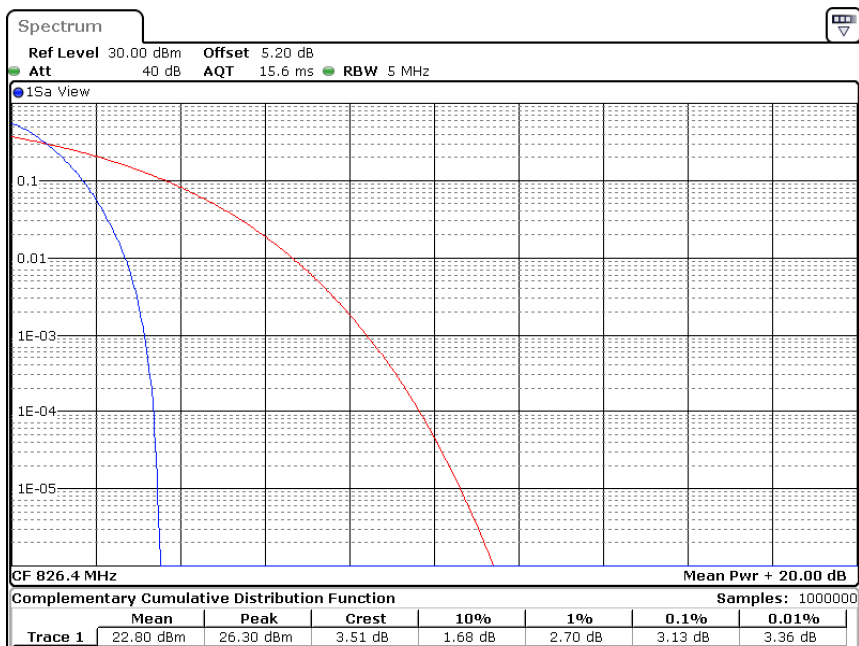


## Band4-1513



Date: 4.SEP.2020 17:57:25

## Band5-4132

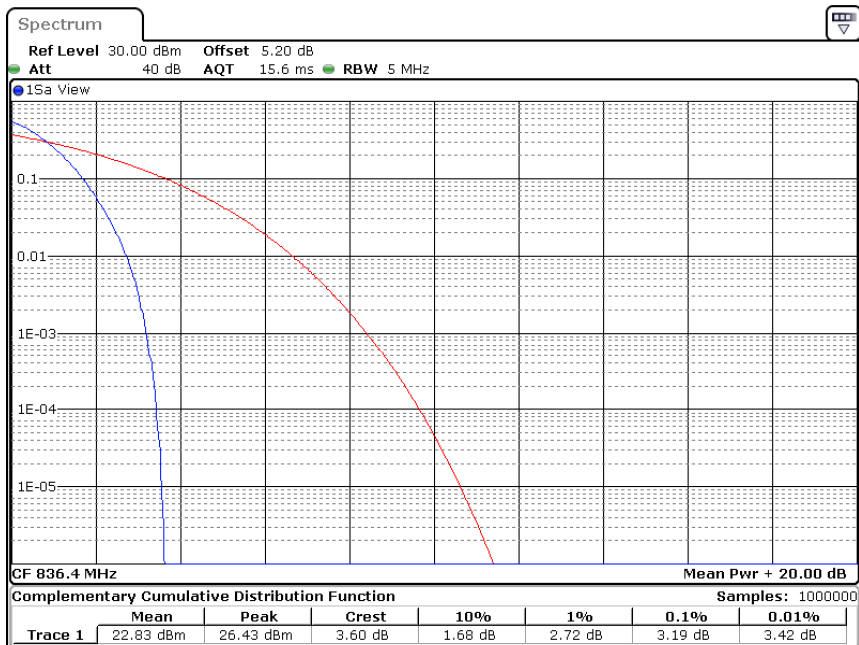


Date: 4.SEP.2020 18:16:15



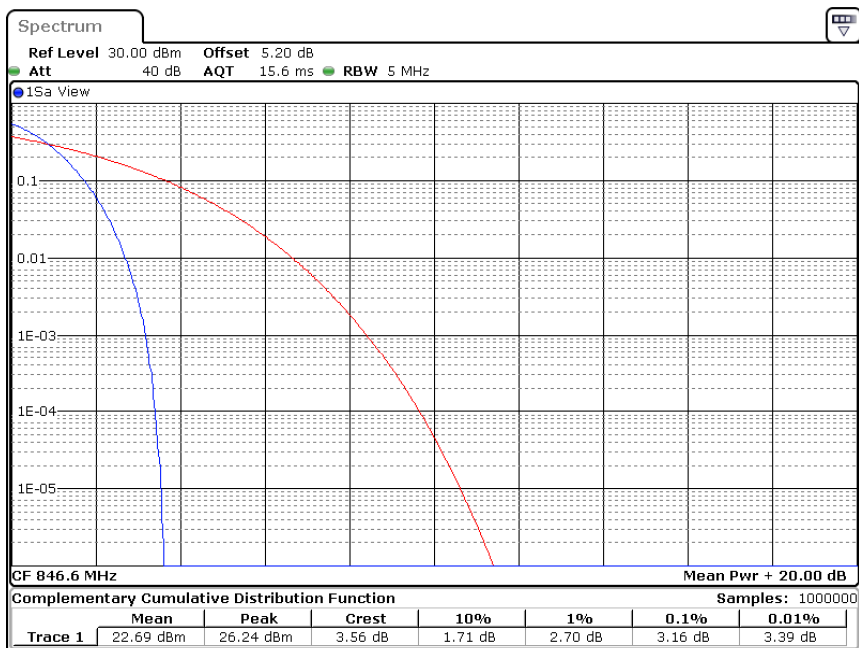


## Band5-4182



Date: 4.SEP.2020 18:16:28

## Band5-4233



Date: 4.SEP.2020 18:19:40

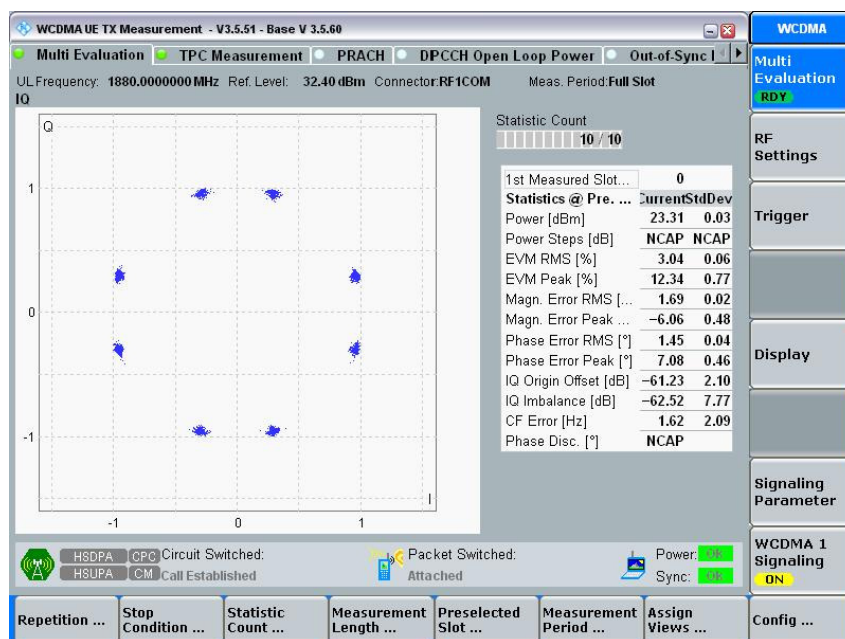


### 3. Modulation Characteristics

#### 3.1. Test Band = WCDMA Band II

##### 3.1.1. Test Mode = UMTS/TM1

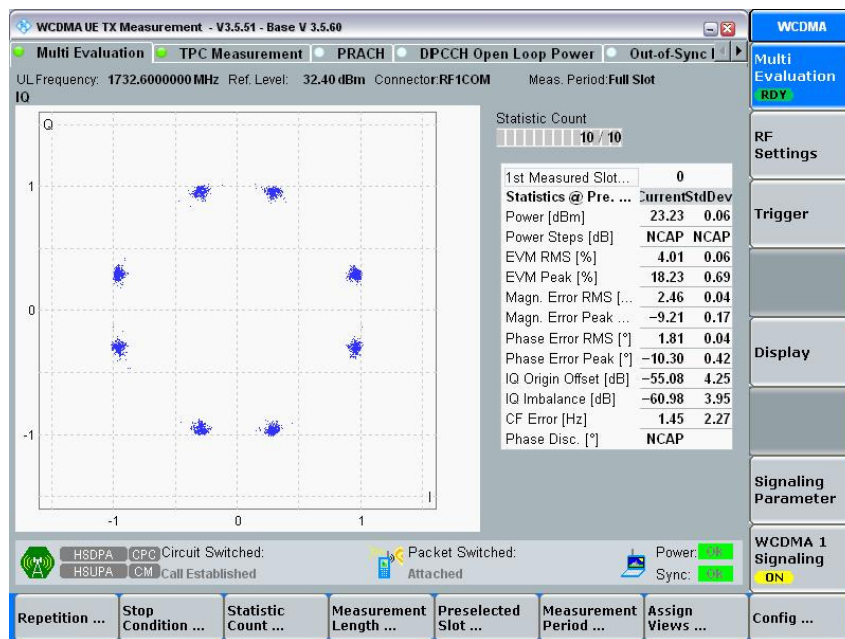
##### 3.1.1.1. Test Channel = MCH



### 3.2. Test Band = WCDMA Band IV

#### 3.2.1. Test Mode = UMTS/TM1

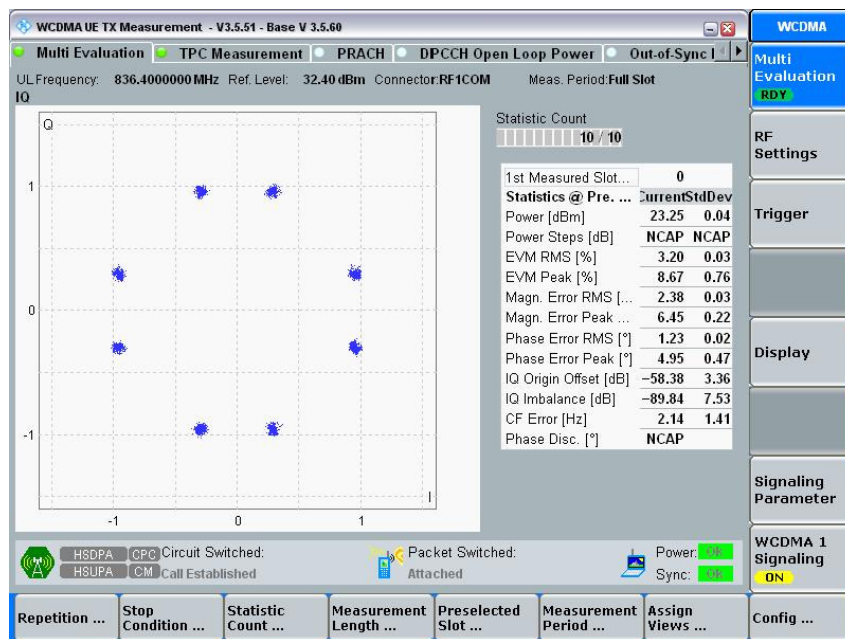
##### 3.2.1.1. Test Channel = MCH



### 3.3. Test Band = WCDMA Band V

#### 3.3.1. Test Mode = UMTS/TM1

##### 3.3.1.1. Test Channel = MCH



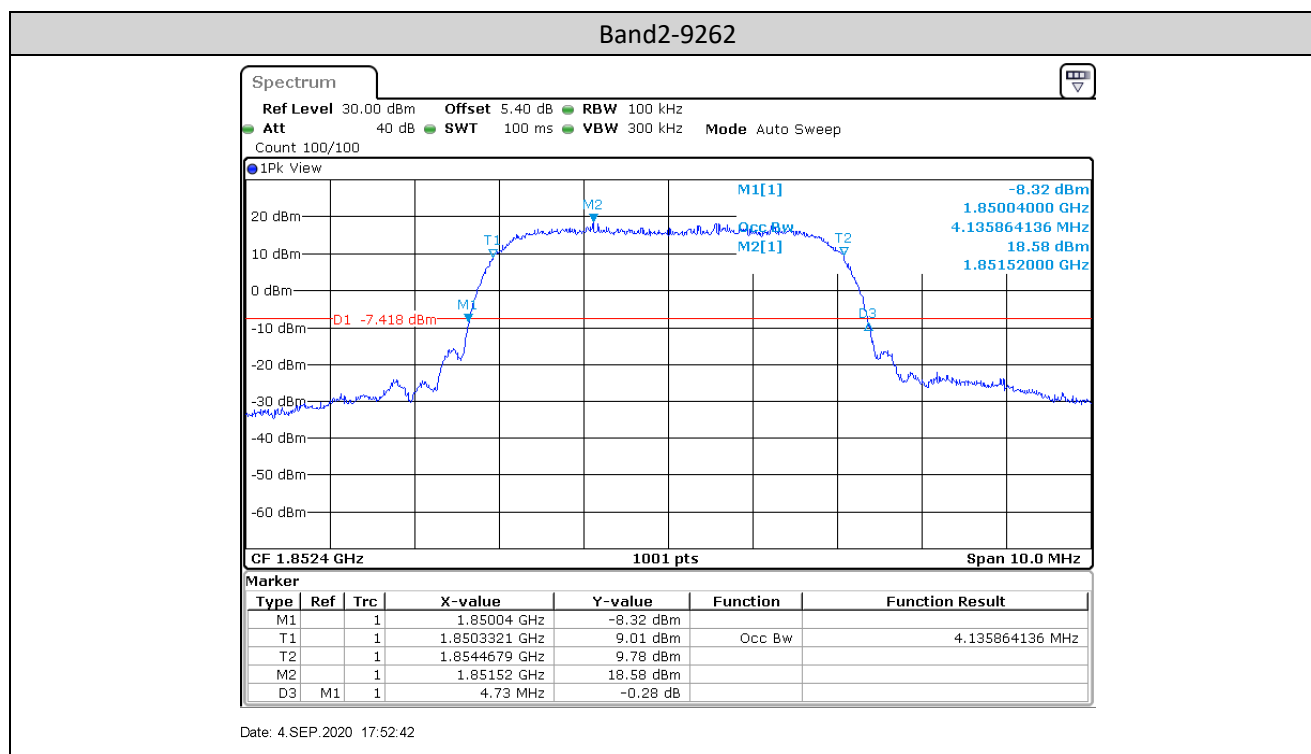


## 4. 26dB Bandwidth and Occupied Bandwidth

### 4.1. Test Result

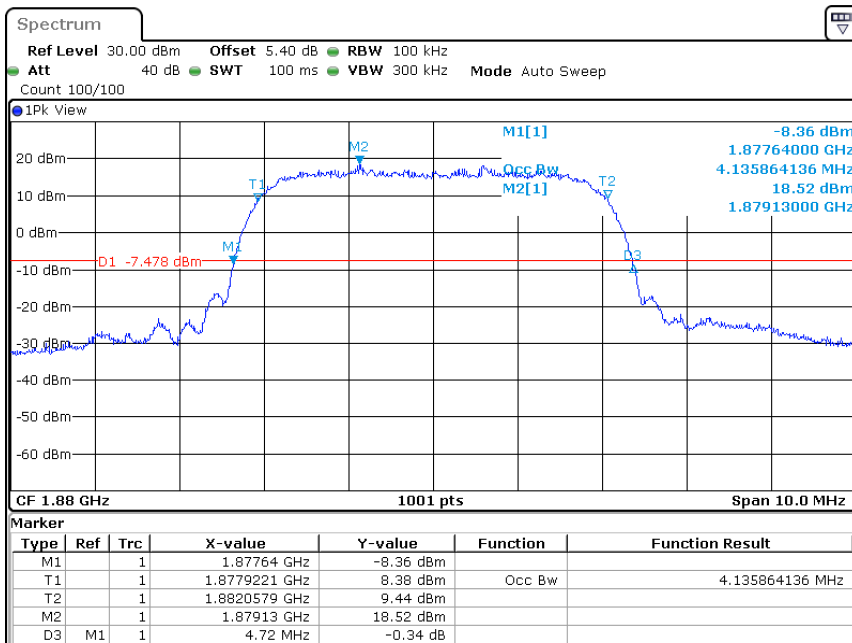
| Band  | Channel | Occupied Bandwidth (kHz) | 26dB Bandwidth (kHz) | Limit(kHz) | Verdict |
|-------|---------|--------------------------|----------------------|------------|---------|
| Band2 | 9262    | 4.136                    | 4.730                | ---        | PASS    |
| Band2 | 9400    | 4.136                    | 4.720                | ---        | PASS    |
| Band2 | 9538    | 4.136                    | 4.710                | ---        | PASS    |
| Band4 | 1312    | 4.126                    | 4.710                | ---        | PASS    |
| Band4 | 1413    | 4.116                    | 4.710                | ---        | PASS    |
| Band4 | 1513    | 4.116                    | 4.710                | ---        | PASS    |
| Band5 | 4132    | 4.116                    | 4.720                | ---        | PASS    |
| Band5 | 4182    | 4.136                    | 4.730                | ---        | PASS    |
| Band5 | 4233    | 4.136                    | 4.720                | ---        | PASS    |

### 4.2. Test Plots



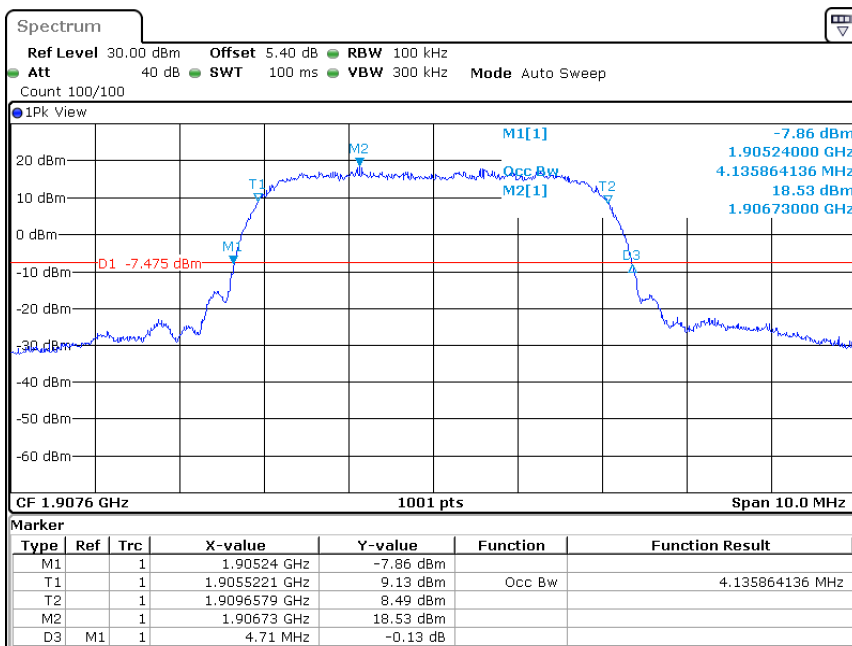


## Band2-9400



Date: 4.SEP.2020 17:53:05

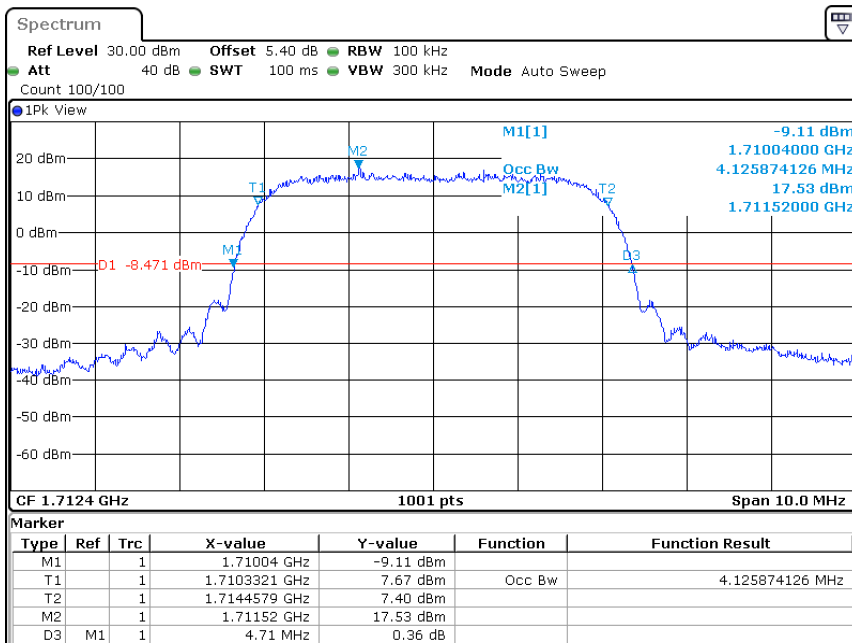
## Band2-9538



Date: 4.SEP.2020 17:53:27

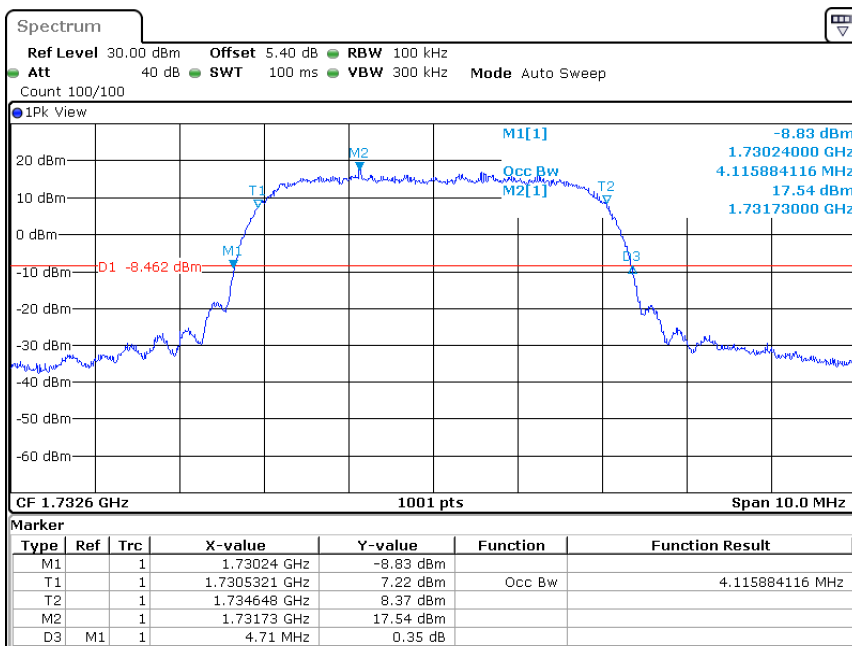


## Band4-1312



Date: 4.SEP.2020 18:10:48

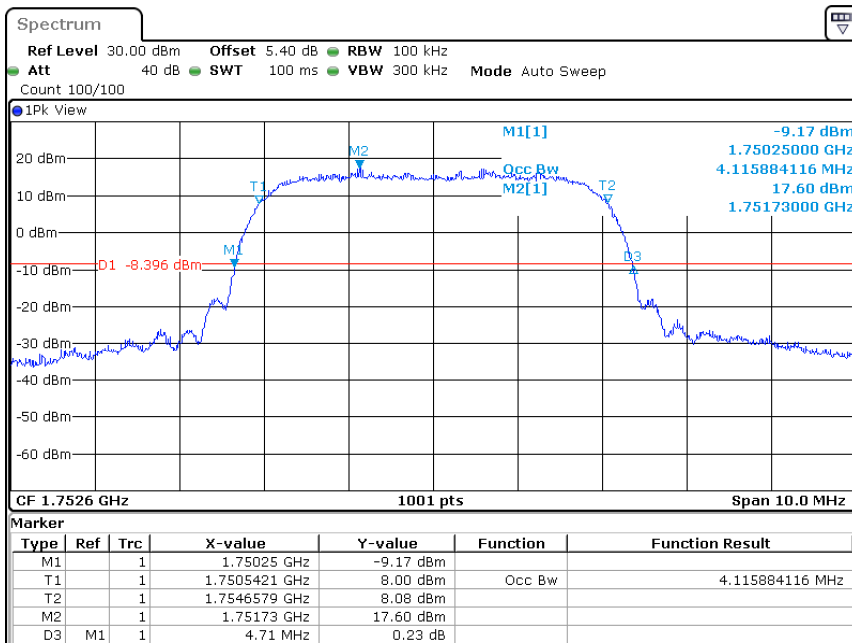
## Band4-1413



Date: 4.SEP.2020 18:11:10

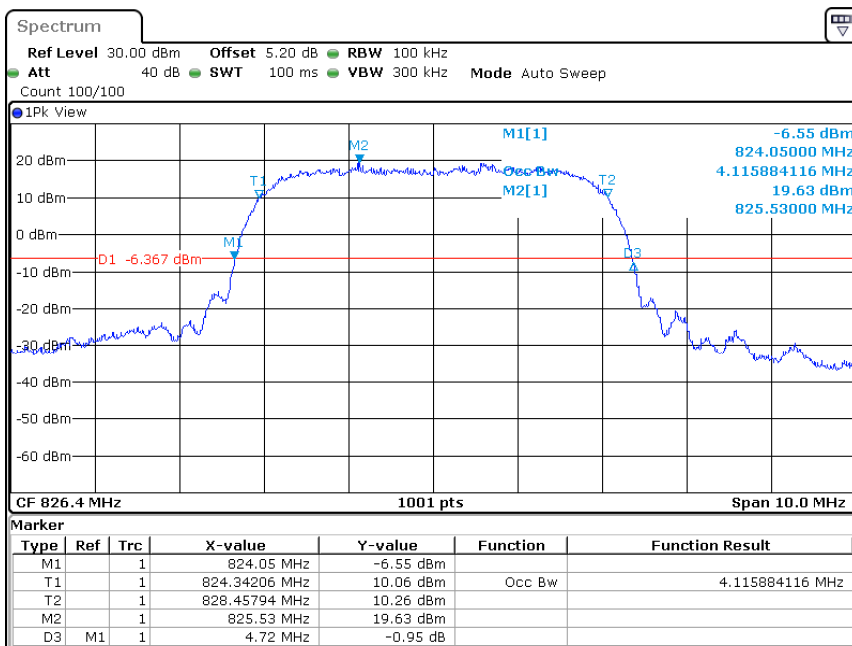


## Band4-1513



Date: 4.SEP.2020 18:11:32

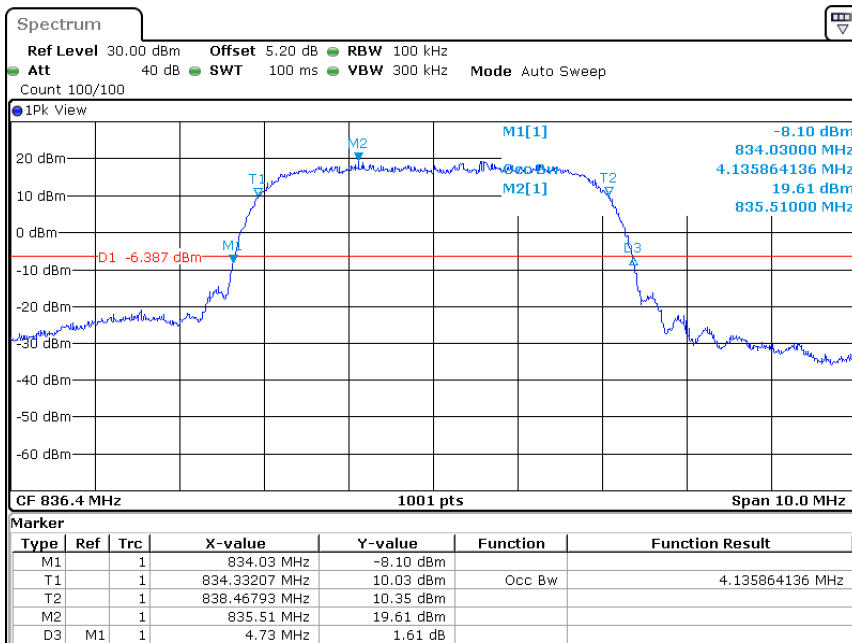
## Band5-4132



Date: 4.SEP.2020 18:33:17

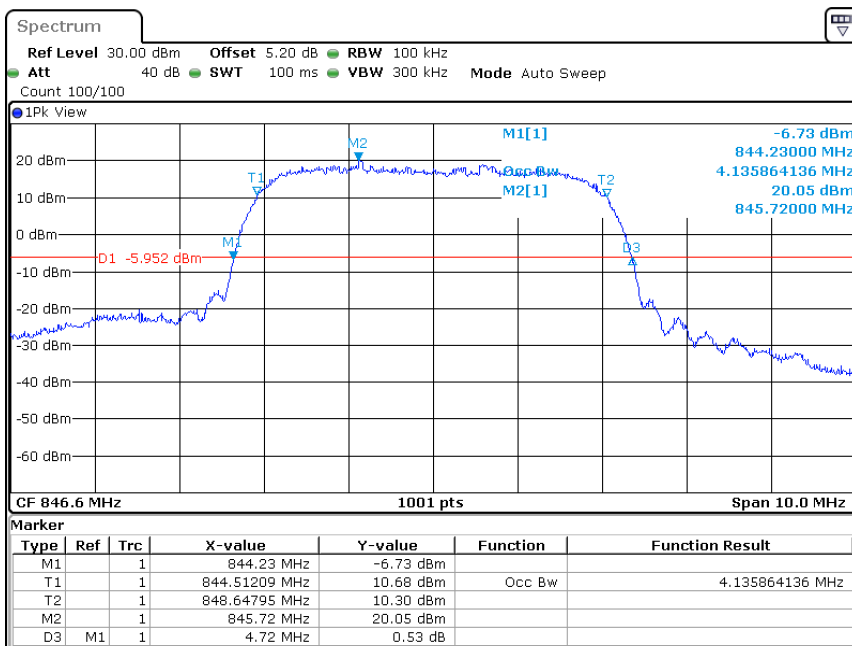


## Band5-4182



Date: 4.SEP.2020 18:33:39

## Band5-4233



Date: 4.SEP.2020 18:34:02



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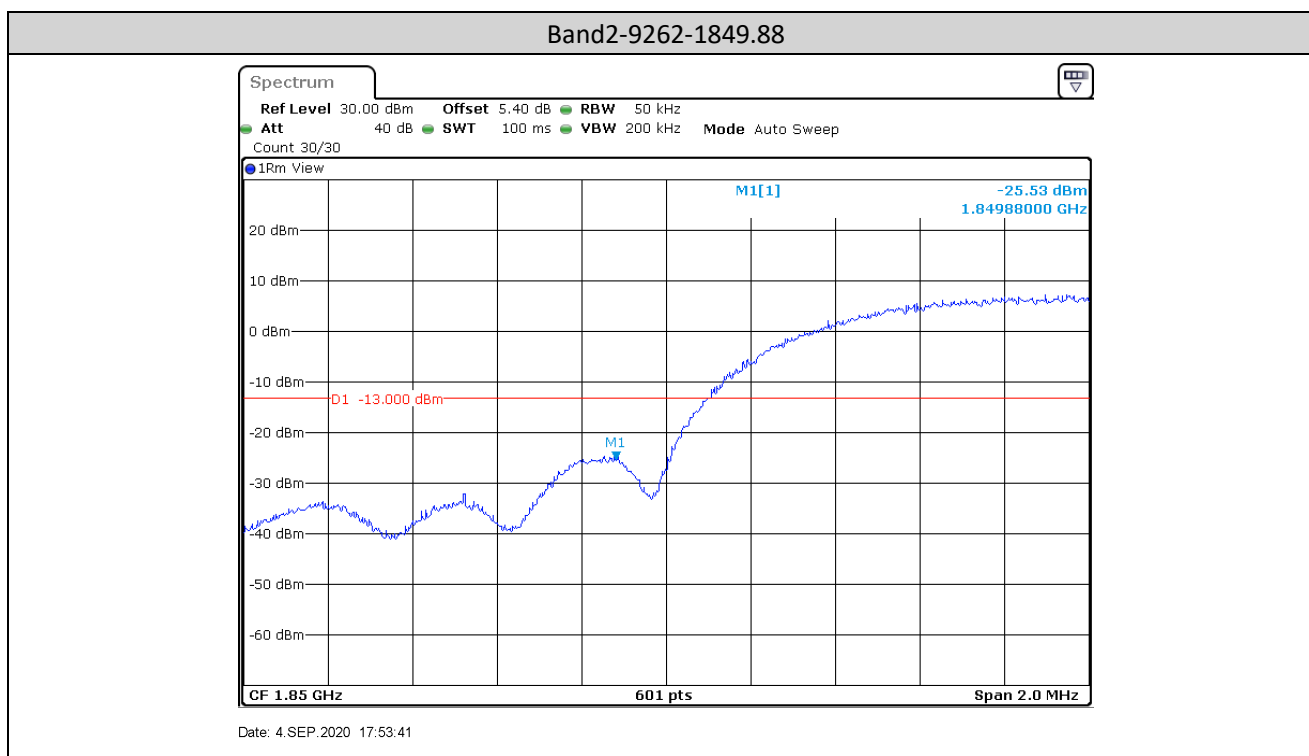
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## 5. Band Edge Compliance

### 5.1. Test Result

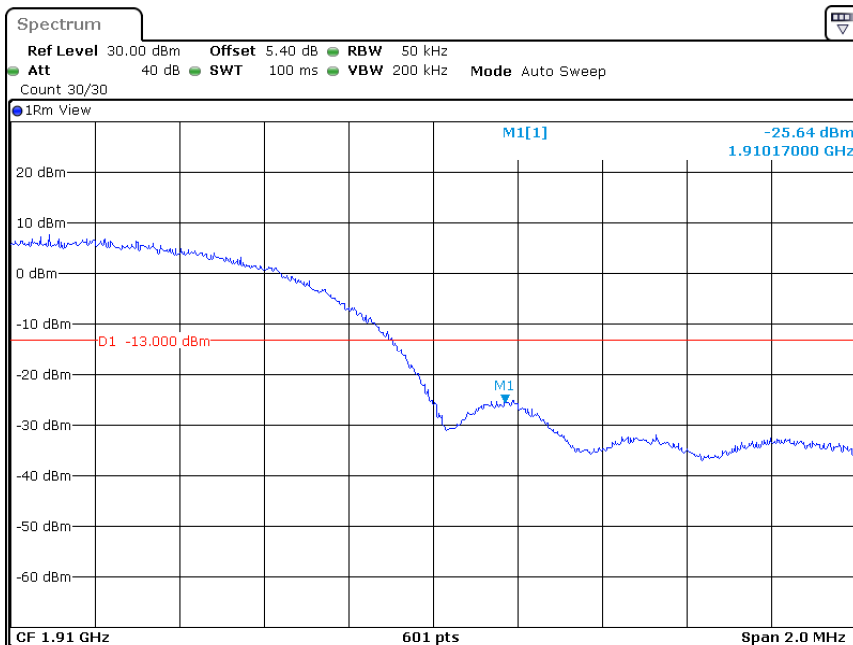
| Band  | Channel | Frequency (MHz) | Result (dBm) | Limit(dBm) | Verdict |
|-------|---------|-----------------|--------------|------------|---------|
| Band2 | 9262    | 1849.88         | -24.46       | -13        | PASS    |
| Band2 | 9538    | 1910.17         | -24.79       | -13        | PASS    |
| Band4 | 1312    | 1709.86         | -26.93       | -13        | PASS    |
| Band4 | 1513    | 1755.15         | -26.65       | -13        | PASS    |
| Band5 | 4132    | 823.85          | -24.23       | -13        | PASS    |
| Band5 | 4233    | 849.00          | -24.25       | -13        | PASS    |

### 5.2. Test Plots



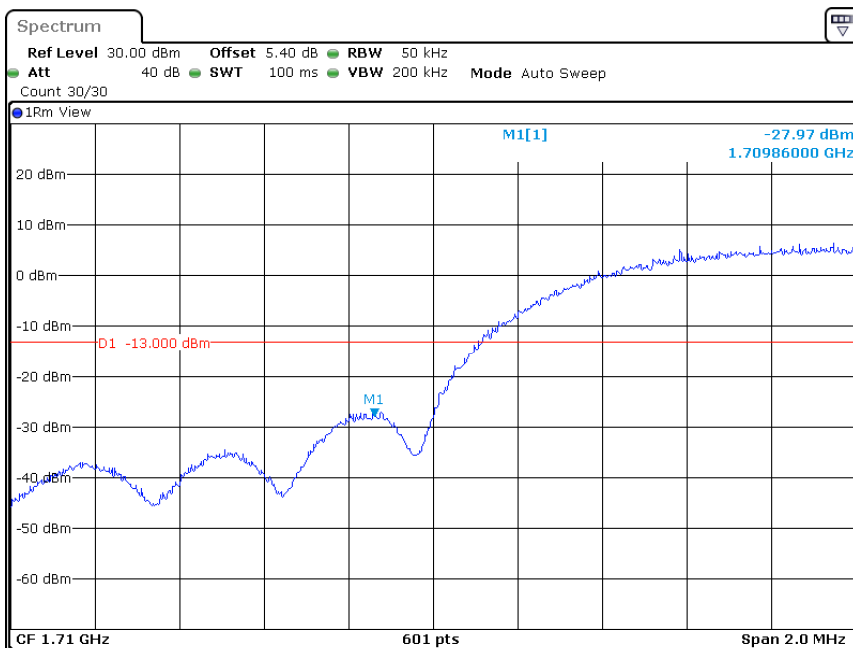


## Band2-9538-1910.17



Date: 4.SEP.2020 17:53:55

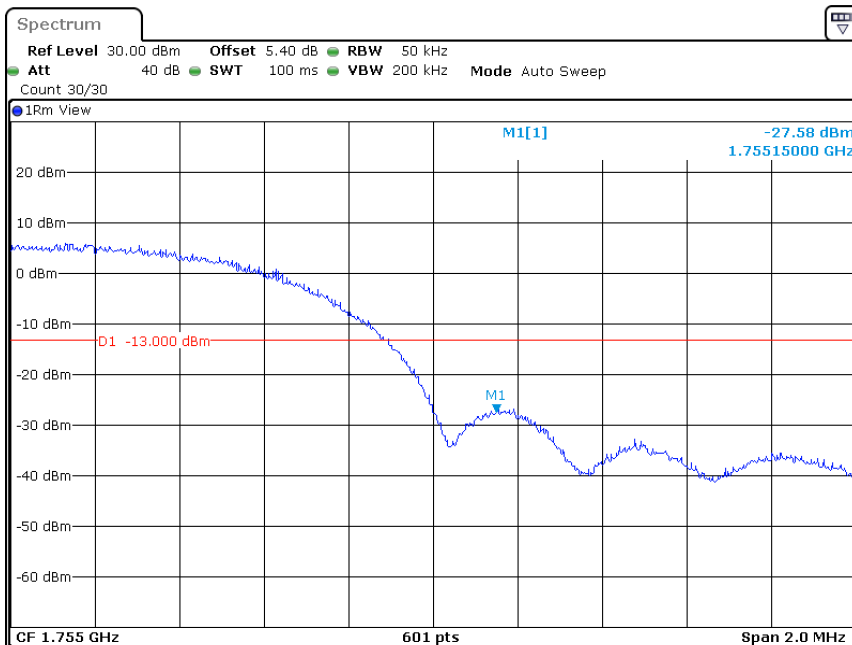
## Band4-1312-1709.86



Date: 4.SEP.2020 18:11:46

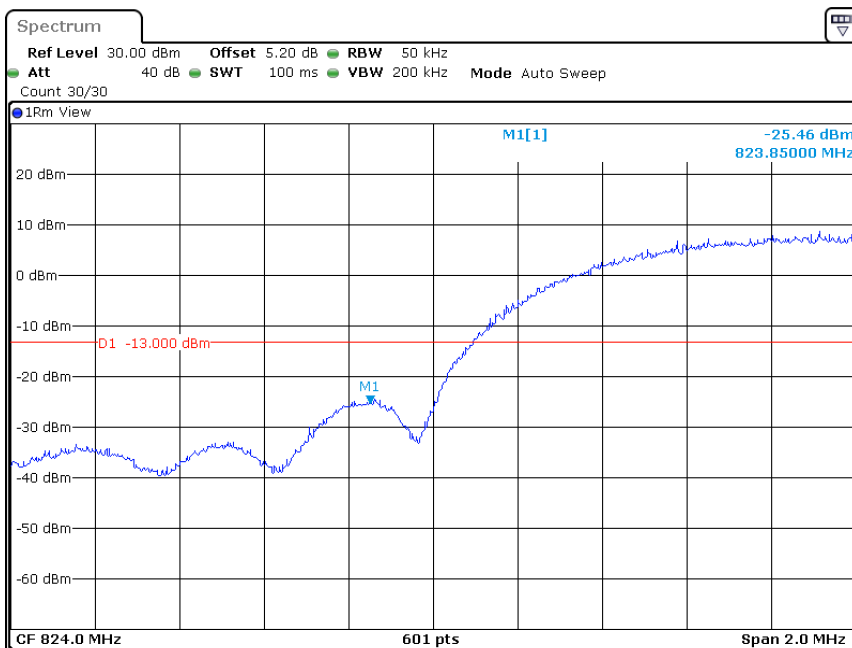


## Band4-1513-1755.15



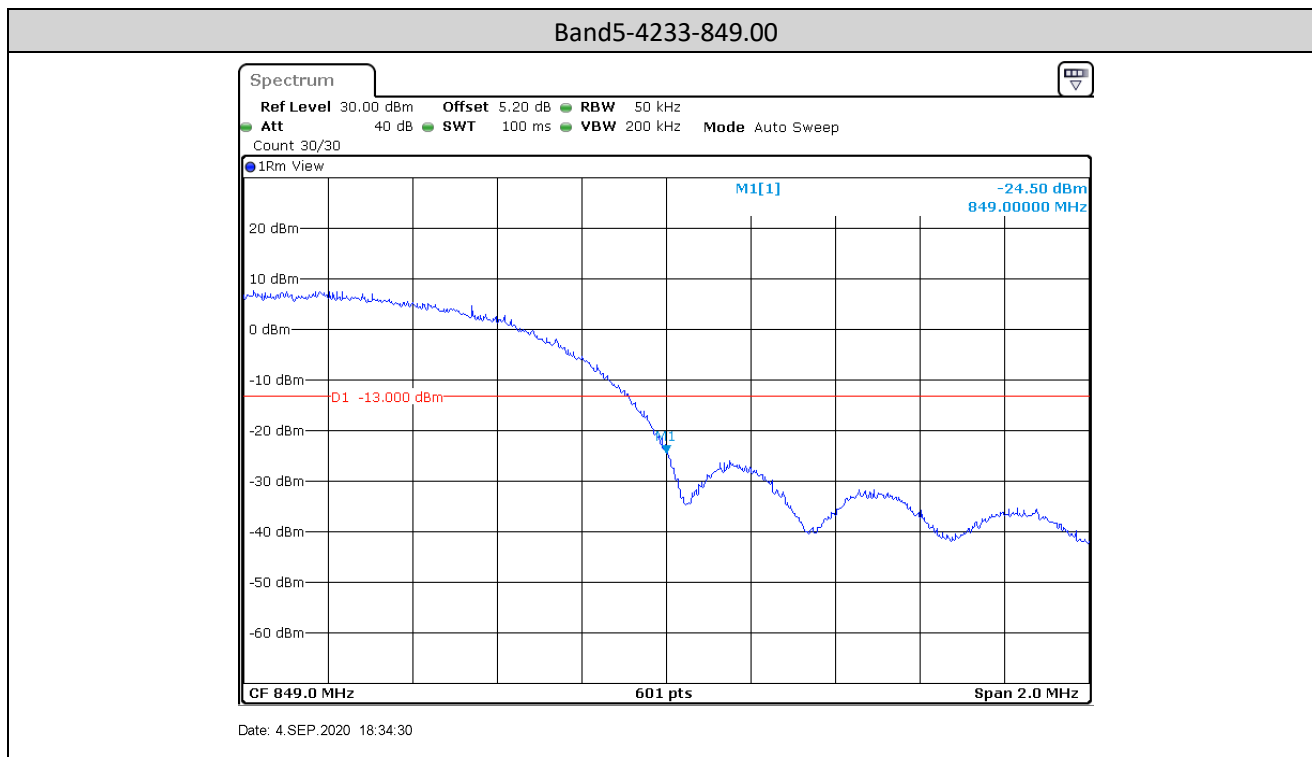
Date: 4.SEP.2020 18:12:00

## Band5-4132-823.85



Date: 4.SEP.2020 18:34:16





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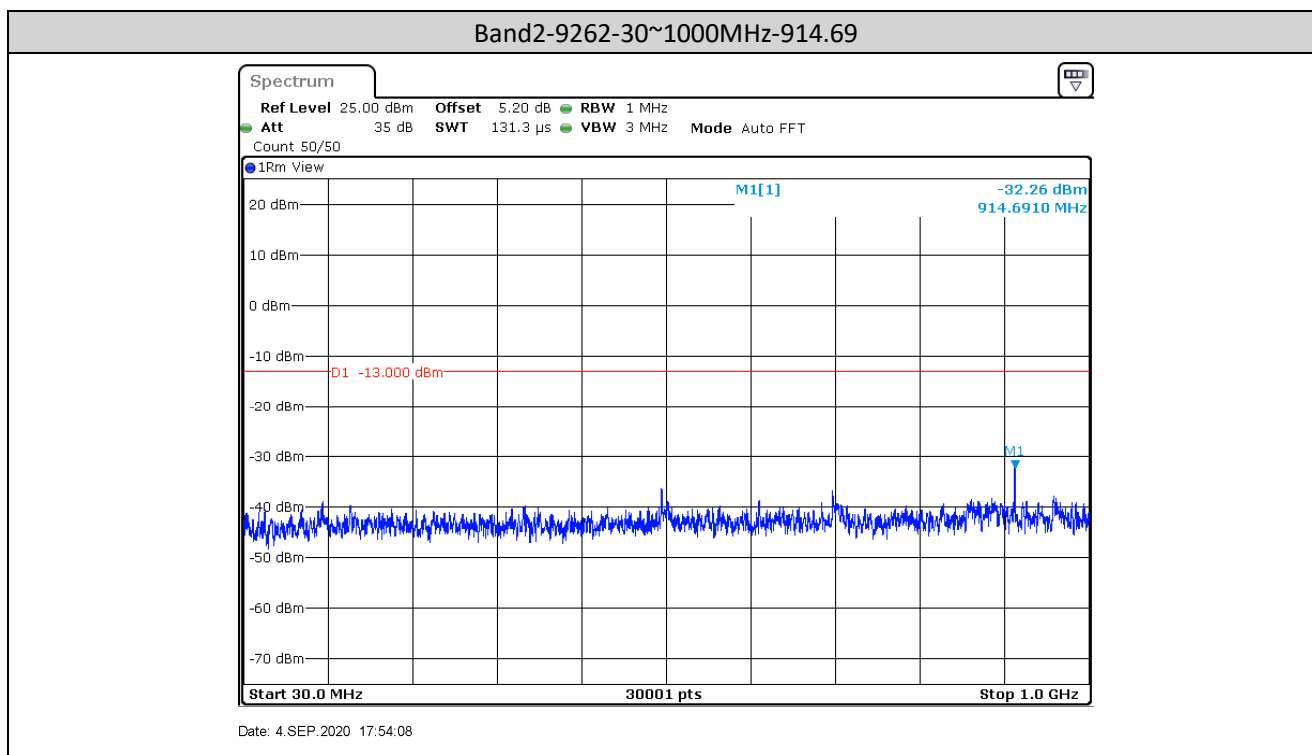
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## 6. Spurious Emission at Antenna Terminal

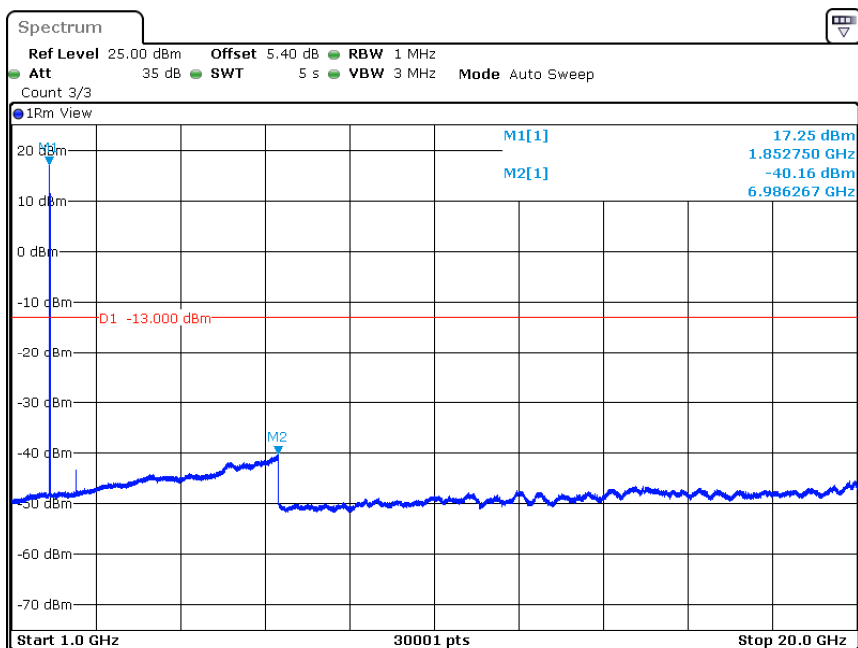
Remark1: For the averaged unwanted emissions measurements, the measurement points in each sweep is greater than twice the Span/RBW in order to ensure bin-to-bin spacing of  $< RBW/2$  so that narrowband signals are not lost between frequency bins. As to the present test item, the "Measurement Points =  $k * (\text{Span} / RBW)$ " with  $k$  between 4 and 5, which results in an acceptable level error of less than 0.5 dB.

Remark2: only the worst case data displayed in this report.

### 6.1. Test Plots

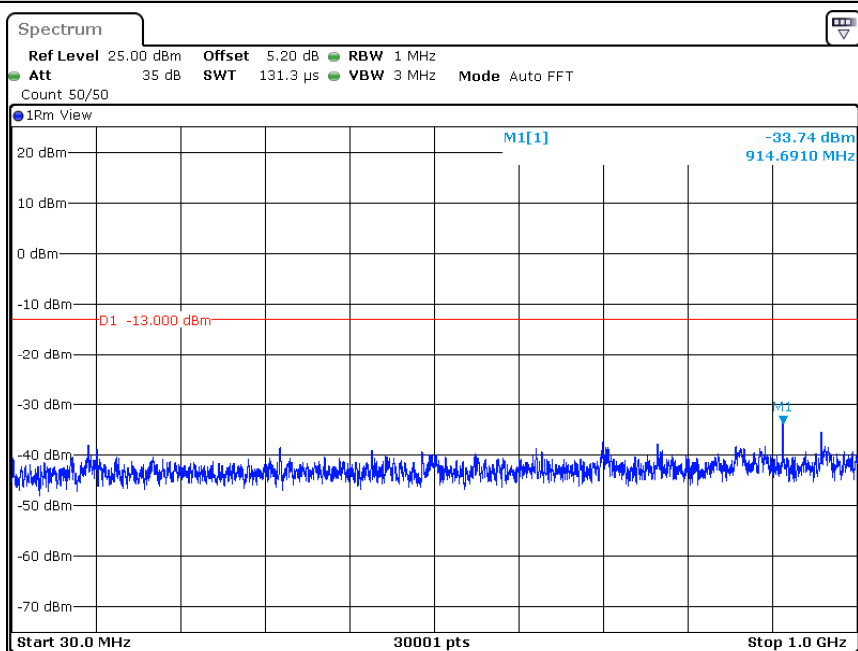


## Band2-9262-1000~20000MHz-6986.27



Date: 4.SEP.2020 17:54:32

## Band2-9400-30~1000MHz-914.69

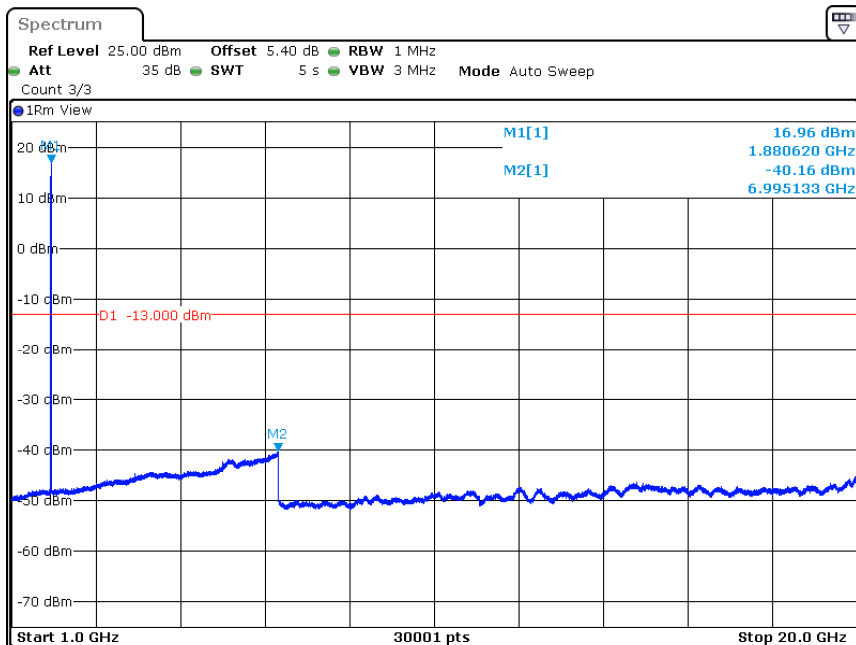


Date: 4.SEP.2020 17:54:45



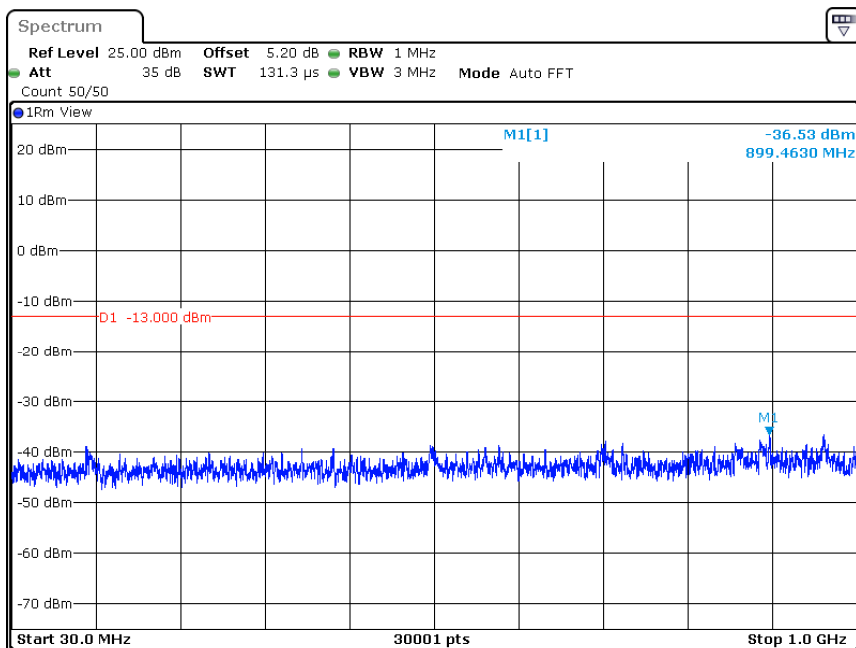


## Band2-9400-1000~20000MHz-6995.13



Date: 4.SEP.2020 17:55:09

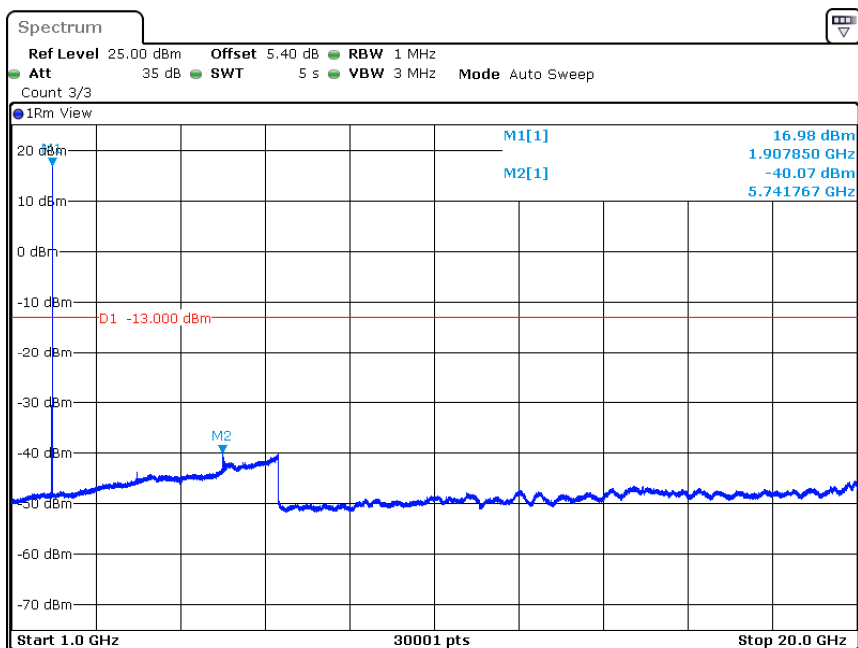
## Band2-9538-30~1000MHz-899.46



Date: 4.SEP.2020 17:55:21

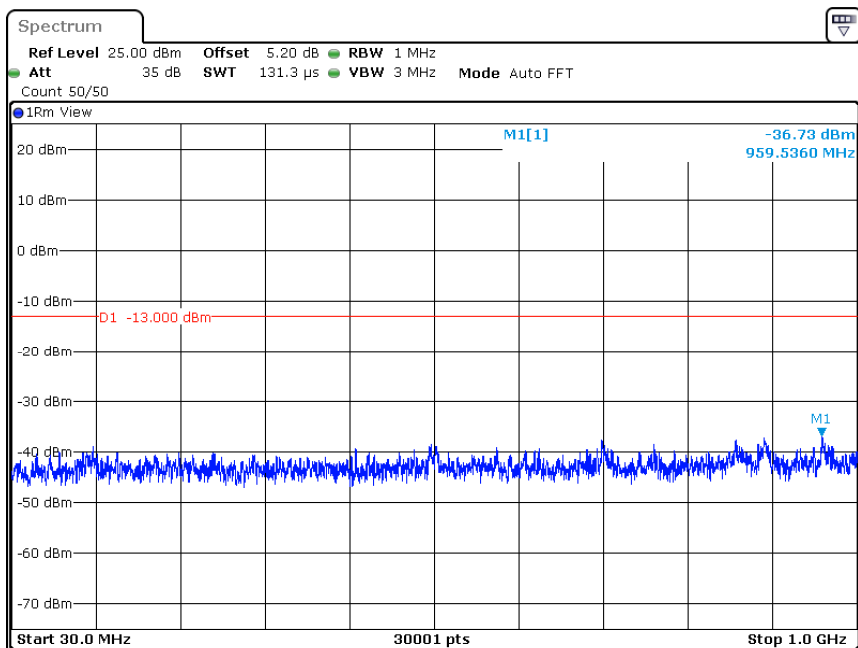


## Band2-9538-1000~20000MHz-5741.77



Date: 4.SEP.2020 17:55:45

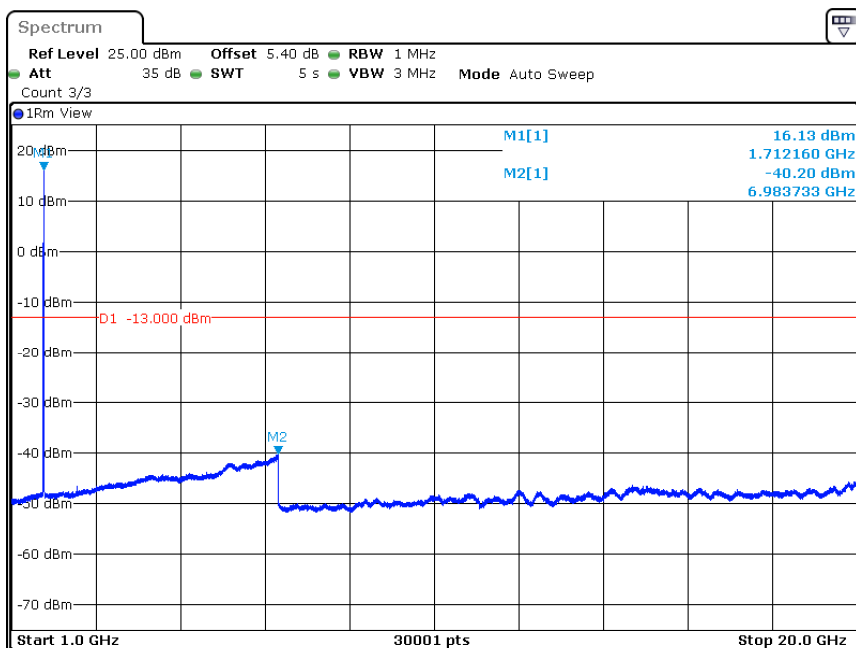
## Band4-1312-30~1000MHz-959.54



Date: 4.SEP.2020 18:12:14

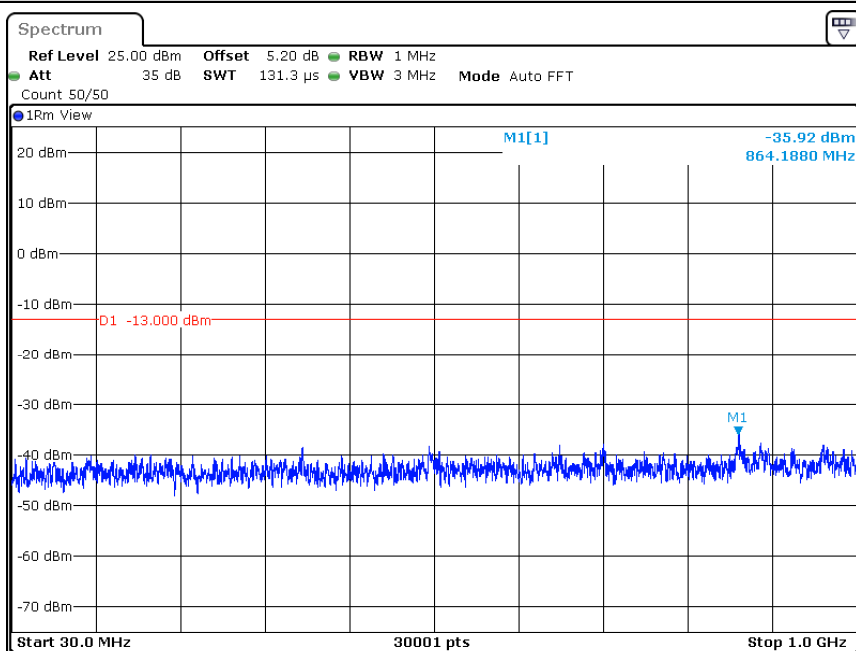


## Band4-1312-1000~20000MHz-6983.73



Date: 4.SEP.2020 18:12:37

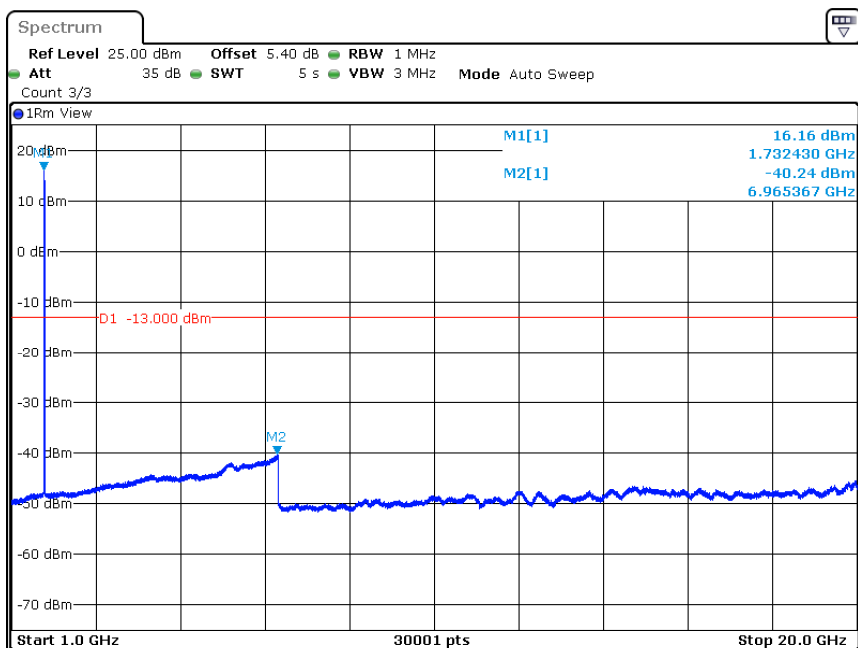
## Band4-1413-30~1000MHz-864.19



Date: 4.SEP.2020 18:12:50

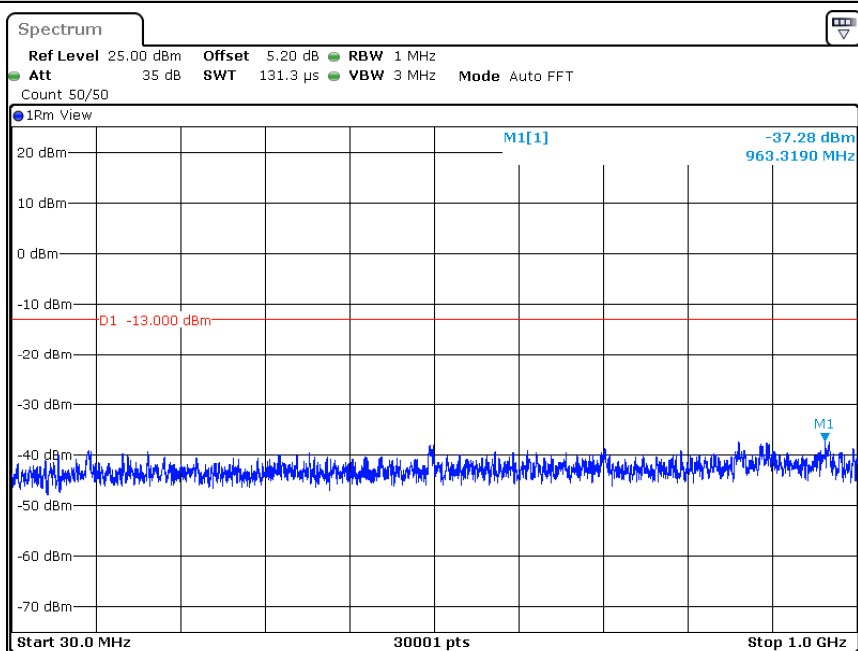


Band4-1413-1000~20000MHz-6965.37



Date: 4.SEP.2020 18:13:14

Band4-1513-30~1000MHz-963.32



Date: 4.SEP.2020 18:13:27



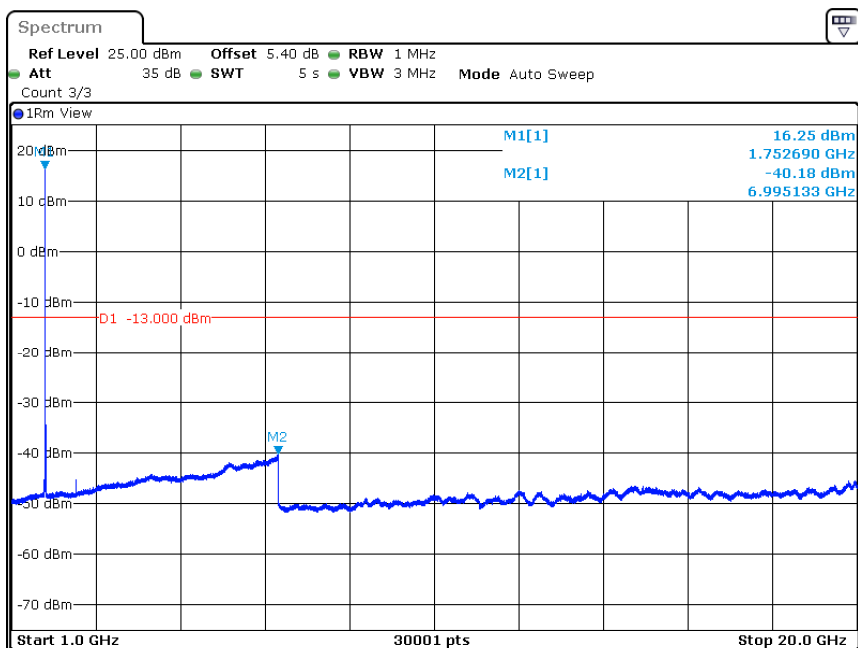
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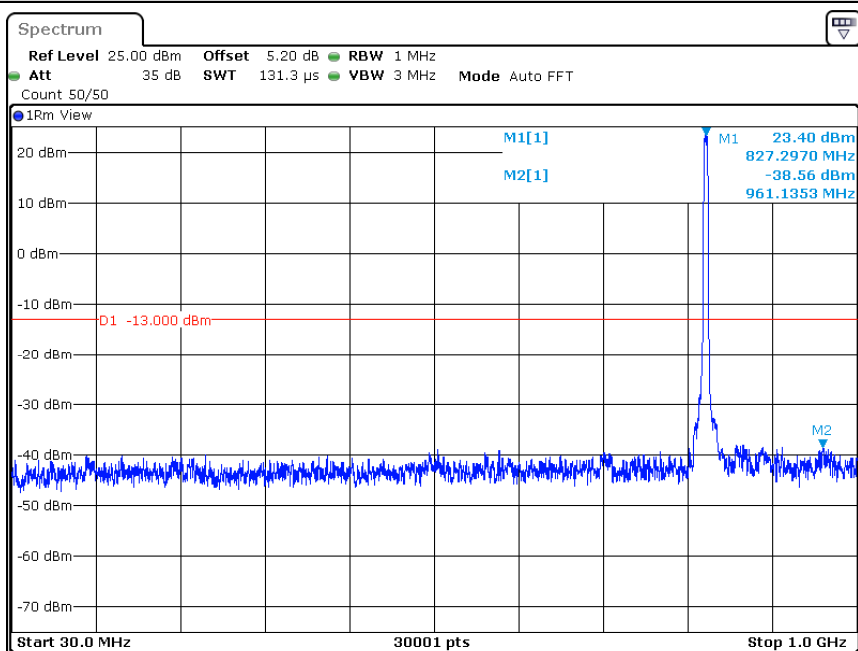
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 中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

## Band4-1513-1000~20000MHz-6995.13



Date: 4.SEP.2020 18:13:50

## Band5-4132-30~1000MHz-961.14

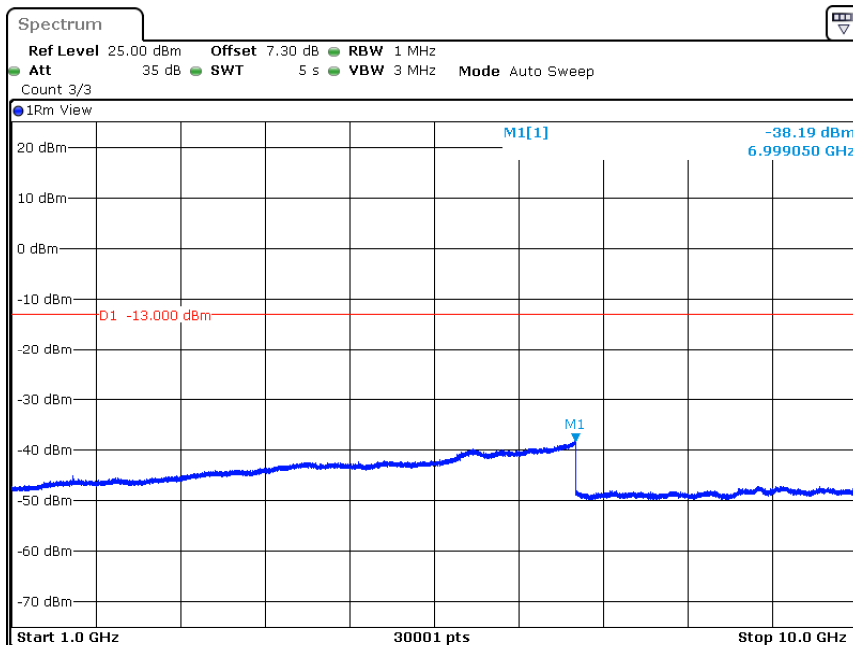


Date: 4.SEP.2020 18:34:45



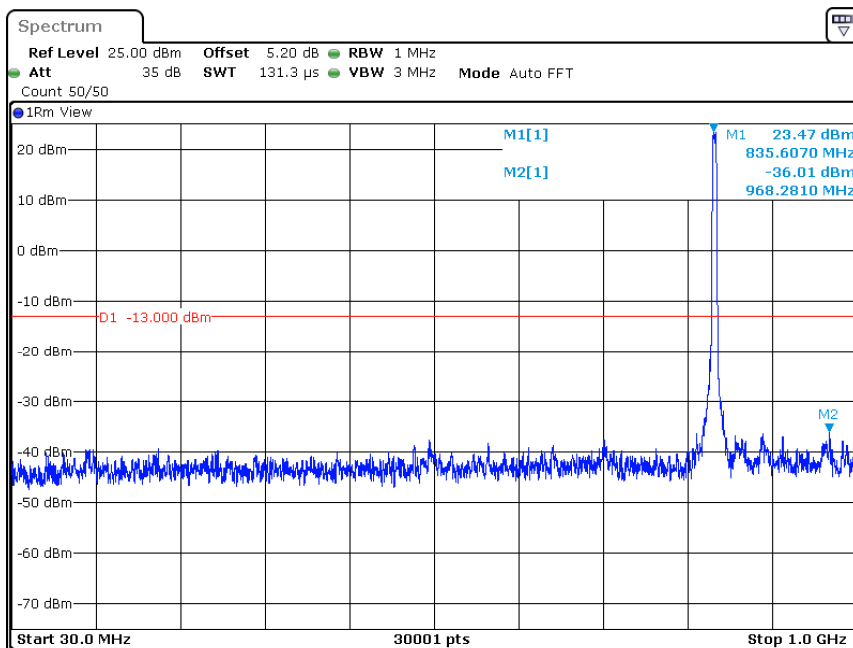


## Band5-4132-1000~10000MHz-6999.05



Date: 4.SEP.2020 18:35:07

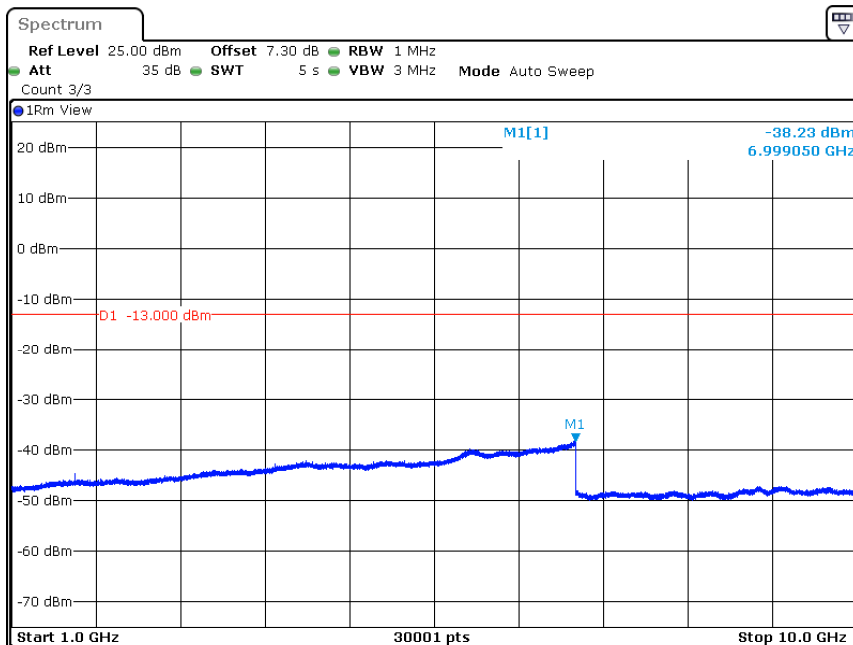
## Band5-4182-30~1000MHz-668.281



Date: 4.SEP.2020 18:35:21

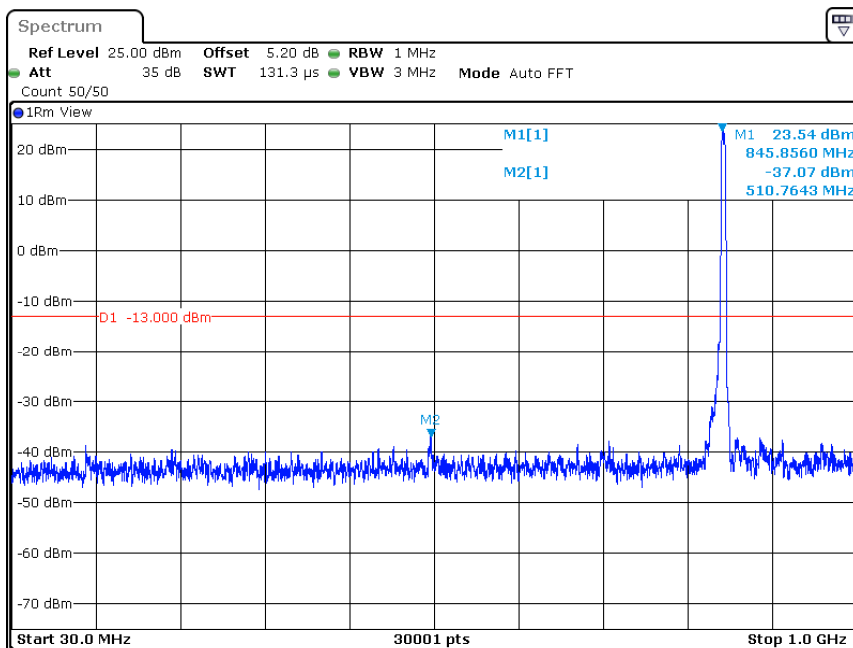


## Band5-4182-1000~10000MHz-6999.05



Date: 4.SEP.2020 18:35:44

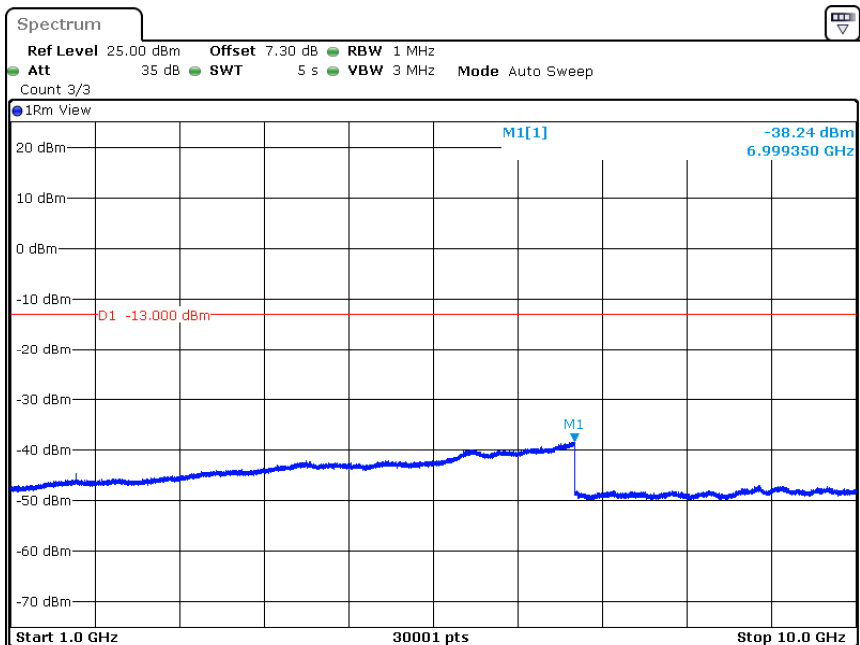
## Band5-4233-30~1000MHz-510.76



Date: 4.SEP.2020 18:35:58



**Band5-4233-1000~10000MHz-6999.35**



Date: 4, SEP. 2020 18:36:20



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Shenzhen Branch (SZ) China EEC Laboratory

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中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com



## 7. Field Strength of Spurious Radiation

### 7.1. Test Band = WCDMA Band II

#### 7.1.1. Test Mode = WCDMA/TM1

##### 7.1.1.1. Test Channel = LCH

| Frequency (MHz) | Level (dBm) | Limit Line (dBm) | Margin (dB) | Polarization |
|-----------------|-------------|------------------|-------------|--------------|
| 49.6435         | -72.10      | -13.00           | 59.10       | Vertical     |
| 109.6410        | -64.10      | -13.00           | 51.10       | Vertical     |
| 608.5369        | -64.04      | -13.00           | 51.04       | Vertical     |
| 3748.0249       | -61.15      | -13.00           | 48.15       | Vertical     |
| 10669.7557      | -51.51      | -13.00           | 38.51       | Vertical     |
| 17991.4997      | -40.16      | -13.00           | 27.16       | Vertical     |
| 44.3567         | -64.06      | -13.00           | 51.06       | Horizontal   |
| 103.9662        | -75.59      | -13.00           | 62.59       | Horizontal   |
| 243.7987        | -68.45      | -13.00           | 55.45       | Horizontal   |
| 3706.5236       | -59.85      | -13.00           | 46.85       | Horizontal   |
| 7460.1487       | -56.21      | -13.00           | 43.21       | Horizontal   |
| 16394.9465      | -43.60      | -13.00           | 30.60       | Horizontal   |

##### 7.1.1.2. Test Channel = MCH

| Frequency (MHz) | Level (dBm) | Limit Line (dBm) | Margin (dB) | Polarization |
|-----------------|-------------|------------------|-------------|--------------|
| 52.2141         | -72.41      | -13.00           | 59.41       | Vertical     |
| 105.6638        | -64.33      | -13.00           | 51.33       | Vertical     |
| 625.2218        | -63.59      | -13.00           | 50.59       | Vertical     |
| 3758.5253       | -61.00      | -13.00           | 48.00       | Vertical     |
| 7372.1457       | -55.89      | -13.00           | 42.89       | Vertical     |
| 17991.4997      | -39.63      | -13.00           | 26.63       | Vertical     |
| 39.3125         | -64.29      | -13.00           | 51.29       | Horizontal   |
| 98.8249         | -75.57      | -13.00           | 62.57       | Horizontal   |



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Shenzhen Branch Laboratory

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057  
中国·深圳·科技园中区M-10栋一号厂房

t (86-755) 26012053 f (86-755) 26710594 www.sgs.com.cn  
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|            |        |        |       |            |
|------------|--------|--------|-------|------------|
| 241.7131   | -67.56 | -13.00 | 54.56 | Horizontal |
| 3762.0254  | -57.21 | -13.00 | 44.21 | Horizontal |
| 7479.1493  | -56.32 | -13.00 | 43.32 | Horizontal |
| 16403.9468 | -43.75 | -13.00 | 30.75 | Horizontal |

### 7.1.1.3. Test Channel = HCH

| Frequency (MHz) | Level (dBm) | Limit Line (dBm) | Margin (dB) | Polarization |
|-----------------|-------------|------------------|-------------|--------------|
| 49.6435         | -72.09      | -13.00           | 59.09       | Vertical     |
| 105.6638        | -64.64      | -13.00           | 51.64       | Vertical     |
| 625.2703        | -63.10      | -13.00           | 50.10       | Vertical     |
| 3817.5273       | -60.67      | -13.00           | 47.67       | Vertical     |
| 7388.1463       | -56.11      | -13.00           | 43.11       | Vertical     |
| 17997.9999      | -40.16      | -13.00           | 27.16       | Vertical     |
| 46.2968         | -63.65      | -13.00           | 50.65       | Horizontal   |
| 241.9071        | -67.95      | -13.00           | 54.95       | Horizontal   |
| 595.2473        | -64.18      | -13.00           | 51.18       | Horizontal   |
| 3814.0271       | -54.44      | -13.00           | 41.44       | Horizontal   |
| 7417.1472       | -56.54      | -13.00           | 43.54       | Horizontal   |
| 16386.4462      | -43.79      | -13.00           | 30.79       | Horizontal   |

## 7.2. Test Band = WCDMA Band IV

### 7.2.1. Test Mode = WCDMA/TM1

#### 7.2.1.1. Test Channel = LCH

| Frequency (MHz) | Level (dBm) | Limit Line (dBm) | Margin (dB) | Polarization |
|-----------------|-------------|------------------|-------------|--------------|
| 50.4680         | -70.49      | -13.00           | 57.49       | Vertical     |
| 116.5283        | -62.73      | -13.00           | 49.73       | Vertical     |
| 575.6038        | -59.99      | -13.00           | 46.99       | Vertical     |
| 5069.5690       | -59.60      | -13.00           | 46.60       | Vertical     |
| 9341.7114       | -48.72      | -13.00           | 35.72       | Vertical     |
| 17981.4994      | -33.86      | -13.00           | 20.86       | Vertical     |



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|            |        |        |       |            |
|------------|--------|--------|-------|------------|
| 36.6448    | -63.24 | -13.00 | 50.24 | Horizontal |
| 99.8920    | -72.94 | -13.00 | 59.94 | Horizontal |
| 244.6717   | -65.40 | -13.00 | 52.40 | Horizontal |
| 5175.0725  | -59.54 | -13.00 | 46.54 | Horizontal |
| 9998.2333  | -49.48 | -13.00 | 36.48 | Horizontal |
| 16402.4467 | -35.56 | -13.00 | 22.56 | Horizontal |

### 7.2.1.2. Test Channel = MCH

| Frequency (MHz) | Level (dBm) | Limit Line (dBm) | Margin (dB) | Polarization |
|-----------------|-------------|------------------|-------------|--------------|
| 50.4195         | -70.47      | -13.00           | 57.47       | Vertical     |
| 110.5625        | -62.32      | -13.00           | 49.32       | Vertical     |
| 592.3371        | -61.64      | -13.00           | 48.64       | Vertical     |
| 5647.0882       | -59.34      | -13.00           | 46.34       | Vertical     |
| 10597.7533      | -47.98      | -13.00           | 34.98       | Vertical     |
| 17993.9998      | -34.26      | -13.00           | 21.26       | Vertical     |
| 41.2526         | -62.42      | -13.00           | 49.42       | Horizontal   |
| 105.5668        | -73.50      | -13.00           | 60.50       | Horizontal   |
| 235.5048        | -64.95      | -13.00           | 51.95       | Horizontal   |
| 3597.5199       | -59.70      | -13.00           | 46.70       | Horizontal   |
| 7463.1488       | -53.67      | -13.00           | 40.67       | Horizontal   |
| 16396.4465      | -35.44      | -13.00           | 22.44       | Horizontal   |

### 7.2.1.3. Test Channel = HCH

| Frequency (MHz) | Level (dBm) | Limit Line (dBm) | Margin (dB) | Polarization |
|-----------------|-------------|------------------|-------------|--------------|
| 52.1656         | -70.50      | -13.00           | 57.50       | Vertical     |
| 109.2530        | -62.61      | -13.00           | 49.61       | Vertical     |
| 597.6239        | -60.33      | -13.00           | 47.33       | Vertical     |
| 5177.5726       | -59.51      | -13.00           | 46.51       | Vertical     |
| 7459.1486       | -53.37      | -13.00           | 40.37       | Vertical     |
| 17997.9999      | -34.00      | -13.00           | 21.00       | Vertical     |
| 37.7119         | -62.93      | -13.00           | 49.93       | Horizontal   |



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|            |        |        |       |            |
|------------|--------|--------|-------|------------|
| 100.2800   | -72.95 | -13.00 | 59.95 | Horizontal |
| 236.3778   | -65.36 | -13.00 | 52.36 | Horizontal |
| 5081.0694  | -58.94 | -13.00 | 45.94 | Horizontal |
| 7475.6492  | -53.26 | -13.00 | 40.26 | Horizontal |
| 16409.9470 | -35.35 | -13.00 | 22.35 | Horizontal |

### 7.3. Test Band = WCDMA Band V

#### 7.3.1. Test Mode = WCDMA/TM1

##### 7.3.1.1. Test Channel = LCH

| Frequency (MHz) | Level (dBm) | Limit Line (dBm) | Margin (dB) | Polarization |
|-----------------|-------------|------------------|-------------|--------------|
| 46.8303         | -71.82      | -13.00           | 58.82       | Vertical     |
| 115.8978        | -64.32      | -13.00           | 51.32       | Vertical     |
| 340.0760        | -68.92      | -13.00           | 55.92       | Vertical     |
| 1789.7580       | -59.96      | -13.00           | 46.96       | Vertical     |
| 2697.9396       | -52.02      | -13.00           | 39.02       | Vertical     |
| 9858.1286       | -51.49      | -13.00           | 38.49       | Vertical     |
| 43.2412         | -64.42      | -13.00           | 51.42       | Horizontal   |
| 82.9646         | -75.18      | -13.00           | 62.18       | Horizontal   |
| 242.4891        | -67.74      | -13.00           | 54.74       | Horizontal   |
| 1595.3191       | -61.29      | -13.00           | 48.29       | Horizontal   |
| 2702.3405       | -50.69      | -13.00           | 37.69       | Horizontal   |
| 9328.6776       | -51.81      | -13.00           | 38.81       | Horizontal   |

##### 7.3.1.2. Test Channel = MCH

| Frequency (MHz) | Level (dBm) | Limit Line (dBm) | Margin (dB) | Polarization |
|-----------------|-------------|------------------|-------------|--------------|
| 47.8004         | -72.36      | -13.00           | 59.36       | Vertical     |
| 115.5098        | -64.13      | -13.00           | 51.13       | Vertical     |
| 396.2418        | -67.80      | -13.00           | 54.80       | Vertical     |
| 1780.1560       | -58.10      | -13.00           | 45.10       | Vertical     |
| 2690.7381       | -51.83      | -13.00           | 38.83       | Vertical     |



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|           |        |        |       |            |
|-----------|--------|--------|-------|------------|
| 9903.1634 | -52.05 | -13.00 | 39.05 | Vertical   |
| 43.5807   | -62.91 | -13.00 | 49.91 | Horizontal |
| 86.9418   | -75.50 | -13.00 | 62.50 | Horizontal |
| 240.1610  | -67.09 | -13.00 | 54.09 | Horizontal |
| 1778.5557 | -58.62 | -13.00 | 45.62 | Horizontal |
| 2703.1406 | -50.84 | -13.00 | 37.84 | Horizontal |
| 9314.9105 | -52.67 | -13.00 | 39.67 | Horizontal |

### 7.3.1.3. Test Channel = HCH

| Frequency (MHz) | Level (dBm) | Limit Line (dBm) | Margin (dB) | Polarization |
|-----------------|-------------|------------------|-------------|--------------|
| 49.4010         | -73.01      | -13.00           | 60.01       | Vertical     |
| 109.0590        | -63.06      | -13.00           | 50.06       | Vertical     |
| 380.4785        | -67.88      | -13.00           | 54.88       | Vertical     |
| 1770.9542       | -56.73      | -13.00           | 43.73       | Vertical     |
| 2849.1698       | -51.78      | -13.00           | 38.78       | Vertical     |
| 9818.6940       | -52.04      | -13.00           | 39.04       | Vertical     |
| 42.9016         | -64.59      | -13.00           | 51.59       | Horizontal   |
| 102.3656        | -75.43      | -13.00           | 62.43       | Horizontal   |
| 243.7502        | -68.36      | -13.00           | 55.36       | Horizontal   |
| 1768.9538       | -57.54      | -13.00           | 44.54       | Horizontal   |
| 2703.1406       | -50.76      | -13.00           | 37.76       | Horizontal   |
| 9611.2537       | -52.70      | -13.00           | 39.70       | Horizontal   |





## Test on the worst care:

### 7.3.1.4. Test Channel = HCH

| Frequency (MHz) | Level (dBm) | Limit Line (dBm) | Margin (dB) | Polarization |
|-----------------|-------------|------------------|-------------|--------------|
| 31.0186         | -75.12      | -13.00           | 62.12       | Vertical     |
| 110.0775        | -63.17      | -13.00           | 50.17       | Vertical     |
| 678.7684        | -63.54      | -13.00           | 50.54       | Vertical     |
| 5070.5690       | -61.62      | -13.00           | 48.62       | Vertical     |
| 7364.1455       | -55.69      | -13.00           | 42.69       | Vertical     |
| 17994.4998      | -40.50      | -13.00           | 27.50       | Vertical     |
| 45.4238         | -64.14      | -13.00           | 51.14       | Horizontal   |
| 98.7764         | -76.28      | -13.00           | 63.28       | Horizontal   |
| 237.1054        | -68.08      | -13.00           | 55.08       | Horizontal   |
| 3602.5201       | -61.10      | -13.00           | 48.10       | Horizontal   |
| 7459.1486       | -56.21      | -13.00           | 43.21       | Horizontal   |
| 16376.9459      | -43.78      | -13.00           | 30.78       | Horizontal   |

#### Remark:

- 1 According to 971168 D01 Power Meas License Digital Systems, The amplitudes of unwanted emissions that are attenuated more than 20 dB below the applicable limit are not required to be reported.
- 2 The disturbance below 30MHz was very low, and the above harmonics were the highest point could be found when testing, so only the worst case data had been displayed.







## 8. Frequency Stability

### 8.1. Frequency Vs Voltage

| Voltage |         |               |                  |                |                 |             |         |
|---------|---------|---------------|------------------|----------------|-----------------|-------------|---------|
| Band    | Channel | Voltage (Vdc) | Temperature (°C) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| Band2   | 9262    | VL            | NT               | -1.97          | -0.001063       | ±2.5        | PASS    |
| Band2   | 9262    | VN            | NT               | -2.72          | -0.001468       | ±2.5        | PASS    |
| Band2   | 9262    | VH            | NT               | -1.36          | -0.000734       | ±2.5        | PASS    |
| Band2   | 9400    | VL            | NT               | -2.09          | -0.001112       | ±2.5        | PASS    |
| Band2   | 9400    | VN            | NT               | -2.03          | -0.001080       | ±2.5        | PASS    |
| Band2   | 9400    | VH            | NT               | -2.20          | -0.001170       | ±2.5        | PASS    |
| Band2   | 9538    | VL            | NT               | -4.94          | -0.002590       | ±2.5        | PASS    |
| Band2   | 9538    | VN            | NT               | -4.99          | -0.002616       | ±2.5        | PASS    |
| Band2   | 9538    | VH            | NT               | -5.07          | -0.002658       | ±2.5        | PASS    |
| Band4   | 1312    | VL            | NT               | 9.63           | 0.005624        | ±2.5        | PASS    |
| Band4   | 1312    | VN            | NT               | 9.14           | 0.005338        | ±2.5        | PASS    |
| Band4   | 1312    | VH            | NT               | 9.72           | 0.005676        | ±2.5        | PASS    |
| Band4   | 1413    | VL            | NT               | -1.89          | -0.001091       | ±2.5        | PASS    |
| Band4   | 1413    | VN            | NT               | -1.72          | -0.000993       | ±2.5        | PASS    |
| Band4   | 1413    | VH            | NT               | -1.85          | -0.001068       | ±2.5        | PASS    |
| Band4   | 1513    | VL            | NT               | -10.18         | -0.005809       | ±2.5        | PASS    |
| Band4   | 1513    | VN            | NT               | -10.02         | -0.005717       | ±2.5        | PASS    |
| Band4   | 1513    | VH            | NT               | -10.24         | -0.005843       | ±2.5        | PASS    |
| Band5   | 4132    | VL            | NT               | -0.27          | -0.000327       | ±2.5        | PASS    |
| Band5   | 4132    | VN            | NT               | -0.65          | -0.000787       | ±2.5        | PASS    |
| Band5   | 4132    | VH            | NT               | -0.12          | -0.000145       | ±2.5        | PASS    |
| Band5   | 4182    | VL            | NT               | -0.09          | -0.000108       | ±2.5        | PASS    |
| Band5   | 4182    | VN            | NT               | -0.34          | -0.000407       | ±2.5        | PASS    |
| Band5   | 4182    | VH            | NT               | -0.13          | -0.000155       | ±2.5        | PASS    |
| Band5   | 4233    | VL            | NT               | -2.61          | -0.003083       | ±2.5        | PASS    |
| Band5   | 4233    | VN            | NT               | -3.43          | -0.004052       | ±2.5        | PASS    |
| Band5   | 4233    | VH            | NT               | -1.65          | -0.001949       | ±2.5        | PASS    |



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## 8.2. Frequency Vs Temperature

| Temperature |         |               |                  |                |                 |             |         |
|-------------|---------|---------------|------------------|----------------|-----------------|-------------|---------|
| Band        | Channel | Voltage (Vdc) | Temperature (°C) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| Band2       | 9262    | NV            | -30              | -0.93          | -0.000502       | ±2.5        | PASS    |
| Band2       | 9262    | NV            | -20              | -1.18          | -0.000637       | ±2.5        | PASS    |
| Band2       | 9262    | NV            | -10              | -0.62          | -0.000335       | ±2.5        | PASS    |
| Band2       | 9262    | NV            | 0                | -0.32          | -0.000173       | ±2.5        | PASS    |
| Band2       | 9262    | NV            | 10               | -0.44          | -0.000238       | ±2.5        | PASS    |
| Band2       | 9262    | NV            | 20               | -0.14          | -0.000076       | ±2.5        | PASS    |
| Band2       | 9262    | NV            | 30               | -0.06          | -0.000032       | ±2.5        | PASS    |
| Band2       | 9262    | NV            | 40               | -0.11          | -0.000059       | ±2.5        | PASS    |
| Band2       | 9262    | NV            | 50               | 0.03           | 0.000016        | ±2.5        | PASS    |
| Band2       | 9400    | NV            | -30              | -2.11          | -0.001122       | ±2.5        | PASS    |
| Band2       | 9400    | NV            | -20              | -2.15          | -0.001144       | ±2.5        | PASS    |
| Band2       | 9400    | NV            | -10              | -2.23          | -0.001186       | ±2.5        | PASS    |
| Band2       | 9400    | NV            | 0                | -2.32          | -0.001234       | ±2.5        | PASS    |
| Band2       | 9400    | NV            | 10               | -2.46          | -0.001309       | ±2.5        | PASS    |
| Band2       | 9400    | NV            | 20               | -2.27          | -0.001207       | ±2.5        | PASS    |
| Band2       | 9400    | NV            | 30               | -2.27          | -0.001207       | ±2.5        | PASS    |
| Band2       | 9400    | NV            | 40               | -2.40          | -0.001277       | ±2.5        | PASS    |
| Band2       | 9400    | NV            | 50               | -2.29          | -0.001218       | ±2.5        | PASS    |
| Band2       | 9538    | NV            | -30              | -4.94          | -0.002590       | ±2.5        | PASS    |
| Band2       | 9538    | NV            | -20              | -4.66          | -0.002443       | ±2.5        | PASS    |
| Band2       | 9538    | NV            | -10              | -4.94          | -0.002590       | ±2.5        | PASS    |
| Band2       | 9538    | NV            | 0                | -4.88          | -0.002558       | ±2.5        | PASS    |
| Band2       | 9538    | NV            | 10               | -4.89          | -0.002563       | ±2.5        | PASS    |
| Band2       | 9538    | NV            | 20               | -4.77          | -0.002501       | ±2.5        | PASS    |
| Band2       | 9538    | NV            | 30               | -5.06          | -0.002653       | ±2.5        | PASS    |
| Band2       | 9538    | NV            | 40               | -4.81          | -0.002521       | ±2.5        | PASS    |
| Band2       | 9538    | NV            | 50               | -4.82          | -0.002527       | ±2.5        | PASS    |
| Band4       | 1312    | NV            | -30              | 9.98           | 0.005828        | ±2.5        | PASS    |
| Band4       | 1312    | NV            | -20              | 10.13          | 0.005916        | ±2.5        | PASS    |
| Band4       | 1312    | NV            | -10              | 10.24          | 0.005980        | ±2.5        | PASS    |
| Band4       | 1312    | NV            | 0                | 10.16          | 0.005933        | ±2.5        | PASS    |
| Band4       | 1312    | NV            | 10               | 10.22          | 0.005968        | ±2.5        | PASS    |
| Band4       | 1312    | NV            | 20               | 10.48          | 0.006120        | ±2.5        | PASS    |



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|       |      |    |     |        |           |      |      |
|-------|------|----|-----|--------|-----------|------|------|
| Band4 | 1312 | NV | 30  | 10.65  | 0.006219  | ±2.5 | PASS |
| Band4 | 1312 | NV | 40  | 10.59  | 0.006184  | ±2.5 | PASS |
| Band4 | 1312 | NV | 50  | 10.80  | 0.006307  | ±2.5 | PASS |
| Band4 | 1413 | NV | -30 | -1.87  | -0.001079 | ±2.5 | PASS |
| Band4 | 1413 | NV | -20 | -1.92  | -0.001108 | ±2.5 | PASS |
| Band4 | 1413 | NV | -10 | -2.28  | -0.001316 | ±2.5 | PASS |
| Band4 | 1413 | NV | 0   | -2.15  | -0.001241 | ±2.5 | PASS |
| Band4 | 1413 | NV | 10  | -2.07  | -0.001195 | ±2.5 | PASS |
| Band4 | 1413 | NV | 20  | -2.07  | -0.001195 | ±2.5 | PASS |
| Band4 | 1413 | NV | 30  | -2.15  | -0.001241 | ±2.5 | PASS |
| Band4 | 1413 | NV | 40  | -2.20  | -0.001270 | ±2.5 | PASS |
| Band4 | 1413 | NV | 50  | -2.07  | -0.001195 | ±2.5 | PASS |
| Band4 | 1513 | NV | -30 | -10.22 | -0.005831 | ±2.5 | PASS |
| Band4 | 1513 | NV | -20 | -10.09 | -0.005757 | ±2.5 | PASS |
| Band4 | 1513 | NV | -10 | -9.91  | -0.005654 | ±2.5 | PASS |
| Band4 | 1513 | NV | 0   | -10.01 | -0.005712 | ±2.5 | PASS |
| Band4 | 1513 | NV | 10  | -9.93  | -0.005666 | ±2.5 | PASS |
| Band4 | 1513 | NV | 20  | -9.93  | -0.005666 | ±2.5 | PASS |
| Band4 | 1513 | NV | 30  | -10.06 | -0.005740 | ±2.5 | PASS |
| Band4 | 1513 | NV | 40  | -10.03 | -0.005723 | ±2.5 | PASS |
| Band4 | 1513 | NV | 50  | -9.97  | -0.005689 | ±2.5 | PASS |
| Band5 | 4132 | NV | -30 | -0.21  | -0.000254 | ±2.5 | PASS |
| Band5 | 4132 | NV | -20 | -0.09  | -0.000109 | ±2.5 | PASS |
| Band5 | 4132 | NV | -10 | -0.08  | -0.000097 | ±2.5 | PASS |
| Band5 | 4132 | NV | 0   | -0.01  | -0.000012 | ±2.5 | PASS |
| Band5 | 4132 | NV | 10  | 0.08   | 0.000097  | ±2.5 | PASS |
| Band5 | 4132 | NV | 20  | -0.04  | -0.000048 | ±2.5 | PASS |
| Band5 | 4132 | NV | 30  | -0.04  | -0.000048 | ±2.5 | PASS |
| Band5 | 4132 | NV | 40  | -0.02  | -0.000024 | ±2.5 | PASS |
| Band5 | 4132 | NV | 50  | 0.08   | 0.000097  | ±2.5 | PASS |
| Band5 | 4182 | NV | -30 | -0.06  | -0.000072 | ±2.5 | PASS |
| Band5 | 4182 | NV | -20 | -0.29  | -0.000347 | ±2.5 | PASS |
| Band5 | 4182 | NV | -10 | -0.23  | -0.000275 | ±2.5 | PASS |
| Band5 | 4182 | NV | 0   | -0.19  | -0.000227 | ±2.5 | PASS |
| Band5 | 4182 | NV | 10  | -0.15  | -0.000179 | ±2.5 | PASS |
| Band5 | 4182 | NV | 20  | -0.07  | -0.000084 | ±2.5 | PASS |
| Band5 | 4182 | NV | 30  | -0.11  | -0.000132 | ±2.5 | PASS |



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|       |      |    |     |       |           |      |      |
|-------|------|----|-----|-------|-----------|------|------|
| Band5 | 4182 | NV | 40  | -0.12 | -0.000143 | ±2.5 | PASS |
| Band5 | 4182 | NV | 50  | -0.16 | -0.000191 | ±2.5 | PASS |
| Band5 | 4233 | NV | -30 | -0.64 | -0.000756 | ±2.5 | PASS |
| Band5 | 4233 | NV | -20 | -1.32 | -0.001559 | ±2.5 | PASS |
| Band5 | 4233 | NV | -10 | -1.71 | -0.002020 | ±2.5 | PASS |
| Band5 | 4233 | NV | 0   | -1.76 | -0.002079 | ±2.5 | PASS |
| Band5 | 4233 | NV | 10  | -0.63 | -0.000744 | ±2.5 | PASS |
| Band5 | 4233 | NV | 20  | -1.75 | -0.002067 | ±2.5 | PASS |
| Band5 | 4233 | NV | 30  | -1.54 | -0.001819 | ±2.5 | PASS |
| Band5 | 4233 | NV | 40  | -1.72 | -0.002032 | ±2.5 | PASS |
| Band5 | 4233 | NV | 50  | -1.66 | -0.001961 | ±2.5 | PASS |

The End

