



# ElectroMagnetic Field(EMF) Radiation Exposure

## Compliance Test Report

For

Model: [REDACTED]

Prepared By: Peng Peng *Peng Peng*

Report Number: WSCT-R&E200300047A-EMF

Report Date: 02 April 2020

Checked By: Lily Zhao *Lily Zhao*

Approved By: Wang Fengbing *Wang Fengbing*

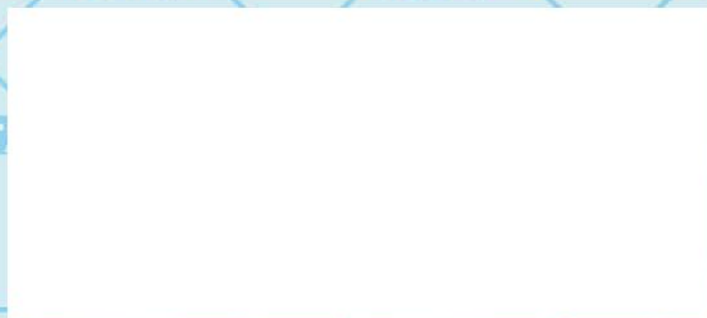


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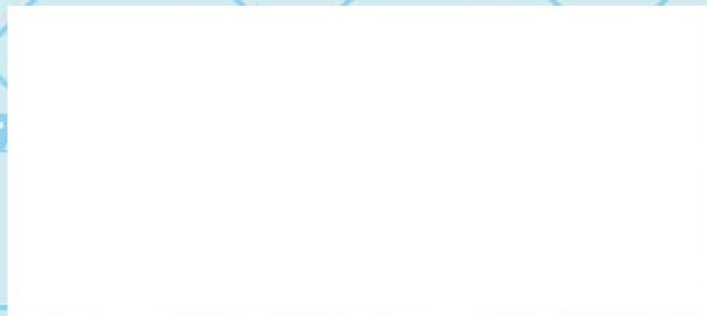
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### Modified History

REV.	Modification Description	Issued Date
REV 1.0	Initial Test Report Release	02 April 2020

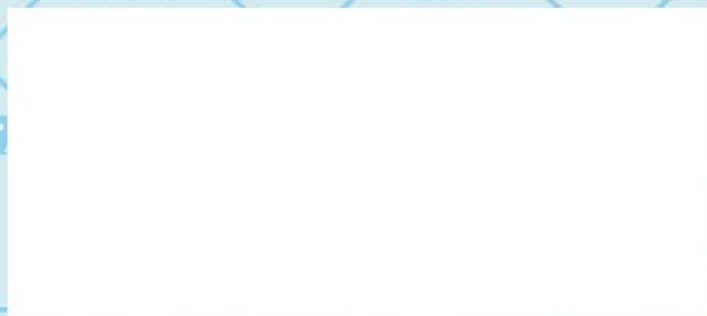




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## 1. General information

### 1.1 EUT Description

<b>Device Information:</b>	
<b>Product Type:</b>	Cablecard Multi-Functional Wireless Charger
<b>Model:</b>	
<b>Trade Name:</b>	N/A
<b>Device Type:</b>	<input checked="" type="checkbox"/> Engineering Sample. <input type="checkbox"/> Product Sample, <input type="checkbox"/> Mass Product Sample.
<b>Exposure Category:</b>	uncontrolled environment / general population
<b>Antenna Type :</b>	Coil Antenna
<b>EUT Power Rating:</b>	Micro USB Input: 5V 2A Wireless Output: 5W
<b>Device Operating Configurations:</b>	
<b>Supporting Mode(s) :</b>	Mode 4: energy transmission
<b>Modulation:</b>	MSK
<b>Operating Frequency Range(s)</b>	110kHz-205kHz

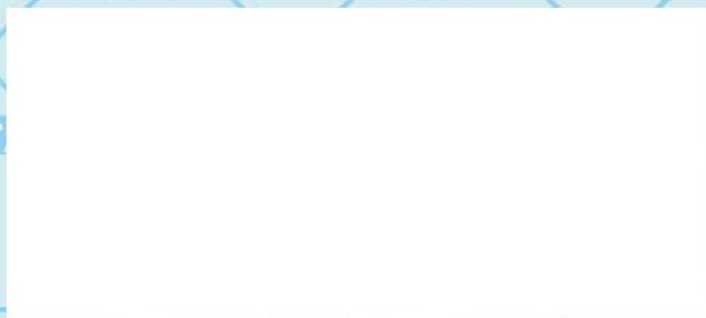




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## 2. Test specification(s)

Test Standard	Version	Test Standard Description
EN 62311	2008	Assessment of electronic and electrical equipment related to human exposure restrictions for electromagnetic fields (0 Hz - 300GHz)





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### 3 Testing laboratory

Test Site	World Standardization Certification & Testing Group(Shenzhen) Co., Ltd.
Test Location	Building A-B, Baoshi Science & Technology Park, Baoshi Road, Bao'an District, Shenzhen, Guangdong, China
Telephone	+86-755-26996192
Fax	+86-755-86376605

### 4 Applicant and Manufacturer

Applicant/Client Name:	
Applicant Address:	
Manufacturer Name:	
Manufacturer Address:	





## 5 DEVICE CATEGORY AND LEVELS LIMITS

Systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy levels in excess of the following limits.

### Compliance criteria

The electronic and electrotechnical apparatus shall comply with the basic restriction as specified in Annex II of Council Recommendation 1999/519/EC.

The reference levels in the Council Recommendation 1999/519/EC on public exposure to electromagnetic fields are derived from the basic restrictions using worst-case assumptions about exposure. If the reference levels are met, then the basic restrictions will be complied with, but if the reference levels are exceeded, that does not necessarily mean that the basic restrictions will not be met. In some situations, it will be necessary to show compliance with the basic restrictions directly, but it may also be possible to derive compliance criteria that allow a simple measurement or calculation to demonstrate compliance with the basic restriction. Often these compliance criteria can be derived using realistic assumptions about conditions under which exposures from a device may occur, rather than the conservative assumptions that underly the reference levels.

If the technology in the apparatus is not capable of producing an E-field, H-field or contact current, at the normal user position, at levels higher than 1/2 the limit values then the apparatus is deemed to comply with the requirements in this standard in respect of that E-field, H-field or contact current without further assessment.





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## Reference Levels

Council Recommendation 1999/519/EC Annex III

Reference levels for electric, magnetic and electromagnetic fields (0Hz to 300GHz)

Reference levels for electric, magnetic and electromagnetic fields  
(0 Hz to 300 GHz, unperturbed rms values)

Frequency range	E-field strength (V/m)	H-field strength (A/m)	B-field (μT)	Equivalent plane wave power density $S_{eq}$ (W/m <sup>2</sup> )
0-1 Hz	—	$3,2 \times 10^4$	$4 \times 10^4$	—
1-8 Hz	10 000	$3,2 \times 10^4/f^2$	$4 \times 10^4/f^2$	—
8-25 Hz	10 000	$4\,000/f$	$5\,000/f$	—
0,025-0,8 kHz	$250/f$	$4/f$	$5/f$	—
0,8-3 kHz	$250/f$	5	6,25	—
3-150 kHz	87	5	6,25	—
0,15-1 MHz	87	$0,73/f$	$0,92/f$	—
1-10 MHz	$87/f^{1/2}$	$0,73/f$	$0,92/f$	—
10-400 MHz	28	0,073	0,092	2
400-2 000 MHz	$1,375\ f^{1/2}$	$0,0037\ f^{1/2}$	$0,0046\ f^{1/2}$	$f/200$
2-300 GHz	61	0,16	0,20	10





## 6 ASSESSMENT RESULT

### 6.1. H-Field Strength

Test Mode	Frequency (kHz)	Results (dBuA/m)	ANT
QI	132.5	20.6	Vertical
Note: The result of this two test mode is at the worst operating mode case, more details please refer to RF report.			

### 6.2. Conclusion

Note: The Max. H-Field strength at worst case is: 20.6 dBuA/m which is below the exempt condition, 5 A/m. RF exposure assessment has been performed below to prove that this unit will not generate the harmful EM emission above the reference level as specified in EC Council Recommendation (1999/519/EC).

This EUT is deemed to comply with the reference level limits by Council Recommendation 99/519/EC, therefore the basic restrictions are compliant with human exposure limits.



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## EUT Photographs

Appearance photograph of EUT



Appearance photograph of EUT



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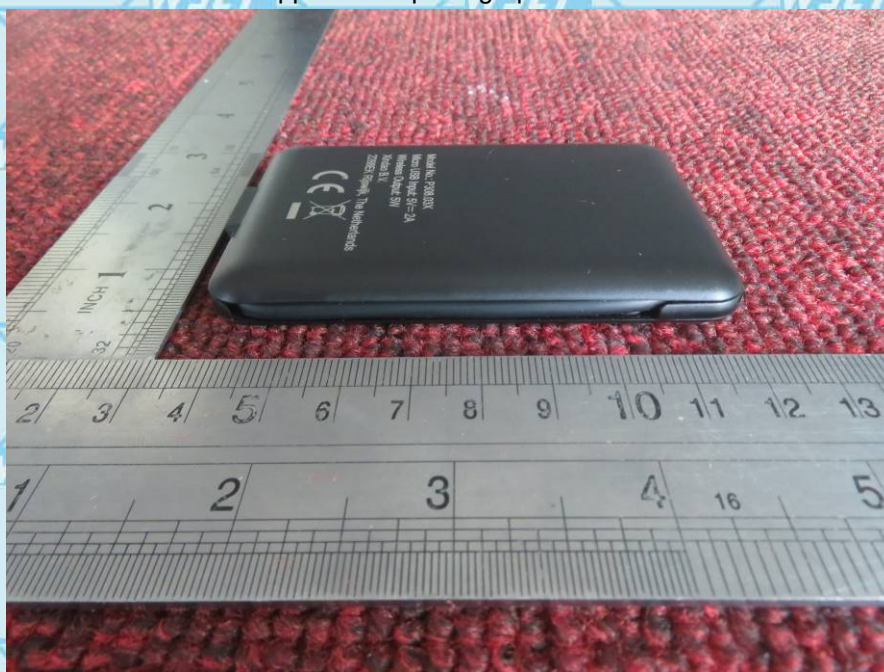


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Internal photograph of EUT



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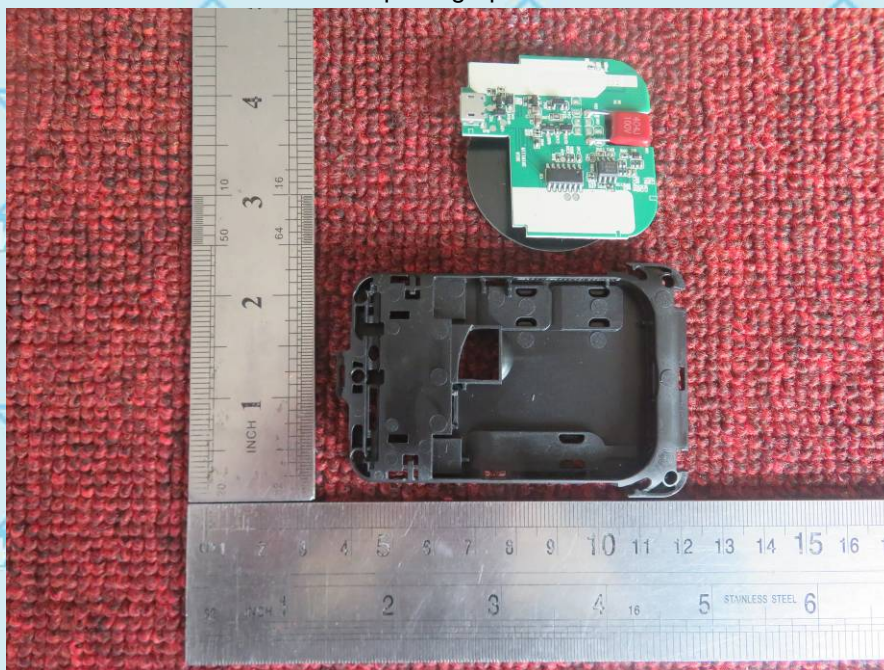


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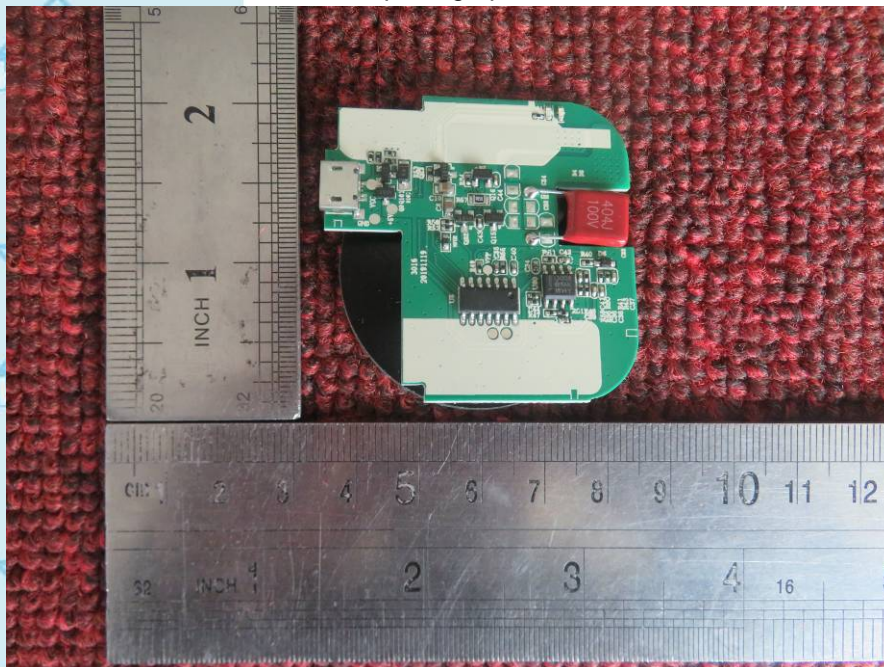


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Internal photograph of EUT



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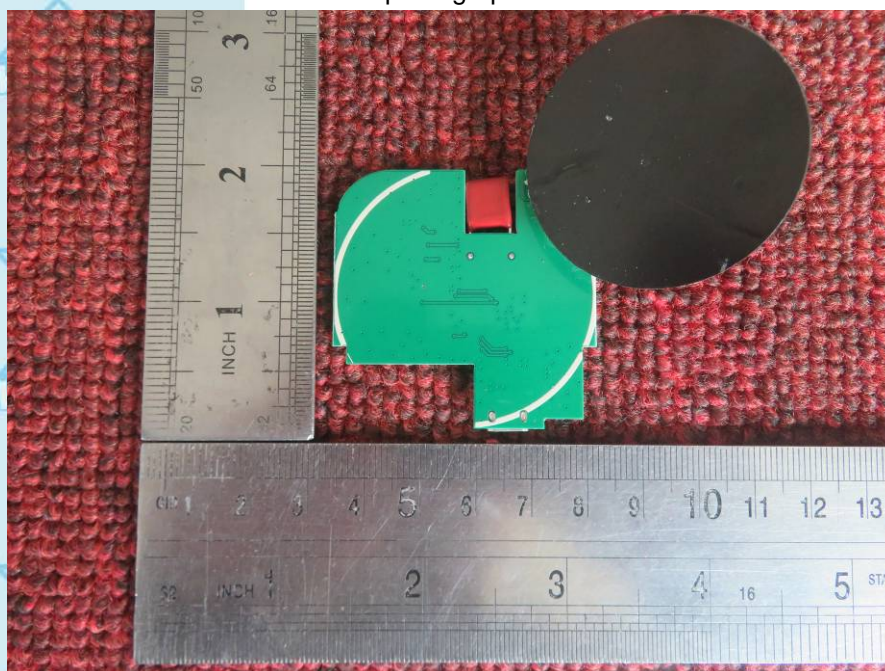
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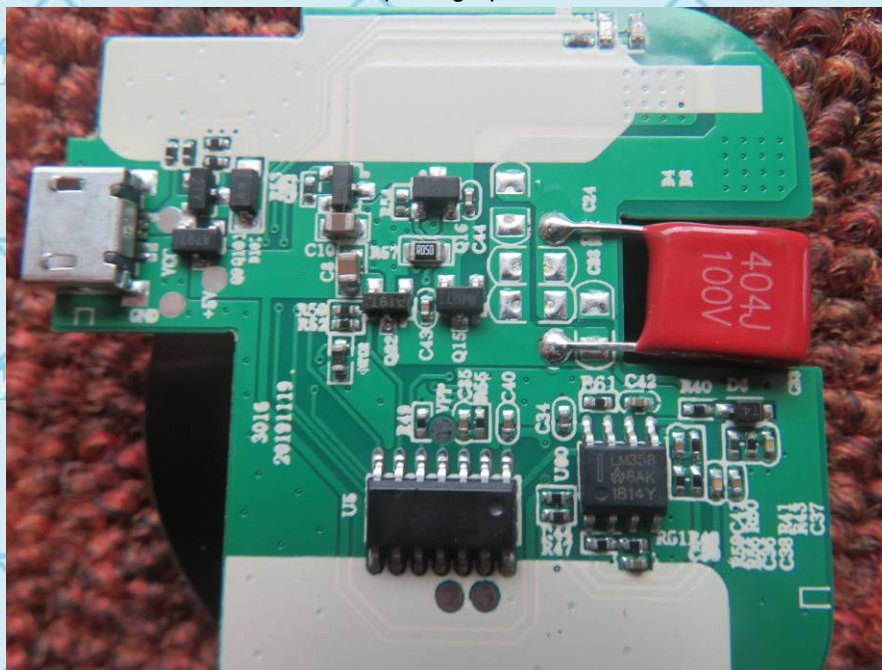
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