

Report No.: FA882305



FCC RADIO EXPOSURE TEST REPORT

FCC ID

: 2AFXU-PL22888

Equipment

: PL22

Brand Name : M2COMM

Model Name : PL22

Applicant

: M2Communication Inc.

15F-1, No.32, Gaotie 2nd Rd., Zhubei City, Hsinchu

County 302, Taiwan (R.O.C.)

Manufacturer

: M2Communication Inc.

15F-1, No.32, Gaotie 2nd Rd., Zhubei City, Hsinchu

County 302, Taiwan (R.O.C.)

Standard

· 47 CFR Part 2.1091

The product was received on Aug. 28, 2018, and testing was started from Sep. 07, 2018 and completed on Nov. 06, 2018. We, SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in 47 CFR Part 2.1091 and shown compliance with the applicable technical standards.

The report must not be used by the client to claim product certification, approval, or endorsement by TAF or any agency of government.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, the test report shall not be reproduced except in full.

Approved by: Sam Chen

SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory

No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)

TEL: 886-3-656-9065

FAX: 886-3-656-9085

Report Template No.: CB Ver1.0

Page Number : 1 of 7

Issued Date : Nov. 23, 2018

Report Version : 01

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History of this test report

Report No. : FA882305

Report No.	Version	Description	Issued Date
FA882305	01	Initial issue of report	Nov. 23, 2018

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Summary of Test Result

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Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
2	-	Exposure evaluation	PASS	-

Declaration of Conformity:

The judgment of conformity in the report is based on the measurement results excluding the measurement uncertainty.

Comments and Explanations:

None

Reviewed by: Sam Chen

Report Producer: Cindy Peng

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1 General Description

1.1 EUT General Information

RF General Information						
Evaluation Mode Frequency Range Operating Frequency (MHz) Modulation Type						
2FSK	902-928	903-927	2FSK			

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1.2 Table for Panel Type

The EUT has two panels which are identical to each other in all aspects except for the following table:

Source of Panels	Brand Name	Model Name	
Main source	WEIFENG	WF0213T1PCZ04230HU57	
Second source	Holitech	HINK-E0213A26	

1.3 Testing Location

	Testing Location							
	HWA YA ADD : No. 52, Hwa Ya 1st Rd., Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C.							
		TEL	:	886-3-327-3456 FAX : 886-3-327-0973				
\boxtimes	JHUBEI	ADD	:	No.8, Lane 724, Bo-ai St., Jhubei City, HsinChu County 302, Taiwan, R.O.C.				
		TEL	:	886-3-656-9065 FAX : 886-3-656-9085				

Test site Designation No. TW0006 with FCC.

Test site registered number IC 4086D with Industry Canada.

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2 Maximum Permissible Exposure

2.1 Limit of Maximum Permissible Exposure

(A) Limits for Occupational / Controlled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/ cm²)	Averaging Time E ², H ² or S (minutes)
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842 / f	4.89 / f	(900 / f)*	6
30-300	61.4	0.163	1.0	6
300-1500			F/300	6
1500-100,000			5	6

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(B) Limits for General Population / Uncontrolled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/ cm²)	Averaging Time E ², H ² or S (minutes)
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f)*	30
30-300	27.5	0.073	0.2	30
300-1500			F/1500	30
1500-100,000			1.0	30

Note: f = frequency in MHz; *Plane-wave equivalent power density

2.2 MPE Calculation Method

The MPE was calculated at 20 cm to show compliance with the power density limit.

The following formula was used to calculate the Power Density:

$$E (V/m) = \frac{\sqrt{30 \times P \times G}}{d}$$
 Power Density: $Pd (W/m^2) = \frac{E^2}{377}$

E = Electric field (V/m)

P = RF output power (W)

G = EUT Antenna numeric gain (numeric)

d = Separation distance between radiator and human body (m)

The formula can be changed to

$$Pd = \frac{30 \times P \times G}{377 \times d^2}$$

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2.3 Calculated Result and Limit

Exposure Environment: General Population / Uncontrolled Exposure

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up EIRP (dBm)	Tune-up EIRP (W)	Distance (cm)	S (mW/cm²)	S Limit (mW/cm²)
2FSK	-4.03	11.90	7.87	0.50	8.37	0.00687	20	0.00137	0.60200

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——THE END——

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