

# TEST REPORT

FCC MPE Test for WSP-W40  
Certification

APPLICANT  
WOOSIM SYSTEMS Inc.

REPORT NO.  
HCT-RF-2108-FC030

DATE OF ISSUE  
August 23, 2021

Tested by  
Jin Gwan Lee



Technical Manager  
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F-TP22-03(Rev.04)

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<b>TEST REPORT</b> FCC MPE Test for WSP-W40	<b>REPORT NO.</b> HCT-RF-2108-FC030
	<b>DATE OF ISSUE</b> August 23, 2021
	<b>Additional Model</b> -

<b>Applicant</b>	<b>WOOSIM SYSTEMS INC.</b> 60, Sandan-ro 388beon-gil, Chwisaeng-ri, Galsan-myeon, Hongseong-gun, Chungcheongnam-do, Korea
<b>Eut Type Model Name</b>	Mobile Printer WSP-W40
<b>FCC ID</b>	QDD-WSPW40
<b>Frequency range</b>	2 402 MHz – 2 480 MHz (Bluetooth)

The result shown in this test report refer only to the sample(s) tested unless otherwise stated.  
This test results were applied only to the test methods required by the standard.

## REVISION HISTORY

The revision history for this test report is shown in table.

Revision No.	Date of Issue	Description
0	August 23, 2021	Initial Release

### Engineering Statement:

The measurements shown in this report were made in accordance with the procedures indicated, and the emissions from this equipment were found to be within the limits applicable. I assume full responsibility for the accuracy and completeness of these measurements, and for the qualifications of all persons taking them. It is further stated that upon the basis of the measurements made, the equipment tested is capable of operation in accordance with the requirements of the FCC Rules under normal use and maintenance

If this report is required to confirmation of authenticity, please contact to [www.hct.co.kr](http://www.hct.co.kr)

**RF Exposure Statement****1. Limit**

According to § 1.1310, § 2.1091 RF exposure is calculated.

## (B) Limits for General Population/Uncontrolled Exposures

Frequency range (MHz)	Electric field Strength (V/m)	Magnetic field Strength (A/m)	Power density (mW/cm <sup>2</sup> )	Averaging time (minutes)
0.3 -				
1.34.....	614	1.63	*(100)	30
1.34 - 30.....	824/f	2.19/f	*(180/f <sup>2</sup> )	30
30 - 300.....	27.5	0.073	0.2	30
300 - 1500.....	.....	.....	f/1500	30
1500 -	.....	.....	1.0	30
100.000.....				

F = frequency in MHz

\* = Plane-wave equivalent power density

**2. Maximum Permissible Exposure Prediction**

Prediction of MPE limit at a given distance

$$S = PG/4\pi R^2$$

S = Power density

P = Power input to antenna

G = Power gain to the antenna in the direction of interest relative to an isotropic radiator

R = Distance to the center of radiation of the antenna

### 3. RESULTS

#### 3-1. Bluetooth

Average output Power at antenna input terminal	4.00	dBm
Average output Power at antenna input terminal	2.51	mW
Prediction distance	20.00	cm
Prediction frequency	2402 – 2480	MHz
Antenna Gain(typical)	-3.00	dBi
Antenna Gain(numeric)	0.501	-
Power density at prediction frequency( S)	0.0003	mW/cm <sup>2</sup>
MPE limit for uncontrolled exposure at prediction frequency	1.0000	mW/cm <sup>2</sup>

#### 2.1091

EIRP	1.00	(dBm)
ERP	-1.15	(dBm)
ERP	0.001	(W)
ERP Limit	3.00	(W)
MARGIN	35.92	(dB)