

# **FCC Test Report**

Report No.: AGC04094190402FE01

**PRODUCT DESIGNATION**: Bobby tech(solar power bank)

**BRAND NAME** : N/A

**MODEL NAME** : P705.251

**CLIENT** : Xindao B.V.

**DATE OF ISSUE** : Apr.22, 2019

**STANDARD(S)** : FCC Part 15 Subpart B

**REPORT VERSION** : V1.0

## Attestation of Global Compliance (Shenzhen) Co., Ltd

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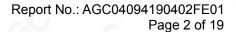




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#### REPORT REVISE RECORD

9	Report Version	Revise Time	Issued Date	Valid Version	Notes
1	V1.0	o 1	Apr.22, 2019	Valid	Initial release



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#### 1. VERIFICATION OF CONFORMITY

Applicant	Xindao B.V.
Address	P.O. Box 3082, 2280 GB, Rijswijk, The Netherlands
Manufacturer	Xindao B.V.
Address	P.O. Box 3082, 2280 GB, Rijswijk, The Netherlands
Factory	Xindao B.V.
Address	P.O. Box 3082, 2280 GB, Rijswijk, The Netherlands
Product Designation	Bobby tech(solar power bank)
Brand Name	N/A
Test Model	P705.251
Measurement Procedure	ANSI C63.4: 2014
Date of test	Apr.17, 2019 to Apr.19, 2019
Deviation	None
Condition of Test Sample	Normal
Test Result	Pass
Report Template	AGCRT-US-IT/DC(2013-03-01)

The above equipment was tested by Attestation of Global Compliance (Shenzhen) Co., Ltd. for compliance with the requirements set forth in the FCC Rules and Regulations Part 15, the measurement procedure according to ANSI C63.4:2014. This said equipment in the configuration described in this report shows the maximum emission levels emanating from equipment are within the compliance requirements.

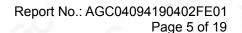
The test results of this report relate only to the tested sample identified in this report.

faler. Yang Tested By Faler Yang(Yang Feiyue) Apr.22, 2019 Lone 2hou Reviewed By Stone Zhou(Zhou Dong) Apr.22, 2019 Approved By Forrest Lei(Lei Yonggang) Apr.22, 2019 **Authorized Officer** 



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#### 2. SYSTEM DESCRIPTION

TEST MODE DESCRIPTION							
NO.	TEST MODE DESCRIPTION	WORST					
1	Full Load	(6)	V	70			
2	Half Load	30	-6	0			

#### Note:

#### 3. MEASUREMENT UNCERTAINTY

The uncertainty is calculated using the methods suggested in the "Guide to the Expression of Uncertainty in measurement" (GUM) published by CISPR and ANSI.

- Uncertainty of Radiated Emission, Uc = ±3.9 dB



<sup>1.</sup> V means EMI worst mode.

<sup>2.</sup> Only the data of the worst mode would be recorded in this report.



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#### 4. PRODUCT INFORMATION

Housing Type	Plastic and metal	100	c.C	0	
EUT Input Rating	DC 7V 1.3A			100	
EUT Output Rating	DC 5V 1.5A Max	a.C	0	-	70

I/O Port Information (⊠Applicable ☐Not Applicable)

I/O Port of EUT						
I/O Port Type	Number	Cable Description	Tested With			
USB	2	F CO	2			

#### Note:

- 1. All the above "--" means that EUT has no cable.
- 2. All the cables were provided by AGC Lab.





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#### 5. SUPPORT EQUIPMENT

Device Type	Device Type Manufacturer		Type Manufacturer Model Name Serial No.		Serial No.	Data Cable	Power Cable	
Resistor		z.6		-	0.8m unshielded			
Multimeter	VICTOR	VC9808	-2.0	<u>a</u>	0.9m unshielded			
Multimeter	FLUKE	15B+	40011565WS	CO C	0.9m unshielded			

#### Note:



<sup>1</sup> All the above equipment/cables were placed in worse case positions to maximize emission signals during emission test.



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#### 6. TEST FACILITY

Site	Attestation of Global Compliance (Shenzhen) Co., Ltd
Location	1-2/F, Building 19, Junfeng Industrial Park, Chongqing Road, Heping Community, Fuhai Street, Bao 'an District, Shenzhen, Guangdong, China

#### **TEST EQUIPMENT OF RADIATED EMISSION TEST**

Equipment	Manufacturer	Model	S/N	Cal. Date	Cal. Due	
TEST RECEIVER	R&S	ESCI	10096	Jun.12, 2018	Jun.11, 2019	
ANTENNA	SCHWARZBECK	VULB9168	D69250	Sep.28, 2017	Sep.27, 2019	





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#### 7. TEST ITEMS AND THE RESULTS

Test item	Test Requirement	Test Method	Class/Severity	Result
CONDUCTED EMISSION	FCC Part 15 Subpart B	ANSI C63.4	Class B	N/A
RADIATED EMISSION	FCC Part 15 Subpart B	ANSI C63.4	Class B	Pass

Note: N/A means not applicable.





#### 8. FCC RADIATED EMISSION TEST

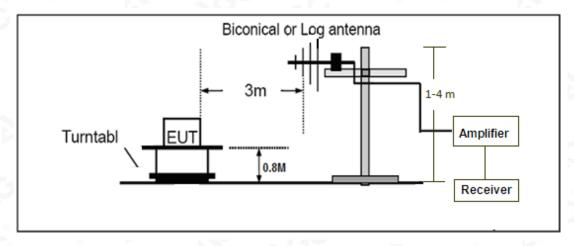
#### 8.1. LIMITS OF RADIATED EMISSION TEST

Frequency (MHz)	Distance (m)	Maximum Field Strength Limit (dBuV/m/ Q.P.)		
30~88	3	40.0		
88~216	3	43.5		
216~960	3	46.0		
Above 960	3	54.0		

Note: The lower limit shall apply at the transition frequency.

#### 8.2. BLOCK DIAGRAM OF TEST SETUP

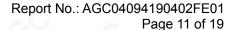
System Diagram of Connections between EUT and Simulators





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#### 8.3. PROCEDURE OF RADIATED EMISSION TEST

- (1) The equipment was set up as per the test configuration to simulate typical actual usage per the user's manual. When the EUT is a tabletop system, a wooden turntable with a height of 0.8 meters is used which is placed on the ground plane as per ANSI C63.4 (see Test Facility for the dimensions of the ground plane used). When the EUT is floor-standing equipment, it is placed on the ground plane which has a 3-12 mm non-conductive covering to insulate the EUT from the ground plane.
- (2) Support equipment, if needed, was placed as per ANSI C63.4.
- (3) All I/O cables were positioned to simulate typical actual usage as per ANSI C63.4.
- (4) The EUT was discharged from resistor.
- (5) The antenna was placed at 3 meter away from the EUT as stated in FCC Part 15. The antenna connected to the Analyzer via a cable and at times a pre-amplifier would be used.
- (6) The Analyzer / Receiver quickly scanned from 30MHz to 1000MHz. The EUT test program was started. Emissions were scanned and measured rotating the EUT to 360 degrees and positioning the antenna 1 to 4 meters above the ground plane, in both the vertical and the horizontal polarization, to maximize the emission reading level.
- (7) The test mode(s) were scanned during the test:
- (8) Recorded at least the six highest emissions. Emission frequency, amplitude, antenna position, polarization and turntable position were recorded into a computer in which correction factors were used to calculate the emission level and compare reading to the applicable limit and Q.P./Peak reading is presented.



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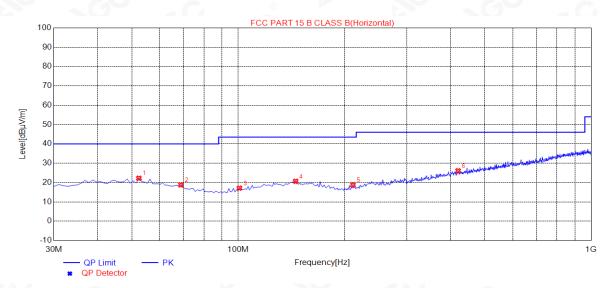
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#### 8.4. TEST RESULT OF RADIATED EMISSION TEST

#### Radiated Emission Test at 3m Distance-Horizontal



	Suspected Data List								
	NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
I	1	52.3100	22.22	14.49	40.00	17.78	100	30	Horizontal
	2	68.8000	18.77	12.43	40.00	21.23	150	260	Horizontal
	3	100.8100	17.10	11.46	43.50	26.40	200	260	Horizontal
	4	145.4300	20.64	14.88	43.50	22.86	200	320	Horizontal
	5	211.3900	18.74	12.74	43.50	24.76	200	270	Horizontal
	6	419.9400	26.07	20.25	46.00	19.93	100	350	Horizontal

**RESULT: PASS** 

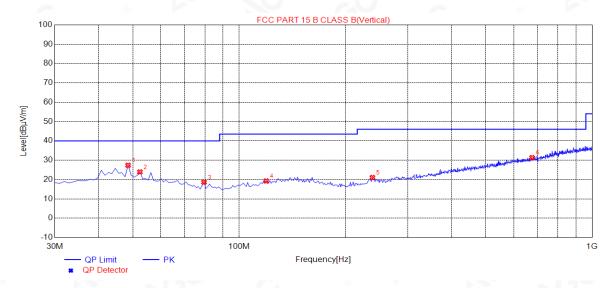


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#### Radiated Emission Test at 3m Distance-Vertical



Suspected Data List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	48.4300	27.38	14.71	40.00	12.62	100	350	Vertical
2	52.3100	23.91	14.49	40.00	16.09	150	330	Vertical
3	79.4700	18.58	10.26	40.00	21.42	200	240	Vertical
4	119.2400	19.25	13.39	43.50	24.25	100	10	Vertical
5	238.5500	21.04	14.73	46.00	24.96	200	200	Vertical
6	676.0200	31.33	25.57	46.00	14.67	150	340	Vertical

#### **RESULT: PASS**

Note:

Level(dBuV/m)=Reading(dBuV)+Factor(dB/m)

Factor(dB/m)=Antenna Factor(dB/m)+Cable loss(dB)+Attenuation(dB)for Attenuator

Margin= Limit-Level

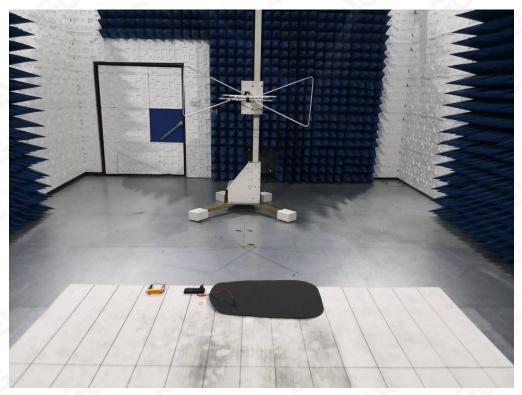


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## **APPENDIX A: PHOTOGRAPHS OF TEST SETUP**

FCC RADIATED EMISSION TEST SETUP



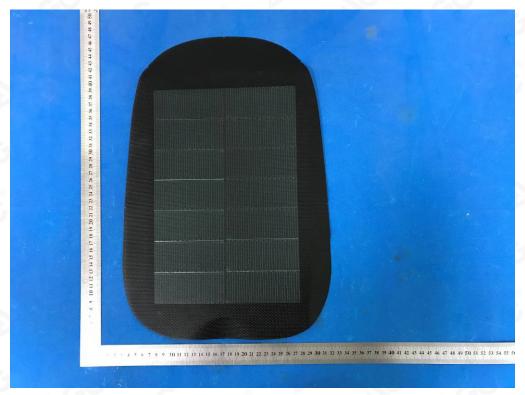


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#### **APPENDIX B: PHOTOGRAPHS OF EUT**

TOP VIEW OF EUT



**BOTTOM VIEW OFEUT** 



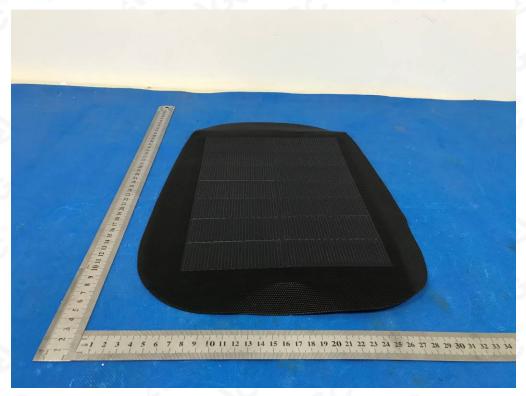


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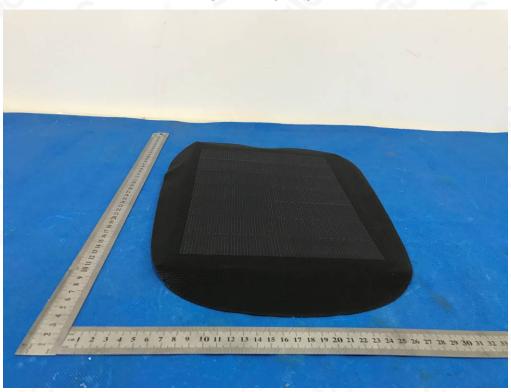
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#### FRONT VIEW OFEUT



**BACK VIEW OF EUT** 



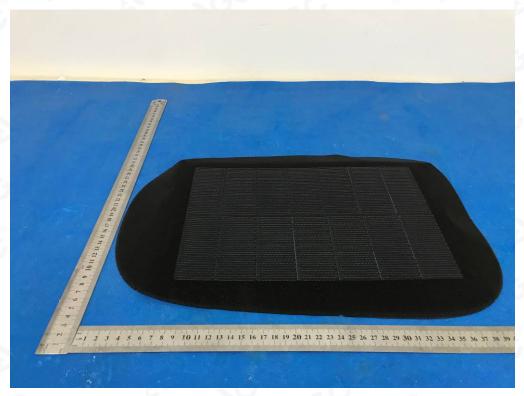


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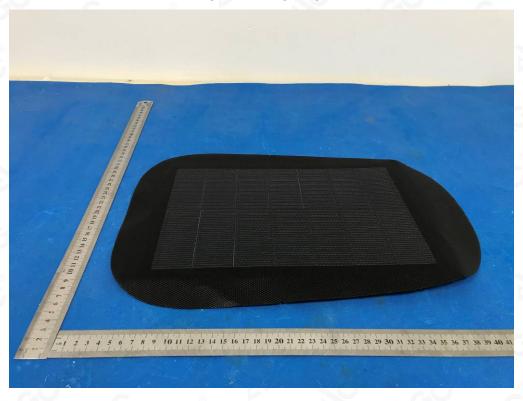
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#### LEFT VIEW OF EUT



RIGHT VIEW OF EUT

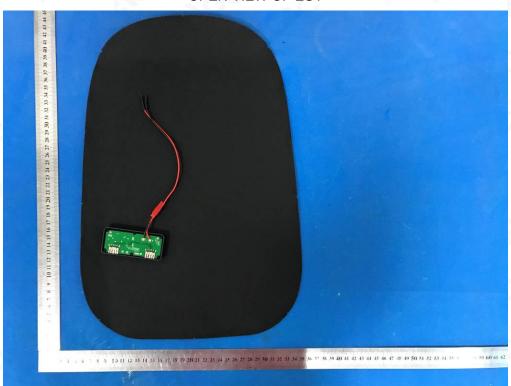




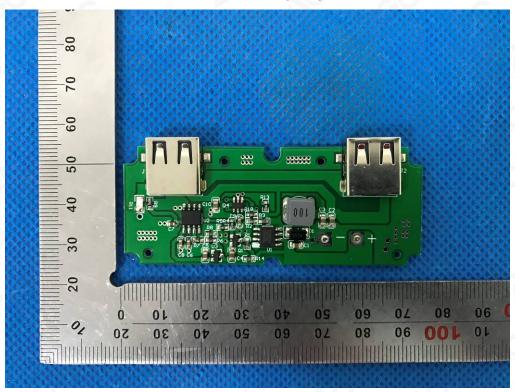
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#### **OPEN VIEW OF EUT**



#### **INTERNAL VIEW OF EUT-1**



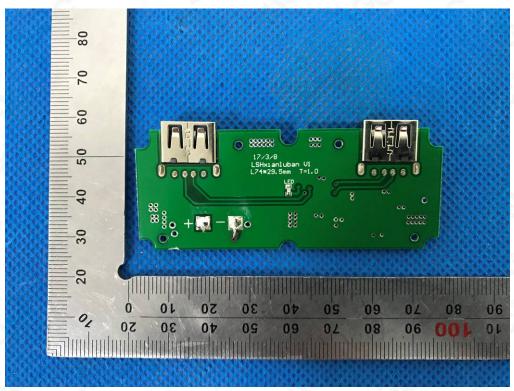


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#### **INTERNAL VIEW OF EUT-2**



-END OF REPORT----



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