

RF EXPOSURE REPORT

Applicant	Ningbo Lingzhu Technology CO., Ltd.
Address	No.578, Building 7, No.535 Kangqiao South Road, Jiangbei District, Ningbo, PRC



Manufacturer or Supplier	Ningbo Lingzhu Technology CO., Ltd.
Address	No.578, Building 7, No.535 Kangqiao South Road, Jiangbei District, Ningbo, PRC
Product	Smart Camera
Brand Name	N/A
Model	SC106-WL3
Additional Model & Model Difference	SC106-WL3A, SC106-WL3B, SC106-WL3C, SC106-WL2, SC106-WL2A, SC106-WL2B, SC106-WL2C, SC106-WL4, SC106-WL4A, SC106-WL4B, SC106-WL4C, SC009-WL2, SC009-WL2A, SC009-WL2B, etc.; see item 1
Date of tests	Apr. 19, 2023 ~ May 08, 2023

☒ **FCC Part 2 (Section 2.1091)**

☒ **KDB 447498 D01**

☒ **IEEE C95.1**

CONCLUSION: The submitted sample was found to COMPLY with the test requirement

Tested by Niko Zhang Project Engineer / EMC Department	Approved by Glyn He Assistant Manager / EMC Department
	
	Date: Jun. 21, 2023

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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
ARFR-ESH-P22080199B-2	Original release	Aug.23, 2022
FM2304WDG0059	Based on the original report ARFR-ESH-P22080199B-1 added additional model. Only model number, main board soc and the bracket changed, it needed to be retest "Radiated Emission below 1GHz" and "AC Power Conducted Emission" items after engineer evaluated.	Jun. 21, 2023

1. CERTIFICATION

FCC ID:	2A789SC009
PRODUCT:	Smart Camera
BRAND NAME:	N/A
MODEL NO.:	SC106-WL3
ADDITIONAL NO.:	SC106-WL3A, SC106-WL3B, SC106-WL3C, SC106-WL2, SC106-WL2A, SC106-WL2B, SC106-WL2C, SC106-WL4, SC106-WL4A, SC106-WL4B, SC106-WL4C, SC009-WL2, SC009-WL2A, SC009-WL2B, SC009-WL2C, SC009-WL1, SC009-WL1A, SC009-WL1B, SC009-WL1C, SC009-WL3, SC009-WL3A, SC009-WL3B, SC009-WL3C, SC106-WL2-FC, SC106-WL2A-FC, SC106-WL2B-FC, SC106-WL2C-FC, SC106-WL3-FC, SC106-WL3A-FC, SC106-WL3B-FC, SC106-WL3C-FC, SC106-WL4-FC, SC106-WL4A-FC, SC106-WL4B-FC, SC106-WL4C-FC
TEST SAMPLE:	Engineering Sample
APPLICANT:	Ningbo Lingzhu Technology CO., Ltd.
STANDARDS:	FCC Part 2 (Section 2.1091)
	KDB 447498 D01
	IEEE C95.1

Note: Additional models (see above table) are identical to each other, except for different model name, resolution of webcam and base. These differences are not related to the radio frequency function. "2, 3, 4" in model name for different resolutions which represents 2MP, 3MP, 4MP. "A, B, C" in model name for different bases, without letter represents round base, A represents square base, B C represents the other bases. "FC" in model name for different lens which represents another aperture and focal length lens.

2. RF EXPOSURE LIMIT

LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

FREQUENCY RANGE (MHz)	ELECTRIC FIELD STRENGTH (V/m)	MAGNETIC FIELD STRENGTH (A/m)	POWER DENSITY (mW/cm ²)	AVERAGE TIME (minutes)
LIMITS FOR GENERAL POPULATION / UNCONTROLLED EXPOSURE				
300-1500	F/1500	30
1500-100,000	1.0	30

F = Frequency in MHz

3. MPE CALCULATION FORMULA

$$P_d = (P_{out} \cdot G) / (4 \cdot \pi \cdot r^2)$$

where

P_d = power density in mW/cm²

P_{out} = output power to antenna in mW

G = gain of antenna in linear scale

π = 3.1416

R = distance between observation point and center of the radiator in cm

4. 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**.

5. ANTENNA GAIN

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

Transmitter Circuit	Peak Gain (dBi)	Antenna Type
Chain 0	1.26	PCB Antenna

6. CALCULATION RESULT OF MAXIMUM CONDUCTED POWER

The measured conducted Peak Power

Mode	Frequency (MHz)	Peak Power (dBm)
802.11b	2412	17.56
802.11g	2412	14.78
802.11n(HT20)	2412	14.48

FREQUENCY BAND (MHz)	MAX PEAK POWER (dBm)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/cm ²)	LIMIT (mW/cm ²)
2412-2462	17.56	1.26	20	0.0152	1.0

--- END ---