

|                                                |                                       |
|------------------------------------------------|---------------------------------------|
| <b>Product Name:</b> Tablet                    | <b>Report No:</b> ITEZA2-202300095RF5 |
| <b>Product Model:</b> T30Pro, T30, T30S, T30SE | <b>Security Classification:</b> Open  |
| <b>Version:</b> V1.0                           | <b>Total Page:</b> 107                |

## TIRT Testing Report

|                     |                    |                     |  |
|---------------------|--------------------|---------------------|--|
| <b>Prepared By:</b> | <b>Checked By:</b> | <b>Approved By:</b> |  |
| Stone Tang          | Randy Lv           | Daniel Chen         |  |
| Stone Tang          | Randy Lv           | Daniel Chen         |  |

# RF TEST REPORT

**FCC ID: 2AX4YT30PRO**

According to

**FCC CFR Title 47 Part 2**  
**FCC CFR Title 47 Part 22 Subpart H**  
**FCC CFR Title 47 Part 24 Subpart E**  
**FCC CFR Title 47 Part 27**

Equipment : Tablet  
Model No. : T30Pro, T30, T30S, T30SE  
Trademark : DOOGEE  
Applicant : Shenzhen DOOGEE Hengtong Technology CO.,LTD  
B, 2/F, Building A4, Silicon Valley Power Digital Industrial Park, No. 22,  
Longhua New District, Shenzhen, China

- The test result referred exclusively to the presented test model /sample.
- Without written approval of TIRT Inc. the test report shall not reproduced except in full.
- Test date: 2023/03/01~2023/03/23

Lab: Beijing TIRT Technology Service Co.,Ltd Shenzhen

Add: 101, 3 # Factory Building, Gongjin Electronics Shatin Community, Kengzi Street,  
Pingshan District, Shenzhen, China

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History of this test report

Original Report Issue Date: 2023.03.23

- No additional attachment
- Additional attachments were issued following record

| Attachment No. | Issue Date | Description |
|----------------|------------|-------------|
|                |            |             |
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## 1 Test Summary

| Test Item                              | Section in CFR 47                                                     | Result                                |
|----------------------------------------|-----------------------------------------------------------------------|---------------------------------------|
| RF Exposure (SAR)                      | Part 1.1307<br>Part 2.1093                                            | Pass*<br>(Please refer to SAR Report) |
| RF Output Power                        | Part 2.1046<br>Part 22.913 (a)(2)<br>Part 24.232 (c)<br>Part 27.50(d) | Pass                                  |
| Peak-to-Average Ratio                  | Part 2.1046<br>Part 24.232 (d)<br>Part 27.50(d)                       | Pass                                  |
| Modulation Characteristics             | Part 2.1047                                                           | Pass                                  |
| 99% & -26 dB Occupied Bandwidth        | Part 2.1049<br>Part 22.917<br>Part 24.238                             | Pass                                  |
| Spurious Emissions at Antenna Terminal | Part 2.1051<br>Part 22.917 (a)<br>Part 24.238 (a)<br>Part 27.53(g)    | Pass                                  |
| Field Strength of Spurious Radiation   | Part 2.1053<br>Part 22.917 (a)<br>Part 24.238 (a)<br>Part 27.53(g)    | Pass                                  |
| Out of band emission, Band Edge        | Part 22.917 (a)<br>Part 24.238 (a)<br>Part 27.53(g)                   | Pass                                  |
| Frequency stability vs. temperature    | Part 2.1055(a)(1)(b)<br>Part 27.54                                    | Pass                                  |
| Frequency stability vs. voltage        | Part 2.1055(d)(1)(2)<br>Part 27.54                                    | Pass                                  |

*Note: 1. Pass: The EUT complies with the essential requirements in the standard.*

*2. The conclusion of this test report is judged by actual test data without considering measurement uncertainty.*

## 2 General Information

### 2.1 General Description of EUT

|              |                                                                                                  |
|--------------|--------------------------------------------------------------------------------------------------|
| EUT Name     | : Tablet                                                                                         |
| Model No.    | : T30Pro, T30, T30S, T30SE                                                                       |
| DIFF.        | : There is no difference except the name of the model. All tests are made with the T30Pro model. |
| Power supply | : DC 3.8V from battery or DC 11V from adapter                                                    |

|                  |                                                                                                                                                                                                                                                                                                                                                                  |
|------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Support Networks | : GSM, GPRS, EGPRS, WCDMA                                                                                                                                                                                                                                                                                                                                        |
| Support Bands    | : GSM850, PCS1900, WCDMA Band V, WCDMA Band IV, WCDMA Band II                                                                                                                                                                                                                                                                                                    |
| TX Frequency     | : GSM850: 824.20MHz-848.80MHz<br>PCS1900: 1850.20MHz-1909.80MHz<br>WCDMA Band V: 826.40MHz -846.60MHz<br>WCDMA Band II: 1852.40MHz -1907.60MHz<br>WCDMA Band IV: 1712.4 MHz -1752.6MHz                                                                                                                                                                           |
| GPRS Class       | : 12                                                                                                                                                                                                                                                                                                                                                             |
| EGPRS Class      | : 12                                                                                                                                                                                                                                                                                                                                                             |
| Modulation type  | : GSM/GPRS: GMSK<br>EGPRS: GMSK/8PSK<br>WCDMA Band II/IV/V: QPSK                                                                                                                                                                                                                                                                                                 |
| Antenna type     | : Internal antenna                                                                                                                                                                                                                                                                                                                                               |
| Antenna gain     | : Maximum Gain is 0.43dBi for GSM 850<br>Maximum Gain is 0.85dBi for PCS1900<br>Maximum Gain is 0.43dBi for WCDMA Band V<br>Maximum Gain is 0.79dBi for WCDMA Band IV<br>Maximum Gain is 0.85dBi for WCDMA Band II<br>Antenna information is provided by applicant.<br>There is WWAN diversity antenna inside the product, which is only for receiving function. |
| Software version | : DOOGEE-T30-EEA-Android13.0-20230315                                                                                                                                                                                                                                                                                                                            |
| Hardware version | : M100TBR110A                                                                                                                                                                                                                                                                                                                                                    |

Remark: 1.The worst-case simultaneous transmission configuration was evaluated with no non-compliance found. Results in this report are only for 2G and 3G function, and there is no other transmitter involved.

2. The product contains two SIM card slots, both of which have been tested and only reflect the data of SIM card slot 1.

**Operation Frequency List:**

| GSM 850 |                 | PCS1900 |                 | WCDMA Band V |                 | WCDMA Band II |                 |
|---------|-----------------|---------|-----------------|--------------|-----------------|---------------|-----------------|
| Channel | Frequency (MHz) | Channel | Frequency (MHz) | Channel      | Frequency (MHz) | Channel       | Frequency (MHz) |
| 128     | 824.20          | 512     | 1850.20         | 4132         | 826.40          | 9262          | 1852.40         |
| 129     | 824.40          | 513     | 1850.40         | 4133         | 826.60          | 9263          | 1852.60         |
| · ∴     | · ∴             | · ∴     | · ∴             | · ∴          | · ∴             | · ∴           | · ∴             |
| 189     | 836.40          | 660     | 1879.80         | 4181         | 836.20          | 9399          | 1879.80         |
| 190     | 836.60          | 661     | 1880.00         | 4182         | 836.40          | 9400          | 1880.00         |
| 191     | 836.80          | 662     | 1880.20         | 4183         | 836.60          | 9401          | 1880.20         |
| · ∴     | · ∴             | · ∴     | · ∴             | · ∴          | · ∴             | · ∴           | · ∴             |
| 250     | 848.60          | 809     | 1909.60         | 4232         | 846.40          | 9537          | 1907.40         |
| 251     | 848.80          | 810     | 1909.80         | 4233         | 846.60          | 9538          | 1907.60         |

Regards to the operating frequency range over 10 MHz, the Lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, and the selected channel see below:

**Final test channel:**

| GSM 850       |                 | PCS1900         |                 | WCDMA Band V |                 | WCDMA Band II |                 |
|---------------|-----------------|-----------------|-----------------|--------------|-----------------|---------------|-----------------|
| Channel       | Frequency (MHz) | Channel         | Frequency (MHz) | Channel      | Frequency (MHz) | Channel       | Frequency (MHz) |
| 128           | 824.20          | 512             | 1850.20         | 4132         | 826.40          | 9262          | 1852.40         |
| 190           | 836.60          | 661             | 1880.00         | 4183         | 836.60          | 9400          | 1880.00         |
| 251           | 848.80          | 810             | 1909.80         | 4233         | 846.60          | 9538          | 1907.60         |
| WCDMA Band IV |                 |                 |                 |              |                 |               |                 |
| Channel       |                 | Frequency (MHz) |                 |              |                 |               |                 |
| 1312          |                 | 1712.4          |                 |              |                 |               |                 |
| 1450          |                 | 1740.0          |                 |              |                 |               |                 |
| 1513          |                 | 1752.6          |                 |              |                 |               |                 |

## 2.2 Related Submittal(s) / Grant (s)

This submittal(s) (test report) is filing to comply with Section Part 22 subpart H and Part 24 subpart E of the FCC CFR 47 Rules.

## 2.3 Test Methodology

Both conducted and radiated testing were performed according to the procedures document on TIA/EIA 603 and FCC CFR 47.1046, 2.1047, 2.1049, 2.1051, 2.1053, 2.1055 and 2.1057

## 2.4 Test Facility

|                                |                                                                                                                    |
|--------------------------------|--------------------------------------------------------------------------------------------------------------------|
| Company:                       | Beijing TIRT Technology Service Co.,Ltd Shenzhen                                                                   |
| Address:                       | 101, 3 # Factory Building, Gongjin Electronics Shatin Community, Kengzi Street, Pingshan District, Shenzhen, China |
| CNAS Registration Number:      | CNAS L14158                                                                                                        |
| A2LA Registration Number:      | 6049.01                                                                                                            |
| FCC Designation Number:        | CN1309                                                                                                             |
| Test Firm Registration Number: | 825524                                                                                                             |
| Telephone:                     | +86-0755-27087573                                                                                                  |

## 2.5 Measurement Uncertainty

| Uncertainty                               |             |
|-------------------------------------------|-------------|
| Parameter                                 | Uncertainty |
| Occupied Channel Bandwidth                | ±142.12 KHz |
| RF power conducted                        | ±0.74 dB    |
| RF power radiated                         | ±3.25dB     |
| Spurious emissions, conducted             | ±1.78dB     |
| Spurious emissions, radiated (9KHz~30MHz) | ±2.56dB     |
| Spurious emissions, radiated (30MHz~1GHz) | ±4.6dB      |
| Spurious emissions, radiated (Above 1GHz) | ±4.9dB      |
| Conduction Emissions(150kHz~30MHz)        | ±3.1 dB     |
| Humidity                                  | ±4.6%       |
| Temperature                               | ±0.7°C      |
| Time                                      | ±1.25%      |

### 3 Test Instruments list

| No. | Equipment                 | Manufacturer   | Type No.         | Serial No.         | Cal. date<br>(yyyy/mm/dd) | Cal. Due date<br>(yyyy/mm/dd) |
|-----|---------------------------|----------------|------------------|--------------------|---------------------------|-------------------------------|
| 1   | EMI Receiver              | Rohde&Schwarz  | ESCI             | 100718             | 2022/11/09                | 2023/11/10                    |
| 2   | AMN                       | Rohde&Schwarz  | ENV216           | 100075             | 2022/11/09                | 2023/11/10                    |
| 3   | AMN                       | Schwarzbeck    | NSLK8127         | #829               | 2022/11/09                | 2023/11/10                    |
| 4   | ECSI RF IN RF<br>Cable    | Rohde&Schwarz  | RP-X1            | \                  | 2022/11/17                | 2023/11/16                    |
| 5   | ECSI RF IN RF<br>Cable    | Rohde&Schwarz  | Sapre sm         | \                  | 2022/11/09                | 2023/11/10                    |
| 6   | EMI Receiver              | Rohde&Schwarz  | ESR7             | 102013             | 2022/11/09                | 2023/11/10                    |
| 7   | Spectrum analyzer         | Rohde&Schwarz  | FSV30            | 103741             | 2022/11/09                | 2023/11/10                    |
| 8   | Spectrum analyzer         | KEYSIGHT       | N9010A           | MY51440158         | 2022/11/09                | 2023/11/10                    |
| 9   | Integral Antenna          | Schwarzbeck    | VULB 9163        | 9163-868           | 2022/12/25                | 2023/12/24                    |
| 10  | Integral Antenna          | Schwarzbeck    | BBHA 9120D       | BBHA 9120D<br>1201 | 2022/11/09                | 2023/11/10                    |
| 11  | Integral Antenna          | Schwarzbeck    | BBHA 9170        | 9170#685           | 2022/11/06                | 2023/11/10                    |
| 12  | Preamplifier              | CD Systems Inc | PAP-03036-<br>30 | 85060000           | 2022/11/09                | 2023/11/10                    |
| 13  | Preamplifier              | Schwarzbeck    | BBV9721          | 9721-019           | 2022/11/09                | 2023/11/10                    |
| 14  | Preamplifier              | emci           | EMC012645<br>SE  | 980417             | 2022/11/09                | 2023/11/10                    |
| 15  | ECSI RF IN RF<br>Cable    | Rohde&Schwarz  | AP-X1            | \                  | 2022/11/09                | 2023/11/10                    |
| 16  | Spectrum Analyzer         | Agilent        | N9010A           | MY52221119         | 2022/11/09                | 2023/11/10                    |
| 17  | Power Collection<br>Unit  | Tonscend       | JS0806-2         | 188060134          | 2022/09/12                | 2023/09/11                    |
| 18  | Tonscend Test<br>System   | Tonscend       | 2.6.77.0518      | NA                 | NA                        | NA                            |
| 19  | Power Sensor              | Agilent        | U2021XA          | MY55410011         | 2022/09/12                | 2023/09/11                    |
| 20  | Power Sensor              | Agilent        | U2021XA          | MY55410012         | 2022/09/12                | 2023/09/11                    |
| 21  | Power Sensor              | Agilent        | U2021XA          | MY55410018         | 2022/09/12                | 2023/09/11                    |
| 22  | Power Sensor              | Agilent        | U2021XA          | MY55410019         | 2022/09/12                | 2023/09/11                    |
| 23  | Temp&Humidity<br>Recorder | Anymetre       | JR900            | NA                 | 2022/11/03                | 2023/11/02                    |
| 24  | Temp&Humidity<br>Chamber  | ETOMA          | NTH1100-<br>30A  | 16080628           | 2022/09/01                | 2023/08/30                    |

## 4 System test configuration

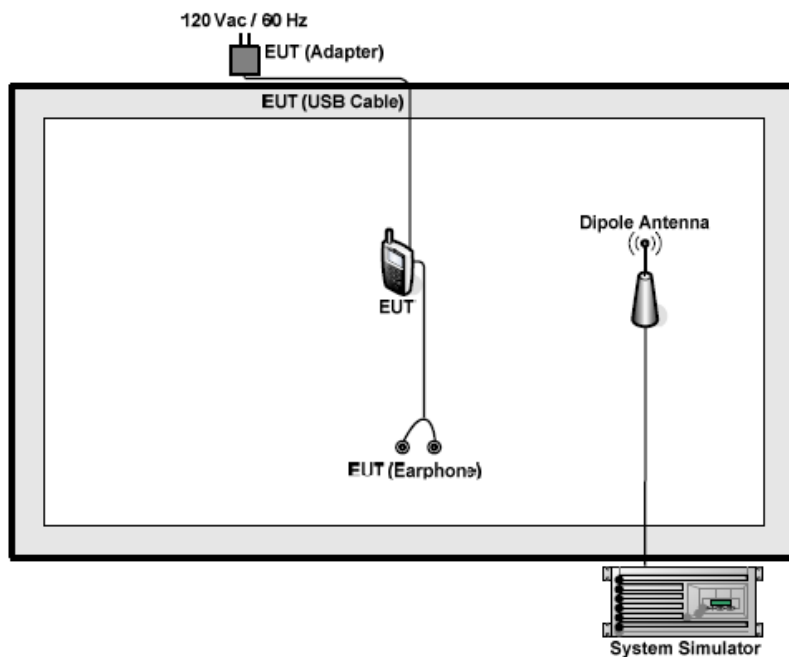
### 4.1 Test mode

During all testing, EUT is in link mode with base station emulator at maximum power level. The spurious emission measurements were carried out in semi-anechoic chamber with 3-meter test range, and EUT is rotated on three test planes to find out the worst emission.

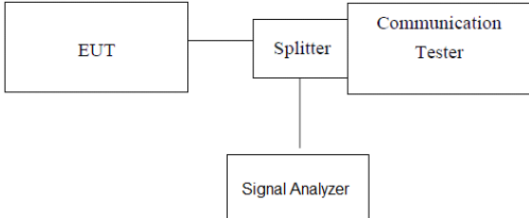
| Test modes           |                                                                                                             |                                                                                                             |
|----------------------|-------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|
| Band                 | Radiated                                                                                                    | Conducted                                                                                                   |
| <b>GSM 850</b>       | <ul style="list-style-type: none"> <li>■ GSM link</li> <li>■ GPRS 1 link</li> <li>■ EPRS 1 link</li> </ul>  | <ul style="list-style-type: none"> <li>■ GSM link</li> <li>■ GPRS 1 link</li> <li>■ EGPRS 1 link</li> </ul> |
| <b>PCS 1900</b>      | <ul style="list-style-type: none"> <li>■ GSM link</li> <li>■ GPRS 1 link</li> <li>■ EGPRS 1 link</li> </ul> | <ul style="list-style-type: none"> <li>■ GSM link</li> <li>■ GPRS 1 link</li> <li>■ EGPRS 1 link</li> </ul> |
| <b>WCDMA II</b>      | <ul style="list-style-type: none"> <li>■ RMC 12.2Kbps link</li> </ul>                                       | <ul style="list-style-type: none"> <li>■ RMC 12.2Kbps link</li> </ul>                                       |
| <b>WCDMA Band IV</b> | <ul style="list-style-type: none"> <li>■ RMC 12.2Kbps link</li> </ul>                                       | <ul style="list-style-type: none"> <li>■ RMC 12.2Kbps link</li> </ul>                                       |
| <b>WCDMA Band V</b>  | <ul style="list-style-type: none"> <li>■ RMC 12.2Kbps link</li> </ul>                                       | <ul style="list-style-type: none"> <li>■ RMC 12.2Kbps link</li> </ul>                                       |

Note: The maximum power levels are GSM mode for GMSK link, GPRS multi-slot class 8 mode for GMSK link, EGPRS multi-slot class 8 mode for 8PSK link, RMC12.2Kbps mode for WCDMA Band V/II. Only these modes were used for all tests.

### 4.2 Configuration of Tested System



### 4.3 Conducted AV Output Power

|                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Test Requirement: | FCC part 22.913(a) and FCC part 24.232(b), FCC part 27.50 (d)(4)                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Test Method:      | FCC part 2.1046                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Limit:            | GSM850, WCDMA Band V: 7W(38.45dbm)<br>PCS1900, WCDMA Band II: 2W(33.01dbm)<br>WCDMA Band IV: 1W(30.00dbm)                                                                                                                                                                                                                                                                                                                                                                                            |
| Test setup:       |  <p><i>Note: Measurement setup for testing on Antenna connector</i></p>                                                                                                                                                                                                                                                                                                                                            |
| Test Procedure:   | <ol style="list-style-type: none"> <li>1. The transmitter output port was connected to base station.</li> <li>2. The RF output of EUT was connected to the Signal Analyzer by RF cable and attenuator, the path loss was compensated to the results for each measurement.</li> <li>3. Set EUT at maximum power through base station.</li> <li>4. Select lowest, middle, and highest channels for each band and different modulation.</li> <li>5. Measure the maximum burst average power.</li> </ol> |
| Test Instruments: | Refer to section 5.0 for details                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Test mode:        | Refer to section 6.1 for details                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Test results:     | Pass                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

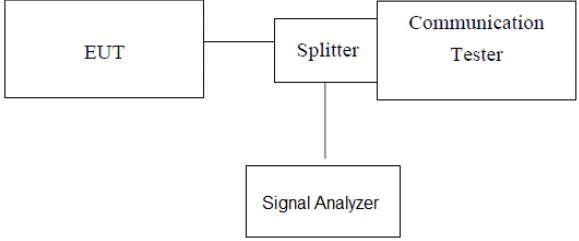
## Measurement Data

| Conducted Burst Power (dBm) |        |              |        |         |              |         |
|-----------------------------|--------|--------------|--------|---------|--------------|---------|
| Band                        | GSM850 |              |        | PCS1900 |              |         |
| Channel                     | 128    | 190          | 251    | 512     | 661          | 810     |
| Frequency                   | 824.20 | 836.60       | 848.80 | 1850.20 | 1880.00      | 1909.80 |
| GSM (GMSK, 1 TX slot)       | 33.43  | <b>33.86</b> | 33.25  | 29.25   | <b>29.65</b> | 29.51   |
| GPRS (GMSK, 1 TX slot)      | 32.98  | 32.39        | 32.58  | 28.42   | 28.62        | 28.54   |
| GPRS (GMSK, 2 TX slot)      | 31.72  | 31.53        | 31.34  | 28.00   | 28.46        | 27.77   |
| GPRS (GMSK, 3 TX slot)      | 32.10  | 31.76        | 31.49  | 28.21   | 28.20        | 28.04   |
| GPRS (GMSK, 4 TX slot)      | 32.42  | <b>33.84</b> | 33.78  | 29.24   | <b>29.28</b> | 28.72   |
| EGPRS (8PSK, 1 TX slot)     | 31.49  | 30.93        | 31.45  | 27.81   | 27.56        | 27.00   |
| EGPRS (8PSK, 2 TX slot)     | 31.01  | 31.33        | 31.84  | 27.95   | 28.09        | 26.90   |
| EGPRS (8PSK, 3 TX slot)     | 31.46  | 31.75        | 31.39  | 27.82   | 28.32        | 28.41   |
| EGPRS (8PSK, 4 TX slot)     | 31.48  | <b>31.92</b> | 31.90  | 27.39   | <b>28.89</b> | 27.91   |

| Burst Average Power (dBm) |               |              |        |              |              |       |
|---------------------------|---------------|--------------|--------|--------------|--------------|-------|
| Band                      | WCDMA Band II |              |        | WCDMA Band V |              |       |
| Channel                   | 9262          | 9400         | 9538   | 4132         | 4183         | 4233  |
| Frequency                 | 1852.4        | 1880.0       | 1907.6 | 826.4        | 836.6        | 846.6 |
| RMC 12.2Kbps              | 23.07         | <b>23.92</b> | 23.77  | 23.83        | <b>23.98</b> | 23.66 |
| HSDPA Subtest-1           | 23.39         | 23.55        | 22.49  | 23.38        | 23.29        | 23.06 |
| HSDPA Subtest-2           | 23.21         | 22.55        | 22.09  | 23.34        | 23.25        | 22.87 |
| HSDPA Subtest-3           | 22.41         | 22.66        | 22.18  | 23.63        | 23.28        | 22.73 |
| HSDPA Subtest-4           | 23.09         | <b>23.86</b> | 23.65  | 23.68        | <b>23.92</b> | 23.45 |
| HSUPA Subtest-1           | 22.76         | 22.72        | 23.13  | 22.96        | 23.12        | 23.14 |
| HSUPA Subtest-2           | 23.27         | 23.52        | 22.21  | 23.66        | 23.93        | 23.04 |
| HSUPA Subtest-3           | 22.70         | 23.17        | 22.59  | 22.86        | 22.96        | 23.38 |
| HSUPA Subtest-4           | 23.03         | 22.81        | 22.25  | 23.78        | 23.68        | 23.38 |
| HSUPA Subtest-5           | 22.29         | <b>23.77</b> | 22.61  | 23.56        | <b>23.90</b> | 23.50 |

| Burst Average Power (dBm) |               |              |              |
|---------------------------|---------------|--------------|--------------|
| Band                      | WCDMA Band IV |              |              |
| Channel                   | 1312          | 1450         | 1513         |
| Frequency                 | 1712.4        | 1740.0       | 1752.6       |
| RMC 12.2Kbps              | 24.85         | 24.90        | <b>24.94</b> |
| HSDPA Subtest-1           | 24.29         | 24.47        | 24.05        |
| HSDPA Subtest-2           | 23.54         | 24.45        | 23.98        |
| HSDPA Subtest-3           | 23.70         | 24.42        | 24.15        |
| HSDPA Subtest-4           | 24.35         | <b>24.84</b> | 24.36        |
| HSUPA Subtest-1           | 24.80         | 24.49        | 24.26        |
| HSUPA Subtest-2           | 24.58         | 24.55        | 24.13        |
| HSUPA Subtest-3           | 23.79         | 24.35        | 24.38        |
| HSUPA Subtest-4           | 23.92         | 24.46        | 24.15        |
| HSUPA Subtest-5           | 24.79         | <b>24.85</b> | 24.36        |

#### 4.4 Peak-to-Average Ratio

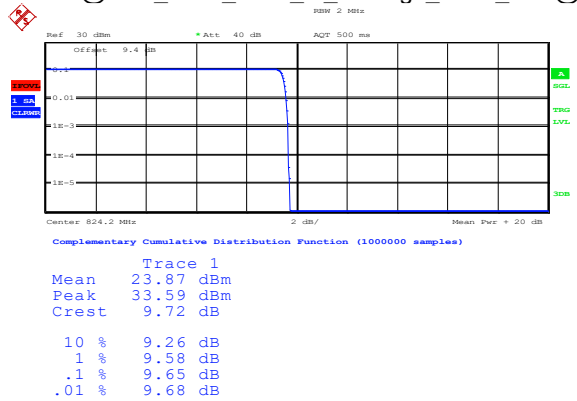
|                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Test Requirement: | FCC part24.232(d)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Test Method:      | FCC part2.1046                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Limit:            | 13db                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Test setup:       |  <p><i>Note: Measurement setup for testing on Antenna connector</i></p>                                                                                                                                                                                                                                                                                                                                                                                                        |
| Test Procedure:   | <ol style="list-style-type: none"> <li>1. The transmitter output port was connected to base station.</li> <li>2. The RF output of EUT was connected to the Signal Analyzer by RF cable and attenuator, the path loss was compensated to the results for each measurement.</li> <li>3. Set EUT at maximum power through base station.</li> <li>4. Select lowest, middle, and highest channels for each band and different modulation.</li> <li>5. Measure the maximum burst average power.</li> <li>6. Record the maximum peak-to-average ratio value.</li> </ol> |
| Test Instruments: | Refer to section 5.0 for details                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Test mode:        | Refer to section 6.1 for details                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Test results:     | Pass                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |

#### Measurement data

| Band      | Channel | Result(dB) | Limit(dB) | Verdict |
|-----------|---------|------------|-----------|---------|
| GSM850    | 128     | 9.65       | 13        | PASS    |
| GSM850    | 190     | 9.65       | 13        | PASS    |
| GSM850    | 251     | 9.62       | 13        | PASS    |
| GPRS850   | 128     | 9.81       | 13        | PASS    |
| GPRS850   | 190     | 9.81       | 13        | PASS    |
| GPRS850   | 251     | 9.84       | 13        | PASS    |
| EGPRS850  | 128     | 12.66      | 13        | PASS    |
| EGPRS850  | 190     | 12.56      | 13        | PASS    |
| EGPRS850  | 251     | 12.69      | 13        | PASS    |
| GSM1900   | 512     | 9.49       | 13        | PASS    |
| GSM1900   | 661     | 9.49       | 13        | PASS    |
| GSM1900   | 810     | 9.46       | 13        | PASS    |
| GPRS1900  | 512     | 9.65       | 13        | PASS    |
| GPRS1900  | 661     | 9.62       | 13        | PASS    |
| GPRS1900  | 810     | 9.65       | 13        | PASS    |
| EGPRS1900 | 512     | 12.4       | 13        | PASS    |
| EGPRS1900 | 661     | 12.5       | 13        | PASS    |
| EGPRS1900 | 810     | 12.47      | 13        | PASS    |

@FCC\_GSM\_Peak\_to\_Average\_Ratio\_IMG@GSM850-128

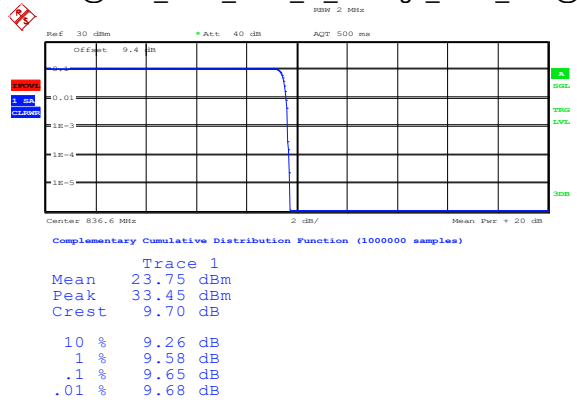
@FCC\_GSM\_Peak\_to\_Average\_Ratio\_IMG@



Date: 21.MAR.2023 10:18:13

@FCC\_GSM\_Peak\_to\_Average\_Ratio\_IMG@GSM850-190

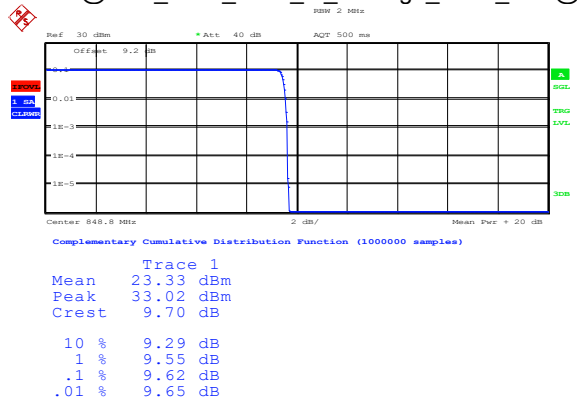
@FCC\_GSM\_Peak\_to\_Average\_Ratio\_IMG@



Date: 21.MAR.2023 10:18:23

@FCC\_GSM\_Peak\_to\_Average\_Ratio\_IMG@GSM850-251

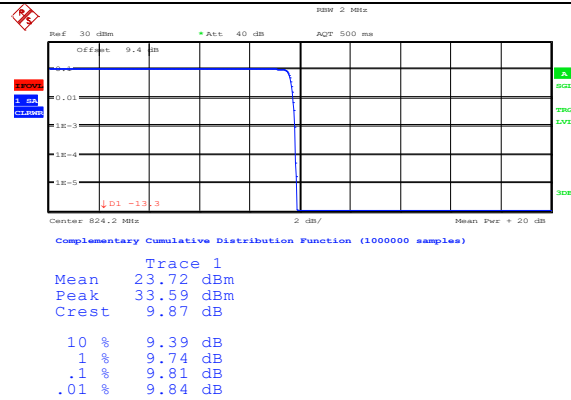
@FCC\_GSM\_Peak\_to\_Average\_Ratio\_IMG@



Date: 21.MAR.2023 10:18:33

@FCC\_GSM\_Peak\_to\_Average\_Ratio\_IMG@GPRS850-128

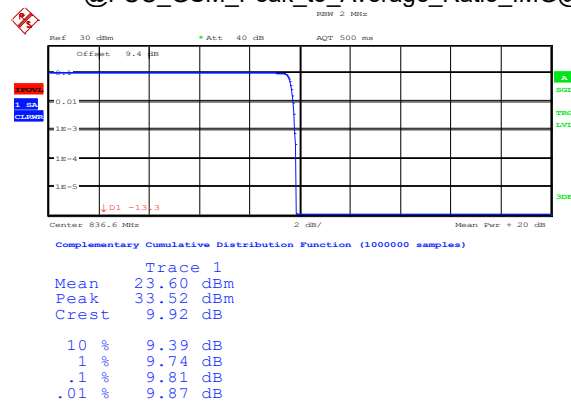
@FCC\_GSM\_Peak\_to\_Average\_Ratio\_IMG@



Date: 21.MAR.2023 10:34:25

## @FCC\_GSM\_Peak\_to\_Average\_Ratio\_IMG@GPRS850-190

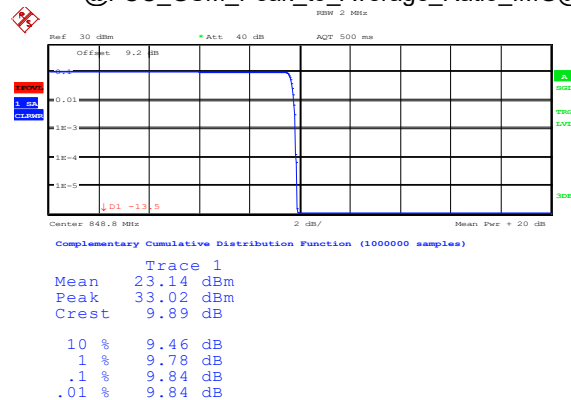
## @FCC\_GSM\_Peak\_to\_Average\_Ratio\_IMG@



Date: 21.MAR.2023 10:34:46

## @FCC\_GSM\_Peak\_to\_Average\_Ratio\_IMG@GPRS850-251

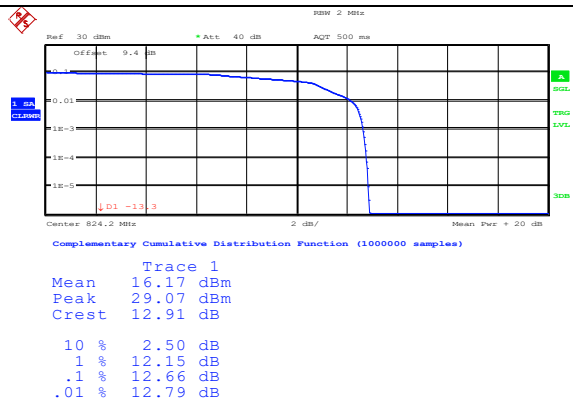
## @FCC\_GSM\_Peak\_to\_Average\_Ratio\_IMG@



Date: 21.MAR.2023 10:35:06

## @FCC\_GSM\_Peak\_to\_Average\_Ratio\_IMG@EGPRS850-128

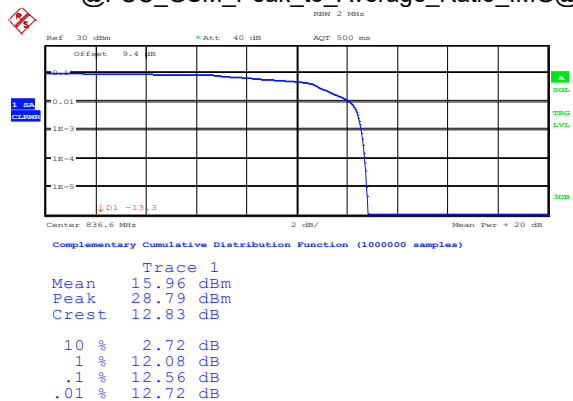
## @FCC\_GSM\_Peak\_to\_Average\_Ratio\_IMG@



Date: 21.MAR.2023 10:51:48

@FCC\_GSM\_Peak\_to\_Average\_Ratio\_IMG@EGPRS850-190

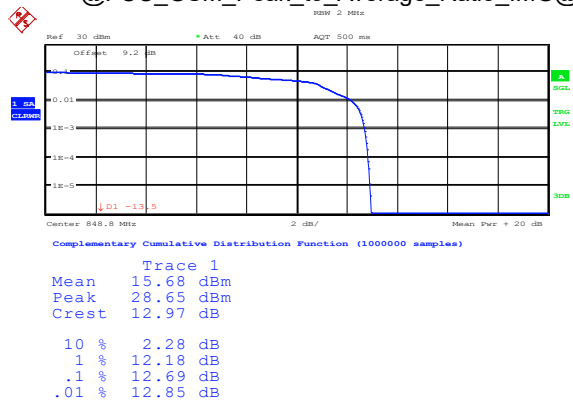
@FCC\_GSM\_Peak\_to\_Average\_Ratio\_IMG@



Date: 21.MAR.2023 10:52:09

@FCC\_GSM\_Peak\_to\_Average\_Ratio\_IMG@EGPRS850-251

@FCC\_GSM\_Peak\_to\_Average\_Ratio\_IMG@



Date: 21.MAR.2023 10:52:30

@FCC\_GSM\_Peak\_to\_Average\_Ratio\_IMG@GSM1900-512

@FCC\_GSM\_Peak\_to\_Average\_Ratio\_IMG@



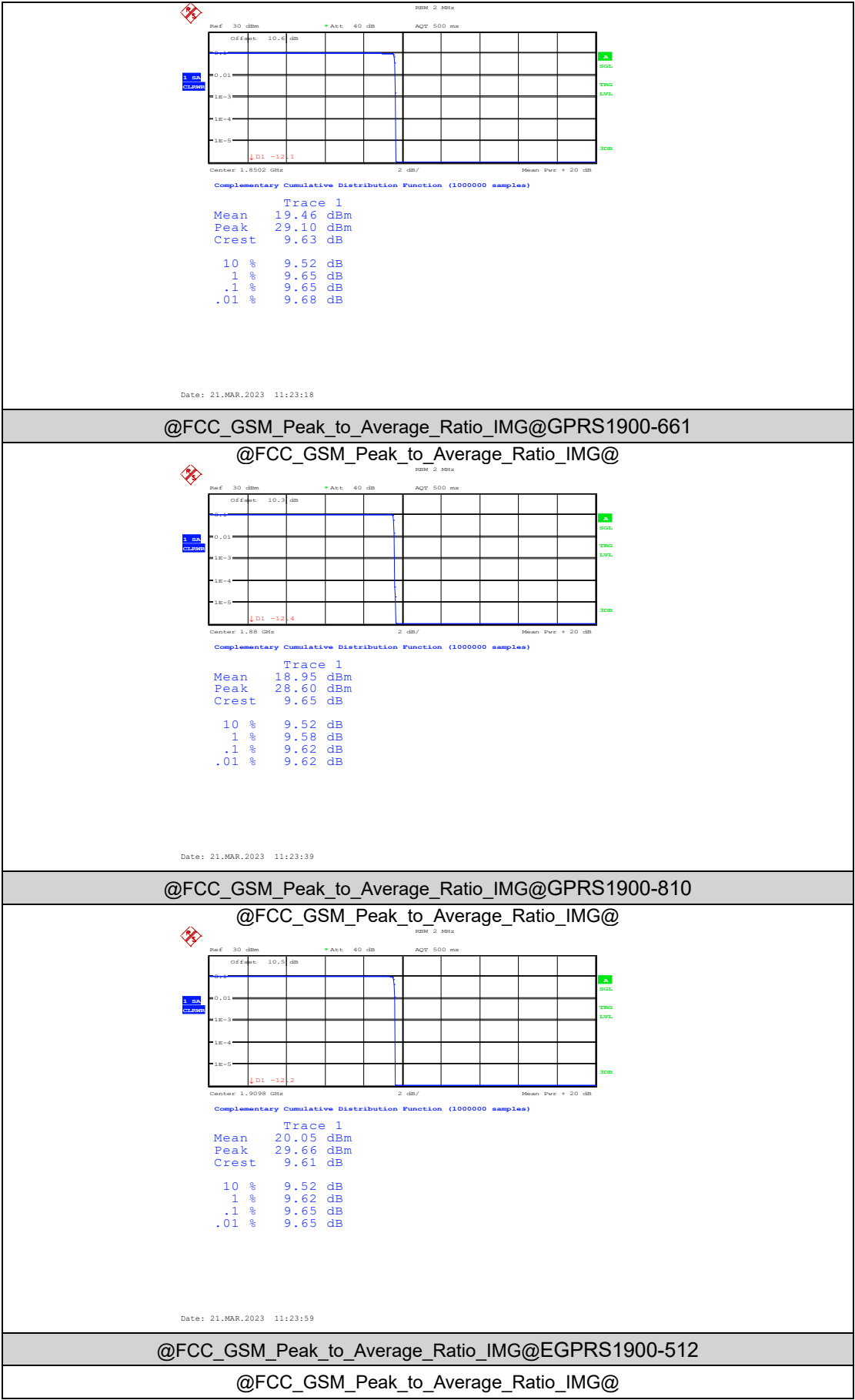
@FCC\_GSM\_Peak\_to\_Average\_Ratio\_IMG@

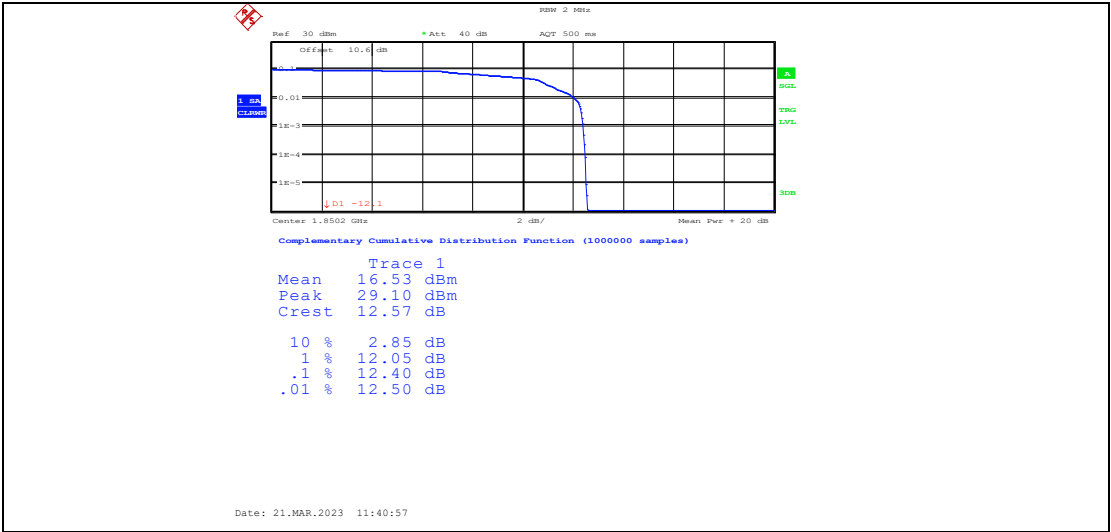


@FCC\_GSM\_Peak\_to\_Average\_Ratio\_IMG@



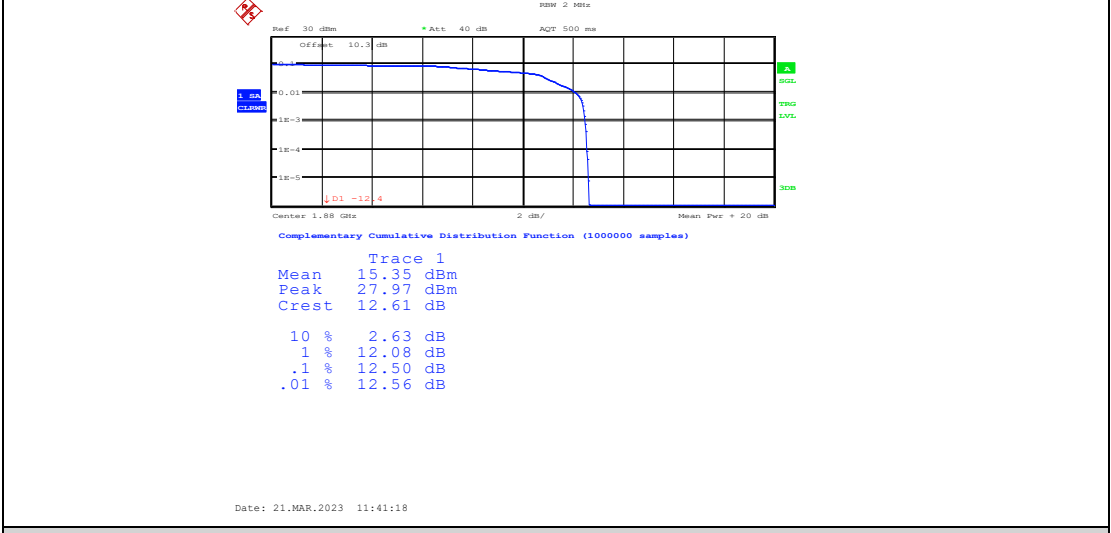
@FCC\_GSM\_Peak\_to\_Average\_Ratio\_IMG@





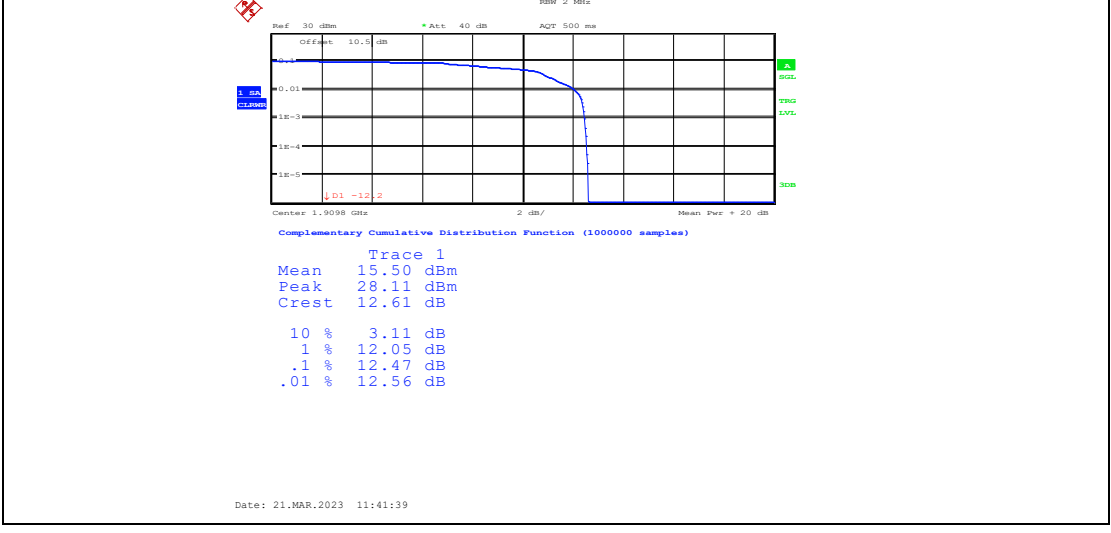
@FCC\_GSM\_Peak\_to\_Average\_Ratio\_IMG@EGPRS1900-661

@FCC\_GSM\_Peak\_to\_Average\_Ratio\_IMG@

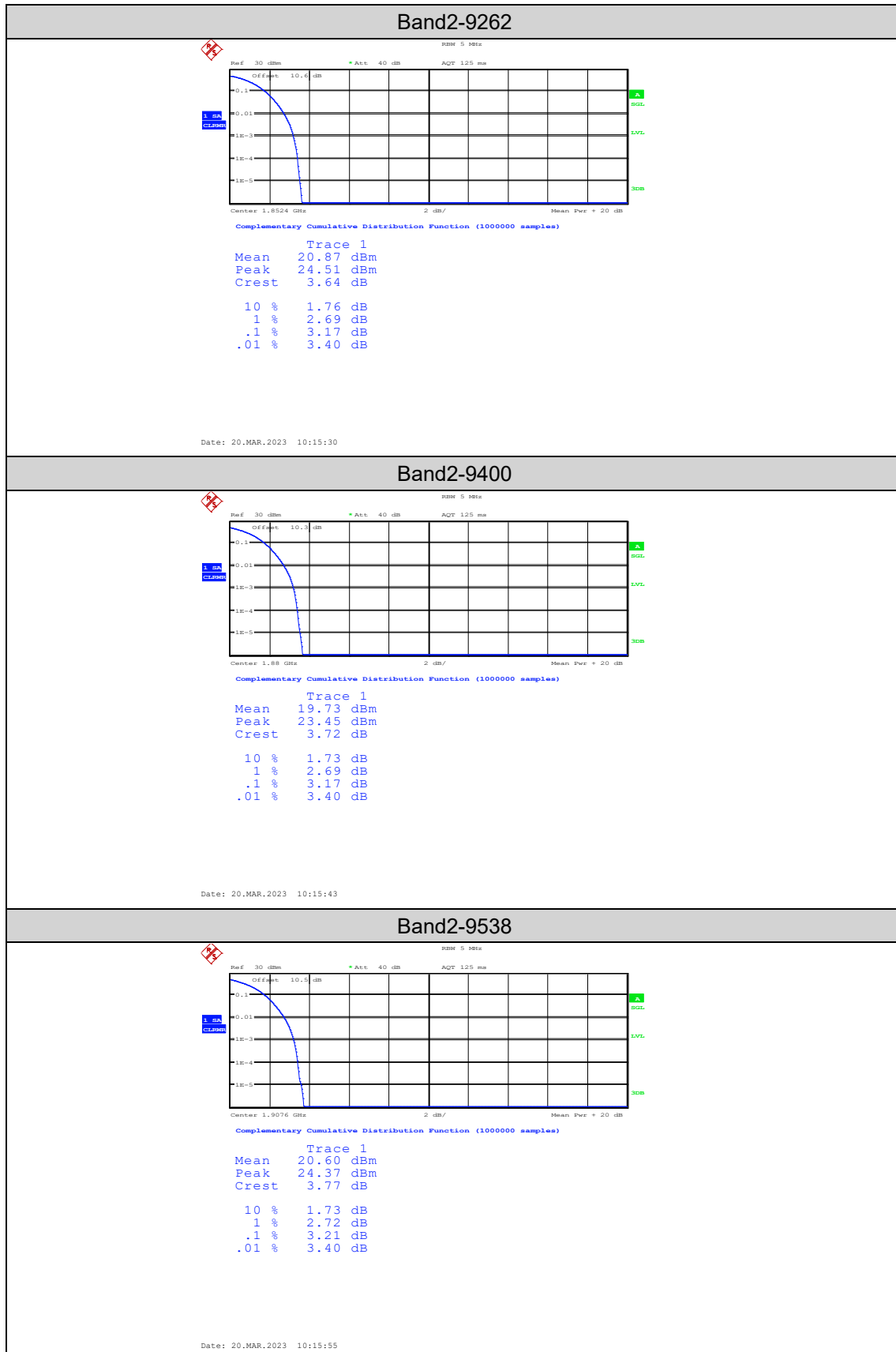


@FCC\_GSM\_Peak\_to\_Average\_Ratio\_IMG@EGPRS1900-810

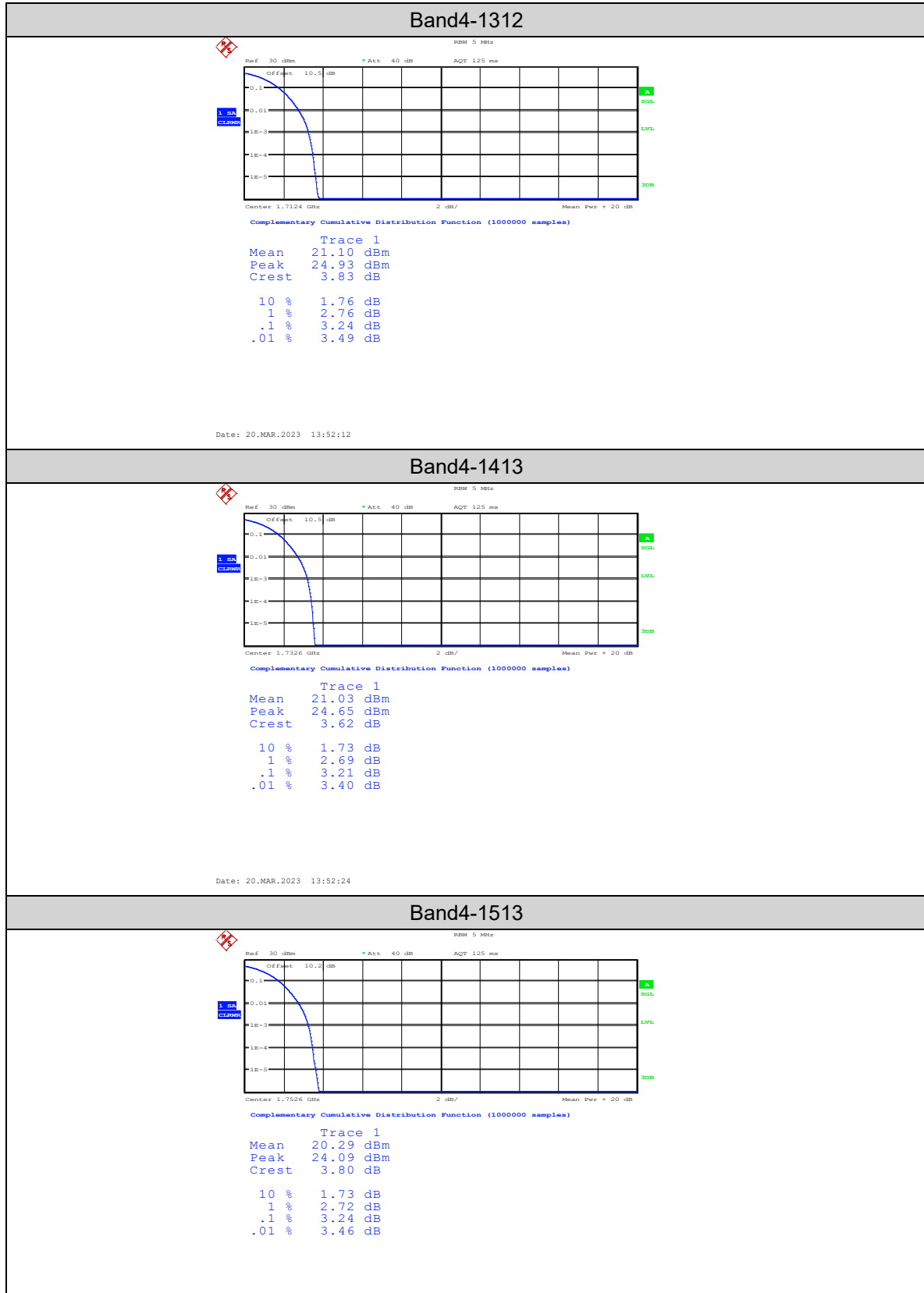
@FCC\_GSM\_Peak\_to\_Average\_Ratio\_IMG@



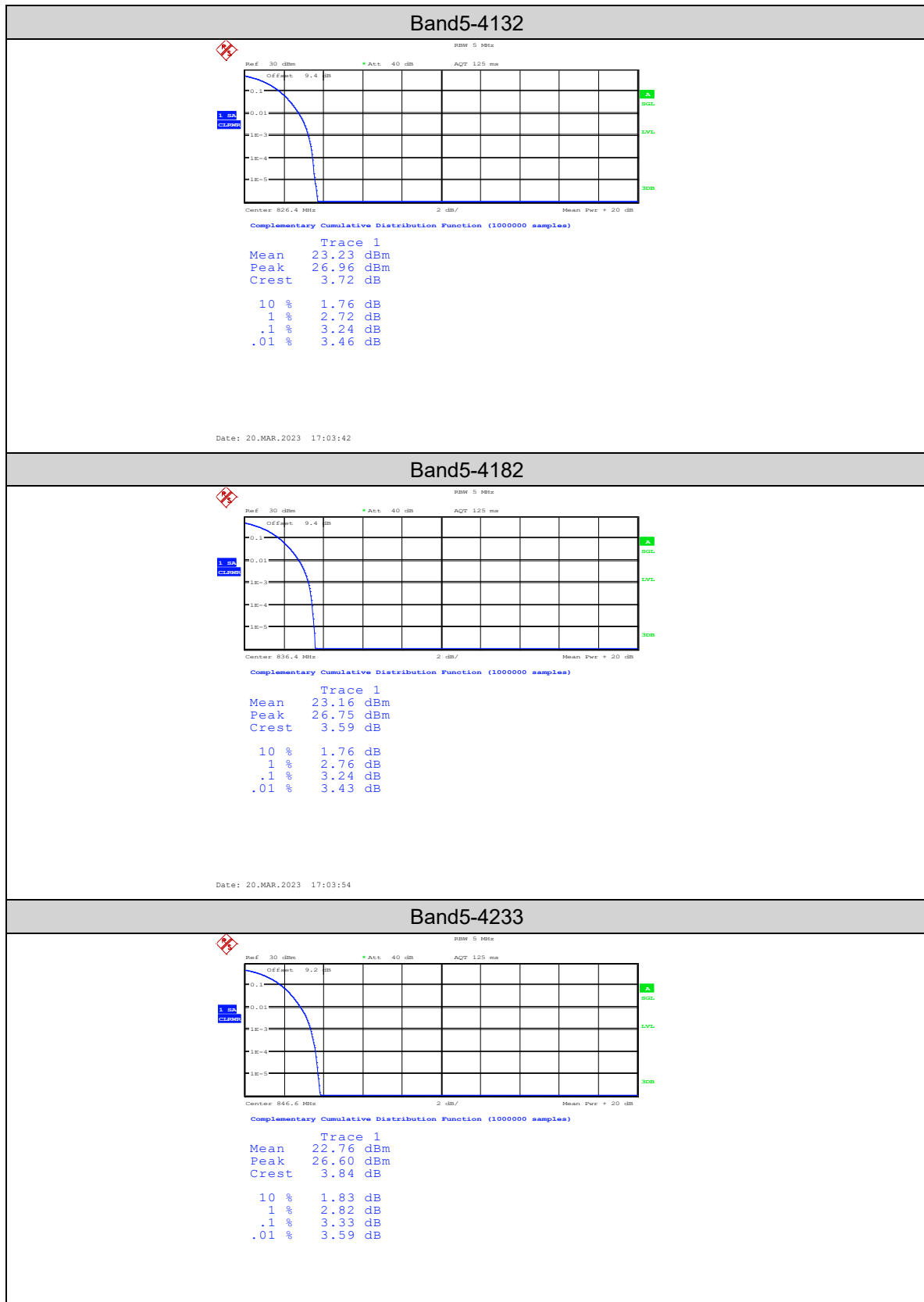
| Band  | Channel | Peak-to-Average Ratio(dB) | Limit(dB) | Verdict |
|-------|---------|---------------------------|-----------|---------|
| Band2 | 9262    | 3.17                      | 13        | PASS    |
| Band2 | 9400    | 3.17                      | 13        | PASS    |
| Band2 | 9538    | 3.21                      | 13        | PASS    |



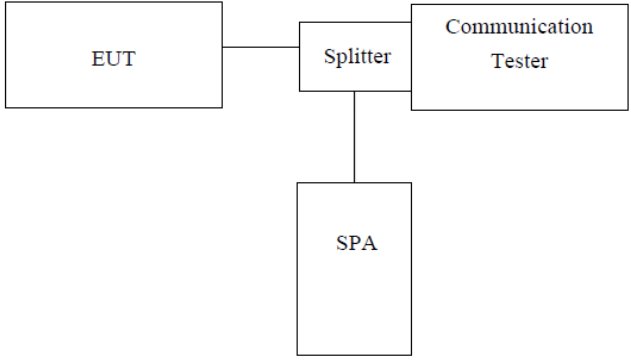
| Band  | Channel | Peak-to-Average Ratio(dB) | Limit(dB) | Verdict |
|-------|---------|---------------------------|-----------|---------|
| Band4 | 1312    | 3.24                      | 13        | PASS    |
| Band4 | 1413    | 3.21                      | 13        | PASS    |
| Band4 | 1513    | 3.24                      | 13        | PASS    |



| Band  | Channel | Peak-to-Average Ratio(dB) | Limit(dB) | Verdict |
|-------|---------|---------------------------|-----------|---------|
| Band5 | 4132    | 3.24                      | 13        | PASS    |
| Band5 | 4182    | 3.24                      | 13        | PASS    |
| Band5 | 4233    | 3.33                      | 13        | PASS    |

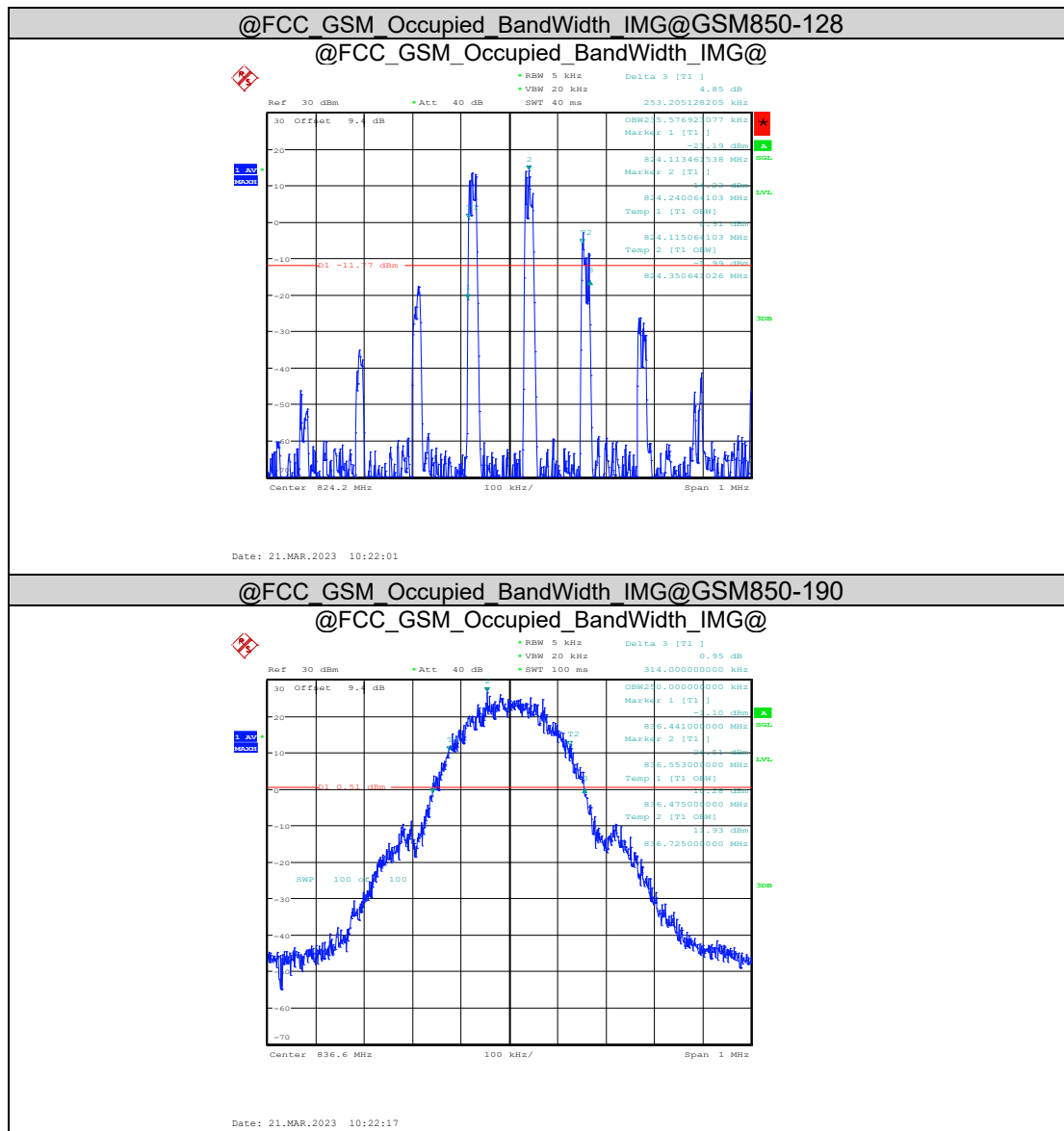


#### 4.5 Occupy Bandwidth

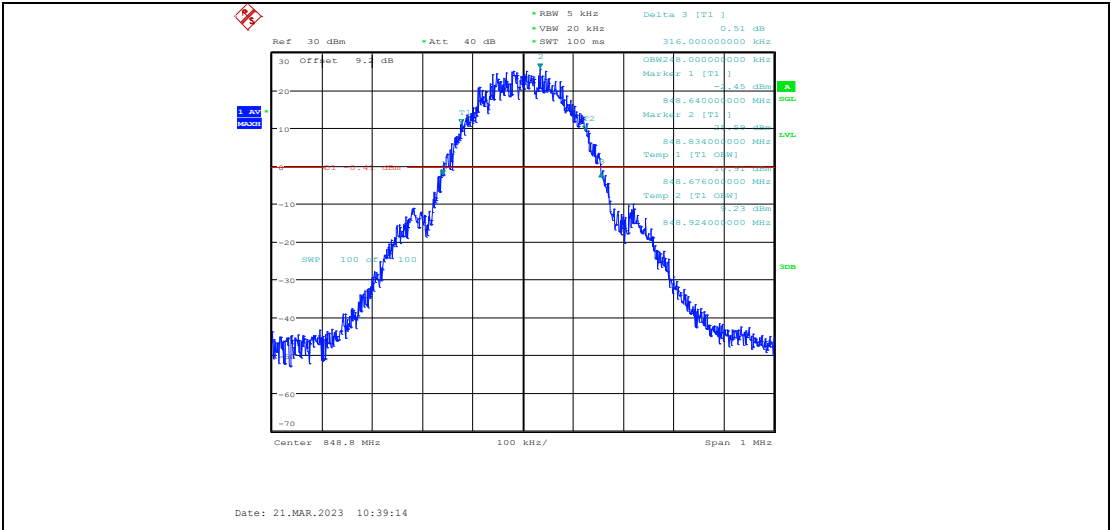
|                   |                                                                                                                                                                                                                                                                                                                                                                                                                          |
|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Test Requirement: | FCC part22.913(a) and FCC part24.232(b)                                                                                                                                                                                                                                                                                                                                                                                  |
| Test Method:      | FCC part2.1049                                                                                                                                                                                                                                                                                                                                                                                                           |
| Test setup:       |  <p><i>Note: Measurement setup for testing on Antenna connector</i></p>                                                                                                                                                                                                                                                                |
| Test Procedure:   | <ol style="list-style-type: none"> <li>1. The EUT's output RF connector was connected with a short cable to the spectrum analyzer</li> <li>2. RBW was set to about 1% of emission BW, VBW= 3 times RBW.</li> <li>3. -26dBc display line was placed on the screen (or 99% bandwidth), the occupied bandwidth is the delta frequency between the two points where the display line intersects the signal trace.</li> </ol> |
| Test Instruments: | Refer to section 5.0 for details                                                                                                                                                                                                                                                                                                                                                                                         |
| Test mode:        | Refer to section 6.1 for details                                                                                                                                                                                                                                                                                                                                                                                         |
| Test results:     | Pass                                                                                                                                                                                                                                                                                                                                                                                                                     |

## Measurement Data

| Band      | Channel | PCL | Occupied Bandwidth (MHz) | 26dB Bandwidth (MHz) | Limit (MHz) | Verdict |
|-----------|---------|-----|--------------------------|----------------------|-------------|---------|
| GSM850    | 128     | 5   | 0.236                    | 0.25                 | ---         | PASS    |
| GSM850    | 190     | 5   | 0.25                     | 0.31                 | ---         | PASS    |
| GSM850    | 251     | 5   | 0.251                    | 0.31                 | ---         | PASS    |
| GPRS850   | 128     | 5   | 0.179                    | 0.32                 | ---         | PASS    |
| GPRS850   | 190     | 5   | 0.25                     | 0.31                 | ---         | PASS    |
| GPRS850   | 251     | 5   | 0.248                    | 0.32                 | ---         | PASS    |
| EGPRS850  | 128     | 8   | 0.216                    | 0.31                 | ---         | PASS    |
| EGPRS850  | 190     | 8   | 0.249                    | 0.31                 | ---         | PASS    |
| EGPRS850  | 251     | 8   | 0.247                    | 0.32                 | ---         | PASS    |
| GSM1900   | 512     | 0   | 0.13                     | 0.13                 | ---         | PASS    |
| GSM1900   | 661     | 0   | 0.245                    | 0.31                 | ---         | PASS    |
| GSM1900   | 810     | 0   | 0.244                    | 0.31                 | ---         | PASS    |
| GPRS1900  | 512     | 0   | 0.215                    | 0.31                 | ---         | PASS    |
| GPRS1900  | 661     | 0   | 0.246                    | 0.32                 | ---         | PASS    |
| GPRS1900  | 810     | 0   | 0.245                    | 0.31                 | ---         | PASS    |
| EGPRS1900 | 512     | 2   | 0.252                    | 0.30                 | ---         | PASS    |
| EGPRS1900 | 661     | 2   | 0.243                    | 0.31                 | ---         | PASS    |
| EGPRS1900 | 810     | 2   | 0.247                    | 0.31                 | ---         | PASS    |

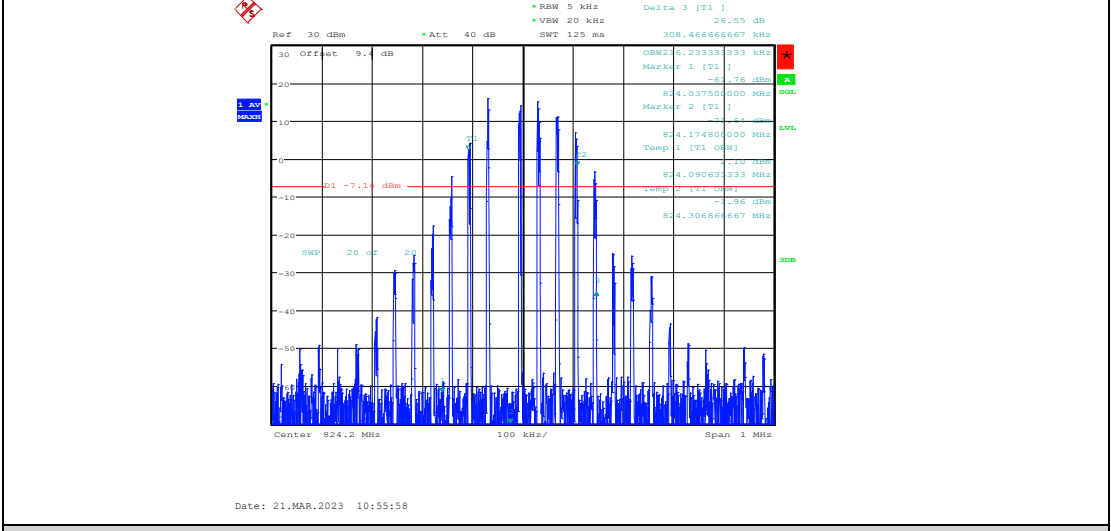






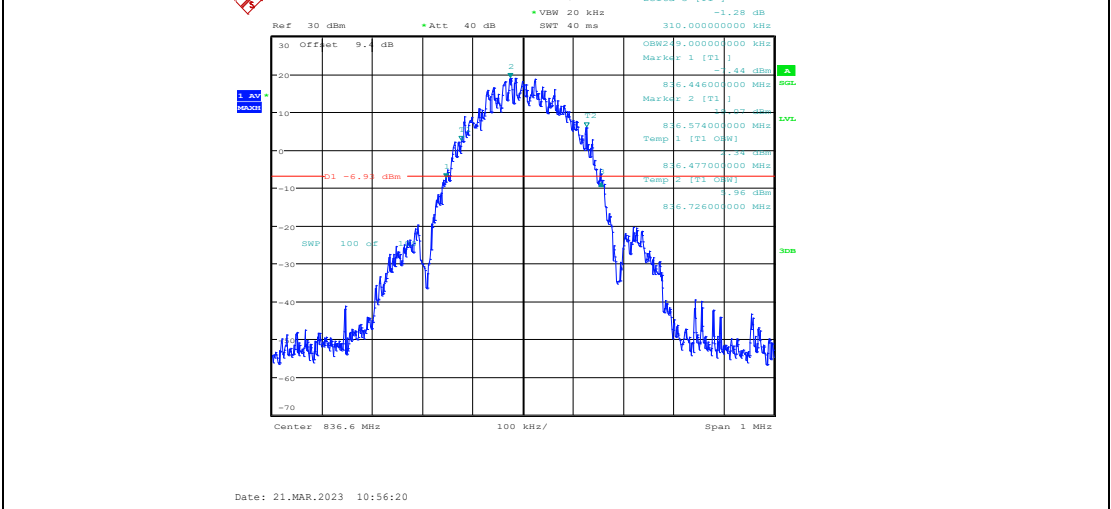
@FCC\_GSM\_Occupied\_BandWidth\_IMG@EGPRS850-128

@FCC\_GSM\_Occupied\_BandWidth\_IMG@



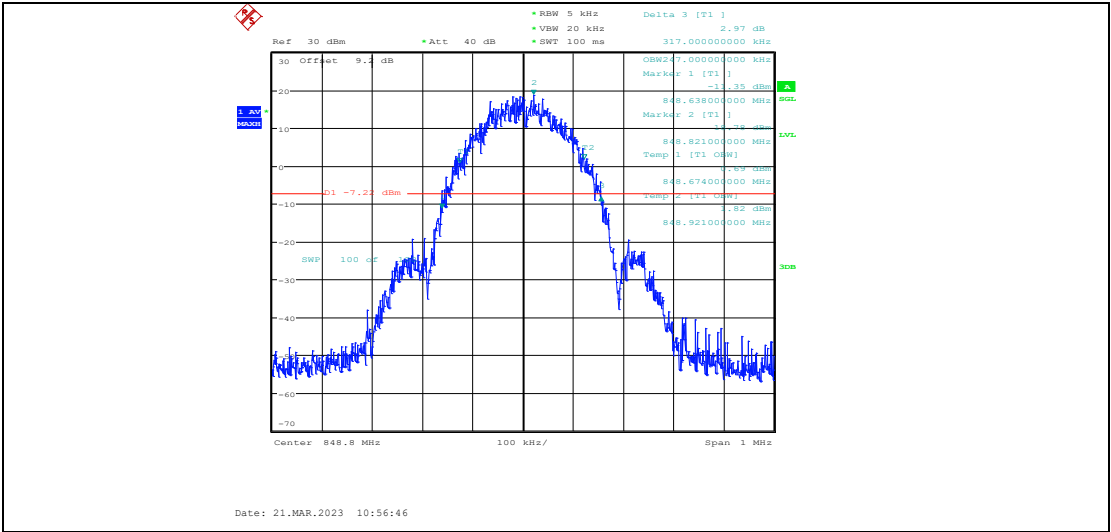
@FCC\_GSM\_Occupied\_BandWidth\_IMG@EGPRS850-190

@FCC\_GSM\_Occupied\_BandWidth\_IMG@



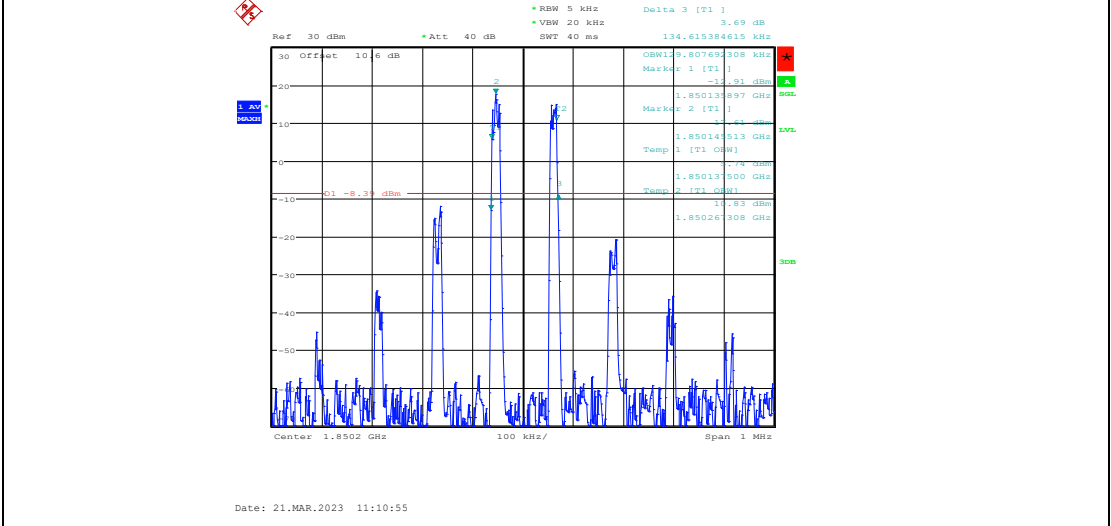
@FCC\_GSM\_Occupied\_BandWidth\_IMG@EGPRS850-251

@FCC\_GSM\_Occupied\_BandWidth\_IMG@



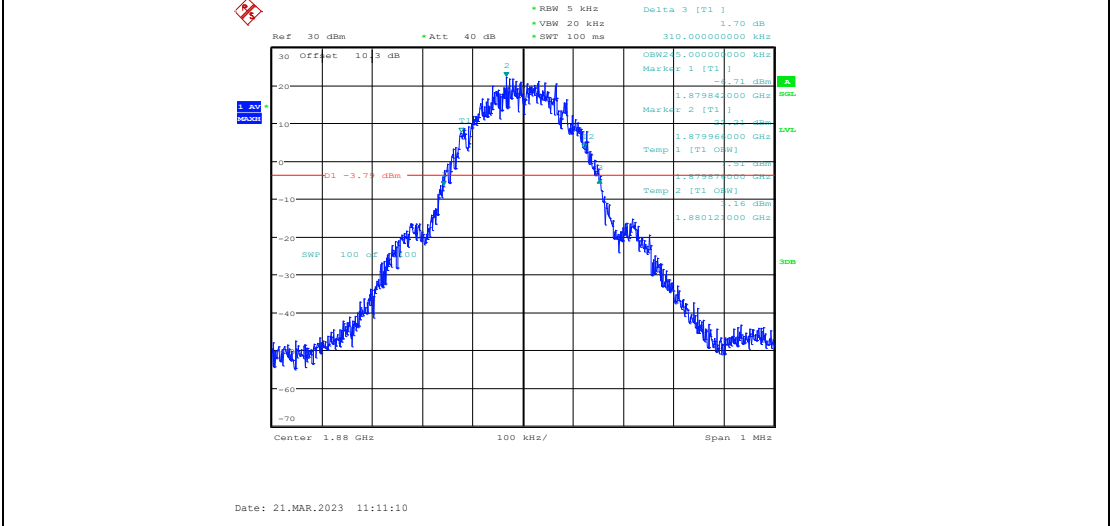
@FCC\_GSM\_Occupied\_BandWidth\_IMG@GSM1900-512

@FCC\_GSM\_Occupied\_BandWidth\_IMG@



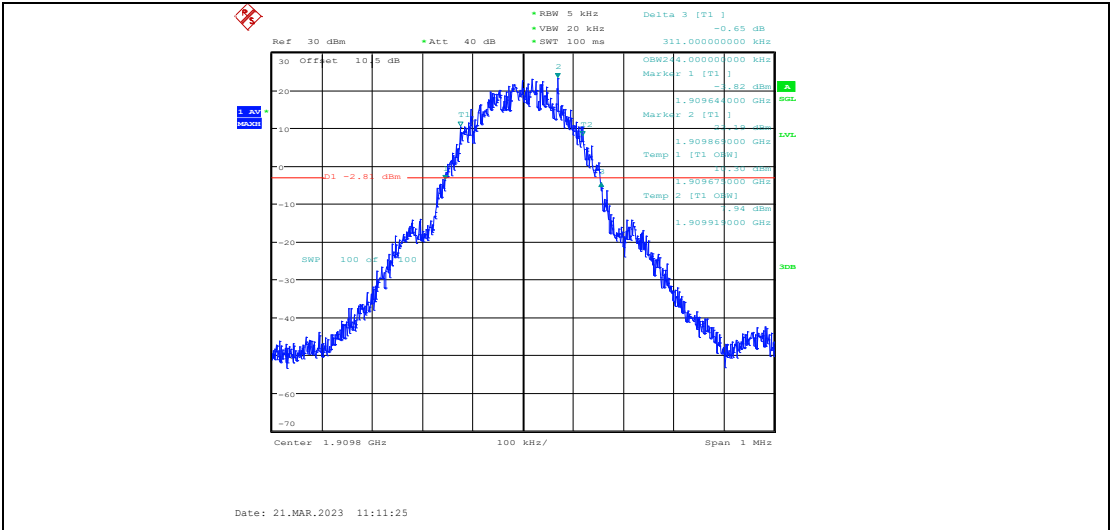
@FCC\_GSM\_Occupied\_BandWidth\_IMG@GSM1900-661

@FCC\_GSM\_Occupied\_BandWidth\_IMG@



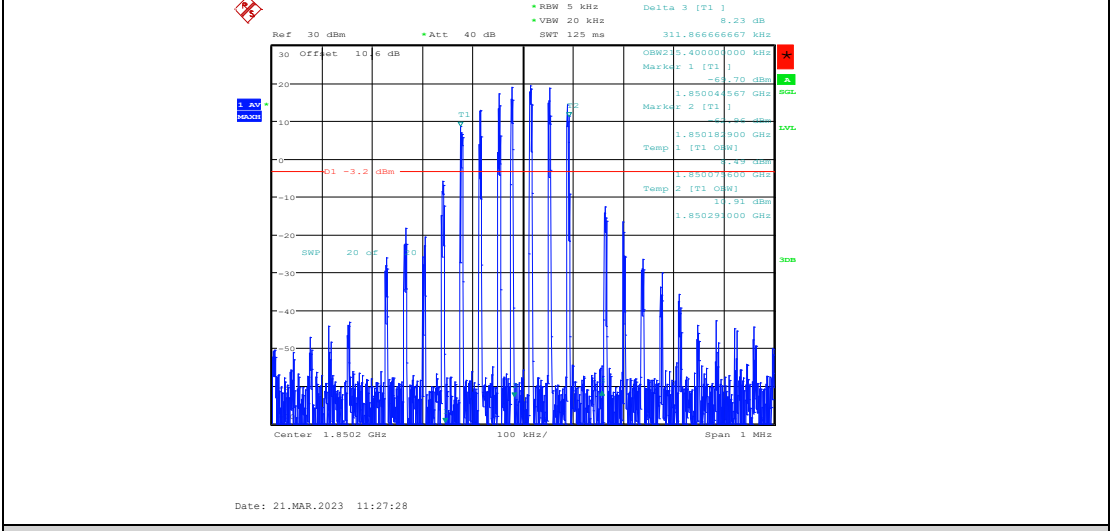
@FCC\_GSM\_Occupied\_BandWidth\_IMG@GSM1900-810

@FCC\_GSM\_Occupied\_BandWidth\_IMG@



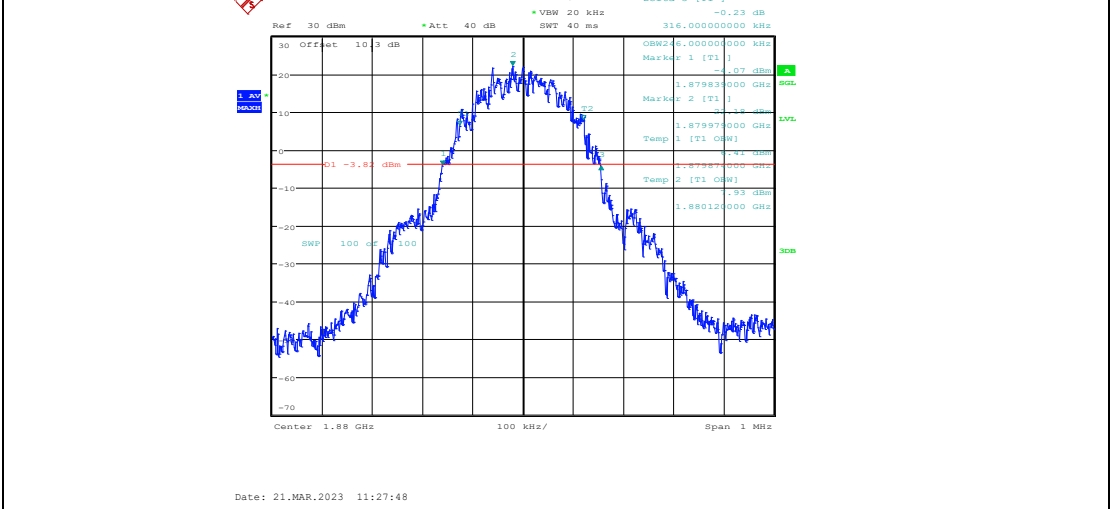
@FCC GSM Occupied BandWidth\_IMG@GPRS1900-512

@FCC\_GSM\_Occupied\_BandWidth\_IMG@



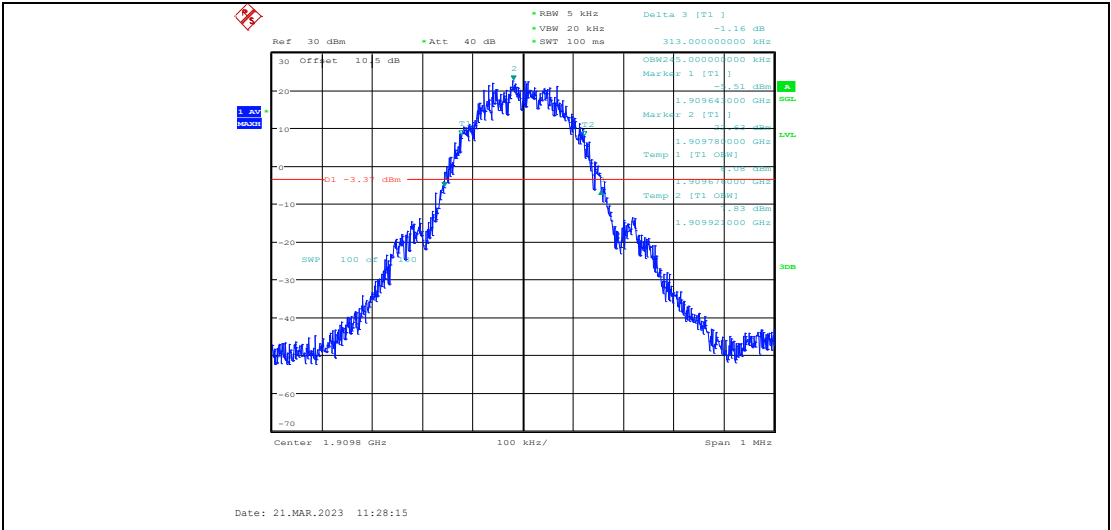
@FCC GSM Occupied BandWidth\_IMG@GPRS1900-661

@FCC\_GSM\_Occupied\_BandWidth\_IMG@



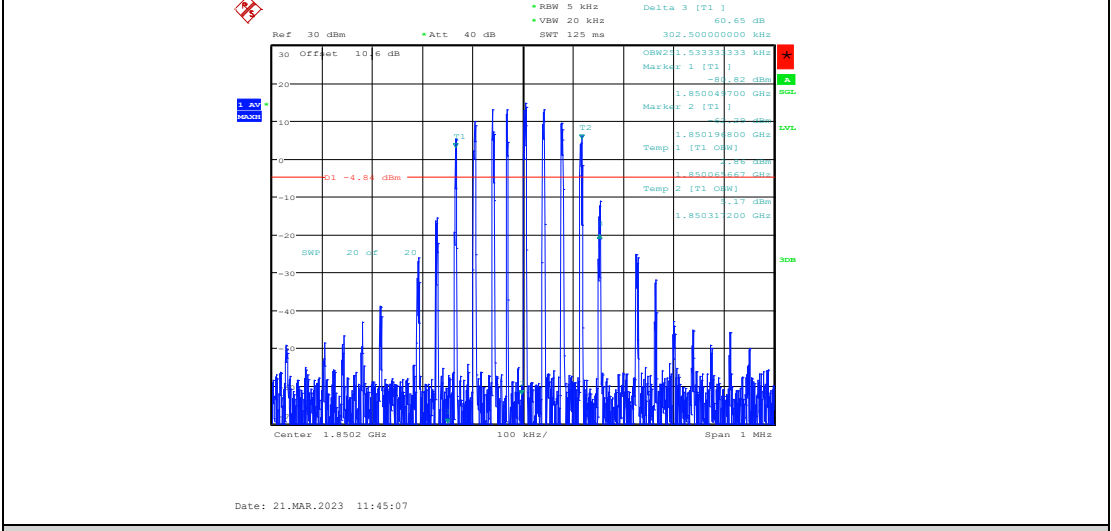
@FCC GSM Occupied BandWidth\_IMG@GPRS1900-810

@FCC\_GSM\_Occupied\_BandWidth\_IMG@



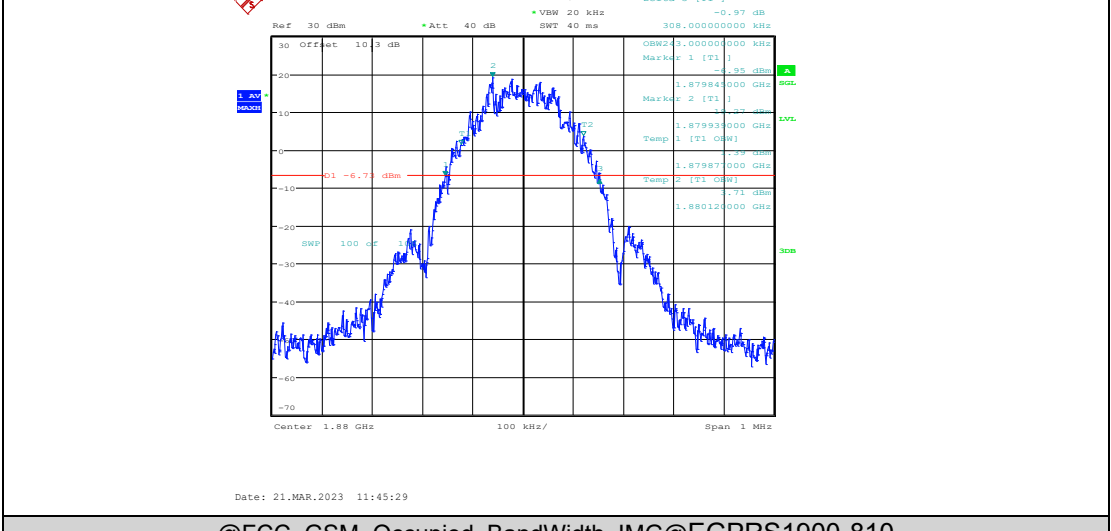
@FCC\_GSM\_Occupied\_BandWidth\_IMG@EGPRS1900-512

@FCC\_GSM\_Occupied\_BandWidth\_IMG@



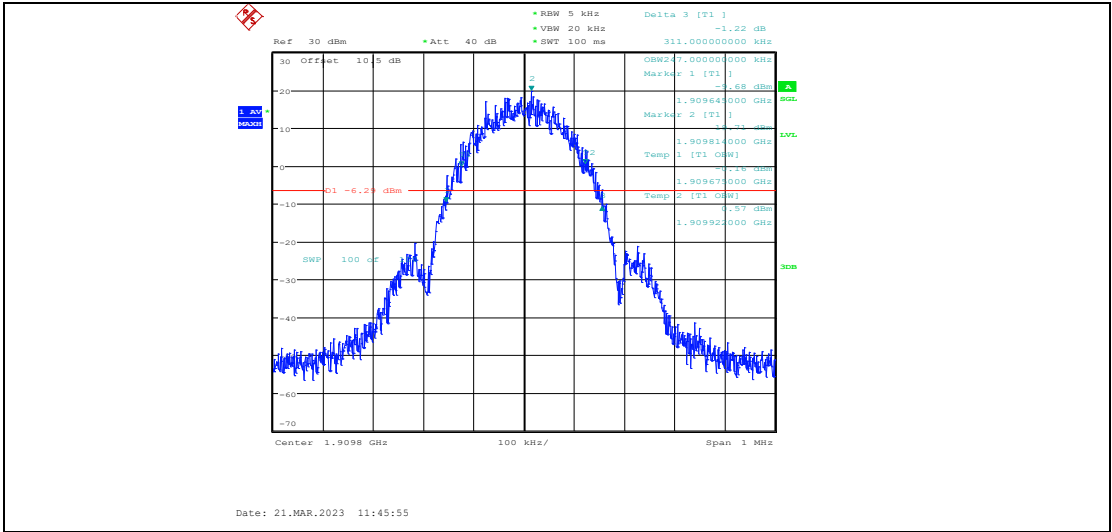
@FCC\_GSM\_Occupied\_BandWidth\_IMG@EGPRS1900-661

@FCC\_GSM\_Occupied\_BandWidth\_IMG@

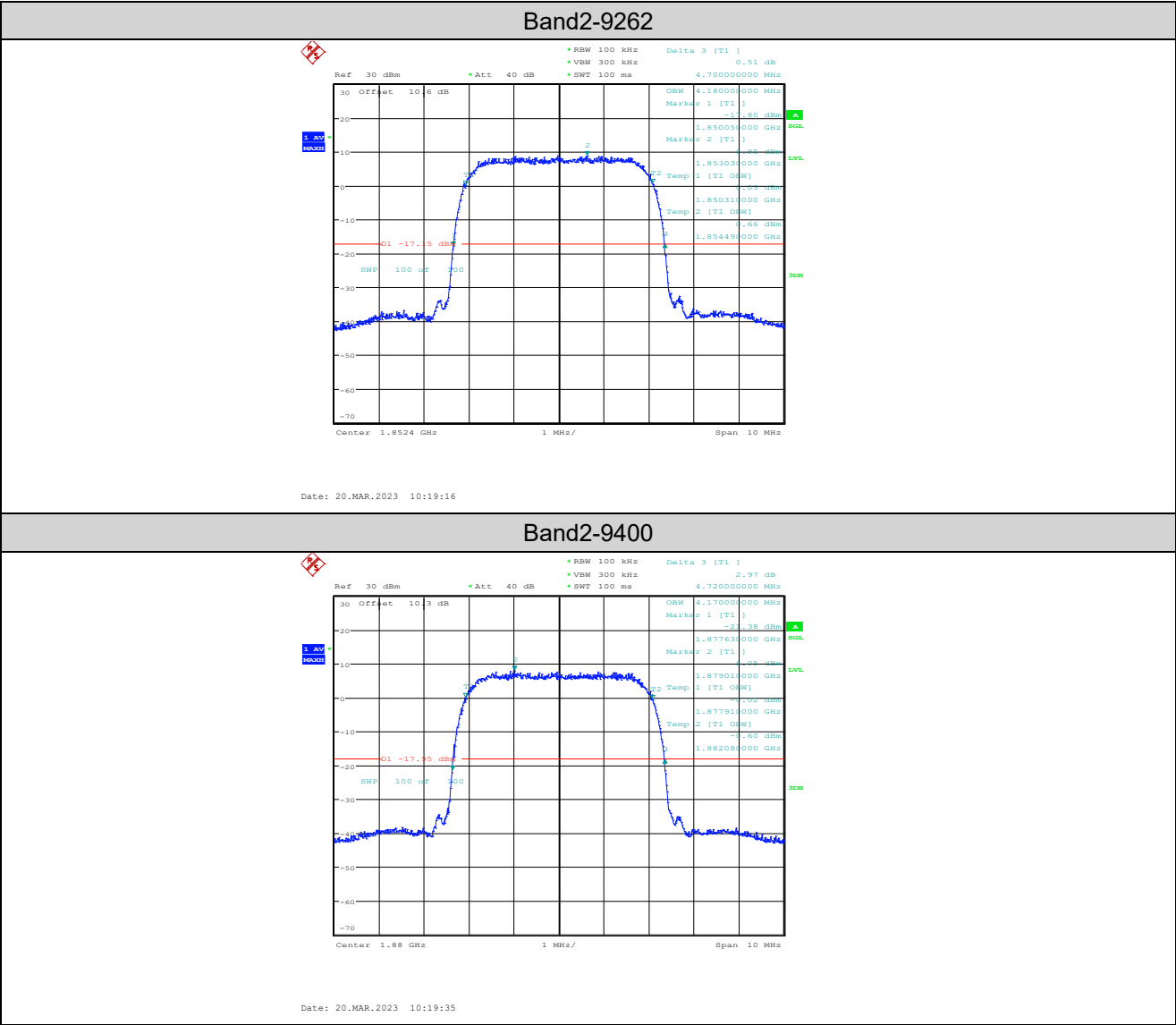


@FCC\_GSM\_Occupied\_BandWidth\_IMG@EGPRS1900-810

@FCC\_GSM\_Occupied\_BandWidth\_IMG@

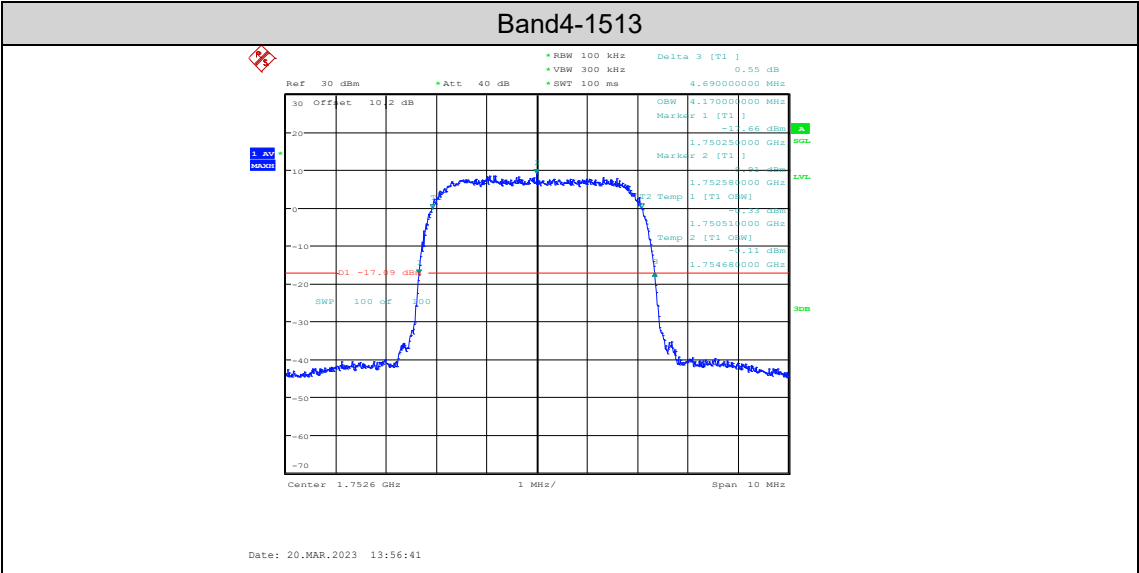


| Band  | Channel | Occupied Bandwidth (kHz) | 26dB Bandwidth (kHz) | Limit(kHz) | Verdict |
|-------|---------|--------------------------|----------------------|------------|---------|
| Band2 | 9262    | 4.18                     | 4.70                 | ---        | PASS    |
| Band2 | 9400    | 4.17                     | 4.72                 | ---        | PASS    |
| Band2 | 9538    | 4.17                     | 4.70                 | ---        | PASS    |

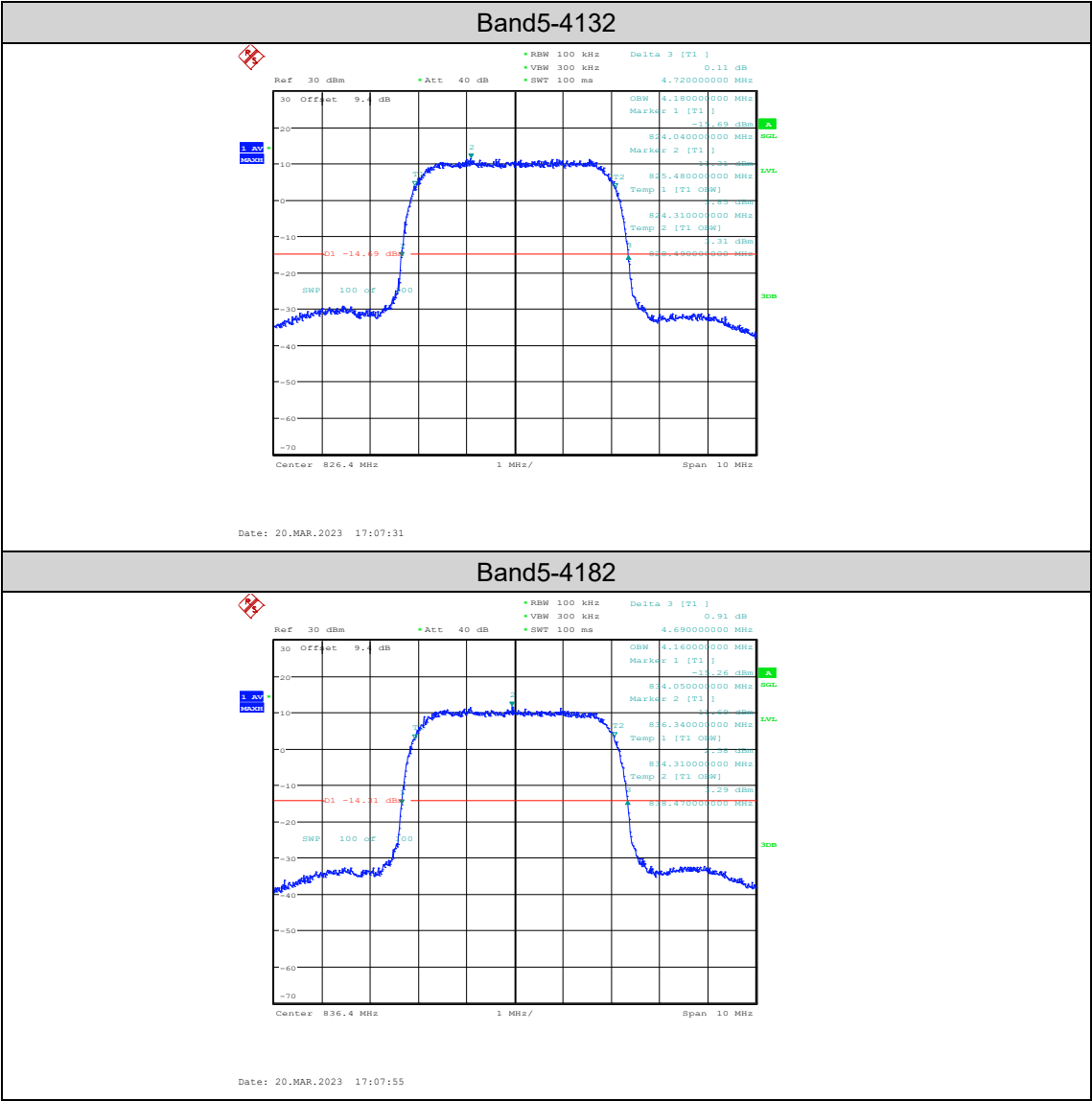


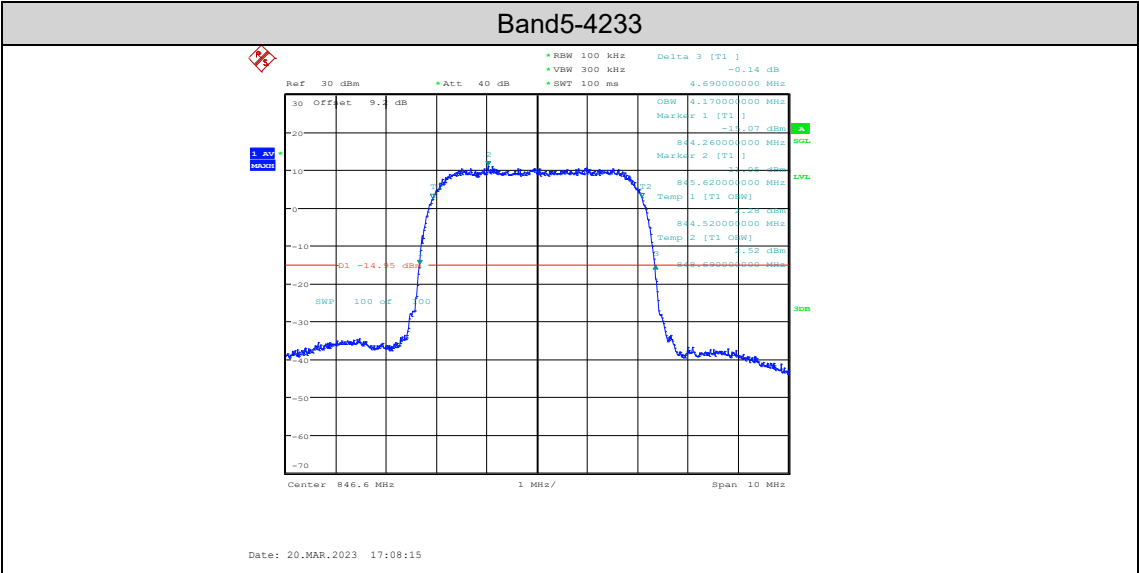






| Band  | Channel | Occupied Bandwidth (kHz) | 26dB Bandwidth (kHz) | Limit(kHz) | Verdict |
|-------|---------|--------------------------|----------------------|------------|---------|
| Band5 | 4132    | 4.18                     | 4.72                 | ---        | PASS    |
| Band5 | 4182    | 4.16                     | 4.69                 | ---        | PASS    |
| Band5 | 4233    | 4.17                     | 4.69                 | ---        | PASS    |

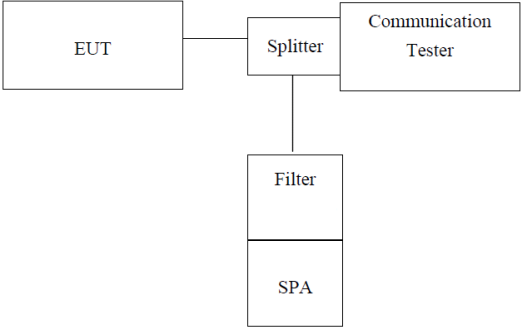




#### 4.6 MODULATION CHARACTERISTIC

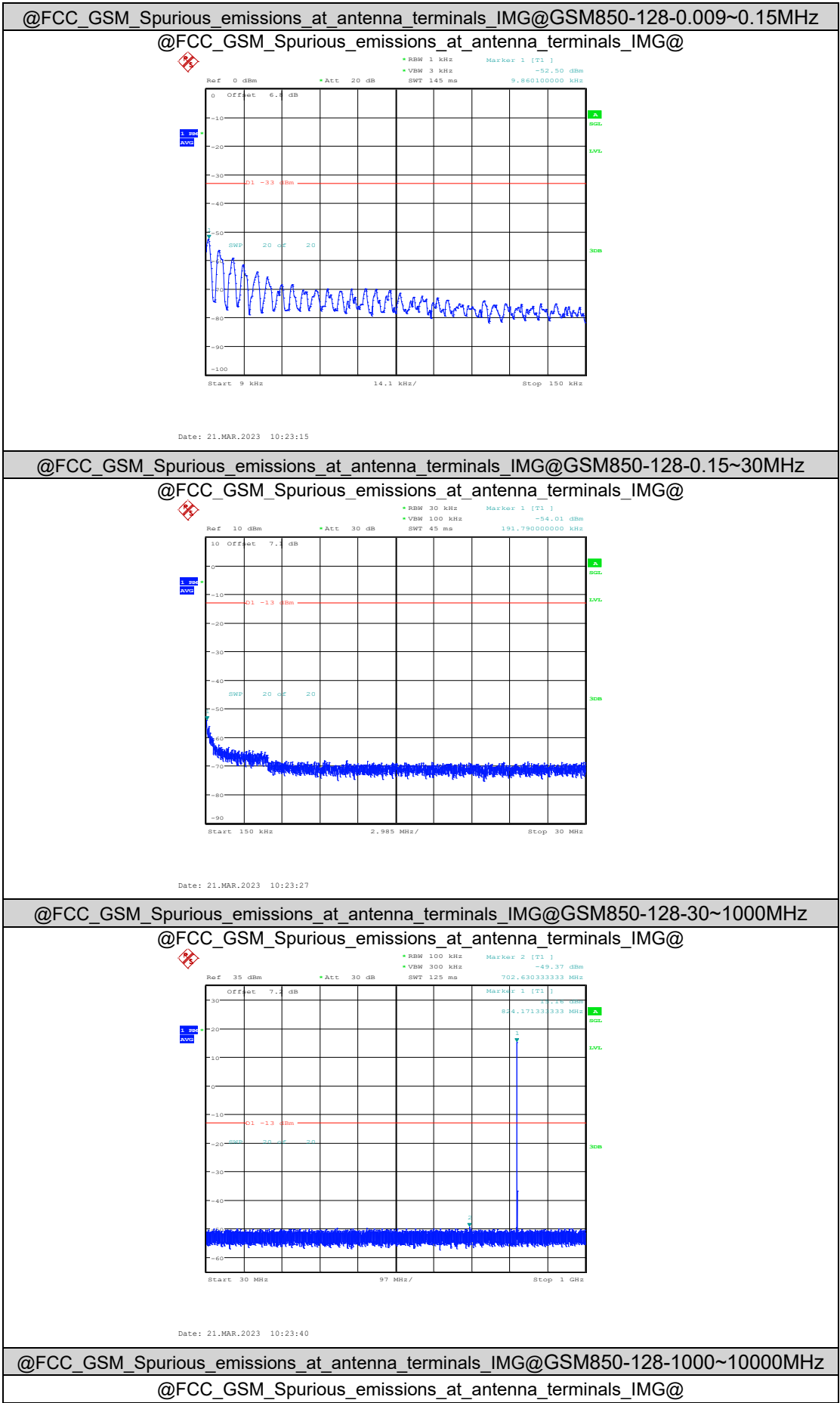
According to FCC § 2.1047(d), Part 22H & 24E there is no specific requirement for digital modulation, therefore modulation characteristic is not presented.

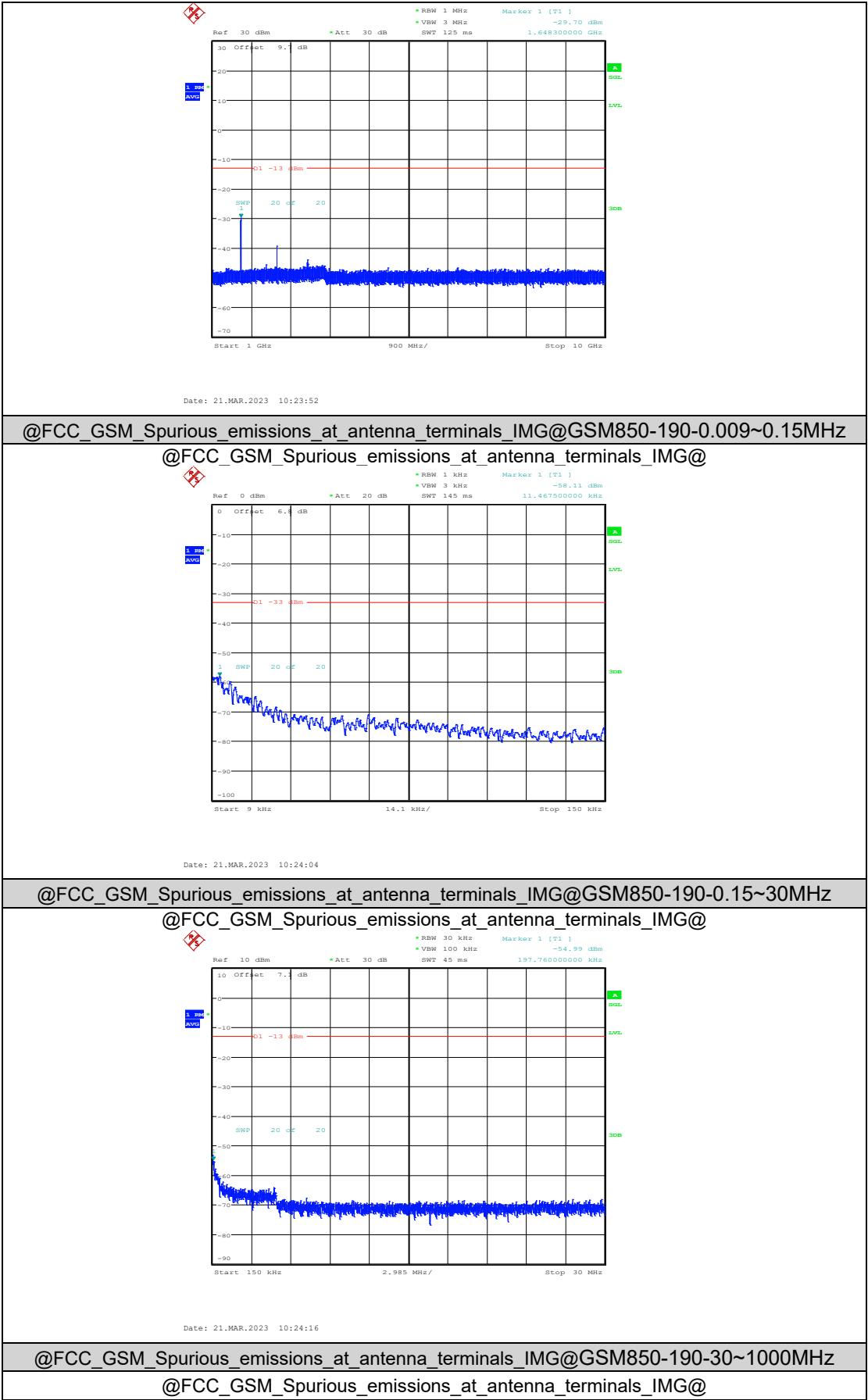
#### 4.7 Out of band emission at antenna terminals

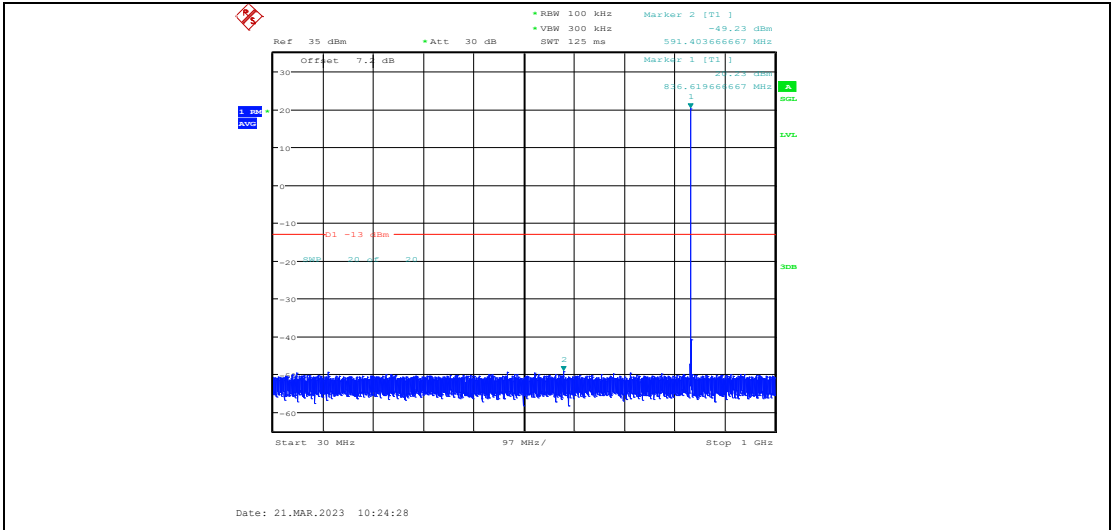
|                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Test Requirement: | FCC part22.917(a) and FCC part24.238(a)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Test Method:      | FCC part2.1051                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Limit:            | -13dBm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Test setup:       |  <p><i>Note: Measurement setup for testing on Antenna connector</i></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Test Procedure:   | <ol style="list-style-type: none"> <li>1 The RF output of the transceiver was connected to a spectrum analyzer through appropriate attenuation.</li> <li>2 The resolution bandwidth of the spectrum analyzer was set at 1MHz, sufficient scans were taken to show the out of band Emissions if any up to 10th harmonic.</li> <li>3 For the out of band: Set the RBW, VBW = 1MHz, Start=30MHz, Stop= 10th harmonic.</li> <li>4 Band Edge Requirements: In the 1 MHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of at least 1 percent of the emission bandwidth of the fundamental emission of the transmitter may be employed to measure the out of band Emissions.</li> </ol> |
| Test Instruments: | Refer to section 5.0 for details                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Test mode:        | Refer to section 6.1 for details                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Test results:     | Pass                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

Test plot as follows:

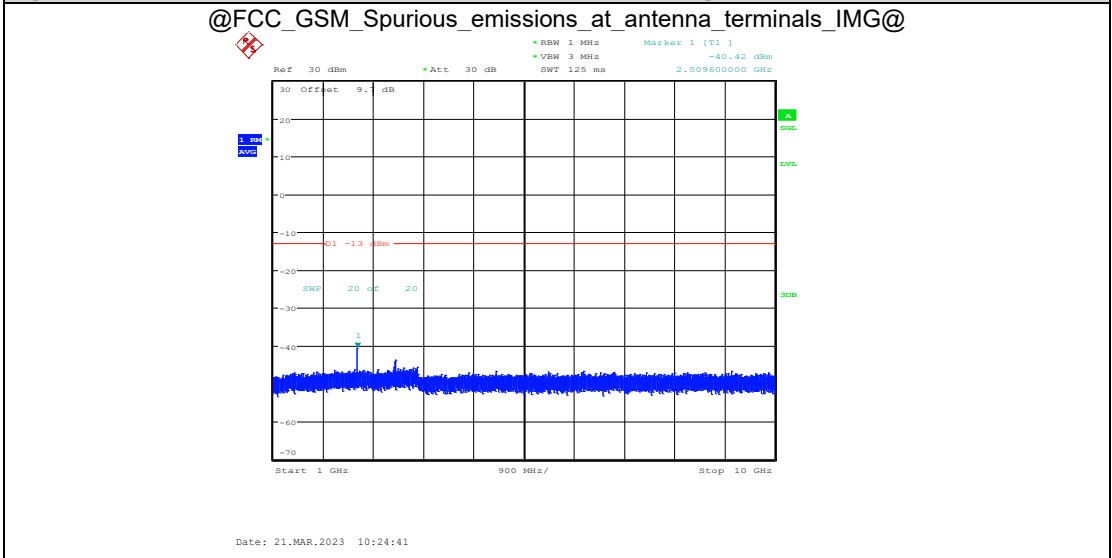
Note: During the conducted spurious emission test, a band filter was used. The information of the filter is reported at section 6.0 (refer to item 24, 25).



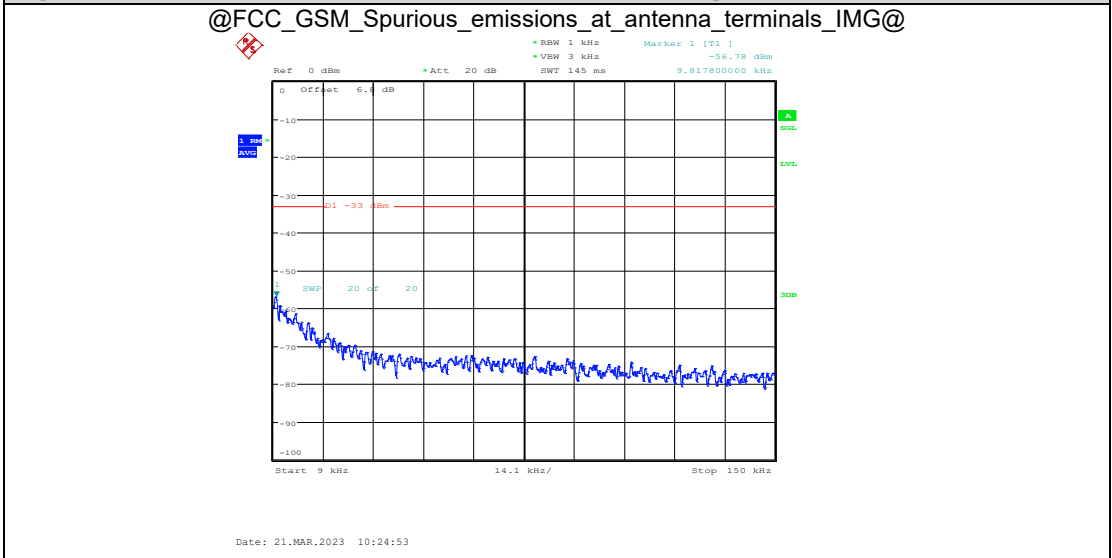




@FCC\_GSM\_Spurious\_emissions\_at\_antenna\_terminals\_IMG@GSM850-190-1000~10000MHz

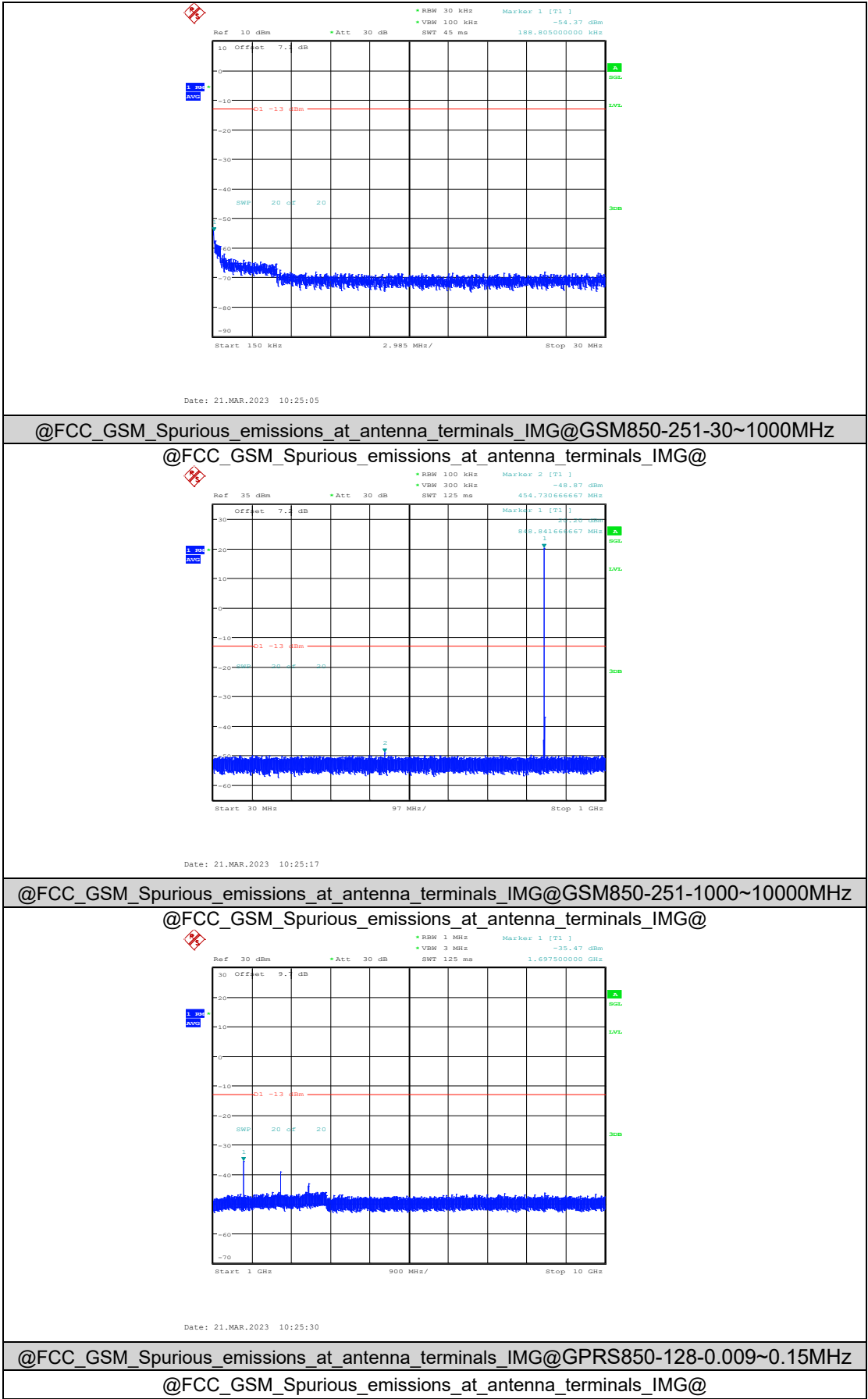


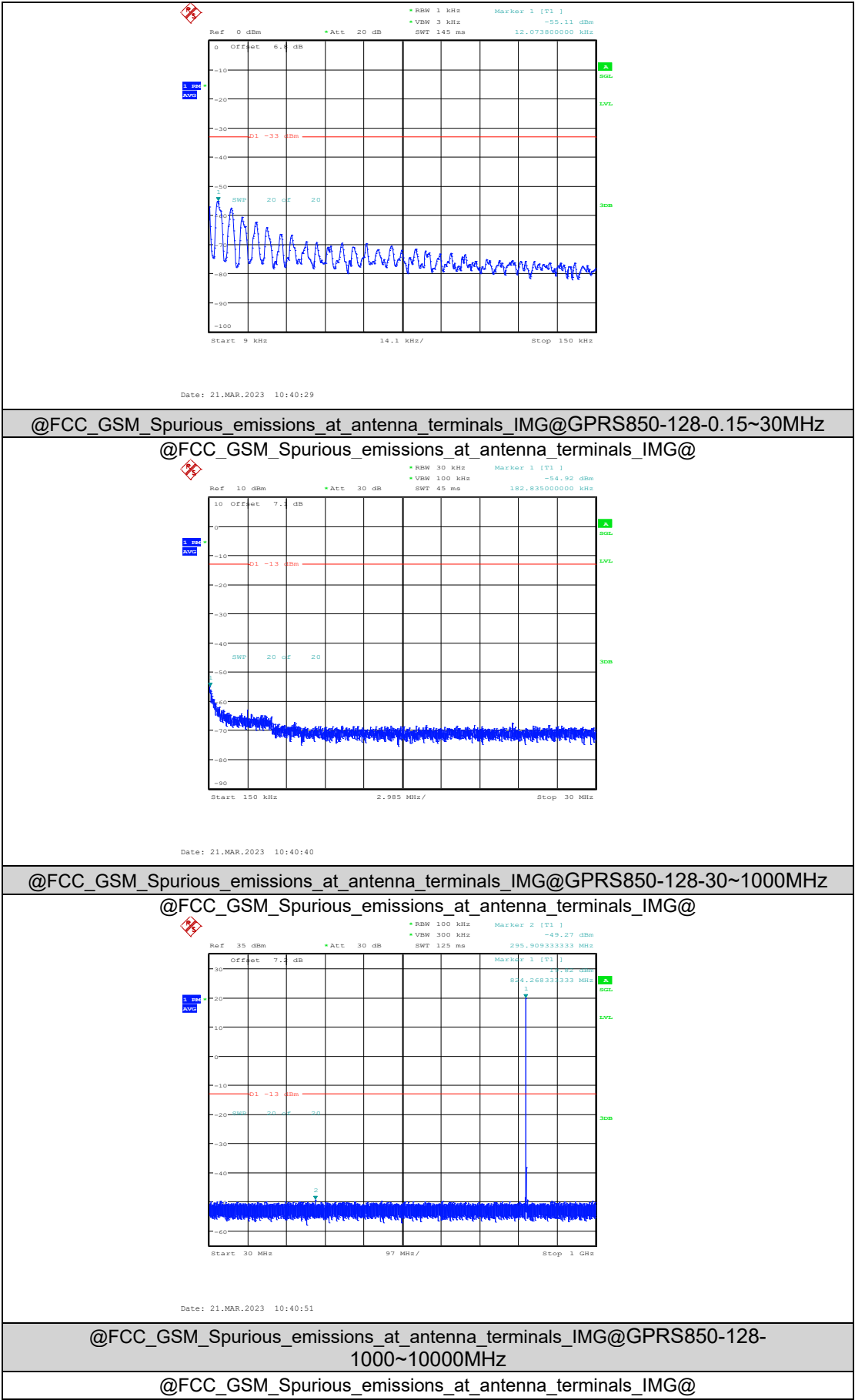
@FCC\_GSM\_Spurious\_emissions\_at\_antenna\_terminals\_IMG@GSM850-251-0.009~0.15MHz

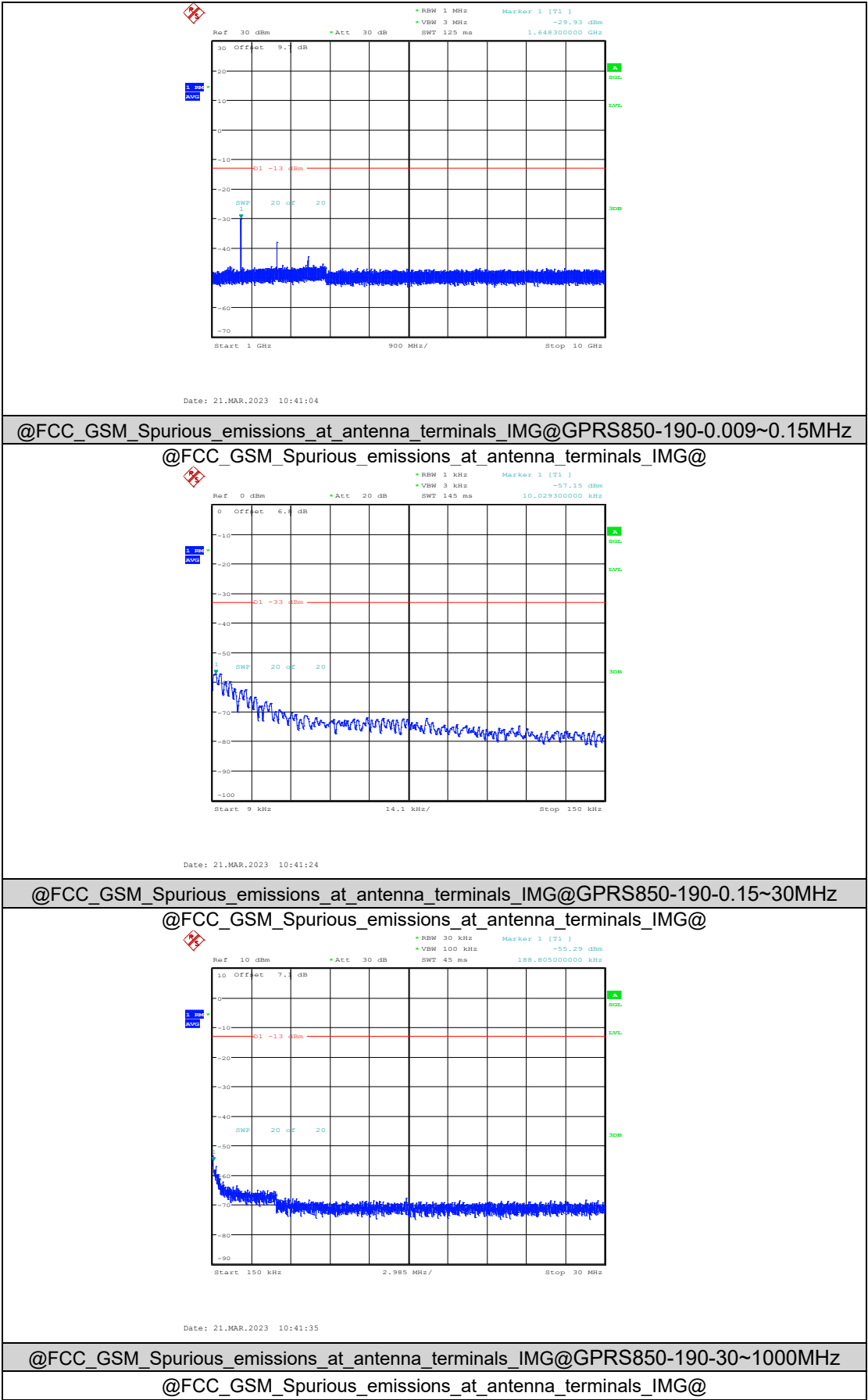


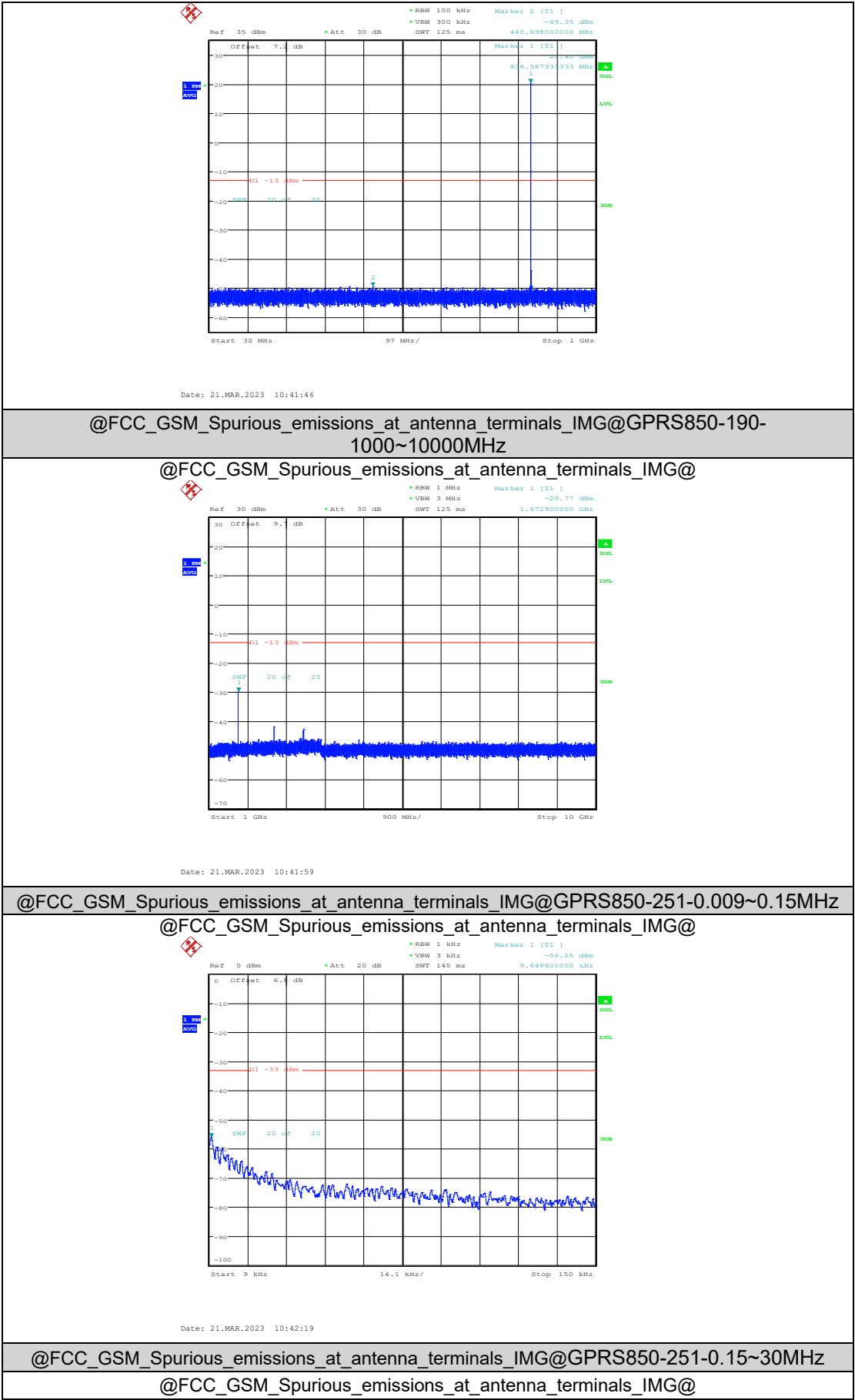
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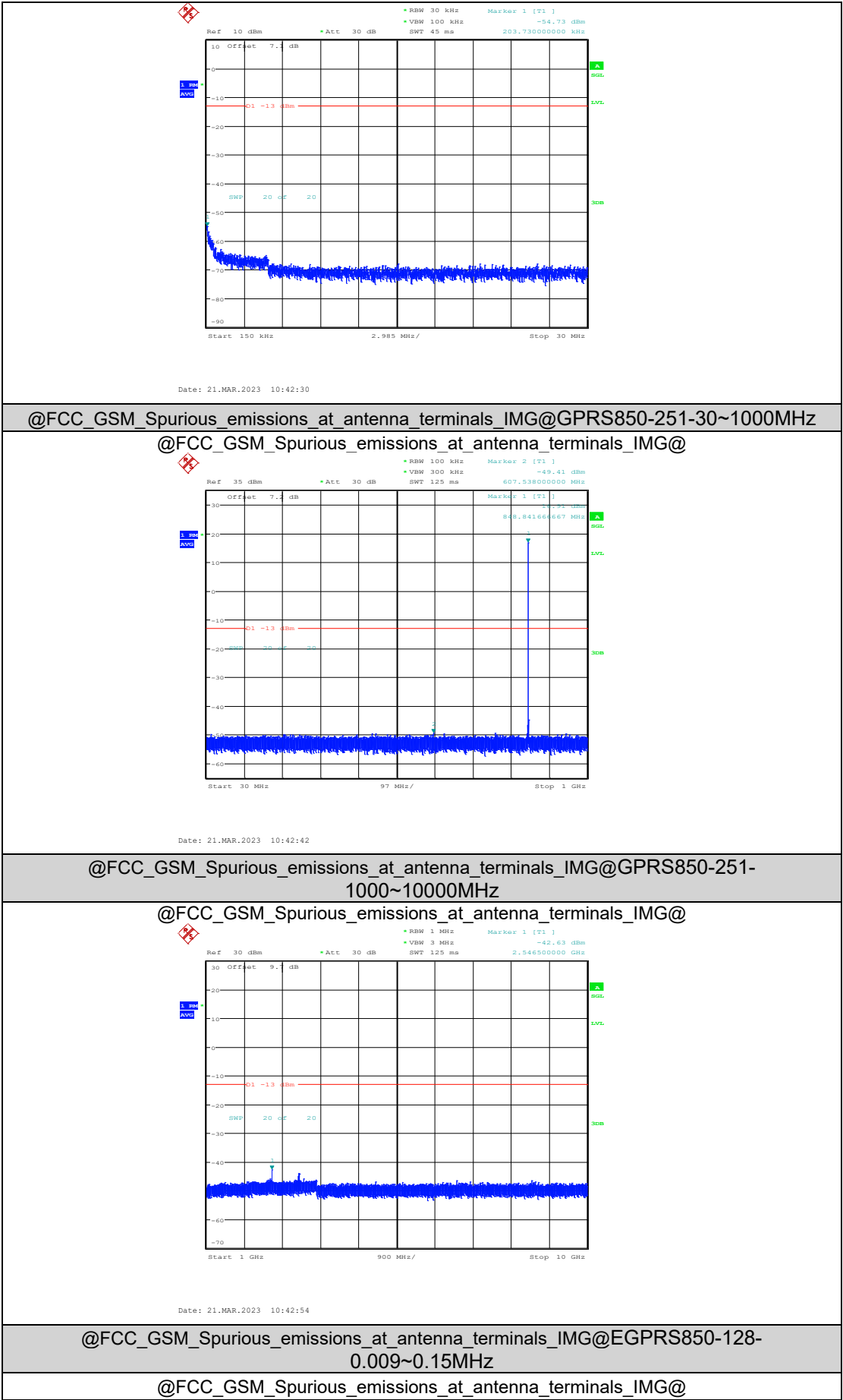
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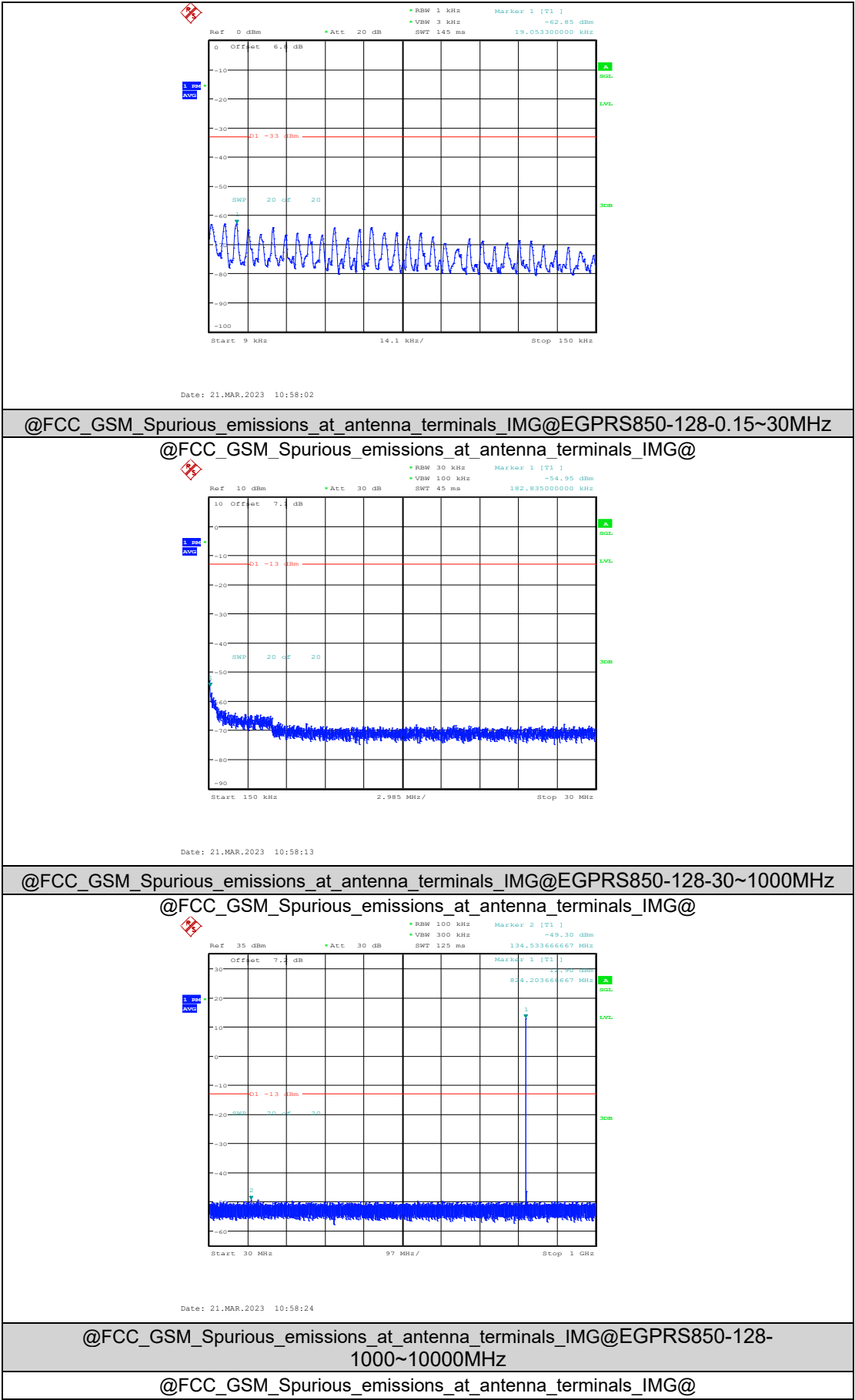


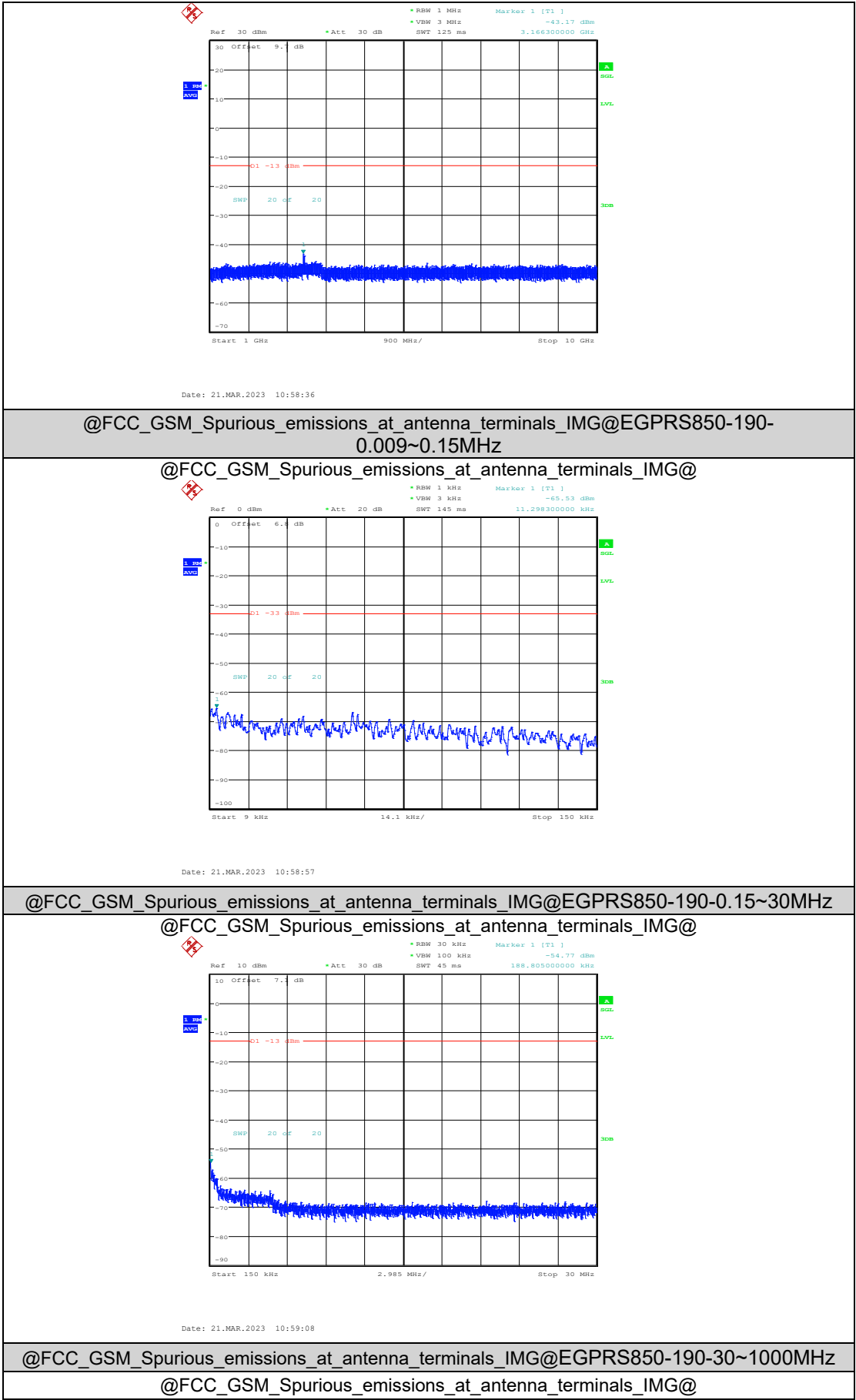


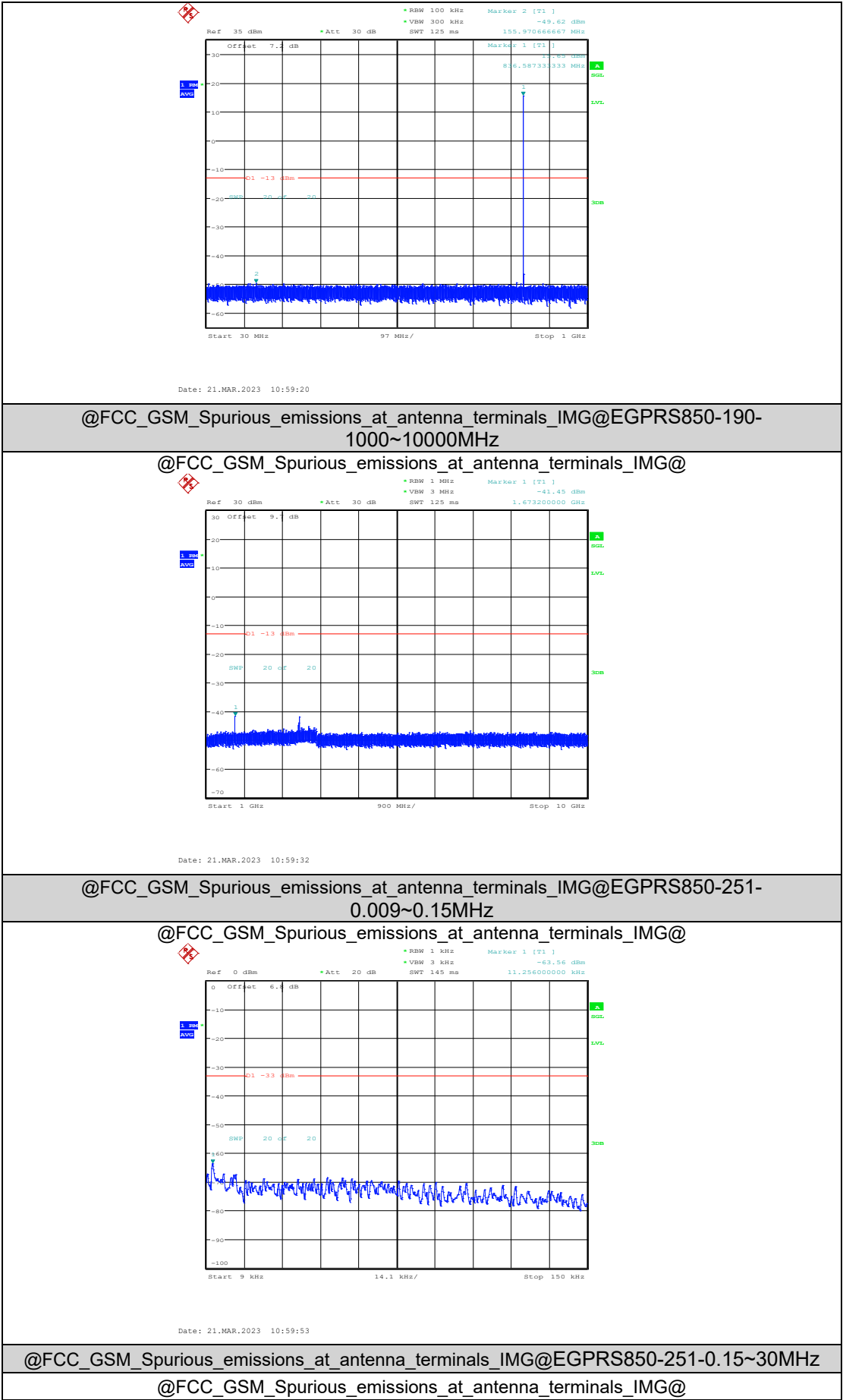


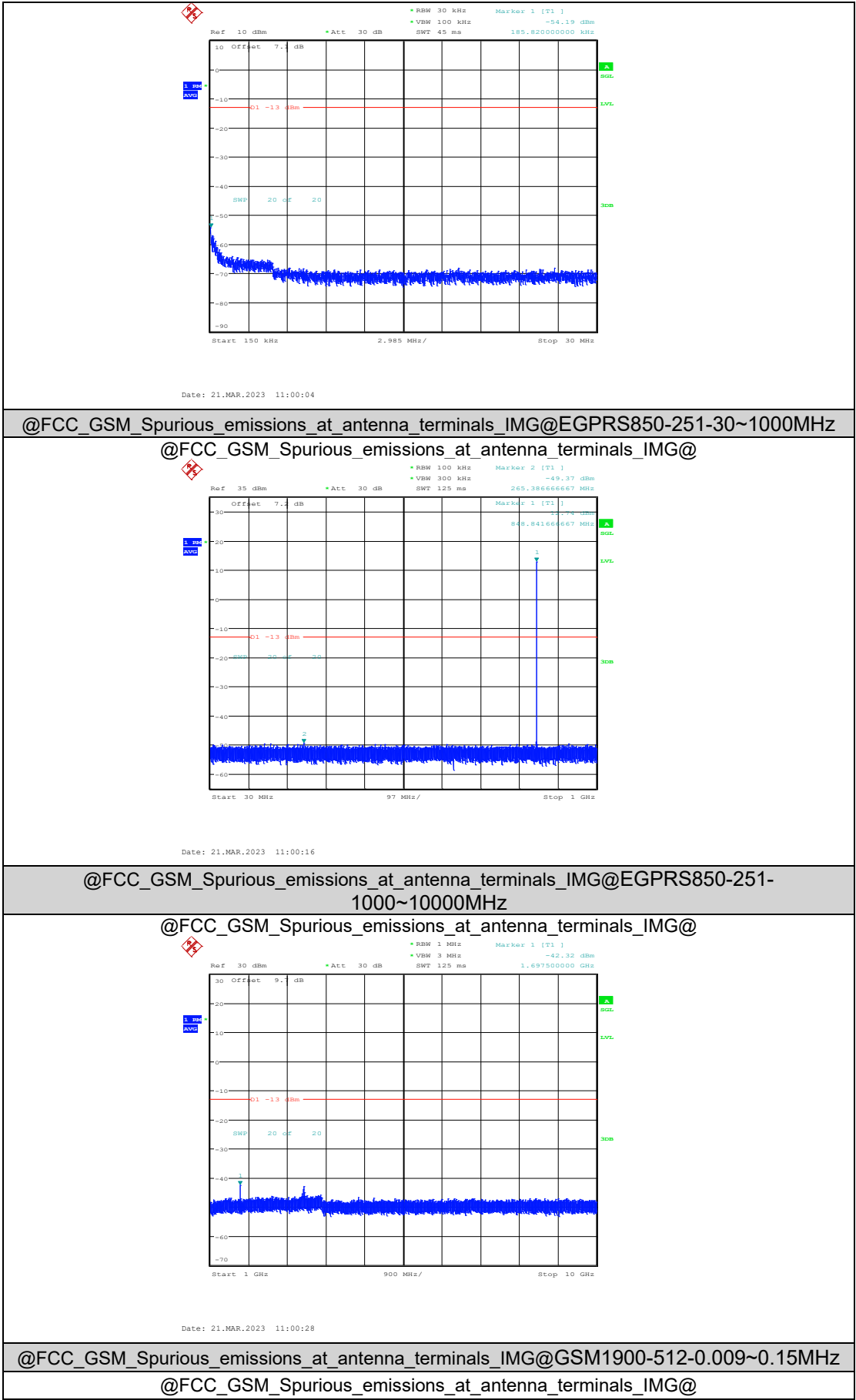


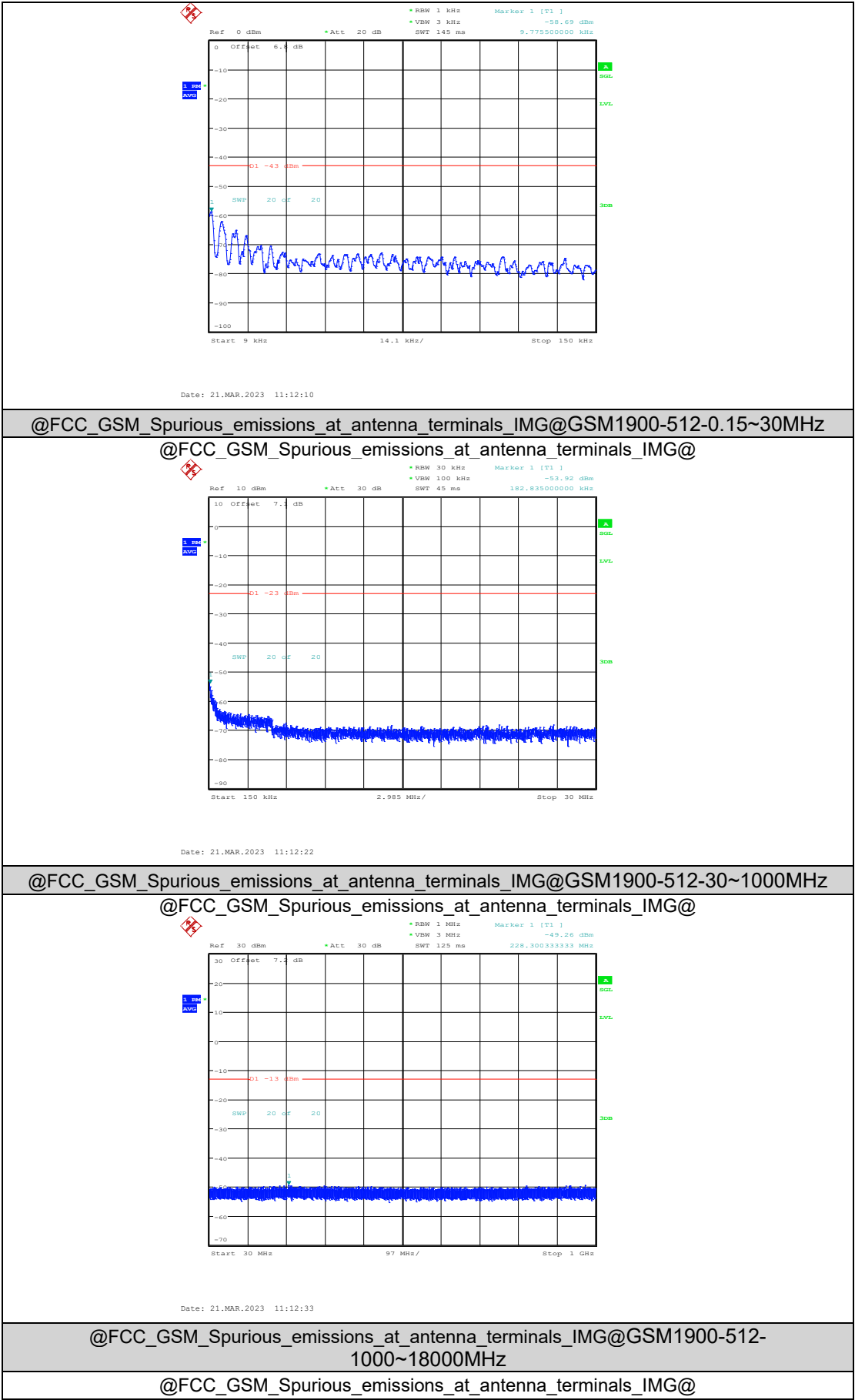


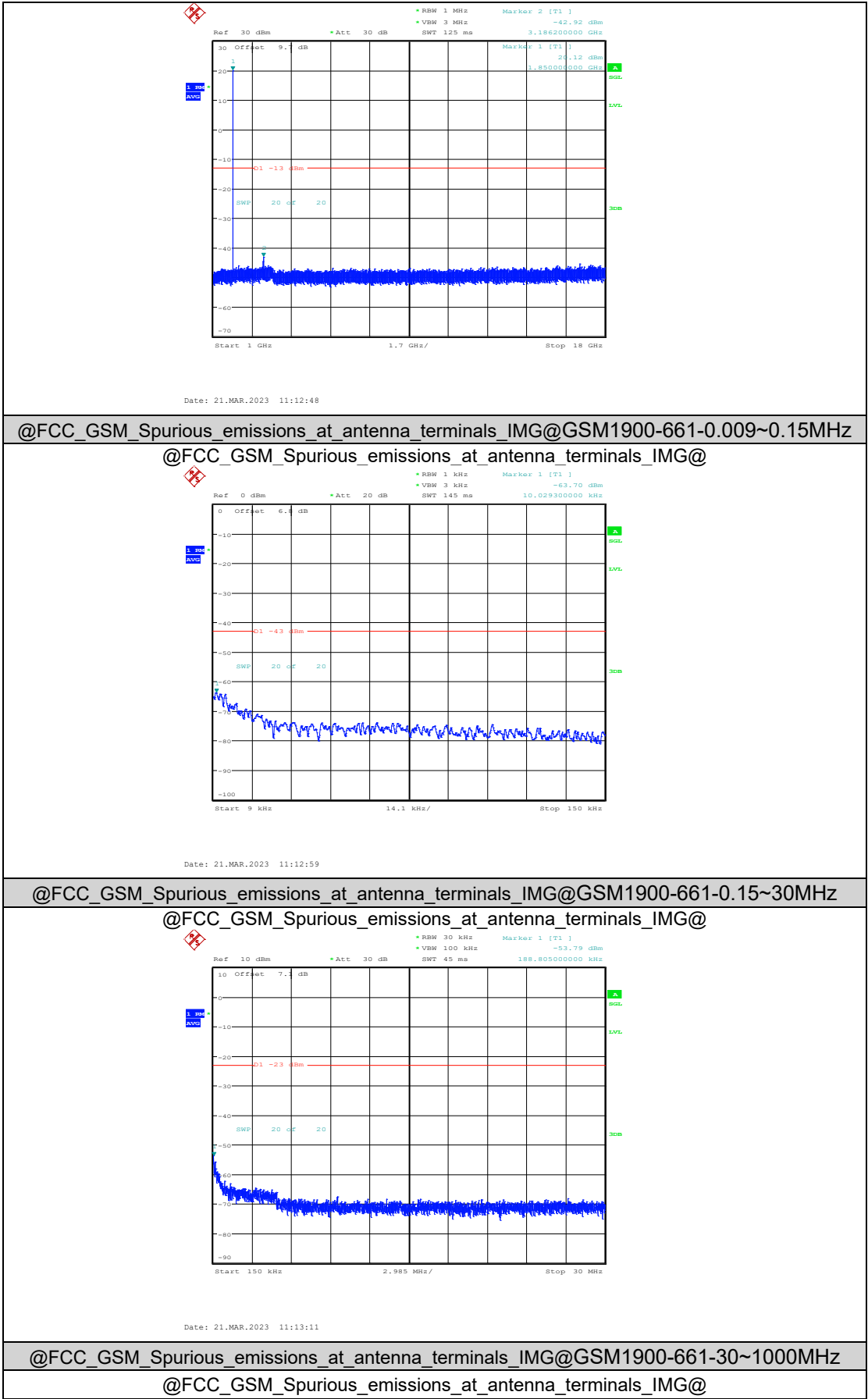


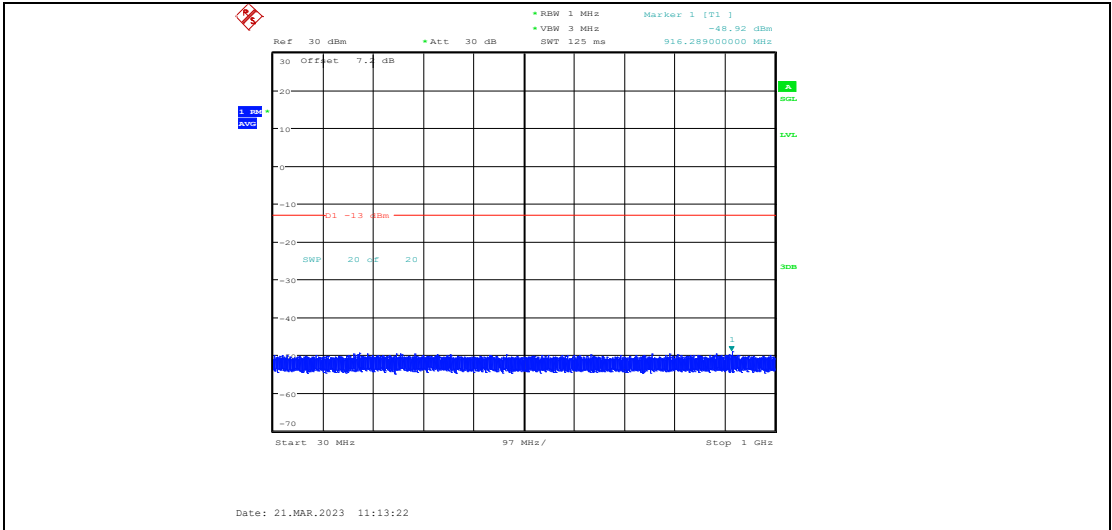






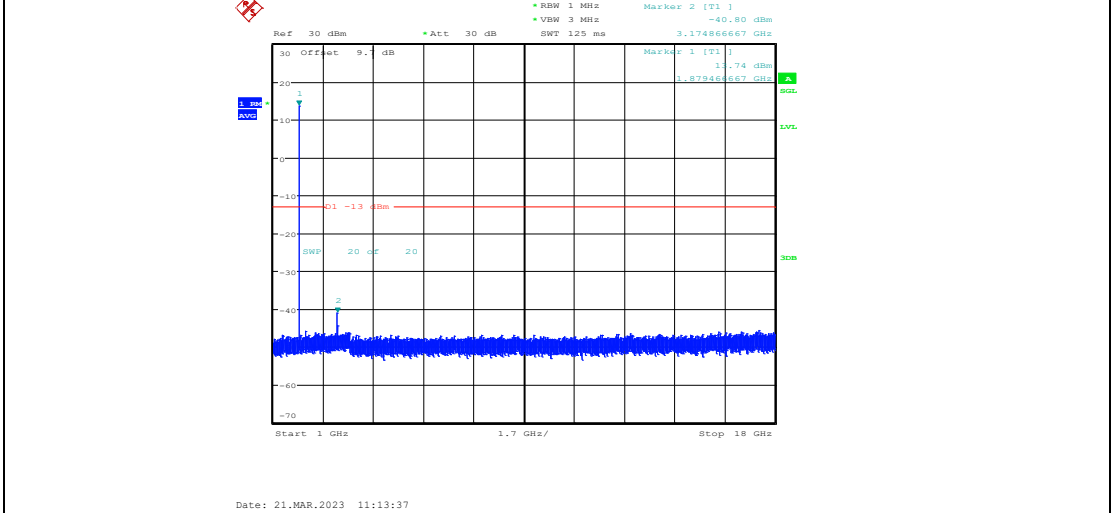






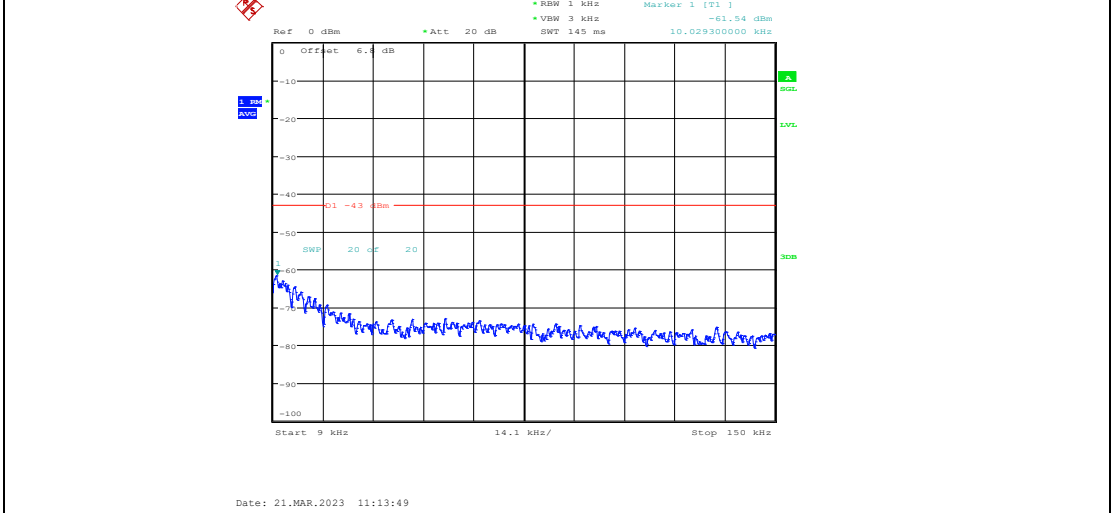
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@FCC\_GSM\_Spurious\_emissions\_at\_antenna\_terminals\_IMG@



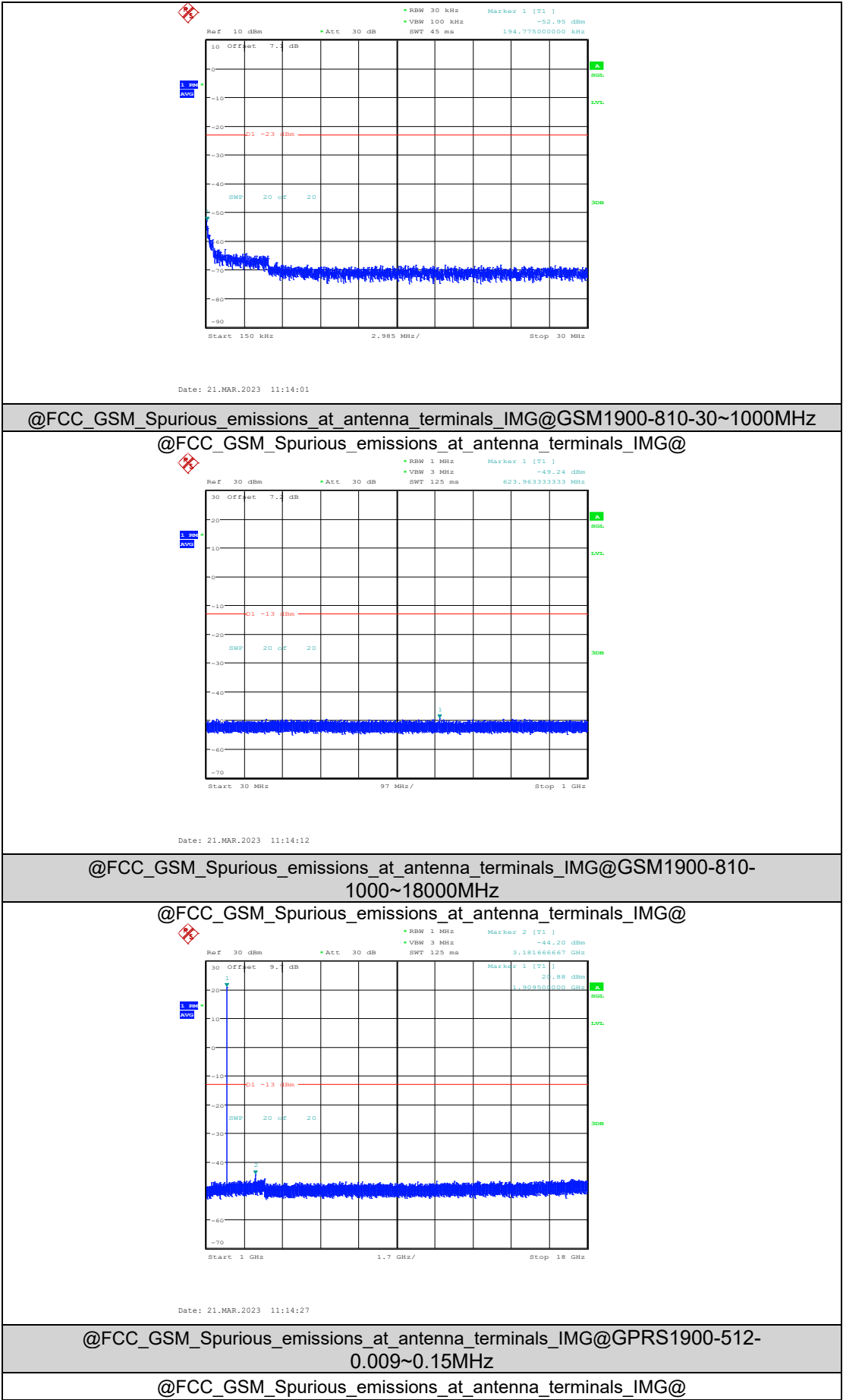
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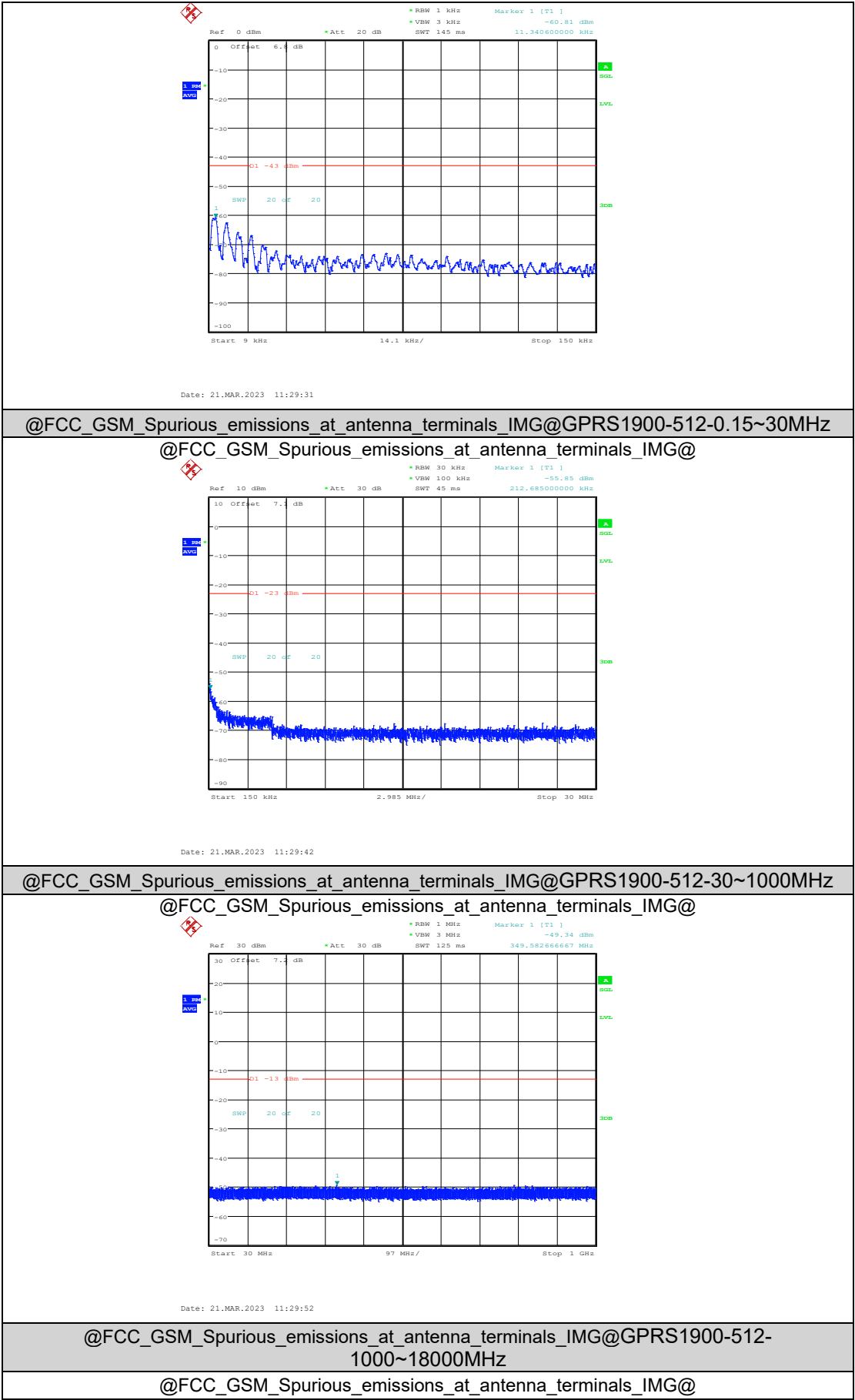
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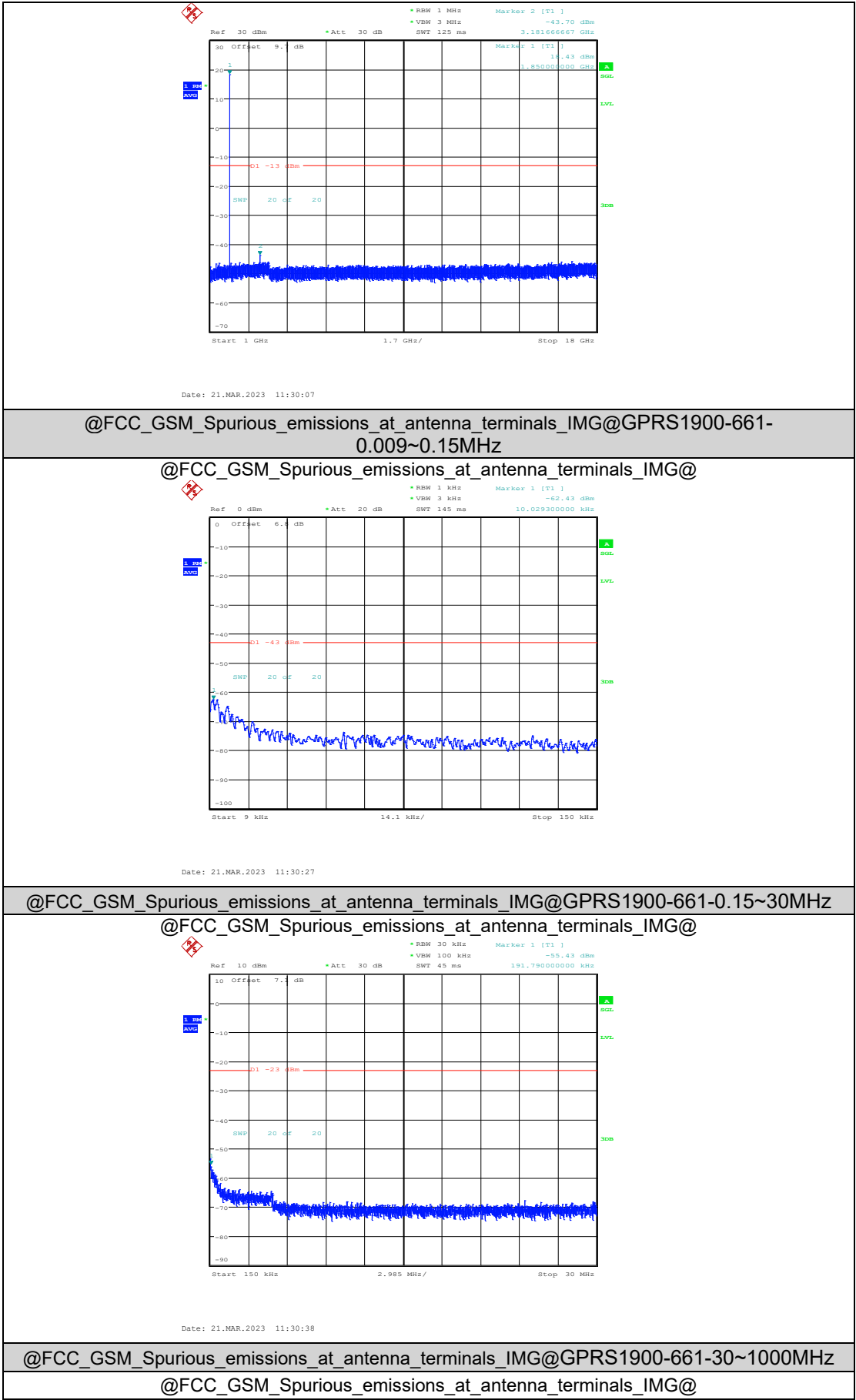


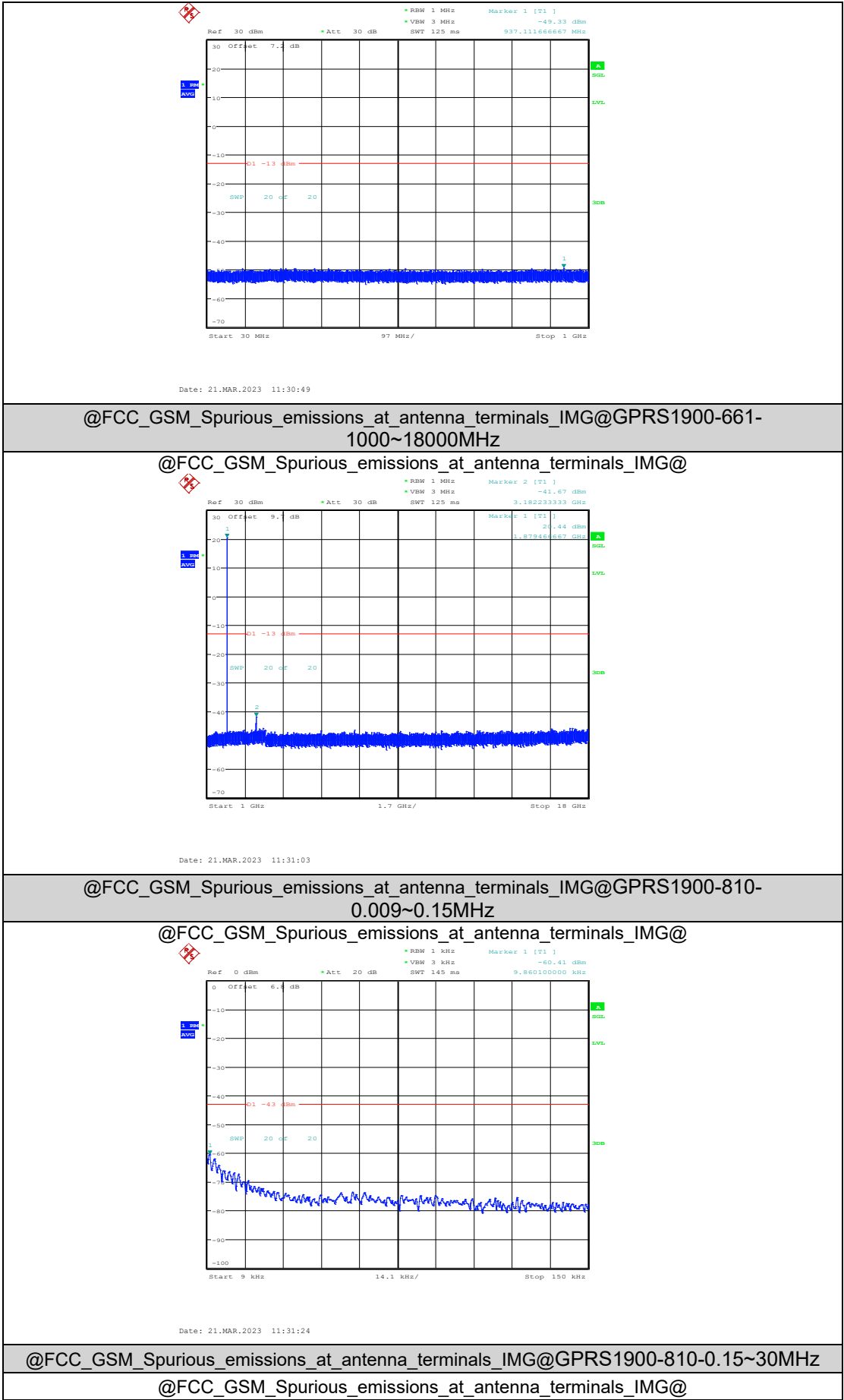
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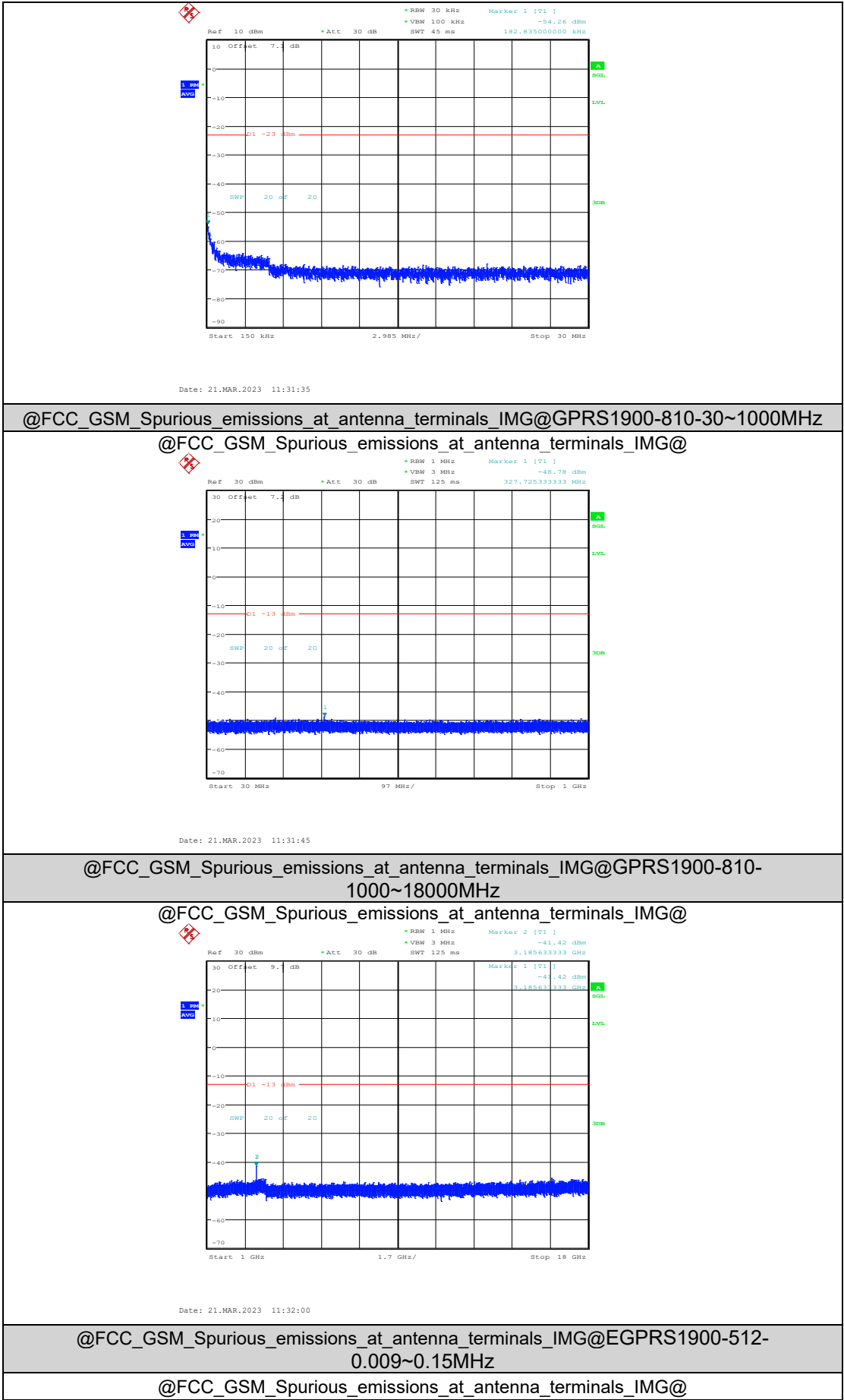
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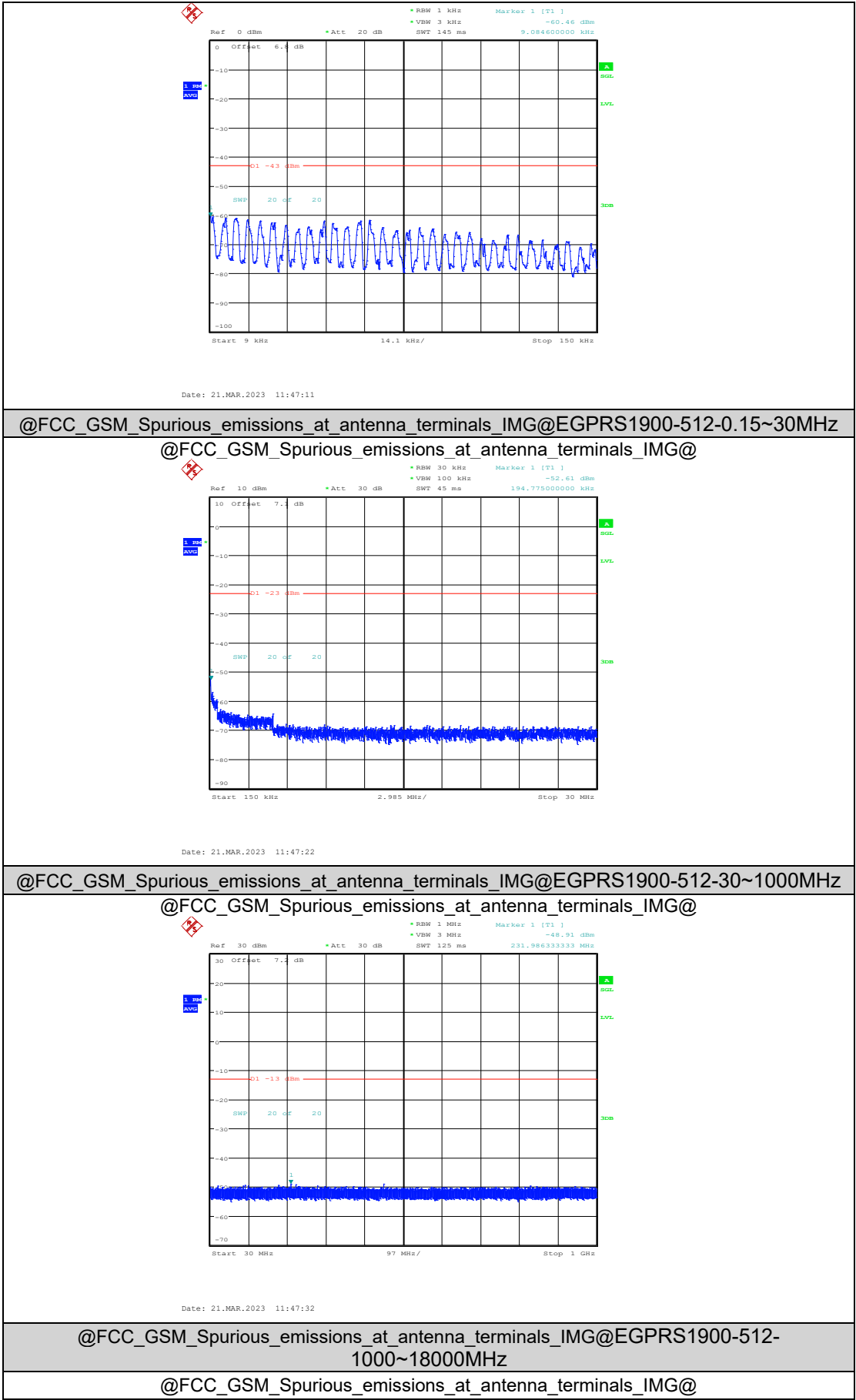


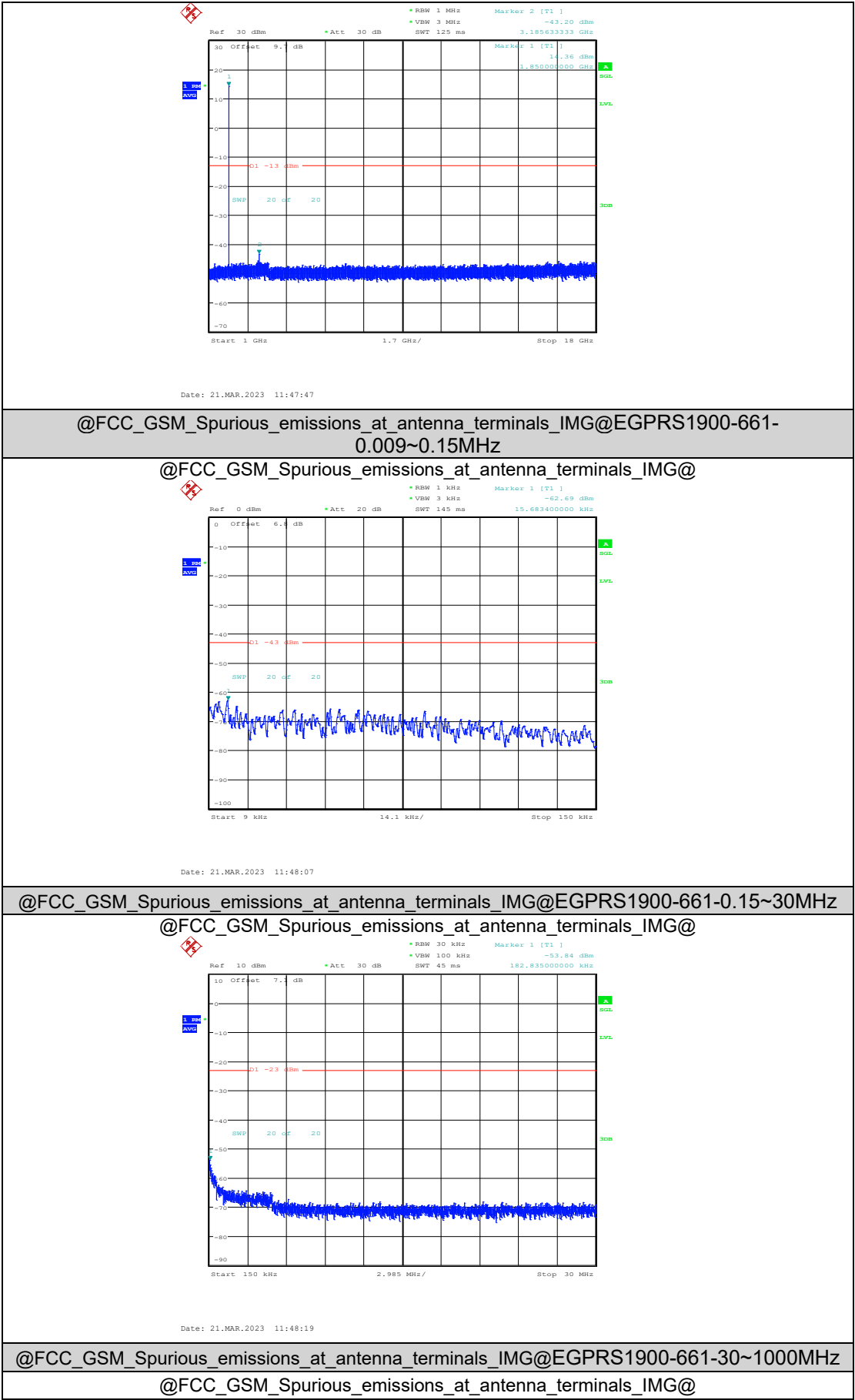


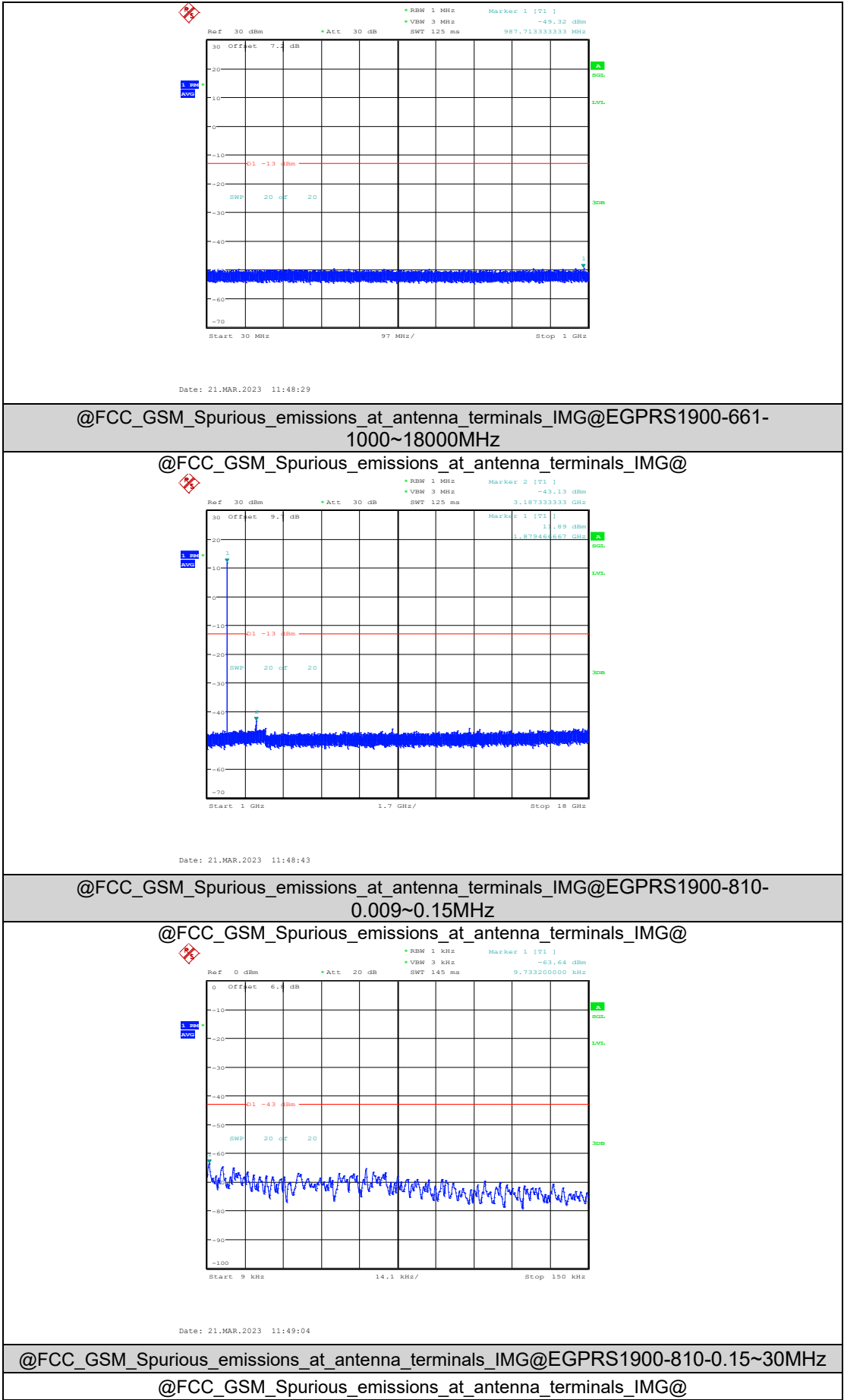


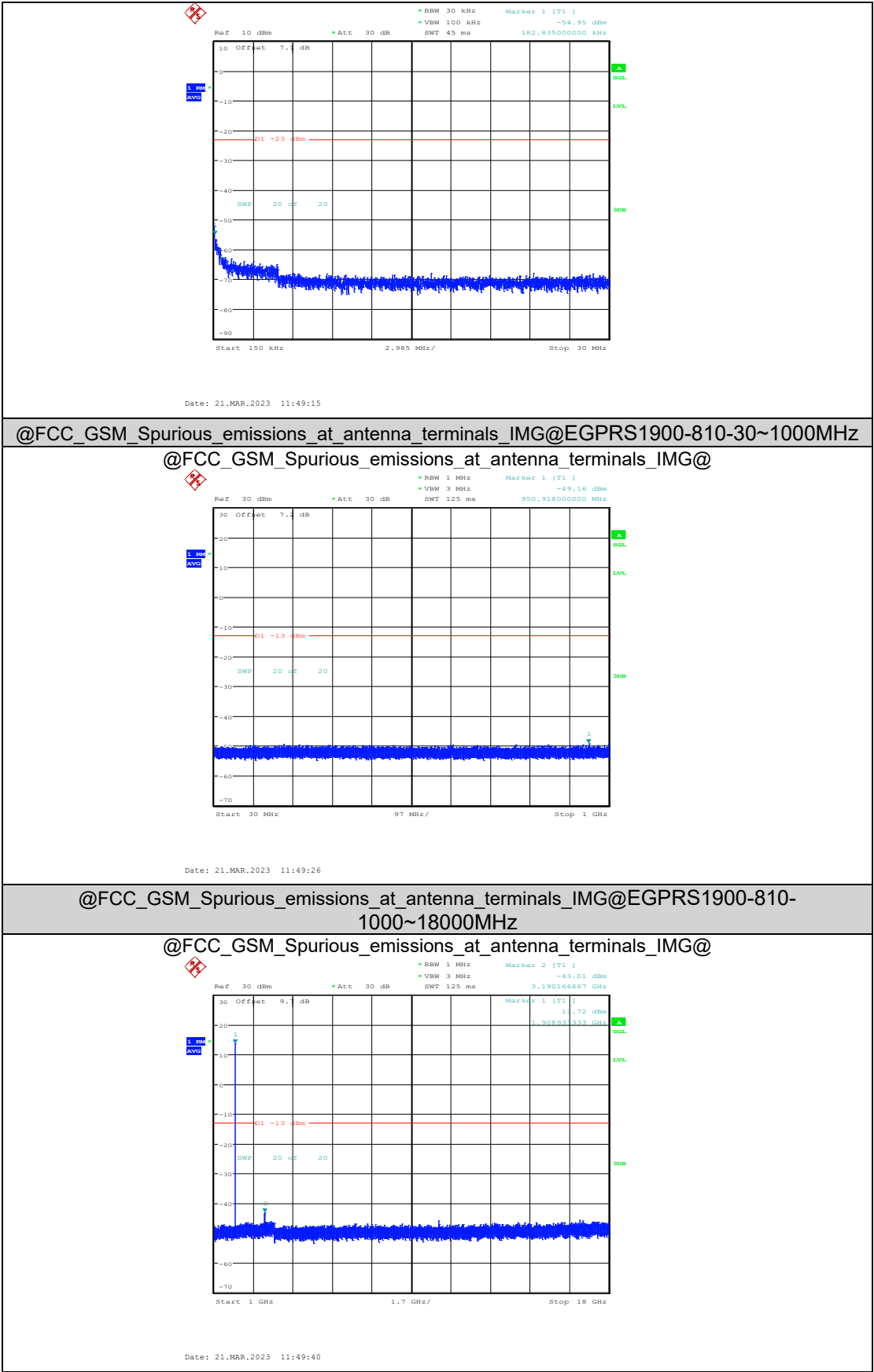




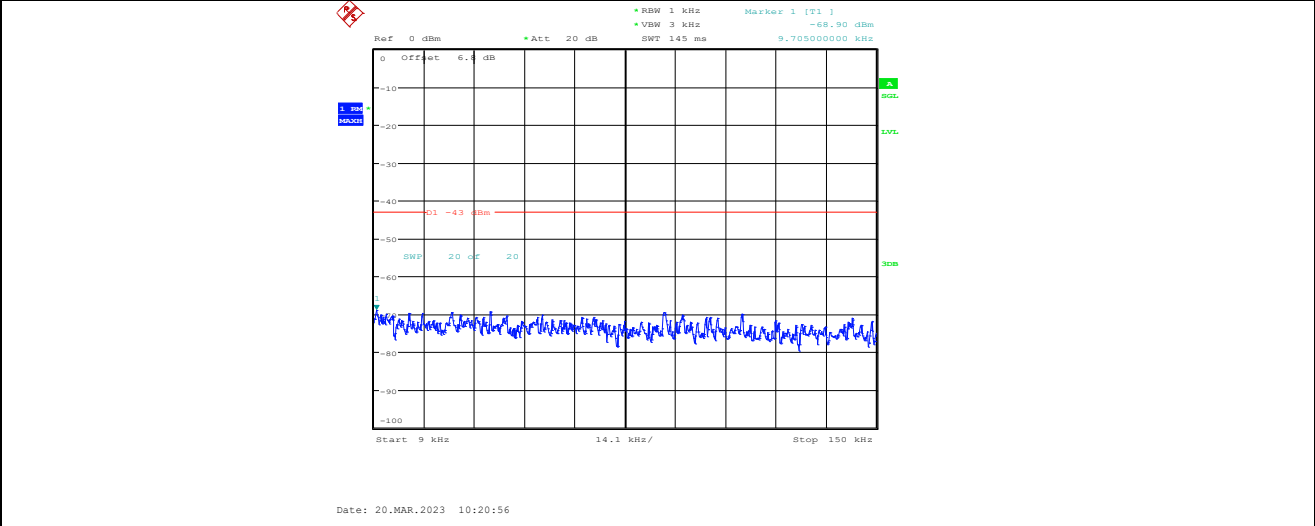




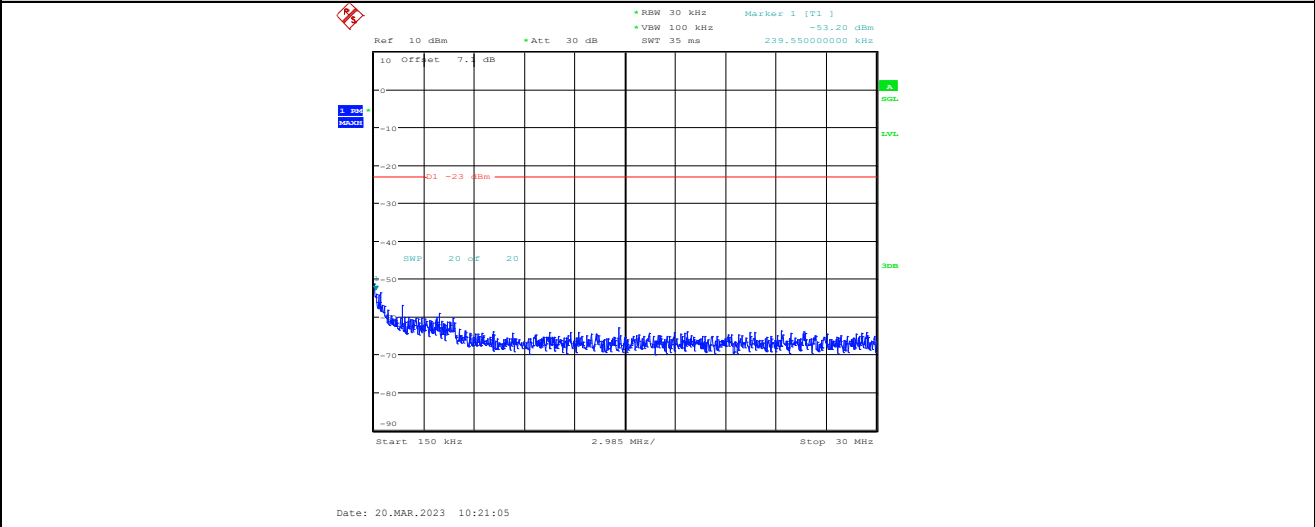




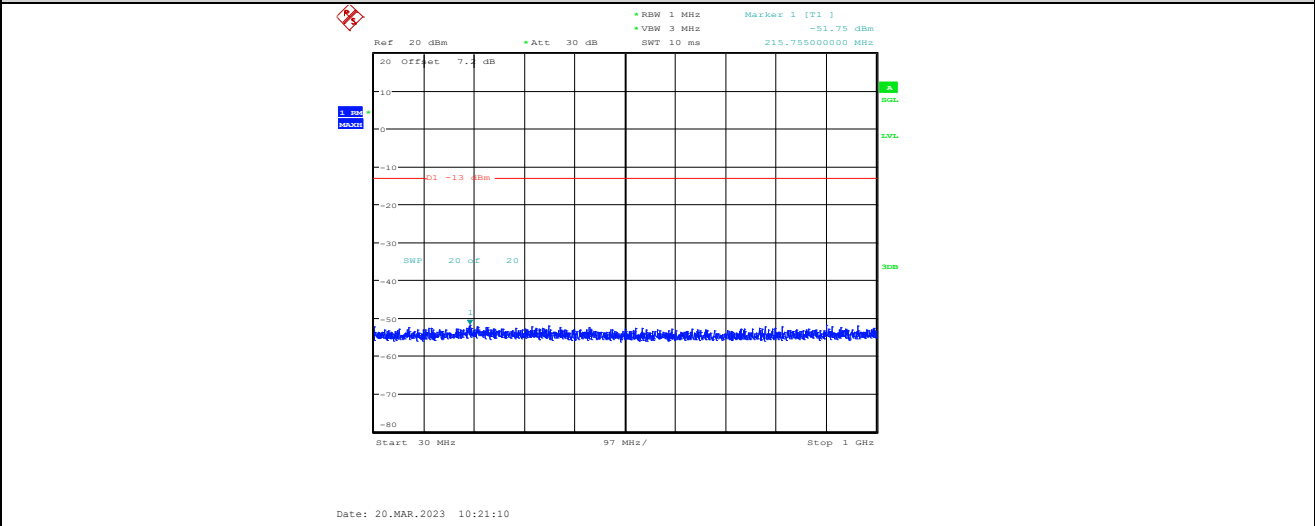
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| Band2-9262-0.009~0.15MHz |
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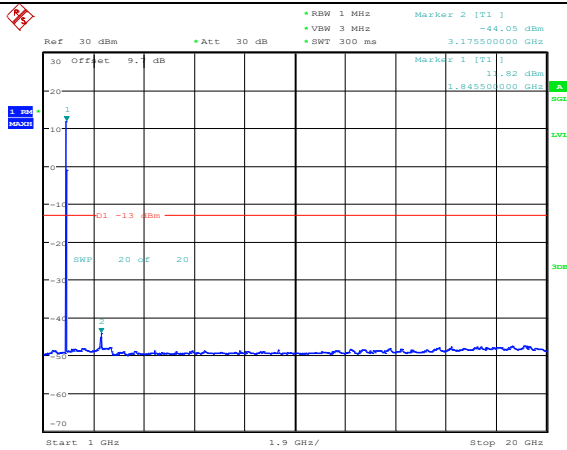
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| Band2-9262-0.15~30MHz |
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|                       |
|-----------------------|
| Band2-9262-30~1000MHz |
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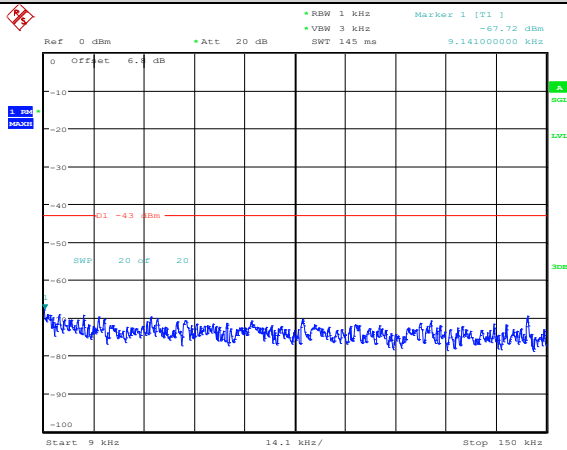


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| Band2-9262-1000~20000MHz |
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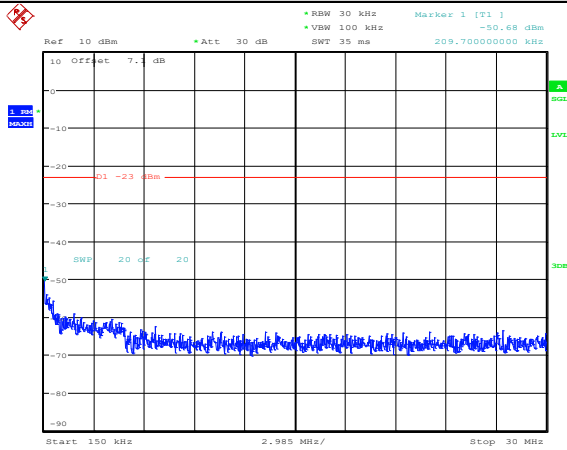
Date: 20.MAR.2023 10:21:25

Band2-9400-0.009~0.15MHz



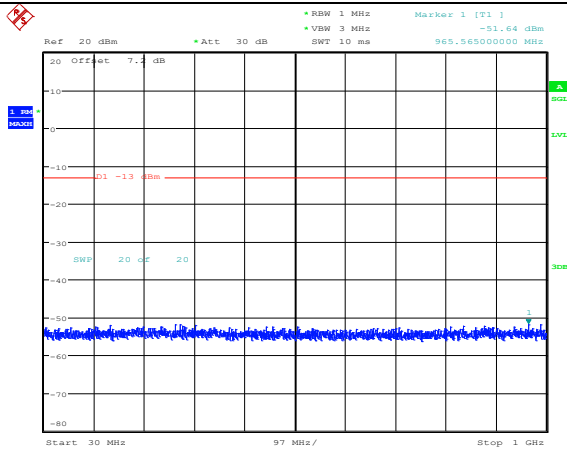
Date: 20.MAR.2023 10:21:41

Band2-9400-0.15~30MHz



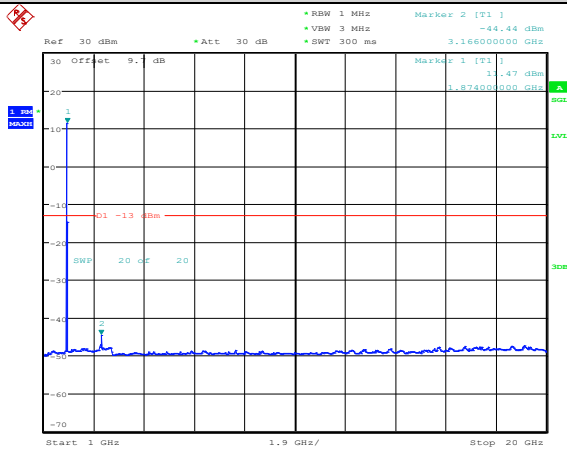
Date: 20.MAR.2023 10:21:49

Band2-9400-30~1000MHz



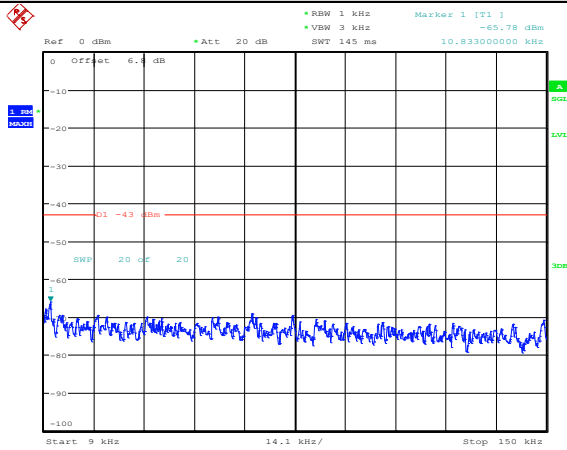
Date: 20.MAR.2023 10:21:55

Band2-9400-1000~20000MHz



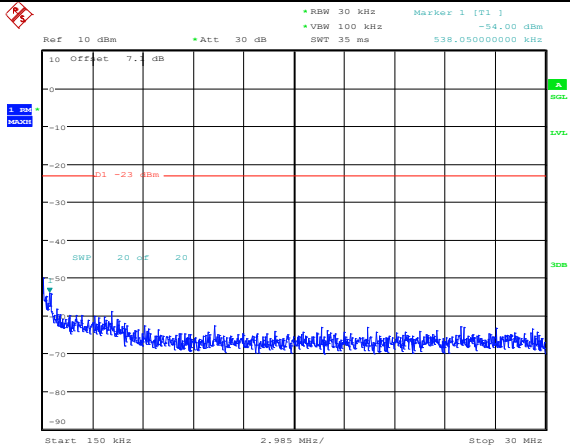
Date: 20.MAR.2023 10:22:10

Band2-9538-0.009~0.15MHz



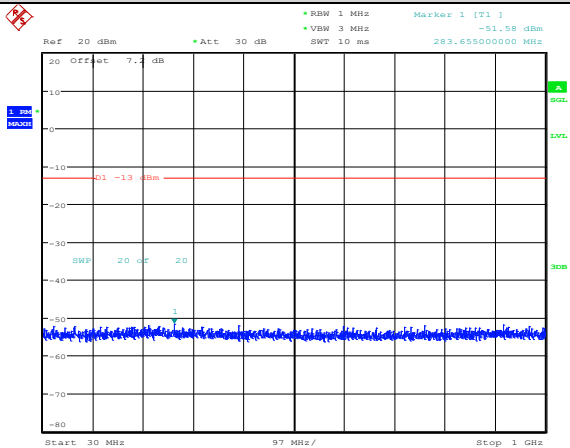
Date: 20.MAR.2023 10:22:26

Band2-9538-0.15~30MHz



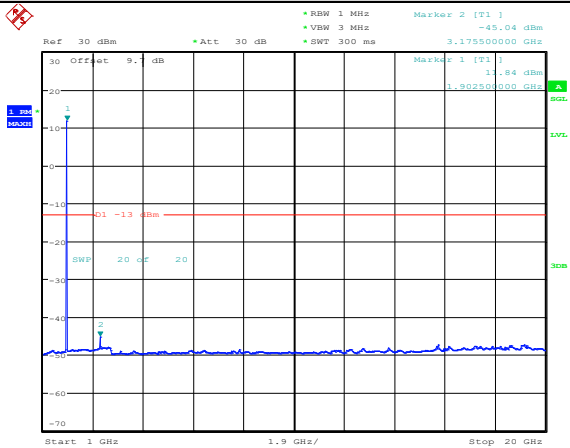
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Band2-9538-30~1000MHz



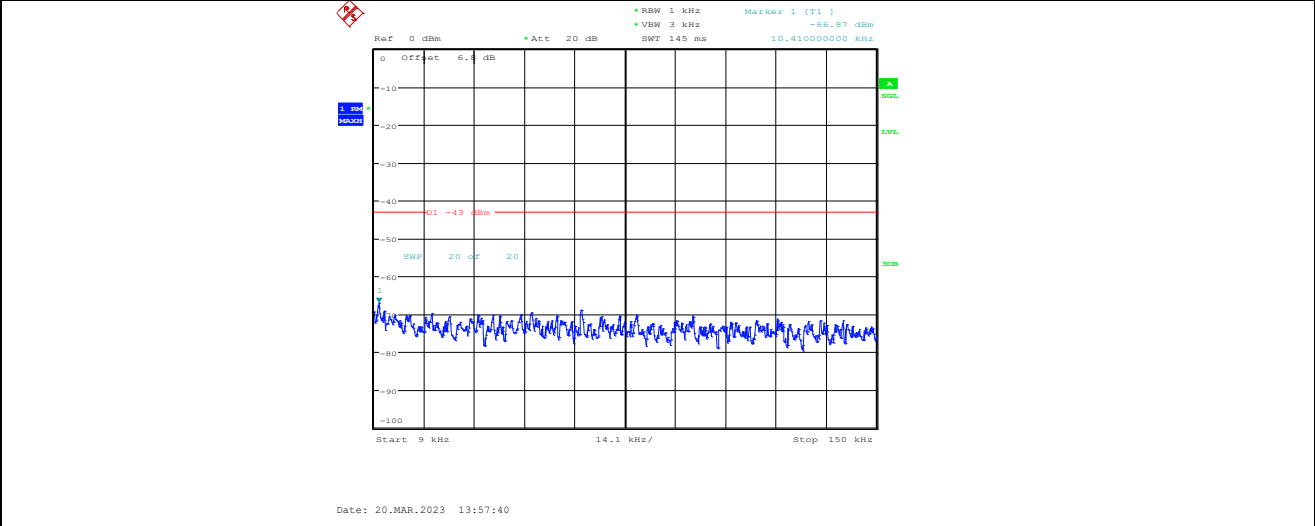
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Band2-9538-1000~20000MHz

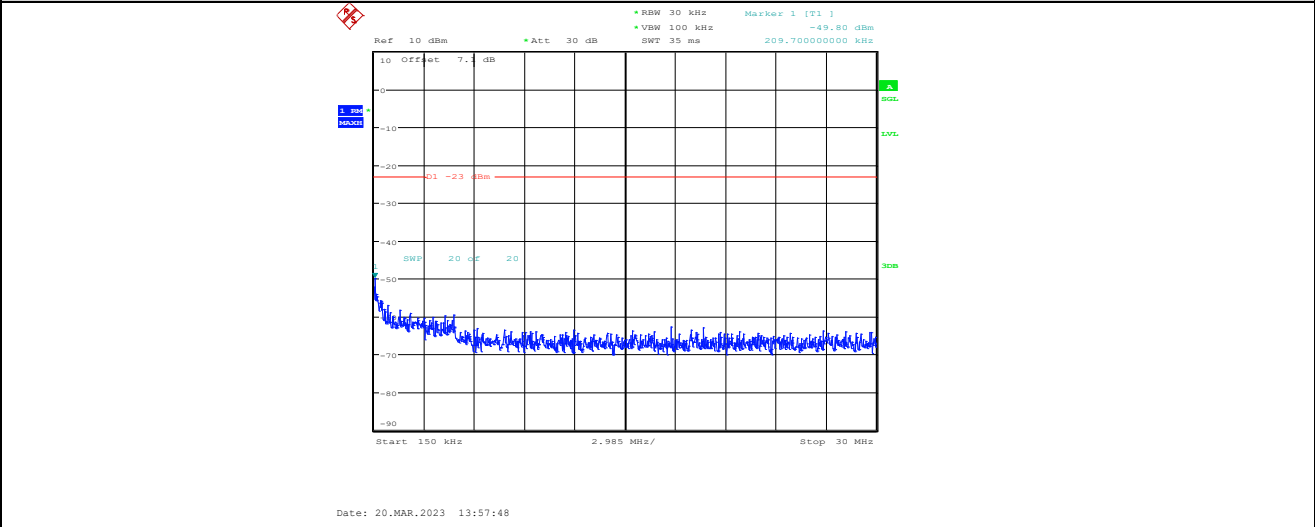


Date: 20.MAR.2023 10:22:55

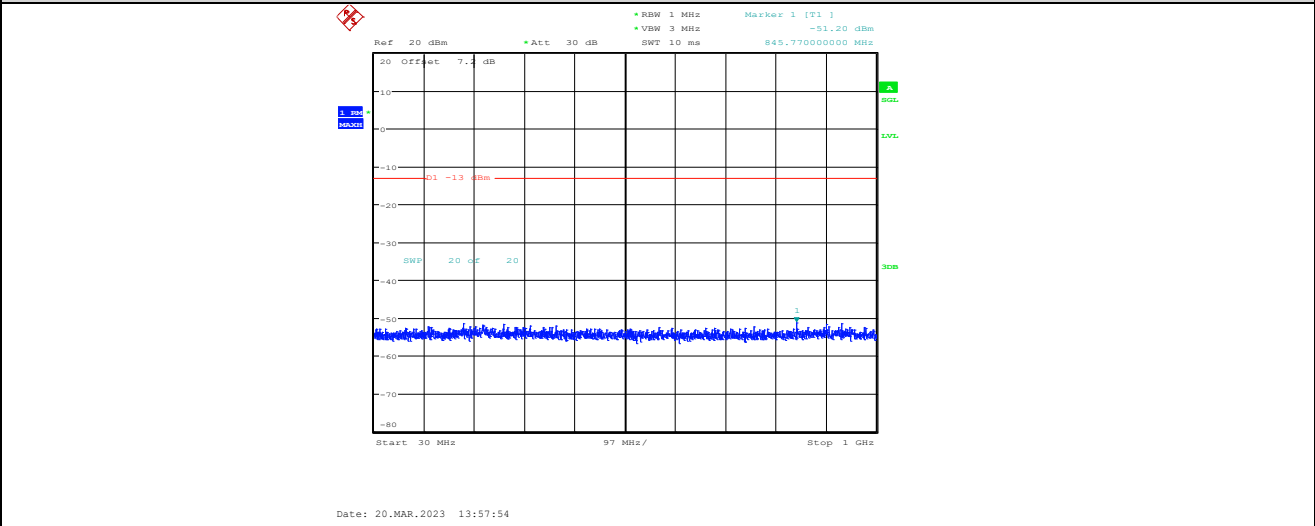
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| Band4-1312-0.009~0.15MHz |
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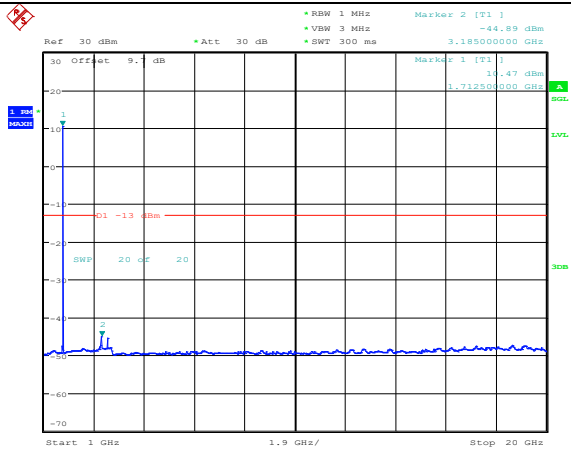
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| Band4-1312-0.15~30MHz |
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|                       |
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| Band4-1312-30~1000MHz |
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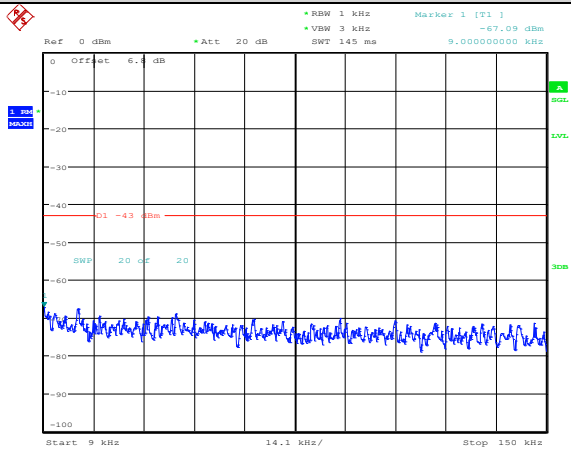


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| Band4-1312-1000~20000MHz |
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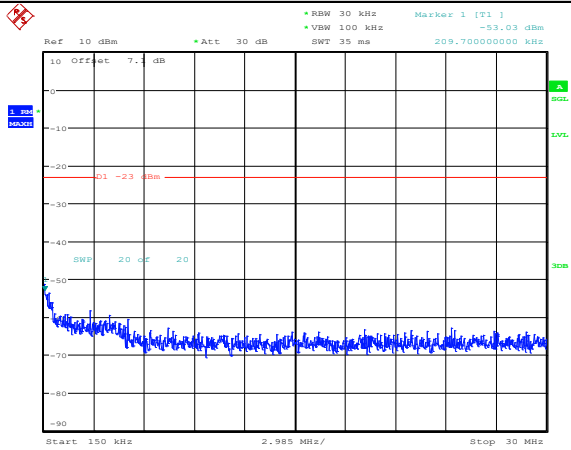
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Band4-1413-0.009~0.15MHz



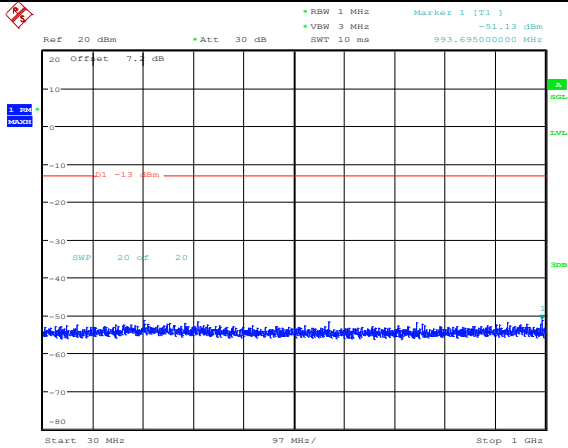
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Band4-1413-0.15~30MHz



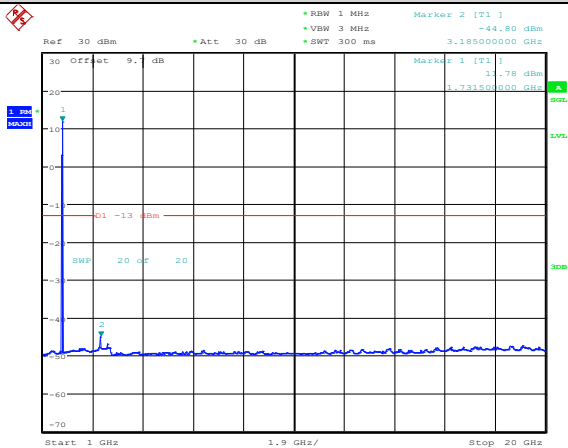
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Band4-1413-30~1000MHz



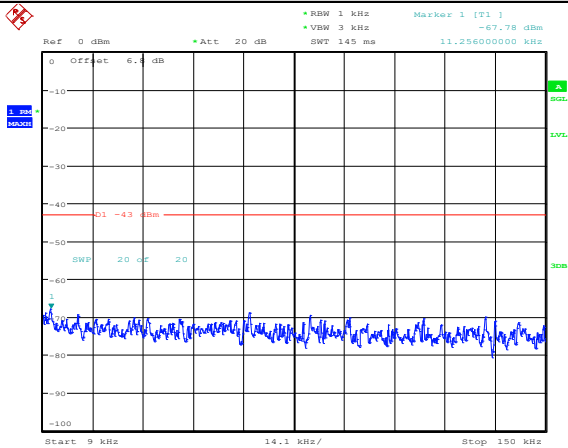
Date: 20.MAR.2023 13:58:37

Band4-1413-1000~20000MHz



Date: 20.MAR.2023 13:58:52

Band4-1513-0.009~0.15MHz



Date: 20.MAR.2023 13:59:08

Band4-1513-0.15~30MHz

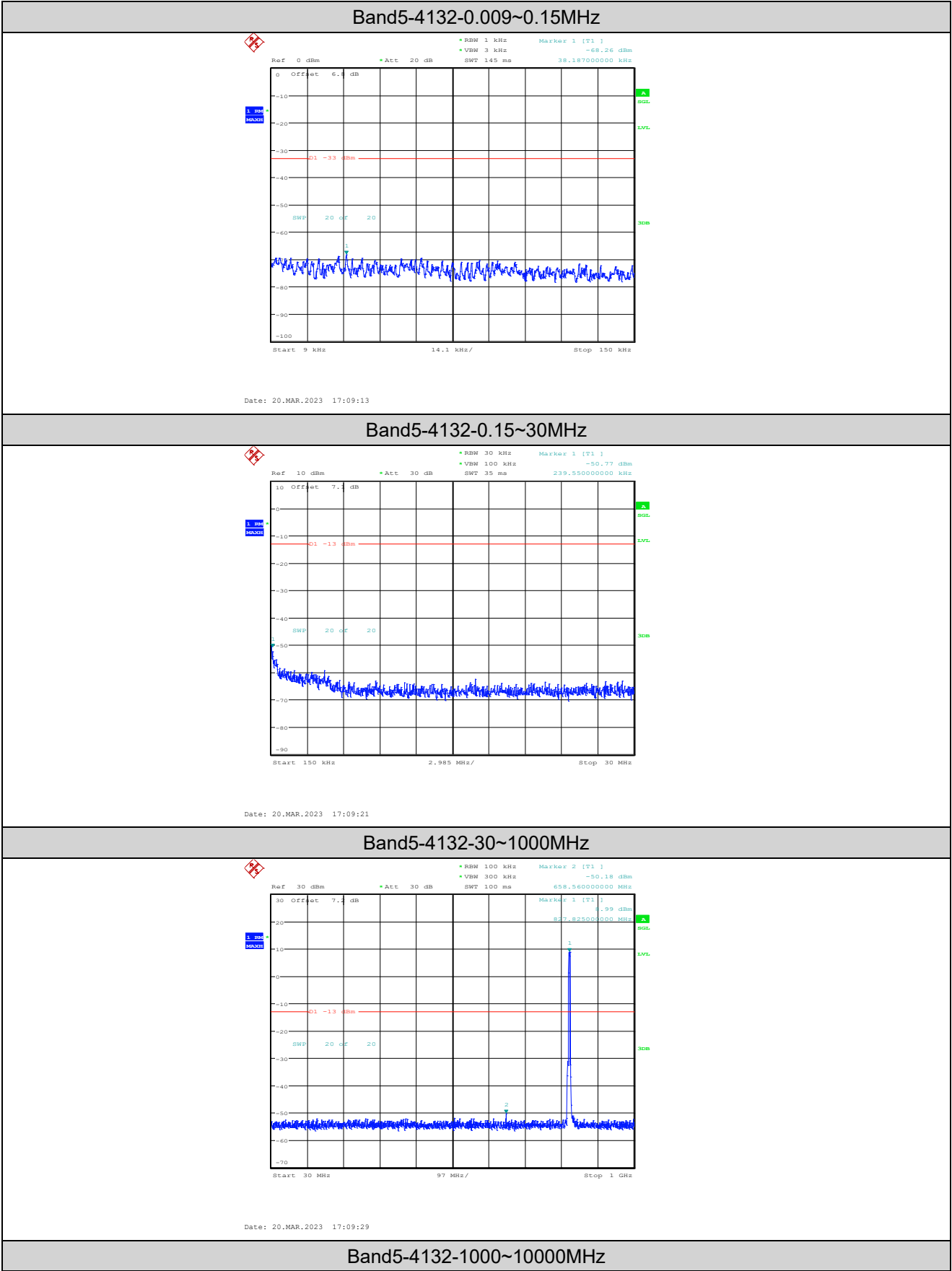


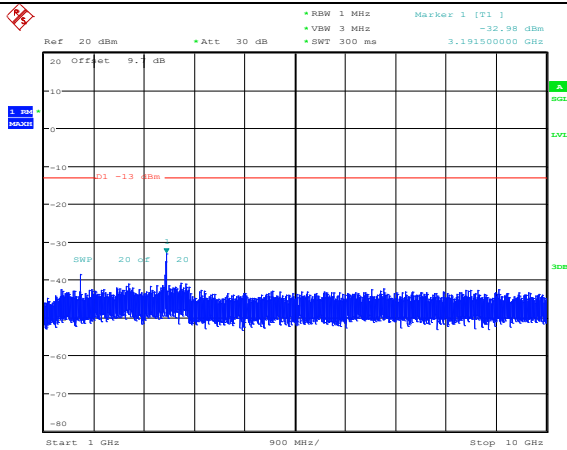
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| Band4-1513-30~1000MHz |
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|                          |
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| Band4-1513-1000~20000MHz |
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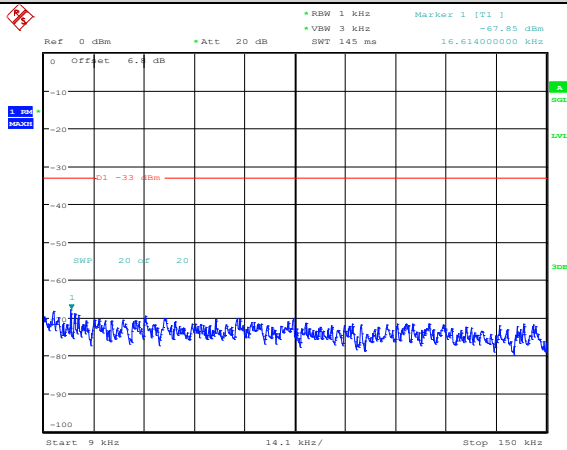






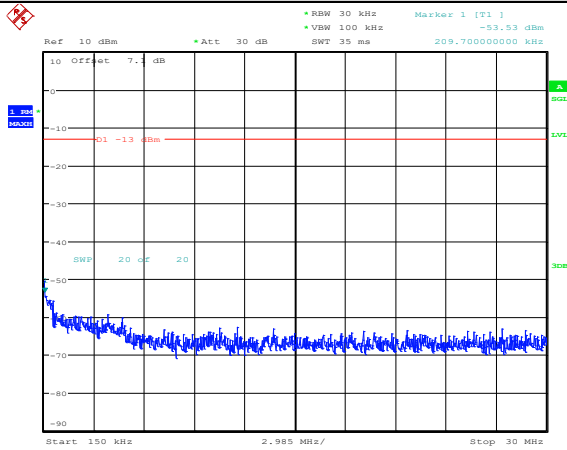
Date: 20.MAR.2023 17:09:43

Band5-4182-0.009~0.15MHz



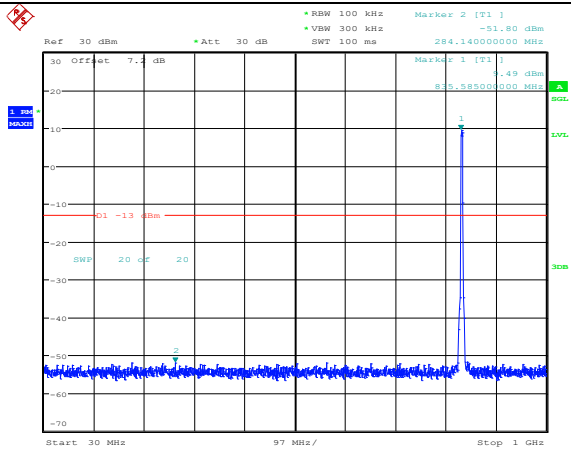
Date: 20.MAR.2023 17:09:59

Band5-4182-0.15~30MHz



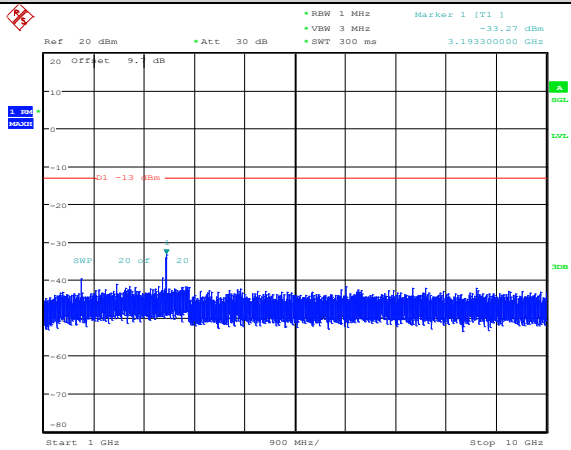
Date: 20.MAR.2023 17:10:07

Band5-4182-30~1000MHz



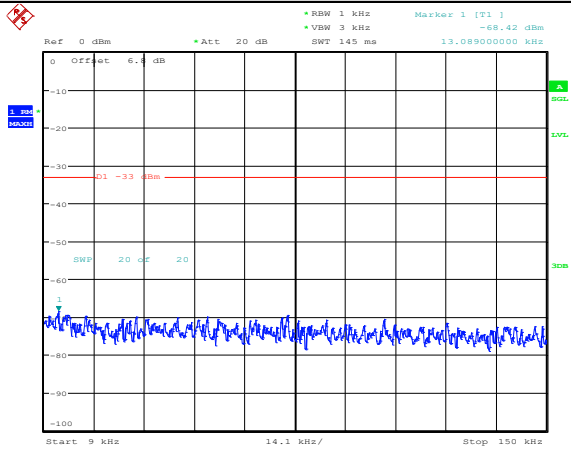
Date: 20.MAR.2023 17:10:15

Band5-4182-1000~10000MHz



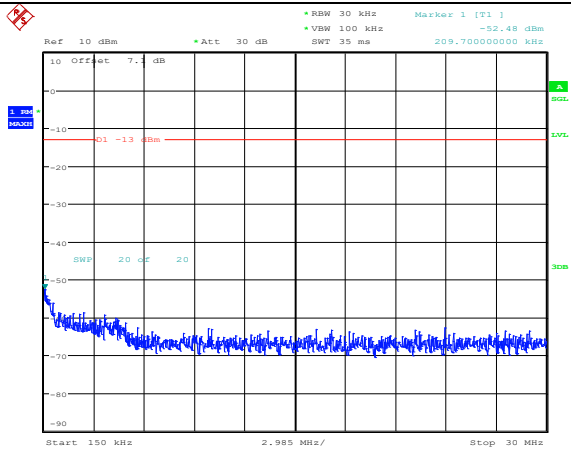
Date: 20.MAR.2023 17:10:29

Band5-4233-0.009~0.15MHz



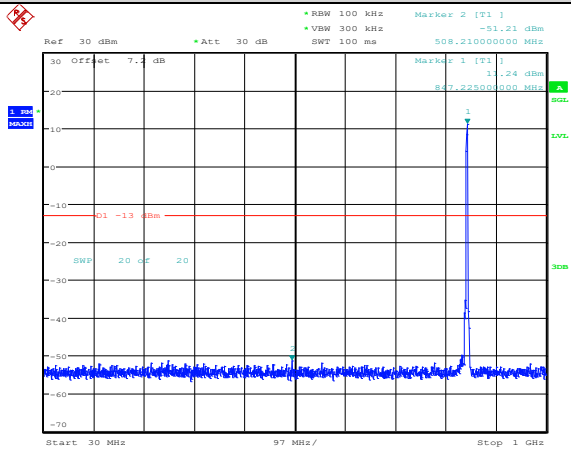
Date: 20.MAR.2023 17:10:45

Band5-4233-0.15~30MHz



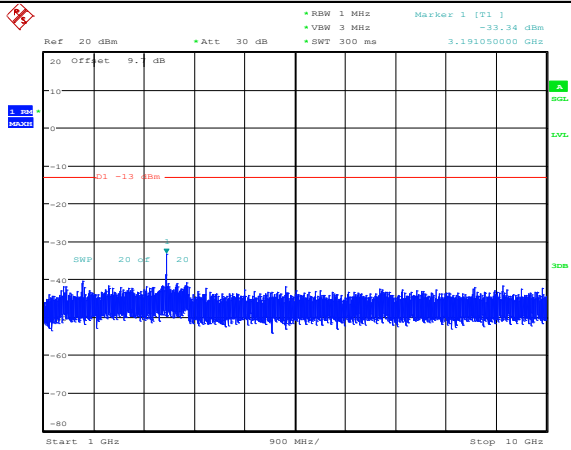
Date: 20.MAR.2023 17:10:53

Band5-4233-30~1000MHz



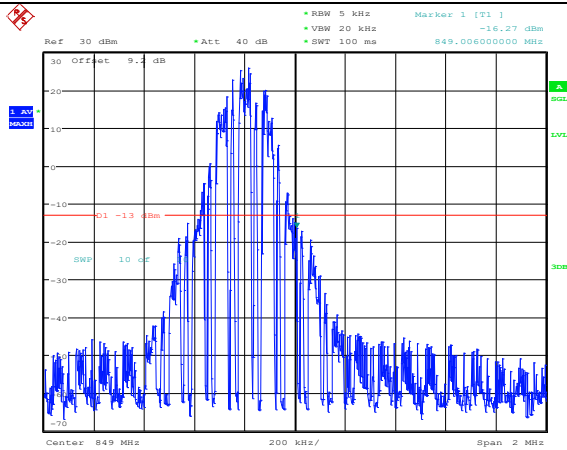
Date: 20.MAR.2023 17:11:01

Band5-4233-1000~10000MHz



Date: 20.MAR.2023 17:11:15

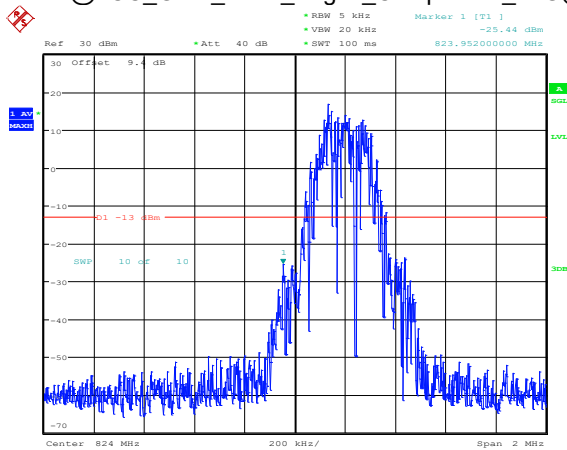




Date: 21.MAR.2023 10:39:58

@FCC\_GSM\_Band\_Edges\_Compliance\_IMG@EGPRS850-128

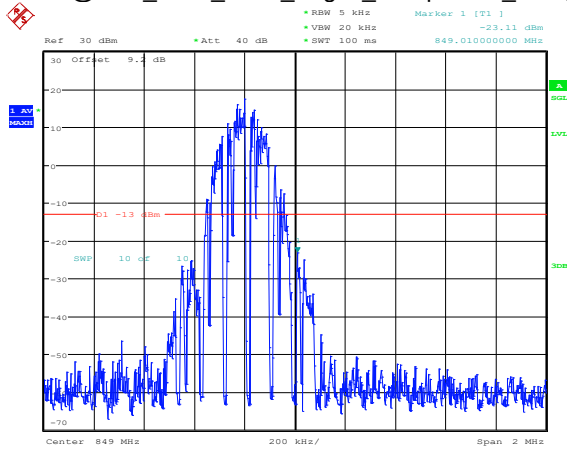
@FCC\_GSM\_Band\_Edges\_Compliance\_IMG@



Date: 21.MAR.2023 10:57:14

@FCC\_GSM\_Band\_Edges\_Compliance\_IMG@EGPRS850-251

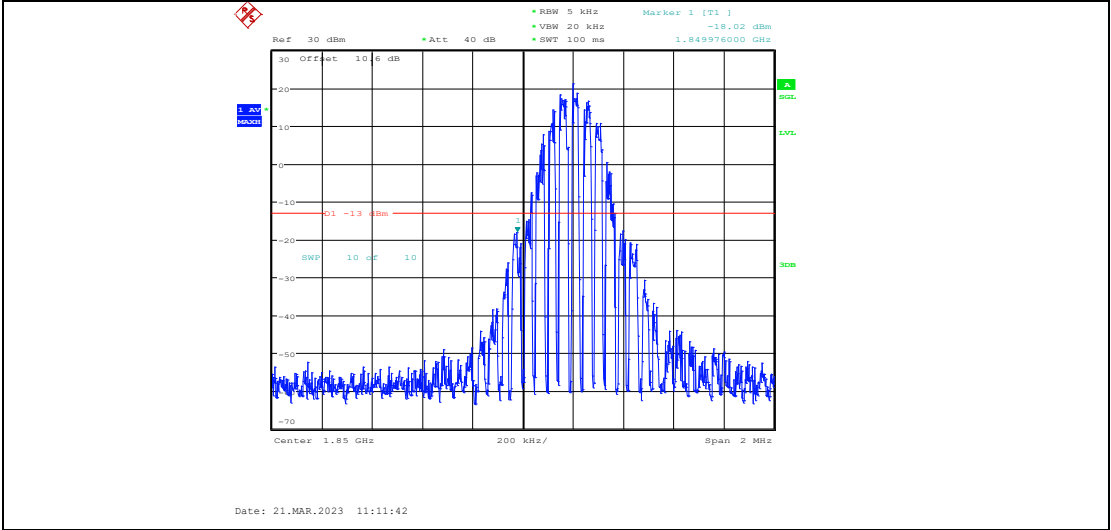
@FCC\_GSM\_Band\_Edges\_Compliance\_IMG@



Date: 21.MAR.2023 10:57:30

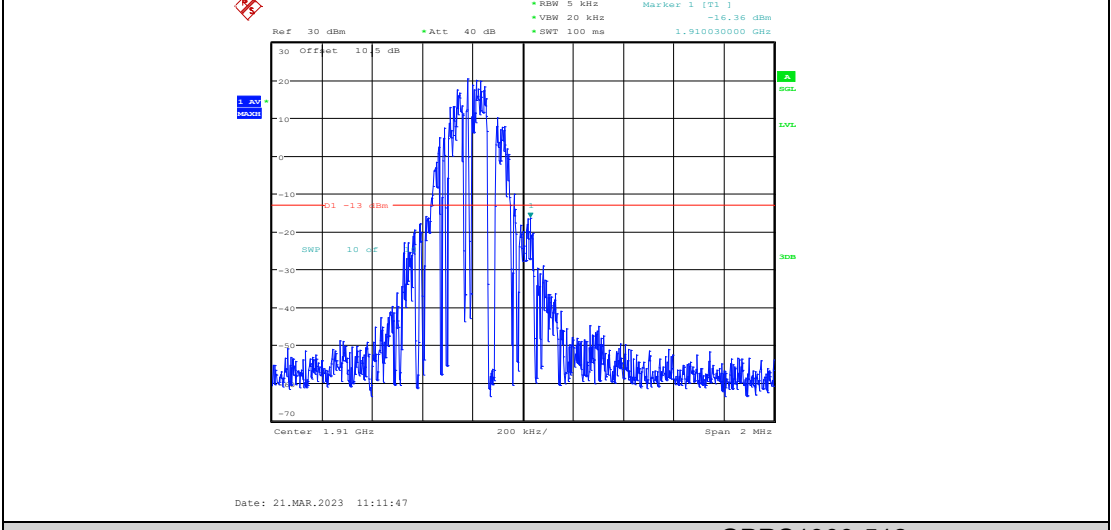
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@FCC\_GSM\_Band\_Edges\_Compliance\_IMG@



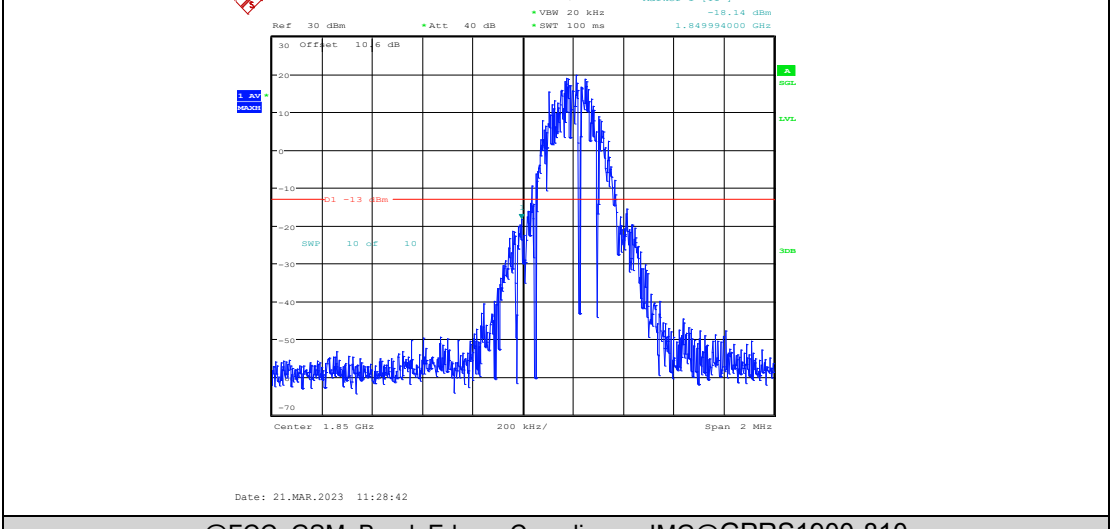
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@FCC\_GSM\_Band\_Edges\_Compliance\_IMG@



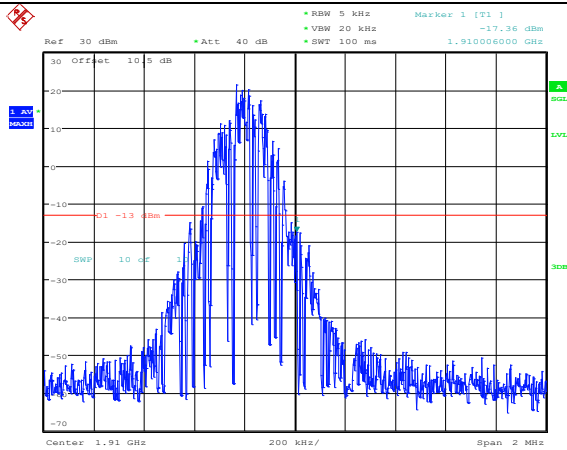
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@FCC\_GSM\_Band\_Edges\_Compliance\_IMG@GPRS1900-810

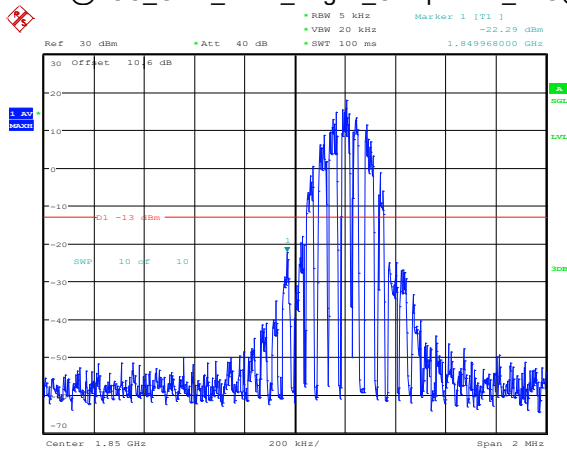
@FCC\_GSM\_Band\_Edges\_Compliance\_IMG@



Date: 21.MAR.2023 11:28:59

@FCC\_GSM\_Band\_Edges\_Compliance\_IMG@EGPRS1900-512

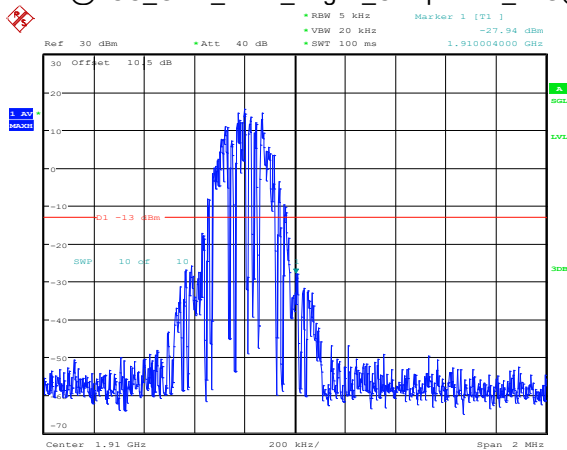
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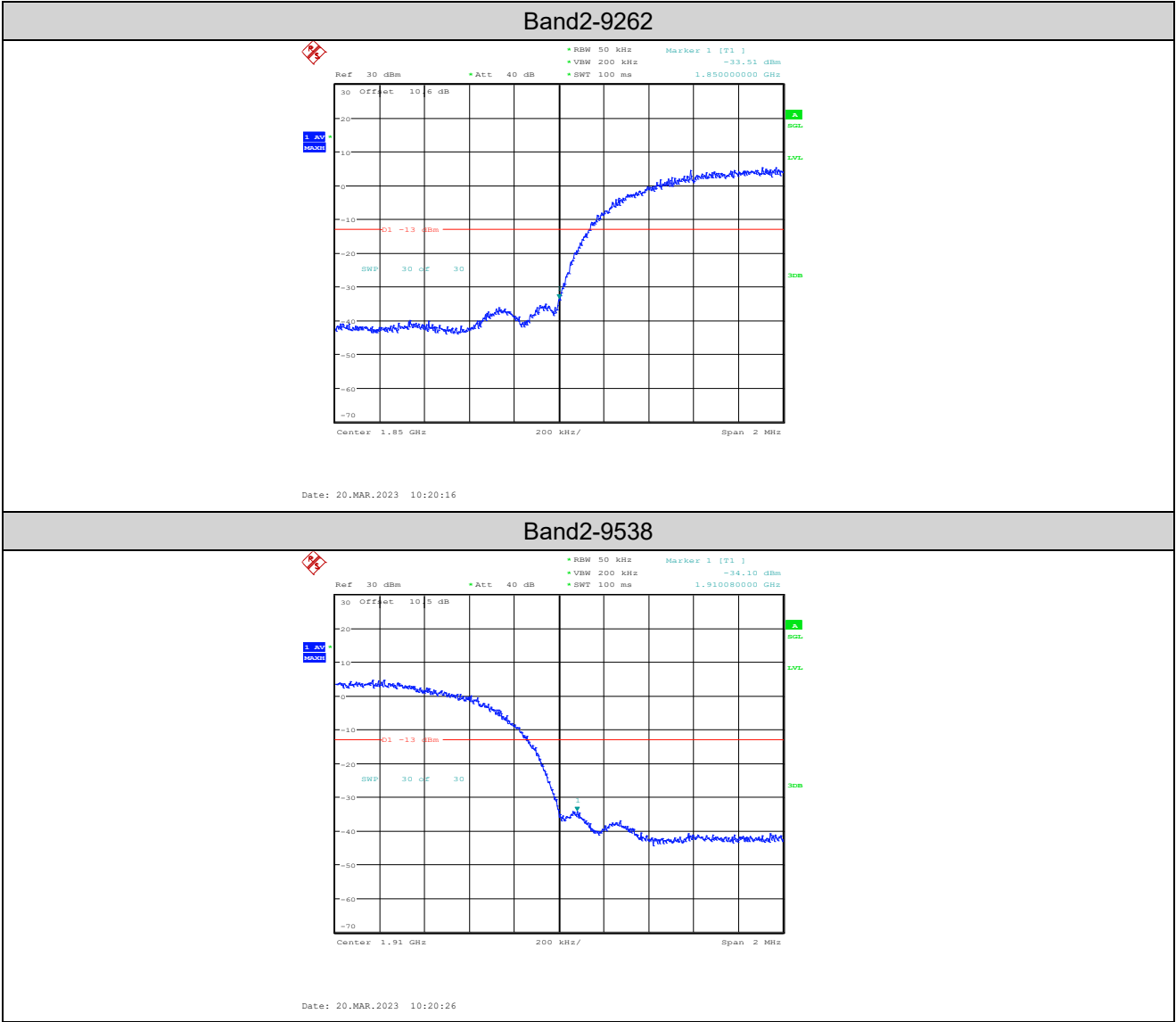
Date: 21.MAR.2023 11:46:22

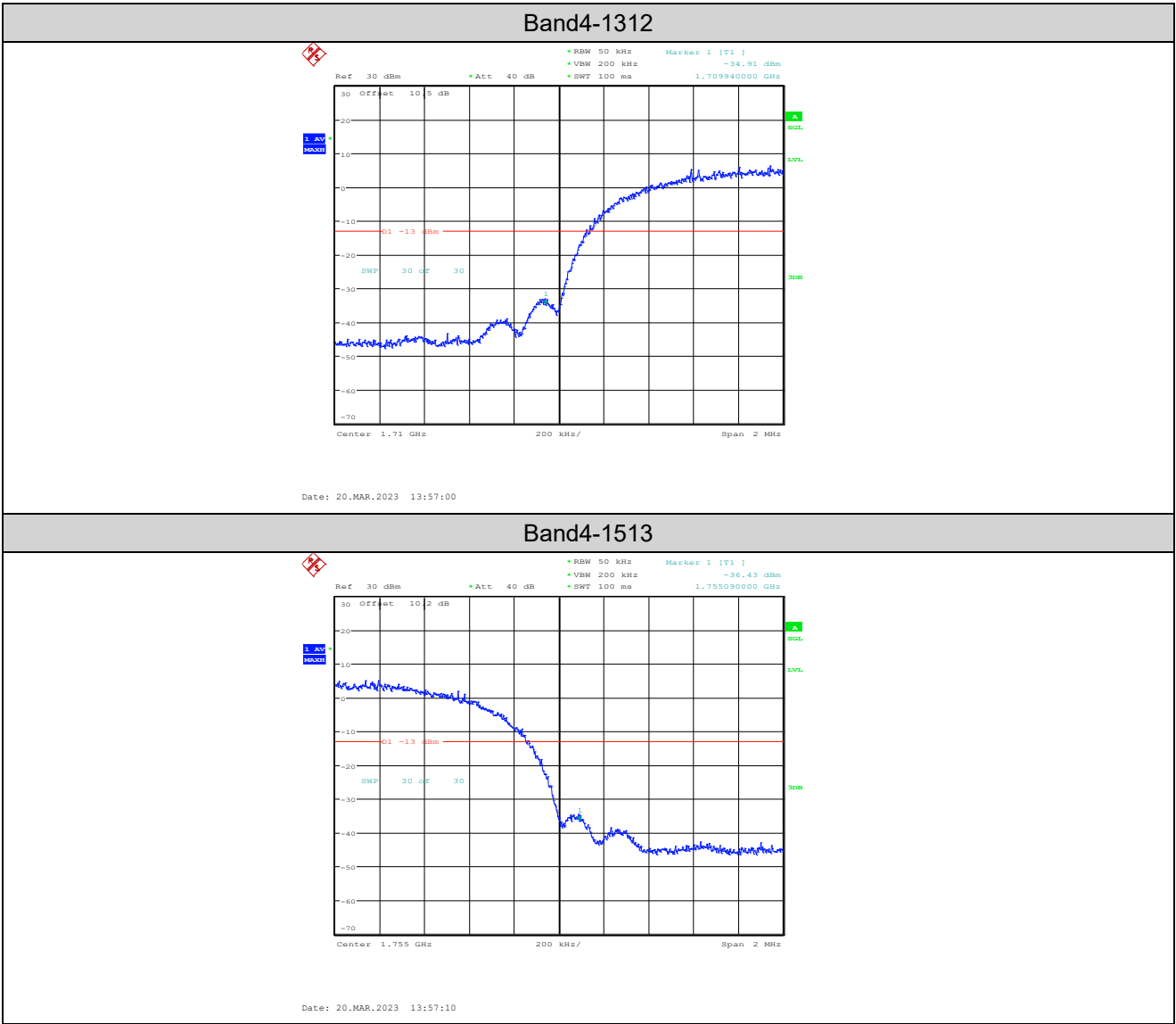
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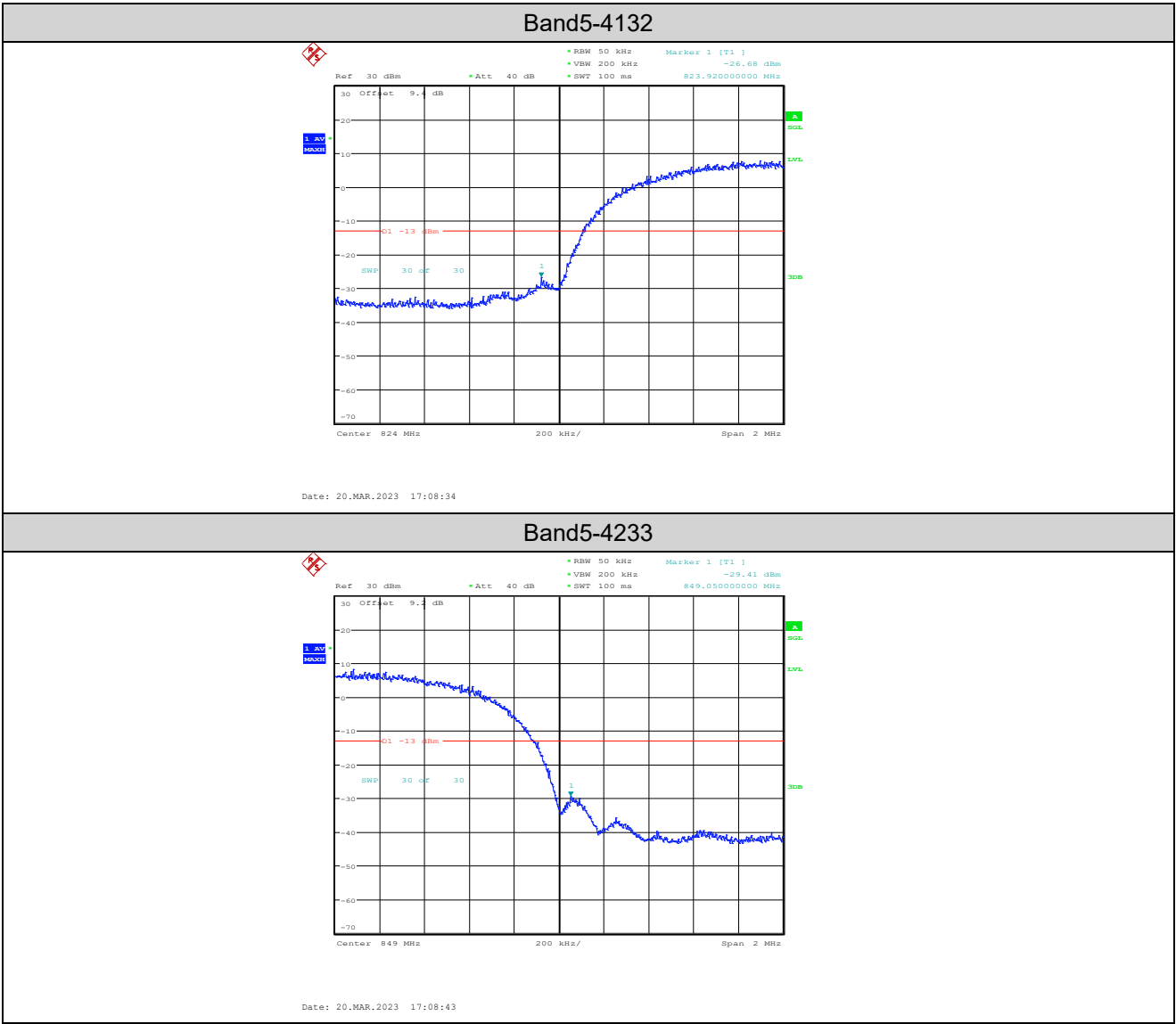
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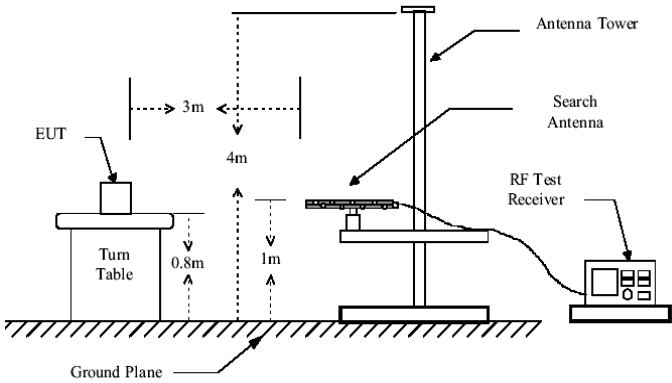
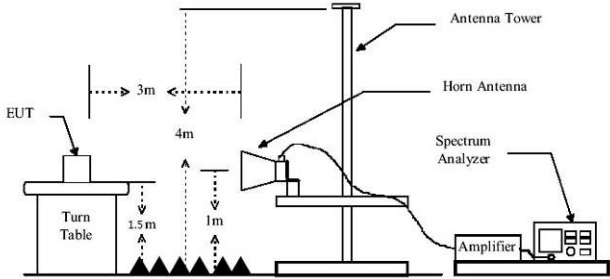
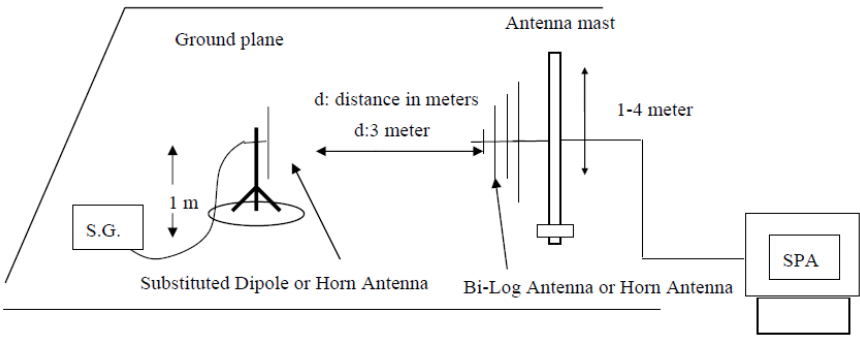
Date: 21.MAR.2023 11:46:39







4.8 ERP, EIRP Measurement

|                   |                                                                                                                                                                                                                                                                                                                             |
|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Test Requirement: | FCC part22.913(a) and FCC part24.232(b)                                                                                                                                                                                                                                                                                     |
| Test Method:      | FCC part2.1046                                                                                                                                                                                                                                                                                                              |
| Limit:            | GSM850, WCDMA Band V: 7W<br>PCS1900, WCDMA Band II: 2W<br>WCDMA Band IV: 1W                                                                                                                                                                                                                                                 |
| Test setup:       | <p>Below 1GHz</p>  <p>Above 1GHz</p>  <p>Substituted method:</p>  |

|                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Test Procedure:   | <ol style="list-style-type: none"> <li>1. The EUT was placed on an non-conductive turntable using a non-conductive support. The radiated emission at the fundamental frequency was measured at 3 m with a test antenna and EMI spectrum analyzer.</li> <li>2. During the measurement, the EUT was communication with the station. The highest emission was recorded with the rotation of the turntable and the lowering of the test antenna from 4m to 1m. The reading was recorded and the field strength (E in dBuV/m) was calculated.</li> <li>3. ERP in frequency band 824.2 –848.80.8MHz were measured using a substitution method. The EUT was replaced by dipole antenna connected, the S.G. output was recorded and ERP was calculated as follows:<br/> <math display="block">\text{ERP} = \text{S.G. output (dBm)} + \text{Antenna Gain (dBd)} - \text{Cable Loss (dB)}</math> </li> <li>4. EIRP in frequency band 1850.2 –1909.8MHz were measured using a substitution method. The EUT was replaced by or horn antenna connected, the S.G. output was recorded and EIRP was calculated as follows:<br/> <math display="block">\text{EIRP} = \text{S.G. output (dBm)} + \text{Antenna Gain (dBi)} - \text{Cable Loss (dB)}</math> </li> </ol> |
| Test Instruments: | Refer to section 5.0 for details                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Test mode:        | Refer to section 6.1 for details                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Test results:     | Pass                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

## Measurement Data

| EUT mode             | Channel | EUT Pol. | Antenna Pol. | ERP(dBm) | Limit (dBm) | Result |
|----------------------|---------|----------|--------------|----------|-------------|--------|
| GSM850<br>(GSM link) | Lowest  | H        | V            | 34.08    | 38.45       | Pass   |
|                      |         |          | H            | 32.22    |             |        |
|                      |         | E1       | V            | 34.39    |             |        |
|                      |         |          | H            | 30.01    |             |        |
|                      |         | E2       | V            | 34.07    |             |        |
|                      |         |          | H            | 30.45    |             |        |
|                      | Middle  | H        | V            | 33.94    | 38.45       | Pass   |
|                      |         |          | H            | 32.24    |             |        |
|                      |         | E1       | V            | 34.39    |             |        |
|                      |         |          | H            | 30.61    |             |        |
|                      |         | E2       | V            | 34.31    |             |        |
|                      |         |          | H            | 30.37    |             |        |
|                      | Highest | H        | V            | 34.58    | 38.45       | Pass   |
|                      |         |          | H            | 32.16    |             |        |
|                      |         | E1       | V            | 34.69    |             |        |
|                      |         |          | H            | 30.15    |             |        |
|                      |         | E2       | V            | 34.08    |             |        |
|                      |         |          | H            | 30.17    |             |        |

| EUT mode                | Channel | EUT Pol. | Antenna Pol. | ERP(dBm) | Limit (dBm) | Result |
|-------------------------|---------|----------|--------------|----------|-------------|--------|
| GSM850<br>(GPRS 1 link) | Lowest  | H        | V            | 33.92    | 38.45       | Pass   |
|                         |         |          | H            | 32.03    |             |        |
|                         |         | E1       | V            | 34.25    |             |        |
|                         |         |          | H            | 29.86    |             |        |
|                         |         | E2       | V            | 33.97    |             |        |
|                         |         |          | H            | 30.26    |             |        |
|                         | Middle  | H        | V            | 34.07    | 38.45       | Pass   |
|                         |         |          | H            | 32.11    |             |        |
|                         |         | E1       | V            | 34.57    |             |        |
|                         |         |          | H            | 30.56    |             |        |
|                         |         | E2       | V            | 34.18    |             |        |
|                         |         |          | H            | 30.20    |             |        |
|                         | Highest | H        | V            | 34.48    | 38.45       | Pass   |
|                         |         |          | H            | 32.37    |             |        |
|                         |         | E1       | V            | 34.66    |             |        |
|                         |         |          | H            | 30.19    |             |        |
|                         |         | E2       | V            | 34.02    |             |        |
|                         |         |          | H            | 30.13    |             |        |

| EUT mode                 | Channel | EUT Pol. | Antenna Pol. | ERP(dBm) | Limit (dBm) | Result |
|--------------------------|---------|----------|--------------|----------|-------------|--------|
| GSM850<br>(EGPRS 1 link) | Lowest  | H        | V            | 33.91    | 38.45       | Pass   |
|                          |         |          | H            | 32.16    |             |        |
|                          |         | E1       | V            | 34.37    |             |        |
|                          |         |          | H            | 30.03    |             |        |
|                          |         | E2       | V            | 34.02    |             |        |
|                          |         |          | H            | 30.26    |             |        |
|                          | Middle  | H        | V            | 34.03    | 38.45       | Pass   |
|                          |         |          | H            | 32.08    |             |        |
|                          |         | E1       | V            | 34.41    |             |        |
|                          |         |          | H            | 30.71    |             |        |
|                          |         | E2       | V            | 34.19    |             |        |
|                          |         |          | H            | 30.33    |             |        |
|                          | Highest | H        | V            | 34.53    | 38.45       | Pass   |
|                          |         |          | H            | 32.31    |             |        |
|                          |         | E1       | V            | 34.77    |             |        |
|                          |         |          | H            | 30.15    |             |        |
|                          |         | E2       | V            | 34.07    |             |        |
|                          |         |          | H            | 30.09    |             |        |

| EUT mode              | Channel | EUT Pol. | Antenna Pol. | EIRP (dBm) | Limit (dBm) | Result |
|-----------------------|---------|----------|--------------|------------|-------------|--------|
| PCS1900<br>(GSM link) | Lowest  | H        | V            | 31.56      | 33.01       | Pass   |
|                       |         |          | H            | 27.70      |             |        |
|                       |         | E1       | V            | 30.56      |             |        |
|                       |         |          | H            | 28.46      |             |        |
|                       |         | E2       | V            | 30.41      |             |        |
|                       |         |          | H            | 28.44      |             |        |
|                       | Middle  | H        | V            | 31.03      | 33.01       | Pass   |
|                       |         |          | H            | 27.90      |             |        |
|                       |         | E1       | V            | 30.63      |             |        |
|                       |         |          | H            | 28.26      |             |        |
|                       |         | E2       | V            | 31.73      |             |        |
|                       |         |          | H            | 27.74      |             |        |
|                       | Highest | H        | V            | 30.43      | 33.01       | Pass   |
|                       |         |          | H            | 27.87      |             |        |
|                       |         | E1       | V            | 31.61      |             |        |
|                       |         |          | H            | 28.37      |             |        |
|                       |         | E2       | V            | 30.80      |             |        |
|                       |         |          | H            | 28.00      |             |        |

| EUT mode                 | Channel | EUT Pol. | Antenna Pol. | EIRP (dBm) | Limit (dBm) | Result |
|--------------------------|---------|----------|--------------|------------|-------------|--------|
| PCS1900<br>(GPRS 1 link) | Lowest  | H        | V            | 31.35      | 33.01       | Pass   |
|                          |         |          | H            | 27.64      |             |        |
|                          |         | E1       | V            | 30.62      |             |        |
|                          |         |          | H            | 28.45      |             |        |
|                          |         | E2       | V            | 30.40      |             |        |
|                          |         |          | H            | 28.46      |             |        |
|                          | Middle  | H        | V            | 31.01      | 33.01       | Pass   |
|                          |         |          | H            | 27.91      |             |        |
|                          |         | E1       | V            | 30.60      |             |        |
|                          |         |          | H            | 28.04      |             |        |
|                          |         | E2       | V            | 31.93      |             |        |
|                          |         |          | H            | 27.75      |             |        |
|                          | Highest | H        | V            | 30.57      | 33.01       | Pass   |
|                          |         |          | H            | 27.84      |             |        |
|                          |         | E1       | V            | 31.60      |             |        |
|                          |         |          | H            | 28.18      |             |        |
|                          |         | E2       | V            | 30.75      |             |        |
|                          |         |          | H            | 28.04      |             |        |

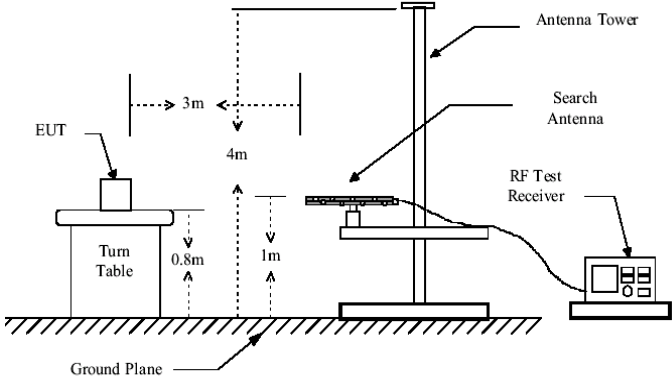
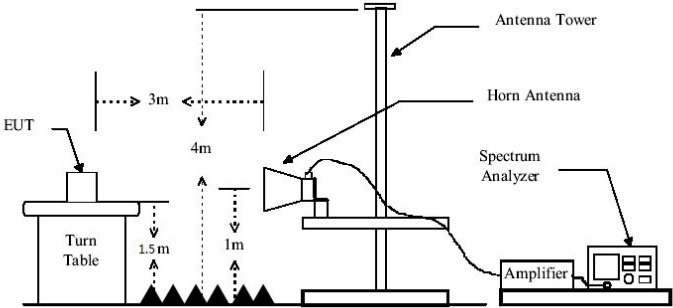
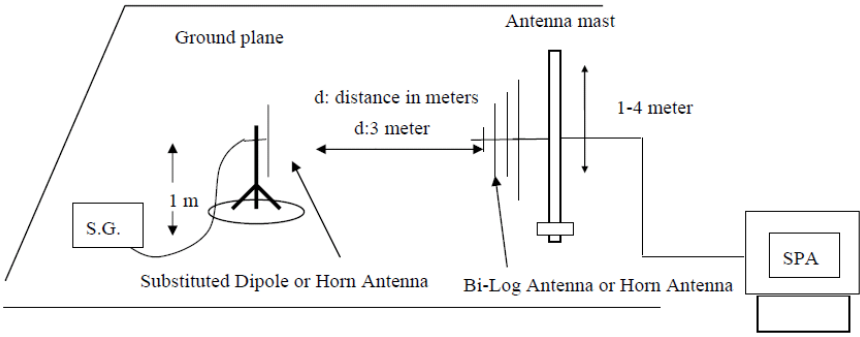
| EUT mode                  | Channel | EUT Pol. | Antenna Pol. | EIRP (dBm) | Limit (dBm) | Result |
|---------------------------|---------|----------|--------------|------------|-------------|--------|
| PCS1900<br>(EGPRS 1 link) | Lowest  | H        | V            | 31.53      | 33.01       | Pass   |
|                           |         |          | H            | 27.51      |             |        |
|                           |         | E1       | V            | 30.63      |             |        |
|                           |         |          | H            | 28.58      |             |        |
|                           |         | E2       | V            | 30.35      |             |        |
|                           |         |          | H            | 28.61      |             |        |
|                           | Middle  | H        | V            | 31.11      | 33.01       | Pass   |
|                           |         |          | H            | 27.71      |             |        |
|                           |         | E1       | V            | 30.54      |             |        |
|                           |         |          | H            | 28.13      |             |        |
|                           |         | E2       | V            | 31.81      |             |        |
|                           |         |          | H            | 27.91      |             |        |
|                           | Highest | H        | V            | 30.60      | 33.01       | Pass   |
|                           |         |          | H            | 27.78      |             |        |
|                           |         | E1       | V            | 31.70      |             |        |
|                           |         |          | H            | 28.38      |             |        |
|                           |         | E2       | V            | 30.92      |             |        |
|                           |         |          | H            | 28.17      |             |        |

| EUT mode        | Channel | EUT Pol. | Antenna Pol. | ERP(dBm) | Limit (dBm) | Result |
|-----------------|---------|----------|--------------|----------|-------------|--------|
| WCDMA<br>Band V | Lowest  | H        | V            | 31.57    | 38.45       | Pass   |
|                 |         |          | H            | 27.72    |             |        |
|                 |         | E1       | V            | 30.59    |             |        |
|                 |         |          | H            | 28.45    |             |        |
|                 |         | E2       | V            | 30.39    |             |        |
|                 |         |          | H            | 28.45    |             |        |
|                 | Middle  | H        | V            | 30.98    | 38.45       | Pass   |
|                 |         |          | H            | 27.70    |             |        |
|                 |         | E1       | V            | 30.50    |             |        |
|                 |         |          | H            | 28.26    |             |        |
|                 |         | E2       | V            | 31.76    |             |        |
|                 |         |          | H            | 27.86    |             |        |
|                 | Highest | H        | V            | 30.50    | 38.45       | Pass   |
|                 |         |          | H            | 27.75    |             |        |
|                 |         | E1       | V            | 31.79    |             |        |
|                 |         |          | H            | 28.35    |             |        |
|                 |         | E2       | V            | 30.89    |             |        |
|                 |         |          | H            | 27.97    |             |        |

| EUT mode         | Channel | EUT Pol. | Antenna Pol. | EIRP(dBm) | Limit (dBm) | Result |
|------------------|---------|----------|--------------|-----------|-------------|--------|
| WCDMA<br>Band II | Lowest  | H        | V            | 24.03     | 33.01       | Pass   |
|                  |         |          | H            | 22.92     |             |        |
|                  |         | E1       | V            | 24.19     |             |        |
|                  |         |          | H            | 22.96     |             |        |
|                  |         | E2       | V            | 24.58     |             |        |
|                  |         |          | H            | 23.81     |             |        |
|                  | Middle  | H        | V            | 24.22     | 33.01       | Pass   |
|                  |         |          | H            | 23.52     |             |        |
|                  |         | E1       | V            | 24.89     |             |        |
|                  |         |          | H            | 23.54     |             |        |
|                  |         | E2       | V            | 24.52     |             |        |
|                  |         |          | H            | 23.57     |             |        |
|                  | Highest | H        | V            | 24.58     | 33.01       | Pass   |
|                  |         |          | H            | 23.17     |             |        |
|                  |         | E1       | V            | 24.46     |             |        |
|                  |         |          | H            | 23.25     |             |        |
|                  |         | E2       | V            | 24.07     |             |        |
|                  |         |          | H            | 23.76     |             |        |

| EUT mode         | Channel | EUT Pol. | Antenna Pol. | EIRP(dBm) | Limit (dBm) | Result |
|------------------|---------|----------|--------------|-----------|-------------|--------|
| WCDMA<br>Band IV | Lowest  | H        | V            | 24.14     | 33.01       | Pass   |
|                  |         |          | H            | 22.88     |             |        |
|                  |         | E1       | V            | 24.16     |             |        |
|                  |         |          | H            | 23.03     |             |        |
|                  |         | E2       | V            | 24.62     |             |        |
|                  |         |          | H            | 23.60     |             |        |
|                  | Middle  | H        | V            | 24.20     | 33.01       | Pass   |
|                  |         |          | H            | 23.65     |             |        |
|                  |         | E1       | V            | 24.99     |             |        |
|                  |         |          | H            | 23.48     |             |        |
|                  |         | E2       | V            | 24.54     |             |        |
|                  |         |          | H            | 23.56     |             |        |
|                  | Highest | H        | V            | 24.59     | 33.01       | Pass   |
|                  |         |          | H            | 23.07     |             |        |
|                  |         | E1       | V            | 24.61     |             |        |
|                  |         |          | H            | 23.05     |             |        |
|                  |         | E2       | V            | 24.02     |             |        |
|                  |         |          | H            | 23.84     |             |        |

4.9 Field strength of spurious radiation measurement

|                   |                                                                                                                                                                                                                                                                                                                                                                          |
|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Test Requirement: | FCC part22.917(a) and FCC part24.238(a)                                                                                                                                                                                                                                                                                                                                  |
| Test Method:      | FCC part2.1053                                                                                                                                                                                                                                                                                                                                                           |
| Limit:            | -13dBm                                                                                                                                                                                                                                                                                                                                                                   |
| Test setup:       | <div>Below 1GHz</div> <div></div> <div>Above 1GHz</div> <div></div> <div>Substituted method:</div> <div></div> |

|                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Test Procedure:   | <ol style="list-style-type: none"><li>1. The EUT was placed on an non-conductive turntable using a non-conductive support. The radiated emission at the fundamental frequency was measured at 3 m with a test antenna and EMI spectrum analyzer.</li><li>2. During the tests, the antenna height and the EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. This maximization process was repeated with the EUT positioned in each of its three orthogonal orientations.</li><li>3. The frequency range up to tenth harmonic was investigated for each of three fundamental frequency (low, middle and high channels). Once spurious emission was identified, the power of the emission was determined using the substitution method.</li><li>4. The spurious emissions attenuation was calculated as the difference between radiated power at the fundamental frequency and the spurious emissions frequency.<br/><math display="block">\text{ERP / EIRP} = \text{S.G. output (dBm)} + \text{Antenna Gain(dB/dBi)} - \text{Cable Loss (dB)}</math></li></ol> |
| Test Instruments: | Refer to section 5.0 for details                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Test mode:        | Refer to section 6.1 for details                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Test results:     | Pass                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

## Measurement Data

| Test mode:      | GSM850            |             | Test channel: | Lowest  |
|-----------------|-------------------|-------------|---------------|---------|
| Frequency (MHz) | Spurious Emission |             | Limit (dBm)   | Result  |
|                 | Polarization      | Level (dBm) |               |         |
| 1648.40         | Vertical          | -37.21      | -13.00        | Pass    |
| 2472.60         | V                 | -39.59      |               |         |
| 3296.80         | V                 | -38.30      |               |         |
| 4121.00         | V                 | -42.91      |               |         |
| 4945.20         | V                 | ---         |               |         |
| 1648.40         | Horizontal        | -39.42      | -13.00        | Pass    |
| 2472.60         | H                 | -42.84      |               |         |
| 3296.80         | H                 | -44.79      |               |         |
| 4121.00         | H                 | -46.40      |               |         |
| 4945.20         | H                 | ---         |               |         |
| Test mode:      | GSM850            |             | Test channel: | Middle  |
| Frequency (MHz) | Spurious Emission |             | Limit (dBm)   | Result  |
|                 | Polarization      | Level (dBm) |               |         |
| 1673.20         | Vertical          | -37.08      | -13.00        | Pass    |
| 2509.80         | V                 | -39.32      |               |         |
| 3346.40         | V                 | -37.56      |               |         |
| 4183.00         | V                 | -43.52      |               |         |
| 5019.60         | V                 | ---         |               |         |
| 1673.20         | Horizontal        | -39.58      | -13.00        | Pass    |
| 2509.80         | H                 | -42.25      |               |         |
| 3346.40         | H                 | -44.40      |               |         |
| 4183.00         | H                 | -45.79      |               |         |
| 5019.60         | H                 | ---         |               |         |
| Test mode:      | GSM850            |             | Test channel: | Highest |
| Frequency (MHz) | Spurious Emission |             | Limit (dBm)   | Result  |
|                 | Polarization      | Level (dBm) |               |         |
| 1697.60         | Vertical          | -36.46      | -13.00        | Pass    |
| 2546.40         | V                 | -39.68      |               |         |
| 3395.20         | V                 | -37.77      |               |         |
| 4244.00         | V                 | -42.84      |               |         |
| 5092.80         | V                 | ---         |               |         |
| 1697.60         | Horizontal        | -39.36      | -13.00        | Pass    |
| 2546.40         | H                 | -42.53      |               |         |
| 3395.20         | H                 | -45.37      |               |         |
| 4244.00         | H                 | -45.84      |               |         |
| 5092.80         | H                 | ---         |               |         |

|                 |                   |             |               |         |
|-----------------|-------------------|-------------|---------------|---------|
| Test mode:      | PCS1900           |             | Test channel: | Lowest  |
| Frequency (MHz) | Spurious Emission |             | Limit (dBm)   | Result  |
|                 | Polarization      | Level (dBm) |               |         |
| 3700.40         | Vertical          | -36.83      | -13.00        | Pass    |
| 5550.60         | V                 | -39.55      |               |         |
| 7400.80         | V                 | -38.46      |               |         |
| 9251.00         | V                 | -43.25      |               |         |
| 11101.20        | V                 | ---         |               |         |
| 3700.40         | Horizontal        | -39.53      | -13.00        | Pass    |
| 5550.60         | H                 | -42.73      |               |         |
| 7400.80         | H                 | -45.31      |               |         |
| 9251.00         | H                 | -45.71      |               |         |
| 11101.20        | H                 | ---         |               |         |
| Test mode:      | PCS1900           |             | Test channel: | Middle  |
| Frequency (MHz) | Spurious Emission |             | Limit (dBm)   | Result  |
|                 | Polarization      | Level (dBm) |               |         |
| 3760.00         | Vertical          | -36.31      | -13.00        | Pass    |
| 5640.00         | V                 | -39.21      |               |         |
| 7520.00         | V                 | -38.40      |               |         |
| 9400.00         | V                 | -43.41      |               |         |
| 11280.00        | V                 | ---         |               |         |
| 3760.00         | Horizontal        | -39.45      | -13.00        | Pass    |
| 5640.00         | H                 | -42.51      |               |         |
| 7520.00         | H                 | -44.98      |               |         |
| 9400.00         | H                 | -45.50      |               |         |
| 11280.00        | H                 | ---         |               |         |
| Test mode:      | PCS1900           |             | Test channel: | Highest |
| Frequency (MHz) | Spurious Emission |             | Limit (dBm)   | Result  |
|                 | Polarization      | Level (dBm) |               |         |
| 3819.60         | Vertical          | -37.29      | -13.00        | Pass    |
| 5729.40         | V                 | -39.40      |               |         |
| 7639.20         | V                 | -37.77      |               |         |
| 9549.00         | V                 | -43.81      |               |         |
| 11458.80        | V                 | ---         |               |         |
| 3819.60         | Horizontal        | -39.01      | -13.00        | Pass    |
| 5729.40         | H                 | -42.78      |               |         |
| 7639.20         | H                 | -44.53      |               |         |
| 9549.00         | H                 | -45.95      |               |         |
| 11458.80        | H                 | ---         |               |         |

| Test mode:      | WCDMA Band V      |             | Test channel: | Lowest  |
|-----------------|-------------------|-------------|---------------|---------|
| Frequency (MHz) | Spurious Emission |             | Limit (dBm)   | Result  |
|                 | Polarization      | Level (dBm) |               |         |
| 1652.80         | Vertical          | -36.74      | -13.00        | Pass    |
| 2479.20         | V                 | -39.27      |               |         |
| 3305.60         | V                 | -37.53      |               |         |
| 4132.00         | V                 | -42.89      |               |         |
| 4958.40         | V                 | ---         |               |         |
| 1652.80         | Horizontal        | -39.04      | -13.00        | Pass    |
| 2479.20         | H                 | -42.74      |               |         |
| 3305.60         | H                 | -44.95      |               |         |
| 4132.00         | H                 | -46.18      |               |         |
| 4958.40         | H                 | ---         |               |         |
| Test mode:      | WCDMA Band V      |             | Test channel: | Middle  |
| Frequency (MHz) | Spurious Emission |             | Limit (dBm)   | Result  |
|                 | Polarization      | Level (dBm) |               |         |
| 1672.80         | Vertical          | -36.96      | -13.00        | Pass    |
| 2509.20         | V                 | -39.04      |               |         |
| 3345.60         | V                 | -37.82      |               |         |
| 4182.00         | V                 | -43.80      |               |         |
| 5018.40         | V                 | ---         |               |         |
| 1672.80         | Horizontal        | -38.60      | -13.00        | Pass    |
| 2509.20         | H                 | -42.91      |               |         |
| 3345.60         | H                 | -44.65      |               |         |
| 4182.00         | H                 | -46.07      |               |         |
| 5018.40         | H                 | ---         |               |         |
| Test mode:      | WCDMA Band V      |             | Test channel: | Highest |
| Frequency (MHz) | Spurious Emission |             | Limit (dBm)   | Result  |
|                 | Polarization      | Level (dBm) |               |         |
| 1693.20         | Vertical          | -36.65      | -13.00        | Pass    |
| 2539.80         | V                 | -39.56      |               |         |
| 3386.40         | V                 | -37.75      |               |         |
| 4233.00         | V                 | -43.17      |               |         |
| 5079.60         | V                 | ---         |               |         |
| 1693.20         | Horizontal        | -39.56      | -13.00        | Pass    |
| 2539.80         | H                 | -42.49      |               |         |
| 3386.40         | H                 | -44.63      |               |         |
| 4233.00         | H                 | -45.52      |               |         |
| 5079.60         | H                 | ---         |               |         |

| Test mode:      | WCDMA Band II     |             | Test channel: | Lowest  |
|-----------------|-------------------|-------------|---------------|---------|
| Frequency (MHz) | Spurious Emission |             | Limit (dBm)   | Result  |
|                 | Polarization      | Level (dBm) |               |         |
| 3704.80         | Vertical          | -36.96      | -13.00        | Pass    |
| 5557.20         | V                 | -39.28      |               |         |
| 7409.60         | V                 | -37.51      |               |         |
| 9262.00         | V                 | -43.02      |               |         |
| 11114.40        | V                 | ---         |               |         |
| 3704.80         | Horizontal        | -38.86      | -13.00        | Pass    |
| 5557.20         | H                 | -42.69      |               |         |
| 7409.60         | H                 | -45.16      |               |         |
| 9262.00         | H                 | -45.97      |               |         |
| 11114.40        | H                 | ---         |               |         |
| Test mode:      | WCDMA Band II     |             | Test channel: | Middle  |
| Frequency (MHz) | Spurious Emission |             | Limit (dBm)   | Result  |
|                 | Polarization      | Level (dBm) |               |         |
| 3760.00         | Vertical          | -36.42      | -13.00        | Pass    |
| 5640.00         | V                 | -39.19      |               |         |
| 7520.00         | V                 | -37.90      |               |         |
| 9400.00         | V                 | -43.44      |               |         |
| 11280.00        | V                 | ---         |               |         |
| 3760.00         | Horizontal        | -38.92      | -13.00        | Pass    |
| 5640.00         | H                 | -43.03      |               |         |
| 7520.00         | H                 | -44.95      |               |         |
| 9400.00         | H                 | -46.39      |               |         |
| 11280.00        | H                 | ---         |               |         |
| Test mode:      | WCDMA Band II     |             | Test channel: | Highest |
| Frequency (MHz) | Spurious Emission |             | Limit (dBm)   | Result  |
|                 | Polarization      | Level (dBm) |               |         |
| 3815.20         | Vertical          | -36.85      | -13.00        | Pass    |
| 5722.80         | V                 | -39.64      |               |         |
| 7630.40         | V                 | -38.07      |               |         |
| 9538.00         | V                 | -43.61      |               |         |
| 11445.60        | V                 | ---         |               |         |
| 3815.20         | Horizontal        | -38.84      | -13.00        | Pass    |
| 5722.80         | H                 | -42.42      |               |         |
| 7630.40         | H                 | -44.92      |               |         |
| 9538.00         | H                 | -46.11      |               |         |
| 11445.60        | H                 | ---         |               |         |

|                 |                   |             |               |         |
|-----------------|-------------------|-------------|---------------|---------|
| Test mode:      | WCDMA Band IV     |             | Test channel: | Lowest  |
| Frequency (MHz) | Spurious Emission |             | Limit (dBm)   | Result  |
|                 | Polarization      | Level (dBm) |               |         |
| 3424.8          | Vertical          | -36.76      | -13.00        | Pass    |
| 5137.2          | V                 | -39.14      |               |         |
| 10274.4         | V                 | -38.07      |               |         |
| 15411.6         | V                 | -43.51      |               |         |
| 30823.2         | V                 | ---         |               |         |
| 3424.8          | Horizontal        | -39.37      | -13.00        | Pass    |
| 5137.2          | H                 | -42.63      |               |         |
| 10274.4         | H                 | -44.54      |               |         |
| 15411.6         | H                 | -45.68      |               |         |
| 30823.2         | H                 | ---         |               |         |
| Test mode:      | WCDMA Band IV     |             | Test channel: | Middle  |
| Frequency (MHz) | Spurious Emission |             | Limit (dBm)   | Result  |
|                 | Polarization      | Level (dBm) |               |         |
| 3480            | Vertical          | -37.26      | -13.00        | Pass    |
| 5220            | V                 | -39.11      |               |         |
| 10440           | V                 | -37.82      |               |         |
| 15660           | V                 | -42.90      |               |         |
| 31320           | V                 | ---         |               |         |
| 3480            | Horizontal        | -39.53      | -13.00        | Pass    |
| 5220            | H                 | -42.82      |               |         |
| 10440           | H                 | -44.78      |               |         |
| 15660           | H                 | -45.84      |               |         |
| 31320           | H                 | ---         |               |         |
| Test mode:      | WCDMA Band IV     |             | Test channel: | Highest |
| Frequency (MHz) | Spurious Emission |             | Limit (dBm)   | Result  |
|                 | Polarization      | Level (dBm) |               |         |
| 3505.2          | Vertical          | -36.90      | -13.00        | Pass    |
| 5257.8          | V                 | -39.46      |               |         |
| 10515.6         | V                 | -38.05      |               |         |
| 15773.4         | V                 | -43.21      |               |         |
| 31546.8         | V                 | ---         |               |         |
| 3505.2          | Horizontal        | -38.78      | -13.00        | Pass    |
| 5257.8          | H                 | -42.45      |               |         |
| 10515.6         | H                 | -44.91      |               |         |
| 15773.4         | H                 | -45.99      |               |         |
| 31546.8         | H                 | ---         |               |         |

Remark:

1. The emission behaviour belongs to narrowband spurious emission.
2. Remark"---" means that the emission level is too low to be measured
3. The emission levels of below 1 GHz are very lower than the limit and not show in test report.