Report on the Testing of the

Rigaku Analytical Devices
KT-500

In accordance with:
FCC Rule Part: 47 CFR Part 2.1093
RSS-102 Issue 5

FCC ID: 2AZ35-SDPAC
IC: 27303-SDPAC

RF Exposure Certification Exhibit - MPE

Prepared for: Rigaku Analytical Devices
30 Upton Drive, Suite 2
Wilmington, MA 01887

COMMERCIAL-IN-CONFIDENCE

Document Number: NC72165147.3 | Issue: 2

America

Add value.
Inspire trust.

SIGNATURE			
NAME	JOB TITLE	RESPONSIBLE FOR	ISSUE DATE
Franklin Rose	Sr. Wireless RF Test Engineer	**Authorized Signatory**	26 MAY 2021

Signatures in this approval box have checked this document in line with the requirements of TÜV SÜD America, Inc. document control rules.

FCC Accreditation Designation Number US1148 New Brighton, MN Test Laboratory	Innovation, Science, and Economic Development Canada Accreditation Site Number 4512A New Brighton, MN Test Laboratory

EXECUTIVE SUMMARY
A sample of this product was tested and found to be compliant with the standards listed above.

A2LA Cert. No. 2955.11

General Information:

Applicant:	Rigaku Analytical Devices
Device Category:	Portable
Environment:	Extremity

Technical Information (2.4GHz WIFI):

FCC ID: 2AZ35-SDPAC
IC: 27303-SDPAC
Antenna Type: Unictron AA258, WiFi Dual Band PCB
Antenna Gain: 2.4GHz = 0.9 dBi
Maximum Transmitter Conducted Power: 17.83 dBm, 60.67 mW
Maximum System EIRP: 18.73 dBm, 74.64mW
Exposure Conditions: 50mm separation distance

Technical Information (5GHz WIFI):

FCC ID: 2AZ35-SDPAC
IC: 27303-SDPAC
Antenna Type: Unictron AA258, WiFi Dual Band PCB
Antenna Gain: 5GHz = 3.8 dBi
Maximum Transmitter Conducted Power: 15.09 dBm, 32.28 mW
Maximum System EIRP: 18.89 dBm, 77.45mW
Exposure Conditions: 50mm separation distance

FCC:

Justification for SAR Test Exclusion:

Standalone SAR Test Exclusion:
Per KDB 447498 D01 General RF Exposure Guidance v05r02, the standalone 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:

[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)] · [√f(GHz)] ≤ 3.0 for 1-g SAR and ≤ 7.5 for 10-g extremity SAR

Table 1: SAR Test Exclusion Calculation - FCC

Transmitter	Max Conducted Source-based Time-averaged Power (mW)	Test Separation (mm)	Frequency (GHz)	1-g / 10-g (Input 1 or 10)	Estimated SAR (W/kg)	Standalone SAR Test Exclusion	Limit for Standalone SAR Test Exclusion	Standalone SAR Required
2.4GHz WIFI	60.67	50	2.47	10	0.1	1.9	7.5	no
5GHz WIFI	32.28	50	5.795	10	0.1	1.6	7.5	no

ISED

Justification for SAR Test Exclusion:

The SAR test exclusion thresholds are determined using IC RSS-102 Issue 5, Section 2.5.1 and shown below in this report.

Table 2: SAR Test Exclusion Calculation - ISED

Transmitter	Transmitter Frequency (GHz)	Max Conducted Source-based Time-averaged Power (mW)	Test Separation (mm)	Frequency (MHz)	Exemption Threshold (mW)	Standalone SAR Required
2.4GHz WIFI	2.47	74.64	50	2450	309	No
5GHz WIFI	5.795	77.45	50	5800	106	No