RF Exposure Report

Report No.:	SA130523E10B
FCC ID:	MCLJ20H076
Test Model:	J20H076
Received Date:	Sep. 14, 2015
Test Date:	Oct. 05, 2015
Issued Date:	Oct. 21, 2015
Applicant:	HON HAI PRECISION IND. CO., LTD.
Address:	5F-1,5 Hsin-An Road Hsinchu, Science-Based Industrial Park Taiwan, R.O.C.
Issued By:	Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch Hsin Chu Laboratory
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Test Location (2):	No. 49, Ln. 206, Wende Rd., Shangshan Tsuen, Chiung Lin Hsiang, Hsin Chu Hsien 307, Taiwan R.O.C.
Test Location (3):	E-2, No.1, Li Hsin 1st Road, Hsinchu Science Park, Hsinchu City 300, Taiwan R.O.C.

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Release Control Record

Issue No.	Description	Date Issued
SA130523E10B	Original release.	Oct. 21, 2015

1 Certificate of Conformity

Product:	802.11abgn wireless module
Brand:	FOXCONN
Test Model:	J20H076
Sample Status:	ENGINEERING SAMPLE
Applicant:	HON HAI PRECISION IND. CO., LTD.
Test Date:	Oct. 05, 2015
Standards:	FCC Part 2 (Section 2.1091) KDB 447498 D03 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 : _____ , **Date:** Oct. 21, 2015

Elsie Hsu / Specialist

Approved by : _____ , **Date:** Oct. 21, 2015

May Chen / 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 Antenna Gain

1. The antennas provided to the EUT, please refer to the following table:

Transmitter Circuit	Brand	Model	Antenna Type	Antenna Gain (dBi)	Connector	Frequency range (MHz to MHz)
Chain (0)	NA	NA	PCB	3.10	Murata	2400~2483.5
				4.51		5150~5350
				4.75		5470~5725
				4.80		5725~5845
Chain (1)	NA	NA	PCB	3.18	Murata	2400~2483.5
				4.54		5150~5350
				4.78		5470~5725
				4.98		5725~5845

3 Calculation Result of Maximum Conducted Power

The Max power (except U-NII-3 band) was refer to the original test report.

For 15.247(2.4GHz):

Frequency Band (MHz)	Max Power (mW)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm^2)	Limit (mW/cm^2)
2412-2462	657.863	6.15	20	0.53934	1

NOTE:

2.4GHz:Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20})^2 / 2] = 6.15dBi$

For 15.407(5GHz):

Frequency Band (MHz)	Max Power (mW)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm^2)	Limit (mW/cm^2)
5180-5240 5260-5320 5500-5580 & 5660-5700	235.624	7.78	20	0.28116	1
5745 ~ 5825	87.007	7.9	20	0.10673	1

NOTE:

5150~5350MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20})^2 / 2] = 7.52dBi$
5470~5725MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20})^2 / 2] = 7.78dBi$
5725~5845MHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20})^2 / 2] = 7.9dBi$

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