



## Test Report

Date : 2024-08-16  
No. : HMD24080004

Page 1 of 21

**Applicant** : Shenzhen Ztotop Technology Co., Ltd.  
203, No. 43 Lixin Road, Danzhutou Community, Nanwan Street,  
Longgang District, Shenzhen

**Supplier / Manufacturer** : Shenzhen Ztotop Technology Co., Ltd.  
203, No. 43 Lixin Road, Danzhutou Community, Nanwan Street,  
Longgang District, Shenzhen

**Description of Sample(s)** : Submitted sample(s) said to be  
Product: 433MHz Wireless Remote Control  
Brand Name: N/A  
Model No.: y43302  
FCC ID: 2BCON-Y43302

**Date Samples Received** : 2024-08-07

**Date Tested** : 2024-08-07 to 2024-08-13

**Investigation Requested** : Perform ElectroMagnetic Interference measurement in accordance with FCC 47CFR [Codes of Federal Regulations] Part 15 and ANSI C63.10:2013 for FCC Certification.

**Conclusions** : The submitted product COMPLIED with the requirements of Federal Communications Commission [FCC] Rules and Regulations Part 15. The tests were performed in accordance with the standards described above and on Section 2.2 in this Test Report.

**Remarks** : ---

**Test by:** Susu

  
Dr.CHAN Kwok Hung, Brian  
Authorized Signatory



## Test Report

Date : 2024-08-16  
No. : HMD24080004

Page 2 of 21

### CONTENT:

Cover	Page 1 of 21
Content	Page 2 of 21
<b><u>1.0 General Details</u></b>	
1.1 Test Laboratory	Page 3 of 21
1.2 Equipment Under Test [EUT] Description of EUT operation	Page 3 of 21
1.3 Date of Order	Page 3 of 21
1.4 Submitted Sample(s)	Page 3 of 21
1.5 Test Duration	Page 3 of 21
1.6 Country of Origin	Page 3 of 21
<b><u>2.0 Technical Details</u></b>	
2.1 Investigations Requested	Page 5 of 21
2.2 Test Standards and Results Summary	Page 5 of 21
<b><u>3.0 Test Results</u></b>	
3.1 Emission	Page 5-11 of 21
3.2 20dB Bandwidth of Fundamental Emission	Page 12-13 of 21
<b><u>Appendix A</u></b> List of Measurement Equipment	Page 14 of 21
<b><u>Appendix B</u></b> Duty Cycle Correction During 100 msec	Page 15-17 of 21
<b><u>Appendix C</u></b> Manual Operated Transmitter Transmission Time	Page 18 of 21
<b><u>Appendix D</u></b> Photograph(s) of Product	Page 19-21 of 21



## Test Report

Date : 2024-08-16  
No. : HMD24080004

Page 3 of 21

### **1.0 General Details**

#### **1.1 Test Laboratory**

The Hong Kong Standards and Testing Centre Ltd.  
EMC Laboratory  
10 Dai Wang Street, Taipo Industrial Estate, New Territories, Hong Kong  
Telephone: 852 2666 1888  
Fax: 852 2664 4353

#### **1.2 Equipment Under Test [EUT]**

##### **Description of Sample(s)**

Product: 433MHz Wireless Remote Control  
Manufacturer: Shenzhen Ztoto Technology Co., Ltd.  
203, No. 43 Lixin Road, Danzhutou Community, Nanwan Street,  
Longgang District, Shenzhen  
Brand Name: N/A  
Model Number: y43302  
Rating: 3.0Vd.c. ("AAA battery × 2)

#### **1.2.1 Description of EUT Operation**

The Equipment Under Test (EUT) is a 433MHz Remote Control. The EUT is operating at 433.92 MHz.  
Test was conducted under Tx mode.

RF modulation: FSK

#### **1.3 Date of Order**

2024-08-05

#### **1.4 Submitted Sample(s):**

1 Sample

#### **1.5 Test Duration**

2024-08-07 to 2024-08-13

#### **1.6 Country of Origin**

China

The Hong Kong Standards and Testing Centre Limited

10 Dai Wang Street, Taipo Industrial Estate, Tai Po, N.T., Hong Kong

Tel: +852 2666 1888 Fax: +852 2664 4353 Email: hkstc@stc.group Website: www.stc.group

This report shall not be reproduced unless with prior written approval from The Hong Kong Standards and Testing Centre Limited.

For Conditions of Issuance of this test report, please refer to "Conditions of Issuance of Test Reports" section or Website.



## Test Report

Date : 2024-08-16  
No. : HMD24080004

Page 4 of 21

### 2.0 Technical Details

#### **2.1 Investigations Requested**

Perform ElectroMagnetic Interference measurement in accordance with FCC 47CFR [Codes of Federal Regulations] Part 15 and ANSI C63.10: 2013 for FCC Certification.  
This is a manually operated transmitter, Press the button to start sending signals.

#### **2.2 Test Standards and Results Summary Tables**

EMISSION Results Summary						
Test Condition	Test Requirement	Test Method	Class / Severity	Test Result		
				Pass	Failed	N/A
Field Strength of Fundamental Emissions & Spurious Emissions	FCC 47CFR 15.231(a)	ANSI C63.10: 2013	N/A	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20dB Bandwidth of Fundamental Emission	FCC 47CFR 15.231(c)	ANSI C63.10: 2013	N/A	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Radiated Emissions	FCC 47CFR 15.209	ANSI C63.10: 2013	N/A	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Manual Operated Transmitter Transmission Time	FCC 47CFR 15.231(a)	ANSI C63.10: 2013	N/A	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Antenna requirement	FCC 47CFR 15.203	N/A	N/A	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Note: N/A - Not Applicable

## Test Report

Date : 2024-08-16  
No. : HMD24080004

Page 5 of 21

### 3.0 Test Results

#### 3.1 Emission

##### 3.1.1 Radiated Emissions

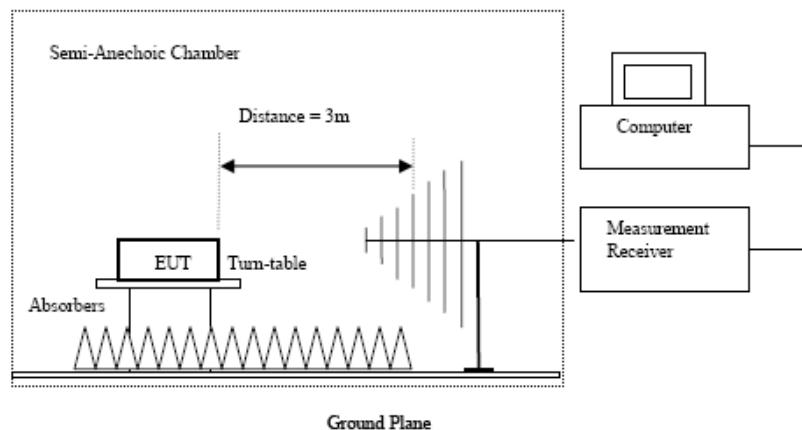
Test Requirement:	FCC 47CFR 15.231(a)	
Test Method:	ANSI C63.10:2013	
Test Date:	2024-08-08	
Mode of Operation:	Tx mode	
Ambient Temperature: 25°C	Relative Humidity: 52%	Atmospheric Pressure: 101 kPa

#### Test Method:

For emission measurements at or below 1 GHz, the sample was placed 0.8m above the ground plane of semi-anechoic Chamber\*. For emission measurements above 1 GHz, the sample was placed 1.5m above the ground plane of semi-anechoic Chamber\*. Measurements in both horizontal and vertical polarities were performed. During the test, each emission was maximized by: having the EUT continuously working, investigated all operating modes, rotated about all 3 axis (X, Y & Z) and considered typical configuration to obtain worst position, manipulating interconnecting cables, rotating turntable, varying antenna height from 1m to 4m in both horizontal and vertical polarizations. The emissions worst-case are shown in Test Results of the following pages.

\* Semi-Anechoic chamber located on the G/F of The Hong Kong Standards and Testing Centre Ltd. with Registration Number: HK0001  
Test Firm Registration Number: 367672

#### Test Setup:



- Absorbers placed on top of the ground plane are for measurements above 1000MHz only.  
- Measurements between 30MHz to 1000MHz made with Bi-log antennas, above 1000MHz horn antennas are used, 9kHz to 30MHz loop antennas are used.

The Hong Kong Standards and Testing Centre Limited  
10 Dai Wang Street, Tai Po Industrial Estate, Tai Po, N.T., Hong Kong

Tel: +852 2666 1888 Fax: +852 2664 4353 Email: hkstc@stc.group Website: www.stc.group

This report shall not be reproduced unless with prior written approval from The Hong Kong Standards and Testing Centre Limited.

For Conditions of Issuance of this test report, please refer to "Conditions of Issuance of Test Reports" section or Website.



## Test Report

Date : 2024-08-16  
No. : HMD24080004

Page 6 of 21

### Limits for Field Strength of Fundamental Emissions [FCC 47CFR 15.231a]:

Frequency Range of Fundamental [MHz]	Field Strength of Fundamental Emission [Average] [μV/m]	Field Strength of Spurious Emission [Average] [μV/m]
40.66-40.70	2,250	225
70-130	1,250	125
130-174	1,250 to 3,750 *	125 to 375 *
174-260	3,750	375
260-470	3,750 to 12,500 *	375 to 1,250 *
Above 470	12,500	1,250

<sup>1</sup>Linear interpolations.

The maximum permitted unwanted emission level is 20 dB below the maximum permitted fundamental level.

### Results of Tx mode(1GHz – 18GHz): PASS

Field Strength of Fundamental Emissions Peak Value						
Frequency MHz	Measured Level @3m	Correction Factor dB/m	Field Strength dBμV/m	Field Strength μV/m	Limit @3m μV/m	E-Field Polarity
433.92	45.1	15.4	60.5	1059.3	109,647.8	Vertical
433.92	55.4	15.3	70.7	3427.7	109,647.8	Horizontal

Field Strength of Spurious Emissions Peak Value						
Frequency MHz	Measured Level @3m dBμV	Correction Factor dB/m	Field Strength dBμV/m	Field Strength μV/m	Limit @3m μV/m	E-Field Polarity
867.84	21.3	22.8	44.1	160.9	10,964.78	Vertical
867.84	29.2	22.5	51.7	385.0	10,964.78	Horizontal
1301.76	12.4	26.8	39.2	91.2	5,011.87	Vertical
1301.76	12.5	26.8	39.3	92.3	5,011.87	Horizontal
1735.68	9.6	32.9	42.5	133.4	10,964.78	Vertical
1735.68	10.4	32.7	43.1	142.9	10,964.78	Horizontal
2169.60	4.6	38.2	42.8	138.0	10,964.78	Vertical
2169.60	5.1	38.1	43.2	144.5	10,964.78	Horizontal

The Hong Kong Standards and Testing Centre Limited

10 Dai Wang Street, Taipo Industrial Estate, Tai Po, N.T., Hong Kong

Tel: +852 2666 1888 Fax: +852 2664 4353 Email: hkstc@stc.group Website: www.stc.group

This report shall not be reproduced unless with prior written approval from The Hong Kong Standards and Testing Centre Limited.

For Conditions of Issuance of this test report, please refer to "Conditions of Issuance of Test Reports" section or Website.



## Test Report

Date : 2024-08-16  
No. : HMD24080004

Page 7 of 21

Results of Tx mode(1GHz – 18GHz): PASS

Field Strength of Fundamental Emissions						
Average Value						
Frequency MHz	Peak Value Level @3m dBμV	Duty Cycle Factor dB/m	Field Strength dBμV/m	Field Strength μV/m	Limit @3m μV/m	E-Field Polarity
433.92	60.5	-7.7	52.8	436.5	10,964.78	Vertical
433.92	70.7	-7.7	63.0	1412.5	10,964.78	Horizontal

Field Strength of Spurious Emissions						
Average Value						
Frequency MHz	Peak Value Level @3m dBμV	Duty Cycle Factor dB/m	Field Strength dBμV/m	Field Strength μV/m	Limit @3m μV/m	E-Field Polarity
867.84	44.1	-7.7	36.4	66.3	1,096.480	Vertical
867.84	51.7	-7.7	44.0	158.7	1,096.480	Horizontal
1301.76	39.2	-7.7	31.5	37.6	501.190	Vertical
1301.76	39.3	-7.7	31.6	38.0	501.190	Horizontal
1735.68	42.5	-7.7	34.8	55.0	1,096.480	Vertical
1735.68	43.1	-7.7	35.4	58.9	1,096.480	Horizontal
2169.60	42.8	-7.7	35.1	56.9	1,096.480	Vertical
2169.60	43.2	-7.7	35.5	59.6	1,096.480	Horizontal

Remarks:

- FCC Limit for Fundamental Average Measurement =  $41.67(433.92)-7083=10964.78\mu\text{V/m}$
- +: Denotes restricted band of operation.  
Measurements were made using a peak detector. Any emission less than 1000 MHz and falling within the restricted bands of FCC Rules Part 15 Section 15.205 were not adjusted for averaging and the limits of FCC Rules Part 15 Section 15.209 were applied.
- \*: Adjusted by Duty Cycle = -20.0dB  
Duty Cycle Correction = -20.0dB  
Correction Factor= Cable loss Factor+ Ant Factor-Amp Factor  
Average Value Final Field Strengthed = Peak Value Final Field Strengthed +Duty Cycle
- Correction Factor includes Antenna Factor and Cable Attenuation.
- Calculated measurement uncertainty (9kHz-30MHz): 2.0dB  
(30MHz -1GHz): 4.9dB  
(1GHz -6GHz): 4.02dB  
(6GHz -26.5GHz): 4.03dB
- Emissions in the vertical and horizontal polarizations have been investigated and the worst-case test results are recorded in this report.



## Test Report

Date : 2024-08-16  
No. : HMD24080004

Page 8 of 21

### Limits for Radiated Emissions FCC 47 CFR 15.209 Class B]:

Frequency Range	Quasi-Peak Limits
[MHz]	[ $\mu$ V/m]
0.009-0.490	2400/F (kHz)
0.490-1.705	24000/F (kHz)
1.705-30	30
30-88	100
88-216	150
216-960	200
Above960	500

The emission limits shown in the above table are based on measurement employing a CISPR quasi-peak detector and above 1000MHz are based on measurements employing an average detector.

#### Remarks:

Correction Factor includes Antenna Factor and Cable Attenuation.

Calculated measurement uncertainty: (9kHz-30MHz): 2.0dB

(30MHz -1GHz): 4.9dB

(1GHz -6GHz): 4.02dB

(6GHz -26.5GHz): 4.03dB

Emissions in the vertical and horizontal polarizations have been investigated and the worst-case test results are recorded in this report.

#### Result of Tx mode (9kHz - 30MHz): PASS

Emissions detected are more than 20 dB below the limit line(s).

The Hong Kong Standards and Testing Centre Limited

10 Dai Wang Street, Taipo Industrial Estate, Tai Po, N.T., Hong Kong

Tel: +852 2666 1888 Fax: +852 2664 4353 Email: hkstc@stc.group Website: www.stc.group

This report shall not be reproduced unless with prior written approval from The Hong Kong Standards and Testing Centre Limited.

For Conditions of Issuance of this test report, please refer to "Conditions of Issuance of Test Reports" section or Website.

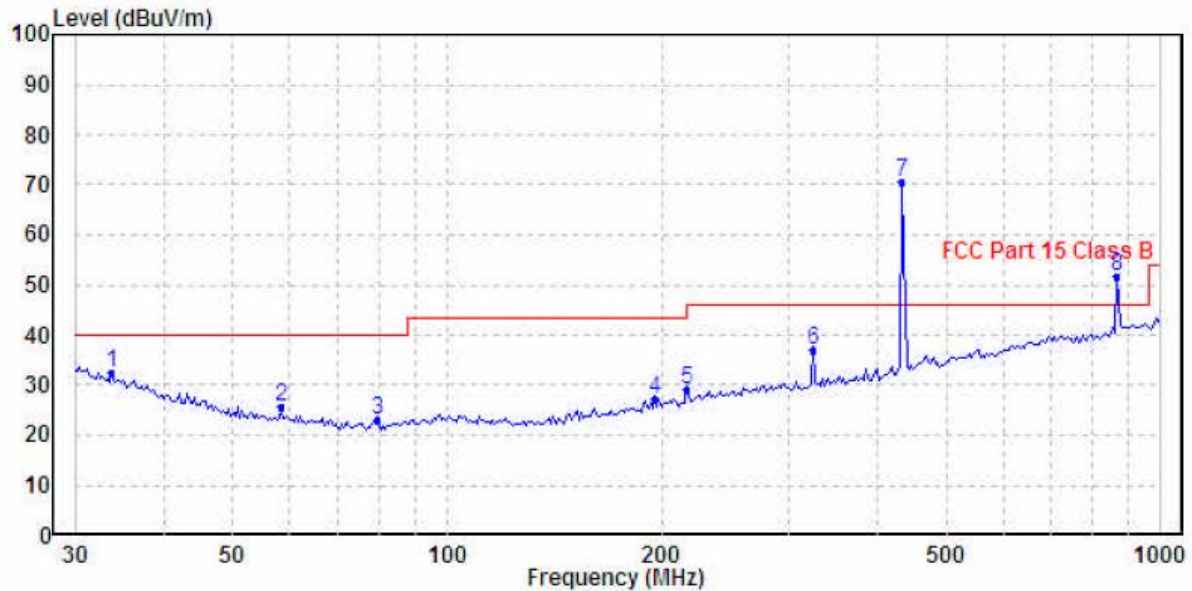


## Test Report

Date : 2024-08-16  
No. : HMD24080004

Page 9 of 21

Results of Tx mode (30MHz – 1GHz): PASS  
Horizontal



Ambient Temperature: 26.3C  
Relative Humidity : 54.7%  
Air Pressure : 100.9kPa

	Freq	Level	Limit	Over	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB		
1	33.799	32.40	40.00	-7.60	QP	Horizontal
2	58.407	25.69	40.00	-14.31	QP	Horizontal
3	79.521	23.00	40.00	-17.00	QP	Horizontal
4	195.137	27.18	43.50	-16.32	QP	Horizontal
5	216.783	28.88	46.00	-17.12	QP	Horizontal
6	325.596	37.07	46.00	-8.93	QP	Horizontal
7	433.920	70.67				
8	867.840	51.71				

The Hong Kong Standards and Testing Centre Limited  
10 Dai Wang Street, Taipo Industrial Estate, Tai Po, N.T., Hong Kong

Tel: +852 2666 1888 Fax: +852 2664 4353 Email: hkstc@stc.group Website: www.stc.group

This report shall not be reproduced unless with prior written approval from The Hong Kong Standards and Testing Centre Limited.

For Conditions of Issuance of this test report, please refer to "Conditions of Issuance of Test Reports" section or Website.

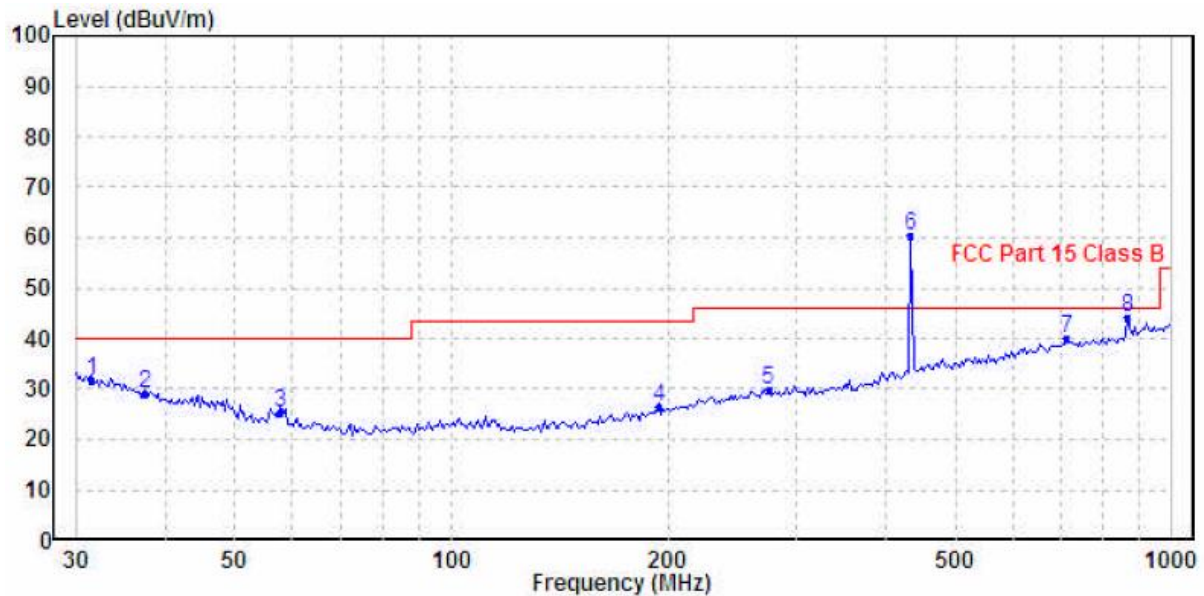


## Test Report

Date : 2024-08-16  
No. : HMD24080004

Page 10 of 21

Vertical



Ambient Temperature: 26.3C  
Relative Humidity : 54.7%  
Air Pressure : 100.9kPa

	Freq	Level	Limit	Over	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB		
1	31.510	31.87	40.00	-8.13	QP	Vertical
2	37.548	28.91	40.00	-11.09	QP	Vertical
3	57.594	25.45	40.00	-14.55	QP	Vertical
4	193.773	26.56	43.50	-16.94	QP	Vertical
5	275.157	29.68	46.00	-16.32	QP	Vertical
6	433.920	60.45				
7	714.173	40.18	46.00	-5.82	QP	Vertical
8	867.840	44.13				

The Hong Kong Standards and Testing Centre Limited  
10 Dai Wang Street, Taipo Industrial Estate, Tai Po, N.T., Hong Kong

Tel: +852 2666 1888 Fax: +852 2664 4353 Email: hkstc@stc.group Website: www.stc.group

This report shall not be reproduced unless with prior written approval from The Hong Kong Standards and Testing Centre Limited.

For Conditions of Issuance of this test report, please refer to "Conditions of Issuance of Test Reports" section or Website.



## Test Report

Date : 2024-08-16  
No. : HMD24080004

Page 11 of 21

### 3.1.2 Antenna Requirement

Ambient Temperature: 25°C

Relative Humidity: 51%

Atmospheric Pressure: 101 kPa

### Test Requirements: § 15.203

#### Test Specification:

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.

#### Test Results:

This is PCB antenna. There is no external antenna, the antenna gain = 0dBi. User is unable to remove or changed the Antenna.

The Hong Kong Standards and Testing Centre Limited

10 Dai Wang Street, Taipo Industrial Estate, Tai Po, N.T., Hong Kong

Tel: +852 2666 1888 Fax: +852 2664 4353 Email: hkstc@stc.group Website: www.stc.group

This report shall not be reproduced unless with prior written approval from The Hong Kong Standards and Testing Centre Limited.

For Conditions of Issuance of this test report, please refer to "Conditions of Issuance of Test Reports" section or Website.



## Test Report

Date : 2024-08-16  
No. : HMD24080004

Page 12 of 21

### 3.2 20dB Bandwidth of Fundamental Emission

Test Requirement: FCC 47 CFR 15.231(c)  
Test Method: ANSI C63.10:2013  
Test Date: 2024-08-07  
Mode of Operation: Tx mode

Ambient Temperature: 25°C      Relative Humidity: 52%      Atmospheric Pressure: 101 kPa

#### Test Method:

The bandwidth is measured at an amplitude level reduced from the reference level by a specified ratio. 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.

#### Test Setup:

As Test Setup of clause 3.1.1 in this test report.

The Hong Kong Standards and Testing Centre Limited

10 Dai Wang Street, Taipo Industrial Estate, Tai Po, N.T., Hong Kong

Tel: +852 2666 1888 Fax: +852 2664 4353 Email: [hkstc@stc.group](mailto:hkstc@stc.group) Website: [www.stc.group](http://www.stc.group)

This report shall not be reproduced unless with prior written approval from The Hong Kong Standards and Testing Centre Limited.

For Conditions of Issuance of this test report, please refer to "Conditions of Issuance of Test Reports" section or Website.



## Test Report

Date : 2024-08-16  
No. : HMD24080004

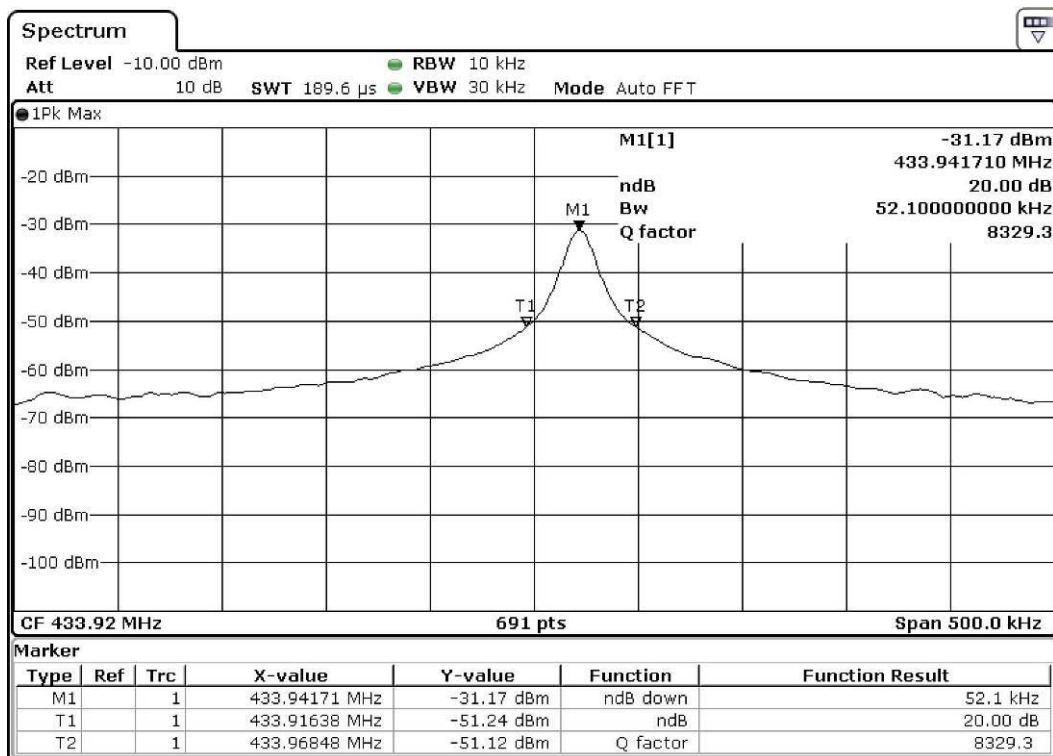
Page 13 of 21

### Limits for 20 dB Bandwidth of Fundamental Emission:

Frequency Range [MHz]	20dB Bandwidth [kHz]	FCC Limits * [MHz]
433.92	226.48335	1.0848

\*: FCC Limit for Bandwidth measurement  
= (0.25%)(Center Frequency)  
= (0.0025)(433.92)  
= 1.0848MHz

### 20dB Bandwidth of Fundamental Emission



The Hong Kong Standards and Testing Centre Limited

10 Dai Wang Street, Taipo Industrial Estate, Tai Po, N.T., Hong Kong

Tel: +852 2666 1888 Fax: +852 2664 4353 Email: hkstc@stc.group Website: www.stc.group

This report shall not be reproduced unless with prior written approval from The Hong Kong Standards and Testing Centre Limited.

For Conditions of Issuance of this test report, please refer to "Conditions of Issuance of Test Reports" section or Website.



## Test Report

Date : 2024-08-16  
No. : HMD24080004

Page 14 of 21

### Appendix A

#### List of Measurement Equipment

##### Radiated Emission

EQP NO.	DESCRIPTION	MANUFACTURER	MODEL NO.	SERIAL NO.	LAST CAL	DUE CAL
EM215	MULTIDEVICE CONTROLLER	EMCO	2090	00024676	N/A	N/A
EM217	ELECTRIC POWERED TURNTABLE	EMCO	2088	00029144	N/A	N/A
EM218	ANECHOIC CHAMBER	ETS-LINDGREN	FACT-3	--	2024-04-18	2029-04-18
EM356	ANTENNA POSITIONING TOWER	ETS-LINDGREN	2171B	00150346	N/A	N/A
EM293	SPECTRUM ANALYZER	AGILENT TECHNOLOGIES	N9020A	MY50510152	2023-03-21	2025-03-21
EM299	BROADBAND HORN ANTENNA	ETS-LINDGREN	3115	00114120	2023-01-25	2025-01-25
EM300	PYRAMIDAL STANDARD GAIN HORN ANTENNA	ETS-LINDGREN	3160-09	00130130	2023-01-16	2025-01-16
EM301	PYRAMIDAL STANDARD GAIN HORN ANTENNA	ETS-LINDGREN	3160-10	00130988	2023-02-15	2025-02-15
EM353	LOOP ANTENNA	ETS_LINDGREN	6502	00206533	2022-09-26	2024-09-26
EM355	BICONILOG ANTENNA	ETS-LINDGREN	3143B	00094856	2022-08-26	2024-08-26
EM200	DUAL CHANNEL POWER METER	R & S	NRVD	100592	2023-08-02	2025-08-02
EM012	PRE-AMPLIFIER	HP	HP8448B	3008A00262	2022-11-08	2025-11-08

Remarks:-

CM     Corrective Maintenance  
N/A    Not Applicable  
TBD    To Be Determined

The Hong Kong Standards and Testing Centre Limited

10 Dai Wang Street, Taipo Industrial Estate, Tai Po, N.T., Hong Kong

Tel: +852 2666 1888 Fax: +852 2664 4353 Email: hkstc@stc.group Website: www.stc.group

This report shall not be reproduced unless with prior written approval from The Hong Kong Standards and Testing Centre Limited.

For Conditions of Issuance of this test report, please refer to "Conditions of Issuance of Test Reports" section or Website.



## Test Report

Date : 2024-08-16  
No. : HMD24080004

Page 15 of 21

### Appendix B

#### Duty Cycle Correction During 100msec

Each packet period (100msec) never exceeds a series of 109 ( $106 \times 0.3478 \text{ ms} + 4 \times 1.1014 \text{ ms}$ ) pulses. Assuming any combination of pulses may be obtained due to encoding the worst case transmit duty cycle would be considered  
 $(106 \times 0.3478 \text{ ms} + 4 \times 1.1014 \text{ ms}) \text{ per } 100 \text{ msec} = 41.2724\% \text{ duty cycle.}$

Remarks:

Duty cycle factor =  $20 \log [41.2724/100] = -7.7 \text{ dB}$

The following figures [Figure A to Figure C] showed the characteristics of the pulse train for one of these functions.

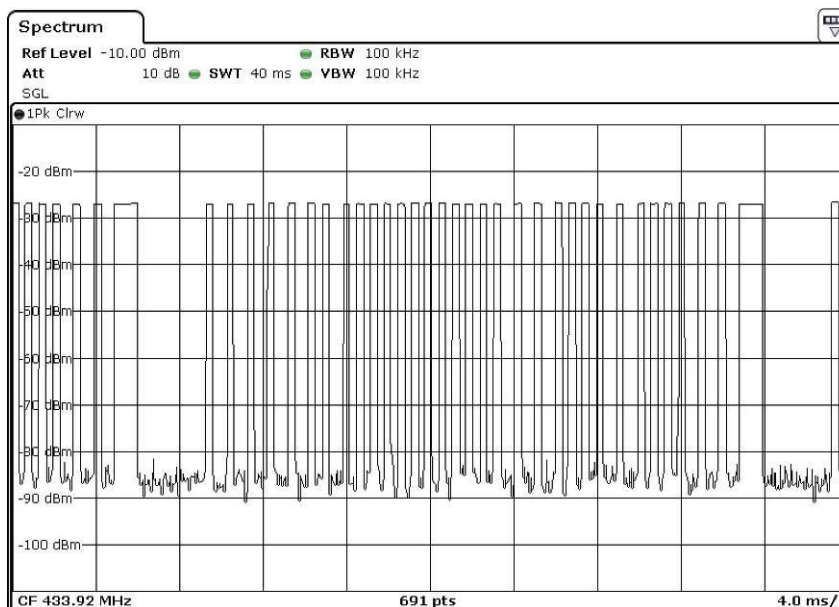
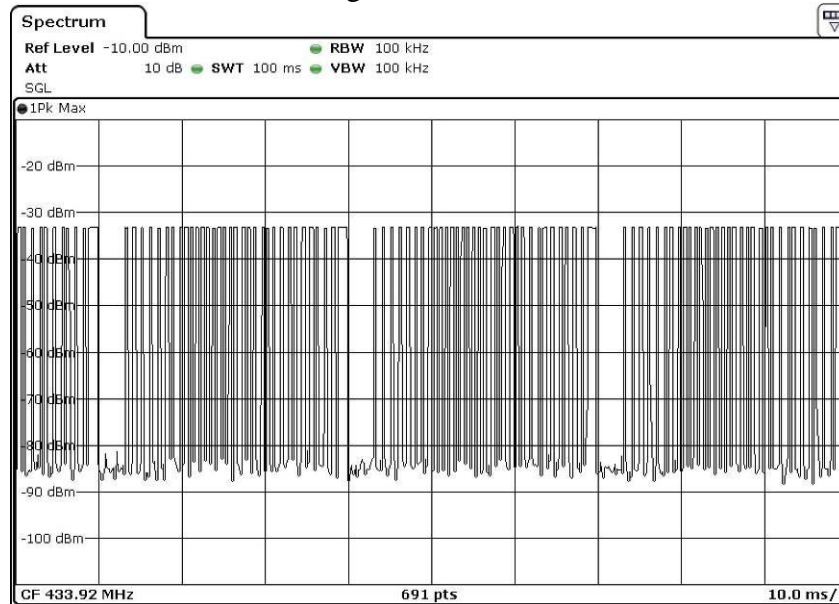


## Test Report

Date : 2024-08-16  
No. : HMD24080004

Page 16 of 21

Figure A [Pulse Train]



The Hong Kong Standards and Testing Centre Limited

10 Dai Wang Street, Taipo Industrial Estate, Tai Po, N.T., Hong Kong

Tel: +852 2666 1888 Fax: +852 2664 4353 Email: [hkstc@stc.group](mailto:hkstc@stc.group) Website: [www.stc.group](http://www.stc.group)

This report shall not be reproduced unless with prior written approval from The Hong Kong Standards and Testing Centre Limited.

For Conditions of Issuance of this test report, please refer to "Conditions of Issuance of Test Reports" section or Website.



## Test Report

Date : 2024-08-16  
No. : HMD24080004

Page 17 of 21

Figure B [ Pulse]

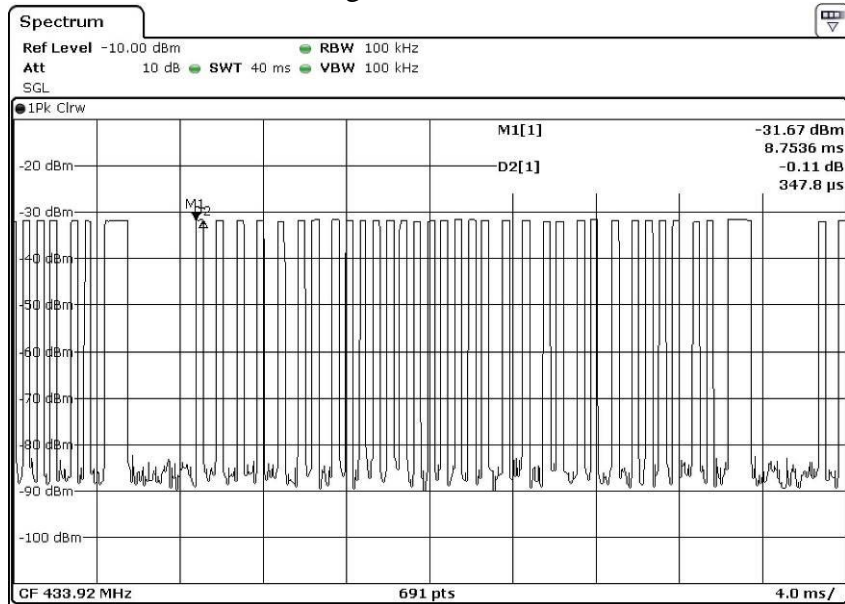
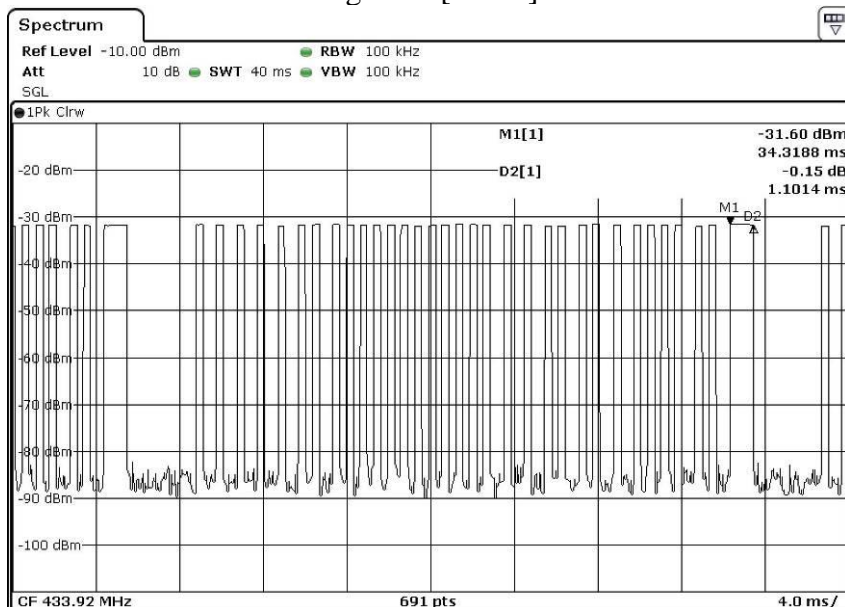


Figure C [ Pulse]



The Hong Kong Standards and Testing Centre Limited

10 Dai Wang Street, Taipo Industrial Estate, Tai Po, N.T., Hong Kong

Tel: +852 2666 1888 Fax: +852 2664 4353 Email: [hkstc@stc.group](mailto:hkstc@stc.group) Website: [www.stc.group](http://www.stc.group)

This report shall not be reproduced unless with prior written approval from The Hong Kong Standards and Testing Centre Limited.

For Conditions of Issuance of this test report, please refer to "Conditions of Issuance of Test Reports" section or Website.

## Test Report

Date : 2024-08-16  
No. : HMD24080004

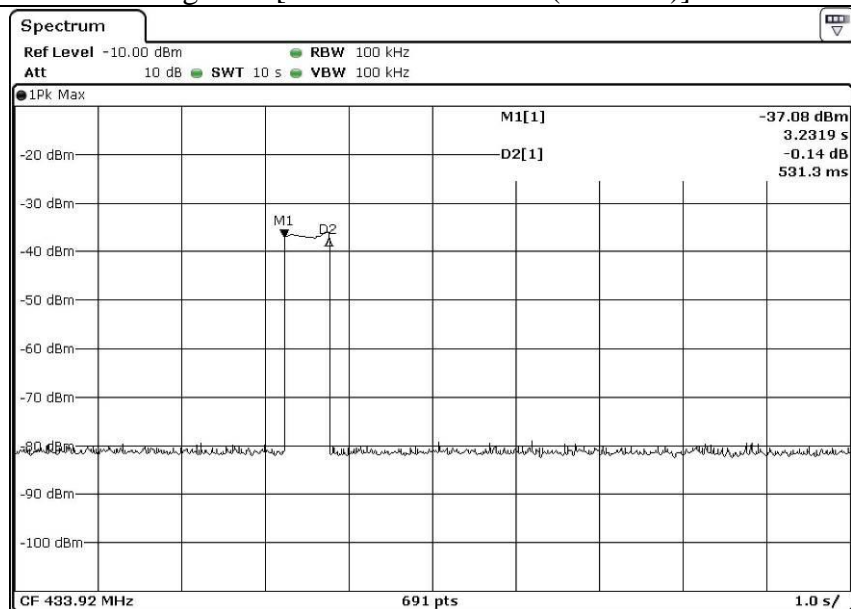
Page 18 of 21

### Appendix C

#### Manual Operated Transmitter Transmission Time [FCC 47CFR 15.231(a)]

According to FCC 47CFR15.231 (a). A manually operated transmitter shall employ a switch that will automatically deactivate the transmitter within not more than 5 seconds of being released.  
The EUT ceases transmission almost immediately upon being released and appears to finish the current packet being transmitted. Therefore the longest period of time the transmitter should take to deactivate is a packet length.

Figure E [Transmission Period(531.3ms)]



The Hong Kong Standards and Testing Centre Limited

10 Dai Wang Street, Taipo Industrial Estate, Tai Po, N.T., Hong Kong

Tel: +852 2666 1888 Fax: +852 2664 4353 Email: hkstc@stc.group Website: www.stc.group

This report shall not be reproduced unless with prior written approval from The Hong Kong Standards and Testing Centre Limited.

For Conditions of Issuance of this test report, please refer to "Conditions of Issuance of Test Reports" section or Website.

## Test Report

Date : 2024-08-16  
No. : HMD24080004

Page 19 of 21

### Appendix D

#### Photographs of EUT

**Front View of the product**



**Rear View of the product**



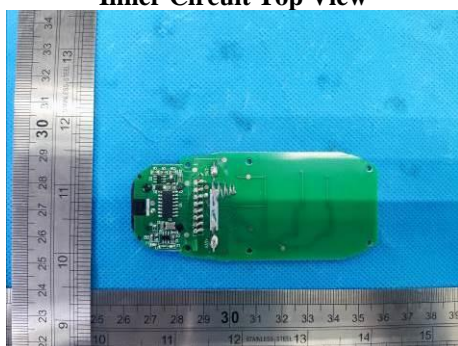
**Inner Circuit Top View**



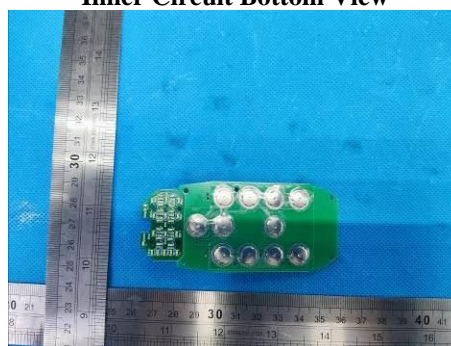
**Inner Circuit Bottom View**



**Inner Circuit Top View**



**Inner Circuit Bottom View**



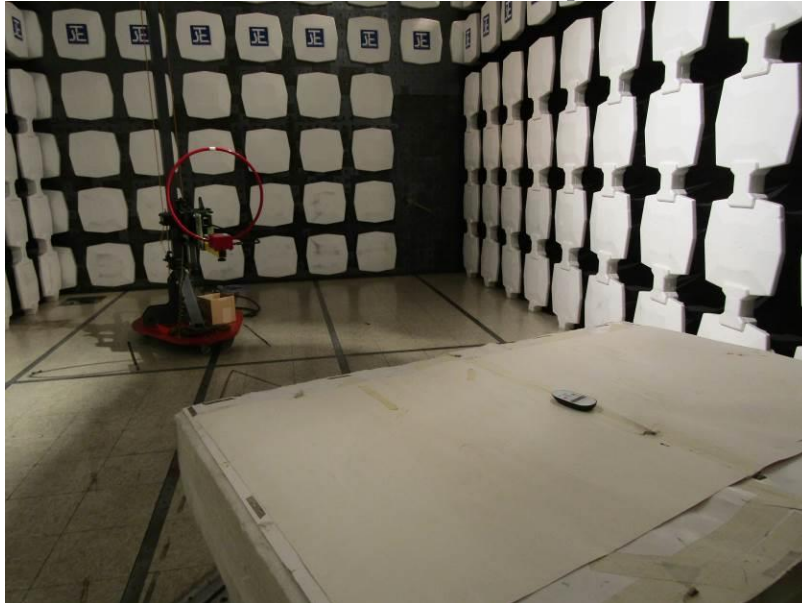
## Test Report

Date : 2024-08-16  
No. : HMD24080004

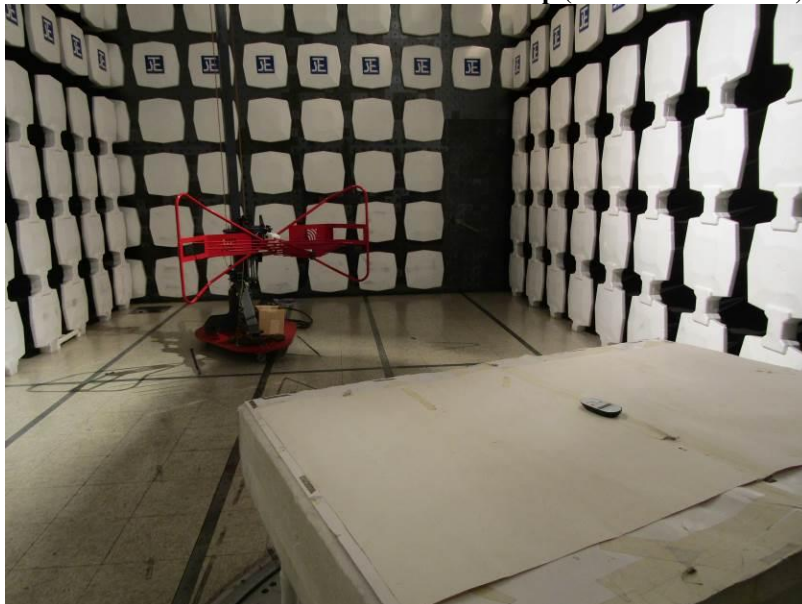
Page 20 of 21

### Photographs of EUT

**Measurement of Radiated Emission Test Set Up (9kHz – 30MHz)**



**Measurement of Radiated Emission Test Set Up (30MHz – 1000MHz)**



The Hong Kong Standards and Testing Centre Limited

10 Dai Wang Street, Taipo Industrial Estate, Tai Po, N.T., Hong Kong

Tel: +852 2666 1888 Fax: +852 2664 4353 Email: [hkstc@stc.group](mailto:hkstc@stc.group) Website: [www.stc.group](http://www.stc.group)

This report shall not be reproduced unless with prior written approval from The Hong Kong Standards and Testing Centre Limited.

For Conditions of Issuance of this test report, please refer to "Conditions of Issuance of Test Reports" section or Website.

## Test Report

Date : 2024-08-16  
No. : HMD24080004

Page 21 of 21

### Photographs of EUT

**Measurement of Radiated Emission Test Set Up (above 1000MHz)**



\*\*\*\*\* End of Test Report \*\*\*\*\*

## Conditions of Issuance of Test Reports

1. All samples and goods are accepted by The Hong Kong Standards & Testing Centre Limited (the “Company”) solely for testing and reporting in accordance with the following terms and conditions. The Company provides its services on the basis that such terms and conditions constitute express agreement between the Company and any person, firm or company requesting its services (the “Clients”).
2. Any report issued by the Company as a result of this application for testing service (the “Report”) shall be issued in confidence to the Clients and the Report will be strictly treated as such by the Company. It may not be reproduced either in its entirety or in part and it may not be used for advertising or other unauthorized purposes without the written consent of the Company. The Clients to whom the Report is issued may, however, show or send it, or a certified copy thereof prepared by the Company to his customer, supplier or other persons directly concerned. Subject to clause 3, the Company will not, without the consent of the Clients, enter into any discussion or correspondence with any third party concerning the contents of the Report, unless required by the relevant governmental authorities, laws or court orders.
3. The Company shall be at liberty to disclose the testing-related documents and/or files anytime to any third-party accreditation and/or recognition bodies for audit or other related purposes. No liabilities whatsoever shall attach to the Company's act of disclosure.
4. The Company shall not be called or be liable to be called to give evidence or testimony on the Report in a court of law without its prior written consent, unless required by the relevant governmental authorities, laws or court orders.
5. The results in Report apply only to the sample as received and do not apply to the bulk, unless the sampling has been carried out by the Company and is stated as such in the Report.
6. When a statement of conformity to a specification or standard is provided, the ILAC-G8 Guidance document (and/or IEC Guide 115 in the electrotechnical sector) will be adopted as a decision rule for the determination of conformity unless it is inherent in the requested specification or standard, or otherwise specified in the Report.
7. In the event of the improper use the report as determined by the Company, the Company reserves the right to withdraw it, and to adopt any other additional remedies which may be appropriate.
8. Sample submitted for testing are accepted on the understanding that the Report issued cannot form the basis of, or be the instrument for, any legal action against the Company.
9. The Company will not be liable for or accept responsibility for any loss or damage howsoever arising from the use of information contained in any of its Reports or in any communication whatsoever about its said tests or investigations.
10. Clients wishing to use the Report in court proceedings or arbitration shall inform the Company to that effect prior to submitting the sample for testing.
11. Subject to the variable length of retention time for test data and report stored hereinto as to otherwise specifically required by individual accreditation authorities, the Company will only keep the supporting test data and information of this test report for a period of three years. The data and information will be disposed of after the aforementioned retention period has elapsed. Under no circumstances shall we provide any data and information which has been disposed of after the retention period. Under no circumstances shall we be liable for damages of any kind, including (but not limited to) compensatory damages, lost profits, lost data, or any form of special, incidental, indirect, consequential or punitive damages of any kind, whether based on breach of contract of warranty, tort (including negligence), product liability or otherwise, even if we are informed in advance of the possibility of such damages.
12. Issuance records of the Report are available on the internet at [www.stc.group](http://www.stc.group). Further enquiry of validity or verification of the Reports should be addressed to the Company.