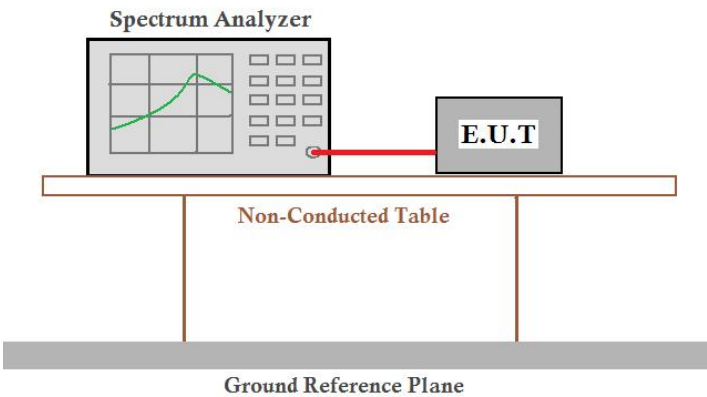


## 5.5 Power Spectral Density

|                        |                                                                                                                                 |
|------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| 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:                 | ≤8.00dBm/3kHz                                                                                                                   |
| Test Results:          | Pass                                                                                                                            |

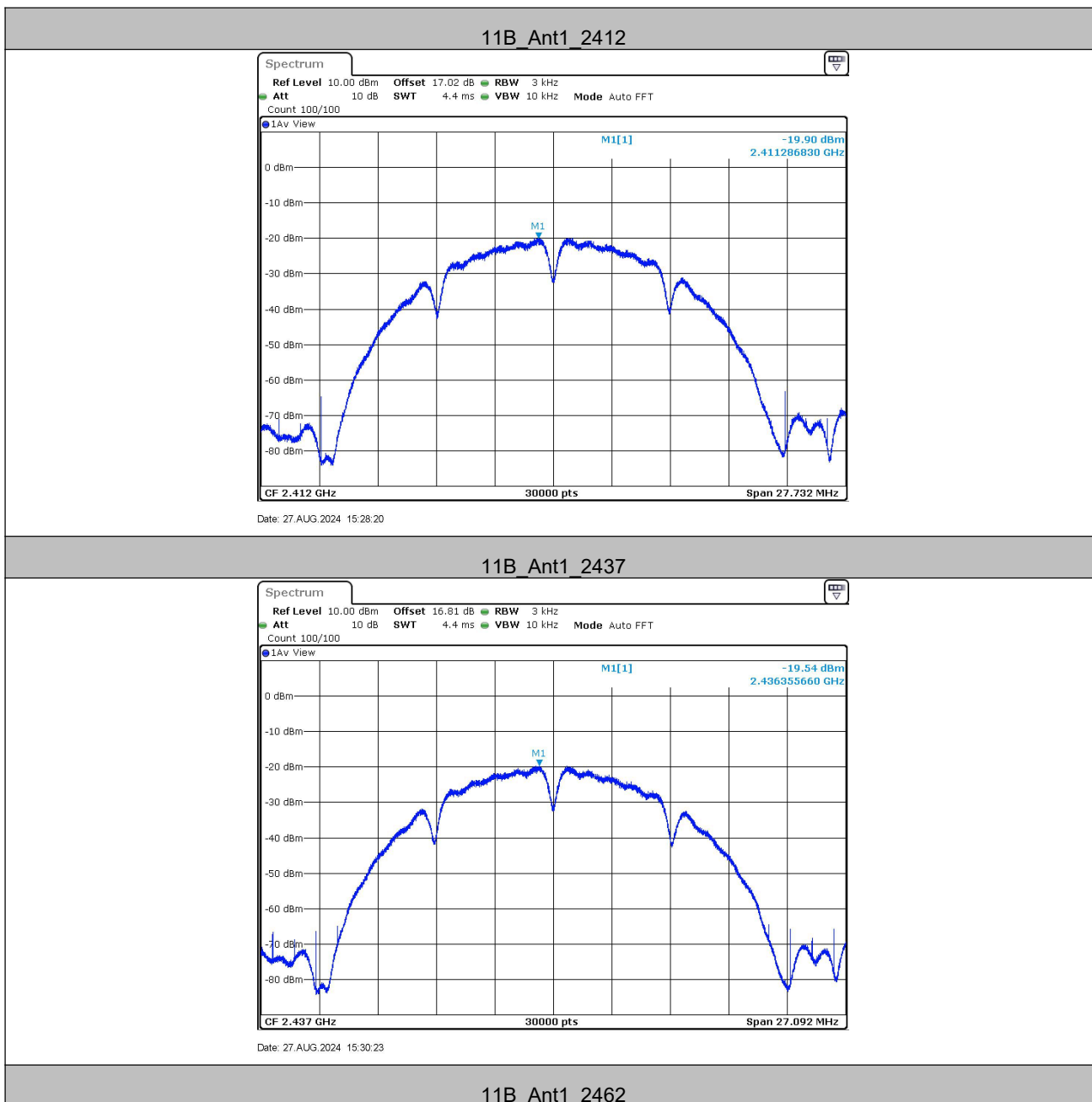
**Test Result**

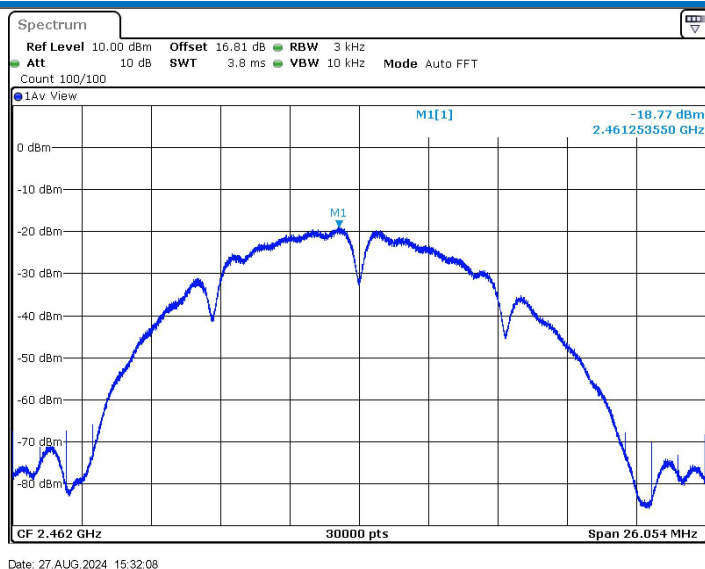
| TestMode  | Frequency[MHz] | Result[dBm/3kHz] | Limit[dBm/3kHz] | Verdict |
|-----------|----------------|------------------|-----------------|---------|
| 11B       | 2412           | -19.9            | ≤8.00           | PASS    |
|           | 2437           | -19.54           | ≤8.00           | PASS    |
|           | 2462           | -18.77           | ≤8.00           | PASS    |
| 11G       | 2412           | -22.46           | ≤8.00           | PASS    |
|           | 2437           | -22.11           | ≤8.00           | PASS    |
|           | 2462           | -20.6            | ≤8.00           | PASS    |
| 11N20SISO | 2412           | -18.29           | ≤8.00           | PASS    |
|           | 2437           | -17.89           | ≤8.00           | PASS    |
|           | 2462           | -16.45           | ≤8.00           | PASS    |
| 11N40SISO | 2422           | -17.36           | ≤8.00           | PASS    |
|           | 2437           | -16.76           | ≤8.00           | PASS    |
|           | 2452           | -14.99           | ≤8.00           | PASS    |

Note:

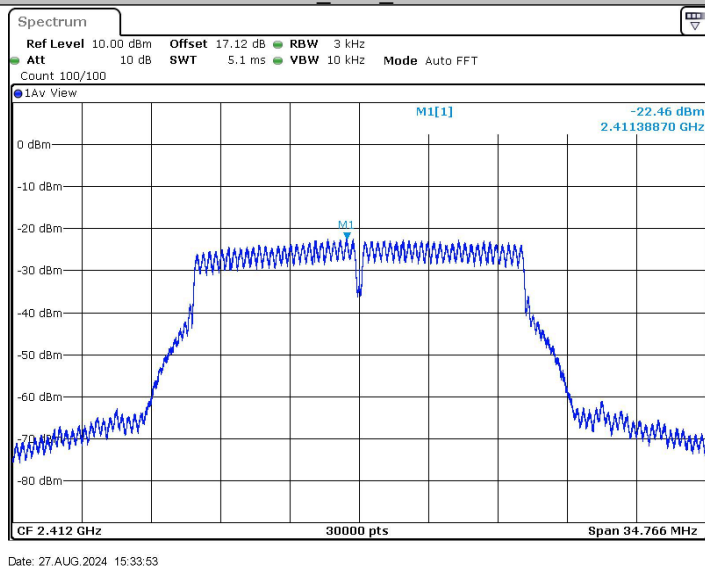
When Duty cycle &gt;98%, D.C.F is not required.

## Test Graphs

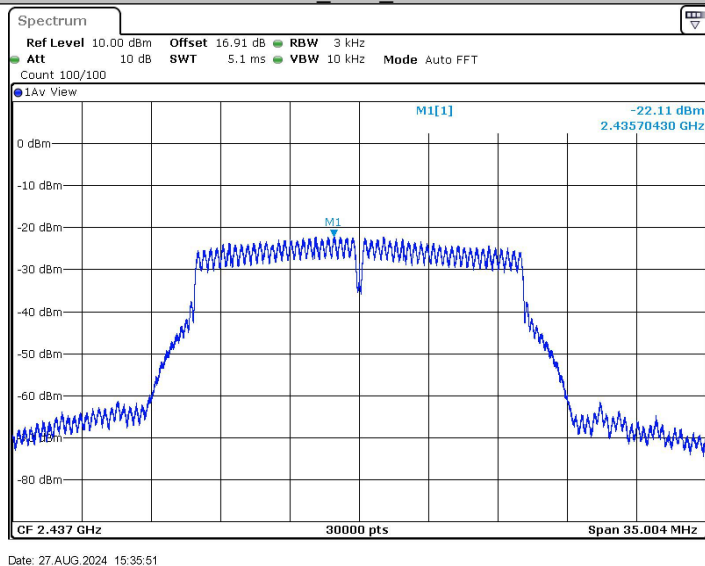




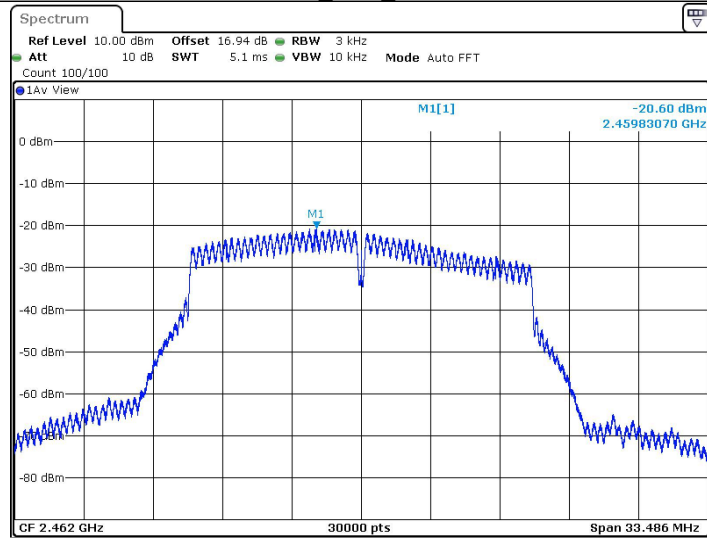
11G\_Ant1\_2412



11G\_Ant1\_2437

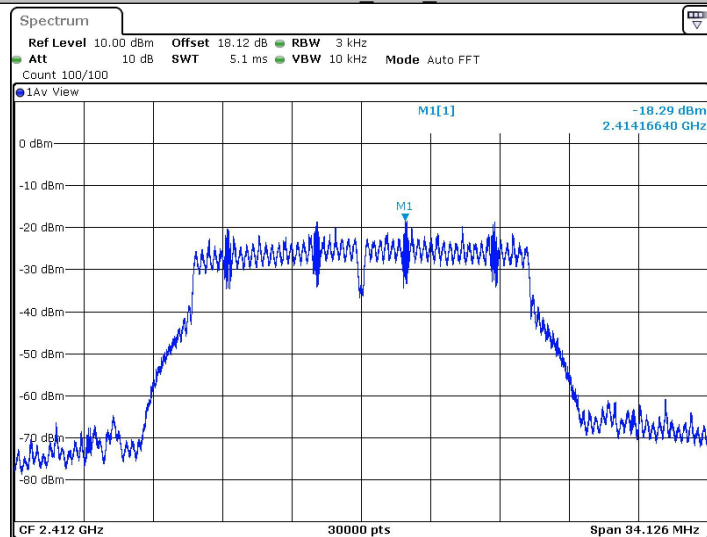


11G\_Ant1\_2462



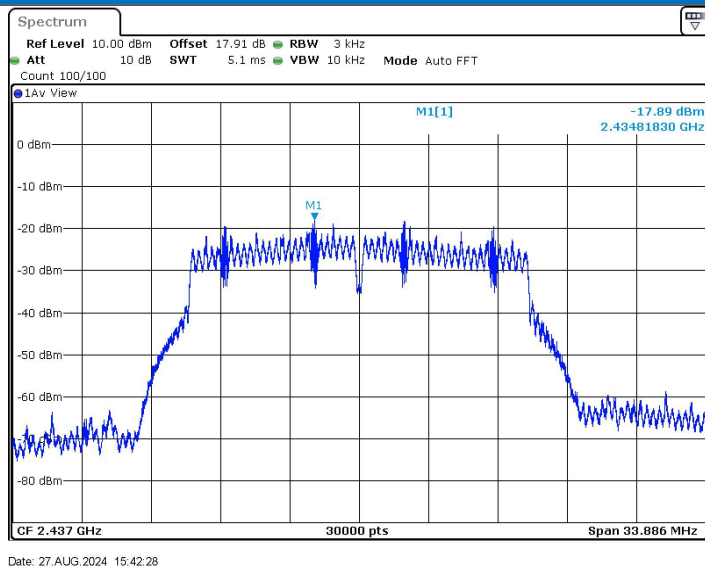
Date: 27.AUG.2024 15:37:33

11N20SISO\_Ant1\_2412

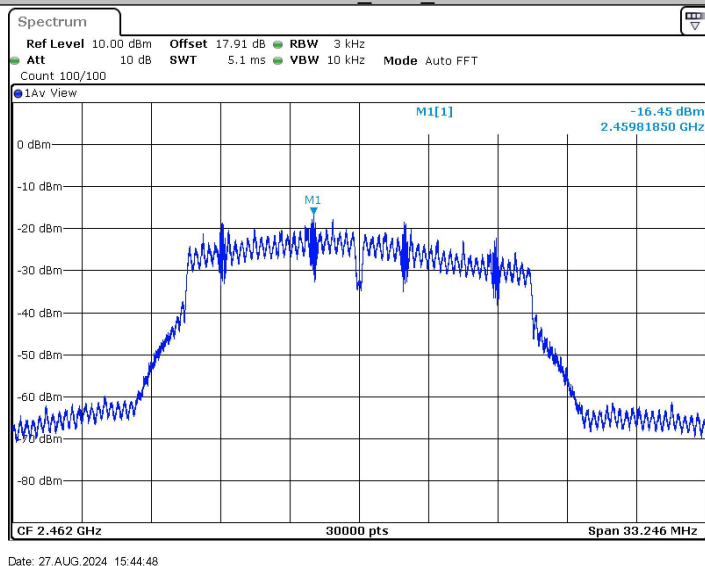


Date: 27.AUG.2024 15:39:47

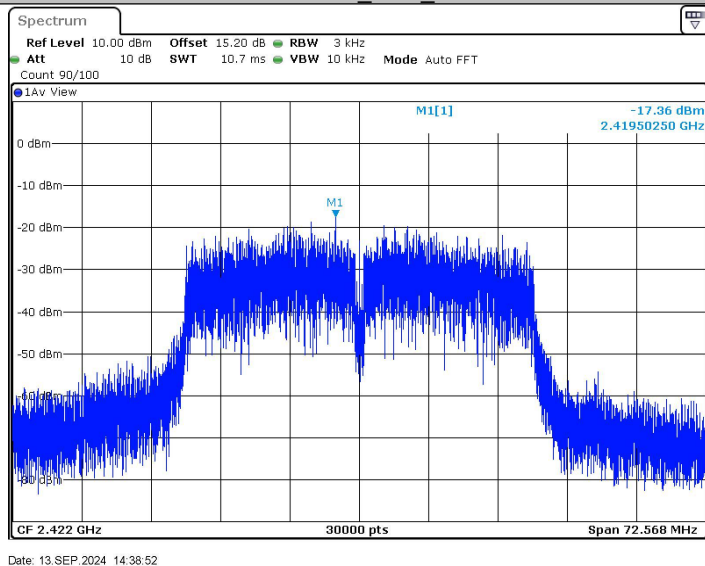
11N20SISO\_Ant1\_2437



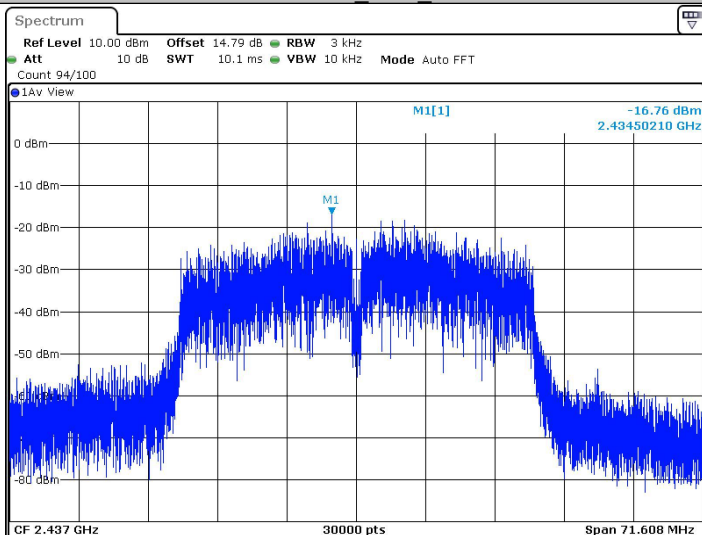
11N20SISO\_Ant1\_2462



11N40SISO\_Ant1\_2422

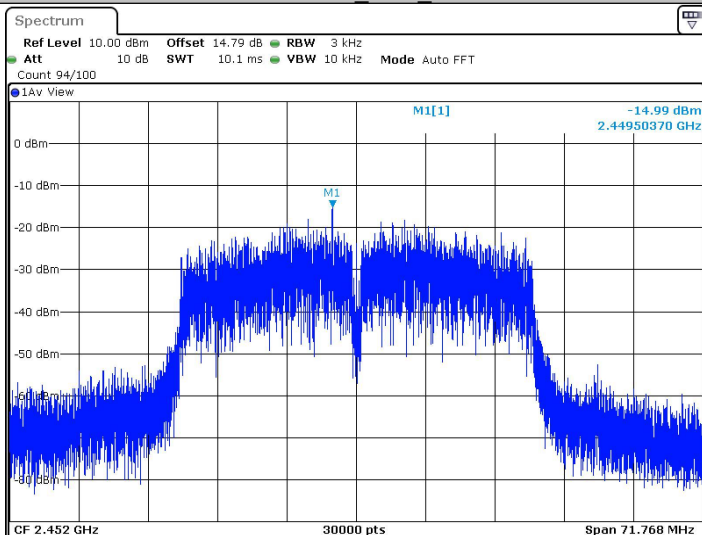


11N40SISO\_Ant1\_2437



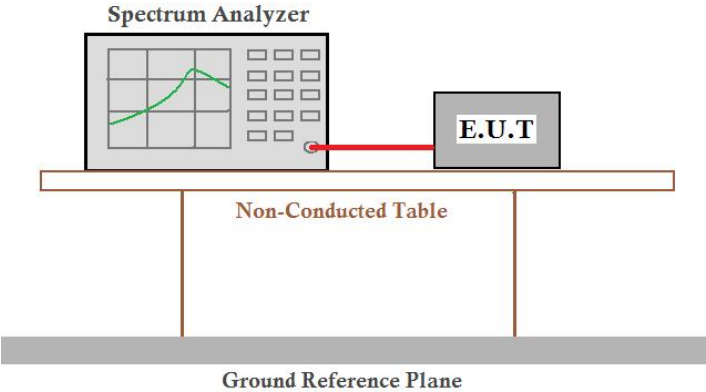
Date: 13 SEP 2024 14:42:10

11N40SISO\_Ant1\_2452



Date: 13 SEP 2024 14:54:01

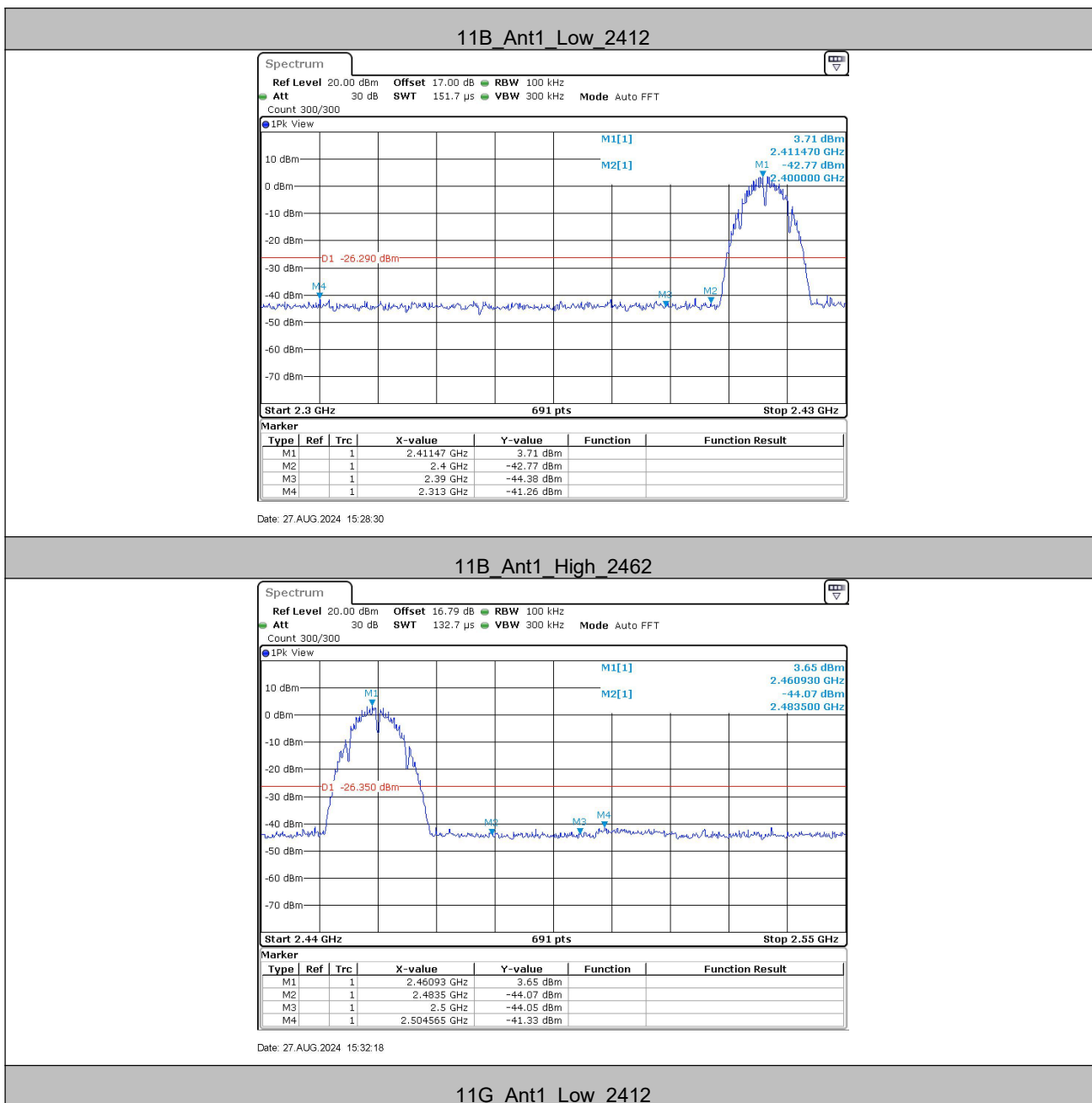
## 5.6 Band-edge for RF Conducted Emissions

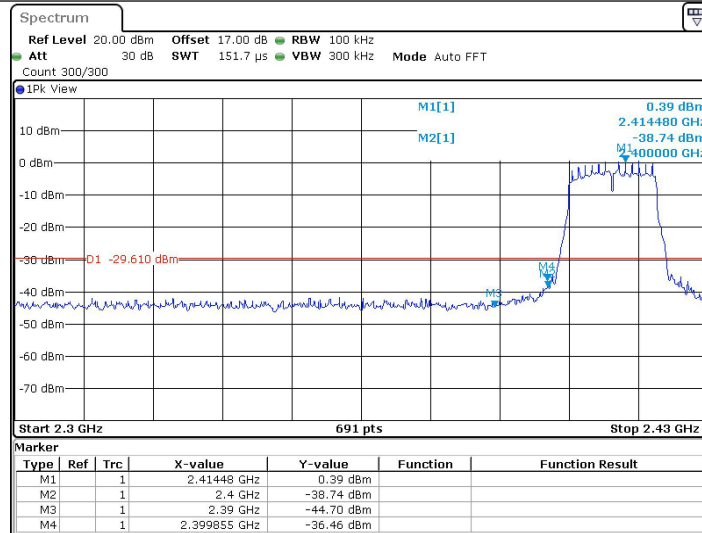
|                        |                                                                                                                                                                                                                                                                                                                                                                                         |
|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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           | 3.71          | -41.26      | $\leq -26.29$ | PASS    |
|           | High   | 2462           | 3.65          | -41.33      | $\leq -26.35$ | PASS    |
| 11G       | Low    | 2412           | 0.39          | -36.46      | $\leq -29.61$ | PASS    |
|           | High   | 2462           | 2.08          | -39.49      | $\leq -27.92$ | PASS    |
| 11N20SISO | Low    | 2412           | 0.36          | -39.53      | $\leq -29.64$ | PASS    |
|           | High   | 2462           | 2.07          | -40.67      | $\leq -27.93$ | PASS    |
| 11N40SISO | Low    | 2422           | -2.80         | -34.26      | $\leq -32.8$  | PASS    |
|           | High   | 2452           | -1.83         | -40.06      | $\leq -31.83$ | PASS    |

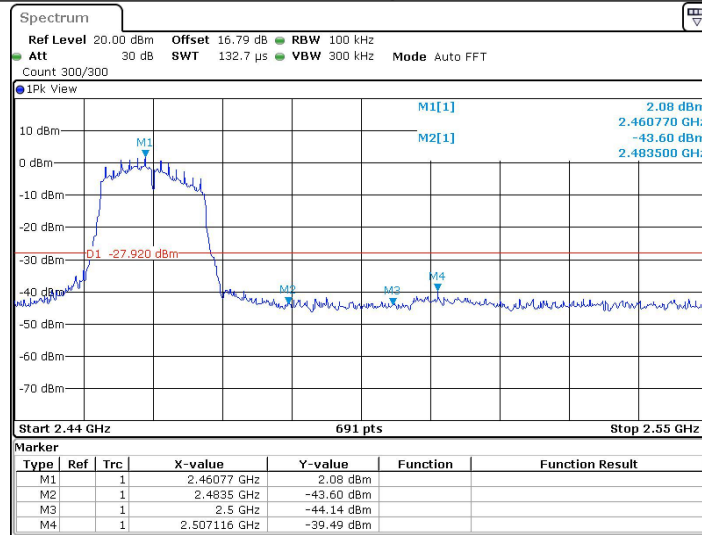
## 5.6.1 Test Graphs





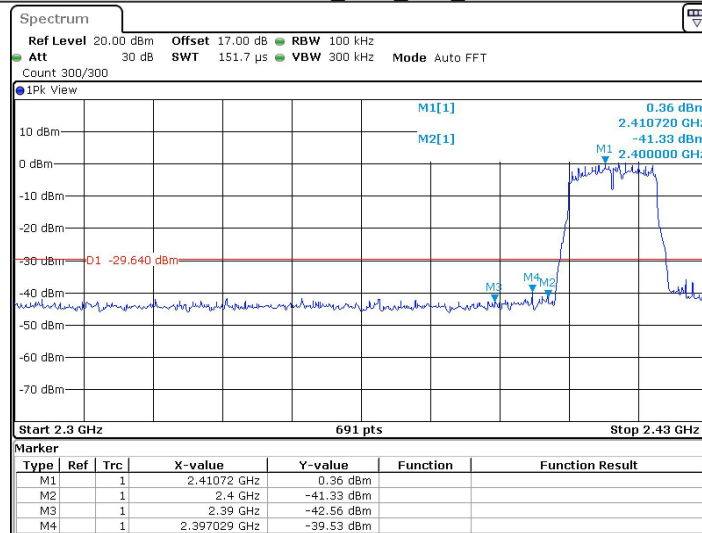
Date: 27.AUG.2024 15:34:03

### 11G\_Ant1\_High\_2462



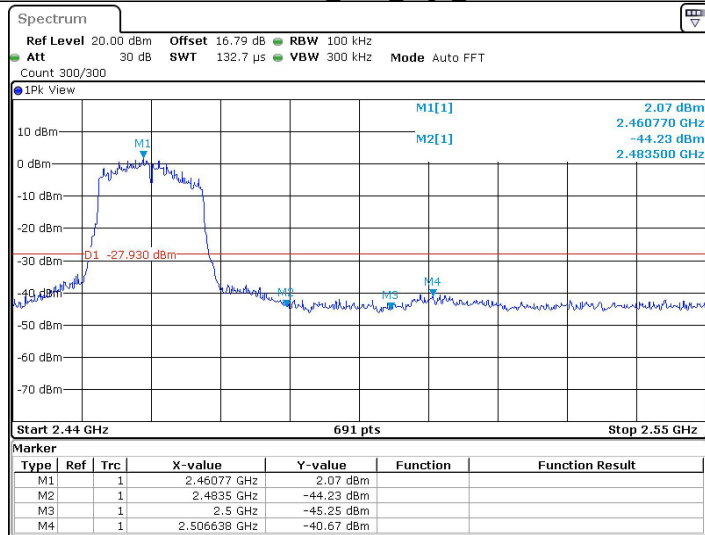
Date: 27.AUG.2024 15:37:43

### 11N20SISO\_Ant1\_Low\_2412



Date: 27.AUG.2024 15:39:58

11N20SISO\_Ant1\_High\_2462



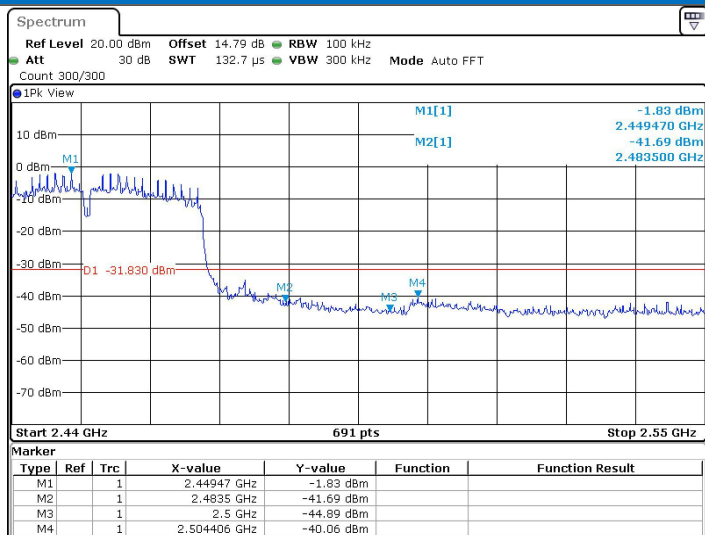
Date: 27.AUG.2024 15:44:58

11N40SISO\_Ant1\_Low\_2422



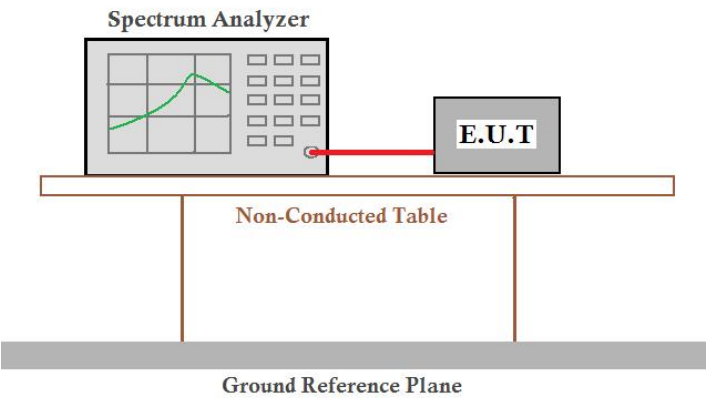
Date: 13.SEP.2024 14:39:02

11N40SISO\_Ant1\_High\_2452



Date: 13 SEP.2024 14:54:12

## 5.7 RF Conducted Spurious Emissions

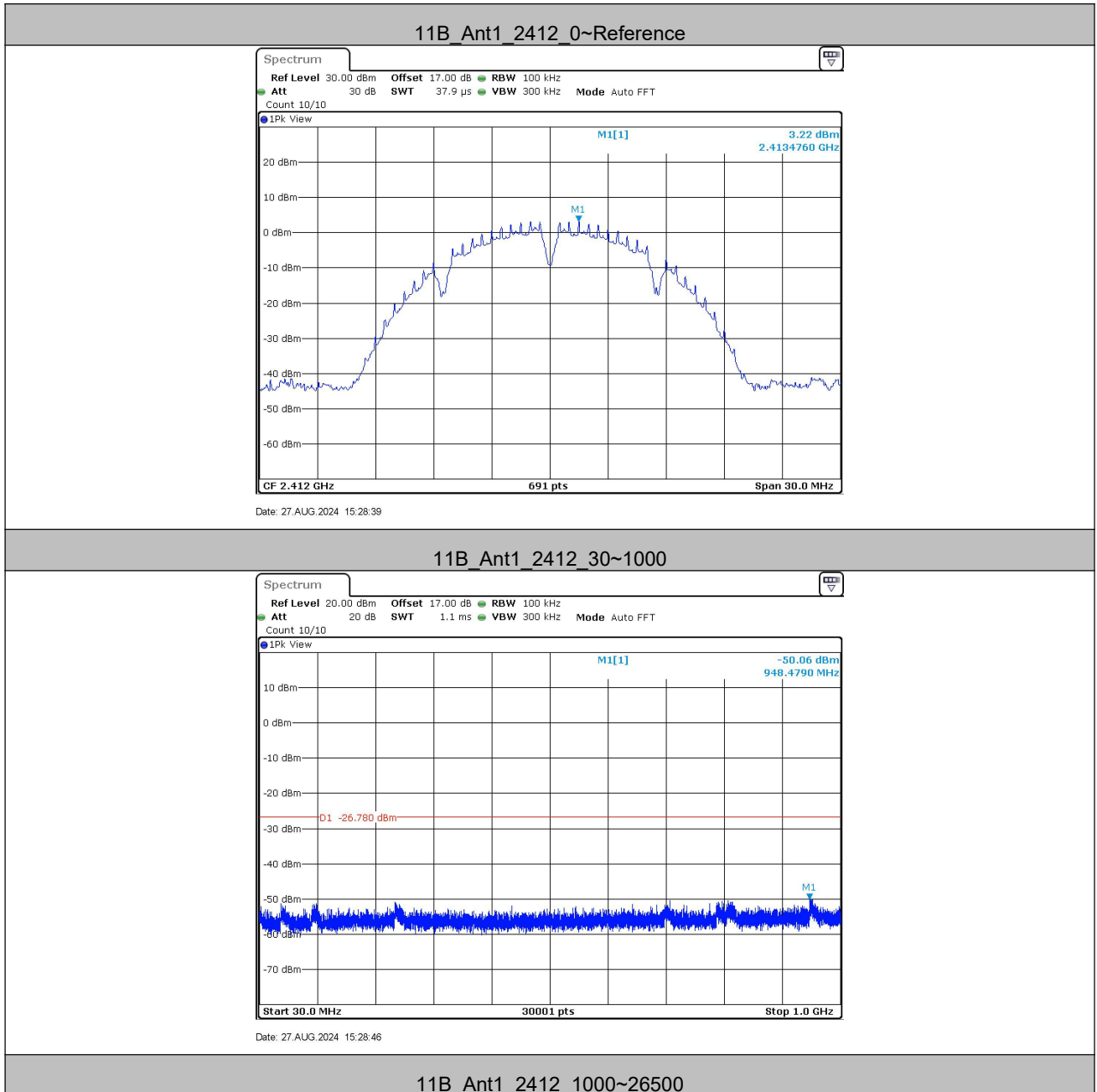
|                        |                                                                                                                                                                                                                                                                                                                                                                                         |
|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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                                                                                                                                                                                                                                                                                                                                                                                    |

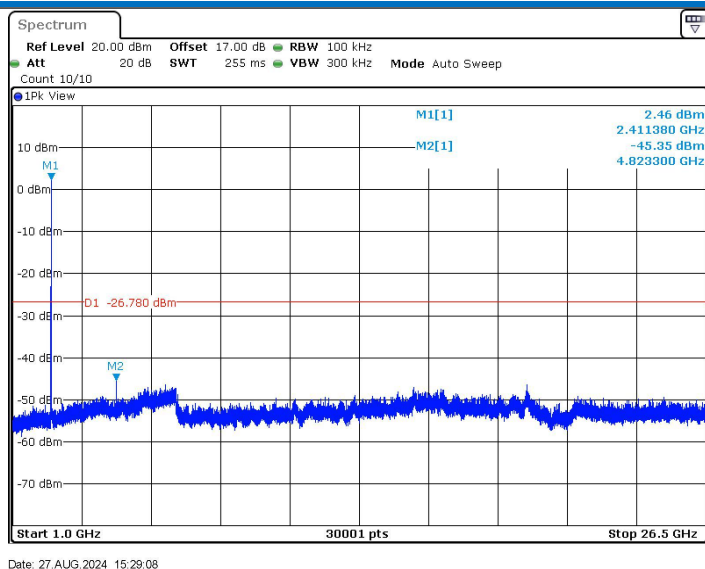
## Test Result

| TestMode  | Frequency[MHz] | FreqRange<br>[Mhz] | RefLevel<br>[dBm] | Result<br>[dBm] | Limit<br>[dBm] | Verdict |
|-----------|----------------|--------------------|-------------------|-----------------|----------------|---------|
| 11B       | 2412           | Reference          | 3.22              | 3.22            | ---            | PASS    |
|           |                | 30~1000            | 3.22              | -50.06          | $\leq -26.78$  | PASS    |
|           |                | 1000~26500         | 3.22              | -45.35          | $\leq -26.78$  | PASS    |
|           | 2437           | Reference          | 3.72              | 3.72            | ---            | PASS    |
|           |                | 30~1000            | 3.72              | -50.32          | $\leq -26.28$  | PASS    |
|           |                | 1000~26500         | 3.72              | -45.7           | $\leq -26.28$  | PASS    |
|           | 2462           | Reference          | 4.00              | 4.00            | ---            | PASS    |
|           |                | 30~1000            | 4.00              | -49.9           | $\leq -26$     | PASS    |
|           |                | 1000~26500         | 4.00              | -46.92          | $\leq -26$     | PASS    |
| 11G       | 2412           | Reference          | 0.62              | 0.62            | ---            | PASS    |
|           |                | 30~1000            | 0.62              | -49.12          | $\leq -29.38$  | PASS    |
|           |                | 1000~26500         | 0.62              | -46.22          | $\leq -29.38$  | PASS    |
|           | 2437           | Reference          | 0.89              | 0.89            | ---            | PASS    |
|           |                | 30~1000            | 0.89              | -50.04          | $\leq -29.11$  | PASS    |
|           |                | 1000~26500         | 0.89              | -47.04          | $\leq -29.11$  | PASS    |
|           | 2462           | Reference          | 1.89              | 1.89            | ---            | PASS    |
|           |                | 30~1000            | 1.89              | -50.09          | $\leq -28.11$  | PASS    |
|           |                | 1000~26500         | 1.89              | -46.49          | $\leq -28.11$  | PASS    |
| 11N20SISO | 2412           | Reference          | 0.44              | 0.44            | ---            | PASS    |
|           |                | 30~1000            | 0.44              | -49.32          | $\leq -29.56$  | PASS    |
|           |                | 1000~26500         | 0.44              | -46.78          | $\leq -29.56$  | PASS    |
|           | 2437           | Reference          | 1.05              | 1.05            | ---            | PASS    |
|           |                | 30~1000            | 1.05              | -49.32          | $\leq -28.95$  | PASS    |
|           |                | 1000~26500         | 1.05              | -46.46          | $\leq -28.95$  | PASS    |
|           | 2462           | Reference          | 1.89              | 1.89            | ---            | PASS    |
|           |                | 30~1000            | 1.89              | -48.06          | $\leq -28.11$  | PASS    |
|           |                | 1000~26500         | 1.89              | -46.49          | $\leq -28.11$  | PASS    |
| 11N40SISO | 2422           | Reference          | -2.77             | -2.77           | ---            | PASS    |
|           |                | 30~1000            | -2.77             | -49.36          | $\leq -32.77$  | PASS    |
|           |                | 1000~26500         | -2.77             | -47.51          | $\leq -32.77$  | PASS    |
|           | 2437           | Reference          | -1.65             | -1.65           | ---            | PASS    |
|           |                | 30~1000            | -1.65             | -48.95          | $\leq -31.65$  | PASS    |
|           |                | 1000~26500         | -1.65             | -46.91          | $\leq -31.65$  | PASS    |
|           | 2452           | Reference          | -1.77             | -1.77           | ---            | PASS    |

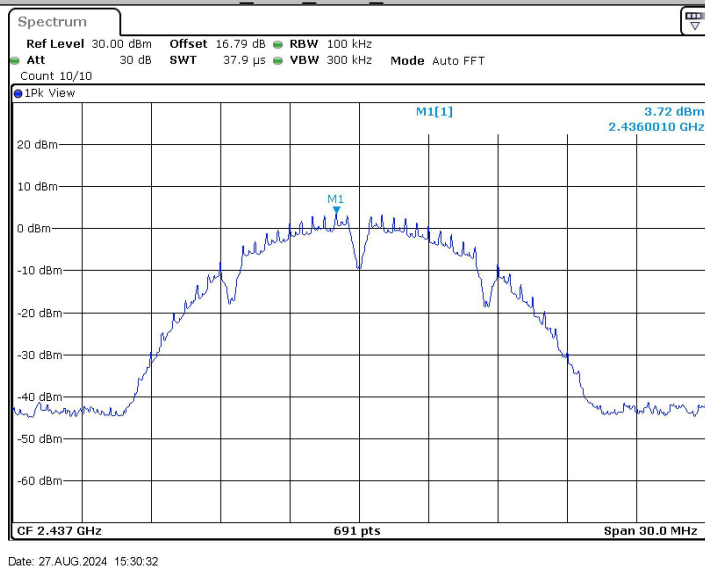
|  |  |            |       |        |               |      |
|--|--|------------|-------|--------|---------------|------|
|  |  | 30~1000    | -1.77 | -50.51 | $\leq -31.77$ | PASS |
|  |  | 1000~26500 | -1.77 | -47.57 | $\leq -31.77$ | PASS |

## Test Graphs

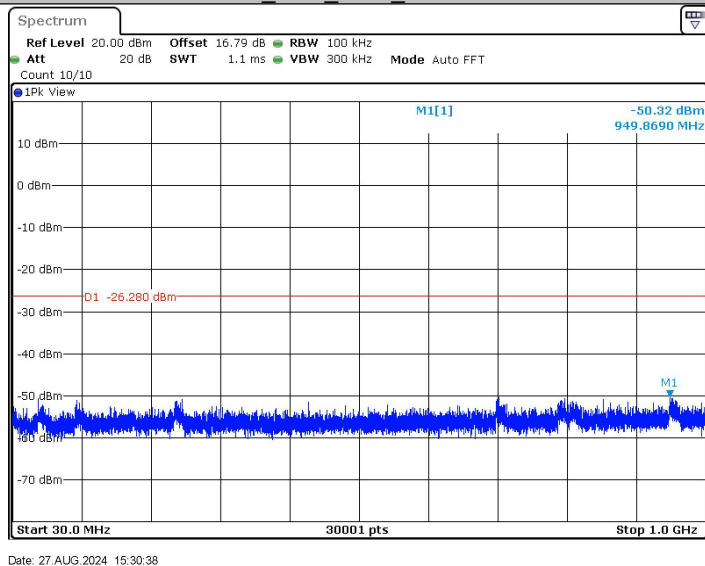




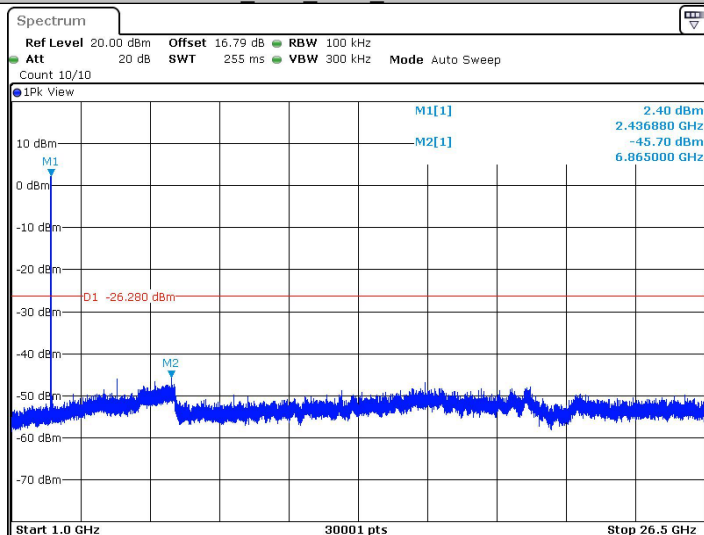
11B\_Ant1\_2437\_0~Reference



11B\_Ant1\_2437\_30~1000

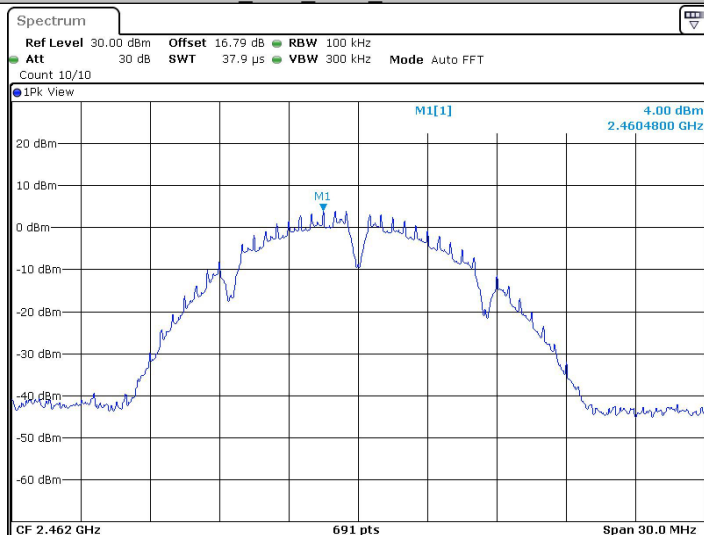


11B\_Ant1\_2437\_1000~26500



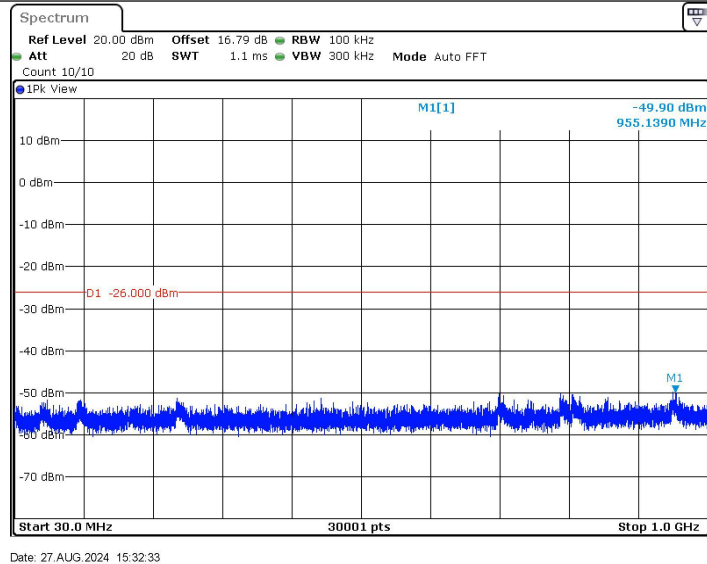
Date: 27.AUG.2024 15:31:00

11B\_Ant1\_2462\_0~Reference

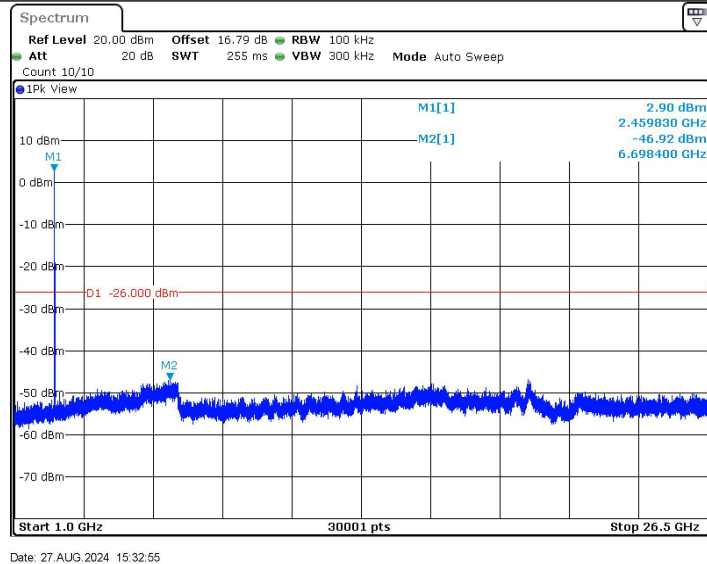


Date: 27.AUG.2024 15:32:27

11B\_Ant1\_2462\_30~1000



11B\_Ant1\_2462\_1000~26500



11G\_Ant1\_2412\_0~Reference

