RF Exposure Report

Report No.: SA191025C12

FCC ID: PD5-DVW-W01I2-E1

Test Model: DVW-W01I2-E1

Series Model: DVW-W01I2-E1-CN, DVW-W01I2-E1-EU

Received Date: Oct. 25, 2019

Test Date: Oct. 31 ~ Nov. 04, 2019

Issued Date: Nov. 14, 2019

Applicant: Delta Electronics, Inc.

Address: No. 18, Xinglong Rd., Taoyuan Dist., Taoyuan City 330, Taiwan (R.O.C.)

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

Table of Contents

Release Control Record

Issue No.	Description	Date Issued
SA191025C12	Original release.	Nov. 14, 2019

1 Certificate of Conformity

Product:	Wireless AP/Client/Gateway
Brand:	Delta
Test Model:	DVW-W01I2-E1
Series Model:	DVW-W01I2-E1-CN, DVW-W01I2-E1-EU
Sample Status:	Engineering sample
Applicant:	Delta Electronics, Inc.
Test Date:	Oct. 31 ~ Nov. 04, 2019
Standards:	FCC Part 2 (Section 2.1091)
References Test Guidance:	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 : _____ , **Date:** _____ Nov. 14, 2019

Polly Chien / Specialist

Approved by : _____ , **Date:** _____ Nov. 14, 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

Frequency Band (MHz)	Max Power (dBm)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm^2)	Limit (mW/cm^2)
WLAN 2412~2462	24.31	5.79	20	0.204	1
WLAN 5180~5240	21.31	6.22	20	0.113	1
WLAN 5745~5825	21.60	6.22	20	0.120	1

Note: Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

2412~2462MHz Directional Gain = 2.78dBi + 10log(2) = 5.79dBi
5180~5825MHz Directional Gain = 3.21dBi + 10log(2) = 6.22dBi

Conclusion:
The formula of calculated the MPE is:
CPD1 / LPD1 + CPD2 / LPD2 + ……etc. < 1
CPD = Calculation power density
LPD = Limit of power density

2.4GHz + 5GHz = 0.204 / 1 + 0.120 / 1 = 0.324 < 1

Therefore the maximum calculations of above situations are less than the "1" limit.

---END---