RF Exposure Statement

TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch

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To whom it may concern:

TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch is authorized as an agency from Applicant: Suzhou Secote Precision Electronic Co.,Ltd. (FCC ID: 2A72V-APF, IC: 28856-APF) to act on their behalf in all matters relating to applications for equipment authorization, including testing the device and the signing of all documents relating to these matters.

MAXIMUM PERMISSIBLE EXPOSURE

FCC RULES

§1.1310 The criteria listed in Table 1 shall be used to evaluate the environmental impact of human exposure to radio-frequency (RF) radiation as specified in §1.1307(b), except in the case of portable devices which shall be evaluated according to the provisions of §2.1093 of this chapter.

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

MPE CALCULATIONS

Pd = (Pout*G) / (4*π*r^2) where

Pd = power density in mW/cm2

Pout = output power to antenna in mW

G = gain of antenna in linear scale

π = 3.1416

r = distance between observation point and center of the radiator in cm

LIMITS

From FCC §1.1310 Table 1 (B), the maximum value of S = 180/(13.56)^2 = 0.979 mW/cm^2

RESULTS

Per the test report included herein,

Frequency (MHz)	Max. Field Strength (dBuV/m)@3m	Max. Output Power (dBm)	Max. Output Power (mW)	Min. test separation distance (mm)	Power density (mW/cm^2)	Result
13.56	48.14(Note 1)	47.09(Note 2)	0.0000195(Note 3)	5mm	0.000000062208	Pass

Note: 1. Field Strength (dBuV/m@3m) test result please refer to test report 709992205006-00.
2. Output power (dBm) = Field Strength (dBuV/m)@3m - 95.23.
3. Output power (mW) = 10^ (Max power (dBm)/10)

Innovation, Science and Economic Development Canada (ISED) MPE / Health Hazard Requirement for the 13.56MHz

According to Innovation, Science and Economic Development Canada (ISED) RSS-102 Issue 5, Section 2.5.1, SAR evaluation is required if the separation distance between the user and/or bystander and the antenna and/or radiating element of the device is less than or equal to 20 cm, except when the device operates at or below the applicable output power level (adjusted for tune-up tolerance) for the specified separation distance defined in Table 1.

Table 1: SAR evaluation – Exemption limits for routine evaluation based on frequency and separation distance[4,5]

Frequency (MHz)	Exemption Limits (mW)				
	At separation distance of ≤5 mm	At separation distance of 10 mm	At separation distance of 15 mm	At separation distance of 20 mm	At separation distance of 25 mm
≤300	71 mW	101 mW	132 mW	162 mW	193 mW
450	52 mW	70 mW	88 mW	106 mW	123 mW
835	17 mW	30 mW	42 mW	55 mW	67 mW
1900	7 mW	10 mW	18 mW	34 mW	60 mW
2450	4 mW	7 mW	15 mW	30 mW	52 mW
3500	2 mW	6 mW	16 mW	32 mW	55 mW
5800	1 mW	6 mW	15 mW	27 mW	41 mW

RESULTS

Per the test report included herein,

Frequency (MHz)	Max. Field Strength (dBuV/m)@3m	Max. Output Power (dBm)	Max. Output Power (mW)	Min. test separation distance (mm)
13.56	48.14(Note 1)	47.09(Note 2)	0.0000195(Note 3)	5mm

Note: 1. Field Strength (dBuV/m@3m) test result please refer to test report 709992205006-00.
2. Output power (dBm) = Field Strength (dBuV/m)@3m - 95.23.
3. Output power (mW) = 10^ (Max power (dBm)/10)

EIRP (PK) = 0.0000195mW < 71 mW (At separation distance of ≤5 mm)