

1 Maximum Permissible Exposure

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 ²)	Averaging Time E ² , H ² or S (minutes)
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842 / f	4.89 / f	(900 / f)*	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 ²)	Averaging Time E ² , H ² or S (minutes)
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f)*	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

1.1.3 Ancillary Equipment

Support Equipment			
No.	Equipment	Brand Name	Model Name
1	Notebook	DELL	E5530
2	WPC Charging Pad	CWT	WCH003A
3	Load	-	-

Note: Load provided by the Customer.

1.1.4 Testing Location Information

Testing Location			
<input checked="" type="checkbox"/>	HWA YA	ADD : No. 52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan District, Tao Yuan City, Taiwan, R.O.C. TEL : 886-3-327-3456 FAX : 886-3-318-0055	
Test Condition		Test Site No.	Test Engineer
RF Conducted		TH01-HY	Candy
Test Environment			
		23°C / 62%	

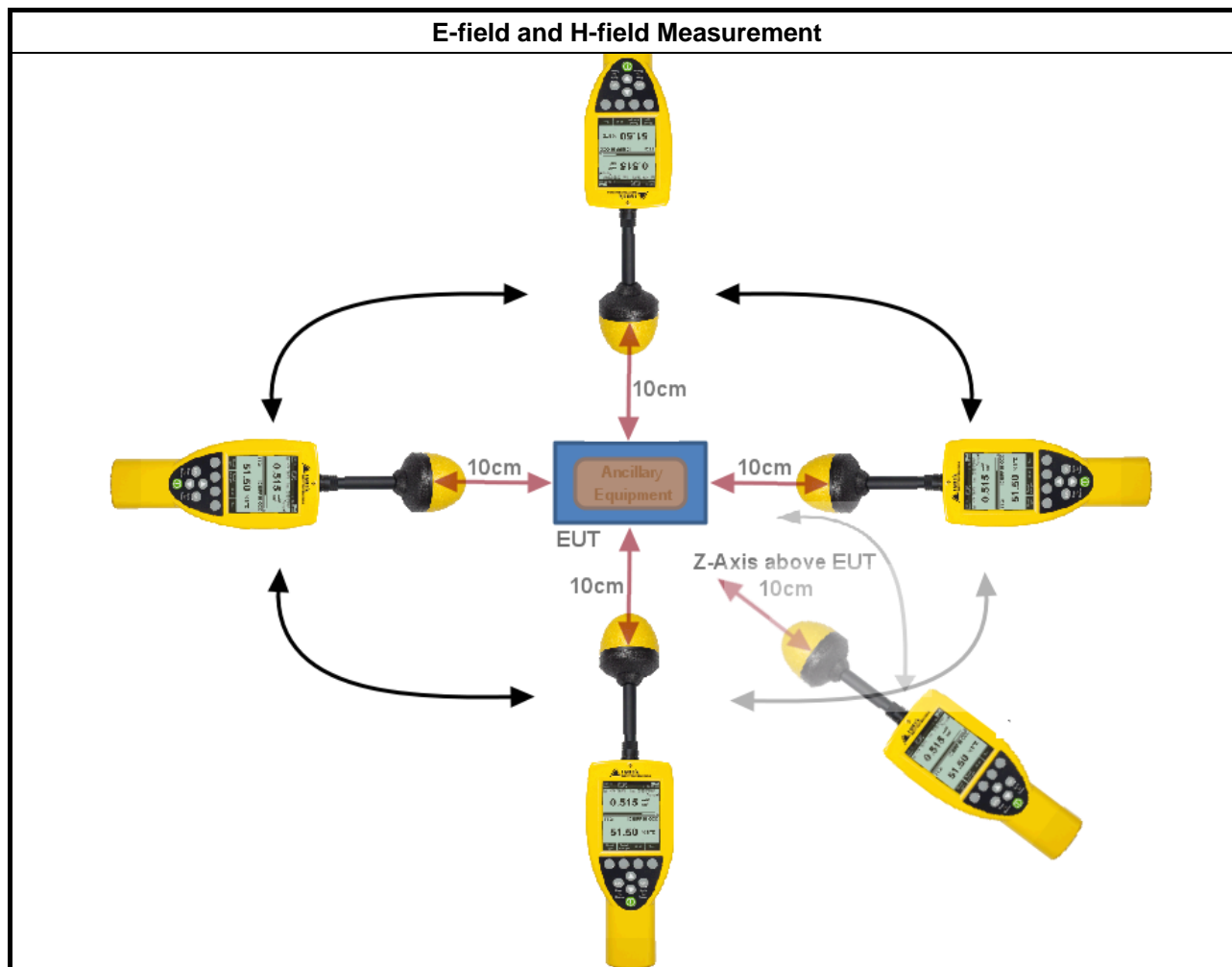
1.1.5 The Worst Charging Condition

Ancillary Equipment	Charging Condition	Worst Charging Condition
Load	Full Loading	Full Loading
Note 1: For Wireless Power Consortium Qi specification, a lower operating frequency or high duty cycle result in the transfer of a higher amount of power and charging current.		

1.1.6 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 10cm 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.
<input checked="" type="checkbox"/> Related OET Knowledge DataBase (KDB) Inquiry. Tracking Number 360363

1.1.7 Test Setup



1.1.8 Result of Maximum Permissible Exposure

Maximum Permissible Exposure				
Charging Condition	Separation	Probe from EUT Side	E-field (V/m)	H-field Limit (A/m)
Full Loading	10cm	Left	1.52	0.329
Full Loading	10cm	Right	1.41	0.315
Full Loading	10cm	Top	1.44	0.319
Full Loading	10cm	Bottom	6.05	0.349
Full Loading	10cm	Z-axis above EUT	3.08	0.417
Limit			87	5
Margin Limit (%)			6.95%	8.34%



2 Test Equipment and Calibration Data

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
B-Field Probe	Narda Safety Test Solutions GmbH	B-Field Probe 100 cm ²	M-0652	50Hz ~ 400kHz	Jun. 17, 2013	Conducted (TH01-HY)
Exposure Level Tester	Narda Safety Test Solutions GmbH	ELT-400	N-0210	100KHz ~ 3MHz	Jun. 26, 2013	Conducted (TH01-HY)
Probe EF	Narda Safety Test Solutions GmbH	0391 E-Field	D-0667	0.1MHz ~ 3GHz	Jun. 24, 2013	Conducted (TH01-HY)
Broadband Field Meter	Narda Safety Test Solutions GmbH	NBM-550	E-0847	0.1MHz ~ 3GHz	Jun. 07, 2013	Conducted (TH01-HY)

Note: Calibration Interval of instruments listed above is two years.