

FCC Test Report

Report No.: AGC01741250501FR02

FCC ID : 2BPQB-LFP700

APPLICATION PURPOSE: Original Equipment

PRODUCT DESIGNATION: Portable Power Station

BRAND NAME : DECOMIL

MODEL NAME : LFP700

APPLICANT: DECOMIL LLC

DATE OF ISSUE : Jun. 26, 2025

STANDARD(S) : FCC Part 15 Subpart C

REPORT VERSION: V1.0

Attestation of Global Concilance (Shenzhen) Co., Ltd



Page 2 of 31

Report Revise Record

Report Version	Revise Time	Issued Date	Valid Version	Notes
V1.0	/	Jun. 26, 2025	Valid	Initial Release



Table of Contents

1. General Information	4
2. Product Information	5
2.1 Product Technical Description	5
2.2 Related Submittal(S) / Grant (S)	6
2.3 Test Methodology	6
2.4 Special Accessories	6
2.5 Equipment Modifications	6
2.6 Antenna Requirement	6
3. Test Environment	7
3.1 Address of The Test Laboratory	7
3.2 Test Facility	7
3.3 Environmental Conditions	8
3.4 Measurement Uncertainty	8
3.5 List of Equipment Used	9
4. System Test Configuration	
4.1 EUT Configuration	10
4.2 EUT Exercise	
4.3 Configuration of Tested System	
4.4 Equipment Used in Tested System	
4.5 Summary of Test Results	
5. Description of Test Modes	
6. Field Strength of Fundamental	
6.1 Measurement Limits	
6.2 Measurement Procedure	
6.3 Field Strength Calculation	
6.4 Measurement Setup	
6.5 Measurement Result	
720 dB Bandwidth Measurement	24
7.1 Provisions Applicable	
7.2 Measurement Procedure	
7.3 Measurement Setup	
7.4 Measurement Result	24
8. AC Power Line Conducted Emission Test	
8.1 Measurement Limits	
8.2 Measurement Setup	
8.3 Preliminary Procedure of Line Conducted Emission Test	
8.4 Final Procedure of Line Conducted Emission Test	
8.5 Measurement Result	
Appendix I: Photographs of Test Setup	
Appendix II: Photographs of Test EUT	30

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc01@agccert.com.

Web: http://www.agccert.com/



Page 4 of 31

1. General Information

Applicant	DECOMIL LLC
Address	12 East 5th Street Paterson, NJ, 07524 United States
Manufacturer	DECOMIL LLC
Address	12 East 5th Street Paterson, NJ, 07524 United States
Factory	Huizhou PowerOak Innovation Co., Ltd
Address	(No.1 Workshop) Longsheng 5th Road, Laoshe Village, Dayawan West Zone, Huizhou, Guangdong, China
Product Designation	Portable Power Station
Brand Name	DECOMIL
Test Model	LFP700
Series Model(s)	N/A
Difference Description	N/A
Date of receipt of test item	Jun. 10, 2025
Date of Test	Jun. 10, 2025 to Jun. 26, 2025
Deviation from Standard	No any deviation from the test method
Condition of Test Sample	Normal
Test Result	Pass
Test Report Form No	AGCER-FCC-WPT-V1

Note: The test results of this report relate only to the tested sample identified in this report.

Prepared By	Jank bai	
	Jack Gui (Project Engineer)	Jun. 26, 2025
Reviewed By	Bibo zhang	
Approved By	Bibo Zhang (Reviewer) Angol Li	Jun. 26, 2025
	Angela Li (Authorized Officer)	Jun. 26, 2025



Page 5 of 31

2. Product Information

2.1 Product Technical Description

Equipment Type	⊠WPT System;				
	☐Desktop Charger				
Device Type	⊠Portable Charger				
	☐Composite charger				
Operation Frequency Band	WPT Band I: 110.5kHz-148kHz				
Hardware Version	19.0601.1142-01				
Software Version	2171-01				
Modulation Type	FSK				
Field Strength of Fundamental	75.49dBµV/m (Max)				
Antenna Designation	Coil Antenna				
Antenna Gain	0dBi				
Number of Coils	1 Primary Coil				
Input Rating	AC: 120V~50/60Hz, 9A DC/PV: 12V-28V-8.5A, 200W Max.				
Output Rating	AC: 120V~50/60Hz, 700W Total USB-A: 5V=3A USB-C: 5/9/12/15/20V=3A; 20V=3.25A each port (With E-Marker chip built in) Cigarette Lighter Port: 12V=10A Wireless Charging: 5/7.5/10/15W AC & DC Output: 700W Total				



Page 6 of 31

2.2 Related Submittal(S) / Grant (S)

This submittal(s) (test report) is intended for **FCC ID: 2BPQB-LFP700**, filing to comply with Part 2, Part 15 of the Federal Communication Commission rules.

2.3 Test Methodology

The tests were performed according to following standards:

No.	Identity	Document Title			
1	FCC 47 CFR Part 2	Frequency allocations and radio treaty matters; general rules and regulations			
2	FCC 47 CFR Part 15	Radio Frequency Devices			
3	ANSI C63.10-2013	American National Standard for Testing Unlicensed Wireless Devices			

2.4 Special Accessories

Not available for this EUT intended for grant.

2.5 Equipment Modifications

Not available for this EUT intended for grant.

2.6 Antenna Requirement

Standard Requirement

15.203 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, 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.

EUT Antenna:

The non-detachable antenna inside the device cannot be replaced by the user at will. The gain of the antenna is 0dBi.



Page 7 of 31

3. Test Environment

3.1 Address of The Test Laboratory

Laboratory: Attestation of Global Compliance (Shenzhen) Co., Ltd.

Address: 1-2/F, Building 19, Junfeng Industrial Park, Chongqing Road, Heping Community, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China

3.2 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

CNAS-Lab Code: L5488

Attestation of Global Compliance (Shenzhen) Co., Ltd. has been assessed and proved to follow CNAS-CL01 Accreditation Criteria for Testing and Calibration Laboratories (identical to ISO/IEC17025: 2017 General Requirements for the Competence of Testing and Calibration Laboratories.)

A2LA-Lab Cert. No.: 5054.02

Attestation of Global Compliance (Shenzhen) Co., Ltd. EMC Laboratory has been accredited by A2LA for technical competence in the field of electrical testing, and proved to follow ISO/IEC 17025: 2017 General Requirements for the Competence of Testing and Calibration Laboratories and any additional program requirements in the identified field of testing.

FCC-Registration No.: 975832

Attestation of Global Compliance (Shenzhen) Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the FCC (Federal Communications Commission). The acceptance letter from the FCC is maintained in our files with Registration 975832.

IC-Registration No.: 24842(CAB identifier: CN0063)

Attestation of Global Compliance (Shenzhen) Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the Certification and Engineering Bureau of Industry Canada. The acceptance letter from the IC is maintained in our files with Registration 24842.



Page 8 of 31

3.3 Environmental Conditions

	Normal Conditions
Temperature range (°C)	0 - 30
Relative humidity range	20 % - 75 %
Pressure range (kPa)	86 - 106
Power supply	AC 120V, 60Hz

3.4 Measurement Uncertainty

The reported uncertainty of measurement y ±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%.

Item	Measurement Uncertainty
Uncertainty of Conducted Emission for AC Port	$U_c = \pm 2.9 \text{ dB}$
Uncertainty of Radiated Emission below 150kHz	$U_c = \pm 4.2 \text{ dB}$
Uncertainty of Radiated Emission below 30MHz	$U_c = \pm 3.9 \text{ dB}$
Uncertainty of Radiated Emission below 1GHz	$U_c = \pm 4.0 \text{ dB}$
Uncertainty of Occupied Channel Bandwidth	$U_c = \pm 2.7 \%$



Page 9 of 31

3.5 List of Equipment Used

• F	Radiated Spurious Emission& RF Conducted Test						
Used	Used Equipment No. Test Equipment Manufacturer Model No. Serial No. Last Cal. Date (YY-MM-DD) (YY-MM-DD)						
	AGC-EM-E046	EMI Test Receiver	R&S	ESCI	100096	2025-01-14	2026-01-13
\boxtimes	AGC-ER-E036	Spectrum Analyzer	Agilent	N9020A	MY49100060	2025-01-14	2026-01-13
\boxtimes	AGC-EM-E061	Spectrum Analyzer	Agilent	N9010A	MY53470504	2025-05-08	2026-05-07
\boxtimes	AGC-EM-E086	Loop Antenna	ZHINAN	ZN30900C	18051	2024-03-05	2026-03-04
\boxtimes	AGC-EM-E001	Wideband Antenna	SCHWARZBECK	VULB9168	D69250	2025-03-14	2027-03-13
\boxtimes	AGC-EM-A138	6dB Attenuator	Eeatsheep	LM-XX-6-5W	N/A	2025-05-16	2027-05-15

• A	AC Power Line Conducted Emission						
Lised Fallinment No. 1. lest Fallinment Manufacturer Model No. 1. Serial No. 1.							Next Cal. Date (YY-MM-DD)
\boxtimes	AGC-EM-E116	EMI Test Receiver	R&S	ESCI	100034	2025-05-08	2026-05-07
\boxtimes	AGC-EM-A171	Attenuator	Mini-Circuits	UNAT-10A+	DC-6GZ	2024-02-01	2026-01-31
\boxtimes	AGC-EM-E023	AMN	R&S	ESH2-Z5	100086	2025-05-08	2026-05-07

● Test Software								
Used	Used Equipment No. Test Equipment Manufacturer Model No. Version Information							
\boxtimes	AGC-EM-S001	CE Test System	R&S	ES-K1	V1.71			
	AGC-EM-S003	RE Test System	FARA	EZ-EMC	VRA-03A			



Page 10 of 31

4. System Test Configuration

4.1 EUT Configuration

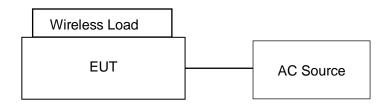
The EUT configuration for testing is installed on RF field strength measurement to meet the Commission's requirement and operating in a manner which intends to maximize its emission characteristics in a continuous normal application.

4.2 EUT Exercise

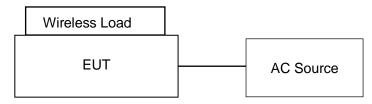
The Transmitter was operated in the normal operating mode. The TX frequency was fixed which was for the purpose of the measurements.

4.3 Configuration of Tested System

Radiated Emission Configure:



Conducted Emission Configure:





Page 11 of 31

4.4 Equipment Used in Tested System

The following peripheral devices and interface cables were connected during the measurement:

No.	Equipment	Manufacturer	Model No.	Specification Information	Cable
1	Wireless Charging Load	YBZ	Q12	Support 5W,7.5W, 10W,15W	
2	Adapter	Xiaomi	DY-14-EU	Input: AC: 100V-240V 50/60Hz 2.0A Output: USB-A/C (DC 5V/3A;9V/3A;11V/6.1A;11V/6A; 20V2.25A)	
3	AC POWER LINE				1.2m,unshielded
4	DC Power Supply	ITECH	E3642A		

Test Accessories Come From The Manufacturer

No.	Equipment	Model No.	Manufacturer	Specification Information	Cable
1		-	-	-	



Page 12 of 31

4.5 Summary of Test Results

Item	FCC Rules	Description of Test	Result
1	§15.203	Antenna Equipment	Pass
2	§15.209(a)(f)	Field Strength of Fundamental	Pass
3	§15.209(a)(f)	Radiated Spurious Emission	Pass
4	§15.215(c)	20dB Bandwidth	Pass
5	§15.205(a)	Restricted Bands of Operation	Pass
6	§15.207	AC Power Line Conducted Emission	Pass



Page 13 of 31

5. Description of Test Modes

Configuration	Test Descriptions	Test Mode	Remark
1	EUT stand alone, standby, powered by AC input.	@110.5kHz-148kHz	None
2		@110.5kHz-148kHz (147.4kHz)	Using a wireless dummy load (15W)
3	Direct contact during charging/operating between the	@110.5kHz-148kHz (147.4kHz)	Using a wireless dummy load (10W)
4	EUT& WPT Load EUT is powered by AC input	@110.5kHz-148kHz (147.4kHz)	Using a wireless dummy load (7.5W)
5		@110.5kHz-148kHz (147.4kHz)	Using a wireless dummy load (5W)

Supplementary Test Instructions

- For the radiated emissions and AC power conducted emissions test, the EUT was tested in desktop position in the following configurations: Standby and charging.
- AC power line conducted testing was performed on Configuration 5 at EUT minimum and maximum load respectively only as worse case.
- Radiated spurious emission 30MHz to 1GHz was performed on Configuration 2 at EUT minimum and maximum load respectively only as worse case
- During the radiation emission test, the device will find the worst placement of the X, Y, and Z axes for testing.
- The EUT supports 15W, 10W, 7.5W, 5W "wireless output, and all modes have been tested at full load, half load and null load, only the worst mode is reflected in the report.



Page 14 of 31

6. Field Strength of Fundamental

6.1 Measurement Limits

Test Requirement:	FCC Part15 C Section 15.209							
Test Method:	ANSI C63.10:2013							
Test Frequency Range:	9kHz to 1GHz							
Test site:	Measurement Distance: 3m							
	Frequency	Detector	RBW	VBW	Value			
	9kHz-150kHz	Quasi-peak	200Hz	600Hz	Quasi-peak			
	150kHz-30MHz	Quasi-peak	9kHz	30kHz	Quasi-peak			
Receiver Setup:	30MHz-1GHz	Quasi-peak	100kHz	300kHz	Quasi-peak			
	Above 1011z	Peak	1MHz	3MHz	Peak			
	Above 1GHz	Peak	1MHz	10Hz	Average			
	Note: For measurements in the frequency bands 9-90kHz and 110-490kHz quasi-peak detection is preferred. If the margin is very small, average detection is added.							

■ Limits for frequency below 30MHz

Frequency	Limit (µV /m)	Measurement Distance(m)	Remark
0.009-0.490	2400/F(kHz)	300	Quasi-peak Value
0.490-1.705	24000/F(kHz)	30	Quasi-peak Value
1.705-30	30	30	Quasi-peak Value

■ Limits for frequency Above 30MHz

Frequency	Limit (dBµV/m @3m)	Remark
30MHz-88MHz	40.00	Quasi-peak Value
88MHz-216MHz	43.50	Quasi-peak Value
216MHz-960MHz	46.00	Quasi-peak Value
960MHz-1GHz	54.00	Quasi-peak Value
Above 1CH7	54.00	Average Value
Above 1GHz	74.00	Peak Value

Remark:

- 1) Emission level dBμV= 20 log Emission level μV/m
- The smaller limit shall apply at the cross point between two frequency bands.
- Distance is the distance in meters between the measuring instrument, antenna and the closest point of any part of the device or system.



Page 15 of 31

6.2 Measurement Procedure

- 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 C63.10 (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. 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 emission, 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. Place the measurement antenna away from each area of the EUT determined to be a source of emissions at the specified measurement distance, while keeping the measurement antenna aimed at the source of emissions at each frequency of significant emissions, with polarization oriented for maximum response. The measurement antenna may have to be higher or lower than the EUT, depending on the radiation pattern of the emission and staying aimed at the emission source for receiving the maximum signal. The final measurement antenna elevation shall be that which maximizes the emissions. The measurement antenna elevation for maximum emissions shall be restricted to a range of heights of from 1 m to 4 m above the ground or reference ground plane.
- 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. For testing above 1GHz, the emissions level of the EUT in peak mode was lower than average limit (that means the emissions level in peak mode also complies with the limit in average mode), then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.
- 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.



Report No.: AGC01741250501FR02 Page 16 of 31

6.3 Field Strength Calculation

The field strength is calculated by adding the Antenna Factor and Cable Factor, and subtracting the Amplifier Gain (if any), Average Factor (optional) from the measured reading. The basic equation with a sample calculation is as follows:

◆ FS = RA + AF + CF - AG - AV

Where

- FS = Field Strength in dBµV/m
- RA = Receiver Amplitude (including preamplifier) in dBµV
- CF = Cable Attenuation Factor in dB
- AF = Antenna Factor in dB/m
- AG = Amplifier Gain in dB
- AV = Average Factor in dB

In the following table(s), the reading shown on the data table reflects the preamplifier gain. An example for the calculations in the following table is as follows:

◆ FS = RR + LF

Where

- FS = Field Strength in dBµV/m
- RR = RA AG AV in dBµV
- LF = CF + AF in dB

Assume a receiver reading of 52.0dBµV is obtained.

- The antenna factor of 7.4dB/m and cable factor of 1.6dB are added.
- The amplifier gain of 29dB and average factor of 5dB are subtracted, giving a field strength of 27dBµV/m.
- This value in dBμV/m was converted to its corresponding level in μV/m.
 - RA = $52.0 \text{ dB}\mu\text{V/m}$, AF = 7.4 dB/m
 - RR = 18.0 dBµV, CF = 1.6 dB
 - LF = 9.0 Db, AG = 29.0 dB
 - AV = 5.0 dB, FS = RR + LF
 - $FS = 18 + 9 = 27 \text{ dB}\mu\text{V/m}$
- Level in μ V/m = Common Antilogarithm [(27 dB μ V/m)/20] = 22.4 μ V/m
- Magnetic field strength calculation (9 kHz 30 MHz)

When the limit is in terms of magnetic field, the following equation applies:

 $+ H[dB(\mu A/m)] = V[dB(\mu V)] + LC [dB] - GPA [dB] + AFH [dB(S/m)]$

Where.

- H is the magnetic field strength (to be compared with the limit),
- V is the voltage level measured by the receiver or spectrum analyzer,
- > LC is the cable loss,
- GPA is the gain of the preamplifier (if used), and
- AFH is the magnetic antenna factor.

If the "electrical" antenna factor is used instead, the above equation becomes:

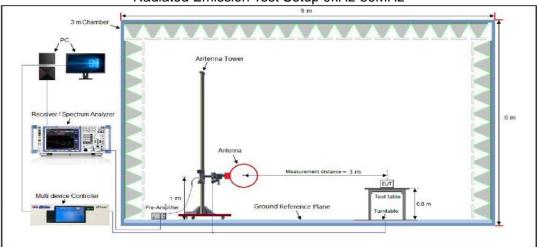
 Φ H[dB(μA/m)] =V[dB(μV)]+LC [dB]–GPA [dB] + AFE [dB(m-1)]-51.5[dBΩ]

where AFE is the "electric" antenna factor, as provided by the antenna calibration laboratory.

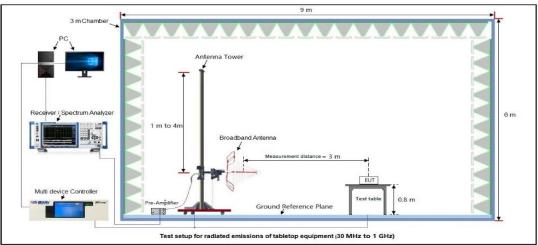


6.4 Measurement Setup

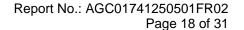
Radiated Emission Test Setup 9kHz-30MHz



Radiated Emission Test Setup 30MHz-1000MHz



The radiated emission tests were performed in the 3 meters chamber test site, using the setup accordance with the ANSI C63.10-2013. The specification used was the FCC 15.209 and FCC 15.205 limits.



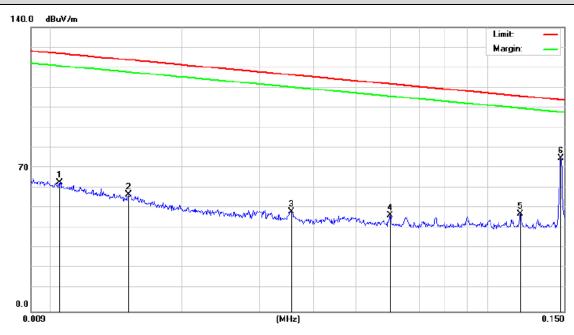


6.5 Measurement Result

Test Equipment	Portable Power Station	Model Name	LFP700
Temperature	21.5 ℃	Relative Humidity	52.3 %
Air Pressure	985 Mbar	Power supply	AC 120V
Worst Mode	Mode 2	Antenna Polarity	Face

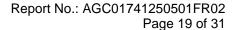
Test graph and data for Electric Field strength between 9kHz-150kHz

Test Mode: Mode 2



No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1	0.0105	26.12	37.34	63.46	126.98	-63.52	peak
2	0.0151	22.89	34.76	57.65	123.84	-66.19	peak
3	0.0355	20.31	28.97	49.28	116.46	-67.18	peak
4	0.0599	20.25	27.10	47.35	111.94	-64.59	peak
5	0.1190	21.74	26.26	48.00	106.02	-58.02	peak
6 *	0.1474	49.07	26.42	75.49	104.17	-28.68	peak

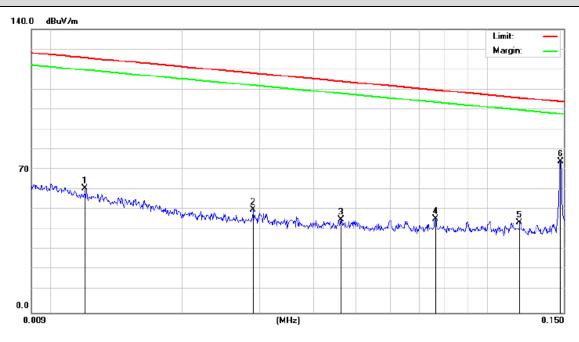
Result: Pass





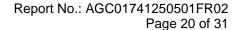
Test graph and data for Electric Field strength between 9kHz-150kHz

Test Mode: Mode 2



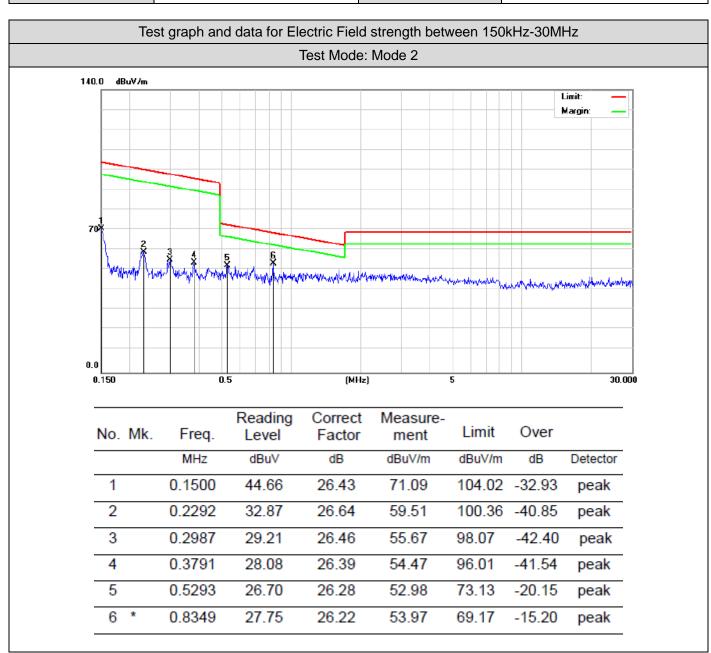
No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1	0.0120	24.88	36.50	61.38	125.82	-64.44	peak
2	0.0291	20.89	29.88	50.77	118.17	-67.40	peak
3	0.0463	18.14	27.89	46.03	114.17	-68.14	peak
4	0.0761	19.67	26.56	46.23	109.88	-63.65	peak
5	0.1188	18.19	26.26	44.45	106.03	-61.58	peak
6 *	0.1474	48.40	26.42	74.82	104.17	-29.35	peak

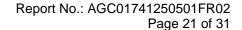
Result: Pass



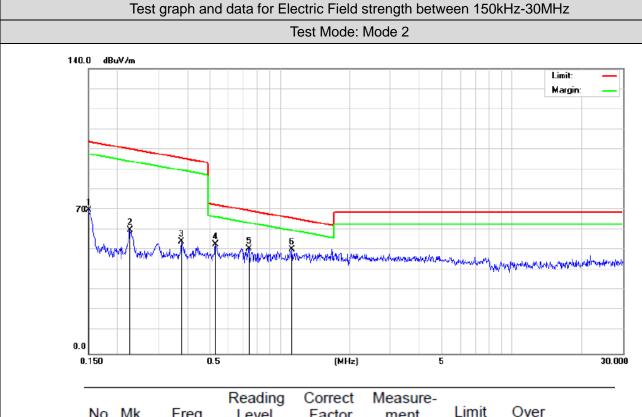


Test Equipment	Portable Power Station	Model Name	LFP700
Temperature	21.5 ℃	Relative Humidity	52.3 %
Air Pressure	985 Mbar	Power supply	AC 120V
Worst Mode	Mode 2	Antenna Polarity	Face





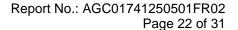




No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1	0.1500	44.01	26.43	70.44	104.05	-33.61	peak
2	0.2268	33.99	26.64	60.63	100.47	-39.84	peak
3	0.3771	28.79	26.39	55.18	96.07	-40.89	peak
4	0.5293	27.62	26.28	53.90	73.13	-19.23	peak
5	0.7352	25.51	26.25	51.76	70.27	-18.51	peak
6 *	1.1292	25.26	26.04	51.30	66.55	-15.25	peak

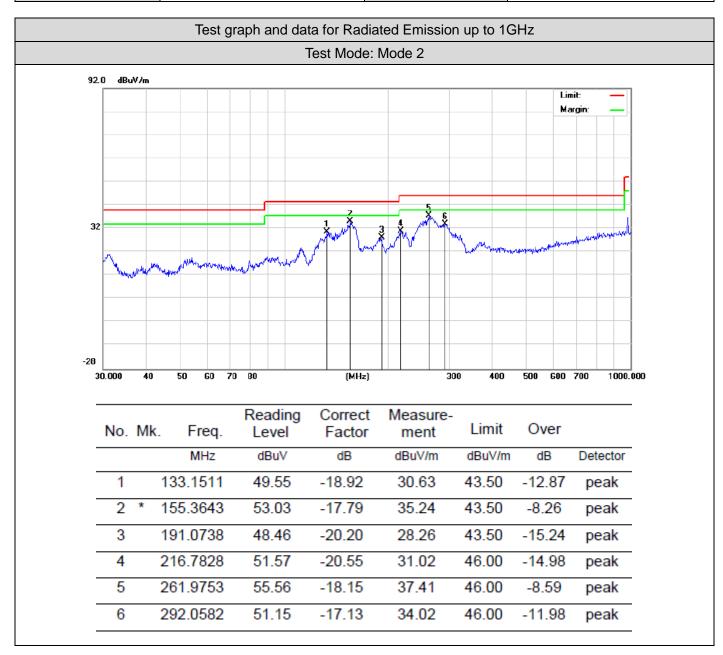
Notes:

- 1. Negative value in the margin column shows emission below limit.
- 2. All measurements were made with 0.6m loop antenna at 3m distance. All emissions are below the QP limit.
- 3. Corr. Factor= Antenna Factor (dB/m) + Cable Loss (dB)
- 4. Loop antenna is used for the emission under 30MHz.
- 5. Only the result of the worst case (Mode 2- full load-15W) was recorded in the report, if no other cases.



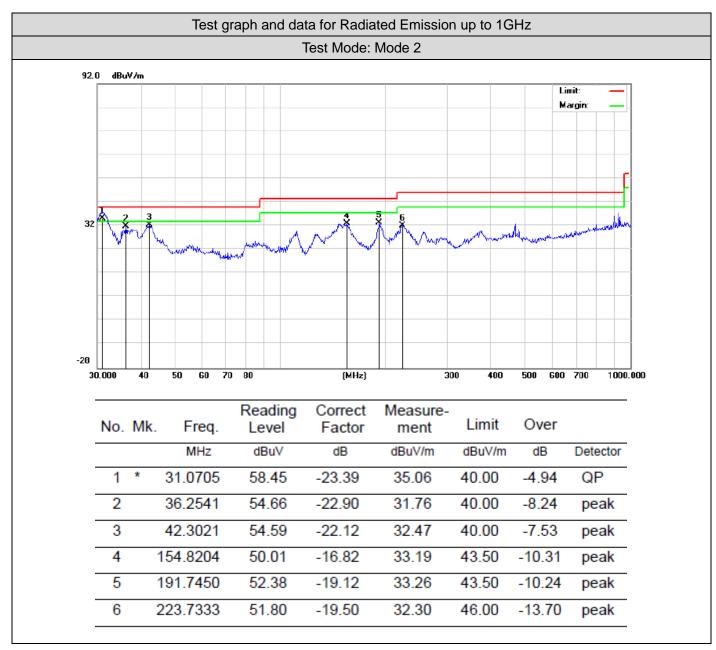


Test Equipment	Portable Power Station	Model Name	LFP700
Temperature	21.5 ℃	Relative Humidity	52.3 %
Air Pressure	985 Mbar	Power supply	AC 120V
Worst Mode	Mode 2	Antenna Polarity	Horizontal









Note: 1. Factor=Antenna Factor + Cable loss, Over = Measurement-Limit.

- 2. All test modes had been pre-tested. The mode 2 is the worst case and recorded in the report.
- 3. The "Factor" value can be calculated automatically by software of measurement system.
- 4. Only the result of the worst case (Mode 2- full load-15W) was recorded in the report, if no other cases.



Page 24 of 31

7. -20 dB Bandwidth Measurement

7.1 Provisions Applicable

N/A

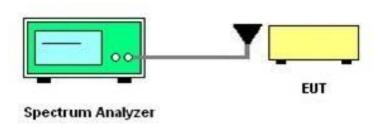
7.2 Measurement Procedure

Set the parameters of SPA as below:

- 1. The spectrum analyzer connected via a receive antenna placed near the EUT in peak Max hold mode.
- 2. Centre frequency = Operation Frequency
- 3. The resolution bandwidth of 300 Hz and the video bandwidth of 1 kHz were used.
- 4. Span: 3kHz, Sweep time: Auto
- 5. Set the EUT to continue transmitting mode. Allow the trace to stabilize. Use the "N dB down" function of SPA to define the bandwidth.
- 6. Measured the spectrum width with power higher than 20dB below carrier.
- 7. Measured the 99% OBW.
- 8. Record the plots and Reported.

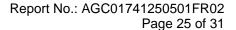
Note: Since the measured signal is CW-like, it is not practical to adjust the RBW according to C63.10, as the measured bandwidth will always follow the RBW, resulting in approximately twice the RBW.

7.3 Measurement Setup



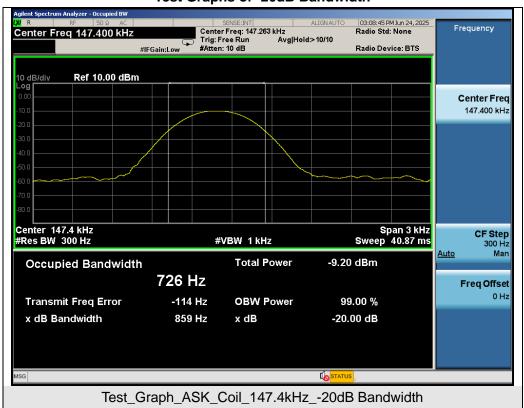
7.4 Measurement Result

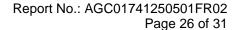
	Test Da	ta of Occupied Bandwidth	and -20dB Bandwidt	h	
Configuration	Frequency (kHz)	99%Bandwidth (Hz)	-20dB Bandwidth (Hz)	Limits (Hz)	Pass or Fail
2	147.4	726	859	N/A	Pass





Test Graphs of -20dB Bandwidth







8. AC Power Line Conducted Emission Test

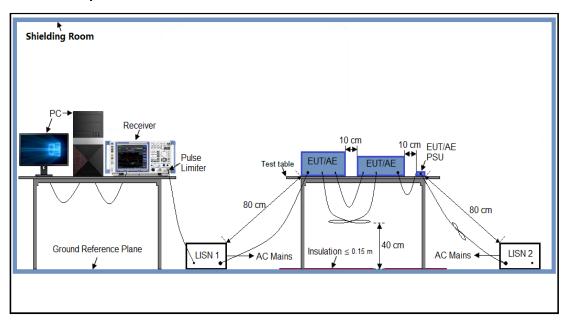
8.1 Measurement Limits

Francisco Dance	Maximum RF Line Voltage				
Frequency Range	Q.P. (dBμV)	Average (dBμV)			
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 0.50 MHz.

8.2 Measurement Setup





Report No.: AGC01741250501FR02 Page 27 of 31

8.3 Preliminary 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 C63.10 (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 C63.10.
- 3. All I/O cables were positioned to simulate typical actual usage as per ANSI C63.10.
- 4. All support equipment received AC120V/60Hz power from a LISN, if any.
- 5. The EUT received AC120V/60Hz power from a LISN.
- 6. The 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.
- 7. Analyzer / Receiver scanned from 150 kHz to 30MHz for emissions in each of the test modes.
- 8. During the above scans, the emissions were maximized by cable manipulation.
- 9. The test mode(s) were scanned during the preliminary test.

Then, the EUT configuration and cable configuration of the above highest emission level were recorded for reference of final testing.

8.4 Final Procedure of Line Conducted Emission Test

- 1. EUT and support equipment was set up on the test bench as per step 2 of the preliminary test.
- 2. A scan was taken on both power lines, Line 1 and Line 2, recording at least the six highest emissions. 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(s) was reported on the Summary Data page.
- 4. A conducted emission is calculated by the following equation:
 - Measurement Level (dBμV) = Receiver reading (dBμV) + Transd (dB)
 - Transd (dB)= AMN Factor(dB)+Cable Loss(dB)+Attenuation(dB)
 - Margin= Limit-Level

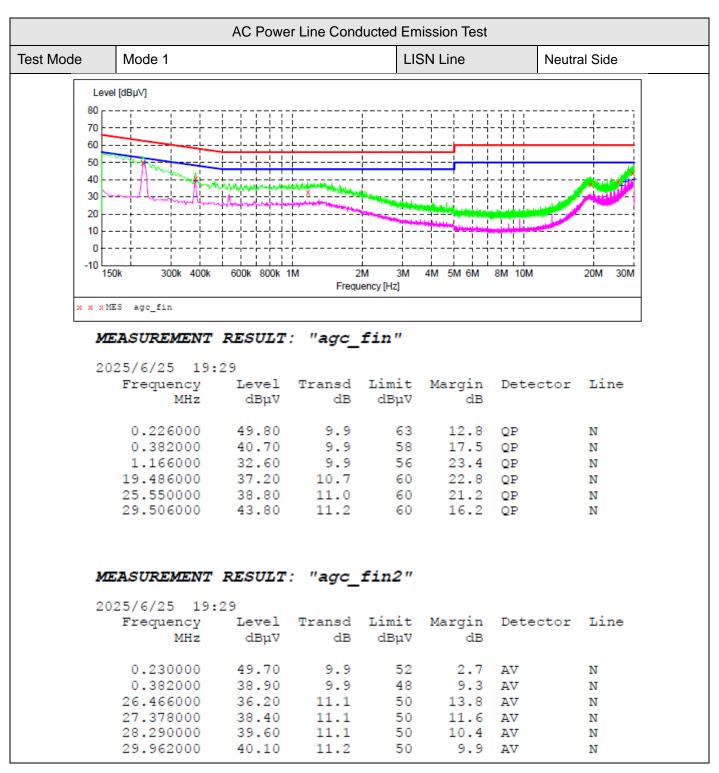


8.5 Measurement Result

		AC Powe	r Line Con	ducted En	nission Test		
Test Mode	Mode 1			LI	SN Line	Hot S	Side
Le	evel [dBµV]						
80	r						
70			-¦				
60			- <u></u>	- <u>-</u>	<u>ii</u>	1 1 1 1	-
50					<u></u>		- !
40			e diamental			 -+-	- state of the sta
30			Y Y	Binhard Committee		{- - -	
20		-+					/
10	-		- <u> </u>				
0							
-10	150k 300k 400k	600k 800k	1M	2M 3M	4M 5M 6M	8M 10M	20M 30M
	JUIN 700K	JOHN GOOK		uency [Hz]	THE SHE OW	om rom	2011 00111
x x 2	MES agc_fin						
М	EASUREMENT	RESULT	"agc_	fin"			
2.	025/6/25 19:	31					
2	025/6/25 19: Frequency		Transd	Limit	Margin	Detector	Line
2	025/6/25 19: Frequency MHz	Level	Transd dB		Margin dB	Detector	Line
2	Frequency			Limit dBµV	_	Detector	Line
2	Frequency MHz	Level dBµV 50.20	dB 9.9	dΒμV 62	dB 12.2	QP	Line
2	Frequency MHz 0.230000 0.382000	Level dBµV 50.20 40.60	dB 9.9 9.9	dВµ∇ 62 58	dB 12.2 17.6	QP QP	L1 L1
2	Frequency MHz 0.230000 0.382000 1.358000	Level dBµV 50.20 40.60 31.90	dB 9.9 9.9 9.9	dBμV 62 58 56	dB 12.2 17.6 24.1	QP QP QP	L1 L1 L1
21	Frequency MHz 0.230000 0.382000 1.358000 25.398000	Level dBµV 50.20 40.60 31.90 39.10	dB 9.9 9.9 9.9 11.0	dBμV 62 58 56 60	12.2 17.6 24.1 20.9	QP QP QP QP	L1 L1 L1 L1
2	0.230000 0.382000 1.358000 25.398000 26.462000	Level dBµV 50.20 40.60 31.90 39.10 41.10	dB 9.9 9.9 9.9 11.0	dBµV 62 58 56 60	dB 12.2 17.6 24.1 20.9 18.9	QP QP QP QP QP	L1 L1 L1 L1
2	Frequency MHz 0.230000 0.382000 1.358000 25.398000	Level dBµV 50.20 40.60 31.90 39.10	dB 9.9 9.9 9.9 11.0	dBμV 62 58 56 60	12.2 17.6 24.1 20.9	QP QP QP QP	L1 L1 L1 L1
21	0.230000 0.382000 1.358000 25.398000 26.462000	Level dBµV 50.20 40.60 31.90 39.10 41.10	dB 9.9 9.9 9.9 11.0	dBµV 62 58 56 60	dB 12.2 17.6 24.1 20.9 18.9	QP QP QP QP QP	L1 L1 L1 L1
	Frequency MHz 0.230000 0.382000 1.358000 25.398000 26.462000 29.354000	Level dBµV 50.20 40.60 31.90 39.10 41.10 46.30	9.9 9.9 9.9 11.0 11.1 11.2	dBµV 62 58 56 60 60	dB 12.2 17.6 24.1 20.9 18.9	QP QP QP QP QP	L1 L1 L1 L1
М	Frequency MHz 0.230000 0.382000 1.358000 25.398000 26.462000 29.354000	Level dBµV 50.20 40.60 31.90 39.10 41.10 46.30	9.9 9.9 9.9 11.0 11.1 11.2	dBµV 62 58 56 60	dB 12.2 17.6 24.1 20.9 18.9	QP QP QP QP QP	L1 L1 L1 L1
М	Frequency MHz 0.230000 0.382000 1.358000 25.398000 26.462000 29.354000 EASUREMENT 025/6/25 19:	Level dBµV 50.20 40.60 31.90 39.10 41.10 46.30	9.9 9.9 9.9 11.0 11.1 11.2	dBμV 62 58 56 60 60 60	dB 12.2 17.6 24.1 20.9 18.9 13.7	QP QP QP QP QP QP	L1 L1 L1 L1 L1
М	Frequency MHz 0.230000 0.382000 1.358000 25.398000 26.462000 29.354000 EASUREMENT 025/6/25 19: Frequency	Level dBµV 50.20 40.60 31.90 39.10 41.10 46.30 RESULT	dB 9.9 9.9 11.0 11.1 11.2	dBµV 62 58 56 60 60 60	dB 12.2 17.6 24.1 20.9 18.9 13.7	QP QP QP QP QP QP	L1 L1 L1 L1 L1
М	Frequency MHz 0.230000 0.382000 1.358000 25.398000 26.462000 29.354000 EASUREMENT 025/6/25 19:	Level dBµV 50.20 40.60 31.90 39.10 41.10 46.30	9.9 9.9 9.9 11.0 11.1 11.2	dBμV 62 58 56 60 60 60	dB 12.2 17.6 24.1 20.9 18.9 13.7	QP QP QP QP QP QP	L1 L1 L1 L1 L1
м	Frequency MHz 0.230000 0.382000 1.358000 25.398000 26.462000 29.354000 EASUREMENT 025/6/25 19: Frequency MHz	Level dBµV 50.20 40.60 31.90 39.10 41.10 46.30 RESULT	9.9 9.9 9.9 11.0 11.1 11.2	dBµV 62 58 56 60 60 60 fin2" Limit dBµV	dB 12.2 17.6 24.1 20.9 18.9 13.7 Margin dB	QP QP QP QP QP QP	L1 L1 L1 L1 L1 L1 L1
М	Frequency MHz 0.230000 0.382000 1.358000 25.398000 26.462000 29.354000 EASUREMENT 025/6/25 19: Frequency MHz 0.230000	Level dBµV 50.20 40.60 31.90 39.10 41.10 46.30 RESULT: 31 Level dBµV 49.70	9.9 9.9 9.9 11.0 11.1 11.2 Transd dB 9.9	dBµV 62 58 56 60 60 60 Eimit dBµV 52	dB 12.2 17.6 24.1 20.9 18.9 13.7 Margin dB	QP QP QP QP QP QP	L1 L1 L1 L1 L1 L1 L1
М	Frequency MHz 0.230000 0.382000 1.358000 25.398000 26.462000 29.354000 EASUREMENT 025/6/25 19: Frequency MHz 0.230000 0.382000	Level dBµV 50.20 40.60 31.90 39.10 41.10 46.30 RESULT	9.9 9.9 9.9 11.0 11.1 11.2 Transd dB 9.9 9.9	dBµV 62 58 56 60 60 60 40 Limit dBµV 52 48	dB 12.2 17.6 24.1 20.9 18.9 13.7 Margin dB	QP QP QP QP QP QP AV	L1 L1 L1 L1 L1 L1 L1 L1
М	Frequency MHz 0.230000 0.382000 1.358000 25.398000 26.462000 29.354000 EASUREMENT 025/6/25 19: Frequency MHz 0.230000	Level dBµV 50.20 40.60 31.90 39.10 41.10 46.30 RESULT: 31 Level dBµV 49.70	9.9 9.9 9.9 11.0 11.1 11.2 Transd dB 9.9	dBµV 62 58 56 60 60 60 40 Limit dBµV 52 48 50	dB 12.2 17.6 24.1 20.9 18.9 13.7 Margin dB	QP QP QP QP QP QP AV AV	L1 L1 L1 L1 L1 L1 L1
м	Frequency MHz 0.230000 0.382000 1.358000 25.398000 26.462000 29.354000 EASUREMENT 025/6/25 19: Frequency MHz 0.230000 0.382000 26.462000	Level dBµV 50.20 40.60 31.90 39.10 41.10 46.30 RESULT 31 Level dBµV 49.70 38.80 36.50	9.9 9.9 9.9 11.0 11.1 11.2 Transd dB 9.9 9.9	dBµV 62 58 56 60 60 60 60 4 Limit dBµV 52 48 50 50	dB 12.2 17.6 24.1 20.9 18.9 13.7 Margin dB 2.7 9.4 13.5	QP QP QP QP QP QP AV AV AV	L1 L1 L1 L1 L1 L1 L1 L1

Result: Pass







Page 30 of 31

Appendix I: Photographs of Test Setup

Refer to the Report No.: AGC01741250501AP01

Appendix II: Photographs of Test EUT

Refer to the Report No.: AGC01741250501AP02



Page 31 of 31

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.

----End of Report----