

# **RF Exposure Report**

Report No.: SA111011C17U

FCC ID: H8N-WLU5153

Test Model: WLU5153-D81

Received Date: Jul. 24, 2013

Test Date: Jul. 26, 2013 ~ Feb. 16, 2016

Issued Date: Feb. 26, 2016

Applicant: ASKEY COMPUTER CORP.

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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					
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# 1 Certificate of Conformity

Product:	Wireless Module
Brand:	Panasonic
Test Model:	WLU5153-D81
Sample Status:	Engineering sample
Applicant:	ASKEY COMPUTER CORP.
Test Date:	Jul. 26, 2013 ~ Feb. 16, 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 :	Ny Ivy Lin / S	Specialist	_, Date:	Feb. 26, 2016	
Approved by :	Ken Liu / Ser	Li	_, Date:	Feb. 26, 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 <sup>2</sup> )	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 <sup>2</sup> )	Limit (mW/cm <sup>2</sup> )
2412-2462	26.07	4.44	20	0.224	1
5180-5240	23.23	6.15	20	0.172	1
5260-5320	18.82	6.25	20	0.064	1
5500-5700	19.13	6.30	20	0.069	1
5745-5825	21.12	5.53	20	0.092	1

\*2.4GHz and 5GHz cannot transmit simultaneously

Note:

2412-2462: Directional gain =  $10 \log[(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2 / N_{ANT}] = 4.44dBi$ 5180-5240: Directional gain =  $10 \log[(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2 / N_{ANT}] = 6.15dBi$ 5260-5320: Directional gain =  $10 \log[(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2 / N_{ANT}] = 6.25dBi$ 5500-5700: Directional gain =  $10 \log[(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2 / N_{ANT}] = 6.30dBi$ 5745-5825: Directional gain =  $10 \log[(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2 / N_{ANT}] = 5.53dBi$ 

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