

RF exposure Estimation

1. Introduction

Product:	Wireless charger
Model no.:	TC03
FCC ID:	2ANY2MTC03
Options and accessories:	N/A
Rating:	5Vdc 1.0A Max supplied by an external adapter
RF Transmission Frequency:	117-175KHz
Antenna Type:	Integrated coil antenna
Description of the EUT:	The Equipment Under Test (EUT) is a wireless charger which operated at 117-175kHz.

2. Limit and Guidelines on Exposure to Electromagnetic Fields

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

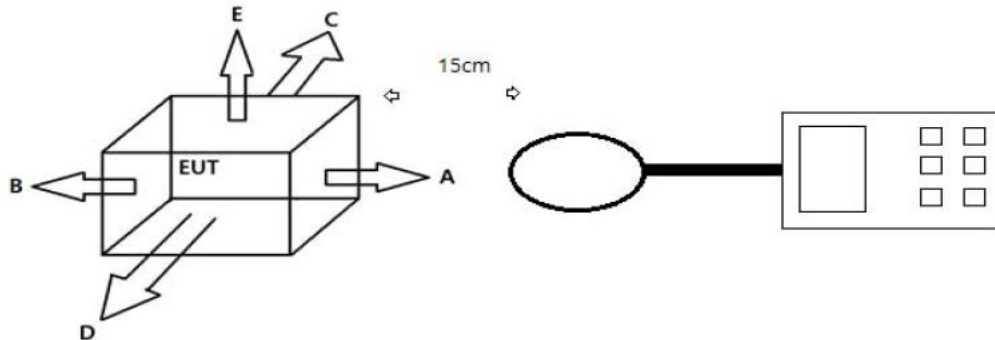
f = frequency in MHz

* = Plane-wave equivalent power density

3. Test Equipment List

DESCRIPTION	MANUFACTURER	MODEL NO.	SERIAL NO.	CAL. DUE DATE
Exposure Level Tester	Narda	ETL-400	K-0018	2020-05-16
B-Field Sensor	Narda	1Hz-400kHz	2300/90.10	2020-05-16

4. Test setup



5. Test Result

Electric Field Emissions					
Test Position	Test Distance (cm)	Measure Value (V/m)	Limit (V/m)	50% Limit (V/m)	Result
A	15	38.25	614	307	Pass
B	15	39.40	614	307	Pass
C	15	32.01	614	307	Pass
D	15	35.55	614	307	Pass
E	15	40.11	614	307	Pass
Magnetic Field Emissions					
Test Position	Test Distance (cm)	Measure Value (A/m)	Limit (A/m)	50% Limit (A/m)	Result
A	15	0.102	1.63	0.815	Pass
B	15	0.101	1.63	0.815	Pass
C	15	0.077	1.63	0.815	Pass
D	15	0.098	1.63	0.815	Pass
E	15	0.103	1.63	0.815	Pass

Remark: test standard refers to KDB 680106 D01 v03.

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