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# APPLICATION FOR VERIFICATION On Behalf of A&H Design Group, Ltd.

Wireless remote control vibrator Model No.: TRC-013 BLK, TRC-013 NAV

FCC ID: 2AG2K-TRC-013RX

Prepared for : A&H Design Group, Ltd.

Address : Suite 608, Tower One, Harbour Centre1 Hok Cheung

Street, Hung Hom ,Kowloon, Hong Kong

Prepared by : Accurate Technology Co., Ltd.

Address : F1, Bldg. A&D, Changyuan New Material Port, Keyuan

Rd., Science & Industry Park, Nanshan District, Shenzhen

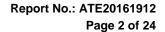
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Report No. : ATE20161912

Date of Test : Aug 25--Aug 30, 2016

Date of Report : Aug 31, 2016





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# Test Report Declaration

Applicant : A&H Design Group, Ltd.

Manufacturer : TOPARC Technology(Shenzhen)Co.,Ltd.

Product : Wireless remote control vibrator

Model No. : TRC-013 BLK, TRC-013 NAV

(Note: they are identical in interior structure, electrical circuits and components, and Product model is different because of different Color of product appearance. So we

prepare the TRC-013 NAV for test.)

Trade name : N/A

Measurement Procedure Used:

# FCC Rules and Regulations Part 15 Subpart B:2015 ANSI C63.4: 2014

The device described above is tested by Accurate Technology Co., Ltd. to determine the maximum emission levels emanating from the device. The maximum emission levels are compared to the FCC Part 15 Subpart B Class B limits both radiated and conducted emissions. The measurement results are contained in this test report and Accurate Technology Co., Ltd. is assumed full responsibility for the accuracy and completeness of these measurements. Also, this report shows that the Equipment Under Test (EUT) is to be technically compliant with the FCC requirements.

This report applies to above tested sample only. This report shall not be reproduced in part without written approval of Accurate Technology Co., Ltd.

Date of Test:	Aug 25Aug 30, 2016
Date of Report :	Aug 31, 2016
Prepared by :	7 in Zhang
	(Tim.zhang, Engineer)
Approved & Authorized Signer :	Lemil
	(Sean Liu, Manager)



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# 1. TEST RESULTS SUMMARY

Test Items	Test Standard	Test Results
Power Line Conducted Emission	FCC Part 15 Subpart B	Pass
Radiated Emission	FCC Part 15 Subpart B	Pass



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# 2. GENERAL INFORMATION

# 2.1.Product of Device (EUT)

**EUT** : Wireless remote control vibrator

Model Number : TRC-013 BLK, TRC-013 NAV

: DC 5V(powered by Charge port) Power Supply

or DC 3.7V(powered by battery)

Modulation: : ASK

**RX** Frequency : 433.92MHz

**Applicant** : A&H Design Group, Ltd.

Address : Suite 608, Tower One, Harbour Centre1 Hok Cheung Street,

Hung Hom ,Kowloon, Hong Kong

Manufacturer : TOPARC Technology(Shenzhen)Co., Ltd.

Address : 1/2F, 12 Building, Lianchuang Park, Bulan Road, Buji Town,

Longgang District, Shenzhen City, Guangdong Province, P.R.

China

: Aug 25, 2016

Date of sample

received

Date of Test : Aug 25--Aug 30, 2016

# 2.2. Special Accessory and Auxiliary Equipment

AC/DC Power Adapter: Model:NF5V-1.5C-1U (provided by laboratory) INPUT: 120V/60Hz 0.5A

OUTPUT:5V/1.5A



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2.3. Description of Test Facility

EMC Lab : Accredited by TUV Rheinland Shenzhen, May 10, 2004

Listed by FCC

The Registration Number is 253065

Listed by FCC

The Registration Number is 752051

Listed by Industry Canada

The Registration Number is 5077A-1

Listed by Industry Canada

The Registration Number is 5077A-2

Accredited by China National Accreditation Committee for

Laboratories

The Certificate Registration Number is L3193

Name of Firm : Accurate Technology Co., Ltd.

Site Location : F1, Bldg. A&D, Changyuan New Material Port, Keyuan

Rd., Science & Industry Park, Nanshan District, Shenzhen

518057, P.R. China

2.4. Measurement Uncertainty

Conducted emission expanded uncertainty : U=2.23dB, k=2

Power disturbance expanded uncertainty : U=2.92dB, k=2 Radiated emission expanded uncertainty : U=3.08dB, k=2

(9kHz-30MHz)

Radiated emission expanded uncertainty : U=4.42dB, k=2

(30MHz-1000MHz)

Radiated emission expanded uncertainty : U=4.06dB, k=2

(Above 1GHz)



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3. MEASURING DEVICE AND TEST EQUIPMENT

# **Table 1: List of Test and Measurement Equipment**

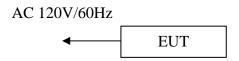
Kind of equipment	Manufacturer	Туре	S/N	Calibrated dates	Cal. Interval
EMI Test Receiver	Rohde&Schwarz	ESCS30	100307	Jan. 09, 2016	One Year
EMI Test Receiver	Rohde&Schwarz	ESPI3	101526/003	Jan. 09, 2016	One Year
Spectrum Analyzer	Agilent	E7405A	MY45115511	Jan. 09, 2016	One Year
Pre-Amplifier	Rohde&Schwarz	CBLU118354 0-01	3791	Jan. 09, 2016	One Year
Loop Antenna	Schwarzbeck	FMZB1516	1516131	Jan. 14, 2016	One Year
Bilog Antenna	Schwarzbeck	VULB9163	9163-323	Jan. 14, 2016	One Year
Horn Antenna	Schwarzbeck	BBHA9120D	9120D-655	Jan. 14, 2016	One Year
Horn Antenna	Schwarzbeck	BBHA9120D	9120D-1067	Jan. 14, 2016	One Year
LISN	Rohde&Schwarz	ESH3-Z5	100305	Jan. 09, 2016	One Year
LISN	Schwarzbeck	NSLK8126	8126431	Jan. 09, 2016	One Year
Highpass Filter	Wainwright Instruments	WHKX3.6/18 G-10SS	N/A	Jan. 09, 2016	One Year
Band Reject Filter	Wainwright Instruments	WRCG2400/2 485-2375/2510 -60/11SS	N/A	Jan. 09, 2016	One Year



# 4. POWER LINE CONDUCTED MEASUREMENT

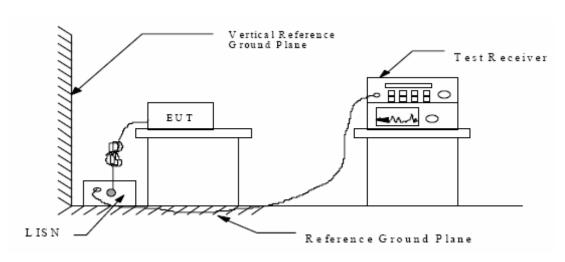
# 4.1. Block Diagram of Test Setup

4.1.1.Block diagram of connection between the EUT and simulators



(EUT: Wireless remote control vibrator)

#### 4.1.2. Shielding Room Test Setup Diagram



(EUT: Wireless remote control vibrator)

#### 4.2. The Emission Limit

#### 4.2.1. Conducted Emission Measurement Limits According to Section 15.107(a)

Frequency	Limit d	$B(\mu V)$
(MHz)	Quasi-peak Level	Average Level
0.15 - 0.50	66.0 - 56.0 *	56.0 – 46.0 *
0.50 - 5.00	56.0	46.0
5.00 - 30.00	60.0	50.0

<sup>\*</sup> Decreases with the logarithm of the frequency.



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### 4.3. Configuration of EUT on Measurement

The following equipments are installed on Power Line Conducted Emission Measurement to meet the commission requirement and operating regulations in a manner, which tends to maximize its emission characteristics in a normal application.

4.3.1.Wireless remote control vibrator (EUT)

Model Number: TRC-013 NAV

Serial Number: N/A

Manufacturer: TOPARC Technology(Shenzhen)Co., Ltd.

# 4.4. Operating Condition of EUT

- 4.4.1. Setup the EUT and simulator as shown as Section 4.1
- 4.4.2. Turn on the power of all equipment.
- 4.4.3.Let the EUT work in test mode and measure it.

#### 4.5. Test Procedure

The EUT is put on the plane 0.8m high above the ground by insulating support and is connected to the power mains through a line impedance stabilization network (L.I.S.N.). This provides a 500hm coupling impedance for the EUT system. Please refer the block diagram of the test setup and photographs. Both sides of AC lines are checked to find out the maximum conducted emission. In order to find the maximum emission levels, the relative positions of equipment and all of the interface cables shall be changed according to ANSI C63.4: 2014 on Conducted Emission Measurement.

The bandwidth of test receiver(R & S ESCS30) is set at 9kHz.

The frequency range from 150kHz to 30MHz is checked.



# 4.6. Power Line Conducted Emission Measurement Results

#### PASS.

MEASUREMENT	RESULT:	"TPAC	004_fi	n"			
8/26/2016 9:1 Frequency MHz	l7AM Level dBμV		Limit dBµV	Margin dB	Detector	Line	PE
0.160000 0.420000 0.505000 1.000000 1.465000 18.325000	35.60 34.20 38.70 30.50 28.00 24.80	10.5 10.7 10.7 10.8 10.9 11.4	66 57 56 56 56	29.9 23.2 17.3 25.5 28.0 35.2	QP QP QP QP QP QP	L1 L1 L1 L1 L1	GND GND GND GND GND GND
MEASUREMENT	RESULT:	"TPAC	00 <b>4</b> _fi	n2"			
8/26/2016 9:1 Frequency MHz	l7AM Level dBμV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.160000 0.420000 0.505000 0.970000 1.470000 17.890000		10.5 10.7 10.7 10.8 10.9	56 47 46 46 46 50	37.1 19.7 13.5 26.3 25.0 33.1	AV AV AV	L1 L1 L1 L1 L1 L1	GND GND GND GND GND GND
MEASUREMEN'		: "TPAG	C003_f	in"			
8/26/2016 9: Frequency MHz	Level			Margin dB	Detector	Line	PE
0.155000 0.290000 0.510000 0.930000 6.040000 19.585000	31.10 35.40 34.10 32.70 25.70 27.60	10.6 10.7	61 56 56 60	25.1 21.9 23.3 34.3	QP QP QP QP	N N N N N	GND GND GND GND GND GND
MEASUREMEN!		: "TPA	C003_f	in2"			
8/26/2016 9: Frequency MHz				Margin dB	Detector	Line	PE
0.155000 0.290000 0.550000 1.185000 5.550000	15.40 18.50 21.60 21.50 17.00	10.5 10.6 10.7 10.9 11.2		32.0 24.4 24.5	AV AV AV	N N N N	GND GND GND GND GND

Emissions attenuated more than 20 dB below the permissible value are not reported.

The spectral diagrams are shown in the following pages.



#### CONDUCTED EMISSION STANDARD FCC PART 15B

EUT: Wireless remote control vibrator M/N:TRC-013 NAV

Manufacturer: TOPARC Operating Condition: Charging

Test Site: 1#Shielding Room

Operator: Star Test Specification: N 120V/60Hz

Comment: Report No.:ATE20161912 Report No..A:22114AM 8/26/2016 / 9:12:14AM Start of Test:

# SCAN TABLE: "V 9K-30MHz fin" Short Description: \_SUI

\_\_\_SUB\_STD\_VTERM2 1.70

Detector Meas. IF Transducer
Time Bandw.

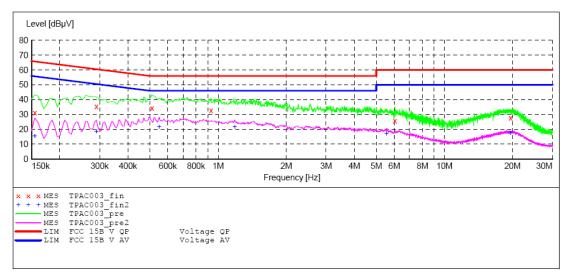
Z QuasiPeak 1.0 s 200 Hz NSLK8126 2008 Start Stop Step

Frequency Frequency Width 9.0 kHz 150.0 kHz 100.0 Hz

Average

150.0 kHz 30.0 MHz 5.0 kHz QuasiPeak 1.0 s 9 kHz NSLK8126 2008

Average



#### MEASUREMENT RESULT: "TPAC003 fin"

8/26/2016 9:1 Frequency MHz	l3AM Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.155000 0.290000 0.510000 0.930000 6.040000 19.585000	31.10 35.40 34.10 32.70 25.70 27.60	10.5 10.6 10.7 10.8 11.2	66 61 56 56 60	34.6 25.1 21.9 23.3 34.3 32.4	QP QP QP QP QP OP	N N N N N	GND GND GND GND GND GND

#### MEASUREMENT RESULT: "TPAC003 fin2"

8/26/2016 9:1 Frequency MHz	3AM Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.155000	15.40	10.5	56	40.3	AV	N	GND
0.290000	18.50	10.6	51	32.0	AV	N	GND
0.550000	21.60	10.7	46	24.4	AV	N	GND
1.185000	21.50	10.9	46	24.5	AV	N	GND
5.550000	17.00	11.2	50	33.0	AV	N	GND
19.585000	17.10	11.4	50	32.9	AV	N	GND

Page 1/1 8/26/2016 9:13AM TPAC003



#### CONDUCTED EMISSION STANDARD FCC PART 15B

EUT: Wireless remote control vibrator M/N:TRC-013 NAV

Manufacturer: TOPARC Operating Condition: Chargi

Test Site: 1#Shie Room

Operator: Star Test Specification: L 120V/60Hz

Report No.:ATE20161912 Comment: Report No..A:22211 8/26/2016 / 9:14:06AM Start of Test:

# SCAN TABLE: "V 9K-30MHz fin" Short Description: \_SUI

\_\_\_SUB\_STD\_VTERM2 1.70

Start Stop Step

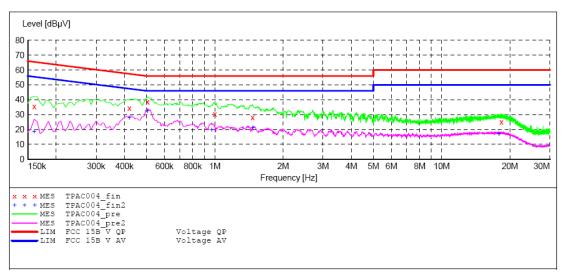
Detector Meas. IF Transducer
Time Bandw.

Z QuasiPeak 1.0 s 200 Hz NSLK8126 2008 Frequency Frequency Width 9.0 kHz 150.0 kHz 100.0 Hz

Average

150.0 kHz 30.0 MHz 5.0 kHz QuasiPeak 1.0 s 9 kHz NSLK8126 2008

Average



#### MEASUREMENT RESULT: "TPAC004 fin"

8/26/2016 9: Frequency MHz	Level	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.160000 0.420000 0.505000 1.000000 1.465000 18.325000	35.60 34.20 38.70 30.50 28.00 24.80	10.5 10.7 10.7 10.8 10.9	66 57 56 56 56	29.9 23.2 17.3 25.5 28.0 35.2	QP QP	L1 L1 L1 L1 L1	GND GND GND GND GND GND

#### MEASUREMENT RESULT: "TPAC004 fin2"

8/26/2016 9:1 Frequency MHz	l7AM Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.160000 0.420000 0.505000 0.970000 1.470000 17.890000	18.40 27.70 32.50 19.70 21.00 16.90	10.5 10.7 10.7 10.8 10.9	56 47 46 46 46 50	37.1 19.7 13.5 26.3 25.0 33.1	AV AV AV AV AV	L1 L1 L1 L1 L1	GND GND GND GND GND GND

Page 1/1 8/26/2016 9:17AM TPAC004

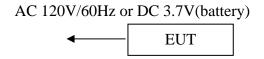
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# 5. RADIATED EMISSION MEASUREMENT

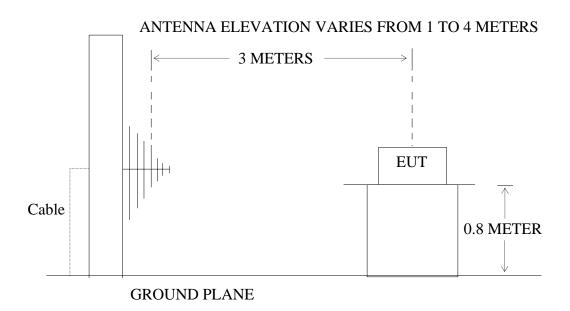
# 5.1.Block Diagram of Test Setup

5.1.1.Block diagram of connection between the EUT and simulators



(EUT: Wireless remote control vibrator)

5.1.2.Semi-Anechoic Chamber Test Setup Diagram



(EUT: Wireless remote control vibrator)



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5.2. The Emission Limit For Section 15.109 (a)

# 5.2.1.Radiation Emission Measurement Limits According to Section 15.109 (a).

Frequency	Distance	Field Stren	gths Limit
MHz	Meters	μV/m	dB(μV/m)
30-88	3	100	40.0
88-216	3	150	43.5
216-960	3	200	46.0
960-1000	3	500	54.0

Remark: (1) Emission level dB ( $\mu$ V) = 20 log Emission level  $\mu$ V/m.

- (2)The smaller limit shall apply at the cross point between two frequency bands.
- (3)Distance is the distance in meters between the measuring instrument antenna and the closest point of any part of the device or system.

# 5.3.EUT Configuration on Measurement

The following equipment is installed on Radiated Emission Measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

#### 5.3.1. Wireless remote control vibrator

Model Number: TRC-013 NAV

Serial Number: N/A

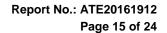
Manufacturer: TOPARC Technology(Shenzhen)Co., Ltd.

# 5.4. Operating Condition of EUT

- 5.4.1. Setup the EUT and simulator as shown as Section 5.1.
- 5.4.2. Turn on the power of all equipment.
- 5.4.3.Let the EUT work in test mode and measure it.

#### 5.5.Test Procedure

The EUT and its simulators are placed on a turntable, which is 0.8 meter high above ground. The turntable can rotate 360 degrees to determine the position of the maximum emission level. EUT is set 3.0 meters away from the receiving antenna, which is mounted on an antenna tower. The antenna can be moved up and down between 1.0 meter and 4 meters to find out the maximum emission level. Broadband antenna (calibrated bilog antenna) is used as receiving antenna. Both horizontal and vertical polarizations of the antenna are set on measurement. In order to find the maximum emission levels, all of the interface cables must be manipulated according to ANSI C63.4: 2014 on radiated emission measurement.





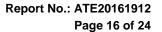
The bandwidth of the EMI test receiver(R&S ESCS30) is set at 120kHz from 30MHz to 1000MHz.

The frequency range from 30MHz to 5000MHz is checked.

# 5.6. Radiated Emission Noise Measurement Result

#### PASS.

Model Num Test mode:			Hz)					
	No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
	1	39.3203	31.29	-18.88	12.41	40.00	-27.59	QP
	2	70.2095	34.44	-22.86	11.58	40.00	-28.42	QP
Horizontal	3	81.0885	33.67	-22.78	10.89	40.00	-29.11	QP
	4	145.2994	35.24	-22.25	12.99	43.50	-30.51	QP
	5	155.8771	36.78	-21.79	14.99	43.50	-28.51	QP
	6	243.5431	36.11	-18.22	17.89	46.00	-28.11	QP
		_		- ·	<u> </u>			
	No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
	1	33.8067	33.46	-17.34	16.12	40.00	-23.88	QP
Marchael	2	46.2180	34.02	-19.70	14.32	40.00	-25.68	QP
Vertical	3	70.7047	43.55	-22.89	20.66	40.00	-19.34	QP
	4	137.3565	46.87	-22.00	24.87	43.50	-18.63	QP
	5	144.2820	45.90	-22.22	23.68	43.50	-19.82	QP
	6	159.1983	46.74	-21.42	25.32	43.50	-18.18	QP
Above 1G								
	No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
Horizontal	1	2832.374	43.72	-4.23	39.49	74.00	-34.51	peak
	2	2832.374	35.06	-4.23	30.83	54.00	-23.17	AVG
	No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
Vertical	1	4648.646	42.24	-0.04	42.20	74.00	-31.80	peak
	2	4648.646	34.67	-0.04	34.63	54.00	-19.37	AVG





Model Number: TRC-013 NAV Test mode: 433.92MHz RX(DC 3.7V) Freq. Reading Factor Result Limit Margin Detector No. (dBuV/m) (dBuV/m) (MHz) (dB) (dBuV/m) (dB) 1 355.4273 35.26 -8.70 26.56 46.00 -19.44 QP 397.6334 37.44 -7.92 29.52 46.00 -16.48 QP 2 Horizontal 3 414.7223 38.46 -7.41 31.05 46.00 -14.95 QP 4 440.1963 33.67 -6.90 26.77 46.00 -19.23 QΡ 5 848.0563 30.10 -0.30 29.80 46.00 -16.20 ΩP 6 875.2470 29.46 0.11 29.57 46.00 -16.43 QΡ Factor Freq. Reading Result Limit Margin No. Detector (MHz) (dBuV/m) (dB) (dBuV/m) (dBuV/m) (dB) QΡ 1 400.4319 34.36 -7.80 26.56 46.00 -19.44 2 437.1199 28.00 -6.91 21.09 46.00 -24.91 QΡ Vertical 3 457.5073 26.40 -6.66 19.74 46.00 -26.26 QP 4 550.9480 30.03 -4.59 25.44 46.00 -20.56 QΡ 5 875.2470 25.71 0.11 25.82 46.00 QΡ -20.18 6 912.8620 26.44 0.40 26.84 46.00 -19.16 QΡ Above 1G Margin Freq. Reading Factor Result Limit No. Detector (MHz) (dBuV) (dB) (dBuV) (dBuV) (dB) Horizontal 1 2316.660 59.15 -7.82 51.33 74.00 -22.67 peak 2 2316.660 45.10 -7.82 37.28 54.00 -16.72 AVG Reading Freq. Factor Result Limit Margin No. Detector (MHz) (dBuV) (dB) (dBuV) (dBuV) (dB) Vertical 2179.222 60.63 52.32 74.00 1 -8.31 -21.68 peak 2 2179.222 47.00 -8.31 38.69 54.00 -15.31 AVG



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#### Below 1GHz



#### ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Site: 2# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: STAR2015 #1739 Polarization: Horizontal Standard: FCC Class B 3M Radiated Power Source: DC 3.7V

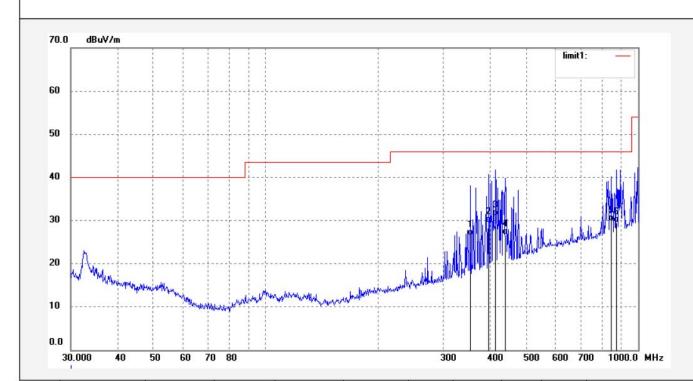
Test item: Radiation Test Date: 16/08/27/
Temp.( C)/Hum.(%) 23 C / 48 % Time: 9/58/49

EUT: Wireless remote control vibrator Engineer Signature:

Mode: RX(433.92MHz) Distance: 3m

Model: TRC-013 NAV Manufacturer: TOPARC

Note: Report NO.:ATE20161912



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	355.4273	35.26	-8.70	26.56	46.00	-19.44	QP			
2	397.6334	37.44	-7.92	29.52	46.00	-16.48	QP			
3	414.7223	38.46	-7.41	31.05	46.00	-14.95	QP	·	6,	
4	440.1963	33.67	-6.90	26.77	46.00	-19.23	QP			
5	848.0563	30.10	-0.30	29.80	46.00	-16.20	QP			
6	875.2470	29.46	0.11	29.57	46.00	-16.43	QP			



Site: 2# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

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F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China

Polarization: Vertical Power Source: DC 3.7V

Date: 16/08/27/ Time: 10/00/29 Engineer Signature: Distance: 3m

Job No.: STAR2015 #1740 Standard: FCC Class B 3M Radiated

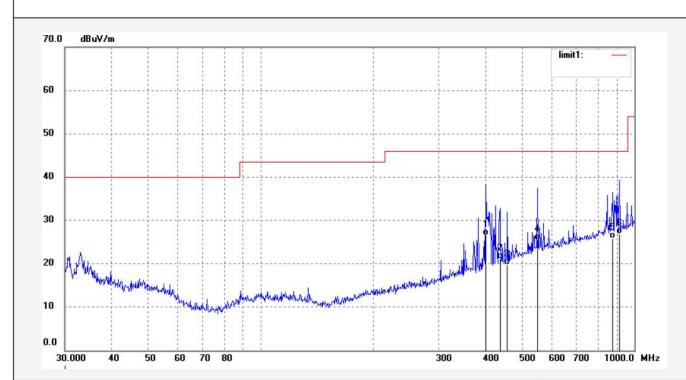
Test item: Radiation Test

Temp.( C)/Hum.(%) 23 C / 48 %

EUT: Wireless remote control vibrator

Mode: RX(433.92MHz)
Model: TRC-013 NAV
Manufacturer: TOPARC

Note: Report NO.:ATE20161912



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	400.4319	34.36	-7.80	26.56	46.00	-19.44	QP			
2	437.1199	28.00	-6.91	21.09	46.00	-24.91	QP			
3	457.5073	26.40	-6.66	19.74	46.00	-26.26	QP			
4	550.9480	30.03	-4.59	25.44	46.00	-20.56	QP			
5	875.2470	25.71	0.11	25.82	46.00	-20.18	QP			
6	912.8620	26.44	0.40	26.84	46.00	-19.16	QP			



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Job No.: STAR2016 #1863

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 %

EUT: Wireless remote control vibrator

Mode: Charging
Model: TRC-013 NAV

Manufacturer: TOPARC

Note: Report No.:ATE20161912

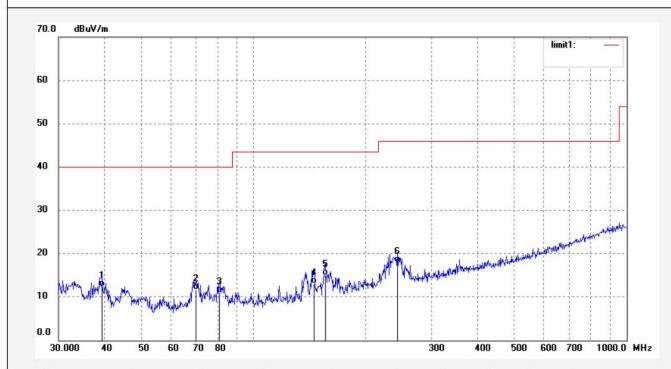
Polarization: Horizontal

Power Source: AC 120V/60Hz

Date: 2016/08/26 Time: 10:43:39

Engineer Signature: star

Distance: 3m



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	39.3203	31.29	-18.88	12.41	40.00	-27.59	QP			
2	70.2095	34.44	-22.86	11.58	40.00	-28.42	QP			
3	81.0885	33.67	-22.78	10.89	40.00	-29.11	QP		, n	
4	145.2994	35.24	-22.25	12.99	43.50	-30.51	QP		*	
5	155.8771	36.78	-21.79	14.99	43.50	-28.51	QP			
6	243.5431	36.11	-18.22	17.89	46.00	-28.11	QP			



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Report No.: ATE20161912

Job No.: STAR2016 #1862

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 %

EUT: Wireless remote control vibrator

Mode: Charging
Model: TRC-013 NAV
Manufacturer: TOPARC

Note: Report No.:ATE20161912

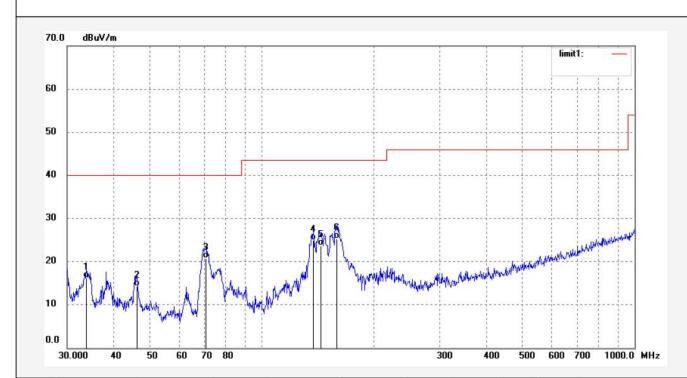
Polarization: Vertical

Power Source: AC 120V/60Hz

Date: 2016/08/26 Time: 10:41:51

Engineer Signature: star

Distance: 3m



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	33.8067	33.46	-17.34	16.12	40.00	-23.88	QP			
2	46.2180	34.02	-19.70	14.32	40.00	-25.68	QP			
3	70.7047	43.55	-22.89	20.66	40.00	-19.34	QP			
4	137.3565	46.87	-22.00	24.87	43.50	-18.63	QP			
5	144.2820	45.90	-22.22	23.68	43.50	-19.82	QP			
6	159.1983	46.74	-21.42	25.32	43.50	-18.18	QP			



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#### Above 1GHz



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Horizontal

Job No.: STAR2016 #1860 Polarization:

Standard: FCC PK Power Source: AC 120V/60Hz

 Test item:
 Radiation Test
 Date: 2016/08/26

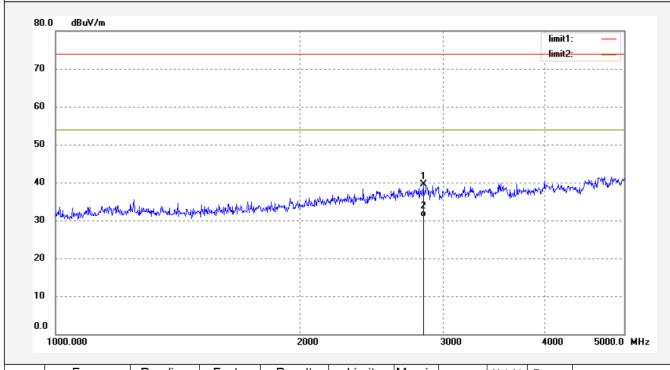
 Temp.( C)/Hum.(%)
 25 C / 55 %
 Time: 10:38:37

EUT: Wireless remote control vibrator Engineer Signature: star

Mode: Charging Distance: 3m

Model: TRC-013 NAV Manufacturer: TOPARC

Note: Report No.:ATE20161912



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)		Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2832.374	43.72	-4.23	39.49	74.00	-34.51	peak			
2	2832.374	35.06	-4.23	30.83	54.00	-23.17	AVG			



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Report No.: ATE20161912

Job No.: STAR2016 #1861

Standard: FCC PK

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 %

EUT: Wireless remote control vibrator

Mode: Charging

Model: TRC-013 NAV

Manufacturer: TOPARC

Note: Report No.:ATE20161912

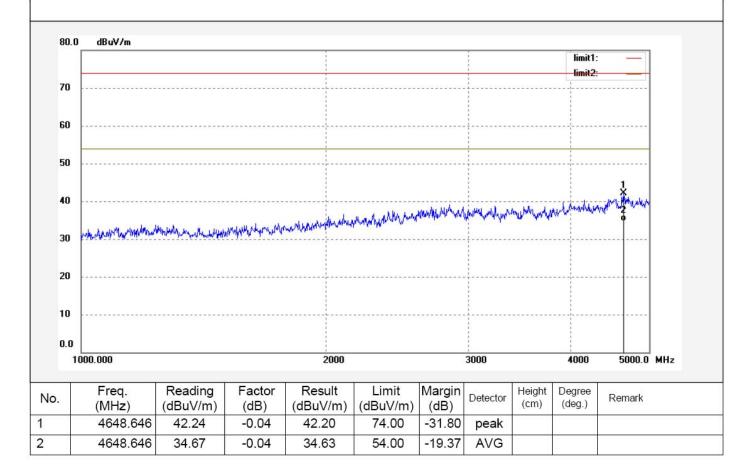
Polarization: Vertical

Power Source: AC 120V/60Hz

Date: 2016/08/26 Time: 10:39:25

Engineer Signature: star

Distance: 3m





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Report No.: ATE20161912

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Job No.: STAR2015 #1738

Standard: FCC PK

Test item: Radiation Test

Temp.( C)/Hum.(%) 23 C / 48 %

EUT: Wireless remote control vibrator

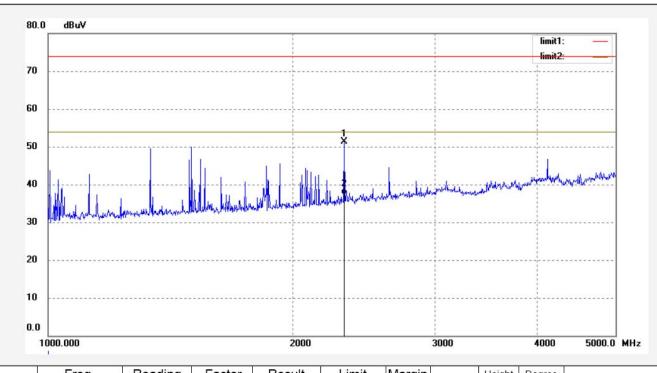
Mode: RX(433.92MHz)
Model: TRC-013 NAV
Manufacturer: TOPARC

Note: Report NO.:ATE20161912

Polarization: Horizontal Power Source: DC 3.7V

Date: 16/08/27/ Time: 9/55/36

Engineer Signature: Distance: 3m



Reading Factor Freq. Result Limit Margin Height Degree Detector No. Remark (cm) (deg.) (MHz) (dBuV) (dB) (dBuV) (dBuV) (dB) 1 2316.660 59.15 -7.82 51.33 74.00 -22.67 peak 2316.660 45.10 -7.82 37.28 2 54.00 -16.72**AVG** 



EUT:

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Engineer Signature: Distance: 3m

Report No.: ATE20161912

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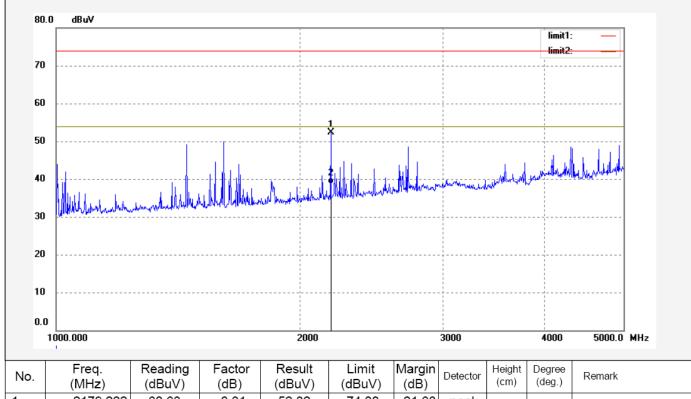
Job No.: STAR2015 #1737 Polarization: Vertical Power Source: DC 3.7V

Standard: FCC PK Test item: Radiation Test Date: 16/08/27/ Temp.( C)/Hum.(%) 23 C / 48 % Time: 9/54/56

Mode: RX(433.92MHz) Model: TRC-013 NAV Manufacturer: TOPARC

Wireless remote control vibrator

Report NO.:ATE20161912 Note:



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2179.222	60.63	-8.31	52.32	74.00	-21.68	peak			
2	2179.222	47.00	-8.31	38.69	54.00	-15.31	AVG			