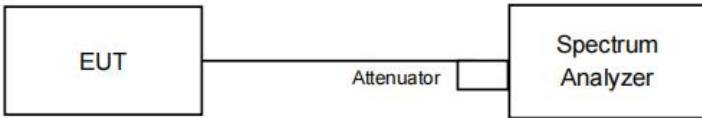


## 4.5 Power Spectral Density

|                        |                                                                                                                                 |
|------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| Test Requirement:      | 47 CFR Part 15C Section 15.247 (e)                                                                                              |
| Test Method:           | ANSI C63.10: 2013                                                                                                               |
| Test Setup:            |  <p>Offset=cable loss+ attenuation factor</p> |
| Exploratory Test Mode: | Transmitting with all kind of modulations, data rates                                                                           |
| Final Test Mode:       | Only the worst case is recorded in the report.                                                                                  |
| Limit:                 | $\leq 8.00\text{dBm}/3\text{kHz}$                                                                                               |
| Test Results:          | Pass                                                                                                                            |

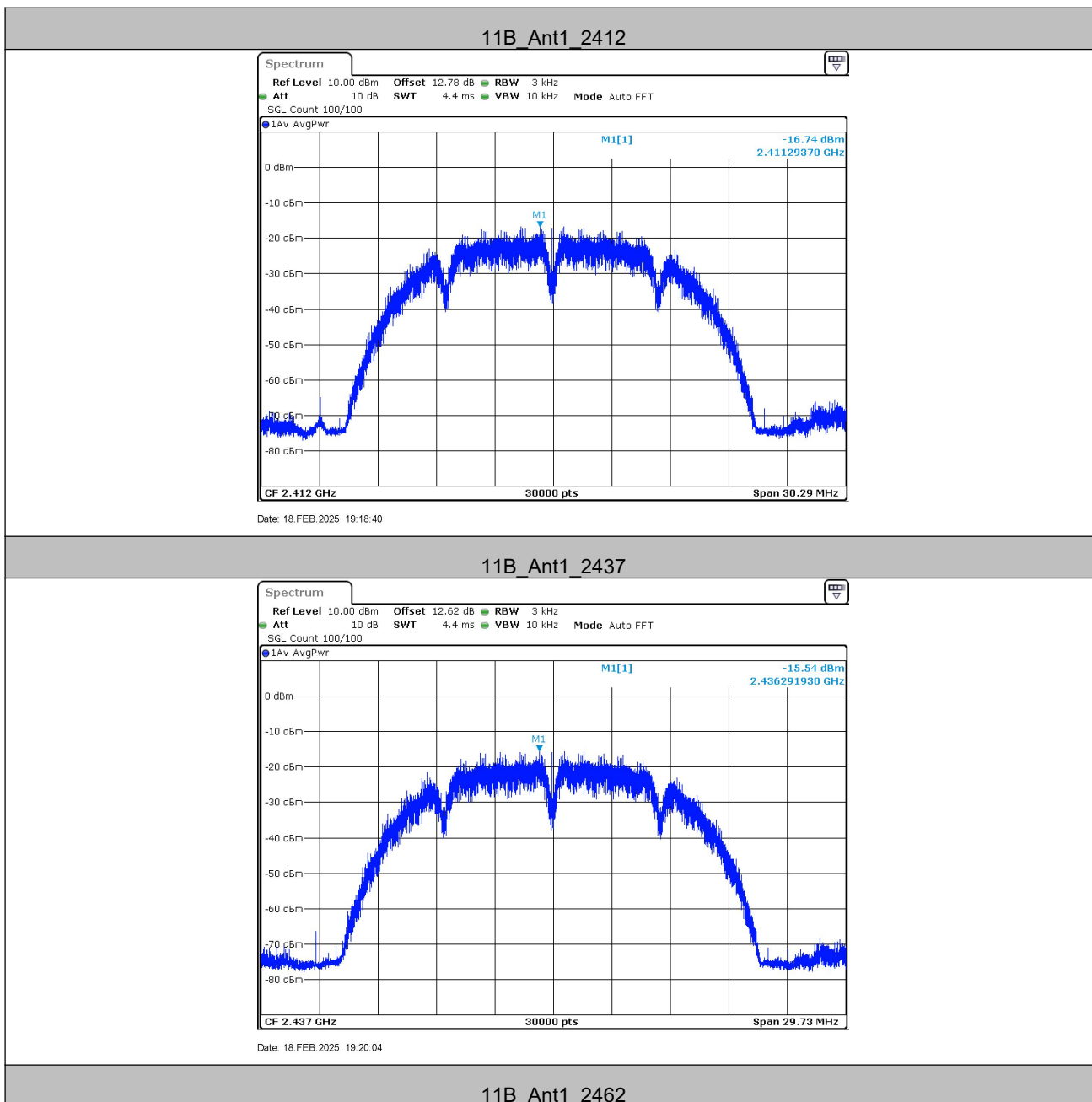
## Test Result

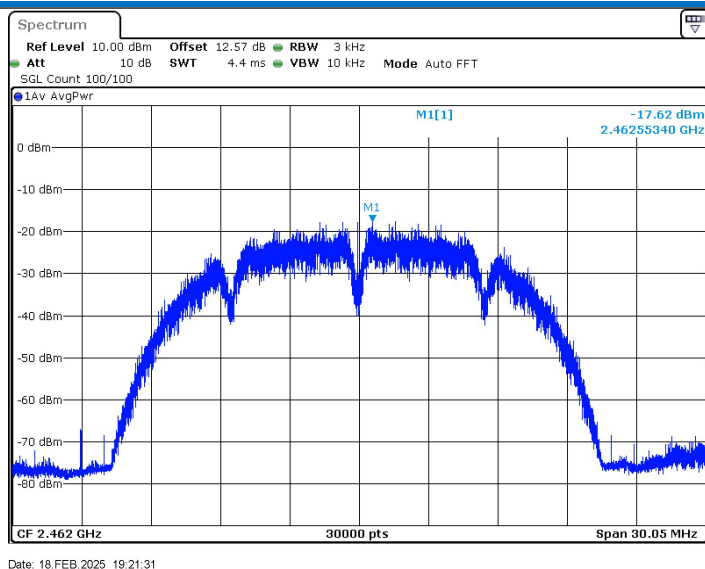
| TestMode  | Frequency[MHz] | Result[dBm/3-100kHz] | Limit[dBm/3kHz] | Verdict |
|-----------|----------------|----------------------|-----------------|---------|
| 11B       | 2412           | -16.74               | $\leq 8.00$     | PASS    |
|           | 2437           | -15.54               | $\leq 8.00$     | PASS    |
|           | 2462           | -17.62               | $\leq 8.00$     | PASS    |
| 11G       | 2412           | -13.02               | $\leq 8.00$     | PASS    |
|           | 2437           | -12.38               | $\leq 8.00$     | PASS    |
|           | 2462           | -15.06               | $\leq 8.00$     | PASS    |
| 11N20SISO | 2412           | -13.18               | $\leq 8.00$     | PASS    |
|           | 2437           | -11.60               | $\leq 8.00$     | PASS    |
|           | 2462           | -14.87               | $\leq 8.00$     | PASS    |

Note:

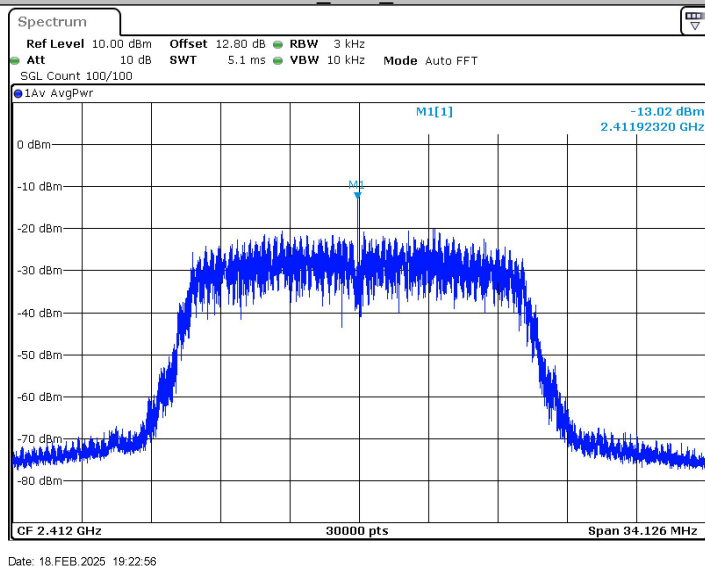
When Duty cycle >98%, D.C.F is not required.

## Test Graphs

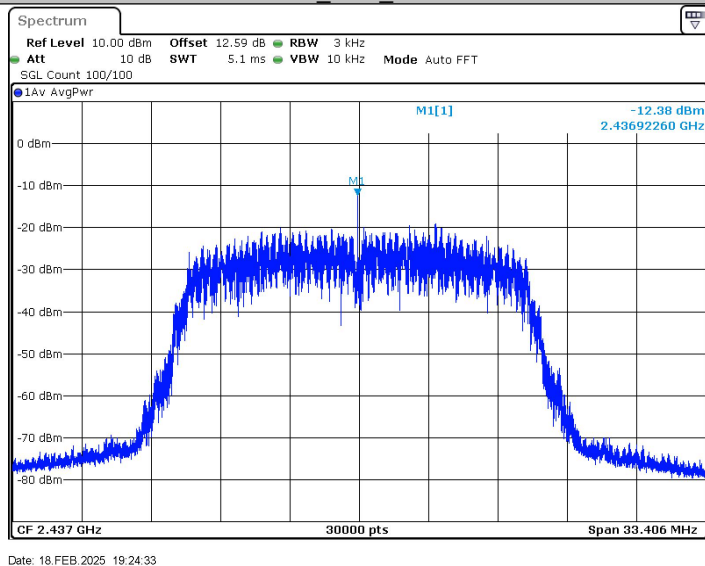




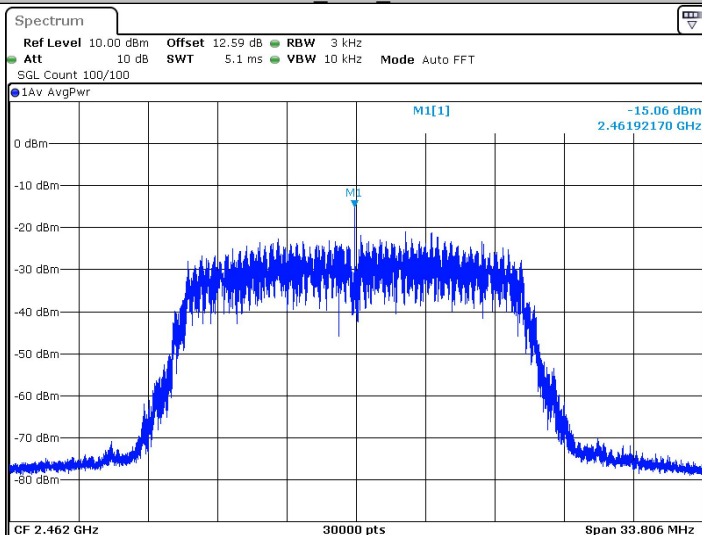
11G\_Ant1\_2412



11G\_Ant1\_2437

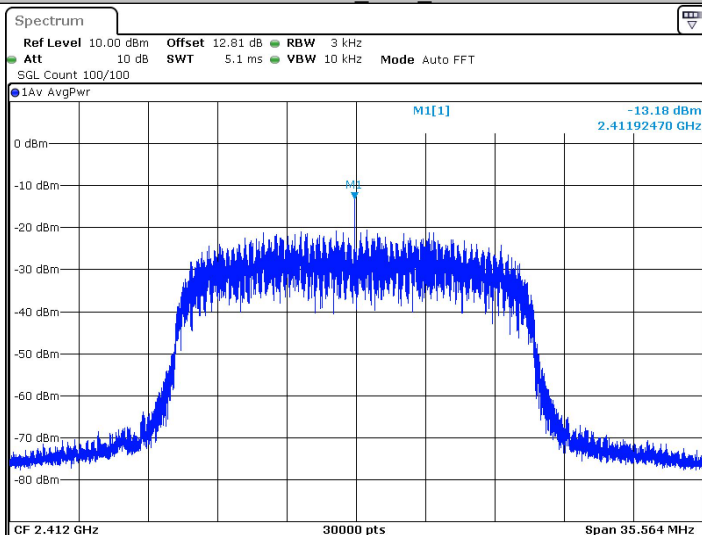


11G\_Ant1\_2462



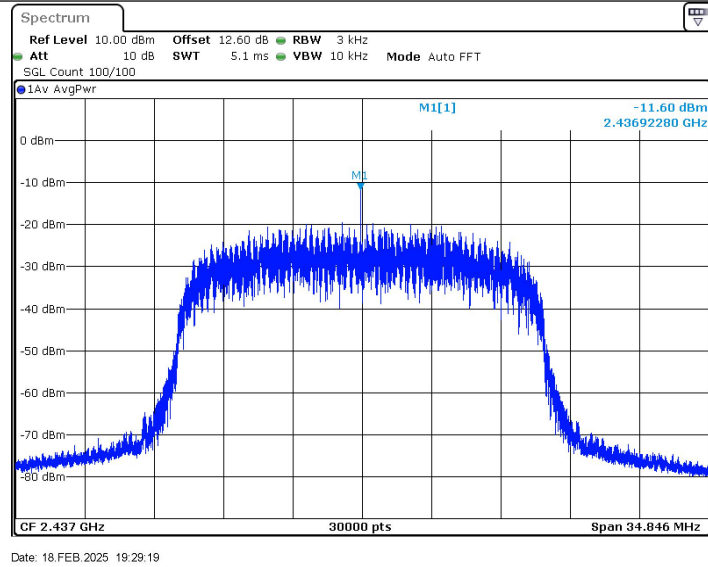
Date: 18.FEB.2025 19:26:19

11N20SISO\_Ant1\_2412

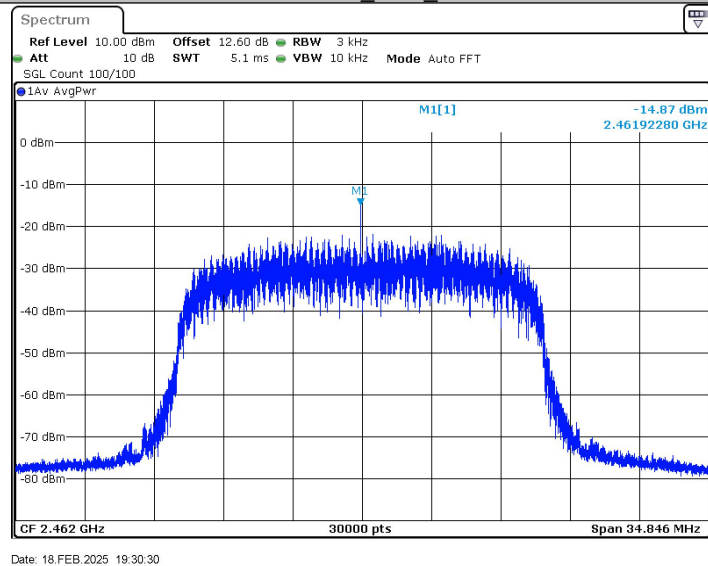


Date: 18.FEB.2025 19:28:05

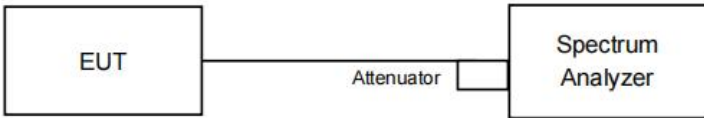
11N20SISO\_Ant1\_2437



11N20SISO\_Ant1\_2462



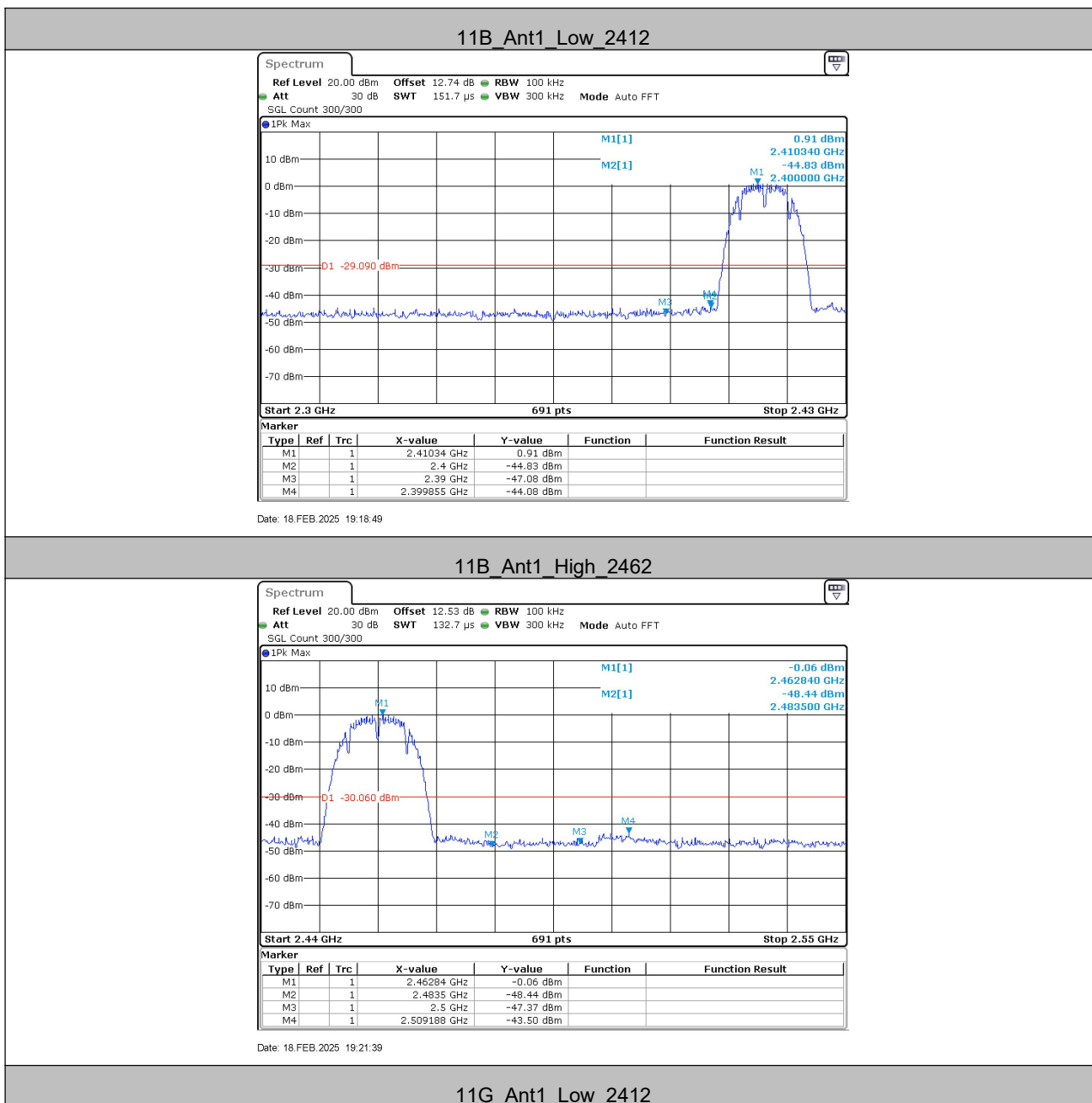
## 4.6 Band-edge for RF Conducted Emissions

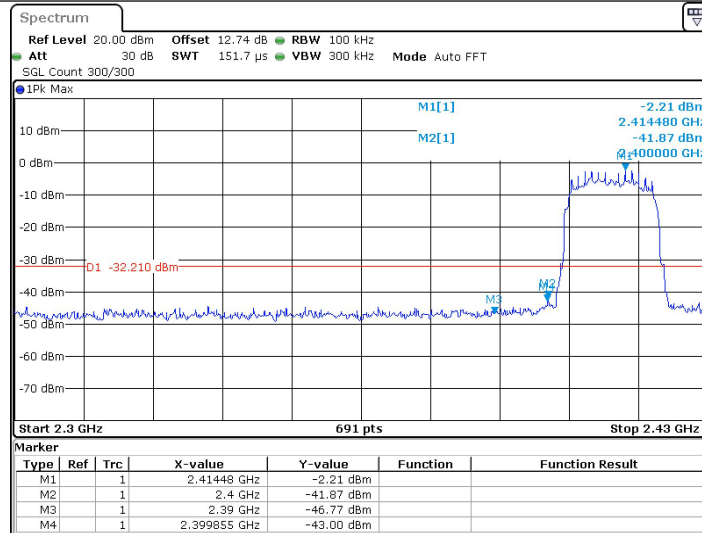
|                        |                                                                                                                                                                                                                                                                                                                                                                                         |
|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Test Requirement:      | 47 CFR Part 15C Section 15.247 (d)                                                                                                                                                                                                                                                                                                                                                      |
| Test Method:           | ANSI C63.10: 2013                                                                                                                                                                                                                                                                                                                                                                       |
| Test Setup:            |  <p>Offset=cable loss+ attenuation factor</p>                                                                                                                                                                                                                                                         |
| Exploratory Test Mode: | Transmitting with all kind of modulations, data rates                                                                                                                                                                                                                                                                                                                                   |
| Final Test Mode:       | Only the worst case is recorded in the report.                                                                                                                                                                                                                                                                                                                                          |
| Limit:                 | In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 30 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. |
| Test Results:          | Pass                                                                                                                                                                                                                                                                                                                                                                                    |

### Test Result

| TestMode  | ChName | Frequency[MHz] | RefLevel[dBm] | Result[dBm] | Limit[dBm] | Verdict |
|-----------|--------|----------------|---------------|-------------|------------|---------|
| 11B       | Low    | 2412           | 0.91          | -44.08      | ≤-29.09    | PASS    |
|           | High   | 2462           | -0.06         | -43.5       | ≤-30.06    | PASS    |
| 11G       | Low    | 2412           | -2.21         | -43         | ≤-32.21    | PASS    |
|           | High   | 2462           | -3.31         | -43.58      | ≤-33.31    | PASS    |
| 11N20SISO | Low    | 2412           | -0.82         | -44.15      | ≤-30.82    | PASS    |
|           | High   | 2462           | -2.67         | -42.9       | ≤-32.67    | PASS    |

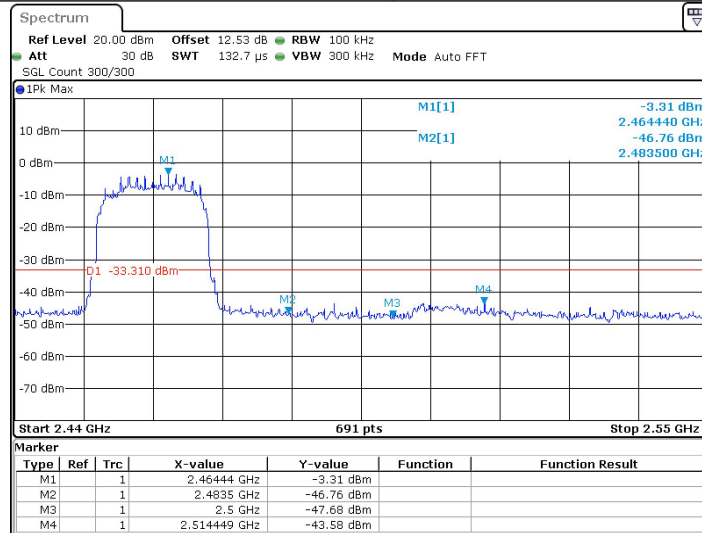
## Test Graphs





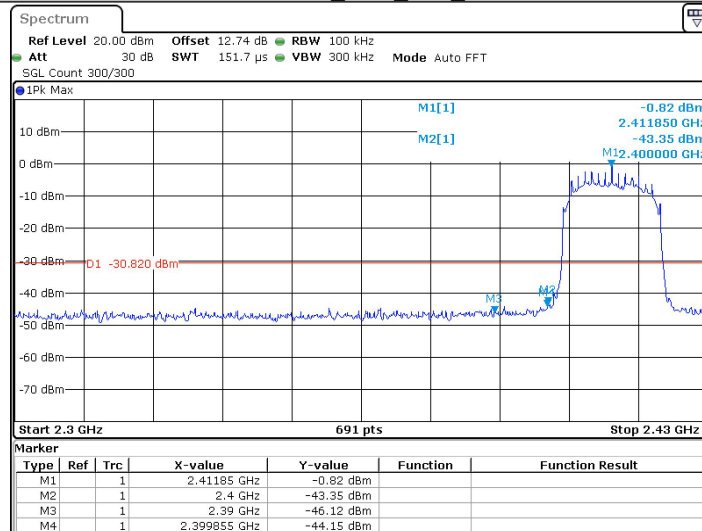
Date: 18.FEB.2025 19:23:04

### 11G\_Ant1\_High\_2462



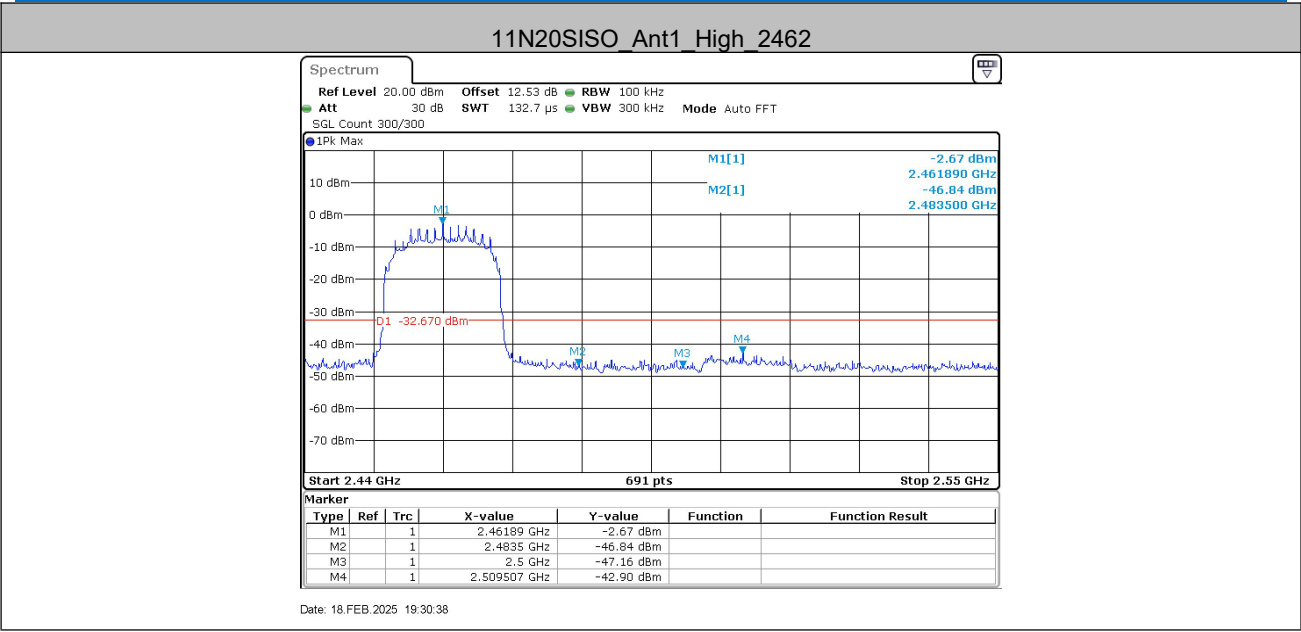
Date: 18.FEB.2025 19:26:27

### 11N20SISO\_Ant1\_Low\_2412

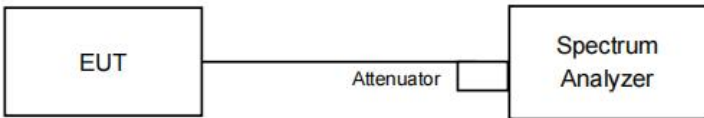


Date: 18.FEB.2025 19:28:14





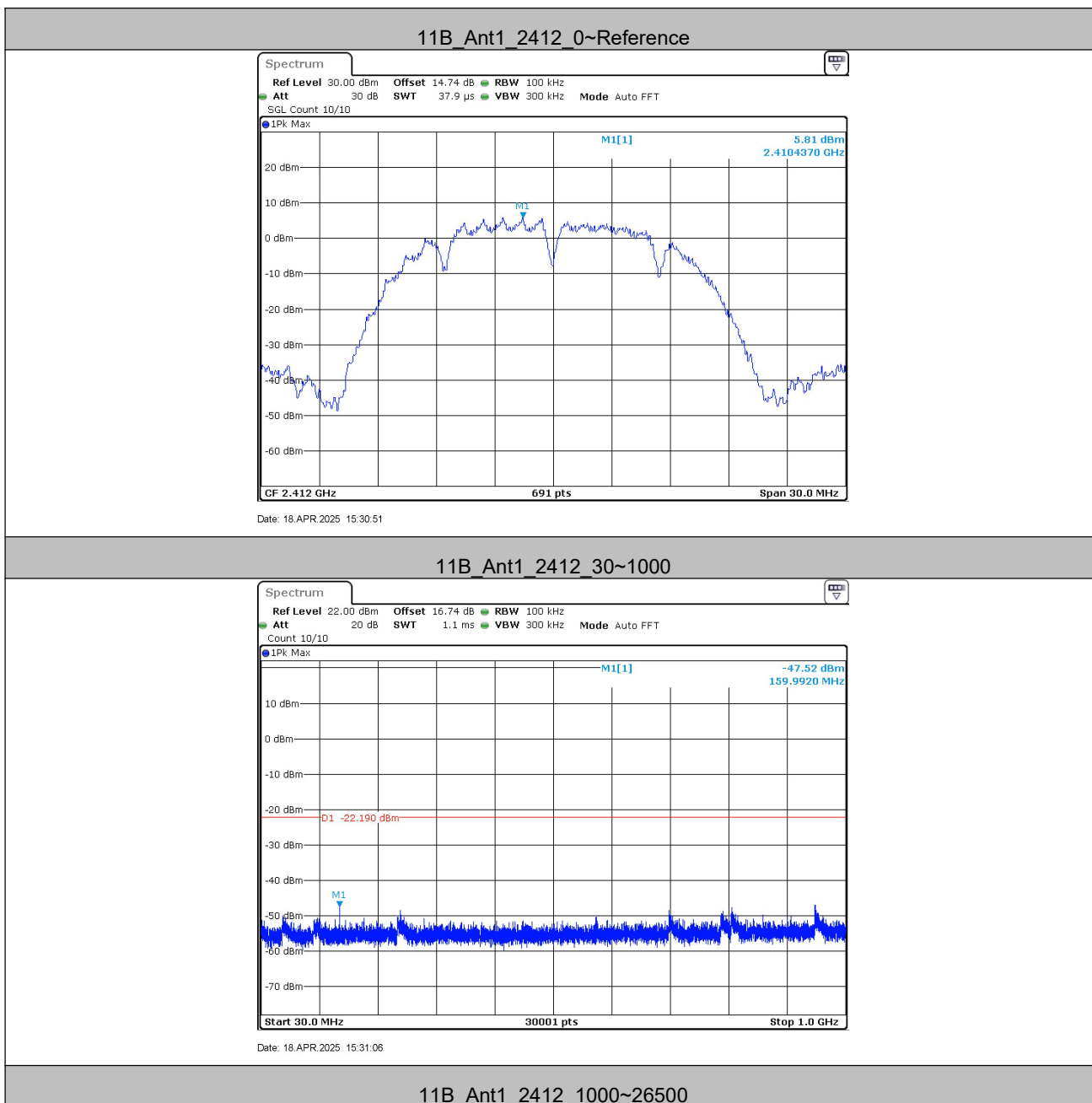
## 4.7 RF Conducted Spurious Emissions

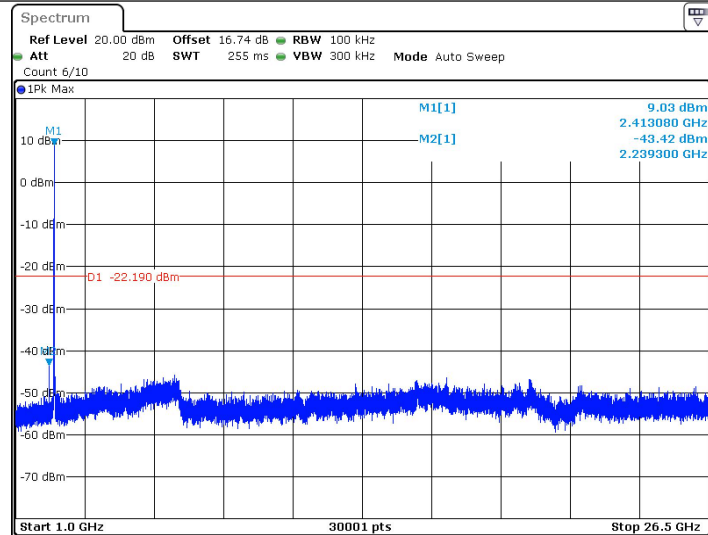
|                        |                                                                                                                                                                                                                                                                                                                                                                                         |
|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Test Requirement:      | 47 CFR Part 15C Section 15.247 (d)                                                                                                                                                                                                                                                                                                                                                      |
| Test Method:           | ANSI C63.10: 2013                                                                                                                                                                                                                                                                                                                                                                       |
| Test Setup:            | <br>$\text{Offset} = \text{cable loss} + \text{attenuation factor}$                                                                                                                                                                                                                                   |
| Exploratory Test Mode: | Transmitting with all kind of modulations, data rates                                                                                                                                                                                                                                                                                                                                   |
| Final Test Mode:       | Only the worst case is recorded in the report.                                                                                                                                                                                                                                                                                                                                          |
| Limit:                 | In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 30 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. |
| Test Results:          | Pass                                                                                                                                                                                                                                                                                                                                                                                    |

**Test Result**

| TestMode  | Frequency[MHz] | FreqRange<br>[Mhz] | RefLevel<br>[dBm] | Result<br>[dBm] | Limit<br>[dBm] | Verdict |
|-----------|----------------|--------------------|-------------------|-----------------|----------------|---------|
| 11B       | 2412           | Reference          | 5.81              | 5.81            | ---            | PASS    |
|           |                | 30~1000            | 5.81              | -47.52          | $\leq -24.19$  | PASS    |
|           |                | 1000~26500         | 5.81              | -43.42          | $\leq -24.19$  | PASS    |
|           | 2437           | Reference          | 7.32              | 7.32            | ---            | PASS    |
|           |                | 30~1000            | 7.32              | -48.54          | $\leq -22.68$  | PASS    |
|           |                | 1000~26500         | 7.32              | -43.5           | $\leq -22.68$  | PASS    |
|           | 2462           | Reference          | 4.32              | 4.32            | ---            | PASS    |
|           |                | 30~1000            | 4.32              | -50.49          | $\leq -25.68$  | PASS    |
|           |                | 1000~26500         | 4.32              | -43.4           | $\leq -25.68$  | PASS    |
| 11G       | 2412           | Reference          | 1.26              | 1.26            | ---            | PASS    |
|           |                | 30~1000            | 1.26              | -47.87          | $\leq -28.74$  | PASS    |
|           |                | 1000~26500         | 1.26              | -43.32          | $\leq -28.74$  | PASS    |
|           | 2437           | Reference          | 1.64              | 1.64            | ---            | PASS    |
|           |                | 30~1000            | 1.64              | -47.95          | $\leq -28.36$  | PASS    |
|           |                | 1000~26500         | 1.64              | -43.82          | $\leq -28.36$  | PASS    |
|           | 2462           | Reference          | -0.34             | -0.34           | ---            | PASS    |
|           |                | 30~1000            | -0.34             | -48.28          | $\leq -30.34$  | PASS    |
|           |                | 1000~26500         | -0.34             | -45.33          | $\leq -30.34$  | PASS    |
| 11N20SISO | 2412           | Reference          | 1.68              | 1.68            | ---            | PASS    |
|           |                | 30~1000            | 1.68              | -48.32          | $\leq -28.32$  | PASS    |
|           |                | 1000~26500         | 1.68              | -43.94          | $\leq -28.32$  | PASS    |
|           | 2437           | Reference          | 2.33              | 2.33            | ---            | PASS    |
|           |                | 30~1000            | 2.33              | -48.68          | $\leq -27.67$  | PASS    |
|           |                | 1000~26500         | 2.33              | -44.36          | $\leq -27.67$  | PASS    |
|           | 2462           | Reference          | 0.15              | 0.15            | ---            | PASS    |
|           |                | 30~1000            | 0.15              | -46.98          | $\leq -29.85$  | PASS    |
|           |                | 1000~26500         | 0.15              | -45.04          | $\leq -29.85$  | PASS    |

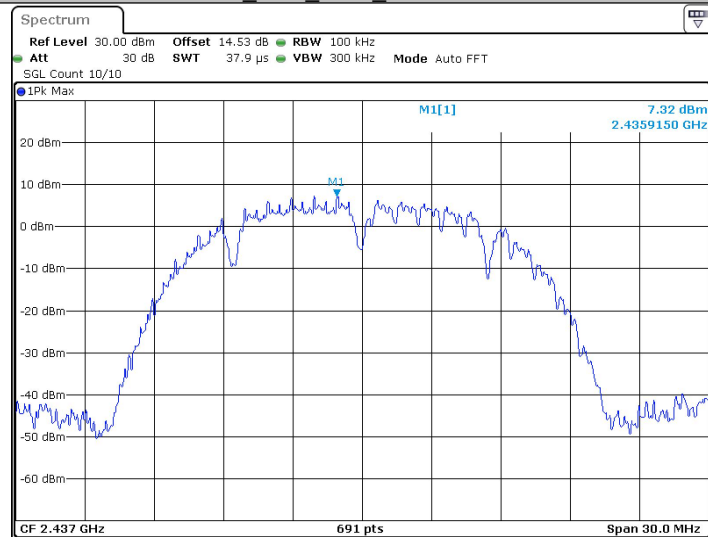
## Test Graphs





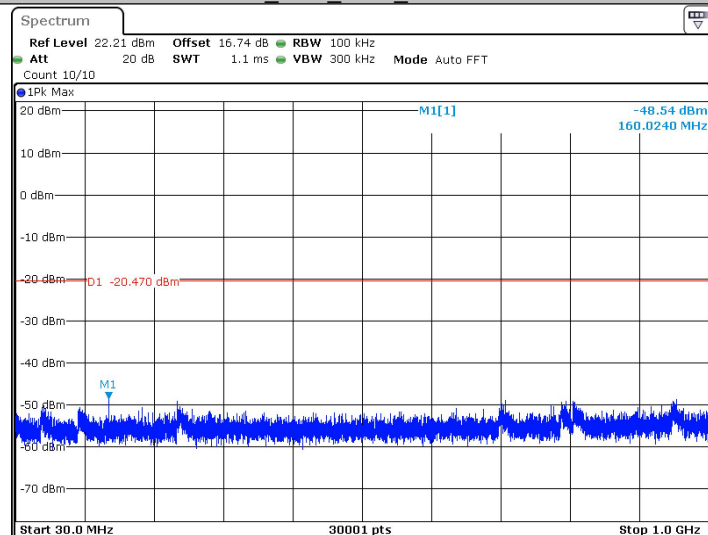
Date: 18.APR.2025 15:31:21

11B\_Ant1\_2437\_0~Reference



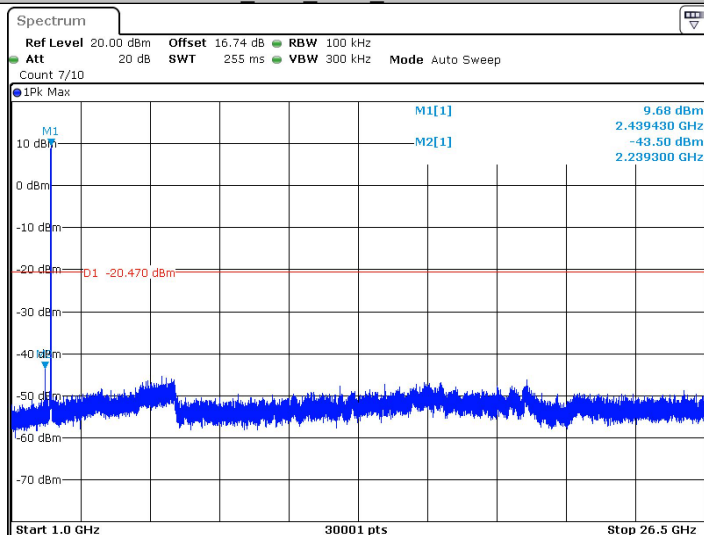
Date: 18.APR.2025 15:31:29

11B\_Ant1\_2437\_30~1000



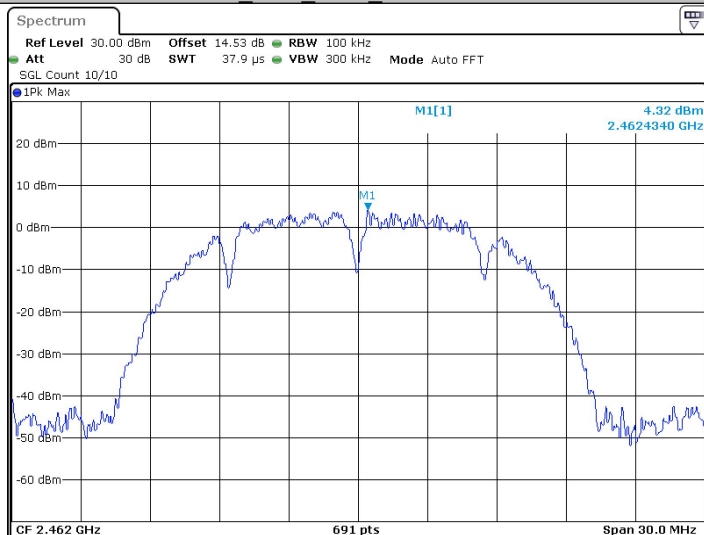
Date: 18.APR.2025 15:31:44

11B\_Ant1\_2437\_1000~26500



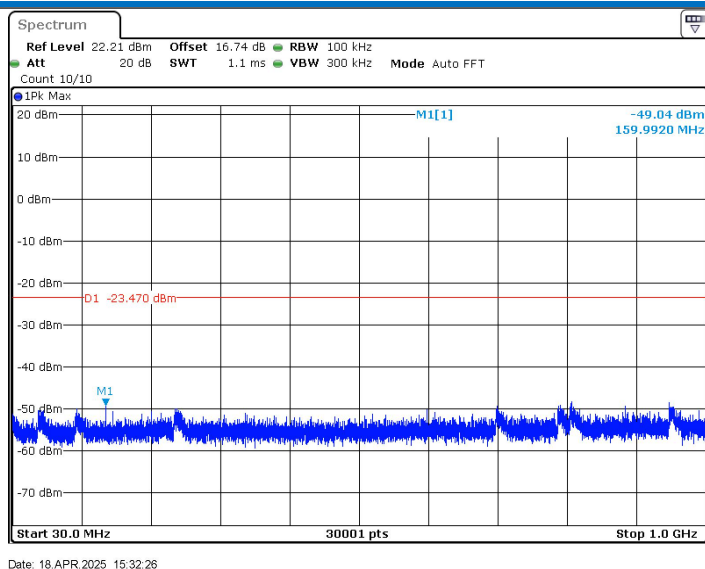
Date: 18.APR.2025 15:31:59

11B\_Ant1\_2462\_0~Reference

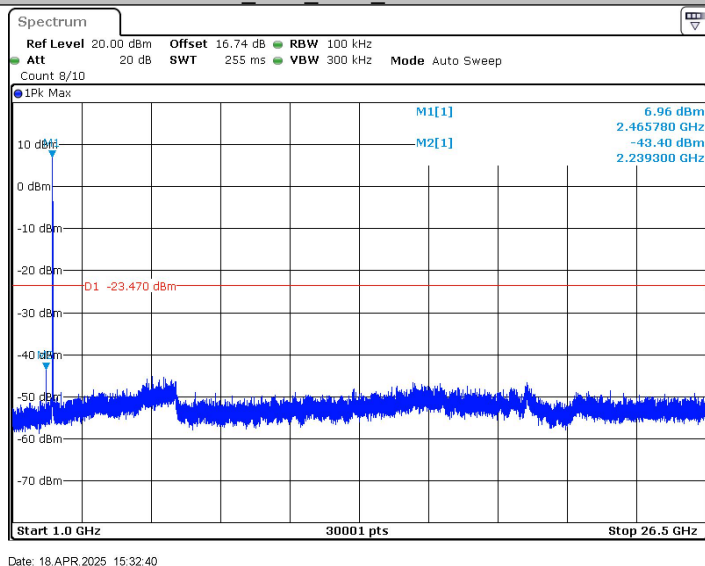


Date: 18.APR.2025 15:32:11

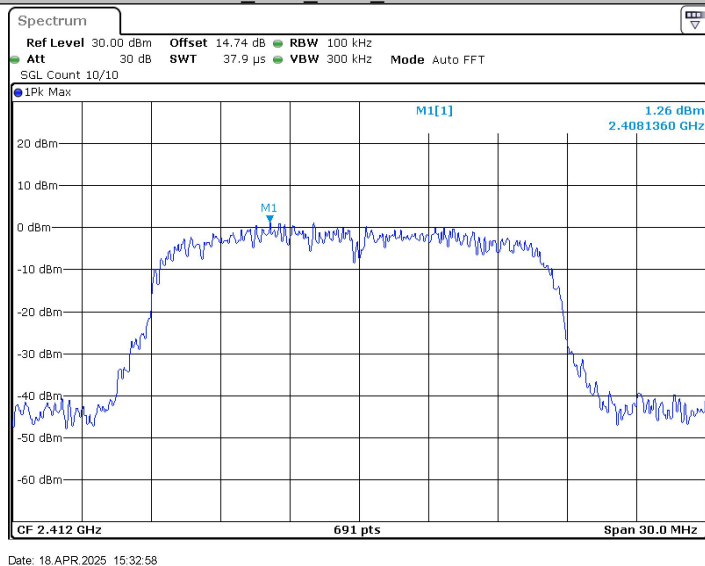
11B\_Ant1\_2462\_30~1000



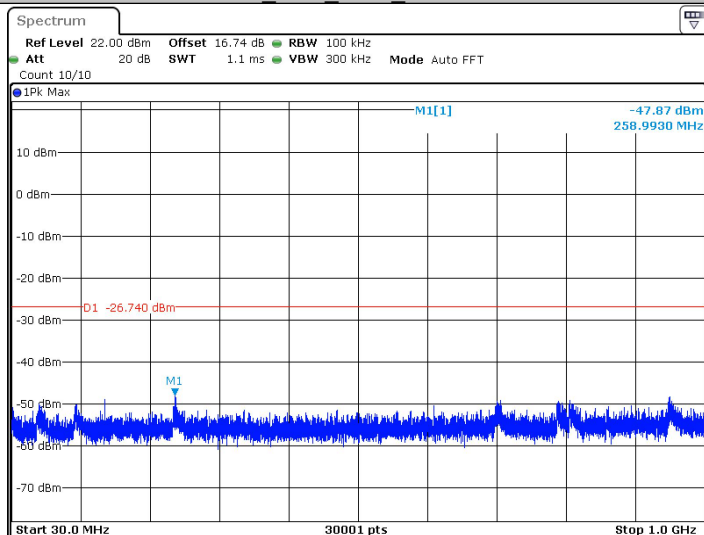
11B\_Ant1\_2462\_1000~26500



11G\_Ant1\_2412\_0~Reference

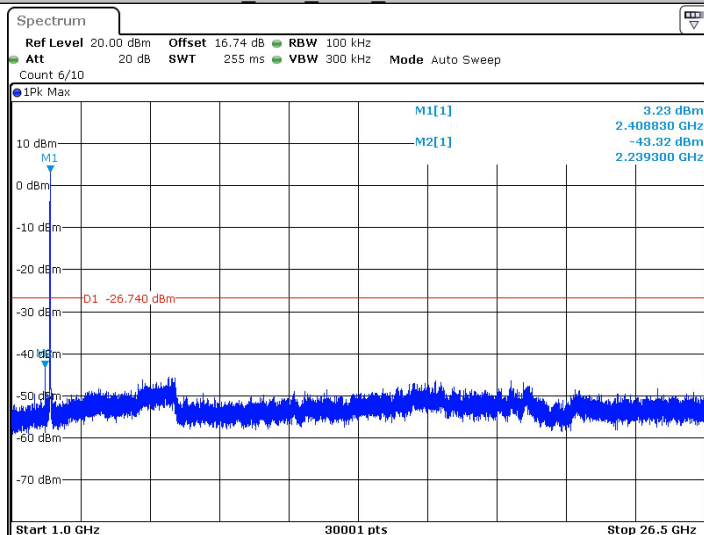


11G\_Ant1\_2412\_30~1000



Date: 18.APR.2025 15:33:10

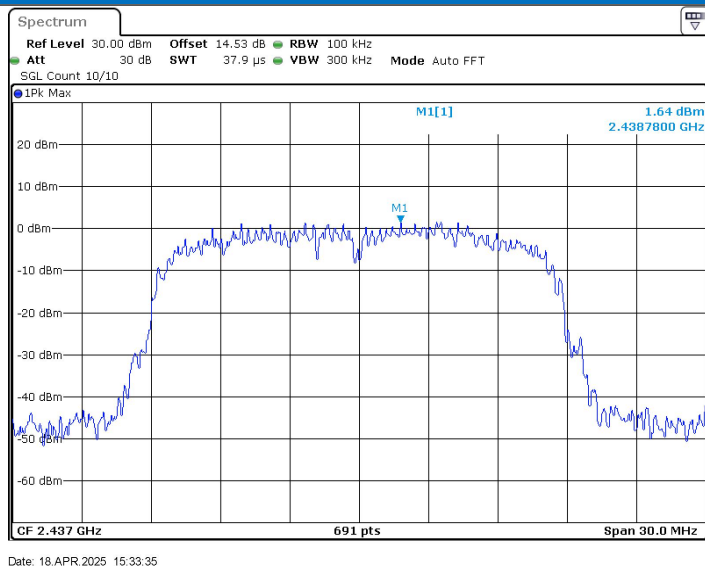
11G\_Ant1\_2412\_1000~26500



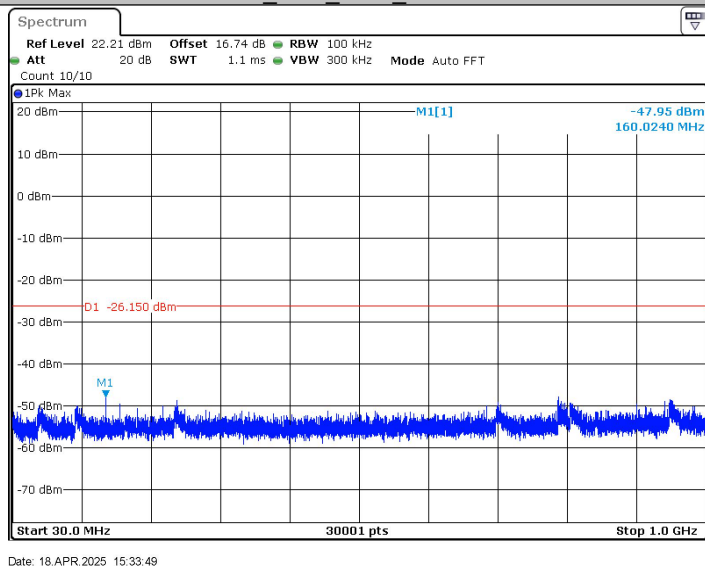
Date: 18.APR.2025 15:33:24

11G\_Ant1\_2437\_0~Reference





11G\_Ant1\_2437\_30~1000



11G\_Ant1\_2437\_1000~26500

