

RF Exposure Report

Report No.: SA160421C05D

FCC ID: 155-WCP003

Test Model: TPA-M601

Received Date: May 31, 2016

Test Date: Jun. 1, 2016

Issued Date: Jun. 2, 2016

Applicant: Merry Electronics Co. Ltd.

Address: No. 22, 23rd Road, Taichung Industrial Park, Taichung, Taiwan, ROC

Issued By: Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch

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(R.O.C.)





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Release Control Record

| Issue No. | Description | Date Issued |
|--------------|-------------------|--------------|
| SA160421C05D | Original release. | Jun. 2, 2016 |

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Report No.: SA160421C05D Reference No.: 160531C09



1 Certificate of Conformity

Product: Wireless charger

Brand: HP

Test Model: TPA-M601

Sample Status: Engineering sample

Applicant: Merry Electronics Co. Ltd.

Test Date: Jun. 1, 2016

Standards: FCC Part 1 (Section 1.1307(b), 1.1310)

The above equipment has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

Prepared by: Jun. 2, 2016

Celia Chen / Supervisor

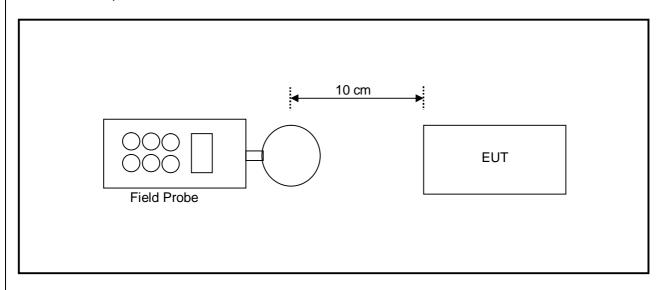
Approved by: , **Date:** Jun. 2, 2016

Rex Lai / Assistant Manager



2 RF Exposure

2.1 Test Setup



Note: Measurements should be made from all sides and the top of the primary/client pair, with the 10 cm measured from the center of the probe(s) to the edge of the device.

2.2 Test Instruments

| Description | Brand | Model No. | Frequency Range | Calibrated Date | Calibrated Until |
|--------------------------|-----------|-----------|-----------------|-----------------|------------------|
| Broadband Field Meter | NARDA | NBM-550 | - | Feb. 9, 2016 | Feb. 8, 2018 |
| Magnetic Field Meter | NARDA | ELT-400 | 1 – 400kHz | Feb. 11, 2016 | Feb. 10, 2018 |
| Magnetic Probe | NARDA | HF-3061 | 300kHz – 30MHz | Feb. 9, 2016 | Feb. 8, 2018 |
| Magnetic Probe | NARDA | HF-0191 | 27 – 1000MHz | Feb. 9, 2016 | Feb. 8, 2018 |
| Broadband Field Meter | NARDA | NBM-550 | - | Feb. 9, 2016 | Feb. 8, 2018 |
| Electric Field Meter | COMBINOVA | EFM 200 | 5Hz – 400kHz | Oct. 16, 2015 | Oct. 15, 2016 |
| E-Field Probe | NARDA | EF-0391 | 100kHz – 3GHz | Feb. 9, 2016 | Feb. 8, 2018 |
| E-Field Probe | NARDA | EF-6091 | 100MHz – 60GHz | Feb. 9, 2016 | Feb. 8, 2018 |

NOTE: 1. The calibration interval of the above test instruments is 12/24 months and the calibrations are traceable to NML/ROC and NIST/USA.

2. The test was performed in Chia Pau RF Chamber



2.3 Limits For Maximum Permissible Exposure (MPE)

§ 1.1310 The criteria listed in table 1 shall be used to evaluate the environmental impact of human exposure to radiofrequency(RF) radiation as specified in § 1.1307(b), except in the case of portable devices which shall be evaluated according to the provisions of § 2.1093 of this chapter.

TABLE 1-LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

| Frequency range (MHz) | Electric field strength (V/m) | Magnetic field strength (A/m) | Power density (mW/cm²) | 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/f²) | 6 | | | |
| 30–300 | 61.4 | 0.163 | 1.0 | 6 | | | |
| 300-1500 | | | f/300 | 6 | | | |
| 1500-100,000 | | | 5 | 6 | | | |
| (B) Limits | for General Populati | ion/Uncontrolled Exp | oosure | | | | |
| 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

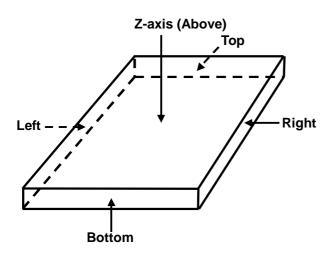
* = Plane-wave equivalent power density
NOTE 1 TO TABLE 1: Occupational/controlled limits apply in situations in which persons are exposed as a consequence of their employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure. Limits for occupational/controlled exposure also apply in situations when an individual is transient through a location where occupational/controlled limits apply provided he or she is made aware of the potential for exposure.

NOTE 2 TO TABLE 1: General population/uncontrolled exposures apply in situations in which the general public may be exposed, or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or can not exercise control over their exposure.

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Aggregate leakage fields at 10 cm surrounding the device from all simultaneous transmitting coils are demonstrated to be less than 30% of the MPE limit.

2.4 Test Point Description



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3 Calculation Result Of Maximum Conducted Power

| E-Field Measurement (10cm) | | | | | | |
|----------------------------|---------|---------|---------|---------|----------------|--|
| EUT Side | Left | Right | Тор | Bottom | Z-axis (Above) | |
| Max E-field (V/m) | 0.74 | 0.64 | 0.63 | 0.62 | 0.76 | |
| Limit 614 (V/m) | 614 | 614 | 614 | 614 | 614 | |
| 70% of the limit | 429.8 | 429.8 | 429.8 | 429.8 | 429.8 | |
| Margin (V/m) | -429.06 | -429.16 | -429.17 | -429.18 | -429.04 | |

| H-Field Measurement (10cm) | | | | | | |
|----------------------------|---------|---------|---------|---------|----------------|--|
| EUT Side | Left | Right | Тор | Bottom | Z-axis (Above) | |
| Max H-field (A/m) | 0.0221 | 0.0203 | 0.0164 | 0.0195 | 0.0216 | |
| Limit 1.63 (A/m) | 1.63 | 1.63 | 1.63 | 1.63 | 1.63 | |
| 70% of the limit | 1.141 | 1.141 | 1.141 | 1.141 | 1.141 | |
| Margin (A/m) | -1.1189 | -1.1207 | -1.1246 | -1.1215 | -1.1194 | |

Measurements was made from all sides and the top of the primary/client pair, with the 10 cm measured from the center of the probe(s) to the edge of the device. The highest emission level was recorded.