

FCC REPORT

Applicant: Liquipel Protection LLC

Address of Applicant: Street: 19800 MacArthur Blvd. Suite 300, Irvine, CA, 92612, USA

Equipment Under Test (EUT)

Product Name: Wireless Charger

LPWP01-RG (Rose Gold)

Model No.: LPWP01-B (Black)

LPWP01-S (Silver)

LPWP01-BL (Blue)

LPWP01-G (Gold)

FCC ID: 2AVV6LPWP01

Applicable standards: FCC CFR Title 47 Part 15 Subpart C Section 15C

Date of sample receipt: 06 Mar., 2020

Date of Test: 06 Mar., to 19 Mar., 2020

Date of report issue: 27 Mar., 2020

Test Result: PASS *

* In the configuration tested, the EUT complied with the standards specified above.

Authorized Signature:



Bruce Zhang
Laboratory Manager

This report details the results of the testing carried out on one sample. The results contained in this test report do not relate to other samples of the same product and does not permit the use of the CCIS product certification mark. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report.

This report may only be reproduced and distributed in full. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards.

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2 Version

| Version No. | Date | Description |
|-------------|---------------|----------------|
| 00 | 20 Mar., 2020 | Original |
| 01 | 27 Mar., 2020 | Update page 11 |
| | | |
| | | |
| | | |

Prepared By:

YT Yang

Report Clerk

Date:

27 Mar., 2020

Check By:

Winner Zhang

Project Engineer

Date:

27 Mar., 2020

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4 Test Summary

| Test Item | Section in CFR 47 | Result |
|---|-------------------|--------|
| Spurious emissions | 15.209 | Pass |
| Bandwidth | 15.215(c) | Pass |
| Conducted Emission | 15.207 | Pass |
| Remark: 1. Pass: The EUT complies with the essential requirements in the standard. 2. The cable insertion loss used by "RF Output Power" and other conduction measurement items is 0.5dB (provided by the customer). | | |
| Test Method: | ANSI C63.10-2013 | |

5 General Information

5.1 Client Information

| | |
|-----------------------|---|
| Applicant: | Liquipel Protection LLC |
| Address of Applicant: | Street: 19800 MacArthur Blvd. Suite 300, Irvine, CA, 92612, USA |
| Manufacturer: | Liquipel Protection LLC |
| Address: | Street: 19800 MacArthur Blvd. Suite 300, Irvine, CA, 92612, USA |
| Factory: | GUANG ZHOU C AND T INDUSTRY COMPANY LIMITED |
| Address: | NO.3 HEPING ROAD DASHI PANYU DISTRICT GUANGZHOU |

5.2 General Description of E.U.T.

| | |
|-------------------------------------|---|
| Product Name: | Wireless Charger |
| Model No.: | LPWP01-RG (Rose Gold) LPWP01-B (Black) LPWP01-S (Silver) LPWP01-BL (Blue) LPWP01-G (Gold) |
| Operation Frequency: | 114.5kHz~204kHz |
| Modulation type: | Loading modulation |
| Antenna Type: | Coil Antenna |
| Power supply (Wireless Charger): | Input: DC 5V, 2.0A Output: DC 5V, 1.0A |
| Test Sample Condition: | The test samples were provided in good working order with no visible defects. |
| Remark: | Model No.: LPWP01-RG(Rose Gold), LPWP01-B(Black), LPWP01-S (Silver), LPWP01-BL(Blue), LPWP01-G (Gold) were identical inside, the electrical circuit design, layout, components used and internal wiring. with only difference being model name and color. |

5.3 Test mode

| | |
|--------------------|---|
| Transmitting mode: | Keep the EUT in transmitting mode with modulation |
|--------------------|---|

5.4 Description of Support Units

| Manufacturer | Description | Model | S/N | FCC ID/DoC |
|--------------|------------------------------|---------------|-----|------------|
| Skytek | Wireless charging match load | N/A | N/A | N/A |
| Apple | Smart Phone | iPhone 11 Pro | N/A | BCG-E3305A |
| Xiaomi | Adapter | MDY-03-EB | N/A | N/A |

5.5 Measurement Uncertainty

| Parameter | Expanded Uncertainty (Confidence of 95%) |
|-------------------------------------|--|
| Conducted Emission (9kHz ~ 30MHz) | ±1.60 dB (k=2) |
| Radiated Emission (9kHz ~ 30MHz) | ±3.12 dB (k=2) |
| Radiated Emission (30MHz ~ 1000MHz) | ±4.32 dB (k=2) |
| Radiated Emission (1GHz ~ 18GHz) | ±5.38 dB (k=2) |
| Radiated Emission (18GHz ~ 26.5GHz) | ±3.36 dB (k=2) |

5.6 Description of Cable Used

N/A

5.7 Laboratory Facility

The test facility is recognized, certified, or accredited by the following organizations:

- **FCC - Designation No.: CN1211**

Shenzhen Zhongjian Nanfang Testing Co., Ltd. has been accredited as a testing laboratory by FCC(Federal Communications Commission). The test firm Registration No. is 727551.

- **ISED – CAB identifier.: CN0021**

The 3m Semi-anechoic chamber of Shenzhen Zhongjian Nanfang Testing Co., Ltd. has been Registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 10106A-1.

- **CNAS - Registration No.: CNAS L6048**

Shenzhen Zhongjian Nanfang Testing Co., Ltd. is accredited to ISO/IEC 17025:2005 General Requirements for the Competence of Testing and Calibration laboratories for the competence of testing. The Registration No. is CNAS L6048.

- **A2LA - Registration No.: 4346.01**

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005 General requirements for the competence of testing and calibration laboratories. The test scope can be found as below link: <https://portal.a2la.org/scopepdf/4346-01.pdf>

5.8 Laboratory Location

Shenzhen Zhongjian Nanfang Testing Co., Ltd.
Address: No. B-C, 1/F., Building 2, Laodong No.2 Industrial Park, Xixiang Road,
Bao'an District, Shenzhen, Guangdong, China
Tel: +86-755-23118282, Fax: +86-755-23116366
Email: info@ccis-cb.com, Website: <http://www.ccis-cb.com>

5.9 Test Instrumentslist

| Radiated Emission: | | | | | |
|--------------------|-----------------|---------------|--------------------|----------------------|--------------------------|
| Test Equipment | Manufacturer | Model No. | Serial No. | Cal. Date (mm-dd-yy) | Cal. Due date (mm-dd-yy) |
| 3m SAC | SAEMC | 9m*6m*6m | 966 | 07-22-2017 | 07-21-2020 |
| BiConiLog Antenna | SCHWARZBECK | VULB9163 | 497 | 03-16-2019 | 03-15-2020 |
| | | | | 03-16-2020 | 03-15-2021 |
| Horn Antenna | SCHWARZBECK | BBHA9120D | 916 | 03-16-2019 | 03-15-2020 |
| | | | | 03-16-2020 | 03-15-2021 |
| Horn Antenna | SCHWARZBECK | BBHA9120D | 1805 | 06-22-2017 | 06-21-2020 |
| Horn Antenna | SCHWARZBECK | BBHA 9170 | BBHA9170582 | 11-21-2019 | 11-20-2020 |
| Loop Antenna | SCHWARZBECK | FMZB 1519 B | 00044 | 04-28-2019 | 04-27-2020 |
| EMI Test Software | AUDIX | E3 | Version: 6.110919b | | |
| Pre-amplifier | HP | 8447D | 2944A09358 | 03-07-2019 | 03-06-2020 |
| | | | | 03-07-2020 | 03-06-2021 |
| Pre-amplifier | CD | PAP-1G18 | 11804 | 03-07-2019 | 03-06-2020 |
| | | | | 03-07-2020 | 03-06-2021 |
| Spectrum analyzer | Rohde & Schwarz | FSP30 | 101454 | 03-07-2019 | 03-06-2020 |
| | | | | 03-07-2020 | 03-06-2021 |
| Spectrum analyzer | Rohde & Schwarz | FSP40 | 100363 | 11-21-2019 | 11-20-2020 |
| EMI Test Receiver | Rohde & Schwarz | ESRP7 | 101070 | 03-07-2019 | 03-06-2020 |
| | | | | 03-07-2020 | 03-06-2021 |
| Simulated Station | Anritsu | MT8820C | 6201026545 | 03-07-2019 | 03-06-2020 |
| | | | | 03-07-2020 | 03-06-2021 |
| Cable | ZDECL | Z108-NJ-NJ-81 | 1608458 | 03-07-2019 | 03-06-2020 |
| | | | | 03-07-2020 | 03-06-2021 |
| Cable | MICRO-COAX | MFR64639 | K10742-5 | 03-07-2019 | 03-06-2020 |
| | | | | 03-07-2020 | 03-06-2021 |
| Cable | SUHNER | SUCOFLEX100 | 58193/4PE | 03-07-2019 | 03-06-2020 |
| | | | | 03-07-2020 | 03-06-2021 |

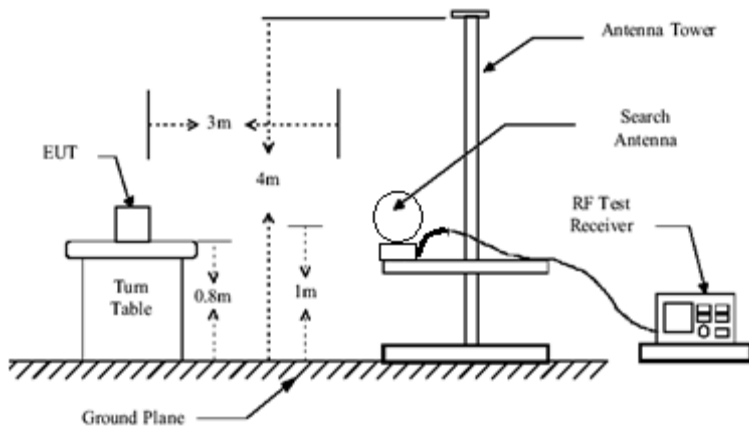
| Conducted Emission: | | | | | |
|---------------------|-----------------|------------|--------------------|----------------------|--------------------------|
| Test Equipment | Manufacturer | Model No. | Serial No. | Cal. Date (mm-dd-yy) | Cal. Due date (mm-dd-yy) |
| EMI Test Receiver | Rohde & Schwarz | ESCI | 101189 | 03-07-2019 | 03-06-2020 |
| | | | | 03-07-2020 | 03-06-2021 |
| Pulse Limiter | SCHWARZBECK | OSRAM 2306 | 9731 | 03-07-2019 | 03-06-2020 |
| | | | | 03-07-2020 | 03-06-2021 |
| LISN | CHASE | MN2050D | 1447 | 03-19-2019 | 03-18-2020 |
| | | | | 03-19-2020 | 03-18-2021 |
| LISN | Rohde & Schwarz | ESH3-Z5 | 8438621/010 | 07-21-2018 | 07-20-2021 |
| Cable | HP | 10503A | N/A | 03-07-2019 | 03-06-2020 |
| | | | | 03-07-2020 | 03-06-2021 |
| EMI Test Software | AUDIX | E3 | Version: 6.110919b | | |

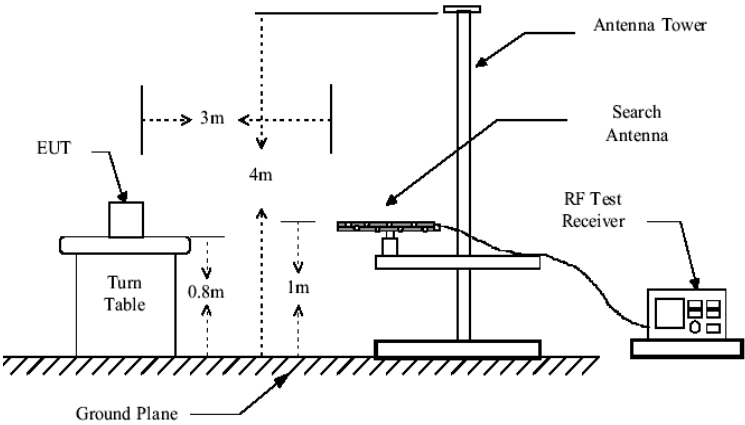
6 Test results and Measurement Data

6.1 Antenna requirement

| | |
|---|--|
| Standard requirement: | FCC Part15 C Section 15.203 |
| 15.203 requirement: An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited. | |
| E.U.T Antenna: | The detailed ant information please check internal photos. |

6.2 Radiated Emission

| | | | | | |
|-----------------------|---|------------|------------------|--------|------------------|
| Test Requirement: | FCC Part15 C Section 15.209 | | | | |
| Test Method: | ANSI C63.10 | | | | |
| Test Frequency Range: | 9kHz to 1000MHz | | | | |
| Test site: | Measurement Distance: 3m(Semi-Anechoic Chamber) | | | | |
| Receiver setup: | Frequency | Detector | RBW | VBW | Remark |
| | 9kHz-150kHz | Quasi-peak | 200Hz | 600Hz | Quasi-peak Value |
| | 150kHz-30MHz | Quasi-peak | 9kHz | 30kHz | Quasi-peak Value |
| | 30MHz-1GHz | Quasi-peak | 120kHz | 300kHz | Quasi-peak Value |
| | Above 1GHz | Peak | 1MHz | 3MHz | Peak Value |
| Limit: | Frequency (MHz) | | Limit (uV/m @3m) | | Distance (m) |
| | 0.009-0.490 | | 2400/F(kHz) | | 300 |
| | 0.490-1.705 | | 24000/F(kHz) | | 30 |
| | 1.705-30 | | 30 | | 30 |
| | 30-88 | | 100 | | 3 |
| | 88-216 | | 150 | | 3 |
| | 216-960 | | 200 | | 3 |
| | Above 1GHz | | 500 | | 3 |
| Test Procedure: | <div>a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic camber. The table was rotated 360 degrees to determine the position of the highest radiation.</div> <div>b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.</div> <div>c. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.</div> <div>d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.</div> <div>e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.</div> <div>f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.</div> | | | | |
| Test setup: | <div>9kHz-30MHz</div> <div></div> <div>30MHz-1GHz</div> | | | | |

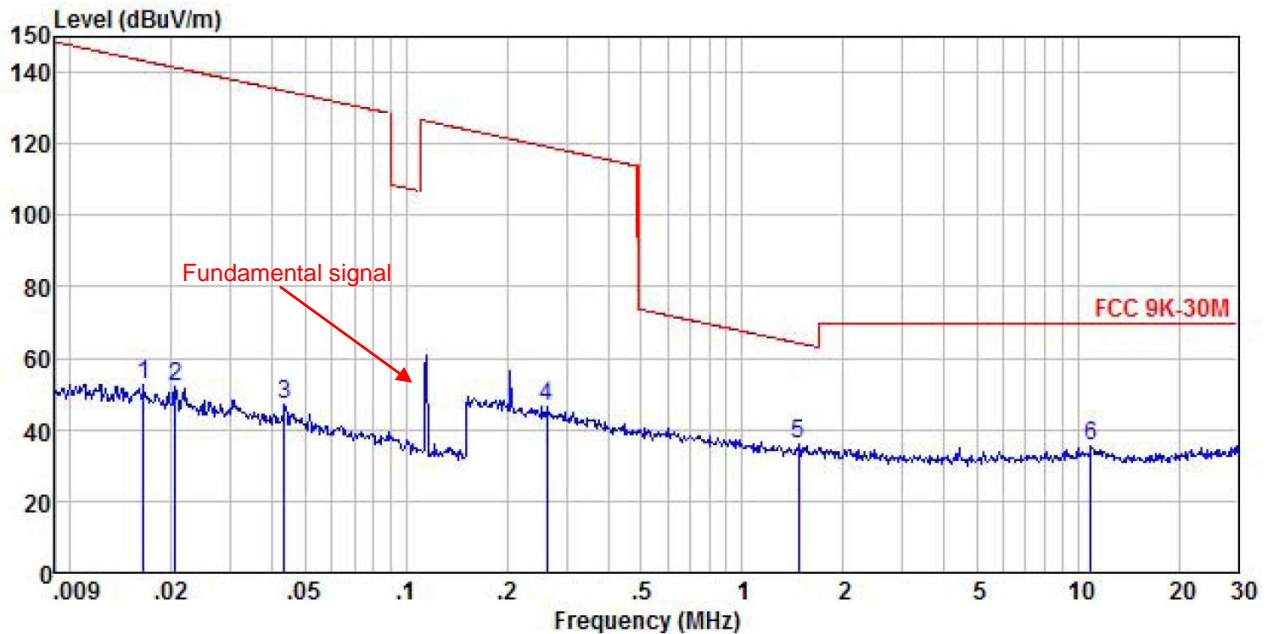
| | |
|-------------------|---|
| |  <p>The diagram illustrates the test setup. An EUT (Equipment Under Test) is placed on a Turn Table at a height of 0.8m from the Ground Plane. A Search Antenna is mounted on an Antenna Tower at a height of 1m from the Ground Plane. The horizontal distance between the EUT and the Search Antenna is 3m. The vertical distance between the EUT and the Search Antenna is 4m. An RF Test Receiver is connected to the Search Antenna.</p> |
| Test Instruments: | Refer to section 5.9 for details |
| Test mode: | Refer to section 5.3 for details |
| Test results: | Pass |
| Remark: | The emission levels of above 1 GHz are very lower than the limit and not show in test report. |

Measurement Data:**a) Fundamental field strength**

| Peak value | | | | |
|-------------------|--------------------|-------------------------------|----------------------------|--------|
| Test Polarization | Frequency (kHz) | Emission@3m (dB μ V/m) | Limit@3m (dB μ V/m) | Result |
| Horizontal | 159.36 | 59.62 | 123.56 | Pass |
| Vertical | 159.36 | 55.63 | 123.56 | Pass |
| Average value | | | | |
| Test Polarization | Frequency (kHz) | Emission@3m (dB μ V/m) | Limit@3m (dB μ V/m) | Result |
| Horizontal | 159.36 | 47.71 | 103.56 | Pass |
| Vertical | 159.36 | 46.98 | 103.56 | Pass |

b) Radiated spurious (By 9 kHz ~ 30 MHz):

| | | | |
|-----------------|------------------|----------------|-----------------------|
| Product name: | Wireless Charger | Product Model: | LPWP01-RG (Rose Gold) |
| Test by: | YT | Test mode: | TX mode |
| Test frequency: | 9 kHz ~ 30 MHz | Phase: | Horizontal |
| Test voltage: | AC 120 V/60 Hz | Environment: | Temp: 22.5℃ Humi: 55% |

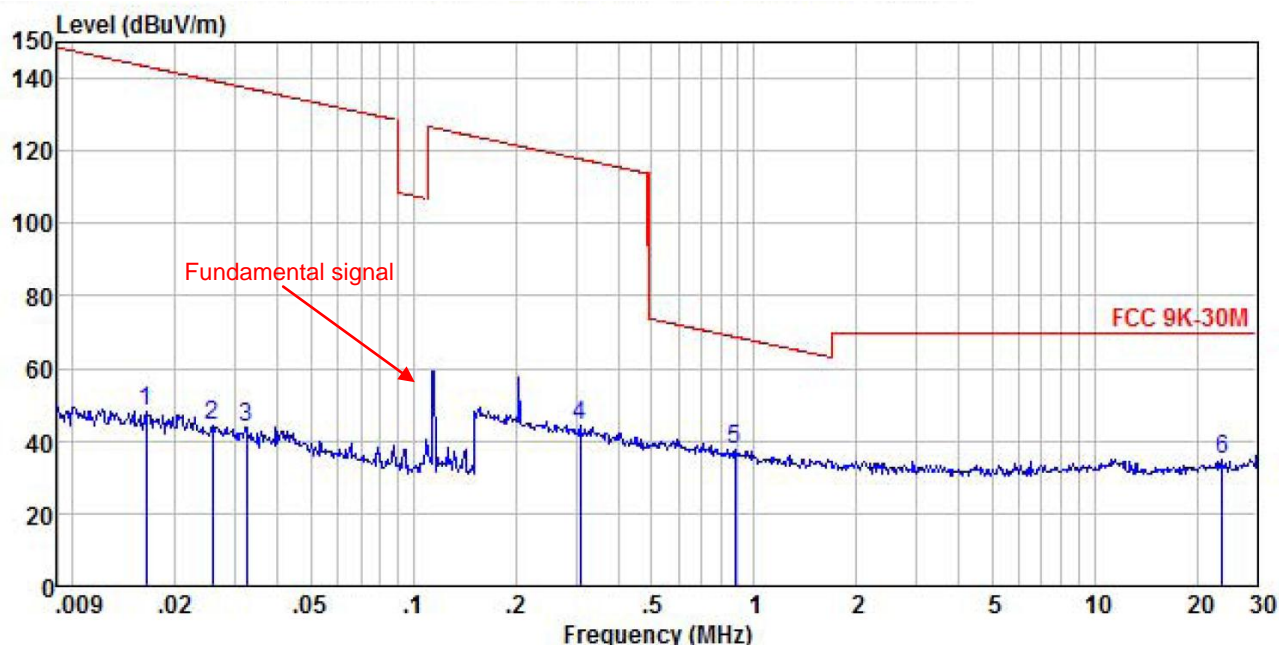


| | Freq | Read | Antenna | Cable | Preamp | Level | Limit | Over | |
|---|--------|-------|---------|-------|--------|--------|--------|--------|--------|
| | MHz | Level | Factor | Loss | Factor | Level | Line | Limit | Remark |
| | MHz | dBuV | dB/m | dB | dB | dBuV/m | dBuV/m | dB | |
| 1 | 0.017 | 26.67 | -25.87 | 0.05 | 0.00 | 52.35 | 143.22 | -90.87 | Peak |
| 2 | 0.021 | 26.45 | -25.90 | 0.06 | 0.00 | 52.11 | 141.31 | -89.20 | Peak |
| 3 | 0.043 | 21.29 | -25.98 | 0.16 | 0.00 | 46.97 | 134.83 | -87.86 | Peak |
| 4 | 0.263 | 20.79 | -26.23 | 0.35 | 0.00 | 46.41 | 119.22 | -72.81 | Peak |
| 5 | 1.480 | 10.14 | -26.41 | 0.63 | 0.00 | 35.86 | 64.23 | -28.37 | Peak |
| 6 | 10.972 | 9.81 | -26.42 | 0.54 | 0.00 | 35.43 | 69.50 | -34.07 | Peak |

Notes:

1. Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor.
2. The emission levels of other frequencies are very lower than the limit and not show in test report.

| | | | |
|-----------------|------------------|----------------|-----------------------------|
| Product name: | Wireless Charger | Product model: | LPWP01-RG (Rose Gold) |
| Test by: | YT | Test mode: | TX mode |
| Test frequency: | 9 kHz ~ 30 MHz | Phase: | Vertical |
| Test voltage: | AC 120 V/60 Hz | Environment: | Temp: 22.5°C Humi: 55% |



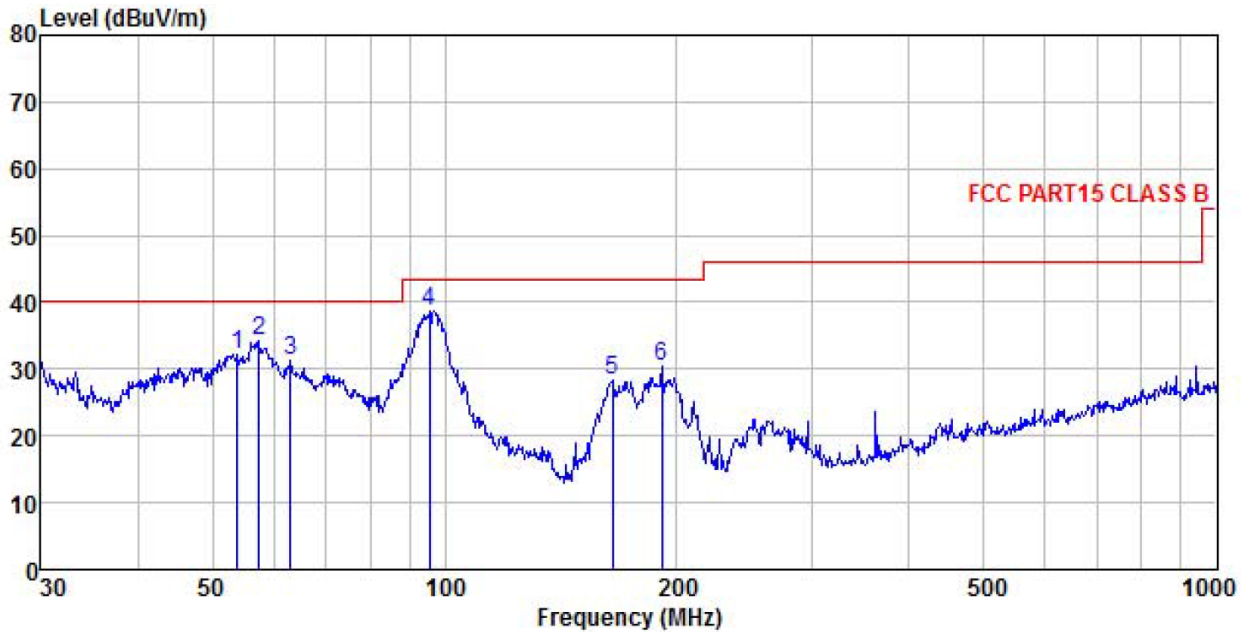
| | Freq | Read Level | Antenna Factor | Cable Loss | Preamp Factor | Level | Limit Line | Over Limit | Remark |
|---|--------|------------|----------------|------------|---------------|--------|------------|------------|--------|
| | MHz | dBuV | dB/m | dB | dB | dBuV/m | dBuV/m | dB | |
| 1 | 0.016 | 22.32 | -25.87 | 0.05 | 0.00 | 48.00 | 143.29 | -95.29 | Peak |
| 2 | 0.026 | 18.41 | -25.93 | 0.09 | 0.00 | 44.07 | 139.41 | -95.34 | Peak |
| 3 | 0.032 | 18.19 | -25.95 | 0.12 | 0.00 | 43.86 | 137.37 | -93.51 | Peak |
| 4 | 0.309 | 18.94 | -26.25 | 0.36 | 0.00 | 44.55 | 117.81 | -73.26 | Peak |
| 5 | 0.880 | 12.04 | -26.30 | 0.60 | 0.00 | 37.84 | 68.72 | -30.88 | Peak |
| 6 | 23.711 | 8.87 | -25.95 | 0.72 | 0.00 | 35.14 | 69.50 | -34.36 | Peak |

Notes:

1. Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor.
2. The emission levels of other frequencies are very lower than the limit and not show in test report.

Radiated spurious (By 30 MHz ~ 1 GHz):

| | | | |
|-----------------|------------------|----------------|-----------------------|
| Product Name: | Wireless Charger | Product Model: | LPWP01-RG (Rose Gold) |
| Test By: | YT | Test mode: | TX mode |
| Test Frequency: | 30 MHz ~ 1 GHz | Polarization: | Vertical |
| Test Voltage: | AC 120V/60Hz | Environment: | Temp: 24℃ Humi: 57% |

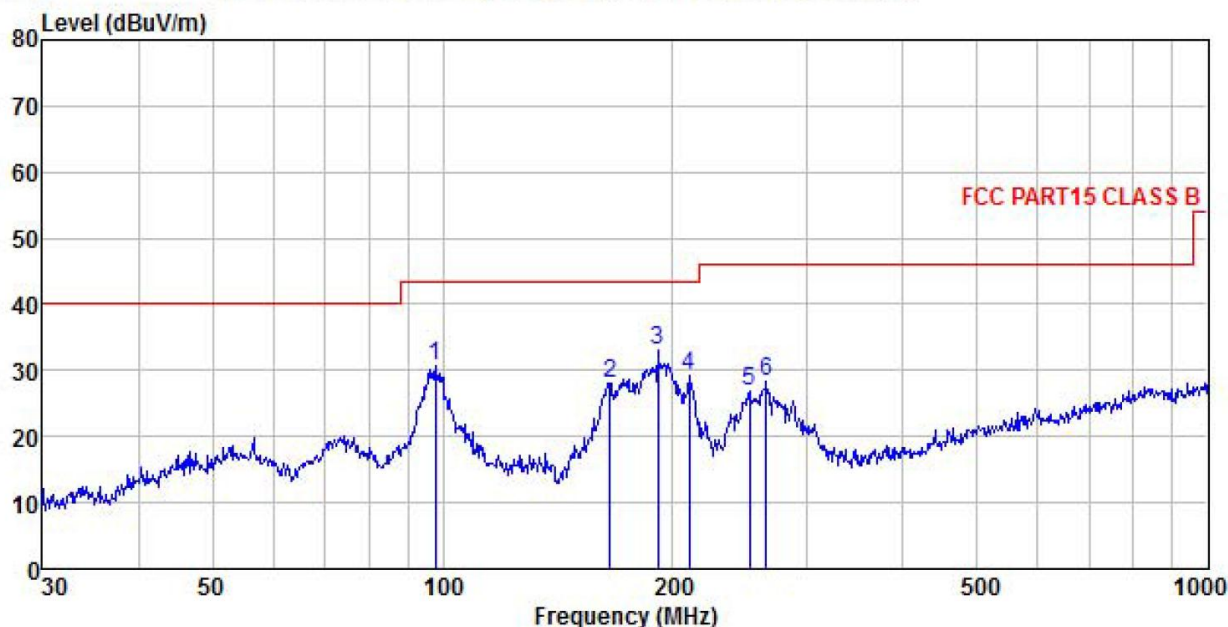


| | Freq | Read | Antenna | Cable | Preamp | Level | Limit | Over | Remark |
|---|---------|-------|---------|-------|--------|--------|--------|--------|--------|
| | MHz | Level | Factor | Loss | Factor | Level | Line | Limit | |
| | | dBuV | dB/m | dB | dB | dBuV/m | dBuV/m | dB | |
| 1 | 53.882 | 48.95 | 11.71 | 1.34 | 29.80 | 32.20 | 40.00 | -7.80 | QP |
| 2 | 57.392 | 51.30 | 11.50 | 1.37 | 29.79 | 34.38 | 40.00 | -5.62 | QP |
| 3 | 63.092 | 49.32 | 10.26 | 1.38 | 29.76 | 31.20 | 40.00 | -8.80 | QP |
| 4 | 95.427 | 54.63 | 11.48 | 2.01 | 29.55 | 38.57 | 43.50 | -4.93 | QP |
| 5 | 164.908 | 45.37 | 9.47 | 2.62 | 29.09 | 28.37 | 43.50 | -15.13 | QP |
| 6 | 191.074 | 46.19 | 10.33 | 2.81 | 28.89 | 30.44 | 43.50 | -13.06 | QP |

Remark:

1. Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor.
2. The emission levels of other frequencies are very lower than the limit and not show in test report.

| | | | |
|-----------------|------------------|----------------|-----------------------|
| Product Name: | Wireless Charger | Product Model: | LPWP01-RG (Rose Gold) |
| Test By: | YT | Test mode: | TX mode |
| Test Frequency: | 30 MHz ~ 1 GHz | Polarization: | Horizontal |
| Test Voltage: | AC 120V/60Hz | Environment: | Temp: 24°C Humi: 57% |

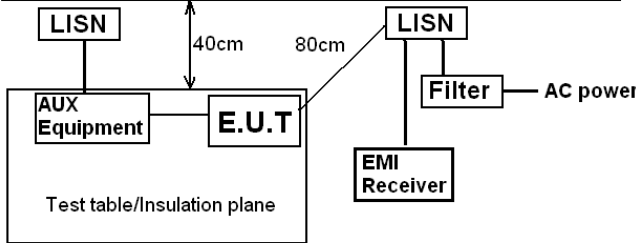


| | Freq | ReadAntenna | Cable | Preamp | Limit | Over | |
|---|---------|-------------|--------|--------|--------|--------|--------|
| | MHz | Level | Factor | Loss | Factor | Level | Line |
| | | dBuV | dB/m | dB | dB | dBuV/m | dBuV/m |
| | | | | | | | dB |
| 1 | 97.798 | 46.44 | 11.95 | 1.98 | 29.54 | 30.83 | 43.50 |
| 2 | 165.487 | 45.04 | 9.49 | 2.62 | 29.09 | 28.06 | 43.50 |
| 3 | 191.074 | 48.86 | 10.33 | 2.81 | 28.89 | 33.11 | 43.50 |
| 4 | 210.048 | 44.02 | 11.04 | 2.86 | 28.77 | 29.15 | 43.50 |
| 5 | 252.063 | 39.84 | 12.74 | 2.82 | 28.54 | 26.86 | 46.00 |
| 6 | 264.746 | 41.08 | 12.99 | 2.85 | 28.51 | 28.41 | 46.00 |

Remark:

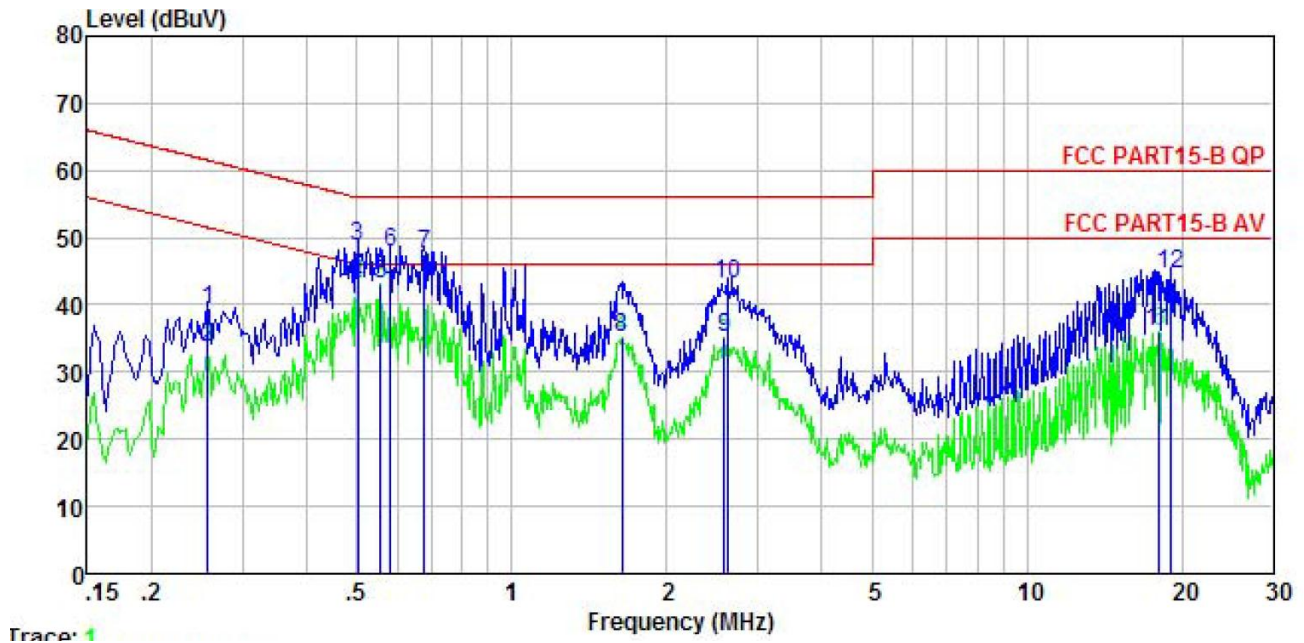
1. Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor.
2. The emission levels of other frequencies are very lower than the limit and not show in test report.

6.3 Conducted Emission

| | | | | | | |
|--|--|--------------|---------|-----------|---------|--------|
| Test Requirement: | FCC Part 15 B Section 15.207 | | | | | |
| Test Method: | ANSI C63.10 | | | | | |
| Test Frequency Range: | 150kHz to 30MHz | | | | | |
| Class / Severity: | Class B | | | | | |
| Receiver setup: | RBW=9kHz, VBW=30kHz | | | | | |
| Limit: | Frequency range (MHz) | Limit (dBμV) | | | | |
| | | Quasi-peak | | Average | | |
| | 0.15-0.5 | 66 to 56* | | 56 to 46* | | |
| | 0.5-5 | 56 | | 46 | | |
| | 0.5-30 | 60 | | 50 | | |
| * Decreases with the logarithm of the frequency. | | | | | | |
| Test setup: | <div><p style="text-align: center;">Reference Plane</p><p>Remark E.U.T: Equipment Under Test LISN: Line Impedance Stabilization Network Test table height=0.8m</p></div> | | | | | |
| Test procedure | <div><div>1. The E.U.T and simulators are connected to the main power through a line impedance stabilization network(L.I.S.N.). The provide a 50ohm/50uH coupling impedance for the measuring equipment.</div><div>2. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination. (Please refers to the block diagram of the test setup and photographs).</div><div>3. Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.4: 2014 on conducted measurement.</div></div> | | | | | |
| Test environment: | Temp.: | 23 °C | Humid.: | 56% | Press.: | 101kPa |
| Test Instruments: | Refer to section 5.9 for details | | | | | |
| Test mode: | Refer to section 5.3 for details | | | | | |
| Test results: | Pass | | | | | |

Measurement Data:

| | | | |
|-----------------|------------------|----------------|-----------------------------|
| Product name: | Wireless Charger | Product Model: | LPWP01-RG (Rose Gold) |
| Test by: | YT | Test mode: | TX mode |
| Test frequency: | 150 kHz ~ 30 MHz | Phase: | Line |
| Test voltage: | AC 120 V/60 Hz | Environment: | Temp: 22.5°C Humi: 55% |

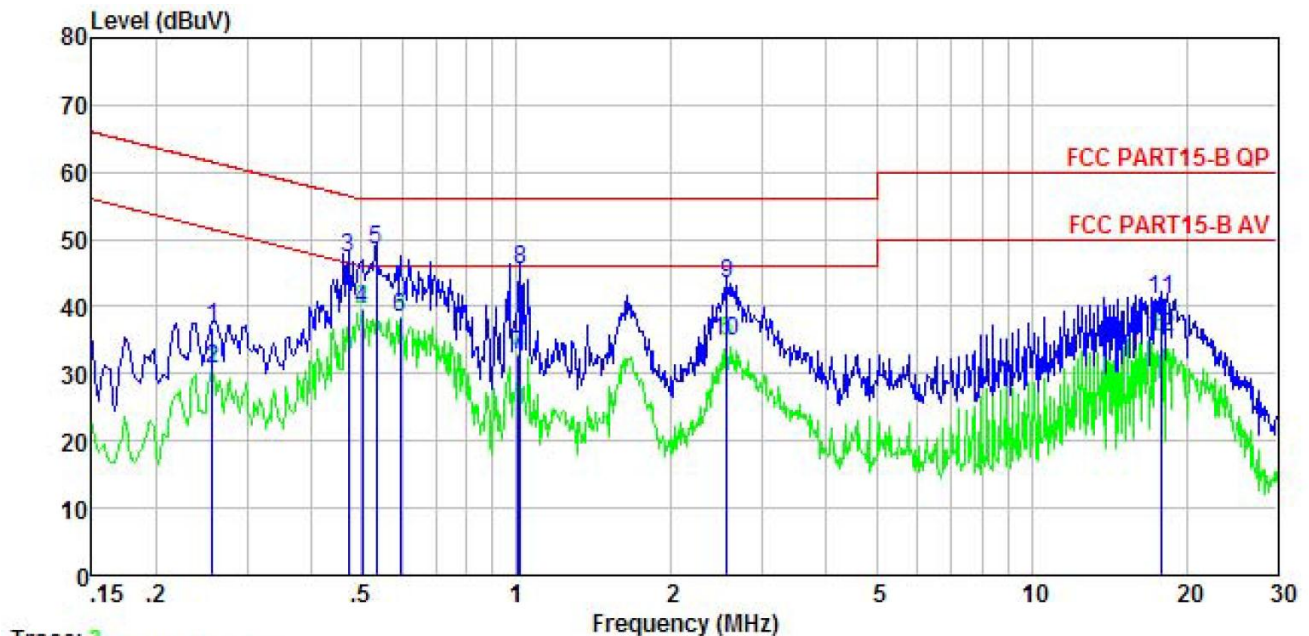


| | Freq | Read Level | LISN Factor | Aux Factor | Cable Loss | Level | Limit Line | Over Limit | Remark |
|----|--------|------------|-------------|------------|------------|-------|------------|------------|---------|
| | MHz | dBuV | dB | dB | dB | dBuV | dBuV | dB | |
| 1 | 0.258 | 29.19 | -0.40 | -0.22 | 10.75 | 39.32 | 61.51 | -22.19 | QP |
| 2 | 0.258 | 23.50 | -0.40 | -0.22 | 10.75 | 33.63 | 51.51 | -17.88 | Average |
| 3 | 0.502 | 38.55 | -0.39 | -0.35 | 10.76 | 48.57 | 56.00 | -7.43 | QP |
| 4 | 0.502 | 33.15 | -0.39 | -0.35 | 10.76 | 43.17 | 46.00 | -2.83 | Average |
| 5 | 0.555 | 33.05 | -0.39 | -0.37 | 10.76 | 43.05 | 46.00 | -2.95 | Average |
| 6 | 0.582 | 37.91 | -0.39 | -0.37 | 10.76 | 47.91 | 56.00 | -8.09 | QP |
| 7 | 0.675 | 37.56 | -0.38 | -0.39 | 10.77 | 47.56 | 56.00 | -8.44 | QP |
| 8 | 1.636 | 24.63 | -0.40 | -0.09 | 10.93 | 35.07 | 46.00 | -10.93 | Average |
| 9 | 2.581 | 24.76 | -0.43 | -0.25 | 10.93 | 35.01 | 46.00 | -10.99 | Average |
| 10 | 2.622 | 32.78 | -0.43 | -0.25 | 10.93 | 43.03 | 56.00 | -12.97 | QP |
| 11 | 18.039 | 24.02 | -0.87 | 1.90 | 10.92 | 35.97 | 50.00 | -14.03 | Average |
| 12 | 19.021 | 33.11 | -0.92 | 1.36 | 10.92 | 44.47 | 60.00 | -15.53 | QP |

Notes:

1. An initial pre-scan was performed on the line and neutral lines with peak detector.
2. Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission.
3. Final Level = Receiver Read level + LISN Factor + Aux Factor + Cable Loss.

| | | | |
|-----------------|------------------|----------------|------------------------|
| Product name: | Wireless Charger | Product Model: | LPWP01-RG (Rose Gold) |
| Test by: | YT | Test mode: | TX mode |
| Test frequency: | 150 kHz ~ 30 MHz | Phase: | Neutral |
| Test voltage: | AC 120 V/60 Hz | Environment: | Temp: 22.5°C Humi: 55% |

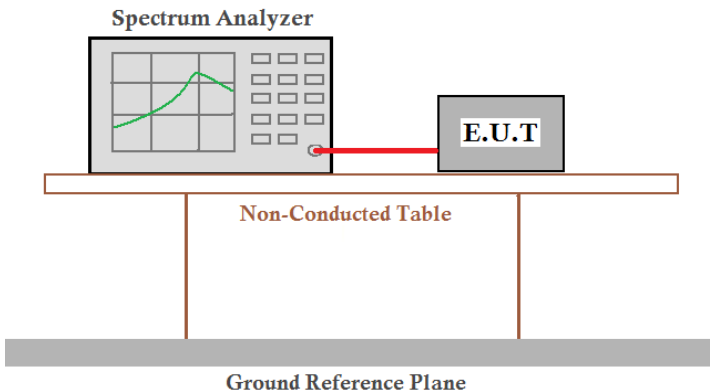


| | Freq | Read Level | LISN Factor | Aux Factor | Cable Loss | Level | Limit Line | Over Limit | Remark |
|----|--------|------------|-------------|------------|------------|-------|------------|------------|---------|
| | MHz | dBuV | dB | dB | dB | dBuV | dBuV | dB | |
| 1 | 0.258 | 26.79 | -0.65 | 0.01 | 10.75 | 36.90 | 61.51 | -24.61 | QP |
| 2 | 0.258 | 20.57 | -0.65 | 0.01 | 10.75 | 30.68 | 51.51 | -20.83 | Average |
| 3 | 0.471 | 37.13 | -0.65 | 0.01 | 10.75 | 47.24 | 56.49 | -9.25 | QP |
| 4 | 0.502 | 29.27 | -0.65 | 0.03 | 10.76 | 39.41 | 46.00 | -6.59 | Average |
| 5 | 0.535 | 38.20 | -0.65 | 0.03 | 10.76 | 48.34 | 56.00 | -7.66 | QP |
| 6 | 0.595 | 28.12 | -0.64 | 0.04 | 10.77 | 38.29 | 46.00 | -7.71 | Average |
| 7 | 1.010 | 22.33 | -0.63 | 0.08 | 10.87 | 32.65 | 46.00 | -13.35 | Average |
| 8 | 1.016 | 35.06 | -0.63 | 0.08 | 10.87 | 45.38 | 56.00 | -10.62 | QP |
| 9 | 2.567 | 32.87 | -0.67 | 0.26 | 10.94 | 43.40 | 56.00 | -12.60 | QP |
| 10 | 2.567 | 24.20 | -0.67 | 0.26 | 10.94 | 34.73 | 46.00 | -11.27 | Average |
| 11 | 17.849 | 30.02 | -1.17 | 1.39 | 10.92 | 41.16 | 60.00 | -18.84 | QP |
| 12 | 17.849 | 24.15 | -1.17 | 1.39 | 10.92 | 35.29 | 50.00 | -14.71 | Average |

Notes:

1. An initial pre-scan was performed on the line and neutral lines with peak detector.
2. Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission.
3. Final Level = Receiver Read level + LISN Factor + Aux Factor + Cable Loss.

6.4 Bandwidth

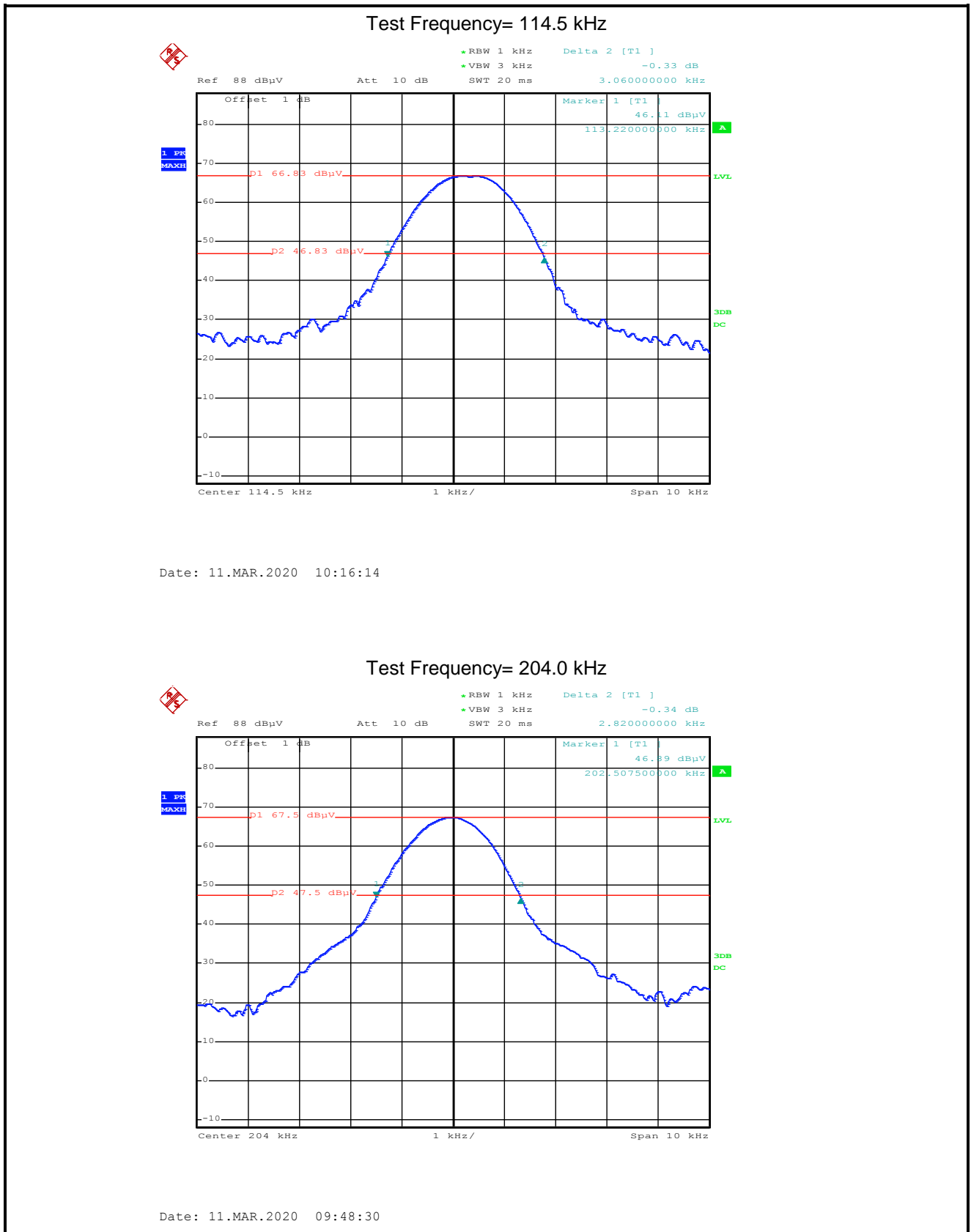
| | |
|-------------------|---|
| Test Requirement: | FCC Part15 C Section 15.215 (c) |
| Test Method: | ANSI C63.10 |
| Receiver setup: | RBW=1 kHz, VBW=3 kHz, detector: Peak |
| Limit: | The fundamentelemission be kept within atleast the central 80% of the permittedband |
| Test Procedure: | <ol style="list-style-type: none"> 1. According to the follow Test-setup, keep the relative position between the artificial antenna and the EUT. 2. Set the EUT to proper test channel. 3. Max hold the radiated emissions, mark the peak power frequency point and the -20dB upper and lower frequency points. 4. Read 20dB bandwidth. |
| Test setup: |  <p>The diagram illustrates the test setup. A Spectrum Analyzer is connected to an E.U.T (Equipment Under Test) via a red cable. Both the Spectrum Analyzer and the E.U.T are placed on a Non-Conducted Table. The table is supported by two vertical legs and sits on a Ground Reference Plane.</p> |
| Test Instruments: | Refer to section 5.9 for details |
| Test mode: | Refer to section 5.3 for details |
| Test results: | Passed |

Measurement Data

| 20dB bandwidth (kHz) | | Limits |
|----------------------------------|-----------------|--------|
| Lowest channel | Highest channel | N/A |
| 3.06 | 2.82 | |
| Remark: For report purpose only. | | |

| 99% bandwidth (kHz) | | Limits |
|----------------------------------|-----------------|--------|
| Lowest channel | Highest channel | N/A |
| 2.33 | 2.12 | |
| Remark: For report purpose only. | | |

Test plot as follows:
20dB bandwidth



99% bandwidth

