

Report No.: TBR-C-202211-0111-83 Page: 1 of 29

# **FCC Radio Test Report**

### FCC ID:2AUDF-DB2

Report No.	:	TBR-C-202211-0111-83
Applicant	:	Shenzhen ADDX Innovation Technology co., LTD.
Equipment Under	·Te	est (EUT)
EUT Name	4	Smart Battery Video Doorbell
Model No.	:	DB2
Serial Model No.	1	
Brand Name	:	THE LEAD LEAD
Sample ID	:	202211-0111-1-1 & 202211-0111-1-2
Receipt Date	2	2022-11-16
Test Date	-	2022-11-16 to 2023-01-06
Issue Date	:	2023-02-01
Standards		FCC Part 15, Subpart C 15.249
Test Method		ANSI C63.10: 2013
Conclusions	÷	PASS

In the configuration tested, the EUT complied with the standards specified above,

The EUT technically complies with the FCC requirements

Countle 4

LVAN SU Roughai.

**Test/Witness Engineer** 

**Engineer Supervisor** 

**Engineer Manager** 

This report details the results of the testing carried out on one sample. The results contained in this test report do not relate to other samples of the same product. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in the report.

Ray Lai

#### TB-RF-074-1.0



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# **Revision History**

Report No.	Version	Description	Issued Date
TBR-C-202211-0111-83	Rev.01	Initial issue of report	2023-02-01
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## 1. General Information about EUT

#### 1.1 Client Information

TOBY

Applicant	cant : Shenzhen ADDX Innovation Technology co., LTD.			
Address :		NO.2902, Building 9A-1.Shenzhen Bay Technology and Ecological Park, Nanshan District, Shenzhen, China		
Manufacturer	Manufacturer : Shenzhen ADDX Innovation Technology co., LTD.			
Address :		NO.2902, Building 9A-1.Shenzhen Bay Technology and Ecological Park, Nanshan District, Shenzhen, China		

### 1.2 General Description of EUT (Equipment Under Test)

EUT Name	:	Smart Battery Video Doorbell			
Model(s)	:	DB2			
Model Difference	-				
TURN T		Operation Frequency: 9	Operation Frequency: 915MHz		
		Number of Channel:	1 Channel		
Product		Out Power:	77.80dBuV/m@3m Peak		
Description		Antenna Gain:	-0.49dBi FPC Antenna		
	5	Modulation Type:	ООК		
		Data Rate:	40kbps		
Power Poting		Input: DC 5V, 1.5A			
Power Rating		DC 3.7V by 5000mAh Rechargeable Li-ion battery			
Software Version	:	V0.9.1	V0.9.1		
Hardware Version	•	DB223_C01_V4			
Connecting I/O Port(S)	:	Please refer to the User's Manual			

#### Note:

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



1.3 Block Diagram Showing the Configuration of System Tested

TX Mode



1.4 Description of Support Units

The EUT has been test as independent unit.



#### 1.5 Description of Test Mode

To investigate the maximum EMI emission characteristics generates from EUT, the test system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned follow was evaluated respectively.

For Conducted Test				
Final Test Mode Description				
Mode 1 TX Mode(915MHz)				
	For Radiated Test			
Final Test Mode Description				
Mode 1 TX Mode(915MHz)				

#### Note:

For all test, we have verified the construction and function in typical operation. And all the test modes were carried out with the EUT in transmitting operation in maximum power with all kinds of data rate.

(1)According to ANSI C63.10 standards, the measurements are performed at the highest, middle, lowest available channels.

(2)During the testing procedure, the continuously transmitting with the maximum power mode was programmed by the customer.

(3) The EUT is considered a portable unit; it was pre-tested on the positioned of each 3 axis, X-plane, Y-plane and Z-plane. The worst case was found positioned on X-plane. Therefore only the test data of this X-plane was used for radiated emission measurement test.

#### 1.6 Description of Test Software Setting

During testing channel & Power controlling software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product power parameters of RF mode.

Test Software Version	N/A	
Frequency	915MHz	
FSK	DEF	



#### 1.7 Measurement Uncertainty

The reported uncertainty of measurement y  $\pm$  U, where expended uncertainty U is based on a standard uncertainty multiplied by a coverage factor of k=2, providing a level of confidence of approximately 95 %.

Test Item	Parameters	Expanded Uncertainty (U <sub>Lab</sub> )
	Level Accuracy:	I BANK
Conducted Emission	9kHz~150kHz	±3.42 dB
	150kHz to 30MHz	±3.42 dB
Radiated Emission	Level Accuracy:	±4.60 dB
Radiated Emission	9kHz to 30 MHz	±4.00 UB
Radiated Emission	Level Accuracy:	±4.40 dB
Radiated Emission	30MHz to 1000 MHz	±4.40 0D
Radiated Emission	Level Accuracy:	±4.20 dB
	Above 1000MHz	14.20 00



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#### 1.8 Test Facility

The testing report were performed by the Shenzhen Toby Technology Co., Ltd., in their facilities located at 1/F., Building 6, Rundongsheng Industrial Zone, Longzhu, Xixiang, Bao'an District, Shenzhen, Guangdong, China. At the time of testing, the following bodies accredited the Laboratory:

#### **CNAS (L5813)**

The Laboratory has been accredited by CNAS to ISO/IEC 17025: 2017 General Requirements for the Competence of Testing and Calibration Laboratories for the competence in the field of testing. And the Registration No.: CNAS L5813.

#### A2LA Certificate No.: 4750.01

The laboratory has been accredited by American Association for Laboratory Accreditation(A2LA) to ISO/IEC 17025: 2017 General Requirements for the Competence of Testing and Calibration Laboratories for the technical competence in the field of Electrical Testing. And the A2LA Certificate No.: 4750.01.FCC Accredited Test Site Number: 854351. Designation Number: CN1223.

#### IC Registration No.: (11950A)

The Laboratory has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing. The site registration: Site# 11950A. CAB identifier: CN0056.



# 2. Test Summary

FCC Part 15 Subpart C(15.249)						
Standard Section	Test Item	Test Sample(s)	Judgment	Remark		
FCC		Test Sample(3)	Judgment	Keman		
15.203	Antenna Requirement	202211-0111-1-2	PASS	N/A		
15.205	Restricted Bands	202211-0111-1-1	PASS	N/A		
15.207	AC Power Conducted Emission	202211-0111-1-1	PASS	N/A		
15.249 &15.209	Radiated Spurious Emission	202211-0111-1-2	PASS	N/A		
15.215(C)	20dB Bandwidth	202211-0111-1-2	PASS	N/A		

# 3. Test Software

Test Item	Test Software	Manufacturer	Version No.
Conducted Emission	EZ-EMC	EZ	CDI-03A2
Radiation Emission	EZ-EMC	EZ	FA-03A2RE
RF Conducted Measurement	MTS-8310	MWRFtest	V2.0.0.0
RF Test System	JS1120	Tonscend	V2.6.88.0336



# 4. Test Equipment

Conducted Emission	on Test				
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Due Date
EMI Test Receiver	Rohde & Schwarz	ESCI	100321	Jun. 23, 2022	Jun. 22, 2023
RF Switching Unit	Compliance Direction Systems Inc	RSU-A4	34403	Jun. 23, 2022	Jun. 22, 2023
AMN	SCHWARZBECK	NNBL 8226-2	8226-2/164	Jun. 22, 2022	Jun. 21, 2023
LISN	Rohde & Schwarz	ENV216	101131	Jun. 22, 2022	Jun. 21, 2023
ISN	SCHWARZBECK	NTFM 8131	8131-193	Jun. 22, 2022	Jun. 21, 2023
ISN	SCHWARZBECK	CAT3 8158	cat3 5158-0094	Jun. 22, 2022	Jun. 21, 2023
ISN	SCHWARZBECK	NTFM5158	NTFM5158 0145	Jun. 22, 2022	Jun. 21, 2023
ISN	SCHWARZBECK	CAT 8158	cat5 8158-179	Jun. 22, 2022	Jun. 21, 2023
<b>Radiation Emission</b>	n Test (B Site)				
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Due Date
Spectrum Analyzer	Agilent	N9020A	MY49100060	Sep. 01, 2022	Aug. 31, 2023
Spectrum Analyzer	Rohde & Schwarz	FSV40-N	102197	Jun. 23, 2022	Jun. 22, 2023
EMI Test Receiver	Rohde & Schwarz	ESU-8	100472/008	Feb. 26, 2022	Feb.25, 2023
Bilog Antenna	SCHWARZBECK	VULB 9168	1225	Dec. 05, 2021	Dec. 04, 2023
Horn Antenna	SCHWARZBECK	BBHA 9120 D	2463	Feb. 26, 2022	Feb.25, 2024
Horn Antenna	SCHWARZBECK	BBHA 9170	1118	Jun. 26, 2022	Jun.25, 2024
Loop Antenna	SCHWARZBECK	FMZB 1519 B	1519B-059	Jun. 26, 2022	Jun.25, 2024
HF Amplifier	Tonscend	TAP9E6343	AP21C806117	Sep. 01, 2022	Aug. 31, 2023
HF Amplifier	Tonscend	TAP051845	AP21C806141	Sep. 01, 2022	Aug. 31, 2023
HF Amplifier	Tonscend	TAP0184050	AP21C806129	Sep. 01, 2022	Aug. 31, 2023
Antenna Conducte	d Emission				
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Due Date
Spectrum Analyzer	Agilent	E4407B	MY45106456	Jun. 23, 2022	Jun. 22, 2023
Spectrum Analyzer	Rohde & Schwarz	FSV40-N	102197	Jun. 23, 2022	Jun. 22, 2023
MXA Signal Analyzer	KEYSIGT	N9020B	MY60110172	Sep. 01, 2022	Aug. 31, 2023
MXA Signal Analyzer	Agilent	N9020A	MY47380425	Sep. 01, 2022	Aug. 31, 2023
Vector Signal Generator	Agilent	N5182A	MY50141294	Sep. 01, 2022	Aug. 31, 2023
Analog Signal Generator	Agilent	N5181A	MY48180463	Sep. 01, 2022	Aug. 31, 2023
Vector Signal Generator	KEYSIGT	N5182B	MY59101429	Sep. 01, 2022	Aug. 31, 2023
Analog Signal Generator	KEYSIGHT	N5173B	MY61252685	Dec. 15, 2022	Dec. 14, 2023
	DARE!! Instruments	RadiPowerRPR3006W	17100015SNO26	Sep. 01, 2022	Aug. 31, 2023
RF Power Sensor	DARE!! Instruments	RadiPowerRPR3006W	17100015SNO29	Sep. 01, 2022	Aug. 31, 2023
NE FOWEI SENSOI	DARE!! Instruments	RadiPowerRPR3006W	17100015SNO31	Sep. 01, 2022	Aug. 31, 2023
er:	DARE!! Instruments	RadiPowerRPR3006W	17100015SNO33	Sep. 01, 2022	Aug. 31, 2023
RF Control Unit	Tonsced	JS0806-1	21C8060380	N/A	N/A
RF Control Unit	Tonsced	JS0806-2	21F8060439	Sep. 01, 2022	Aug. 31, 2023
Band Reject Filter Group	Tonsced	JS0806-F	21D8060414	Jun. 23, 2022	Jun. 22, 2023
Power Control Box	Tonsced	JS0806-4ADC	21C8060387	N/A	N/A



Wideband Radio Comunication Tester	Rohde & Schwarz	CMW500	144382	Sep. 01, 2022	Aug. 31, 2023
Universal Radio Communication Tester	Rohde&Schwarz	CMW500	168796	Jun. 23, 2022	Jun. 22, 2023
Temperature and Humidity Chamber	ZhengHang	ZH-QTH-1500	ZH2107264	Jun. 22, 2022	Jun. 21, 2023



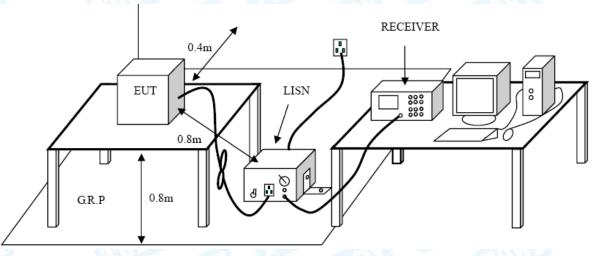
### 5. Conducted Emission Test

- 4.1 Test Standard and Limit
  - 4.1.1Test Standard FCC Part 15.207
  - 4.1.2 Test Limit

	Maximum RF Line Voltage (dBμV)				
Frequency	Quasi-peak Level	Average Leve			
150kHz~500kHz	66 ~ 56 *	56 ~ 46 *			
500kHz~5MHz	56	46			
5MHz~30MHz	60	50			

#### Notes:

- (1) \*Decreasing linearly with logarithm of the frequency.
- (2) The lower limit shall apply at the transition frequencies.
- (3) The limit decrease in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.
- 4.2 Test Setup



#### 4.3 Test Procedure

The EUT was placed 0.8 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.

Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back



and forth in the center forming a bundle 30 to 40 cm long.

I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.

LISN is at least 80 cm from nearest part of EUT chassis.

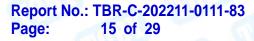
The bandwidth of EMI test receiver is set at 9kHz, and the test frequency band is from 0.15MHz to 30MHz.

4.4 EUT Operating Mode

Please refer to the description of test mode.

4.5 Test Data

Please refer to the Attachment A.





### 6. Radiated Emission Test

- 5.1 Test Standard and Limit
  - 5.1.1 Test Standard
    - FCC Part 15.209
  - 5.1.2 Test Limit

#### Radiated Emission Limit (9kHz~1000MHz)

Frequency (MHz	Field Strength (microvolt/meter)	Measurement Distance (meters)
0.009~0.490	2400/F(KHz)	300
0.490~1.705	24000/F(KHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
Above 960	500	3

#### Radiated Emission Limit (Above 1000MHz)

	Frequency	Distance Meters (at 3m)		
	(MHz)	Peak	Average	
2	Above 1000	74	54	

#### Note:

- (1) The tighter limit applies at the band edges.
- (2) Emission Level(dBuV/m)=20log Emission Level(Uv/m)

#### Limits of radiated emission measurement (15.249)

FCC Part 15 (15.2	49), Subpart C				
Limit Frequency Range (MHz)					
Field strength of fundamental	2402 2402 5				
50000 μV/m (94 dBμV/m) @ 3 m	2400~2483.5				
Field strength of fundamental	Above 2422 5				
500 μV/m (94 dBμV/m) @ 3 m	Above 2483.5				

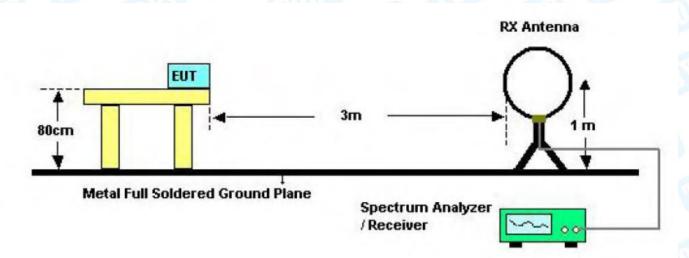
Restricted bands requirement for equipment operating in 2400MHz to 2483.5 MHz

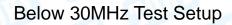


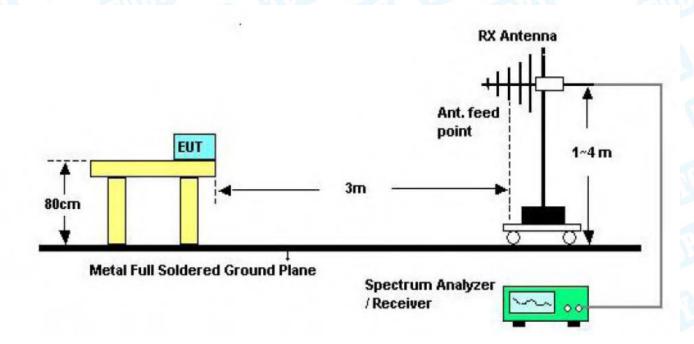
### (15.249)

Restricted Frequency Band (MHz)	(dBuV/m)(at 3 M)
2310~2390	Attenuated by at least 50 dB below the level
2483.5~2500	of the fundamental or to the general radiated emission limits in 15.209, whichever is the
	lesser attenuation

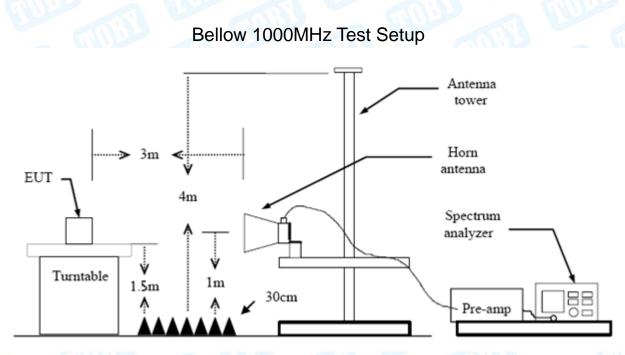
5.2 Test Setup











Above 1GHz Test Setup

#### 5.3 Test Procedure

- (1) The measuring distance of 3m shall be used for measurements at frequency Below 1GHz. The EUT was placed on a rotating 0.8m high above ground, the table was rotated 360 degrees to determine the position of the highest radiation.
- (2) Measurements at frequency above 1GHz. The EUT was placed on a rotating 1.5m high above the ground. RF absorbers covered the ground plane with a minimum area of 3.0m by 3.0m between the EUT and measurement receiver antenna. The RF absorber shall not exceed 30cm in high above the conducting floor. The table was rotated 360 degrees to determine the position of the highest radiation.
- (3) The Test antenna shall vary between 1m and 4m, Both Horizontal and Vertical antenna are set to make measurement.
- (4) The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- (5) If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit Bellow 1 GHz, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed. But the Peak Value and average value both need to comply with applicable limit above 1 GHz.
- (6) Testing frequency range below 1GHz the measuring instrument use VBW=120 kHz with Quasi-peak detection.
- (7) Testing frequency range above 1GHz the measuring instrument use RBW=1 MHz and VBW=3 MHz with Peak Detector for Peak Values, and use RBW=1 MHz and VBW=10 Hz with Peak Detector for Average Values.



(8) For the actual test configuration, please see the test setup photo.

5.4 EUT Operating Condition

The EUT was set to Continual Transmitting in maximum power, and new batteries are used during testing.

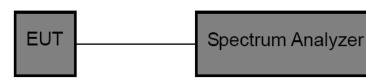
5.5 Test Data

Please refer to the Attachment B.



### 7. Bandwidth Test

6.1 Test Setup



#### 6.2 Test Procedure

- (1) The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram above.
- (2) Spectrum Setting:

Bandwidth: RBW=100 kHz, VBW=300kHz.

- (3) The bandwidth is measured at an amplitude level reduced 20dB from the reference level. The reference level is the level of the highest amplitude signal observed from the transmitter at the fundamental frequency. Once the reference level is established, the equipment is conditioned with typical modulating signal to produce the worst –case (i.e the widest) bandwidth.
- 6.3 EUT Operating Condition

The EUT was set to continuously transmitting for the Bandwidth Test.

6.4 Test Data

Please refer to the Attachment B.



### 8. Antenna Requirement

- 7.1 Standard Requirement
  - 7.1.1 Standard

FCC Part 15.203

7.1.2 Requirement

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this Section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

#### 7.2 Antenna Connected Construction

The gains of the antenna used for transmitting is -0.49dBi, and the antenna de-signed with permanent attachment and no consideration of replacement. Please see the EUT photo for details.

#### 7.3 Result

The EUT antenna is a FPC Antenna. It complies with the standard requirement.

	Antenna Type
103	▼ Permanent attached antenna
E	□ Unique connector antenna
25	Professional installation antenna



### **Attachment A-- Conducted Emission Test Data**

mperature:	<b>25.1</b> ℃	Relati	ive Humidity:	54%
st Voltage:	AC 120V/60Hz			10132
rminal:	Line	2 110-		
st Mode:	Mode 1		AUCH	200
mark:	Only worse cas	e is reported.		
	Muser at with			QP:
-20				

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector
1		0.1620	25.63	11.08	36.71	65.36	-28.65	QP
2		0.1620	9.71	11.08	20.79	55.36	-34.57	AVG
3		0.2380	19.95	10.94	30.89	62.16	-31.27	QP
4		0.2380	5.71	10.94	16.65	52.16	-35.51	AVG
5		0.4260	31.67	10.91	42.58	57.33	-14.75	QP
6	*	0.4260	23.56	10.91	34.47	47.33	-12.86	AVG
7		0.7019	20.30	10.88	31.18	56.00	-24.82	QP
8		0.7019	13.94	10.88	24.82	46.00	-21.18	AVG
9		0.8580	18.17	10.77	28.94	56.00	-27.06	QP
10		0.8580	12.17	10.77	22.94	46.00	-23.06	AVG
11		2.2060	13.65	10.43	24.08	56.00	-31.92	QP
12		2.2060	8.47	10.43	18.90	46.00	-27.10	AVG

TOBY

Remark: 1. Corr. Factor (dB) = LISN Factor (dB) + Cable Loss (dB)

2. Margin (dB) =QuasiPeak/Average (dBuV)-Limit (dBuV)



emperature	<b>e:</b> 25.1°	C		Relative Hur	nidity:	54%	
est Voltage	e: AC 1	20V/60Hz	A GU	L'ES	3		-
erminal:	Neutr	al		00		~	ALT:
est Mode:	Mode	• 1	-		6.0	133	-
emark:	Only	worse case i	s reported.				ABL)
30.0 dBu¥						QP:	
30 mm	n Ann	min man man			happenen of the	• AV6: • • • • • • • • • • • • • • • • • • •	pea AVI
0	0.5			5			20.000
0.150	0.5	Reading	(MHz)	-			30.000
NI-							
No. Mk.	Freq.	Level	Factor	Measure- ment	Limit	Over	
NO. MK.	Freq. MHz	<u> </u>			Limit dBuV	Over dB	Detecto
No. Mk.		Level	Factor	ment			Detecto
	MHz	Level dBuV	Factor dB	ment dBuV	dBuV 65.73	dB	QP
1	MHz 0.1548	Level dBuV 26.85	Factor dB 11.00	ment dBuV 37.85	dBuV 65.73 55.73	dB -27.88	QP
1 2	MHz 0.1548 0.1548	Level dBuV 26.85 8.28	Factor dB 11.00 11.00	ment dBuV 37.85 19.28	dBuV 65.73 55.73 57.37	dB -27.88 -36.45	QP AVC QP
1 2 3	MHz 0.1548 0.1548 0.4237	Level dBuV 26.85 8.28 30.19	Factor dB 11.00 11.00 10.89	ment dBuV 37.85 19.28 41.08	dBuV 65.73 55.73 57.37 47.37	dB -27.88 -36.45 -16.29	QP AVC QP AVC
1 2 3 4 *	MHz 0.1548 0.1548 0.4237 0.4237	Level dBuV 26.85 8.28 30.19 21.67	Factor dB 11.00 11.00 10.89 10.89	ment dBuV 37.85 19.28 41.08 32.56	dBuV 65.73 55.73 57.37 47.37 56.00	dB -27.88 -36.45 -16.29 -14.81	QP AVC QP AVC QP
1 2 3 4 * 5	MHz 0.1548 0.1548 0.4237 0.4237 0.6980	Level dBuV 26.85 8.28 30.19 21.67 17.33	Factor dB 11.00 11.00 10.89 10.89 10.87	ment dBuV 37.85 19.28 41.08 32.56 28.20	dBuV 65.73 55.73 57.37 47.37 56.00 46.00	dB -27.88 -36.45 -16.29 -14.81 -27.80	QP AVC QP AVC QP AVC
1 2 3 4 * 5 6	MHz 0.1548 0.1548 0.4237 0.4237 0.6980 0.6980	Level dBuV 26.85 8.28 30.19 21.67 17.33 9.83	Factor dB 11.00 11.00 10.89 10.89 10.87 10.87	ment dBuV 37.85 19.28 41.08 32.56 28.20 20.70	dBuV 65.73 55.73 57.37 47.37 56.00 46.00 56.00	dB -27.88 -36.45 -16.29 -14.81 -27.80 -25.30	QP AVC
1 2 3 4 * 5 6 7	MHz 0.1548 0.1548 0.4237 0.4237 0.6980 0.6980 0.8780	Level dBuV 26.85 8.28 30.19 21.67 17.33 9.83 15.75	Factor dB 11.00 11.00 10.89 10.89 10.87 10.87 10.77	ment dBuV 37.85 19.28 41.08 32.56 28.20 20.70 26.52	dBuV 65.73 55.73 57.37 47.37 56.00 46.00 56.00 46.00	dB -27.88 -36.45 -16.29 -14.81 -27.80 -25.30 -29.48	QP AVC QP AVC QP AVC QP AVC
1 2 3 4 * 5 6 7 8	MHz 0.1548 0.1548 0.4237 0.4237 0.6980 0.6980 0.6980 0.8780 0.8780	Level dBuV 26.85 8.28 30.19 21.67 17.33 9.83 15.75 8.46	Factor dB 11.00 11.00 10.89 10.89 10.87 10.87 10.77 10.77	ment dBuV 37.85 19.28 41.08 32.56 28.20 20.70 26.52 19.23	dBuV 65.73 55.73 57.37 47.37 56.00 46.00 56.00 56.00	dB -27.88 -36.45 -16.29 -14.81 -27.80 -25.30 -29.48 -26.77	QP AVC QP AVC QP AVC QP AVC QP
1 2 3 4 * 5 6 7 8 9	MHz 0.1548 0.1548 0.4237 0.4237 0.6980 0.6980 0.6980 0.8780 0.8780 1.5980	Level dBuV 26.85 8.28 30.19 21.67 17.33 9.83 15.75 8.46 13.31	Factor dB 11.00 11.00 10.89 10.89 10.87 10.87 10.77 10.77 10.61	ment dBuV 37.85 19.28 41.08 32.56 28.20 20.70 26.52 19.23 23.92	dBuV 65.73 55.73 57.37 47.37 56.00 46.00 56.00 46.00 56.00	dB -27.88 -36.45 -16.29 -14.81 -27.80 -25.30 -29.48 -26.77 -32.08	QP AVC QP AVC QP AVC QP

Remark: 1. Corr. Factor (dB) = LISN Factor (dB) + Cable Loss (dB)

2. Margin (dB) =QuasiPeak/Average (dBuV)-Limit (dBuV)



### **Attachment B-- Radiated Emission Test Data**

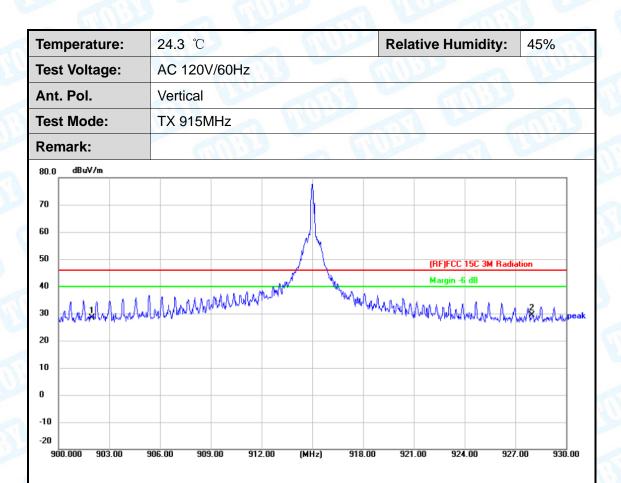
### Field Strength of the Fundamental

TOBY

Terr	perature:	<b>24.3</b> ℃		Relat	ive Humidity:	45%
Tes	t Voltage:	AC 120V/60Hz		-		an bl
Ant	. Pol.	Horizontal			- The second	
Tes	t Mode:	TX 915MHz	and		TU	2
Ren	nark:			ang)		100
80.0	dBuV/m					
70						
60						
50					(RF)FCC 15C 3M Rad	F. C.
					Margin -6 dB	Jation
40 30		Ader Anton March Ma	www.company.com	Marth Martin and Marth Martha	water water	NAME SHALL P
20	Anddo an and a sound of	adone a la cluita de attilitada esta esta esta esta esta esta esta est			Conservation of the conservation of	a colored finder of
10						
0						
-10						
-20						

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1 *	902.0000	35.08	-7.52	27.56	46.00	-18.44	peak
2	928.0000	34.44	-7.07	27.37	46.00	-18.63	peak





No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	902.0000	35.84	-7.52	28.32	46.00	-17.68	peak
2 *	928.0000	36.36	-7.07	29.29	46.00	-16.71	peak



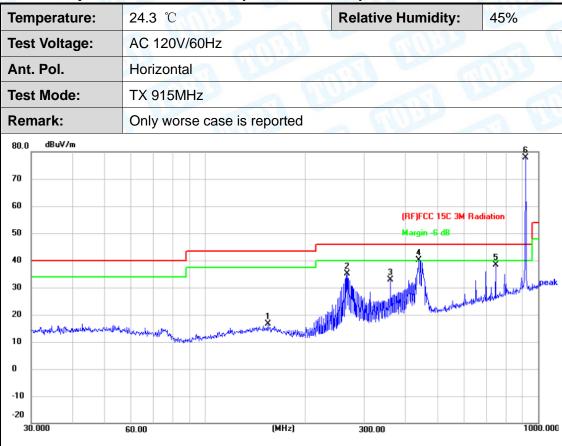
#### Radiated Spurious Emission (9 KHz~30 MHz)

From 9 KHz to 30 MHz: Conclusion: PASS

Note: The amplitude of spurious emissions which are attenuated by more than 20dB

below the permissible value has no need to be reported.

#### Radiated Spurious Emission (Below 1 GHz)



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	154.2786	38.88	-22.31	16.57	43.50	-26.93	peak
2	266.6089	57.19	-22.10	35.09	46.00	-10.91	peak
3	360.4476	52.03	-19.13	32.90	46.00	-13.10	peak
4 !	438.6554	57.15	-16.94	40.21	46.00	-5.79	peak
5	744.8661	48.60	-10.21	38.39	46.00	-7.61	peak
6 *	916.0687	85.08	-7.28	77.80	46.00	31.80	peak



Temperature	e: 24.3 ℃		Relative Humidity:	45%
Test Voltage	: AC 120V/6	j0Hz		ALO PA
Ant. Pol.	Vertical		any s	
Test Mode:	TX 915MH	z		C C C C
Remark:	Only worse	e case is reported		
-10 -20				poddhyk-synial ky-peak
30.000	60.00	(MHz)	300.00	1000.000

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	59.6493	38.33	-23.61	14.72	40.00	-25.28	peak
2	112.9196	37.96	-24.46	13.50	43.50	-30.00	peak
3	269.4284	50.57	-21.95	28.62	46.00	-17.38	peak
4 !	404.6665	59.02	-17.76	41.26	46.00	-4.74	peak
5 !	438.6554	58.05	-16.94	41.11	46.00	-4.89	peak
6 *	916.0687	84.01	-7.28	76.73	46.00	30.73	peak



#### **Temperature: 26** °C **Relative Humidity:** 54% **Test Voltage:** AC 120V/60Hz Ant. Pol. Horizontal Test Mode: TX 915MHz Remark: No report for the emission which more than 10 dB below the prescribed limit. dBu¥/m 90.0 80 (RF) FCC PART 15C (PEAK) 70 60 (RF) FCC PART 15C (AVG) 2 X 50 40 30 20 10 0 -10 1000.000 1500.00 4000.00 6000.00 2000.00 2500.00 3000.00 (MHz) 4500.00 5000.00 5500.00

#### Radiated Spurious Emission (Above 1 GHz)

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	2745.000	65.70	-14.60	51.10	74.00	-22.90	peak
2	3660.000	61.47	-13.34	48.13	74.00	-25.87	peak

#### Emission Level= Read Level+ Correct Factor

Note: The average measurement was not performed when the peak measured data under the limit of average detection.



Ten	nperature:	<b>26</b> ℃			Relative Humidity:	54%		
Tes	t Voltage:	AC 120	V/60Hz		6000			
Ant	t. Pol.	Vertical	U.S.	1 and	mnB			
Tes	t Mode:	TX 915	TX 915MHz					
Rer	mark:	No repo	No report for the emission which more than 10 dB below the					
		prescrib	ed limit.					
90.0	dBu¥/m							
80								
70					(BF) FCC PART 1	ISC (PEAK)		
60								
					(RF) FCC PART 1	5C (AVG)		
50			×	2 X				
40	Lange and a production of the second second	and when and and	and and and an and the	manufacture	anomenous checked and and	weeken have been pe		
30								
20								
10								
0								
-10								

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	2745.000	61.08	-14.60	46.48	74.00	-27.52	peak
2	3660.000	58.34	-13.34	45.00	74.00	-29.00	peak

Emission Level= Read Level+ Correct Factor

Note: The average measurement was not performed when the peak measured data under the limit of average detection.



### **Attachment C--Bandwidth Test Data**

Channel Frequency (MHz)	20dB Bandwidth (MHz)
915	15.14



-----END OF REPORT----