

# Maximum Permissive Exposure

## 1. Description of EUT

Product Name	CURRENT TAPS
Test Model	(1)S1J203NJH2 (2)S1J203O2H3
Date of Test	2019. 03. 28

## 2. Radiated Emission Measurement

Item	Type	Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due
1.	Broadband Field Meter	NARDA	NBM-550	B-0959	2019.02.05	2 Years
2.	E-Field Probe	NARDA	EF0391	A-1034	2019.02.05	2 Years
3.	Exposure Level Tester	NARDA	ELT-400	M-0291	2019.02.04	2 Years
4.	B-Field Probe 100 cm2	NARDA	2300/90.10	M-0309	2019.02.04	2 Years

## 3. Tested Supporting System List

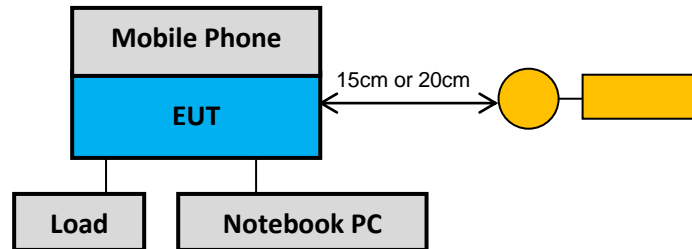
### 3.1. Support Peripheral Unit

No.	Product	Brand	Model No.	Serial No.	Approval
1.	Power Socket	N/A	N/A	N/A	N/A
2.	R Load (2.7Ω)	N/A	N/A	N/A	N/A
3.	Notebook PC	acer	N16Q2	N/A	Contains FCC ID: PPD-QCNFA435
4.	Mobile Phone (10W)	SAMSUNG	Galaxy S9	N/A	N/A

### 3.2. Cable Lists

No.	Cable Description Of The Above Support Units
1.	AC Power Cord: Unshielded, Detachable, 1.0m
2.	USB Cable: Unshielded, Detachable, 0.45m
3.	Adapter: Chicony, M/N A11-065N1A DC Cord : Shielded, Undetachable, 1.8m, Bonded a ferrite core AC Power Cord : Unshielded, Detachable, 1.0m
4.	None

## 5. Setup Configuration



## 6. Operating Condition of EUT

The mobile phone was at 0% power and in contact directly with EUT for charging.

## 7. MPE Calculation

**POWERTECH Industrial Co., Ltd** declares that the product described above has been evaluated and found to comply with the RF exposure limits for humans, as specified based on ANSI/FCC recommendation.

According to FCC CFR 47 §1.1310, the criteria listed in the following table shall be used to evaluate the environmental impact of human exposure to radio frequency (RF) radiation as specified in 1.1307(b).

**Table 1 Limits for Maximum Permissible Exposure**

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm <sup>2</sup> )	Averaging Time (minutes)
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	0.73	2	30
300-1500	--	--	f/150	30
1500-100,000	--	--	1	30

**Table 4 RF Field Strength Limits for Devices Used by the General Public (Uncontrolled Environment)**

Frequency Range (MHz)	Electric Field (V/m rms)	Magnetic Field (A/m rms)	Power Density (W/m <sup>2</sup> )	Reference Period (minutes)
0.003-10 <sup>21</sup>	83	90	-	Instantaneous*
0.1-10	-	0.73/ f	-	6**
1.1-10	87/ f <sup>0.5</sup>	-	-	6**
10-20	27.46	0.0728	-2	6
20-48	58.07/ f <sup>0.25</sup>	0.1540/ f <sup>0.25</sup>	8.944/ f <sup>0.5</sup>	6
48-300	22.06	0.05852	1.291	6
300-6000	3.142 f <sup>0.3417</sup>	0.008335 f <sup>0.3417</sup>	0.02619 f <sup>0.6834</sup>	6
6000-15000	61.4	0.163	10	6
15000-150000	61.4	0.163	10	616000/ f <sup>1.2</sup>
150000-300000	0.158 f <sup>0.5</sup>	4.21 x 10 <sup>-4</sup> f <sup>0.5</sup>	6.67 x 10 <sup>-5</sup> f	616000/ f <sup>1.2</sup>

**Note:** f is frequency in MHz.  
 \*Based on nerve stimulation (NS).  
 \*\*Based on specific absorption rate (SAR).

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Test Model: S1J203NJH2			
Test Frequency	TX 123.40kHz	Test Mode	5W Charge

Separation	Probe from EUT side	E-field strength (V/m)	H-field strength (A/m)
15cm	Left	0.55	0.0318
15cm	Right	0.61	0.0318
20cm	Top	0.46	0.0334
15cm	Back	0.30	0.0326
15cm	Z-axis (Front) above EUT	0.82	0.0398
Limit		614	1.63

Test Model: S1J203NJH2			
Test Frequency	TX 140.90kHz	Test Mode	10W Charge

Separation	Probe from EUT side	E-field strength (V/m)	H-field strength (A/m)
15cm	Left	0.66	0.0334
15cm	Right	0.72	0.0318
20cm	Top	0.41	0.0342
15cm	Back	0.32	0.0334
15cm	Z-axis (Front) above EUT	0.88	0.0398
Limit		614	1.63

Test Model: S1J203O2H3			
Test Frequency	TX 123.40kHz	Test Mode	5W Charge

Separation	Probe from EUT side	E-field strength (V/m)	H-field strength (A/m)
15cm	Left	0.57	0.0342
15cm	Right	0.64	0.0342
20cm	Top	0.41	0.0318
15cm	Back	0.33	0.0310
15cm	Z-axis (Front) above EUT	0.73	0.0497
Limit		614	1.63

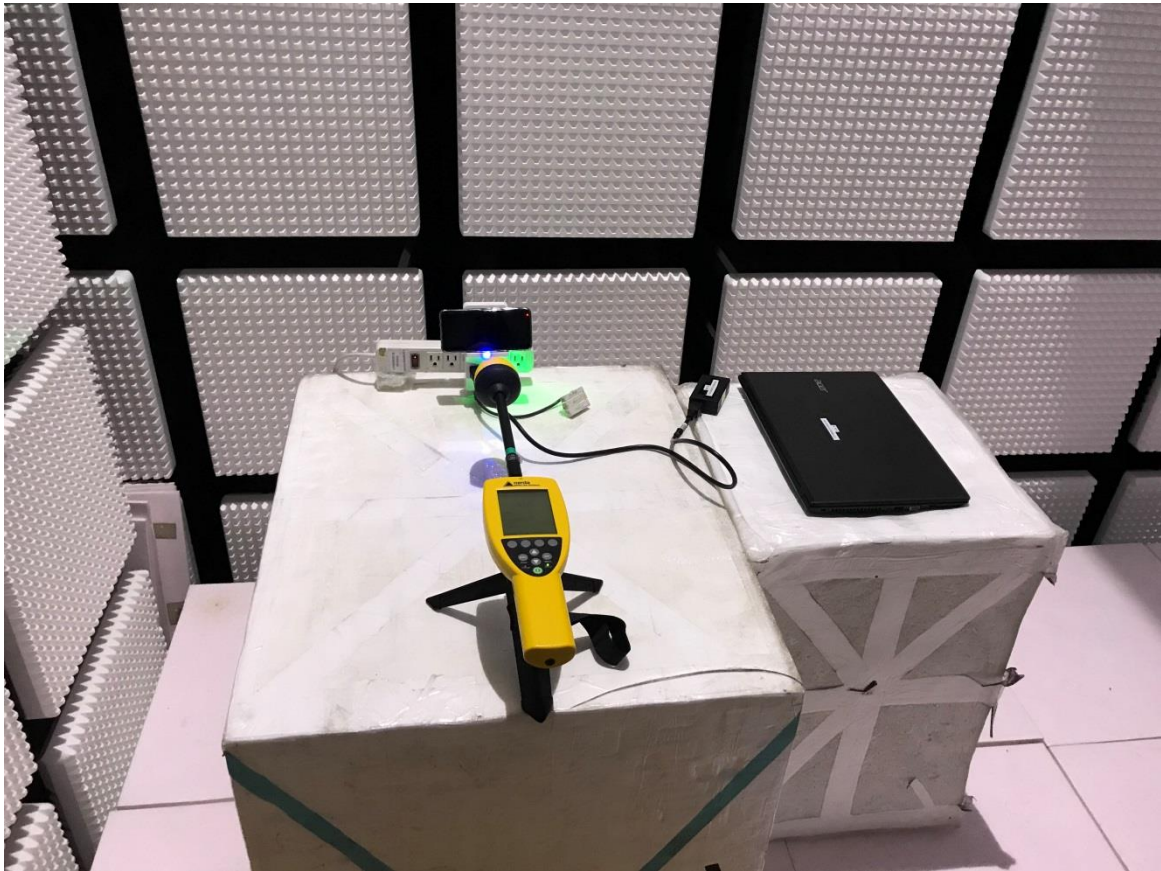
Test Model: S1J203NJH2			
Test Frequency	TX 140.90kHz	Test Mode	10W Charge

Separation	Probe from EUT side	E-field strength (V/m)	H-field strength (A/m)
15cm	Left	0.62	0.0318
15cm	Right	0.75	0.0334
20cm	Top	0.39	0.0358
15cm	Back	0.37	0.0326
15cm	Z-axis (Front) above EUT	0.94	0.0507
Limit		614	1.63

Sincerely Yours, Mr. Ben Cheng

  
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Manager  
AUDIX Technology Corporation

## 8. Test Setup Photo



Zoom View

