

# TEST REPORT

FCC MPE Test for WHM210A  
Certification

**APPLICANT**  
SJIT Co.,Ltd

**REPORT NO.**  
HCT-RF-2502-FI007

**DATE OF ISSUE**  
February 21, 2025

**Tested by**  
Sang Hoon Lee



**Technical Manager**  
Jong Seok Lee



**HCT CO., LTD.**  
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# TEST REPORT

**REPORT NO.**

HCT-RF-2502-FI007

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February 21, 2025

Applicant	<b>SJIT Co.,Ltd</b> 54-11, Dongtanhana 1-gil, Hwaseong-si, Gyeonggi-do, Republic of Korea
Product Name	WIFI Halow Module
Model Name	WHM210A
FCC ID	2BEK7WHM210A
Frequency range	902.0 MHz – 928.0 MHz (802.11ah)
Date of Test	February 03, 2025 ~ February 21, 2025
Test Standard Used	FCC Rule Part(s): § 1.1310, § 2.1091
Location of Test	<input checked="" type="checkbox"/> Permanent Testing Lab <input type="checkbox"/> On Site Testing (Address: 74, Seoicheon-ro 578beon-gil, Majang-myeon, Icheon-si, Gyeonggi-do, Republic of Korea)
Test Results	PASS

## REVISION HISTORY

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

Revision No.	Date of Issue	Description
0	February 21, 2025	Initial Release

## Notice

### Content

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.

The results shown in this test report only apply to the sample(s), as received, provided by the applicant, unless otherwise stated.

The test results have only been applied with the test methods required by the standard(s).

The laboratory is not accredited for the test results marked \*.

Information provided by the applicant is marked \*\*.

Test results provided by external providers are marked \*\*\*.

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

The test results in this test report are not associated with the ((KS Q) ISO/IEC 17025) accreditation by KOLAS (Korea Laboratory Accreditation Scheme) / A2LA (American Association for Laboratory Accreditation) that are under the ILAC (International Laboratory Accreditation Cooperation) Mutual Recognition Agreement (MRA).

## 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	<sup>(a)</sup> (100)	30
1.34 - 30	824/f	2.19/f	<sup>(a)</sup> (180/ f <sup>2</sup> )	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

<sup>(a)</sup> = 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. 802.11ah

Average output Power at antenna input terminal	17.000	dBm
Average output Power at antenna input terminal	50.119	mW
Prediction distance	20.000	cm
Prediction frequency	902.0 – 928.0	MHz
Antenna Gain(typical)	3.00	dBi
Antenna Gain(numeric)	1.995	-
Power density at prediction frequency( S)	0.0199	mW/cm <sup>2</sup>
MPE limit for uncontrolled exposure at prediction frequency	0.6013	mW/cm <sup>2</sup>