



Human Exposure Report

Application No.: SZEM1911020311CR
Applicant: SHENZHEN DNS INDUSTRIES CO., LTD.
Address of Applicant: 23/F Building A, Shenzhen International Innovation Center, No.1006
Shennan Road, Futian, shenzhen, 518026 China
Manufacturer: SHENZHEN DNS INDUSTRIES CO., LTD.
Address of Manufacturer: 23/F Building A, Shenzhen International Innovation Center, No.1006
Shennan Road, Futian, shenzhen, 518026 China
Equipment Under Test (EUT):
EUT Name: Wireless Charger
Model No.: WD-210B, WD-210D, WD-210G, WD-210H, 3S-1833, 3S-1834, 07036,
07038, 07037, 07035, 07039 ♣
♣ Please refer to section 3.1 of this report which indicates which model was
actually tested and which were electrically identical.
Trade mark: DNS, mbest, 3SIXT
FCC ID: ZBCWD210BF
Standards: 47 CFR PART 1, Subpart I, Section 1.1310
47 CFR PART 2, Subpart J, Section 2.1091
Date of Receipt: 2019-10-11
Date of Test: 2019-10-12 to 2019-10-23
Date of Issue: 2019-10-25

| | |
|----------------------|--------------|
| Test Result : | Pass* |
|----------------------|--------------|

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

Keny Xu

Keny Xu
EMC Laboratory Manager



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Shenzhen Branch

Report No.: SZEM191102031102
Page: 2 of 9

| Revision Record | | | | |
|-----------------|---------|------------|----------|----------|
| Version | Chapter | Date | Modifier | Remark |
| 01 | | 2020-01-07 | | Original |
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| Authorized for issue by: | | | |
| | |  | |
| | | <hr/> | |
| | | Powell Bao /Project Engineer | |
| | |  | |
| | | <hr/> | |
| | | Eric Fu /Reviewer | |



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2 Contents

| | | |
|----------|--|----------|
| 1 | COVER PAGE | 1 |
| 2 | CONTENTS | 3 |
| 3 | GENERAL INFORMATION | 4 |
| 3.1 | DETAILS OF E.U.T. | 4 |
| 3.2 | DESCRIPTION OF SUPPORT UNITS | 5 |
| 3.3 | TEST LOCATION | 6 |
| 3.4 | TEST FACILITY | 6 |
| 3.5 | DEVIATION FROM STANDARDS | 6 |
| 3.6 | ABNORMALITIES FROM STANDARD CONDITIONS | 6 |
| 4 | EQUIPMENTS USED DURING TEST | 7 |
| 5 | TEST RESULTS | 8 |
| 5.1 | RF EXPOSURE TEST | 8 |
| 5.1.1 | <i>E.U.T. Operation</i> | <i>8</i> |



3 General Information

3.1 Details of E.U.T.

Power supply: Input: DC5V 2A, DC9V 2A
Output: 5W/7.5W/10W

Operation Frequency: 110.10 kHz -148.72kHz

Modulation Type: Load Modulation

Antenna Type: Loop Antenna

Remark: Tests were conducted in all three load modes and the worst case 10W(DC 9V/1.1A) is reported only.

Remark:

Model No.: WD-210B, WD-210D, WD-210G, WD-210H, 3S-1833, 3S-1834, 07036, 07038, 07037, 07035, 07039

Only the model WD-210D was tested, since the electrical circuit design, layout, components used, internal wiring and functions were identical for all the above models, with only difference on trade mark, model No, NTC design, details see below:

| Trade Mark | Model No. | NTC design | Enclosure shape code |
|---------------|-----------|--------------|----------------------|
| DNS, mbest | WD-210B | SMD | A |
| | WD-210D | SMD | B |
| | WD-210G | Bonding wire | B |
| | WD-210H | Bonding wire | A |
| 3SIXT | 3S-1833 | SMD | A |
| | 3S-1834 | SMD | A, B |
| DANSOON | 07036 | SMD | B |
| | 07038 | SMD | B |
| | 07037 | SMD | B |
| | 07035 | SMD | B |
| | 07039 | SMD | B |





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Report No.: SZEM191102031102
Page: 5 of 9

3.2 Description of Support Units

| Description | Manufacturer | Model No. | Serial No. |
|--------------------|--------------|-----------|------------------|
| Adapter | LeTV | EQ-248CN | 16041847014 |
| Adapter | SAMSUNG | EP-TA200 | R37J8YA7W71DK3 |
| HUAWEI Mate 20 Pro | HUAWEI | LYA-AL00 | S2D7N19124014116 |
| iPhone 8 | Apple | A1863 | F4GVQ656JC6D |
| SAMSUNG Galaxy S8 | SAMSUNG | SM-G9500 | R28J9140LPB |
| USB Cable | PHILIPS | SWR2101 | REF. No.SEA0700 |



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3.3 Test Location

All tests were performed at:

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen Branch E&E Lab,

No. 1 Workshop, M-10, Middle section, Science & Technology Park, Shenzhen, Guangdong, China 518057.

Tel: +86 755 2601 2053 Fax: +86 755 2671 0594

No tests were sub-contracted.

3.4 Test Facility

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

• **A2LA (Certificate No. 3816.01)**

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory is accredited by the American Association for Laboratory Accreditation (A2LA). Certificate No. 3816.01.

• **VCCI**

The 3m Fully-anechoic chamber for above 1GHz, 10m Semi-anechoic chamber for below 1GHz, Shielded Room for Mains Port Conducted Interference Measurement and Telecommunication Port Conducted Interference Measurement of SGS-CSTC Standards Technical Services Co., Ltd. have been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: G-20026, R-14188, C-12383 and T-11153 respectively.

• **FCC –Designation Number: CN1178**

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been recognized as an accredited testing laboratory.

Designation Number: CN1178. Test Firm Registration Number: 406779.

• **Innovation, Science and Economic Development Canada**

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been recognized by ISED as an accredited testing laboratory.

CAB identifier: CN0006.

IC#: 4620C.

3.5 Deviation from Standards

None.

3.6 Abnormalities from Standard Conditions

None.



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4 Equipments Used during Test

| Item | Test Equipment | Manufacturer | Model No. | Inventory No. | Cal. Due date |
|------|--------------------------------------|--------------|-----------|---------------|---------------|
| 1 | Electric and Magnetic Field Analyzer | Narda | EHP-50F | EMC092 | 2020-02-05 |



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5 Test Results

5.1 RF Exposure test

Test Requirement: 47 CFR PART 1, Subpart I, Section 1.1310

Measurement Distance: 15cm

Limit:

| Frequency range (MHz) | Electric field strength (V/m) | Magnetic field strength (A/m) | Power density (mW/cm ²) | Averaging time (minutes) |
|--|-------------------------------|-------------------------------|-------------------------------------|--------------------------|
| (A) Limits for Occupational/Controlled Exposures | | | | |
| 0.3-3.0 | 614 | 1.63 | *(100) | 6 |
| 3.0-30 | 1842/f | 4.89/f | *(900/f ²) | 6 |
| 30-300 | 61.4 | 0.163 | 1.0 | 6 |
| 300-1500 | / | / | f/300 | 6 |
| 1500-100,000 | / | / | 5 | 6 |
| (B) Limits for General Population/Uncontrolled Exposure | | | | |
| 0.3-1.34 | 614 | 1.63 | *(100) | 30 |
| 1.34-30 | 824/f | 2.19/f | *(180/f ²) | 30 |
| 30-300 | 27.5 | 0.073 | 0.2 | 30 |
| 300-1500 | / | / | f/1500 | 30 |
| 1500-100,000 | / | / | 1.0 | 30 |

F=frequency in MHz
*=Plane-wave equivalent power density
RF exposure compliance will need to be determined with respect to 1.1307(c) and (d) of the FCC rules. The emissions should be within the limits at 300kHz in Table 1 of 1.1310(use the 300kHz limits for 150kHz:614V/m,1.63A/m).

5.1.1 E.U.T. Operation

Operating Environment:

Temperature: 24.0 °C Humidity: 52 % RH Atmospheric Pressure: 1015 mbar

EUT Operation:

This device has been tested with mobile phone at zero charge, intermediate charge, and full charge.



5.1.2 Measurement Data

Output Voltage=DC 9V; The max output power =10W;

Magnetic Field Emissions

| Operation frequency | Test Distance (cm) | Test Position | Probe Measure Result (A/m) | 50% Limit (A/m) |
|---------------------|--------------------|---------------|----------------------------|-----------------|
| 129 kHz | 15 | Side 1 | 0.0667 | 0.815 |
| | | Side 2 | 0.0329 | 0.815 |
| | | Side 3 | 0.0613 | 0.815 |
| | | Side 4 | 0.0378 | 0.815 |
| | | Top | 0.0244 | 0.815 |

Mobile phone has been charge at zero charge, intermediate charge, and full charge.

Magnetic Field Emissions

| Operation frequency | Test Distance (cm) | Test Position | Probe Measure Result(A/m) | | | 50%Limit (A/m) |
|---------------------|--------------------|---------------|---------------------------|---------------------|-------------|----------------|
| | | | zero charge | intermediate charge | full charge | |
| 129 kHz | 15 | Side 1 | 0.0787 | 0.0660 | 0.0623 | 0.815 |
| | | Side 2 | 0.0430 | 0.0281 | 0.0231 | 0.815 |
| | | Side 3 | 0.0704 | 0.0578 | 0.0541 | 0.815 |
| | | Side 4 | 0.0506 | 0.0349 | 0.0314 | 0.815 |
| | | Top | 0.0376 | 0.0256 | 0.0245 | 0.815 |

- End of the Report -



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