

TEST REPORT

FCC MPE Test for WD-MSOII

APPLICANT
EVERINT CO., LTD.

REPORT NO.
HCT-RF-2108-FI002

DATE OF ISSUE
August 3, 2021

Tested by
Jeong Ho Kim



Technical Manager
Jong Seok Lee



HCT CO., LTD.
BongJai Huh
BongJai Huh / CEO

HCT Co., Ltd.

74, Seoicheon-ro 578beon-gil, Majang-myeon, Icheon-si, Gyeonggi-do, 17383 KOREA
Tel. +82 31 634 6300 Fax. +82 31 645 6401

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WD-MSOII

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Additional Model

-

Applicant

EVERINT Co., Ltd.

(Yongtan-dong) 129, Chungjusandan 1-ro Chungju-si, Chungcheongbuk-do,

**Eut Type
Model Name**

WLAN Module(Data transmission equipment)
WD-MSOII

FCC ID

2AKMF-WD-MSOII

Frequency range

2 412 MHz ~ 2 462 MHz (WLAN)
5 180 MHz ~ 5 825 MHz (UNII)

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 03, 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

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 ²)	Averaging time (minutes)
0.3 - 1.34.....	614	1.63	*(100)	30
1.34 - 30.....	824/f	2.19/f	*(180/ f ²)	30
30 - 300.....	27.5	0.073	0.2	30
300 - 1500.....	f/1500	30
1500 - 100.000.....	1.0	30

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. DTS

Average output Power at antenna input terminal	22.00	dBm
Average output Power at antenna input terminal	158.49	mW
Prediction distance	20.00	cm
Prediction frequency	2 412 – 2 462	MHz
Antenna Gain(typical)	0.27	dBi
Antenna Gain(numeric)	1.064	-
Power density at prediction frequency(S)	0.0336	mW/cm ²
MPE limit for uncontrolled exposure at prediction frequency	1.0000	mW/cm ²

2.1091

EIRP	22.27	(dBm)
ERP	20.12	(dBm)
ERP	0.103	(W)
ERP Limit	3.00	(W)
MARGIN	14.65	(dB)

3-2. UNII

Average output Power at antenna input terminal	15.00	dBm
Average output Power at antenna input terminal	31.62	mW
Prediction distance	20.00	cm
Prediction frequency	5 180 – 5 825	MHz
Antenna Gain(typical)	1.34	dBi
Antenna Gain(numeric)	1.361	-
Power density at prediction frequency(S)	0.0086	mW/cm ²
MPE limit for uncontrolled exposure at prediction frequency	1.0000	mW/cm ²

2.1091

EIRP	16.34	(dBm)
ERP	14.19	(dBm)
ERP	0.026	(W)
ERP Limit	3.00	(W)
MARGIN	20.58	(dB)