RF Exposure Report

Report No.:	SA200511C02
FCC ID:	2ATM8EC25AF
Test Model:	EC25-AF
Received Date:	May 11, 202
Test Date:	May 22 ~ May 29, 2020
Issued Date:	Jun. 05, 2020
Applicant:	HAWKEYE TECH CO LTD
Address:	13F. No. 736, Zhongzheng Rd., Zhonghe Dist., New Taipei City 235, Taiwan
Issued By:	Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch Lin Kou Laboratories
Lab Address:	No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan
Test Location:	No.19, Hwa Ya 2nd Rd., Wen Hwa Vil., Kwei Shan Dist., Taoyuan City 33383, Taiwan
FCC Registration / Designation Number:	788550 / TW0003

Testing Laboratory
2021

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Release Control Record

Issue No.	Description	Date Issued
SA200511C02	Original release	Jun. 05, 2020

1 Certificate of Conformity

Product:	LTE Module
Brand:	Quectel
Test Model:	EC25-AF
Sample Status:	Engineering Sample
Applicant:	HAWKEYE TECH CO LTD
Test Date:	May 22 ~ May 29, 2020
Standards:	FCC Part 2 (Section 2.1091) IEEE C95.3 -2002
References Test Guidance:	KDB 447498 D01 General RF Exposure Guidance v06

The above equipment has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's RF characteristics under the conditions specified in this report.

Prepared by : Celine Chou , **Date:** Jun. 05, 2020

Celine Chou / Senior Specialist

Approved by : Bruce Chen , **Date:** Jun. 05, 2020

Bruce Chen / Senior Project Engineer

2 RF Exposure

2.1 Limits for Maximum Permissible Exposure (MPE)

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm^2)	Average Time (minutes)
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
300-1500	…	…	f/1500	30
1500-100,000	…	…	1.0	30

f = Frequency in MHz; *Plane-wave equivalent power density

2.2 MPE Calculation Formula

$Pd = (Pout*G) / (4*pi*r^2)$
where
Pd = power density in mW/cm^2
Pout = output power to antenna in mW
G = gain of antenna in linear scale
pi = 3.1416
r = distance between observation point and center of the radiator in cm

2.3 Classification

The antenna of this product, under normal use condition, is at least 20cm away from the body of the user. So, this device is classified as Mobile Device.

3 Calculation Result of Maximum Conducted Power

Frequency Band (MHz)	Max Power (dBm)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm^2)	Limit (mW/cm^2)
WCDMA Bnad 2	25.00	3.00	20	0.126	1.00
WCDMA Bnad 4	25.00	3.00	20	0.126	1.00
WCDMA Bnad 5	25.00	2.00	20	0.100	0.55
LTE Band 2	25.00	3.00	20	0.126	1.00
LTE Band 4	25.00	3.00	20	0.126	1.00
LTE Band 5	25.00	2.00	20	0.100	0.54
LTE Band 12	25.00	2.00	20	0.100	0.46
LTE Band 13	25.00	2.00	20	0.100	0.51
LTE Band 14	25.00	2.00	20	0.100	0.52
LTE Band 66	25.00	3.00	20	0.126	1.00
LTE Band 71	25.00	2.00	20	0.100	0.44

Note:

1. The above Max Power is Tune-up Power which client declaried.
2. Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

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