



Report No.: GZEM201201692003

Page: 1 of 10

FCC ID: 2AYCX-WAHRYTONE

RF Exposure Evaluation Report

Application No.: GZEM2012016920CR
Applicant: Prostage SL
Address of Applicant: Apdo. 57, 07560 Cala Millor, Spain
Manufacturer: Prostage SL
Address of Manufacturer: Apdo. 57, 07560 Cala Millor, Spain
Factory: Prostage SL
Address of Factory: Apdo. 57, 07560 Cala Millor, Spain
Equipment Under Test (EUT):
FCC ID: 2AYCX-WAHRYTONE
EUT Name: WAHryTone
Model No.: WAHryTone
Trade Mark: Prostage
Standard(s): CFR 47 Part 1.1310, Part 2.1091
Date of Receipt: 2020-12-01
Date of Test: 2020-12-14 to 2020-12-31
Date of Issue: 2021-03-30

Test Result:	Pass*
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* In the configuration tested, the EUT complied with the standards specified above.

Kobe Jian
EMC Laboratory Manager

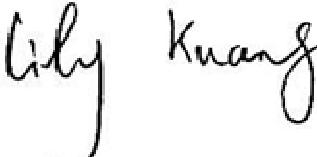


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Revision Record				
Version	Chapter	Date	Modifier	Remark
01		2021-03-30		Original

Authorized for issue by:			
Tested By	 Lily Kuang	2020-12-14 to 2020-12-31	
	Lily_Kuang /Project Engineer	Date	
Checked By	 Ricky Liu	2021-03-30	
	Ricky_Liu /Reviewer	Date	



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2 Test Summary

Radio Spectrum Technical Requirement				
Item	Standard	Method	Requirement	Result
RF Exposure	CFR 47 Part 1.1310, Part 2.1091	CFR 47 Part 2.1091	CFR 47 Part 2.1091	Pass



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3 Contents

	Page
1 Cover Page	1
2 Test Summary	3
3 Contents	4
4 General Information	5
4.1 Details of E.U.T.....	5
4.2 Description of Support Units.....	5
4.3 Test Location.....	5
4.4 Test Facility	6
4.5 Deviation from Standards.....	7
4.6 Abnormalities from Standard Conditions	7
5 Radio Spectrum Technical Requirement	8
5.1 RF Exposure.....	8
5.1.1 Test Requirement:.....	8
5.1.2 Conclusion	9
5.1.3 Calculated Result and Limit	9
6 Photographs.....	10
6.1 EUT Constructional Details	10



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4 General Information

4.1 Details of E.U.T.

Power Supply: AC 9V, 60 Hz
Antenna Gain: 2 dBi
Antenna Type: dedicated antenna (RP-SMA connector)
Channel Spacing: 2MHz
Modulation Type: GFSK
Number of Channels: 40
Operation Frequency: 2402MHz to 2480MHz
Hardware Version: 802814-A
Firmware Version: V2.03
S/N: L O0189
Test Software Version: RF StudioV2.19

4.2 Description of Support Units

Description	Manufacturer	Model No.	Serial No.
Notebook	IBM	T30	S/N78-3VMLX 06/01

4.3 Test Location

All tests were performed at:

SGS-CSTC Standards Technical Services Co., Ltd., Guangzhou Branch EMC Laboratory,
198 Kezhu Road, Scientech Park, Guangzhou Economic & Technology Development District,
Guangzhou, China 510663

Tel: +86 20 82155555 Fax: +86 20 82075059

No tests were sub-contracted.

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4.4 Test Facility

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

● NVLAP (Lab Code: 200611-0)

SGS-CSTC Standards Technical Services Co., Ltd., Guangzhou EMC Laboratory is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP/NIST). NVLAP Code: 200611-0.

The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government.

● ACMA

SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory can also perform testing for the Australian C-Tick mark as a result of our NVLAP accreditation.

● SGS UK(Certificate No.: 32), SGS-TUV SAARLAND and SGS-FIMKO

Have approved SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory as a supplier of EMC TESTING SERVICES and SAFETY TESTING SERVICES.

● CNAS (Lab Code: L0167)

SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory has been assessed and in compliance with CNAS-CL01:2018 accreditation criteria for testing laboratories (identical to

ISO/IEC 17025:2017 General Requirements) for the Competence of Testing Laboratories.

● FCC Recognized 2.948 Listed Test Firm(Registration No.: 282399)

SGS-CSTC Standards Technical Services 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. Registration 282399, May 31, 2002.

● FCC Recognized Accredited Test Firm(Registration No.: 486818)

SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory has been accredited and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Designation Number: CN5016, Test Firm Registration Number: 486818, Jul 13, 2017.

● Industry Canada (Registration No.: 4620B, CAB identifier: CN0052)

SGS-CSTC Standards Technical Services Co., Ltd., has been registered by Innovation Science and Economic Development Canada for Wireless Device Testing laboratories to test to Canadian radio equipment requirements. Registration No. 4620B, CAB identifier: CN0052.

● VCCI (Registration No.: R-12460, C-12584, G-10449 and T-11179)

The 10m Semi-anechoic chamber and Shielded Room of SGS-CSTC Standards Technical Services Co., Ltd. have been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: R-12460, C-12584, G-10449 and T-11179 respectively.

● CBTL (Lab Code: TL129)

SGS-CSTC Standards Technical Services Co., Ltd., E&E Laboratory has been assessed and fully comply with the requirements of ISO/IEC 17025:2005, the Basic Rules, IECEE 01 and Rules of procedure IECEE 02, and the relevant IECEE CB-Scheme Operational documents.

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4.5 Deviation from Standards

None

4.6 Abnormalities from Standard Conditions

None



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5 Radio Spectrum Technical Requirement

5.1 RF Exposure

5.1.1 Test Requirement:

CFR 47 Part 1.1310

Limit:

According to FCC Part1.1310: The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) radiation as specified in Part1.1307(b)

TABLE 1—LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm ²)	Averaging time (minutes)
(A) Limits for Occupational/Controlled Exposure				
0.3-3.0	614	1.63	*100	6
3.0-30	1842/f	4.89/f	*900/f ²	6
30-300	61.4	0.163	1.0	6
300-1,500			f/300	6
1,500-100,000			5	6
(B) Limits for General Population/Uncontrolled Exposure				
0.3-1.34	614	1.63	*100	30
1.34-30	824/f	2.19/f	*180/f ²	30
30-300	27.5	0.073	0.2	30
300-1,500			f/1500	30
1,500-100,000			1.0	30

f = frequency in MHz

* = Plane-wave equivalent power density

According to IEEE C95.3:2002 section 5.5.1.1, The power density S at a point on the axis at a distance d from a transmitting antenna is given by the Friis free-space transmission formula

$$S = \frac{PG}{4\pi d^2}$$

S = power density (mW/cm²)
 P = the net power delivered to the antenna (mW)
 G = gain of the antenna in linear scale
 d = distance between observation point and center of the radiator (cm)

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5.1.2 Conclusion

Antenna Gain: 2dBi

Antenna Gain: The maximum Gain measured in fully anechoic chamber is 1 in linear scale.

Output Power Into Antenna & RF Exposure Evaluation Distance: 20 cm

5.1.3 Calculated Result and Limit

Frequency (MHz)	Antenna Gain (Numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
2402	1.585	-17.44	0.018	0.000006	1	Complies
2442	1.585	-19.56	0.011	0.000003	1	Complies
2480	1.585	-20.65	0.009	0.000003	1	Complies

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6 Photographs

6.1 EUT Constructional Details

Please refer to Appendix A - Photographs of EUT Constructional Details for GZEM2012016920CR.

--End of Report--



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