

# 1 Safety Human Exposure

## 1.1 Radio Frequency Exposure Compliance

### 1.1.1 Electromagnetic Fields

FCC ID: 2AYYSZEDC05

RESULT:

Pass

#### Test Specification

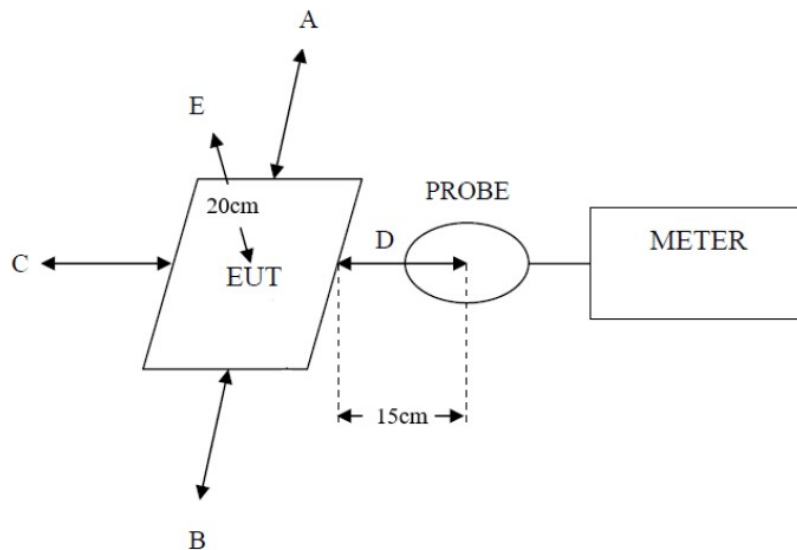
Test standard : CFR47 FCC Part 2: Subpart J Section 1.1310  
 : FCC CFR 47 Part 1(1.1310) KDB 680106 D01 v03

According to the table 1 of FCC Part 2.1310, the reference limit as below:

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm <sup>2</sup> )	Averaging time (minutes)
<b>(A) Limits for Occupational/Controlled Exposure</b>				
0.3-3.0	614	1.63	*100	6
3.0-30	1842/f	4.89/f	*900/f <sup>2</sup>	6
30-300	61.4	0.163	1.0	6
300-1,500			f/300	6
1,500-100,000			5	6
<b>(B) Limits for General Population/Uncontrolled Exposure</b>				
0.3-1.34	614	1.63	*100	30
1.34-30	824/f	2.19/f	*180/f <sup>2</sup>	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

Test Setup:



**Test Result:**

**For single frequency: left charge base**

Table: H-Field Strength at 15 cm from the edges surrounding the EUT and 20cm from the top surface of the EUT

EUT Test Mode	Measured H-Field Strength Values (A/m)					50% Limit (A/m)	Limit (A/m)	Result
	Test Position A	Test Position B	Test Position C	Test Position D	Test Position E			
Device working at the maximum power	0.2032	0.1928	0.1968	0.1856	0.1976	0.815	1.63	Pass

**For single frequency: right charge base**

Table: H-Field Strength at 15 cm from the edges surrounding the EUT and 20cm from the top surface of the EUT

EUT Test Mode	Measured H-Field Strength Values (A/m)					50% Limit (A/m)	Limit (A/m)	Result
	Test Position A	Test Position B	Test Position C	Test Position D	Test Position E			
Device working at the maximum power	0.2029	0.1925	0.1958	0.1855	0.1972	0.815	1.63	Pass

**For single frequency: apple watch charger**

EUT Test Mode	Measured H-Field Strength Values (A/m)					50% Limit (A/m)	Limit (A/m)	Result
	Test Position Top	Test Position front	Test Position rear	Test Position left	Test Position right			
Device working at the maximum power	0.183	0.182	0.182	0.184	0.182	0.815	1.63	Pass

For an exposure waveform consisting of multiple frequencies, a test for compliance of exposure waveform shall satisfy the following criterion

$$\sum_0^{5 \text{ MHz}} \frac{A_i}{MPE_i} \leq 1$$

EX:

left charge base + right charge base + apple watch charger Max H-field (Left)

(left charge base Max H-field (A/m) + right charge base Max H-field (A/m) + apple watch charger Max H-field (A/m)) / Limit (A/m) = Max H-field

-> (0.2032 + 0.2029 + 0.1840) / 1.63 = 0.3620 ≤ 1

Test Equipment:

<b>RF Exposure</b>				
<b>Description</b>	<b>Manufacturer</b>	<b>Model</b>	<b>Serial No.</b>	<b>Cal. Until</b>
"Van der Hoofden" test head	Schwarzbeck	VDHH 9502	159	2021-08-17
EMF Tester	NARDA	ELT-400	D-0009/D-0010	2022-01-15