

1. RF Exposure Test Report

1.1 General Information

Client Information

Applicant:	Shenzhen Future Automotive Technology Co,Ltd
Address of applicant:	Fuyong Street Fuyuan No.2 Road 10th Forzen Technology B third story B,Baoan District ShenZhen City Guangdong Province,China
Manufacturer:	Shenzhen Future Automotive Technology Co,Ltd
Address of manufacturer:	Fuyong Street Fuyuan No.2 Road 10th Forzen Technology B third story B,Baoan District ShenZhen City Guangdong Province,China

Description of EUT

Product Name:	Vehicle phone wireless charger
Trade Name:	酷霸
Model No.:	FC8092,FC8093,FC8094,FC8095,FC8096,FC8097,FC8098,FC8099,FC8100,FC8101,FC8102,FC8103,FC8104,FC8105
FCC ID:	2ARYD-FC8091
IC:	N/A
Rated Voltage:	Input: DC 9-16V
Frequency Range:	110-205kHz
Modulation Type:	ASK
Antenna Type:	Coil Antenna
Rated Voltage:	DC 5V (Wireless output)
Rated Current:	1A (Wireless output)
Rated Power:	5W (Wireless output)

1.2 Standard Applicable

According to § 1.1310 system operating under the provisions of this section shall be operating in a manner that the public is not exposed to radio frequency energy level in excess limit for maximum permissible exposure.

TABLE 1—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 Exposure				
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
300-1,500			f/300	6
1,500-100,000			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
300-1,500			f/1500	30
1,500-100,000			1.0	30

f = frequency in MHz * = Plane-wave equivalent power density

1.3 Test Conditions

Test Mode	Description	Remark
TM1	Full Load	With resistor
TM2	Full Charge	With mobile phone
Measurement Distance:	10 cm	
Test Standard:	KDB 680106 D01 V02	

1.4 Test Result

The following test data shall to demonstrate RF exposure compliance.

Test Mode: TM1 (with resistor)

Electric Field Emissions			
Test Position	Measure Value (V/m)	Limit(V/m)	30% Limit (V/m)
Top	2.45	614	184.2
Bottom	2.12	614	184.2
Side 1	1.53	614	184.2
Side 2	1.56	614	184.2
Side 3	1.69	614	184.2
Side 4	1.75	614	184.2
Magnetic Field Emissions			
Test Position	Measure Value (A/m)	Limit(A/m)	30% Limit (A/m)
Top	0.0048	1.63	0.489
Bottom	0.0055	1.63	0.489
Side 1	0.0054	1.63	0.489
Side 2	0.0052	1.63	0.489
Side 3	0.0051	1.63	0.489
Side 4	0.0051	1.63	0.489

Test Mode: TM2 (with mobile phone)

Electric Field Emissions			
Test Position	Measure Value (V/m)	Limit(V/m)	30% Limit (V/m)
Top	2.16	614	184.2
Bottom	2.23	614	184.2
Side 1	2.25	614	184.2
Side 2	1.91	614	184.2
Side 3	1.94	614	184.2
Side 4	2.12	614	184.2
Magnetic Field Emissions			
Test Position	Measure Value (A/m)	Limit(A/m)	30% Limit (A/m)
Top	0.0059	1.63	0.489
Bottom	0.0055	1.63	0.489
Side 1	0.0055	1.63	0.489
Side 2	0.0051	1.63	0.489
Side 3	0.0051	1.63	0.489
Side 4	0.0052	1.63	0.489