

FCC MPE REPORT

Certification

Applicant Name:
I&C Technology Co.,Ltd.

Address:
(Sampyeong-dong, I&C Building), 24, Pangyo-
ro255beon-gil,Bundang-gu Seongnam-si, South Korea

Date of Issue:

August 21, 2018

Test Site/Location:

HCT CO., LTD., 74,Seoicheon-ro 578beon-
gil,Majang-
myeo,Icheon-si, Gyeonggi-do, 17383, Rep. of
KOREA

Report No.: HCT-RF-1808-FC008-R1

FCC ID: 2ADXS-WFM60-SFP2501

APPLICANT: I&C Technology Co.,Ltd.

Model: WFM60-SFP2501

EUT Type: Dual Module

The measurements shown in this report were made in accordance with the procedures specified in §2.947. I assume full responsibility for the accuracy and completeness of these measurements, and for the qualifications of all persons taking them.

HCT CO., LTD. Certifies that no party to this application has subject to a denial of Federal benefits that includes FCC benefits pursuant to section 5301 of the Anti-Drug Abuse Act of 1998,21 U.S. C.853(a)



Report prepared by : Jeong Ho Kim
Engineer of Telecommunication testing center



Approved by : Jong Seok Lee
Manager of Telecommunication testing center

This report only responds to the tested sample and may not be reproduced, except in full, without written approval of the HCT Co., Ltd.

Version

TEST REPORT NO.	DATE	DESCRIPTION
HCT-RF-1808-FC008	August 08, 2018	- First Approval Report
HCT-RF-1808-FC008-R1	August 21, 2018	- Apply U-NII BAND Average Power tolerance (Page 5 to 6)

RF Exposure Statement

1. LIMITS

According to §1.1310 and §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 of the antenna in the direction of interest relative to an isotropic radiator

R = distance to the center of radiation of the antenna

3. RESULT

3-1. 2.4 GHz Band (DTS)

(2412 – 2462)

Max Peak output Power at antenna input terminal	27.000	dBm
Max Peak output Power at antenna input terminal	501.187	mW
Prediction distance	20.000	cm
Prediction frequency	2 412 ~ 2 462	MHz
Antenna Gain(typical)	1.980	dBi
Antenna Gain(numeric)	1.578	-
Power density at prediction frequency(S)	0.157301	mW/cm ²
MPE limit for uncontrolled exposure at prediction frequency	1.000	mW/cm ²

3-2. 5 GHz Band

(UNII 1)

Max Average output Power at antenna input terminal	16.500	dBm
Max Average output Power at antenna input terminal	44.668	mW
Prediction distance	20.000	cm
Prediction frequency	5 180 ~ 5 240	MHz
Antenna Gain(typical)	2.900	dBi
Antenna Gain(numeric)	1.950	-
Power density at prediction frequency(S)	0.017327	mW/cm ²
MPE limit for uncontrolled exposure at prediction frequency	1.000	mW/cm ²

(UNII 2A)

Max Average output Power at antenna input terminal	16.000	dBm
Max Average output Power at antenna input terminal	39.811	mW
Prediction distance	20.000	cm
Prediction frequency	5 260 ~ 5 320	MHz
Antenna Gain(typical)	3.500	dBi
Antenna Gain(numeric)	2.239	-
Power density at prediction frequency(S)	0.017731	mW/cm ²
MPE limit for uncontrolled exposure at prediction frequency	1.000	mW/cm ²

(UNII 2C)

Max Average output Power at antenna input terminal	15.500	dBm
Max Average output Power at antenna input terminal	35.481	mW
Prediction distance	20.000	cm
Prediction frequency	5 500 ~ 5 700	MHz
Antenna Gain(typical)	3.340	dBi
Antenna Gain(numeric)	2.158	-
Power density at prediction frequency(S)	0.015231	mW/cm ²
MPE limit for uncontrolled exposure at prediction frequency	1.000	mW/cm ²

(UNII 3)

Max Average output Power at antenna input terminal	16.000	dBm
Max Average output Power at antenna input terminal	39.811	mW
Prediction distance	20.000	cm
Prediction frequency	5 745 ~ 5 825	MHz
Antenna Gain(typical)	3.010	dBi
Antenna Gain(numeric)	2.000	-
Power density at prediction frequency(S)	0.015839	mW/cm ²
MPE limit for uncontrolled exposure at prediction frequency	1.000	mW/cm ²