RF EXPOSURE REPORT

REPORT NO.: SA130308C12

MODEL NO.: WLU5054-D84

FCC ID: H8N-WLU5054

RECEIVED: Mar. 08, 2013

TESTED: Mar. 13 ~ Mar. 15, 2013

ISSUED: Mar. 22, 2013

APPLICANT: Askey Computer Corp

ADDRESS: 10F, No. 119, Chienkang Rd Chung-Ho, Taipei 235, Taiwan

ISSUED BY: Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch

LAB ADDRESS: No. 47, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan, R.O.C.

TEST LOCATION: No. 19, Hwa Ya 2nd Rd, Wen Hwa Tsuen, Kwei Shan Hsiang, Taoyuan Hsien 333, Taiwan, R.O.C.

This report should not be used by the client to claim product certification, approval, or endorsement by TAF or any government agencies.

TABLE OF CONTENTS

RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
SA130308C12	Original release	Mar. 22, 2013

1. CERTIFICATION

PRODUCT:	Wireless LAN module
MODEL NO.:	WLU5054-D84
BRAND:	Askey
APPLICANT:	Askey Computer Corp
TESTED:	Mar. 13 ~ Mar. 15, 2013
TEST SAMPLE:	ENGINEERING SAMPLE
STANDARDS:	**FCC Part 2 (Section 2.1091)**
	FCC OET Bulletin 65, Supplement C (01-01)
	IEEE C95.1

The above equipment (model: WLU5054-D84) 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 : _____ **DATE :** Mar. 22, 2013
Ivy Lin / Specialist

APPROVED BY : _____ **, DATE :** Mar. 22, 2013
Ken Liu / Senior Manager

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**.

2.4 CALCULATION RESULT OF MAXIMUM CONDUCTED POWER

Frequency band (MHz)	Conducted power (dBm)	Antenna Gain (dBi)	POWER DENSITY (mW/cm^2)	LIMIT (mW/cm^2)
2412~2462	28.33	5.33	0.462	1
5180~5240	16.99	6.28	0.042	1
5260~5320	18.31	6.60	0.062	1
5500~5700	18.11	6.69	0.060	1
5745~5825	25.89	6.39	0.336	1

Note:

For 2.4GHz:

Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2 / N_{ANT}]$= 5.33dBi

For 5180~5240MHz:

Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2 / N_{ANT}]$= 6.28dBi

For 5260~5320MHz:

Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2 / N_{ANT}]$= 6.60dBi

For 5500~5700MHz:

Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2 / N_{ANT}]$= 6.69dBi

For 5745~5825MHz:

Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2 / N_{ANT}]$= 6.39dBi