

RF Exposure Report

Report No.: SA130605C26A

FCC ID: I88Z5SPM9382

Test Model: Z5SPM9382

Received Date: Mar. 15, 2016

Test Date: Apr. 13 ~ May 05, 2016

Issued Date: May 10, 2016

Applicant: ZyXEL Communications Corporation

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Issued By: Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch

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Test Location: No.19, Hwa Ya 2nd Rd., Wen Hwa Vil., Kwei Shan Dist., Taoyuan City 33383, TAIWAN (R.O.C.)



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Release Control Record

Issue No.	Description	Date Issued
SA130605C26A	Original release.	May 10, 2016

1 Certificate of Conformity

Product: 5G Wireless Card

Brand: ZyXEL

Test Model: Z5SPM9382

Sample Status: Engineering sample

Applicant: ZyXEL Communications Corporation

Test Date: Apr. 13 ~ May 05, 2016

Standards: FCC Part 2 (Section 2.1091)
KDB 447498 D01 (October 23, 2015)
IEEE C95.1

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 EMC characteristics under the conditions specified in this report.

Prepared by :



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Date:

May 10, 2016

Approved by :



Ken Liu / Senior Manager

Date:

May 10, 2016

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

$$P_d = (P_{out} * G) / (4 * \pi * r^2)$$

where

P_d = power density in mW/cm²

P_{out} = 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

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)
5180-5240	27.47	6.01	20	0.443	1
5745-5825	28.83	6.01	20	0.606	1

Note: Directional gain = 3dBi + 10log(2) = 6.01dBi

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