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WEEE TEST REPORT

European Directive 2012/19/EU

Evaluation of Recycling Rate for Waste of Electrical and Electronic Equipment

Report Reference No.	61.406.19.0105.03
Date of issue	2019-11-21
Applicant	
Company	Zeroplus Technology
Address	2F., No.123, Jian 8th Rd., Zhonghe Dist., New Taipei City, Taiwan
Test Item Description	PC-Based Three-in-one analyzer
Trade Mark / Brand	孕龍科技 ZEROPLUS TECHNOLOGY CO.,LTD.
Model/Type reference	LAP-C PRO 16064M/32064M/32128M/32256M
Ratings	N/A
Test Address	No.8, Ln. 29, Wenming Rd., Guishan Dist., Taoyuan City 33383, Taiwan (R.O.C.)
Test Specifications	
Directive	WEEE Directive 2012/19/EU, Article 11 – Recovery targets
Test Standard(s)	N/A
Non-standard test method	N/A
Test Result	☒Pass ☐ Not OK The equipment which was evaluated has fulfilled with Recovery requirement (Article 11) of 2012/19/EU Directive: (Recovery: 99.2 %, Recycling: 92.1 %)
Test Report Form No.	PPP19001 / Rev.1:2006.12
TRF Originator	TÜV SÜD KOREA
Master TRF	PPP19001.doc

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Approved by: Rosa Tu

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1. General Information

1.1 Product Preview

Product Name:	PC-Based Three-in-one analyzer
Model No.:	LAP-C Pro 16064M

Product Category according to Annex I of 2012/19/EU	Category 6 (Small IT and telecommunication equipment)

Possible Evaluation Result Verdicts

Case for not applicable item ..... :	N/A
Comply with the requirement..... :	P (Pass or Ok)
Does not comply with the requirement..... :	F (Fail or Not Ok)

Test Period

Date of receipt product..... :	2019-10-28
Date of evaluation finished ..... :	2019-11-21

Normative references

VDI 2243:2002 – Recycling-oriented product development

VDI 2343 – Recycling of Electrical and Electronic Products
Part I: 2001 Principles and terminology
Part II: 2000 External and Internal logistics
Part III: 2002 Disassembly and processing

ECMA 341 – Design for Environment standard

CECED Guidance on information for treatment facilities

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2. Evaluation Results

2.1 Disassembly Summary

Photo			
	Analyzer		
Recycling Information		Weight (g)	Weight (%)
	0. Total (=1+2+3+4)	135.00	100.0
	1. Reuse	-	-
	2. Recycling	124.4	92.1
	3. Recovery (Waste to energy)	9.6	7.1
	4. Disposal (Landfill)	1.0	0.8
	Recycling Rate (=1+2): 124.4 g (92.1%)		
	Recovery Rate (=1+2+3): 134.0 g (99.2%)		

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Part List- Analyzer

No.	Part / Assembly Name					
	Name	Material	Quantity	Weight(g)	Characteristic	Mark
G1	Rubber	Rubber	4	1	Recovery	NA
G2	Plastic Bottom	Plastic	1	40	Recyclable	NA
A3	PCB	PCB Complex	1	48	Recyclable	NA
G4	Plastic	Plastic	1	1	Recyclable	NA
G5	Plastic Cover	Plastic	1	43	Recyclable	NA
----	Screw(Cross)	Metal	5	2	Recyclable	NA

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2.2 Derivatives Summary

Part / Assembly Name	Material	Weight		Treatment			
		(g)	(%)	Reuse	Recyclable	Recovery	Disposal
5L4C4T	Metal (total)	2	1.5		√		
	Plastic	84	62.2		√		
	Plastic (Brominated)	0	0.0		√		
	Wires / Cables	0	0.0		√		
	Glass (non CRT)	0	0.0		√		
	Packaging materials	1	0.7			√	
	Other Misc. materials	0	0.0		√		
	Annex VII Materials	48	35.6		√		

Expand the table according to results of disassembling

2.3 WEEE Annex VII (components with special handling needs)

Floodlight cam

No.	Name	Quantity	Weight (g)	Annex VII Materials	Page
A3	PCB	1	48	Printed Circuit Assemblies > 10 cm^2	9

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3. Recommended Disassembling Procedures

Joint Technology Information- Floodlight cam

No.	Separate	Joint Technology	Quantity	Dismantling Tool
01	Separate 1	Snap Fit	4	Chisel
02	Separate 2	Screw(Cross)	4	Screwdriver (cross)
03	Separate 3	Put Together	1	Without Tool
04	Separate 4	Screw(Cross)	1	Screwdriver (cross)
Total				
----	----	Screw(Cross)	5	Screwdriver (cross)
		Put Together	1	Without Tool
		Snap Fit	4	Chisel
PS: Without Tool main handle				

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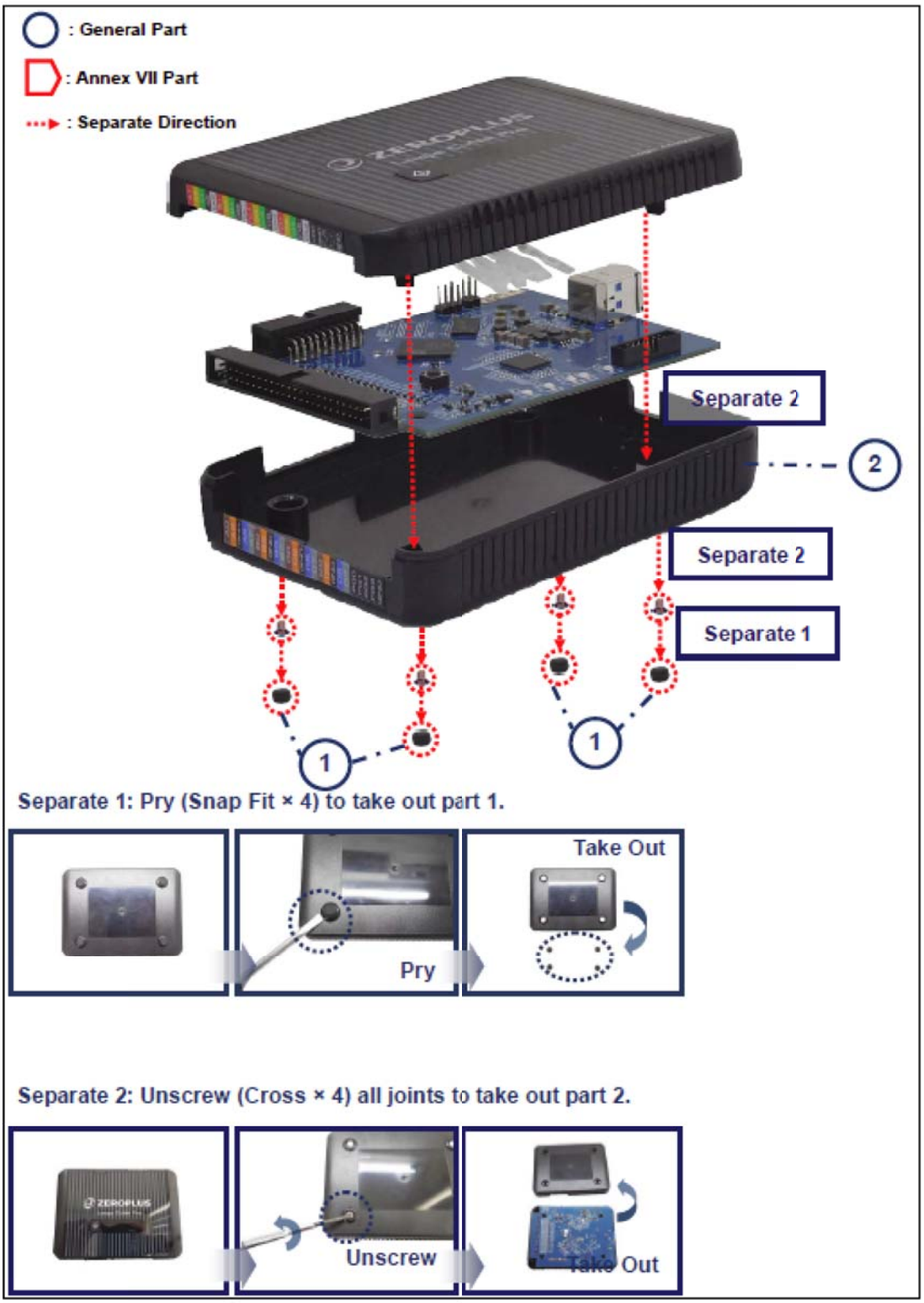
4. Disassembling Results



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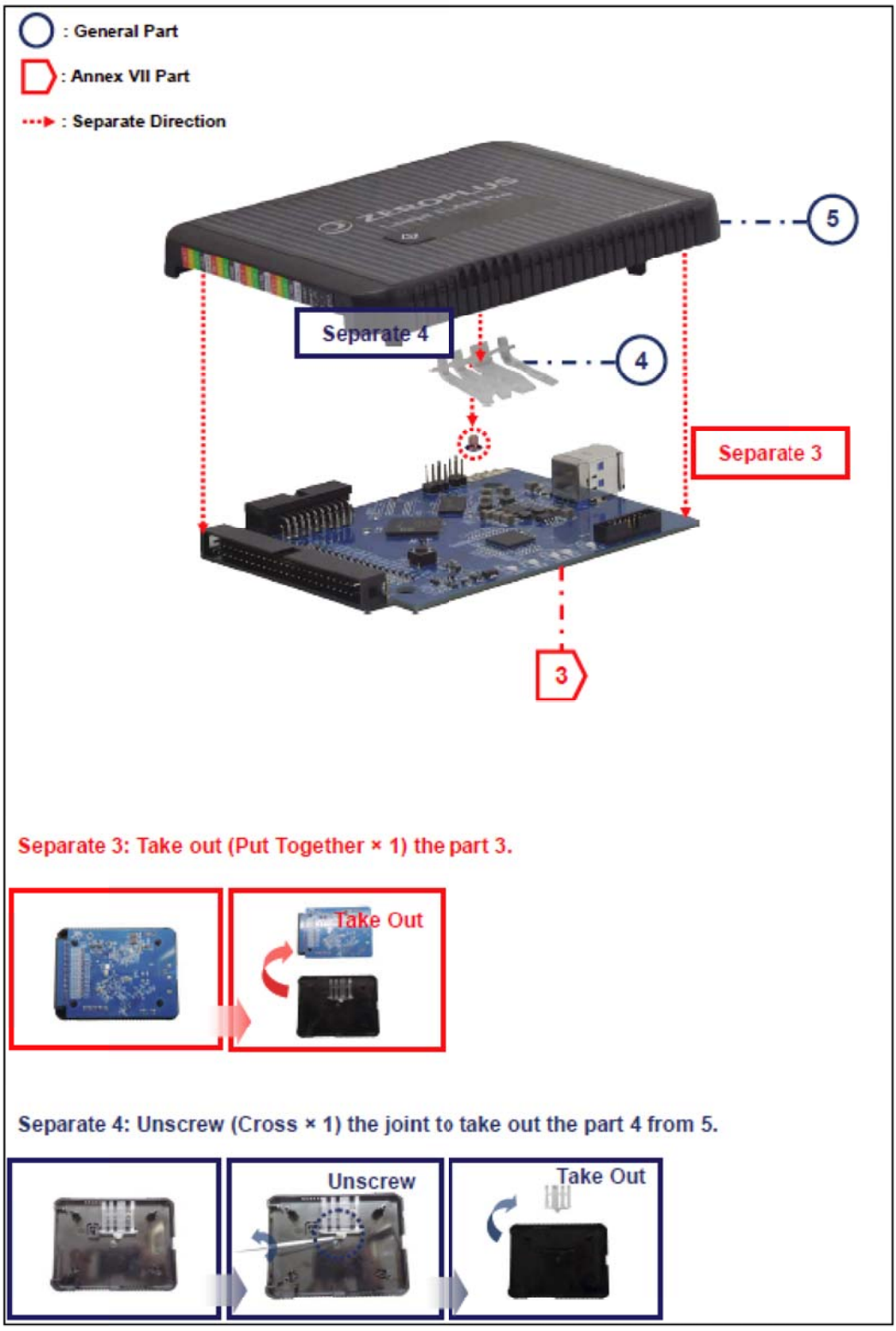

Separate 3: Take out (Put Together × 1) the part 3.

Separate 4: Unscrew (Cross × 1) the joint to take out the part 4 from 5.

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5. Plastic Composition Analysis

Test Method

Analytical Substance	Equipment	Methods	XRF Screening Action Limit(ppm)
Pb	ED-XRF	IEC 62321-2 & -3	700
Cd	ED-XRF	IEC 62321-2 & -3	70
Hg	ED-XRF	IEC 62321-2 & -3	700
Cr	ED-XRF	IEC 62321-2 & -3	700
Br	ED-XRF	IEC 62321-2 & -3	300

Test Results

Tested Part No.	XRF Screening (ppm)	Tested Part Description	Tested Part Photo
001	Cd: 0.0 Pb: 15.1 Hg: 0.0 Br: 210.6 Cr: 0.0	Plastic	
002	Cd: 0.0 Pb: 3.2 Hg: 1.4 Br: 0.0 Cr: 8.7	Plastic	

Note: ppm = mg/kg (0.1% = 1000ppm)

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