

FCC Test Report

Report No.: AGC00408230305FE01

FCC ID	: 2A3DR-M8
APPLICATION PURPOSE	: Original Equipment
PRODUCT DESIGNATION	: 4G Mobile Phone
BRAND NAME	: AGM
MODEL NAME	: AGM_M8_FLIP
APPLICNAT	: AGM MOBILE LIMITED
DATE OF ISSUE	: May 05, 2023
STANDARD(S)	: FCC Part 15B Rules
REPORT VERSION	: V1.0
<u>Attestation of G</u>	obal Compliance (Shenzhen) Co., Ltd





REPORT REVISE RECORD

Report Version	Revise Time	Issued Date	Valid Version	Notes
V1.0	/	May 05, 2023	Valid	Initial Release



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1. VERIFICATION OF CONFORMITY

Applicant	AGM MOBILE LIMITED
Address	FLAT/RM 2253 22/F HOI TAI FACTORY ESTATE TSING YEUNG CIRCUIT TUEN MUN NT HONG KONG, CHINA
Manufacturer	Shenzhen AIJIEMO Technology Company Limited
Address	1st Floor 101 and 2nd Floor 201, Building A2, Huafeng Century Technology Park, Nanchang Community, Xixiang, Baoan District, Shenzhen, China
Factory	Shenzhen AIJIEMO Technology Company Limited
Address	1st Floor 101 and 2nd Floor 201, Building A2, Huafeng Century Technology Park, Nanchang Community, Xixiang, Baoan District, Shenzhen, China
Product Designation	4G Mobile Phone
Brand Name	AGM
Test Model	AGM_M8_FLIP
Date of receipt of test ite m	Apr. 14, 2023
Date of Test	Apr. 14, 2023~May 05, 2023
Deviation	No any deviation from the test method.
Condition of Test Sample	Normal
Report Template	AGCRT-US-IT/AC

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 result of this report relate only to the tested sample identified in this report.

Bibo zhang Prepared By **Bibo Zhang** May 05, 2023 (Project Engineer) alin Lin ^u ər) Ma **Reviewed By** Calvin Liu May 05, 2023 (Reviewer) Max Zhan Approved By Max Zhang

Max Zhang Authorized Officer

May 05, 2023



2. SYSTEM DESCRIPTION

EUT test procedure:

- 1. Connect EUT and peripheral devices (PC) through USB port.
- 2. Power on the EUT, use the software to transfer data between EUT and PC.
- 3. Make sure the EUT operates normally during the test.

Test Mode

TEST MOD	TEST MODE DESCRIPTION					
NO. TEST MODE DESCRIPTION WORS						
1	USB (connection for data transferring)	V				
Note: 1. V means EMI worst mode						



3. MEASUREMENT UNCERTAINTY

Test	Measurement Uncertainty	Notes
Transmitter power conducted	±0.57 dB	(1)
Transmitter power Radiated	±2.20 dB	(1)
Conducted spurious emission 9KHz-40 GHz	±2.20 dB	(1)
Occupied Bandwidth	±0.01ppm	(1)
Radiated Emission 30~1000MHz	±4.10dB	(1)
Radiated Emission Above 1GHz	±4.32dB	(1)
Conducted Disturbance0.15~30MHz	±3.20dB	(1)

Note: This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.



4. PRODUCT INFORMATION

Housing Type Plastic and metal	
Hardware Version	V1.1
Software Version	Q15_CT12_AJM02_AM_Y01_V0.2
EUT Input Rating	DC 3.7V by battery or DC 5.0V by adapter.

I/O Port Information (Applicable Information Not Applicable)

I/O Port of EUT						
I/O Port Type Number Specific Tested With						
USB Port	1	1.0 Unshielded	1			
Earphone Port	1	-	1			



5. SUPPORT EQUIPMENT

Device Type	Manufacturer	Model Name	Serial No.	Data Cable	Power Cable
PC	Xiaomi Inc.				
Adapter	Xiaomi Inc.				1.25m Unshielded

Note: All the above equipment/cables were placed in worse case positions to maximize emission signals during emission test.



6. TEST FACILITY

Test Site	Attestation of Global Compliance (Shenzhen) Co., Ltd
Location1-2/F, Building 19, Junfeng Industrial Park, Chongqing Road, He Community, Fuhai Street, Bao'an District, Shenzhen, Guangdor	
Designation Number	CN1259
FCC Test Firm Registration Number	975832
A2LA Cert. No.	5054.02
Description	Attestation of Global Compliance(Shenzhen) Co., Ltd is accredited by A2LA

TEST EQUIPMENT OF CONDUCTED EMISSION TEST

Equipment	Manufacturer	Model	S/N	Cal. Date	Cal. Due
TEST RECEIVER	R&S	ESPI	101206	Aug. 04, 2022	Aug. 03, 2023
LISN	R&S	ESH2-Z5	100086	Jun. 08, 2022	Jun. 07, 2023
Test software	R&S	ES-K1 (Ver.V1.71)	N/A	N/A	N/A

TEST EQUIPMENT OF RADIATED EMISSION TEST

Equipment	Manufacturer	Model	S/N	Cal. Date	Cal. Due
TEST RECEIVER	R&S	ESCI	10096	Feb. 18, 2023	Feb. 17, 2024
EXA Signal Analyzer	Aglient	N9010A	MY53470504	Aug. 04, 2022	Aug. 03, 2023
Horn antenna	SCHWARZBECK	BBHA 9170	#768	Oct. 31, 2021	Oct. 30, 2023
preamplifier	ChengYi	EMC184045SE	980508	Oct. 29, 2021	Oct. 28, 2023
Double-Ridged Waveguide Horn	ETS LINDGREN	3117	00034609	Apr. 23, 2021	Apr. 22, 2023
Broadband Preamplifier	SCHWARZBECK	3117PA	00225134	Sep. 01, 2022	Aug. 31, 2023
ANTENNA	SCHWARZBECK	VULB9168	D69250	Jan. 05, 2023	Jan. 04, 2025
Test software	Tonscend	JS32-RE (Ver.2.5)	N/A	N/A	N/A



6. TEST ITEMS AND THE RESULTS

Test item	Test Requirement Test Method		n Test Requirement Test Method Class/Sever		Class/Severity	Result
CONDUCTED EMISSION	FCC Part 15.107 Rules	ANSI C63.4:2014	Class B	Pass		
RADIATED EMISSION	FCC Part 15.109 Rules	ANSI C63.4:2014	Class B	Pass		



7. FCCLINE CONDUCTED EMISSION TEST

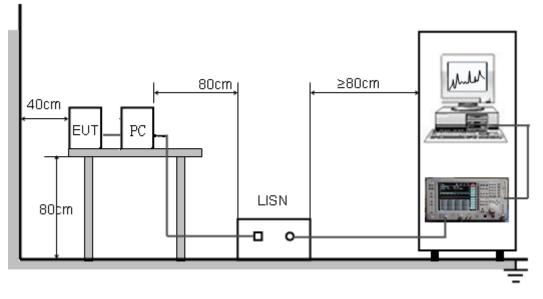
7.1. LIMITS OF LINE CONDUCTED EMISSION TEST

Fraguanay	Maximum RF Line Voltage				
Frequency	Q.P.(dBuV)	Average(dBuV)			
150kHz-500kHz	66-56	56-46			
500kHz-5MHz	56	46			
5MHz-30MHz	60	50			

Note:

- 1. The lower limit shall apply at the transition frequency.
- 2. The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50MHz.

7.2. BLOCK DIAGRAM OF TEST SETUP





7.3. PROCEDURE OF LINE CONDUCTED EMISSION TEST

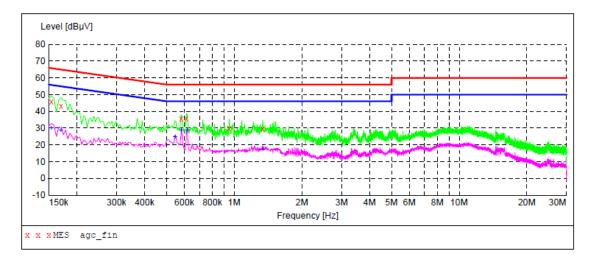
- (1) The equipment was set up as per the test configuration to simulate typical actual usage per the user's manual. When the EUT is a tabletop system, a wooden table with a height of 0.8 meters is used and is placed on the ground plane as per ANSI C63.4 (see Test Facility for the dimensions of the ground plane used). When the EUT is a 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 received DC 5V power from PC with receive AC120V/60Hz power from a LISN.
- (5) The EUT test program was started. Emissions were measured on each current carrying line of the EUT using a spectrum Analyzer / Receiver connected to the LISN powering the EUT. The LISN has two monitoring points: Line 1 (Hot Side) and Line 2 (Neutral Side). Two scans were taken: one with Line 1 connected to Analyzer / Receiver and Line 2 connected to a 50 ohm load; the second scan had Line 1 connected to a 50 ohm load and Line 2 connected to the Analyzer / Receiver.
- (6) Analyzer / Receiver scanned from 150 kHz to 30MHz for emissions in each of the test modes.
- (7) During the above scans, the emissions were maximized by cable manipulation.
- (8) A scan was taken on both power lines, Line 1 and Line 2, recording at least the six highest emissions.
- (9) Emission frequency and amplitude were recorded into a computer in which correction factors were used to calculate the emission level and compare reading to the applicable limit. If EUT emission level was less –2dB to the A.V. limit in Peak mode, then the emission signal was re-checked using Q.P and Average detector.

The test data of the worst case condition (mode 1) was reported on the Summary Data page.



7.4. TEST RESULT OF LINE CONDUCTED EMISSION TEST





MEASUREMENT RESULT: "agc_fin"

2023/4/18 16:27

Frequency MHz		Transd dB	Limit dBµV	Margin dB	Detector	Line
0.154000 0.170000 0.582000 0.614000 0.950000 1.338000	45.80 43.40 35.80 35.70 29.90 29.80	6.2 6.2 6.2 6.3 6.3	66 65 56 56 56	21.6 20.2 20.3	QP	L1 L1 L1 L1 L1 L1

MEASUREMENT RESULT: "agc fin2"

2023/4/18 16:26											
Frequen	-			-	Detector	Line					
М	Hz dBµV	dB	dBµV	dB							
0.1540	00 29.90	6.2	56	25.9	AV	L1					
0.1700		6.2	55		AV	L1					
0.5460	00 24.70	6.2	46	21.3	AV	L1					
0.5820	00 28.80	6.2	46	17.2	AV	L1					
0.6180	00 28.60	6.2	46	17.4	AV	L1					
1.3420	00 17.10	6.3	46	28.9	AV	L1					

RESULT: PASS

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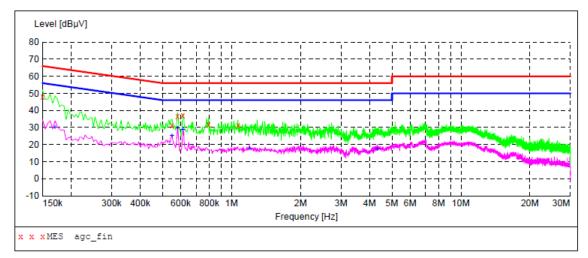
 Attestation of Global Compliance(Shenzhen)Co., Ltd

 Attestation of Global Compliance(Shenzhen)Std & Tech Co., Ltd

 Tel: +86-755 2523 4088
 E-mail: agc@agccert.com



LINE CONDUCTED EMISSION TEST-N



MEASUREMENT RESULT: "agc fin"

2023/4/18 1	6:23						
Frequency MHz		Transd dB	Limit dBµV	Margin dB	Detector	Line	
0.150000	48.20	6.2	66	17.8	QP	N	C
0.550000	31.50	6.2	56	24.5	QP	Ν	(
0.582000	36.50	6.2	56	19.5	QP	N	(
0.614000	37.00	6.2	56	19.0	QP	Ν	(
0.794000	31.70	6.3	56	24.3	QP	N	(
1.066000	31.50	6.3	56	24.5	QP	N	C

MEASUREMENT RESULT: "agc fin2"

2023/4/18 16	5:21						
Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	
0.170000	30.00	6.2	55	25.0	AV	N	(
0.550000	25.10	6.2	46	20.9	AV	N	(
0.582000	29.80	6.2	46	16.2	AV	Ν	(
0.614000	28.90	6.2	46	17.1	AV	Ν	(
1.194000	17.80	6.3	46	28.2	AV	N	(
4.318000	17.20	6.4	46	28.8	AV	N	C

RESULT: PASS



8. FCC RADIATED EMISSION TEST

8.1. EXCEPT FOR CLASS A DIGITAL DEVICES, THE FIELD STRENGTH OF RADIATED EMISSIONS

from unintentional radiators at a distance of 3 meters shall not exceed the following values:

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.

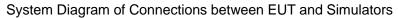
8.1.1 The following table is the setting of spectrum analyzer and receiver:

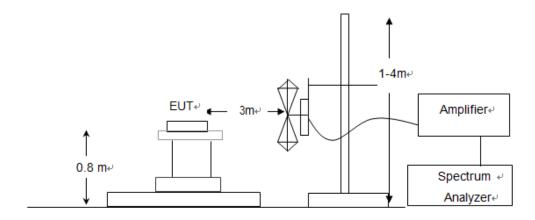
Spectrum Parameter	Setting
Start ~Stop Frequency	9KHz~150KHz/RB 200Hz for QP
Start ~Stop Frequency	150KHz~30MHz/RB 9KHz for QP
Start ~Stop Frequency	30MHz~1000MHz/RB 120KHz for QP
Start Stap Frequency	1GHz~26.5GHz
Start ~Stop Frequency	1MHz/1MHz for Peak, 1MHz/10Hz for Average

Receiver Parameter	Setting
Start ~Stop Frequency	9KHz~150KHz/RB 200Hz for QP
Start ~Stop Frequency	150KHz~30MHz/RB 9KHz for QP
Start ~Stop Frequency	30MHz~1000MHz/RB 120KHz for QP

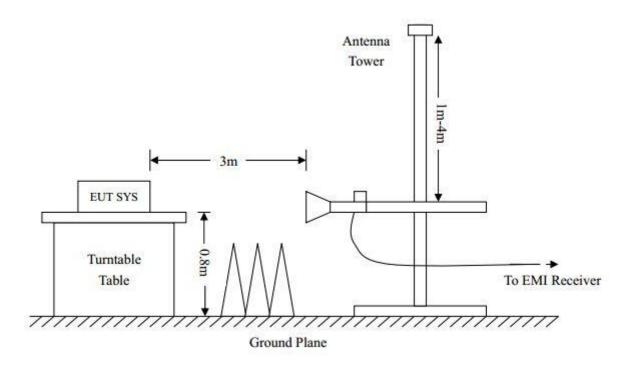


8.2. BLOCK DIAGRAM OF TEST SETUP





RADIATED EMISSION TEST SETUP ABOVE 1000MHz



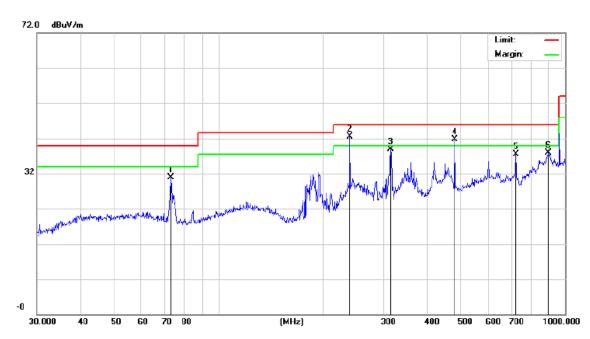


8.3. PROCEDURE OF RADIATED EMISSION TEST

- 1. Configure the EUT according to ANSI C63.4. The EUT was placed on the top of the turntable 0.8 meter above ground. The phase center of the receiving antenna mounted on the top of a height-variable antenna tower was placed 3 meters far away from the turntable.
- 2. Power on the EUT and all the supporting units. The turntable was rotated by 360 degrees to determine the position of the highest radiation.
- 3. The height of the broadband receiving antenna was varied between one meter and four meters above ground to find the maximum emissions field strength of both horizontal and vertical polarization.
- 4. For each suspected emissions, the antenna tower was scan (from 1 M to 4 M) and then the turntable was rotated (from 0 degree to 360 degrees) to find the maximum reading.
- 5. Set the test-receiver system to Peak or CISPR quasi-peak Detect Function with specified bandwidth under Maximum Hold Mode.
- 6. For emissions above 1GHz, use 1MHz RBW and 3MHz VBW for peak reading. Then 1MHz RBW and 3MHz VBW for average reading in spectrum analyzer. The EUT was placed on the top of the turntable 0.8 meter above ground. The phase center of the receiving antenna mounted on the top of a height-variable antenna tower was placed 3 meters far away from the turntable.
- 7. When the radiated emissions limits are expressed in terms of the average value of the emissions, and pulsed operation is employed, the measurement field strength shall be determined by averaging over one complete pulse train, including blanking intervals, as long as the pulse train does not exceed 0.1 seconds. As an alternative (provided the transmitter operates for longer than 0.1 seconds) or in cases where the pulse train exceeds 0.1 seconds, the measured field strength shall be determined from the average absolute voltage during a 0.1 second interval during which the field strength is at its maximum values.
- 8.If the emissions level of the EUT in peak mode was 3 dB lower than the average limit specified, then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions which do not have 3 dB margin will be repeated one by one using the quasi-peak method for below 1GHz.
- 9. If the emission level of the EUT in peak mode was 10 dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10 dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.
- 10. In case the emission is lower than 30MHz, loop antenna has to be used for measurement and the recorded data should be QP measured by receiver. High Low scan is not required in this case.
- 11. The test data of the worst case condition (mode 1) was reported on the Summary Data page.



8.4. TEST RESULT OF RADIATED EMISSION TEST

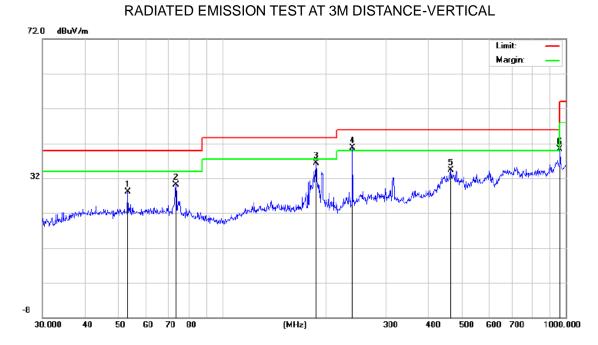


RADIATED EMISSION TEST AT 3M DISTANCE-HORIZONTAL

No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector
1		73.1025	18.03	12.93	30.96	40.00	-9.04	peak
2	*	239.9874	24.07	18.40	42.47	46.00	-3.53	peak
3		314.3765	21.49	17.50	38.99	46.00	-7.01	peak
4	İ	480.5276	18.97	22.78	41.75	46.00	-4.25	peak
5		721.7259	10.95	26.46	37.41	46.00	-8.59	peak
6		896.9965	6.56	31.42	37.98	46.00	-8.02	peak

RESULT: PASS





Reading Correct Measure-Limit Over No. Mk. Freq. Level Factor ment dB MHz dBuV dBuV/m dB/m dB Detector 53.1313 11.13 17.03 28.16 40.00 -11.84 1 peak 2 73.3593 13.23 16.97 30.20 40.00 -9.80 peak 187.7530 18.27 -7.20 3 18.03 36.30 43.50 peak 239.9874 24.50 16.23 -5.27 4 * 40.73 46.00 peak 5 463.9696 9.36 24.92 34.28 46.00 -11.72 peak 6 -13.74 962.1623 10.16 30.10 40.26 54.00 peak

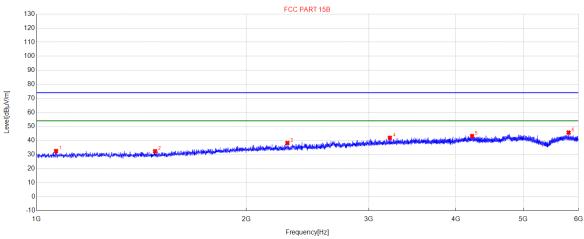
RESULT: PASS

Note: 1.Measurement = Reading + Factor, Over = Measurement-Limit.

2. The "Factor" value can be calculated automatically by software of measurement system.



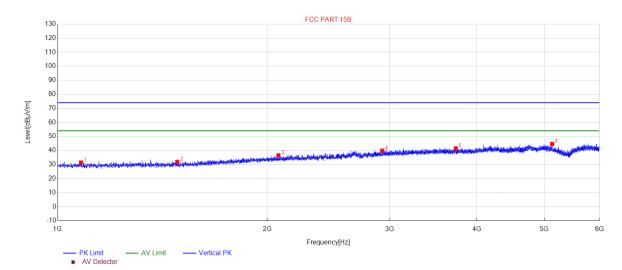
RADIATED EMISSION ABOVE 1GHZ TEST AT 3M DISTANCE -HORIZONTAL



PK Limit — AV Limit — Horizontal PK
 AV Detector

NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1066.5067	32.49	-19.85	74.00	41.51	100	230	Horizontal
2	1479.548	32.35	-19.93	74.00	41.65	100	20	Horizontal
3	2291.6292	38.19	-14.33	74.00	35.81	100	360	Horizontal
4	3215.7216	41.89	-10.57	74.00	32.11	100	130	Horizontal
5	4220.322	43.16	-7.84	74.00	30.84	100	240	Horizontal
6	5806.9807	45.63	-5.54	74.00	28.37	100	300	Horizontal





RADIATED EMISSION ABOVE 1GHZ TEST AT 3M DISTANCE -VERTICAL

NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1080.5081	31.43	-19.85	74.00	42.57	100	10	Vertical
2	1485.5486	31.84	-19.93	74.00	42.16	100	140	Vertical
3	2075.6076	36.52	-15.58	74.00	37.48	100	130	Vertical
4	2924.6925	39.87	-11.51	74.00	34.13	100	150	Vertical
5	3731.2731	41.43	-8.96	74.00	32.57	100	150	Vertical
6	5130.413	44.66	-6.39	74.00	29.34	100	180	Vertical

Note: 1. Emissions range from 6GHz to 12.5GHz have 20dB margin. No recording in the test report.

2. Factor=Antenna Factor + Cable loss - Amplifier gain, Margin= Limit - Measurement.

3. The "Factor" value can be calculated automatically by software of measurement system.



APPENDIX A: PHOTOGRAPHS OF TEST SETUP

Refer to the Report No.: AGC00408230305AP04

APPENDIX B: PHOTOGRAPHS OF EUT

Refer to the Report No.: AGC00408230305AP02

----END OF REPORT----



Conditions of Issuance of Test Reports

1. All samples and goods are accepted by the Attestation of Global Compliance (Shenzhen) Co., Ltd (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 Company as a result of this application for testing services (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 its customer, supplier or other persons directly concerned. 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 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.

4. In the event of the improper use of 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.

5. Samples 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.

6. The Company will not be liable for or accept responsibility for any loss or damage however arising from the use of information contained in any of its Reports or in any communication whatsoever about its said tests or investigations.

7.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.

8. The Company is not responsible for recalling the electronic version of the original report when any revision is made to them. The Client assumes the responsibility to providing the revised version to any interested party who uses them.

9. Subject to the variable length of retention time for test data and report stored hereinto as otherwise specifically required by individual accreditation authorities, the Company will only keep the supporting test data and information of the test report for a period of six 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 retention period. Under no circumstances shall we be liable for damage 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.