

MPE Evaluation Report

Applicant Positec Technology (China) Co., Ltd.
FCC ID 2ASC3KR804
Product Robotic Lawnmower
Brand KRESS
Model KR804
Report No. EFTA26030396-IE-06-M1V1
Issue Date July 10, 2026

Eurofins TA Technology (Shanghai) Co., Ltd. tested the above equipment in accordance with the requirements in **FCC 47 CFR Part 1 §1.1310, §2.1091**. The test results show that the equipment tested can demonstrate compliance with the requirements as documented in this report.



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Version	Revision Description	Issue Date
Rev.0	Initial issue of report.	June 12, 2026
Rev.1	Updated data. Updated information. Update description.	July 10, 2026
Note: This revised report (Report No.: EFTA26030396-IE-06-M1V1) supersedes and replaces the previously issued report (Report No.: EFTA26030396-IE-06-M1). Please discard or destroy the previously issued report and dispose of it accordingly.		

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1 Test Laboratory

1.1 Notes of the Test Report

This report shall not be reproduced in full or partial, without the written approval of **Eurofins TA Technology (Shanghai) Co., Ltd.** The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. Measurement Uncertainties were not taken into account and are published for informational purposes only. This report is written to support regulatory compliance of the applicable standards stated above.

1.2 Test Facility

FCC (Designation number: CN1179, Test Firm Registration Number: 446626)

Eurofins TA Technology (Shanghai) Co., Ltd. has been listed on the US Federal Communications Commission list of test facilities recognized to perform measurements.

1.3 Testing Location

Company:	Eurofins TA Technology (Shanghai) Co., Ltd.
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2 Description of Equipment Under Test

Client Information

Applicant	Positec Technology (China) Co., Ltd.
Applicant address	18, Dongwang Road, Suzhou Industrial Park, Jiangsu 215123, P.R.China
Manufacturer	Positec Technology (China) Co., Ltd.
Manufacturer address	18, Dongwang Road, Suzhou Industrial Park, Jiangsu 215123, P.R.China

General Technologies

EUT Description			
Model	KR804		
Lab Internal SN	260309-28-001		
Hardware Version	HV1.6		
Software Version	8.1.1 + 23		
Frequency	Band	TX (MHz)	RX (MHz)
	GSM850	824 ~ 849	869 ~ 894
	GSM1900	1850 ~ 1910	1930 ~ 1990
	WCDMA B2	1850 ~ 1910	1930 ~ 1990
	WCDMA B4	1710 ~ 1755	2110 ~ 2155
	WCDMA B5	824 ~ 849	869 ~ 894
	LTE Band 2	1850 ~ 1910	1930 ~ 1990
	LTE Band 4	1710 ~ 1755	2110 ~ 2155
	LTE Band 5	824 ~ 849	869 ~ 894
	LTE Band 7	2500 ~ 2570	2620 ~ 2690
	LTE Band 12	699 ~ 716	729 ~ 746
	LTE Band 13	777 ~ 787	746 ~ 756
	LTE Band 25	1850 ~ 1915	1930 ~ 1995
	LTE Band 26	814 ~ 849	859 ~ 894
	LTE Band 38	2570 ~ 2620	2570 ~ 2620
	LTE Band 41	2496 ~ 2690	2496 ~ 2690
	LTE Band 66	1710 ~ 1780	2110 ~ 2180
	Wi-Fi 2.4GHz	2412~2462	2412~2462
	Bluetooth	2402~2480	2402~2480
EUT Accessory			

Battery charger	Manufacturer: Positec Technology (China) Co., Ltd. Model: KA3884
Battery	Manufacturer: Positec Technology (China) Co., Ltd. Model: KA3141
Date of Testing	April 13, 2026~ April 17, 2026
Date of Sample Received	March 26, 2026
Note: 1. The EUT is sent from the applicant to Eurofins TA and the information of the EUT is declared by the applicant. 2. All indications of Pass/Fail in this report are opinions expressed by Eurofins TA Technology (Shanghai) Co., Ltd. based on interpretations and/or observations of test results. Measurement Uncertainties were not taken into account and are published for informational purposes only.	

This report only adds Wi-Fi 2.4G and Bluetooth data; all other WWAN data are sourced from Report No.: 2211RSU065-U4.

3 Maximum Tune up and Antenna Gain

The numeric gain (G) of the antenna with a gain specified in dB is determined by

$$\text{Numeric gain (G)} = 10^{(\text{antenna gain}/10)}$$

Band	Maximum Tune up Tolerance		Antenna Gain (dBi)	Numeric Gain
	(dBm)	(mW)		
GSM850	26.00	398.11	2.29	1.69
GSM1900	23.00	199.53	1.38	1.37
WCDMA B2	25.00	316.23	1.38	1.37
WCDMA B4	25.00	316.23	2.00	1.58
WCDMA B5	25.00	316.23	2.13	1.63
LTE Band 2	25.00	316.23	1.38	1.37
LTE Band 4	25.00	316.23	2.00	1.58
LTE Band 5	25.00	316.23	2.13	1.63
LTE Band 7	25.00	316.23	2.33	1.71
LTE Band 12	25.00	316.23	3.26	2.12
LTE Band 13	25.00	316.23	3.98	2.50
LTE Band 25	25.00	316.23	1.38	1.37
LTE Band 26	25.00	316.23	2.13	1.63
LTE Band 38	25.00	316.23	2.00	1.58
LTE Band 41	25.00	316.23	2.04	1.60
LTE Band 66	25.00	316.23	2.00	1.58
Wi-Fi 2.4GHz	18.00	63.10	1.50	1.41
Bluetooth	9.00	7.94	1.50	1.41

4 MPE Limit

According to section 1.1310 of FCC 47 CFR Part 1, limits for maximum permissible exposure (MPE) are as following.

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm ²)	Averaging time (minutes)
(i) 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
(ii) 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.

Note1. Occupational/controlled limits apply in situations in which persons are exposed as a consequence of their employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure. Limits for occupational/controlled exposure also apply in situations when an individual is transient through a location where occupational / controlled limits apply provided he or she is made aware of the potential for exposure.

Note2: General population/uncontrolled exposures apply in situations in which the general public may be exposed, or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or can not exercise control over their exposure.

The maximum permissible exposure for 300~1500 MHz is f/1500, 1500~100,000MHz is 1.0. So

Band	The Maximum Permissible Exposure (mW/cm ²)
GSM850	0.549
GSM1900	1.000
WCDMA B2	1.000

WCDMA B4	1.000
WCDMA B5	0.549
LTE Band 2	1.000
LTE Band 4	1.000
LTE Band 5	0.549
LTE Band 7	1.000
LTE Band 12	0.466
LTE Band 13	0.518
LTE Band 25	1.000
LTE Band 26	0.543
LTE Band 38	1.000
LTE Band 41	1.000
LTE Band 66	1.000
Wi-Fi 2.4GHz	1.000
Bluetooth	1.000

5 RF Exposure Evaluation Result

RF exposure evaluation method is based on KDB 447498 D01, this calculation is based on the conducted power, maximum power and antenna gain with provides the minimum separation distance. The formula shown below is from OET Bulletin 65 Edition 97-01 Per KDB 447498 D01:

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

Where: S = power density (in appropriate units, e.g. mW/cm²)

P = Time-average maximum tune up procedure (in appropriate units, e.g., mW)

G = the numeric gain of the antenna

R = distance to the center of radiation of the antenna (20 cm = limit for MPE)

Band	Maximum Tune up (dBm)	Antenna Gain (dBi)	Maximum EIRP (dBm)	PG (mW)	Result (mW/cm ²)	Limit Value (mW/cm ²)	Result/ Limit
GSM850	26.000	2.290	28.290	674.528	0.134	0.549	0.244
GSM1900	23.000	1.380	24.380	274.157	0.055	1.000	0.055
WCDMA B2	25.000	1.380	26.380	434.510	0.086	1.000	0.086
WCDMA B4	25.000	2.000	27.000	501.187	0.100	1.000	0.100
WCDMA B5	25.000	2.130	27.130	516.416	0.103	0.549	0.187
LTE Band 2	25.000	1.380	26.380	434.510	0.086	1.000	0.086
LTE Band 4	25.000	2.000	27.000	501.187	0.100	1.000	0.100
LTE Band 5	25.000	2.130	27.130	516.416	0.103	0.549	0.187
LTE Band 7	25.000	2.330	27.330	540.754	0.108	1.000	0.108
LTE Band 12	25.000	3.260	28.260	669.885	0.133	0.466	0.286
LTE Band 13	25.000	3.980	28.980	790.679	0.157	0.518	0.304
LTE Band 25	25.000	1.380	26.380	434.510	0.086	1.000	0.086
LTE Band 26	25.000	2.130	27.130	516.416	0.103	0.543	0.189
LTE Band 38	25.000	2.000	27.000	501.187	0.100	1.000	0.100
LTE Band 41	25.000	2.040	27.040	505.825	0.101	1.000	0.101
LTE Band 66	25.000	2.000	27.000	501.187	0.100	1.000	0.100
Wi-Fi 2.4GHz	18.000	1.500	19.500	89.125	0.018	1.000	0.018
Bluetooth	9.000	1.500	10.500	11.220	0.002	1.000	0.002
Note: R = 20cm $\pi = 3.1416$ The MPE Ratio = Mac Result ÷ Limit Value							

This device only supports simultaneous transmission via Wi-Fi 2.4GHz and WWAN or Bluetooth and WWAN.

So, the simultaneous transmitting antenna max pairs as below:

$$\text{TER} = \text{Wi-Fi 2.4GHz Antenna MPE Ratio} + \text{WWAN Antenna MPE Ratio} = 0.018 + 0.304 = 0.322 < 1$$

So, the limit is kept.

Note: For this device, minimum separation distance is 20cm, even if calculations indicate MPE distance is less.

ANNEX A: The EUT Appearance

The EUT Appearance are submitted separately.

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