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FCC TEST REPORT

Client Name : Anker Innovations Limited

Address Room 1318-19, Hollywood Plaza, 610 Nathan Road,

Mongkok, Kowloon, Hong Kong

Product Name : PowerWave 10 Dual Pad

Date : May 09, 2019

Shenzhen Anbotek Compliance Laboratory Limited



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TEST REPORT

Applicant : Anker Innovations Limited

Manufacturer : Anker Innovations Limited

Product Name : PowerWave 10 Dual Pad

Model No. : A2571

Trade Mark : ANKER

Rating(s) : Input: DC 12V, 3A

Output: 10W x 2

Test Standard(s) : FCC Part 1.1310, 1.1307(b)

Test Method(s) : KDB680106 D01 RF Exposure Wireless Charging Apps v03

The device described above is tested by Shenzhen Anbotek Compliance Laboratory Limited to determine the maximum emission levels emanating from the device and the severe levels of the device can endure and its performance criterion. The measurement results are contained in this test report and Shenzhen Anbotek Compliance Laboratory Limited is assumed full of responsibility for the accuracy and completeness of these measurements. Also, this report shows that the EUT (Equipment Under Test) is technically compliant with the FCC Part 1.1307 & KDB680106 D01 requirements.

This report applies to above tested sample only and shall not be reproduced in part without written approval of Shenzhen Anbotek Compliance Laboratory Limited.

Date of Receipt	Apr. 25, 2019
Date of Test	Apr. 25~May 06, 2019
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Prepared By	otek Amboten J botek Ambote A
*Approved *	(Engineer / Oliay Yang)
Anbo kek Abotek botek	And Stek Anbotek abov An hotek Anbotek
	Snavy Meng
Reviewer	Anbot An Anbo
botek Anboter Anb stek Anbote	(Supervisor / Snowy Meng)
	otek Anbote Ann Mex Inbotek Anbot. A
Anbotek Anbotek Anbote An	Sally Zhong
Approved & Authorized Signer	Tun Tek Dotek Nor Will Hek Dotek
	(Manager / Sally Zhang)

Shenzhen Anbotek Compliance Laboratory Limited



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1. General Information

1.1. Client Information

Applicant	: Anker Innovations Limited
Address	Room 1318-19, Hollywood Plaza, 610 Nathan Road, Mongkok, Kowloon, Hong Kong
Manufacturer	: Anker Innovations Limited
Address	Room 1318-19, Hollywood Plaza, 610 Nathan Road, Mongkok, Kowloon, Hong Kong
Factory	: SHENZHEN RUIJING INDUSTRIAL CO., LTD
Address	Building C1, Hengli Industrial Park, Xiakeng 1st Road No.168, Longgang Street, Longgang District, Shenzhen, Guangdong, China

1.2. Description of Device (EUT)

Product Name	:	PowerWave 10 Dual Pad	otek Anbotek Anbote Anbotek				
Model No.	:	A2571	nbotek Anbotek Anbotek Anbotek				
Trade Mark	:	ANKER	Anbotek Anbotek Anbotek Anbotek				
Test Power Supply	:	AC 120V, 60Hz for adapter					
Test Sample No.	:	1-2-1(Normal Sample), 1-2-2(Engineering Sample)					
		Operation Frequency:	110.1-205KHz				
Product		Modulation Type:	MSK				
Description	•	Antenna Type:	Inductive loop coil Antenna				
		Antenna Gain(Peak):	0 dBi				

Remark: 1) For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.

1.3. Auxiliary Equipment Used During Test

6	Adapter	:	MODEL: ASSA79A-120300				lod's
. 10			INPUT: 100-240V~ 50/60Hz, 1.2A				bu.
0.			OUTPUT: 12.0V== 3.0A	upor -k	Air	Anbotek	PL

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Hotline 400-003-0500



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1.4. Test Equipment List

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1 tek	Magnetic field meter	NARDA	ELT-400	423623	Dec. 24, 2018	1 Year
2	E-Field Probe	Narda	EF0391	Q15221	Nov.17, 2017	3 Year
3	H-Field Probe	Narda	HF3061	Q15835	Nov.17, 2017	3 Year

1.5. Measurement Uncertainty

Radiation Uncertainty	:	Ur = 3.9 dB (Horizontal)	Auport Ar	anbotek Ar	ipotek An
P		Ur = 3.8 dB (Vertical)	Anboatek	nbotek	Anbote
		ek abotek Anbotek	k Anbo	Anbotek	Anbore
Conduction Uncertainty	:	Uc = 3.4 dB	re. Yup	ek Anbotek	Anboro

1.6. Description of Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

FCC-Registration No.: 184111

Shenzhen Anbotek Compliance Laboratory Limited, EMC Laboratory has been registed and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration No. 184111, July 31, 2017.

ISED-Registration No.: 8058A-1

Shenzhen Anbotek Compliance Laboratory Limited, EMC Laboratory has been registered and fully described in a report filed with the (ISED) Innovation, Science and Economic Development Canada. The acceptance letter from the ISED is maintained in our files. Registration 8058A-1, June 13, 2016.

Test Location

Shenzhen Anbotek Compliance Laboratory Limited.

1/F, Building D, Sogood Science and Technology Park, Sanwei community, Hangcheng Street, Bao'an District, Shenzhen, Guangdong, China. 518102



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2. Measurement and Result

2.1. Requirements

According to the item 5.b) of KDB 680106 D01v03:

Inductive wireless power transfer applications that meet all of the following requirements are excluded from submitting an RF exposure evaluation.

- 1) Power transfer frequency is less that 1 MHz
- 2) Output power from each primary coil is less than or equal to 15 watts.
- 3) The transfer system includes only single primary and secondary coils. This includes charging systems that may have multiple primary coils and clients that are able to detect and allow coupling only between individual pairs of coils
- 4) Client device is inserted in or placed directly in contact with the transmitter
- 5) Mobile exposure conditions only (portable exposure conditions are not covered by this exclusion)
- 6) The aggregate H-field strengths at 15 cm surrounding the device and 20 cm above the top surface from all simultaneous transmitting coils are demonstrated to be less than 50% of the MPE limit.

Limits For Maximum Permissible Exposure (MPE)

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm²)	Averaging time (minutes)					
(A) Limits for Occupational/Controlled Exposures									
0.3-3.0	614	1.63	*(100)	6					
3.0-30	1842/f	4.89/f	*(900/f ²)	6					
30-300	61.4	0.163	1.0	6					
300-1500	/	/	f/300	6					
1500-100,000	1	1	5	6					
	(B) Limits for Genera	l Population/Uncontrolle	ed Exposure						
0.3-1.34	614	1.63	*(100)	30					
1.34-30	824/f	2.19/f	*(180/f ²)	30					
30-300	27.5	0.073	0.2	30					
300-1500	1	1	f/1500	30					
1500-100,000	/	/	1.0	30					

F=frequency in MHz

RF exposure compliance will need to be determined with respect to 1.1307(c) and (d) of the FCC rules. The emissions should be within the limits at 300kHz in Table 1 of 1.1310(use the 300kHz limits for 150kHz:614V/m,1.63A/m).

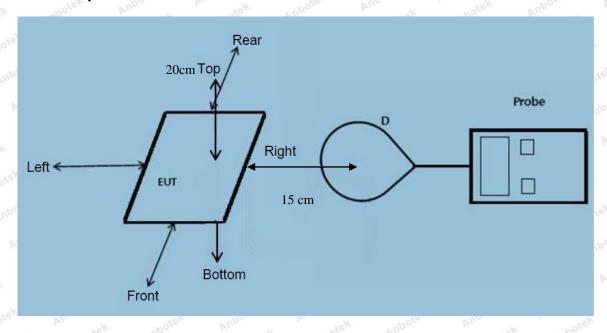
Hotline 400-003-0500

^{*=}Plane-wave equivalent power density



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2.2. Test Setup



Note: Measurements should be made at 15 cm surrounding the EUT and 20cm above the top surface of the EUT.

2.3. Test Procedure

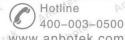
- 1) The RF exposure test was performed in anechoic chamber.
- 2) The measurement probe was placed at required test distance which is between the edge of the charger and the geometric center of probe.
- 3) The highest emission level was recorded and compared with limit as soon as measurement of each points
- (A, B, C, D, E) were completed.(A is the right, B is the back, C is the left, D is the front, and E is the top.)
- 4) The EUT was measured according to the dictates of KDB 680106 D01 v03.

The EUT's test position A, B, C, D and E is valid for the E and H field measurements.

2.4. Test Result

- 2.4.1. Equipment Approval Considerations item 5.b of KDB 680106 D01 v03.
- 1) Power transfer frequency is less that 1 MHz
- The device operate in the frequency range 110.1-205KHz.
- 2) Output power from each primary coil is less than 15 watts
 - The maximum output power of the primary coil is 10W.

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- 3) The transfer system includes only single primary and secondary coils. This includes charging systems that may have multiple primary coils and clients that are able to detect and allow coupling only between individual pairs of coils
- The transfer system including a charging system with only single primary coils is to detect and allow only between individual pairs of coils.
- 4) Client device is inserted in or placed directly in contact with the transmitter
- Client device is placed directly in contact with the transmitter.
- 5) Mobile exposure conditions only (portable exposure conditions are not covered by this exclusion)
- The EUT is a Mobile Power Pack with Wireless Charger
- 6) The aggregate H-field strengths at 15 cm surrounding the device and 20 cm above the top surface from all simultaneous transmitting coils are demonstrated to be less than 50% of the MPE limit.
- Conducted the measurement with the required distance and the test results please refer to the section 2.4.



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2.4.2. Environmental evaluation and exposure limit according to FCC CFR 47 part 1, 1.1307(b), 1.1310

Temperature:	23.9°C	Relative Humidity:	54 %
Pressure:	1012 hPa	Test Voltage:	AC 120V, 60Hz for adapter

E-Field Strength at 15 cm surrounding the EUT and 20cm above the top surface of the EUT

VUP	191-	2000	by.	AC L	0,00	100	You	2001
Battery	Frequency	Test	Test	Test 📉	Test	Test	Reference	Limits
	Range	Position	Position	Position	Position	Position	Limit	Test
power	(KHz)	kek A Ani	B A	C	Ant Diek	PE S	(V/m)	(V/m)
Dien Mu	wotek a	botek	Aupor	Andotek	Anbotek	N Vupos	otek Anbo	CEK PL
1%	110.1-205	0.34	0.33	0.26	0.48	0.82	307	614
Anbote.	And	Anbotek	Anbor	ek w	otek M	poter	Yupo ofek	Anbotek
Anbore	k Ann hotek	Anbote	K Aupo	tek by	nbotek	Anboten	Anbanotek	
50%	110.1-205	1.43	1.26	1.27	1.35	1.24	307	614
otek Ant	Jose Ans	wotek !	inpotek	Anbo	A. botek	Anbore	Y And	ek no
nbotek	Anbore Ar	hotek	Anbotek	Anbo	k Anhol	ek Anh	oter And	
99%	110.1-205	2.26	2.13	2.74	2.34	2.36	307	614
All		Anbo	K Anbol	ek Aup	oke. An	botek	Anbotek	
Ctond b	k Anbote	VK VUD	otek an	potek P	upor	All	Anbotek	Aupo
Stand-b v	110.1-205	0.38	0.45	0.59	0.85	0.62	307	614
FEK W.	abotek An	pote. P	in hotek	Anbotek	Pupor	o.k	otek Anbot	Su Vul



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H-Field Strength at 15 cm surrounding the EUT and 20cm above the top surface of the EUT

0.7		101	10 P		-10	400	The second secon	-
Pottony	Frequency	Test	Test	Test	Test	Test	Reference	Limits
Battery	Range	Position	Position	Position	Position	Position	Limit Cho	Test
power	(KHz)	Anb A	An B workey	Canbot	K D Anbe	E Ann	(A/m)	(A/m)
Anbo	Anbotek	Anbore	K PUL	tek Ant	otek V	100 P	nbotek	Anbote
1%	110.1-205	0.055	0.051	0.053	0.035	0.056	0.815	1.63
Anbo		tek Ani	oter A	hotek	Anbotek	Anbore	Annabotek	Anb
ter Yu	otek k	obotek	Anbolo	Ann	Anbotek	Anbot	lek abot	3.K
50%	110.1-205	0.27	0.43	0.52	0.36	0.44	0.815	1.63
Anbotek		All	Anboten	K Anbo	otek pr	botek A	pore An	botek
Anbotek	Anboatek	Anbote	k Aupo	ie. Vur	notek	Anbotek	Anbore	All abote
99%	110.1-205	0.54	0.53	0.47	0.35	0.36	0.815	1.63
ek Ant	otek Anbo	Tek VIII	abotek	Anboten	Anbo	Anbotek	Anbore	K Ann
Otomal k	inbotek Ar	loo.	Anbotek	Anboten	Ans	ek Anbo	ek Anbor	otek b
Stand-b	110.1-205	0.42	0.28	0.34	0.53	0.33	0.815	1.63
Aupok		Anbore	P.L.	ek anb	Ster Mu	Do K	hotek	Anbote.

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