



BUREAU  
VERITAS

Test Report No.: FM2011WDG0188

## RF EXPOSURE REPORT

Applicant	TTS-Group Ltd.
Address	Unit 1, Park Lane Business Park Park Lane, Kirkby in Ashfield, NG179GU, United Kingdom

Manufacturer or Supplier	TTS-Group Ltd.
Address	Unit 1, Park Lane Business Park Park Lane, Kirkby in Ashfield, NG179GU, United Kingdom
Product	Light Up Twist & Turn Spinning Tops
Brand Name	N/A
Model	EY10972
Additional Model & Model Difference	N/A
Date of tests	Nov. 17, 2020 ~ Jan. 05, 2021

☒ 47 CFR PART 1, Subpart I, Section 1.1310

☒ KDB 680106 D01

**CONCLUSION: The submitted sample was found to COMPLY with the test requirement**

Tested by Lucas Chen  
Project Engineer / EMC Department

Approved by Glyn He  
Assistant Manager / EMC Department

Date: Jan. 15, 2021

This report is governed by, and incorporates by reference, CPS Conditions of Service as posted at the date of issuance of this report at <http://www.bureauveritas.com/home/about-us/our-business/cps/about-us/terms-conditions/> and is intended for your exclusive use. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission. This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Our report includes all of the tests requested by you and the results thereof based upon the information that you provided to us. Measurement uncertainty is only provided upon request for accredited tests. You have 60 days from date of issuance of this report to notify us of any material error or omission caused by our negligence or if you require measurement uncertainty; provided, however, that such notice shall be in writing and shall specifically address the issue you wish to raise. A failure to raise such issue within the prescribed time shall constitute your unqualified acceptance of the completeness of this report, the tests conducted and the correctness of the report contents.



## Table of Contents

RELEASE CONTROL RECORD .....	3
1. CERTIFICATION.....	4
2. DESCRIPTION OF SUPPORT UNITS .....	5
2.1 TEST LOCATION .....	5
2.2 DEVIATION FROM STANDARDS .....	5
2.3 ABNORMALITIES FROM STANDARD CONDITIONS.....	5
3. EQUIPMENTS USED DURING TEST .....	5
4. TEST RESULTS .....	6
4.1 RF EXPOSURE TEST .....	6
4.1.1 EUT OPERATION .....	6
4.1.2 MEASUREMENT DATA .....	7



Test Report No.: FM2011WDG0188

## RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
FM2011WDG0188	Original release	Jan. 15, 2021



Test Report No.: FM2011WDG0188

## 1. CERTIFICATION

<b>FCC ID:</b>	2ADRE-EY10972
<b>PRODUCT:</b>	Light Up Twist & Turn Spinning Tops
<b>BRAND NAME:</b>	N/A
<b>MODEL:</b>	EY10972
<b>ADDITIONAL NO.:</b>	N/A
<b>APPLICANT:</b>	TTS-Group Ltd.
<b>STANDARDS:</b>	47 CFR PART 1, Subpart I, Section 1.1310 KDB 680106 D01



Test Report No.: FM2011WDG0188

## 2. DESCRIPTION OF SUPPORT UNITS

The EUT has been tested with associated equipment below

Description	Manufacturer	Model No.	Serial No.
Adapter	N/A	5V/2A	N/A

### 2.1 TEST LOCATION

All tests were performed at:

Bureau Veritas Shenzhen Co., Ltd. Dongguan Branch

No. 96, Guantai Road (Houjie Section), Houjie Town, Dongguan City, Guangdong Province. 523942.

People's Republic of China.

Tel: +86 769 8998 2098

Fax: +86 769 8593 1080

### 2.2 DEVIATION FROM STANDARDS

None

### 2.3 ABNORMALITIES FROM STANDARD CONDITIONS

None

## 3. EQUIPMENTS USED DURING TEST

Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Car.Due date.
1	3m Semi-Anechoic Chamber	ETS-LINDGRE N	9m*6m*6m	NSEMC003	2021-03-19
2	Electric Filed Meter	Narda	Y2006	L-0017	2021-11-08

**NOTE:** 1. The test was performed in RS chamber.

2. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA.



## 4. TEST RESULTS

### 4.1 RF EXPOSURE TEST

Test Requirement: 47 CFR PART 1, Subpart I, Section 1.1310  
Measurement Distance: 15cm  
Test voltage: DC 5V from Adapter input AC 120V/60Hz

Limit:

Frequency range(MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm <sup>2</sup> )	Averaging time (minutes)
<b>(A) Limits for Occupational/Controlled Exposures</b>				
0.3-3.0	614	1.63	*(100)	6
3.0-30	1842/f	4.89/f	*(900/f <sup>2</sup> )	6
30-300	61.4	0.163	1.0	6
300-1500	/	/	f/300	6
1500-100.000	/	/	5	6
<b>(B) Limits for General Population/Uncontrolled Exposure</b>				
0.3-1.34	614	1.63	*(100)	30
1.34-30	824/f	2.19/f	*(180/f <sup>2</sup> )	30
30-300	27.5	0.073	0.2	30
300-1500	/	/	f/1500	30
1500-100.000	/	/	1.0	30
F=frequency in MHz *=Plane-wave equivalent power density 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).				

#### 4.1.1 EUT OPERATION

##### Operating Environment:

Temperature: 25.0°C Humidity: 54% RH Atmospheric Pressure: 1015 mbar

##### EUT Operation:

This device has been tested in standby and wireless charging status, but only the worst status was shown in test report.



#### 4.1.2 MEASUREMENT DATA

**Wireless radiation frequency: 520KHz ~ 572KHz**

##### **Electric Field Emissions**

Test Position	Test Distance (cm)	Probe Measure Result (V/m)	Limit (V/m)
Side 1	15	1.67	614
Side 2	15	1.89	614
Side 3	15	1.80	614
Side 4	15	2.04	614
Top	20	1.36	614

##### **Magnetic Field Emissions**

Test Position	Test Distance (cm)	Probe Measure Result (A/m)	Limit (A/m)
Side 1	15	0.0034	1.63
Side 2	15	0.0048	1.63
Side 3	15	0.0023	1.63
Side 4	15	0.0063	1.63
Top	20	0.0167	1.63

Note: Wireless charging mode was recorded as the worst result in the report



**Test Report No.: FM2011WDG0188**

## **PHOTOGRAPHS OF THE TEST CONFIGURATION**

Please refer to the attached file (MPE Test Setup Photo).