Prüfbericht-Nr.: *Test Report No.:*	**50147877 001**	**Auftrags-Nr.:** *Order No.:*	**114074673**	**Seite 1 von 10** *Page 1 of 10*
Kunden-Referenz-Nr.: *Client Reference No.:*	N/A	**Auftragsdatum:** *Order date:*	16-Apr-2018	
Auftraggeber: *Client:*	Miézo Inc. 16F., No.663, Bannan Rd., Zhonghe Dist., New Taipei City., Taiwan (R.O.C)			
Prüfgegenstand: *Test item:*	Qi Wireless Charging TX Module			
Bezeichnung / Typ-Nr.: *Identification / Type No.:*	QI-00E			
Auftrags-Inhalt: *Order content:*	Exposure Assessment Report for Wireless Charging Pads acc. to KDB680106 D01			
Prüfgrundlage: *Test specification:*	CFR47 FCC §1.1307(c) and (d), §1.1310			
Wareneingangsdatum: *Date of receipt:*	23-Apr-2018			
Prüfmuster-Nr.: *Test sample No.:*	A000729996-001			
Prüfzeitraum: *Testing period:*	26-Apr-2018 – 10-May-2018			
Ort der Prüfung: *Place of testing:*	ICT Laboratory Taipei			
Prüflaboratorium: *Testing laboratory:*	TUV Rheinland Taiwan Ltd.			
Prüfergebnis*: *Test result*:*	Pass			

geprüft von / *tested by:*			**kontrolliert von** / *reviewed by:*		
21-May-2018	Mars Y.J. Lin/ Project Engineer		21-May-2018	Arvin Ho/Vice General Manager	
Datum *Date*	**Name / Stellung** *Name / Position*	**Unterschrift** *Signature*	**Datum** *Date*	**Name / Stellung** *Name / Position*	**Unterschrift** *Signature*

Sonstiges / *Other:*

Zustand des Prüfgegenstandes bei Anlieferung: Prüfmuster vollständig und unbeschädigt
Condition of the test item at delivery: *Test item complete and undamaged*

* Legende:	1 = sehr gut	2 = gut	3 = befriedigend	4 = ausreichend	5 = mangelhaft
	P(ass) = entspricht o.g. Prüfgrundlage(n)		F(ail) = entspricht nicht o.g. Prüfgrundlage(n)	N/A = nicht anwendbar	N/T = nicht getestet
Legend:	*1 = very good*	*2 = good*	*3 = satisfactory*	*4 = sufficient*	*5 = poor*
	P(ass) = passed a.m. test specification(s)		*F(ail) = failed a.m. test specification(s)*	*N/A = not applicable*	*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 only 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 test mark.

V04

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1. General Remarks

1.1 Complementary Materials

All attachments are integral parts of this test report. This applies especially to the following appendix:
Appendix P: Photo Documentation
(File Name: 50147877APPENDIX P)

Test Specifications
The following standards were applied.

Table 1: Applied Standard and Test Levels

Radio
CFR47 FCC §1.1307(c) and (d), §1.1310 KDB680106 D01

2. Test Sites

2.1 Test Facilities

TUV Rheinland Taiwan Ltd.

11F, No.758, Sec. 4, Bade Rd.,
Songshan Dist.
Taipei City 105
Taiwan (R.O.C.)

2.2 List of Test and Measurement Instruments

Table 2: List of Test and Measurement Equipment

Kind of Equipment	Manufacture	Type	S/N	Last Calibration	Next Calibration
Exposure Level Tester ELT-400	Narda Safety Test Solutions	BN 2304/03	C-0016	2017-11-22	2020-11-22
Magnetic Field Probe 100cm^2	Narda Safety Test Solutions	BN 2300/90.10	C-0016	2017-11-22	2020-11-22
Electric Field Meter	Combinova	EFM100	240	2017-05-25	2018-05-24

3. General Product Information

3.1 Product Function and Intended Use

The EUT is a Wireless Charging Pad. It contains a WPC compatible module enabling the user to charge the battery through a Wireless interface.
For details please also refer to the User Guide, Data Sheet and Circuit Diagram.

3.2 System Details

Table 3: Technical Specification of EUT

Item	**EUT information**
Kind of Equipment	Embedded Wireless Charger
Type Designation	QI-00E
FCC ID	2APSG-QI-00E-1801

Table 4: Technical Specification of EUT

Item	Value
Operating Frequencies	112 ~ 205KHz
Operation Voltage	5Vdc
Modulation	AM

3.3 Independent Operation Modes

Testing was performed near the lowest operating frequency, at an operating frequency in the middle range of the specified frequency band and near the highest operating frequency. The highest value found is shown below in the result section of this report. This was achieved by testing with the battery at low charge, medium charge and near full charge.

3.4 Special Accessories and Auxiliary Equipment

The product has been tested together with the following additional accessories:

Kind of Equipment	Manufacturer	Model Name	S/N
Adapter	W&T	W&T-AD12J050200U	N/A

4. RF EXPOSURE ASSESSMENT

4.1 EUT Operating Condition

Measures taken to maximize magnetic Flux: Power on the EUT and put Load device on it. EUT will start providing wireless power. Power transmission and load status detection is done simultaneously using the fundamental frequency in the range of 112 – 205 KHz.

4.2 Reference limits

4.2.1 FCC

CFR47 FCC §1.1307(c) and (d), §1.1310
According to §1.1310, the criteria listed in the following table shall be used to evaluate the environment impact of a human exposure to RF radiation.

FCC LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

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
(B) Limits for General Population/Uncontrolled Exposure				
0.3-1.34	614	1.63	*(100)	30
1.34–30	842/f	2.19/f	*(180/f^2)	30

* = Plane-wave equivalent power density

Measurement is done in a distance of 10 cm. The power transfer is achieved by inductive coupling. Therefore, in the table below only the magnetic field is measured. The electric field component would have to be measured at a distance of more than Lambda/2 and will therefore be far below the limits shown in above table.

4.3 Measurement Results

Maximum H-field strength at 10 cm from the edges surrounding the EUT:

\Values Position\	Display uT	Value A/m	Limit A/m	Result	Remark
Left	0.363	0.289	90	PASS	--
Right	0.474	0.377	90	PASS	--
Front	0.363	0.289	90	PASS	Ambient 0.044uT
Back	0.377	0.300	90	PASS	--
Top	0.372	0.296	90	PASS	--

For FCC:
Remarks: DoC authorization as described in FCC *KDB 680106 D01 RF Exposure Wireless Charging Apps v02* is possible. (Limit: 0.5 A/m)

Remarks: Certification as described in FCC *KDB 680106 D01 RF Exposure Wireless Charging Apps v02* is possible. (Limit: 1.63 A/m)

Maximum E-field strength at 20 cm from the edges surrounding the EUT:

Position	Max. E-field (V/m)	Limit (V/m)
Left	2.15	83
Right	3.14	
Front	1.44	
Back	3.71	
Top	6.62	

4.4 Photographs of the Test Set-Up

Photograph 1: Set-up for H-field strength

Photograph 2: Set-up for H-field strength

Photograph 3: Set-up for E-field strength