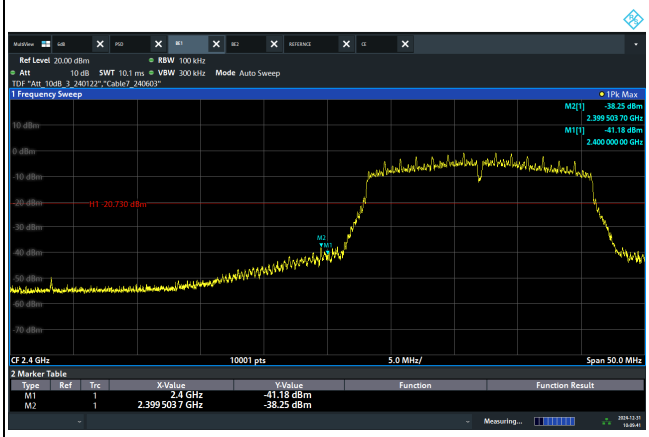
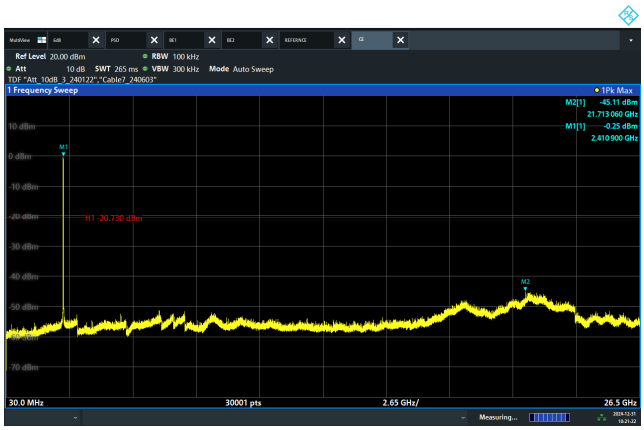
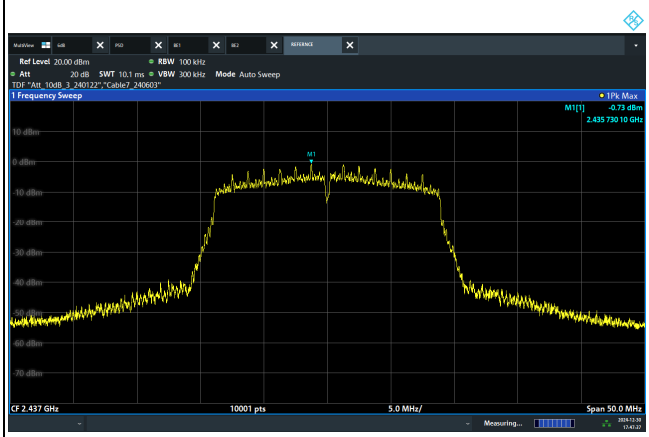
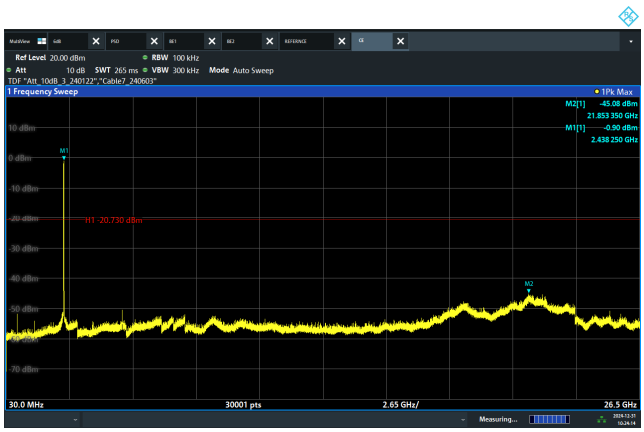
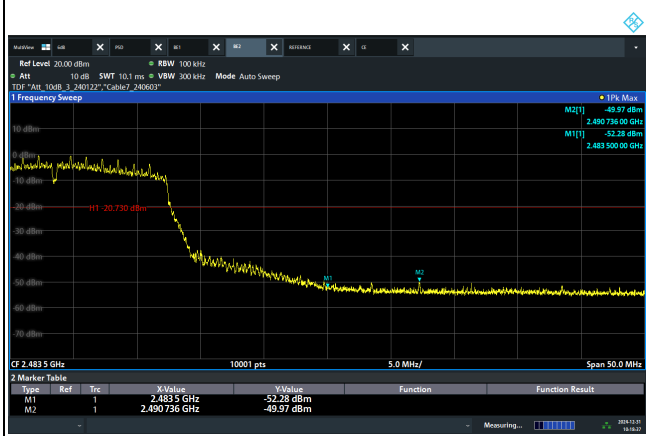
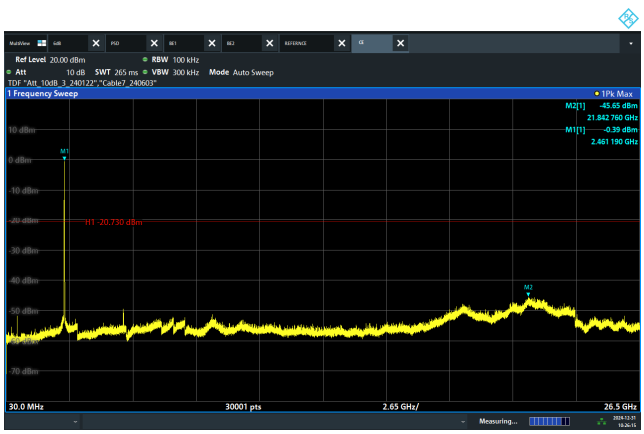
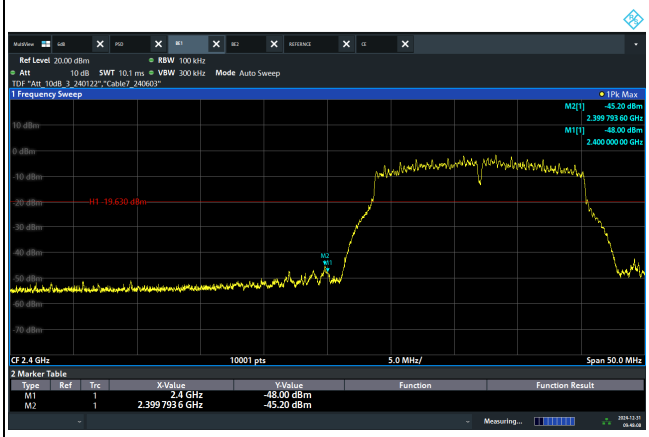
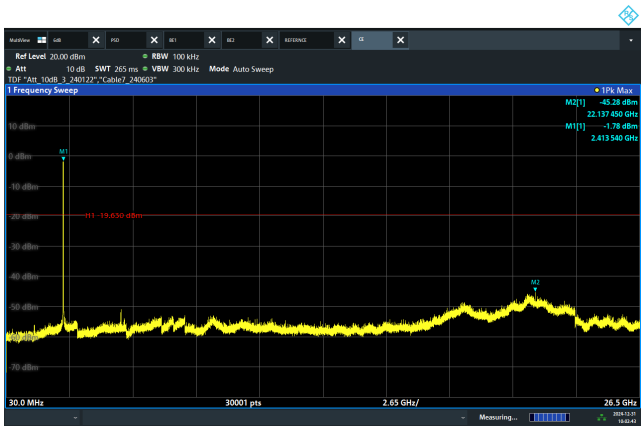
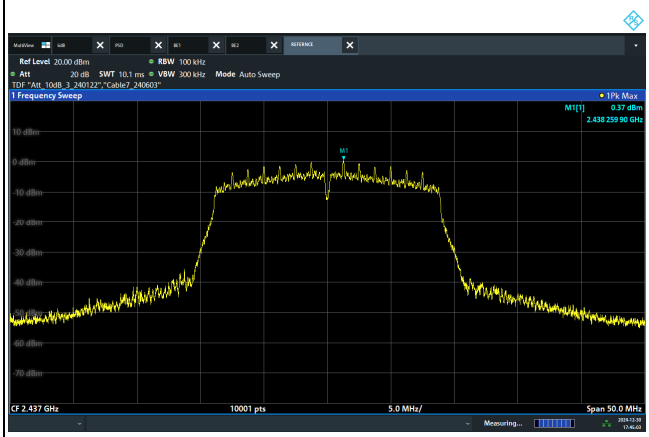
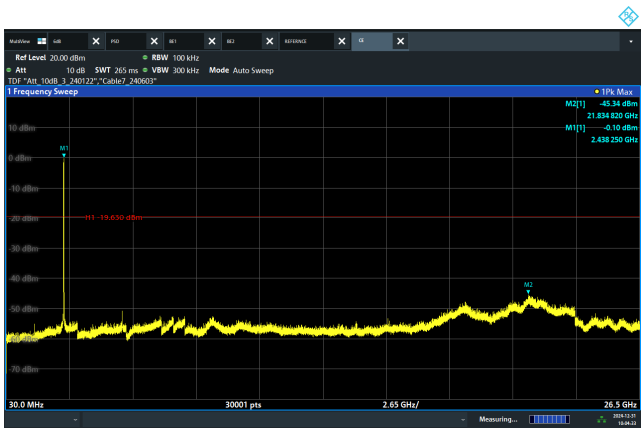
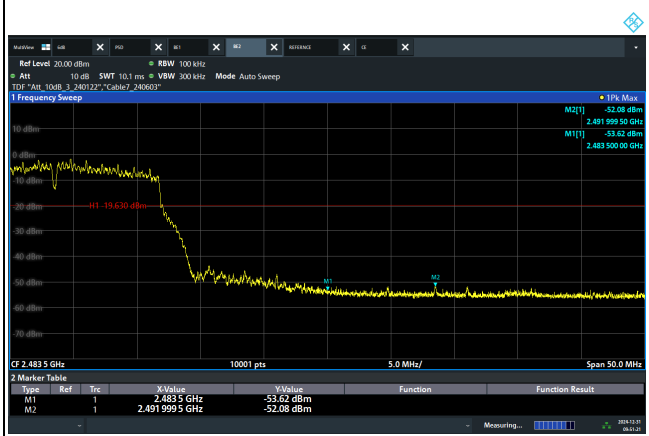
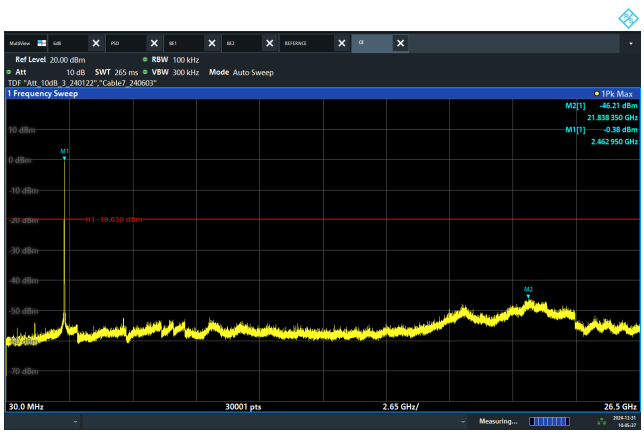
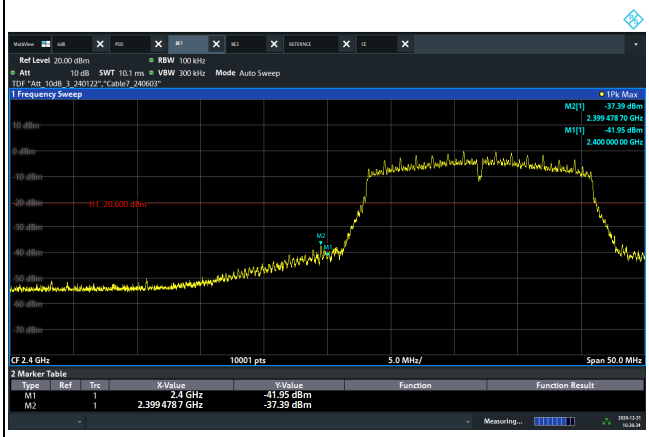
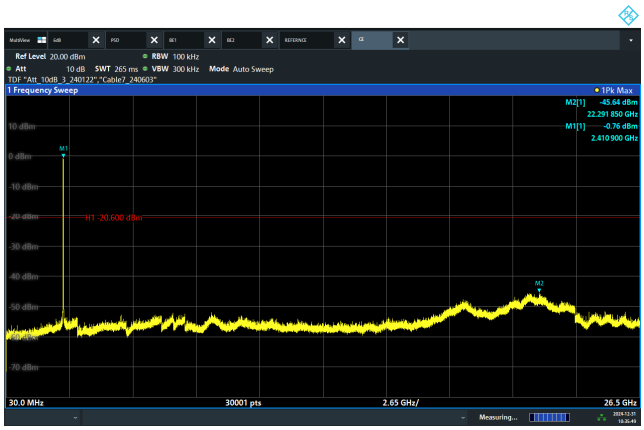
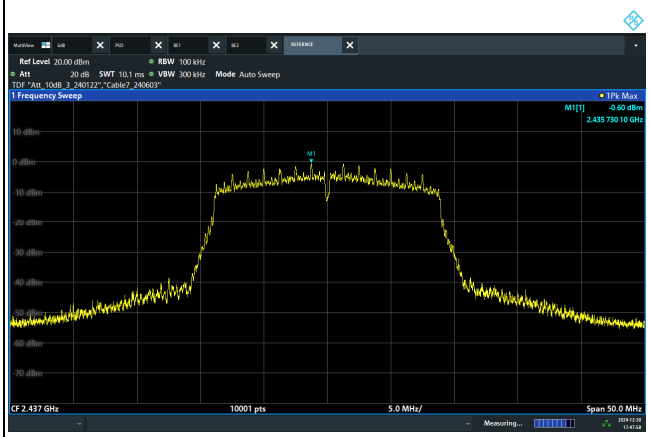
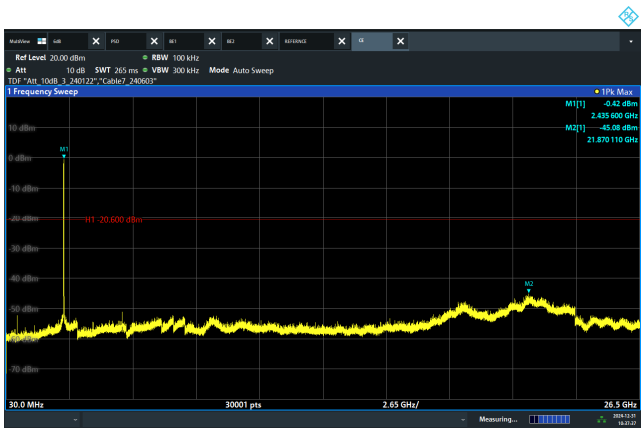
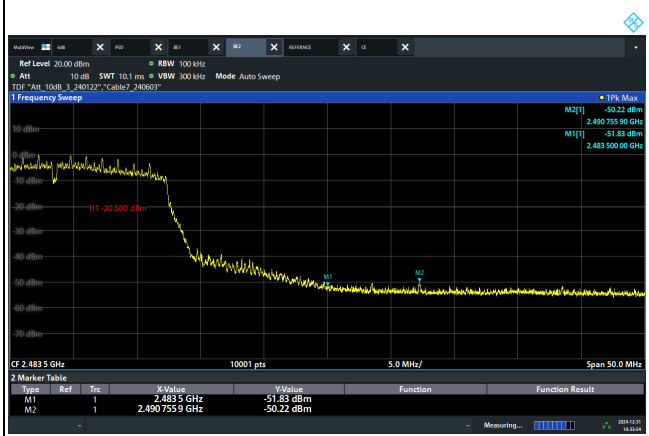
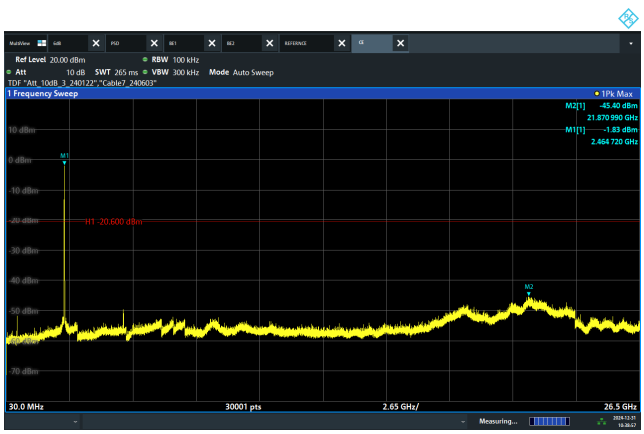
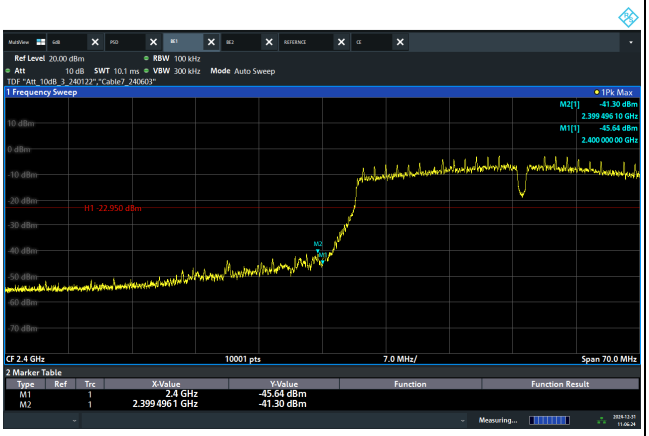
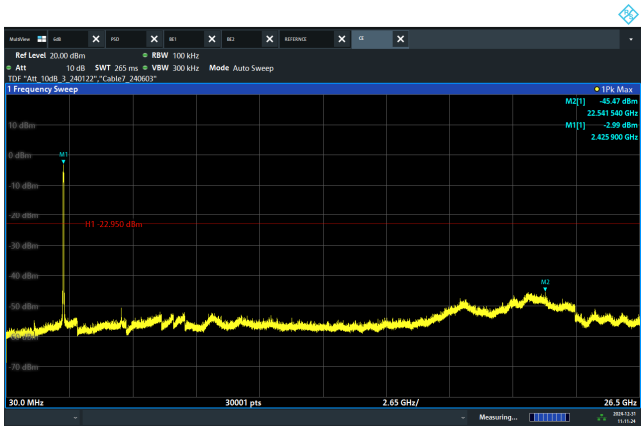
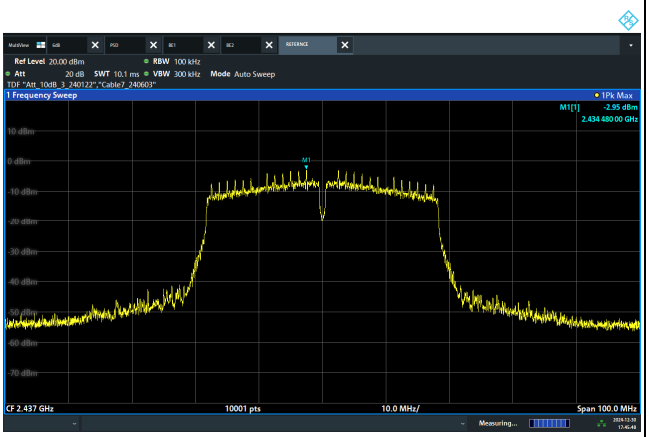
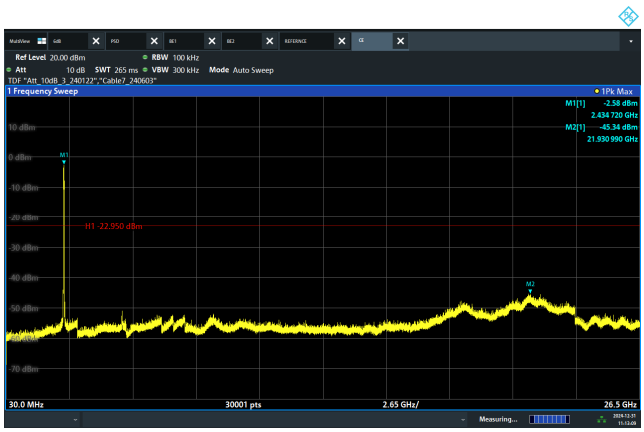
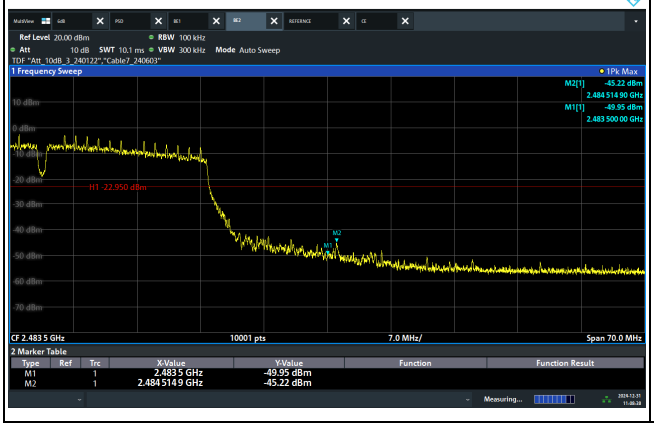
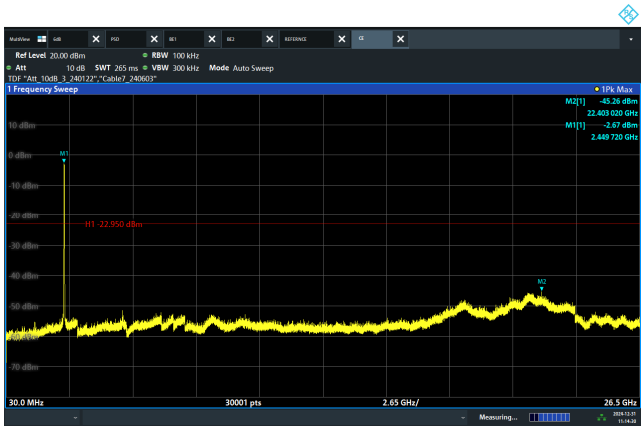
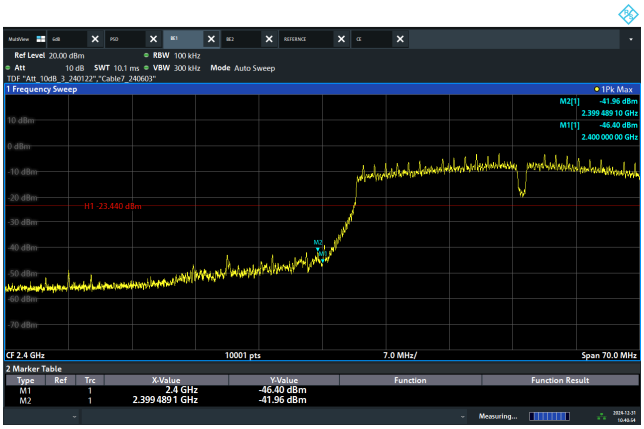
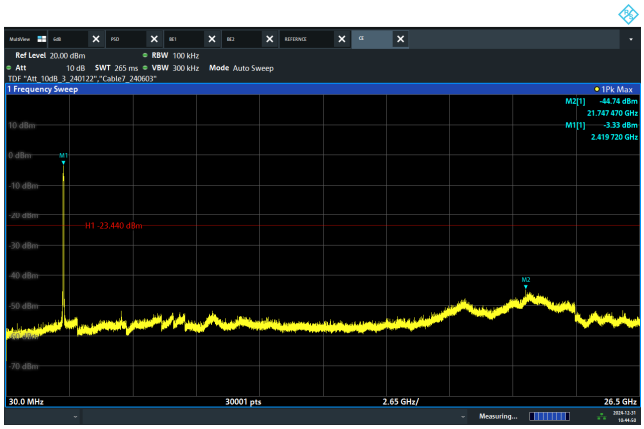
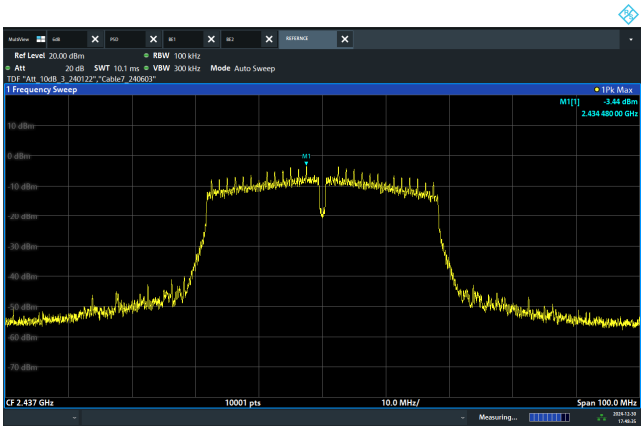
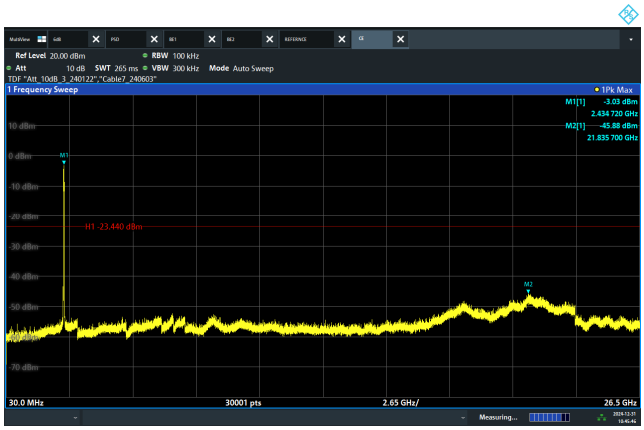
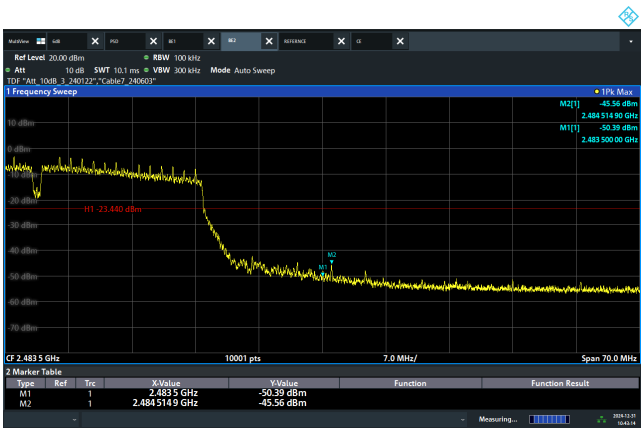
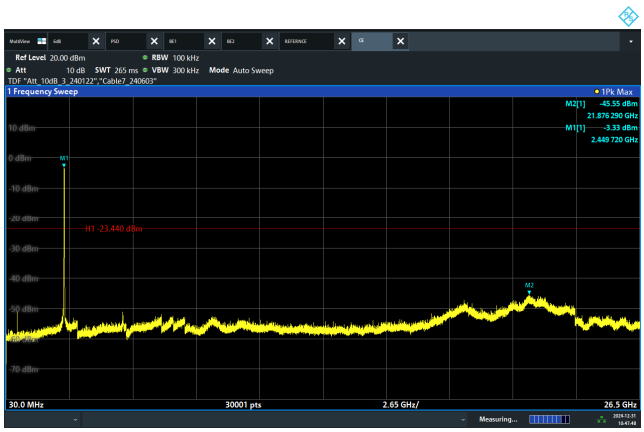
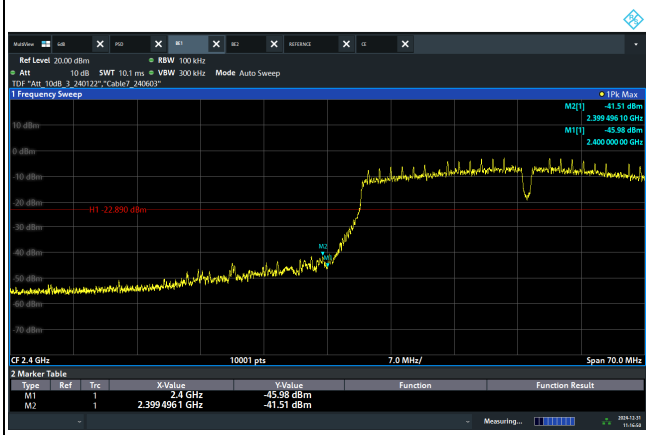
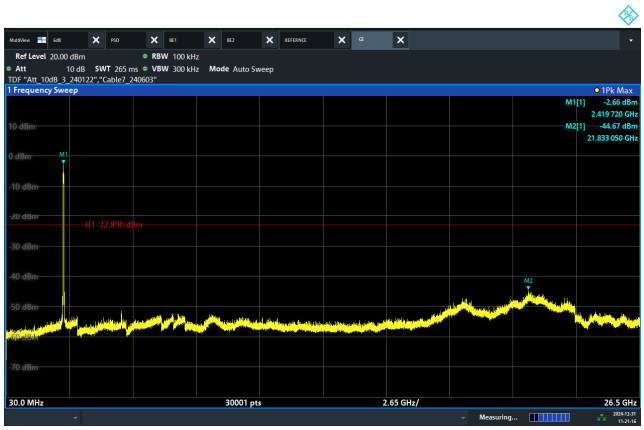
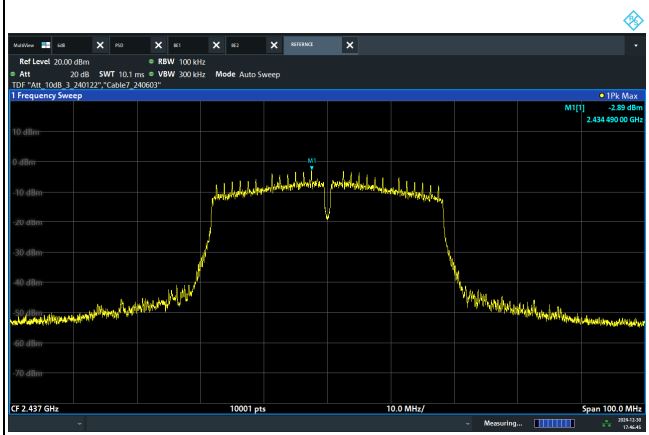
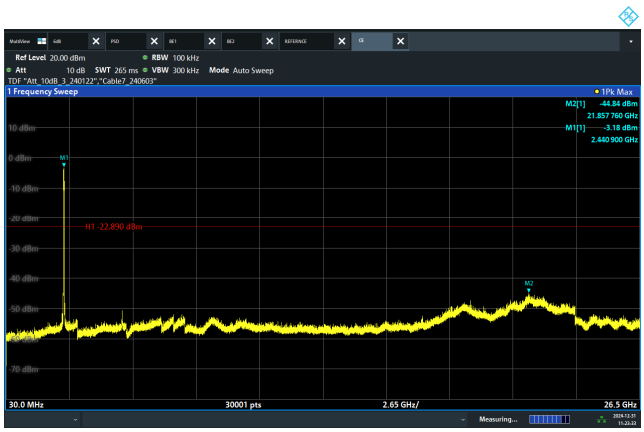
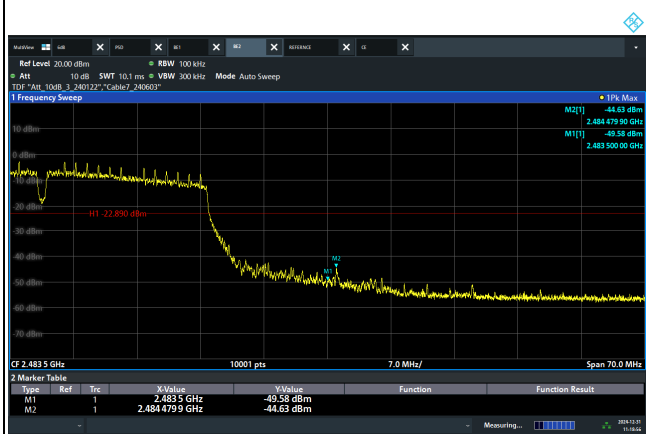
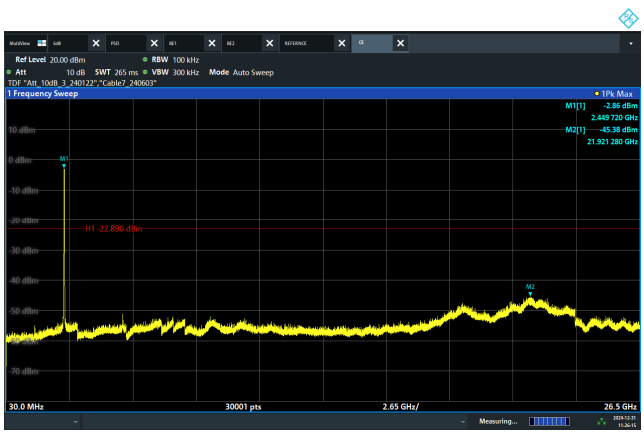
| 802.11n(HT20)_ANT B_Adaptor(DC 5 V) | |
|---|---|
| **Band edge_2 412 MHz** | **Spurious_2 412 MHz** |
|  |  |
| **Reference Level_2 437 MHz** | **Spurious_2 437 MHz** |
|  |  |
| **Band edge_2 462 MHz** | **Spurious_2 462 MHz** |
|  |  |

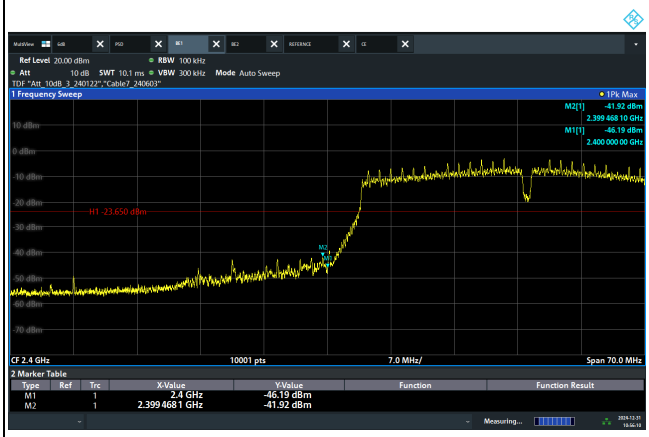
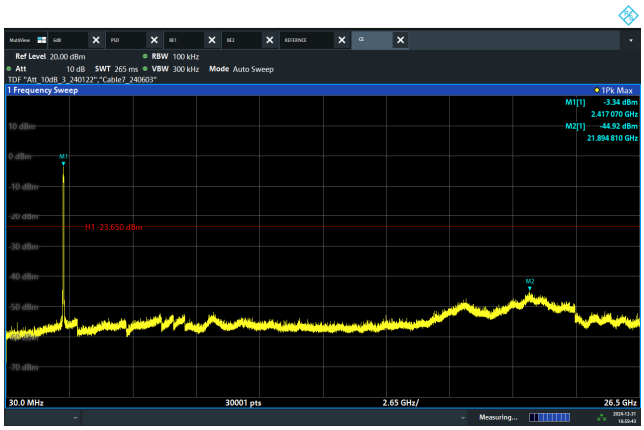
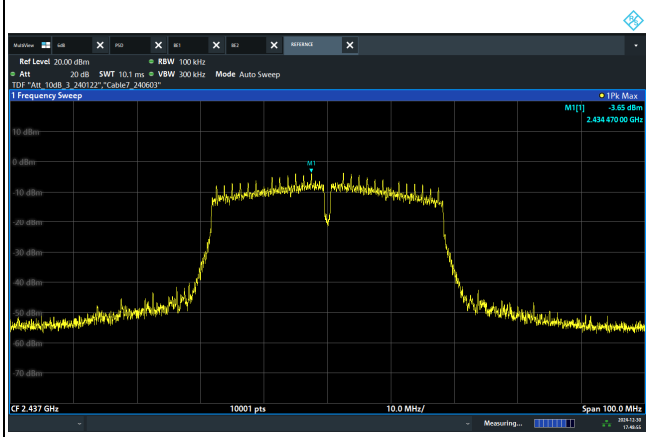
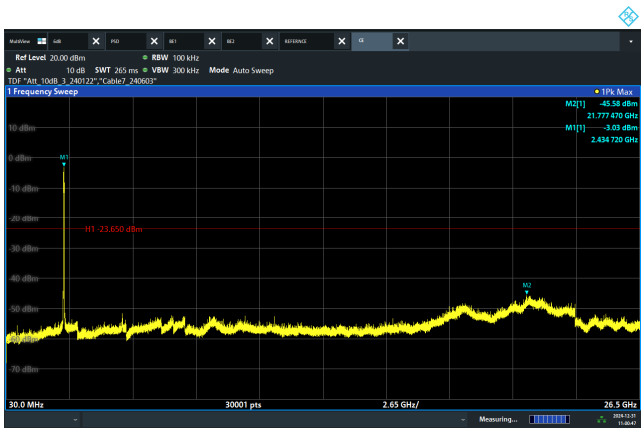
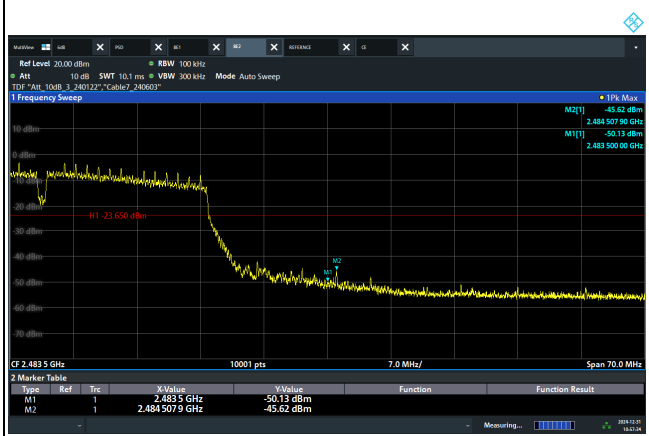
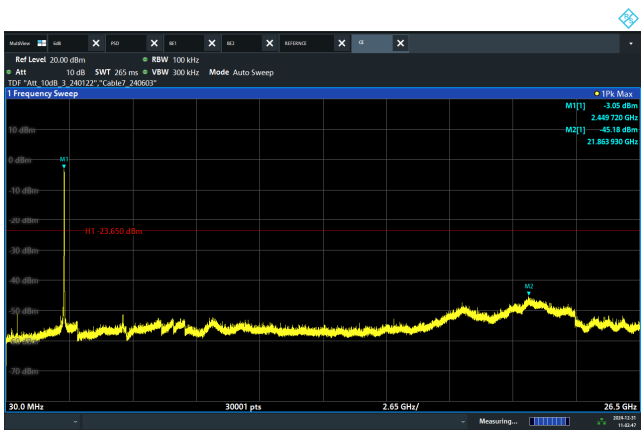
| 802.11n(HT20)_ANT A_POE(DC 48 V) | |
|---|---|
| **Band edge_2 412 MHz** | **Spurious_2 412 MHz** |
|  |  |
| **Reference Level_2 437 MHz** | **Spurious_2 437 MHz** |
|  |  |
| **Band edge_2 462 MHz** | **Spurious_2 462 MHz** |
|  |  |

| 802.11n(HT20)_ANT B_POE(DC 48 V) | |
|---|---|
| **Band edge_2 412 MHz** | **Spurious_2 412 MHz** |
|  |  |
| **Reference Level_2 437 MHz** | **Spurious_2 437 MHz** |
|  |  |
| **Band edge_2 462 MHz** | **Spurious_2 462 MHz** |
|  |  |

| 802.11n(HT40)_ANT A_Adaptor(DC 5 V) | |
|---|---|
| **Band edge_2 422 MHz** | **Spurious_2 422 MHz** |
|  |  |
| **Reference Level_2 437 MHz** | **Spurious_2 437 MHz** |
|  |  |
| **Band edge_2 452 MHz** | **Spurious_2 452 MHz** |
|  |  |

| 802.11n(HT40)_ANT B_Adaptor(DC 5 V) | |
|---|---|
| **Band edge_2 422 MHz** | **Spurious_2 422 MHz** |
|  |  |
| **Reference Level_2 437 MHz** | **Spurious_2 437 MHz** |
|  |  |
| **Band edge_2 452 MHz** | **Spurious_2 452 MHz** |
|  |  |

| 802.11n(HT40)_ANT A_POE(DC 48 V) | |
|---|---|
| **Band edge_2 422 MHz** | **Spurious_2 422 MHz** |
|  |  |
| **Reference Level_2 437 MHz** | **Spurious_2 437 MHz** |
|  |  |
| **Band edge_2 452 MHz** | **Spurious_2 452 MHz** |
|  |  |

| 802.11n(HT20)_ANT B_POE(DC 48 V) | |
|---|---|
| **Band edge_2 422 MHz** | **Spurious_2 422 MHz** |
|  |  |
| **Reference Level_2 437 MHz** | **Spurious_2 437 MHz** |
|  |  |
| **Band edge_2 452 MHz** | **Spurious_2 452 MHz** |
|  |  |

## 6.6 AC Conducted Emissionss ( 150 kHz to 30 MHz)

### 6.6.1 Regulation

§15.207(a) : Except as shown in paragraphs (b) and (c) of this section, for an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies, within the band 150 kHz to 30 MHz, shall not exceed the limits in the following table, as measured using a 50 μH/50 ohms line impedance stabilization network (LISN). Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower limit applies at the boundary between the frequency ranges.

| | Conducted limit (dBμV) | |
|---|---|---|
| Frequency of emission (MHz) | Quasi-peak | Average |
| 0.15-0.5 | 66 to 56* | 56 to 46* |
| 0.5-5 | 56 | 46 |
| 5-30 | 60 | 50 |

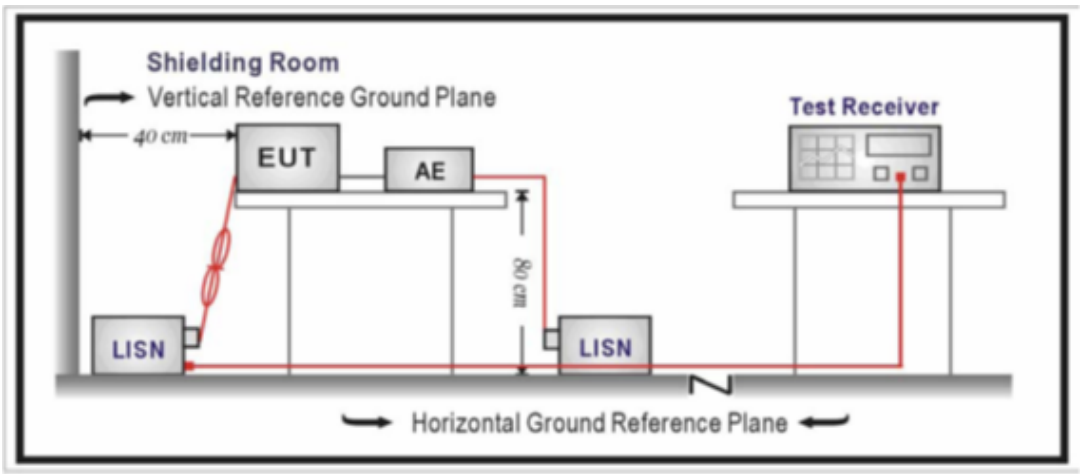
* Decreases with the logarithm of the frequency.

### 6.6.2 Test Procedure

a) The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm / 50 μH of coupling impedance for the measuring instrument.
b) Both lines of the power mains connected to the EUT were checked for maximum conducted interference.
c) The frequency range from 150 kHz to 30 MHz was searched. Emission levels under (Limit – 20 dB) was not recorded.

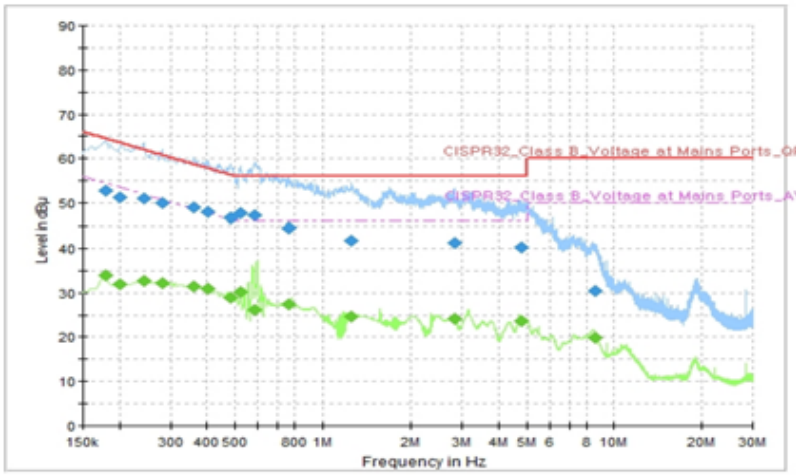
**Remark :** The resolution bandwidth and video bandwidth of test receiver is 9 kHz for quasi-peak detection (QP) and average detection (AV) at frequency 0.15 MHz – 30 MHz.

### 6.6.3 Test Setup



### 6.6.4 Test Result

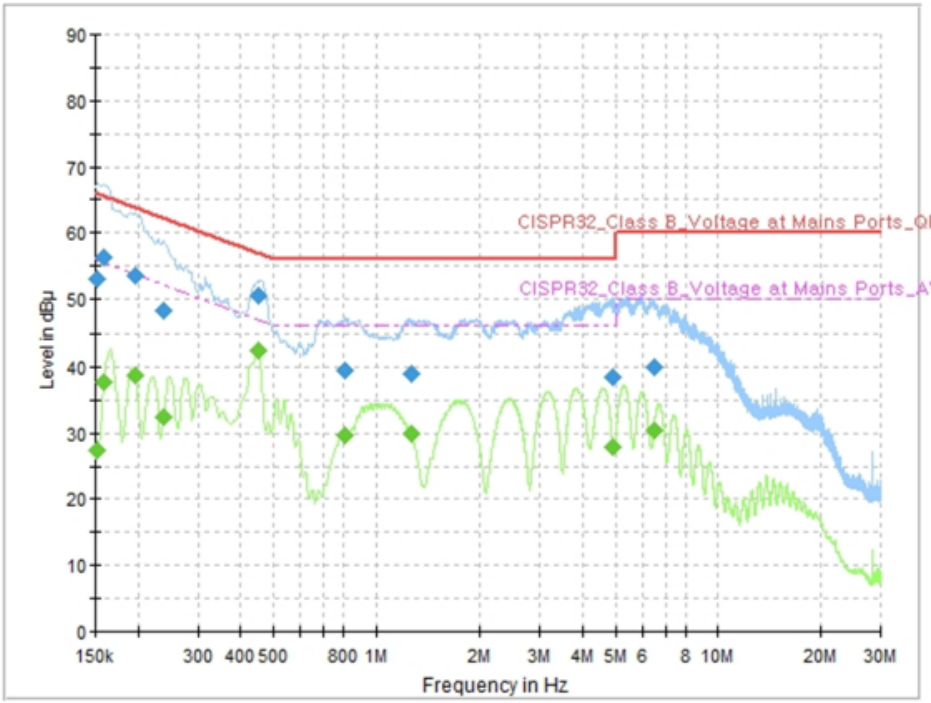
**Worst Case - 802.11n(HT20)_Adaptor(DC 5 V)**




**Final_Result**

| Frequency (MHz) | QuasiPeak (dBµV) | CAverage (dBµV) | Limit (dBµV) | Margin (dB) | Bandwidth (kHz) | Line | Filter | Corr. (dB) |
|---|---|---|---|---|---|---|---|---|
| 0.179 | --- | 33.96 | 54.52 | 20.56 | 9.0 | L1 | ON | 10.3 |
| 0.179 | 52.72 | --- | 64.52 | 11.80 | 9.0 | L1 | ON | 10.3 |
| 0.202 | --- | 31.93 | 53.54 | 21.61 | 9.0 | L1 | ON | 10.3 |
| 0.202 | 51.36 | --- | 63.54 | 12.18 | 9.0 | L1 | ON | 10.3 |
| 0.242 | --- | 32.79 | 52.02 | 19.23 | 9.0 | L1 | ON | 10.1 |
| 0.242 | 50.93 | --- | 62.02 | 11.09 | 9.0 | L1 | ON | 10.1 |
| 0.281 | --- | 32.21 | 50.80 | 18.59 | 9.0 | L1 | ON | 10.1 |
| 0.281 | 50.14 | --- | 60.80 | 10.67 | 9.0 | L1 | ON | 10.1 |
| 0.362 | --- | 31.47 | 48.69 | 17.22 | 9.0 | L1 | ON | 10.1 |
| 0.362 | 48.91 | --- | 58.69 | 9.78 | 9.0 | L1 | ON | 10.1 |
| 0.402 | --- | 30.86 | 47.81 | 16.95 | 9.0 | L1 | ON | 10.1 |
| 0.402 | 48.10 | --- | 57.81 | 9.71 | 9.0 | L1 | ON | 10.1 |
| 0.483 | 46.69 | --- | 56.29 | 9.60 | 9.0 | N | ON | 10.0 |
| 0.483 | --- | 28.89 | 46.29 | 17.40 | 9.0 | N | ON | 10.0 |
| 0.524 | --- | 30.06 | 46.00 | 15.94 | 9.0 | L1 | ON | 10.1 |
| 0.524 | 47.78 | --- | 56.00 | 8.22 | 9.0 | L1 | ON | 10.1 |
| 0.587 | 47.21 | --- | 56.00 | 8.79 | 9.0 | L1 | ON | 10.0 |
| 0.587 | --- | 26.08 | 46.00 | 19.92 | 9.0 | L1 | ON | 10.0 |
| 0.764 | --- | 27.40 | 46.00 | 18.60 | 9.0 | L1 | ON | 10.0 |
| 0.764 | 44.37 | --- | 56.00 | 11.63 | 9.0 | L1 | ON | 10.0 |
| 1.262 | 41.85 | --- | 56.00 | 14.15 | 9.0 | L1 | ON | 9.8 |
| 1.262 | --- | 24.73 | 46.00 | 21.27 | 9.0 | L1 | ON | 9.8 |
| 2.812 | 41.17 | --- | 56.00 | 14.83 | 9.0 | L1 | ON | 9.9 |
| 2.812 | --- | 24.11 | 46.00 | 21.89 | 9.0 | L1 | ON | 9.9 |
| 4.778 | 40.24 | --- | 56.00 | 15.76 | 9.0 | L1 | ON | 9.9 |
| 4.778 | --- | 23.69 | 46.00 | 22.31 | 9.0 | L1 | ON | 9.9 |
| 8.581 | 30.49 | --- | 60.00 | 29.51 | 9.0 | L1 | ON | 9.9 |
| 8.581 | --- | 19.94 | 50.00 | 30.06 | 9.0 | L1 | ON | 9.9 |

**Worst Case - 802.11n(HT20)_POE(DC 48 V)**




## Final_Result

| Frequency (MHz) | QuasiPeak (dBµV) | CAverage (dBµV) | Limit (dBµV) | Margin (dB) | Bandwidth (kHz) | Line | Filter | Corr. (dB) |
|---|---|---|---|---|---|---|---|---|
| 0.152 | --- | 27.38 | 55.88 | 28.50 | 9.0 | L1 | ON | 9.8 |
| 0.152 | 52.93 | --- | 65.88 | 12.95 | 9.0 | L1 | ON | 9.8 |
| 0.159 | 56.25 | --- | 65.52 | 9.27 | 9.0 | N | ON | 9.9 |
| 0.159 | --- | 37.77 | 55.52 | 17.75 | 9.0 | N | ON | 9.9 |
| 0.197 | --- | 38.70 | 53.73 | 15.03 | 9.0 | N | ON | 10.1 |
| 0.197 | 53.47 | --- | 63.73 | 10.25 | 9.0 | N | ON | 10.1 |
| 0.238 | --- | 32.34 | 52.17 | 19.84 | 9.0 | N | ON | 10.0 |
| 0.238 | 48.33 | --- | 62.17 | 13.84 | 9.0 | N | ON | 10.0 |
| 0.452 | 50.51 | --- | 56.85 | 6.33 | 9.0 | N | ON | 9.9 |
| 0.452 | --- | 42.50 | 46.85 | 4.34 | 9.0 | N | ON | 9.9 |
| 0.814 | --- | 29.76 | 46.00 | 16.24 | 9.0 | N | ON | 9.7 |
| 0.814 | 39.57 | --- | 56.00 | 16.43 | 9.0 | N | ON | 9.7 |
| 1.266 | --- | 29.84 | 46.00 | 16.16 | 9.0 | L1 | ON | 9.7 |
| 1.266 | 38.89 | --- | 56.00 | 17.11 | 9.0 | L1 | ON | 9.7 |
| 4.902 | --- | 27.92 | 46.00 | 18.08 | 9.0 | N | ON | 9.6 |
| 4.902 | 38.48 | --- | 56.00 | 17.52 | 9.0 | N | ON | 9.6 |
| 6.479 | --- | 30.52 | 50.00 | 19.48 | 9.0 | N | ON | 9.6 |
| 6.479 | 40.03 | --- | 60.00 | 19.97 | 9.0 | N | ON | 9.6 |

**Note)**
1. Final Value (QP and/or CAV) = Reading Value (QP and/or CAV) + Corr. (LISN Insertion Loss + Cable Loss)
2. Margin (QP and/or CAV) = Limit – Final Value (QP and/or CAV)
3. Two graphs measured for both Live (L1) and Neutral (N) of the LISN are combined into one graph.

**- END of report -**