RF EXPOSURE
Test Report

Report No.	:	**MTi250326008-0102E3**
Date of Issue	:	**2025-04-28**
Applicant	:	**Torvo Tech Solutions LLC**
Product	:	**Dashcam**
Model(s)	:	**TD3**
FCC ID	:	**2BP7V-TD3**

Shenzhen Microtest Co., Ltd.

Table of contents

TEST REPORT

Report No.: MTi250326008-0102E3

Test Result Certification		
Applicant	Torvo Tech Solutions LLC	
Applicant Address	30 N Gould St Ste R, Sheridan, WY 82801	
Manufacturer	Shenzhen Zhongxiang Technology Co., Ltd.	
Manufacturer Address	4th Floor, Building 8, North Industrial Park, No. 18, Makan Village, Xili Street, Shenzhen, Guangdong, China	
Product description		
Product name	Dashcam	
Trademark	Torvo	
Model name	TD3	
Series Model(s)	N/A	
Standards	47 CFR Part 2.1091	
Test method	KDB 447498 D01 v06	
Testing Information		
Date of test	2025-04-22 to 2025-04-28	
Test Result	Pass	
Prepared by	James Qin	
Reviewed by	David Lee	
Approved by	Lewis Lian	

1 RF EXPOSURE EVALUATION

According to FCC 1.1310: 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)

Limits for Maximum Permissible Exposure (MPE)

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm^2)	Averaging time (minutes)
(A) Limits for Occupational/Controlled Exposure				
0.3-3.0	614	1.63	*100	6
3.0-30	1842/f	4.89/f	$*900/f^2$	6
30-300	61.4	0.163	1.0	6
300-1,500			f/300	6
1,500-100,000			5	6
(B) 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
300-1,500			f/1500	30
1,500-100,000			1.0	30

f = frequency in MHz * = Plane-wave equivalent power density

MPE Calculation Method

Friis transmission formula: $Pd= (Pout*G)\ (4*pi*R^2)$

Where

Pd= Power density in mW/cm^2

Pout=output power to antenna in mW

G= Numeric gain of the antenna relative to isotropic antenna

Pi=3.1415926

R= distance between observation point and center of the radiator in cm(20cm)

Pd the limit of MPE, $1mW/cm^2$. If we know the maximum gain of the antenna and total power input to the antenna, through the calculation, we will know the distance where the MPE limit is reached.

2 Measurement Result

2.4G WIFI:

Operation Frequency: WIFI 802.11b/g/n HT20: 2412-2462MHz,
ANT Gain: 1.5dBi
Power density limited: 1mW/ cm^2

Channel Freq. (MHz)	modulation	conducted power	Tune-up power	Max		Antenna	Evaluation result at 20cm	Power density Limits
		(dBm)	(dBm)	tune-up power		Gain	Power density(mW/cm^2)	(mW/cm^2)
				(dBm)	(mW)	Numeric		
2412	802.11b	13.34	13±1	14	25.119	1.41	0.00706	1
2437		13.5	13±1	14	25.119	1.41	0.00706	1
2462		13.04	13±1	14	25.119	1.41	0.00706	1
2412	802.11g	18.37	18±1	19	79.433	1.41	0.02232	1
2437		18.16	18±1	19	79.433	1.41	0.02232	1
2462		17.02	17±1	18	63.096	1.41	0.01773	1
2412	802.11n H20	18.68	18±1	19	79.433	1.41	0.02232	1
2437		17.91	17±1	18	63.096	1.41	0.01773	1
2462		17.04	17±1	18	63.096	1.41	0.01773	1

5G WIFI:

802.11a/n(HT20):
U-NII 3: 5745MHz to 5825MHz;
ANT Gain: 2.6dBi;

Power density limited: 1mW/ cm2

Channel Freq. (MHz)	modulation	conducted power	Tune-up power	Max		Antenna	Evaluation result at 20cm	Power density Limits
		(dBm)	(dBm)	tune-up power		Gain	Power density(mW/cm^2)	(mW/cm^2)
				(dBm)	(mW)	Numeric		
5745	11A	-3.51	-3±1	-2	0.631	1.82	0.00023	1
5785		-5.31	-5±1	-4	0.398	1.82	0.00014	1
5825		-6.28	-6±1	-5	0.316	1.82	0.00011	1
5745	11N20SISO	-3.49	-3±1	-2	0.631	1.82	0.00023	1
5785		-5.54	-5±1	-4	0.398	1.82	0.00014	1
5825		-6.41	-6±1	-5	0.316	1.82	0.00011	1

Conclusion:

For the max result: 0.02232≤ 1.0 test exclusion threshold, No SAR is required.

Statement

1. This report is invalid without the seal and signature of the laboratory.

2. The test results of this report are only responsible for the samples submitted.Client shall be responsible for representativeness of the sample and authenticity of the material.
3. The report shall not be partially reproduced without the written consent of the Laboratory.
4. This report is invalid if transferred, altered or tampered with in any form without authorization.
5. The observations or tests with special mark fall outside the scope of accreditation, and are only used for purpose of commission, research, training, internal quality control etc.
6. Any objection to this report shall be submitted to the laboratory within 15 days from the date of receipt of the report.

****** END OF REPORT ******