RHEIN TECH LABORATORIES, INC.

Engineering Solutions & Electromagnetic Compatibility Services

**VEGA Grieshaber KG**
**Am Hohenstein 113**
**77761 Schiltach**
**Germany**

**MODEL: PS60K**
**FCC ID: O6QPS60XK2**
**IC: 3892A-PS60XK2**

**December 30, 2016**

| **Standards Referenced for this Report** | |
|---|---|
| Part 2: 0ctober 2015 | Frequency Allocations and Radio Treaty Matters; General Rules and Regulations |
| Part 15: October 2015 | Radio Frequency Devices - §15.209: Radiated Emissions Limits |
| ANSI C63.10-2013: | American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices. |
| RSS-Gen | General Requirements for Compliance of Radio Apparatus |
| RSS-211 | Level Probing Radar Equipment |

| Frequency Range | Output Power (W) Conducted | Frequency Tolerance (ppm) | Emission Designator |
|---|---|---|---|
| 26 GHz | 0.000201 | N/A | N/A |

We, the undersigned, hereby declare that the equipment tested and referenced in this report conforms to the identified standard(s) as described in this attached test record. No modifications were made to the equipment during testing in order to achieve compliance with these standards. Furthermore, there was no deviation from, additions to, or exclusions from, the above standards for Certification methodology.

Signature: _____ Date: December 30, 2016

Typed/Printed Name: Desmond Fraser Position: President

Signature: _____ Date: December 30, 2016

Typed/Printed Name: Dan Baltzell Position: Test Engineer

**Document Number: 2015083-2**



*These test(s) are accredited under Rhein Tech Laboratories, Inc. ISO/IEC 17025 accreditation issued by the ANSI-ASQ National Accreditation Board. Refer to certificate and scope of accreditation AT-1445.*

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# 1 General Information

## 1.1 Scope

The following Type Certification Report is prepared on behalf of Vega Grieshaber KG in accordance with the Federal Communications Commission and Industry Canada Rules and Regulations. The Equipment Under Test (EUT) was Model PS60K, Level Probing Radar, FCC ID: O6QPS60XK2, IC: 3892A-PS60XK2, tested with nine different antennas.

The EUT is available with three different electronics units:

1) HART (PS60HK)
2) PA (PS60PAK)
3) FF (PS60FFK)

The worst-case emissions are found with the HART electronics unit (PS60HK) implemented in the EUT.

The test results reported in this document relate only to the items tested.

All measurements contained in this application were conducted in accordance with FCC Rules and Regulations CFR 47, and ANSI C63.10 American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices. 2013. The instrumentation utilized for the measurements conforms to the ANSI C63.4 standard for EMI and Field Strength Instrumentation. Calibration checks are performed regularly on the instruments, and all accessories including high pass filter, coaxial attenuator, preamplifier and cables.

## 1.2 Test Facility

The open area test site and conducted measurement facility used to collect the radiated data is located on the parking lot of Rhein Tech Laboratories, Inc., 360 Herndon Parkway, Suite 1400, Herndon, Virginia 20170. This site has been fully described in a report submitted to and approved by the Federal Communications Commission to perform AC line conducted and radiated emissions testing.

## 1.3 Related Submittal(s)/Grant(s)

This is an original FCC §15.209/IC RSS-211 application report to support a composite application.

Vega Grieshaber KG submitted justification to IC, and received their approval, for tilted installation for in-tank measurements, provided the assessment includes compliant in-tank measurements with tilted installation and follows the test guidance in ETSI EN 302 372. A copy of the approved justification, and IC's response, was submitted with this application.

There are only 5 antenna configurations for the Part 15.256 application and 9 antenna configurations for the Part 15.209 application. Furthermore, the parameters of the EUT transmitter path are not changeable by software as all of them are fixed by hardware.

It should be noted that though KDB 890966 footnote 1 states that LPR devices under Part 15 for use in metal or concrete tanks follow the provisions of 15.209, the LPR was installed inside a fiberglass tank and radiated emissions measurements were performed outside the fiberglass tank. As shown in the report, the radiated emissions data from the fiberglass tank demonstrates compliance with Part 15.209 mounted inside the fiberglass tank and measured outside the fiberglass tank. There is a precedence since the client has submitted numerous applications with fiberglass tanks to the FCC and IC, and these applications were approved.

## 1.4 Modifications

None.

## 2 Tested System Details

The test sample was received on May 2, 2015. Listed below are the identifiers and descriptions of all equipment, cables, and internal devices used with the EUT for this testing, as applicable.

**Table 2-1: Equipment under Test (EUT)**

| Part | Manufacturer | Model (HVIN) | Serial Number | FCC ID | Cable Type | RTL Bar Code |
|---|---|---|---|---|---|---|
| UXBXCHKMAX | VEGA Grieshaber KG | PS60K | 27522102 | O6QPS60XK2 | N/A | 21455 |
| UXDND2HKMAX | VEGA Grieshaber KG | PS60K | 27522103 | O6QPS60XK2 | N/A | 21456 |
| UXKND2HKMAX | VEGA Grieshaber KG | PS60K | 27522104 | O6QPS60XK2 | N/A | 21457 |
| UXNCCHKMAX | VEGA Grieshaber KG | PS60K | 27522105 | O6QPS60XK2 | N/A | 21458 |
| 75mm Filled Horn Antenna (23.6 dBi) | VEGA Grieshaber KG | N/A | N/A | N/A | N/A | 21138 |
| 75mm Plastic Horn Antenna (24.8 dBi) | VEGA Grieshaber KG | N/A | N/A | N/A | N/A | 21140 |
| 40mm Horn Antenna (19.5 dBi) | VEGA Grieshaber KG | N/A | N/A | N/A | N/A | 21910 |
| 48mm Horn Antenna (21.5 dBi) | VEGA Grieshaber KG | N/A | N/A | N/A | N/A | 21911 |
| 75mm Horn Antenna (24.5 dBi) | VEGA Grieshaber KG | N/A | N/A | N/A | N/A | 21137 |
| 95mm Horn Antenna (27.0 dBi) | VEGA Grieshaber KG | N/A | N/A | N/A | N/A | 21136 |
| 245mm Parabolic Dish (32.8) | VEGA Grieshaber KG | N/A | N/A | N/A | N/A | 21139 |
| 48mm Filled Horn Antenna (19.8 dBi) | VEGA Grieshaber KG | N/A | N/A | N/A | N/A | 21909 |
| 40mm Encapsulated Horn Antenna (19.6 dBi) | VEGA Grieshaber KG | N/A | N/A | N/A | N/A | 21912 |
| DC Power Supply | Hewlett Packard | 6024A | 1912A00331 | N/A | 1m un-shielded | 901635 |

## 2.1 Test Configurations

The EUT was tested in the following configurations, and the test data is included in this report. The appropriate test configuration numbers (TC #1, TC #2, TC #3, TC #4, TC #5, TC #6, TC #7, TC#8, or TC #9) are provided with the test data.

**Table 2-2: Test Configuration #1 (TC #1)**

| Part | Model (HVIN) | Manufacturer | Cable Type | RTL Bar Code |
|---|---|---|---|---|
| UXBXCHKMAX | PS60K | VEGA Grieshaber KG | N/A | 21455 |
| Electronics | PS60HK | VEGA Grieshaber KG | N/A | 21460 |
| 75mm Plastic Horn Antenna (24.8 dBi) | N/A | VEGA Grieshaber KG | N/A | 21140 |

**Photograph 1: Test Configuration #1 (TC #1)**

**Table 2-3: Test Configuration #2 (TC #2)**

| Part | Model | Manufacturer | Cable Type | RTL Bar Code |
|---|---|---|---|---|
| UXDND2HKMAX | PS60K | VEGA Grieshaber KG | N/A | 21456 |
| Electronics | PS60HK | VEGA Grieshaber KG | N/A | 21459 |
| 40mm Horn Antenna (19.5 dBi) | N/A | VEGA Grieshaber KG | N/A | 21910 |

**Photograph 2: Test Configuration #2 (TC #2)**

**Table 2-4: Test Configuration #3 (TC #3)**

| Part | Model | Manufacturer | Cable Type | RTL Bar Code |
|---|---|---|---|---|
| UXKND2HKMAX | PS60K | VEGA Grieshaber KG | N/A | 21457 |
| Electronics | PS60HK | VEGA Grieshaber KG | N/A | 21459 |
| 48mm Horn Antenna (21.5 dBi) | N/A | VEGA Grieshaber KG | N/A | 21911 |

**Photograph 3: Test Configuration #3 (TC #3)**

**Table 2-5: Test Configuration #4 (TC #4)**

| Part | Model | Manufacturer | Cable Type | RTL Bar Code |
|---|---|---|---|---|
| UXKND2HKMAX | PS60K | VEGA Grieshaber KG | N/A | 21457 |
| Electronics | PS60HK | VEGA Grieshaber KG | N/A | 21461 |
| 75mm Horn Antenna (24.5 dBi) | N/A | VEGA Grieshaber KG | N/A | 21137 |

**Photograph 4: Test Configuration #4 (TC #4)**

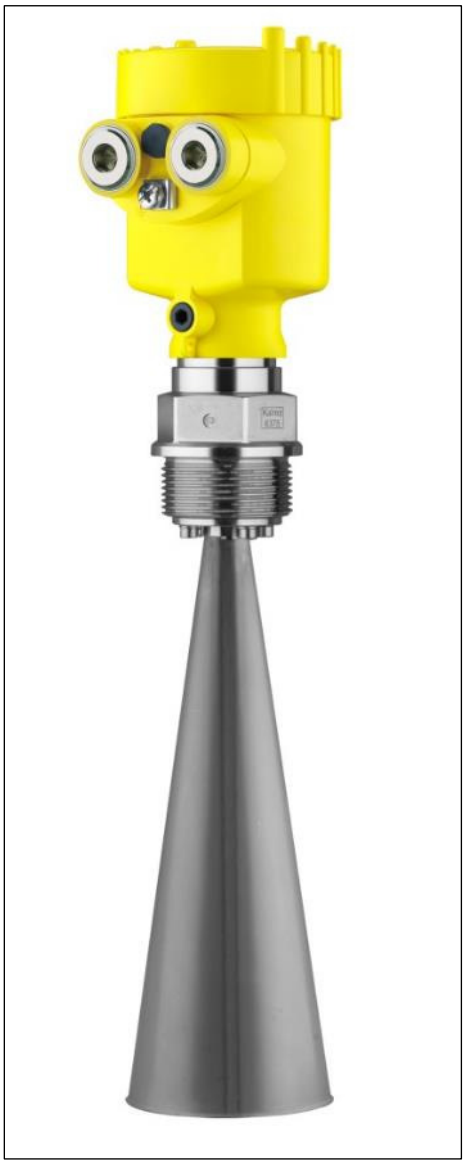


**Table 2-6: Test Configuration #5 (TC #5)**

| Part | Model | Manufacturer | Cable Type | RTL Bar Code |
|---|---|---|---|---|
| UXKND2HKMAX | PS60K | VEGA Grieshaber KG | N/A | 21457 |
| Electronics | PS60HK | VEGA Grieshaber KG | N/A | 21461 |
| 95mm Horn Antenna (27.0 dBi) | N/A | VEGA Grieshaber KG | N/A | 21136 |

**Photograph 5: Test Configuration #5 (TC #5)**

**Table 2-7: Test Configuration #6 (TC #6)**

| Part | Model | Manufacturer | Cable Type | RTL Bar Code |
|---|---|---|---|---|
| UXKND2HKMAX | PS60K | VEGA Grieshaber KG | N/A | 21457 |
| Electronics | PS60HK | VEGA Grieshaber KG | N/A | 21462 |
| 245mm Parabolic Dish Antenna (32.8 dBi) | N/A | VEGA Grieshaber KG | N/A | 21904 |

**Photograph 6: Test Configuration #6 (TC #6)**

**Table 2-8: Test Configuration #7 (TC #7)**

| Part | Model | Manufacturer | Cable Type | RTL Bar Code |
|---|---|---|---|---|
| UXNCCHKMAX | PS60K | VEGA Grieshaber KG | N/A | 21458 |
| Electronics | PS60HK | VEGA Grieshaber KG | N/A | 21141 |
| 48mm Filled Horn Antenna (19.8 dBi) | N/A | VEGA Grieshaber KG | N/A | 21909 |

**Photograph 7: Test Configuration #7 (TC #7)**

**Table 2-9: Test Configuration #8 (TC #8)**

| Part | Model | Manufacturer | Cable Type | RTL Bar Code |
|---|---|---|---|---|
| UXBXCHKMAX | PS60K | VEGA Grieshaber KG | N/A | 21455 |
| Electronics | PS60HK | VEGA Grieshaber KG | N/A | 21459 |
| 40mm Encapsulated Horn Antenna (19.6 dBi) | N/A | VEGA Grieshaber KG | N/A | 21912 |

**Photograph 8: Test Configuration #8 (TC #8)**

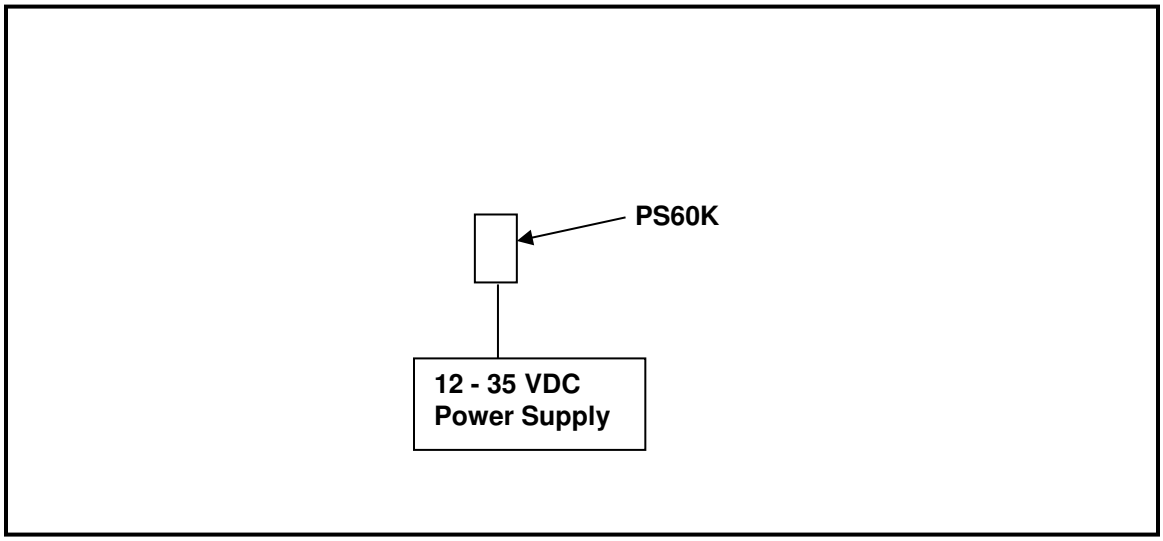
**Table 2-10: Test Configuration #9 (TC #9)**

| Part | Model (HVIN) | Manufacturer | Cable Type | RTL Bar Code |
|---|---|---|---|---|
| UXNCCHKMAX | PS60K | VEGA Grieshaber KG | N/A | 21458 |
| Electronics | PS60HK | VEGA Grieshaber KG | N/A | 21459 |
| 75mm Filled Horn Antenna (23.6 dBi) | N/A | VEGA Grieshaber KG | N/A | 21138 |

**Photograph 9: Test Configuration #9 (TC #9)**

**Photograph 10: EUT in Swivel Holder**

**Figure 2-1: Configuration of Tested System**




## 3 Test Distance and Exercising the EUT

The EUT's normal operating measurement mode is transmitting 2 pulses every second continuously. In measurement mode, the EUT maintains its full power. The EUT's spurious emissions were investigated and tested in the restricted and non-restricted bands from 9 kHz to 100 GHz at 3 meters. Furthermore, test antenna handheld measurements were performed in and around the EUT to determine radiated emissions emanating from the EUT since it was mounted on metal, concrete and fiberglass containers such that its main beam was enclosed and perpendicularly pointing downwards. All measurements above 1 GHz were performed at an antenna–EUT test distance of 0.1 meter with the test antenna polarized horizontally and vertically to determine the EUT's worst-case emissions up to 100 GHz. The measurement results were then corrected to the 3-meter limit. Measurements below 1 GHz were performed at an antenna distance of 3 meters on the EUT as a digital interface device. The EUT was tested with its main beam pointing vertically downward within steel, reinforced concrete and reinforced fiberglass enclosed containers. The EUT was investigated and tested up to 100 GHz in accordance with FCC Part 15.33(a)2. There were no discernable emissions above 26 GHz, hence the reason for reported data only up to 26 GHz in the test report.

Furthermore, all antennas were also investigated with the tilt bracket attached and positioned at the maximum tilt angle during the in-tank, LPR-installed radiated emissions measurements. However, there were no discernible differences between the main beam pointing vertically downward radiated emissions measured data and the tilt bracket (max tilt angle) radiated emissions measured data; as such the worst-case radiated emissions data with the main beam pointing vertically downward is presented in the report. Rohde & Schwartz FSU 50 spectrum analyzer and Rohde & Schwartz harmonic mixers were used for testing the EUT. The analyzer has functions and routines that distinguish ghost images from real images. Furthermore, RTL engineers have been thoroughly trained by Rohde & Schwartz to use the spectrum analyzer and mixers. We further attest that real measurements were made and the measurements were not masked by ghost images.

It must be noted for IC/ISED/Canada that the -41.3 dB EIRP limit required in section 5.3 of RSS-211 could not be measured for EUT with antennas configured in the metal, reinforced fiberglass and reinforced concrete tanks and tested, there were no fundamental carrier frequencies that could be measured for the RSS-211 report using the substitution method. The resolution bandwidth was reduced to 1 kHz to discern the signals, and handheld antenna measurements were performed in and around the EUT to measure the carrier with all EUT antenna. Thus, the EIRP could not be measured since the carrier is completely attenuated for the most part. The data in the report is an attempt to show the noise floor, there is hardly any carrier.

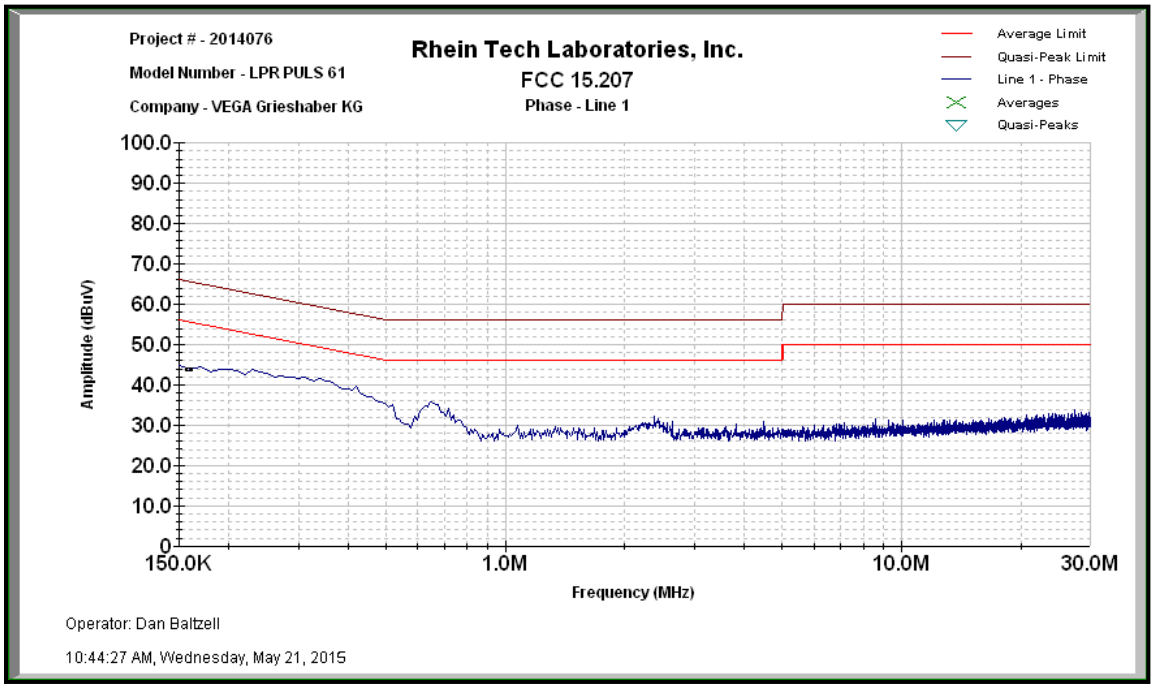
# 4 Conducted Limits - §15.207, IC RSS-Gen

Conducted emissions were performed on the EUT using an off-the-shelf 12-volt power supply. This was considered adequate since the EUT is used in industrial environments where industrial 12 VDC power is provided. The general conducted limit under Part 15.207 was applied. The EUT was investigated and tested with the highest gain antenna in TC #1. The antenna configuration or gain has does not have an impact on the conducted emissions data. The data below shows the worst-case emissions represents all EUT antenna configurations.

## 4.1 Conducted Emission Limits Test Data

### 4.1.1 Test Configuration #1 (TC #1)

**Plot 4-1: Conducted Emissions Transmit - Phase (TC #1)**



**Plot 4-2: Conducted Emissions Transmit – Neutral (TC #1)**

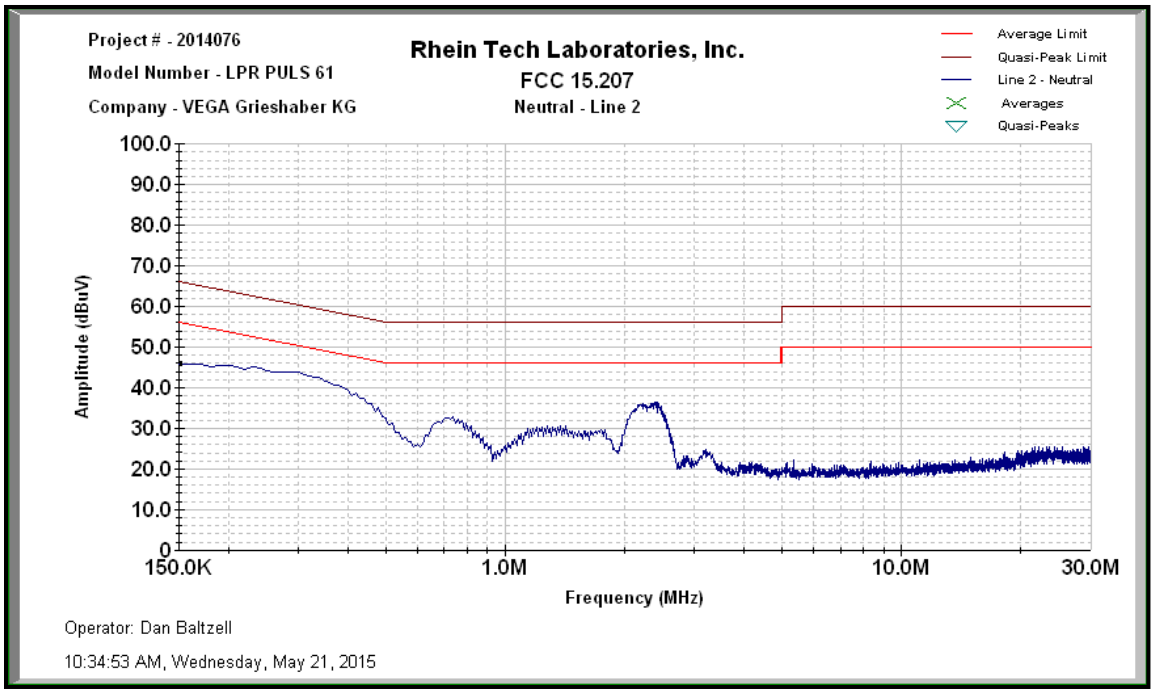
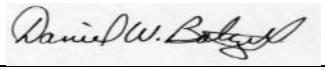



**Table 4-1: Conducted Line Emissions Test Equipment**

| RTL Asset # | Manufacturer | Model | Part Type | Serial Number | Calibration Due Date |
|---|---|---|---|---|---|
| 900968 | Hewlett Packard | 8567A | Spectrum Analyzer (10 kHz - 1.5 GHz) | 2602A00160 | 2/17/16 |
| 900339 | Hewlett Packard | 85650A | Quasi-Peak Adapter | 2521A00743 | 2/17/16 |
| 900970 | Hewlett Packard | 85662A | Spectrum Analyzer Display | 2542A11239 | 2/17/16 |
| 901083 | AFJ International | LS16 | 16A LISN (110 V) | 16010020080 | 12/27/15 |
| N/A | Rhein Tech Laboratories, Inc. | Automated Emissions Tester | Emissions Testing Software Rev. 14.0.2 | N/A | N/A |

**Test Personnel:**

| Daniel W. Baltzell |  | May 21, 2015 |
|---|---|---|
| Test Engineer | Signature | Date of Test |

# 5 Modulated Bandwidth – ANSI C63.10 6.9, RSS-211 5.1(a)

## 5.1 Modulated Bandwidth Test Procedure

The minimum 26 dB bandwidth was measured using a 50-ohm spectrum analyzer with the resolution bandwidth set at 1 MHz and the video bandwidth set at 3 MHz. The spectrum analyzer's mixer mode resulted in an overlapping bandwidth image with the actual image and a ghost image. The analyzer "Signal ID" and "Auto ID" were used to aid in discerning between the ghost images displayed by the mixer; the left and right markers can be calculated from twice the intermediate frequency of 404.4 MHz (808.8 MHz) from the ghost edge images to the actual bandwidth edges (distance between ghost images). The display markers could not be set to -26 dB from the peak since the spectral lines were completely vertical resulting in a noise floor placement. Max hold was used until the spectrum was adequately filled to portray the bandwidth and a plot was taken.

**Plot 5-1: Modulated Bandwidth - TC #1**

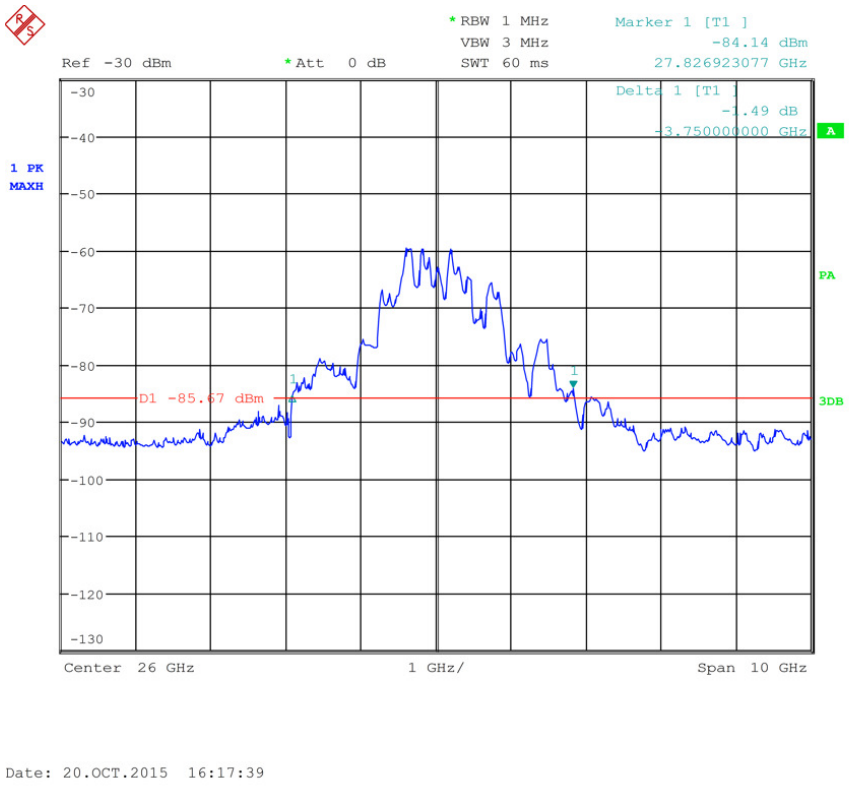
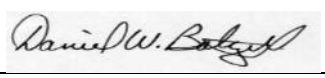



**Table 5-1: Modulated Bandwidth Data**

| Model | EUT Configuration | 26 dB Bandwidth (MHz) |
|---|---|---|
| Electronics PS60HK | TC #1 | 3750.0 |

**Test Personnel:**

| Daniel W. Baltzell |  | October 20, 2015 |
|---|---|---|
| Test Engineer | Signature | Date of Test |

# 6 Radiated Emission Limits - §15.209, IC RSS-Gen, RSS-211 5.3

## 6.1 Radiated Emission Limits Test Procedure

The EUT's radiated spurious emissions, comprised of harmonic and spurious emissions that fall in the restricted and non-restricted bands, were investigated and tested from 0.009 kHz to 100 GHz in accordance with C63.10 2015. The restricted bands are listed in Part 15.205. The maximum permitted average field strength for the restricted band is listed in Part 15.209. To determine worst-case emissions, the EUT was tested while installed perpendicularly downwards in steel and concrete containers, and the EUT was rotated along its axis.
The test antenna was horizontally and vertically polarized during testing. The general limit under Part 15.209 was applied for all frequencies from 0.009 kHz to 100 GHz, per FCC 15.209. Radiated spurious emissions were detected between 9kHz MHz to 1 GHz; none were detected from 1 GHz to 100 GHz that were within 6dB of the peak or average limits. Horizontal and vertical antenna polarization radiated spurious emissions plots are provided from 9kHz to 26.5 GHz to demonstrate that the EUT has no discernable radiated spurious emissions to measure. A handheld test-antenna measurement method was also used in, around, and close to the EUT, to investigate radiated spurious emissions; no radiated spurious emissions were found, except within the authorized band of the carrier.

The EUT was investigated and tested with test configurations TC #1, TC #2, TC #3, TC #4, TC #5, TC #6, TC #7, TC #8, and TC #9 in enclosed steel, reinforced concrete and reinforced fiberglass containers. The EUT configurations TC #1, TC #2, TC #3, TC #4, TC #5, TC #6, TC #7, TC #8, and TC #9 were also investigated and tested configured with a swivel holder and installed inside the enclosed steel, reinforced concrete and reinforced fiberglass containers.

## 6.2 Field Strength Calculation

The field strength is calculated by adding the antenna factor and the cable factor from the measured Spectrum Analyzer reading.

Spectrum Analyzer Level Corrected (dBuV/m) = Spectrum Analyzer Level (dBuV/m) + AF (dB/m) + CL (dB);

where AF = antenna factor and CL = cable loss

## 6.3 Radiated Emission Limits Test Data 9 kHz – 26 GHz

### 6.3.1 Radiated Emissions Carrier Test Data - Steel Container

#### 6.3.1.1 Radiated Emissions Carrier Test Data - TC#1 Steel Container

**Plot 6-1: Radiated Emissions of Carrier - TC #1 Steel Container**

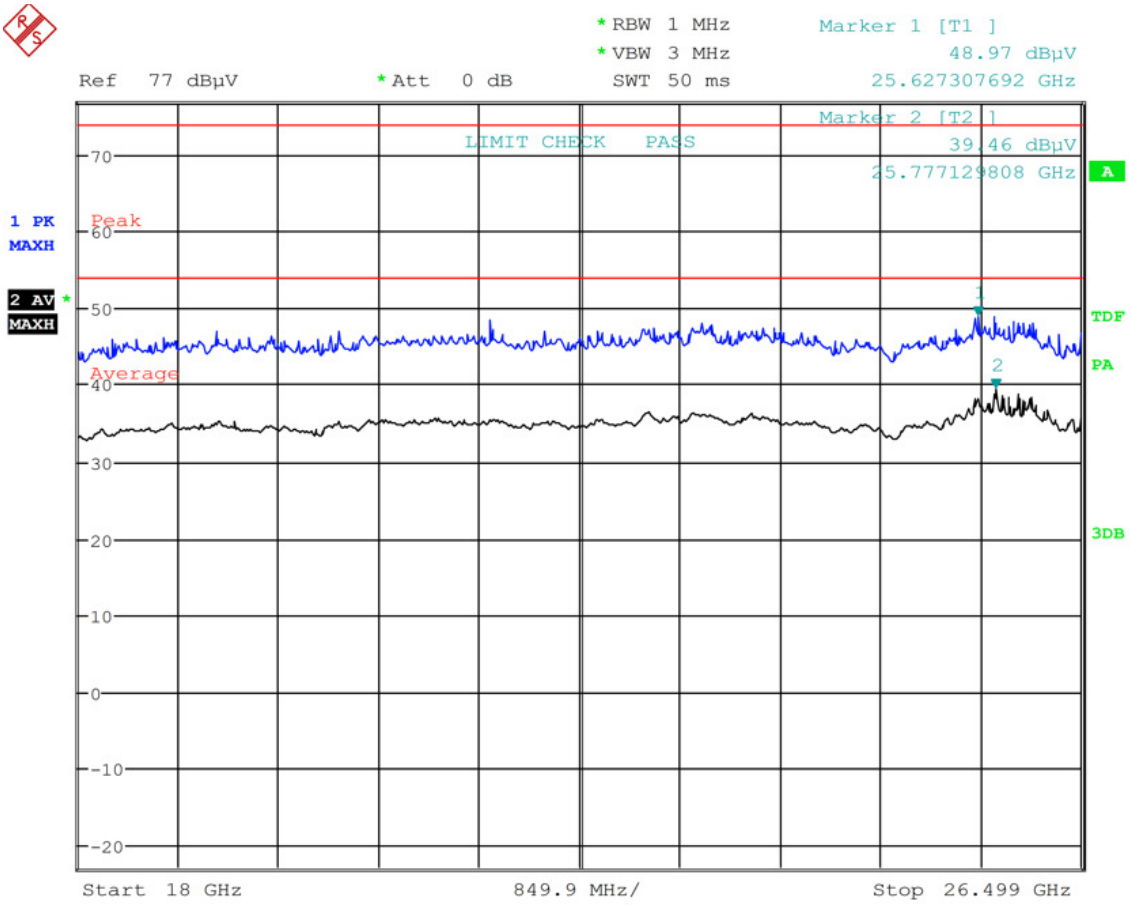
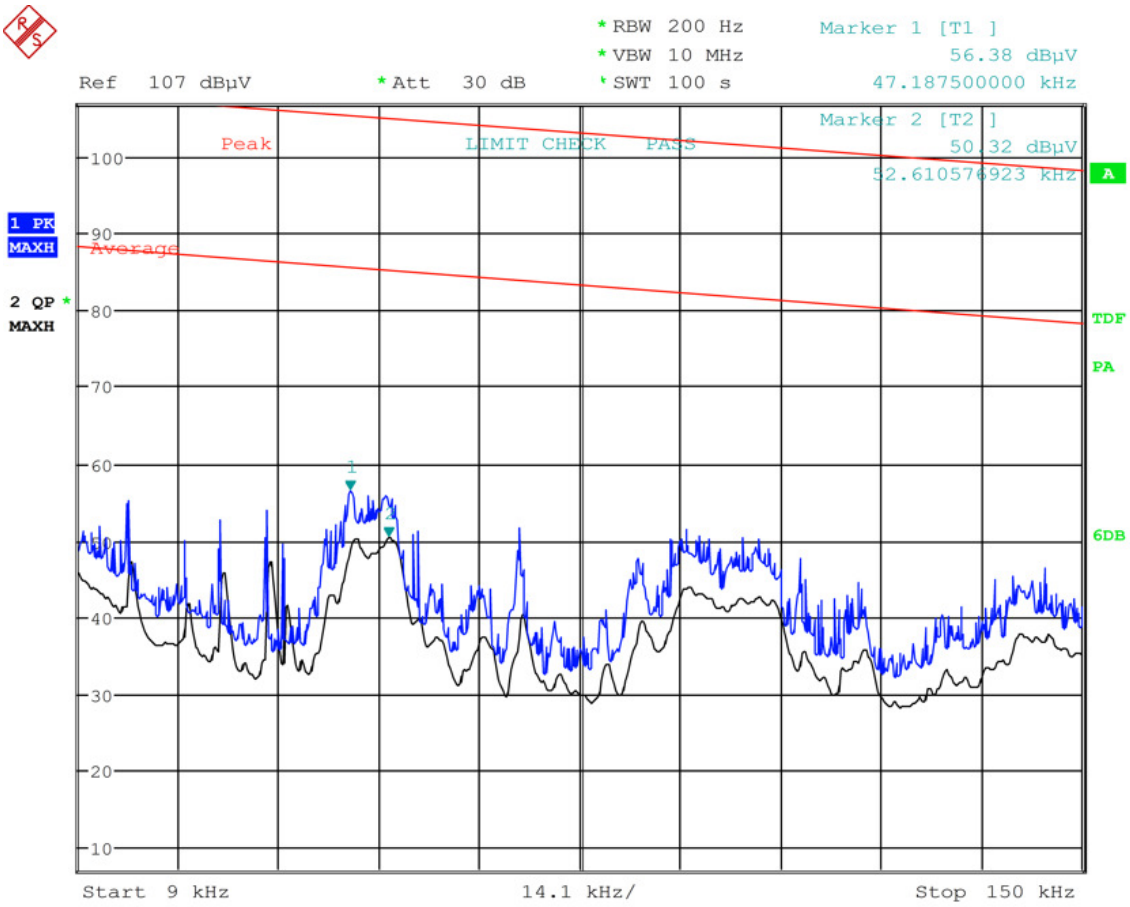



**Table 6-1: Radiated Emissions of Carrier – TC #1 Steel Container**

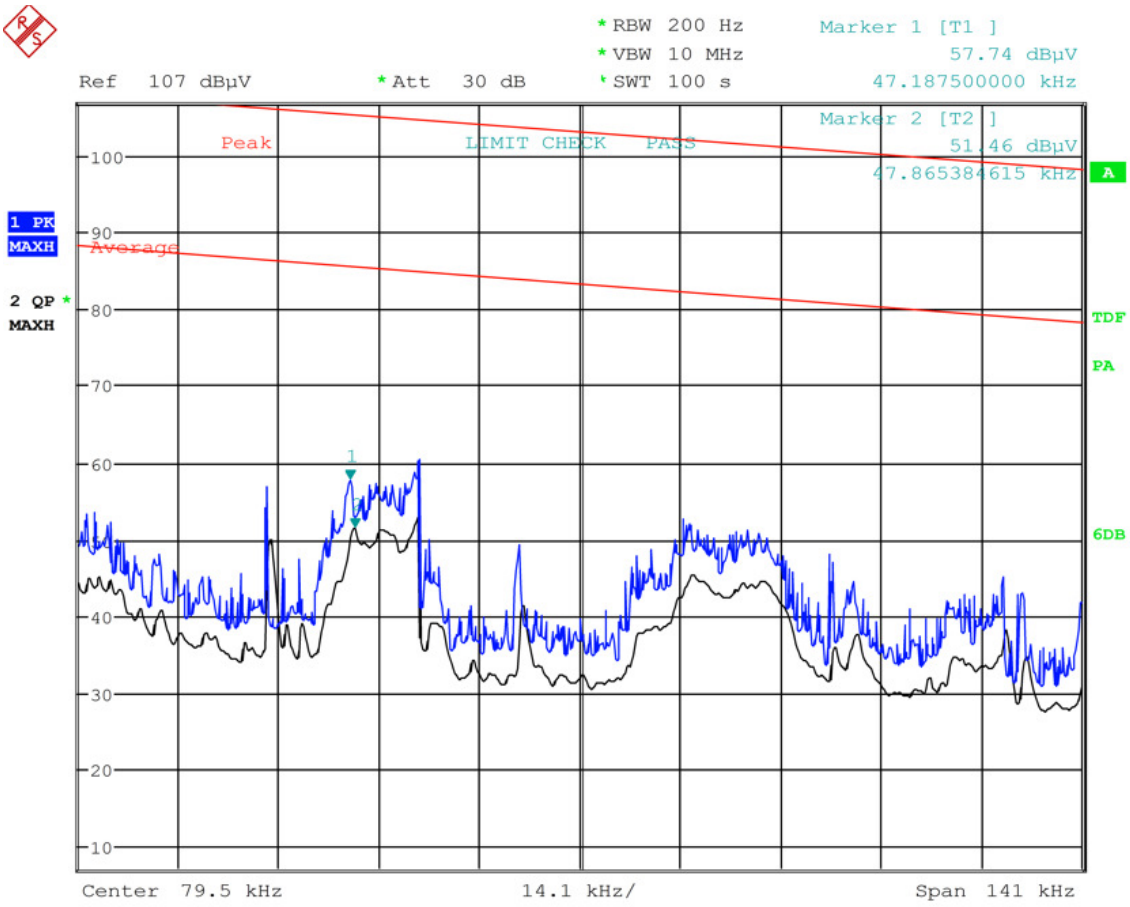
| Frequency (GHz) | Detector | Test Antenna Pol | Corrected Spectrum Analyzer Level (dBuV/m) | FCC Limit (dBuV) | Margin (dB) | Corrected Spectrum Analyzer Level (dBm/MHz) | IC Limit (dBm/MHz) | Margin (dBm) |
|---|---|---|---|---|---|---|---|---|
| 25.6273 | Peak | H | 49.0 | 74.0 | -25.0 | NA | | |
| 25.7771 | Average | H | 39.5 | 54.0 | -14.5 | -55.7 | -41.3 | 14.4 |

**Plot 6-2: Radiated Emissions Transmit – 9 kHz – 150 kHz Horizontal Peak/Average**



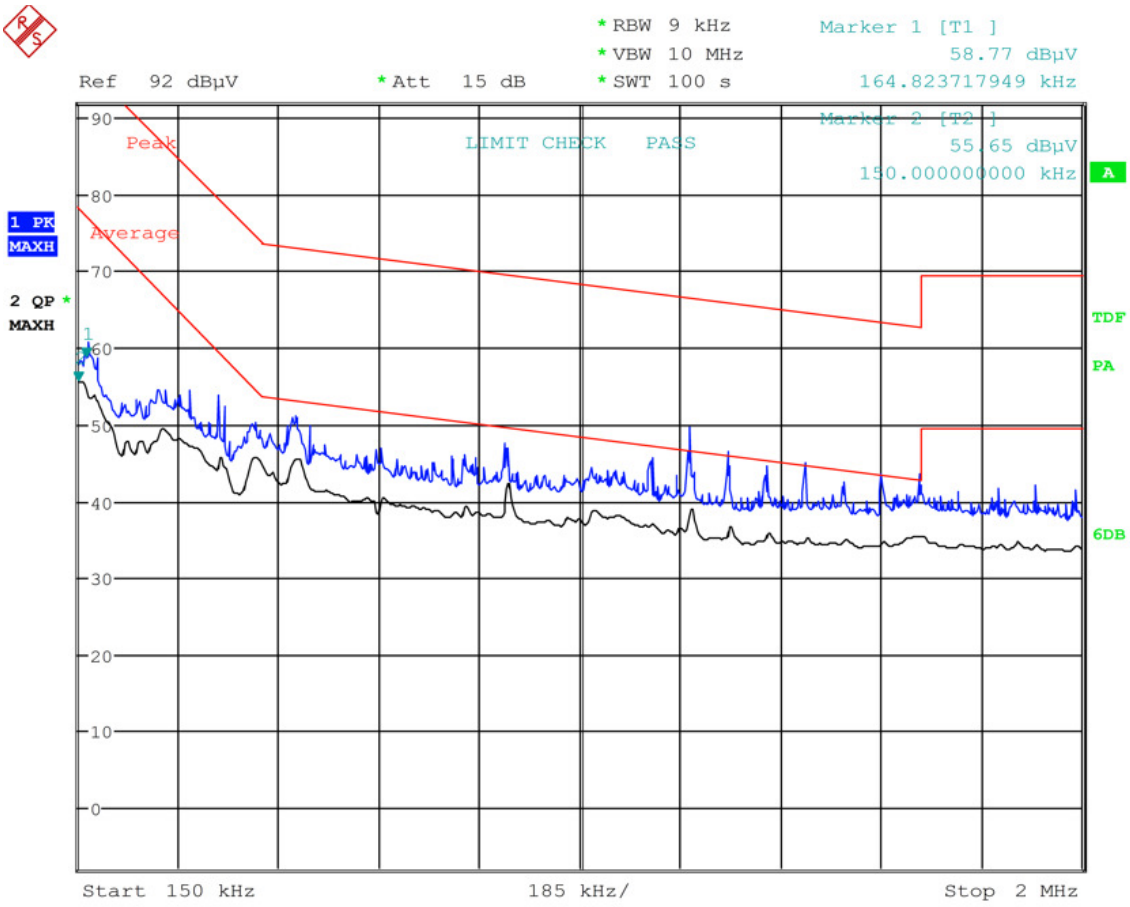

Date: 24.OCT.2015 16:26:53

**Plot 6-3: Radiated Emissions Transmit – 9 kHz – 150 kHz Vertical Peak/Average**



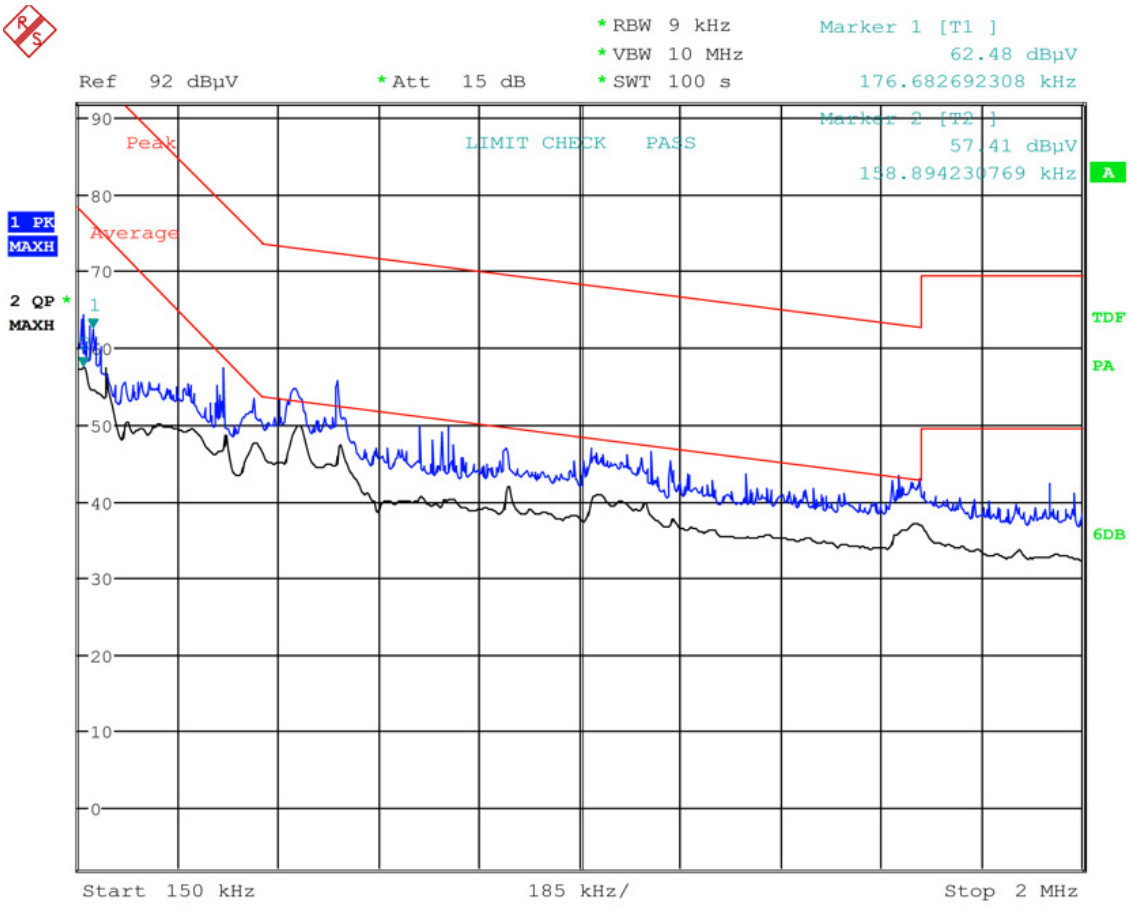

Date: 24.OCT.2015 16:29:31

**Plot 6-4: Radiated Emissions Transmit – 150 kHz – 2 MHz Horizontal Peak/Average**



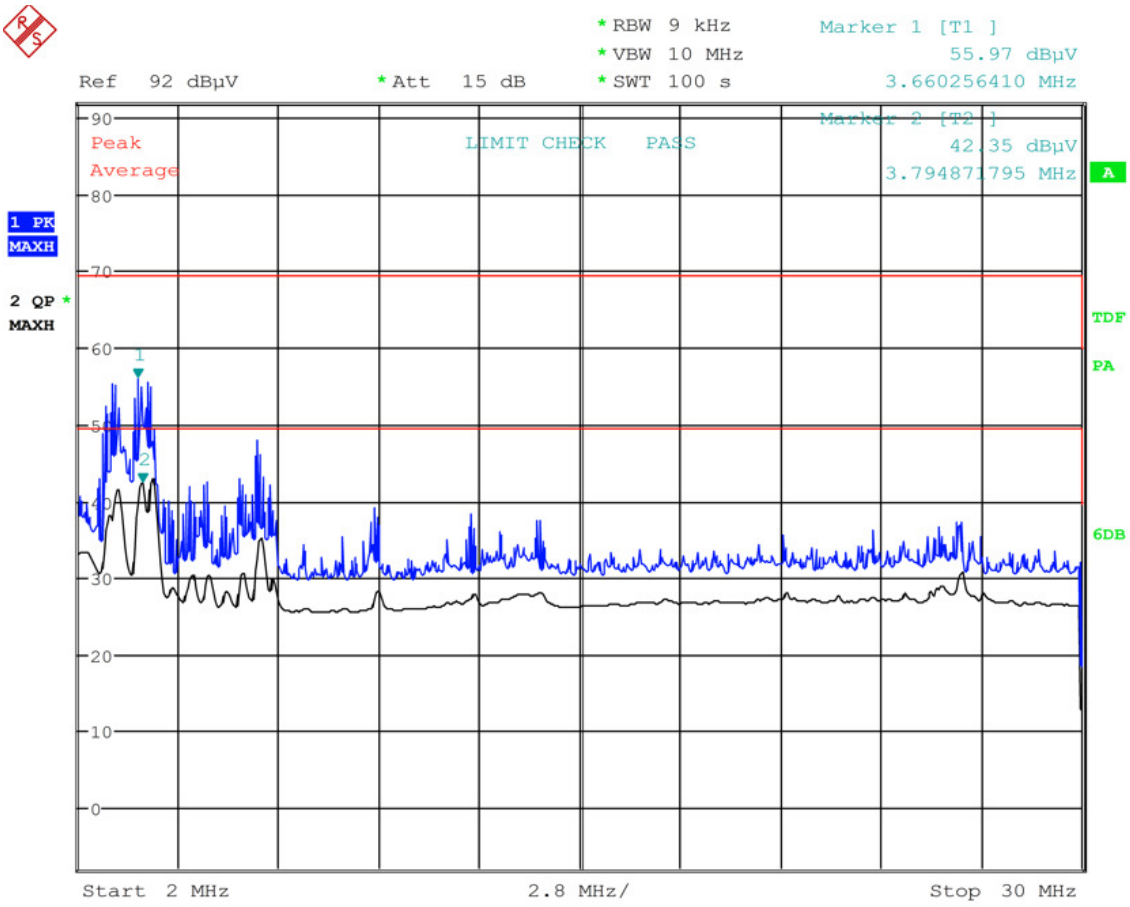

Date: 24.OCT.2015 16:24:23

**Plot 6-5: Radiated Emissions Transmit – 150 kHz – 2 MHz Vertical Peak/Average**



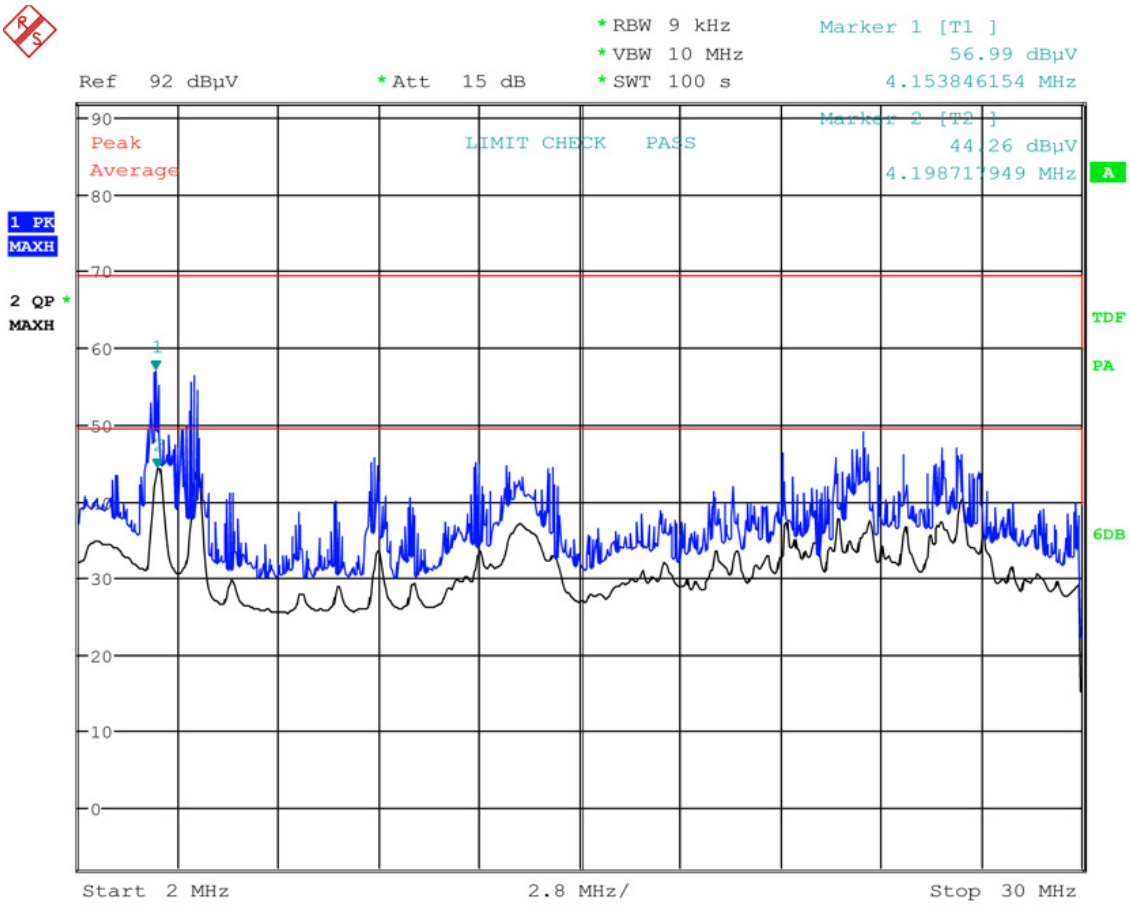

Date: 24.OCT.2015 16:22:21

**Plot 6-6: Radiated Emissions Transmit – 2 MHz – 30 MHz Horizontal Peak/Average**



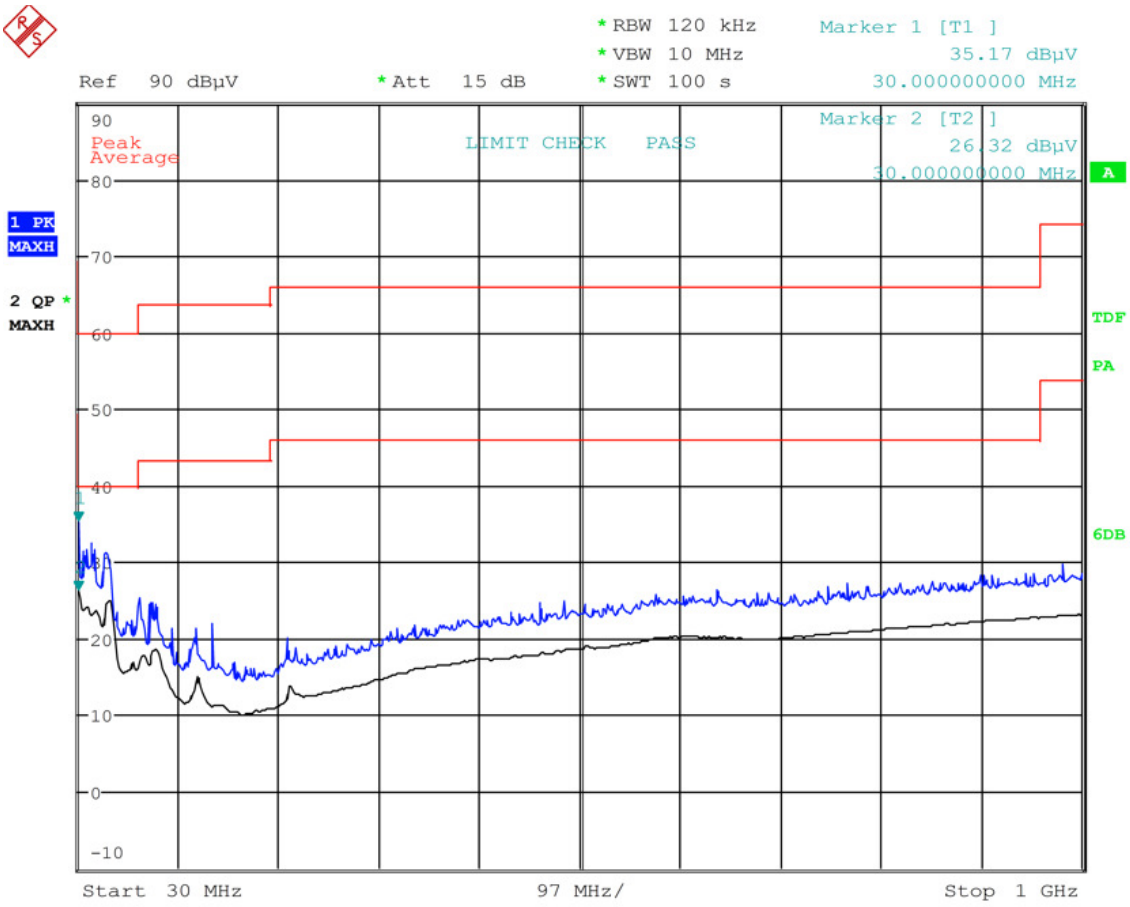

Date: 24.OCT.2015 16:17:56

**Plot 6-7: Radiated Emissions Transmit – 2 MHz – 30 MHz Vertical Peak/Average**



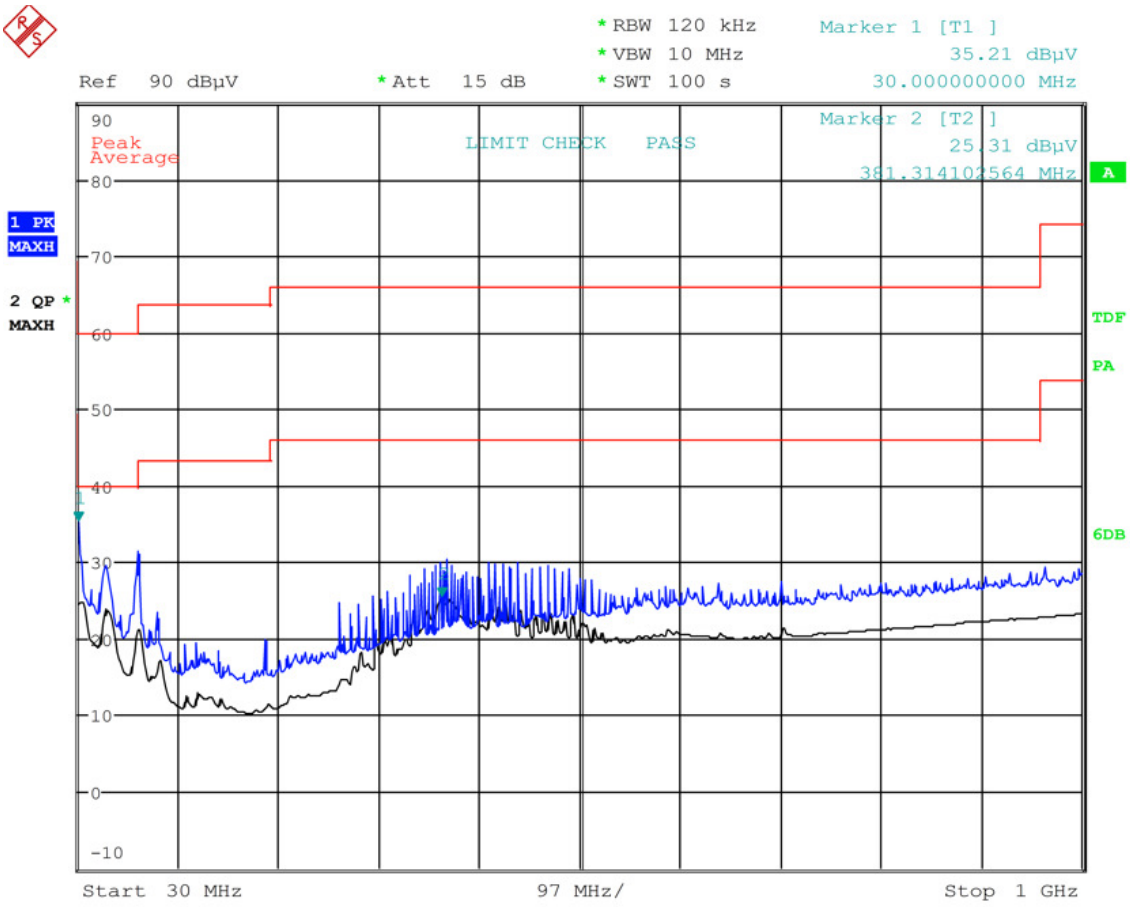

Date: 24.OCT.2015 16:19:56

**Plot 6-8: Radiated Emissions Transmit – 30 MHz – 1 GHz Horizontal Peak/Average**




Date: 24.OCT.2015 16:10:30

**Plot 6-9: Radiated Emissions Transmit – 30 MHz – 1 GHz Vertical Peak/Average**

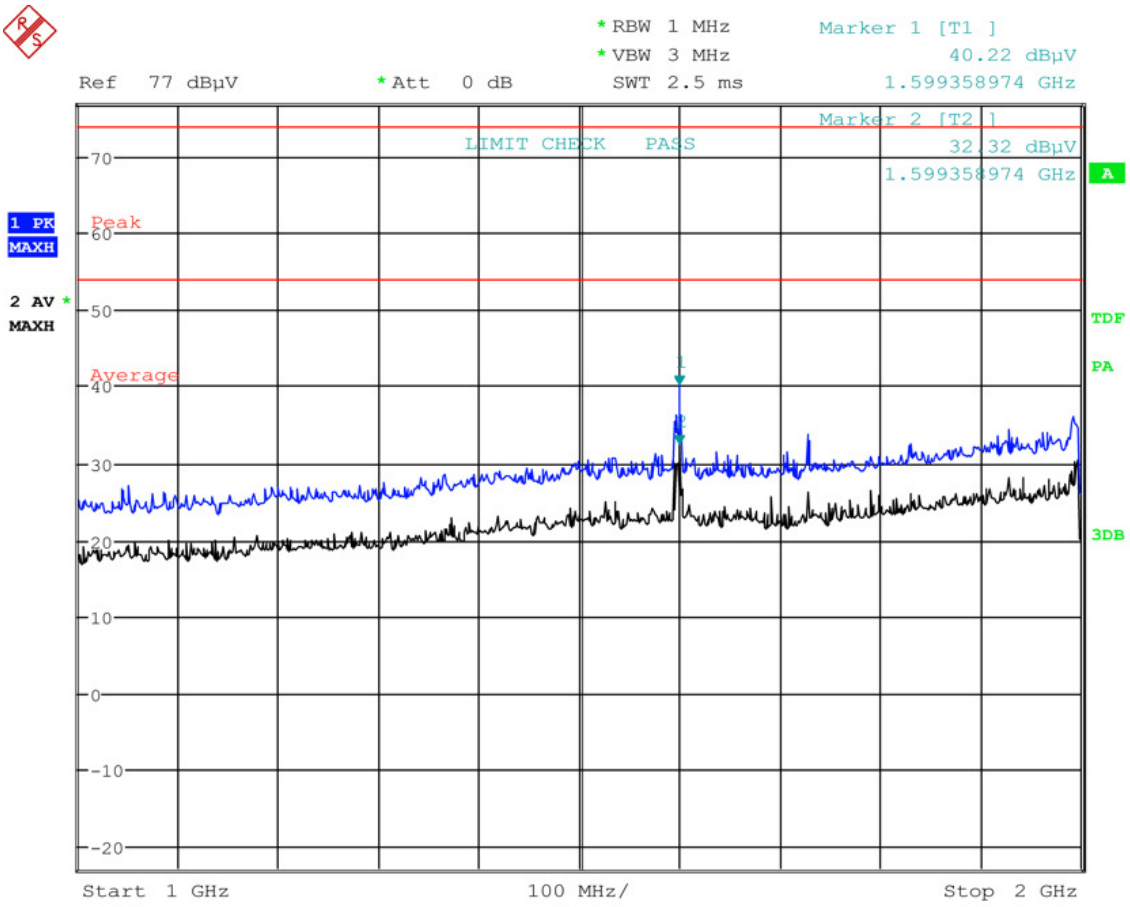



Date: 24.OCT.2015 16:12:34

Note: Unwanted emissions were investigated as a digital device (other than harmonics) as required by 15.33(a)(3).

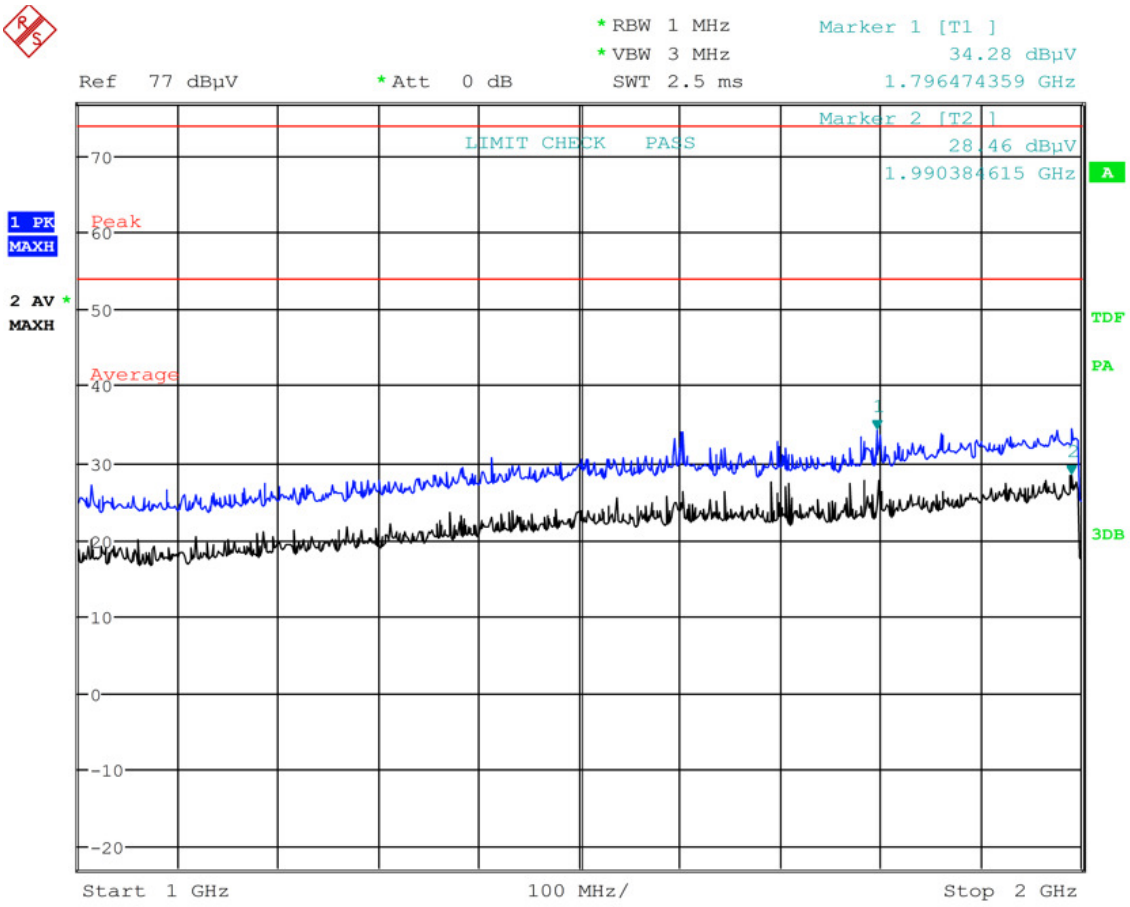
### 6.3.1.2 Radiated Emissions 1 GHz – 26 GHz Test Data – TC#1 Steel Container

**Plot 6-10: Radiated Emissions 1 GHz – 2 GHz Horizontal Peak/Average**



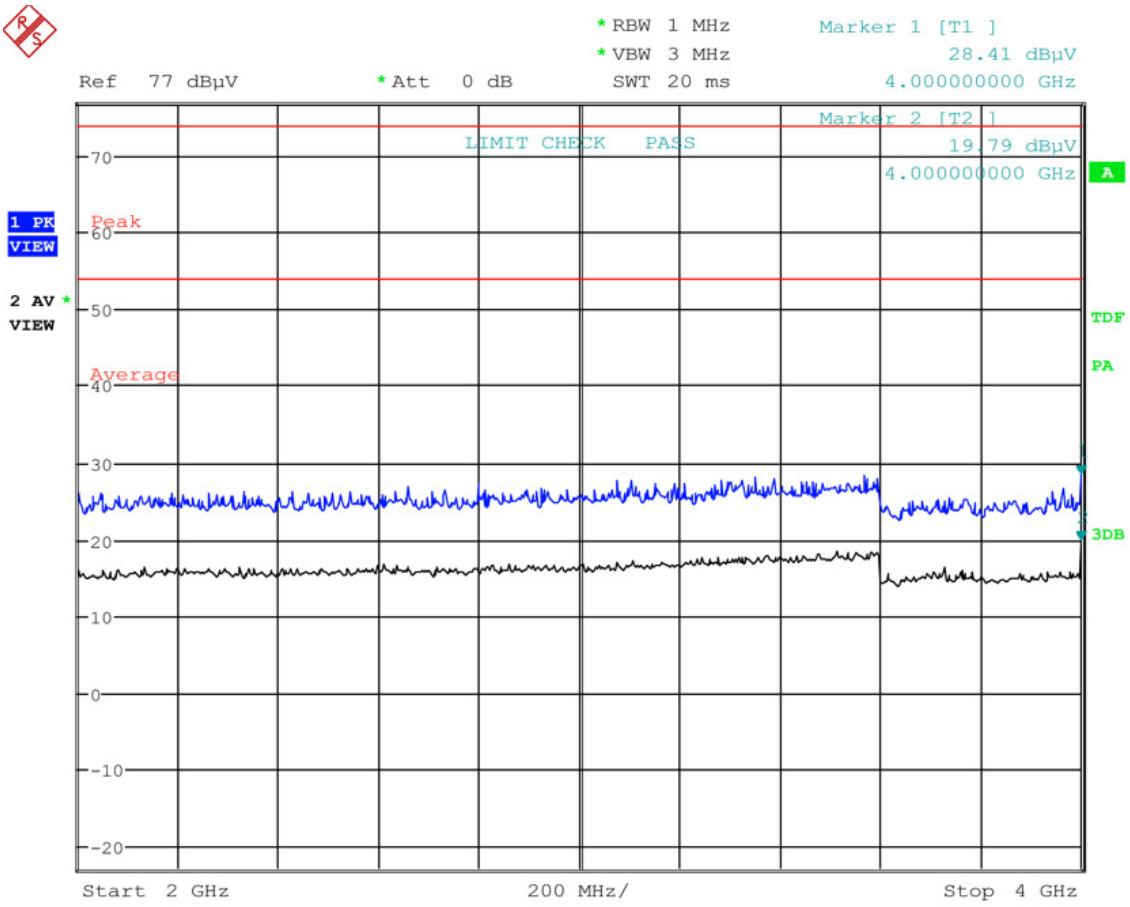

Date: 24.OCT.2015 16:06:17

**Plot 6-11: Radiated Emissions 1 GHz – 2 GHz Vertical Peak/Average**



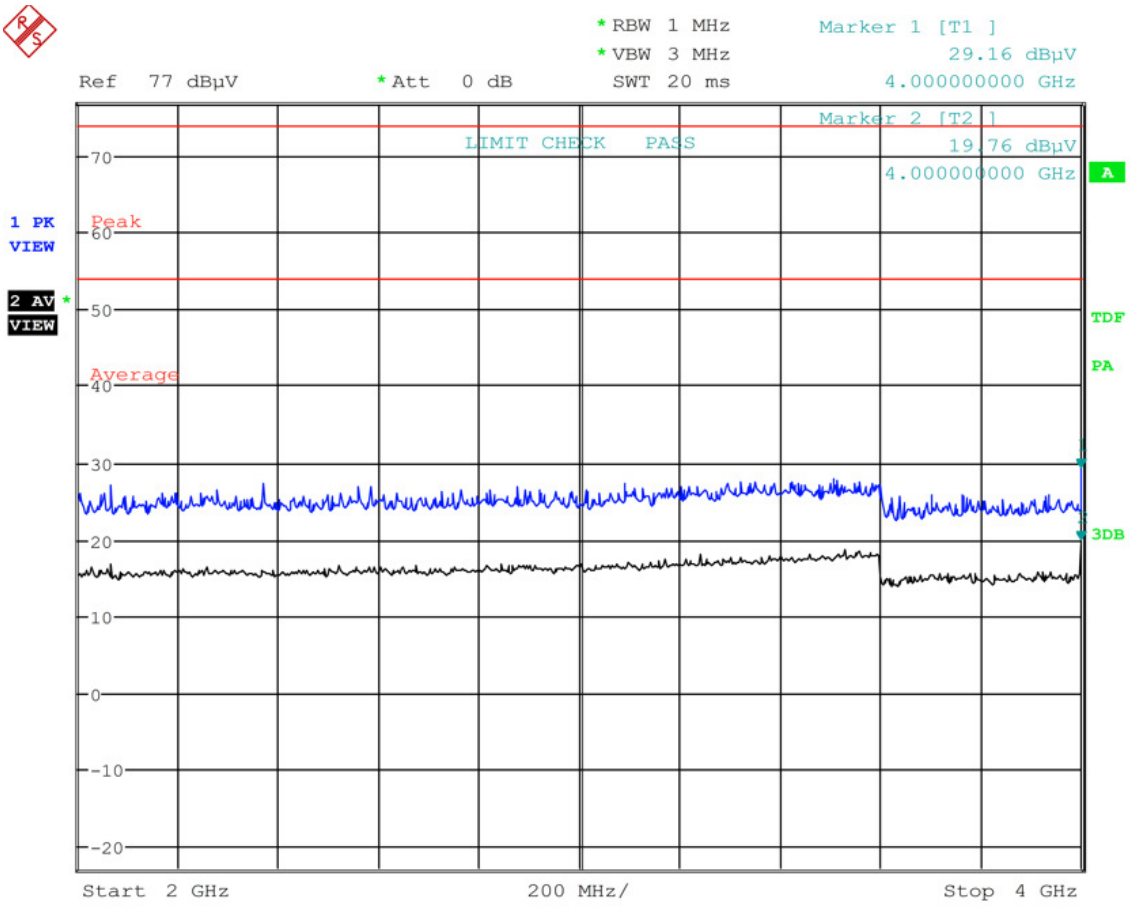

Date: 24.OCT.2015 16:05:49

**Plot 6-12: Radiated Emissions 2 GHz – 4 GHz Horizontal Peak/Average**



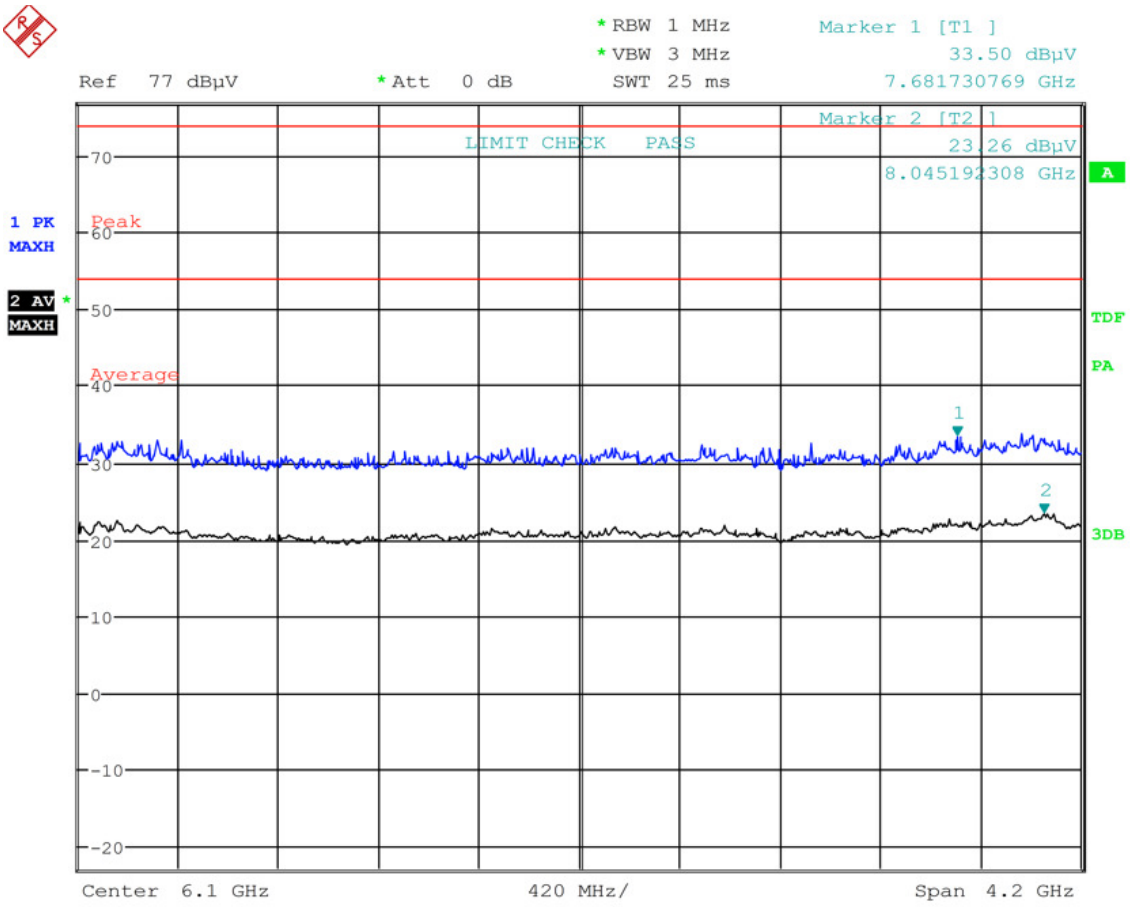

Date: 24.OCT.2015 16:02:43

**Plot 6-13: Radiated Emissions 2 GHz – 4 GHz Vertical Peak/Average**



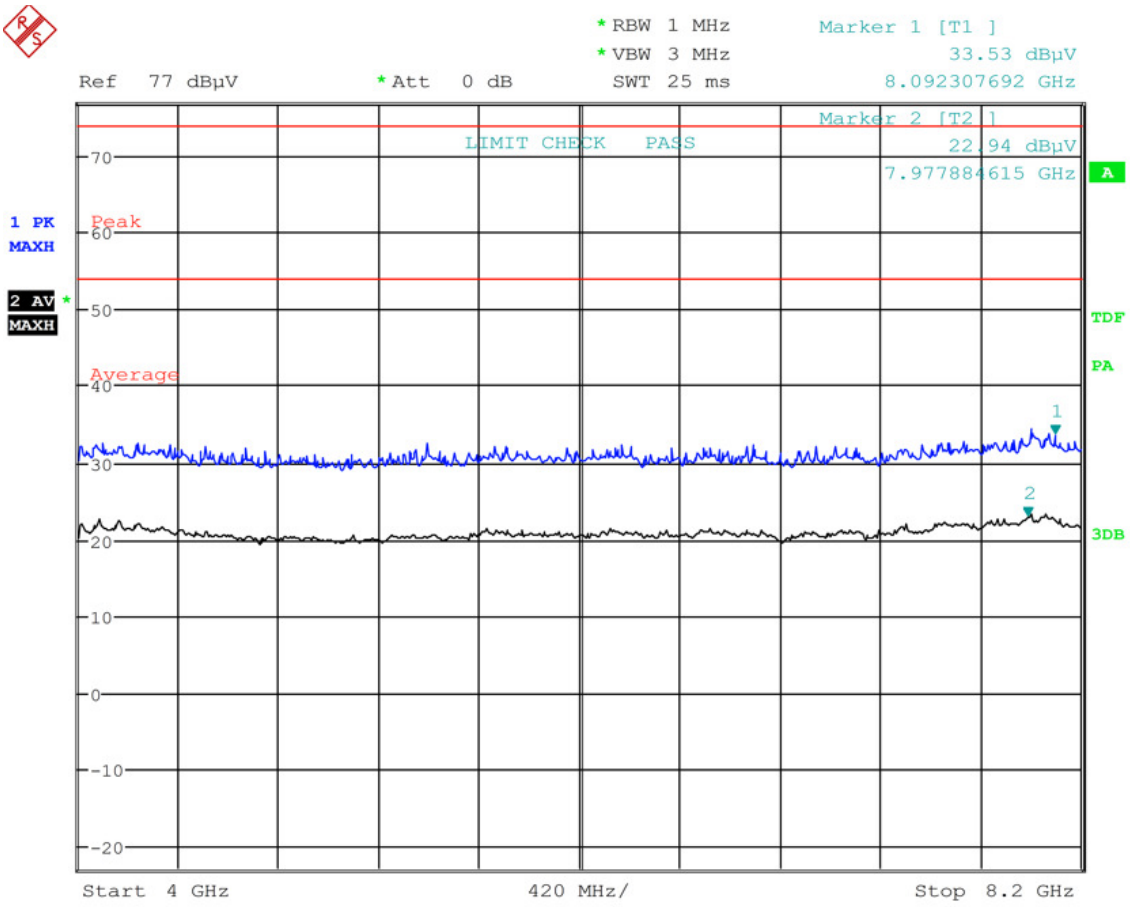

Date: 24.OCT.2015 16:03:27

**Plot 6-14: Radiated Emissions 4 GHz – 8 GHz Horizontal Peak/Average**



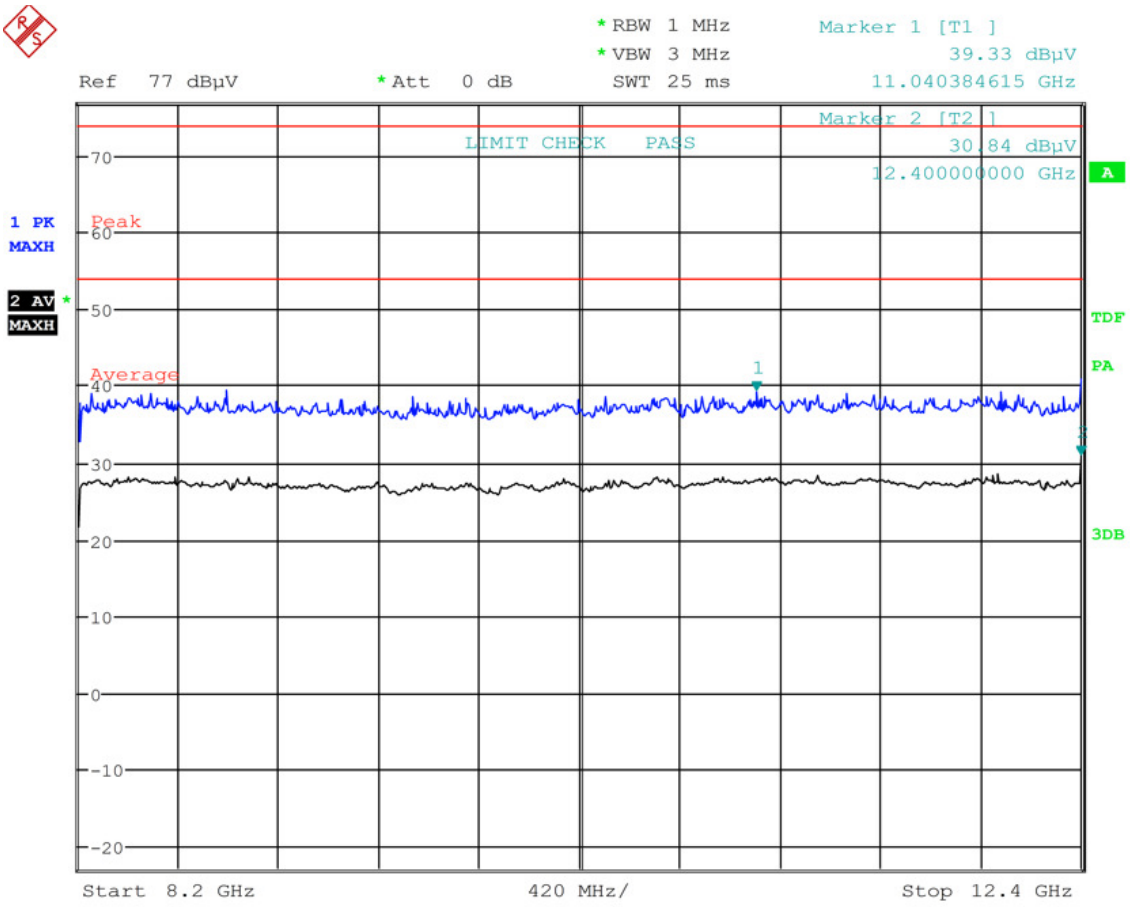

Date: 24.OCT.2015 16:00:44

**Plot 6-15: Radiated Emissions 4 GHz – 8 GHz Vertical Peak/Average**



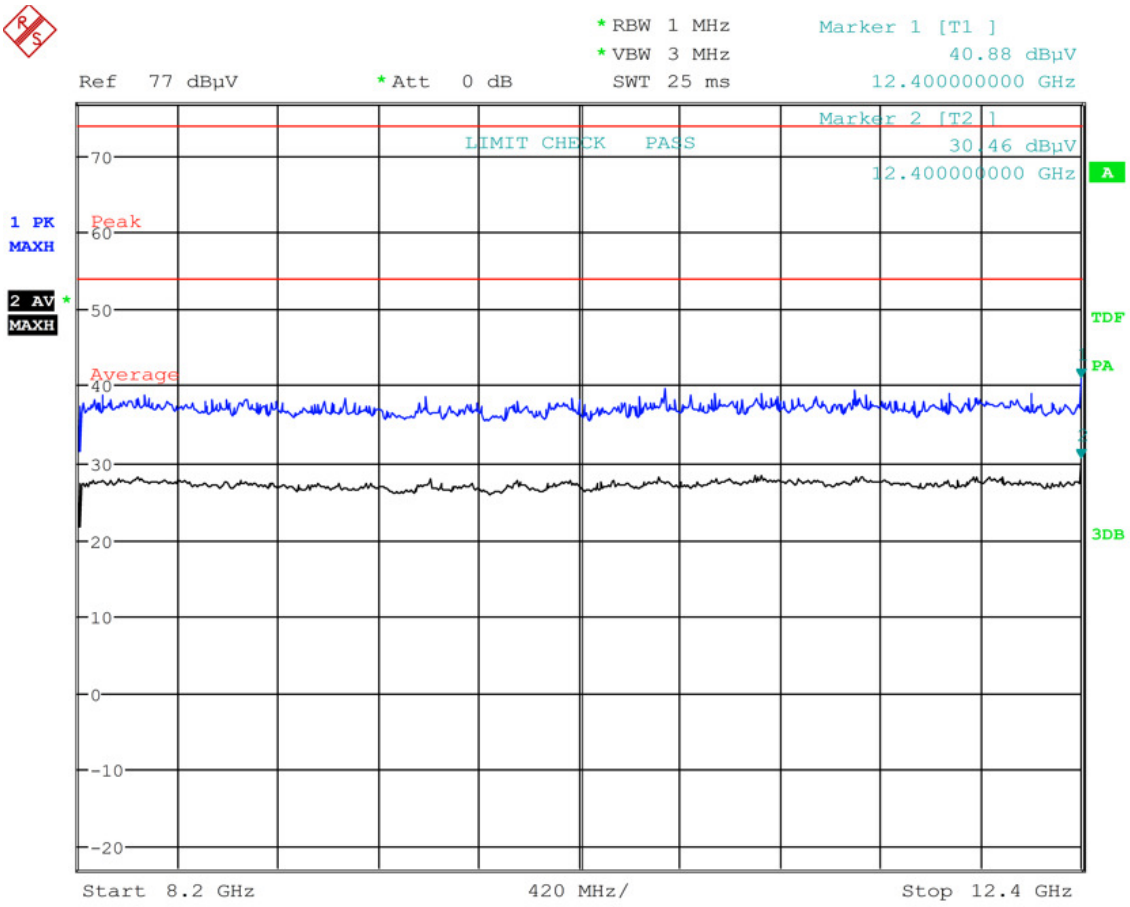

Date: 24.OCT.2015 16:00:20

**Plot 6-16: Radiated Emissions 8 GHz – 12 GHz Horizontal Peak/Average**



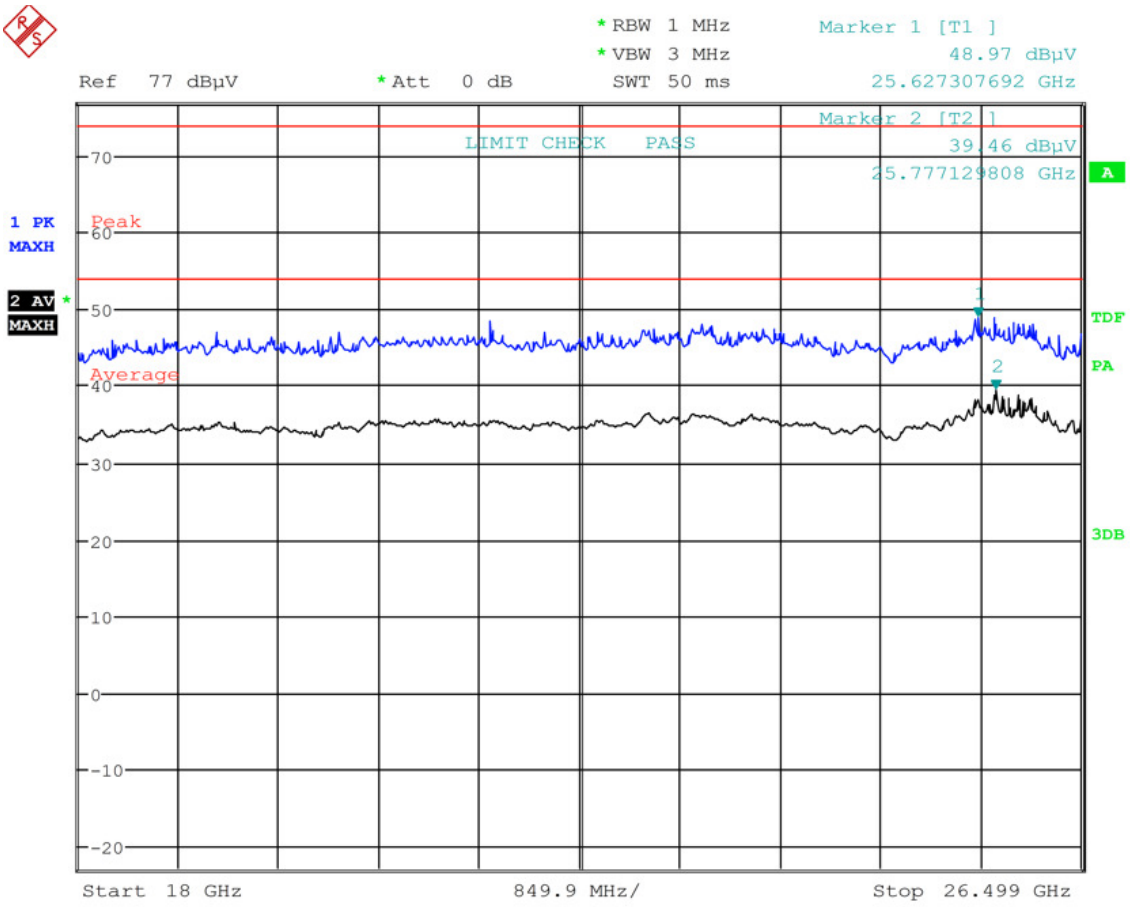

Date: 24.OCT.2015 15:59:13

**Plot 6-17: Radiated Emissions 8 GHz – 12 GHz Vertical Peak/Average**



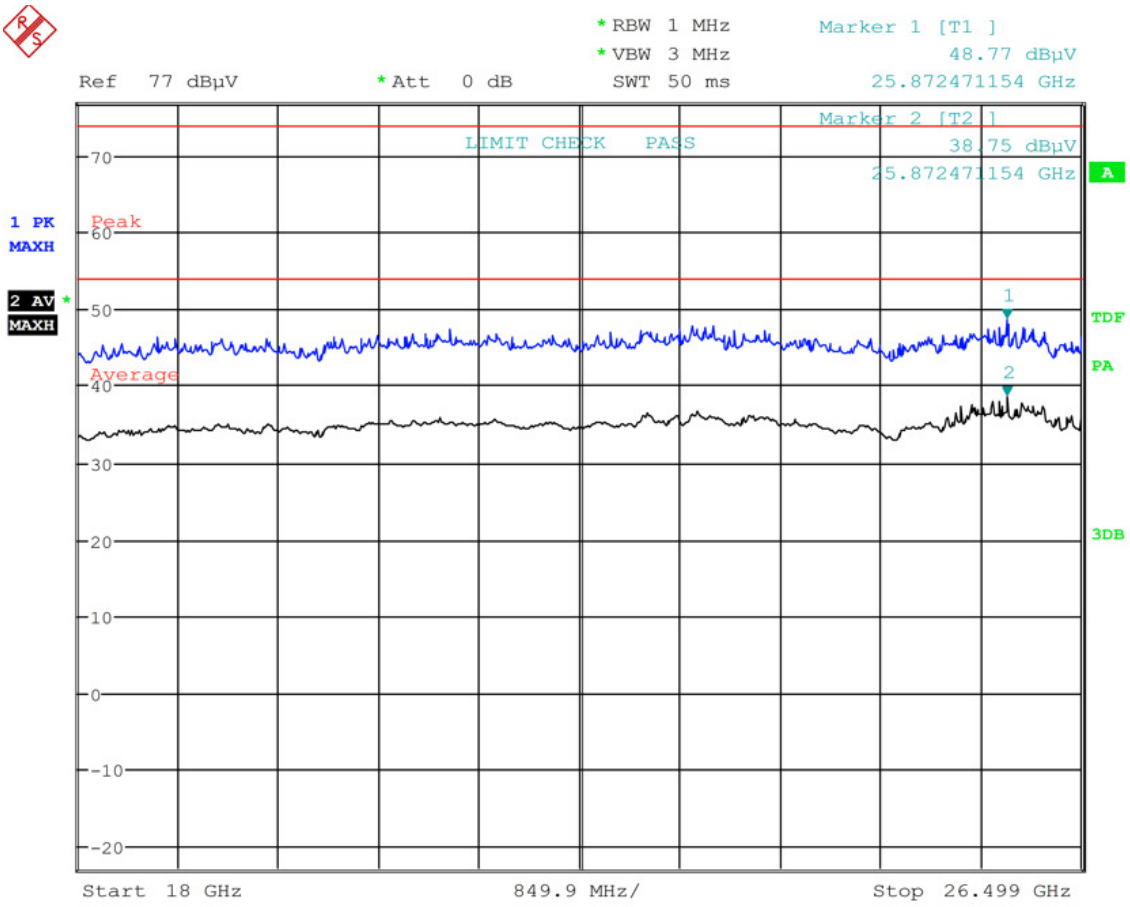

Date: 24.OCT.2015 15:59:35

**Plot 6-18: Radiated Emissions 18 GHz – 26 GHz Horizontal Peak/Average**




Date: 24.OCT.2015 15:56:42

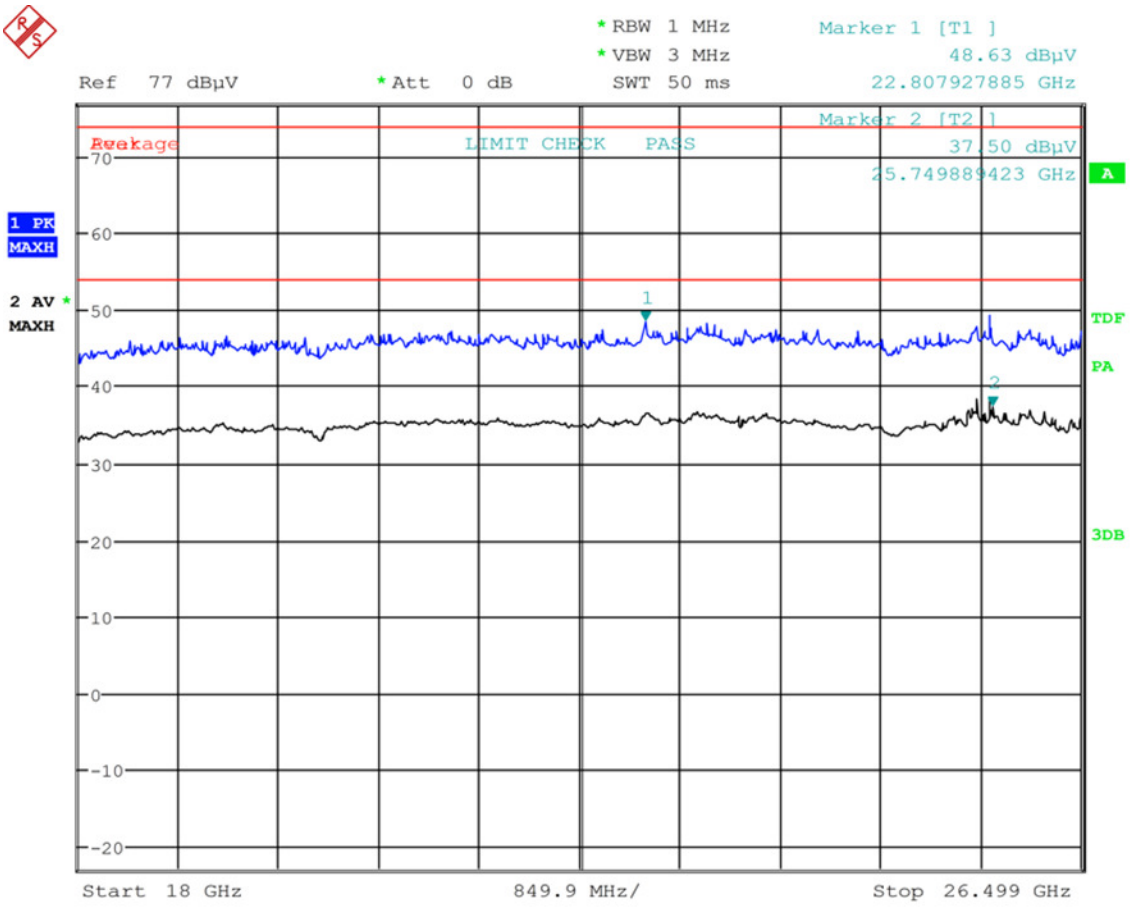
**Plot 6-19: Radiated Emissions 18 GHz – 26 GHz Vertical Peak/Average**




Date: 24.OCT.2015 15:57:05

### 6.3.1.3 Radiated Emissions Carrier Test Data - TC#2 Steel Container

**Plot 6-20: Radiated Emissions of Carrier - TC #2 Steel Container**



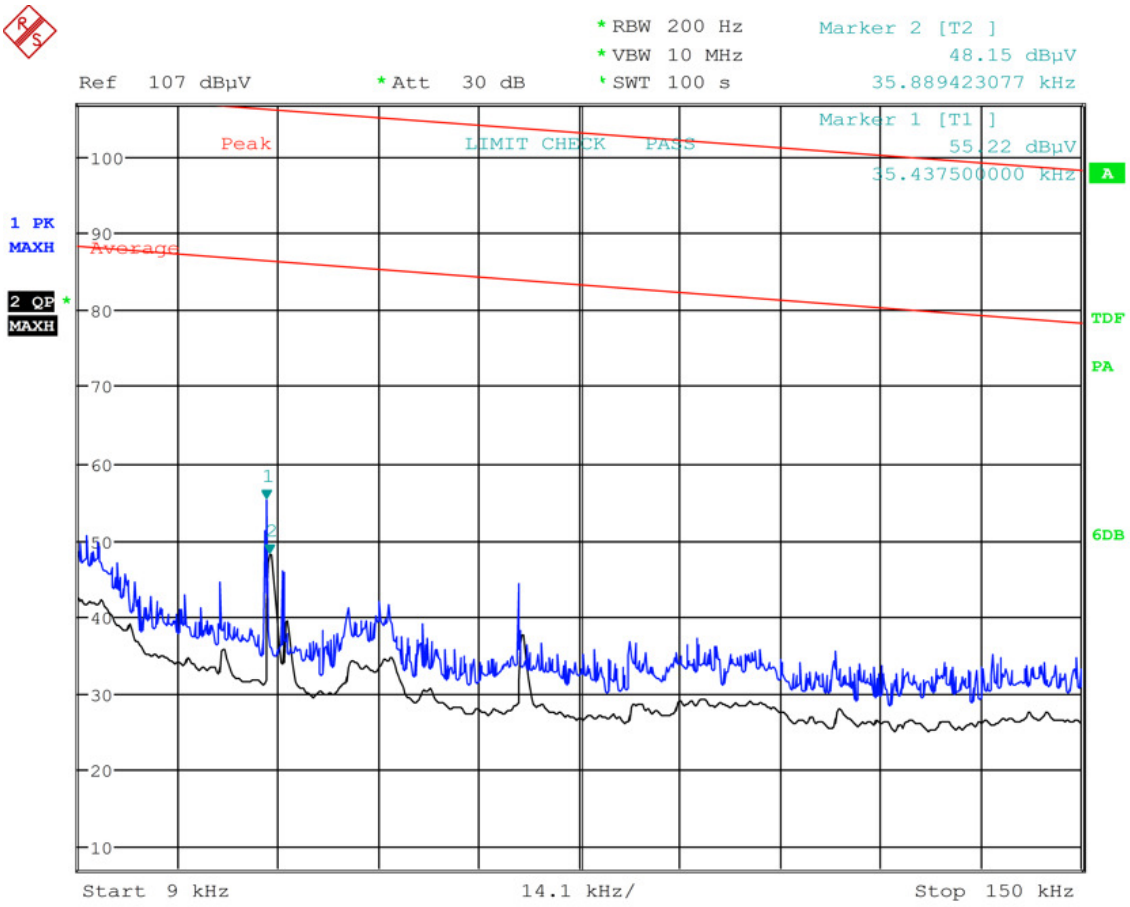

Date: 4.NOV.2015 09:54:16

**Table 6-2: Radiated Emissions of Carrier – TC #2 Steel Container**

| Frequency (GHz) | Detector | Test Antenna Pol | Corrected Spectrum Analyzer Level (dBuV/m) | FCC Limit (dBuV) | Margin (dB) | Corrected Spectrum Analyzer Level (dBm/MHz) | IC Limit (dBm/MHz) | Margin (dBm) |
|---|---|---|---|---|---|---|---|---|
| 25.5434 | Peak | V | 48.6 | 74.0 | -25.4 | NA | | |
| 25.7771 | Average | V | 37.5 | 54.0 | -16.5 | -57.7 | -41.3 | 15.7 |

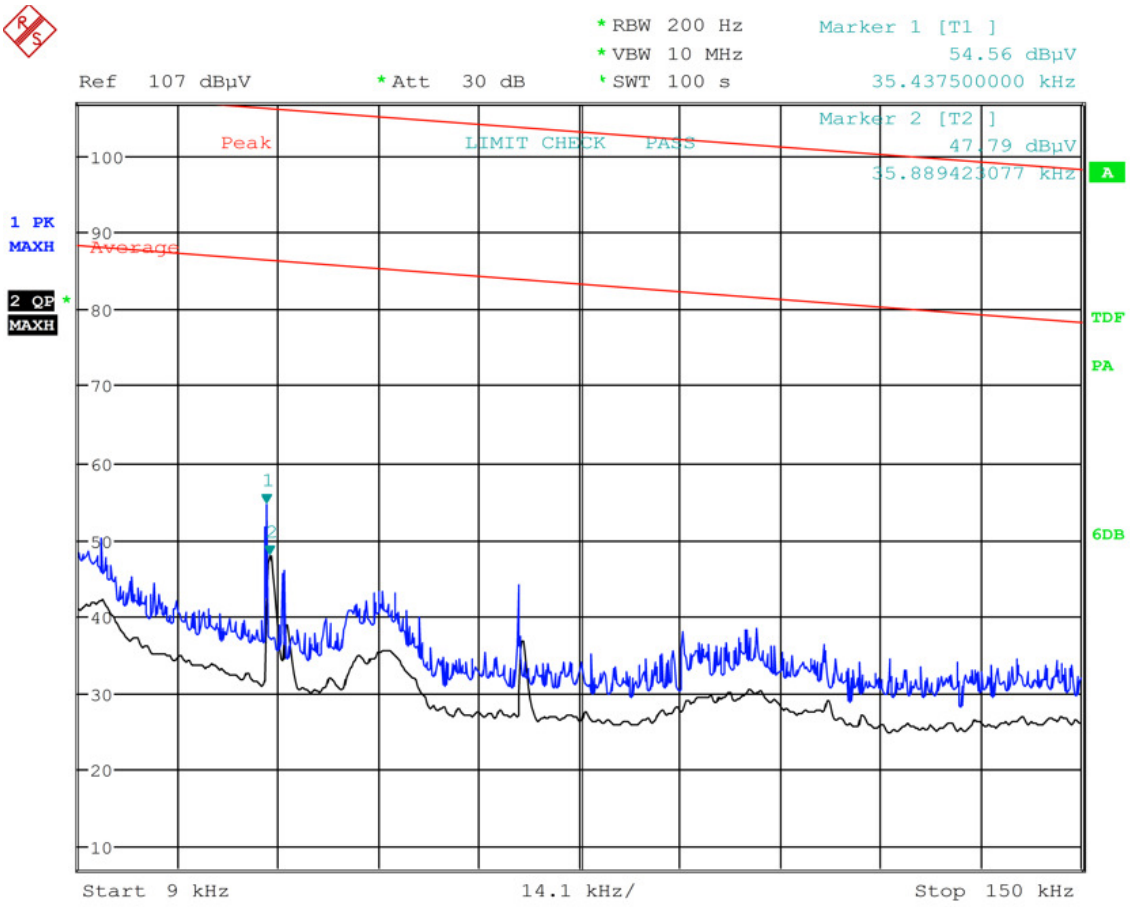
### 6.3.1.4 Radiated Emissions Below 1 GHz Test Data – TC#2 Steel Container

**Plot 6-21: Radiated Emissions Transmit – 9 kHz – 150 kHz Horizontal Peak/Average**



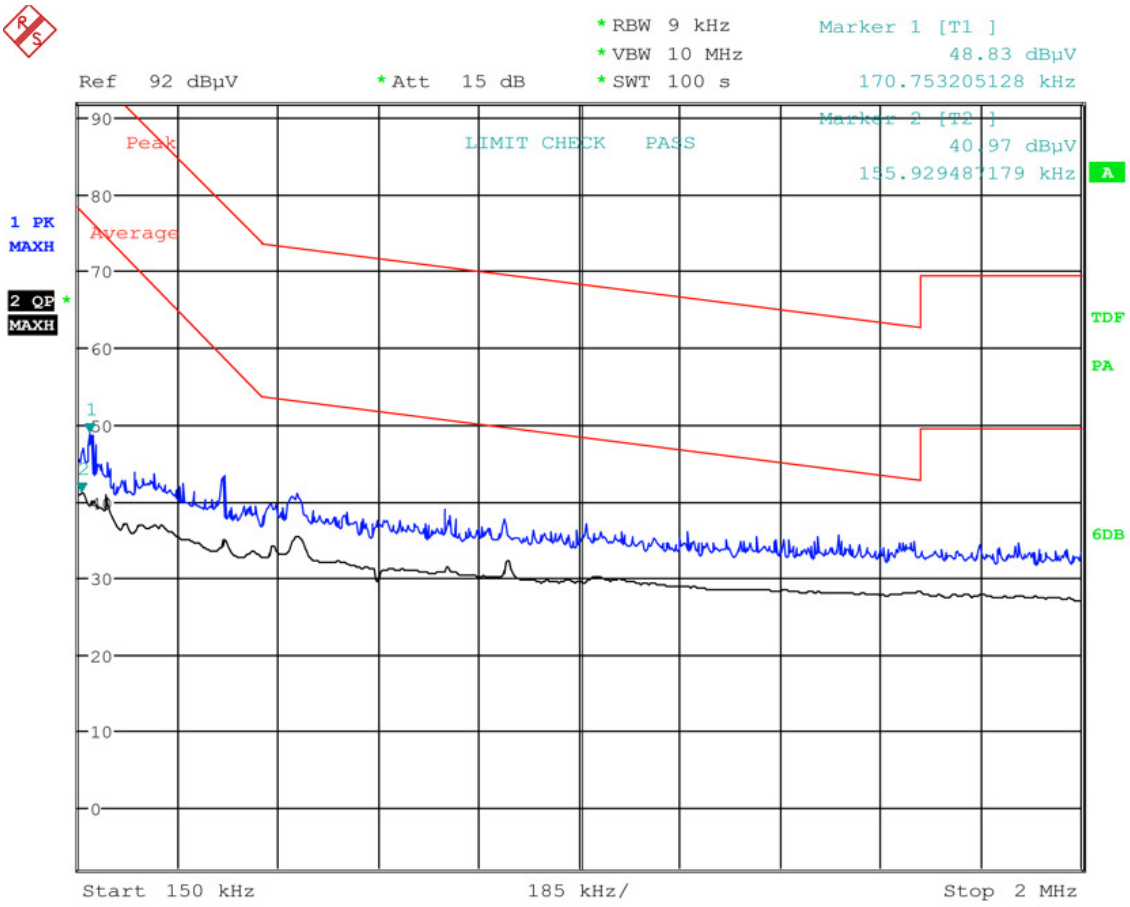

Date: 4.NOV.2015 10:46:48

**Plot 6-22: Radiated Emissions Transmit – 9 kHz – 150 kHz Vertical Peak/Average**



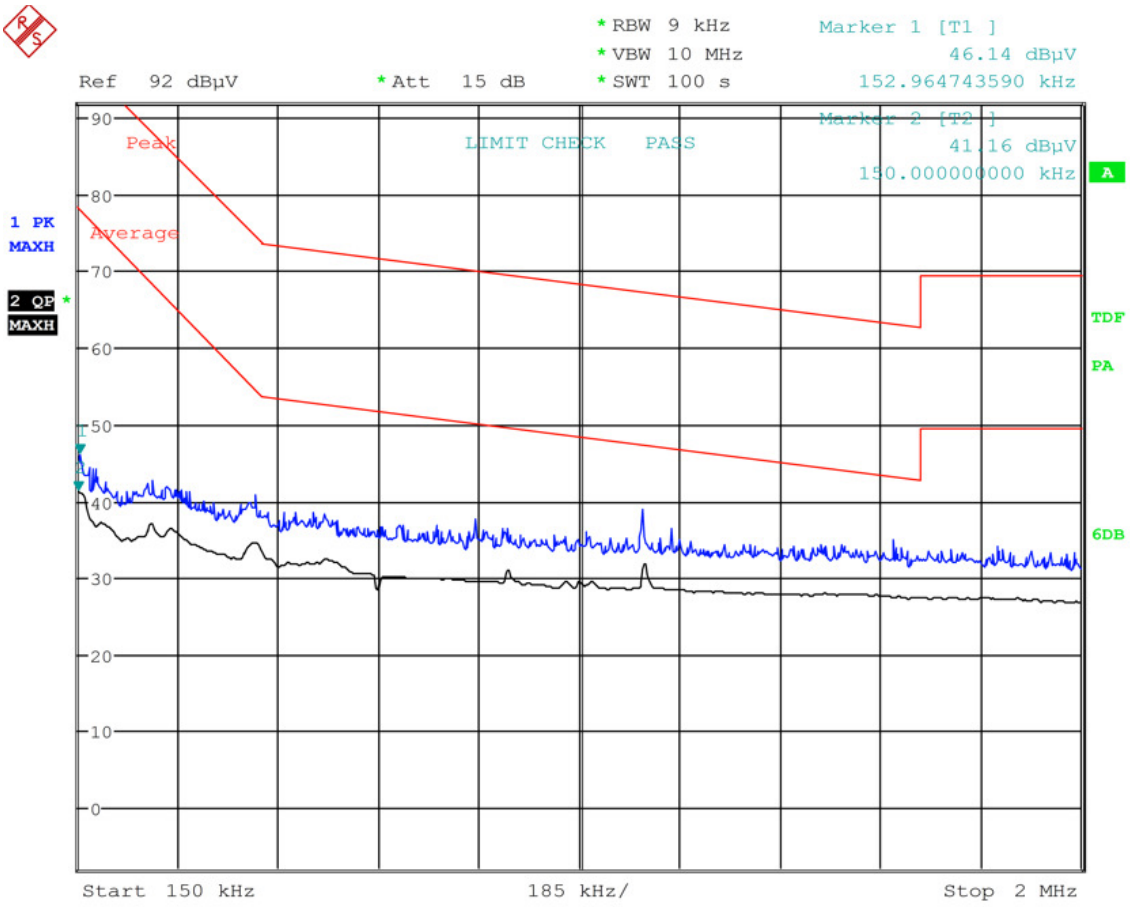

Date: 4.NOV.2015 10:44:42

**Plot 6-23: Radiated Emissions Transmit – 150 kHz – 2 MHz Horizontal Peak/Average**




Date: 4.NOV.2015 10:38:33

**Plot 6-24: Radiated Emissions Transmit – 150 kHz – 2 MHz Vertical Peak/Average**




Date: 4.NOV.2015 10:41:58