# FCC PART 15C TEST REPORT FOR CERTIFICATION
# On Behalf of

NIMBLE FOR GOOD, PBC.

VALET 3-IN-1 WIRELESS CHARGER

Model Number: NB-WP-3N1VLT

FCC ID: 2AZIO-VALETA

| | |
|---|---|
| Applicant: | NIMBLE FOR GOOD, PBC. |
| Address: | 1008 Brioso Drive, Costa Mesa, California 92627, United States |
| | |
| Prepared By: | EST Technology Co., Ltd. |
| | Chilingxiang, Qishantou, Santun, Houjie, Dongguan, Guangdong, China |
| Tel: 86-769-83081888-808 | |

| | |
|---|---|
| Report Number: | ESTE-R2408199 |
| Date of Test: | Aug. 09, 2024~ Aug. 23, 2024 |
| Date of Report: | Aug. 27, 2024 |

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|---|---|---|---|
| **Applicant:**<br>**Address:** | NIMBLE FOR GOOD, PBC.<br>1008 Brioso Drive, Costa Mesa, California 92627, United States | | |
| **Manufacturer:**<br>**Address:** | PYS High-Tech Co., Ltd.<br>1F~12F, Block 9, Lianhua Industrial Zone, Longhua, Shenzhen, Guangdong 518109 CHINA | | |
| **Factory 1:**<br>**Address:** | PYS High-Tech Co., Ltd.<br>1F~12F, Block 9, Lianhua Industrial Zone, Longhua, Shenzhen, Guangdong 518109 CHINA | | |
| **Factory 2:**<br>**Address:** | PYS VIETNAM TECHNOLOGY COMPANY LIMITED<br>CN-06, ThuanThanh II industrial zone, Mao Dien commune, ThuanThanh district, BacNinh, Vietnam | | |
| **E.U.T:** | VALET 3-IN-1 WIRELESS CHARGER | | |
| **Model Number:** | NB-WP-3N1VLT | | |
| **Power Supply:** | Input: DC 5V/3A; DC 9V/3A; DC 12V/3A | | |
| **Trade Name:** | Nimble | Serial No.: | ------ |
| **Date of Receipt:** | Aug. 09, 2024 | Date of Test: | Aug. 09, 2024~ Aug. 23, 2024 |
| **Test Specification:** | FCC Part 15 Subpart C<br>ANSI C63.10:2013 | | |
| **Test Result:** | The device described above is tested by EST Technology Co., Ltd. The measurement results were contained in this test report and EST Technology Co., Ltd. was assumed full responsibility for the accuracy and completeness of these measurements. Also, this report shows that the EUT to be technically compliance with the FCC Rules and Regulations Part 15 Subpart C requirements.<br><br>This report applies to above tested sample only and shall not be reproduced in part without written approval of EST Technology Co., Ltd. | | |

**Date:** Aug. 27, 2024

| Prepared by: | Reviewed by: | Approved by: |
|---|---|---|
| Ring Yang / Assistant | Seven Wang / Engineer | Iceman Hu / Manager |

**Other Aspects:**
None.

Abbreviations: OK/P=passed fail/F=failed n.a/N=not applicable E.U.T=equipment under tested

# 1. GENERAL INFORMATION

## 1.1. Description of Device (EUT)

| | | |
|---|---|---|
| Product Name | : | VALET 3-IN-1 WIRELESS CHARGER |
| Model Number | : | NB-WP-3N1VLT |
| Operation Frequency | : | Phone: 110.5-205kHz;360kHz<br>Airpods: 110.5-205 kHz<br>iWatch: 326.5 kHz |
| Max Wireless Charge Power | : | Phone: 15W Max<br>Airpods: 5W Max<br>iWatch: 3.5W Max |
| Max Field Strength of Fundamental | : | 72.46dBμV/m |
| Modulation Type | : | ASK |
| Antenna Type | : | Induction coil |
| Sample Type | : | Prototype production |

Note: For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.

# 2. SUMMARY OF TEST

## 2.1. Summary of test result

| No. | Description of Test Item | FCC Standard Section | Results |
|---|---|---|---|
| 1 | Radiated Emission | 15.205<br>15.209 | PASS |
| 2 | AC Power Line Conducted Emissions | 15.207 | PASS |
| 3 | Antenna Requirement | 15.203 | PASS |

Note:“N/A” denotes test is not applicable in this test report.

## 2.2. Test Facilities

EMC Lab : Accredited by CNAS, CHINA
Registration No.: L5288
This Accreditation is valid until: November 12, 2029

Recognized by FCC, USA
Designation Number: CN1215
This Recognition is valid until: January 31, 2026

Accredited by A2LA, USA
Registration No.: 4366.01
This Accreditation is valid until: January 31, 2026

Recognized by Industry Canada
CAB identifier No.: CN0035
This Recognition is valid until: January 31, 2026

Recognized by VCCI, Japan
Registration No.:C-14103; T-20073; R-13663; R-20103; G-20097
Date of registration: Apr. 20, 2020
This Recognition is valid until: Apr. 19, 2026

Recognized by TUV Rheinland, Germany
Registration No.: UA 50413872 0001
Date of registration: July 31, 2018

Recognized by Intertek
Registration No.: 2011-RTL-L2-64
Date of registration: November 08, 2018

Name of Firm : EST Technology Co., Ltd.

Site Location : Chilingxiang, Qishantou, Santun, Houjie, Dongguan, Guangdong, China

## 2.3. Measurement uncertainty

| Test Item | Uncertainty |
|---|---|
| Uncertainty for Conduction emission test | ±3.48dB |
| Uncertainty for spurious emissions test (Below 30MHz) | ±1.62dB |
| Uncertainty for spurious emissions test (30MHz-1GHz) | ±4.60 dB(Polarize: H) |
| | ±4.68 dB(Polarize: V) |
| Uncertainty for spurious emissions test (1GHz to 18GHz) | ±4.96dB |
| Uncertainty for radio frequency | $7\times10^{-8}$ |
| Uncertainty for conducted RF Power | 1.08dB |
| Uncertainty for Power density test | 0.26dB |

Note: This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

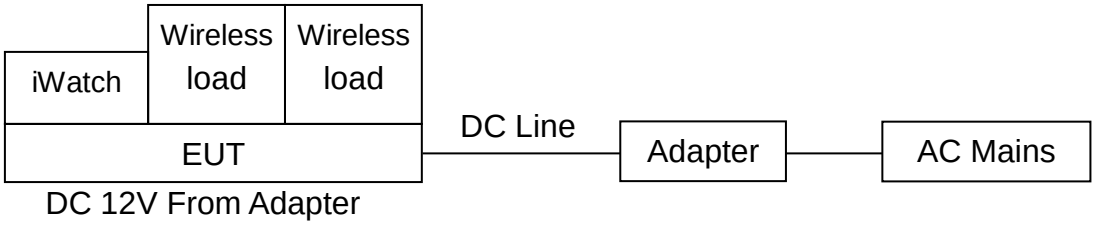
## 2.4. Assistant equipment used for test

| Item | Equipment | Brand | Model Name/Type No. | FCC ID | Series No. |
|---|---|---|---|---|---|
| A | Adapter | - | HKAP3891B-36US | - | - |
| B | Wireless load | - | YBZ BPP | - | - |
| C | iWatch | - | A1889 | - | - |
| D | Wireless load | - | CPS4041_MPP_RX_V1.0.1 | - | - |

| Item | Shielded Type | Ferrite Core | Length | Model Name/Type No. | Note |
|---|---|---|---|---|---|
| 1 | NO | NO | 1.5m | - | DC Cable |

## 2.5. Block Diagram

For radiated emissions test: EUT was placed on a turn table, which is 0.8 meter high above ground.




(EUT: VALET 3-IN-1 WIRELESS CHARGER)

2.6. The test mode was selected for the final test as listed below.

| Test Item | Test Mode | |
|---|---|---|
| Radiated Emission | Phone: 15W+Airpods 5W+iWatch 3.5W | Full load |
| | | Half load |
| | | No load |
| | Phone: 15W | Full load |
| | | Half load |
| | Airpods 5W | Full load |
| | | Half load |
| | iWatch 3.5W | Full load |
| | | Half load |
| AC Power Line Conducted Emissions | Phone: 15W+Airpods 5W+iWatch 3.5W | Full load |
| | | Half load |
| | | No load |
| | Phone: 15W | Full load |
| | | Half load |
| | Airpods 5W | Full load |
| | | Half load |
| | iWatch 3.5W | Full load |
| | | Half load |

Note: All mode have been tested, only the worst case test data record in the report.

## 2.7. Test Equipment List

| For AC Power Line Conducted Emissions Test | | | | | | |
|---|---|---|---|---|---|---|
| Equipment | Manufacturer | Model No. | Serial No. | Calibration Body | Last Cal. | Next Cal. |
| EMI Test Receiver | Rohde & Schwarz | ESRP3 | EST-E070 | LISAI | June 11,24 | June 10,25 |
| Artificial Mains Network | Rohde & Schwarz | ENV216 | EST-E002 | LISAI | June 11,24 | June 10,25 |
| Pulse Limiter | Rohde & Schwarz | ESH3-Z2 | EST-E078 | LISAI | June 11,24 | June 10,25 |
| Test Software | Audix | e3-6.111221a | N/A | N/A | N/A | N/A |

| For Radiated Emission Test(9kHz-30MHz) | | | | | | |
|---|---|---|---|---|---|---|
| Equipment | Manufacturer | Model No. | Serial No. | Calibration Body | Last Cal. | Next Cal. |
| EMI Test Receiver | Rohde & Schwarz | ESR7 | EST-E047 | LISAI | June 11,24 | June 10,25 |
| Active Loop Antenna | SCHWAREBECK | FMZB 1519B | EST-E054 | LISAI | June 11,24 | June 10,25 |
| Test Software | Audix | e3-6.111221a | N/A | N/A | N/A | N/A |
| 9kHz-30MHz Cable | N/A | EST-001 | N/A | N/A | N/A | N/A |

| For Radiated Emission Test (30MHz-1000MHz) | | | | | | |
|---|---|---|---|---|---|---|
| Equipment | Manufacturer | Model No. | Serial No. | Calibration Body | Last Cal. | Next Cal. |
| EMI Test Receiver | Rohde & Schwarz | ESR7 | EST-E047 | LISAI | June 11,24 | June 10,25 |
| Bilog Antenna | Teseq | CBL 6111D | EST-E034 | LISAI | June 11,24 | June 10,25 |
| Test Software | Audix | e3-6.111221a | N/A | N/A | N/A | N/A |
| 30-1000MHz Cable | N/A | EST-002 | N/A | N/A | N/A | N/A |

# 3. RADIATED EMISSION

## 3.1. Limit

**15.209 Radiated emission limits**

| Frequency (MHz) | Field Strength(μV/m) | 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 960 | 500 | 3 |

Note:

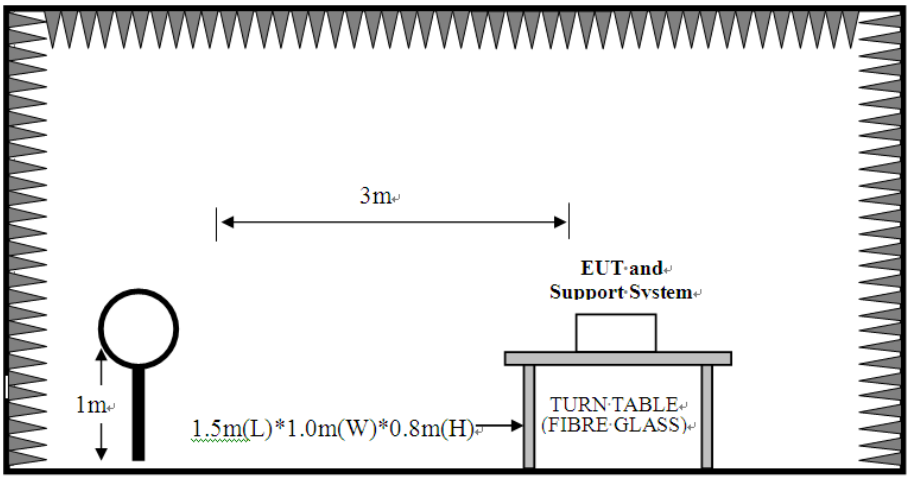
1. Emission level dBμV = 20 log Emission level μV/m.
2. The smaller limit shall apply at the cross point between two frequency bands.
3. Distance is the distance in meters between the measuring instrument,antenna and the closest point of any part of the device or system

**15.205 Restricted frequency band**

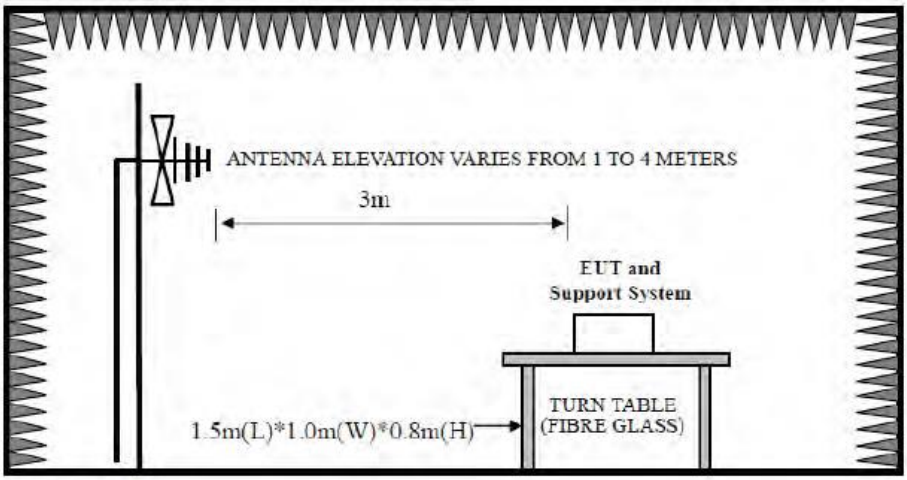
| MHz | MHz | MHz | GHz |
|---|---|---|---|
| 0.090 - 0.110 | 16.42 - 16.423 | 399.9 - 410 | 4.5 - 5.15 |
| [1]0.495 - 0.505 | 16.69475 - 16.69525 | 608 - 614 | 5.35 - 5.46 |
| 2.1735 - 2.1905 | 16.80425 - 16.80475 | 960 - 1240 | 7.25 - 7.75 |
| 4.125 - 4.128 | 25.5 - 25.67 | 1300 - 1427 | 8.025 - 8.5 |
| 4.17725 - 4.17775 | 37.5 - 38.25 | 1435 - 1626.5 | 9.0 - 9.2 |
| 4.20725 - 4.20775 | 73 - 74.6 | 1645.5 - 1646.5 | 9.3 - 9.5 |
| 6.215 - 6.218 | 74.8 - 75.2 | 1660 - 1710 | 10.6 - 12.7 |
| 6.26775 - 6.26825 | 108 - 121.94 | 1718.8 - 1722.2 | 13.25 - 13.4 |
| 6.31175 - 6.31225 | 123 - 138 | 2200 - 2300 | 14.47 - 14.5 |
| 8.291 - 8.294 | 149.9 - 150.05 | 2310 - 2390 | 15.35 - 16.2 |
| 8.362 - 8.366 | 156.52475 - 156.52525 | 2483.5 - 2500 | 17.7 - 21.4 |
| 8.37625 - 8.38675 | 156.7 - 156.9 | 2690 - 2900 | 22.01 - 23.12 |
| 8.41425 - 8.41475 | 162.0125 - 167.17 | 3260 - 3267 | 23.6 - 24.0 |
| 12.29 - 12.293 | 167.72 - 173.2 | 3332 - 3339 | 31.2 - 31.8 |
| 12.51975 - 12.52025 | 240 - 285 | 3345.8 - 3358 | 36.43 - 36.5 |
| 12.57675 - 12.57725 | 322 - 335.4 | 3600 - 4400 | ([2]) |

## 3.2. Test Setup

9kHz~30MHz




30~1000MHz



## 3.3. Spectrum Analyzer Setting

For 9KHz-150KHz

| Spectrum Parameters | Setting |
|---|---|
| RBW | 300Hz(for Peak&AVG)/CISPR 200Hz(for QP) |
| VBW | 300Hz(for Peak&AVG)/CISPR 200Hz(for QP) |
| Start frequency | 9KHz |
| Stop frequency | 150KHz |
| Sweep Time | Auto |
| Detector | PEAK/QP/AVG |
| Trace Mode | Max Hold |

For 150KHz-30MHz

| Spectrum Parameters | Setting |
|---|---|
| RBW | 9KHz |
| VBW | 9KHz |
| Start frequency | 150KHz |
| Stop frequency | 30MHz |
| Sweep Time | Auto |
| Detector | QP |
| Trace Mode | Max Hold |

For 30MHz-1000MHz

| Spectrum Parameters | Setting |
|---|---|
| RBW | 120KHz |
| VBW | 300KHz |
| Start frequency | 30MHz |
| Stop frequency | 1000MHz |
| Sweep Time | Auto |
| Detector | QP |
| Trace Mode | Max Hold |

## 3.4. Test Procedure

a. EUT was placed on a turn table, which is 0.8 meter high above ground.
b. EUT is set 3 meters away from the receiving antenna, which is mounted on a antenna tower.
c. Set the EUT transmit continuously with maximum output power.
d. Spectrum analyzer setting parameters in accordance with section 3.3.
e. The turn table can rotate 360 degrees to determine the position of the maximum emission level.
f. For below 30MHz test, the center of the Loop Test Antenna is 1m above the ground. During the measurement the Loop Test Antenna rotates both coaxial and coplanar polarization to find out the maximum emission level.
g. For above 30MHz test, the antenna can be moved up and down between 1 meter and 4 meters to find out the maximum emission level. Both coaxial and coplanar polarization of the antenna are set on test.
h. Record the results in the test report.

Note:

1. For emissions below 30MHz, if peak level comply with average limit, then the average level is deemed to comply with average limit.
2. For emissions below 30MHz, if peak level comply with QP limit, then the QP level is deemed to comply with QP limit.

## 3.5. Test Result

### Radiated Emission Below 30MHz

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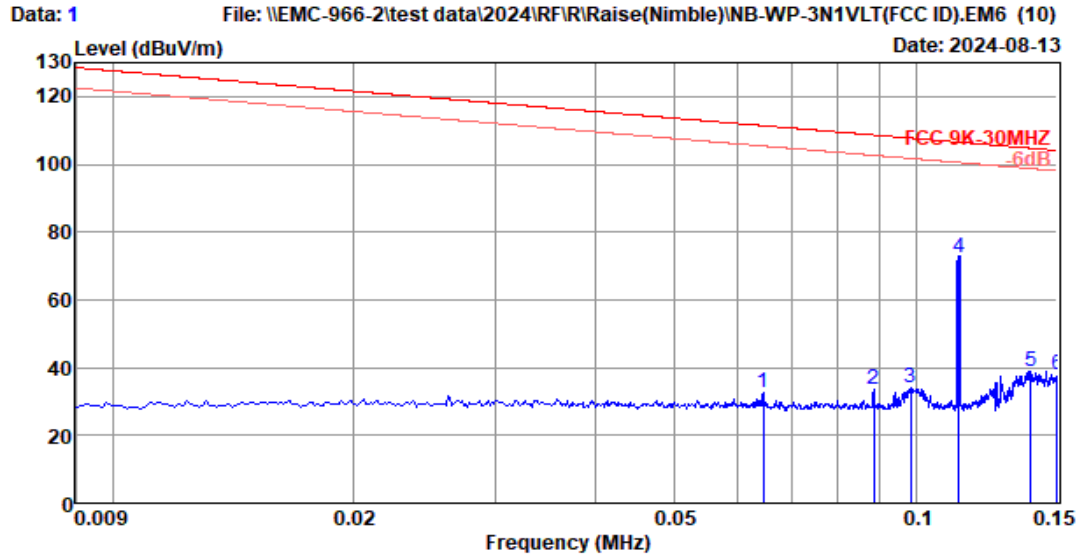


Site no. : 2# 966 chamber Data no. : 1
Dis. / Ant. : 3m FMZB 1519B Ant. pol. : COAXIAL
Limit : FCC 9K-30MHZ
Env. / Ins. : Temp:20.6°C;Humi:48%;Press:101.52kPa
Engineer : Eric
EUT : VALET 3-IN-1 WIRELESS CHARGER
Power : DC 12V From Adapter Input AC 120V/60Hz
M/N : NB-WP-3N1VLT
Test Mode : Charging
15W+5W+3.5W

| | Freq. (MHz) | ANT Factor (dB/m) | Cable Loss (dB) | Reading (dBuV) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|---|---|---|---|---|---|---|---|---|
| 1 | 0.06455 | 19.80 | 0.03 | 12.78 | 32.61 | 111.41 | 78.80 | Peak |
| 2 | 0.08866 | 19.90 | 0.03 | 13.46 | 33.39 | 108.65 | 75.26 | Peak |
| 3 | 0.09839 | 19.90 | 0.03 | 14.10 | 34.03 | 107.74 | 73.71 | Peak |
| 4 | 0.11300 | 19.90 | 0.03 | 52.53 | 72.46 | 106.54 | 34.08 | Peak |
| 5 | 0.13900 | 20.10 | 0.03 | 18.75 | 38.88 | 104.74 | 65.86 | Peak |
| 6 | 0.15000 | 20.00 | 0.03 | 17.93 | 37.96 | 104.08 | 66.12 | Peak |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. Margin= Limit - Emission Level.
3. The emission levels that are 20dB below the official limit are not reported.

EST Technology

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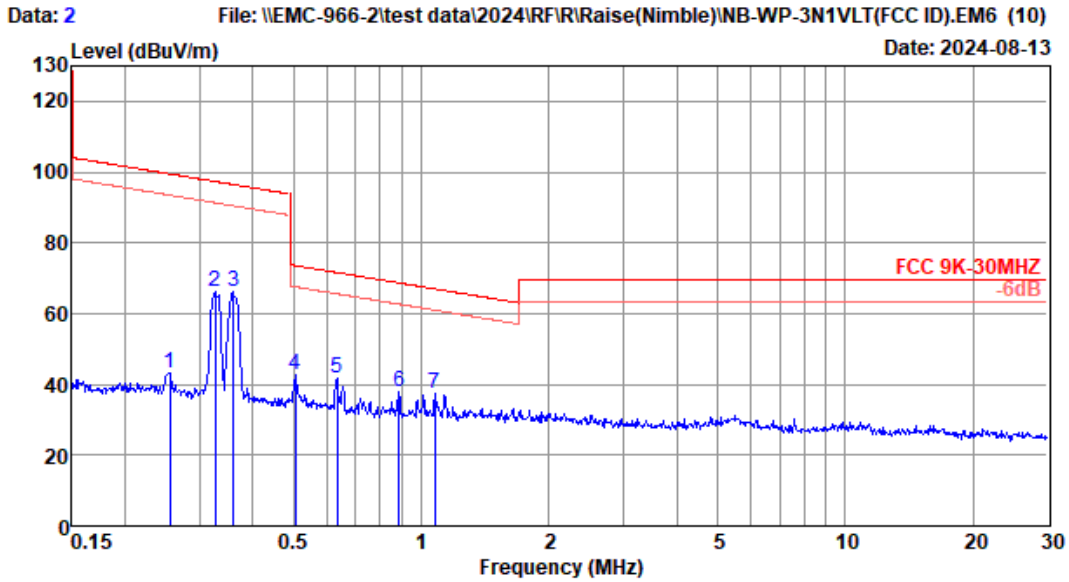


Site no. : 2# 966 chamber Data no. : 2
Dis. / Ant. : 3m FMZB 1519B Ant. pol. : COAXIAL
Limit : FCC 9K-30MHZ
Env. / Ins. : Temp:20.6°C;Humi:48%;Press:101.52kPa
Engineer : Eric
EUT : VALET 3-IN-1 WIRELESS CHARGER
Power : DC 12V From Adapter Input AC 120V/60Hz
M/N : NB-WP-3N1VLT
Test Mode : Charging
15W+5W+3.5W

| | Freq. (MHz) | ANT Factor (dB/m) | Cable Loss (dB) | Reading (dBuV) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|---|---|---|---|---|---|---|---|---|
| 1 | 0.25480 | 19.97 | 0.03 | 23.22 | 43.22 | 99.48 | 56.26 | Peak |
| 2 | 0.32650 | 19.95 | 0.03 | 46.43 | 66.41 | 97.33 | 30.92 | Peak |
| 3 | 0.36000 | 19.94 | 0.03 | 46.17 | 66.14 | 96.48 | 30.34 | Peak |
| 4 | 0.50469 | 19.89 | 0.03 | 22.97 | 42.89 | 73.54 | 30.65 | Peak |
| 5 | 0.63383 | 19.87 | 0.07 | 21.98 | 41.92 | 71.56 | 29.64 | Peak |
| 6 | 0.88499 | 19.82 | 0.07 | 17.87 | 37.76 | 68.67 | 30.91 | Peak |
| 7 | 1.07665 | 19.81 | 0.07 | 17.58 | 37.46 | 66.96 | 29.50 | Peak |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. Margin= Limit - Emission Level.
3. The emission levels that are 20dB below the official limit are not reported.

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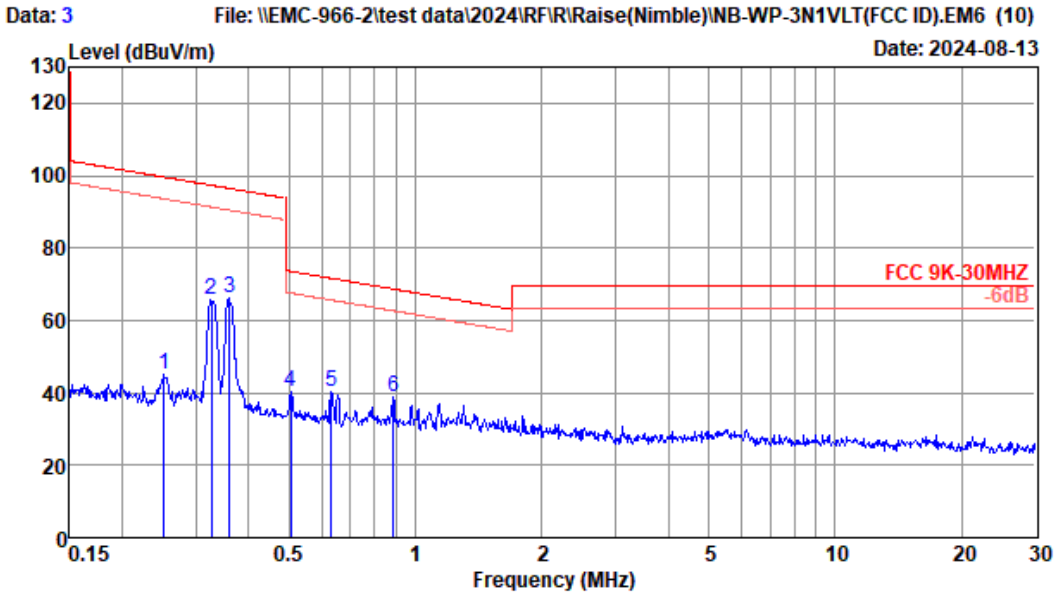


Site no. : 2# 966 chamber Data no. : 3
Dis. / Ant. : 3m FMZB 1519B Ant. pol. : COPLANAR
Limit : FCC 9K-30MHZ
Env. / Ins. : Temp:20.6℃;Humi:48%;Press:101.52kPa
Engineer : Eric
EUT : VALET 3-IN-1 WIRELESS CHARGER
Power : DC 12V From Adapter Input AC 120V/60Hz
M/N : NB-WP-3N1VLT
Test Mode : Charging
15W+5W+3.5W

| | Freq. (MHz) | ANT Factor (dB/m) | Cable Loss (dB) | Reading (dBuV) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|---|---|---|---|---|---|---|---|---|
| 1 | 0.25211 | 19.97 | 0.03 | 24.95 | 44.95 | 99.57 | 54.62 | Peak |
| 2 | 0.32650 | 19.95 | 0.03 | 45.61 | 65.59 | 97.33 | 31.74 | Peak |
| 3 | 0.36000 | 19.94 | 0.03 | 46.01 | 65.98 | 96.48 | 30.50 | Peak |
| 4 | 0.50469 | 19.89 | 0.03 | 20.38 | 40.30 | 73.54 | 33.24 | Peak |
| 5 | 0.63048 | 19.87 | 0.07 | 20.55 | 40.49 | 71.61 | 31.12 | Peak |
| 6 | 0.88499 | 19.82 | 0.07 | 19.19 | 39.08 | 68.67 | 29.59 | Peak |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. Margin= Limit - Emission Level.
3. The emission levels that are 20dB below the official limit are not reported.

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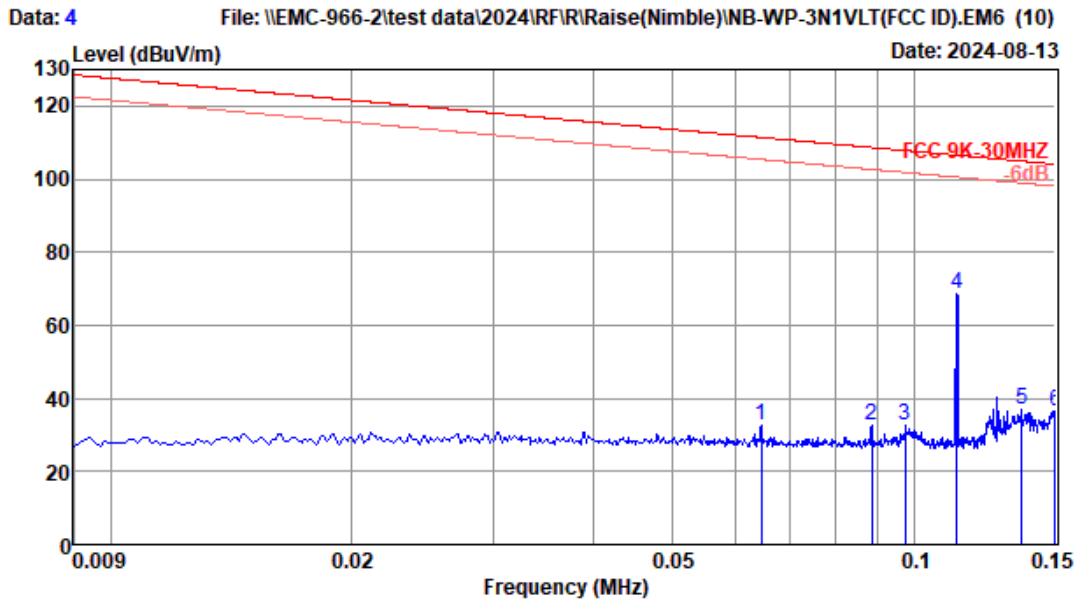


```
Site no.       : 2# 966 chamber              Data no.   : 4
Dis. / Ant.    : 3m   FMZB 1519B             Ant. pol. : COPLANAR
Limit          : FCC 9K-30MHZ
Env. / Ins.    : Temp:20.6°C;Humi:48%;Press:101.52kPa
Engineer       : Eric
EUT            : VALET 3-IN-1 WIRELESS CHARGER
Power          : DC 12V From Adapter Input AC 120V/60Hz
M/N            : NB-WP-3N1VLT
Test Mode      : Charging
                 15W+5W+3.5W
```

| | Freq. (MHz) | ANT Factor (dB/m) | Cable Loss (dB) | Reading (dBuV) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|---|---|---|---|---|---|---|---|---|
| 1 | 0.06455 | 19.80 | 0.03 | 12.92 | 32.75 | 111.41 | 78.66 | Peak |
| 2 | 0.08866 | 19.90 | 0.03 | 12.46 | 32.39 | 108.65 | 76.26 | Peak |
| 3 | 0.09755 | 19.90 | 0.03 | 12.47 | 32.40 | 107.82 | 75.42 | Peak |
| 4 | 0.11300 | 19.90 | 0.03 | 48.64 | 68.57 | 106.54 | 37.97 | Peak |
| 5 | 0.13618 | 20.10 | 0.03 | 16.84 | 36.97 | 104.92 | 67.95 | Peak |
| 6 | 0.14972 | 20.00 | 0.03 | 16.67 | 36.70 | 104.10 | 67.40 | Peak |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. Margin= Limit - Emission Level.
3. The emission levels that are 20dB below the official limit are not reported.

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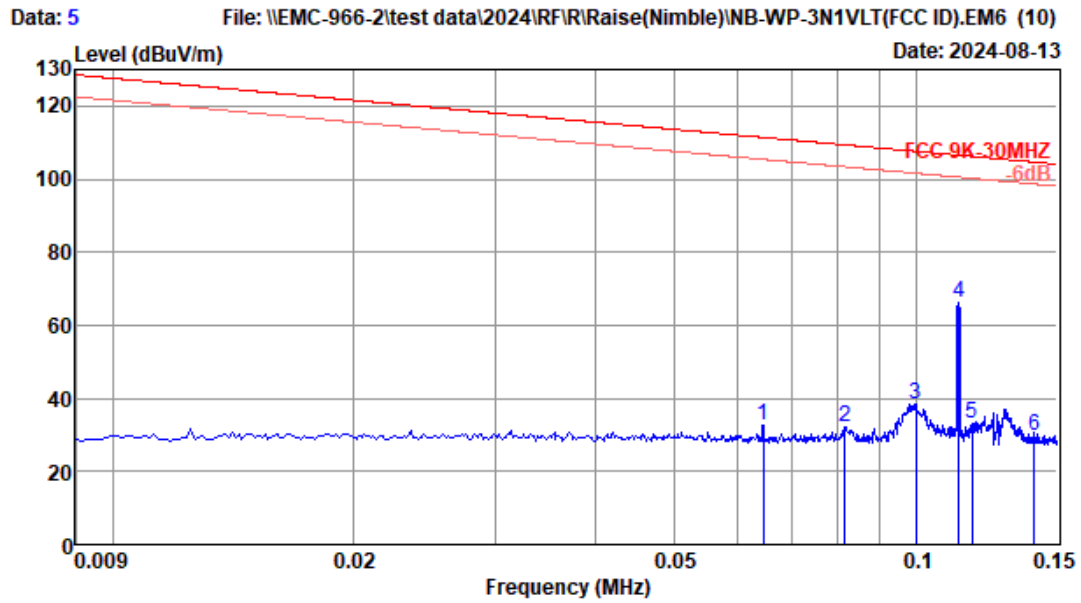


Site no. : 2# 966 chamber Data no. : 5
Dis. / Ant. : 3m FMZB 1519B Ant. pol. : COPLANAR
Limit : FCC 9K-30MHZ
Env. / Ins. : Temp:20.6°C;Humi:48%;Press:101.52kPa
Engineer : Eric
EUT : VALET 3-IN-1 WIRELESS CHARGER
Power : DC 12V From Adapter Input AC 120V/60Hz
M/N : NB-WP-3N1VLT
Test Mode : No Load

| | Freq. (MHz) | ANT Factor (dB/m) | Cable Loss (dB) | Reading (dBuV) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|---|---|---|---|---|---|---|---|---|
| 1 | 0.06455 | 19.80 | 0.03 | 12.99 | 32.82 | 111.41 | 78.59 | Peak |
| 2 | 0.08162 | 19.80 | 0.03 | 12.36 | 32.19 | 109.37 | 77.18 | Peak |
| 3 | 0.09994 | 19.90 | 0.03 | 18.68 | 38.61 | 107.61 | 69.00 | Peak |
| 4 | 0.11300 | 19.90 | 0.03 | 46.50 | 66.43 | 106.54 | 40.11 | Peak |
| 5 | 0.11743 | 20.10 | 0.03 | 12.77 | 32.90 | 106.21 | 73.31 | Peak |
| 6 | 0.14041 | 20.10 | 0.03 | 9.37 | 29.50 | 104.66 | 75.16 | Peak |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. Margin= Limit - Emission Level.
3. The emission levels that are 20dB below the official limit are not reported.

EST Technology

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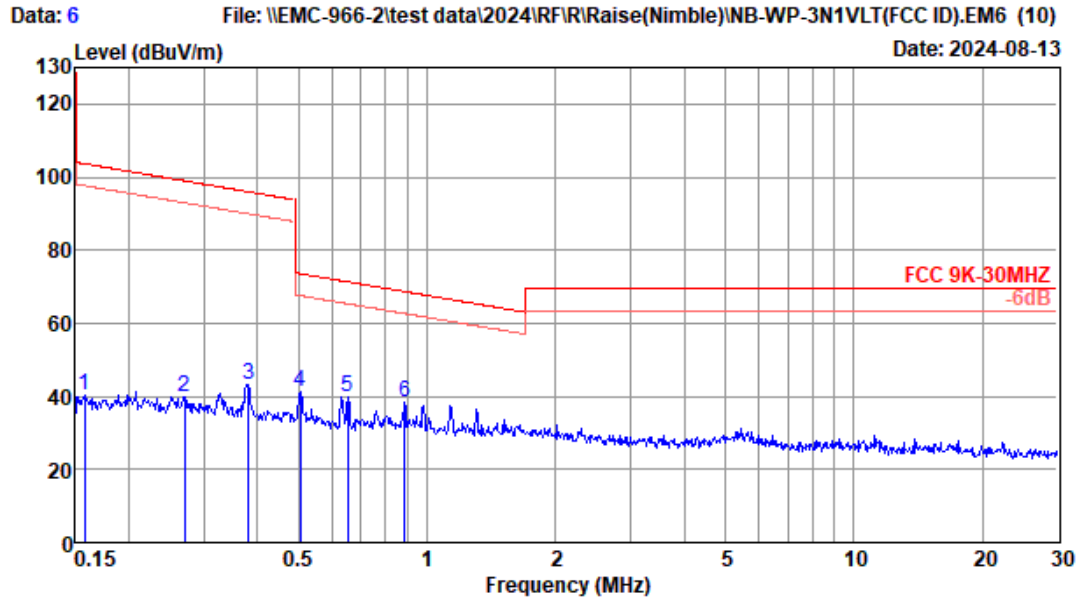


Site no. : 2# 966 chamber Data no. : 6
Dis. / Ant. : 3m FMZB 1519B Ant. pol. : COPLANAR
Limit : FCC 9K-30MHZ
Env. / Ins. : Temp:20.6°C;Humi:48%;Press:101.52kPa
Engineer : Eric
EUT : VALET 3-IN-1 WIRELESS CHARGER
Power : DC 12V From Adapter Input AC 120V/60Hz
M/N : NB-WP-3N1VLT
Test Mode : No Load

| | Freq. (MHz) | ANT Factor (dB/m) | Cable Loss (dB) | Reading (dBuV) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|---|---|---|---|---|---|---|---|---|
| 1 | 0.15733 | 20.00 | 0.03 | 20.21 | 40.24 | 103.67 | 63.43 | Peak |
| 2 | 0.27009 | 19.96 | 0.03 | 19.88 | 39.87 | 98.97 | 59.10 | Peak |
| 3 | 0.38113 | 19.94 | 0.03 | 23.23 | 43.20 | 95.98 | 52.78 | Peak |
| 4 | 0.50469 | 19.89 | 0.03 | 21.35 | 41.27 | 73.54 | 32.27 | Peak |
| 5 | 0.65084 | 19.87 | 0.07 | 20.05 | 39.99 | 71.33 | 31.34 | Peak |
| 6 | 0.88499 | 19.82 | 0.07 | 18.63 | 38.52 | 68.67 | 30.15 | Peak |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. Margin= Limit - Emission Level.
3. The emission levels that are 20dB below the official limit are not reported.

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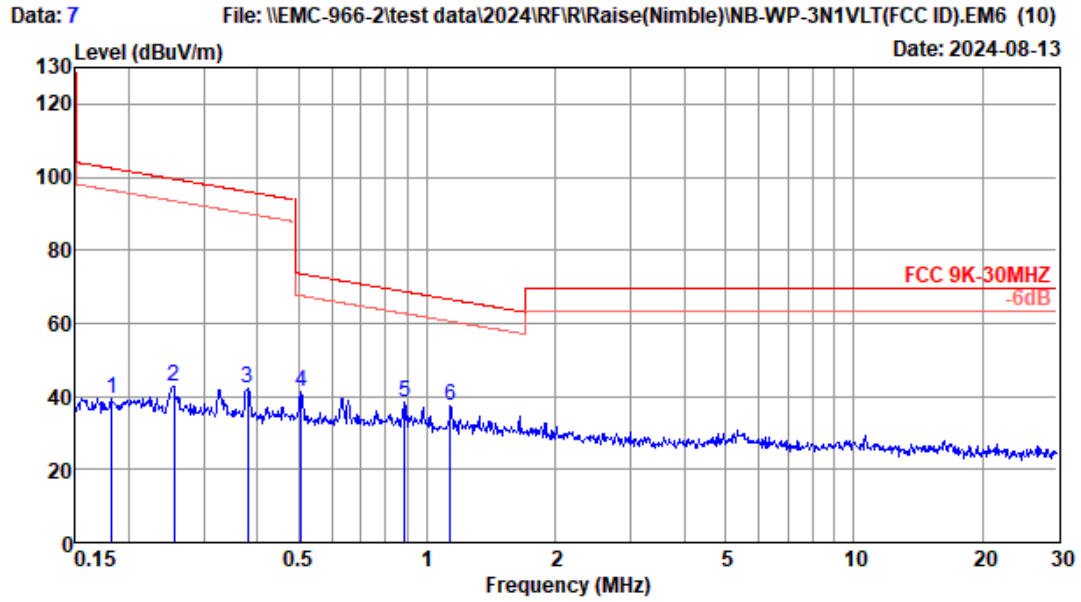


Site no. : 2# 966 chamber Data no. : 7
Dis. / Ant. : 3m FMZB 1519B Ant. pol. : COAXIAL
Limit : FCC 9K-30MHZ
Env. / Ins. : Temp:20.6°C;Humi:48%;Press:101.52kPa
Engineer : Eric
EUT : VALET 3-IN-1 WIRELESS CHARGER
Power : DC 12V From Adapter Input AC 120V/60Hz
M/N : NB-WP-3N1VLT
Test Mode : No Load

| | Freq. (MHz) | ANT Factor (dB/m) | Cable Loss (dB) | Reading (dBuV) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|---|---|---|---|---|---|---|---|---|
| 1 | 0.18249 | 19.99 | 0.03 | 19.30 | 39.32 | 102.38 | 63.06 | Peak |
| 2 | 0.25480 | 19.97 | 0.03 | 22.91 | 42.91 | 99.48 | 56.57 | Peak |
| 3 | 0.37912 | 19.94 | 0.03 | 22.30 | 42.27 | 96.03 | 53.76 | Peak |
| 4 | 0.50737 | 19.89 | 0.03 | 21.28 | 41.20 | 73.50 | 32.30 | Peak |
| 5 | 0.88499 | 19.82 | 0.07 | 18.46 | 38.35 | 68.67 | 30.32 | Peak |
| 6 | 1.13523 | 19.81 | 0.07 | 17.67 | 37.55 | 66.50 | 28.95 | Peak |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. Margin= Limit - Emission Level.
3. The emission levels that are 20dB below the official limit are not reported.

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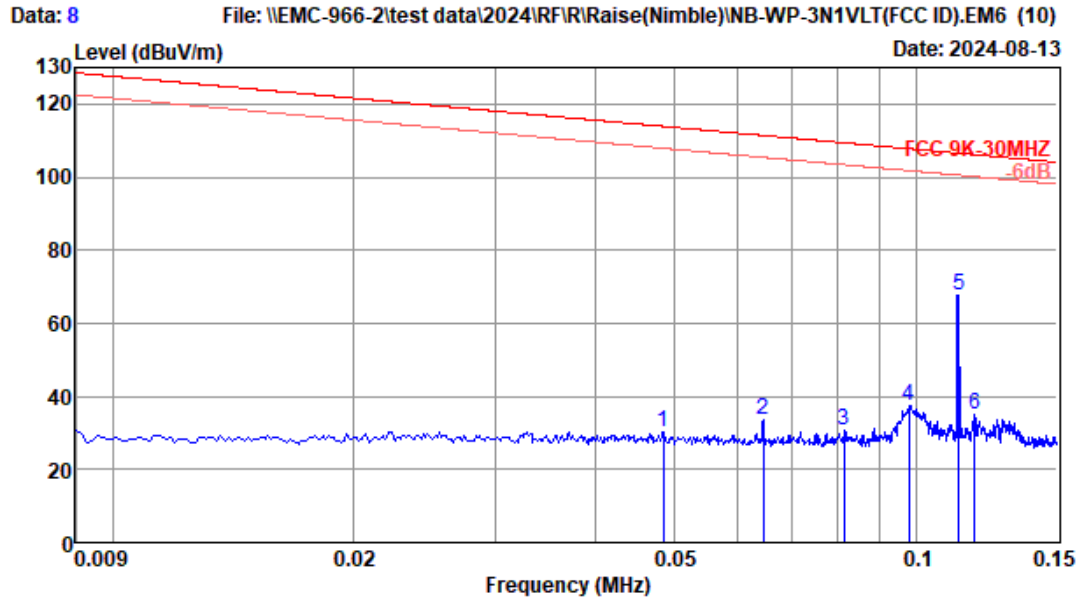


Site no. : 2# 966 chamber Data no. : 8
Dis. / Ant. : 3m FMZB 1519B Ant. pol. : COAXIAL
Limit : FCC 9K-30MHZ
Env. / Ins. : Temp:20.6°C;Humi:48%;Press:101.52kPa
Engineer : Eric
EUT : VALET 3-IN-1 WIRELESS CHARGER
Power : DC 12V From Adapter Input AC 120V/60Hz
M/N : NB-WP-3N1VLT
Test Mode : No Load

| | Freq. (MHz) | ANT Factor (dB/m) | Cable Loss (dB) | Reading (dBuV) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|---|---|---|---|---|---|---|---|---|
| 1 | 0.04848 | 19.80 | 0.03 | 10.29 | 30.12 | 113.89 | 83.77 | Peak |
| 2 | 0.06455 | 19.80 | 0.03 | 13.97 | 33.80 | 111.41 | 77.61 | Peak |
| 3 | 0.08147 | 19.80 | 0.03 | 11.05 | 30.88 | 109.38 | 78.50 | Peak |
| 4 | 0.09797 | 19.90 | 0.03 | 17.62 | 37.55 | 107.78 | 70.23 | Peak |
| 5 | 0.11300 | 19.90 | 0.03 | 47.72 | 67.65 | 106.54 | 38.89 | Peak |
| 6 | 0.11842 | 20.10 | 0.03 | 14.68 | 34.81 | 106.14 | 71.33 | Peak |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. Margin= Limit - Emission Level.
3. The emission levels that are 20dB below the official limit are not reported.

# Radiated Emission Above 30MHz

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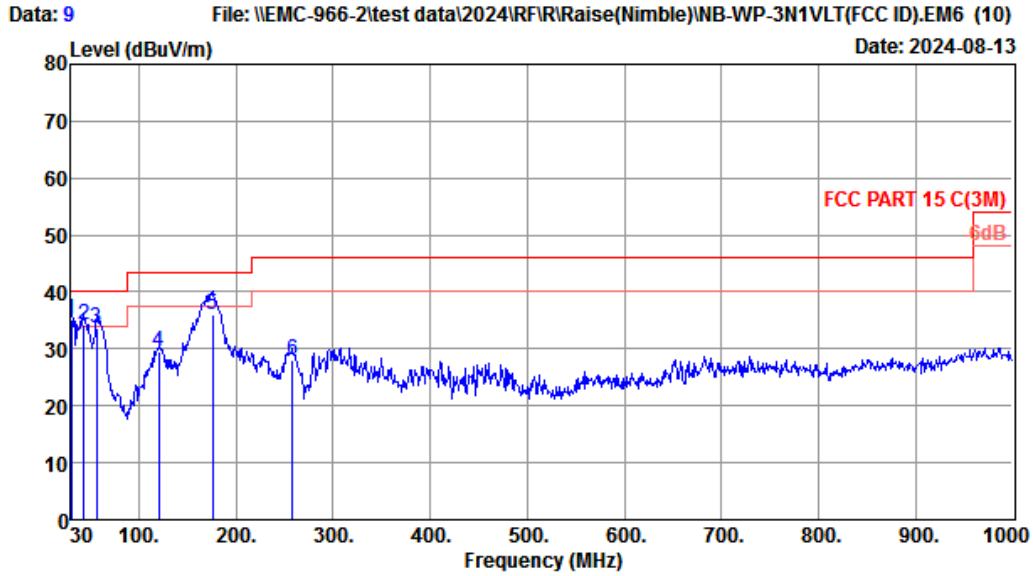


Site no. : 2# 966 chamber Data no. : 9
Dis. / Ant. : 3m 47018 Ant. pol. : VERTICAL
Limit : FCC PART 15 C(3M)
Env. / Ins. : Temp:28.2℃,Humi:69%;Press:101.52KPa
Engineer : Ennis
EUT : VALET 3-IN-1 WIRELESS CHARGER
Power : DC 12V From Adapter Input AC 120V/60Hz
M/N : NB-WP-3N1VLT
Test Mode : TX Mode
15W+5W+3.5W (Full load)

| | Freq. (MHz) | ANT Factor (dB/m) | Cable Loss (dB) | Reading (dBuV) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|---|---|---|---|---|---|---|---|---|
| 1 | 30.00 | 18.70 | 0.62 | 15.70 | 35.02 | 40.00 | 4.98 | QP |
| 2 | 43.58 | 11.60 | 0.74 | 22.05 | 34.39 | 40.00 | 5.61 | QP |
| 3 | 56.19 | 6.80 | 0.85 | 25.95 | 33.60 | 40.00 | 6.40 | QP |
| 4 | 120.21 | 12.10 | 1.36 | 15.96 | 29.42 | 43.50 | 14.08 | QP |
| 5 | 175.50 | 9.15 | 1.67 | 25.19 | 36.01 | 43.50 | 7.49 | QP |
| 6 | 257.95 | 13.62 | 2.01 | 12.56 | 28.19 | 46.00 | 17.81 | QP |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. Margin= Limit - Emission Level.
3. The emission levels that are 20dB below the official limit are not reported.

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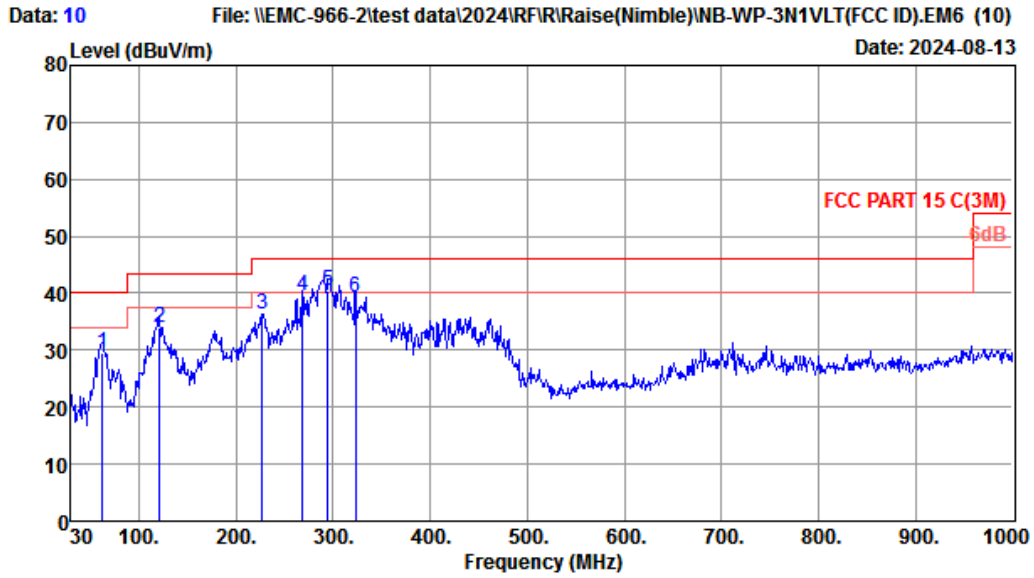



Site no. : 2# 966 chamber Data no. : 10
Dis. / Ant. : 3m 47018 Ant. pol. : HORIZONTAL
Limit : FCC PART 15 C(3M)
Env. / Ins. : Temp:28.2℃,Humi:69%;Press:101.52KPa
Engineer : Ennis
EUT : VALET 3-IN-1 WIRELESS CHARGER
Power : DC 12V From Adapter Input AC 120V/60Hz
M/N : NB-WP-3N1VLT
Test Mode : TX Mode
15W+5W+3.5W (Full load)

| | Freq. (MHz) | ANT Factor (dB/m) | Cable Loss (dB) | Reading (dBuV) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|---|---|---|---|---|---|---|---|---|
| 1 | 62.01 | 5.70 | 0.89 | 22.84 | 29.43 | 40.00 | 10.57 | QP |
| 2 | 121.18 | 12.20 | 1.37 | 20.30 | 33.87 | 43.50 | 9.63 | QP |
| 3 | 226.91 | 9.74 | 1.88 | 24.72 | 36.34 | 46.00 | 9.66 | QP |
| 4 | 268.62 | 13.04 | 2.06 | 24.42 | 39.52 | 46.00 | 6.48 | QP |
| 5 | 294.81 | 13.10 | 2.18 | 25.23 | 40.51 | 46.00 | 5.49 | QP |
| 6 | 322.94 | 13.40 | 2.30 | 23.47 | 39.17 | 46.00 | 6.83 | QP |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. Margin= Limit - Emission Level.
3. The emission levels that are 20dB below the official limit are not reported.

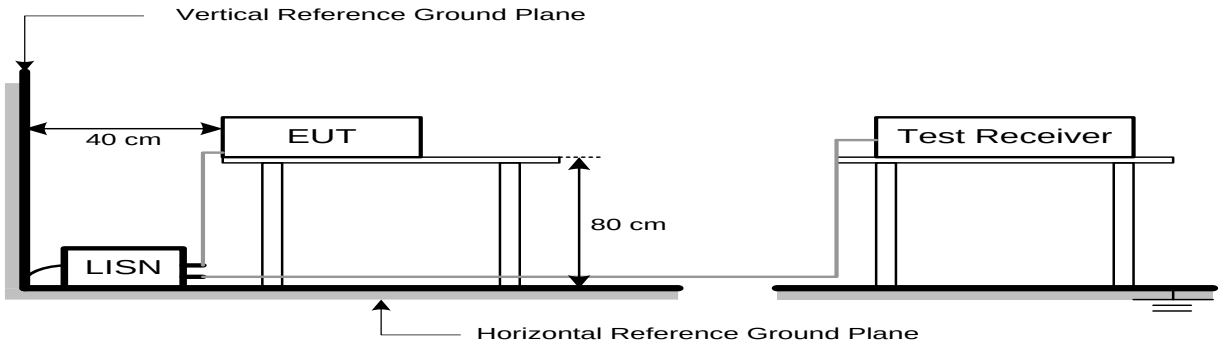
# 4. AC POWER LINE CONDUCTED EMISSIONS

## 4.1. Limit

| Frequency | | | Maximum RF Line Voltage | |
|---|---|---|---|---|
| | | | Quasi-Peak Level dB(μV) | Average Level dB(μV) |
| 150kHz | ~ | 500kHz | 66 ~ 56* | 56 ~ 46* |
| 500kHz | ~ | 5MHz | 56 | 46 |
| 5MHz | ~ | 30MHz | 60 | 50 |

Note:
1. * Decreasing linearly with logarithm of frequency.
2. The lower limit shall apply at the transition frequencies.

## 4.2. Test Setup




## 4.3. Spectrum Analyzer Setting

| Spectrum Parameters | Setting |
|---|---|
| RBW | 9KHz |
| VBW | 9KHz |
| Start frequency | 150KHz |
| Stop frequency | 30MHz |
| Sweep Time | Auto |
| Detector | QP/AVG |
| Trace Mode | Max Hold |

## 4.4. Test Procedure

a. The EUT was placed on a non-metallic table, 80cm above the ground plane.
b. The EUT Power connected to the power mains through a line impedance stabilization network.
c. Provides a 50 ohm coupling impedance for the EUT (Please refer the block diagram of the test setup and photographs).
d. Set the EUT transmit continuously with maximum output power.
e. Spectrum analyzer setting parameters in accordance with section 4.3.
f. The AC line are checked to find out the maximum conducted emission. In order to find the maximum emission levels, the relative positions of equipment and all of the interface cables shall be changed according to ANSI C63.10: 2013 on Conducted Emission Test.
g. Record the results in the test report.

## 4.5. Test Result

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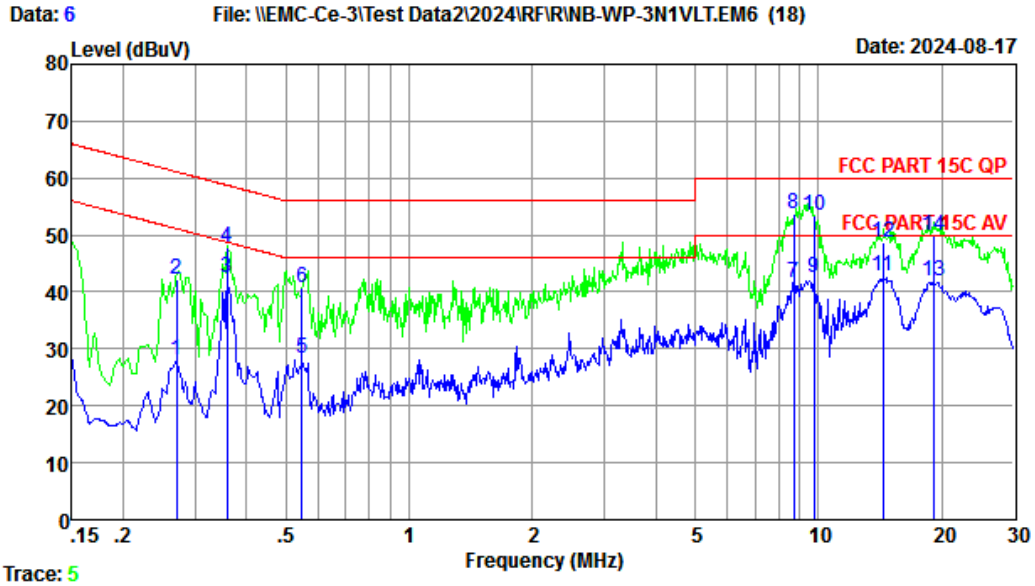


Trace: 5

Site no : 1#CE Shield Room Data no. : 6
Env. / Ins. : Temp:27℃;Humi:55%;Press:101.50kPa LINE Phase : LINE
Limit : FCC PART 15C QP
Engineer : Micheal
EUT : VALET 3-IN-1 WIRELESS CHARGER
Power : DC 12V From Adapter Input AC 120V/60Hz
M/N : NB-WP-3N1VLT
Test Mode : Charging
15W+5W+3.5W (Full load)

| | Freq. (MHz) | LISN Factor (db) | Cable Loss (db) | Reading dBuV) | Emission Level (dBuv) | Limits (dBuv) | Margin (dB) | Remark |
|---|---|---|---|---|---|---|---|---|
| 1 | 0.27 | 10.12 | 9.87 | 8.03 | 28.02 | 51.12 | 23.10 | Average |
| 2 | 0.27 | 10.12 | 9.87 | 22.12 | 42.11 | 61.12 | 19.01 | QP |
| 3 | 0.36 | 10.14 | 9.87 | 22.64 | 42.65 | 48.74 | 6.09 | Average |
| 4 | 0.36 | 10.14 | 9.87 | 27.67 | 47.68 | 58.74 | 11.06 | QP |
| 5 | 0.55 | 10.14 | 9.87 | 8.24 | 28.25 | 46.00 | 17.75 | Average |
| 6 | 0.55 | 10.14 | 9.87 | 20.66 | 40.67 | 56.00 | 15.33 | QP |
| 7 | 8.73 | 10.14 | 9.93 | 21.55 | 41.62 | 50.00 | 8.38 | Average |
| 8 | 8.73 | 10.14 | 9.93 | 33.51 | 53.58 | 60.00 | 6.42 | QP |
| 9 | 9.76 | 10.14 | 9.94 | 22.39 | 42.47 | 50.00 | 7.53 | Average |
| 10 | 9.76 | 10.14 | 9.94 | 33.31 | 53.39 | 60.00 | 6.61 | QP |
| 11 | 14.36 | 10.11 | 9.97 | 22.70 | 42.78 | 50.00 | 7.22 | Average |
| 12 | 14.36 | 10.11 | 9.97 | 28.55 | 48.63 | 60.00 | 11.37 | QP |
| 13 | 19.22 | 10.08 | 10.01 | 21.85 | 41.94 | 50.00 | 8.06 | Average |
| 14 | 19.22 | 10.08 | 10.01 | 29.67 | 49.76 | 60.00 | 10.24 | QP |

Remarks: 1. Emission Level= LISN Factor + Cable Loss + Reading.
2. Margin= Limit - Emission Level.
3. If the average limit is met when useing a quasi-peak detector, the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.

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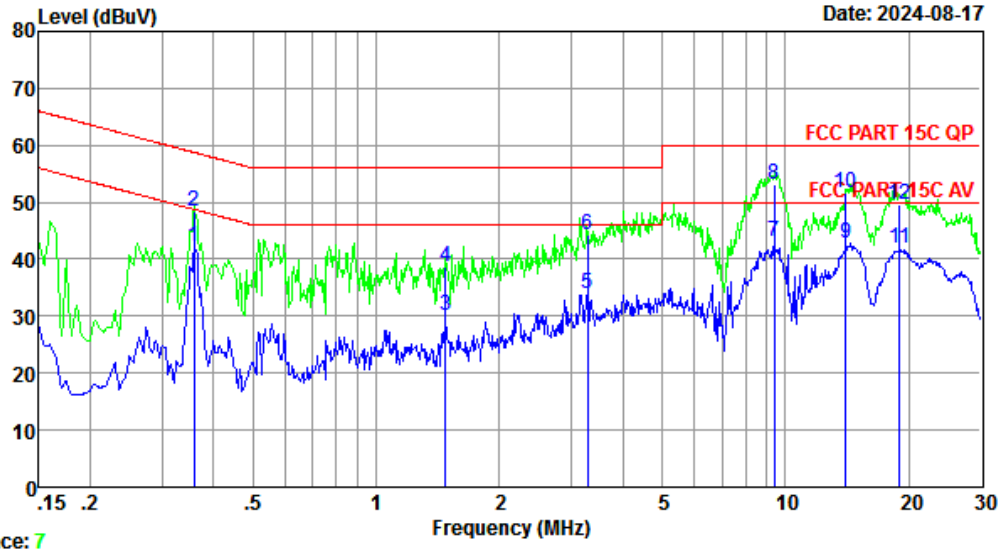
Data: 8 File: \\EMC-Ce-3\Test Data2\2024\RF\R\NB-WP-3N1VLT.EM6 (18)




Trace: 7

Site no : 1#CE Shield Room Data no. : 8
Env. / Ins. : Temp:27℃;Humi:55%;Press:101.50kPa LINE Phase : NEUTRAL
Limit : FCC PART 15C QP
Engineer : Micheal
EUT : VALET 3-IN-1 WIRELESS CHARGER
Power : DC 12V From Adapter Input AC 120V/60Hz
M/N : NB-WP-3N1VLT
Test Mode : Charging
15W+5W+3.5W (Full load)

| | Freq. (MHz) | LISN Factor (db) | Cable Loss (db) | Reading dBuV) | Emission Level (dBuv) | Limits (dBuv) | Margin (dB) | Remark |
|---|---|---|---|---|---|---|---|---|
| 1 | 0.36 | 10.12 | 9.87 | 22.37 | 42.36 | 48.74 | 6.38 | Average |
| 2 | 0.36 | 10.12 | 9.87 | 28.31 | 48.30 | 58.74 | 10.44 | QP |
| 3 | 1.48 | 10.19 | 9.88 | 9.92 | 29.99 | 46.00 | 16.01 | Average |
| 4 | 1.48 | 10.19 | 9.88 | 18.56 | 38.63 | 56.00 | 17.37 | QP |
| 5 | 3.29 | 10.05 | 9.89 | 14.05 | 33.99 | 46.00 | 12.01 | Average |
| 6 | 3.29 | 10.05 | 9.89 | 24.23 | 44.17 | 56.00 | 11.83 | QP |
| 7 | 9.40 | 10.18 | 9.94 | 23.05 | 43.17 | 50.00 | 6.83 | Average |
| 8 | 9.40 | 10.18 | 9.94 | 33.00 | 53.12 | 60.00 | 6.88 | QP |
| 9 | 14.06 | 10.05 | 9.97 | 22.76 | 42.78 | 50.00 | 7.22 | Average |
| 10 | 14.06 | 10.05 | 9.97 | 31.71 | 51.73 | 60.00 | 8.27 | QP |
| 11 | 19.02 | 10.01 | 10.01 | 21.92 | 41.94 | 50.00 | 8.06 | Average |
| 12 | 19.02 | 10.01 | 10.01 | 29.56 | 49.58 | 60.00 | 10.42 | QP |

Remarks: 1. Emission Level= LISN Factor + Cable Loss + Reading.
2. Margin= Limit - Emission Level.
3. If the average limit is met when useing a quasi-peak detector, the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.

# 5. ANTENNA REQUIREMENTS

## 5.1. Limit

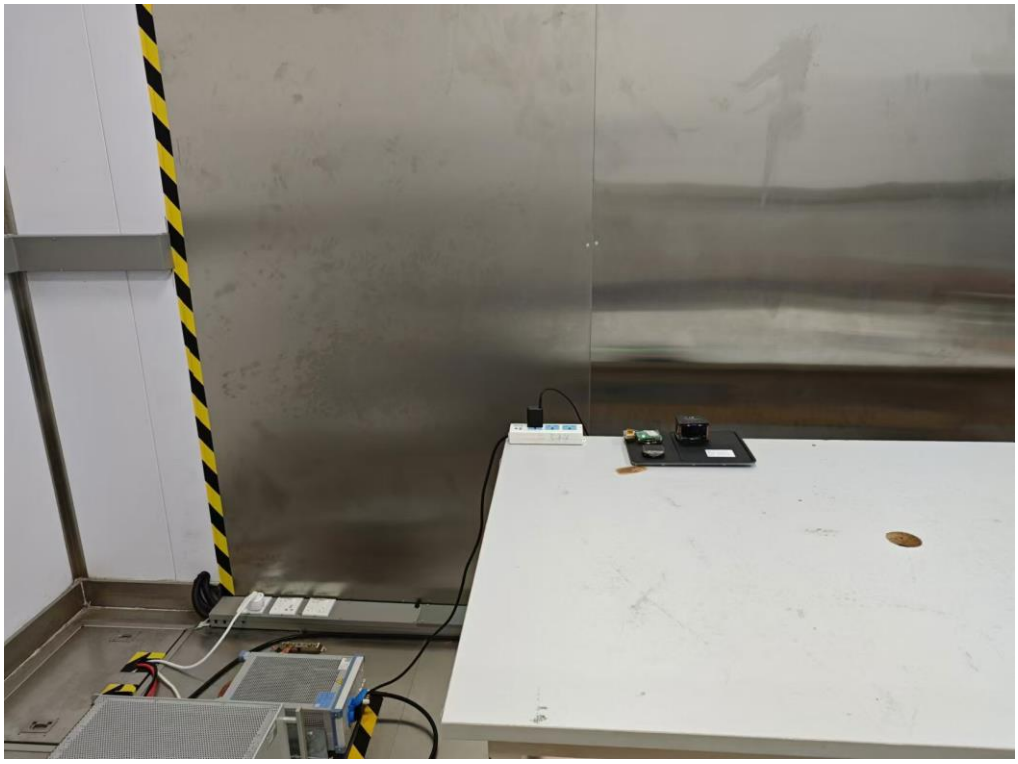
An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. 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. This requirement does not apply to carrier current devices or to devices operated under the provisions of §§15.211, 15.213, 15.217, 15.219, 15.221, or §15.236. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with §15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this part are not exceeded.

## 5.2. Test Result

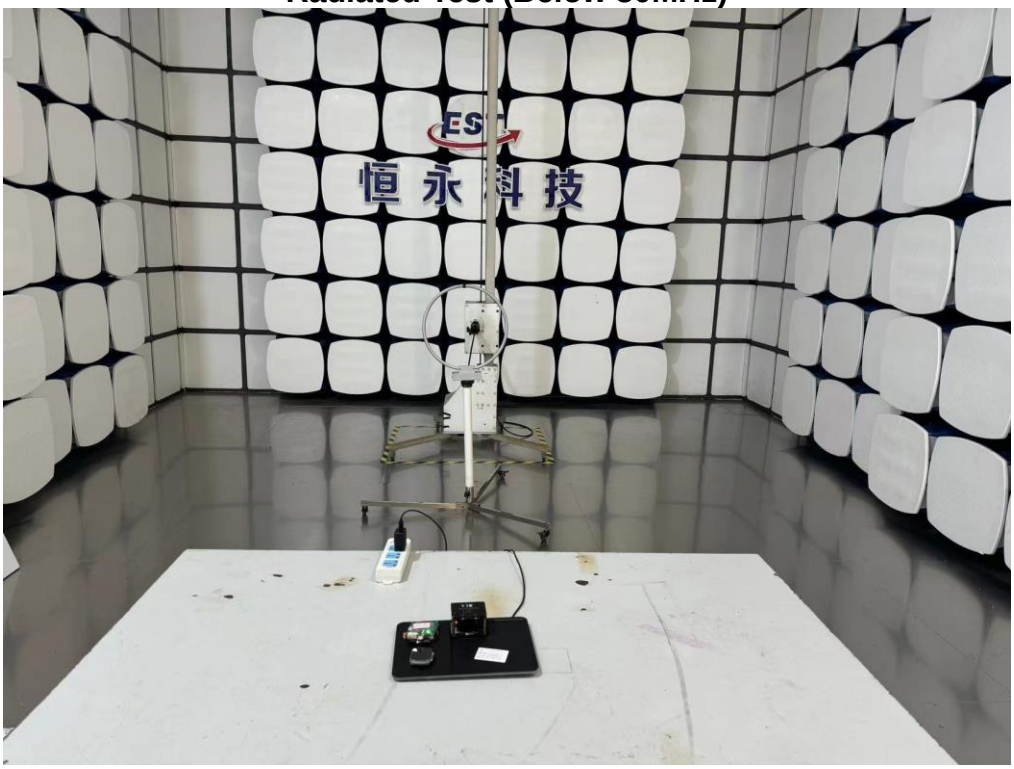
The antennas used for this product is Coil antenna, so compliance with antenna requirements. ( Please refer to the EUT photo for details)

# 6. TEST SETUP PHOTO

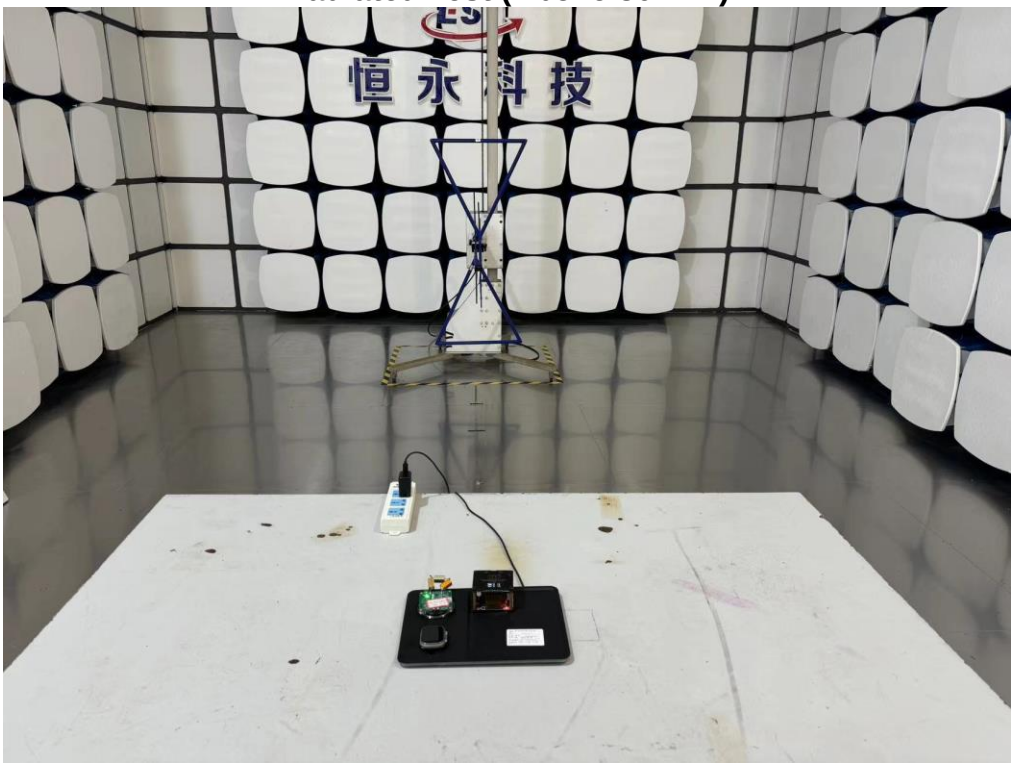
**Conducted Emissions Test**



## Radiated Test (Below 30MHz)



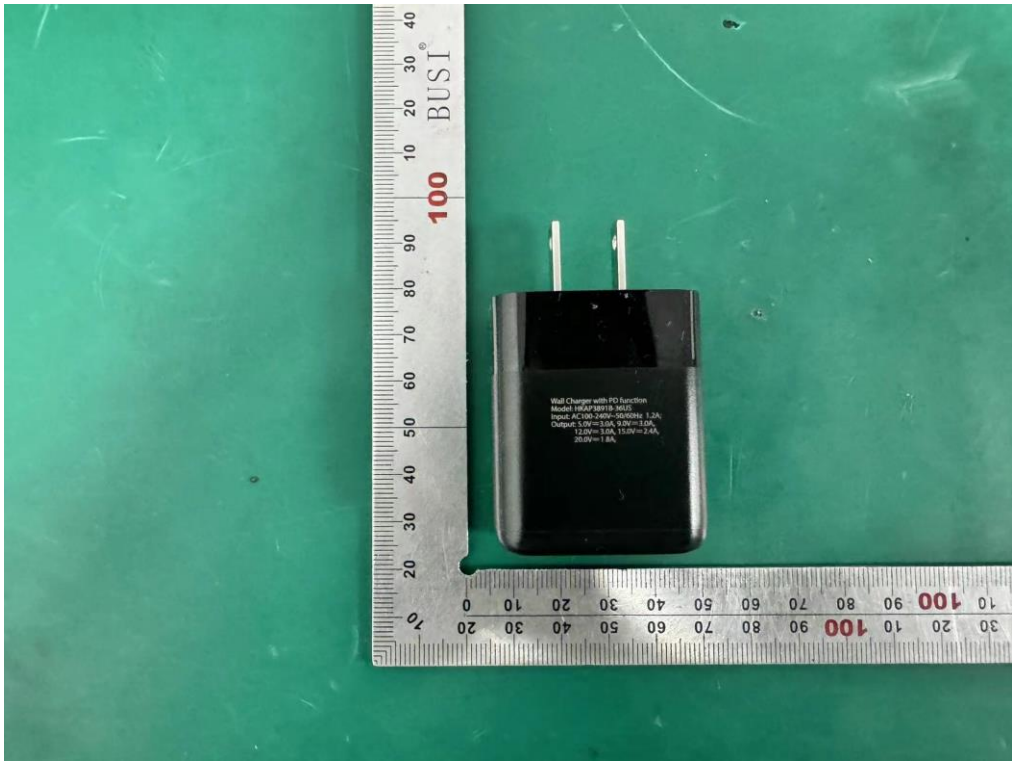

## Radiated Test (Above 30MHz)



# 7. EUT PHOTO

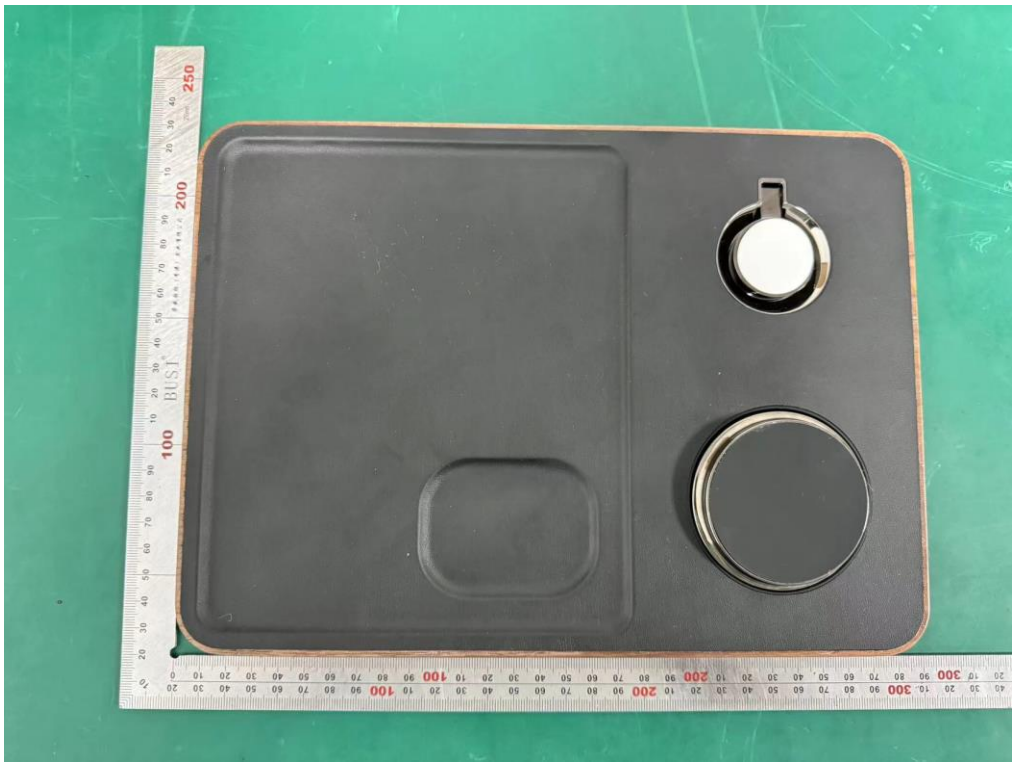
**External Photos**

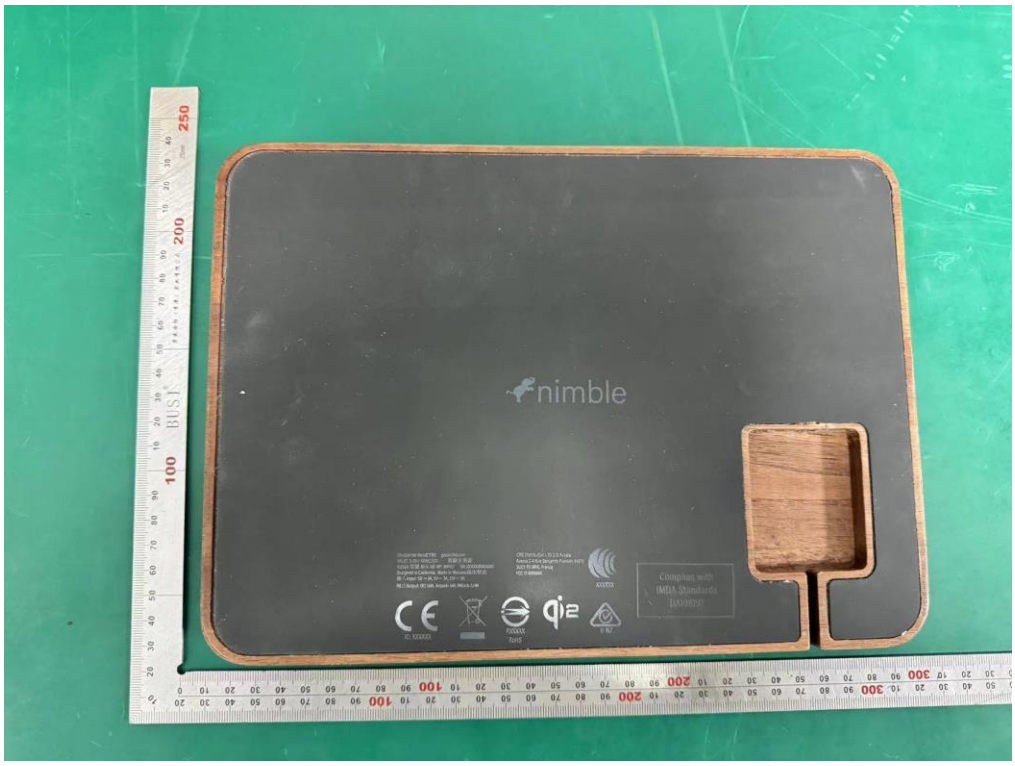
M/N: NB-WP-3N1VLT



## External Photos

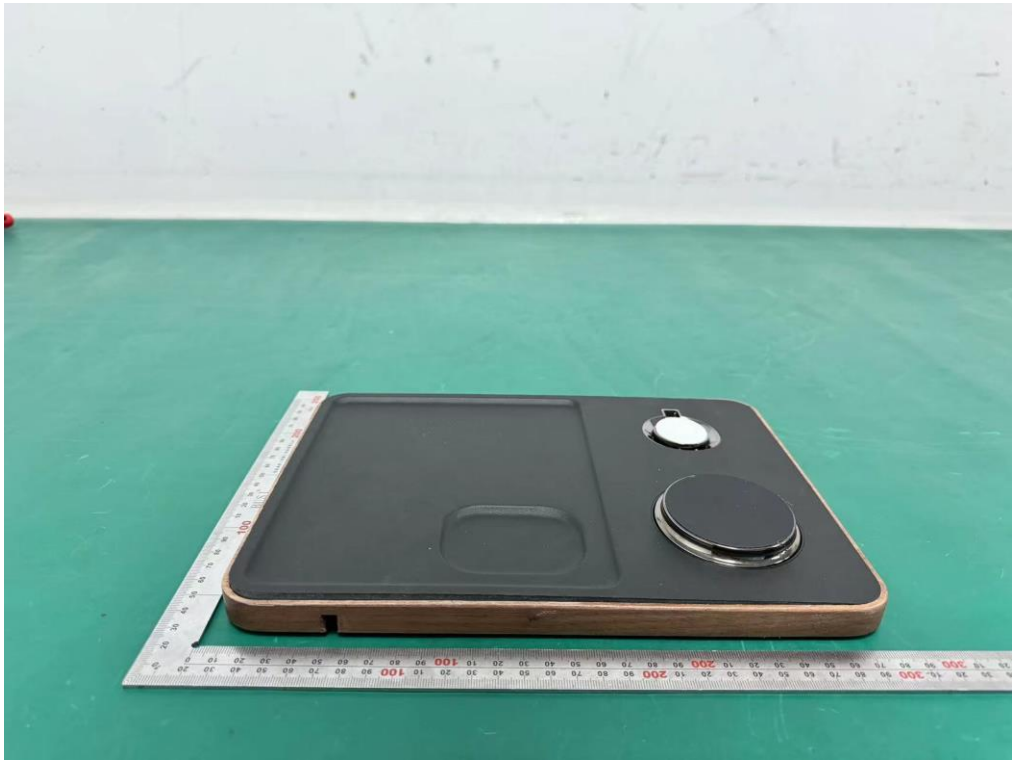
M/N: NB-WP-3N1VLT





## External Photos

M/N: NB-WP-3N1VLT



## External Photos

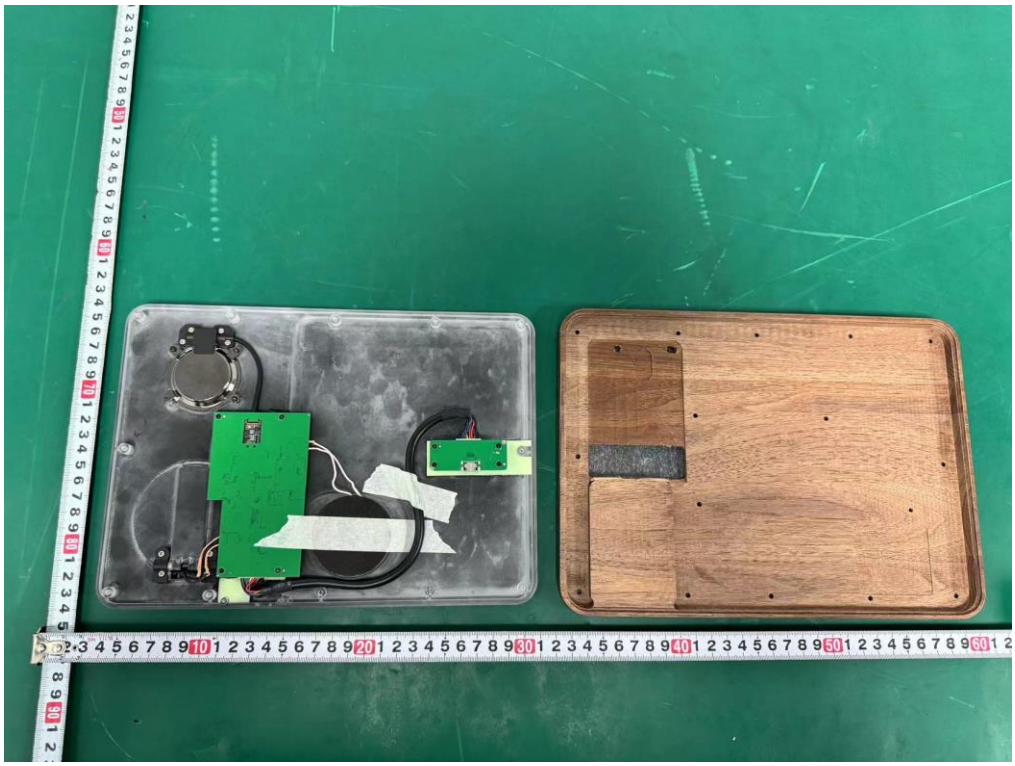
M/N: NB-WP-3N1VLT

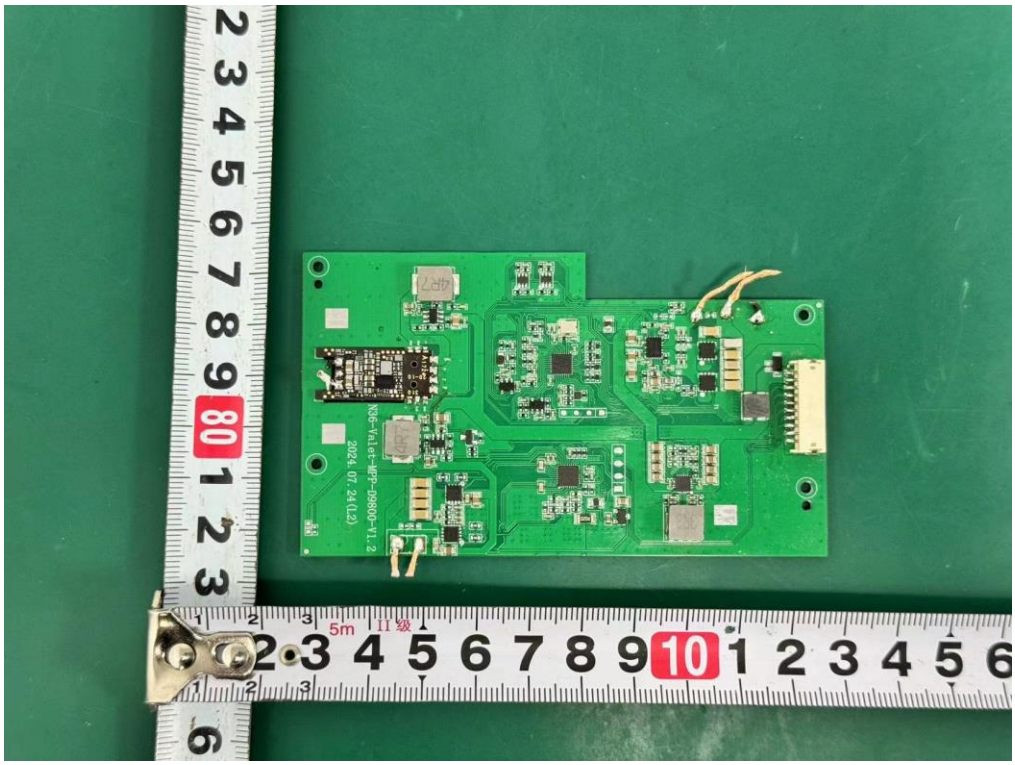

**External Photos**

M/N: NB-WP-3N1VLT

## External Photos

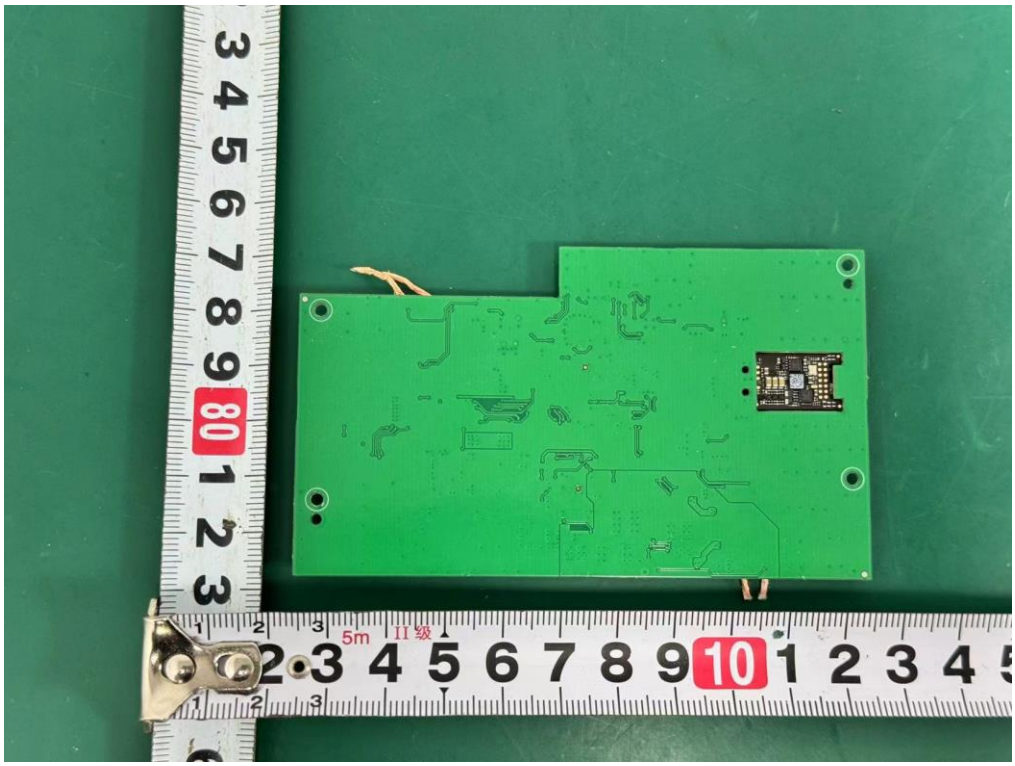
M/N: NB-WP-3N1VLT

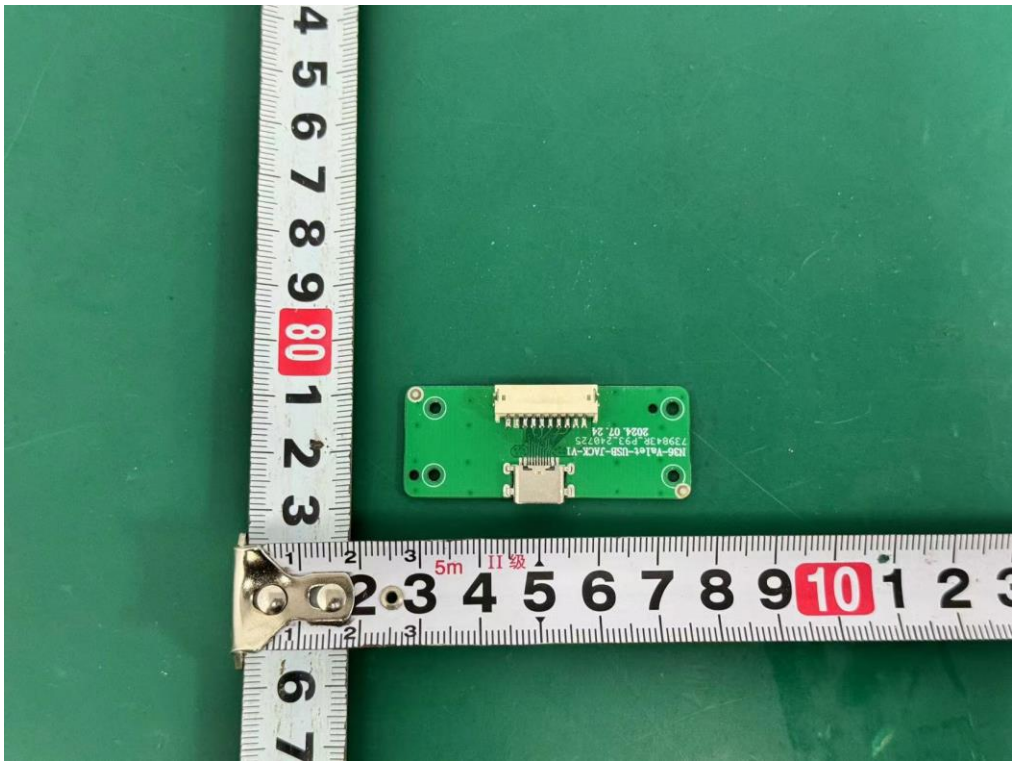




**Internal Photos**

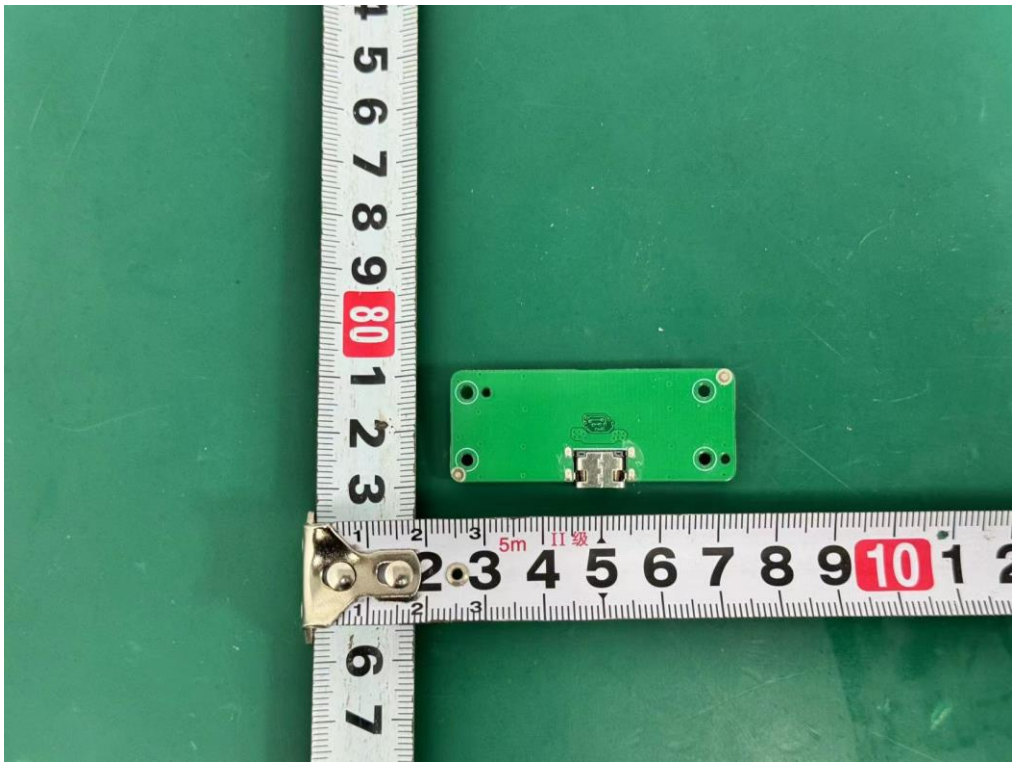
M/N: NB-WP-3N1VLT

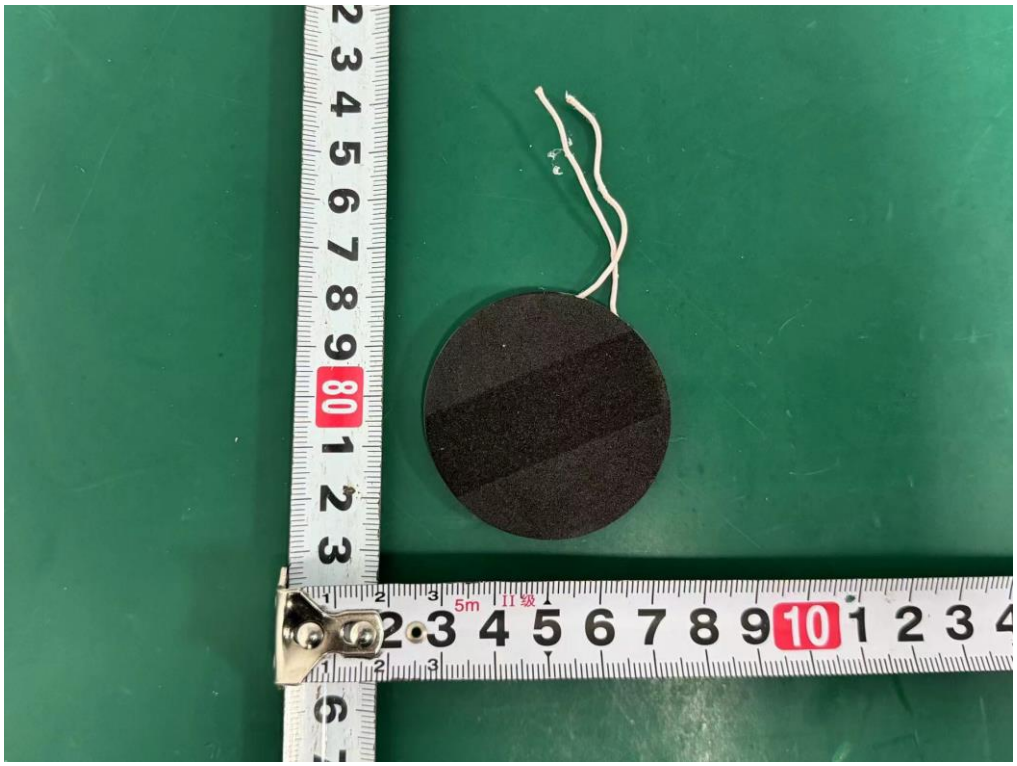




**Internal Photos**

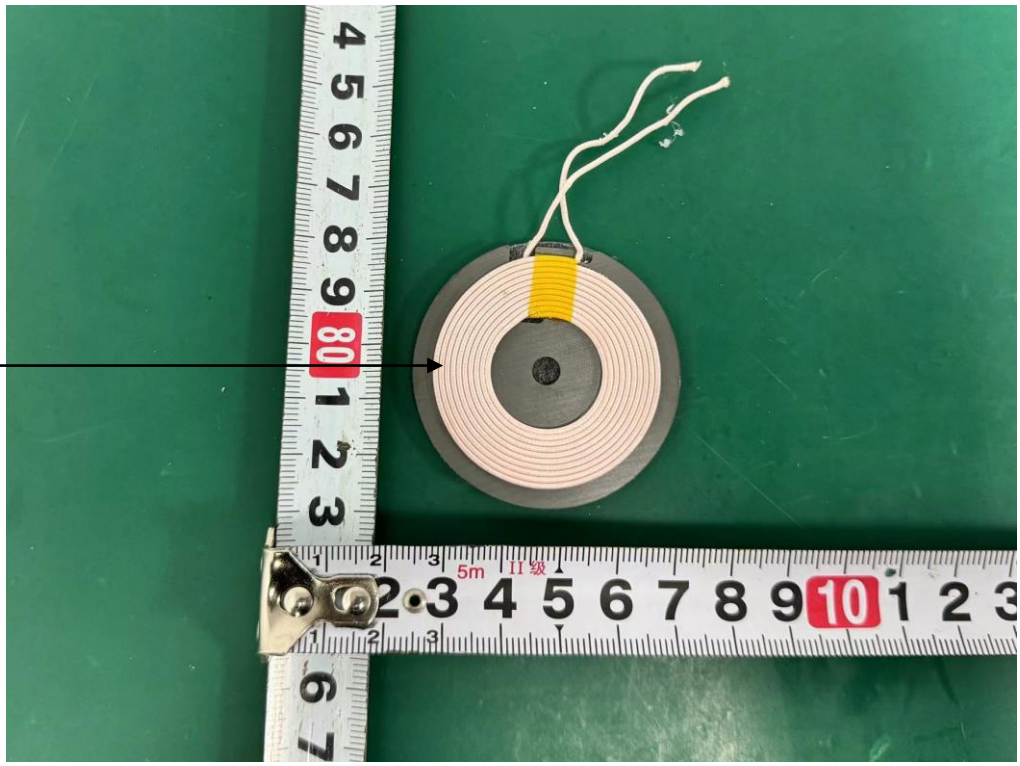
M/N: NB-WP-3N1VLT

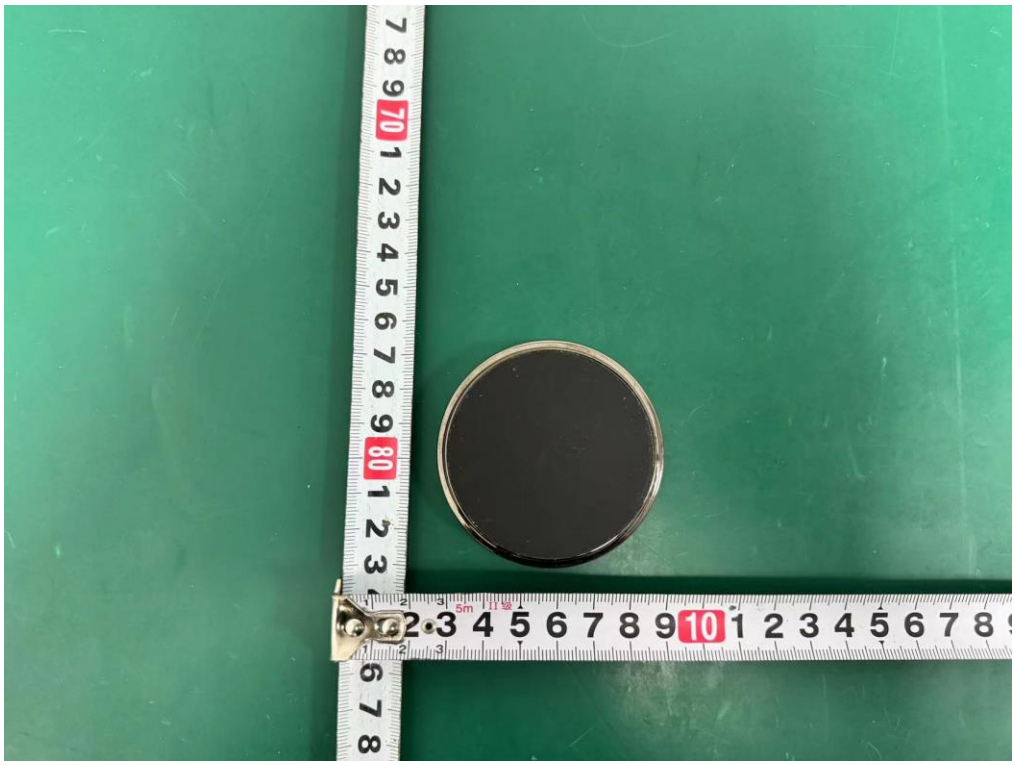




**Internal Photos**

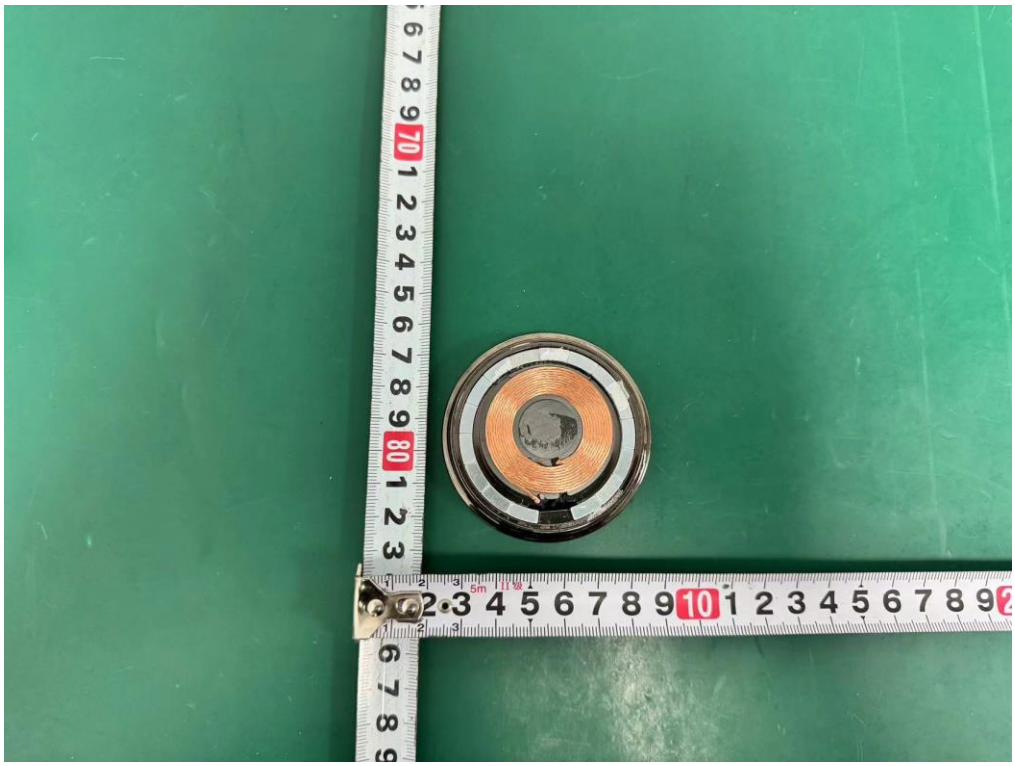
M/N: NB-WP-3N1VLT



## Internal Photos

M/N: NB-WP-3N1VLT



## Internal Photos

M/N: NB-WP-3N1VLT


## End of Test Report