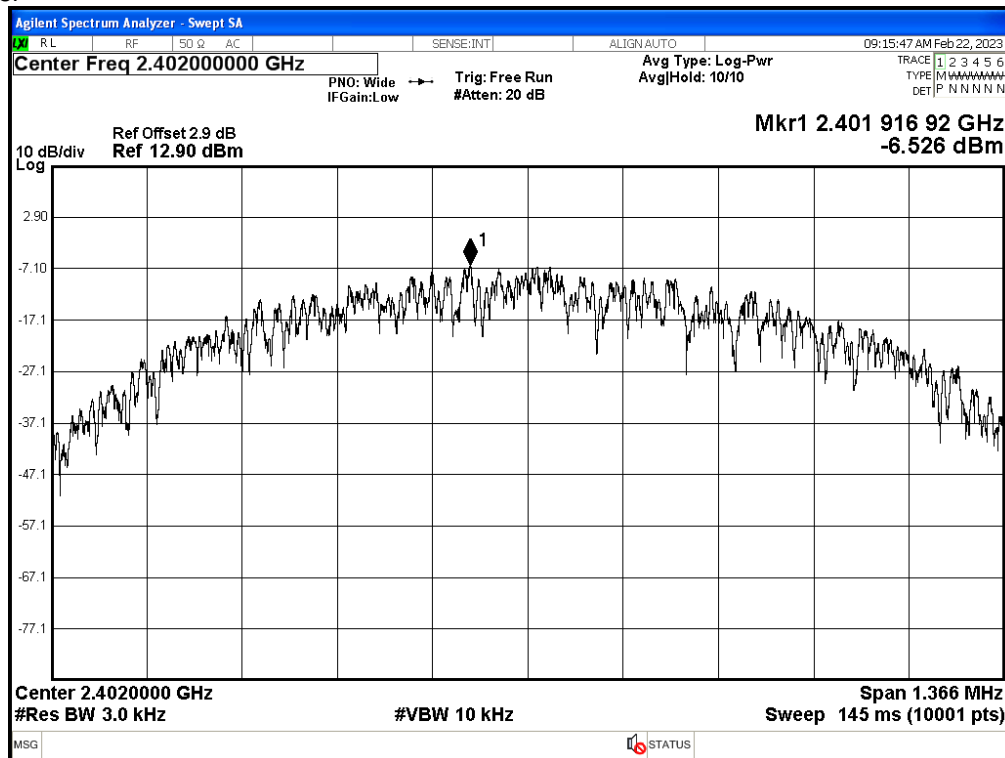


## Appendix B: Test Results of BLE

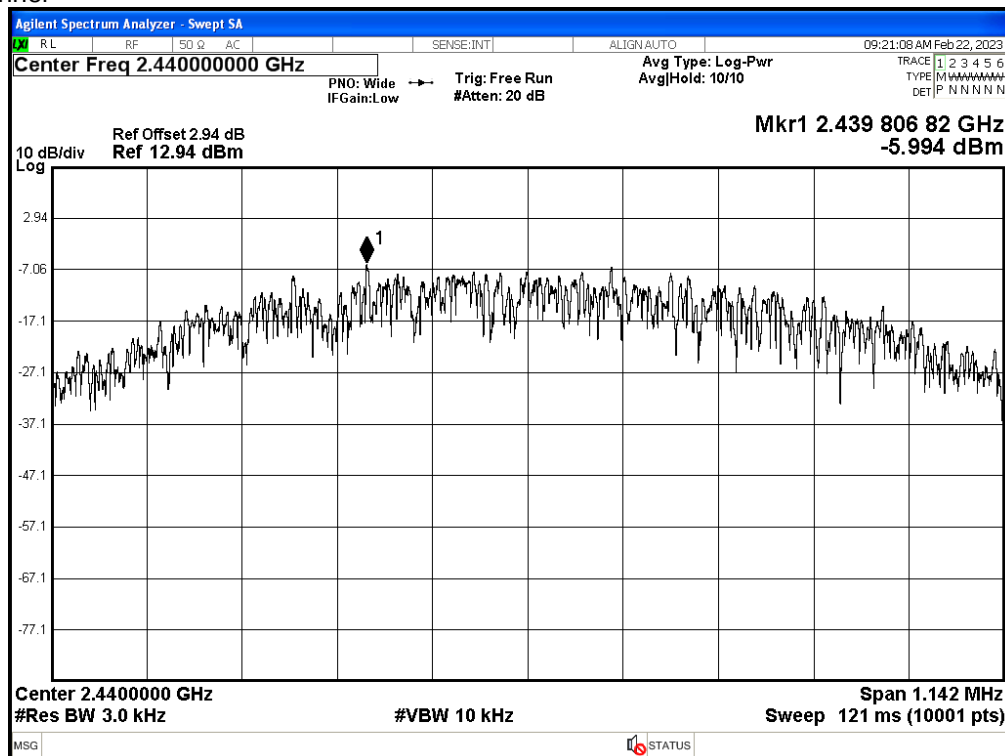
|                                                                                                       |           |
|-------------------------------------------------------------------------------------------------------|-----------|
| <b>APPENDIX B: TEST RESULTS OF BLE .....</b>                                                          | <b>1</b>  |
| <b>APPENDIX B.1: TEST RESULTS OF CONDUCTED POWER SPECTRAL DENSITY .....</b>                           | <b>2</b>  |
| <b>APPENDIX B.2: TEST RESULTS OF 6dB BANDWIDTH AND 99% BANDWIDTH .....</b>                            | <b>4</b>  |
| <b>APPENDIX B.3: TEST RESULTS OF CONDUCTED SPURIOUS EMISSIONS MEASURED IN 100 kHz BANDWIDTH .....</b> | <b>6</b>  |
| <b>APPENDIX B.4: TEST RESULTS OF RADIATED SPURIOUS EMISSIONS .....</b>                                | <b>11</b> |
| <b>30MHz - 1GHz (Worst case) .....</b>                                                                | <b>11</b> |
| <b>1GHz - 18GHz (Worst case) .....</b>                                                                | <b>14</b> |
| <b>APPENDIX B.5: TEST RESULTS OF RADIATED EMISSIONS IN RESTRICTED BANDS .....</b>                     | <b>20</b> |
| <b>APPENDIX B.6: TEST RESULTS OF CONDUCTED EMISSION ON AC MAINS .....</b>                             | <b>22</b> |

## Appendix B.1: Test Results of Conducted Power Spectral Density

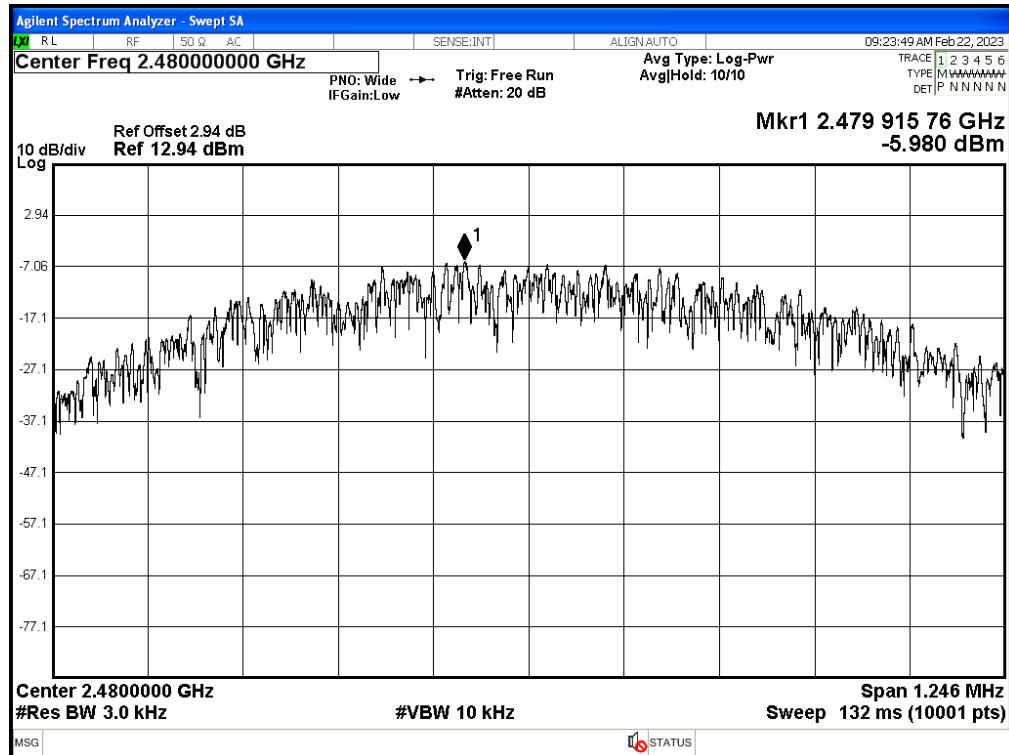
### Low Channel



### Middle Channel

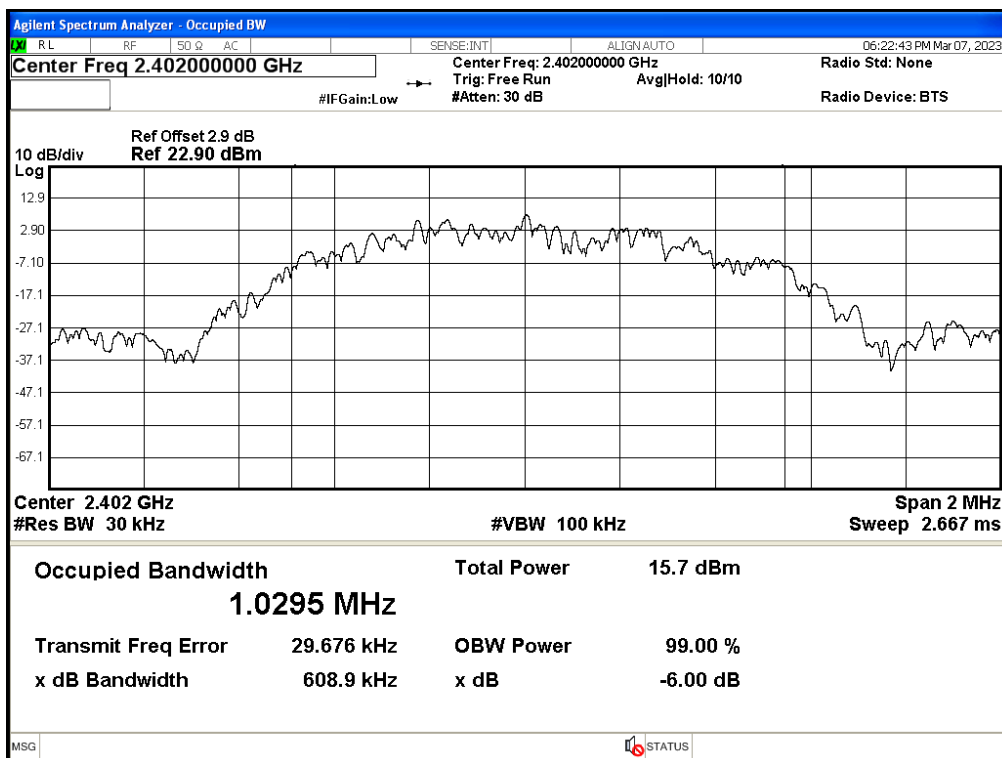


High Channel

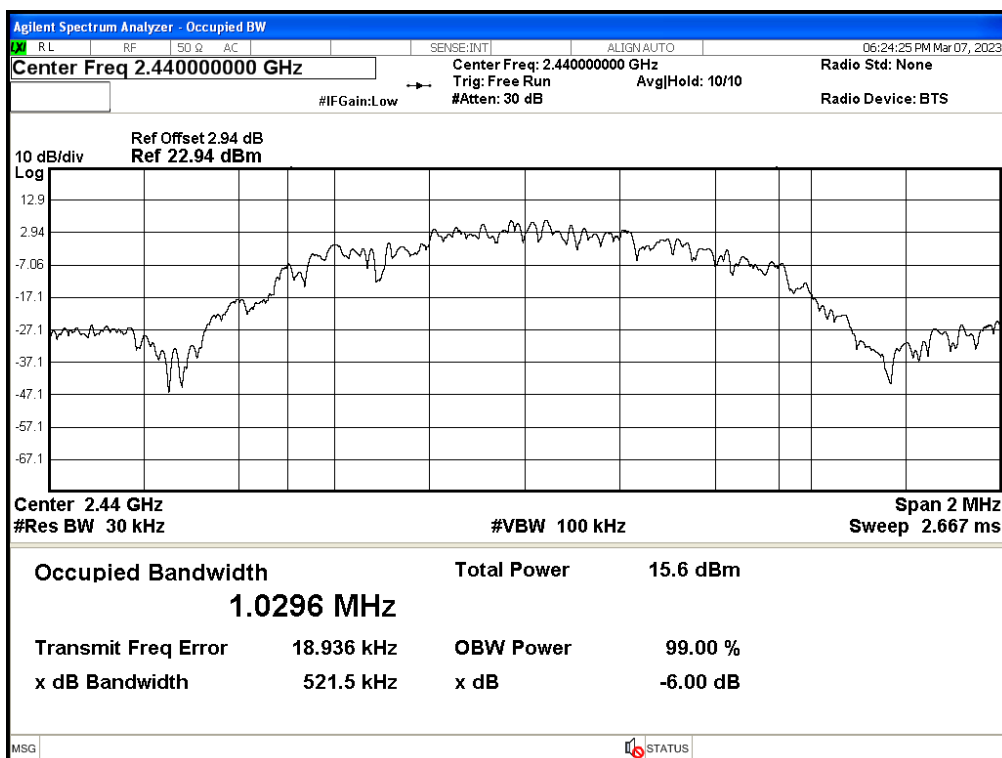


## Appendix B.2: Test Results of 6dB Bandwidth and 99% Bandwidth

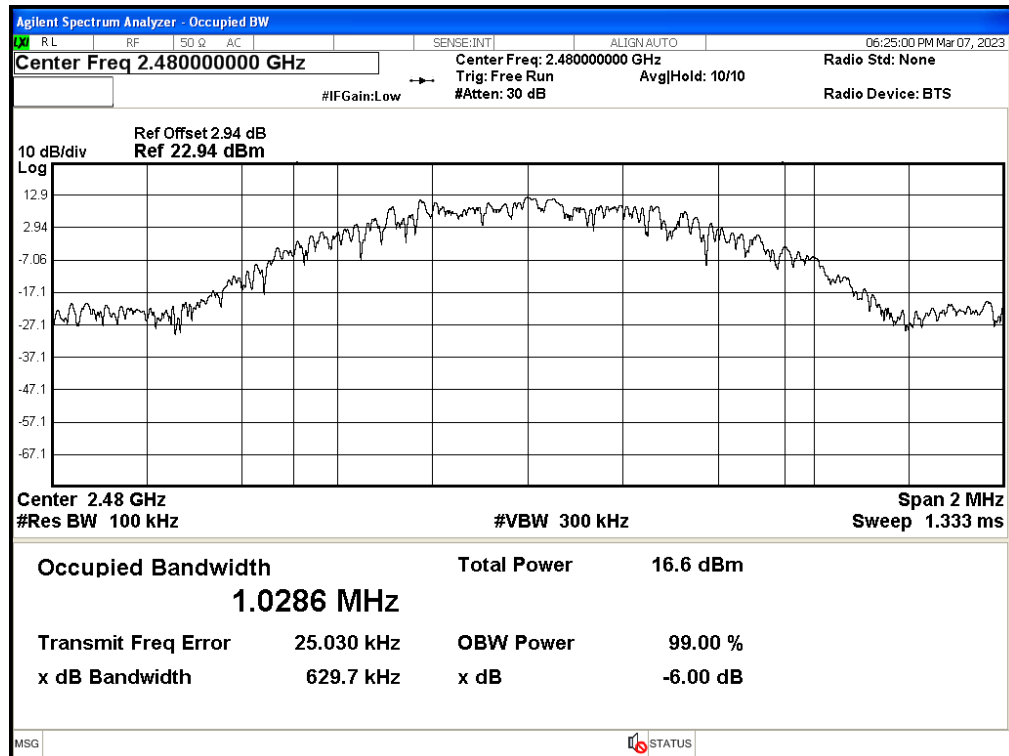
### Low Channel

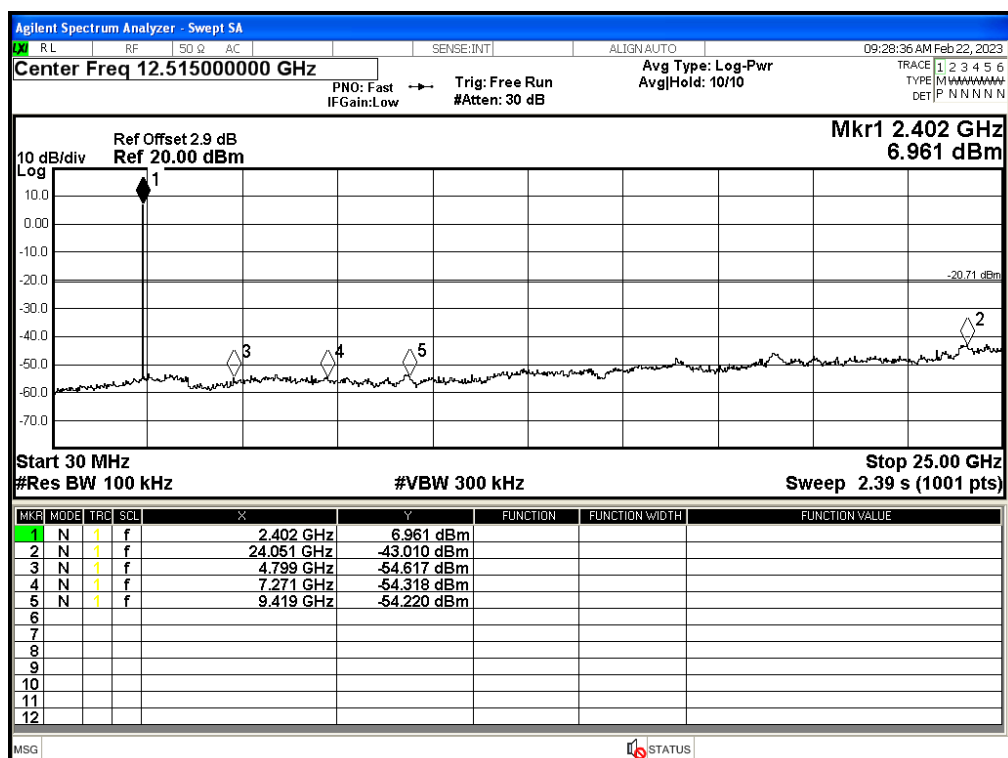


### Middle Channel

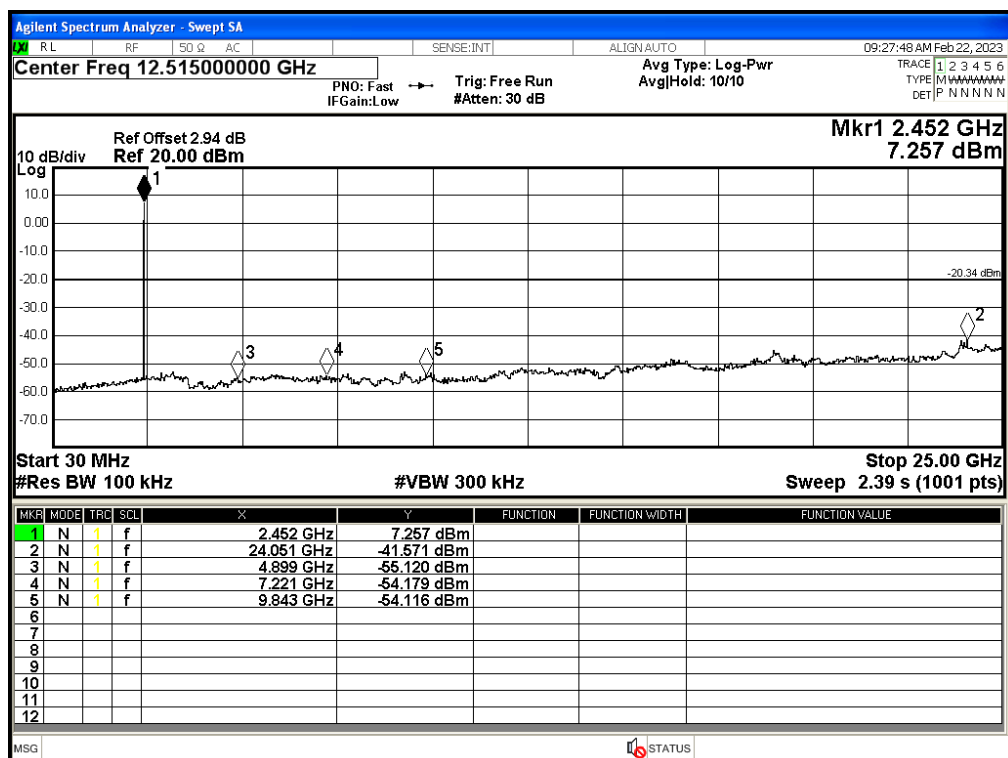
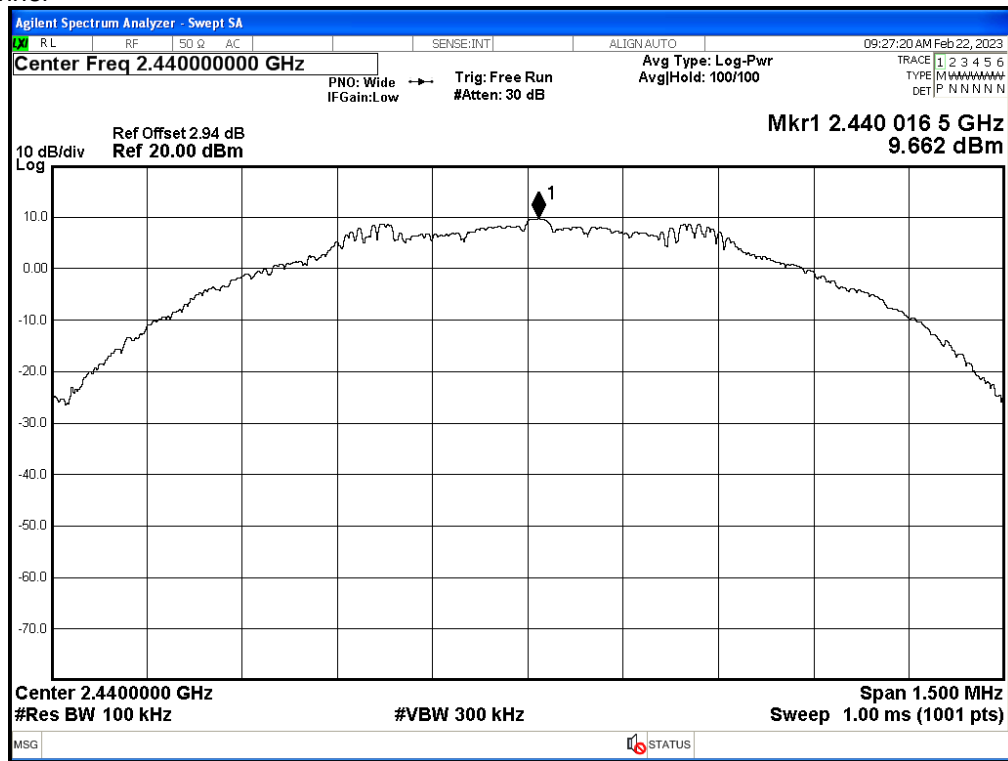


## High Channel

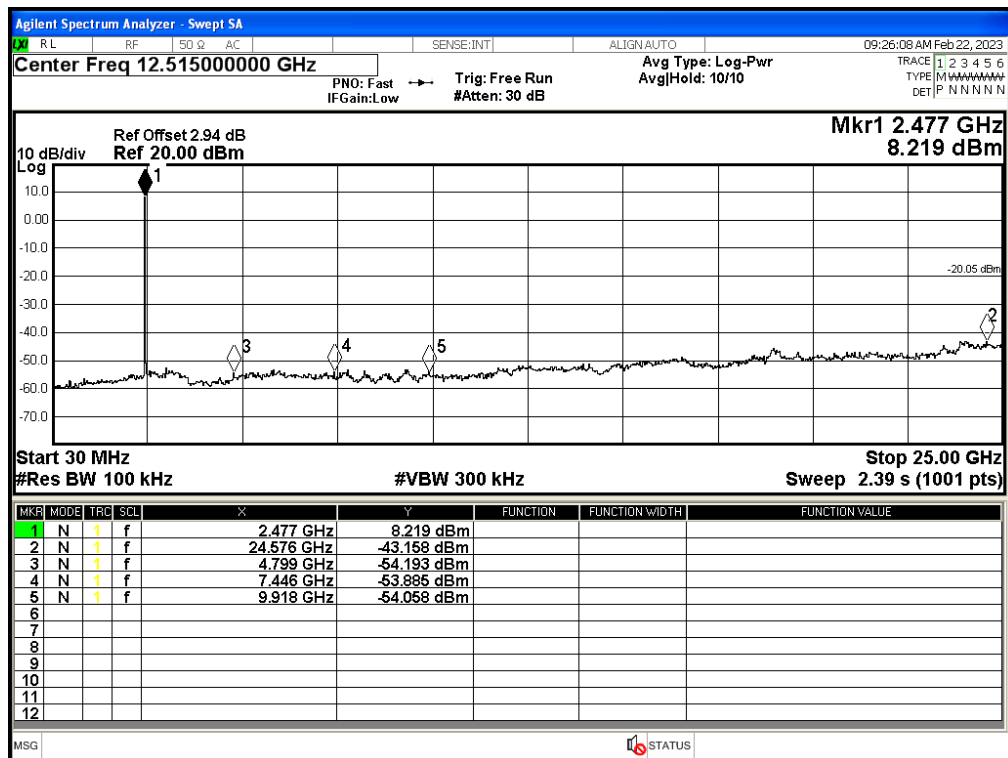
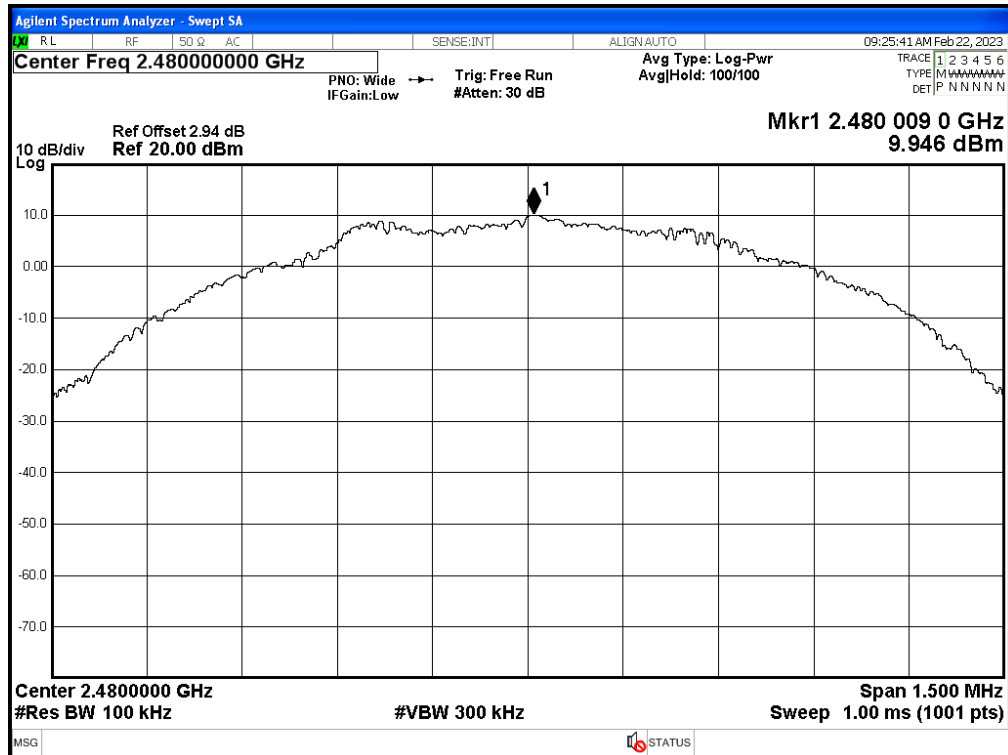


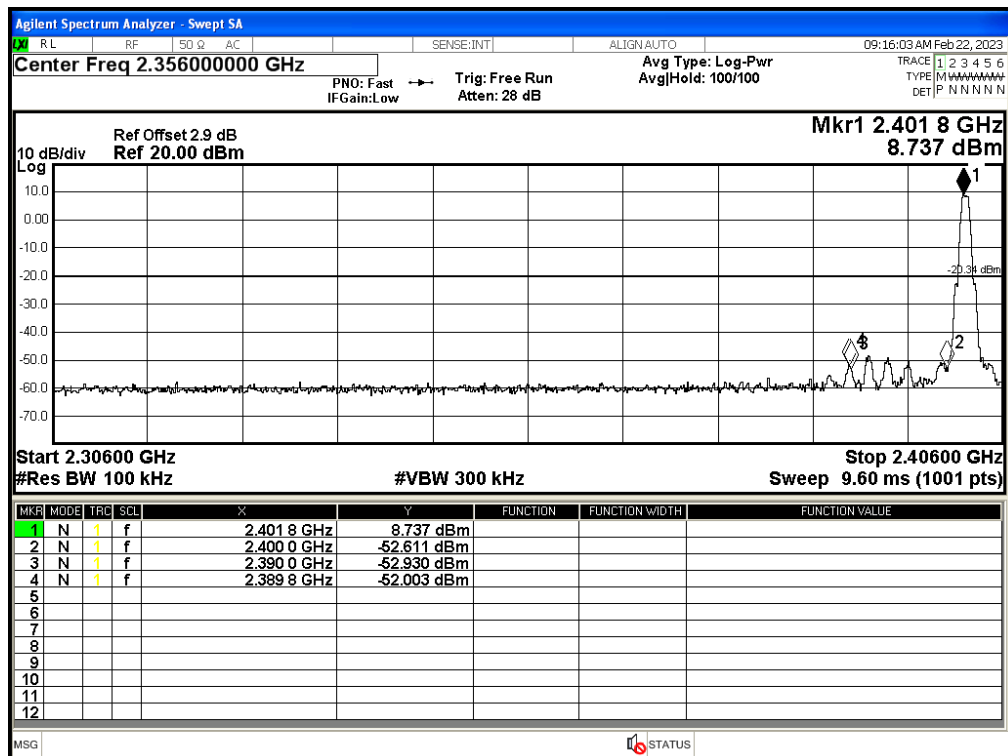


## Middle Channel

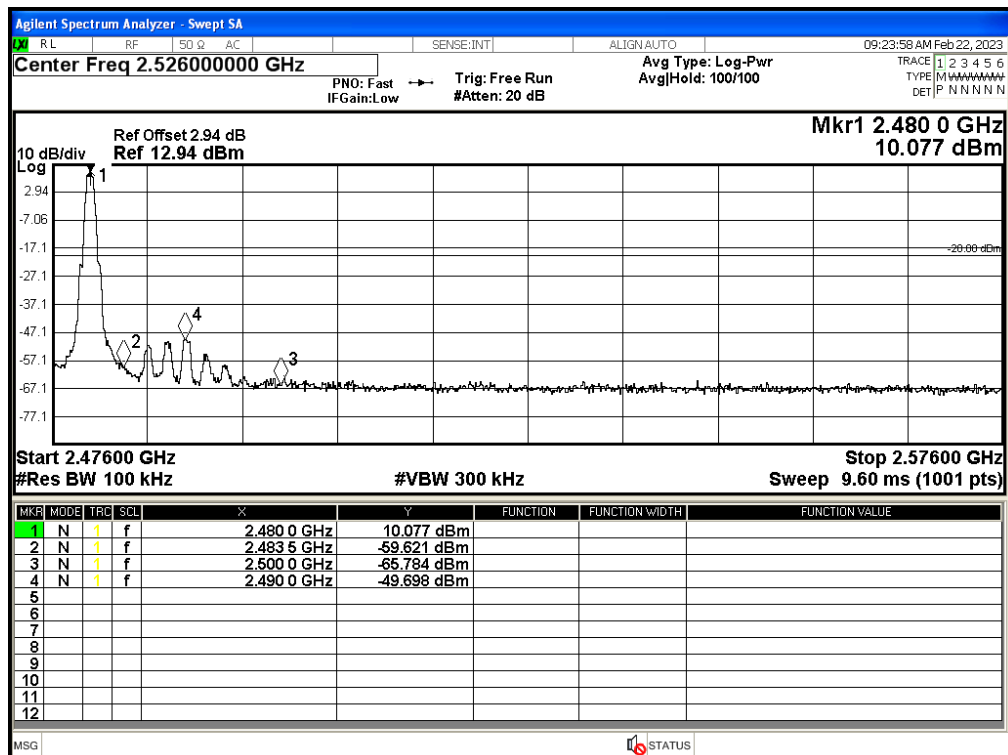
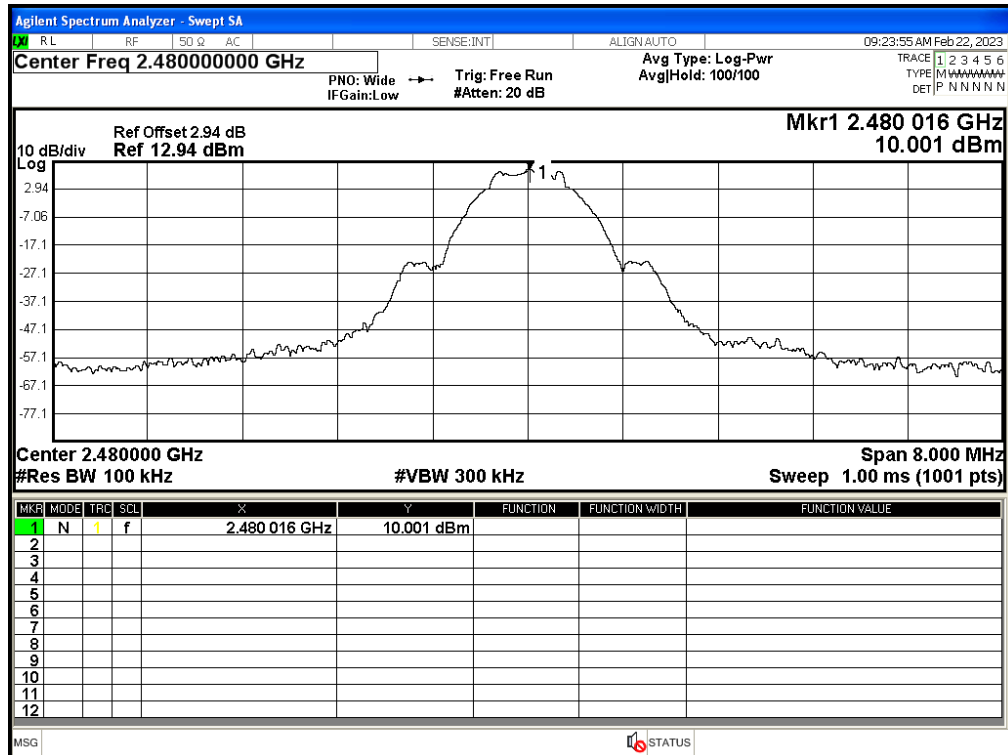


## High Channel





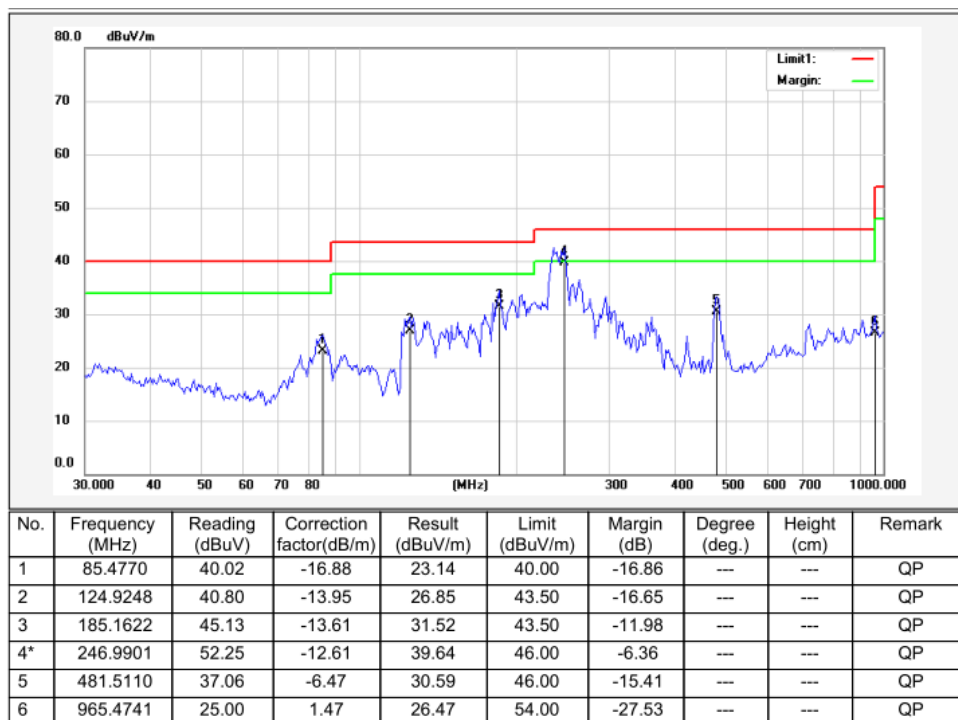
## High Channel



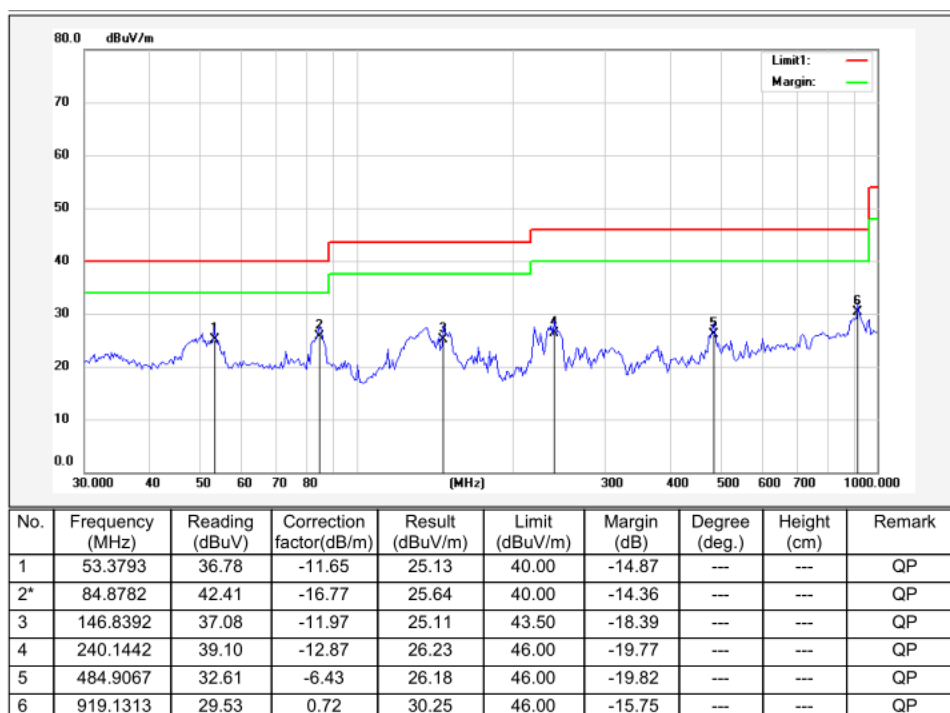
Note: Testing was carried out within frequency range 9kHz to the tenth harmonics. The measurement results below 30MHz and 18GHz - 26.5GHz were greater than 20dB below the limit, so only the radiated spurious emissions from 30MHz to 18GHz were reported.

## Appendix B.4: Test Results of Radiated Spurious Emissions 30MHz - 1GHz (Worst case)

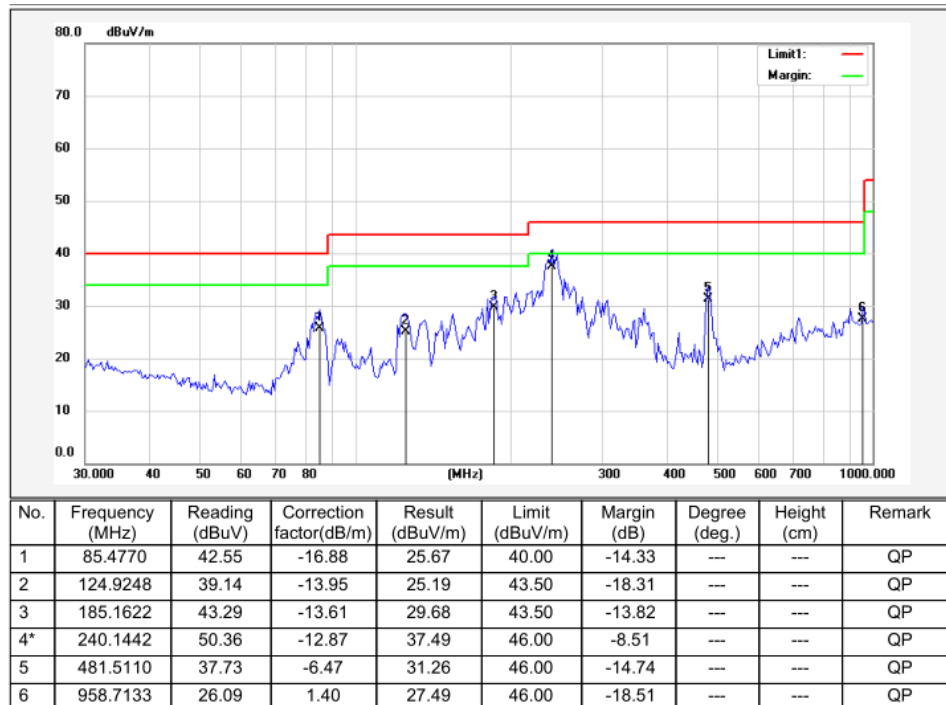
Low Channel Horizontal



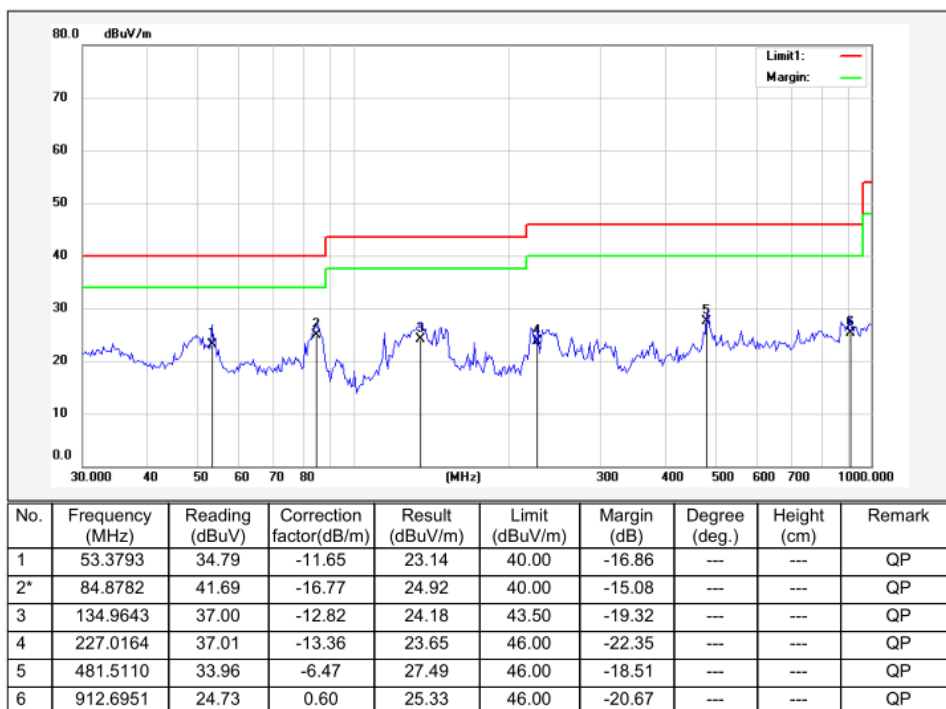
Low Channel Vertical



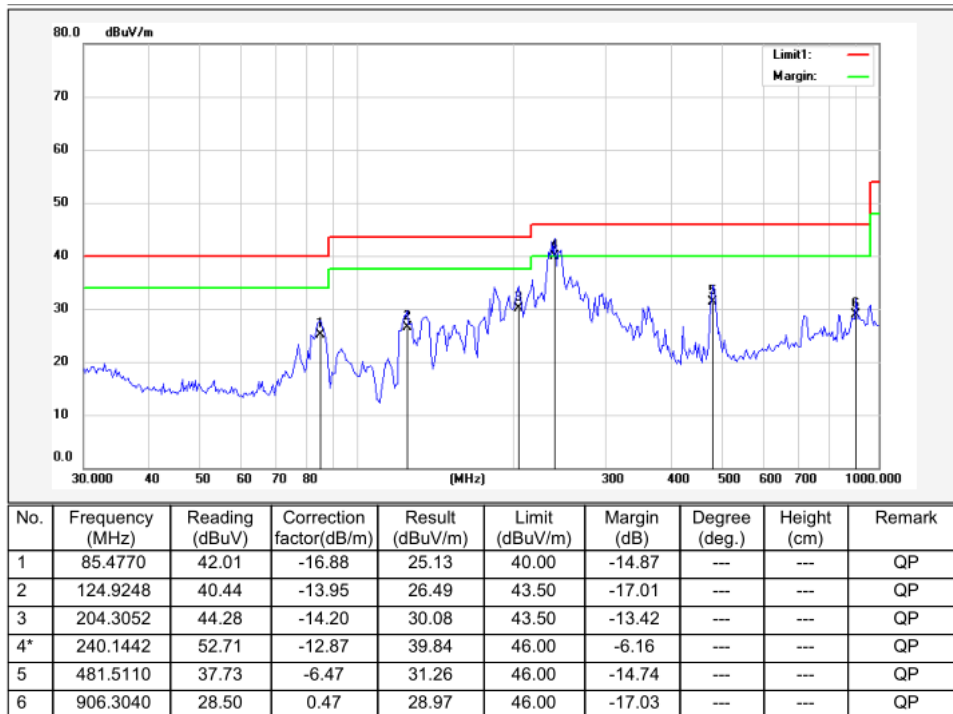
### Middle Channel Horizontal



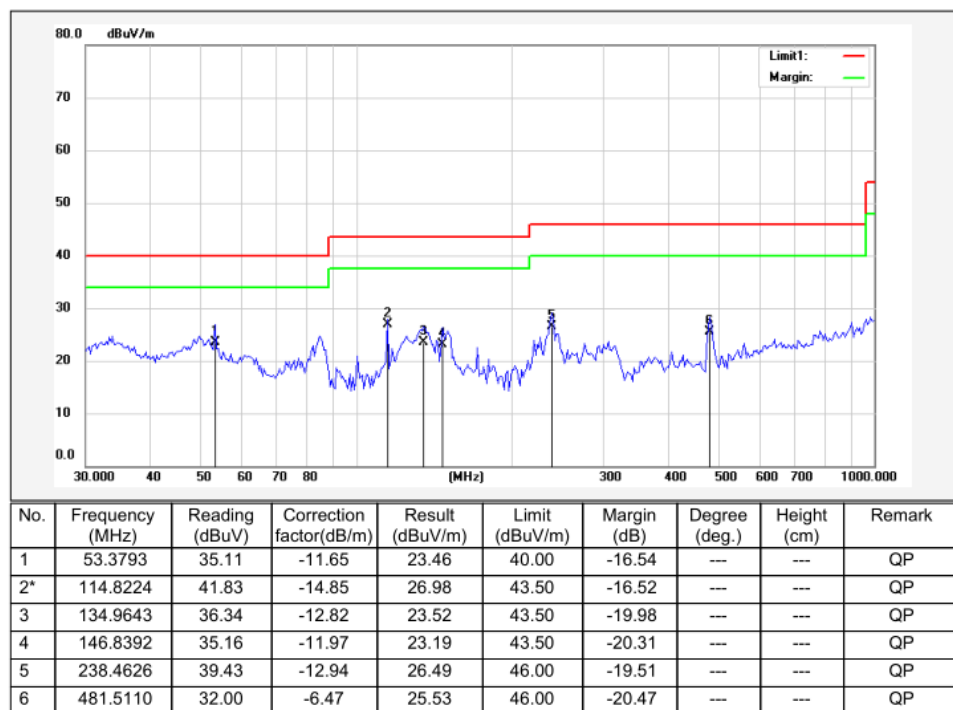
### Middle Channel Vertical



### High Channel Horizontal



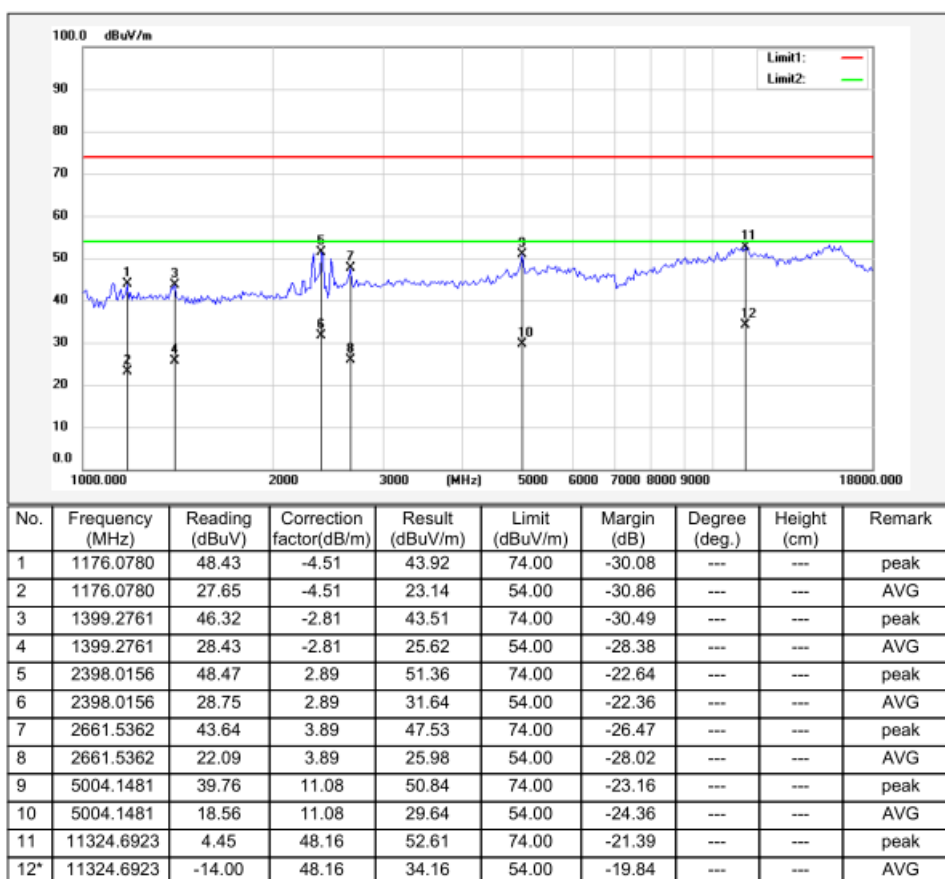
### High Channel Vertical



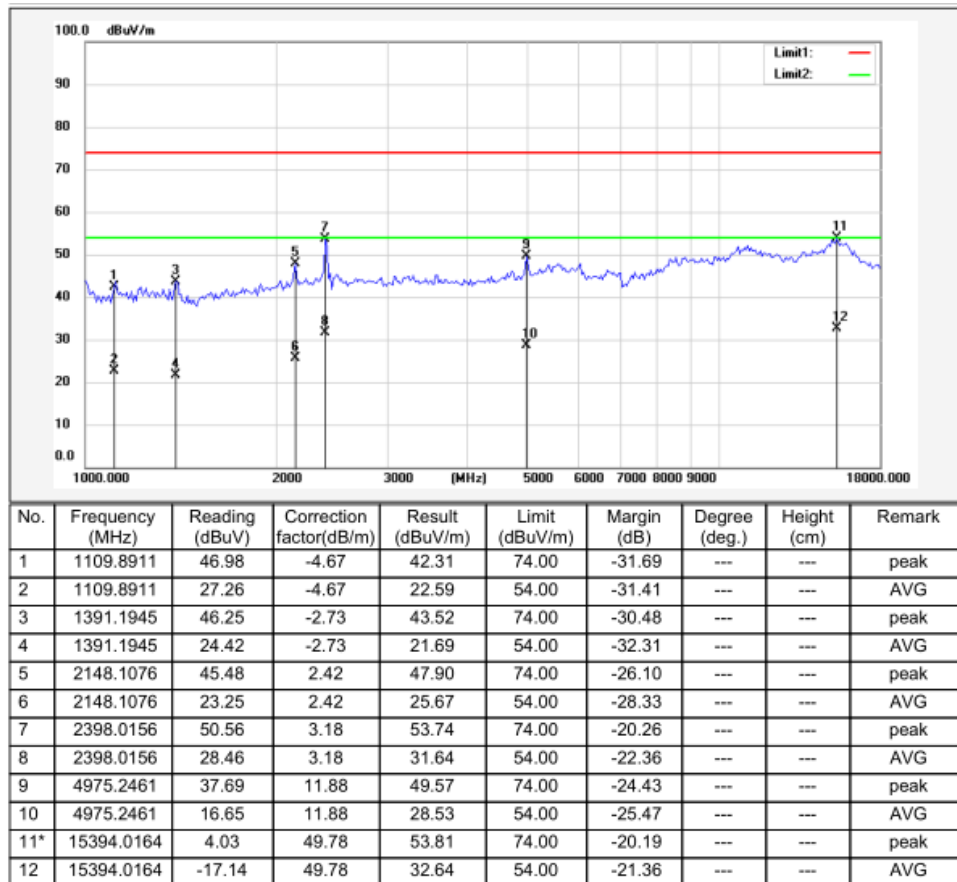
# 1GHz - 18GHz (Worst case)

Note: The highest waveform in the figure is BLE Fundamental.

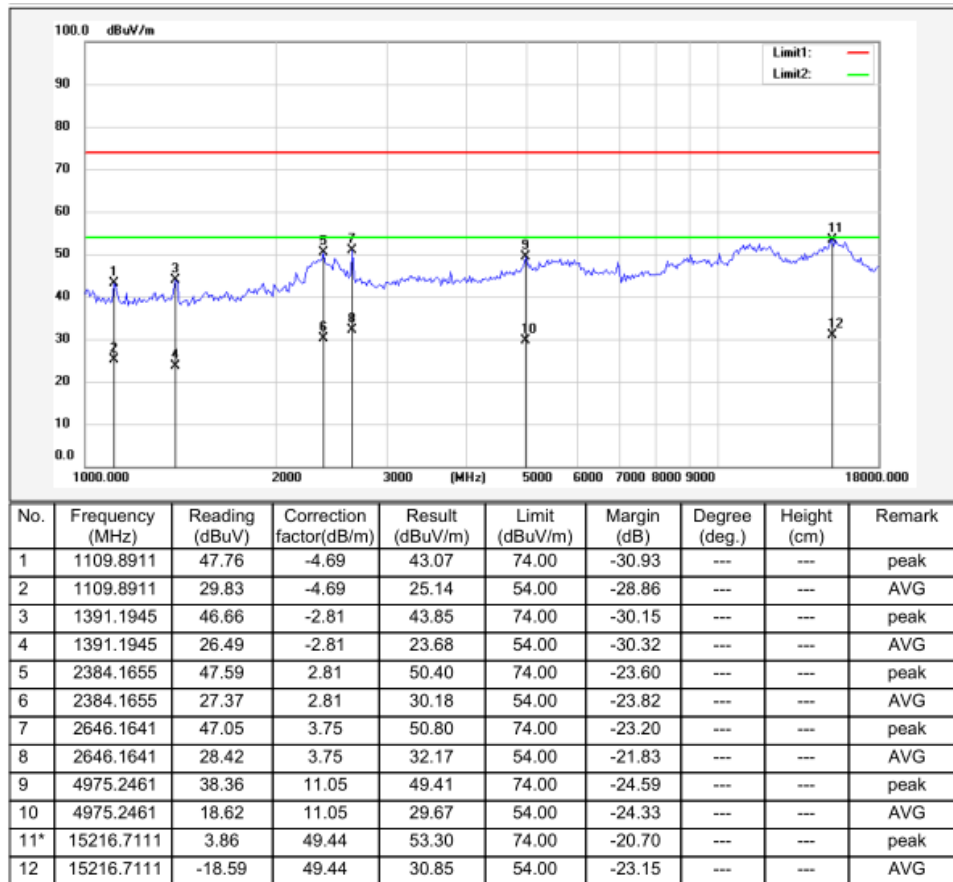
Low Channel Horizontal



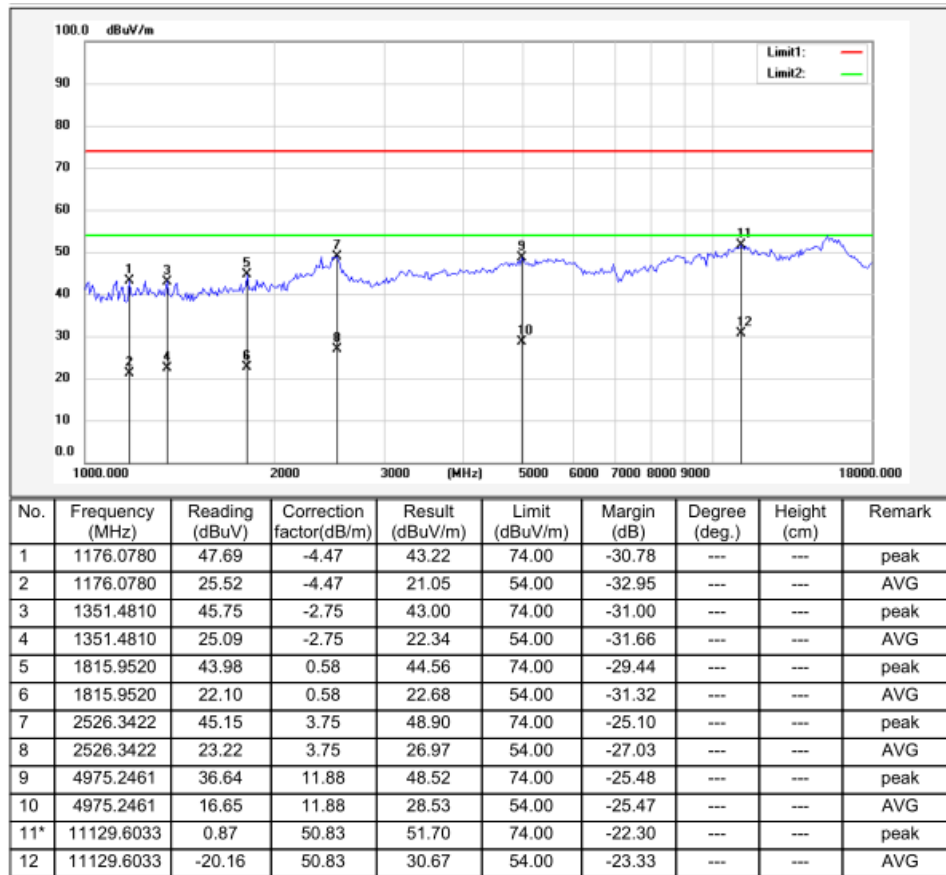
Low Channel Vertical



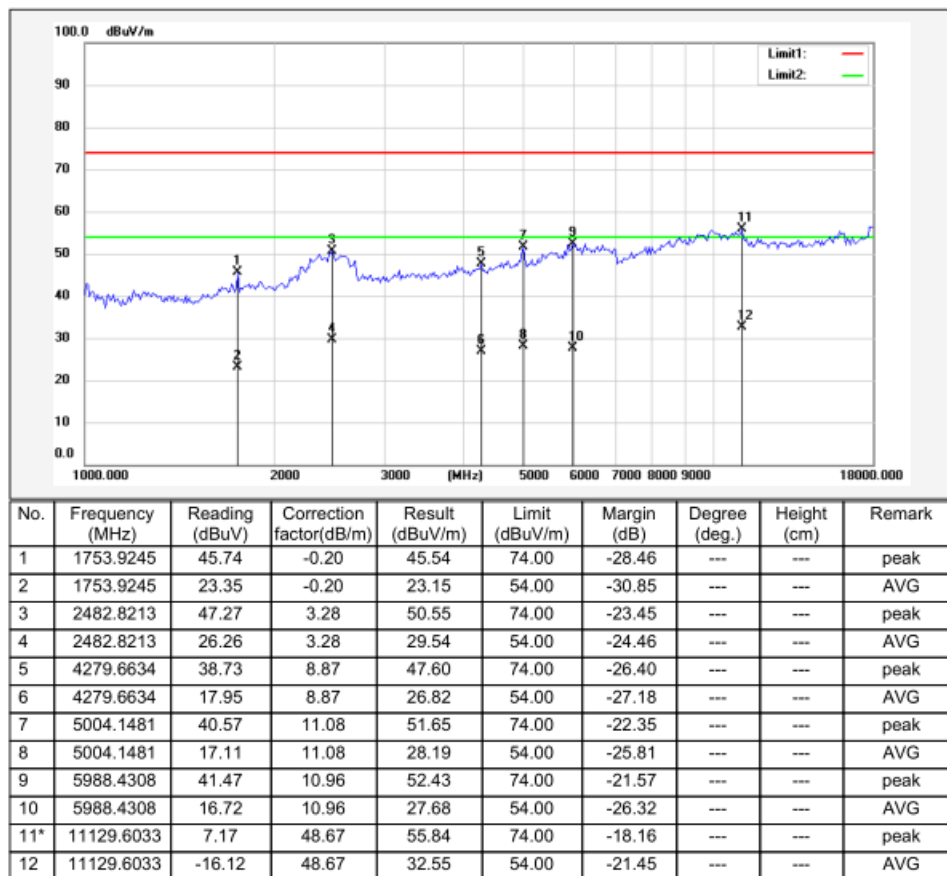
Middle Channel Horizontal



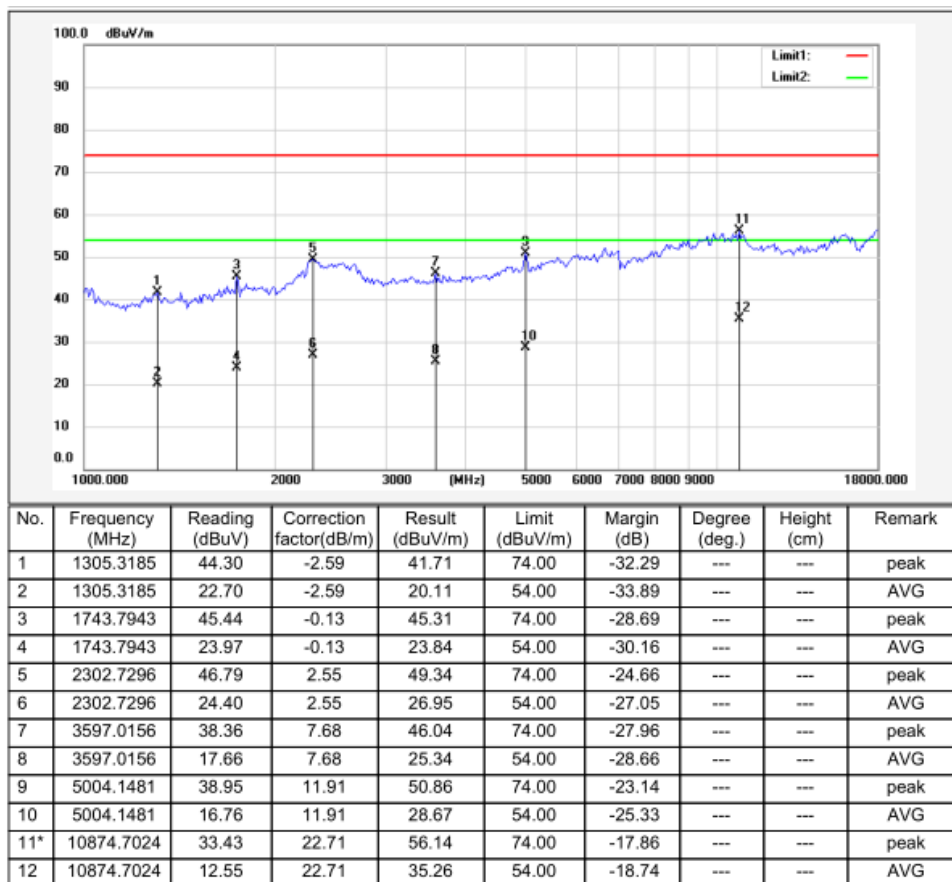
Middle Channel Vertical



# High Channel Horizontal

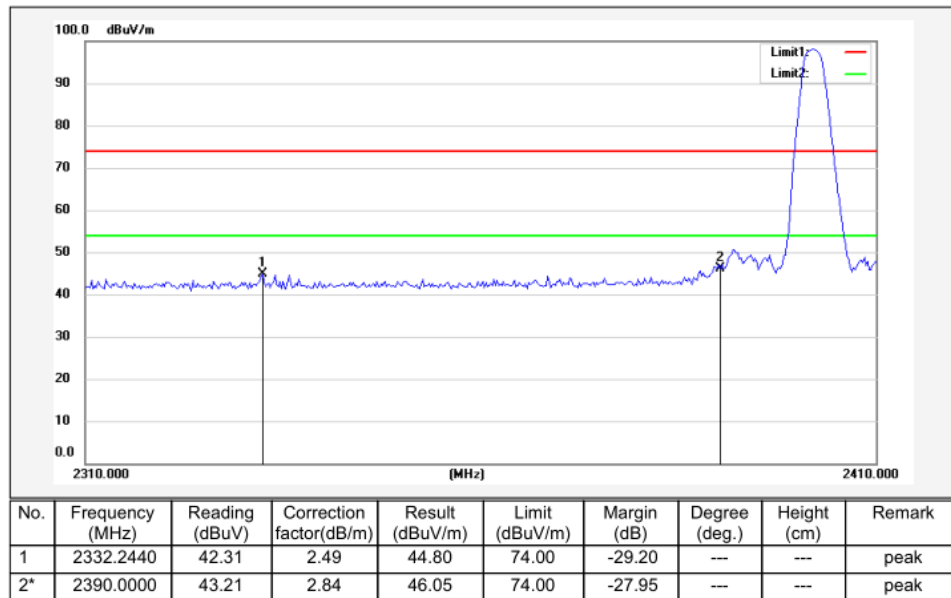


# High Channel Vertical

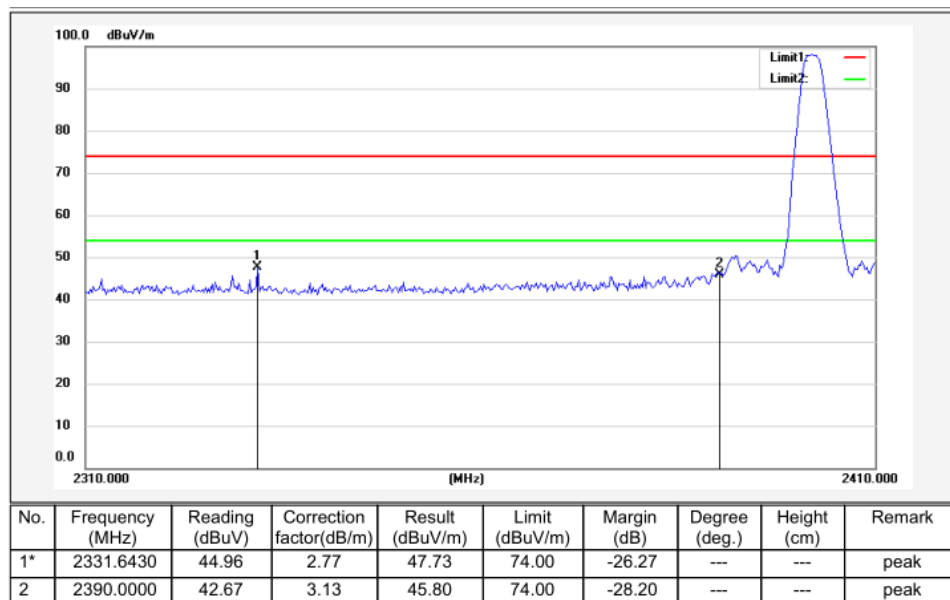


## Appendix B.5: Test Results of Radiated Emissions in Restricted Bands

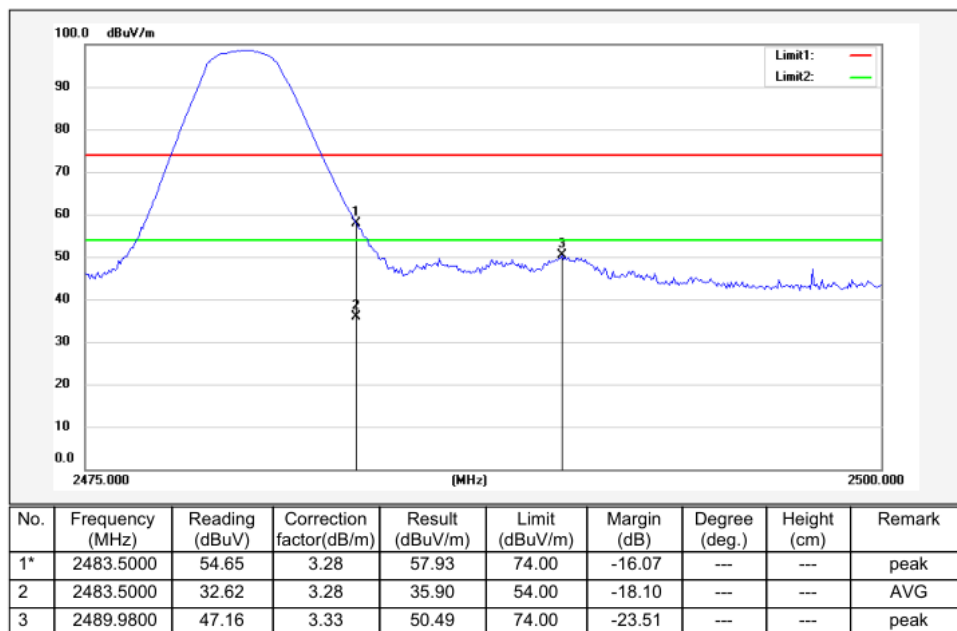
### Low Channel Horizontal



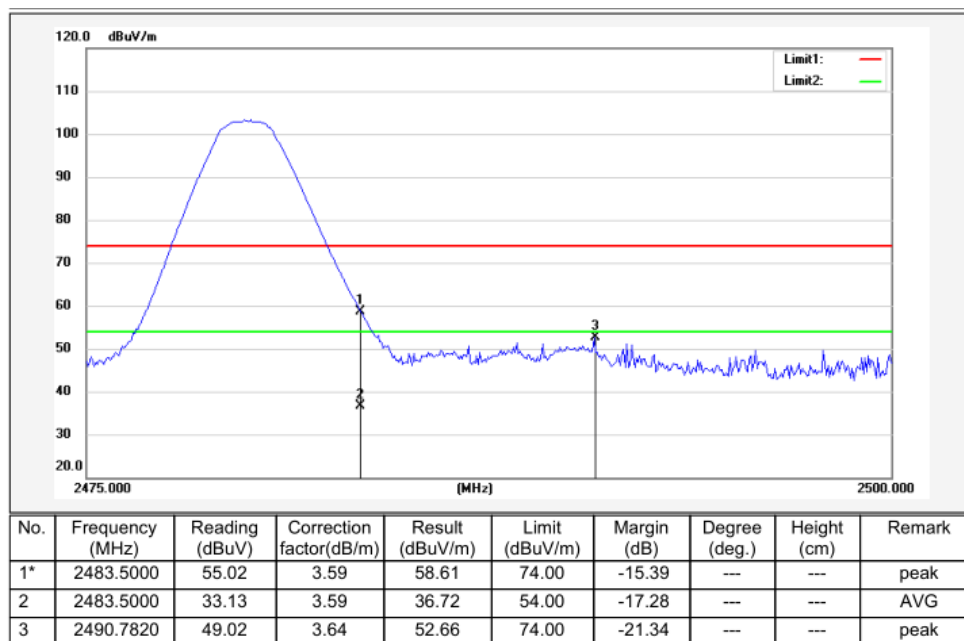
### Low Channel Vertical



### High Channel Horizontal

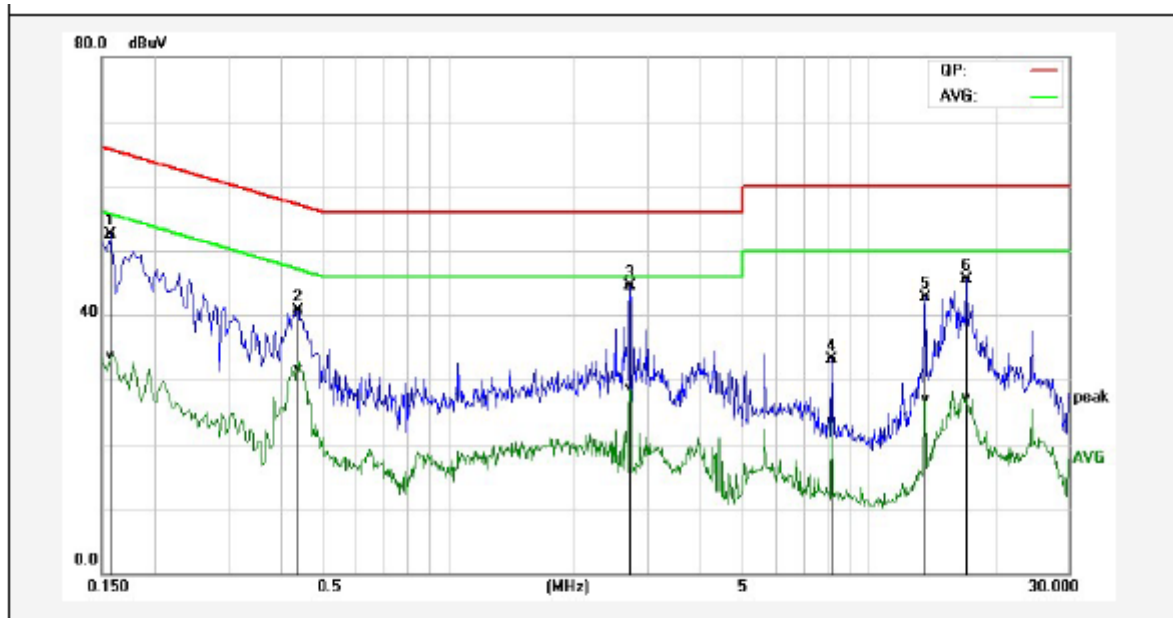


### High Channel Vertical



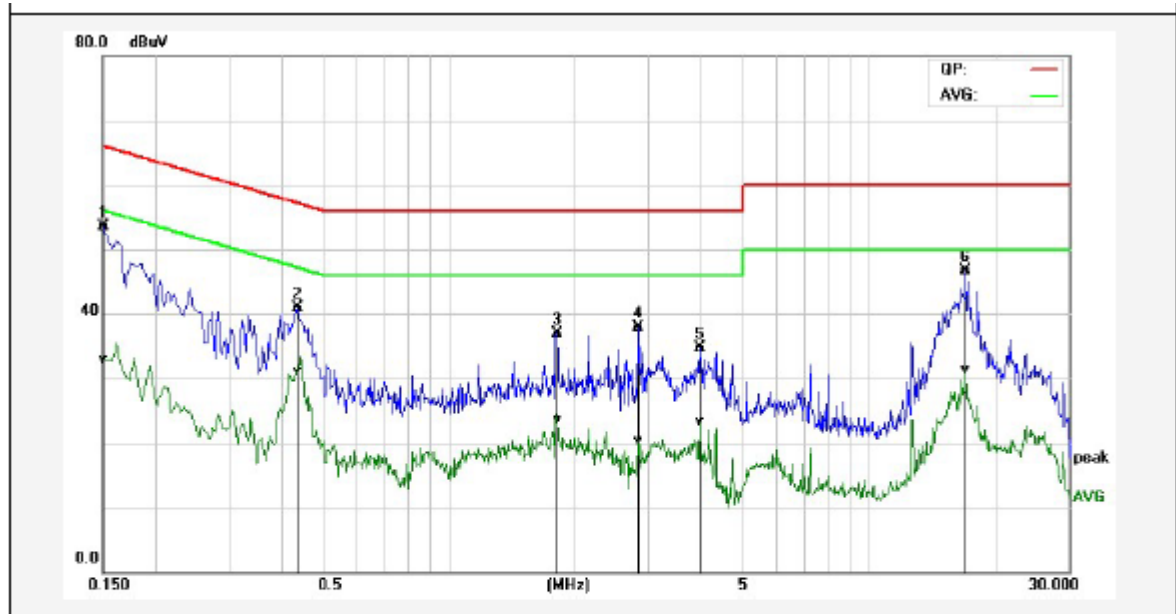
## Appendix B.6: Test Results of Conducted Emission on AC Mains

L



| No. | Frequency<br>(MHz) | QuasiPeak<br>reading<br>(dBuV) | Average<br>reading<br>(dBuV) | Correction<br>factor<br>(dB) | QuasiPeak<br>result<br>(dBuV) | Average<br>result<br>(dBuV) | QuasiPeak<br>limit<br>(dBuV) | Average<br>limit<br>(dBuV) | QuasiPeak<br>margin<br>(dB) | Average<br>margin<br>(dB) | Remark |
|-----|--------------------|--------------------------------|------------------------------|------------------------------|-------------------------------|-----------------------------|------------------------------|----------------------------|-----------------------------|---------------------------|--------|
| 1P  | 0.1580             | 42.62                          | 23.95                        | 9.85                         | 52.47                         | 33.80                       | 65.56                        | 55.57                      | -13.09                      | -21.77                    | Pass   |
| 2P  | 0.4380             | 31.18                          | 22.24                        | 9.53                         | 40.71                         | 31.77                       | 57.10                        | 47.10                      | -16.39                      | -15.33                    | Pass   |
| 3*  | 2.7260             | 34.88                          | 19.02                        | 9.60                         | 44.48                         | 28.62                       | 56.00                        | 46.00                      | -11.52                      | -17.38                    | Pass   |
| 4P  | 8.1860             | 23.31                          | 13.73                        | 9.71                         | 33.02                         | 23.44                       | 60.00                        | 50.00                      | -26.98                      | -26.56                    | Pass   |
| 5P  | 13.6340            | 32.73                          | 16.81                        | 10.00                        | 42.73                         | 26.81                       | 60.00                        | 50.00                      | -17.27                      | -23.19                    | Pass   |
| 6P  | 17.1299            | 35.48                          | 17.03                        | 10.04                        | 45.52                         | 27.07                       | 60.00                        | 50.00                      | -14.48                      | -22.93                    | Pass   |

N



| No. | Frequency<br>(MHz) | QuasiPeak<br>reading<br>(dBuV) | Average<br>reading<br>(dBuV) | Correction<br>factor<br>(dB) | QuasiPeak<br>result<br>(dBuV) | Average<br>result<br>(dBuV) | QuasiPeak<br>limit<br>(dBuV) | Average<br>limit<br>(dBuV) | QuasiPeak<br>margin<br>(dB) | Average<br>margin<br>(dB) | Remark |
|-----|--------------------|--------------------------------|------------------------------|------------------------------|-------------------------------|-----------------------------|------------------------------|----------------------------|-----------------------------|---------------------------|--------|
| 1*  | 0.1500             | 43.95                          | 23.25                        | 9.60                         | 53.55                         | 32.85                       | 65.99                        | 56.00                      | -12.44                      | -23.15                    | Pass   |
| 2P  | 0.4380             | 31.36                          | 21.61                        | 9.53                         | 40.89                         | 31.14                       | 57.10                        | 47.10                      | -16.21                      | -15.96                    | Pass   |
| 3P  | 1.8220             | 27.36                          | 13.90                        | 9.62                         | 36.98                         | 23.52                       | 56.00                        | 46.00                      | -19.02                      | -22.48                    | Pass   |
| 4P  | 2.8540             | 28.27                          | 10.72                        | 9.68                         | 37.95                         | 20.40                       | 56.00                        | 46.00                      | -18.05                      | -25.60                    | Pass   |
| 5P  | 3.9980             | 25.05                          | 13.50                        | 9.75                         | 34.80                         | 23.25                       | 56.00                        | 46.00                      | -21.20                      | -22.75                    | Pass   |
| 6P  | 17.0340            | 36.75                          | 21.23                        | 10.02                        | 46.77                         | 31.25                       | 60.00                        | 50.00                      | -13.23                      | -18.75                    | Pass   |