TEST REPORT

FCC MPE Test for SJ-ORU4402-N48US
Certification

APPLICANT
SAMJI Elecronics Co., Ltd.

REPORT NO.
HCT-RF-2412-FC053

DATE OF ISSUE
December 20, 2024

Tested by
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Applicant	**SAMJI Elecronics Co., Ltd.** 63-25, Geumgok-ro, Hwaseong-si, Gyeonggi-do, 18511, KOREA
Product Name Model Name	CBRS 5G n48 4T4R 4W Outdoor ORAN RU SJ-ORU4402-N48US
FCC ID	2BK6Y-GC457198
Date of Test	November 27, 2024 ~ December 16, 2024
Location of Test	■ Permanent Testing Lab ☐ On Site Testing (Address: 74, Seoicheon-ro 578beon-gil, Majang-myeon, Icheon-si, Gyeonggi-do, Republic of Korea)
Test Standard Used	CFR 47 Part 2.1091
Test Results	PASS

REVISION HISTORY

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

Revision No.	Date of Issue	Description
0	December 20, 2024	Initial Release

Notice

Content
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. 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 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. 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. RESULTS

(4 Port) 5G NR n48 10 MHz 1 Carrier

Max output Power at antenna input terminal	30.02	dBm
Max output Power at antenna input terminal	1004.62	mW
Prediction distance	130.00	cm
Prediction frequency	3 550.00	MHz
Directional Gain(typical)	17.00	dBi
Directional Gain(numeric)	50.12	-
Power density at prediction frequency(S)	0.2371	mW/cm^2
MPE limit for uncontrolled exposure at prediction frequency	1.0000	mW/cm^2

(4 Port) 5G NR n48 20 MHz 1 Carrier

Max output Power at antenna input terminal	33.02	dBm
Max output Power at antenna input terminal	2004.47	mW
Prediction distance	130.00	cm
Prediction frequency	3 550.00	MHz
Directional Gain(typical)	17.00	dBi
Directional Gain(numeric)	50.12	-
Power density at prediction frequency(S)	0.4730	mW/cm^2
MPE limit for uncontrolled exposure at prediction frequency	1.0000	mW/cm^2

(4 Port) 5G NR n48 40 MHz 1 Carrier

Max output Power at antenna input terminal	36.02	dBm
Max output Power at antenna input terminal	3999.45	mW
Prediction distance	130.00	cm
Prediction frequency	3 550.00	MHz
Directional Gain(typical)	17.00	dBi
Directional Gain(numeric)	50.12	-
Power density at prediction frequency(S)	0.9439	mW/cm^2
MPE limit for uncontrolled exposure at prediction frequency	1.0000	mW/cm^2