




RF EXPOSURE REPORT

Applicant	HONG HAI Precision IND.CO.,LTD.
Address	5F-1,5,Hsin-An Road Hsinchu Science-Based Industrial Park, HsinChu, Taiwan.

Manufacturer or Supplier	HONG HAI Precision IND.CO.,LTD.
Address	5F-1,5,Hsin-An Road Hsinchu Science-Based Industrial Park, HsinChu, Taiwan.
Product	pHin Wireless Bridge
Brand Name	
Model	CY-WB1500-A1
Additional Model & Model Difference	N/A
Date of tests	Mar. 24, 2016 ~ May 03, 2016

FCC Part 2 (Section 2.1091)

KDB 447498 D01

IEEE C95.1

CONCLUSION: The submitted sample was found to COMPLY with the test requirement

Tested by Breeze Jiang
Supervisor / EMC Department

Approved by Chris Chen
Manager / EMC Department



Date: May 03, 2016

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Test Report No.: FS160324N064

RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
FS160324N064	Original release	May 03, 2016

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Test Report No.: FS160324N064

1. CERTIFICATION

FCC ID:	MCL-CYWB1500
PRODUCT:	pHin Wireless Bridge
BRAND NAME:	
MODEL NO.:	CY-WB1500-A1
ADDITIONAL NO.:	N/A
TEST SAMPLE:	Engineering Sample
APPLICANT:	HONG HAI Precision IND.CO.,LTD.
STANDARDS:	FCC Part 2 (Section 2.1091)
	KDB 447498 D01
	IEEE C95.1

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2. RF EXPOSURE LIMIT

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

3. MPE CALCULATION FORMULA

$$Pd = (Pout * G) / (4 * pi * r^2)$$

where

Pd = power density in mW/cm²

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

4. 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**.



5. ANTENNA GAIN

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

Transmitter Circuit	Max.Peak Gain (dBi)	ANT Number	Total Gain (dBi)	Antenna Type
BT 2.0 and BT-LE	1.37	1	1.37	FPC Antenna
2.4G WIFI	2.45	2	5.46	FPC Antenna

6. CALCULATION RESULT OF MAXIMUM CONDUCTED POWER

FREQUENCY BAND (MHz)	MAX POWER (mW)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/cm ²)	LIMIT (mW/cm ²)
2402-2480 For BT 2.0	4.688	1.37	20	0.001279	1.0
2402-2480 For BT-LE	2.301	1.37	20	0.000628	1.0
2412-2462MHz 2422-2452MHz For WIFI	571.518	5.46	20	0.399695	1.0

CALCULATION FOR SIMULTANEOUS TRANSMISSION

Both of the WLAN and BT can transmit simultaneously, the formula of calculated the exposure is:

$$(CEF1/LEF1)+(CEF2/LEF2)+.....etc.<1$$

CEF= Calculation E-Field Strength

LEF= Limit of E-Field Strength

Therefore the calculation of this situation is $(0.001279/1) + (0.399695/1) = 0.400974 < 1$, which is less than the "1" limit.

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