

Technical Description:

The following requirements have been met according to clause 5b of 680106 D01 RF Exposure Wireless Charging App v03r01.

(1) Power transfer frequency is less than 1MHz.

Ans: the operating frequency is 142.4kHz – 155.8kHz.

(2) Output power from each primary coil is less than or equal to 15 watts.

Ans: The WPT output power is less than 15W

(3) The system may consist of more than one source primary coils, charging one or more clients. If more than one primary coil is present, the coil pairs may be powered on at the same time.

Ans: It is confirmed that there is a single primary coil only.

(4) Client device is placed directly in contact with the transmitter.

Ans: Yes.

(5) Mobile exposure conditions only (portable exposure conditions are not covered by this exclusion).

Ans: Yes, it is Mobile exposure condition only.

(6) The aggregate H-field strengths at 15 cm surrounding the device and 20 cm above the top surface from all simultaneous transmitting coils are demonstrated to be less than 50% of the MPE limit.

Ans: Complied. The result can be found on RF exposure report.

The Equipment Under Test (EUT), is a wireless charger with LED lamp that is designed to work on table. The EUT is powered DC 5.0V/9.0V adaptor input, which is operated at 142.4kHz – 155.8kHz for 10W wireless power transmission. The Mobile phone can be placed on the charging Pad for wireless battery charging. The LED can be ON once the button is pressed.

The brief circuit description is listed as follows:

1. U4 (GP3105B) acts as master MCU
2. U2 (GD2315A) acts as full bridge wireless charging MCU
3. L3 acts as wireless charging coil
4. U1 acts as single, dual and quad rail-to-rail input and output single supply amplifiers
5. Q6 acts as NMOS2300 transistor
6. U3 (M2700) acts as Touch light control IC