



시험 성적서

TEST REPORT

페이지(page) : (1) / 총(Total) (9)

성적서 번호 Report No.		ICRT-TR-E241968-0A	
신청자 Client	기관명 Name	AURES TECHNOLOGIES S.A.	
	주 소 Address	24 bis rue Léonard de Vinci, 91090 Lisses FRANCE	
시험대상품목 Sample description		POS SYSTEM	
모델명 Type description		EKO	
정 격 Ratings		DC 12.0 V	
시험장소 Place of test		☒ 고정시험실(Permanent Testing Lab) ☐ 현장시험(On Site Testing) 주소지(Address): 112, 113 Hwanggeum 3-ro 7beon-gil, Hagun-ri, Yangchon-eup, Gimpo-si, Gyeonggi-do, Korea	
시험기간 Date of test		05. Jul. 2024 ~ 12. Jul. 2024	
시험방법/항목 Test Method/Item		FCC rule part 1.1310	
시험결과 Test Results		Refer to 3. Test Summary	
확 인 Affirmation	작성자 Tested by	기술책임자 Technical Manager	
	성명 Name Eun-Hye, Kwak (Signature)	성명 Name Tae-Yang, Yoon (Signature)	
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Revision History

Issued Report No.	Issued Date	Revisions	Effect Section
ICRT-TR-E241968-0A	2024. 07. 22	Initial Issue	All



1. Applicant & Manufacturer & Test Laboratory Information

1.1 Applicant information

Applicant	AURES TECHNOLOGIES S.A.
Address	24 bis rue Léonard de Vinci, 91090 Lisses FRANCE
Contact Person	Christophe GUNTZ
Telephone No.	-
Fax No.	-
E-mail	Christophe.Guntz@aures.com

1.2 Manufacturer Information

Applicant	AURES TECHNOLOGIES S.A.
Address	24 bis rue Léonard de Vinci, 91090 Lisses FRANCE

1.3 Test Laboratory Information

Laboratory	ICR Co., Ltd.
Address	112, Hwanggeum 3-ro 7beon-gil, Hagun-ri, Yangchon-eup, Gimpo-si, Gyeonggi-do, Korea
Telephone No.	+82-2-6351-9002
Fax No.	+82-2-6351-9007
KOLAS No.	KT652
KC & FCC	KR0165

1.4 Measurement Uncertainty

Parameter	Uncertainty for ICR	Limit
Occupied Channel Bandwidth	0.19%	±5 %
RF output power, conducted	0.90 dB	±1.5 dB
Power Spectral Density, conducted	1.51 dB	±3 dB
Unwanted Emissions, conducted	1.36 dB	±3 dB
Supply voltages	0.02%	±3 %
Time	0.58%	±5 %
All emissions, radiated (Under the 1 GHz)	3.22 dB	±6 dB
All emissions, radiated (Above the 1 GHz)	3.67 dB	±6 dB



2. Equipment under Test(EUT) Information

2.1 General Information

Product Name	POS SYSTEM
Model Name	EKO
Additional Model Name	-
Power Supply	DC 12.0 V

2.2 Additional Information

Equipment Class	DTS - Digital Transmission System	
	NII - National Information Infrastructure	
Device Type	Stand-alone	
Operating Frequency	802.11n(20 MHz BW)	2 412 MHz ~ 2 462 MHz
		5 180 MHz ~ 5 240 MHz
		5 190 MHz ~ 5 230 MHz
	802.11n(40 MHz BW)	2 422 MHz ~ 2 452 MHz
		5 745 MHz ~ 5 825 MHz
		5 755 MHz ~ 5 795 MHz
RF Output Power	Bluetooth LE 1M	2 402 MHz ~ 2 480 MHz
	802.11n(20 MHz BW)	17.02 dBm
	802.11n(40 MHz BW)	15.94 dBm
	Bluetooth LE 1M	4.23 dBm
Number of Channel	802.11n(20 MHz BW)_DTS	11
	802.11n(40 MHz BW)_DTS	7
	802.11n(20 MHz BW)_NII	9
	802.11n(40 MHz BW)_NII	4
	Bluetooth LE 1M	40
Modulation Type	OFDM / GFSK	
Antenna Type	FPCB Antenna	
Antenna Gain	2.63 dBi / 0.60 dBi	

2.3 Modifications of EUT

- None

2.4 Reason of Additional Model Name

- None



3. Test Summary

3.1 Test standards and results

FCC rule part 1.1310			
Clause	Test items	Applied	Results
FCC rule part 1.1310	Radiofrequency radiation exposure.	■	PASS



4. Result

4.1 RF Exposure

4.1.1 Regulation

FCC rule part 1.1310(d)

(1) Evaluation with respect to the SAR limits in this section must demonstrate compliance with both the whole-body and peak spatial-average limits using technically supported measurement or computational methods and exposure conditions in advance of authorization (licensing or equipment certification) and in a manner that facilitates independent assessment and, if appropriate, enforcement. Numerical computation of SAR must be supported by adequate documentation showing that the numerical method as implemented in the computational software has been fully validated; in addition, the equipment under test and exposure conditions must be modeled according to protocols established by FCC-accepted numerical computation standards or available FCC procedures for the specific computational method.

(2) For operations within the frequency range of 300 kHz and 6 GHz (inclusive), the limits for maximum permissible exposure (MPE), derived from whole-body SAR limits and listed in Table 1 in paragraph (e)(1) of this section, may be used instead of whole-body SAR limits as set forth in paragraphs (a) through (c) of this section to evaluate the environmental impact of human exposure to RF radiation as specified in § 1.1307(b) of this part, except for portable devices as defined in § 2.1093 of this chapter as these evaluations shall be performed according to the SAR provisions in § 2.1093.

4.1.2 Evaluation Method

OET Bulletin 65 Section 2: PREDICTION METHODS_Equations for Predicting RF Fields

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

S = power density (in appropriate units, e.g. mW/cm²)

P = power input to the antenna (in appropriate units, e.g., mW)

G = power gain of the antenna in the direction of interest relative to an isotropic radiator

R = distance to the center of radiation of the antenna (appropriate units, e.g., cm)

$$S = \frac{EIRP}{4\pi R^2}$$

EIRP = equivalent (or effective) isotropically radiated power



4.1.3 Limit

Table 1 to § 1.1310(e)(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)
(i) 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
(ii) 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.



4.1.4 Result

Mode	Frequency [MHz]	Max Power / tolerance [dBm]	Max Tune-up Power [dBm]	Ant Gain [dBi]	Power density at 20 cm [mW/cm ²]	Limit [mW/cm ²]
802.11n (20 MHz BW)	2 462	17.02 ± 1.0	18.02	2.63	0.023 11	1.00
802.11n (40 MHz BW)	2 452	15.94 ± 1.0	16.94	2.63	0.018 02	1.00
802.11n (20 MHz BW)	5 825	14.68 ± 1.0	15.68	0.60	0.008 45	1.00
802.11n (40 MHz BW)	5 795	14.57 ± 1.0	15.57	0.60	0.008 24	1.00
Bluetooth LE 1M	2 480	4.23 ± 1.0	5.23	2.63	0.001 22	1.00

$$S(\text{power density [mW/cm}^2]) = 10^{\{(\text{Max Tune-up Power [dBm]} + \text{Ant Gain [dBi]} \} / 10} / (4 \times \pi \times R^2)$$

4.1.5 Conclusion of Simultaneous Transmitter

Mode	Frequency [MHz]	Max Power / tolerance [dBm]	Max Tune-up Power [dBm]	Ant Gain [dBi]	Power density at 20 cm [mW/cm ²]	Conclusion MPE	Limit [mW/cm ²]
802.11n (20 MHz BW)	2 462	17.02 ± 1.0	18.02	2.63	0.023	0.032	1.00
802.11n (20 MHz BW)	5 825	14.68 ± 1.0	15.68	0.60	0.008		
Bluetooth LE 1M	2 480	4.23 ± 1.0	5.23	2.63	0.001		

END OF REPORT.