TÜVRheinland®
Precisely Right.

**Produkte**
*Products*

## Prüfbericht - Nr.: 19660282 001
*Test Report No.:*



| | |
|---|---|
| **Auftraggeber:** *Client:* | **BTL India Private Limited**<br>**SIGMA SOFT TECH PARK, DELTA**<br>**1ST FLOOR, VARTHUR MAIN ROAD, WHITEFIELD**<br>**BENGALURU** |
| **Gegenstand der Prüfung:** *Test item:* | **BTL Flexi 12 ECG** |
| **Bezeichnung:** *Identification:* | **Flexi 12** |
| **Serien-Nr.:** *Serial No.* | **07600B000151** |
| **Wareneingangs-Nr.:** *Receipt No.:* | **1803201744** |
| **Eingangsdatum:** *Date of receipt:* | **10.01.2017** |
| **Prüfort:** *Testing location:* | **Refer Page 4 of 19 for test facilities** |
| **Prüfgrundlage:** *Test specification:* | **47 CFR Part 15, Subpart C - 15.247**<br>**ANSI C63.10-2013** |
| **Prüfergebnis:** *Test Result:* | **Der Prüfgegenstand entspricht oben genannter Prüfgrundlage(n).**<br>*The test items passed the test specification(s).* |
| **Prüflaboratorium:** *Testing Laboratory:* | **TÜV Rheinland (India) Pvt. Ltd.**<br>**82/A, 3rd Main, West Wing, Electronic City Phase 1**<br>**Hosur Road, Bangalore – 560 100. India**<br>**FCC Registration No.: 176555** |

| **geprüft** / *tested by:* | | | **kontrolliert** / *reviewed by:* | | |
|---|---|---|---|---|---|
| 07.02.2016 | Raghavendra Katti<br>Engineer | Raghu.K.. | 13.02.2016 | Saibaba Siddapur<br>Asssistant.Manager | Saibaba |
| **Datum**<br>*Date* | **Name/Stellung**<br>*Name/Position* | **Unterschrift**<br>*Signature* | **Datum**<br>*Date* | **Name/Stellung**<br>*Name/Position* | **Unterschrift**<br>*Signature* |

**Sonstiges** /*Other Aspects:* **Contains FCC ID:2ALCO-CC3100PROD1**

| ***Abkürzungen:*** | | | | ***Abbreviations:*** | | | |
|---|---|---|---|---|---|---|---|
| *P(ass)* | = | *entspricht Prüfgrundlage* | | *P(ass)* | = | *passed* | |
| *F(ail)* | = | *entspricht nicht Prüfgrundlage* | | *F(ail)* | = | *failed* | |
| *N/A* | = | *nicht anwendbar* | | *N/A* | = | *not applicable* | |
| *N/T* | = | *nicht getestet* | | *N/T* | = | *not tested* | |

**Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens.**

*This test report relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any safety mark on this or similar products.*



® TÜV, TUEV and TUV are registered trademarks. Any use or application requires prior approval.

## Test Result Summary

| Clause | Test Item | Result |
|---|---|---|
| Section 15.209 / 15.205 | Spurious Radiated Emissions and Restricted Bands of Operation | Pass |
| Section 15.207 | Conducted emission test on A.C Power line | Pass |

**Note:** Product contains FCC approved Radio module with FCC ID: 2ALCO-CC3100PROD1.
Hence antenna port conducted measurements are excluded.

# Content

**List of Test and Measurement Instruments ..... 4**
**General Product Information ..... 5**
**Product Function and Intended Use ..... 5**
**Ratings and System Details ..... 5**

**Test Set-up and Operation Mode ..... 6**
**Principle of Configuration Selection ..... 6**
**Test Operation and Test Software ..... 6**
**Test Modes – Data Rates and Modulations ..... 6**

**Test Methodology ..... 8**
**Radiated Emission Test ..... 8**
**Conducted Emission Test on A.C. mains line ..... 9**

**Test Results ..... 10**
**Restricted Bands of Operation** **Section 15.209 and 15.205 ..... 10**
**Conducted Emission Test on A.C. Power Line** **Section 15.207 ..... 17**

**Appendix 1: Test Setup Photo**

**Appendix 2: EUT External Photo**

**Appendix 3: EUT Internal Photo**

**Appendix 4: FCC Label and Label Location**

**Appendix 5: Block Diagram**

**Appendix 6: Specification of EUT**

**Appendix 7: Schematic Diagrams**

**Appendix 8: Bill of Material**

**Appendix 9: User Manual**

**Appendix 10: SAR test report**

# List of Test and Measurement Instruments

| Equipment | Manufacturer | Model Name | Serial Number | Calibration Due Date | Periodicity | Used for Test Items |
|---|---|---|---|---|---|---|
| EMI Test Receiver | Rohde & Schwarz | ESU 40 | 100288 | 29-10-2017 | Yearly | Radiated Spurious Emission |
| Broadband Antenna | Frankonia | ALX-4000 | ALX-4000-806 | 09.01.2018 | Yearly | |
| Active Loop Antenna | Frankonia | LAX-10 | LAX-10-800 | 22.12.2017 | Yearly | |
| Broadband Horn Antenna | Frankonia | HAX-18 | HAX18-802 | 16-03.2018 | Yearly | |
| Emission Horn Antenna | ETS Lindgren | 116706 | 00107323 | 02.11.2017 | Yearly | |
| Semi Anechoic Chamber | Frankonia | - | - | - | - | |

**Testing Facilities:**

TUV Rheinland (India) Private Limited
No. 108, West Wing
Electronic city Phase I
Bangalore – 560100

# General Product Information

### Product Function and Intended Use

The ECG system is intended for acquisition, processing, recording, analysis and presentation of 12-lead simultaneous resting ECG for diagnostic purposes. The ECG system should be used in hospitals and healthcare facilities, by trained ECG technicians and qualified healthcare professionals for effective usage, maintenance and troubleshooting of the ECG system. The ECG system acquires and processes 12 lead resting ECG data of a patient. The processed data and generated reports should be used by qualified physicians for cardiac examination and diagnosis. It is advised to not use the interpretations as a sole basis for making clinical decisions. Any other application of data and reports, other than its intended use are not advised and considered misuse of the system. The ECG system is not intended for use at Home.

### Ratings and System Details

| | |
|---|---|
| Frequency Range | 2400-2483.5 MHz |
| No. of channel | 11 (Refer Table 1) |
| Channel Spacing | 5 MHz |
| Supporting Data Rate | 802.11b: 1,2,5.5 & 11 Mbps<br>802.11g: 6,9,12,18,24,36,48& 54 Mbps |
| Number of antenna | One |
| Antenna Gain | 1.9dBi |
| Supply Voltage | 3.6 VDC |
| Dimensions (L*B*H) | 86.7 mm *82 mm *24.5mm |
| Environmental Condition | Operating temperature is 10°C to 40°C |

**Test Conditions:**

Supply Voltage: 110V AC, 60Hz with adapter

Battery Supply: 3.6V DC

**Environmental conditions:**

Temperature: +25 º C RH: 62%

# Test Set-up and Operation Mode

### Principle of Configuration Selection

- Transmission was enabled with continuous transmission on low, mid and high channel.

### Test Operation and Test Software

-Test firmware F076_FLEXI_Release_2.0.3.11_F12_Rev1_WiFiLabTest.bin V: 2.0.3.11. Has been used to enable the continuous transmission, changing channels (low/mid/high) and data rates on the EUT for the test

### Special Accessories and Auxiliary Equipment

- None

### Countermeasures to achieve EMC Compliance

- None

### Test Modes – Data Rates and Modulations

For Radiated spurious emissions, tests were performed for all the data rates in 802.11b/g and only worst case results are reported in this report.

**List of Centre Frequencies: Table 1**

| Frequency Band (MHz) | Channel No. | Channel Frequency (MHz) |
|---|---|---|
| **2400 – 2483.5** | **1** | **2412** |
| | 2 | 2417 |
| | 3 | 2422 |
| | 4 | 2427 |
| | 5 | 2432 |
| | **6** | 2437 |
| | 7 | **2442** |
| | 8 | 2447 |
| | 9 | 2452 |
| | 10 | 2457 |
| | **11** | **2462** |

# Test Methodology

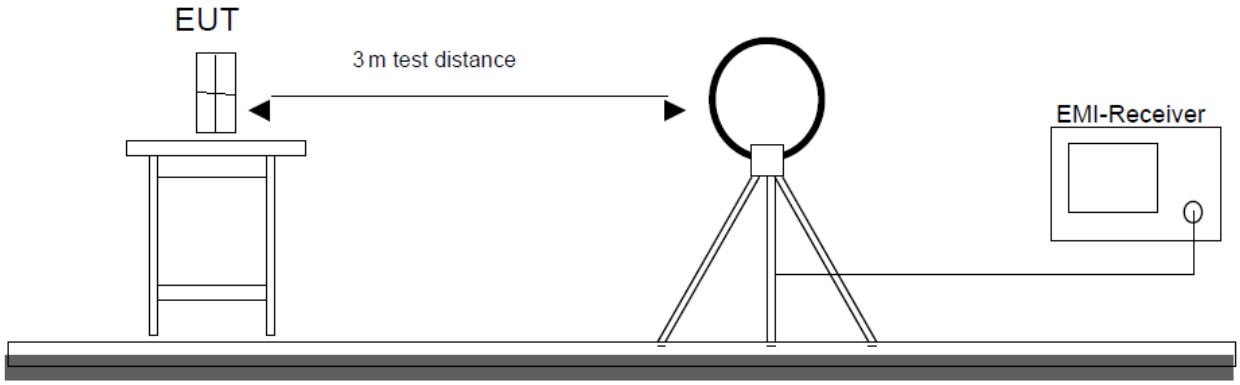
## Radiated Emission Test

The radiated emission measurement was performed according to the procedures in ANSI C63.10-2013. The equipment under test (EUT) was placed at the middle of the 80 cm high turntable for below 1GHz & 1.5m height for above 1GHz measurement, and the EUT is 3 meters far from the measuring antenna. The turntable was rotated 360° for obtaining the maximum emission. The height of the measuring antennas was scanned between 1m and 4m, and the antenna rotated to repeat the measurements for both the horizontal and vertical antenna polarizations. Repeat the measurement steps until the maximum emissions were obtained. The measurement above 1000MHz was performed by horn antenna. The measurement below 30MHz was performed by loop antenna.

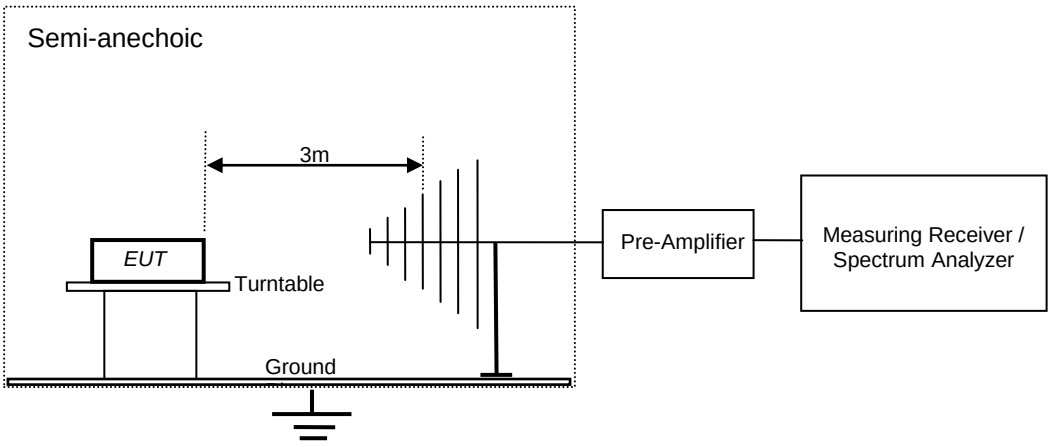
The EUT was rotated around the X-, Y-, and Z-Axis and the results from worst case axis are recorded.

### Test Setup Configuration

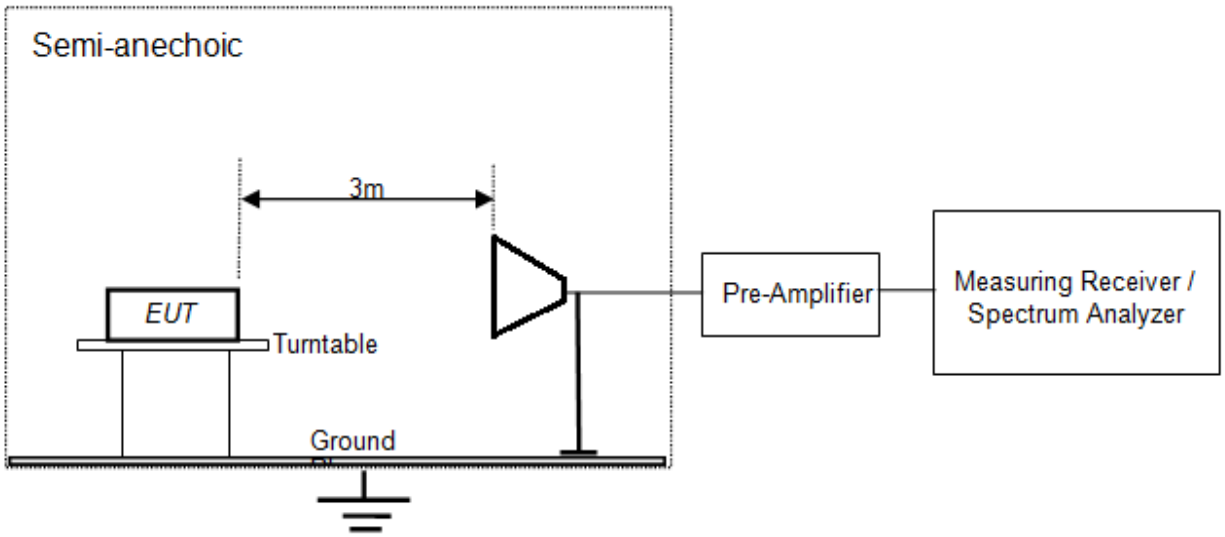
**Frequency Range 9 kHz -30 MHz**




**Frequency Range 30MHz -1GHz**

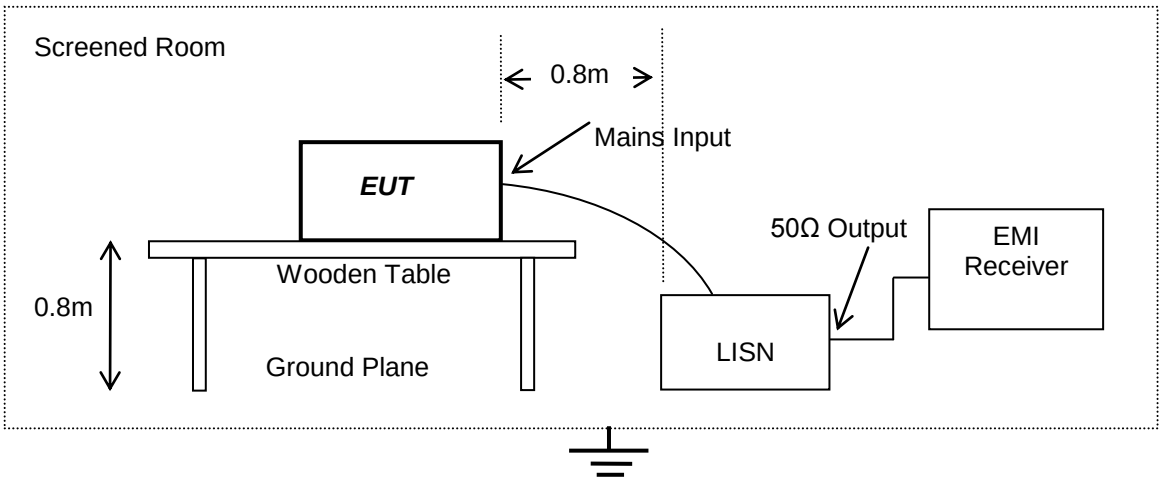


**Frequency above 1GHz**




**Conducted Emission Test on A.C. mains line**

The equipment under test (EUT) was placed on a wooden table 80cm above the ground plane, the LISN was place 80cm away from the EUT. The test was performed in accordance with ANSI C63.10 - 2013, with the following: an initial measurement was performed in peak and average detection mode on the live and neutral lines. The pre-scan was performed by peak detection on both live and neutral conductors. Any emissions recorded within 20dB of the relevant limit line were re-measured using quasi-peak and average detections, the 6 worst cases was recorded in the table of results.



# Test Results

**Radiated Spurious Emissions and Restricted Bands of Operation** **Section 15.209 and 15.205**

**Result** **Pass**

| | |
|---|---|
| Test Specification | FCC Part 15 Section 15.209 &15.205 |
| Test Method | ANSI C63.10-2013 |
| Measurement Location | Semi Anechoic Chamber |
| Measuring Distance | 3m |
| Detection | QP for frequency below 1GHz, Average for frequency above 1GHz |
| Requirement | As per the limits mentioned in the bellow table |

**Limit for Radiated Emission of Section 15.209:**

| Frequency (MHz) | Field strength (µV/m) | Field strength (dBµV/m) | Distance of Measurement (m) |
|---|---|---|---|
| 0.009 – 0.490 | 2400/F(kHz) | 48.50 – 13.80 | 300* |
| 0.490 – 1.705 | 24000/F(kHz) | 33.80 – 23.00 | 30* |
| 1.705 -30 | 30 | 29.54 | 30* |
| 30-88 | 100 | 40.0 | 3 |
| 88-216 | 150 | 43.5 | 3 |
| 216-960 | 200 | 46.0 | 3 |
| Above 960 | 500 | 54.0 | 3 |

Remark: * The limit shows in the table above of frequency range 0.009 – 0.490, 0.490 – 1.705 MHz and 1.705-30MHz is at 300 meter, 30 meter and 3 meter range respectively, which corresponds to 88.50 – 53.80, 53.80 – 43.00 and 49.5dBµV/m at 3m range by extrapolation calculation and the measurement of loop antenna.

The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9–90 kHz, 110–490 kHz and above 1000 MHz Radiated emission limits in these three bands are based on measurements employing an average detector.

# Test results:

**For frequency Range 9kHz – 30MHz**

No emissions found in this frequency range.

**For the Frequency range 30MHz -1GHz**

Worst case test results are reported.

| 30 MHz to 1GHz - Battery Mode | | | |
|---|---|---|---|
| **Polarization** | **Frequency (MHz)** | **Emission level (dBµV/m)** | **Limit (dBuV/m)** |
| Vertical | 359.99 | 33.32 | 46 |
| Horizontal | 360.09 | 40.94 | 46 |

**B Mode: 1 Mbps**

| Channel | Polarization | Frequency (MHz) | Emission level (dBµV/m) | Limit (dBµV/m) | Margin (dB) |
|---|---|---|---|---|---|
| Low | Vertical | 2390 (Pk) | 49.83 | 74.00 | -24.17 |
| | | 2390 (Av) | 35.51 | 54.00 | -18.49 |
| | | 2412 (Pk) | 100.98 | - | * |
| | | 2412 (Av) | 94.41 | - | * |
| | | 4824 (Pv) | 52.86 | 74.00 | -21.14 |
| | | 4824 (Av) | 42.55 | 54.00 | -11.45 |
| | | 7236 (Pk) | 58.68 | 74.00 | -15.32 |
| | | 7236 (Av) | 45.04 | 54.00 | -8.96 |
| | Horizontal | 2390 (Pk) | 44.24 | 74.00 | -29.76 |
| | | 2390 (Av) | 30.69 | 54.00 | -23.31 |
| | | 2412 (Pk) | 94.67 | - | * |
| | | 2412 (Av) | 87.62 | - | * |
| | | 4824 (Pk) | 52.12 | 74.00 | -21.88 |
| | | 4824 (Av) | 41.19 | 54.00 | -12.81 |
| | | 7236 (Pk) | 59.26 | 74.00 | -14.74 |
| | | 7236 (Av) | 45.02 | 54.00 | -8.98 |
| Mid | Vertical | 2437 (Pk) | 95.04 | - | * |
| | | 2437 (Av) | 101.69 | - | * |
| | | 4884 (Pk) | 54.15 | 74.00 | -19.85 |
| | | 4884 (Av) | 44.86 | 54.00 | -9.14 |
| | | 7326 (Pk) | 59.53 | 74.00 | -14.47 |
| | | 7326 (Av) | 45.60 | 54.00 | -8.40 |
| | Horizontal | 2437 (Pk) | 97.08 | - | * |
| | | 2437 (Av) | 90.34 | - | * |
| | | 4884 (Pk) | 53.61 | 74.00 | -20.39 |
| | | 4884 (Av) | 44.33 | 54.00 | -9.67 |
| | | 7326 (Pk) | 58.68 | 74.00 | -15.32 |
| | | 7326 (Av) | 45.51 | 54.00 | -8.49 |
| High | Vertical | 2462 (Pk) | 101.60 | - | * |
| | | 2462 (Av) | 95.07 | - | * |
| | | 2483.5 (Pk) | 49.28 | 74.00 | -24.72 |
| | | 2483.5 (Av) | 35.90 | 54.00 | -18.10 |
| | | 4924 (Pk) | 53.77 | 74.00 | -20.23 |
| | | 4924 (Av) | 43.70 | 54.00 | -10.30 |
| | | 7386 (Pk) | 59.39 | 74.00 | -14.61 |
| | | 7386 (Av) | 46.25 | 54.00 | -7.75 |
| | Horizontal | 2462 (Pk) | 97.12 | - | * |
| | | 2462 (Av) | 90.81 | - | * |
| | | 2483.5 (Pk) | 45.81 | 74.00 | -28.19 |
| | | 2483.5 (Av) | 32.18 | 54.00 | -21.82 |
| | | 4924 (Pk) | 53.34 | 74.00 | -20.66 |
| | | 4924 (Av) | 42.87 | 54.00 | -11.13 |
| | | 7386 (Pk) | 59.42 | 74.00 | -14.58 |
| | | 7386 (Av) | 46.11 | 54.00 | -7.89 |

***- Fundamental Frequency**
**Pk- Peak Detector**
**Av-Average Detector**

**Result: B Mode: 11Mbps**

| Channel | Polarization | Frequency (MHz) | Emission level (dBµV/m) | Limit (dBµV/m) | Margin (dB) |
|---|---|---|---|---|---|
| Low | Vertical | 2390 (Pk) | 51.14 | 74.00 | -22.86 |
| | | 2390 (Av) | 35.72 | 54.00 | -18.28 |
| | | 2412 (Pk) | 104.86 | - | * |
| | | 2412 (Av) | 89.65 | - | * |
| | | 4824 (Pv) | 53.67 | 74.00 | -20.33 |
| | | 4824 (Av) | 41.44 | 54.00 | -12.56 |
| | | 7236 (Pk) | 59.29 | 74.00 | -14.71 |
| | | 7236 (Av) | 45.08 | 54.00 | -8.92 |
| | Horizontal | 2390 (Pk) | 46.52 | 74.00 | -27.48 |
| | | 2390 (Av) | 31.22 | 54.00 | -22.78 |
| | | 2412 (Pk) | 99.50 | - | * |
| | | 2412 (Av) | 84.91 | - | * |
| | | 4824 (Pk) | 53.83 | 74.00 | -20.17 |
| | | 4824 (Av) | 40.90 | 54.00 | -13.10 |
| | | 7236 (Pk) | 59.20 | 74.00 | -14.80 |
| | | 7236 (Av) | 45.01 | 54.00 | -8.99 |
| Mid | Vertical | 2442 (Pk) | 105.30 | - | * |
| | | 2442 (Av) | 91.08 | - | * |
| | | 4884 (Pk) | 54.86 | 74.00 | -19.14 |
| | | 4884 (Av) | 42.19 | 54.00 | -11.81 |
| | | 7326 (Pk) | 60.23 | 74.00 | -13.77 |
| | | 7326 (Av) | 45.17 | 54.00 | -8.83 |
| | Horizontal | 2442 (Pk) | 100.69 | - | * |
| | | 2442 (Av) | 86.50 | - | * |
| | | 4884 (Pk) | 53.29 | 74.00 | -20.71 |
| | | 4884 (Av) | 41.73 | 54.00 | -12.27 |
| | | 7326 (Pk) | 58.82 | 74.00 | -15.18 |
| | | 7326 (Av) | 45.52 | 54.00 | -8.48 |
| High | Vertical | 2462 (Pk) | 104.29 | - | * |
| | | 2462 (Av) | 88.33 | - | * |
| | | 2483.5 (Pk) | 50.45 | 74.00 | -23.55 |
| | | 2483.5 (Av) | 36.96 | 54.00 | -17.04 |
| | | 4924 (Pk) | 54.65 | 74.00 | -19.35 |
| | | 4924 (Av) | 41.73 | 54.00 | -12.27 |
| | | 7386 (Pk) | 59.64 | 74.00 | -14.36 |
| | | 7386 (Av) | 46.25 | 54.00 | -7.75 |
| | Horizontal | 2462 (Pk) | 100.00 | - | * |
| | | 2462 (Av) | 85.25 | - | * |
| | | 2483.5 (Pk) | 47.75 | 74.00 | -26.25 |
| | | 2483.5 (Av) | 35.44 | 54.00 | -18.56 |
| | | 4924 (Pk) | 53.62 | 74.00 | -20.38 |
| | | 4924 (Av) | 41.39 | 54.00 | -12.61 |
| | | 7386 (Pk) | 59.28 | 74.00 | -14.72 |
| | | 7386 (Av) | 46.21 | 54.00 | -7.79 |

***- Fundamental Frequency**
**Pk- Peak Detector**
**Av-Average Detector**

www.tuv.com

**Result: G Mode: 6Mbps**

| Channel | Polarization | Frequency (MHz) | Emission level (dBµV/m) | Limit (dBµV/m) | Margin (dB) |
|---|---|---|---|---|---|
| Low | Vertical | 2390 (Pk) | 54.01 | 74.00 | -19.99 |
| | | 2390 (Av) | 32.47 | 54.00 | -21.53 |
| | | 2412 (Pk) | 99.89 | - | * |
| | | 2412 (Av) | 81.08 | - | * |
| | | 4824 (Pv) | 51.06 | 74.00 | -22.94 |
| | | 4824 (Av) | 37.45 | 54.00 | -16.55 |
| | | 7236 (Pk) | 58.97 | 74.00 | -15.03 |
| | | 7236 (Av) | 45.09 | 54.00 | -8.91 |
| | Horizontal | 2390 (Pk) | 49.21 | 74.00 | -24.79 |
| | | 2390 (Av) | 30.95 | 54.00 | -23.05 |
| | | 2412 (Pk) | 96.88 | - | * |
| | | 2412 (Av) | 78.28 | - | * |
| | | 4824 (Pk) | 51.14 | 74.00 | -22.86 |
| | | 4824 (Av) | 37.40 | 54.00 | -16.60 |
| | | 7236 (Pk) | 58.16 | 74.00 | -15.84 |
| | | 7236 (Av) | 45.03 | 54.00 | -8.97 |
| Mid | Vertical | 2442 (Pk) | 102.74 | - | * |
| | | 2442 (Av) | 84.14 | - | * |
| | | 4884 (Pk) | 54.56 | 74.00 | -19.44 |
| | | 4884 (Av) | 38.18 | 54.00 | -15.82 |
| | | 7326 (Pk) | 59.46 | 74.00 | -14.54 |
| | | 7326 (Av) | 45.44 | 54.00 | -8.56 |
| | Horizontal | 2442 (Pk) | 99.39 | - | * |
| | | 2442 (Av) | 80.33 | - | * |
| | | 4884 (Pk) | 52.76 | 74.00 | -21.24 |
| | | 4884 (Av) | 37.86 | 54.00 | -16.14 |
| | | 7326 (Pk) | 58.87 | 74.00 | -15.13 |
| | | 7326 (Av) | 45.45 | 54.00 | -8.55 |
| High | Vertical | 2462 (Pk) | 101.64 | - | * |
| | | 2462 (Av) | 83.00 | - | * |
| | | 2483.5 (Pk) | 62.15 | 74.00 | -11.85 |
| | | 2483.5 (Av) | 40.24 | 54.00 | -13.76 |
| | | 4924 (Pk) | 52.06 | 74.00 | -21.94 |
| | | 4924 (Av) | 37.85 | 54.00 | -16.15 |
| | Horizontal | 2462 (Pk) | 97.60 | - | * |
| | | 2462 (Av) | 79.12 | - | * |
| | | 2483.5 (Pk) | 57.40 | 74.00 | -16.60 |
| | | 2483.5 (Av) | 33.89 | 54.00 | -20.11 |
| | | 4924 (Pk) | 51.15 | 74.00 | -22.85 |
| | | 4924 (Av) | 37.86 | 54.00 | -16.14 |

***- Fundamental Frequency**

**Pk- Peak Detector**

**Av-Average Detector**

**Result: G Mode: 24 Mbps**

| Channel | Polarization | Frequency (MHz) | Emission level (dBµV/m) | Limit (dBµV/m) | Margin (dB) |
|---|---|---|---|---|---|
| Low | V | 2390 (Pk) | 53.62 | 74.00 | -20.38 |
| | | 2390 (Av) | 30.01 | 54.00 | -23.99 |
| | | 2412 (Pk) | 97.98 | - | * |
| | | 2412 (Av) | 75.75 | - | * |
| | | 4824 (Pv) | 51.09 | 74.00 | -22.91 |
| | | 4824 (Av) | 37.15 | 54.00 | -16.85 |
| | H | 2390 (Pk) | 49.74 | 74.00 | -24.26 |
| | | 2390 (Av) | 29.56 | 54.00 | -24.44 |
| | | 2412 (Pk) | 94.01 | - | * |
| | | 2412 (Av) | 71.68 | - | * |
| | | 4824 (Pk) | 50.59 | 74.00 | -23.41 |
| | | 4824 (Av) | 37.36 | 54.00 | -16.64 |
| Mid | V | 2442 (Pk) | 100.15 | - | * |
| | | 2442 (Av) | 78.19 | - | * |
| | | 4884 (Pk) | 51.56 | 74.00 | -22.44 |
| | | 4884 (Av) | 37.49 | 54.00 | -16.51 |
| | | 7326 (Pk) | 60.23 | 74.00 | -13.77 |
| | | 7326 (Av) | 45.55 | 54.00 | -8.45 |
| | H | 2442 (Pk) | 97.08 | - | * |
| | | 2442 (Av) | 75.38 | - | * |
| | | 4884 (Pk) | 50.96 | 74.00 | -23.04 |
| | | 4884 (Av) | 37.74 | 54.00 | -16.26 |
| | | 7326 (Pk) | 58.77 | 74.00 | -28.45 |
| | | 7326 (Av) | 45.52 | 54.00 | -8.48 |
| High | V | 2462 (Pk) | 98.43 | - | * |
| | | 2462 (Av) | 75.67 | - | * |
| | | 2483.5 (Pk) | 55.01 | 74.00 | -18.99 |
| | | 2483.5 (Av) | 32.38 | 54.00 | -21.62 |
| | | 4924 (Pk) | 52.06 | 74.00 | -21.94 |
| | | 4924 (Av) | 37.90 | 54.00 | -16.10 |
| | | 7386 (Pk) | 60.18 | 74.00 | -13.82 |
| | | 7386 (Av) | 45.96 | 54.00 | -8.04 |
| | H | 2462 (Pk) | 95.17 | - | * |
| | | 2462 (Av) | 73.18 | - | * |
| | | 2483.5 (Pk) | 53.40 | 74.00 | -20.60 |
| | | 2483.5 (Av) | 31.58 | 54.00 | -22.42 |
| | | 4924 (Pk) | 50.19 | 74.00 | -23.81 |
| | | 4924 (Av) | 37.90 | 54.00 | -16.10 |
| | | 7386 (Pk) | 59.14 | 74.00 | -14.86 |
| | | 7386 (Av) | 46.20 | 54.00 | -7.80 |

***- Fundamental Frequency**
**Pk- Peak Detector**
**Av-Average Detector**

**www.tuv.com**
**Result: G Mode: 54 Mbps**

| Channel | Polarization | Frequency (MHz) | Emission level (dBµV/m) | Limit (dBµV/m) | Margin (dB) |
|---|---|---|---|---|---|
| Low | V | 2390 (Pk) | 54.05 | 74.00 | -19.95 |
| | | 2390 (Av) | 29.94 | 54.00 | -24.06 |
| | | 2412 (Pk) | 97.70 | - | * |
| | | 2412 (Av) | 74.00 | - | * |
| | | 4824 (Pv) | 51.18 | 74.00 | -22.82 |
| | | 4824 (Av) | 37.17 | 54.00 | -16.83 |
| | H | 2390 (Pk) | 49.13 | 74.00 | -24.87 |
| | | 2390 (Av) | 28.94 | 54.00 | -25.06 |
| | | 2412 (Pk) | 93.70 | - | * |
| | | 2412 (Av) | 70.11 | - | * |
| High | V | 2462 (Pk) | 97.56 | - | * |
| | | 2462 (Av) | 73.73 | - | * |
| | | 2483.5 (Pk) | 57.62 | 74.00 | -16.38 |
| | | 2483.5 (Av) | 31.77 | 54.00 | -22.23 |
| | | 4924 (Pk) | 51.24 | 74.00 | -22.76 |
| | | 4924 (Av) | 37.79 | 54.00 | -16.21 |
| | H | 2462 (Pk) | 94.73 | - | * |
| | | 2462 (Av) | 71.17 | - | * |
| | | 2483.5 (Pk) | 53.05 | 74.00 | -20.95 |
| | | 2483.5 (Av) | 29.84 | 54.00 | -24.16 |
| | | 4924 (Pk) | 51.98 | 74.00 | -22.02 |
| | | 4924 (Av) | 37.80 | 54.00 | -16.20 |

***- Fundamental Frequency**
**Pk- Peak Detector**
**Av-Average Detector**

**Conducted Emission Test on A.C. Power Line** **Section 15.207**

**Result** **Pass**

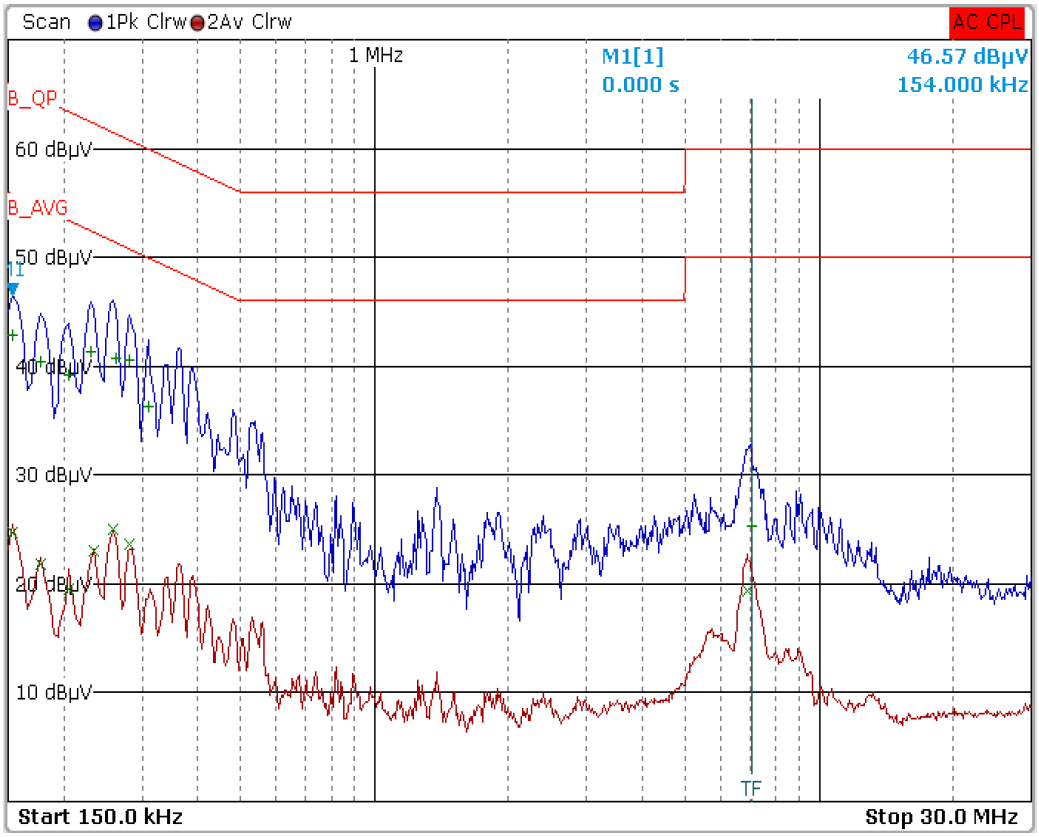
| | | |
|---|---|---|
| Test Specification | : | FCC Part 15 Section 15.207 |
| Test Method | : | ANSI C63.10-2013 |
| Testing Location | : | Screened room |
| Measurement Bandwidth | : | 9kHz |
| Frequency Range | : | 150kHz – 30MHz |
| Supply Voltage | : | 110VAC,60Hz |

**Limit of section 15.207**

| Frequency of emission (MHz) | QP Limit (dBµV) | AV Limit (dBµV/m) |
|---|---|---|
| 0.15 – 0.5 | 66 – 56* | 56 – 46* |
| 0.5 – 5 | 56 | 46 |
| 5 – 30 | 60 | 50 |

* Decreases with the logarithm of the frequency

**Test Result:**




**Line Graph**

**Scan Table**

| | |
|---|---|
| Scan Start | 150.000000000 kHz |
| Scan Stop | 30.000000000 MHz |
| Scan Type | LIN |
| Transducer | ENV216_Line |
| Detector | Trace 1: Max Peak Trace 2: Average |

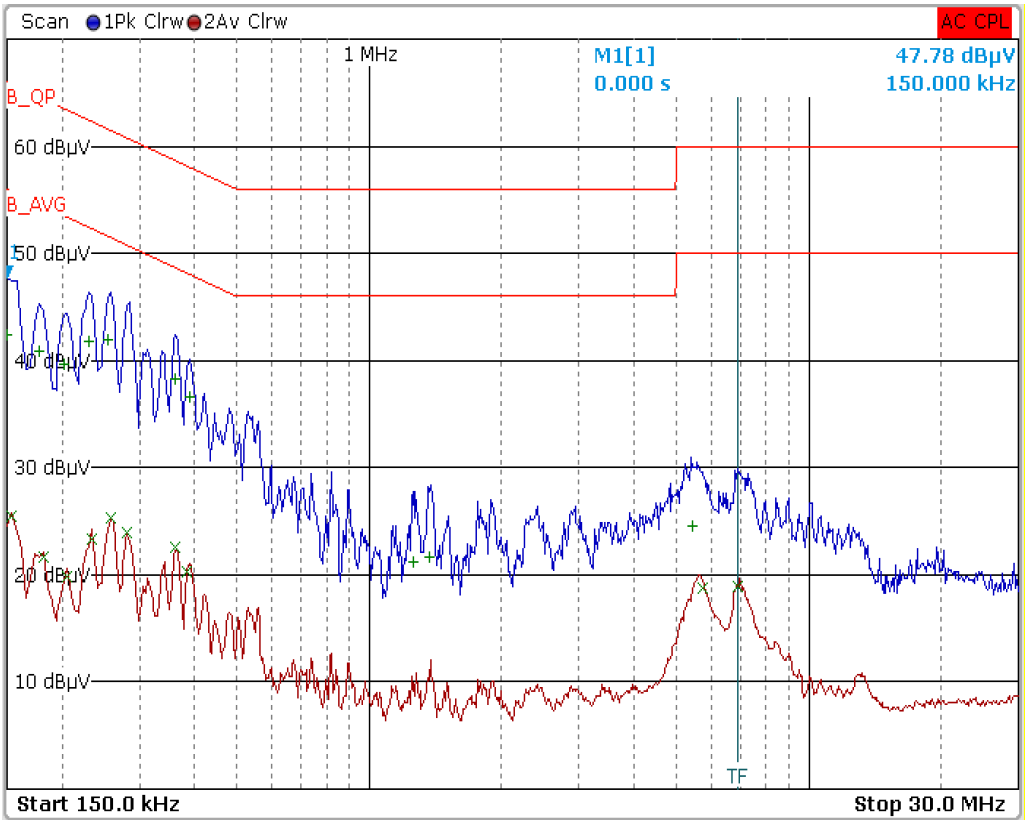
| Start Frequency | Stop Frequency | Step Size | RBW | Meas Time | RF Atten | Preamp | Input |
|---|---|---|---|---|---|---|---|
| 150.000 kHz | 30.000 MHz | 4.000 kHz | 9.0 kHz | 20.0 ms | 10.0 dB | 30.0 dB | INPUT1 |

**Final Results**

| | |
|---|---|
| Meas Time | 1.0 s |
| Margin | 6.0 dB |
| Peaks | 25 |

| Trace | Frequency | Level (dBµV) | Phase | Detector | Delta Limit/dB |
|---|---|---|---|---|---|
| 1 | 282.000000000 kHz | 40.57 | | Quasi Peak | -20.19 |
| 1 | 262.000000000 kHz | 40.76 | | Quasi Peak | -20.61 |
| 1 | 230.000000000 kHz | 41.39 | | Quasi Peak | -21.06 |
| 1 | 154.000000000 kHz | 42.85 | | Quasi Peak | -22.93 |
| 1 | 310.000000000 kHz | 36.29 | | Quasi Peak | -23.68 |
| 1 | 206.000000000 kHz | 39.24 | | Quasi Peak | -24.13 |
| 1 | 178.000000000 kHz | 40.36 | | Quasi Peak | -24.22 |
| 2 | 258.000000000 kHz | 25.01 | | Average | -26.49 |
| 2 | 282.000000000 kHz | 23.70 | | Average | -27.06 |
| 2 | 234.000000000 kHz | 23.04 | | Average | -29.27 |
| 2 | 6.910000000 MHz | 19.37 | | Average | -30.63 |
| 2 | 154.000000000 kHz | 24.76 | | Average | -31.02 |
| 2 | 178.000000000 kHz | 21.85 | | Average | -32.73 |
| 2 | 206.000000000 kHz | 19.57 | | Average | -33.80 |
| 1 | 7.038000000 MHz | 25.36 | | Quasi Peak | -34.64 |

**Line: Table**




**Neutral: Graph**

**Scan Table**

| | |
|---|---|
| Scan Start | 150.000000000 kHz |
| Scan Stop | 30.000000000 MHz |
| Scan Type | LIN |
| Transducer | ENV216_Neutral |
| Detector | Trace 1: Max Peak Trace 2: Average |

| Start Frequency | Stop Frequency | Step Size | RBW | Meas Time | RF Atten | Preamp | Input |
|---|---|---|---|---|---|---|---|
| 150.000 kHz | 30.000 MHz | 4.000 kHz | 9.0 kHz | 20.0 ms | 10.0 dB | 30.0 dB | INPUT1 |

**Final Results**

| | |
|---|---|
| Meas Time | 1.0 s |
| Margin | 6.0 dB |
| Peaks | 25 |

| Trace | Frequency | Level (dBµV) | Phase | Detector | Delta Limit/dB |
|---|---|---|---|---|---|
| 1 | 254.000000000 kHz | 41.90 | | Quasi Peak | -19.73 |
| 1 | 362.000000000 kHz | 38.30 | | Quasi Peak | -20.38 |
| 1 | 230.000000000 kHz | 41.75 | | Quasi Peak | -20.70 |
| 1 | 390.000000000 kHz | 36.59 | | Quasi Peak | -21.47 |
| 1 | 150.000000000 kHz | 42.44 | | Quasi Peak | -23.56 |
| 1 | 178.000000000 kHz | 40.81 | | Quasi Peak | -23.77 |
| 1 | 202.000000000 kHz | 39.64 | | Quasi Peak | -23.89 |
| 2 | 362.000000000 kHz | 22.53 | | Average | -26.15 |
| 2 | 258.000000000 kHz | 25.25 | | Average | -26.25 |
| 2 | 282.000000000 kHz | 23.89 | | Average | -26.87 |
| 2 | 386.000000000 kHz | 20.33 | | Average | -27.82 |
| 2 | 234.000000000 kHz | 23.32 | | Average | -28.99 |
| 2 | 154.000000000 kHz | 25.40 | | Average | -30.38 |
| 2 | 6.894000000 MHz | 18.84 | | Average | -31.16 |
| 2 | 5.734000000 MHz | 18.73 | | Average | -31.27 |
| 2 | 182.000000000 kHz | 21.64 | | Average | -32.75 |
| 2 | 206.000000000 kHz | 19.86 | | Average | -33.51 |
| 1 | 1.374000000 MHz | 21.60 | | Quasi Peak | -34.40 |
| 1 | 1.258000000 MHz | 21.21 | | Quasi Peak | -34.79 |
| 1 | 5.442000000 MHz | 24.48 | | Quasi Peak | -35.52 |

**Neutral: Table**

***** END OF TEST REPORT *****