

# 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	SC116-WZ3
Additional Model & Model Difference	SC116-WZ2, SC116-WZ2A, SC116-WZ2B, SC116-WZ2C, SC116-WZ4, SC116-WZ4A, SC116-WZ4B, SC116-WZ4C, SC116-WZ3A, SC116-WZ3B, SC116-WZ3C ,etc.; see item 1
Date of tests	Apr. 19, 2023 ~ May 17, 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. 06, 2023

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## TABLE OF CONTENTS

RELEASE CONTROL RECORD .....	3
1. CERTIFICATION.....	4
2. RF EXPOSURE LIMIT .....	5
3. MPE CALCULATION FORMULA.....	5
4. CLASSIFICATION .....	5
5. ANTENNA GAIN .....	6
6. CALCULATION RESULT OF MAXIMUM CONDUCTED POWER.....	6



Test Report No.: FM2304WDG0121

## RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
FM2304WDG0121	Original release	Jun. 06, 2023

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## 1. CERTIFICATION

<b>FCC ID:</b>	2A789SC116
<b>PRODUCT:</b>	Smart Camera
<b>BRAND NAME:</b>	N/A
<b>MODEL NO.:</b>	SC116-WZ3
<b>ADDITIONAL NO.:</b>	SC116-WZ2, SC116-WZ2A, SC116-WZ2B, SC116-WZ2C, SC116-WZ4, SC116-WZ4A, SC116-WZ4B, SC116-WZ4C, SC116-WZ3A, SC116-WZ3B, SC116-WZ3C, SC116-WZ2-FC, SC116-WZ2A-FC, SC116-WZ2B-FC, SC116-WZ2C-FC, SC116-WZ4-FC, SC116-WZ4A-FC, SC116-WZ4B-FC, SC116-WZ4C-FC, SC116-WZ3-FC, SC116-WZ3A-FC, SC116-WZ3B-FC, SC116-WZ3C-FC
<b>TEST SAMPLE:</b>	Engineering Sample
<b>APPLICANT:</b>	Ningbo Lingzhu Technology CO., Ltd.
<b>STANDARDS:</b>	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 <sup>2</sup> )	AVERAGE TIME (minutes)
<b>LIMITS FOR GENERAL POPULATION / UNCONTROLLED EXPOSURE</b>				
300-1500	...	...	F/1500	30
1500-100,000	...	...	1.0	30

F = Frequency in MHz

## 3. MPE CALCULATION FORMULA

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

where

P<sub>d</sub> = power density in mW/cm<sup>2</sup>

P<sub>out</sub> = 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	3.36	FPC Antenna

## 6. CALCULATION RESULT OF MAXIMUM CONDUCTED POWER

The tuned conducted Average Power (declared by client)

Mode	Frequency (MHz)	Target Power (dBm)	Tolerance (dBm)	Lower Tolerance (dBm)	Upper Tolerance (dBm)
802.11b	2412-2462	17	+2	15	19
802.11g	2412-2462	14	+2	12	16
802.11n(HT20)	2412-2462	13	+2	11	15

The measured conducted Average Power

Mode	Frequency (MHz)	Averaged Power (dBm)
802.11b	2437	17.65
802.11g	2462	14.86
802.11n(HT20)	2412	13.67

FREQUENCY BAND (MHz)	MAX AVERAGE POWER (dBm)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/cm <sup>2</sup> )	LIMIT (mW/cm <sup>2</sup> )
2412-2462	19	3.36	20	0.03426	1.0

--- END ---