

## AppendixA: Effective (Isotropic) Radiated Power Output Data

### Test Result(WCDMA)

| Band  | Type     | Channel | Conducted Power (dBm) | ERP/EIRP (dBm) | ERP/EIRP Limit (dBm) | Verdict |
|-------|----------|---------|-----------------------|----------------|----------------------|---------|
| Band2 | Voice    | 9262    | 23.05                 | 21.35          | 33                   | PASS    |
| Band2 | TestMode | 9262    | 23.07                 | 21.37          | 33                   | PASS    |
| Band2 | Voice    | 9400    | 23.13                 | 21.43          | 33                   | PASS    |
| Band2 | TestMode | 9400    | 23.17                 | 21.47          | 33                   | PASS    |
| Band2 | Voice    | 9538    | 23.06                 | 21.36          | 33                   | PASS    |
| Band2 | TestMode | 9538    | 23.10                 | 21.4           | 33                   | PASS    |
| Band5 | Voice    | 4132    | 23.16                 | 18.81          | 38.5                 | PASS    |
| Band5 | TestMode | 4132    | 23.28                 | 18.93          | 38.5                 | PASS    |
| Band5 | Voice    | 4183    | 23.45                 | 19.1           | 38.5                 | PASS    |
| Band5 | TestMode | 4183    | 23.46                 | 19.11          | 38.5                 | PASS    |
| Band5 | Voice    | 4233    | 23.28                 | 18.93          | 38.5                 | PASS    |
| Band5 | TestMode | 4233    | 23.42                 | 19.07          | 38.5                 | PASS    |

### Test Result(HSDPA)

| Band  | Channel | SubTest | Conducted Power (dBm) | ERP/EIRP (dBm) | ERP/EIRP Limit (dBm) | Verdict |
|-------|---------|---------|-----------------------|----------------|----------------------|---------|
| Band2 | 9262    | 1       | 22.23                 | 20.53          | 33                   | PASS    |
| Band2 | 9262    | 2       | 22.02                 | 20.32          | 33                   | PASS    |
| Band2 | 9262    | 3       | 21.76                 | 20.06          | 33                   | PASS    |
| Band2 | 9262    | 4       | 21.83                 | 20.13          | 33                   | PASS    |
| Band2 | 9400    | 1       | 22.31                 | 20.61          | 33                   | PASS    |
| Band2 | 9400    | 2       | 22.13                 | 20.43          | 33                   | PASS    |
| Band2 | 9400    | 3       | 21.90                 | 20.2           | 33                   | PASS    |
| Band2 | 9400    | 4       | 21.89                 | 20.19          | 33                   | PASS    |
| Band2 | 9538    | 1       | 22.04                 | 20.34          | 33                   | PASS    |
| Band2 | 9538    | 2       | 21.85                 | 20.15          | 33                   | PASS    |
| Band2 | 9538    | 3       | 21.64                 | 19.94          | 33                   | PASS    |
| Band2 | 9538    | 4       | 21.70                 | 20             | 33                   | PASS    |
| Band5 | 4132    | 1       | 21.96                 | 17.61          | 38.5                 | PASS    |
| Band5 | 4132    | 2       | 21.91                 | 17.56          | 38.5                 | PASS    |
| Band5 | 4132    | 3       | 21.46                 | 17.11          | 38.5                 | PASS    |
| Band5 | 4132    | 4       | 21.48                 | 17.13          | 38.5                 | PASS    |
| Band5 | 4183    | 1       | 22.16                 | 17.81          | 38.5                 | PASS    |
| Band5 | 4183    | 2       | 22.08                 | 17.73          | 38.5                 | PASS    |
| Band5 | 4183    | 3       | 21.72                 | 17.37          | 38.5                 | PASS    |

|       |      |   |       |       |      |      |
|-------|------|---|-------|-------|------|------|
| Band5 | 4183 | 4 | 21.77 | 17.42 | 38.5 | PASS |
| Band5 | 4233 | 1 | 22.30 | 17.95 | 38.5 | PASS |
| Band5 | 4233 | 2 | 22.18 | 17.83 | 38.5 | PASS |
| Band5 | 4233 | 3 | 21.80 | 17.45 | 38.5 | PASS |
| Band5 | 4233 | 4 | 21.81 | 17.46 | 38.5 | PASS |

### Test Result(HSUPA)

| Band  | Channel | SubTest | Conducted Power<br>(dBm) | ERP/EIRP<br>(dBm) | ERP/EIRP Limit<br>(dBm) | Verdict |
|-------|---------|---------|--------------------------|-------------------|-------------------------|---------|
| Band2 | 9262    | 1       | 20.09                    | 18.39             | 33                      | PASS    |
| Band2 | 9262    | 2       | 20.43                    | 18.73             | 33                      | PASS    |
| Band2 | 9262    | 3       | 20.03                    | 18.33             | 33                      | PASS    |
| Band2 | 9262    | 4       | 20.27                    | 18.57             | 33                      | PASS    |
| Band2 | 9262    | 5       | 22.45                    | 20.75             | 33                      | PASS    |
| Band2 | 9400    | 1       | 20.12                    | 18.42             | 33                      | PASS    |
| Band2 | 9400    | 2       | 20.48                    | 18.78             | 33                      | PASS    |
| Band2 | 9400    | 3       | 20.05                    | 18.35             | 33                      | PASS    |
| Band2 | 9400    | 4       | 20.30                    | 18.6              | 33                      | PASS    |
| Band2 | 9400    | 5       | 22.54                    | 20.84             | 33                      | PASS    |
| Band2 | 9538    | 1       | 20.06                    | 18.36             | 33                      | PASS    |
| Band2 | 9538    | 2       | 20.46                    | 18.76             | 33                      | PASS    |
| Band2 | 9538    | 3       | 20.00                    | 18.3              | 33                      | PASS    |
| Band2 | 9538    | 4       | 20.28                    | 18.58             | 33                      | PASS    |
| Band2 | 9538    | 5       | 22.32                    | 20.62             | 33                      | PASS    |
| Band5 | 4132    | 1       | 20.54                    | 16.19             | 38.5                    | PASS    |
| Band5 | 4132    | 2       | 20.65                    | 16.3              | 38.5                    | PASS    |
| Band5 | 4132    | 3       | 20.29                    | 15.94             | 38.5                    | PASS    |
| Band5 | 4132    | 4       | 20.07                    | 15.72             | 38.5                    | PASS    |
| Band5 | 4132    | 5       | 22.04                    | 17.69             | 38.5                    | PASS    |
| Band5 | 4183    | 1       | 20.88                    | 16.53             | 38.5                    | PASS    |
| Band5 | 4183    | 2       | 21.08                    | 16.73             | 38.5                    | PASS    |
| Band5 | 4183    | 3       | 20.56                    | 16.21             | 38.5                    | PASS    |
| Band5 | 4183    | 4       | 20.42                    | 16.07             | 38.5                    | PASS    |
| Band5 | 4183    | 5       | 22.34                    | 17.99             | 38.5                    | PASS    |
| Band5 | 4233    | 1       | 20.94                    | 16.59             | 38.5                    | PASS    |
| Band5 | 4233    | 2       | 21.08                    | 16.73             | 38.5                    | PASS    |
| Band5 | 4233    | 3       | 20.61                    | 16.26             | 38.5                    | PASS    |
| Band5 | 4233    | 4       | 20.50                    | 16.15             | 38.5                    | PASS    |
| Band5 | 4233    | 5       | 22.32                    | 17.97             | 38.5                    | PASS    |

Remark: EIRP (dBm) = Conducted power (dBm) + Antenna Gain (dBi). (For Band2)

ERP (dBm) = EIRP (dBm) - 2.15 (dB). (For Band5)

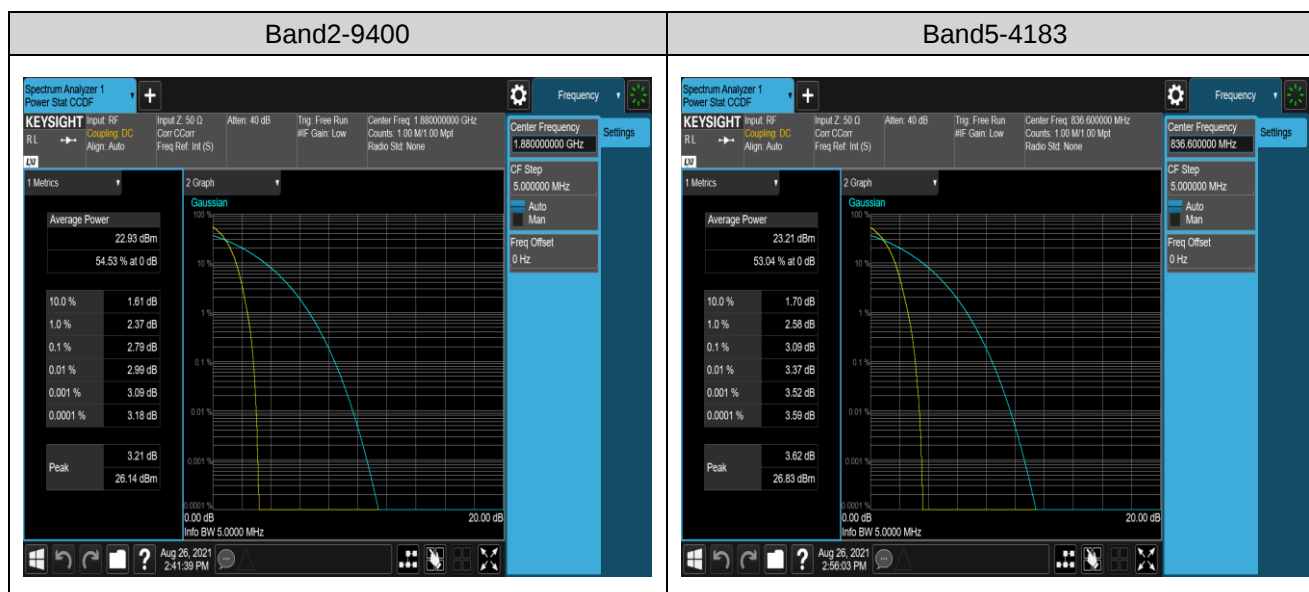
## AppendixB:Peak-to-Average Ratio

### Test Result(WCDMA)

| Band  | Channel | Peak-to-Average Ratio(dB) | Limit(dB) | Verdict |
|-------|---------|---------------------------|-----------|---------|
| Band2 | 9400    | 2.79                      | 13        | PASS    |
| Band5 | 4183    | 3.09                      | 13        | PASS    |

Remark: All channel had been tested, but only the worst case data displayed in this report.

### Test Graphs(WCDMA)



## AppendixC:26dB Bandwidth andOccupied Bandwidth

### Test Result(WCDMA)

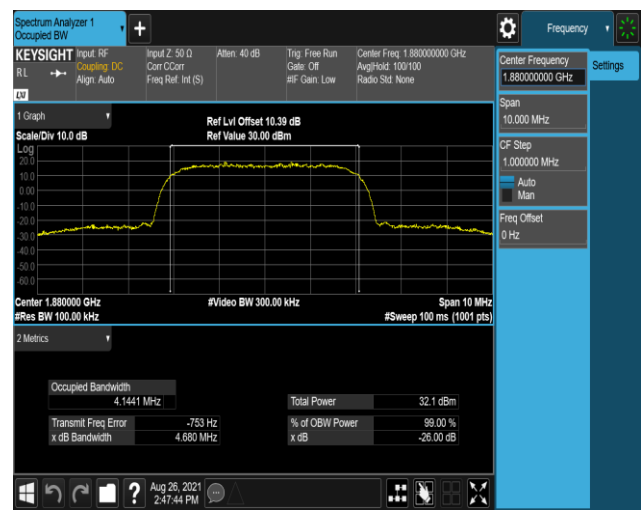
| Band  | Channel | Occupied Bandwidth<br>(MHz) | 26dB Bandwidth<br>(MHz) | Limit(kHz) | Verdict |
|-------|---------|-----------------------------|-------------------------|------------|---------|
| Band2 | 9262    | 4.1456                      | 4.674                   | ---        | PASS    |
| Band2 | 9400    | 4.1441                      | 4.680                   | ---        | PASS    |
| Band2 | 9538    | 4.1493                      | 4.672                   | ---        | PASS    |
| Band5 | 4132    | 4.1473                      | 4.669                   | ---        | PASS    |
| Band5 | 4183    | 4.1478                      | 4.659                   | ---        | PASS    |
| Band5 | 4233    | 4.1421                      | 4.663                   | ---        | PASS    |

# Test Graphs(WCDMA)

Band2-9262-4.674



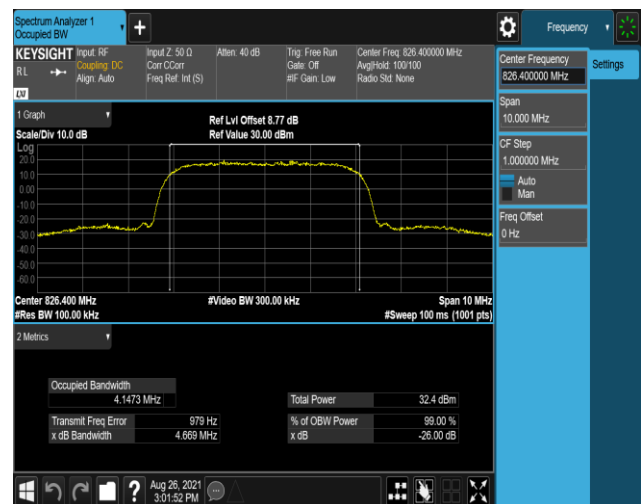
Band2-9400-4.680



Band2-9538-4.672



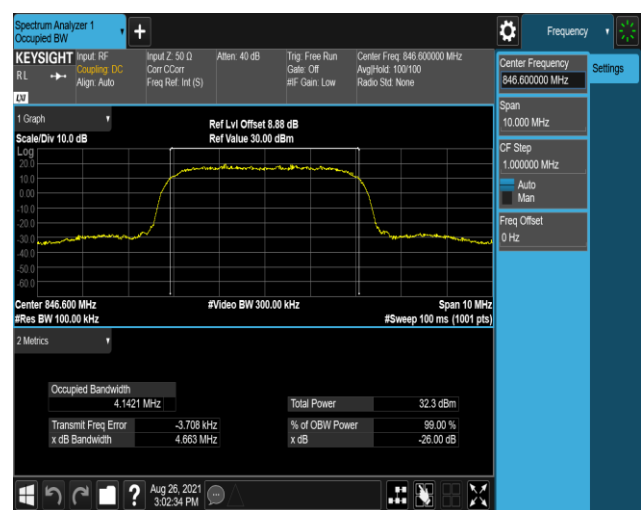
Band5-4132-4.669



Band5-4183-4.659



Band5-4233-4.663

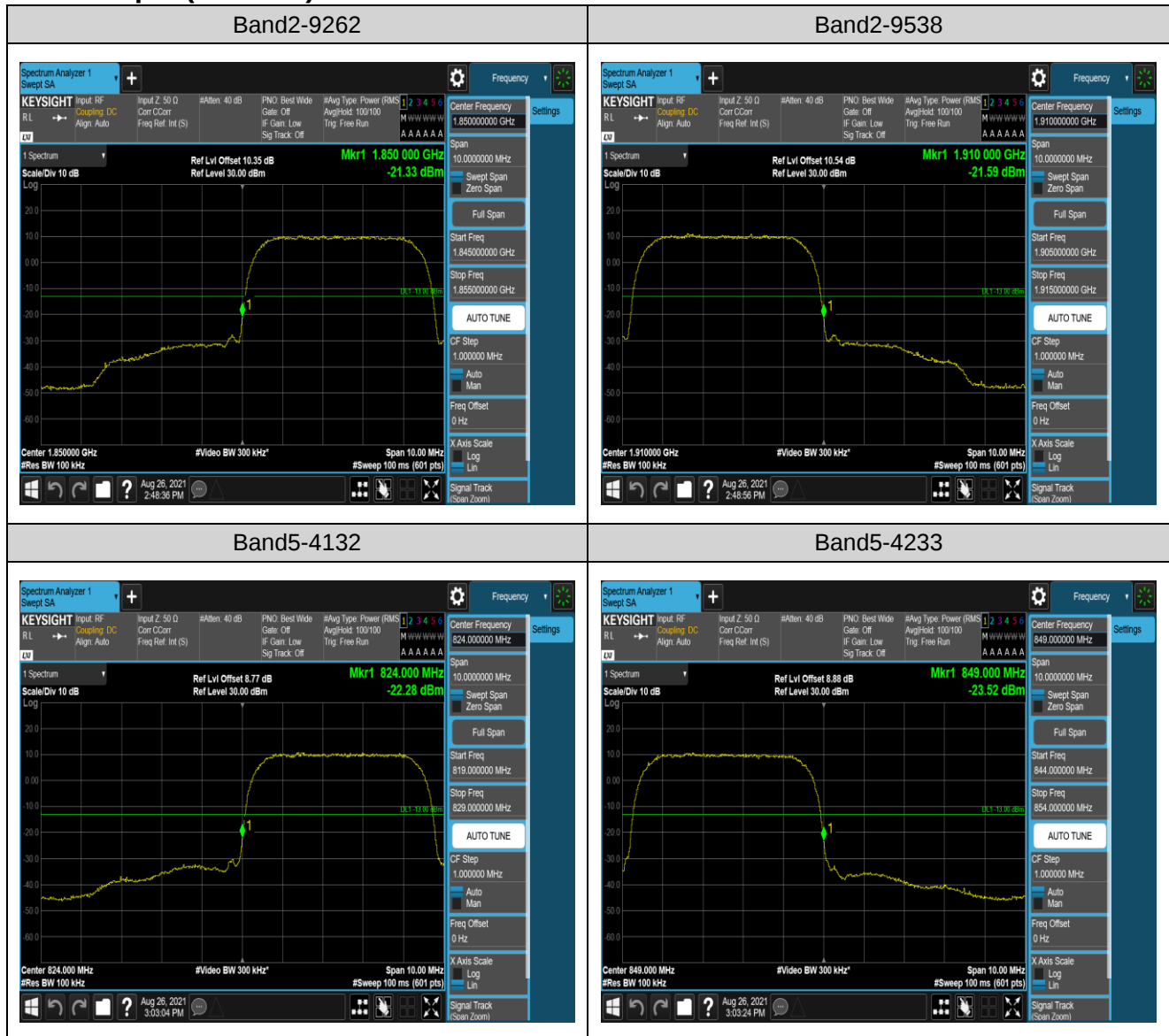


## AppendixD:Band Edge

### Test Result(WCDMA)

| Band  | Channel | Frequency (MHz) | Result (dBm) | Limit(dBm) | Verdict |
|-------|---------|-----------------|--------------|------------|---------|
| Band2 | 9262    | 1850.00         | -21.33       | -13        | PASS    |
| Band2 | 9538    | 1910.00         | -21.59       | -13        | PASS    |
| Band5 | 4132    | 824.00          | -22.28       | -13        | PASS    |
| Band5 | 4233    | 849.00          | -23.52       | -13        | PASS    |

# Test Graphs(WCDMA)



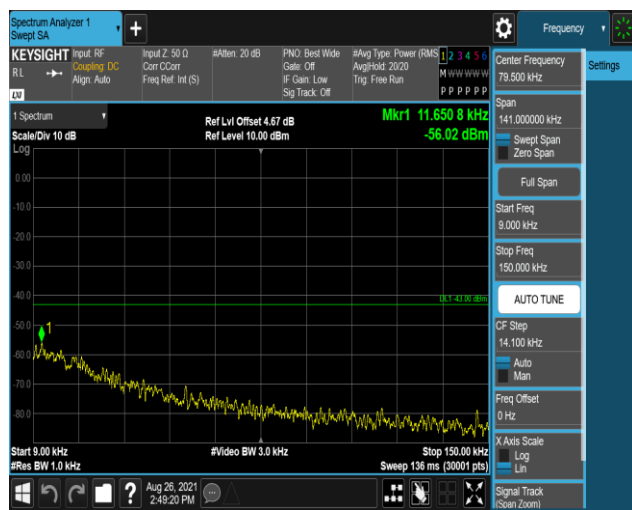
## AppendixE:Conducted SpuriousEmission

### Test Result(WCDMA)

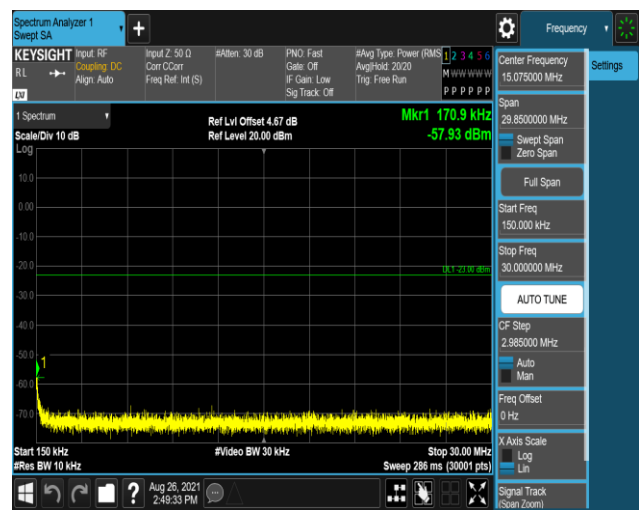
| Band  | Channel | Frequency Range (Mhz) | Frequency (dBm) | Result (dBm) | Limit (dBm) | Verdict |
|-------|---------|-----------------------|-----------------|--------------|-------------|---------|
| Band2 | 9262    | 0.009~0.15MHz         | 0.01            | -56.02       | -43         | PASS    |
| Band2 | 9262    | 0.15~30MHz            | 0.17            | -57.93       | -23         | PASS    |
| Band2 | 9262    | 30~1000MHz            | 832.61          | -46.78       | -13         | PASS    |
| Band2 | 9262    | 1000~20000MHz         | 3795.53         | -34.22       | -13         | PASS    |
| Band2 | 9400    | 0.009~0.15MHz         | 0.01            | -57.11       | -43         | PASS    |
| Band2 | 9400    | 0.15~30MHz            | 0.17            | -56.2        | -23         | PASS    |
| Band2 | 9400    | 30~1000MHz            | 804.48          | -46.4        | -13         | PASS    |
| Band2 | 9400    | 1000~20000MHz         | 19361.6         | -35.06       | -13         | PASS    |
| Band2 | 9538    | 0.009~0.15MHz         | 0.01            | -55.16       | -43         | PASS    |
| Band2 | 9538    | 0.15~30MHz            | 0.2             | -56.55       | -23         | PASS    |
| Band2 | 9538    | 30~1000MHz            | 790.87          | -46.58       | -13         | PASS    |
| Band2 | 9538    | 1000~20000MHz         | 19784.67        | -34.31       | -13         | PASS    |
| Band5 | 4132    | 0.009~0.15MHz         | 0.01            | -54.77       | -33         | PASS    |
| Band5 | 4132    | 0.15~30MHz            | 0.15            | -58.41       | -13         | PASS    |
| Band5 | 4132    | 30~1000MHz            | 681.23          | -56.04       | -13         | PASS    |
| Band5 | 4132    | 1000~10000MHz         | 3868.9          | -34.28       | -13         | PASS    |
| Band5 | 4183    | 0.009~0.15MHz         | 0.02            | -56.99       | -33         | PASS    |
| Band5 | 4183    | 0.15~30MHz            | 0.16            | -58.27       | -13         | PASS    |
| Band5 | 4183    | 30~1000MHz            | 964.11          | -54.21       | -13         | PASS    |
| Band5 | 4183    | 1000~10000MHz         | 3757            | -34.16       | -13         | PASS    |
| Band5 | 4233    | 0.009~0.15MHz         | 0.01            | -57.17       | -33         | PASS    |
| Band5 | 4233    | 0.15~30MHz            | 0.15            | -57.45       | -13         | PASS    |
| Band5 | 4233    | 30~1000MHz            | 479.27          | -54.94       | -13         | PASS    |
| Band5 | 4233    | 1000~10000MHz         | 4228            | -34.28       | -13         | PASS    |

## Test Graphs(WCDMA)

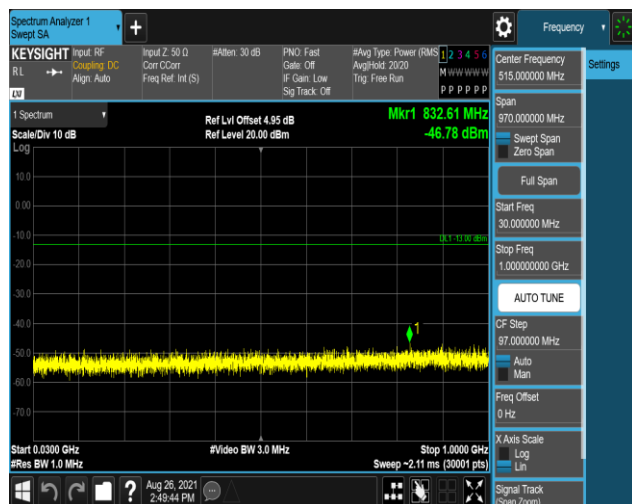
Band2-9262-0.009~0.15MHz



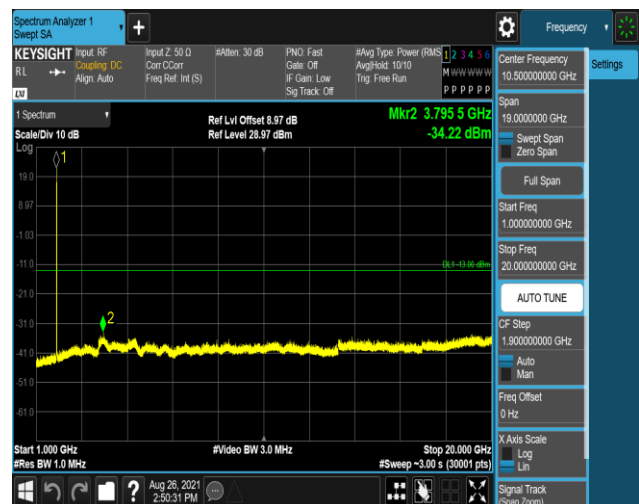
Band2-9262-0.15~30MHz



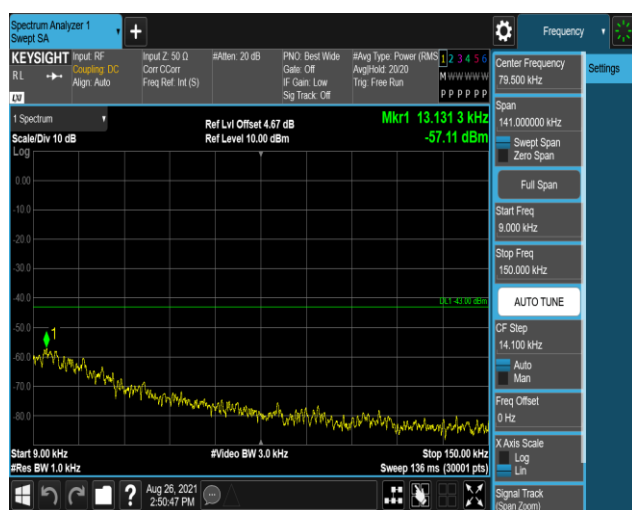
Band2-9262-30~1000MHz



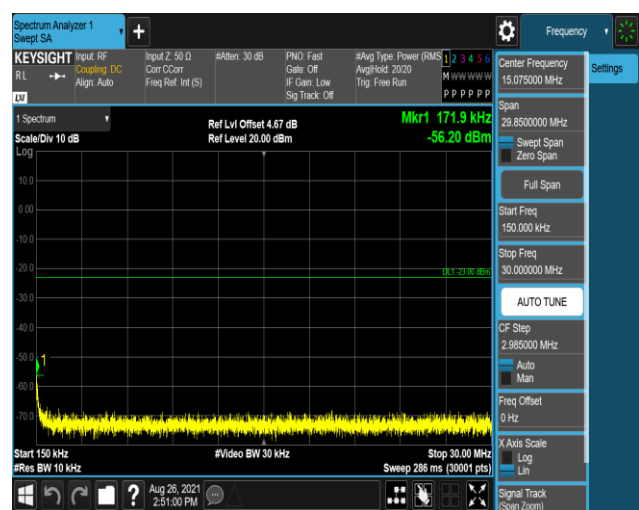
Band2-9262-1000~20000MHz



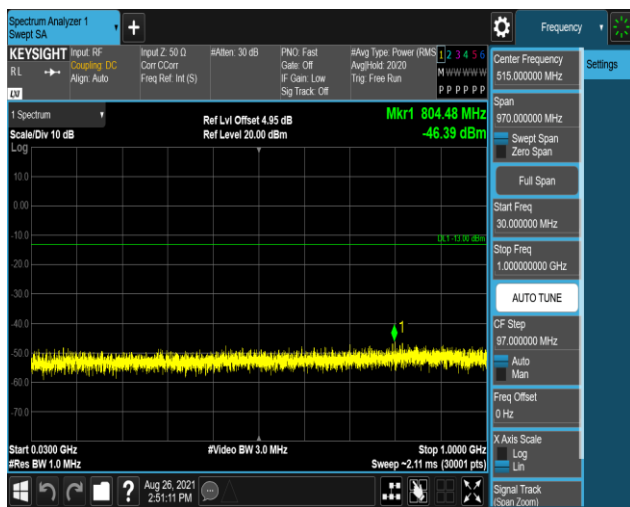
Band2-9400-0.009~0.15MHz



Band2-9400-0.15~30MHz



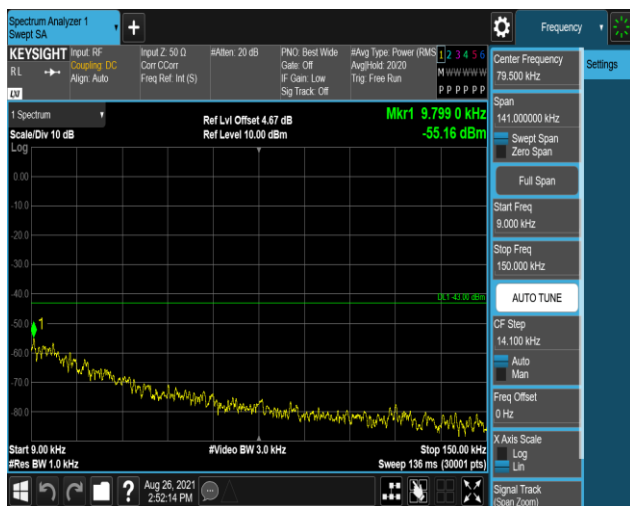
Band2-9400-30~1000MHz



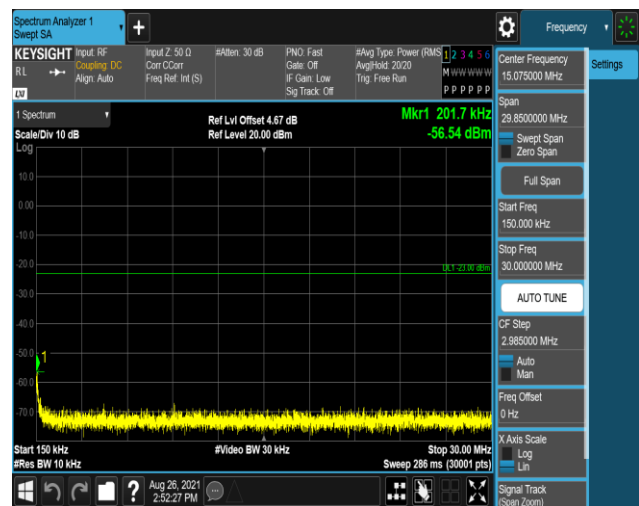
Band2-9400-1000~20000MHz



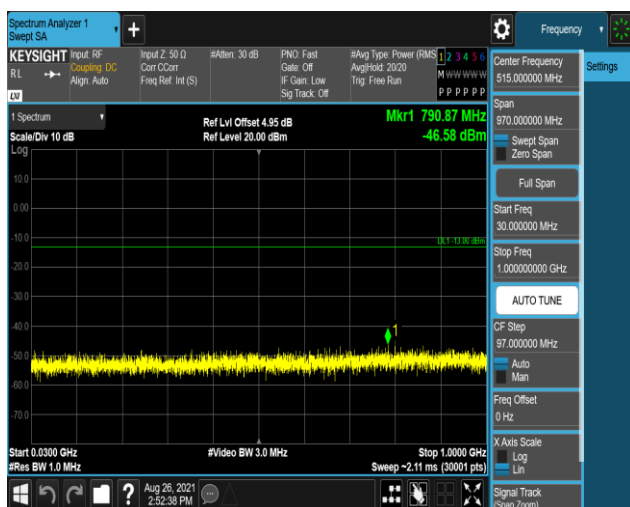
Band2-9538-0.009~0.15MHz



Band2-9538-0.15~30MHz



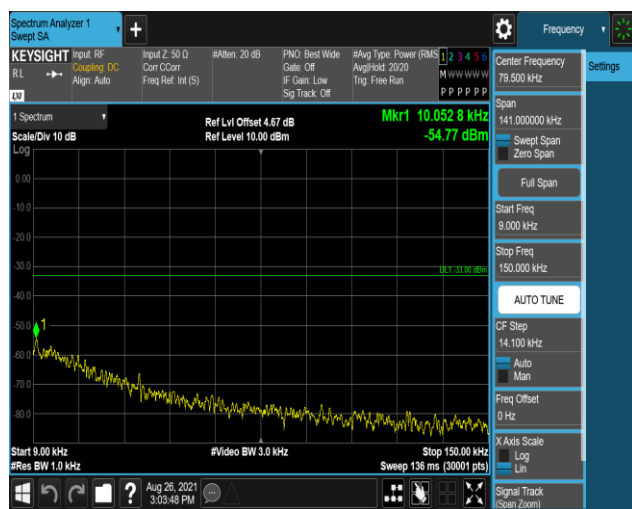
Band2-9538-30~1000MHz



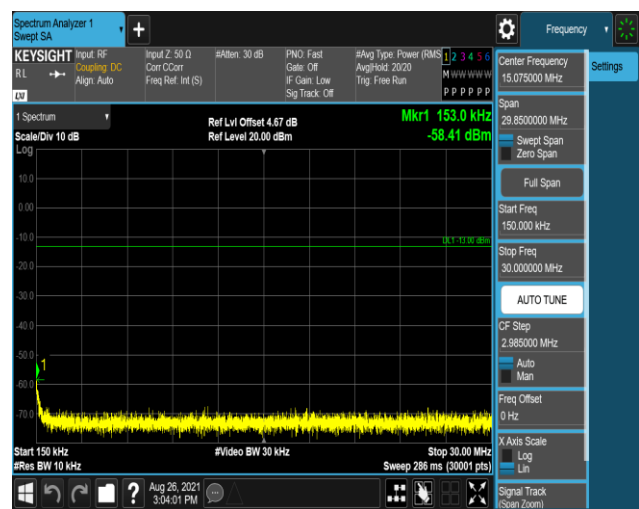
Band2-9538-1000~20000MHz



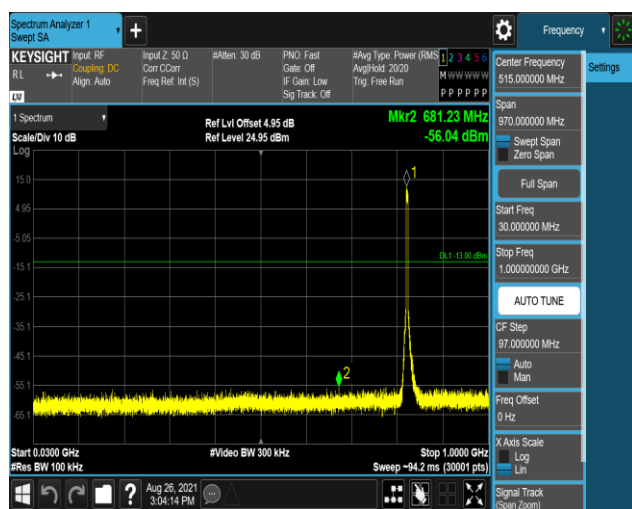
Band5-4132-0.009~0.15MHz



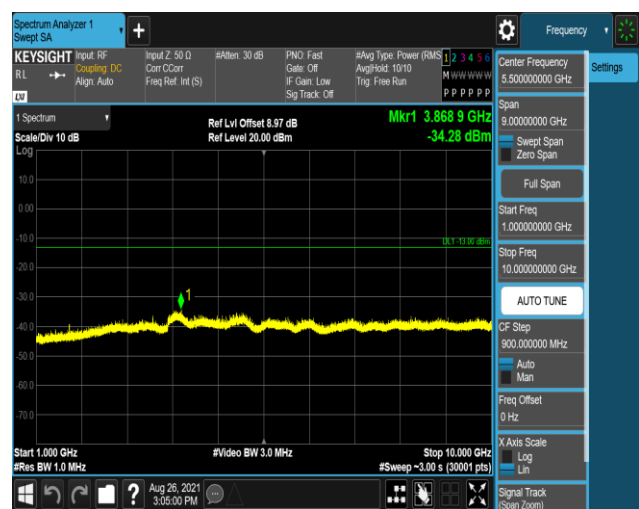
Band5-4132-0.15~30MHz



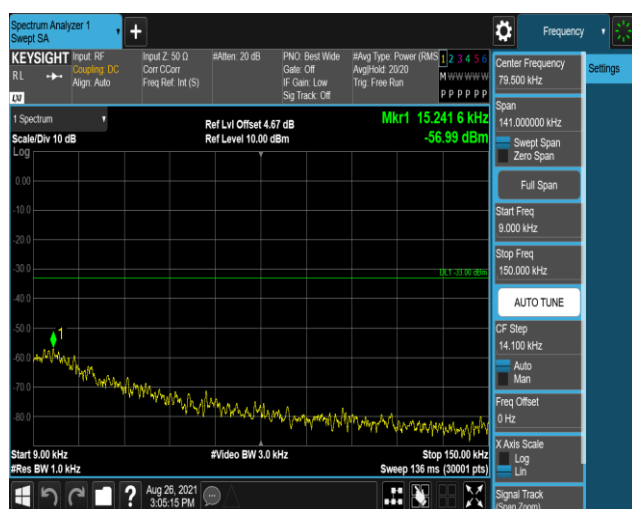
Band5-4132-30~1000MHz



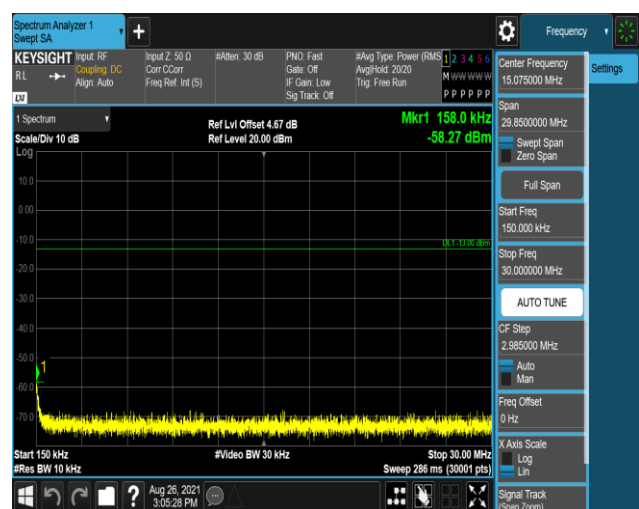
Band5-4132-1000~10000MHz



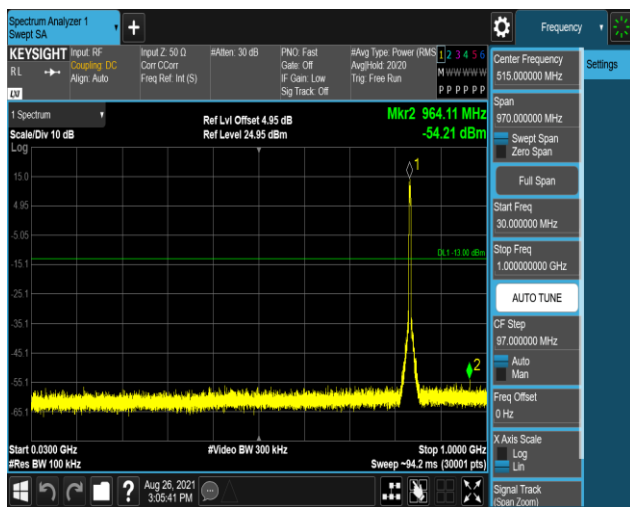
Band5-4183-0.009~0.15MHz



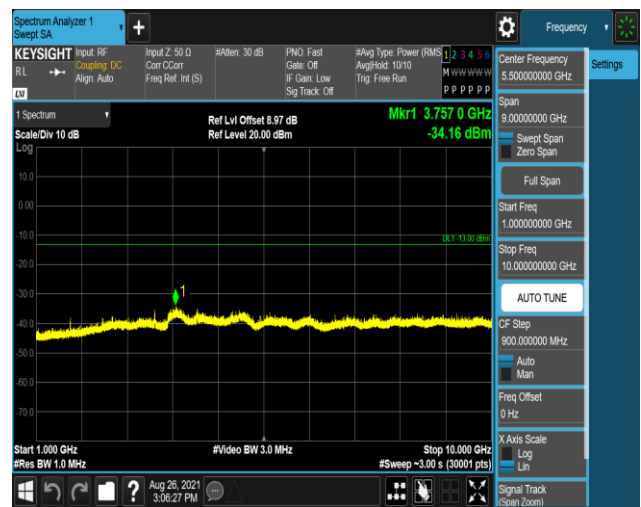
Band5-4183-0.15~30MHz



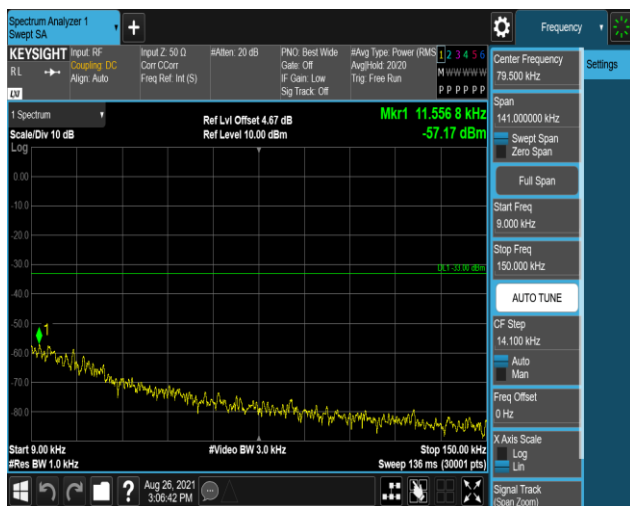
Band5-4183-30~1000MHz



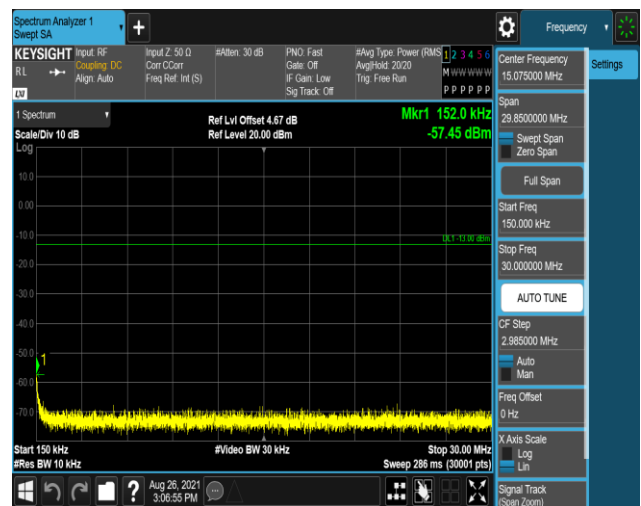
Band5-4183-1000~10000MHz



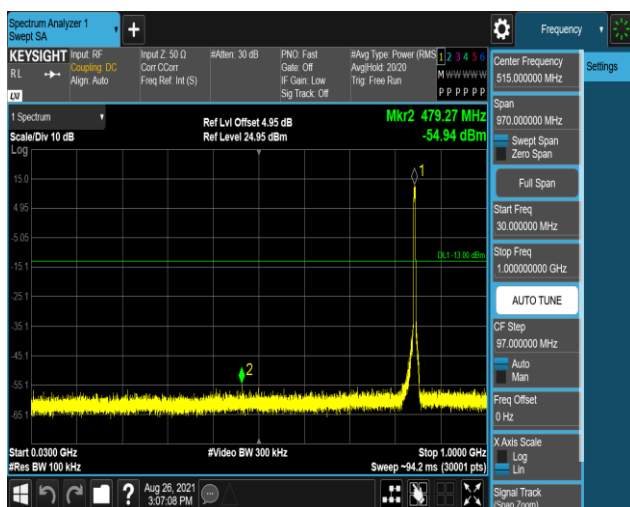
Band5-4233-0.009~0.15MHz



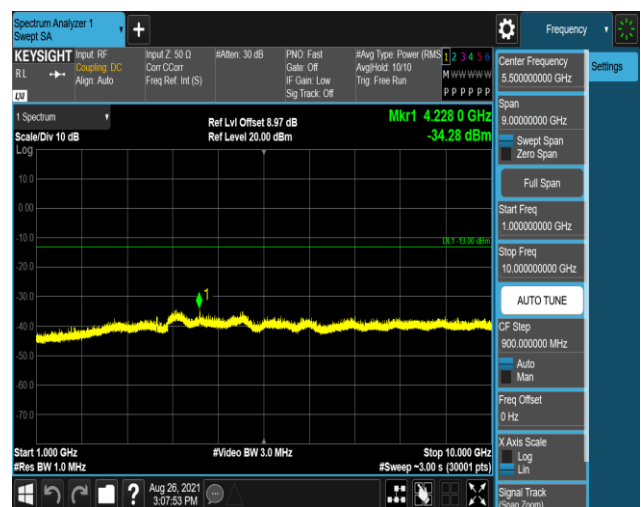
Band5-4233-0.15~30MHz



Band5-4233-30~1000MHz



Band5-4233-1000~10000MHz



## AppendixF:Frequency Stability

### Test Result

| Reference Frequency: WCDMA BAND II 12.2k RMC Middle Frequency=9400 channel=1880MHz          |                         |                 |           |                                       |        |
|---------------------------------------------------------------------------------------------|-------------------------|-----------------|-----------|---------------------------------------|--------|
| Temperature                                                                                 |                         |                 |           |                                       |        |
| Power supplied<br>(Vdc)                                                                     | Temperature<br>(℃)      | Frequency error |           | Limit (ppm)                           | Result |
|                                                                                             |                         | Hz              | ppm       |                                       |        |
| 3.70                                                                                        | -30                     | -0.62           | -0.000330 | Within authorized<br>band for BAND II | Pass   |
|                                                                                             | -20                     | -0.69           | -0.000367 |                                       |        |
|                                                                                             | -10                     | -0.57           | -0.000303 |                                       |        |
|                                                                                             | 0                       | 2.10            | 0.001117  |                                       |        |
|                                                                                             | 10                      | 0.22            | 0.000117  |                                       |        |
|                                                                                             | 20                      | 1.66            | 0.000883  |                                       |        |
|                                                                                             | 30                      | -5.05           | -0.002686 |                                       |        |
|                                                                                             | 40                      | 4.09            | 0.002176  |                                       |        |
|                                                                                             | 50                      | -3.33           | -0.001771 |                                       |        |
| Voltage                                                                                     |                         |                 |           |                                       |        |
| Temperature<br>(℃)                                                                          | Power supplied<br>(Vdc) | Frequency error |           | Limit (ppm)                           | Result |
|                                                                                             |                         | Hz              | ppm       |                                       |        |
| 25                                                                                          | 3.50                    | -1.20           | -0.000638 | Within authorized<br>band for BAND II | Pass   |
|                                                                                             | 3.70                    | 1.02            | 0.000543  |                                       |        |
|                                                                                             | 4.20                    | -0.20           | -0.000106 |                                       |        |
| Remark: All channel had been tested, but only the worst case data displayed in this report. |                         |                 |           |                                       |        |

| Reference Frequency: WCDMA BAND V 12.2k RMC Middle channel=4183 Frequency=836.6MHz          |                         |                 |           |             |        |
|---------------------------------------------------------------------------------------------|-------------------------|-----------------|-----------|-------------|--------|
| Temperature                                                                                 |                         |                 |           |             |        |
| Power supplied<br>(Vdc)                                                                     | Temperature<br>(℃)      | Frequency error |           | Limit (ppm) | Result |
|                                                                                             |                         | Hz              | ppm       |             |        |
| 3.70                                                                                        | -30                     | -1.77           | -0.002116 | ±2.5        | Pass   |
|                                                                                             | -20                     | -1.07           | -0.001279 |             |        |
|                                                                                             | -10                     | -2.62           | -0.003132 |             |        |
|                                                                                             | 0                       | -2.44           | -0.002917 |             |        |
|                                                                                             | 10                      | -3.36           | -0.004016 |             |        |
|                                                                                             | 20                      | -4.04           | -0.004829 |             |        |
|                                                                                             | 30                      | -0.86           | -0.001028 |             |        |
|                                                                                             | 40                      | -3.94           | -0.004710 |             |        |
|                                                                                             | 50                      | -1.89           | -0.002259 |             |        |
| Voltage                                                                                     |                         |                 |           |             |        |
| Temperature<br>(℃)                                                                          | Power supplied<br>(Vdc) | Frequency error |           | Limit (ppm) | Result |
|                                                                                             |                         | Hz              | ppm       |             |        |
| 25                                                                                          | 3.50                    | -3.93           | -0.004698 | ±2.5        | Pass   |
|                                                                                             | 3.70                    | -3.26           | -0.003897 |             |        |
|                                                                                             | 4.20                    | -2.12           | -0.002534 |             |        |
| Remark: All channel had been tested, but only the worst case data displayed in this report. |                         |                 |           |             |        |

## Appendix G: Modulation Characteristics

### Test Result

| Band  | Channel | Result | Verdict |
|-------|---------|--------|---------|
| Band2 | 9400    | PASS   | PASS    |
| Band5 | 4183    | PASS   | PASS    |

Remark: All channel had been tested, but only the worst case data displayed in this report.

### Test Graphs

