



Shenzhen CTA Testing Technology Co., Ltd.

Room 106, Building 1, Yibaolai Industrial Park, Qiaotou Community, Fuhai Street, Bao'an District, Shenzhen, China

RF Exposure MPE

Report Reference No.....: CTA26050900903

FCC ID.....: 2A7AQ-BD13

Compiled by

(position+printed name+signature) .: File administrators Zoey Cao

Supervised by

(position+printed name+signature) .: Project Engineer Ace Chai

Approved by

(position+printed name+signature) .: RF Manager Eric Wang

Date of issue: May 19, 2026

Testing Laboratory Name.....: Shenzhen CTA Testing Technology Co., Ltd.

Address.....: Room 106, Building 1, Yibaolai Industrial Park, Qiaotou Community, Fuhai Street, Bao'an District, Shenzhen, China

Applicant's name.....: Newsmay Technology Co.,limited

Address.....: 402&405, Building B, Taiyufeng Industrial Park, Dalang, Longhua New District, shenzhen, China

Standard.....: 47CFR §1.1310
47CFR §2.1091
KDB447498 D01 General RF Exposure Guidance v06

Shenzhen CTA Testing Technology Co., Ltd. All rights reserved.

This publication may be reproduced in whole or in part for non-commercial purposes as long as the Shenzhen CTA Testing Technology Co., Ltd. is acknowledged as copyright owner and source of the material. Shenzhen CTA Testing Technology Co., Ltd. takes no responsibility for and will not assume liability for damages resulting from the reader's interpretation of the reproduced material due to its placement and context.

Test item description: MINI PC

Trade Mark: N/A

Manufacturer: Newsmay Technology Co.,limited

Model/Type reference: BD13

Listed Models: N/A

Rating: Input:DC 19V 3.78A

Result: PASS

Shenzhen CTA Testing Technology Co., Ltd.

Room 106, Building 1, Yibaolai Industrial Park, Qiaotou Community, Fuhai Street, Bao'an District, Shenzhen, China
Tel:+86-755 2322 5875 E-mail:cta@cta-test.cn Web:http://www.cta-test.cn

TEST REPORT

Equipment under Test : MINI PC

Model /Type : BD13

Listed Models : N/A

Applicant : **Newsday Technology Co.,limited**

Address : 402&405, Building B, Taiyufeng Industrial Park, Dalang, Longhua New District, shenzhen, China

Manufacturer : **Newsday Technology Co.,limited**

Address : 402&405, Building B, Taiyufeng Industrial Park, Dalang, Longhua New District, shenzhen, China

Test Result:	PASS
---------------------	-------------

The test report merely corresponds to the test sample.
It is not permitted to copy extracts of these test result without the written permission of the test laboratory.

Shenzhen CTA Testing Technology Co., Ltd.

Room 106, Building 1, Yibaolai Industrial Park, Qiaotou Community, Fuhai Street, Bao'an District, Shenzhen, China
Tel:+86-755 2322 5875 E-mail:cta@cta-test.cn Web:http://www.cta-test.cn

Contents

1	TEST STANDARDS	4
2	SUMMARY	5
2.1	General Remarks	5
2.2	Product Description	5
2.3	Special Accessories	6
2.4	Modifications	6
3	TEST ENVIRONMENT	7
3.1	Address of the test laboratory	7
3.2	Test Facility	7
3.3	Statement of the measurement uncertainty	7
4	Test limit	8
4.1	Requirement	8
4.2	MPE Calculation Method	8
4.3	Conducted Power Results	9
4.4	Manufacturing tolerance	9
4.5	Standalone MPE Result	10
4.6	Simultaneous Transmission for MPE Result	10
5	Conclusion	10

1 TEST STANDARDS

The tests were performed according to following standards:

[ANSI C95.1-1999](#): IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz.

[FCC KDB 447498 D01 General RF Exposure Guidance v06](#): Mobile and Portable Device, RF Exposure, Equipment Authorization Procedures.

[FCC CFR 47 part1 1.1310](#): Radiofrequency radiation exposure limits.

[FCC CFR 47 part2 2.1091](#): Radiofrequency radiation exposure evaluation: mobile devices

2 SUMMARY

2.1 General Remarks

Date of receipt of test sample	:	May 09, 2026
Testing commenced on	:	May 09, 2026
Testing concluded on	:	May 19, 2026

2.2 Product Description

Product Name:	MINI PC			
Model/Type reference:	BD13			
Power supply:	Input:DC 19V 3.78A			
Adapter information:	Model: MX65C1-1903780 Input: AC 100-240V 50/60Hz 2A Output: DC 19V 3.78A 71.82W			
Hardware version:	V1.0			
Software version:	V1.0			
Testing sample ID:	CTA260509009-1# (Engineer sample) CTA260509009-2# (Normal sample)			
2.4GWIFI :				
Supported type:	802.11b/802.11g/802.11n(HT20)/ 802.11n(HT40)			
Modulation:	802.11b: DSSS 802.11g/802.11n(HT20)/ 802.11n(HT40): OFDM			
Operation frequency:	802.11b/802.11g/802.11n(HT20): 2412MHz~2462MHz 802.11n(HT40): 2422MHz~2452MHz			
Channel number:	802.11b/802.11g/802.11n(HT20): 11 802.11n(HT40):7			
Channel separation:	5MHz			
Antenna type:	External antenna			
Antenna gain:	1.39 dBi for Antenna 1&2			
5GWIFI				
Supported type:	20MHz system	40MHz system	80MHz system	160MHz system
	802.11a 802.11n 802.11ac	802.11n 802.11ac	802.11ac	N/A
Operation frequency:	5180MHz-5240MHz	5190MHz-5230MHz	5210MHz	N/A
Modulation:	OFDM	OFDM	OFDM	N/A
Channel number:	4	2	1	N/A
Channel separation:	20MHz	40MHz	80MHz	N/A
Antenna type:	External antenna			
Antenna gain:	1.64 dBi for Antenna 1&2			

Shenzhen CTA Testing Technology Co., Ltd.

Room 106, Building 1, Yibaolai Industrial Park, Qiaotou Community, Fuhai Street, Bao'an District, Shenzhen, China
Tel:+86-755 2322 5875 E-mail:cta@cta-test.cn Web:http://www.cta-test.cn

2.3 Special Accessories

The following is the EUT test of the auxiliary equipment provided by the laboratory:

Description	Manufacturer	Model	Technical Parameters	Certificate	Provided by
/	/	/	/	/	/

2.4 Modifications

No modifications were implemented to meet testing criteria.

3 TEST ENVIRONMENT

3.1 Address of the test laboratory

Shenzhen CTA Testing Technology Co., Ltd.

Room 106, Building 1, Yibaolai Industrial Park, Qiaotou Community,
Fuhai Street, Bao'an District, Shenzhen, China

3.2 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

FCC-Registration No.: 517856 Designation Number: CN1318

Shenzhen CTA Testing Technology Co., Ltd. has been listed on the US Federal Communications Commission list of test facilities recognized to perform electromagnetic emissions measurements.

A2LA-Lab Cert. No.: 6534.01

Shenzhen CTA Testing Technology Co., Ltd. has been listed by American Association for Laboratory Accreditation to perform electromagnetic emission measurement.

ISED#: 27890 CAB identifier: CN0127

Shenzhen CTA Testing Technology Co., Ltd. has been listed by Innovation, Science and Economic Development Canada to perform electromagnetic emission measurement.

3.3 Statement of the measurement uncertainty

The data and results referenced in this document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities. The measurement uncertainty was calculated for all measurements listed in this test report acc. to TR-100028-01" Electromagnetic compatibility and Radio spectrum Matters (ERM);Uncertainties in the measurement of mobile radio equipment characteristics; Part 1" and TR-100028-02 "Electromagnetic compatibility and Radio spectrum Matters (ERM);Uncertainties in the measurement of mobile radio equipment characteristics; Part 2 " and is documented in the Shenzhen CTA Testing Technology Co., Ltd. quality system acc. to DIN EN ISO/IEC 17025. Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device.

Hereafter the best measurement capability for Shenzhen CTA Testing Technology Co., Ltd. :

Test	Range	Measurement Uncertainty	Notes
Radiated Emission	9KHz~30MHz	3.02 dB	(1)
Radiated Emission	30~1000MHz	4.06 dB	(1)
Radiated Emission	1~18GHz	5.14 dB	(1)
Radiated Emission	18-40GHz	5.38 dB	(1)
Conducted Disturbance	0.15~30MHz	2.14 dB	(1)
Output Peak power	30MHz~18GHz	0.55 dB	(1)
Power spectral density	/	0.57 dB	(1)
Spectrum bandwidth	/	1.1%	(1)
Radiated spurious emission (30MHz-1GHz)	30~1000MHz	4.10 dB	(1)
Radiated spurious emission (1GHz-18GHz)	1~18GHz	4.32 dB	(1)
Radiated spurious emission (18GHz-40GHz)	18-40GHz	5.54 dB	(1)
Time	/	±2%	(1)

Shenzhen CTA Testing Technology Co., Ltd.

Room 106, Building 1, Yibaolai Industrial Park, Qiaotou Community, Fuhai Street, Bao'an District, Shenzhen, China

Tel:+86-755 2322 5875 E-mail:cta@cta-test.cn Web:http://www.cta-test.cn

4 Test limit

4.1 Requirement

Limits for Maximum Permissible Exposure (MPE)/Controlled Exposure

Frequency Range(MHz)	Electric Field Strength(V/m)	Magnetic Field Strength(A/m)	Power Density (mW/cm ²)	Averaging Time (minute)
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 – 1500	/	/	f/300	6
1500 – 100,000	/	/	5	6

Limits for Maximum Permissible Exposure (MPE)/Uncontrolled Exposure

Frequency Range(MHz)	Electric Field Strength(V/m)	Magnetic Field Strength(A/m)	Power Density (mW/cm ²)	Averaging Time (minute)
Limits for Occupational/Controlled Exposure				
0.3 – 3.0	614	1.63	(100) *	30
3.0 – 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

4.2 MPE Calculation Method

Predication of MPE limit at a given distance

Equation from page 18 of OET Bulletin 65, Edition 97-01

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

Where: S=power density

P=power input to antenna

G=power gain of the antenna in the direction of interest relative to an isotropic radiator

R=distance to the center of radiation of the antenna

4.3 Conducted Power Results

Type	Channel	Output power PK (dBm) Antenna 1	Output power PK (dBm) Antenna 2
802.11b	01	12.26	12.42
	06	12.46	12.63
	11	12.55	12.8
802.11g	01	12.44	12.52
	06	12.6	12.75
	11	12.79	12.86
802.11n(HT20)	01	12.37	12.4
	06	12.5	12.54
	11	12.74	12.87
802.11n(HT40)	03	12.73	12.8
	06	12.97	13.25
	09	12.92	13.12

Test Mode	Antenna	Freq(MHz)	Result [dBm] Antenna 1	Result [dBm] Antenna 2
11A	Ant1	5180	12.88	12.23
		5220	12.84	12.5
		5240	12.71	12.26
11N20SISO	Ant1	5180	12.32	12.15
		5220	12.81	12.35
		5240	12.67	12.29
11N40SISO	Ant1	5190	12.71	12.24
		5230	12.91	12.19
11AC20SISO	Ant1	5180	12.48	12.03
		5220	12.48	12.07
		5240	12.44	12.04
11AC40SISO	Ant1	5190	12.11	11.91
		5230	12.52	12.17
11AC80SISO	Ant1	5210	12.82	12.19

4.4 Manufacturing tolerance

Mode	Max. Peak Conducted Output Power (dBm)	Max. tune-up
2.4GWIFI Ant 1	12.97	13.0±1
2.4GWIFI Ant 2	13.25	13.0±1
Mode	Max. Average Conducted Output Power (dBm)	Max. tune-up
5.2GWIFI Ant 1	12.91	13.0±1
5.2GWIFI Ant 2	12.50	13.0±1

Shenzhen CTA Testing Technology Co., Ltd.

Room 106, Building 1, Yibaolai Industrial Park, Qiaotou Community, Fuhai Street, Bao'an District, Shenzhen, China

Tel:+86-755 2322 5875 E-mail:cta@cta-test.cn Web:http://www.cta-test.cn

4.5 Standalone MPE Result

As declared by the Applicant, the EUT is a wireless device used in a fix application, at least 20 cm from any body part of the user or nearby persons; from the maximum EUT RF output power, the minimum separation distance, $r = 20\text{cm}$, as well as the gain of the used antenna is refer to section 2.2, the RF power density can be obtained.

Modulation Type	Output power		Antenna Gain (dBi)	Antenna Gain (linear)	MPE (mW/cm ²)	MPE Limits (mW/cm ²)
	dBm	mW				
2.4GWIFI Ant 1	14.0	25.1189	1.39	1.3772	0.0069	1.0000
2.4GWIFI Ant 2	14.0	25.1189	1.39	1.3772	0.0069	1.0000
5.2GWIFI Ant 1	14.0	25.1189	1.62	1.4521	0.0073	1.0000
5.2GWIFI Ant 2	14.0	25.1189	1.62	1.4521	0.0073	1.0000

Remark:

1. Output power (Peak) including turn-up tolerance;
2. MPE evaluate distance is 20cm from user manual provide by manufacturer.

4.6 Simultaneous Transmission for MPE Result

WIFI ANT1 MPE (Ratio)	WIFI ANT2 MPE (Ratio)	simultaneous MPE (Ratio)	MPE Limits (Ratio)
0.0073	0.0073	0.0146	1.0000

5 Conclusion

The measurement results comply with the FCC Limit per 47 CFR 2.1091 for the uncontrolled RF Exposure of mobile device Threshold per KDB 447498 D01v06

***** End of Report *****