



RF EXPOSURE EVALUATION

FCC ID:2BUK3VC-5KNANO

Applicant: Senerport Tech (Shenzhen) Co., Ltd.
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Manufacturer: Versogo Technology (shenzhen) Co., Ltd.
Address: F3-4 No.3 Xialingpai New Industrial Zone, Dalang Street, Longhua District Shenzhen, China
EUT: MAGNETIC WIRELESS POWER PACK
Trade Mark: VELVET CAVIAR
Model Number: VC-5K Nano
Date of Receipt: Jan. 05, 2026
Test Date: Jan. 05, 2026 to Jan. 09, 2026
Date of Report: Jan. 09, 2026
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Applicable Standards: KDB 680106 D01v04
Test Result: Pass

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This test report is based on a single evaluation of one sample of above mentioned products. It is not permitted to be duplicated in extracts without written approval of Shenzhen DL Testing Technology Co., Ltd.



Product Name:	MAGNETIC WIRELESS POWER PACK
Trade Mark:	VELVET CAVIAR
Model No.:	VC-5K Nano
Serial No.:	N/A
Model Difference:	N/A
Operation Frequency:	111kHz ~ 205kHz
Modulation Type:	ASK
Antenna Type:	Loop Coil Antenna
Power Supply:	USB-C Input: 5V $\overline{\text{---}}$ 3A, 9V $\overline{\text{---}}$ 2A USB-C Output: 5V $\overline{\text{---}}$ 3A, 9V $\overline{\text{---}}$ 2.2A, 12V $\overline{\text{---}}$ 1.67A Wireless Output: 5W/7.5W/10W/15W
Battery Capacity:	5000mAh/3.85V/19.25Wh
Transmitting Mode:	Keep the EUT in continuously wireless charging mode

a. EUT mode for mobile exposure:

Test Modes:	Test Coil:	Description:
Mode 1	ANT 1	AC/DC Adapter (9V/2A) + EUT + Phone (Battery Status: <1%)
Mode 2		AC/DC Adapter (9V/2A) + EUT + Phone (Battery Status: 50%)
Mode 3		AC/DC Adapter (9V/2A) + EUT + Phone (Battery Status: >98%)
Mode 4		AC/DC Adapter (5V/3A) + EUT + Phone (Battery Status: <1%)
Mode 5		AC/DC Adapter (5V/3A) + EUT + Phone (Battery Status: 50%)
Mode 6		AC/DC Adapter (5V/3A) + EUT + Phone (Battery Status: >98%)

b. EUT mode for portable exposure:

Test Modes:	Test Coil:	Description:
Mode 1a	ANT 1	EUT + Phone (Battery Status: <1%)
Mode 2a		EUT + Phone (Battery Status: 50%)
Mode 3a		EUT + Phone (Battery Status: >98%)



TABLE OF CONTENTS

1. Measuring Standard	4
1.1 KDB 680106 D01 Wireless Power Transfer v04	4
1.2 Measurement Uncertainty	4
2. Requirements	4
2.1 According to the item 5.2 of KDB 680106 D01v04:	4
3. Method Of Measurement	5
3.1 Applicable Standard	5
3.2 Block diagram of Test Setup	5
3.3 For mobile exposure conditions:	5
3.4 For portable exposure conditions:	5
3.5 Limits for Maximum Permissible Exposure (MPE):	6
3.6 Test Procedure	6
4. Test instrument and equipment list	6
4.1 Test Instruments list	6
4.2 Test auxiliary equipment list	6
5. Test Result	7
5.1 For portable exposure result	7
5.2 For mobile exposure result	12
6. Test Set-up Photo	13
6.1 Test distance: 20cm	13
6.2 Test distance: 6cm	13



1. Measuring Standard

1.1 KDB 680106 D01 Wireless Power Transfer v04

1.2 Measurement Uncertainty

The reported uncertainty of measurement $y \pm U$, where expanded uncertainty U is based on a standard uncertainty multiplied by a coverage factor of $k=2$, providing a level of confidence of approximately 95 %.

No.	Item	Uncertainty
1	H-filed	$\pm 0.93\text{dB}$
2	E-filed	$\pm 0.51\text{dB}$

2. Requirements

2.1 According to the item 5.2 of KDB 680106 D01v04:

Inductive wireless power transfer applications that meet all of the following requirements are excluded from submitting an RF exposure evaluation.

a) The power transfer frequency is below 1 MHz.

Yes. The device operates in the frequency from ANT1 is 111kHz to 205kHz.

b) The output power from each transmitting element (e.g., coil) is less than or equal to 15 watts.

Yes. The maximum output power of the primary coil is 15 watts.

c) A client device providing the maximum permitted load is placed in physical contact with the transmitter (i.e., the surfaces of the transmitter and client device enclosures need to be in physical contact).

Yes. Client device is placed directly in contact with the transmitter.

d) Only § 2.1091-Mobile exposure conditions apply (i.e., this provision does not cover § 2.1093-Portable exposure conditions).

NO. The EUT is a portable wireless charger.

e) The E-field and H-field strengths, at and beyond 20 cm surrounding the device surface, are demonstrated to be less than 50% of the applicable MPE limit, per KDB 447498, Table 1. These measurements shall be taken along the principal axes of the device, with one axis oriented along the direction of the estimated maximum field strength, and for three points per axis or until a $1/d$ (inverse distance from the emitter structure) field strength decay is observed. Symmetry considerations may be used for test reduction purposes. The device shall be operated in documented worst-case compliance scenarios (i.e., the ones that lead to the maximum field components), and while all the radiating structures

Yes. The EUT coil is evaluated at maximum output power and the test results are less than 50% of the limit.

f) For systems with more than one radiating structure, the conditions specified in (5) must be met when the system is fully loaded (i.e., clients absorbing maximum power available), and with all the radiating structures operating at maximum power at the same time, as per design conditions. If the design allows one or more radiating structures to be powered at a higher level while other radiating structures are not powered, then those cases must be tested as well.

NO, The EUT has one coil.

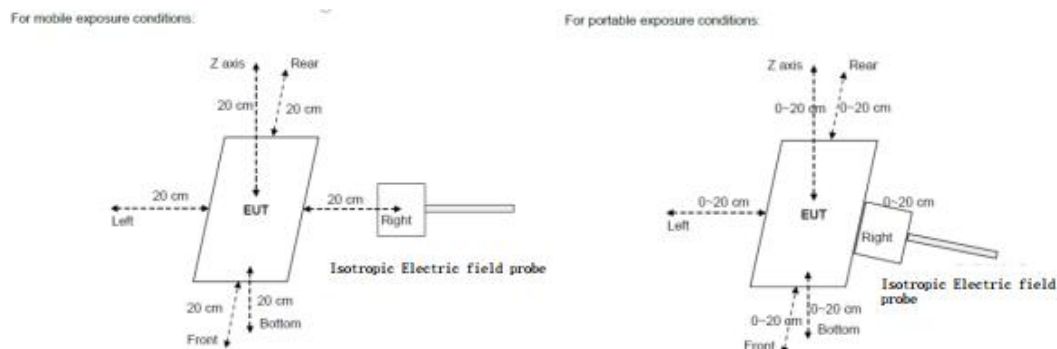


3. Method Of Measurement

3.1 Applicable Standard

According to §1.1307(b)(1), 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. According to §1.1310 and §2.1093 RF exposure is calculated. According KDB 680106 D01 Wireless Power Transfer v04.

3.2 Block diagram of Test Setup



Note: Measurements should be made from all sides and the top of the primary/client pair, with the 20cm - 0cm measured from the center of the top, and 20cm - 0cm measured from the center of the rest.

3.3 For mobile exposure conditions:

- The RF exposure test was performed in an echoic chamber;
- E and H-field measurements should be made with the center of the probe at a distance of 20 cm surrounding the EUT and 20 cm above the top surface of the primary/client pair;
- The highest emission level was recorded and compared with limit;
- The EUT was measured according to the dictates of KDB 680106 D01v04.

3.4 For portable exposure conditions:

- The RF exposure test was performed in an echoic chamber;
- E and H-field measurements should be made with the probe at 0 - 20 cm for all side of the EUT;
- The highest emission level was recorded and compared with limit;
- Perform H-field measurements for each edge/top surface of the host/client pair at every 2 cm starting from as close as possible out to 20cm.



3.5 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 Exposures				
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
300-1500	/	/	f/300	6
1500-100,000	/	/	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
300-1500	/	/	f/1500	30
1500-100,000	/	/	1.0	30
F=frequency in MHz *=Plane-wave equivalent power density RF exposure compliance will need to be determined with respect to 1.1307(c) and (d) of the FCC rules. The emissions should be within the limits at 300kHz in Table 1 of 1.1310(use the 300kHz limits for 150kHz:614V/m,1.63A/m).				

3.6 Test Procedure

- 1) The RF exposure test was performed on 360 degree turn table in an echoic chamber.
- 2) 20 cm-0cm measured from the center of the top, and 20cm-0cm measured from the center of the rest sides.
- 3) The turn table was rotated 360 degree to search of highest strength.
- 4) The highest emission level was recorded and compared with limit as soon as measurement of each points were completed.
- 5) The EUT were measured according to the dictates of KDB 680106 D01v04.

4. Test instrument and equipment list

4.1 Test Instruments list

Test Equipment	Manufacturer	Model No.	SN.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)
Exposure Level Tester	Narda	ELT-400	180ZX10220	Sep. 29, 2025	Sep. 28, 2026
Magnetic field probe 100cm ²	Narda	ELT probe 100cm ²	M0675	Sep. 29, 2025	Sep. 28, 2026

4.2 Test auxiliary equipment list

Item	Equipment	Mfr/Brand	Model/Type No.	Series No.	Note
E-1	MAGNETIC WIRELESS POWER PACK	VELVET CAVIAR	VC-5K Nano	N/A	EUT
E-2	AC/DC Adapter	SAMSUNG	EP-T4510	N/A	Auxiliary
E-3	Phone	APPLE	iPhone 13 Pro	N/A	Auxiliary



5. Test Result

5.1 For portable exposure result

Test mode 1a to 3a recorded

H-Filed Strength at (distance from 6cm to 20cm at 2cm iteration) surrounding the EUT (A/m)

distance (cm)	Battery Level:	Position Left (uT)	Position Right (uT)	Position Rear (uT)	Position Front (uT)	Position Top (uT)	Position Bottom (uT)
20	<1%	0.0184	0.0183	0.0180	0.0181	0.0179	0.0178
18	<1%	0.0246	0.0244	0.0241	0.0243	0.0239	0.0238
16	<1%	0.0339	0.0336	0.0332	0.0334	0.0329	0.0327
14	<1%	0.0482	0.0477	0.0473	0.0475	0.0468	0.0466
12	<1%	0.0714	0.0705	0.0701	0.0703	0.0692	0.0690
10	<1%	0.1104	0.1091	0.1085	0.1087	0.1070	0.1068
8	<1%	0.1795	0.1773	0.1763	0.1767	0.1738	0.1734
6	<1%	0.3046	0.3008	0.2991	0.2997	0.2950	0.2942

distance (cm)	Battery Level:	Position Left (A/m)	Position Right (A/m)	Position Rear (A/m)	Position Front (A/m)	Position Top (A/m)	Position Bottom (A/m)	50% Limits (A/m)	Limits (A/m)
20	<1%	0.0147	0.0146	0.0144	0.0145	0.0143	0.0142	0.815	1.63
18	<1%	0.0197	0.0195	0.0193	0.0194	0.0191	0.0190	0.815	1.63
16	<1%	0.0271	0.0268	0.0266	0.0267	0.0263	0.0262	0.815	1.63
14	<1%	0.0386	0.0381	0.0379	0.0380	0.0374	0.0373	0.815	1.63
12	<1%	0.0571	0.0564	0.0561	0.0562	0.0553	0.0552	0.815	1.63
10	<1%	0.0884	0.0873	0.0868	0.0870	0.0856	0.0854	0.815	1.63
8	<1%	0.1436	0.1418	0.1410	0.1413	0.1391	0.1387	0.815	1.63
6	<1%	0.2437	0.2406	0.2393	0.2398	0.2360	0.2354	0.815	1.63



H-Filed Strength at (distance from 6cm to 20cm at 2cm iteration) surrounding the EUT (A/m)

distance (cm)	Battery Level:	Position Left (uT)	Position Right (uT)	Position Rear (uT)	Position Front (uT)	Position Top (uT)	Position Bottom (uT)
20	50%	0.0170	0.0166	0.0169	0.0168	0.0165	0.0164
18	50%	0.0228	0.0223	0.0226	0.0224	0.0221	0.0219
16	50%	0.0313	0.0306	0.0311	0.0308	0.0305	0.0301
14	50%	0.0446	0.0436	0.0443	0.0438	0.0434	0.0429
12	50%	0.0660	0.0645	0.0655	0.0647	0.0642	0.0634
10	50%	0.1021	0.0998	0.1014	0.1002	0.0992	0.0981
8	50%	0.1659	0.1621	0.1647	0.1629	0.1612	0.1594
6	50%	0.2815	0.2749	0.2796	0.2764	0.2736	0.2704

distance (cm)	Battery Level:	Position Left (A/m)	Position Right (A/m)	Position Rear (A/m)	Position Front (A/m)	Position Top (A/m)	Position Bottom (A/m)	50% Limits (A/m)	Limits (A/m)
20	50%	0.0136	0.0133	0.0135	0.0134	0.0132	0.0131	0.815	1.63
18	50%	0.0182	0.0178	0.0181	0.0179	0.0177	0.0175	0.815	1.63
16	50%	0.0251	0.0245	0.0249	0.0246	0.0244	0.0241	0.815	1.63
14	50%	0.0357	0.0349	0.0354	0.0350	0.0347	0.0343	0.815	1.63
12	50%	0.0528	0.0516	0.0524	0.0518	0.0513	0.0507	0.815	1.63
10	50%	0.0817	0.0798	0.0811	0.0802	0.0794	0.0785	0.815	1.63
8	50%	0.1327	0.1296	0.1318	0.1303	0.1290	0.1275	0.815	1.63
6	50%	0.2252	0.2199	0.2236	0.2211	0.2189	0.2163	0.815	1.63



H-Filed Strength at (distance from 6cm to 20cm at 2cm iteration) surrounding the EUT (A/m)

distance (cm)	Battery Level:	Position Left (uT)	Position Right (uT)	Position Rear (uT)	Position Front (uT)	Position Top (uT)	Position Bottom (uT)
20	>98%	0.0153	0.0150	0.0151	0.0149	0.0148	0.0145
18	>98%	0.0204	0.0201	0.0202	0.0199	0.0197	0.0194
16	>98%	0.0281	0.0277	0.0279	0.0274	0.0272	0.0267
14	>98%	0.0398	0.0395	0.0397	0.0390	0.0388	0.0379
12	>98%	0.0590	0.0584	0.0586	0.0577	0.0573	0.0560
10	>98%	0.0913	0.0905	0.0907	0.0894	0.0888	0.0867
8	>98%	0.1482	0.1470	0.1474	0.1452	0.1442	0.1407
6	>98%	0.2516	0.2494	0.2501	0.2465	0.2446	0.2388

distance (cm)	Battery Level:	Position Left (A/m)	Position Right (A/m)	Position Rear (A/m)	Position Front (A/m)	Position Top (A/m)	Position Bottom (A/m)	50% Limits (A/m)	Limits (A/m)
20	>98%	0.0122	0.0120	0.0121	0.0119	0.0118	0.0116	0.815	1.63
18	>98%	0.0163	0.0161	0.0162	0.0159	0.0158	0.0155	0.815	1.63
16	>98%	0.0224	0.0222	0.0223	0.0219	0.0218	0.0213	0.815	1.63
14	>98%	0.0319	0.0316	0.0317	0.0312	0.0310	0.0303	0.815	1.63
12	>98%	0.0472	0.0468	0.0469	0.0462	0.0459	0.0448	0.815	1.63
10	>98%	0.0730	0.0724	0.0726	0.0715	0.0710	0.0693	0.815	1.63
8	>98%	0.1186	0.1176	0.1179	0.1162	0.1153	0.1126	0.815	1.63
6	>98%	0.2012	0.1995	0.2001	0.1972	0.1956	0.1911	0.815	1.63

Note: A/m = uT/1.25



H-Filed Strength at (distance from 4cm to 0cm) surrounding the EUT (A/m)

distance (cm)	Battery Level:	Position Left (A/m)	Position Right (A/m)	Position Rear (A/m)	Position Front (A/m)	Position Top (A/m)	Position Bottom (A/m)	50% Limits (A/m)	Limits (A/m)
4	<1%	0.4178	0.4125	0.4103	0.4111	0.4046	0.4036	0.815	1.63
2	<1%	0.6556	0.6473	0.6438	0.6451	0.6349	0.6333	0.815	1.63
0	<1%	0.7898	0.7798	0.7756	0.7772	0.7649	0.7630	0.815	1.63
4	50%	0.3861	0.3770	0.3833	0.3791	0.3753	0.3708	0.815	1.63
2	50%	0.6059	0.5916	0.6015	0.5949	0.5889	0.5819	0.815	1.63
0	50%	0.7300	0.7127	0.7247	0.7167	0.7095	0.7011	0.815	1.63
4	>98%	0.3449	0.3420	0.3431	0.3381	0.3353	0.3276	0.815	1.63
2	>98%	0.5412	0.5367	0.5384	0.5305	0.5262	0.5141	0.815	1.63
0	>98%	0.6520	0.6466	0.6486	0.6391	0.6339	0.6194	0.815	1.63

Note: Biot-Savar law:

(1) Magnetic field on the axis of a current-carrying circle coil:

$$B = \frac{\mu_0 I R^2}{2(R^2 + X^2)^{\frac{3}{2}}}$$

R is the coil outside diameter radius.

X is the distance from the test point to the center of the coil circle.

B is the magnetic magnetic field.

(2) According to the KDB 680106, the model needs to be validated by probe measurements at the two points closest to the surface of the device, in 2cm increments, and if there is a 30% agreement between the model and the (E-field and/or h-field) probe measurements, the validation is considered sufficient.

(3) We derived the field strengths at 10cm to 8cm and 8cm to 6cm, respectively, which are close to the actual test values, based on the field strength at 6 cm, the field strength at 4cm and 2cm and 0 cm can be deduced.

(4) A table of error data between the assessed and measured values:

distance (cm)	Measurements (A/m)	distance (cm)	Assessed (A/m)	Error (%)	Limit (%)
10	0.0884	\	\	\	\
8	0.1436	10 to 8	0.1207	2.29	<30
6	0.2437	8 to 6	0.2118	3.19	<30



(5) Calculation process:

Distance (cm)	Battery Level (%)	Position Left (A/m)
8	<1	0.1436
6	<1	0.2437
4	<1	0.4178
2	<1	0.6556
0	<1	0.7898

$$8\text{cm: } u_0IR^2 = B * 2(R^2 + X^2)^{\frac{3}{2}} = 0.1436 * 2(0.055^2 + 0.08^2)^{\frac{3}{2}} = 0.000262789$$

$$\text{To 6cm: } B = \frac{u_0IR^2}{2(R^2+X^2)^{\frac{3}{2}}} = \frac{0.000262789}{2(0.055^2+0.06^2)^{\frac{3}{2}}} = 0.2437$$

$$6\text{cm: } u_0IR^2 = B * 2(R^2 + X^2)^{\frac{3}{2}} = 0.2437 * 2(0.055^2 + 0.06^2)^{\frac{3}{2}} = 0.000262824$$

$$\text{To 4cm: } B = \frac{u_0IR^2}{2(R^2+X^2)^{\frac{3}{2}}} = \frac{0.000262824}{2(0.055^2+0.04^2)^{\frac{3}{2}}} = 0.4178$$

$$4\text{cm: } u_0IR^2 = B * 2(R^2 + X^2)^{\frac{3}{2}} = 0.4178 * 2(0.055^2 + 0.04^2)^{\frac{3}{2}} = 0.000262825$$

$$\text{To 2cm: } B = \frac{u_0IR^2}{2(R^2+X^2)^{\frac{3}{2}}} = \frac{0.000262825}{2(0.055^2+0.02^2)^{\frac{3}{2}}} = 0.6556$$

$$2\text{cm: } u_0IR^2 = B * 2(R^2 + X^2)^{\frac{3}{2}} = 0.6556 * 2(0.055^2 + 0.02^2)^{\frac{3}{2}} = 0.000262821$$

$$\text{To 0cm: } B = \frac{u_0IR^2}{2(R^2+X^2)^{\frac{3}{2}}} = \frac{0.000262821}{2(0.055^2+0^2)^{\frac{3}{2}}} = 0.7898$$



5.2 For mobile exposure result

Test mode 1 to 3 recorded

H-Filed Strength at (distance from 20cm) surrounding the EUT (A/m)

distance (cm)	Battery Level:	Position Left (uT)	Position Right (uT)	Position Rear (uT)	Position Front (uT)	Position Top (uT)	Position Bottom (uT)
20	<1%	0.0189	0.0188	0.0187	0.0185	0.0186	0.0184
20	50%	0.0177	0.0179	0.0176	0.0174	0.0175	0.0173
20	>98%	0.0161	0.0162	0.0160	0.0163	0.0159	0.0158

distance (cm)	Battery Level:	Position Left (A/m)	Position Right (A/m)	Position Rear (A/m)	Position Front (A/m)	Position Top (A/m)	Position Bottom (A/m)	50% Limits (A/m)	Limits (A/m)
20	<1%	0.01512	0.01504	0.01496	0.0148	0.01488	0.01472	0.815	1.63
20	50%	0.01416	0.01432	0.01408	0.01392	0.01400	0.01384	0.815	1.63
20	>98%	0.01288	0.01296	0.0128	0.01304	0.01272	0.01264	0.815	1.63

Note: A/m = uT/1.25



6. Test Set-up Photo

Probe	Length	Width	Radius
	11cm	11cm	5.5cm

6.1 Test distance: 20cm

Reference to the appendix III for details.

6.2 Test distance: 6cm

Reference to the appendix III for details.

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