TEST REPORT

On Behalf of

Yuncheng Yanhu District Jianchun Network TechnologyCo., Ltd

Room 916, Ping An Building, Shenghui North Road, Yanhu Disstrict Yuncheng, Shanxi

Tablet PC

Model: T20

Test Standard:	:	COMMISSION REGULATION (EU) 2023/1670
		COMMISSION DELEGATED REGULATION (EU) 2023/1669
		EN 45554:2020
Report Number	:	GVT250605113E
Test Date	:	June. 05 - June.10, 2025
Date of Report	:	June.10, 2025
Prepared By	:	**ShenZhen GVT Testing Technology Co., Ltd.**
		Room 504, Unit 1, Building 4, Zhaofuda Industrial Zone, Hongqiaotou Community, Yanluo Street, Bao 'an District, Shenzhen, Guangdong, China.

TEST REPORT

EN 45554:2020

General methods for the assessment of the ability to repair, reuse and upgrade energy-related products

Report reference No............	:	GVT250605113E
Date of issue.........................	:	June.10, 2025

Testing laboratory

Testing Laboratory Name...	:	ShenZhen GVT Testing Technology Co., Ltd.
Address................................	:	Room 504, Unit 1, Building 4, Zhaofuda Industrial Zone, Hongqiaotou Community, Yanluo Street, Bao 'an District, Shenzhen, Guangdong, China.
Test location.........................	:	(Same as above)

Client

Name....................................	:	Yuncheng Yanhu District Jianchun Network TechnologyCo., Ltd
Address................................	:	Room 916, Ping An Building, Shenghui North Road, Yanhu Disstrict Yuncheng, Shanxi

Test specification

Standard................................	:	COMMISSION REGULATION (EU) 2023/1670 COMMISSION DELEGATED REGULATION (EU) 2023/1669 EN 45554:2020
Test procedure.......................	:	Safety report
Procedure deviation...............	:	N.A.
Non-standard test method.....	:	N.A.

Test item

Description.............................	:	Tablet PC
Model No.	:	T20
Other Models........................	:	/
Trade Mark............................	:	VekfulPC
Manufacturer..........................	:	Yuncheng Yanhu District Jianchun Network TechnologyCo., Ltd
Address................................	:	Room 916, Ping An Building, Shenghui North Road, Yanhu Disstrict Yuncheng, Shanxi
Rating	:	5V⎓,2A

Possible test case verdicts:

- test case does not apply to the test object.................. :	N(N/A)
- test object does meet the requirement........................ :	P(Pass)
- test object does not meet the requirement.................. :	F(Fail)

Testing... :

Date of receipt of test item.. :	June. 05 - 2025
Date (s) of performance of tests.................................... :	June. 05 - June.10, 2025
Sample appearance and function are in normal condition, yes or no.. .	Yes
Ambient temperature.. :	24.1 ºC
Ambient humidity.. :	57%

General remarks:

The test results presented in this report relate only to the object tested.

This report shall not be reproduced, except in full, without the written approval of the Issuing testing laboratory.

Laboratory GVT. The authenticity of this Test Report and its contents can be verified by contacting GVT, responsible for this Test Report.

"(see Enclosure #)" refers to additional information appended to the report.

"(see appended table)" refers to a table appended to the report.

Throughout this report a ☐ comma / ☒ point is used as the decimal separator.

Summary of testing:

The submitted sample were tested and found to compliance with requirements of the standards
EN 45554:2020

Testing procedure and testing location

Laboratory name…………….................	:	ShenZhen GVT Testing Technology Co., Ltd.
Testing location/address:	:	Room 504, Unit 1, Building 4, Zhaofuda Industrial Zone, Hongqiaotou Community, Yanluo Street, Bao 'an District, Shenzhen, Guangdong, China.
Testing procedure	:	TL ☒ RMT ☐ SMT ☐ WMT ☐ TMP ☐

Tested By (Test Engineer)	:	Clare Wen
Reviewed By (Supervisor)	:	Keith Zhu
Approved By (Chief Engineer)	:	Peter Chen

COMMISSION DELEGATED REGULATION (EU) 2023/1669			
Section	Requirement + Test	Result - Remark	Verdict
5	**METHOD FOR THE CALCULATION OF THE REPAIRABILITY INDEX OF SMARTPHONES AND SLATE TABLETS**		P
	The Repairability Index is an aggregated and normalised score, as a calculated value derived from six scoring parameters where:		--
	— S_{DD} is the 'Disassembly Depth' score.		-
	— S_F is the 'Fasteners (type)' score.		-
	— S_T is the 'Tools (type)' score.		-
	— S_{SP} is the 'Spare Parts' score.		-
	— S_{SU} is the 'Software Updates (duration)' score.		-
	— S_{RI} is the 'Repair Information' score.		-
	The same scoring methodology shall apply to both smartphones and slate tablets. The Repairability Index (R) shall be calculated as follows: R = (SDD*0,25)+(SF*0,15)+ (ST*0,15)+ (SSP*0,15)+ (SSU*0,15)+ (SRI*0,15)		P
	The 'Disassembly Depth' (S_{DD}), 'Fasteners (type)' (S_F) and 'Tools (type)' (S_T) scores are based on the aggregation of the following priority part level scores:		P
	— BAT is the battery.		--
	— DA is the display assembly.		--
	— BC is the back cover or back cover assembly.		--
	— FFC is the front-facing camera assembly.		--
	— RFC is the rear-facing camera assembly		--
	— EC is the external charging port.		--
	— BUT is the mechanical button.		--
	— MIC is the main microphone(s).		--
	— SPK is the speaker.		--
	— FM is the hinge assembly or the mechanical display folding mechanism	No such equipment	--
	If any of the priority parts listed above is present in a product more than once, only the one which delivers the lowest score shall be considered in the calculation of the 'Disassembly Depth' (S_{DD}), 'Fasteners (type)' (S_F) and 'Tools (type)' (S_T) scores. If a priority part is not present in the product, the highest point level for each score shall be considered for this part.		P
	The 'Disassembly Depth' (S_{DD}) score shall be calculated as follows:		P
	(a) if the hinge assembly or the mechanical display folding mechanism are not present in the product, the following formula shall be used:		P
	S_{DD} = (DD$_{BAT}$*0,30)+ (DD$_{DA}$*0,30)+ (DD$_{BC}$*0,10)+ (DD$_{FFC}$*0,05)+(DD$_{RFC}$*0,05)+(DD$_{EC}$*0,05)+(DD$_{BU}$T*0,05) +(DD$_{MIC}$*0,05)+(DD$_{SPK}$ *0,05)	S_{DD}=3.45	P

COMMISSION DELEGATED REGULATION (EU) 2023/1669			
Section	Requirement + Test	Result - Remark	Verdict
	(b) if the hinge assembly or the mechanical display folding mechanism are present, the following formula shall be used:	No such equipment	N/A
	S_{DD} = (DD$_{BAT}$*0,25)+ (DD$_{DA}$*0,25)+ (DD$_{BC}$*0,09)+ (DD$_{FFC}$*0,04)+ (DD$_{RFC}$*0,04)+(DD$_{EC}$ *0,04)+(DD$_{BUT}$*0,04) +(DD$_{MIC}$*0,04)+(DD$_{SPK}$ *0,04)+ (DD$_{FM}$*0,17).		N/A
	Disassembly Depth (DD) assessment at part leve		--
	The Disassembly Depth score (DDi) for each priority part i (DD$_{BAT}$; DD$_{DA}$, DD$_{BC}$, DD$_{FFC}$, DD$_{RFC}$, DD$_{EC}$, DD$_{BUT}$, DD$_{MIC}$, DD$_{SPK}$, DD$_{FM}$) shall be calculated based on the number of steps required to remove a part from a product, without damaging the product. The counting of the steps for each part starts from the product fully assembled, with the charger disconnected and any SIM card installed. Points ranging from 1 to 5 are assigned as follows:	DD$_{BAT}$=4 pt. DD$_{DA}$= 3 pt. DD$_{BC}$= 3 pt. DD$_{FFC}$= 3 pt. DD$_{RFC}$= 3 pt. DD$_{EC}$=3 pt. DD$_{BUT}$= 5pt. DD$_{MIC}$= 4 pt. DD$_{SPK}$= 3 pt.	P
	— DDi ⩽ 2 steps = 5 pt.		--
	— 5 steps ⩾ DDi > 2 steps = 4 pt.		--
	— 10 steps ⩾ DDi > 5 steps = 3 pt.		--
	— 15 steps ⩾ DDi > 10 steps = 2 pt.		--
	— DDi > 15 steps = 1 pt.		--
	For the calculation of disassembly steps, the following rules shall apply:		--
	— the disassembly depth count is completed when the target part is separated and individually accessible.		--
	— where multiple tools need to be used simultaneously, the use of each tool counts as a separate step		--
	— operations related to cleaning, removing traces or heating are counted as steps.		--
	— the disassembly depth shall be calculated on the basis of the repair and maintenance information, and of the description of the disassembly steps for each priority part given in the technical documentation;		--
	— where remote notification or authorisation of serial numbers is necessary for the full functionality of the spare part and the device, each of these actions is counted as five additional disassembly steps.		--
	The 'Fasteners (type)' (SF) score is calculated as follow:		--
	(a) for smartphones or slate tablets, except foldable ones, the following formula shall be used:		P
	SF=(F$_{BAT}$*0,30)+ (F$_{DA}$*0,30)+ (F$_{BC}$*0,10) +(F$_{FFC}$*0,05) +(F$_{RFC}$ *0,05)+(F$_{EC}$ *0,05)+(F$_{BUT}$*0,05)+(F$_{MIC}$*0,05) +(F$_{SPK}$*0,05)	SF=3.8	P

Section	Requirement + Test	Result - Remark	Verdict
COMMISSION DELEGATED REGULATION (EU) 2023/1669			

Section	Requirement + Test	Result - Remark	Verdict
	(b) for foldable smartphones or foldable slate tablets, the following formula shall be used:		N/A
	$SF=(F_{BAT}*0,25)+(F_{DA}*0,25)+(F_{BC}*0,09)+(F_{FFC}*0,04)+(F_{RFC}*0,04)+(F_{EC}*0,04)+(F_{BUT}*0,04)+(F_{MIC}*0,04)+(F_{SPK}*0,04)+(F_{FM}*0,17)$		N/A
	Fasteners (type) (F) assessment at part level:		--
	The 'Fasteners (type)' scores (Fi) for each priority part i (F_{BAT}, F_{DA}, F_{BC}, F_{FFC}, F_{RFC}, F_{EC}, F_{BUT}, F_{MIC}, F_{SPK}, F_{FM}) are assigned according to the level of removability and reusability of the fasteners used in the device assembly. Points ranging from 1 to 5 are assigned as follows:	F_{BAT}=5 pt. F_{DA}=3 pt. F_{BC}=3 pt F_{FFC}=3 pt. F_{RFC}=3 pt. F_{EC}=5 pt. F_{BUT}=5 pt. F_{MIC}=3 pt. F_{SPK}=3 pt.	P
	— Reusable Fasteners = 5 pt.		--
	— Resupplied Fasteners = 3 pt.		--
	— Removable Fasteners = 1 pt.		--
	The assessment of the type of fasteners is based on the disassembly process to remove the specific priority part, starting from the previous priority part in disassembly sequence already removed.		P
	In case different types of fasteners are encountered in the disassembly of a priority part, the worst score shall be considered.		P
	The Fi scores shall be calculated on the basis of the repair and maintenance information, and of the description of the fasteners for each priority part given in the technical documentation.		P
	The 'Tools (type)' (ST) score shall be calculated as follows:		P
	(a) for smartphones or slate tablets, except foldable ones, the following formula shall be used:		P
	$ST=(T_{BAT}*0,30)+(T_{SCR}*0,30)+(T_{BC}*0,10)+(T_{FFC}*0,05)+(T_{RFC}*0,05)+(T_{EC}*0,05)+(T_{BUT}*0,05)+(T_{MIC}*0,05)+(T_{SPK}*0,05)$	ST=2.8	P
	(b) for foldable smartphones or foldable slate tablets, the following formula shall be used:		N/A
	$ST=(T_{BAT}*0,25)+(T_{SCR}*0,25)+(T_{BC}*0,09)+(T_{FFC}*0,04)+(T_{RFC}*0,04)+(T_{EC}*0,04)+(T_{BUT}*0,04)+(T_{MIC}*0,04)+T_{SPK}*0,04)+(T_{FM}*0,17)$		N/A

Section	Requirement + Test	Result - Remark	Verdict
	Tools (type) (T) assessment at part level		--
	The 'Tools (type)' scores (Ti) for each priority part i (T_{BAT}, T_{DA}, T_{BC}, T_{FFC}, T_{RFC}, T_{EC}, T_{BUT}, T_{MIC}, T_{SPK} and T_{FM}) are assigned according to the complexity and availability of the tools needed for its replacement. Points ranging from 1 to 5 are assigned as follows:	T_{BAT}=3 pt T_{DA}=3 pt T_{BC}=4 pt T_{FFC}=1 pt T_{RFC}=1pt T_{EC}=4 pt T_{BUT}=4 pt T_{MIC}=1 pt T_{SPK}=1 pt	P
	— No tools = 5 pt;		--
	— Basic tools = 4 pt.		--
	— A set of tools that is supplied (or offered to be supplied at no additional cost) with the spare part = 3 pt.		--
	— A set of tools that is supplied (or offered to be supplied at no additional cost) with the product = 2 pt.		--
	— Commercially available tools = 1 pt.		--
	The assessment of the type of tools is based on the disassembly process to remove the specific priority part, starting from the previous priority part in disassembly sequence already removed.		P
	Where different types of tools are needed for the disassembly of a priority part, the lowest score shall be considered.		--
	The Ti scores shall be calculated on the basis of the repair and maintenance information, and of the description of the tools for each priority part given in the technical documentation.		P
	Spare parts		P
	The 'Spare Parts' (S_{SP}) score shall be calculated at product level as follows:	S_{SP}=4	--
	— Spare parts for all priority parts are available to end users and professional repairers = 5 pt;		N/A
	— Spare parts for display assembly, battery, back cover (or back cover assembly) and cameras are available to end users and professional repairers; spare parts for all other parts are available to professional repairers = 4 pt; — Spare parts for display assembly, battery and back cover (or back cover assembly) are available to end users and		P
	— Spare parts for display assembly and battery are available to end users and professional repairers; spare parts for all other parts are available to professional repairers = 2 pt;		N/A
	— Spare parts for display assembly are available to end users and professional repairers; spare parts for all other parts are available to professional repairers = 1 pt;		N/A

COMMISSION DELEGATED REGULATION (EU) 2023/1669			
Section	Requirement + Test	Result - Remark	Verdict
	— Spare parts for the hinge assembly, mechanical display folding mechanism are to be available only in case of foldable smartphones.		N/A
	Software Updates (duration)		P
	The 'Software Updates (duration)' (S_{SU}) score shall be calculated at product level as follows:	$S_{SU}=3$	--
	— Minimum guaranteed availability of security updates, corrective updates and functionality updates to the operating system for at least 7 years = 5 pt.		N/A
	— Minimum guaranteed availability of security updates, corrective updates and functionality updates to the operating system for 6 years = 3 pt.		N/A
	— Minimum guaranteed availability of security updates, corrective updates and functionality updates to the operating system for 5 years = 1 pt.		P
	— The above durations refer to years from the date of end of placement on the market of the product model.		--
	Repair Information		P
	The Repair Information (S_{RI}) score shall be calculated at product level as follows:	$S_{RI}=5$	--
	— Public availability of repair and maintenance information, except electronic board diagrams, at no cost for end users and availability of repair and maintenance information, including electronic board diagrams, at no cost for professional repairers = 5 pt.		N/A
	— Availability of repair and maintenance information at no cost for professional repairers = 3 pt.		N/A
	— Availability of repair and maintenance information with a reasonable and proportionate fee for professional repairers = 1 pt.		P
	— A fee shall be considered reasonable if it does not discourage access by failing to take into account the extent to which the professional repairer uses the information.		--

COMMISSION DELEGATED REGULATION (EU) 2023/1669			
Section	Requirement + Test	Result - Remark	Verdict

Test result :Repairability classes of smartphones and slate tablets			P

Standard		Test Conditions	
(EU) 2023/1669		Ambient:23±5℃, 50±10%R.H.	

Technical requirements		Energy efficiency classes of Smartphones	
$R = (S_{DD}*0,25)+(S_F*0,15)+(S_T*0,15)+(S_{SP}*0,15)+(S_{SU}*0,15)+(S_{RI}*0,15)$		Repairability Class	Repairability Index (R)
S_{DD}:	3.45		
S_F:	3.8		
S_T:	2.8		
S_{SP}:	4	A (most efficient)	R ≥ 4.00
S_{SU}:	3	B	4.00 > R ≥ 3.35
S_{RI}:	5	C	3.35 > R ≥ 2.55
Repairability Index	3.65	D	2.55 > R ≥ 1.75
Energy efficiency classes	B	E(least efficient)	1.75 > R ≥ 1.00

Photo Documentation

Photo 1

View:

☐ front

☐ rear

☐ right side

☐ left side

☐ top

☐ bottom

☐ internal

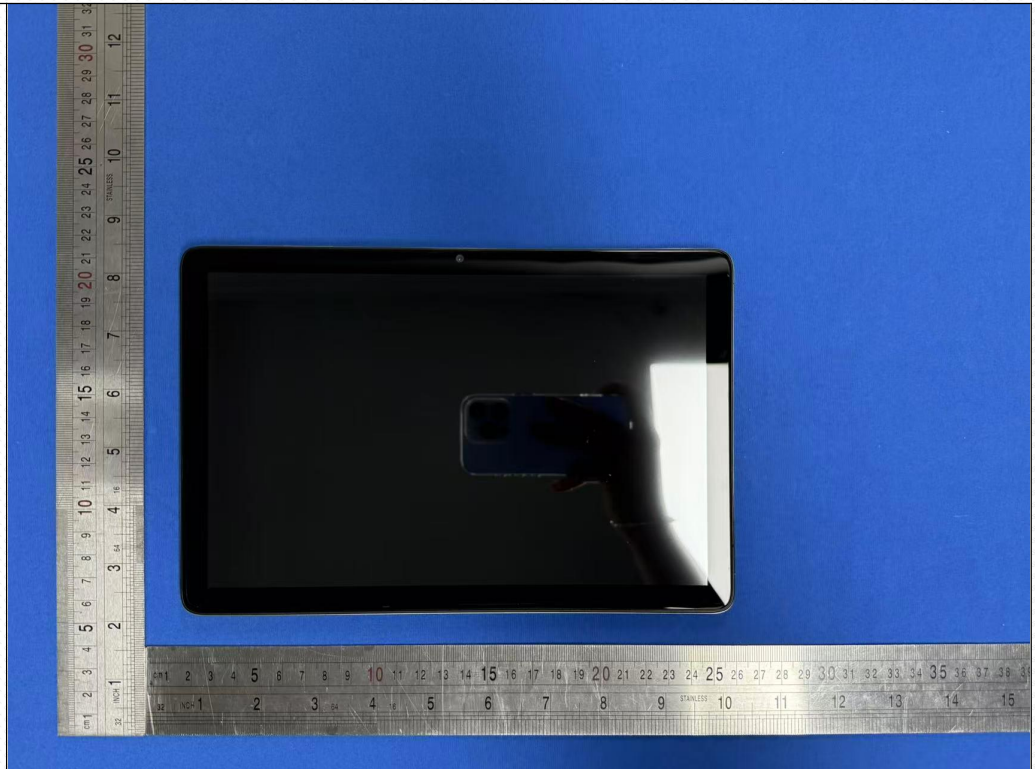**Photo 2**

View:

☐ front

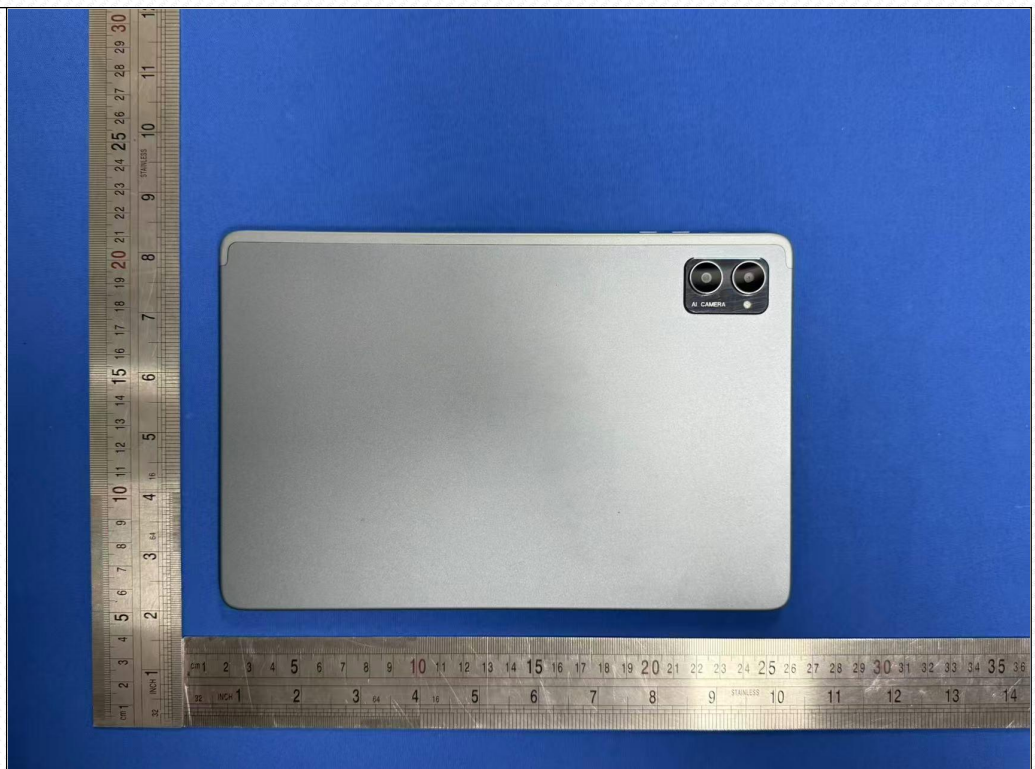☐ rear

☐ right side

☐ left side

☐ top

☐ bottom

☐ internal

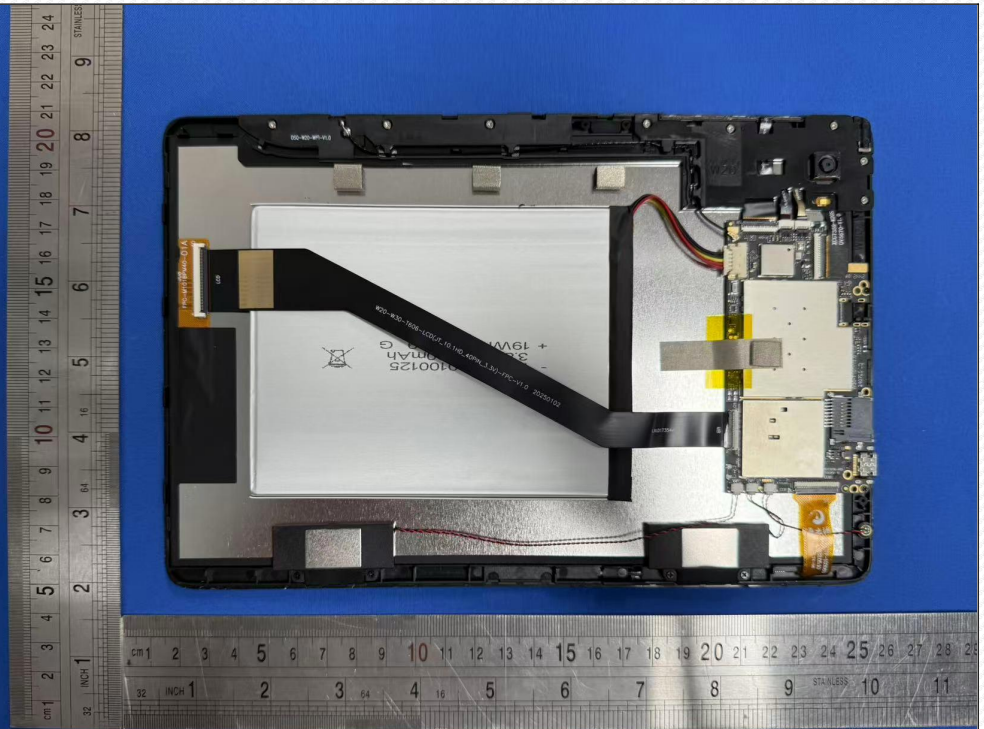**Photo 3**

View:

☐ front

☐ rear

☐ right side

☐ left side

☐ top

☐ bottom

☐ internal

End of Report