



No.:
FCCSZ2025-0065-H

TEST REPORT

FCC ID : 2BSME-NG45XX

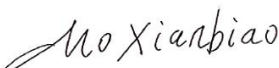
NAME OF SAMPLE : NeoEdge NG4500 AI Box

APPLICANT : Xiamen CamThink Technology Co., Ltd.

CLASSIFICATION OF TEST : N/A

CVC Testing Technology (Shenzhen) Co., Ltd.



Applicant	Name: Xiamen CamThink Technology Co., Ltd. Address: Building C09, Software Park Phase III, Xiamen 361024, Fujian, China		
Manufacturer	Name: Xiamen CamThink Technology Co., Ltd. Address: Building C09, Software Park Phase III, Xiamen 361024, Fujian, China		
Equipment Under Test	Product Name: NeoEdge NG4500 AI Box Model Name: NG4511 Additional Model Name: See section 1 Brand Name: CamThink Serial NO.: N/A Sample NO.: 202507017577-1		
Date of Receipt.	Jul. 03, 2025	Date of Testing	Jul. 03, 2025 ~ Aug. 06, 2025
Test Specification		Test Result	
FCC Part 2 (Section 2.1091) KDB 447498 D04 v01 IEEE C95.1		PASS	
Evaluation of Test Result	The equipment under test was found to comply with the requirements of the standards applied. Seal of CVC Issue Date: Aug. 06, 2025		
Compiled by:  Zhu Yulin Name Signature	Reviewed by:  Mo Xianbiao Name Signature	Approved by:  Dong Sanbi Name Signature	
Other Aspects: NONE.			
Abbreviations: OK, Pass= passed Fail = failed N/A= not applicable EUT= equipment, sample(s) under tested			

This test report relates only to the EUT, and shall not be reproduced except in full, without written approval of CVC.



TABLE OF CONTENTS

RELEASE CONTROL RECORD	4
1. GENERAL PRODUCT INFORMATION	5
2. RF EXPOSURE LIMIT	6
5. CALCULATION RESULT OF MAXIMUM CONDUCTED POWER	9
6. MAXIMUM PERMISSIBLE EXPOSURE	10



RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
FCCSZ2024-0030-H	Original release	Aug. 06, 2025



1. GENERAL PRODUCT INFORMATION

PRODUCT NAME	NeoEdge NG4500 AI Box	
BRAND NAME	CamThink	
MODEL NAME	NG4511	
ADDITIONAL MODEL NAME (Remark 6)	NG4510, NG4520, NG4521, NR4511, NR4510, NR4520, NR4521	
POWER SUPPLY	DC 20V From Adapter(Input: 100-240V~50/60Hz)	
MODULATION TYPE	BT	GFSK, $\pi/4$ DQPSK, 8DPSK for FHSS GFSK for DTS
	WiFi 2.4G:	CCK, DQPSK, DBPSK for DSSS 256QAM, 64QAM, 16QAM, QPSK, BPSK for OFDM
OPERATING FREQUENCY	BT	2402 ~ 2480MHz
	WiFi 2.4G:	2412MHz ~ 2462MHz
PEAK OUTPUT POWER	BT: 3.01dBm	
	WiFi 2.4G: 16.80dBm	
ANTENNA TYPE (Remark 5)	External Antenna, Gain see section 4	
HARDWARE VERSION (Remark 7)	HW1: AIB00-00-V1.1	
	HW2: AIB00-00-V1.1(LTE)	
SOFTWARE VERSION	N/A	
I/O PORTS	Refer to User's Manual	
CABLE SUPPLIED	N/A	

Remark:

1. For more detailed features description, please refer to the manufacturer's specifications or the User's Manual.
2. For the test results, the EUT had been tested with all conditions. But only the worst case was shown in test report.
3. EUT photo refer to the report (Report NO.: FCCSZ2025-0065-EUT).
4. Please refer to the antenna report.
5. Since the above data and/or information is provided by the client relevant results or conclusions of this report are only made for these data and/or information, CVC is not responsible for the authenticity, integrity and results of the data and information and/or the validity of the conclusion.
6. This sample only differs in model name.
7. This product has two versions. HW 1 supports WiFi 2.4G + BT, while Version 2 supports WiFi 2.4G + BT + WWAN. Hence, in this report, therefore, in this report, there will be two evaluation portfolios.



2. RF EXPOSURE LIMIT

(Option B) According to FCC Part2.1091 and FCC Part1.1307b, the available maximum time-averaged power or effective radiated power (ERP), whichever is greater, is less than or equal to the threshold P_{th} (mW) described in the following formula. This method shall only be used at separation distances (cm) from 0.5 centimeters to 40 centimeters and at frequencies from 0.3 GHz to 6 GHz (inclusive). P is given by:

$$P_{th} \text{ (mW)} = \begin{cases} ERP_{20 \text{ cm}} (d/20 \text{ cm})^x & d \leq 20 \text{ cm} \\ ERP_{20 \text{ cm}} & 20 \text{ cm} < d \leq 40 \text{ cm} \end{cases}$$

Where:

$$x = -\log_{10} \left(\frac{60}{ERP_{20 \text{ cm}} \sqrt{f}} \right)$$

and f is in GHz;

and

$$P_{th} \text{ (mW)} = ERP_{20 \text{ cm}} \text{ (mW)} = \begin{cases} 2040f & 0.3 \text{ GHz} \leq f < 1.5 \text{ GHz} \\ 3060 & 1.5 \text{ GHz} \leq f \leq 6 \text{ GHz} \end{cases}$$

(Option C) Or using Table 1 and the minimum separation distance (R in meters) from the body of a nearby person for the frequency (f in MHz) at which the source operates, the ERP (watts) is no more than the calculated value prescribed for that frequency. For the exemption in Table 1 to apply, R must be at least $\lambda/2\pi$, where λ is the free-space operating wavelength in meters. If the ERP of a single RF source is not easily obtained, then the available maximum time-averaged power may be used in lieu of ERP if the physical dimensions of the radiating structure(s) do not exceed the electrical length of $\lambda/4$ or if the antenna gain is less than that of a half-wave dipole (1.64 linear value).

Table 1 to §1.1307(b)(3)(i)(C) - Single RF Sources Subject to Routine Environmental Evaluation

RF Source Frequency (MHz)	Threshold ERP (W)
0.3 - 1.34	$1920R^2$
1.34 - 30	$3450R^2 / f^2$
30 - 300	$3.38R^2$
300 - 1500	$0.0128R^2 / f^2$
1500 - 100000	$19.2R^2$



For multiple RF sources: Multiple RF sources are exempt if:

- The available maximum time-averaged power of each source is no more than 1 mW and there is a separation distance of two centimeters between any portion of a radiating structure operating and the nearest portion of any other radiating structure in the same device, except if the sum of multiple sources is less than 1 mW during the time-averaging period, in which case they may be treated as a single source (separation is not required). This exemption may not be used in conjunction with other exemption criteria other than those in paragraph (b)(3)(i)(A) of this section. Medical implant devices may only use this exemption and that in paragraph (b)(3)(i)(A).
- in the case of fixed RF sources operating in the same time-averaging period, or of multiple mobile or portable RF sources within a device operating in the same time averaging period, if the sum of the fractional contributions to the applicable thresholds is less than or equal to 1 as indicated in the following equation.

$$\sum_{i=1}^a \frac{P_i}{P_{th,i}} + \sum_{j=1}^b \frac{ERP_j}{ERP_{th,j}} + \sum_{k=1}^c \frac{Evaluated_k}{Exposure Limit_k} \leq 1$$

Where:

a = number of fixed, mobile, or portable RF sources claiming exemption using paragraph (b)(3)(i)(B) of this section for Pth, including existing exempt transmitters and those being added.

b = number of fixed, mobile, or portable RF sources claiming exemption using paragraph (b)(3)(i)(C) of this section for Threshold ERP, including existing exempt transmitters and those being added.

c = number of existing fixed, mobile, or portable RF sources with known evaluation for the specified minimum distance including existing evaluated transmitters.

Pi = the available maximum time-averaged power or the ERP, whichever is greater, for fixed, mobile, or portable RF source i at a distance between 0.5 cm and 40 cm (inclusive).

Pth,i = the exemption threshold power (Pth) according to paragraph (b)(3)(i)(B) of this section for fixed, mobile, or portable RF source i.

ERPj = the ERP of fixed, mobile, or portable RF source j.

ERPth,j = exemption threshold ERP for fixed, mobile, or portable RF source j, at a distance of at least λ/2π according to the applicable formula of paragraph (b)(3)(i)(C) of this section.

Evaluatedk = the maximum reported SAR or MPE of fixed, mobile, or portable RF source k either in the device or at the transmitter site from an existing evaluation at the location of exposure.

Exposure Limitk = either the general population/uncontrolled maximum permissible exposure (MPE) or specific absorption rate (SAR) limit for each fixed, mobile, or portable RF source k, as applicable from § 1.1310 of this chapter.

3. CLASSIFICATION

The antenna of this product, under normal use condition, is at least 20cm away from the body of the user. So, this device is classified as **Mobile Device**.



4. ANTENNA GAIN

The antennas provided to the EUT, please refer to the following table:

Mode	TX(MHz)	RX(MHz)	Peak Gain (dBi)
BT	2402 ~ 2480	2402 ~ 2480	3.89
WiFi 2.4G	2412 ~ 2462	2412 ~ 2462	3.89
WCDMA B2*	1850 ~ 1910	1930 ~ 1990	2.48
WCDMA B4*	1710 ~ 1755	2110 ~ 2155	1.96
WCDMA B5*	824 ~ 849	869 ~ 894	0.46
LTE B2*	1850 ~ 1910	1930 ~ 1990	2.48
LTE B4*	1710 ~ 1755	2110 ~ 2155	1.96
LTE B5*	824 ~ 849	869 ~ 894	0.46
LTE B7*	2500 ~ 2570	2620 ~ 2690	0.62
LTE B12*	699 ~ 716	729 ~ 746	-1.41
LTE B13*	777 ~ 787	746 ~ 756	-1.41
LTE B14*	788 ~ 798	758 ~ 768	-1.41
LTE B25*	1850 ~ 1915	1930 ~ 1995	2.48
LTE B26*	814 ~ 824	859 ~ 869	0.38
	824 ~ 849	869 ~ 894	0.46
LTE B38*	2570 ~ 2620	2570 ~ 2620	0.37
LTE B41*	2496 ~ 2690	2496 ~ 2690	0.62
LTE B66*	1710 ~ 1780	2110 ~ 2200	2.54
LTE B71*	663 ~ 698	617 ~ 652	-1.41

Remark:

1. This is provided by the manufacturer. The laboratory is not responsible for technical data provided by the customer.
2. *The EUT contains a certified module (Model No.: EM05-G), according to the MPE reports of FCC ID: XMR2021EM05G, Date of Grant: 06/23/2021.



5. CALCULATION RESULT OF MAXIMUM CONDUCTED POWER

The measured Conducted Power

Option	Mode	Frequency (MHz)	Target Power (dBm)	Tolerance (dBm)	Lower Tolerance (dBm)	Upper Tolerance (dBm)
B	BT	2402 ~ 2480	3	+1	2	4
	WiFi 2.4G	2412 ~ 2462	17	+1	16	18
	WCDMA B2*	1850 ~ 1910	25.5	+1	24.5	26.5
	WCDMA B4*	1710 ~ 1755	25.5	+1	24.5	26.5
	WCDMA B5*	824 ~ 849	25.5	+1	24.5	26.5
	LTE B2*	1850 ~ 1910	25.5	+1	24.5	26.5
	LTE B4*	1710 ~ 1755	25.5	+1	24.5	26.5
	LTE B5*	824 ~ 849	25.5	+1	24.5	26.5
	LTE B7*	2500 ~ 2570	25.5	+1	24.5	26.5
	LTE B12*	699 ~ 716	25.5	+1	24.5	26.5
	LTE B13*	777 ~ 787	25.5	+1	24.5	26.5
	LTE B14*	788 ~ 798	25.5	+1	24.5	26.5
	LTE B25*	1850 ~ 1915	25.5	+1	24.5	26.5
	LTE B26*	814 ~ 824	25.5	+1	24.5	26.5
		824 ~ 849	25.5	+1	24.5	26.5
	LTE B38*	2570 ~ 2620	25.5	+1	24.5	26.5
	LTE B41*	2496 ~ 2690	25.5	+1	24.5	26.5
	LTE B66*	1710 ~ 1780	25.5	+1	24.5	26.5
	LTE B71*	663 ~ 698	25.5	+1	24.5	26.5



6. MAXIMUM PERMISSIBLE EXPOSURE

Mode	Frequency (MHz)	Maximum tune up power(dBm)	Maximum Antenna Gain(dBi)	EIRP (dBm)	ERP (dBm)	ERP (mW)	Part1.1307b Threshold (mW)	Ratio
BT	2402 ~ 2480	4	3.89	7.89	5.74	3.75	3060	0.001
WiFi 2.4G	2412 ~ 2462	18	3.89	21.89	19.74	94.19	3060	0.031
WCDMA B2*	1850 ~ 1910	26.5	2.48	28.98	26.83	481.95	3060	0.157
WCDMA B4*	1710 ~ 1755	26.5	1.96	28.46	26.31	427.56	3060	0.140
WCDMA B5*	824 ~ 849	26.5	0.46	26.96	24.81	302.69	1680.96	0.180
LTE B2*	1850 ~ 1910	26.5	2.48	28.98	26.83	481.95	3060	0.157
LTE B4*	1710 ~ 1755	26.5	1.96	28.46	26.31	427.56	3060	0.140
LTE B5*	824 ~ 849	26.5	0.46	26.96	24.81	302.69	1680.96	0.180
LTE B7*	2500 ~ 2570	26.5	0.62	27.12	24.97	314.05	3060	0.103
LTE B12*	699 ~ 716	26.5	-1.41	25.09	22.94	196.79	1425.96	0.138
LTE B13*	777 ~ 787	26.5	-1.41	25.09	22.94	196.79	1585.08	0.124
LTE B14*	788 ~ 798	26.5	-1.41	25.09	22.94	196.79	1607.52	0.122
LTE B25*	1850 ~ 1915	26.5	2.48	28.98	26.83	481.95	3060	0.157
LTE B26*	814 ~ 824	26.5	0.38	26.88	24.73	297.17	1660.56	0.179
	824 ~ 849	26.5	0.46	26.96	24.81	302.69	1680.96	0.180
LTE B38*	2570 ~ 2620	26.5	0.37	26.87	24.72	296.48	3060	0.097
LTE B41*	2496 ~ 2690	26.5	0.62	27.12	24.97	314.05	3060	0.103
LTE B66*	1710 ~ 1780	26.5	2.54	29.04	26.89	488.65	3060	0.160
LTE B71*	663 ~ 698	26.5	-1.41	25.09	22.94	196.79	1352.52	0.145

Remark: BT, WiFi 2.4G and WWAN can transmit simultaneously

The Combination:

HW1: BT + WiFi = 0.001 + 0.031 = 0.032 < 1

HW2: BT + WiFi + WWAN = 0.001 + 0.031 + 0.180 = 0.212 < 1

Which is less than the “1” limit, is compliant with the RF exposure requirements.

----- End of the Report -----



Important

- (1) The test report is invalid without the official stamp of CVC;
- (2) Any part photocopies of the test report are forbidden without the written permission from CVC;
- (3) The test report is invalid without the signatures of tester, reviewer and approver;
- (4) The test report is invalid if altered;
- (5) Objections to the test report must be submitted to CVC within 15 days;
- (6) Generally, commission test results apply to the samples as received. The sample information is provided by the customer and laboratory is not responsible for its authenticity;
- (7) As for the test result “-” or “N” means “not applicable”, “/” means “not test”, “P” means “pass” and “F” means “fail”

Address: No. 1301-14&16, Guanguang Road, Xinlan Community, Guanlan Subdistrict, Longhua District, Shenzhen, Guangdong, China

Post Code: 518110 Tel: 0755-23763060-8805

Fax: 0755-23763060 E-mail: sz-kf@cvc.org.cn