RF Exposure Report

Report No.:	SA190429C10
FCC ID:	M82-WISE2210
Test Model:	WISE-2210
Series Model:	WISE-2211
Received Date:	Apr. 30, 2019
Test Date:	Jun. 07 ~ Jun. 26, 2019
Issued Date:	Jun. 28, 2019
Applicant:	ADVANTECH CO., LTD
Address:	No. 1, Alley 20, Lane 26, Rueiguang Rd, Neihu District, Taipei, Taiwan 114
Issued By:	Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch
Lab Address:	No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan, R.O.C.
Lab Address:	No. 19, Hwa Ya 2nd Rd., Wen Hwa Vil., Kwei Shan Dist., Taoyuan City 33383, TAIWAN (R.O.C.)
FCC Registration / Designation Number:	788550 / TW0003

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Release Control Record

Issue No.	Description	Date Issued
SA190429C10	Original release	Jun. 28, 2019

1 Certificate of Conformity

Product:	IoT Wireless Sensor Node
Brand:	Advantech
Test Model:	WISE-2210
Series Model:	WISE-2211
Applicant:	ADVANTECH CO., LTD
Test Date:	Jun. 07 ~ Jun. 26, 2019
Standards:	FCC Part 2 (Section 2.1091) KDB 447498 D01 General RF Exposure Guidance v06 IEEE C95.3 -2002

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 : Polly Chien , **Date:** Jun. 28, 2019

Polly Chien / Specialist

Approved by : Bruce Chen , **Date:** Jun. 28, 2019

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				
300-1500	…	…	F/1500	30
1500-100,000	…	…	1.0	30

F = Frequency in MHz

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

Electric field (dBuV/m) @3m	Electric field (dBuV/m) @0.2m	EIRP Power (dBm)	Power Density (mW/cm^2)	Limit (mW/cm^2)
93.8	117.32	-1.431	0.00014	0.601

Note: 93.8+20log(3/0.2) = 117.32dBuV/m

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