



**COMPLIANCE  
ENGINEERING**

EMC Product Safety Environmental Shielding

90 Indian Drive  
Keysborough VIC 3173 Australia  
Telephone: + 61 3 9763 3079  
Email: [info@compeng.com.au](mailto:info@compeng.com.au)  
Web: [www.compeng.com.au](http://www.compeng.com.au)  
ABN: 56 101 639 588

# EMC Compliance Test Report

CFR 47, Chapter 1, Subpart A,  
Part 15, Subpart B (Class A limits)

Report Number: CE3751

May 2023



NeoProducts Pty Ltd  
Betline SST Cash Kiosk  
Model No: 15302-GA00x

The results detailed in this test report relate only to the specific sample/s tested. It is the Manufacturer's responsibility to ensure that all production units are manufactured with equivalent EMC characteristics. This report is not to be reproduced except in full, without written approval from Compliance Engineering Pty



## COMPLIANCE CERTIFICATE

**Client Details:** Lex Dickson  
NeoProducts Pty Ltd  
62-66 Pacific Drive, Keysborough, VIC 3173  
Telephone: + +61 3 9701 1511  
Email: Lex.dickson@neoproductsgroup.com

**Device:** Betline SST Cash Kiosk

**Model No:** 15302-GA00x

**Serial No:** 15302-GA001-0002  
(FCC ID# 2A3TL-15302)

**Reference Standard:** CFR 47 - Telecommunication  
Chapter I - Federal Communications Commission  
Subchapter A - General  
Part 15 - Radio Frequency Devices  
Subpart B Unintentional Radiators

**Test Method:** ANSI C63.4-2014:  
American National Standard for Methods of Measurement of Radio-Noise  
Emissions from Low-Voltage Electrical and Electronic Equipment in the range  
of 9 kHz to 40 GHz.

**Test Date:** 17<sup>th</sup> – 18<sup>th</sup> April 2023

**Tests Performed by:** Mohamed Elmi  
Compliance Engineering Pty Ltd  
90 Indian Drive,  
Keysborough, Victoria, Australia 3173.  
Telephone: +61 3 9763 3079  
Email: [info@compeng.com.au](mailto:info@compeng.com.au)

The **Betline SST Cash Kiosk (15302-GA00x)** complies with the conducted and radiated RF emission requirements detailed in CFR 47, Chapter 1, Subpart A, Part 15, Subpart B (class A limits)

|                                                                                     |                                                                                       |                          |
|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--------------------------|
|  |    | 5 <sup>th</sup> May 2023 |
| <b>Prepared:</b> Mohamed Elmi<br>Test Engineer<br>Compliance Engineering Pty Ltd    | <b>Approved:</b> Andrew Burden<br>Technical Manager<br>Compliance Engineering Pty Ltd | <b>Date</b>              |

| Revision History |            |                 |            |
|------------------|------------|-----------------|------------|
| Revision         | Issue Date | Remarks         | Revised by |
| 0                | 05-05-2023 | Initial release | -          |

# EMC Compliance Test Report

## 1. INTRODUCTION

Electromagnetic compatibility (EMC) measurements were performed on the Betline SST Cash Kiosk (15302-GA00x), in accordance with the requirements detailed in CFR 47, Chapter 1, Subpart A, Part 15, Subpart B (Class A limits).

## 2. RESULTS SUMMARY

CFR 47, Chapter 1, Subpart A, Part 15, Subpart B

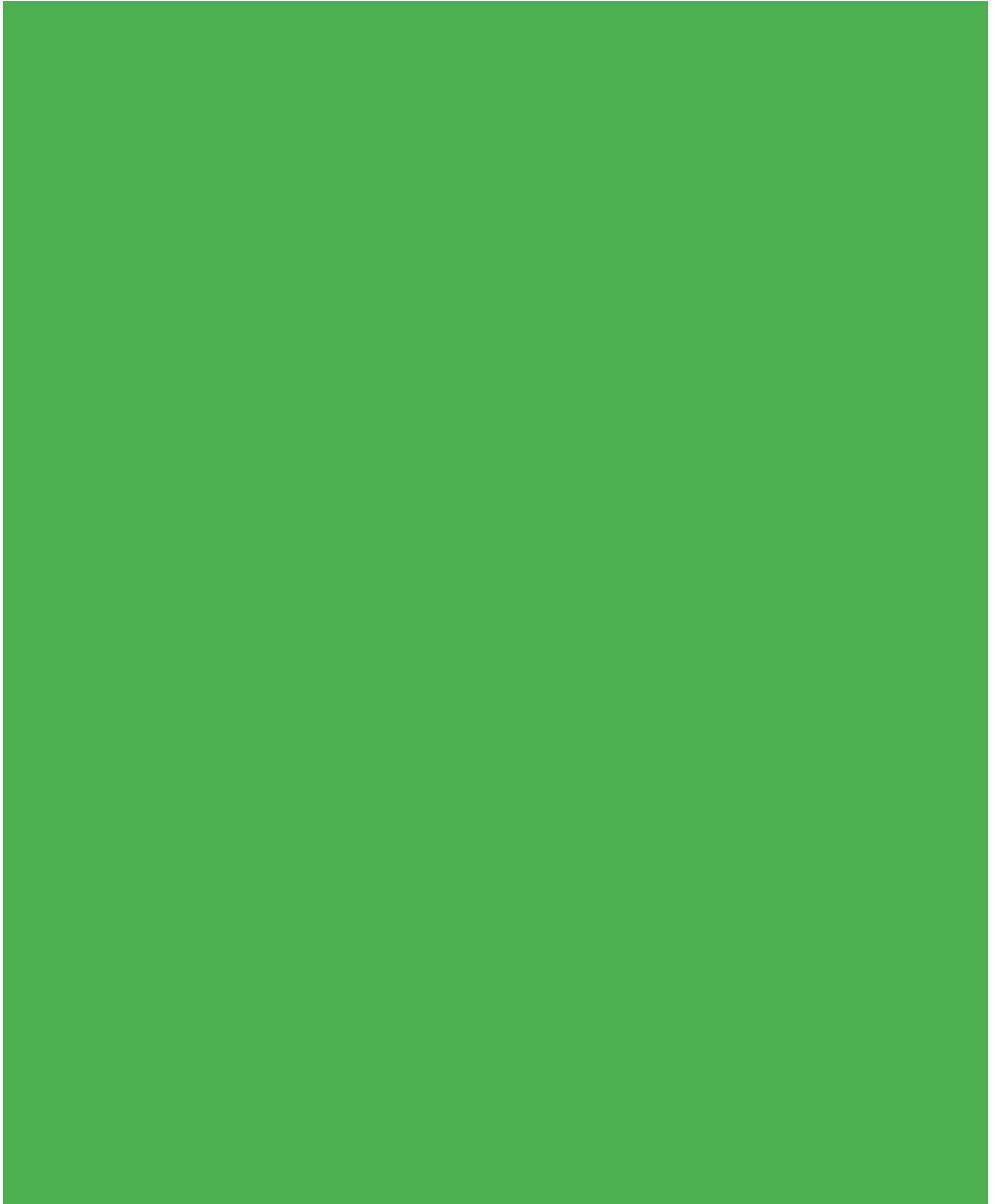
| FCC Rule | Test Description       | Class | Result | Remark                                      |
|----------|------------------------|-------|--------|---------------------------------------------|
| 15.107   | AC conducted emissions | A     | Pass   | 11.4 dB under the Class A limit at 1216 MHz |
| 15.109   | Radiated emissions     | A     | Pass   | 4.7 dB under the Class A limit at 143.6 MHz |

## 3. TEST SAMPLE

| Equipment Under Test ( <i>Information supplied by client</i> ): |                                                                                                                                                                                                     |
|-----------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product Name                                                    | Betline SST Cash Kiosk                                                                                                                                                                              |
| Model Number:                                                   | 15302-GA00x (where x is any number)                                                                                                                                                                 |
| Serial Number:                                                  | 15302-GA001-0002                                                                                                                                                                                    |
| Highest Operating Frequency                                     | 5.8GHz, Wi-Fi Frequency                                                                                                                                                                             |
| FCC ID:                                                         | 2A3TL-15302                                                                                                                                                                                         |
| NFC FCC ID#                                                     | V5MACR1252                                                                                                                                                                                          |
| Computer Wi-Fi FCC ID#                                          | PD9AX201D2                                                                                                                                                                                          |
| 4G Modem FCC ID#                                                | 2AJYU-8PYA007                                                                                                                                                                                       |
| Power Supply:                                                   | 120VAC, 50/60Hz                                                                                                                                                                                     |
| Interconnecting Cables (ports):                                 | IEC C13 cable for power and RJ45 Ethernet for Internet/Network connectivity.                                                                                                                        |
| Equipment type                                                  | The Betline Self Service Terminal & Cash Kiosk is a multifunction wagering terminal designed to provide people with the ability to place wagers at sporting facilities and receive cash redemption. |

The information provided on the EUT above was declared by the manufacturer. Please refer to the specifications/user manual for more details.







#### 4. MODIFICATIONS

No modifications were performed.

#### 5. STANDARD DEVIATIONS

No deviation from the standard.

#### 6. CONFIGURATION

The Betline SST Cash Kiosk (15302-GA00x) was powered by 120 VAC, 60 Hz power supply.

During the measurements, the printer was enabled to continuously print. Both cash dispenser and MSR Reader were forced to continuously cycle. and the Ethernet port exercised with a streaming 4K video played on YouTube during the entirety of the measurement.

For radiated emissions measurement, only two sides with the most electronic components had been tested.

#### 7. TEST FACILITY

All measurements were performed inside Compliance Engineering's, 3m Semi-Anechoic (iOATS) and/or shielded enclosures located at 90 Indian Drive, Keysborough, Victoria, Australia.

##### **A2LA (ISO 17025-2017) – Certificate No: 2829.01**

Compliance Engineering Pty Ltd, is accredited to ISO 17025-2017 by American Association for Laboratory Accreditation (A2LA) which is an ILAC member and has mutual recognition agreements with the National Voluntary Laboratory Accreditation Program (NVLAP)

All tests within this report have been conducted in accordance with Compliance Engineering's scope of A2LA accreditation.

The current full scope of accreditation can be found on the A2LA website: [www.a2la.org](http://www.a2la.org)

### FCC – Registration No: 982700

Compliance Engineering Pty Ltd, has been recognized and is listed as an FCC part 47 CFR 2.948 measurement facility to perform compliance testing on equipment under Parts 15 and 18. The Designation Number is AU0006 and the Test Firm Registration Number is 982700.

### Innovation, Science & Economic Development Canada (ISED) - Registration No: 27266

Compliance Engineering's 3m indoor semi-anechoic chamber (iOATS) has been accepted by Innovation, Science & Economic Development Canada (ISED) for performing radiated measurements in accordance with RSS-102, RSS-GEN, RSS-210, RSS-247, RSS-248 – ISED Canada Registration No: 27266

## 8. FIELD STRENGTH CALCULATION

All emission measurements are automatically calculated via the dedicated EMC software using the pre-stored calibration factors. The following equation simplifies the actual calculation performed;

$$\text{Corr.Ampl} = V_{\text{RAW}} + \text{AF} - \text{G} + \text{L}$$

Where:

**Corr.Ampl** = Corrected amplitude in dBμV/m (for radiated) & dBμV (for conducted)  
**V<sub>RAW</sub>** = Raw voltage receiver/analyser reading in dBμV  
**AF** = Antenna Factor in dB (stored as a data array of factor vs frequency)  
**G** = Preamplifier Factor in dB (stored as a data array of gain vs frequency)  
**L** = Cable Loss Factor in dB (stored as a data array of insertion loss vs frequency)

Limit:

The FCC limits are given in units of μV/m. The following formula is used to convert the units of μV/m to dBμV/m.

$$\text{Limit (dBμV/m)} = 20 \cdot \log(\mu\text{V/m})$$

Margin:

This is the margin of compliance below the FCC limit. The units are given in dB. A negative margin indicates the emission was below the limit. A positive margin indicates that the emission exceeds the limit.

Example Calculation:

A peak emission is observed at 100 MHz at 21.5 dBμV. An antenna factor for that frequency is 10 dB. The preamplifier gain factor is 30 dB and the cable loss at that same frequency 1.5 dB. Hence the overall Correction Amplitude is as follows;

$$\begin{array}{lcl} V_{\text{RAW}} + \text{AF} - \text{G} + \text{L} & : & \text{Corr.Amp} - \text{FCC Limit} = \text{Margin} \\ 31.5 + 10 - 20 + 1.5 & : & 23 \text{ dBμV/m} - 57.0 \text{ dBμV/m} = - 34 \text{ dB} \end{array}$$

## 9. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2.

| Measurement                                       | Frequency / Range   | Uncertainty |
|---------------------------------------------------|---------------------|-------------|
| Temperature (ANSI C63.4-2014)                     | 10°C to 40°C        | 0.5°C       |
| Humidity (ANSI C63.4-2014)                        | 5% to 90%           | 2%          |
| Conducted Emissions (using a 50Ω/50μH + 5μH LISN) | 0.09 MHz to 30 MHz  | ± 4.79      |
| Conducted Emissions (using a Voltage Probe)       | 0.15 MHz to 30 MHz  | ± 5.07      |
| Conducted Emissions (using a 50Ω/50μH LISN)       | 0.15 MHz to 30 MHz  | ± 4.35      |
| Radiated Emissions (Horizontal Polarisation)      | 30 MHz to 200 MHz   | ± 4.98      |
| Radiated Emissions (Vertical Polarisation)        | 30 MHz to 200 MHz   | ± 5.23      |
| Radiated Emissions (Horizontal Polarisation)      | 200 MHz to 1000 MHz | ± 5.24      |
| Radiated Emissions (Vertical Polarisation)        | 200 MHz to 1000 MHz | ± 5.92      |
| Radiated Emissions (STLP)                         | 1 GHz to 6 GHz      | ± 5.14      |
| Radiated Emissions (STLP)                         | 6 GHz to 18 GHz     | ± 6.11      |
| Radiated Emissions (SGH)                          | 18 GHz to 26 GHz    | ± 6.11      |
| Radiated Emissions (SGH)                          | 26 GHz to 40 GHz    | ± 6.11      |

These uncertainties represent an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

The reference uncertainty standard specifies that although the measurement uncertainty shall be documented within the test report, the actual determination of compliance shall be based on measurements without taking into account the measurement uncertainty.

## 10. CONDUCTED RF EMISSION MEASUREMENTS

### 10.1 REQUIREMENTS

Frequency Range: 0.15 MHz to 30 MHz  
 Limit: FCC Part 15B (Class A)

### 10.2 TEST EQUIPMENT

| Asset    | Equipment             | Model No   | Serial No     | Cal Due  |
|----------|-----------------------|------------|---------------|----------|
| 644      | EMI Receiver 7 GHz    | ESIB7      | 100338        | Jul 24   |
| 34       | LISN                  | 3816/2AS   | 9605-1047     | Dec 24   |
| 229      | High Pass Filter      | FEH0.15B   | 1247          | April 24 |
| 230      | Transient Limiter     | TL250-10B  | 383           | April 24 |
| 760      | iOATS (11m x 7m x 6m) | CE-iOATS   | 2021          | Oct 23   |
| TER-S004 | Measurement Software  | RadiMation | Rev: 2022.1.3 | -        |

### 10.3 ENVIRONMENTAL CONDITIONS

| Environment | Range          | Actual |
|-------------|----------------|--------|
| Temperature | 15.5°C to 24°C | 20.9°C |
| Humidity    | 15% to 60%     | 49%    |

## 10.4 PROCEDURE

In accordance with Compliance Engineering Test Procedure TP72.

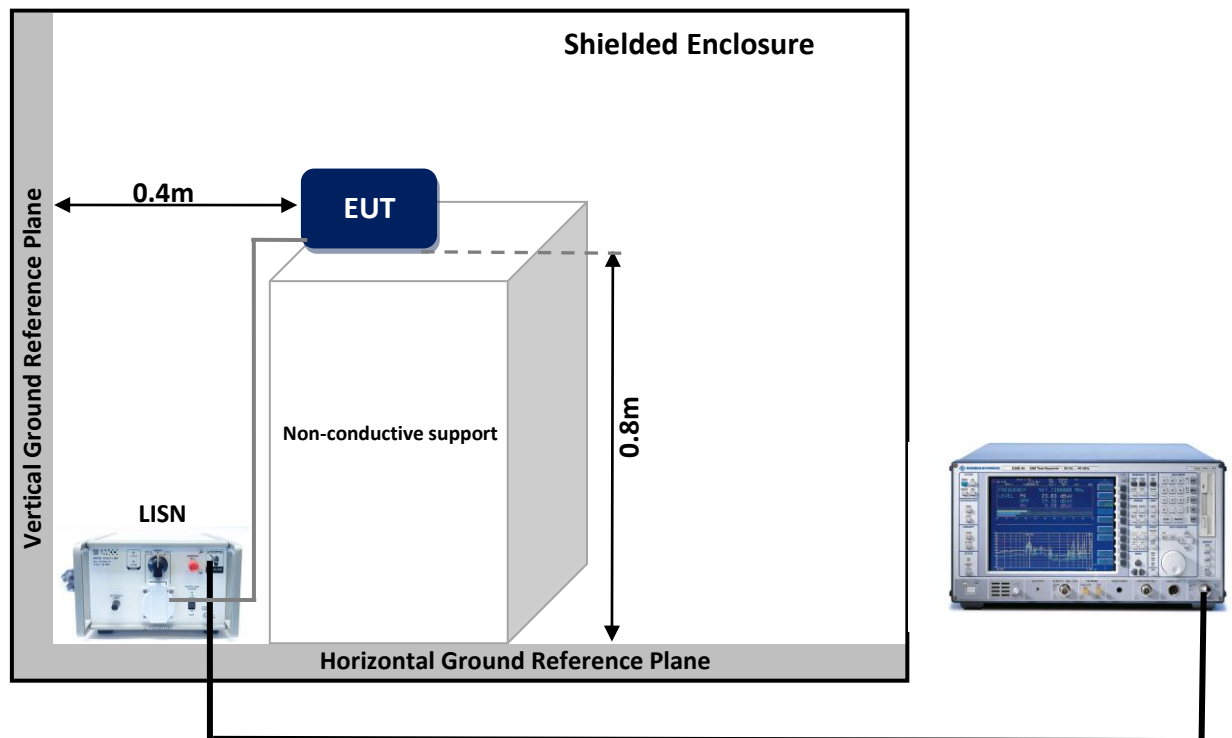
Mains terminal disturbance voltage emission measurements were performed inside a semi-anechoic enclosure.

The EUT was positioned on a non-conductive support 0.8 metres above the ground reference plane.

Measurements were performed on both the active and neutral lines in turn with the Line Impedance Stabilization Network (LISN) located 0.8 metres away from the test sample (When applicable, other accessories are connected to a separate LISN).

The receiver/spectrum analyser was configured to capture the highest peak emissions. Quasi-peak and or average detector measurements were performed at frequencies where peak emissions are close to or exceed the applicable limit.

Plots of the accumulated measurement data, including all transducer correction factors were then produced and stored on file.



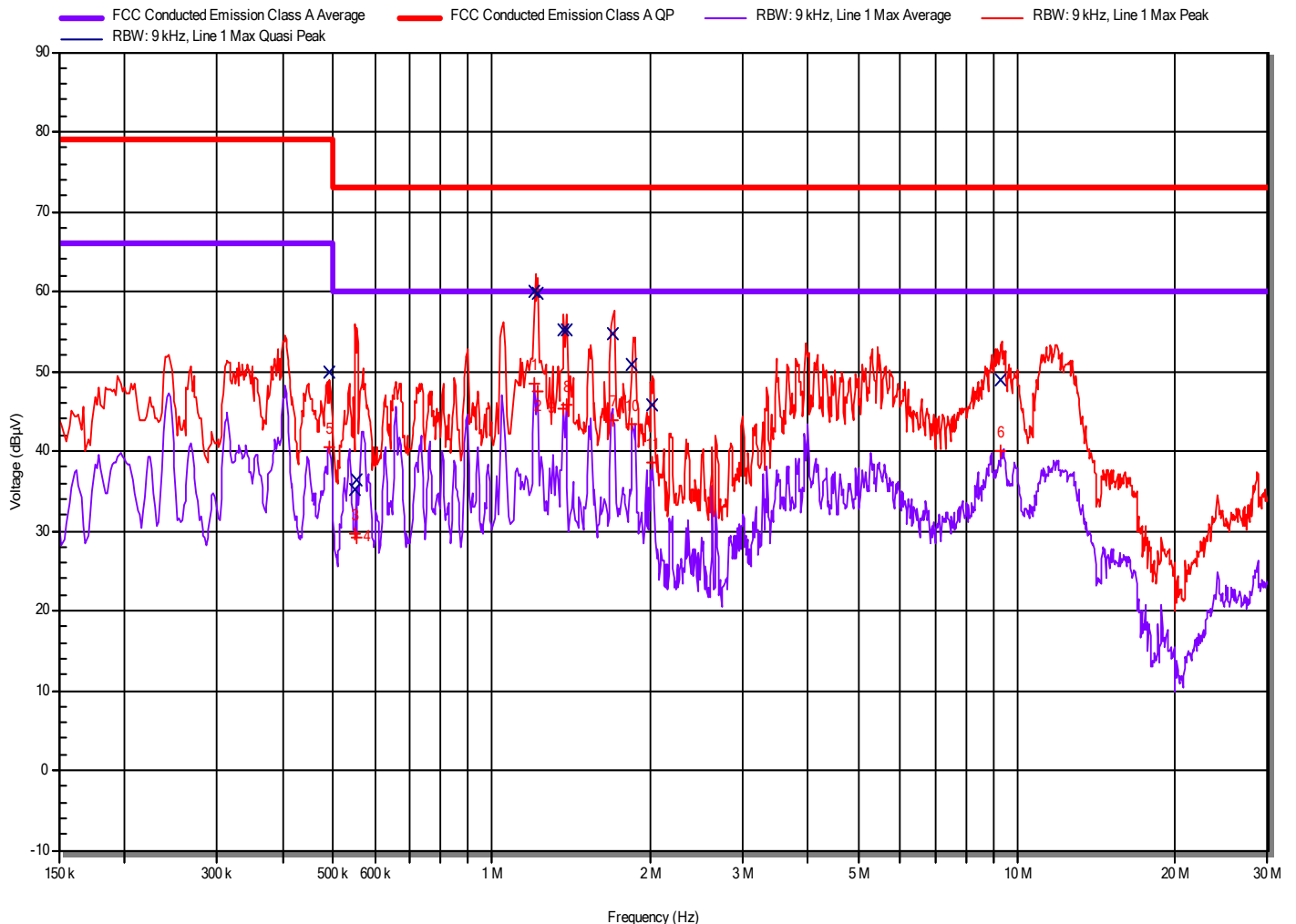
Mains Terminal Emissions measurement setup photos.



## 10.5 RESULTS

| Mains Terminal Emission Measurements – Active Line |                   |                         |                     |                |                      |                      |        |
|----------------------------------------------------|-------------------|-------------------------|---------------------|----------------|----------------------|----------------------|--------|
| Frequency (kHz)                                    | Quasi-peak (dBμV) | Quasi-peak Limit (dBμV) | Delta QP Limit (dB) | Average (dBμV) | Average Limit (dBμV) | Delta AVG Limit (dB) | Result |
| 553                                                | 36.4              | 73                      | -36.6               | 29.2           | 60                   | -30.8                | Pass   |
| 550                                                | 35.1              | 73                      | -37.9               | 29.6           | 60                   | -30.4                | Pass   |
| 2026                                               | 45.8              | 73                      | -27.2               | 38.5           | 60                   | -21.5                | Pass   |
| 9329                                               | 48.8              | 73                      | -24.2               | 39.9           | 60                   | -20.1                | Pass   |
| 490                                                | 49.9              | 79                      | -29.1               | 40.6           | 66                   | -25.4                | Pass   |
| 1850                                               | 50.9              | 73                      | -22.1               | 43.3           | 60                   | -16.7                | Pass   |
| 1705                                               | 54.8              | 73                      | -18.2               | 43.8           | 60                   | -16.2                | Pass   |
| 1369                                               | 55.2              | 73                      | -17.8               | 45.3           | 60                   | -14.7                | Pass   |
| 1385                                               | 55.3              | 73                      | -17.7               | 45.9           | 60                   | -14.1                | Pass   |
| 1224                                               | 59.8              | 73                      | -13.2               | 47.4           | 60                   | -12.6                | Pass   |
| 1208                                               | 60                | 73                      | -13.0               | 48.3           | 60                   | -11.7                | Pass   |

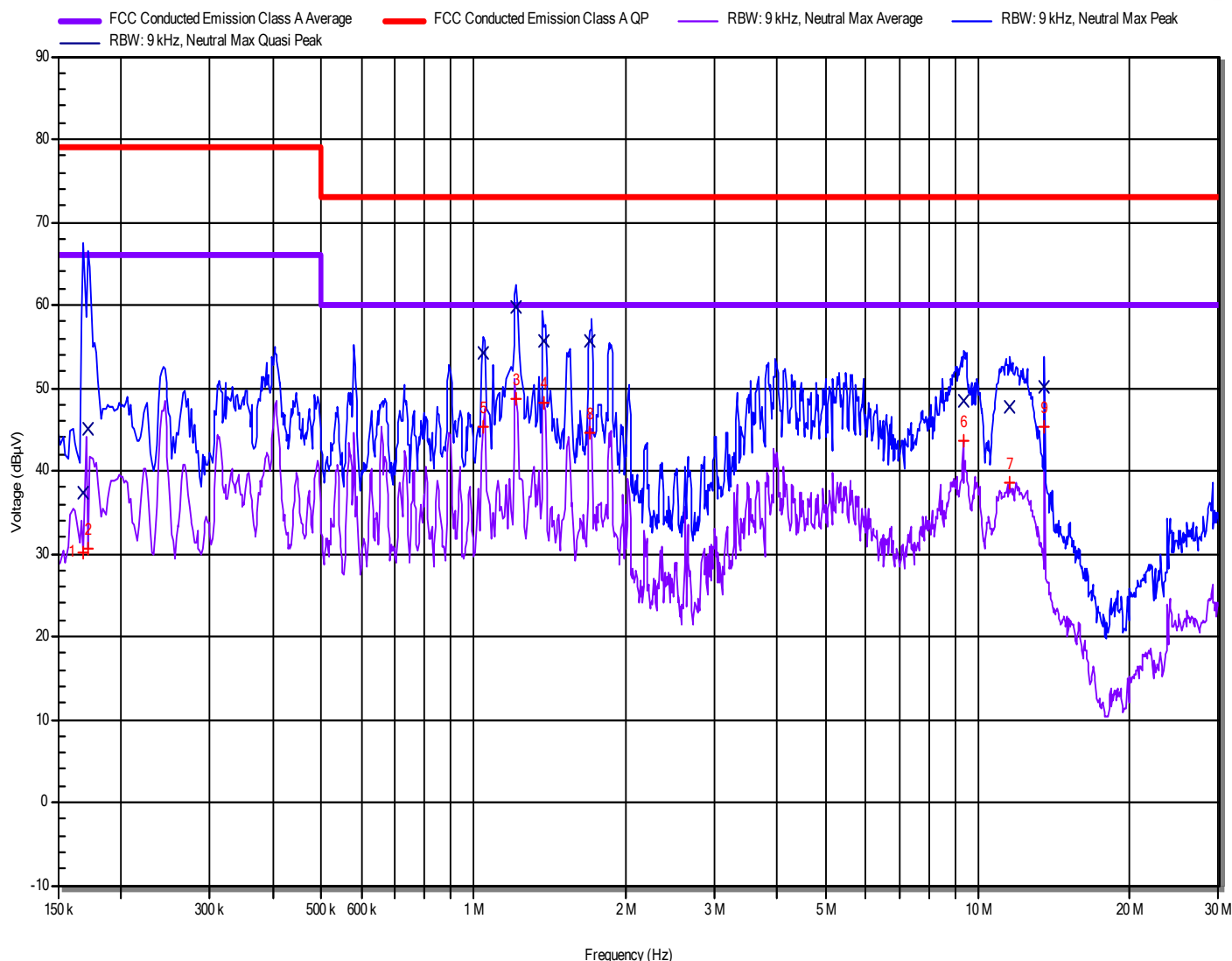
RadiMation



### Mains Terminal Emission Measurements – Neutral Line

| Frequency (kHz) | Quasi-peak (dBμV) | Quasi-peak Limit (dBμV) | Delta QP Limit (dB) | Average (dBμV) | Average Limit (dBμV) | Delta AVG Limit (dB) | Result |
|-----------------|-------------------|-------------------------|---------------------|----------------|----------------------|----------------------|--------|
| 168.7           | 37.5              | 79                      | -41.5               | 30             | 66                   | -36.0                | Pass   |
| 172.1           | 45                | 79                      | -34.0               | 30.6           | 66                   | -35.4                | Pass   |
| 11523           | 47.7              | 73                      | -25.3               | 38.6           | 60                   | -21.4                | Pass   |
| 9339            | 48.4              | 73                      | -24.6               | 43.7           | 60                   | -16.3                | Pass   |
| 1705            | 55.6              | 73                      | -17.4               | 44.5           | 60                   | -15.5                | Pass   |
| 1048            | 54.1              | 73                      | -18.9               | 45.3           | 60                   | -14.7                | Pass   |
| 13557           | 50.1              | 73                      | -22.9               | 45.4           | 60                   | -14.6                | Pass   |
| 1377            | 55.7              | 73                      | -17.3               | 48.1           | 60                   | -11.9                | Pass   |
| 1216            | 59.8              | 73                      | -13.2               | 48.6           | 60                   | -11.4                | Pass   |

**RadiMation**



## 10.6 ASSESSMENT

The Betline SST Cash Kiosk (15302-GA00x) complied with the CFR 47, Chapter 1, Subpart A, Part 15, Subpart B (Class A limits) conducted RF emission requirements.

## 11. RADIATED RF EMISSION MEASUREMENTS

### 11.1 REQUIREMENTS

Frequency Range: 30 MHz to the 5<sup>th</sup> harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower.

Measurement Distance: 3 metres

Limit: FCC Part 15B (Class A)

### 11.2 TEST EQUIPMENT

| Asset    | Equipment             | Model No           | Serial No      | Cal Due |
|----------|-----------------------|--------------------|----------------|---------|
| 644      | EMI Receiver          | ESIB7              | 100338         | Jul 24  |
| 091      | Spectrum Analyzer     | HP8593EM           | 3710A00205     | Jul 23  |
| 796      | Spectrum Analyser     | 8564EC             | 4439A00960     | Dec 23  |
| 731      | Biconical Antenna     | VHBB 9124+BBA 9106 | 9124-1461      | Aug 24  |
| 733      | Log Periodic Antenna  | USLP 9143 B        | USLP 9143B 136 | Aug 24  |
| 52       | Preamplifier          | UTC10-212-1        | 9232SN02       | Apr 24  |
| 278      | Preamplifier          | LA1018N4009        | J1012090727001 | Mar 24  |
| 853      | Preamplifier          | ALN3325-41-4320    | 44398          | Mar 24  |
| 779      | Preamplifier          | ALN2225-38-4025    | 41502          | Mar 24  |
| 734      | Stacked Log Periodic  | STLP 9148          | 176            | Aug 24  |
| 364      | Horn Antenna          | JXTXLB-42-20-C-SF  | J2021090616013 | NR      |
| 799      | 26.5-40GHz Antenna    | LB-28-20-C-KF      | 2020056001026  | NR      |
| 760      | iOATS (11m x 7m x 6m) | CE-iOATS           | 2021           | Oct 23  |
| TER-S004 | Measurement Software  | Radimation         | Rev: 2022.1.3  | -       |

### 11.3 ENVIRONMENTAL CONDITIONS

| Environment | Range          | Actual |
|-------------|----------------|--------|
| Temperature | 15.5°C to 24°C | 21.3°C |
| Humidity    | 15% to 60%     | 46%    |

### 11.4 PROCEDURE

In accordance with Compliance Engineering Test Procedure TP72.

Measurements were performed inside a semi-anechoic chamber at a distance of 3 m from the EUT. The EUT was supported 0.8 metres above the ground reference plane on a large polystyrene block, which in turn rested on top of a turntable.

The EUT was rotated 360° and the antenna height varied between 1 m and 4 m. The measuring antenna polarisation was rotated and measurements performed for horizontal and vertical antenna polarisations.

The receiver/spectrum analyser was configured to capture the highest peak emissions. Quasi-peak and or average detector measurements were performed at frequencies where peak emissions are close to or exceed the applicable limit.

Plots of the accumulated measurement data, including all transducer correction factors were produced and stored to file.

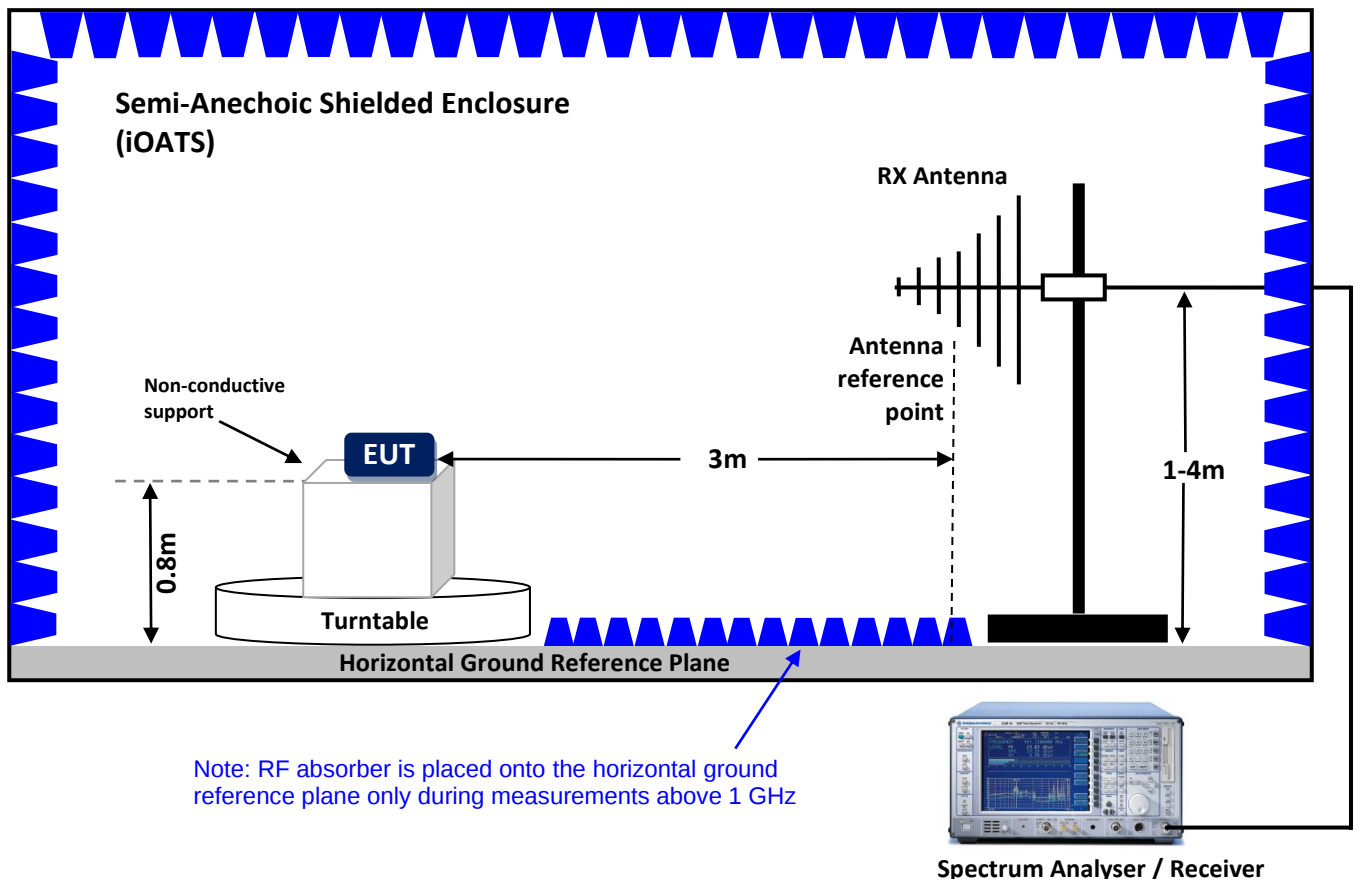
### Measurements below 1 GHz:

RWB = 120 kHz, VBW = 3 x RBW

### Measurements above 1 GHz:

RF absorber is placed on the ground reference plane between the EUT and the measuring antenna and its location size should allow the test site area comply with the CISPR 16-1-4 requirements.

RWB = 1 MHz (minimum), VBW = 3 x RBW



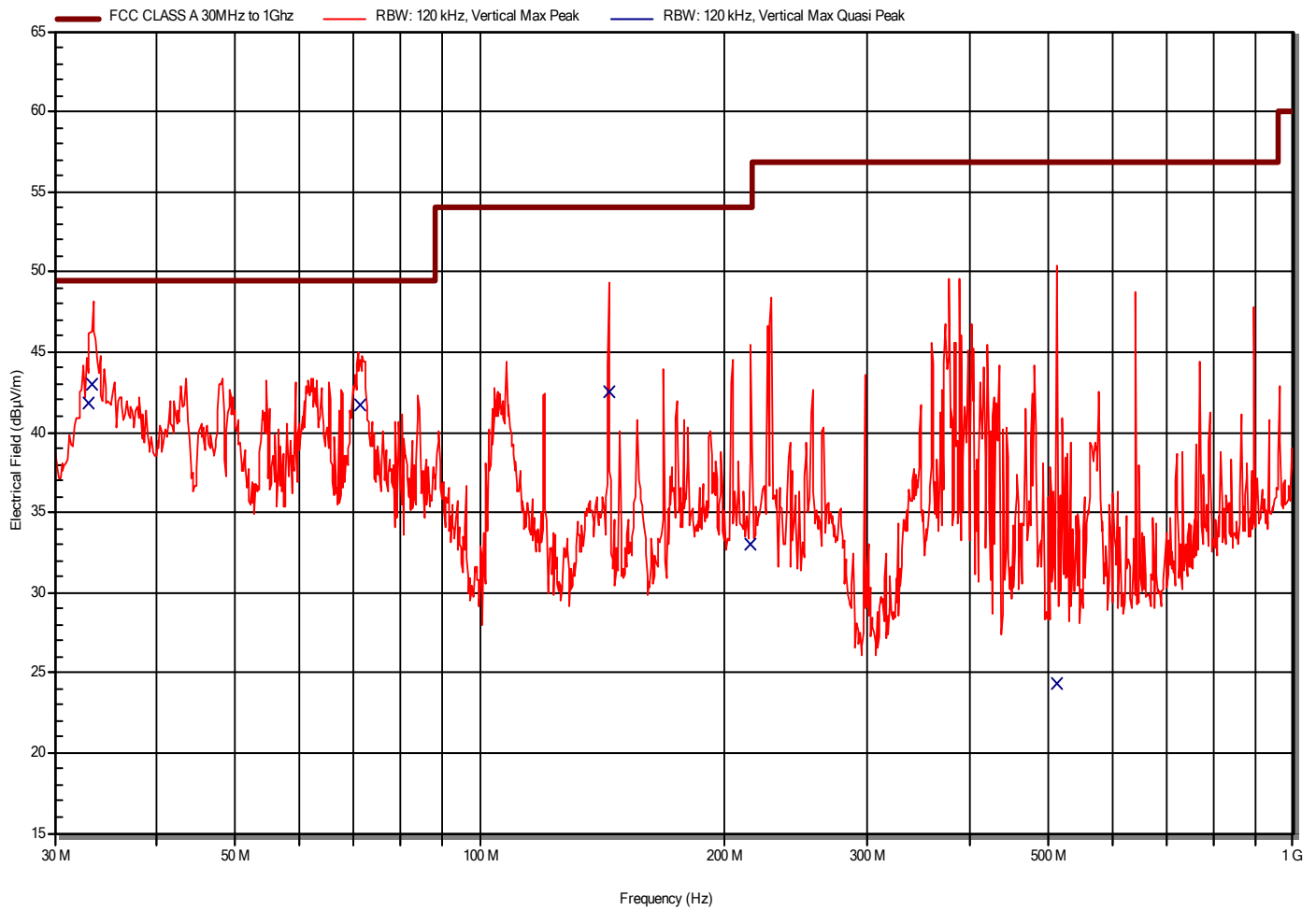
Radiated RF emissions measurement setup photos.



## 11.5 RESULTS

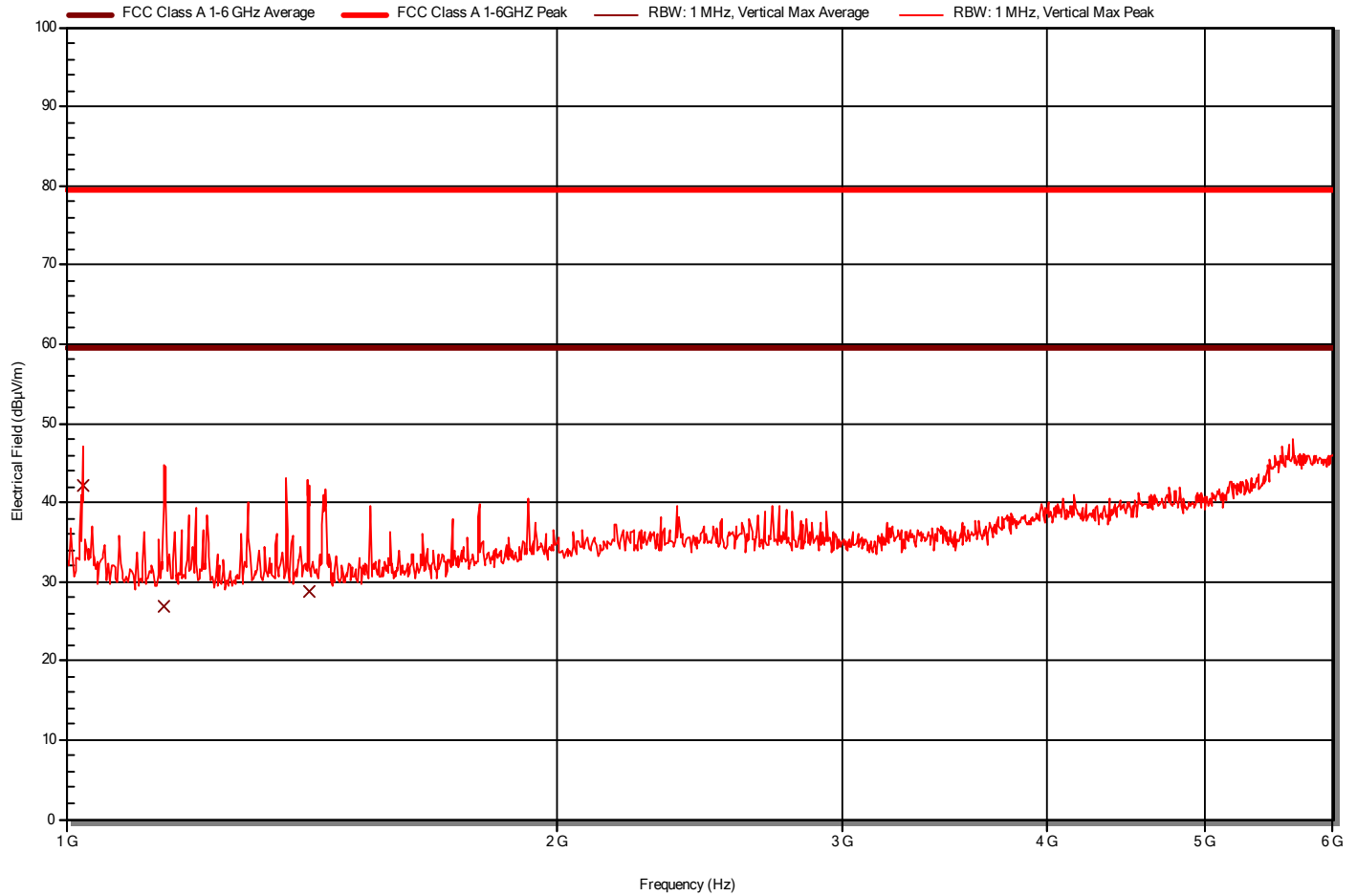
| Radiated RF Emission Measurements – Vertical Polarisation – Frontside- 30 MHz to 1GHz |                     |                           |                  |        |
|---------------------------------------------------------------------------------------|---------------------|---------------------------|------------------|--------|
| Frequency (MHz)                                                                       | Quasi-Peak (dBμV/m) | Quasi-Peak Limit (dBμV/m) | Delta Limit (dB) | Result |
| 33.08                                                                                 | 41.8                | 49.5                      | -7.7             | Pass   |
| 33.36                                                                                 | 43                  | 49.5                      | -6.5             | Pass   |
| 71.38                                                                                 | 41.7                | 49.5                      | -7.8             | Pass   |
| 144.08                                                                                | 42.5                | 54                        | -11.5            | Pass   |
| 215.23                                                                                | 33                  | 54                        | -21.0            | Pass   |
| 512.62                                                                                | 24.3                | 56.3                      | -32.6            | Pass   |

RadiMation



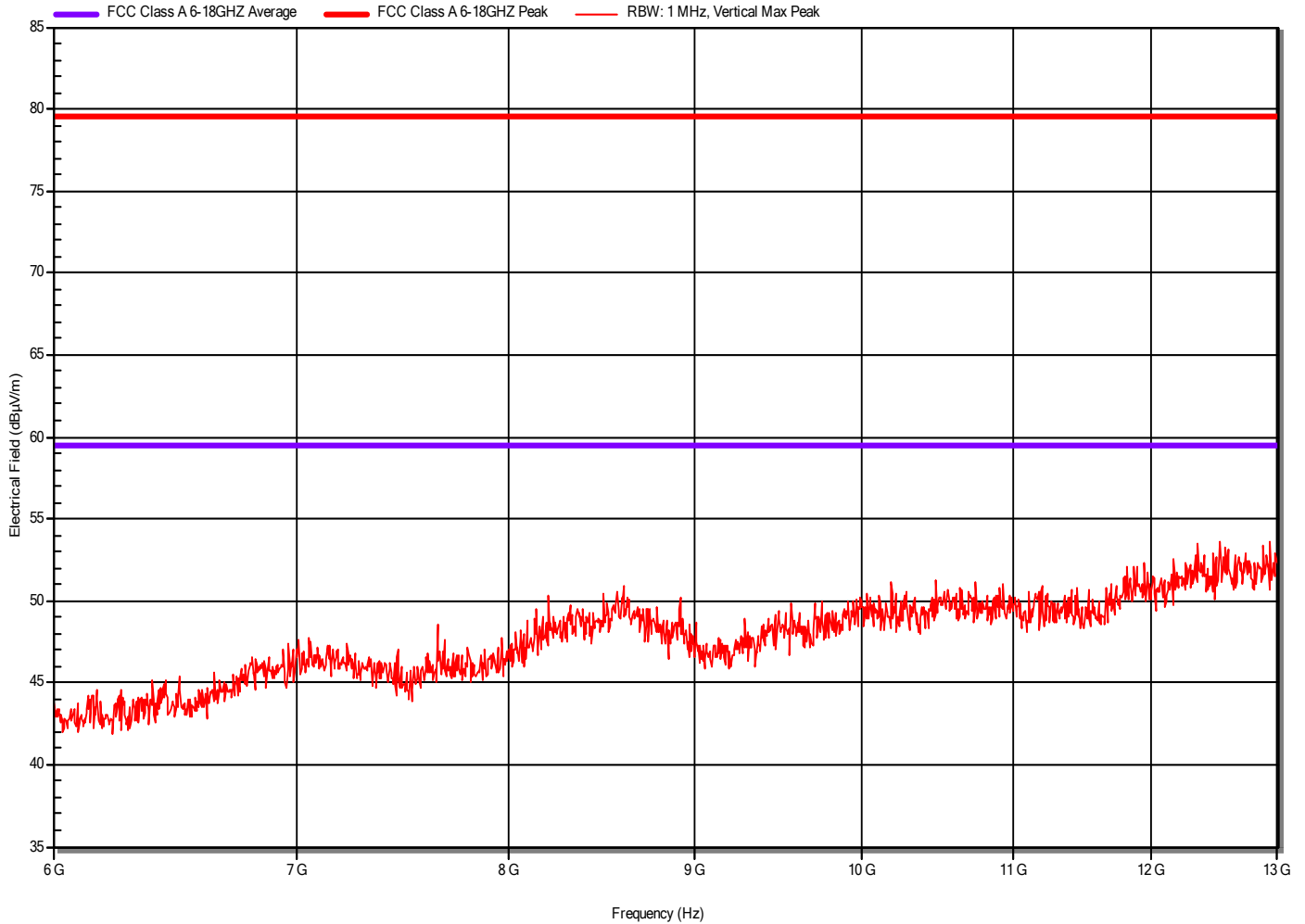
| Radiated RF Emission Measurements – Vertical Polarisation – Frontside - 1 to 6 GHz |               |                     |                  |               |                |                |        |
|------------------------------------------------------------------------------------|---------------|---------------------|------------------|---------------|----------------|----------------|--------|
| Frequency (GHz)                                                                    | Peak (dBµV/m) | Peak Limit (dBµV/m) | Average (dBµV/m) | Average Limit | Pk Delta Limit | AV Delta Limit | Result |
| Peak emissions are more than 10dB below the limits                                 |               |                     |                  |               |                |                | Pass   |

RadiMation



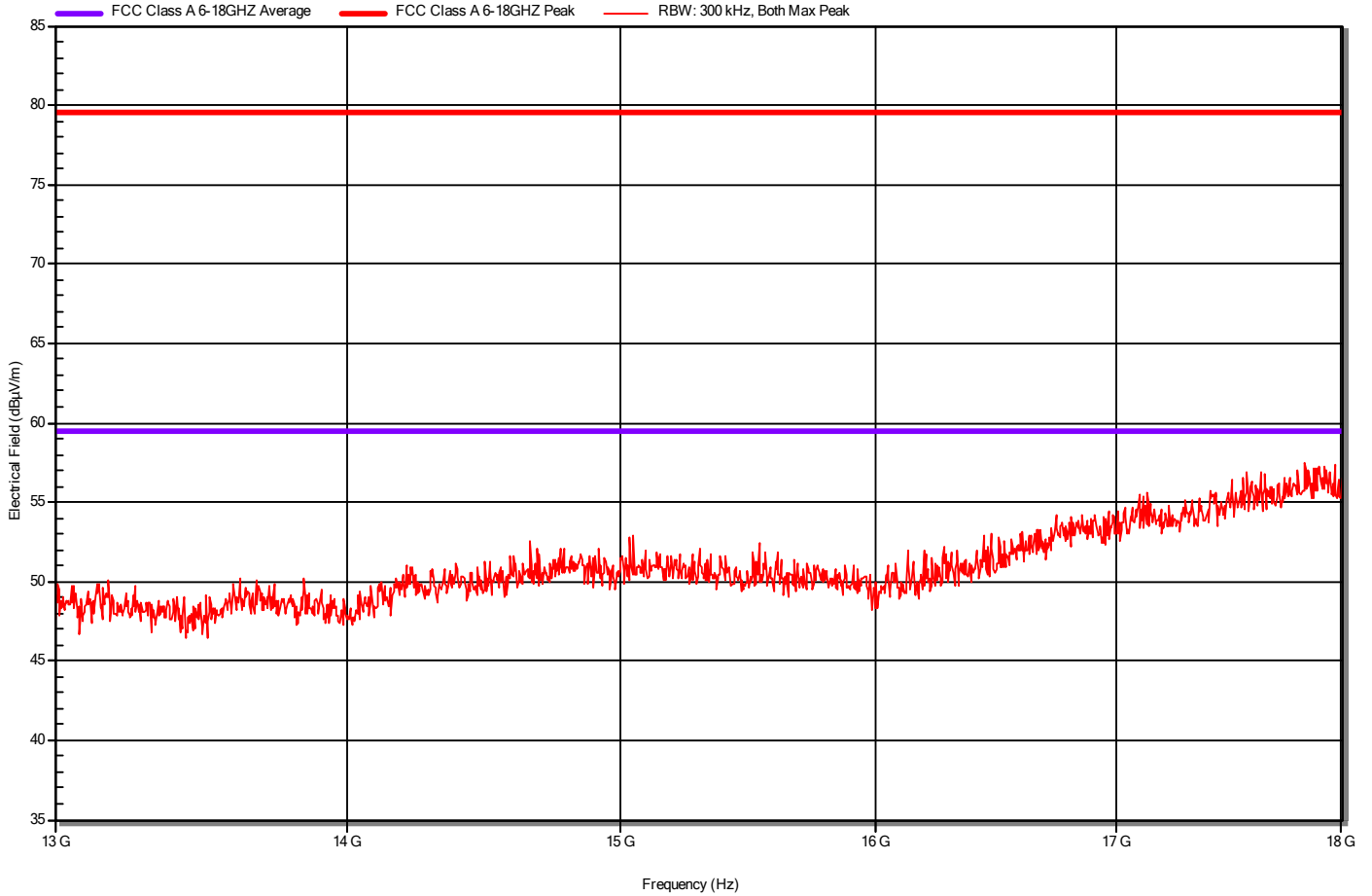
| Radiated RF Emission Measurements – Vertical Polarisation - Frontside - 6 to 13 GHz |               |                     |                  |                        |                     |                     |        |
|-------------------------------------------------------------------------------------|---------------|---------------------|------------------|------------------------|---------------------|---------------------|--------|
| Frequency (GHz)                                                                     | Peak (dBµV/m) | Peak Limit (dBµV/m) | Average (dBµV/m) | Average Limit (dBµV/m) | Pk Delta Limit (dB) | AV Delta Limit (dB) | Result |
| Peak emissions are more than 10dB below the limits                                  |               |                     |                  |                        |                     |                     | Pass   |

RadiMation



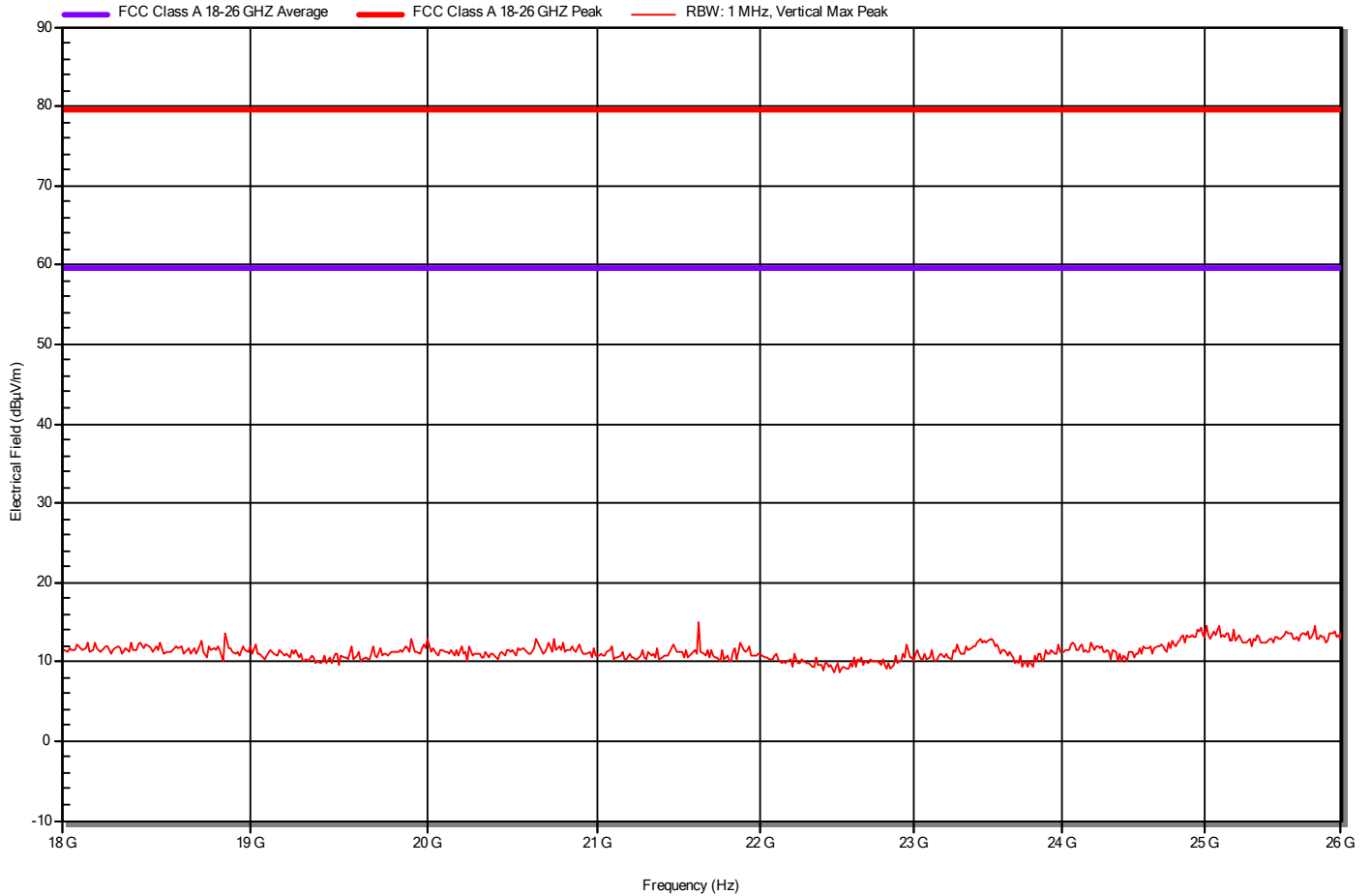
| Radiated RF Emission Measurements – Vertical Polarisation - Frontside - 13 to 18 GHz |               |                     |                  |               |                |                |        |
|--------------------------------------------------------------------------------------|---------------|---------------------|------------------|---------------|----------------|----------------|--------|
| Frequency (GHz)                                                                      | Peak (dBµV/m) | Peak Limit (dBµV/m) | Average (dBµV/m) | Average Limit | Pk Delta Limit | AV Delta Limit | Result |
| Peak emissions are more than 10dB below the limits                                   |               |                     |                  |               |                |                | Pass   |

RadiMation



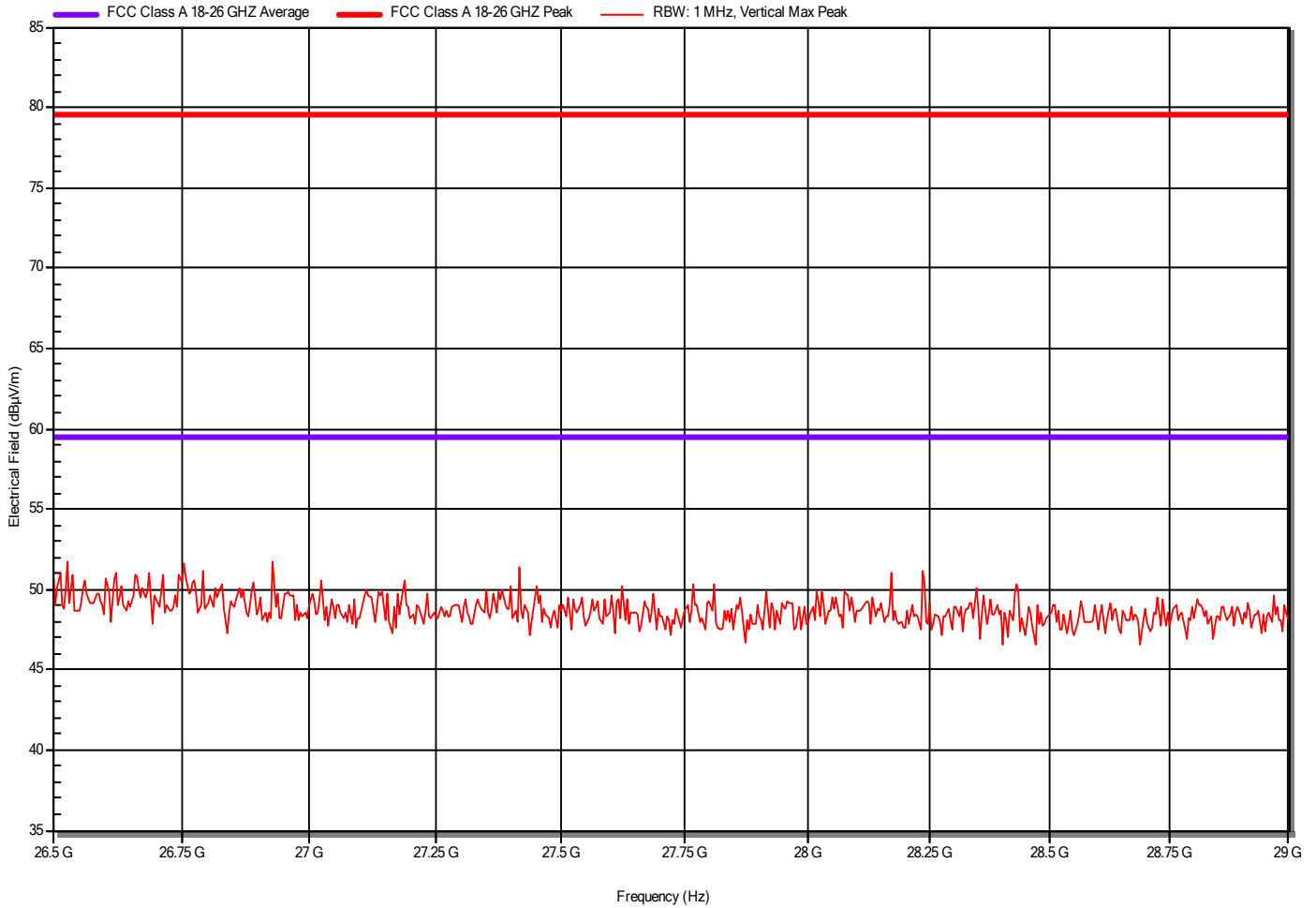
| Radiated RF Emission Measurements – Vertical Polarisation - Frontside - 18 to 26 GHz |               |                     |                  |                        |                     |                     |        |
|--------------------------------------------------------------------------------------|---------------|---------------------|------------------|------------------------|---------------------|---------------------|--------|
| Frequency (GHz)                                                                      | Peak (dBµV/m) | Peak Limit (dBµV/m) | Average (dBµV/m) | Average Limit (dBµV/m) | Pk Delta Limit (dB) | AV Delta Limit (dB) | Result |
| Peak emissions are more than 10dB below the limits                                   |               |                     |                  |                        |                     |                     | Pass   |

RadiMation



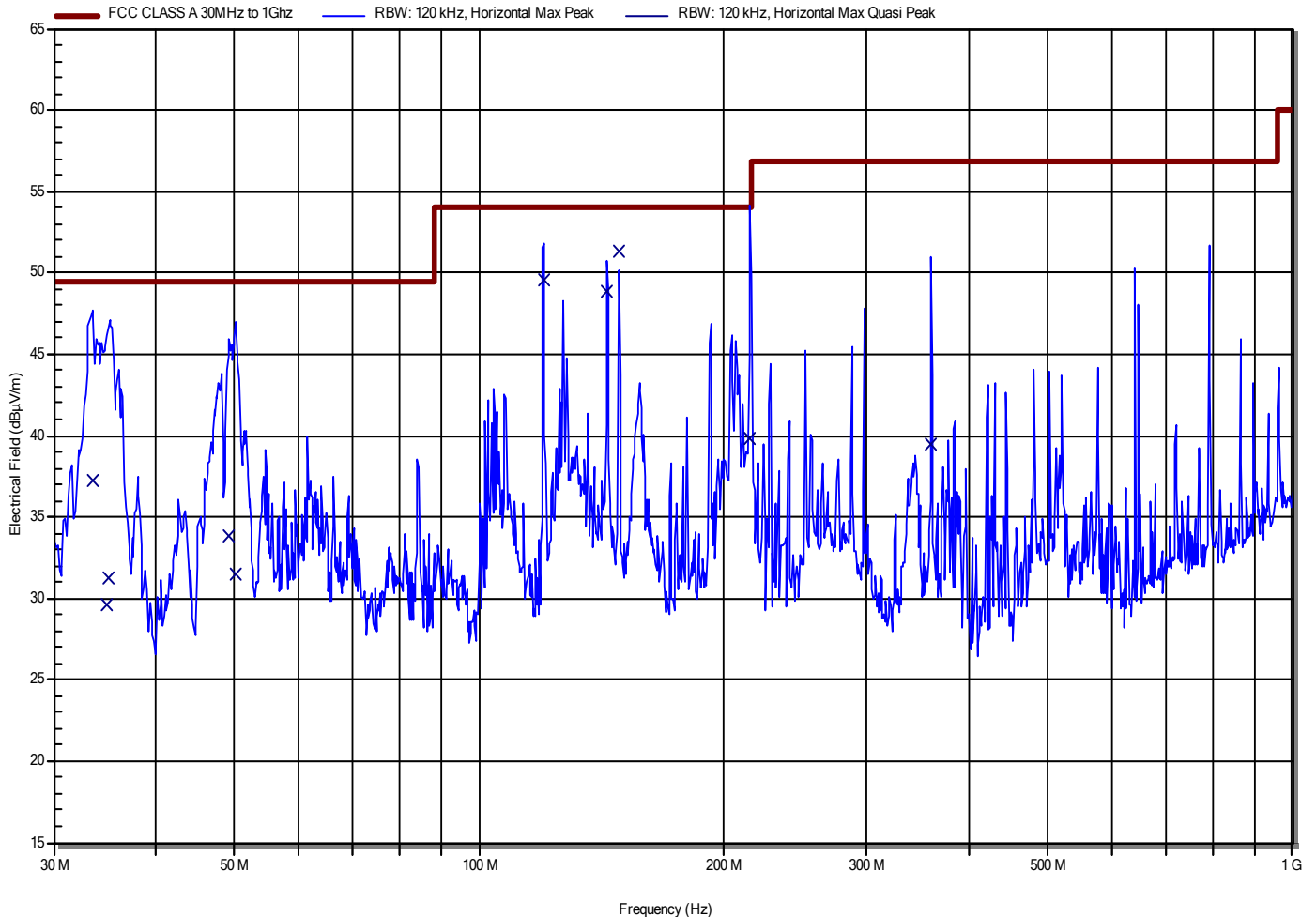
| Radiated RF Emission Measurements – Vertical Polarisation – Frontside - 26 to 29 GHz |               |                     |                  |               |                |                |        |
|--------------------------------------------------------------------------------------|---------------|---------------------|------------------|---------------|----------------|----------------|--------|
| Frequency (GHz)                                                                      | Peak (dBµV/m) | Peak Limit (dBµV/m) | Average (dBµV/m) | Average Limit | Pk Delta Limit | AV Delta Limit | Result |
| Peak emissions are more than 10dB below the limits                                   |               |                     |                  |               |                |                | Pass   |

RadiMation



| Radiated RF Emission Measurements – Horizontal Polarisation – Frontside- 30 MHz to 1GHz |                           |                                 |                  |        |
|-----------------------------------------------------------------------------------------|---------------------------|---------------------------------|------------------|--------|
| Frequency (MHz)                                                                         | Quasi-Peak (dB $\mu$ V/m) | Quasi-Peak Limit (dB $\mu$ V/m) | Delta Limit (dB) | Result |
| 33.50                                                                                   | 37.3                      | 49.5                            | -12.2            | Pass   |
| 34.91                                                                                   | 29.6                      | 49.5                            | -19.9            | Pass   |
| 35.05                                                                                   | 31.2                      | 49.5                            | -18.3            | Pass   |
| 49.21                                                                                   | 33.8                      | 49.5                            | -15.7            | Pass   |
| 50.20                                                                                   | 31.5                      | 49.5                            | -18.0            | Pass   |
| 120.04                                                                                  | 49.6                      | 54                              | -4.4             | Pass   |
| 143.68                                                                                  | 48.9                      | 54                              | -5.1             | Pass   |
| 148.49                                                                                  | 51.4                      | 54                              | -2.6             | Pass   |
| 215.23                                                                                  | 39.8                      | 54                              | -14.2            | Pass   |
| 359.51                                                                                  | 39.5                      | 56                              | -17.4            | Pass   |

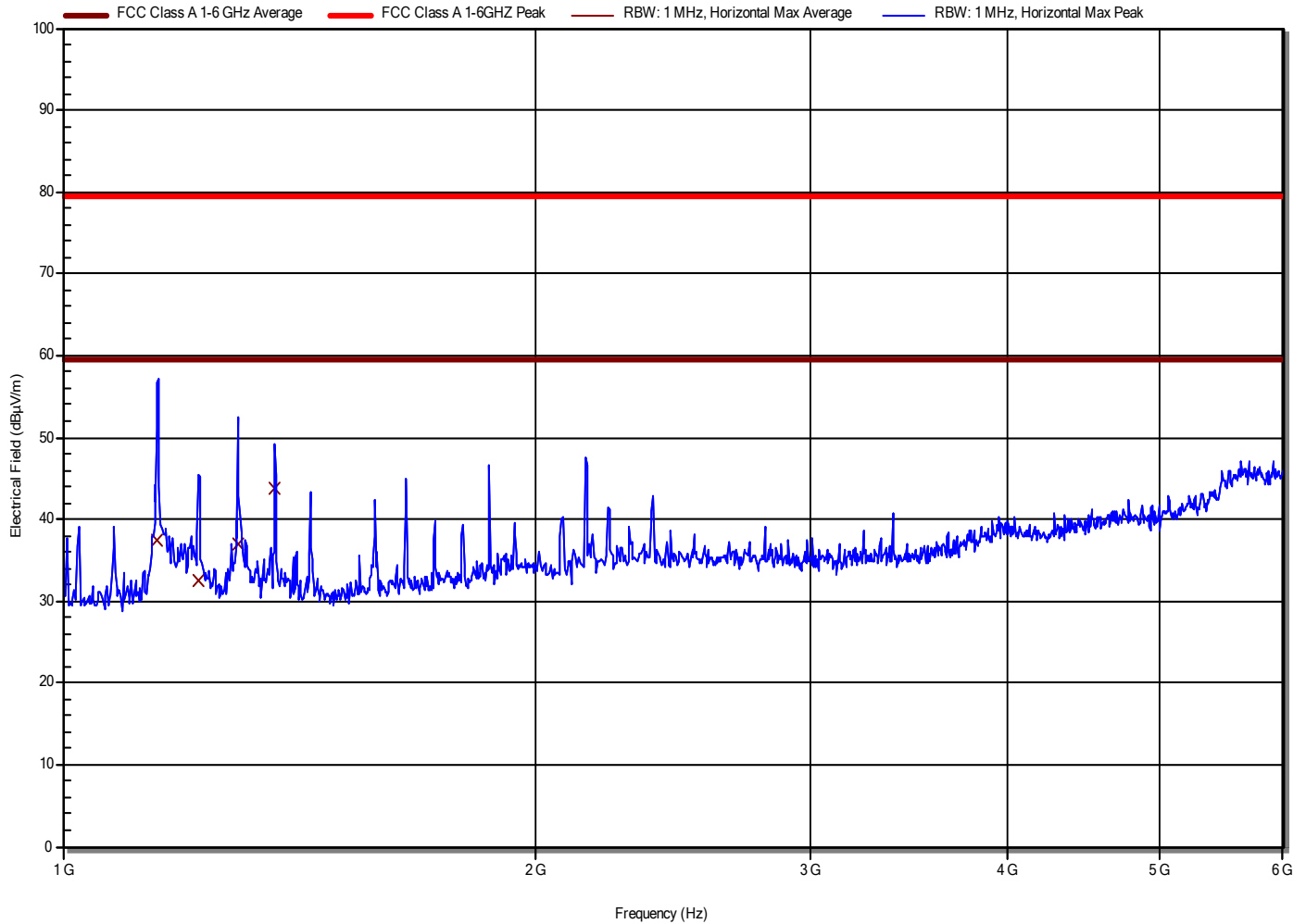
RadiMation



**Radiated RF Emission Measurements – Horizontal Polarisation - Frontside - 1 to 6 GHz**

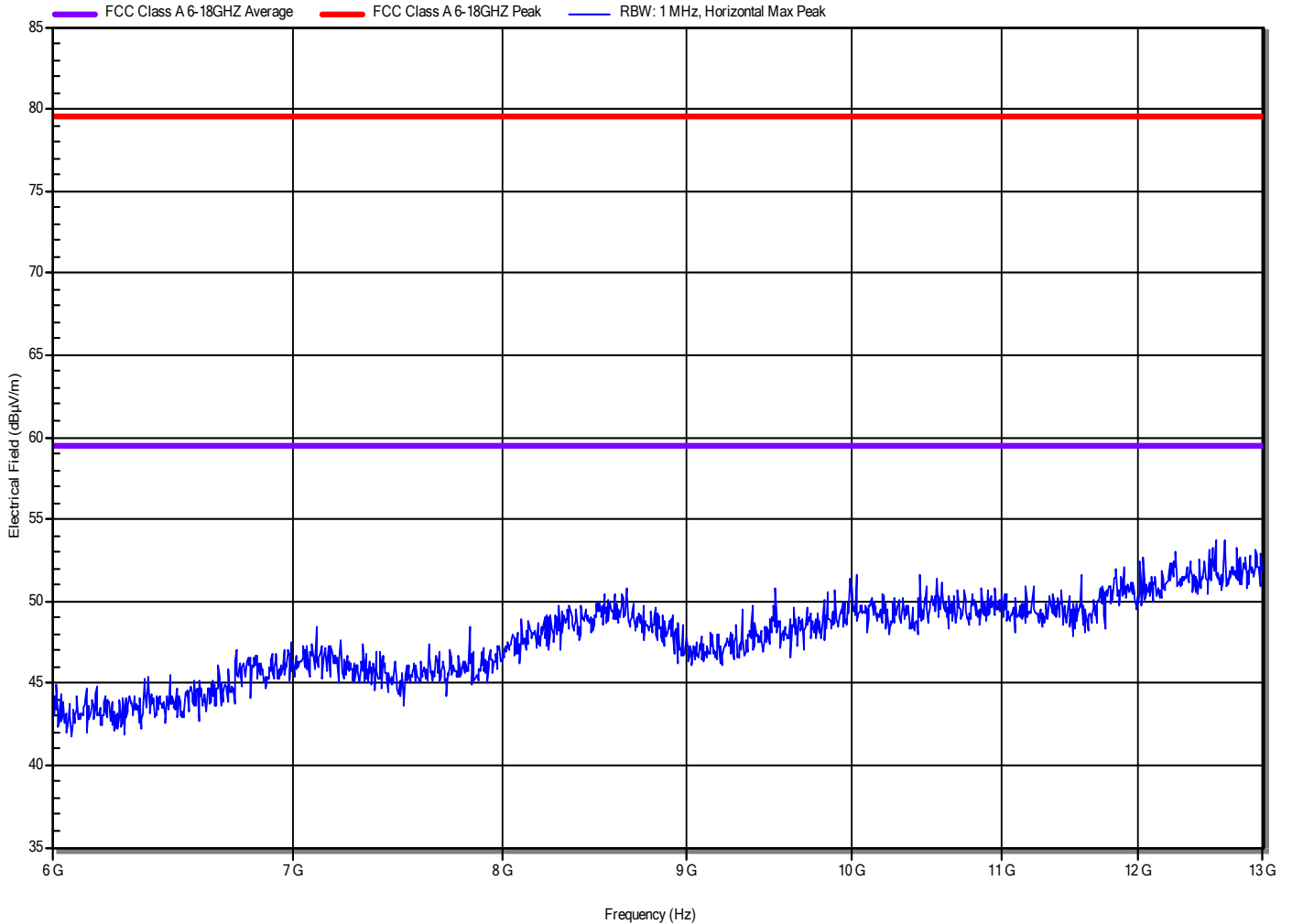
| Frequency (GHz)                                    | Peak (dBµV/m) | Peak Limit (dBµV/m) | Average (dBµV/m) | Average Limit (dBµV/m) | Pk Delta Limit (dB) | AV Delta Limit (dB) | Result |
|----------------------------------------------------|---------------|---------------------|------------------|------------------------|---------------------|---------------------|--------|
| Peak emissions are more than 10dB below the limits |               |                     |                  |                        |                     |                     | Pass   |

RadiMation



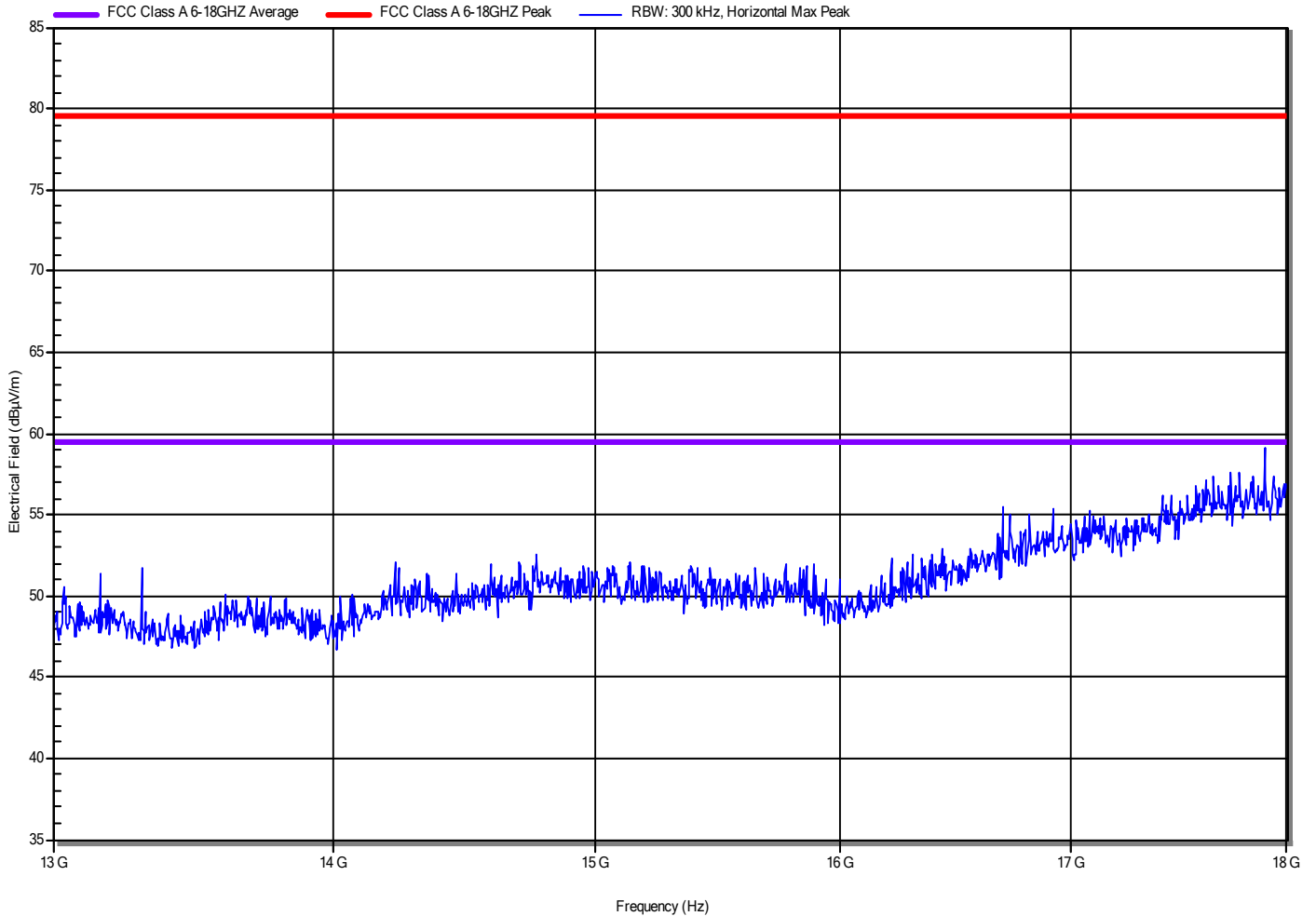
| Radiated RF Emission Measurements – Horizontal Polarisation - Frontside - 6 to 13 GHz |               |                     |                  |                        |                     |                     |        |
|---------------------------------------------------------------------------------------|---------------|---------------------|------------------|------------------------|---------------------|---------------------|--------|
| Frequency (GHz)                                                                       | Peak (dBµV/m) | Peak Limit (dBµV/m) | Average (dBµV/m) | Average Limit (dBµV/m) | Pk Delta Limit (dB) | AV Delta Limit (dB) | Result |
| Peak emissions are more than 10dB below the limits                                    |               |                     |                  |                        |                     |                     | Pass   |

RadiMation



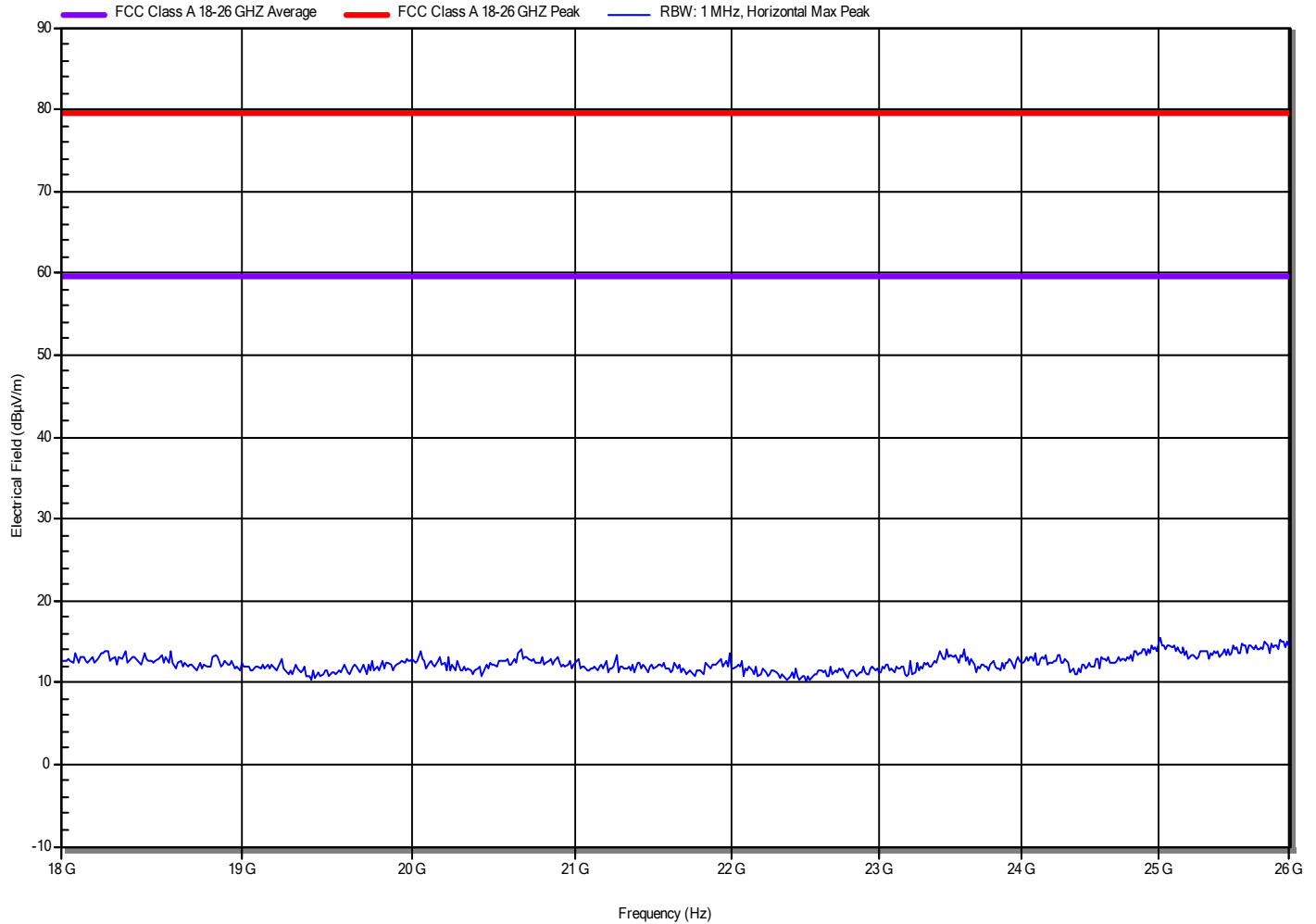
| Radiated RF Emission Measurements – Horizontal Polarisation - Frontside - 13 to 18 GHz |               |                     |                  |               |                |                |        |
|----------------------------------------------------------------------------------------|---------------|---------------------|------------------|---------------|----------------|----------------|--------|
| Frequency (GHz)                                                                        | Peak (dBµV/m) | Peak Limit (dBµV/m) | Average (dBµV/m) | Average Limit | Pk Delta Limit | AV Delta Limit | Result |
| Peak emissions are more than 10dB below the limits                                     |               |                     |                  |               |                |                | Pass   |

RadiMation



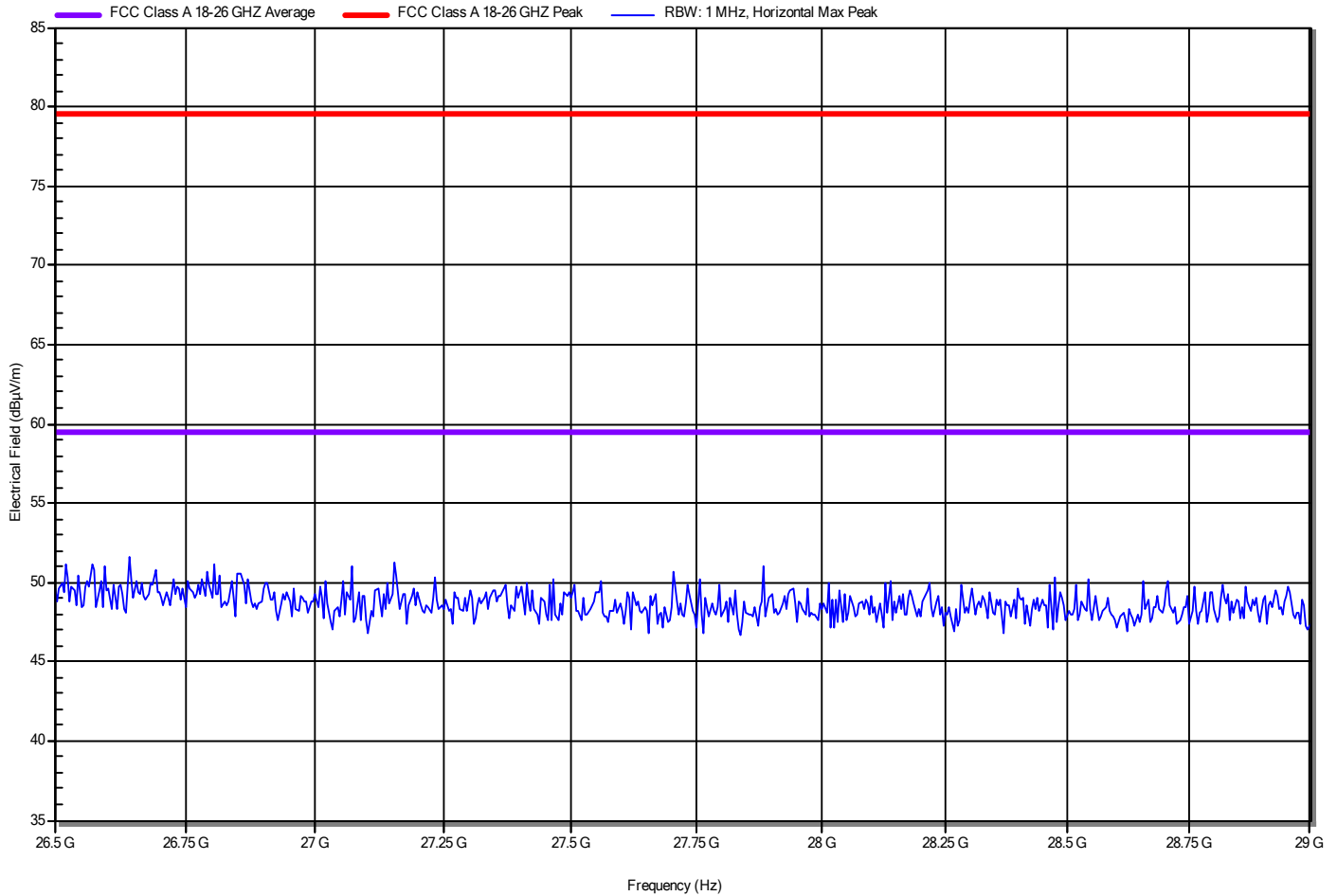
| Radiated RF Emission Measurements – Horizontal Polarisation - Frontside - 18 to 26 GHz |               |                     |                  |               |                |                |        |
|----------------------------------------------------------------------------------------|---------------|---------------------|------------------|---------------|----------------|----------------|--------|
| Frequency (GHz)                                                                        | Peak (dBµV/m) | Peak Limit (dBµV/m) | Average (dBµV/m) | Average Limit | Pk Delta Limit | AV Delta Limit | Result |
| Peak emissions are more than 10dB below the limits                                     |               |                     |                  |               |                |                | Pass   |

RadiMation



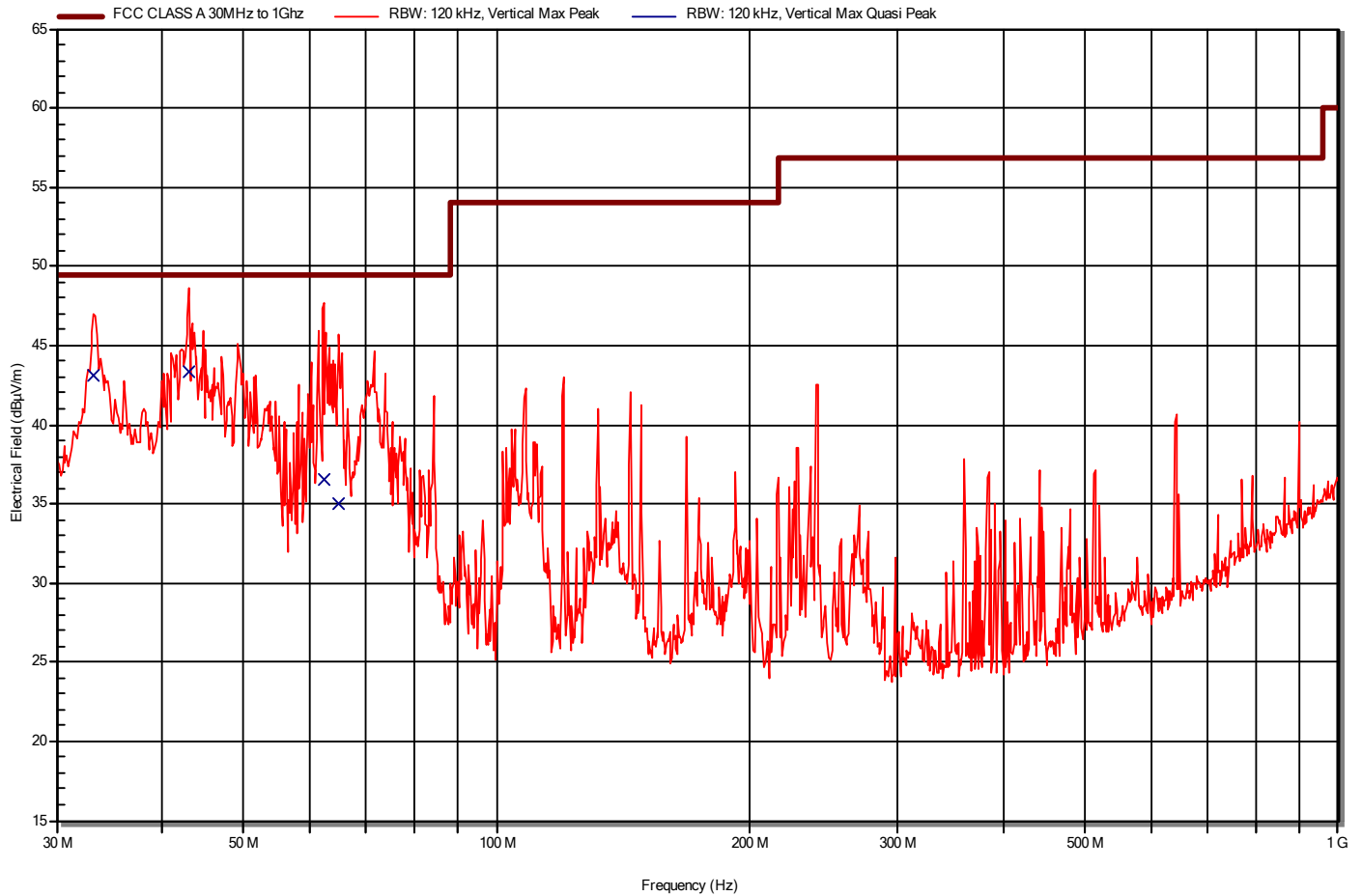
| Radiated RF Emission Measurements – Horizontal Polarisation – Frontside - 26 to 29 GHz |               |                     |                  |               |                |                |        |
|----------------------------------------------------------------------------------------|---------------|---------------------|------------------|---------------|----------------|----------------|--------|
| Frequency (GHz)                                                                        | Peak (dBµV/m) | Peak Limit (dBµV/m) | Average (dBµV/m) | Average Limit | Pk Delta Limit | AV Delta Limit | Result |
| Peak emissions are more than 10dB below the limits                                     |               |                     |                  |               |                |                | Pass   |

RadiMation



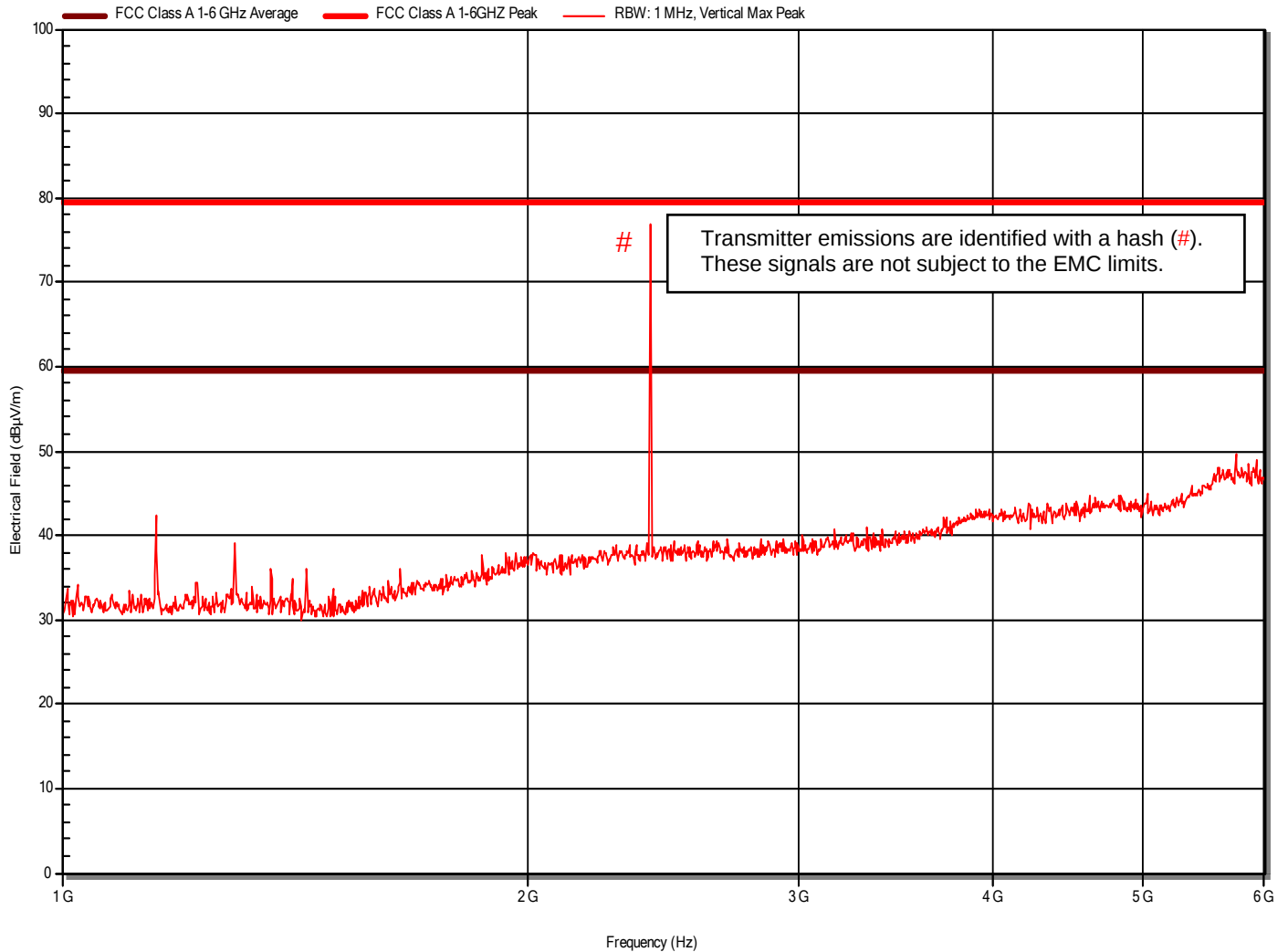
| Radiated RF Emission Measurements – Vertical Polarisation – Side1- 30 MHz to 1GHz |                           |                                 |                  |        |
|-----------------------------------------------------------------------------------|---------------------------|---------------------------------|------------------|--------|
| Frequency (MHz)                                                                   | Quasi-Peak (dB $\mu$ V/m) | Quasi-Peak Limit (dB $\mu$ V/m) | Delta Limit (dB) | Result |
| 43.04                                                                             | 43.4                      | 49.5                            | -6.1             | Pass   |
| 33.22                                                                             | 43.1                      | 49.5                            | -6.4             | Pass   |
| 62.26                                                                             | 36.5                      | 49.5                            | -13.0            | Pass   |
| 64.93                                                                             | 35                        | 49.5                            | -14.5            | Pass   |

RadiMation



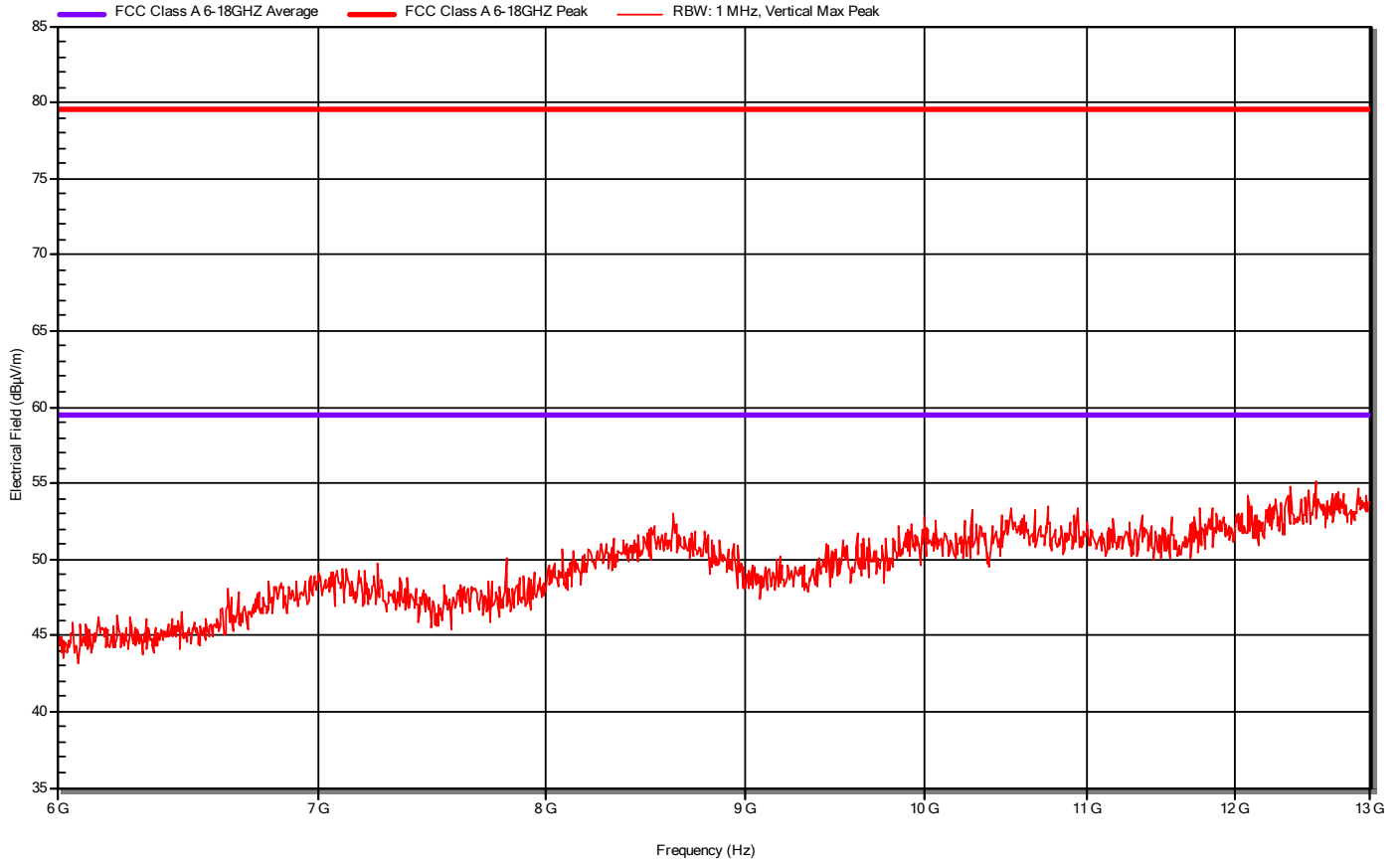
| Radiated RF Emission Measurements – Vertical Polarisation – Side1- 1 to 6 GHz |               |                     |                  |                        |                     |                     |        |
|-------------------------------------------------------------------------------|---------------|---------------------|------------------|------------------------|---------------------|---------------------|--------|
| Frequency (GHz)                                                               | Peak (dBµV/m) | Peak Limit (dBµV/m) | Average (dBµV/m) | Average Limit (dBµV/m) | Pk Delta Limit (dB) | AV Delta Limit (dB) | Result |
| Peak emissions are more than 10dB below the limits                            |               |                     |                  |                        |                     |                     | Pass   |

RadiMation



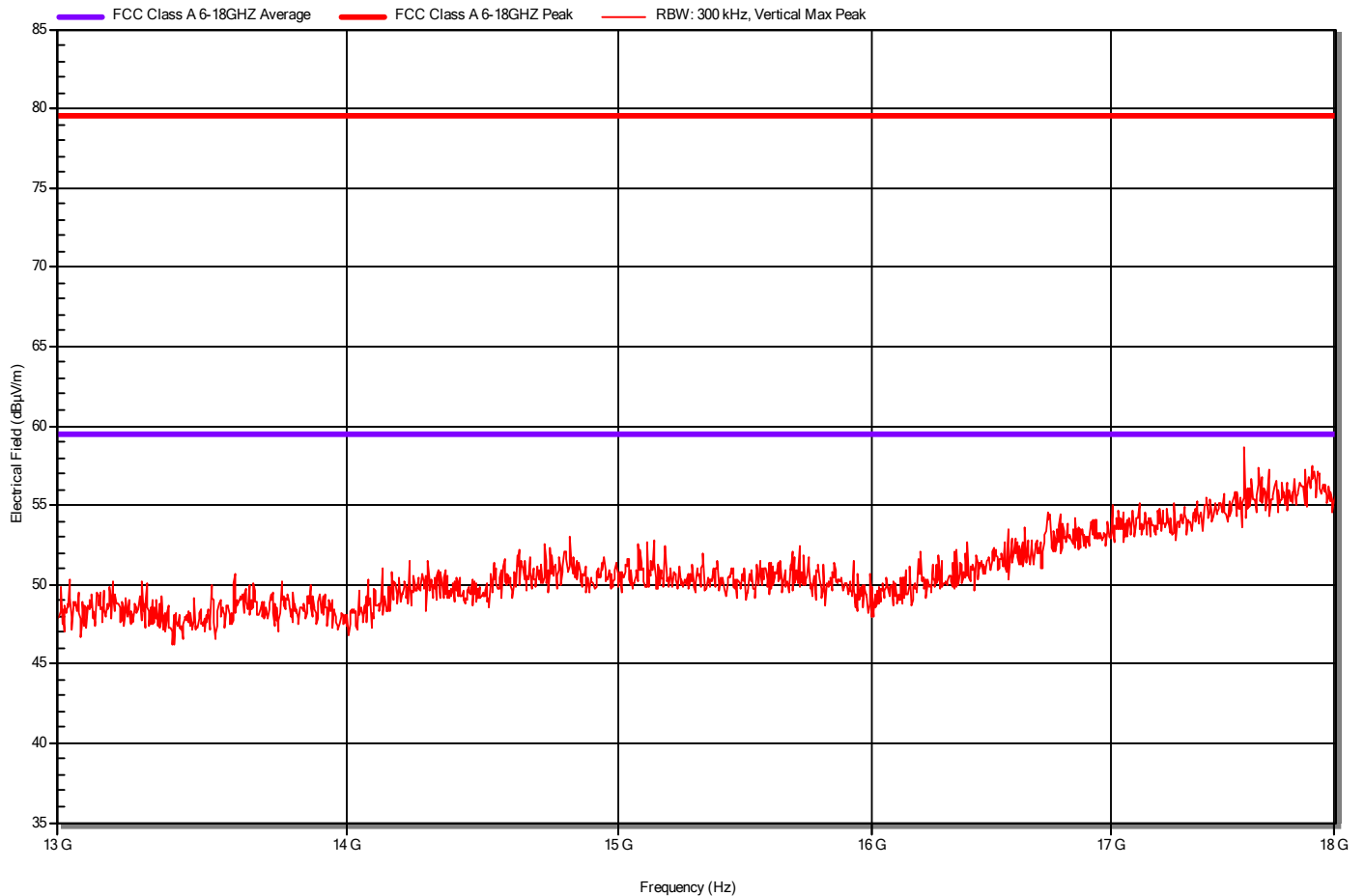
| Radiated RF Emission Measurements – Vertical Polarisation - Side1- 6 to 13 GHz |               |                     |                  |               |                |                |        |
|--------------------------------------------------------------------------------|---------------|---------------------|------------------|---------------|----------------|----------------|--------|
| Frequency (GHz)                                                                | Peak (dBµV/m) | Peak Limit (dBµV/m) | Average (dBµV/m) | Average Limit | Pk Delta Limit | AV Delta Limit | Result |
| Peak emissions are more than 10dB below the limits                             |               |                     |                  |               |                |                | Pass   |

RadiMation



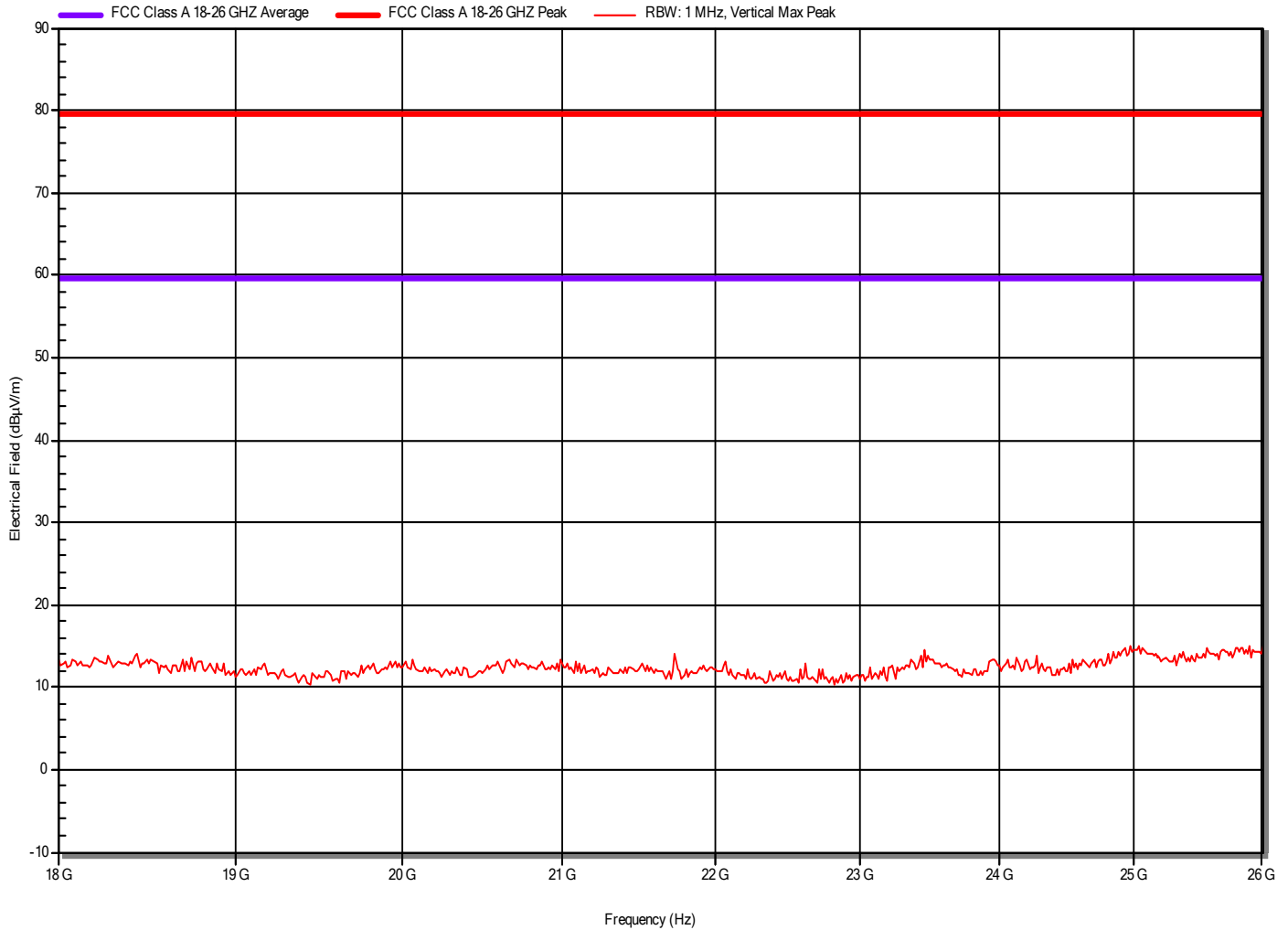
| Radiated RF Emission Measurements – Vertical Polarisation - Side1- 13 to 18 GHz |               |                     |                  |               |                |                |        |
|---------------------------------------------------------------------------------|---------------|---------------------|------------------|---------------|----------------|----------------|--------|
| Frequency (GHz)                                                                 | Peak (dBµV/m) | Peak Limit (dBµV/m) | Average (dBµV/m) | Average Limit | Pk Delta Limit | AV Delta Limit | Result |
| Peak emissions are more than 10dB below the limits                              |               |                     |                  |               |                |                | Pass   |

RadiMation



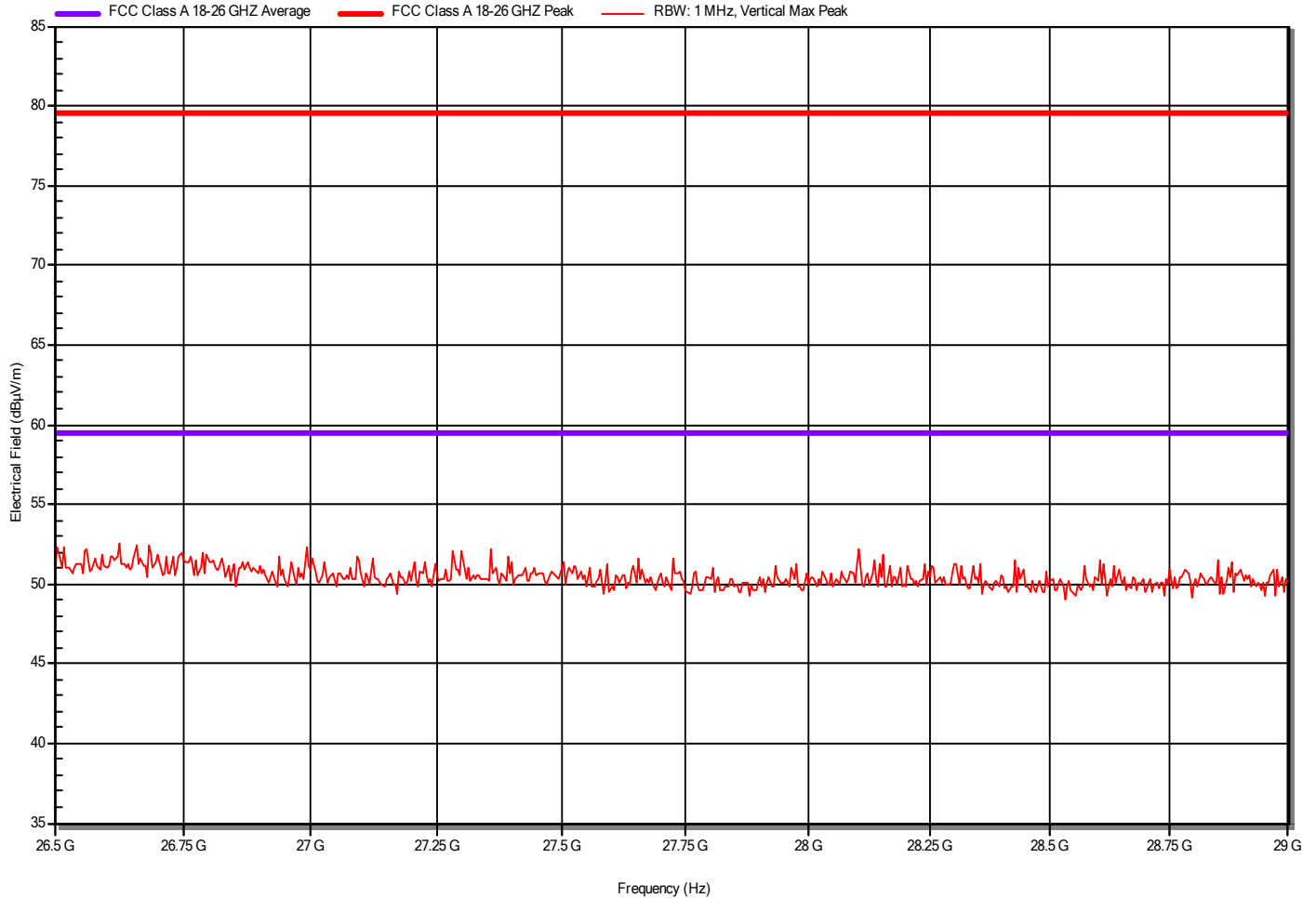
| Radiated RF Emission Measurements – Vertical Polarisation - Side1- 18 to 26 GHz |               |                     |                  |               |                |                |        |
|---------------------------------------------------------------------------------|---------------|---------------------|------------------|---------------|----------------|----------------|--------|
| Frequency (GHz)                                                                 | Peak (dBµV/m) | Peak Limit (dBµV/m) | Average (dBµV/m) | Average Limit | Pk Delta Limit | AV Delta Limit | Result |
| Peak emissions are more than 10dB below the limits                              |               |                     |                  |               |                |                | Pass   |

RadiMation



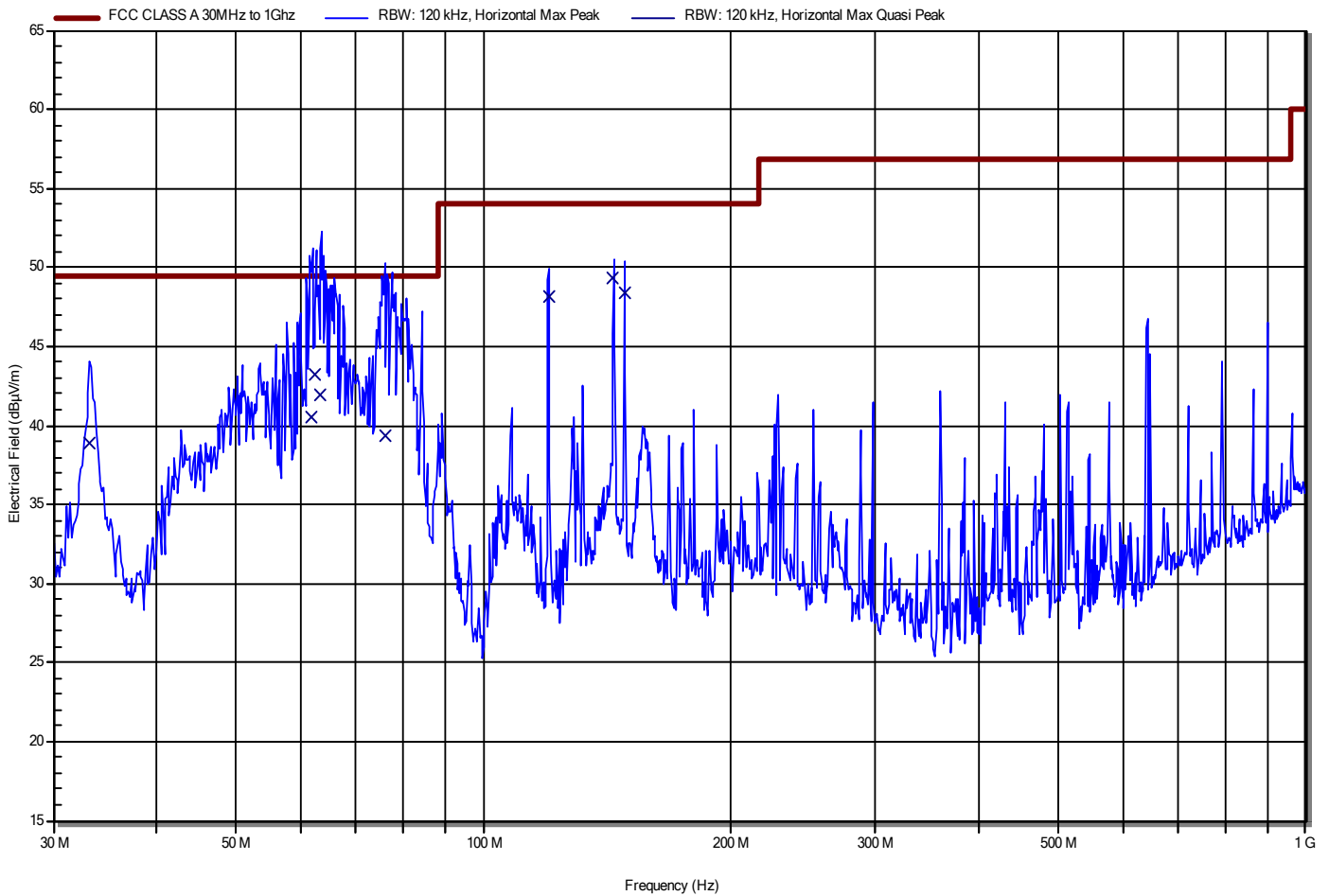
| Radiated RF Emission Measurements – Vertical Polarisation – Side1- 26 to 29 GHz |               |                     |                  |               |                |                |        |
|---------------------------------------------------------------------------------|---------------|---------------------|------------------|---------------|----------------|----------------|--------|
| Frequency (GHz)                                                                 | Peak (dBµV/m) | Peak Limit (dBµV/m) | Average (dBµV/m) | Average Limit | Pk Delta Limit | AV Delta Limit | Result |
| Peak emissions are more than 10dB below the limits                              |               |                     |                  |               |                |                | Pass   |

RadiMation



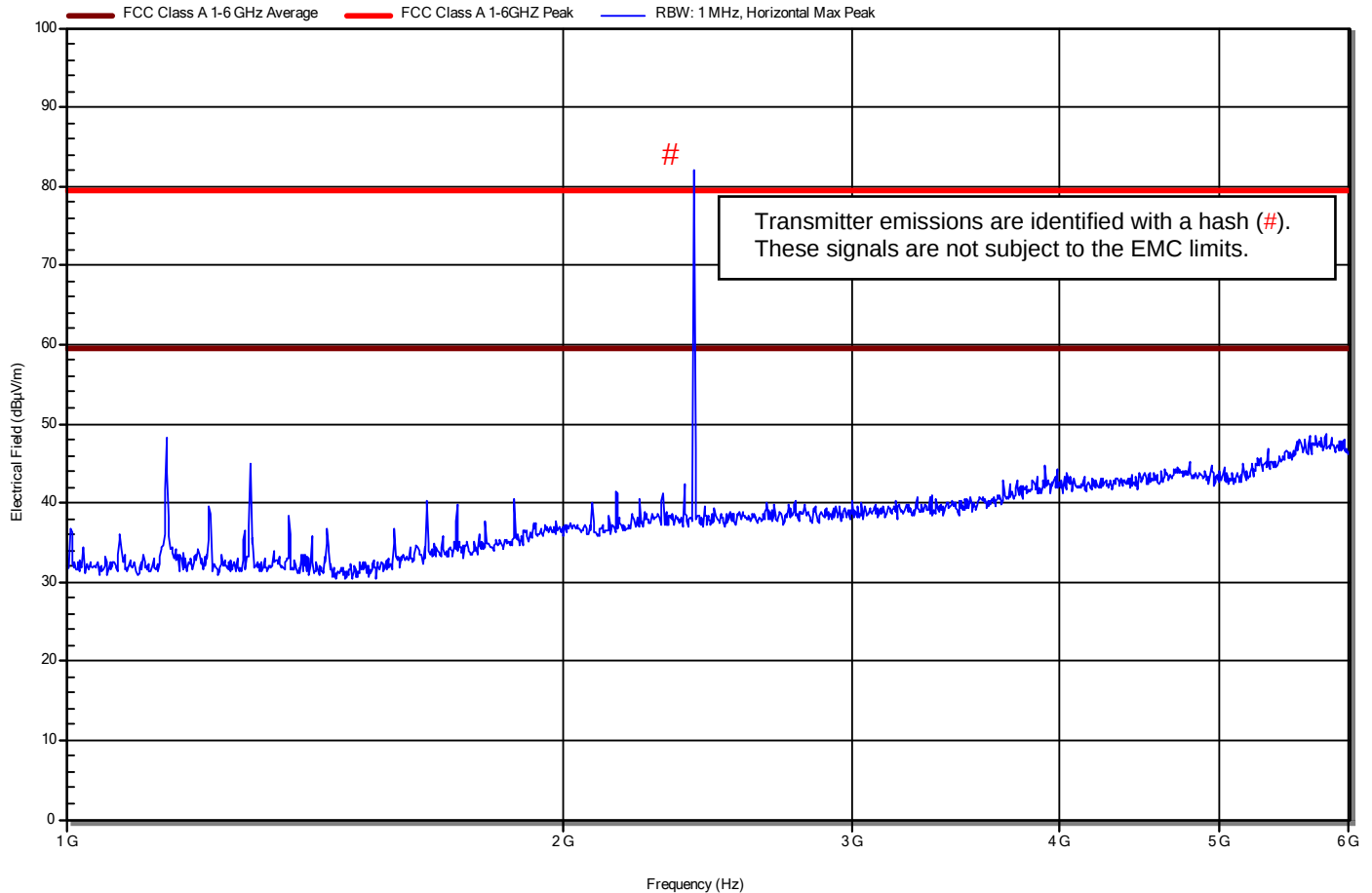
| Radiated RF Emission Measurements – Horizontal Polarisation – Side1- 30 MHz to 1GHz |                           |                                 |                  |        |
|-------------------------------------------------------------------------------------|---------------------------|---------------------------------|------------------|--------|
| Frequency (MHz)                                                                     | Quasi-Peak (dB $\mu$ V/m) | Quasi-Peak Limit (dB $\mu$ V/m) | Delta Limit (dB) | Result |
| 33.22                                                                               | 38.8                      | 49.5                            | -10.7            | Pass   |
| 63.38                                                                               | 42                        | 49.5                            | -7.5             | Pass   |
| 61.84                                                                               | 40.5                      | 49.5                            | -9.0             | Pass   |
| 62.54                                                                               | 43.2                      | 49.5                            | -6.3             | Pass   |
| 75.87                                                                               | 39.3                      | 49.5                            | -10.2            | Pass   |
| 143.68                                                                              | 49.3                      | 54                              | -4.7             | Pass   |
| 148.49                                                                              | 48.4                      | 54                              | -5.6             | Pass   |
| 120.04                                                                              | 48.1                      | 54                              | -5.9             | Pass   |

RadiMation



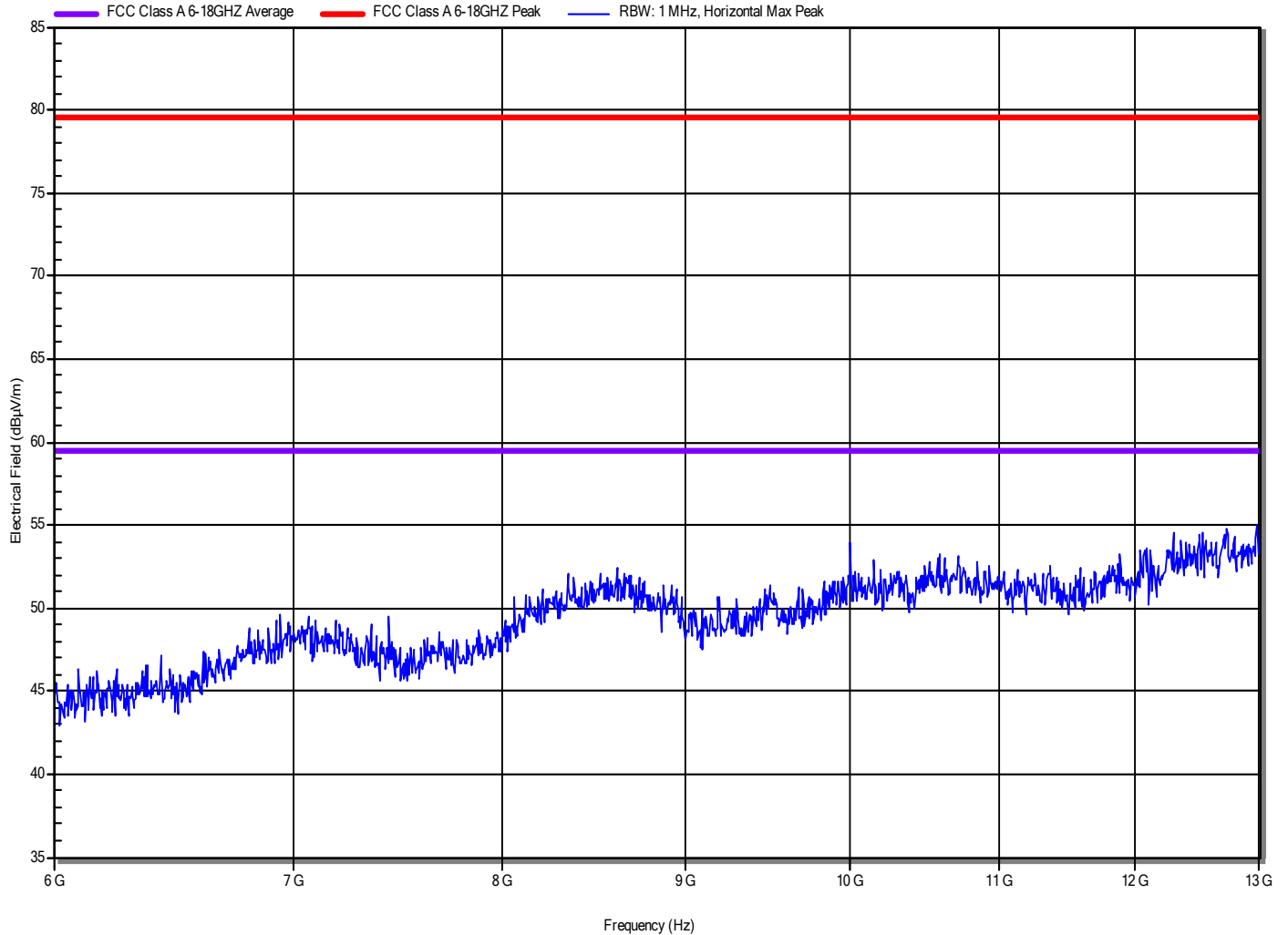
| Radiated RF Emission Measurements – Horizontal Polarisation - Side1- 1 to 6 GHz |               |                     |                  |               |                |                |        |
|---------------------------------------------------------------------------------|---------------|---------------------|------------------|---------------|----------------|----------------|--------|
| Frequency (GHz)                                                                 | Peak (dBµV/m) | Peak Limit (dBµV/m) | Average (dBµV/m) | Average Limit | Pk Delta Limit | AV Delta Limit | Result |
| Peak emissions are more than 10dB below the limits                              |               |                     |                  |               |                |                | Pass   |

RadiMation



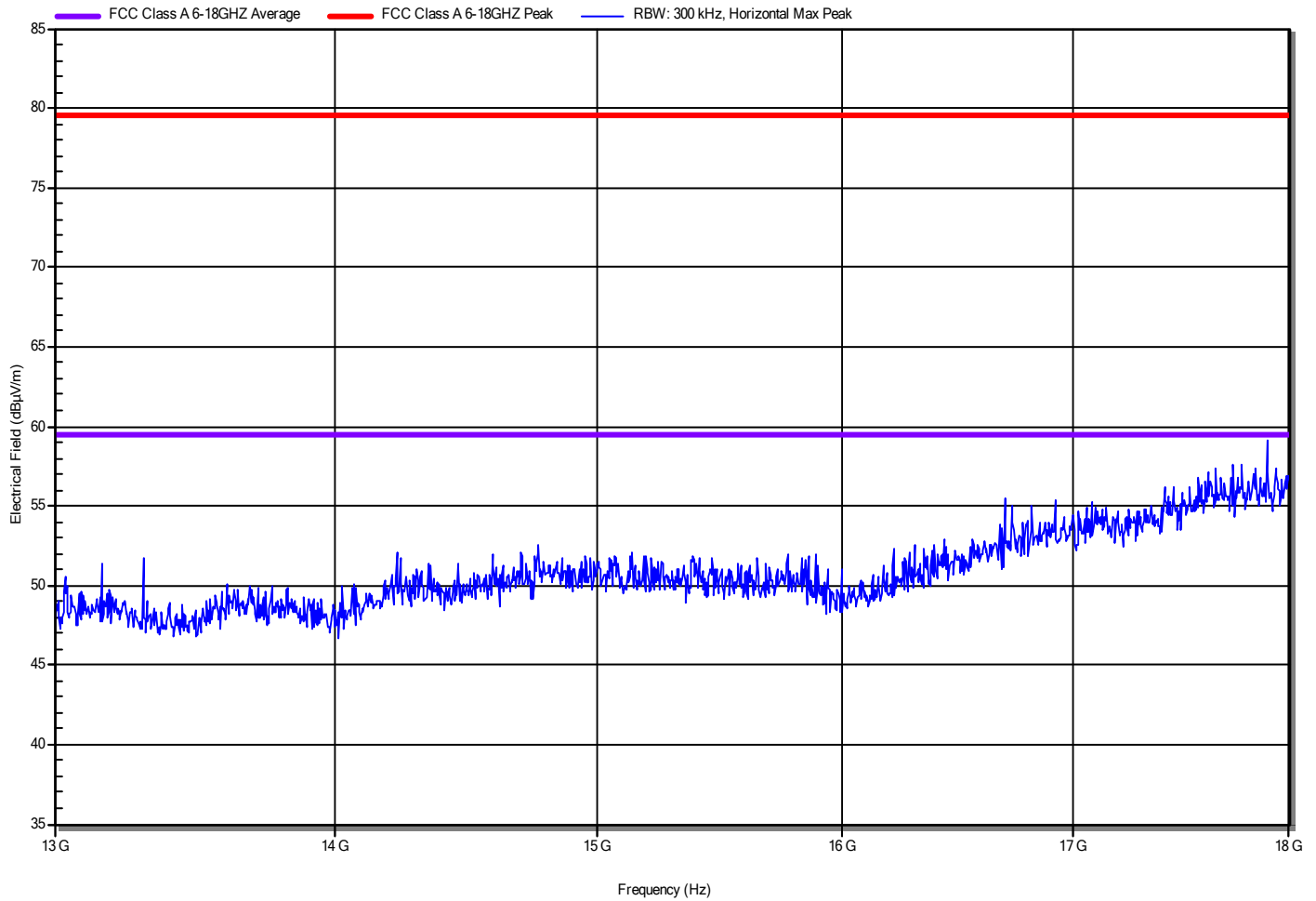
| Radiated RF Emission Measurements – Horizontal Polarisation - Side1- 6 to 13 GHz |               |                     |                  |               |                |                |        |
|----------------------------------------------------------------------------------|---------------|---------------------|------------------|---------------|----------------|----------------|--------|
| Frequency (GHz)                                                                  | Peak (dBµV/m) | Peak Limit (dBµV/m) | Average (dBµV/m) | Average Limit | Pk Delta Limit | AV Delta Limit | Result |
| Peak emissions are more than 10dB below the limits                               |               |                     |                  |               |                |                | Pass   |

RadiMation



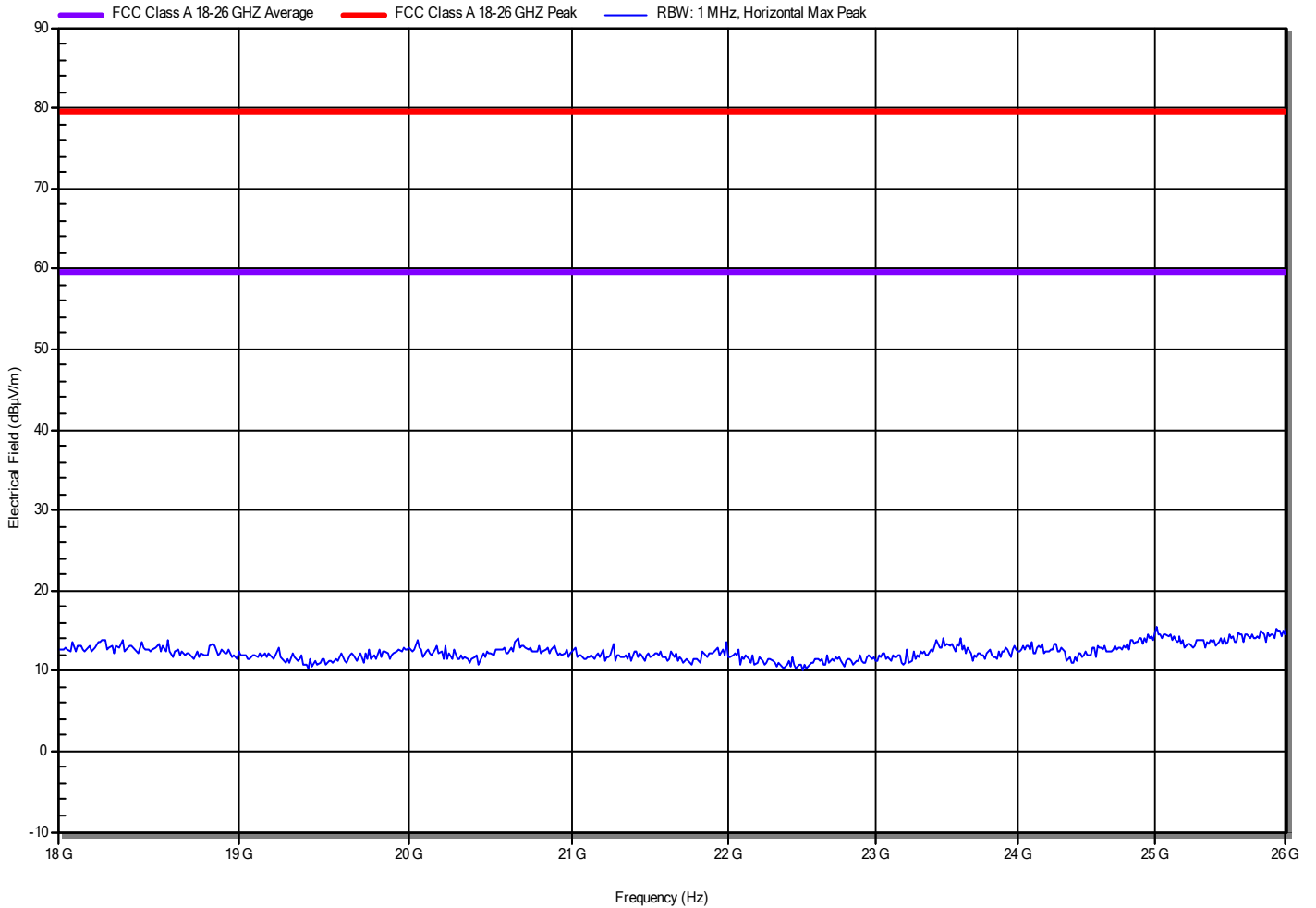
| Radiated RF Emission Measurements – Horizontal Polarisation - Side1- 13 to 18 GHz |               |                     |                  |                        |                     |                     |        |
|-----------------------------------------------------------------------------------|---------------|---------------------|------------------|------------------------|---------------------|---------------------|--------|
| Frequency (GHz)                                                                   | Peak (dBµV/m) | Peak Limit (dBµV/m) | Average (dBµV/m) | Average Limit (dBµV/m) | Pk Delta Limit (dB) | AV Delta Limit (dB) | Result |
| Peak emissions are more than 10dB below the limits                                |               |                     |                  |                        |                     |                     | Pass   |

RadiMation



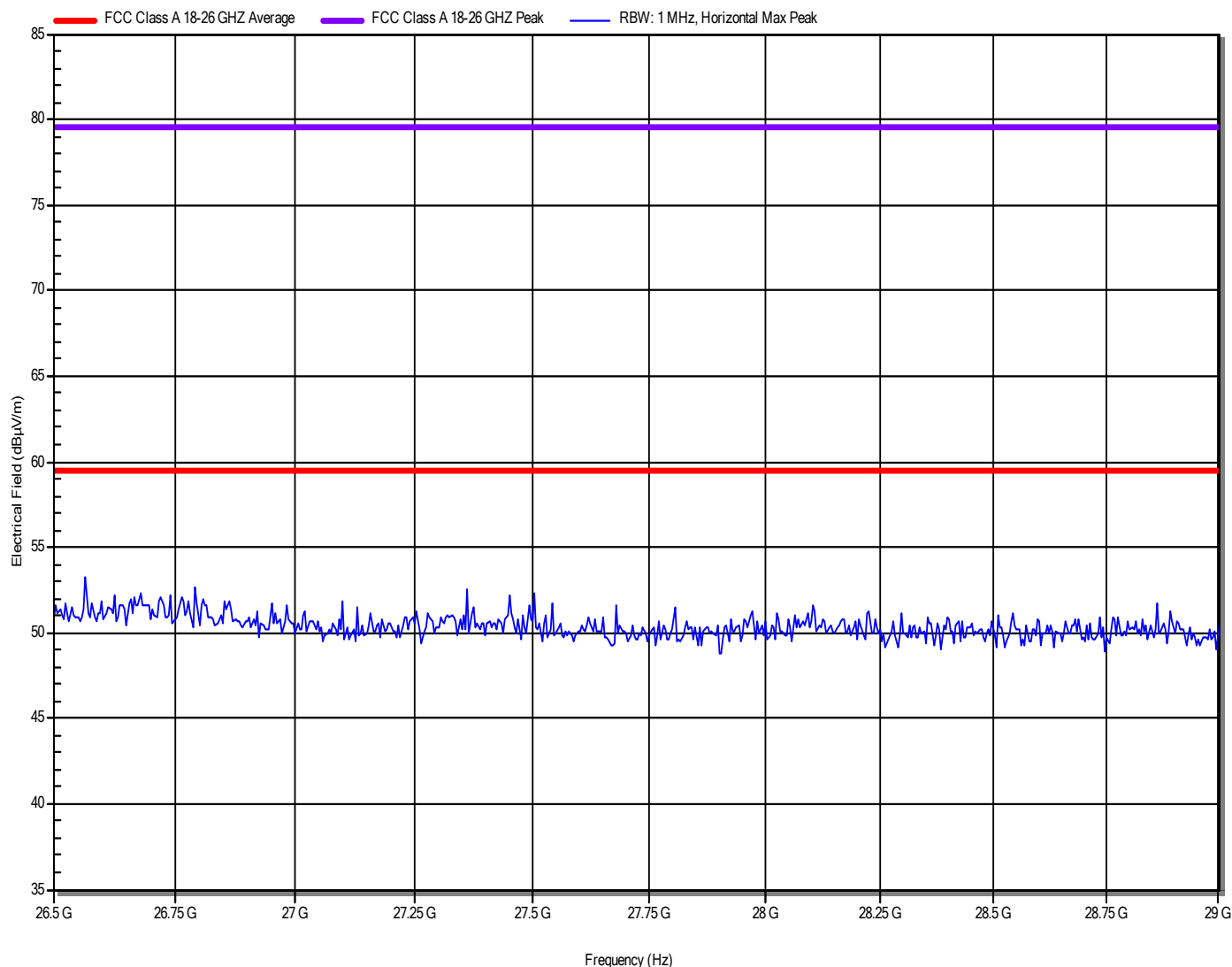
| Radiated RF Emission Measurements – Horizontal Polarisation - Side1- 18 to 26 GHz |               |                     |                  |               |                |                |        |
|-----------------------------------------------------------------------------------|---------------|---------------------|------------------|---------------|----------------|----------------|--------|
| Frequency (GHz)                                                                   | Peak (dBµV/m) | Peak Limit (dBµV/m) | Average (dBµV/m) | Average Limit | Pk Delta Limit | AV Delta Limit | Result |
| Peak emissions are more than 10dB below the limits                                |               |                     |                  |               |                |                | Pass   |

RadiMation



| Radiated RF Emission Measurements – Horizontal Polarisation – Side1- 26 to 29 GHz |               |                     |                  |               |                |                |        |
|-----------------------------------------------------------------------------------|---------------|---------------------|------------------|---------------|----------------|----------------|--------|
| Frequency (GHz)                                                                   | Peak (dBµV/m) | Peak Limit (dBµV/m) | Average (dBµV/m) | Average Limit | Pk Delta Limit | AV Delta Limit | Result |
| Peak emissions are more than 10dB below the limits                                |               |                     |                  |               |                |                | Pass   |

RadiMation



## 11.6 ASSESSMENT

The Betline SST Cash Kiosk (15302-GA00x) complied with the CFR 47, Chapter 1, Subpart A, Part 15, Subpart B (Class A limits) radiated RF emission requirements.

## 12. CONCLUSION

The **Betline SST Cash Kiosk (15302-GA00x)** complied with the conducted and radiated RF emission requirements detailed in CFR 47, Chapter 1, Subpart A, Part 15, Subpart B (Class A limits).