Maximum Permissible Exposure Evaluation
FCC ID: Z63-E97

1. Client Information

Applicant	:	SHENZHEN AONI ELECTRONIC CO., LTD.
Address	:	No.5,Bldg., Honghui Industrial Park, 2nd Liuxian Road, Xin'An streets, Bao'an District, ShenZhen, China 518101
Manufacturer	:	SHENZHEN AONI ELECTRONIC CO., LTD.
Address	:	No.5,Bldg., Honghui Industrial Park, 2nd Liuxian Road, Xin'An streets, Bao'an District, ShenZhen, China 518101

2. General Description of EUT

EUT Name	:	Smart Floodlight Camera	
Models No.	:	E97P, MI-CW073-199W EFXY（X:0~9,A~Z ;Y:0~9,A~Z）	
Model Different	:	All these models are identical in the same PCB, layout and electrical circuit, The only difference is model name.	
Product Description	:	Operation Frequency:	802.11b/g/n(HT20): 2412MHz~2462MHz 802.n(HT40): 2422MHz~2452MHz
		Number of Channel:	802.11b/g/n(HT20):11 channels 802.n(HT40):7 channels
		Antenna Gain:	3.63dBi FPC Antenna
Power Rating		Input: AC 110~240V	
Software Version	:	N/A	
Hardware Version	:	V1.2	
Connecting I/O Port(S)	:	Please refer to the User's Manual	
Remark	:	the evaluation report used the EUT(HC-C-202312-0138-01-01-2#).	

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MPE Calculations for WIFI

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

2. **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

3. **Simultaneous transmission MPE Considerations**
   According to KDB447498: All transmitters and antennas in the host must be either evaluated for MPE compliance, by measurement or computational modeling, or qualify for the standalone MPE test exclusion in section 7.1. Simultaneous transmission MPE test exclusion applies when the sum of the MPE ratios for all simultaneous transmitting antennas incorporated in a host device, based on the calculated/estimated, numerically modeled or measured field strengths or power density, is ≤ 1.0.
   This means that:
   ∑ of MPE ratios ≤ 1.0
4. **Test Result:**

2.4G WiFi worst reported.

Mode	Frequency (MHz)	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 of Power Density (mW/ cm^2) (S)
802.11b	2412	18.372	18±1	19	3.63	20	0.0365	1
	2437	18.515	18±1	19	3.63	20	0.0365	1
	2462	18.504	18±1	19	3.63	20	0.0365	1
802.11g	2412	15.133	15±1	16	3.63	20	0.0183	1
	2437	15.47	15±1	16	3.63	20	0.0183	1
	2462	15.39	15±1	16	3.63	20	0.0183	1
802.11 n(HT20)	2412	14.813	14±1	15	3.63	20	0.0145	1
	2437	14.744	14±1	15	3.63	20	0.0145	1
	2462	14.629	14±1	15	3.63	20	0.0145	1
802.11 n(HT40)	2422	12.729	12±1	13	3.63	20	0.0092	1
	2437	13.623	13±1	14	3.63	20	0.1153	1
	2452	11.829	11±1	12	3.63	20	0.0073	1

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 2.4WIFI:2412~2462 MHz and Bluetooth LE
MPE limit S: 1mW/ cm^2
The MPE is calculated as **0.0365** ***< limit 1mW / cm^2***. 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-----