



# RF EXPOSURE REPORT

Report No.: 20240817G16885X-W4

Product Name: MT Series Thermal Dome Camera

Model No.: M6T25S, M6T25SNA

FCC ID: 2BHFB-9000

Applicant: Inlumen Technologies Co., Ltd.

Address: Building B3, NO.800 Wangjiang West Road, National High-tech

Industry Development District, Hefei, Anhui, China

**Dates of Testing:** 08/30/2024 - 09/29/2024

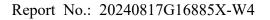
**Issued by:** CCIC Southern Testing Co., Ltd.

Electronic Testing Building, No.43, Shahe Road, Xili Street,

Lab Location: Nanshan District, Shenzhen, Guangdong, China

**Tel:** 86-755-26627338 **E-Mail:** manager@ccic-set.com

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# **Test Report**

Product.....: MT Series Thermal Dome Camera

Trade Name .....: Nocpix

Applicant.....: Inlumen Technologies Co., Ltd.

Applicant Address...... Building B3, NO.800 Wangjiang West Road, National

High-tech Industry Development District, Hefei, Anhui,

China

Manufacturer.....: Inlumen Technologies Co., Ltd.

Manufacturer Address...... Building B3, NO.800 Wangjiang West Road, National

High-tech Industry Development District, Hefei, Anhui,

China

Test Standards.....: 47 CFR Part 2.1091

Test Result.....: Pass

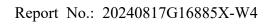
Kim Li, Test Engineer

Reviewed by...... Sun Jidohui 2024.09.29

Sun Jiaohui, Senior Engineer

Approved by....: 2024.09.29

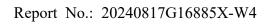
Chris You, Manager





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Change History					
Issue	Date	Reason for change			
1.0	2024.09.29	First edition			



# 1. GENERAL INFORMATION

# 1.1. EUT Description

Product Name	MT Series Thermal Dome Camera
Model No.	M6T25S, M6T25SNA
Device Type	Fixed Devices
EUT supports Radios application	BLE/WIFI
Frequency Range	BLE: 2402MHz~2480MHz
	WIFI: 2412MHz~2462MHz
Modulation Type	BLE: GFSK
Modulation Type	WIFI: DSSS (802.11b), OFDM (802.11g/n)
Antenna gain	BLE/WIFI: 3.0dBi
Antenna Type	BLE/WIFI: External antenna

Note 1: The information of antenna gain and cable loss is provided by the manufacturer and our lab is not responsible for the accuracy of the antenna gain and cable loss information.

Note 2: The model M6T25S and the model M6T25SNA have the same technical structure, including circuit diagrams, wireless modules, and antenna positions, with the only difference being that the visible laser function of M6T25S cannot be turned on.



# 1.2. EUT Description

EUT has been tested according to the following standards.

No.	Identity	Document Title	
1	47 CFR Part 1	Practice and Procedure	
2	47 CFR Part 2	Frequency Allocations and Radio Treaty Matters; General	
2	4/ CFR Part 2	Rules and Regulations	
2	KDB 447498 D01 General	RF Exposure Procedures and Equipment Authorization	
3	RF Exposure Guidance v06	Policies for Mobile and Portable Devices	
1	OET Bulletin 65	Evaluating Compliance with FCC Guidelines for Human	
4	Edition 97-01	Exposure to Radiofrequency Electromagnetic Fields	

# 1.3. Laboratory Facilities

FCC-Registration No.: CN1283

CCIC Southern Testing Co., Ltd EMC Laboratory has been registered and fully described in a report filed with the FCC (Federal Communications Commission). The acceptance letter from the FCC is maintained in our files. Designation Number: CN1283, valid time is until Jun. 30th, 2025.

**ISED Registration: 11185A-1** 

CCIC Southern Testing Co., Ltd. EMC Laboratory has been registered by Certification and Engineering Bureau of Industry Canada for the performance of radiated measurements with Registration No. 11185A-1 on Aug. 04, 2016, valid time is until Jun. 30th, 2025.

**A2LA Code: 5721.01** 

CCIC-SET is a third party testing organization accredited by A2LA according to ISO/IEC 17025. The accreditation certificate number is 5721.01.

# 1.4. Laboratory Location

Company Name:	CCIC Southern Testing Co., Ltd.				
Address:	Electronic Testing Building, No. 43, Shahe Road, Xili Street,				
Address.	Nanshan District, Shenzhen, Guangdong, China				



#### 2. **Technical Requirements Specification in CFR Title 47 Part 2.1091**

#### 2.1. **Evaluation method**

The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) radiation as specified in 1.1307(b).

Table 1 to § 1.1310(e)(1) - 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> )	Averaging Time (minutes)			
(i) Limits for Occupational/Controlled Exposure							
0.3-3.0	614	1.63	*(100)	< 6			
3.0-30	1824/f	4.89/f	*(900/f <sup>2</sup> )	< 6			
30-300	61.4	61.4 0.163 1.0		< 6			
300-1500	/	/	f/300	< 6			
1500-100,000	/	/	5	< 6			
(ii) Limits for General Population/Uncontrolled Exposure							
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			
Note: f = frequency in MHz. * = Plane-wave equivalent power density.							

#### Predication of MPE limit at a given distance 2.2.

Refer to formulas on page 19 of OET Bulletin 65, Edition 97-01.

$$S = \frac{PG}{4\pi R^2}$$

Where:

S = power density (in appropriate units, e.g. mW/cm<sup>2</sup>)

P = power input to the antenna (in appropriate units, e.g., mW)

G = numeric gain of the antenna in the direction of interest relative to an isotropic radiator

R = distance to the centre of radiation of the antenna (appropriate units, e.g., cm)



# 2.3. Evaluation Results

# **Worst-Case mode Conducted Output Power Results**

BLE(GFSK)						
Frequency (MHz)	2402	2440	2480			
Test Results (dBm)	2.59	4.29	5.05			
Target (dBm)	3.0	5.0	6.0			
Tolerance (dB)	±1	±1	±1			

2.4G WIFI (IEEE 802.11b)						
Frequency (MHz)	2412	2437	2462			
Test Results (dBm)	15.11	15.60	15.98			
Target (dBm)	16.0	16.0	16.0			
Tolerance (dB)	±1	±1	±1			

### Calculation results: Worst-Case mode

Operation	Output Power	An	Ant. Gain D		MPE	MPE Limit	D. C
Mode	(dBm)	(dBi)	(numeric)	(cm)	(mW/cm <sup>2</sup> )	(mW/cm <sup>2</sup> )	Ratio
BLE	6.0	3.0	2.0	20	0.002	1.000	0.002
2.4G WIFI	16.0	3.0	2.0	20	0.016	1.000	0.016

Note: Output power including turn-up tolerance

# **Simultaneous Transmission Calculation (Worst-case mode)**

No.	Transmitter Combinations	Scenario Supported or not
1	Bluetooth LE + 2.4G WLAN	Yes

# Max Simultaneous Transmission Calculation (Worst-case mode)

No.	Worst Mode	MPE Ratio	Limit	Results
1	Bluetooth LE + 2.4G WLAN	0.018	≤ 1.0	Pass

Note: MPE Ratio = 0.002 + 0.016 = 0.018.

### 2.4. Conclusion

According to the KDB 447498 D01 General RF Exposure Guidance v06 section 7.2 determine the device is exclusion from SAR test.

\*\* END OF REPORT \*\*