RF Exposure Evaluation declaration

Product Name	802.11ac Dual Band Access Point
Model No.	WK-1,WK-1-B,WK-1-C,WK-1-CB
FCC ID	SLY-WK1X22

Applicant	Pakedge Device and Software Inc.
Address	3847 Breakwater Avenue, Hayward, CA 94545

Date of Receipt	June. 24, 2015
Date of Declaration	Aug. 17, 2015
Report No.	1560591R-RFUSP05V00

1. RF Exposure Evaluation

1.1. Limits

According to FCC 1.1310: The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) radiation as specified in 1.1307(b)
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)
(A) Limits for Occupational/ Control Exposures				
300-1500	--	--	F/300	6
1500-100,000	--	--	5	6
(B) Limits for General Population/ Uncontrolled Exposures				
300-1500	--	--	F/1500	6
1500-100,000	--	--	1	30

F= Frequency in MHz

Friis Formula
Friis transmission 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

Pd id the limit of MPE, 1 mW/cm^2. If we know the maximum gain of the antenna and the total power input to the antenna, through the calculation, we will know the distance r where the MPE limit is reached.

1.2. Test Procedure

Software provided by client enabled the EUT to transmit and receive data at lowest, middle and highest channel individually.
The temperature and related humidity: 18℃and 78％ RH.

1.3. Test Result of RF Exposure Evaluation

Product : 802.11ac Dual Band Access Point
Test Item : RF Exposure Evaluation
Test Site : No.3 OATS

Operation Frequency	802.11a/n-20MHz: 5260-5320MHz, 5500-5700MHz 802.11n-40MHz: 5270-5310MHz, 5510-5670MHz 802.11ac-80MHz: 5290MHz, 5530-5610MHz
Maximum Conducted output power	23.72dBm
Antenna gain	5.6dBi

Output Power Into Antenna & RF Exposure Evaluation Distance:

Output Power to Antenna (mW)	Power Density at R = 20 cm (mW/cm2)
235.5049284	0.1701

Power density is lower than the limit (1 mW/cm2).