EMC TEST REPORT

Applicant	Deer Management Systems LLC
FCC ID	2BBNQ-RVG3
Product	CABELAS OUTFITTER CELL CAM
Brand	Cabelas
Model	CABOCC-V1
Report No.	R2407A1004 -E1V1
Issue Date	October 14, 2024

Eurofins TA Technology (Shanghai) Co., Ltd. tested the above equipment in accordance with the requirements in **FCC Code CFR47 Part15B (2023)/ ANSI C63.4-2014**. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

Liu Wei

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Version	Revision Description	Issue Date
Rev.0	Initial issue of report.	September 20, 2024
Rev.1	Updated information, data, and description.	October 14, 2024
Note: This revised report (Report No.: R2407A1004-E1V1) supersedes and replaces the previously issued report (Report No.: R2407A1004-E1). Please discard or destroy the previously issued report and dispose of it accordingly.		

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Summary of measurement results

Number	Test Case	Clause in FCC Rules	Conclusion
1	Radiated Emission	FCC Part15.109, ANSI C63.4-2014	Only tested 30MHz to 1GHz and PASS Others Not Test [1]
2	Conducted Emission	FCC Part15.107, ANSI C63.4-2014	Not Test [1]
Date of Testing: September 3, 2024 ~ September 4, 2024 Date of Sample Received: August 23, 2024			
Note: 1. Not Test means after evaluation, test items are no need to test, the test results please refer to Original Report. 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.			

CABOCC-V1 (Report No.: R2407A1004-E1V1) is a variant model of Gen3 (Report No.: R2401A0012-E1).
This product only changes Product Name, Model Name, SW Version and Mechanical shell.
This report tests Radiated Emission (30MHz to 1GHz), and recorded in the report.
This report is used in conjunction with the original report (Report No.: R2401A0012-E1).
The detailed product change description please refers to the Difference Declaration Letter.

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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.

A2LA (Certificate Number: 3857.01)

Eurofins TA Technology (Shanghai) Co., Ltd. has been listed by American Association for Laboratory Accreditation to perform measurement.

1.3 Testing Location

Company:	Eurofins TA Technology (Shanghai) Co., Ltd.
Address:	Building 3, No.145, Jintang Rd, Pudong Shanghai, P.R.China
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2 General Description of Equipment Under Test

2.1 Applicant and Manufacturer Information

Applicant	Deer Management Systems LLC
Applicant address	1668 Jordan West Rd, Decorah Iowa, United States, 52101
Manufacturer	AsiaTelco Technologies Co.
Manufacturer address	No. 68 Huatuo Road, Building-8, Zhangjiang Hi-Tech Park, Pudong, Shanghai 201203, China

2.2 General Information

EUT Description			
Device Type	Fixed Device		
Model	CABOCC-V1		
SN	Original: G32351P300017		
HW Version	P3		
SW Version	1.0		
Power Rating	9Vdc (six AA Batteries)		
Connecting I/O Port(s)	Please refer to the User's Manual.		
Antenna Type	External Antenna		
Frequency	Band	Tx (MHz)	Rx (MHz)
	WCDMA Band II	1850 ~ 1910	1930 ~ 1990
	WCDMA Band IV	1710 ~ 1755	2110 ~ 2155
	WCDMA Band V	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 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
	Bluetooth LE	2400 ~ 2483.5	2400 ~ 2483.5
	Wi-Fi 2.4G	2400 ~ 2483.5	2400 ~ 2483.5
Date of Sample Received	August 23, 2024		

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EUT Accessory	
Power supply 1	Dry battery: six AA Batteries DC 9V
Power supply 2	Lithium battery: Manufacturer: Asiatelco Technologies Co. Model: TBP-01 DC 7.25V 5000mAh
Note: 1. The EUT is sent from the applicant to Eurofins TA and the information of the EUT is declared by the applicant.	

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2.3 Applied Standards

According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

Test standards
FCC Code CFR47 Part15B (2023)
ANSI C63.4-2014

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2.4 Test Mode

Test Mode	
Mode 1	EUT POWER ON+WCDMA/LTE/Bluetooth LE/WLAN Standby
Note: The complete Test Mode please refers to the original report (Report No.: R2401A0012-E1)	

Test Type	Test Mode
Radiated Emission	Mode 1

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3 Test Case Results

3.1 Radiated Emission

Ambient Condition

Temperature	Relative humidity
15°C ~ 35°C	30% ~ 60%

Methods of Measurement

The EUT is placed on a non-metallic table 0.8m above the horizontal metal reference ground plane. The distance between EUT and receive antenna should be 10 meters below 1GHz. During the test, the EUT was operating in its typical mode. The test method is according to ANSI C63.4-2014. Sweep the whole frequency band through the range from 30MHz to the 5th harmonic of the carrier. During the test, the height of receive antenna shall be moved from 1 to 4 meters, and the antenna shall be performed under horizontal and vertical polarization. The turn table shall be rotated from 0 to 360 degrees for detecting the maximum of radiated signal level.
The data of cable loss and antenna factor has been calibrated in full testing frequency range before the testing. During the test, the EUT is worked at maximum output power.
Set the spectrum analyzer in the following:

Below 1GHz:
RBW=100 kHz / VBW=300 kHz / Sweep=AUTO
Above 1GHz:
(a) PEAK Detector: RBW=1MHz / VBW=3MHz/ Sweep=AUTO
(b) AVERAGE Detector: RBW=1MHz / VBW=3MHz / Sweep=AUTO

The radiated emission was measured in the following position: EUT stand-up position (Z axis), lie-down position (X, Y axis). The worst emission was found in lie-down position (X axis) and the worst case was recorded.

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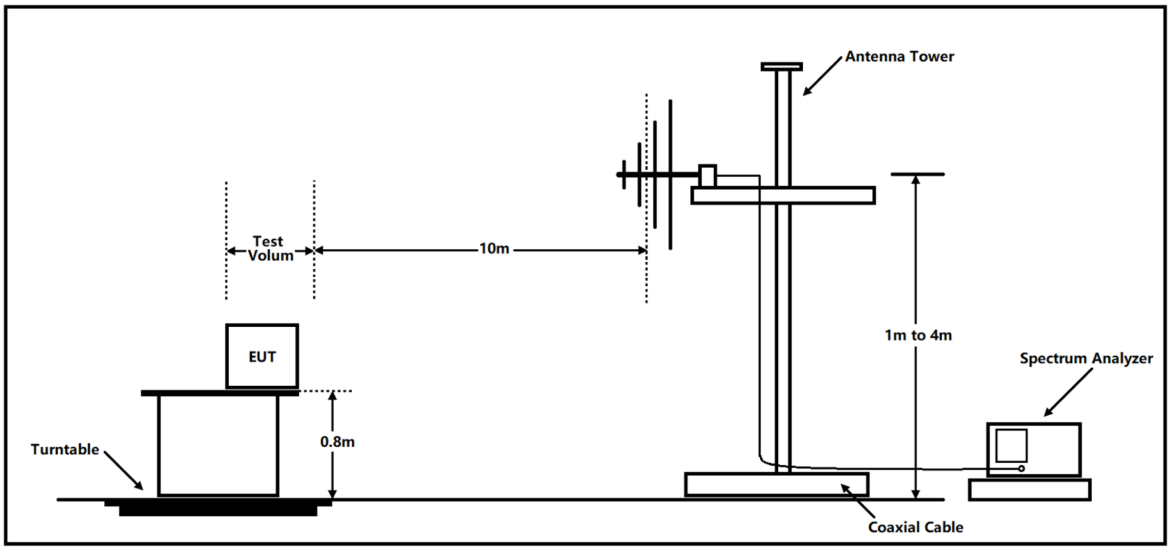
Test Setup

Below 1GHz



Note: Area side: 21m x 12m

Antenna Tower meets ANSI C63.4 requirements for measurements above 1 GHz by keeping the antenna aimed at the EUT during the antenna's ascent/ descent along the antenna mast.

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Limits

Class B

Frequency (MHz)	Field Strength (dBμV/m)	Detector
30 -88	30.0	Quasi-peak
88-216	33.5	Quasi-peak
216 – 960	36.0	Quasi-peak
960-1000	44.0	Quasi-peak
1000-5th harmonic of the highest frequency or 40GHz, which is lower	54 74	Average Peak

Frequency range of radiated measurements

Highest frequency generated or used in the device or on which the device operates or tunes (MHz)	Upper frequency of measurement range (MHz)
Below 1.705	30
1.705-108	1000
108-500	2000
500-1000	5000
Above 1000	5th harmonic of the highest frequency or 40 GHz, whichever is lower.

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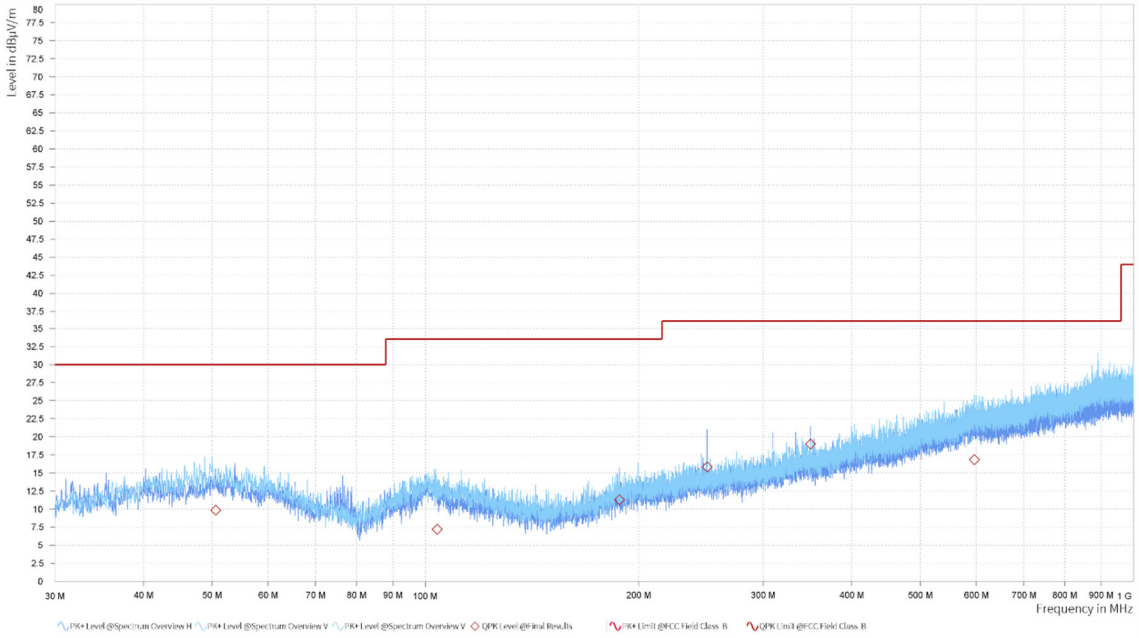
Test Results

Sweep the whole frequency band through the range from 30MHz to the 5th harmonic of the carrier.

The following graphs display the maximum values of horizontal and vertical by software.



Radiated Emission from 30MHz to 1GHz

Frequency (MHz)	Quasi-Peak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (m)	Polarization	Azimuth (deg)	Correct Factor (dB)
188.008	11.25	33.50	22.25	1.91	H	283.5	-11.47
249.974	15.81	36.00	20.19	1.21	H	305.8	-8.91
349.992	19.00	36.00	17.00	2.22	H	93.5	-6.61
50.593	9.86	30.00	20.14	1.03	V	96.7	-8.39
103.931	7.20	33.50	26.30	2.01	V	296.3	-9.97
596.048	16.84	36.00	19.16	1.25	V	249.4	-0.72

Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Margin = Limit – Quasi-Peak

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4 Uncertainty Measurement

Case	Uncertainty	Factor k
Radiated Emission 30MHz – 200MHz	3.39 dB	1.96
Radiated Emission 200MHz – 1GHz	3.82 dB	1.96

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5 Main Test Instruments

Name of Equipment	Manufacturer	Type/Model	Serial Number	Calibration Date	Expiration Time
Radiated Emission					
EMI Test Receiver	R&S	ESR	102721	2024-05-07	2025-05-06
Signal Analyzer	R&S	FSV3044	103495	2024-05-07	2025-05-06
TRILOG Broadband Antenna	SCHWARZBECK	VULB 9163	01614	2023-09-13	2026-09-12
TRILOG Broadband Antenna	SCHWARZBECK	VULB 9163	01615	2023-10-19	2026-10-18
Software	R&S	ELEKTRA	5.00.2	/	/

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ANNEX A: The EUT Appearance

The EUT Appearance are submitted separately.

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ANNEX B: Test Setup Photos

The Test Setup Photos are submitted separately.

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ANNEX C: Product Change Description

The Product Change Description are submitted separately.

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

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