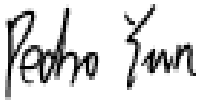
NVLAP TESTING
NVLAP LAB CODE 600341-0

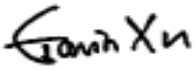
BACL Bay Area Compliance Labs Corp.

MAXIMUM PERMISSIBLE EXPOSURE EVALUATION REPORT

Applicant:	**Autel Robotics Co., Ltd**
Address:	**601,701,801,901, Block B1, Nanshan iPark, No. 1001 Xueyuan Avenue, Nanshan District, Shenzhen, Guangdong, 518055, China**
Product Name:	**EVO Max 4T, EVO Max 4N, EVO Max 4T XE, EVO Max 4T Pro**
FCC ID:	**2AGNTMDX600958C**
Standard(s):	**47 CFR §1.1310, 47 CFR §2.1091, 47 CFR §15.247(i),47 CFR §15.407(f) 47 CFR §15.255(g)**
Report Number:	**2402A23350E-RF-00G**
Report Date:	**2025/2/17**

The above device has been tested and found compliant with the requirement of the relative standards by Bay Area Compliance Laboratories Corp. (Dongguan).





Reviewed By: **Pedro Yun** Title: **Project Engineer**

Approved By: **Gavin Xu** Title: **RF Supervisor**

Bay Area Compliance Laboratories Corp. (Dongguan)
No.12, Pulong East 1st Road, Tangxia Town, Dongguan, Guangdong, China
Tel: +86-769-86858888
Fax: +86-769-86858891
www.baclcorp.com.cn

GENERAL INFORMATION

General Description Of Equipment under Test

EUT Name:	EVO Max 4T, EVO Max 4N, EVO Max 4T XE, EVO Max 4T Pro
EUT Model:	MDX
Rated Input Voltage:	DC 14.76V from battery or DC 14.88V from battery
EUT Received Date:	2024/12/28
EUT Received Status:	Good

RF EXPOSURE EVALUATION (MPE)

RF Exposure Evaluation

Applicable Standard

According to subpart 15.247(i), 15.407(f),15.255(g)and subpart §1.1310, systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

Limits for Maximum Permissible Exposure (MPE) (§1.1310, §2.1091)

(B) Limits for General Population/Uncontrolled Exposure				
Frequency Range (MHz)	**Electric Field Strength (V/m)**	**Magnetic Field Strength (A/m)**	**Power Density (mW/cm^2)**	**Averaging Time (minutes)**
0.3–1.34	614	1.63	*(100)	30
1.34–30	824/f	2.19/f	*(180/f²)	30
30–300	27.5	0.073	0.2	30
300–1500	/	/	f/1500	30
1500–100,000	/	/	1.0	30

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

According to §1.1310 and §2.1091 RF exposure is calculated.

Calculation formula

Prediction of power density at the distance of the applicable MPE limit
$S = PG/4\pi R^2$ = power density (in appropriate units, e.g. mW/cm^2);
P = power input to the antenna (in appropriate units, e.g., mW);
G = power gain of the antenna in the direction of interest relative to an isotropic radiator, the power gain factor, is normally numeric gain;
R = distance to the center of radiation of the antenna (appropriate units, e.g., cm);

For simultaneously transmit system, the calculated power density should comply with:

$$\sum_i \frac{S_i}{S_{Limit,i}} \leq 1$$

Calculated Data:

Operation Modes	Frequency (MHz)	Antenna Gain		Conducted output power including Tune-up Tolerance▲		Evaluation Distance (cm)	Power Density (mW/cm^2)	MPE Limit (mW/cm^2)
		(dBi)	(numeric)	(dBm)	(mW)			
SRD 900MHz	904-926	0.3	1.07	21.0	125.89	20.00	0.027	0.6
SRD 2.4G	2403.5-2475.5	1.9	1.55	26.5	446.68	20.00	0.138	1.0
SRD 5.2G	5154-5246	0.7	1.17	20.5	112.20	20.00	0.026	1.0
SRD 5.8G	5728-5847	1.7	1.48	25.0	316.23	20.00	0.093	1.0
WiFi 2.4G	2412-2462	2.2	1.66	19.5	89.13	20.00	0.029	1.0
WiFi 5.2G	5180-5240	1.1	1.29	18.0	63.10	20.00	0.016	1.0
WiFi 5.8G	5745-5825	2.8	1.91	15.5	35.48	20.00	0.013	1.0
Radar 60G*6	60000-64000	9	7.94	10.98	12.53	20.00	0.020	1.0
Note: For Radar 60G, Radar EIRP is 19.98dBm, Maximum Conducted Power=19.98-9=10.98dBm Maximum Conducted Power (dBm)=EIRP(dBm)-Gain(dBi)								

Note:

The Conducted output power including Tune-up Tolerance provided by manufacturer.

For Simultaneous transmission:

WiFi, SRD and 6 Radars can transmit simultaneously:

$$\sum_i \frac{S_i}{S_{Limit,i}} \le 1$$

$= S_{2.4G\ WiFi} / S_{limit-\ 2.4G\ WiFi} + S_{2.4G\ SRD} / S_{limit-2.4G\ SRD} + S_{Radar\ 60G} / S_{limit-\ Radar\ 60G} * 6$

=0.029/1.0+0.138/1.0+0.020/1.0*6

=0.287

＜1.0

Result: The device meet FCC MPE at 20 cm distance

EXHIBIT A - EUT PHOTOGRAPHS

Please refer to the attachment 2402A23350E-RF-EXP EUT EXTERNAL PHOTOGRAPHS and 2402A23350E-RF-INP EUT INTERNAL PHOTOGRAPHS.

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