

# Maximum Permissible Exposure

**Equipment** : Pen Tablet  
**Brand Name** : Wacom  
**Model No.** : CTL-4100WL  
**FCC ID** : HV4CTL4100WL  
**Standard** : 47 CFR Part 2.1091  
**Applicant / Manufacturer** : Wacom Co., Ltd.  
2-510-1 Toyonodai, Kazo-shi, Saitama 349-1148 Japan

The product sample received on Nov. 16, 2017 and completely tested on Dec. 17, 2017. We, SPORTON, would like to declare that the tested sample has been evaluated in accordance with the procedures given in IEEE C95.1 and shown compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC., the test report shall not be reproduced except in full.

Reviewed by:



Kevin Liang / Assistant Manager





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# 1 Human Exposure Assessment

## 1.1 Maximum Permissible Exposure

### 1.1.1 Limit of Maximum Permissible Exposure

Limits for Occupational / Controlled 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  E  <sup>2</sup> , H  <sup>2</sup> or S (minutes)
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
300-1500	-	-	F/300	6
1500-100,000	-	-	5	6
Limits for General Population / Uncontrolled 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  E  <sup>2</sup> , H  <sup>2</sup> or S (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	0.073	0.2	30
300-1500	-	-	F/1500	30
1500-100,000	-	-	1.0	30
Note 1: f = frequency in MHz ; *Plane-wave equivalent power density				
Note 2: For the applicable limit, see FCC 1.1310				

### 1.1.2 Testing Applied Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

FCC KDB 680106 D01 RF Exposure Wireless Charging Apps v02 - Part 2 Section 2.109



### 1.2 Testing Location Information

Testing Location				
<input checked="" type="checkbox"/>	HWA YA	ADD : No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)		
		TEL : 886-3-327-3456	FAX : 886-3-327-0973	
Test site Designation No. TW1190 with FCC.				
Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
RF Conducted	TH01-HY	Gary	23.7°C / 61%	17/Dec/2017

### 1.3 Accessories and Support Equipment

Accessories				
Battery	Brand Name	Wacom	Model Name	PR-234385G
	Manufacturer	TCL Hyperpower Batteries		
	Power Rating	3.8Vdc, 1260mAh	Type	Li-ion
Touch Pen	Brand Name	Wacom	Model Name	LP-1100
Micro USB Cable	Brand Name	Wacom	Model Name	STJ-A393
	signal line	1.5 meter, shielded cable, w/o ferrite core		

Note: Regarding to more detail and other information, please refer to user manual.

Support Equipment - RF Conducted				
No.	Equipment	Brand Name	Model Name	FCC ID
1	Notebook	DELL	E5410	DOC
2	Adapter for Notebook	DELL	HA65NM130	DOC
3	AC Source	G.W	APS-9102	N/A

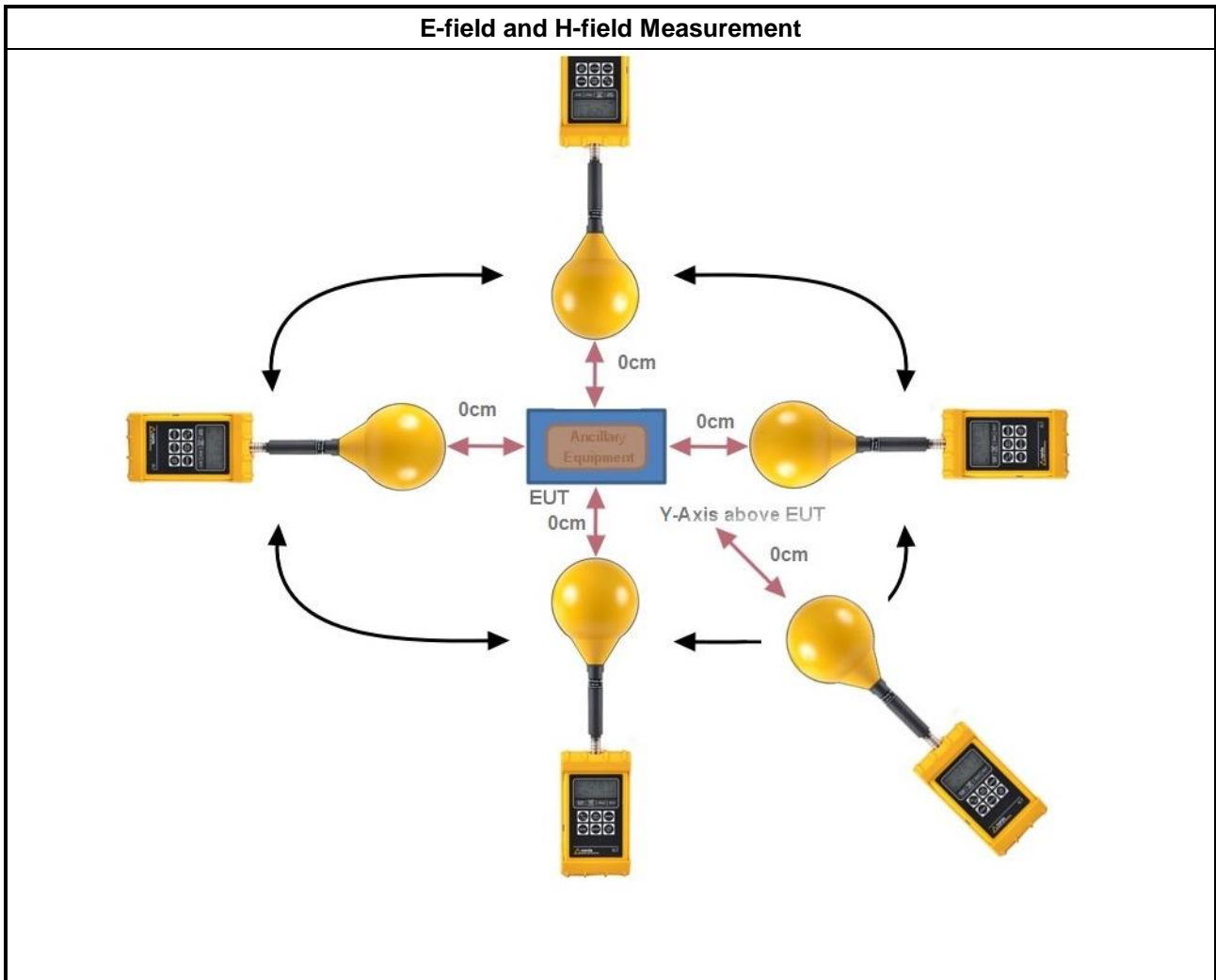
### 1.4 The Worst Charging Condition

Ancillary Equipment	Operating Condition
Touch Pen	Touch Panel

### 1.5 Test Method

Test Method
<input checked="" type="checkbox"/> Performed aggregate both leakage E-field and H-field at surrounding the device from all simultaneous transmitting coils.
<input checked="" type="checkbox"/> During testing, the EUT was placed on a non-conductive table top and the ancillary equipment (e.g., mobile phone) was placed on the EUT for charging. Maximum E-field and H-field measurements were tested 0cm from each side of the EUT. Along the side of the EUT to center of E-field probe and H-field probe were positioned at the location to search maximum field strength.

### 1.6 Test Setup





### 1.7 Result of Maximum Permissible Exposure

Maximum Permissible Exposure				
Charging Condition	Separation	Probe from EUT Side	E-field (V/m) - rms	H-field (A/m) - rms
Touch Panel	0cm	Left	0.56	0.001
Touch Panel	0cm	Right	0.66	0.002
Touch Panel	0cm	Top	0.82	0.002
Touch Panel	0cm	Bottom	0.73	0.002
Touch Panel	0cm	Z-axis above EUT	1.75	0.005
<b>Limit</b>			614	1.63
<b>Margin Limit (%)</b>			0.29%	0.29%



## 2 Test Equipment and Calibration Data

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date
Probe EF	Narda Safety Test Solutions GmbH	0391 E-Field	D-0667	0.1MHz ~ 3GHz	09/ Jun/2016	08/Jun/2018
Broadband Field Meter	Narda Safety Test Solutions GmbH	NBM-550	E-0847	0.1MHz ~ 3GHz	09/ Jun/2016	08/Jun/2018