



Maximum Permissible Exposure Evaluation

FCC ID:2BK80-D05E

1. General Information about EUT

1.1 Client Information

Applicant	:	Shenzhen TBZ Technology Co.,LTD.
Address	:	C808,ZiGuang Information Harbor,Nanshan District,ShenZhen City.Guangdong,China
Manufacturer	:	Shenzhen TBZ Technology Co.,LTD.
Address	:	C808,ZiGuang Information Harbor,Nanshan District,ShenZhen City.Guangdong,China

1.2 General Description of EUT (Equipment Under Test)

EUT Name	:	PuppyGo3 AI Dog
Models No.	:	D05E
Model Different	:	N/A
Brand Name	:	N/A
Sample ID	:	HC-C-202404-0185-01-01
Product Description	:	<div>Operation Frequency:</div> <div>Bluetooth&BLE: 2402MHz~2480MHz 2.4G: 2401MHz~2470MHz 802.11b/g/n(HT20): 2412MHz~2462MHz</div>
Power Rating	:	<div>USB Input: DC 5V</div> <div>DC 3.7V 800mAh Rechargeable Li-ion battery</div>
Software Version	:	1.6.0
Hardware Version	:	TBZ_DO5_MAIN_V1.1 20231023

1.3 Antenna Information

Band	Antenna Type	Antenna Gain(dBi)
2.4G	PCB	1.3dBi
Bluetooth&BLE	PCB	2.85dBi
2.4G Wi-Fi		
Remark: The above antenna information is declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications, the laboratory shall not be held responsible.		



2. Method of Measurement for FCC

EUT Operation Condition:

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

1. 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

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:

$$\sum \text{ of MPE ratios } \leq 1.0$$



2. Test Result:

Worst MPE Result							
Test Mode	Antenna	Conducted Power(max) (dBm)	Turn-up Power (dB)	Max tune up power (dBm) [P]	Max. ANT Gain (dBi) [G]	Distance (cm) [R]	Power Density (mW/ cm ²) [S]
Bluetooth	Ant1	6.845	6±1	7	2.85	20	0.00192
2.4G	Ant1	4.053	4±1	5	1.3	20	0.00085
2.4G WIFI	Ant1	14.69	14±1	15	2.85	20	0.01213
Note: The antenna gain used max. antenna gain							



3. 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

4. Summary simultaneous transmission results

2.4G and WiFi support Synchronization transmittether

Maximum MPE ratio 2.4G	Maximum MPE ratio WiFi	ΣMPE ratios	Limit	Results
0.00085	0.01213	0.01298	1	PASS

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.

For: 2402~2480MHz&2412~2462MHz&2401-2470MHz

MPE limit S: 1mW/ cm²

The MPE is calculated as **0.01298mW / cm² < limit 1mW / cm²**.

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

