Maximum Permissible Exposure Evaluation
FCC ID:2BMXI-CMPT2U

1. Client Information

Applicant	:	Hangzhou SuperAcme Electronics Technology Co., Ltd.
Address	:	14th Floor, Building 2, Silergy Plaza, 6 Lianhui St., Binjiang District,Hangzhou, Zhejiang, China
Manufacturer	:	Hangzhou SuperAcme Electronics Technology Co., Ltd.
Address	:	14th Floor, Building 2, Silergy Plaza, 6 Lianhui St., Binjiang District,Hangzhou, Zhejiang, China

2. General Description of EUT

EUT Name	:	2.5K 4G 24/7 Recording Pan & Tilt Camera	
Model(s) No.		CM-PT2U, CM-PT1U, CM-PT3U, CM-PT4U, CM-PT5U, CM-PT6U, CM-PT7U, CM-PT8U, CM-PT9U	
Model Difference	:	All these models are identical in the same PCB layout and electrical circuit, the only difference is that appearance and sales area.	
Product Description	:	Operation Frequency:	LTE Band 2/4/5/12/13/66/71
Power Rating	:	Input: 5V	
Li-ion Polymer Battery	:	DC 3.6V by 18000mAh Rechargeable Li-ion battery	
Software Version	:	N/A	
Hardware Version	:	N/A	
Remark: The antenna gain provided by the applicant, the adapter and verified for the RF conduction test and adapter provided by TOBY test lab.			

Note: More test information about the EUT please refer the RF Test Report.

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MPE Calculations

1. **Antenna Gain:**

LTE Band 2: 2.72dBi PIFA Antenna
LTE Band 4: 2.62dBi PIFA Antenna
LTE Band 5: -0.68dBi PIFA Antenna
LTE Band 12: -0.86dBi PIFA Antenna
LTE Band 13: -0.15dBi PIFA Antenna
LTE Band 66: 2.92dBi PIFA Antenna
LTE Band 71: 0.23dBi PIFA Antenna

2. **EUT Operation Condition:**

Software provided by client enabled the EUT to transmit and receive data at lowest, middle and highest channel individually.

3. **Exposure Evaluation:**

Equation from page 18 of OET Bulletin 65, Edition 97-01

$$S=(PG)/4\pi R^2$$

Where

S: power density
P: power input to the 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

4. Test Result:

Mode	N_{TX}	Conducted Power(max) (dBm)	Turn-up Power (dB)	Max tune up power (dBm) [P]	ANT Gain (dBi) [G]	Distance (cm) [R]	Power Density (mW/ cm^2) [S]	limit (mW/cm2)
LTE Band 2	1	25.91	26±1	27	2.72	20	0.1865	1
LTE Band 4	1	25.19	25±1	26	2.62	20	0.1448	1
LTE Band 5	1	25.07	25±1	26	-0.68	20	0.0677	0.55
LTE Band 12	1	25.12	25±1	26	-0.86	20	0.0650	0.47
LTE Band 13	1	25.90	26±1	27	-0.15	20	0.0963	0.52
LTE Band 66	1	25.33	25±1	26	2.92	20	0.1551	1
LTE Band 71	1	25.63	26±1	27	0.23	20	0.1051	0.44
Note: RF Output power specifies that Maximum Conducted Peak Output Power.								

5. Conclusion:

As specified in Table 1B of 47 CFR 1.1310- Limits for Maximum Permissible Exposure (MPE),

Limits for General Population/ Uncontrolled Exposure

Frequency Range (MHz)	Power density (mW/ cm^2)
300-1,500	F/1500
1,500-100,000	1.0

For LTE

MPE limit S: $1mW/ cm^2$

The MPE is calculated as **0.1865 < *limit 1mW / cm²***. So, RF exposure limit warning or SAR test are not required.

The EUT will only be used with a separation of 20cm or greater between the antenna and nearby persons and can therefore be considered a mobile transmitter per 47 CFR2.1091 (b).

The RF Exposure Information page from the manual is included here for reference.

Note

For a more detailed features description, please refer to the RF Test Report.

6. Conclusion:

The measurement results comply with the FCC Limit per 47 CFR 2.1091 for the uncontrolled RF Exposure of mobile device.

-----END OF REPORT-----